

Approved:

Standard Procedure No. 510-010(SP)

Effective: June 20, 2003

Responsible Division: Construction Management

Supersedes Policy : 512-004(P)

Date: September 29, 1998

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Deputy Director

STANDARD PROCEDURES FOR PROCESSING CHANGE ORDERS AND DETERMINATION OF ADDITIONAL CONTRACTOR COMPENSATION

The Standard Procedures for Processing Change Orders and Determination of Additional Contractor Compensation implement the provisions of Ohio law for increasing or decreasing the quantities of any bid item and for adding new items to the contract.

Change orders are written in CMS by the District Construction Offices and approved by these offices. The Contractor may be authorized to proceed with added work before the approval of a change order to avoid delay to the project, however, the District will process a change order promptly to compensate the Contractor for added work performed.

REFERENCES

The following attached documents are for use in processing change orders:

- Appendix A: Force Account
- Appendix B: Example of Force Account Summary and Breakdown
- Appendix C: Recognized Fringe Benefits
- Appendix D: Payroll Dues and Administrative Fees
- Appendix E: Third Party Billing
- Appendix F: Emergency Declaration
- Appendix G: Amended Emergency
- Appendix H : Extension of Work Limits
- Appendix I: Changed Contract Conditions and Claims

BACKGROUND AND PURPOSE

This Standard Procedure **510-010(SP)** and Policy **27-010(P)** replaces Policy **512-004(P)** that was issued September 29, 1998 and subsequently issued administrative rulings on change orders.

Policy **512-004(P)** replaced Standard Operating Procedure **PH-C-209** (“Change Orders and Extra Work Contracts”) dated May 17, 1991 and Directive No. **DH-34C** (“Procedure for Equitable Adjustment Because of Changed Conditions, Alteration of Plans or Specifications, or Suspension of the Work”) dated September 15, 1981.

DEFINITIONS

Blue Book: “Rental Rate Blue Book for Construction Equipment”

C&MS: “Construction and Material Specifications”

change order A contract document that changes the bid documents either by changes in the contract quantities, specifications, or plans or adds Extra Work.

1. When the term is capitalized, Change Order (CO), it refers a District level change order used as detailed in part III of this procedure and does not add non-bid work.
2. When used in lower case letters, change order, it refers to both Change Orders and Extra Work Change Orders.
3. A change order is also know as a supplementary agreement.

CMS: Construction Management System, the Department wide computer system for administration of construction projects.

Contract Limits: The amount a contract pay item may be increased or the cost of a new item of work that may be added to a project without competitive bidding or State Controlling Board review. *ORC 5525.14* sets these limits as:

<u>Original Contract Price</u>	<u>Contract Limits</u>
\$500,000 or lower	\$25,000
\$500,001 to \$2,000,000	5% of Total Contract Price
Over \$2,000,000	\$100,000

DCE: District Construction Engineer

DDD: District Deputy Director

- EWCO:** Extra Work Change Order, a change order for Extra Work.
- Extra Work:**
1. An increase in a bid item quantity for payment beyond Contract Limits.
 2. A new pay item for a negotiated price.
 3. A new pay item paid by force account.
- Final Measurements:** A legal term used in *5525.14 ORC* which means an increase in an original bid item, that was required to accomplish the originally planned work within the original work limits, and for the original unit price, but resulted in a payment on the bid item that exceeded the Contract Limits. Change orders for Final Measurements are not subject to State Controlling Board approval, but must be reported quarterly to the State Controlling Board. Final Measurements are not limited to pay quantities determined during finalization, but may occur any time during the project.
- NHS:** National Highway System, the system of roadways so designated by the National Highway Systems Act of 1995.
- Non-NHS:** Those roadways not designated as NHS, but remain eligible for Federal funding.
- OCA:** Office of Construction Administration in the Division of Construction Management, in the ODOT Central Office.
- ORC:** Ohio Revised Code

PROCEDURE STATEMENT

- I. Only work that is required to complete the project as intended by the bid documents or to implement an accepted Value Engineering change proposal may be added to a project by change order. The work covered by a change order must be within the existing Right-of-Way, allowed by the approved environmental document, and within the work limits as stated in the plans or extended by the District Deputy Director (DDD) as provided in Appendix H. Work beyond the scope of the plans shall not be added to a project except as an emergency to eliminate an immediate threat to human life or safety.

Contract specified incentives for early completion are paid on the CMS LIQID screen and not by change order.

Items used to implement the Contractor's erosion control requirements are paid from an encumbered amount included in the proposal as a non-bid reference number. The proposal specifies the unit prices for the erosion control items. Payments for erosion control items that exceed the encumbered amount will be made by an EWCO using the proposal specified unit prices.

II. All change orders shall be written in CMS.

- A. The District shall develop all documentation, with the exception of Controlling Board requests, required for the processing and approval of change orders.
- B. The Deputy Director of the Division of Construction Management may prepare and approve a change order after consultation with the District and the Assistant Director for Highway Management.
- C. Change orders on projects funded by Central Office, administered for particular programs, must be approved by the Program Manager (PM) if the amount is over the specified threshold for the program. Districts shall consult the appropriate PM when they first anticipate a change order over the threshold. The OCA will maintain a list of Program Managers and thresholds for each program.

The Deputy Director of the Division of Construction Management may require Districts on specific projects, to consult with a PM on change orders below the normal program threshold.

III. A Change Order (CO) shall be used for the following contract quantity and price adjustments, Change Orders are not used to add work using negotiated pricing:

- A. Increases and decreases of contract quantities to meet field condition and design changes within the Contract Limits.
- B. Decreases in Extra Work quantities explained in the Explanation.
- C. Lump sum adjustments of contract payments for the following:
 - 1. Payment for unapproved material incorporated in the work and accepted with a cost deduction.

2. Adjustment of a contract price when the item is reduced by more than 25 percent as provided in Table I of Section **104.02** C&MS (1997) or Table **104.02-2** of Section **104.02** C&MS (2002) .
 3. Compensation for eliminated items as provided in Section **104.02** (C&MS 1997), or Section **104.02.E.** (C&MS 2002), and Appendix I, Section I.C.4.
 4. Asphalt binder price adjustments and other price adjustments as specified in the project proposal.
 5. Price adjustments as specified in an individual pay item's specifications, such as, but not limited to, price adjustments specified in C&MS Sections **446**, **448**, and **451** or the project proposal.
 6. Material cost adjustments due to specification changes and calculated as described in Appendix I, Section I.C.5 and Section I.C.6.
- D. Changes in contract specifications for the following:
1. Allow a substitute material because the specified item is not available.
 2. Acceptance of a superior material at no additional cost to the project.
 3. Acceptance of undocumented material incorporated into the work and performing acceptably.
 4. Department ordered change in materials.
 5. Any other change in the project specifications.
- E. Nonperformances that result from the acceptance of a VECP.
- F. Other reasons as authorized by E-mail Administrative Rulings issued by the OCA.

- IV. Extra Work Change Orders (EWCO) are used for the following:
- A. An increase in a bid item quantity that results in a total payment increase for that bid item that exceeds of the Contract Limits.
 - B. The addition of new items of work.
 - C. The payment of settlements of disputes and claim awards, also termed an equitable adjustment. These disputes and claims are due to changed conditions, alteration of the plans or specifications, Department caused delays, utility delays, delays caused by the action of a Local Government, and suspension of work under Section **104.02 (b)** (C&MS 1997) or **104.02.C.** (C&MS 2002).
 - D. Project termination cost when terminated under Section **108.031**(C&MS 1997) or **108.09** (C&MS 2002) for the convenience of the Department.
 - E. Implementation of a Value Engineering Change Proposal (VECP) and payment of the Contractor's share of the VECP savings.
 - F. Payments for erosion control items that exceed the encumbered amount will be made by an EWCO using the proposal specified unit prices. The proposal specified unit prices are fixed for the contract and may not be negotiated or adjusted for inflation or claimed changed condition.
- V. The Extra Work negotiated prices shall be comparable to prices that would have resulted from a competitive bid contract. These prices may be agreed unit prices or agreed lump sums. The CMS explanation shall document the justification for these Extra Work prices. Acceptable methods to justify negotiated prices are as follows:
- A. Use of contract bid prices.
 - 1. Contract bid prices may be used to establish prices for new work where the labor and equipment used are the same as the bid priced work but the material cost is different, in which case the bid price will be adjusted for the difference in the invoiced material cost difference plus fifteen percent (15%) mark up. Adjustments for inflation or subcontractor mark ups are not allowed.

2. When a bid item is increased beyond the Contract Limits, a new price for the quantity beyond Contract Limits may be negotiated at the request of the Contractor or the District Construction Office if either party believes the bid price is not an equitable price for the increased quantity.
- B. Use of the average unit prices awarded for the item of work as reported in the "Summary of Contracts Awarded" posted on the web page for the Office of Contracts each calendar year. These prices may be adjusted for inflation using factors issued by the OCA. No markup for subcontractor work is allowed in addition to an average unit price.
 - C. Use of comparative prices bids on different projects found by a query of CMS conducted by the District. Adjustments of comparative bid prices for inflation or subcontractor mark ups are not allowed.
 1. The District may use an average of bid prices from three (3) different projects on items of similar work and having a quantity similar to the estimated extra work quantity but may differ by more than 10%.
 2. The District may use a bid price from a project for the same type of work with a quantity within 10% of the estimated extra work quantity and judged by the District to approximate the conditions of the extra work.
 - D. A cost analysis of labor, equipment, and material with markups allowed under Section **109.04** (C&MS 1997) or Section **109.05** (C&MS 2002). Subcontractor costs must be broken down by labor, equipment, and material. The full analysis shall be attached to the copy of the EWCO on file in the District. A cost analysis may be done by either the Contractor or the District Construction Office in consultation with the Contractor or Office of Estimating.
- VI. Force Account shall be used when agreement can not be reached on prices to perform Extra Work. Force Account shall be paid by an EWCO.
- A. The allowed compensation for Force Account shall be as provided in Section **109.04** (C&MS 1997) or **109.05** (C&MS 2002) and Appendix A.

