WEST VALLEY JUVENILE COURTS PROBATION OFFICE ADA RAMP RECONSTRUCTION

DFCM PROJECT NUMBER 09203150
CONTRACT NUMBER 107312

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2006	National Electrical Code	2005
International Mechanical Code	2006	Uniform Code for	
International Plumbing Code	2006	Building Conservation	N/A
International Fire Code	2006	ANSI A117.1	
International Energy Conservation Code	2006	Guildelines	2003

A. Occupancy and Group: PROJECT IS ALL EXTERIOR WORK

Change in Use: Yes _____ No __X__ Mixed Occupancy: Yes __N/A__ No _____
Special Use and Occupancy (e.g. High Rise, Covered Mall): __N/A__

B. Seismic Design Category: __D__ Design Wind Speed: __90__ mph
Eposure __C__

C. Type of Construction (circle one): N/A

I/A I/B II/A II/B III/A III/B IV/HT V/A V/B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):

North: __N/A__ South: __N/A__ East: __N/A__ West: __N/A__

E. Mixed Occupancies: __N/A__ Nonseparated Uses: __N/A__

F: Sprinklers:

Required: __N/A__ Provided: _____ Type of Sprinkler System: __N/A__

G: Number of Stories: __2__ Building Height: __27'__

H: Actual Area per Floor (square feet): __N/A__

I: Tabular Area: __N/A__

J: Area Modifications: N/A

K. Fire Resistance Rating Requirements for Building Elements (hours). N/A

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	0		Floors - Ceiling Floors	0	
Interior Bearing Walls	0		Roofs - Ceiling Roofs	0	
Exterior Non-Bearing Walls	0		Exterior Doors and Windows	0	
Structural Frame	0		Shaft Enclosures	0	
Partitions - Permanent	0		Fire Walls	0	
Fire Barriers	0		Fire Partitions	0	
			Smoke Partitions	0	

L. Design Occupant Load: __N/A__
Exit Width Required: __N/A__ Exit Width Provided: __N/A__

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.

GRAPHIC SYMBOLS

DTL# / SHT# — BLDG. ELEV. SYMB.
RM NAME / RM# / F/B W/W — RM. NAME/NUMB RM. FINISH SYMB.
FINELEV — CEIL. FINISH/ELEV. SYMB.
DTL# / SHT# — BLDG. SECT. SYMB.
DTL# / SHT# — DETAIL REF. SYMB.
DTL# / SHT# — WALL SECT. SYMB.
N / W DTL# SHT# E / S — INTR. ELEV. SYMB.
— KEYED NOTE SYMB.
T.O. ELEV — DATUM PT. SYMB.
DR# / HW# — DOOR/HDWR. SYMB.
ELEV — SPOT ELEV. SYMB.
REF# — WINDOW SYMB.

DRAWING INDEX

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SE101	NEW RAMP & STAIR PLAN
SE201	WEST RAMP & STAIRS ELEVATIONS
SE202	SOUTHEAST RAMP ELEVATIONS
SE301	SOUTHEAST STAIR SECTIONS
SE501	TYPICAL DETAILS
SE501	TYPICAL STAIR, HANDRAIL & GUARDRAIL DETAILS

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PROJECT NAME

WEST VALLEY JUVENILE COURTS PROBATION OFFICE ADA RAMP RECONSTRUCTION & Alternate #1 Alternate #2 Alternate #3

REVISIONS

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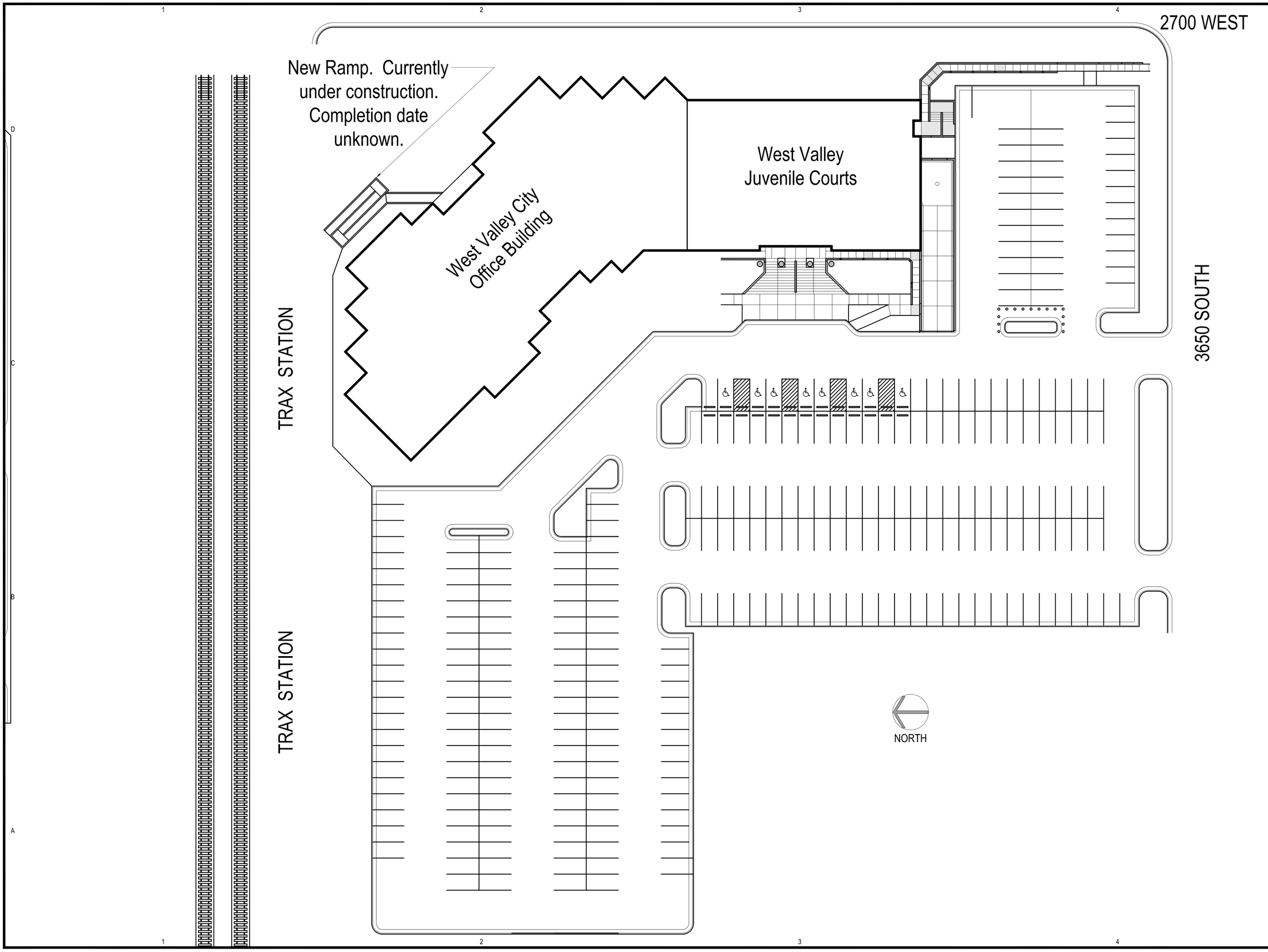
SHEET TITLE

COVER SHEET AND GENERAL INFO.

