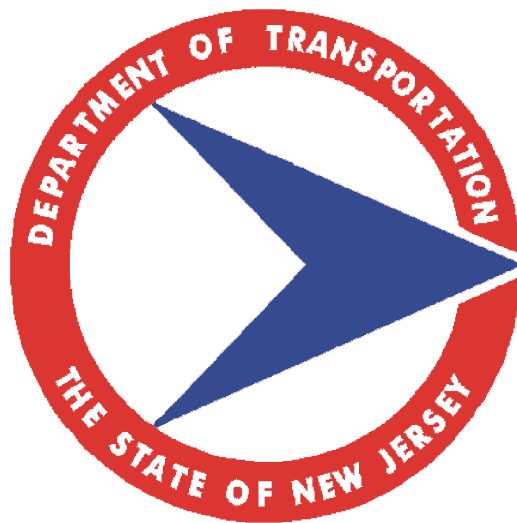


NEW JERSEY

DEPARTMENT OF TRANSPORTATION



2020

Change Order Guide

Introduction

The 2020 Change Order Construction Guide replaces all prior versions of the Guide. It is written from the perspective of the 2007/2019 Standard Specifications as amended by existing BDC's (Baseline Document Changes).

As with previous guides, this guide is intended to assist the RE in preparing Change Orders according to current Department Policies. In addition to establishing standards, this guide seeks to explain the rationale behind good Change Order composition, documentation and execution, and thus expedite a Change Order's approval.

No compilation can anticipate every possible circumstance. Therefore, each project's Special Provisions should be reviewed for changes, which may require revisions to the examples provided. Furthermore, sample statements are offered to help the RE, but such statements should only be used when they are appropriate.

If an RE has any questions about the instructions provided, he or she should contact their Field Manager.

Table of Contents

<u>Overview</u>	4
<u>General Format</u>	5
<u>Financial Participation Statement</u>	9
<u>Time Adjustments</u>	12
<u>General Notes on Change Order Submission</u>	16
<u>Index of Sample Orders</u>	17
<u>Appendix</u>	57

Overview

Change Orders are alterations to the Contract that involve one or more of the following changes:

- increases or decreases of quantities of existing contract items at previously established unit prices (either in the bid proposal or in a previous Change Order);
- major increases or decreases of quantities that result in a renegotiation of the unit prices;
- establishment of new contract items (either for a negotiated price, on a force account basis, or on another basis established in the contract- such as for quality payment adjustments);
- changes in the terms or conditions of the work;
- changes in the contract time (extension or reduction in time, or establishing a new milestone completion date;

DOT staff is limited by the following APPROVAL Limits based on APPROVAL AUTHORITY:

APPROVAL AUTHORITY

RE
Field Manager
Regional Construction Engineer
Change Control Board

APPROVAL AUTHORITY

\$50,000.00
\$50,000.01 TO \$200,000.00
\$200,000.01 TO \$500,000.00
OVER \$500,000.00

The RCE must be contacted by the RE on approval limits above \$200,000.00

It is important to recognize that Change Orders (and Field Orders) are the only means of altering the Contract. No other form of written or verbal agreement creates a contractual obligation on either the Contractor or the Department. There can be no “side deals” or separate arrangements. Until a Change Order is executed, the Contractor is expected to prosecute the work in accordance with the existing Contract.

While the primary purpose of the Change Order is to execute a change to the Contract, the Change Order is used to for a number of associated purposes, including:

- documenting design approval for a change
- documenting the cost of the change
- documenting the time impact of the change
- documenting the funding source for the change, and approvals authorizing the use these funds

General Format

Change Orders are generated by AASHTOWare's SiteManager, the construction management software used by the Department. Instructions on creating a Change Order in SiteManager can be found at:

<http://www.state.nj.us/transportation/eng/pdf/SMCManualRE.pdf> .

Change Orders are processed both electronically in SiteManager, and as a hard-copy (paper) document that is routed for signatures. In the future, Change Orders may become an electronic only (paperless) process, but currently, the hard-copy document is the official document of record.

All Change Orders are to be submitted on the Department's forms, DC-173A/DC-173B as generated by Crystal Reports. The DC-174A/DC-174B are required on ALL Change Orders, regardless of whether the project is Federal or State funded.

Change Orders are assigned a Change Order number by SiteManager. This number is solely used as a unique identifier to distinguish between various Change Orders. Change Orders may be processed out of sequence, and any particular Change Order may never be executed. A Change Order entered into Site Manager that is never executed (and thus will perpetually remain in Draft status cannot be deleted.

The Final Change Order shall contain the notation "**FINAL**". in the "**Change Order Description**" and the word "FINAL" shall be written on the top right corner as well.

For every project, submit with the **FIRST** Change Order a copy of the Participation Breakdown for the project. It is available at:

<http://www.state.nj.us/transportation/business/procurement/ConstrServ/awards16.shtm>.

It is important that the Change Order that is approved and executed, be the same version as the version pending in SiteManager. The date of the printed copy of the Change Order must be the same on **all** pages of the Change Order. Therefore, the RE should make a complete printout of the Change Order whenever any revisions are made. Do NOT just print out the changed page(s) and insert them into an older printed copy of the Change Order.

Field Orders should only be issued as a letter to the Contractor and will not use the DC-173/174 form. Change Orders that make changes to the Contract that require the Contractor's assent (i.e. signature on the change order noting acceptance) are no longer called "Supplementary Agreements", even though they are handled in much the same manner as "Supplementary Agreements".

The distinction as to when a Change Order requires the Contractor's signature is the same was previously used for "Supplementary Agreements". The Department can make unilateral changes to the Contract for minor changes in quantity to the contract (refer to 104.03.03 to determine if a change is a "major" or "minor" change in quantity), modify the Contract Time as per 108.11, direct New Work by force account, or establishing payment modifications as provided elsewhere in the Contract (e.g. damages, credits, bonuses, penalties).

Change Orders that makes changes to the Contract, either for changes in the specifications, or for the creation of New Work as described by subsection 104.03.03 require the Contractor's signature before it can be executed by the Regional Construction Engineer.

The location noted should either be a specific location by citing the route, road, or ramp name with station number(s) and offset(s), or a specific structure name when applicable. For change Orders with multiple changes or changes at multiple locations, or for Change Orders for nonspecific locations (such as for as-built Change Orders.) The location may be noted as: **Throughout the Project**.

The DC-174 A & B are completed for any project with cost sharing agreements. Typically, this is a Federal Agreement with the F.H.W.A., but may be with other agencies such as the N.J. Turnpike, the Port Authority, County or Municipal Governments, or a utility company.

The Participation Summary amounts are calculated from the Project's Cost Sharing Agreement. It is important that the RE be familiar with the project's Cost Sharing Agreement. In addition to Federal/State distribution, on federal projects, the cost breakdown must detail the Construction Engineering (CE) cost portion of the contract.

When setting up federal projects, the original dollar amounts for the various funding sources must be entered into the DC-174A, Cost Sharing Distribution form. Furthermore, the DC-174A must list the non-participating item numbers for the 100% State funded line, and list the CE Item numbers for the CE cost line.

CE costs are any administrative cost component of the Contract. Examples of CE costs are construction field office, field office maintenance, and telephone service. For New Work items considered CE cost items check your Bid Tabulations to ensure that you are splitting out all of the items correctly. This is a step that the **RE** shall be responsible for, not the Site Manager Coordinator or Trainer or the Regional Change Order Engineer (RCOE).

Adjusted amounts for the Participation Breakdown for a Change Order should conform to the general cost sharing agreement. Thus, the RE will need to be aware of the cost distribution for any item and its respective adjustment. This may be determined by such parameters as the location, a fixed percentage, or both. It may not be possible to determine the exact cost distribution for an adjustment prior to the as-built calculation, but the RE should endeavor to make a reasonable approximation to avoid excessive redistribution in the Final Change Order.

Note that when Change Orders establish New Work items with 100% State Funding on Federally funded projects or change the participation basis of the 100% State funding for existing items, an additional statement is required in the Change Order. (See pages 9& 10 for additional information). Special attention should be given to the participation or non-participation for time extensions.

Note that for Change Orders with Third Party participation (i.e., cost sharing agreements with agencies other than F.H.W.A.) an additional statement is required in the Order. (See pages 9 & 10 for additional information.)

The totals for Participation Breakdown must agree with the adjustment amounts shown on sheet 1 of the Change Order.

On the last two pages of the Change Order, the two tables named "Participation Breakdown for this Order" and "Participation Summary Based on CO's No. 001 - XXX", the RE is to enter the item numbers that are on the subject CO that are either CE costs or are non-participating (or any other participating fund/agency). Enter the item numbers in the left-most column in the appropriate box(s). If you have not yet printed out the Participation Breakdown for your project, where you'll find which items are participating and which are not, you can find it on the Intranet ((Divisions and Bureaus, Procurement, Awarded Projects). If you have no changes to the CE items nor to n/p items, enter the word "none" in both boxes on both pages. If these entries are not on your Change Order, the Change Order will be returned to you. NOTE: this is not required for 100% State projects.

When submitting the Final Change Order, it must be accompanied by a full participation breakdown report. This will be an accounting of all previously written change orders (See Appendix D for a sample). Ensure that the changes on this report match to the penny the adjusted totals that the DC-174B has generated. NOTE: This is not required for 100% State projects. **IMPORTANT! DO NOT PUT A FINAL C.O. DATE IN SITE MANAGER! WHEN YOU ARE GETTING CLOSE TO WRITING YOUR FINAL C.O. AND PREPARING YOUR FINAL ESTIMATE, DO NOT MARK EITHER AS FINAL WITHOUT FURTHER GUIDANCE FROM YOUR FIELD MANAGER.**

The Contractor's mailing address is shown on the first page of the Change Order. This is the address the Regional Office is going to use to mail the Construction Order. If the Contractor mailing address needs to be changed, this needs to change in SiteManager before running the final version of the Change Order.

The body of the Change Order is divided into two parts:

The narrative- generally the narrative provides an account of the changes being proposed and a reason why the changes are necessary. The reason must be thoroughly explained relative to the existing plans and specifications. Specific requirements and statements are presented in more detail in the Sample Change Orders. Additionally, every Change Order is required to provide a statement analyzing the effect of the Change Order on the Contract time. (See pages 9-10 for additional information) Orders with participation agreements may require statements concerning concurrence from participating agencies. (See page 7 for additional information)

It will be common to include several separate issues in a single Change Order. When doing so, separate the issues by labeling sections of the order as A); B); C) etc.

The item listing- provides an account of the quantity and monetary adjustments broken down by item and is automatically completed. However, the RE should note that quantity adjustments must be consistent with item's significant figures as determined by the item's unit price. Quantities for all Contract Items will be reported to the nearest decimal in accordance with the following:

Unit Price Report Pay Quantity to the Nearest Example

<\$50.00	Whole Unit	7 CY
\$50.00 to \$500.00	Tenth Unit	7.1 CY
>\$500.00	Hundredth Unit	7.14 CY

Rounding off of quantities as follows:

If the portion of the decimal to be dropped is less than one-half of an increment, the last digit to be retained remains the same. If the portion of the decimal to be dropped is one-half or more of the increment, the last digit to be retained is increased to the next higher number.

Field Orders should only be issued as a letter to the Contractor and will not use the DC-173 or the DC-174A & DC-174 B forms. Field Order will state whether the directions provided by the Field Order are eligible for payment or modification of Contract Time. The Department will provide such payment or modification to Contract Time in a subsequent Change Order. Field orders must clearly state:

- The change/work that is being added (Change or Plan or clearly written change based on an RFI response or other clearly written direction).
- An effective date for the change. The effective date might be:
 - Immediately upon receipt of the field order.
 - Immediately incorporated into the Work with minimum impact to the overall Completion of the project.
 - Upon completion of price negotiations or within two weeks, whichever is sooner (in which the work would be compensated on a force account basis).
- A method of payment.
 - If the field order involves no new work and only additional work, it can state that the work will be paid with existing Contract items. Include a total cost if it can be calculated at the time the field order is written.
 - If the Field order contains new work, the Contractor should be directed to submit a price for the work.
 - If the start of work is dependent upon negotiation of a price and if delay in implementation is harmful to the project, the field order can direct that the work be tracked and paid on a force account basis.
 - If the project can tolerate a reasonable time for negotiation of a price, that time frame should be limited.
 - If a price cannot be agreed upon, the Contractor should be given second direction to begin and track the work on a force account basis.
- Impact on Contract Time.
 - The field order should state if it does not impact Contract time.
 - If the field order impacts contract time, the field order should direct the Contractor to submit a Time Impact Evaluation.

The Contractor's objection to these terms would not invalidate the field order and may be the subject of further consideration by the RE, if necessary, through the Dispute Resolution procedure.

Financial Participation Statements

PODI Projects (Federal Full Oversight)

For Federally Funded projects, which are not under “PODI – State CO Oversight” classifications, the RE must contact the F.H.W.A. Area Engineer in an attempt to obtain concurrence. Verbal approval must be secured prior to commencement of any New Work.

If the RE cannot reach a mutual agreement with the F.H.W.A. Area Engineer, he shall inform the Project Manager of the unresolved issue so that he/she can reach an administrative conclusion.

STANDARD WORDING

Full Agreement Statement:

This Change Order was discussed with the F.H.W.A. on MM/DD/YY, is mutually agreed upon and has tentative approval for both content and financial participation, dependent upon the submittal of supporting documentation.

Partial Agreement Statement:

This Change Order was discussed with the F.H.W.A. on MM/DD/YY, is mutually agreed upon and has tentative approval for both content and financial participation with the exception of _____

Total Exception:

This Change Order was discussed with the F.H.W.A. on MM/DD/YY, who takes exception to _____ both content and financial participation because of _____.

Agreement Not Required Statement:

This Change Order does not require F.H.W.A. approval for both content and financial participation.

NON-PODI Delegated Projects (Federally Funded Alternate Procedures)

Any Change Orders with cost sharing agreements, which change the participation basis of 100% State funding, must include a statement noting and explaining the 100% State funding costs. This is necessary for any Orders establishing extra work with 100% State funding, or for any Change Orders with increases or decreases which change the original basis of determining 100% State Funding. Typical reasons are listed in CPH IV-B.

Attention should be given to the federal participation or non-participation for time extensions. For non-participating time extensions, the dollar value equivalent of the time extension (i.e., the

number of days x the liquidated damage schedule) must be shown as a decrease for the federally funded portion of the project and as an increase for the 100% State funded portion of the project (See page 6 for additional information).

The non-participating cost of equipment turned over to the State shall be based on the salvage value. The F.H.W.A. will participate on salvage credit so long as the item has a salvage value less than \$5,000.00. (Refer to CPH IV-B.)

Third Party Agency Participation

When third party agency participation is involved, check with the Project Manager to determine if the cost sharing agreement requires prior approval of change orders. If prior approval is required, the RE shall contact the appropriate representative of the agency to obtain concurrence and shall include a concurrence statement in the Change Order.

