



INTERMODAL TRANSPORTATION DIVISION

SUPPLEMENTAL AGREEMENTS

TECHNICAL GUIDE

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Directions to Users

This technical guide is intended to be a standalone reference for preparing Supplemental Agreements. It is also used as a course workbook for TCH3039.

It is a guide through the Federal and State Requirements, [Standard Specifications](#), and the [Arizona State Department of Transportation Construction Manual](#) requirements for preparing a Supplemental Agreement (changes to a Construction Contract).

The most current PDF copy of the [Supplemental Agreements Technical Guide](#) is available online from the Construction & Materials Group website, and can be open using Adobe Reader. To perform a basic search within the document, press CTRL-F (PC) or Command (⌘)-F (Macintosh). A search box will be displayed in the upper right of the screen. Enter your search criteria. Type the word or phrase you want to search for in the entry field. Use the small left and right arrows in the blue search box to skip to the previous or next instance of the searched-for word.

Goals & Objectives

1. To give engineers, supervisors, and staff an **understanding** of the Supplemental Agreements (SA) **process**.
2. To **ensure adherence** to Public Law.
3. To provide **consistency** in the application of the policies and procedures in the development and creation of SAs.

This course addresses the development process for creating SA: Letter Agreements (LOA), Change Orders (CO), and Force Accounts. **These documents are legal contract documents and must be correct!**

This is an Open Book process using the Standard Specifications, ADOT Construction Manual, and this technical guide. After reviewing the content in this technical guide you will be able to:

- Define a contract change and describe what is allowable when changing a contract.
- Navigate in the Specifications and determine what is allowable, relative to changes.
- Select the proper type, and prepare each of the three types of SAs.
- Name and describe the roles of authorities involved in approving SAs.

Evaluation

If you are using this technical guide for TCH3039, at the end of the course there is a final examination of true-false and multiple choice questions. It is an open book exam in which students are allowed to use any references. An 80% score on the final exam is necessary to achieve credit for the course. There is also a course evaluation sheet. We value your opinions and if you have any ideas or suggestions on how to improve the course, please list it on the critique form and hand it to your instructor or e-mail suggestions to [Construction Group Training](#).

References:

This technical guide is a synopsis of the Standard Specifications with guidance from the Construction Manual; it does not replace either of them.

ADOT Standard Specifications for Road and Bridge Construction 2008 (Standard Specification) available online at: <http://www.azdot.gov/docs/business/2008-standards-specifications-for-road-and-bridge-construction.pdf?sfvrsn=0>

- Section Definitions, *Major Items of Work*, page 11
- Section Definitions, *Supplemental Agreement*, page 17
- Section 104.02, *Revisions to the Contract*, pages 37-40
- Section 104.03, *Notification*, pages 40-41
- Section 104.13, *Value Engineering*, pages 51-56
- Section 108.08, *Determination and Extension of Contract Time*, pages 113-114
- Section 109.03, *Compensation for Altered Quantities*, pages 123
- Section 109.04, *Adjustments in the Contract Price*, pages 123-130

Construction Group's internet home page:

- **ADOT Construction Manual** available online at: http://www.azdot.gov/Highways/ConstGrp/construction_manual/index.asp
- **ADOT Construction Bulletins** available online at: <http://www.azdot.gov/business/engineering-and-construction/construction/construction-bulletins>
See CB 10-1.
- **ADOT Standard Specifications for Road and Bridge Construction, 2008** available for download at: <http://www.azdot.gov/docs/business/2008-standards-specifications-for-road-and-bridge-construction.pdf?sfvrsn=0>
- **Also; Lots of useful links on specifications, standard drawings, ADOT Photo Log, Traffic / MUTCD, SWPPP, etc. from "Standard Specifications" on the right nav bar:** <http://www.azdot.gov/business/engineering-and-construction/construction>
- **ADOT's Project Development Process Manual** available online at: <http://spsprod/sites/projectdevmanual/default.aspx>. See Section 6.04.08, Contract Modifications.
- **ADOT Stored Specs** available for download at: <http://www.azdot.gov/business/ContractsandSpecifications/Specifications>
- **ADOT Historic Unit Prices** available at: <https://www.azdot.gov/e2c2/HistoricalPrice.aspx>
- **ADOT (Project) Information Center** available at: <http://aidw/aidw2/Default.aspx?d=1>

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- **Local tax rates (for cost estimating):**
http://www.arizonatax.org/sites/default/files/publications/sales_tax_rates/prime_contracting_class-september_10_2015.pdf
Select Publications, Sales Tax Rates; Use Tax Rates
- **Force Account detail (the Contractor’s weekly summary for payment)**
<http://www.azdot.gov/business/engineering-and-construction/construction/field-reports/forms>
- **Alternative Design Contracts’ Contract Modification Request Form**
<http://www.azdot.gov/business/engineering-and-construction/construction/field-reports/forms>

ADOT Learning Center for related (matrix) classes:

| | |
|--|-----------------|
| Force Account Documentation for Inspectors ***** | TCH 3000 |
| Supplemental Agreement Tracking System (SATS) ***** | TCH 3010 |
| Cost Estimating ***** | TCH 3011 |
| Force Accounting ***** | TCH 3042 |

Unit One: Understanding the Process

Standard Specification 101.02 Definitions:

Contract: The written agreement between the Department and the contractor setting forth the obligation of the parties, including the performance of the work, the furnishing of labor and materials and the basis of payment. The contract includes the advertisement for bids, proposal, bidding schedule, contract agreement and contract bonds, certificates of insurance, Standard Specifications, Special Provisions, project plans, Standard Drawings, documents incorporated by reference, and any supplemental agreements that are required to complete the construction of the work in an acceptable manner, including authorized time extensions, all of which constitute one instrument.

Controlling Item of Work: Page 8, Standard Specification 101.02

Major Item of Work: Page 11, Standard Specification 101.02

Supplemental Agreement (SA): A written agreement between the Department and the contractor covering work not otherwise provided for in the contract, for extensions or reductions of contract time or revisions in or amendments to the terms of the contract. A Supplemental Agreement becomes a part of the contract when signed by the contractor and the Department.

Standard Specification 105.06 Coordination of Plans, Specifications, and Special Provisions:

The Special Provisions, the Plans, the Standard Specifications, and all supplementary documents are essential parts of the contract and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work.

In case of discrepancy or conflict, the order in which they govern shall be as follows:

- (A) Supplemental Agreements (SA)**
- (B) Special Provisions**
- (C) Project Plans**
- (D) Standard Drawings**
- (E) Standard Specifications**

The contractor shall take no advantage of any error or omission in the plans, estimated quantities, or specifications. In the event the contractor discovers an error or omission, it shall immediately notify the Engineer in accordance with Standard Specification 104.03.

The purpose of Unit One is to stress the importance of the Supplemental Agreement as a contract document that must be legally correct. This unit requires careful reference to the ADOT Standard Specifications 2008, and a thorough review of the Construction Manual sections for detailed explanations on the proper application of the Specifications.

Navigating in the Standard Specs

ADOT Standard Specifications are modeled after the Guide Specifications of the American Association of State Highway and Transportation Officials and the format is standard throughout most Transportation agencies. The standard format is:

- Division I - General Provisions
- Division II through IX - Technical Specifications
 - ◆ Description
 - ◆ Construction Requirements
 - ◆ Materials
 - ◆ Method of Measurement
 - ◆ Basis of Payment
- Division X - Materials

The Contract and Project Plans

Standard Specification 104, *Scope of Work*, addresses the processes and procedures for making changes to the construction contract. The Scope of Work of the construction contract is detailed in the Standard Specifications, Standard Drawings, Contract Plans, and the Contract Special Provisions. The Special Provisions contain any revisions to the Standard Specifications and any specific requirements for the project to be built. It is necessary for the construction staff to thoroughly review and understand these documents to determine if a change in the construction Scope of Work has occurred and if a Supplemental Agreement is necessary to address revisions to the contract.

Scope of Work

To better understand “Scope of Work” it is necessary to briefly look at the development of the project. Long before a project is ready for construction; it is “scoped” in the Planning phase to establish the intent and purpose of the project. This sets the limits and elements of work. It also sets a budget. The Scope and Budget then goes through an approval process.

The approved scope of work is conveyed to the designer in by Scoping Letter, Project Assessment (PA), or a Design Concept Report (DCR). Any of these can be the starting point for the designer to begin work. The designer develops plans and Special Provisions which follow the scope, schedule, and budget for the project.

These documents contain basic information on:

- Project identification
- Project location

- Purpose and background
- Objectives to be obtained
- Accident analysis
- Major construction components of the work
- Right of way issues
- Environmental issues
- Design Exceptions / Variances
- Possible engineering solutions
- Items which effect schedule, such as utility relocation or seasonal considerations
- Cost estimates
- Preliminary schedule

An understanding of these design documents is necessary to determine if a “revision to the contract” has occurred. The Project Manager can assist in the determination of a change in the Scope of Work, and is the reason why they must be contacted for concurrence with Supplemental Agreements.

Revisions to the Contract

A contract change or revision is merely something required which is different than what the contract requires. The Department reserves the right to revise the contract and the Contractor is obligated to complete the contract as revised. The Contractor shall not proceed with work for which a revision to the contract is required without prior approval of the Engineer.

Changes or revisions are done by Supplemental Agreement. See Standard Specification 104.02. It allows contracts to be changed ONLY for reasons given in Subsections A-E:

A. Extra Work (Std Spec 101.02, page 10)

- Work to be performed by the contractor not provided for in the contract, but found essential for the satisfactory completion of the project.

B. Differing Site Condition

- Subsurface (usually Utilities).
- Latent physical conditions

Examples of differing site conditions could be changes in earthwork type, substantial difference in water table elevations, old pavement not identified on plans, difference in specified type of foundation conditions.

There will not be any adjustment allowed for effects caused on unchanged work.

C. Work is suspended

- By the Department for an unreasonable period of time.
- Beyond the control and not the fault of the contractor.
- Not caused by weather except as noted in Standard Specification 104.11 (A) when the Governor declares an emergency.

D. Significant changes in the character of work

- Necessary to satisfactorily complete the project
- Differs materially in kind or nature.

- Major Item increased in excess of 125% or decreased less than 75% of the original contract quantity. (See Standard Specification 101.02, p. 11.)

Character of Work is based upon the normal construction techniques and equipment needed to accomplish an item of work as specified in the contract documents. A change in character is justified when the equipment, labor efforts and techniques change. Examples:

- Change cast in place concrete wall to masonry wall.
- Change a section of pavement from asphalt to concrete.
- Change the size of plants needed on a landscape project.
- Change type of fence from barbed wire to chain link fence.

E. Revise the Contract Time

Notification

See Standard Specification 104.03, p. 40.

When an issue arises, the Contractor notifies the Department of any perceived changes to the contract. This issue is reviewed by the project personnel to determine if it is a Supplemental Agreement candidate. Usually a resolution is reached.

If no resolution is reached within two days of issue submission, the Contractor must submit written notice to the RE which details (at a minimum) a description of the issue, time and date discovered, and location of the unresolved issue. The Escalation Process of the Partnering Program is the method ADOT uses to resolve issues. In ADOT contract administration, Partnering is intended to quickly resolve all ongoing issues in a win-win, cooperative atmosphere.

Good points to remember:

Supplemental Agreement (SA) work (except by Force Account - FA) cannot begin until there is an agreement between the Department and the contractor.

Payment for new work cannot be made until a Contract Revision Notification (CRN) is entered with all approval dates and an item number (for new items) is established.

Alternative delivery projects (Design-Build & CMAR) require an extra step to determine if an SA for "new" work is required, or if it is already provided for in the contract. See Appendix R.

[ARS 28-6923](#), "Bid requirements; procedure; bond"

K. This section allows a change to a construction contract if:

1. It does not alter the scope of the work under a contract and the cost of the change does not exceed ten per cent of the contract amount or fifty thousand dollars, whichever is greater.
2. It does alter the scope of the work if the cost of the change does not exceed ten per cent of the contract amount or fifty thousand dollars, whichever is greater, and the changed work is within twenty per cent of the total project length.

Question & Answers:

How is extra work defined & where is it defined?

Name two examples that may be defined as differing site conditions?

1.

2.

Name at least three examples of delay for which a time extension will not be considered:

1.

2.

3.

What is a Controlling Item of Work?

When can the Engineer change the work?

What determines a Major Item of Work?

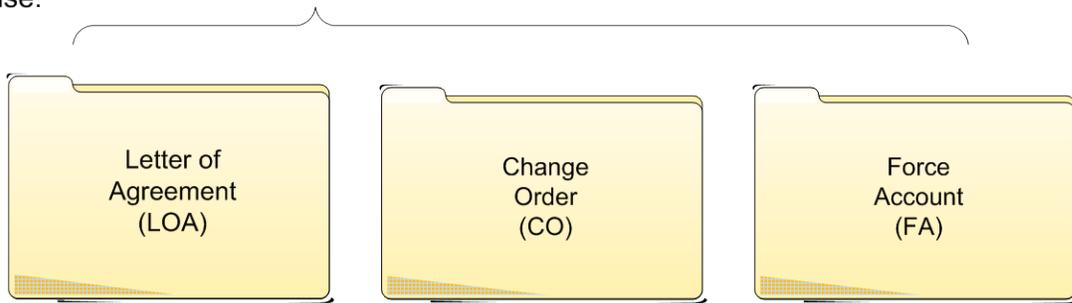
Unit Two: Selecting a Document Type

Document Types

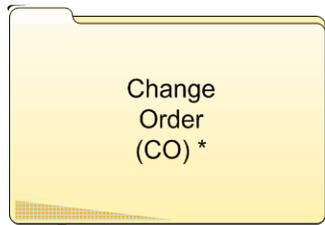
A change in the scope of work is processed as a Supplemental Agreement using one of three different documents:

A Supplemental Agreement is needed.
What Document Type should be used?

For changed **COSTS**
use:

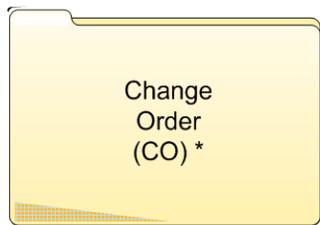


For changed **TIME** with or without Compensation
use:



A Procedural Change Order is a special case with zero costs.

For changed **SPECIFICATIONS** or **DRAWINGS**
use:

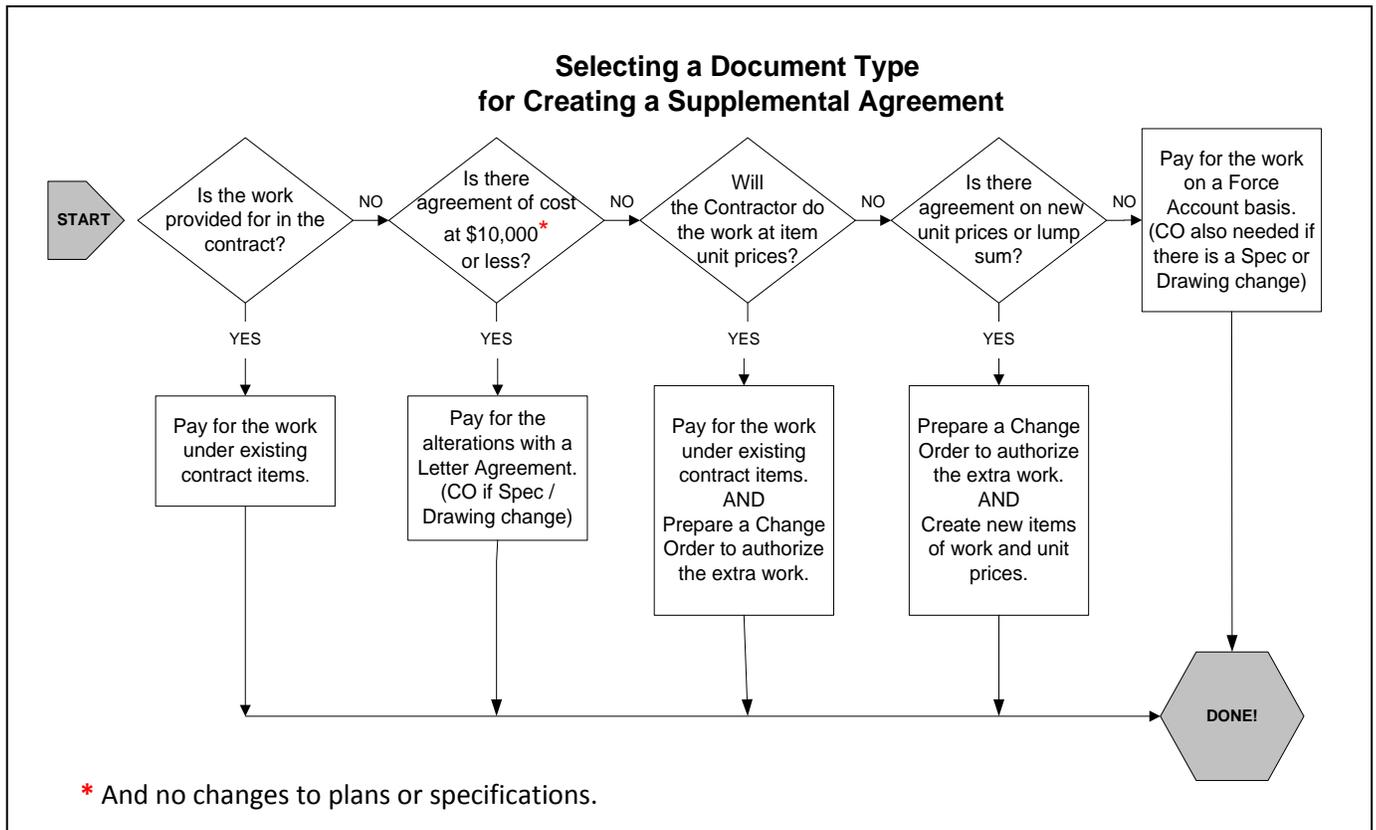


A Procedural Change Order is a special case with zero costs.

