

GRADING NOTES

1. Call the assigned City of San Marcos Engineering Inspector 24-hours before commencement of work.
2. Imported material shall be obtained from a legal site.
3. All cut and fill slopes shall be planted with a mixture of trees, shrubs, and ground cover to control erosion. Slope landscaping shall be installed as soon as practical. Irrigation systems are required and shall be installed for perpetual maintenance of the plant life used for slope stabilization in accordance with Section 17.32.170, Title 19, and Title 20 of the City's Grading Ordinance.
4. Precise locations/elevations of the existing underground utilities are not known. The Contractor shall be solely responsible for making sufficient explorations to locate all utilities and substructures whether shown on the plans or not and to protect them from any possible damage prior to and during construction. The expense of repair or replacement of said utilities and substructures shall be borne by the Contractor. Contractor shall notify the Engineer-of-Work of any potential conflicts sufficiently in time for construction changes to be made and approved.
5. The Contractor shall contact the Underground Service Alert at 1-800-422-4133 at least 48 hours prior to excavating to verify the locations of underground facilities of the following utilities:

AT&T
San Diego Gas & Electric
Vallecitos Water District
Cox Communications
Buena Sanitation District
Vista Irrigation District

A Dig Alert Identification Number must be issued before a "Permit to Excavate" is valid per Government Code section 4216.

6. Approval of these plans by the City does not authorize any work or grading to be performed until the property owner's permission is obtained and a valid grading permit has been issued.
7. All operations conducted on the premises, including the warming up, repair, arrival, departure or running of any equipment shall be limited to the hours of 7:00 a.m. to 4:30 p.m., Monday through Friday. No work shall be performed on the premises on Saturday, Sunday, or holidays.
8. All major slopes shall be shaped and trimmed as shown on the plans and rounded into existing slopes to produce a contoured transition from cut or fill faces to natural ground and abutting cut or fill slopes. All stones, roots or other waste matter exposed on excavation or embankment slopes shall be removed and disposed of off-site in a legal manner by the Contractor.
9. Notwithstanding the minimum standards set forth in the City's Grading Ordinance and 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 system, or any other public or private property without supporting and protecting such property from settling, cracking, erosion, silting, scour or other damage which might result from the grading described on this plan. The City will hold the permittee responsible for correction of non-dedicated improvements, which cause damage to adjacent property.
10. The Engineer-of-Work shall be notified when construction commences.
11. Contractor shall be responsible for all construction/grading of slopes, pads, street grades, and infrastructure improvements according to these plans. The Engineer-of-Work shall be contacted when changes or additions are made during the progress of construction or if there is a misunderstanding of these plans or field stakes and an interpretation is needed.
12. Certification from the registered civil engineer stating that the grading has been completed per the approved plan, and the compaction report from the geotechnical engineer on any required fill areas shall be provided prior to building permits being issued.
13. Minimum 90% compaction is required in all on-site fill areas with a minimum of 95% compaction twelve inches (12") below finished subgrade in a public street.
14. Excavations, fills, and obstructions in Public Places shall conform to the requirements of City Ordinance 2022-1521 subject to the approval of the Director.
15. Contractor shall be responsible for protecting any monumentation and/or benchmarks. Any monumentation and/or benchmarks, which are disturbed or destroyed by construction, shall be replaced at the Contractor's expense. Such points shall be referenced and replaced with appropriate monumentation by a licensed land surveyor or a registered civil engineer authorized to practice land surveying. A Corner Record or Record of Survey, as appropriate, shall be filed by the licensed land surveyor or registered civil engineer as required by the Land Surveyor's Act.
16. Dust control measures, such as the periodic wetting down of the bare and exposed areas, shall be utilized at all times during construction to the satisfaction of the Engineering and/or Building Inspectors.
17. All work shown on these plans to be completed in accordance with City Grading Ordinance Chapter 17.32.
18. All grading shall be supervised by an individual appropriately licensed under the Business and Professions Code.
19. The Contractor is responsible for maintaining the adjoining public streets and rights-of-way in a clean and dust free condition within the limitation of the City Municipal Code Section 14.15.030 Illicit "Discharges Prohibited." This section of the Code prohibits the "washing down" of a street into a public storm drain. The continuous use of street sweeping machines may be advisable.
20. The Contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including the safety of all persons and property. This requirement shall apply continually and not be limited to normal working hours. The Contractor shall defend, indemnify, and hold the owner, the engineer, and the City harmless from any and all liability, real or alleged, in connection with the performance of work on this project excepting for liability arising from the sole negligence of the owner, engineer, or City.
21. A permit must be obtained from the San Marcos Fire Department prior to any blasting. Separate City permits are required prior to any construction, excavation, storage of materials or any other encroachments.
22. A right-of-way permit will be required for any work within the City right-of-way.
23. Accessible parking space(s) shall have a maximum slope not exceeding 2% in any direction.