The Third Party's concurrence signature on the transmittal letter (Refer to CPH Sec IV-b, attachment "E") will be used in lieu of their signature on the Change Order. Submittal of these Change Orders will be done by the Regional Construction Engineer. The Regional Construction Engineer will be responsible for ensuring that the transmittal letter is returned by the cost sharing party. The Regional Construction Engineer will keep the letter on file and forward a copy of the signed letter to the RE for the project files. The Project Manager is responsible for resolving any disagreements between parties.

NJDOT Maintenance Funded Contracts

Prior to performing any additional work, and prior to processing a Change Order, the RE must obtain concurrence from the Manager, Bureau of Maintenance Engineering & Operations. The Manager's concurrence must be obtained by e-mail signature of concurrence. The Manager's concurrence must specifically note what work is being authorized. This is necessary for any change, even for changes having minor costs. A copy of Manager's concurrence is to be sent to the Regional Construction Engineer prior to start this work and a copy is to be included as part of the Change Order backup. If the Bureau Manager is unavailable, then concurrence must be requested from the Director of Operations Support. A sample statement is included below.

STANDARD WORDING

This Change Order was discussed with the F.H.W.A. on MM/DD/YY, is mutually agreed upon, and has tentative approval for both content and financial participation with the exception of the adjustments for Item No. XXX, Description, which is 100% State Funded as it is associated with normal maintenance.

The amount of \$ 220.00 of the \$ 3,500.00 cost for Item No. XXX, Description, is 100% State Funded. The cost attributed to the material turned over to Regional Maintenance is non-participating.

Because the 20-day extension of time is due to utility delays, it is non-participating. Accordingly, the 100% State Funding has been increased and correspondingly the federal

funding [M-OOOS(999)] has been decreased by the amount of \$ 14,000.00 (20 days x \$700.00/day).

NJDOT Maintenance Contracts

The work in this Change Order was discussed with the Manager, Bureau of Maintenance Engineering & Operations on MM/DD/YY, who authorized the performance of additional work.

Time Adjustments

This section of the Change Order Guide cannot provide a complete guide to schedule analysis, time adjustments, however, some basic guidance is offered and what needs to be provided in a Change Order.

An adjustment of time may only be made as provided for in subsection 108.11 of the Specifications. Adjustments of time are only provided for excusable delays as allowed by 108.11.

In administering the Contract, the RE should be mindful that in some circumstances it is better to accelerate the work rather than simply provide an extension of time. This is particularly true where work is restrained by weather or environmental restrictions and where small delays can have exaggerated impacts to the project progress. Consideration of acceleration should be discussed with the Field Manager, Regional Construction Engineer and Project Manager prior to discussion with the Contractor.

If a decrease in Contract work reduces time of the Contractor's approved Progress Schedule's critical path, the Contract Completion date is to be reduced.

The RE is the sole authority on the determination of time. The Contractor may present those facts that may be useful to aid the RE's decision, but it is not generally a matter of negotiation.

Adjustments of time must be based on an analysis of the project's progress schedule and should be based upon reasonable production rates.

Float belongs to the project and is not for the exclusive use of the Contractor or the Department.

In analyzing the progress schedule, the RE should understand that precedence/successor relationships can sometimes be changed. Sometimes the sequence cannot be changed (e.g. bituminous paving must be preceded by dense graded aggregate base course; concrete in substructure must be preceded by foundation excavation). But sometimes the sequence can be changed. For example, the schedule may show construction of pier no. 1 followed by pier no. 2 followed by pier no. 3 etc., but it may be possible to re-sequence the work as pier no. 3 followed by pier no. 2 and then pier no. 1.

The effect of any delay upon the Contractor's progress must be analyzed in the context of the working day schedule. That is, additional time extension may be required to account for weekends, holidays, weather or environmental restraints, etc. Similarly, weather or environmental restraints may mitigate or even eliminate the impact of a delay. For example, if the Contractor's critical path shows the placement of soil aggregate followed by a winter shutdown for an HMA paving successor activity, a delay to the soil aggregate activity may have no impact upon the contract completion if the winter shut down restraint is simply decreased.

Concurrent delays are separate delays that arise at the same time (which is not usual). While there can be multiple situations that can prevent project progress, the first situation to arise is considered to be driving the critical path. If that situation is resolved, and another situation is impacting the critical path, that must be considered separately. This is particularly relevant

when a non-compensable delay or a non-excusable delay is involved. Refer to 108.11.01 of the Standard Specifications.

Every Change Order must clearly indicate the effect of the Change Order on Contract Time. The effect should be related to the project's approved Progress Schedule.

When making an extension of time for New Work, the following should be included:

1. Show how the critical path is affected.
2. Indicate what activity on the Progress Schedule is being delayed. Referred to the activity by name and node no. (s).
3. Note the duration that the critical activity is delayed. Is the duration for New Work based on reasonable production rates? If the length of the delay is due to other than normal production rates (e.g., time necessary to procure material, working drawing approval, etc.), this should be explained.
4. Show how the Late Finish of the following activity affected by the delay. The Late Finish should be based upon the project's actual progress. If the Contractor is on schedule, it will be the same as the CPM. If the project is behind schedule, the RE should note how far the Contractor is behind schedule.
5. Explain the effect on any interim completion dates.
6. If addressing an event that has already occurred, note when the Department made aware of the condition that caused the delay.
7. Explain if the delay is considered non-compensable.

For projects that only require a Bar Chart Progress Schedule, adjustments of time should be related to the approved bar chart Progress Schedule.

NOTE: If a Change Order provides an adjustment of Contract time, for an excusable, compensable delay, the Department is liable for delay damages as per 104.03.09.

In addition, alterations to the Contract that include changes in the Contract Time, with associated quantity adjustments and/or the establishment of New Work Items must be processed in the same Change Order. They should not be separated into multiple Change Orders. Time Impact Evaluation should be performed/approved once it is known there will be impacts to the project schedule. If a Change of Plan is required, the submission should include the work, cost, specs, and anticipated time to complete this Change. Ensure the Contractor performs the Time Impact Evaluation as soon as possible to determine the schedule impacts and prior to finalizing the Change Order

The only exception to this will be a unique and/or unusual issue that prevents the Time Impact Evaluation from being performed immediately.

On the rare occasion that the RCE determines that a unique and/or unusual issues arises on any Federally Funded Projects, the RCE will contact the FHWA, Project and Program Delivery Manager for review and concurrence to not include time with the original Change Order.

Upon FHWA's concurrence, the RE must issue a Field Order to the Contractor stating the scope of the change, effective date of the Change, method of payment, impact on Contract Time and notification that two subsequent Change Orders will be issued. The first Change Order will be issued for all associated quantity adjustments and/or the establishment of New Work Items as per 104.03.03 of the Contract. The second Change Order will be issued for Modifications to Contract Time as per 108.11 of the Contract.

When adjusting the final completion date and the substantial completion date in Site Manager, the RE must make three-time adjustments on the Change Order. These include: Completion Date, Milestone 1, and Milestone 2. Each change requires an explanation. If just adjusting Final Completion, the RE would make just two adjustments on the CO; one for the Final and one for the FC Milestone. Two explanations would be needed.

IMPORTANT - If you are making NO adjustments to Final Completion or to any milestones, enter NO TEXT in the text boxes within Site Manager in the adjustment of time text box. You would enter comment #1 or #2 below within the body of the CO.

STANDARD WORDING

- Since this work can be performed concurrently with existing Contract work without causing a delay to the critical path of the Contractor's approved progress schedule, no adjustment of time is warranted.
- Since this Change Order does not affect the critical path of the Contractor's approved Progress Schedule, no adjustment of time is warranted.
(This statement is applicable for as-built adjustments, and specification changes that do not affect the duration of activities.)
- The Contractor's approved progress schedule, update no. ____, has a late finish of MM/DD/YY for activity no. _____. This additional work has a duration of ____ days. Because the Contractor's approved progress schedule, update no. ____, has _____ days float, no extension of time is warranted.
- The New Work associated with this Change Order will impact the critical path of the Contractor's approved progress schedule, Update No. _____ by _____ calendar days. Therefore, it is proposed to provide a time adjustment of ____ calendar days to the Achieve Completion date noted in Subsection 108.10 (B) of the Contract from _____ to _____. This time adjustment is considered an Excusable, Compensable Delay in accordance with Subsection 108.11.B. #, therefore Item No. xxx was incorporated into the Contract by this Change Order to address full payment for the delay damages associated with this time adjustment.

- This time adjustment is considered as Excusable, Non-Compensable Delay in accordance with Subsection 108.11.B.2, therefore the Department will extend the Contract Time but not make payment for the delay costs associated with this time extension.

General Notes on Change Order Submission:

- Change Orders should be issued in a timely manner, to provide direction to the Contractor and to provide compensation for work performed.
- When possible, issues requiring a Change Order should be grouped to minimize the number of Change Orders processed.
- All Change Orders are to be up submitted to the Regional office in “Draft” Status.
- Do not use personal names (including F.H.W.A. or other agency participation concurrence statements).
- Submit **ONE COPY** for Regional Office Review (**RE retains all original paperwork**). If the CO is the FINAL, note the word FINAL on the top left corner as well. **NOTE: UNTIL FURTHER INSTRUCTED, DO NOTHING WITHIN SITE MANAGER ITSELF AS TO INDICATING THAT THIS ORDER IS THE FINAL.**
- Copies of all letters and memorandums cited in the Change Order (e.g., design concurrence, price acceptance memo & supporting documentation) must be attached to the Regional Work Copy.
- Change Orders should not have references to attachments. It can refer to transmittals and letters but should not make them an **attachment** to the Change Order.
- The RE must discuss all Change Orders with the Project Manager prior to submission.
- A full copy of the Change Order with the original backup documentation shall be maintained in the field office files.
- If the value of a change exceeds \$500,000, it must be presented to the Change Control Board (CCB) for approval. If a Change Order incorporates a change that exceeds \$500,000, the Change Order must include the following statement:
This Change Order was reviewed by the Change Control Board and received approval for both content and funding on MM/DD/YY.
- Attach a copy of the C.O. Checklist to EVERY Change Order. Some portions are to be verified by the RE and some portions are to be verified by the FM. The Regional Change Order Engineer (RCOE) will return CO's to the RE that are not accompanied by the Checklist.

Index to Sample Change Orders

Certain types of Change Orders are presented with regular frequency. To assist the RE in his/her preparation, a review of the required elements for these Change Orders and a sample of each are offered.

Again, it is the RE's responsibility to review the project's Special Provisions for changes that would create exceptions to sample statements.

<u>Quantity Adjustment</u>	20
<u>Major Changes</u>	24
<u>Change of Plans</u>	26
<u>Quality Payment Adjustment</u>	29
<u>New Work/Value Engineering Change Orders</u>	32
<u>Change Orders/Time Adjustments</u>	35
<u>Repair of Traffic Damaged Work</u>	37
<u>Force Account Change Orders</u>	40
<u>Increases to an Estimate FA Budget</u>	42
<u>Final FA Adjustment</u>	46
<u>As-built Change Orders</u>	48
<u>Final Change Orders</u>	51
<u>Assessing Damages and Charges</u>	53
<u>Claims</u>	56

Quantity Adjustments

The 2007/2019 Standard Specifications significantly changes how increases and decreases are handled.

As per Section 109.01, the Department will not measure quantities for Proposal Items (items having a "P" suffix in the item number) other than for quantities shown on the plans as "If and Where Directed", unless the measured quantity differs from the Contract quantity by more than 10% of the Contract quantity. Note that the Contract makes no allowance for "spot" adjustments for calculative errors on individual plan sheets.

Accordingly, quantity adjustments of Proposal Items and quantity adjustments of unit quantity items require a detailed explanation of the change.

As per 104.03.03, if the quantity for an item increases and decreases by more than 25% of the Proposal Quantity, it is considered a major change and may result in the renegotiation of price. The details for dealing with changes are provided in Changes to the Contract – A Guide to Section 104.03.03 of the Standard Specifications (see Appendix K).

In most situations, adjustments are for minor changes, or are otherwise not eligible (refer to the Changes to the Contract guide regarding "if and where directed quantities), the following standard wording should be used. If major changes are required see page 21.

The standard wording provided below is only intended to provide an explanation of changes in quantities resulting from differences between the plan estimate and the actual quantity used for work constructed according to plan. **It is not intended for incorporation of a change in design.** Changes in design must have a detailed explanation and must be authorized by the appropriate Design authority. Such approval should be noted in the detailed explanation. (The RE's attention is directed to CPH IV-A for changes by Construction Engineering Forces.) Some flexibility is allowed for what is considered a "change in design". Generally, if the work is already proposed and a comparable item is substituted, this would not be considered a change in design (e.g. using traffic stripes in lieu of traffic marking tape; guide rail in lieu of reset guide rail; an inlet in lieu of a reconstructed inlet). Any use of an item with an "If and Where Directed" quantity, used in accordance with the plan details, is not considered as a change in design.

What items require/do not require justification in the Nature and Reason:

- All Proposal Items (items having a "P" suffix in the item number) as per Subsection 109.01 which differ from the contract quantity by more than 10% of the contract quantity except for "If and Where Directed" items should be explained.
- For "If and Where Directed" items an explanation will be needed if the adjusted contract quantity is over 100% of the proposal quantity.
- If the quantity of a single item increases/decreases by more than 25% of the Proposal quantity as per Subsection 104.03.03, it is considered a Major change and may result in the renegotiation of the price. A detailed explanation needs to be included in the Nature and Reason (please refer to page 21-23 of the Change Order Guide and sample Change Orders provided)

- No explanation is needed if the total negotiated cost of a change to a single item is less than \$5,000.00 (please refer to Section 104.03.03 of the Standard Specifications).
- No explanation needed for the Fuel/Asphalt price adjustments.

STANDARD WORDING

Due to variations between plan and field conditions, it is proposed to revise the contract quantities of the following items to agree with the Engineer's records. These quantities may be subject to further revision when final as-built calculations are available. * (Items requiring justification are noted and explained).

** add if appropriate*

QUANTITY ADJUSTMENTS TO PREVIOUSLY ESTABLISHED NEW WORK ITEMS

Include in the Nature and Reason

Item No. 9XXX was previously established in **Change Order No. XX**, dated **MM/DD/YY**. The quantity adjustment in this Change Order will be recorded as an **Increase/Decrease** on both the DC-174A & DC-174B.

RE must update the highlighted and underlined information above.

Quantity Adjustments

Examples

Major Changes

As per 104.03.03, if the quantity for an item increases and decreases by more than 25% of the Proposal Quantity, it is considered a major change and may result in the renegotiation of price. The details for dealing with changes are provided in **Changes to the Contract – A Guide to Section 104.03 of the 2007 Standard Specifications** (see Appendix K).

