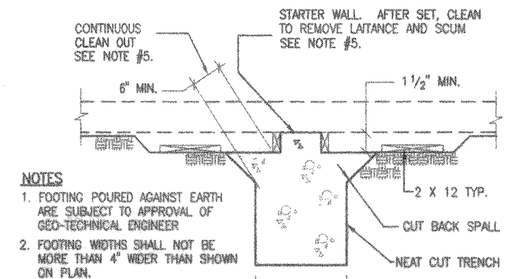
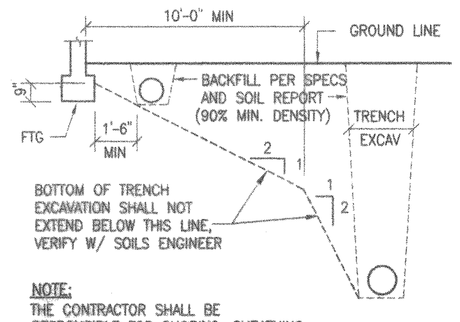


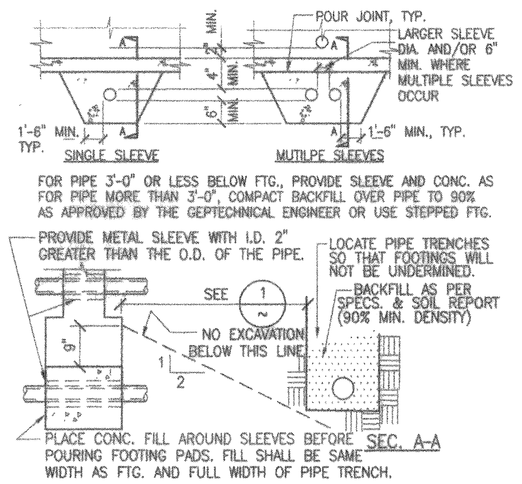
NOTES
1. FOOTING POURED AGAINST EARTH ARE SUBJECT TO APPROVAL OF GEO-TECHNICAL ENGINEER
2. FOOTING WIDTHS SHALL NOT BE MORE THAN 4" WIDER THAN SHOWN ON PLAN.
3. FORMWORK NOT PERMITTED BELOW GRADE UNLESS FULLY FORMED.
4. FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE FOUNDATION TRENCH WALLS ARE STABLE AS DETERMINED BY THE GEO-TECHNICAL ENGINEER. SUBJECT TO APPROVAL OF DSA. THE MIN. FORMWORK SHOWN ON THE DRAWINGS IS MANDATORY TO INSURE CLEAN EXCAVATIONS IMMEDIATELY PRIOR TO AND DURING THE PLACING OF CONCRETE.
5. STAKES NOT PERMITTED IN THE FTG. AREA.

FOOTING POURED AGAINST EARTH (1)



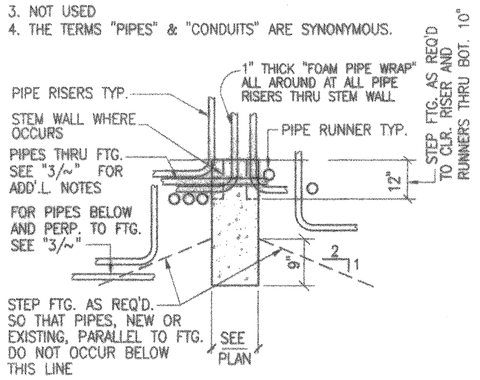
NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING, SHEATHING OR OTHERWISE PREVENTING THE SIDES OF THE EXCAVATION FROM CAVING IN UNTIL ALL BACKFILL IS COMPLETED PER SPECIFICATIONS AND SOIL REPORT.

EXCAVATIONS PARALLEL TO FOOTING (2)

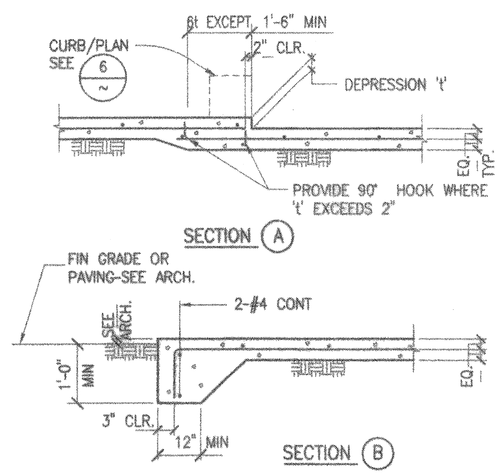


PIPE TRENCHES (3)

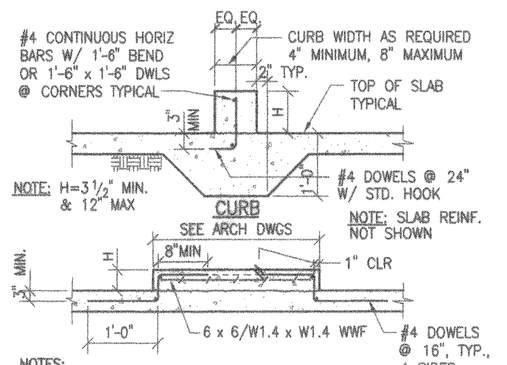
NOTES:
1. PIPES SHALL NOT BE PLACED THRU OR UNDER ANY COL. PAD FTG.
2. NOT USED
3. NOT USED
4. THE TERMS "PIPES" & "CONDUITS" ARE SYNONYMOUS.



TYPICAL PIPES AT FTG. (4)



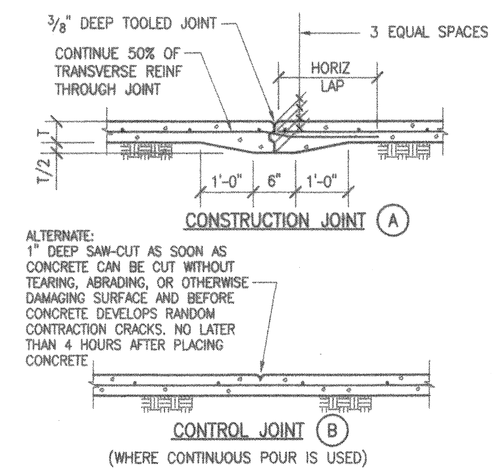
DEPRESSED SLAB AND SLAB EDGE (5)



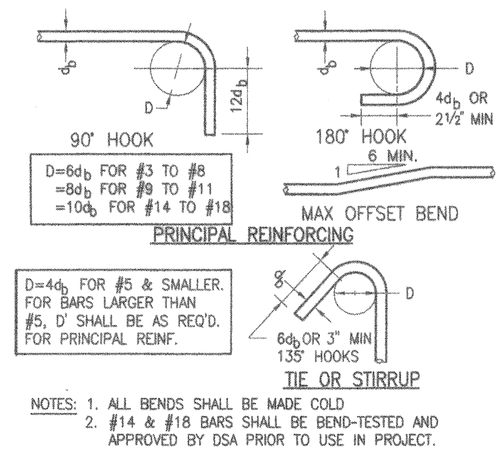
NOTES:
1. SEE ARCH FOR SIZE AND LOCATION OF CURBS
2. PROVIDE INSERTS AS REQ'D BY ARCH & MECH DRAWINGS

NOTE: SEE CURB DET. FOR #4 HORIZ BAR REQUIREMENTS

CONCRETE CURBS AND ISLANDS (6)

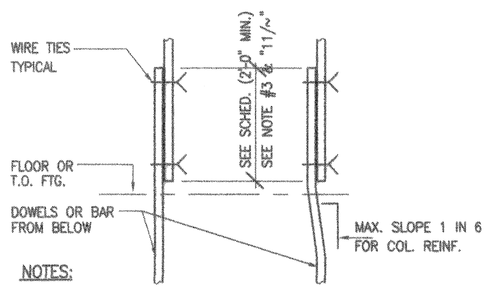


JOINTS IN SLAB ON GRADE (7)



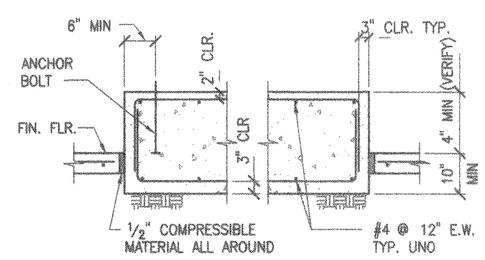
NOTES: 1. ALL BENDS SHALL BE MADE COLD
2. #14 & #18 BARS SHALL BE BEND-TESTED AND APPROVED BY DSA PRIOR TO USE IN PROJECT.

BAR BENDS (8)



NOTES:
1. ALL VERTICAL REINFORCING FOR COLUMNS, PIERS AND WALLS SHALL BE DOWELED AS SHOWN EXCEPT SPECIFIC DETAILS ON DRAWINGS SHALL GOVERN IN CASES OF CONFLICT.
2. DOWELS SHALL BE THE SAME GRADE, SIZE AND NUMBER AS VERTICAL REINFORCING.
3. BARS OF #8 & LARGER SHALL BE SPLICED BY WELDING PER "12/~".

VERTICAL REINFORCING LAP SPLICE FOR CONCRETE AND MASONRY (9)



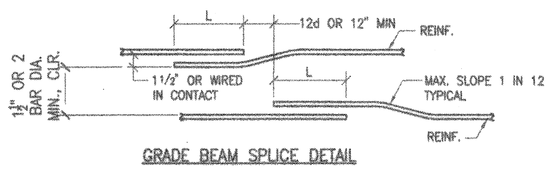
NOTE: SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
1. LOCATION AND DIMENSIONS OF PADS AND BASES
2. DETAILS OF STRUCTURAL SLABS, SUPPORTS AND ISOLATORS.
3. LOCATION AND SIZE OF ANCHOR BOLTS.

CONCRETE BASE AND SLAB FOR EQUIPMENT (10)

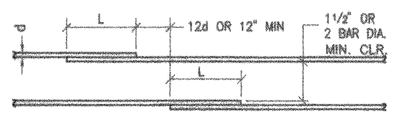
SCHEDULE I											
LOCATION IN STRUCTURE	CONC f'c PSI	STEEL GRADE KSI	BAR SIZE								
			3	4	5	6	7	8	9	10	11
			L = LAP SPLICE IN INCHES								
BARS OF BEAMS, JOISTS, ELEVATED SLABS, SPANDRELS AND FOOTINGS	3000	60	17	22	28	33	48	55	62	70	78
	4000	60	15	19	24	28	42	47	54	60	67

SCHEDULE II											
LOCATION IN STRUCTURE	CONC f'c PSI	STEEL GRADE KSI	BAR SIZE								
			3	4	5	6	7	8	9	10	11
			L = LAP SPLICE IN INCHES								
TOP BARS* OF BEAMS, JOISTS, ELEVATED SLABS, SPANDRELS AND FOOTINGS	3000	60	22	29	37	47	62	71	81	97	101
	4000	60	19	25	32	37	54	62	70	78	87
WALL STEEL HORIZONTAL, VERTICAL & DOWELS & GRD. BMS.	3000	60	29	38	47	56	81	92	105	118	131
	4000	60	27	33	42	48	70	81	91	101	113
WALL STEEL HORIZONTAL, VERTICAL & DOWELS AT MASONRY	f'm'=1500	60	← 60 DIA. TYP. → 72 DIA. AT JAMB, ENDS, CANTILEVER YARD & RETAINING WALLS, CORNERS AND CHORD						WELD SPLICE		

NOTES:
1. THE SCHEDULES SHOWN ON THIS DETAIL APPLY TO REGULAR WEIGHT CONCRETE @ 145 TO 150 PCF.
2. THE SMALLER BAR LAP LENGTH SHALL BE USED WHEN SPLICING DIFFERENT SIZE BARS.
3. LAP LENGTHS SPECIFICALLY DETAILED ON DRAWINGS SHALL GOVERN IN LIEU OF THE LAP LENGTHS SCHEDULED HERE.
4. THE CONTRACTOR, AT HIS OPTION, MAY USE A BUTT WELDED SPLICE IN LIEU OF THE LAP SPLICE SHOWN-SEE DETAIL "17/S1-3".
5. * TOP BARS ARE HORIZONTAL BARS PLACED SO THAT 12" OR MORE OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR. USE SCHEDULE II FOR LAP LENGTHS FOR TOP BARS IN SLABS WHERE MORE THAN 12" OF FRESH CONCRETE IS CAST BELOW THEM.
6. ALL DETAILING AND PLACING OF REINFORCING SHALL COMPLY WITH THESE LAP SPLICE SCHEDULES AND DETAILS, UNLESS SPECIFICALLY DETAILED OTHERWISE ON THE DRAWINGS.
7. BUNDLED BAR SPLICES:
   a) INDIVIDUAL BAR SPLICES WITHIN THE BUNDLE SHALL NOT OVERLAP EACH OTHER.
   b) INCREASE LAP LENGTH 20% AT THREE BAR BUNDLES.
   c) INCREASE LAP LENGTH 33% AT FOUR BAR BUNDLES
8. ADJACENT SPLICES OF WALL BARS SHALL BE STAGGERED. SPLICES IN TWO CURTAINS SHALL NOT OCCUR IN THE SAME LOCATION.
9. LAP SPLICE FOR REINFORCING IN CONCRETE CHORDS AND DRAGS SHALL BE AS SCHEDULED FOR HORIZONTAL WALL STEEL.
10. STANDARD HOOKS IN LIGHTHEIGHT CONCRETE SHALL HAVE TAILS 25% LONGER THAN SCHEDULED.
11. DOWELS SHALL BE THE SAME GRADE, SIZE, SPACING AS VERTICAL REINFORCING U.N.O.

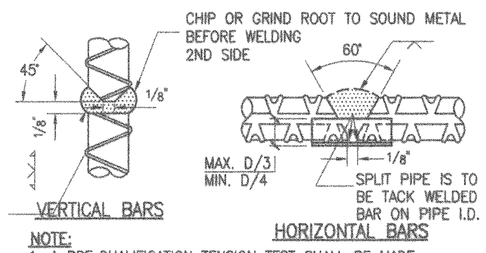


GRADE BEAM SPLICE DETAIL



WALL OR SLAB SPLICE DETAIL

REGULAR WEIGHT CONC. AND MASONRY REINF. LAP SPLICE SCHEDULE (11)



NOTE:
1. A PRE-QUALIFICATION TENSION TEST SHALL BE MADE BY AN APPROVED TESTING LABORATORY ON SAMPLES OF EVERY SIZE BAR BEING WELDED.
2. SPLICE SHALL DEVELOP AT LEAST 125% OF SPECIFIED YEILD STRENGTH, Fy, OF THE BAR.
3. MATERIALS, CONDITIONS AND WELDING PROCEDURES UTILIZED SHALL COMPLY WITH THE CURRENT APPLICABLE BUILDING CODE AND THE REQUIREMENTS OF THE GOVERNING INSPECTION AGENCY.
4. ALL COSTS INCURRED FOR OBTAINING APPROVALS SHALL BE BORNE BY THE GENERAL CONTRACTOR.

BUTT WELDED REINFORCING BAR SPLICES (12)

San Gabriel Unified School District

408 Junipero Serra
San Gabriel, CA 91776

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REGISTERED PROFESSIONAL ENGINEER MATTHIS G. NAKABARA NO. 2165 Exp. 9-30-11 STRUCTURAL STATE OF CALIFORNIA

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Del Mar High School

312 Del Mar Ave
San Gabriel, CA 91776

TYPICAL DETAILS

Project Number	20318
Date	02.23.10
Drawn By	STF
Checked By	MGN

S0.2

Scale