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| Document Type | Change of... | Used when... |
|---------------------------|---|---|
| Letter of Agreement (LOA) | Work (Cost) | Changes are minor, <\$10,000. Work paid as a Lump Sum. |
| Change Orders (CO) | Work (Cost) and / or Time Extension and / or Plans or Specifications | Contract unit prices or new agreed upon prices are used. Time extensions with or without compensation when time is added to the contract. Plans or Specifications are changed (Requires the approval of the Assistant State Engineer for Construction). |
| Force Account (FA) | Work (Cost) | An agreement cannot be reached on cost. |

Use the flow chart in determining the type of document to be used for changed price of work.



NOTES:

Do not confuse a Force Account Supplemental Agreement with a Pay Item Force Account established by the contract.

Alternative delivery projects (Design-Build & CMAR) require an extra step to determine if an SA for "new" work is required, or if it is already provided for in the contract. See Appendix R: Contract Modification Request for Review From.

Letter of Agreement SAs

Standard Specification 109.04 (A): The Letter of Agreement (LOA) is best suited when the changes are simple, can be easily identified and estimated, and the cost is \$10,000 or less. LOA's are the easiest for the Department to administer and do not require an extensive approval process.

Refer to Appendix D: for a sample LOA. Each LOA includes the following information.

- The project number and contract information
- Date of authorization
- A description of the work authorized
- The lump sum cost of the alteration
- The Contractor is paid under Item No. 9240101, Miscellaneous Work, for all LOA's. Item No. 9240101 is established with the first Letter of Agreement. All subsequent Letters of Agreements are also paid under Item No. 9240101: SATS creates a new sub item for each new LOA.

The cost proposal (analysis/estimate) submitted by the contractor is transmitted with the LOA and is included in the project file. The Field Office shall also prepare the Engineer's Estimate of Probable Costs (ADOT's independent cost analysis) to verify the cost proposal submitted by the contractor. ADOT's estimate should be signed by the preparing (approving) RE. Both the contractor's proposal and the RE's estimate are transmitted to Field Reports with the SA package to explain how the cost of the LOA was arrived at, but they are not part of the SA -- The agreed costs are stated in the LOA.

In an LOA, the Unit is always Lump Sum; the Unit Price is always \$1.00; The Unit Price Subitem Adjustment is the total dollar amount of the LOA (without a \$ sign); Quantity is ALWAYS listed and paid in Dollars. See Appendix D.

Letters of Agreement can never be used to change plans or specifications. Plan or specification changes always require a Change Order, regardless of cost.

Change Order SAs

Cost, Time, or Plans / Specification changes?

A Change Order must be used for changes over \$10,000 (except Force Account), but can be used for any dollar amount: Positive, Negative, or No Cost.

A Change Order is used to change the amount or type of work. The change can CREATE new pay items, INCREASE or DECREASE existing pay item quantities, or change Plans and/or Specifications. A Change Order cannot delete a pay item of work: it can only revise the pay item to a zero quantity.

A Change Order is also used to ADD contract time.

There is a special case called a Procedural Change Order for Change Orders with a zero cost.

A Procedural Change Order is only used when there is no change to the project's cost or to any pay item.

Change Orders use existing items and unit prices in the bidding schedule or establish new items with unit prices to pay for extra work. If there is an existing pay item, then it must be used unless it is a **Major Item of Work** and there is a quantity change of plus or minus 25%. If the price of a Major Item of Work with a quantity change of 25% is re-negotiated, the change only affects quantities 25% above or below the original contract amount (CREATE a new pay item for the quantities outside of this range).

Selecting an Item Number:

In FAST, click open "Contract Initiation."

On the right side of the new screen, click open "Pay Item Maintenance."

Click open "Maintenance" on the top menu bar and select "Pay Item Report."

Select "English" and click "OK."

This will give you a data base of all pay item numbers which can be sorted by Description or Item Number.

Scroll through looking for the "English Description" that best describes the new work – there are usually multiple listings with different Units of Measurement. Select the number with the proper Description and Unit of Measurement.

If you cannot locate an item that describes what is needed, check the 924 (Miscellaneous Work).

An alternate method if you know the specification section of the work:

In FAST, click open "Contract Initiation."

On the right side of the new screen, click open "Pay Item Maintenance."

Click open "Maintenance" on the top menu bar and select "Find Item."

At the bottom center of the screen, type in the first three numbers of the Specification Section, and "Find."

SUPPLEMENTAL AGREEMENTS

Scroll through looking for the “English Description” that best describes the new work – there are usually multiple listings with different Units of Measurement. Select the number with the proper Description and Unit of Measurement.

When the need for a change is first identified, the Resident Engineer must prepare an analysis / Estimate of Probable Costs: If the change only requires the use of existing pay items, then the RE uses drawings / cross sections with supporting calculations to document the changed quantities and impact on the construction costs.

If new items of work are required, the RE requests the contractor to prepare a detailed cost estimate / unit prices (a cost proposal) for the work. Standard Specification 109.04C specifies 10 calendar days for the contractor to prepare his estimate.

If the change cannot be handled by adjusting the quantities of existing contract items (Standard Specification 109.04 (B), then a detailed cost analysis of the extra work must be developed per (Standard Specification 109.04(C). The RE’s Estimate of Probable Costs and the contractor’s cost proposal are used as the basis of negotiation; insuring a fair and equitable agreement on the changes and their costs. Since Change Order prices are generally agreed on before the extra work begins, contractors may attempt to include many contingencies in their cost estimates to offset any perceived risks. These risks must be carefully evaluated for validity prior to developing the formal document and pricing.

All contract documents that are modified by the Change Order such as plans or specifications must be included with the Change Order as an attachment or clearly incorporated by reference (e.g.: ASTM or MAG standards, ADOT Standard Drawings, etc.).

After agreements and approvals, the Change Order describing the change(s) and listing the pay items and quantities affected by the change is printed, then sent to the contractor for signature.

The RE’s and the contractor’s detailed analysis’ of costs are not a part of the Change Order – the agreed upon quantities and costs are stated in the C.O. These estimates are used to support the agreement: They explain to an audit how the Resident Engineer determined the equitable cost of the work. They are a part of the supporting documentation package forwarded to Field Reports (with copies kept in the project file).

Note:

As of 2013, a Lump Sum Pay Item 1050001, Claims and Escalation Settlements, has been added. See [Construction Bulletin 13-04](#).

Time Extensions:

If time is requested, the contractor must prepare his request on a Request for Extension of Time Form ([Construction Bulletin 13-06](#)). See Appendix Q: Request for Extension of Time Form.

Approval of Time Extensions is solely at the Department’s discretion; Standard Specification 108.08. As part of the negotiation of the Change Order, either party may decide that both cost and time must be agreed upon together. In this case, the contractor and the Department should work diligently to resolve the issue in a timely manner using the contractor’s Request for Extension of Time process.

If the contractor requests additional contract time because of external forces (national shortages, weather, disasters, etc.), added work, or ADOT action, the request must be analyzed using the contractor’s approved CPM (Critical Path Method schedule – See Standard Specification 108.03). Only impacts to controlling items of work on the Critical Path (original or added work), justifies additional time. The CPM provides answers to four questions that every engineer faces: 1) How long will the project take? 2) Are we on schedule? 3) How long will the project be delayed because of a setback to a Critical Item of Work? 4) How long did the project really take?

The Resident Engineer analyzes the request. If the additional time requested is non-compensatory (no cost), the RE forwards the form with his analysis to the District Engineer for determination. If approved in whole or part by the District Engineer, the form is signed by both the DE and the contractor, and the Resident Engineer prepares a Procedural Change Order for additional contract time with the signed Request for Extension of Time Form attached.

If the additional time requested is compensatory (the contractor requests payment for a delay), the Resident Engineer contacts the Assistant State Engineer for Construction for assistance in analyzing the request. The RE forwards the form with the analysis from the Assistant State Engineer for Construction to the District Engineer for determination. If approved by the District Engineer, the form is signed by both the DE and the contractor. The Resident Engineer then prepares a Change Order to establish an item for compensation to the contractor, and granting additional contract time. The signed Request for Extension of Time Form is attached to, and becomes part of, the Change Order. The form is in [CB 13-06](#), Appendix Q.

If the contractor does not agree with the District Engineer’s determination, the matter is escalated using the Dispute Resolution form.

The District Engineer is the authority to approve time extensions, but Authorization Levels (the total increase in costs to the project by the Change Order) are unchanged. Remember that only Working Day or Calendar Day contracts can have time added.

Fixed Date completion contracts must use a Change Order to change the date – from the original stated completion date, to a new stated completion date.

Note: As of 2013, a Pay Item 1080800, Contract Time Extended Overhead, has been added. See [Construction Bulletin 13-04](#).

If an agreement is reached on the cost of the change, but NOT on additional time, process the Change Order for cost with a **DISCLAIMER** statement in the Specification/Stipulation section that **“Contract Time is unresolved.”**

This will keep work from being delayed while the Request for Extension of Time Form ([Construction Bulletin 13-06](#)) is processed.

If time is not required, state that:

“By agreeing to this Change Order, (THE NAME OF THE CONTRACTOR GOES HERE) waives all rights to all claims against the Department on any matter related to this project, this Agreement, and the interrelated effects of this Agreement.” in the Specification/Stipulation section of the Change Order.

Parts of a Change Order:

1. REQUEST which lists the extra work (to CREATE, DECREASE, or INCREASE Pay Items and or quantities).
2. REASON or background on the need for the work. It must succinctly review the problem and method selected to correct it.
3. SPECIFICATIONS/STIPULATIONS listing stipulations, specification requirements, plans, and/or reference to attachments (as needed).
4. Pay Item Adjustments (Not on Procedural Change Orders) which includes Item Numbers, Descriptions, Units of Measurements, Unit Prices, Quantities, individual Item Extended Amounts and the Total change to the contract amount.

When writing a Change Order, the author should think like a reporter. Assume the reader is unfamiliar with the project, thus the explanation needs to clearly provide the change(s) requested. It must be complete, clear and accurate, and answer Who? What? Where? When? Why? and How? Using this questioning in writing a Supplemental Agreement makes the process easier. This is especially important when projects are audited after project completion by people unfamiliar with the project.

SUPPLEMENTAL AGREEMENTS

Request

| Ask... | Include... |
|--------|--|
| What? | Create, Decrease, or Increase Pay items identified by number. Compensation for Time also requires the creation of a new pay item identified by number. |

Reason

| Ask... | Include... |
|--------|---|
| Why? | Why the change is being made. Explain in sufficient detail and reasoning: <ul style="list-style-type: none">– Identify the cause for the change.– Explain why the change is needed. |
| Who? | It is appropriate to note who is initiating the change. Attach any correspondence requesting the change. |
| Where? | Specify where the changes are to take place, i.e. station reference, area limits, or other specific location information. |
| How? | Specify how the change will be done, i.e. method of construction, etc. This may require a new Specification and/or Plans for the work. |

Specifications/Stipulations

| Ask... | Include... |
|--------|---|
| How? | The RE should list or attach drawings, specifications and/or referenced Standards to completely describe the method to complete the work. Remember to list deleted or superseded Plan sheets or Specifications. Restrictions are also included: Is work limited by day of the week, time of day, or listed special events or dates? List them. |
| What? | Specify or stipulate all conditions affecting the change: Is Time being added? (Attach the signed Request for Extension of Time form). Is Time unresolved or not an issue? Say so as a Stipulation! |

Cost Analysis

Cost Analysis by both the Resident Engineer and the contractor are not part of the Change Order because the costs are stated on the SA document. **They are both required as backup to how prices were determined or negotiated.** See Standard Specification 109.04(C) and page 35 of this technical guide for estimate preparation format. The Contractor submits a cost proposal (detailed estimate) and the RE or consultant designer independently prepares a detailed Engineer's Estimate of Probable Costs.

Force Account SAs

The Force Account (FA) Supplemental Agreement is only used when the Contractor and ADOT are unable to reach agreement on the cost of additional work. Force Account may be the only agreement possible at times when the scope of work of a change is unknown or the scope of additional work cannot be otherwise clearly defined.

It requires the most intense administrative efforts and record keeping both for the contractor and for the Department.

The Force Account process requires the engineer to use two forms: the Force Account Work Request and the Detail Daily Reports. The FA Work Request is prepared on the same Supplemental Agreement Form as a Change Order, with only minor changes to the body. The body consists of:

- **REQUEST** which defines the work to be done by this process...**What** is to be done? These are pay items identified by item number. A new item of work requires the creation of a new pay item number.
- **REASON** why the work is being done...**Why** we are doing it / why are we doing it this way?

Again, Cost Analysis' by both the Resident Engineer and the contractor are not part of a Force Account Supplemental Agreement. But both estimates are required in the package sent to Field Reports to document how prices were determined, or negotiated. It should also state conditions or limitations on the quantities. There is little difference between estimating for a Force Account from that of either a Letter Agreement or a Change Order. The difference is some items need a guesstimate of quantities – sometimes approaching a SWAG (you have to work with what you have). See Standard Specification 109.04(C) and page 35 of this technical guide for estimate preparation format. See page 38 of this technical guide on how FA are PAID.

Because of the guesstimate / SWAG nature of FA quantities, the actual labor, equipment and materials used to do the work must be accurately tracked on detail sheets by the contractor using ADOT's FA Detail. Force Accounts require that the both the contractor and ADOT inspectors keep complete and accurate record of the Contractor's labor and equipment hours as well as the materials used on force account work. Daily labor, material and equipment use are recorded by the Contractor on ADOT's, [Force Account detail](#) (the Contractor's weekly summary for payment) and are submitted weekly (No form; no payment). ADOT uses the Daily Diaries to track of the work: The Daily Diaries are used to check the contractor's detail.

Non-Allowable Charges (Standard Spec 109.04 (E):

For both estimating and compensation / reimbursed the contractor is not paid for:

- 1) Profit in excess of that provided by specification.
- 2) Loss of profit.
- 3) Home office overhead.
- 4) Consequential damages, including loss of bonding capacity, loss of bidding opportunities and insolvency.
- 5) Indirect costs or expenses of any nature.
- 6) Attorney's fees, claims preparation expenses or costs of litigation.
- 7) Interest.

Refer to the Construction Manual for detailed information on documenting and processing Force Account work. Additional information is found in the Standard Specification 109.04 (D).

NOTES:

- **Use the S.A. EXACTLY as it is printed from SATS! Do not modify it by clipping, cutting & pasting, or montaging.**

- **All printed pages must be signed (executed) by all parties to the Supplemental Agreement.**

Question & Answers:

1. What are the types of Supplemental Agreements?
2. What is the difference between a Letter of Agreement and a Change Order?
3. What are the dollar limits for a Change Order?
4. Can you delete a bid item of work that is not needed?
5. How is contract time / completion date changed?

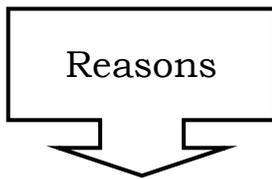
Unit Three: Developing the Documents

Process Improvement

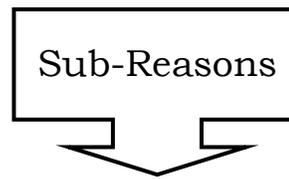
In 1997 the Auditor General requested the Department to classify reasons for Supplemental Agreements. Based on the information collected, the various ADOT sections and consultant engineers can use the information to improve future plans; and hopefully prevent the problem from reoccurring. This should result in substantial savings in the cost of construction. If the reason for each Supplemental Agreements wasn't documented, we wouldn't know what needs to be improved.

Selecting Reasons/Sub-Reasons for Minor Alterations and Change Orders

When a Minor Alteration or Change Order is determined to be the right document type for creating a Supplemental Agreement, reasons and sub-reasons MUST be included.