FIRE NOTES

1. Fire hydrants shall be CLOW Model 865 with Two 4" and One 2.5" port.
2. The tops and nozzle caps of the fire hydrant shall be color coded per NFPA 291 based on fire flow:
Class AA - Light Blue Point - 150 GPM or greater
Class A - Green Point - 100 to 1499 GPM
Class B - Orange point - 500 to 999 GPM
Class C - Red Point - Less than 500 GPM
3. Color coding shall be from FSC Coatings, Ametco Silicon Poly Plus.

PRIVATE WATER/SEWER NOTES

1. Private on-site water and sewer lines are permitted and inspected under separate permit and are shown on these plans for informational purposes only.
2. Private on-site Fire lines are permitted and inspected under separate permit and are shown on these plans for informational purposes only.
3. Trenching and backfill operation for private fire, water, and sewer lines shall be observed by the Public works inspection for general conformance with the geotechnical specifications. Trenches shall also be subject to inspection by the permitting department for additional requirements.

GENERAL NOTES

1. Contractor will be responsible for the repair of all damages incurred as a direct result of construction activities. Prior to the final acceptance and approval of improvements shown on these plans all repair and rehabilitation will be done to facilities disrupted by construction activities. All repair will be in conformance tot he City of San Marcos Standards.

REFERENCE DRAWINGS:

VWD DWG. XXXX
SM DWG. NO. XX-XXXX

SOURCE OF TOPO

FIELD SURVEY CONDUCTED BY XXXXXXXXXXXXXXXX
ON XXXX XX, 20XX .

BASIS OF BEARING

BASIS OF BEARING PER XXXXXXXXXXXX

SITE ADDRESS AND ASSESSOR PARCEL NUMBERS

SITE ADDRESS LINE 1
SITE ADDRESS LINE 2

ASSESSOR PARCEL NO(S): XXX-XXX-XX-XX & XXX-XXX-XX-XX

LEGAL DESCRIPTION

LOT XXX OF FINAL MAP XXXXXX RECORDED ON XX/XX/XXXX

OWNER

OWNER NAME/COMPANY NAME
ADDRESS LINE 1
ADDRESS LINE 2
TELEPHONE NO.
EMAIL

TITLE/COMPANY

DATE: _____

EARTHWORK SUMMARY

CUT: XXXX CY
FILL: XXXX CY
OVEREXCAVATION: XXXX CY
IMPORT/EXPORT: XXXX CY

STORM WATER SUMMARY

WDD:
PROJECT AREA:
DISTURBED AREA:
IMPERVIOUS AREA:
STORM WATER DEVELOPMENT PROJECT TYPE: PRIORITY/ STANDARD/ EXEMPT
CITY BMP ID NO: XX THRU XX
FACILITY TYPE: MIXED USE/ RESIDENTIAL/ COMMERCIAL/ INDUSTRIAL
MAINTENANCE AGREEMENT DOC #:
CONTRACTOR 24-HR CONTACT #:

SHEET INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
X	SHEET INDEX MAP
X	SECTIONS
X-X	EROSION CONTROL

CITY OF SAN MARCOS

GRADING PLANS FOR
XXXXXXXXXXXXXXXXXX



VICINITY MAP

N.T.S.



LOCATION MAP

N.T.S.