- B. The District will process an Estimated Cost of Force Account change order (ECFA) when the Force Account will likely amount to \$100,000 or greater and the expected duration of the Force Account is expected to be more than 2 weeks. The District will process estimates on ECFA every two weeks based on the progress of the Force Account work.
 - C. The District is required to monitor Force Account work .
 - 1. The project will document daily number of workers by work classification and pieces of equipment that they observe working on the Force Account.
 - 2. The Project and Contractor will document on a Daily Force Account Record the labor and equipment used on the Force Account. Each Daily Force Account Record will be signed by the Project and Contractor personnel.
- VII. Other pricing methods used on EWCO.
- A. Third party billing within the limits allowed in Appendix E.
 - B. Proposal specified unit prices for erosion control.
 - C. Awards made by the Deputy Directors Board and the Director's Claim Board.
- VIII. Additional bonding documents for EWCOs are not required. Sureties, however, initially charge contractors based on the awarded bid price. Contractors are then charged additional premiums when the cost of the project is increased by Change Orders or EWCO, see Appendix A. part II.. A.7.c. Such charges usually occur during finalization when final quantities are determined. These bonding premiums for increases in the project cost are compensable by an EWCO without any Contractor mark up, according to Section **109.05.C.7** (C&MS 2002). The same method of bonding compensation will apply to projects under C&MS 1997. The Contractor is allowed 60 calendar-days after agreement on final quantities, to submit for compensation any additional bonding premiums.
- IX. Approval Authority:
- A. The District shall establish a change order approval process whereby two different signatures are required.

1. The people selected to sign change orders shall be knowledgeable with this standard procedure **510-010(SP)** and policy **27-010(P)** and familiar with the project involved.
 - a. A person will be granted either recommended or approval authority on a project, but not both.
 - b. Several people may be authorized for each of the two signature levels on a project.
 - c. The person or people granted approval authority must be a Professional Engineer registered with the Ohio State Board of Registration for Professional Engineers and Surveyors.
 2. One person will sign their own name on the recommended line and enter this action into CMS. The other person will sign their own name as a Professional Engineer with the initials P.E. next to their signature, on the approved line and enter this action into CMS.
 3. The District shall inform the Contractor, at the preconstruction conference, of the people with change order approval authority for the project.
- B. State Controlling Board approval is also required on EWCO for increases in contract quantities and new work that are greater than Contract Limits, according to *ORC 127.16 and 5525.14*.
1. If the EWCO is not an emergency covered by part XI. B. of this procedure, the District shall approve it pending State Controlling Board approval. Approval shall not be entered into CMS before State Controlling Board approval is granted.
 - a. The OCA will notify the District by phone or e-mail of the State Controlling Board's approval on the next business day following the State Controlling Board meeting. The District may then approve the EWCO in CMS.
 - b. The OCA will send to the District the executed State Controlling Board approval of the EWCO. This approval shall be attached to the EWCO on file.
 - c. The District shall inform the Contractor of the State Controlling Board approval.

2. If work beyond the Contract Limits is covered by the emergency process specified in part XI of this procedure, then the EWCO may be approved without State Controlling Board approval. Such change orders shall be designated “Emergency” in CMS.
- C. Deputy Director of the Division of Construction Management has approval authority of OCA initiated change orders allowed in part II.B of this procedure, subject to State Controlling Board approval when required.
- X. The District shall consult with the appropriate Federal Highway Administration (FHWA) Programs Engineer when a major change is first contemplated on a Federal oversight project. This consultation may be by phone or e-mail with a follow up via e-mail to “FieldEngineers_OH@fhwa.dot.gov”, and documentation to the project file. The e-mail must have the Construction Project Number and the County-Route-Section in the subject line. The purpose of the consultation is to determine the eligibility of Federal participation in the change and the effect on Federal project funding.
- A. FHWA considers a change order to be a major change if it:
1. Results in a project cost increase exceeding the lesser of \$250,000 or 5% of the award amount.
 2. Alters the intent or scope of the contract or character of the work including changes to planned access and work limits.
 3. Results in significant new environmental impacts.
- B. FHWA does not participate in maintenance items or purchase of surplus material.
- C. FHWA does not participate in the repair of completed permanent items of work damaged by traffic and compensated under **107.15** (C&MS 2002) or Section **107.16** (CMS 1997) with the following exceptions:
1. FHWA participation is allowed on Federally-funded projects on the non-NHS system as determined by State law and policy.
 2. FHWA participation is allowed on Federally-funded projects on the NHS when the proximate cause of damage was the result of traffic being diverted from its normal path by construction activity.

- XI. Authority to proceed with work prior to processing a change order may be granted to the Contractor by the following people under the specified conditions and procedures:
- A. The District Construction Engineer (DCE), under authority given to the Director by *ORC Section 5525.14*, may grant permission to proceed with new items of work if the total payment for each new item is less than the Contract Limits.
 - 1. The permission shall be written and kept in the project file with a copy to the Contractor.
 - 2. The written permission shall define the extent of the work and the agreed price for the work negotiated with the Contractor or the estimated cost of the force account.
 - 3. The District shall consult with the FHWA under the conditions stated in part X of this procedure, prior to granting permission to proceed.
 - B. The DDD, by Director signature authority, may grant emergency permission under *ORC Section 5525.14*, to proceed with an item of new work greater than the Contract Limits, prior to processing a change order. This permission shall be in writing and granted only for emergency circumstances as defined below.
 - 1. Emergency circumstances are:
 - a. Removal of a life, safety, or health threatening situation, or
 - b. Work that must begin in less than 60 days to avoid a delay to the completion of the project or otherwise increases its cost.
 - 2. Only work necessary to complete the project, adjustments to meet changed conditions, alteration in the original plans, unforeseen contingencies, or payments necessitated by contract terminations or suspensions are allowed by *ORC Section 5525.14* to be approved under these emergency procedures.
 - 3. The DDD written permission shall use the form given in Appendix F and shall:
 - a. Describe the work and state the estimated work quantities.

- b. State the agreed prices negotiated for the work and the basis for finding the prices acceptable under Section VI of this policy. If a price agreement is not reached, the emergency permission shall state that the work will be done by force account and state the estimated total cost of such force account.
 - c. State the results of the consultation with the FHWA if required by part X of this procedure.
 - d. State the finding of fact that an emergency circumstance exists and declare the emergency as required by *ORC Section 5525.14*.
 4. The original signed emergency permission, with supporting documentation attached, shall be kept in the District project file.
 5. Copies of the signed emergency permission shall be sent to:
 - a. Contractor, as the Department's written commitment to pay for the work at the stated prices or by force account, according to Section **109.04** (C&MS 2002). The Contractor is not legally required to perform the change order until it is approved.
 - b. The OCA for inclusion on the quarterly report to the State Controlling Board.
 - c. Attach a copy of the emergency permission to the subsequent EWCO.
 6. Payment of claim awards or dispute settlements on work already performed do not qualify as an Emergency. When such payments exceed the Contract Limits a Controlling Board request and approval are required before payment is made.
- XII. An EWCO with a pay item in excess of Contract Limits and not covered by sections F or G in this part of the procedure, must be submitted to the State Controlling Board for approval prior to performance of the added work or payment of a claim settlement, or payment of a VECP for time savings.
- A. The District shall forward to the OCA a copy of the EWCO and a draft explanation appropriate for the State Controlling Board request. This draft explanation shall be free of obscure technical jargon and shall give a person unfamiliar with the project an easy understanding of the project and the requested addition.

- B. The OCA will process the information submitted by the District into a State Controlling Board request and submit it to the Deputy Director for Construction Management, who will obtain State Controlling Board approval.
- C. The OCA will inform the District of the State Controlling Board action and the District shall then advise the Contractor.
- D. When a District discovers that added work beyond the Contract Limits was performed without emergency permission and the added work did not qualify as final measurements, the DDD may approve a retroactive emergency provided the DDD agrees that the added work did qualify for emergency status. When the amount of an Emergency Declaration change order exceeds the authorized amount, the DDD may authorize the excess amount by an Amended Emergency Declaration using the form in Appendix G. A copy of any Amended Emergency shall be submitted to the OCA for reporting to the State Controlling Board.
- E. EWCO shall not be divided into inappropriate pay items for the purpose of avoiding State Controlling Board review.
- F. *ORC Section 5525.14* requires reporting contract increases to the State Controlling Board for the following reasons, but does not require their approval:
 - 1. Additions of quantities beyond the Contract Limits due to Final Measurements. The EWCO must be coded as Final Measurements in CMS.
 - 2. Added work due to Federal mandates that did not exist at the time of the original contract award.
 - 3. Added quantities or work where the District gave emergency approval in accordance with part XI. B. of this procedure.
 - 4. Contract termination costs.
- G. State Controlling Board approval or reporting is not required for the following:
 - 1. Added payments due to a contract specified formula.
 - 2. Changes in material or methods of construction of items of work when the net change in the contract price of all items affected, is below the Contract Limits.

3. Implementation of an accepted VECP that results in a net savings to the projects. Payment of the Contractor's share of a savings for time must be approved by the Controlling Board if the payment is beyond the Contract Limits and there is no offsetting savings in the cost of construction.

XIII. An EWCO should include the following information, if applicable:

- A. The EWCO should state whether the work will require additional time. This could be used in time extension processing. The statement should state one of the following:
 1. The additional work would not take additional time.
 2. The additional work will take ___ days to perform.
 3. It is unknown how this additional work will effect the time on the project.
- B. If the EWCO includes asphalt concrete, the explanation should state whether or not the asphalt concrete will be subject to the asphalt binder price adjustment.
- C. If any additional cost of maintaining traffic is included in the agreed prices.
- D. If any additional cost to revise or provide a Storm Water Pollution Prevention Plan is included in the agreed prices.
- E. Other information as required by E-Mail issued by the OCA.

XIV. Change orders on projects under litigation shall be coordinated with the Chief Legal Counsel prior to submitting to the Contractor for signature. Monthly, the Chief Legal Counsel will supply to each District a list of District projects that are subject to a law suit. The District shall inform the Chief Legal Counsel's Office, Court of Claims Section, of the following:

- A. Pending disputes on each listed project that could result in a change order.
- B. Change orders currently in process on each listed project.
- C. All change orders approved on each listed project.

