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**UDOT  
MASTERWORKS**

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**Contract  
Management**

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**TRAINING**

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# Daily Progress Report

Workmanship and materials are inspected to assess compliance with the contract requirements. It is the responsibility of the inspector to verify that the work is performed in accordance with specified requirements. Inspector's duties include inspection and observation, sampling and testing of materials, documentation and keeping of necessary records or reports of operations, and other duties as directed by the RE. The importance of the inspector keeping a neat, complete, up-to-date and accurate diary and submitting reports in a timely manner cannot be over-emphasized. If there are disputes, the inspector's daily records (Daily Progress Reports) are the legal documents with which the matter may be resolved. Refer to the [Construction Manual of Instruction](#) for more information.

## Creating a Daily Progress Report

Roles that create a *Daily Progress Report*:

Resident Engineer

Field Engineer

Field Inspector 4

Field Inspector 1-3

## Copying a Daily Progress Report

*Daily Progress Reports* for ongoing work can be copied, with equipment, contractor onsite, and personnel completed, and edited for subsequent days.

Verify that the *Daily Progress Report* shows the correct date. A copied *Daily Progress Report* or one synced from a mobile device on a later date may show the incorrect date.

### *Mobile Apps*

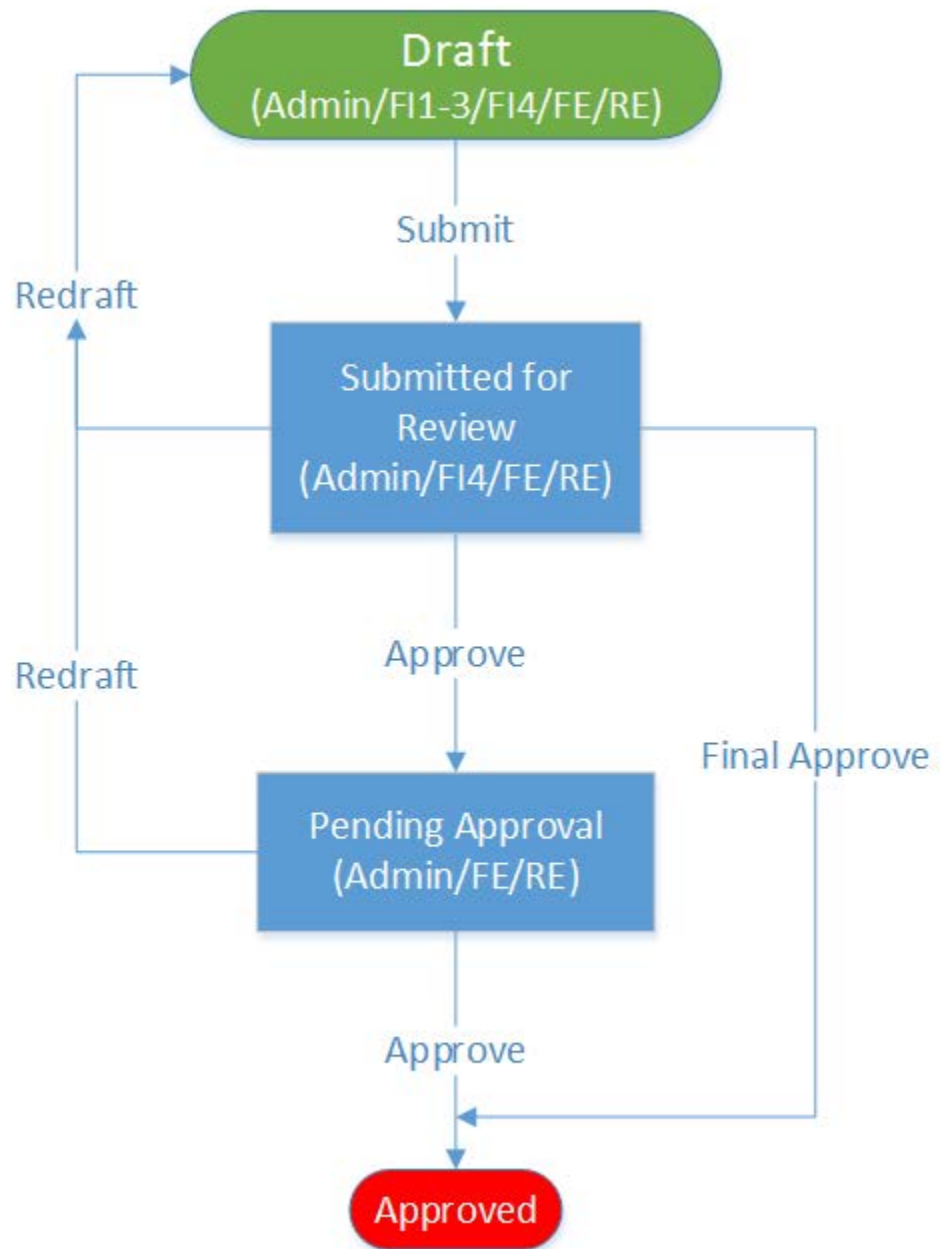
*Daily Progress Reports* are available on the Mobile Application (App).

Remember: **Sync** the mobile device daily.

A *Daily Progress Report* needs to be copied before it is approved.

Approved *Daily Progress Reports* are not listed on the Mobile App.

## DAILY PROGRESS REPORT WORKFLOW



# Visual Inspection Reports

*Visual Inspection Reports* (VIRs) are used to document visual observations of material and placement. The Minimum Sampling and Testing Requirements (MS&TR) requires VIRs for acceptance of very small quantities of material that are not sampled and tested in accordance with the general sampling frequencies cited in the MS&TR. The Acceptance and Documentation Guide indicates that VIRs or other inspector's notes or diaries are required supporting documentation for work and materials acceptance.

## Creating a Visual Inspection Report

Roles that create a *Visual Inspection Report*:

Resident Engineer

Field Engineer

Field Inspector 4

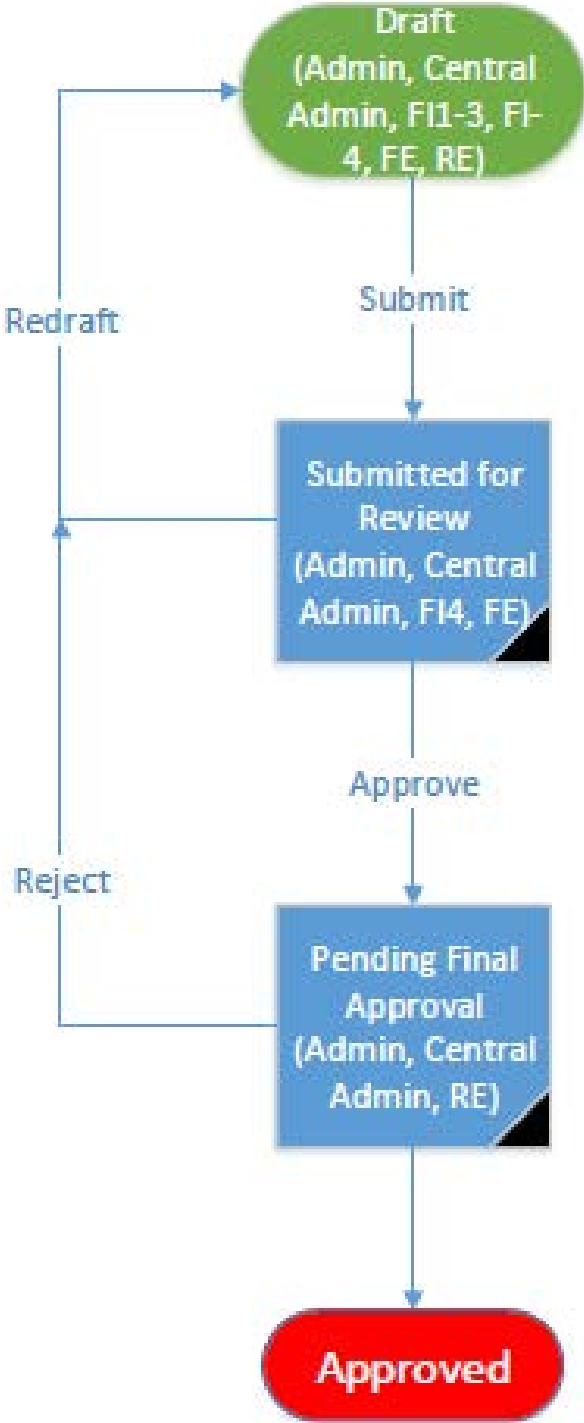
Field Inspector 1-3

### *Mobile Apps*

*Visual Inspection Reports* are available on the [Mobile Application \(App\)](#).

Remember: **Sync** the mobile device daily.

# VISUAL INSPECTION REPORT WORKFLOW



## Item Postings Page

The *Line No* for the pay item is unique to the project and is listed in order in the contract documents.

The *Item No* is the number assigned to the pay item. This number is the same throughout all contracts for the same for the work. The first five digits of an item number are the section number of the technical specification that defines the work for that pay item. The last character of a pay item signifies whether something is new or changed. A digit as the last character indicates a standard pay item. An asterisk (\*) in place of the last digit indicates that the pay item is supported by a contract specific Special Provision. The letter "P" in place of the last digit indicates that a new pay item that does not require a Special Provision is used or that the name, unit of measure, or Measurement & Payment (M&P) description of a standard pay item has been modified. The letter "D" in place of the last digit indicates a standard lump sum pay item with an estimated quantity in the item name

### Creating Item Postings

Roles that create *Item Postings*:

Resident Engineer  
Field Engineer  
Office Manager  
Field Inspector 4  
Field Inspector 1-3

#### *Mobile Apps*

*Item Postings* are available on the [Mobile Application \(App\)](#).

Remember: **Sync** the mobile device daily.