Major Changes: (Quantity Increase and/or Decrease – No negotiation)

If a Major Change to an item is made and it's eligible for renegotiation but it is agreed that the bid price is reasonable and acceptable, the Nature and Reason of the Change Order should include:

- Detailed explanation why the changes are required (i.e. variations between plan and field conditions, Change of Plan etc.)
- A statement that the Change Order results in a major change for this item.
- A statement containing standard wording that it is agreed that the Department will pay for this work using the bid price or previously renegotiated price with a **project specific** explanation, as addressed in a memorandum from Resident Engineer to the Regional Construction Engineer dated MM/DD/YY.
- Reference to the RE's justification memorandum to the Regional Construction Engineer.

STANDARD WORDING

The resulting quantity adjustments of the following items are considered a major change in quantity: (list item numbers and item descriptions). While the quantity adjustments for these items are eligible for a renegotiation of price, the existing bid price is considered reasonable and acceptable as explained in a memorandum from the RE to the Regional Construction Engineer dated MM/DD/YY, and it is agreed that the Department will pay for this work using the bid price.

Major Changes: (Quantity Increase – Renegotiation)

If a Major Change to an item is made and renegotiation price is developed for the eligible quantities, the Nature and Reason of the Change Order should include:

- Detailed explanation why the changes are required (i.e. variations between plan and field conditions, Change of Plan etc.)
- A statement that the Change Order results in a major change for this item.
- A statement containing that the work will be performed at the renegotiated price, or statement noting the decrease or elimination of the existing item.

- A detailed statement identifying that the work is being performed at the renegotiated price (if the location cannot be identified use “Throughout the Project” wording)
- Reference to the RE’s justification memorandum to the Regional Construction Engineer.
- * If the cost (C) is less than \$5,000, the Department will not make a modification, and will make payment for the quantity of the item performed at the bid price.

STANDARD WORDING

The resulting quantity increases of the following items are considered a major change in quantity, and in accordance with Section 104.03.03 a renegotiated price was developed (list item numbers and item descriptions, the quantity increased, the quantity to be performed at the renegotiated price and the unit price that was developed).

Since there is no item in the Contract to pay for this work at this price, it is proposed to establish Item No. XXXX, (use same item description), for (qty. & units) at the unit price of \$ XXXX. The work to be performed at this unit price is at the following location(s): (include locations of work sufficient to differentiate it from the work performed at the bid price).

The cost this work has been reviewed by the RE and has been found reasonable and acceptable as explained in a memorandum from the RE to the Regional Construction Engineer dated MM/DD/YY.

Major Changes: (Quantity Decreases – Renegotiation)

If a Major Change to an item is made and renegotiation price is developed for the eligible quantities, the Nature and Reason of the Change Order should include:

- Detailed explanation why the changes are required (i.e. variations between plan and field conditions, Change of Plan etc.)
- A statement that the Change Order results in a major change for this item.
- A statement containing that the work will be performed at the renegotiated price, or statement noting the decrease or elimination of the existing item.
- A detailed statement identifying that the work is being performed at the renegotiated price (if the location cannot be identified use “Throughout the Project” wording)
- Reference to the RE’s justification memorandum to the Regional Construction Engineer.
- * If the cost (C) is less than \$5,000, the Department will not make a modification, and will make payment for the quantity of the item performed at the bid price.

STANDARD WORDING

The resulting quantity decreases of the following items are considered a major change in quantity, and in accordance with Section 104.03.03 a renegotiated price was developed: (list Item numbers and item descriptions, the quantity decreased, the quantity to be performed at the renegotiated price and the unit price that was developed)

Since there is no item in the Contract to pay for this work at this price, it is proposed to establish Item No. XXXX, (use same Item description), for (quantity& units) at the unit price of \$ XXXX, and (Item No. and item description of the original item) is eliminated.

The cost this work has been reviewed by the RE and has been found reasonable and acceptable as explained in a memorandum from the RE to the Regional Construction Engineer dated MM/DD/YY

*** Quantity Adjustments - \$5,000 Threshold**

Nature and Reason

Item 212 Service Wire, No. 6 AWG

The original Contract quantity was under-estimated for the project. The original quantity did not provide for adequate slack in the junction boxes, cabinets, standards and mast arms.

RCE Justification Memo

Item 212 - Service Wire, No. 6 AWG

The Contract bid price for Service Wire, No. 6 AWG is \$4.50 LF. The Contractor agreed to complete the extra work at the Contract bid price. This price is higher than the average weighted price of \$3.62 LF, however in accordance the Contract Specification 104.03.03.1 paragraph 7, a lower unit price will not cause the \$ 5,000.00 threshold. Based on the average weighted price, the negotiated cost would be \$156.64 (\$4.50 - \$3.62 = \$0.88/LF x 178 LF). Therefore, the Department will not be required to renegotiate prices for work having minor cost.

Major Changes Examples

Change of Plans

A Change of Plan (COP) is usually authorized by the Project Management to address a certain field condition. In this case the Nature and Reason should include the following:

- An explanation stating the existing conditions and the problem resulting in that condition.
- The method resolving the problem and a general description contained in the Change of Plan.
- A detailed statement identifying who authorized the change in the design (i.e. the Designer, the Project Manager, the Bureau of Electric Engineering etc.)
- *(Refer to COP No. or other identifying reference. If the COP does not affix a C.O.P. number, the C.O.P. should reference the affected Plan Sheets and date.)
- If the C.O.P. includes New Work and requires the Contractor's agreement to establish New Work items, refer to the section on Agreement Change Orders.

STANDARD WORDING

This Change Order is issued to incorporate C.O.P. # ____ dated MM/DD/YY into the Contract.

Change of Plans Examples

Quality Payment Adjustments

Various sections of the Contract specify payment adjustments to be made based on their test results. This is a change from the 2001 Standard Specifications which deducted quantities rather assess a payment adjustment. In particular:

- Failing Sample Charges – as per Section 106.05
- HMA Air Void – as per Section 401.03.03
- HMA Rideability – as per Section 401.03.03
- HMA Thickness – as per Section 401.03.03
- Concrete Strength – as per Section 903.03
- Concrete Pavement Rideability – as per Section 507.03
- Concrete Pavement Thickness – as per Section 405.03

Note that other sections may note that the Department will make payment adjustments in accordance with these sections (e.g. 404.04 notes that for SMA Surface Course, payment adjustments are made as per 401.03.03.)

So, if a New Item must be established for each type of quality adjustments for various items can be combined (e.g. air void quality adjustments for a number of asphalt items), can be calculated and combined into a single New Item for Hot Mix Asphalt Air Void Quality Adjustment. The RE must utilize the standard items that have been established for these adjustments.

The RE should also be aware that if New Work is being added for which the Department intends to assess quality performance and assess a payment adjustment, the Change Order must specify such. This is only necessary when establishing a New Work item that is not covered by the Standard Specifications.

A payment adjustment can be either positive or negative. It is important to remember that while a “bank” may be established for bonus payments, a similar negative “bank” cannot be made for damages or penalties. This is because a negative amount is deducted from the total adjusted Contract amount even before it is assessed by the estimate.

Payment adjustments do not require the Contractor’s agreement and should not be handled as an Agreement Change Order.

STANDARD WORDING

Subsection 106.05 of the NJDOT Standard Specifications provides for assessment of costs resulting from sampling and testing of materials that fail to meet the requirements of the Contract. The RE was notified of the pay adjustments by the Regional Materials Engineer via email dated MM/DD/YY.

Since there is no item in the contract to allow this assessment, it is proposed to establish Item No. XXX, Failing Sample Charges, with the Unit Price of \$1.00 and an As-Built Contract Quantity of XXXX

Subsection 401.03.03 of the Standard Specification provides for payment adjustments for air voids. The Bureau of Materials Engineering and Testing has issued the Final Core Summary Report dated MM/DD/YY.

Since there is no item in the contract to pay for this adjustment, it is proposed to establish Item No. XXXX, Hot Mix Asphalt Air Void Quality Adjustment, with the Unit Price of \$1.00 and an As-Built Contract Quantity of XXXX.

Subsection 401.03.03 of Standard Specifications provides for payment adjustments for the International Roughness Index (IRI) ride quality. The latest IRI Summary report issued by the Pavement Management dated MM/DD/YY

Since there is no item in the contract to pay for this adjustment, it is proposed to establish Item No. XXXX, IRI Ride Quality Adjustment, with the Unit Price of \$1.00 and an As-Built Contract Quantity of XXXX.

Subsection 903.03 of the NJDOT Standard Specifications provides for payment adjustments for concrete strength quality. The RE was notified of the pay adjustments by the Regional Materials Engineer via email dated MM/DD/YY.

Since there is no item in the contract to pay for this adjustment, it is proposed to establish Item No. XXX, Statistical Concrete Payment Adjustment, with the Unit Price of \$1.00 and an As-Built Contract Quantity of XXXX

Subsection 507.03N of the NJDOT Standard Specifications provides for payment adjustments for Concrete Rideability Quality. The RE was notified of the pay adjustments by the Regional Materials via email dated MM/DD/YY.

Since there is no item in the contract to pay for this adjustment, it is proposed to Establish Item No. XXX, Concrete Surface Rideability Quality Adjustment, with the Unit Price of \$1.00 and an As-Built Contract Quantity of XXXX

Quality Payment **Adjustments Examples**

New Work Change Orders

Change Orders that require the Contractor's agreement are no longer called Supplementary Agreements in the Contract but are handled in the same way. Informally, these Change Orders will be called Change Orders. The Contractor's assent is required whenever there is a change in to the terms of the Contract: e.g. change in the specifications, holding the bid price for major changes (as per 104.03.03, establishing a renegotiated price for major changes, and for establishing New Work. If work is already defined by the Contract, it is not considered New Work – even if it requires the establishment of a new item. The alternative to entering into an agreed price is to direct the work using Force Account.

If a change in the terms of the Contract or if New Work is required, the RE is responsible for negotiating a price and for determining if an adjustment of time is required. When negotiating a change, the RE should understand that a Change Order for New Work places the inherent risk on the Contractor. A Force Account may provide the Department with certain flexibility and control, but it also places all of the risk with the Department. Thus, when negotiating a price, the RE should consider the cost benefit of having the Contractor assume the risks involved. The RE should not accept a price based on a worst-case scenario, but rather should evaluate and apportion costs based on reasonable risk factors.

Take note that while the RE is responsible for the negotiation, there is no agreement until the Change Order is executed by the Regional Construction Engineer, and as such the RE should not notify the Contractor that a price is acceptable.

Change Orders that establish items that are defined by the Standard Specifications do not require any additional reference to the specifications (e.g., 9" x 18" Concrete Vertical Curb; Inlet, Type E; Temporary Sheeting) as long as the standard item description is used. The RE can use a standard item and standard specification even if the work involved as additional requirements that are non-standard. In that situation, the Change Order should note the additional or changed portion of the work requirements similar to how addenda note changes to the Contract.

Change Orders that establish items that are not defined by the Standard Specifications must include a specification in the Change Order. The specification must detail;

- what materials are required
- what work is being performed
- what performance standards or construction methods are required
- how the work is measured and paid (including any quality payment adjustments)

If the specification is lengthy, it is acceptable to send the specifications to the Contractor and to refer to the transmittal in the Change Order. Alternatively, the work can be specified by referencing a standard (e.g., AASHTO, ASTM, EPA regulations, manufacturer's recommendations), but all of the requirements must be established. Where the Change Order establishes unique work, it is necessary to define all of the work requirements (e.g. maintenance, removal, disposal, restoration). Anything which is not specified may later be protested by the Contractor as not included in the price negotiated, and thus require additional payment due to the omission.

When a Change Order is anticipated the RE should request the Contractor to submit a cost proposal for New Work and for any impact the work will have to the progress schedule.

Price Justification

When the Contractor submits a price for New Work, the RE should review the cost and determine if the price is reasonable for the work. The RE may require the Contractor to submit a detailed cost estimate as per 104.03.08. If the RE believes that the price is not reasonable, the RE should negotiate with the Contractor for a price the RE believes is reasonable. The RE must prepare a memo to the Regional Construction Engineer explaining how and why the price for the work is justified.

Price justification can be developed in a number of ways, the most common are by:

- Price comparison with similar items in the same contract
- Price comparison with Bidx and/or the average weighted price index or with similar items from other contracts
- Price comparison with a Force Account style breakdown

Price comparisons with items from other Contracts should be based upon equivalent specifications. A valid price comparison may be developed from a comparison of other projects grouped by similar quantities and/or a comparison of other projects grouped by location.

A price developed from a Force Account style breakdown, should attempt to follow the same requirements as listed for an estimated Force Account budget; i.e., presenting it according to the format for a Force Account in appendix “B” & providing explanatory statements for wage rates, additive rates, material prices, and equipment rates.

In analyzing a detailed cost submitted by the Contractor, it is common that the RE’s assessment of the price differs because of a difference in the estimation of risk involved. A higher than usual price may be acceptable with an explanation of particular field conditions and explaining the risk to cost ratio.

In some circumstances, the RE may generate the cost breakdown. The RE can demonstrate that a price is reasonable if his or her estimate of the cost is higher than the price submitted by the Contractor. The RE should not raise the price to match his estimation of cost.

The price justification memo is considered an internal document and should not be shared with the Contractor.

New Work/Value **Engineering Change** **Orders Examples**

Change Orders and Contract Time

Time is generally not subject to negotiation, but rather is a calculated value. An exception to this is when there is a major change to the Contract for which a simple Time Impact analysis is not possible. However, with a New Work Change Order, the Contractor's assent is considered as acceptance of the time adjustment provided.

If there is a disagreement about adjustment to Contract Time for the Change Order, either the change must proceed on a Force Account basis, or the Change Order must note the Department will accept a claim for the sole purpose of the impact of the Change Order on Contract Time. When the latter is required, it is advisable to seek the advice of the DAG for the proper wording to be placed in the Change Order.

In a Change Order establishing New Work, the following elements are required:

- A detailed explanation stating the existing condition and the problem resulting from that condition; i.e., a reason why the work is necessary.
- The proposed method of correcting the condition; i.e., a description of the work involved in the COP
- A statement noting who authorized the change in design.
- Reference to the RE's price justification memo.

General

A Change Order cannot be processed with a protest. If the Regional Construction Engineer executes a Change Order within 15 days of receiving the Contractor's signature, the specifications bar the contractor from protesting the Change Order. If the Regional Construction Engineer delays in executing the Change Order by more than 15 days, the Regional Construction Engineer should contact the Contractor to determine if the Contractor is still willing to agree to the Change Order. If so, the Change Order may be processed. If not, the Change Order must be re-negotiated so that the Contractor finds the terms acceptable, or direct the work proceed on a force-account basis.

When work for an existing item is affected (i.e., part of the work required under an item is no longer required), a credit may be due the State. If this consideration has been factored into the cost of the New Work item, the Change Order must state such.

Work that is part of an existing item may be incorporated as part of a New Work item, only when there is a change in the character of the work as defined by Section 104.03.03. In this situation, the Change Order must note that there is a change in the character of the work as per Section 104.03.03.

When establishing a New Work item for a credit due the State, the quantity (usually Lump Sum) not the unit price must be a negative to produce a negative dollar amount. The Department's mainframe will not accept negative unit prices.

When establishing a New Work item, check that the item description is identical in The Nature and Reason and in the setup of the item that follows the Nature and Reason. Use standard item descriptions if applicable.

STANDARD WORDING

Item No. 90XX, Description \$Price DOLL Unit/LS

Detailed description of Change:

The RE by (Letter, Email, etc.) dated _____, directed the Contractor to submit a cost proposal for New Work. The Contractor complied and by letter dated _____ submitted a (lump sum, unit, etc.) cost breakdown of _____.

The cost this work has been reviewed by the RE, with written concurrence from the Project Manager obtained on MM/DD/YY and has been found reasonable and acceptable as explained in a memorandum from the RE to the Regional Construction Engineer dated MM/DD/YY

Since there is no item in the Contract to pay for this work, it is proposed to establish Item No. XXX, Description, for (quantity& units) at the unit (or lump sum) price of \$ XXXX.

Change Orders and **Contract Time Examples**

Repair of Damaged Work

Any part of the project, which is damaged by the Contractor, is to be repaired to the satisfaction of the RE at no expense to the Department.

Any part of the Work, which is damaged prior to final acceptance of the work, is the responsibility of the Contractor. The Contractor bears the risk of loss or damage for permanent or temporary construction arising from acts or omissions whether negligent or not, except for work that has been completed and is serving its intended function is damaged by a traffic accident and the Contractor provides satisfactory evidence that such damage was caused by a public traffic accident as per Section 107.11.

Satisfactory evidence shall generally be limited to:

- accident reports filed with the Motor Vehicle Commission, police agencies or insurance companies
- statements by reliable, unbiased eye witnesses
- identification of the vehicle involved in the accident

Physical evidence that the damage was caused by a motor vehicle (e.g. tire marks or broken headlight glass) will not be sufficient unless it can be clearly shown that the damage was not caused by the Contractor's vehicles or by vandalism.

If the conditions noted in 107.11 are met, payment for repairs will be made on a Force Account basis. Change Orders for this will include the following in addition to the usual requirements for a Force Account Change Order:

- A statement noting that damage was caused by an accident, explaining in detail what was damaged.
- If a Police report is available: a statement noting the date of the accident, and citation of the Police Report noting the report no. and the name of the Police Dept. issuing the report (A copy of the police report will be attached to the Regional Work copy of the Change Order.) The RE will also write a memorandum to the Bureau of Maintenance Engineering, informing them of the date the accident occurred and the cost of the repair. A copy of the Change Order and a copy of the accident report are to be attached to the memorandum to Maintenance Engineering.
- When a Police Report is not available: a statement noting how the party responsible is identified or a statement that no police report is on file.
- Reference to Design authority approval for any changes in design (Design should be contacted prior to the repair of existing work, as any repairs should be done in accordance with the latest design standard. Design need not be contacted for repair of new work).
- A copy of the memorandum advising the Bureau of Maintenance Engineering will be attached to the Regional Work Copy of the Change Order.

NOTE: Such work is **Non-participating**

Repair of Damaged Work

Examples

Force Account Change Orders

If RE and the Contractor cannot agree on the price for New work (or if the urgency of the work requires issuance of a Change Order without negotiating a price, work may be directed to proceed on a Force Account basis. (As per 104.03.08 of the specifications)

The RE should issue a Field Order (refer to page 8) directing the Contractor to proceed with the work on a Force Account basis and establish a preliminary budget. On PODI Projects, the RE must contact the FHWA where the estimated Force Account budget is greater than \$10,000.

Change Order establishing a Force Account requires the following elements:

- A detailed explanation stating the existing condition and the problem resulting from that condition.
- The proposed method of correcting the condition.
- Who is authorizing the change in design and reference to authorizing or concurrence memorandum by date? e.g., The Bureau of Structural Engineering has concurred with this decision as noted in a memorandum dated MM/DD/YY.
- If the Force Account involves a credit due to the State for the reduction of work and/or the change in materials for an existing item, the Change Order will state the nature of the reduction included and which item is involved.
- The Change Order will include a cost breakdown prepared or approved by the RE.

The RE's cost breakdown shall be presented according to the sample format shown in [Appendix "B"](#).

In addition, the RE shall provide explanatory notes on the breakdown as to how estimated costs were derived.

- When labor wage rates or benefits differ from the prevailing wage rate, a note should be added why such rates are used; e.g., from certified payrolls for the project.
- Additive rates should be broken down by cost - FICA, Workman's Comp., General Liability, etc. and how the quoted rates were derived; e.g., from previously approved Force Account Construction Order No., Contractor's initial price quote.
- Material prices - e.g., from invoices, price quotes from area suppliers, from Contractor's initial price quote.
- Equipment should have full descriptions and a copy of the blue book page quote. When differing rates are used, a note should be added as to how the rate was derived; e.g., rental rate price quote from area suppliers, rental rate invoices.

Notes on Force Account Costs:

On PODI Projects, the RE must contact the FHWA where the estimated Force Account budget is greater than \$10,000.

Prior to performing the work, the RE should confer with the Contractor, and decide on the labor and equipment which will be deployed in the performance of the Force Account work.

The RE should establish which labor classifications and how many of each will be required.

Additionally, there should exist an understanding as to what labor rates are allowable; i.e., the RE is not bound to the Contractor's payment of premium wage rates or the use of higher level classifications just because it is part of the Contractor's regular work force. The RE may require that personnel who receive only the prevailing wage rate be deployed. The RE may authorize the use of personnel with higher wage rates if he determines that to do so is more efficient.

The RE should be aware of the labor agreements concerning holiday pay, and decide the work schedule accordingly. Certain labor agreements award holiday pay based upon whether the employee works the day before or the day after the holiday. The RE may authorize work, which would incur such expenses if he determines that to do so is more efficient.

STANDARD WORDING

Establish Estimated Force Account Budget

Since there is no item in the Contract to pay for this work, it is proposed to establish Item No. XXX, with an estimated Force Account budget of \$ XXXX, as explained in a memorandum from the RE to the Regional Construction Engineer dated MM/DD/YY.

It is understood that this amount will be adjusted to agree with the actual costs incurred by the Contractor submitted in accordance with Subsection 104.03.08 of the Contract's Specifications and substantiated by the RE's records.

Establish Force Account

The Contractor, by correspondence XXX dated MM/DD/YY, submitted an acceptable Force Account cost in the amount of \$ XXXX as complete reimbursement for this work. The amount of the Force Account represents the actual costs incurred by the Contractor, submitted in accordance with subsection 104.03 and 109.03 of the Contract Specifications and substantiated by the Engineer's records.

Since there is no item in the Contract to pay for this work, it is proposed to establish the Extra Work Item XXX Force Account for the actual amount of \$ XXXX.

Force Account Change

Orders Examples

Increases to an Estimated For Account Budget

In the event that the scope of the work changes due to field conditions or during the course of the work it becomes evident that the estimated costs are projected to be substantially more than the Force Account budget an additional Change Order should be submitted.

An Order increasing an estimated Force Account requires the following elements:

STANDARD WORDING

Change Order No. established Item No. XXX, with an estimated Force Account budget of \$XXXX.

[Explain the reason why the costs are projected to be substantially more than estimated. (e.g., the conditions which require additional work, increase rates, lower production rates, etc.)]

It is, therefore, proposed to increase the estimated Force Account budget by the amount of \$XXXX, as explained in a memorandum from the RE to the Regional Construction Engineer dated MM/DD/YY.

NOTE: Conversion of a Force Account Item to an agreed price via an Agreement Change Order is generally discouraged but may be considered on a case-by-case basis by the Regional Construction Engineer.

Increases to an Estimated **Force Account** **Budget Examples**

Final Force Account Adjustment

When the work is complete and the Contractor has submitted the required documentation, the force account must be adjusted to agree with the actual costs. This adjustment may be part of an as-built Change Order for smaller Force Accounts.

A Change Order making a final Force Account adjustment requires the following elements:

- The RE will provide a Force Account cost breakdown with the Change Order according to the sample format shown in appendix "B". In addition, the RE shall provide explanatory statements on the breakdown, as needed, as to how the costs were substantiated.

Direct Labor

- The time period when the work is performed must be indicated on the breakdown - it may be necessary to break down the labor summary according to the various time periods to account for the increases in wages, benefits, or additive rates.
- When labor wage rates differ from the prevailing wage rate, a note should be added that the rates are verified from certified payrolls for the project. Important - see note on differentiating between direct wage and taxable wage rates.
- When benefit rates or overtime rates do not conform to the prevailing wage rate, a statement explaining the difference and how the rates were substantiated must be included. The Contractor's cost quote should not be accepted as substantiation. It may be necessary for the Contractor to provide a copy of the labor agreement from the Union local. Rate quotes from other final Force Accounts for the same project will be accepted, e.g. "rate as substantiated in Change Order No. XXX".

Labor Fringe Benefits and Insurance

- Additive rates must be broken down by cost - FICA, Workers Compensation, Federal and State unemployment insurance, General Liability Insurance, etc.
- For the first final Force Account on a project, the additive rates must be substantiated. The RE must provide a copy of the supporting documentation and how the quoted rates were derived with the Change Order. These rates may be used for the remainder of the project for that Contractor by citing the Change Order which accepted the costs; e.g., "rate as substantiated in Order No." (provide that the rates have not changed since that time). If new or different rates are used, supporting documentation must be provided which substantiates the new rates.

Materials

- Materials costs must be itemized and the prices must be substantiated from a paid invoice. (A purchase order is not acceptable.) The Department has the right to establish the cost of the material at the lowest current wholesale cost. Thus, if a price is deemed excessive or the Contractor fails to provide a satisfactory invoice, the RE may establish the price. If a price is established by a means other than an invoice, the breakdown must contain a statement explaining how the cost was established. (e.g. based on a price quotes from an area supplier)
- Materials costs should not include any sales tax.
- If any discount is offered on the material, the discount is to be applied regardless to the price actually paid.

Extraordinary Expenses

- Permit and Disposal fees should be broken out separately.
- Extraordinary Expenses must be substantiated from a paid invoice.

Equipment

- Equipment listings should have a full description, the year of the equipment, and a copy of blue book page quote supplied by the Contractor. When equipment, which is not listed in the Blue Book (B.B.) is used, a note must be added explaining how the rate was established; e.g., rental rate price quote from area suppliers, rental rate invoices, composite of B.B. rates, comparable B.B. rate.
- Age adjustments must be made for all non-rental equipment. Area adjustments will not be made.
- Rented equipment must be substantiated by a paid invoice The Contractor may only rent equipment, which has been authorized by the RE. Taxes on rental equipment are eligible for compensation.
- Idle time rate is applied only for such equipment which is held at the request of the RE. It is generally applied for 8-hour increments. Back-up equipment, such as generators for concrete operations or equipment retained on the project due to weather delays, are examples of circumstances when an idle rate is applicable. Generally, equipment is maintained on an idle basis when the RE determines that the transportation cost of removing and returning a piece of equipment, or the resulting delays from such actions warrant keeping the idle equipment. Idle time for a piece of equipment is limited to 8 hours/day or and to 176 hours/month.
- Operating costs are applied for those hours for which the equipment was actually in use. The RE need not monitor equipment used on an irregular basis. The RE should use his judgment as to when it is reasonable to monitor such costs. Equipment such as power tools, which are used throughout the days, would not warrant being broken down for operating costs hours. Large equipment requiring an operator should be monitored. Breakdowns with 16 hours of operating costs for large equipment and only 8 hours of operator would be questioned.

- The Department will apply the rental and operating rates that are current on the first day that the equipment is in use for the force account work for the first 6 months that the force account is in progress. Rates are updated for every following 6-month period the force account is in progress.
- Minor equipment is considered part of the overhead expense.

Profit

- 10% profit is allowed on direct labor, fringe benefits and material costs (excluding transportation, shipping, handling, and taxes).

Overhead

- 15% profit is allowed on direct labor, fringe benefits and material costs (excluding transportation, shipping, handling, and taxes).

Subcontractors

- Markup for subcontractors is limited to 5% of the total subcontract cost up to a maximum \$5,000.
- Only approved Subcontractors should be allowed to work. When a specialty services are required and the Contractor cannot obtain a Subcontractor to perform the work in accordance with the State's Force Account requirements, the RE must request a waiver from the Regional Construction Engineer permitting the use of the Subcontractor. In that event, such work will be deemed ineligible for markup, and the costs should be listed separately under the header, Extraordinary Expenses.

STANDARD WORDING

Change Order No. _____ established Item No. _____, _____, with an estimated Force Account budget of \$ _____. This Change Order adjusts the estimated Force Account costs to agree with the actual Force Account costs of \$ _____. Therefore, it is proposed to increase (decrease) Item No. by the amount of \$ _____

The amount of the Force Account represents the actual costs incurred by the Contractor, submitted in accordance with subsection 104.03 and 109.03 of the Contract Specifications and substantiated by the Engineer's records.

Final Force Account **Adjustment Examples**

As-built Adjustment

The explanation that an adjustment is an as-built adjustment should only be applied when the adjustment based upon the as-built calculation for work, which has been authorized; either by the plans and specifications or by a previously approved Change Order.

It should not be used to mask changes in design. Certain flexibility is allowed for the definition of a change in design. Generally, if the work is already proposed in some manner and a comparable item is substituted, this would not be considered a change in design. (e.g., using traffic stripes in lieu of pavement marking tape, guide rail in lieu of reset guide rail, an inlet in lieu of a reconstruct inlet.)

Changes in design must be authorized by the appropriate Design authority and require a detailed explanation in a Change Order. (The RE's attention is directed to CPH IV-A for Changed Field Conditions.)

As per Section 109.01, the Department will not measure quantities for Proposal Items (items having a "P" suffix in the item number) other than for quantities shown on the plans as "If and Where Directed", unless the measured quantity differs from the Contract quantity by more than 10% of the Contract quantity. Note that the Contract makes no allowance for "spot" adjustments for calculative errors on individual plan sheets.

Accordingly, quantity adjustments of Proposal Items and quantity adjustments of unit quantity items require a detailed explanation of the change.

Similarly, as it is unusual that unit quantity items are adjusted for an as-built calculation reason, the Regional Construction Engineer may question the adjustment. The RE may expedite the approval process by anticipating this inquiry and provide a note confirming that a particular item adjustment was the result of plan sheet tabulations and not a change in design.

STANDARD WORDING

To revise the Contract quantities to agree with available as-built quantities, the following adjustments are required. * (Items requiring justification are noted and explained.)

*Add this statement only if appropriate.

As-built Adjustment **Examples**

Final Change Order

The last Change Order executed for a project must be noted as the Final Change Order. In rare circumstances a subsequent Change Order for claim settlements or for corrections to errors in the as-built quantities maybe necessary - such Change Orders must be duly noted as "2nd Final". **NOTE: Until further notice, do not within Site Manager itself mark any C.O. as “Final.”** The Department is working ultimately to having the Final C.O. be the DC20, but that procedure is not yet in place. **Until such time as you are further directed, the “Final” designation shall be noted on the C.O.’s first page by hand and HIGHLIGHTED when you submit the Order.**

The RE must submit the final DC-104 and a Contract Summary with the Final Change Order.