XV. Printed copies of change orders shall be signed, copies distributed, and filed as follows:

A. Change Orders.

1. Signed and dated by the Contractor and the District. The District signs on the "Recommended" and "Approved" lines indicating titles as appropriate. The District shall indicate any required Program Manager approval on the front of the change order.
2. Approval entered into CMS by the District.
3. District keeps the original signed copy in their project file and sends copies of the signed copy to the Contractor on all projects.

B. Extra Work Change Orders.

1. Signed and dated by the Contractor and the District. The District signs on the "Recommended" and "Approved" lines indicating titles as appropriate. The District shall indicate any required Program Manager approval on the front of the change order.
2. Approval entered into CMS by the District.
3. District sends the original signed copy with all attached documents to the Office of Accounting for filing with the original contract.
 - a. A copy of the signed change order and attachments shall be kept in the District project file.
 - b. Copies of the signed change orders shall be distributed to the Contractor and project on all projects.
 - c. If the EWCO attachments exceed 24 pages instead of sending all attachments to Accounting, and the Contractor attach a sheet summarizing the attachments and include a statement that because of the number of attachments a summary is attached and the backup documentation is on file in the District.
 - d. Printed copies of the signed EWCO shall be provided to FHWA upon request.

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4. Copies of signed EWCOs for additions due to Final Measurements and work added due to Federal mandates shall be sent to the OCA for inclusion on the quarterly report to the State Controlling Board. The OCA will notify the Districts monthly of the EWCOs and emergency declarations required for Controlling Board reporting.

XVI. The OCA will monitor CMS and conduct periodic Quality Assurance Reviews (QAR) to assure District compliance with this policy. Districts that are found in non-compliance may have their change order approval authority removed until conformity is assured.

TRAINING

The OCA will provide consultation to the Districts and individual training when requested.

FISCAL ANALYSIS

This policy will not have any monetary impact.

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I. Estimated Cost of Force Account

- A. An Estimated Cost of Force Account change order (ECFA) shall be processed if the amount of the Extra Work is greater than \$100,000 and the Force Account is expected to take more than two weeks to complete.
- B. The ECFA shall describe the work to be performed and state the estimated cost.
- C. Approval an ECFA allows payments as the work is performed up to the estimated change order amount.
- D. A cost analysis or estimate based on similar bid items shall be included in the change order.
 - 1. A cost analysis must detail
 - a. Labor costs: crew size, work classifications, rates, and the estimated hours of work for each classification.
 - b. Equipment costs: each piece of equipment to be used, Blue Book rates, rental rates, operating rates, and estimated hours of use for each piece of equipment.
 - c. Material costs: quantities of material to be used and the unit cost of each type of material.
 - d. Trucking costs: estimated amount of trucking required by hauling hours or weight and quoted hauling rates. If the trucking is covered by prevailing wage then the labor and equipment costs as required in a and b of this section.
 - e. Allowed mark ups.
 - f. A Contractor's affidavit shall be attached to the cost analysis stating that, "Labor rates shown are the actual rates paid for labor, unit prices for materials and rates for owned and rented equipment have been estimated on the basis they are not in excess of those charged in the area in which the work will be performed and discounts usually allowed are not included."

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2. An estimate based on similar bid items must state:
 - a. The state-wide average bid prices awarded used by item description and year awarded. An inflation factor may be used.
 - b. The bid prices used by project, type of work, and quantity. Do not adjust for inflation.

- E. After the work covered by a ECFA is complete, the District shall prepare a change order reflecting the actual total cost, substantiated by a summary of the actual cost of performing the force account work.
 1. The difference between the actual cost and the original estimated cost of the force account work shall be entered as a plus (positive) or a minus (negative), as the case may be and labeled "Difference Between Actual Cost and Estimated Cost of Force Account Work, Authorized by Change Order Number xx."
 2. The explanation shall give the reasons for difference in cost and any conditions encountered that differ from those originally anticipated, in order to substantiate final payment.
 3. If the difference is positive, another EWCO must be used.
 4. If the difference is negative, a CO shall be used.

6. The actual cost of Force Account may vary from the ECFA because:
 1. The number of hours required to perform the extra work was different than that estimated.
 2. The rates for labor and owned equipment may not vary from the rates stated in the approved ECFA when it is based on a cost analysis. The crew size , number and type of equipment may not vary without approval of the Engineer.
 3. The timely completion of the Force Account required the Contractor to work the crew more than a 40-hour week and incur overtime rates. This may be the case even if the cost analysis showed straight time wage rates.
 4. If the EWCO was based on bid items for similar work, then the actual amount of Force Account is not constrained by the ECFA.

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II. Actual Cost of Force Account Change Order

- A. An orderly summary of the actual cost of items required to perform non-bid work on force account basis shall be included in the EWCO explanation. Follow, as appropriate, the format given in the fictitious example in Appendix B. Substantiate the force account by comparison to project records and as follows:
1. Labor Costs documented and costed according to 109.05.C.1. & 2. and as follows:
 - a. The actual cost of labor covered by prevailing wage and fringes shall be substantiated by the Contractor's payroll records.
 - b. The rates paid to workers not covered by prevailing wages, such as time keepers and salaried foreman, shall be substantiated by the Contractor's affidavit required in Section XII.F of this Appendix. A 38% mark up is allowed salary and fringes paid.
 - c. If any person is paid more than the one rate, a separate listing shall be made for that person for each rate paid.
 - d. Labor costs shall conform to Section 109.04 (a) C&MS (1997) or 109.05.C.2 C&MS (2002) and shall not be in excess of rates paid when the crew is engaged in original contract work.
 - e. Separate fringes from administrative fees according to Appendix E.
 - f. For projects under the 2002 Spec Book, pay for liability insurance premiums in excess of 5% of payroll according to 109.05.C.11. Document the higher liability insurance premium rate with copies of paid premiums.
 - g. Force account wages and fringes on all Federally funded projects, including projects without Federal oversight, shall be checked by the District for compliance with prevailing wages and fringes. This check shall be documented on the change order and identify the person who performed the check .
 2. Material costs documented and costed according to 109.04(b) C&MS(1997) or 109.05.C.1. & 3. C&MS (2002) and as follows:

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- a. Invoices must be attached to support the quantities of materials used and the unit prices paid.
 - b. Credit for any discounts received by the Contractor must be taken into account in arriving at prices allowed for payment.
 - c. Freight or hauling costs charged to the Contractor and not included in unit prices shall be itemized and supported by invoices.
 - d. If only part of the expenditure represented by an invoice is applicable to force account work, or if the invoice represents expenditure for more than one force account item, the District will clearly indicate the actual amount of expenditure applicable to each Reference Number.
 - e. The fair market price of materials produced by the Contractor or taken from the Contractor's stock, shall be documented according to 109.05.C.1.g. and 109.05.C.3. of the 2002 C&MS. This method will be followed on projects under the 1997 Spec Book.
 - f. The cost of owned or rented equipment used to haul materials to the project is not part of the materials cost. Such equipment, when used for hauling materials, shall be listed under cost of equipment.
3. Equipment costs documented and costed according to 109.05.C.1. & 4 (C&MS 2002) including projects that are under C&MS 1997, and as follows:
- a. Allow Blue Book rates that were in effect at the time the force account was performed, however, Districts that use the CD-ROM or Internet may allow the rates given in the current up date if the estimated difference between the applicable and current rates total less than \$100 for all the equipment.
 - b. Each District Construction Office must subscribe to the Blue Book by: Printed book; CD-ROM, or Internet access and verify the rates submitted by the Contractor.
 - c. The cost of repair and maintenance is compensated in the rates allowed in 109.05.C.4. accordingly compensation for equipment repair is not allowed on force account.

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- d. Intermittently used owned equipment is compensated at the allowed rate for the full workday, the following criteria qualify for intermittently used equipment:
 - (1) Equipment on the force account exclusively all day and not used on bid work..
 - (2) Equipment works before and after the intermittent idle-period and its total working time during the workday is at least 2 hours.
 - (3) Equipment that is captive to the Force Account (ie it must remain at the Force Account site), but does not qualify for intermittently used owned-equipment, is paid as idle equipment according to Section 109.04(c)(2) C&MS (1997) or 109.05.C.4.c. (C&MS 2002) for the time it is not working.
 - e. State and Local sales taxes on rented equipment will be allowed and included in the base for the 15% mark up calculation.
 - f. Traffic control devices used in Maintaining Traffic and owned by the Contractor shall be treated as owned equipment.
 - (1) The Office of Construction Administration will periodically issue allowed rates for common traffic control devices and concrete barrier that are not listed in the Blue Book.
 - g. Tool trucks will be allowed for compensation if they are used at the force account site. Only the tools used from the tool truck will be allowed for compensation. Tools in the tool truck that are not used in the force account will not be compensated. A tool trailer that remains at the Contractor's office or yard will not be allowed on the force account. Tool trailers that are taken to the force account site will be allowed for compensation along with the tools used on the Force Account that were taken from the trailer.
5. Foreman's transportation is paid according to 109.05.C.5 of the 2002 C&MS, including projects under the 1997 Spec Book. for work performed on or after March 1, 2003.

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6. The prime Contractor's allowance is as provided in 109.05.C.5. of the 2002 C&MS or Section 109.04 of the 1997 C&MS.
 - a. The subcontractor force account costs must be documented and costed according to part II of this appendix except that the subcontractor will not be allowed a mark up on work performed by a sub-subcontractor.
7. Fees incurred during the performance of the force account, such as landfill and overload permit fees, will be included and paid without mark up according to 109.05.C.7 of the 2002 C&MS, including projects under the 1997 Spec Book.
 - a. Additional bonding costs for the force account will be paid by separate change order after determination of final quantities at the end of the project. The basis for compensation of additional bonding costs will be the invoice showing the additional premium charged by the Contractor's surety for the increased cost of the project.
 - b. Incentive payments for early completion and the Contractor's share of savings from an accepted VECP should not be included in the bonded amount. The District should break out these "non-construction payments" when communicating the final contract quantities and final contract amount according to Section 109.12.C,D, and E. of C&MS (2002) or 109.09 of C&MS (1997) to avoid being charged bonding costs on these payments.
8. Trucking costs documented and costed according to 109.05.C.1 & 8 (C&MS 2002) including projects that are under C&MS 1997, and as follows:
 - a. Hauling by an owner-operator is not subject to prevailing wage in any circumstances. Evidence for owner-operator status is the registration of the truck which shows ownership by the driver as documented by their drivers license.
 - b. Hauling by employees of the Contractor, subcontractor, or trucking company from a plant, borrow site, or a supplier onto the project and hauling material off the project to a waste site is not subject to prevailing wage if the plant, borrow or waste site, or supplier's facility was not established for the project but was in existence and operating commercially before the start of work on the project.

