PROJECT DESCRIPTION

1. THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS IS FOR THE CONSTRUCTION OF A NEW ONE-STORY RESTROOM BUILDING AND RAMP.

2. THE DESIGN OF NEW WORK IS IN GENERAL CONFORMANCE TO THE REQUIREMENTS OF THE 2010 SAN FRANCISCO BUILDING CODE (SFBC) WHICH COMPRISES THE 2010 CALIFORNIA BUILDING CODE (CBC) AND 2010 SAN FRANCISCO AMENDMENTS.

GENERAL

1. THESE GENERAL NOTES APPLY THROUGHOUT ALL STRUCTURAL DRAWINGS EXCEPT WHERE SPECIFICALLY SHOWN BY NOTES ON DRAWINGS AND/OR DETAILS.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF CONSTRUCTION OR FABRICATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION OR FABRICATION. ANY DISCREPANCIES, INCONSISTENCIES, OR UNSOUND CONDITIONS SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO THE START OF ANY CONSTRUCTION OR FABRICATION SO THAT A CLARIFICATION CAN BE ISSUED.

3. DIMENSIONS ARE TO CENTERLINE OF STEEL FRAMING, FACE OF CONCRETE SURFACES, FACE OF STUDS, FACE OF CONCRETE MASONRY UNITS (CMU), TOP OF SHEATHING, OR TOP OF STRUCTURAL SLAB, UNLESS OTHERWISE NOTED.

4. DIMENSIONS IN THE STRUCTURAL DRAWINGS ARE AS NOTED. DO NOT USE DIMENSIONS SCALED FROM THE STRUCTURAL DRAWINGS.

5. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE CITY AND COUNTY OF SAN FRANCISCO.

6. ALL TYPICAL DETAILS AND NOTES SHOWN ON DRAWINGS SHALL APPLY UNLESS OTHERWISE NOTED. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS, BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE DRAWINGS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO DETAILS ARE NOTED, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.

7. REFER TO OTHER DISCIPLINES' DRAWINGS AND COORDINATE INFORMATION RELATED TO THOSE OTHER DISCIPLINES' SYSTEMS FOR ITEMS SUCH AS:

   a. FINISH FLOOR ELEVATIONS, FLOOR DEPRESSIONS, CHANGES IN ELEVATION, SLOPES, DRAINS, CURBS, PADS, INSERTS, ETC.
   b. SIZE AND LOCATION OF ALL NON-BEARING PARTITIONS.
   c. SIZE AND LOCATION OF ALL WALL, FLOOR AND ROOF OPENINGS.
   d. STAIR FRAMING, HANGERS AND DETAILS.
   e. WATERPROOFING AND WATERSTOPS.
   f. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND FLOOR OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
   g. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS, ETC., IN WALLS AND SLABS.
   h. SIZE, LOCATION, ANCHORAGE AND BRACING FOR MECHANICAL, ELECTRICAL, AND PLUMBING EQUIPMENT.

8. FOR OPENINGS LARGER THAN 6" THAT ARE REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS, THE CONTRACTOR SHALL SUBMIT DRAWINGS INDICATING OPENING LOCATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

9. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS AND/OR METHODS OF CONSTRUCTION. ALTHOUGH THE NEED FOR SHORING MAY SOMETIMES BE INDICATED IN THE STRUCTURAL DRAWINGS, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN, PROVIDE, AND MAINTAIN TEMPORARY BRACING, SHORING, GUYING, OR OTHER TEMPORARY SUPPORT AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION.

10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION OF ADJACENT STRUCTURES DURING CONSTRUCTION. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT.

11. WALLS SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION UNTIL WALL DESIGN STRENGTH HAS BEEN ATTAINED AND ALL PERMANENT SUPPORTS ARE IN PLACE.

12. THE USE OF NEW CONSTRUCTION FOR TEMPORARY SUPPORT OR STORAGE OF CONSTRUCTION EQUIPMENT OR MATERIALS IS RESTRICTED TO THE DESIGN CAPACITY OF THE NEW CONSTRUCTION AT THE TIME IT IS TO BE USED. EQUIPMENT OR MATERIALS SHALL BE PLACED SO AS NOT TO EXCEED THE CAPACITY OF INDIVIDUAL ELEMENTS. PROVIDE ADEQUATE, ENGINEERED SHORING AND/OR BRACING WHERE DESIGN CAPACITY IS NOT SUFFICIENT.

13. CONSTRUCTION LOADS SHALL NOT BE PLACED ON NEW CONCRETE CONSTRUCTION, INCLUDING CONCRETE FILL ON METAL DECK, FOR AT LEAST 7 DAYS AFTER CONCRETE PLACEMENT.

14. SPECIFICATIONS AND DETAILING OF ALL WATERPROOFING AND DRAINAGE ITEMS, ALTHOUGH SOMETIMES INDICATED ON THE STRUCTURAL DRAWINGS FOR GENERAL INFORMATION PURPOSES ONLY, ARE SOLELY THE DESIGN RESPONSIBILITY OF OTHERS.

15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING PIPES, DUCTS, AND UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT.

16. ALL STRUCTURAL MEMBERS AND ELEMENTS SHOWN ON THE STRUCTURAL DRAWINGS ARE NEW UNLESS NOTED (E) FOR EXISTING CONDITIONS.

BASIS OF DESIGN

1. ALL NEW CONSTRUCTION SHALL CONFORM TO THE 2010 SAN FRANCISCO BUILDING CODE (SFBC) WHICH COMPRISES THE 2010 CALIFORNIA BUILDING CODE (CBC) AND 2010 SAN FRANCISCO AMENDMENTS.

2. THE PUBLICATIONS LISTED BELOW ARE THE GOVERNING CODES AND STANDARDS REFERENCE BY THE CBC AND ARE REFERENCED HEREIN BY THEIR BASIC DESIGNATION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE SFBC SHALL GOVERN.

ACI 301-10	AMERICAN CONCRETE INSTITUTE, "SPECIFICATIONS FOR STRUCTURAL CONCRETE", 2010 EDITION
ACI 318-08	AMERICAN CONCRETE INSTITUTE, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", 2005 EDITION
ASCE 7-10	AMERICAN SOCIETY OF CIVIL ENGINEERS, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", 2005 EDITION
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS D1.4	AMERICAN WELDING SOCIETY, "STRUCTURAL WELDING CODE - REINFORCING STEEL", 2000 EDITION

STRUCTURAL DESIGN CRITERIA

1. DESIGN LIVE LOADS:

ROOF:	20 PSF (REDUCIBLE)

2. WIND DESIGN CRITERIA:

BASIC WIND SPEED:	85 MPH
EXPOSURE:	C

3. SEISMIC DESIGN CRITERIA:

PEAK GROUND ACCELERATION :	S_S = 1.730g, S_1 = 0.883g
SITE CLASSIFICATION:	D
SITE COEFFICIENTS:	F_a = 1.00, F_V = 1.50
MAXIMUM SPECTRAL ACCELERATION:	S_{MS} = 1.730g, S_{M1} = 1.324g
DESIGN SPECTRAL ACCELERATION:	S_{DS} = 1.153g, S_{D1} = 0.883g
OCCUPANCY CATEGORY:	II
IMPORTANCE FACTOR:	I = 1.0
SEISMIC DESIGN CATEGORY:	S_{DC} = D

FOR BEARING WALL SYSTEMS WITH ORDINARY REINFORCED CONCRETE SHEAR WALLS:

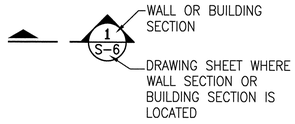
RESPONSE MODIFICATION FACTOR:	R = 4
SYSTEM OVERSTRENGTH FACTOR:	Ω_o = 2½
DEFLECTION AMPLIFICATION FACTOR:	C_d = 4
SEISMIC BASE SHEAR:	V = 0.288 W (LRFD)

SHEET INDEX

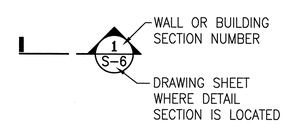
SHEET NO.	TITLE	100% CD SUBMITTAL BID SET	100% CD SUBMITTAL PERMIT SET
S1.1	STRUCTURAL GENERAL NOTES	X	X
S1.2	STRUCTURAL GENERAL NOTES	X	X
S1.3	STRUCTURAL GENERAL NOTES	X	X
S1.4	TYPICAL CONCRETE DETAILS	X	X
S1.5	TYPICAL CONCRETE DETAILS	X	X
S2.0	SITE PLAN	X	X
S2.1	FOUNDATION AND ROOF PLANS	X	X
S3.1	FOUNDATION DETAILS	X	X
S4.1	WALL ELEVATIONS	X	X
S4.2	WALL SECTIONS & DETAILS	X	X
S5.1	ROOF DETAILS	X	X
S6.1	RETAINING WALLS PLAN & ELEVATION	X	X
S6.2	RETAINING WALLS DETAILS	X	X
S6.3	RETAINING WALLS DETAILS	X	X
S6.4	RETAINING WALLS DETAILS	X	X
REFERENCE:			
		SEPT 28, 2012	SEPT 28, 2012

LEGEND

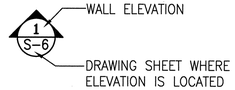
WALL SECTION AND BUILDING SECTION:



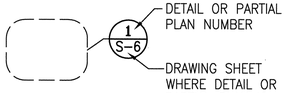
DETAIL SECTION REFERENCE:



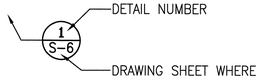
WALL ELEVATION:



DETAIL OR PARTIAL PLAN REFERENCE:



DETAIL REFERENCE:




CONC WALL

REVISION

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
Fuad s. Sweiss - City Engineer

BUILDING DESIGN & CONSTRUCTION

Architecture • Construction
Tara D. Lamont - Acting Deputy Division Manager
30 Van Ness Avenue, Suite 4100
San Francisco, CA (415) 557-4700
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Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

			DATE
DESIGNED BY:	SL	SL	09/2012
DRAWN BY:	BH	BH	09/2012
CHECKED BY:	JC	JC	09/2012

APPROVED

SECTION MANAGER: DATE: 10/9/12
DEPUTY DIVISION MANAGER: DATE: 10/11/12
DIVISION MANAGER: DATE: 10/9/12

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LO
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

STRUCTURAL GENERAL NOTES

Sheet No.

S1.1

Scale NONE

Job No.

3092V-2

Original Sheet Size: 22"x34"

FOUNDATIONS

1. THE FOUNDATION DESIGN IS BASED UPON THE PROJECT GEOTECHNICAL REPORT "GEOTECHNICAL MEMORANDUM – BATHROOM REPLACEMENT PROJECT CONTEMPORARY DESIGN" PREPARED BY THE DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING, DATED 11/15/2011.

2. DESIGN SOIL PARAMETERS:
   ALLOWABLE BEARING PRESSURE: 2,500 PSF FOR DEAD LOADS + LIVE LOADS
   3,500 PSF FOR DEAD LOADS + LIVE LOADS + LATERAL LOADS

3. REFER TO THE GEOTECHNICAL MEMORANDUM FOR ADDITIONAL INFORMATION AND RECOMMENDATIONS NOT NOTED HERE.

4. THE GEOTECHNICAL ENGINEER SHALL VERIFY THE CONDITIONS AND/OR ADEQUACY OF ALL SUBGRADES, ENGINEERED FILLS, AND BACKFILLS BEFORE PLACEMENT OF FILLS, FOOTINGS, SLABS, OR OTHER CONSTRUCTION DEPENDENT UPON THEM.

5. EXCAVATIONS FOR FOOTINGS SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING REINFORCING AND CONCRETE. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER WHEN THE EXCAVATIONS ARE READY FOR OBSERVATION BY THE GEOTECHNICAL ENGINEER.

6. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED NATIVE SOIL OR ENGINEERED FILL. ALL ABANDONED FOOTINGS, UTILITIES, ETC., SHALL BE REMOVED. ALL FOOTINGS SHALL BE FOUNDED AT A DEPTH AT LEAST 30" BELOW THE LOWEST ADJACENT GRADE. FOOTING DEPTHS SHOWN ON THE STRUCTURAL DRAWINGS ARE MINIMUM DEPTHS AND SHALL BE VERIFIED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.

7. SIDES OF FOUNDATIONS SHOWN STRAIGHT ARE FORMED. IF SITE CONDITIONS ALLOW AND GEOTECHNICAL ENGINEER CONCURS, SIDES OF FOUNDATION MAY BE FORMED OR NOT FORMED AT CONTRACTOR'S OPTION.

8. WHERE FOUNDATIONS ARE CAST AGAINST EARTH, SLOPE SIDES OF EXCAVATIONS AS APPROVED BY GEOTECHNICAL ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP OF SLOUGHED MATERIALS BEFORE AND DURING CONCRETE PLACEMENT. CONCRETE COVER FOR REINFORCEMENT MAY BE AFFECTED.

9. ENGINEERED FILL BELOW BUILDING FOOTINGS SHALL BE COMPACTED TO 95% RELATIVE COMPACTION AS DETERMINED BY THE ASTM D1557 COMPACTION TEST METHOD AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. ENGINEERED FILL SHALL EXTEND AT LEAST 5 FEET BEYOND THE BUILDING PERIMETER.

10. CONTRACTOR SHALL PROVIDE FOR DE-WATERING IF WATER IS PRESENT IN THE EXCAVATION. DE-WATERING PLANS SHALL BE SUBMITTED FOR REVIEW. DE-WATERING PLANS MAY INCLUDE A MONITORING PROGRAM TO EVALUATE SETTLEMENT IN THE ADJACENT IMPROVEMENTS. SEE GEOTECHNICAL REPORT.

11. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE THE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH UNLESS SPECIFICALLY APPROVED BY THE ENGINEER IN WRITING. THE CONTRACTOR SHALL BRACE OR PROTECT ALL BUILDING AND PIT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHING FLOORS ARE COMPLETELY IN PLACE AND HAVE ATTAINED FULL STRENGTH. THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN, PERMITS, AND INSTALLATION OF SUCH BRACING.

12. OVER-EXCAVATED FOOTINGS SHALL BE BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) (fc'min = 100 PSI, fc'max = 1,200 PSI).

13. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF APPROPRIATE, ADEQUATE SHORING AND BRACING OF FOUNDATION EXCAVATION, AND UNDERPINNING OF EXISTING STRUCTURES TO ENSURE PROTECTION OF LIFE AND ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL ORDINANCES. UNDERPINNING, SHORING, LAGGING, ETC., SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SHALL BE CONSTRUCTED UNDER SEPARATE PERMIT. SHORING PLAN TO BE SUBMITTED TO THE GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER FOR REVIEW TO ENSURE CONFORMANCE WITH DESIGN DOCUMENTS.