1. Value Engineering
2. Work Out of Scope (ADOT)
3. Work Out of Scope (Other Jurisdiction)
4. Quantity Omissions
5. Plans Revisions and Oversights
6. Changed Condition
7. Penalty or Bonus
8. Other



- Roadside
- Contracts and Specs
- Materials
- Traffic
- Structures
- Civil
- Drainage
- Utilities

One of the principle motivators for developing the automated Supplemental Agreement & Tracking System (SATS) is to determine the cause of Change Orders and Minor Alterations. Thus, the Supplemental Agreement author needs to assign both reasons and sub reasons.

Note: When preparing a Change Order to add Contract Time, the Reason Code is for the underlying cause for the need. Was it because of additional work caused by Changed Conditions, Added Work, Omissions, etc.? There is no Reason Code “Add Time.”

See [Appendix N](#): for bar graphs of calendar years 2012, 2013, 2014 & 2015 costs of Supplemental Agreements by Reason Code.

Value Engineering (VE) SA Reason 1

This is a contract change in which both the owner and the Contractor agree to alter the contract to reduce the total contract amount: Any change must perform the functions of the original design. Savings are split 50/50. The Contractor initiates this change, and the owner accepts or rejects it. See Standard Specification 104.13 Value Engineering Proposals by the Contractor:

Proposed changes are examined so that future designs may include Value Engineered improvements. By improving the process through plan changes, ADOT realizes all of the savings in subsequent projects.

EXAMPLE A

Remain-in-place, metal, deck forms are now sometimes called for on Structure Sheets in the General Notes. This VE introduced a new product.

EXAMPLE B

Non-reinforced, cast-in-place, concrete pipe is now specified on the Pipe Summary Sheets when permitted to be used.

Savings from traffic control modifications or construction phasing changes may only be considered when it is part of a systematic change. There is no payment for unused traffic control that was provided in the contract but was not needed or never implemented during the execution of the work as planned.

Complete details and requirements for a Value Engineering proposal are in Standard Specification 104.13. They should be reviewed and followed when evaluating any Value Engineering SAs.

Requirements are briefly summarized as:

- The Contractor can request a change in plans, specifications, or other contract requirements after execution of the contract.
- Any resultant savings are shared equally between the Department and Contractor.
- An independent cost analysis must be developed, not just relying on the contractor's unit prices.
- Proposal is reviewed within specified time limits.
- Several conditions need to be met for an item to be considered a Value Engineering SA.
- ADOT makes the formal acceptance or rejection decision on a case by case basis by the VE Engineer.
- It isn't a VE if the concept has been used in the past. To review past VEs, visit VE's web site: <http://www.azdot.gov/business/engineering-and-construction/construction/value-engineering>
- Concurrence from the Value Engineering Manager is required prior to initiating an SA.
- In all cases, the statutory requirements to have plans / specifications signed and sealed by a Professional Engineer are unchanged.

When setting up a VE change order, the Resident Engineer needs to keep in mind that the Contractor's portion of the savings is added back into the change order as a separate item. In other words, all negative quantity adjustments and new work items are listed first. A new item called "VE savings" is then created to pay for the Contractor's half of the savings (the new item will be numbered 9248001 through 948031).

It is important for the VE change order to clearly show the savings to both the Department and Contractor. This can be done on the cover sheet or within the body of the change order. In addition, any documents used to develop the VE should also be referenced.

Additional or Extra Work Out-of-Scope SA Reason 2 or 3

This is work for which a price is not included in the original contract, but where the work is deemed necessary or desirable for satisfactory completion of the contract. There are two SA reasons codes for this category: Reason 2 for 'ADOT' and Reason 3 for 'Other Jurisdictions' (cities, towns, counties, etc.).

The key words "Out of Scope" indicates that these items were not in the original contract. Some of the items that can be extra work may include aesthetic treatment to walls, sound walls, additional landscaping, and other work generated by Intergovernmental Agreements (IGA's), or Joint Project Agreements (JPA's).

If the work should have been constructed but wasn't included in the plans, use the Plans Revisions and Oversight reason. Examples include required work not described (such as a missing attenuation device).

Additional/Out of scope improvement costs compete with new projects and can adversely impact ADOT's Work Program. ADOT funded work on this SA type should only be done with good cause.

Quantity Omissions SA Reason 4

This SA reason is for missing pay items for work described in plans or specifications or when a major item quantity is increased or decreased more than 25% of the plan quantity

Plans Revisions and Oversights SA Reason 5

Use this SA reason when the plans did not accommodate existing, visible field conditions at the time of design, and a change to the design is desirable for obvious design oversights or omissions.

EXAMPLE C

Sidewalk is built 8 feet beyond curb and no provision is made for the earthwork embankment quantity needed to be placed under the sidewalk.

The changes are within the original scope and should have been on the original plans. This is another situation where improvements could be made to the design process.

Changed Condition SA Reason 6

Use this SA reason when an unusual and unknown condition occurs on the project after award of the contract, such as for: unknown utility conflicts or other subsurface conditions; unknown or unusual material characteristics; acts of nature; vandalism.

EXAMPLE D

Rapid population growth of an area has created new roadside conditions, thereby creating the need for additional driveways, sidewalks, etc.

This SA reason is a condition that could not have been known at the time the contract was awarded, or a hidden condition that could not have been controlled, estimated, or decreased. This SA reason would also allow for an explanation that a certain percentage of the construction budget must be spent to fix construction conditions that were not and could not be predicted.

Penalty or Bonus SA Reason 7

Use this SA type when paying for items where construction quality or time was modified. It should also be considered when work has to be “Approved As Is” rather than replaced or repaired.

Example E

ADOT chooses to accept a substandard product at a reduced price.

Example F

ADOT wants to Accelerate the Contractor’s schedule with a bonus.

Example G

ADOT accepts a different product at a discount (penalty) or bonus when the plan’s materials are unavailable.

Other SA Reason 8

This SA reason is used ONLY when none of the other six types fit the situation that exists on the project. Write in any items not included in the previous SA types and provide detailed explanations.

Example H

When there is agreement that a contract change has occurred and the price is being negotiated, negotiated settlements should be included in any of the above categories for Change Order / Letters of Agreement.

Example I

When a contract issue is escalated and a settlement is reached, the reason of *Other* is used for the Change Order SA and the negotiated settlement should be explained in detail.

SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

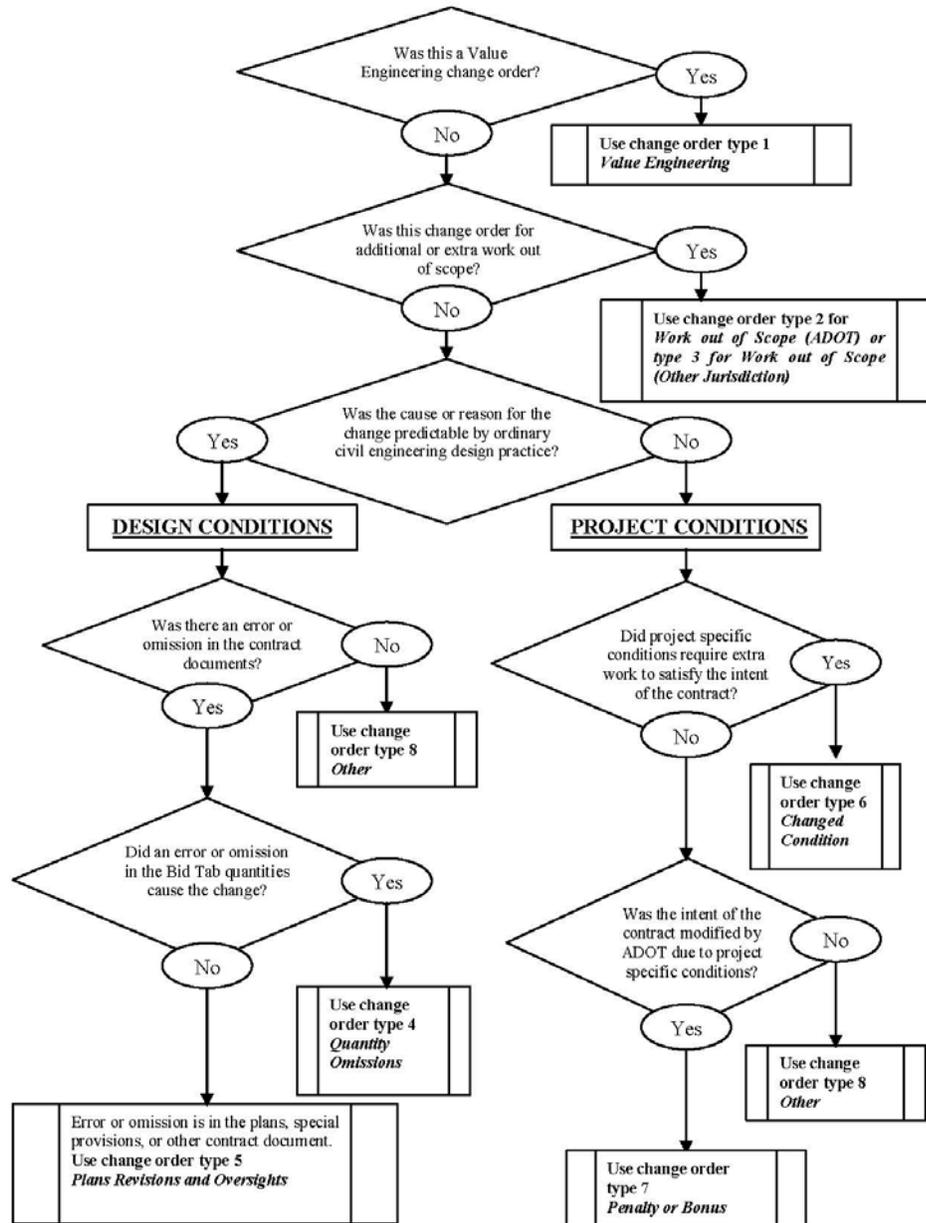


Exhibit 104.02-1. Choosing Supplemental Agreement Type

Project Development/Management Process

ADOT is committed to the Project Development/Management Process.

An ADOT **Project Manager (PM)** maintains direction of the project through the financial allocation and control, design, stakeholder's involvement, construction and maintenance. This responsibility requires the PM to stay in contact with the project. All changes need PM approval to assure the Department the original scope of the project is being met without added or deleted features. Construction personnel must contact the PM regarding any contemplated changes and to receive approval before taking proceeding. **The PM is not to be confused with the Resident Engineer (Construction Manager), who is responsible for day to day construction activities.**

The Construction Manual contains a very good discussion of this process in Chapter 1, pages 100-10 through 100-11. Refer to these pages regarding involving the PM in the Supplemental Agreement process.

Errors and Omissions Policy

See Appendix O: for the ADOT Intermodal Transportation Division Policy, MGT 00-2 Error and Omissions by Consultants Policy. This policy was implemented because:

- ◆ Approximately 75% of the highway plans are designed by consulting engineering firms.
- ◆ At ADOT, approximately 50% of the Change Order SAs are to correct plan errors and omissions.

From this process improvement, a concerted effort is made to recover additional costs generated by correcting plan errors. The policy defines a procedure to follow when the cumulative total of the cost of correcting plans errors or omissions exceeds 5% of the construction bid amount, or \$20,000, (whichever is less).

This same process improvement awareness is needed for projects designed by ADOT. Become familiar with the MGT 00-2 Error and Omissions by Consultants policy in order to advise the Resident Engineer, Project Manager, and Designer when a plan error/omission is encountered.

NOTE: As of 5/31/2013, the policy is being revised.

Question & Answers:

1. What reason for change would be used when a drilled shaft hit material different than that shown on the drilling logs?

2. The plans did not provide a method of payment for removal of pavement markers which were not listed in the contract as an item to be removed. What reason should be used?

3. What reason would be used to change from AB Class 3 to AB Class 2 at the contractor's request?

4. What reason would be used if a concrete structure's dimensions were out of specifications, yet the structure was allowed to remain in place at a reduced price?

5. What is a PM; what are their duties?

6. What is an RE; what are their duties?

Unit Four: Processing the Documents

Learning the principles and application of this unit requires careful referral to the Construction Manual and the Standard Specifications.

Monetary Authority

The Resident Engineer is responsible for monitoring the cumulative value of all changes to the original contract amount. Contracts are typically funded with a 5% contingency, so when the cumulative amount of changes reaches 5% of the original contract amount, there isn't sufficient funding to complete the project. An RE / DE should not approve any supplemental agreements without a funds increase which requires approvals from the Project Manager and the Assistant State Engineer, Construction. The authority rules apply to negative as well as positive cost adjustments.

Authority / Financial Approval Limits

Professional Engineer / Registered Landscape Architect.

[ARS 28-6921](#) states: The state engineer shall be a civil engineer registered to practice in this state. To be in compliance with laws and rules, the Department requires that all contract documents are signed by a registered Professional.

Changing a professional's sealed work can only be done by a registered professional: Usually a **Professional Engineer (PE)**, this also applies to work signed / sealed by a **Registered Landscape Architect (RLA)**, which can only be done by an RLA. Changes shall be signed and sealed in accordance with [ARS 32-142](#) and [Article R4-30-304](#) of the Code & Rules of the Arizona State Board of Technical Registration.

FHWA

FHWA APPROVAL is required for all **Full Oversight** federal-aid projects. FHWA Full Oversight can be identified by the last letter in the Project Number. On older projects these are N (National Highway System - NHS) or X (non NHS). Typically a project over \$1 million on the Interstate Highway System is an **N** project - **Full Oversight**.

Project numbers that end in an A are in the **Certification Acceptance** program: ADOT has the authority to approve supplemental agreements for federal-aid projects in the Certification Acceptance program.

Although FHWA does not need to approve supplemental agreements for Certification Acceptance (A) projects, they do need to be advised that the supplemental agreement is being processed. Any local government or agency with participation (funding) in a project also must be contacted for approval.

SUPPLEMENTAL AGREEMENTS

THIS IS CHANGING!

- The federal-aid project number assigned to the projects have changed; the letter identifiers at the end of the project number will include one of the following to denote the type of oversight authority for the project:
 - S = Full Oversight/State Administered (formerly “N” or “X”)
 - F = Full Oversight/Locally Administered (formerly “N” or “X”)
 - T = Delegated/State Administered (formerly “A”)
 - D = Delegated/Locally Administered (formerly “A”)
 - Z = Other
 - NFA = Non Federal Aid

For Full Oversight/State Administered (“S”) and Full Oversight/Locally Administered (Local Public Agency - LPA) (“F”) projects, FHWA retains full-oversight and approval authority. For Delegated/State Administered (“T”) projects, ADOT has been delegated oversight and approval authority by FHWA. For Delegated/Locally Administered (“D”) projects, the LPA has been delegated oversight and approval authority by ADOT and FHWA. However, ADOT retains some monitoring and oversight of “D” project activities, as required by law. The locally-administered designation applies to Certification Acceptance projects, as well as project activities that have been approved by ADOT with concurrence from FHWA to be self-administered by the LPA.

See the ADOT – [FHWA Stewardship Agreement March 2010](#), Tables 2 and 3 (Construction)

Resident Engineer: Up to \$75,000.00

Resident Engineers (REs) are authorized to approve changes to the contract up to \$75,000. This authorization includes changes in contract specifications*, design** and unit price adjustments. Contact and consensus with both the Project Manager and Project Designers are required on design changes that are greater than \$25,000. Project Managers are to be kept informed of all significant changes. If the RE cannot reach a consensus with the Project Manager (PM) or Designer on a change, then the issue should be immediately escalated.

- * Also Requires State Construction Engineer Approval.
- ** Concurrence from the project designer and ADOT’s Technical Managers is also required (See Appendix M: CB 04-01).

District Engineer / State Construction Engineer: Up to \$350,000.00.

The District Engineer (DE) has authority to approve changes to the contract that equal or exceed \$75,000 and up to \$350,000. This authorization includes changes in specifications, design, and unit price adjustments. Concurrence from the project’s designer and ADOT Technical Managers is required (See Appendix M: CB 04-01). If the District Engineer is unavailable for approval, the Assistant State Engineer for Construction has the authority to approve changes.

Deputy State Engineer: Up to \$750,000.00.

The Deputy State Engineer has authority to approve all Supplemental Agreements that equal or exceed \$350,000 and up to \$750,000. This authorization includes changes in specifications, design, and unit price adjustments. Concurrence from the Project Designers is needed on all design-related changes.

State Engineer: Up to \$10 million.

The State Engineer has authority to approve all Supplemental Agreements up to \$10 million. This authorization includes changes to specifications, design, and unit price adjustments. Concurrence from the Project Designers is needed on all design-related changes.

Contacts for Supplemental Agreements

The authorization levels apply to the financial approval of a supplemental agreement. Resident Engineers must contact the Project Manager and all applicable Technical Managers for approvals for proposed Supplemental Agreements. The Technical Manager(s) should concur with the contract revision prior to implementation of the Supplemental Agreement (See Appendix M: CB 04-01).

Financial Increase Approval

[ARS 28-6923 K](#) provides the legal limits for a change to a construction contract. A change is allowed if the SA:

- 1. Does not alter the scope of the work under a contract and the cost of the change does not exceed ten per cent of the contract amount or fifty thousand dollars, whichever is greater.***

2. Does alter the scope of the work if the cost of the change does not exceed ten per cent of the contract amount or fifty thousand dollars, whichever is greater, and the changed work is within twenty per cent of the bid project's original length.

