

RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT



ADDENDUM NO. 01

Bid #1502 Barrier Removal Campus Wide/Child Development Center
at
Santa Ana College

Address: 1530 West 17th Street, Santa Ana, CA 92706

Project ID #2959.1, DSA #04-124768

August 6, 2026

Owner:
Rancho Santiago Community College District
2323 North Broadway, Room 112
Santa Ana, California 92706

**RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED ON BID FORM WHEN
SUBMITTED**

The following changes, additions, deletions or corrections shall become a part of the Contract Documents for the project named on the previous page and all other conditions shall remain the same. The Bidders shall be responsible for transmitting this information to all affected Subcontractors and Suppliers, prior to the closing of Bids. Prospective Bidders shall acknowledge receipt of all Addenda in the space provided on the Bid Proposal Form by the number (list every addenda). Failure to do so shall deem the Bid Proposal as non-responsive and subject the Bidder to disqualification.

Item No. AD 1-1 Responses to Questions

The following provides a response to the Bidder's Request for Pre-Bid Information submitted on the Pre-Bid Clarification Form. See attached for a total of (1) RFI Response(s).

Item No. AD 1-2 Architect's Addendum #01

For a description of the modifications to the design documents, please see page (4) of this document, "Changes from DSA Approved Set to Bid Set."

Enclosure: One (1) Pre-Bid Clarification Form Response and Architect's Addendum #01 with revisions to the drawings and specifications.

This is the end of Addendum No. 1

PRE-BID CLARIFICATION FORM

(Email this completed form to FacilitiesBid@rsccd.edu. See Instructions to Bidders.)

PROJECT NAME:	Barrier Removal Campuswide/Child Development Center at Santa Ana College		
PROJECT NUMBER:	2959.1	BID NUMBER:	1502
EMAIL TO: facilitiesbid@rsccd.edu			
DATE:	07/24/2026		
FROM:	Corner Keystone Construction Corporation	EMAIL:	bids@cornerkeystone.com
SPEC SECTION:		DRAWING NUMBER:	
REQUESTED CLARIFICATION:			
What is the engineer's estimate?			
RESPONSE TO CLARIFICATION:			
The design team's construction cost estimate is \$120,000-\$150,000. -RSCCD, 08/06/2026			

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

END OF DOCUMENT

A# 04 - 124768

Changes from DSA Approved Set to Bid Set

Architectural:

A1.01 – REMOVE reference to restriping

A2.01 – MODIFY guardrail and modified slope of curb ramp landing to 1.8% Max. Modified slope of curb ramp to 7.8% max per District Standard.

A2.02 – REMOVE reference to restriping.

Civil:

C2.00 – REMOVE reference to guardrail

C3.00 – REMOVE guardrail graphic

C4.00 – REMOVE Guardrail details and references

C-5.00 & C5.10 – REMOVE content from sheet as only construction fencing is needed for this small of a project.

Specifications:

REPLACE Table of Contents (Added Sections indicated below)

MODIFY Specifications 01 3119 Project Meetings, 3.03, A to read "...bi-weekly or weekly..."

MODIFY Specifications 01 6211 Substitution Request Form to remove reference to Russell Hall

ADD Specifications 01 4524 Environmental Import/Export Materials Testing

ADD Specifications 31 1000 Site Clearing

ADD Specifications 31 2200 Grading

ADD Specifications 31 2313 Excavation and Fill

ADD Specifications 31 2316 Excavation Fill for Paving

ADD Specifications 31 2326 Base Course

ADD Specifications 32 0117 Asphalt Pavement Repair

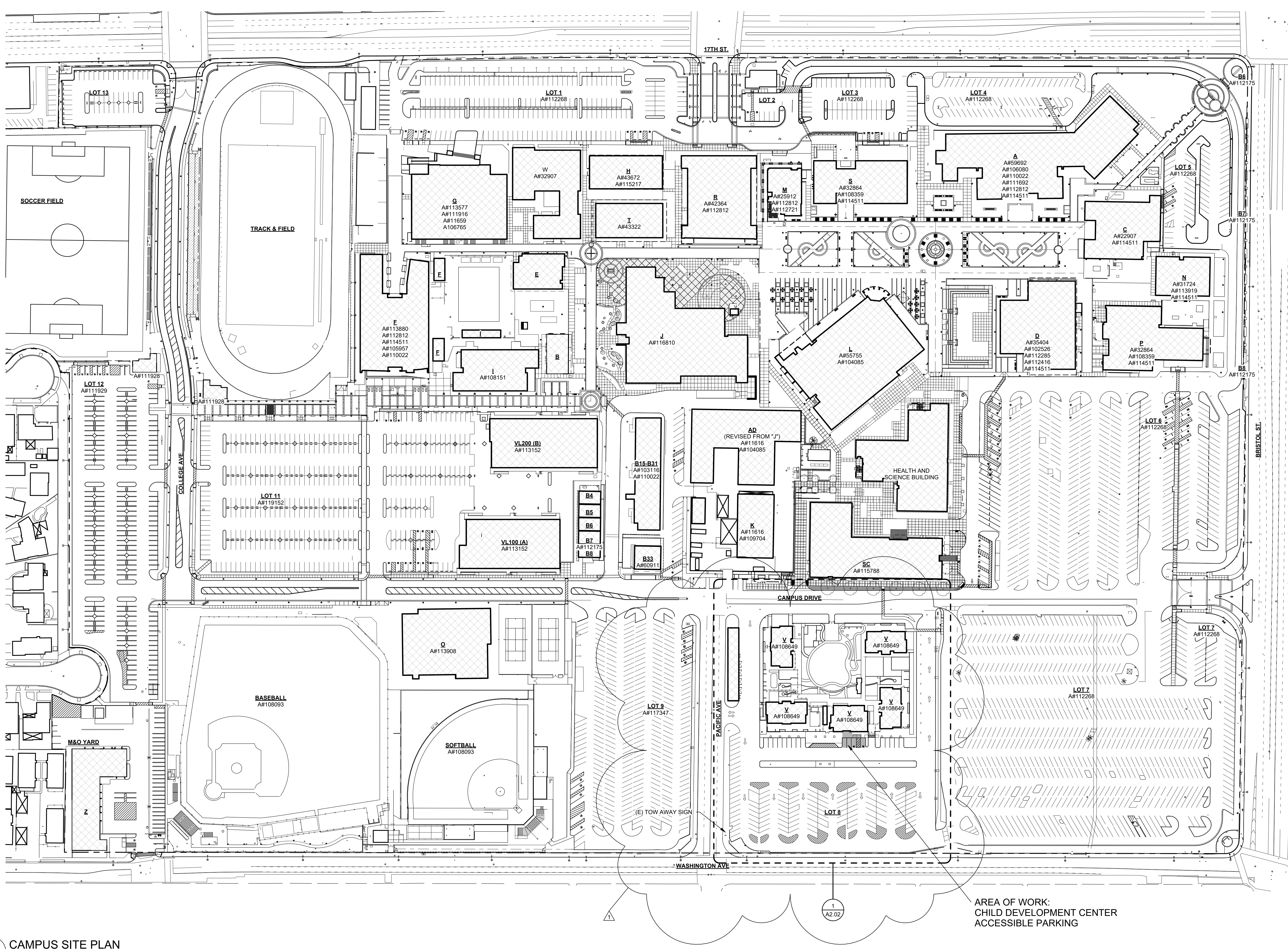
REPLACE Specification 32 1216 Asphalt Paving

ADD Specifications 32 1236 Seal Bituminous Surfacing

REPLACE Specifications 32 1314 Concrete Paving and Sitework

REPLACE Specifications 32 1723 Pavement Markings

ADD Specifications Appendix A – RSCCD Project Forms



1 CAMPUS SITE PLAN
Scale: 1" = 80'-0"

PARKING RATIO LOT 8:

TOTAL PARKING STALLS: 216
ACCESSIBLE STALLS REQUIRED: 7
ACCESSIBLE STALLS PROVIDED: 2*

* NOTE: ACCESSIBLE STALLS CALCULATED FOR ENTIRE CAMPUS RATHER THAN LOT BY LOT

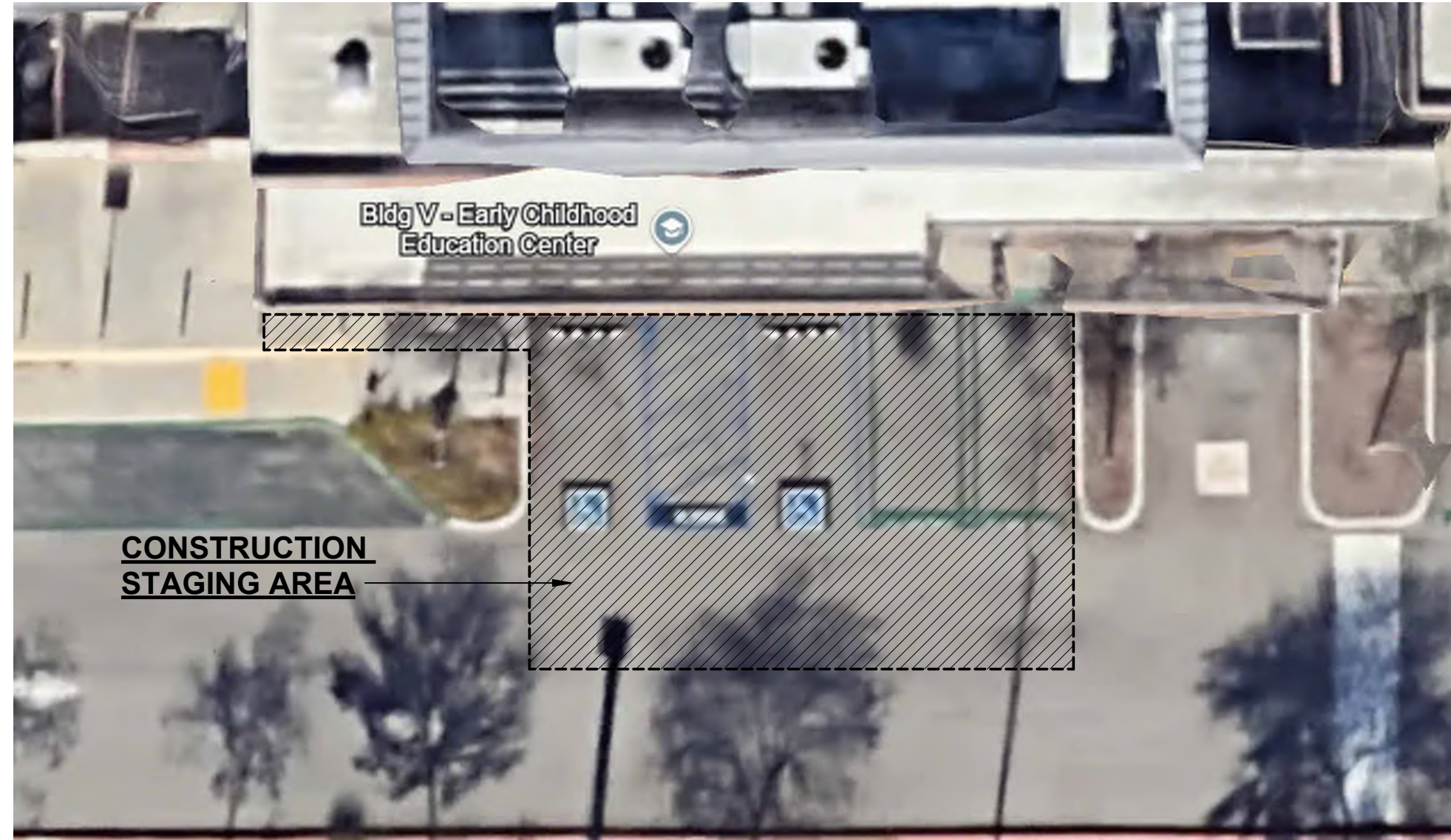
OVERALL ACCESSIBLE PARKING COUNT:

LOT 1: 8 STALLS
LOT 2: 2 STALLS
LOT 3: 3 STALLS
LOT 4: 3 STALLS
LOT 5: 3 STALLS
LOT 6: 26 STALLS
LOT 7: 0 STALLS
LOT 8: 2 STALLS
LOT 9: 12 STALLS
LOT 11: 16 STALLS
LOT 12: 7 STALLS
LOT 13: 2 STALLS

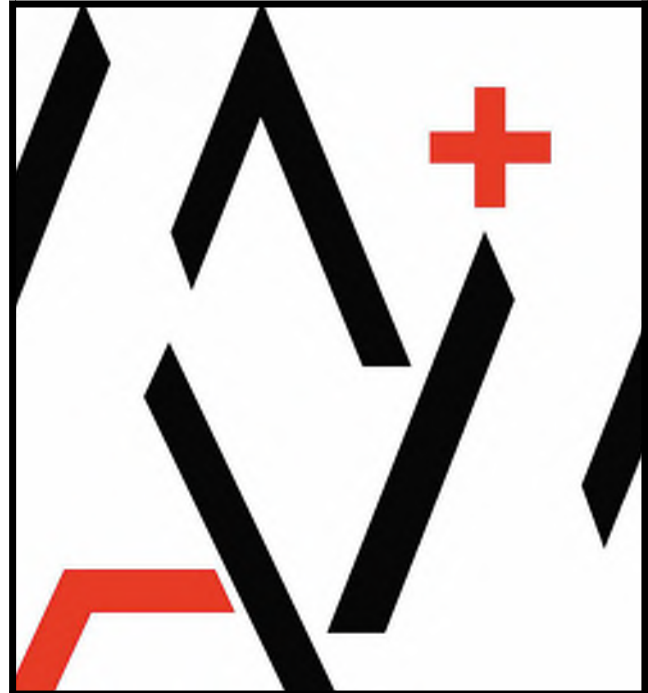
TOTAL: 84 STALLS

CAMPUS SITE PLAN LEGEND

- AREA OF WORK
- CONSTRUCTION STAGING AREA



LOCATION MAP
Scale: 1 : 1



MORETO MATHISON & ASSOCIATES
ARCHITECTS
449 W FOOTHILL BLVD, #251
GLENORA CA 91741
(626) 594-0307

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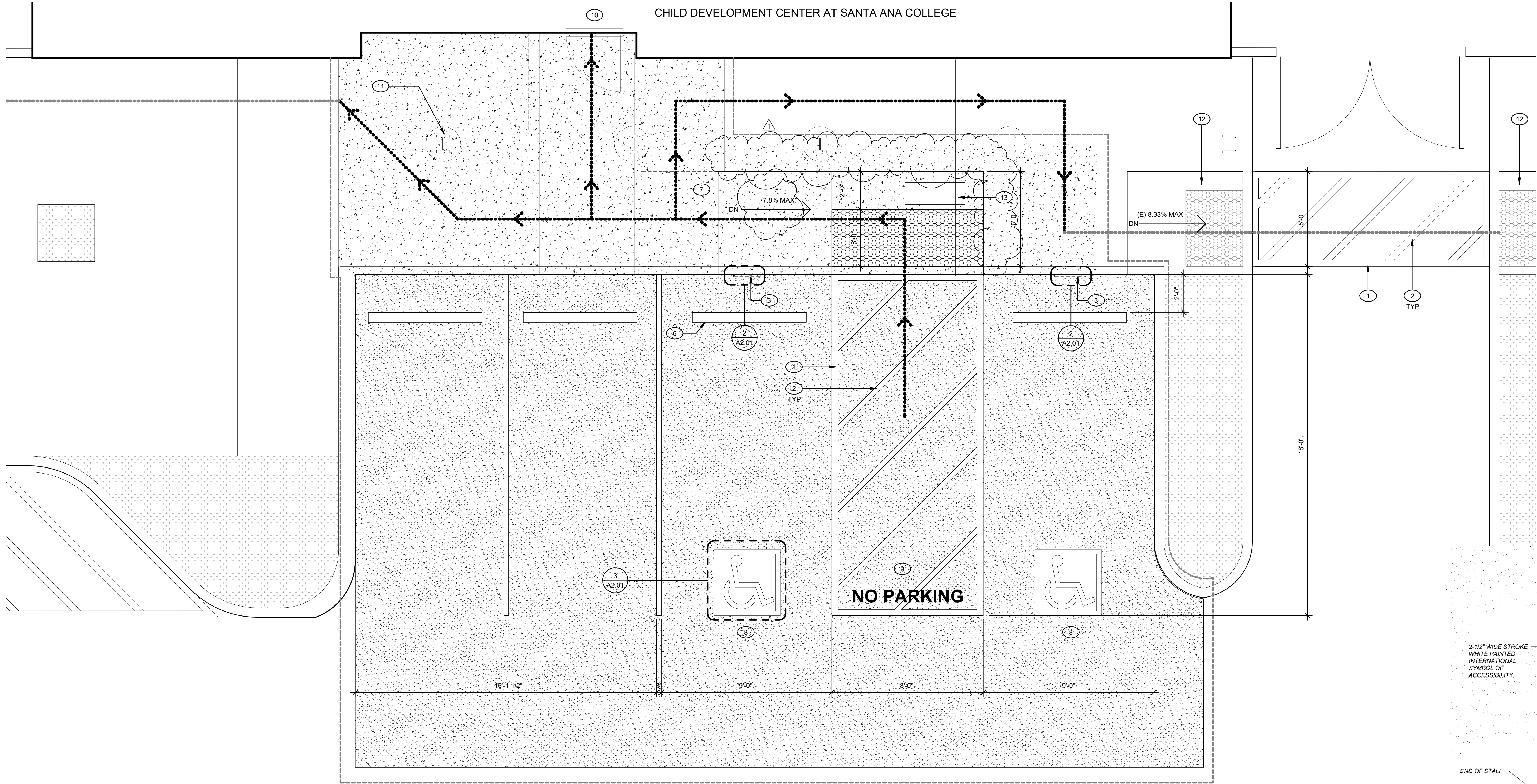
REVISIONS

1 Addendum #1	6/26/26
DSA BACK CHECK 01	01/20/2026

MMA NO	25802
DATE:	02/06/2026
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CHECKED:	DM

