

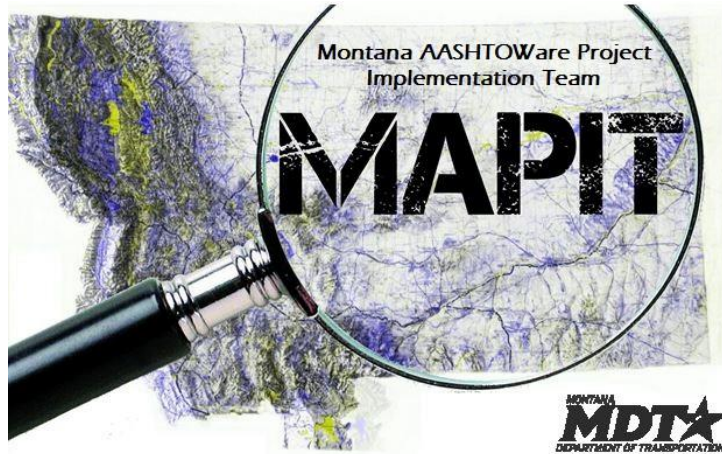


MONTANA DEPARTMENT OF TRANSPORTATION
AASHTOWare Project Construction and Materials



MDT Procedure
Process: Change Orders

Date: April 1, 2019
Updated: August 26, 2019





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❑ **Process Definition**

This process is for creating a new change order and sending it through the review and approval stages.

❑ **Acronyms and Definitions**

- CAS – Contract Administration Section
- CES – Construction Engineering Services
- CO – Change Order
- DA – District Administrator
- DCE – District Construction Engineer
- DCOE – District Construction Operations Engineer
- DWR – Daily Work Report
- EPM – Engineering Project Manager
- FHWA – Federal Highways Administration
- PoDI – Project of Division Interest
- SME – Subject Matter Expert

❑ **Change Order Components**

Components	Step	Page
Create Change Order	9	3
Explanation	10	4
New Item	11	5
New Contract Item	12	6
Overrun/Underrun	13	7
Balance Item	14	7
Time Adjustment	15	8
Review Phase	16	10
Approval Phase	19	12



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□ **MDT Procedure**

1. The contractor, EPM, DCE or other identifies a potential change to the contract.
2. The EPM and DCE determine the need for a change order.

Refer to the construction memo “Change Orders” from Kevin Christensen dated 4/23/2019.

3. If the work qualifies for emergency approval or verbal authorization per the Change Order construction memo, note that information in the change order checklist and proceed with the work without an immediate change order.

See the process “Unattached Items” for adding new items prior to the change order, if needed.

4. The EPM calls all appropriate individuals to discuss a possible change order.

- Construction Reviewer (required)
- DCE/DCOE (required)
- DA
- Subject matter experts (e.g. Geotechnical, Bridge, Consultant Design)
- Construction Engineer
- Other entity (e.g. tribe)

The EPM documents the discussions on the checklist.

5. If the contract is a PoDI project, the EPM discusses the change with the FHWA Operations Engineer.
6. The EPM fills out the change order checklist and gathers information and/or backup documents and saves them to the same folder as the checklist.
7. If there is any question about federal participation, it is discussed with FHWA and the CAS Supervisor. The CAS Supervisor will determine if the work is eligible for federal-aid.
8. If a new category or new fund package is needed, the EPM will notify the CAS Supervisor (phone or email).

Typical reasons for needing a new category or fund package include: work is not federal-aid eligible, Accounts Receivable, materials takeover and third-party funding.

The CAS Supervisor will establish the new category or fund package and notify the EPM when they have been added to the contract.

9. The EPM creates a new change order.

Navigation – Construction > Contract Progress > (select contract) > Change Orders tab

- a. Click Add
- b. Enter a Description of the change order



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- c. Select the Approval Rules
 - CO-P – Change Order – PoDI
 - This is for use on contracts where FHWA has oversight. The box PoDI (FHWA) is checked on these contracts upon saving the change order.
 - CO – Change Order
 - This is for use on typical change orders.
 - ADMIN – Administrative Change Order
 - This is only used with the CAS Supervisor is creating an administrative change order.
- d. Select the (predominant) Reason
- e. Click Save

Change Orders

Add Change Order Summary

Contract: 01315 - SF 119 - SIGN IMP - FISHTAIL

General	<p>Change Order Date 01/15/2018</p> <p>Description * This is a new change order</p> <p>Approval Rules * CO - Change Order</p> <p>PoDI (FHWA)</p> <p>Author * DurbinL Durbin Lisa</p> <p>Reason EW - Extra Work</p> <p>Unilateral <input type="checkbox"/></p> <p>Administrative (CASE) <input type="checkbox"/></p>	<p>Explanations 0</p> <p>Change Order Revision Number</p> <p>Approval Date</p> <p>Entered By</p> <p>Entered Date</p> <p>Current Approval Round 1</p> <p>Current Approval Group</p> <p>Override Approval Rules No</p>
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10. The EPM enters the explanation on the change order.