Application of the Laws

Scope of Work

The contract must include the same type of work being considered in the change. For example pavement cannot generally be added to a grade and drain job which has no paving contract items. Likewise, Intelligent Highway Systems cannot generally be added to any contract not containing this type of work in the original work. [ARS 28-6923, K.1.](#)

Cost of Work

On projects with a total value of \$500,000 or less, any one cost increase is limited to ten per cent of the work or \$50,000 (whichever is greater). On projects with a total value over \$500,000 the total amount of any one change can be ten per cent of the contract value. [ARS 28-6923, K.2.](#)

Location of Additional Work Covered by a Change

Any additional work must be within 20 % of the project limits. This allows the engineer to do additional work sometimes required to make modifications or connections at the ends of the project such as detours, signs, markings, or adjustment to local conditions which may have changed since original design. For example, any additional work on a project ten miles long must be within two miles of either end of the original project length. [ARS 28-6923, K.2.](#)

Exceptions: Any Supplemental Agreements being considered in excess of these limits must be discussed with the State Construction Engineer and must be thoroughly justified as needed prior to issuing any approval to commence the work. Often times these exceptions will require legal review and approval of the State Engineer's Office.

ADOT Administrative Services Requirements

When a project Budget is established a contingency amount of 5% of the contract amount is provided for unforeseen changes that may occur during the construction process.

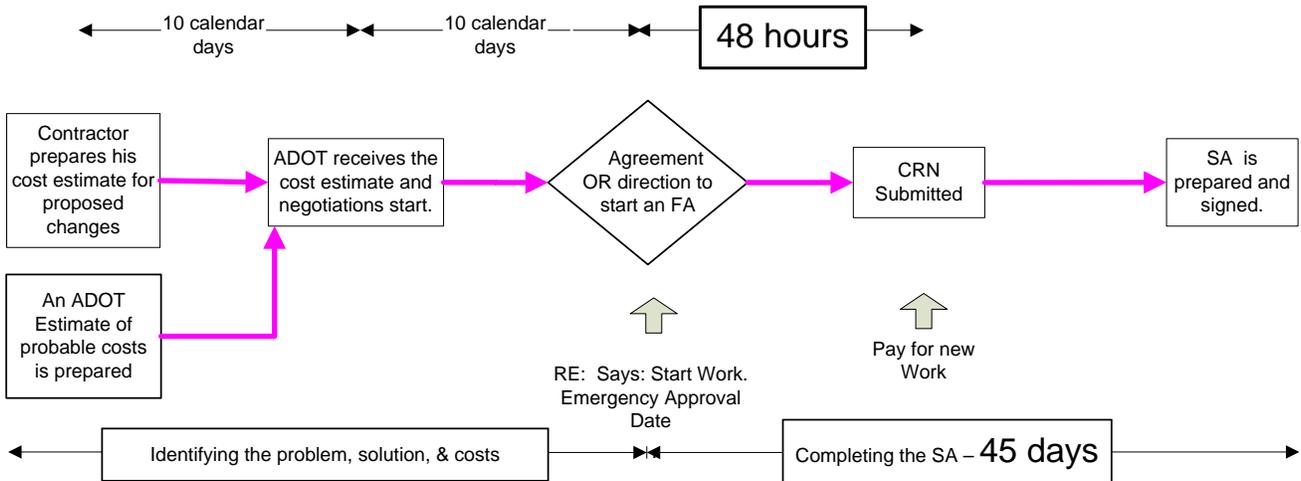
When an individual change exceeds 2% of the contract amount, a Resident Engineer or District Engineer may **not** approve any supplemental agreement without the approval of the Assistant State Engineer for Construction. The RE is responsible for monitoring the cumulative value of all changes to the original contract amount. The RE must verify the project budget can accommodate all supplemental agreement amounts by referencing the Finance Card found in the Contract Card of the FAST Desktop. If not, a Request for Additional Project Funds, Construction Manual exhibit 109.04-5 (See Appendix K) must be submitted and approved by the Assistant State Engineer for Construction.

Once the 5% contingency amount is reached, the project should request approval in writing to exceed the budgeted contingency amount. An evaluation is made to determine adequate funds are available in the ADOT Construction budget to approve the change. Continued overrunning of project budgets could result in the need to drop a planned project from the program.

Summary of Activities

1. Contractor and ADOT verbally agree to additional work that is not included in the contract.
 - ◆ Contractor is asked to prepare a detailed Cost Estimate or unit prices for the work. ADOT also prepares an Engineers' Estimate of Probable Costs and identifies a reasonable time for completion of the work if it is / will be a Critical Path Activity. The time frame for preparing estimates and analyzing time requirements is specified in Standard Specification 109.04 C: **10 calendar days for preparation of the estimate.**
 - ◆ If work must start before a formal approval is received (e.g. an emergency repair or impact to a critical path item of work), the work is documented as if it is a Force Account until the SA is processed.
2. Cost Estimate is submitted to ADOT.
 - ◆ Start SA negotiation. See 109.04 (D).
 - ◆ If the Prime Contractor's cost proposal / estimate includes an attached estimate from a subcontractor which does not detail P&OH, assume that it was included. The Prime Contractor is entitled to a 5% mark up on that portion of the work for a total of 20% P&OH (15% for the sub, and 5% for the Prime).
 - ◆ If the Cost Estimate is not received on time OR if a contract price adjustment cannot be agreed upon, the work is processed as a Force Account and the RE prepares the Force Account request.
3. Agreement to proceed on the Supplemental Agreement is reached.
4. A Contract Revision Notification (CRN) document is prepared.
 - ◆ No pay outs on existing pay items are permitted prior to the submission of the CRN.
 - ◆ No pay outs on new items until they are contractually established in CPE.
5. SA is completed and signed as the official contract document.

Time Line for SAs



NOTES:

- The “Emergency Approval Date” is when the contractor is instructed to begin work by the R.E.
- The 10 calendar days between identifying the problem and starting time / cost negotiations using the contractor’s and RE’s estimates [Std Spec 104.03 (D)] is a guideline – if the work urgent, a Force Account could be directed on day one.
- The 10 calendar days between identifying beginning negotiations and the RE directing the start of work is a guideline that should generally be adhered to.

Questions & Answers:

1. On an \$8 million project how large can an SA be?
2. On a \$200,000 project, how large can an SA be?
3. A project is 8 miles long. It has box culverts to be built. Can a box be added 2 miles from the end of the project? Yes or No; Why?
4. What percentage change requires the State Construction Engineer's approval of/and SA?
5. What type of Supplemental Agreement reason code would be selected for the following scenarios and why?
 - A. It is necessary to add 200 L.Ft. of 36" pipe culvert under a new roadway because of a channel built by a private owner adjacent to the project. The channel was built prior to ADOT's construction project, but after Right-of-Way acquisition.
 - B. A storm caused the water table in a streambed to rise 20 feet. This required the contractor to pump the footing dry prior to placing box culvert floor.
 - C. After the start of construction, ADOT Traffic Engineering decided to increase the width of existing auxiliary lanes on an intersection signalization project from 11 foot to 12 foot, and to increase shoulder widths. The contractor agrees to use the contract's bid prices; the total estimated cost of the change is \$27,200.00.
6. When is FHWA approval needed to process a CO?

Processing, Packaging, & Estimates

Contract Revision Notification Document (CRN)

The CRN is the initial document prepared in SATS to make notifications that an SA is being prepared and to get all required permissions. The completed CRN is used as a coversheet for a SA. It summarizes the SA and documents verbal authorization to proceed with the requested changes.

A Supplemental Agreement is approved by ADOT, and then sent to the Contractor for signature. Once returned from the Contractor, the signed SA package is sent to Field Reports.

- It lists the people contacted who technically approved the SA.
- It summarizes any important internal discussions within the Department regarding the reasons for developing the SA which are not appropriate to include in the Supplemental Agreement form in the Comments section.
- It summarizes any discussion with FHWA when federal aid is involved.
- It includes the cost estimates used to negotiate the cost of the changes.

The CRN is where options that were considered during the development of the Supplemental Agreement are discussed, and other issues of interest to those who review or approve the change are listed.

Sealing of Agreements

Resident Engineers are responsible for sealing Supplemental Agreements only when the RE has been in Responsible Charge of a design issue. Design issues requiring a seal are:

- changes to drawings
- changes to technical specifications (Blue Book or Specials)
- new drawings or specifications

Engineer seals are NOT required for contract administrative issues such as quantity, cost, and time adjustments.

When the change is to an existing design sealed by an engineering registrant, the RE shall coordinate with the registrant. When consulting designers develop changes, they shall send sealed drawings or specifications to the RE for inclusion with the Change Order. When a Value Engineering proposal requiring new drawings is submitted, it shall be sealed by the Contractor's registered engineer prior to final approval of the proposal. (Because of "Responsible Charge" of the work, the contractor may elect to reimburse the Engineer of Record – ADOT's designer). When an issue has been escalated beyond the RE, it shall be sealed by the responsible registrant making the final decision. Drawings and specification must be sealed in accordance with Article R4-30-304 of the Code & Rules of the Arizona State Board of Technical Registration.

Packaging

After the Supplemental Agreement has been signed by ADOT (RE, Assistant DE, DE, Assistant State Engineer, and/or SE as appropriate) and the Contractor, the packet is ready to send to the Field Reports / District Office. The packet should be a self-contained set of the critical parts of the document (see below). The RE should designate a person in charge of putting together the packet for the District Office. When the Supplemental Agreement comes back from the Contractor signed, it should be given to the designated person and the packet assembled, copied and sent. A copy should be given to the inspector(s) in charge of inspection and payment.

What is in the contractor's packet? Only the signed SA and drawings / materials necessary to describe the change to the contract.

All new / revised sealed drawings or specifications are attached to the Supplemental Agreement forms or referenced on the first page.

The plans should normally be originals with the changes clearly noted. These plans can be reduced to 8 1/2 x 11 inches, but may be larger to ensure enough detail for reviewing and copying. Include all other detail sheets or drawings needed to show what is being built and the location. Thick / detailed submittals, such as shop drawings, cut sheets, etc., should be referred to by reference in the SA - THEY ARE PART OF THE CHANGE – with copies to the contractor and the Project Office, but not usually included in the District packet.

What is included in Field Reports' packet? They get a copy of everything. Each district sets its own policy on what is forwarded to district.

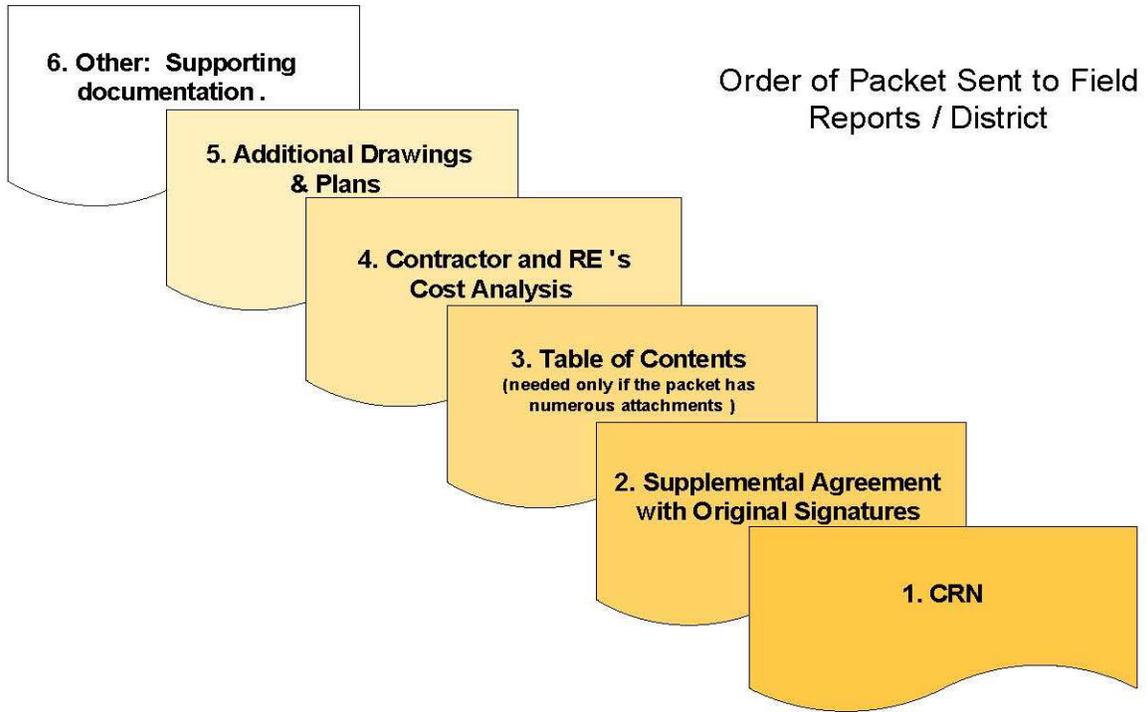
Attach letters, e-mail approvals, sketches, etc. that provide back-up, explanation, or detail in case of later audit.

Note that both the contractor's and ADOT's cost estimates are forwarded to Field Reports. The contractor gets neither estimate because the SA lists the AGREED COST of the change.

Log all signature / transmittal dates in SATS!

Note: The contractor shall furnish an Authorized Signature Form that states which individuals are authorized to execute and sign documents on behalf of the contractor ([ARS 47-3402](#)).

Documents to Field Reports/District:



SUPPLEMENTAL AGREEMENTS

**Engineer's Cost Estimate for Supplemental Agreements (LOA, CO & FA)
Std Spec 109.04 (C)**

Use existing pay items !

Part A: Review work for existing pay items (Example: Paving, curb & Aggregate Base, etc.)
Calculate quantities x existing pay items.

Do not add Profit, Overhead, Bonds or Taxes – they are already included in these items.

Part B: Do a cost analysis for the remaining work (without existing pay items).

Total Estimate = Part A + Part B.

To estimate work without pay items (Part B):

| WHAT | HOW CALCULATED |
|----------------------------|-----------------------------------|
| Labor | (Wages + Fringes) x 1.35) |
| Materials | Cost |
| Equipment | Cost |
| Other | As needed |
| Subtotal | |
| Taxes | Subtotal x rate x 0.65* |
| Bond | Subtotal x 0.005 (which is ½%) |
| Total | |
| Profit & Overhead | total x 15% or 20% |
| ESTIMATE for Part B | \$\$\$. |

* REGARDLESS OF AMOUNT OF TAXES PAID

Total Estimate = Part A + Part B.

SUPPLEMENTAL AGREEMENTS

LABOR “Burden” is the total of all indirect labor costs: Costs necessary for an employee to perform the work that they were hired to do.

ADOT calculates it as 35% of wages. This includes 6.2% Social Security Tax, 1.45% Medicare Tax, Workers’ Comp (Insurance the employer must purchase) and State and Federal Unemployment Insurance (another insurance the employer must purchase). It also includes training, paid holidays, use of vehicles, computers, equipment, PPE, office furniture, air conditioning, pens, pencils, paper, etc.

LABOR “Fringes” are the non-take home portion of wages which can include Pension / 401K, paid vacation and sick leave, contributions to Health Insurance, etc. ADOT verifies fringe benefit rates (FR) from payrolls. “The contractor shall provide the hourly wage rates and fringe benefit rate at the preconstruction conference. The rates will be verified by comparison to the contractor’s payrolls.” [SS 109.04 (D) (1)]. A recent ADOT audit did not find a current fringe benefit plan on file with the ADOT Field Reports Section. The Construction Manual, Page 1210-12 states:

“It is necessary that at the time payrolls are submitted to each field office, the distribution of fringe benefits be reviewed. If the Contractors indicate on the Statement of Compliance that fringes are contributed to a plan and there is no current plan on file in ADOT Field Reports, request a copy of the complete plan including the *Explanation of Benefits*. Submit it to Field Reports to review for Davis-Bacon compliance.”

The use of Certified Payrolls for actual employees’ data is preferred to applying a fringe rate to the Davis Bacon scale.

Tax rate is based on the location of the project. Use http://www.arizonatax.org/sites/default/files/publications/sales_tax_rates/prime_contracting_class-september_10_2015.pdf to find current rates. If a project goes through different cities / counties, you may have different tax rates which must be apportioned. Work on an Indian Reservation may also have a tribal tax rate.

Profit & Overhead (P&OH) for SA’s is 15% (maximum) for work done by the Prime Contractor alone. If work is done with a subcontractor, 20% P&OH may be used on the subcontractor’s portion only. Note, when a contractor’s estimate includes a quote from a subcontractor whose P&OH is not listed, a 15% markup is assumed; add an additional 5% P&OH for the Prime Contractor.

There are two distinct overhead items: Fixed and variable.