CAMPUS SITE PLAN

A1.01

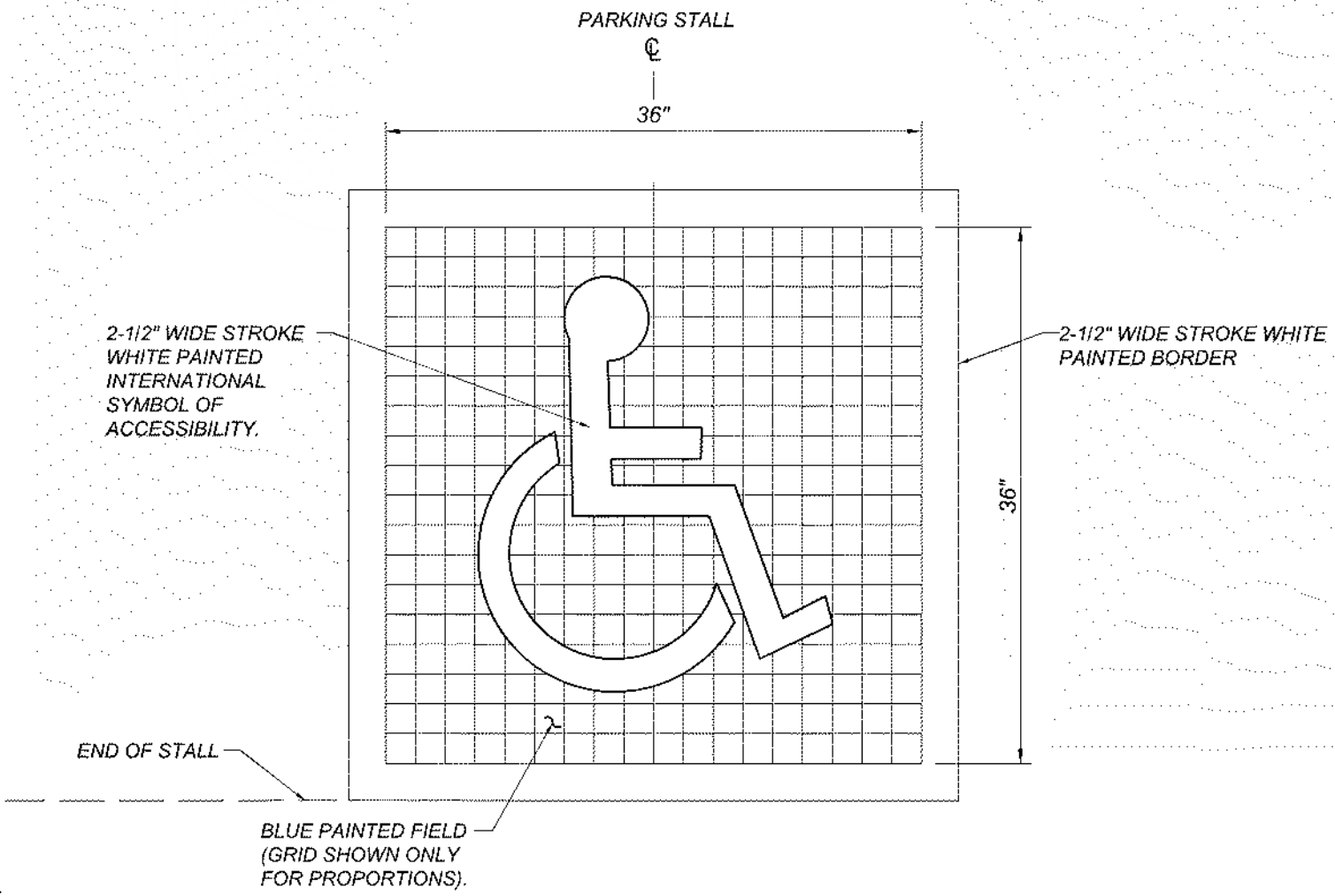


ENLARGED SITE PLAN CODED NOTES

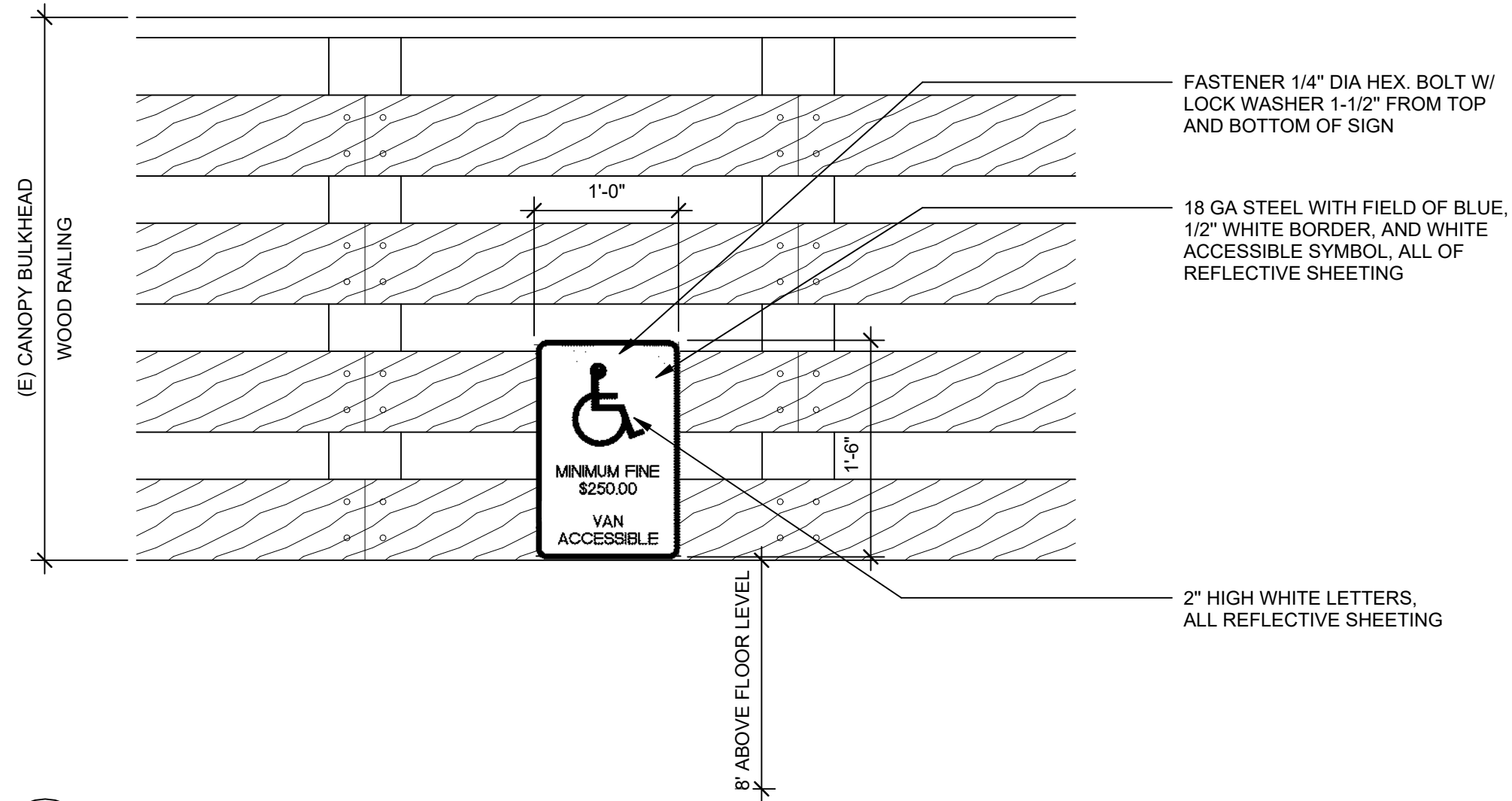
- 4" BLUE BORDER
- HATCHED LINES (BLUE) @ 36" O.C. MAX SPACING
- ACCESSIBLE SIGNAGE; ATTACH TO WOOD RAILS OF CANOPY BULKHEAD ABOVE. SEE ELEVATION 2/A2.01
- INTERNATIONAL SYMBOL OF ACCESSIBILITY (36"x36")
- WHITE LETTERING 12" HEIGHT
- CONCRETE WHEEL STOP
- LANDING 1.8% MAX SLOPE IN ANY DIRECTION
- PARKING STALL 2% MAX SLOPE IN ANY DIRECTION
- ACCESS AISLE 2% MAX SLOPE IN ANY DIRECTION
- EXISTING DOOR, PROTECT IN PLACE
- EXISTING COLUMN, PROTECT IN PLACE
- EXISTING RAMP, INCLUDING TRUNCATED DOMES
- MOVE PULL BOX TO BE LEVEL WITH ADJACENT PAVING, PROVIDE LESS THAN 1/4" VERTICAL CHANGES IN LEVEL

ENLARGED SITE PLAN LEGEND

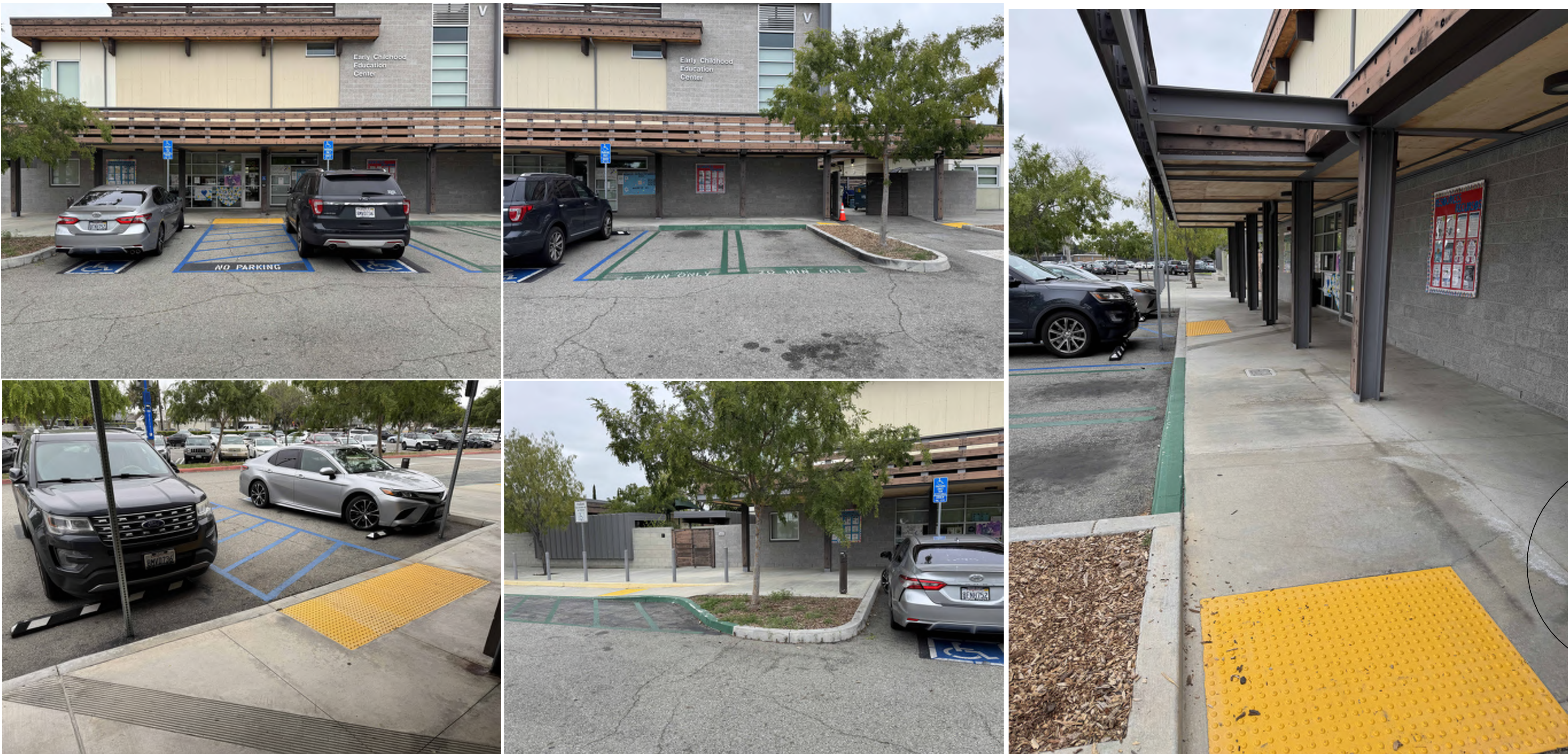
- # FLOOR PLAN CODED NOTE
- CONCRETE PAVING, SEE CIVIL
 - ASPHALT PAVING, SEE CIVIL
 - TRUNCATED DOME, SEE CIVIL
 - (E) TRUNCATED DOME TO REMAIN PER DSA #04-108649
 - LIMIT OF WORK
 - (E) ACCESSIBLE ROUTE OF TRAVEL PER DSA #04-108649
 - ACCESSIBLE ROUTE OF TRAVEL



3 ACCESSIBLE SYMBOL
Scale: 1" = 1'-0"



2 ACCESSIBLE SIGNAGE LOCATION ON ELEVATION
Scale: 1" = 1'-0"



4 PICTURES
Scale: 1/8" = 1'-0"



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**ENARGED
ACCESSIBLE
PARKING
RECONSTRUCTION
PLAN & DETAILS**

A2.01

#

ENLARGED SITE PLAN CODED NOTES

1.

EXISTING PARKING PER DSA A#04-108649

2.

EXISTING FIRE LANE PER A#04-108649

A

SITE PLAN LEGEND

(E) 20' - 0" WIDE FIRE ACCESS LANE PER DSA A# 04-108649

(E) LANDSCAPE TO REMAIN

.....

(E) ACCESSIBLE ROUTE OF TRAVEL PER DSA A# 04-108649

————

ACCESSIBLE ROUTE OF TRAVEL

FH

(E) FIRE HYDRANT

1

SITE PLAN

Scale: 1" = 20'-0"

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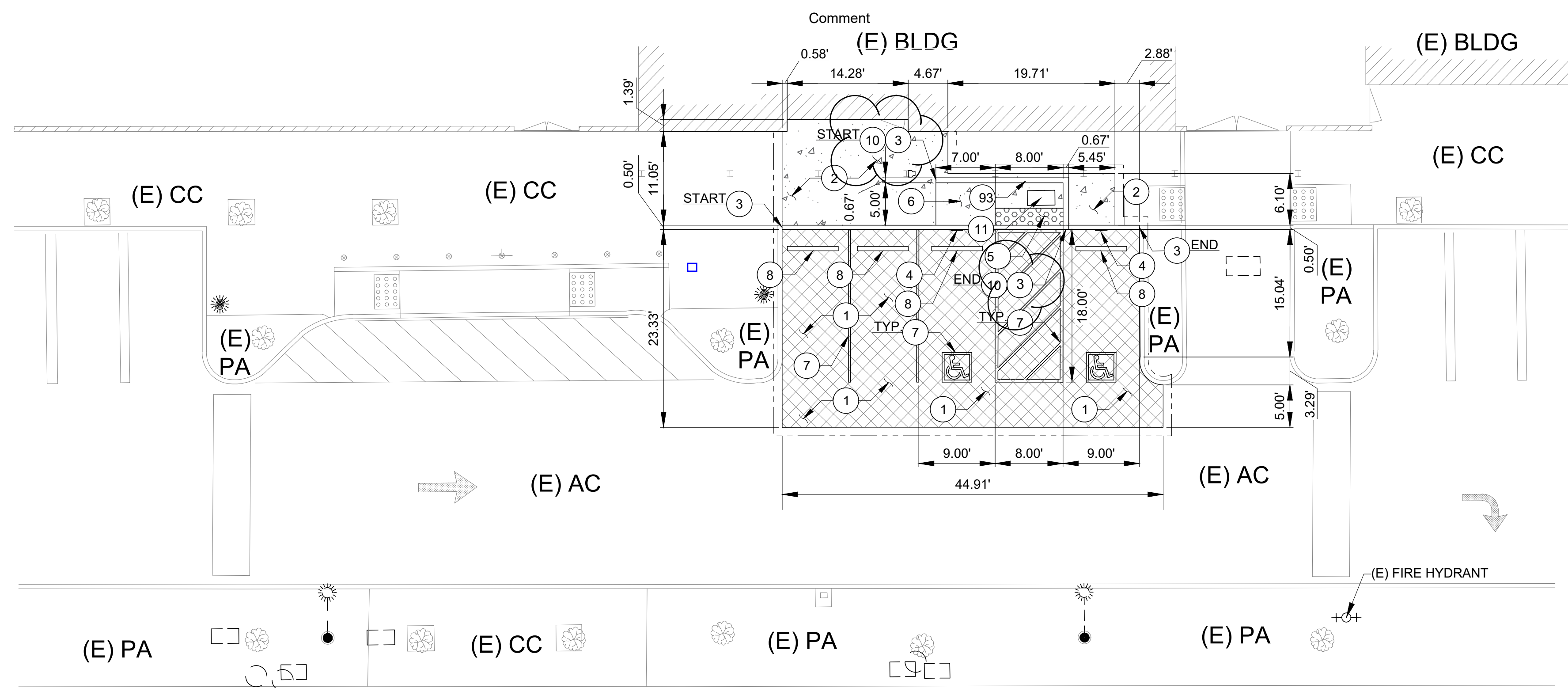
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**ENARGED SITE
RECONSTRUCTION
PLAN**

A2.02

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- CONSTRUCTION NOTES:**
1. CONSTRUCT NEW 3" THICK ASPHALT CONCRETE PAVEMENT OVER 4" THICK CAB PER DETAIL 2 ON SHEET C4.00.
 2. CONSTRUCT NEW 4" THICK CONCRETE PAVEMENT OVER 4" THICK CAB PER DETAIL 1 ON SHEET C4.00.
 3. CONSTRUCT NEW CONCRETE CURB PER DETAIL 4 ON SHEET C4.00.
 4. REINSTALL EXISTING ACCESSIBLE SIGNAGE PER ARCHITECTURAL DRAWINGS.
 5. INSTALL NEW TRUNCATED DOMES PER DETAIL 6 ON SHEET C4.00.
 6. CONSTRUCT ACCESSIBLE CURB RAMP FOR DETAIL 7 ON SHEET C4.00.
 7. INSTALL NEW STRIPING PER ARCHITECTURAL DRAWINGS.
 8. REINSTALL EXISTING CONCRETE WHEELSTOP PER ARCHITECTURAL DRAWINGS.
 9. NOT USED.
 10. NOT USED.
 11. ADJUST EXISTING ELECTRICAL PULL BOX TO BE FLUSHED WITH FINISHED SURFACE PER DETAIL 7 ON SHEET C4.00.

- LEGENDS:**
- CONSTRUCT NEW 3" THICK ASPHALT CONCRETE PAVEMENT OVER 4" THICK CAB PER DETAIL 2 ON SHEET C4.00.
 - CONSTRUCT NEW 4" THICK CONCRETE PAVEMENT OVER 4" THICK CAB PER DETAIL 1 ON SHEET C4.00.
 - INSTALL NEW TRUNCATED DOMES PER DETAIL 6 ON SHEET C4.00.
 - LIMIT OF WORK

- SHEET NOTES:**
1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE SHEETS C1.00.
 2. REFER TO ARCHITECTURAL DRAWINGS FOR OTHER SITE DIMENSIONS AND IMPROVEMENTS NOT SHOWN ON THIS DRAWING.



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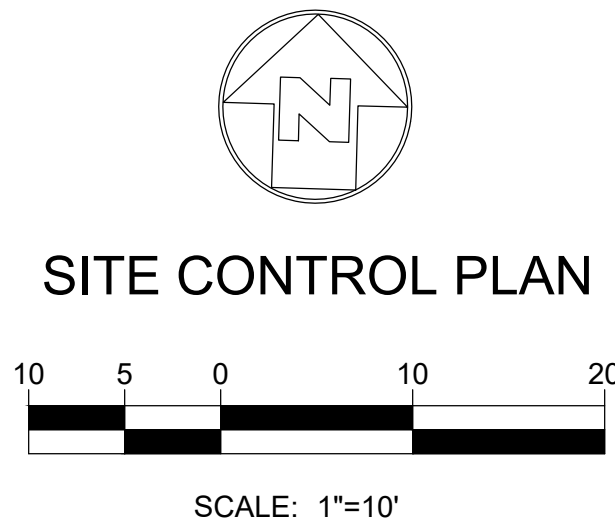
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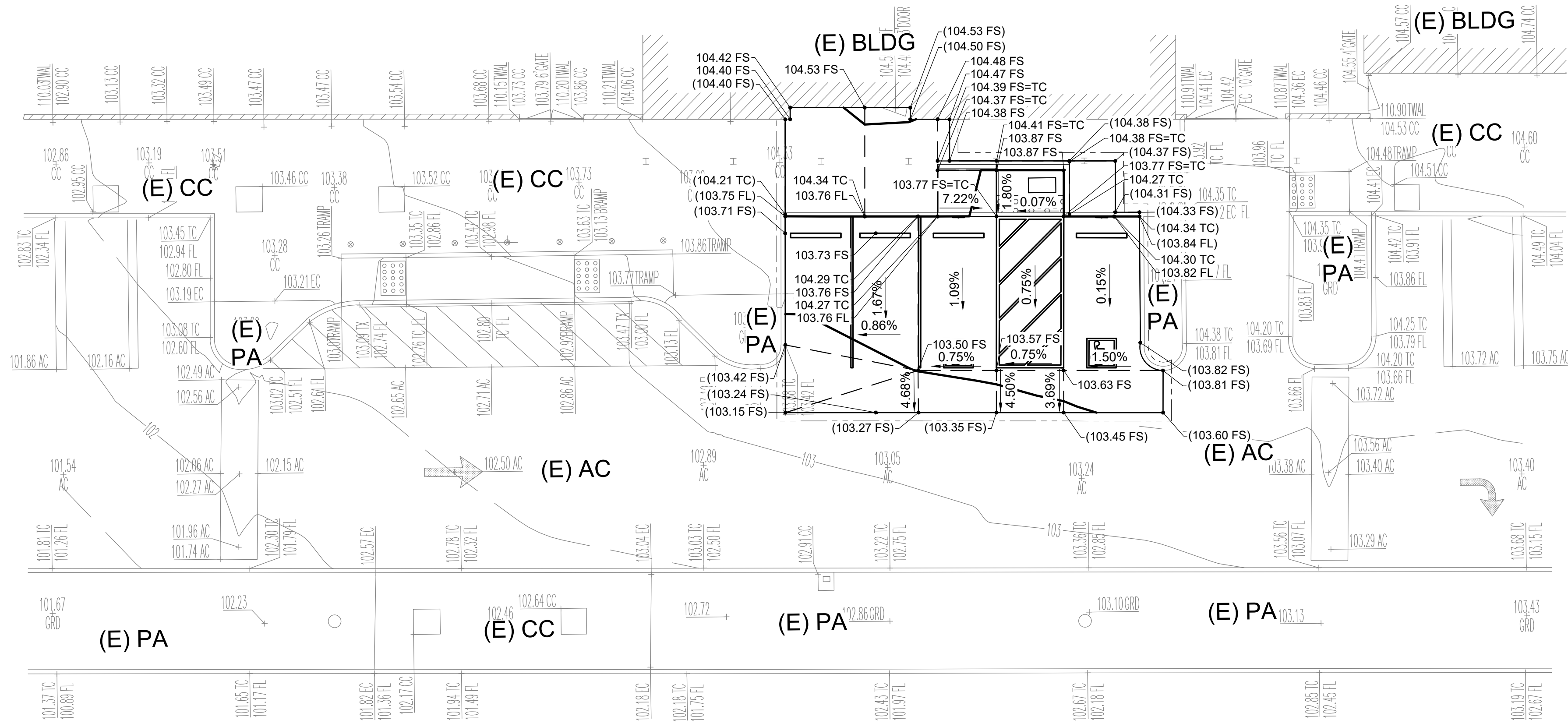
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SITE CONTROL PLAN

C2.00





ESTIMATED EARTHWORK QUANTITY

ESTIMATED CUT	=	1 CY
ESTIMATED FILL	=	2 CY
ESTIMATED IMPORT	=	1 CY (FILL)

NOTES:

- THE ESTIMATED QUANTITIES PROVIDED ABOVE ARE FOR REFERENCE ONLY TO BE USED FOR JURISDICTIONAL PLAN CHECKING AND PERMITTING PURPOSES ONLY.
- ESTIMATED EARTHWORK ABOVE IS BASED ON DESIGN FINISH GRADES TO EXISTING GRADES IN SURVEY. THE ESTIMATED EARTHWORK DOES NOT CONSIDER THE THICKNESS OF EACH PAVEMENT MATERIAL, FOUNDATION AND SLAB ON GRADE VOLUMES, THE REMOVAL OF ANY UNSUITABLE MATERIAL, AND THE REMOVAL OF EXISTING BASEMENTS, PITS, VAULTS, TOP SOIL OR VEGETATION.
- THE ESTIMATED EARTHWORK QUANTITIES DO NOT INCLUDE SHRINKAGE FACTORS DUE TO COMPACTION OR ANY OVER EXCAVATION QUANTITIES.
- THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES NECESSARY FOR HIS BID AND WORK. THE ENGINEER IS NOT RESPONSIBLE AND LIABLE FOR THE CONTRACTOR'S EARTHWORK CALCULATIONS.
- ESTIMATED EARTHWORK QUANTITIES ABOVE ASSUME THAT ALL ON-SITE MATERIALS ARE SUITABLE FOR BACKFILLING. HOWEVER, ACTUAL EXISTING ON-SITE MATERIALS AND IMPORTED MATERIALS MUST FIRST BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION, REMOVAL, OR REPLACEMENT.
- THE ESTIMATED QUANTITIES WERE CALCULATED AND LIMITED ON ON-SITE AREA ONLY.