14. THE CONTRACTOR SHALL NOT UNDERMINE EXISTING FOUNDATIONS AND STRUCTURES DURING EXCAVATION. IF UNDERMINING OCCURS, THE CONTRACTOR SHALL PROVIDE CORRECTIVE MEASURES FOR ENGINEER TO REVIEW AND APPROVE AT CONTRACTOR'S EXPENSE.

15. THE GEOTECHNICAL ENGINEER SHALL PREPARE A LETTER FOR THE DEPARTMENT OF BUILDING INSPECTION GIVING AN OPINION REGARDING CONFORMANCE OF THE FOOTING EXCAVATIONS, ENGINEERED FILL COMPACTION, SUBGRADE PREPARATION, AND BACKFILL WITH THE REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT.

CONCRETE

1. MIXING, BATCHING, TRANSPORTING, PLACING, AND CURING OF ALL CONCRETE AND SPECIFICATION OF CONCRETE MATERIALS, SHALL CONFORM TO ACI 301 "SPECIFICATION FOR STRUCTURAL CONCRETE", EXCEPT AS NOTED BELOW.

2. CONCRETE SHALL BE READY-MIXED CONFORMING TO ASTM C94. CEMENT SHALL BE PORTLAND CEMENT TYPE II, CONFORMING TO ASTM C150. ALL CONCRETE USED IN SUSPENDED SLABS AND SLABS-ON-GRADE SHALL BE DESIGNED WITH A SHRINKAGE LIMITATION OF 0.04% AFTER 28 DAYS OF DRYING.

3. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER AND APPROVED PRIOR TO USE. SELECTION OF CONCRETE MIX PROPORTIONS SHALL BE IN ACCORDANCE WITH ACI 301. MIX PROPORTIONS SHALL MEET OR EXCEED THE REQUIREMENTS LISTED BELOW FOR THE LOCATIONS NOTED. THE MORE STRINGENT OF THE REQUIREMENTS LISTED SHALL GOVERN.

4. SUPPLEMENTARY CEMENTITIOUS MATERIALS (SCM), SUCH AS SLAG, FLY ASH, SILICA FUME, AND CALCINED CLAY, AS A PERCENTAGE OF TOTAL WEIGHT OF CEMENTITIOUS MATERIAL SHALL BE A MINIMUM OF 25 PERCENT AND A MAXIMUM OF 50 PERCENT. COAL FLY ASH, AS A PERCENTAGE OF TOTAL WEIGHT OF CEMENTITIOUS MATERIAL, SHALL BE A MAXIMUM OF 20 PERCENT. COAL FLY ASH SHALL BE CLASS F, MEETING ASTM C618 REQUIREMENTS. FINELY GROUND GRANULATED BLAST-FURNACE SLAG SHALL CONFORM TO ASTM C989. WATER/CEMENT RATIO SHALL BE BASED ON TOTAL CEMENTITIOUS MATERIAL, INCLUDING SUPPLEMENTARY CEMENTITIOUS MATERIALS.

5. PROPORTIONS OF AGGREGATE TO CEMENTITIOUS PASTE SHALL BE SUCH AS TO PRODUCE A DENSE, WORKABLE MIX THAT CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER. SUPERPLASTICIZERS MAY BE USED TO IMPROVE WORKABILITY IN THIN OR CONGESTED SECTIONS.

6. CONCRETE SHALL HAVE THE FOLLOWING CHARACTERISTICS:

LOCATION	STRENGTH, fc' MIN	TEST AGE	MAXIMUM AGGREGATE SIZE	MAXIMUM WATER/CEMENT RATIO	MAX SLUMP
MAT	4,000 PSI	28 DAYS	¾"	0.45	4"
COLUMNS	4,000 PSI	28 DAYS	¾"	0.45	3 ½"
WALLS	4,000 PSI	28 DAYS	¾"	0.45	3 ½"
SUSPENDED SLABS	4,000 PSI	28 DAYS	¾"	0.45	3 ½"

7. PIPES OTHER THAN ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY THE ENGINEER. OUTSIDE DIAMETER OF CONDUIT EMBEDDED IN CONCRETE SHALL NOT EXCEED 1/6 TIMES THE MEMBER THICKNESS, OR 1 ¼", WHICHEVER IS LESS, WITHOUT APPROVAL OF THE ENGINEER. MINIMUM CLEAR DISTANCE BETWEEN CONDUITS OR REBAR SHALL BE 3 TIMES CONDUIT-DIAMETER (LARGER CONDUIT) OR 1 INCH, WHICHEVER IS GREATER. CONDUIT EMBEDDED IN SLABS SHALL BE EMBEDDED IN ONE LAYER AT MID-DEPTH OF SLABS. CONDUITS SHALL BE FIRMLY CHAIRED AND TIED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. CONDUIT CAN BE TIED TO REBAR WHEN ORIENTED PERPENDICULAR TO THEM, PROVIDE THE LOCATION OF THE REBAR IS NOT AFFECTED BY THE CONDUIT. PLACE #3 AT 12 INCHES ADDED REINFORCEMENT PERPENDICULAR TO CONDUITS WHERE REQUIRED TO SUPPORT CONDUIT. CONDUITS WITHOUT CLEARANCE NOTED ABOVE SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION. ADDED TRIM REINFORCEMENT WILL BE REQUIRED WHERE CLEARANCES CANNOT BE MET, SUCH AS ELECTRICAL PANEL ROOMS.

8. SLEEVES, WHEN EMBEDDED IN CONCRETE, SHALL BE SPACED WITH ONE SLEEVE-DIAMETER (LARGER SLEEVE) CLEAR BETWEEN ADJACENT SLEEVES OR REBAR, OR 1 INCH, WHICHEVER IS GREATER. SLEEVES WITHOUT CLEARANCE NOTED ABOVE SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION. ADDED TRIM REINFORCEMENT WILL BE REQUIRED WHERE CLEARANCES CANNOT BE MET, SUCH AS ELECTRICAL PANEL ROOMS.

9. ALUMINUM PIPES, CONDUITS, AND SLEEVES SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE.

10. THE CONTRACTOR SHALL INFORM THE ENGINEER AT LEAST 3 DAYS PRIOR TO POURING ANY STRUCTURAL CONCRETE SO THAT THE ENGINEER MAY HAVE THE OPPORTUNITY OF REVIEWING THE WORK PRIOR TO CONCRETE PLACEMENT.

11. ALL CONCRETE EXCEPT SLABS-ON-GRADE 6"THICK OR LESS SHALL BE MECHANICALLY VIBRATED AS TO COMPLETELY FILL THE FORM WITHOUT CAUSING UNDUE SEGREGATION.

12. FOR EACH CLASS OF CONCRETE, FOUR TEST CYLINDERS FROM EACH 150 CUBIC YARDS OR 5,000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS, PLACED IN ANY ONE DAY, SHALL BE SECURED AND TESTED BY THE BUREAU OF CONSTRUCTION MANAGEMENT – ONE TO BE TESTED AT 7 DAYS, TWO AT 28 DAYS, AND THE FOURTH HELD IN RESERVE. FOR POST-TENSIONED CONCRETE, SECURE FIVE CYLINDERS PER 150 CUBIC YARDS OR 5,000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS, PLACE IN ANY ONE DAY, TWO SETS MINIMUM – ONE TO BE TESTED AT 4 DAYS, TWO AT 28 DAYS, AND TWO HELD IN RESERVE.

13. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY CONCRETE WHICH FAILS TO ATTAIN SPECIFIED STRENGTH IN 28 DAYS IF SO DIRECTED BY THE ENGINEER. ANY DEFECTS IN THE HARDENED CONCRETE SHALL BE SATISFACTORILY REPAIRED OR THE HARDENED CONCRETE SHALL BE REPLACED.

14. ALL CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 318 AND THE TYPICAL CONSTRUCTION JOINT DETAILS SHOWN ON THE STRUCTURAL DRAWINGS. ALL SURFACES OF CONSTRUCTION JOINTS SHALL BE CLEANED TO REMOVE DUST, CHIPS, OR OTHER FOREIGN MATTER PRIOR TO PLACING THE ADJACENT CONCRETE. THE CONTRACTOR SHALL SUBMIT THE PROPOSED LOCATIONS OF CONSTRUCTION JOINTS TO THE ARCHITECT FOR REVIEW PRIOR TO START OF CONSTRUCTION.

15. WHERE NEW CONCRETE IS TO BE CAST AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SURFACE SHALL BE ROUGHENED TO A MINIMUM OF ¼" AMPLITUDE BY SANDBLASTING OR BUSH HAMMERING. THE EXISTING SURFACE SHALL BE CLEANED AND LAITANCE REMOVED. APPLY "SIKADUR 32, HI-MOD" EPOXY BONDING ADHESIVE, AS MANUFACTURED BY SIKA CORPORATION, LYNDHURST, NEW JERSEY, OR APPROVED EQUAL, TO EXISTING CONCRETE SURFACE PRIOR TO PLACEMENT OF NEW CONCRETE.

REINFORCING STEEL

1. REINFORCING STEEL DETAILING, FABRICATION, AND PLACEMENT SHALL CONFORM TO THE ACI 318, CHAPTER 7.

2. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS:

DEFORMED BARS	ASTM A615 OR ASTM A706, GRADE 60
DEFORMED BARS USED IN SHEAR WALLS AND MOMENT-RESISTING-FRAMES	ASTM A706, GRADE 60
WELDED REINFORCEMENT, WHEN SPECIFIED BY THE ENGINEER	ASTM A706, GRADE 60
WELDED WIRE FABRIC (WWF) (SMOOTH WIRE)	ASTM A185
WELDED WIRE REINFORCEMENT (DEFORMED WIRE)	ASTM A496, ASTM A497

3. ALL STEEL REINFORCING BAR BENDS SHALL BE MADE COLD.

4. REINFORCEMENT AND EMBEDMENTS SHALL BE ACCURATELY POSITIONED AND SECURED AGAINST DISPLACEMENT BEFORE AND DURING CONCRETE PLACEMENT. PROVIDE SUFFICIENT SUPPORTS TO PREVENT DAMAGE OR DISPLACEMENT DUE TO CONSTRUCTION TRAFFIC ON REINFORCEMENT.

5. PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE. SPLICE ONLY AS SHOWN OR APPROVED.

6. WHERE NOTED ON PLANS, PROVIDE THREADED COUPLERS CAPABLE OF DEVELOPING 125% OF THE SPECIFIED YIELD STRENGTH OF THE REINFORCING STEEL. THREADED COUPLERS SHALL BE "LENTON COUPLERS", AS MANUFACTURED BY ERICO COMPANY, SOLON, OHIO, OR APPROVED EQUAL WITH CURRENT ICC-ES EVALUATION REPORT.

7. WELDING (INCLUDING TACK WELD) OR REINFORCING BARS IS PROHIBITED EXCEPT WHERE DETAILED OR APPROVED IN WRITING BY ENGINEER.

8. REINFORCEMENT CROSSING CONSTRUCTION JOINTS SHALL BE CONTINUOUS OR LAP SPLICED PER TENSION LAP TABLE OR APPROVED COUPLERS.

9. MINIMUM CLEAR COVER DISTANCES FROM FINISHED FACE OF CONCRETE TO STEEL REINFORCEMENT SHALL BE AS FOLLOWS:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 THROUGH #18 BARS	2"
#5 BAR, W31 OR D31 WIRE, AND SMALLER	1 ½"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS, JOISTS	
#14 AND #18 BARS	1 ½"
#11 BAR AND SMALLER	¾"
BEAMS, COLUMNS	1 ½"

10. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INCLUDE ELEVATION OF ALL BEAMS AND COLUMNS SHOWING BAR AND LAP LOCATIONS. SUBMIT MILL CERTIFICATES FOR REINFORCING STEEL PRIOR TO REBAR PLACEMENT.

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
Fuad s. Sweiss - City Engineer

BUILDING DESIGN & CONSTRUCTION

Architecture • Construction
Tara D. Lamont - Acting Deputy Division Manager
30 Van Ness Avenue Suite 4100
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Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

DESIGNED BY: SL	SL	DATE 09/2012
DRAWN BY: BH	BH	09/2012
CHECKED BY: JC	JC	09/2012

APPROVED

SECTION MANAGER: 10/9/12 DATE:
DEPUTY DIVISION MANAGER: 10/11/12 DATE:
DIVISION MANAGER: 10/11/12 DATE:

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LAU
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

STRUCTURAL GENERAL NOTES

Sheet No.

S1.2

Scale NONE

Job No.

3092V-2

Original Sheet Size: 22"x34"

GROUT AND ADHESIVES

1. NON-SHRINK GROUT SHALL BE "SIKAGROUT 212", AS MANUFACTURED BY SIKA CORPORATION, LYNDHURST, NEW JERSEY, OR APPROVED EQUAL. NON-SHRINK GROUT SHALL BE NON-METALLIC AND CONTAIN NO CHLORIDES.

ADHESIVE AND MECHANICAL ANCHORS

1. ADHESIVE ANCHORS FOR CONCRETE CONSTRUCTION SHALL USE "HILTI HIT-RE 500-SD EPOXY" (ICC-ES ESR-2322), AS MANUFACTURED BY HILTI INC., TULSA, OKLAHOMA, OR "SIMPSON SET-XP" (ICC-ES ESR-2508), AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC., PLEASANTON, CALIFORNIA, OR APPROVED EQUAL. ADHESIVE ANCHORS SHALL CONFORM TO ICC-ES ACCEPTANCE CRITERIA AC308 FOR CRACKED AND UNCRACKED CONCRETE.

2. ADHESIVE ANCHORS IN CONCRETE AND MAONSRY SHALL BE INSTALLED WITH THE FOLLOWING MINIMUM EMBEDMENT AND DIRECT TENSION TEST LOAD AND/OR TORQUE TEST LOAD, U.O.N.:

REBAR OR THREADED BOLT	MIN EMBED	TENSION TEST LOAD	MIN TORQUE
#3 OR ⅜" DIA	3⅜"	2,000 POUNDS	20 FOOT-POUNDS
#4 OR ½" DIA	4½"	4,000 POUNDS	40 FOOT-POUNDS
#5 OR ⅝" DIA	5⅝"	6,000 POUNDS	50 FOOT-POUNDS
#6 OR ¾" DIA	6¾"	9,000 POUNDS	60 FOOT-POUNDS
#7 OR ⅞" DIA	7⅞"	12,000 POUNDS	
#8 OR 1" DIA	9"	15,000 POUNDS	

5 PERCENT OF ALL NEW ADHESIVE ANCHORED BOLTS IN EXISTING CONCRETE, BUT NOT LESS THAN TWO BOLTS, SHALL BE SUBJECT TO DIRECT TENSION TEST, AND AN ADDITIONAL 20 PERCENT, BUT NOT LESS THAN THREE BOLTS, SHALL BE TESTED USING A TORQUE CALIBRATED WRENCH. ANCHORS THAT FAIL THE TEST LOAD SHALL BE REPLACED AND RE-TESTED AT CONTRACTOR'S EXPENSE.