A Final Participation Summary (see Appendix “C”) detailing the final cost distribution is required for projects with a cost sharing agreement. (See page 6 for comments on the DC-174) For some projects this may simply be a summary showing which items are 100% State funded, and which items are funded under a Federal Project Number - breaking down the final cost for these categories by road and bridge classification. More complicated projects, with numerous federal or other agency funding sources must provide an item by item cost distribution with summaries for each fund broken down by road and bridge classification.

The cost distribution must be calculated from the differences between the Final Participation Summary provided and the Participation Summary Adjusted Amounts shown on the last Order preceding the Final Change Order. If changes are required to account for errors or omissions from previous Change Orders, the RE must attach a note to the DC-174 explaining the difference, so that the Bureau of Programming can track the change in the Participation Summary.

STANDARD WORDING

To revise the Contract quantities to agree with the final as-built quantities, the following adjustments are required. * (Items requiring justification are noted and explained)

* Add this statement if appropriate

New Work

Item No. XXX Performance and Payment Bond is being established in this Change Order to adjust the as-built quantity of Item No. Performance and Payment Bond as per subsection 151.04 of the Contract in agreement with the RE’s records.

The dollar amount of \$XXXX for Item No. XXX Performance and Payment Bond is the difference between what was initially paid at the start of the work in accordance with Subsection 151.04 and the amount calculated in accordance with Subsection 151.04 of the Contract at the completion of the project.

Since there is no Item in the Contract to pay for this work, it is proposed to establish Item No, XXX Performance and Payment Bond in the amount of \$ XXXX DOLL.

Item No. XXX Construction Layout is being established in this Change Order to adjust the as-built quantity of Item No. Construction Layout as per subsection 157.04 of the Contract in agreement with the RE's records.

The dollar amount of \$XXXX for Item No. XXX Construction Layout is the difference between what was initially paid at the start of the work in accordance with Subsection 157.04 and the amount calculated in accordance with Subsection 157.04 of the Contract at the completion of the project.

Since there is no Item in the Contract to pay for this work, it is proposed to establish Item No, XXX Construction Layout in the amount of \$ XXXX DOLL.

Final Change Order **Samples**

Assessing Damages and Charges

The Standard Specifications provide for the Department to assess damages or charges in a number of circumstances, including Liquidated Damage, Lane Occupancy Charges, Failing Samples as per Section 106.05; As built Measurement as per Section 109.01; Progress Schedule Update Damages as per 153.04; and ITS Liquidated Damages as per 704.03. In these circumstances, the RE will need to create a New Work Item.

A summary of how the total damage or charge was calculated **MUST** be submitted with the Change Order.

Payment adjustments do not require the Contractor's agreement and should not be handled as a New Work Change Order.

The following example of a Failing Sample Charge is provided below:

STANDARD WORDING

Section 106.05 of the Standard Specifications provides for the assessment of costs resulting from sampling and testing of material that fails to meet the requirements of the Contract.

Since there is no item in the Contract to allow for this assessment, it is proposed to establish Item No. XXX, Failing Sample Charges, for the price of \$ XXXX

Since this Change Order does not affect the critical path of the Contractor's approved Progress Schedule, no Time Adjustment is warranted.

NOTE: The credit amount for the failing samples will be an adjustment in the Federal Participating, Roadway or Bridge costs of the project shown on the Change Order participation breakdown sheet.

Assessing Damages and **Charges Examples**

Claims

Change Orders that are issued to resolve disputes for which a DC-161 form has been filed, a “Contractual Notice Release Form” shall be attached (See [Appendix “A”](#)), and must be signed by the Contractor prior to execution of the Change Order. A copy of the DC-161 is to be included in the Change Order’s backup information. The Change Order also requires the Contractor’s signature to indicate their agreement.

If the claim is resolved at the RE level (Step 1 of the Dispute Resolution Procedure), the Change Order should be handled as a typical New Work Change Order (see page 30).

STANDARD WORDING

The Contractor filed a DC-161 Contractual Notice form dated MM/DD/YY for costs incurred as a result of widget redesign. Following Step I of the Administrative Process for dispute resolution under subsection 107.12, the RE tendered a settlement offer of \$400,000.00 for the resolution of this Claim.

By acceptance of this Change Order, the Contractor accepts this settlement offer as full and complete compensation for all matters associated with the DC-161 Contractor’s Notice of Potential Claim dated MM/DD/YY

Since there is no item in the Contract to pay for this settlement, it is proposed to create the Item Widget Redesign Claim, at the lump sum price of \$400,000.00.

If the claim is resolved at the Dispute Review Board (Step II of the Dispute Resolution Procedure), the Change Order should be handled as a typical New Work Change Order (see page 30).

STANDARD WORDING

The Contractor filed a DC-161 Contractual Notice form dated MM/DD/YY for costs and delays incurred as a result of widget redesign. Following Step II of the Administrative Process for dispute resolution under subsection 107.12, the Regional Dispute Board tendered a settlement offer of \$400,000.00 and an extension of time of 45 days as the resolution of this Claim.

Since there is no item in the Contract to pay for this settlement, it is proposed to create the Item, Widget Redesign Claim, at the lump sum price of \$400,000.00.

Additionally, in accordance with the settlement, an extension of time of 45 days to granted to the Substantial and Final Completion dates, which adjusts Contract Time for the Substantial Completion date to MM/DD/YY and adjusts the Contract Time for the Final Completion date to MM/DD/YY.

By acceptance of this Change Order, the Contractor accepts this settlement offer as full and complete compensation for the claim dated MM/DD/YY.

If the claim is resolved at the Claims Committee (Step III of the Dispute Resolution Procedure), the Change Order should be handled as a typical New Work Change Order (see page 30).

STANDARD WORDING

The Contractor filed a DC-161 Contractual Notice form dated MM/DD/YY for costs and delays incurred as a result of widget redesign. Following Step III of the Administrative Process for dispute resolution under subsection 107.12, the Claims Committee tendered a settlement offer of \$400,000.00 and an extension of time of 45 days as the resolution of this Claim.

Since there is no item in the Contract to pay for this settlement, it is proposed to create the Item, Widget Redesign Claim, at the lump sum price of \$400,000.00.

Additionally, in accordance with the settlement, an extension of time of 45 days to granted to the Substantial and Final Completion dates, which adjusts Contract Time for the Substantial Completion date to MM/DD/YY and adjusts the Contract Time for the Final Completion date to MM/DD/YY.

By acceptance of this Change Order, the Contractor accepts this settlement offer as full and complete compensation for the claim dated MM/DD/YY.

Note: FHWA will not participate in claim settlements to the extent that they involve:

- Costs attributed to result from the gross negligence by NJDOT employees, officers, or agents acted with gross negligence, or if they participated in intentional acts or omissions, fraud, or other acts not consistent with Department's usual practices in project design, plan preparation, contract administration, or other activities which gave rise to the claim.
- Costs resulting from consequential or punitive damages, anticipated profit, or any award or payment of attorneys' fee paid by the State to an opposing party in litigation; and
- Costs resulting from tort, inverse condemnation, or other claims erroneously styled as claims "under a Contract."

Claims Examples

Appendix

<u>“A”</u>	<u>DC-161R Form</u>	<u>58</u>
<u>“B”</u>	<u>DC-54 Daily Force Account Summary</u>	<u>59</u>
<u>“C”</u>	<u>Final Breakdown Summary</u>	<u>60</u>
<u>“D”</u>	<u>Change Order Check List</u>	<u>61</u>
<u>“E”</u>	<u>Site Manager DC 174A</u>	<u>64</u>
<u>“F”</u>	<u>Site Manager DC 174B</u>	<u>65</u>
<u>“G”</u>	<u>Sample CO-1 Letter</u>	<u>66</u>
<u>“H”</u>	<u>Sample SA-1 Letter</u>	<u>67</u>
<u>“I”</u>	<u>Sample SA-2 Letter</u>	<u>68</u>
<u>“J”</u>	<u>Items typically not Eligible for Federal Participation</u>	<u>69</u>
<u>“K”</u>	<u>Guide to Section 104.03.03 of the Specifications</u>	<u>70</u>
<u>“L”</u>	<u>Federal Project End Date (FPED) Modification</u>	<u>81</u>
<u>“M”</u>	<u>DC-172 Change Order Quantity Adjustment Form</u>	<u>83</u>

Appendix A

CONTRACTUAL NOTICE RELEASE FORM

Contract Description:
Federal Project Number:
0% State
UPC
DP Number:

In consideration of payment and/or terms and conditions stipulated in the attached Change Order (Form DC-173A) Number: _____ dated _____, I hereby release the State of New Jersey, the Commissioner of the Department of Transportation, the Department, their agents, officers and employees, from all liability and claims asserted now or in the future, set forth in this Contractual Notice Form filed on _____, regarding _____.

By acceptance of this Change Order, the Contractor agrees that the compensation provided by this Change Order constitutes the full extent of payment and modification of Contract Time as settlement for the above noted claims, and waives its right to any additional compensation associated with the above noted claims. Furthermore, the Contractor waives its right to file suit for the above noted claims. If the Contractor files suit for these claims after the execution of this Change Order, it further agrees to reimburse the Department for any and all legal expenses incurred by the Department associated with these claims.

Furthermore, I acknowledge that I have full power and authority to execute this release and bind the Contractor and that all approvals and actions necessary in connection with my execution of this release have been obtained and are in full effect as of the release execution date.

Firm: _____

Date: _____

Authorized Representative: _____

Witness To: _____

Name: _____

Name: _____

Title: _____

Title: _____

Appendix B

Form DC-54 (03/2018)

New Jersey Department of Transportation DAILY FORCE ACCOUNT RECORD

JOB:
LOCATION:
CONTRACTOR (SUB) :
ITEM NO.:

DAY:
DATE:
WEATHER:
INSPECTOR:

LABOR	Time Worked		Straight Time	Overtime	Total Hours
Name/Classification	From:	To:			

EQUIPMENT

Time Worked

Idle
Hours Total
Hours

Make/Model	Owned / Rented	From:	To:	Hrs.:
	Choose One			
	Choose One			
	Choose One			
	Choose One			
	Choose One			
	Choose One			
	Choose One			
	Choose One			

MATERIALS

Delivered	QUANTITY Placed
-----------	--------------------

COMMENTS:

AUTHORIZED PERSONNEL SIGNATURES AGREEING TO THE ABOVE FORCE ACCOUNT RECORD

AUTHORIZED SIGNATURE (PRIME CONTRACTOR) : _____

AUHTORIZED SIGNATURE (SUBCONTRACTOR) : _____

AUTHORIZED SIGNATURE (N.J.D.O.T.) : _____

Appendix C

Final Breakdown Summary

FUNDING DESCRIPTION	ROAD	BRIDGE	TOTAL
Federal Funding			
HPP-NH-A00S(447)	\$5,414,169.25	\$4,483,078.47	\$9,897,247.72
Subtotal	\$5,414,169.25	\$4,483,078.47	\$9,897,247.72
100% STATE FUNDINGS (NP)			
Item #14	\$9,730.00		\$9,730.00
Item #166	\$8,149.00		\$8,149.00
Item #167	\$4,147.00		\$4,147.00
Item #9006		\$144,282.96	\$144,282.96
Subtotal	\$22,026.00	\$144,282.96	\$166,308.96
CE Cost			
Item #4	\$105,000.00		\$105,000.00
Item #5	\$13,250.00		\$13,250.00
Item #6	\$12,010.40		\$12,010.40
Item #7	\$5,000.00		\$5,000.00
Item #8	\$2,300.00		\$2,300.00
Item #9	\$-		\$-
Item #10	\$-		\$-
Item #12	\$9,000.00		\$9,000.00
Item #9007	\$(3,000.00)		\$(3,000.00)
Subtotal	\$143,560.40	\$-	\$143,560.40
Grand Total	\$5,579,755.65	\$4,627,361.43	\$10,207,117.08

Appendix D

Updated 3-1--2020

CHANGE ORDER CHECKLIST - RE PORTION

- ___ 1) Select the "Draft" status in Site Manager prior to sending the Change Order package to the Region
- ___ 2) Change Orders should be in a PDF Format
- ___ 3) ONE (1) copies of the entire Change Order package including all supporting documents provided
- ___ 4) First Change Order submittal include a copy of the participation breakdown for the Project.
- ___ 5) For re-submittals return Regional work copy along with package (if applicable)
- ___ 6) DP Number is consistent under the Contract and Project headers.
- ___ 7) The State project seven digits number (CE Job Code No.) is correct.
- ___ 8) Route, Section, and Region are correct.
- ___ 9) Contractor's name and address are current and complete in the Change Order.
- ___ 10) Federal Project number is shown (if applicable).
- ___ 11) Project name and contract number are correct under Description header.
- ___ 12) Copies of all backup materials, letters, memorandums, emails cited in the Change Order are included (i.e., design concurrence, price acceptance memo, average weighted prices/Bidx, & supporting documentation such as diary page).
- ___ 13) All backup material is stapled; is in the order of reference in the Change Order; and have the item number on ALL respective supporting documents in the upper right hand corner.
- ___ 14) The Change Order should not refer to attachments in the body of the Change Order.
- ___ 15) Field Manager initials and dates Change Order lower left corner.
- ___ 16) Item numbers and descriptions match EXACTLY between the body of the Change Order and the item listing.
- ___ 17) Quantity adjustments, unit prices, and adjustment extensions match EXACTLY between the body of the Change Order and the item listing.
- ___ 18) An explanation as to how the Change Order affects the completion dates including Interim, Substantial, and Final regardless of whether an extension, reduction, or no time adjustment is necessary is provided. The explanation is specific, and references

the project's approved Progress Schedule. If there is no time adjustment, statement must be provided in the body of the Change Order.

____ 19) The location of proposed Change Order: states the location of the change. If the Change Order does not have a specific location, enter "Throughout the Project".

____ 20) For the Nature and Reason of change, a statement explaining the condition(s) that warrant the Change Order is provided.

____ 21) Change Orders include or reference in the body of the Change Order the following information:

____ a) A detailed explanation stating the existing condition and the problem resulting from that condition.

____ b) The proposed method of correcting the condition, including a detailed specification or reference to the Specifications as necessary.

____ c) Who is authorizing the change in design with reference to the authorizing or concurrence memorandum by date? For example, the Bureau of Structural Engineering has concurred with this decision as noted in a memorandum dated _____. Also refer to the Change Order Guide.

____ d) Reference the Regional Construction Engineer (RCE) Justification Memorandum (if applicable).

____ 22) Items which require explanation in Nature and Reason of the Change Order:

____ a) Plan quantity items, Proposed (P)

____ b) All New Work items

____ c) Any major increases or decreases in accordance with Subsection 104.03.03 of Standard Specifications.

____ d) Lump sum items

____ e) Items increase or decrease by \$50,000.00 cumulative

____ 23) Items which require explanation in a Regional Construction Engineer justification Memorandum (signed and dated by the Field Manager):

____ a) Any increases or decreases that are considered as a Major Change.

____ b) Time adjustment (for Federally funded projects, complete the DC-62 Federal Project End Date Modification)

____ c) All New Work items except Construction Layout, Performance and Payment Bond, Fuel and Asphalt price adjustments, Payment Adjustments (i.e. Air voids and IRI) (if applicable).