Select **Contractor permitted to work**. Only the prime contractor and approved subcontractors are listed.

**Is Complete** is only available from the **Submitted for Review** Workflow Stage  
Do not select until item is complete.

**'Hold Payment'** will allow the item to be posted but not paid until payment is released.  
Only available from the **Submitted for Review** Workflow Stage

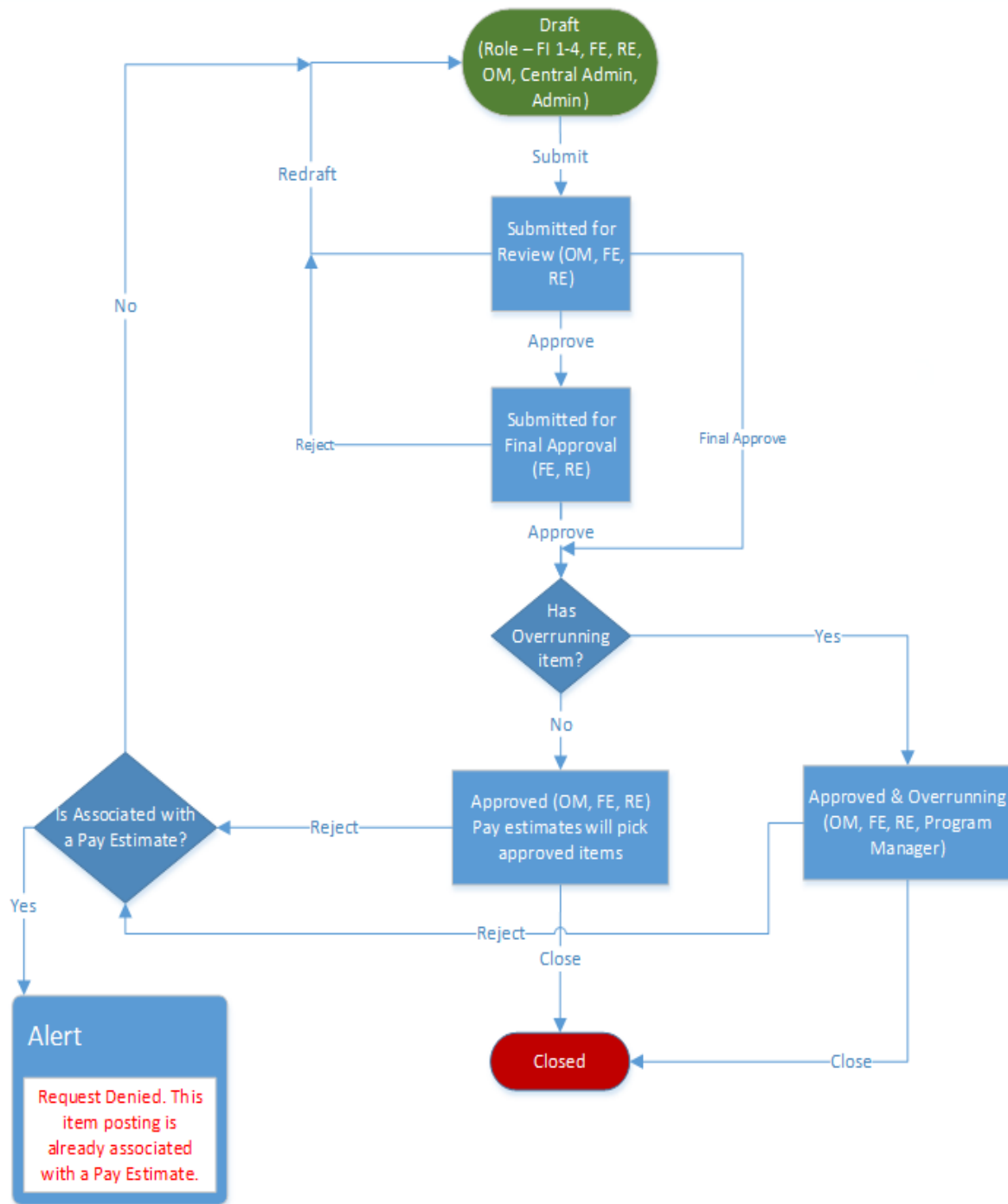
### Resident Engineer's Diary

The *Resident Engineer's* Diary provides management level documentation of activities and events that impact the project work or schedule including verbal instructions or directions given to the contractor and other pertinent notes and comments. (no Workflow)





# ITEM POSTING WORKFLOW



# Inspection Checklists

The inspection staff's responsibilities include observation and inspection, documentation of materials acceptance, sampling and testing of materials, measurement of pay quantities, making necessary records or reports of Contractor's operations, and other duties as directed by the RE and FE.

The *Inspection Checklists* includes the information necessary to verify that work and material meets plans and specification.

Provided checklists are:

*Bridge Deck Pour*

*Bridge Deck Pre-Pour Conference*

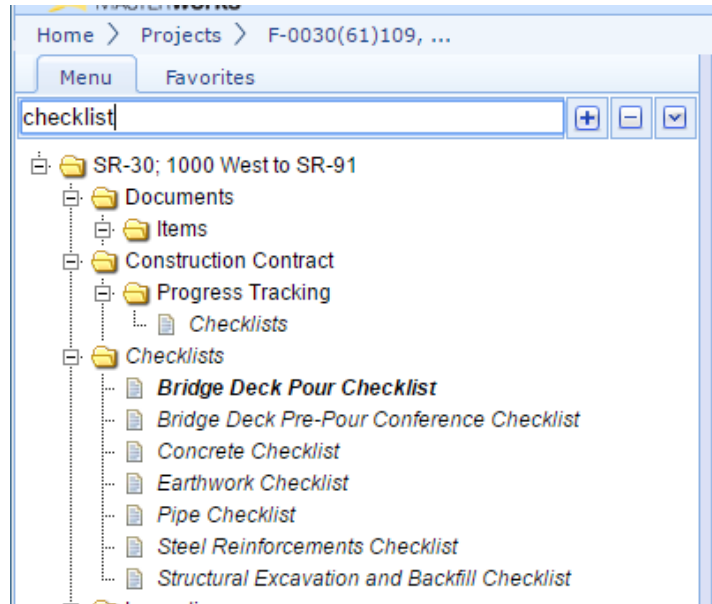
*Concrete*

*Earthwork*

*Pipe*

*Steel Reinforcements*

*Structural Excavation and Backfill*



## Creating an Inspection Checklist

Roles that use the *Inspection Checklists*:

Resident Engineer

Field Engineer

Field Inspector 4

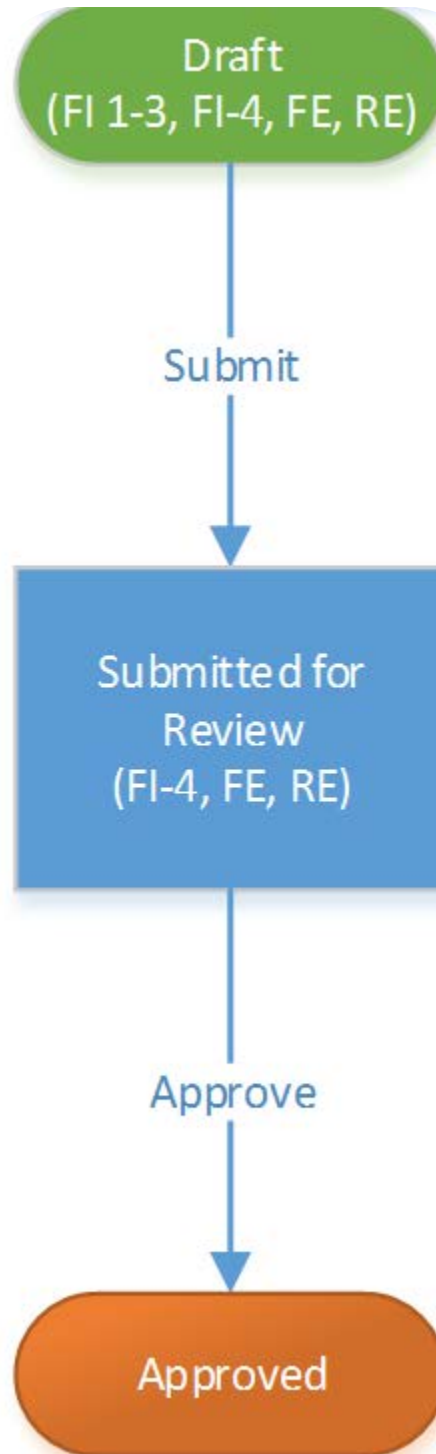
Field Inspector 1-3

### *Mobile Apps*

*Inspection Checklists* are available on the [Mobile Application \(App\)](#).

Remember: **Sync** the mobile device daily.

## CHECKLIST WORKFLOW



## Monthly Status of Time

The RE is to keep time charges current and send a completed monthly status of time report, generated from Masterworks, to the Contractor for review and approval or disapproval.

Take care when omitting a month, to generate a report for a month that was skipped the reports for subsequent months need to be 'redrafted,' deleted, and recreated.