3. ADHESIVE ANCHORS FOR MASONRY CONSTRUCTION SHALL USE "HILTI HIT HY-150 EPOXY" (ICC-ES ESR-1967), AS MANUFACTURED BY HILTI INC., TULSA, OKLAHOMA, OR APPROVED EQUAL.

4. MECHANICAL EXPANSION ANCHORS FOR CONCRETE AND MASONRY CONSTRUCTION SHALL BE "HILTI KWIK BOLT TZ WEDGE ANCHOR" (ICC-ES ESR-1917), AS MANUFACTURED BY HILTI INC., TULSA, OKLAHOMA, OR "SIMPSON STRONG-BOLT WEDGE ANCHOR" (ICC-ES ESR-1771), AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC., PLEASANTON, CALIFORNIA, OR APPROVED EQUAL.

SPECIAL INSPECTION, TESTING, STRUCTURAL OBSERVATION, AND SUBMITTALS

1. WHERE INDICATED WITH AN "X", THE FOLLOWING ITEMS SHALL BE INSPECTED IN ACCORDANCE WITH SFBC 1704 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED SPECIAL INSPECTION AGENCY. "C" INDICATES CONTINUOUS SPECIAL INSPECTION AND "P" INDICATES PERIODIC SPECIAL INSPECTION. THE SPECIAL INSPECTION AGENCY SHALL SEND COPIES OF ALL SPECIAL INSPECTION REPORTS DIRECTLY TO THE RESIDENT ENGINEER, ARCHITECT, ENGINEER, AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

VERIFICATION AND INSPECTION	C	P	NOTES
CONCRETE CONSTRUCTION			
1. INSPECTION OF REINFORCING STEEL PLACEMENT		X	
2. INSPECTION OF REINFORCING STEEL WELDING 2.1. VERIFICATION OF WELDABILITY 2.2. REINFORCING STEEL RESISTING FLEXURAL & AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS 2.3. SHEAR REINFORCEMENT 2.4. OTHER REINFORCING STEEL			
3. INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	X		
4. VERIFY USE OF REQUIRED DESIGN MIX		X	
5. FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF CONCRETE		X	
6. INSPECTION OF CONCRETE & SHOTCRETE PLACEMENT	X		
7. INSPECTION OF CONCRETE CURING		X	
8. INSPECTION OF PRESTRESSED CONCRETE 8.1. APPLICATION OF PRESTRESSING FORCES 8.2. GROUTING OF BONDED PRESTRESSING TENDONS			
9. ERECTION OF PRECAST CONCRETE MEMBERS			
10. VERIFICATION OF IN-SITU CONCRETE STRENGTH			PRIOR TO REMOVAL OF FORMS
11. INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X	

VERIFICATION AND INSPECTION	C	P	NOTES
SOILS			
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIRED BEARING CAPACITY		X	BY GEOTECHNICAL ENGINEER
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND REACHED PROPER MATERIAL		X	BY GEOTECHNICAL ENGINEER
3. PERFORM CLASSIFICATION AND TESTING OF ENGINEERED FILL MATERIAL		X	BY GEOTECHNICAL ENGINEER
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF ENGINEERED FILL		X	BY GEOTECHNICAL ENGINEER
5. PRIOR TO PLACEMENT OF ENGINEERED FILL, OBSERVE SUBGRADE & VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X	BY GEOTECHNICAL ENGINEER

2. WHERE INDICATED WITH AN "X", THE FOLLOWING ITEMS SHALL BE SAMPLED AND/OR TESTED BY A CERTIFIED TECHNICIAN FROM AN ESTABLISHED MATERIALS TESTING LABORATORY IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, GENERAL NOTES, OR PREVAILING BUILDING, WHICHEVER IS MORE STRINGENT. ALL MATERIAL SAMPLING AND TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM REQUIREMENTS. THE MATERIALS TESTING LABORATORY SHALL SEND COPIES OF ALL STRUCTURAL TESTING REPORTS DIRECTLY TO THE RESIDENT ENGINEER, ARCHITECT, ENGINEER, AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATION SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

STRUCTURAL TESTING FOR SEISMIC RESISTANCE ITEMS	REQ'D	NOTES
MASONRY		
1. COMPRESSIVE STRENGTH TESTS FOR MINIMUM COMPRESSIVE STRENGTH, f'M' AND f'AAC'		
CONCRETE		
1. COMPRESSIVE STRENGTH TESTS FOR CONCRETE WITH SPECIFIED MINIMUM COMPRESSIVE STRENGTH, f'c', OF 3,000 PSI OR GREATER AT 28 DAYS	X	
2. SHOTCRETE TEST PANELS AND CORE SAMPLES		
REINFORCING AND PRESSTRESSING STEEL		
1. WELDABILITY OF REINFORCEMENT, EXCEPT THAT WHICH CONFORMS WITH ASTM A706		
STRUCTURAL STEEL		
1. TESTING CONTAINED IN THE QUALITY ASSURANCE PLAN		THIS INCLUDES NON-DESTRUCTIVE TESTING (NDT) OF WELDS
2. BASE METAL THICKER THAN 1½"		ULTRASONIC TESTING FOR DISCONTINUITIES BEHIND & ADJACENT TO WELDS SUBJECT TO THROUGH-THICKNESS WELD SHRINKAGE STRAINS

3. THE ENGINEER OF RECORD SHALL PROVIDE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, INDICATED WITH AN "X" BELOW, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS AT SIGNIFICANT CONSTRUCTION STAGES AND AT THE COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS AND SPECIAL INSPECTIONS REQUIRED BY THE SFBC.

STRUCTURAL OBSERVATION REQUIREMENTS	REQ'D	NOTES
FOUNDATIONS		
1. ISOLATED & CONTINUOUS FOOTINGS, STEM WALLS	X	
2. MAT FOUNDATIONS	X	
3. PIERS, CAISSONS, PILES, PILE CAPS		
4. RETAINING WALLS, HILLSIDE CONSTRUCTION	X	
SHEAR WALLS		
1. LIGHT-FRAMED SHEAR WALLS, INCLUDING HOLDOWN INSTALLATION AND SHEATHING NAILING		
2. CONCRETE SHEAR WALLS, INCLUDING REINFORCING STEEL PLACEMENT AND CONCRETE PLACEMENT	X	
3. MASONRY SHEAR WALLS, INCLUDING REINFORCING STEEL PLACEMENT AND GROUT PLACEMENT		
4. STEEL SHEAR WALLS		
MOMENT-RESISTING FRAMES		
1. CONCRETE MOMENT-RESISTING FRAMES, INCLUDING REINFORCING STEEL PLACEMENT & CONCRETE PLACEMENT		
2. STEEL MOMENT-RESISTING FRAMES		
BRACED FRAMES		
1. STEEL BRACED FRAMES		
HORIZONTAL ROOF AND FLOOR DIAPHRAGMS		
1. CONCRETE	X	
2. STEEL DECK, CONCRETE ON STEEL DECK		
3. WOOD		
4. CHORDS AND/OR COLLECTORS		
OTHER		

4. WHERE INDICATED WITH AN "X" BELOW, THE CONTRACTOR SHALL SUBMIT CERTIFICATES OF CONFORMANCE, SHOP DRAWINGS, CALCULATIONS, AND DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. WHERE CALCULATIONS AND DETAILS ARE REQUIRED, THE SUBMITTAL SHALL BE SEALED AND SIGNED BY A REGISTERED DESIGN PROFESSIONAL IN THE STATE OF CALIFORNIA. FOR ADDITIONAL INFORMATION REGARDING SUBMITTALS, SEE SPECIFICATIONS.

ITEM	CERTIFICATES	SHOP DRAWINGS	CALCULATIONS & DETAILS	REMARKS
CONCRETE, REINFORCING	X	X		
CONCRETE, MIX DESIGN		X		
CONCRETE, CEMENT	X			
CONCRETE, FINE AGGREGATES	X			
CONCRETE, COARSE AGGREGATES	X			
CONCRETE, ADMIXTURES	X			
SHOTCRETE, MIX DESIGN				
PRECAST CONCRETE MEMBERS				
MASONRY, REINFORCING				
MASONRY, MORTAR MIX DESIGN				
MASONRY, GROUT MIX DESIGN				
MASONRY, UNITS				
MASONRY, LIME				
STRUCTURAL STEEL				
OPEN WEB JOISTS				
METAL DECKING WITH STUD LAYOUT				
COLD-FORMED STRUCTURAL STEEL				
METAL STAIRS				
TEMPORARY SHORING SYSTEM		X	X	

ABBREVIATIONS

A.B.	ANCHOR BOLT	JT	JOINT
ACI	AMERICAN CONCRETE INSTITUTE		
ADDT'L	ADDITIONAL	L	ANGLE
ADJ	ADJACENT	L.L.H.	LONG LEG HORIZONTAL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	L.L.V.	LONG LEG VERTICAL
ARCH	ARCHITECTURAL	L.O.L.	LAYOUT LINE
ASTM	AMERICAN STANDARDS TESTING AND MATERIALS	LVL	LAMINATED VENEER LUMBER
AWS	AMERICAN WELDING SOCIETY	L.W.C.	LIGHT WEIGHT CONCRETE
&	AND		
@	AT	MAT'L	MATERIAL
		MAX	MAXIMUM
BAL	BALANCE	MECH	MECHANICAL
BLDG	BUILDING	MET	METAL
BLKG	BLOCKING	MIL	MILLIMETER
BM	BEAM	MIN	MINIMUM
B, BOT	BOTTOM	MISC	MISCELLANEOUS
B.O.	BOTTOM OF		
B.O.E.	BOTTOM OF EXCAVATION	(N)	NEW
B.O.F.	BOTTOM OF FOOTING	N.D.T.	NON-DESTRUCTIVE TESTING
B.O.S.	BOTTOM OF STEEL	N.I.C.	NOT IN CONTRACT
B.O.W.	BOTTOM OF WALL	N.T.S.	NOT TO SCALE
B.S.	BOTH SIDE	NO.	NUMBER
BET, BTWN	BETWEEN	NOM	NOMINAL
		N.W.C.	NORMAL WEIGHT CONCRETE
CBC	CALIFORNIA BUILDING CODE		
CCSF	CITY AND COUNTY OF SAN FRANCISCO	O.C.	ON CENTER
CHK PL	CHECKERED PLATE	O.D.	OUTSIDE DIAMETER
C.J.	CONTROL JOINT	O.F.	OUTER FACE
C.J.P.	COMPLETE JOINT PENETRATION	O.H.	OPPOSITE HAND
℄	CENTER LINE	OPNG	OPENING
CLR	CLEAR	OPP	OPPOSITE
CMU	CONCRETE MASONRY UNITS		
COL	COLUMN	P.J.P.	PARTIAL JOINT PENETRATION
CONC	CONCRETE	PL	PLATE
CONN	CONNECTION	P.L.	PROPERTY LINE
CONT	CONTINUOUS	PLF	POUNDS PER LINEAR FOOT
CTR	CENTER	PLYWD	PLYWOOD
		PSI	POUNDS PER SQUARE INCH
DBL	DOUBLE	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSL	PARALLEL STRAND LUMBER
DIA, ø	DIAMETER		
DIAG	DIAGONAL	R	RADIUS
DIM	DIMENSION	R.C.	RELATIVE COMPACTION
DIR	DIRECTION	RDWD	REDWOOD
DN	DOWN	REINF	REINFORCING, REINFORCEMENT, REINFORCED
DO	DITTO	REQ'D	REQUIRED
DWG	DRAWING	RET	RETAIN, RETAINING
		R.O.	ROUGH OPENING
(E)	EXISTING		
EA	EACH	S.A.D.	SEE ARCHITECTURAL DRAWING
E.K.	EACH FACE	S.E.D.	SEE ELECTRICAL DRAWING
E.J.	EXPANSION JOINT	S.M.D.	SEE MECHANICAL DRAWING
EL, ELEV	ELEVATION	S.P.D.	SEE PLUMBING DRAWING
ELEC	ELECTRICAL	SCHED	SCHEDULE
EMBED	EMBEDMENT	SEC	SECTION
E.N.	EDGE NAILING	SFBC	SAN FRANCISCO BUILDING CODE
EQ	EQUAL	SHT	SHEET
EQUIP	EQUIPMENT	SHTG	SHEATHING
E.S.	EACH SIDE	SIM	SIMILAR
E.W.	EACH WAY	S.P.G.	SLAB-ON-GRADE
EXT	EXTERIOR	SPEC	SPECIFICATION
		S.S.	STAINLESS STEEL
F.F.	FINISH FLOOR	SQ	SQUARE
F.G.	FINISH GRADE	STD	STANDARD
FIN	FINISH	STIFF	STIFFENER
FL	FLOOR	STIR	STIRRUP
FNDN	FOUNDATION	STL	STEEL
F.O.C.	FACE OF CONCRETE	STRUCT	STRUCTURAL
F.O.F.	FACE OF FINISH	SYM	SYMMETRICAL
F.O.S.	FACE OF STUD		
F.O.W.	FACE OF WALL	T	TOP
FRP	FIBER REINFORCED PLASTIC	T & B	TOP AND BOTTOM
FT	FOOT, FEET	THK	THICK
FTG	FOOTING	THRU	THROUGH
		T.O.	TOP OF
GA	GAGE	T.O.C.	TOP OF CONCRETE
GALV	GALVANIZED	T.O.S.	TOP OF STEEL
		T.O.W.	TOP OF WALL
H, HORIZ	HORIZONTAL	TYP	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE		
H.R.	HAND RAIL	U.O.N.	UNLESS OTHERWISE NOTED
H.S.B.	HIGH STRENGTH BOLT		
HSS	HOLLOW STRUCTURAL SECTION	V, VERT	VERTICAL
		V.I.F.	VERIFY IN FIELD
ICC	INTERNATIONAL CODE COUNCIL		
I.D.	INSIDE DIAMETER	W/	WITH
I.F.	INNER FACE	W/O	WITHOUT
IN	INCHES	WD	WOOD
INFO	INFORMATION	WF	WIDE FLANGE
INSUL	INSULATION	W.R.T.	WITH RESPECT TO
INT	INTERIOR	WT	WEIGHT
		W.W.F.	WELDED WIRE FABRIC

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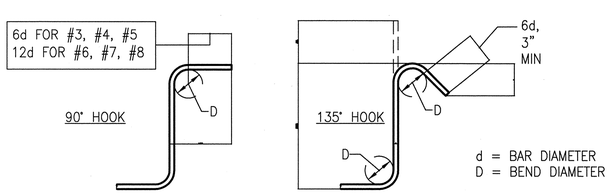
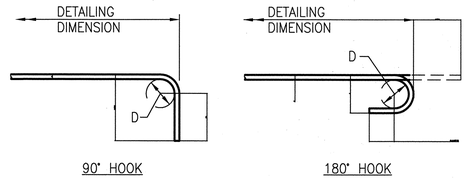




STIRRUP / TIE HOOK				
		90° HOOKS	135° HOOKS	
BAR SIZE	D	A OR G	A OR G	APPROX H
#3	1½"	4"	4¼"	3"
#4	2"	4½"	4½"	3"
#5	2½"	6"	5½"	3¾"
#6	4½"	1'–0"	8"	4½"
#7	5¼"	1'–2"	9"	5¼"
#8	6"	1'–4"	10½"	6"

MAIN REBAR HOOK				
		90° HOOKS	180° HOOKS	
BAR SIZE	D	A OR G	J	A OR G
#3	2¼"	6"	3"	5"
#4	3"	8"	4"	6"
#5	3¾"	10"	5"	7"
#6	4½"	1'–0"	6"	8"
#7	5¼"	1'–2"	7"	10"
#8	6"	1'–4"	8"	11"

TYPICAL REINFORCEMENT BAR HOOKS AND BENDS
SCALE: N.T.S.

