

A blue-tinted map of North America with a grid overlay. A black dot is placed over the location of Denver, Colorado, with the word "DENVER" written in black capital letters to its right.

● DENVER

DIA CLOSEOUT PROCESS & PROCEDURES

Mary Henderson-Reps, Russ Smith, & Russ Carr
Contract Administrators
November, 2014



DENVER INTERNATIONAL AIRPORT
TOGETHER WE SOAR

CLOSEOUT PROCESS

DENVER

- Closeout is defined as being **“The period that represents the time when the Project Manager reviews the Project, verifies that all the Contract Document requirements have been met and the systems or facility is functioning as intended.”**
- The Closeout Process begins at the “beginning” of the Job.
- Five Steps to the Process:
 - Step 1 – Issuance of Closeout Checklist to Contractor
 - Step 2 – Substantial Completion
 - Step 3 – Final Completion
 - Step 4 – Advertisement
 - Step 5 – Retention Billing



Step 1 – Closeout Checklist to Contractor

- The Closeout Checklist should be reviewed by the DIA Project Manager (PM) and Contract Administrator (CA) and edited for any Non-Applicable Items.
- The CA issues the Closeout Checklist (CM-75) within the Bid Documentation. The purpose of this change is to **begin the Closeout Process at the beginning of the Project.**
- Contractor reviews and provides a Serial Letter stating which Items they believe are Non-Applicable or can be closed and why.
- Contractor provides required Closeout documentation throughout the Project or Task.
- Originals must be provided for the Consent of Surety and all Subcontractor Lien Releases.



Step 2 – Substantial Completion

- **The City & County of Denver General Conditions (Yellow Book) defines Substantial Completion as “the Work has progressed to the point that the City can take beneficial occupancy or utilize the Work for the purpose that is intended, and the Work complies with all applicable coded and regulations, including if required, issuance of a Certificate of Occupancy, or certificate of suitability for use from appropriate governmental agencies, as determined by the Manager in his sole discretion.”**
- Contractor will request Substantial Completion on their company’s letterhead accompanied by the Punch List (CM-74) prepared during the Walk-thru with the Project Managers, Designer of Record, and Quality Assurance Inspector (QA).
- CA will fill out the Request for Substantial Completion to be routed for signatures.



Step 3 – Final Completion

DENVER



- **Final Completion will be issued when the following criteria have been met:**
 - Contractors portion of the Closeout Checklist is complete.
 - All Original Subcontractor Final Lien Releases have been provided by the Contractor.
 - All RFI's have been answered and Submittals have been provided, accepted and the Logs have been closed.
 - All NCR's and Deficiencies have been addressed, remediated, and accepted by QA and DIA's PM.
 - All Contractors Change Requests and Change Orders have been issued and executed, including the Final Reconciliation Change Order if applicable.
 - Deductions have been made for liquidated damages or work not provided if applicable.
 - Final Completion inspection has been made and there are no open items on the Final Punch List.
 - Final Punch List has been signed off by the PM, DOR, and QA.
 - Disposition of all failing tests have been agreed to or remediated and signed off.
 - All Permits have been signed off, closed and provided to the Project Management Team (PMT).
 - All Owner training has been completed to DIA's end user satisfaction.
 - All Spare Parts and O & M Manuals have been turned over to DIA if applicable.

5



DENVER INTERNATIONAL AIRPORT
TOGETHER WE SOAR

Step 4 – Project Advertisement

- When Final Completion and Acceptance has been issued and executed, the CA will Request Advertisement from Business Management Services (BMS).
- Contractors Consent of Surety from their Bond Issuance company must be included. This can be attained with the executed Substantial Completion document.
- Advertisement will be scheduled and run for 21 consecutive days giving any parties with claims to the Project an opportunity to file for Claim.
- A Notice of Settlement is issued by BMS and notification sent to the PMT.



Step 5 – Retention Billing

DENVER

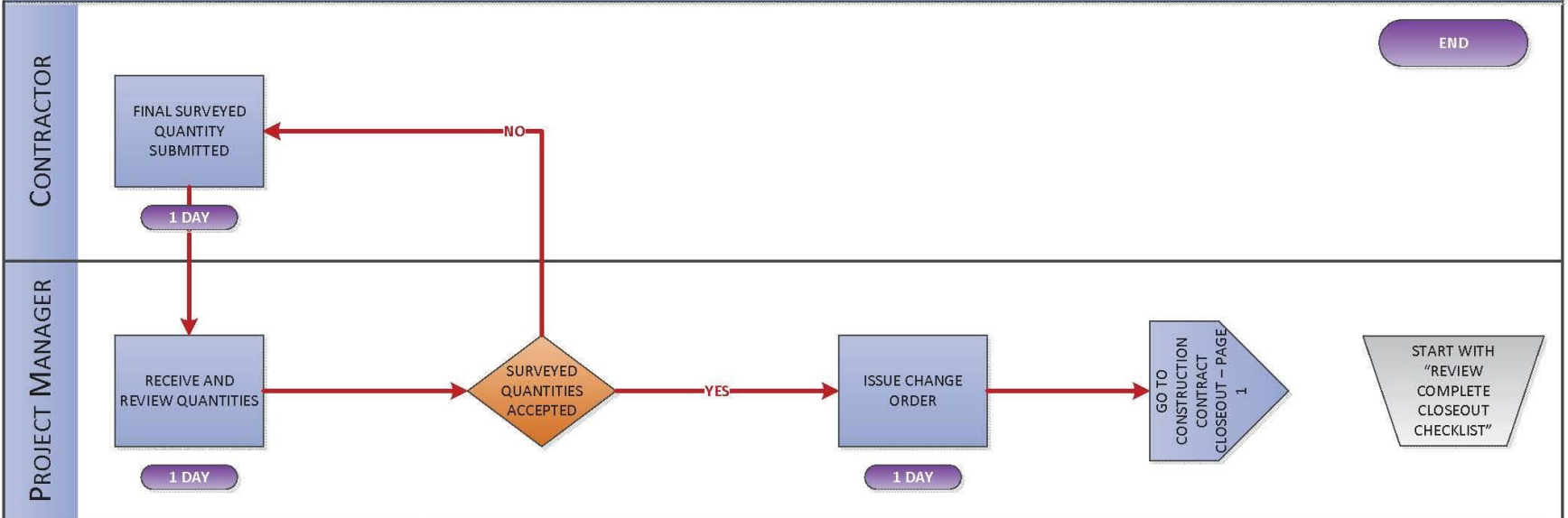
- **Final Billing or Retention billing may be requested by the Contractor when the following criteria have been met:**
 - Executed Final Completion.
 - Contractor’s Settlement Publication Advertisement has expired.
 - Sales Tax Exemption Certificate has been provided.
 - Original Final Lien Releases have been provided.
 - Completed Closeout Checklist.
 - Original Consent of Surety has been provided.
 - Contractors Affidavit of Completion has been provided.
 - Statement of Accounting from the Contractor has been provided.
- Billing for Retention is essentially the same as all other billings, but must be billed separately from all other Tasks or billings.
- Once Retention has been billed and paid, other than any Warranty work that arises, the Project is considered closed.



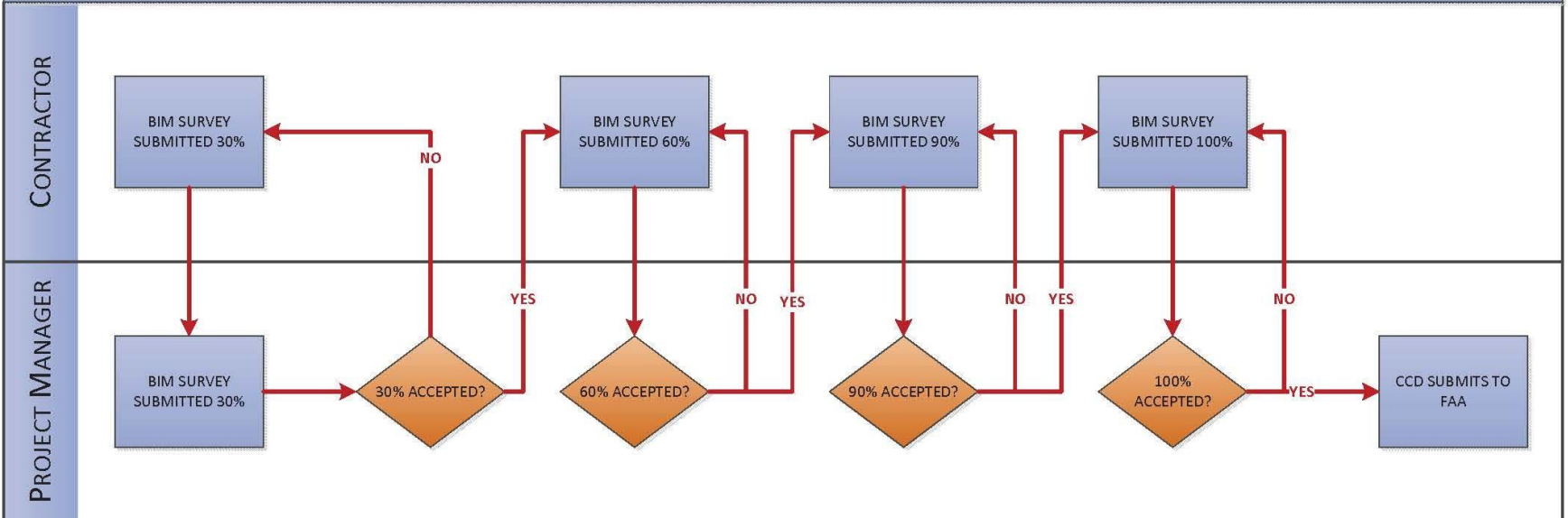
FAA CONTRACT CLOSEOUT

PROCESS TIME = 30 DAYS + CLOSEOUT 90 DAYS = 120 CAL. DAYS

SURVEY FINAL QUANTITY VERIFICATION



BIM PROJECT QUANTITY VERIFICATION (RECORD DRAWINGS)



DENVER INTERNATIONAL AIRPORT
2013 ANNUAL AIRFIELD PAVEMENT REHABILITATION
Final Report (AIP-81)



MATERIAL TEST REQUIREMENTS

PROJECT: 201208796 - 2013 Annual Airfield Pavement Rehabilitation
 CONTRACTOR: Interstate Highway Construction, Inc.
 QUALITY ASSURANCE: Kumar and Associates

Material	Quantity	Test Type	Acceptance / Control Tests	Test Frequency	# of Tests Required	# of Tests Taken	# of Retests Taken	# of Passing Tests	# of Outstanding Failures	
P-401a Bituminous Surface Course	319 tons	Air Voids	Acceptance	500 tons	2	9	0	9	0	
		Stability	Acceptance	500 tons	2	9	0	9	0	
		Flow	Acceptance	500 tons	2	9	0	9	0	
		Mat Density	Acceptance	500 tons	2	9	0	9	0	
		Joint Density	Acceptance	500 tons	Varies	0	0	0	0	
		Smoothness	Acceptance	2,000 sy	0	Performed by QA Inspector in the field				
		Grade	Acceptance	2,000 sy	0	Performed by QA Inspector in the field				
		Thickness	Acceptance	500 tons	2	9	0	9	0	
P-401b Bituminous Base Course	818 tons	Air Voids	Acceptance	500 tons	2	9	0	8	a 1	
		Stability	Acceptance	500 tons	2	9	0	9	0	
		Flow	Acceptance	500 tons	2	9	0	9	0	
		Mat Density	Acceptance	500 tons	2	9	0	9	0	
		Joint Density	Acceptance	500 tons	Varies	0	0	0	0	
		Smoothness	Acceptance	2,000 sy	1	Performed by QA Inspector in the field				
		Grade	Acceptance	2,000 sy	1	Performed by QA Inspector in the field				
		Thickness	Acceptance	500 tons	2	9	0	9	0	
P-501 Portland Cement Concrete Pavement	16,181 sy	Flexural Strength	Acceptance	530 sy	31	60	0	60	b 0	
		Thickness	Acceptance	1,059 sy	15	30	0	29	b 1	
		Smoothness	Acceptance	Entire surface		Performed by QA Inspector in the field				
		Grade	Acceptance	Entire surface		Performed by QA Inspector in the field				
		Edge Slump	Acceptance	All edges		Performed by QA Inspector in the field				
		Dowel Bar Alignment	Acceptance	All dowel bars		Performed by QA Inspector in the field				
P-610 Structural Concrete		Compressive Strength	Acceptance		Varies	20	0	20	0	

All deductions are referenced in Part VII.

- a) This Air Void test failure was accounted for in the PWL calculation sheet as shown on the following sheets for P-401.
- b) This one (1) Thickness test failure was accounted for on the PWL calculation sheets as shown on the following sheets for P-501.
One (1) test was in a lot with an average thickness of 17.3" resulting in 100% pay for the lot.



Acceptance Test Summary P-401 (Surface Course)
 Denver International Airport
 Denver, Colorado

June 2014
 201208798
 2013 Pavement Rehab

Unit Price Mix: \$108.00 / ton AC: Cost incidental	Acceptance Test			Control Test			
	Marshall Air Voids (%)	Mat Density (%)	Thickness (inch)	Marshall Unit Wt. (pcf)	Stability (lbs)	Flow (.01in)	Joint Density (%)
Specification	2-5	98.30%			>1,800	8-16	93.30%
Date: 9/29/2013	Lot	Average					
Lot: 1	3.56	98.22%	2.560	151.9	3473.00	13.70	N/A
Location: WA De-ice Pad	Standard						
Lift: Surface	Deviation	1.206	1.200		146.521	0.67	N/A
% Pay: 100%	QU	1.1980				3.5000	
Tons Mix: 370	QL						
Ton AC: N/A		1.2902	1.6026		146.5210	8.5000	N/A
Total Pay: \$ 39,220.00	PWL	100.00	100.00		100.00	100.00	N/A
Date:	Lot	Average					
Lot: 2	3.56	98.22%	2.560	151.9	3473.00	13.70	N/A
Location: Surface	Standard						
Lift: Surface	Deviation	1.206	1.200		146.521	0.67	N/A
% Pay:	QU	1.1980				3.5000	
Tons Mix:	QL						
Ton AC:		1.2902	1.6026		146.5210	8.5000	N/A
Total Pay:	PWL	100.00	100.00		100.00	100.00	N/A

ACCEPTANCE TESTS

Denver International Airport
P-501 Non-Reinforced Concrete Summary
Design Thickness = 17"
Specified Flexural Strength = 700 psi

1	CORE THICKNESS (INCHES)				FLEXUAL STRENGTH				TOTAL % PAY	LOT QUANTITY	UNIT PRICE	TOTAL PAYMENT	
	LOT AVG	PWL	% PAY	28 DAY		LOT AVG	PWL	% PAY					
				Sample 1	Sample 2								
A	17.4				720	755							
B	17.5				760	735							
C	17.3				800	750							
D	18.7	17.7	97	106.00%	735	715	746.25	97	106.00%	100.00%	2,897.00	\$121.00	\$326,337.00
2	CORE THICKNESS (INCHES)				FLEXUAL STRENGTH				TOTAL % PAY	LOT QUANTITY	UNIT PRICE	TOTAL PAYMENT	
	LOT AVG	PWL	% PAY	28 DAY		LOT AVG	PWL	% PAY					
				Sample 1	Sample 2								
A	17.7				745	750							
B	17.7				815	810							
C	16.8				705	810							
D	17.0	17.3	85	103.40%	800	815	781.25	85	97.50%	100.00%	1,891.00	\$121.00	\$228,811.00
3	CORE THICKNESS (INCHES)				FLEXUAL STRENGTH				TOTAL % PAY	LOT QUANTITY	UNIT PRICE	TOTAL PAYMENT	
	LOT AVG	PWL	% PAY	28 DAY		LOT AVG	PWL	% PAY					
				Sample 1	Sample 2								
A	18.2				870	840							
B	17.8				845	810							
C	17.9				800	795							
D	18.3	18.1	100	106.00%	790	780	813.75	100	106.00%	100.00%	2,718.00	\$121.00	\$328,636.00
4	CORE THICKNESS (INCHES)				FLEXUAL STRENGTH				TOTAL % PAY	LOT QUANTITY	UNIT PRICE	TOTAL PAYMENT	
	LOT AVG	PWL	% PAY	28 DAY		LOT AVG	PWL	% PAY					
				Sample 1	Sample 2								
A	18.0					835							
B	17.1				790	810							
C	17.2				800	800							
D	17.1	17.4	100	106.00%	790	810	805.00	100	106.00%	100.00%	2,053.00	\$121.00	\$248,413.00

