GRADING NOTES

- ALL GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 2. ALL GRADING SHALL BE DONE UNDER OBSERVATION AND TESTING BY A QUALIFIED CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND, IF REQUIRED, BOTH A QUALIFIED PROFESSIONAL CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND AN ENGINEERING GEOLOGIST.
- PROPOSED BUILDING PADS. STRUCTURAL IMPROVEMENT AREAS, AND AREAS TO RECEIVE FILL SHOULD BE CLEARED OF ANY DELETERIOUS MATERIAL VEGETATION, ASPHALT, CONCRETE AND DEBRIS PRIOR TO COMMENCING GRADING. ANY ORGANIC OR UNSUITABLE MATERIAL GENERATED SHOULD BE EXPORTED FROM THE SITE. THE REMOVAL OF UNSUITABLE MATERIALS SHOULD BE OBSERVED BY THE GEOTECHNICAL CONSULTANT TO EVALUATE THE COMPETENCY OF THE EXPOSED MATERIALS FOR SUPPORT OF STRUCTURAL AND FILL LOADS.
- . BRUSH AND TREES SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. WHEN TREES ARE REMOVED. THE ROOT SYSTEM SHALL ALSO BE REMOVED AND THE RESULTING EXCAVATION FILLED WITH PROPERLY COMPACTED FILL SOILS.
- 5. ANY MAN-MADE STRUCTURES OR IMPROVEMENTS WITHIN THE GRADING LIMITS. THAT ARE NOT TO BE SAVED FOR FUTURE USE. SHOULD BE DEMOLISHED AND LEGALLY DISPOSED OFF-SITE. SUBSURFACE IMPROVEMENTS OR OBSTRUCTIONS THAT ARE TO BE REMOVED SHOULD BE EXCAVATED AND HAULED OFF-SITE. THE RESULTING EXCAVATIONS SHOULD BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT. MAN-MADE IMPROVEMENTS TO BE SAVED SHOULD BE PROTECTED FROM DAMAGE BY THE CONTRACTOR.
- CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF LOCATION OF EXISTING FACILITIES.
- THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- 8. THE PAVEMENT SECTIONS SHOWN ON THESE PLANS ARE PRELIMINARY. FINAL PAVEMENT SECTIONS SHOULD BE DETERMINED ONCE SUBGRADE ELEVATIONS HAVE BEEN ATTAINED AND R-VALUE TESTING ON SUBGRADE SAMPLES IS PERFORMED.
- 9. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH AND UNIFORM SURFACE OR CROSS-SECTION. THE SLOPES OF EXCAVATIONS OR EMBANKMENT SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE ENGINEER OF WORK AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPE SHALL BE REMOVED AND DISPOSED OF.
- 10. DURING CONSTRUCTION: THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. CONTRACTOR SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE. THE CONTRACTOR SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS AND UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. AFTER COMPLETION: AFTER GRADING IS COMPLETED AND THE SOILS ENGINEER HAS FINISHED HIS OBSERVATIONS OF THE WORK. NO FURTHER EXCAVATION OR FILLING SHALL BE DONE EXCEPT UNDER THE OBSERVATION OF THE SOILS ENGINEER.
- 11. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATIONS.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AGENCY APPROVAL OF THE ROUTE AND SITE LOCATION FOR EXPORT AND/OR IMPORT MATERIALS.
- 13. REMEDIAL GRADING MAY BE NECESSARY TO REMOVE COMPRESSIBLE SOILS BENEATH STRUCTURES OR STRUCTURAL FILLS, BENEATH EXTERIOR FLATWORK AND PAVEMENT AREAS. OR WHEREVER THE EXISTING SOILS ARE DISTURBED DUE TO DEMOLITION OF EXISTING STRUCTURES OR IMPROVEMENTS. REMEDIAL GRADING SHOULD CONSIST OF COMPLETE REMOVAL OF COMPRESSIBLE SOILS UNTIL COMPETENT SOILS ARE EXPOSED. REMEDIAL EXCAVATIONS SHOULD INCLUDE ALL AREAS THAT WILL SUPPORT STRUCTURES, IMPROVEMENTS OR NEW FILLS. EXCAVATION BOTTOMS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER TO EVALUATE THE NEED FOR DEEPER REMOVALS.

GENERAL NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE. REFERENCE. AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, A LAND SURVEYOR SHALL REPLACE SUCH MONUMENTS WITH APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF PERRIS FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
- 2. THE AREA WHICH IS DEFINED AS A NON GRADING AREA AND WHICH IS NOT TO BE DISTURBED SHALL BE STAKED PRIOR TO START OF THE WORK. THE PERMIT APPLICANT AND ALL THEIR REPRESENTATIVES OR CONTRACTORS SHALL COMPLY WITH THE REQUIREMENTS FOR PROTECTION OF THIS AREA AS REQUIRED BY ANY APPLICABLE AGENCY. ISSUANCE OF THE CITY'S GRADING PERMIT SHALL NOT RELIEVE THE APPLICANT OR ANY OF THEIR REPRESENTATIVES OR CONTRACTORS FROM COMPLYING WITH ANY STATE OR FEDERAL REQUIREMENTS BY AGENCIES INCLUDING BUT NOT LIMITED TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD. CALIFORNIA DEPARTMENT OF FISH AND GAME. COMPLIANCE MAY INCLUDE OBTAINING PERMITS. OTHER AUTHORIZATIONS, OR COMPLIANCE WITH MANDATES BY ANY APPLICABLE STATE OR FEDERAL AGENCY.
- 3. CONTRACTOR TO VERIFY EXACT PERIMETER OF DEMOLITION AND AREA OF WORK FOR THE PROJECT. AREA SHOWN IS APPROXIMATE.

SPECIAL NOTES

- 1. ALL LANDSCAPE AREAS SHALL BE GRADED TO SLOPE AWAY FROM STRUCTURES AND PROPERTY LINES TOWARD LANDSCAPE DRAINAGE SWALES AND/ OR SITE DRAIN INLETS AT 2% MINIMUM GRADIENT (1% WHERE FLOW IS CONCENTRATED). SMOOTH FINISH GRADES TO ELIMINATE PONDING OR STANDING WATER.
- 2. ALL LANDSCAPE DRAINS SHALL BE 4" MINIMUM CONSTRUCTED WITH RIGID
- LANDSCAPE DRAINS, CATCH BASINS, INLETS, ETC. SHOWN HEREON ARE DIAGRAMMATIC. CONTRACTOR SHALL PROVIDE COMPLETE DRAINAGE SYSTEMS MINOR DISCREPANCIES WITH THESE PLANS.
- 4. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO MAINTAIN PROPER DRAINAGE AND EROSION CONTROL DURING CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY ENGINEER UPON THE DISCOVERY OF AREAS WHICH NOT BEEN ADEQUATELY ADDRESSED AS A RESULT OF A FIELD CONDITION OR ANOMALY IN THE TOPOGRAPHY.
- HARDSCAPE GRADES SHALL BE 0.02' BELOW DRIP SCREED AT HIGHEST POINT LANDSCAPE AREAS. HARDSCAPE SHALL SLOPE AND DRAIN AWAY FROM THE STRUCTURE UNLESS OTHERWISE NOTED.
- 7. THE HIGHEST ADJACENT GRADE AGAINST STRUCTURE FOOTINGS SHALL BE PER THE LATEST CALIFORNIA BUILDING CODE AND GREEN BOOK STANDARDS.
- 8. EARTHWORK QUANTITIES SHOWN HEREON ARE RAW QUANTITIES CALCULATED INCLUDE POTENTIAL SHRINKAGE OR BULKING FACTORS. REMEDIAL GRADING. QUANTITIES TO THEIR OWN SATISFACTION.
- 9. THE LOCATIONS OF UNDERGROUND STRUCTURES AND UTILITIES SHOWN HEREON HAVE BEEN OBTAINED FROM AVAILABLE RECORDS FOR THE BENEFIT OF THE CONSTITUTE A GUARANTEE OF THEIR EXACT LOCATION, DEPTH, SIZE, OR TYPE. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONARY MEASURES TO PROTECT ALL UNDERGROUND AND/OR
- 10. CONTRACTOR SHALL NOTIFY DIGALERT OR UNDERGROUND SERVICE ALERT (USA) @ 811 AT LEAST TWO DAYS BEFORE START OF CONSTRUCTION.
- 11. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF WORK OF ANY DISCREPANCIES PRIOR TO START OF WORK.
- 12. LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK.
- 13. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE & COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THE PROJECT. SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD THE JURISDICTIONAL AGENCY AND THE DESIGN LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE JURISDICTIONAL AGENCY OR DESIGN PROFESSIONAL.
- 14. NEITHER THE OWNER. NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS, THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL. STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS. THE CONTRACTOR SHALL ENFORCE ALL SAFETY MEASURES.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES. STREETS, UTILITIES, AND STORM DRAINS ARE BUILT IN ACCORDANCE WITH ANY WORK BY CALLING THE ENGINEER OF WORK. THE CONTRACTOR SHALL PROPERTY FROM ANY EROSION AND SILTATION THAT RESULTS FROM HIS OPERATIONS BY APPROPRIATE MEANS (SAND BAGS, HAY BALES, TEMPORARY IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY WHATEVER OWNER. AGENCY OR ASSOCIATION IS TO BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE.
- 16. CONTRACTOR SHALL NOTIFY THE LOCAL GAS & ELECTRIC UTILITY AGENCY PRIOR TO STARTING WORK NEAR AGENCY FACILITIES AND SHALL COORDINATE HIS WORK WITH AGENCY REPRESENTATIVES. NOTICE: ELECTRICAL AND GAS SERVICES MAY BE "UNDERGROUND INSTALLATIONS". USA WILL NOT HAVE ANY ON-SITE UNDERGROUND INFORMATION, CONTRACTOR SHALL SECURE SERVICES OF PRIVATE UTILITY LOCATOR SERVICE.
- 17. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER OF UTILITIES OR STRUCTURES PRIOR TO ANY EXCAVATION FOR VERIFICATION AND LOCATION OF UTILITIES.



BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BELOW GRADE PIPING WITH A 1% MINIMUM GRADIENT UNLESS OTHERWISE NOTED.

AND ADJUST THE LAYOUT AS REQUIRED TO MATCH SITE CONDITIONS AND / OR

DO NOT DRAIN PROPERLY OR ANY OTHER DISCREPANCY OR AREA WHICH HAS

NEAR STRUCTURE AND SHALL SLOPE AT A 1% MINIMUM GRADE TO DRAINS OR

FOR PERMIT AND/OR BONDING PURPOSES ONLY. UNLESS NOTED, THEY DO NOT FOOTING SPOILS, UTILITY TRENCH SPOILS, ETC. THE CONTRACTOR SHALL VERIFY

CONTRACTOR. THE DEPICTION OF UTILITIES SHOWN ON THESE PLANS DOES NOT EXACT LOCATION, DEPTH, TYPE AND SIZE SHOULD BE VERIFIED BY POTHOLING

OVERHEAD STRUCTURES AND/OR UTILITIES WHETHER OR NOT THEY ARE SHOWN HEREON. ALL DAMAGES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE APPROPRIATE SPECIFICATIONS AND AT THE EXPENSE OF THE CONTRACTOR.

INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING

THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ALSO TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT DESILTING BASINS. DIKES. SHORING. ETC.) UNTIL SUCH TIME THAT THE PROJECT

EROSION AND SEDIMENT CONTROL NOTES

- CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT GRADING AND/OR CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD AND THE LOCAL AGENCY.
- 2. GRADING FOR THE PROJECT SHOULD BE ENCOURAGED DURING THE DRY SEASON (APRIL 1 THROUGH OCTOBER 31). GRADING WHICH OCCURS DURING THE RAINY SEASON (OCTOBER 15 TO APRIL 15) SHALL REQUIRE EROSION CONTROL MEASURES.
- 3. EMERGENCY EROSION CONTROL MEASURES ARE REQUIRED TO CONTROL SOIL MOVEMENT SATISFACTORY TO THE INSPECTOR IN THE EVENT THE SITE IS EXPOSED TO EROSION DURING THE PERIOD BETWEEN OCTOBER 15TH AND APRIL 15TH. EROSION CONTROL MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, SLOPE PROTECTION, INSTALLATION OF JUTE MATING OR APPROVED EQUIVALENT. SILTING BASINS, SILT CONTROL, GRAVEL BAGGING AND STORM DRAINS.
- 4. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
- 5. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE INSPECTOR AFTER EACH RUN-OFF PRODUCING RAINFALL.
- 6. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSON/SEDIMENT CONTROL MEASURES AS MAY BE REQUIRED BY THE AGENCY PERSONNEL DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
- 8. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING, FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
- 9. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE INSPECTOR.
- 10. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED AS AND WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
- 11. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
- 12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
- 13. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
- 14. ALL GRAVEL BAGS SHALL BE BURLAP TYPE WITH 3/4-INCH MINIMUM AGGREGATE
- 15. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.0' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS. THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
- 16. GRADED, DISTURBED, OR ERODED AREAS THAT WILL NOT BE PERMANENTLY PAVED, COVERED BY STRUCTURE, OR PLANTED FOR A PERIOD OVER 90 CALENDAR DAYS SHALL BE TEMPORARILY REVEGETATED WITH A NON-IRRIGATED HYDROSEED MIX, GROUND COVER, OR EQUIVALENT MATERIAL.

TOPOGRAPHY SOURCE

THE EXISTING TOPOGRAPHY AS SHOWN ON THESE PLANS IS BASED ON AN AERIAL MAP DONE BY SWS ENGINEERING ON 9/21/2020

BASIS OF BEARINGS

ASSUMED CL OF GLENOAKS BLVD. I.E. N 76*49'30" W

BENCHMARK

CITY OF GLENDALE BM814 NAIL IN SOUTHERLY CURB GLENOAKS BLVD. 2.0 FT WESTERLY BCR SOUTHWESTERLY CORNER

STANDARDS AND SPECIFICATIONS

FOLLOWING DOCUMENTS: BOOK"). 3. 2019 CALIFORNIA BUILDING CODE

CIVIL SHEET INDEX

C1.0				
C2.0				
C3 0				
C/ 0				
CE 0		•••••		•••••
05.0	•••••	•••••	•••••	
UD.1				

ABBREVIATIONS

AC	ASPHALT CONCRETE	PIV
AB	AGGREGATE BASE	PL
СВ	CATCH BASIN	PA
CF	CURB FACE	R/W
CL	CENTERLINE	RD
CLR.	CLEAR	S=
CO	CLEAN OUT	
	DOUBLE DETECTOR CHECK	SSPWC
FC	EDGE OF CONCRETE	55/ 10
FX	FXISTING	SWP
FDC	FIRE DPT CONNECTION	SWA
FF	FINISH FLOOR	55 TC
FG	FINISH GRADE	TC TE
FS	FINISH SURFACE	TC
FH	FIRE HYDRANT	TG
FI		
C	CAS	
CP	CRADE PREAK	VV
		WM
		WV
	INVERT ELEVATION	NDS
LD	LUCAL DEPRESSION	SDR
LG	LIP OF GUITER	HDPE
LP	LOW POINT	SDRSD
MAX	MAXIMUM	RCP
МН	MANHOLE	RCB
MIN	MINIMUM	CASQA

WORK SHOWN ON THE PLANS SHALL BE DONE IN ACCORDANCE WITH THE

1. 2012 STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION 2. 2018 STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREEN

ANY CHANGE OR REVISIONS THEREFORE SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO CONSTRUCTION.

NFPA..

GENERAL NOTES GRADING AND PAVING PLAN

..... EROSION CONTROL PLAN DETAIL SHEET

..... UTILITY PLAN UTILITY DETAIL SHEET

POST INDICATOR VALVE PROPERTY LINE PLANTED AREA RIGHT-OF-WAY ROOF DRAIN SLOPE STORM DRAIN STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION SEWER SANITARY SEWER TOP OF CURB TOP OF FOOTING TOP OF GRATE TOP OF WALL TYPICAL WATER WATER METER WATER VALVE NATION DIVERSIFIED SALES PIPE SCHEDULE HIGH DENSITY POLYETHYLENE SAN DIEGO AREA REGIONAL STANDARD DRAWINGS REINFORCED CONCRETE PIPE REINFORCED CONCRETE BOX CALIFORNIA STORMWATER QUALITY ASSOCIATION NATIONAL FIRE PROTECTION ASSOCIATION









ROSION	CONTROL NOT
	STORM DRAIN INLET PROTECTI PER DETAIL 1 / C-4.0
MS	MATERIAL DELIVERY STORAGE

MS	MATERIAL DELIVERY STORAG
<u>sm</u>	SOLID WASTE MANAGEMENT
\wedge	HAZARDOUS WASTE MANAGE
СИМ	CONCRETE WASTE MANAGEN
SS	SANITARY/SEPTIC WASTE MA (WM9)

NOTE: BMP DRAWING NUMBERS IN () REFER TO THE CALIFORNIA STORMWATER QUALITY ASSOCIATION'S <u>BEST</u> MANAGEMENT PRACTICES HANDBOOK. CONSTRUCTION.