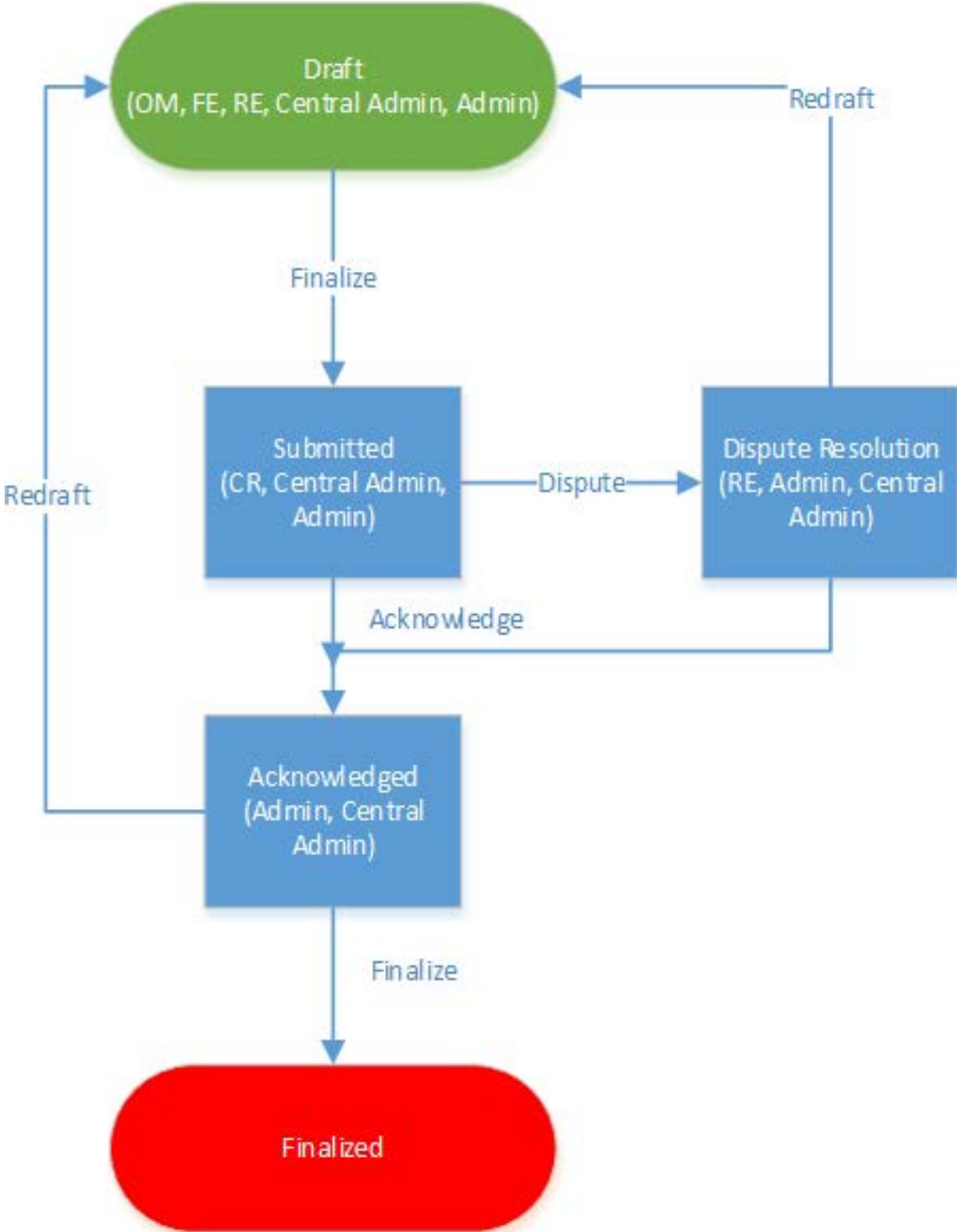
Roles that create *Monthly Status of Contract Time*:

Resident Engineer

Field Engineer

Office Manager

# MONTHLY STATUS OF TIME WORKFLOW



## Compliance

Reports under the *Compliance* heading are:

*Non-conformance Reports (NCR)*

*Storm Water Pollution Protection Plan (SWPPP) Compliance Inspection*

## Non-conformance Report Page

Materials or workmanship not in conformance with the contract plans and specifications are documented in the *Non-conformance Report*. The report is also used to document the action taken and the resolution of the non-conforming materials and workmanship including pay adjustment factors if applicable. See [UDOT 2017 Standard Specification](#), Section 00727, *Control of Work*.

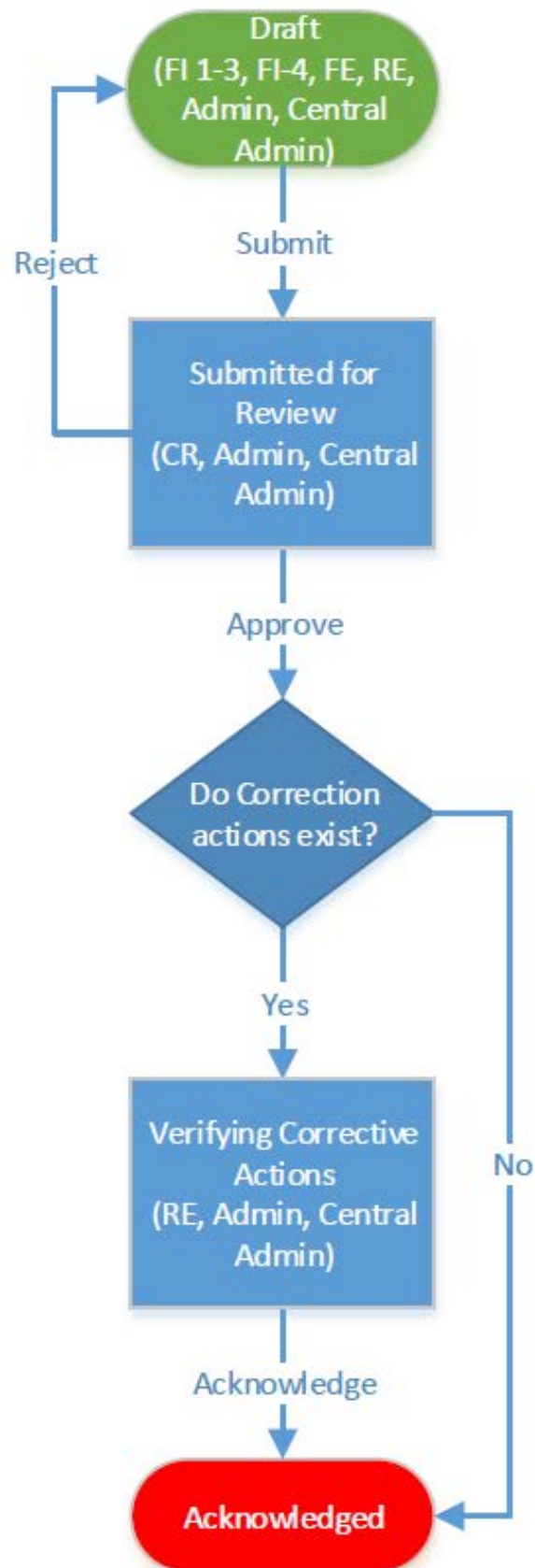
## Creating a Non-Conformance Report

Roles that create a *Non-Conformance Report*:

Resident Engineer

Field Engineer

## NON-CONFORMANCE REPORT WORKFLOW



# SWPPP Compliance Inspection Page

A storm water pollution prevention plan (SWPPP) must be prepared and on file. The SWPPP is prepared by design staff and is supplied to the contractor and construction staff by inclusion in the project plans or at the preconstruction conference.

As the permit holder, the contractor is responsible for meeting the requirements and documenting compliance with the permit, including updating the SWPPP. A complete and updated SWPPP should be provided to the RE as part of the final project documentation.

The UDOT Environmental Control Supervisor (ECS) is responsible to attend inspections and ensure compliance with the SWPPP as provided in [UDOT 2017 Standard Specification](#), Section 01571, *Temporary Environmental Controls*.

## Creating a SWPPP Compliance Inspection Report

Roles that create a *SWPPP Compliance Inspection* report:

### Contractor Representative

Resident Engineer

Field Engineer

Office Manager

Field Inspector 4

Field Inspector 1-3

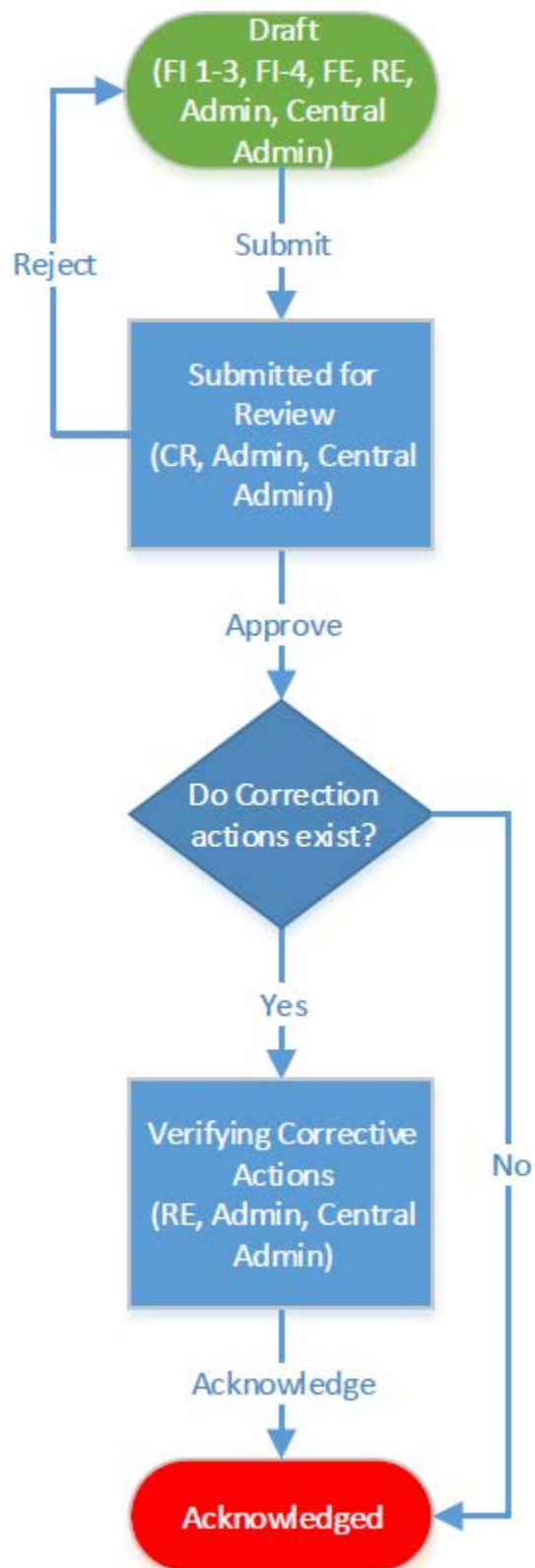
### *Mobile Apps*

*SWPPP Compliance Inspection Reports* are available on the [Mobile Application \(App\)](#).

