Washington State Department of Transportation

Concrete Mix Design

Contractor	Submitted By	Date
Concrete Supplier	Plant Location	
Contract Number	Contract Name	

This mix is to be used in the following Bid Item No(s): _____

Concrete Class:

Remarks

Mix Design No. _____ **Plant No.** _____

Cementitious Materials	Source	Plant	Type, Class or Grade	Sp. Gr.	Lbs/cy
Cement					
Fly Ash [a]			☐ **F** ☐ **C** **Alkali %** _____		
GGBFS (Slag) [a]			☐ **100** ☐ **120**		

Concrete Admixtures	Manufacturer	Product	Est. Range (oz/cy)
Air Entrainment			

Water (Maximum) _____ lbs/cy

Is any of the water Recycled or Reclaimed? ☐ Yes[d] ☐ No

Water Cementitious Ratio (Maximum) _____

Mix Design Density (pcf) _____

Design Performance (Attach Test Data)

Average 28-day compressive strength (psi)

Average 14-day flexural strength (psi) (Concrete Pavement Only)

Concrete Chloride Ion Content (% by mass of cement) ☐ Water Soluble ☐ Acid Soluble

Agency Use Only (Check appropriate Box)

☐ **This Mix Design MEETS CONTRACT SPECIFICATIONS and may be used on the bid items noted above**

☐ **This Mix Design DOES NOT MEET CONTRACT SPECIFICATIONS and is being returned for corrections**

Reviewed By: _____ _____

PE Signature Date

Mix Design No. _____ **Plant No.** _____

Aggregate Gradation ☐ AASHTO ☐ Combined **Nominal Maximum Size (In)** Edit...

Aggregates	**1**	**2**	**3**	**4**	**5**	**Total**
WSDOT Source No. [b]						
Source Expiration Date [b]						
ASR Expansion (%) b ☐ 14 Day ☐ 1 Year						
Is ASR Mitigation Required?						
Stock Pile Grading [c]						
Percent of Total Aggregate						0
Specific Gravity (SSD)						
Lbs/cy (ssd)						0
Include Percent Passing for each aggregate component. Include Total only for Combined Gradations.	**Percent Passing**					**Total**
2 inch						0.00
1-1/2 inch						0.00
1 inch						0.00
3/4 inch						0.00
1/2 inch						0.00
3/8 inch						0.00
No. 4						0.00
No. 8						0.00
No. 16						0.00
No. 30						0.00
No. 50						0.00
No. 100						0.00
No. 200						0.00

Fineness Modulus: (Required for Class 2 Sand)

Proposed ASR Mitigation Method:

Notes:

a Fly ash or GGBFS is required for Class 4000P mix.

b Enter data from WSDOT ASA Database. ASR Mitigation is required for sources with 14-day expansions greater than 0.20%. No mitigation is required if the 1-year expansion is less than 0.04%. Proposed mitigation methods for 14-day expansions greater than 0.45% require ASTM C 1567 tests proving that the method is effective. See WSDOT Standard Specification 9-03.1.

c Stockpile gradation: AASHTO No. 467, 57, 67, 7, 8; WSDOT Class 1, Class 2; or combined gradation stockpile sizes. See WSDOT Standard Specification 9-03.1.

d Attach test results indicating conformance to Standard Specification 9-25.1.