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR SHEETS XXXX THRU XXXX OF THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SAN MARCOS IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

XXXXXXXXXXXXXX RCE 12345 EXP. 6/30/XX

ASSUMPTION OF RESPONSIBLE CHARGE

AFTER CITY ENGINEER'S APPROVAL OF A SET OF PLANS, IF A NEW ENGINEER ASSUMES RESPONSIBLE CHARGE OF THE WORK, THEY SHALL ADD, SIGN, AND SEAL THE FOLLOWING IN EACH SHEET:

AS OF _____, I HEREBY ASSUME RESPONSIBLE CHARGE FOR DESIGN CHANGES TO THIS DRAWING

XXXXXXXXXXXXXX RCE 12345 EXP. 6/30/XX

FIRM:
ADDRESS:
TELEPHONE #:

GEOTECHNICAL ENGINEER CERTIFICATE

THESE PLANS HAVE BEEN REVIEWED BY THE UNDERSIGNED RELATIVE TO GEOTECHNICAL ASPECTS OF THE PLANS AND HAVE BEEN FOUND TO BE IN CONFORMANCE WITH INTENTIONS OF THE FINDINGS AND RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT BY JXXXXXXXXXXXXXXXXXXXXXXXXXXXXX (GE XXXX) DATED XXXXXXXX XX, XXXX.

XXXXXXXXXXXXXX GE XXXX EXP. 12/31/XX

LIST OF EASEMENTS & ENCUMBRANCES			
EASEMENT/ENCUMBRANCE TYPE	GRANTEE	RECORDED DOCUMENT NO.	RECORDATION DATE
CC&RS	XXXXXXXX XXXXXX	1234-0001234	XX/XX/XXXX
PUBLIC DRAINAGE ESMT FOR ACCESS AND MAINTENANCE	CITY OF SAN MARCOS	2345-0002345	XX/XX/XXXX
RECIPROCAL ACCESS EASEMENT TO THE BENEFIT OF XXX-XXX-XX	XXXXXXXX XXXXXX	1234-0001234	XX/XX/XXXX

ENGINEER OF WORK

By: FIRST LAST NAME
R.C.E.: _____ exp.: _____
Date: _____

RECOMMENDED FOR APPROVAL

By: Kyrenne Chua, Principal Civil Engineer
R.C.E.: 91911 exp.: 3/31/2027
Date: _____

APPROVED FOR CONSTRUCTION

By: Isaac Etchamendy, City Engineer
R.C.E.: 81294 exp.: 9/30/2027
Date: _____

ENGINEER OF WORK AS-BUILT CERTIFICATE

AS THE ENGINEER OF WORK, I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE IMPROVEMENTS SHOWN ON THIS SET OF CONSTRUCTION PLANS, SHEET XXXX THROUGH SHEET XXXX, HAVE BEEN INSTALLED AND CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THESE AS-BUILT PLANS, INCLUDING ALL APPROPRIATE STANDARDS AND ANY DISCRETIONARY APPROVAL(S) FOR THE PROJECT.

DATE:
FIRST LAST NAME RCE 12345 EXP. 6/30/XX

BENCH MARK

Description: _____
Location: _____
Record From: Record of Survey 23731
Elev.: _____ Datum: NAVD88

INSPECTED AND RECOMMENDED FOR ACCEPTANCE

APPROVED AS RECORD PLAN

ISAAC ETCHAMENDY 81294 9/30/2027
DATE: _____

Engineering Inspector Date

CITY OF SAN MARCOS

GRADING PLANS FOR:
XXXXXX XXXXXXXX XXXXXX
XXXXXX XXXXXXXX XXXXXX

IPXX-XXXX
PLANNING PROJECT NO.
SDPXX-XXXX
MF XXXX

City Drawing No.
GP25-XXXX
Sheet 1 of X

VISTA IRRIGATION DISTRICT GENERAL NOTES

3. The District's approval given here is not an approval to begin the installation or construction of water facilities. Approval for the installation or construction of the water facilities is only given after proper application and/or execution of a construction contract and payment of all applicable fees to the District. To be accepted the applications and/or the construction contract must be signed by the General Manager.
2. Any water facilities that will be under the jurisdiction of the District shall be constructed in accordance with the plans signed by the District and with the District's current "Standard Specifications" approved by the Board of Directors and posted on our website at www.vivwater.org. The signed "original plans on file at the District office are the only plans recognized by the District as "Approved." A signed set of plans and a copy of the "Standard Specifications" must be on the job site during construction or inspection or water facilities may not be rendered.
3. The Contractor shall notify the District's Engineering Department of any discrepancies between the approved plans and actual field conditions. This includes the Contractor's responsibility for locating and protecting all existing utilities and substructures during construction, whether shown on the plans or not. The actual location and depth of all utilities, substructures, and connection points are to be verified (excavated or potholed) by the Contractor prior to the commencement of work, and any discrepancy is to be brought to the attention of the Developer's engineer for correction and then submitted to the District for review and approval. All proposed changes to the "Approved" plans must be reviewed and signed by the District prior to the installation of such changes and shall be incorporated into the "original" plans.
4. The Contractor shall obtain the District's approval for the installation of any other utility to be installed within any District easement. The approval must be obtained prior to installation and must be inspected by the District's inspector. The Contractor shall coordinate with the District all work within the District's easements or in close physical proximity to District facilities. Stand-by personnel may be required during all phases of work as determined by the District.
5. The Contractor agrees to assume sole and complete responsibility for job site conditions during the course of construction of the project including safety of all persons and property. This requirement shall apply continuously and not be limited to normal working hours. To the fullest extent permitted by law, the Contractor, and any subcontractor, shall defend, indemnify and hold harmless the District, its directors, officers, employees, and authorized volunteers from and against all claims, damages, losses and expenses, including reasonable attorneys' fees and costs to defend arising out of or resulting from or in connection with the performance of the work or caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone whose acts any of them may be liable.
6. Before any work is allowed to begin within District right-of-way, including grading and non-water related facility construction, the Contractor shall procure and maintain insurance as required by the District and name the District as additional primary insured. Prior to any work that would necessitate crossing any District underground facilities, including grading and non-water related facility construction, the Developer or Contractor shall execute a Temporary Encroachment Permit as required by the District and pay any associated fees. Following insurance and encroachment approvals by the District, the Contractor is to contact the District's Engineering Department at (760) 597-3116 to determine when or if work can begin and to arrange a pre-construction meeting with the District's Engineering Inspector at (760) 597-3126. Inspection requests shall be made at least 24 hours in advance.
7. The District requires all new and existing water lines to have 36 to 42 inches of final cover or a minimum of 24-inches of cover from the bottom of the sub-grade, whichever is greater. The 24-inch cover does not relieve the Contractor from locating and protecting existing utilities during construction. The District shall be notified when street structural sections are determined by the appropriate road agency having jurisdiction over the street. The Contractor shall, at his sole expense, comply with that agency's requirements and obtain the District's written approval on the plans of any cover changes before the installation of the water line or before removing existing cover.
8. Unauthorized connections to the District's water system for construction water or any other purpose is strictly forbidden and are subject to enforcement under the District's Rules and Regulations. The Contractor will be charged a minimum fee (refer to current Fee Schedule) for each unauthorized connection as the estimated amount of water used through any unauthorized connection and the District may confiscate any hoses, valves or other opportunities used to make any unauthorized connection.
9. Any proposed fencing or gates within District right-of-way must be identified on the improvement/grading plan and District access coordinated per the District's requirements. Fences will not be permitted across the easement unless gates satisfactory to District are provided and maintained by Owner for District use.
10. These plans are subject to additional water notes contained in the "Standard Specifications". Those notes will also be dispensed to the Contractor at the required preconstruction meeting.
11. All PVC pipe shall be installed using a come-a-long jack or similar. No backhoe or heavy machinery allowed unless authorized by vid inspector. Use high deflection couplings to achieve radii with a maximum of 2-1/2 degree total deflection per coupling using a minimum of 10' pipe lengths.

VISTA IRRIGATION DISTRICT

THE REVIEW GIVEN HERE IS ONLY FOR THE GRADING LAYOUT
AND IS NOT THE APPROVAL FOR THE CONSTRUCTION OF ANY
WATER FACILITIES THAT MAY BE SHOWN HEREON NOR DOES IT
IMPLY THAT WATER SERVICE WILL BE PROVIDED.

REVIEWED BY _____ DATE _____
APPROVAL VALID FOR TWO (2) YEARS FROM DATE

1. ALL GRADING IS TO BE DONE IN ACCORDANCE WITH THE CITY OF VISTA DEVELOPMENT CODE, CHAPTER 17, SECTION 17.56 AND THE SOILS REPORT PREPARED BY _____ (SOILS ENGINEER), KNOWN AS JOB NUMBER _____

2. THIS GRADING PLAN DOES NOT AUTHORIZE WORK TO COMMENCE PRIOR TO THE ISSUANCE OF A GRADING PERMIT BY THE CITY OF VISTA.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES, WHETHER SHOWN HEREON OR NOT, AND PROTECT THEM FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT OF SAID STRUCTURES SHALL BE BORNE BY THE CONTRACTOR.

4. BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING THE FOLLOWING:

UNDERGROUND SERVICE ALERT	(800) 422-4133
UNDERGROUND SERVICE ALERT (SDG&E)	(800) 227-2600
SAN DIEGO GAS & ELECTRIC (EMERGENCY)	(800) 411-7343
PACIFIC BELL TELEPHONE CO. (EMERGENCY)	611
VISTA IRRIGATION DISTRICT (ENG. DEPT)	(760) 597-3116
VISTA IRRIGATION DISTRICT (EMERGENCY)	(760) 597-3131
COX CABLE (EMERGENCY)	(760) 599-6063
ADELPHIA COMMUNICATIONS (EMERGENCY)	(760) 438-7741
CITY OF VIRE (MAIN NUMBER)	(760) 726-1340
*RANCHO FIRE DISPATCH (EMERGENCY)	(858) 756-3006

(*THIS NUMBER IS FOR THE CITY OF VISTA (AFTER HOURS EMERGENCY DISPATCH FOR SEWER SPILLS OR STORM DRAIN CONTAMINATION)

5. A PERMIT FROM THE DEVELOPMENT SERVICES DEPARTMENT WILL BE REQUIRED PRIOR TO ANY WORK WITHIN THE CITY OF VISTA RIGHT-OF-WAY.

6. NO BUILDING PERMITS WILL BE ISSUED AND NO BUILDING INSPECTIONS WILL BE MADE UNTIL ROUGH GRADING HAS BEEN APPROVED PER CITY OF VISTA.

7. ALL SLOPES SHALL BE PLANTED WITH A GROUND COVER AS APPROVED BY THE CITY OF VISTA PLANNING DEPARTMENT.

8. THE FACE OF CUT AND/OR FILL SLOPES SHALL BE PREPARED AND MAINTAINED TO CONTROL AGAINST EROSION PER CITY OF VISTA DEVELOPMENT CODE, CHAPTER 17, SECTION 56.

9. ALL MAJOR SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT OR FILL TO NATURAL GROUND ABUTTING CUT OR FILL SURFACES.

10. A PRELIMINARY SOILS REPORT SHALL BE SUBMITTED PRIOR TO GRADING APPROVAL.

11. A FINAL SOILS REPORT, WITH ORIGINAL SIGNATURE/SEAL OF SOILS ENGINEER, SHALL BE SUBMITTED IN DUPLICATE PRIOR TO ROUGH GRADING APPROVAL, AND MUST PROVIDE THE FOLLOWING INFORMATION:

- a. SOILS BEARING VALUE
- b. EXPANSIVE CHARACTERISTICS
- c. FOUNDATION RECOMMENDATION
- d. DISPOSITION OF LARGE ROCKS ENCRORCHING ONTO THE FOUNDATION
- e. COMPACTION REPORT ON GRADED LOTS
- f. ELEVATION OF WATER TABLE IF ENCOUNTERED
- g. A PLAT SHOWING THE LOCATIONS OF TEST BORINGS AND/OR EXCAVATIONS

12. ALL ON-SITE AND PRIVATE RESIDENTIAL DRIVEWAYS MUST HAVE A MINIMUM THICKNESS OF 4 INCHES CONCRETE OR 2 INCHES ASPHALT OVER 6 INCHES CLASS 3 BASE, AND MUST BE INSPECTED BY THE ENGINEERING DEPARTMENT.

13. THE STRUCTURAL SECTION OF PARKING LOTS AND DRIVEWAYS ON ALL COMMERCIAL AND INDUSTRIAL COMPLEXES SHALL BE DESIGNED BASED ON "R" VALUES OF SOILS AND ON A MINIMUM T.I. OF 4.5 IN PARKING STALLS AND A MINIMUM T.I. OF 6.0 IN THE DRIVE LANES. THE MINIMUM SECTION SHALL BE 3'A.C. ON 6' CLASS 2 BASE, OR MINIMUM 4"PCC ON NATIVE. STRUCTURAL SECTIONS DESIGN TO BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION. ALL CURBS, GUTTERS AND SIDEWALKS MUST HAVE A MINIMUM OF 6' CLASS 3 BASE, OR AS RECOMMENDED BY THE SOILS' ENGINEER AND APPROVED BY THE CITY ENGINEER.

14. THE PERMITEE SHALL GIVE NOTICE TO THE CITY OF VISTA ENGINEERING INSPECTION DEPARTMENT FOR A PRE-CONSTRUCTION CONFERENCE AT LEAST 48 HOURS PRIOR TO COMMENCING THE WORK. ANY WORK DONE WITHOUT PROPER INSPECTION WILL BE SUBJECT TO REJECTION. PHONE (760) 639-6113 FOR INSPECTIONS.

15. A FENCE AT LEAST THREE AND ONE-HALF FEET (3-1/2') IN HEIGHT SHALL BE CONSTRUCTED AT THE TOP OF ANY VERTICAL CUT OR RETAINING WALL EXCEEDING FOUR FEET (4') IN HEIGHT, OR AT THE TOP OF ANY CUT OR FILL EXCEEDING FIFTEEN FEET (15') IN HEIGHT.

16. EROSION CONTROL OF SLOPES -ALL SLOPES IN EXCESS OF 5 FEET IN VERTICAL HEIGHT SHALL BE COVERED BY STRAW MATS OR OTHER SUBJECT TO CITY OF VISTA APPORVAL.

17. "AS BUILT" DRAWINGS MUST BE SUBMITTED BY THE ENGINEER OF WORK AND APPROVED BY THE CITY ENGINEER PRIOR TO FINAL ACCEPTANCE OF WORK.

CITY APPROVED CHANGES[illegible]

RECOMMENDED FOR APPROVAL		ENGINEER OF WORK		INSPECTED AND RECOMMENDED FOR ACCEPTANCE		ENGINEER OF WORK AS-BUILT CERTIFICATE		
By: Kyrenne Chua, Principal Civil Engineer R.C.E.: 91911 exp.: 3/31/2027 Date:		By: FIRST LAST NAME R.C.E.: exp.: Date:		Engineering Inspector Date		FIRST LAST NAME RCE 12345 EXP. 6/30/XX DATE:		
APPROVED FOR CONSTRUCTION		BENCH MARK		CITY OF SAN MARCOS				City Drawing No.
By: Isaac Etchamendy, City Engineer R.C.E.: 81294 exp.: 9/30/2027 Date:		Description: Location: Record From: Record of Survey 23731 Elev.: Datum: NAVD88		GRADING PLANS FOR: XXXXXXXX XXXXXXXX XXXXXX IPXX-XXXXX PROJECT NO PLANNING SDP XX-XXXX MF XXXX XXXXXXXX XXXXXXXX XXXXXX				GP25-XXXXX Sheet 2 of X



AS-BUILT

** INSERT NOTES ON EROSION CONTROL SHEET **

TEMPORARY EROSION CONTROL (PLANTING AND IRRIGATION)

1. ALL PERMANENT AND TEMPORARY EROSION CONTROL PLANTING AND IRRIGATION SHALL BE INSTALLED AND MAINTAINED AS REQUIRED IN SECTION 212 OF THE STANDARD SPECIFICATIONS AND THE FOLLOWING.
2. HYDROSEEDING SHALL BE APPLIED TO:

A. ALL SLOPES THAT ARE GRADED 6:1 (HORIZONTAL TO VERTICAL) OR STEEPER WHEN THAT ARE:

a. THREE FEET OR MORE IN HEIGHT AND ADJACENT TO A PUBLIC WALL OR STREET,

b. ALL SLOPES 4 FEET MORE IN HEIGHT.

B. AREAS GRADED FLATTER THAN 6:1 WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:

a. NOT SCHEDULED FOR IMPROVEMENTS (CONSTRUCTION OR GENERAL LANDSCAPING) WITHIN 60 DAYS OF ROUGH GRADING,

b. IDENTIFIED BY THE PARKS AND RECREATION DIRECTOR AS HIGHLY VISIBLE TO THE PUBLIC, HAVE ANY SPECIAL CONDITION IDENTIFIED BY THE CITY ENGINEER THAT WARRANTS IMMEDIATE TREATMENT.
3. HYDROSEEDED AREAS SHALL BE IRRIGATED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:

A. ALL SLOPES THAT ARE GRATED 6:1 OR STEEPER THAT ARE:

a. THREE TO EIGHT FEET IN HEIGHT SHALL BE IRRIGATED BY HAND WATERING FROM QUICK COUPLERS/HOSE BIDS OR A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE

b. GREATER THAN 8 FEET IN HEIGHT SHALL BE WATERED BY A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE

B. AREAS SLOPED LESS THAN 6:1 SHALL BE IRRIGATED AS APPROVED BY THE CITY ENGINEER, PRIOR TO THE HYDROSEEDING. THE DEVELOPER SHALL SUBMIT A PROPOSED SCHEME TO PROVIDE IRRIGATION TO THE CITY ENGINEER. THE PROPOSAL SHALL BE SPECIFIC REGARDING THE NUMBERS, TYPES AND COSTS OF THE ELEMENTS OF THE PROPOSED SYSTEM.

C. IRRIGATION SHALL MAINTAIN THE MOISTURE LEVEL OF THE SOIL AT THE OPTIMUM LEVEL FOR THE GROWTH OF THE HYDROSEED GROWTH.
4. HYDROSEEDING MIX SHALL CONSIST OF THE FOLLOWING:

A. SEED MIX SHALL CONSIST OF ALL OF THE FOLLOWING:

a. 20 lbs PER ACRE OF ROSE CLOVER

b. 20 lbs PER ACRE OF ZORRO FESCUE

c. 3 lbs PER ACRE OF F. SCHOOL CIA CALIFORNICA

d. 4 lbs PER ACRE OF KCHILLEA WILLEFOUA

e. 3 lbs PER ACRE OF ALYSSUM (CARPET OF SNOW)

f. 1/2 lb PER ACRE OF DIMORPHOLECA

g. ITEMS c,d,e, and f OF THIS SUBSECTION MAY BE OMITTED ON LOCATIONS WHERE THE AREA BEING HYDROSEEDED IS NOT VISIBLE FROM EITHER THE PUBLIC STREET RESIDENTIAL STRUCTURES

h. ITEM 1.1 OF THIS SUBSECTION MUST BE INOCULATED WITH A NITROGEN FIXING BACTERIA AND APPLIED DRY EITHER BY DRILLING OR BROADCASTING BEFORE HYDROSEEDING

i. ALL SEED MATERIALS SHALL BE TRANSPORTED TO THE JOBSITE IN UNOPENED CONTAINERS WITH THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE CERTIFICATION TAG ATTACHED TO, OR PRINTED ON SAID CONTAINERS

j. NON-PHYTO-TOXIC WETTING AGENTS MAY BE ADDED TO THE HYDROSEED SLURRY AT THE DISCRETION OF THE CONTRACTOR

B. TYPE 1 MULCH APPLIED AT THE RATE OF NO LESS THAN 2000 lbs PER ACRE. TYPE 6 MULCH (STRAW) MAY BE SUBSTITUTED, ALL OR PART, FOR HYDRAULICALLY APPLIED FIBER MATERIAL. WHEN STRAW IS USED IT MUST BE ANCHORED TO THE SLOPE BY MECHANICALLY PUNCHING NO LESS THAN 50% OF THE STRAW INTO THE SOIL.

C. FERTILIZER CONSISTING OF AMMONIUM PHOSPHATE SULFATE, 16-20-0, WITH 15% SULPHUR APPLIED AT THE RATE OF 500 lbs PER ACRE.
5. AREAS TO BE HYDROSEEDED SHALL BE PREPARED PRIOR TO HYDROSEEDING BY:

A. ROUGHENING THE SURFACE TO BE PLANTED BY ANY OR A COMBINATION OF:

a. TRACK WALKING SLOPES STEEPER THAN 6:1

b. HARROWING AREAS 6:1 OR FLATTER THAT ARE SUFFICIENTLY FRIABLE

c. RIPPING AREAS THAT WILL NOT BREAK UP USING ITEMS a OR b ABOVE

B. CONDITIONING THE SOILS SO THAT IT IS SUITABLE FOR PLANTING BY:

a. ADJUSTING THE SURFACE SOIL MOISTURE TO PROVIDE A DAMP BUT NOT SATURATED SEED BED

b. THE ADDITION OF SOIL AMENDMENTS, PH ADJUSTMENT, LEACHING COVERING SALINE SOILS TO PROVIDE VIABLE CONDITIONS FOR GROWTH.
6. HYDROSEEDED AREAS SHALL BE MAINTAINED TO PROVIDE A VIGOROUS GROWTH UNTIL THE PROJECT IS PERMANENTLY LANDSCAPED OR, FOR AREAS WHERE HYDROSEEDING IS THE PERMANENT LANDSCAPING, UNTIL THE PROJECT IS COMPLETED AND ALL BONDS RELEASED.

EROSION CONTROL NOTES

1. In case emergency work is required, contact _____ at _____, phone no. _____. Available 24-hr.
2. 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 erosion control devices when rain is imminent.
3. Erosion control devices shown on plans shall not be moved or modified without the approval of the Engineering Inspector.
4. The Contractor shall restore all erosion control devices to working order, including silt and other debris removal, to the satisfaction of the Engineering Inspector after each run-off producing rainfall.
5. The Contractor shall install additional erosion control measures as may be required by the Engineering Inspector due to uncompleted grading operations or unforeseen circumstances which may arise.
6. The Contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded waters create a hazardous condition.
7. All erosion control measures provided per the approved grading plan and/or SWPPP shall be incorporated herein.
8. Graded areas around the project perimeter must drain away from the face of slope at the conclusion of each working day.
9. All removable protective erosion control devices shown shall be in place at the end of each working day when the five-day rain probability forecast exceeds 40%.
10. All gravel bags shall be burlap type with 3/4" inch minimum aggregate.
11. Should germination of hydroseeded slopes fail to provide effective coverage (90%) of graded slopes prior to November 15, the slopes shall be stabilized by punch straw.
12. For projects covered by state SWPPP/NDID, in accordance with the constructions order issued by the California Regional Water Quality Control Board, the Contractor's Qualifies SWPPP Practitioner (QSP) shall update and maintain the water pollution control (WPC) plan to address updated site conditions of the project.
13. The updated WPC plan and updated SWPPP shall be kept on the project site and made available to the City Inspector.
14. Additional constructions BMP's beyond the original approved SWPPP shall be provided by the contractor to address the site conditions not anticipated. The QSP shall report BMP deficiencies to the City Inspector.
15. The QSP shall obtain approval from the Contractor's Qualified SWPPP designer/developer for any changes to the WPC.

WATER DISTRICT	SAN MARCOS FIRE PROTECTION DISTRICT
By: _____ Date: _____	By: _____ Date: _____
R.C.E. NO. _____ exp.: _____	JASON NAILON, FIRE MARSHAL
PRESSURE ZONE: _____ HGL	APPROVED FIRE HYDRANT FLOW _____*(GPM) *GALLON PER MINUTE
PUMP ZONE: _____	WATER DISTRICT IS NOT RESPONSIBLE FOR MAINTENANCE, REPAIR, OR REPLACEMENT OF FIRE HYDRANTS UNLESS SPECIFIED UNDER SEPARATE AGREEMENT WITH THE JURISDICTIONAL FIRE AGENCY

CITY APPROVED CHANGES					
ΔNO.	DESCRIPTION	AFFECTED SHEETS	EOW APP'D	APP'D BY	DATE

RECOMMENDED FOR APPROVAL	ENGINEER OF WORK	INSPECTED AND RECOMMENDED FOR ACCEPTANCE		ENGINEER OF WORK AS-BUILT CERTIFICATE	
By: Kyrenne Chua, Principal Civil Engineer R.C.E.: 91911 exp.: 3/31/2027 Date: _____	By: FIRST LAST NAME R.C.E.: _____ exp.: _____ Date: _____			FIRST LAST NAME RCE 12345 EXP. 6/30/XX	DATE: _____
APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SAN MARCOS		City Drawing No.	
By: Isaac Etchamendy, City Engineer R.C.E.: 81294 exp.: 9/30/2027 Date: _____	Description: _____ Location: _____ Record From: Record of Survey 23731 Elev.: _____ Datum: NAVD88	GRADING PLANS FOR: XXXXXX XXXXXXXX XXXXXX		IPXX-XXXX PLANNING PROJECT NO. SDPXX-XXXX MF XXXX	
		XXXXXX XXXXXXXX XXXXXX		GP25-XXXX	
				Sheet X of X	



AS-BUILT