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- c. Hauling by employees of the Contractor, subcontractor, or trucking company from a plant, borrow site, or a supplier onto the project and hauling material off the project to a waste site is subject to prevailing wage if the plant, borrow or waste site, or supplier's facility was established for the project and if any portion of the facility site is within 1 mile of any portion of the project Right-of-Way.
9. Professional and specialized work documented and costed according to 109.05.C.1 & 9 (C&MS 2002) including projects that are under C&MS 1997, and paid as third-party billing.

B. An affidavit by the Contractor shall be attached to the change order stating:

“The name, classification, total hours worked and rates paid each person listed on the Summary of Actual Cost are substantiated by actual records of persons employed on the force account work. All materials and equipment listed on the Summary of Actual Costs are substantiated by actual records of materials and equipment actually used in performance of the force account work and the price of any owned equipment not previously agreed upon is not in excess of prices charged for similar equipment in the area in which the work was performed.”

III. Reconciliation of Force Account Records.

- A. When the Contractor's Force Account records disagree with the project records the District shall use the following order of priority to determine the actual cost of Force Account:
 1. Daily Force Account records signed by the Project and Contractor personnel will govern over other Contractor and Project records, however, when the Contractor is subject to a Union Contract that requires a minimum number of paid hours, the compensation will be for the verified contract minimum hours.
 2. Project records of labor and equipment hours will have more weight than Contractor records, however, the District shall reach agreement with the Contractor for the number of hours for labor and equipment that reasonably approximate the hours required to perform the task.

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3. Differences on material quantities used will be resolved by field measurements of the installed quantities or the Engineer's estimate of the amount of temporary or unmeasurable material used. The Engineer shall review and consider the Contractor's material invoices and material certifications, but the Engineer will make the final estimate of a reasonable amount of material used.
- B. When there is a conflict between the ECFA and the Contractor's Force Account records on crew size, worker classification, or number, type, and size of equipment, the District shall use the following order of priority to determine the actual cost of Force Account:
1. The ECFA will govern unless the Engineer approved a variance from the estimated Force Account after approval of the ECFA.
 2. The documented actual number of hours of labor for each worker classification and equipment hours by type and size, will govern over the estimated hours in the ECFA and the resulting cost of Force Account will govern over the estimated total in the ECFA.
- C. When the Contractor's Force Account shows the work done on overtime and there was no prior agreement that the work would be done on overtime:
1. The District shall accept the overtime rates when:
 - a. The District determines that overtime had to be worked in order to avoid a delay to the completion of the project. The overtime hours do not have to be worked on the force account work but only that working on the force account caused the Contractor to incur overtime for the crew during a calendar week.
 - b. The District denied or failed to act timely on a request for a time extension for the extra work and there was no float in the project schedule to perform the work without impacting the critical path.
 2. The District shall deny the overtime rates when:
 - a. There was a prior agreement that the work would be done on straight time without delaying the project completion and the District was willing to grant a time extension to avoid overtime.

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- b. The Contractor brings in a different crew to perform the force account for the sole purpose of incurring over time.
- D. When the Contractor's Force Account includes crews or individuals that performed work without the knowledge of the Project, it can be paid on the Force Account providing:
1. The Engineer determined that work was actually performed, necessary for the completion of the authorized extra work, and the amounts of labor, equipment, and material requested for payment are reasonable for the work performed.
 2. If the work, such as inspecting and maintaining a traffic zone or dust control, did not create a permanent feature that could be evaluated, the Project can include it on the Force Account if it was reasonable and customary in the performance of the authorized extra work.

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ACTUAL COST OF FORCE ACCOUNT

Contractor: M.P.F.C.

Project: Essex County Project 100(04)

Summary of Work: Piling things on top of things at station 1973+ 00 Rt 100 feet.

Date: April 1, 2005 Thru: April 1, 2005

SUMMARY OF COSTS:

Cost of Labor:	\$1,993.57
Cost of Owned Equipment	\$ 1290.14
Cost of Rented Equipment	\$ 210.39
Cost of Materials	\$5,520.00
Cost of Trucking	\$ 967.44
Cost of Subcontractor	\$ 0.00
Third Party Billing	\$ 378.00

Total Cost of Force Account \$10,359.54

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Cost of LABOR

Contractor: M.P.F.C.

Project: Essex County Project 100(04)

Summary of Work: Piling things on top of things at station 1973+ 00 Rt 100 feet.

Date: April 1, 2005 Thru: April 1, 2005

			A	B	x	y	f	xA+yB	f(A+B)
Date of Work	Name of Worker	Work Class	ST Hrs	OT Hrs	ST Wage Rate	OT Wage Rate	Fringe Rate	Total Wages	Total Fringes
4/1/05	John Clesse	Foreman Laborer	8	2	\$25.00	\$37.50	\$7.00	\$275.00	\$70.00
4/1/05	Eric Idle	Laborer	8	2	\$20.00	\$30.00	\$7.00	\$220.00	\$70.00
4/1/05	Mike Palin	Operator	6	2	\$30.00	\$45.00	\$9.50	\$270.00	\$76.00
4/1/05	Mike Palin	Driver	2	0	\$30.00	\$45.00	\$9.50	\$60.00	\$19.00
4/1/05	Terry Jones	Diver	5	0	\$19.29	\$28.94	\$7.02	\$96.45	\$35.10

Subtotal: ST Wages \$696.45 OT Wages \$225

Total Wages: \$921.45

Total Fringes: \$270.10

38% Mark Up on Wages & Fringes:[.38 x (\$921.45 + \$270.10)]: \$452.79

Payroll Taxes 21.95% of Wages (.2195 x \$921.45): \$202.26

Administrative Fees Charged per Hour of Payroll

[Laborers (20hrs. x \$.29), Operator (10 hrs. x \$.19), Driver (5 hrs x \$.19)] \$ 8.75

Liability Insurance Premiums in Excess of 5%[(20%- 5%)x \$921.45]: \$138.22

(allowed only on 2002 Spec Book projects, attach supporting invoice)

Total Labor Costs: \$1,993.57

Payroll Tax and Government Insurance Premiums Breakdown

FICA (Social Security 6.20% Medicare 1.45%) 7.65%

Federal Unemployment Insurance (paid on the first \$7,000 of wages) 0.80%

State Unemployment Insurance (paid on the first \$9,000 of wages) 6.50%

Ohio Workers' Compensation (premium reductions are credited) 7.00%

21.95%

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Administrative Fee Breakdown

Laborers: OCA Dues \$.14/Hr, OCIA \$.05/Hr, LECET \$.05/Hr, Tri-Fund \$.05/Hr

Operator and Driver: OCA Dues \$.14/Hr, OCIA \$.05/Hr

NOTE: An explanation of mark ups, payroll taxes, administrative fees, and liability insurance is given at the end of Appendix B.

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Cost of Owned Equipment

Contractor: M.P.F.C.

Project: Essex County Project 100(04)

Summary of Work: Piling things on top of things at station 1973+ 00 Rt 100 feet.

Date: April 1, 2005 Thru: April 1, 2005

Manf	Model	Yr	Des	date	hrs	work	idle	Rate*	Cat/BB Sec-pg	Op Rate	Amount
CAT	722P	98	Stacker	4/1/05	10	10	0	\$27.82	9-43	\$7.45	\$352.70
CAT	320	00	Backhoe	4/1/05	10	10	0	\$45.61	9-15	\$24.80	\$704.10
NAV	550	97	Truck	4/1/05	5	5	0	\$6.88	20-6	\$8.20	\$ 75.00
Misc	NA	99	Lowboy	4/1/05	2	2	0	\$9.86	Trailers	\$7.10	\$33.92
Misc	NA	00	Tracter	4/1/05	2	2	0	\$15.80	O-High Trks	\$21.41	\$74.42
Foreman Truck	NA		Truck	4/1/05	10			\$5.00	NA		\$ 50.00

\$1290.14

* Rate is the Blue Book Monthly Rate divided by 176 hours to give an hourly rate and then multiplied by all allowed factors.

(Monthly Rate/ 176) (Region Factor) (Age Factor) (109.05-1 Factor)

CAT 722P:

[Caterpillar 722P, stacker, manufactured 1998, brought to project just for this force account only]

$$(\$2585 / 176 \text{ hrs}) (.996) (.956) (1.989) = \$ 27.82 / \text{hr}$$

$$109.05-1 \text{ Factor: } 2.048 - 10/168 = 1.98847619 \text{ round to } 1.989$$

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CAT 320

[Caterpillar backhoe, manufactured in 2000, on the project for other work, it is used to excavate in the morning for 2 hours and then in the afternoon for 2 hours, since it is not used for other project work the day of the force account, it is considered intermittent usage and is paid as working for the full 10 hours]

$$(\$8044/176)(1.00)(.998) = \$ 45.61/ hr$$

Nav 550:

[Navistar 550 truck to haul things, already on the project and after 5 hours on force account it was used on other project work included in the 5 hours is one-half hour to drive it to the force account site and then back.]

$$(\$1285/ 176 hrs) (.996) (.940) = \$ 6.88/ hr$$

MISC 1999 Trailers and 2000 O-High Trks

[Lowboy trailer 20 foot 90 Ton and Truck to haul the CAT 722P from the Contractor yard to the force account site and then back, the Blue Book reference is by category because the rates were obtained from the internet Blue Book. The trailer and truck are on the project for other work.]

$$(\$1765/176)(.996)(.987) = \$ 9.86/ hr$$

$$(\$2817.80/176)(1.002)(.985) = \$ 15.80/ hr$$

Foreman's Truck:

[Truck drove by the foreman to the force account site and not used to haul equipment or materials]

Paid at \$5.00 an hour for every hour the foreman and truck are at the force account site according to Section 109.05.C.5 C&MS (2002) and by policy the rate used on 1997 Spec Book projects force accounts performed on or after March 1, 2003.

