FIXTURE CONNECTION SCHEDULE (ROUGH-IN AND CONNECT)

SYM.	DESCRIPTION	SOIL OR WASTE	VENT	TRAP	COLD WATER	HOT WATER	REMARKS
WC-1	WATER CLOSET (FLOOR MOUNTED)	4"	2"	INTEG	1"	-	"AMERICAN STANDARD" #2234.015 "MADERA" FLOOR MOUNTED, SIPHON JET VITREOUS CHINA CLOSET BOWL, WITH 14-1/8" ELONGATED RIM, 1-½" TOP SPUD, PLASTIC BOLT CAPS. FLUSH VALVE: SLOAN "ROYAL" #111 FLUSHOMETER, 1.6 GALLON PER FLUSH SEAT: OLSONITE #95SSCT SOLID WHITE PLASTIC, OPEN FRONT, EXTENDED BACK, SELF-SUSTAINING HINGE, STAINLESS STEEL BOLTS, WITHOUT COVER SEAT.
WC-2	WATER CLOSET (FLOOR MOUNTED) (ACCESSIBLE)	4"	2"	INTEG	1"	-	"AMERICAN STANDARD" #2305.100 "MADERA ADA" FLOOR MOUNTED, SIPHON JET VITREOUS CHINA CLOSET, ELONGATED BOWL, 1-½" TOP SPUD, PLASTIC BOLT CAPS. FLUSH VALVE: SLOAN "ROYAL" #111 FLUSHOMETER, 1.6 GALLON FLUSH. SEAT: OLSONITE #95SSCT, SOLID WHITE PLASTIC, OPEN FRONT, EXTENDED BACK, SELF-SUSTAINING HINGE, STAINLESS STEEL BOLTS, WITHOUT COVER SEAT.
U-1	URINAL	3"	1-1/2"	INTEG	3/4"	-	"AMERICAN STANDARD" 6541.132 "ALLBROOK", WHITE VITREOUS CHINA, 1.0 GALLON PER FLUSH, FLUSHING RIM, SIPHON JET, 3/4" TOP SPUD, WALL HANGER. FLUSH VALVE: SLOAN "ROYAL" 186-1 FLUSHOMETER VALVE. CARRIER: ZURN Z-1221 PLATE TYPE CONCEALED FLOOR MOUNTED CARRIER SYSTEM WITH ALL REQUIRED FITTINGS, HARDWARE, AND COMPONENTS PER MANUFACTURER'S RECOMMENDATIONS.
U-2	URINAL (ACCESSIBLE)	3"	1-1/2"	INTEG	3/4"	-	"AMERICAN STANDARD" 6541.132 "ALLBROOK", WHITE VITREOUS CHINA, 1.0 GALLON PER FLUSH, FLUSHING RIM, SIPHON JET, 3/4" TOP SPUD, WALL HANGER. FLUSH VALVE: SLOAN "ROYAL" 186-1 FLUSHOMETER VALVE. CARRIER: ZURN Z-1221 PLATE TYPE CONCEALED FLOOR MOUNTED CARRIER SYSTEM WITH ALL REQUIRED FITTINGS, HARDWARE, AND COMPONENTS PER MANUFACTURER'S RECOMMENDATIONS. MOUNT AT ACCESSIBLE HEIGHT.
L-1	LAVATORY (ACCESSIBLE)	2"	1-1/2"	1-1/2"	1/2"	-	"AMERICAN STANDARD" # 0498.400 "ROSELYN", (16½"x 10½"x 5¾" DEEP) COUNTERTOP SINK, VITREOUS CHINA, FRONT OVERFLOW, 4" CENTERS. FAUCET: CHICAGO 3400-CP, 4" CENTERS, WITH E2805 VANDAL PROOF AERATOR ; .5 GPM FLOW RATE, CHICAGO #1017 ANGLE STOP. DRAIN: MCGUIRE 155A WITH 1¼" TAILPIECE. CAST BRASS LA. PATTERN P-TRAP, CHROME PLATED WHERE EXPOSED WITH 1½" IPS ESCUTCHEON TUBE. PROVIDE PRO-WRAP ADA INSULATION.
S-1	SINK - COUNTER (COLD WATER) (ACCESSIBLE)	2"	1-1/2"	1-1/2"	1/2"	-	"ELKAY" LRAD-1720-6-1, 17"x 20"x 5½" DEPTH, 18 GAUGE, TYPE 304 SS, SELF RIMMING, SINGLE HOLE, OFF CENTERED REAR SINGLE BOWL SINK. FAUCET: CHICAGO. FAUCET #350-CP WITH 4" WRIST BLADE HANDLES, GOOSENECK SPOUT. STRAINERS: MCGUIRE #152 WIDE TOP SINK STRAINER. "P" TRAP: MCGUIRE #PW215LA "PRO WRAP" SEAMLESS ANTI-MICROBIAL PREWRAPPED INSULATED DRAIN FITTING WITH ANGLE STOP AND SUPPLY COVERS. STOPS/SUPPLIES: CHICAGO #1017 ANGLE STOP WITH 1/2" FEMALE INLET AND 3/8" FLEX RISER.
DF-1	DRINKING FOUNTAIN (ACCESSIBLE) (PEDESTAL)	2"	1-1/2"	1-1/2"	1/2"	-	"HAWS" #1119.14, "HI-LO", WALL MOUNTED, BARRIER FREE DRINKING FOUNTAIN, DUAL 14 GAUGE TYPE 304 STAINLESS STEEL BASINS , PUSH BUTTON OPERATED VALVES, VANDEL RESISTANT BUBBLER WITH MOUNTING PLATE HAWS #6715, WASTE STRAINER, 1-¼" IPS TRAPS AND CHICAGO # 45LKCP STRAIGHT STOP.
FD-1	FLOOR DRAIN	2"	-	-	-	-	"ZURN" MODEL #ZN-415B-2NH-P-VP, ROUND NICKEL BRONZE STRAINER, NO-HUB OUTLET WITH TRAP PRIMER CONNECTION.
HB-1	HOSE BIBB	-	-	-	3/4"	-	"ACORN" #8151, STAINLESS STEEL RECESSED HOSE BOX WITH WALL FLANGE AND DOOR, PROVIDE WITH VACUUM BREAKER.
HB-2	HOSE BIBB	-	-	-	3/4"	-	"ACORN" #8121LK-RBVB, BENT NOSE HOSE VALVE WITH VACCUM BREAKER, AND LOOSE TEE KEY.
TP-1	TRAP PRIMER	-	-	-	3/4"	-	"PPP" P1-500 TRAP PRIMMER, INSTALL AS PER MANUFACTURES RECOMMENDATION BEHIND STAINLESS STEEL ACCESS PANEL AND PROVIDE ½" TO FLOOR DRAIN.
RD-1	ROOF DRAIN	SEE ROOF PLANS FOR DRAIN SIZES				-	"ZURN" ZC100-NH-C-VP, 15" DIA. DURA-COATED CAST IRON BODY W/ COMBINATION MEMBRANE FLASING CLAMP/GRAVEL GUARD.
WHA-1	WATER HAMMER ARRESTOR	-	-	-	-	-	"PPP" SC SERIES WATER HAMMER ARRESTOR. INSTALL AS PER MANUFACTURERS RECOMENDATION.

MISC. PLUMBING EQUIPMENT SCHEDULE

SYM.	DESCRIPTION
PRV 1	WILKINS # 500YSBR-HR WATER PRESSURE REDUCING VALVE WITH INTEGRAL BY-PASS CHECK VALVE AND IN-LINE BRONZE "Y" STAINER WITH 20 MESH STAINLESS STEEL SCREEN.

NOTE: INSTALL ALL OF THE ABOVE EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.

LIST OF DEFERRED APPROVAL

DEFERRED APPROVAL OF DESIGN AND ENG. OF SOME SYSTEMS ARE TO BE OBTAINED SEPARATELY FROM THE DIVISION OF THE STATE ARCHITECT. THE ARCHITECT SHALL SUBMIT DOCUMENTS FOR REVIEW AS REQUIRED BY THE BUILDING OFFICIAL, AND OBTAIN ALL NECESSARY APPROVALS AND PERMITS FOR THE SYSTEMS, AND OTHERS AS REQUIRED BY THE DIVISION OF THE STATE ARCHITECT. "INSTALLATION OF DEFERRED APPROVAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE IN INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY DSA."

- AUTOMATIC FULLY SUPERVISED FIRE SPRINKLER SYSTEM (ABOVE GROUND ONLY)

DEFERRED APPROVAL SUBMITTAL REQUIREMENTS
1. SUBMIT DSA APPROVED FIRE WATER SUPPLY PLAN(S)
2. SUBMIT UNDERGROUND PIPING MATERIALS & TEST CERTIFICATE
3. SUBMIT CURRENT WATER AVAILABILITY REPORT FROM WATER PURVEYOR
4. SUBMIT MATERIAL LISTS OF ALL COMPONENTS TO BE STAMPED & SIGNED BY C-16 CONTRACTOR
5. SUBMIT MANUFACTURE WATER FLOW DATA FOR BACKFLOW DOUBLE DETECTOR CHECK.
6. ARCHITECT OF RECORD; MECHANICAL ENGINEER & FIRE PROTECTION CONTRACTOR (C-16) SHALL SEAL STAMP & SIGN ALL DRAWINGS.
7. REFER TO FIRE SPRINKLER SYSTEM DESIGN REQUIREMENTS ON SHEET(S) M0.0.1/P0.0.1

ALL PROJECTIONS GREATER THAN 3' SHALL BE SPRINKLER PROTECTED.

A) ORDINARY I DESIGN SHALL APPLY TOO: JANITOR; STORAGE; ELECTRIAL; MECHANICAL ROOMS/AREAS.

B) ORDINARY II DESIGN SHALL APPLY TOO: SCIENCE LABORATORIES

ALTERNATIVES FOR CBC 508 PROVISIONS:
* MINIMUM 1500 SQ. FT. DESIGN AREA
* ORDINARY I DESIGN
* ALL INTERSTITIAL SPACE PROTECTED
* ELEVATOR PIT
* NFPA EXCEPTIONS NOT APPLICABLE.

- ELEVATOR GUIDE RAILS AND SUPPORTING BRACKETS AS PER MANUFACTURER

PIPING MATERIALS

1.	SOIL, WASTE, AND VENT PIPING BELOW GROUND:	SERVICE WEIGHT NO-HUB CAST-IRON WITH 4-BAND STAINLESS STEEL COUPLINGS. WRAP ALL UNDERGROUND PIPING WITH 10 MIL. POLYETHYLENE ENCASEMENT PER ANSI/AWWA C105/A21.5-93.
2.	SOIL, WASTE AND VENT PIPING ABOVE GROUND:	SERVICE WEIGHT NO-HUB CAST IRON PIPE AND FITTINGS WITH 2-BAND STAINLESS STEEL COUPLINGS.
3.	WATER PIPING BELOW GROUND: WATER PIPING BELOW BUILDING:	TYPE 'K' COPPER WITH BRAZED JOINTS. TYPE 'K' COPPER, NO JOINTS ALLOWED.
4.	WATER PIPING ABOVE GROUND:	TYPE 'L' COPPER WITH LEAD FREE SOLDERED JOINTS.
5.	INSULATION OF DOMESTIC HOT WATER, HOT WATER RETURN, AND INTERIOR CONDENSATE PIPING:	GLASS FIBER PIPE INSULATION WITH FACTORY APPLIED WHITE JACKET, J-M MICRO-LOK 750AP, 1 INCH THICK FOR PIPE SIZES 1 INCH AND BELOW, AND 1-1/2 INCHES THICK FOR PIPE SIZES 1-1/4 INCHES AND LARGER.
7.	CONDENSATE PIPING:	TYPE 'M' COPPER WITH SOLDER JOINTS.
8.	ALL OF THE ABOVE SHALL COMPLY WITH THE SPECIFICATIONS.	
9.	REFER TO SPEC SECTION 15300 FOR FIRE SPRINKLER PIPING.	

PLUMBING DRAWING LIST

P0.1	PLUMBING GENERAL NOTES, LEGENDS, & ABBREVIATIONS
P1.1	PLUMBING SITE PLAN
P2.1	PLUMBING FLOOR PLAN
P2.3	PLUMBING ROOF PLANS
P5.0	PLUMBING DETAILS

MECHANICAL EQUIPMENT ANCHORAGE NOTES:

ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN THE 2007 CBC, SECTION 1614A.1.13 AND ASCE 7-05 SECTIONS 13.3, 13.4 & 13.6.

THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE, BUT NEED NOT BE DETAILED ON THE PLANS:
A. EQUIPMENT WEIGHING LESS THAN 400 POUNDS SUPPORTED DIRECTLY ON THE FLOOR OR ROOF.
B. FURNITURE REQUIRED TO BE ATTACHED IN ACCORDANCE WITH PART 2, TITLE 24, C.C.R..
C. TEMPORARY OR MOVABLE EQUIPMENT.
D. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED BY VIBRATION ISOLATORS.
E. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL/ELECTRICAL ENGINEER AND THE FIELD REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO RESIST THE FORCES PRESCRIBED IN ASCE 7-05 SECTION 13.3 AD DEFINED IN ASCE 7-05 SECTION 13.6.8, 13.6.7, AND 13.6.5.5, ITEM 6, RESPECTIVELY.

THE BRACING AND ATTACHMENTS TO THE STRCTURE SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS WITH AN OPA #, SUCH AS MASON INDUSTRIES (OPA 349), OR ISAT (OPA 485) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

COPIES OF THE MANUAL SHALL BE ON THE JOBSITE PRIOR TO STARTING HANGING AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF THE RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR CHANGE ORDER APPROVED BY THE OFFICE OF STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE OFFICE OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

UNLESS SPECIFICALLY SHOWN ON THESE PLANS, NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	S OR W	SOIL OR WASTE PIPING (BELOW GRADE OR FLOOR)
	S OR W	SOIL OR WASTE PIPING (ABOVE GRADE OR FLOOR)
	V	SANITARY VENT PIPING
	CW	DOMESTIC COLD WATER PIPING
	HW	DOMESTIC HOT WATER PIPING
	HWR	DOMESTIC HOT WATER RETURN PIPING
SD	SD	STORM DRAIN PIPING (BELOW GRADE OR FLOOR)
SD	SD	STORM DRAIN PIPING (ABOVE GRADE OR FLOOR)
OD	OD	OVERFLOW DRAIN PIPING (BELOW GRADE OR FLOOR)
OD	OD	OVERFLOW DRAIN PIPING (ABOVE GRADE OR FLOOR)
G	G	FUEL GAS (7" W.C.)
CD	CD	CONDENSATE PIPING
TP	TP	TRAP PRIMER PIPING BELOW FLOOR
D	D	INDIRECT DRAIN
		LINES TO BE ABANDON OR DEMO'D
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	FCO	FLOOR CLEANOUT
	WCO	WALL CLEANOUT
	COTG	CLEANOUT TO GRADE
	SOV	SHUT-OFF VALVE
	TP	TRAP PRIMER IN S.S. VANDAL PROOF ACCESS PANEL
	S.O.V.	SHUT-OFF VALVE IN S.S. VANDAL PROOF ACCESS PANEL
	CHV	CHECK VALVE
	HB	HOSE BIBB
	W.H.A.	WATER HAMMER ARRESTOR
	P.O.C.	POINT OF CONNECTION
	ABV.	ABOVE
	A.F.F.	ABOVE FINISH FLOOR
	A.P.	ACCESS PANEL
	B.G.	BELOW GRADE
	BEL.	BELOW
	BTUH	BRITISH THERMAL UNITS PER HOUR
	CFH	CUBIC FOOT PER HOUR
	CLG.	CEILING
	DN.	DOWN
	DRNS.	DRAINS
	F.F.E.	FINISHED FLOOR ELEVATION
	FLR.	FLOOR
	G.P.F.	GALLONS PER FLUSH
	HDR.	PIPE HEADER
	I.E.	INVERT ELEVATION
	N.C.	NORMALLY CLOSED
	N.O.	NORMALLY OPEN
	NIC	NOT IN CONTRACT
	TYP.	TYPICAL
	U.N.O.	UNLESS NOTED OTHERWISE
	U.T.R.	UP THRU ROOF
	V.T.R.	VENT THRU ROOF
	W/, W/O	WITH, OR WITHOUT
	S.O.V	SHUT-OFF VALVE IN CONCRETE YARD BOX WITH C.I. LID
	SV	SEISMIC GAS SHUT-OFF VALVE
	FR.	FROM

ENERGY REQUIREMENTS NOTES:

1. CONTRACTOR SHALL PROVIDE STATEMENTS INDICATING THAT THE INSTALLED DEVICES CONFORM TO THE STATE OF CALIFORNIA APPLIANCE STANDARDS, CHAPTER 2-53 OF THE TITLE 24, AND THESE PLANS AND SPECIFICATIONS.
2. CONTRACTOR SHALL PROVIDE THE OWNER WITH A LIST OF THE DOMESTIC WATER HEATING SYSTEMS AND THE FEATURES, COMPONENTS, AND MECHANICAL DEVICES INSTALLED, AND ALSO PROVIDE INSTRUCTIONS ON HOW TO USE THESE DEVICES EFFICIENTLY.
3. WATER HEATERS SHALL BE CERTIFIED AND LISTED BY THE CALIFORNIA ENERGY COMMISSION.
4. RESISTANCE OF R-3. SUCH INSULATON SHALL BE 1" THICKNESS FOR 2" AND LESS DIAMETER PIPING AND 1-1/2" THICKNESS FOR 2-1/2" AND GREATER DIAMETER PIPING.
5. LAVATORY FAUCETS AND SINKS SHALL MEET THE FLOW REQUIREMENTS OUTLINED IN THE APPLIANCE EFFICIENCY STANDARDS.
6. CLEARANCES TO BE PER MANUFACTURER'S LISTINGS ON ALL MECHANICAL AND ELECTRICAL EQUIPMENT.
7. CAULK PLUMBING PENETRATIONS BETWEEN WALL SOLEPLATES, FLOORS, AND ALL OTHER PIPE OPENINGS IN THE BUILDING.

GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC TO THE EXTENT THAT SOME ITEMS ARE SHOWN ON PLANS IN A MANNER TO PROVIDE CLARITY. ACTUAL FIELD ROUTING AND INSTALLATION SHALL BE PROVIDED IN COORDINATION WITH OTHER TRADES, FIELD CONDITIONS, AND TO PROPERLY INTERFACE WITH STRUCTURE AND OTHER SYSTEMS TO ACCOMPLISH THE INTENT OF THIS OF THIS DESIGN. LOCATION OF OVERHEAD PIPING MAY VARY, PROVIDED PIPE SIZES INDICATED ARE ADHERED TO. COORDINATE LOCATIONS OF ALL FIXTURES, ACCESS PANELS, AND OTHER VISIBLE ITEMS WITH ARCHITECT. FIELD VERIFY ALL DIMENSIONS, LOCATIONS, AND CONDITIONS PRIOR TO COMMENCEMENT OF WORK AND ORDERING OF MATERIALS. MAKE ALL ACCOMMODATIONS NECESSARY TO PROVIDE PROPER AND FULLY FUNCTIONING SYSTEMS AS INTENDED BY THESE DRAWINGS AND SPECIFICATIONS.
2. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES.
3. ALL SOIL AND WASTE DRAIN PIPING SHALL HAVE A MINIMUM 1/4" PER FOOT SLOPE. U.N.O.
4. COORDINATE ALL WORK SHOWN ON THESE SHEETS WITH MECHANICAL, ELECTRICAL, CIVIL, STRUCTURAL, AND ARCHITECTURAL SHEETS, AS WELL AS ALL OTHER TRADES.
5. THE LOCATION AND ELEVATION OF ALL PLUMBING PIPING SHALL BE VERIFIED AND COORDINATED WITH ALL OTHER TRADES, STRUCTURAL CONDITIONS AND BUILDING CONSTRUCTION PRIOR TO START OF INSTALLATION.
6. ALL BARRIER FREE DIMENSIONS SHALL MEET CURRENT APPLICABLE GOVERNING CODES. LOCATIONS SHOWN ARE APPROXIMATE. REFER TO ARCHITECTURAL PLANS FOR ALL LOCATION AND ROUGH-IN DIMENSIONS.
7. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING FIXTURES, DRAINS AND EQUIPMENT.
8. REFER TO ARCHITECTURAL FINISH SCHEDULE FOR FLOOR FINISHES FOR TYPICAL SETTINGS OF FIXTURES.
9. COORDINATE AND VERIFY WITH STRUCTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL GRADE BEAMS AND FOOTINGS. PROVIDE AND INSTALL SLEEVES ABOVE OR BELOW FOOTINGS AS REQUIRED IN ACCORDANCE WITH ALL REQUIREMENTS OF STRUCTURAL PLANS. OBTAIN STRUCTURAL ENGINEER'S PRIOR APPROVAL FOR ANY REQUIRED SLEEVING NOT MEETING CONDITIONS INDICATED ON STRUCTURAL PLANS/SLEEVING DETAILS.
10. COORDINATE AND VERIFY ALL LOCATIONS, SIZES AND ELEVATIONS OF ALL SLEEVES THROUGH SLABS AND FOOTINGS WITH STRUCTURAL ENGINEERING PRIOR TO STARTING INSTALLATION OF THE PLUMBING SYSTEM.
11. ALL WALL CLEANOUTS, TRAP PRIMERS AND WATER HAMMER ARRESTORS SHALL BE LOCATED ABOVE THE FLOOD RIM LEVEL OF FIXTURES SERVED. U.N.O.
12. ALL VALVES, COCKS, WALL CLEANOUTS, WATER HAMMER ARRESTORS, AND TRAP PRIMERS SHALL BE PROVIDED WITH FLUSH MOUNTED VANDAL PROOF STAINLESS STEEL ACCESS PANELS INSTALLED IN A READILY ACCESSIBLE LOCATION.
13. WHERE TRAP PRIMERS ARE INDICATED ON PLANS, CONTRACTOR SHALL ROUTE 1/2" TYPE "L" COPPER TUBE FROM TRAP PRIMER, DOWN TO BELOW FINISHED FLOOR AND ACROSS FLOOR AT A MINIMUM 1/4" PER FOOT SLOPE TO CONNECTION TO FLOOR DRAIN.
14. ALL VENTS THROUGH ROOF SHALL BE 10'-0" MINIMUM AWAY FROM ANY FRESH AIR INTAKE OR WINDOW.
15. PROVIDE STOP VALVES ON ALL DOMESTIC WATER SUPPLY PIPING TO FIXTURES AT EACH FIXTURE LOCATION.
16. LAVATORIES SHALL DELIVER A MAXIMUM OF 0.5 GPM FLOW AT A MAXIMUM TEMPERATURE OF 110°F
17. PROVIDE ALL NECESSARY EQUIPMENT, ACCESSORIES AND INSTALLATION PROCEDURES, PER MANUFACTURER'S RECOMMENDATIONS TO ENSURE FULL AND PROPER FUNCTIONING OF SYSTEMS DESCRIBED IN THESE DRAWINGS, AND MAKE FIELD ADJUSTMENTS AS REQUIRED. ALL SUCH ADJUSTMENTS AND ACCESSORIES SHALL BE PROVIDED AT NO EXTRA COST TO OWNER.
18. VERIFY AND COORDINATE TO ENSURE ADEQUACY OF INVERT ELEVATIONS AT ALL POINTS OF CONNECTION AND AREAS OF INTERFACE WITH STRUCTURE PRIOR TO ORDERING OF MATERIALS AND INSTALLATION.
19. INSTALL ALL ACCESS PANELS WITHIN TOILET ROOMS, SO AS NOT TO CONFLICT WITH ANY TOILET ACCESSORIES, GRAB BARS, ETC.
20. WHENEVER SPECIFICATIONS OR DRAWING ITEMS ARE SPECIFIED, NOTED OR DRAWN WITH MULTIPLE AND/OR CONFLICTING REQUIREMENTS, THE MOST STRINGENT REQUIREMENTS SHALL APPLY. (TYP.)
21. CONTRACTOR SHALL INSTALL ALL PLUMBING PIPING AS SHOWN ON PLANS. ALL SUCH PIPING SHALL BE COORDINATED WITH MECHANICAL DUCT WORK, EQUIPMENT AS WELL WITH OTHER TRADES PRIOR TO COMMENCEMENT OF WORK. WHERE CONFLICTS OCCUR WITH MECHANICAL OR OTHER TRADES, CONTRACTOR SHALL PROVIDE AND INSTALL NECESSARY PIPING, FITTINGS, COMPONENTS, AND REROUTE PIPING IN SUCH A MANNER TO AVOID INTERFERENCE WITH ALL TRADES.
22. CONTRACTOR SHALL INSTALL ALL PLUMBING PIPING AS SHOWN ON PLANS. ALL SUCH PIPING SHALL BE COORDINATED WITH MECHANICAL DUCT WORK, EQUIPMENT AS WELL WITH OTHER TRADES PRIOR TO COMMENCEMENT OF WORK. WHERE CONFLICTS OCCUR WITH MECHANICAL OR OTHER TRADES, CONTRACTOR SHALL PROVIDE AND INSTALL NECESSARY PIPING, FITTINGS, COMPONENTS, AND REROUTE PIPING IN SUCH A MANNER TO AVOID INTERFERENCE WITH ALL TRADES.
23. ALL EQUIPMENT, PIPING, AND DUCTWORK SHALL BE SEISMICALLY SECURED TO THE STRUCTURE IN COMPLIANCE WITH CALIFORNIA TITLE 24 AND SMACNA SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL SYSTEMS, LATEST EDITION.
24. ALL BRACING OF DUCTWORK AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL SYSTEMS, LATEST EDITION. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL, STRUCTURAL, AND JOB SITE INSPECTOR. A COPY OF THE GUIDELINES AS PUBLISHED BY SMACNA (LATEST EDITION) SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB SITE AT ALL TIMES (TYP.)
25. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

FIRE SPRINKLER/SERVICE NOTES:

1. UNDERGROUND FIRE LINES WILL BE TERMINATED 6" ABOVE FINISH FLOOR PER CIVIL & BUILDING DATA.
2. DEFERRED ABOVE GROUND FIRE SPRINKLER SYSTEM PIPING. COMMENCING AT 6" ABOVE FINISHED FLOOR AND EXTENDING THROUGH STRUCTURE TO INCLUDE ATTACHED INTERIOR WALKS, CORRIDORS, BALCONIES, STAIRS AND ELEVATORS.
3. PLANS SHALL BE DESIGNED BY THE "INSTALLING" CONTRACTOR (C16, C34, 36 OR GENERAL ENGINEERING CONTRACTOR [A]) OR BY A REGISTERED PROFESSIONAL ENGINEER (CIVIL, MECHANICAL, OR FIRE PROTECTION). LICENSED BY THE STATE OF CALIFORNIA (BOARD OF PROFESSIONAL ENGINEERES). (BUSINESS & PROFESSIONAL CODE).
4. INSTALLATION SHALL BE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS "APPROVED" BY THE AUTHORITY HAVING JURISDICTION (AHJ'S). (NFPA-24,1.4)
5. INSTALLATION WORK SHALL BE PERFORMED BY FULLY EXPERIENCED AND RESPONSIBLE PERSONS. (NFPA-24,1-5)
6. FIRE DEPARTMENT CONNECTION HOSE CONNECTIONS SHALL BE OF AN APPROVED TYPE, PROPERLY SUPPORTED, AND LOCATED, WITHOUT INTERFERENCE FROM NEARBY OBSTRUCTIONS AND ON THE STREET SIDE OF THE BUILDING(S) WHERE APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ'S). (HFPA-24, 2-6)
7. FIRE DEPARTMENT CONNECTION(S) SHALL BE IDENTIFIED BY A SIGN HAVING RAISED LETTERS AT LEAST 1" IN SIZE. CAST ON A PLATE OF FITING ("AUTO SPRK", "OPEN SPRK", "STANDPIPE"). ETC. (NFPA-24, 7-1.1)
8. PIPING SHALL BE "LISTED" FOR THE PROTECTION SERVICE AND COMPLY WITH AWWA STANDARDS. WHERE APPLICABLE. (NFPA-24, 7-4)
9. FITTINGS SHALL BE OF AN "APPROVED" TYPE. (NFPA-24, 7-4)
10. ALL CONTROL VALVES SHALL BE "LISTED" INDICATING TYPE UNLESS A NON INDICATING VALVE, SUCH AS AN UNDERGROUND GATE VALVE WITH APPROVED ROADWAY BOX COMPLETED WITH T-WRENCH, IS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION (AHJ'S). (NFPA-24. 3-1.1)
11. POST INDICATING VALVES (PIV) SHALL BE TESTED TO ENSURE THAT THE "TARGETS" (OPEN, CLOSED) ARE CLEARLY IDENTIFIED WHEN VALVE IS OPEN AND CLOSED. (NFPA-24 3-1.1)
12. ALL TECS, PLUGS, CAPS, BENDS AND HYDRANT ON PIPE INSTALLED UNDERGROUND SHALL BE RESTRAINED (PIPE CLAMPS, AND TIE RODS, THURST BLOCKS, LOKED MECHANICAL OR PUSH-ON METHODS) AGAINST MOVEMENT. (NFPA-24. 8-7.1)
13. DEPTH OF COVER OF PIPING SHALL BE 36-INCHES (MINIMUM) UNDER DRIVEWAYS AND 48-INCHES (MINIMUM) UNDER RAILROAD TRACKS. (IN NO CASE LESS THAN 1 FT. BELOW THE FROST LINE.) (NFPA-24, 8-7.1)
14. THE TRENCH SHALL BE BACKFILLED BETWEEN JOINTS BEFORE PRESSURE TESTING TO PREVENT MOVEMENT OF PIPE. (NFPA-24, 8-9.2)
15. BACKFILL SHALL BE WELL TAMPED IN LAYERS, NO ASHES, CINDERS, REFUSE ORGANIC OR OTHER CORROSIVE MATERIALS SHALL BE USED AS BACKFILL MATERIAL. (NFPA-24, 8-9.2)
16. ALL UNDERGROUND PIPING MUST BE FLUSHED AT A MINIMUM WATER DEMAND RATE OF THE SYSTEM, OR WHEN SUCH RATE IS NOT VERIFIED OR MET, PIPING SHAL BE FLUSHED AT THE MAXIMUM FLOW RATE AVAILABLE TO THE SYSTEM UNDER FIRE CONDITIONS. (NFPA-24, 8-8.2)
17. ALL NEW PRIVATE FIRE SERVICE MAINS SHALL BE HYDROSTATICALLY TESTED AT NO LESS THAN 200 PSI PRESSURE FOR TWO HOURS, OR AT 50-PSI IN EXCESS OF 150-PSI. (NFPA-24, 8-9.3.1)
18. TEST SHALL BE MADE BY THE INSTALLING CONTRACTOR IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION (AHJ'S) SHOULD MAKE IT KNOWN IF THEY DESIRE TO BE PRESENT. (NFPA-24, 8-9.3.4)
19. THIS INFORMATION INDICATED ON THE DRAWINGS IS TO DEFINE DESIGN INTENT & MAKE AWARE OF THE PROVISIONS FOR THE ACCOMMODATION OF THE FIRE SPRINKLER SYSTEM BY OTHER TRADES.
20. VERIFY ALL COSTS & RELATED ITEM WITH THE FIRE SPRINKLER SYSTEM DESIGN & INSTALL SUB-CONTRACTOR PRIOR TO SUBMISSION OF BID.
21. NFPA 13 SECTION 10.6.1 PROHIBITS PIPES UNDER BUILDING. IF PIPE MUST BE INSTALLED UNDER BLDG, PROVIDE PIV'S AT BOTH SIDES OF PIPES (NFPA 13/10.6.2).
22. PROVIDE SPRINKLERS ABOVE ALL ATTICS/CEILING (SPEC. 15300/1.01.B). PROVIDE SPRINKLERS IN LUCNH PAVILION AND ELEVATOR BOTTOM PIT.
23. PROVIDE ONE CONTROL VALVE AND FLOW SWITCH PER FLOOR/ZONE.
24. WHERE FIRE SUPPLY PIPING OCCURS UNDER BUILDING PROVIDE PIV'S ON BOTH SIDES OF PIPE.
   * ALL PROJECTIONS GREATER THAN 3' SHALL BE SPRINKLER PROTECTED.
   * MINIMUM DESIGN AREA 1500 SQ. FT. (ASSESS BLDG DATA).
   * ASSESS PROVISIONS FOR SPECIAL TYPE SPRINKLERS.

A) ORDINARY I DESIGN SHALL APPLY TOO: ROUTES UTILIZED TO TRANSPORT MATERIALS DEFINED AS HAZARDOUS; KITCHEN; LIBRARIES; PARKING GARAGE (NOT UNDER BLDG'S); JANITOR; STORAGE; ELECTRICAL; MECHANICAL ROOMS / AREAS.

B) ORDINARY II DESIGN SHALL APPLY TOO: STAGES (INCLUDE ACCESSORY AREA); LARGE STACK ROOMS LIBRARIES; AUTO SHOP; WELDING SHOP; SCIENCE & LABORATORIES (RECOMMEND ROUTES UTILIZED FOR MATERIALS DEFINED AS HAZARDOUS); PARKING GARAGES (UNDER BLDG'S).

San Gabriel Unified School District

408 Junipero Serra
San Gabriel, CA 91776

IBI GROUP

ARCHITECTS ENGINEERS PLANNERS

ARCHITECT:
IBI Group
18401 Von Karman Avenue, Suite 110
Irvine, California 92612
Phone 949-833-5588
Fax 949-833-5511

STRUCTURAL ENGINEER:
Martin, Chow & Nakabara, Inc.
3185-C Airway Avenue
Costa Mesa, CA 92626
Phone 714-979-3003
Fax 714-979-3259

MECHANICAL ENGINEER:
Fundament & Associates
26 Executive Park #100
Irvine, CA 92614
Phone 949-251-1131
Fax 949-251-9434

ELECTRICAL ENGINEER:
FBA
3420 Irvine Avenue, Suite 200
Newport Beach, CA 92660-3189
Phone 949-852-9995
Fax 949-852-1657

CIVIL ENGINEER:
Snipes-Dye Associates
8348 Center Drive, Suite G
La Mesa, CA 91942-2910
Phone 619-697-9234
Fax 619-460-2033

LANDSCAPE ENGINEER:
IBI Group
10 Exchange Place- Suite 112
Salt Lake City UT 84111 USA
Phone 801-532-4233
Fax 801-532-4231

REGISTERED PROFESSIONAL ENGINEER ★ PAULO FUNDAMENT ★ No. 24311 ★ MECHANICAL ★ STATE OF CALIFORNIA

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LICENSED ARCHITECT ★ KEVIN S. FLEMING ★ NO. C36668 ★ 08-31-11 RENEWAL DATE ★ STATE OF CALIFORNIA

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Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and the Architect shall be informed of any variations from the dimensions and conditions show on the drawing. Shop drawings shall be submitted to the Architect for approval before proceeding with fabrication.

Del Mar High School

312 Del Mar Ave
San Gabriel, CA 91776

PLUMBING GENERAL NOTES, LEGENDS, & ABBREVIATIONS

Project Number	20318
Date	FEBRUARY, 2010
Drawn By	CR
Checked By	EM
P0.1	
Scale	NONE