

CHANGE ORDER MEMORANDUM

CEM-4903 (REV 06/2019)

DATE _____

TO			FILE	
FROM			CONTRACT NO. _____	
			CO-RTE-PM _____	
			FED NO. _____	
CHANGE ORDER NO.	SUPPLEMENT NO.	CATEGORY CODE	CONTINGENCY BALANCE (Including this change)	
			\$ _____	
CHANGE ORDER AMOUNT			HEADQUARTERS APPROVAL REQUIRED? <input type="checkbox"/> YES <input type="checkbox"/> NO	
\$ _____ <input type="checkbox"/> INCREASE <input checked="" type="checkbox"/> DECREASE				
SUPPLEMENTAL FUNDS PROVIDED			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input type="checkbox"/> YES <input type="checkbox"/> NO	
\$ _____				
ORIGINAL CONTRACT TIME	TIME ADJUSTMENT THIS CHANGE	PREVIOUSLY APPROVED TIME ADJUSTMENTS	PERCENTAGE TIME ADJUSTED (Including this change)	TOTAL # OF UNRECONCILED DEFERRED TIME (Including this change)
_____ DAY(S)	0 DAY(S)	_____ DAY(S)	_____ %	_____

THIS CHANGE ORDER PROVIDES FOR (Use additional pages as needed):
 Allowing concrete pavement that does not comply with the pavement smoothness mean roughness index (MRI) requirement in Section 40-1.01D(8)(c) (i) "General" of the 2015 and 2018 *Standard Specifications* be accepted with a deduction, provided it complies with the new smoothness acceptance ranges using the MRI values of the revised specification. In addition, the area of localized roughness (ALR) acceptance requirement will be increased from 120 to 160 inches per mile.

CPD 19-X incorporates the new smoothness acceptance ranges using the MRI values of the revised specification. Upon completion of paving work, the contractor may request to take disincentive pay deductions rather than grinding to meet acceptable smoothness requirements of the existing specification. The existing specification has MRI requirements equal to MRI 60 inches per mile. The deductions will start at MRI 60 and extend to the upper limit of the acceptance values of the revised specification. In addition, the ALR acceptance requirement will be increased from 120 to 160 inches per mile. Additional funds are not available for incentive payments.

In the revised specification, pavement smoothness requirements are defined for two concrete pavement types used for new alignments or reconstruction and for widening or lane replacements. The four pavement scenarios are: Continuously Reinforced Concrete Pavement (CRCP) New Alignment, CRCP Widen, Jointed Plain Concrete Pavement (JPCP) New Alignment, and JPCP Widen. The attached four sample change orders address the four concrete pavement scenarios, incorporating the new smoothness acceptance requirements and associated deductions instead of grinding. The deductions are prorated from the required smoothness of MRI 60 inches per mile in the existing specification to the smoothness deduction limit defined in the revised specification.

The attached change orders can be summarized as follows:

CRCP New Alignment or Reconstruction:

Existing contract specification smoothness requirements of maximum MRI = 60 in/mi and maximum ALR = 120 in/mi

- Change order allows prorated deductions instead of grinding
- Prorated deduction zone for MRI 60 - 80; \$112.50 per MRI point
- Maximum deduction = \$2,250 for a 0.1 mile of a lane
- Mandatory correction if MRI > 80 in/mi
- Mandatory correction if ALR > 160 in/mi

CRCP Widen:

Existing contract specification smoothness requirements of maximum MRI = 60 in/mi and maximum ALR = 120 in/mi

- Change order allows prorated deductions instead of grinding
- Prorated deduction zone for MRI 60 - 90; \$75.00 per MRI point
- Maximum deduction = \$2,250 for a 0.1 mile of a lane
- Mandatory correction if MRI > 90 in/mi
- Mandatory correction if ALR > 160 in/mi

JPCP New Alignment or Reconstruction:

Existing contract specification smoothness requirements of maximum MRI = 60 in/mi and maximum ALR = 120 in/mi

- Change order allows prorated deductions instead of grinding
- Prorated deduction zone for MRI 60 - 90; \$75.00 per MRI point
- Maximum deduction = \$2,250 for a 0.1 mile of a lane
- Mandatory correction if MRI > 90 in/mi
- Mandatory correction if ALR > 160 in/mi

CHANGE ORDER MEMORANDUM

CEM-4903 (REV 06/2019)

DATE

CHANGE ORDER NUMBER	SUPPLEMENT NUMBER	CONTRACT NUMBER
---------------------	-------------------	-----------------

JPCP Widen:

Existing contract specification smoothness requirements of maximum MRI = 60 in/mi and maximum ALR = 120 in/mi

- Change order allows prorated deductions instead of grinding
- Prorated deduction zone for MRI 60 - 90; \$50.00 per MRI point
- Max deduction = \$1,500 for a 0.1 mile of a lane.
- Mandatory correction if MRI > 90 in/mi
- Mandatory correction if ALR > 160 in/mi

Reason for Change

Caltrans is implementing an incentive/disincentive specification for concrete pavement smoothness. The revised specification recognizes different smoothness requirements for the two concrete pavement types (CRCP and JPCP). Pavement smoothness requirements are affected when matching existing adjacent lanes, so widening projects where the new edge of pavement matches the existing pavement will have slightly rougher pavement. This is reflected in the target smoothness MRI values for the four concrete pavement scenarios. Additionally, the revised specification encourages better concrete paving practices and smoother pavement with incentives and requires payment deductions for rougher pavement. There should be no contract time extension for implementing the contractor requested change order.

Concurrence

FHWA concurrence, dated July XX, 2019

Method of Payment

Adjustment at Agreed Lump Sum

The agreed lump sum \$<lump sum price> is based on an analysis of pavement smoothness MRI_{final} values filed in the project records.

Time Adjustment

This change order will not affect the controlling activity; therefore, no time adjustment is warranted.

CHANGE ORDER MEMORANDUM

CEM-4903 (REV 06/2019)

DATE _____

CHANGE ORDER NUMBER	SUPPLEMENT NUMBER	CONTRACT NUMBER
CONCURRED BY		ESTIMATE OF COST
CONSTRUCTION ENGINEER/BRIDGE ENGINEER	DATE	THIS REQUEST TOTAL TO DATE
PROJECT ENGINEER	DATE	ITEMS _____
PROJECT MANAGER	DATE	FORCE ACCOUNT _____
FHWA REP.	DATE	AGREED PRICE _____
ENVIRONMENTAL	DATE	ADJUSTMENT _____
MAINTENANCE	DATE	TOTAL _____ \$0.00 _____ \$0.00
OTHER (SPECIFY)	DATE	FEDERAL PARTICIPATION
HQ OR DISTRICT PRIOR APPROVAL BY	DATE	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE
RESIDENT ENGINEER SIGNATURE	DATE	<input type="checkbox"/> NON-PARTICIPATING <input type="checkbox"/> NON-PARTICIPATING (Maintenance)
FEDERAL SEGREGATION (If more than one funding source or P.I.P. type)		
<input type="checkbox"/> CHANGE ORDER FUNDED PER CONTRACT		
<input type="checkbox"/> CHANGE ORDER FUNDED AS FOLLOWS		
FEDERAL FUNDING SOURCE		PERCENT
_____		_____
_____		_____
_____		_____