____ d) Estimated Force Account (How was estimate established).

____ e) Attach the Average Weighted Price (AWP)/Bidx report to the Regional Construction Engineer memo which was used as a reference.

- ____ 24) For Minor Changes if any, RE confirms (either in Regional Construction Engineer justification memo or by supporting documentation) that the cumulative change for any particular Pay Item is still under 25% in accordance with Subsection 104.03 of Standard Specifications.
- ____ 25) Prepare and submit the “Draft” DC-174a and 174b MS Excel spreadsheet with the appropriate funding sources located in the Bid Tabulations found on BidX and/or NJDOT website at the Division of Procurement, Awarded Projects..
- ____ 26) Cover letters CO-1, SA-1, SA-2 are provided with the Contractors complete and current address and cc's. (Do not staple)

Final Change Orders:

- ____ 27) For Final Change Order of a project the word “FINAL” should be hand written at the top right hand corner. **Note: Do not check “Final” for Change Orders in Site Manager.**
- ____ 28) Appendix D (for Federally funded projects)
- ____ 29) Contract Summary and DC-104
- ____ 30) Construction Layout Calculation
- ____ 31) Performance and Payment Bond Calculation
- ____ 32) Correspondence from Contractor indicating they agree with asbuilt quantities.
- ____ 33) Penalty/Bonus (if applicable)

Signature of RE: _____

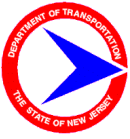
CHANGE ORDER CHECKLIST – FM portion

- ____ 1) The below are not included for Federal participation:
- Work items unrelated to the project's scope and purpose
 - Re-work. If improperly installed, not eligible for participation a 2nd time.
 - Additional work or changes of plan caused by Design Errors and Omissions.
 - Retroactively granted extensions of time, particularly after Substantial or Final Completion.
 - Extensions of time for utility or railroad delays.
 - Extensions of time or costs for State ordered shutdowns.

If there are any extraordinary circumstances contrary to the above, an explanation is attached to this checklist.

Signature of FM: _____

Appendix E



New Jersey Department of Transportation

Contract/DP File: _____

Change Order : _____

Job Number: _____

Job Name: _____

Date:

Status:

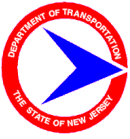
Funding:

DC-174A

PARTICIPATION BREAKDOWN THIS CHANGE ORDER					
FUNDING ALLOCATIONS		EXTRA	INCREASES	DECREASES	
PARTICIPATING	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
FED PROJ NO:	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
CE PARTICIPATING	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
Item Nos:	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
NON PARTICIPATING/State	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
Item Nos:	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
CE NON PARTICIPATING/State	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
Item Nos:	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
UTILITY BETTERMENT	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
Item Nos:	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
THIRD PARTY	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
Item Nos:	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
TOTAL	ROAD	\$ 0.00	\$ 0.00	\$ 0.00	
	BRIDGE	\$ 0.00	\$ 0.00	\$ 0.00	
	TOTAL	\$ 0.00	\$ 0.00	\$ 0.00	

Net Total Road	\$ 0.00
Net Total Bridge	\$ 0.00
Net Total for CO	\$ 0.00

Appendix F



New Jersey Department of Transportation

Contract/DP File: _____

Change Order : _____

Job Number: _____

Job Name: _____

Date:

Status:

Funding

DC-174B

PARTICIPATION BREAKDOWN - BASED ON APP CHANGE ORDERS Nos:

FUNDING ALLOCATIONS		ROAD AMOUNT	BRIDGE AMOUNT	TOTAL AMOUNT
PARTICIPATING FED PROJ NO:	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$	\$	\$
CE PARTICIPATING Item Nos:	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$	\$	\$
NON PARTICIPATING/State Item Nos:	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$	\$	\$
CE NON PARTICIPATING/State Item Nos:	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$	\$	\$
UTILITY BETTERMENT Item Nos:	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$	\$	\$
THIRD PARTY Item Nos:	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$ 0.00	\$ 0.00	\$ 0.00
	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$ 0.00	\$ 0.00	\$ 0.00
	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$ 0.00	\$ 0.00	\$ 0.00
	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$ 0.00	\$ 0.00	\$ 0.00
TOTAL	Original	\$ 0.00	\$ 0.00	\$ 0.00
	Adjusted	\$ 0.00	\$ 0.00	\$ 0.00

Appendix G

Form CO-1-2018 2/12



State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI
Commissioner

SHEILA Y. OLIVER
Lt. Governor

To: **Asphalt Paving Systems, Inc.**
P.O. Box 530
Hammonton, NJ 08037

Date: **12/10/2019**

Re: **Rt. 22 WB, Ramp from Rt. 78 to CR 523 (Oldwick Road)**
Federal Project No. NHP-0022 (336)
CE No. 100516 DP No. 18126

Gentlemen:

Enclosed is a fully executed copy of Change Order number **6**, dated **12/6/2019** which has been issued in accordance with Subsection 104.03 of the Specifications relative to the subject project.

THIS IS BEING SENT FOR YOUR RECORDS. CONTRACTORS SIGNATURE IS NOT REQUIRED ON CHANGE ORDERS OR FIELD ORDERS. DO NOT SIGN AND RETURN.

Subsection 104.03 of the Specifications describes the procedure and time frame for presenting a written, specific protest concerning the enclosed Change Order should there be a disagreement. Protest MUST be on Form DC-161 NEW JERSEY DEPARTMENT OF TRANSPORTATION CONTRACTUAL NOTICE FORM. The RE must be copied on all protests.

Sincerely,

James F. Mesinger
Regional Construction Engineer

cc: Suzanne Tomlinson, Bureau of Capital Program Coordination (w/attachments)
Scott Deeck, Project Manager (w/attachments)
Henry Jablonski, RE (w/attachments)
File

Appendix H

Form SA-1-2018 2/12



State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI
Commissioner

SHEILA Y. OLIVER
Lt. Governor

To: **Asphalt Paving Systems, Inc.**
P.O. Box 530
Hammonton, NJ 08037

Date: **2/13/2020**

Re: **Route 22 WB, Ramp from Route 78 to CR 523**
Federal Project No. NHP-0022(336)
CE No. 1005516 DP No. 18126

Gentlemen:

Enclosed are the four (4) original copies of Change Order number **7**, dated **2/13/2020**, relative to the subject project.

PLEASE SIGN, DATE, AND PRINT SIGNER'S NAME IN THE SPACE PROVIDED ON ALL COPIES AND RETURN THEM ALL TO ME AT THE ABOVE ADDRESS.

You will receive a fully executed copy of this Change Order after it is fully executed by the Regional Construction Engineer.

Your expeditious reply is requested.

Sincerely,

James F. Mesinger
Regional Construction Engineer

cc: **Scott Deeck**, Project Manager
Henry Jablonski, RE
File

Appendix I

Form SA-2-2018 2/12



State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI
Commissioner

SHEILA Y. OLIVER
Lt. Governor

To: **Asphalt Paving Systems, Inc.**
P.O. Box 530
Hammononton, NJ 08037

Date: **2/13/2020**

Re: **Route 22 WB, Ramp from Route 78 to CR 523**
Federal Project No. NHP-0022(336)
CE No. 1005516 DP No. 18126

Gentlemen:

Enclosed is a fully executed copy of the Change Order number **7**, dated **2/12/2020**, relative to the subject project.

THIS IS BEING SENT FOR YOUR RECORDS.

Sincerely,

James F. Mesinger
Regional Construction Engineer

cc: Suzanne Tomlinson, Bureau of Capital Program Coordination (w/attachments)
Scott Deeck, Project Manager (w/attachments)
Henry Jablonski, RE (w/attachments)
File

Appendix J

Items typically not Eligible for Federal Participation

The following is a representative list of those construction items that are typically considered ineligible for participation with Federal funds. This list is not all-inclusive, and on occasion, the RE may encounter items, which are questionable. The FHWA suggests the RE have a prior discussion with them in such instances. The FHWA will participate on a case-by-case basis, if deemed project beneficial.

As a general rule, the following items would not be eligible:

1. Any items associated with normal maintenance activities, for instance, cleaning drainage system.
2. Payment for re-doing faulty work.
3. The value of additional or extra work resulting from a design error or omission for which the Department could seek reimbursement from the design consultant.
4. Traffic damaged items.
5. Time extensions and additional costs incurred due to utility delays and unavailability of right-of-way.
6. Payment for added survey cost for work added to the contract where the bid items provide for the proration of the survey bid based on the final contract cost.
7. Spare parts.
8. Material and parts not incorporated into the project and turned over to Operations.
9. Material not meeting contract specifications but incorporated into the project.
10. Additional work resulting from unapproved change of plan.
11. Claims, as noted below:
 - I. If it has been determined that NJDOT employees, officers, or agents acted with gross negligence, or participated in intentional acts or omissions, fraud, or other acts not consistent with usual State practices in project design, plan preparation, contract administration, or other activities which gave rise to the claim.
 - II. In such cost items are consequential or punitive damages, anticipated profit, or any award or payment of attorney's fees paid by the State to an opposing party in litigation.
 - III. In tort, inverse condemnation, or other claims erroneously styled as claims "under a contract."
 - IV. For the value of additional or extra work resulting from an error or omission for which the Department could seek reimbursement from a consultant.

All non-participation is to be explained in the body of the Change Order or by memorandum of record referenced in the Change Order.

NOTE: The FHWA will participate on salvage credit on a case-by-case basis. Prior approval from the FHWA must be received before federal participation in the item can be shown, regardless of the project's oversight category. This does not include the non-participating items listed above.

Appendix K

Changes to the Contract: A Guide to Section 104.03.03 of the Standard Specifications

How the RE deals with changes to a Contract is handled very differently under the 2007/2019 Standard Specifications than was done under previous specifications. Section 104.03.03 provides for how the Contract will address changes. However, since many of the provisions are new, this guide is being issued to provide instructions as to how the RE should handle various situations.

Quantity Increases and Decreases

The way Contracts under the Standard Specifications handle quantity increases and decreases is a significant departure from the way we traditionally have done business. Under previous versions of the Specifications, the Contractor received the bid-price for an item, regardless of how much the quantity increased or decreased. (The only exception to this was for increases and decreases for Major Pay Items, which did not exist on most projects.)

On Contracts under the 2007/2019 Standard Specifications, the bid-price for an item will hold for increases and decreases that are within 25% of the Proposal Quantity. Increases and decreases that are within 25% of the Proposal Quantity are considered minor changes. When an increase or decrease changes the quantity by more than 25% of the Proposal Quantity, it is considered a major change. When a major change is made, it may result in a renegotiation of price for the work or a portion of the work. An increase or decreases is classified as minor or major depends upon the net change in quantity. A Change Order can decrease 100% of the original plan quantity for an item and increase the quantity at other locations for that same quantity, and the net change would be zero. So even though changes may be significant, they may not qualify as a major change. Furthermore, while individual changes may be minor in nature, if there are several changes – the cumulative change may constitute a major change. If there are three change orders that each increase an item's quantity by 10% - the individual changes may be minor, but the third change order results in an increase that is considered a major change.

If there is a major change, Section 104.03.03 provides that the Contractor or the Department may seek to renegotiate a price for work in excess of 125% of the proposal quantity for an item, or, for when there is a major decrease, the Contractor or the Department may seek to renegotiate a price for the quantity of work performed. There are three requirements that must be met before starting any such negotiation.

- 1) The item must be increased or decreased by more than 25% of the Proposal Quantity. The Proposal Quantity for this provision does not include quantities designated in the Contract as "If and Where Directed".
- 2) Either the Contractor or the RE, must want to renegotiate the item price. So if both parties are satisfied with the bid-price, no negotiation is necessary.

- 3) The value of the negotiation (the difference in cost multiplied by the quantity eligible for negotiation), must be at least \$5,000. The intent of this restriction is to avoid excessive administrative costs for minor adjustments. An item with a small quantity may have a small increase that on a percentage basis qualifies it as a major increase. With this threshold, the RE will not be required to renegotiate prices for work having a minor cost.

It is important that there is a uniform application of the Specifications. The following examples are provided to guide the RE for various situations. Keep in mind that the above noted restrictions would still need to be met. The examples illustrate a number of scenarios, which may not trigger a need to renegotiate a price (because of # 2 and 3 above). Some of these scenarios are expected to be rare occurrences, but are provided as guidance so that the RE better understands how to apply the Specifications. Some RE's may never encounter some of these scenarios. The fact that some situations will arise infrequently, is a good reason as to why the RE should consult this guide when dealing with increases and decreases.

1) Minor Increase

The Proposal calls for 600 LF of 15" x 32" Concrete Barrier Curb. A COP increases the quantity by 110 LF. The percent increase for the item is $(110 \div 600 = 18.3\%) < 25\%$ of the Proposal quantity, thus the increase is a minor change and the additional quantity is paid under the bid-price.

2) Minor Decrease

The Proposal calls for 14,500 Tons of HMA 19V76 Surface Course. A COP decreases the quantity by 1,200 Tons. The percent decrease for the item is $(1,200 \div 14,500 = 8.3\%) < 25\%$ of the Proposal quantity, thus the decrease is a minor change and the item is paid at the bid-price.

3) Minor Increase of an Item Having a Portion of the Quantity as IAWD

The Proposal calls for 850 LF of Beam Guide Rail with 50 LF designated as "If and Where Directed". A COP increases the quantity by 125 LF. The percent increase for the item is $[125 \div (850-50) = 15.6\%] < 25\%$ of the Proposal quantity, thus the increase is a minor change and the additional quantity is paid under the bid-price.

4) Minor Decrease of an Item Having a Portion of the Quantity as IAWD

The Proposal calls for 850 LF of Beam Guide Rail with 50 LF designated as "If and Where Directed". A COP decreases the quantity by 125 LF. The percent decrease for the item is $[125 \div (850-50) = 15.6\%] < 25\%$ of the Proposal quantity, thus the decrease is a minor change and the quantity is paid under the bid-price.

5) Major Increase with Negotiation Examples

The Proposal calls for 1,000 LF of 9" x 16" Concrete Vertical Curb. A COP increases the quantity by 400 LF.

The first 250 LF of this increase $\leq 25\%$ of the Proposal quantity $[400 \div 1,000 = 250]$, and is paid under the bid-price.

The quantity in excess of 125% of the proposal (the other 150 LF) is eligible for renegotiation.

- A. If the bid-price for the Concrete Vertical Curb is \$20/LF, and the Contractor offers to do the work at the bid-price, and the RE believes the price is reasonable (the average weighted price is \$20.80), the work can be done at the bid-price without further negotiations. Note that the average weighted price for standard items is simply one way to determine the reasonableness of a price. A bid-price may be higher or lower than the average weighted price, and both

parties may still find the price as acceptable. In circumstances where the bid-price is higher than usual, the RE may have to provide justification to the RCE as to why and how the price was found to be reasonable and acceptable.

- B. If the bid-price for the Concrete Vertical Curb is \$1/LF, it is likely that the Contractor would seek to renegotiate the price. However, in this example, since the cost difference must exceed \$5,000 to warrant renegotiation, the RE would not need to pursue renegotiation unless the renegotiated price was for more than \$34.33/LF. [$\$5,000 = 150 \text{ LF} \times (34.33 - 1.00)$]
- C. If the bid-price for the Concrete Vertical Curb is \$50/LF, it is likely that the RE would seek to renegotiate the price. However, in this example, unless the price difference exceeded the \$5,000 threshold, the RE would not pursue renegotiation unless the renegotiated price was for less than \$16.67/LF.
[$\$5,000 = 150 \text{ LF} \times (50.00 - 16.67)$]

6) Major Increase Resulting from Multiple Change Orders

The Proposal calls for 800 LF of 18" Reinforced Concrete Pipe. A series of Change Orders affecting the item's total adjusted quantity are issued:

Order	Δ Qty this CO	Total Adj. Qty	Δ from Proposal
CO# 1	+100	900	12.5 %
CO# 2	-50	850	6.25
CO# 8	+75	925	15.6
CO# 12	+100	1,025	28.125

In this example, only with CO#12 does the total adjusted quantity exceed 125% of the Proposal quantity. With CO#12, the quantity eligible for renegotiation is 25 LF [$1,025 - (1.25 \times 800) = 25$].

7) Major Increase with Partial Units

The Proposal calls for 5 units of Inlets, Type B. A COP increases the quantity by 2 units. The first 1 unit of this increase is ($1 \div 5 = 20\%$) $\leq 25\%$ of the Proposal quantity and thus is paid under the bid-price,

The second unit exceeds the 25% threshold ($2/5 = 40\%$), and the entire unit is eligible for renegotiation. We do not pay for $\frac{1}{4}$ of the second unit at the bid-price, and $\frac{3}{4}$ of the unit at a renegotiated price – the entire price of the second unit is eligible for renegotiation.

8) Major Increase of an Item Having a Portion of the Quantity as IAWD

The Proposal calls for 1,200 LF of Heavy Duty Silt Fence with 300 LF designated as "If and Where Directed". A COP increases the quantity by 850 LF. If none of the IWD quantity has been used to date, then a CO is required to provide $(850-300) = 550$ LF. The percent increase for the item is $(550 \div (1,200-300)) = 61\%$ of the Proposal quantity. Thus the first 25% (or 225 LF) is paid at bid-price. The quantity in excess of 125% of the Proposal quantity (325 LF) is eligible for renegotiation.

9) Major Increase of an Item for which the Entire Quantity is IAWD

The Proposal calls for 45 CY of Excavation, Test Pit. 100% of the quantity is designated as "If and Where Directed". The RE directs an additional quantity of 55 CY for a total of 100 CY. For items where the entire quantity is "If and Where Directed", an increase must be for more than 100% to be considered a major change. The increase is $(55 \div 45 = 122\%) > 100\%$ of the Proposal quantity. Thus the first 45 CY of this increase is paid at bid-price, and the quantity in excess of 200% of the Proposal quantity (10 CY) is eligible for renegotiation.

10) Decrease of an Item for which the Entire Quantity is IAWD

The Proposal calls for 45 CY of Excavation, Test Pit. All of the quantity is designated as “If and Where Directed”. The RE directs only the use of only 9 CY of the item for the project. A decrease of an item for which the entire quantity is designated IWD, never qualifies for renegotiation. Thus the quantity used is paid at the bid-price.

11) Minor Increase of a Pay Proposal item

The Proposal calls for 3,000 LF of 24” Reinforced Concrete Pipe (which is a Proposal Item not a Measured Item). A COP increases the quantity by 625 LF to 3,625. The Contractor requests the quantity to be measured in accordance with Subsection 109.01 (Don’t be confused by the use of the term “Proposal quantity” used in 104.03.03 and the term “Contract quantity” used in 109.01). The measured quantity is 3,775 LF. Because the difference between the measured amount and the Proposal quantity is $< 10\%$ of the Contract quantity, payment is made for 3,625 LF. Because the total increase is $< 25\%$ of the Proposal quantity ($625/3000 = 21\%$), the increase is a minor increase and the entire quantity is paid at the bid-price. This is true even though the measured quantity is $> 25\%$, but because the paid quantity is less than 25% no quantity is eligible for renegotiation. This holds even if the difference in measurement (150 LF) was entirely associated with the COP.

12) Major Increase of a Pay Proposal item (A)

The Proposal calls for 3,000 LF of 24” Reinforced Concrete Pipe (which is a Proposal Item not a Measured Item). A COP increases the quantity by 1,600 LF to 4,600 LF. The first 750 LF of this increase $\leq 25\%$ of the Proposal quantity and is paid under the bid-price, and the quantity in excess of 125% of the Proposal quantity (850 LF) is eligible for renegotiation, and is renegotiated to a price P_{R1} .

Subsequently, the Contractor requests the item to be measured, and the measured quantity paid at the bid-price is determined to be 3,380 LF. Because the difference between the Contract quantity and the measure quantity is $< 10\%$, payment for the quantity paid at the bid-price is made at the Proposal quantity of 3,750 LF.

13) Major Increase of a Pay Proposal item (B)

The Proposal calls for 3,000 LF of 24” Reinforced Concrete Pipe (which is a Proposal Item not a Measured Item). A COP increases the quantity by 1,600 LF to 4,600 LF. The first 750 LF of this increase $\leq 25\%$ of the Proposal quantity and is paid under the bid-price, and the quantity in excess of 125% of the Proposal quantity (850 LF) is eligible for renegotiation, and is renegotiated to a price P_{R1} .

Subsequently, the Contractor requests the item to be measured, and the measured quantity paid at the bid-price is determined to be 2,750 LF. Because the difference between the Contract quantity and the measured quantity is $> 10\%$ of the Contract quantity, payment is made at measured quantity. Even though this adjustment results in the fact that the total increase in the item paid at the bid-price and the quantity paid at P_{R1} [$(2,750 + 850 - 3,000) \div 3,000 = 20\%$] is less now less than the threshold for renegotiation, it does not undo the effect of establishing the work to be performed at P_{R1} .

14) Major Increase Followed by a Minor Increases

The Proposal calls for 2,800 LF of Steel H-Piles 12 x 53. A COP increases the quantity by 2,700 LF for a total of 5,500 LF. The first 700 LF of this increase $\leq 25\%$ of the Proposal quantity and is paid under the bid-price.

The quantity in excess of 125% of the proposal (2,000 LF) is eligible for renegotiation, and is renegotiated to a price P_{R1} . Subsequently, another COP further increases the quantity by 550 LF. For any quantity to be eligible for a second renegotiation, it must meet two criteria:

Does it exceed 25% of the quantity being paid at the renegotiated price P_{R1} ? In this example it does ($550 \div 2000 = 27.5\%$).

Does it exceed 25% of the Proposal quantity? In this example it does not ($550 \div 2800 = 19.6\%$), and thus is no amount of this subsequent increase is eligible for another renegotiation.

Thus the additional 550 LF is paid at the renegotiated price P_{R1} .

15) Major Increase Followed by a Major Increases

The Proposal calls for 2,800 CY of I-9 Soil Aggregate. A COP increases the quantity by 7,200 CY for a total of 10,000 CY. The first 700 LF of this increase $\leq 25\%$ of the Proposal quantity and is paid under the bid-price.

The quantity in excess of 125% of Proposal quantity (6,500 CY) is eligible for renegotiation, and is renegotiated to a price P_{R1} .

Subsequently, another COP further increases the quantity by 5,000 CY for a total of 15,000 CY.

For any quantity to be eligible for a second renegotiation, it must meet two criteria:

Does it exceed 25% of the quantity being paid at the renegotiated price P_{R1} ? In this example it does ($5,000 \div 6,500 = 83.3\%$).

Does it exceed 25% of the Proposal quantity? In this example it does ($5,000 \div 2,800 = 178.6\%$).

Thus, of the 5,000 CY increase, 1,625 CY would be paid at the renegotiated price P_{R1} . [1,625 is the greater of either 25% of the Proposal ($0.25 \times 2,800 = 700$) or 25% of the quantity established at the renegotiated price ($0.25 \times 6,500 = 1,625$).] The remaining quantity, 3,375 LF ($5,000 - 1,625 = 3,375$), is eligible for a second price renegotiation P_{R2} .

16) Major Increase followed by a Minor Decrease

The Proposal calls for 2,800 CY of I-9 Soil Aggregate. A COP increases the quantity by 7,200 CY for a total of 10,000 CY. The first 700 LF of this increase $\leq 25\%$ of the Proposal quantity and is paid under the bid-price.

The quantity in excess of 125% of the Proposal quantity (6,500 CY), is eligible for renegotiation, and is renegotiated to a price P_{R1} .

Subsequently, another COP decreases the quantity for work paid under the bid-price in the amount of 500 CY to a total of 3,000 CY ($3,500 - 500 = 3,000$), and a decrease of 300 CY for work paid under P_{R1} for a total of 6,200 CY ($6,500 - 300 = 6,200$). The quantity of work paid at the bid-price is $> 75\%$ of the Proposal quantity ($3,000 \div 2,800 = 107.1\%$) and thus not eligible for any renegotiation. The decrease in the quantity of work paid at P_{R1} ($300 \div 6,500 = 4.6\%$) is not eligible for renegotiation, because work performed at a renegotiated price is not affected by decreases of any magnitude.

17) Major Increase followed by a Major Decrease(A)

The Proposal calls for 2,800 CY of I-9 Soil Aggregate. A COP increases the quantity by 7,200 CY for a total of 10,000 CY. The first 700 LF of this increase $\leq 25\%$ of the Proposal quantity and is paid under the bid-price.

The quantity in excess of 125% of the proposal (6,500 CY) is eligible for renegotiation, and is renegotiated to a price P_{R1} .

Subsequently, another COP decreases the quantity for work paid under P_{R1} in the amount of 3,000 CY to a total of 3,500 CY ($6,500 - 3,000 = 3,500$). Because this decrease is more than 25% of the quantity for the work paid at P_{R1} ($3,000 \div 6,500 = 46\%$), thus the price for the work paid at P_{R1} is eligible for a renegotiation. (See example 19).

18) Major Increase followed by a Major Decrease(B)

The Proposal calls for 2,800 CY of I-9 Soil Aggregate. A COP increases the quantity by 7,200 CY for a total of 10,000 CY. The first 700 LF of this increase $\leq 25\%$ of the Proposal quantity and is paid under the bid-price.

The quantity in excess of 125% of the Proposal (6,500 CY) is eligible for renegotiation, and is renegotiated to a price P_{R1} .

Subsequently, another COP decreases the quantity for work paid under bid-price in the amount of 1,500 CY to a total of 2,000 CY ($3,500 - 1,500 = 2,000$). This decrease changes the quantity scheduled to be paid at the bid-price to $< 75\%$ of the original proposal quantity ($75\% \times 2,800 = 2,100$). Consequently, this represents a major decrease and the price for the quantity remaining the Contract may be renegotiated. This is true regardless of the quantity established with P_{R1} .

19) Major Decrease

The Proposal calls for 5,000 SY of Diamond Grinding Existing Concrete Pavement at the bid-price of \$10/SY. A COP decreases the quantity by 3,000 SY for an adjusted quantity total of 2,000 SY. The decreases is $> 25\%$ of the Proposal quantity ($3,000 \div 5,000 = 60\%$), thus the price for the quantity remaining in the Contract is eligible for renegotiation.

However, the total cost for the remaining quantity cannot exceed 75% the original value of the work ($75\% \times 5,000 \times \$10 = \$37,500$ or $\$18.75/\text{SY}$). This calculation is a limit, and not a method for determining a unit price (i.e. the Contractor is not guaranteed to get 75% of the original value of the work.) The fact that there is a major reduction, does not in itself justify an increased price. With a decrease, the renegotiated price is applied to any work performed under the item, even work that was performed prior to the change.

20) Major Decrease of an Item Having a Portion of the Quantity as IAWD

The Proposal calls for 1,200 LF of Heavy Duty Silt Fence with 300 LF designated as "If and Where Directed". Subsequently, a COP decreases the designated quantities by 250 LF.

The decreases is $> 25\%$ of the Proposal quantity [$250 \div (1,200 - 300) = 27.8\%$], thus all of plan designated quantity ($1,200 - 300 - 250 = 650$ LF) is eligible for renegotiation. This is true, regardless of any quantity the RE directed using the available "If and Where Directed" quantity.

21) Major Decrease followed by a Major Decrease

The Proposal calls for 5,000 SY of Diamond Grinding Existing Concrete Pavement at the bid-price of \$10/SY. A COP decreases the quantity by 3,000 SY for an adjusted quantity total of 2,000 SY. The decrease is $> 25\%$ of the Proposal quantity ($3,000 \div 5,000 = 60\%$), thus the price for the quantity remaining in the Contract is eligible for renegotiation. In this example, the remaining quantity is renegotiated, for a price P_{R1} .

Subsequently, another COP is issued which decreases the quantity by a further 1,000 SY. This decrease is $>25\%$ of the Proposal quantity ($1,000 \div 2,000 = 50\%$), thus the price for the quantity remaining in the Contract is eligible for a second renegotiation.

22) Major Decrease followed by a Major Increase

The Proposal calls for 5,000 SY of Diamond Grinding Existing Concrete Pavement at the bid-price of \$10/SY. A COP decreases the quantity by 3,000 SY for a revised total of 2,000 SY. The decrease is $> 25\%$ of the Proposal quantity ($3,000 \div 5,000 = 60\%$), thus the price for the quantity remaining in the Contract is eligible for renegotiation, and is renegotiated to a price P_{R1} .

Subsequently, another COP is issued which increases the quantity by 1,000 SY. This increase is $>25\%$ of the Proposal quantity ($1,000 \div 2,000 = 50\%$). The first 500 LF of this increase $\leq 25\%$ of the Proposal quantity * and is paid under the price P_{R1} . The quantity in excess of 125% (500 LF) is eligible for renegotiation for a separate price P_{R2} .

* In this example, the *Proposal* quantity becomes the quantity initially established at the price P_{R1} .

23) Deleted Work (Decreased Work) and material costs

The Proposal calls for 6 Units of Controller, ITS. A Change Order decreases the quantity to 3 units. The Contractor informs the RE that the controllers were purchased prior to the execution of the Change Order. The Contractor should be reimbursed for the cost of the restocking fee. Alternatively, the Department could accept the material, and the Contractor would be reimbursed for the cost of the material plus any additional costs for delivering it the Department. However, payment is limited to the value of the work (the bid-price x quantity). So if the bid-price for the Controller, ITS, was \$500/ Unit and the material price is \$3,500/ Unit, the Contractor could not receive more than $\$500 \times 3$ Units or \$1,500.

24) Deleted Work (Decreased Work) and reimbursement for disproportionate costs

This issue will require some discussion to understand the principals involved. In the Standard Specifications, it states: *The Department will consider making payment for costs attributed to a disproportionate allocation of costs for work for which no Item is provided in the Contract if the Contractor has escrowed its bid documents as specified in [103.05](#). The Department will not make payment for lost anticipated profits.* Work that is specific to an item is compensated by the item's bid-price. So if the quantity is decreased, work not performed obviously does not require compensation. However, sometimes there are costs that are not specific to a single item. Sometimes, Contractors, in preparing their bids, distribute some costs across all items in the contract and other times they distribute some costs across a particular group of items. For example, there is no item in the contract for night operations requirements (night lighting). A contractor may distribute these costs for a specific operation.

For example, a Proposal calls for 15 Units of Traffic Signal Standard, Aluminum. The Contractor allocated the cost for the maintenance of existing traffic signals into the bid-price for this item. A COP decreases the item by 10 Units. In this example, the change is a major decrease and the price for

the remaining 5 Units. The Contractor would seek to include the cost for maintenance of the existing traffic signals in the cost of this quantity. This could be recovered, only if the Contractor escrowed its bid documents and the documents demonstrated that that was how the Contractor structured its bid – to the satisfaction of the RE.

Consider the example of a Proposal that calls for 15 Units of Traffic Signal Standard, Aluminum. The Contractor allocated the cost for the maintenance of existing traffic signals into the bid-price for this item. A COP deletes the entire item, but did not eliminate the requirement to maintain the existing traffic signals. While there is no renegotiation for the item price, the Contractor would be eligible to be reimbursed for the cost of maintaining the traffic signal system. Again such compensation could be recovered, only if the Contractor escrowed its bid documents and the documents demonstrated that that was how the Contractor structured its bid – to the satisfaction of the RE.

Change in Character of Work

A change is a “change in the character of work”, if it causes the work to substantially differ in kind or nature from the original proposed construction. By “substantially differ in kind or nature”, we usually mean that it changes the means, methods or materials from the original requirements of the Contract.

For example, the Contract required a concrete structure be constructed using Class B concrete, but a Change Order changed this to require Class A concrete, the Contractor would be eligible to receive reimbursement for the increased material cost. If the Contract required bridge deck repairs, and did not limit the size of pneumatic hammers, but a Change Order imposed a requirement limiting the size of pneumatic hammers to those having a weight less than 25 Lbs, the Contractor would be eligible to receive reimbursement for the difference in productivity.

A change in character of work can result in additional payment or a credit due the State, depending upon the change. The basis of a modification is based on the difference between what the cost to perform the work as changed and the cost to perform the work if there had been no change. The Contractor’s bid price does not factor into the calculation.

So if the Contractor bid \$10/ton for HMA Surface Course containing polymer modifiers and the Department eliminated the polymer requirement, and the reduced cost for materials is calculated to be \$8/ton, then the price for the work would be adjusted to \$2/ton. The Contractor’s bid price does not factor into the calculation. The bid price, high or low does not factor into the calculating the cost modification. So even though the material costs alone have an actual cost of more than \$2/Ton, it is not factored into the calculation.

Efficiency/Inefficiency with Minor Quantity Changes

Efficiencies or inefficiencies resulting from minor increases or decreases in quantities of work are not a change in the character of work. So, if a small run of Beam Guide Rail is added to a Contract, even though the work cannot be constructed concurrent with other runs of Beam Guide Rail, so that the operation is not as efficient where the Contractor could install longer runs of Beam Guide Rail that are typical in the Contract, it does not qualify as a change in character of work.

The Standard Specifications address a few specific types of changes in character of work, among these are:

Differing Site Condition

Contractors will sometimes make the mistake of believing that anything encountered in the field that differs from what they anticipated (and included in their bid) is a differing site condition. This is incorrect. The underlying issue is whether the Contractor could have reasonably anticipated the condition encountered from:

- 1) a knowledgeable interpretation of the Contract
- 2) pre-bid examination of the Project Limits (see Subsection 102.04)
- 3) a usual understanding as a Contractor as to what is a foreseeable risk

There are two types of differing site conditions (DSC) noted in the specifications.

Type 1 DSC deals with latent (hidden) conditions that are found at the site, which differ from what is shown in the Contract.

So for a Type 1 DSC – two questions must be answered:

- 1) Do the plans or specifications misrepresent existing conditions
- 2) Is the condition latent (or hidden)/ could the Contractor have reasonably determined the difference between the Contract and field condition during a pre-bid examination of the site?

Usually, Type 1 DSC involves the character of subsurface elements. An example of a Type 1 DSC would be:

The plans call for saw cutting full depth existing pavement, which is detailed to be 8 inches in thickness, and removal of the pavement. The Contractor actually encountered a pavement that was 16 inches in depth. This would be a condition that was 1) latent, and 2) one that differs from the Contract's representation of existing conditions.

Type 2 DSC deals with unusual conditions that differ from what is ordinarily encountered. This is a difficult standard to establish. It is important to emphasize that the standard is not – what did the Contractor anticipate, but what should the Contractor have reasonably anticipated.

So for a Type 2 DSC – two questions must be answered:

- 1) Is the condition unusual and not reasonably foreseeable for the work being performed?
- 2) Could the condition be reasonably anticipated from a pre-bid examination of the site?

An example of a Type 2 DSC would be:

The plans call 10,000 CY of Excavation, Unclassified and the Contractor encounters 300 CY of Regulated Material (and there are no provisions in the Contract for Regulated Material). The condition is 1) not one that is normally encountered, and 2) not one that the Contractor could have anticipated from a pre-bid examination of the site.

An important consideration in DSC claims is that the Department will not pay for a DSC unless the cost exceeds the limit in Table 104.03-1. For Contracts $\leq$ \$2M the Department will not make payment for DSC claims $<$ \$5,000. For Contracts $>$ \$2M the Department will not make payment for DSC claims $<$ \$25,000. These thresholds are not deductibles. If the value of the claim exceeds these limits, then the Contractor is eligible for full compensation.

Some of examples of a site condition claims:

Example 1)

Information: The Contract calls for 50,000 CY of Excavation, Unclassified. The boring logs note the existence of hard rock at different elevations for different borings. The Contractor anticipated 15,000 CY of rock, but encounters 25,000 CY of rock, and files a differing site condition claim.

Analysis: The amount that the Contractor anticipated is not a determining factor. The question that must be answered is: how much rock could a Contractor reasonably expect to encounter. This type of question is not always easily answered. It may depend upon the normal variation in rock elevation expected for this type of geology and geography. So while a bid may be developed based on a simple average, a quantity also needs to be compared to the expected risk or standard deviation for the variables involved.

In this scenario, if the expected quantity of rock was calculated to be 14,000 CY but could reasonably be expected to vary by +/-25% (based on known variations for this type of geology in this geographical region), it would not be unusual to encounter 17,500 CY of rock.

How one determines the expected /average quantity of rock or how one determines a reasonable upper threshold, using what confidence limit – is determined by a subject matter expert. Different experts may have different answers.

If the upper limit for expected rock is 17,500 CY, and the Contractor encountered 25,000 CY, then the additional rock is not ordinary and because it is not something that could be determined by a pre-bid examination of the site, it would qualify as a Type 2 DSC. However, the additional effort that is compensable is the difference between the quantity found and the quantity expected using the upper confidence limit (25,000 CY - 17,500 CY = 7,500 CY).

Example 2)

Information: The Contract calls for 800 LF of 24" Reinforce Concrete Pipe. The Contractor trenched through reactive shale, which when exposed to water (when rain/storm water accumulated in the open trench) became extremely hard, and could not be excavated using a normal back hoe. In the areas, where the shale was exposed to water, the Contractor trenched the material using a hoe ram to sufficiently loosen the material so that it could be removed with an excavator. The Contractor gave notice to the RE about the condition, and sought additional compensation as Type 2 DSC.

Analysis: The reactive shale was determined to be a common geophysical characteristic for the county. Section 102.04 states: *The Bidder is charged with knowledge of the State's physical geography and geology, and in performing its Project Limit evaluation is fully aware of the available publications on that subject matter.*

The nature of this reactive shale is documented. Thus the condition is not unusual and does not qualify as a Type 2 DSC.

Constructive Acceleration

Constructive acceleration is very different from directed acceleration in that constructive acceleration is not intended by the Department. The Department will recognize qualified constructive acceleration claims. However, costs for constructive acceleration are limited by the amount of liquidated damages that the acceleration sought to avoid. The Contractor cannot recover \$1M in actual damages, if the cost of liquidated damages would only have been \$10,000. Additionally, the Contractor must provide the RE with a plan detailing how the Contractor is accelerating, so that the RE can document the costs of the Contractor's efforts.

Inefficiencies

Inefficiency claims are typically the most difficult to analyze. This guide cannot be a complete reference on inefficiency claims. However the specifications do recognize inefficiency claims, and provide some direction.

In Section 104.03.06, the Specifications establish that the Contractor has the burden of substantially proving entitlement to and quantifying its costs. This is especially true with inefficiency claims, which are often very difficult to document. If the Contractor fails to provide adequate documentation, the claim should be denied.

The Department will consider making payment for inefficiency costs based on a Measured Mile analysis. The key aspect of this is that damages must be reasonably demonstrated and quantified by comparing the productivity of work impacted by a change to the productivity of similar work under unimpacted conditions. The Department specifically rejects Total Cost Methods or Modified Total Cost Methods of calculating damages under Section 104.03.06.

There is no one method of Measured Mile analysis. Often the methodology is limited by the circumstances. Is there any reasonably similar work with unimpacted conditions? Undoubtedly, arguments will arise as to the similarity of work for various unimpacted reference periods. Ideally, such work should be on the same project, but in the lack of such circumstances, information from other projects can be used. In the absence of any comparable circumstances, where no data is available, it is not acceptable to rely on the bid documents (which would be a Total Cost Method or Modified Total Cost Method and not a Measured Mile analysis).

Disruption is lost productivity that results from interruptions in the planned sequence of operations. Where such claims are made, in addition to demonstrating damages using Measured Mile analysis, the interruption in the planned sequence must be demonstrated using the current approved progress schedule. In this context, a current approved progress schedule is the schedule that is current at the time the change, which caused the re-sequencing, was made.

As with all claims, the Contractor is specifically denied compensation for costs incurred prior to providing notice (as required under Section 104.03.04). Consequently, "cumulative change" claims or other types of inefficiency claims that imply a retroactive impact should be denied. Section 104.03.04 is explicit when it states that the Contractor waives its right to file a claim for costs incurred before providing notice to the RE.

Appendix L

Form DC-62 (03/2019)

NEW JERSEY DEPARTMENT OF TRANSPORTATION

Edit Letter

MEMORANDUM

E-mail this form to:

DOT-CPC.EndDateModification@dot.nj.gov

TO: Suzanne Tomlinson
Federal Aid Coordination
Bureau of Capital Program Coordination

FROM: Regional Construction Engineer
Region North Construction

PHONE:

DATE:

SUBJECT: Federal Project End Date ((FPED) Modification
Project Name:
Contract No.:
Federal Project No.:
CE#: DP#:
PUC/PUR#:
NONPODI

Enter values into fields below. They will transfer to the memo below. This area will not print.

Original Completion Date

Original and or previously revised FPED

Proposed FPED

Project Manager

Field Manager

When finished, click the "Process Letter" below.

Reset Form

Print Letter

The subject project has an Original Completion date of and the original and/or previously established FPED is .

Following is the key reason for Modification of FPED.

- ☐ Extra Work
Enter Brief Explanation
- ☐ Change of Plan
Enter Brief Explanation
- ☐ Differing Site Conditions
Enter Brief Explanation
- ☐ Environmental Constraints
Enter Brief Explanation
- ☐ Material Shortage
Enter Brief Explanation
- ☐ Labor Disputes

Enter Brief Explanation

☐ Extreme Weather
Enter Brief Explanation

☐ Utility Delay
Enter Brief Explanation

☐ Contractor failed to meet
Enter Brief Explanation

☐ Current FPED is within 8 months of expiration.
Enter Brief Explanation

☐ Construction Claim under review.
Enter Brief Explanation

☐ Project is in litigation.
Enter Brief Explanation

☐ Other
Enter Brief Explanation

☐ The FHWA provided pre approval (see attached) on the modification of the current FPED.
Enter Brief Explanation

☐ Other - (Project Specific)
Enter Brief Explanation

Therefore, it is requested that the current FPED for both the CE number and PUR/PUC number above be modified to . Please notify the Project Manager and our Region Office upon FHWA's approval of this FPED modification. Please feel free to contact this office if you need additional information.

C: , Project Manager
, Field Manager
Region North Construction

Appendix M

Form DC 172, 02/26/2020

Change Order Quantity Adjustment Form

Project:
DP Number:
Change Order:

Blue Spaces are for YOUR Input
Brown Spaces are non-editable

TOTAL \$ CHANGE IN THIS CO=

\$0.00

[illegible]

STEPS TO INITIATE DC-172 FILE

Please contact Bob May if you do not have BidX Login

Step 1 : Login to BidX and Open the project

The screenshot shows the BidExpress website interface. At the top, there is a navigation bar with links like 'Home', 'About Us', 'Contact Us', etc. Below this, there is a header section with the text 'New Jersey Department of Transportation'. The main content area displays a list of projects. A red arrow points to a specific project entry, which is highlighted. The project details include 'Letting of November 1, 2019'. On the right side, there is a sidebar with various links and a search bar.

Step 2 : Select the Bid Tabulation

The screenshot shows the BidExpress website interface. The main content area displays a list of projects. A red arrow points to a specific project entry, which is highlighted. The project details include 'Proposal 18145'. On the right side, there is a sidebar with various links and a search bar.

Step 3 : Check Box only for the Contractor to whom Project is Awarded.

The screenshot shows the BidExpress website interface. The main content area displays a list of projects. A red arrow points to a specific project entry, which is highlighted. The project details include 'Proposal 18145'. On the right side, there is a sidebar with various links and a search bar.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		Form DC 129															
2			Change Order Quantity Adjustment Form														
3																	
4		Drawn:															
5		DP Number:															
6		Change Order:															
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	
36																	
37																	
38																	
39																	
40																	
41																	
42																	
43																	
44																	
45																	
46																	
47																	
48																	
49																	
50																	
51																	
52																	
53																	
54																	
55																	
56																	
57																	
58																	
59																	
60																	
61																	
62																	
63																	
64																	
65																	
66																	
67																	
68																	
69																	
70																	
71																	
72																	
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	
81																	
82																	
83																	
84																	
85																	
86																	
87																	
88																	
89																	
90																	
91																	
92																	
93																	
94																	
95																	
96																	
97																	
98																	
99																	
100																	

Step 7 : Repeat Step 5 & Step 6 for Item No., Item Code, Description, Unit and Unit Price Columns.