SW Construction

LETTER OF TRANSMITTAL

DATE: 09/04/2025

TO: Manuel Maldonado

ATTENTION: Manuel Maldonado

Architect / Principal

RE: _____

Ordiz-Melby Architects

5500 Ming Ave. Unit 280, Bakersfield CA. 93309

JOB NO: 2037

WE ARE SENDING YOU:

- [x] Attached
- [ ] Mailed
- [ ] Faxed
- [ ] Hand Delivered
- [ ] Shop Drawings
- [ ] Prints
- [ ] Plans
- [ ] Samples
- [ ] Copy of Letter
- [ ] Change Order
- [ ] Other
- [x] Specifications

COPIES	DATE	NO.	DESCRIPTION
1	09/04/2025	6	Concrete Mix Design for Manhole Base

THESE ARE TRANSMITTED as checked below:

- [x] For Approval & Execution
- [ ] Approved as Submitted
- [ ] Resubmit Copies for Approval
- [ ] For Your Use
- [ ] Approved as Noted
- [ ] Submit Copies for Distributions
- [ ] As Requested
- [ ] Returned for Corrections
- [ ] Return Corrected Prints
- [ ] For Review & & Comment
- [ ] Other: _____
- [ ] FOR BIDS DUE: _____

REMARKS: _____

[X] REVIEWED [ ] NOT ACCEPTABLE

[ ] REVISE AND RESUBMIT [ ] FOR RECORD ONLY

[ ] REVIEWED AND CORRECTED

The review of Shop Drawings and/or Submittals is only for conformance with the design concept of the Project and compliance with the information given in the contract documents. Contractor is responsible for dimension confirmation and correlation at the job site, for information that pertains solely to the fabrication processes or to techniques of construction, and for coordination of the work of all trades involved in the project. The review of these Shop Drawings and/or Submittals does not relieve the Contractor from compliance with the Contract Documents.

Ordiz-Melby Architects, Inc.

BY _____ DATE 09/09/2025

COPY TO: _____ **SIGNED:** Jesse Baeza, Project Manager

Your Name, Title

If enclosures are not as noted, kindly notify us at once.

Metro Ready Mix Company
1635 James Road
P.O. Box 80487
Bakersfield, CA. 93380-0847
661-399-9144 (Office)
661-399-9195 (Fax)
661-399-9140 (Dispatch)

Mix Design Submittal

Date: 9/4/2025
Project: Fletcher ES
Customer: SW Construction
Location: 9801 Highland Knolls
Strength (psi): 3500
Mix ID: 628CT
Plant: James Road
Usage: Manhole base (cast in place)

Rock %: 55
Sand %: 45
Unit Weight (lbs.): 151.60
Slump +-1": 4
Air % range: 1.5
Placement: Tailgate/Pump
w/c ratio: 0.49
Cementitious Content (sacks): 6.28
Cementitious Content (lbs): 590

Materials	%	Wt. (lbs	SpGr	Cu.Ft.	Source	Spec.
Portland Cement Type II/V	100	590	3.15	3.00	National Cement Company	ASTM C 150
Flyash (Class F)	0	0	2.16	0.00	Salt River Materials Group (SRMG)	ASTM C 618
1" X #4 Rock	55	1798	2.770	10.40	Griffith Company (Edmonston Plant)	ASTM C 33
3/8" X #8 Rock	0	0	2.730	0.00	Griffith Company (Edmonston Plant)	ASTM C 33
Washed Concrete Sand	45	1413	2.660	8.51	Griffith Company (Edmonston Plant)	ASTM C 33
Water (Gals)	35	292	1	4.67		
Air Content %			0.41	0.41		
Total		4093		27.00		

Admixtures	Oz/cwt	Ozs/yd	Source	Spec.