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Cost of Rented Equipment

Contractor: M.P.F.C.

Project: Essex County Project 100(04)

Summary of Work: Piling things on top of things at station 1973+ 00, Rt 100 feet.

Date: April 1, 2005 Thru: April 1, 2005

Equipment Rented for Force Account

Description	Invoiced Amount	
Hammer Drill	\$ 77.28	(10 hours at \$7.29/ hr plus 6% sales tax)
15% mark up	\$11.59	
Operating costs	\$ 8.00	(Full 10 hours because it was used intermittently, at a Blue Book rate of \$.80/ hr)
Total:	\$ 96.87	

Rented Equipment Already on Project for Other Work

Hammer Drill Invoiced Monthly Rate of \$513.04/ month including 6% sales taxes

Allowed for force account: $(\$513.04 / 176) (10 \text{ hrs}) = \$ 29.15$

15% Mark Up = \$ 4.37

Operating Cost 10 hours at \$8/hr = \$ 80.00

Total = \$113.52

Total rented equipment: \$210.39

NOTE: Attach copies of invoices for the rented equipment.

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Cost of Material

Contractor: M.P.F.C.

Project: Essex County Project 100(04)

Summary of Work: Piling things on top of things at station 1973+ 00 Rt 100 feet.

Date: April 1, 2005 Thru: April 1, 2005

Things from Contractor's stock: 384 cu-yds @ \$5.00/ cu-yd	\$ 1,920.00
Things from commercial quarry: 192 cu-yds @ \$15./cu-yd	\$ 2,880.00
MPFC mark up 15%	\$ 720.00
Total Cost of Material	\$ 5,520.00

Price for material from Contractor stock is supported by affidavit according to Section 109.05.C.1.g C&MS (2002). Price for materials from commercial quarry is stated in invoice and is sales tax free because the material will remain on the project. Attach the required affidavit and invoices.

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Cost of Trucking

Contractor: M.P.F.C.

Project: Essex County Project 100(04)

Summary of Work: Piling things on top of things at station 1973+ 00 Rt 100 feet.

Date: April 1, 2005 Thru: April 1, 2005

Trucking of things from borrow site established for project and within 1 mile of project.

Vanguard Trucking Company:

Date of Work	Name of Worker	Work Class	ST Hrs	OT Hrs	ST Wage Rate	OT Wage Rate	Fringe Rate	Total Wages	Total Fringes
4/1/05	J. Hoffa	Truck Driver Gr 1	8	0	\$19.29	\$28.94	\$7.02	\$154.32	\$56.16

Total Wages	\$ 154.32
Total Fringes	\$ 56.16
38% Mark Up	\$ 79.98
Payroll Taxes use 15% of wages	\$ 23.15
OCIA Fee \$.05/hr	\$.40
Administrative fee \$.05/hr	\$.40
Vanguard Trucking Total Labor Costs	\$ 314.41

Manuf	Model	Yr	date	hrs	work	idle	Rate*	BB Sec-pg	Op Rate	Amount
Nav	550	97	4/1/05	8	8	0	\$13.67	20-6	\$8.20	\$ 174.96

* Rate = (Monthly Rate/ 176) (Region Factor) (Age Factor) (109.05-1 Factor)

$$(\$1285 / 176 \text{ hrs}) (.996) (.940) (2) = \$13.67 / \text{hr}$$

Vanguard labor costs	\$ 314.41
Vanguard owned equipment costs	\$ 174.96
MPFC mark up 5%	\$ 24.47
Cost of Trucking under PW	\$ 513.84

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Trucking Not Under Prevailing Wage

Contractor: M.P.F.C.

Project: Essex County Project 100(04)

Summary of Work: Piling things on top of things at station 1973+ 00 Rt 100 feet.

Date: April 1, 2005 Thru: April 1, 2005

Trucking things to force account site from a commercial quarry in business before the project started work. This trucking is not covered by prevailing wage.

Invoice from Vanguard Trucking: 8 hrs Trucking at \$54.00/ hr

8 hrs x \$54.00	\$ 432.00
MPFC mark up 5%	\$ 21.60
Cost of Trucking not under PW	\$ 453.60

Note: Attach invoice form trucking company.

Total Cost of Trucking

Under PW	\$ 513.84
Not under PW	\$ 453.60
	\$ 967.44

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Professional Survey Cost

Joseph Sanspied Survey Company

3 hours of surveying site of piling things on top of things March 28, 2005:

\$120/ hr x 3 hrs \$ 360.00

MPFC mark up 5% \$ 18.00

Total Third Party Billing \$ 378.00

NOTE: Attach copy of invoice from the surveying company.

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Explanation of Labor Mark up, Payroll Taxes, Administrative Fees, and Liability Insurance Premiums

Compensation of Wages and Fringes with 38% Mark Up

The Contractor is entitled to compensation for the wages and fringes paid to the crew working on the force account plus the specified mark up of 38% specified in 109.05.C.2. of the 2002 C&MS and 109.04(a) in the 1997 C&MS. This mark up provides compensation for profit and other expenses specified in 109.05.C.11 in C&MS 2002 and 109.04(f) in C&MS 1997.

The Contractor is allowed compensation for wages and fringes at rates normally paid to the work classifications involved on the force account. The wages and fringes must be at least the Prevailing Wage rates specified in the proposal. The Contractor is entitled to reimbursement for wages and fringes paid at rates above the Prevailing Wage rates if such higher rates are supported by certified payrolls on original contract work or other acceptable documentation showing that this is Contractor's normal compensation to these workers.

The crew size and composition allowed is what the Contractor would normally use on similar work paid by bid prices. The project records should match the crew size submitted on the force account. Any differences must be explained to the satisfaction of the District.

Compensation for the salary or wages of the superintendent is not allowed on the force account. This expense is covered by allowed mark ups. If the superintendent performs physical labor covered by Prevailing Wage on the force account for more than 20% of the work day, then the time the superintendent is engaged in Prevailing Wage work on the force account is compensable.

Payroll Taxes and Government Insurance Premiums

FICA (Social Security 6.20% Medicare 1.45%) 7.65%

This is paid by the Contractor for each employee as follows:

- Social Security (OASDI) 6.20% of the first \$87,000 paid to the worker in the calendar year.
- Medicare 1.45% of all wages paid to the worker during the calendar year.

An equal amount is deducted from the worker's pay for the worker's contribution. The expected rate during the entire year is 7.65% of payroll and the District may accept it as such without verification.

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Federal Unemployment Insurance .8%

The Contractor pays into the Federal Unemployment fund an amount equal to .8% of the first \$7,000 that is paid to that worker during the calendar year. After a worker is paid \$7,000 in wages the Contractor does not pay into Federal Unemployment for that worker for the rest of the year.

State Unemployment Insurance .1% to 6.50%

The Contractor pays Ohio unemployment taxes as a percentage of the first \$9,000 paid in wages to a worker during a year. This includes overtime pay. This percentage is established by the Ohio Department of Jobs and Family Services (ODJFS) and varies by Contractor as follows:

- A new Construction Contractor is charged 3.5%.
- Once a Contractor's account is charged with benefits for 4 consecutive calendar quarters ending June 30 ODJFS establishes a new Experience Rate based on the amount of unemployment claims the Contractor's employees made and the Contractor's annual taxable payroll (reported to ODJFS quarterly by the Contractor).
- The Contractors are notified by December 1st as to the rate they will pay for the coming year.
- Contractors who fail to submit their payroll by September 1 are charged 125% of the maximum experience rate. This Delinquency Rate for the year 2002 would be $1.25 \times 6.5\% = 8.125\%$, however if the Contractor files the necessary by December 31 then their rate is revised to their appropriate Experience Rate.
- If the Contractor fails to submit their payroll information by December 31, then they are charged 120% of their appropriate Experience Rate as a Penalty Rate. For the year 2002 this would likely be $1.2 \times 6.5\% = 7.8\%$

For both Federal and State Unemployment taxes, the full rates are compensable if the work is performed on or before July 6 of the year. For work performed after July 6 of the year, the Contractor must show that these taxes are still being paid for the individual worker. Acceptable evidence would be the company's monthly unemployment tax report.

Ohio Workers' Compensation 1% to 34%

This premium is paid into the State Insurance Fund for injured workers, administered by the Ohio Bureau of Workers' Compensation (BWC). This premium is calculated as a percentage(s) of wages paid by the Contractor throughout the calendar year. The payroll rates vary greatly by Contractor based on the type of work the Contractor does and their on-the-job accident history.

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The BWC pays an injured or disabled worker's medical expenses and a portion of their normal income when they cannot work due to injury or disability suffered on the job. Under Ohio Law the worker cannot sue the Contractor for damages for a job related accident.

Twice a year (January and July), the Contractor receives a form from BWC which informs the Contractor what rates they are charged for the previous six months of work. The Contractor uses this form to report to BWC their payroll for the previous six months of work and calculate their six-month premium. This means that wages paid from January 1 to June 30 are reported on the July payroll report and wages paid July 1 to December 31 are reported on the January Payroll Report.

BWC payroll report instructs the Contractor to report the payroll for the previous 6-month period separating the payroll according to the different manual classifications. Manual classifications are assigned to each employer based on the job duties reported on the initial application for BWC coverage. The payroll report comes to the Contractor with the manual classifications and the rates already entered. The Contractor enters the actual payroll for each manual classification, multiplies by the rate assigned to that manual classification, then adds the totals for each and this figure is the premium amount due to BWC. Accordingly, the Contractor does not know for certain what rate they will be charged until after the work is performed, but they have a good approximation. Also, the rates vary by worker classification but Contractors quote a single rate which is acceptable if it fairly represents the effective rate to be paid for the crew(s) working on force the account.

When there is a significant surplus in the State Insurance Fund, BWC will reduce Contractors' premiums. For the years 2001 and 2002, these reductions have been 75% of the normal premium and must be reflected on the force account. They are announced on the BWC web site. Many large Contractors have a BWC recognized self-insurance program, which do not benefit from BWC premium reductions.

Longshore & Harborworkers' Compensation and Jones Act 52.50%

This is a Federal program to provide medical care and income compensation to dock workers injured or disabled by on-the-job accidents. The Contractor is required to carry this insurance only for workers who are working from a barge or ship or unloading a barge or ship. There is an program called the Jones Act that covers the captain and crew of a barge or ship and would be compensable on the force account if it requires such workers.

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The Contractor may carry Longshore & Harborworker insurance for any work “Over Water”, however, force account compensation is allowed only for work from a barge or ship, loading and unloading a barge or ship, and for the captain and crew.

This insurance can be obtained through the Ohio Bureau of Workers’ Compensation which is the rate cited above or from a Federally recognized private insurance company.

Standard 15% of Wages Instead of Itemization

The Contractor may elect to be compensated for payroll taxes at a specified rate of 15% of force account wages. This is specified in section 109.05.C.2. of C&MS 2002 and 109.04(a) of the 1997 C&MS. The Contractor may take this option even when the actual payroll taxes are less than 15%.

Payroll taxes are paid on wages only and not on fringes paid into a benefit program. Some Contractors, however, pay their workers wages equal to the required prevailing wage and fringes instead of paying into fringe benefit programs. In these cases of “Paying Fringes as Cash” the amount that represents the required fringe payment is taxed as wages and the Contractor is entitled to 15% of the fringes paid as cash as part of the compensation for payroll taxes.

Administrative Fees

Contractors that use workers covered by Union contracts must pay various fees and dues required by the contract. A summary of such payroll dues and administrative fees for the current Union contracts, are listed in Appendix D. These are compensable under 109.05.C.2. of the 2002 C&MS on force account without a mark up. The 1997 C&MS does not address this issue, however, compensation without mark up is allowed on projects under the 1997 Spec Book.

Appendix D does not give the amount of the dues and fees, because they are subject to change by new Union contracts. The amounts are stated in the Union contracts and the Contractor or the District Prevailing Wage Coordinator can supply the District Construction Office with copies of these charges.

Liability Insurance Premiums in Excess of 5%

The Contractor’s premiums for General Liability and Auto Liability required by 107.14 C&MS (1997) or 107.12.B and C of C&MS (2002), are charged as percentages of the Contractor’s payroll for various work classifications. The classifications that involve greater risk of liability, such as steel erection and bridge painting, are charged higher rates than those that carry lower risk of liability such as earthwork. The overall company-wide rate most Contractors are assessed is no more than 5%.

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The 5% of payroll premium that most Contractors incur on extra work is compensated as part of the allowed 38% mark up on labor costs. This is stated in 109.05.C.11. in the 2002 Spec Book and 109.04(f) in the 1997 Spec Book and modified in the Boiler Plate proposal note. The 2002 Spec Book, however, recognizes that some Contractors whose work is mostly in high risk classifications will be charged a premium in excess of 5% of payroll. This excess, when documented by the Contractor, is compensable without mark up, on force accounts and agreed prices based on cost analysis on projects under the 2002 Spec Book. This compensation is not allowed on projects under the 1997 Spec Book.

APPENDIX C RECOGNIZED FRINGE BENEFITS

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RECOGNIZED FRINGE BENEFITS

(As listed by the Ohio Department of Commerce as part of Prevailing Wages)

These payroll costs are included in the 38% mark up allowed on labor.

Work Class	H & W	Pension	Apprenticeship Training	Annuity	Vacation	E&S
Laborer	X	X	X			
Operating Engineer	X	X	X			Note 1
Ironworker	X	X	X	X	Note 2	
Cement Mason	X	X	X	X		
Carpenter	Note 3	X	X	X		
Teamster	X	X				
Painter	X	X	X			
Electrical: Lineman, Groundman, Equipment Operator	Note 4	Note 5	X	Note 6		

See the project proposal prevailing wage provisions for the dollar amount the contract must pay in fringes. If the Contractor claims a higher figure than the listed rate they must submit documentation that supports the higher rate as their normal contract arrangement with their workers.

Note 1: E&S is Education and Safety Fund, it is listed on the schedule of Ohio Prevailing Wages for Operating Engineers as "Other".

Note 2: Vacation is a fringe benefit recognized by Dept of Commerce for Ironworkers in Belmont, Guernsey, Harrison, Jefferson, Monroe, and Muskingum Counties. This is required by the contract for Ironworkers Local 549.

Note 3: Carpenter Health and Welfare contribution includes their contract required contribution to the United Brotherhood of Carpenters and Joiners of America National Health & Safety Fund and United Brotherhood of Carpenters and Joiners of North America National Apprenticeship and Training Fund. This is identified as National Health /Safety in their contract.

Note 4: LINCO, Line Construction Benefit Fund

Note 5: NEBF, National Electrical Benefit Fund

Note 6: NEAP, National Electrical Annuity Fund

APPENDIX D PAYROLL DUES AND ADMINISTRATIVE FEES

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PAYROLL DUES AND ADMINISTRATIVE FEES REQUIRED BY UNION CONTRACTS

These dues and fees are compensated but no mark up is applied to them according to Section 109 109.05.c.2. 4th paragraph (C&MS 2002) the same rule applies to projects under C&MS 1997.

Administrative fees and dues that contractors are required to pay by the Ohio Contractors Association (OCA) contracts with various Labor Unions: Laborers, Operating Engineers, Carpenters, Cement Masons, & Teamsters as shown in their Master Contract .

Work Class	OCA Dues or Administrative Fee	OCIA	Tri-Fund	LECET
Laborer	X	X	X	X
Operating Engineer	X	X		
Carpenter	X	X		
Cement Mason	X	X		
Teamster	X	X		

Contractor Dues: Membership dues based on payroll paid to the Ohio Contractors Construction Association for negotiating and administering labor contracts by OCA members. Non-OCA Contractors under the OCA-Union contracts pay the Administrative Fee below.

Administrative Fee: Required of Contractors covered by the Union contract but not OCA member.

Note: A Contractor will pay either OCA Dues or the Administrative Fee but not both.

OCIA , Ohio Construction Information Association: An association of Labor, Contractors, and business groups that are concerned with the condition of Ohio’s public infrastructure. They research Ohio infrastructure issues and inform the public of infrastructure needs.

LECET, Laborers-Employers Cooperation and Education Trust: Labor-Management cooperation fund established in accordance with Section 302(c)(9) of the Taft-Hartley Act.

Tri-Fund, LIUNA: Labor-Management cooperation fund established in accordance with Section 302(c)(9) of the Taft-Hartley Act.

APPENDIX D PAYROLL DUES AND ADMINISTRATIVE FEES

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IRONWORKERS FEES

Ironworkers are not covered by the OCA-Union Contracts. They are covered by the Association of General Contractors (AGC) contract with the Ironworkers Union. The fees that are paid by the contractor for Ironworkers are:

Construction Advancement Fund : This fee is paid to the AGC for negotiating and administering the contract with the Ironworkers.

IPAL: This fee is paid to the Ironworkers Political Action League. Compensation for this Contractor expense is allowed on Federal-aid projects because the FHWA Division Office has judged that proposal note "Limitation of Use of Contract Funds for Lobbying" is not violated because the IPAL is primarily to support Ironworkers apprentice program and is only incidentally used for lobbying and political action.

ELECTRICAL WORKERS FEES

The International Brotherhood of Electrical Workers (IBEW) contracts apply to several electrical contractors who work on ODOT projects. The work classifications involved are Lineman, Groundman (some areas this is Groundman/Trucker), and Equipment Operator. These contractors are required to pay the following fees that are required under the IBEW contracts with the National Electrical Contractors Association (NECA).

Electrical Contractors Administrative Fund (ECAAF): This is a fee paid to the local NECA chapter for negotiating and administering the IBEW-contract on behalf of the member contractors. There are several NECA chapters in Ohio: Central Ohio (Columbus), Cincinnati, Greater Cleveland, North Central (Akron), Ohio/Michigan (Toledo & northwest Ohio), Penn-Ohio (Youngstown), and Western (Dayton). This payroll fee is paid by all contractors who employ workers covered by the various IBEW contracts.

National Electrical Industry Fund (NEIF): This is a fund in Washington DC that is used to promote the electrical industry. Contractors who are members of NECA are required to pay this payroll fee.

National Labor Management Cooperative Committee (NLMCC): This payroll fee is required of all contractors who employ workers covered by the various IBEW contracts.

APPENDIX E THIRD PARTY BILLING

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THIRD PARTY BILLING

- I. Third party billing shall consist of a paid invoice amount plus 5 percent mark up. The allowed mark up is limited to \$10,000.00 for the entire third party billing work.
- II. Third party billing is limited to the following circumstances and services:
 - A. Emergency work to eliminate a hazardous situation which does not allow time to process a Form C-92 (Request to Sublet).
 - B. Professional services such as surveying, testing, erosion control plan development by a consultant, or other consultant engineering.
 - C. Specialized work that is not usually performed on a project such as:
 1. Removal of asbestos, underground storage tanks, or other hazardous waste.
 2. Railroad flagging performed by a railroad approved consultant.
 - D. Maintaining traffic items installation, periodic maintenance, and removal by a traffic control service or rental company provided the workers are not on the project full-time.
- III. The following non emergency work cannot be paid by third party billing:
 - A. Work entirely within the project right of way and covered by prevailing wages and contractor work types.
 - B. Work usually performed by a contractor or subcontractor.
 - C. Operators of rented equipment within the project right of way.

County:
Project:
Contract No:

**EMERGENCY PERMISSION TO PROCEED WITH WORK
UNDER *ORC SECTION 5525.14***

Description of the Work:

Estimated Quantities:

Method of Payment:

FHWA Concurrence (if required):

Statement of Fact that an Emergency Exists:

Whereas, the above described work is necessary to complete fully the Work as intended by the plans, I hereby declare that any undue delay in the performance of the work will/would have jeopardize(d) the completion date and increase(d) the cost of the project.

District Deputy Director _____ Date: _____

c: Original to District file
Contractor
Office of Construction Administration (Chris Hines)
Copy for Change Order
Project Engineer

County:
Project:
Contract No.