Navigation – Contract Change Order Summary > General tab (bottom of the window)

a. Enter the Sequence Nbr (the first explanation is 1)

Note: the red asterisk on the sequence number is not indicating it is a required field by itself. If an explanation is being entered, the sequence number is required.

b. If one of the standard explanations can be used:

- 1) Click in the Standard Explanation Name field and start typing or hit enter. You can enter the type, e.g. QTY to filter the list for easier selection.
- 2) Select the appropriate explanation.



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- 3) If a supplemental explanation is needed (e.g. date on a NTP change), enter it in the General/Supplemental Explanation field
- c. If one of the standard explanations cannot be used, enter the explanation in the General/Supplemental Explanation field.
- d. Click Save

▼ Change Order Explanations			
Seq Nbr*	Standard Explanation Name	Standard Explanation Description	Gen/Supp Explanation
1	NTP TA - Time Adjustment	The Notice to Proceed date is revised. The contractor	June 1, 2017
	Begin typing to search or press Enter		

11. The EPM adds new items to the change order as necessary.

Navigation – Contract Change Order Summary > New Items tab

- a. Click the Select New Item button
- b. In the Reference Item field, start typing part of the name or item number
- c. Select the appropriate item
- d. Click the project/category the item needs to be added to
- e. Click Add to Change Order
- f. Enter the Project Item Line Number (e.g. 905010 for the first item on change order 5)
 - 1) Item number is six digits 9XXYYY
 - 2) XX is the change order number
 - 3) YYY is the sequence number of the item on the change order, beginning with 010
- g. Enter the Contract Item Line Number (the same as the project item line number)
- h. Enter the Quantity
- i. Enter the Unit Price
- j. Enter a Supplemental Description, if needed. For example, AR number for a guardrail hit or short description on a miscellaneous lump sum item
- k. Select the Subcontractor, if the new item will be performed by an existing subcontractor
- l. Click Save
 - 1) Note, the funding dropdown should automatically populate after you save.



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Select New Item... 0 marked for deletion | 0 changed

Proj Item Ln Num	Cont Item Ln Num	Item - Descr	Supp Descr
923010	923010	606010030 - GUARDRAIL-STEEL	AR 14158
Unit	Proj - Descr	Cat - Descr	
LNFT - Linear Feet	8051033000 - SF129 - GUARDRAIL BEARCREEK	0004 - ar 13818	
Qty	Price	Ext Amt	
250.000	20.00000	5,000.00	

Project Item Line Number *	Unit Price *
<input type="text" value="923010"/>	<input type="text" value="20.00000"/>
Contract Item Line Number *	Extended Amount
<input type="text" value="923010"/>	5,000.00
Quantity *	Supplemental Description
<input type="text" value="250.000"/>	<input type="text" value="AR 14158"/>
Item Source	Subcontractor
ChangeOrder	<input type="text" value="PAVEMENT SOLUTIONS INC"/>
Funding	
<input type="text" value="MISCO - MISC-AR14158"/>	

12. The EPM adds new *contract* items to the change order as necessary. This option is used to add an existing item to another category/project at the same bid price.
- Navigation – Contract Change Order Summary > New Items tab
- Click the Select Contract Item button
 - In the Contract Item field, start typing part of the name or item number.
 - Choose the item
 - Select category/project to add the item to
 - Click Add to Change Order
 - Enter the Project Item Line Number (e.g. 905010 for the first item on change order 5)
 - Item number is six digits 9XXYYY
 - XX is the change order number
 - YYY is the sequence number of the item on the change order, beginning with 010
 - Enter the quantity
 - Select the funding if the change order is for a new category or a new fund package on an existing category
 - Select the Subcontractor, if the new contract item will be performed by an existing subcontractor
 - Click Save



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13. The EPM adds items being adjusted in quantity (overrun or underrun) as necessary

Navigation – Contract Change Order Summary > Increase/Decrease Items tab

- a. Click the Select Items button
- b. Press enter or begin typing in the search field
- c. Select the appropriate item
- d. Click Add to Change Order
- e. Enter the Quantity
- f. Click Save