GI001



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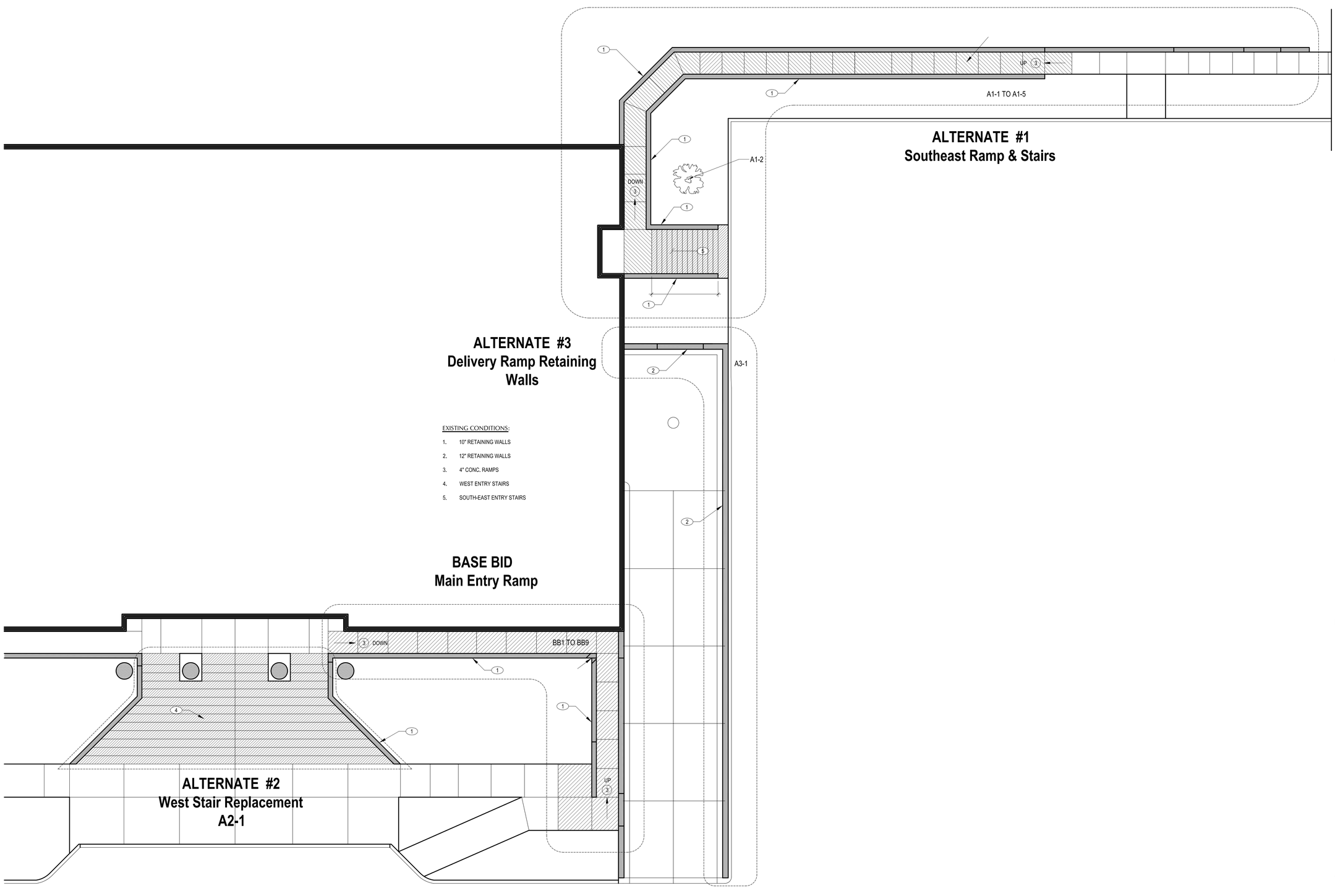
EXISTING PARKING PLAN

G1002



EXISTING ACCESS AND DEMO PLAN SCALE: 1/8"=1'-0"

NORTH

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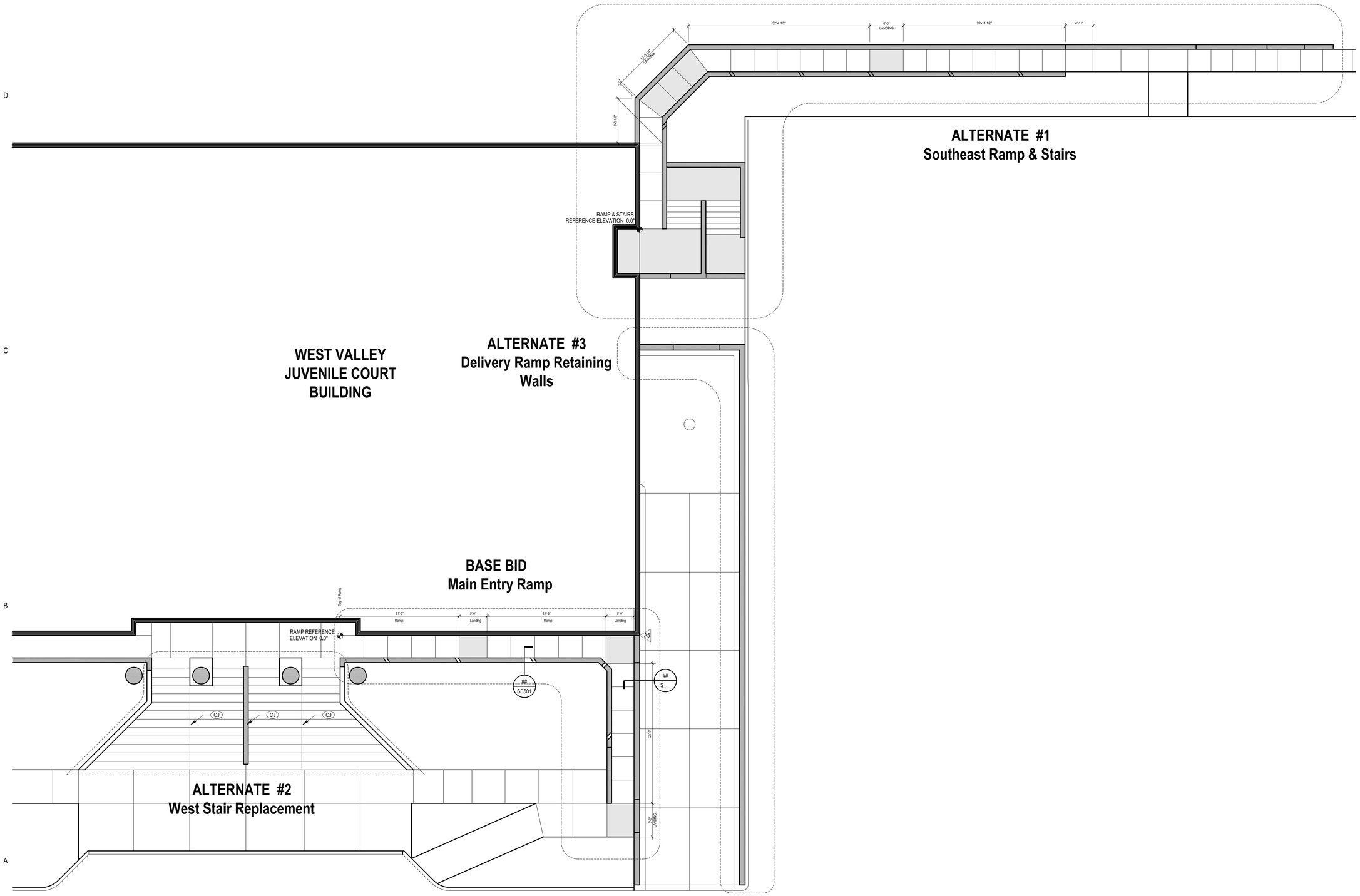
STRUCTURAL DEMOLITION

SD101



NEW ACCESS RAMPS & STAIRS PLAN SCALE: 1/8"=1'-0"

