

MIX DESIGN REVIEW CHECKLIST

CS-JN PW-7018		JMF # P1-SM-B2 McCoig Plant M-40																																					
REVIEWER Ian Duncan		APPROVED ☒	REJECTED ☐	DATE 07/06/20																																			
THE SUBMITTAL MUST INCLUDE THE FOLLOWING:			YES	NO																																			
Form 1976 – Job Mix Formula (JMF) Concrete Field Communication			☒	☐																																			
Source of Materials			☒	☐																																			
Batch Weights of Constituent Materials (Dry)			☒	☐																																			
For Optimized Gradations Only – Individual Aggregate Gradations			☐	☐																																			
Specific Gravity of Constituent Materials (Dry - Required, SSD - Optional)			☒	☐																																			
<table border="0"> <tr> <td>Typical Ranges:</td> <td>Type I Portland Cement:</td> <td>3.15 (approximate)</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Class F Fly Ash:</td> <td>2.20 – 2.70</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Class C Fly Ash:</td> <td>2.55 – 2.80</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Slag Cement:</td> <td>2.85 – 2.95</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Coarse Aggregate:</td> <td>2.55 – 2.85</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Intermediate Aggregate:</td> <td>2.55 – 2.85</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Fine Aggregate:</td> <td>2.60 – 2.80</td> <td></td> <td></td> </tr> </table>					Typical Ranges:	Type I Portland Cement:	3.15 (approximate)				Class F Fly Ash:	2.20 – 2.70				Class C Fly Ash:	2.55 – 2.80				Slag Cement:	2.85 – 2.95				Coarse Aggregate:	2.55 – 2.85				Intermediate Aggregate:	2.55 – 2.85				Fine Aggregate:	2.60 – 2.80		
Typical Ranges:	Type I Portland Cement:	3.15 (approximate)																																					
	Class F Fly Ash:	2.20 – 2.70																																					
	Class C Fly Ash:	2.55 – 2.80																																					
	Slag Cement:	2.85 – 2.95																																					
	Coarse Aggregate:	2.55 – 2.85																																					
	Intermediate Aggregate:	2.55 – 2.85																																					
	Fine Aggregate:	2.60 – 2.80																																					
Dry Loose or Dry Rodded Unit Weight of Coarse Aggregate			☒	☐																																			
Water/Cementitious Ratio (w/cm) – 0.45 max			☒	☐																																			
Volume (dry, rodded) of coarse aggregate per unit volume concrete – 65 – 75% (inclusive)			☒	☐																																			
Aggregate Absorptions and Correction Factors			☒	☐																																			
<table border="0"> <tr> <td>Typical Absorptions:</td> <td>Coarse Aggregate:</td> <td>≤ 2.5%</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Intermediate Aggregate:</td> <td>≤ 2.5%</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Fine Aggregate:</td> <td>≤ 2.0%</td> <td></td> <td></td> </tr> </table>					Typical Absorptions:	Coarse Aggregate:	≤ 2.5%				Intermediate Aggregate:	≤ 2.5%				Fine Aggregate:	≤ 2.0%																						
Typical Absorptions:	Coarse Aggregate:	≤ 2.5%																																					
	Intermediate Aggregate:	≤ 2.5%																																					
	Fine Aggregate:	≤ 2.0%																																					
Alkali-Silica Reactivity (ASR) testing results for fine aggregate			☒	☐																																			
Date of completion within the last 2 years			☒	☐																																			
Conforms with one of the methods in c.5.A of 12SP604B			☒	☐																																			
STRENGTH, COMPRESSION																																							
The Lower Specification Limit (LSL) at 28 days, or			☒	☐																																			
70% of the Lower Specification Limit (LSL) at 7 days (Method 1 verification only)			☐	☐																																			
SUPPLEMENTAL CEMENTITIOUS MATERIALS (SCM)																																							
If Used, Maximum Slag Cement Replacement is 40% (Minimum replacement 25% for P1M and DM)			☒	☐																																			
If Used, Maximum Fly Ash Replacement is 40% (Minimum replacement 25% for P1M and DM)			☐	☐																																			
If Both Are Used, They Must Not Exceed 40% of Cementitious Material			☐	☐																																			

DOCUMENTATION

Air Content	6.44	(%)
Slump	3.15	Inch
Compressive Strength	5840	Psi
Concrete Age at Time of Test	28	Days
Verification Method Use (ref. c.5.B.2 of 12SP604B)	1 ☐ 2 ☒ 3 ☐ 4 ☐	

QPL/APPROVED SOURCE CHECK

	YES	NO	N/A
Coarse Aggregate	☒	☐	☐
Intermediate Aggregate	☐	☐	☒
Fine Aggregate	☒	☐	☐
Cement	☒	☐	☐
Fly Ash	☐	☐	☒
Slag Cement	☒	☐	☐
Admixtures	☒	☐	☐
Specified Dosage Greater Than Minimum or Within Dosage Range	☒	☐	☐

CEMENTITIOUS CONTENT

Meets Requirements (ref. Table 1 of 12SP604B)	☐	☐	
---	--------------------------	--------------------------	--

YIELD AND OPTIMIZED GRADATION CHECK

Mix Design Yields (Use Concrete Job Mix Formula Yield Calculator)	☒	☐	
If Used, Optimized Aggregate Gradation Meets Appendix 1 requirements of 12SP602D	☐	☐	☐

NOTES/COMMENTS

JMF P1-SW-B2 is approved for use in curb, sidewalk, driveways, pavement water reducing admixture used. Maximum time to discharge = 60 minutes