0 marked for deletion | 0 changed

Select Items...				
SF 119 - SIGN IMP - FISHTAIL				
>	907010	7892013000 - 0002	618030015 - TRAFFIC CONTROL-FIXED	0.000
	1,000.000	1,000.00	0.000	0.000
				UNIT
Description				
SF 119 - SIGN IMP - FISHTAIL				
v	Proj Item Ln Num	Proj - Cat	Item - Descr	Pending CO Qty
	907020	7892013000 - 0002	606010030 - GUARDRAIL-STEEL	0.000
	Curr Qty	Curr Ext Amt	Qty Posted to Dt Appr DWRs	Pend CO Ext Amt
	100.000	2,500.00	100.000	14,625.00
			Qty Posted to Dt	Unit of Measure
			100.000	LNFT
Quantity * v			Pending CO Ext Amt	
<input type="text" value="585.000"/>			14,625.00	
Unit Price				
25.00000				

14. If a change order is being done to document final quantities (typically an overrun of greater than \$75,000), the EPM does a balance change order. Balancing a change order item automatically adjusts the quantity to the paid quantity. No manual adjustment is needed. The item must be complete.

- a. Mark the item complete

Navigation – Contract Progress > Items > General tab

- 1) Scroll down to the item being finalized on the change order
- 2) Open the row action and select “Mark Item Complete”



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Line Num	Bid Qty	Current Dollar Amount	Major Item	Item Complete
0020	1.000	2,250.00	No	Complete: No
109200005 - MOBILIZATION				
0030	60.000	5,400.00	No	Complete: No
301020416 - SHOULDER GRAVEL				
0040	962.500	8,093.75	No	Complete: Yes
606010030 - GUARDRAIL-STEEL				
0050	2.000	1,000.00	No	Complete: No
606010140 - GUARDRAIL END SECTION WIDENING				
0060	2.000	2,500.00	No	Complete: No
606011300 - RESET OPTIONAL TERMINAL SECT				
0070	500.000	500.00	No	Complete: No
618030015 - TRAFFIC CONTROL-FIXED				
0080	1.000	2,250.00	No	Complete: No
618030080 - TRAFFIC CONTROL				
0090	12.600	378.00	No	Complete: No
619010088 - SIGNS-ALUM REFL SHEET IX				

- Actions
- Delete
- Exclude from Search Results
- Mark Item Complete
- Mark Item Not Complete
- Tasks
- Contract Item Attention Flags...
- DWR Agency View Contract Item Association
- Views
- Attachments
- Links
- Tracked Issues
- Reports
- Item History To Date Report
- Item Posting by Item

b. Add the balance item on the change order

Navigation – Contract Change Order Summary > Increase/Decrease Items

- 1) Click the button Balance Completed Items
- 2) Click in the search box and hit Enter or hit Show first 10
- 3) Select the appropriate items(s)
- 4) Click Balance Completed Items

Balance Completed Items ✕

Advanced Showing 1 of 1

Select: [All](#) | [None](#) 1 selected

Contract Item Ln Num	Item - Description	Supp Descr	Unit	Item Src
✓ 0040	606010030, GUARDRAIL-STEEL		LNFT - Linear Fee	Original

Balance Completed Items

15. The EPM adds time adjustments to the change order as necessary. This includes adjustments to the main time or any milestones.

Navigation – Contract Change Order Summary > Time Adjustments tab

- a. Click the Select Contract Time button
- b. Click in the search box and hit Enter or click Show first 10
- c. Select the contract time



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- d. Click Add Time Adjustments to Change Order button.
- e. If the Time Type is Available Time (working day or calendar day):
 - 1) Enter the Adjustment Time Units
 - 2) Click Save

Select Contract Time... 0 marked for deletion | 0 changed

Time ID	Time Descr	Adj Time Units	Adj Completion Date
00 AT	GUARDRAIL AND SIGNING	12.00	

Time ID
00 AT

Time Description
GUARDRAIL AND SIGNING

Time Type
Available Time

Charge Type

Time Unit
Days

Original Number of Time Units
20.00

Current Number of Time Units
23.00

Current Time Units Charged on Approved Estimates

Adjustment Time Units
12.00

Adjustment Completion Date

Original Completion

Current Completion

Pending Change Completion Date

Pending Change Order Number of Time Units
0.00

Current Time Units Charged on Diaries
0.00

- f. If the Time Type is Completion Date:
 - 1) Enter the Adjustment Time Units. This is the number of days required to get to the adjusted completion date, based on 7-days a week
 - 2) Click Save
 - 3) Review the Adjustment Completion Date to ensure that the correct number of days was entered