NORTH

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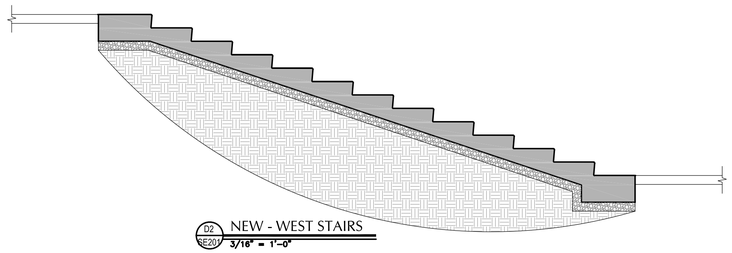
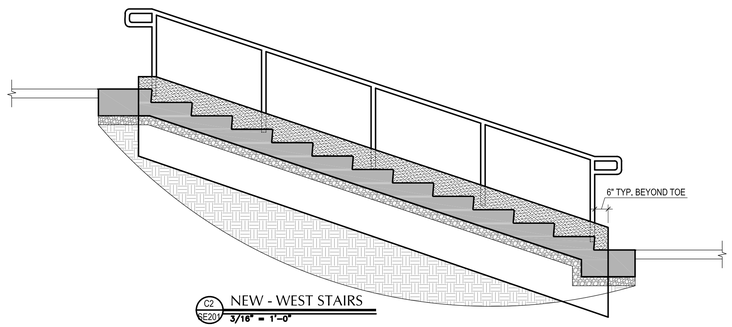
NEW PLAN

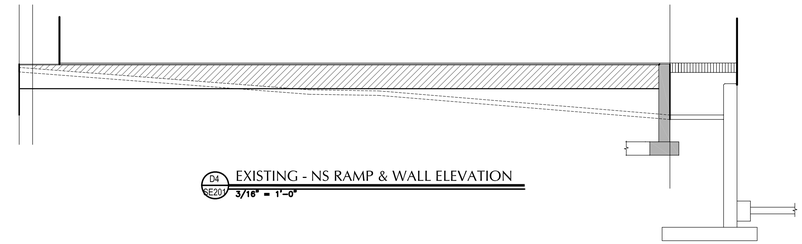
SE101



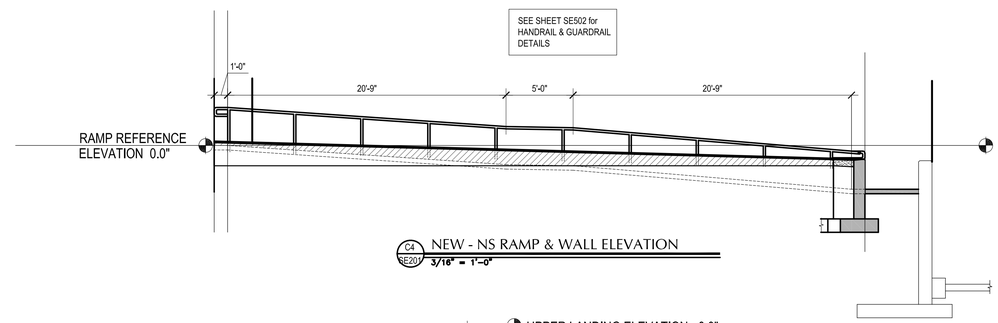
D2 SE201 NEW - WEST STAIRS
3/16" = 1'-0"



C2 SE201 NEW - WEST STAIRS
3/16" = 1'-0"

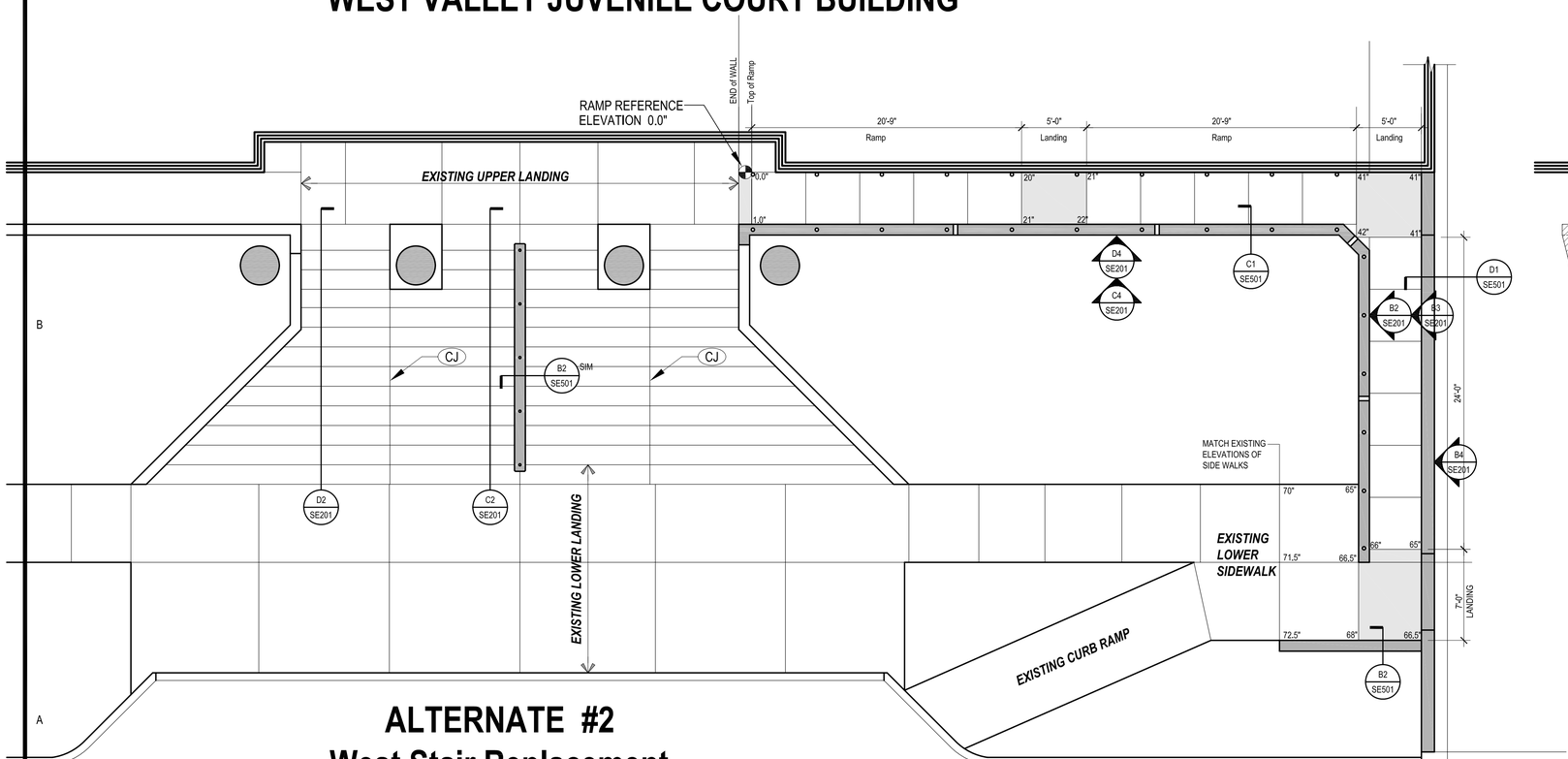


D4 SE201 EXISTING - NS RAMP & WALL ELEVATION
3/16" = 1'-0"



C4 SE201 NEW - NS RAMP & WALL ELEVATION
3/16" = 1'-0"

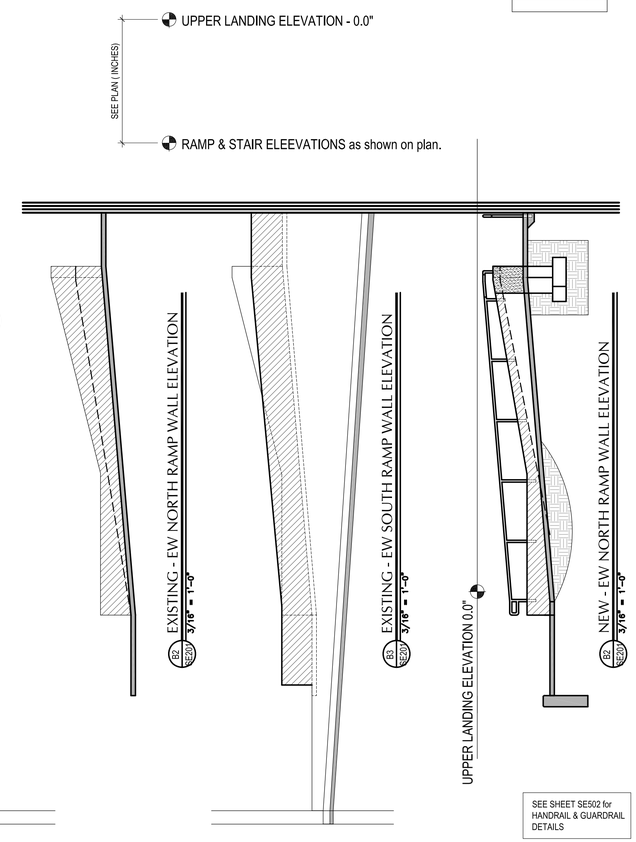
WEST VALLEY JUVENILE COURT BUILDING



ALTERNATE #2
West Stair Replacement

NEW WEST RAMPS & STAIR PLAN SCALE: 3/16" = 1'-0"

NORTH



B2 SE201 EXISTING - EW NORTH RAMP WALL ELEVATION
3/16" = 1'-0"

B3 SE201 EXISTING - EW SOUTH RAMP WALL ELEVATION
3/16" = 1'-0"

B2 SE201 NEW - EW NORTH RAMP WALL ELEVATION
3/16" = 1'-0"

BASE BID
Main Entry Ramp

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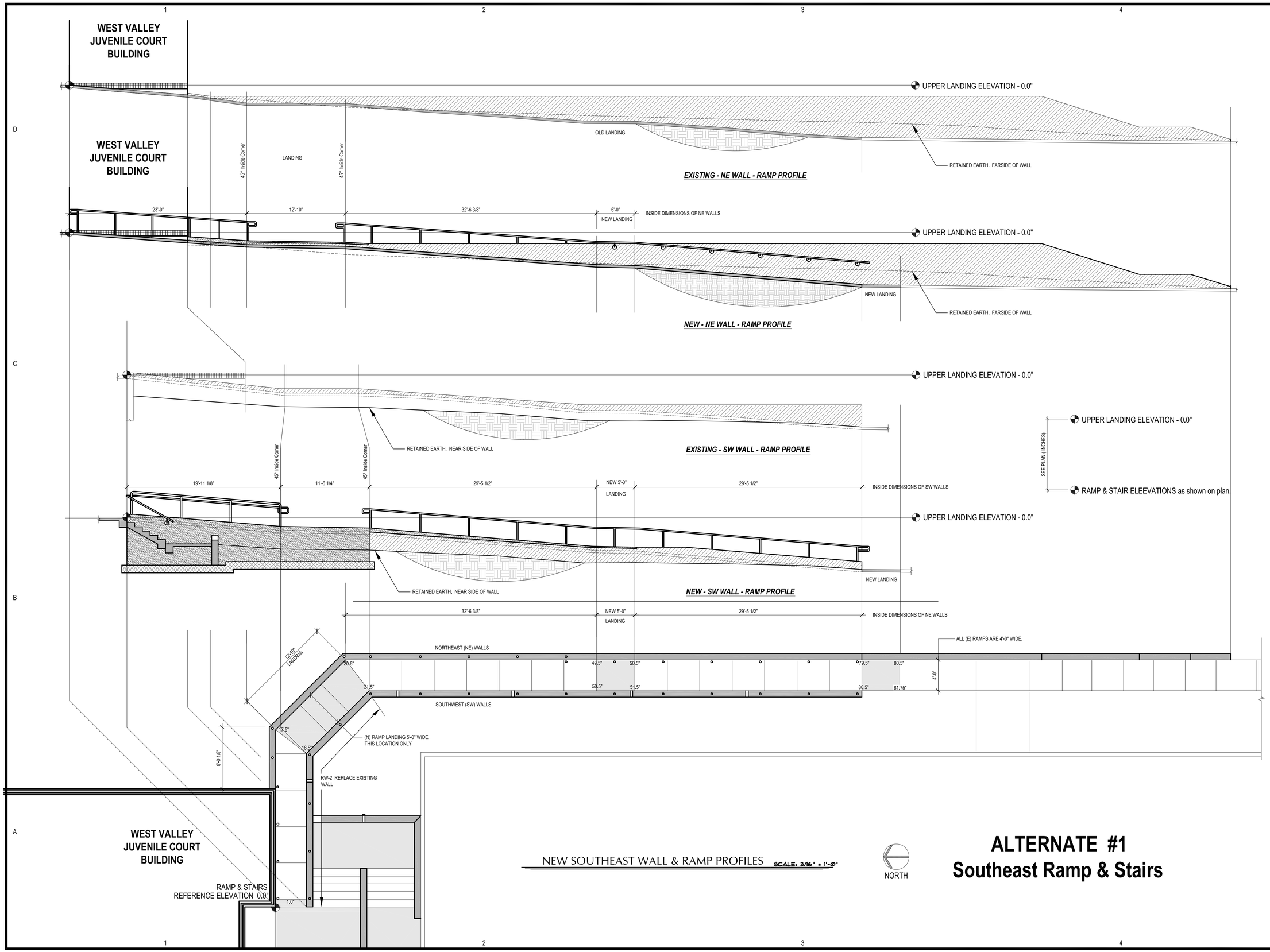
SOUTH-EAST RAMP ELEVATIONS

SE202



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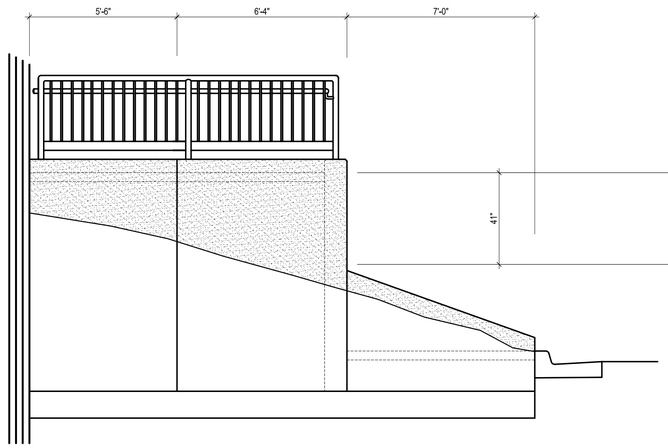
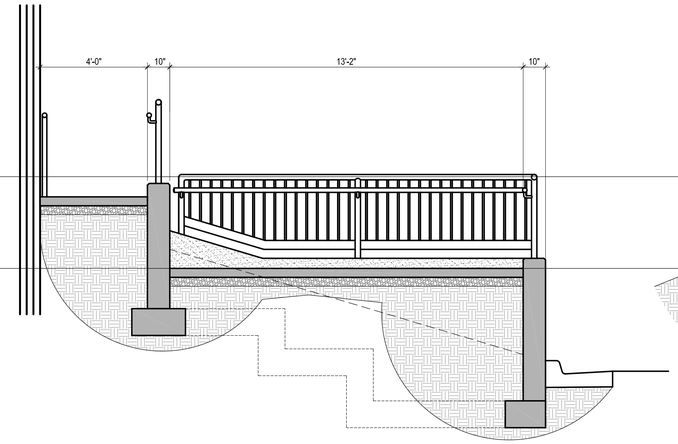
SOUTH-EAST RAMP ELEVATIONS

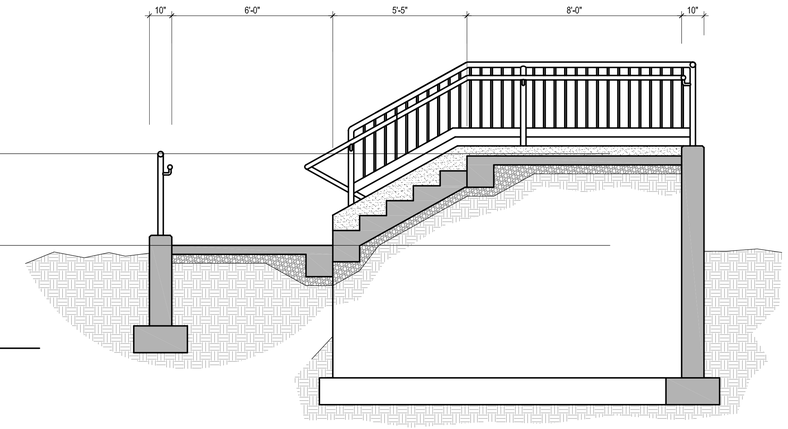
SE202



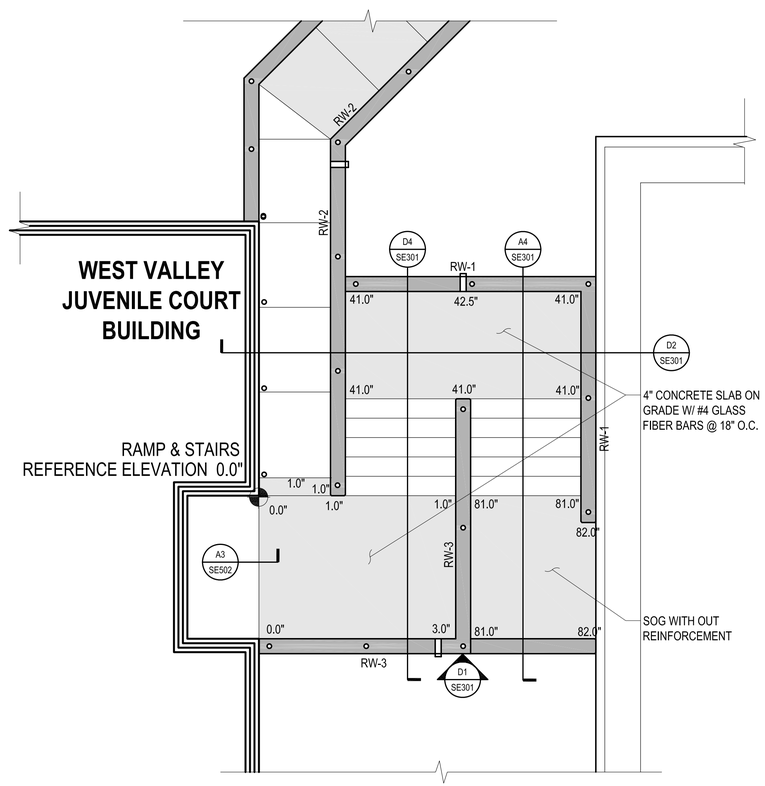
D1 SE301 WALL ELEVATION
3/8" = 1'-0"



D2 SE301 STAIR & RAMP SECTION
3/8" = 1'-0"



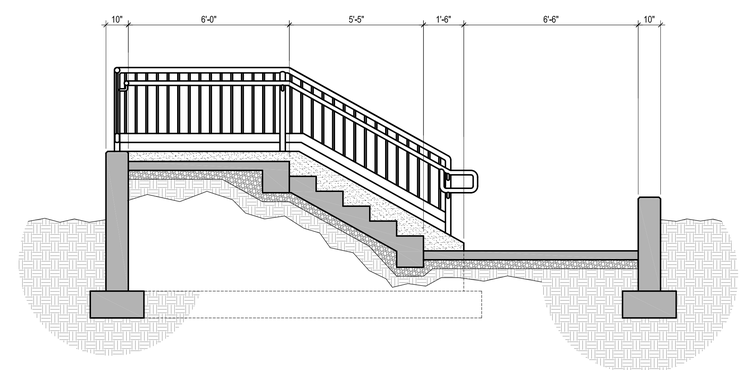
D4 SE301 STAIR SECTION
3/8" = 1'-0"



NEW SOUTH STAIRS PLAN SCALE: 3/8" = 1'-0"

NORTH

SEE SHEET SE502 for
HANDRAIL & GUARDRAIL
DETAILS



A4 SE301 STAIR SECTION
3/8" = 1'-0"

ALTERNATE #1
Southeast Ramp & Stairs

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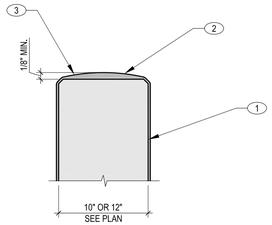
SHEET TITLE

STAIR SECTIONS

SE301

1

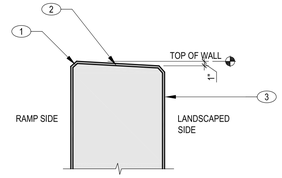


KEYNOTES:

1. (E) WALL
2. ROUND TOP OF WALL WHERE BEVEL CUT IS NOT REQ'D. BUILT-UP SMEAR COAT TO MAKE UNIFORM CURVATURE.
3. SMEAR COAT AS REQ'D.

D1 SE501 EXISTING WALL - ROUNDED CAP
NO SCALE

2

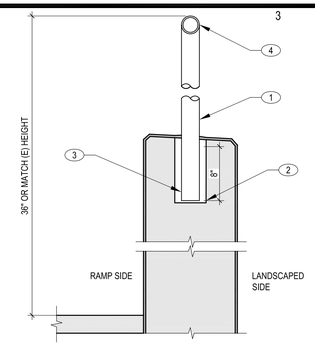


KEYNOTES:

1. 3/4" CHAMFED CORNERS
2. SAW CUT TOP OF WALL TO MATCH NEW WALL ELEVATIONS
3. SMEAR COAT

D2 SE501 REDUCE WALL HEIGHT WITH BEVELLED SAWCUT
NO SCALE

3

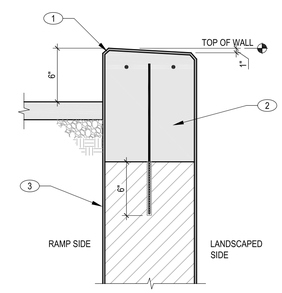


KEYNOTES:

1. STEEL PIPE POST 1-1/2"Ø N.D. TO HANDRAIL. MAX. SPACING 5'-0"
2. CORE CONCRETE 1"Ø GREATER THAN POST DIA. (MIN.). REMOVE CORE.
3. GROUT IN-PLACE WITH SUPER FLOW ROCK. BEVEL GROUT FOR DRAINAGE @ TOP OF WALL
4. HANDRAIL 1-1/2"Ø N.D. STD. PIPE.

D3 SE501 TYPICAL HANDRAIL POST DETAIL
NO SCALE

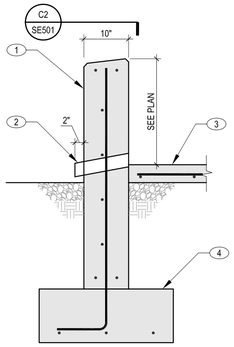
4



KEYNOTES:

1. SEE DETAIL D3/SE501. FORM WALL WITH 1" SLOPE.
2. NEW WALL, SEE WALL ELEVATIONS. ADD WALL HEIGTH FOR NEW RAMP ELEVATIONS WITH (2) #4 GLASS FIBER BARS TOP AND #4 GLASS FIBER VERT. DOWELS @ 16"O.C.
3. (E) WALL

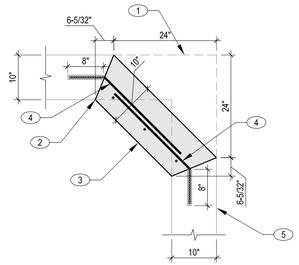
D4 SE501 ADDED HEIGHT TO EXISTING WALL
NO SCALE



KEYNOTES:

1. NEW 10" CONC. WALL WITH #5 VERT. @ 12"O.C. AND #5 HORIZ. @ 10"O.C. AND (2) #5 TOP AND BOTTOM
2. NEW 3"Ø PVC PIPE. IF SOIL INTERFERS WITH OUT LET. PROVIDE 2 CUBIC FEET OF GRAVEL SUMP BELOW OUTLET.
3. NEW RAMP
4. FOOTING 12"x24" OR MATCH EXISTING WITH (3) #5 BOTTOM
5. SEE DETAIL C2/SE501 FOR WALL AND FOOTING DOWELS INTO (E) SIDE MEMBERS.

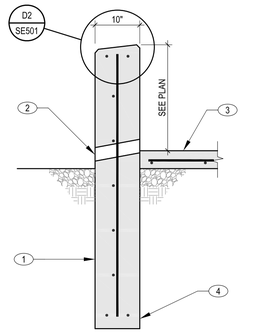
C1 SE501 NEW RAMP WALL DETAIL
NO SCALE



KEYNOTES:

1. (E) CORNER
2. SAW CUT (E) WALL AND FOOTING AFTER TOP OF WALL IN CUT
3. NEW 10" CONC. WALL
4. NEW HORIZ. DOWELS EPOXIED TO (E) WALLS WITH 24" LAP
5. (E) WALL

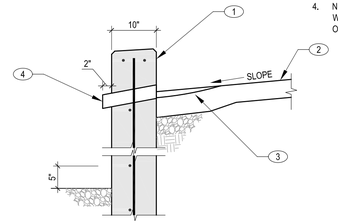
C2 SE501 NEW RAMP WALL DETAIL - PLAN VIEW
NO SCALE



KEYNOTES:

1. (E) WALL
2. CORE DRILL 3" WEEP HOLE, CENTER ON TOP OF RAMP, SLOPE TO OUT-SIDE. COAT WEEP HOLE WITH NEW Hydrozo (SEE GENERAL NOTES). IF SOIL INTERFERES WITH OUTLET, PROVIDE 2 CUBIC FEET OF GRAVEL SUMP BELOW OUTLET
3. NEW RAMP
4. BOTTOM OF WALL (FOOTING OR WALL UNKNOWN

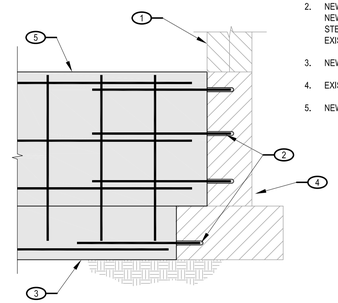
C3 SE501 EXISTING WALL UPGRADE
NO SCALE



KEYNOTES:

1. NEW STAIR WALL, SEE PLAN
2. NEW LANDING. SLOPE TO DRAIN
3. DEPRESS SLAB @ WEEP HOLE
4. NEW 4"Ø PVC PIPE. IF SOIL INTERFERES WITH OUTLET, PROVIDE 2 CUBIC FEET OF GRAVEL. SUMP BELOW OUTLET

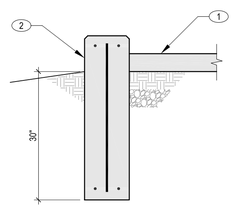
C4 SE501 DETAIL
NO SCALE



KEYNOTES:

1. EXISTING WALL
2. NEW #5 x 24"HORIZ DOWELS, TO MATCH NEW FOUNDATION AND STEM WALL STEEL, DRILL & EPOXY 6" MIN. INTO EXISTING FOOTING OR FOUNDATION
3. NEW FOOTING, SEE PLAN
4. EXISTING FOUNDATION
5. NEW CONCRETE WALL, SEE PLAN

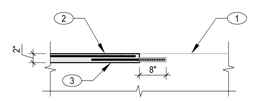
B1 SE501 NEW CONCRETE TO EXISTING STRUCTURE
NO SCALE



KEYNOTES:

1. NEW 4" CONC. SLAB ON GRADE
2. NEW 10" CONC. GRADE BEAM WITH (2) #5 TOP AND BOTTOM WITH #5 VERT. AND HORIZ. @ 14"O.C.

B2 SE501 DETAIL
NO SCALE



KEYNOTES:

1. (E) CONC. WALL
2. NEW CONC. WALL EXTENTION OVER (E) WALL WITH (2) #4 GLASS REBAR
3. NEW (2) #4 GLASS REBAR

B3 SE501 DETAIL
NO SCALE

KEYNOTES:

1. 3/4" CHAMFER.
2. VERTICAL WALL REINFORCEMENT, SEE SCHEDULE w/ #5 @ 14"o.c. HORIZ.
3. GRANULAR FREE DRAINING BACKFILL. SEE NOTE BELOW OR USE A FRENCH DRAIN AT FACE OF WALL, 2'-0" WIDE.
4. WALL DOWELS, SEE SCHEDULE
5. #4 DIAGONAL DOWELS, MATCH DOWEL SPACING.
6. FOOTING REINF. TOP, SEE SCHEDULE
7. (3) #4 CONT. MIN., OR #4 @ 18"o.c.
8. STRUCTURAL FILL OR UNDISTURBED NATURAL SOIL, COMPACT TO 95% MODIFIED PROCTOR
9. (2) #4 CONT. MIN., OR #4 @ 18"o.c.
10. 2"Ø WEEP HOLES @ 4'-0"o.c. MAX.
11. (2) #5 TOP AND BOTTOM.

NOTES:

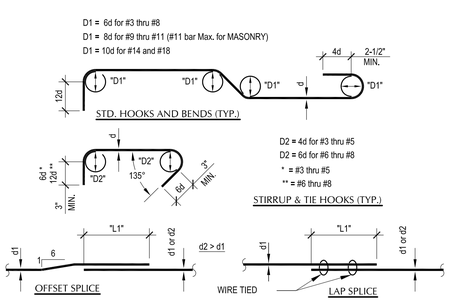
A. PROVIDE WEAKENED VERTICAL CONTROL JOINTS AT 10'-0"o.c. MAXIMUM SPACING

RETAINING WALL SCHEDULE

MARK	RW-1	RW-2	RW-3
WALL HEIGHT	4'-0"	6'-0"	8'-0"
WALL THICKNESS	10"	10"	10"
FOOTING THICKNESS	12"	12"	12"
FOOTING WIDTH	1'-10"	4'-3"	5'-0"
FOOTING TOE LENGTH	1'-0"	2'-3"	2'-0"
VERT. WALL REINF.	#5 @ 16" O.C.	#5 @ 16" O.C.	#5 @ 12" O.C.
DOWEL REINF.	#5 @ 16" O.C.	#5 @ 16" O.C.	#6 @ 12" O.C.
DOWEL LAP LENGTH	2'-0"	2'-6"	36"
FOOTING REINF. TOP	#4 @ 16" O.C.	#4 @ 16" O.C.	#5 @ 16" O.C.