**AMENDED EMERGENCY PERMISSION
UNDER *ORC SECTION 5525.14***

Description of the Work:

Date and Amount of Original Emergency Declaration:

Actual Cost to Perform Emergency Work:

Amendment to Original Emergency Declaration:

Whereas, the above described work was covered by a previous emergency declaration allowed by O.R.C. section 5525.14 and the work performed was within the scope of that emergency, I hereby amend the previous declaration to include the actual cost to perform the emergency work.

District Deputy Director _____

Date: _____

c: Original to District file
Contractor
Office of Construction Administration (Chris Hines)
Copy for Change Order
Project Engineer

APPENDIX H THIRD PARTY BILLING

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EXTENSION OF WORK LIMITS

- I. The DDD may extend work limits on a project under contract for the purpose of adding work outside of the original project. This action shall be limited to work required to complete the project as originally intended or to prevent an immediate threat to human life. The procedures are as follows:
 - A. The project limits are extended by the DDD signature of a document entitled "EXTENSION OF WORK LIMITS" with the following contents:
 1. The extension must identify the original work limits by station, the new work limits, the amount of extension in kilometers, miles, meters, or feet, and the direction of extension.
 2. The extension must describe the added work to be performed in the new work limits.
 3. The extension must explain the emergency situation or the circumstances requiring the extension of the work limits.
 4. The extension of the work limits may be included on an emergency permission to proceed with the work prior to processing a change order described in Section X.B.3 of 510-008(SP).
 - B. The extension shall be kept in the District project file.

APPENDIX I CHANGED CONTRACT CONDITIONS AND CLAIMS

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CHANGED CONTRACT CONDITIONS AND CLAIMS

Contractor costs incurred as the result of a change in contract conditions from the time of bid are compensable by EWCO. The District shall establish the existence of any changed condition and allowable compensation based upon acceptable Contractor supplied documentation or project records and the guidelines stated in this Appendix.

If the District and Contractor do not agree on the existence of a changed condition or the compensable cost and time extension resulting from an established changed condition, then a dispute exists which is subject to the resolution process established by the proposal note entitled "Dispute Resolution and Administrative Claim Process".

- I. The following are compensable changed contract conditions that cover most situations, but are not all inclusive of every possible situation. The Office of Construction Administration is authorized to modify this list by e-mailing Administrative Rulings to the Districts.
 - A. Differing site conditions covered by Section 104.02.B. C&MS(2002) or 104.02 (a) C&MS(1997).
 1. Examples are:
 - a. Rock strata encountered at a different location than shown in the plans.
 - b. Rock strata encountered that is substantially different in type or condition than shown in the plans. Examples are significant differences in layer thickness, weathering, strength or hardness, recovery or loss of core, or rock quality designation.
 - c. In the absence of plan soil borings or profile or any other contract indication of subsoil conditions, the excavation of rock other than that covered by Item 503, does not warrant additional compensation, except if the rock strata is unusual for the geographic area of the project site.
 - (1) A rock strata anomaly may be established by comparing the rock elevation encountered with those reported for the area in Water Well Logs on the Ohio Department of Natural Resources web site. "www.dnr.state.oh.us" ; or
 - (2) Comparison to rock stratum exposed in local road cuts.

APPENDIX I CHANGED CONTRACT CONDITIONS AND CLAIMS

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4. If rock or shale is encountered in the excavation for a structure, it shall be paid under item 503 Unclassified excavation including rock, shale, or rock and/or shale.
 5. Boulders not shown on the plans and of a size and number that are unusual for the area.
 6. A human-buried object or structure not shown in the plans.
 7. A buried object or structure which is larger or in a different location than shown in the plans.
2. Groundwater is not a differing site condition, except for an artesian condition not shown in the plans. An artesian condition is clear groundwater that rises above the water bearing strata in an excavation.
 3. Compensation is in accordance with Section 109.04 C&MS (1997) or 109.05 C&MS (2002).
- B. Suspension of Work under Section 104.02 (b) C&MS (1997) or 104.02.C. C&MS (2002).
1. The Engineer may order a suspension of Work for any reason. Usually ordered suspensions are to avoid conflicts with local events or adjacent projects, to comply with a court order, to allow archaeological studies under Section 203.04 C&MS (1997 & 2002), and to resolve plan errors or omissions.
 2. Suspensions that are the result of improper work, faults of the Contractor, subcontractors, or suppliers are not compensable.
 3. Suspensions due to weather, strikes, shortages of labor, equipment, or material, natural cataclysm, epidemics, fires, and vandalism, and other unforeseeable delays are not compensable, but may warrant a postponement of the contract completion date.
 - a. The cost of the State Field Office for the extended contract period is compensable.
 - b. The repair of damage to the Work caused by weather or a natural cataclysm is compensable if the Contractor did exercise normal care to protect the work.

APPENDIX I CHANGED CONTRACT CONDITIONS AND CLAIMS

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4. Compensation will be made provided the Contractor notifies the Engineer within the time-period specified in the Contract Documents.
 5. Recognized costs will be compensated in accordance with:
 1. Section 109.04 C&MS (1997) or 109.05 C&MS (2002) for added work on the project.
 2. Delay costs will be paid according to 109.05.D. C&MS (2002) for projects under either the 1997 or 2002 Spec Book.
- C. Changes in scope of work
1. Changed contract quantities are paid at the unit bid price provided:
 - a. The total increase in a reference number is less than the Contract Limits.
 - b. A decrease in reference number is no more than 25 percent.
 - c. The cost of maintaining traffic associated with a quantity increase is compensable since the lump sum bid for Item 614 Maintaining Traffic is based on the proposal estimated quantities. The Department will not seek a savings in the maintaining traffic item for decreases or elimination of work, unless there is a significant change in the scope of maintaining traffic.
 2. Increases in a reference number greater than the Contract Limits are compensated in accordance with C&MS Section 109.04.
 3. When a decrease in a reference number quantity is more than 25 percent, the District shall make a lump sum payment based on the unit price increase of the remaining work as prescribed in Table I of Section 104.02 C&MS (1997) or Table 104.02-2 C&MS (2002).
 - a. If the Contractor documents that the adjustment in the spec book Table is not sufficient to cover fixed costs associated with the diminished work, the Engineer shall determine a fair and equitable adjustment based upon the Contractor documented costs if compensation is found warranted.

APPENDIX I CHANGED CONTRACT CONDITIONS AND CLAIMS

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4. The following costs associated with eliminated items are compensable and paid in accordance with C&MS Section 109.04:
 - a. Restocking charges supported by paid invoices. A 5 percent mark up is added to the compensation for overhead and profit.
 - b. The cost of material transferred to the Department or a local government agency in lieu of restocking or disposal. The allowed compensation is the paid invoice cost plus 15 percent markup, but no more than the unit bid price for the reference number involved. Federal participation is not allowed.
 - c. Hauling costs, if not included in restocking charges, for returned material and for material delivered to the Department.
5. Changes in material specifications that result in increased cost to the Contractor are compensated by lump sum adjustment to the reference number. The allowed compensation is equal to the invoice supported material cost increase plus 15 percent markup for profit and overhead.
6. Material cost savings resulting from a specification change shall be credited to the project by a lump sum adjustment to the reference number plus a 15 percent markup if the originally specified material has not been ordered.
 - a. If the original material was ordered before the Contractor was informed of the change, the savings markup allowed is 2.5 percent in order to exclude profit on the original bid price and pay only for incurred overhead.
 - b. If the Contractor does not agree with savings calculated by the criteria in this Section, then the original item shall be nonperformed and the work shall be performed under the new specification by force account under C&MS Section 109.04.
7. Compensation for loss of anticipated profit resulting from any change in the scope of work is not allowed. This prohibition is specified in Section 104.02 C&MS (1997) or 109.04 C&MS (2002).

APPENDIX I CHANGED CONTRACT CONDITIONS AND CLAIMS

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8. Increased bonding cost due to increased contract cost is compensable. The amount of compensation is the additional premium without any markup. If the premium is more than \$1,000, a paid invoice must be submitted to the project.

D. Utility delay and interference, Section 105.06 C&MS(1997) or 105.07 C&MS (2002).

1. The Contractor shall be compensated for actual costs incurred as the result of a utility caused delay or interference provided:
 - a. The utility facility in question was located more than 2 feet from where it was shown in the plans, described in the 4A proposal notes, or marked in the field; or
 - b. The utility failed to relocate their facilities by the time period stated in the 4A proposal notes; or
 - c. The utility failed to relocate their facilities or mark them to a 2-foot accuracy within two working-days of being notified by the Contractor of planned work in the area; and
 - d. The Contractor made a reasonable effort to prosecute the work despite the utility interference. Reasonable effort includes field adjustments in the work allowed by the specifications such as one foot vertical adjustment of pipe flowline, Section 603.03 C&MS (1997 and 2002), and one foot adjustment in the plan location of various drainage items, Section 604.04 C&MS (1997).
 - e. The 2-foot accuracy means that center of pipe or cable is no more than 2 feet from the flag or other marker placed on the surface by the utility company.
2. Compensation for recognized and documented utility delays and interferences will be according to:
 1. Section 109.04 C&MS (1997) or 109.05 C&MS (2002) for added work on the project.
 2. Delay costs will be paid according to 109.05.D. C&MS (2002) for projects under either the 1997 or 2002 Spec Book.

APPENDIX I CHANGED CONTRACT CONDITIONS AND CLAIMS

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3. Utility delay costs are not eligible for FHWA participation on NHS projects provided the utility relocation work was properly identified in the Right-of-Way certification.
- E. The Director may terminate a contract under Section 108.031 C&MS (1997) or 108.09 C&MS (2002) for the convenience of the Department at any time. The Contractor shall be compensated for added expenses resulting from such a termination as follows.
1. The Contractor is not entitled to any compensation if the Department elects not to execute the contract.
 2. If the termination occurs after the execution of the contract, but before work starts at the project site, the Contractor is entitled to compensation for:
 - a. Documented and reasonable salaries and expenses of the superintendent and company officers and staff expended for project planning and organization, exclusive of bid preparation and bid shopping.
 - b. Mobilization costs incurred and documented.
 - c. Documented bonding cancellation charges.
 - d. Restocking charges for material purchased for the project. Compensation will be the documented charge plus 5 percent markup and hauling costs paid under C&MS Section 109.04.
 3. If the termination occurs after the Contractor has worked on the project and received payment for completed work, the Contractor is entitled to compensation for:
 - a. Added work necessary to make the roadway safe and usable compensated according to Section 109.04 C&MS (1997) or 109.05 C&MS (2002).

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- b. Maintaining traffic by prorating the lump sum bid for Item 614 by the percentage of the project completed plus compensation for traffic control devices purchased, but not used. Compensation may be based on a cost analysis of the traffic control performed in lieu of prorating the maintaining traffic item.
 - c. Mobilization by prorating the lump sum bid for Item 624 based on the amount of mobilization performed. The 10 percent of mobilization payment withheld under Section 624.05(3) C&MS (1997) or 624.04.C. C&MS (2002) shall be paid after project site clean up.
 - d. Bonding costs less any refunds.
 - e. Unused material compensated per Section 104.02 (d) C&MS (1997) or 104.02.E. C&MS (2002) and I.C.4. of this Appendix. The FHWA will participate in restocking fees, but not in the purchase of surplus material.
 - f. Documented and reasonable salaries and expenses of the superintendent and company offices and staff expended as part of the planning and organization of the project before the start of work on the project site and not compensated by the payment for work completed. The compensation is calculated by reaching agreement on the amount expended preparing for the project, less bid preparation and bid shopping, and multiplying it by the percentage of the original contract not completed.
- 4. The Department will not compensate for claimed loss of anticipated profits or unabsorbed home office overhead.
 - 5. Project termination or defaults made under Section 108.08 C&MS (1997 & 2002) for unsatisfactory progress will not result in any compensation for work resulting from such termination or default.
- F. The following acceleration costs are allowed for compensation if agreed to by the District as part of an ordered acceleration or as part of a settlement of a Contractor's claim for compensation for a forced acceleration:

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1. Premium time of the work crew and the superintendent plus 5 percent markup on both the crew and superintendent wages. Payroll taxes paid on premium time without mark up.
 - a. Fringes are not paid on premium time except when required by labor contracts.
 - b. Premium time is additional wage received (usually ½ the base rate) by the employee when working overtime.
 - c. Premium time included in the original unit bid, as determined by the Contractor's normal work week or analysis of the baseline progress schedule, will not be allowed for compensation.
2. Additional cost of material plus 15 percent mark up.
3. Multiple shift charges on rented equipment plus 15 percent markup.
4. Blue Book allowances on owned equipment worked multiple shifts.
5. Efficiency losses due to overtime work by individuals and cold weather work.
 - a. Inefficiency allowances are applicable to both straight-time and overtime worked by the same individuals within the period of acceleration.
 - b. Inefficiency factors are to be established by force account records and comparison to the same work done under a nonaccelerated condition or similar work on another unaccelerated project.
 - c. Productivity versus overtime work charts from general construction literature may be used to establish inefficiency factors up to a maximum of 5 percent if such agreement is made for such compensation prior to an ordered acceleration.
 - d. No mark ups are allowed on inefficiency factors or allowances.
6. Cold weather protection and night work lighting is compensated according to Section 109.04 C&MS (1997) or 109.05 C&MS (2002).

APPENDIX I CHANGED CONTRACT CONDITIONS AND CLAIMS

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7. The prime Contractor markup on accelerated subcontract work is limited to 5 percent to a maximum of \$10,000 for each subcontractor.
- II. Costs incurred during an extended contract period that is the result from a Department caused delay are compensable. Concurrent delays such as weather shall be deducted from the compensation period.
- A. Delay costs that are compensable according to 109.05.D. C&MS (2002) for projects under either the 2002 or the 1997 Spec Book and as follows:
1. Deduct from the payment of the superintendent and other compensated project staff, the time they were used on other projects or general company work.
 2. Superintendent's transportation is compensable at the same rate allowed for foreman's transportation in Section 109.0.C.5 C&MS (2002), which includes the cost of mobile communication devices. The allowed hours are when the superintendent is at the project site.
 3. Superintendent's subsistence, provided this is the company's terms of compensation to such employees as documented by the Contractor's written company policy or contracts with their employees.
 4. Maintaining Traffic
 - a. Prorating of the Item 614 lump sum for maintaining traffic is allowed provided the extended contract period required the same traffic control as the original contract period.
 - b. Paid rental invoices from a traffic control rental company plus 5 percent markup is an allowed basis of compensation.
 - c. Payment in accordance with C&MS Section 109.04 C&MS (1997) or 109.05 C&MS (2002) is allowed.
 5. Move-in and move-out costs are compensable in accordance with Section 109.04 C&MS (1997) or 109.05 C&MS (2002) provided the project agreed to this course of action in lieu of idle equipment charges.

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6. Compensation for “Extended Equipment Usage” is not allowed. This is defined as equipment used after the original contract completion date. Since this equipment is working on original contract work or Extra Work it is compensated by payment of completed contract items.
7. Winter concrete protection is compensable in accordance with Section 109.04 C&MS (1997) or 109.05 C&MS (2002) when the Department delays such work into cold weather.
8. Home Office Overhead
 - a. Exclude from the compensable delay period **D**, delays due to extra work and added quantities by either of the following methods as agreed upon by the Contractor:
 - (1) Summation of time extensions granted for extra work and additional quantities.
 - (2) Analysis of the CPM Baseline schedules and up dates.
 - (3) Stream of Revenue calculation:

$$\frac{\Delta A}{A} B = D_{(ew, aq)}$$

ΔA is net increase due to extra work and quantity adjustments and as listed as Net Project Adjustment in CMS Basic Project Data.

A is the original contract price as defined in Section 109.05.D.3.b C&MS (2002) and listed in CMS Basic Project Data.

B is the contract duration defined in Section 109.05.D.3.b. C&MS (2002).

D_(ew, aq) is the delay in days due to extra work and quantity adjustments. This delay will be deducted from the HOOP delay period **D** in the formula for HOOP in Section 109.05.D.3.b. C&MS(2002).

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- b. Determination of whether the Contractor normally works a portion of the winter and is entitled to HOOP for that portion, will be made by reviewing the work record of the Contractor on other projects via CMS or by the following type of Contractor:
 - (1) Asphalt or concrete paving contractor: No portion of winter allowed.
 - (2) Bridge contractor: December 1-15 and March 1 - April 30.
 - (3) Dirt contractor: March 15-April 30.
 - (4) Electrical contractor: March 15 - April 30.
 - (5) Drainage contractor: December 1-15 and all of April.
 - c. Consult with the Office of Construction Administration before recognizing a subcontractor as a significant subcontractor and entitled to HOOP compensation.
- B. The delays that are eligible for these compensable items are those cited in Section 108.06.D. C&MS (2002) for projects under either the 1997 or 2002 Spec Book
- C. Delays that are due to Extra Work will not merit additional compensation. According to Section 109.04 (f) C&MS (1997) and 109.05.C.11 C&MS (2002) the compensation paid by the change order for the Extra Work includes administration, superintendence, project overhead, and other costs incurred by a delay.
- 1. Traffic control required to do the Extra Work is compensable if the change order did not include this expense and if the traffic control required was in addition to that required for other contract work.
 - 2. If Extra Work delays a project over a winter shutdown, then delay costs during the winter are compensable.
 - 3. If a combination of weather or other excusable noncompensable delays and extra work delays a project over the winter, then the compensable delay costs over the winter will be prorated based on the portion due to extra work.

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- D. Costs due to delays caused by weather, strikes, labor, material, or equipment shortages are not compensable except for the State Field Office.
- E. State Field Office is compensable for any postponed completion date if the Department requires them on the project.
 - 1. Long distance phone calls are not included in the monthly bid price for the State Field Office.
 - 2. Long distance calls, when itemized, are compensable as a separate item with a 5 percent markup.
- F. Interest is payable on delays in processing payments on completed work, change orders, and claims. Interest will be calculated according to *ORC 5703.47* using the Ohio Department of Administrative Services web site for interest on late payments: “www.wiggum.das.state.oh.us/lpc/”
 - 1. Allowed interest periods are as specified for the following cases:
 - a. Completed work:
 - (1) Begins 30 days after work is completed and all necessary tests and documentation are submitted by the Contractor and acceptable.
 - (2) Ends with date of the warrant.
 - b. Change order processing:
 - (1) Begins 30 days after Contractor submission of all documentation necessary to write the change order provided the Contractor signs and returns the change order within 3 working days.
 - (2) Ends on the date the Department approves the change order provided payment is made within a month of approval. If State Controlling Board approval is required, it is included in the interest period.

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- c. Dispute Resolution and Claims processing:
 - (1) If the dispute is settled before it advances to the Director's Claim Board, the beginning date of the interest period is 30 days after the Contractor supplied the District with sufficient documentation to decide the issue and determine the settlement amount.
 - (2) If the Dispute is not settled and it is advanced to the Director's Claim Board (DCB) the interest period begins 30 days after the Contractor's certified claim document is submitted to the Secretary of DCB.
 - (3) Ends on the date of the decision that settles the claim provided payment is received within two months. The decision may be made by the Engineer, Deputy Directors Board, Director's Claim Board, or Arbitrator. If the decision is made by the Court of Claims, the decision will specify the ending date.
 - d. The beginning date is modified when the District or Secretary notifies the Contractor of required additional information or corrections. This notice must be sent to the Contractor within 15 days of receipt of the documents. The new beginning period will start 30 days after District receipt of the requested information or correction.
- III. Claims will be paid by EWCO based upon the decision of the Engineer, Director's Claim Board, Arbitrator, or Ohio Court of Claims. The description of the change order shall include a disclaimer stating: "The execution of this document constitutes full settlement of Claim Number () and all rights for any additional compensation based on this cause are waived."
- IV. Compensable costs that can not be established by the foregoing Sections of this Appendix may be paid as a negotiated settlement provided the District judges that the negotiated amount is fair and reasonable compensation for recognized costs and is no more than the Contractor could obtain in a claim. The EWCO covering such a settlement shall state the payment was based on all available documentation and was reached by negotiations with the Contractor and the Contractor waives all rights to any additional compensation based on this cause.