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Time ID	Time Descr	Adj Time Units	Adj Completion Date
MLSTNDT	Milestone - Completion Date	8.00	05/15/2017 8:37:25 PM

Time ID MLSTNDT	Adjustment Time Units 8.00
Time Description Milestone - Completion Date	Adjustment Completion Date 05/15/2017 8:37:25 PM
Time Type Completion Date	Original Completion 05/07/2017 8:37:25 PM
Charge Type	Current Completion 05/07/2017 8:37:25 PM
Time Unit Days	Pending Change Completion Date
Original Number of Time Units 20.00	Pending Change Order Number of Time Units 0.00
Current Number of Time Units 20.00	Current Time Units Charged on Diaries
Current Time Units Charged on Approved Estimates	

16. The EPM adds the change order reviewers to the change order when ready.

Navigation: Contract Change Order Summary > Review Tracking tab

- Click Select Reviewers button
- Change filter from System Default to the appropriate district CO filter
- Click All
- Deselect any reviewers that are not applicable

See table "Review and Approval Levels" for the list of reviewers.

- Click Save

Note, the status of the change order is now Pending Review. No changes can be made to the change order while in this status.

- A database trigger will send an email to the MDT Change Orders (district) distribution list, which includes personnel from Preconstruction and other areas.

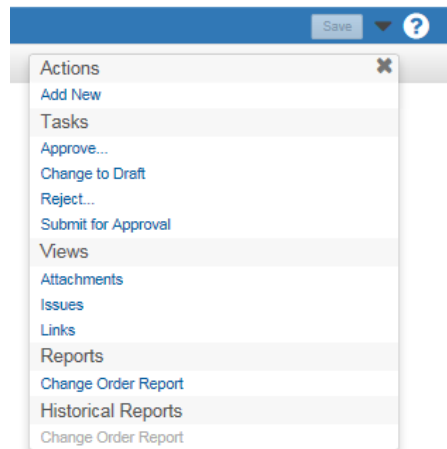
User Name	Title
<input checked="" type="checkbox"/> Lisa Durbin	
<input checked="" type="checkbox"/> TJ Ramaeker	
<input checked="" type="checkbox"/> Chris Trautmann	
<input checked="" type="checkbox"/> Jake Sienko	
<input checked="" type="checkbox"/> James Stevenson	
<input checked="" type="checkbox"/> Brandon Brown	
<input type="checkbox"/> Andrew Harmon	
<input checked="" type="checkbox"/> Shane Johnson	
<input checked="" type="checkbox"/> Traci Steen	
<input type="checkbox"/> Paul Rieger	

17. Each reviewer looks over everything and takes action on the change order.

Navigation: Contract Change Order Summary

a. If there are no changes or comments needed, the reviewer approves the change order.

1) Under the Component Actions, click Approve



2) Enter a comment

3) Click Save

b. If there are changes or comments needed, the reviewer rejects the change order with comments.

1) Under the Component Actions, click Reject

2) Enter all comments/questions

3) Note, this includes all comments on the change order and the checklist

4) Click Save

Note, the change order status changes to Rejected but this does not prevent other reviewers from approving or rejecting

18. The EPM monitors the Review Tracking to see when people have approved or rejected the change order with comments. If there are significant changes or a number of small changes, the EPM changes the status to Draft and modifies the change order.

Navigation: Contract Change Order Summary > Review Tracking

a. Under the Component Actions, select Change to Draft

b. Modify the change order as needed

c. On the Review Tracking tab, click Select Reviewers

d. Change the filter from System Default to the appropriate district CO filter



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e. Click All

f. Deselect any reviewers that are not applicable

Note, if the changes are small, the people that already have a decision “Approved” do not need to be selected

g. Click Save

This step is repeated until all required reviewers have approved the change order. The required approvals are listed in the table “Review and Approval Levels”.

Note, change the Rounds filter from Latest Only to No Filter. It is possible that people have approved it on a previous round.

19. When all required reviewers have approved the change order, the EPM submits the change order for approval.

a. Under the component actions, click Submit for Approval

20. The EPM runs the change order report (Component Actions > Reports > Change Order Report), prints it and sends it to the contractor for signature. If there are documents referenced in the change order description, those are included.

