MAINTENANCE ORDINARY UPKEEP - PLUMBING AND FINISHES REPAIR WORK (NOT AN ACCESSIBILITY UPGRADE) AT WILLOW CREEK CENTER 1026 MOHR LANE CONCORD CA 94519



MT DIABLO UNIFIED SCHOOL DISTRICT - CONTRA COSTA COUNTY

Insulation Interior

Intermediate

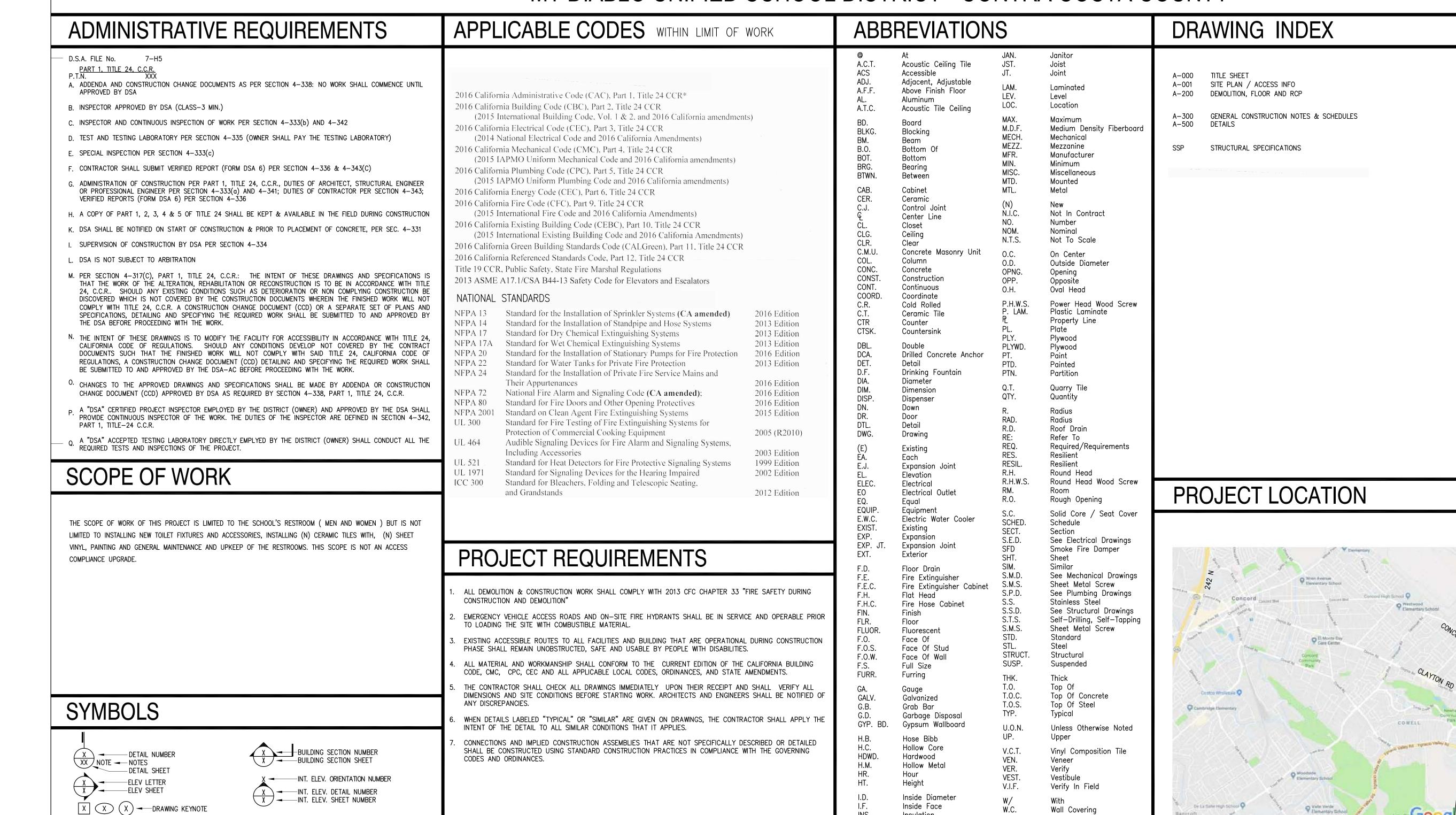
W.R.

W.S.

Water Resistant

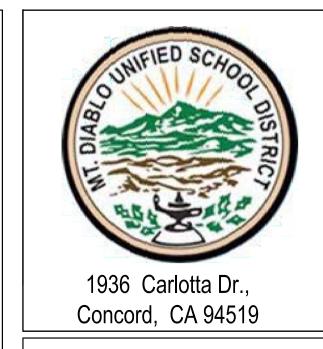
Wood Screw

Waste Receptacle



── COLUMN REF. GRID

REVISION NUMBER



ARCHITECTS, INC.

Architecture • Planning • Interiors

3211 Ronino Way
Lafayette, California 94549
925,949,8333 tel.

STRUCTURAL ENGINEER
TSA STRUCTURAL ENGINEERS
433 AIRPORT BLVD., #106E

BURLINGAME, CA 94010 TEL. (650) 620-9555

PROJECT TITLE:

MAINTENANCE WORK

PLUMBING AND FINISHES
AT STUDENTS'
RESTROOMS
WILLOW CREEK
CENTER

KEY PLANS:



| DISTRICT REVIEW | |
|-----------------|---------|
| NON DSA | |
| | |
| | |
| | |
| | NON DSA |

PHD ARCHITECTS JOB # 17-215

SCALE: AS NOTED

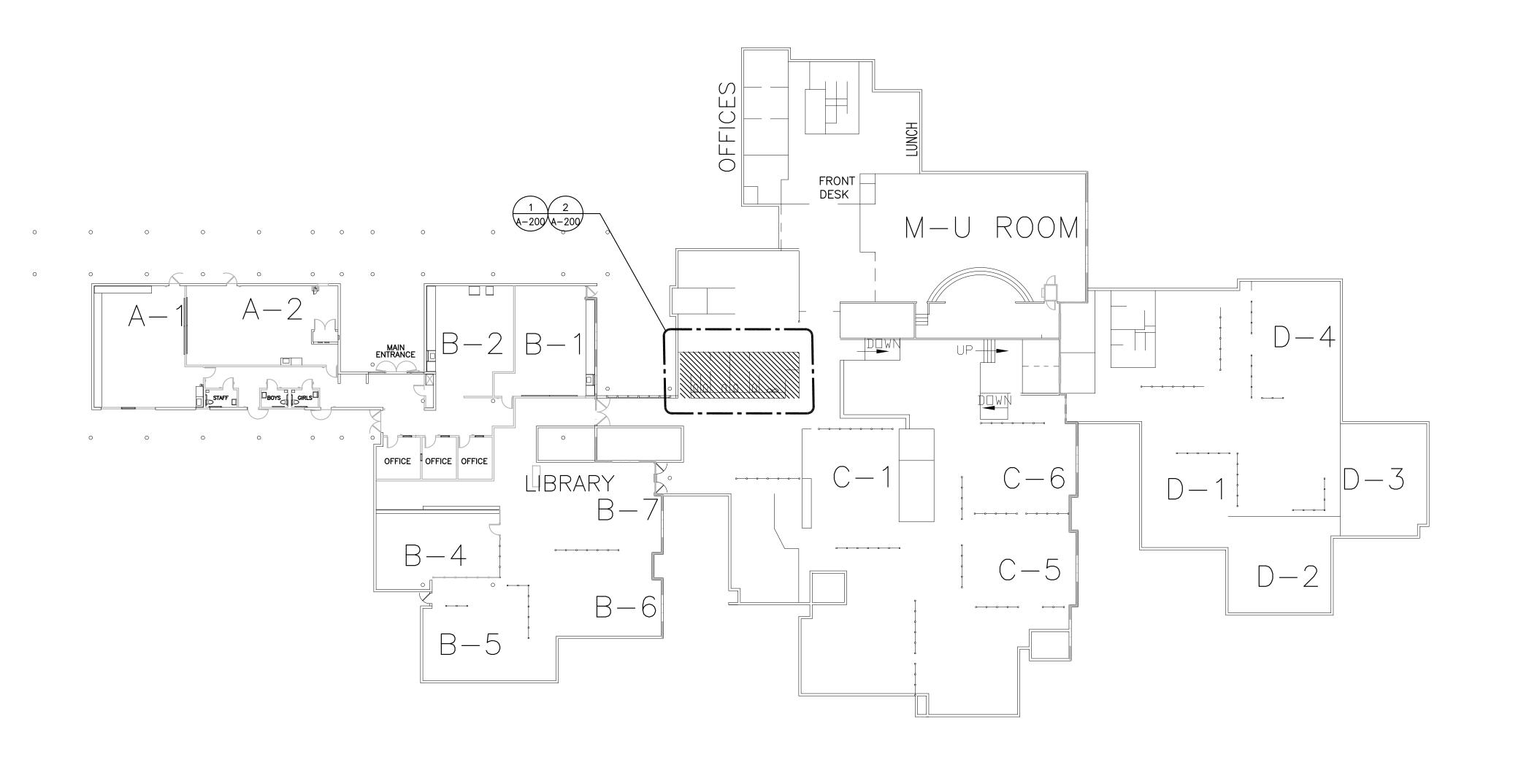
SILVERWOOD ELEMENTARY SCHOOL

SHEET NAME & NUMBER:

1/30/18

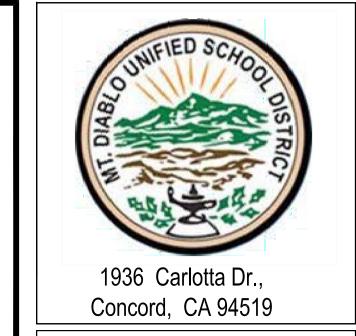
TITLE SHEET

A-000



WILLOW CREEK CENTER - EXISTING SITE PLAN

SCALE: 1"=20'-0"





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BID & CONSTRUCTION REQUIREMENTS

THE CONTRACTOR IS <u>REQUIRED</u> TO <u>VERIFY</u> IN <u>FIELD</u> ACTUAL EXISTING EXPOSED CONDITION AND EXTENT OF DEMOLITION AND CONSTRUCTION REQUIRED TO PERFORM THE JOB PRIOR TO BID — NOT ALL EXISTING CONDITIONS ARE SHOWN ON THE

THE ABOVE IS APPLICABLE FOR THE EXTERIOR AND THE INTERIOR OF THE BUILDING WITHIN THE AREA OF THE SCOPE OF WORK.

IT IS UNDERSTOOD THAT THESE APPROVED DRAWINGS ARE SHOWING THE INTENT OF THE SCOPE OF WORK AND ASSUMPTIONS HAVE BEEN MADE. CONTINGENCY FOR REMOVAL/RE-ROUTNG. RE-CONSTRUCTING, RE-SIZING EXISTING INTERIOR & EXTERIOR UTILITY LINES SUCH AS (<u>BUT NOT LIMITED TO</u>) GAS, SEWER, WATER, DRAINS, CLEAN—OUTS, WALL & CEILING MOUNTED FIRE ALARM EQUIPMENT, MONITOR DEVICES & SENSORS, LIGHTING FIXTURES & EQUIPMENT, ELECTRICAL BOXES, PLUGS & SWITCHES AND RELATED CABLES & CONDUITS (CONCEALED AND NOT) MUST BE INCLUDED ON THE BASE BID.

THE DISTRICT HAS MADE AVAILABLE ALL AS—BUILT INFORMATION FOR THE CONTRACTOR TO ASSES SCOPE AS ACCURATE AS POSSIBLE PRIOR TO FINAL BID.

WITH THE ABOVE THE CONTRACTOR IS ADVISED AND AGREES THAT THE DISTRICT WILL NOT NEGOTIATE ADDITIONAL COMPENSATIONS ON ITEMS NOT SHOWN ON THE DRAWINGS BUT, VISIBLE AND/OR EXPOSED AND REASONABLY ASSUMED FROM THE PROJECT SCOPE AND OBVIOUSLY REQUIRED TO BE PERFORMED IN ORDER TO ATTAIN A COMPLETE AND FINISHED PRODUCT

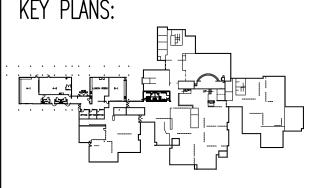
RESTROOMS WILLOW CREEK CENTER KEY PLANS:

MAINTENANCE WORK

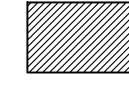
PLUMBING AND FINISHES

AT STUDENTS'

PROJECT TITLE:



SHEET LEGEND



SCOPE OF WORK

NO WORK IS PROPOSED IN (E) BUILDING

(E) FIRE HYDRANT

(E) PROPERTY LINE

_____ × _____ (E) CHAIN LINK FENCE

REVISIONS: description
DISTRICT REVIEW symbol NON DSA 3/14/2018

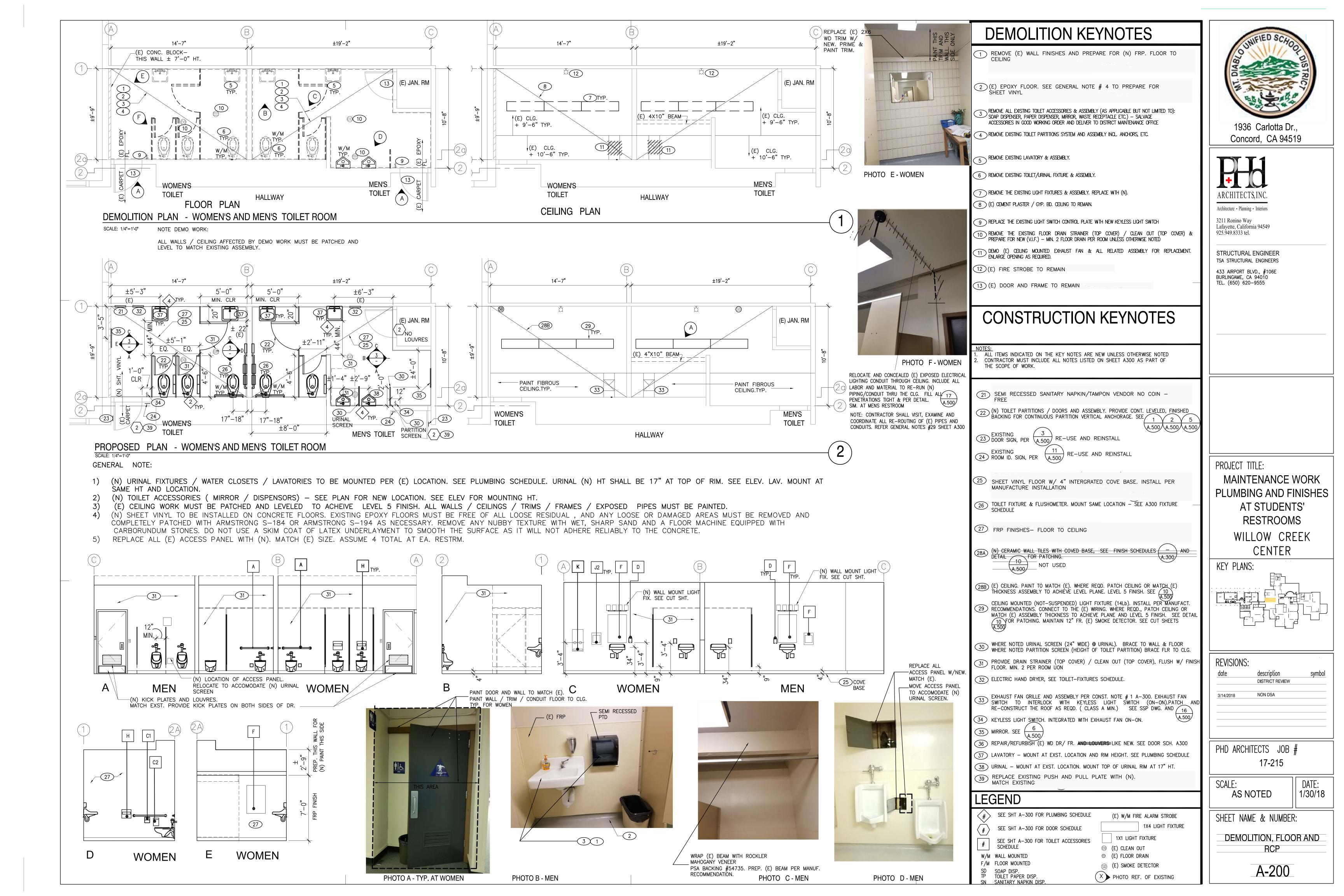
PHD ARCHITECTS JOB # 17-215

SCALE: AS NOTED 1/30/18

SHEET NAME & NUMBER:

SITE PLAN / ACCESS INFO.

A-001



CONSTRUCTION NOTES **GENERAL NOTES**

- THE DISTRICT ASSUMES THAT ALL THE NOTES & SCOPE LISTED ON THIS SHEET HAVE BEEN UNDERSTOOD, AGREED, INCORPORATED INTO THE BID PROPOSAL AND ALL WORK LISTED HAS BEEN INCLUDED. IF THE CONTRACTOR DOES NOT AGREE WITH ANY OF THESE NOTES HE MUST NOTIFY THE DISTRICT, IN WRITING, PRIOR <u>TO BID.</u> NOTE: ALL LISTED SCOPE OF WORK IS INTENDED AS "COMPLETE" THEREFORE THE CONTRACTOR MUST INCLUDE IN THIS BID ALL LABOR & MATERIAL (& ASSEMBLY) NECESSARY TO ATTAIN THE FULL INTENT OF THE LISTED SCOPE (FROM THE DEMOLITION THROUGH THE FINISHED (READY TO USE) CONSTRUCTION.
- THIS SET OF DRAWINGS SHOWS ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL & FIRE ALARM SCOPE & SCOPE-NOTES. THE GENERAL CONTRACTOR IS ADVISED THAT THE DRAWINGS ARE NOT DIVIDED BY TRADES.
- ALL SALVAGED ITEMS ARE TO BE DELIVERED TO THE DISTRICT MAINTENANCE & OPERATIONS'S YARD OFFICE.
- ALL EXISTING FIRE ALARM DEVICES (& RELATED ASSEMBLY) SUCH AS (BUT NOT LIMITED TO) SMOKE & HEAT DETECTORS THAT ARE TO REMAIN MAY REQUIRE TO BE TEMPORARILY DISCONNECTED & REINSTALLED AS PART OF THE SCOPE. THE CONTRACTOR MUST INCLUDE ALLOWANCE (FOR EVERY ROOM) TO EXTEND 10' THE FIRE ALARM WIRING AND UNIT.
- THE CONTRACTOR IS RESPONSIBLE, AS PART OF THE COMPLETE SCOPE, TO REINSTALL/RELOCATE, AS REQUIRED, ALL THE PREVIOUSLY DISCONNECTED AND/OR REMOVED ITEMS CEILING/WALL/FLOOR MOUNTED ITEMS (SUCH AS, BUT NOT LIMITED TO, ELECTRICAL CONDUITS & CABLES & WIRES, FIRE ALARM/SECURITY/LIGHTING MOTION SENSORS AND BOXES, LIGHTING FIXTURES, PIPING ETC.) AS PER THE ORIGINAL CONDITION (PROVIDED THAT ORIGINAL CONDITION WAS CONFORMING WITH STATE CODES AND STANDARDS). INCLUDE TEST FOR PROPER OPERATION (IN CASE OF FIRE ALARM EQUIPMENT) WHICH MUST BE PERFORMED BY A EST3 CERTIFIED TECHNICIAN W/ A CALIFORNIA STATE FIRE ALARM TECHNICIAN CARD.
- ASSUMPTIONS HAVE BEEN MADE CONCERNING EXPOSED AND CONCEALED CONDITIONS. WORK WHICH IS NOT SHOWN ON THE DRAWINGS, BUT COULD BE REASONABLY ASSUMED FROM THE PROJECT SCOPE AND THE REQUIRED EXAMINATION OF THE EXISTING SITE CONDITIONS, AND IS OBVIOUSLY REQUIRED TO BE PERFORMED IN ORDER TO ATTAIN A COMPLETE AND FINISHED PRODUCT, SHALL BE PERFORMED BY THE CONTRACTOR WITHOUT ADDED COST TO THE OWNER. FOLLOW THE BID REQUIREMENTS NOTED ON SHEET A-001.
- THE CONTRACTOR IS RESPONSIBLE TO CLEAN AND KEEP CLEAN ALL AREAS OF THE WORK EVERY DAY. NO TRASH PILES SHALL ACCUMULATE AT ANY TIME.
- 10. THE SCOPE OF WORK (& INTENT OF THE DRAWINGS) IS TO INCLUDE ALL LABOR, MATERIAL & PARTS (INCLUDING FIXTURES & EQUIPMENT, PARTS, CONNECTIONS & LABOR) AS PART OF THE SCOPE TO ATTAIN A COMPLETE & FINISHED JOB.
- THE LOCATION OF THE EXISTING UTILITIES WAS ESTABLISHED FROM BEST AVAILABLE INFORMATION. ASSUME THAT THIS INFORMATION IS APPROXIMATE. IT IS THE CONTRACTOR RESPONSIBILITY TO VERIFY & EXAMINE THE AVAILABLE AS-BUILT DISTRICT RECORDS AS WELL AS THE SITE FOR THE EXACT LOCATION & CONDITIONS BEFORE BID, AS REQUIRED BY THE BID DOCUMENTS.
- 12. COORDINATE ALL WORK LISTED ON THESE DRAWINGS WITH ALL TRADES AND CONTRACTORS.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRENCHING, BACKFILLING, RE-PAVING, AND RESTORATION OF THE EXISTING SURFACES AS A RESULT OF THE NEW WORK.
- 14. BID & CONSTRUCTION REQUIREMENTS NOTES: SEE SHEET A-001 SITE PLAN / ACCESS INFO.
- 15. THE CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING EXTERIOR CONCRETE & SOFTSCAPES PAVING. ANY DAMAGE TO THE (E) PAVING DUE TO EQUIPMENT, TRUCKS OR STORED MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS ADVISED THAT PLAYGROUND PAVING GENERALLY IS NOT OF SUFFICIENT THICKNESS TO WITHSTAND REPEATED OR CONCENTRATED LOADING FROM HEAVY TRUCKS OR EQUIPMENT.
- ALL DIMENSIONS NOTED ON THE FLOOR PLANS MUST BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION, DO NOT SCALE DIMENSIONS FROM ANY DRAWINGS. NO TOLERANCES ARE ALLOWED. NOTIFY ARCHITECT OF ANY DISCREPANCY, PRIOR TO START THE WORK.
- PROTECT AREAS ADJACENT TO THE WORK-AREA. PATCH & REPAIR (TO ORIGINAL CONDITION) ALL DAMAGED AREAS AS A RESULT OF THE WORK, INCLUDING WALLS/ROOMS IN THE ADJACENT ROOMS.
- EVERY TOILET-ROOM WORK INCLUDES EXTENSIVE DEMOLITION & RECONSTRUCTION IN THE ADJACENT MECHANICAL/ELECTRICAL ROOMS DUE TO THE SHARED WALL WHICH HOSTS TOILETS CARRIAGES (& ASSEMBLIES), URINALS' ASSEMBLIES, WATER, SEWER & VENTING PIPING. THE CONTRACTOR MUST INCLUDE IN THE BASE BID ALL DEMOLITION, SHORING, CONSTRUCTION & PATCHING WORK ASSOCIATED WITH THIS ROOM.
- 19. THE WORK SHOWN ON THE DRAWINGS SHOWS THE INTENT OF THE SCOPE AND MAY NOT REFLECT THE ACTUAL AMOUNT/LOCATION OF DEMOLITION & RE—CONSTRUCTION REQUIRED. ACTUAL CONDITIONS MAY REQUIRE ADDITIONAL CEILING, WALL & FLOOR ASSEMBLY DEMOLITION/CONSTRUCTION AND/OR CONCEALED/EXPOSED PLUMBING, SEWER, ELEC./FIRE ALARM LINES (ETC.) TO BE DEMOLISHED AND/OR TEMPORARILY REMOVED (AND RECONSTRUCTED) TO PERFORM THE WORK. PER DISTRICT BIDDING DOCUMENTS FIELD & AVAILABLE AS-BUILT DRAWINGS SHOULD BE EXAMINED PRIOR TO BID BY THE CONTRACTOR.
- . SCOPE CONDITIONS MAY REQUIRE THE CONTRACTOR TO DISCONNECT & RELOCATE (WITHIN 20' MAX.) EXISTING CEILING/WALL MOUNTED ITEMS (SUCH AS, BUT NOT LIMITED TO, ELECTRICAL CONDUITS/CABLES/WIRES. FIRE ALARM/SECURITY/LIGHTING MOTION SENSORS & BOXES, LIGHTING FIXTURES, ETC.) IN THE RESTROOMS OR IN THE MECHANICAL ROOMS. (THIS WORK MAY REQUIRE THE TEMPORARY DISCONNECT). INCLUDE COST ALLOWANCE IN YOUR BID.
- ASSUME THAT ALL EXISTING WALLS (WITHIN THE SCOPE OF WORK) HAVE INTERIOR DIAGONAL SHEETING (WOOD SLATS). IF DEMO. WILL REQUIRE CUTTING THE DIAGONAL SHEETING FOR MORE THAN 4'X6' TO RELOCATE A TOILET FIXTURE REQUEST DIRECTIONS TO PROCEED TO THE MDUSD CONSTRUCTION MANAGER, OTHERWISE PATCH/REPAIR 4'X6' OPENING WITH BLOCKING & STRUCTURAL PLYWOOD (MATCH THICKNESS).
- INCLUDE IN THE BASE BID COMPLETE LABOR & MATERIALS TO RUN ALL EXISTING CONDUITS & WIRING INSIDE THE WALLS & CEILINGS. INCLUDE: CUTTING THROUGH THE PLASTER AND/OR PLYWOOD AND/OR GYP. BD.; NOTCHING STUDS AND/OR JOISTS; ANCHORING THE CONDUITS; PATCHING & PAINTING; NEW CONDUITS & WIRES (±30 LF MIN.); REPLACING & INSTALLING NEW J-BOXES & ASSEMBLIES AS REQUIRED.

DEMOLITION NOTES

- ASBESTOS NOTE: REQUEST ASBESTOS INFORMATION REGARDING THIS PROJECT TO THE MDUSD PRIOR TO BID.
- SALVAGE ALL EXISTING LAVATORIES & ACCESSORIES (SOAP DISPENSERS, GRAB BARS, ETC.) & ALL FAUCETS AND FLUSHOMETERS FOR DISTRICT REUSE, UNLESS OTHERWISE DIRECTED BY THE MDUSD CM.
- INCLUDE IN THE BASE BID ALL DEMOLITION REQUIRED TO INSTALL NEW WALL BACKING AND FIXTURE CARRIER, AS DESCRIBED IN THE CONSTRUCTION NOTES FOR ALL FIXTURES, EQUIPMENT AND PARTITIONS.
- INCLUDE IN THE BASE BID 20% (MEASURED WITHIN THE PERIMETER OF THE ROOM) OF STUD/SILL DEMO. DUE TO
- DRY-ROT (INCLUDE ALL <u>DEMO</u> REQUIRED INCLUDING CUTTING OF THE ROTTED STUD/SILL & DRY-WALL).
- REMOVE, FOR REPLACEMENT (LIKE FOR LIKE) ALL EXISTING LIGHT-SWITCHES & PLUGS.

TOILET

PAPER

DISP.

FLOOR ASSEMBLY DEMOLITION: THE EXISTING CONCRETE FLOOR ASSEMBLY (INCLUDING THE GROUT BED) VARIES. EXISTING GROUT CAN BE BETWEEN 4" TO 6" THICK AND SLAB BETWEEN 8" TO 18" THICK. THE CONTRACTOR MUST CONSULT THE AVAILABLE AS-BUILT DRAWINGS TO GET ACTUAL CONDITION. NO CHANGE ORDER WILL BE AWARDED IF EXISTING CONDITIONS ARE SHOWN ON THE AVAILABLE MDUSD AS-BUILT DRAWINGS.

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INCLUDE IN THE BASE BID THE COMPLETE WORK (DEMOLITION, CONSTRUCTION, INSTALLATION, ETC.) OF THE (ATTIC MOUNTED) EXHAUST FAN UNIT AND COMPLETE WIRING; SEE CONSTRUCTION NOTE #27.

- INCLUDE IN THE BASE BID THE REPLACEMENT (WITH NEW) OF ALL EXTERIOR DOOR THRESHOLDS.
- ALL DOORS AND FRAMES ARE TO BE REPLACED WITH NEW FRP DOORS & METAL FRAMES. VERIFIED IN 29. FIELD EXACT DOOR, OPENING & SIZE AND PRIOR TO ORDERING FINAL PRODUCT. LISTED DOOR & FRAME DIMENSIONS ARE ROUNDED TO NEAREST WHOLE NUMBER.
- WALLS & CEILINGS: THE DISTRICT EXPECTS STRAIGHT LEVELED (& PLUMB) WALLS & CEILINGS WITHIN THE AREA OF WORK. THE CONTRACTOR MUST INCLUDE IN THE BASE BID THE WORK NECESSARY TO OBTAIN STRAIGHT VERTICAL/HORIZONTAL SURFACES (WALLS & CEILINGS), INCLUDING AT CORNERS. THE CONTRACTOR IS WARNED THAT UN-LEVELED/UN-STRAIGHT/UN-PLUMB SURFACES WILL BE REJECTED AND REQUESTED TO BE REDONE BY THE DISTRICT.
- CERAMIC TILE NOTE: THE DISTRICT REQUIRES STRAIGHT & PLUMB TILE—SETS WITH EQUAL GROUT LINES, PARTICULARLY ON THE CORNERS. UNSATISFACTORY RESULTS WILL BE REJECTED BY THE DISTRICT.
- TOILET COMPARTMENT PARTITIONS: ALL TOILET COMPARTMENT PARTITIONS (INCLUDING THE PRIVACY SCREENS) MUST BE BRACED WITH AN HORIZONTAL BRACE-SYSTEM THAT CONNECTS TO THE ADJACENT PARTITIONS TO SECURE/OBTAIN STURDINESS (TO PREVENT "WIGGLING). IF A PARTITION WILL BE PLACED IN FRONT OF A WINDOW IT MUST BE BRACED TO THE WALL BELOW THE WINDOW AND, ON THE TOP OF THE PARTITION, WITH AN HORIZONTAL BRACE SYSTEM THAT CONNECTS TO THE ADJACENT PARTITION (THE DOOR PARTITION) ON ONE SIDE AND TO THE OTHER SIDE TO THE WALL (ADJACENT TO THE WINDOW). INCLUDE ALL PROPER WALL BACKING & A FINISHED LOOK. ALL CUT-SEGMENTS OF THE BRACING SYSTEM MUST BE CAPPED & FINISHED. NO SHARP ENDS OR EDGES. ALL PARTITIONS BRACING MUST HAVE PROPER (FINISHED) BACKING TO CONTINUE STRAIGHT FROM A TILING SURFACE TO A WALL SURFACE. NOTE: THE PARTITION MANUFACTURER REPRESENTATIVE WILL INSPECT FINAL PARTITION INSTALLATION FOR DISTRICT ACCEPTANCE. NOT-PERFECT JOBS WILL BE REJECTED.
- INCLUDE IN THE BASE BID ALL NEW: DOOR CLOSER, CONTINUOUS HINGES, DOOR LOUVERS (& DOOR OPENINGS) & THRESHOLD TO ALL DOORS. LEVER HANDLES & LOCK (RESTROOMS FUNCTION) AS NOTED ON PLANS. SEE SPECIFICATIONS.
- INCLUDE IN THE BASE BID (COST ITEM) A NEW CONCRETE 7 9 DOOR LANDING INCLUSIVE OF DEMOLITION & NEW CONSTRUCTION (& REBARS) PER 7 9 AT EACH EXTERIOR DOOR.
- INCLUDE IN THE BASE BID THE PATCHING/REBUILDING OF THE INTERIOR CONCRETE FLOOR. EXISTING CONCRETE FLOOR THICKNESS VARY, INCLUDING ALLOWANCE FOR THICKENED EDGES. FOR THE EXISTING CONCRETE FLOOR CONDITIONS REFER TO THE REFERENCE ASSUMED AS-BUILT CONDITIONS DRAWINGS ATTACHED TO THE BID DOCUMENTS AND TO THE AVAILABLE MDUSD AS-BUILT DRAWINGS AS REQUIRED BY THE BID DOCUMENTS.
- INCLUDE IN THE BASE BID THE REPLACEMENT OF ALL EXISTING FLUORESCENT CEILING MOUNTED LIGHT FIXTURES WITH NEW 4' LED-LIGHTING FIXTURES. INCLUDE ALL DEMO., ELECTRICAL, INSTALLATION, 40 BACKING, FIXTURES, BRACKETS & PARTS.
- INCLUDE IN THE BASE BID, ALL REQUIRED BRACKETS (& 4X6 BLOCKING MIN. WHEN NOT SPECIFIED) TO HANG (CEILING & WALL) ALL (AS PART OF THE SCOPE OF WORK) ELECTRICAL, MECHANICAL & PLUMBING 41 FIXTURES (INCLUDING CONDUITS, CABLES, ETC.), EQUIPMENT & ALL FIRE ALARM SYSTEMS EQUIPMENT, WIRING, SENSORS, ETC.
- . INCLUDE IN THE BASE BID ALL REQUIRED BLOCKING FOR TOILET—PARTITIONS, EQUIPMENT & FIXTURES. SINKS WILL BE MOUNTED ON CONCEALED LAVATORY ARM-BRACKETS WITH $\frac{1}{2}$ -20 CARRIAGE BOLTS (ON 6X8 BLOCKING) OR STRONG-DRIVE-SCREWS (ON STUDS) AS NECESSARY. SEE CARRIER CUT SHEET, FOLLOW MANUFACTURER RECOMMENDATIONS.
- ALL NEW GYPSUM BOARD TO BE: "GOLD BOND XP GYP. BD. WITH SPORGARD".
- . ALWAYS PROVIDE GALVANIZED, PAINTED, ESCUTCHEON OR SIMILAR TO SEAL PIPING GAPS THROUGH THE CEILING, WALLS OR FLOOR - NO OPENING & ROUGH GAPS - COLORS TO MATCH ADJACENT WALL/CEIL.
- INCLUDE IN THE BASE BID ALL NEW SIGNAGE (DOOR & WALLS) WITH TAMPER-PROOF SCREWS. INCLUDE THE PATCHING AND PAINTING AROUND THE OLD SIGNAGE AS REQUIRED.
- INCLUDE IN THE BASE BID ALL NEW LIGHT-SWITCHES & PLUGS REPLACEMENT. AS APPLICABLE USE THE FOLLOWING: Brand: Hubbell — 122 Series HBL 122 1L - Single Pole 20A 120-277 VAC
- 17. THE SCOPE OF WORK REQUIRES LEVEL 5 FINISH AT ALL (NEW & EXIST.) UN-THED WALL/CHILING SURFACES. INCLUDE LEVELING, PRIMING & PAINTING. INCLUDE ALL NEW (& EXISTING) CONDUITS, PIPES, CABLES, DUCTS, BEAMS, SOFFITS, ETC. - TYP.
- 8. ALL EXISTING WINDOWS & FRAMES ARE TO BE SANDED SMOOTH, PRIMED AND PAINTED.
- . INCLUDE IN THE BASE BID THE ADJUSTING (ADAPTING/LEVELING) OF ALL CEILING MOUNTED FIXTURES, EQUIPMENT, CONDUITS, ETC. AS REQUIRED TO BE IN LINE WITH NEW CEILING, THIS INCLUDES EXTENDING/RELOCATING THE BLOCKING.
- 20. IF APPLICABLE: INCLUDE IN THE BASE BID THE REQUIRED WORK TO ALIGN & LEVEL THE NEW GYP. BD. CEILING (NEW/PATCHED) TO BE LEVELED WITH THE EXISTING FINISHED CEILING AND TO OBTAIN THE REQUIRED FINISH LEVEL (INCLUDE MULTIPLE GYP. BD. LAYERS, MUDDING, ETC.). THE EXISTING CEILING ASSEMBLY IS A THICK PLASTER OVER WOOD LATH. REFER TO THE AVAILABLE AS-BUILT.
- INCLUDE IN THE BASE BID 20% (MEASURED WITHIN THE PERIMETER OF THE ROOM) OF STUD & SILL REPLACEMENT DUE TO DRY-ROT: <u>CONSTRUCTION</u> WILL REQUIRE NEW 6X STUD (FL-TO-CEIL) AND/OR SILL (TO MATCH EXISTING SIZE) AND ADDING REQUIRED ANCHOR BOLTS (4' O.C.). INCLUDE ALL PALSTER WALL PATCHING & FINÍSHING.
- 23. INCLUDE IN THE BASE BID NEW CONCRETE CURBS AT ALL NEW PARTITIONS/WALLS.
- 5. INCLUDE IN THE BASE BID THE REBUILD OF THE EXISTING FLOOR ASSEMBLY (CONCRETE & GROUT); COORDINATE WITH THE DEMOLITION NOTE #10. SLOPE THE FINISH FLOOR AS REQUIRED TO THE FLOOR DRAINS & DO NOT EXCEED 1:48 SLOPE IN ALL DIRECTIONS (PATH-OF-TRAVEL). CONNECT THE NEW FINISH FLOOR LEVELED TO THE NEW DOOR THRESHOLD.
- ALL NEW TOILET COMPARTMENT-PARTITIONS (PANELS) TO BE 7' HIGH MINIMUM, UNLESS OTHERWISE NOTED. SUBMIT SAMPLE TO THE MDUSD FOR APPROVAL PRIOR TO ORDERING.

DIRECT DRIVE CENTRIFUGAL ROOF EXHAUSTER MODEL PRN (SEE CUT SHEETS)

PROVIDE 1 NEW EXHAUST FAN AT EACH TOILET: SCOPE TO INCLUDE ALL DEMOLITION, CONSTRUCTION, LABOR & MATERIAL FOR THE INSTALLATION OF THE NEW EXHAUST FAN & RELATED ASSEMBLY (DUCT INCLUDED). INCLUDE MECHANICAL, ELECTRICAL, STRUCTURAL & BUILT-UP ROOFING WORK AND PARTS. ELECTRICAL: INTERCEPT (E) SWITCHED LEG OF NEAREST LIGHT FIXTURE (ESTIMATED @ ±20') AND RUN (CONCEALED) (N) CONDUIT AND WIRES TO THE (N) EXHAUST FAN AS REQUIRED. PROVIDE (N) HORSEPOWER RATED MANUAL SWITCH 15A, 12OV, SIMILAR TO SQUARE "D" CLASS 2510. PRODUCT: ACME

9" ABOVE FL @ ACCESS STALL

- PROVIDE 1 NEW ELECTRIC HAND DRYER PER ROOM: INCLUDE 120V POWER CONNECTION TO ELECTRIC HAND DRYER. FIELD VERIFY NEAREST LOCATION OF EXISTING BREAKER WITH 2#12 AND 1#12 G WIRES IN 3/4"C. IF SPARE BREAKER IS NOT AVAILABLE (ASSUME IS NOT AVAILABLE) PROVIDE A NEW ONE IN EXISTING SPACE. NEW CIRCUIT BREAKER TYPE AND INTERRUPTING RATING SHALL MATCH EXISTING.
- PATCH & REPAIR AS REQUIRED THE CEILING AND WALL ASSEMBLY AROUND ALL EXISTING & NEW PENETRATIONS. FILL GAPS WITH RUBBER SILICONE AND MATCH THE CEILING COLOR. ALWAYS MATCH (E) CEILING OR/AND WALL ASSEMBLY TECHNICAL SPECIFICATIONS.
- PRIOR TO ANY PLUMBING WORK ALL EXISTING CONCEALED PLUMBING LINES IMPACTED FROM THE SCOPE OF WORK NEED TO BE INSPECTED FROM A LICENSED PLUMBER AND CERTIFIED AS IN COMPLIANCE WITH THE CODE REQUIREMENTS. IN ADDITION THE CERTIFIED PLUMBER HAS TO CERTIFY THAT ALL EXISTING CONCEALED LINES ARE CLEAN, IN GOOD WORKING CONDITIONS AND ARE NOT DETERIORATING.
- INCLUDE IN THE BASE BID A NEW RECESSED MASTER WATER-CONTROL VALVE AT EACH TOILET-ROOM WITH LOCKABLE, COMMERCIAL GRADE ACCESS PANEL (DOOR) AT ALL PLUMBING PRIMED & PAINTED.
- INCLUDE IN THE BASE BID THE REPLACEMENT (IN EVERY TOILET ROOM) OF ALL EXISTING FLOOR DRAINS & CLEAN-OUTS WITH NEW (COMPLETE ASSEMBLIES); COORDINATE ALSO WITH NOTE #48 BELOW. USE ZURN PRODUCTS. ADJUST RIM-HEIGHT AS REQUIRED TO MEET NEW TILED FLOOR. INCLUDE ALL LABOR AND MATERIAL FOR THE INSTALLATION OF NEW TRAP PRIMERS AT ALL FLOOR DRAINS. NOTE: NOT ALL BOYS TOILET ROOMS HAVE EXISTING DRAINS. INCLUDE ALL LABOR TO INSTALL: 1 NEW DRAIN (AND ASSEMBLIES) FOR EACH BOYS ROOM & 1 NEW FLOOR CLEAN-OUT (AND ASSEMBLIES) FOR ONE ROOM.
- PROVIDE & INSTALL ACCESSIBLE (WITH ACCESS DOOR) TRAP PRIMERS WITH PIPING (& COMPLETE ASSEMBLIES, LABOR ETC.) TO ALL NEW (AND REPLACED) FLOOR DRAIN TRAPS (INCLUDE ALL REQUIRED LABOR AND MATERIALS). PROVIDE SHUT-OFF VALVE UPSTREAM OF TRAP PRIMER UNIT.
- INSTALL BACKFLOW PROTECTION DEVICES AS REQUIRED BY THE UNIFORM PLUMBING CODE.
- 35. VERIFY SIZE, DEPTH, LOCATION AND ADEQUACY OF ALL UTILITIES, INCLUDING METER LOCATIONS AND SEWER INVERTS, BEFORE START OF WORK.
- 36. SEWER LINES TO BE LAID WITH MIN. SLOPE OF 1/4" PER FOOT.
- INCLUDE 1 CLEAN-OUT AT THE END OF THE RUN (INCLUDE IN BASE BID).
- ALL PIPING IN FINISHED AREAS SHALL BE CONCEALED UNLESS SPECIFICALLY SHOWN OTHERWISE
- COORDINATE ALL PLUMBING WORK WITH ALL OTHER WORK TO AVOID CONFLICTS. PIPING SHALL BE ROUTED TO AVOID ARCHITECTURAL OPENINGS, STRUCTURAL MEMBERS, FIXTURES AND/OR ANY OTHER OBSTRUCTIONS.
- DRAWINGS DO NOT SHOW THE ACTUAL ROUTING. OFFSET PIPING WHERE REQUIRED. REFER TO THE PLUMBING DIAGRAM 17/A-500 FOR PLUMBING <u>SIZING INTENT ONLY.</u> VERIFY WITH THE ACTUAL PLUMBING AS-BUILT (AVAILABLE AT THE MDUSD) PRIOR TO BID.
- CONNECTIONS BETWEEN DISSIMILAR PIPES SUCH AS COPPER AND IRON OR STEEL SHALL BE MADE WITH 6" BRASS NIPPLE. PROVIDE COMMERCIAL GRADE, RECESSED (PRIMED & PAINTED) REFER TO THE ATTACHED REFERENCE A500 SHEET FOR ASSUMED GENERAL LOCATION OF SANITARY ACCESS PANEL (AS REQUIRED BY CODE). AT 2-LEVEL SURFACES (TILES/GYP. BD) FURR TO WASTE, VENT & WATER LINES LEVEL (SMOOTH & STRAIGHT) AS REQUIRED.
- IF APPLICABLE: ALL HOT WATER SUPPLY AND RETURN PIPING SHALL BE INSULATED. INSULATION SHALL COMPLY WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATION CODE (MINIMUM R4).
- 43. ALL PLUMBING FIXTURES SHALL BE CERTIFIED TO COMPLY WITH 2016—CAC TITLE 24 STANDARDS.
- 44. PROVIDE SEISMIC RESTRAINT BRACING FOR NEW PIPE SUPPORTS AS REQUIRED BY STATE AND
- 45. IT IS NOT PERMITTED FOR THE PIPING, PIPE CONNECTORS, PIPE HANGERS OR VALVES TO DIRECTLY TOUCH THE STRUCTURE, STUDS, GYPSUM BOARD OR OTHER PIPES.
- 46. INCLUDE IN THE BASE BID INSULATION AT ALL NEW WATER PIPING.
- 47. AS REQUIRED VENT PIPE ROUTING MUST RISE VERTICALLY NOT LESS THAN 6" ABOVE FLOOD LEVEL RIM OF THE FIXTURE BEEN SERVED BEFORE OFFSETTING HORIZONTALLY.
- 48. THE CONTRACTOR MUST VERIFY THE HEIGHT OF THE FIXTURE DRAIN CONNECTION WITH RESPECT
- 49. CENTER WATER CLOSET AT ALL NON-ACCESSIBLE TOILET STALLS AND/OR KEEP MIN. 15" CENTERLINE (EACH SIDE OF WATER CLOSET). INCLUDE ALLOWANCE FOR SEWER RELOCATION. INCLUDE ALLOWANCE FOR ADJUSTING FLUSHOMETER TAILPIECE HEIGHT TO ACCOMMODATE ACCESSIBLE GRAB-BAR HEIGHTS REQUIREMENTS AT ACCESSIBLE TOILET STALLS.
- INCLUDE IN THE BASE BID 1 NEW CHROME-PLATED BRASS HOSE-BIB AT EACH TOILET-ROOM. LOCATE (NEXT TO) BELOW SINK, WITH LOCKABLE, COMMERCIAL GRADE ACCESS PANEL (DOOR) PRIMED & PAINTED.
- INCLUDE IN THE BASE BID ALL LABOR & MATERIALS TO INSTALL A 3" DIA. BRASS ROUGH-IN WATERLINE FOR EACH URINAL. STUB-OUT ABOVE URINAL (FOR FUTURE FLUSHOMETER) WITH A POLISHED CHROME NIPPLE, ESCUTCHEON & CAP (NIPPLE TO PROTRUDE 1" OR LESS).
- INCLUDE IN THE BASE BID ALL LABOR & MATERIALS TO INSTALL 1 WATER-SUPPLIED URINAL (THE ONE LOCATED UPSTREAM ON THE DRAIN LINE OF THE URINALS).
- INCLUDE IN THE BASE BID (AS PART OF THE SCOPE OF WORK) THE REPLACEMENT OF ALL NEW PLUMBING PARTS, PIPING, MATERIAL & EQUIPMENT (WITHIN THE LIMIT OF THE TOILET-ROOM & ADJACENT MECHANICAL ROOM/UTILITY ROOM) SUCH AS (BUT NOT LIMITED TO) SEWER PIPING PLUS CONNECTION & ASSEMBLY, VENT PIPING PLUS CONNECTION & ASSEMBLY, WATER PIPING PLUS CONNECTION & ASSEMBLY, ETC. COMPLY WITH THE 2016 CPC. ACTUAL LENGTH & RUNS VARY, COORDINATE WITH THE AVAILABLE AS-BUILT & WITH THE SITE EVALUATION (PRIOR TO BID) OR ESTIMATE FOR ROOM-LENGTH SIZE MIN.
- THE PLUMBING DIAGRAM 17/A-500 IS FOR PLUMBING SIZING INTENT ONLY. THE CONTRACTOR MUST COORDINATE THE NEW WORK WITH THE AVAILABLE AS-BUILT PLUMBING DRAWINGS PRIOR
- 55. INCLUDE IN THE BASE BID THE COMPLETE LABOR AND MATERIAL TO INSTALL WATER-ARRESTORS AT EACH PLUMBING FIXTURE.
- INCLUDE IN THE BASE BID COMPLETE LABOR & MATERIALS TO INSTALL 2 WATER-SUPPLIED URINALS (THE ONES LOCATED UPSTREAM ON THE DRAIN LINE OF THE URINALS).

PLUMBING SCHEDULE SÉE CUTSHEETS FOR PLUMBING PRODUCT TOIL. ACCESSORIES SCHEDULE

FLOOR MOUNTED WATER CLOSET MODEL: ELEMENTARY rack rack rack 1Aig> AMERICAN STANDARD MADERA FLOWISE 15" HEIGHT ELONGATED WITH EVERCLEAN FLUSHOMETER TOILET. SEAT COLOR WHITE 5901100 SS STAINLESS STEEL HINGE POSTS FLUSHOMETER VALVE: AMERICAN STANDARD 1.28 GPF MANUAL #6047.121.002 TOP SPUD

SEE CUT SHEETS, FOLLOW MANUFACTURER RECOMMENDATIONS & INCLUDE ALL

FLOOR MOUNTED WATER CLOSET MODEL: MIDDLE SCHOOL / ADULT (1B) AMERICAN STANDARD MADERA FLOWISE 16" HEIGHT ELONGATED WITH EVERCLEAN FLUSHOMETER TOILET. SEE (1A) FOR FLUSHOMETER VALVE AND SEAT. SEAT COVER 1" THICK

PARTS, MATERIAL & LABOR.

- FLOOR MOUNTED WATER CLOSET MODEL: PRESCHOOL (1C) BABY DEVORO FLOWISE 10" HIGH # 2282.001 TOP SPUD FLUSH VALVE MANUAL AMERICAN STANDARD # 6047.121.002 SEAT AMERICAN STANDARD # 5001G.055 HEAVY DUTY SS HINGE POSTS
- WALL MOUNTED WATER CLOSET MODEL: AMERICAN STANDARD AFWALL MILLENNIUM FLOWISE ELONGATED W/EVERCLEAN TOP SPUD FLUSHOMETER TOILET. SEAT #5901100 SS HINGE POSTS FLUSHOMETER #6047.121.002 MANUAL1.28 GPF -SEE DET. 16 ON SHEET A-500 SEE CUT SHEETS, FÖLLOW MANUFACTURER RECOMMENDATIONS & INCLUDE ALL PARTS, MATERIAL & LABOR.
- LAVATORY MODEL: AMERICAN STANDARD LUCERNE WALL-HUNG LAVATORY - $\langle 3 \rangle$ SINGLE CENTER FAUCET HOLE WITH DELTA METERING FAUCET MODEL NO. 87T105. SEE CUT SHEETS, FOLLOW MANUFACTURER RECOMMENDATIONS & INCLUDE ALI MATERIAL & LABOR.
- URINAL SEE CONSTRUCTIONNOTES #56/A300 4 A. WATERLESS: ANZA MODEL#2005, OR EQUIVALENT — OPCI <u>B. FLUSH—URINAL & FLUSHOMËTER :</u> AMERICAN STANDARD PINTBROOK URIN #6002.001 0.125 GPF. SEE CUT SHEETS, FOLLOW MANUFACTURER RECOMMEN INCLUDE, ARM-BRACKETS & LABOR.

PIPING SCHEDULE

| SYSTEM NAME | MATERIAL | PIPING & FITTING JOINTS |
|---------------------|------------------|-----------------------------|
| DOMESTIC COLD WATER | TYPE L COPPER | LEAD FREE SOLDERED FITTINGS |
| SANITARY WASTE | NO-HUB CAST IRON | NO-HUB FITTINGS |
| SANITARY VENT | TYPE DWV COPPER | LEAD FREE SOLDERED FITTINGS |

| S. | ROOM NAME | FLOOR | BASE | WALL | CEILING | REMARKS | |
|----|--------------|---------------|---------------|--------------------------|----------------------|----------------------|--|
| | BOYS TOILET | CERAMIC TILES | CERAMIC TILES | CERAMIC TILES / PAINT | PATCH & PAINT ALL | SEE DET. 13/A-500 | |
| | GIRLS TOILET | CERAMIC TILES | CERAMIC TILES | CERAMIC TILES / PAINT | PATCH & PAINT ALL | SEE DET. 13/A-500 | |
| | | | N 14 | ATEC. | | | |

DOOR SCHEDULE

EXISTING (3'X7') DOOR &

FRAME TO REMAIN

NOTES FOR EXISTING DOORS TO REMAIN: >

DOOR AT TOILET-STALL

CBC 2016 FIG. 11B-306.3

FINISH SURFACE (NEW OR EXISTING) TO PROVIDE SMOOTH & EVEN PLANES. MUD AS

THE FOLLOWING ACCESSORIES ARE NEW & MUST BE PROVIDED AT ALL WATER CLOSETS COMPARTMENTS & SINKS SINKS AS PART OF THE SCOPE OF WORK EVEN IF NOT SHOWN ON T

FLOOR PLANS SEE CUTSHEETS FOR TOILET ACCESSORIES PRODUCT

| | MARK | ITEM | CAT. NO | MOUNTING | REMARKS |
|-----|------|-----------------------------|---|-----------------|---|
| | А | 36" GRAB BAR | BOBRICK 6806X36 | | SEE DETAIL 12/A-500 |
| | В | 42" GRAB BAR | BOBRICK 6806X42 | | SEE DETAIL 12/A-500 |
| | C1 | TOILET TISSUE | KC PROFESSIONAL 09612 JRT JUMBO ROLL | SURFACE MOUNTED | <pre> NON ACCESSIBLE STALLS - COORDINATE W/ CUT SHEETS </pre> |
|) | | DISPENSER | BOBRICK B-2888 | SURFACE MOUNTED | <pre> ACCESSIBLE STALLS - COORDINATE W/ CUT SHEETS</pre> |
|)5, | C2 | SANITARY NAPKIN DISPOSAL | BOBRICK B-270 | SURFACE MOUNTED | 1 @ ALL GIRLS' TOILET STALL ONLY |
| , | D | SOAP DISPENSER | DEB GROUP PROLINE CURVF 1000 | SURFACE MOUNTED | 1 PER LAVATORY OFCI |

| ALL PARTS, | D | SOAP DISPENSER | DEB GROUP PROLINE CURVE 1000 WHITE WITH CHROME | SURFACE MOUNTED | 1 PER LAVATORY OFCI |
|-------------|---|------------------|--|-----------------|------------------------|
| ENDATIONS & | E | WASTE RECEPTACLE | BOBRICK B-2250 | FLOOR-STANDING | 1 PER ROOM |

B-1556

3-370634C

MIRROR (STAINLESS | BOBRICK

STEEL)

NAPKIN / TAMPON

VENDOR

<u>ABBREVIATION:</u> HM — HOLLOW METAL

2. ALL DOORS: PROVIDE NEW CONTINUOUS HINGES, COMPLETE HARDWARE & CLOSER ASSEMBLY PER DISTRICT STANDARDS. SEE SPECIFICATION SECTION 08 71 00 FOR HARDWARE GROUP NO. 2

PROVIDE ALL (E) DOORS WITH BOTTOM LOUVER AND KICK PLATES. PROVIDE KICK PLATES 10"X34" STAINLESS STEEL @ PULL AND PUSH SIDE OF DOORS. SEE 13/A.500

HARDWARE FIRE

GROUP | RATING | REMARKS

DETAILS

ACCESS STALL: DOOR 34" MIN. CLR PER MANUF

STD STALL: PER MANUFACTURER OF PARTITION

SEE DETAIL 13 ON SHEET A-500 FOR DOOR AND FRAME TYPE INFORMATION. VERIFY IN FIELD TO MATCH EXISTING CONDITION.

3. CONTRACTOR MUST ADJUST/ SAND / REFURBISH & PAINT THE EXISTING WOOD FRAME AND WOOD DOOR THAT ARE TO REMAIN LIKE NEW CONDITION

8/A-500

MOUNTED (TRANSITION TILES AND GYP. BD.) AS REQUIRED 7 OBTAIN A LEVELED VERTICAL MIRROR. PAINT AND FINISH AS SEAT-COVER SURFACE MOUNTED BOBRICK B-221 1 PER TOILET **DISPENSER** PAPER TOWEL KIMBERLY CLARK SURFACE MOUNTED OFCI LEVERMATIC DISPENSER 1 PER ROOM XLERATOR XL-SB RECESSED ELECT HAND DRYE RECESSED#40502

24"X36"

SURFACE

SEMI RECESSED

USE GOLD BOND XP GYPSUM BOARD AS A HEAVY MOLD/MILDEW/MOISTURE RESISTANT, SEE CONSTRUCTION NOTE NO. 8 AND DETAIL 14/A-500 FOR ADDITIONAL INFORMATION

. ALTERNATE: PROVIDE ALL SCHLUTER SATIN ANODIZED ALUMINUM PROFILE TRANSITION SYSTEMS: COVED, OUTSIDE/INSIDE CORNER WALLS, BULLNOSE TRIM (@ WAINSCOT)

FRAME

SYSTEM ASSEMBLY

No. WIDTH HEIGHT THK MAT TYPE MAT TYPE THRESHOLD JAMB HEAD

3. ALL EXISTING AND/OR NEW WALL/CEILING FINISH TO BE LEVEL 5, TYP. . ALL NEW CEILING/WALL FINISHES MUST BE SKIMMED LEVELED WITH THE ADJACENT

PROVIDE BLOCKING FOR ALL TOILET ROOM ACCESSORIES, SEE FLOOR PLANS & INTERIOR ELEVATIONS FOR LOCATIONS. COORDINATE WITH \A.500\\A.500\\A.500\\A.500\\ **TOILET PARTITION SYSTEM**

BOBRICK 2080 DURALINE SERIES PHENOLIC TOILET PARTITION FLOOR MOUNTED OVERHEAD BRACED 18-8, 304 STAINLESS STEEL HARDWARE.SEE CONSTRUCTION NOTES #6 THIS SHEET FOR ALL TOILET COMPARTMENT PARTITIONS CONDITION

PROVIDE BUMPER GUARD TO ALL PARTITION DOORS.

WD - PAINTED SOLID WOOD TO MATCH (E)

PROVIDE CONTINUOUS FURRING /FINISHED LEVELED BACKING @ UNEVEN FINISHES (TRANSITION TILES TO WALL) FOR CONTINUOUS BRACING.

SEE CUT SHEET FOR FRP DOOR / KICK PLATES AND DOOR LOUVRES. SEE $\left(\begin{array}{c}15\end{array}\right)$ 3,4 $\left(\begin{array}{c}3,4\end{array}\right)$

\a.500/\a.500/

MAINTAIN MIN. 4" CLEAR FROM STRIKE-SIDE TO EDGE OF ADJACENT PARTITION

PROVIDE NEW CONT. HINGES, COMPLETE HARDWARE & CLOSER UON.

SEE SPEC. FOR HARDWARE GROUP NO. 2

→ SEE NOTES 💥 BELOW. SEE DET. 🖊 15 🗸 3,4 🗋

PROVIDE 1 COAT-HOOK PER DOOR. INSTALL @ 40" A.F.F.

PULL AT BOTH SIDES OF DOOR AT ACCESSIBLE TOILETS

PROJECT TITLE: MAINTENANCE WORK PLUMBING AND FINISHES AT STUDENTS' **RESTROOMS**

1936 Carlotta Dr.

Concord, CA 94519

Architecture • Planning • Interiors

Lafayette, California 94549

STRUCTURAL ENGINEER

TSA STRUCTURAL ENGINEERS

433 AIRPORT BLVD., #106E

BURLINGAME, CA 94010

TEL. (650) 620-9555

3211 Ronino Way

925.949.8333 tel.

SEE DETAIL 11/A-500

FURR BEHIND MIRROR

1 @ GIRLS RESTROOM

.A.500/\A.500/

ONLY

1 PER ROOM -

9/30/19

RENEWAL DATE

KEY PLANS:

REVISIONS:

description DISTRICT REVIEW NON DSA 3/14/2018

PHD ARCHITECTS JOB # 17-215

AS NOTED

SHEET NAME & NUMBER:

NOTES & SCHEDULES

A-300

DATE:

1/30/18

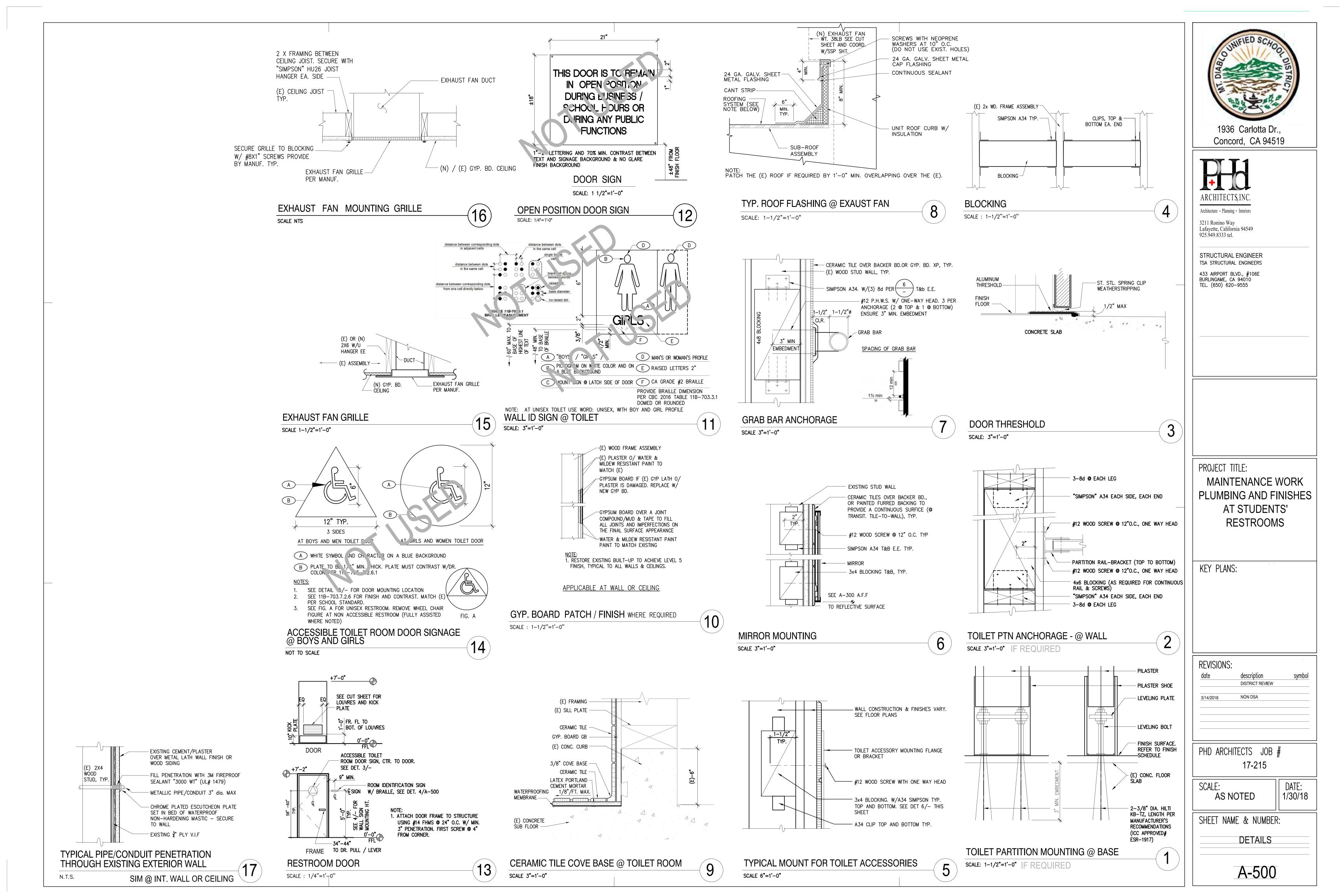
GENERAL CONSTRUCTION

MIN. 6" CLR BELOW GB FOR TOP COVER TO OPEN 54" MIN MIN. 12" CLR TOILET PAPER DISP. FOR ANY _1-1/2" CLR MIN. _<u>_</u>_12"MAX PROJECTION SEAT BELOW GRAB BAR COVER ABOVE GB

4" ABOVE FL @ STD. STALL

유 ELEVATION @ LAV.

FIXTURES AND ACCESSORIES MOUNTING HEIGHT FOR MIDDLE SCHOOL AND HIGH SCHOOL PER CBC 2016



STRUCTURAL SPECIFICATIONS

DESIGN CRITERIA

CALIFORNIA BUILDING CODE 2016 EDITION, TITLE 24, PART 2.

STRUCTURAL SPECIFICATIONS

CAST-IN-PLACE CONCRETE

TESTING AND INSPECTION BY THE OWNER'S TESTING LABORATORY

- THE OWNER'S TESTING LABORATORY WILL REVIEW CONCRETE MIX DESIGNS, CEMENT CHEMICAL ANALYSIS, CERTIFICATES OF COMPLIANCE, AS SUPPLIED BY THE CONTRACTOR FOR CONFORMANCE TO 2013 CBC, SECTION 1903A AND THESE SPECIFICATIONS.
- 2. REVIEW OF: CONTRACTOR SUBMITTALS, BATCH PLANT CERTIFICATES; ADMIXTURES, ETC.
- 3. TEST AGGREGATES PER CBC.
- 4. BATCH PLANT INSPECTION IN ACCORDANCE WITH CBC.
- 5. ALL CEMENT USED SHALL BE SAMPLED BY THE OWNER'S TESTING LABORATORY IN ACCORDANCE WITH CBC. CEMENT SAMPLES SHALL BE HELD FOR POSSIBLE TESTING UNTIL COMPLETION OF CONSTRUCTION CONCRETE STRENGTH=F'C=3000 PSI
- 6. CONSTRUCTION TESTING AND INSPECTION:
- A. REVIEW AND/OR PROPOSE ADJUSTMENTS TO REVIEWED MIX DESIGNS TO ACCOUNT FOR SITE, WEATHER CONDITIONS, ETC.
- B. THE OWNER'S TESTING LABORATORY INSPECTOR WILL MAKE A SET OF THREE (3) SPECIMENS AT THE JOB FOR EACH CLASS OF CONCRETE FOR EACH 50 CUBIC YARDS, OR FRACTION THEREOF AND NOT LESS THAN ONE SET FOR EACH 2,000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS, OF EACH GRADE OF STRUCTURAL CONCRETE USED FOR EACH DAY'S PLACEMENT EXCEPT WHEN THE TOTAL VOLUME OF ANY ONE GRADE OF CONCRETE EXCEEDS 150 CUBIC YARDS PLACED PER DAY, THERE SHALL BE NOT LESS THAN ONE TEST FOR EACH 150 YARDS, OR FRACTION THEREOF, PLACED EACH DAY. PERFORM STANDARD 6"X12" CYLINDER TESTS IN ACCORDANCE WITH ASTM C31 & CBC STANDARDS. A RECORD OF THE LOCATION IN THE BUILDING OF EACH CONCRETE BATCH WILL BE KEPT AND NOTED ON THE SPECIMEN. STANDARD COMPRESSION TESTS OF CYLINDERS WILL BE MADE, ONE AT 7 DAYS AND ONE AT 28 DAYS IN ACCORDANCE WITH ASTM C39 & CBC.
- C. THESE CYLINDERS WILL REPRESENT AS NEARLY AS POSSIBLE THE BATCH OF CONCRETE FROM WHICH THEY ARE TAKEN, AND WILL BE TESTED AT THE AGES OF 7 AND 28 DAYS RESPECTIVELY
- (2 CYLINDERS), WITH ONE IN RESERVE. THE STRENGTH OF THE CONCRETE IS THE AVERAGE OF THE COMPRESSION STRENGTH OF TWO CYLINDERS TESTED AT 28 DAYS. IF THE STRENGTH OF THE MOLDED TEST CYLINDERS FALLS BELOW THE MINIMUM ULTIMATE COMPRESSIVE STRENGTH IN DESIGN, THE PROPORTION OF THE CONCRETE MIX OF THE REMAINING PORTION OF THE STRUCTURE SHALL BE ADJUSTED AS TO GIVE CONCRETE OF THE ASSUMED STRENGTH. THE DEFECTIVE CONCRETE IN PLACE SHALL BE TESTED BY TAKING CORES FROM THE STRUCTURE AS OUTLINED IN CBC, SECTION AT THE CONTRACTOR'S EXPENSE.
- D. IF THE COMPRESSIVE TESTS OF THE CORE SPECIMENS FAIL TO SHOW THE COMPRESSIVE
- STRENGTH CALLED FOR AS A MINIMUM, THE CONCRETE WILL BE DEEMED DEFECTIVE AND SHALL BE REMOVED AND REPLACED OR ADEQUATELY STRENGTHENED IN A MANNER ACCEPTABLE TO THE DSA & THE OWNER AT THE CONTRACTOR'S EXPENSES
- EXPENSE. FIELD SPECIMENS OF CONCRETE AND TESTS THEREOF SHALL BE IN ACCORDANCE WITH
- E. NOTE: WHERE A CYLINDER TESTED AT 7 OR 28 DAYS IS IN EXCESS OF DESIGN STRENGTH, NO FURTHER TESTING WILL BE DONE. THE CONTRACTOR SHALL PROVIDE A SATISFACTORY BIN FILLED WITH DAMP SAND FOR STORAGE OF THE SPECIMEN CYLINDERS UNTIL DELIVERED TO THE LABORATORY.
- 7. NON-STRUCTURAL CONCRETE
- A. TESTING AND INSPECTION IS NOT REQUIRED.
- 8. SLUMP TEST AND AIR TESTS WILL BE MADE AT THE TIME OF TAKING TEST SPECIMENS, AND/OR AT ONE-HOUR INTERVALS DURING PLACING OF CONCRETE IN ACCORDANCE WITH ASTM D143.9.
- 9. TESTING OF DRILLED AND/OR GROUTED CONCRETE ANCHORS: TESTING LABORATORY SHALL TEST ALL SUCH ANCHORS AS NOTED ON THE DRAWINGS.
- 10. THE INSPECTOR WILL OBTAIN, FOR EACH TRANSIT MIXER, BATCH CERTIFICATES FOR EACH DELIVERY, INDICATING BATCH DATE, TIME, INGREDIENT QUANTITIES, WATER ADDED AT PLANT AND JOB SITE, AND NUMBER OF MIXER REVOLUTIONS UP TO START OF PLACING.
- 11. THE LABORATORY'S INSPECTOR WILL REPORT TO THE CONTRACTOR WHEN MATERIAL DOES NOT MEET THE REQUIREMENTS NOTED HEREIN. THE CONTRACTOR SHALL DISALLOW USE OF SUCH MATERIAL UNLESS PRIOR APPROVAL FOR USE IS GIVEN BY THE ARCHITECT/ENGINEER AND THE OSHPD.
- MATERIALS
- 1. PORTLAND CEMENT: ASTM C150, TYPE II WITH THE FOLLOWING PROPERTIES:
- A. MAXIMUM PERCENTAGE (BY WEIGHT) OF THE FOLLOWING COMPOUNDS IS LIMITED TO:
- TRI-CALCIUM ALUMINATE 6% TRI-CALCIUM ALUMINATE AND TRI-CALCIUM SILICATE 60%.
- 2. CEMENT SHALL CONFORM TO CBC.
- 3. CONCRETE AGGREGATES: ASTM C33 AND CBC, STONE AGGREGATE. SOURCE
- SHALL REMAIN CONSTANT THROUGHOUT THE DURATION OF THE JOB. THE EXACT PROPORTIONS OF COMBINED FINE AGGREGATES AND COURSE AGGREGATES TO BE USED IN THE MIX SHALL MEET THE REQUIREMENTS OF CBC.
- 4. WATER: POTABLE, CLEAN, FROM DOMESTIC SOURCE:
- A. ADMIXTURES: ALL ADMIXTURES SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ADMIXTURES CONTAINING CALCIUM CHLORIDES SHALL NOT BE USED WITHOUT THE APPROVAL OF THE ARCHITECT/ENGINEER AND THE OWNERS TESTING LABORATORY. ADMIXTURES SHALL CONFORM TO CBC.
- B. WATER REDUCING ADMIXTURES: ASTM C494, TYPE A; "POZZOLITH 300R", MASTER BUILDERS; WRDA 79, WR GRACE CO.; APPROVED EQUAL.
- C. WATER REDUCING ADMIXTURES AND RETARDER: ASTM C494, TYPE D; "POZZOLITH 300R", MASTER BUILDERS; "PLASTIFLOW-R" BY NOX-CRETE; OR APPROVED EQUAL.
- D. AIR ENTRAINMENT: MBAE-10, MASTER BUILDERS AIR ENTRAINMENT.

STRUCTURAL SPECIFICATIONS (CONTINUE)

CONCRETE MIXES

- CONTRACTOR SUBMITTALS SHALL BE SUPPLIED TO THE DSA, THE PI AND THE OWNER'S TESTING LABORATORY AT LEAST 15 DAYS BEFORE PLACING CONCRETE.
- THE PROPORTIONS OF THE CONCRETE MIXES SHALL BE SUCH AS TO PRODUCE CONCRETE OF REQUIRED: AVERAGE STRENGTH (AS DESCRIBED BY CBC SECTION 1905A), SET TIME, SLUMPS, AGGREGATE SIZES, SHRINKAGE, AND OF A CONSISTENCY THAT WILL ALLOW THOROUGH COMPACTION WITHOUT EXCESSIVE PUDDLING, SPADING, OR VIBRATION, AND WITHOUT PERMITTING THE MATERIALS TO SEGREGATE, OR FREE WATER TO COLLECT ON THE SURFACE. THE SIZE OF AGGREGATES SHALL BE SUCH THAT IT WILL PRODUCE DENSE AND UNIFORM CONCRETE FREE FROM ROCK POCKETS, HONEYCOMB AND OTHER IRREGULARITIES. ALL CONCRETE MIXES SHALL HAVE ENTRAINED AIR FOR WORKABILITY (4% MAXIMUM). THE MINIMUM SET TIME FOR CONCRETE TO BE USED FOR FLATWORK SHALL BE 3-1/2 HOURS, OTHER CONCRETE 3 HOURS AS MEASURED FROM PLACEMENT OF MATERIALS IN THE MIXER.
- PRIOR TO SUBMITTAL OF MIX DESIGNS THE CONTRACTOR SHALL REVIEW THEM FOR COMPATIBILITY WITH HIS PLACING REQUIREMENTS TO INSURE THAT THE CONCRETE AS DESIGNED CAN BE PLACED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
- CONCRETE MAY, AT THE CONTRACTOR'S OPTION, BE DESIGNED FOR EITHER PUMP OR CONVENTIONAL PLACEMENT WITH AGGREGATE SIZE, SLUMPS, ETC. TO BE MAINTAINED AS SPECIFIED BELOW.
- VARIATIONS IN MIX DESIGN ARE TO BE RESUBMITTED FOR REVIEW PRIOR TO USE.

<u>CURING</u>

CURING SHALL IMMEDIATELY FOLLOW FINISHING.

- FLATWORK ON GRADE: CURE BY ONE OF THE FOLLOWING METHODS:
- A. WATERPROOF CURING PAPER: WHILE IN THOROUGHLY DAMP CONDITION, COVER WITH CURING PAPER; LAP SEAMS 6" MINIMUM AND EXTEND BEYOND SLAB OR PAVING PERIMETERS 6' MINIMUM; SEAL ALL LAPS AND EDGES WITH CONTINUOUS REINFORCING PLASTIC TAPE.. DO NOT REMOVE FOR 7 DAYS MINIMUM.
- B. WATER CURING: FLATWORK MAY BE CONTINUOUSLY WATER CURED WITH A FOG SPRAY OR FLOODED, FOR A PERIOD OF (7) DAYS MINIMUM (INCLUDING HOLIDAYS AND WEEKENDS).
- FORMED CONCRETE MEMBERS:
- A. BEAMS, WALLS, COLUMNS, ETC., SHALL BE KEPT CONTINUOUSLY WET FOR A MINIMUM OF SEVEN (7) DAYS AFTER PLACEMENT, AND SHALL BE ADEQUATELY PROTECTED FROM COLD AND HOT WEATHER.
- B. FORMS SHALL BE KEPT TIGHT FOR THIS MINIMUM PERIOD OF TIME
- C. COVER EXPOSED SURFACES WITH DAMP CLOTH MATERIALS.

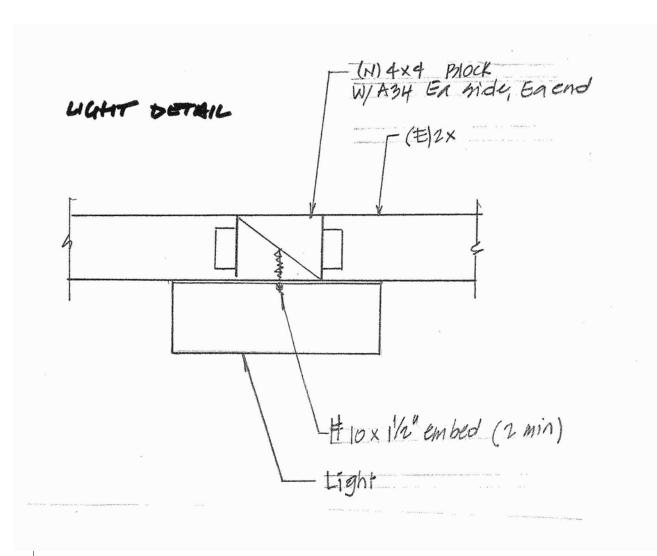
CONCRETE REINFORCEMENT

TESTING AND INSPECTION

- REINFORCING STEEL IS TO BE SAMPLED AND TESTED BY THE OWNERS TESTING LABORATORY IN ACCORDANCE WITH ASTM A615 AND, 2013 CBC.
- MATERIAL TESTS: WHERE SAMPLES ARE TAKEN FROM BUNDLES AS DELIVERED FROM THE MILL, WITH THE BUNDLES IDENTIFIED AS TO HEAT NUMBER, AND PROVIDED THE MILL ANALYZES ACCOMPANY THE REPORT, THEN ONE TENSILE TEST AND ONE BENT TEST SHALL BE MADE FROM A SPECIMEN FROM EACH 10 TONS OR FRACTION THEREOF EACH SIZE OF REINFORCING STEEL. WHERE IDENTIFICATION OF MATERIALS BY HEAT NUMBER TO MILL TESTS CANNOT BE MADE, THE CONTRACTOR SHALL HAVE THE MATERIALS TESTED AT HIS EXPENSE, MAKE ONE SERIES OF TENSION AND BEND TESTS FOR EACH 2-1/2 TONS OR FRACTION THEREOF EACH SIZE AND TYPE OF REINFORCING STEEL. TESTS SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY.
- THE FABRICATOR SHALL PROVIDE THE OWNER'S TESTING LABORATORY MANUFACTURER'S MILL TEST REPORTS FOR THE MATERIALS TO BE USED ON THE JOB. THESE REPORTS ARE TO INCLUDE CHEMICAL AND PHYSICAL PROPERTIES OF THE REINFORCING FOR EACH HEAT NUMBER MANUFACTURED. ALL FABRICATED MATERIALS TO BE TAGGED WITH HEAT NUMBER.
- REINFORCING BARS NEW BILLET STEEL, ASTM A615, GRADE 40 #4 AND SMALLER, GRADE 60 #5 AND LARGER EXCEPT STIRRUPS AND COLUMN TIES, WHICH SHALL BE GRADE 40.
- TIE WIRE: NO. 16 AWG OR HEAVIER, BLACK ANNEALED.

DOWELS, SPLICING AND OFFSETS

BARS SHALL BE SPREAD THE MINIMUM DISTANCE SPECIFIED. STAGGER SPLICES 50% OF ADJACENT BARS. BEAM OR SLAB TOP BARS SHALL BE SPLICED MID-SPAN OF COLUMN SUPPORT AND BOTTOM BARS SPLICED AT COLUMN SUPPORTS. ALL SPLICES NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY ARCHITECT/ENGINEER. ALL SPLICES AND LAPS AT CORNERS AND INTERSECTIONS SHALL BE TIED WITH WIRE AT EACH END.



STRUCTURAL SPECIFICATIONS (CONTINUE)

ROUGH CARPENTRY

. REFERENCE STANDARD

1. CALIFORNIA BUILDING CODE 2013 EDITION, CHAPTER 23 (NOTED HEREIN AS CBC) 2. "NATIONAL DESIGN SPECIFICATIONS", 2012 EDITION.

II. MATERIALS

A. FASTENERS:

1. GENERAL REQUIREMENTS FOR FASTENERS:

REQUIREMENTS ABOVE.

- a. FASTENINGS SHALL BE OF ADEQUATE SIZE AND TYPES FOR THE PURPOSES
- FOR WHICH THEY ARE USED AND AS SHOWN ON THE DRAWINGS.
- b. INCLUDE WASHERS, PRE-DRILLING, ETC. REQUIRED FOR INSTALLATION. c. FOR EXTERIOR WORK, FASTENINGS SHALL BE HOT DIP GALVANIZED,
- NON-FERROUS, OR MADE RUST-RESISTANT BY APPROVED METHODS.
- 2. NAILS AND NAILING NOT OTHERWISE SHOWN OR SPECIFIED:
- a. FOR FRAMING, PLYWOOD AND GENERAL STRUCTURAL WOOD WORK. 1. ALL NAILS SHALL BE OF BRIGHT COMMON WIRE WITH FULL ROUND HEADS, AND SHALL BE OF SUFFICIENT LENGTH TO EXCEED REQUIRED
- PENETRATION INTO THE SUPPORTING MEMBER BY 1/8 ".
- 2. FRAMING NAILS SHALL BE HAND-DRIVEN AND SHALL MEET THE DIMENSIONAL REQUIREMENTS FOR COMMON WIRE NAILS OF THE CBC. 3. PLYWOOD NAILS: HAND-DRIVEN NAILS SHALL CONFORM TO
- 4. PNEUMATICALLY (MACHINE) DRIVEN NAILS SHALL NOT BE USED WITHOUT A VALID ICC REPORT. CONTRACTOR SHALL PROVIDE FOR SUBMITTAL TO OWNER AND TO THE PI A CURRENT ICC REPORT, NAIL SAMPLE WITH NAILDIMENSIONS, HEAD AND SHANK DIAMETER AND NAIL LENGTH, AND SPECIFICATIONS FOR THE NAILING DEVICE. NAILING DEVICE MUST BE ADJUSTABLE REGARDS THE DEPTH OF FOR EACH NORMAL FOR A HAND HAMMER, OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.
- NAILS AND NAILING SHALL ALSO CONFORM TO 1 ABOVE. 3. BOLTS:

DIVISION 5,

ASTM A-307, STANDARD SEMI-FINISHED MACHINE BOLTS AS SHOWN, WITH MALLEABLE IRON WASHERS OR STEEL PLATE WASHERS UNLESS OTHERWISE

- 4. POWDER-ACTUATED FASTENINGS: USE ONLY AS APPROVED BY THE ARCHITECT AND DSA.
- 5. FRAMING HARDWARE: FABRICATED SHEET METAL TIMBER FRAMING MANUFACTURED FROM HOT-DIPPED GALVANIZED STEEL BY "SIMPSON COMPANY", SAN LEANDRO, "UNIVERSAL ANCHORS COMPANY" (SIMPSON CO. PER CATALOGUE NO. C2015 ARE IDENTIFIED ON THE DRAWINGS). CONNECTORS SHALL BE AT LEAST 16 GAUGE MATERIAL. NAILS AND NAILING SHALL CONFORM TO THE MANUFACTURER'S INSTRUCTIONS WITH A NAIL PROVIDED FOR EACH

PUNCHED HOLE. ALL HEAVY HARDWARE TO BE FABRICATED FROM A-36 STEEL PER

- 6. ALL FASTENERS, NAILS AND BOLTS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED.
- B. STRUCTURAL LUMBER AND PLYWOOD
- 1. LUMBER AND PLYWOOD GRADED AND GRADE_MARKED PER STANDARDS SPECIFIED. 2. LUMBER:
- a. SIZE PER INDUSTRY STANDARDS FOR NOMINAL SIZES SHOWN; S4S.
- b. MOISTURE CONTENT OF FRAMING: MAXIMUM 19% WHEN INSTALLED AND MAXIMUM 15% AT TIME OF CLOSE-IN. IN AREAS WITH DRY HOT SUMMER MONTHS, MAXIMUM 12%.AT CLOSE-IN.
- c. STRUCTURAL FRAMING SHALL BE DOUGLAS FIR WITH GRADES AS NOTED BELOW UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. ALL GRADES PER WCLB STD GRADING RULES #17.
- 1. ALL PERMANENTLY EXPOSED FRAMING SHALL BE SELECT STRUCTURAL GRADE WITH NO BOX HEART.
- 2. EXCEPT PER 1 ABOVE, MINIMUM GRADES ARE:
- * ROOF 2X JOIST AND 2X RAFTERS D.F. NO. 2;
- * 4X AND LARGER D.F. NO. 1. BLOCKING DF NO. 1; 3. 6X POSTS, DF SELECT STRUCTURAL WITH NO BOX HEART.
- 4. MISCELLANEOUS FRAMING D.F. NO. 2
- 5. APPLICABLE WCLB PARAGRAPHS FOR FRAMING:
- * 2 X 4 TO 4 X 4 PAR. 124
- * 2 X 6 TO 4 X 16, STRUCTURAL JOISTS AND PLANKS PAR. 123
- * BEAMS (6 X), BEAMS & STRINGERS PAR.130
- * POSTS (6 X) PAR. 131
- e. SPLITS AND CHECKS ARE TO BE LIMITED TO 1X THE DEPTH OF THE MEMBER.
- f. WARPED/TWISTED AND EXCESSIVELY CHECKED MEMBERS SHALL NOT BE USED REGARDLESS OF GRADE MARKS.

3. PLYWOOD

- ALL STRUCTURAL PLYWOOD SHALL BE GRADE MARKED FOR CONFORMANCE WITH CBC AND DEP'T OF COMMERCE, "PRODUCT STANDARD PS-1-07", AND SHALL BE FABRICATED WITH EXTERIOR GLUE. GRADES SHALL BE AS PER THE DRAWINGS.
- C. BUILDING PAPER

WATERPROOF, NON-STAINING, LONG FIBERED KRAFT TYPE PAPER. F.S. UU-B-790, TYPE I OR II.

STRUCTURAL SPECIFICATIONS (CONTINUE)

ROUGH HARDWARE

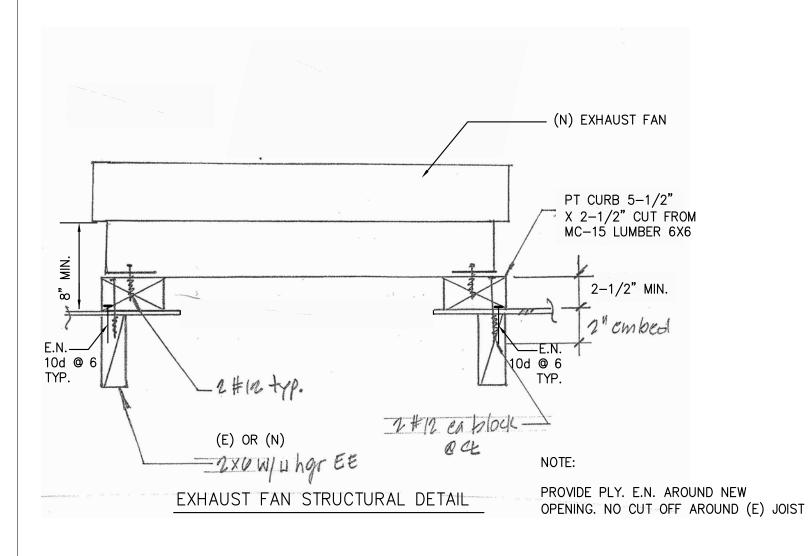
- A. GENERAL: NAILS, SPIKES, SCREWS, FABRICATED SHEET METAL ANCHORS, TIES, HANGERS AND ANY OTHER MATERIALS SHOWN OR REQUIRED FOR THE ATTACHMENT OF WOOD TO CONCRETE, WOOD TO STEEL, AND WOOD TO WOOD SHALL BE FURNISHED AND INSTALLED AS PART OF THIS WORK.
- B. FRAMING NAILING: ALL FRAMING NAILING SHALL CONFORM TO MINIMUM REQUIREMENTS OF THE CBC, AND WITH DETAILS SHOWN ON THE DRAWINGS.
- C. BOLTS, LAG SCREWS AND WASHERS
- 1. BOLTS IN WOOD SHALL BE MACHINE BOLTS CONFORMING TO ASTM A-307, UNLESS OTHERWISE NOTED, AND SHALL BE OF SUCH LENGTH THAT NOT MORE THAN 1/2" OF THREAD WILL BEAR AGAINST WOOD. BOLT HOLES IN WOOD SHALL BE 1/32" OVERSIZED. BOLT HOLES FOR SILL PLATE MAY BE 1/16" MAXIMUM
- 2. PROVIDE SQUARE PLATE OR MALLEABLE IRON WASHER AND NUT AT HEAD WHERE BEARING IS AGAINST WOOD; CUT WASHER UNDER NUT WHERE IT IS AGAINST STEEL. WASHER WILL NOT BE REQUIRED UNDER HEAD OF CARRIAGE BOLTS. PROVIDE MALLEABLE IRON WASHERS WHERE EXPOSED OR NOTED.
- 3. ALL NUTS SHALL BE TIGHTENED WHEN PLACED AND RETIGHTENED AT COMPLETION OF THE JOB OR IMMEDIATELY BEFORE CLOSING.

OVERSIZE. HOLES IN STEEL SHALL BE 1/16" OVERSIZE.

4. LAG SCREWS SHALL BE SCREWED, NOT DRIVEN, INTO PLACE. DRILL HOLES SAME DIAMETER AND DEPTH AS SHANK, THEN DRILL HOLES SAME DIAMETER AS AT BASE OF THREAD (60% TO 75% SHANK DIAMETER) FOR THE THREADED PORTION.

ANCHOR AND TIES

PROVIDE AND INSTALL ALL ANCHORS, BOLTS, TIES, ETC.. REQUIRED FOR THE TEMPORARY OR PERMANENT CARPENTRY WORK ANCHORS AND BOLTS SHALL BE ACCURATELY LOCATED WERE EMBEDDED IN CONCRETE AND SHALL BE SECURED IN POSITION BEFORE PLACING CONCRETE.



EXPANSION ANCHORAGE IN CONCRETE

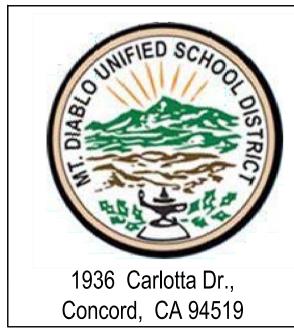
| A. WEDGE | ANCHORS- KWIKBOLT KB- | -TZ STEEL (No: ER 191 | 7) fc=3000 psi CRACKED |
|-----------|-----------------------|-------------------------|------------------------|
| BOLT SIZE | MINIMUM EMBEDMENT | TORQUE (FT-LBS) TEST | |
| 3/8"~ | 3" | 30 | |
| 5/8"~ | 4" | 50 | |
| 3/4"~ | 4" | 110 | |

- INSTALL DRILLED EXPANSION ANCHORS PER MANUFACTURER'S INSTRUCTIONS.
- WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN REINFORCMENT AND THE DRILLED-IN ANCHOR
- ALL TEST SHALL BE DONE IN THE PRESENCE OF THE IOR

TESTING NOTES

- APPLY PROOF TEST LOADS TO WEDGE & SLEEVE ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE NUT & INSTALL A THREADED COUPLER TO THE SAME TIGHTNESS OF THE ORIGINAL NUT USING A TORQUE WRENCH & APPLY LOAD.
- 2. FOR SLEEVE INTERNALLY THREADED CATEGORIES, VERIFY THAT THE ANCHOR IS NOT PREVENTED FROM WITHDRAWING BY A BASEPLATE OR OTHER FIXTURES. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE FIXTURE(S) PRIOR TO TESTING.
- 3. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING THE FIXTURE(S).
- 4. TEST EQUIPMENT IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.
- 5. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS: HYDRAULIC RAM METHOD: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. FOR WEDGE AND SLEEVE TYPE ANCHORS, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES
- BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE OR SLEEVE TYPE: ONE-HALF (1/2) TURN OF THE NUT. ONE-QUARTER (1/4) TURN OF THE NUT FOR THE 3/8 IN. SLEEVE ANCHOR ONLY.
- 6. TESTING SHOULD OCCUR 24 HOURS MINIMUM AFTER INSTALLATION OF THE SUBJECT ANCHORS.

7. TEST ALL ANCHORS





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PROJECT TITLE: MAINTENANCE WORK PLUMBING AND FINISHES AT STUDENTS' **RESTROOMS** WILLOW CREEK

KEY PLANS:



CENTER

| description | evm |
|-----------------|------|
| | syml |
| DISTRICT REVIEW | |
| NON DSA | |
| | |
| | |
| | |

PHD ARCHITECTS JOB # 17-215

SCALE: AS NOTED

SHEET NAME & NUMBER: STRUCTURAL

DATE:

1/30/18

SSP

SPECIFICATIONS