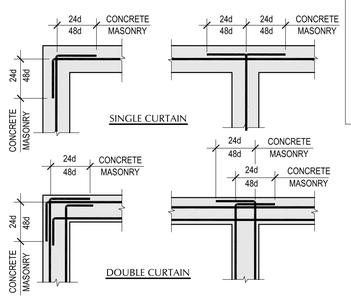
1. BACK FILL PLACED BEHIND RETAINING WALLS SHALL BE NON-COHESIVE, GRANULAR AND FREE DRAINING AND FREE OF CLAY, DEBRIS OR ORGANIC MATTER. COMPACTED TO 90% OF MAXIMUM DENSITY.

A4 SE501 TYPICAL RETAINING WALL (45 pcf EFP w/ 100 psf Surcharge)
NO SCALE



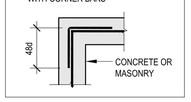
MARK	WALL TYPE	LAP LENGTH	MIN. LAP LENGTH
L1	CONCRETE	30d2 for 40 GRADE	2'-0"
L1	CONCRETE	40d2 for 60 GRADE	2'-0"
L1	MASONRY	48d2	2'-0"

A1 SE501 TYPICAL HOOKS & BENDS
NO SCALE

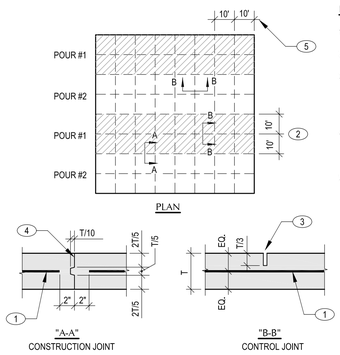


NOTE:

HOOKED ENDS MAY BE REPLACED WITH CORNER BARS



A2 SE501 CONCRETE OR MASONRY WALL CORNER REINF.
NO SCALE



KEYNOTES:

1. SLAB REINFORCING
2. MAX. WIDTH OF POUR = 20'-0"
3. 1/8" FIBERBOARD STRIP, ZIP STRIP, OR SAW CUT, SEE SPECIFICATIONS. AT EXPOSED SLOT WITH SLAB, USE 1/4" JOINT SEALER.
4. FOR SLABS LEFT EXPOSED, PROVIDE 1/4" WIDE SLOT FILLED WITH JOINT SEALER.
5. MAX. LENGTH OF POUR WITHOUT CONTROL JOINT = 10'-0" COORDINATE JOINT LOCATIONS WITH ARCHITECTS REQUIREMENTS

A3 SE501 SLAB ON GRADE JOINT
NO SCALE

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CONSULTANTS

PROJECT NAME

WEST VALLEY JUVENILE COURTS PROBATION OFFICE ADA RAMP RECONSTRUCTION & Alternate #1 Alternate #2 Alternate #3

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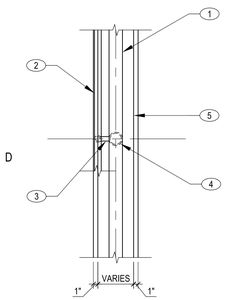
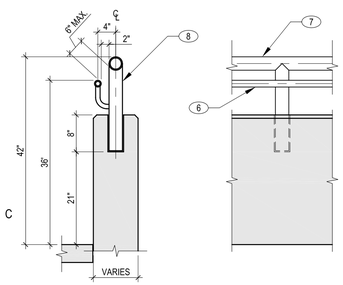
SE501

1



PLAN



SECTION ELEVATION

KEYNOTES:

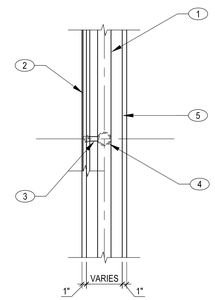
1. 2-1/2"Ø STEEL PIPE GUARDRAIL PAINTED
2. 1-1/2" Ø STEEL PIPE HANDRAIL PAINTED
3. 3/4"Ø STEEL PIPE SUPPORT PAINTED
4. 2-1/2"Ø STEEL PIPE SUPPORT PAINTED. MAX. SPACING 6'-0"
5. CONC. WALL WITH 1" 45° CHAMFERED EDGES
6. HANDRAIL
7. GUARDRAIL
8. TYP. GUARDRAIL WITH ADJUSTED DIMENSIONS AND TYP. GUARDRAIL HANDRAIL CONSTRUCTION, SEE DETAIL C2/SE502

NOTES:

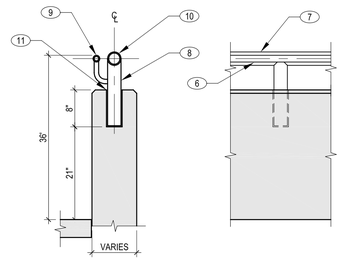
WELD AND GRIND ALL CONNECTIONS TO PRODUCE SMOOTH UNIFORM FINISH (TYP.)

C1 SE502 HANDRAIL AND GUARDRAIL DETAIL
NO SCALE

2



PLAN



SECTION ELEVATION

KEYNOTES:

1. 2-1/2"Ø STEEL PIPE GUARDRAIL PAINTED
2. 1-1/2" Ø STEEL PIPE HANDRAIL PAINTED
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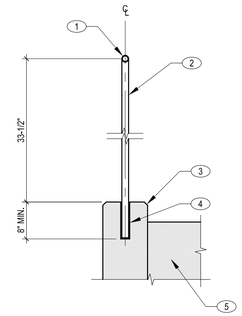
4. 2-1/2"Ø STEEL PIPE SUPPORT PAINTED. MAX. SPACING 6'-0"
5. CONC. WALL WITH 1" 45° CHAMFERED EDGES
6. HANDRAIL
7. GUARDRAIL
8. TYP. GUARDRAIL WITH ADJUSTED DIMENSIONS AND TYP. GUARDRAIL HANDRAIL CONSTRUCTION, SEE ACCOMPANYING DETAILS.
9. 1-1/2"Ø HANDRAIL WITH 1"Ø SUPPORT
10. 3"Ø STEEL PIPE GUARDRAIL AND SUPPORT
11. CORE DRILL FOR 3"Ø PIPE SUPPORT, SECURE WITH POR-ROC.

NOTES:

WELD AND GRIND ALL CONNECTIONS TO PRODUCE SMOOTH UNIFORM FINISH (TYP.)

C2 SE502 HANDRAIL AND GUARDRAIL DETAIL
NO SCALE

3

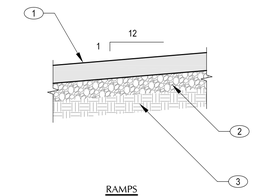


KEYNOTES:

1. 1-1/2"Ø STEEL PIPE HANDRAIL PAINTED
2. 1-1/2"Ø STEEL PIPE SUPPORT SET IN CHEEK WALL PAINTED
3. TYP. CONC. CHEEK WALL WITH CHAMFERED EDGES TO MATCH WALLS
4. CORE DRILL FOR 1-1/2"Ø STEEL SUPPORT, SECURE WITH POR-ROK
5. CONC. STEPS

D3 SE502 DETAIL
NO SCALE

4

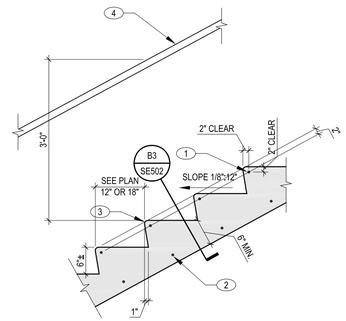


RAMPS

KEYNOTES:

1. NEW 4" CONC. SLAB-ON-GRADE. MAX. SLOPE 1 TO 12
2. 4" MIN. GRAVEL BASE COURSE @ 95% COMPACTION. (TYP)
3. UNDISTURBED SOIL OR COMPACTED SUBGRADE MATERIAL 95% (TYP)

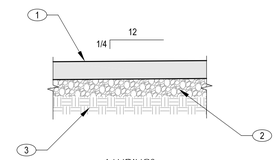
D4 SE502 TYPICAL RAMP SLOPE
NO SCALE



KEYNOTES:

1. #4 GLASS FIBER NOSING BAR
2. #4 GLASS FIBER DOWEL BY 24" LONG AND 16"O.C.
3. 3/4" RADIUS, TYP.
4. HANDRAIL

C3 SE502 STAIR STEPS AND NOSING
NO SCALE

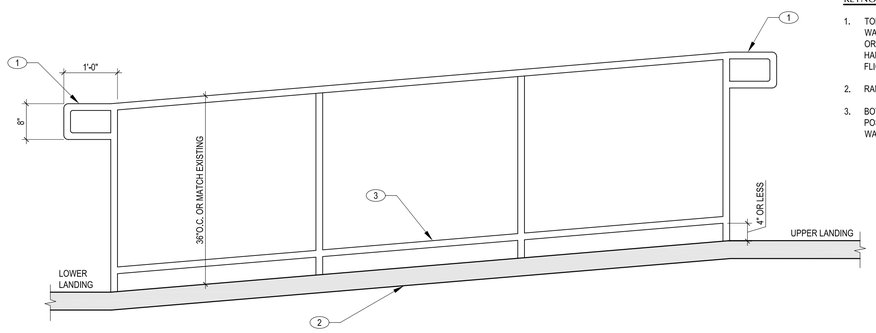


LANDINGS

KEYNOTES:

1. NEW 4" CONC. SLAB-ON-GRADE. MAX. SLOPE 1/4 TO 12
2. 4" MIN. GRAVEL BASE COURSE @ 95% COMPACTION. (TYP)
3. UNDISTURBED SOIL OR COMPACTED SUBGRADE MATERIAL 95% (TYP)

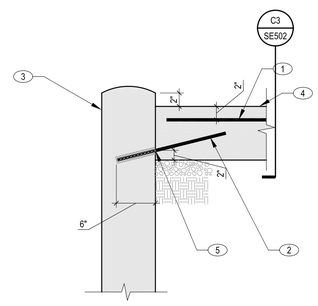
C4 SE502 TYPICAL LANDING SLOPE
NO SCALE



KEYNOTES:

1. TOP EXTENSION OR RETURN TO A WALL, GUARD, OR LANDING SURFACE, OR HANDRAIL IS CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP FLIGHT
2. RAMP
3. BOTTOM RUNG NOT REQ'D. WHEN POSTS ARE MOUNTED ON RAMP EDGE WALLS

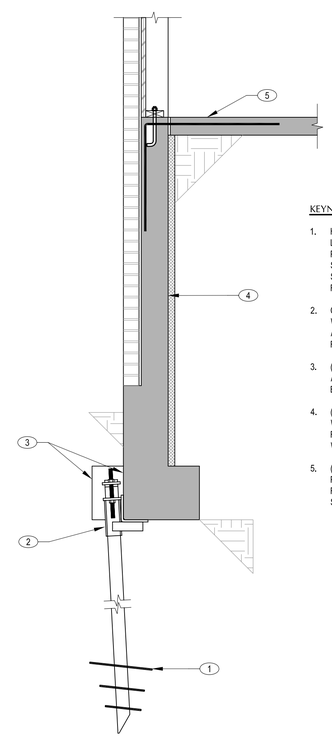
B1 SE502 TOP AND BOTTOM HANDRAIL EXTENSIONS 2 RAMPS
NO SCALE



KEYNOTES:

1. #4 GLASS FIBER NOSING BAR
2. #4 GLASS FIBER DOWEL BY 24" LONG AND 16"O.C. EPOXY INTO WALL
3. EDGE WALL ABOVE NOSING
4. TREAD
5. WALL DOWELS @ STAIRS

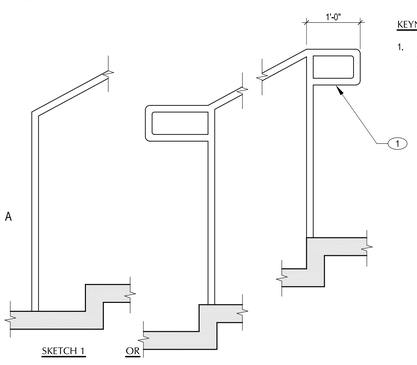
B3 SE502 WALL DOWELS @ STAIRS
NO SCALE



KEYNOTES:

1. HELICAL PIER. GOOD FOR 45 kip SERVICE LOAD. TENSION OR COMPRESSION. PROVIDE A FACTOR OF SAFETY OF 2. SEE "HELICAL PIERS" ON GENERAL STRUCTURAL NOTES THIS SHEET SE100 FOR ADDITIONAL INFORMATION.
2. CONNECTION BRACKETS. COORDINATE WITH HELICAL PIER CONTRACTOR. ATTACH TO FOOTING PER BRACKET REQUIREMENTS.
3. (E) CONCRETE FOOTING. DEMO FOOTING AT BRACKET LOCATIONS TO ALINE WITH EXTERIOR FACE OF FOUNDATION WALL.
4. (E) REINFORCED CONCRETE FOUNDATION WALL W/ BRICK VENEER. REINFORCEMENT NOT SHOWN EXCEPT WALL-FLOOR DOWEL.
5. (E) CONCRETE SLAB-ON-GRADE. SEE PLAN. ORIGINAL PLANS SHOW FOUNDATION WALL DOWELED TO THE SLAB-ON-GRADE AS SHOWN.

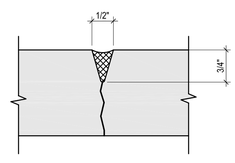
A4 SE502 HELICAL PIER DETAIL
NO SCALE



KEYNOTES:

1. TOP EXTENSION OR RETURN TO A WALL, GUARD, OR LANDING SURFACE, OR HANDRAIL IS CONT. TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT

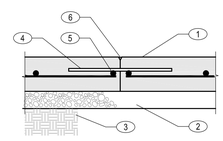
A1 SE502 HANDRAIL EXTENSIONS AT STAIRS
NO SCALE



NOTE:

1. PREPARE AND ALLOW FOR PRIMER TO CURE PROPERLY PRIOR TO INSTALLING SEALANT.
2. SEE STRUCTURAL GENERAL NOTES FOR APPROVED MATERIAL.
3. INSTALL SEALANT EVENLY AND RECESS 1/16" BELOW SURFACE. DO NOT OVERFILL JOINT.

A2 SE502 DETAIL
NO SCALE



KEYNOTES:

1. REINFORCED CONCRETE SLAB-ON-GRADE (SOG) WITH RADIANT HEAT PIPING (NOT SHOWN). SEE PLAN. DO NOT RUN REINFORCENMENT THRU JOINT.
2. COMPACTED 3/4" WASHED GRAVEL SUBGRADE.
3. COMPACT (E) SOIL TO 95% MAXIMUM DENSITY. DO NOT LEAVE ANY LOOSE SURFACES.
4. 5/8"Ø SMOOTH STAINLESS STEEL DOWELS @ 12" O.C. COAT BAR TO PREVENT BOND.
5. #5 EDGE BAR, TYP.
6. CONSTRUCTION JOINT W/ JOINT SEALING COMPOUND. SEE DETAIL C4/SE100

A3 SE502 DETAIL
NO SCALE

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REVISIONS

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SE502