21. When the signed change order is received, the EPM scans it and attaches it to the change order in the system.

Note, if the contractor refuses to sign the change order, see the Override Approval Rules process.

Navigation: Contract Change Order Summary

a. Under the component actions, select Attachments

b. Click Select File

c. Navigate to the location of the scanned document

d. Select the file

e. Click Open

f. Enter a description of the document (e.g. Signed CO)

g. Click Save

h. Hit Previous to return to the change order

22. The EPM (or their designee) approves the change order, using the Contractor role.

Note, enter the date the contractor signed the change order in the comments.

A trigger sends an email to each approval level, consecutively, that they are the next approver.

23. When the change order has been approved by all required levels, the status of the change order automatically changes to “Approved” and the work can proceed and be recorded on a DWR.



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Note, the expected turnaround time for the approval is less than a week. The change order status does not change to “Approved” and the items available on a DWR until all approvals are completed. If the change order approval needs to be expedited, the EPM or DCE can contact others directly to notify them the change order is ready for approval. *Communication is critical in processing a change order.*

- 24. When the change order status changes to Approved, a trigger sends an email to CAS notifying them to send the change order report to the contractor.

Navigation: Contract Change Order Summary

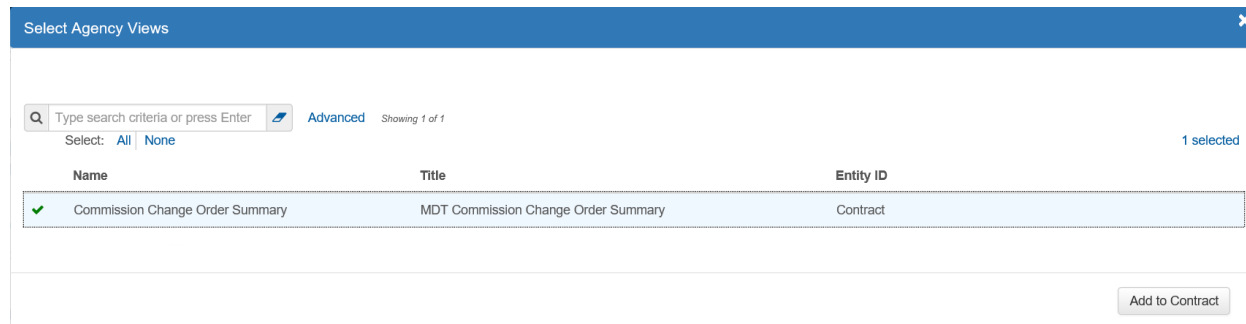
- a. Under the component actions, click the Historical Reports > Change Order Report
- b. Click Open
- c. Print the change order
- d. Save the change order report for use on the Commission Summary
- e. Mail or email it to the contractor

- 25. The CAS creates a summary of the change order for the Transportation Commission.

- a. If it is the first change order, add the agency view.

Navigation: Construction > Contract Progress > (select contract) > Agency Views tab

- 1) Click Select Agency Views
- 2) Select the Commission Change Order Summary view



- 3) Click Add to Contract
- 4) Enter the Effective Date (this can be the current date)
- 5) Change the status to Active
- 6) Click Save

Contract Progress Summary Save Complete

Contract: 14415 - SF129 - GUARDRAIL BEARCREEK Save

General

Financials

Daily Work Reports

Diaries

Diary Adjustments

Payment Estimates

Contractors

Change Orders

Contract Adjustments

Item Adjustments

Agency Views

Q Type search criteria or press Enter Advanced Showing 1 of 1

Select Agency Views...

Name	Title	Entity ID	Effective Date	Expiration Date	Status	Active
Commission Change Order	MDT Commission Change Order S	Contract	03/18/2018		ACTIVE - Active	Yes

0 marked for deletion | 0 changed

b. Add the change order summary explanation.

Navigation: Construction > Contract Progress > (select contract)

- 1) Click on the action button on the component
- 2) Under Views, click Commission Change Order Summary

Contract Progress Summary

Contract: 14415 - SF129 - GUARDRAIL BEARCREEK Save

General

Financials

Daily Work Reports

Diaries

Diary Adjustments

Payment Estimates

Contractors

Change Orders

Contract Adjustments

Item Adjustments

Agency Views

Mix Designs

Progress Schedule

Weekly Report Of Time Charges

Force Accounts

Stormwater Periods

Q Type search criteria or press Enter Advanced Showing 1 of 1

Select Agency Views...

Name	Title	Entity ID	Effective Date	Expiration Date	Status	Active
Commission Change Order	MDT Commission Change Order S	Contract	03/18/2018		ACTIVE - Active	Yes

Actions

There are no actions available.

Tasks

Delete Migrated Contract

Views

Attachments

Contract Price Adjustment Index

Issues

Links

MDT Commission Change Order Summary

Reports

Contract Clearance

Contract Employment Data

Contract Payment

Contract Status Report

Contract Time Report

Items with Unpaid Placed Quantities

Outstanding Contract Item List Report

Payment Estimate for Contractor

Subcontract Listing

Summary By Funding Report

Weekly Report of Time Charges

<https://awproject.mdt.mt.gov/AgencyView/72/AgencyViewTemplate?BaseParentModel=Contract&BaseModelParentId=363>

- 3) Click in the Change Order Nbr field and hit Enter
- 4) Select the appropriate change order
- 5) If a common explanation can be used, click the dropdown arrow and select the appropriate explanation
- 6) If a common explanation cannot be used, enter a summary of the change order in the Custom Explanation field
- 7) If the change order should not be included on the Commission Summary Report, change the Include to N. It defaults to Y



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Contract Progress

Agency View Summary

Commission Change Order Summary

Contract ID: 14415 Description: SF129 - GUARDRAIL BEARCREEK

New 0 added 0 marked for deletion 0 changed

Change Order Nbr	Common CO Explanation Code	Custom Explanation	Incl
0001 Replace guardrail - AR 12173	5Guardrail - Replaces guardrail damaged by traffic.		Y
0003 Test Approval Rules		Administrative change order	N
0004 Install approach 13+23		Install new private approach per R/W agreements.	Y
0005 Testing change order approval rules	3FniQty - Increases the following item to the quanti...	Special Borrow.	Y

8) Click Save

26. If the Notice to Proceed Date was changed, the CAS modifies the date on the contract.

Navigation: Construction > Contract Administration > (select contract) > Contract Times tab

a. Under the Site time section, click on the Time ID of the Main time

Contract Administration Summary

Contract: 14415 - SF129 - GUARDRAIL BEARCREEK

General
Additional Information
Administrative Offices
Contract Authority
Contract Times
DBE
Labor
Funding
Locations
Insurance
Permits

Informational
Site

Type search criteria or press Enter Advanced Showing 4 of 4

Select Site Times...

Time ID	Contr Stat Typ	Time Type
00 AT		Available Time
Time Descr *	Main	Active
GUARDRAIL AND SIGNING	Yes	Yes
MLSTNAD		Available Time
Milestone - Working Days	No	Yes

- b. Go to the Units and Dates tab
- c. Change the Notice to Proceed
- d. Click Save



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Contract Time Summary - Available Time

▼ Contract: 14415 - SF129 - GUARDRAIL BEARCREEK

CT: 00 AT - GUARDRAIL AND SIGNING Main: Yes Current Number of Time Units: 28.00 Time Unit: Days

General	Notice to Proceed / Milestone Start	Time Unit
Units And Dates	07/20/2015 12:00:00 AM	Days
Rates And Cap Amount	Stop Time	Original Number of Time Units
Suspend/Resume Events	<input type="text"/>	20.00
	Actual Completion	Adjusted Number of Time Units
	<input type="text"/>	8.00
	Estimate Processing Complete	Current Number of Time Units
		28.00
		Pending Change Order Number of Time Units
		0.00
		Road User Cost Per Time Unit
		<input type="text"/>

27. The CAS Supervisor creates the monthly change order reports for the Transportation Commission.
 - a. After the 1st of the month, the CAS Supervisor runs the Monthly Commission change order report, reviews for accuracy and makes any corrections.
 - b. Prior to the bimonthly Transportation Commission meeting, the CAS Supervisor meets with the Engineering Division Administrator to review the change order reports.
28. The Engineering Division Administrator presents the custom change order reports to the Transportation Commission for their approval.



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❑ **Review and Approval Levels**

Role	Review	Response Required	Approve	Response Required
Contractor			X	Yes
EPM			X	Yes
CAS	X	Yes		
DEO	X	No		
DCE	X	Yes	X	Yes
DCOE	X	No		
Construction/Bridge Reviewer	X	Yes	X	Yes
DA	X	Yes, if significant	X	Yes
FHWA, if PoDI	X	Yes	X	Yes

❑ **IT Systems Interfaces Outside of AASHTOWare Project**

❑ **Process Exceptions**

❑ **Business Change Summary**

❑ **Comments**

Communication is critical to the change order process.