60

DTES

CTION (SE10)

E (WM1)

T (WM5)

GEMENT (WM6)

EMENT (WM8)

MANAGEMENT









DC

FIRE SERVICE LINE PER 2/C5.1 (PVC CL200), CONSTRUCT WITH 3.5' MIN COVER
THRUST BLOCK
FIRE HYDRANT
DETECTOR CHECK ASSEMBLY

|--|

40	4" AC / 4" AB - FIRE TRUCK RATED PAVEMENT SECTION COMPACTED SUBGRADE
(41)	3" AC / 4" AB - PARKING/DRIVE AISLE RATED PAVEMENT OVER 12" 95% COMPACTED SUBGRADE

- 1" GRIND AND OVERLAY PER DETAIL 6, SHEET C5.1
 - FOINT OF CONNECTION WATER MAIN. CONTRACTOR TO POTHOLE AND CONFIRM EXISTING INVERT AT POINT OF CONNECTION AND ELEVATIONS OF EXISTING UTILITY CROSSINGS PRIOR TO START OF CONSTRUCTION.
 - (51) THRUST BLOCK PER THRUST BLOCK TABLE ON SHEET C5.0 AND DETAIL 1, SHEET C5.1
 - (52) TEE WITH 4" STUB-OUT FOR FIRE SERVICE TO FUTURE BUILDING
 - (53) SHUT-OFF VALVE PER DETAIL 7, SHEET C5.1
 - (54) FIRE HYDRANT PER DETAIL 4, SHEET C5.1
 - (55) 8" DOUBLE CHECK DETECTOR ASSEMBLY WITH POST INDICATOR GATE VALVE (WILKINS 350DA OR APPROVED EQUAL ALTERNATE)

\bigcirc	WATERL	INE AND FIR	E SERVICE DATA TABLE			
SYM	LENGTH	BEARING	DESCRIPTION			
	16.14'	N19 ° 53'55"E	8" PVC (CL 200)			
3	13.48'	N70°06'05"W	8" PVC (CL 200)			
4	54.07'	S74 * 42'51"E	8" PVC (CL 200)			
5 19.64' S15"			8" PVC (CL 200)			
6 70.18'		S58°02'59"W	8" PVC (CL 200)			
7 108.14'		S76 * 57'01"E	8" PVC (CL 200)			
8	27.35'	N13°02'59"E	8" PVC (CL 200)			

	THRUST BLOCK TABLE								
	PER NFPA 24								
		SOIL	BEARING	<i>= 2,000 PS</i>	SF W/ 1.5 S	SAFETY FAC	TOR		
PIPE (IN)	ANGLE (DEG)	HEIGHT (FT)	WIDTH (FT)	AREA (SF)	PIPE (IN)	ANGLE (DEG)	HEIGHT (FT)	WIDTH (FT)	AREA (SF)
4	11.25	1.0	1.0	1.0	8	11.25	1.0	2.0	2.0
4	22.5	1.0	1.1	1.1	8	22.5	1.9	2.0	3.8
4	45	1.1	2.0	2.2	8	45	2.0	3.7	7.4
4	90	1.9	2.0	3.8	8	90	2.7	5.1	13.8
4	TEE	1.4	2.0	2.8	8	TEE	2.3	4.2	9.7
6	11.25	1.0	1.1	1.1	10	11.25	1.4	2.0	2.8
6	22.5	1.1	2.0	2.2	10	22.5	2.0	3.0	6.0
6	45	2.0	2.2	4.4	10	45	2.4	4.7	11.3
6	90	2.0	4.0	8.0	10	90	3.2	6.4	20.5
6	TEE	2.0	2.8	5.6	10	TEE	2.7	5.4	14.6

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