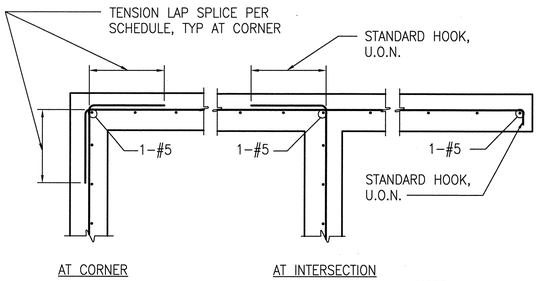
1 / –

	f'c = 3,000 PSI				
	MIN DEVELOPMENT LENGTH			MIN LAP SPLICE LENGTH	
	STRAIGHT		HOOKED		
BAR SIZE	TOP	OTHER	–	TOP	OTHER
#3	1'–10"	1'–5"	0'–9"	2'–4"	1'–10"
#4	2'–5"	1'–10"	0'–11"	3'–1"	2'–5"
#5	3'–0"	2'–4"	1'–2"	3'–11"	3'–0"
#6	3'–7"	2'–9"	1'–5"	4'–8"	3'–7"
#7	5'–3"	4'–0"	1'–8"	6'–9"	5'–3"
#8	6'–0"	4'–7"	1'–10"	7'–9"	6'–0"

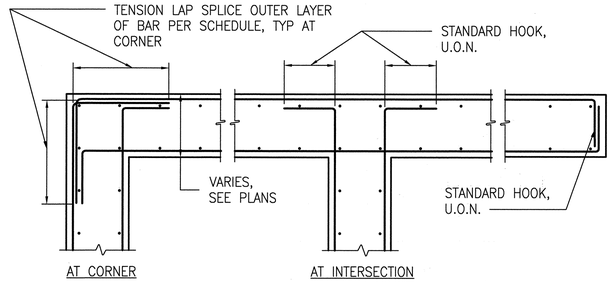
1. ALL REINFORCING BARS SHALL BE DEVELOPED OR LAP SPLICED AS SHOWN, U.O.N.
2. LAP SPLICE LOCATIONS SHALL BE STAGGERRED WHENEVER POSSIBLE.
3. TOP BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST BELOW THE LAP SPLICE.

DEVELOPMENT LENGTH & LAP SPLICE SCHEDULE
SCALE: N.T.S.

2 / –



SINGLE CURTAIN REINF. DETAILS



DOUBLE CURTAIN REINF. DETAILS

NOTE:
REINFORCEMENT SHOWN ON FOUNDATION DETAILS, WALL ELEVATIONS, AND OTHER SPECIFICALLY REFERENCED DETAILS TAKE PRECEDENCE OVER REINFORCEMENT SHOWN HERE.

TYPICAL CONCRETE REINFORCEMENT AT CORNERS AND INTERSECTIONS
SCALE: N.T.S.

3 / –

	f'c = 4,000 PSI				
	MIN DEVELOPMENT LENGTH			MIN LAP SPLICE LENGTH	
	STRAIGHT		HOOKED		
BAR SIZE	TOP	OTHER	–	TOP	OTHER
#3	1'–7"	1'–3"	0'–8"	2'–0"	1'–7"
#4	2'–1"	1'–7"	0'–10"	2'–8"	2'–1"
#5	2'–7""	2'–0"	1'–0"	3'–5"	2'–7"
#6	3'–1"	2'–5"	1'–3"	4'–1"	3'–1"
#7	4'–6""	3'–6"	1'–5"	5'–11"	4'–8"
#8	5'–2"	4'–0"	1'–7"	6'–9"	5'–2"

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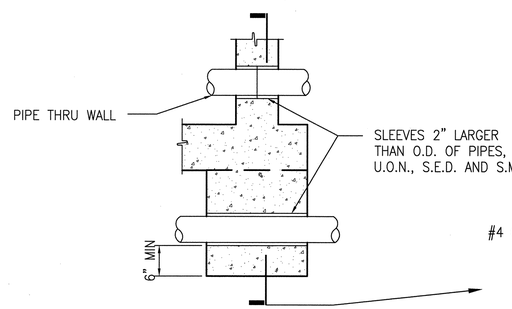
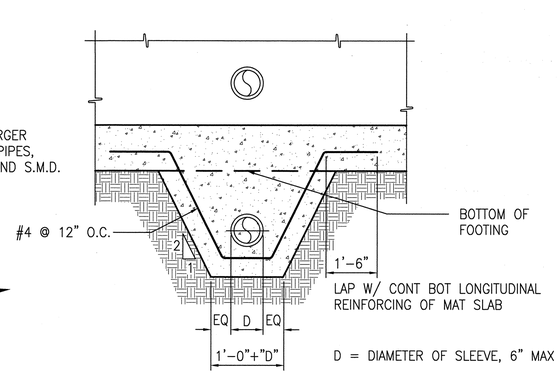
SCALE: N.T.S.

4 / –

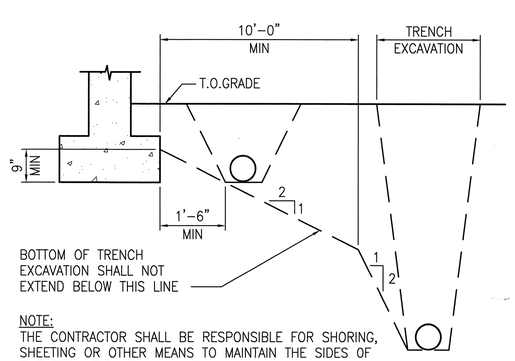


NOTE:
FOR PIPES 3'–0" OR LESS BELOW BOTTOM OF FOOTING, PROVIDE SLEEVE AND CONCRETE AS SHOWN; FOR PIPES MORE THAN 3'–0" BELOW BOT OF FOOTING, COMPACT BACKFILL OVER PIPE TO 95% PER GEOTECHNICAL REPORT.



TYPICAL DETAIL AT PIPES PERPENDICULAR TO FOOTING
SCALE: N.T.S.

5 / –



NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING, SHEETING OR OTHER MEANS TO MAINTAIN THE SIDES OF THE EXCAVATION FROM CAVE–IN UNTIL ALL BACKFILL IS COMPLETED PER SPECIFICATIONS.

TYPICAL DETAIL AT PIPES PARALLEL TO FOOTING
SCALE: N.T.S.

6 / –

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
Fuad s. Sweiss - City Engineer

BUILDING DESIGN & CONSTRUCTION

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San Francisco, CA (415) 557-4700
94102-6028 Fax (415) 5574701

Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

DESIGNED BY:	SL	SL	DATE 09/2012
DRAWN BY:	BH	BH	09/2012
CHECKED BY:	JC	JC	09/2012
APPROVED			
SECTION MANAGER:			DATE: 10/9/12
DEPUTY DIVISION MANAGER:			DATE: 10/11/12
DIVISION MANAGER:			DATE: 10/11/12

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

TYPICAL CONCRETE DETAILS

Sheet No.

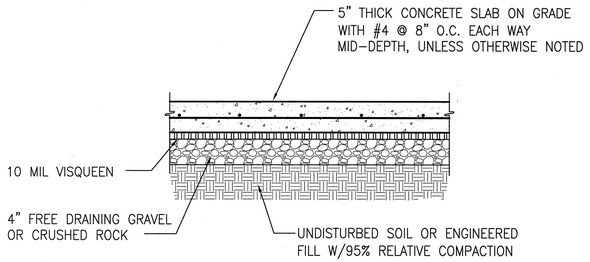
S1.4

Scale NONE

Job No.

3092V-2

Original Sheet Size: 22"x34"

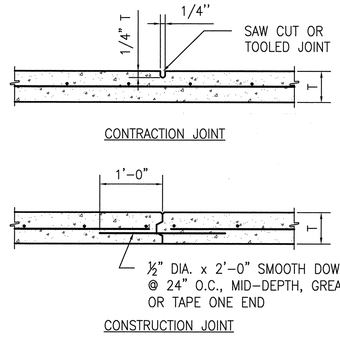


NOTE:
REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION ON SUB-GRADE PREPARATION AND SLAB-ON-GRADE CONSTRUCTION.

TYPICAL CONCRETE SLAB-ON-GRADE

1

SCALE: N.T.S.

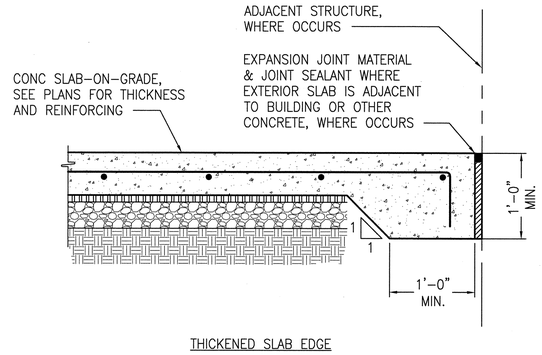


NOTES:
1. FOR SLAB THICKNESS AND REINFORCEMENT, SEE PLANS.
2. CONTRACTOR TO DETERMINE CONTROL JOINT LOCATIONS AND SUBMIT TO ENGINEER FOR REVIEW.
3. LOCATE CONTRACTION JOINTS TO ENCLOSE APPROXIMATE AREAS OF 600 SQUARE FEET AND SPACE 15'-0" O.C. MAXIMUM.
4. LOCATE CONSTRUCTION JOINTS TO ENCLOSE APPROXIMATE AREAS OF 3,600 SQUARE FEET MAXIMUM. CONSTRUCTION JOINTS SHALL BE LOCATED 5 FEET OR MORE FROM ANY OTHER JOINT TO WHICH THEY ARE PARALLEL.
5. FOR SAW CUT, CUT SLAB IMMEDIATELY AFTER INITIAL CONCRETE SET AND BEFORE FINAL CURING.
6. CONSTRUCTION JOINTS MAY BE FORMED BY USING WOOD EDGE FORM WITH BEVELED 1x KEYS x 12" LONG AT 24" O.C.

TYPICAL SLAB-ON-GRADE CONTROL JOINTS

2

SCALE: N.T.S.

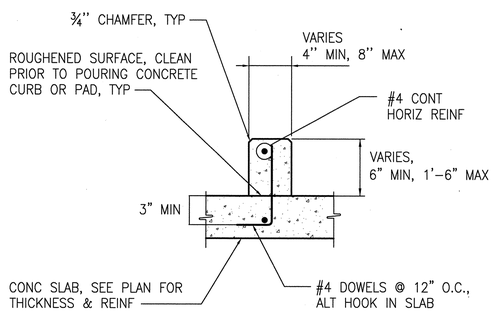


THICKENED SLAB EDGE

TYPICAL SLAB-ON-GRADE THICKENED EDGE

3

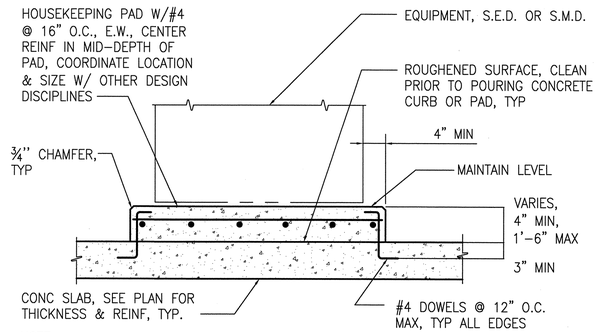
SCALE: N.T.S.



TYPICAL CONCRETE CURB

4

SCALE: N.T.S.

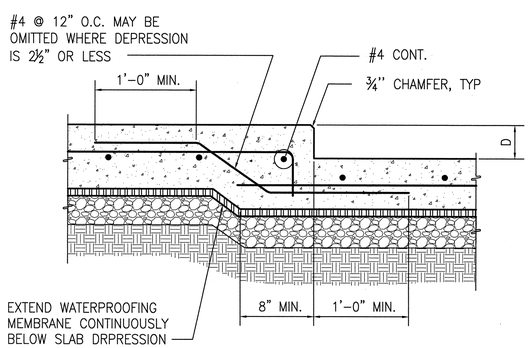


NOTE:
FOR EQUIPMENT ANCHORAGE, SEE ELECTRICAL, MECHANICAL, AND ADDITIONAL DRAWINGS FOR INFORMATION

TYPICAL CONCRETE HOUSEKEEPING PAD

5

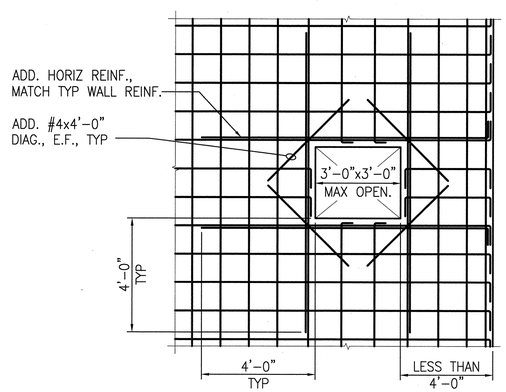
SCALE: N.T.S.