For instance, a Carpenter will cost wages + Social Security (FICA) + Workers Compensation (WC) + Medicare + Unemployment Insurance (SUTA) + Medical (Health, Dental, Vision) + Long Term Disability (LTD) + Retirement + Life Insurance + cell phone + truck reimbursement + etc. This is the Burdened Labor or Burden, which is basically the same thing as variable overhead. If the Carpenter was not hired, the labor burden (or variable OH) will decrease by 100%.

SUPPLEMENTAL AGREEMENTS

Fixed overhead would contain the cost of running the office, rent, phones, fax, etc. Most salaried (supervisory) staff are also overhead. It is fixed because if half of the field staff were fired, the fixed overhead amount would stay relatively constant.

The correct way to calculate the Navajo Nation tax:

| | | |
|--------------------------------|------------------|---------------------------------|
| Construction | \$ 12,587.42 | |
| Tax (6.1% x .65) | \$ 499.09 | (6.1% is used for example only) |
| Navajo Tax (Construction x 3%) | <u>\$ 377.62</u> | |
| Grand Total | \$ 13,464.13 | |

For analyzing a contractor’s request for Compensatory Time, contact the State Construction Engineer.

Take care when using Excel spread sheets for estimates! Imbedded formulae can be corrupted, especially when reusing a spreadsheet (Do the math!).

If the Contractor does not submit a detailed estimate, record that and use in place of the contractor’s estimate. Attach what was received.

Do not confuse a Force Account Cost Analysis with Pay Item Force Accounts or Force Account method of payment.

The Cost Estimate for a Force Account is prepared in the exact same manner as any other estimate for a Supplemental Agreement, except that the quantities may be more “Guesstimates.”

Although the paragraphs follow each other, Spec.109.04 (D) is the method office staff calculates payment from inspected / documented work.

Related classes:

| | |
|---|----------|
| Force Account Documentation for Inspectors _____ | TCH 3000 |
| Supplemental Agreement Tracking System (SATS) _____ | TCH 3010 |
| Cost Estimating _____ | TCH 3011 |
| Force Accounting _____ | TCH 3042 |

**Office Procedure in calculating PAYMENT for Force Account Work
Std Spec 109.04 (D)**

| WHAT | HOW CALCULATED |
|--------------------|-----------------------------------|
| Labor | (Wages + Fringes) x 1.5 |
| Materials | Cost + 15% |
| Equipment | Cost + 15% |
| Equipment (rented) | Cost + 10% |
| Direct Charges | Cost + 5% |
| Subtotal | |
| Taxes | Subtotal x rate x 0.65 |
| Bond | Subtotal x 0.005 (Which is ½%) |
| Profit & Overhead | Zero, Zip, Zilch, Nada |
| PAYMENT | \$\$\$. |

Direct Charges include “pass through” billing for utility bills / invoices (water, sewer, electric, dumpsters, landfill charges, etc.)

Force Account’s (FA) do not include P&OH calculated from the totals: Labor, Materials, and Equipment are marked up individually. P&OH is therefore ZERO, ZIP, ZILCH, NADA!

When Paying for LABOR on Force Account work, “No part of the salary or expense of anyone connected with the contractor’s forces above the grade of foreman, and having general supervision of the work will be included in the labor items.” Exception; See 109.4 (D) (4).

ADOT reimburses the contractor for work performed – the contractor submits the “[PRIME CONTRACTOR FORCE ACCOUNT WEEKLY DETAIL SHEET - OUTSIDE RENTED EQUIPMENT](#)” form weekly for approval.

Questions & Answers:

1. What documents are sent to Field Reports?
2. How is a CRN used?
3. Who signs and seals SA documents?
4. How do you prepare an estimate for Force Account work?
5. How do REs estimate a contractor's request for compensatory time?
6. What is the Emergency Approval Date on a CRN?
7. What form or document is used to add contract time?

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SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

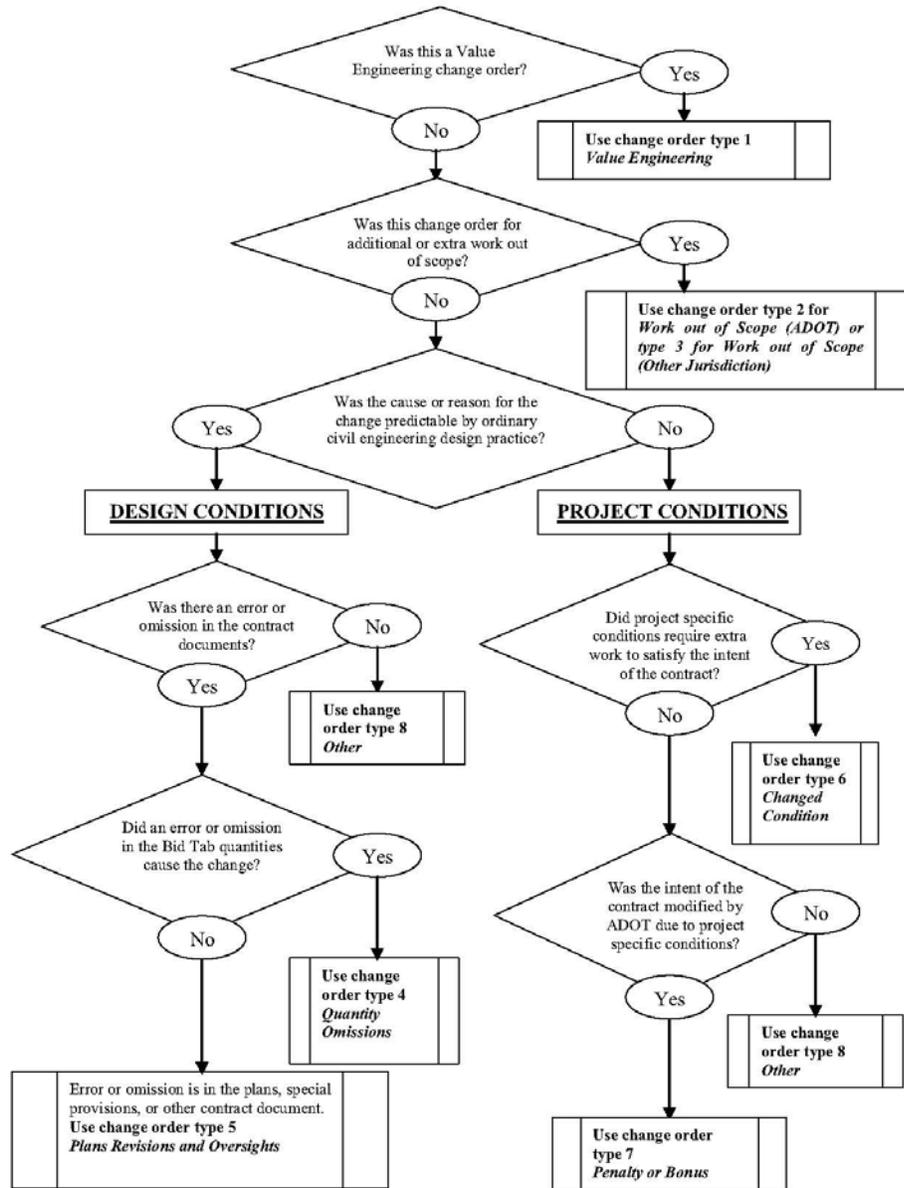


Exhibit 104.02-1. Choosing Supplemental Agreement Type

Appendix A: Choosing Supplemental Agreement Reason Type

SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

Arizona Department of Transportation
Intermodal Transportation Division
Contract Revision Notification

10/08/03

To: R.U. Sure
District Engineer
From: I.M. Right
Resident Engineer

Signature _____
Signature _____

| | | | | |
|--------------------------|----------------------------------|------------------------|----------------------------------|------------------------|
| Track# | Project# | Project Name | | |
| H1234501C | I-10-4(001) | I-10-TL ANYWHERE | | |
| Contractor | Contract Amt | Contingency % | Contingency Adjustment % | Contingency Amt |
| Quality Construction Co. | \$11,855,000.00 | 5 % | % | |
| Original Amt | Percentage of Contract | Accumulated Amt | Accumulated % of Contract | |
| \$85,000 | .74 % | \$278,000.00 | 2.41 % | |
| Agreement Type | Document Num | SATS Doc Num | Emergency Approval Date | |
| Change Order | | 1004 | 10/06/2003 | |
| Prime Designer | Errorless Design Engineering | | | |
| Reason Code | Plans, Revisions, and Oversights | | | |

Brief Description

Add a 6" dedicated waterline to the pump station for the fire suppression system.

SA Description

During the construction of the pump station it was determined that the new 4" water line would not supply enough flow to run the fire suppression system. The pressure and flow problems were not determined until after the majority of the 4" line had already been installed. The designer recommended installing an unmetred, dedicated 6" ductile iron line for the fire suppression system.

| Name | Title | Date Contacted | Comments |
|------------|------------------------------|----------------|--------------------------------|
| R. U. Sure | District Engineer | 10/06/2003 | Concurs |
| M. J. Sane | ADOT Valley PM | 10/06/2003 | Acknowledged Change |
| C. Y. Bass | Errorless Design Engineering | 10/06/2003 | Recommended Change |
| Y. Knott | Quality Construction Co. | 10/06/2003 | Contractor's Authorizing Agent |
| B. Ware | FHWA | 10/06/2003 | Authorized FHWA participation |

Exhibit 109.04-1. Contract Revision Notification

Construction Manual

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Appendix B: Sample Contract Revision Notification (CRN)

SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

Arizona Department of Transportation

Intermodal Transportation Division

Supplemental Agreement

12/18/2003

Letter of Agreement No. 2

| | | | |
|---|-----------------------------|---|---------|
| Tracs No.: H508801 | Project No.: AC* 600-7-[1] | Org: 7742 | Phoenix |
| Project name: I-10 TI, PH 2(INCL CHNDR BLV) | | Contractor: EDWARD KRAEMER & SONS, INC. | |

- Federal Aid
 Non-Federal Aid

Request:

To compensate the Contractor for removal of reinforced concrete curb from the top ends of Equipment. Overpass.

Reason:

This work is necessary to accommodate the roadway section and is not identified in the plans as a removal item. This curb required the use of jackhammers and compressors for removal. Reference subitem 56.

| Pay Item Adjustments: | | | | | | |
|-----------------------|----------|---------------------------------------|-------|-------------|--------------|----------|
| Sec | Item Nbr | Description | Unit | Unit Price | Quantity | Amount |
| 1 | 9240101 | MISCELLANEOUS WORK (RESIDENT) | L.SUM | 1.00 | 0.000 | \$.00 |
| | | Subitem: LOA56 Unit Price Adjustment: | .00 | 1.00 | 761.580 | \$761.58 |
| | | Total: | | | | \$761.58 |
| | | | | Plus | Minus | |
| | | Total Difference: | | \$761.58 | \$.00 | |

Approved for ADOT

 Robert J. Samour Date

Approved for Edward Kraemer & SONS, INC.

 Contractor Signature Date

cc: Field Reports

Exhibit 109.04-4. Letter Agreement

Construction Manual

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Appendix C: Sample Letter of Agreement (LOA)

SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

Arizona Department of Transportation
Intermodal Transportation Division
Supplemental Agreement

12/01/03

Change Order No. 1004

Tracs No.: H1234S01C

Project No.: I-10-4(001)

Org: 7777

Phoenix

Project Name: I-10 TI, Anywhere

Contractor: Quality Construction Co.

Federal Aid

Non-Federal Aid

Request:

To create:
 Bid Item No. 8073999 - 6" Tapping sleeve
 Bid Item No. 8080039 - 6" Backflow Preventor
 Bid Item No. 8082106 - Pipe, Ductile Iron, 6"
 Bid Item No. 8089399 - Misc. (Concrete Coring)
 Bid Item No. 8089999 - Misc. (City Permit)

Reason:

During the construction of the pump station it was determined that the new 4" water line would not supply enough flow to run the fire suppression system. The pressure and flow problems were not determined until after the majority of the 4" line had already been installed. The designer recommended installing an unmetere, dedicated 6" ductile iron line for the fire suppression system.

Pay Item Adjustments:

| Sec | Item Nbr | Description | Unit | Unit Price | Quantity | Amount |
|-----|----------|----------------------------------|-------|------------|----------|-----------|
| 1 | 8073999 | 6" Tapping Sleeve | EACH | 2,000.00 | 1.000 | 2,000.00 |
| 1 | 8080039 | BACKFLOW PREVENTION ASSEMBLY, 6" | EACH | 6,000.00 | 1.000 | 6,000.00 |
| 1 | 8082106 | PIPE, DUCTILE IRON, 6" | L.FT. | 50 | 1250.000 | 62,500.00 |
| 1 | 8089399 | MISC (Concrete Coring) | EACH | 1,500.00 | 1.000 | 1,500.00 |
| 1 | 8089999 | MISC (City Permit) | L.SUM | 13,000.00 | 1.000 | 13,000.00 |

Total **\$85,000.00**

| | | |
|------------------|-------------|--------------|
| | Plus | Minus |
| Total Difference | \$85,000.00 | \$ 0.00 |

Date: _____ Date: _____ Date: _____ Date: _____

 Resident Engineer City/County Engineer District Engineer Field Reports

For valuable consideration, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____
 Approved for: _____ Approved for State of Arizona _____ Approved without Federal participation
 Contractor _____ Approved with Federal participation
 By: _____ By: _____ By: _____

Exhibit 109.04-2. Change Order Agreement

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation
Intermodal Transportation Division
Supplemental Agreement
05/25/2012

Change Order No. 15

Approval Date: **06/07/2011 (RE)**

Tracs No: H650401C

Project No: 010-E-(200)N

Org: 8431 Safford

Project Name: I 10 & SR 90 TI

Contractor: Value Contracting CO., INC.

Federal Aid
 Non-Federal Aid

Request:

- (1) To decrease Item No. 9140155-Retaining Wall (MSE)
- (2) To create Item No. 9140156- Retaining Wall (Soil Nail)
- (3) To create Item No. 9248001- Value Engineering (MSE Wall VS Soil Nail Wall)
- (4) To create item No. 9248002- Contractor Design Fees

Reason:

The Contractor submitted a Value Engineering proposal to substitute soil nail walls for the MSE walls located on I-10/SR 90 bridge structures. In addition to a reduction of cost, this proposal will minimize impact by eliminating lane closures on I-10 that would have been required for the construction of the MSE walls during Phase I and IV construction.

A total savings of \$40,000.00 will be equally divided between ADOT and the Contractor after reimbursement of design fees of \$15,000.00 and \$5,000.00 respectively.

| Sec | Item Nbr | Description | Unit | Unit Price | Quantity | Amount |
|--------------|----------|---|--------|------------|-------------|------------------------|
| 1 | 9140155 | RETAINING WALL (MSE) | SQ.FT. | 65.00 | -12,000.000 | \$-780,000.00 |
| 1 | 9140156 | RETAINING WALL (Soil Nail Wall) | SQ.FT. | 60.00 | 12,000.000 | \$ 720,000.00 |
| 1 | 9248001 | VALUE ENGINEERING (MSE WALL vs. SOIL NAIL WALL) | L.SUM | 20,000.00 | 1.00 | \$20,000.00 ② |
| 1 | 9248002 | CONTRACTOR DESIGN FEES | L.SUM | 5000.00 | 1.00 | \$ 5,000.00 |
| Total | | | | | | \$ -35,000.00 ③ |

Date: _____ Date: _____ Date: _____ Date: _____

Resident Engineer

City/County Engineer

Field Reports

For valuable considerations, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____

Approved for:
BORDERLAND CONSTRUCTION CO., INC.
Contractor

Approved for State of Arizona

Approved without Federal participation
 Approved with Federal participation

By: _____

By: _____

By: _____

1. The total savings is difference in cost between original contract & VE idea, less other costs (i.e., design, review).
\$780,000 – \$720,000 – \$15,000 (ADOT design) - \$5,000 (contractor design) = \$40,000.
2. Value Engineering item amount is equal to half of the net savings (\$40,000/2 = \$20,000)
3. The value by which the CO reduces the contract is equal to ADOT's half of savings (\$20,000) plus ADOT design cost (\$15,000)

Page 1 of 2

Appendix E: Sample Change Order (VE)

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation
Intermodal Transportation Division
Supplemental Agreement
05/25/2012

Change Order No. 15

Approval Date: 06/07/2011 (RE)

Tracs No: H650401C

Project No: 010-E-(200)N

Org: 8431

Safford

Project Name: I 10 & SR 90 TI

Contractor: VALUE CONTRACTING CO., INC.

No Extension of Contract Time is Authorized for this Supplemental Agreement.

Date: _____ Date: _____ Date: _____ Date: _____

Resident Engineer City/County Engineer _____ Field Reports

For valuable considerations, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____
Approved for: Approved for State of Arizona _____ Approved without Federal participation
BORDERLAND CONSTRUCTION CO., INC. Contractor _____ Approved with Federal participation
By: _____ By: _____ By: _____

Appendix E: Sample Change Order (VE)

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation
Intermodal Transportation Division
Supplemental Agreement
11/17/2010

Procedural Change Order No. 1

Approval Date: 9/17/2010 (em)

Tracs No: H066701C

Project No: 091-E-(200)A

Org: 111 Two Guns

Project Name: HELLINGONE HIGHWAY - SOUTH

Contractor: AVERY BIG CONSTRUCTION COMPANY

Federal Aid
 Non-Federal Aid

Request:

To extend contract time by Thirty (30) Non-Compensatory Working Days.

