SYMBOL

□8008Þ

\_\_\_\_\_

STD DWG/DTL

FIRE SERVICE LINE . . . . . . . . . . . . . . . SDRSD WF-05 \_\_\_\_\_ FS \_\_\_\_

BACKFLOW PREVENTER . . . . . . . . . . . . SDRSD WR-01

REDUCED PRESSURE BACKFLOW PREVENTER SDRSD WF-05

MODULAR WETLAND SYSTEM . . . . . . . DTL 1/SHT 4

CMP DETENTION SYSTEM . . . . . . . . . . . DTL 1/SHT 5

GRAVITY RETAINING WALL (TYPE B) . . . . . SDRSD C-09

CURB OUTLET . . . . . . . . . . . . . . . . . . SDRSD D-25

ADA SIGN . . . . . . . . . . . . . . . . . . SDRSD M-28

WHEELSTOP . . . . . . . . . . . . . . . . . DTL 5/SHT 3

EXISTING POWER POLE & ANCHOR. . . . . . . . . . . . . . . . Label

#### **GENERAL NOTES:**

- ALL GRADING SHALL CONFORM TO THE REQUIREMENTS OF COUNTY GRADING ORDINANCE SECTION 87.101 THROUGH 87.804
- APPROVAL OF THIS GRADING PLAN DOES NOT CONSTITUTE APPROVAL OF VERTICAL OR HORIZONTAL ALIGNMENT OF ANY PRIVATE ROAD SHOWN HEREON FOR COUNTY ROAD
- NATURAL DRAINAGE SHALL NOT BE DIVERTED OR CONCENTRATED ONTO ADJACENT PROPERTY
- FINAL APPROVAL OF THESE GRADING PLANS IS SUBJECT TO FINAL APPROVAL OF THE ASSOCIATED IMPROVEMENT PLANS WHERE APPLICABLE, FINAL CURB GRADE ELEVATIONS MAY REQUIRE CHANGES IN THESE PLANS.
- 5. IMPORT MATERIAL SHALL BE OBTAINED FROM A LEGAL SITE.
- 6. A CONSTRUCTION, EXCAVATION OR ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS WILL BE REQUIRED FOR ANY WORK IN THE COUNTY RIGHT-OF-WAY.
- REGARDLESS OF WHICH BMPS ARE IMPLEMENTED. ALL SLOPES OVER THREE FEET IN HEIGHT WILL BE PLANTED AND MAINTAINED WITH GROUND COVER OR OTHER PLANTING IN ACCORDANCE WITH SAN DIEGO COUNTY SPECIFICATIONS TO PROTECT THE SLOPES AGAINST EROSION AND INSTABILITY. PLANTING SHALL COMMENCE AS SOON AS SLOPES ARE
- THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. NOTICE OF PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING

PHONE NUMBER: SAN DIEGO GAS AND ELECTRIC E (800) 411-7343 SAN DIEGO GAS AND ELECTRIC G (858) 636-3997 AT&T TELEPHONE <u>(800)</u> 288-2020 AT&T CATV <u>(800)</u> 288-2020 WATER (PADRE DAM) <u>(619) 258-4600</u>

- . A SOILS REPORT WITH COMPACTION TEST IS REQUIRED FOR ALL FILL OVER 12" IN DEPTH. PDS FORM 73 MINOR GRADING CERTIFICATION AND A COPY OF THE COMPACTION REPORT IS REQUIRED PRIOR TO ROUGH GRADING APPROVAL.
- O. APPROVAL OF THESE PLANS BY THE DIRECTOR OF DEPARTMENT OF PLANNING AND DEVELOPMENT SERVICES (PDS) DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSION HAS BEEN OBTAINED AND VALID GRADING HAS BEEN ISSUED.
- 1. THE DIRECTOR'S APPROVAL OF THESE PLANS DOES NOT CONSTITUTE COUNTY BUILDING OFFICIAL APPROVAL OF ANY FOUNDATION FOR STRUCTURES TO BE PLACE ON THE AREA COVERED BY THESE PLANS. NO WAIVER OF THE GRADING ORDINANCE REQUIREMENTS CONCERNING MINIMUM COVER OVER EXPANSIVE SOIL IS MADE OR IMPLIED (SECTIONS 87.403 & 87.410). ANY SUCH WAIVER MUST BE OBTAINED FROM THE DIRECTOR OF PLANNING AND DEVELOPMENT SERVICES.
- 2. ALL OPERATIONS CONDUCTED ON THE PREMISES, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTHMOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED GRADING EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00AM AND 6:00PM EACH DAY, MONDAY THROUGH SATURDAY, AND NO EARTHMOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON THE PREMISES IN SUNDAYS OR HOLIDAYS.
- I3. ALL MAJOR SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT OR FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.
- 4. NOTWITHSTANDING THE MINIMUM STANDARDS SET FORTH IN THE GRADING ORDINANCE AND NOTWITHSTANDING THE APPROVAL OF THESE GRADING PLANS, THE PERMITTEE IS RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO ADJACENT PROPERTY. NO PERSON SHALL EXCAVATE ON LAND SO CLOSE TO THE PROPERTY LINE AS TO ENDANGER ANY ADJOINING PUBLIC STREET, SIDEWALK, ALLEY, FUNCTION OF ANY SEWAGE DISPOSAL SYSTEM OR ANY OTHER PUBLIC OR PRIVATE PROPERTY FROM SETTLING, CRACKING, EROSION, SILTING, SCOUR OR OTHER DAMAGE WHICH MIGHT RESULT FROM THE GRADING DESCRIBED ON THIS PLAN. THE COUNTY WILL HOLD THE PERMITTEE RESPONSIBLE FOR CORRECTION OF NON-DEDICATED IMPROVEMENTS WHICH DAMAGE ADJACENT PROPERTY.
- 5. SLOPE RATIOS:
- CUT-11/2:1 FOR MINOR SLOPES (SLOPES<15'), 2:1 FOR MAJOR SLOPES.
- EXCAVATION: 8 C.Y. FILL: 2180 C.Y. IMPORT: 2172 C.Y. (NOTE: A SEPARATE VALID PERMIT MUST EXIST FOR EITHER WASTE OR IMPORT AREAS BEFORE PERMIT TO BE ISSUED).
- 5. SPECIAL CONDITION: IF ANY ARCHEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE OF THIS GRADING DURING GRADING OPERATIONS, SUCH OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE DIRECTOR OF PUBLIC WORKS OF THE DISCOVERY. GRADING OPERATIONS WILL NOT RECOMMENCE UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE DIRECTOR OF PUBLIC WORKS TO DO SO.
- 7. PERMANENT POST-CONSTRUCTION BMP DEVICES SHOWN ON PLAN SHALL NOT BE REMOVED OR MODIFIED WITHOUT THE APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS.
- I8. THE APPLICANT IS RESPONSIBLE FOR THE ROAD MAINTENANCE (SWEEPING AS NECESSARY) AND REPAIRS OF ANY DAMAGE CAUSED BY THE HEAVY LOADS THAT LOADED TRUCKS PLACE ON THE ROUTE IDENTIFIED.
- 19. FINAL APPROVAL OF THIS GRADING PLAN IS SUBJECT TO FINAL APPROVAL OF THE ASSOCIATED IMPROVEMENT PLANS WHERE APPLICABLE. FINAL CURB GRADE ELEVATIONS MAY REQUIRE CHANGE TO THESE PLANS.

- 20. THE ENGINEER-OF-WORK SHALL COMPLY WITH ALL PROJECT APPLICABLE LAWS THAT INCLUDE. NUT ARE NOT LIMITED TO. HEALTH, SAFETY, AND ENVIRONMENTAL LAWS. ORDINANCES, AND REGULATIONS RELATING TO THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, AND U.S, FEDERAL GOVERNMENT. THE PROJECT IS SUBJECT TO ENFORCEMENT UNDER PERMITS FROM THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) AND THE COUNTY OF SAN DIEGO WATERSHED PROTECTION. STORMWATER MANAGEMENT. AND DISCHARGE CONTROL ORDINANCE NO. 10410, COUNTY OF SAN DIEGO HYDRAULIC DESIGN MANUAL, AND ALL OTHER APPLICABLE ORDINANCES AND STANDARDS FOR THE LIFE OF THIS PERMIT. THE PROJECT SITE SHALL BE IN COMPLIANCE WITH ALL APPLICABLE STORMWATER REGULATIONS REFERENCED ABOVE AND ALL OTHER APPLICABLE ORDINANCES AND STANDARDS. THIS INCLUDES COMPLIANCE WITH THE APPROVED STORM WATER QUALITY MANAGEMENT PLAN (SWQMP), ALL REQUIREMENTS FOR LOW IMPACT DEVELOPMENT (LID), HYDROMODIFICATION, DETENTION FACILITIES, MATERIALS AND WASTES CONTROL, EROSION CONTROL, SEDIMENT CONTROL ON THE PROJECT SITE.
- 21. THE ISSUANCE OF THIS PERMIT/APPROVAL BY THE COUNTY OF SAN DIEGO DOES NOT AUTHORIZE THE APPLICANT FOR THE PERMIT/APPROVAL TO VIOLATE ANY FEDERAL, STATE, OR COUNTY LAWS, ORDINANCES, REGULATIONS, OR POLICIES INCLUDING, BUT NOT LIMITED TO THE FEDERAL ENDANGERED SPECIES ACT AND CLEAN WATER ACT. GRADING AND/OR FURTHER DEVELOPMENT ARE PROHIBITED WITHIN THE AREAS DESIGNATED "LIMITS OF JURISDICTIONAL" HABITAT" UNTIL FEDERAL PERMITS AND STATE PERMITS (IF ANY) HAVE BEEN ACQUIRED.

#### **EARTHWORK NOTES:**

THE EARTHWORK QUANTITIES SHOWN BELOW AND ON SHEET 1 DO NOT REFLECT ANY SPECIAL CONDITIONS THAT MAY EXIST ON-SITE AND ARE FOR REFERENCE AND FEE PURPOSE ONLY. SINCE THE ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE CONTRACTOR DURING GRADING OPERATIONS, NOR CAN THE ENGINEER GUARANTEE THE EXACT SOIL CONDITION OVER THE ENTIRE SITE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTHWORK QUANTITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN EARTHWORK QUANTITIES FOR BIDDING, CONTRACT, AND CONSTRUCTION PURPOSES. QUANTITIES ARE TO SUBGRADE AND BACK OF WALL AND DO NOT INCLUDE REMEDIAL GRADING AND ALLOWANCES FOR SHRINKAGE OR BULKING.

#### GRADING AND GEOTECHNICAL SPECIFICATIONS

- 1. ALL GRADING SHALL BE DONE UNDER OBSERVATION AND TESTING BY A QUALIFIED CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND. IF REQUIRED, BOTH A QUALIFIED CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND AN ENGINEER GEOLOGIST. ALL GRADING MUST BE PERFORMED IN ACCORDANCE WITH APPLICABLE COUNTY ORDINANCE.
- 2. ALL FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MOST RECENT VERSION OF A.S.T.M. D-1557.
- 3. SEE "GEOTECHNICAL INVESTIGATION FOR SAN MIGUEL FIRE STATION NO. 18" DATED MARCH 12, 2024 FOR REFERENCE.

#### SOIL'S ENGINEER CERTIFICATE

#### BIOLOGICAL RESOURCES NOTE:

THERE SHALL BE NO BRUSHING, CLEARING AND/OR GRADING SUCH THAT NONE WILL BE ALLOWED WITHIN 300' OF ANY BIOLOGICAL OPEN SPACE EASEMENT DURING THE MIGRATORY BIRD BREEDING SEASON. THE BREEDING SEASON IS DEFINED AS OCCURRING BETWEEN FEBRUARY 15 AND AUGUST 31.

### OWNERS CERTIFICATE:

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS.

IT FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE A REGISTERED CIVIL ENGINEER MAKE SUCH CHANGES. ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE DIRECTOR OF PLANNING & DEVELOPMENT SERVICES DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETIONS OF THE IMPROVEMENTS.

BY:		DATE:	
ASSESSOR'S PARCEL NO.			
NAME:			
ADDRESS:			
PHONE:			
SAN MIGUEL FIRE DISTRICT: APPROVED:			
BY:	DATE:		

### TOTAL DISTURBED AREA = 0.54 AC.

PAD + SLOPES: 5397 SF DRIVEWAY: 13,087 SF PRIMARY SEPTIC: 4,875 SF FIRE CLEARING: N/A TOTAL: 23,359 SF

		121-13
_	Civil Engineering	T (858) 292-7770
sland	Surveying Land Planning	4740 Ruffner Stre San Diego, CA 92

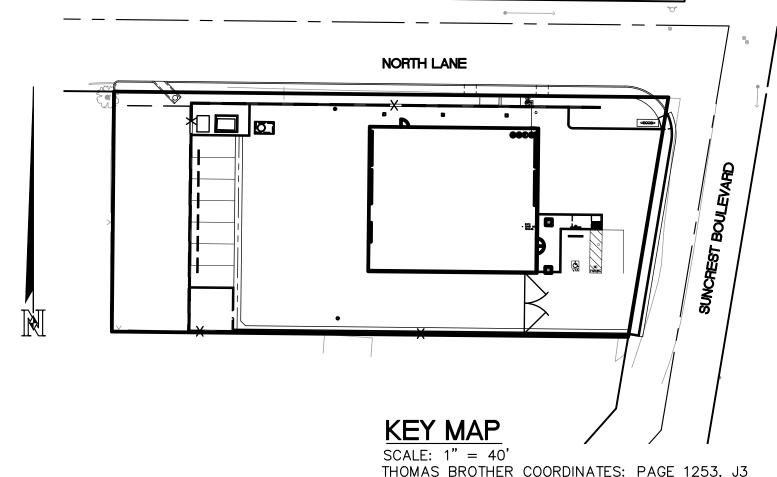
EXPIRES: \_\_\_\_

 $F \geq 1$  AC. PROVIDE WDID#: N/A

#### NO. DESCRIPTION: DISTURBED AREA CALCS TITLE SHEET NOTES DETAILS

# SAN MIGUEL FIRE STATION #18 SAN MIGUEL FIRE DISTRICT

GRADING PLANS FOR:



### WORK TO BE DONE:

GRADING AND DRAINAGE WORK CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND PER THE STANDARDS BELOW:

#### STANDARD SPECIFICATIONS:

- STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREEN BOOK" (CURRENT EDITION), INCLUDING THE REGIONAL SUPPLEMENT AMENDMENT (CURRENT EDITION).
- 2. STANDARD SPECIFICATIONS FOR STORM DRAIN CONSTRUCTION OF THE COUNTY OF SAN DIEGO 3. WATER AGENCIES' STANDARD - STANDARD SPECIFICATIONS FOR POTABLE WATER. RECYCLED
- WATER AND SEWER FACILITIES (CURRENT EDITION). 4. STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS
- 5. CALIFORNIA MANUÁL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) (CURRENT EDITION) 6. COUNTY OF SAN DIEGO STREET LIGHTING SPECIFICATIONS (SEPTEMBER 2021).

### STANDARD DRAWINGS:

- 1. SAN DIEGO COUNTY DESIGN STANDARDS (OCTOBER 2012) (DS).
- 2. SAN DIEGO REGIONAL STANDARD DRAWINGS (2018) (RSD) 3. WATER AGENCIES' STANDARDS - STANDARD DRAWINGS (CURRENT EDITION).
- 4. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLAN (2018) (CT). 5. GREEN STREETS STANDARD DRAWINGS, COUNTY OF SAN DIEGO PUBLIC WORK (MARCH 2021).

## ABBREVIATIONS:

FEET

SHEET INDEX

DETAILS

DETAILS

GRADING PLAN

BMP PLAN

PROFILES & CROSS SECTIONS

PHASE 1 EROSION CONTROL PLAN

PHASE 2 EROSION CONTROL PLAN EROSION CONTROL NOTES & DETAILS

<u> </u>	<u> </u>		
С	ASPHALT CONCRETE	GB	GRADE BREAK
DA	AMERICAN DISIBILITY ACT	ΙE	INVERT ELEVATION
SPH	ASPHALT	MB	MAILBOX
MP	BEST MANAGEMENT PRACTICE	NO.	NUMBER
ASQA	CALIFORNIA STORMWATER	OHE	OVERHEAD ELECTRICA
	QUALITY ASSOCIATION	POC	POINT OF CONNECTION
	CAST IRON	PVC	POLYVINYL CHLORIDE
LF	CHAIN LINK FENCE	SC0	SEWER CLEANOUT
ONC	CONCRETE	SD	STORM DRAIN
OC .	FIRE DEPARTMENT CONNECTION	SDRSD	SAN DIEGO REGIONAL
<del>-</del>	FINISHED FLOOR		STANDARD DRAWINGS
_	FLOW LINE	TG	TOP OF GRATE
_ >	FIRE PROTECTION	TW	TOP OF WALL
S	FIRE SERVICE	(XXX.XX)	EXISTING ELEVATION

CONCRETE RIBBON GUTTER . . . . . . . . DTL 3/SHT 3 CURB RAMP (TYPE D-3) . . . . . . . . . SDRSD G-31 MODIFIED A4 STORM DRAIN CLEANOUT . . . DTL 2/SHT 4

STORMWATER TREATMENT CONTROL, L.I.D., AND HYDRO-MODIFICATION BMP'S			
ESCRIPTION / TYPE	SHEET	MAINTENANCE CATEGORY	REVISIONS
ODULAR WETLAND / STORMWATER TREATMENT CONTROL	7	CATEGORY 1	
ONTECH CMP DETENTION / HYDRO-MODIFICATION BMP'S	7	CATEGORY 1	

OWNER'S /	PERMITTEE'S

SAN MIGUEL FIRE DISTRICT 2850 VIA ORANGE WAY SPRING VALLEY, CA 91978

TELEPHONE NO: (619) 670-0500

PURPOSE OF GRADING: FOR THE INSTALLATION OF THE PROPOSED FIRE STATION.

SHORT LEGAL DESCIPTION: A PORTION OF SECTION 3, TOWNSHIP 16, RANGE 1 EAST.

SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT.

509-191-16-00 SITE ADDRESS: 1811 SUNCREST BLVD, EL CAJON, CA 92021 SEE PAGE 1253 SECTION 3-J OF THE THOMAS GUIDE. RECORD PLAN R.C.E. **EXPIRES:** 

VICINITY MAP

NORTHEASTERN CORNER OF THE PROJECT SITE AT NORTH

THE NEAREST STREET INTERSECTION IS ON THE

LANE AND SUNCREST BOULEVARD.

**PROJECT** 

LOCATION

Nasland

RCE NO: \_\_\_

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXCERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPEC-IFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITES FOR PROJECT DESIGN \_\_\_ DATE: \_\_\_\_\_

PLANNING & DEVELOPMENT SERVICES	(	COUNTY APPROVE	D CHAI	NGES
ADDDOVED FOR COMPLIANCE WITH THE ENVIRONMENTAL	NO.	DESCRIPTION:	APPROVED BY:	DATE:
APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW.				
APPROVED BY:				
DATE:				

EXISTING CONDITIONS AND DEMOLITION PLAN

PERMITS	
REZONE PERMIT NO	ł
SPECIAL USE PERMIT NO	L
TENTATIVE MAP NO.	
DISCREATIONARY PERMIT NO	
LANDSCAPE PERMIT NO	
BENCH MARK	
DESCRIPTION: <u>C/L MON ON RIOS CANYON ROAD</u> <u>C/L MON BRASS DISC SET IN CONC. BELOW SURFACE.</u>	

TENTATIVE MAP NO.
DISCREATIONARY PERMIT NO
LANDSCAPE PERMIT NO
BENCH MARK
DESCRIPTION: C/L MON ON RIOS CANYON ROAD
C/L MON BRASS DISC SET IN CONC. BELOW SURFACE.
LOCATION: C/L OF RIOS CANYON RD AND MOUNTAIN VIEW RD
RECORD FROM: RECORD OF SURVEY 11252
ELEVATION: 1377.47' DATUM: M.S.L.

	FOR:	
		_
T	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	_
	PRIVATE CONTRACT	

ALIFORNIA COORDINATE INDEX	x <u>230-1809</u>
ROVED CCTOR OF PUBLIC WORKS	ENGINEER OF WORK  JARRETT J. LINN R.C.E. 84231

SHEETS

#### **EMERGENCY EROSION CONTROL MEASURES NOTES:**

- ALL BUILDING PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PAD UNTIL THE STREETS AND DRIVEWAYS ARE PAVED AND WATER CAN FLOW FROM THE PADS WITHOUT CAUSING EROSION. OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
- TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
- MANUFACTURED SLOPES AND PADS SHALL BE ROUNDED VERTICALLY AND HORIZONTALLY AS APPROPRIATE TO BLEND WITH THE SURROUNDING TOPOGRAPHY.
- AS SOON AS CUTS OR EMBANKMENTS ARE COMPLETED. BUT NOT LATER THAN OCTOBER 1 ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITH A HYDROMULCH MIXTURE OR AN EQUAL TREATMENT APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS BETWEEN OCTOBER 1 AND APRIL 15. APPROVED SLOPE PROTECTION MEASURES SHALL PROCEED IMMEDIATELY BEHIND THE EXPOSURE OF CUT SLOPES AND/OR THE CREATION OF EMBANKMENT SLOPES.
- CATCH BASINS, DESILTING BASINS AND STORM DRAIN SYSTEM SHALL BE INSTALLED TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- SAND BAG CHECK DAMS TO BE PLACED IN A MANNER APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS IN UNPAVED STREETS WITH GRADIENTS IN EXCESS OF 2% AND ON OR IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- THE DEVELOPER TO MAINTAIN THE PLANTING AND EROSION CONTROL MEASURES DES-CRIBED ABOVE UNTIL RELIEVED OF THE SAME BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. THE DEVELOPER TO REMOVE ALL SOIL INTERCEPTED BY THE SAND BAGS, CATCH BASINS AND DESILTING BASINS AND KEEP THESE FACILITIES CLEAN AND FREE OF SILT AND SAND AS DIRECTED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. THE DEVE-LOPER SHALL REPAIR ANY ERODED SLOPES AS DIRECTED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.

#### <u> SILTATION AND SEDIMENT CONTROL MEASURES NOTES:</u>

- THE SEDIMENT BASINS SHALL BE PROVIDED AT THE LOWER END OF EVERY DRAINAGE AREA PRODUCING SEDIMENT RUNOFF. THE BASINS SHALL BE MAINTAINED AND CLEANED TO DESIGN CONTOURS AFTER EVERY RUNOFF PRODUCING STORM. THE BASINS SHOULD BE SEMI-PERMANENT STRUCTURES THAT WOULD REMAIN UNTIL SOIL STABILIZING VEGETATION HAS BECOME WELL ESTABLISHED ON ALL ERODIBLE SLOPES.
- SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR APPROVAL OF THE COUNTY ENGINEER.
- SEWER OR STORM DRAIN TRENCHES THAT ARE CUT THROUGH BASIN DIKES OR BASIN INLET DIKES SHALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE TO TOP OF DIKE.
- . ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF SANDBAGS WITH A TOP ELEVATION TWO SANDBAGS BELOW THE GRADED SURFACE OF THE STREET. SANDBAGS ARE TO BE PLACED WITH LAPPED COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE BUT NOT TO EXCEED THE FOLLOWING:

GRADE OF THE STREET	INTERVAL
LESS THAN 2% 2% TO 4% 4% TO 10% OVER 10%	AS REQUIRED 100 FEET 50 FEET 25 FEET

GRADE OF CHANNEL

LESS THAN 3%

WHEN REQUIRED.

- AFTER UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A
- 6. ALL BUILDING PADS SHOULD BE SLOPED TOWARDS THE DRIVEWAYS AND VELOCITY CHECK DAMS PROVIDED AT THE BASE OF ALL DRIVEWAYS DRAINING INTO THE STREET.

INTERVALS BETWEEN CHECK DAMS

PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

3% TO 6% OVER 6%	50 FEET 25 FEET	
PROVIDE VELOCITY CHECK DAMS		
PACING FOR EROSION CONTROL ONSTRUCTED OF SANDRAGS TI	L IN GRADED STREETS".	VELOCITY CHECK DAMS N

100 FEET

COM-RIER APPROVED BY THE COUNTY ENGINEER, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. VELOCITY CHECK DAMS MAY ALSO SERVE AS SEDIMENT TRAPS.

GRADE OF THE STREET	INTERVAL	NUMBER OF BAGS HIGH
LESS THAN 2%	AS REQUIRED (200 FEET MAX)	1
2% TO 4%	100 FEET	1
4% TO 6%	50 FEET	1
6% TO 10%	50 FEET	2
OVER 10%	25 FEET	2

- PROVIDE A SANDBAG SILT BASIN OR TRAP BY EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING DRAIN SYSTEM.
- 10. SANDBAGS AND FILL MATERIAL SHALL BE STOCKPILED AT INTERVALS, READY FOR
- 1. ALL EROSION CONTROL DEVICES WITHIN THE DEVELOPMENT SHOULD BE MAINTAINED DURING AND AFTER EVERY RUNOFF PRODUCING STORM, IF POSSIBLE, MAINTENANCE CREWS WOULD BE REQUIRED TO HAVE ACCESS TO ALL AREAS.
- 2. PROVIDE ROCK RIPRAP ON CURVES AND STEEP DROPS IN ALL EROSION PRONE DRAINAGE CHANNELS DOWNSTREAM FROM THE DEVELOPMENT. THIS PROTECTION WOULD REDUCE EROSION CAUSED BY THE INCREASED FLOWS THAT MAY BE ANTICIPATED FROM DENUDED SLOPES, OR FROM IMPERVIOUS SURFACES.
- 3. ANY PROPOSED ALTERNATE CONTROL MEASURES MUST BE APPROVED IN ADVANCE BY ALL RESPONSIBLE AGENCIES: I.E., COUNTY ENGINEER, DEPARTMENT OF SANITATION AND FLOOD CONTROL, OFFICE OF ENVIRONMENTAL MANAGEMENT, ETC.

#### STORMWATER PROTECTION NOTES:

- THE EVENT OF A RAINSTORM. 125% OF ALL SUPPLIES NEEDED FOR BMP MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL DEPLOYMENT AND COMPLETE INSTALLATION IN 48 HOURS OR LESS OF A FORECAST RAIN.
- 2. NO AREA BEING DISTURBED SHALL EXCEED 50 ACRES AT ANY GIVEN TIME WITHOUT DEMOSTRATING TO THE SAN DIEGO COUNTY DPW DIRECTOR'S SATISFACTION THAT ADEQUATE EROSION AND SEDIMENT CONTROL CAN BE MAINTAINED. ANY DISTURBED AREA THAT IS NOT ACTIVELY GRADED FOR 15 DAYS MUST BE FULLY PROTECTED FROM EROSION. UNTIL ADEQUATE LON-TERM PROTECTIONS ARE INSTALLED. THE DISTURBED AREA SHALL BE INCLUDED WHEN CALCULATING THE ACTIVE DISTURBANCE AREA. ALL EROSION CONTROL MEASURES SHALL REMAIN INSTALLED AND MAINTAINED DURING ANY
- THE PROPERTY OWNER IS OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORMWATER REGULATIONS AT ALL TIMES. THE BMP'S (BEST MANAGEMENT PRACTICES) THAT HAVE BEEN INCORPORATED INTO THIS PLAN SHALL BE IMPLEMENTED AND MAINTAINED TO EFFECTIVELY PREVENT THE POTENTIALLY NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORMWATER QUALITY. THE MAINTENANCE OF THE BMP'S IS THE PERMITTEE'S RESPONSIBILITY, AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE BMP'S MAY RESULT IN ENFORCEMENT ACTION BY THE COUNTY OF SAN DIEGO OR OTHERS. IF INSTALLED BMP'S FAIL, THEY MUST BE REPAIRED OR REPLACED WITH AN ACCEPTABLE ALTERNATE WITHIN 24 HOURS, OR AS SOON AS SAFE TO DO SO.
- 4. ON PROJECTS OF GREATER THAN 1 ACRE ADD THE FOLLOWING NOTE: A NOTICE OF INTENT (NOI) HAS BEEN, OR WILL BE FILED WITH THE STATE WATER RESOURCES CONTROL BOARD (SWRCB) AND THAT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN OR WILL BE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CALIFORNIA GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (PERMIT NO. CASOOOOO2) FOR ALL OPERATIONS ASSOCIATED WITH THESE PLANS. THÈ NOI NUMBER ASSIGNED BY SWRCB FOR THIS PROJECT IS NOT YET ASSIGNED, BUT WILL BE PROVIDED BEFORE A PERMIT IS ISSUED, THE PERMITTEE SHALL KEEP A COPY OF THE SWPPP ON SITE AND AVAILABLE FOR REVIEW BY COUNTY.

#### THE USE OF BFM'S IS SUBJECT TO THE FOLLOWING LIMITATIONS AND RESTRICTIONS:

- 1. APPLICATION RATES SHALL BE 3500 POUNDS PER ACRE MINIMUM FOR 2:1 OR SHALLOWER SLOPES AND 4000 POUNDS PER ACRE FOR SLOPES STEEPER THAN 2:1.
- 2. BFM SHALL BE APPLIED AT LEAST 2 HOURS BEFORE OR AFTER RAINFALL.
- 3. THE SITE MUST BE PROTECTED WITH BROW DITCHES AND / OR DIVERSION BERMS AT THE TOP OF SLOPES TO DIVERT FLOW FROM THE FACE OF THE SLOPE.
- 4. BFM SHALL BE APPLIED TO PROVIDE 100% COVERAGE (IE. APPLICATION FROM MULTIPLE
- FOR PERMANENT EROSION CONTROL PURPOSES, BFM MUST BE INSTALLED IN CONJUNCTION WITH SEEDED EROSION CONTROL VEGETATION.
- 6. A LETTER FROM THE HYDROSEED CONTRACTOR CERTIFYING THAT THE BFM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED APPLICATION RATES AND COVERAGE REQUIREMENTS SHALL BE SUBMITTED TO THE COUNTY INSPECTOR FOR APPROVAL.

#### **BMP STENCIL PLACEMENT NOTES:**

- A) ALL STORM DRAIN INLETS AND CATCH BASINS WITHIN THE PROJECT AREA SHALL HAVE A STENCIL OR TILE PLACED WITH PROHIBITIVE LANGUAGE (SUCH AS: "NO DUMPING — I LIVE IN <>NAME RECEIVED WATER>>") AND/OR GRAPHICAL ICONS TO DISCOURAGE ILLEGAL DUMPING.
- SIGNS AND PROHIBITIVE LANGUAGE AND/OR GRAPHICAL ICONS, WHICH PROHIBIT ILLEGAL DUMPING, MUST BE POSTED AT PUBLIC ACCESS POINTS ALONG CHANNELS AND CREEKS WITHIN THE PROJECT AREA.
- C) LEGIBILITY OF STENCILS, TILES AND SIGNS MUST BE MAINTAINED AND TILES MUST BE PLACED FLUSH WITH THE TOP OF CONCRETE TO REDUCE TRIPPING BY PEDESTRIANS.

### **DISABLED ACCESS NOTES:**

- 1. ALL GRADES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY THE CALIFORNIA BUILDING CODE (C.B.C.) AND THE AMERICANS WITH DISABILITY ACT ACCESS GUIDE (A.D.A.A.G.) IN ORDER TO ALLOW FOR CONSTRUCTION TOLERANCES. IT IS CONTRACTORS' RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH A.D.A.A.G. AND 2013 C.B.C. AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE ENGINEER NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
- 2. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO C.B.C. AND A.D.A.A.G. ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY C.B.C. AND A.D.A.A.G. ARE SUBJECT TO REJECTION BY THE CITY AND MAY BE REQUIRED TO BE REMOVED AND REPLACED.
- 3. SINCE THE CIVIL ENGINEER OR SURVEYOR CAN NOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUB-CONTRACTORS DURING GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF A.D.A.A.G. RELATED ITEMS BY THE CITY, ANY OTHER AUTHORITY, OR OTHER AFFECTED PARTIES.

### TRUCK HAUL NOTES:

PRIOR TO BEGINNING OF GRADING, SUBMIT A TRAFFIC CONTROL PLAN TO ENVIRONMENTAL SERVICE UNIT (ESU) FOR APPROVAL INCLUDING:

- 1. SPECIFIC TRUCK TRAVEL ROUTES.
- 2. ANTICIPATED LENGTH OF GRADING PERIOD INVOLVING THE NEED FOR TRUCK IMPORTS OR EXPORTS OF SOIL.
- 3. TIME OF OPERATIONS.
- 4. EXISTING CONDITIONS OF THE IMPACTED ROAD AREAS INCLUDING TRAFFIC AND ROAD CONDITIONS.
- 5. TRAFFIC SAFETY INCLUDING SAFETY TO RESIDENTS ON FOOT, ON BICYCLE AND IN VEHICLES, AND POSSIBLE MITIGATION FOR AVOIDANCE OF SIGNIFICANT PEAK HOUR TRAFFIC AT CERTAIN INTERCHANGES, AND
- 6. INTERCHANGE GEOMETRY TO DETERMINE IF IT WILL ALLOW SAFE USE BY THE TRUCKS.

#### ADVISORY NOTE ON STORM WATER OBLIGATIONS

DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL THE ACTIVITIES SHOWN ON THESE PLANS ARE SUBJECT TO ENFORCEMENT UNDER PERMITS FROM NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER IN THE STATE WATER RESOURCES CONTROL BOARD AND SAN DIEGO REGIONAL WATER CONTROL BOARD AND MUST ALSO COMPLY WITH THE REQUIREMENT OF THE SAN DIEGO COUNTY MUNICIPAL STORM WATER PERMIT. THIS INCLUDES REQUIREMENT'S FOR MATERIALS AND WASTE CONTROL, EROSION CONTROL, AND SEDIMENT CONTROL ON PROJECT CONSTRUCTION SITES. THE PERMITTEES OF OPERATIONS SHOWN ON THESE PLANS ARE OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORM WATER REGULATIONS AT ALL TIMES.

#### PDS ENVIRONMENTAL NOTE:

"NOTICE:" THE ISSUANCE OF THIS PERMIT/APPROVAL BY THE COUNTY OF SAN DIEGO DOES NOT AUTHORIZE THE APPLICANT FOR SAID PERMIT/APPROVAL TO VIOLATE ANY FEDERAL. STATE OR COUNTY LAWS, ORDINANCES, REGULATIONS OR POLICIES INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT AND ANY AMENDMENTS THERETO.

#### **CULTURAL RESOURCES NOTE:**

IF, IN THE PROCESS OF GRADING OPERATIONS, HUMAN REMAINS OR NATIVE AMERICAN ARTIFACTS ARE ENCOUNTERED, GRADING OPERATIONS SHALL BE SUSPENDED IN THAT AREA AND THE OPERATOR SHALL IMMEDIATELY INFORM THE COUNTY OFFICIAL, AND THE REQUIREMENTS OF HEALTH AND SAFETY CODE SECTION 7050.5 AND THE PUBLIC RESOURCES CODE SECTION 5097.99 SHALL BE COMPLIED WITH.







DESCRIPTION:

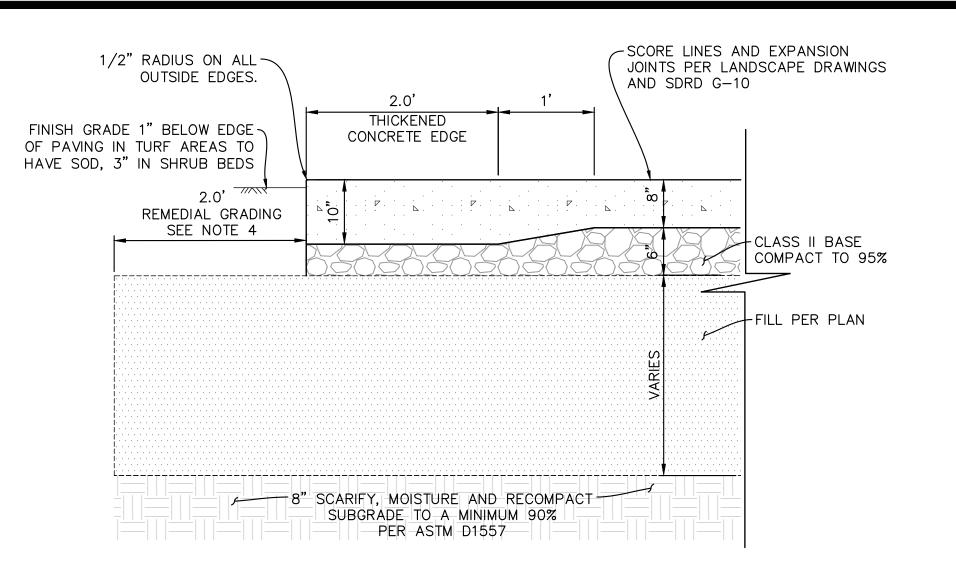
COUNTY APPROVED CHANGES

APPROVED DATE

BY:

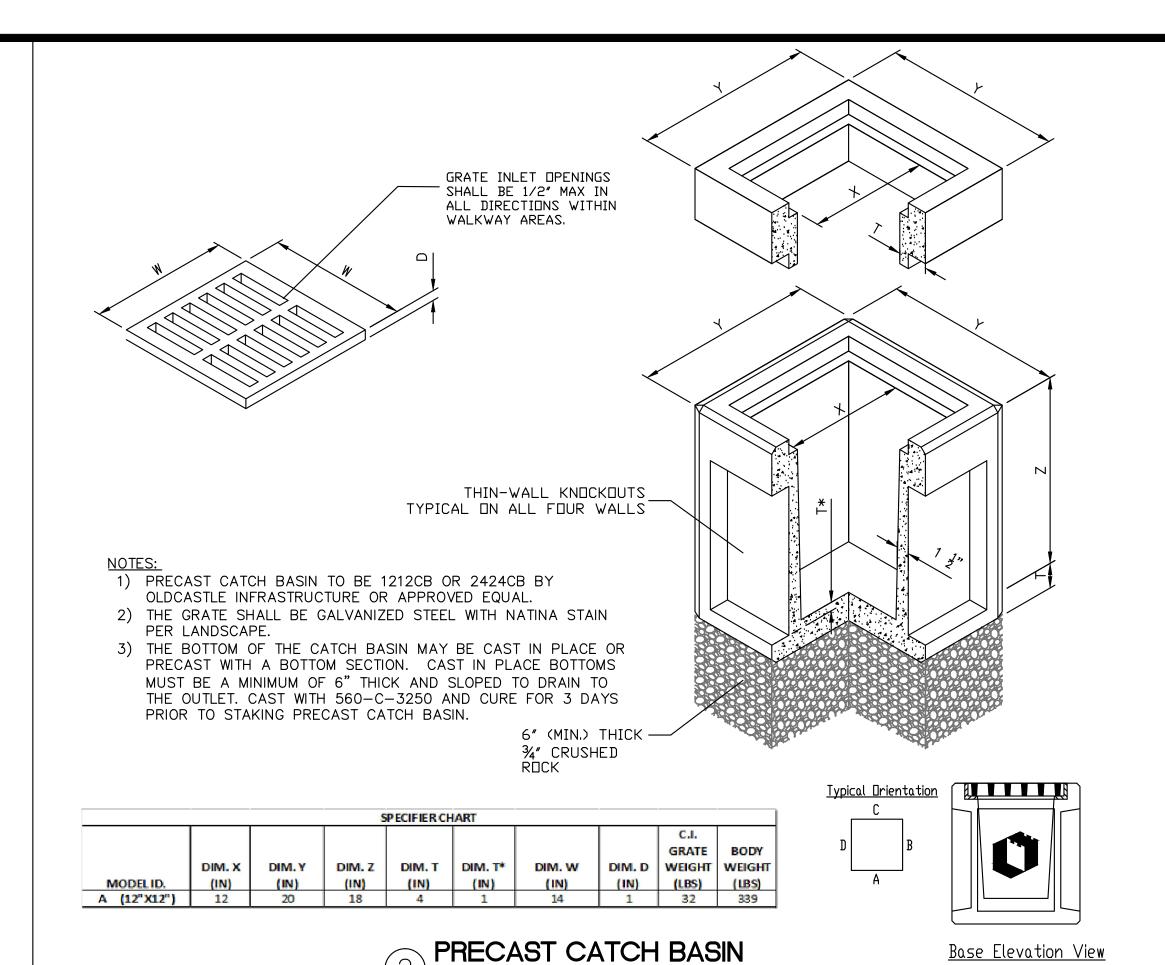
BENCH MARK DESCRIPTION: C/L MON ON RIOS CANYON ROAD C/L MON BRASS DISC SET IN CONC. BELOW SURFACE. LOCATION: C/L OF RIOS CANYON RD AND MOUNTAIN VIEW RD RECORD FROM: RECORD OF SURVEY 11252 ELEVATION: 1377.47' \_ DATUM: <u>M.S.L.</u>





### <u>NOTES</u>

- 1. THICKENED CONCRETE EDGE REQUIRED ADJACENT TO LANDSCAPE AREAS.
- 2. SEE SDRSD G-10 FOR EXPANSION AND WEAKENED PLANE JOINT DETAILS.
- 3. REMEDIAL GRADING TO EXTEND 2' OUTSIDE THE PLANNED PAVEMENT OR UP TO EXISTING IMPROVEMENTS, WHICHEVER IS LESS. NATIVE SOILS SHALL BE EXCAVATED A MINIMUM OF 24" BELOW SUBGRADE ELEVATION UNLESS FORMATIONAL MATERIALS ARE EXPOSED. BACKFILL WITH SOIL WITH AN EXPANSIVE INDEX LESS THAN 50 AND COMPACT TO 90%.



NO SCALE

121-138.

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4740 Ruffner Street San Diego, CA 92111 ADJACENT PAVING

UNLESS NOTED OTHERWISE

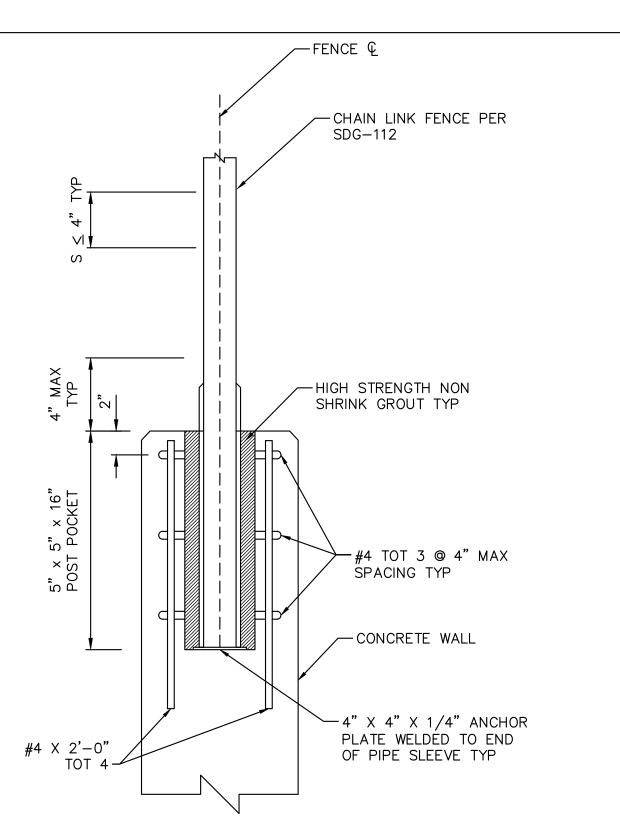
CLASS II BASE
COMPACTED TO 95%

### NOTES

- 1) PROVIDE 1/2" CHAMFERS ON ALL EXPOSED SURFACES.
- 2) CONCRETE SHALL BE 520-C-2500.
- 3) REMEDIAL GRADING PER VEHICULAR CONCRETE SECTION ON DETAIL 1 THIS SHEET.

# CONCRETE RIBBON GUTTER NO SCALE

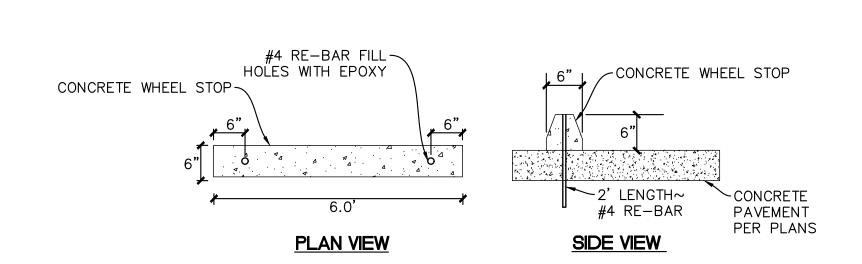
# 1 CONCRETE PAVEMENT SECTION NO SCALE



## NOTES:

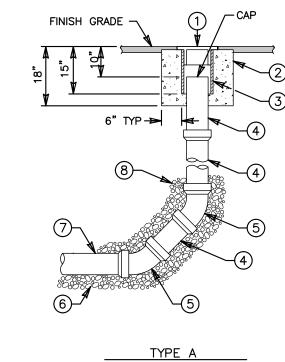
1. POST SHALL BE CENTERED IN WALL AND PLUMB.

CONCRETE WALL FENCE MOUNT
NO SCALE



CONCRETE WHEELSTOP

NO SCALE



### **NOTES**

- 1. CLEANOUTS TO BE INSTALLED AT THE END OF 12" STORM DRAIN WHERE INDICATED ON THE PLANS.
- 2. CLEANOUT PIPE TO BE SAME SIZE AND MATERIAL AS 12" PVC STORM DRAIN. 3. BACKFILL TO TOP OF 45° BEND WITH 3/8" CRUSHED ROCK.
- 3. BACKFILL TO TOP OF 45° BEND WITH 3/8° CRUSHED ROCK

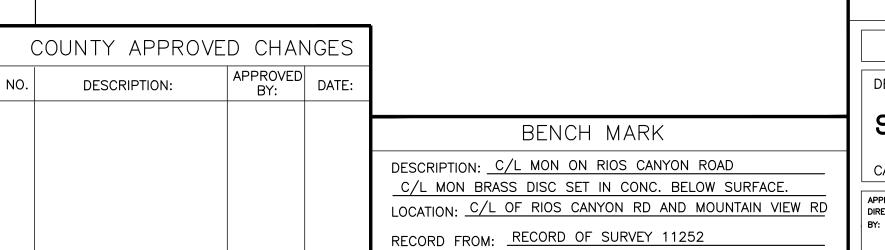
ITEM NO	SIZE AND DESCRIPTION	ITEM NO	SIZE AND DESCRIPTION
1	12" CI CLEANOUT BOX COVER MARKED 'SEWER' AND AGENCY NAME AS REQUIRED	56	45° ELBOW 3/8" CRUSHED ROCK PIPE BEDDING
② ③	CONCRETE RING 12" PVC, C-900 x 15" LONG (CLEANOUT BOX)	8	STORM DRAIN LINE 3/8" CRUSHED ROCK SEE NOTE 3

4 SIZE × REQUIRED LENGTH PVC PIPE

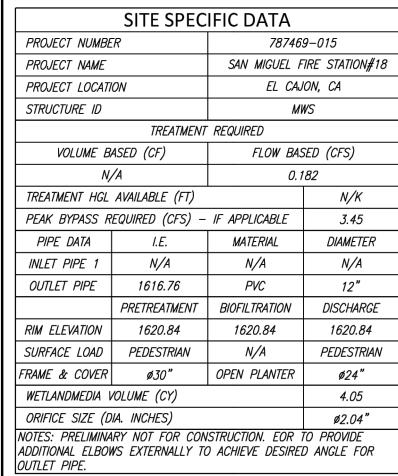
# STORM DRAIN CLEANOUT

NO SCALE

\_\_ DATUM: M.S.L.



ELEVATION: 1377.47'



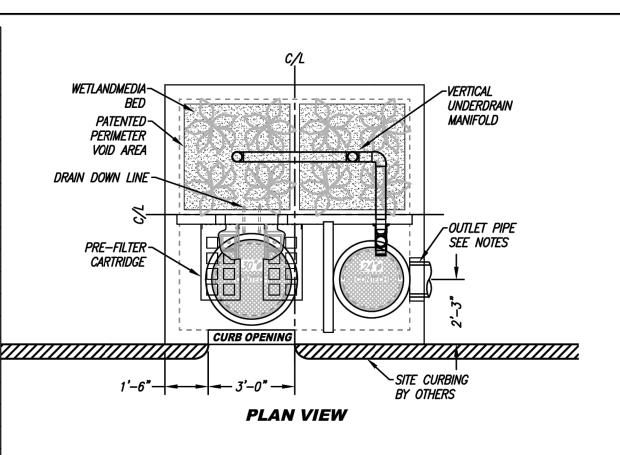
**INSTALLATION NOTES** 

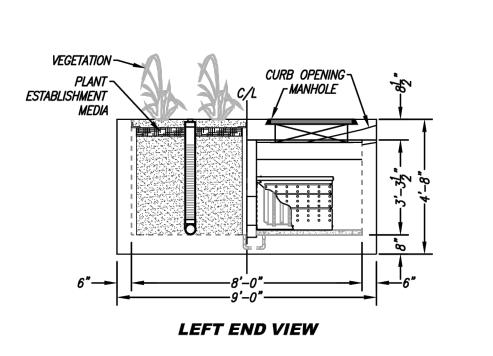
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
- UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING
- PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
- CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH
- VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS. CONTRACTOR RESPONSIBLE FOR CONTACTING CONTECH FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER

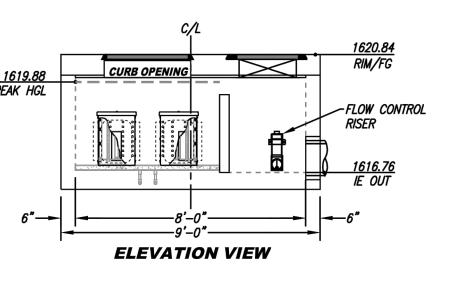
ACTIVATION BY A CONTECH REPRESENTATIVE.

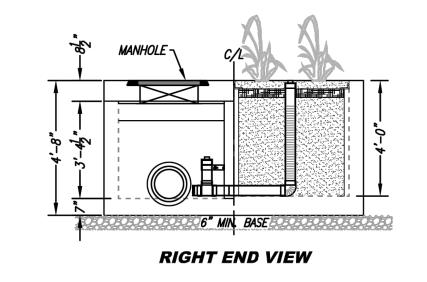
#### GENERAL NOTES

MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT CONTECH.









### **INTERNAL BYPASS DISCLOSURE:**

THE DESIGN AND CAPACITY OF THE PEAK CONVEYANCE METHOD TO BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. HGL(S) AT PEAK FLOW SHALL BE ASSESSED TO ENSURE NO UPSTREAM FLOODING. PEAK HGL AND BYPASS CAPACITY SHOWN ON DRAWING ARE USED FOR GUIDANCE ONLY.

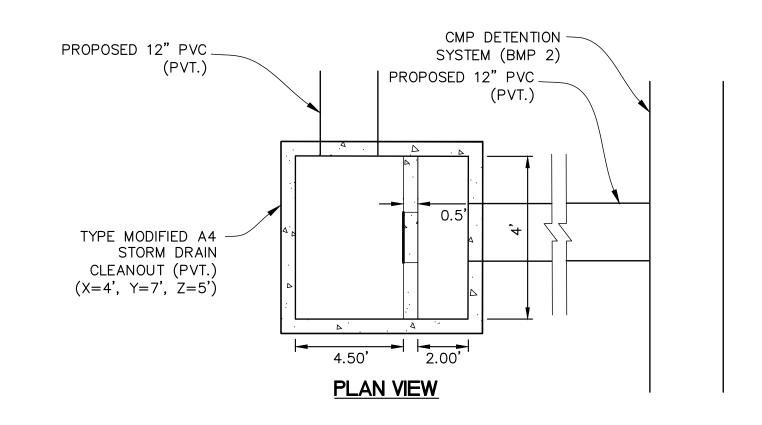
FOR PATENT INFORMATION, GO TO WWW.ContechES.com/IP

**ENGINEERED SOLUTIONS LLC** www.ContechES.com

TREATMENT FLOW (CFS) 0.182 OPERATING HEAD (FT) 2.7 PRETREATMENT LOADING RATE (GPM/SF) 1.6 WETLAND MEDIA LOADING RATE (GPM/SF) *MWS-L-8-8-4'-0"-C* STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

### RIM PER PLAN CONCRETE WEIR, USE 560-C-3250 CONCRETE WITH #5 @ 6" O.C. HORIZONTAL #5 @ 12" O.C. VERTICAL -18"W x 18"H x 1/2"T GALVANIZED STEEL PLATE WITH DRILLED ORIFICE (UPSTREAM SIDE) AND NEOPRENE 0.5" DIAMETER GASKET, ANCHOR TO WEIR WALL WITH ORIFICE 4-1/2" DIAMETER SS EXPANSION ANCHORS

**CROSS-SECTION** 



## MODIFIED A4 STORM DRAIN CLEANOUT (PVT.)

NO SCALE

# MWS-L-8-8-4'-0"-C STORMWATER **BIOFILTRATION SYSTEM**

NO SCALE





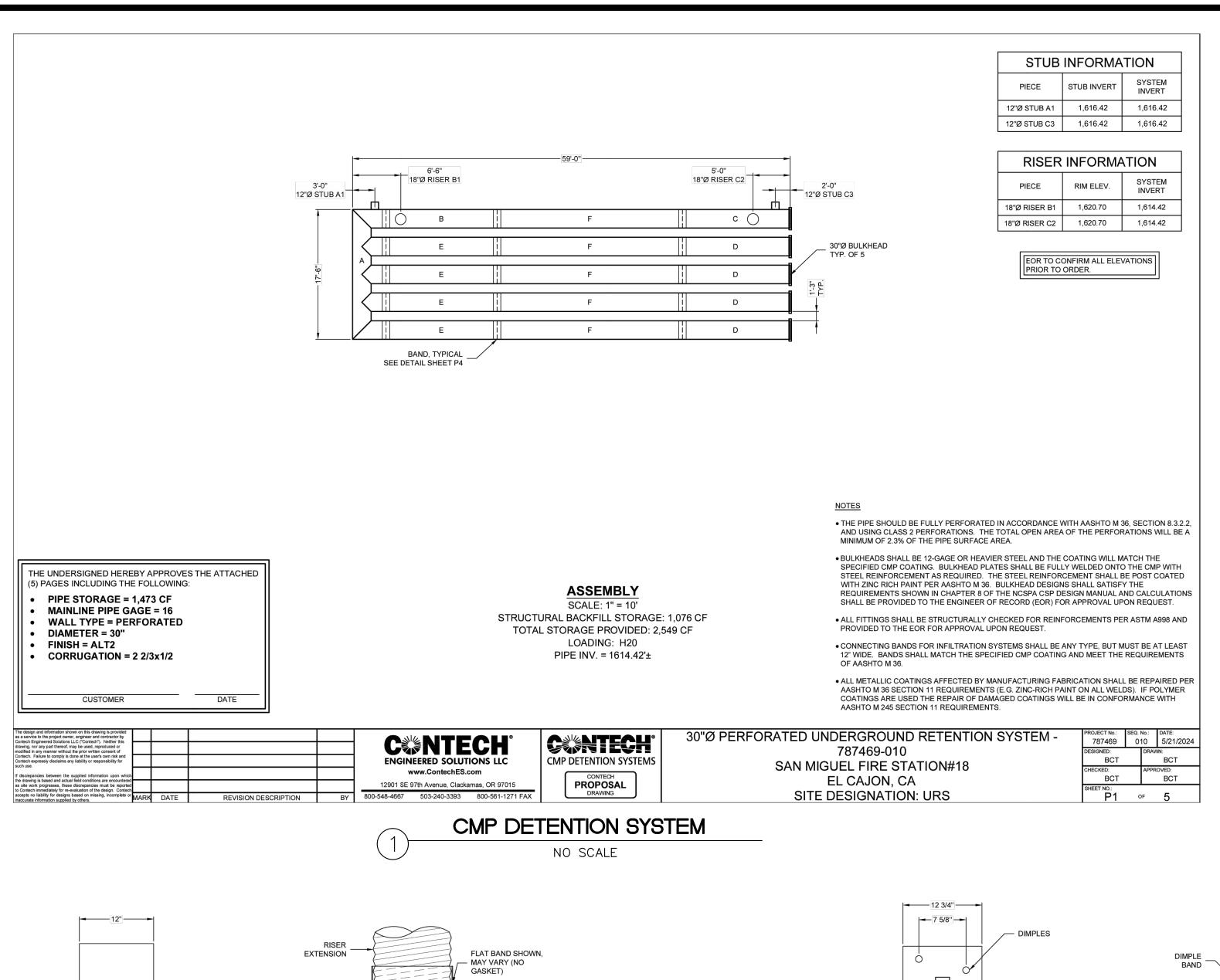
121-138.1 T (858) 292-7770 4740 Ruffner Street San Diego, CA 92111 nasland.com

COUNTY APPROVED CHANGES APPROVED DATE: DESCRIPTION:

BENCH MARK DESCRIPTION: C/L MON ON RIOS CANYON ROAD C/L MON BRASS DISC SET IN CONC. BELOW SURFACE. LOCATION: C/L OF RIOS CANYON RD AND MOUNTAIN VIEW RD RECORD FROM: RECORD OF SURVEY 11252 ELEVATION: 1377.47' \_\_\_ DATUM: <u>M.S.L.</u>

PRIVATE CONTRACT COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS DETAILS FOR: SAN MIGUEL FIRE STATION #18 CALIFORNIA COORDINATE INDEX 230-1809 DIRECTOR OF PUBLIC WORKS JARRETT J. LINN R.C.E. 84231

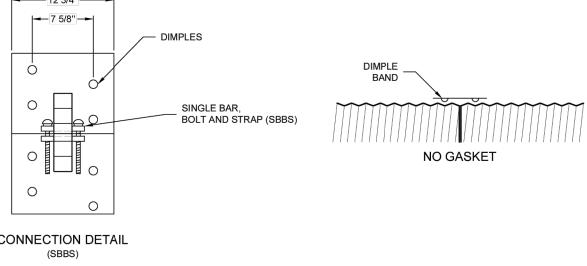
GRADING PERMIT NO:



MAINLINE

ELEVATION VIEW

OF CMP AND RISER



### PLAIN END CMP RISER PIPE

- GENERAL NOTES: 1. DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.
- 2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.

- TECHCO BAND ANGLES

— 1/2" DIA. BOLT

- 3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
- 4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT. 5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
- 12" THRU 48" 1-PIECE 54" 2-PIECES

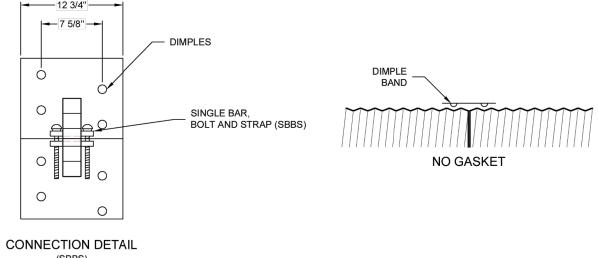
CONNECTION DETAIL

7 1/2" TECHCO SHOWN - MAY VARY

- 6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
- 7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
- 8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL NOT TO SCALE

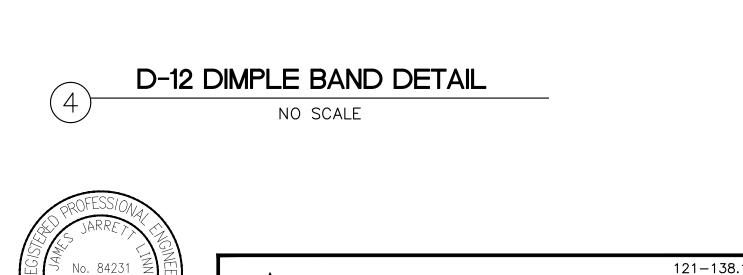
12" RISER BAND DETAIL NO SCALE



### PLAIN END CMP PIPE

### **GENERAL NOTES:**

- 1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
- 2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
- 3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
- 4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
- 12" THRU 48" 1-PIECE
- 102" THRU 144" 3-PIECES
- 5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
- 6. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- 7. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

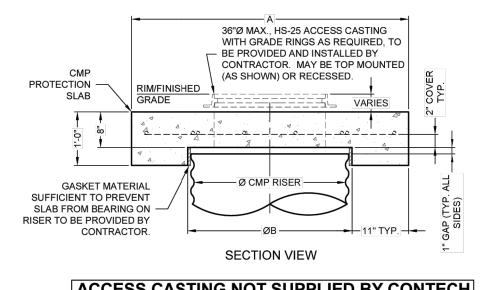




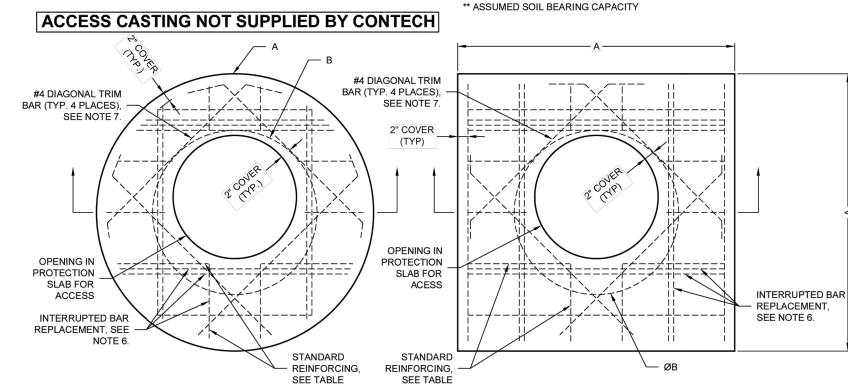
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San Diego, CA 9211 nasland.com



	REINFORCING TABLE				
Ø CMP RISER	А	ВØ	REINFORCING	**BEARING PRESSURE (PSF)	
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900	
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670	
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500	
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370	
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270	



### ROUND OPTION PLAN VIEW

### 1. DESIGN IN ACCORDANCE WITH AASHTO, 17th

- EDITION AND ACI 350.
- 2. DESIGN LOAD HS25.
- 3. EARTH COVER = 1' MAX.
- 4. CONCRETE STRENGTH = 4,000 psi
- 5. REINFORCING STEEL = ASTM A615, GRADE 60.
- 6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

#### SQUARE OPTION PLAN VIEW

- 7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- 8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- 9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

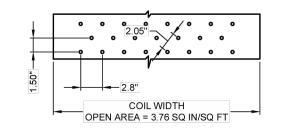
**MANHOLE CAP DETAIL** 

NOT TO SCALE

### MANHOLE CAP DETAIL

NO SCALE

2 2/3" x 1/2" CORRUGATION - STEEL AND ALUMINUM CMP EDGE SPACING EQUAL ON BOTH SIDES



- PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE. 3. DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
- ALL HOLES 3/8"Ø.

EXFILTRATION AREA STANDARD PERFORATION PATTERNS

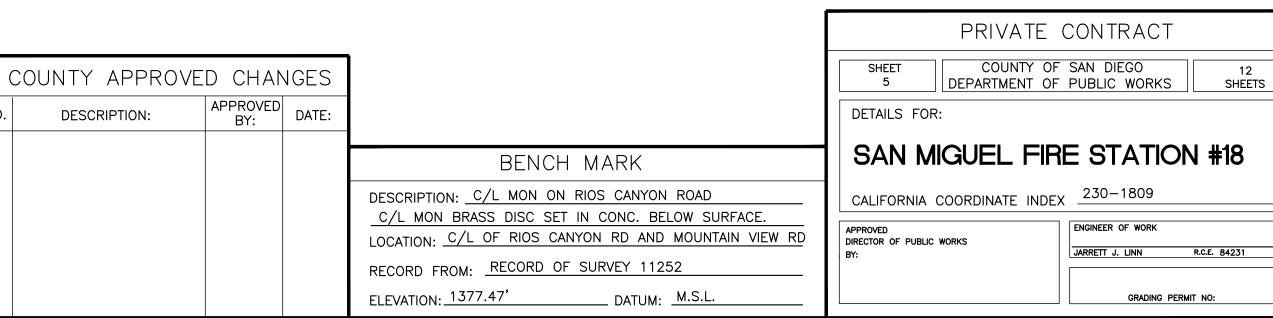
APPROXIMATE AREA PER LINEAR FOOT OF PIPE					
	CORRUGATION PATTERN				
PIPE	2 2/3" x 1/2"	3" x 1"	5" x 1"	ULTRA FLO	
30"Ø	30.5 SQ. IN.	32.3 SQ. IN.			

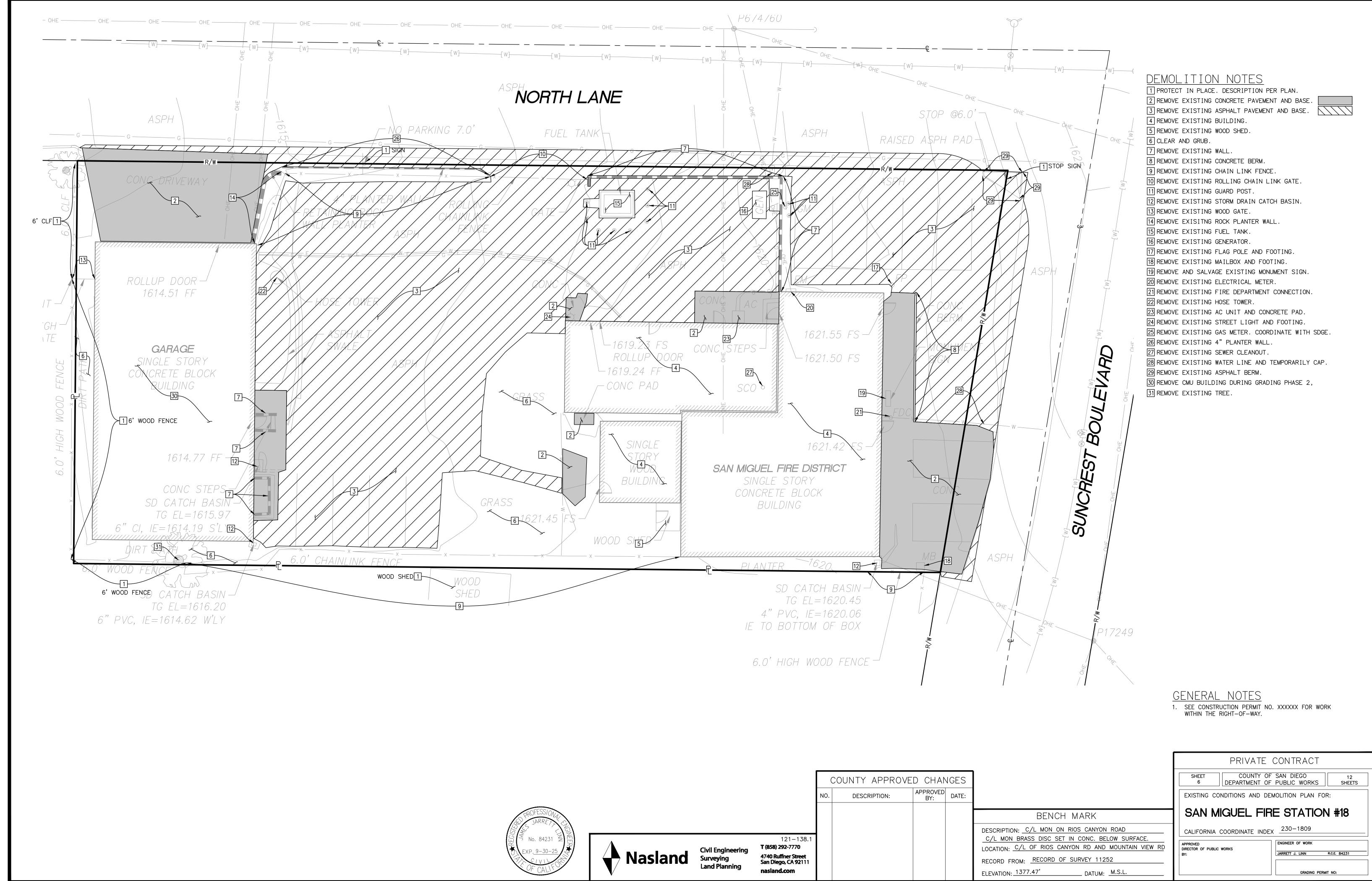
GAGE AND COATING LIMITATIONS APPLY. 5" x 1" IS NOT AVAILABLE IN

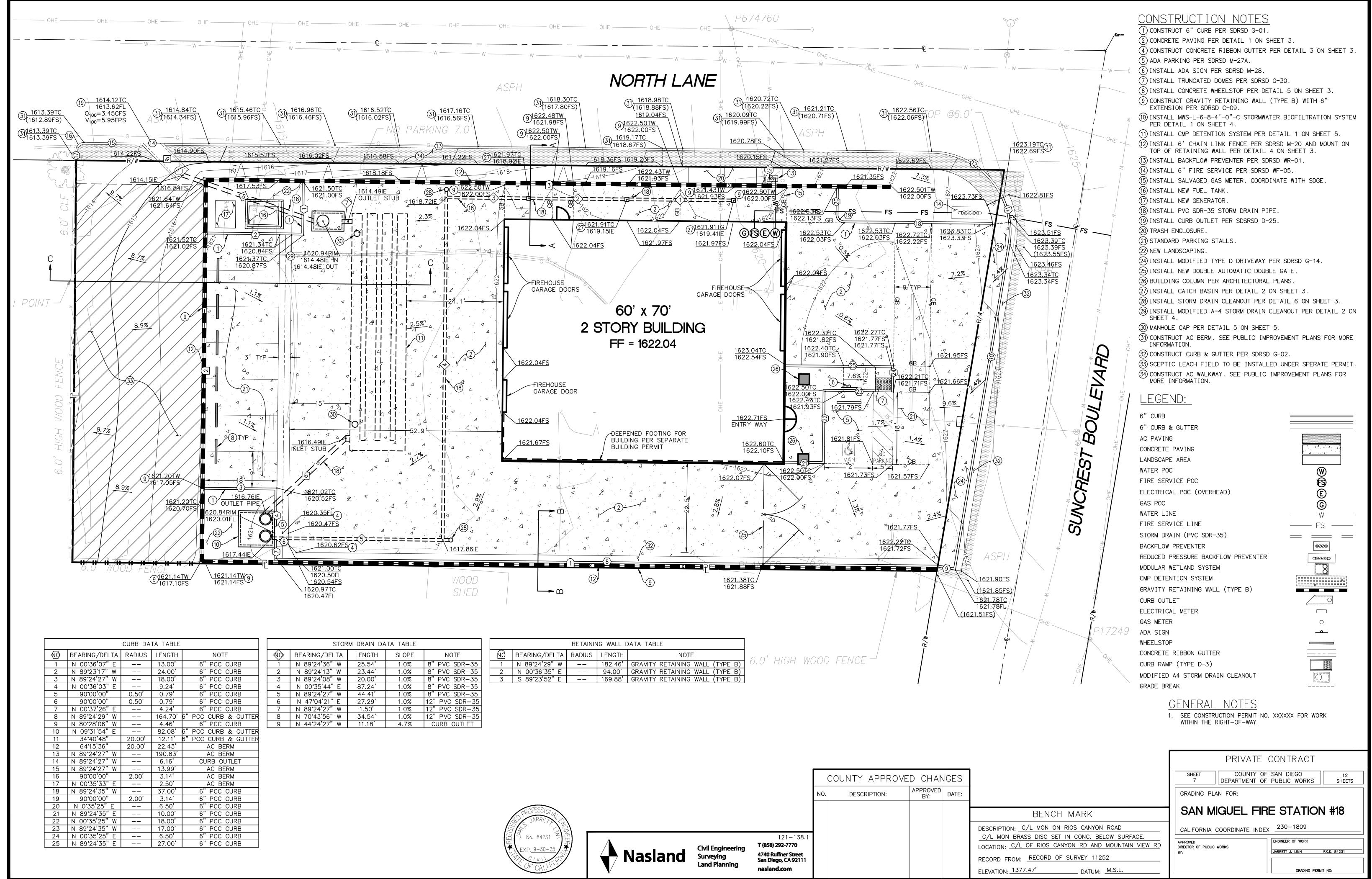
DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.

# TYPICAL PERFORATION DETAIL

NO SCALE







CONSTRUCTION NOTES

(18) INSTALL PVC SDR-35 STORM DRAIN PIPE.

(27) INSTALL CATCH BASIN PER DETAIL 2 ON SHEET 3.

(32) CONSTRUCT CURB & GUTTER PER SDRSD G-02.

(2) CONCRETE PAVING PER DETAIL 1 ON SHEET 3.

(4) CONSTRUCT CONCRETE RIBBON GUTTER PER DETAIL 3 ON SHEET 3.

(8) INSTALL CONCRETE WHEELSTOP PER DETAIL 5 ON SHEET 3.

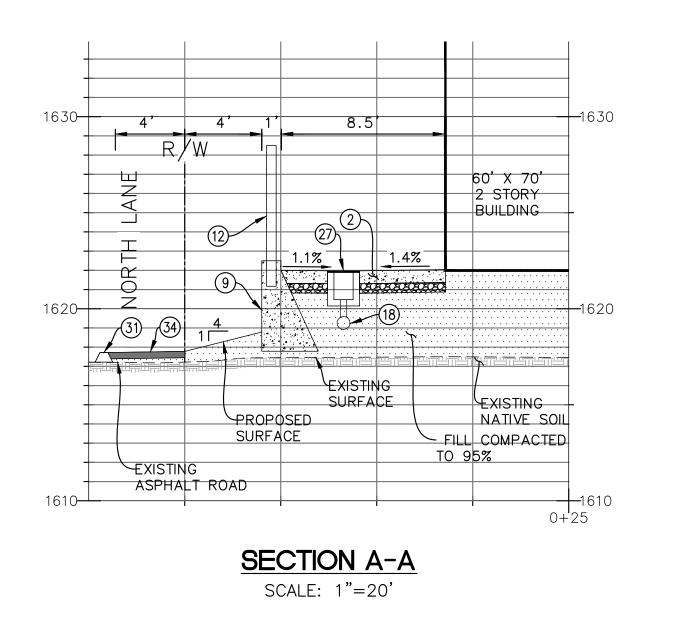
9 CONSTRUCT GRAVITY RETAINING WALL (TYPE B) WITH 6" EXTENSION PER SDRSD C-09.

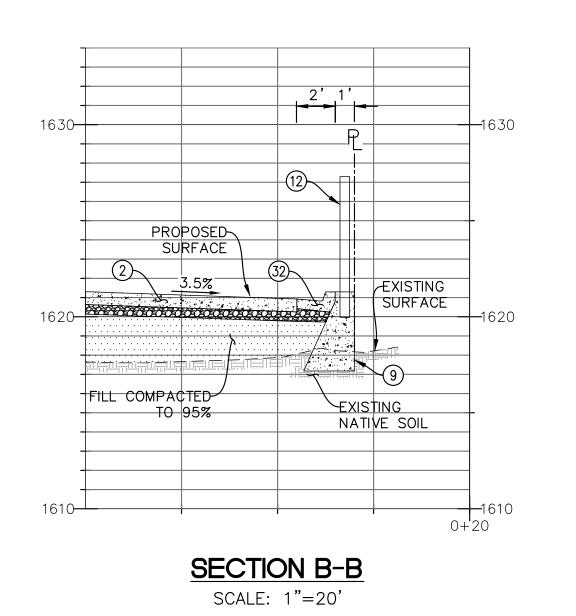
(11) INSTALL CMP DETENTION SYSTEM PER DETAIL 1 ON SHEET 5.

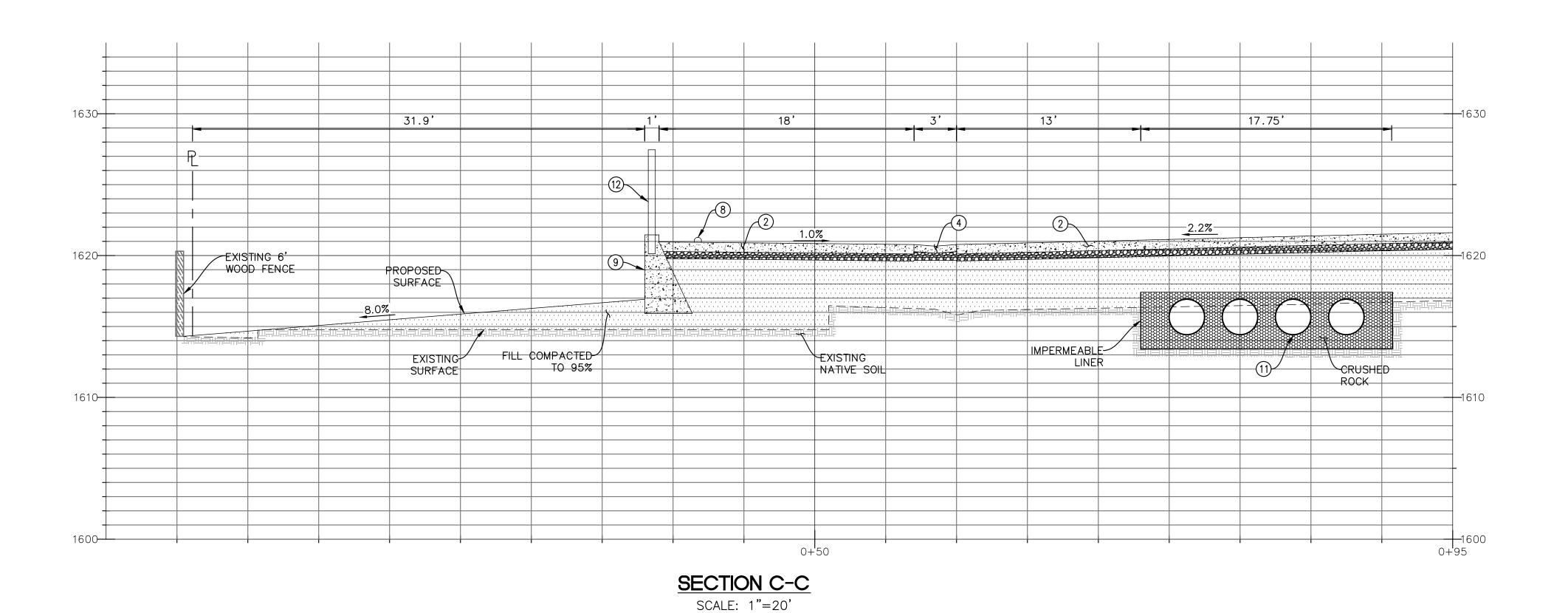
12 INSTALL 6' CHAIN LINK FENCE PER SDRSD M-20 AND MOUNT ON TOP OF RETAINING WALL PER DETAIL 4 ON SHEET 3.

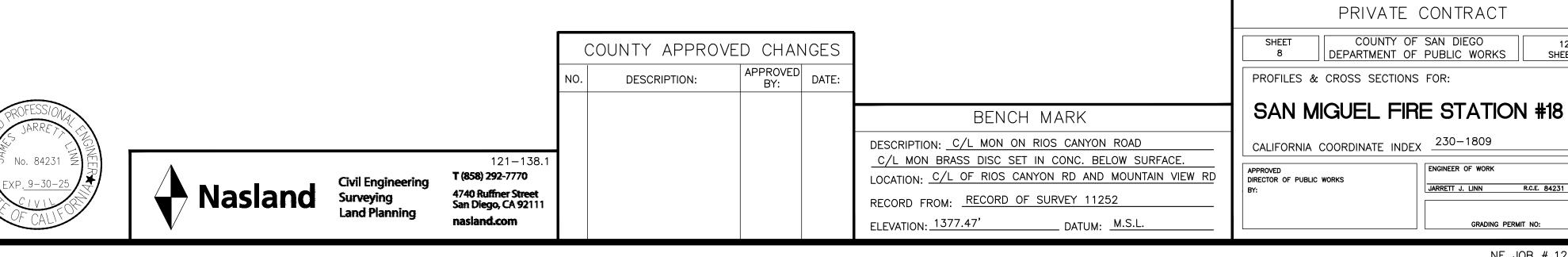
31) CONSTRUCT AC BERM. SEE PUBLIC IMPROVEMENT PLANS FOR MORE INFORMATION.

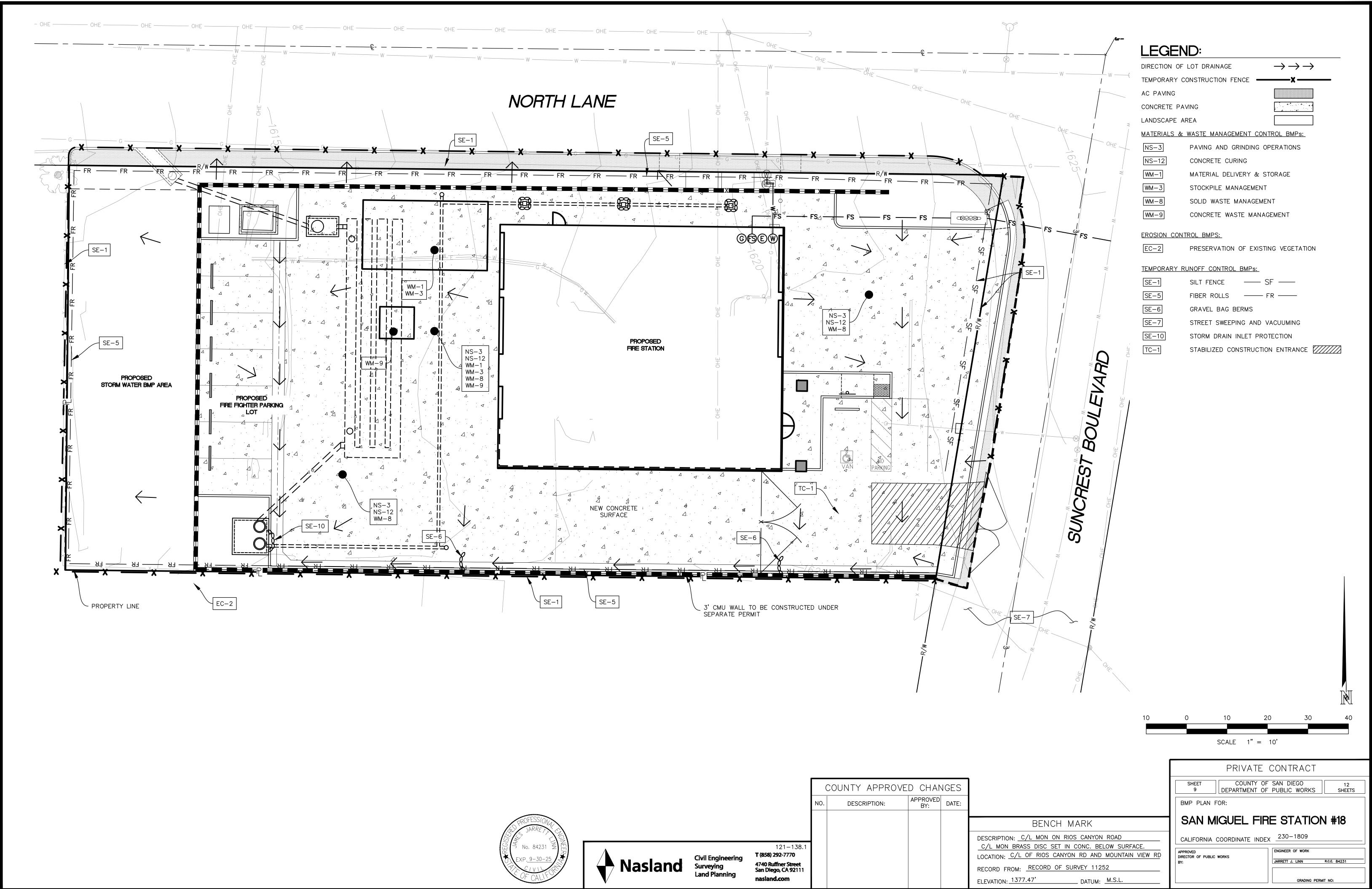
34 CONSTRUCT AC WALKWAY. SEE PUBLIC IMPROVEMENT PLANS FOR MORE INFORMATION.

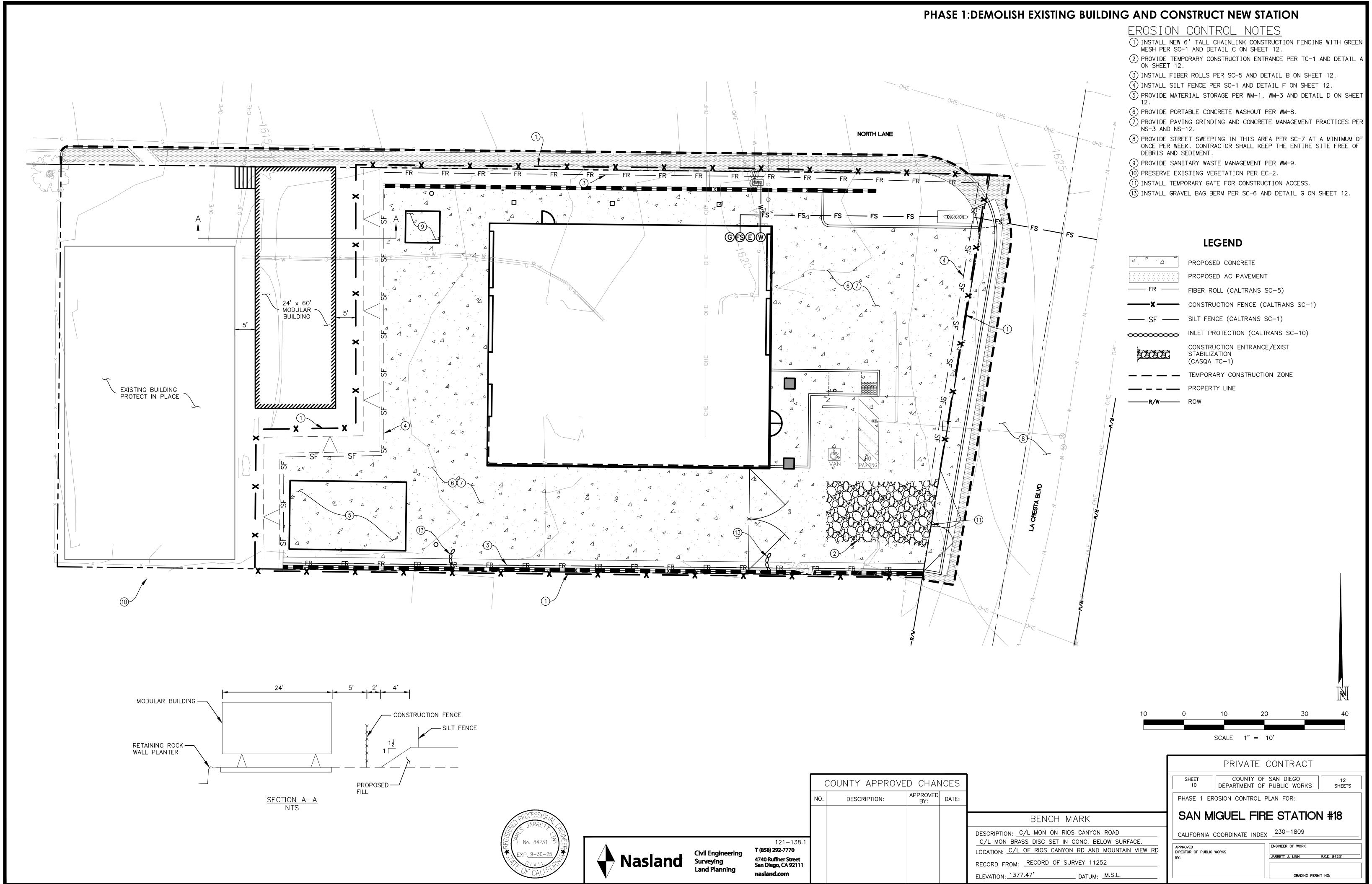


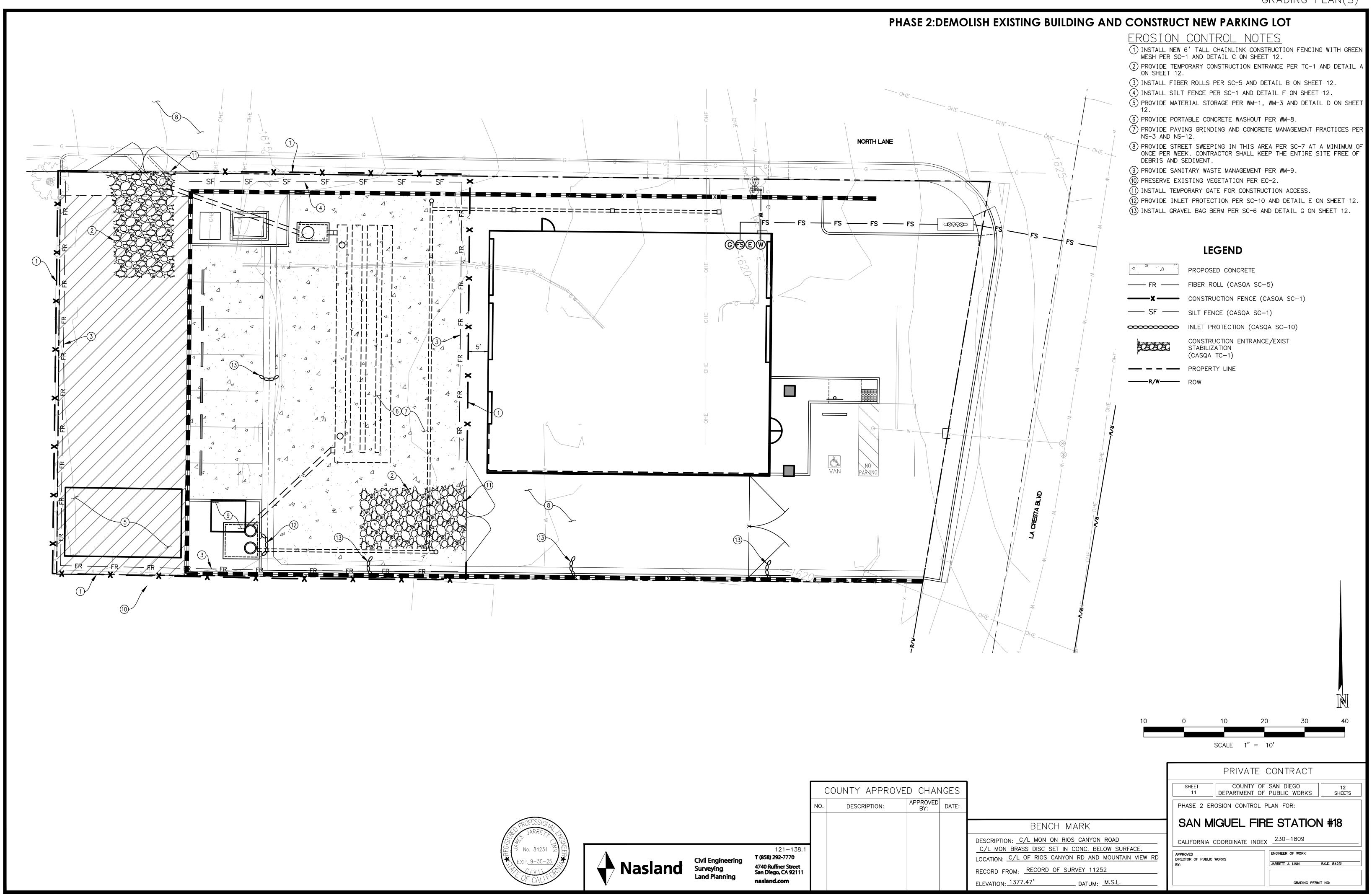












-2" X 2" WOOD STAKE

### **EROSION CONTROL NOTES**

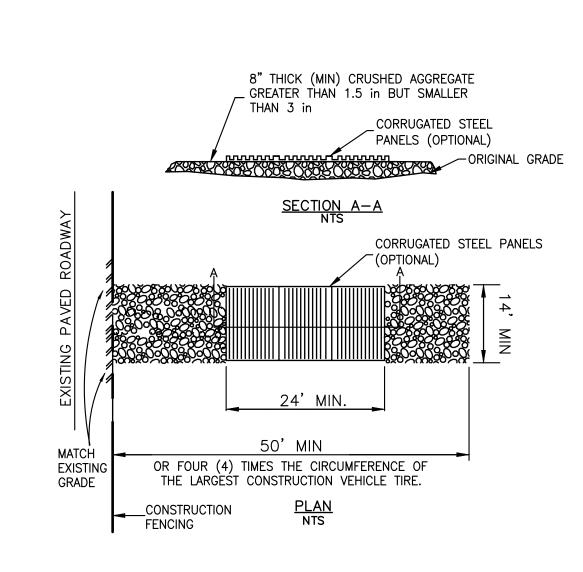
- 1. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT THE SCHOOL DISTRICT REPRESENTATIVE.
- 2. EROSION CONTROL MEASURES SHOWN ON PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE SCHOOL DISTRICT.
- 3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES IN WORKING ORDER TO THE SATISFACTION OF THE SCHOOL DISTRICT THROUGHOUT THE CONSTRUCTION PHASE OF THE PROJECT AND UNTIL PERMANENT GROUND COVER AND LANDSCAPING IS ESTABLISHED.
- 4. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE SCHOOL DISTRICT DUE TO COMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
- 6. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
- 7. ALL GRAVEL BAGS SHALL HAVE 3/4 INCH MINIMUM AGGREGATE (NO SANDBAGS AND NO BURLAP TYPE BAGS ALLOWED).
- 8. EXISTING STREETS SHALL BE KEPT FREE OF DIRT AND DEBRIS, AND SHALL BE MAINTAINED IN GOOD CONDITION. DUST SHALL BE CONTROLLED SO THAT IT IS NOT A NUISANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY STREET OR PROPERTY DAMAGED, PUBLIC OR PRIVATE, AS A RESULT OF THE WORK.
- 9. THE PLAN SHALL PROVIDE THAT NO SAND, SILT, OR DEBRIS SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM INCLUDING PUBLIC STREETS.
- 10. THE OWNER AND/OR THE OWNER'S CONTRACTOR SHALL IMPLEMENT THE PLAN AND TAKE REMEDIAL AND PREVENTIVE ACTION IMMEDIATELY WHEN POLLUTANT DISCHARGE OCCURS AND/OR THE SCHOOL DISTRICT
- 11. THE ABOVE SHALL APPLY STARTING THE 1ST DAY OF GRADING AND OR CONSTRUCTION AND SHALL REMAIN IN EFFECT UNTIL ALL GRADING AND/OR CONSTRUCTION WORK HAS BEEN COMPLETED AND 70% OF THE DISTURBED LAND HAS BEEN STABILIZED BY APPROVED VEGETATION, MULCH, GRAVEL, ETC.

#### DRY SEASON (MAY 1 THROUGH SEPTEMBER 30)

- 1. ALL EXPOSED DISTURBED AREAS MUST HAVE EROSION PREVENTION CONTROLS PROPERLY INSTALLED INCLUDING BUILDING PADS, UNFINISHED ROADS AND SLOPES. SLOPES LESS THAN 33.3% OR 1:3 (VERTICAL VS. HORIZONTAL) MAY USE PROPERLY DESIGNED AND INSTALLED DE-SILTING BASINS AT ALL DISCHARGE POINTS IN LIEU OF THIS REQUIREMENT.
- 2. ADEQUATE PERIMETER PROTECTION BMPS MUST BE INSTALLED AND MAINTAINED.
- 3. ADEQUATE SEDIMENT CONTROL BMPS MUST BE INSTALLED AND MAINTAINED.
- 4. ADEQUATE BMPS DESIGNED TO CONTROL OFF-SITE SEDIMENT TRACKING MUST BE INSTALLED AND MAINTAINED.
- 5. AT A MINIMUM, 125% OF THE MATERIALS NEEDED TO INSTALL STANDBY BMPS NECESSARY TO COMPLETELY PROTECT EXPOSED PORTIONS OF THE SITE FROM EROSION AND PREVENT SEDIMENT DISCHARGES MUST BE STORED ON THE SITE.
- 6. AN APPROVED "WEATHER TRIGGERED" RESPONSE PLAN IS MANDATED FOR IMPLEMENTATION IN THE EVENT THAT A PREDICTED STORM EVENT HAS AT LEAST A 50% CHANCE OF RAIN. THE PROPONENT MUST HAVE THE CAPACITY TO DEPLOY THE STANDBY BMPS WITHIN 48 HOURS OF THE PREDICTED STORM EVENT.
- 7. ALL SLOPES MUST BE EQUIPPED WITH EROSION PREVENTION BMPS AS SOON AS SLOPES ARE COMPLETED FOR ANY PORTION OF THE SITE.
- 8. CLEARED OR GRADED AREAS LEFT EXPOSED AT ANY GIVEN TIME ARE LIMITED TO THE AMOUNT OF ACREAGE THAT THE PROJECT PROPONENT CAN ADEQUATELY PROTECT PRIOR TO A PREDICTED STORM EVENT.

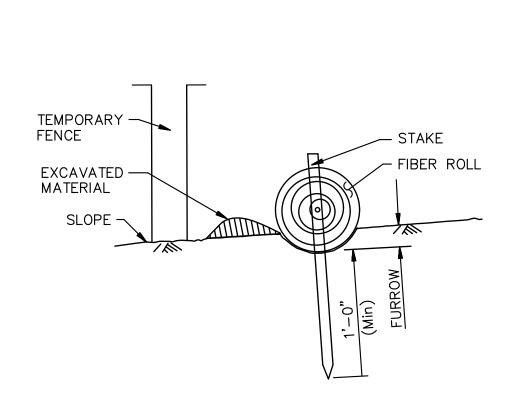
### WET SEASON (OCTOBER 1 THROUGH APRIL 30)

- IN ADDITION TO THE DRY SEASON REQUIREMENTS:
- 1. PERIMETER PROTECTION AND SEDIMENT CONTROL BMPS MUST BE UPGRADED IF NECESSARY TO PROVIDE SUFFICIENT PROTECTION FOR STORMS.
- 2. ADEQUATE EROSION PREVENTION BMPS MUST BE INSTALLED AND ESTABLISHED FOR ALL COMPLETED SLOPES PRIOR TO OCTOBER 1 AND MAINTAINED THROUGHOUT THE WET SEASON. IF A BMP FAILS, IT MUST BE REPAIRED, IMPROVED OR REPLACED WITH AN ACCEPTABLE ALTERNATE AS SOON AS IT IS SAFE TO DO SO.
- 3. THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED STANDBY EROSION AND SEDIMENT CONTROL BMP CAPACITY.
- 4. AN INCOMPLETE DISTURBED AREA THAT IS NOT BEING ACTIVELY GRADED MUST BE FULLY PROTECTED FROM EROSION IF LEFT FOR 10 DAYS OR MORE.



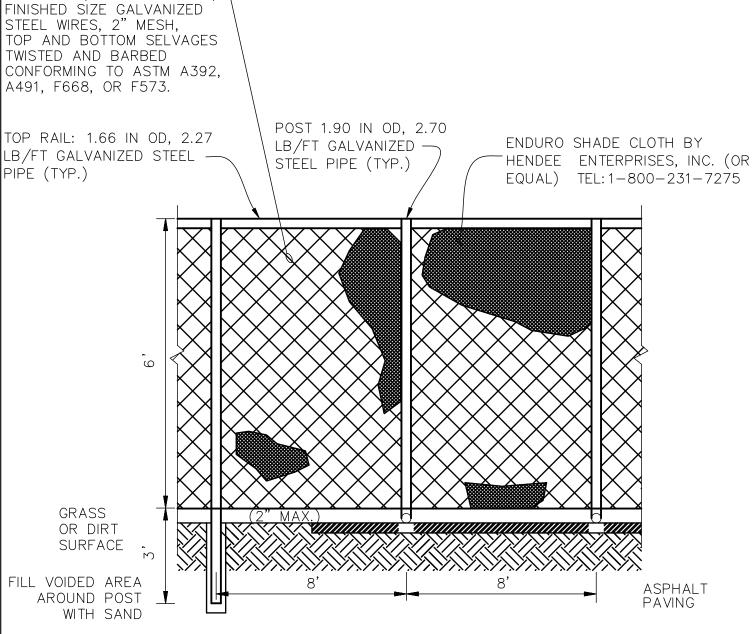
### DETAIL A: STABILIZED CONSTRUCTION **ENTRANCE PER TC-1**

NOT TO SCALE



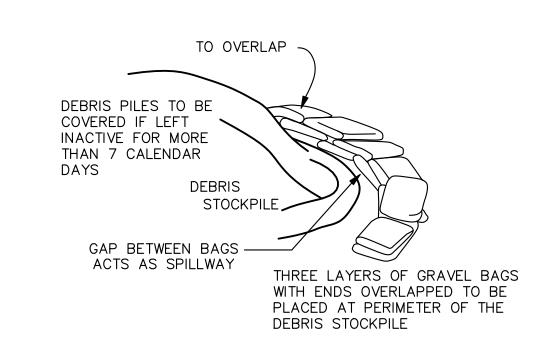
## DETAIL B: FIBER ROLLS PER SC-5

NOT TO SCALE



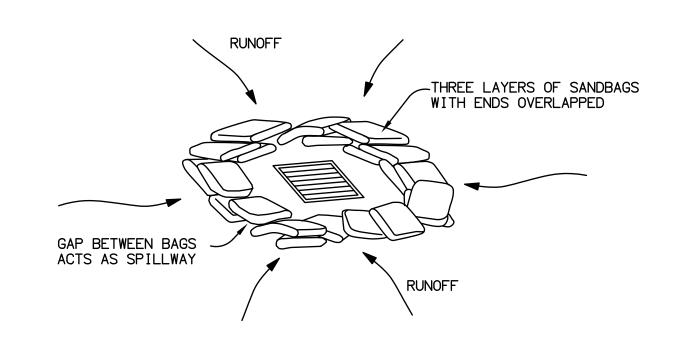
NO.9 GAGE,  $0.148" \pm 0.00"$ ,

### DETAIL C: TEMPORARY CONSTRUCTION FENCE



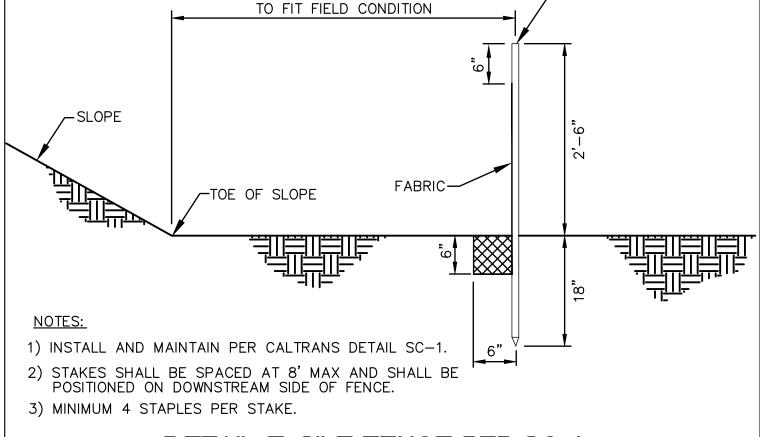
### DETAIL D: MATERIAL STORAGE PER WM-1 AND WM-3

NOT TO SCALE



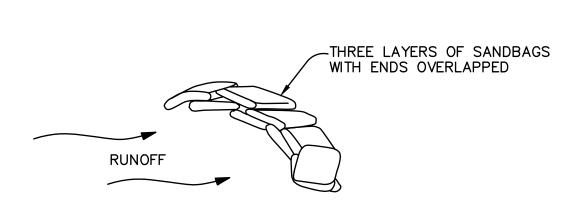
### DETAIL E: GRAVEL BAGS FOR 24"X24" CATCH BASIN AND SMALLER PER SC-10

NOT TO SCALE

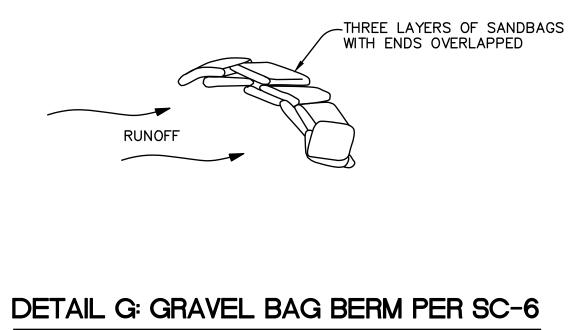


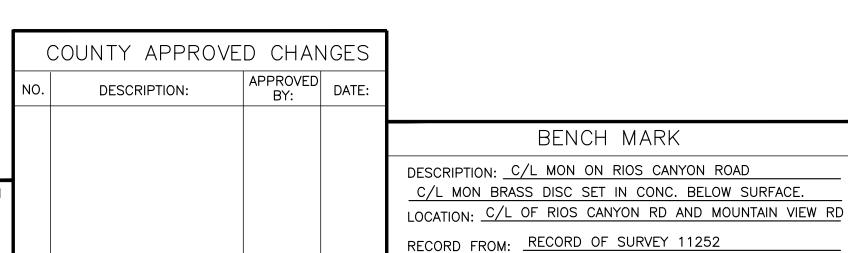
### DETAIL F: SILT FENCE PER SC-1

NO SCALE



NOT TO SCALE





BENCH MARK

\_ DATUM: M.S.L.

ELEVATION: 1377.47'

PRIVATE CONTRACT COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS EROSION CONTROL NOTES & DETAILS FOR:

SAN MIGUEL FIRE STATION #18

CALIFORNIA COORDINATE INDEX 230-1809 DIRECTOR OF PUBLIC WORKS JARRETT J. LINN R.C.E. 84231

Nasland

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Land Planning

GRADING PERMIT NO: