SEWER

3. A CONSTRUCTION, EXCAVATION OR ENCROACHMENT PERMIT FROM THE DIRECTOR OF PUBLIC WORKS WILL BE REQUIRED FOR ANY WORK IN THE COUNTY RIGHT-OF-WAY.

4. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. NOTICE OF THE PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING AGENCIES.

UNDERGROUND SERVICE ALERT: SAN DIEGO GAS AND ELECTRIC: COX CABLE TV OTAY WATER DISTRICT

(800) 422-4133(800) 227-2600 (866) 272-5777 (619) 670-2222

COUNTY OF SAN DIEGO - HHSA

5. PROTECTION OF EXISTING UTILITIES:

THE OWNER 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. ANY PAVEMENT OR OTHER EXISTING SURFACE IMPROVEMENTS DAMAGED BY THE OWNER SHALL BE REPLACED AS REQUIRED BY THE COUNTY OF SAN DIEGO ENGINEERING DEPARTMENT. EXISTING UTILITIES SHOWN HEREON ARE PLOTTED FROM RECORD DATA AND MAY NOT NECESSARILY BE WHERE SHOWN. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE LOCATION PRIOR TO CONSTRUCTION.

6. GENERAL UTILITY NOTES EXPLORATORY EXCAVATION REQUIRED: OWNER WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF EXCAVATION TO PREVENT DAMAGE TO SAID UTILITIES. ALL EXISTING UTILITIES WITHIN THE SITE, AND THOSE ADJACENT TO THE SITE WHICH ARE AFFECTED BY THE WORK PROPOSED TO BE DONE ARE SHOWN ON THIS PLAN. THE UTILITY COMPANIES HAVE REVIEWED THESE PLANS AND ARE SATISFIED WITH THE ARRANGEMENTS MADE BY THE PERMITEE TO PROTECT OR RELOCATE THE UTILITIES.

7. EXISTING UTILITIES OR STRUCTURES ARE SHOWN ACCORDING TO THE RECORDS OF THE ABOVE COMPANIES AND HAVE BEEN EXAMINED TO VERIFY THAT THEY OWN NO UTILITIES OR STRUCTURES WHICH WILL BE AFFECTED BY THE PROPOSED GRADING.

8. 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 ACCORDING TO THE PERIOD SPECIFIED IN THE MAJOR USE PERMIT.

9. 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.

10. NOTWITHSTANDING THE MINIMUM STANDARDS SET FORTH IN THE GRADING ORDINANCE AND NOTWITHSTANDING THE APPROVAL OF THESE RECLAMATION PLANS. THE PERMITTEE IS RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO THE 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 WITHOUT SUPPORTING AND PROTECTING SUCH PROPERTY FROM SETTLING, CRACKING, EROSION, SILTING, SCOUR OR OTHER DAMAGE WHICH MIGHT RESULT FORM THE GRADING DESCRIBED ON THIS PLAN. THE COUNTY WILL HOLD THE PERMITTEE RESPONSIBLE FOR CORRECTION OF NON-DEDICATED IMPROVEMENTS WHICH DAMAGE ADJACENT PROPERTY.

11. SLOPE RATIOS

MAXIMUM SLOPE RATIOS TO BE 3:1

12. IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE 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.

13. COMPACTION TESTING AND A COMPACTION REPORT IS REQUIRED FOR ALL FINISH PADS THAT ARE OVER 12" IN DEPTH.

14. AN INDUSTRIAL SWPPP WILL OUTLINE BEST MANAGEMENT PRACTICES REQUIRED DURING MINING AND RECLAMATION.

15. EXISTING TRAFFIC SIGNS ALONG WILLOW GLEN ROAD TO REMAIN. SIGNS WILL BE ADDED TO SITE ENTRANCE AND EXIT AS REQUIRED BY THE COUNTY OF SAN DIEGO. SMALL SAFETY SIGNS REQUIRED BY MSHA WILL BE PLACED ON FENCES AROUND THE PROJECT AREA. NO SIGNS WILL BE ILLUMINATED.

16. CONTRACTOR SHALL REMOVE BOTH ABOVEGROUND STORAGE TANKS AT THE EXISTING GOLF COURSE MAINTENANCE FACILITY. ONE IS A 1,000 GALLON DIESEL AST AND THE OTHER IS A 500 GALLON GASOLINE AST.

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED 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 CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

WAYNE W. CHANG CHANG CONSULTANTS P.O. BOX 9496 RANCHO SANTA FE, CA 92067 PHONE: (858) 692-0760

WAYNE W. CHANG, R.C.E. 46548

EARTHWORK QUANTITIES

0 CY FILL EAST 1,655,000 CY CUT (2,482,500 TONS) WEST 319,200 CY CUT (478,800 TONS)

MINING AND BACKFILL 2,292,700 CY CUT (3,439,050 TONS) 4,266,900 CY CUT (6,400,350 TONS)

DISCRETIONARY REVIEW APPROVAL

THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.

PROJECT PHASING

PHASE 1 - 319,200 CY CUT (MINING/BACKFILL OVEREX 971,200 CY CUT) THE FIRST PHASE (PHASE 1) WILL INCLUDE SITE DEVELOPMENT FOR THE CONSTRUCTION OF THE ACCESS ROAD, PROCESSING AREA PAD, SCREENING BERMS AND INSTALLATION OF THE CONVEYOR LINE AND PROCESSING PLANT. IN ADDITION THE PROJECT WILL WIDEN AND RESTRIPE A PORTION OF WILLOW GLEN DRIVE AND ADD A 5- TO 8-WIDE PATHWAY ALONG A PORTION OF WILLOW GLEN DRIVE. FOLLOWING INITIAL SITE DEVELOPMENT ACTIVITIES. EXTRACTIVE OPERATIONS WILL COMMENCE IN THE AREA WEST OF STEELE CANYON ROAD.

INITIAL EXTRACTIVE OPERATIONS WILL INVOLVE REMOVAL OF ALL MATERIALS FROM THE SURFACE TO APPROXIMATELY 15 TO 40 FEET BELOW GROUND SURFACE (BGS) WITH A COMBINATION OF FRONT END LOADERS AND AN EXCAVATOR. EACH PIECE OF EXCAVATION EQUIPMENT WILL WORK IN SEPARATE AREAS. THIS EQUIPMENT WILL MOVE MATERIAL DIRECTLY TO THE CONVEYOR. APPROXIMATELY, 79 ACRES WILL BE INCLUDED IN PHASE 1 WHICH WILL INCLUDE APPROXIMATELY 10 ACRES OF HABITAT IMPROVEMENT WITHIN THE RIVER CHANNEL ON THE SOUTHWEST END OF THE PROJECT.

PHASE 1 WILL BEGIN EXCAVATION IN THE SUB-PHASE 1A AREA SOUTH OF THE RIVER CHANNEL. ONCE EXCAVATION IS COMPLETE IN SUB-PHASE 1A, THE CONVEYOR LINE AND EXCAVATING EQUIPMENT WILL MOVE TO THE SUB-PHASE 1B AREA ON THE SOUTHWESTERN EDGE OF THE PROJECT. RECLAMATION IN SUB-PHASE 1A WOULD THEN BEGIN WITH FINAL GRADING, INSTALLATION OF IRRIGATION EQUIPMENT AND REVEGETATION. THIS PROCESS WILL CONTINUE IN SUB-PHASES 1B AND 1C. EXCAVATION IN EACH SUB-PHASE IS EXPECTED TO TAKE APPROXIMATELY ONE YEAR.

RECLAMATION OF THE PHASE 1 AREA WILL BEGIN ANNUALLY AS THE FINAL LANDFORMS ARE ESTABLISHED IN EACH SUB-PHASE. RECLAMATION WILL INCLUDE ESTABLISHMENT OF ALL FINAL SLOPES, INCORPORATION OF ANY ACCUMULATED WASH FINES AND TOPSOIL; REVEGETATION USING NATIVE SPECIES COMMON TO RIPARIAN HABITAT AND/OR UPLAND VEGETATION DEPENDING ON THE LOCATION OF THE LANDFORM; ESTABLISHMENT OF PADS SUITABLE FOR FUTURE DEVELOPMENT SEEDED WITH AN EROSION SEED MIX; WEED CONTROL, AND MONITORING.

PHASE 2 - 356,500 CY CUT (MINING/BACKFILL OVEREX 458,200 CY CUT) PHASE 2 WILL CONTINUE THE IDENTICAL EXTRACTION PROCESS IN A WEST TO EAST DIRECTION ON AN AREA OF APPROXIMATELY 48 ACRES EAST OF THE STEELE CANYON ROAD BRIDGE. THIS PHASE IS ANTICIPATED TO LAST APPROXIMATELY 3 YEARS. EXCAVATION OF THE MATERIALS WILL CONTINUE IN THE WEST AND PROCEED EASTWARD IN THE SAME FASHION AS UTILIZED IN PHASE 1. THE MAXIMUM DEPTH OF THE EXCAVATION IS EXPECTED TO BE APPROXIMATELY 15 TO 40 FEET BELOW GROUND SURFACE OUTSIDE THE CHANNEL.

PHASE 2 WILL ALSO INCLUDE 3 SUB-PHASES OF 14 TO 19 ACRE AREAS THAT WILL BEGIN WITH SUB-PHASE 2A AND PROGRESS TO THE NORTHEAST. EXCAVATION IN EACH SUB-PHASE IS EXPECTED TO BE COMPLETED IN APPROXIMATELY 1 YEAR.

RECLAMATION OF THE PHASE 2 SUB-PHASES WILL BEGIN EACH YEAR AS THE FINAL LANDFORMS ARE ESTABLISHED IN EACH SUB-PHASE. RECLAMATION WILL INCLUDE ESTABLISHMENT OF ALL FINAL SLOPES, INCORPORATION OF ANY ACCUMULATED WASH FINES AND TOPSOIL, REVEGETATION OF THE CHANNEL USING NATIVE SPECIES COMMON TO RIPARIAN HABITAT, UPLAND VEGETATION ON THE UPPER SLOPES AND ESTABLISHMENT OF PADS SUITABLE FOR FUTURE DEVELOPMENT. PADS WILL BE SEEDED WITH AN EROSION CONTROL SEED MIX. SEEDING AND PLANTING WILL GENERALLY OCCUR DURING THE RAINY SEASON.

PHASE 3 - 1,052,200 CY CUT (MINING/BACKFILL OVEREX 863,300 CY CUT) THE EXCAVATION PROCESS IN PHASE 3 IS A REPEAT OF PHASE 2 ON APPROXIMATELY 79 ACRES OF THE VALLEY. EAST OF THE PHASE 2 AREA. PHASE 3 IS ANTICIPATED TO LAST ABOUT 4 YEARS, WILL INCLUDE 4 SUB-PHASES AND WILL EMPLOY THE SAME PROCEDURE AS THE TWO PREVIOUS PHASES. UPON CONCLUSION OF PHASE 2. THE CONVEYOR LINE WILL BE RELOCATED TO RUN FROM THE PLANT TO THE EAST. SUB-PHASE 3A WILL BE LOCATED AT THE NORTHEAST EDGE OF THE PROPERTY. EXCAVATION OF EACH SUB-PHASE WILL PROCEED WESTWARD

RECLAMATION IN EACH OF THE PHASE 3 SUB-PHASES WILL BEGIN EACH YEAR AS THE FINAL LANDFORMS ARE ESTABLISHED. RECLAMATION WILL INCLUDE ESTABLISHMENT OF ALL FINAL SLOPES, INCORPORATION OF ANY ACCUMULATED WASH FINES AND TOPSOIL, REVEGETATION OF THE CHANNEL USING NATIVE SPECIES COMMON TO RIPARIAN HABITAT UPLAND VEGETATION ON THE UPPER SLOPES AND ESTABLISHMENT OF PADS SUITABLE FOR POSSIBLE FUTURE DEVELOPMENT. ALL PADS WILL BE PLANTED WITH AN EROSION CONTROL SEED MIX.

PHASE 4 - 246,300 CY CUT

PHASE 4 WILL CONSIST OF EXCAVATION OF MATERIALS BENEATH PLANT, BACKFILLING PLANT AREA, FINAL RECLAMATION EFFORTS, CLEANUP AND EQUIPMENT REMOVAL. REVEGETATION MONITORING WILL CONTINUE AFTER THIS FINAL PHASE. MINE PHASE ACREAGES AND THE ESTIMATED DURATION OF EACH PHASE ARE SUMMARIZED IN TABLE 4 AND ASSUMES A PROJECT START IN 2021.

MINE PHASE ACREAGES

Mining Phase	Acres	Subphase Area (acres)	Mining Duration (years)	Mining Initiation Date (est.)	Mining Completion Date (est.)	Reclamation Completion Date (est.)
Phase 1	78.98		3	2022	2025	2027
Subphase 1A		22.10	1	. .	181	*
Subphase 1B	123	26.46	1] 4		48
Subphase 1C	**	30.42	1		[2]	220
Phase 2	48.18	3	3	2025	2028	2030
Subphase 2A	123	15.26	1	3	=	192
Subphase 2B	(- 6.	19.08	1	3	S	· ·
Subphase 2C	- 1	13.74	1			
Phase 3	78.57		4	2028	2032	2034
Subphase 3A	ista .	29.42	1	ia	:51	-
Subphase 3B	-	16.15	1		-	-
Subphase 3C	960	14.13	1	9	. H	-
Subphase 3D	*	18.87	1	P2	2	120
Phase 4	8.65	12	1	2032	2032	2034
Total	214.4		10*	-	2 :5 2	190

RESOURCE AGENCY PERMITTING THE SUBJECT PROPERTY CONTAINS WETLANDS, A LAKE, A STREAM, AND/OR WATERS OF THE U.S. AND/OR STATE WHICH MAY BE SUBJECT TO REGULATION BY STATE AND/OR FEDERAL AGENCIES, INCLUDING, BUT NOT LIMITED TO, THE REGIONAL WATER QUALITY CONTROL BOARD, U.S. ARMY CORPS OF ENGINEERS AND THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE. IT IS THE APPLICANT'S RESPONSIBILITY TO CONSULT WITH EACH AGENCY TO DETERMINE IF A PERMIT, AGREEMENT OR OTHER APPROVAL IS REQUIRED AND TO OBTAIN ALL NECESSARY PERMITS, AGREEMENTS OR APPROVALS BEFORE COMMENCING ANY ACTIVITY WHICH COULD IMPACT THE WETLANDS, LAKE, STREAM, AND/OR WATERS OF THE U.S. ON THE SUBJECT PROPERTY. THE AGENCY CONTACT INFORMATION IS PROVIDED BELOW.