Reason:

Avery Big Construction Company requested thirty (30) Non-Compensatory Working Days be added to the contract time because of (put a short synopsis of reason here: e.g.: flooding in bridge foundation work area) as detailed in the attached Request for Extension of Time form. The Department agrees with Avery Big Construction Company and will allow Thirty (30) Non-Compensatory Working Days be added to contract time.

Specifications/Stipulations:

Attachment A - Request for Extension of Time form signed by the District Engineer and the Contractor.

This Change Order constitutes full and final compensation related to this extension of contract time as agreed to in the attached Request for Extension of Time form as described herein. By executing this Change Order, Contractor expressly waives the right to pursue any further claims or requests for compensation related to this contract modification, including, but not limited to, materials, labor, services, overhead, profit and damages.

An Extension of Contract Time is Authorized for 30 days as a result of this Supplemental Agreement

Date: _____ Date: _____ Date: _____ Date: _____

Resident Engineer

City/County Engineer

Field Reports

For valuable considerations, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____

Approved for:
AVERY BIG CONSTRUCTION COMPANY
Contractor

Approved for State of Arizona
DISTRICT ENGINEER

___Approved without Federal participation
___Approved with Federal participation

By: _____

Appendix F: Sample CO for Time Extensions (No Compensatory Time)

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation

Intermodal Transportation Division

Contract Revision Notification

05/30/2013

Approval Date: 12/7/2012 (DE)

To: Alvin Stump
District Engineer

From: Sam Patton
Resident Engineer

| | | | | | |
|-----------------------|----------------------------------|---------------------|--------------------------------|----------------------------------|------------------------|
| Tracs # | Project # | Project Name | | | |
| H426901C | IM 017-B(001)N | CORDES JCT TI | | | |
| Contractor | | Contract Amt | Contingency % | Contingency Adjustment % | Contingency Amt |
| VASTCO/SUNDT, (JV) | | \$50,927,648.00 | 5 % | 0 % | \$2,546,382.40 |
| Original Amt | Percentage of Contract | | Accumulated Amt | Accumulated % of Contract | |
| \$240,340.87 | 0.47 % | | \$204,580.24 | 0.40 % | |
| Agreement Type | Document Num | SATS Doc Num | Emergency Approval Date | | |
| Change Order | | 10 | 11/09/2012 | | |
| Reason Code | Plans, Revisions, and Oversights | | | | |

Brief Description

Methacrylate - Bridge Deck Seal

SA Description

The addition of a methacrylate seal coat to the bridge decks will provide additional protection for the deck reinforcing steel from de-icing chemicals. ADOT Bridge Group requested the addition of the Mehtacrylate seal coat because of the use of de-icing chemicals on the bridge decks.

Prime Designer

HDR Engineering, Inc.

Contacts

| Name | Title | Date Contacted | Comments |
|--------------------|----------------------|-----------------------|-----------------|
| Kimberly Utley | Area Engineer (FHWA) | 11/21/2012 | Via Email |
| George Wallace, PE | Project Manager | 11/09/2012 | Via Email |

Appendix G: Sample CRN & CO for Time Extension (With Compensatory Time)

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation
 Intermodal Transportation Division
Supplemental Agreement
05/30/2013

Change Order No. 10

Approval Date: 5/7/2013 (RE)

Tracs No: H426901C

Project No: IM 017-B(001)N

Org: 8832 Prescott

Project Name: CORDES JCT TI

Contractor: VASTCO/SUNDT, (JV)

Federal Aid
 Non-Federal Aid

Request:

Create Item: 1080800 Contract Time Extended Overhead, 9240059 Miscellaneous Work (Seal Bridge Deck), 9240067 Miscellaneous Work (Traffic Control Seal Bridge Deck)

Reason:

The use of de-icing chemicals was realized after the project design phase was complete and epoxy coated reinforcing steel was not used in the bridge decks due to the projects elevation. The addition of a Methacrylate seal coat to the bridge decks will provide additional protection for the deck reinforcing steel from de-icing chemicals. ADOT Bridge Group directed the application of the Methacrylate seal coat to provide additional protection for the deck reinforcing, because of the use of de-icing chemicals on bridge decks.

Specifications/Stipulations:

ADOT Standard Specifications for Road and Bridge Construction and Project Special Provision.

ITEM 9240059 - MISC. WORK (SEAL BRIDGE DECK): (see attachment D of change order package)

The seven Bridges that will receive receive a Methacrylate seal coat, including approach slabs, are as follows: NB Big Bug Creek, SB Big Bug Creek, Ramp N-N over I-17, Cordes Lakes, Arcosanti, Ramp S-S over Arcosanti, Ramp N-N over Arcosanti.

Pay Item

Date: _____ Date: _____ Date: _____ Date: _____

 Resident Engineer City/County Engineer Field Reports

For valuable considerations, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____
 Approved for: VASTCO/SUNDT, (JV) Contractor Approved for State of Arizona
 _____ Approved without Federal participation
 _____ Approved with Federal participation
 By: _____ By: _____ By: _____

Appendix G: Sample CRN & CO for Time Extension (With Compensatory Time)

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation
Intermodal Transportation Division
Supplemental Agreement
05/30/2013

Change Order No. 10

Approval Date: 5/7/2013 (RE)

Tracs No: H426901C

Project No: IM 017-B(001)N

Org: 8832 Prescott

Project Name: CORDES JCT TI

Contractor: VASTCO/SUNDT, (JV)

| Adjustments | | | | | | |
|--------------|----------|---|----------|------------|----------|---------------------|
| Sec | Item Nbr | Description | Unit | Unit Price | Quantity | Amount |
| 1 | 1080800 | CONTRACT TIME EXTENDED OVERHEAD | EACH-DAY | 1,017.93 | 16.000 | \$16,286.88 |
| 1 | 9240059 | MISCELLANEOUS WORK (Seal Bridge Deck) | L.SUM | 208,679.17 | 1.000 | \$208,679.17 |
| 1 | 9240067 | MISCELLANEOUS WORK (Traffic Control Seal Bridge Deck) | L.SUM | 15,374.82 | 1.000 | \$15,374.82 |
| Total | | | | | | \$240,340.87 |

| | | |
|--------------------------|--------------|--------------|
| Total Difference: | Plus | Minus |
| | \$240,340.87 | |

An Extension of Contract Time is Authorized for 16 days as a result of this Supplemental Agreement.

Date: _____ Date: _____ Date: _____ Date: _____

Resident Engineer City/County Engineer _____ Field Reports

For valuable considerations, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____

Approved for:
VASTCO/SUNDT, (JV)
Contractor

Approved for State of Arizona

____ Approved without Federal participation
____ Approved with Federal participation

By: _____ By: _____ By: _____

Appendix G: Sample CRN & CO for Time Extension (With Compensatory Time)

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation

Intermodal Transportation Division

Contract Revision Notification

04/24/2012

Approval Date: 04/25/2012 (DSE)

To:

From:

| | | | | | |
|-----------------------------|-------------------------------|------------------------------|----------------------------------|---------------------------------|------------------------|
| Tracs # | Project # | Project Name | | | |
| H693901C | ARRA-101A(207)A | AGUA FRIA 101L & OLIVE TI (I | | | |
| Contractor | | Contract Amt | Contingency % | Contingency Adjustment % | Contingency Amt |
| BISON CONTRACTING CO., INC. | | \$1,769,076.82 | 5 % | 51.44 % | \$998,453.84 |
| Original Amt | Percentage of Contract | Accumulated Amt | Accumulated % of Contract | | |
| \$480,000.00 | 27.13 % | \$408,145.72 | 23.07 % | | |
| Agreement Type | Document Num | SATS Doc Num | Emergency Approval Date | | |
| Change Order | | 18 | 04/17/2012 | | |
| Reason Code | Other | | | | |

Brief Description
Negotiated Settlement

SA Description

The contractor submitted a claim for direct costs, unallocated overhead expenses, and additional subcontractor compensation totaling \$827,281.06 related to delays and inefficiencies encountered during the project. During the prosecution and progress of the project, Time Extension No. 1 was executed that established an additional 125 Working Day excusable, compensable delay. Force Account No. 1 was established at \$200,000.00 and was paid as a partial payment for unallocated costs associated with the delay.

On April 17, 2012, a resolution of the claim was agreed to at the State Engineer's level. The agreement was to compensate the contractor a total of \$480,000.00 as a negotiated settlement for all existing and potential requests and claims for additional compensation on this project, including claims and damages sought in Civil Case CV2012-050459. This agreement represents complete resolution and settlement of all disputed claims related to this project, including but not limited to inefficiency and delay, unallocated overhead expenses, and additional compensation sought by all subcontractors related to this project. Neither party (ADOT or Bison Contracting Co., Inc.) has made or makes any admission with regard to the merits of the claims and requests covered in this agreement. It is understood by both parties (ADOT and Bison Contracting Co., Inc.) that each waive all rights to pursue any additional costs associated with interest, attorney's fees, taxable costs and other damages allowed by law related to this project. Bison Contracting Co., Inc. shall indemnify and hold ADOT harmless from all claims made by all subcontractors, consultants or suppliers of any tier associated with this project.

It is further understood by both parties that liquidated damages totaling \$33,800.00 for 26 working days will be retained by ADOT. The prior payment of \$200,000.00, paid as an estimated payment for unallocated costs, will be removed from monies paid the contractor during the next progress payment and replaced with payment under this agreement in the amount of \$480,000.00.

Appendix H: Sample CRN with Negotiated Settlement

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation

Intermodal Transportation Division

Contract Revision Notification

04/24/2012

Approval Date: 04/25/2012 (DSE)

All other final accounting of payments and quantity balances will follow ADOT Standard Specification 109.09 (Acceptance and Final Payment). Final accounting adjustments may be required.

Prime Designer
JLK Engineers

Contacts

| Name | Title | Date Contacted | Comments |
|----------------|--------------------------------|-----------------------|-----------------|
| Joe Gonzalez | JLK Engineers | 04/19/2012 | notified |
| Julio Alvarado | ADOT Asst. State Engr. - Const | 04/19/2012 | |
| Ron McCally | ADOT Valley Project Manager | 04/19/2012 | notified |
| Tom Deitering | FHWA | 04/19/2012 | notified |

Appendix H: Sample CRN with Negotiated Settlement

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation
Intermodal Transportation Division
Supplemental Agreement
04/24/2012

Change Order No. 18

Approval Date: 04/17/2012 (em)

Tracs No: H693901C

Project No:

Org: Phoenix

Project Name:

Contractor: BISON CONTRACTING CO., INC.

Federal Aid
 Non-Federal Aid

Request:

To establish Item 9240102, Miscellaneous Work (Negotiated Settlement) as L.Sum in Section 1.
To establish Item 1050001, Claims and Escalation Settlements

Reason:

The contractor submitted a claim for direct costs, unallocated overhead expenses, and additional subcontractor compensation totaling \$827,281.06 related to delays and inefficiencies encountered during the project. During the prosecution and progress of the project, Time Extension No. 1 was executed that established an additional 125 Working Day excusable, compensable delay. Force Account No. 1 was established at \$200,000.00 and was paid as a partial payment for unallocated costs associated with the delay.

On April 17, 2012, a resolution of the claim was agreed to at the State Engineer's level. The agreement was to compensate the contractor a total of \$480,000.00 as a negotiated settlement for all existing and potential requests and claims for additional compensation on this project, including claims and damages sought in Civil Case CV2012-050459. This agreement represents complete resolution and settlement of all disputed claims related to this project, including but not limited to inefficiency and delay, unallocated overhead expenses, and additional compensation sought by all subcontractors related to this project.

Neither party (ADOT or Bison Contracting Co., Inc.) has made or makes any admission with regard to the merits of the claims and requests covered in this agreement. It is understood by both parties (ADOT and Bison Contracting Co., Inc.) that each waive all rights to pursue any additional costs associated with interest, attorney's fees, taxable costs and other damages allowed by law related to this project. Bison Contracting Co., Inc. shall indemnify and hold ADOT harmless from all claims made by all subcontractors, consultants or suppliers of any tier associated with this project.

Date: _____ Date: _____ Date: _____ Date: _____

Resident Engineer

City/County Engineer

Field Reports

For valuable considerations, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____

Approved for:
BISON CONTRACTING CO., INC.
Contractor

Approved for State of Arizona

___ Approved without Federal participation
___ Approved with Federal participation

By: _____

By: _____

By: _____

Appendix H: Sample CRN with Negotiated Settlement

SUPPLEMENTAL AGREEMENTS



Arizona Department of Transportation
Intermodal Transportation Division
Supplemental Agreement
04/24/2012

Change Order No. 18

Approval Date: 04/17/2012 (em)

Tracs No: H693901C

Project No:

Org: Phoenix

Project Name:

Contractor: BISON CONTRACTING CO., INC.

It is further understood by both parties that liquidated damages totaling \$33,800.00 for 26 working days will be retained by ADOT. The prior payment of \$200,000.00, paid as an estimated payment for unallocated costs, will be removed from monies paid the contractor during the next progress payment and replaced with payment under this agreement in the amount of \$480,000.00.

All other final accounting of payments and quantity balances will follow ADOT Standard Specification 109.09 (Acceptance and Final Payment). Final accounting adjustments may be required.

Specifications/Stipulations:

By agreeing to this Change Order, Bison Contracting Co., Inc. waives all rights to all claims against the Department on any matter related this project, this Agreement, and the interrelated effects of this Agreement.

| Pay Item Adjustments | | | | | | |
|----------------------|----------|--|-------|------------|-------------------|---------------------|
| Sec | Item Nbr | Description | Unit | Unit Price | Quantity | Amount |
| 1 | 9240102 | MISCELLANEOUS WORK (Negotiated Settlement) | L.SUM | 480,000.00 | 1.000 | \$480,000.00 |
| 1 | 1050001 | Claims and Escalation Settlements | | | Total | \$480,000.00 |
| | | | | | Plus | |
| | | | | | Total Difference: | \$480,000.00 |
| | | | | | Minus | |

No Extension of Contract Time is Authorized for this Supplemental Agreement.

Date: _____ Date: _____ Date: _____ Date: _____

Resident Engineer

City/County Engineer

Field Reports

For valuable considerations, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____

Approved for:
BISON CONTRACTING CO., INC.
Contractor

Approved for State of Arizona

___ Approved without Federal participation
___ Approved with Federal participation

By: _____

By: _____

By: _____

Appendix H: Sample CRN with Negotiated Settlement

SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

Arizona Department of Transportation
 Intermodal Transportation Division
Supplemental Agreement
 12/17/2003
Force Account No. 1

Tracs No.: H541701C Project No.: AC* 202-C(006)B Org: 7742 Phoenix

Project Name: SANTAN, I-10/MARI/COPA ROAD TI Contractor: PULICE CONSTRUCTION INC.

- Federal Aid
 Non-Federal Aid

Request:
 To compensate the Contractor for extra work necessary to remove and replace unsuitable material.

Reason:
 After milling off the existing AC from WB I-10 the Contractor started preparation of the subgrade for placement of the 50% AB - 50 millings mix. The large hauling vehicles started to break down the existing subgrade causing it to pump badly. The subsurface is randomly saturated in both small and large areas and is at optimum moisture. After an inspection by ADOT's Geotech Engineer it was determined that existing material would have to be removed up to 2' in depth and replaced with suitable material.

| | | | |
|--|-------------------------|----------------------------|-------------------------|
| Section: <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> | Labor: | 20,000.00 | |
| | Equipment: | 40,000.00 | |
| | Materials: | 15,000.00 | Original Request Amount |
| | Fa Amount | \$75,000.00 | 75,000.00 |
| | Total Difference | Plus \$75,000.00 | Minus \$0.00 |

Date: _____ Date: _____ Date: _____ Date: _____
 Resident Engineer City/County Engineer District Engineer Field Reports

For valuable consideration, it is mutually agreed that the matter detailed above shall be done and payment made as shown herein for a Supplemental Agreement Change Order, all in accordance with the terms of the contract. For work being performed as a Supplemental Agreement Force Account Work Order, final payment shall be made as stipulated in the Standard Specifications and its supplements upon completion of said work.

Date: _____ Date: _____ Date: _____
 Approved for: _____ Approved for State of Arizona _____ Approved without Federal participation
 Contractor _____ Approved with Federal participation
 By: _____ By: _____ By: _____

Exhibit 109.04-3. Force Account Agreement

Construction Manual

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Appendix I: Sample Force Account

SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

ARIZONA DEPARTMENT OF TRANSPORTATION

OFFICE MEMO

May 8, 2003

TO: JULIO ALVARADO
Assistant State Engineer
Construction Group 172A

FROM: Resident Engineer
Org Name

RE: TRACS #, PROJECT #
PROJECT NAME
Project Location

ORG: The referenced project requires additional work in order to adequately address the construction needs at this location. Pertinent fiscal information is as follows:

Table with 2 columns: Item, Amount. Rows include Original contract amount (\$1,637,003.74), Five percent contingency (34,335.55), 15% CE (103,006.65), DPS (21,000.00), Incentives (120,000.00), and Original Available (\$1,915,345.94).

Table with 2 columns: Item, Amount. Rows include Actual Construction Costs (\$1,626,342.58), Actual CE (142,389.74), Contract Work Remaining (165,000.00), Additional Supplemental Agreements (98,000.00), Additional CE Costs (45,000.00), Proposed New Total Needed (\$2,076,732.32), Less Previous Increases (\$25,000.00), and Requested Amount (\$136,386.38).

Reason for increase: (Be specific)

RESIDENT ENGINEER

DISTRICT ENGINEER

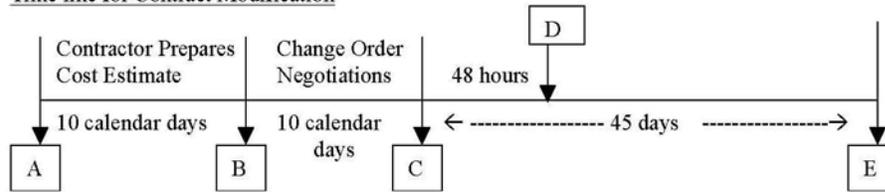
Exhibit 109.04-5. Request for Additional Funds

SUPPLEMENTAL AGREEMENTS

GENERAL PROVISIONS

August 2009

Time line for Contract Modification



- A. Contractor or ADOT agree to additional work that is not included in the contract.
 1. Contractor is asked to prepare a detailed cost estimate or unit prices for the work, and ADOT specifies a reasonable time for the Contractor to complete the estimate. Std Spec 109.04C specifies 10 calendar days for the Contractor to prepare a cost estimate.
 2. If work is required to start prior to "C", ADOT starts documenting the work as if it were force account.
- B. Cost Estimate is received from the Contractor.
 1. Start change order negotiations [see 109.04(D)].
 2. If the cost estimate is not received from the Contractor on time or if a contract price adjustment cannot be agreed upon, the work is processed as a force account and the Resident Engineer will prepare the force account request.
- C. Emergency Authorization Date
ADOT and Contractor agree to proceed as either a change order or force account.
If Force Account then ADOT estimate is required.
- D. Contract Revision Notification Document prepared for a force account or a change order.
- E. Change order is completed and signed as the official contract document.

Sealing Change Orders

Resident Engineers are responsible for sealing change orders only when they have been in responsible supervisory charge of a design issue. Design issues include changes to or the creation of drawings or technical specifications covering the quality or performance of the finished construction work. For example, seals are not required for contract administrative issues such as quantity, cost, and time adjustments.

When the change is to an existing design sealed by registrant, the RE shall coordinate with the registrant. When consulting designers develop changes, they shall send sealed drawings or specifications to the RE for inclusion with the change order. When a value engineering proposal requiring new drawings is submitted, it shall be sealed by the Contractor's registered engineer prior to final approval of the proposal. When an issue has been escalated beyond the Resident Engineer, it shall be sealed by the responsible registrant making the final decision. Drawings and specification must be sealed in accordance with Article R4-30-304(A)(3) of the Code & Rules of the Arizona State Board of Technical Registration.

All change order forms must originate from and be tracked by the RE in the same manner as all other change orders. Any new or revised sealed drawings or specifications shall be attached to the supplemental agreement forms or referenced on the first page of the form.

Construction Manual

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Appendix K: Timeline for Contract Modifications (SA Processing times)



Arizona Department of Transportation

INTERMODAL TRANSPORTATION DIVISION
Construction Group

CONSTRUCTION BULLETIN 04-01

To: District Engineers Construction & Materials Orgs Consultant Contract Administrator William Higgins, State Engineer Dan Lance, Deputy State Engineer, Valley Transportation Doug Forstie, Deputy State Engineer, Operations

Date: February 12, 2004

From: Julio Alvarado, Assistant State Engineer, Construction

Subject: Technical Manager Concurrence with Proposed Supplemental Agreements

Consultation with Technical Managers on Proposed Supplemental Agreements

Effective immediately, Resident Engineers should contact the Project Manager and all applicable Technical Managers for proposed Supplemental Agreements. The Technical Manager(s) should concur with the contract revision prior to implementation of the Supplemental Agreement.

The contact(s) should be documented in the Supplemental Agreement Tracking System (SATS) Contract Revision Notification (CRN) screen.

In the event that any Technical Manager does not agree with the Supplemental Agreement, the proposed agreement must be escalated to the applicable Deputy State Engineer(s) for approval.

Current Technical Managers:

Valley Project Management – Chaun Hill
State Project Management – Vincent Li
Value & Quality Assurance - Paul Hurst
Materials – Bill Hurguy
Roadway – Annette Riley

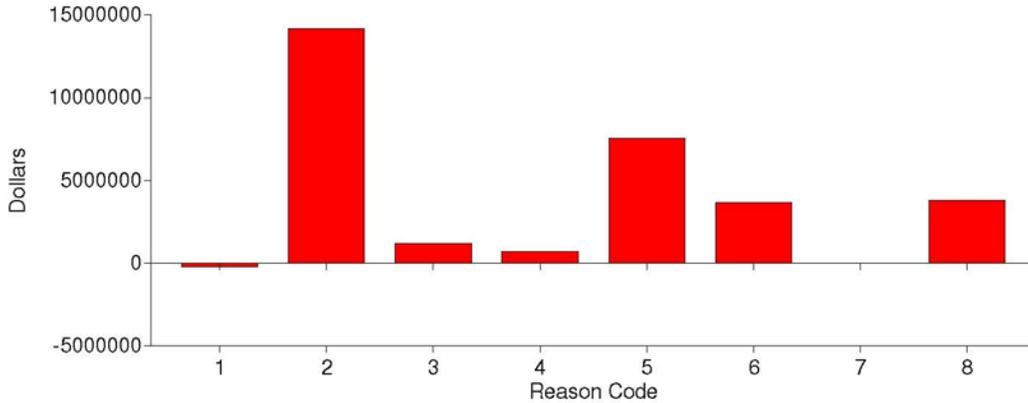
Environmental Planning Group – Paul O'Brien
Traffic Engineering – Al Zubi, Acting
Right of Way – Paula Gibson
Bridge – Jean Nehme

Appendix L: Construction Bulletin 04-01; Technical Manager Concurrence

SUPPLEMENTAL AGREEMENTS

Cost by Supplemental Agreement Reason Code

From: 01/01/2012 Thru 12/31/2012 with 962 supplemental agreements
 Supplemental agreements include change orders, force accounts, and letters of agreement



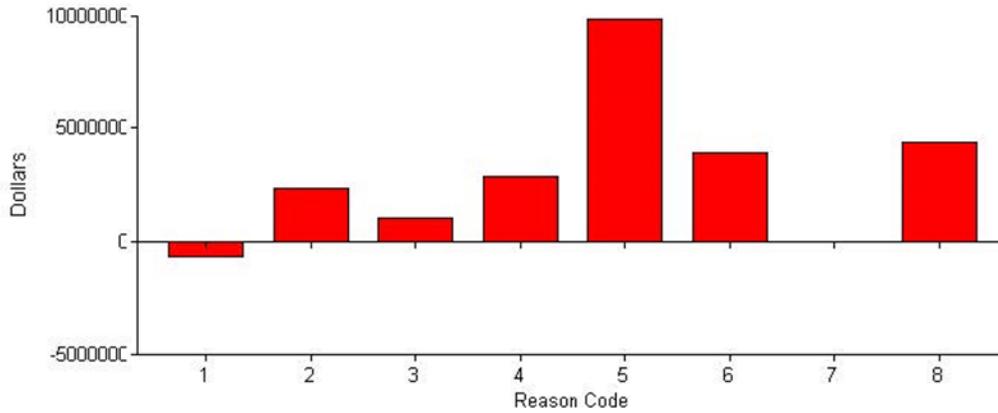
| SA Reason | Total | Total Number |
|--|---------------|--------------|
| 1 Value Engineering | -230,349.97 | 6 |
| 2 Work Out of Scope (ADOT) | 14,160,998.36 | 84 |
| 3 Work Out of Scope (Other Jurisdiction) | 1,209,357.43 | 12 |
| 4 Quantity Omissions | 717,528.11 | 45 |
| 5 Plans, Revisions, and Oversights | 7,565,658.52 | 438 |
| 6 Changed Condition | 3,649,737.16 | 154 |
| 7 Penalties or Bonuses | 1,888.53 | 4 |
| 8 Other | 3,810,410.20 | 219 |
| Grand Total | 30,885,228.34 | 962 |

Appendix M: Costs by Supplemental Agreement Reason Code 2012

SUPPLEMENTAL AGREEMENTS

Cost by Supplemental Agreement Reason Code

From: 01/01/2013 Thru 12/31/2013 with 1065 supplemental agreements
 Supplemental agreements include change orders, force accounts, and letters of agreement



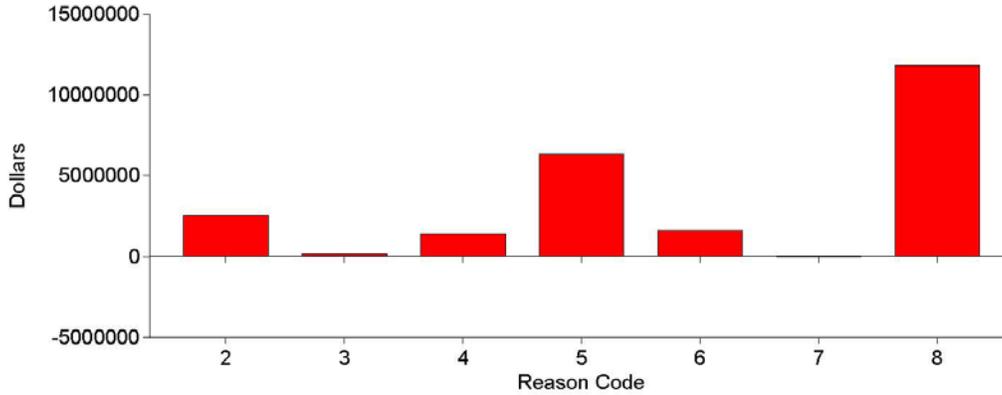
| SA Reason | Total | Total Number |
|--|----------------------|--------------|
| 1 Value Engineering | -664,250.65 | 4 |
| 2 Work Out of Scope (ADOT) | 2,311,000.01 | 67 |
| 3 Work Out of Scope (Other Jurisdiction) | 1,002,278.24 | 12 |
| 4 Quantity Omissions | 2,888,528.82 | 54 |
| 5 Plans, Revisions, and Oversights | 9,836,709.55 | 538 |
| 6 Changed Condition | 3,879,581.05 | 117 |
| 7 Penalties or Bonuses | 5,915.57 | 6 |
| 8 Other | 4,352,471.34 | 267 |
| Grand Total | 23,612,233.93 | 1065 |

Appendix M: Costs by Supplemental Agreement Reason Code 2013

SUPPLEMENTAL AGREEMENTS

Cost by Supplemental Agreement Reason Code

From: 01/01/2014 Thru 12/31/2014 with 920 supplemental agreements
 Supplemental agreements include change orders, force accounts, and letters of agreement



| SA Reason | Total | Total Number |
|--|----------------------|--------------|
| 2 Work Out of Scope (ADOT) | 2,521,115.54 | 62 |
| 3 Work Out of Scope (Other Jurisdiction) | 160,866.11 | 9 |
| 4 Quantity Omissions | 1,389,149.58 | 48 |
| 5 Plans, Revisions, and Oversights | 6,340,569.55 | 392 |
| 6 Changed Condition | 1,624,455.55 | 148 |
| 7 Penalties or Bonuses | -3,418.33 | 3 |
| 8 Other | 11,807,492.51 | 258 |
| Grand Total | 23,840,230.51 | 920 |

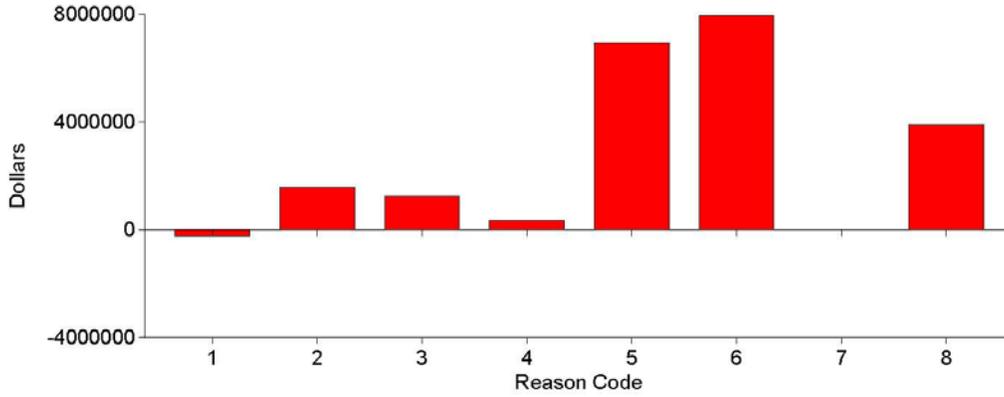
01/08/2016 07:07 am

Appendix M: Costs by Supplemental Agreement Reason Code 2014

SUPPLEMENTAL AGREEMENTS

Cost by Supplemental Agreement Reason Code

From: 01/01/2015 Thru 12/31/2015 with 1008 supplemental agreements
 Supplemental agreements include change orders, force accounts, and letters of agreement



| SA Reason | Total | Total Number |
|--|----------------------|--------------|
| 1 Value Engineering | -251,178.71 | 5 |
| 2 Work Out of Scope (ADOT) | 1,571,606.87 | 37 |
| 3 Work Out of Scope (Other Jurisdiction) | 1,241,853.98 | 18 |
| 4 Quantity Omissions | 345,750.73 | 53 |
| 5 Plans, Revisions, and Oversights | 6,954,886.52 | 433 |
| 6 Changed Condition | 7,949,872.35 | 137 |
| 7 Penalties or Bonuses | -4,570.92 | 3 |
| 8 Other | 3,891,571.64 | 322 |
| Grand Total | 21,699,792.46 | 1008 |

01/08/2016 07:08 am

Appendix M: Costs by Supplemental Agreement Reason Code 2015



**Intermodal
Transportation
Division
Policy**

November 3, 2000
Effective Date

November 3, 2005
Review Date

Supersedes
ITD Policy 90-01

A handwritten signature in black ink, appearing to read "Dick Wright".

Dick Wright,
State Engineer

**MGT 00-2 ERRORS AND OMISSIONS
BY CONSULTANTS**

Purpose

The purpose of this policy memorandum is to develop and implement a Division Claims process for resolution of consultant errors or omissions.

Scope

The Intermodal Transportation Division will actively pursue the resolution of claims as a result of consultant errors or omissions.

Authority

This procedure applies to all consultant contracts issued through and/or administered by Engineering Consultants Section (ECS). All contracts will follow the procedures outlined in this policy.

Definitions

“Consultant” means a business concern or individual that enters into a contract with the Department to furnish professional services such as, but not limited to, project design or construction contract administration.

Background

As a result of the Intermodal Transportation Division’s extensive use of consultants, it is anticipated that contract changes during the course of a project’s construction will occasionally involve allegations of consultant errors or omissions. This policy has been developed to determine responsibility and expedite resolution.

Claims avoidance is a primary consideration throughout the duration of the project from design conception. During design, maximum emphasis should be placed on delivering a quality product. A clear, comprehensible, and complete scope of work sets the stage for a quality product. Implementation of quality control plans, complete submittals at various stages of project design and a consultant evaluation program are critical to quality products.

Field reviews are an essential part of the design process to ensure that the design product is understood and meets the needs of the Department. Operation and maintenance considerations of a project should also be emphasized during these reviews.

During the construction phase, there are a number of steps that can be utilized to avoid claims arising from errors and omissions. Daily documentation, soliciting the consultant’s input before any significant change order, and the timely processing of any potential construction claims, are examples of avoidance techniques.

Page 1 of 3

Policy

Appendix N: MGT 00-02 Errors and Omissions by Consultants

SUPPLEMENTAL AGREEMENTS

The initiation of errors or omissions claims against the consultant normally begins during the construction phase of a project. At this point, steps must be taken to collect information for determining the validity of the claim, specific responsibilities, and extent of the claim. The communication between the District, Construction Contractor, the Federal Highway Administration (if applicable), Project Manager, and Consultant must be clear, open, and well documented.

When an error or omission is perceived by District, it is imperative that the Project Manager and Consultant be immediately notified of the error or omission and invited to participate in corrective action in order to mitigate the cost. If the notification is oral, it must be followed up in writing. This notification should be forwarded through the District to the Project Manager. Responsiveness by the Consultant is crucial to this process.