We guarantee that the strengths produced by this mix design will meet the criteria of ACI 318, "Building Code and Requirements for Reinforced Concrete, and ACI 301, (Specification for Structural Concrete Buildings", when sampling and specimen preparation are performed by personnel certified as technicians by ACI in full accord with applicable ASTM standards. ASTM C 94 (para. 6.1), ACI 318-14 (para. 26.12.1.1), and ACI 301-10 (Sec. 1.6) requires that the Ready Mix Producer be given copies of all reports of acceptance tests in a timely manner or upon request.

REGISTERED PROFESSIONAL ENGINEER
DARREN GREY WILLIAMS
C40007
EXPIRES 3/31/13
CIVIL
STATE OF CALIFORNIA

DAVID CHANDLER

Full Gradiation Analysis

Date: 9/4/2025
Project: Fletcher ES
Strength (psi): 3500
Mix ID: 628CT
Location: 9801 Highland Knolls

Sieve Size	1" X #4	3/8" X #8	Sand	Combined Passing	ASTM C 33 Spec.	1" Max Caltrans Section 90	Cumulative %Retained
1.5"	100	100	100	100	100	100.0	0.0
1"	98	100	100	98.9	90 - - 100	90 - 100	1.1
3/4"	81	100	100	89.6	70 - - 95	55 - - 100	10.5
1/2"	50	100	100	72.5	XXXXXX	XXXXXX	27.5
3/8"	29	91	100	61.0	45 - - 70	45 - - 75	39.1
#4	8	16	99	49.0	35 - - 55	35 - - 60	51.1
#8	2	2	88	40.7	27 - - 45	27 - - 45	59.3
#16	0	0	66	29.7	20 - - 28	20 - - 35	70.3
#30	0	0	42	18.9	12 - - 27	12 - - 25	81.1
#50	0	0	17	7.7	5 - - 15	5 - - 15	92.4
#100	0	0	1.3	0.6	0 - - 5	1 - - 8	99.4
#200	0.5	0.4	1.77	1.1		0 - - 4	98.9
Absorbtion %	0.75	0.40					

% by mass	55.0	0.0	45.0	

Coarseness Factor: 65.9
Workability Factor: 40.7
Paste Fraction: 26.9
Mortar Fraction: 48.8

DETAILED STRENGTH, Compression

Date	Mix ID #	Slump	7 Day		28 Day	Project
	Average:	#DIV/0!	#DIV/0!		#DIV/0!	

AASHTO R18

NATIONAL CEMENT

National Cement Company of California, Inc.

LEBEC Plant

Certified to NSF/ANSI 61

We certify that the below described Hydraulic Portland Cement, at the time of shipment and Manufactured Production of Lot 25-142 meets the Chemical and Physical requirements of TYPE II & V as per ASTM C150/C150M-24 and AASHTO M 85.

Chemical Specifications and Analysis

ASTM (C114)	ASTM C150 TYPE II	ASTM C150 TYPE V	Actual Analysis	
SiO2	NA	NA	23.0	%
Al2O3	6.0 max	NR	4.5	%
Fe2O3	6.0 max	NR	4.0	%
CaO	NA	NR	62.1	%
MgO	6.0 max	6.0 max	2.1	%
SO3	3.0 max	2.3 max	2.8	% *
Loss	3.5 max	3.5 max	3.2	%
Insoluble	1.5 max	1.5 max	1.3	%
*Eq.Alkalies Max.0.60%	-	-	0.60	%
Free Lime (C-114)	NR	NR	1.8	%
Potential Phase Compounds:				
C3S	NR	NR	32.6	%
C2S	NR	NR	38.9	%
C3A	8 max	**5 max**	4.9	%
C4AF	NR	NR	11.8	%
2C3A+C4AF	NR	25 max	21.5	%
%CO2	NA	NA	1.6	%
% Limestone	5.0 Max	5.0 Max	3.7	%
%CaCO3 in LS	70%min	70%min	98.1	%