TYPICAL DEPRESSED SLAB-ON-GRADE

6

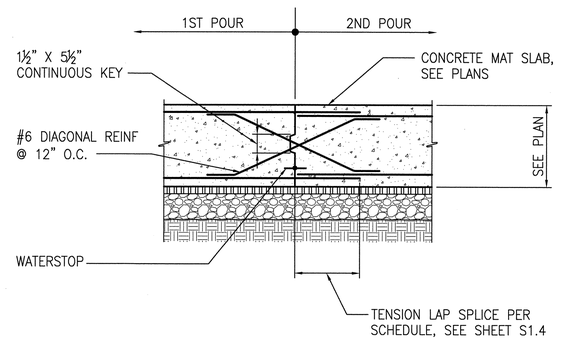
SCALE: N.T.S.



TYPICAL OPENING IN CONC WALL

7

SCALE: 3/8"=1'-0"



TYPICAL CONCRETE MAT CONSTRUCTION JOINT

8

SCALE: N.T.S.

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Project

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CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

DESIGNED BY: SL	SL	DATE 09/2012
DRAWN BY: BH	BH	09/2012
CHECKED BY: JC	JC	09/2012

APPROVED
SECTION MANAGER: 10/9/12 DATE:
DEPUTY DIVISION MANAGER: 10/9/12 DATE:
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Drawn
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Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

TYPICAL CONCRETE DETAILS

Sheet No.

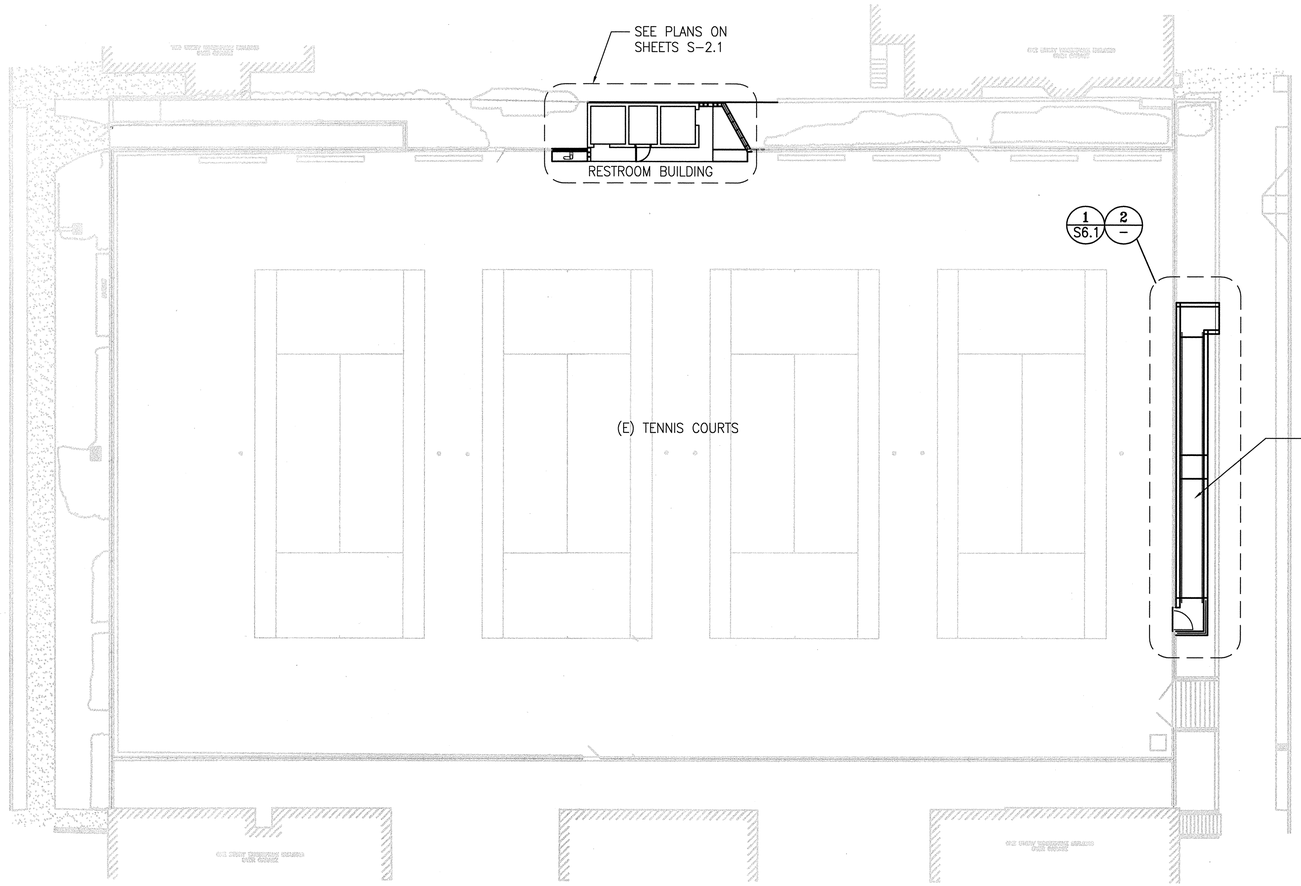
S1.5

Scale NONE

Job No.

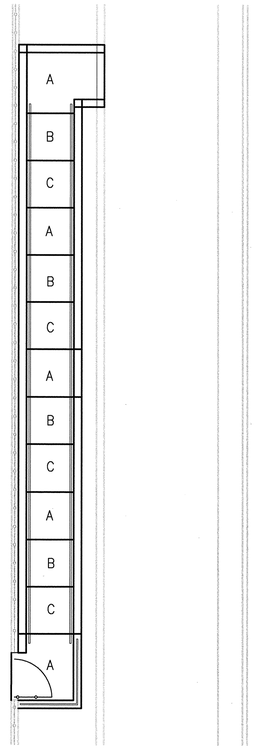
3092V-2

Original Sheet Size: 22"x34"



SITE PLAN
SCALE: 1/16"=1'-0"

1
–



PARTIAL PLAN
SCALE: 1/8"=1'-0"

2
–

NOTES:

1. MONITOR AND SURVEY EXISTING ADJOINING CONCRETE CURB FOR MOVEMENT, INCLUDING SETTLEMENT, BEFORE AND DURING CONSTRUCTION OF NEW RETAINING WALLS.
2. EXCAVATE AND CONSTRUCT NEW CONCRETE RETAINING WALL AGAINST EXISTING CONCRETE CURB IN SECTIONS AND IN SEQUENCE "A", "B", AND "C".
3. NEW CONCRETE IN "A" LOCATIONS SHALL CURE MINIMUM OF 3 DAYS BEFORE EXCAVATION OF "B" LOCATIONS.
4. SIMILARLY, NEW CONCRETE IN "B" LOCATIONS SHALL CURE MINIMUM OF 3 DAYS BEFORE EXCAVATION OF "C" LOCATIONS.

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Consultant

INFRASTRUCTURE DIVISION
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CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

			DATE
DESIGNED BY:	SL	SL	09/2012
DRAWN BY:	RH	BH	09/2012
CHECKED BY:	JC	JC	09/2012

APPROVED
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DEPUTY DIVISION MANAGER: DATE:
DIVISION MANAGER: DATE:

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Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

SITE PLAN

Sheet No.

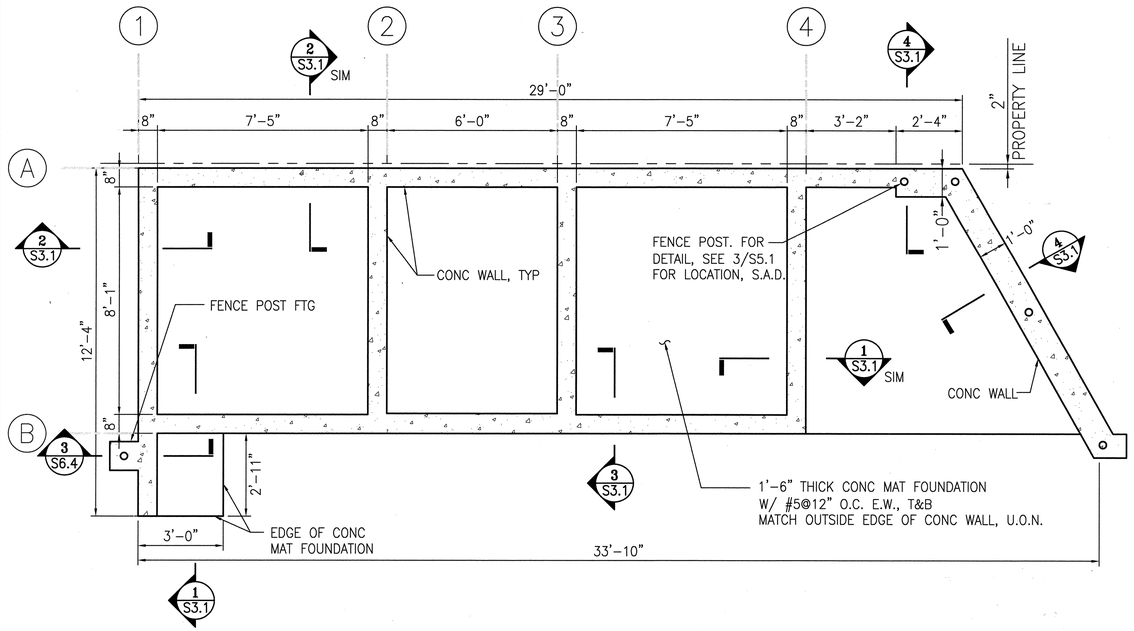
S2.0

Scale 3/8"=1'-0"

Job No.

3092V-2

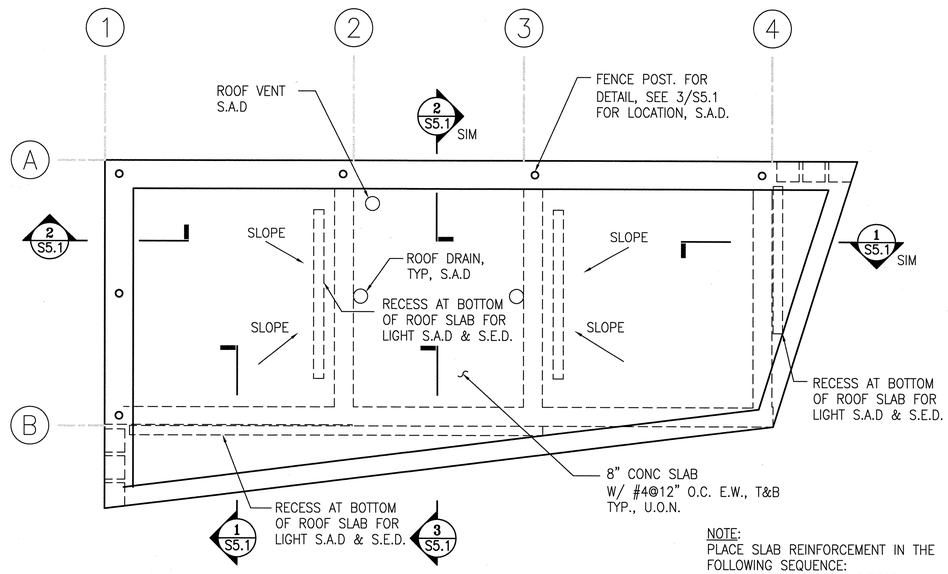
Original Sheet Size: 22"x34"



FOUNDATION PLAN

SCALE: 3/8"=1'-0"

1

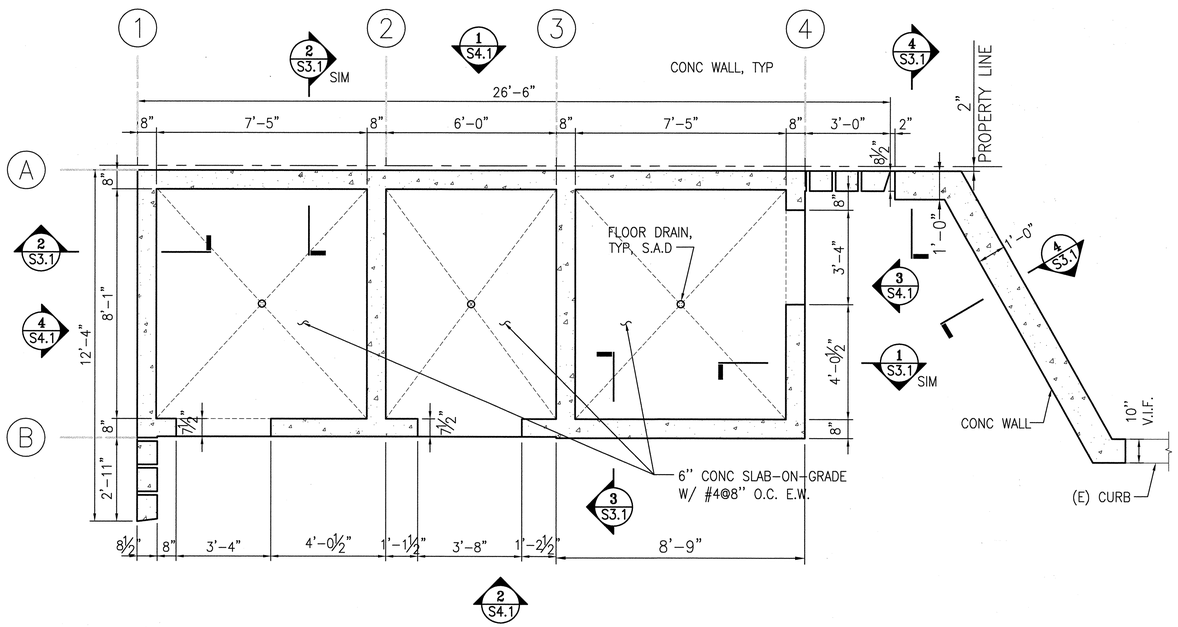


ROOF FRAMING PLAN

SCALE: 3/8"=1'-0"

3

NOTE:
PLACE SLAB REINFORCEMENT IN THE FOLLOWING SEQUENCE:
- BOTTOM EAST-WEST DIRECTION
- BOTTOM NORTH-SOUTH DIRECTION
- TOP EAST-WEST DIRECTION
- TOP NORTH-SOUTH DIRECTION



GROUND FLOOR FRAMING PLAN

SCALE: 3/8"=1'-0"

2

SHEET NOTES:

1. FOR GENERAL NOTES, REFER TO SHEETS S1.1 TO S1.3.
   FOR TYPICAL CONCRETE DETAILS, REFER TO SHEETS S1.4 TO S1.5.
2. VERIFY ALL DIMENSIONS, ELEVATIONS, FINISH SURFACES, SLOPES, DRAINS, SLAB DEPRESSIONS, ETC. WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS PRIOR TO START OF CONSTRUCTION.
3. SLOPE SLABS TO DRAIN. FOR DRAIN LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
4. FOR ROOFING, SEE ARCHITECTURAL DRAWINGS.
5. MECHANICAL FANS NOT SHOWN, SUPPORTS TO BE DESIGN-BUILD ITEM, SEE MECHANICAL DRAWINGS.
6. PROVIDE CURING AND SEALING COMPOUND ON FINISHED CONCRETE SURFACES. ADD POLYMER GRIT ADDITIVE TO SEALING COMPOUND ON ALL WALKING SURFACES.
7. FOR SCORE LINES IN CONCRETE SLAB-ON-GRADE, SEE ARCHITECTURAL DRAWINGS.
8. ENGINEER FILL BELOW CONC SLAB SHALL BE COMPACTED TO 90% RELATIVE COMPACTION AS DETERMINED BY THE ASTM D1557 COMPACTION TEST METHOD AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER.

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Project

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CONTEMPORARY DESIGN

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Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
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30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

DESIGNED BY:	SL	SL	DATE 09/2012
DRAWN BY:	BH	BH	09/2012
CHECKED BY:	JC	JC	09/2012

APPROVED

SECTION MANAGER: 10/9/12
DEPUTY DIVISION MANAGER: 10/11/12 DATE:
DIVISION MANAGER: DATE:

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Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

FOUNDATION AND ROOF PLANS

Sheet No.

S2.1

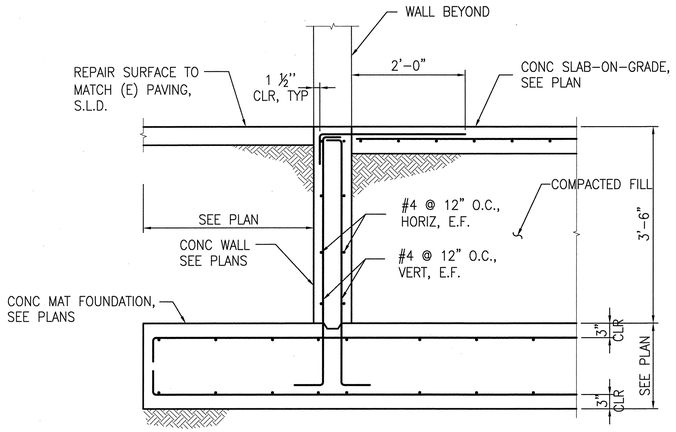
Scale 3/8"=1'-0"

Job No.

3092V-2

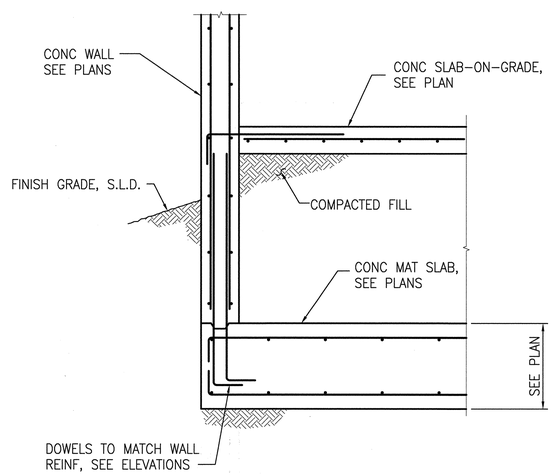
Original Sheet Size: 22"x34"

NOTE:
1. PROVIDE CURING & SEALING COMPOUND ON TOP SURFACE OF CONC SLAB.
2. SLOPE SLAB TO DRAIN, S.A.D.



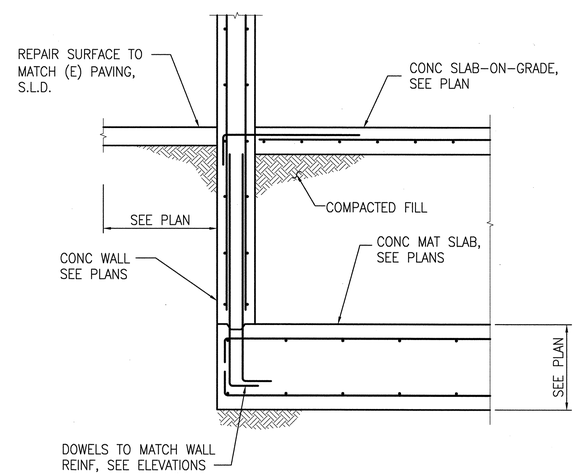
FOUNDATION DETAIL 1/–
SCALE: 3/4"=1'-0"

NOTE:
FOR INFORMATION NOT SHOWN OR NOTED, SEE DET 1/–.



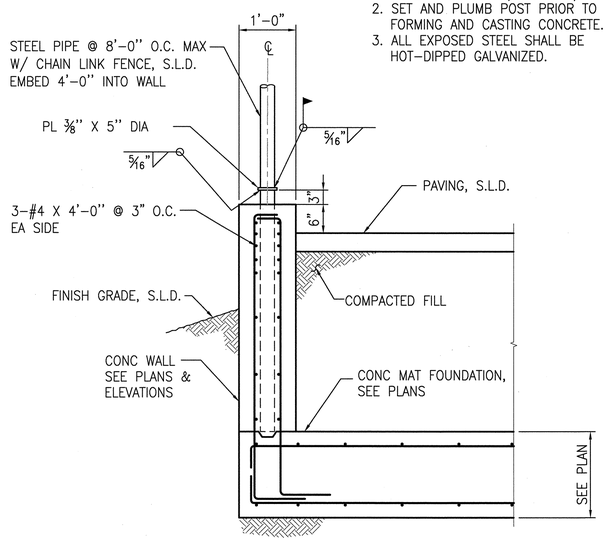
FOUNDATION DETAIL 2/–
SCALE: 3/4"=1'-0"

NOTE:
FOR INFORMATION NOT SHOWN OR NOTED, SEE DET 1/– AND 2/–.



FOUNDATION DETAIL 3/–
SCALE: 3/4"=1'-0"

NOTE:
1. FOR INFORMATION NOT SHOWN OR NOTED, SEE DET 1/– AND 2/–.
2. SET AND PLUMB POST PRIOR TO FORMING AND CASTING CONCRETE.
3. ALL EXPOSED STEEL SHALL BE HOT-DIPPED GALVANIZED.



FOUNDATION DETAIL 4/–
SCALE: 3/4"=1'-0"

DEPARTMENT OF PUBLIC WORKS
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Project

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Consultant

INFRASTRUCTURE DIVISION
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CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
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DESIGNED BY:	SL	DATE 09/2012
DRAWN BY:	BH	09/2012
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Drawn
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Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER RAYMOND R. LUI No. S 4094 STRUCTURAL STATE OF CALIFORNIA 10/9/12

Drawing Title

FOUNDATION DETAILS

Sheet No.

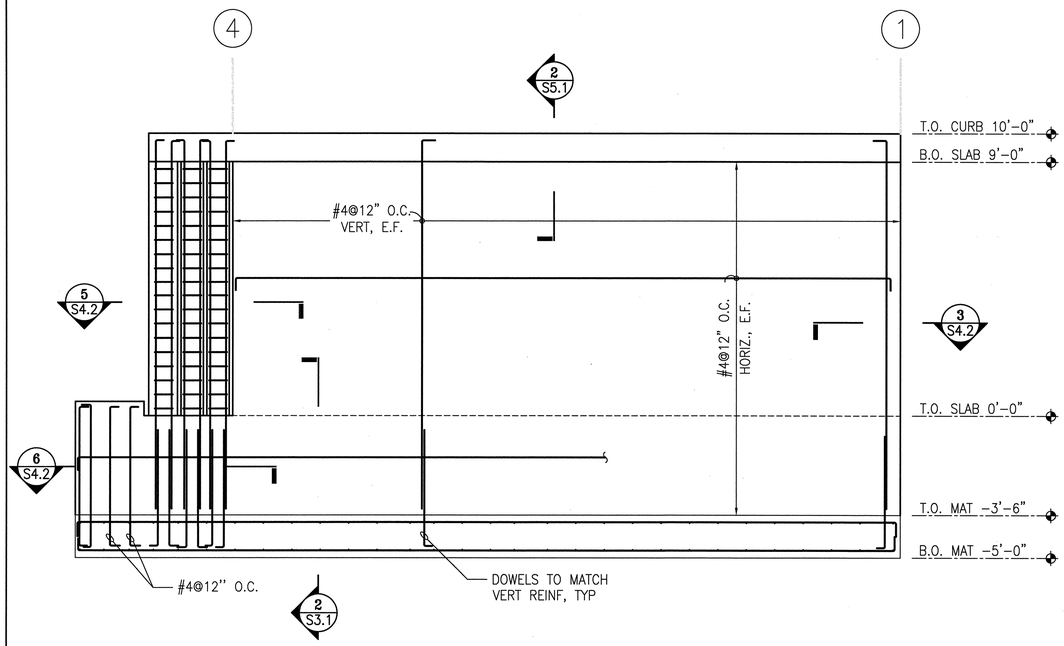
S3.1

Scale 3/8"=1'-0"

Job No.

3092V-2

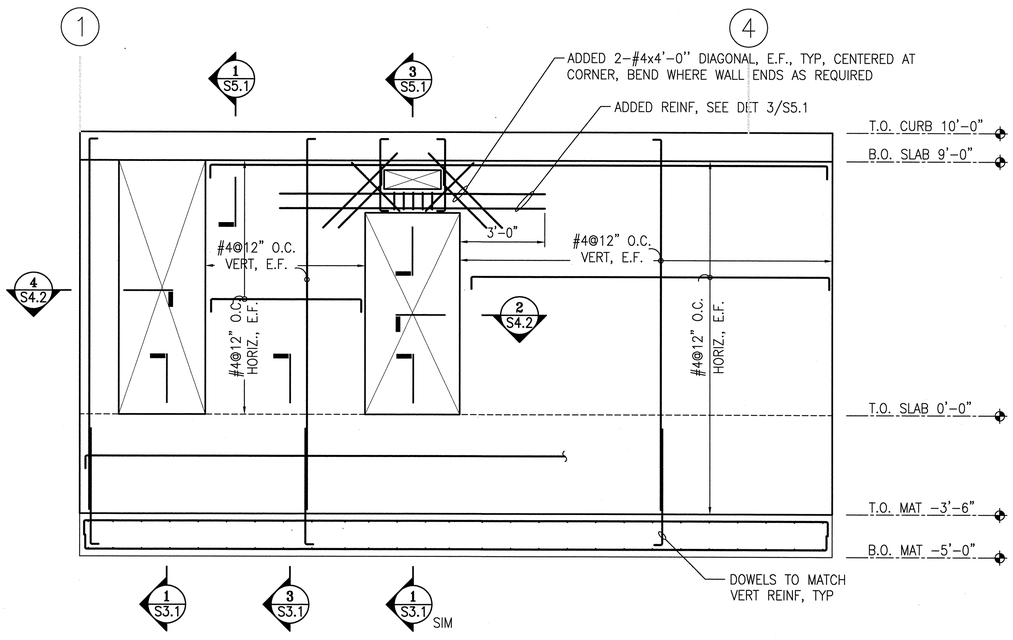
Original Sheet Size: 22"x34"



EXTERIOR WALL ELEVATION - NORTH

SCALE: 3/8"=1'-0"

1 / –

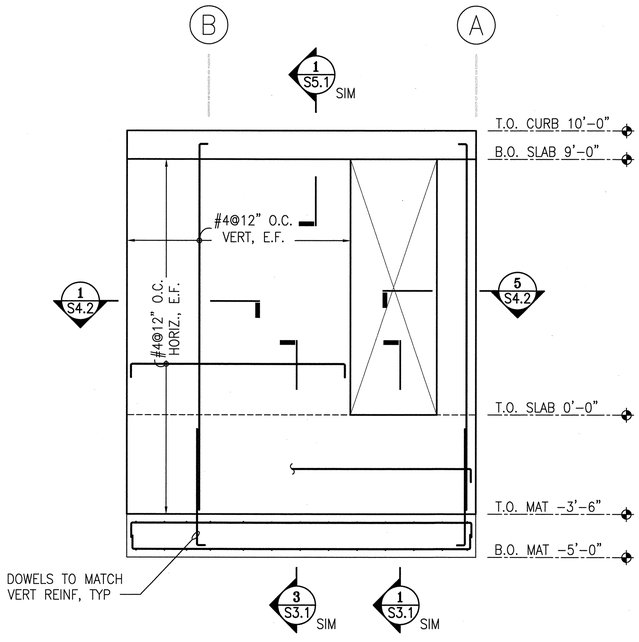


NOTES:
1. FOR OPENING LOCATIONS AND DIMENSIONS, S.A.D.
2. FOR TYPICAL REINFORCEMENT AROUND OPENINGS, SEE DETAIL 7/S1.5.

EXTERIOR WALL ELEVATION - SOUTH

SCALE: 3/8"=1'-0"

2 / –

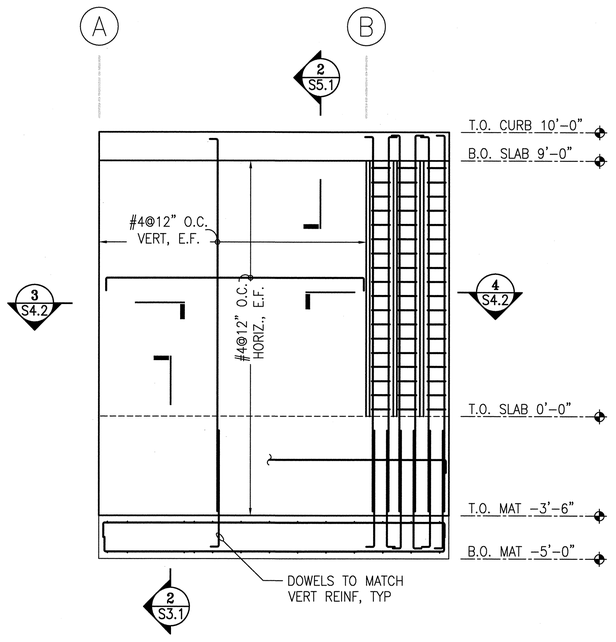


NOTE:
FOR OPENING LOCATIONS AND DIMENSIONS, S.A.D.

EXTERIOR WALL ELEVATION - EAST

SCALE: 3/8"=1'-0"

3 / –



EXTERIOR WALL ELEVATION - WEST

SCALE: 3/8"=1'-0"

4 / –

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			DATE
DESIGNED BY:	SL	SL	09/2012
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RAYMOND R. LUI
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STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

WALL ELEVATIONS

Sheet No.

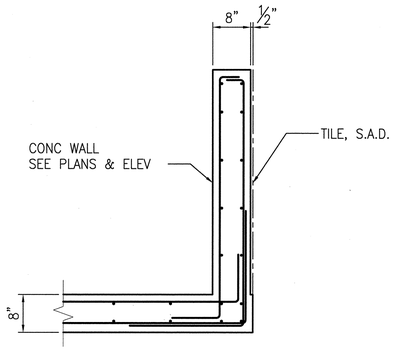
S4.1

Scale AS NOTED

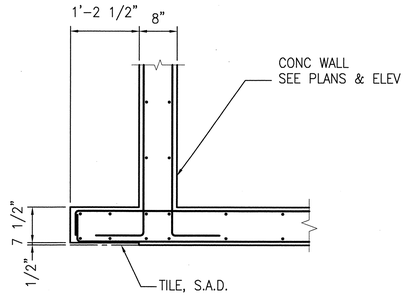
Job No.

3092V-2

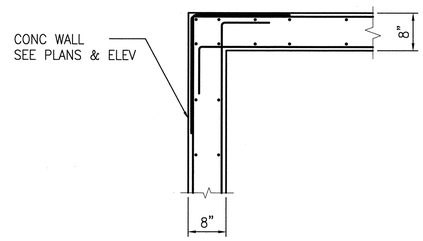
Original Sheet Size: 22"x34"



PLAN DETAIL 1
SCALE: 3/4"=1'-0"



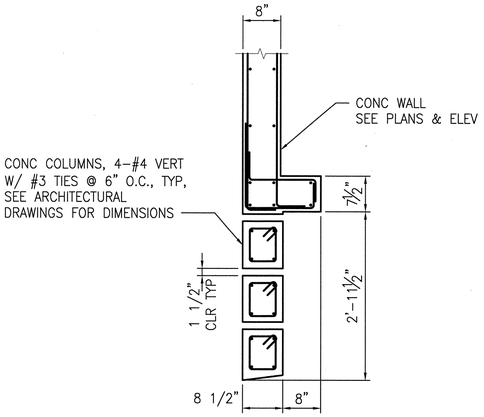
PLAN DETAIL 2
SCALE: 3/4"=1'-0"



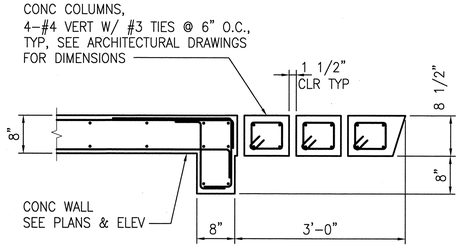
PLAN DETAIL 3
SCALE: 3/4"=1'-0"

SHEET NOTES:

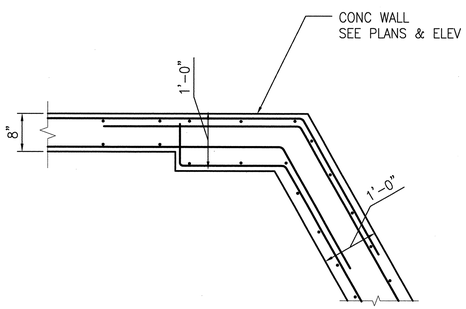
1. FOR GENERAL NOTES, REFER TO SHEETS S1.1 TO S1.3. FOR TYPICAL CONCRETE DETAILS, REFER TO SHEETS S1.4 TO S1.5.
2. VERIFY ALL DIMENSIONS, ELEVATIONS, FINISH SURFACES, ETC. WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION.



PLAN DETAIL 4
SCALE: 3/4"=1'-0"



PLAN DETAIL 5
SCALE: 3/4"=1'-0"



PLAN DETAIL 6
SCALE: 3/4"=1'-0"

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
Fuad s. Sweiss - City Engineer

BUILDING DESIGN & CONSTRUCTION

Architecture • Construction
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San Francisco, CA (415) 557-4700
94102-6028 Fax (415) 5574701

Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

		DATE
DESIGNED BY: SL	SL	09/2012
DRAWN BY: BH	BH	09/2012
CHECKED BY: JC	JC	09/2012

APPROVED

SECTION MANAGER: 10/9/12 DATE:
DEPUTY DIVISION MANAGER: 10/11/12 DATE:
DIVISION MANAGER: 10/11/12 DATE:

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

WALL SECTIONS & DETAILS

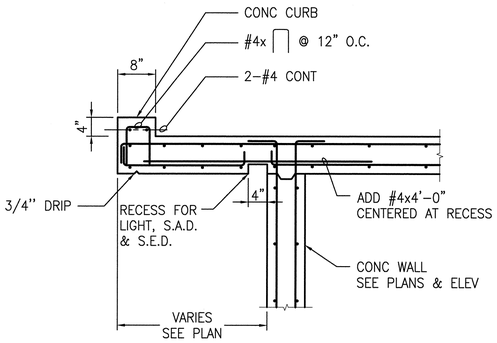
Sheet No.

S4.2

Scale AS NOTED

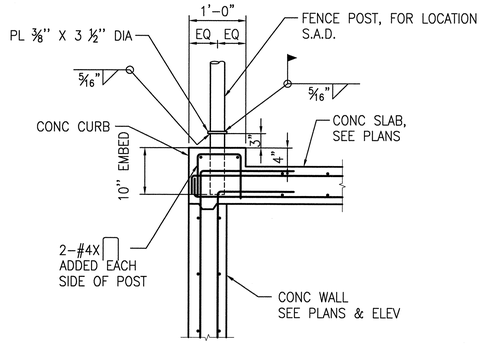
Job No. 3092V-2

Original Sheet Size: 22"x34"



ROOF DETAIL
SCALE: 3/4"=1'–0"

1 / –

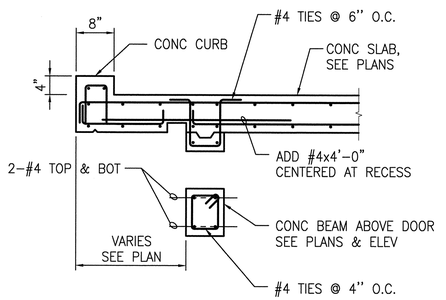


NOTES:
1. ALL EXPOSED STEEL SHALL BE HOT–DIPPED GALVANIZED.

ROOF DETAIL
SCALE: 3/4"=1'–0"

2 / –

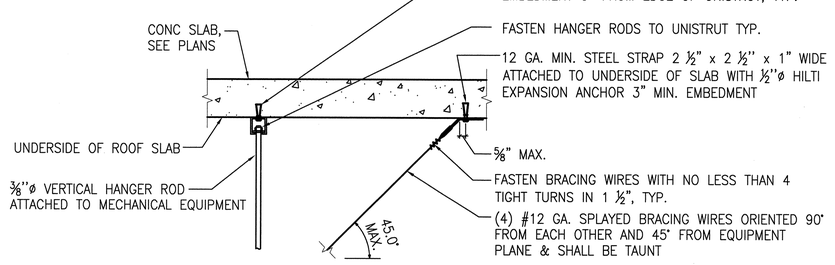
NOTE:
FOR INFORMATION NOT SHOWN OR NOTED, SEE DET 1/–.



ROOF DETAIL
SCALE: 3/4"=1'–0"

3 / –

NOTES:
1. ALL EXPOSED STEEL SHALL BE HOT–DIPPED GALVANIZED.
2. FOR LOCATION OF ANCHORS, S.M.D.



MECHANICAL SUPPORT AND SEISMIC BRACING DETAIL
SCALE: 3/4"=1'–0"

4 / –

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Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

DESIGNED BY:	SL	SL	DATE 09/2012
DRAWN BY:	BH	BH	09/2012
CHECKED BY:	JC	JC	09/2012

APPROVED

SECTION MANAGER: DATE: 10/25/12

DEPUTY DIVISION MANAGER: DATE: 10/25/12

DIVISION MANAGER: DATE: 10/26/12

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/25/12

Drawing Title

ROOF DETAILS

Sheet No.

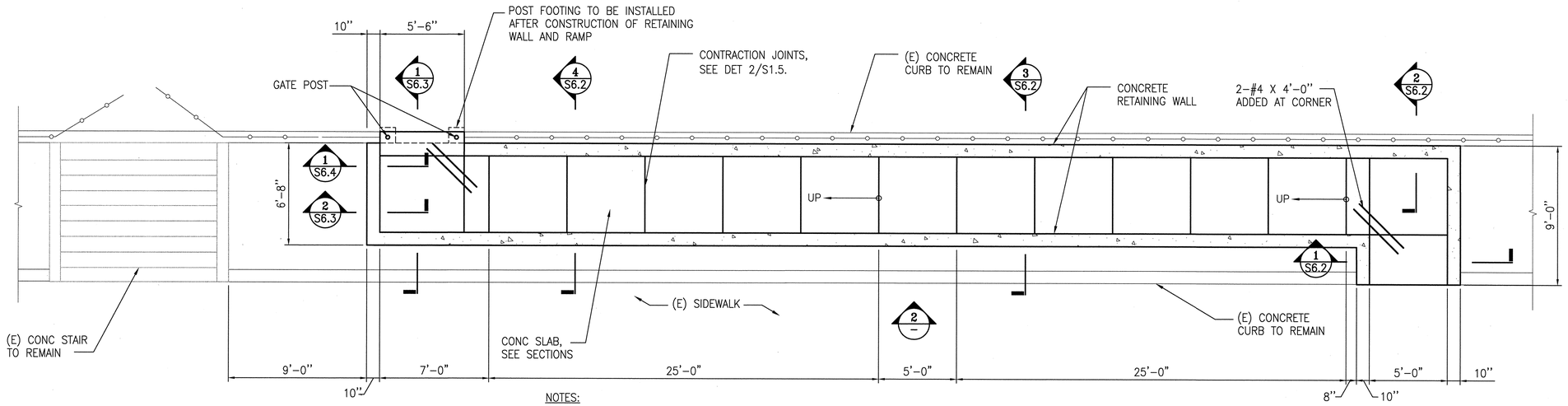
S5.1

Scale AS NOTED

Job No.

3092V-2

Original Sheet Size: 22"x34"



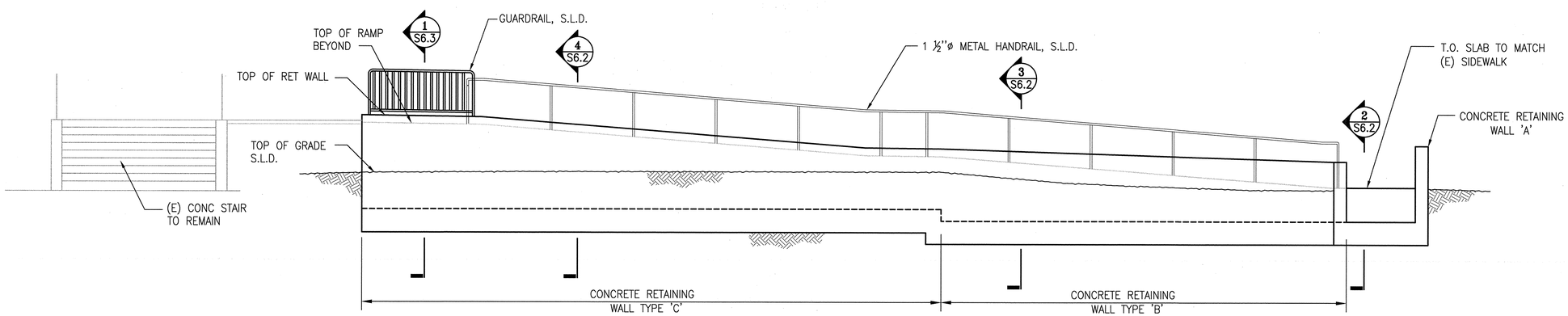
NOTES:

1. FOR GENERAL NOTES, REFER TO SHEETS S1.1 TO S1.3.
   FOR TYPICAL CONCRETE DETAILS, REFER TO SHEETS S1.4 TO S1.5.
2. VERIFY ALL DIMENSIONS, ELEVATIONS, FINISH SURFACES, SLOPES, DRAINS, SLAB DEPRESSIONS, ETC. WITH LANDSCAPE DRAWINGS PRIOR TO START OF CONSTRUCTION.
3. SLOPE SLABS TO DRAIN. SEE LANDSCAPE DRAWINGS FOR SLOPING REQUIREMENTS.
4. PROVIDE CURING AND SEALING COMPOUND ON FINISHED CONCRETE SURFACES. ADD POLYMER GRIT ADDITIVE TO SEALING COMPOUND ON ALL WALKING SURFACES.
5. CONTRACTOR SHALL SUBMIT CONTRACTION JOINT LOCATIONS TO CITY REPRESENTATIVE FOR APPROVAL.
6. FOR GATE DETAILS, S.L.D. PROVIDE POST FOOTING AS SHOWN IN 1/S6.4 AND 2/S6.4.
7. FOR TOP OF WALL ELEVATIONS, SEE LANDSCAPE DRAWINGS.
8. ALL EXPOSED STEEL SHALL BE HOT-DIPPED GALVANIZED.

RAMP FOUNDATION PLAN

SCALE: 1/4"=1'-0"

1 / –



CONCRETE RAMP ELEVATION

SCALE: 1/4"=1'-0"

2 / –

Original Sheet Size: 22"x34"

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
Fuad s. Sweiss - City Engineer

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Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION DEPARTMENT OF PUBLIC WORKS CITY & COUNTY OF SAN FRANCISCO 30 VAN NESS AVENUE, 5TH FLOOR SAN FRANCISCO, CA 94102-6028		
DESIGNED BY: SL	SL	DATE 09/2012
DRAWN BY: BH	BH	09/2012
CHECKED BY: J.C.	JC	09/2012
APPROVED		
SECTION MANAGER: Raymond		DATE: 10/9/12
DEPUTY DIVISION MANAGER: Margaret Pea		DATE: 10/11/12
DIVISION MANAGER:		DATE:

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

RETAINING WALLS PLAN & ELEVATION

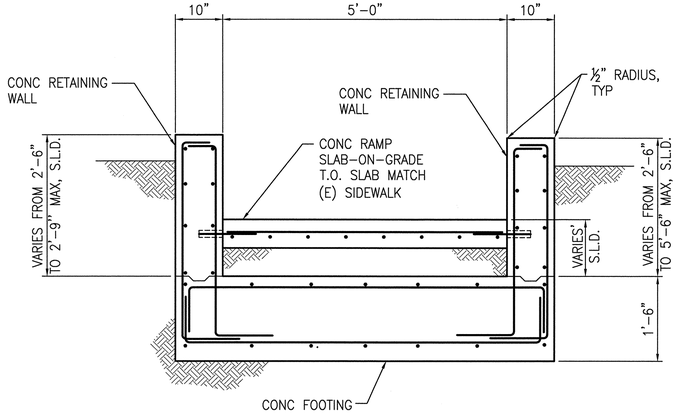
Sheet No.

S6.1

Scale AS NOTED

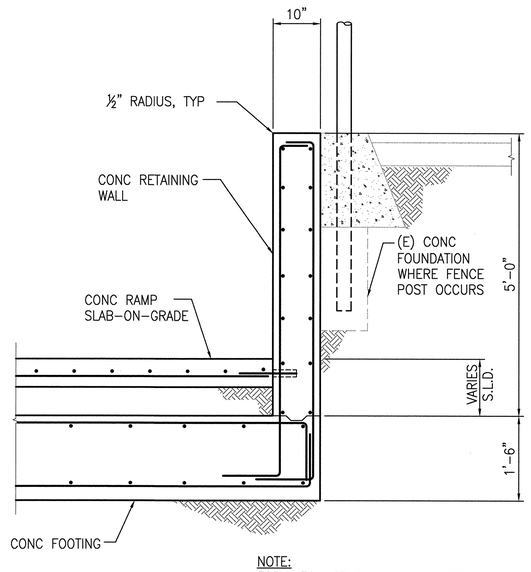
Job No.

3092V-2



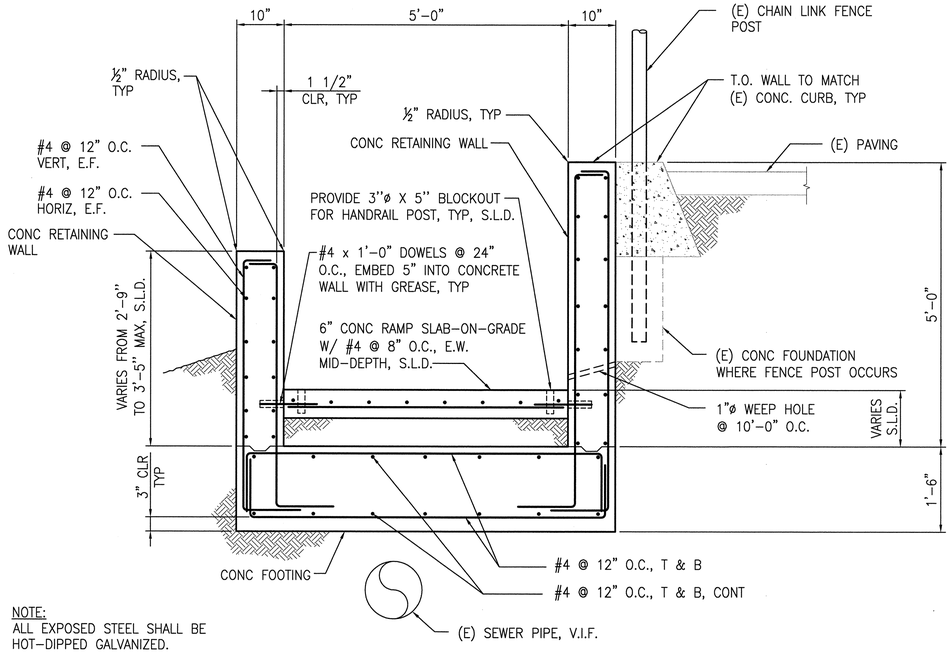
NOTE:
FOR INFO NOT SHOWN OR NOTED, SEE DET 3/–.

WALL TYPE "A" — 1/–
SCALE: 3/4"=1'-0"



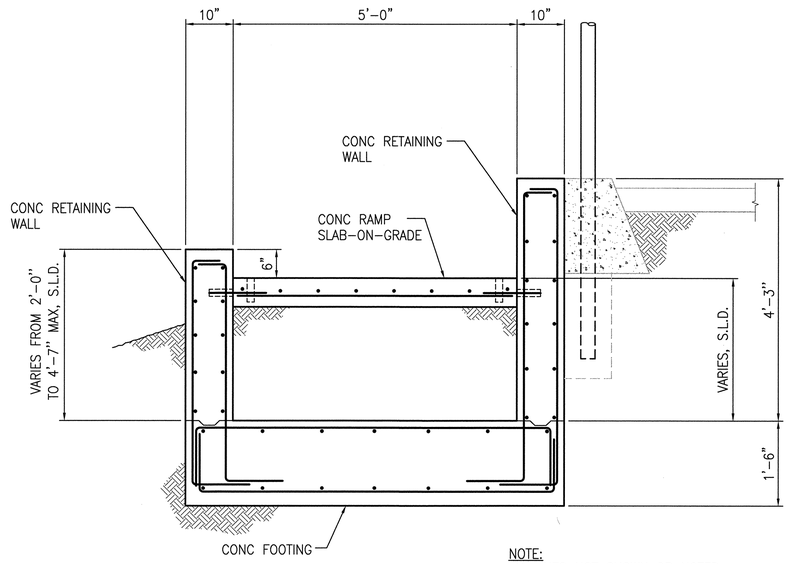
NOTE:
FOR INFO NOT SHOWN OR NOTED, SEE SECTION 3/–.

SECTION — 2/–
SCALE: 3/4"=1'-0"



NOTE:
ALL EXPOSED STEEL SHALL BE HOT-DIPPED GALVANIZED.

WALL TYPE "B" — 3/–
SCALE: 3/4"=1'-0"



NOTE:
FOR INFO NOT SHOWN OR NOTED, SEE SECTION 3/–.

WALL TYPE "C" — 4/–
SCALE: 3/4"=1'-0"

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
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Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

DESIGNED BY: SL	SL	DATE 09/2012
DRAWN BY: BH	BH	09/2012
CHECKED BY: JC	JC	09/2012

APPROVED
SECTION MANAGER: DATE: 10/25/12
DEPUTY DIVISION MANAGER: DATE:
DIVISION MANAGER: DATE: 10/26/12

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/25/12

Drawing Title

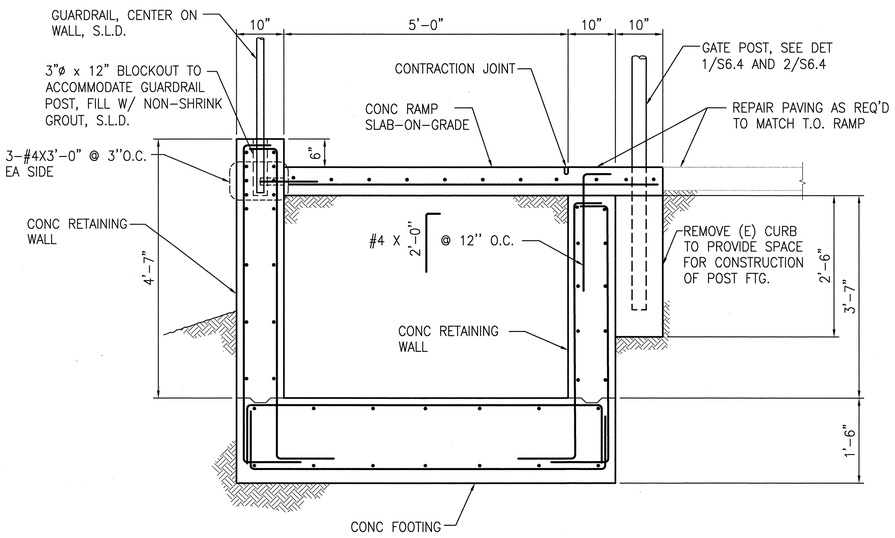
RETAINING WALLS DETAILS

Sheet No. S6.2

Scale AS NOTED

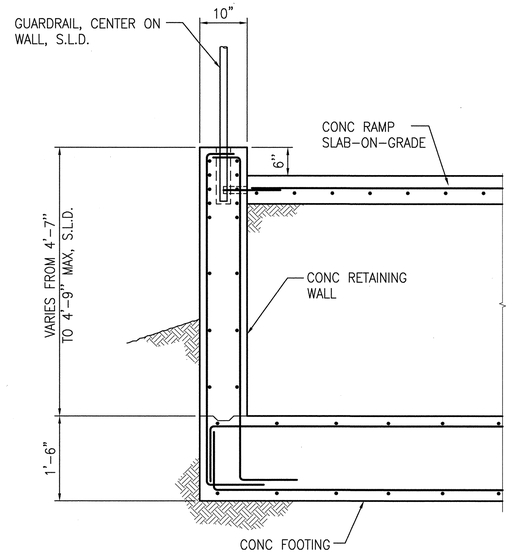
Job No. 3092V-2

Original Sheet Size: 22"x34"



NOTE:
1. FOR INFO NOT SHOWN OR NOTED, SEE SECTION 3/6.2.
2. ALL EXPOSED STEEL SHALL BE HOT-DIPPED GALVANIZED.

SECTION 1/–
SCALE: 3/4"=1'-0"



NOTE:
1. FOR INFO NOT SHOWN OR NOTED, SEE SECTION 3/6.2 AND 1/–.
2. ALL EXPOSED STEEL SHALL BE HOT-DIPPED GALVANIZED.

SECTION 2/–
SCALE: 3/4"=1'-0"

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
Fuad s. Sweiss - City Engineer

BUILDING DESIGN & CONSTRUCTION

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Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
336 31st Ave, San Francisco, CA 94121
Block No. 1403 - Lot No. 007

Consultant

INFRASTRUCTURE DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF SAN FRANCISCO
30 VAN NESS AVENUE, 5TH FLOOR
SAN FRANCISCO, CA 94102-6028

DESIGNED BY: SL	SL	DATE 09/2012
DRAWN BY: BH	BH	09/2012
CHECKED BY: J.C.	JC	09/2012

APPROVED
SECTION MANAGER: Raymond Lui 10/9/12 DATE:
DEPUTY DIVISION MANAGER: Margaret Brodkin 10/11/12 DATE:
DIVISION MANAGER: 10/11/12 DATE:

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

RETAINING WALLS DETAILS

Sheet No.

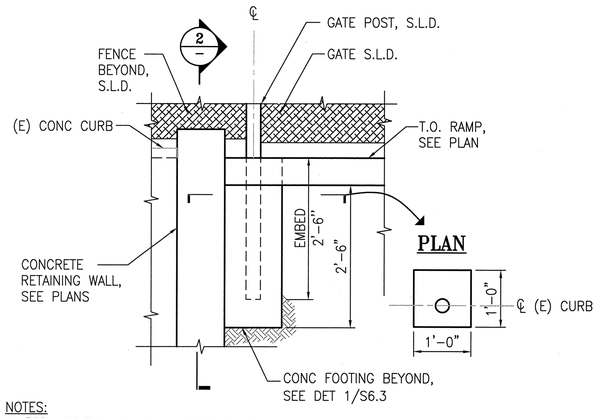
S6.3

Scale AS NOTED

Job No.

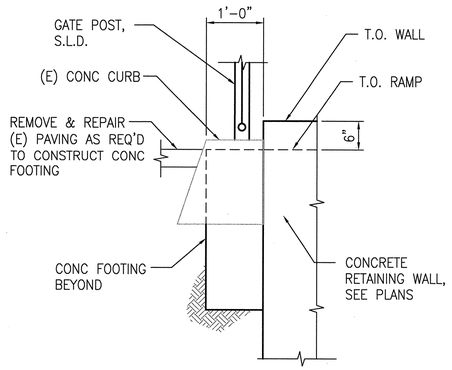
3092V-2

Original Sheet Size: 22"x34"

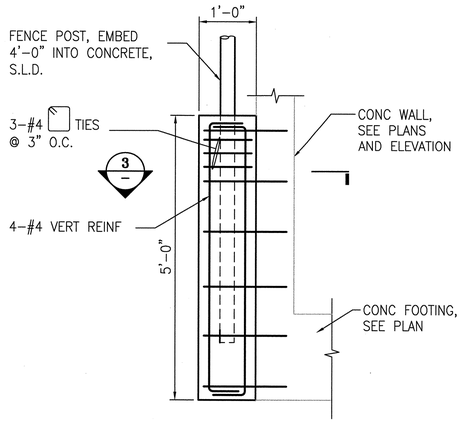


NOTES:
1. FOR LOCATION OF GATE POST, S.L.D.
2. ALL EXPOSED STEEL SHALL BE HOT-DIPPED GALVANIZED

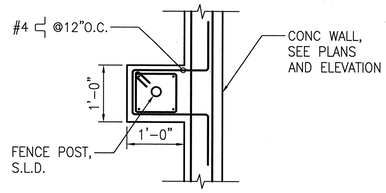
GATE POST DETAIL 1 –
SCALE: 3/4"=1'-0"



GATE POST DETAIL 2 –
SCALE: 3/4"=1'-0"



POST FOOTING DETAIL 3 –
SCALE: 3/4"=1'-0"



POST FOOTING DETAIL 4 –
SCALE: 3/4"=1'-0"

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO
Fuad s. Sweiss - City Engieneer

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Project

2008 PARK BOND RESTROOM REPLACEMENT PROJECT
CONTEMPORARY DESIGN

DUPONT TENNIS COURTS RESTROOMS
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Consultant

INFRASTRUCTURE DIVISION DEPARTMENT OF PUBLIC WORKS CITY & COUNTY OF SAN FRANCISCO 30 VAN NESS AVENUE, 5TH FLOOR SAN FRANCISCO, CA 94102-6028		
DESIGNED BY: SL	SL	DATE 09/2012
DRAWN BY: BH	BH	09/2012
CHECKED BY: JC	JC	09/2012
APPROVED		
SECTION MANAGER:		DATE: 10/9/12
DEPUTY DIVISION MANAGER:		DATE: 10/11/12
DIVISION MANAGER:		DATE:

BID & CONSTRUCTION

No.	Date	Revisions

Section Head T. LEUNG
Proj. Mgr. M. YEE
Proj. Arch. T. LEUNG
Drawn
Date SEPTEMBER 2012
Phase PERMIT SET

REGISTERED PROFESSIONAL ENGINEER
RAYMOND R. LUI
No. S 4094
STRUCTURAL
STATE OF CALIFORNIA
10/9/12

Drawing Title

RETAINING WALLS DETAILS

Sheet No.

S6.4

Scale AS NOTED

Job No. 3092V-2

Original Sheet Size: 22"x34"