25'

12'

		ΓΙΟΝ	S	SYMBOLS
&	AND		PAPER TOWEL DISPENSER	
& @ @ @ @ @ @ @ @ @ @ @ @ @	ADDICLEVIA AND AT CENTERLINE DIAMETER POUND OR NUMBER AIR CONDITIONING ASPHALTIC CONCRETE ACOUSTIC CELLING TILE ADDITIONAL ADJACENT ABOVE FINSHED FLOOR ALTERNATE ALUMINUM ANDOZED APPROXIMATE ARCHITECTURAL BITUMINOUS BOARD BULCID BULTUP ROOFING CABINET CATCH BASIN CONTRACTOR FURNISHED CONTRACTOR INSTALLED CONTRACTOR FURNISHED CONTRACTOR INSTALLED CONTRACTOR FURNISHED CONTRACTOR INSTALLED CONTRACTOR FURNISHED CONTRACTOR INSTALLED CONTROL JOINT CELLING CLOSET CLEAR CONCRETE MASONRY UNIT CLEAN OUT COLUMN COMPOSITION CONCRETE CONSTRUCTION CONTRUCTION CONTRUCTION CONTRUCTION DUBLE DEMOLITION DEMOLIT	PTD PVC (R) RB RCP RD REF REINF REQ RF RM RO RWL S SCD SCD SCD SCD SCD SCD SCD SCD SCD S	PAPER TOWEL DISPENSER POLYVINYL CHLORIDE RELOCATE RESILIENT OR RUBBER BASE REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFRIGERATOR REINFORCED REQUIRED RESILIENT FLOORING ROOM ROUGH OPENING RAIN WATER LEADER SOUTH SOLID CORE SEE CIVIL DRAWINGS SCHEDULE SOAP DISPENSER SEE ELECTRICAL DRAWINGS SEE FIRE PROTECTION DRAWINGS SHEET SIMILAR SEE LANDSCAPE DRAWINGS SHEET METAL SCREW SANITARY NAPKIN DISPENSER SEE PLUMBING DRAWINGS SPECIFICATION SQUARE STAINLESS STEEL SEE STRUCTURAL DRAWINGS STEEL STORAGE STRUCTURAL SUSPEND TELEPHONE TEMPORARY THICK TOP OF CURB TOP OF PARAPET TOP OF SLAB TOP OF PARAPET TOP OF SLAB TOP OF S	A GRID LINE BUILDING ELEVATION (1) - ELEVATION IDENTIFICATION (30) - SHEET WHERE ELEVATION (1) - SECTION IDENTIFICATION (1) - SECTION IDENTIFICATION (1) - SECTION IDENTIFICATION (1) - SECTION IDENTIFICATION (1) - SHEET WHERE SECTION (1) - DETAIL IDENTIFICATION (1) - DETAIL IDENTIFICATION (1) - DETAIL IDENTIFICATION (1) - DETAIL NO. OF ELEVATION (2) - NO ARROWS MEAN (3) - DETAIL NO. OF ELEVATION (2) - WORK POINT, CONTROL POINT (2) - WORK POINT, CONTROL POINT (3) - REVISION NUMBER, SEE (3) - REVISION NUMBER, SEE (4) - REVISION
FD FE FEC FF FIN FLR FO FOC FOF FOS FRP FT FTG	FLOOR DRAIN FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FINISH FLOOR FINISH FLOOR FACE OF FACE OF CONCRETE FACE OF FINISH FACE OF STUD FIBERGLASS REINFORCED PANEL FOOT OR FEET FOOTING			
GA GALV GB GSM GYP	GAUGE GALVANIZED GRAB BAR GALVANIZED WHEET METAL GYPSUM			
HB HC HD HDWR HM HORIZ HR HT	HOSE BIB HOLLOW CORE HEAD HARDWARE HOLLOW METAL HORIZONTAL HOUR HEIGHT			
INFO INSUL INT JAN	INFORMATION INSULATION INTERIOR JANITOR JOINT			
LAB LAM — LAV LBS LT	LABORATORY LAMINATE LAVATORY POUNDS LIGHT			
MAX MB MDF MECH MFR MH MIN MISC MOD MTD MTG MTL MUL	MAXIMUM MACHINE BOLT MEDIUM DENSITY FIREBOARD MECHANICAL MANUFACTURER MANHOLE MINIMUM MISCELLANEOUS MODULAR MOUNTED MOUNTING METAL MULLION			
(N) N NIC NO or # NOM NTS	NEW NORTH NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE			
O/ OC OFCI OFOI OPP	OVER ON CENTER OWNER FURNISHED CONTRACTOR INSTALLED OWNER FURNISHED OWNER INSTALLED OPPOSITE			
PL PLAM PLAS PLYWD PR	PLATE PLASTIC LAMINATE PLASTER PLYWOOD PAIR			

SAN RAFAEL CITY SCHOOLS SAN RAFAEL HIGH SCHOOL **PAINTING PROJECT--BID SET**

150 3RD STREET, SAN RAFAEL, CA 94901

GENERAL NOTES

- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO SEE TO IT THAT ALL MATERIALS AND/OR WORK DESCRIBED, DEPICTED OR DETAILED WITHIN THESE DOCUMENTS, BE FURNISHED AND OR INSTALLED REGARDLESS OF THE LOCATION OF THAT MATERIAL OR WORK WITHIN THE DOCUMENTS OR OMISSION (WHETHER DELIBERATE OR ACCIDENTAL) OF THAT MATERIAL OR WORK BY A SUBCONTRACTOR ON HIS/HER BID.
- ALL CONTRACTORS, WHETHER THE GENERAL OR SUB, SHALL CONSIDER THESE DOCUMENTS IN THEIR ENTIRETY. DISCREPANCIES OR CONTRADICTIONS BETWEEN PORTIONS OF THESE DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AT LEAST 48 HRS PRIOR TO BID OPENING FOR CLARIFICATION. OTHERWISE EITHER DESCRIPTION OR INSTRUCTION SHALL BE IN FORCE UNTIL ONE IS OMITTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING TEMPORARY FENCING AND GATES, SIGNAGE, SECURITY LIGHTING OR OTHER SECURITY AND CONTROL MEASURES NECESSARY TO PROVIDE FOR THE SAFETY OF STUDENTS. FACULTY AND STAFF AROUND THE WORK, UNTIL THE COMPLETION OF THE WORK UNLESS OTHERWISE DETERMINED BY THE ARCHITECT OR CONSTRUCTION MANAGER.
- THE CONTRACTOR IS RESPONSIBLE TO REPAIR AND/OR REPLACE ALL DISTRICT PROPERTY DAMAGED DURING THE COURSE ON THE WORK, ESPECIALLY BUT NOT LIMITED TO ASPHALT PAVING AROUND THE SITE, STAGING AREA OR PATH OF TRAVEL TO EITHER.
- THE CONTRACTOR SHALL LIMIT HIS/HER ACTIVITY TO THE AREA DESCRIBED WITHIN THE DOCUMENTS SO AS TO LIMIT HIS/HER LIABILITY FOR DAMAGED PROPERTY UNLESS OTHERWISE PERMITTED BY THE CONSTRUCTION MANAGER OR OWNER.
- 3. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF ALL APPLICABLE CODES. SEE LIST THIS SHEET.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION EXCEPT DSA APPROVAL.
- ALL DIMENSIONS SHALL BE FACE OF STUD. UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLR" MEAN CLEAR DIMENSION TO FACE OF FINISH. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND.
- 9. ALL ITEMS IN THESE DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
- 10. SCHEDULE ALL WORK OUTSIDE THE "EXTENT OF WORK" SET FORTH IN THESE DOCUMENTS WITH THE CONSTRUCTION MANAGER INCLUDING ACCESS AND STORAGE. THE CONSTRUCTION SCHEDULE SHALL BE APPROVED BY THE OWNER PRIOR TO THE START OF CONSTRUCTION.
- LALL UTILITIES REQUIRED FOR THE CONTINUOUS OPERATION OF ALL EXISTING FACILITIES TO REMAIN MUST BE MAINTAINED IN SERVICE AT ALL TIMES. ANY SHUT DOWNS FOR NEW CONNECTIONS MUST BE COORDINATED WITH THE CONSTRUCTION MANAGER TWO WEEKS PRIOR TO THE REQUESTED SHUT DOWN.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY ITEMS DAMAGED OR DISTURBED DURING THE COURSE OF THE WORK. INSTALLATION SHALL MATCH EXISTING IN KIND, QUALITY, AND PERFORMANCE.
- 3. THE CONTRACTOR SHALL CONTAIN ALL DUST AND DEBRIS TO THE CONSTRUCTION AREA. BROOM CLEAN ALL SIDEWALKS AND DRIVEWAYS EACH DAY. KEEP DIRT AND DUST TO A MINIMUM.
- 4. ALL REMODELED ITEMS LISTED TO BE SALVAGED FOR THE OWNER SHALL BE DELIVERED TO A PLACE OF STORAGE AS DIRECTED BY THE OWNER. ALL OTHER ITEMS MUST BE DISPOSED OF OFF SITE IN A LEGAL MANNER.
- 15. ALL WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO THE PUBLIC AND TO OCCUPANTS OF EXISTING BUILDINGS.
- 16. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. GUARD ALL HAZARDS IN ACCORDANCE WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
- A. COORDINATION WITH OTHER CONTRACTS: IF ANY PART OF THIS CONTRACTOR'S WORK DEPENDS UPON THE WORK OF A SEPARATE CONTRACTOR, THIS CONTRACTOR SHALL INSPECT SUCH OTHER WORK AND PROMPTLY REPORT IN WRITING TO THE CONSTRUCTION MANAGER ANY DEFECTS IN SUCH OTHER WORK THAT RENDER IT UNSUITABLE TO RECEIVE THE WORK OF THIS CONTRACTOR. FAILURE OF THIS CONTRACTOR TO SO INSPECT AND REPORT SHALL CONSTITUTE AN ACCEPTANCE OF THE OTHER CONTRACTOR'S WORK, EXCEPT AS TO DEFECTS WHICH MAY DEVELOP IN OTHER CONTRACTOR'S WORK AFTER EXECUTION OF THIS CONTRACTOR'S WORK.
- B. COORDINATION SCHEDULE: PORTIONS OF WORK UNDER THIS CONTRACTOR'S WORK MUST BE COMPLETED ON SCHEDULE IN ORDER FOR OTHER NOT-IN-CONTRACT WORK TO BE COMPLETED BY OTHERS. COORDINATION WITH THE CONSTRUCTION MANAGER AND STRICT ADHERENCE TO THE COMPLETION DATES FOR DESIGNATED PORTIONS OF WORK ARE IMPERATIVE. SEE SPECIFICATIONS FOR LIQUIDATED DAMAGES.
- 7. DEMOLITION IS NOT NECESSARILY LIMITED TO ONLY WHAT IS SHOWN ON THIS OR OTHER DRAWINGS OR AS OUTLINED IN THE SPECIFICATIONS. THE INTENT IS TO INDICATE GENERAL SCOPE OF DEMOLITION REQUIRED TO COMPLETE THE PROJECT WITH THE CONSTRUCTION DOCUMENTS.
- 8. ARCHITECT IS NOT RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE. TO THE EXTENT THESE DOCUMENTS RELATE TO SUCH ISSUES, ARCHITECT'S PARTICIPATION IS SOLELY ADMINISTRATIVE WITHOUT ANY RESPONSIBILITY FOR THE CONTENT OR EXECUTION OF SUCH DOCUMENTS.
- 19. OF PARTICULAR IMPORTANCE IS THE NEED FOR CONTRACTOR TO ASSURE THAT ALL PERSONS ENTERING A POSSIBLY HAZARDOUS AREA, INCLUDING SUPERINTENDENTS, WORKERS, SUBCONTRACTORS, OTHER CONTRACTORS, AND OTHER PERSONS NOT UNDER CONTRACTUAL CONTROL TO THE CONTRACTOR, ARE AWARE OF PROCEDURES.
- 20. ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE FIRE STOPPED AND SEALED TO MAINTAIN THE REQUIRED RATING.
- 21. DETAIL DRAWINGS WITH REFERENCES TO FIRE-RATED ASSEMBLIES OR CONSTRUCTION WHICH HAVE BEEN TESTED BY UNDERWRITERS LABORATORIES, THE CALIFORNIA BUILDING CODE OR ANY OTHER APPROVED TESTING AGENCY, SHALL BE CONSTRUED TO INDICATE ALL CONSTRUCTION AND PROCEDURES CONTAINED IN THE REFERENCED ASSEMBLY FOR CONSTRUCTION.

ALL WORK PERFORMED UNDER THIS CONTRACT IS TO CONFORM TO THE FOLLOWING CODES AND REGULATIONS:

2018 NATIONAL ELECTRICAL CODE (NEC)

2018 UNIFORM MECHANICAL CODE (UMC)

2018 UNIFORM PLUMBING CODE (UPC)

(ASME A17.1-2007)

2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, CCR BASED ON THE

NFPA 13	INSTALL
NFPA 14	INSTALL
NFPA 17	STANDA
NFPA 17A	STANDA
NFPA 20	INSTALL
NFPA 24	INSTALL
NFPA 72	NATION
NFPA 80	FIRE DC
NFPA 92	STANDA
NFPA 253	CRITICA
NFPA 2001	CLEAN /

2016 EDITION
2010 EDITION
2017 EDITION
2017 EDITION
2016 EDITION
2016 EDITION
2016 EDITION
2016 EDITION
2018 EDITION
2019 EDITION
2015 EDITION

APPLICABLE CODES OWNER INDEX OF DRAWINGS SAN RAFAEL CITY SCHOOLS ARCHITECTURAL 310 NOVA ALBION WAY TEL. (415) 492-3285 SAN RAFAEL, CA 94903 FAX. (415) 492-3229 A0.01 TITLE SHEET DIRECTOR OF CAPITAL FACULTIES: DAN ZAICH 2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR) A1.01 SITE PLAN A3.01 BUILDING AD ELEVATIONS SAN RAFAEL HIGH SCHOOL A3.02 BUILDING AD ELEVATIONS 150 THIRD STREET 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) TEL. (415) 485-2330 A3.03 BUILDING AR ELEVATIONS SAN RAFAEL, CA 94901 A3.04 BUILDING LA ELEVATIONS PRINCIPAL: GLEN DENNIS A3.05 BUILDING MU ELEVATIONS 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, CCR BASED ON THE CONSTRUCTION MANAGER A3.06 BUILDING PE ELEVATIONS A3.07 BUILDING PE ELEVATIONS GREYSTONE WEST COMPANY TEL. (707) 933-0624 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, CCR BASED ON THE A3.08 BUILDING SC ELEVATIONS FAX. (707) 996-8390 621 WEST SPAIN STREET SONOMA, CA 95476 A3.09 BUILDING TE ELEVATIONS CONTACT: JOHN DILENA A3.10 PAINTING DETAILS 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, CCR BASED ON THE A3.11 BUILDING AD REPAIR SCOPE **CONSULTANTS** A3.12 BUILDING AD REPAIR SCOPE A3.13 BUILDING AR REPAIR SCOPE 2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR A3.14 BUILDING LA REPAIR SCOPE 2016 SAFETY CODE FOR ELEVATORS AND ESCALATORS A3.15 BUILDING MU REPAIR SCOPE ARCHITECT A3.16 BUILDING PE REPAIR SCOPE HIBSER YAMAUCHI ARCHITECTS, INC. TEL. (510) 446-2222 A3.17 BUILDING PE REPAIR SCOPE 300 27TH STREET FAX (510) 446-2211 A3.18 BUILDING SC REPAIR SCOPE OAKLAND, CA 94612 2018 INTERNATIONAL FIRE CODE (IFC) A3.19 BUILDING TE REPAIR SCOPE A8.01 EXTERIOR DETAILS 2019 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 CCR (2018 IEB CODE AND CALIFORNIA AMENDMENTS) A10.01 SHEET SPECS A10.02 SHEET SPECS 2019 CALIFORNIA GREEN BUILDING CODE (CALGreen), PART 11, TITLE 24, CCR A10.03 SHEET SPECS 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN LATION OF SPRINKLER SYSTEMS LATION OF STANDPIPE SYSTEMS ARD FOR DRY CHEMICAL EXTINGUISHING SYS. ARD FOR WET CHEMICAL SYS. LATION OF STATIONARY PUMPS LATION OF PRIVATE FIRE MAINS NAL FIRE ALARM AND SIGNALING CODE OORS AND OTHER OPENING PROTECTIVES ARD FOR SMOKE CONTROL SYSTEMS AL RADIANT FLUX OF FLOOR COVERING SYS AGENT FIRE EXTINGUISHING SYSTEM REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS - 2019 CBC CHAPTER 35 AND 2019 CFC CHAPTER 80. THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN FORCE ON THE DATE OF THE CONTRACT, UNLESS OTHERWISE STATED. NOTHING ON THE DRAWINGS IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE. COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED. **SCOPE OF WORK** NEW EXTERIOR PAINT ON CAMPUS BUILDINGS SHEET METAL FABRICATION CHAIN LINK FENCING & GATES HOSE BIB REMOVAL AND REPLACMENT ELECTRICAL SAFE OFF FOLLOWING REMOVAL OF EXISTING DEVICES METAL SCREENS AND VENTS - LANDSCAPE PROTECTION VICINITY MAP NO SCALE PROJECT LOCATION—

1" = 1'-0"	







KMA89 BLACK

KMA3 HAUTE

COUTURE

OAK

EAST/WINDOW RECESSES AND WALKWAY PAINT, ——

TYP, SEE 26/A8.01















25'

1/8" = 1'-0"

	12'
= 1'-0"	

6'

0 1'

4'

KM5819 ROTUNDA WHITE





3/2021 9:08:25 AM C:\Revit Locals\5323 SRHS STEAM BLDG rvt19 eme



0 5'



12'





1/8" = 1'-0"

	I	I III → III → III → III	Kara and a second		



KMW45 FEATHER WHITE -WHITE KMA3 HAUTE COUTURE ___ KM5819 ROTUNDA WHITE 2 SC BUILDING - EAST 1/8" = 1'-0"





25'

1/8" = 1'-0"

KMW45 FEATHER WHITE	
KM5819 ROTUNDA WHITE	
KM5819 ROTUNDA WHITE -	
KMA89 BLACK OAK	
KM5819 ROTUNDA WHITE	
٢	(MA89 BLACK) OAK

1

0 1' 6' 1/2" = 1'-0"

0

4' 3/4" = 1'-0"

0 1' <u>____</u>__





1/2" = 1'-0"

.1..... 3/4" = 1'-0"



PLASTER AROUND WINDOW - KM4935 SEQUOIA FOG -**REPLACE EXISTING** OLIVE GREEN

WINDOW FRAME -KMA89 BLACK OAK

KM4835 SEQUOIA FOG - REPLACE **EXISTING RED** STRIPES

KM5819 ROTUNDA WHITE - REPLACE EXISTING OLIVE **GREEN STRIPE**

KM4935 SEQUOIA FOG - REPLACE **EXISTING OLIVE** GREEN

KMW45 FEATHER WHITE - REPLACE EXISITNG WHITE SHADE



(12)-

AD BUILDING MAIN ENTRY - NORTH

(17)

PLASTER AROUND WINDOW - KM4935 SEQUOIA FOG -REPLACE EXISTING OLIVE GREEN

WINDOW FRAME -KMA89 BLACK OAK

KM4835 SEQUOIA FOG - REPLACE EXISTING RED STRIPES

KM5819 ROTUNDA WHITE - REPLACE **EXISTING OLIVE GREEN STRIPE**

KM4935 SEQUOIA FOG - REPLACE EXISTING OLIVE GREEN

KMW45 FEATHER WHITE - REPLACE EXISITNG WHITE SHADE

2021 9:08:25 AM C:\Revit Locals\5323 SRHS STEAM BLDG rvt19 emehlhop.

Revit Version:

/2021 9:08:25 AM C:\Revit_Locals\5323 SRHS STEAM BLDG rvt19_emehlhop.

//2021 9:08:25 AM C:\Revit_Locals\5323 SRHS STEAM BLDG rvt19_emehlhop.

25'

1/8" = 1'-0"

STRAIGHTEN & SECURE LIGHT FIXTURE

SAFE OFF & REMOVE DANGLING WIRE IN COVERED WALKWAY & **COIL AT** BUILDING **PENETRATION**, PATCH

SAFE OFF & REMOVE **ELECTRICAL WIRING &** LOW VOLTAGE WIRING

CUT DANGLING ELECTRICAL WIRE & COIL AND SECURE **ON ROOF**

1/8" = 1'-0"

SC BUILD 1/8" = 1'-0"	NG - NORTH	
	REROUTE DOWNSPOUT FROM (E) SCUPPER TO LEFT OF WINDOW TO GRADE AND AREA DRAIN TO AVOID ELECTRICAL EQUIPMENT	
	2 SC BUILDING - EAST 1/8" = 1'-0" REMOVE BANDONED CONDUIT, PATCH HOLE	
		3 SC BUILDING - SOUTH 1/8" = 1'-0"

25'

1/8" = 1'-0"

1/8" = 1'-0"

Revit Version: 2019

	-	
	SECTION 01 73 29 Cutting and Patching	D. Existing Services: Where existing services a or abandoned, bypass such services before
	ENERAL	services to occupied areas.
1.1 SEC	CTION INCLUDES	3.4 CUTTING AND PATCHING
А.	Requirements and limitations for cutting and patching of Work.	A. Execute cutting, titting, and patching to could be a could be could be could be a cou
1.2 SUI	BMITTALS	C. Uncover work to install ill-timed Work.
Α.	Submit written request in advance of cutting or alteration which affects:	D. Remove and replace defective or non-conf
	2. Integrity of weather-exposed or moisture-resistant element.	E. Remove samples of installed Work for testi
	 Efficiency, maintenance, or safety of any operational element. Visual qualities of sight-exposed elements. 	F. Provide openings in the Work for penetrativ
	5. Work of San Rafael City Schools or separate contractor.	G. Cut rigid materials using saw or drill. Pneu prior approval.
В.	Include in request:	3.5 PERFORMANCE
	 Location and description of affected Work. 	A. Execute Work by methods to avoid damag provide appropriate surfaces to receive particular
	 Necessity for cutting or alteration. Description of proposed Work, and Products to be used. 	B. Employ skilled and experienced installer to
	5. Alternatives to cutting and patching.	C. Cut rigid materials using masonry saw or c without prior approval.
	 Effect on Work of San Rafael City Schools or separate contractor. Written permission of affected separate contractor. 	D. Do not cut and patch structural elements ir
	8. Date and time Work will be executed.	load-carrying capacity or load deflection re
1.3 DE	SIGN CRITERIA	that results in reducing their capacity to pering the second decreased oper
А.	and shall preserve continuity of existing fire ratings.	F. Restore work with new products in accorde
В.	Patching shall successfully duplicate undisturbed adjacent finishes, colors, textures, and profiles. Where there is dispute as to whether duplication is	Documents.
	successful or has been achieved to a reasonable degree, the Architect's judgment shall be final.	ש. דוז vvork air tight to pipes, sleeves, ducts, c through surfaces.
1.4 CU	ITTING AND PATCHING	H. At penetrations of fire rated walls, partition completely seal all voids with fire-rated mo
A.	Structural Work: Do not cut-and-patch structural Work in a manner resulting in a	penetrated element.
	and request and obtain Engineer's approval before proceeding with cut-and- patch of new and/or existing structural Work.	i. кетinisn surfaces to match adjacent tinish. nearest intersection or natural break. For c
В.	Operational/Safety Limitations: Do not cut-and-patch operational elements and	END OF SECTION
	assembly, decreased performance, shortened useful life, or increased maintenance. The Contractor shall be responsible for the location of all existing	
	utilities and coordinate all Work to avoid any interruption of service to adjacent properties and/or to other facility operations without proper notification.	Common Work Results For Exis
C.	Visual/Quality Limitations: Do not cut-and-patch Work exposed to view, such as	PART 1 - GENERAL
	plaster, in a manner resulting in noticeable reduction of visual qualities and similar qualities, as judged by Architect.	A. SUMMARY
D.	Limitation on Approvals: Architect's approval to proceed with cutting-and- patching does not waive right to later require removal/replacement of Work	1. Provide selective demolition of exterior maintenance repairs and/or replacem
	found to be cut and patched in an unsatisfactory manner, as judged by Architect	2. Protect portions of building, site, and a demolition operations.
ayment f	OR INCURRED COSTS	a. Protect from damage existing cons
ne costs co ocuments.	aused by ill-timed or defective Work, or Work not conforming to Contract , including costs for additional service of Architect, shall be paid by the party	b. Contractor shall patch and repair
esponsible	for ill-timed, rejected or non-conforming Work.	City Schools.
ART 2 - PR	ODUCTS	3. San Rafael City Schools will occupy p adjacent to areas of selective demolitie
2.1 MA	ATERIAL	Schools normal operations
	Primary Products: Those required for original installation.	
A.	Evisting Materials, Lise materials identical to evisting materials. If identical	B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow
A. B.	Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations.
А. В. С.	Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco,	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities.
А. В. С.	Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations.
А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 2111 using materials to be used on 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public
А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities.
А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: 1. Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. 	 B. Provide a minimum of 72 hours advance reselective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and electraccessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, sepathways, and adjacent facilities. G. Provide pollution control during demolition
А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: 1. Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. 2. Maximum water cement ratio 0.47 at point of placement. 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat
А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS:
А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incluwerk and location of temporary partitions
А. В. С. ART 3 - EX	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions.
А. В. С. ART 3 - EX .1 GEN А.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION WERAL Execute cutting, fitting, and patching to complete Work, and to: 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if app
А. В. С. ART 3 - EX .1 GEN А.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION VERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if appendix and selective demolition work, if appendix and selective demolition of the provide temporary bacterial abatement work, if appendix and selective demolition of the provide temporary bacterial abatement work, if appendix and selective demolition of the provide temporary bacterial abatement work, if appendix and selective demolition of the provide temporary bacterial abatement work and bacteria.
А. В. С. ART 3 - EX 1 GEN А.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: 1. Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. 2. Maximum water cement ratio 0.47 at point of placement. 3. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION VERAL Execute cutting, fitting, and patching to complete Work, and to: 1. Fit the several parts together, to integrate with other Work. 3. Remove and replace defective and non-conforming Work	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if appendix and used.
A. B. C. ART 3 - EX .1 GEN A.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: 1. Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. 2. Maximum water cement ratio 0.47 at point of placement. 3. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION VERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work.	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if app PART 2 - PRODUCTS Not used. PART 3 - EXECUTION
A. B. C. ART 3 - EX .1 GEN A. 3.2 EXA A.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION IERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. 	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if ap PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION
A. B. C. ART 3 - EX .1 GEN A. 3.2 EXA A.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION IERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. AMINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new	 B. Provide a minimum of 72 hours advance in selective demolition work or utility shutdow. Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if ap PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate wir verify extent of demolition required.
А. В. С. ART 3 - EX .1 GEN А. 3.2 EXA А.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION HERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. 	 B. Provide a minimum of 72 hours advance a selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if ap PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate wit verify extent of demolition required. B. Do not damage building elements and im
A. B. C. ART 3 - EX .1 GEN A. 3.2 EXA A. B.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION HERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. AMINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. After uncovering existing Work, inspect conditions affecting performance of Work.	 B. Provide a minimum of 72 hours advance a selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if ap PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate wiverify extent of demolition required. B. Do not damage building elements and im C. Examine conditions at site to verify that de not endanger existing structures by overlow
А. В. С. ART 3 - EX .1 GEN А. 3.2 EXA А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION IERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. AMINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. After uncovering existing Work, inspect conditions affecting performance of Work. Do not cut and patch any piping, conduit, or equipment supports or related components in a manner that could change their load-carrying capacity, that	 B. Provide a minimum of 72 hours advance a selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of matter 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl. work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if ap PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate wit verify extent of demolition required. B. Do not damage building elements and im C. Examine conditions at site to verify that de not endanger existing structures by overlood. D. If known or suspected hazardous material
А. В. С. ART 3 - EX .1 GEN А. 3.2 EXA А. В. С.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION NERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. AMINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. After uncovering existing Work, inspect conditions affecting performance of Work. Do not cut and patch any piping, conduit, or equipment supports or related components in a manner that could change their load-carrying capacity, that results in increased maintenance or decreased operational life or safety.	 B. Provide a minimum of 72 hours advance is selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and Cexisting utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, sepathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mart 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incluvork and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if ap PART 2 - PRODUCTS Not used. PART 3 - EXECUTION A. Survey existing conditions and correlate with verify extent of demolition required. B. Do not damage building elements and im C. Examine conditions at site to verify that de not endanger existing structures by overlow.
A. B. C. ART 3 - EX .1 GEN A. 3.2 EXA A. B. C. D.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION IERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Incover work to install ill-timed Work. Remove and replace defective and non-conforming Work. AMINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. After uncovering existing Work, inspect conditions affecting performance of Work. Do not cut and patch any piping, conduit, or equipment supports or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintennece or decreased operational life or safety. Do not cut and patch construction in a manner that results in visual evidence of quiting and patching. Do not cut and patch construction in a manner that results in visual evidence of a patch construction.	 B. Provide a minimum of 72 hours advance i selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the publi F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mathematical battement work and location of temporary partitions. B. Submit selective demolition schedule. Incluverk and location of temporary partitions. B. Submit proposed duration of: Noise prodhazardous material abatement work, if appendix and selective demolition required. PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate w verify extent of demolition required. B. Do not damage building elements and im C. Examine conditions at site to verify that de not endanger existing structures by overlood. D. If known or suspected hazardous material stop operations immediately and notify Sa E. Do not close or obstruct streets, walkways spaces or facilities without the written permonter structure instructures and structures and stop operations immediately and notify Sa
А. В. С. ART 3 - EX .1 GEN А. 3.2 EXA А. В. С. D.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION IERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. MINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. After uncovering existing Work, inspect conditions affecting performance of Work. Do not cut and patch any piping, conduit, or equipment supports or related components in reducing their load-carrying capacity, that results in reducing that could change their load-carrying capacity, that results in reducing that could change there load-carrying capacity, that results in reducing that could patch construction exposed on the exterior or in occupied spaces in a manner that would, in the Architec's opinion, reduce of cutting and patching. Do not cut and patch construction in a manner that results in visual evidence of cut	 B. Provide a minimum of 72 hours advance selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the publi F. Ensure minimum interference with roads, sepathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of main selective demolition schedule. Inc. work and location of temporary partitions. B. Submit selective demolition schedule. Inc. work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if appendix and used. PART 2 - PRODUCTS Not used. PART 3 - EXECUTION A. Survey existing conditions and correlate w verify extent of demolition required. B. Do not damage building elements and im C. Examine conditions at site to verify that de not endanger existing structures by overload to exist without the written permission of a baying iurisdiction. If necessary mervides to having iurisdiction in precision of a baying iurisdiction. If necessary mervides to having iurisdiction. If ne
А. В. С. ART 3 - EX .1 GEN А. 3.2 EXA А. В. С. D.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION IERAL Execute cutting, fitting, and patching to complete Work, and to: Fit the several parts together, to integrate with other Work. Incover work to install ill-timed Work. MINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. After uncovering existing Work, inspect conditions affecting performance of Work. Do not cut and patch any piping, conduit, or equipment supports or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Do not cut and patch construction in a manner that results in visual evidence of cuting and patching. Do not cut and patch construction in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patche in a visu	 B. Provide a minimum of 72 hours advance selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the publi F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolitio H. Provide removal and legal disposal of main 1.2 SUBMITTALS: A. Submit selective demolition schedule. Inc. work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if appending the selective demolition required. PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate w verify extent of demolition required. B. Do not damage building elements and im C. Examine conditions at site to verify that de not endanger existing structures by overlow. D. If known or suspected hazardous material stop operations immediately and notify Sa E. Do not close or obstruct streets, walkways spaces or facilities without the written permission of having jurisdiction. If necessary, provide to having jurisdiction. If necessary, pro
А. В. С. ART 3 - EX .1 GEN А. 3.2 EXA А. В. С. D. E.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office). (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: a. Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. a. Maximum water cement ratio 0.47 at point of placement. a. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. EVENTON EVENTON EVENTON	 B. Provide a minimum of 72 hours advance is selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and Cexisting utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, sepathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mathematical abatement work, if approximate and location of temporary partitions. B. Submit selective demolition schedule. Incluwork and location of temporary partitions. B. Submit proposed duration of: Noise prodhazardous material abatement work, if approximate abatement work, if approximate abatement work, if approximate abatement work, if approximate abatement work and location of temporary partitions. B. Submit proposed duration of: Noise prodhazardous material abatement work, if approximate abatement work, if approximate abatement work and location of the provide the section of the provide temporary partitions. B. Submit proposed duration and correlate with verify extent of demolition required. B. Do not damage building elements and import existing structures by overloc. D. If known or suspected hazardous materials stop operations immediately and notify Sa E. Do not close or obstruct streets, walkways, spaces or facilities without the written permission of thaving jurisdiction. Do not interfacilities without the written permission of thaving jurisdiction. If necessary, provide temporary operations if public safety or remain Perform temporary corrective measures or properly.
A. B. C. C. ART 3 - EX S.1 GEN A. 3.2 EXA A. B. C. D. E. 3.3 PRE	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. [951]737-6240 (main office), (951) 737-7032 (fax) www.quickcrete.com a. Proportion mixes by either testing agency trial batch or field test data methods in accordance with ACI 211.1, using materials to be used on the project, to provide lightweight concrete with properties as follows: Compressive Strength: 2,500 PSF when tested in accordance with ASTM 213R. Maximum water cement ratio 0.47 at point of placement. Add air-entrainment admixture to result in air content at point of placement complying with ACI 533 requirements. ECUTION ERAL The the several parts together, to integrate with other Work. Uncover work to install ill-timed Work. Remove and replace defective and non-conforming Work. MINATION Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Verify compatibility with and suitability of substrates and finishes to accept the new Work. After uncovering existing Work, inspect conditions affecting performance of Work. Do not cut and patch any piping, conduit, or equipment supports or related components in a manner that could change their load-carrying capacity, that results in visual evidence of cut and patch ing. Do not cut and patch ing. Do not cut and patch construction in a manner that results in visual evidence of cut and patch ing. Do not cut and patch construction in a manner that results in visual evidence of cut and patch ing. Do not cut and patch construction in a manner that results in visual evidence of cut and patch ing. Do not cut and patch construction in a manner that results in visual evidence of cut and patch ing.	 B. Provide a minimum of 72 hours advance is selective demolition work or utility shutdow. Schools normal operations. C. Coordinate work with Maintenance and Cexisting utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, signathways, and adjacent facilities. G. Provide pollution control during demolition H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl. work and location of temporary partitions. B. Submit proposed duration of: Noise prod hazardous material abatement work, if appendix and election of temporary partitions. PART 2 - PRODUCTS Not used. PART 3 - EXECUTION A. Survey existing conditions and correlate wiverify extent of demolition required. B. Do not damage building elements and imple. Examine conditions at site to verify that denot endanger existing structures by overloc. D. If known or suspected hazardous materials stop operations immediately and notify Sale. Do not close or obstruct streets, walkways, spaces or facilities without the written permatthorities having jurisdiction. Do not interfacilities without the mitten permatthorities having jurisdiction. If necessary, provide te F. Cease operations if public safety or remain Perform temporary corrective measures on properly. G. Perform demolition operations so as to premate the provide abute are accurated to each by the provide section of the part of the public stop operations in properly.
A. B. C. C. ART 3 - EX S.1 GEN A. 3.2 EXA A. B. C. D. E. 3.3 PRE A.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) (951) 737-7032 (fax) (951) 737-7032 (fax) (951) 737-6240 (main office), (951) 737-7032 (fax) (951) 737-7032 (fax) (951) 737-7032 (fax) (951) 737-7032 (fax) (951) 737-6240 (main office), (951) 737-7032 (fax) (951) 737-703 (B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow. Schools normal operations. C. Coordinate work with Maintenance and C existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolitior H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise produhazardous material abatement work, if app PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate wit verify extent of demolition required. B. Do not damage building elements and imp C. Examine conditions at site to verify that der not endanger existing structures by overloa. D. If known or suspected hazardous materials stop operations immediately and notify Sar E. Do not close or obstruct streets, walkways, spaces or facilities without the written permission of S having jurisdiction. If necessary, provide te F. Cease operations if public safety or remair Perform temporary corrective measures un properly. G. Perform demolition operations so as to pre Provide chutes as required to control dust of the writely dispose of demolished materials of the writely dispose of demolished materials and purce structures by overload to the writen permission of S having jurisdiction. Provide to control dust of the writen permission of S having jurisdiction. Provide to control dust of the writen permission of S having jurisdiction. If necessary, provide te
A. B. C. ART 3 - EX 3.1 GEN A. 3.2 EXA A. B. C. D. E. 3.3 PRE A. B.	 Existing Materials: Use materials identical to existing materials. If identical materials are unavailable or cannot be used, use materials that visually match the original. Lightweight Concrete Infill: Quick Crete Products Corp. P.O. Box 639 Norco, CA 92860. (951)737-6240 (main office), (951) 737-7032 (fax) (951) 737-7032 (fax) (951) 737-6240 (main office), (951) 737-7032 (fax) (951) 737-6240 (main office), (951) 737-7032 (fax) (951) 737-7032 (fax) (951) 737-6240 (main office), (951) 737-7032 (fax) (951) 737-703 (fax) (951)	 B. Provide a minimum of 72 hours advance r selective demolition work or utility shutdow Schools normal operations. C. Coordinate work with Maintenance and O existing utilities. D. Remove abandoned mechanical and elect accessible locations. E. Provide temporary protection for the public F. Ensure minimum interference with roads, s pathways, and adjacent facilities. G. Provide pollution control during demolitior H. Provide removal and legal disposal of mat 1.2 SUBMITTALS: A. Submit selective demolition schedule. Incl work and location of temporary partitions. B. Submit proposed duration of: Noise produhazardous material abatement work, if app PART 2 - PRODUCTS Not used. PART 3 - EXECUTION 3.1 SELECTIVE DEMOLITION A. Survey existing conditions and correlate wit verify extent of demolition required. B. Do not damage building elements and imp C. Examine conditions at site to verify that der not endanger existing structures by overloa D. If known or suspected hazardous materials stop operations immediately and notify Sar E. Do not close or obstruct streets, walkways, spaces or facilities without the written perm authorities having jurisdiction. Do not inter facilities without the written perm authorities having jurisdiction. Do not inter facilities without the written perm authorities having jurisdiction. If necessary, provide te F. Cease operations if public safety or remain Perform temporary corrective measures un properly. G. Perform demolition operations so as to pre Provide chutes as required to control dust of the accemptote chutes as required to control dust of the accemptote chutes as required to control dust of the accemptote chutes as required to control dust of the cacemptote chutes as required to control dust of the cacemptote chutes as required to control dust of the accemptote chutes as required to control dust of the accemptote chutes as required to control dust of the

12' 0 1' 	6' 0 4' 0 1/2" = 1'-0" 1/2" = 1'-0" 3/4" = 1'-0"	1' 3' 0 2 1'' = 1'-0'' 1'' = 1'-0'' 1 1/2'' = 1'-0''	2' 0 1' IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT SCALE ACCORDINGLY 3" = 1'-0"
e required to be removed, relocated, cutting to avoid interruption of	3.2 SCHEDULE	6. Items to be Galvanized: Fabricate in accordance with recommended	1.3 QUALITY ASSURANCE
	 A. Items to remain in place and protected for reuse: As indicated in drawings. B. Items to be salvaged for reinstallation in this project: As indicated in drawings. 	7. Eabricate exterior items for assembly and installation on site without field-	A. Applicator: Company specializing in sheet metal flashing Work with five years
	C. Items to be salvaged and delivered to San Rafael City Schools: As indicated in	welding of joint.	B. Perform Work in accordance with SMACNA standard details and requirements.
nplete Work.	drawings.	 Ensure metal thickness and assembly details provide ample strength and stiffness. 	1.4 SUBMITTALS
r Work.	END OF SECTION	9. Size sleeves for approximately 1/4" clearance all around.C. Fastening:	A. Submit Shop Drawings of sheet metal items indicating profiles, jointing, terminations, sill pans and installation details. Indicate type and spacing of fasteners.
a when requested.		1. Provide fasteners and anchor assemblies required for complete fabrication, field assembly, and erection	B. Submit two 4" square Samples illustrating metal finish color when pre-coated or
on of mechanical and electrical Work.	SECTION 05 50 00 Metal Fabrications	 Size internally threaded diameters to accommodate galvanized threaded 	where required to match existing conditions.
natic tools are not allowed without	PART 1 - GENERAL	 bolts where galvanizing is required. 3. Permanent Connections in Ferrous Metal Items: Employ welding wherever practicable; avoid bolts and screws. 	 A. Stack preformed material to prevent twisting, bending, or abrasion, and to provide ventilation.
	A. All items of miscellaneous metal and related accessories and fasteners, including	D. Welding:	B. Prevent contact with materials during storage which may cause discoloration, staining, or damage.
to other Work, and which will ching and finishing.	but not necessarily limited to the following:	1. Use electric shielded-arc process according to AWS D1.1.	1.6 WARRANTY
perform cutting and patching.	 Steel guardrail panels. Continuous inserts for pipe and conduit supports. 	 Maintain shape and profile of item welded. Decent head blickers are a three state of a solid static set 	A. Provide manufacturer's 20-year warranty against defective materials and finish.
ore drill. Pneumatic tools not allowed	 Backing and mounting plates for conduit shrouds. 	 Prevent heat blisters, run-throughs, and surface distortions. Welds Normally Exposed to View in Finished Work: Make uniform and arind 	B. Provide installer's 2-year warranty coverage for water tightness and integrity of
a manner that could change their tio	4. Metal grating with frames and ledger angles.	smooth.	seals.
nd related components in a manner	5. Flashing, shroud enclosure and caps, and conduit covers.	5. Exposed Welds: Remove burrs, flux, welding oxide, air spots and discoloration; grind smooth, polish, or otherwise finish to match material	PART 2 - PRODUCTS
form as intended or that results in tional life or safety.	6. Fence enclosures including post and chain link fence.	welded.	2.1 SHEET MATERIALS
nce with requirements of Contract	1.2 REFERENCES	 Use bolts for field connections only, and then only as noted. Countersink 	A. Galvanized Steel: ASTM A653, Grade 33, G90 zinc coating in accordance with ASTM A924, 0.0299" thick core steel.
and uit and other penetrations	A. Published specifications:	heads; finish smooth and flush:	2.2 ACCESSORIES
Shudhi, und omer penerunons	California Building Code (CBC) and amendments.	a. Provide washers under heads and nuts bearing on wood.	A. Fastener: Galvanized steel or stainless steel with soft neoprene washers at
, ceiling, or floor construction, erial, to full thickness of the		 Draw nuts tight and prevent loosening of permanent connections by nicking threads. 	exposed fasteners. Finish exposed fasteners shall match pre-coated metal where occurs
	A Welded Qualifications: Welders shall be qualified in accordance with AWS	c. Use beveled washers where bearing is on sloped surfaces.	B. Metal Primer: As specified in Section 09 91 00.
or continuous surtaces, retinish to assembly, refinish entire unit.	D1.1.(2007)	 Where necessary to use screws for permanent connections in ferrous metal, use flat head type, countersink, fill screw slots, and finish smooth and flush. 	C. Protective Backing Paint: Zinc chromate alkyd.
	1.4 SUBMITTALS	3. Evenly space exposed heads.	D. Sealant: As specified in Section 07 92 00.
	A. Manufacturer's literature describing products including details and dimensions.	2.3 FINISHES	E. Bedding Compound: Rubber-asphalt type.
0 ting Conditions	B. Shop Drawings:	A. Preparations of Surfaces:	G. Metal Flashing System: Two piece pre-coated galvanized steel similar to
	thickness of metals, profiles of surfaces, reinforcing, anchorage, and structural supports. Include information regarding concealed and exposed joints, welds, and fastenings.	 Thoroughly clean mill scale, rust, dirt, grease, and other foreign matter from ferrous metal prior to painting. Hardware Including Easteneous (Bolts, Nuts, Washers, Etc.); 	Springlok Flashing System, manufactured by Fry Reglet, type as indicated. Include fabricated end closures and mitered corners.
finishes as needed to complete	2. Where welded connectors and concrete inserts are required to receive Work, show size and locations required	a. Finish to match items fastened.	similar to "Springlock Flashing System" or approved equal, manufactured by Fry Reglet, type as indicated. Include fabricated end closures and mitered corners.
nts. djacent structures affected by	C. Samples: Provide samples of each type of guardrail panel, mesh, grating, gutter, downspout, shroud, and other fabricated metal, to be approved by Architect.	PART 3 - EXECUTION	Finish: Manufacturer's gray epoxy primer; exposed portions shall be field finish painted as specified in Section 09 91 00.
truction to remain	1.5 DELIVERY, STORAGE AND HANDLING	3.1 INSPECTION	I. Fabricated Galvanized Sill Pans. Shop fabricate sill pans from 24 ga, fully soldered and watertight as per the drawings. Protect underside of pans sitting
any existing construction to remain	A. Deliver, store, and handle packaged materials in original containers with seals	A. Examine areas to receive Work and verify that setting conditions and dimensions	atop concrete surfaces with continuous layer of self-adhered flashing.
lition work at no cost to San Rafael	unbroken and labels intact until time of use.	are correct to receive items.	2.3 FABRICATION
rtions of the building directly	platform in safe, dry area.	B. Do not start installation until unsatisfactory conditions have been corrected.	defects.
n. Contractor shall conduct selective ninimize disruption of San Rafael City	1.6 JOB CONDITIONS	3.2 INSTALLATION	B. Fabricate concealed cleats of galvanized steel, ASTM A653, Grade 33, G90 zinc coating, 0.0478" thickness, interlockable with sheet.
ptice to San Rafael City Schools of	A. Scheduling, Sequencing:	 A. Install Work plumb, true, rigid, and neatly trimmed out. B. Do not tighten fastener through finish glope without spacer washers. 	C. Fabricate exposed cleats and coverplates of same material as sheet,
is that will affect San Rafael City	 Ensure timely fabrication of items to be embedded or enclosed by other Work. 	C. Provide concrete inserts or predrilled expansion bolts in fastening items into	D Form pieces in longest practical lengths
perations about capping or closure of	2. Furnish information and assistance required for locating embedded items and be responsible for proper locations.	concrete.	E. Hem exposed edges on underside 1/2". Miter and seam corners.
cal systems; cap or terminate at		causing corrosion.	F. Form material with flat lock seam.
f l lui u	PART 2 - PRODUCTS	E. Fasten Work tightly to prevent rattle or vibration except where expansion- contraction tolerances are required.	G. Solder and seal metal joints. After soldering, remove flux. Wipe and wash solder joints clean.
trom demolition operations.	2.1 BASIC MATERIALS AND ACCESSORIES	F. Use nonshrink grout mixed in accordance with manufacturer's direction for	H. Fabricate corners from one piece with minimum 18" long legs; seam for rigidity,
	A. Ferrous Metals:	G. Set items shown or required to be installed in sleeves with quicksetting anchor	I. Fabricate vertical faces with bottom edge formed outward 1/4" and hemmed to
operations.	2. Welding Electrodes: E-70XX.	cement unless otherwise noted.	form drip.
rials.	3. Grout: Embeco "636" or approved equal.	H. Protect metal from damage to surface, profile and shape.	J. Fabricate flashings to allow toe to extend 4" over [bituminous base flashings] [roofing surface]. Return and brake edges.
de methods for protecting adjacent	4. Grating: Irving, Reliance or approved equal typical 1" x 3/16" beaming bars at 1-3/6" centers with 1/4" twisted cross bars welded at 4" centers.	3.3 CLEANING	K. Fabricate vent pipe and roof penetration flashings of non lead-bearing material with clamping ring and storm collar.
	galvanized with bolted anchorage.	operations or removal is required to permit related Work.	2 4 FINISH
cing work; utility shut-downs; and licable.	5. Other fabrications where indicated to match existing conditions.	B. Clean prime-coated items as required for finish painting.	A. Shop prepare and prime exposed ferrous metal surfaces.
	B. Fastenings:	END OF SECTION	B. Back-paint concealed metal surfaces with protective backing paint to a minimum
	fasteners, externally and internally threaded, ASTM A307 Grade A; malleable washers.		dry film thickness of 15 mil.
	2. Expansion Bolts: Hilti's "Kwik-Bolt III Wedge Anchors"; Wej-It Expansion	SECTION 07 62 00 Sheet Metal Flashing and Trim	C. She pulli exposed to view metal soluces officer provisions of section of 71 ob.
	C. Primer: Zinc-chromate type. Same as manufactured by Fuller-O'Brien Corp.; The Glidden Co : Sinclair Paint Co : or approved equal	PART 1 - GENERAL	PART 3 - EXECUTION 3.1 INSPECTION
n Drawings and specifications to	2 2 SPECIALTY FABRICATED PRODUCTS	1.1 SECTION INCLUDES	A. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, cant strips and reglets are in place, and pailing strips located
rovements indicated to remain.	A. Preparation:	A. Parapet and cap flashings.	B. Verify membrane termination and base flashings are in place, sealed, and
nolition methods proposed for use will ding, failure, or unplanned collapse.	1. Coordinate with other Work supporting or adjoining miscellaneous metal	B. Fascias, gutters, and scuppers.	secure.
are encountered during operations,	 ana verity requirements of cutting out, titting, and attaching. 2. Verify sizes, designs, and locations of items: do so at site whenever 	 Conternasings at piping penetrations, vent pipes, and conduits. D. Manufactured realets. 	C. Contractor to contirm that site conditions and substrates are ready for sheet metal work to commence. If not, make suitable repairs or adjustments to the
Katael City Schools.	construction progress permits.	1.2 REFERENCES	work. Beginning of installation means acceptance of existing conditions.
ssion of San Rafael City Schools and upt utilities serving occupied or used	B. General Requirements:	Contractor's work shall comply with the following standards as applicable.	3.2 PREPARATION
an Rafael City Schools and authorities	 Fabricate items trom materials noted and make true to profiles shown. Obtain the Architect's approval of proposed variations. 	Manufactured items are to be fabricated to these same standards.	 B. Install starter and edge strips, and cleats before starting installation.
ng structures are endangered.	2. Miter corners and angles of frames and moldings unless otherwise noted.	The following standards (and publications) are applicable to the extent	C. Install surface-mounted reglets true to line and level. Seal top with sealant.
I operations can be continued	 Perform cutting, shearing, drilling, punching, threading, tapping as required for items or their adjacent Work. 	reterenced in the text. The most recent of these standards is implied, unless otherwise stated.	
vent dust and pollutant hazards. nd debris. Do not allow demolished materials	 Drill or punch holes; do not use cutting torch. Ensure shearing and punching leaves true lines and surfaces. 	A. ASTM A755 - Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.	
		B. ASTM B32 - Standard Specification for Solder Metal.	

0 5'	50' 0 5'	25' 0 1'
GRAPHI	C SCALES: 1/16" = 1'-0" 1/8	
3.3	INSTALLATION A. Conform to recommendations included in the SMACNA Architectural Sheet Maturel Manual	C. Steel Pipe Downspouts: Fabricate from Schedu stock as indicated, all full penetration welded galvanized. (Use these within 8' of finished gro
	B. Provide for thermal expansion of exposed sheet metal Work. Space movement	D. Sheet Metal Downspouts: 22 gauge continuou
	joints at 10' on center maximum with no joints within 2' of corners. Attach members with clips to permit movement without damage, or provide slotted or oversize holes with washers.	 E. Strainers: Basket-type constructed of 12 gauge correctly into the leader, provide stainless stee
	C. Form expansion joints of intermeshing hooked flanges filled with sealant.	E. Splash Blocks: Pre-cast concrete type, of sizes
	D. Insert flashings into reglets to form tight fit. Secure in place with lead wedges at maximum 12" on center. Pack remaining spaces with lead wool. Seal flashings into reglets with sealant.	3000 psi at 28 days, with minimum 5% air en G. Splash Pans: Fabricated from same metal as g
	E. Secure flashings in place using concealed fasteners. Use exposed fasteners only	surface with asphalt cement.
	F Lap, lock, seam and seal all joints. Make lock seam Work flat and true to line.	2.3 ACCESSORIES
	and sweat full of solder, except where installed to permit expansion and contraction. Lap flat lock seams, and lap seams where soldered according to pitch, but in no case less than 3". Make seams in direction of flow.	 A. Anchorage Devices: Meet SMACNA requirem B. End Caps, Downspout Outlets, Rain Diverters, Fasteners. Profiled to suit gutters and downsport
	G. Apply plastic cement compound between metal flashings and felt flashings.	C. Protective Backing Paint: Zinc chromate alkyd
_	 Apply bituminous coaling between dissimilar metals where occurs. H. Fit flashings tight in place. Make corners square, surfaces true and straight in 	D. Gutter Expansion Joints: Provide at every 50' o SMACNA.
	planes, and lines accurate to profiles.	2.4 FABRICATION
	metal clean with neutralizing solution and rinse with water.	A. Form gutters and downspouts of profiles and s
	J. Seal metal joints watertight and weathertight throughout.	B. Field measure site conditions prior to fabricati
3.4	FIELD QUALITY CONTROL	C. Fabricate with required connection pieces.
	A. Conform to SMACNA Architectural Sheet Metal Manual.	D. Form sections square, true, and accurate in size and free of distortion or defects detrimental to
	B. Field observation will involve surveillance of Work during installation to ascertain compliance with specified requirements.	E. Hem exposed edges of metal.
3.5	CLEANING AND ADJUSTMENT	F. Seal metal joints.
	A. Leave Work clean and free of stains, scrap and debris.	G. Fabricate gutter and downspout accessories; s
	B. Repair and replace damaged Work.	H. Form splash pans to size as detailed with rolle
		2.5 SHOP FINISHING
	END OF SECTION	A. Shop prepare and prime exposed ferrous met
	SECTION 07 71 23 Manufactured Gutters and Downspouts	 B. Back-paint concealed metal surfaces with prot dry film thickness of 15 mils.
	Manolacionea Concis ana Downspools	C. Site paint exposed to view metal surfaces as sp
PART 1	- GENERAL	
1.1	SECTION INCLUDES	
	A. Galvanized steel gutters {and downspouts}.	3.1 EXAMINATION A Verify that surfaces are ready to receive Work
	B. Aluminum-Zinc Alloy Coated gutters and downspouts.	in the surfaces at own expense.
	C. Steel pipe downspouts.	B. Beginning of installation means acceptance o
	D. Precast concrete splash blocks and sheet metal splash pans.	3.2 INSTALLATION
1.2	REFERENCES	A. Provide concealed solid blocking at all steel p
N N	Lontractor's work shall comply with the following standards as applicable. Manufactured items are to be fabricated to these same standards.	 B. Coordinate layout of downspouts with site cor building not shown in the building elevations. C. Install auttors, downspouts, and accessories in
t	he text. The most recent of these standards is implied, unless otherwise stated.	requirements.
	A. ASTM A53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc- Coated Welded and Seamless	D. Coordinate installation of sheet metal gutters
	 B. ASTM A755 - Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior 	E. Join lengths with seams sealed watertight. Flat and accessories.
	Exposed Building Products.	F. Seal metal joints watertight.
_	C. SMACNA - Architectural Sheet Metal Manual.	roof surface with asphalt cement.
1.3	SUBMITTALS	H. Coordinate downspouts connecting to the sto
	A. Submit Shop Drawings of metal items indicating profiles, jointing, terminations, and installation details. Indicate type and spacing of fasteners.	END OF SECTION
1.4	Submit samples of all materials where required to match existing conditions.	
1.5	QUALITY ASSURANCE	Joint Sealers
	A. Applicator: Company specializing in sheet metal Work with tive years minimum experience.	PART 1 - GENERAL
1.6	STORAGE AND HANDLING	1.1 SECTION INCLUDES
	A. Store products under provisions of Section 01 87 00.	A. Preparing sealant substrate surfaces.
:	B. Stack preformed material to prevent twisting, bending, or abrasion and to provide ventilation.	B. Sealant and backing.
	C. Prevent contact with materials during storage which may cause discoloration,	1.2 SUMMARY OF SEALANT LOCATIONS
	staining or damage.	A. Joints in Horizontal Surfaces:
1.7	WARRANTY	1. Control and expansion joints in soffits, ce
	A. Provide manufacturer's 20 year warranty against defective materials and finish.	 Joints on underside of precast beams and Berimeter joints in exterior exemption
	B. Provide installers 2 year warranty coverage for water tightness and integrity of seals.	 Joints between ceiling surfaces and frame
		5. Joints in flashing and sheet metal.
		6. Joints between thresholds and floors.
2.1	MATERIALD A Galvanized Steel: ASTM A653 Grade 33 GOD ring agating in provide with	7. Joints between dissimilar materials and th
	ASTM A924; thickness as specified.	8. Other joints as indicated.
	B. 22 GA Aluminum-Zinc Alloy Coated.	B. Joints in Vertical Surfaces:
	C. Steel Pipe: ASTM A53, Grade B, Schedule 40 steel pipe, standard weight, Type S, one piece without joints, aalvanized according to ASTM A53: 1.8 ounces per	 Expansion and isolation joints in masonry Perimeter joints in exterior openings.
	square foot.	3. Joints in flashing and sheet metal.
2.2	COMPONENTS	4. Joints between wall surfaces and door an
	A. Fascia Gutters: 16 gauge or as indicated. Formed to profiles indicated. Include downspout outlet and integral straps as part of the assembly.	5. Isolation joints in plaster walls.
		6. Joints between dissimilar materials and th

B. Ogee Gutters: 22 gauge or as indicated, die-formed to profiles indicated.

7. Other joints as indicated.

dule 40 steel pipe, and other steel	1.3 REFERENCES	3 3 INISTALLATIONI	2. Vertical Edges: Vertical edges to be mechanically interlocked with bairling	
d into one assembly, then hot-dip rade only.)	A. ASTM C834 - Standard Specification for Latex Sealing.	A. Install sealant in accordance with manufacturer's instructions.	seam. Beveled Lock Edge, 1/8" in 2" (3 mm in 50 mm).	
ous lock-seamed tube, round or	B. ASTM C1193 - Standard Guide for Use of Joint Sealants.	B. Measure joint dimensions and size materials to achieve required width/depth	 Top and Bottom Edges: Reinforce tops and bottoms of doors with a continuous steel channel not less than 16 gauge, extending the full width of the door and wolded to the face sheet. Doors with an inverted top channel. 	
ge stainless steel wire, size to fit eel strap tie-downs to clamp to the	 C. ASTM D1056 – Standard Specification for Flexible Cellular Materials - Sponge or Expanded Rubber. D. SWRL - (Seclant Waterproofing and Restoration Institute) - Seclant and Caulking 	C. Install joint backing to achieve a neck dimension no greater than 1/3 the joint width.	to include a steel closure channel, screw attached, with the web of the channel flush with the face sheets of the door. Plastic or composite channel fillers are not acceptable.	
es and profiles indicated; minimum	Guide Specification.	D. Install bond breaker where joint backing is not used.	B. Manufacturers Basis of Design:	
entrainment.	1.4 SUBMITTALS	E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.	1. CECO Door Products Trio-E/Trio Series., www.cecodoor.com	
gullers. Tack down to rooling	criteria, limitations, and color availability.	F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.	2. Curries Company, "777E Series Trio-E", www.curries.com	-
	B. Submit two 4" long Samples illustrating colors selected.	G. Tool joints concave unless otherwise detailed.	2.4 ACCESSORIES	
nents. rs, Straps, Support Brackets, Joint	1.5 QUALITY ASSURANCE A. Manufacturer: Company specializing in manufacturing the products specified in	3.4 CLEANING AND REPAIRING A. Clean adjacent soiled surfaces.	mechanical anchors.	
oouts.	this Section with minimum five years documented experience.	B. Repair or replace defaced or disfigured finishes caused by Work of this Section.	B. Grout Guards: Formed from same material as frames, not less than 0.016" thick.	_# De
of length or as recommended by	minimum three years documented experience, approved by sealant manufacturer.	3.5 PROTECTION OF FINISHED WORK A. Protect sealants until cured.	2.5 FABRICATION A. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle.	
	C. Conform to Sealant, Waterproofing, and Restoration Institute (SWRI) requirements for materials and installation.	3.6 SCHEDULE	Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's	
l sizes indicated.	D. Perform Work in accordance with ASTM C1193.	<u>Type</u> <u>Location</u> <u>Color</u>	plant. When shipping limitations so dictate, trames for large openings are to be fabricated in sections for splicing or splining in the field by others.	
iting Work.	1.6 ENVIRONMENTAL REQUIREMENTS	Type A - AcrylicAll interior joints otherwiseTo match adjacentLatex CureScheduledmaterial	2.6 STEEL FINISHES	
	 A. Do not install solvent curing sealants in enclosed building spaces. B. Do not install sealant when temperature is less than 40°F. 	Type B - Butyl Under thresholds Black	A. Prime Finishes: Doors and frames to be cleaned, and chemically treated to insure maximum finish paint adhesion. Surfaces of the door and frame exposed	
size, in maximum possible lengths to appearance or performance.	C. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.	Type C - One-PartExterior door, entrance, &To match adjacentNonacid Curingwindow frames, metalmaterialflashingflashingmaterial	to view to receive a tactory applied coat of rust inhibiting shop primer. 1. Shop Primer: Manufacturer's standard, fast-curing, lead and chromate free primer complying with ANSI/SDI A250.10 acceptance criteria;	
	1.7 WARRANTY	Type D - Multi-part Exterior & interior joints in To match adjacent	recommended by primer manufacturer for substrate; and compatible with substrate and field-applied coatings.	
seal watertight.	 A. Provide sealant manufacturer's 5 year warranty against defects in materials. B. Include coverage for installed sealants and accessories which fail to achieve air 	Pourable Sealant horizontal surtaces of concrete; material between metal & concrete masonry and mortar	B. Factory Pre-Finished: Factory apply electrostatic paint finish to doors and frames in accordance with ANSI/SDI A250.3 test procedure acceptance criteria for steel	
led edges.	and water seal and exhibit loss of adhesion or cohesion or do not cure.		doors and frames with factory applied finished coatings.	
etal surfaces.	PART 2 - PRODUCTS	END OF SECTION	PART 3 - EXECUTION	
otective backing paint to a minimum	2.1 MANUFACTURERS	SECTION 08 13 13	3.1 EXAMINATION	
specified in Section 09 91 00.	A. Manufacturers and products are listed for each sediant type.	Hollow Metal Doors and Frames	 A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work 	
	A. Type A - Acrylic Latex: One-part, non-sag, mildew resistant acrylic emulsion compound complying with ASTM C834, Type S, Grade NS, formulated to be	PART 1 - GENERAL	 B. General Contractor to verify the accuracy of dimensions given to the steel door and frame manufacturer for existing openings or existing frames (strike height, 	
	paintable: 1. Tremco Inc., Acrylic Latex Caulk "Tremflex 834/TremPro 655",	A. Drawings and general provisions of the Contract, including General and	hinge spacing, hinge back set, etc.). C. Proceed with installation only after unsatisfactory conditions have been	
k. Contractor to correct deticiencies	www.tremosealants.com	Supplementary Conditions and Division 01 Specification Sections, apply to this Section.		
of existing conditions.	 Pecora Corporation, "Pecora AC-20"., www.pecora.com 	1.2 SUMMARY	A. Remove welded in shipping spreaders installed at factory. Restore exposed finish	
pipe downspout brackets.	B. Type B - Butyl Sealant: One-part, non-sag solvent-release-curing sealant complying with FS TT-S-001657 for Type 1 and formulated with a minimum of 75% solids:	 A. Related Sections: 1. Section 09 91 00 Painting; for field painting hollow metal doors and frames 	by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces. B Prior to installation, adjust and securely brace welded hollow metal frames for	
onditions and features on the s.	1. Tremco Inc., Tremco "Bitul Sealant", www.tremosealants.com	B. Codes and References: Comply with the version year adopted by the Authority	squareness, alignment, twist, and plumbness.	
in accordance with SMACNA	2. Bostik Construction Products Division, www.bostik-us.com	Having Jurisdiction. 1. ANSI/SDI A250.8 - Standard Steel Doors and Frames.	C. Drill and tap doors and trames to receive non-template, mortised, and surtace- mounted door hardware.	
s with steel pipe downspouts.	 Pecora Corporation, www.pecora.com C. Type C - Silicone Sealant: One-part nonacid-curing silicone sealant complying 	2. California Building Code and amendments.	3.3 INSTALLATION	
ash and seal gutters to downspouts	with ASTM C920, Type S, Grade NS, Class 25:	1.3 DELIVERY, STORAGE, AND HANDLING	A. General: Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.	
	www.dow.com	A. Deliver hollow metal work palletized, wrapped, or crated to provide protection during transit and Project site storage. Do not use non-vented plastic.	B. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.	
own all metal rooftop splash pans to	 General Electric Co., "SCS2000 Silprut Sealant"., siliconetorbuilding.com Tremco, Inc., "Spectrem® 1"., www.tremosealants.com 	B. Store hollow metal work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum	1. Non-Fire-Rated Standard Steel Doors:	
orm drain system with other Work.	4. Pecora Corp., "Pecora 864NST" or "Pecora 890NST"., www.pecora.com	4" high wood blocking. Do not store in a manner that traps excess humidity.	a. Jambs and Head: $1/8" \pm 1/16"$.	
	D. Type D - Multi-Part Pourable Sealant: Complying with ASTM C920, Type M, Grade P, Class 25. Shore A hardness +40:	1.4 PROJECT CONDITIONS A. Field Measurements: Verify actual dimensions of openings by field	c. Between Bottom of Door and Top of Threshold: Maximum 3/8".	
	1. Tremco, Inc.	measurements before fabrication.	d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4".	
	 Pecora Corp., "Pecora DynaTred" or "Pecora Urexpan NR-200"., www.pecora.com 	1.5 WARRANTY	2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.	\vdash
	3. Sika Corporation, "Sikaflex 2C NS EZ Mix"., usa.sika.com	repair or replace doors that fail in materials or workmanship within specified warranty period.	3.4 ADJUSTING AND CLEANING	
	4. W.K. Meadows, "Pourthane INS/SL"., www.wrmeadows.com	B. Warranty includes installation and finishing that may be required due to repair	A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition.	
	A. Primer: Non-staining type, recommended by sealant manufacturer to suit	or replacement of detective doors.	Remove and replace detective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.	
	application. B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant	PART 2 - PRODUCTS	B. Remove grout and other bonding material from hollow metal work immediately after installation.	
	manufacturer; compatible with joint forming materials.	2.1 MANUFACTURERS	C. Prime-Coat and Painted Finish Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat, or painted finishes, and apply	
ceilings and overhead surfaces. nd planks.	oversized 30% to 50% larger than joint width.	A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:	touchup of compatible air drying, rust-inhibitive primer, zinc rich primer (exterior and galvanized openings) or finish paint.	
	 Bond Breaker: Pressure-sensitive tape recommended by sealant manufacturer to suit application. 	 CECO Door Products., www.cecodoor.com Curries Company, www.curries.com 		
nes for doors and windows.	PART 3 - FXECUTION	 Comes Company:, www.comes.com Security Metal Products. 	END OF SECTION SECTION 09 91 00	H` Fa
	3.1 EXAMINATION	4. Steelcraft., www.steelcraft.com	Painting	
those listed above.	A. Verify that joint openings are ready to receive Work and field measurements are as shown on Drawings and recommended by the manufacturer.	2.2 MATERIALS A. Cold-Rolled Steel Sheet: ASTM A1008/ A1008M, Commercial Steel (CS), Type	PART 1 - GENERAL	Pr
	B. Beginning of installation means installer accepts existing substrate.	B; suitable for exposed applications. B. Metallic-Coated Steel Sheet: ASTM A653/ A653M. Commercial Steel (CS). Type	A. Surface preparation.	S
ry.	3.2 PREPARATION	B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.	B. Products and application.	
	recommended by manufacturer.	2.3 ENERGY EFFICIENCY HOLLOW METAL DOORS	C. Surface finish schedule.	Sr
ind window frames.	B. Remove loose materials and foreign matter which might impair adhesion of sealant.	indicated; fabricated with smooth surfaces, without visible joints or seams on exposed faces unless otherwise indicated. Comply with ANSI/SDI A250.8 and	1.2 REFERENCES	
	C. Verify that joint backing and release tapes are compatible with sealant.	ANSI/NAAMM HMMA 867.	A. ASTM D16 – Standard Terminology for Paint, Related Coatings, Materials, and Applications.	
those listed above.	 E. Protect elements surrounding the Work of this Section from damage or 	Minimum 18 gauge (0.042" - 1.1-mm) thick steel, Model 2.	1.3 SYSTEM DESCRIPTION	CI Sc
	disfiguration.		A. Preparation of all surfaces to receive final finish.	Dr

including primers, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

5'	50' 0 5'	25' 0 1'	
APHIC SC	ALES: 1/16" = 1'-0" 1/8" =	1'-0"	1/
C.	Painting and finishing all exterior surfaces of materials including structural, mechanical, and electrical Work on site, in building spaces, and above or on the roof	F. Galvanized Surfaces: solvent. Pretreat with p primer the same day of	Remove surface con phosphoric acid etch
D.	Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces.	G. Concrete and Unit Mo powder, and other for	sonry: Remove dirt, eign matter. Remove
1.4 QL	JALITY ASSURANCE	sodium phosphate; rir weathering of corrodiu thoroughly wetting wit	ise well and allow to ng metals with a solu h water. Allow to dry
A.	Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.	H. Plaster: Fill hairline cro plaster. Make smooth	acks, small holes, an and flush with adjac
B.	Applicator: Company specializing in commercial painting and finishing with five years documented experience. Regulatory Requirements: Comply with applicable codes and regulations of	high alkali surfaces. I. Shop Primed Steel: Sa	ind and scrape to rei
0.	governmental agencies having jurisdiction including those having jurisdiction over airborne emissions and industrial waste disposal. Where those requirements conflict with this specification, comply with the more stringent provisions. Comply with the current applicable regulations of the California Air Resources Board	Prime bare steel surface J. Exterior Wood: Remov and sappy sections. F	ve dust, grit, and fore ill nail holes with tint
D.	(CARB) and the Environmental Protection Agency (EPA). Employ coats and undercoats for all types of finishes in strict accordance with	prime coat has been of 3.3 PROTECTION OF ADJAC	applied. ENT WORK
1.5 SU	the recommendations of the paint manufacturer. BMITTALS	A. Protect elements surrc disfiguration.	unding the Work of
A.	Provide manufacturer's technical information and instructions for application of	B. Repair damage to oth	er surfaces caused b
В.	List each material by catalog number and cross-reference specific coating with	C. Furnish drop cloths, sl droppings from disfigi	nields, and protective uring other surfaces.
C.	Provide manufacturer's certification that products proposed meet or exceed	D. Remove empty paint of 3.4 WORK NOT TO BE PAIN	ontainers from site.
D.	Submit two 8-1/2" x 11" Samples of each paint color and texture applied to	A. Painting is not require	d on surfaces in con
	cardboard. Resubmit Samples until acceptable color, sheen and texture is obtained.	furred spaces, founda B. Do not paint metal su	tion spaces, utility tu rfaces such as stainly
1.6 FIE	LD SAMPLES On wall surfaces and other exterior components, duplicate specified finishes on	C. Do not paint over Un	derwriters Laboratori
R.	at least 100 square feet of surface area.	required labels or ider 3.5 APPLICATION	ntifications.
D.	obtained.	A. Apply products in acc	ordance with manuf
1.7 DE	LIVERY, STORAGE, AND HANDLING	B. Do not apply finishes	to surfaces that are i
Α.	acceptance.	C. Apply each coat to un	iform finish.
В.	Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing. Paint containers not	approved.	ini siigniy darker ini
	displaying product identification will not be acceptable.	E. Sand lightly between of F. Allow applied coat to	dry before next coat
C.	Store paint materials at minimum ambient temperature of 45°F and a maximum of 90°F, in well ventilated area, unless required otherwise by manufacturer's instructions.	G. The number of coats s additional coats when	specified is the minir undercoats, stains
D.	Take precautionary measures to prevent fire hazards and spontaneous combustion.	H. Where clear finishes c	tilm is ot unitorm tin ire required, tint fille
1.8 EN	VIRONMENTAL REQUIREMENTS	I. Prime back surfaces c	f exterior woodwork
A.	Provide continuous ventilation and heating tacilities to maintain surtace and ambient temperatures above 45°F for 24 hours before, during, and 48 hours after application of finishes, unless required otherwise by manufacturer's instructions.	J. Paint mill finished doc K. Paint primed steel gla	or seals to match doors t
В.	Minimum Application Temperatures for Latex Paints: 45°F for interiors; 50°F for exterior; unless required otherwise by manufacturer's instructions.	L. Cloudiness, spotting, surface imperfections	lap marks, brush mo will not be acceptab
1.9 EXT	IRA STOCK	M. Where spray applicati not double back to bι	on is used, apply ec uild up film thickness
A. B.	Provide a ten gallon container of each finish paint color to San Rafael City Schools for touchup. Label each container with color, texture, and room locations in addition to the	N. Where roller applicati texture. Leave no evid other surface imperfe	on is used, roll and ence of roller laps, i ctions.
1 10 (manufacturer's label.	O. For painting of exteric	or patchwork, paint t
A.	Product Manufacturer: Company specializing in manufacturing quality paint and	3.6 FINISHING MECHANICAI	
RT 2 - PI	RODUCTS	A. Paint shop primed equB. Remove unfinished low	uvers, grilles, covers
2.1 AC	CEPTABLE MANUFACTURERS	and electrical compor C. Prime and paint insula	ients and paint sepc ated and exposed pi
A.	Subject to compliance with requirements, approved manufacturers are:	exposed ducts, hange prefinished.	rs, brackets, collars
2.2 MA	TERIALS	D. Replace identification painted accidentally.	markings on mecha
A.	Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a	E. Paint both sides and e equipment before inst	edges of plywood ba alling equipment.
В.	Good flow and brushing properties; capable of drying or curing free of streaks or sags.	F. Replace electrical plat to finishing.	es, hardware, light t
C.	Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified,	G. Do not paint moving p as valve operators; lin	parts of operating un kages; sensing devi-
2.3 FIN	of commercial quality. IISHES	I. Do not paint mechani	cal room specialties
A.	Refer to schedule at end of Section for surface finish schedule.	control panels, etc. J. Do not paint switch pl	ates, light fixtures, a
RT 3 - EX	ECUTION	3.7 CLEANING	
3.1 INS	SPECTION Examine surfaces to be finished prior to commencement of Work. Report any	A. As Work proceeds, pr	omptly remove pain
В.	condition that may potentially affect proper application. Measure moisture content of surfaces using an electronic moisture meter. Do not	 B. During progress of We tools, equipment, surp C. Collect cotton waster 	ork maintain premise olus materials, and d
	apply finishes unless moisture content of surfaces are below the following maximums:	place in closed metal 3.8 PROTECTION OF COMP	containers and remo
	 Plaster and Gypsum Wallboard: 12%. Masonry Concrete and Concrete Unit Masonry 12%. 	A. Erect barriers and pos	t warning signs. Mai
	 Exterior Located Wood: 15%, measured in accordance with ASTM D2016. 	dry. B. Confirm that no dust a	generating activities
C.	Beginning of installation means acceptance of existing surfaces.	Coatings.	-
3.2 SU A	RFACE PREPARATION Remove electrical plates, hardware, light fixture trim, and fittings prior to	A. After completion of pc	ainting in any area, r
- · · ·	preparing surfaces or finishing.	trades. B. Touch-up or re-finish	as required to produ
В.	Correct minor aetects and clean surfaces which attect Work of this Section.	1	

- C. Shellac and seal marks which may bleed through surface finishes.
- D. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- E. Aluminum Surfaces: Remove surface contamination by steam or high pressure water. Remove oxidation with acid etch and solvent washing. Apply etching primer immediately following cleaning.
- A. The San Rafael City Schools reserves the right procedure at any time and as often as the Sar necessary.

3.10 FIELD QUALITY CONTROL

B. The San Rafael City Schools will engage the se agency to sample paint material being used.

mination and oils and wash with	C. Samples of material delivered to	the Project will be taken, identified, sealed, and	occupied facilities, or provide notice minimum 3 days in advance.	SECTION 32 01 91
or vinyl wash. Apply coat of etching lied.	certified in the presence of the Co	ontractor.	E. Salvage all removed electrical fixtures and equipment and deliver to San Rafael	
oose mortar, scale, salt or alkali pil and grease with a solution of tri-	A. Paint and finish colors shall be cu	ustom color, mixed and formulated to match	City Schools.	
Iry. Remove stains caused by on of sodium metasilicate after	existing finishes except as indicate	ed	PART 2 - PRODUCTS	A. Work necessary to ensure that trees and landscaping in general designated on
importactions with later natching	B. Access doors, registers, exposed mechanical/electrical panels if no indicated	piping, electrical conduit and ot stainless steel; match adjacent walls except as	Not Used	the Drawings to remain receive all due protection, care, and maintenance necessary to ensure their survival.
nt surfaces. Wash and neutralize	C. Exterior and interior steel doors, f	frames and trim; match adjacent existing door	PART 3 - EXECUTION	1.2 PROTECTION
ove loose primer and rust. Feather	frames except as indicated.		3.1 EXAMINATION	A. In addition to the requirements of Division 1, every effort shall be made to
ous. Clean surfaces with solvent.	D. Doors: Match adjacent existing d	door paint except as indicated.	A. Verify existing conditions before starting work.	protect all trees and landscaping on the site, except such shrubs and grasses which would be removed for grading at building sites and trees indicated to be
gn matter. Seal knots, pitch streaks,	except as indicated.	Stainless Steel: Match existing or adjacent walls	 B. Verity wiring and equipment indicated to be demolished serve only abandoned facilities. 	R Trees to be saved shall be clearly indicated and shall be protected by the
a exterior caulking compound after	3.12 SCHEDULE - EXTERIOR SURFACES	S	C. Verify termination points for demolished services.	Contractor, who shall erect temporary barricades placed no closer than the drip line of the tree or directed by Architect
	A. The following paint systems shall	be used:	3.2 PREPARATION	1. Barricades shall be placed before commencing other Work and shall remain
is Section from damage or	1 st coat: 2nd coat:	KM 255 AcryShield Wood Primer KM 1200 Premium Professional 100%	A. Erect, and maintain temporary safeguards, including warning signs and lights, for protection of the public, District, Contractor's employees, and existing	in place until completion of the entire construction or until removal is directed by the Architect.
Work of this Section.	3rd coat:	Acrylic Flat KM 1200 Premium Professional 100% Ac	improvements to remain.	C. Existing trees and landscaping to be saved shall be protected from the following:
methods to prevent spray or	2 Weed Deinted (Servi Class	Acrylic Flat	B. Provide temporary egress signage and emergency lighting	1. Damage during the process of painting adjacent walls or other surfaces.
	2. Wood-Fainted (Semi-Gloss A 1st coat: 2nd coat:	KM 255 AcryShield wood Primer	system only to make switchovers and connections. Make temporary connections to maintain service in areas adjacent to work area.	2. Stockpiling of any materials under the spread of the trees.
	3rd coat:	Acrylic S/G KM 1215 Premium Professional 100% Acryl	3 3 DEMOLITION	 Driving or parking venicies under the spread of the frees. Dumping of refuse or chemically injurious materials or liquids.
ealed and inaccessible areas such as nels, pipe spaces and duct shafts.		Acrylic S/G	A. Demolition Drawings are based on field observation and existing record	 Continual puddling or running of water.
s steel, chromium plate, brass,	3. Concrete (Flat Acrylic) - Expo painted	osed concrete indicated on drawings to be	documents. Report discrepancies to Engineer before disturbing existing installation.	6. Gathering of workmen under the trees during breaks or lunch periods.
Easton Mutual or other code	2nd coat:	KM 255 AcryShield Masonry Primer KM 1200 Premium Professional 100% Acry Acrylic Flat	B. Remove abandoned conduit, cabling and associated supports, including	D. After building construction, dispose fallen debris present around the existing trees and landscaping within the Work area. Restore the arounds around the
, I actory Multial of other code-	3rd coat:	KM 1200 Premium Professional 100%	flush with walls and floors, and patch surfaces to match existing.	trees to their existing natural condition.
	4. Concrete Masonry Units (Fla Fill coat:	at Acrylic) KM 521 Color Shield Prime and Fill	C. Remove conduit, wire, boxes, and fastening devices to avoid any interference with new installation.	PART 2 - PRODUCTS
turer's instructions.	1 st coat:	KM 1200 Premium professional 100% Acry Acrylic Flat	D. Disconnect electrical systems in walls, floors, and ceilings scheduled for removal.	Not used
or dry.		Acrylic Flat	E. Remaining Circuits and Equipment: Reinstall existing electrical installations disturbed. Certain existing electrical installations may be located in walls.	PART 3 - EXECUTION
n preceding coat unless otherwise	5. Cement Plaster (Flat Acrylic) 1 st coat:	KM 98 Multi-Seal	ceilings or floors that are to be removed and are essential for the operation of other remaining installations. Where this condition occurs provide a new	Not used
rad finish	2nd coat: 3rd coat:	KM 1128 Kel-Seal KM 1128 Kel-Seal	extension of original circuits, raceways, equipment and outlets to retain service continuity. Installations shall be concealed in finished areas.	END OF SECTION
s applied.	6. Steel-Primed or Unprimed (F	-lat Acrylic) Rust-Oleum CV740 Primer	F. Reconnect equipment being disturbed by renovation work and required for	SECTION 32 31 13 Chain Link Fences and Gates
um that shall be applied. Apply	2nd coat:	KM 1200 Premium professional 100% Acrylic Flat	G Disconnect or shut off service to areas where electrical work is to be removed	Chain Link rences and Gales
other conditions show through final h, color and appearance.	3rd coat:	KM 1200 Premium professional 100% Acrylic Flat	Remove electrical fixtures, equipment, and related switches, outlets, conduit and wiring which are not part of final project.	PART 1 - GENERAL
to match wood. Work fillers into the	7. Steel-Primed or Unprimed (S	Semi-Gloss Acrylic) Rust-Oloum CV740 Primor	H. Install temporary wiring and connections to maintain existing systems in service	1.1 SECTION INCLUDES
with primer paint.	2nd coat:	KM 1215 Premium Professional 100% Acrylic S/G	during construction.	A. Fence framework, fabric, and accessories.
or frame.	3rd coat:	KM 1215 Premium Professional 100%	J. Remove, relocate, and extend existing installations for new construction.	1.2 REFERENCES
match door or frame.	8. Steel-Galvanized (Flat Acryli	ic)	K. Repair adjacent construction and finishes damaged during demolition and	A. ASTM A392 – Standard Specification for Zinc-Coated Steel Chain Link Fence Fabric.
cs, runs, sags, spikes and other	1 st coat: 2nd coat:	Krud Kutter Metal and Etch KM 5725 DTM Primer	extension work.	B. ASTM F567 – Standard Practice for Installation of Chain-Link Fence.
coat of the required thickness. Do	3rd coat:	KM 1200 Premium Professional 100% Acrylic Flat	and supports, and electrical identification components, including abandoned components above accessible ceiling finishes. Cut embedded support elements	C. Chain Link Fence Manufacturers Institute - Chain Link Fence Wind Load Guide for Selection of Line Post and Line Post Spacing.
it two coats in one pass.	4th coat	KM 1200 Premium Professional 100% Acrylic Flat	flush with walls and floors.	1.3 QUALITY ASSURANCE
egularity of texture, skid marks, or	9. Steel-Galvanized (Semi-Glo 1st coat:	oss - Acrylic) Krud Kutter Metal and Etch	M. Clean and repair existing equipment to remain or to be reinstalled.	A. Manufacturer: Company specializing in commercial quality chain link fencing
the nearest surface break.	2nd coat: 3rd coat:	KM 5725 DTM Primer KM 1215 Premium Professional 100%	O. Cap abandoned empty conduit at both ends.	with three years' documented experience.
QUIPMENT	4th coat	Acrylic Flat KM 1215 Premium Professional 100% Acrylic Flat	3 4 EXISTING PANELBOARDS	B. Installation: Comply with ASTM 1507.
shop prefinished items.		Acrylic Flat	A. If requested by San Rafael City Schools, ring out circuits in existing panel	A Submit two samples 12" x 12" in size, illustrating fence fabric finish
and access panels on mechanical itely.	END OI	FSECTION	affected by the Work. Where additional circuits are needed, reuse circuits available for reuse. Install new breakers.	
es, conduit, boxes, insulated and	SECTION Selective Demo	N 26 05 05 lition for Electrical	B. Tag unused circuits as spare.	PART 2 - PRODUCTS
la supports, except where tierns are	PART 1 - GENERAL		C. Where existing circuits are indicated to be reused, use sensing measuring devices to verify circuits feeding Project area or are not in use.	2.1 MATERIALS
cal or electrical equipment when	1 1 SUMMARY		D. Remove existing wire no longer in use from panel to equipment.	A. Fabric: ASTM A392, Class 1, 1" diamond mesh zinc-coated steel wire, interwoven, 9 gauge thick, top and bottom selvage knuckle end closed, 7 mil.
boards for electrical and telephone	A. Section Includes:		E. Provide new updated directories where more than three circuits have been	thick black vinyl finish, black privacy slats.
ture trim, and fittings removed prior	1. Removal of existing electrica	al equipment, wiring, and conduit in areas to be		and fittings.
	remoaelea; removal ot designation alterations for completion of	f the Work.	A. Remove and protect items indicated on Drawinas to be salvaaed and turn over	C. Tension Wire: 7 gauge thick steel, single strand.
s; mechanical or electrical parts such s; and motor shafts.	2. Disposal of materials.		to San Rafael City Schools.	D. Swinging Gates: Fabric to match adjacent fencing.
ification markings.	3. Storage of removed material	ils.	B. Items of salvageable value may be removed as work progresses. Transport salvaged items from site as they are removed.	PART 3 - EXECUTION
uch as compressors, boilers, pumps,	5. Salvaged items.		3.6 REUSABLE ELECTRICAL EQUIPMENT	3.1 INSTALLATION
d fixture lenses.	6. Protection of items to remain	n as scheduled at end of section as indicated on	A. Carefully remove equipment, materials, or fixtures which are to be reused.	 A. Install tramework, tabric, accessories and gates in accordance with ASTM F567. B. Stretch fabric between terminal pacts.
	Drawings.	to accommodate construction	 B. Disconnect, remove, or relocate existing electrical material and equipment interfering with new installation. 	C. Position bottom of fabric 2" above finished grade.
vhere spilled, splashed, or spattered.			C. Relocate existing lighting fixtures as indicated on Drawings. Clean fixtures and	D. Fasten fabric to top rail, line posts, braces, and bottom tension wire with wire
free of unnecessary accumulation of oris.	A. Schedule work to coincide with B	Building Operations.	new location.	ties maximum 15 inches on centers.
hich may constitute a fire hazard, e daily from site	1.3 COORDINATION		3.7 CLEANING	clips.
· ·	A. Conduct demolition to minimize	interference with adjacent and occupied	A. Remove demolished materials as work progresses. Legally dispose.	F. Install bottom tension wire stretched taut between terminal posts.
ain in place until coatings are fully	B Coordinate dama litica en la vil	San Rafael City Schools	B. Keep workplace neat.	3.2 ERECTION TOLERANCES
Il occur following application of	C. Coordinate and sequence demo	lition so as not to cause shutdown of operation	3.8 RECYCLARIE AND RELIGARIE MATERIAL AND ECHIDAENIT	A. Maximum Variation from Plumb: 1/4". B. Maximum Offset from True Position: 1"
and approximation	of surrounding areas.		A. Contractor shall be responsible for recycling of all removed materials and	
	D. Shut-down Periods:	a required arrange timing of in the	equipment as part of this work. Materials shall be collected by a recognized and approved reuse and recycling center.	END OF SECTION
our surfaces damaged by other	with San Rafael City Schools	s. Do not shut down any utility without prior	B. Recyclable and reusable material and equipment shall include but not limited to	
e intended appearance.	2. Keep shut-down period to m	ninimum or use intermittent period as directed by	the tollowing:	
ht to involve the fallent in the	San Rafael City Schools. Ma	aintain life-safety systems in full operation in	 Ferrous and non-ferrous metals 	
an Rafael City Schools deems			3. Fluorescent lamps and ballasts	
services of an independent testing				
			END OF SECTION	