SHEET NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE SHEETS C1.00.
- FOR PAVEMENT MARKINGS AND STRIPING, RAMP WITH HANDRAILS, SEE ARCHITECTURAL DRAWINGS.
- FOR CATCH BASIN LOCATIONS AND GRATE ELEVATIONS AND INVERTS SEE UTILITY PLAN. IF TOP OF GRATE ELEVATIONS ARE DIFFERENT FROM GRADING CATCH BASIN ELEVATIONS SHOWN ON THIS SHEET, NOTIFY CPM AND ENGINEER.
- PROVIDE A $\frac{1}{2}$ " THRESHOLD FOR ALL EXTERIOR ACCESSIBLE DOORS.
- REFER TO UTILITY PLANS FOR PROJECT SITE DATA.



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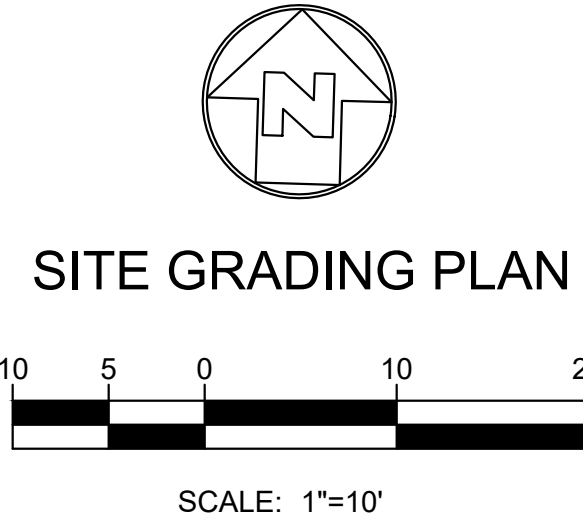
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SITE GRADING PLAN

C3.00



SEE DETAIL 1
FOR THICKENED EDGE

SEE ABOVE FOR
THICKNESS

EDGE

A

B

#4 @ 18" O.C. EW TYP

CAB COMPACTED TO 95%
RELATIVE COMPACTION

IFY AND RECOMPACT TOP
12" OF SUBGRADE TO 90%
RELATIVE COMPACTION

FINISH GRADE

CONCRETE PAVEMENT

#4 REBAR @ 18" O.C. EW

2-#4 CONT. REBAR TYP.

A+B

8"

SCARIFY AND RECOMPACT
TOP 18" OF SUBGRADE TO 95%
RELATIVE COMPACTION

NOTES:

1. FOR CONSTRUCTION JOINTS, EXPANSION JOINTS, PAVEMENT TRANSITION, AND FINISH SURFACE REQUIREMENTS, REFER TO DETAIL 3 & 5 ON THIS SHEET.
2. CONCRETE, F'C=3000 PSI @ 28 DAYS, REBARS, FY=60,000 PSI ASTM A615.
3. SEE LANDSCAPE AND ARCHITECTURAL DRAWINGS FOR FINISH.
4. FOR CONCRETE JOINTING AND PATTERN TO ARCHITECTURAL DRAWINGS.
5. SPACING BETWEEN CONTRACTION JOINTS IN CONCRETE PAVEMENTS SHALL NOT EXCEED 15 FEET IN BOTH LONGITUDINAL AND TRANSVERSE DIRECTIONS.

AC SURFACING CLASS C2

TACK COAT FULL DEPTH (TYP)

RIGID PAVEMENT WHERE OCCURS

TWO COATS OF SURFACE SEAL

TACK COAT FULL DEPTH (TYP)

MOW STRIP/CURB WHERE OCCURS

SCARIFY AND RECOMPACT TOP 12" OF SUBGRADE TO 90% RELATIVE COMPACTION

"B" CAB COMPACTED TO 95% RELATIVE COMPACTION

NOTES:

1. FOR PAVEMENT TRANSITION REFER TO DETAIL 5 ON THIS SHEET.



1. PAVING FINISH SURFACE.
2. 18" SMOOTH W/ SPEED DOWEL @ 18" OC, CENTER IN CONC. AT EXPANSION JOINTS.
3. 1/4" R. @ EDGES. TYP.
4. PREMOLED E.J. FILLER.
5. JOINT SEALANT, COLOR TO BE SELECTED BY ARCHITECT. SUBMIT COLOR SAMPLES PRIOR TO INSTALLATION.
6. BACKER ROD.
7. EXPANSION JOINTS 20' O.C MAX.
8. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF CONTROL JOINT AND EXPANSION JOINT LAYOUT.

NOTES:

1. PROVIDE 1/4" SELF SEALING EXPANSION JOINT WITH PREFORMED JOINT FILLER AT ALL ANGLE POINTS AND THE BEGINNING AND END OF ALL CURVES.
2. PROVIDE CONTRACTION JOINTS CONSISTING OF ONE INCH DEEP CUT SCORES AT 20' O.C. MAX UNLESS OTHERWISE NOTED BY SIDEWALK OR PAVEMENT JOINT PATTERN.
3. WHERE A WALK IS ADJACENT TO THE CURB, ALL JOINTS IN THE CURB SHALL LINE WITH ALL JOINTS IN THE WALK.
4. CONCRETE, FC=3,500 PSI @ 28 DAYS PER SSPWC.

PLAN

2.35"

0.45" AT TOP

0.90" AT BASE

REPLACEABLE TRUNCATED DOMES SHALL BE CAST IN PLACE AND FLUSH WITH SURROUNDING SURFACE

REPLACEABLE TACTILE AND 33538 OF SAE AMS-STD-595A YELLOW

TYP. SECTION

0.987"

0.20"

0.722"

1.375" DIA

0.090 DEG. POINTS

0.045 HIGH TYP.

DOME TILE

REPLACEABLE TRUNCATED DOMES SHALL BE CAST IN PLACE AND FLUSH WITH SURROUNDING SURFACE

REPLACEABLE TACTILE AND 33538 OF SAE AMS-STD-595A YELLOW

SURROUNDING PEDESTRIAN SURFACE

NOTES:

1. ONLY APPROVED ADA-AC DETECTABLE WARNING PRODUCTS (TRUNCATED DOME) AND DIRECTIONAL SURFACES SHALL BE INSTALLED AS PROVIDED IN THE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 1, ARTICLES 2, 3 AND 4. REFER TO CCR TITLE 24, PART 12, CHAPTERS 12-11A AND B-102, FOR BUILDING AND FACILITY ACCESS SPECIFICATIONS FOR PRODUCT APPROVAL FOR DETECTABLE WARNING PRODUCTS AND DIRECTIONAL SURFACES. [CBC 11B-247.1]
2. SEE MANUFACTURER'S (ADA SOLUTIONS, INC.) PRODUCT DRAWINGS AND SPECIFICATIONS FOR MORE DETAILS.

A rectangular area with a wavy border, crossed out with a large 'X' and labeled 'NOT USED'.

[illegible]

7 ACCESSIBLE CURB RAMP DETAIL
NOT TO SCALE

MORETO MATHISON & ASSOCIATES
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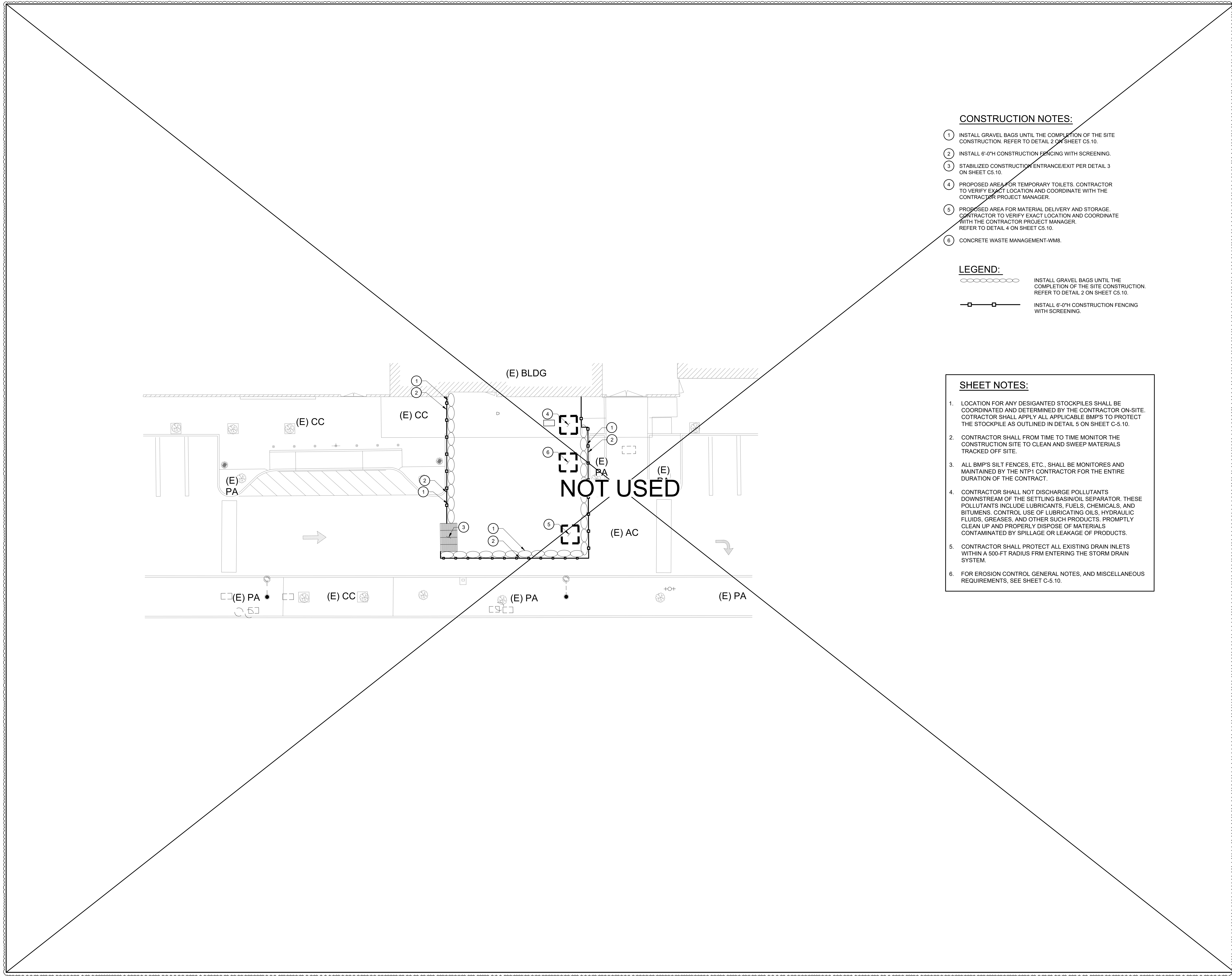
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[illegible]

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MISCELLANEOUS DETAILS

C4.00



1. INSTALL GRAVEL BAGS UNTIL THE COMPLETION OF THE SITE CONSTRUCTION. REFER TO DETAIL 2 ON SHEET C5.10.
2. INSTALL 6'-0" CONSTRUCTION FENCING WITH SCREENING.
3. STABILIZED CONSTRUCTION ENTRANCE/EXIT PER DETAIL 3 ON SHEET C5.10.
4. PROPOSED AREA FOR TEMPORARY TOILETS. CONTRACTOR TO VERIFY EXACT LOCATION AND COORDINATE WITH THE CONTRACTOR PROJECT MANAGER.
5. PROPOSED AREA FOR MATERIAL DELIVERY AND STORAGE. CONTRACTOR TO VERIFY EXACT LOCATION AND COORDINATE WITH THE CONTRACTOR PROJECT MANAGER. REFER TO DETAIL 4 ON SHEET C5.10.
6. CONCRETE WASTE MANAGEMENT-WM8.

	INSTALL GRAVEL BAGS UNTIL THE COMPLETION OF THE SITE CONSTRUCTION. REFER TO DETAIL 2 ON SHEET C5.10.
	INSTALL 6'-0" H CONSTRUCTION FENCING WITH SCREENING.

1. LOCATION FOR ANY DESIGNATED STOCKPILES SHALL BE COORDINATED AND DETERMINED BY THE CONTRACTOR ON-SITE. CONTRACTOR SHALL APPLY ALL APPLICABLE BMP'S TO PROTECT THE STOCKPILE AS OUTLINED IN DETAIL 5 ON SHEET C-5.10.
2. CONTRACTOR SHALL FROM TIME TO TIME MONITOR THE CONSTRUCTION SITE TO CLEAN AND SWEEP MATERIALS TRACKED OFF SITE.
3. ALL BMP'S SILT FENCES, ETC., SHALL BE MONITORED AND MAINTAINED BY THE NTP1 CONTRACTOR FOR THE ENTIRE DURATION OF THE CONTRACT.
4. CONTRACTOR SHALL NOT DISCHARGE POLLUTANTS DOWNSTREAM OF THE SETTLING BASIN/OIL SEPARATOR. THESE POLLUTANTS INCLUDE LUBRICANTS, FUELS, CHEMICALS, AND BITUMENS. CONTROL USE OF LUBRICATING OILS, HYDRAULIC FLUIDS, GREASES, AND OTHER SUCH PRODUCTS. PROMPTLY CLEAN UP AND PROPERLY DISPOSE OF MATERIALS CONTAMINATED BY SPILLAGE OR LEAKAGE OF PRODUCTS.
5. CONTRACTOR SHALL PROTECT ALL EXISTING DRAIN INLETS WITHIN A 500-FT RADIUS FROM ENTERING THE STORM DRAIN SYSTEM.
6. FOR EROSION CONTROL GENERAL NOTES, AND MISCELLANEOUS REQUIREMENTS, SEE SHEET C-5.10.

CONSULTANT



04-124768

[illegible]

C5.00

EROSION AND SEDIMENT GENERAL NOTES:

- IN CASE OF EMERGENCY, CALL: CONTRACTOR NAME HANK (ALL STAR PAVING CO.), PHONE NUMBER: (714) 635-9177.
- A STAND-BY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
- EROSION CONTROL DEVICES SHOWN ON THIS PLAN MAY BE REMOVED WHEN APPROVED BY THE BUILDING OFFICIAL IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
- GRADED AREAS ADJACENT TO FILL SLOPES LOCATED AT THE SITE PERIMETER MUST DRAIN AWAY FROM THE TOP OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY. ALL LOOSE SOILS AND DEBRIS THAT MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY SHALL BE STABILIZED OR REMOVED FROM THE SITE ON A DAILY BASIS.
- ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
- A GUARD SHALL BE POSTED ON SITE WHEREVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS TWO FEET. THE DEVICE SHALL BE DRAINED OR PUMPED DRY WITHIN 24 HOURS AFTER EACH RAINSTORM. PUMPING AND DRAINING OF ALL BASINS AND DRAINAGE DEVICES MUST COMPLY WITH THE APPROPRIATE BMP FOR DEWATERING OPERATIONS.
- THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE AND CONTAIN POLLUTANTS WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE OSP. ADDITIONAL DEVICES AS NEEDED SHALL BE INSTALLED TO RETAIN SEDIMENTS AND OTHER POLLUTANTS ON SITE.
- STORM WATER POLLUTION AND EROSION CONTROL DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES, THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILITY OF THE FIELD ENGINEER. PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL IF REQUESTED BY THE BUILDING OFFICIAL.
- EVERY EFFORT MUST BE MADE TO ELIMINATE THE DISCHARGE OF NONSTORM WATER FROM THE PROJECT SITE AT ALL TIMES.
- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTINGS AND ARE NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASTED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER. ALL WORK SHALL BE IN ACCORDANCE WITH THE EROSION CONTROL PLANS.
- EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHENEVER THE DAILY RAINFALL PROBABILITY EXCEEDS 40%.
- EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY EROSION CONTROL DEVICES AT ALL TIME.
- CONTROLS SHALL BE SET UP AND MAINTAINED AS CONSTRUCTION PROCEEDS. ADJUSTMENTS TO THE EROSION CONTROL PLANS ARE ALLOWABLE AS REQUIRED AND APPROVED BY CITY.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL IMPLEMENT STRUCTURAL AND NONSTRUCTURAL BEST MANAGEMENT PRACTICES (BMPs) IN CONFORMANCE WITH THE GUIDELINES OF THE CALIFORNIA STORM WATER BMP HANDBOOKS.
- AFTER A RAINSTORM, ALL SEDIMENT AND DEBRIS SHALL BE REMOVED FROM STREETS, BERMS AND DESILTING BASINS. ANY GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING A RAINSTORM SHALL BE IMMEDIATELY REPAIRED.
- THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATED A HAZARDOUS CONDITION.
EROSION CONTROL
EC1 - SCHEDULING
EC2 - PRESERVATION OF EXISTING VEGETATION

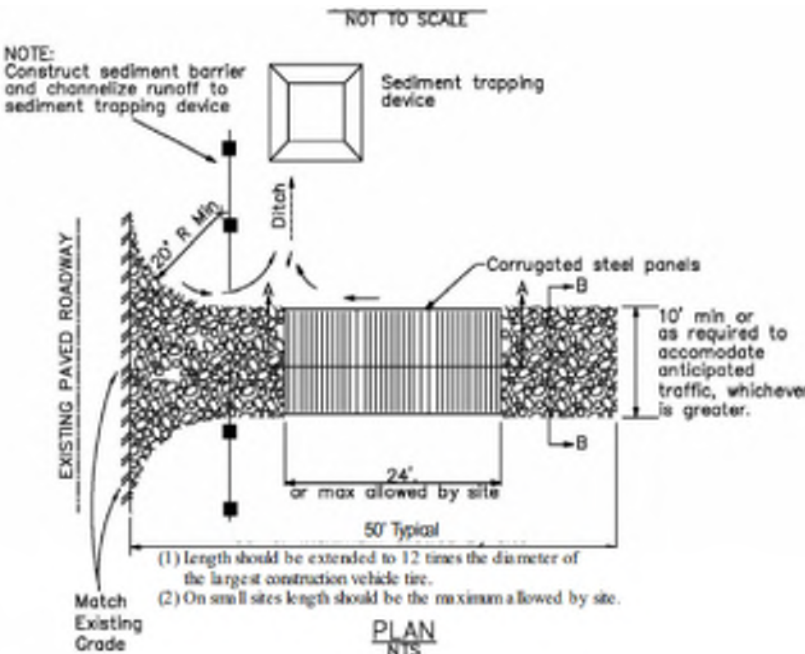
EQUIPMENT TRACKING CONTROL
TC1 - STABILIZED CONSTRUCTION ENTRANCE EXIT

NON-STORMWATER MANAGEMENT
NS2 - DEWATERING OPERATIONS
NS3 - PAVING AND GRINDING OPERATIONS
NS12 - CONCRETE CURING
NS13 - CONCRETE FINISHING
NS14 - MATERIAL AND EQUIPMENT USE

TEMPORARY SEDIMENT CONTROL
SE1 - SILT FENCE
SE7 - STREET SWEEPING AND VACUUMING
SE8 - GRAVEL BAG BARRIER

WIND EROSION CONTROL
WE1 - WIND EROSION CONTROL

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL
WM1 - MATERIAL DELIVERY AND STORAGE
WM2 - MATERIAL USE
WM3 - STOCKPILE MANAGEMENT
WM5 - SOLID WASTE MANAGEMENT
WM6 - HAZARDOUS WASTE MANAGEMENT
WM8 - CONCRETE WASTE MANAGEMENT
WM9 - SANITARY/SEPTIC WASTE MANAGEMENT
WM10 - LIQUID WASTE MANAGEMENT



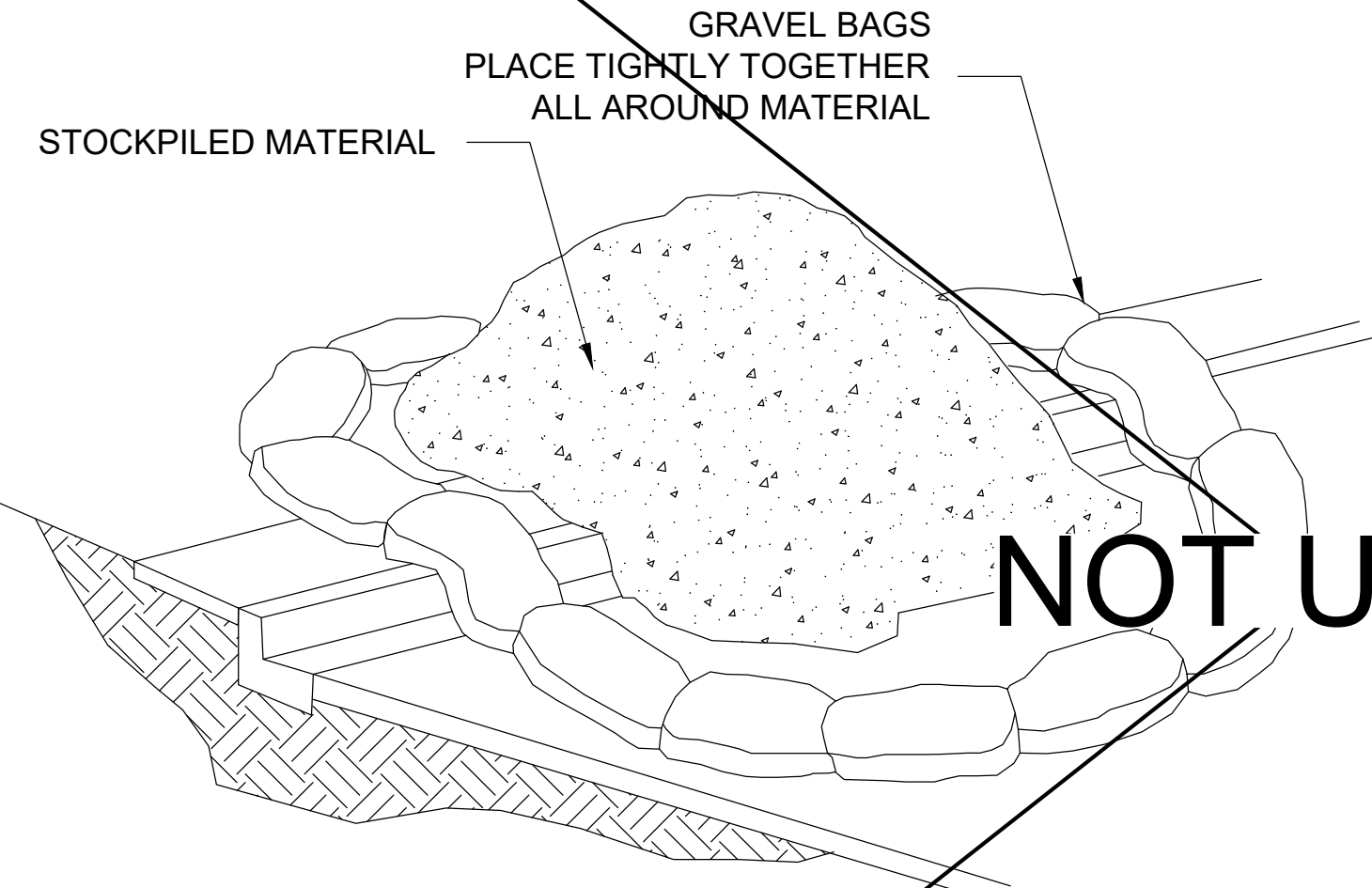
NOTES:

- SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
 - LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE RD OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
 - A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
- ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
- ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE

- REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
- SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
- PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.
- REGULAR SWEEPING SCHEDULES SHALL BE SET UP, PARTICULARLY AFTER HEAVY RAINFALL OR CONSTRUCTION ACTIVITIES, TO ADDRESS VISIBLE DEBRIS AND ENSURE THE ROADWAYS REMAIN CLEAR OF CONTAMINANTS. VACUUM SWEEPERS, IN PARTICULAR, ARE HIGHLY EFFECTIVE AT COLLECTING FINE DUST AND PARTICLES THAT ARE HARDER TO CAPTURE WITH TRADITIONAL MECHANICAL SWEEPERS.