Remember: **Sync** the mobile device daily.



# SWPPP COMPLIANCE WORKFLOW





## Billings and Payments

Reports and forms under the *Billings and Payments* heading are:

*Materials on Hand*

*Pay Estimates*

*Asphalt Cost Adjustment*

*Fuel Cost Adjustment*

## Materials on Hand

Payment may be made for material on hand that is not yet incorporated into the project. [UDOT 2017 Standard Specification](#), Section 01282 Payment, specifies criteria that must be met for payment for material on hand.

The *Materials on Hand* payment cannot exceed the contractor provided invoice amount or 75 percent of the in-place price, whichever is less.

## Creating a Materials on Hand payment

Role that creates a *Materials on Hand* payment:

Office Manager

Enter **Amount in \$** of the *Materials on Hand* payment (usually invoice dollar amount, \$64,377.00 from example).

The **Recovery Range** will show the maximum recovery (total contract item quantity) in units and the quantity represented by the **Amount in \$** (*Amount in \$* entered divided by the unit price).

The **Recovery Quantity** is the quantity of the contract item in units that the **Amount in \$** is spread over, this quantity must be less than the total contract item quantity and more than or equal to the units represented by the prepayment; this is represented by the **Recovery Range**.

Enter the **Recovery Quantity** (57300 from example). **Recovery Rate in \$** is automatically calculated (**Amount in \$** divided by the **Recovery Quantity**).

### Example

The Contractor submitted an invoice for approximately half the reinforcing steel that will be used on the project. The invoice dollar amount is \$64,377.00 for 57300 lbs. of reinforcing steel. The total quantity of reinforcing steel on the project is 114,448 lbs. The unit price is \$1.25.

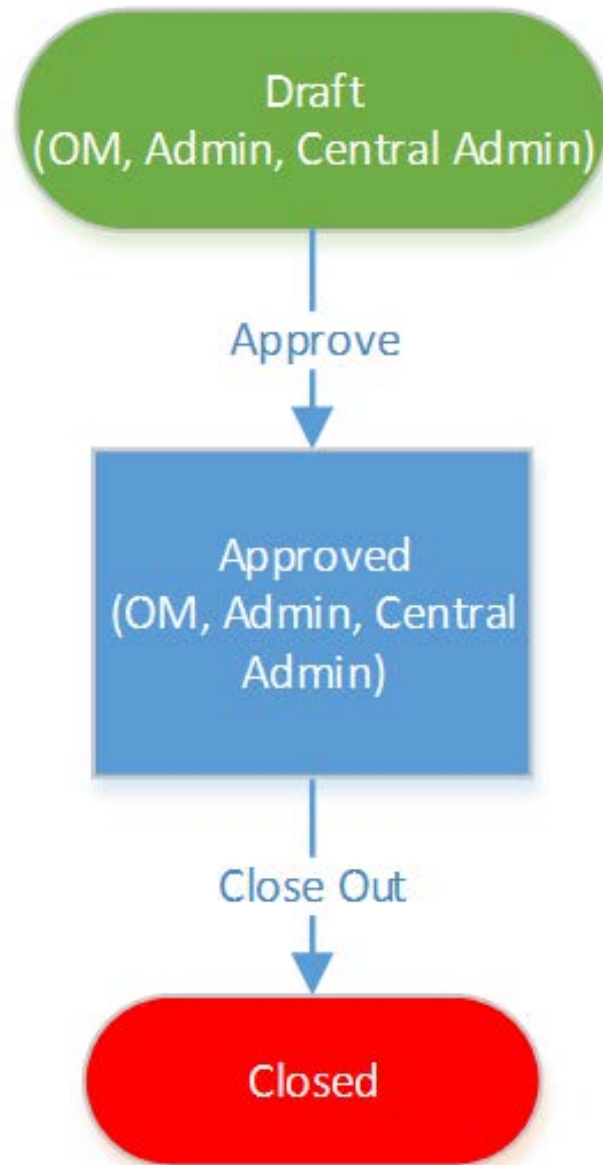
The **Amount in \$** entered is \$64,377.00 from the invoice and the **Recovery Quantity** is 57224 lbs.

The **Recovery Range** is 51,501 (\$64,377/\$1.25) to 114,448 lbs. The **Recovery Rate** is \$1.12, because the price of the reinforcing steel is less than the full unit price.

Amount in \$	Recovery Quantity	Recovery Range
64,377.00	57,300.00	[114448.0000 - 51501

**Recovered Quantity** is updated when *Pay (Partial) Estimates* are processed. When the entire Quantity in \$ is recovered, the **Is complete** will indicate Yes.

## MATERIALS ON HAND WORKFLOW



## Pay Estimate Page

The RE prepares progress payments, referred to as pay estimates or partial estimates, at least once each month as work progresses. The RE and Contractor agree to a Saturday closing date to be used throughout the project. This date should be determined before beginning work. More frequent payments may be made during any period when the RE determines the value of work performed during the period is sufficient to warrant a payment. No payment is made when the value of work is less than \$1,000.

### Creating a Pay (Partial) Estimate

Roles that create *Pay Estimates*:

Resident Engineer

Field Engineer

Office Manager

### Fuel and Asphalt Cost Adjustments

Fuel and Asphalt Cost Adjustments are created separately after a *Pay (Partial) Estimate* is generated with eligible items to be paid. [See Asphalt / Fuel Cost Adjustments \(ACA / FCA\)](#)

### Creating a Pay (Partial) Estimate for Retainage Release

Roles that create *Pay Estimates*:

Resident Engineer

Field Engineer

Office Manager

### *Retainage*

The Department deducts and retains 5 percent from the total value of the work until the entire contract is completed. With the consent of the Surety the RE may reduce retainage to 1.5 percent of the original contract amount when no less than 95 percent of the work is complete

See [Error! Reference source not found..](#)

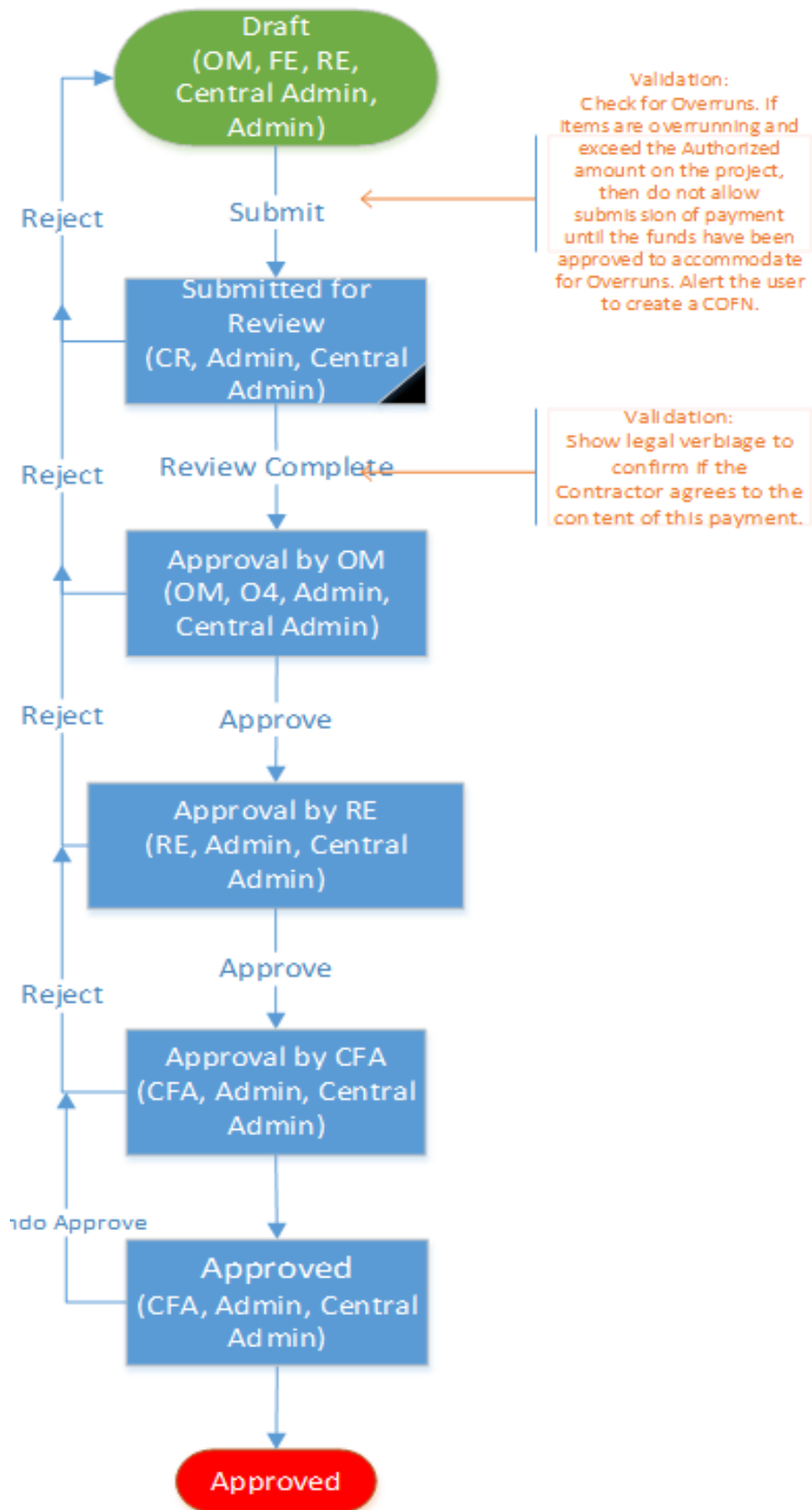
### *Retainage Release*

The Department deducts and retains 5 percent from the total value of the work until the entire contract is completed. With the consent of the Surety the RE may reduce retainage to 1.5 percent of the original contract amount when no less than 95 percent of the work is complete.

### *Subcontractor Retainage Release*

Retention for subcontracted work is paid upon satisfactory completion by the Department. Refer to UDOT 2017 Standard Specification, Section 01284 *Prompt Payment*.

# PAY (PARTIAL) ESTIMATE WORKFLOW



## Asphalt / Fuel Cost Adjustments (ACA / FCA)

[UDOT 2017 Standard Specification](#), Section 01282, *Payment* specifies compensation for fuel and asphalt cost adjustment due to price volatility.

ACA / FCA allow the payments to be adjusted current Asphalt Cost Price and Fuel Cost Price changes.

Contract items marked as **Is eligible for ACA?** or **Is eligible for FCA?** are eligible for Cost Adjustment. These items must be identified before the contract is **Locked**.

ACA / FCA can be used to set the percentage of Asphalt or Fuel quantity in the materials used in a particular Pay Estimate. The applicable Cost Adjustments due to Asphalt or Fuel cost fluctuations can be included.

### Creating an Asphalt Cost Adjustment

Before an *Asphalt Cost Adjustment* can be applied a *Pay (Partial) Estimate* must be generated with eligible items to be paid.

Roles that create an *Asphalt Cost Adjustment*:

Resident Engineer

Field Engineer

Office Manager

The values for **Base Price for Asphalt (BPA)** and **Estimated Price for Asphalt (EPa)** are automatically populated.

### Creating a Fuel Cost Adjustment Record

Before a *Fuel Cost Adjustment* can be applied a *Pay (Partial) Estimate* must be generated with eligible items to be paid.

Roles that create a *Fuel Cost Adjustment*:

Resident Engineer

Field Engineer

Office Manager

The values for **Base Price for Fuel (BPf)** and **Estimated Price for Fuel (EPf)** are automatically populated.

# Change Management

[UDOT 2017 Standard Specification](#), Section 00777 *Change Management* includes provisions for making changes to the contract during execution of the contract and determination of additional time and compensation for changed and extra work.

The Department, with FHWA's concurrence, has established that the following types of changes or extra work are considered major changes or major extra work:

1. Significant changes in the character of work in accordance with [UDOT 2017 Standard Specification](#), Section 00725 Scope of Work (Reference 23 CFR 635.109)
2. Revisions in conflict with approved standards
3. Revisions to pavement structural section (excluded are changes to nominal maximum size mixture for HMA, provided volumetric design  $N_{values}$  remain unaffected)
4. Revisions in geometric design (alignment, and/or grade), which affect the design speed, or change the structural design of a major structure
5. Revisions involving addition, deletion, or relocation of bridges
6. Any change requiring a revision in controlled access, including changes to median openings and changes requiring additional ROW (On uncontrolled access projects, changes in access locations will be considered minor as long as the change does not violate Administrative Rule [R930-6](#), *Access Management*).
7. Changes in any feature of design or construction which may be contrary to the intent of the environmental document (changes must be coordinated with the Region environmental staff)
8. Any change related to the type or quality of materials to be furnished and incorporated into the finished project on a major item

Changes and extra work that do not fall into the above types of changes are considered non-major.

A fully executed change order or Authorization to Proceed with Extra Work or Contract Revision (formerly Form C-107) is required before proceeding with any change or extra work. When emergency or unusual conditions justify, the District Engineer may give advance verbal approval and ratify such approval with formal approval, as soon as practicable. Reference 23 CFR [635.120](#).



## Request for Information (RFI)

RFIs can be initiated by the Contractor or the RE. RFIs initiated by the Contractor are submitted to the RE. The RE either responds to RFIs or forwards it to the appropriate party for response. The RE maintains an RFI log to track and document responses and dates. The log includes the date of submission, RFI ID No., the party initiating, the party responsible for responding, date a response is required, the final response and the date of response. The log should be reviewed at the weekly project meeting. All RFIs should be processed in a timely manner and the RE must document all conversations and responses regardless of whether a log is maintained. Refer to the [Construction Manual of Instruction](#) for more information.

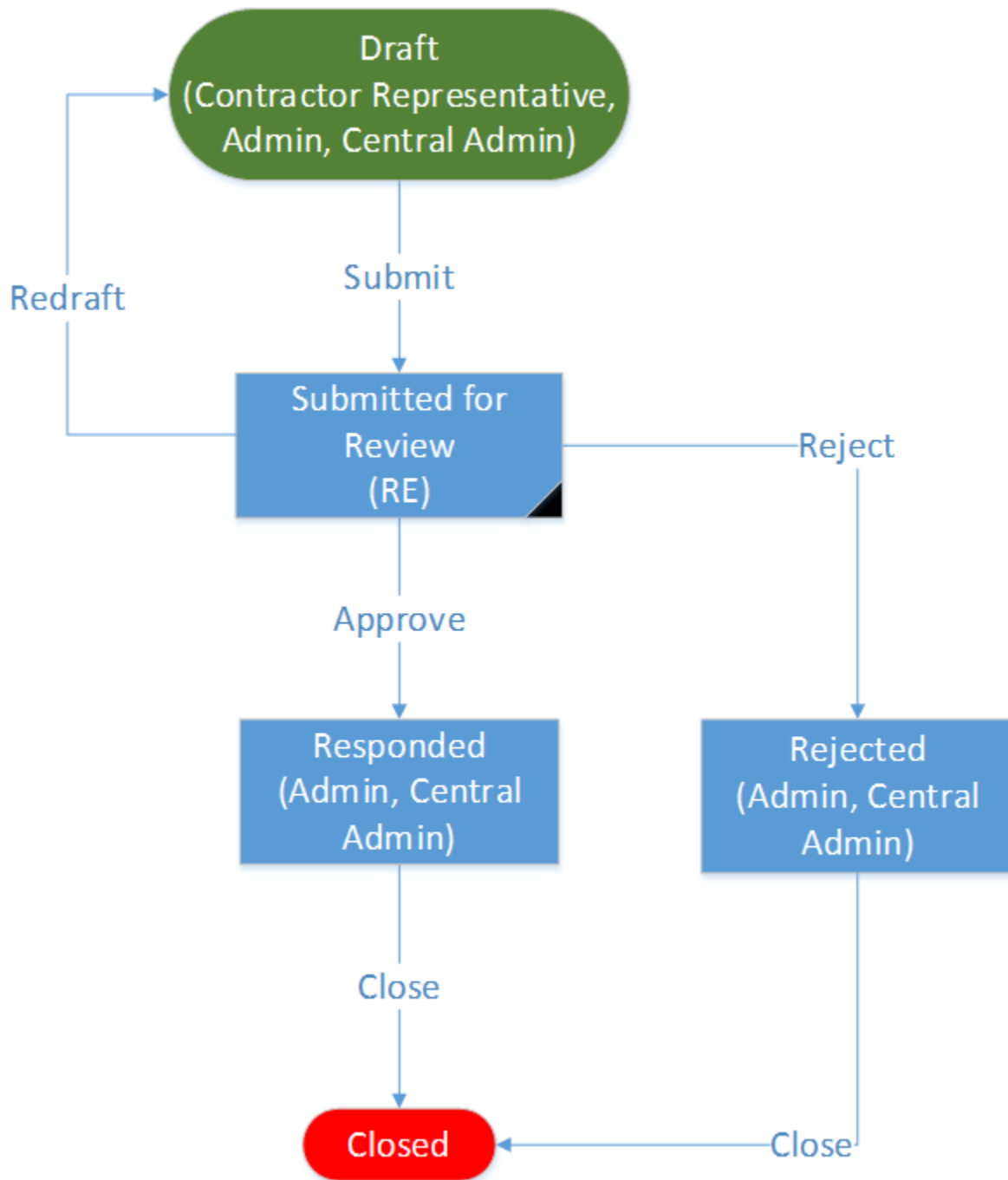
### Creating a Request for Information Item

Roles that create a *Request for Information*:

**Contractor Representative**

Resident Engineer

## REQUEST FOR INFORMATION WORKFLOW



## Potential Change Order (PCO)

According to [UDOT 2017 Standard Specification](#), Section 00777 Change Management, a Potential Change Order is used to document a potential risk that may result in a request for equitable adjustment in cost or time if said risk is realized.

There are four options in creating a *Potential Change Order*:

Potential Change Order  Request for Change Order  Anticipated Overrun/Underruns  Authorization to proceed

A **Potential Change Order** is generated when an event or situation resulting in a contract change is likely to occur.

A **Request for Change Order** is generated to begin the administrative process for Change Orders.

An **Anticipated Overrun/Underrun** is generated when an item is likely to overrun or underrun, such as an Untreated Base Course with a significantly higher unit weight that used in the design.

The **Authorization to Proceed** replaces Form **C 107** and is required to be generated and approved before proceeding with any change or extra work.

### Creating a Potential Change Order (PCO)

Roles that create a *Potential Change Order*:

**Contractor Representative**

Resident Engineer

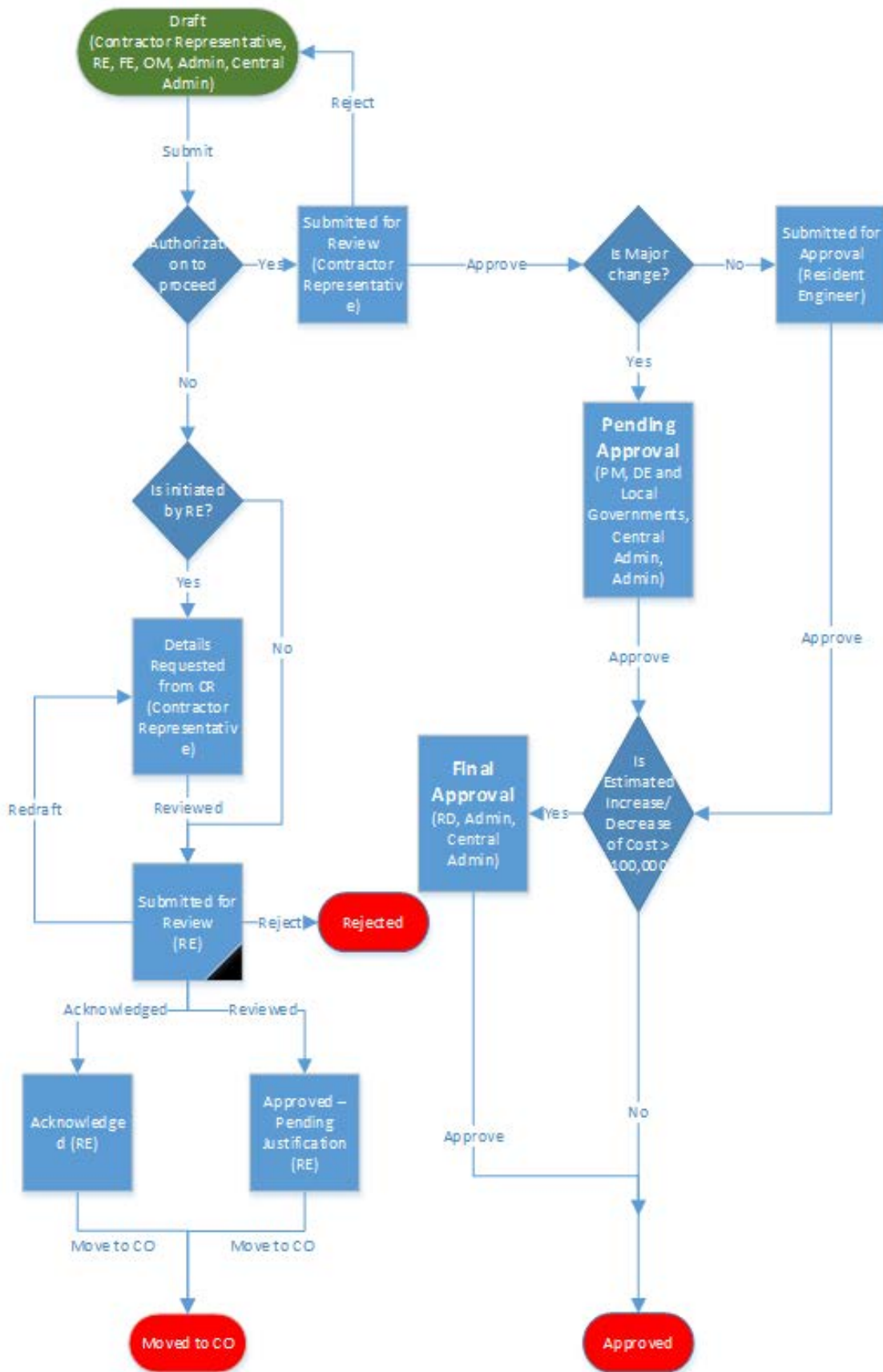
Field Engineer

Office Manager

The **PCO Type** selected will generate questions specific to that type.

The *Potential Change Order* can be associated to an existing [Request for Information \(RFI\)](#).

# POTENTIAL CHANGE ORDER WORKFLOW



## Change Order

According to [UDOT 2017 Standard Specification](#), Section 00777 Change Management, a *Change Order* is an order issued by the Department after execution of the contract that alters the original contract and is agreed to by the Department and Contractor.

### Creating a Change Order

Roles that create a *Change Order*:

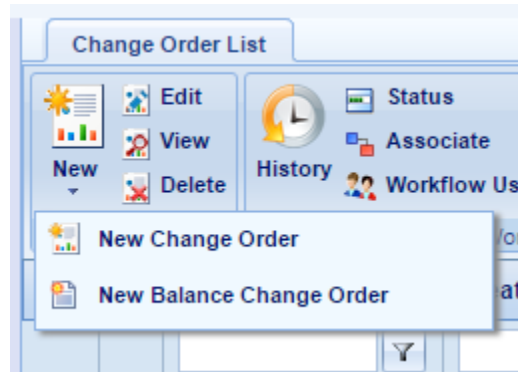
Resident Engineer

Field Engineer

Office Manager

The *Change Order Details* page is displayed.

The *Change Order* can be associated with a *Potential Change Order (PCO)* or a *Request for Information (RFI)*



with a *Request*

### Contract Information

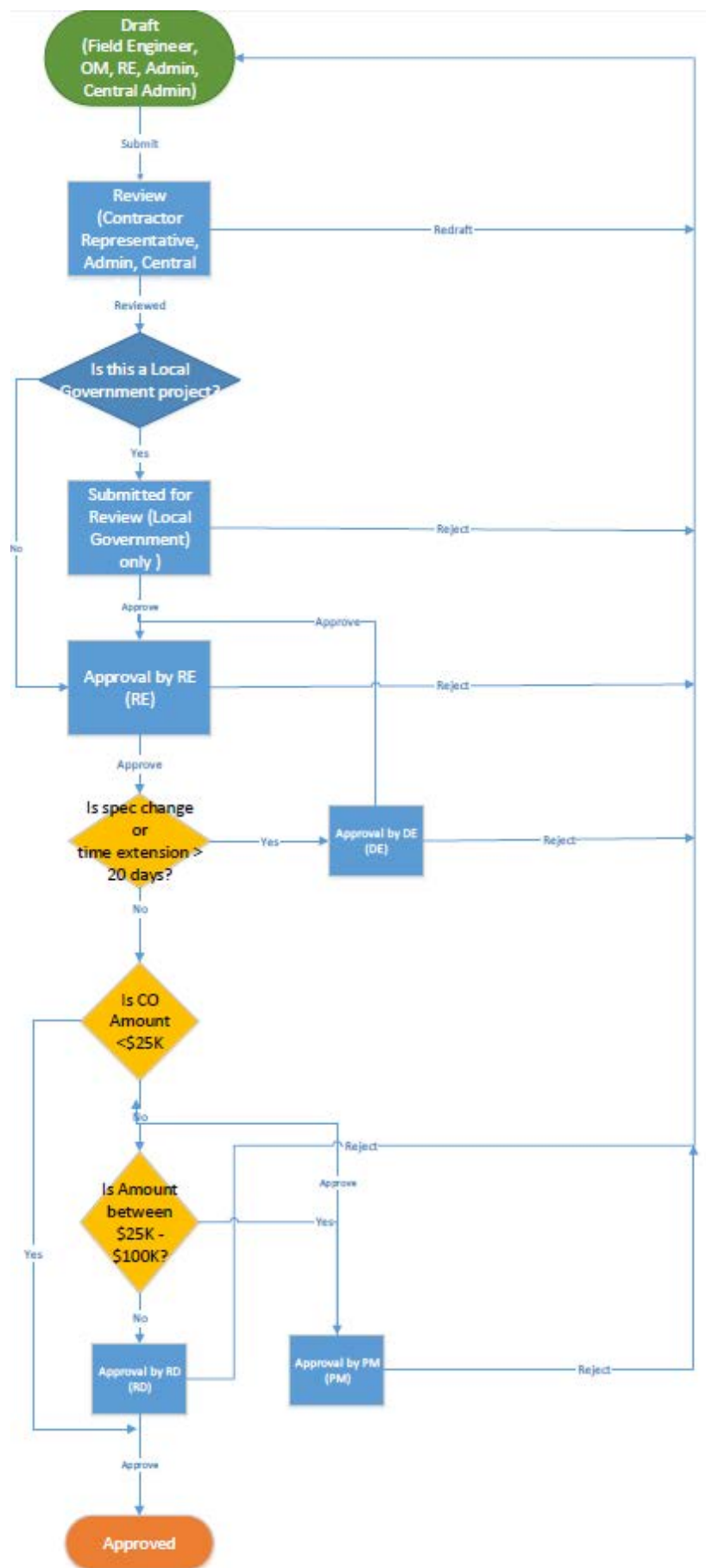
The *Change Order* was formerly documented on **Form C 100**, the *Long Description* and *Reasons for Change Order* were documented on **Form C 101**, the *Resident Engineer's Cost Analysis* was on **Form C 103**, and *Special Provisions*, formerly **Form C 102**, would be attached when required.

### Contract Time Information

### Change Order Items

Add new items to the *Change Order*, modify existing *Contract Items* or convert *Non-Contract Items* to *Contract Items*.

# CHANGE ORDER WORKFLOW



## Construction Overrun Funding Need (COFN)

If the amount due the Contractor exceeds the original contract amount, the RE must prepare a *Construction Overrun Funding Need (COFN)* request for additional funding. A message is generated on the partial estimate that overruns stating a COFN is necessary.

### Creating a COFN

Roles that create a COFN:

Resident Engineer

Office Manager

**Current Funding Needed** is the amount required to close current partial estimate.

Current Funding Needed

**Future Funding Needed** is the amount anticipated for future estimates. Another COFN is required to close the partial estimate for this quantity.