Physical Specifications and Analysis

	ASTM C150 TYPE II	ASTM C150 TYPE V	Actual Analysis
Air content of mortar (%volume) (C185)	12 max	12 max	8
Blaine, Sq.cm/gm (C204)	2600 min	2600 min	4447
Fineness (M-325) (C430)			97.9
*Autoclave Max. Exp. 0.50 % (Caltrans Std Spec)	-	-	0.013
False Set, % (C451)		50 min	78
Time of Setting:			
Vicat, Initial minutes (C191)	45 min	45 min	143
Vicat, Final minutes (C191)	375 max	375 max	259
Gilmore, Initial (C266)	60 min	60 min	162
Gilmore, Final (C266)	600 max	600 max	271
C-1038 Mortar bar exp.(%)		0.020 max	0.005
Compressive Strength: (C109/C109M)			
1 day (Psi)	NR	NR	1950
3 days (Psi)	1450 min	1160 min	3600
7 days (Psi)	2470 min	2180 min	4470
28 days (Psi)	NR	3050 min	5960

NA = Not Applicable; NR = No Requirement

This Cement Meets Or Exceeds The Following Described Specifications

ASTM & AASHTO: ASTM C150/150M-24. and AASHTO M85 Types II & V Modified, (low Alkalie)
California: Section 201-1.2.1(a) 1) Latest Edition of Standard Specifications for Public Works Construction.

* Caltrans: Section 90-1.02B(2) of Standard Specifications, Type -II and Type V (2023 Stan. Specs.)

Main Office:

15821 Ventura Blvd.
Suite 475
Encino, Ca. 91436-2935
(818) 788-4228

NATIONAL CEMENT COMPANY OF CALIFORNIA

By: _____

Quality Control Manager
8/4/25

TEHACHAPI

Tehachapi Cement, LLC.

TECHNICAL SERVICES
SALES & MARKETING

Telephone (805) 479-2468

PLANT LOCATION
13573 Tehachapi Blvd.
Tehachapi, CA 93561
Telephone (661) 825-2600
FAX (661) 822-1278

CEMENT TEST REPORT

Cement: Type II/V, Low Alkali, Type GU
Production Period: December 1, 2024 - December 31, 2024
Report Date: January 10, 2025

CHEMICAL REQUIREMENTS	Test Method	ASTM SPECIFICATION LIMITS Type II	Type V	Type GU	CalTrans 90-1.02B(2)	Test Results
SiO2 (%)	C114	-	-	-	-	21.2
Al2O3 (%)	C114	6.0 max	-	-	-	4.2
Fe2O3 (%)	C114	6.0 max	-	-	-	3.8
CaO (%)	C114	-	-	-	-	63.6
MgO (%)	C114	6.0 max	6.0 max	-	-	1.0
SO3 (%)	C114	3.0 max*	2.3 max*	-	-	3.3
Loss on ignition (%)	C114	3.5 max	3.5 max	-	-	1.6
Na2O (%)	C114	-	-	-	-	0.21
K2O (%)	C114	-	-	-	-	0.46
Equivalent alkalies (%)	C114	0.60 max	0.60 max	-	0.60 max	0.51
Insoluble residue (%)	C114	1.5 max	1.5 max	-	-	0.5
CO2 (%)	C114	-	-	-	-	0.7
Limestone (%)	C150-A2	5.0 max	5.0 max	-	-	2.0
CaCO3 in Limestone (%)	C150-A2	70 min	70 min	-	-	76
Potential phase composition (%) [a]						
C3S	C150-A1	-	-	-	65 max	54
C2S	C150-A1	-	-	-	-	19
C3A	C150-A1	8 max	5 max	-	-	5
C4AF	C150-A1	-	-	-	-	11
C4AF + 2(C3A)	C150-A1	-	25 max	-	-	20
C3S + 4.75(C3A)	C150-A1	-	-	-	-	76

- Not applicable.
* Can be exceeded if ASTM C1038 expansion is below 0.020%
[a] Adjusted per ASTM C150 Section A 1.6

PHYSICAL REQUIREMENTS	Test Method	ASTM SPECIFICATION LIMITS Type II	Type V	Type GU	CalTrans 90-1.02B(2)	Test Results
Air content of mortar (volume %)	C185	12 max	12 max	12 max	-	6
Blaine fineness (m2/kg)	C204	260 min	260 min	-	-	373
Passing 45 µm sieve (%)	C430	-	-	-	-	99.0
Autoclave expansion (%)	C151	0.80 max	0.80 max	0.80 max	0.50 max	-0.05
Compressive strength (Mpa [psi])					-	
1 day	C109	-	-	-	-	15.6 [2260]
3 days	C109	10.0 min	8.0 min	13.0 min	-	28.3 [4100]
7 days	C109	17.0 min	15.0 min	20.0 min	-	35.0 [5080]
28 days (previous month)	C109	-	21.0 min	28.0 min	-	45.8 [6640]
Time of setting, Vicat (minutes)					-	
Initial	C191	45 - 375	45 - 375	45 - 420	-	119
Final	C191	-	-	-	-	233
Mortar bar expansion (%)	C1038	0.020 maxr	0.020 maxr	0.020 max	-	0.002
False set (%)	C451	50 min	50 min	50 min	-	90
Heat of hydration (J/g [cal/g]) [i]					-	
3 days	C1702	-	-	-	-	0 [0]
Normal Consistency, %	C187	-	-	-	-	26.1

[r] Required only if percent SO3 exceeds the chemical specification limit.
[i] Represents latest result, provided for information only

We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of:

ASTM C150 - Type II/V, Low Alkali
ASTM C1157 - Type GU
AASHTO M85 - Type II/V, Low Alkali
Caltrans Section 90-1.02B(2) Cement
ADOT Subsection 1006-2.01 - Hydraulic Cement
NSF/ANSI 61 - Drinking Water System Components

⚠ WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Samuel Steeley

Samuel Steeley - Asst Plant Manager

TEHACHAPI

Tehachapi Cement, LLC.

TECHNICAL SERVICES
SALES & MARKETING

Telephone (805) 479-2468

PLANT LOCATION
13573 Tehachapi Blvd.
Tehachapi, CA 93561
Telephone (661) 825-2600
FAX (661) 822-1278

CEMENT TEST REPORT - Additional Data

Cement: Type II/V, Low Alkali, Type GU
Production Period: December 1, 2024 - December 31, 2024
Report Date: January 10, 2025

Limestone Addition	Test Method	Test Results
Amount (%)	C150-A2	2.0
SiO2 (%)	XRF	10
Al2O3 (%)	XRF	2
Fe2O3 (%)	XRF	0
CaO (%)	XRF	83
SO3 (%)	XRF	0

Base Cement	Test Method	Test Results
C3S (%)	C150-A1	55
C2S (%)	C150-A1	19
C3A (%)	C150-A1	5
C4AF (%)	C150-A1	12

We certify that the above described data represents the materials used in the cement manufactured during the production period indicated.

Samuel Steeley

Samuel Steeley - Asst Plant Manger

⚠ WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SRMG
Salt River Materials Group
100% AMERICAN

Metro Ready Mix
Attn: Mark
1635 James Rd
Bakersfield, CA 93308

Product: ASTM C618 Class F, Four Corners Fly Ash
AASHTO M295

POZZOLAN TEST REPORT

April 2024	Results	Specifications
Chemical Analysis (C311 / C114 / T105 / D4326)		
Silicon Dioxide, SiO_2	60.60 %	---
Aluminum Oxide, Al_2O_3	23.00 %	---
Ferric Oxide, Fe_2O_3	5.08 %	---
$SiO_2+Al_2O_3+Fe_2O_3$	88.68 %	50.00 Min
Calcium Oxide, CaO	2.75 %	18.00 Max
Magnesium Oxide, MgO	1.14 %	---
Sulfur Trioxide, SO_3	0.27 %	5.00 Max
Moisture Content	0.10 %	3.00 Max
Loss on Ignition	0.30 %	6.00 Max
Sodium Oxide, Na_2O	1.47 %	---
Potassium Oxide, K_2O	1.29 %	---
Total Alkalis	2.32 %	---
Available Alkalis	0.63 %	---
Physical Analysis		
Fineness, amount retained on #325 sieve, % (C430)	27.30	34.00 Max
variation, points from average	0.36	5.00 Max
Density, g/cm^3 (C188)	1.98	---
Variation from average, %	0.01	5.00 Max
Strength Activity Index with Portland Cement (C311 / C109)		
at 7 days, % of cement control	76.30	---
at 28 days, % of cement control	79.18	75.00 Min
Water Requirement (C311)		
% of cement control	97.52	105.00 Max
Soundness, autoclave expansion (C311 / C151)		
or contraction, %	-0.01	0.80 Max

All tests have been made in strict accordance with the current standards of the American Society for Testing and Materials covering the type of material specified.

Mark Evans, Quality Systems Manager
06 MAY 2024

AAR AASHTO R18

PHOENIXCEMENT

Clarkdale Cement Plant
601 N. Cement Plant Rd
Clarkdale, AZ 86324

Lower Buckeye Terminal
1941 W. Lower Buckeye Rd
Phoenix, AZ 85007

54th Ave. Terminal
5402 W Buchanan St.
Phoenix, AZ 85043

21st Ave. Terminal
1325 N. 21st Ave.
Phoenix, AZ 85009

19th Ave. Terminal
1802 W. Lower Buckeye Rd
Phoenix, AZ 85007

Dobson Storage
9595 E. McKellips Rd.
Scottsdale, AZ 85250

Cholla Fly Ash Plant
4801 Frontage Rd.
Joseph City, AZ 86032

Four Corners Fly Ash Plant
End of County Road 6675
Fruitland, NM 87416

Bonanza Fly Ash Plant
12500 East, 25500 South
Vernal, UT 84078

Huntington Fly Ash Plant
8 Miles West on Highway 31
Huntington, UT 84528

Apache Fly Ash Plant
3537 H Highway 191 South
Cochise, AZ 85606

Coronado Generating Station
Hwy 191, 7 miles North of St. Johns
St. Johns, AZ 85936

Gallup Terminal
900 N 9th St.
Gallup, NM 87301

Fontana Terminal
13600 Napa St.
Fontana, Ca 92335

Bakersfield Terminal
32535 7th Standard Rd.
Bakersfield, CA 93314

Stockton Terminal
1300 N. Gertrude Ave.
Stockton, CA 95215

Tucson Terminal
4120 E Irvington Rd
Tucson, AZ 85714

G3 QUALITY

Bakersfield: 661.241.8950 | 254 E. Norris Rd, Suite 5, Bakersfield, CA 93308 | www.g3quality.com

February 5, 2025

Project: BK4765

Mike Williams
Griffith Company
1128 Carrier Parkway Ave
Bakersfield, CA 93308

Subject: **Concrete Aggregate 1-1/2" x 3/4", 1" x #4, 3/8" x #8, and WCS Aggregate Quality Report**

Dear Mr. Williams,
Transmitted as part of this letter are the requested test results to evaluate the aggregates from the Griffith Edmonston Quarry (SMARA #91-15-0068) in accordance with ASTM C33/C33M-23 and the following standards:

1. ASTM C127-15 & C128-22, "Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate." "Fine Aggregate."
2. ASTM C88-18, "Standard Test Method for Soundness of Aggregates by use of Sodium Sulfate or Magnesium Sulfate."
3. ASTM C535-16, "Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (LA Rattler)."
4. ASTM C131-20, "Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregates by Abrasion and Impact in the Los Angeles Machine (LA Rattler)."
5. ASTM C136-19, "Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates."
6. ASTM C117-23, "Standard Test Method for Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing."
7. ASTM C40-20, "Standard Test Method for Organic Impurities."
8. ASTM C29-23, "Standard Test Method for Bulk Density (Unit Weight) and Voids in Aggregates."
9. ASTM C142-17, "Standard Test Method for Clay Lumps and Friable Particles in Aggregates."
10. ASTM C123-23, "Standard Test Method for Lightweight Particles in Aggregate."

Testing for the above C33 testing schedule was performed by G3 Quality, Inc. Materials were sampled by Stuart Ahumada of G3 Quality on 01/13/2025 for evaluation.

G3 Quality, Inc. has no authority regarding where aggregates are to be used; therefore, it is the responsibility of the project architect, engineer, and/or contractor to ensure that the reported aggregates quality results from the specific mine are appropriate for the anticipated concrete material use and weather regional environmental conditions.

Should you have any questions or comments, please contact our Project Manager Marc G. Robert, at 562-321-5561.

Best Regards,
G3 Quality, Inc.

Marc G. Robert
Technical Services Director

Jordan Roper, PE
Civil Engineer

G3 QUALITY

GRIFFITH EDMONSTON QUARRY ASTM C33 SUMMARY OF TEST RESULTS

Aggregate Source: Griffith Edmonston SMARA 91-15-0068
Material Type: **PCC Aggregates 1" x #4 (No. 57 Agg)**
Tested by: M. Kaus, D. Silva, S. Chang of G3 Quality

Sample Date: 1/13/2025
Report Date: 2/5/2025
Project Number: BK4765

ASTM C136, Sieve Analysis of Coarse Aggregates		
Sieve Size	Percent Passing	Grading Limits ASTM C33 Table 3, No. 57
1-1/2''	100	100
1''	99	95-100
3/4"	91	-
1/2"	54	25-60
3/8"	29	-
#4	7	0-10
#8	4	0-5

ASTM C117, Material Finer than 0.075mm (No. 200 Sieve)	
Procedure Used:	A
Material Passing No. 200 Sieve:	0.9%
Maximum Limit per ASTM C33, Table 3	1.0%

ASTM C127, Density, Relative Density, Absorption of Coarse Aggregate	
Bulk Specific Gravity	2.73
Bulk Specific Gravity (SSD)	2.77
Apparent Specific Gravity	2.85
Absorption	1.5%

ASTM C88, Soundness of Aggregates by Sodium Sulfate	
Total Weighted Percentage Loss	11.3%
Maximum Limit per ASTM C33, Table 4	12%

ASTM C29, Bulk Density (Unit Weight) and Voids in Aggregates	
Bulk Density, based on Shoveling	94.4 lbs./cu.ft.
Bulk Density, based on Jigging	98.6 lbs./cu.ft.
Bulk Density, based on Dry Rodded	100.2 lbs./cu.ft.

ASTM C131, Resistance to Degradation by Abrasion & Impact in the Los Angeles Machine	
Grading:	B
Loss by Abrasion, % (100 revs)	8%
Loss by Abrasion, % (500 revs)	34%
Maximum Limit per ASTM C33, Table 4	50%

ASTM C142, Clay Lumps and Friable Particles	
Average Clay Lumps and Friable Particles	0%
Maximum Limit per ASTM C33, Table 4	Varies: 2 to 10%

ASTM C123, Lightweight Particles in Aggregate		
Medium Used:	Zinc Chloride	Zinc Bromide
Specific Gravity of Medium Used:	2.0	2.4
Lightweight Particles:	0%	0%
Maximum Limit per ASTM C33, Table 4	Varies: 0.5 to 8%	

AASHTO ACCREDITED

G3 QUALITY

GRIFFITH EDMONSTON QUARRY ASTM C33 SUMMARY OF TEST RESULTS

Aggregate Source: Griffith Edmonston SMARA 91-15-0068
Material Type: **PCC Aggregates 3/8" x #8 (No. 8 Agg)**
Tested by: M. Kaus, D. Silva, S. Chang of G3 Quality

Sample Date: 1/13/2025
Report Date: 2/5/2025
Project Number: BK4765

ASTM C 136, Sieve Analysis of Coarse Aggregates		
Sieve Size	Percent Passing	Grading Limits ASTM C33 Table 3, No. 8
1/2''	100	100
3/8''	99	85-100
#4	26	10-30
#8	2	0-10
#16	1	0-5

ASTM C117, Material Finer than 0.075mm (No. 200 Sieve)	
Procedure Used:	A
Material Passing No. 200 Sieve:	1.0%
Maximum Limit per ASTM C33, Table 3	1.0%

ASTM C 127, Density, Relative Density, Absorption of Coarse Aggregate	
Bulk Specific Gravity	2.69
Bulk Specific Gravity (SSD)	2.73
Apparent Specific Gravity	2.80
Absorption	1.5%

ASTM C88, Soundness of Aggregates by Sodium Sulfate	
Total Weighted Percentage Loss	4.3%
Maximum Limit per ASTM C33, Table 4	12%

ASTM C 29, Bulk Density (Unit Weight) and Voids in Aggregates	
Bulk Density, based on Shoveling	95.2 lbs./cu.ft.
Bulk Density, based on Jigging	99.4 lbs./cu.ft.
Bulk Density, based on Dry Rodded	98.2 lbs./cu.ft.

ASTM C131, Resistance to Degradation by Abrasion & Impact in the Los Angeles Machine	
Grading:	C
Loss by Abrasion, % (100 revs)	8%
Loss by Abrasion, % (500 revs)	36%
Maximum Limit per ASTM C33, Table 4	50%

ASTM C 142, Clay Lumps and Friable Particles	
Average Clay Lumps and Friable Particles	0%
Maximum Limit per ASTM C33, Table 4	Varies: 2 to 10%

ASTM C 123, Lightweight Particles in Aggregate		
Medium Used:	Zinc Chloride	Zinc Bromide
Specific Gravity of Medium Used:	2.0	2.4
Lightweight Particles:	0%	0%
Maximum Limit per ASTM C33, Table 4	Varies: 0.5 to 8%	

AASHTO ACCREDITED

G3 QUALITY

GRIFFITH EDMONSTON QUARRY ASTM C33 SUMMARY OF TEST RESULTS

Aggregate Source:	Griffith Edmonston SMARA 91-15-0068	Sample Date:	1/13/2025
Material Type:	**Fine Aggregate (Washed Concrete Sand)**	Report Date:	2/5/2025
Tested by:	M. Kaus, D. Silva, P Rice, & S Chang of G3 Quality	Project Number:	BK4765

ASTM C136, Sieve Analysis of Fine Aggregates & ASTM C 117, Material Finer than 0.075mm (No. 200 Sieve)		
Sieve Size	Percent Passing	Grading Limits ASTM C33 Table 1
3/8''	100	100
#4	100	95-100
#8	87	80-100
#16	64	50-85
#30	39	25-60
#50	16	5-30
#100	4	0-10
#200	2.1	0-3.0
Fineness of Modulus	2.70	2.3-3.1

ASTM C128, Density, Relative Density, Absorption of Fine Aggregate	
Bulk Specific Gravity	2.62
Bulk Specific Gravity (SSD)	2.66
Apparent Specific Gravity	2.73
Absorption	1.5%

ASTM C88, Soundness of Aggregates by Sodium Sulfate	
Total Weighted Percentage Loss	5.9%
Maximum Limit per ASTM C33, Table 8.1	10%

ASTM C29, Bulk Density (Unit Weight) and Voids in Aggregates	
Bulk Density, based on Shoveling	97.8 lbs./cu.ft.
Bulk Density, based on Jigging	102.8 lbs./cu.ft.
Bulk Density, based on Dry Rodded	99.1 lbs./cu.ft.

ASTM C142, Clay Lumps and Friable Particles	
Average Clay Lumps and Friable Particles	0%
Maximum Limit per ASTM C33, Table 2	3.0%

ASTM C123, Lightweight Particles in Aggregate		
Medium Used:	Zinc Chloride	Zinc Bromide
Specific Gravity of Medium Used:	2.4	2.0
Lightweight Particles:	0%	0%
Maximum Limit per ASTM C33, Table 2	Varies: 0.5 to 8%	

ASTM C40, Organic Impurities	
Organic Impurities	Lighter
Maximum Limit per ASTM C33	Lighter Than The Standard

AASHTO ACCREDITED

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

CALTRANS MATERIAL PLANT QUALITY PROGRAM CERTIFICATION

DOT CEM-4204C (NEW 01/2024)

This is to certify that

Metro Ready Mix

located at

1635 James Road, Bakersfield, CA 93308

complies with Caltrans Material Plant Quality Program (MPQP) requirements. This plant is to be used in the production of

Concrete - Batch Plant

This certificate is valid until the expiration date shown below, provided that no measuring components, spans, and wire seals change during this time frame without the knowledge of the weights and measure coordinator. Should any evidence indicate otherwise, the plant will be re-tested as often as the resident engineer deems necessary within this period. Compliance with all applicable sections of the *Standard Specifications*, special provisions, and the California Division of Occupational Safety and Health requirements will be the responsibility of plant management.

Material Type	Operational Limit Range	Span/Cal Factor	Mass Factor/Other Info
Aggregate	0 - 32000 lbs	Lead Wire Sealed	
Cement/SCM	0 - 8000 lbs	Lead Wire Sealed	
Water	0 - 300 gals	041.7	

Comments (if applicable)
* No additional comment is reported.

Approved By Jessa Dhaliwal

District 06 Weights & Measures Coordinator

Signature: Jessa Dhaliwal

Certification Number 06-240617-JD-1

Date Approved 6/17/2024

Date Expires 6/17/2025 , or void if moved (see Note)

Note: Excluding volumetric trucks, full or partial depth recycling, cold central plant recycling equipment.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

CALTRANS MATERIAL PLANT QUALITY PROGRAM CERTIFICATION

DOT CEM-4204C (NEW 01/2024)

This is to certify that

Metro Ready Mix

located at

1104 Earth Mover Court, Bakersfield, CA 93314

complies with Caltrans Material Plant Quality Program (MPQP) requirements. This plant is to be used in the production of

Concrete - Batch Plant

This certificate is valid until the expiration date shown below, provided that no measuring components, spans, and wire seals change during this time frame without the knowledge of the weights and measure coordinator. Should any evidence indicate otherwise, the plant will be re-tested as often as the resident engineer deems necessary within this period. Compliance with all applicable sections of the *Standard Specifications*, special provisions, and the California Division of Occupational Safety and Health requirements will be the responsibility of plant management.

Material Type	Operational Limit Range	Span/Cal Factor	Mass Factor/Other Info
Aggregate	0 - 32000 lbs	Lead Wire Sealed	
Cement/SCM	0 - 8000 lbs	Lead Wire Sealed	
Water	0 - 300 gals	0397	

Comments (if applicable)

* No additional comment is reported.

Approved By Jessa Dhaliwal

District 06 Weights & Measures Coordinator

Signature: Jessa Dhaliwal

Certification Number 06-241206-JD-1

Date Approved 12/6/2024

Date Expires 12/6/2025 , or void if moved (see Note)

Note: Excluding volumetric trucks, full or partial depth recycling, cold central plant recycling equipment.