The Department will estimate the value of errors or omissions as they are identified. The value shall include those additional costs to ADOT above the amount that would have been expected in the contractor's bid, had the error or omission not occurred. In the event that the cumulative total value of errors or omissions exceeds five percent of the construction contractor's bid, or \$20,000 (whichever is less), the Department may pursue a claim against the Consultant. Claims filed will be for that amount which exceeds five percent of the construction contractor's bid, or \$20,000 (whichever is less).

If it is determined that a claim will be filed against the consultant, Engineering Consultant Section will issue a formal Notice of Claim to the Consultant. Three things need to be present throughout the process: a professional attitude, complete preparation, and responsive action. A professional attitude will set the stage for future negotiation. Complete preparation is a must in order to know and document the facts and circumstances. Responsive action is important to resolve differences when facts are fresh in all parties' minds.

The following steps will be utilized to facilitate the review and processing of claims:

1. Errors or omissions are identified, normally at the Project level.
2. An initial review is conducted by the Department to determine the validity, responsibility, and extent of the problem.
3. Notification is given to the consultant.
4. If the value of the errors / omissions is determined to be less than five percent of the construction contractor's bid, or \$20,000 (whichever is less), the Engineering Consultant Section will maintain the documentation for a possible future claim.
5. If the errors /omissions exceeds five percent of the construction contractor's bid, or \$20,000 (whichever is less); or if the cumulative total of claims held by the Engineering Consultant Section exceeds five percent of the construction contractor's bid, or \$20,000 (whichever is less) the Department may file a formal claim. The Project Manager and the Resident Engineer will review the data and reconcile the costs to determine if the Agency should pursue a claim.

PER 00-3
Page 2 of 3

Appendix N: MGT 00-02 Errors and Omissions by Consultants

SUPPLEMENTAL AGREEMENTS

6. The amount of the initial claim will be the cost as determined by the Department less five percent of the construction contractor's bid, or \$20,000 (whichever is less). Any future claim will not be subject to this reduction.
7. The claim will, as minimum, cover the following areas:
 - Statement of circumstances: brief description of who, what, where, when, and why;
 - ADOT's intention: dollar amount of consultant's liability for the claim
 - A copy of the construction force account and/or construction change order, and
 - An explanation of the Department's administrative review process.
8. The Consultant may pay the claim or may request an administrative review. There will be two levels of administrative review. The claim review shall not escalate to the second level without an attempt to resolve it at a lower level. The first level administrative review shall involve the Project Manager, the Resident Engineer, and the Assistant State Engineer – Construction Group, and an Assistant State Engineer from Development
9. If the claim is not resolved at a lower level, the Department will appoint a review panel, which will be chaired by the Deputy State Engineer for Development and consist of the Deputy State Engineer for Operations and a third party selected by the Chairman. The panel will review all documents and conduct such investigations and interviews as necessary to make a determination on the validity and extent of the claim. Engineering Consultants Section will provide administrative support to this process.
10. If the review process does not resolve the claim, the Department may pursue the claim through arbitration or litigation, as appropriate.
11. For all unresolved claims of \$100,000 or less, the Construction Group will file a Demand for Arbitration with the America Arbitration Association. The Arbitration will follow the guidelines set forth in the latest version of the ADOT Construction Manual at the time of contract. Unresolved claims in excess of \$100,000 will be forwarded by the Construction Group to the Office of the Attorney General.
12. When claims are resolved Engineering Consultants Section will notify all parties in writing.

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Page 3 of 3

Appendix N: MGT 00-02 Errors and Omissions by Consultants

SUPPLEMENTAL AGREEMENTS

http://adotnet/divisions/itd/Office_Managers/PDF/Spec_Pay_Items.pdf

SPEC. PAY ITEM LIST

THE FOLLOWING PAY ITEMS ARE ALLOWED TO BE CREATED IN CPE PER SPEC:

- 1080200 PROSECUTION AND PROGRESS ADJUSTMENT
Liquidated Damages
Payroll Submittal Retention (*\$500 per payroll retained for Liquidated Damages*)

- 1090001 DIESEL FUEL PRICE ADJUSTMENT
Needs a Change Order if spec. is not in Special Provisions
Call Field Reports to see if a project qualifies to have this item included in the contract.

- 1090010 ASPHALTIC CONCRETE PAVEMENT SMOOTHNESS INCENTIVES

- 1090011 ASPHALTIC CONCRETE PAVEMENT QUALITY LOTS
Sub-items for Spread, Mix and Compaction

- 1090020 PORTLAND CEMENT CONCRETE PAVEMENT SMOOTHNESS INCENTIVES

- 1090021 PORTLAND CEMENT CONCRETE PAVEMENT THICKNESS INCENTIVES

- 1090022 PORTLAND CEMENT CONCRETE PAVEMENT STRENGTH INCENTIVES

- 1090030 PAYROLL SUBMITTAL RETENTION (*Retention of \$2500 per payroll*)

- 1090035 MISCELLANEOUS INCENTIVES / DISINCENTIVES
Quality Control
Penalties on Asphalt Binder (*sub-item for each %*)
Agreed upon penalties for AB
Strength Penalty for Structural Concrete
Temporary Penalty for Retention Spec (*This is failure of prime to pay sub within so many days after sub has completed all work, including partial payments, final payments and retention payments*)

- 1090040 MISCELLANEOUS ADJUSTMENTS
Sales Tax on Estimates (*A CO is needed to pay this item*)
Referee Testing (*The cost for the testing*)
Cost of developing a new mix design

- 4040000 BITUMINOUS PRICE ADJUSTMENT

- 9250101 ONE-PERSON SURVEY PARTY

- 9250102 TWO-PERSON SURVEY PARTY

- 9250103 THREE-PERSON SURVEY PARTY

- 9250104 FOUR-PERSON SURVEY PARTY

- 9250105 OFFICE SURVEY TECHNICIAN

- 9250106 SURVEY MANAGER

Newly Added Pay Items

1050001 Claims and Escalation Settlements

1080800 Contract Time Extended Overhead

Appendix O: Special Pay Item List



CONSTRUCTION BULLETIN 13-06

TO: Jennifer Toth, Deputy Director for Transportation
Dallas Hammit, Sr. Deputy State Engineer, Development
Robert J. Samour, Sr. Deputy State Engineer, Operations
Todd Emery, Deputy State Engineer, Statewide Operations
Brent Cain, Deputy State Engineer, Urban Operations
Steve Boschen, Deputy State Engineer, Design
Barry Crockett, Deputy State Engineer, Contracts & Clearances
Bill Hurguy, Asst. State Engineer, Materials
Lonnie Hendrix, Asst. State Engineer, Maintenance
Chaun Hill, Asst. State Engineer, Valley Project Management
Vincent Li, Asst. State Engineer, Statewide Project Management
Maysa Hanna, Asst. State Engineer, Traffic Engineering Group
Annette Riley, Asst. State Engineer, Roadway Design Group
Jean Nehme, Asst. State Engineer, Bridge Group
Paul O'Brien, Environmental Planning Group Manager
District Engineers
Resident Engineers

FROM: Julie E. Kliever, Assistant State Engineer, Construction

DATE: September 19, 2013

Pay Item Created for Contract Time Extended Overhead

(Supersedes Construction Bulletin 10-01)

Purpose

- To advise all construction personnel of a new pay item (**#1080800 Contract Time Extended Overhead**) created to record and track all contractor payments as a result of granting a compensable contract time extension. The unit of measure for this pay item is "EACH DAY".
- To reiterate the process for requesting, documenting and approving time extensions.
- To amend the "Request for Extension of Time" form to:
 - document the consultation between the Resident Engineer (RE) and the Assistant State Engineer for Construction (when compensatory days are requested); and
 - add fields for the daily compensatory cost agreed upon & the total compensatory cost (compensatory days approved times the daily rate).
- To emphasize that all time extensions must be executed via Change Order through the Supplemental Agreement Tracking System (SATS).

ARIZONA DEPARTMENT OF TRANSPORTATION
206 S. 17th Ave. | Phoenix, AZ 85007 | azdot.gov

SUPPLEMENTAL AGREEMENTS

Background

Construction Bulletin 10-01, issued August 2, 2010, directed that time extensions approved must differentiate between compensatory and non-compensatory days. The bulletin made it clear that all time extensions must be approved by the District Engineer (DE) and that the Assistant State Engineer for Construction needs to be contacted for guidance when compensatory days are requested. The *“Request for Extension of Time”* form was amended at that time. Compliance has been less than desired.

Process

Effective immediately, pay item (#1080800) must be used to record the value of compensable days granted. The Supplemental Agreement processed to compensate the contractor must reflect the number of compensable extension days, the daily rate and the total for all compensable days. Steps to follow are:

1. The contractor has identified an issue that could necessitate extra contract time. The RE provides the contractor the *“Request for Extension of Time”* form.
2. Contractor completes the top portion of form, noting compensatory and non-compensatory days requested, and attaches *all* justification (i.e., **schedule indicating critical path impacts, cost estimates**, etc.). Schedule analysis should specify sufficiently detailed activities that allow a reviewer to follow the sequence. Provide resource loading for each activity listing personnel and equipment. Make certain that all documents show TRACS number, request number and contractor’s name.
3. **NOTE: If project is CMAR or Design-Build, also complete the *Contract Modification Request form*.**
4. RE notifies the Assistant State Engineer for Construction if compensatory days are requested. RE forwards *all* documentation (**contractor submissions and RE independent estimate, critical path impact analysis – see Step 2**) to the Assistant State Engineer for Construction.
5. Assistant State Engineer for Construction provides guidance on time and related overhead costs.
6. Assistant State Engineer for Construction emails recommendations to the RE. RE attaches email to the *“Request for Extension of Time”* form. RE determines number of days to recommend, signs and sends to DE for approval. If fewer days are recommended for approval, explanation must be attached (***all time extensions must be approved by the DE***).
7. DE reviews, approves, and documents the number of compensatory and non-compensatory days granted. DE completes the compensatory daily cost rate and the total compensatory cost.
8. RE returns form to contractor for concurrence if approved extension of time is different than the contractor’s request.
9. If contractor doesn’t agree, escalation process is followed.
10. RE completes the change order (attach all documentation). Escalation cases will await final disposition prior to completing the change order.

NOTE: *If an agreement is reached on the cost of the change, but NOT on additional time, process the Change Order for the cost with a **DISCLAIMER** statement in the Specification/Stipulation section that **“Contract Time is unresolved.”***

Attachments

ARIZONA DEPARTMENT OF TRANSPORTATION
206 S. 17th Ave. | Phoenix, AZ 85007 | azdot.gov

Appendix P: Construction Bulletin 13-06; Pay Item Created for Contract Time Extended Overhead

SUPPLEMENTAL AGREEMENTS



ARIZONA DEPARTMENT OF TRANSPORTATION
REQUEST FOR EXTENSION OF TIME

Project No. _____ TRACS No. _____ Request No. _____

Project Name _____ Contractor _____

Total Days Requested Working Days
Calendar Days
Fixed Date Requested Amended Fixed Date

The work has been impacted for the following **attached** reasons. Include a schedule (CPM if applicable) detailing the impact to the contract. **ALL ATTACHED JUSTIFICATION DOCUMENTS MUST SHOW TRACS NUMBER, REQUEST NUMBER AND CONTRACTOR.**

Compensatory Days Requested Non-Compensatory Days Requested

Contractor Signature _____ Title _____ Date _____

Contractor Printed Name _____

The days claimed and reasons thereof have been studied. If fewer days are recommended than claimed, attach explanation.

Compensatory Days Recommended Non-Compensatory Days Recommended

NOTE: If compensatory days are requested, attach the consultation e-mail FROM the Assistant State Engineer for Construction.

Sr./Resident Engineer _____ Date _____

NOTE: This recommendation must be sent to the District Engineer for approval.

Compensatory Days Approved # \$ \$ Non-Compensatory Days Approved
Daily Rate Total Approved

District Engineer _____ Date _____

NOTE: If approved date differs from Contractor's request, return for concurrence.

Contractor Concurrence Signature _____ Title _____ Date _____

Contractor Concurrence Printed Name _____

IF THE CONTRACTOR DOES NOT AGREE THE ESCALATION PROCESS MUST BE FOLLOWED.

After a review of the facts,
an additional _____ Compensatory Days and _____ Non-Compensatory Days are approved.

Federal Highway Administration _____ Date _____

After Signatures, a Change Order must be executed in accordance with Standard Specification 108.08.
The Request for Extension of Time and all documentation must be attached to completed Change Order. 05/2013

Appendix P: Attachment: Request for Time Extension form

SUPPLEMENTAL AGREEMENTS



**ALTERNATIVE DELIVERY
CONTRACT MODIFICATION REQUEST**

| | |
|--------------|--------------------------|
| CM@R | <input type="checkbox"/> |
| Design-Build | <input type="checkbox"/> |

Page ____ of ____
Date: _____

| | | | |
|------------------|--------------|------------|-------|
| Contractor: | Project No.: | TRACS No.: | Date: |
| Project Manager: | Design Firm: | Initiator: | |

Requested Change (What):

Reason/Justification (Why):

| | |
|--|---------------------------------|
| General Supplemental Agreement Types Choose from dropdown If Other, please explain: | List Technical Managers: |
|--|---------------------------------|

ADOT Recommendation:

| | |
|--|----------------|
| Concept Recommended <input type="checkbox"/> Yes <input type="checkbox"/> No _____ <i>ADOT Sr./Resident Engineer</i> | Date: __/__/__ |
| Concept Recommended <input type="checkbox"/> Yes <input type="checkbox"/> No _____ <i>ADOT Asst. District Engineer/District Engineer</i> | Date: __/__/__ |
| Concept Recommended <input type="checkbox"/> Yes <input type="checkbox"/> No _____ <i>Assistant State Engineer, Construction</i> | Date: __/__/__ |

| | |
|--|---|
| Concept Recommended <input type="checkbox"/> Yes <input type="checkbox"/> No _____ <i>FHWA</i> | Eligible for Federal Reimbursement <input type="checkbox"/> Yes <input type="checkbox"/> No Date: __/__/__ |
|--|---|

Any decision to approve the change to contract terms will be within the sole discretion of ADOT and is dependent on the documentation that is submitted and entered into the Supplemental Agreement Tracking System (SATS).

Appendix Q: Alternative Delivery – Contract Modification Request for Review form

If you are enrolled in the Supplemental Agreements course

TCH 3039

It's time to take the exam:

Log on to the ADOT computer system with your own RACF and password.

Go to the ADOT Home page; Place your cursor on "Training" on the lower left -three choices will pop out -click on "ADOT Learning Center".

Your training page will open.

On the left side, click on "My Transcript" under "My Training Info".

Find the Supplemental Agreements class with the proper date from the list and click on the "Select" button.

Click on the tab "Class Contents" and click on the underlined word "Start". (Depending upon who built this class, Start could be in various locations.)

Another screen appears, click Start again: This opens the test at Question 1.

Warning! The system allows you to move backward and forward. Sometimes students have invalidated their test results by skipping questions. For best results, only move forward in answering questions. You risk of losing test results if you move backward! You will be able to review questions and change answers at the end of the test before submitting it for a grade.

Answer all questions.

After the last question is answered, a screen appears listing all questions by number with an X if answered. -this is your opportunity to revisit the question by clicking on the number, or answering skipped questions (Read again the Warning!) After answering all questions, click the "Submit" button.

An instant test score is given. (Depending who built this course, the results can be in various locations). You can review your answers.

After results are reviewed they may be accepted or deemed unofficial until the Instructor closeout of course with grades.

Students must logoff the computer.

Appendix R: Instructions on Testing (Enrolled Students)

Course Evaluation

Course Title: _____

Instructor: _____ Date: _____

Please take the time to help make ADOT's Training a better program for you.

| Place circle the number following each question to indicate your rating. | 1 = Poor | 2 = Below Average | 3 = Average | 4 = Above Average | 5 = Excellent |
|--|----------|-------------------|-------------|-------------------|---------------|
| 1. The goals and objectives of the course were clearly defined. | 1 | 2 | 3 | 4 | 5 |
| 2. The course objectives were accomplished. | 1 | 2 | 3 | 4 | 5 |
| 3. Considering the time available, the subject matter was adequately covered. | 1 | 2 | 3 | 4 | 5 |
| 4. The instructor demonstrated strong subject knowledge. | 1 | 2 | 3 | 4 | 5 |
| 5. The instructor was well organized and presented the subject in the logical order. | 1 | 2 | 3 | 4 | 5 |
| 6. Participants were provided adequate opportunity to ask questions. | 1 | 2 | 3 | 4 | 5 |
| 7. Please indicate which topics should be added or discussed in more detail: | | | | | |

8. If you believe there should be follow up training to this course, what do you recommend?

9. Will the course material serve as a useful reference? Yes No

10. Other comments or suggestions:

Thank you for your time, we hope you enjoyed the course.

Appendix S: Evaluation