Future Funding Needed

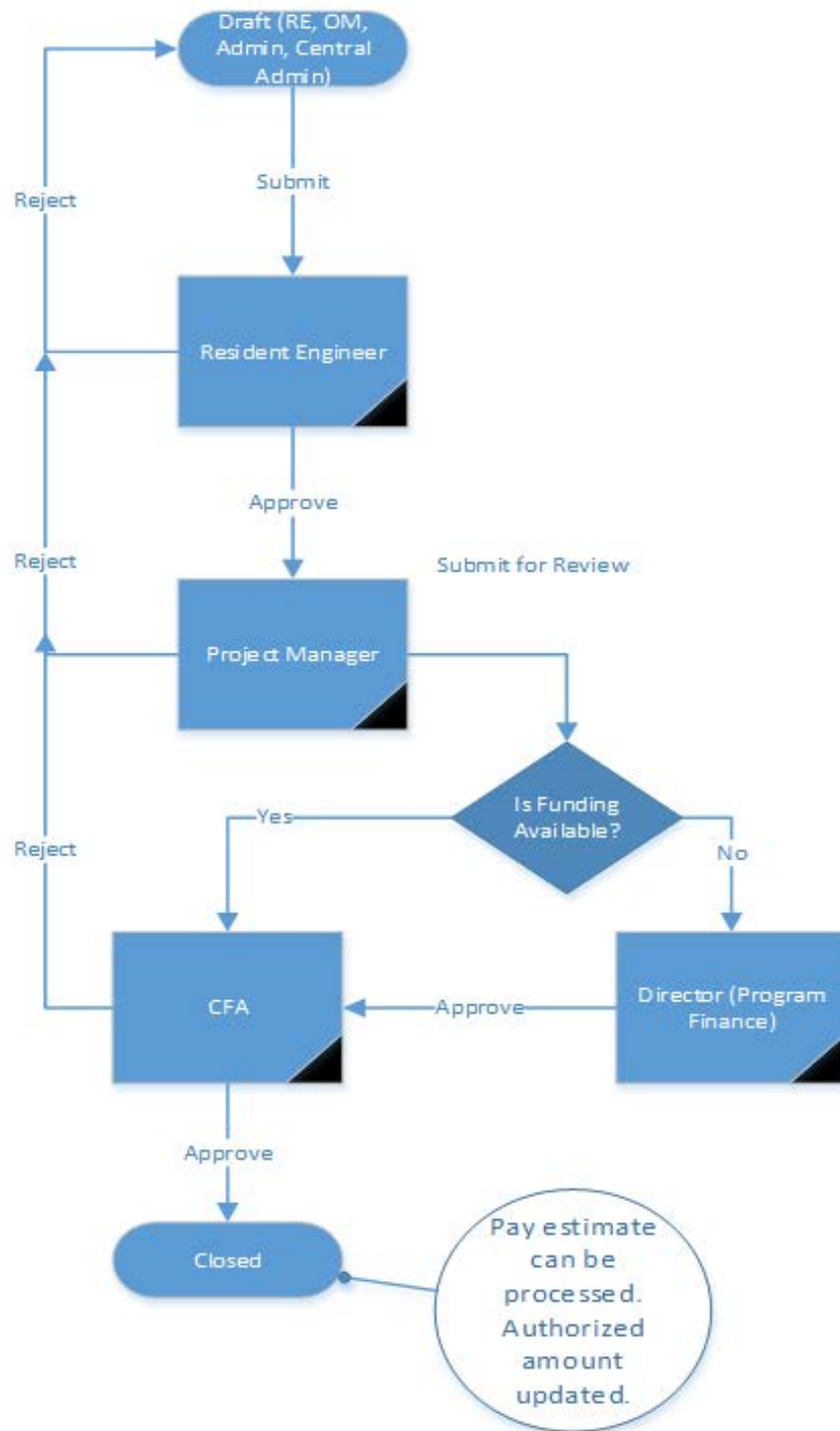
Total Current Funding Request

**Total Current Funding Request** is only for the current estimate.

**Change Order Information** and **Overrunning Items Information** are included for information only.



# COFN WORKFLOW



## Design Change

According to [UDOT 2017 Standard Specification](#), Section 00777 Change Management, a *Design Change* is a revision to the contract issued by the Department directing the Contractor to proceed with new or revised work including an intended payment methodology for the new or revised work.

### Creating a Design Change Item

Roles that create a *Design Change* item:

Resident Engineer

Field Engineer

## Design Change Impact of Change Options

After a *Design Change* is submitted for review the RE must complete the section marked **\*Section to be filled by Resident Engineer only.**

Select one of the following from the dropdown:

**Level 1 (Copy sent to design)** – RE approved design change without concurrence such as a field change.

**Level 2 (Concurrence by design)** – RE to confer with and copy Project Design Engineer on design change made at field level.

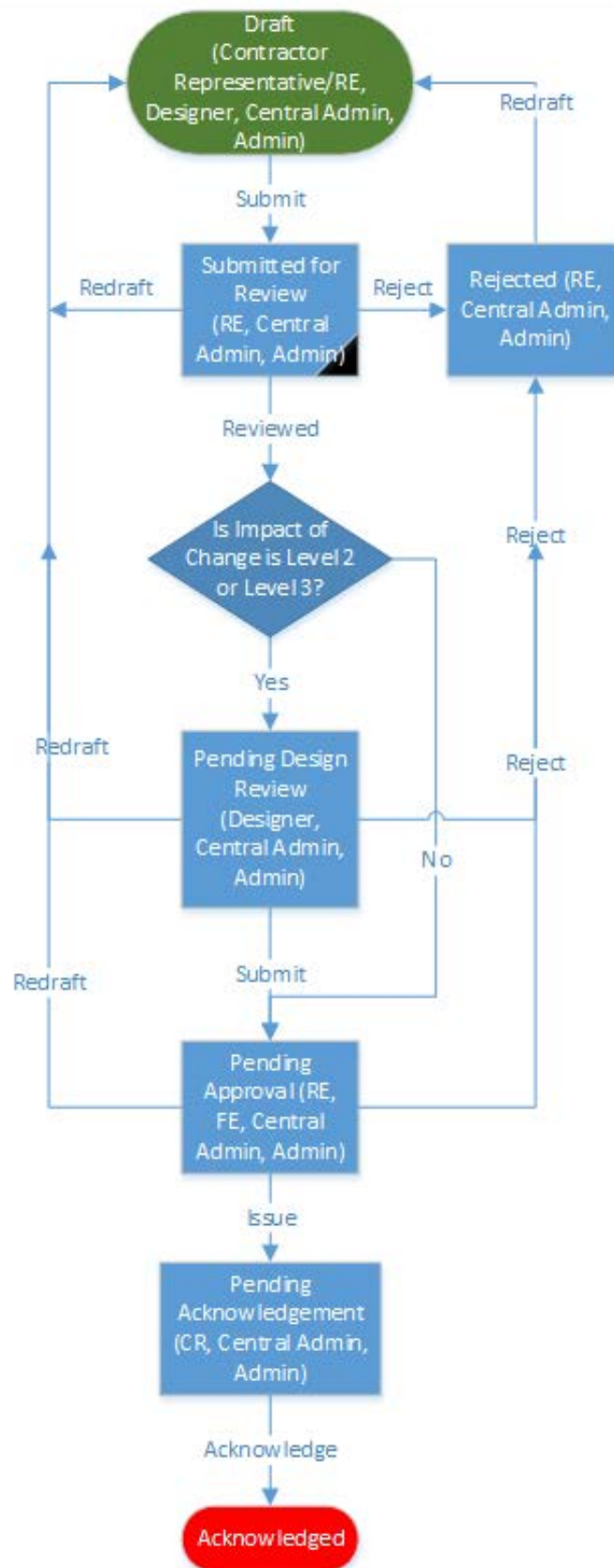
**Level 3 (New Design)** – RE to obtain Project Design Engineer or Discipline Expert concurrence on proposed design change or RE requests Project Design Engineer or Discipline Expert to perform design changes.

\*Section Below to be filled by resident engineer only

Impact of Change *	<input type="text" value="▼"/>
Final Resolution *	<input type="text" value="Level 1 (Copy sent to design)"/> <input type="text" value="Level 2 (Concurrence by design)"/> <input type="text" value="Level 3 (New Design)"/>

Final Resolution entry

# DESIGN CHANGE WORKFLOW



## Exception

According to [UDOT 2017 Standard Specification](#), Section 00777 Change Management, an *Exception* is a waiver of one or more contract requirements which may include instructions or interpretations. *Exceptions* do not involve adjustment to the contract value or time duration.

Documenting *Exceptions* benefit both the Department and the Contractor if a change in Contract Management occurs. This information also helps the Department track repeated *Exceptions* that may assist in clarifying or revising a standard.

### Creating an Exception Item

Role that creates an *Exception* item:

Resident Engineer

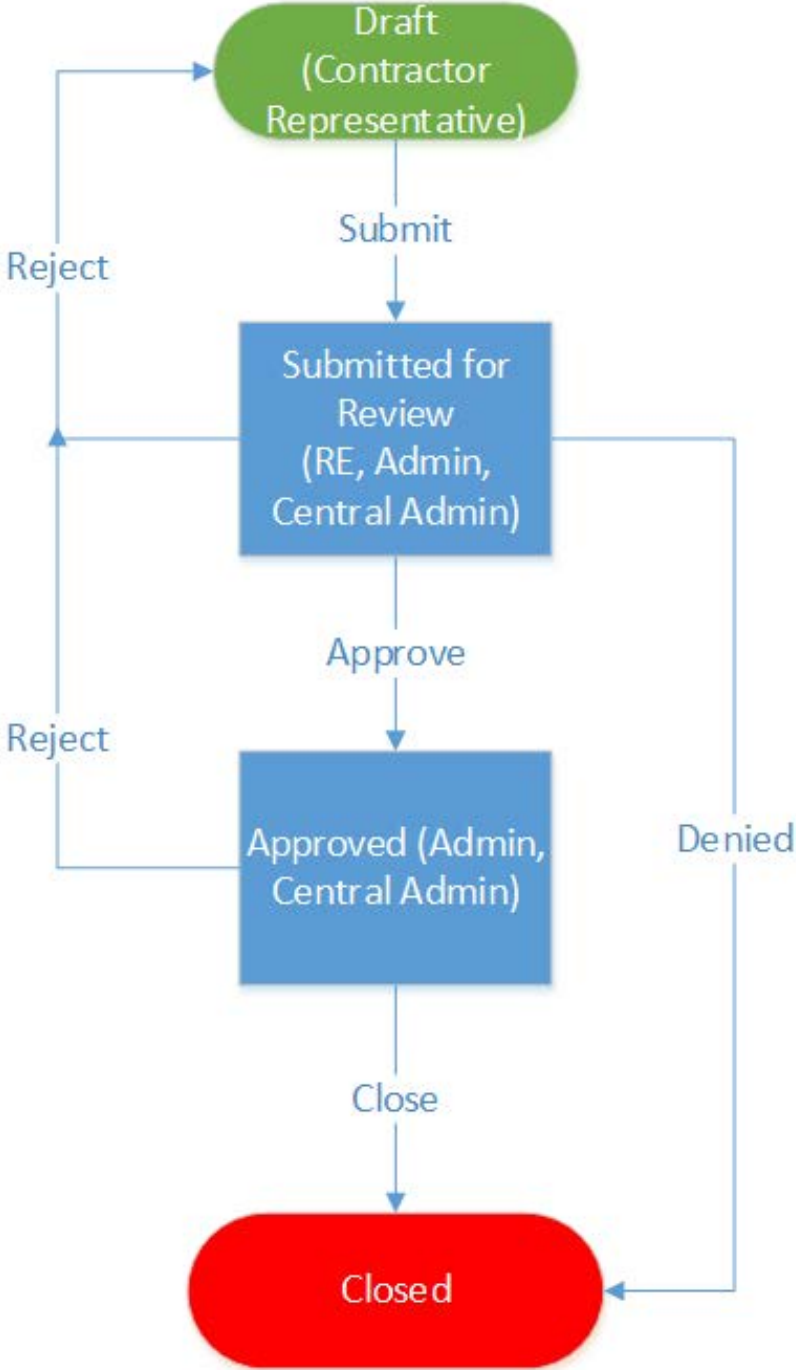
*Additional Requirements* is available to the RE to complete after the *Exception* is submitted.

#### *Mobile Apps*

*Exception* items are available on the [Mobile Application \(App\)](#).

Remember: **Sync** the mobile device daily.

# EXCEPTIONS WORKFLOW





## Force Account

According to [UDOT 2017 Standard Specification](#), Section 00777 Change Management, a Force Account may be required if an agreed upon price cannot be negotiated for changed or added work or for the convenience of the Department.

### Creating a Force Account Number in the Force Account List

Roles that create a *Force Account Number*:

Resident Engineer

Field Engineer

Office Manager

### Creating a Force Account Report

Roles that use the *Force Account*:

Resident Engineer

Field Engineer

Office Manager

Field Inspector 4

Field Inspector 1-3

#### *Mobile Apps*

*Force Account Reports* are available on the [Mobile Application \(App\)](#).

Remember: **Sync** the mobile device daily.

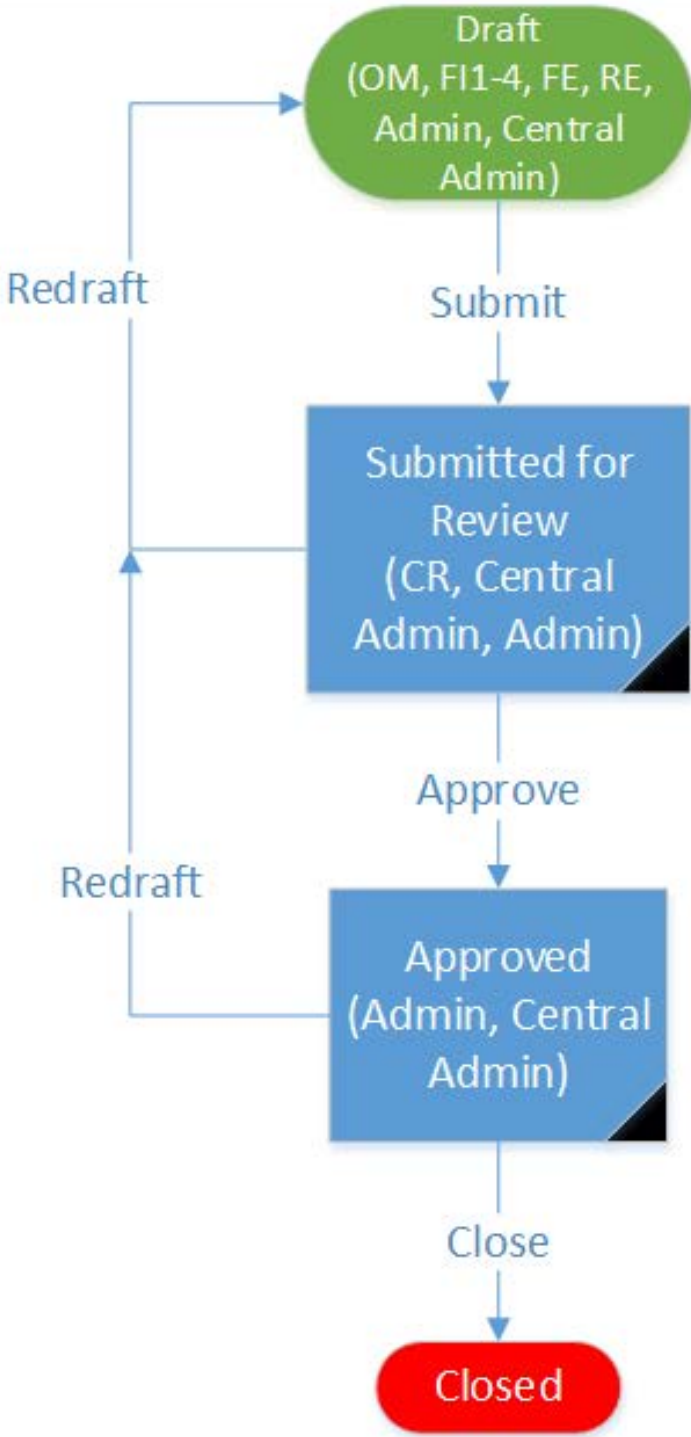
### Copying a Force Account Report

*Force Account Reports* for ongoing work can be copied and edited for subsequent days.

Select the report to be copied by checking box and clicking **Copy**. Edit for current work day.

Verify that the *Force Account Report* shows the correct date. A copied *Force Account Report* or one synced from a mobile device on a later date may show the incorrect date.

# FORCE ACCOUNT WORKFLOW





## Issue Tracking

Upon notification of physical completion from the Contractor, the RE performs the final inspection and identifies any necessary corrective work (punch list).

### Punch List

A punch list is a list of tasks or "To-do" items required to complete an activity or project. Near the end of a project, after physical completion, an inspection is conducted and a punch list is created to document incomplete or unsatisfactory work items and verify their completion.

### Creating a Punch List Item

Roles that create *Punch list* items:

Resident Engineer

Field Engineer

Field Inspector 4

## Work Flow Summary

Task	Draft/Initiator	Review	Approve/Respond Close	Review	Approve/Acknowledge Close
<i>Change Order</i>	RE, FE, OM	Contractor Representative Local Gov't	RE	Spec Change/Time Ext? <\$25K \$25K-\$100K >\$100K	District Engineer RE Project Manager Region Director
<i>Construction Overrun Funding Need</i>	RE, OM	Project Manager		Funding Available? Yes / No	Central Financial Analyst  Director Program Finance
<i>Design Change</i>	Contractor Representative RE Designer	RE Designer or UDOT Designer/Expert		Contractor Representative Central Administration	Contractor Representative
<i>Exceptions</i>	Contractor Representative	RE Central Admin	Central Administration		
<i>Force Account</i>	RE, FE, OM FI 1-4	Contractor Representative	Central Administration		
<i>Potential Change Order</i>	Contractor Representative RE, FE, OM	Contractor Rep  Initiated by RE? Request details		RE	RE initiates Change Order
<i>Request for Information</i>	Contractor Representative	RE	RE		
<i>Daily Progress Report</i>	RE, FE, FI 1-4	FI 4, FE, RE	FE, RE		
<i>Item Postings</i>	FI 1-4, FE, RE, OM	RE, FE, OM	FE, RE	Overrunning Item?	RE, FE, OM
<i>Materials on Hand</i>	Office Manager	OM	OM		
<i>Pay (Partial) Estimates</i>	OM, FE, RE	Contractor Representative	Resident Engineer		Central Financial Analyst
<i>Purchase Order</i>	Central Financial Analyst	Central Admin	Central Financial Analyst		
<i>Expenses</i>	Central Financial Analyst	Office Manager FI 1-4	Resident Engineer	Central Financial Analyst	
<i>Monthly Status of Time Working Day</i>	OM, FE, RE	Contractor Representative	Central Administration		
<i>SWPPP</i>	FI 1-4, FE, RE	Contractor Representative		Corrective Actions?	RE
<i>Checklists</i>	FI 1-4, FE, RE	FE, RE	FE, RE		

## Request to Sublet Work

Requests to sublet work are submitted to the Resident Engineer. A separate request form is required for each subcontractor. Requests to sublet work must be reviewed and approved before the subcontractor performs any work on the project. Before the RE approval, requests to sublet work must be reviewed to verify:

1. The maximum allowable percent sublet is not exceeded.
2. Compliance with the original Disadvantaged Business Enterprise (DBE) commitment (Federal-aid projects).

## Adding a Subcontractor



# REQUEST TO SUBLET WORK