U.S. ARMY CORPS OF ENGINEERS: 915 WILSHIRE BLVD., SUITE 1101 LOS ANGELES, CA 90017 (213) 452-3333 HTTP://WWW.USACE.ARMY.MIL/

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE: 3883 RUFFIN RD. SAN DIEGO, CA 92123 (858) 636-3160 ASKR5@WILDLIFE.CA.GOV HTTP://WWW.DFG.CA.GOV/

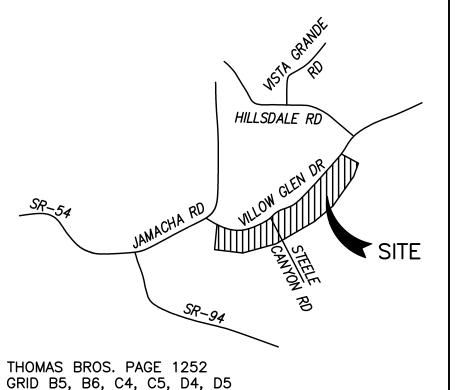
REGIONAL WATER QUALITY CONTROL BOARD: 2375 NORTHSIDE DRIVE, SUITE 100 SAN DIEGO, CA 92108 RB9_DREDGEFILL@WATERBOARDS.CA.GOV HTTP://WWW.WATERBOARDS.CA.GOV/SANDIEGO/

VALLE DE ORO CONTEXT MAP

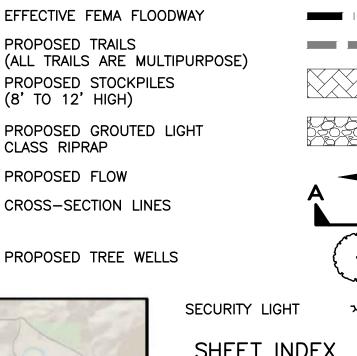
San Diego County General Plan

VALLE DE ORO COMMUNITY PLAN

SAND MINING PROJECT 60' WILLOW GLEN DRIVE ROW GENTLY SLOPED AREA (12.5 ACRES) GENTLY SLOPED AREA (10.9 ACRES) || 6 | GENTLY SLOPED 91' WILLOW GLEN AREA (4.8 ACRES) DRIVE ROW GENTLY SLOPED GENTLY SLOPED AREA (4.7 ACRES) 40' STEEL CANYON 111' WILLOW GLEN 📝 AREA (13.5 ACRES) ROAD ROW DRIVE ROW KEY MAP PREVIOUS RESIDENCE IN PARCEL SCALE: 1" = 1000' NOT PART OF EXISTING FACILITIES LEGEND MUP BOUNDARY EXISTING CONTOUR ~925~ PROPERTY LINE **EXISTING SPOT ELEVATION** x 1012.7 EXISTING POWER LINES AND POLES PROPOSED CONTOUR 1.0% PROPOSED GRADE PUBLIC PATHWAY PROPERTY LINE



VICINITY MAP



MUP BOUNDARY

PROPOSED SLOPE

PROPOSED PERIMETER FENCE

PROPOSED POWER LINES

EFFECTIVE FEMA FLOODWAY

DAYLIGHT LINE

PROJECT SITE

COUNTY APPROVED CHANGES

SHEET INDEX SHEET 1 COVER SHEET SHEET 2 PLOT PLAN SHEET 3 PLOT PLAN SHEET 4 PLANT DETAILS SHEET 5 RECLAMATION PLAN

SHEET 6 RECLAMATION PLAN SHEET 7 SITE CROSS—SECTIONS SHEET 8 SITE CROSS-SECTIONS SHEET 9 FINAL PLAN

SHEET 10 REVEGETATION PLAN

— -III — —

PERMIT NUMBERS

PDS2018-MUP-18-023.

PDS2018-ER-18-19-007

PDS2018-RP-18-001,

SHEET 11 EASEMENT PLAN

X-X-XX

LEGAL DESCRIPTION

PARCEL 'E' OF C/C 90-0204 TOGETHER WITH PARCELS 'A' AND 'B' OF B/C

PROJECT DESCRIPTION

THE PROJECT PROPOSES TO MINE SAND SUITABLE FOR PORTLAND CEMENT CONCRETE (PCC) USE OVER AN EXTENDED PERIOD WITHIN DESIGNATED PHASES. RECLAMATION OF THE MINED LANDS WILL FOLLOW AS SOON AS MINING OPERATIONS ARE COMPLETED IN A SPECIFIC AREA. RECLAMATION PROCEDURES WILL BE PHASED WITH MINING OPERATIONS AND WILL BE INITIATED IMMEDIATELY AFTER THE CONCLUSION OF RESOURCE EXTRACTION AND BACKFILLING TO DESIGN ELEVATIONS.

THE MAXIMUM LEVEL OF AGGREGATE PRODUCTION IS ANTICIPATED TO BE 570,000 TONS PER YEAR (TPY), THIS LEVEL OF PRODUCTION WILL BE REALIZED AFTER 1 YEAR OF SITE DEVELOPMENT. ACTUAL PRODUCTION LEVELS AND PROJECT LIFE WILL DEPEND ON MARKET DEMAND BUT WILL NOT EXCEED THE MAXIMUM PERMITTED PRODUCTION LEVEL. THE PROJECT IS EXPECTED TO CONTINUE FOR 12 YEARS. THIS WILL INCLUDE 10 YEARS OF EXTRACTION AND RECLAMATION OF PREVIOUS PHASES. RECLAMATION OF PREVIOUSLY DISTURBED AREAS IS ANTICIPATED TO BEGIN IN YEAR 2. VEGETATION MONITORING WILL CONTINUE FOR 5 YEARS AFTER MINING CEASES.

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS. THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2021 EDITION), THE REGIONAL SUPPLEMENT AMENDMENTS (2012 EDITION), THE SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (DATED JULY 2018), SAN DIEGO COUNTY GRADING ORDINANCE, CONSTRUCTION DEMOLITION AND RECYCLING ORDINANCE, LANDSCAPE ORDINANCE, FLOOD DAMAGE AND PREVENTION ORDINANCE, WATERSHED PROTECTION ORDINANCE, HYDROLOGY MANUAL, 2003, HYDRAULIC DESIGN MANUAL, 2014, RESOURCE PROTECTION ORDINANCE, AND BIOLOGICAL MITIGATION ORDINANCE.

<u>OWNER</u>

COTTONWOOD CAJON ES LLC 9255 DOHENY ROAD, #602 WEST HOLLYWOOD, CA 90069 **PERMITTEE** GREG BROWN **NEW WEST DEVELOPMENT** 565 N. MAGNOLIA AVE., EL CAJON, CA 92020

ASSESSOR'S PARCEL NUMBERS

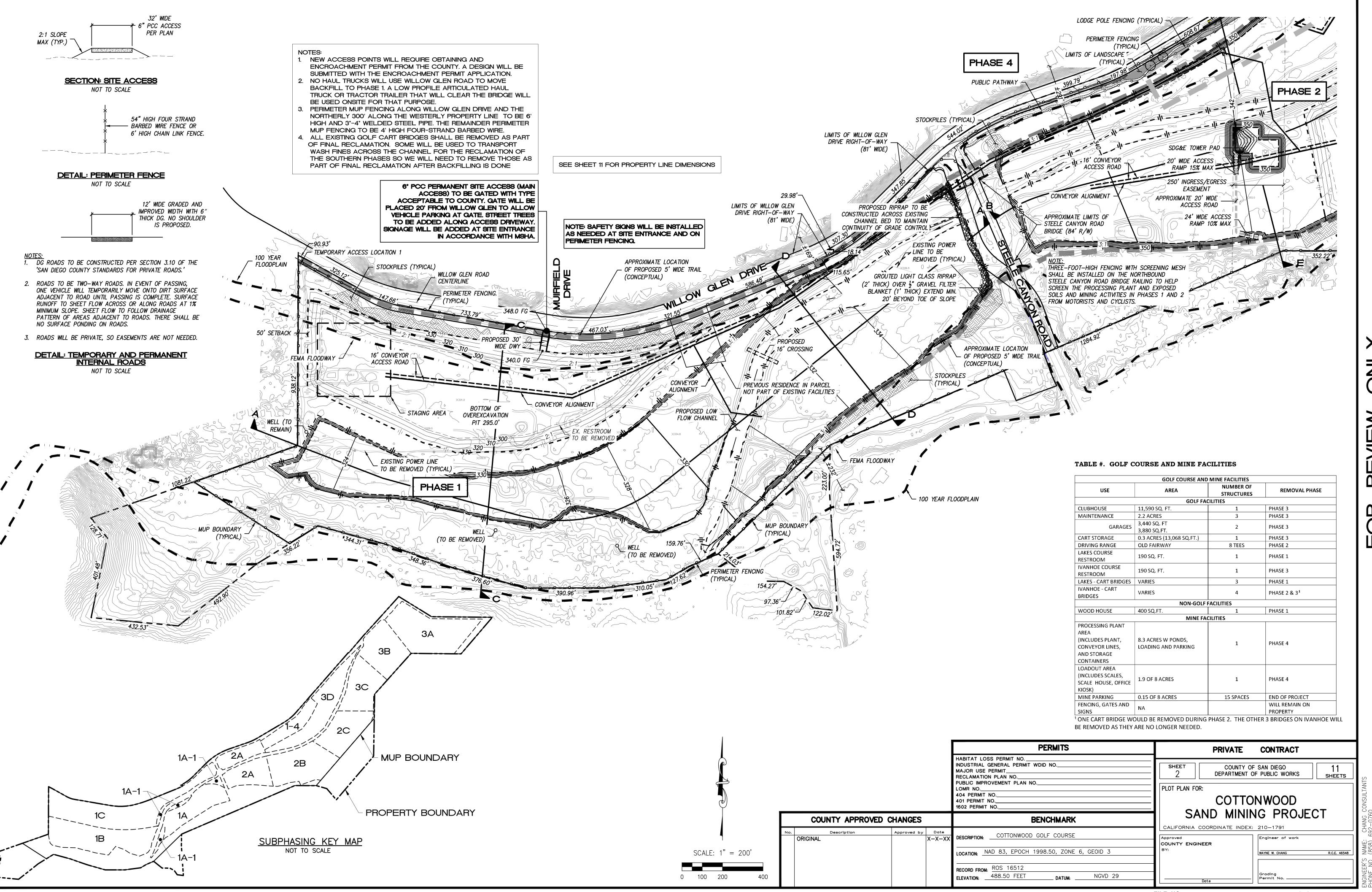
THE PROJECT IS LOCATED ON TWENTY-TWO SEPARATE ASSESSORS PARCELS (APNS) AS PRESENTED IN FOLLOWING TABLE. PORTIONS OF THE PROPERTY WILL NOT BE MINED ALTHOUGH THOSE AREAS MAY BE DISTURBED AS DAPT OF THE DECLAMATION

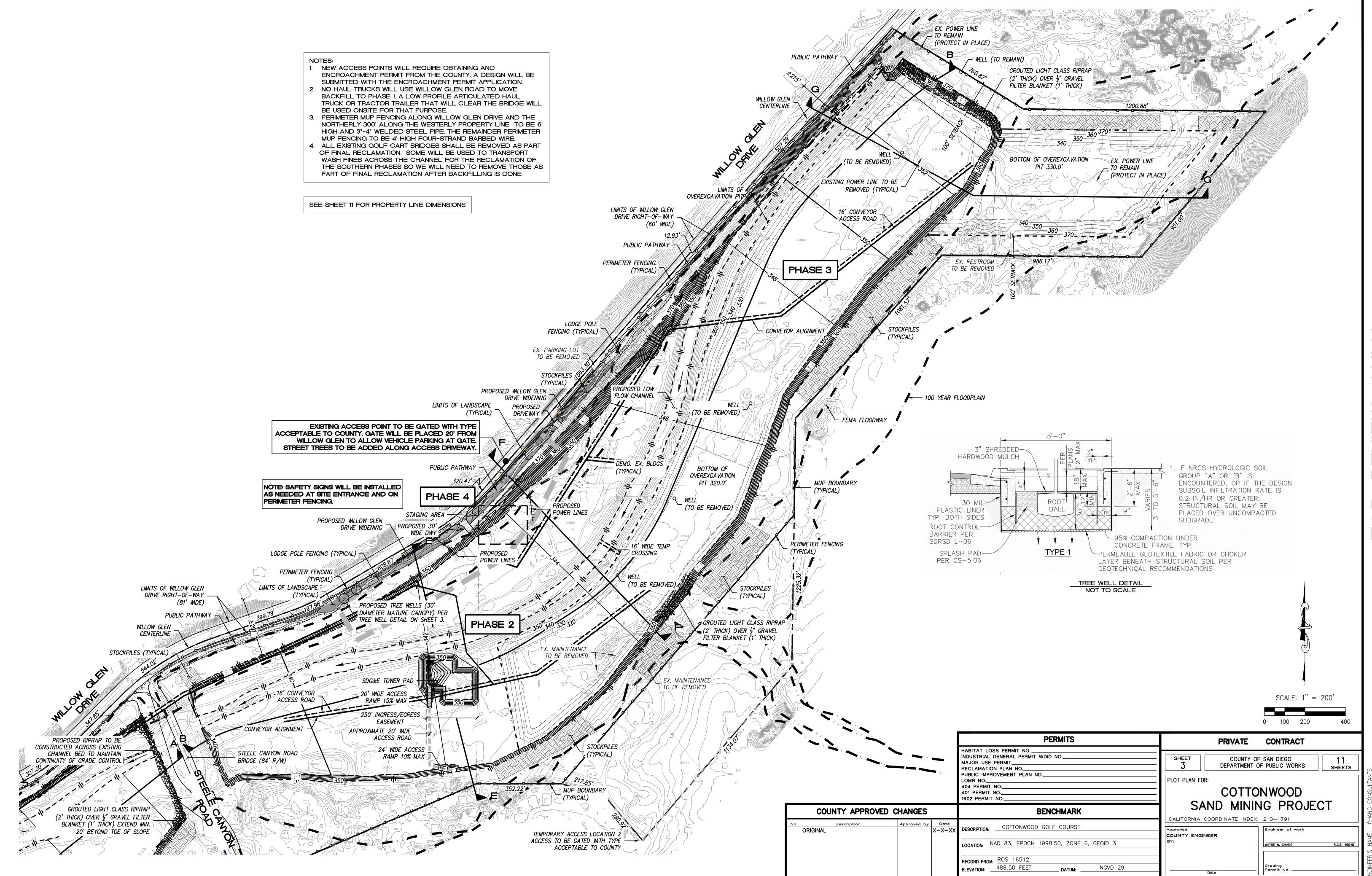
8.20 4.01 2.97 46.61 2.30 5.58 2.59 0.69 7.16 6.88 10.20 4.04 56.71	COTTONWOOD CAJON ES, LLC	\$88 \$80 \$90 \$90 \$90 \$90 \$90 \$90 \$90 \$90	OS-R OS-R OS-R OS-R OS-R OS-R OS-R OS-R
2.97 46.61 2.30 5.58 2.59 0.69 7.16 6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC	\$90 \$90 \$90 \$90 \$90 \$90 \$90 \$90	OS-R OS-R OS-R OS-R OS-R OS-R OS-R OS-R
46.61 2.30 5.58 2.59 0.69 7.16 6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC	\$90 \$90 \$90 \$90 \$90 \$90 \$90	OS-R OS-R OS-R OS-R OS-R OS-R OS-R
2.30 5.58 2.59 0.69 7.16 6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC	\$90 \$90 \$90 \$90 \$90 \$90	OS-R OS-R OS-R OS-R OS-R OS-R
5.58 2.59 0.69 7.16 6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC	\$90 \$90 \$90 \$90 \$90 \$90	OS-R OS-R OS-R OS-R OS-R
2.59 0.69 7.16 6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC	\$90 \$90 \$90 \$90 \$90	OS-R OS-R OS-R OS-R OS-R
0.69 7.16 6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC COTTONWOOD CAJON ES, LLC COTTONWOOD CAJON ES, LLC COTTONWOOD CAJON ES, LLC	\$90 \$90 \$90 \$90	OS-R OS-R OS-R
7.16 6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC COTTONWOOD CAJON ES, LLC COTTONWOOD CAJON ES, LLC	\$90 \$90 \$90	OS-R OS-R OS-R
6.88 10.20 4.04	COTTONWOOD CAJON ES, LLC COTTONWOOD CAJON ES, LLC	\$90 \$90	OS-R OS-R
10.20	COTTONWOOD CAJON ES, LLC	S90	OS-R
4.04	·		
	COTTONWOOD CAJON ES, LLC	S90	OS-R
56.71		1	O3 K
	COTTONWOOD CAJON ES, LLC	S90	OS-R
19.43	COTTONWOOD CAJON ES, LLC	S90	OS-R
33.72	COTTONWOOD CAJON ES, LLC	S90	OS-R
14.59	COTTONWOOD CAJON ES, LLC	S90	OS-R
19.22	COTTONWOOD CAJON ES, LLC	S90	OS-R
1.10	COTTONWOOD CAJON ES, LLC	S90	OS-R
1.76	COTTONWOOD CAJON ES, LLC	S90	OS-R
7.17	COTTONWOOD CAJON ES, LLC	S90	OS-R
1.06	COTTONWOOD CAJON ES, LLC	S90	OS-R
23.80	COTTONWOOD CAJON ES, LLC	S88	OS-R
279.79			
	<u>DEFINITIONS</u>		
LDING AREA			
ECIFIC PLAN A	AREA		
EN SPACE			
	7.17 1.06 23.80 279.79 LDING AREA	7.17 COTTONWOOD CAJON ES, LLC 1.06 COTTONWOOD CAJON ES, LLC 23.80 COTTONWOOD CAJON ES, LLC 279.79 DEFINITIONS LDING AREA ECIFIC PLAN AREA EN SPACE	7.17 COTTONWOOD CAJON ES, LLC S90 1.06 COTTONWOOD CAJON ES, LLC S90 23.80 COTTONWOOD CAJON ES, LLC S88 279.79 DEFINITIONS LDING AREA ECIFIC PLAN AREA

PERMITS	PRIVATE CONTRACT				
HABITAT LOSS PERMIT NO	SHEET COUNTY OF SAN DIEGO 11 SHEETS				
LOMR NO.	RECLAMATION PLAN FOR:				
404 PERMIT NO	COTTONWOOD				
1602 PERMIT NO.					
BENCHMARK	SAND MINING PROJECT				
DESCRIPTION:COTTONWOOD GOLF COURSE	CALIFORNIA COORDINATE INDEX: 210-1791				
DESCRIPTION: COTTONWOOD GOLF COOKSE	Approved Engineer of work COUNTY ENGINEER				
LOCATION: NAD 83, EPOCH 1998.50, ZONE 6, GEOID 3	BY: WAYNE W. CHANG R.C.E. 46548				
RECORD FROM: ROS 16512	Grading				
ELEVATION: 488.50 FEET DATUM: NGVD 29	Permit No.				

FILE NO. 12/5/2021 10:01 PM

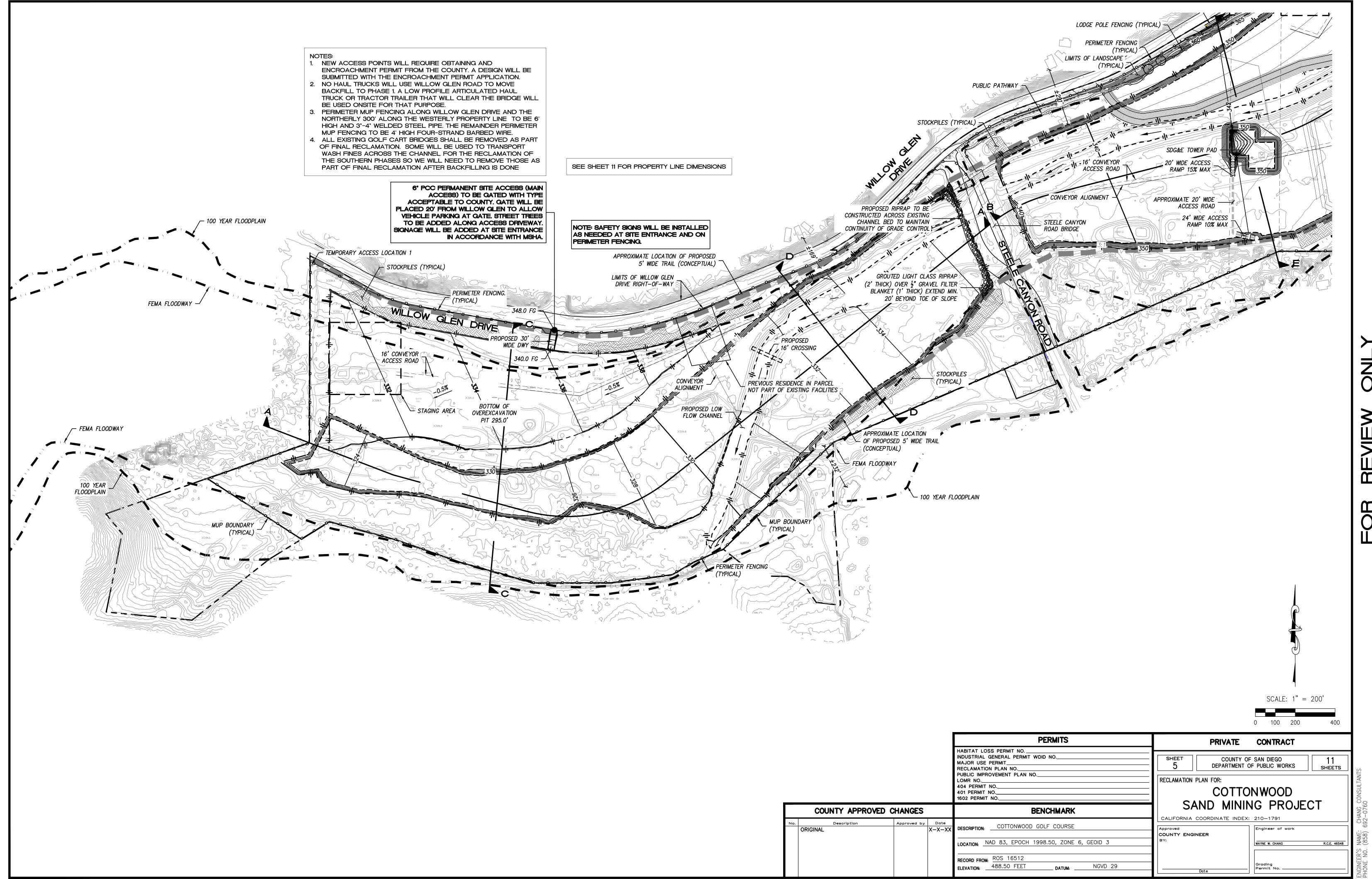


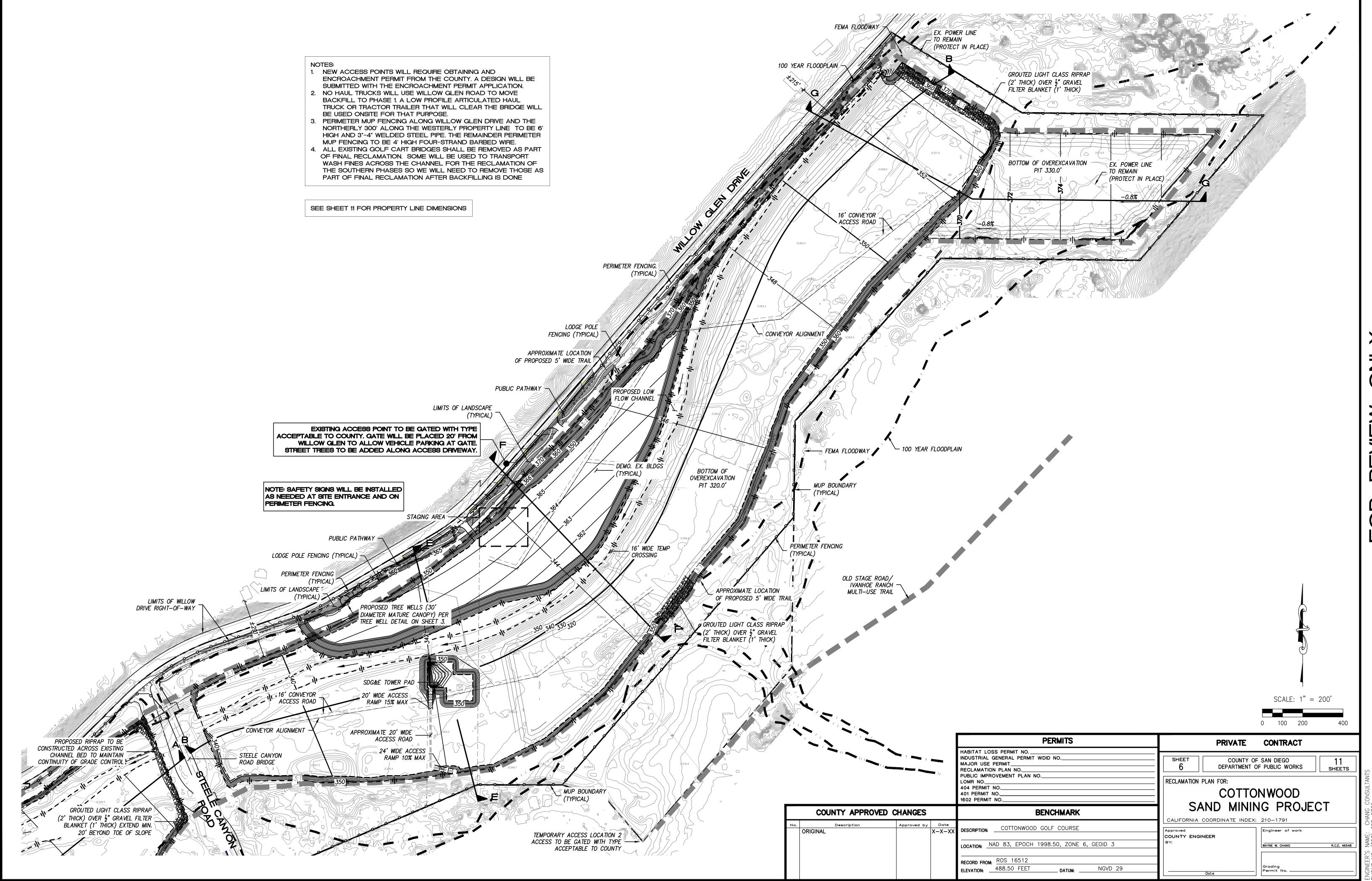


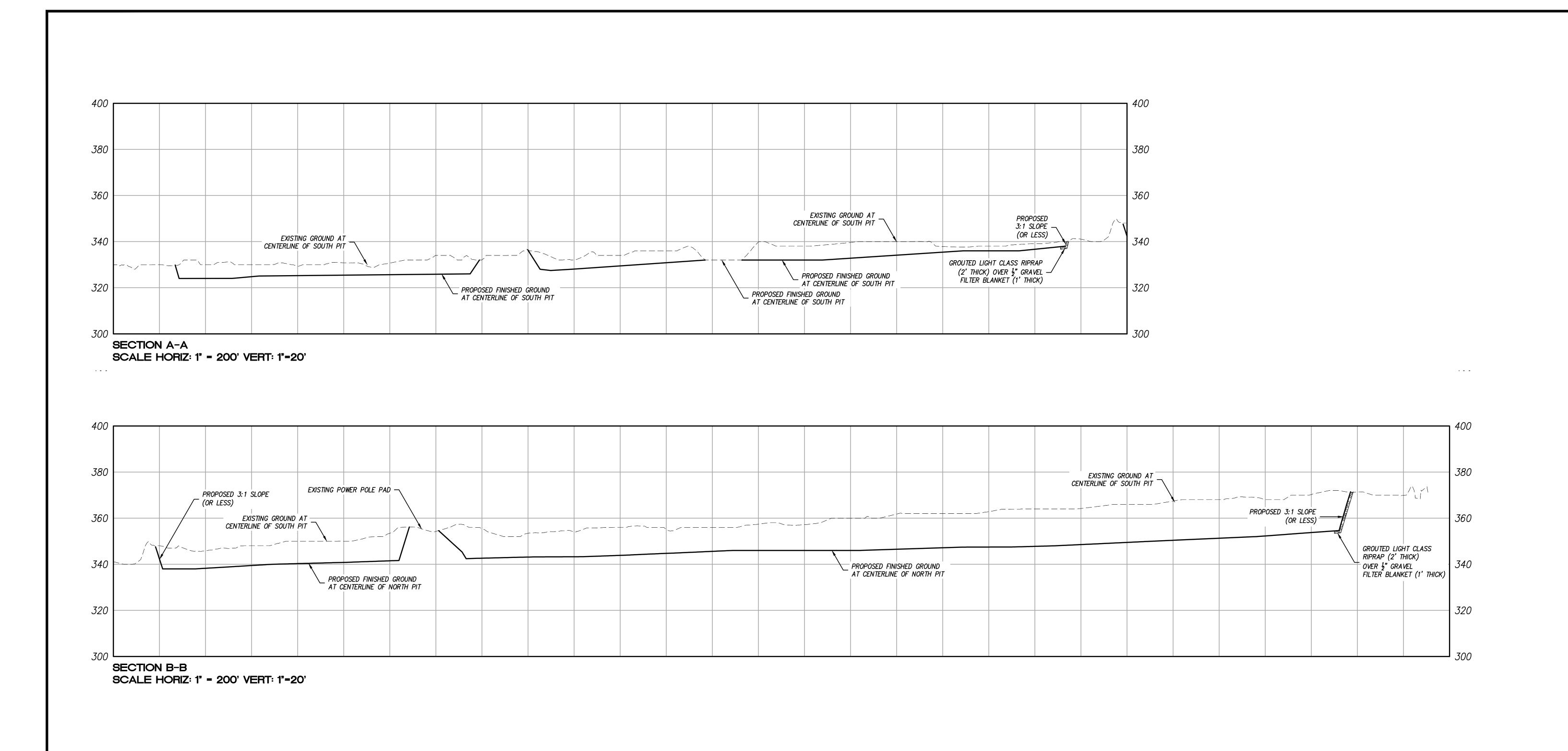


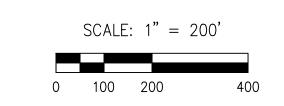
FILE NO.

12/5/2021 10:13 PM

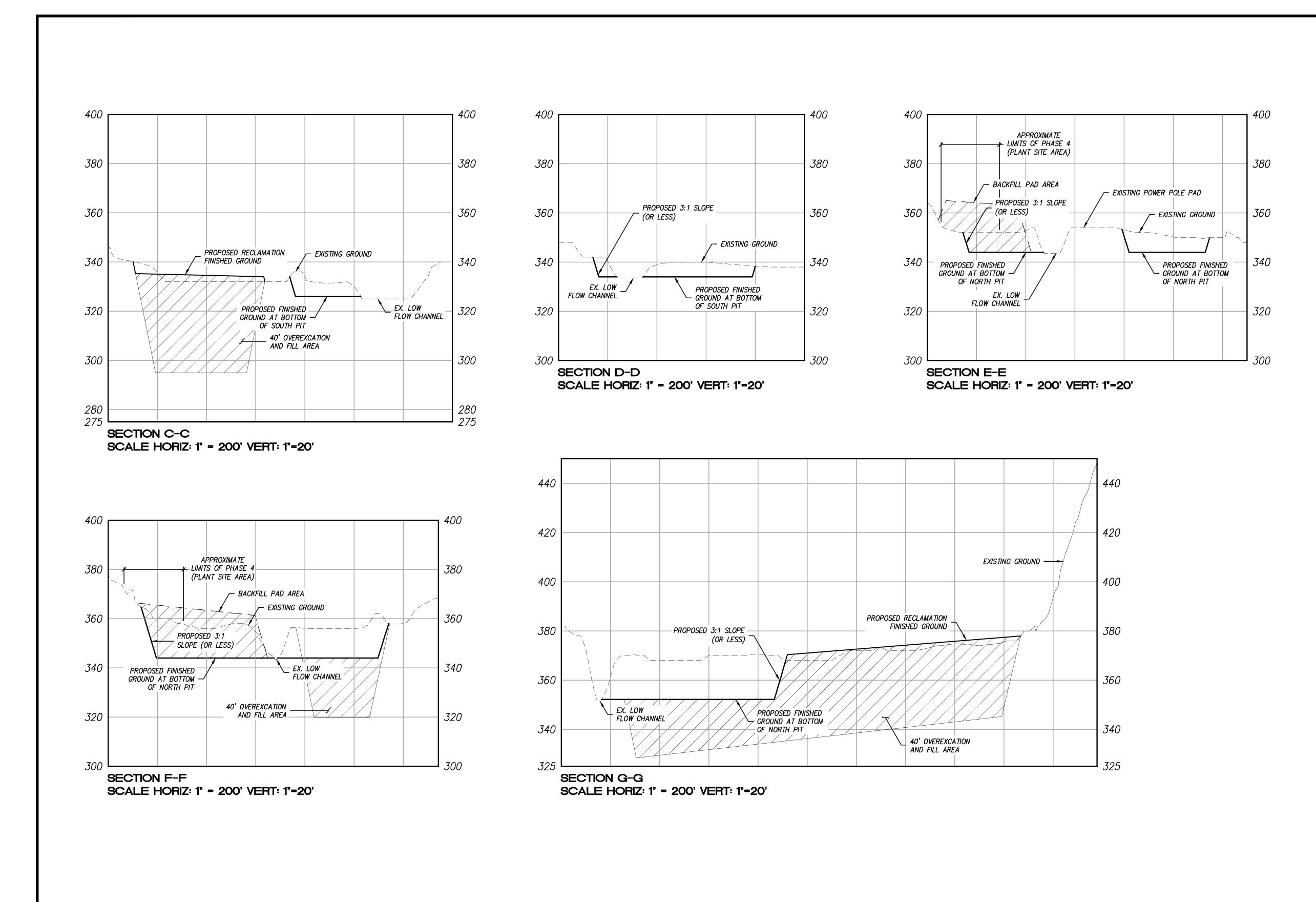








PERMITS PRIVATE CONTRACT HABITAT LOSS PERMIT NO.______INDUSTRIAL GENERAL PERMIT WDID NO.______MAJOR USE PERMIT_____ SHEET 7 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS SHEETS RECLAMATION PLAN NO.____ PUBLIC IMPROVEMENT PLAN NO.__ SITE CROSS-SECTIONS FOR: LOMR NO.____ 404 PERMIT NO._ COTTONWOOD 401 PERMIT NO.____ 1602 PERMIT NO.___ SAND MINING PROJECT COUNTY APPROVED CHANGES **BENCHMARK** CALIFORNIA COORDINATE INDEX: 210-1791 Approved by Date X—X—XX DESCRIPTION: COTTONWOOD GOLF COURSE Approved
COUNTY ENGINEER LOCATION: NAD 83, EPOCH 1998.50, ZONE 6, GEOID 3 RECORD FROM: ROS 16512
ELEVATION: 488.50 FEET __ DATUM: ____NGVD 29 Grading Permit No. ———



SCALE: 1" = 200'
0 100 200 400

		0 100 200 400	
	PERMITS	PRIVATE CONTRACT	
	HABITAT LOSS PERMIT NO	SHEET COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS SITE CROSS-SECTIONS FOR: COTTONWOOD	
COUNTY APPROVED CHANGES	BENCHMARK	COTTONWOOD SAND MINING PROJECT CALIFORNIA COORDINATE INDEX: 210-1791	
No. Description Approved by Date ORIGINAL X—X—XX	DESCRIPTION: COTTONWOOD GOLF COURSE LOCATION: NAD 83, EPOCH 1998.50, ZONE 6, GEOID 3	Approved COUNTY ENGINEER BY:	
	NAD 83, EPOCH 1998.50, ZONE 6, GEOID 3 RECORD FROM: ROS 16512 488.50 FEET DATUM: NGVD 29 NGVD 29	WAYNE W. CHANG R.C.E. 46548 Grading Permit No.	

RIPARIAN SCRUB/FOREST REHABILITATION PLANT PALETTE (6.13 acres)

CONTAINER STOCK ¹						
Scientific Name	Common Name	Spacing on Center (feet)	Grouping Size	Number Per Acre		
Baccharis salicifolia	mule fat	6	10	230		
Distichlis spicata	saltgrass	10	3	50		
Platanus racemosa	western sycamore	15	2	25		
Populus fremontii ssp. fremontii	western cottonwood	15	2	25		
Salix exigua	sand bar willow	8	4	90		
Salix gooddingii	black willow	12	5	120		
Salix laevigata	red willow	12	5	120		
Salix lasiolepis	arroyo willow	12	5	120		
Sambucus nigra	blue elderberry	10	3	85		
	-		TOTAL	865		

		OTAL 805				
SEED MIXTURE ¹						
Common Name	% Purity / Germination	Pounds per Acre				
western ragweed	45/45	4				
yerba mansa	55/80	1				
Douglas' sagewort	15/40	3				
Palmer's sagebrush	20/50	2				
mule fat	10/20	3				
bulrush	90/60	1				
tall flatsedge	80/75	1				
saltgrass	90/75	1				
pale spike-rush	95/60	1				
goldenbush	18/40	1				
southwestern spiny rush	95/80	0.5				
Pacific rush	95/60	0.5				
evening primrose	98/84	0.5				
salt marsh fleabane	30/40	2				
	Common Name western ragweed yerba mansa Douglas' sagewort Palmer's sagebrush mule fat bulrush tall flatsedge saltgrass pale spike-rush goldenbush southwestern spiny rush Pacific rush evening primrose	SEED MIXTURE¹ % Purity / Germination western ragweed 45/45 yerba mansa 55/80 Douglas' sagewort 15/40 Palmer's sagebrush 20/50 mule fat 10/20 bulrush 90/60 tall flatsedge 80/75 saltgrass 90/75 pale spike-rush 95/60 goldenbush 18/40 southwestern spiny rush 95/80 Pacific rush 95/60 evening primrose 98/84				

¹ Substitutions require approval of the Restoration Specialist.

RIPARIAN FOREST PLANT PALETTE¹ (15.51 acres)

CONTAINER STOCK ²						
Scientific Name	Common Name	Spacing on Center (ft.)	Grouping Size	Number Per Acre		
Artemisia dracunculus	tarragon	5	5	100		
Baccharis salicifolia	mule fat	6	10	230		
Distichlis spicata	saltgrass	10	3	150		
Iva hayesiana	San Diego marsh elder	5	5	120		
Platanus racemosa	western sycamore	15	3	50		
Populus fremonti ssp. fremonti	western cottonwood	15	3	50		
Salix exigua	sand bar willow	8	5	120		
Salix gooddingii	black willow	12	5	150		
Salix laevigata	red willow	12	5	200		
Salix lasiolepis	arroyo willow	12	5	200		
Sambucus nigra	blue elderberry	10	3	50		
			Total	1.420		

SEED MIXTURE ²				
Common Name	%Purity/ Germination	Pounds per Acre		
western ragweed	45/45	4		
San Diego ambrosia	-	0.5 ³		
yerba mansa	55/80	1		
Douglas' sagewort	15/40	3		
Palmer's sagebrush	20/50	2		
mule fat	10/20	3		
broom baccharis	7/42	1		
alkali bulrush	90/60	1		
California croton	90/40	1		
pale spike-rush	95/60	1		
goldenbush	18/40	1		
southwestern spiny rush	95/80	1		
Pacific rush	95/60	0.5		
evening primrose	98/84	0.5		
salt marsh fleabane	30/40	2		
	western ragweed San Diego ambrosia yerba mansa Douglas' sagewort Palmer's sagebrush mule fat broom baccharis alkali bulrush California croton pale spike-rush goldenbush southwestern spiny rush Pacific rush evening primrose	Common Name %Purity/Germination western ragweed 45/45 San Diego ambrosia - yerba mansa 55/80 Douglas' sagewort 15/40 Palmer's sagebrush 20/50 mule fat 10/20 broom baccharis 7/42 alkali bulrush 90/60 California croton 90/40 pale spike-rush 95/60 goldenbush 18/40 southwestern spiny rush 95/80 Pacific rush 95/60 evening primrose 98/84		

- The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed as
- part of mining activities.
- ² Substitutions require approval of the Restoration Specialist. ³ San Diego ambrosia (*Ambrosia pumila*) will only be installed within the 1.00 acre of wetland re-establishment area based on
- availability. * No less than 20 lbs. per acre of seed shall be installed.

EROSION CONTROL SEED MIX^{1,2}

SEED MIXTURE ²					
Scientific Name	Common Name	%Purity/ Germination	Pounds per Acre		
Anemopsis californica	yerba mansa	55/80	1		
Artemisia douglasiana	Douglas' sagewort	15/40	3		
Bolboschoenus maritimus	alkali bulrush	90/60	1		
Cyperus eragrostis	tall flatsedge	80/75	1		
Eleocharis macrostachys	pale spike-rush	95/60	1		
Euthamia occidentalis	western goldenrod	24/45	1		
Juncus effusus var. pacificus	Pacific rush	95/60	0.5		
Pluchea odorata	salt marsh fleabane	30/40	2		
		Total	10.5*		

STREAMBED (EMERGENT WETLAND) SEED MIX¹

(9.92 acres)

TOTAL 21.5

- ¹ The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed as
- part of mining activities. ² Substitutions require approval of the Restoration Specialist.

* No less than 10 lbs. per acre of seed shall be installed.

(85.08 acres) CONTAINER STOCK² Scientific Name Artemisia dracunculus Baccharis salicifolia mule fat California croton Croton californicus Distichlis spicata saltgrass San Diego marsh elder Iva hayesiana Platanus racemosa western sycamore Populus fremonti ssp. fremonti western cottonwood Salix exigua sand bar willow Salix gooddingii black willow Salix laevigata red willow arroyo willow Sambucus nigra blue elderberry

RIPARIAN SCRUB PLANT PALETTE¹

	SEED MIXTURE ²		
Scientific Name	Common Name	%Purity/ Germination	Pound per Ac
Ambrosia psilostachya	western ragweed	45/45	4
Artemisia douglasiana	Douglas' sagewort	15/40	3
Artemisia palmeri	Palmer's sagebrush	20/50	2
Baccharis salicifolia	mule fat	10/20	3
Baccharis sarothroides	broom baccharis	7/42	1
Bolboschoenus maritimus	alkali bulrush	90/60	1
Croton californicus	California croton	90/40	1
Eleocharis macrostachys	pale spike-rush	95/60	1
lsocoma menziesii	goldenbush	18/40	1
luncus acutus ssp. leopoldii	southwestern spiny rush	95/80	1
Juncus effusus var. pacificus	Pacific rush	95/60	0.5
Oenothera elata ssp. hookeri	evening primrose	98/84	0.5
Pluchea odorata	salt marsh fleabane	30/40	2
		Total	21.0

The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed as part of mining activities.

Substitutions require approval of the Restoration Specialist. * No less than 20 lbs. per acre of seed shall be installed.

APPROXIMATE LOCATION
OF PROPOSED 5' WIDE TRAIL

Scientific Name Ambrosia psilostachya western ragweed Bromus carinatus California bromegrass Plantago insularis small fescue

(96.06 acres)

¹ The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed as part of mining activities.

² Substitutions require approval of the Restoration Specialist.

* No less than 50 lbs. per acre of seed shall be installed.

SCALE: 1" = 300'

0 150 300

COUNTY APPRO

Description

DIEGAN COASTAL SAGE SCRUB PLANT PALETTE¹

COASTAL SAGE SCRUB

EROSION CONTROL SEED MIX

RIPARIAN SCRUB / FOREST REHABILITATION

REVEGETATION AREAS

RIPARIAN SCRUB

RIPARIAN FOREST

STREAM BED

(11.91 acres) **CONTAINER STOCK²** Scientific Name Artemisia californica California sagebrush Bebbia juncea rough sweetbush Encelia californica coast sunflower Eriogonum fasciculatum flat top buckwheat Hazardia squarrosa saw-toothed goldenbush Hesperoyucca whipplei chaparral yucca Heteromeles arbutifolia Mimulus aurantiacus bush monkey flower Rhus integrifolia Salvia apiana white sage

SEED MIX ²				
Scientific Name	Common Name	Percent Purity/ Germination	Pounds Per Acre	
Acmispon glaber	deerweed	95/80	0.5	
Amsinckia intermedia	common fiddleneck	45/65	1	
Artemisia californica	California sagebrush	30/60	4	
Deinandra fasciculata	fascicled tarplant	25/65	3	
Encelia californica	California encelia	30/45	2	
Ericameria palmeri var. palmeri	Palmer's goldenbush	N/A	2	
Eriogonum fasciculatum	flat top buckwheat	50/20	7	
Eriophyllum confertiflorum	golden-yarrow	N/A	2	
Eschscholzia californica	California poppy	98/80	2	
Lupinus bicolor	miniature lupine	98/85	1	
Phacelia parryi	Parry's phacelia	95/80	1	
Salvia apiana	white sage	88/30	3	
Stipa lepida, deawned	foothill needlegrass	90/71	3	
Stipa pulchra, deawned	purple needlegrass	90/75	3	

¹ The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed

OVED CHANGES			HABITAT LOSS PERMIT NO		SHEET 10	
			BENCHMARK		0.445004	
	Approved by	Date X—X—XX	DESCRIPTION:	COTTONWOOD GOLF COURSE		Approved
						COUNTY E

RNIA COORDINATE INDEX: 210-1791

FILE NO. 12/5/2021 10:47 PM

as part of mining activities. ² Substitutions require approval of the Restoration Specialist. * No less than 30 lbs. per acre of seed shall be installed. **PERMITS** PRIVATE CONTRACT COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS TATION PLAN FOR: COTTONWOOD SAND MINING PROJECT

ENGINEER

LOCATION: NAD 83, EPOCH 1998.50, ZONE 6, GEOID 3

RECORD FROM: ROS 16512
ELEVATION: 488.50 FEET NGVD 29

_ DATUM: ___