3 STABILIZED CONSTRUCTION ENTRANCE / EXIT PER TC-1
NOT TO SCALE



NOTES:

- DIRT AND OTHER CONSTRUCTION RELATED MATERIALS PLACED IN THE STREET OR ON OTHER IMPERVIOUS SURFACES MUST BE CONTAINED WITH SANDBAGS OR OTHER MEASURES TO PREVENT TRANSPORT TO THE STORM DRAIN SYSTEM.
- ANY CONSTRUCTION MATERIAL STORED OR STOCKPILED ON-SITE SHALL BE PROTECTED FROM BEING TRANSPORTED BY THE FORCE OF WIND OR WATER.

4 MATERIAL STORAGE PER WM-3
NOT TO SCALE

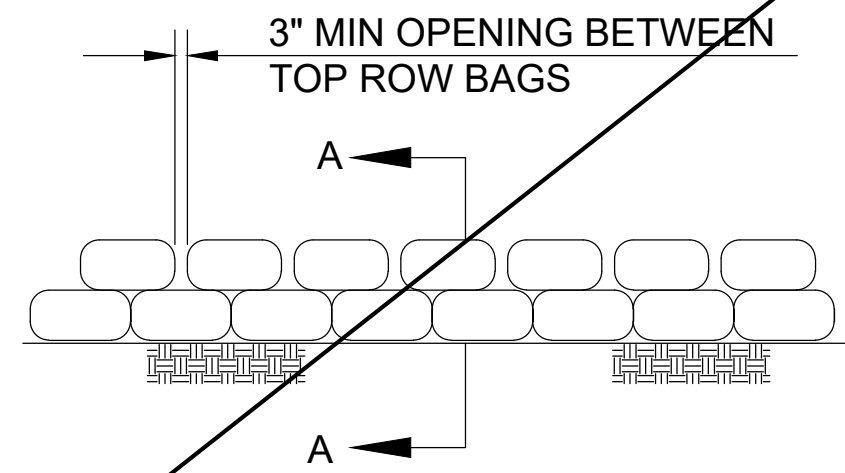
OWNER STATEMENT OF UNDERSTANDING:

AS THE PROJECT OWNER OR AUTHORIZED AGENT OF THE OWNER, I HAVE READ AND UNDERSTAND THE REQUIREMENTS TO CONTROL STORM WATER POLLUTION FROM SEDIMENTS, EROSION, AND CONSTRUCTION MATERIALS, AND I CERTIFY THAT I WILL COMPLY WITH THESE REQUIREMENTS. I, OR MY REPRESENTATIVE, CONTRACTOR, DEVELOPER, OR ENGINEER, WILL MAKE CERTAIN THAT ALL BMP'S SHOWN ON THIS PLAN WILL BE FULLY IMPLEMENTED, AND ALL EROSION CONTROL DEVICES WILL BE KEPT CLEAN AND FUNCTIONING. PERIODIC INSPECTIONS OF THE BMPs WILL BE CONDUCTED AND A CURRENT LOG, SPECIFYING THE EXACT NATURE OF THE INSPECTION AND ANY REMEDIAL MEASURES, WILL BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES AND WILL BE AVAILABLE FOR THE REVIEW BY THE BUILDING OFFICIAL.

AS THE PROJECT OWNER OR AUTHORIZED AGENT OF THE OWNER, "I CERTIFY THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFORMATION SUBMITTED IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT SUBMITTING FALSE AND/OR INACCURATE INFORMATION, FAILING TO UPDATE THE LOCAL SWPPP TO REFLECT CURRENT CONDITIONS, OR FAILING TO PROPERLY AND/OR ADEQUATELY IMPLEMENT THE LOCAL SWPPP MAY RESULT IN REVOCATION OF GRADING AND/OR OTHER PERMITS OR OTHER SANCTIONS PROVIDED BY THE LAW."

NARESH ARAYA 11/26/2024
OWNER OR AUTHORIZED REPRESENTATIVE (PERMITEE) DATE

1 GENERAL NOTES
NOT TO SCALE



SECTION A-A

2 GRAVEL BAG DETAIL
NOT TO SCALE

5 STATEMENT OF UNDERSTANDING



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CLIENT
RANCHO SANTIAGO
COMMUNITY COLLEGE DISTRICT
**BARRIER REMOVAL
AT EARLY CHILHOOD
EDUCATION CENTER**
2323 N BROADWAY, SANTA
ANA, CA 92706

A# 04-124768

REVISIONS	
DSA BACK CHECK 01	11/26/2026
A ADDENDUM 1	06/26/2026

MMA NO	25802
DATE:	05/20/2025
DRAWN	LS
CHECKED	DM

EROSION CONTROL
DETAILS

C5.10



FACILITY PLANNING, CONSTRUCTION
AND DISTRICT SUPPORT SERVICES
2323 NORTH BROADWAY, RM 112
SANTA ANA, CA 92706

TEL: 714-480-7510

Rancho Santiago Community College District
ATTACHMENT - B

Division 01 RSCCD Specifications
Division 31 Earthwork Specifications
Division 32 Site Work Specifications

Bid # 1502

Project Name:

Barrier Removal at Child Development Center (CDC)
at Santa Ana College

Project Manager:
Julio Celada

July 22, 2026



David Mathison, Architect
Moreto, Mathison & Associates Architects

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APPENDIX A - RSCCD PROJECT FORMS

SECTION 01 45 24 ENVIRONMENTAL IMPORT/EXPORT MATERIALS TESTING

PART 1 – GENERAL

1.01 SUMMARY

- A. This Section specifies the requirements for the sampling, testing, transportation and certification of imported fill materials or exported fill materials from RSCCD Sites.
- B. This Section defines:
 - 1. Contractor requirements for use of existing, imported or generated materials on RSCCD Sites.
 - 2. Contractor requirements for stockpiling materials for use on school sites.
 - 3. Contractor requirements for exporting materials from a school site including transportation.
 - 4. Testing requirements for all materials imported, exported, stockpiled or generated for use on the school site.
 - 5. Testing and reporting requirements.
 - 6. Contractor submittal requirements.

1.02 RELATED SECTIONS

- A. General Conditions.
- B. Section 01 11 00: Summary of Work.
- C. Section 01 31 13: Project Coordination.
- D. Section 01 32 13: Construction Schedule.
- E. Section 01 32 29: Project Forms
- F. Section 01 33 00: Submittal Procedures.
- G. Section 31 22 00: Grading.
- H. Section 31 23 13: Excavation and Fill.
- I. Section 31 23 16: Excavation and Fill. (Pavement)
- J. Section 31 23 26: Base Course.

1.03 OBJECTIVES

- A. Ensure that fill materials imported to RSCCD Sites are free of known and expected environmental contaminants for students, staff, and visitors.
- B. Ensure that materials exported from RSCCD Sites comply with California Code of Regulations (CCR) Title 22 requirements.
- C. Ensure that representative data be collected so that analytical determinations can be made in regards to the first two objectives.

1.04 SUBMITTALS

A. Contractor shall submit to District Representative for transmittal to RSCCD Environmental Consultant:

- 1. Written notification in the form of a memo or e-mail from the Contractor to the District Representative is required prior to the importing/exporting of soils from a school or borrow site.

All hauling contracts must specify the use of “clean” trucks. Clean trucks shall be clean of any and all visible contamination or deleterious materials.

2. Written documentation confirming that the trucks traveled directly from the source location to the recipient location with no detours or stops at other locations and that short loads were not augmented by other materials that were not tested as part of the final import/export activities. It is the Contractor’s responsibility to document that no other trips or short load augmentation occurred and submit the documentation within seven (7) calendar days of the completion of the import/export activities. All import/export transportation activities shall be conducted in accordance with all applicable (local, State, Federal) rules and regulations.
3. The District’s third party Environmental Consultant shall have the required tests performed and report results noting if the tested material passed or failed and shall furnish copies to the District Representative, Project Inspector (PI), Architect, Contractor and/or others as required. Report shall state tests were conducted under the responsible charge of a licensed State of California professional engineer or professional geologist and the material was tested in accordance with applicable provisions of the Contract Documents, DSA, and CCR Title 22.
4. Certification, in the form of haul tickets or completed waste manifests, documenting the volume/weight and recipient of all import/export materials and activities. This documentation shall be coordinated through the District Representative and RSCCD Environmental Consultant. Contractor shall provide, track, and maintain a log of all imported and exported materials.
5. Specific Import Requirements:
 - a. Within ten (10) calendar days of receipt of Notice to Proceed, the contractor shall submit a spreadsheet listing all required import material types including but not limited to backfill soil, sand, gravel, and crushed aggregate base **(NO Crushed Miscellaneous Base (CMB) shall be allowed for use on RSCCD projects)**. The list shall include estimated volumes/weights required by each subcontractor and the intended borrow site locations each contractor intends to procure material from.
 - b. Prior to the import of material, the Contractor must provide a “Request for Import Material Testing” form a minimum of two (2) weeks prior to needing material on site. The “Request for Import Material Testing” form can be found in Specification Section 01 32 29.
 - c. For import to the school project site, haul tickets shall be utilized, and shall contain the following minimum information:
 - 1) Date(s) of haul activity.
 - 2) Address of source site.
 - 3) Address of recipient.
 - 4) Load volume/weight.
 - 5) Day of departure from source.
 - 6) Day of arrival at recipient site.
 - 7) Signature of recipient or recipient’s agent.
 - 8) It is the Contractor’s responsibility to confirm that no other trips or short-load augmentation occurred and submit documentation to the District Representative.
6. Specific Export Requirements:
 - a. Prior to the export of material from the site, the Contractor must provide a “Request for Export Material Testing” form a minimum of four (4) weeks prior to the scheduled material export date.

- b. All export material must be shipped to the location identified on the “Request for Export Material Testing” form.
- c. Contractor is responsible for finding an acceptable receiving site or facility including facilities permitted to receive exports deemed unusable or environmentally impacted/contaminated. The contractor shall obtain the receiving site’s test requirements and the district shall test to these requirements prior to loading or hauling of material.
- d. Contractor shall provide to the District, the receiving facilities’ acceptance criteria and test requirements so that the District’s Environmental Consultant can have the requisite testing performed based on requirements of the site or facility.
- e. The District’s Environmental Consultant shall confirm that the proposed waste classification for any proposed export material is appropriate. For materials deemed unacceptable for export except to a permitted facility, or for those materials sent electively by Contractor to a permitted facility, the Contractor shall provide to the District’s Environmental Consultant information on the necessary waste manifest documentation no later than 30 calendar days from the date of material/waste hauling from the site.
- f. Contractor shall provide a waste acceptance letter to the District from the designated disposal facility prior to any export from the District’s site.
- g. Contractor must provide the appropriate waste manifest(s) and provide a copy, signed by the receiving site. A copy of the executed manifest shall be provided to the District Representative.
- h. Materials identified as hazardous wastes will need the site US EPA waste generator identification number and hazardous waste manifests prepared with requisite information on generator and receiving facility.

1.05 APPROVALS

- A. Import or export of soil, granular base, geotechnical grading or filling materials at RSCCD sites will occur only with prior approval of the District through the District Representative.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Imported:
 - 1. Soils: Soils proposed for import shall be tested pursuant to the requirements as outlined in Part 3 of this Section.
 - 2. Gravels/CAB: Clean gravel, consisting of native rock from a commercial source, shall be tested pursuant to the requirements of this Section.
 - 3. Sands: Clean sand from a commercial source shall be tested pursuant to the requirements of this Section. Contractor shall provide written documentation, which identifies the source, volume/weight and proposed transport date(s) of the material for review.
 - 4. Miscellaneous Material: No crushed miscellaneous base (CMB) containing crushed concrete, asphalt, construction debris, recycled, or other potential deleterious materials may be utilized or imported to a RSCCD project site for use as fill or grading material.
- B. Exported/Site Generated:
 - 1. Contractor is responsible for finding an acceptable receiving site or facility including facilities permitted to receive exports deemed unusable or environmentally impacted/contaminated.

2. Contractor shall provide a waste acceptance letter to the District from the designated disposal facility prior to any export from the District's site.
3. Contractor must provide the appropriate waste manifest(s) and provide a copy, signed by the receiving site. A copy of the executed manifest shall be provided to the District Representative.
4. Materials identified as hazardous waste will need the site US EPA waste generator identification number and hazardous waste manifests prepared with requisite information on generator and receiving facility.
5. Soils: Soils proposed for export shall be tested pursuant to the requirements of the intended receiving facility's acceptance criteria. (Note: Once soils or other materials for export have been tested, they cannot be disturbed or reused for any purpose without prior approval by District Representative.
6. Gravels/Sands: Gravels, sands, or other natural rock materials shall not be exported from a RSCCD project site without prior testing. An exception to this provision is gravel adhering to concrete or asphalt pavement. In this instance and in consultation with the RSCCD Environmental Consultant, the Contractor may be allowed the disposal of said materials and construction debris without sampling and analytical testing required under this Section.
7. Miscellaneous Material. No miscellaneous material or other similar materials shall be exported from a RSCCD project site without prior evaluation, testing, and approval of the RSCCD Environmental Consultant. No crushed miscellaneous material containing concrete, asphalt, construction debris, or other potential deleterious materials that is generated onsite may be used as fill or grading material for any RSCCD project site. Crushed asphalt shall be segregated and stockpiled separately. The onsite use of crushing equipment is not permitted.

PART 3 – EXECUTION

3.01 GRADING/EXCAVATION

- A. If the Contractor encounters an area(s) with discolored, stained, and/or odorous soils or any other evidence of contamination during excavation/grading work, Contractor must immediately notify the District Representative, cease work at the aforementioned area(s), and secure the area(s) with fencing, tape, stakes or other suitable means to prevent entry by personnel or equipment. Upon notification, the District Representative will immediately notify the RSCCD Environmental Consultant, which will initiate a construction response to address the area(s) of concern, in accordance with pertinent regulatory requirements.

3.02 SAMPLING AND TESTING

- A. All import/export material testing will be performed by a testing laboratory selected by District's Environmental Consultant. Contractor must coordinate with the District per Item 1.04, of this Section, to request testing.
- B. All fill/grading material must be tested at the site of origin. Import/export testing and certification process shall include the steps listed below. OWNER retains the right to refuse any fill material proposed for use at any RSCCD site.
 1. Stockpile all materials for sampling (standard stockpile or backhoe pothole stockpile). Crushed fill materials generated by Contractor at a RSCCD site must be segregated by material type (e.g., separate stockpiles for concrete, asphalt, etc. – not to be tested).
 2. Provide completed Request for Import/Export Fill Material Testing form, per Item 1.04.A.1.
- C. Import/export fill materials shall be stockpiled by Contractor (or the export site) and will be deemed acceptable for import/export or reuse only when it has been tested and proven clean to the satisfaction of the District's Environmental Consultant.

- D. Import/export fill material may be deemed defective for use by the RSCCD Environmental Consultant at a RSCCD site should any of the following compounds or chemicals exceed the prescribed volumes:
1. TPH are present at concentrations exceeding 100 milligrams per kilogram (mg/kg) for gasoline and/or 1,000 mg/kg for oil/diesel and long-chain hydrocarbons.
 2. Solvents and other VOCs are present at concentrations exceeding the human health risk levels for unrestricted land use and/or hazardous waste characterization criteria whichever is lower.
 3. PCBs are present at concentrations exceeding the human health risk levels for unrestricted land use and/or hazardous waste characterization criteria whichever is lower.
 4. SVOCs are present at concentrations exceeding the human health risk levels for unrestricted land use and/or hazardous waste characterization criteria whichever is lower.
 5. OCPs are present at concentrations exceeding the human health risk levels for unrestricted land use and/or hazardous waste characterization criteria whichever is lower.
 6. OPPs are present at concentrations exceeding the human health risk levels for unrestricted land use and/or hazardous waste characterization criteria whichever is lower.
 7. Chlorinated herbicides are present at concentrations exceeding the human health risk levels for unrestricted land use and/or hazardous waste characterization criteria whichever is lower.
 8. California Code of Regulations Title 22 (CAM 17) Metals at concentrations exceeding human health risk levels for unrestricted land use or typical background levels expected in California and/or hazardous waste characterization criteria whichever is lower.
 9. Hexavalent chromium is present at concentrations exceeding 17 mg/kg or failing hazardous waste STLC leachate criteria.
- E. All export/import material shall be characterized, handled, and documented in accordance with applicable US EPA and State of California hazardous waste and hazardous materials regulations. For the purpose of this specification, "contaminated" shall mean any soil or geotechnical material with constituent concentrations, which would require disposal at a permitted facility (i.e., California hazardous or RCRA hazardous). District Representative must be notified at least five days prior to the disposal of any hazardous waste or hazardous material. No material disposal or reuse can take place without prior written approval of District Representative.
- F. Specification test results and RSCCD Environmental Consultant approvals shall be valid for a period of 90 days from the date of the subject testing. Previously approved materials shall not be utilized or disposed offsite after the 90-day limit without prior review and approval by the District's Environmental Consultant.
- G. Soils with concentrations above Section 01 45 24 - 3.02.D screening levels may, upon prior approval by the RSCCD Environmental Consultant, be reused at other RSCCD sites if supported by a site-specific human health risk assessment at the receiving school.

3.03 TRANSPORTATION

- A. Details of the samples and testing must be submitted to and approved by RSCCD Environmental Consultant before the materials from which the samples were collected undergo transportation.
- B. Haul Routes and Regulations/Restrictions: Contractor must comply with requirements of project environmental disclosure documents (e.g., CEQA EIR) and authorities having jurisdiction over the project area and the proposed activities (e.g. Regional Water Quality Control Board, Orange County Health Care Agency, DTSC, etc.).

3.04 COSTS

- A. The District has pre-test sites for sand, aggregate, and CAB that the Contractor may use without requiring any additional environmental testing. If the Contractor elects to utilize a separate site from the pre-tested sites for

- these materials, the Contractor shall provide an import inspection request form in accordance with Section 1.04 above.
- B. District will incur the costs of testing both mined (quarry) and borrow sites up to and including four (4) locations within a distance of 70 miles of project location. The costs for the need to test more than four (4) sites shall be incurred by the Contractor through the District's Environmental Consultant.
 - C. Contractor shall pay all fees associated with loading, hauling and disposal of exported soil and aggregates. Should contaminated soil be encountered, the district shall pay the fee difference if the soil is determined to be treated as a hazardous material.
 - D. Contractor shall pay all fees for loading, hauling, disposal and/or processing of contaminated and/or hazardous fill materials identified in the contract documents.

END OF SECTION 01 45 24

SECTION 31 1000 SITE CLEARING

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Removal of vegetation, grass, grass roots, shrubs, tree stumps, trees, upturned stumps, weed growth, tree roots, brush, masonry, concrete, rubbish, debris and other materials.
2. Removal of concrete and bituminous surfaces.
3. Removal of existing fences and gates.

B. Related Requirements:

1. Division 01 - General Requirements.
2. Section 31 2200 - Grading.
3. Section 31 2313 - Excavation and Fill.
4. Section 31 2316 - Excavation and Fill for Pavement.
5. Section 31 2326 - Base Course.

1.02 SUBMITTALS

- A. Shop Drawings: Submit site plan indicating extent of site clearing.

1.03 QUALITY ASSURANCE

- A. Comply with Standard Specifications for Public Works Construction, current edition, as a minimum requirement.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 TREE AND STUMP REMOVAL

- A. Remove trees and stumps indicated or required to be removed. Remove trees, together with bulk of roots, to a minimum depth of 4 feet below required grade, and within a radius of approximately 7 feet beyond perimeter of trunk at grade.

- B. Fill and compact excavation from tree and stump removal. Fill in 6 inch layers, each compacted to 90 percent of maximum density in accordance with ASTM D1557.
 - 1. Back filling shall not commence until the excavation is inspected and tested.

3.02 CONCRETE AND BITUMINOUS SURFACING REMOVAL

- A. Break up and completely remove existing concrete surfacing, curbs, gutters, walks and bituminous surfacing to indicated limits. Cutting shall be performed to a neat and even line with proper tools or a concrete cutting saw. Minimum depth of cut shall be 1 1/2-inch, unless otherwise indicated. Remove concrete broken beyond the indicated limits to the nearest joint or score line and replace with new concrete to match existing.

3.03 CLEANUP

- A. Remove rubbish, debris and waste materials and legally dispose of off the Project site.

END OF SECTION

SECTION 31 2200 GRADING**PART 1 - GENERAL****1.01 SUMMARY**

- A. Section Includes:
 - 1. General exterior grading, cutting and filling, including grading for building area, paving, planting areas, banks and hillsides.
- B. Related Requirements:
 - 1. Division 01 - General Requirements.
 - 2. Section 31 1000 - Site Clearing.
 - 3. Section 31 2313 - Excavation and Fill.
 - 4. Section 31 2316 - Excavation and Fill for Pavement.
 - 7. Section 31 2326 - Base Course.

1.02 PROJECT REQUIREMENTS

- A. General:
 - 1. Fees: Pay as required by authorities having jurisdiction over the area.
 - 2. Bonds: Post as required by authorities having jurisdiction over the area.
 - 3. Haul Routes and Restrictions: Comply with requirements of authorities having jurisdiction over the area.
 - 4. Before grading, contact Underground Service Alert of Southern California (USASC) for information on public buried utilities and pipelines. Retain the services of an underground utility locator for on-site utilities.

PART 2 - PRODUCTS**2.01 MATERIALS**

- A. Materials shall conform to requirements specified in this and related sections.

PART 3 - EXECUTION**3.01 PREPARATION**

- A. Protect and maintain installed stakes until their removal is required for the Work. Provide replacement grade or location stakes lost or disturbed.

- B. Install grade stakes and compare to indicated grades. If discrepancies are found between existing grades and grades indicated on Drawings, do not proceed until discrepancies are resolved.

3.02 ROUGH AND FINE GRADING

- A. Rough grade area sufficiently high to require cutting by fine grading:
 - 1. Grade area for bituminous surfacing and other paving to the indicated grades, equal to the section of the indicated base and pavement.
 - 2. Slope banks to required finish grades as cut progresses or leave cuts full and finish grade by mechanical equipment to provide grades and soil densities indicated on the Drawings.
 - 3. Rough grade, fill and compact banks beyond indicated finish grades. Finish grade banks and slopes to indicated grades and specified soil densities.
 - 4. Grade Only Areas: In areas not indicated to receive pavement, rough grade to approximate finish grades and then scarify, moisten and roll to obtain required density and indicated finish grades.
 - 5. Tolerances: Finish grades shall be within a tolerance of 0.05 inch per foot above or below grades indicated. Provide an average grade as indicated.
- B. Base or Subgrade:
 - 1. After subgrade has been constructed to approximate required grades, scarify to a depth of at least 6 inches:
 - a. After scarifying, process loosened material to a finely divided condition and adjust moisture content to optimum condition by addition of water, addition and blending of dry suitable material, or by drying of existing material.
 - b. Subgrade material shall be compacted by tamping, sheepsfoot rollers or pneumatic tire rollers. Required relative compaction shall be **90**percent minimum for the top 6 inches below subgrade.
 - c. Install base course in accordance with Section 31 2326 - Base Course.
 - 2. Tolerance of completed grades of base or subgrade shall not vary more than 0.03 inch per foot from grades indicated. Provide an average grade as indicated.

3.03 SHORING

- A. Provide shoring as necessary to properly and safely support earth sides of excavations, and existing curbs, sidewalks, gutter, drives and stairs, against movement and collapse.
- B. Design and Calculations: Provide in accordance with requirement of CalOHSA.

- C. Remove shoring upon completion of the Work of this section or when no longer needed unless required otherwise by authorities having jurisdiction.

3.04 EXCESS MATERIAL DISPOSAL

- A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

3.05 PROTECTION

- A. Protect the Work of this section until Substantial Completion.

END OF SECTION

SECTION 31 2313 EXCAVATION AND FILL**PART 1 - GENERAL****1.01 SUMMARY****A. Section Includes:**

1. Excavating, filling, backfilling, and compacting for Project site pavement, planting areas, buildings, and other structures.
2. Trenches for utility lines such as water, gas, irrigation, storm drain and sewer lines, concrete-encased conduits, manholes, vaults, valve boxes, catch basins, underground tanks, thrust blocks, yard boxes, pull boxes, and other utility appurtenances.

B. Related Requirements:

1. Division 01 - General Requirements.
2. Section 31 1000 - Site Clearing.
3. Section 31 2200 - Grading.
4. Section 31 2326 - Base Course.
5. Section 32 0117 - Pavement Repair.

1.02 PROJECT REQUIREMENTS**A. Import and Export of Earth Materials:**

1. Fees: Pay as required by authorities having jurisdiction over the area.
2. Bonds: Post as required by authorities having jurisdiction over the area.
3. Haul Routes and Restrictions: Comply with requirements of authorities having jurisdiction over the area.

1.03 SUBMITTALS

- A.** Shoring calculations as required in Article 3.03 of this Section.

1.04 QUALITY ASSURANCE

- A.** Comply with the Standard Specifications for Public Works Construction, current edition, except as modified herein.
- B.** Sampling, testing, and certification of imported and exported soils shall be performed in accordance with Section 01 4524, Environmental Import/Export Materials Testing.

1.05 TESTING

- A.** OWNER will retain a Geotechnical Engineer as an OWNER Consultant who will provide observations, tests, inspections and approvals identified in the Contract Documents as being responsibility of OWNER.

- B. Imported Soils: The Geotechnical Engineer will obtain initial product Sample for testing in accordance Article 3.05 of this Section.

1.06 PROJECT CONDITIONS

- A. Information on Drawings or in soil investigation report does not constitute a guarantee of accuracy or uniformity of soil conditions over the Project site.

PART 2 - PRODUCTS

2.01 FILL AND BACKFILL MATERIALS

- A. Fill and backfill material shall be a granular material previously removed from excavation or imported fill material, free of clods and stones larger than 3 inches, (2½ inches for utility trenches) foreign materials, vegetable growths, sod, expansive soils, rubbish and debris. Material shall conform to these specified requirements and related sections.
- B. Fill material exhibiting a wide variation in consistency and moisture content shall be blended and aerated to stabilize and upgrade the material.
- C. Bedding material from trench bottom to one foot above the pipe:
1. Sand, gravel, crushed aggregate or native free-draining granular material providing a sand equivalent of at least 30 or a coefficient of permeability greater than 1.4 inches per hour.
 2. Sand complying with the Specifications for cement concrete aggregates.
- D. Brick rubble and broken concrete originating from the Project site shall be legally disposed of off the Project site No such material shall be imported from outside the Project site.
- E. Permeable Backfill:
1. Provide permeable backfill material behind retaining structures consisting of gravel, crushed gravel, crushed rock, natural sands, manufactured sand, or combinations of these materials conforming to the following gradations:

<u>Sieve Size:</u>	<u>Percentage Passing:</u>
3/4 inch (19mm)	100
3/8 inch (10mm)	80 to 100
No. 100	0 to 8
No. 200	0 to 3
 2. Those portions of fill material passing a No. 4 sieve shall provide a sand equivalent of at least 60.
 3. Provided backing for weep-holes shall consist of two cubic feet of aggregate in burlap sacks, securely tied. Aggregate shall conform to requirements for No. 3 concrete aggregate as specified in subsection 200-1.4 of the Standard Specifications for Public Works Construction.

- 4. Permeable Backfill Alternate Materials: Instead of the materials specified for retaining structures backfill, a drainage matting system Miradrain by Mirafi, Inc., American Wick Drain, JDR Enterprises, or equal, may be provided if reviewed and approved by the ARCHITECT.
- F. Cement-sand slurry shall be provided with one sack of cement per cubic yard of the mixture.

2.02 BASE MATERIALS

- A. Concrete Slabs on Grade: Provide "Crushed Aggregate Base" as specified in Standard Specifications for Public Works Construction, Section 200 - Rock Materials, with 3/4 inch maximum size aggregates. Provide 3 inch thick base, unless noted otherwise.
- B. Bituminous Surfacing: Provide as indicated on Drawings and specified in Section 31 2326 Base Course.

PART 3 - EXECUTION

3.01 GENERAL

- A. Before initiating intrusive activities, contact Underground Service Alert of Southern California (USA or Dig Alert) to obtain a Dig Alert ticket for location information on buried public and USA member utilities and pipelines at least 48-hours prior to beginning work. A copy of the Dig Alert ticket shall be forwarded to the OWNER. For on-site utilities, retain a state-licensed third party underground utility locating service.
- B. Where the Work includes a building extension or addition on an occupied Project site, perform Work in such a manner, and at such times, as not to disrupt performance of existing utility services to existing Project site facilities. Where an interruption is necessary, obtain review from the OAR before proceeding.
- C. Remove concrete or bituminous pavement to straight lines by saw cutting.

3.02 PROTECTION

- A. Protect and guard excavations against danger to life, limb, and property as required by, but not limited to, OSHA regulations.
- B. Protect existing improvements including landscaping against damage. Repair or replace damaged items.
- C. Protect existing utility services and distribution systems from damage or displacement.
- D. Remove conduits or pipes not in service, exposed during Work, unless a minimum cover of two feet is provided. Remove concrete, clay or other non-metallic pipe over 8 inches in diameter, unless otherwise indicated.
- E. Shore, crib, or lag excavations and earthen banks as necessary to prevent cave in, erosion or gullyng of sides.
- F. Provide excavations free from standing water by pumping, draining, or providing protection against water intrusion. If soil becomes soft, soggy, or saturated, excavate to firm undisturbed earth and fill as required. Slope adjacent grades away from excavations to minimize entry of water.

3.03 SHORING

- A. Provide shoring as necessary to properly and safely support earth sides of excavations, and existing curbs, sidewalks, gutter, drives and stairs, against movement and collapse.
- B. Design and Calculations: Provide in accordance with requirement of governing Cal-OSHA requirements.
- C. Remove shoring upon completion of the Work of this Section or when no longer needed unless required otherwise by authorities having jurisdiction.

3.04 EXCAVATION

- A. Unclassified Excavations: Comply with the Standard Specifications for Public Works Construction, Section 300: "Earthwork", except as modified herein.
- B. Form sides of footings, pads, grade beams, and slab foundations, unless otherwise indicated. Provide excavations of sufficient size to permit installation and removal of forms and other required Work.
- C. Machine-drill excavation for round footings to size and depth indicated. Provide a collar or casing, or other adequate protection, to exclude dirt and debris. Protect excavations with plank covers until concrete is placed.
- D. Provide excavation bottoms level and free from loose material. Excavate to indicated or required elevations of undisturbed earth.
- E. Barricade trenches, ditches, pits, sumps, and similar Work outside the barricaded working area with chain link fence as specified in Section 01 5000 - Construction Facilities and Temporary Controls, and in accord with Cal-OSHA standards and requirements.
- F. Trenches over five feet in depth shall comply with the Construction Safety Orders of the California Division of Industrial Safety.
- G. Where indicated or required to excavate in lawn areas, protect adjoining lawn areas outside of the Work area. Replace or install removed sod upon completion of backfill by installing sod level with adjacent lawns. If installation of removed sod fails, furnish sod and install to match existing lawns.
- H. For Structures:
 - 1. Calculate excavation quantities based on elevations or depths indicated on Drawings.
 - 2. Provide 2,000 psi concrete for backfill of over-excavated areas to indicated or required elevations.
 - 3. Special preparation of bottom of excavated planes areas: Excavate areas shown on Drawings as bottom of excavated planes (B.E.P.), by excavating and filling to indicated grades and elevations.
- I. For Utilities:
 - 1. Excavate trenches to required depth for utility lines, such as pipes, conduits, and tanks, with minimum allowance of 6 inches at the bottom and 6 inches at the

sides for bedding or concrete encasement as indicated on Drawings. Grade bottom of trenches to a uniform smooth surface. Remove loose soil from the excavation before placing sand bedding or concrete encasement.

2. Do not install piping lengthwise under concrete walks without review by the ARCHITECT.
3. Do not excavate trenches parallel to footings closer than 18 inches from the face of the footing or below a plane having a downward slope of two horizontal to one vertical, from a line 9 inches above bottom of footings.

- a. Unless otherwise indicated on Drawings, depth of excavations outside buildings shall provide for a minimum coverage above top of piping, tank or conduit measured from the lowest adjoining finished grade, as follows:

Steel Pipe	24 inches below finish grade
Copper Water Tube	18 inches below finish grade
Cast-Iron, Pressure Pipe	36 inches below finished grade
Plastic Pipe (other than waste)	30 inches below finished grade
Tanks or other structure	36 inches below finished grade
Soil, sewer and storm drain	minimum 18 inches below finished grade, and as required for proper pitch and traffic load. Install polypropylene sewer pipe with at least 24 inches of coverage.
Irrigation Pipe:	Non-pressure pipe - 12 inches, pressure pipe - 24 inches.

- b. Trench width shall provide space for fitting and joining. Excavate for piping bells and fittings, bell and spigot pipe and other fittings.
4. Where portions of existing structures, walks, paving, or other improvements are removed or cut for piping or conduit installation, replace the material with equal quality, finished to match adjoining existing improvements. Repair pavement as specified in Section 32 0117 - Pavement Repair.
5. Provide a minimum clear dimension of 2 inches from sides of wall excavation to outer surfaces of buried pipes or conduits placed in the same trench or outside surfaces of containers and tanks.

3.05 IMPORT/EXPORT OF MATERIALS

- A. Unclassified Fill and Compaction: Comply with the Standard Specifications for Public Works Construction, Section 300 - Earthwork, except as modified herein. Install and compact fill in layers not to exceed 6 inches in thickness.

- B. Provide fill materials as specified in Part 2- Products. If excavated materials from the Project site are not of required quality or sufficient quantity, import additional materials as necessary.
- C. In addition to the requirements of this Section, import and/or exported materials shall comply with the requirements of Section 01 4524, Environmental Import/Export Materials Testing.
- D. Imported fill materials shall be sampled by the Geotechnical Engineer, for compliance with the requirements of Part 2 of this Section.
- E. The Geotechnical Engineer, will submit the samples to an independent DSA approved testing laboratory for testing.
- F. Initial sampling and testing shall be performed before importing material to the Project site. Identify the location of the source site in addition to the address, name of the person and entity responsible for the source site. The Geotechnical Engineer, will obtain both the initial and additional samples from the identified site and submit samples for required testing.
- G. The Geotechnical Engineer will perform additional sampling during import operations. If the total quantity of import is determined to be greater than 1000 cubic yards of material, one sample shall be obtained and submitted for testing for each 250 cubic yards of imported material. If the total quantity of import is determined to be less than 1000 yards, one sample shall be obtained and submitted for testing for each 100 cubic yards of imported material.
- H. The independent approved testing laboratory will perform the required tests and report results of tests noting if the tested material passed or failed such tests and will furnish copies to the Project Inspector, ARCHITECT, OAR, DSA, CONTRACTOR, and others as required. Report shall state tests were conducted under the responsible charge of a licensed State of California professional engineer and the material was tested in accordance with applicable provisions of the Contract Documents, California Building Code, and the DSA. Upon completion of the Work of this Section, the independent testing laboratory and Geotechnical Engineer will submit a verified report to the DSA as required by the CBC.
- I. Bills of lading or equivalent documentation will be submitted to the Project Inspector on a daily basis.
- J. Upon completion of import operations, provide the OAR a certification statement attesting that imported material has been obtained from the identified source site.

3.06 INSTALLATION OF MATERIALS

- A. Pavement: Fill or backfill materials shall be installed in horizontal layers of 6 inches, unless otherwise required. Each layer shall be evenly placed and moistened or aerated as necessary. Unless otherwise reviewed by the Geotechnical Engineer, each layer of fill material shall cover the length and width of the area to be filled before the next layer of material is installed. Top surface of each layer shall be installed to an approximate level with a crown or crossfall of at least 1 in 50, but not more than 1 in 20. Provide adequate drainage at all times during installation of the Work of this Section.
- B. Structures:

1. After concrete has been placed, forms removed, and concrete Work inspected, backfill excavations with earth to indicated or required grades. Backfill simultaneously on each side of walls or grade beams. Remove rubbish, debris and other waste materials from excavations before placing backfill.
2. Before placing backfill, adequately cure concrete and provide bracing, if required to stabilize structure. Protect waterproofing or damp-proofing against damage during backfilling operations, with required protection board. Remove bracing as backfill operation progresses.
3. Do not furnish or install expansive soils for retaining wall backfill.
4. Rigidly control the amount of water to be installed to provide optimum moisture content for type of fill material furnished. Do not over-saturate or compact by flooding or jetting.
5. Install wall backfill before installing railings and fences on walls.
6. Install weep hole drainage at the backside of walls so the backing completely covers the weep holes, is horizontally centered and extends at least 12 inches above the bottom of the weep opening. Provide an 8-inch square section of 1/4 inch galvanized or aluminum screen, with a minimum wire diameter of 0.03 inch, and install at the backside of each weep hole before installing the backfill material.
7. Where a reviewed drainage matting system is provided instead of permeable backfill for retaining structures, install in accordance with the manufacturer recommendations.

C. Utilities:

1. Do not install backfill until the Work of this Section has been inspected and tested. Do not furnish or install materials excavated from the Project site containing materials not permitted for backfill.
2. Backfill electrical or other excavated utility trenches located outside of barricaded installation areas within 24 hours after inspection by the IOR.
3. Install backfill in layers not exceeding 4 inches in thickness, except cement-sand slurry.
4. If materials excavated from the Project site are not permitted for trench backfill in paved areas, backfill trenches with a cement-sand slurry mix. Install backfill to an elevation of the existing undisturbed grades plus one inch.

3.07 COMPACTING

- A. Each layer of fill material shall be compacted by tamping, sheepsfoot rollers, or pneumatic-tired rollers to provide specified relative compaction. At inaccessible locations, provide specified compaction by manually held, operated and directed compaction equipment.
- B. Install and compact sand bedding to provide a uniform bearing under the full length of piping and conduits.

- C. Unless otherwise indicated, compact each layer of fill material to a relative compaction of at least ninety percent.
- D. When fill materials, or a combination of fill materials, are encountered or provided which develop densely packed surfaces as a result of installation or compacting operations, scarify each layer of compacted fill before installing the next succeeding layer.

3.08 INSPECTION AND TESTING

- A. The Geotechnical Engineer will inspect and test excavations, sample material quality for testing as set required in Part 2, and observe installation and compaction of fill materials.
- B. The Geotechnical Engineer will sample imported fill materials from their designated source and submit samples to the independent approved testing laboratory before delivery to the Project site.
- C. Installation of backfill shall be observed by the Geotechnical Engineer.
- D. The Geotechnical Engineer will inspect and test excavation Work before the installation of fill and other materials.
- E. Compaction: Test compaction in accordance with ASTM D1557, Method C.
- F. The Project Inspector will inspect foundation excavations when completed and ready for forms, after forms are in place, and before first placement of concrete.

3.09 PROTECTION

- A. Protect the Work of this Section until Substantial Completion.

3.10 CLEANING

- A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

END OF SECTION

SECTION 31 2316 EXCAVATION AND FILL FOR PAVING**PART 1 - GENERAL****1.01 SUMMARY**

- A. Section Includes:
 - 1. Excavating, backfill, and compacting for paved areas.
 - 2. Installation of fill materials.
- B. Related Requirements:
 - 1. Division 01 - General Requirements.
 - 2. Section 31 1000 - Site Clearing.
 - 3. Section 31 2200 - Grading.
 - 4. Section 32 2326 - Base Course.
 - 5. Section 32 0117 - Pavement Repair.
 - 6. Section 32 1216 - Asphalt Paving.

1.02 PROJECT REQUIREMENTS

- A. Import and Export of Earth Materials:
 - 1. Fees: Pay as required by authorities having jurisdiction over the area.
 - 2. Bonds: Post as required by authorities having jurisdiction over the area.
 - 3. Haul Routes and Restrictions: Comply with requirements of authorities having jurisdiction over the area.

1.03 QUALITY ASSURANCE

- A. Comply with Standard Specifications for Public Works Construction, current edition, except as modified herein.

1.04 TESTING

- A. OWNER will retain a Geotechnical Engineer as an OWNER Consultant who will provide observations, tests, inspections and approvals identified in the Contract Documents as being responsibility of OWNER.
- B. Imported Soils: The Geotechnical Engineer will obtain initial product Sample for testing in accordance Article 3.05 of this Section.

1.05 PROJECT CONDITIONS

- A. Information on Drawings or in soils report does not constitute a guarantee of accuracy or uniformity of soil conditions over the Project site.

PART 2 - PRODUCTS

2.01 BASE MATERIALS

- A. Concrete Slabs On Grade: Provide "Crushed Aggregate Base "as specified in the Standard Specifications for Public Works Construction, Section 200: "Rock Materials," with ¾ inch maximum size aggregates. Provide 3-inch thick base, unless noted otherwise.
- B. Bituminous Surfacing: As indicated on Drawings and specified in Section 31 2326 - Base Course.

2.02 FILL AND BACKFILL MATERIALS

- A. Fill and backfill materials shall be previously excavated materials or imported fill material, free of clods and stones larger than 3-inch, foreign materials, vegetable growths, sod, expansive soils, rubbish and debris. Material shall conform to these specified requirements and related sections.
- B. Fill material exhibiting a wide variation in consistency and moisture content shall be blended or aerated to stabilize and upgrade the material.
- C. Imported Fill Material:
 - 1. Provide suitable materials obtained from Project site excavations for earthwork and fill materials. If excavated materials are not of suitable quality or sufficient quantity, import additional materials as necessary.
 - 2. Imported fill shall be a granular material with sufficient binder to form a firm and stable unyielding subgrade and shall not have more than 60 percent of fines passing 200 mesh sieve. Material shall have a coefficient of expansion of not more than 2 percent from air dry to optimum moisture content and not more than 6 percent from air dry to saturation. Imported material shall be clean and free of rubbish, debris, and toxic or hazardous contaminants. Adobe or clay soils are not permitted.
- D. Brick rubble and broken concrete originating from the Project site shall be legally disposed of off the Project site. No such materials shall be imported from outside the Project site.
- E. Permeable Backfill:
 - 1. Provide permeable backfill material behind retaining structures consisting of gravel, crushed gravel, crushed rock, natural sands, manufactured sand, or combinations of these materials conforming to the following gradations:

Sieve Size:	Percentage Passing:
3/4 inch (19mm)	100
3/8 inch (10mm)	80 to 100

No. 100	0 to 8
No. 200	0 to 3

2. Those portions of fill material passing a No. 4 sieve shall provide a sand equivalent of at least 60.
3. Provided backing for weep holes shall consist of two cubic feet of aggregate in burlap sacks, securely tied. Aggregate shall conform to requirements for No. 3 concrete aggregate as specified in subsection 200-1.4 of the Standard Specifications for Public Works Construction.
4. Permeable Backfill Alternate Materials: Instead of the materials specified for retaining structures backfill, a drainage matting system, Miradrain by Mirafi, Inc., or equal, may be provided if reviewed and approved by the ARCHITECT.

PART 3 - EXECUTION

3.01 GENERAL

- A. Before initiating intrusive activities, contact Underground Service Alert of Southern California (USA or Dig Alert) to obtain a Dig Alert ticket for location information on buried public and USA member utilities and pipelines at least 48-hours prior to beginning work. A copy of the Dig Alert ticket shall be forwarded to the OWNER. For on-site utilities, retain a state-licensed third party underground utility locating service.
- B. Clear the Project site as indicated in Section 31 1000 - Site Clearing.

3.02 PROTECTION

- A. Protect and guard excavations against danger to life, limb, and property as required by, but not limited to, Cal-OSHA regulations.
- B. Protect adjacent existing improvements including landscaping against damage.

3.03 EXISTING UTILITY LINES

- A. Protect existing utility lines from damage or displacement.
- B. Remove conduits or pipes not in service, exposed during Work, unless a minimum cover of 2 feet is provided. Remove concrete, clay or other non-metallic pipe over 8 inches in diameter, unless otherwise indicated.

3.04 EXCAVATION

- A. Unclassified Excavations: Comply with the Standard Specifications for Public Works Construction, Section 300: "Earthwork," except as modified herein.

3.05 FILL

- A. Unclassified Fill and Compaction: Comply with the Standard Specifications for Public Works Construction, Section 300: "Earthwork," except as modified herein.
- B. Provide fill materials as specified in Part 2 - Products. If excavated materials from the Project site are not of required quality or sufficient quantity, import additional materials as necessary.
- C. Imported fill materials will be sampled by the Geotechnical Engineer for compliance with the requirements of Part 2 of this Section.
- D. The Geotechnical Engineer will submit samples to a DSA approved independent approved testing laboratory for testing.
- E. Initial sampling will be performed by the Geotechnical Engineer before importing material to the Project site. Identify the location of the source site in addition to the address, name of the person and/or entity responsible for the source site. The Geotechnical Engineer will obtain both the initial and additional samples from the identified site and will submit samples to the approved independent testing laboratory for testing.
- F. The Geotechnical Engineer will perform additional sampling during import operations. If the total quantity of import is determined to be greater than 1,000 cubic yards of material, one sample shall be obtained and submitted for testing for each 250 cubic yards of imported material. If the total quantity of import is determined to be less than 1,000 yards, one sample shall be obtained and submitted for testing for each 100 cubic yards of imported material.
- G. The independent approved testing laboratory will perform the required tests and report results of tests noting if the tested material passed or failed such tests and will furnish copies to the Project Inspector, ARCHITECT, OAR, DSA, CONTRACTOR, and others as required. Report shall state tests were conducted under the responsible charge of a licensed State of California professional engineer and the material was tested in accordance with applicable provisions of the Contract Documents, CBC, and the DSA. Upon completion of the Work of this Section, the independent testing laboratory and Geotechnical Engineer shall submit a verified report to the DSA as required by CBC.
- H. Bills of lading or equivalent documentation will be submitted to the Project Inspector on a daily basis.
- I. Upon completion of import operations, provide the OAR a certification statement attesting that imported material has been obtained from the identified source site.

3.06 INSTALLATION OF MATERIALS

- A. Fill or backfill materials shall be installed in horizontal layers of 6 inches, unless otherwise required. Each layer shall be evenly placed and moistened or aerated as necessary. Unless otherwise reviewed by the Geotechnical Engineer, each layer of fill material shall cover the length and width of the area to be filled before the next layer of material is installed. Top surface of each layer shall be installed to an approximate level with a crown or crossfall of at least 1 in 50, but no more than 1 in 20. Provide adequate drainage at all times during construction of the Work of this Section.

3.07 COMPACTING

- A. Each layer of fill material shall be compacted by tamping, sheepsfoot rollers, or pneumatic-tired rollers to provide specified relative compaction. At inaccessible locations, provide specified compaction by manually held, operated and directed compaction equipment.
- B. Unless otherwise indicated, compact each layer of earth fill to a relative compaction of at least 90 percent.
- C. When fill materials, or a combination of fill materials, are encountered or provided which develop densely packed surfaces as a result of installation or compacting operations, scarify each compacted layer before installing the next succeeding layer.

3.08 INSPECTION AND TESTING

- A. The Geotechnical Engineer will inspect and test excavations, sample material quality as required in Part 2, and observe installation and compaction of fill materials.
- B. The Geotechnical Engineer will sample imported fill materials from their designated source before delivery to the Project site.
- C. Installation of backfill will be observed by the Geotechnical Engineer.
- D. The Geotechnical Engineer will inspect and test excavation Work before the installation of fill and/or other materials.
- E. Compaction: Test compaction in accordance with ASTM D1557, Method C.

3.09 PROTECTION

- A. Protect the Work of this Section until Substantial Completion.

3.10 CLEANING

- A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

END OF SECTION

SECTION 31 2326 BASE COURSE**PART 1 - GENERAL****1.01 SUMMARY**

- A. Section Includes:
 - 1. Installation of base material.
- B. Related Requirements:
 - 1. Division 01 - General Requirements.
 - 2. Section 31 1000 - Site Clearing.
 - 3. Section 31 2200 - Grading.
 - 4. Section 31 2313 - Excavation and Fill.
 - 5. Section 31 2316 - Excavation and Fill for Paving.
 - 6. Section 32 0117 - Pavement Repair.
 - 7. Section 32 1216 - Asphalt Paving.

1.02 SUBMITTALS

- A. Crushed aggregate base (CAB) shall consist of native rock without naturally occurring asbestos or recycled materials. The CONTRACTOR shall submit written documentation, which identifies the source, volume, and proposed transport date of the material for review and approval by OWNER'S Office of Environmental Health and Safety (OEHS) prior to importing the material. A statement on company letterhead from the CAB source, stamped by either a California Professional Geologist or Engineer, which states that the subject materials are native rock, do not contain any recycled materials and that the source quarry does not mine ultramafic materials, a source of natural occurring asbestos shall be included in the submittal to OEHS.
- C. Product Data: Submit material source, technical information and test data for base materials. Gradation and quality certifications shall be dated within 30 days of the submittal.
- D. Sample: Submit sample of proposed base course material.

1.03 QUALITY ASSURANCE

- A. Comply with the following as a minimum requirement: Standard Specifications for Public Works Construction, current edition.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Crushed Aggregate Base (CAB) materials shall conform to the requirements of the Standard Specifications for Public Works Construction: Section 200 - Rock Materials.
- B. Crushed Miscellaneous Base (CMB) or materials generated on site shall not be used as a base course material.

2.02 MATERIAL APPROVAL

- A. Base material shall be inspected by the Project Inspector for gradation and material content prior to installation. The OWNER may choose to have additional tests performed by a geotechnical engineer, retained by the OWNER, before installation.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install base course material in layers not exceeding 4 inches in thickness, unless required otherwise. Grade and compact to indicated levels or grades, cut and fill, water and roll until the surface is hard and true to line, grade and required section. Provide a relative compaction of at least 95 percent, unless otherwise required.
- B. Grade base course to elevations indicated on Drawings, ready to receive surfacing, in accordance with Section 31 2200 - Grading.

3.02 PROTECTION

- A. Protect the Work of this section until Substantial Completion.

3.03 CLEANUP

- A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

END OF SECTION

SECTION 32 0117 ASPHALT PAVEMENT REPAIR**PART 1 - GENERAL****1.01 SUMMARY****A. Section Includes:**

1. Bituminous Surfacing Repair: Areas removed for utility trenches, heaved by tree roots, cracked areas, protruding areas where pavement meets hard surfaces, depressed areas, holes and areas around new structures, and raveled bituminous pavement.
2. Areas heaved by tree roots, cracked areas, holes and trenches, and areas around new structures.

B. Related Sections:

1. Division 01 - General Requirements.
2. Section 31 2200 - Grading.
3. Section 31 2313 - Excavation and Fill.
4. Section 31 2316 - Excavation and Fill for Paving.
5. Section 31 2326 - Base Course.
6. Section 32 1216 - Asphalt Paving.
7. Section 32 1236 - Seal for Bituminous Surfacing.

1.02 SUBMITTALS

- A. Shop Drawings: Submit Shop Drawings indicating areas to be repaired.
- B. Product Data: Submit manufacturer's technical data for materials and products.

1.03 QUALITY ASSURANCE

- A. Comply with Standard Specifications for Public Works Construction, current edition.

PART 2 - PRODUCTS**2.01 MATERIALS**

- A. Base course materials: Section 31 2326 - Base Course.
- B. Asphalt paving materials: Section 32 1216 - Asphalt Paving.

- C. Seal materials: Section 32 1236 - Seal for Bituminous Surfacing.
- D. Headers: Section 32 1216 - Asphalt Paving.

2.02 BITUMINOUS MATERIALS

- A. Provide materials and products of the class, grade or type indicated, conforming to relevant provisions of Section 203 - Bituminous Materials of the latest Standard Specifications for Public Works Construction.

PART 3 - EXECUTION

3.01 PAVEMENT REMOVAL

- A. Remove bituminous and concrete pavement in accordance with applicable provisions of Section 300 - Earthwork of the Standard Specifications for Public Works Construction.
- B. Pavement Heaved By Roots: Remove pavement to limits of distortion and expose roots. Trim roots to provide at least 12-inch clearance to pavement. Coordinate with OWNER's Tree Trimming Department for recommendations and approval prior to trimming roots.
- C. Remove protruding bituminous surfaces flush with the surrounding grade using a suitable tool or equipment so that adjacent finishes are not blackened.
- D. Remove raveled and depressed bituminous pavement to limits indicated or required.
- E. Saw cut existing improvements, trim holes and trenches in bituminous and concrete pavement to permit mechanical hand tampers to compact the fill.
- F. Remove broken concrete by saw cutting. If the required cut line is within 30 inches of a score or joint line or edge, cut and remove to the score, joint line, or edge.

3.02 EXCAVATING, BACKFILLING AND COMPACTING

- A. Conform to requirements in Section 31 2313 - Excavation and Fill; or Section 31 2316 - Excavation and Fill for Paving, as required.
- B. Where subgrade or base is deemed to be unstable or otherwise unsuitable, excavate such materials to firm earth, and replace with a required material. Install and compact fill materials in accordance with the requirements of Section 31 2316 Excavation and Fill for Paving.

3.03 HEADERS

- A. Install headers along edge of bituminous surfacing abutting turf, earth, or planting area, unless indicated otherwise.
- B. Install headers so the bottom surface has continuous bearing on solid grade. Where excavation for headers is undercut, thoroughly tamp soil under the header. Compact backfill on both sides of header to the density of the adjacent undisturbed grade.

- C. Fasten headers in place with redwood or Douglas fir stakes of length necessary to extend into solid earth a minimum of 12 inches. Stakes shall be of sound material, neatly pointed, driven vertically, and securely nailed to headers. Space stakes, not to exceed 4 feet on centers with top of stakes set one inch below top of header. Provide a minimum of two 12d galvanized common nails through each stake.
- D. Remove existing headers where new surfacing is installed adjacent to existing surfacing.
- E. Install temporary headers at transverse joints of paving where continuous paving operations are not maintained.
- F. Provide additional stakes and devices as required to fasten headers.

3.04 BASE COURSE

- A. Unless otherwise indicated, base course shall be crushed aggregate base, fine grade, 3 inches thick or equal to thickness of the existing base, whichever is greater.
- B. Fill grade and compact as specified in Section 31 2200 - Grading.

3.05 RESURFACING

- A. Utility Trenches: Remove loose dirt and backfill with cement-sand slurry allowing for surfacing one inch thicker than existing. Resurface flush with existing adjoining pavement installing the same type of materials and section provided in existing improvements.
- B. Other Areas: Other surface improvements damaged or removed shall be cut to a neat even line and excavated one inch below the bottom of the existing pavement. Resurface by following the original grades and installing the same type of materials provided in existing improvements.
- C. Where bituminous surfacing abuts concrete, masonry, walks or paving, tamp joint smooth, if necessary, as described above to obtain a uniformly even joint, true to line and grade. Tamp and smooth materials before asphalt cools.

3.06 REPAIRING AND RESEALING EXISTING SURFACES

- A. Preparation of Surfaces: Prior to filling cracks, clean existing bituminous surfacing of loose and foreign materials and coat with a film of asphalt emulsion.
- B. Repair of Existing Surfacing:
 - 1. Fill cracks 1/2 inch wide and less with RS-1 emulsion and washed plaster sand or other OEHS approved crack filler material. Cracks larger than 1/2 inch wide shall be filled with Type F/Sheet Mix Asphalt Concrete as specified. Cracks shall be filled to the level of adjacent surfacing.
 - 2. Where low areas, holes, or depressions occur in existing surfacing, refer to Section 32 1216; Asphalt Paving, Article 3.02. Use Type E/School Mix and feather edge joint flush to the level of adjacent surfacing.

- C. Testing: Flood test entire area in presence of the Project Inspector. Inspect area after waiting one hour. Entire area tested shall be free of standing water or puddles in excess of 0.01 foot. Practical field measurement: 0.01 foot = two quarters stacked.
- D. Surface Seal: After surface has been repaired and tested, install seal coat over entire area indicated. Surface seal shall be as specified in Section 32 1236 - Seal for Bituminous Surfacing.

3.07 CLEANING

- A. Remove all stains on the Project site and adjacent properties caused by or attributed to the Work of this section.
- B. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

3.08 PROTECTION

- A. Protect the Work of this section until Substantial Completion.

END OF SECTION

SECTION 32 1216 ASPHALT PAVING**PART 1 - GENERAL****1.01 SUMMARY**

- A. Section Includes:
 - 1. Paving for playground, parking areas, areas between buildings surfacing adjacent to planting and turf areas as indicated.
- B. Related Requirements:
 - 1. Division 01 - General Requirements.
 - 2. Section 31 2200 - Grading.
 - 3. Section 32 0117 - Pavement Repair.
 - 4. Section 31 2326 - Base Course.
 - 5. Section 32 1236 - Seal for Bituminous Surfacing.

1.02 SUBMITTALS

- A. Shop Drawings: Submit site plan indicating extent of paving and accessories.
- B. Product Data: Manufacturer's technical data for materials and products.

1.03 QUALITY ASSURANCE

- A. Comply with the following as a minimum requirement: Standard Specifications for Public Works Construction.
- B. ADA related slopes shall be measured with a twenty-four-inch digital level.

1.04 PROJECT CONDITIONS

- A. Information on Drawings or in soils report does not constitute a guarantee of accuracy or uniformity of soil conditions over the Project site.
- B. A copy of the soils report is available for examination in the office of the ARCHITECT during regular office hours of the ARCHITECT.

PART 2 - PRODUCTS**2.01 BITUMINOUS MATERIALS**

- A. Provide materials of the class, grade, or type indicated on the Drawings, conforming to relevant provisions of Section 203 - Bituminous Materials of the Standard Specifications for Public Works Construction.
- B. Asphalt Concrete Mix:
 - 1. Paved slopes: Type III, D, PG-64-10.
 - 2. Between buildings, playgrounds, parking and fire lanes: Type III, C3, PG-64-10.
 - 3. Driveways for trash and delivery trucks: Type III, C3, PG-64-10 and Type III, B3, PG-64-10

2.02 HEADERS

- A. Concrete: Per specification Section 32 1313 - Site Concrete Work.

PART 3 - EXECUTION

3.01 HEADERS

- A. Concrete Headers:
 - 1. Install headers along edge of bituminous surfacing as indicated on the Drawings.
 - 2. Verify that gradients and elevations of base are correct. Maintain subgrade clean and in a smooth, compacted condition until the concrete is placed.
 - 3. Construct forms, install steel reinforcement and place concrete as indicated on Section 32 1313 Site Concrete.

3.02 CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT

- A. Pavement Thickness: Unless otherwise indicated on Drawings or specified, install bituminous surfacing to a compacted thickness of 2 inches.
- B. Base course shall be as specified in Section 31 2326, Base Course.
- C. Surfaces of walls, concrete, masonry, or existing bituminous surfacing indicated to be in direct contact with installed bituminous surfacing shall be cleaned, dried and uniformly coated with an asphaltic emulsion film.
- D. Thicken edges of bituminous surfacing that do not abut walls, concrete, or masonry, and at edges joining existing bituminous surfaces. Remove headers at existing bituminous surfacing where new bituminous surfacing is to be installed. Thicken edges an additional 2 inches and taper to the indicated or specified thickness 6 inches back from such edges.
- E. At stairways, adjust thickness of paving such that the first tread is equal in height to all other treads.

- F. Provide adequate protection for concrete, planting areas, and other finish Work adjacent to areas indicated to receive bituminous surfacing.
- G. Placing:
 - 1. Do not install bituminous surfacing when atmospheric temperature is below 40 degrees F; or when fog or other unsuitable weather conditions are present. Temperature of mixture at time of installation shall not be lower than 260 degrees F in warm weather or higher than 320 degrees F in cold weather.
 - 2. Where 2-inch or 3-inch thick surfacing is indicated or specified, install surfacing in one course. Where surfacing is indicated or specified 4 inches or more in thickness, except for thickened edges, install bituminous surfacing in courses of approximately equal thickness, each course not exceeding 2 ½ inches in thickness.
- H. Stakes or Screeds: Provide grade or screed stakes spaced not more than 15 feet apart in flow lines with grades of less than one percent. Continuous screeds may be provided instead of stakes.
- I. Spreading: Install bituminous surfacing in a manner to cause least possible handling of mixture. In open areas and wherever practicable, install by mechanical means with a self-propelled mechanical spreader. In confined or restricted areas, install mixture with hot shovels and rakes, and smooth with lutes.
- J. Joints: Provide vertical joints between successive runs. Install joints true to line, grade, and cross section. Lapped joints are not permitted.
- K. Rolling:
 - 1. Finish roll with a self-propelled tandem roller weighing at least 8 tons. Break down roll with a self-propelled roller weighing between 1 ½ tons and 8 tons.
 - 2. Roll in a manner that preserves flow lines and the established finished grades. Break down roll in areas adjacent to flow lines parallel to flow lines. Break down roll after bituminous surfacing is installed without shoving or cracking of mixture under roller. Continue finish rolling until surfacing is unyielding, true to grade, and meets requirements for specified smoothness. Areas inaccessible to finish roller may be finish rolled with breakdown roller or tamped with hot tamping irons and smoothed with hot smoothing irons, hand roller or asphalt plate compactor.
 - 3. Where bituminous surfacing abuts concrete, masonry, walks or paving, tamp joint smooth, if necessary, as described above to obtain a uniformly even joint, true to line and grade. Tamp and smooth to properly compact.
 - 4. Compacted bituminous surfacing shall be provided with a bulk specific gravity of at least 2.31 when tested in accordance with ASTM D1188.
- L. Allow bituminous surfacing a thirty day curing time before applying surface seal.

3.03 TOLERANCE

- A. Smoothness: Surface of bituminous surfacing after rolling, shall be even, smooth and uniform in texture with no voids or rock pockets, free of roller marks or other irregularities, and not

varying by more than 0.03 foot, except at local depressions or raised areas as indicated, when a 10-foot straightedge is placed on surface.

- B. Grade: Finished grade shall not vary more than 0.02 foot above or below required grade. Variations within prescribed tolerance shall be compensating so that average grade and cross-section are provided.

3.04 TESTING

- A. Asphalt Pavement to Receive Solar Reflective Coating:
 - 1. After asphalt paving has been installed and after a 24 hour period, flood test entire area in presence of the Project Inspector. Inspect area after waiting one hour. Entire area tested shall be free of standing water or puddles in excess of 0.01 foot. Practical field measurement 0.01 foot = two quarters stacked. Repair areas of standing water or puddles and flood test locally; install surface seal and retest as necessary.
 - 2. No seals are to be applied to areas of asphalt paving that are to receive solar reflective coatings.
- B. Asphalt Pavement to Receive Bituminous Seal: refer to Section 32 1236 Seal for Bituminous Surfacing.

3.05 SURFACE SEALING

- A. Refer to Section 32 1236 - Seal for Bituminous Surfacing.
- B. Where indicated, provide multiple coats of surface seal to existing bituminous surfacing.
- C. Where new bituminous surfacing joins existing bituminous surfacing, overlap surface seal a minimum of 12 inches onto existing bituminous surfacing.

3.06 PROTECTION

- A. Protect the Work of this section until Substantial Completion.

3.07 CLEANUP

- A. Remove rubbish, debris and waste materials and legally dispose of off the Project site.

END OF SECTION

SECTION 32 1236 SEAL FOR BITUMINOUS SURFACING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Surface sealer over bituminous surfacing.
- B. Related Requirements:
 - 1. Division 01 - General Requirements.
 - 2. Section 32 0117 - Pavement Repair.
 - 3. Section 32 1216 - Asphalt Paving.
 - 4. Section 32 1723 - Pavement Marking.

1.02 SUBMITTALS

- A. Product Data: Submit manufacturer's product information and application procedures for bituminous surfacing.

1.03 QUALITY ASSURANCE

- A. Comply with the Standard Specifications For Public Works Construction, current edition.
- B. Agitate bulk materials during transport.

1.04 MAINTENANCE

- A. Extra Materials: Provide 10 gallons in unopened containers.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide one of the following surface seals:

<u>Product Name</u>	<u>Manufacturer</u>
1. Guard-Top	CALMAT / Industrial Asphalt
2. Over Kote	Diversified Asphalt Product
3. Park Top	Western Colloid Products

- | | | |
|----|------------------|-----------------------------|
| 4. | Sure Seal | Asphalt Coating Engineering |
| 5. | Super Drive Top. | SAF- T Seal. Inc. |
| 6. | Equal. | |

PART 3 - EXECUTION

3.01 SURFACE PREPARATION

- A. Thoroughly wash surfaces with water to remove dirt, debris, excessive oil and grease, or other foreign matter.

3.02 APPLICATION

- A. Install seal coat in strict accordance with manufacturer's written directions and recommendations.
- B. Install two coats of surface seal to new bituminous surfacing. First coat shall be installed before flood testing. Clean surface and allow to dry before installing second coat. Second coat shall be installed after bituminous surfacing has passed flood test.
- C. Where new bituminous surfacing is installed adjacent to existing bituminous surfacing, overlap surface seal a minimum of 12 inches onto existing bituminous surfacing.
- D. Where existing bituminous surfacing is indicated to be patched and sealed, install two coats of surface seal after patching. Refer to Section 32 1216 - Asphalt Paving.

3.03 PROTECTION OF SURFACES

- A. Protect sealed and unsealed surfaces from damage and traffic during performance of the Work of this section and until surface seal has thoroughly set and cured. Do not permit traffic of any kind for at least 24 hours after completion of installation.
- B. Protect the Work of this section until Substantial Completion.

3.04 TESTING

- A. OWNER reserves the right to obtain samples, perform tests to ensure compliance with the Specifications, and to review weight slips and invoices of materials delivered to the Project site.
- B. After first coat of surface seal has been installed and after a 24-hour period, flood test entire area in presence of the Project Inspector. Inspect area after waiting one hour. Entire area tested shall be free of standing water or puddles in excess of 0.01 foot. Practical field measurement: 0.01 foot = two quarters stacked. Repair areas of standing water or puddles and flood test locally; install surface seal and retest as necessary.

3.05 CLEAN UP

- A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

END OF SECTION

SECTION 32 1314 CONCRETE PAVING AND SITE WORK

PART 1 - GENERAL

1.01 SUMMARY

- A. Section specifies exterior Portland cement concrete pavements and the following as indicated on the drawings including:
 - 1. Sidewalks.
- B. Provide Portland cement and concrete placement in accordance with materials, workmanship, and other applicable requirements of the Standard specification for Public Works Construction (SSPWC), current edition.
- C. Warranty
 - 1. Provide unconditional (2) year installation warranty for cracking.
 - 2. Provide site review with the District Project Manager prior to expiration of warranty as a condition to end installation warranty period.

1.02 ACTION SUBMITTALS

- A. Design Mixtures: For each concrete mixture. Include alternate mixture designs when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
- B. Material Certificates: Signed by manufacturers certifying that each of the following materials complies with requirements:
 - 1. Cementitious materials.
 - 2. Steel reinforcement and reinforcement accessories.
 - 3. Fiber reinforcement.
 - 4. Admixtures.
 - 5. Curing compounds.
 - 6. Applied finish materials.
 - 7. Bonding agent or epoxy adhesive.
 - 8. Joint fillers.

PART 2 - PRODUCTS

2.01 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 - 1. Use flexible or curved forms for curves with a radius of 100 feet or less.

- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.02 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Reinforcement: ASTM A185, fabricated from as-drawn steel wire into flat sheets.
- B. Deformed-Steel Welded Wire Reinforcement: ASTM A497, flat sheet.
- C. Reinforcing Bars: ASTM A615 Grade 60; deformed.
- D. Galvanized Reinforcing Bars: ASTM A767, Class II zinc coated, hot-dip galvanized after fabrication and bending; with ASTM A615, Grade 60 deformed bars.
- E. Plain Steel Wire: ASTM A82, as drawn.
- F. Deformed-Steel Wire: ASTM A496.
- G. Joint Dowel Bars: Plain steel bars, ASTM A615, Grade 60. Cut bars true to length with ends square and free of burrs.
- H. Tie Bars: ASTM A615, Grade 60, deformed.
- I. Hook Bolts: ASTM A307, Grade A, internally and externally threaded. Design hook-bolt joint assembly to hold coupling against pavement form and in position during concreting operations, and to permit removal without damage to concrete or hook bolt.
- J. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports in accordance with CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete, and as follows:

2.03 BASE MATERIAL

- A. Base material: Crushed aggregate base:
 - 1. Base Course shall be as specified in Section 31 2326, Base Course.
 - 2. Sub-base material shall be suitable material approved by the University's Representative for use as sub-base material.

2.04 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout the Project:
 - 1. Portland Cement: ASTM C150, Type II.

- a. Fly Ash: ASTM C618, Class C or F.
- B. Normal-Weight Aggregates: ASTM C33, Class 1N coarse aggregate, uniformly graded. Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar pavement applications and service conditions using similar aggregates and cementitious materials.
 - 1. Maximum Coarse-Aggregate Size: 1-inch nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Exposed Aggregate: Selected, hard, and durable; washed; free of materials with deleterious reactivity to cement or that cause staining; from a single source, with gap-graded coarse aggregate as follows:
 - 1. Aggregate Sizes: ½-inch to ¾-inch nominal.
- D. Water: ASTM C94.
- E. Air-Entraining Admixture: ASTM C260.
- F. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and to contain less than 0.1 percent water-soluble chloride ions by mass of cementitious material.
 - 1. Water-Reducing Admixture: ASTM C494, Type A.
 - 2. Retarding Admixture: ASTM C494, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C494, Type D.
 - 4. High-Range, Water-Reducing Admixture: ASTM C494, Type F.
 - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C494, Type G.
 - 6. Plasticizing and Retarding Admixture: ASTM C1017, Type II.

2.05 CURING MATERIALS

- A. Absorptive Cover: AASHTO M182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 ounces per square yard.
- B. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.

2.06 ACCESSORY MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D1752, cork or self-expanding cork.
- B. Integral Color Pigment: ASTM C979, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, free of carbon black, nonfading, and resistant to lime and other alkalis.
 - 1. Manufacturers: Subject to compliance with specified requirements, provide products of one of the following:

- a. Davis Colors.
 - b. Scofield, L. M. Company.
 - c. QC Construction Products, Inc.
 - d. Or equal.
- 2. Color: As selected by University's Representative from manufacturer's full range of colors.
- C. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery with emery aggregate containing greater than 50 percent aluminum oxide and greater than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.
- D. Acrylic Bonding Agent: ASTM C1059, Type II, non-redispersible, acrylic emulsion, or styrene butadiene.
- E. Epoxy Bonding Adhesive: ASTM C881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to requirements, and as follows:
 - 1. Types I and II, non-load bearing, IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
- F. Chemical Surface Retarder: Water-soluble, liquid-set retarder with color dye, for horizontal concrete surface application, capable of temporarily delaying final hardening of concrete to a depth of $\frac{1}{8}$ to $\frac{1}{4}$ inch.
 - 1. Products: Subject to compliance with specified requirements, provide one of the following:
 - a. Burke by Edeco; True Etch Surface Retarder.
 - b. ChemMasters; Exposee.
 - c. Conspec Marketing & Manufacturing Co., Inc.; Delay S.
 - d. Euclid Chemical Company (The); Surface Retarder S.
 - e. Kaufman Products, Inc.; Expose.
 - f. Metalcrete Industries; Surfard.
 - g. Nox-Crete Products Group, Kinsman Corporation; Crete-Nox TA.
 - h. Scofield, L. M. Company; Lithotex.
 - i. Sika Corporation, Inc.; Rugasol-S.
 - j. Vexcon Chemicals, Inc.; Certi-Vex Envioset.
 - k. Or equal.
- G. Pigmented Mineral Dry-Shake Hardener: Factory-packaged dry combination of Portland cement, graded quartz aggregate, color pigments, and plasticizing admixture. Use color pigments that are finely ground, nonfading mineral oxides interground with cement.
 - 1. Products: Subject to compliance with specified requirements, provide one of the following:
 - a. Conspec Marketing & Manufacturing Co., Inc.; Conshake 600 Colortone.
 - b. Dayton Superior Corporation; Quartz Tuff.

- c. Euclid Chemical Company (The); Surflex.
 - d. Lambert Corporation; Colorhard.
 - e. L&M Construction Chemicals, Inc.; Quartz Plate FF.
 - f. MBT Protection and Repair, ChemRex Inc.; Mastercron.
 - g. Metalcrete Industries; Floor Quartz.
 - h. Scofield, L. M. Company; Lithochrome Color Hardener.
 - i. Symons Corporation; Hard Top.
 - j. Or equal.
2. Color: As selected by University's Representative from manufacturer's full range of colors.

2.07 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned in accordance with ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete mixture designs for the trial batch method.
- B. Proportion mixtures to provide normal-weight concrete with the following properties:
 - 1. Compressive Strength (28 Days): As indicated on the drawings and not less than 3000 psi.
 - 2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.50.
 - 3. Slump Limit: 4 inches, plus or minus 1 inch.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 - 1. Air Content: 3½ percent plus or minus 1½ percent for 1-inch nominal maximum aggregate size.
- D. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- E. Chemical Admixtures: Use admixtures in accordance with manufacturer's written instructions.
- F. Color Pigment: Add color pigment to concrete mixture in accordance with manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.08 ALTERNATIVE CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete in accordance with ASTM C94. Furnish batch certificates for each batch discharged and used in the Work.

1. When air temperature is between 85°F and 90°F, reduce mixing and delivery time from 1½ hours to 75 minutes; when air temperature is above 90°F, reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete in accordance with ASTM C94. Mix concrete materials in appropriate drum-type batch machine mixer.
 1. For concrete mixes one cubic yard or smaller, continue mixing at least 1½ minutes, and not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
 2. For concrete mixes larger than one cubic yard, increase mixing time by 15 seconds for each additional cubic yard.
 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

PART 3 - EXECUTION

3.01 FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for concrete to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.02 STEEL REINFORCEMENT

- A. General: Comply with the CRSI "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- E. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch overlap of adjacent mats.

3.03 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.

1. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints.
 1. Continue steel reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.
 2. Provide tie bars at sides of pavement strips where indicated.
 3. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.
- C. Isolation and expansion Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated. Form doweled expansion joints of preformed joint-filler strips at maximum spacing of 24 feet.
 1. Extend joint fillers full width and depth of joint.
 2. Terminate joint filler not less than $\frac{1}{2}$ inch or more than 1 inch below finished surface if joint sealant is indicated.
 3. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
 4. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 5. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows to match jointing of existing adjacent concrete pavement:
 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a $\frac{1}{4}$ -inch or $\frac{3}{8}$ -inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate groove marks on concrete surfaces. Locate joints at maximum of 30 inches on center each way.
 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut $\frac{1}{8}$ -inch-wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks. Locate joints at maximum of 30 inches on center each way.
 3. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint. Locate joints at 20 feet minimum to 24 feet maximum on center each way unless otherwise indicated.

- E. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to a ¼-inch or ⅜-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.

3.04 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- C. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- D. Do not add water to concrete during delivery or at Project site.
- E. Do not add water to fresh concrete after testing.
- F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- G. Consolidate concrete in accordance with ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- H. Place concrete in two operations; strike off initial pour for entire width of placement and to the required depth below finish surface. Lay welded wire fabric or fabricated bar mats immediately in final position. Place top layer of concrete, strike off, and screed.
 - 1. Remove and replace concrete that has been placed for more than 15 minutes without being covered by top layer, or use bonding agent if approved by University's Representative.
- I. Screed pavement surfaces with a straightedge and strike off.
- J. Commence initial floating using bull floats or darbies to impart an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- K. Curbs and Gutters: When automatic machine placement is used for curb and gutter placement, submit revised mix design and laboratory test results that meet or exceed requirements. Produce curbs and gutters to required cross section, lines, grades, finish, and

jointing as specified for formed concrete. If results are not approved, remove and replace with formed concrete.

- L. Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature below 90°F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 - 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.05 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
 - 2. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.
 - 3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8-inch deep with a stiff-bristled broom, perpendicular to line of traffic.

3.06 CONCRETE PROTECTION AND CURING

- A. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
 - 1. Moist Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately

repair any holes or tears during curing period using cover material and waterproof tape.

3. Curing Compound: Apply uniformly in continuous operation by power spray or roller in accordance with manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.07 PAVEMENT TOLERANCES

A. Comply with tolerances of ACI 117 and as follows:

1. Elevation: $\frac{1}{4}$ inch.
2. Thickness: Plus $\frac{3}{8}$ inch, minus $\frac{1}{4}$ inch.
3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed $\frac{1}{4}$ inch.
4. Lateral Alignment and Spacing of Tie Bars and Dowels: 1 inch.
5. Vertical Alignment of Tie Bars and Dowels: $\frac{1}{4}$ inch.
6. Alignment of Tie-Bar End Relative to Line Perpendicular to Pavement Edge: $\frac{1}{2}$ inch.
7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Pavement Edge: Length of dowel $\frac{1}{4}$ inch per 12 inches.
8. Joint Spacing: 3 inches.
9. Contraction Joint Depth: Plus $\frac{1}{4}$ inch, no minus.
10. Joint Width: Plus $\frac{1}{8}$ inch, no minus.

3.08 FIELD QUALITY CONTROL

A. Testing Agency: District will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Testing Services: Testing of composite samples of fresh concrete obtained in accordance with ASTM C172 shall be performed in accordance with the following requirements:

1. Testing Frequency: District will obtain at least one composite sample for each 100 cubic yards, or fraction thereof, of each concrete mix placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
2. Slump: ASTM C143; University will one test at point of placement for each composite sample, and not less than one test for each day's pour of each concrete mix. University will perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C231, University will pressure method; one test for each composite sample, and not less than one test for each day's pour of each concrete mix.
4. Concrete Temperature: ASTM C1064; University will one test hourly when air temperature is 40°F and below and when 80°F and above, and one test for each composite sample.
5. Compression Test Specimens: ASTM C31; University will cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
6. Compressive-Strength Tests: ASTM C39; University will test 1 specimen at 7 days and 2 specimens at 28 days.

- a. A compressive-strength test shall be the average compressive strength from 2 specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mix will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to University's Representative, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by University's Representative and will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met.
- G. Remove and replace concrete pavement where test results indicate that it does not comply with specified requirements.
- H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work to meet specified requirements.

3.09 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective or that does not comply with requirements in this Section.
- B. Drill test core(s), where directed by University's Representative, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with Portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION

SECTION 32 1723 PAVEMENT MARKINGS

GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Painted markings applied to asphalt paving.

1.02 PREINSTALLATION MEETINGS

Preinstallation Conference: Conduct conference at Project site unless otherwise directed by the University's Representative.

Review methods and procedures related to marking asphalt paving or concrete surfaces including, but not limited to, the following:

- a. Asphalt-paving or concrete-surface aging period before application of pavement markings.
- b. Review requirements for protecting pavement markings, including restriction of traffic during installation period.

1.03 ACTION SUBMITTALS

- A. Product Data: Include technical data and tested physical and performance properties.
 - 1. Pavement-marking paint, alkyd.
 - 2. Pavement-marking paint, solvent-borne.
 - 3. Pavement-marking paint, acrylic.
 - 4. Pavement-marking paint, latex.
 - 5. Glass beads.
- B. Shop Drawings:
 - 1. Indicate pavement markings, colors, lane separations, defined parking spaces, and dimensions to adjacent work.
 - 2. Indicate, with international symbol of accessibility, spaces allocated for people with disabilities.

Samples: For each exposed product and for each color and texture specified; on rigid backing, 8 inches square.

1.04 FIELD CONDITIONS

- A. Environmental Limitations: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg F for alkyd materials, 55 deg F for water-based materials, and not exceeding 95 deg F.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Source Limitations: Obtain pavement-marking paints from single source from single manufacturer.

2.02 PERFORMANCE REQUIREMENTS

Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design"

2.03 PAVEMENT-MARKING PAINT

Pavement-Marking Paint, Alkyd: Alkyd-resin type, lead and chromate free, ready mixed, complying with AASHTO M 248, Type N; colors complying with FS TT-P-1952F.

Color: As indicated.

2.04 EXAMINATION

- A. Verify that pavement-marking substrate is dry and in suitable condition to begin pavement marking in accordance with manufacturer's written instructions.
- B. Proceed with pavement marking only after unsatisfactory conditions have been corrected.

2.05 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with University's Representative.

Allow asphalt paving or concrete surfaces to age for a minimum of 30 days before starting pavement marking.

- C. Sweep and clean surface to eliminate loose material and dust.

Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

Apply graphic symbols and lettering with paint-resistant, die-cut stencils, firmly secured to asphalt paving or concrete surface. Mask an extended area beyond edges of each stencil to prevent paint application beyond stencil. Apply paint so that it cannot run beneath stencil.

Broadcast glass beads uniformly into wet markings at a rate of 6 lb/gal..

2.06 PROTECTING AND CLEANING

- A. Protect pavement markings from damage and wear during remainder of construction period.

- B. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

APPENDIX A - RSCCD PROJECT FORMS

SECTION 016211
SUBSTITUTION REQUEST FORM

To: <Insert Contact Info>

From:

Contact:

Email:

Phone:

Owner:

Submittal Date:

Project:

Previous Date:

PROPOSED SUBSTITUTION

Specification Section, Article, Paragraph: _____

Applicable Drawing & Details: _____

Proposed Substitution: _____

Manufacturer: _____

Product/Model: _____

REASON FOR SUBSTITUTION REQUEST

☐ Specified product is not available. Explain: _____

☐ Other: _____

EFFECTS OF PROPOSED SUBSTITUTION

Does substitution affect dimensions indicated on Drawings?

☐ NO ☐ YES Explain: _____

Does substitution affect Work of other Sections?

☐ NO ☐ YES Explain: _____

Does substitution require modifications to design, changes to Drawings, or revisions to specifications to be incorporated into the Project?

☐ NO ☐ YES Explain: _____

CONTRACTOR'S REPRESENTATION

Undersigned accepts responsibility for coordination of proposed substitution and accepts all additional costs resulting from the incorporation of proposed substitution into the Project per Section 016000.

Subcontractor

Signature: _____

Date: _____

DISTRICT/ARCHITECT'S REVIEW

☐ Accepted

☐ Not Accepted

Contractor

Signature: _____

Date: _____

Reviewer: _____

Review Date: _____



REQUEST FOR INFORMATION (RFI)

School Name: _____

RFI Number: _____

Project Name: _____

Date: _____

Contractor: _____

Project No.: _____

Date Issued To: _____
(Architect)

DSA No.: _____

Drawing Number Detail

Drawing Page

Specification

Information Requested:

Suggested Course of Action:

Schedule Impact: ☐ Yes

☐ No

Cost Impact: ☐ Yes

☐ No

Request Issued by:

Contractor's Signature

Name (Printed)

Date

Response:

Response Issued by:

Signature

Name (Printed)

Date

Response Reviewed by:

Architect's Signature

Name (Printed)

Date

Proceeding with the Work in accordance with the above information indicates the Contractor's acknowledgement that there will be no change in the Contract Sum or Contract Time. If the Contractor considers that a change in Contract Sum or Contract Time is required, before proceeding with the work obtain authorization from the Owner by notifying the Owner and the Architect within five (5) working days and submit an itemized proposal within ten (10) days.

**Rancho Santiago Community College District**

2323 North Broadway

Santa Ana, CA 92706

PAYMENT NO. _____

For the period: _____ to _____
Contractor: _____
Address: _____
Phone: _____

DSA # _____
Project Name _____
P.O. No. _____

A. ANALYSIS OF ADJUSTED CONTRACT AMOUNT TO DATE

1. Original contract amount		\$	-
2. Change made from Approved Change Orders		\$	-
3. Adjusted contract amount to date	(B.1 + B.2 + B.3)	\$	-

B. COMPUTATION OF PAYMENT DUE

1. Work completed to date on original contract		\$	-
2. Change Order work performed to date		\$	-
3. Total work performed to date	(B.1 + B.2)	\$	-
4. Less: 5% retained	(B.3 x 5%)	\$	-
5. Net amount earned to date	(B.3 - B.4)	\$	-
6. Amount to be withheld because of: _____		\$	-
7. Balance	(B.5 - B.6)	\$	-
8. Less: Amount of previous payments	(B.9 from previous application)		
9. Amount due this payment	(B.7 - B.8)	\$	-
10. Unpaid balance on RSCCD amount of contract	\$	-	

C. CERTIFICATION OF CONTRACTOR OR HIS DULY AUTHORIZED REPRESENTATIVE

To the best of my knowledge and belief, I certify that all items and prices of work and material shown on this periodical estimate are correct; that all work has been performed and materials supplied in full accordance with the terms and conditions of the construction contract documents covering the work of the indicated contract, and all change orders approved by the **Board of Trustees**; that this is a true and correct statement of the contract account up to and including the last day of the period covered by this estimate and that no part of the amount "Amount Due This Payment" has been received.

I further certify that this payment will be used to pay all just and lawful bills against the undersigned for labor, materials and expendable equipment employed in the performance of the indicated contract.

Contractor Signature Date
Print Name: _____

RSCCD Project Manager Signature Date
Print Name: _____

Project Inspector Signature Date
Print Name: _____

RSCCD Director Facilities Planning Signature Date
Print Name: Joe Melendez

Architect Signature Date
Print Name: _____

RSCCD Asst. Vice Chancellor Signature Date
Print Name: Carri M. Matsumoto

Construction Mngr Signature Date
Print Name: _____

RSCCD Vice Chancellor Signature Date
Print Name: Iris I. Ingram

D. CERTIFICATE OF PAYMENT

This is to certify that _____ 0
is entitled to a payment of \$0.00
For the work performed at the _____ in accordance with terms of the contract.

CONTINUATION SHEET

APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signing Certification, is attached. In tabulation below, amounts are stated to the nearest dollar. Use Column 1 and Contract where variable retainage for line items may apply

Application No.: 0
Application Date: 1/0/1900
Period To: 1/0/1900

A ITEM NO.	B DESCRIPTION OF WORK	C			D	E	F	G		H	I
		ORIGINAL CONTRACT AMOUNT	CHANGE ORDER AMOUNT	CURRENT CONTRACT AMOUNT	WORK COMPLETED		MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)	BALANCE TO FINISH (C-G)	RETAINAGE (IF VARIABLE RATE)
					FROM PREVIOUS APPLICATIONS (D + E)	THIS PERIOD					
	GENERAL CONDITIONS			\$ -				\$ -	#DIV/0!	\$ -	\$ -
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Rancho Santiago Community College District
 2323 North Broadway
 Santa Ana, CA 92706

Change Order Tracker

PAYMENT NO. 0

For the period 1/0/1900 to 1/0/1900
 Contractor 0
 Address 0
 Phone 0

DSA # 0
 Project Name
 P.O. No. 0

CHANGE ORDER				ADDITIONS		
NO.	DATE	DESCRIPTION	Percentage Complete	CO AMOUNT (\$)	COMPLETED TO DATE (\$) (6)	
(1)	(2)	(3)	(4)	(5)	Previous Period	This Period
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COMPLETED TO DATE (\$)						\$ -

Change Orders Total	\$ -
Previous Period Total	\$ -
This Period Total	\$ -
Completed to Date Total	\$ -

Matches SOV
Matches SOV
Matches SOV
Matches SOV



Facility Planning, District Construction & Support Services
2323 North Broadway, Rm 112
Santa Ana, CA 92706

Project Name: _____
Contractor: _____
Contract No.: _____

Board Date: _____
Project/Bid No. _____
Site: _____
Change Order (CO) No. : _____

Contract Schedule Summary					
Notice to Proceed Date	Original Contract Duration (Days)	Original Contract Completion Date	Previous Extension Days Approved	Proposed CO Days Requested	New Revised Completion Date

Change Order Summary			
Description	Number	Amount	% of Contact
Original Contract Amount		\$0.00	
Previous Change Orders		\$0.00	#DIV/0!
This Change Order		\$0.00	#DIV/0!
Total Change Order (s)		\$0.00	#DIV/0!
Revised Contract Amount		\$0.00	

Items in Change Order						
Item No.	Description	Reason	Ext. Day	Credit	Add	Net
				\$ -	\$ -	\$ -
Subtotal				\$ -	\$ -	\$ -
Grand Total						\$ -

- 1 - CODE REQUIREMENT
2 - FIELD CONDITION
3 - INSPECTION REQUIREMENT
4 - DESIGN REQUIREMENT
5 - OWNER REQUIREMENT

The Contractor is to provide a complete description and specification of work involved and reason. The documents supporting this Change Order, including any drawings and estimates of that cost are attached hereto and made a part thereof.

Contractor agrees to furnish all labor and materials and perform all of the above described work in accordance with the above terms in compliance with applicable sections of the Contract Documents. The amount of the charges under this Change Order is limited to the charges allowed under the General Conditions. The adjustment in the contract sum, if any, and the adjustment in the contract time, if any, set out in this Change Order shall constitute the entire compensation and/or adjustment in the contract time and contract sum due to the Contractor arising out of the change in the work covered by this Change Order, unless otherwise provided in this Change Order. It is understood that this Change Order shall be effective upon approval

Contractor _____ Date _____

Architect _____ Date _____

Inspector _____ Date _____

RSCCD Project Manager _____ Date _____

Joe Melendez
RSCCD Director _____ Date _____

Carri M. Matsumoto
RSCCD Assistant Vice Chancellor _____ Date _____

Iris Ingram
RSCCD Vice Chancellor _____ Date _____



Rancho Santiago Community College District

CONTRACTOR ALLOWANCE DISBURSEMENT AUTHORIZATION

College Name: _____ Initiation Date: _____
Project Name: _____ Allowance Disbursement No.: _____
To: (District) _____ Project Bid No: _____
From: (Contractor) _____ Contract / PO Number: _____

Description of Item to be charged to District Allowance:

Amount

Contractor Allowance Request Total: \$0.00

A. Original Contractor Allowance Amount:	<u>\$0.00</u>
B. Net Allowance Disbursements previously authorized:	<u> </u>
C. Charges to Contractor Allowance as a result of this authorization:	<u>\$0.00</u>
D. Current Contractor Allowance Balance including this authorization:	<u>\$0.00</u>

Acknowledgment:

Project Manager Signature

Name (Printed)

Date

District Representative Signature

Name (Printed)

Date

cc: Project File


Facility Planning, Construction & District Support Services

 2323 North Broadway, Suite 112
 Santa Ana, CA 92706-1640

Immediate Change Directive (ICD)

 Date: _____
 Project Name: _____
 Project No.: _____
 Architect: _____
 Contractor: _____

 ICD No.: _____
 Reference Contingency or Allowance: _____
 Reference RFI No.: _____
 Reference COR No.: _____
Initiated By: ☐ District
 ☐ Architect
 ☐ Contractor
 ☐ Other: _____

WORK REQUIRED: _____

REASON FOR CHANGE DIRECTIVE: _____

STATUS OF WORK/CONSTRUCTION ACTIVITIES AFFECTED: _____

CONTRACTOR IS AUTHORIZED TO PROCEED WITH THE WORK PURSUANT TO THE CONSTRUCTION SERVICES AGREEMENT IN THE FOLLOWING MANNER:

- ☐ *Time & Materials (T&M), Not-to-Exceed* _____
 Complete work within dollar limit stated, submit daily time tickets
- ☐ *Lump Sum* _____
 Complete work for above indicated agreed upon lump sum
- ☐ *Directed to Proceed, Submit Pricing* _____
 Proceed with work immediately. Pricing shall be submitted per the Agreement

 Additional Days Required: _____
 Days beyond Approved Contract Completion Date

Schedule Activity Nos. Affected: _____

This Immediate Change Directive (ICD) authorizes the Contractor to proceed with the work as described herein. Contractor agrees to furnish all labor and material and perform all of the above described work in accordance with the above terms in compliance with the applicable sections of the Contract Documents. By signing this ICD, the Contractor agrees with the compensation indicated herein. If Contractor disagrees with the compensation indicated herein, Contractor may file a Claim pursuant to the Contract. If this ICD is issued on a T&M basis, the Contractor shall notify the District immediately when 80% of the NTE amount is reached. The ICD is not valid until signed by both the Architect and the Construction Manager on behalf of the Rancho Santiago Community College District. Signature below represents approval of this ICD. Provisions herein for adjustment of compensation and/or time shall constitute mutual accord and full satisfaction with respect to all impacts, disruptions, delays of costs (including, without limitations, any home office, overhead, whatsoever related to the change specified herein).

 CONTRACTOR: _____
 Approved By: _____
 Date: _____
 CM: _____
 Approved By: _____
 Date: _____

 DISTRICT: Rancho Santiago Community College
District
 Approved By: _____
 Date: _____
 ARCHITECT: _____
 Approved By: _____
 Date: _____

CONTRACTOR PAYMENT CHECKLIST

To: Rancho Santiago Community College District

Transmittal Date: _____

Payment Application No.: _____

Campus Name: _____

Project Number: _____

Project Name: _____

Contract Number: _____

☐ Progress Payment ☐ Substantial Completion ☐ Final Payment

The following items have been VERIFIED:

- ☐ **Certified Payroll Records** submitted to DIR
- ☐ **Project Record Documents** current (RFI's and changes updated on CD's) Thru Date _____
 - ☐ Contractor Daily Reports current _____
 - ☐ SWPPP site monitoring Report Forms current _____
 - ☐ Asbuilts current and verified by IOR _____
 - ☐ Construction and Demolition Waste Management Progress Reports _____
 - ☐ Prior Months Unconditional Releases from 1st Tier Subs _____
- ☐ **Updated Project Schedule** submitted/reviewed _____
- ☐ **Change Orders Board** approved
- ☐ **Allowance Expenditures approved by District**
- ☐ **Payment calculations correct**; line items reconciled with approved Schedule of Values and Accounting Verification Summary sheet included (2nd tab)

The following REQUIRED documents are ATTACHED {w/docs in order listed}:

- ☐ **Contractor Payment Checklist**
- ☐ **Accounting Verification Summary** (signed by CM)
- ☐ **Stop Notice Summary Log**
- ☐ **Application for Payment w SOV** (4 originals signed, 3 sent to District)
- ☐ **Conditional Release from Prime Contractor and Subcontractor Release Log**
- ☐ **Other:** _____

ATTACH AND/OR VERIFY additional REQUIRED documents as needed:

- ☐ **Consent of Surety for Final Payment**
- ☐ **Certificate of Substantial Completion** (ONLY Required for payment at Substantial Completion)
- ☐ **Unconditional Waiver and Releases Upon Final Payment** (Contractor/Subcontractors)
- ☐ **Warranties, guarantees and maintenance agreements**
- ☐ **Training Program and M&O Books**
- ☐ **Report of Completion & Recommendation of Acceptance** (w/ required attachments)
- ☐ **Final Punchlist Acceptance** (note any holds or contested items)

ALL applicable items and/or documents referenced above have been verified by the Prime Contractor (and reviewed by the Construction Manager) and submitted in accordance with the contract documents. All items are considered precedent to Owner obligation to make payment under the Contract:

Project Manager/Contractor Name

Signature

Date

Project Manager

Signature

Date

cc:



Project Name: _____

Project No.: _____ DSA Application No. _____

Conditional Waiver and Release Upon Final Payment

CALIFORNIA CIVIL CODE SECTION 8136

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: _____

Amount of Check: _____

Check Payable To: _____

Exceptions

This document does not affect any of the following: Disputed claims for extras in the amount of \$ _____.

Date: _____

(Company Name)

BY: _____
(Signature)

(Title)



Project Name: _____

Project No.: _____ DSA Application No. _____

Conditional Waiver and Release Upon Progress Payment

CALIFORNIA CIVIL CODE SECTION 8132

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

Through Date: _____

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: _____

Amount of Check: _____

Check Payable To: _____

Exceptions

This document does not affect any of the following: (1) Retentions; (2) Extras for which claimant has not received payment; (3) The following progress payments for which the claimant has previously provided a conditional waiver and release but has not received payment: Date(s) of waiver and release: _____, Amount(s) of unpaid progress payment(s): \$ _____; (4) Contract rights including: (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Date: _____ (Company Name)

BY: _____ (Signature)

(Title)



Project Name: _____

Project No.: _____ DSA Application No. _____

Unconditional Waiver and Release Upon Final Payment

CALIFORNIA CIVIL CODE SECTION 8138

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

Exceptions

This document does not affect any of the following: Disputed claims for extras in the amount of \$ _____.

Date: _____

(Company Name)

BY: _____
(Signature)

(Title)



Project Name: _____

Project No.: _____ DSA Application No. _____

**Unconditional Waiver and Release
Upon Progress Payment
CALIFORNIA CIVIL CODE SECTION 8134**

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

Through Date: _____

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment: \$ _____.

Exceptions

This document does not affect any of the following: (1) Retentions; (2) Extras for which claimant has not received payment; (3) Contract rights including: (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Date: _____

(Company Name)

BY: _____

(Signature)

(Title)



Instructions regarding Form:

1. General:
 - a. Attach proposed Recycling and Waste Bin Location Plan.
 - b. Attach name and contact data for each recycling or disposal destination to be used.
2. Column 1: "Material Types" – Enter types of materials targeted for recycling, reuse, and/or salvage, either on or off-site, and include a category for waste materials requiring disposal.
3. Columns 2 – 4: "Estimated Generation" – Enter estimated quantities (tons) of recyclable, reusable, or salvageable waste materials anticipated to be generated and state number of salvageable items.
4. Column 5: "Estimated Landfill" – Enter quantities (tons) of materials to be disposed in landfill.
5. Column 6: "Disposal Location" – Enter end-destination of recycled, salvaged, and disposed materials.

(DELETE TEXT BOX BEFORE PROVIDING TO DISTRICT REPRESENTATIVE)

CONSTRUCTION WASTE MANAGEMENT PLAN

PROJECT NAME: _____

PROJECT SITE ADDRESS: _____

PROJECT NO: _____

NAME OF COMPANY: _____

CONTACT PERSON: _____

TELEPHONE: _____

PROJECT TYPE: ☐ NEW CONSTRUCTION ☐ DEMOLITION
☐ RENOVATION / ALTERATION PROJECTS

PROJECT SIZE (SQ. FT.): _____

DATE & ESTIMATED PERIOD: _____

(1) Material Type	(2) Tons Estimated Recycle	(3) Tons Estimated Reuse	(4) Tons Estimated Salvage	(5) Tons Estimated Landfill	(6) Proposed Disposal or Recycling Facility (e.g., Onsite, Name of Facility)
Total					
Diversion Rate: Columns [(2)+(3)+(4)] / [(2)+(3)+(4)+(5)]					=

Signature	Title	Date
-----------	-------	------



Instructions regarding Form:

1. General:
 - a. Attach proposed Recycling and Waste Bin Location Plan.
 - b. Attach name and contact data for each recycling or disposal destination to be used.
2. Column 1: "Material Types" – Enter types of materials targeted for recycling, reuse, and/or salvage, either on or off-site, and include a category for waste materials requiring disposal.
3. Columns 2 – 4: "Estimated Generation" – Enter estimated quantities (tons) of recyclable, reusable, or salvageable waste materials anticipated to be generated and state number of salvageable items.
4. Column 5: "Estimated Landfill" – Enter quantities (tons) of materials to be disposed in landfill.
5. Column 6: "Disposal Location" – Enter end-destination of recycled, salvaged, and disposed materials.

(DELETE TEXT BOX BEFORE PROVIDING TO DISTRICT REPRESENTATIVE)

CONSTRUCTION WASTE MANAGEMENT PROGRESS REPORT

PROJECT NAME:

PROJECT SITE ADDRESS:

PROJECT NO:

NAME OF COMPANY:

CONTACT PERSON:

TELEPHONE:

PROJECT TYPE:

☐ NEW CONSTRUCTION ☐ DEMOLITION
☐ RENOVATION / ALTERATION PROJECTS

PROJECT SIZE (SQ. FT.):

PERIOD:

(1) Material Type	(2) Tons Actual Recycle	(3) Tons Actual Reuse	(4) Tons Actual Salvage	(5) Tons Actual Landfill	(6) Disposal or Recycling Facility (e.g., Onsite, Name of Facility)
Total					
Diversion Rate: Columns [(2)+(3)+(4)] / [(2)+(3)+(4)+(5)]					=

Signature	Title	Date
-----------	-------	------



REQUEST FOR IMPORT MATERIALS TESTING FORM

Date:	
Project Name:	
RSCCD Project No.:	
Contractor:	
School Site Receiving Import (Name and Address):	

Location of Soil Borrow Site:

Borrow Site Address:	
Borrow Site City:	
Major Cross Streets:	

Soil Owner Information:

Soil Owner Name:	
Contact Name:	
Contact Phone Number:	

Site History:

Describe Current Site Use:	
Describe Site History:	
Available Environmental Documents:	

Borrow Soil Description:

Material Type:	☐ Fill Soil		
	☐ Other:		
Import Soil Volume:		(Tonnage)	
If in place material, depth and acres of excavation:			
☐ Only portion of material is available or ☐ All required material is available		☐ Stockpile or ☐ In Place	
Materials already on Import Site?	☐ Yes ☐ No		

Schedule:

Date and time when results are needed:	
Date formal report is needed:	

Comments:

--

Note: Requests for testing at District pre-tested sites must be received four (4) weeks in advance of material being needed on site. Requests for non-pre-tested sites must be received eight (8) weeks in advance of material being needed on site.

CERTIFICATE OF SUBSTANTIAL COMPLETION

DATE:

SITE:	CONTRACT #:	
PROJECT NAME:	PROJECT ID#:	DSA#:
CONTRACTOR:	CONTRACT DATE:	

- ☐ This Certificate of Substantial Completion applies to **all work** under the Contract Documents.
- ☐ This Certificate of Substantial Completion applies to ***the following specific parts*** of the Contract Documents:

--

The work performed under the above-referenced Contract has been reviewed and found, by the signatory's (below) best knowledge, information and belief, to be "Substantially Completed" as defined in the Contract. The Substantial Completion Date of the Project or portion thereof designated above is hereby established as _____, 20____.

- ☐ The completion of the Punch List for Final Completion is attached hereto

This list may not be inclusive, and the failure to include an item on such list does not alter the responsibility of the Contractor to reach Final Completion of all work in accordance with the Contract Documents. Such work shall be completed or corrected to the satisfaction of the District within the number of days provided in the Contract for Punch List work.

This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of the Contract's obligation to complete the Work in accordance with the Contract Documents.

Contractor	Date
------------	------

RSCCD Project Manager	Date
-----------------------	------

Inspector _____ Date _____

RSCCD Director	Date
----------------	------

Architect	Date
-----------	------



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Santa Ana College • Santiago Canyon College

Local Hires and Local Businesses Participation

On May 18, 2015, The Board of Trustees approved Board Policy 6610 which applies to contracts awarded for public projects, as defined in the Public Contract Code Section 22002, to require the awarded contractor to complete and submit forms pertaining to local hires and local businesses participation.

_____ is the prime contractor for the project, _____.

Therefore, the District is requesting your assistance in providing the information pertaining to the project. Please answer the questions below.

1. On this project, our business (check the applicable boxes below):

- ☐ Provided labor (use attached form for workers)
☐ Provided materials or supplies
☐ Furnished or provided equipment rentals
☐ Other service: _____

(Please indicate the type of service above)

2. Please specify if your business is:

- A. Minority Business Enterprise (MBE) ☐ Yes ☐ No
B. Women Business Enterprise (WBE) ☐ Yes ☐ No
C. Disabled Veteran Business Enterprise (DVBE) ☐ Yes ☐ No

If yes, please provide a copy of certification.

3. This business participates in an internship program: ☐ Yes ☐ No

If yes, please state what type of internship program your business offers?

4. This business utilized an apprentice from the apprenticeship program: ☐ Yes ☐ No

If yes, please provide the name of apprenticeship program _____.

5. Please complete the information below:

Company Name:		
Address:		
City:	State:	Zip Code:
Completed by:	Contact Telephone No:	
Email:		

Signature: _____ Date: _____



Contractor Workers Summary

Project Name _____
Project ID: _____

Company Name:		
Mailing Address:		
City:	State:	Zip Code:
Completed by (Full Name):		Contact No.:
Email Address:		Date Submitted:

Please click on the applicable box below pertaining to your company on the project.

☐ I am the Prime Contractor.

☐ I am the Subcontractor. The portion of work is for: _____

Local Hire Definition Pursuant to Board Policy 6610:

Local Hires are identified by their zip codes of residence*: 92602, 92606, 92610, 92612, 92614, 92618, 92620, 92626, 92627, 92660, 92675, 92676, 92679, 92688, 92701, 92703, 92704, 92705, 92706, 92707, 92708, 92780, 92782, 92802, 92805, 92806, 92807, 92808, 92840, 92843, 92861, 92862, 92865, 92866, 92867, 92868, 92869, 92883, 92887

Local Hires are also identified by these categories:

- Current or former Rancho Santiago Community College District (RSCCD) Student
- Veteran

A RSCCD student is individual who is or was enrolled in one or more classes at any of these campuses (Santa Ana College, Centennial Education Center, Digital Media Center, Orange County Sheriff's Regional Training Academy, Santiago Canyon College or Orange Education Center).

Additionally, please indicate if your worker is an intern or apprentice (applicable to businesses that utilizes an internship program or apprenticeship program).

1. List ALL workers who have worked on this project.

2. Check all applicable boxes pertain to EACH of the workers.

Worker (Full Name)	Zip Code	Local Resident*	RSCCD Student	Veteran	Intern	Apprentice
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

Please make a copy of this page, if you required additional pages

WARRANTY GUARANTEE FORM

(To issue to the Contractor by the District)

Project Name: _____

Project ID: _____

The following is a warranty and guarantee by the undersigned for the work which has been completed/installed at

Capitalized terms not defined herein shall have the meanings assigned to them in the Contract Documents applicable to the Warranted Work at the time it was furnished and installed at the Project.

The undersigned hereby warrants and guarantees that (1) the Warranted Work (including, without limitation, all pieces and parts thereof that are incorporated into the Warranted Work), unless otherwise expressly permitted or required by the Contract Documents, is of first-class quality and new; and (2) the Warranted Work conforms with the requirements of the Contract Documents and Applicable Laws; and (3) the Warranted Work is and will remain free of defects appearing within a period of two (2) years from FINAL COMPLETION as defined in the Contract; ordinary wear and tear and unusual abuse or neglect excepted.

SYSTEM OR ITEM	WARRANTY DURATION (YEARS)

In the event of the Warranted Work is found not in compliance with the terms of this warranty, then the District shall have the right, after expiration of a reasonable period of time (not later than seven (7) calendar days) following mailing by regular mail of notification by the District to the undersigned as its last known or reputed address, to proceed to have the Warranted Work repair, replace or otherwise made good, to whatever extent necessary, to make the Warranted Work comply with its terms of this warranty.

Warranties shall provide by written endorsement that if warranted Work fails and is replaced, removed or substantially rebuilt, that the original warranty on such Work shall be renewed, whereas the full warranty periods starts over again, commencing from when Work covered by warranty was corrected.

The responsibility of the undersigned under this warranty includes, without limitation, replacement, removal and repair not only of the Warranted Work, but also of related or adjoining portions of work, equipment, materials or property as necessary to provide access for correction of the Warranted Work, as well as any other loss or damage (including, without limitation, economic loss) resulting directly or indirectly to District from the failure of the Warranted Work to comply with the terms of this warranty. All costs, expenses, damages and other losses to District due to the failure of the Warranted Work to comply with the terms of this warranty shall be deemed to be expenses of undersigned and shall be paid by the undersigned to the District upon demand.

_____ Print-Subcontractor or Supplier (Company Name)	_____ Signature of Subcontractor or Supplier	_____ Date
_____ Print-General Contractor (Company Name)	_____ Signature of General Contractor	_____ Date

Representative(s) to be contacted for service:

First and Last Name of Representative:	
Mailing Address:	
Email Address:	Contact Number: