



STAFF REPORT

CITY OF SOLANA BEACH

TO: Honorable Mayor and City Councilmembers
FROM: Alyssa Muto, City Manager
MEETING DATE: October 22, 2025
ORIGINATING DEPT: Engineering Department
SUBJECT: **Project Update on the Lomas Santa Fe–East Improvement Project – Final Design and Extension of PSA with Michael Baker International for Design-Related Construction Support**

BACKGROUND:

The Lomas Santa Fe Corridor is the City’s primary east–west arterial and provides access to schools, parks, the library, transit, and commercial areas. The City has advanced the Lomas Santa Fe–East Improvement Project with design, funding, and agency coordination over several years to prepare the Loma Santa Fe–East Improvement Project for construction. The project will maintain two lanes of travel in both direction, and includes new sidewalks, a multi-use trail, bicycle lanes, landscaped medians, and pedestrian enhancements, including benches, decorative paving of the sidewalks and trash receptacles.

This item is before the City Council to receive input on the final design elements associated with the pedestrian enhancements (benches, decorative paving, and trash receptacles) and the tree palette prior to advertisement for construction bids. This item is also before City Council for consideration of Resolution 2025-115 (Attachment 1), authorizing an amendment to the Professional Services Agreement (PSA) with Michael Baker International, Inc. to update final design plans, provide design-related construction support services, and extend the contract term to align with the construction schedule, in the amount of \$230,000, funded by the TIF Fund.

DISCUSSION:

Lomas Santa Fe Drive is a key east–west corridor in the City, connecting neighborhoods to schools, parks, the train station, and the Cedros commercial district. The Lomas Santa

COUNCIL ACTION:

Fe Corridor Project is comprised of an east and west project and is designed to improve connectivity, circulation, and access for pedestrians, cyclists, and drivers. The project is identified in the City's Comprehensive Active Transportation Strategy (CATS) and Safe Routes to School Plan.

The Lomas Santa Fe-East Improvement Project (Santa Helena to Highland Drive) will maintain two lanes of vehicle travel in both directions, and construct a multi-use trail with pedestrian enhancements, buffered bike lanes, ADA-compliant ramps, signal upgrades, crosswalk improvements, street trees, and landscaped medians. These improvements are intended to enhance mobility and safety along the corridor, particularly for students traveling to Skyline Elementary and Earl Warren Middle School. The project will also include modifications to lane widths and signal phasing to support better traffic flow and visibility at key intersections, while still maintaining two travel lanes in both directions.

A community workshop/open house was held in May 2018, and a presentation was made at a City Council meeting in August 2018, to present initial design ideas that included four roundabouts and active transportation improvements. Through public and Council feedback, the project was redesigned to remove all roundabouts and the results of the community workshop were incorporated into the design and shared with the City Council on January 22, 2020. During the May 26, 2021, Council meeting, the City Council approved the final geometric alignment, including direction to extend the Highway 101 Westside Improvement Project theme to Lomas Santa Fe's streetscape features. While bike racks and bus shelters are not included on the east segment because there is no bus service east of Interstate 5, other elements-such as lighting, waste receptacles, decorative paving and retaining wall treatments are part of the final design. At the October 20, 2021, meeting, Council reviewed options for enhancing the retaining wall between Santa Helena and Via Mil Cumbres and expressed support for a simple decorative treatment, in lieu of a bluff face replica.

In 2022, the City coordinated with Congressman Mike Levin's office to request a grant for construction funding for the Lomas Santa Fe-East Improvement Project. A federal grant was received in May 2023 in the amount of \$7.0 million through the National Infrastructure Investment and Jobs Act. It was determined that the grant award would allow for the construction of the project on the east side of Interstate 5, from Santa Helena to Highland Drive. City Council has also allocated surplus funds to this project to cover anticipated costs that have escalated since the design process concluded.

Because of federal funding, Caltrans serves as the delegated authority for construction authorization. The City received in August 2025 Caltrans Authorization to Proceed with advertising the project for construction bids. The purpose of this item is to receive Council's input on final design elements associated with the pedestrian enhancements (benches, decorative paving, trash receptacles) and the tree palette, prior to bid advertisement. Staff will incorporate any final Council direction into the plans and specifications before advertising. Staff anticipates returning to Council in early 2026 to award the construction contract.

On February 13, 2019, the City entered into a Professional Services Agreement (PSA) with Michael Baker International, Inc. (MBI) for final design services for the Lomas Santa Fe Corridor Phase III Project. The original contract was authorized under Resolution 2019-011 for an amount not to exceed \$684,500 and a term of two years, through February 13, 2021. The scope included development of engineering plans, specifications, and estimates (PS&E) for the full corridor, from Highway 101 to Highland Drive.

MBI has provided engineering design, community engagement, agency coordination, and federal grant compliance support for the Lomas Santa Fe Corridor Project under a Professional Services Agreement originally authorized in February 2019. The agreement has been amended three times to extend the term and increase compensation, reflecting the evolving scope of work and the need to complete final bid documents in coordination with Caltrans. With these amendments, the total contract amount is \$873,980, and the current term expired March 22, 2025 (Resolutions 2023-035 and 2024-079).

With Caltrans granting Authorization to Proceed with advertising the project for construction bids, Staff recommends executing a fourth amendment to retain MBI for design-related construction support services, including but not limited to:

- Review of contractor submittals and requests for information (RFI),
- Attendance at construction meetings,
- Coordination with City Staff, the construction management consultant and Caltrans, and
- Assistance with design clarifications during construction.

The proposed Amendment No. 4 would increase the PSA amount by \$230,000, for a total amount of \$1,103,980, and extend the term to December 31, 2027, allowing MBI to remain engaged through the construction phase of the project.

Pursuant to Solana Beach Municipal Code Section 3.08.130.D, the requirement for competitive selection may be waived when it is in the public's interest. In this case, retaining the existing design team is the most efficient and cost-effective approach. MBI has been involved with the project since 2016, has in-depth knowledge of the design history, and is familiar with Caltrans oversight procedures and federal grant requirements. Continuing with the same team avoids duplicative efforts, reduces the risk of miscommunication, and allows design-related construction support to begin without delay.

CEQA COMPLIANCE STATEMENT:

A Notice of Exemption/Categorical Exemption for this project was recorded with the County Recorder's Office in April 2024. This Categorical Exemption found the project exempt from CEQA under section number 15301(c) – Existing Highways and Streets.

Since construction of this project will be partially funded from federal funds, environmental clearance is also required under the National Environmental Policy Act (NEPA). The FHWA has delegated this authority to Caltrans. Caltrans originally approved a Categorical

Exclusion under section 23USC 326, 23 CFR 771, activity (c) 3 in April 2024. The NEPA Categorical Exclusion was re-validated by Caltrans in May 2025.

FISCAL IMPACT:

This item is to authorize the City Manager to execute an amendment to the PSA with MBI for design-related construction support, in the amount of \$230,000. There is sufficient budget available in the TIF Account (4546510-66610).

The current PSA with MBI is for a total not to exceed amount of \$873,980. The amendment would increase the compensation by \$230,000, increasing the not-to-exceed amount to \$1,103,980 and extending the PSA to December 31, 2027. The additional cost will be covered by TIF funding that has already been allocated.

WORK PLAN:

The Lomas Santa Fe Corridor Project is included as Item II.1 under Transportation and Mobility Priorities in the Fiscal Year 2025/26 Council Work Plan. This staff report updates progress on key objectives, including completion of the federal funding process, amending the PSA with Michael Baker International to provide design-related construction support services, and advertising the project for construction. These steps move the project toward implementation of mobility, access, and safety goals.

OPTIONS:

- Approve Staff recommendation.
- Approve Staff recommendation with modifications.
- Deny Staff recommendation and provide further direction to the City Manager.

CITY STAFFRECOMMENDATION:

Staff recommends that the City Council:

1. Receive this final report and provide additional input and comments as needed on the Lomas Santa Fe-East Improvement Project.
2. Authorize the City Manager to take any actions necessary to advertise the Lomas Santa Fe-East Improvement Project for construction bids.

Staff also recommends that the City Council adopt Resolution 2025-115:

3. Authorizing the City Manager to execute an amendment to the Professional Services Agreement, for an increase of \$230,000, with Michael Baker International for the completion of the bid documents and design-related construction support services for the Lomas Santa Fe-East Improvement Project, which would extend from Santa Helena to Highland Drive. The amendment would also extend the term of the agreement so that the new end date is December 31, 2027.


Alyssa Muto, City Manager

Attachments:

1. Resolution 2025-115
2. Project Preliminary Design Plans (Pre-Bid)

RESOLUTION 2025-115

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, APPROVING AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH MICHAEL BAKER INTERNATIONAL FOR DESIGN-RELATED CONSTRUCTION SUPPORT

WHEREAS, the City has advanced the Lomas Santa Fe–East Improvement Project with design, funding, and agency coordination over several years to prepare the Loma Santa Fe-East Improvement Project for construction. The project includes new sidewalks, a multi-use trail, bicycle lane buffers, landscaping, and pedestrian enhancements; and

WHEREAS, on February 13, 2019, the City entered into a Professional Services Agreement (PSA) with Michael Baker International, Inc. (MBI) for final design services for the Lomas Santa Fe Corridor Phase III Project. The original contract was authorized under Resolution 2019-011 for an amount not to exceed \$684,500 and a term of two years, through February 13, 2021 (Attachment 2). The scope included development of engineering plans, specifications, and estimates (PS&E) for the full corridor, from Highway 101 to Highland Drive; and

WHEREAS, three amendments have been executed that extended the term of the agreement and increased the compensation to provide for changes to the scope of work and split the plans and specifications into separate packages for east and west side construction due to construction funding limitations; and

WHEREAS, with Caltrans granting the Authorization to Proceed with advertising the project for construction bids, Staff recommends executing a fourth amendment to retain MBI for design-related construction support services including, but not limited to, review of contractor submittals and requests for information, attendance at construction meetings, coordination with City Staff, the construction management consultant and Caltrans and assistance with design clarifications during construction; and

WHEREAS, the proposed Amendment No. 4 would increase the PSA amount by \$230,000, for a total amount of \$1,103,980, and extend the term to December 31, 2027, allowing MBI to remain engaged through the construction phase of the project; and

WHEREAS, pursuant to Solana Beach Municipal Code Section 3.08.130.D, the requirement for competitive selection may be waived when it is in the public's interest. In this case, retaining the existing design team is the most efficient and cost-effective approach. MBI has been involved with the project since 2016, has in-depth knowledge of the design history, and is familiar with Caltrans oversight procedures and federal grant requirements. Continuing with the same team avoids duplicative efforts, reduces the risk

of miscommunication, and allows design-related construction support to begin without delay.

NOW, THEREFORE, the City Council of the City of Solana Beach, California, does resolve as follows:

1. That the foregoing recitations are true and correct.
2. Authorize the City Manager to advertise the Lomas Santa Fe-East Improvement Project for construction bids.
3. That the City Council authorizes the City Manager to execute an amendment to the Professional Services Agreement, for an increase of \$230,000, with Michael Baker International for the completion of the bid documents and design-related construction support services for the Lomas Santa Fe-East Improvement Project, which would extend from Santa Helena to Highland Drive. The amendment would also extend the term of the agreement so that the new end date is December 31, 2027.

PASSED AND ADOPTED this 22nd day of October 2025, at a regularly scheduled meeting of the City Council of the City of Solana Beach, California by the following vote:

AYES: Councilmembers –
NOES: Councilmembers –
ABSENT: Councilmembers –
ABSTAIN: Councilmembers –

LESA HEEBNER, Mayor

APPROVED AS TO FORM:

ATTEST:

JOHANNA N. CANLAS, City Attorney

ANGELA IVEY, City Clerk

STANDARD REQUIREMENTS

1. ALL WORK, UNLESS OTHERWISE SPECIFIED, SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION AND SUPPLEMENTS OF THE "STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION", SAN DIEGO REGIONAL STANDARD DRAWINGS AND CITY OF SOLANA BEACH ENGINEERING CONSTRUCTION STANDARDS.
2. WORK ZONE TRAFFIC CONTROLS THROUGHOUT PERMIT CONSTRUCTION SHALL CONFORM TO THE LATEST CALIFORNIA DEPARTMENT OF TRANSPORTATION, "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES".
3. BEFORE WORK ON ANY SEWER LINE BEGINS, A PERMIT MUST BE ISSUED BY THE SOLANA BEACH ENGINEERING DEPARTMENT. FOR INFORMATION ON SEWER PERMITS, PLEASE CALL (858) 720-2470.
4. PARKING RESTRICTIONS, AS APPROVED BY CITY ENGINEER, SHALL REQUIRE A MINIMUM OF 48 HOURS NOTICE, EXCLUDING HOLIDAYS AND WEEKENDS.
5. TRAFFIC LANE RESTRICTIONS AND DETOURS MAY OCCUR ONLY BETWEEN THE HOURS OF 9:00 A.M. AND 3:00 P.M., AND ARE SUBJECT TO REVIEW OF THE CITY ENGINEER. EXCAVATIONS SHALL BE BACKFILLED OR OTHER ADEQUATE MEANS PROVIDED TO MAINTAIN EXISTING TRAFFIC LANES OTHER THAN DURING THESE HOURS.
6. ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON ALL MAJOR AND SECONDARY HIGHWAYS.
7. A MINIMUM 4' WIDE PEDESTRIAN WALKWAY, CLEAR OF ANY OBSTRUCTION SHALL BE MAINTAINED WHEREVER SIDEWALKS EXISTS AND MUST BE MAINTAINED WITH SAFETY FENCING OR BARRIER SEPARATION FROM ADJACENT EXCAVATION WHEN LEFT UNMANNED.
8. ANY DAMAGE TO TRAFFIC CONTROL EQUIPMENT, TRAFFIC STRIPING OR RAISED PAVEMENT MARKERS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE INSPECTOR. THE REPLACEMENT OF DAMAGED TRAFFIC EQUIPMENT, STRIPING OR RAISED PAVEMENT MARKERS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND BE DONE AS SOON AS PRACTICAL AFTER COMPLETION OF WORK.
9. A.C. PAVEMENT SHALL BE COLD MILLED BEYOND THE EDGE OF THE TRENCH PER SDRSD G-24A & B. CONCRETE SECTIONS TO BE REPLACED SCORELINE TO SCORELINE.
10. PERMANENT PAVEMENT REPAIRS SHALL BE MADE WITHIN 25 DAYS AFTER EXCAVATION WORK IS COMPLETED. INSPECTOR'S APPROVAL IS REQUIRED BEFORE PERMANENT REPAIRS ARE MADE.
11. WHEN PERMITTEE TUNNELS UNDER EXISTING CURBS, GUTTERS AND SIDEWALKS, THE EXCAVATED TRENCH SHALL BE BACKFILLED WITH CEMENT GROUT AS PRESCRIBED IN THE STANDARD SPECIFICATIONS.
12. WHEN COMPACTION TESTS ARE REQUIRED, ALL COSTS ARE TO BE BORNE BY THE PERMITTEE.
13. A ONE-SACK CEMENT AND SLURRY MIXTURE MAY BE REQUIRED FOR COMPACTION WHERE EXCAVATION INTERFERES WITH TRAFFIC FLOW OR WHERE WORK IS WITHIN THE ROADWAY PORTION OF AN INSPECTION.
14. TREE TRUNKS SHALL BE CUT TO WITHIN 4" OF CURB HEIGHT AND SAID TRUNK AND ALL ROOTS SHALL BE GROUND TO A DEPTH OF 18" BELOW GRADE BY A MECHANICAL STUMP GRINDER TO THE SATISFACTION OF THE PUBLIC WORKS SUPERINTENDENT. ALL WOOD CHIPS SHALL BE REMOVED AND THE HOLE FILLED AND COMPACTED WITH TOPSOIL.
- GENERAL NOTES
1. A PERMIT SHALL BE OBTAINED FROM THE CITY OF SOLANA BEACH ENGINEERING DEPARTMENT FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
2. THE STRUCTURAL SECTION SHALL BE APPROVED BY THE CITY OF SOLANA BEACH AND AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
3. APPROVAL OF THESE IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
4. ALL UNDERGROUND UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED, CONNECTED AND TESTED PRIOR TO CONSTRUCTION OF BERM, CURB, CROSS GUTTER AND PAVING.
5. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY SHOWN HEREON AND ANY OTHER, WHICH IS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
6. LOCATIONS AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR WILL 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.
7. THE CONTRACTOR SHALL NOTIFY DIG ALERT AT 811 PRIOR TO STARTING WORK AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.
8. NO PAVING SHALL BE DONE UNTIL EXISTING POWER POLES ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.
9. PRIVATE ROAD IMPROVEMENTS SHOWN HEREON ARE FOR INFORMATION ONLY. CITY ENGINEER'S SIGNATURE HEREON DOES NOT CONSTITUTE APPROVAL OR RESPONSIBILITY OF ANY KIND FOR THE DESIGN OR CONSTRUCTION OF THESE PRIVATE IMPROVEMENTS (IF APPLICABLE).
10. THE CONTRACTOR SHALL REQUEST FROM THE CITY ENGINEER'S OFFICE A PRE-CONSTRUCTION MEETING AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE FOR SUCH A MEETING.
11. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY AGENCIES AND ADVISE THEM OF THE PROPOSED IMPROVEMENTS AND BEAR THE COST OF RELOCATIONS, IF NEEDED.
12. POWER SOURCES AND RUNS SERVING STREETLIGHTS SHALL BE SHOWN ON THE "AS-BUILT" IMPROVEMENT DRAWINGS. ALL SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT OF WAY OR WITHIN EASEMENT DEDICATED TO THE CITY OF SOLANA BEACH.

LOMAS SANTA FE CORRIDOR EAST IMPROVEMENTS
FEDERAL AID NO. CPFCDL-5445(008)
CITY OF SOLANA BEACH BID NO. 2025-01

TRANSFER OF RESPONSIBILITY

- IF RESPONSIBLE PROFESSIONALS (CIVIL ENGINEER, SOIL ENGINEER, ENGINEERING GEOLOGIST, THE TESTING AGENCY, THE CONTRACTOR OR OTHER PROFESSIONAL) OF RECORD ARE CHANGED DURING THE COURSE OF THE WORK, THE WORK SHALL BE STOPPED UNTIL:
1. THE OWNER SUBMITS A LETTER OF NOTIFICATION VERIFYING THE CHANGE OF THE RESPONSIBLE PROFESSIONAL; AND
 2. THE NEW RESPONSIBLE PROFESSIONAL SUBMITS IN WRITING THAT HE/SHE HAS REVIEWED ALL PRIOR REPORTS AND/OR PLANS (SPECIFIED BY DATE AND TITLE) AND WORK PERFORMED BY THE PRIOR RESPONSIBLE PROFESSIONAL AND THAT HE/SHE ASSUMES ALL RESPONSIBILITY WITHIN HIS PURVIEW AS OF THE SPECIFIED DATE. ALL EXCEPTIONS MUST BE JUSTIFIED TO THE SATISFACTION OF THE CITY ENGINEER. WHERE CLEARLY INDICATED THAT THE FIRM, NOT AN INDIVIDUAL PROFESSIONAL IS THE CONTRACTING PARTY, THE DESIGNATED PROFESSIONAL MAY BE REASSIGNED AND ANOTHER PROFESSIONAL OF COMPARABLE ACCREDITATION WITHIN THE FIRM MAY ASSUME RESPONSIBILITY.
 3. THE NEW RESPONSIBLE PROFESSIONAL PROCESSING A REVISION TO THE APPROVED PLANS SHALL INCLUDE BUBBLING OUT THE REVISION AND SIGNING THE PLANS AT THE REQUIRED LOCATIONS. THE "DECLARATION OF (PROFESSIONAL TITLE) OF WORK" ON THE PLANS SHALL ALSO BE INCLUDED AND SIGNED IN THE EVENT OF A CHANGE OF PROFESSIONAL.

AS-BUILT

UPON COMPLETION, AND PRIOR TO RELEASING THE SECURITIES, THE ENGINEER OF WORK SHALL "AS-BUILT" THE ORIGINAL MYLAR PLANS. INITIALLY, TWO COPIES OF RED-LINED PLANS SHOWING ALL AS-BUILT INFORMATION, INCLUDING ALL NEW UNDERGROUND FACILITIES (MAIN LINES, SERVICES AND LATERALS), IS TO BE SUBMITTED TO THE ENGINEERING DEPARTMENT. WHEN THE RED-LINES ARE APPROVED, THE ORIGINAL MYLAR PLANS WILL BE CHECKED OUT TO THE ENGINEER. THE ENGINEER SHALL MAKE THE CHANGES, SIGN EACH SHEET UNDER "AS-BUILT", AND RETURN ORIGINAL MYLARS TO THE CITY.

ENGINEER OF WORK AS-BUILT CERTIFICATE

THE INFORMATION SHOWN IS BASED ON AN ACTUAL FIELD SURVEY OF THE IMPROVEMENTS BETWEEN THE DATES OF _____ AND _____ TO THE BEST OF MY KNOWLEDGE AND EXPERIENCE THE SURVEY AND THESE PLANS PROVIDE AN ACCURATE AND CORRECT REPRESENTATION OF THE AS-BUILT CONDITIONS.

SIGNED _____ DATE _____

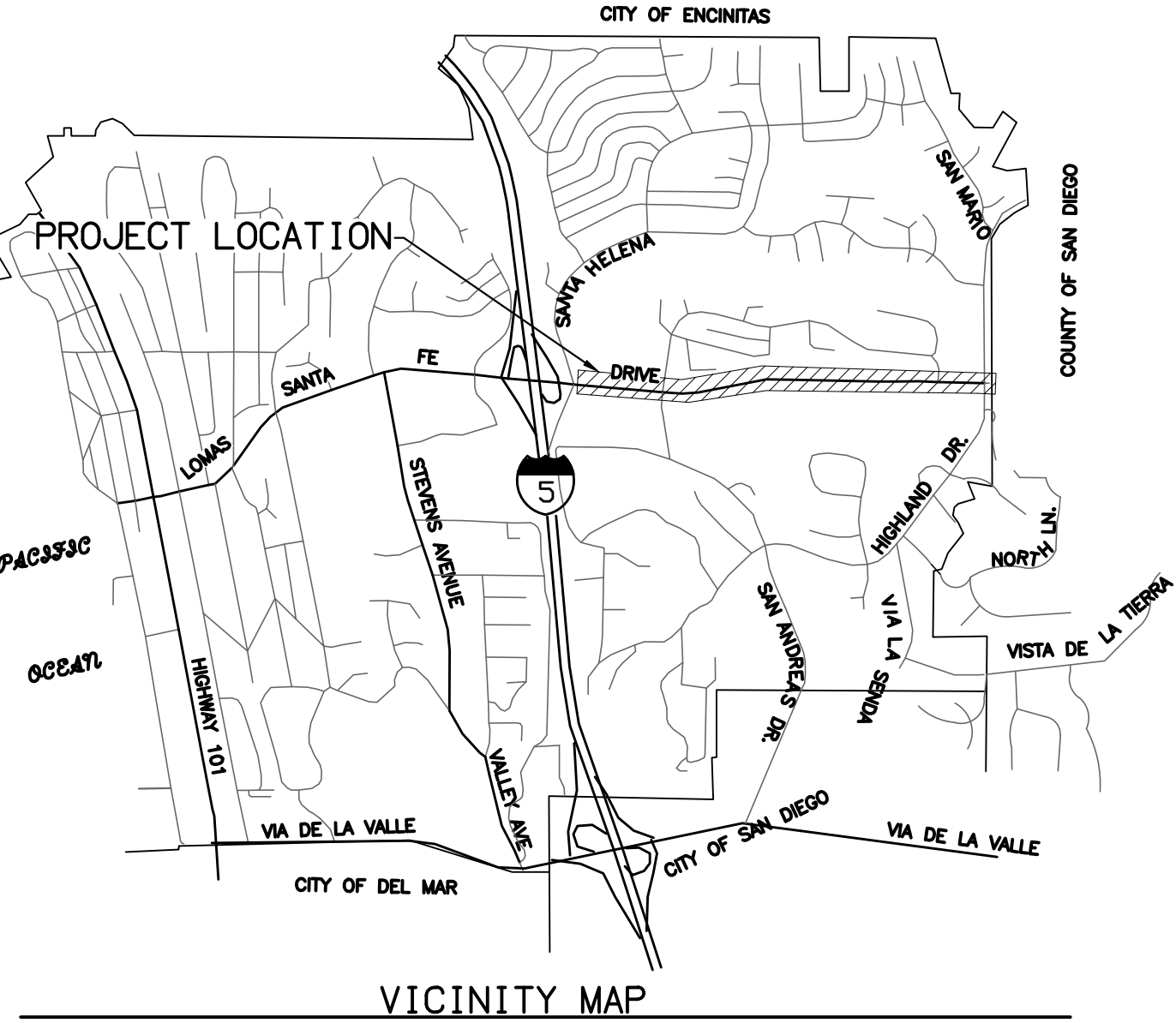
R.C.E. NO. _____ EXP. _____

CONTRACTOR'S NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICE, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CITY OF SOLANA BEACH HARMLESS FORM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF CITY OF SOLANA BEACH PROFESSIONAL.

LIST OF ABBREVIATIONS

AB	AGGREGATE BASE	MH	MANHOLE
AB	ABANDON (TRAFFIC SHEETS ONLY)	MIN	MINIMUM
AC	ASPHALT CONCRETE	MJ	MECHANICAL JOINT
ACP	ASBESTOS CEMENT PIPE	NO	NUMBER
ADV	ADVANCE	NTS	NOT TO SCALE
ARV	AIR RELEASE VALVE AND ENCLOSURE	PB	PULL BOX
APS	ACCESSIBLE PEDESTRIAN SIGNAL	PCC	POINT OF COMPOUND CURVE
BC	BEGIN CURVE	POC	POINT OF CONNECTION
BOR	BEGIN CURB RETURN	PRC	POINT OF REVERSE CURVE
BTP	BACK FLOW PREVENTER	PROP	PROPOSED
BK	BIKE	PT	POINT
BLVD	BOULEVARD	PVC	POLYVINYL CHLORIDE PIPE
BP	BOTTOM OF PIPE	R/C	REINFORCED CONCRETE PIPE
C	CONDUIT	RMC	RIGID METALLIC CONDUIT
CAB	CRUSHED AGGREGATE BASE	RREB	RECTANGULAR RAPID FLASHING BEACON
CAV	SEWAGE COMBINATION AIR VALVE	RT	RIGHT
C&G	CURB & GUTTER	RTU	REMOTE TERMINAL UNIT
CI	CENTERLINE	RW	RECYCLED WATER
CMP	CORRUGATED METAL PIPE	R/W	RIGHT-OF-WAY
CR	CROWN	SC	SPLICE NEW TO EXISTING CONDUCTORS
DI	DUCTILE IRON	SD	STORM DRAIN
DIP	DUCTILE IRON PIPE	SDMN	STORM DRAIN MANHOLE
DL	DETECTOR LOOP CABLE	SDRSD	SAN DIEGO REGIONAL STANDARD DRAWINGS
DWG	DRAWING	SF	SQUARE FEET
EA	EACH	SFM	SEWER FORCEMAIN
EC	END CURVE	SM	SURVEY MONUMENT
EOR	END CURB RETURN	SMH	SEWER MANHOLE
EV	ELECTRIC VAULT	SNS	STREET NAMESIGN
EVALT	EMERGENCY VEHICLE PREEMPTION	STA	STATION
EVP	EXISTING	STD	STANDARD
EX	FUEL	STP	SHIELDED TWISTED PAIR
F	FIRE HYDRANT	SWK	SIDEWALK
FL	FLOW LINE	TC	TOP OF CURB
FLG	FLANGE	TP	TOP OF PIPE
FO	FIBER OPTIC	TELE	TELECOM
FS	FINISH SURFACE	TRANS	TRANSFORMER
G	GAS / GROUND	TS	TRAFFIC SIGNAL
GV	GAS VALVE	TYP	TYPICAL
GB	GRADE BREAK	VERT	VERTICAL
HDPE	HIGH DENSITY POLYETHYLENE	VWD	VALLECITOS WATER DISTRICT
HORIZ	HORIZONTAL	W	WATER
HP	HIGH POINT / HIGH PRESSURED	WC	WATER CONNECTION
IRR	IRRIGATION	WM	WATER METER
IVC	IRRIGATION VALVE COVER	WV	WATER VALVE
IE	INVERT ELEVATION		
LF	LINEAR FEET		
LT	LEFT		



VICINITY MAP

SITE ADDRESS

EAST OF HWY I-5: FROM SANTA HELENA TO HIGHLAND DR.

SOURCE OF TOPOGRAPHY

TOPOGRAPHY PROVIDED BY AEROTECH MAPPING, INC. DATE FLOWN: MAY, 2019

BASIS OF BEARING

THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 6, (EPOCH 1991.35). SAID COORDINATES AND BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWING CONTROL POINTS PER RECORD OF SURVEY 18971 (CITY OF SOLANA BEACH SURVEY CONTROL)

STATION	NORTHING (ft.) GRID	EASTING (ft.) GRID
2001	1941484.322	6248585.851
2010	1945083.493	6253573.589

THE BASIS OF BEARINGS IS THE CALCULATED BEARING BETWEEN SAID CONTROL STATIONS 2001 & 2010. I.E. N54°11'08"E. COORDINATES SHOWN HEREON ARE GROUND AND IN TERMS OF THE U.S. SURVEY FOOT. CONTROL STATION #130: GRID DISTANCE = GROUND DISTANCE X COMBINED SCALE FACTOR (0.99996480)

STATION	NORTHING (ft.) GRID	EASTING (ft.) GRID
130	1643648.598	6256070.045

BENCHMARK

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) PER RECORD OF SURVEY 18971 (CITY OF SOLANA BEACH SURVEY CONTROL). BENCHMARK DESIGNATION: #2010 ENC-46:2.5" CITY OF ENCINITAS BRASS DISC IN NORTHWEST CORNER OF CONCRETE DROP INLET IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF SANTA HELENA AND SANTA ROSITA STREETS. ELEVATION: 170.241 (NAVD88)

BOUNDARY NOTES

THE BOUNDARY AND ALL DIMENSIONS SHOWN HEREON ARE BASED ON AN UNRECORDED RECORD OF SURVEY AS PREPARED BY MICHAEL BAKER, INC. PER FIELD SURVEY PERFORMED ON APRIL 5TH - APRIL 19TH, 2019.

ENGINEER'S NOTE

UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

ENGINEER OF WORK CERTIFICATE

I, Geoffrey H. Retemeyer, 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 THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS AND CITY OF SOLANA BEACH RESOLUTION NO. _____.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SOLANA BEACH AND ANY OTHER PUBLIC AGENCY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME OF RESPONSIBILITIES FOR PROJECT DESIGN.

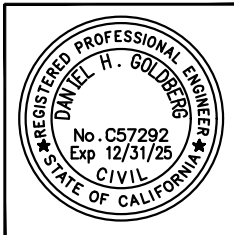
SIGNED Geoffrey H. Retemeyer DATE 12/2/2024

R.C.E. NO. 90577 EXP. 12/31/2025

FIRM MICHAEL BAKER INTERNATIONAL

ADDRESS 5050 AVENIDA ENCINAS, SUITE 260, CARLSBAD CA 92008

TELEPHONE: 760-603-6260



WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE (UNLESS OTHERWISE NOTED) ACCORDING TO THESE PLANS AND THE LATEST EDITIONS OF:

STANDARD SPECIFICATIONS

- (1) STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2018 GREENBOOK) INCLUDING THE REGIONAL SUPPLEMENTAL AMENDMENTS.
- (2) CALIFORNIA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROL DEVICES"
- (3) STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS
- (4) SAN DIEGO WATER AGENCIES' WATER STANDARDS (SDWAS)

STANDARD DRAWINGS

- (1) SAN DIEGO REGIONAL STANDARD DRAWINGS
- (2) STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD PLANS
- (3) SAN DIEGO WATER AGENCIES' WATER STANDARDS (SDWAS)

LEGEND

IMPROVEMENTS	STD. DWGS.	SYMBOL
6" CURB & GUTTER	SDRSD G-2	
6" MEDIAN CURB	SDRSD G-6	
EXISTING MEDIAN CURB		
CONCRETE SIDEWALK	SDRSD G-7	
2" GRIND AND OVERLAY		
12" AC PATCH		
PROPOSED RETAINING WALL		
WATER QUALITY BASIN		
LANDSCAPE AREA		
CURB RAMP W/ TRUNCATED DOMES	SDRSD G-27,28-32	
EXISTING DRIVEWAY		
PROPOSED DRIVEWAY	SDRSD G-14	
STORM DRAIN CLEANOUT - TYPE A	SDRSD D-9	
STORM DRAIN INLET - TYPE B	SDRSD D-2	
PROPOSED CONTOUR		
EXISTING CONTOUR		
LIMITS OF WORK/DAYLIGHT LINE		
EXISTING PROPERTY LINE		
STREET CENTERLINE		
EXISTING RIGHT OF WAY LINE		
EXISTING CONCRETE		
EXISTING EDGE OF PAVEMENT		
EXISTING WALL		
EXISTING FENCE		
EXISTING VALVE		
EXISTING FIRE HYDRANT		
EXISTING WATER METER		
EXISTING MANHOLE		
EXISTING SIGN		
EXISTING TREE TO REMAIN		
EXISTING TREE TO BE REMOVED		
EXISTING LIGHT		
PROPOSED STREET LIGHT POLE		
FOUND SURVEY MONUMENT		
FOUND M-10 SURVEY MONUMENT		

SHEET INDEX

SHEET	PLAN CODE	DESCRIPTION
1	T-1	TITLE SHEET
2-3	GN-1 TO GN-2	GENERAL NOTES
4	KM-1	KEY MAP
5	TYP-1	TYPICAL CROSS SECTIONS
6-16	IMP-1 TO IMP-11	IMPROVEMENT PLANS & PROFILES
17-21	CD-1 TO CD-5	CONSTRUCTION DETAILS
22-24	RWALL-1 TO RWALL-3	RETAINING WALL PLANS & PROFILES
25	SD-1	DRAINAGE PLANS & PROFILES, AND DETAILS
26-28	PD-1 TO PD-3	PAVEMENT DELINEATION PLANS
29-30	TS-1 TO TS-2	TRAFFIC SIGNAL PLANS
31-54	LDSC-1 TO LDSC-22	LANDSCAPE AND IRRIGATION PLANS

PLAN CODE

T-1 R.C.E.: _____ Exp: _____

AS-BUILT

By: _____ Date: _____
R.C.E.: _____ Exp: _____

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ENGINEER OF WORK

CITY APPROVED CHANGES

APP'D

DATE

RECOMMENDED FOR APPROVAL

APPROVED FOR CONSTRUCTION

BENCH MARK

CITY OF SOLANA BEACH

ENGINEERING DEPARTMENT

DRAWING NO.

IMPROVEMENT PLANS FOR:

TITLE SHEET

CG-3185

LOMAS SANTA FE CORRIDOR

Sheet 1 of 54

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY OF THESE NOTES, AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. NEITHER THE OWNER NOT 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. SAFETY FENCES SHALL BE PROVIDED BY THE CONTRACTOR WHERE REQUIRED BY THE CITY ENGINEER.
2. PRIOR TO ANY CONSTRUCTION OR EXCAVATING FOR THIS CONTRACT, THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS SHALL BE CONFIRMED BY FIELD MEASUREMENT. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS ONLY AND MAY NOT REFLECT ALL EXISTING UTILITIES. LOCATIONS OF ALL EXISTING UTILITIES SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF WORK TO BE PERFORMED, EXPLORATORY EXCAVATIONS SHALL BE DONE IN ADVANCE IN ORDER TO PROVIDE SUFFICIENT TIME PRIOR TO CONSTRUCTION FOR ANY NECESSARY PERMIT REVISIONS. CONTRACTOR SHALL NOTIFY ENGINEER OF WORK OF ANY DISCREPANCY.
3. THE CONTRACTOR SHALL POTHOLE, VIDEO, UTILITY LOCATE OR UNCOVER ALL UTILITIES THAT MAYBE GRADED OVER, CONNECTED TO, JOINED, CROSSED, OR PARALLELED TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY CONFLICT OR DISCREPANCY SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION, OTHERWISE THE CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ANY ADDITIONAL CONSTRUCTION OR RELOCATION COSTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, RELOCATING, MAINTAINING, AND OR REMOVAL OF EXITING UTILITIES WHEN IN CONFLICT WITH PROPOSED IMPROVEMENTS.
5. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINE NOT OF RECORD OR SHOWN ON THESE PLANS. CONTRACTOR SHALL MARK ALL DISCOVERED UTILITIES ON A SET OF PLANS IN RED AND MODIFY IN RED-LINE PLANS ANY CHANGES TO EXISTING UTILITIES SHOWN ON THESE PLANS.
6. WHERE TRENCHES ARE ADJACENT TO FUTURE BUILDING SITES, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF WORK BY A QUALIFIED SOIL ENGINEER WHICH CERTIFY THAT TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH THE ON-SITE EARTHWORK SPECIFICATIONS *AS DEFINED IN AND LIMITED IN SECTION 6735.5 OF THE BUSINESS AND PROFESSIONAL CODE OF CALIFORNIA.
7. CONTRACTOR SHALL ADJUST EXISTING AND PROPOSED WATER VALVE COVERS, CLEANOUT COVERS, AND SEWER MANHOLE COVERS, ETC. TO GRADE WHERE NECESSARY.
8. ANY RETAINING WALLS SHOWN ON THESE PLANS ARE FOR INFORMATION ONLY. A SEPARATE BUILDING PERMIT AND INSPECTION WILL BE REQUIRED FROM THE BUILDING INSPECTION DEPARTMENT FOR THEIR CONSTRUCTION. TOP OF WALLS; TOP OF FOOTINGS AND WALL HEIGHTS SHOWN ON THESE PLANS ARE GENERAL IN NATURE AND SHOULD NOT BE USED IN CONSTRUCTION.
9. THE BOTTOM OF ALL EXCAVATIONS SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER.
10. CONTRACTOR TO REMOVE/REPLACE/RELOCATE ANY LANDSCAPING OR HARDSCAPING WHICH CONFLICTS IN ANY WAY WITH THE INSTALLATION OR PROPER FUNCTIONING OF THE PROPOSED IMPROVEMENTS.
11. THE CONTRACTOR SHALL REPLACE ALL DESTROYED OR DAMAGED SURFACE IMPROVEMENTS EQUAL TO OR SUPERIOR.
12. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR SHALL COORDINATE PLANS WITH ALL OTHER DISCIPLINES AND NOTIFY ENGINEER OF WORK OF ANY DISCREPANCIES.
13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER TO ACQUIRE AND ENFORCE ALL NECESSARY TRAFFIC CONTROL PERMITS NEEDED TO SAFELY CONDUCT WORK IN THE PUBLIC RIGHT OF WAY. CONTRACTOR OR DEVELOPER/OWNER MUST COORDINATE ALL TRAFFIC CONTROL WITH THE AGENCY OF JURISDICTION.
14. CONTRACTOR SHALL EMPLOY INDIVIDUALS WHO ARE FAMILIAR WITH ALL CODES RELATED TO THE VARIOUS AREAS OF WORK AND CONSTRUCT THE INTENT OF THESE PLANS TO MEET ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
15. DURING ACTIVE CONSTRUCTION AREAS SHALL BE WATERED TO REDUCE FUGITIVE DUST.
16. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGE, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
17. CONTRACTOR SHALL CONSTRUCT AREA DRAINS ABOVE FINISHED GRADE ELEVATION AND ARE TO BE ADJUSTED TO MATCH FINISHED GRADES (AS SHOWN ON THESE PLANS) AND PROVIDE POSITIVE DRAINAGE, SHALL ANY DISCREPANCY ARISE, THE CONTRACTOR IS TO NOTIFY THE ENGINEER OF WORK IMMEDIATELY.
18. CONTRACTOR SHALL MAKE ALL NECESSARY ADJUSTMENTS AND UNDERCUTS FOR SOIL AMENDMENTS, SODS ETC. TO ENSURE THAT THE FINISHED GRADES ARE ESTABLISHED AS INDICATED ON THESE PLANS. THE GRADES REFLECTED HEREON SHALL BE DELIVERED AS THE FINAL CONDITION, POST LANDSCAPING.
19. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES, PADS, CURBS, INLETS AND SIDEWALKS ARE BUILT IN ACCORDANCE WITH THESE PLANS AND APPLICABLE CODES AND LAWS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CONTACTING THE ENGINEER. IF STAKING IS PROVIDED, CONTRACTOR SHALL REVIEW STAKES PRIOR TO CONSTRUCTION ITEM, COMPARE STAKES AND CUT SHEETS TO THE PLANS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES.
20. ALL CONCRETE REMOVALS SHALL BE TO THE NEAREST WEAKENED PLANE JOINT, UNLESS OTHERWISE DELINEATED ON PLAN.
21. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD OF MONUMENTS OF ANY SURVEY MONUMENTS DAMAGED DURING CONSTRUCTION MONUMENTS SHALL BE REPLACE AT THE CONTRACTOR'S EXPENSE.
22. CONTRACTOR TO PROTECT ALL EXISTING SIGNS IN PLACE AND REPLACE ANY SIGNS DAMAGED DURING CONSTRUCTION.
23. PROVIDE 36 INCHES MINIMUM COVER (FINISH GRADE TO TOP OF PIPE) OVER FIRE SERVICE. UNLESS OTHERWISE NOTED ON PLANS.

SPECIAL NOTES (CONT.)

24. CONTRACTOR SHALL POTHOLE ALL WET UTILITY CROSSINGS PRIOR TO CONSTRUCTION TO ENSURE EXISTING IMPROVEMENTS ALIGNMENT AND GRADE CONFORMANCE TO PLANS. IF DISCREPANCIES ARE NOTICED, NOTIFY ENGINEER OF WORK PRIOR TO INSTALLATION SO ENGINEER CAN MAKE ADJUSTMENTS TO ALIGNMENT AND/OR GRADE OF PROPOSED IMPROVEMENTS.
25. CONTRACTOR TO RESTRIPE ALL DESTROYED, DAMAGED AND/OR REMOVED PAVEMENT MARKINGS DURING CONSTRUCTION IN KIND, ANY DAMAGED THERMAL STRIPES/LEGENDS SHALL BE REMOVED BY GRINDING AND REPLACED IN WHOLE IN KIND.
26. THE CONTRACTOR SHALL CHECK DRAINAGE PATTERNS BETWEEN EXISTING PAVEMENT AND PROPOSED PAVEMENT, GUTTERS OR CURBS DURING FORMWORK OF PROPOSED IMPROVEMENT. 1% MINIMUM GRADES SHALL BE MAINTAINED IN PROPOSED PAVEMENT SURFACES DRAINING TOWARDS ACCEPTING AREA. FORMS SHALL BE CHECKED AND ADJUSTED PRIOR TO POURING CONCRETE. ENGINEER OF RECORD SHALL BE NOTIFIED TO INSPECT ALL FORMS PRIOR TO POURING CONCRETE. CONTRACTOR SHALL ADJUST FORMS PER ENGINEERING OF RECORD'S DIRECTION.
27. CONTOURS SHALL BE USED AS GRADE BREAKS.

STRIPING AND SIGNING GENERAL NOTES

1. THE CONTRACTOR SHALL STRIPE AND REPLACE ALL EXISTING STRIPING AND PAVEMENT MARKERS AS SHOWN ON THE PLANS.
2. NEW STRIPING SHALL BE APPLIED IN 2 COATS. EXISTING STRIPING TO REMAIN MAY BE PAINTED OVER WITH ONE COAT.
3. THE CONTRACTOR SHALL REMOVE BY MECHANICAL MEANS ALL CONFLICTING STRIPING, MARKERS AND PAVEMENT LEGENDS WITHIN THE AREA OF THE NEW STRIPING.
4. ALL DEBRIS TO BE REMOVED AT THE END OF EACH WORK DAY.
5. STRIPING AND PAVEMENT MARKINGS SHALL CONFORM TO SECTIONS 84 AND 85 OF THE CALTRANS STANDARD SPECIFICATIONS. ALIGNMENT AND LAYOUT IS SUBJECT O CITY OF SOLANA BEACH ENGINEERING DEPARTMENT APPROVAL.
6. PAINT FOR TRAFFIC STRIPS SHALL BE RAPID DRY WATERBORNE, WHITE AND YELLOW 8010--42L-30 OR 8010--61G-10. GLASS BEADS SHALL CONFORM TO STANDARD SPECIFICATIONS NUMBER 8010-51J-22 (TYPE 1 - MOISTURE PROOF).
7. THINNING OF PAINT WILL NOT BE ALLOWED.
8. THERMOPLASTIC SHALL BE USED FOR PAVEMENT LEGENDS AND CROSSWALKS.
9. INSTALL REFLECTIVE PAVEMENT MARKERS WHERE MISSING IN EXISTING PAVING.
10. ARROWS PER CALTRANS TYPE 1 (10'), TYPE I & TYPE VII.
11. SIGNING SHALL CONFORM TO THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CALIFORNIA MUTCD, 2012 EDITION), CALTRANS STANDARD PLANS AND SPECIFICATIONS, AND THESE PLANS.
12. THE CONTRACTOR SHALL RESTORE OR REPLACE ALL EXISTING IMPROVEMENTS DISTURBED DURING CONSTRUCTION INCLUDING, BUT NOT LIMITED TO STREET STRIPING, RAISED PAVEMENT MARKERS, LANDSCAPING, AND SIGNS.
13. SIGN STRUCTURES AND ROADSIDE SIGNS SHALL BE AS SPECIFIED IN SECTION 56 OF THE STATE STANDARD SPECIFICATIONS EXCEPT AS HEREIN MODIFIED.
14. STREET NAME SIGNS SHALL BE PER CA MUTCD SPECIFICATIONS.
15. ALL SIGNS SHALL BE REFLECTIVE PER CA MUTCD SPECIFICATIONS.
16. ALL REGULATORY AND WARNING SIGNS SHALL BE CONSTRUCTED TO THE STANDARD SIZE AND SPECIFICATIONS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION.
17. SIGNS SHALL BE INSTALLED AS PER THESE SPECIFICATIONS AND FACING TRAFFIC IN THE LANE ADJACENT TO WHICH THE SIGN IS INSTALLED. ALL OTHER SIGNS SHALL BE INSTALLED AT AN ANGLE TOWARD THE TRAVELED WAY PER THE SIGN MANUFACTURER'S REFLECTIVE REQUIREMENTS.
18. SIGNS IN THE MEDIAN AREA SHALL BE PLACED MIDWAY BETWEEN CURBS. THESE SIGNS SHALL BE MOUNTED NO CLOSER THAN 12 INCHES FROM THE EDGE OF PAVEMENT, AND NO FURTHER THAN 6 FEET FROM, THE EDGE OF THE TRAVELED WAY WHICH THE SIGN FACES.
19. THE MINIMUM MOUNTING HEIGHT FOR ALL SIGNS LOCATED WITHIN A PEDESTRIAN PATH OF TRAVEL SHALL BE SEVEN FEET MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVEMENT ,
20. THE MOUNTING HEIGHT OF ROUNDABOUT DIRECTIONAL ARROWS INSTALLED IN THE CENTER ISLAND SHALL BE 4 FEET, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE ELEVATION OF THE NEAR EDGE OF THE TRAVELED WAY.
21. SIGNS SHALL BE INSTALLED ON STREET LIGHT POLES WHERE APPLICABLE AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL NOTES

TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR FOR HIS WORK. TRAFFIC CONTROL SHALL CONFORM TO THE CALTRANS TRAFFIC MANUAL, TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE, AND THE REGIONAL STANDARD DRAWINGS. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN AND RECEIVE CITY APPROVAL FOR TRAFFIC CONTROL THAT DIFFERS FROM THOSE PLANS INCLUDED IN THE REGIONAL STANDARD DRAWINGS.

EXISTING UTILITY NOTE

THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK. EXISTING UTILITY INFORMATION SHOWN ON THESE PLANS IS BASED ON AVAILABLE AS-BUILT RECORD INFORMATION WHICH MAY OR MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL NOTIFY "UNDERGROUND SERVICE ALERT" AT 1-800-227-2600.

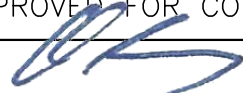
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PLAN CODE

GN-1

By: _____ Date: _____

R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL	5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBAKERINTL.COM	PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA No. C90577 EXPIRATION DATE 12/31/2025	ENGINEER OF WORK		CITY APPROVED CHANGES	APP'D	DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH	ENGINEERING DEPARTMENT	DRAWING NO.
			 GEOFFREY H. RETEMEYER RCE 90577					By: _____ Date: _____	By:  Date: 05/01/2025	DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.	IMPROVEMENT PLANS FOR:	GENERAL NOTES	CG-3185
			12/2/2024				R.C.E.: _____ Exp: _____	Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25			LOMAS SANTA FE CORRIDOR		Sheet 2 of 54
			DATE										

STORM DRAIN MARKERS

1. ALL NEW OR REPLACED STORM DRAIN INLETS SHALL HAVE A TILE PERMANENTLY AFFIXED ON THE CURB FACE OF EACH SIDE OF THE INLET OPENING WITH THE FOLLOWING MESSAGE ON IT: "NO DUMPING, THIS DRAINS TO OCEAN," INCLUDING A FISH STENCIL.
2. THE SIZE, COLOR AND DESIGN SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER. THE TILE MARKER SHALL CONSIST OF A HEAT-FIRED, VITREOUS, CERAMIC BASE AND A HEAT-FIRED, OPAQUE, GLAZED SURFACE. THE BOTTOMS OF THE TILE MARKER SHALL BE FREE FROM GLOSS OR GLAZE AND SHALL HAVE A NUMBER OF INTEGRALLY FORMED PROTRUSIONS PROJECTING FROM THE SURFACE IN A UNIFORM PATTERN.
3. THE TILE MARKER SHALL BE APPLIED WITH AN EPOXY ADHESIVE TO MEET SERVICE REQUIREMENTS FOR HIGHWAY CONSTRUCTION. THE PORTION OF CURB FACE SURFACE TO WHICH THE TILE MARKER IS TO BE BONDED BY THE ADHESIVE SHALL BE FREE OF DIRT, CURING COMPOUND, GREASE, OIL, MOISTURE, LOOSE OR UNSOUND LAYERS, PAINT AND OTHER MATERIAL WHICH WOULD ADVERSELY AFFECT THE BOND OF THE ADHESIVE.

PAVING NOTES

1. FINAL STREET STRUCTURAL SECTION SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF BASE MATERIAL. THE DESIGN SHALL BE BASED ON THE "R" VALUE METHOD AND SHALL INCLUDE ALL SUPPORTING CALCULATIONS AND TEST RESULTS. THE TRAFFIC INDEX (T.I.) AND MINIMUM STRUCTURAL SECTIONS SHALL BE USED IN ACCORDANCE WITH THE CITY OF SOLANA BEACH ENGINEERING CONSTRUCTION STANDARDS STREET STRUCTURAL SECTION DESIGN TABLE.
2. A COMPACTION REPORT FROM A REGISTERED CIVIL ENGINEER CERTIFYING ALL ROADWAY AND UTILITY TRENCHING HAS BEEN COMPACTED TO THE MINIMUM REQUIREMENTS SPECIFIED IN THE STANDARDS SPECIFICATION FOR PUBLIC WORK CONSTRUCTION AND THE RECOMMENDATIONS OF THE SOIL ENGINEERING CONTAINED IN THE PROJECT'S SOILS REPORT.

UTILITY COORDINATION

THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS, HOWEVER, THE CONTRACTOR IS REQUIRED TO 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 FOLLOWING OWNERS OF SAID UTILITIES OR STRUCTURES PRIOR TO ANY EXCAVATION, FOR VERIFICATION AND LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK:

- | | |
|----------------------------------|-----------------------|
| A. SEWERS - CSD/ESD | (760) 633-2770 |
| B. GAS & ELECTRIC - SDGE | (760) 438-6200 |
| C. WATER - SFID | (858) 761-4141 |
| D. TELEPHONE - SBC BELL | (760) 489-3411 |
| E. CABLE TV - COX COMMUNICATIONS | (760) 806-9809 X-2233 |
| F. AT&T TELEPHONE COMPANY | (858) 886-2863 |

TRAFFIC SIGNAL GENERAL NOTES

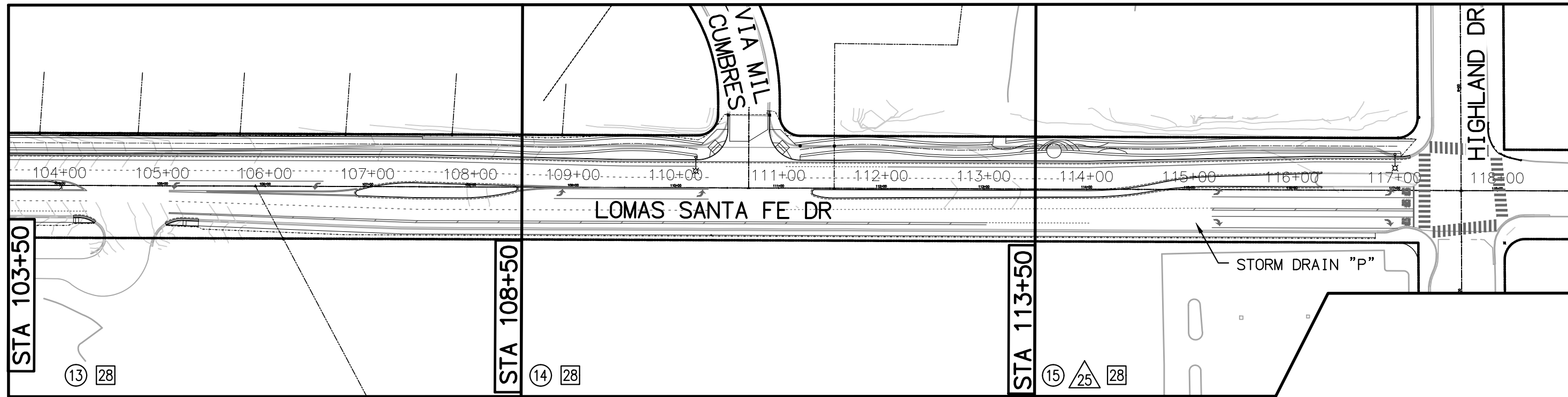
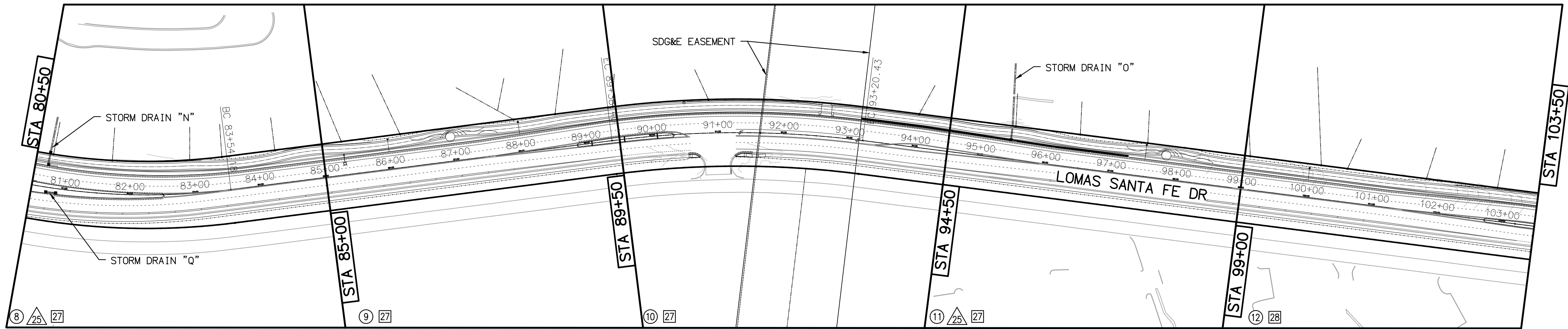
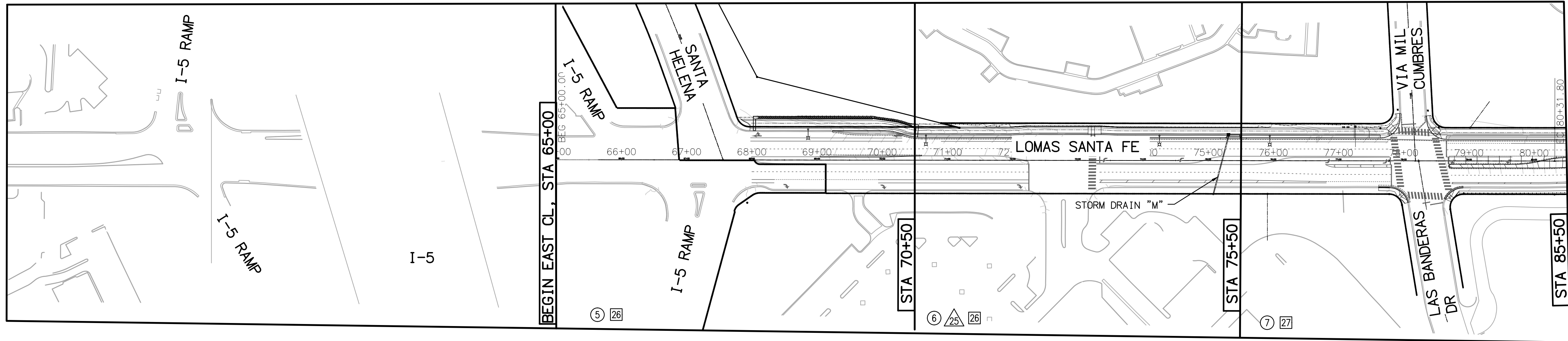
1. DETECTOR, POLE, AND PULL BOX LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. CONTRACTORS SHALL OBTAIN APPROVAL FOR LOCATIONS PRIOR TO FINAL PLACEMENT.
2. THE SHOWN LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL SUBSTRUCTURES, WHETHER SHOWN HERE IN OR NOT AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT OF SAID SUBSTRUCTURES SHALL BE BORNE BY THE CONTRACTOR. HAND DIG FOUNDATIONS UNTIL CLEAR OF SUBSTRUCTURES. IF REQUIRED TO PROTECT UTILITIES, PHONE "UNDERGROUND SERVICE ALERT" AT (800) 422-4133.
3. ALL NEW LOOP DETECTORS SHALL BE TYPE E LOOPS AND CENTERED IN LANE UNLESS SHOWN OTHERWISE. INSTALL TYPE F LOOP DETECTORS ON ALL FRONT LOOPS AS SHOWN ON THIS PLAN. SEE SAWCUT AND WINDING DETAIL THIS SHEET.
4. ALL TRAFFIC SIGNAL, HIGHWAY LIGHTING, SIGNING AND STRIPING SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLANS AND SPECIFICATIONS, 2018 EDITION.
5. ALL ABBREVIATIONS AND SYMBOLS USED ARE SHOWN ON CALTRANS STANDARD PLAN AS DEFINED ON PLAN.
6. ALL LOCATIONS OF DETECTOR LOOP, SIGNAL POLE AND CABINET REQUIRE ENGINEER'S APPROVAL PRIOR TO SAW CUTTING OR EXCAVATION.
7. CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS AND CABLES REQUIRED FOR THE INTENDED OPERATION.
8. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT REQUIRED FOR THE INTENDED OPERATION.
9. IT IS REQUIRED TO MAINTAIN SIGNAL OPERATION INCLUDING SIGNAL INTERCONNECT DURING MODIFICATION OF EXISTING TRAFFIC SIGNAL SYSTEM.
10. ALL CONSTRUCTION OPERATIONS SHALL BE LIMITED TO THE PERIOD BETWEEN 9:00AM AND 3:00PM, MONDAY THROUGH FRIDAY, UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER.
11. CONTRACTOR SHALL MAINTAIN TRAFFIC THROUGH THE CONSTRUCTION AREA AND PROVIDE ALL NECESSARY CONSTRUCTION WARNING SIGNS AND MARKINGS REQUIRED. CONTRACTOR IS TO SUBMIT A TRAFFIC CONTROL PLAN BEFORE ANY WORK IS STARTED.

SANTA FE IRRIGATION DISTRICT (SFID) WATER NOTES

1. UNLESS EXPLICITLY CALLED OUT DIFFERENTLY ON THE APPROVED PLANS AND SPECIFICATIONS, ALL POTABLE WATER CONSTRUCTION AND RECYCLED WATER CONSTRUCTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SAN DIEGO WATER AGENCIES' STANDARDS (WAS). CURRENT WAS REQUIREMENTS CAN BE FOUND AT WWW.SDWAS.ORG.
2. ALL EXISTING WATER INFRASTRUCTURE IS TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON THE PLANS OR IN WRITTEN APPROVAL FROM SANTA FE IRRIGATION DISTRICT.
3. THE SANTA FE IRRIGATION DISTRICT AND/OR ITS DESIGNATED REPRESENTATIVE SHALL BE RESPONSIBLE FOR INSPECTION. WHERE USED IN THESE DRAWINGS, THE TERM INSPECTOR SHALL BE KNOWN TO REFER TO THE SANTA FE IRRIGATION DISTRICT'S INSPECTOR.
4. THE CONTRACTOR SHALL NOTIFY SFID 24 HOURS IN ADVANCE FOR INSPECTION.
5. ALL TESTING AND CERTIFICATIONS REQUIRED FOR THIS PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ALL TESTING. THIS INCLUDES COMPACTION TESTING, DISINFECTION TESTING, CONCRETE TESTING, AND/OR ANY OTHER TESTING REQUIREMENTS ASSOCIATED WITH THIS PROJECT. TESTING SHALL BE COMPLETED IN ACCORDANCE WITH WAS OR OTHER APPLICABLE STANDARDS. ALL TESTING AND PROVISION OF TESTING RESULTS SHALL BE COORDINATED CLOSELY WITH THE INSPECTOR. THE INSPECTOR SHALL BE RESPONSIBLE FOR REVIEWING AND APPROVING ALL TEST RESULTS.
6. DISINFECTION OF WATER MAINS SHALL BE ACCORDANCE WITH WAS.
7. ANY AND ALL REQUIRED PERMITS SHALL BE PROCURED, PAID FOR, AND ADHERED BY THE CONTRACTOR. THIS INCLUDES TRAFFIC CONTROL, EXCAVATION, AND ALL OTHER PERMITS ASSOCIATED WITH THIS PROJECT.
8. FOR WORK OVER EXISTING FACILITIES, HEAVY EQUIPMENT (ABOVE H20 LOADING) SHALL NOT BE USED WHEN COVER OVER THE WATER MAIN IS LESS THAN 36 INCHES THROUGH ALL PHASES OF CONSTRUCTION, INCLUDING THE REMOVAL, OVER EXCAVATION, AND/OR INSTALLATION OF PAVEMENT SECTIONS, WITHOUT THE WRITTEN APPROVAL OF SFID.
9. THE CONTRACTOR SHALL POTHOLE ALL TIE-IN AND POTENTIAL CONFLICT LOCATIONS BEFORE WORK COMMENCES. ANY DISCREPANCIES WITH THE APPROVED PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE INSPECTOR PRIOR TO PROCEEDING. APPROVAL OF THIS PLAN BY THE CITY OR SFID DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF, OR THE EXISTENCE OR NON-EXISTENCE OF , ANY UNDERGROUND UTILITY, PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT.
10. BEFORE EXCAVATION, VERIFY LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL DIG ALERT: 811. CALL A MINIMUM OF TWO WORK DAYS PRIOR TO EXCAVATION.
11. CONTRACTOR TO PROVIDE CONSTRUCTION STAKING AND THREE (3) SETS OR CUTSHEETS TO THE INSPECTOR 24 HOURS PRIOR TO EXCAVATING.
12. NO PERSONS, OTHER THAN AN EMPLOYEE OF SFID, SHALL HAVE A RIGHT TO OPERATE ANY PART OF SFID'S DISTRIBUTION SYSTEM. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES, BUT SHALL REQUEST THAT THE INSPECTOR CONTACT SFID TO SCHEDULE VALVE OPERATION. ONCE THE NEW IMPROVEMENT IS CONNECTED TO THE EXISTING, ALL VALVES ON THE NEW SYSTEM SHALL ONLY BE OPERATED BY SFID.
13. ALL TRENCHES SHALL BE PLATED FOLLOWING THE COMPLETION OF EACH DAY'S WORK.
14. ALL VALVES INSTALLED SHALL BE HOLIDAY-FREE GATE VALVES, IN ACCORDANCE WITH WAS WV-01, UNLESS OTHERWISE NOTED ON THE PLANS. CONTRACTOR SHALL PAINT ALL VALVE CAN LIDS PER SFID'S COLOR CODE.
15. VALVES SHALL HAVE A MINIMUM OF 1.5' OF COVER FROM THE TOP OF NUT/OPERATOR TO GROUND SURFACE. IF LESS THAN THIS EXISTS, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.
16. THE CONTRACTOR SHALL FURNISH ALL NEW WATER METER, BOXES PER SFID REQUIREMENTS. WATER METERS TO BE FURNISHED AND INSTALLED BY SFID.
17. SOILS REPORT ON ALL BACKFILL SHALL BE SUBMITTED TO THE ENGINEER OF WORK AND SFID BY THE SOILS ENGINEER OF RECORD, CERTIFYING BACKFILL COMPACTION PER THE SOILS ENGINEER IN ACCORDANCE WITH EARTHWORK SPECIFICATIONS.
18. NO CONNECTIONS FOR THE PURPOSE OF OBTAINING WATER SUPPLY DURING CONSTRUCTION SHALL BE MADE TO ANY FIRE HYDRANT OR OTHER APPURTENANCE WITHOUT FIRST OBTAINING WRITTEN AUTHORIZATION FROM SFID. THE CONTRACTOR SHALL OBTAIN A TEMPORARY CONSTRUCTION METER FOR THE PURCHASE OF CONSTRUCTION WATER.
19. DEVIATIONS FROM THE APPROVED PLANS SHALL NOT BE ALLOWED WITHOUT WRITTEN APPROVAL BY THE CITY'S ENGINEER AND SFID. THE CONTRACTOR SHALL MAINTAIN REDLINE DRAWINGS SHOWING ANY CONSTRUCTION CHANGES. AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL FURNISH REDLINES TO THE INSPECTOR FOR INCORPORATION INTO AS-BUILT DRAWINGS.
20. EMPLOYEES OF SFID TO RELOCATE ALL POTABLE WATER AND RECYCLED WATER METERS.
21. CONTRACTOR TO NOTIFY SFID TO BE PRESENT DURING INSTALLATION OF TRAFFIC SIGNAL LOOPS OVER POTABLE WATER LINES.
22. CONTRACTOR TO MAINTAIN MINIMUM 5' HORIZONTAL CLEARANCE BETWEEN PUBLIC WATER FACILITIES AND PROPOSED LANDSCAPING. CONTRACTOR TO CONTACT SFID FOR ANY DISCREPANCIES.

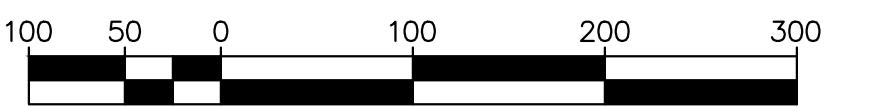
PLAN CODE	AS-BUILT
	By: _____ Date: _____
GN-2	R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL	5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBAKERINTL.COM	PROFESSIONAL ENGINEER No. 090577 EXPIRATION DATE 12/31/25 STATE OF CALIFORNIA 12/2/2024	ENGINEER OF WORK 12/2/2024 GEOFFREY H. RETEMEYER RCE 90577	CITY APPROVED CHANGES	APP'D	DATE	RECOMMENDED FOR APPROVAL By: _____ Date: _____ R.C.E.: _____ Exp: _____	APPROVED FOR CONSTRUCTION 05/01/2025 Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	BENCH MARK DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.	CITY OF SOLANA BEACH ENGINEERING DEPARTMENT GENERAL NOTES IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	DRAWING NO. CG-3185 Sheet 3 of 54



KEY MAP LEGEND

- (X) IMPROVEMENT PLAN SHEET NUMBER
- (A) STORM DRAIN PLAN SHEET NUMBER
- (X) SIGNING AND STRIPING PLAN SHEET NUMBER



SCALE: 1"=100'

AS-BUILT

PLAN CODE

KM-1

By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker

INTERNATIONAL

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Suite 260
Carlsbad, CA 92008
Phone: (760) 476-9193
MBAKERINTL.COM



ENGINEER OF WORK

GRH
GEOFFREY H. RETEMEYER RCE 90577

12/2/2024
DATE

CITY APPROVED CHANGES

APP'D DATE

RECOMMENDED FOR APPROVAL

By: _____ Date: _____

R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION

By: *DS* Date: 05/01/2025

Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK

DESCRIPTION:

LOCATION:

ELEV.: _____

DATUM: M.S.L.

CITY OF SOLANA BEACH

ENGINEERING DEPARTMENT

DRAWING NO.

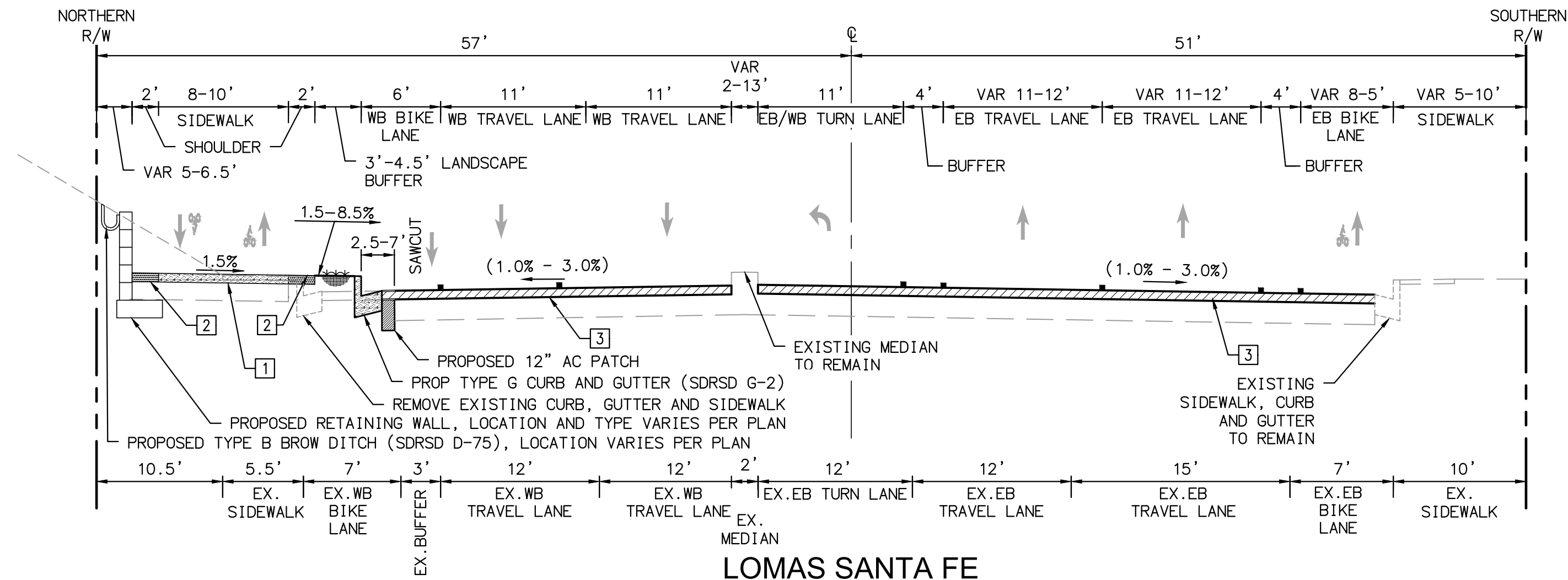
IMPROVEMENT PLANS FOR:

KEY MAP

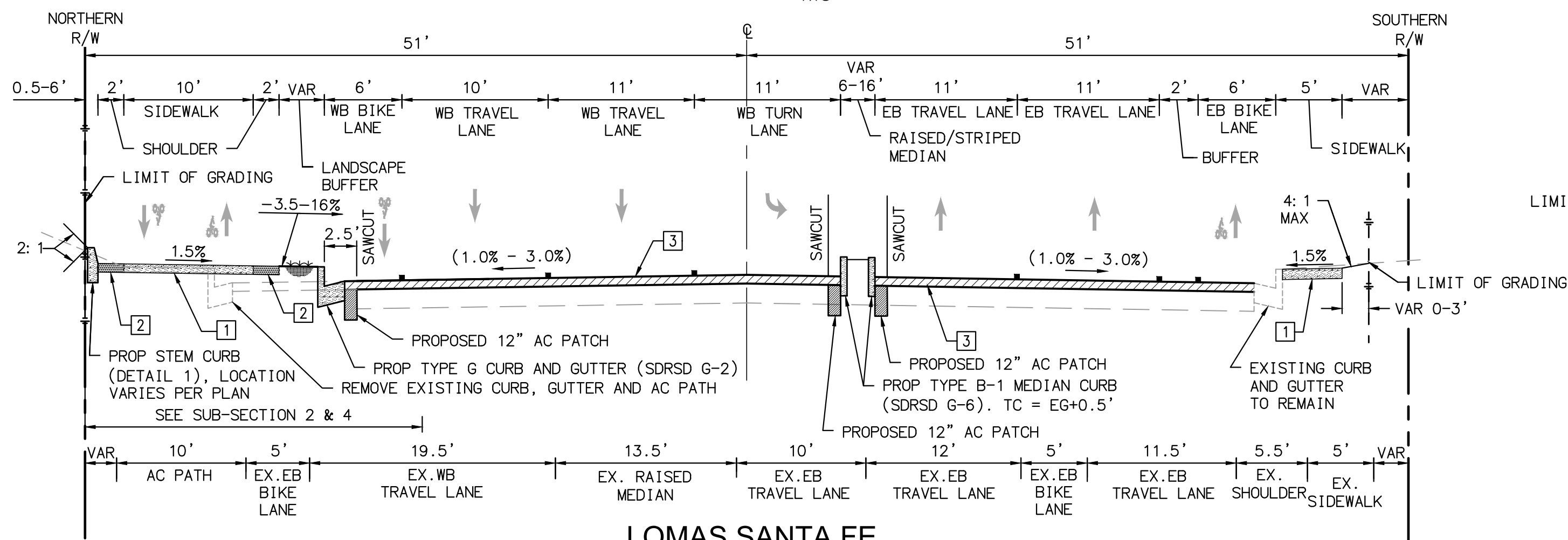
LOMAS SANTA FE CORRIDOR

CG-3185

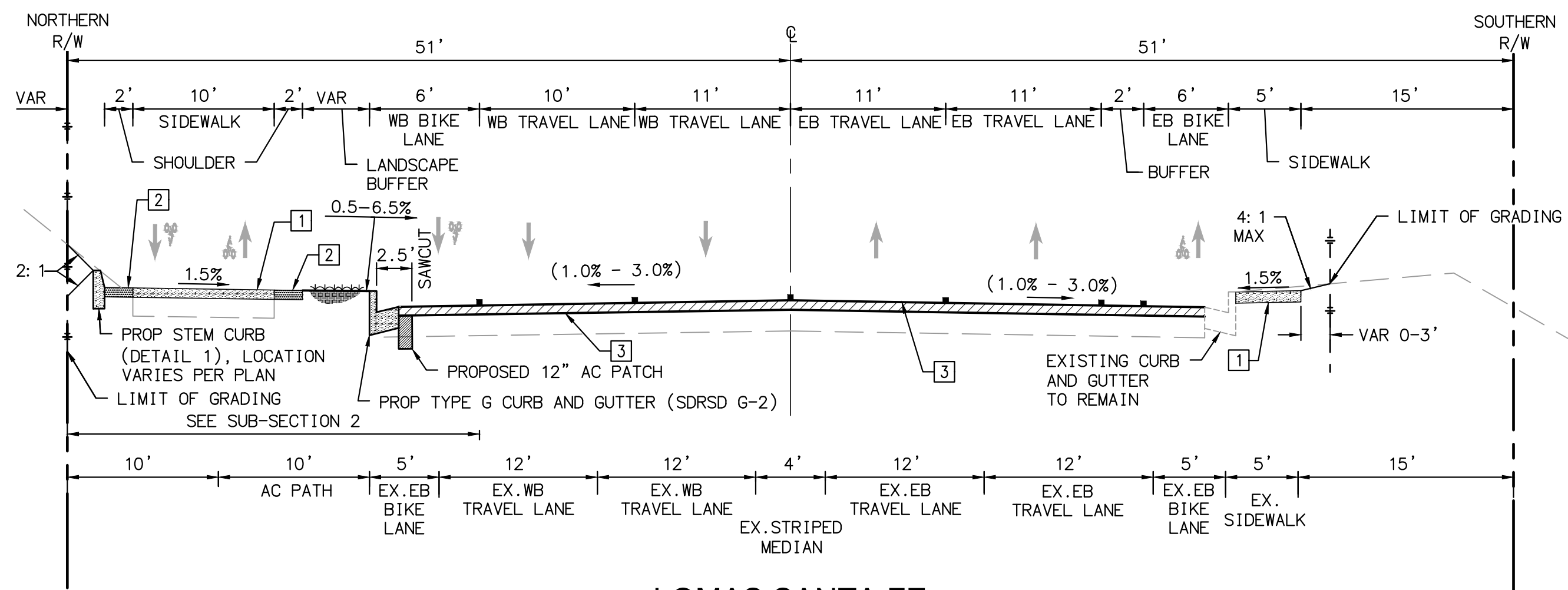
Sheet 4 of 54



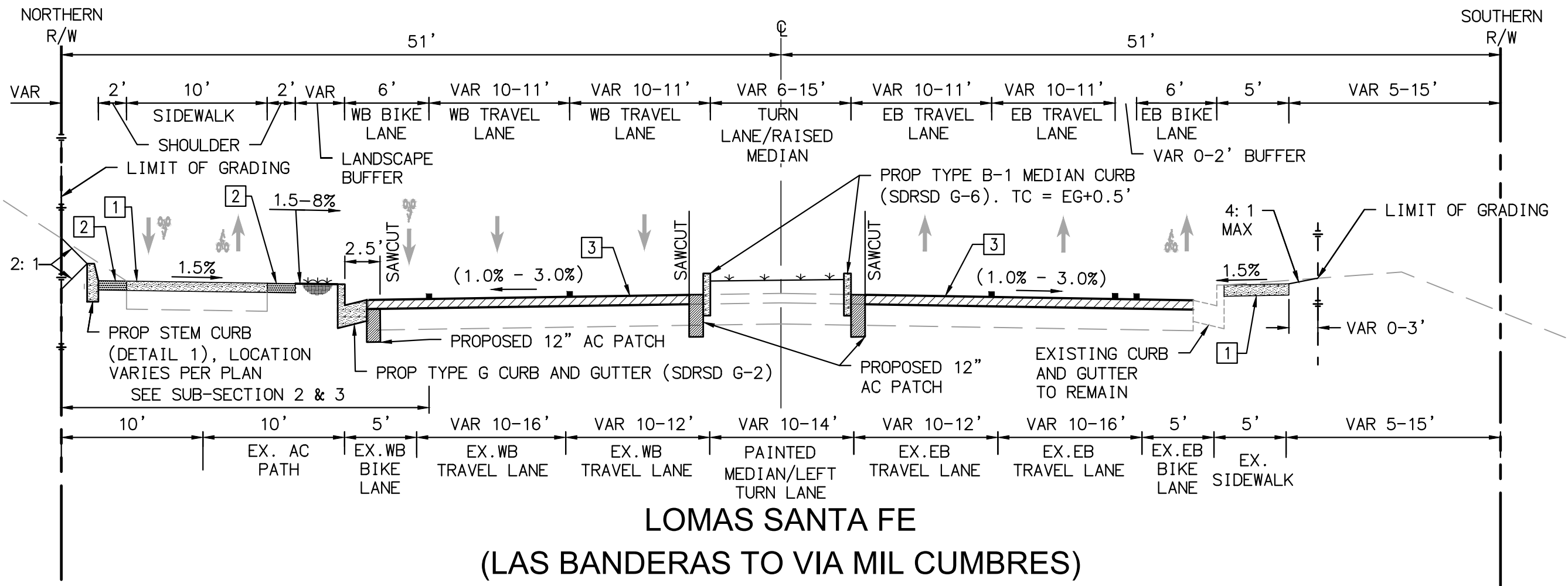
LOMAS SANTA FE
(SANTA HELENA TO LAS BANDERAS)
STA 67+98.97 TO 77+23.83



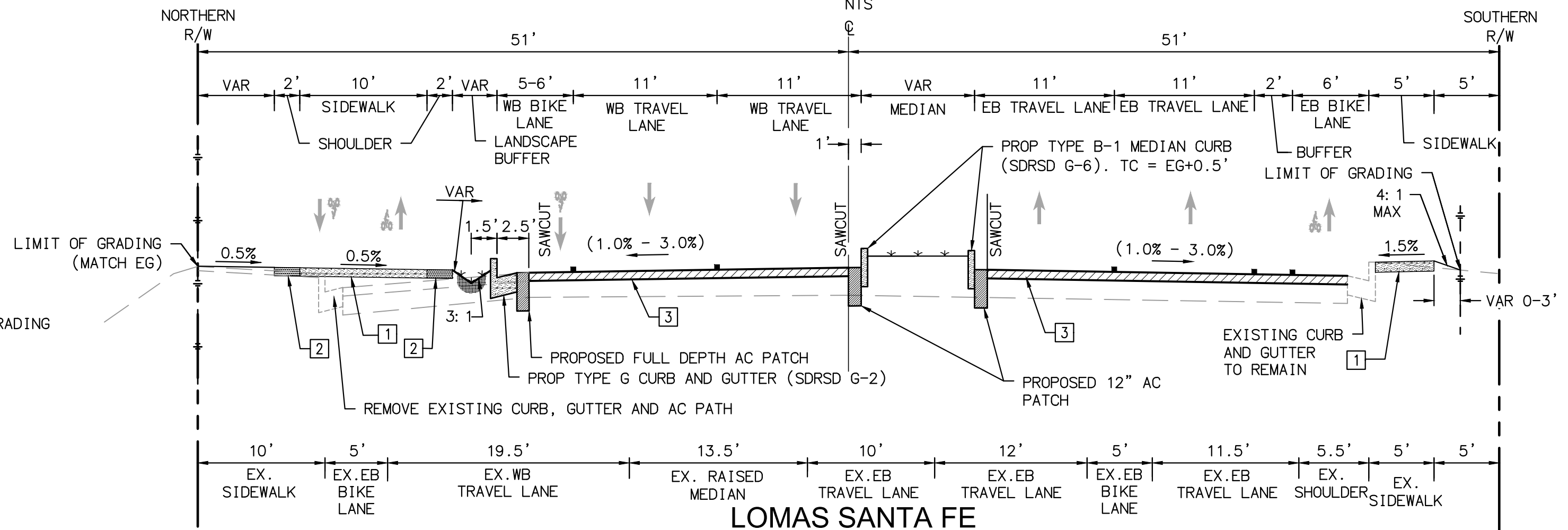
LOMAS SANTA FE
(LAS BANDERAS TO VIA MIL CUMBRES)
STA 77+23.83 TO 83+50



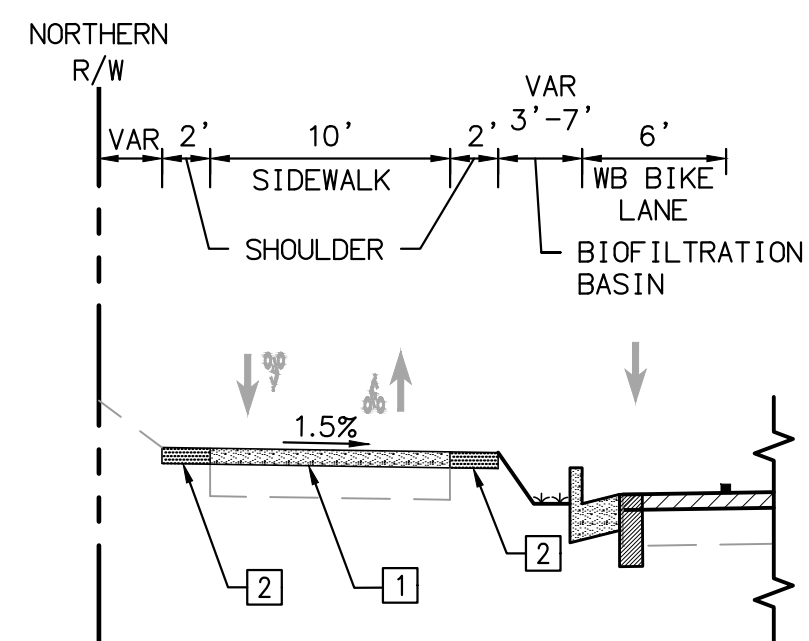
LOMAS SANTA FE
(LAS BANDERAS TO VIA MIL CUMBRES)
STA 83+50 TO 87+38.32
STA 96+10.51 TO 101+26.17



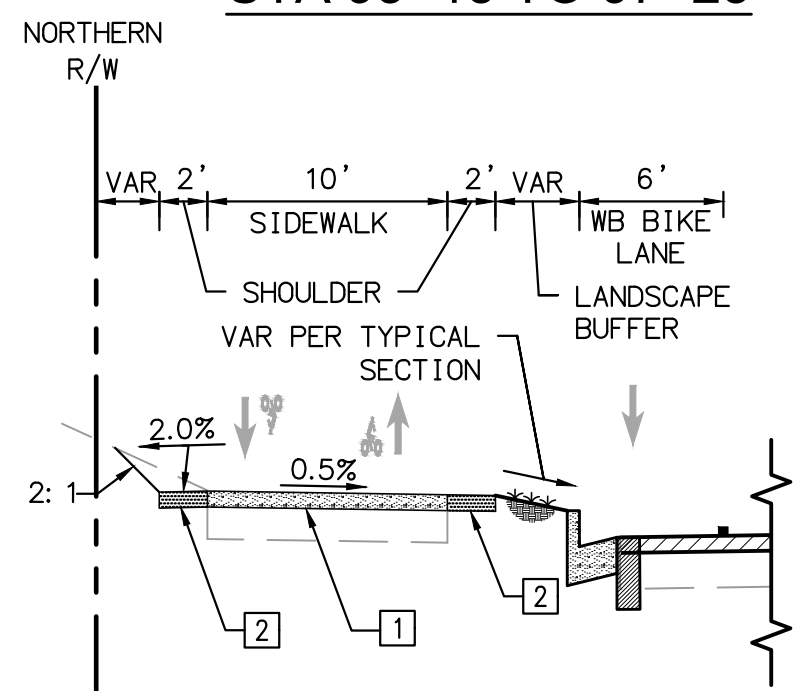
LOMAS SANTA FE
(LAS BANDERAS TO VIA MIL CUMBRES)
STA 87+38.32 TO 96+10.51
STA 101+26.17 TO 110+70.80



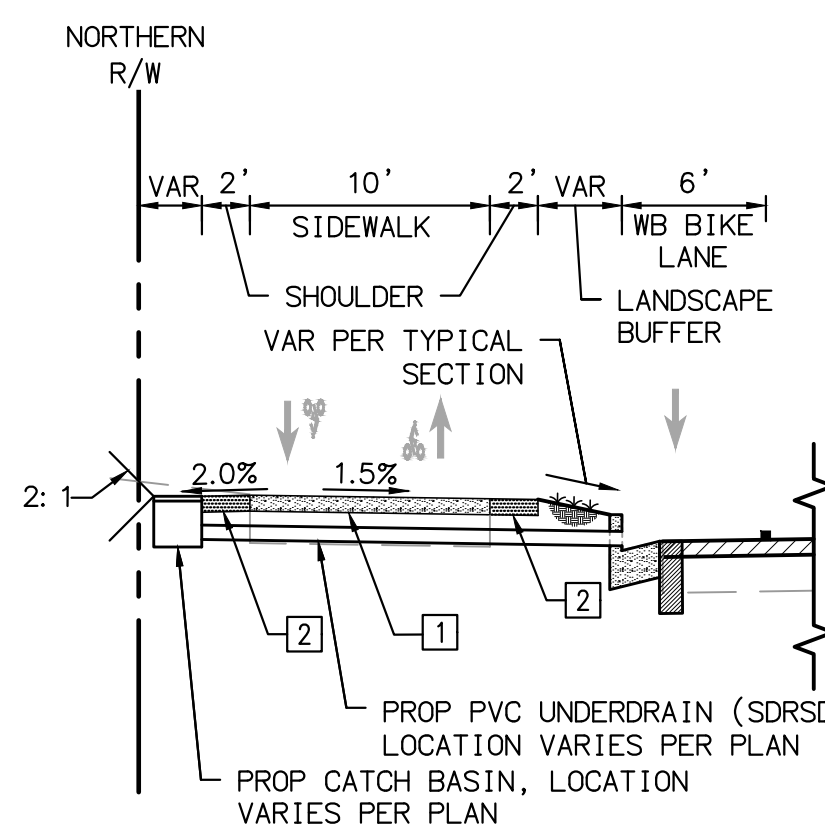
LOMAS SANTA FE
(VIA MIL CUMBRES TO HIGHLAND)
STA 110+70.80 TO 117+14.70



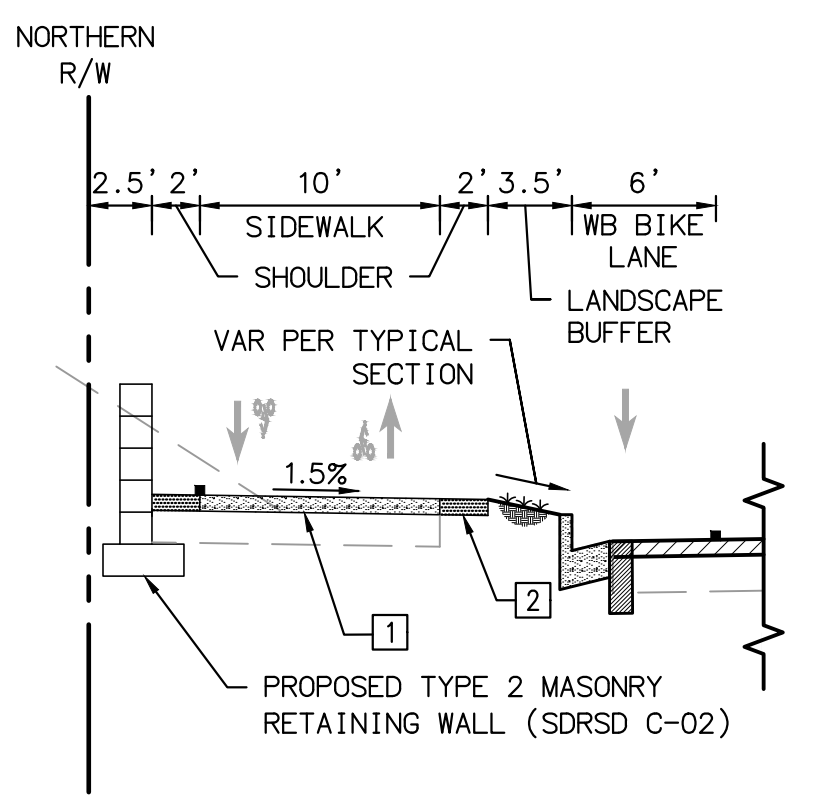
LOMAS SANTA FE: SUB SECTION 1
STA 93+15 TO 97+25



LOMAS SANTA FE: SUB SECTION 4
STA 77+23.83 TO 80+32.34



LOMAS SANTA FE: SUB SECTION 2
STA 83+12.77 TO 84+40.34
STA 85+75.00 TO 90+55.50
STA 95+82.31 TO 102+22.00
STA 107+53.00 TO 110+70.80



LOMAS SANTA FE: SUB SECTION 3
STA 104+00 TO 105+52 (TYPE 2 WALL)

STRUCTURAL SECTIONS	
1	4" PORTLAND CEMENT CONCRETE 12" NATIVE SUBGRADE REMOVE AND RECOMPACT TO 95%
2	4" STABILIZED DECOMPOSED GRANITE
3	2" GRIND AND OVERLAY

AS-BUILT
By: _____ Date: _____
R.C.E.: _____ Exp: _____

PLAN CODE
TYP-1

Michael Baker
INTERNATIONAL

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Carlsbad, CA 92008
Phone: (760) 476-9193
MBakerINTL.COM



ENGINEER OF WORK
Geoffrey H. Retemeyer RCE 90577
12/2/2024 DATE

CITY APPROVED CHANGES
APP'D DATE

RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION
By: _____ Date: 05/01/2025
Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION: _____
ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH
IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

ENGINEERING DEPARTMENT
TYPICAL CROSS SECTIONS
CG-3185

DRAWING NO.
CG-3185
Sheet 5 of 54

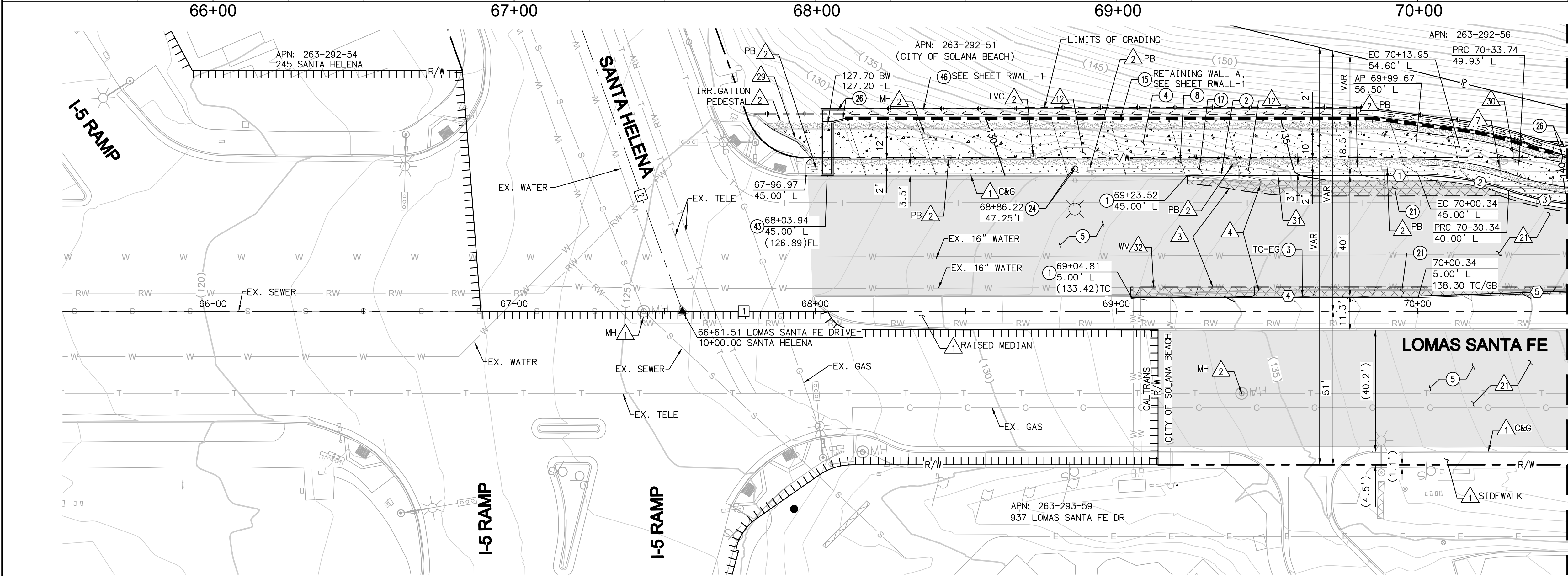


DEMOLITION NOTES

- PROTECT IN PLACE
- ADJUST TO FINISH GRADE
- SAWCUT EXISTING PAVEMENT
- REMOVE EXISTING CURB AND GUTTER
- RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
- REMOVE EXISTING SIDEWALK
- GRIND EXISTING AC PAVEMENT 2"
- REMOVE EXISTING RETAINING CURB
- PRIVATE RW IRRIGATION EQUIPMENT TO BE REMOVED OR RELOCATED TO PRIVATE PROPERTY BY OWNER.
- REMOVE EXISTING ABANDONED PULLBOX.
- CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.

CONSTRUCTION NOTES

- MATCH EXISTING IMPROVEMENTS AND ELEVATIONS.
- CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
- CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- OVERLAY AC PAVEMENT 2"
- CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- CONSTRUCT RETAINING WALL. SEE SHEET RWALL-1 TO RWALL-4 FOR PLAN AND PROFILE.
- LANDSCAPE AREA PER LANDSCAPING PLANS.
- CONSTRUCT 12" FULL DEPTH AC PAVEMENT
- RELOCATE EXISTING STREET LIGHT PER SDRSD E-01 AND E-02. SPLICE NEW TO EXISTING CONDUCTORS.
- CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.
- CONSTRUCT CURB OUTLET PER SDRSD D-25A WITH OPEN CHANNEL CONNECTION.
- CONSTRUCT TYPE B BROW DITCH AT BACK OF RETAINING WALL PER SDRSD D-75.



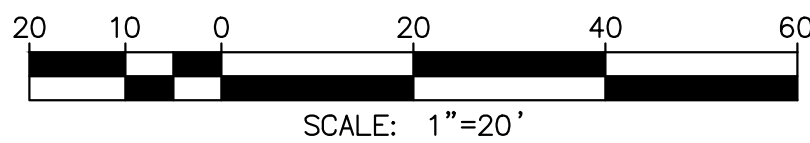
CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N84°43'48"W	--	76.81'	6" CURB & GUTTER
2	18°55'12"	92.50'	30.55'	6" CURB & GUTTER
3	18°55'12"	92.50'	20.05'	6" CURB & GUTTER
4	N84°43'48"W	--	95.53'	MEDIAN CURB
5	N86°38'24"W	--	49.58'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N84°43'48"W	--	500.00'	LOMAS SANTA FE DR
2	N14°21'15"W	--	92.85'	SANTA HELENA

PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 12" FULL DEPTH AC PAVEMENT
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



LOMAS SANTA FE-PLAN

SCALE: 1"=20'

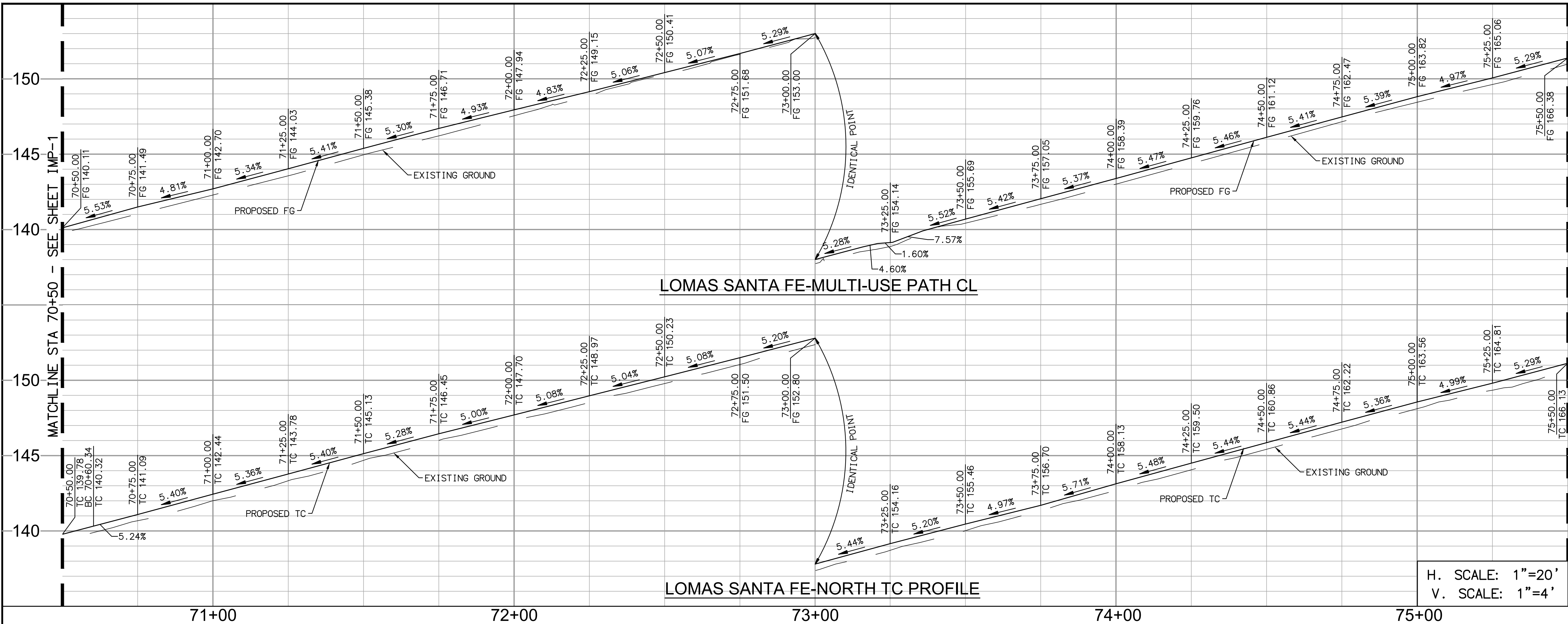
PLAN CODE

IMP-1

AS-BUILT

By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBAKERINTL.COM		ENGINEER OF WORK	CITY APPROVED CHANGES	APP'D DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH	ENGINEERING DEPARTMENT	DRAWING NO.
		 GEOFFREY H. RETEMEYER RCE 90577 12/2/2024 DATE			By: _____ Date: _____ R.C.E.: _____ Exp: _____	By: Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.	IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	IMPROVEMENT PLAN & PROFILE	CG-3185 Sheet 6 of 54



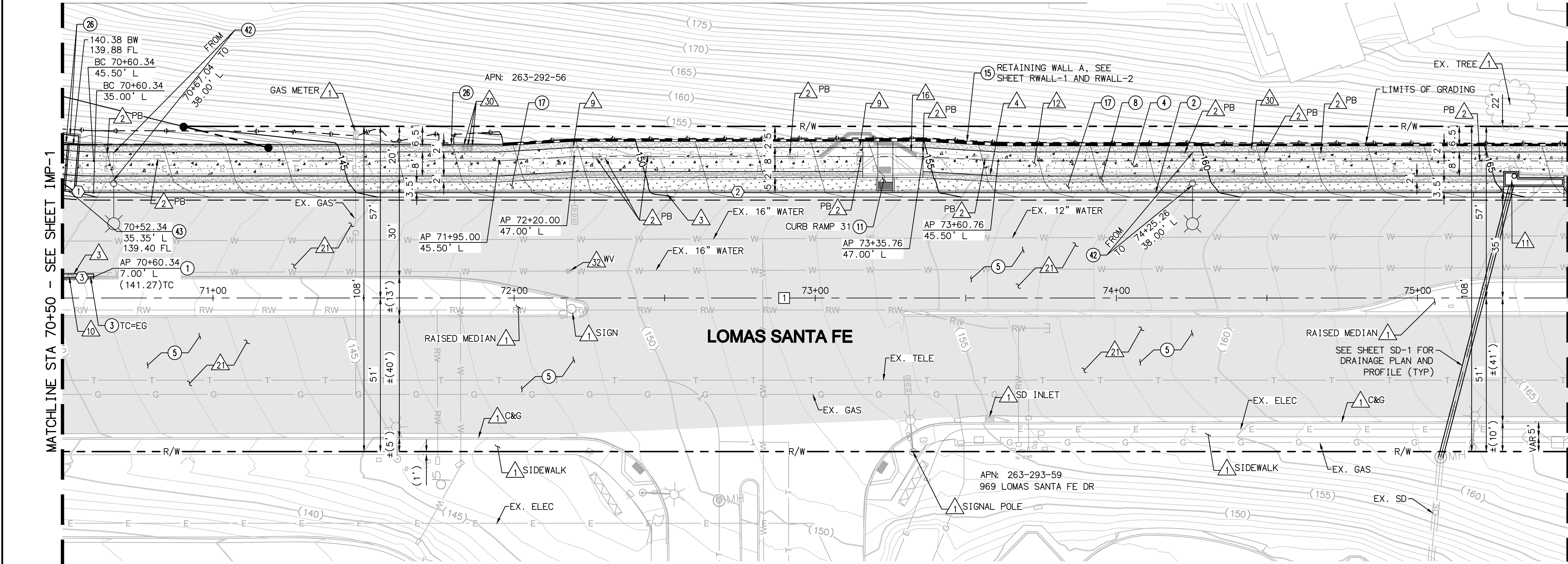
DEMOLITION NOTES

- PROTECT IN PLACE
- ADJUST TO FINISH GRADE
- SAWCUT EXISTING PAVEMENT
- REMOVE EXISTING CURB AND GUTTER
- REMOVE/RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT PER TRAFFIC SIGNAL MODIFICATIONS PLANS
- REMOVE EXISTING MEDIAN CURB
- REMOVE EXISTING CURB INLET. SEE DRAINAGE PLANS FOR NEW LOCATION.
- REMOVE EXISTING SIDEWALK
- REMOVE EXISTING RETAINING WALL
- GRIND EXISTING AC PAVEMENT 2"
- CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.

CONSTRUCTION NOTES

- MATCH EXISTING IMPROVEMENTS AND ELEVATIONS.
- CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
- CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- OVERLAY AC PAVEMENT 2"
- CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- CONSTRUCT TYPE C CURB RAMP PER SDRSD G-29. SEE DETAILS ON SHEET CD-1 TO CD-2 TYP.
- CONSTRUCT RETAINING WALL. SEE SHEET RWALL-1 TO RWALL-4 FOR PLAN AND PROFILE.
- LANDSCAPE AREA PER LANDSCAPING PLANS.
- CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.
- RELOCATE EXISTING STREET LIGHT PER SDRSD E-01 AND E-02. SPLICE NEW TO EXISTING CONDUCTORS. SEE STREET LIGHT RELOCATION PER DETAIL 5 ON SHEET CD-4.

H. SCALE: 1"=20'
V. SCALE: 1"=4'



CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	18°55'12"	92.50'	10.50'	6" CURB & GUTTER
2	N84°43'48"W	--	466.28'	6" CURB & GUTTER
3	N86°38'24"W	--	10.45'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N84°43'48"W	--	500.00'	LOMAS SANTA FE DRIVE

PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



LOMAS SANTA FE-PLAN

SCALE: 1"=20'

AS-BUILT

By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL

5050 Avenida Encinas
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Carlsbad, CA 92008
Phone: (760) 476-9193
mbakerintl.com

ENGINEER OF WORK

GEOFFREY H. RETEMEYER RCE 90577

12/2/2024
DATE

CITY APPROVED CHANGES

APP'D DATE

RECOMMENDED FOR APPROVAL

By: _____ Date: _____

R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION

Dan Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK

DESCRIPTION: _____

LOCATION: _____

ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH

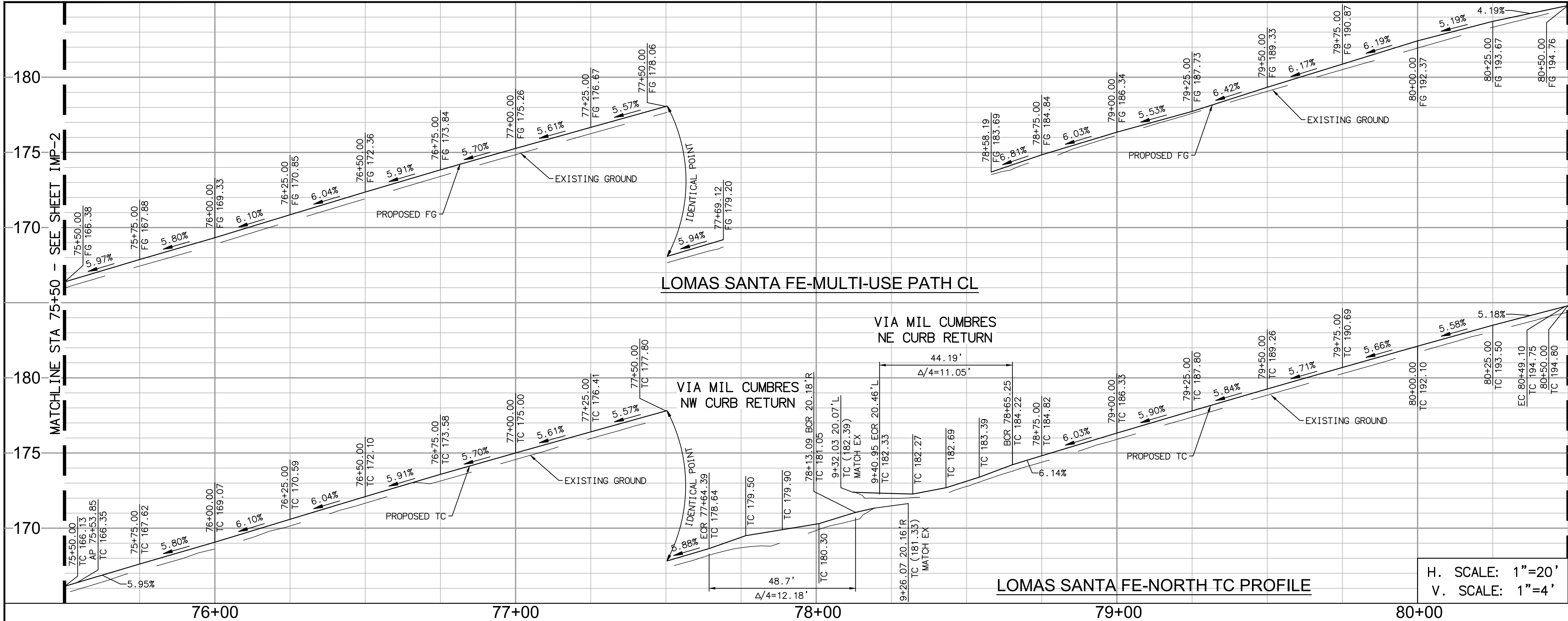
ENGINEERING DEPARTMENT

IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

IMPROVEMENT PLAN & PROFILE

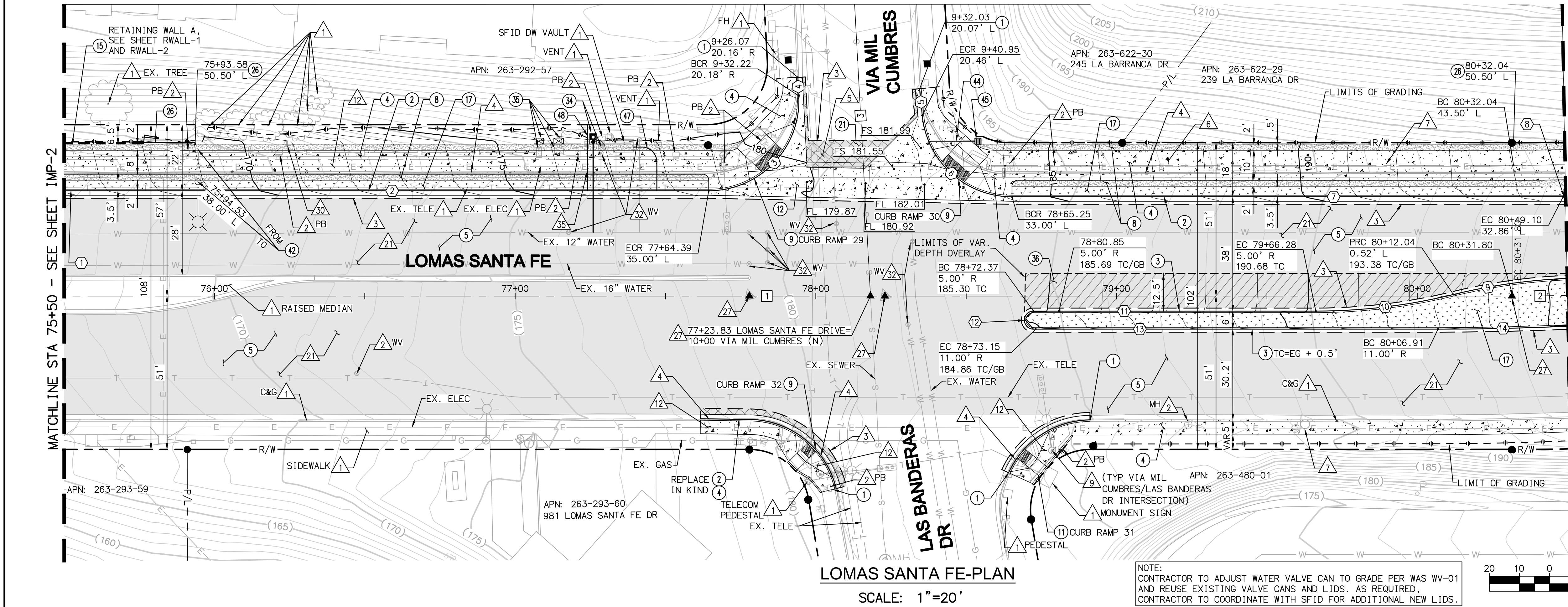
DRAWING NO.
CG-3185

Sheet 7 of 54



- ### DEMOLITION NOTES
- 1 PROTECT IN PLACE
 - 2 ADJUST TO FINISH GRADE
 - 3 SAWCUT EXISTING PAVEMENT
 - 4 REMOVE EXISTING CURB AND GUTTER
 - 5 REMOVE EXISTING CROSS GUTTER
 - 6 REMOVE EXISTING AC PATH
 - 7 RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
 - 8 REMOVE/RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT PER TRAFFIC SIGNAL MODIFICATIONS PLANS
 - 9 REMOVE EXISTING SIDEWALK
 - 10 GRIND EXISTING AC PAVEMENT 2"
 - 11 ADJUST EXISTING M-10 MONUMENT COVER TO FINISH GRADE. EXISTING M-10 SURVEY MONUMENT TO BE PROTECTED PLACE.
 - 12 PRIVATE RW IRRIGATION EQUIPMENT TO BE REMOVED OR RELOCATED TO PRIVATE PROPERTY BY OWNER.
 - 13 CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.
 - 14 REMOVE EXISTING UNDERDRAIN UP TO PROPERTY LINE. CONTRACTOR TO CONNECT NEW UNDERDRAIN TO EXISTING.

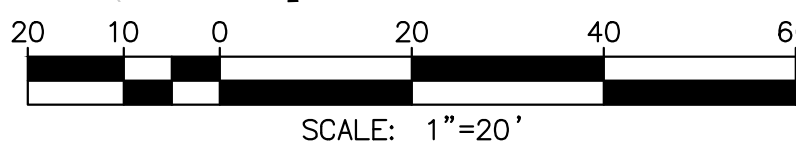
- ### CONSTRUCTION NOTES
- 1 MATCH EXISTING IMPROVEMENTS AND ELEVATIONS.
 - 2 CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
 - 3 CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
 - 4 CONSTRUCT PCC SIDEWALK PER SDRSD G-7
 - 5 OVERLAY AC PAVEMENT 2"
 - 6 CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
 - 7 CONSTRUCT TYPE A CURB RAMP PER SDRSD G-27. SEE DETAILS ON SHEETS CD-1 TO CD-2 TYP.
 - 8 CONSTRUCT TYPE C CURB RAMP PER SDRSD G-29. SEE DETAILS ON SHEET CD-1 TO CD-2 TYP.
 - 9 CONSTRUCT CONCRETE CROSS GUTTER PER SDRSD G-12
 - 10 CONSTRUCT RETAINING WALL. SEE SHEET RWALL-1 TO RWALL-4 FOR PLAN AND PROFILE.
 - 11 LANDSCAPE AREA PER LANDSCAPING PLANS.
 - 12 CONSTRUCT 12" FULL DEPTH AC PAVEMENT
 - 13 CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.
 - 14 RELOCATE EXISTING AIR AND VACUUM VALVE, AND ENCLOSURE TO BACK OF PROPOSED PATH. EXTEND OR RE-CONNECT TUBING AS REQUIRED FOR RELOCATION PER WAS WA-04 AND WA-06. CONTRACTOR TO COORDINATE WITH SFID PRIOR TO RELOCATION.
 - 15 RELOCATE EXISTING REMOTE TERMINAL UNIT (RTU) ENCLOSURE AND METER PEDESTAL TO BACK OF PROPOSED PATH. RE-ESTABLISH CONNECTION FROM NEW RTU ENCLOSURE AND METER PEDESTAL LOCATIONS TO EXISTING SFID PRESSURE REDUCING STATION IMPROVEMENTS. SEE DETAIL ON SHEET CD-3.
 - 16 OVERLAY AC PAVEMENT WITH VARIABLE DEPTH (2" MIN.)
 - 17 RELOCATE EXISTING STREET LIGHT PER SDRSD E-01 AND E-02. SPLICE NEW TO EXISTING CONDUCTORS. SEE STREET LIGHT RELOCATION PER DETAIL 5 ON SHEET CD-4.
 - 18 INSTALL 3" PVC SIDEWALK UNDERDRAIN PIPE PER SDRSD D-27.
 - 19 CONSTRUCT 24" BY 24" CATCH BASIN.
 - 20 REMOVE AND RECONSTRUCT EXISTING 1.5" DISCHARGE DRAIN LINE PER SDRSD D-27. INTERCEPT EXISTING DRAIN LINE AT EXISTING PRESSURE REDUCING STATION. CONTRACTOR TO COORDINATE WITH SFID BEFORE WORK IS PERFORMED.
 - 21 INSTALL 3" PVC SIDEWALK UNDERDRAIN PIPE PER SDRSD D-27. CONTRACTOR TO COORDINATE WITH SFID TO BE PRESENT DURING CONSTRUCTION TO ENSURE EXISTING INFRASTRUCTURE FOR PRESSURE REDUCING STATION IS PROTECTED IN PLACE.



CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N84°43'48"W	---	3.23'	6" CURB & GUTTER
2	N84°43'48"W	---	210.54'	6" CURB & GUTTER
3	93°00'37"	30.00'	48.70'	6" CURB & GUTTER
4	N02°15'35"E	---	6.16'	6" CURB & GUTTER
5	N00°19'50"W	---	8.93'	6" CURB & GUTTER
6	84°23'58"	30.00'	44.19'	6" CURB & GUTTER
7	N84°43'48"W	---	183.28'	6" CURB & GUTTER
8	00°03'00"	1000.00'	0.87'	6" CURB & GUTTER
9	11°23'56"	192.50'	38.30'	MEDIAN CURB
10	13°45'04"	192.50'	46.20'	MEDIAN CURB
11	N84°43'48"W	---	93.91'	MEDIAN CURB
12	180°00'00"	3.00'	9.42'	MEDIAN CURB
13	N84°43'48"W	---	134.54'	MEDIAN CURB
14	02°33'26"	970.00'	43.29'	MEDIAN CURB

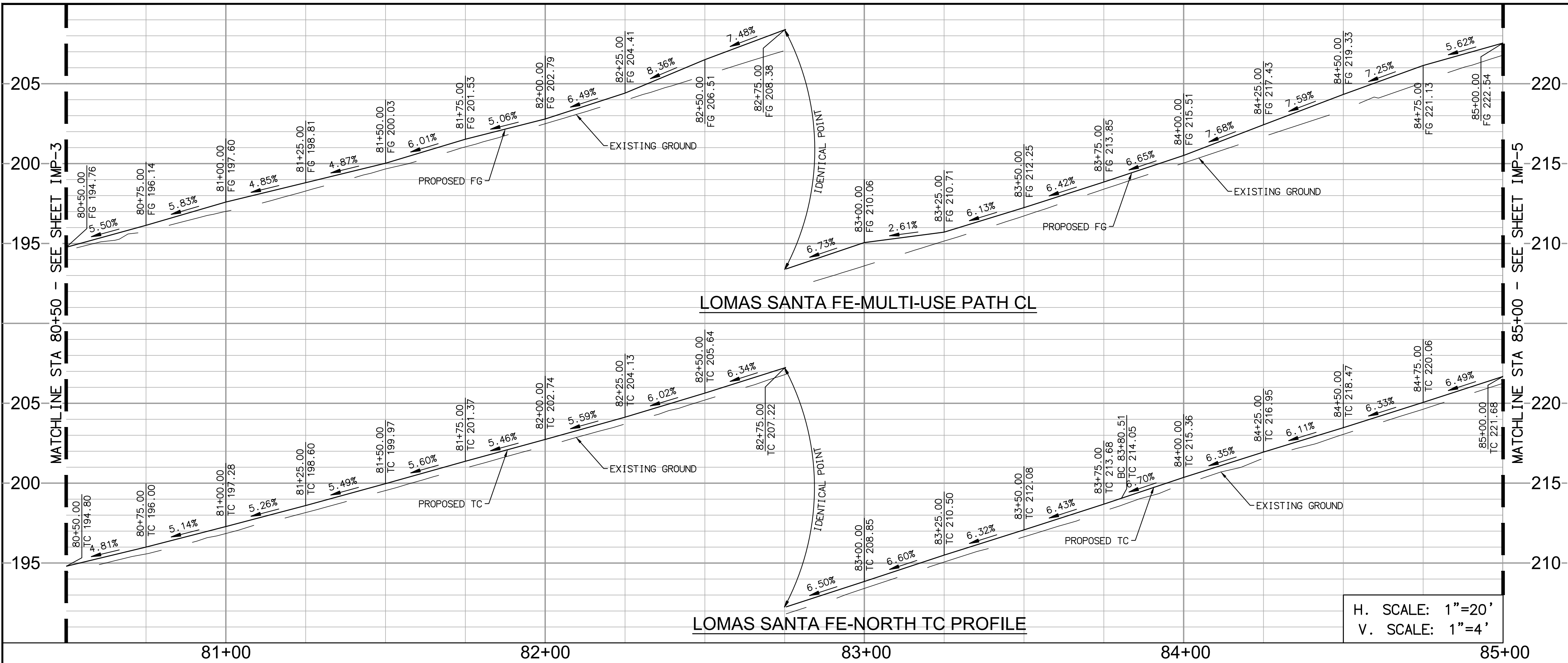
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NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
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2	01°02'34"	1000.00'	18.20'	LOMAS SANTA FE DR
3	N02°09'09"E	---	97.20'	VIA MIL CUMBRES

- ### PAVEMENT LEGEND
- 2"AC GRIND & OVERLAY
 - 2"AC GRIND & VAR DEPTH OVERLAY
 - 4" STABILIZED DECOMPOSED GRANITE SHOULDER
 - PCC SIDEWALK PER SDRSD G-7



PLAN CODE
IMP-3
By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 mbakerintl.com		ENGINEER OF WORK	CITY APPROVED CHANGES	APP'D DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	ENGINEERING DEPARTMENT	DRAWING NO.	
						By: _____ Date: _____	By: Date: 05/01/2025			IMPROVEMENT PLAN & PROFILE	CG-3185
		12/2/2024				R.C.E.: _____ Exp: _____	R.C.E.: 57292 Exp: 12/31/25		DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.	Sheet 8 of 54	



DEMOLITION NOTES

- PROTECT IN PLACE
- ADJUST TO FINISH GRADE
- SAWCUT EXISTING PAVEMENT
- REMOVE EXISTING CURB AND GUTTER
- REMOVE EXISTING AC PATH
- RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
- REMOVE EXISTING CURB INLET. SEE DRAINAGE PLANS FOR NEW LOCATION.
- GRIND EXISTING AC PAVEMENT 2"
- ADJUST EXISTING M-10 MONUMENT COVER TO FINISH GRADE. EXISTING M-10 SURVEY MONUMENT TO BE PROTECTED PLACE.
- CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.

CONSTRUCTION NOTES

- CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
- CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- OVERLAY AC PAVEMENT 2"
- CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- LANDSCAPE AREA PER LANDSCAPING PLANS.
- CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.
- CONSTRUCT TYPE B-2 MEDIAN CURB PER SDRSD G-6.

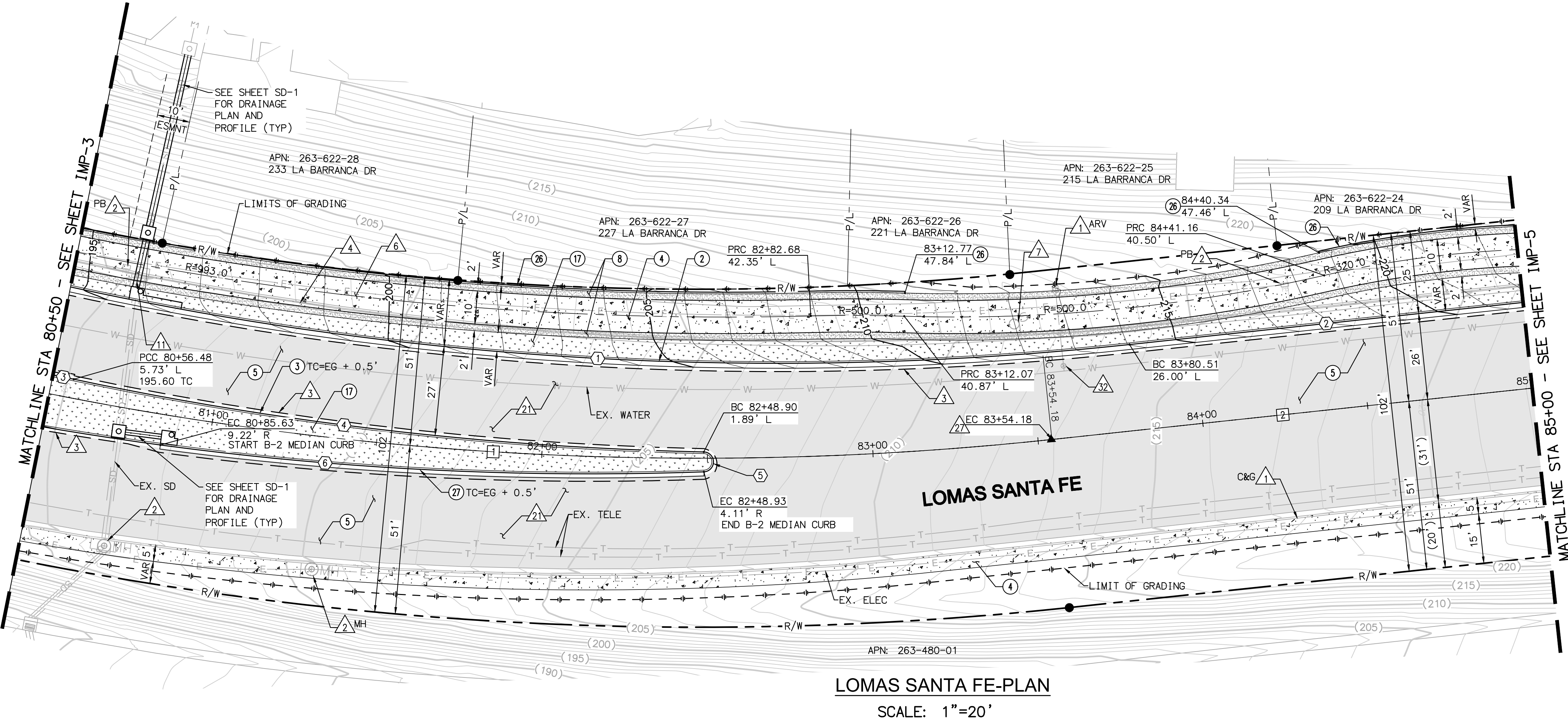
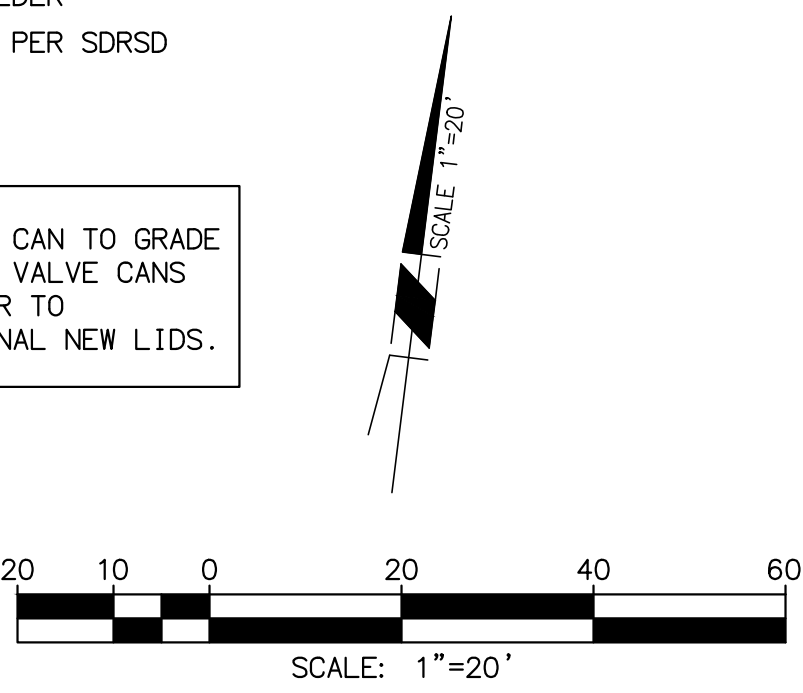
CURB DATA TABLE					
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE	
1	18°25'16"	1000.00'	321.51'	6" CURB & GUTTER	
2	N76°47'56"E	---	119.49'	6" CURB & GUTTER	
3	01°55'01"	192.50'	6.44'	MEDIAN CURB	
4	10°41'43"	1027.00'	191.71'	MEDIAN CURB	
5	176°43'55"	3.00'	9.25'	MEDIAN CURB	
6	11°50'29"	970.00'	200.47'	MEDIAN CURB	

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	17°45'08"	1000.00'	309.83'	LOMAS SANTA FE DR
2	N76°47'56"E	---	140.17'	LOMAS SANTA FE DR

PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



AS-BUILT

By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL
5050 Avenida Encinas
Suite 260
Carlsbad, CA 92008
Phone: (760) 476-9193
MBAKERINTL.COM



ENGINEER OF WORK
GEOFFREY H. RETEMEYER RCE 90577
12/2/2024 DATE

CITY APPROVED CHANGES
APP'D DATE

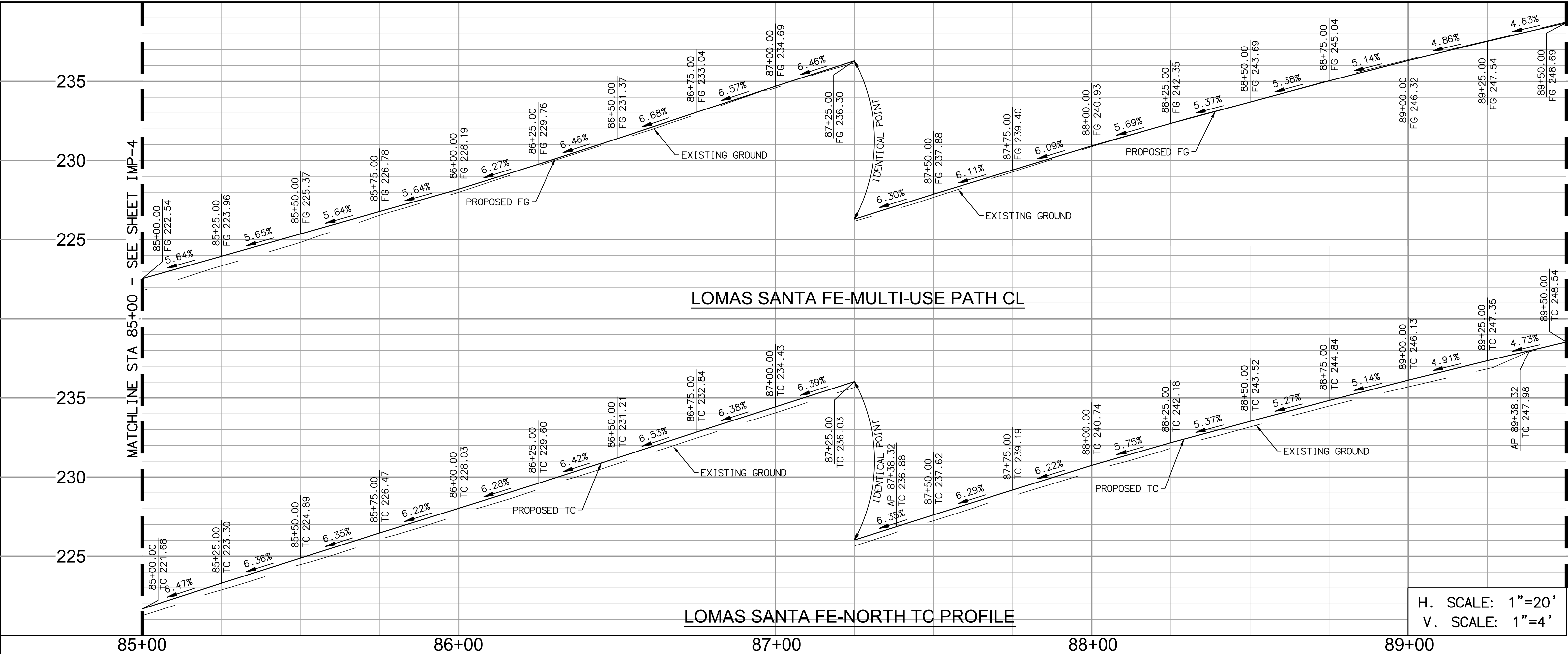
RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION
By: _____ Date: 05/01/2025
Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION: LOCATION:
ELEV.: DATUM: M.S.L.

CITY OF SOLANA BEACH
ENGINEERING DEPARTMENT
IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR
IMPROVEMENT PLAN & PROFILE

DRAWING NO.
CG-3185
Sheet 9 of 54

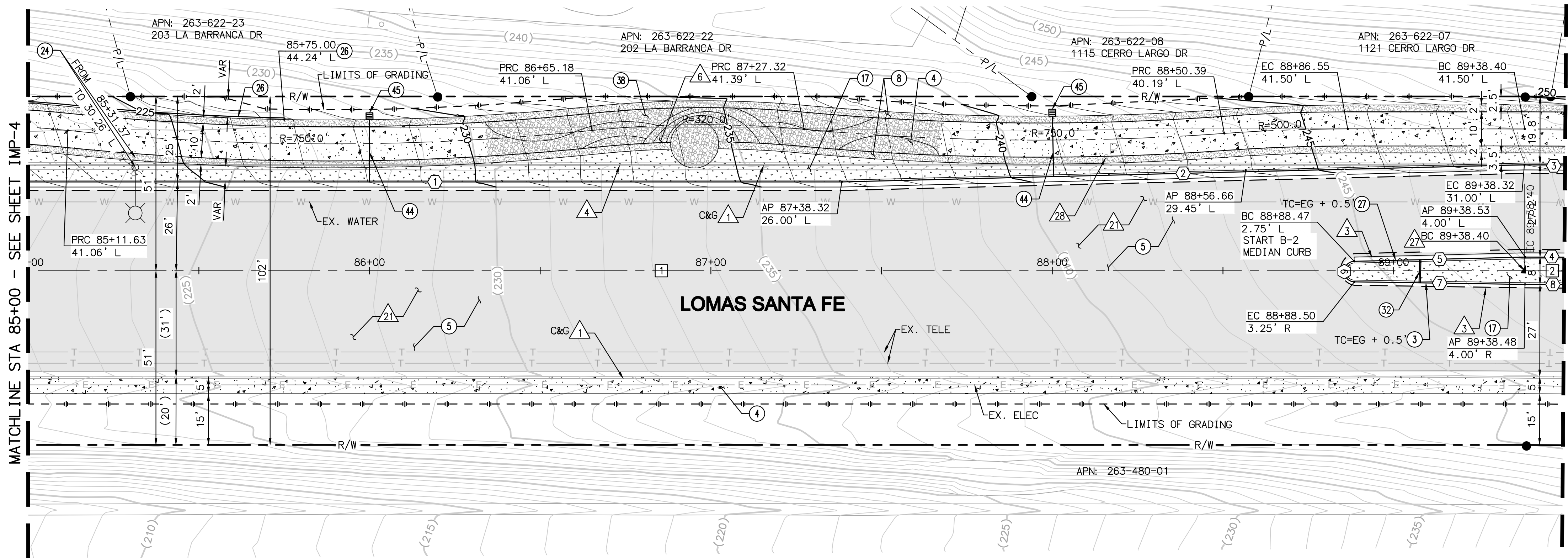


DEMOLITION NOTES

- PROTECT IN PLACE
- SAWCUT EXISTING PAVEMENT
- REMOVE EXISTING CURB AND GUTTER
- REMOVE EXISTING AC PATH
- GRIND EXISTING AC PAVEMENT 2"
- ADJUST EXISTING M-10 MONUMENT COVER TO FINISH GRADE. EXISTING M-10 SURVEY MONUMENT TO BE PROTECTED PLACE.
- REMOVE EXISTING POST

CONSTRUCTION NOTES

- CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- OVERLAY AC PAVEMENT 2"
- CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- LANDSCAPE AREA PER LANDSCAPING PLANS.
- RELOCATE EXISTING STREET LIGHT PER SDRSD E-01 AND E-02. SPLICE NEW TO EXISTING CONDUCTORS.
- CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.
- CONSTRUCT TYPE B-2 MEDIAN CURB PER SDRSD G-6.
- CONSTRUCT MEDIAN UNDERDRAIN PER DETAIL 3 ON SHEET CD-4.
- HARDSCAPE PER LANDSCAPE PLANS.
- INSTALL 3" PVC SIDEWALK UNDERDRAIN PIPE PER SDRSD D-27.
- CONSTRUCT 24" BY 24" CATCH BASIN.



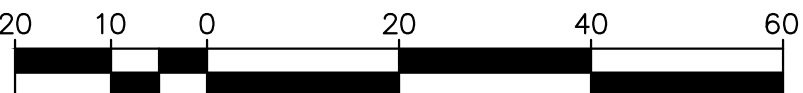
CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N76°47'56"E	--	238.32'	6" CURB & GUTTER
2	N75°22'00"E	--	200.06'	6" CURB & GUTTER
3	00°26'46"	1531.00'	11.92'	6" CURB & GUTTER
4	00°26'17"	1504.00'	11.50'	MEDIAN CURB
5	N75°22'00"E	--	50.08'	MEDIAN CURB
6	177°42'30"	3.00'	9.30'	MEDIAN CURB
7	N77°39'30"E	--	49.98'	MEDIAN CURB
8	00°26'25"	1496.00'	11.50'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N76°47'56"E	--	438.40'	LOMAS SANTA FE DR
2	00°26'36"	1500.00'	11.61'	LOMAS SANTA FE DR

PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7
- DECORATIVE HARDSCAPE PER LANDSCAPE PLANS

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



AS-BUILT

PLAN CODE

By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL

5050 Avenida Encinas
Suite 260
Carlsbad, CA 92008
Phone: (760) 476-9193
MBAKERINTL.COM

ENGINEER OF WORK

GEOFFREY H. RETEMEYER RCE 90577

12/2/2024
DATE

CITY APPROVED CHANGES

APP'D DATE

RECOMMENDED FOR APPROVAL

By: _____ Date: _____
R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION

Dan Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK

DESCRIPTION:
LOCATION:
ELEV.: _____ DATUM: M.S.L.

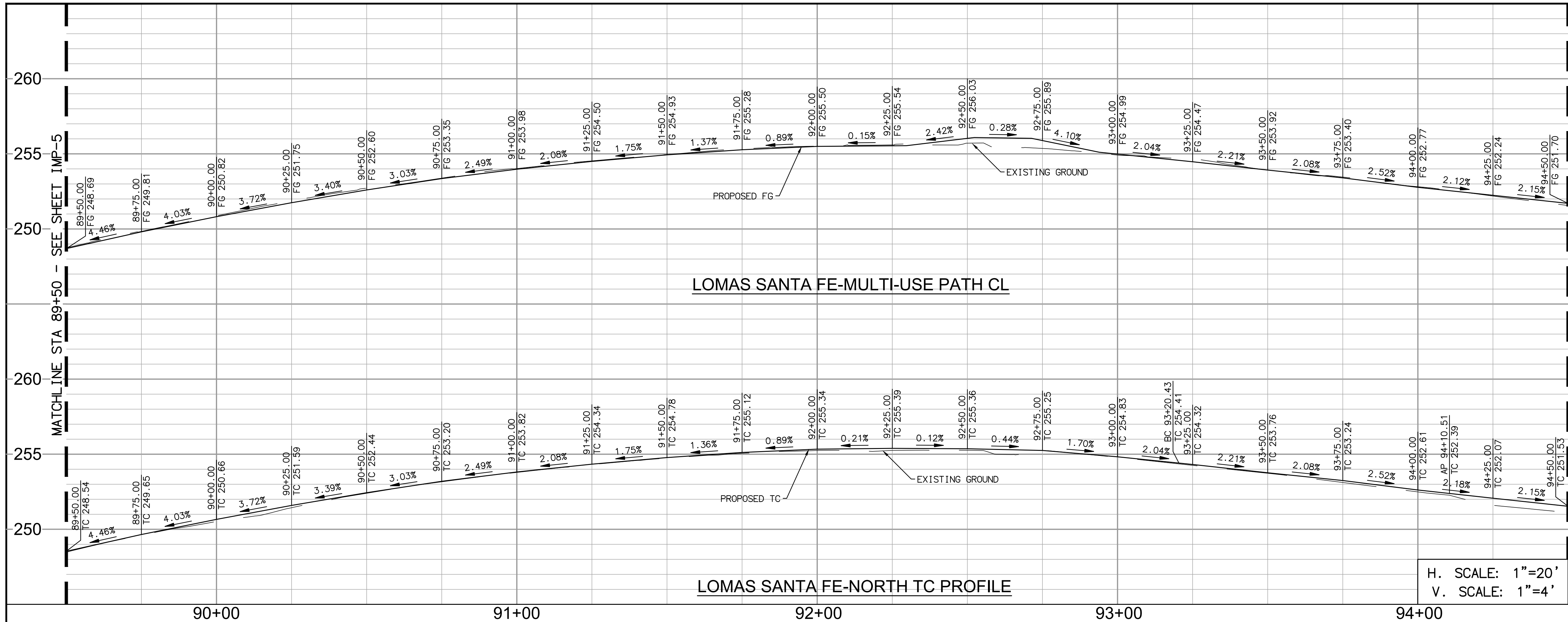
CITY OF SOLANA BEACH

ENGINEERING DEPARTMENT

IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

DRAWING NO.
CG-3185

Sheet 10 of 54



DEMOLITION NOTES

- 1 PROTECT IN PLACE
- 2 ADJUST TO FINISH GRADE
- 3 SAWCUT EXISTING PAVEMENT
- 4 REMOVE EXISTING CURB AND GUTTER
- 5 REMOVE EXISTING AC PATH
- 6 RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
- 7 GRIND EXISTING AC PAVEMENT 2"
- 8 RELOCATE EXISTING UNDERGROUND GAS MARKER.
- 9 ADJUST EXISTING M-10 MONUMENT COVER TO FINISH GRADE. EXISTING M-10 SURVEY MONUMENT TO BE PROTECTED PLACE.
- 10 CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.

CONSTRUCTION NOTES

- 1 MATCH EXISTING IMPROVEMENTS AND ELEVATIONS.
- 2 CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
- 3 CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- 4 CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- 5 OVERLAY AC PAVEMENT 2"
- 6 CONSTRUCT MULTI-USE PATH, 4" PCC OVER NATIVE GROUND.
- 7 CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- 10 CONSTRUCT TYPE B DIRECTIONAL CURB RAMP PER SDRSD G-27. SEE DETAILS ON SHEETS CD-1 TO CD-2.
- 13 CONSTRUCT TYPE A CONCRETE DRIVEWAY PER SDRSD G14A FOR COMMERCIAL USE. SEE DETAILS ON SHEET CD-3.
- 16 CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 AND 3 ON SHEET CD-5.
- 17 LANDSCAPE AREA PER LANDSCAPING PLANS.
- 23 CONSTRUCT MODIFIED 6" CURB AND GUTTER WITH CUTOFF WALL ADJACENT TO BIOFILTRATION BASIN PER DETAIL 2 ON SHEET CD-4.
- 26 CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.
- 27 CONSTRUCT TYPE B-2 MEDIAN CURB PER SDRSD G-6.
- 28 CURB CUT PER DETAIL 2 ON SHEET CD-5.
- 29 INSTALL CLEANOUT PER DETAIL 1 AND 3 ON SHEET CD-5.
- 31 CONSTRUCT 6" PVC PERFORATED UNDERDRAIN.
- 32 CONSTRUCT MEDIAN UNDERDRAIN PER DETAIL 3 ON SHEET CD-4.
- 34 RELOCATE EXISTING AIR AND VACUUM VALVE AND ENCLOSURE TO BACK OF PROPOSED PATH. EXTEND OR RE-CONNECT TUBING AS REQUIRED FOR RELOCATION PER WAS WA-04 AND WA-06. CONTRACTOR TO COORDINATE WITH SFID PRIOR TO RELOCATION.

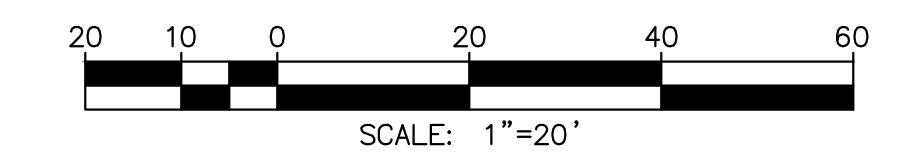
CURB DATA TABLE				
NO	BEARING/Delta	RADIUS	LENGTH	NOTE
1	14°08'58"	1531.00'	378.09'	6"CURB & GUTTER
2	N88°36'30"W	---	90.07'	6"CURB & GUTTER
3	N87°10'35"W	---	39.51'	6"CURB & GUTTER
4	02°31'20"	1504.00'	66.21'	MEDIAN CURB
5	17°13'10"	49.00'	14.73'	MEDIAN CURB
6	163°18'04"	3.00'	8.55'	MEDIAN CURB
7	03°02'34"	1496.00'	79.45'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/Delta	RADIUS	LENGTH	NOTE
1	14°08'58"	1500.00'	370.43'	LOMAS SANTA FE DR
2	N88°36'30"W	---	129.57'	LOMAS SANTA FE DR

PAVEMENT LEGEND

- 2"AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- 12" FULL DEPTH AC PAVEMENT
- PCC SIDEWALK PER SDRSD G-7

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.

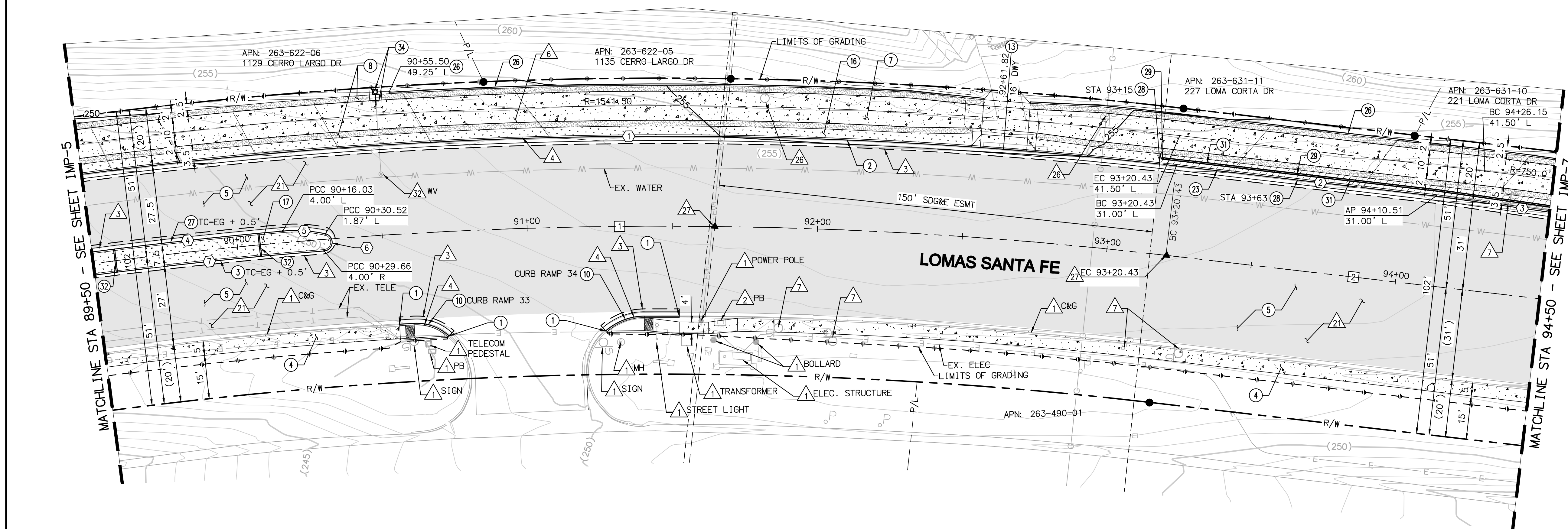


AS-BUILT

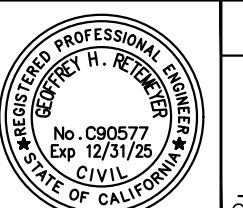
PLAN CODE

IMP-6

By: _____ Date: _____
R.C.E.: _____ Exp: _____



Michael Baker INTERNATIONAL
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Carlsbad, CA 92008
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mbakerintl.com



ENGINEER OF WORK
GEOFFREY H. RETEMEYER RCE 90577
12/2/2024
DATE

CITY APPROVED CHANGES
APP'D DATE
By: _____ Date: _____
R.C.E.: _____ Exp: _____

RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

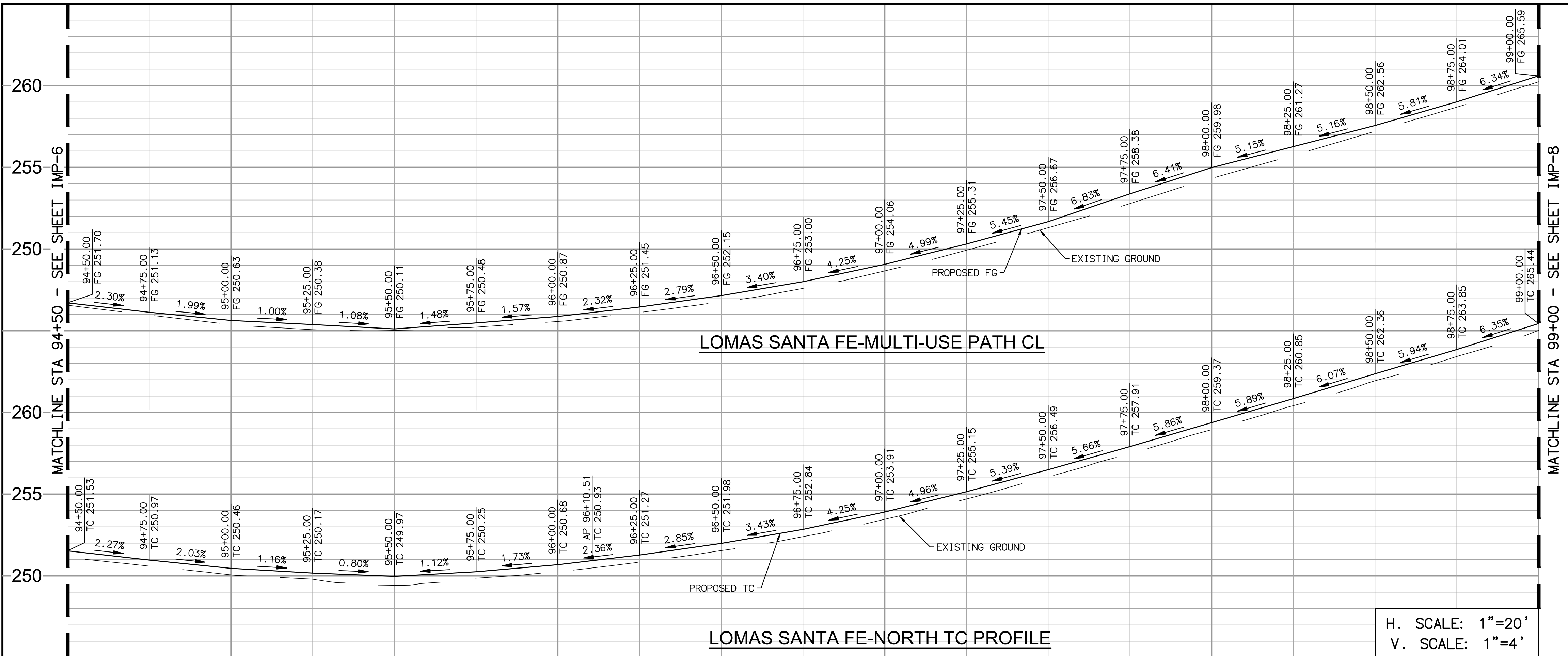
APPROVED FOR CONSTRUCTION
By: _____ Date: 05/01/2025
Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION: LOCATION:
ELEV.: DATUM: M.S.L.

CITY OF SOLANA BEACH
IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

ENGINEERING DEPARTMENT
IMPROVEMENT PLAN & PROFILE

DRAWING NO.
CG-3185
Sheet 11 of 54

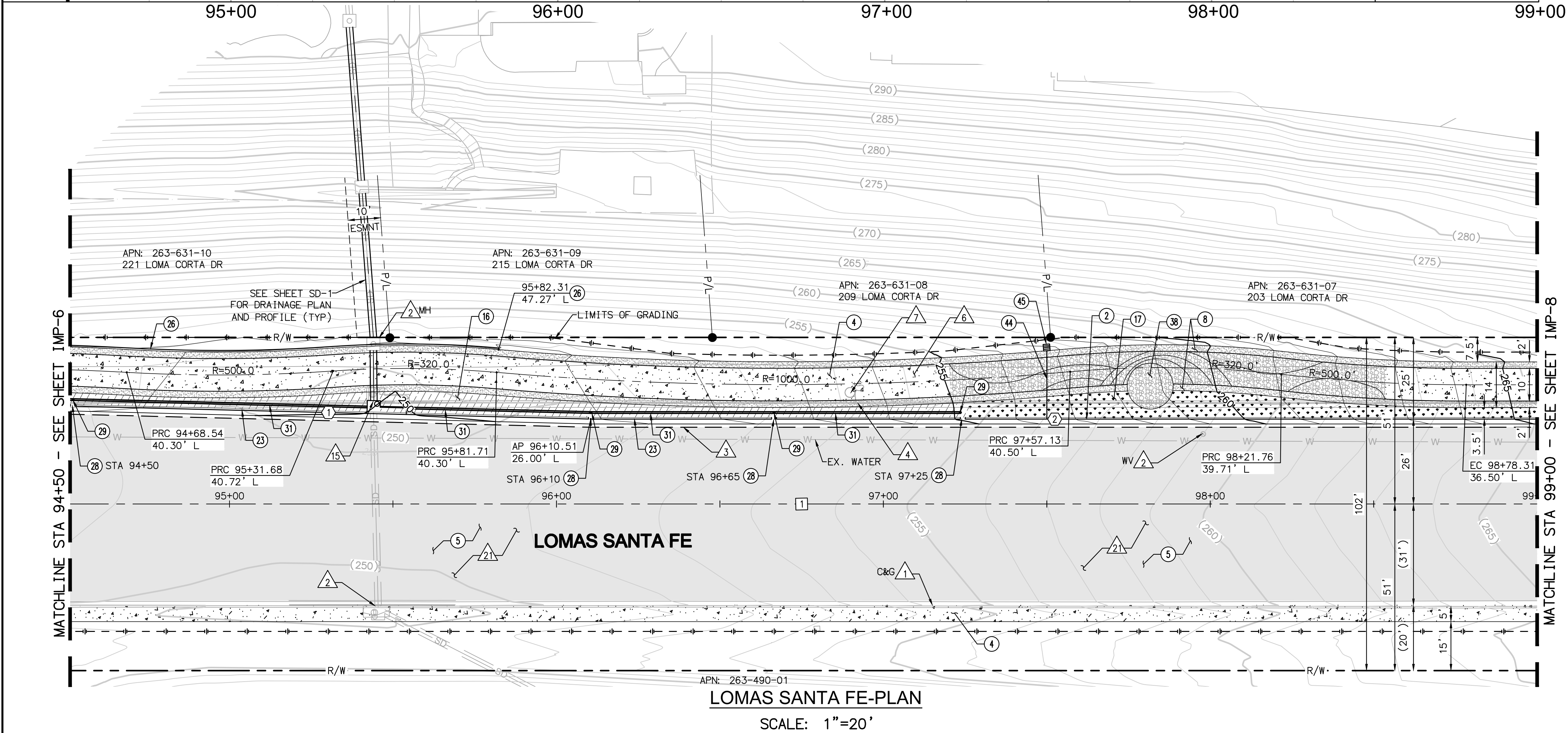


- DEMOLITION NOTES
- 1 PROTECT IN PLACE
 - 2 ADJUST TO FINISH GRADE
 - 3 SAWCUT EXISTING PAVEMENT
 - 4 REMOVE EXISTING CURB AND GUTTER
 - 6 REMOVE EXISTING AC PATH
 - 15 RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
 - 18 REMOVE EXISTING CURB OUTLET
 - 21 GRIND EXISTING AC PAVEMENT 2"

- CONSTRUCTION NOTES
- 2 CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
 - 4 CONSTRUCT PCC SIDEWALK PER SDRSD G-7
 - 5 OVERLAY AC PAVEMENT 2"
 - 8 CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
 - 16 CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 AND 3 ON SHEET CD-5.
 - 17 LANDSCAPE AREA PER LANDSCAPING PLANS.
 - 23 CONSTRUCT MODIFIED 6" CURB AND GUTTER WITH CUTOFF WALL ADJACENT TO BIOFILTRATION BASIN PER DETAIL 2 ON SHEET CD-4.
 - 26 CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.
 - 28 CURB CUT PER DETAIL 2 ON SHEET CD-5.
 - 29 INSTALL CLEANOUT PER DETAIL 1 AND 3 ON SHEET CD-5.
 - 31 CONSTRUCT 6" PVC PERFORATED UNDERDRAIN.
 - 38 HARDSCAPE PER LANDSCAPE PLANS.
 - 44 INSTALL 3" PVC SIDEWALK UNDERDRAIN PIPE PER SDRSD D-27.
 - 45 CONSTRUCT 24" BY 24" CATCH BASIN.

CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N87°10'35"W	--	160.56'	6" CURB & GUTTER
2	N88°36'30"W	--	289.49'	6" CURB & GUTTER

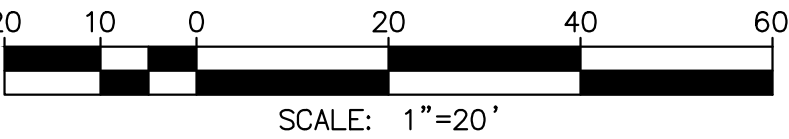
CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	--	450.00'	LOMAS SANTA FE DR



PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7
- DECORATIVE HARDSCAPE PER LANDSCAPE PLANS

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



AS-BUILT
PLAN CODE
IMP-7

Michael Baker INTERNATIONAL

5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBAKERINTL.COM

PROFESSIONAL ENGINEER
GEOFFREY H. RETEMEYER
No. 009577
Exp. 12/31/25
CIVIL
STATE OF CALIFORNIA

ENGINEER OF WORK
GEOFFREY H. RETEMEYER RCE 90577
12/2/2024
DATE

CITY APPROVED CHANGES

APP'D

DATE

RECOMMENDED FOR APPROVAL

By: _____ Date: _____

R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION

By: _____ Date: 05/01/2025

Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK

DESCRIPTION: _____

LOCATION: _____

ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH

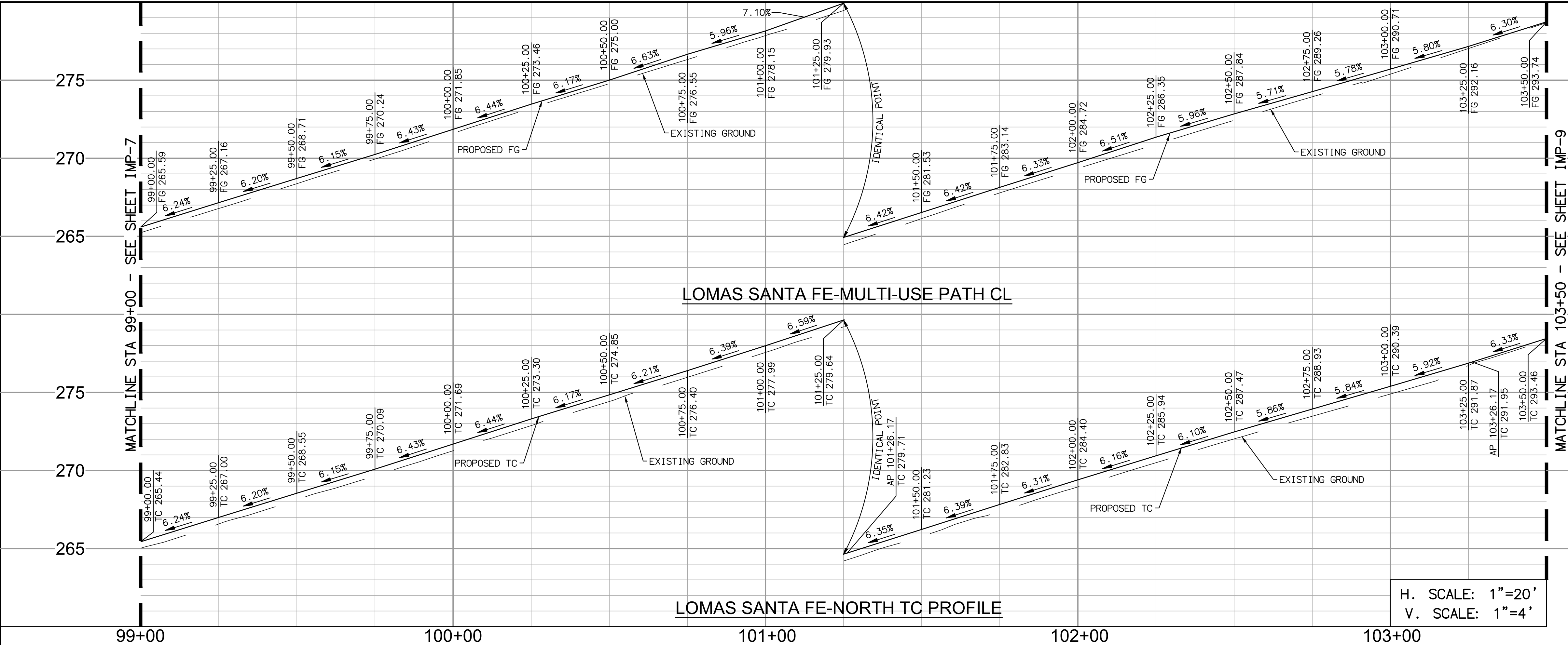
ENGINEERING DEPARTMENT

IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

IMPROVEMENT PLAN & PROFILE

DRAWING NO.
CG-3185

Sheet 12 of 54



DEMOLITION NOTES

- 1 PROTECT IN PLACE
- 3 SAWCUT EXISTING PAVEMENT
- 4 REMOVE EXISTING CURB AND GUTTER
- 6 REMOVE EXISTING AC PATH
- 6 GRIND EXISTING AC PAVEMENT 2"
- 27 ADJUST EXISTING M-10 MONUMENT COVER TO FINISH GRADE. EXISTING M-10 SURVEY MONUMENT TO BE PROTECTED PLACE.

CONSTRUCTION NOTES

- 2 CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
- 3 CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- 4 CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- 5 OVERLAY AC PAVEMENT 2"
- 8 CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- 17 LANDSCAPE AREA PER LANDSCAPING PLANS.
- 26 CONSTRUCT 8" STEM CURB PER DETAIL 1 ON SHEET CD-4 TYP.

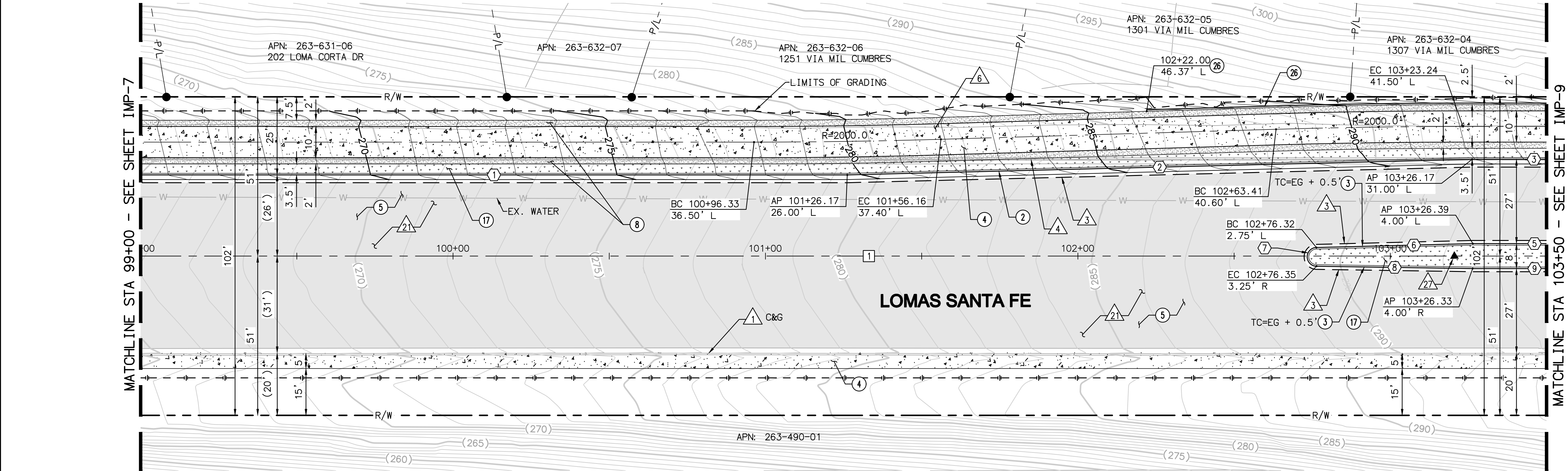
CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	---	226.17'	6" CURB & GUTTER
2	N89°57'34"E	---	200.06'	6" CURB & GUTTER
3	N88°36'30"W	---	23.83'	6" CURB & GUTTER
5	N88°36'30"W	---	23.61'	MEDIAN CURB
6	N89°57'34"E	---	50.08'	MEDIAN CURB
7	177°42'30"	3.00'	9.30'	MEDIAN CURB
8	N87°44'56"W	---	49.98'	MEDIAN CURB
9	N88°36'30"W	---	23.67'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	---	450.00'	LOMAS SANTA FE DR

PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7

NOTE:
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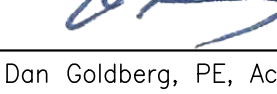


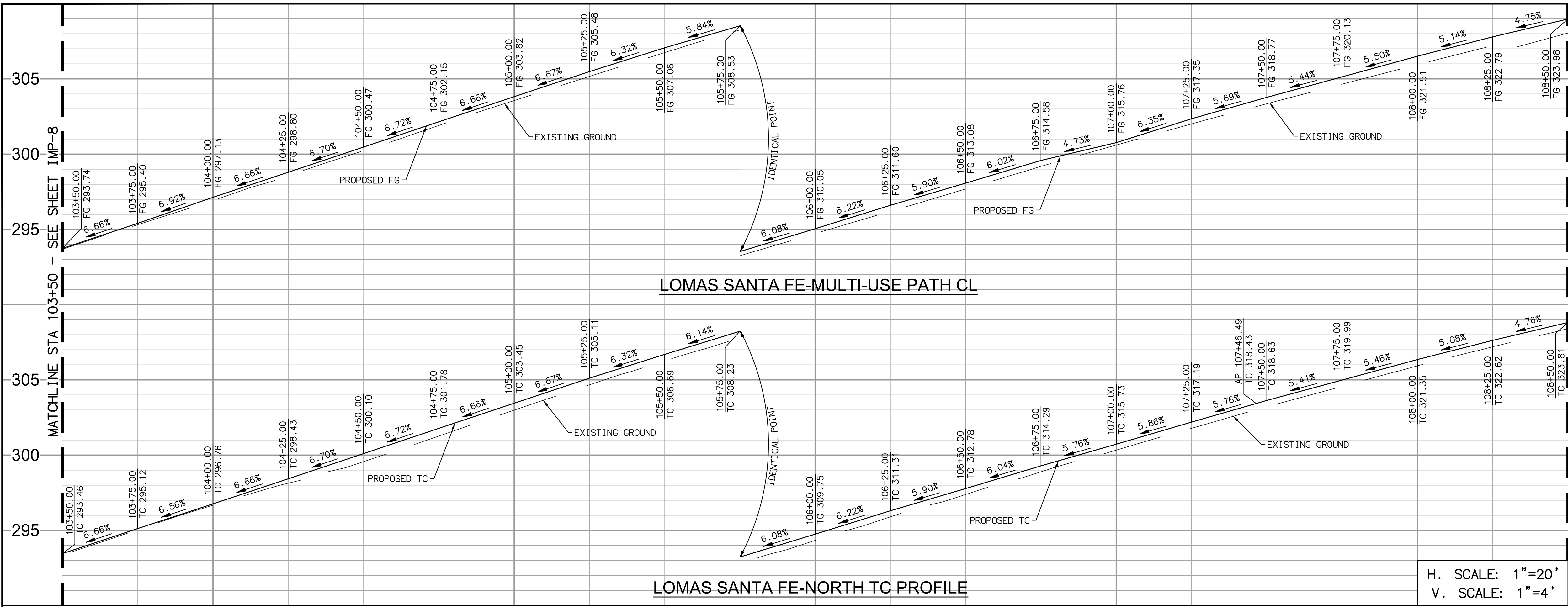
LOMAS SANTA FE-PLAN

SCALE: 1"=20'

AS-BUILT

PLAN CODE
IMP-8
By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 mbakerintl.com		ENGINEER OF WORK  GEOFFREY H. RETEMEYER RCE 90577 12/2/2024 DATE	CITY APPROVED CHANGES APP'D DATE	RECOMMENDED FOR APPROVAL By: _____ Date: _____ R.C.E.: _____ Exp: _____	APPROVED FOR CONSTRUCTION  Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	BENCH MARK DESCRIPTION: _____ LOCATION: _____ ELEV.: _____ DATUM: M.S.L.	CITY OF SOLANA BEACH IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	ENGINEERING DEPARTMENT IMPROVEMENT PLAN & PROFILE	DRAWING NO. CG-3185 Sheet 13 of 54



- DEMOLITION NOTES**
- 1 PROTECT IN PLACE
 - 2 SAWCUT EXISTING PAVEMENT
 - 3 REMOVE EXISTING CURB AND GUTTER
 - 4 REMOVE EXISTING AC PATH
 - 5 RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
 - 6 GRIND EXISTING AC PAVEMENT 2"
 - 7 ADJUST EXISTING M-10 MONUMENT COVER TO FINISH GRADE. EXISTING M-10 SURVEY MONUMENT TO BE PROTECTED PLACE.
 - 8 CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.

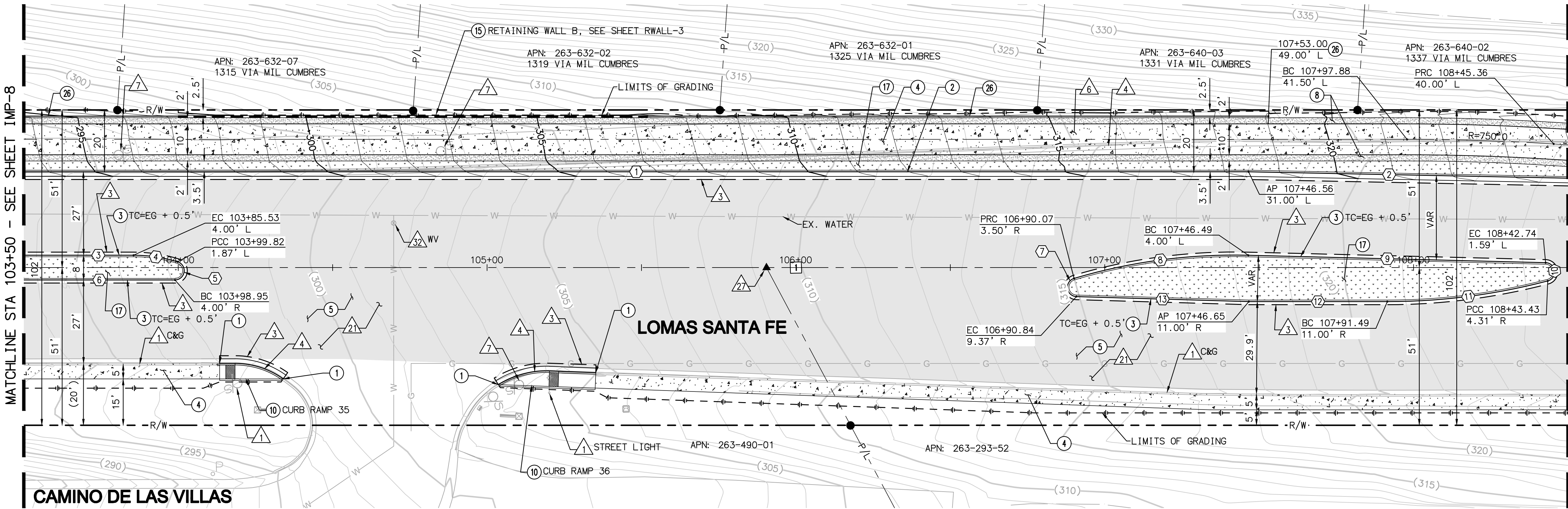
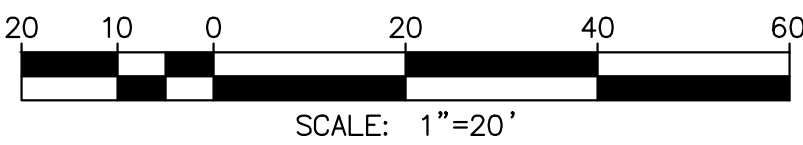
- CONSTRUCTION NOTES**
- 1 MATCH EXISTING IMPROVEMENTS AND ELEVATIONS.
 - 2 CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
 - 3 CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
 - 4 CONSTRUCT PCC SIDEWALK PER SDRSD G-7
 - 5 OVERLAY AC PAVEMENT 2"
 - 6 CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
 - 7 CONSTRUCT TYPE B DIRECTIONAL CURB RAMP PER SDRSD G-27. SEE DETAILS ON SHEETS CD-1 TO CD-2.
 - 8 CONSTRUCT RETAINING WALL. SEE SHEET RWALL-1 TO RWALL-4 FOR PLAN AND PROFILE.
 - 9 LANDSCAPE AREA PER LANDSCAPING PLANS.

CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	---	396.56'	6" CURB & GUTTER
2	N87°27'44"W	---	103.46'	6" CURB & GUTTER
3	N88°36'30"W	---	35.53'	MEDIAN CURB
4	16°57'27"	49.00'	14.50'	MEDIAN CURB
5	16°57'27"	3.00'	8.54'	MEDIAN CURB
6	N88°36'30"W	---	48.95'	MEDIAN CURB
7	161°45'54"	3.00'	8.47'	MEDIAN CURB
8	17°59'47"	181.96'	57.15'	MEDIAN CURB
9	N87°10'35"W	---	96.28'	MEDIAN CURB
10	163°53'28"	3.00'	8.58'	MEDIAN CURB
11	14°40'37"	205.00'	52.51'	MEDIAN CURB
12	N88°36'30"W	---	44.84'	MEDIAN CURB
13	N86°56'16"W	---	55.84'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	---	500.00'	LOMAS SANTA FE DR

- PAVEMENT LEGEND**
- 2" AC GRIND & OVERLAY
 - 4" STABILIZED DECOMPOSED GRANITE SHOULDER
 - PCC SIDEWALK PER SDRSD G-7

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



LOMAS SANTA FE-PLAN
SCALE: 1"=20'

AS-BUILT
By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL
5050 Avenida Encinas
Suite 260
Carlsbad, CA 92008
Phone: (760) 476-9193
MBAKERINTL.COM



ENGINEER OF WORK
By: *GRH*
GEOFFREY H. RETEMEYER RCE 90577
12/2/2024 DATE

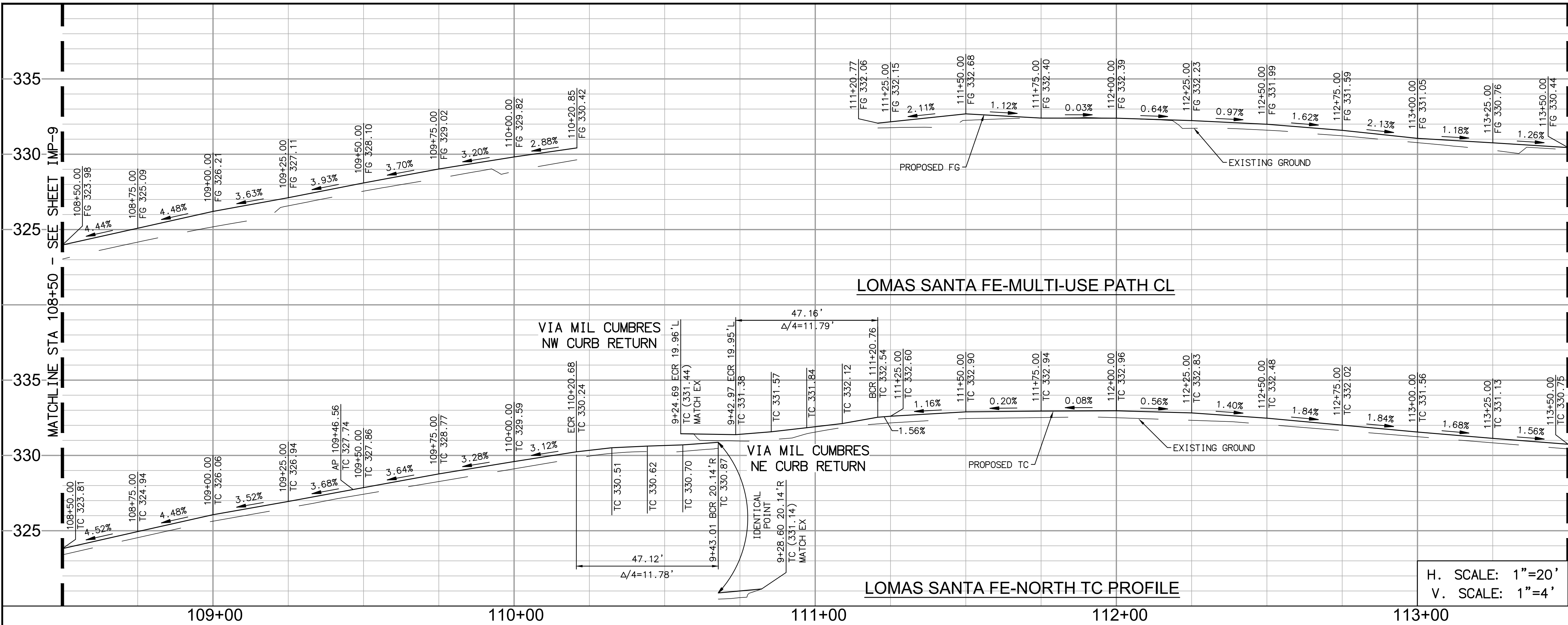
CITY APPROVED CHANGES
APP'D DATE
By: _____ Date: _____
R.C.E.: _____ Exp: _____

RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION
By: *DS* Date: 05/01/2025
Dan Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION: _____
LOCATION: _____
ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH
IMPROVEMENT PLANS FOR: **LOMAS SANTA FE CORRIDOR**
ENGINEERING DEPARTMENT
IMPROVEMENT PLAN & PROFILE
DRAWING NO. **CG-3185**
Sheet 14 of 54



DEMOLITION NOTES

- 1 PROTECT IN PLACE
- 2 ADJUST TO FINISH GRADE
- 3 SAWCUT EXISTING PAVEMENT
- 4 REMOVE EXISTING CURB AND GUTTER
- 5 REMOVE EXISTING CROSS GUTTER
- 6 REMOVE EXISTING AC PATH
- 7 RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
- 8 REMOVE EXISTING SIDEWALK
- 9 GRIND EXISTING AC PAVEMENT 2"
- 10 RELOCATE EXISTING WOOD FENCE TO BACK OF PROPOSED SIDEWALK
- 11 ADJUST EXISTING M-10 MONUMENT COVER TO FINISH GRADE. EXISTING M-10 SURVEY MONUMENT TO BE PROTECTED PLACE.
- 12 CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.
- 13 PROTECT WATER METER IN PLACE. ADJUST BOX TO GRADE. CONTRACTOR TO COORDINATE WITH SFID FOR INSPECTION.

CONSTRUCTION NOTES

- 1 MATCH EXISTING IMPROVEMENTS AND ELEVATIONS.
- 2 CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
- 3 CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- 4 CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- 5 OVERLAY AC PAVEMENT 2"
- 6 CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- 9 CONSTRUCT TYPE A CURB RAMP PER SDRSD G-27. SEE DETAILS ON SHEETS CD-1 TO CD-2 TYP.
- 12 CONSTRUCT CONCRETE CROSS GUTTER PER SDRSD G-12
- 17 LANDSCAPE AREA PER LANDSCAPING PLANS.
- 21 CONSTRUCT 12" FULL DEPTH AC PAVEMENT
- 24 RELOCATE EXISTING STREET LIGHT PER SDRSD E-01 AND E-02. SPLICE NEW TO EXISTING CONDUCTORS.
- 38 HARDSCAPE PER LANDSCAPE PLANS.

CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N87°27'44"W	--	96.51'	6" CURB & GUTTER
2	N88°36'30"W	--	74.44'	6" CURB & GUTTER
3	91°00'08"	30.00'	47.65'	6" CURB & GUTTER
4	N00°23'22"E	--	13.89'	6" CURB & GUTTER
5	N01°27'19"E	--	18.27'	6" CURB & GUTTER
6	90°03'49"	30.00'	47.16'	6" CURB & GUTTER
7	N88°36'30"W	--	229.24'	6" CURB & GUTTER
8	N88°36'30"W	--	214.51'	MEDIAN CURB
9	160°26'42"	3.00'	8.40'	MEDIAN CURB
10	19°58'09"	49.50'	17.25'	MEDIAN CURB
11	N89°01'21"W	--	198.60'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	--	500.00'	LOMAS SANTA FE DR
2	N01°24'12"E	--	84.30'	VIA MIL CUMBRES

PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7
- DECORATIVE HARDSCAPE PER LANDSCAPE PLANS

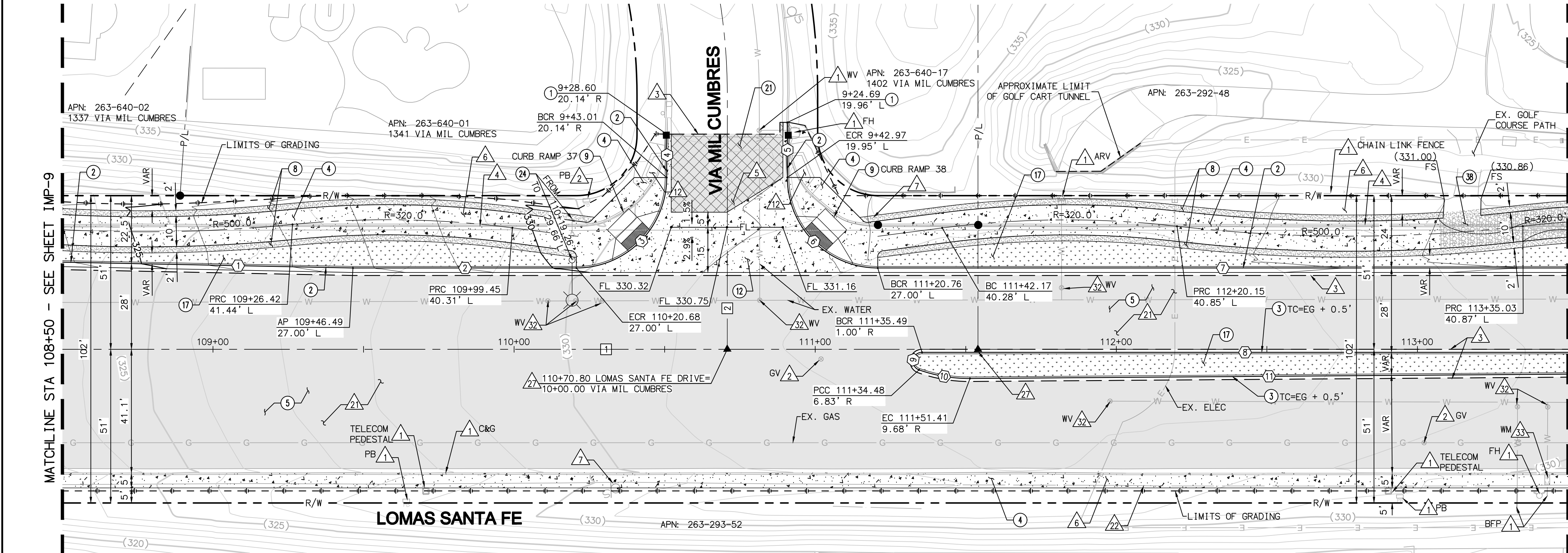
NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



AS-BUILT

PLAN CODE

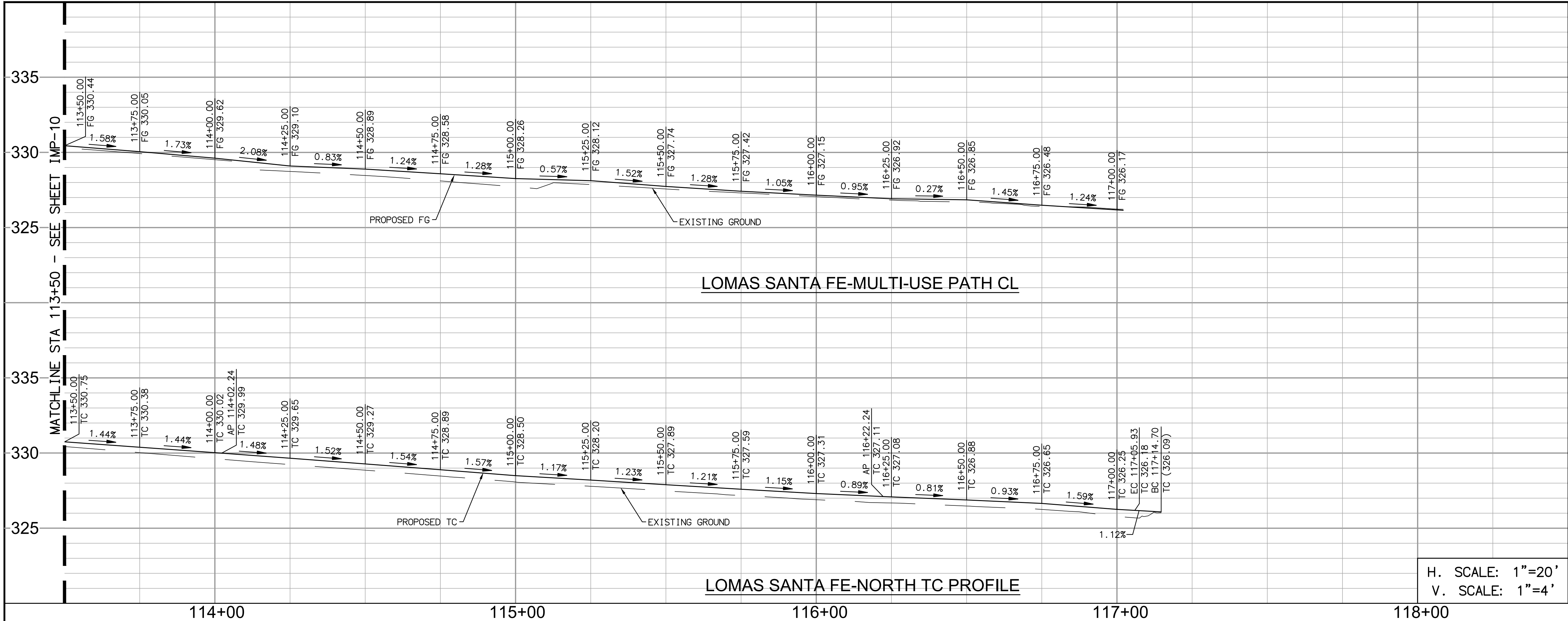
IMP-10



LOMAS SANTA FE-PLAN

SCALE: 1"=20'

Michael Baker INTERNATIONAL 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBAKERINTL.COM		ENGINEER OF WORK	CITY APPROVED CHANGES	APP'D DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH	ENGINEERING DEPARTMENT	DRAWING NO.
		 GEOFFREY H. RETEMEYER RCE 90577 12/2/2024 DATE			By: _____ Date: _____ R.C.E.: _____ Exp: _____	By: Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25		DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.	IMPROVEMENT PLAN & PROFILE	CG-3185 Sheet 15 of 54



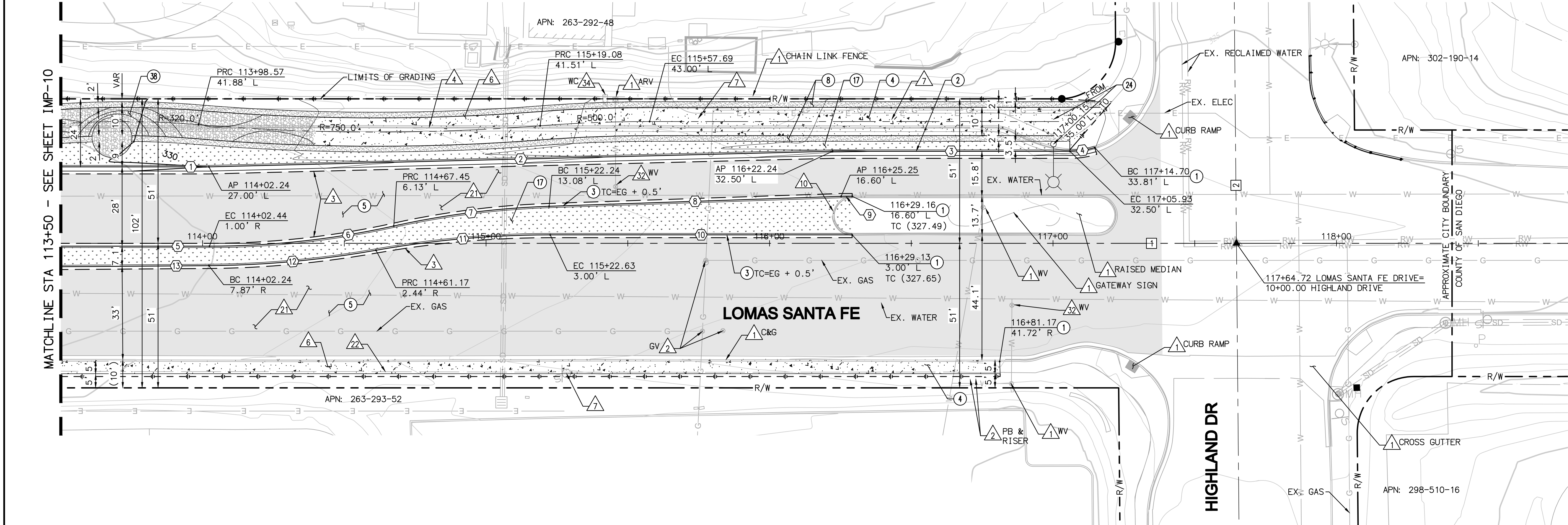
DEMOLITION NOTES

- 1 PROTECT IN PLACE
- 2 ADJUST TO FINISH GRADE
- 3 SAWCUT EXISTING PAVEMENT
- 4 REMOVE EXISTING CURB AND GUTTER
- 6 REMOVE EXISTING AC PATH
- 7 RELOCATE EXISTING SIGN PER SIGNING AND STRIPING PLANS
- 10 REMOVE EXISTING MEDIAN CURB
- 21 GRIND EXISTING AC PAVEMENT 2"
- 22 RELOCATE EXISTING WOOD FENCE TO BACK OF PROPOSED SIDEWALK
- 32 CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.
- 34 PROTECT WATER CONNECTION IN PLACE. ADJUST BOX TO GRADE. CONTRACTOR TO COORDINATE WITH SFID FOR INSPECTION.

CONSTRUCTION NOTES

- 1 MATCH EXISTING IMPROVEMENTS.
- 2 CONSTRUCT TYPE G 6" CURB AND GUTTER PER SDRSD G-2.
- 3 CONSTRUCT TYPE B-1 MEDIAN CURB PER SDRSD G-6.
- 4 CONSTRUCT PCC SIDEWALK PER SDRSD G-7
- 5 OVERLAY AC PAVEMENT 2"
- 8 CONSTRUCT 4" STABILIZED DECOMPOSED GRANITE SHOULDER.
- 17 LANDSCAPE AREA PER LANDSCAPING PLANS.
- 24 RELOCATE EXISTING STREET LIGHT PER SDRSD E-01 AND E-02. SPLICE NEW TO EXISTING CONDUCTORS.
- 38 HARDSCAPE PER LANDSCAPE PLANS.

H. SCALE: 1"=20'
V. SCALE: 1"=4'



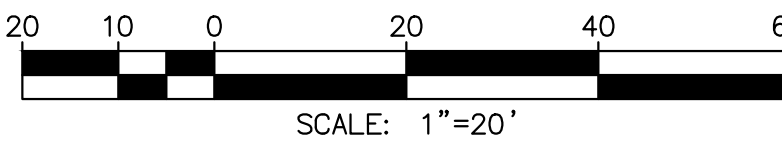
CURB DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	---	52.24'	6" CURB & GUTTER
2	N89°57'34"E	---	220.07'	6" CURB & GUTTER
3	N88°36'30"W	---	83.68'	6" CURB & GUTTER
4	17°00'45"	30.00'	8.91'	6" CURB & GUTTER
5	N88°36'30"W	---	52.44'	MEDIAN CURB
6	12°30'58"	300.00'	65.53'	MEDIAN CURB
7	10°33'49"	300.00'	55.31'	MEDIAN CURB
8	N89°26'21"E	---	103.07'	MEDIAN CURB
9	N88°36'30"W	---	3.91'	MEDIAN CURB
10	N88°36'30"W	---	106.50'	MEDIAN CURB
11	10°06'48"	350.00'	61.78'	MEDIAN CURB
12	09°41'57"	350.00'	59.25'	MEDIAN CURB
13	N89°01'21"W	---	52.24'	MEDIAN CURB

CENTERLINE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	---	790.85'	LOMAS SANTA FE DR
2	N00°52'57"E	---	630.25'	HIGHLAND DR

PAVEMENT LEGEND

- 2" AC GRIND & OVERLAY
- 4" STABILIZED DECOMPOSED GRANITE SHOULDER
- PCC SIDEWALK PER SDRSD G-7
- DECORATIVE HARDSCAPE PER LANDSCAPE PLANS

NOTE:
CONTRACTOR TO ADJUST WATER VALVE CAN TO GRADE PER WAS WV-01 AND REUSE EXISTING VALVE CANS AND LIDS. AS REQUIRED, CONTRACTOR TO COORDINATE WITH SFID FOR ADDITIONAL NEW LIDS.



LOMAS SANTA FE-PLAN

SCALE: 1"=20'

AS-BUILT

PLAN CODE

IMP-11

By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL
5050 Avenida Encinas Suite 260
Carlsbad, CA 92008
Phone: (760) 476-9193
mbakerintl.com



ENGINEER OF WORK
Geoffrey H. Retemeyer
GEOFFREY H. RETEMEYER RCE 90577
12/2/2024 DATE

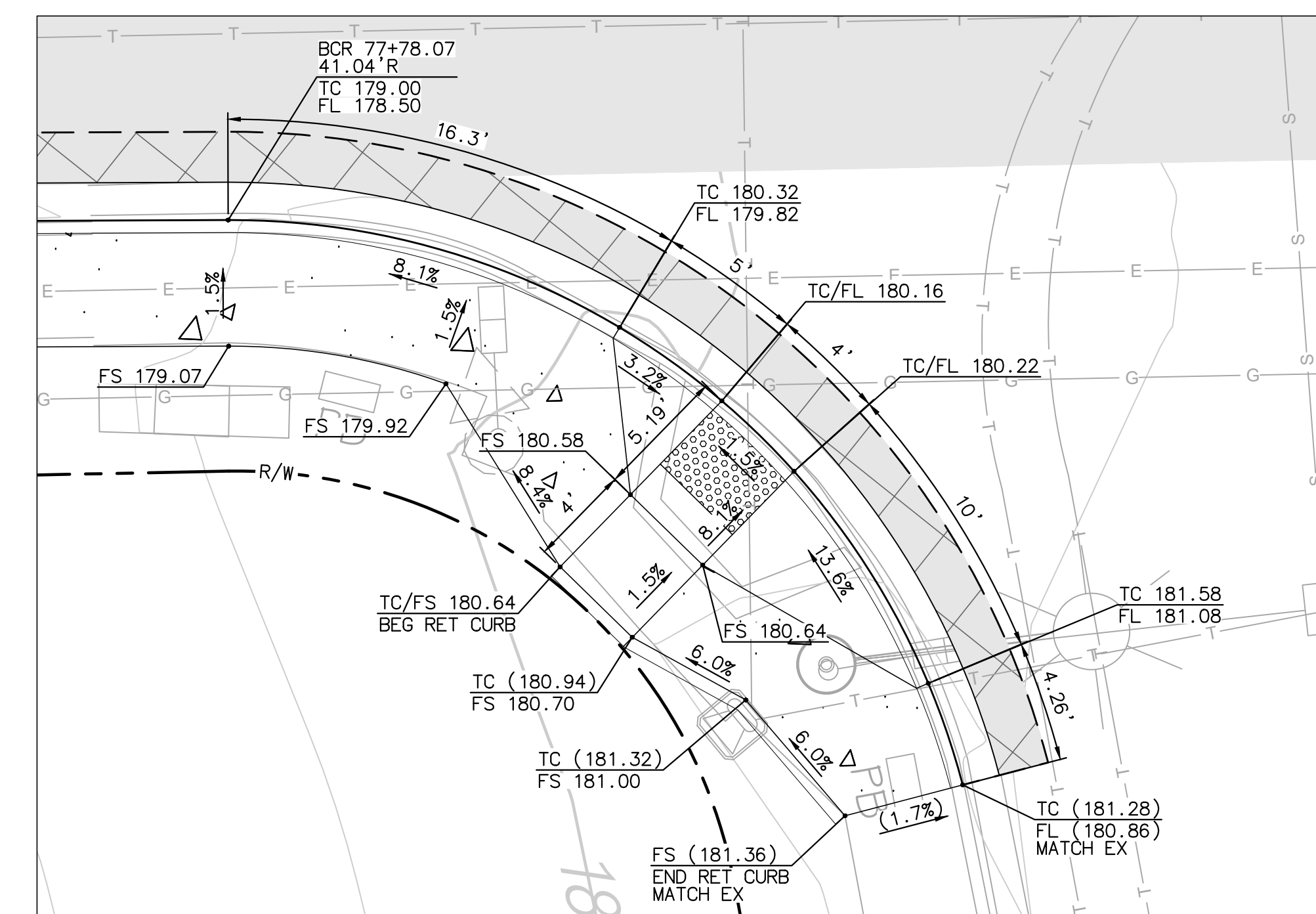
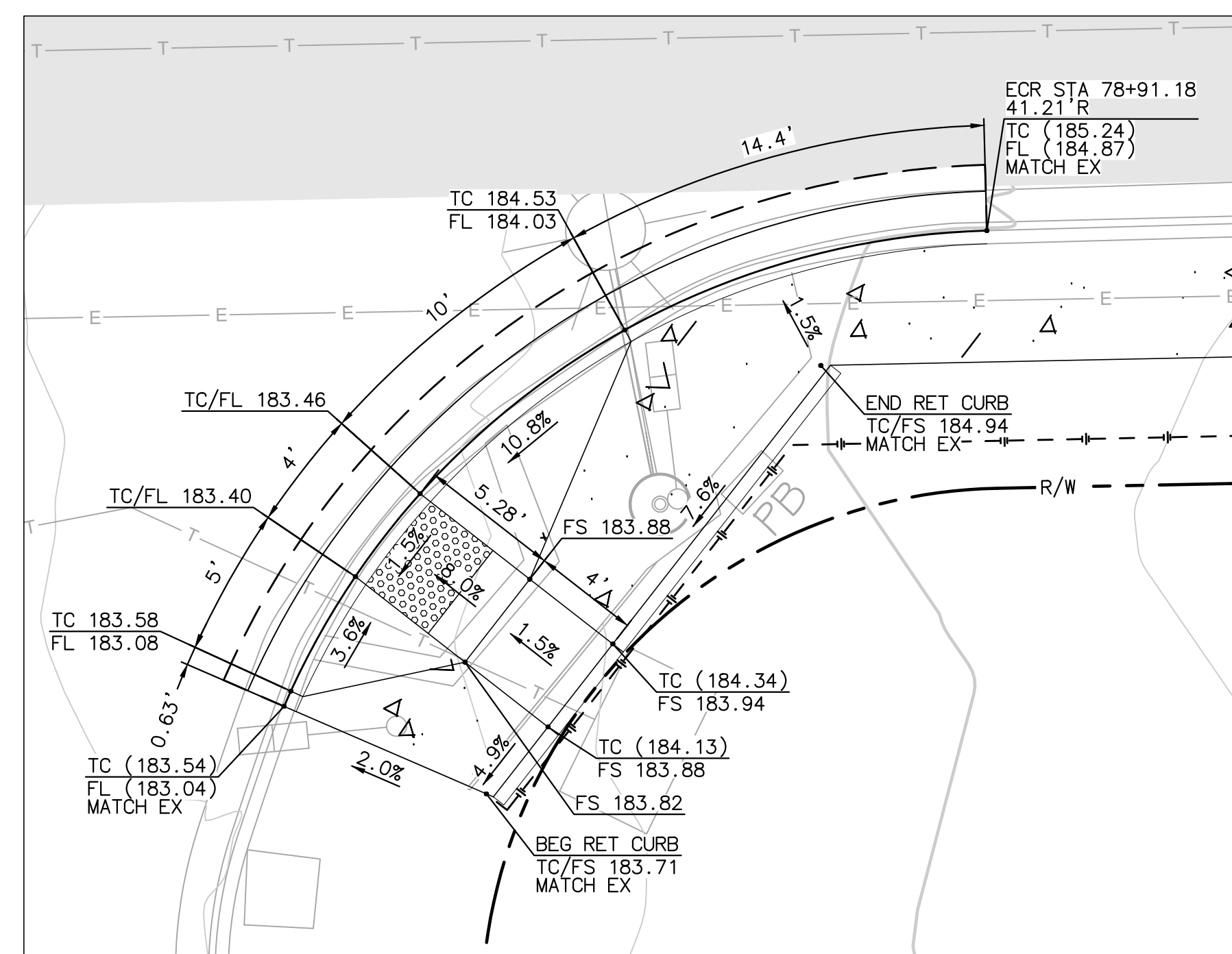
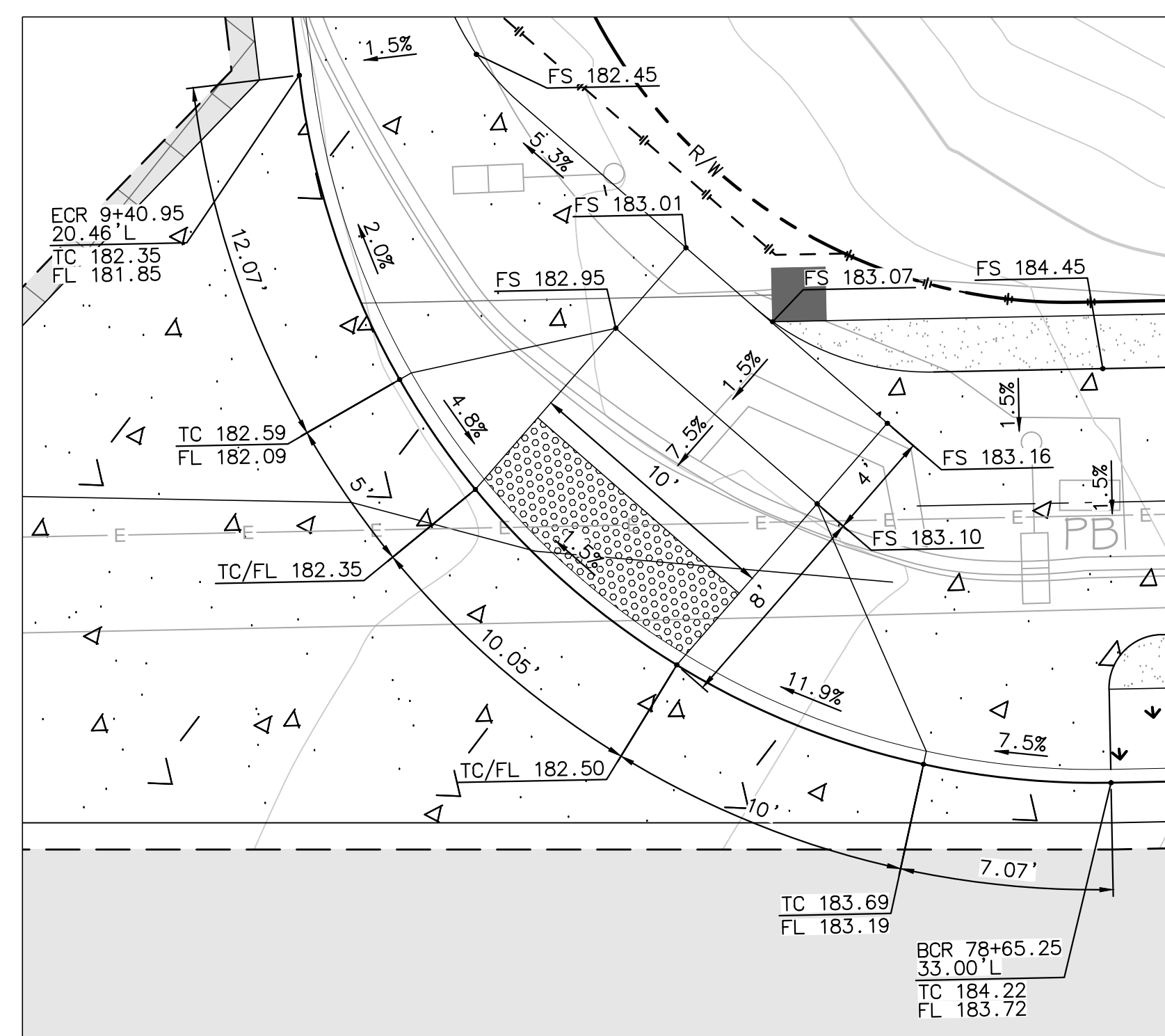
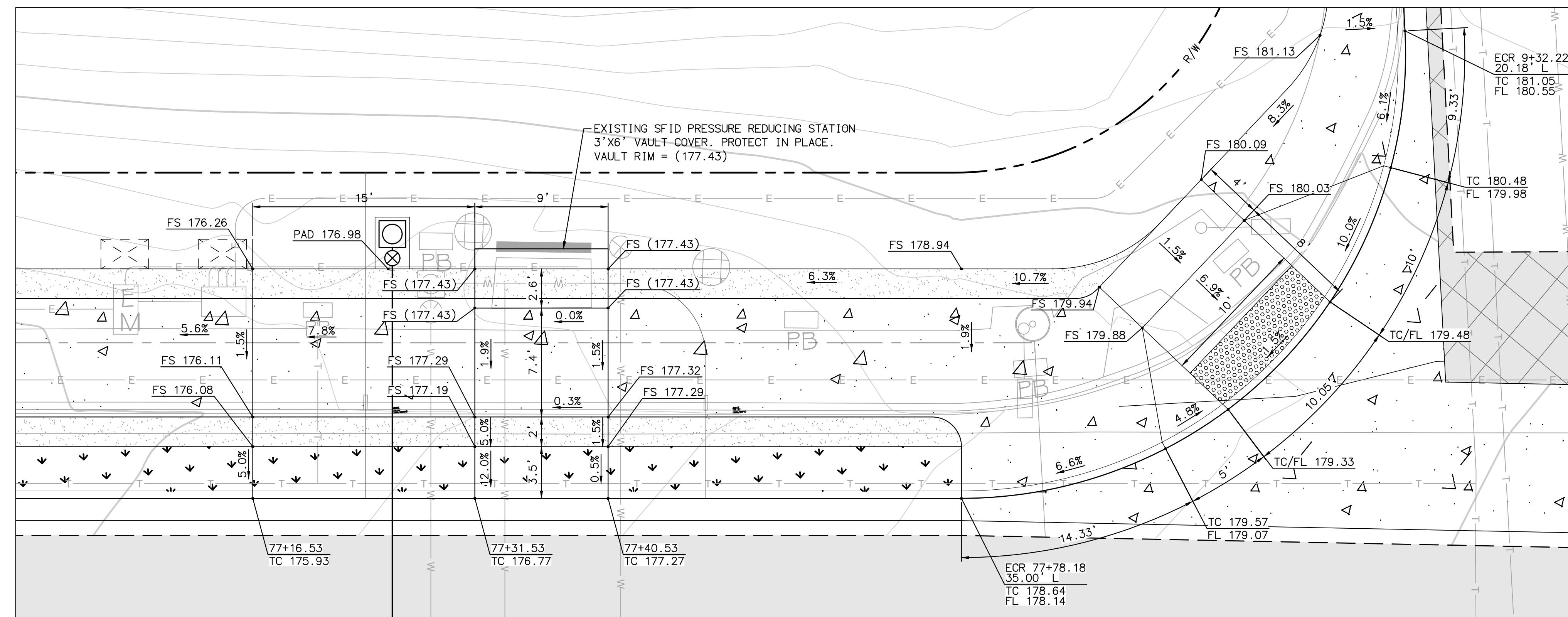
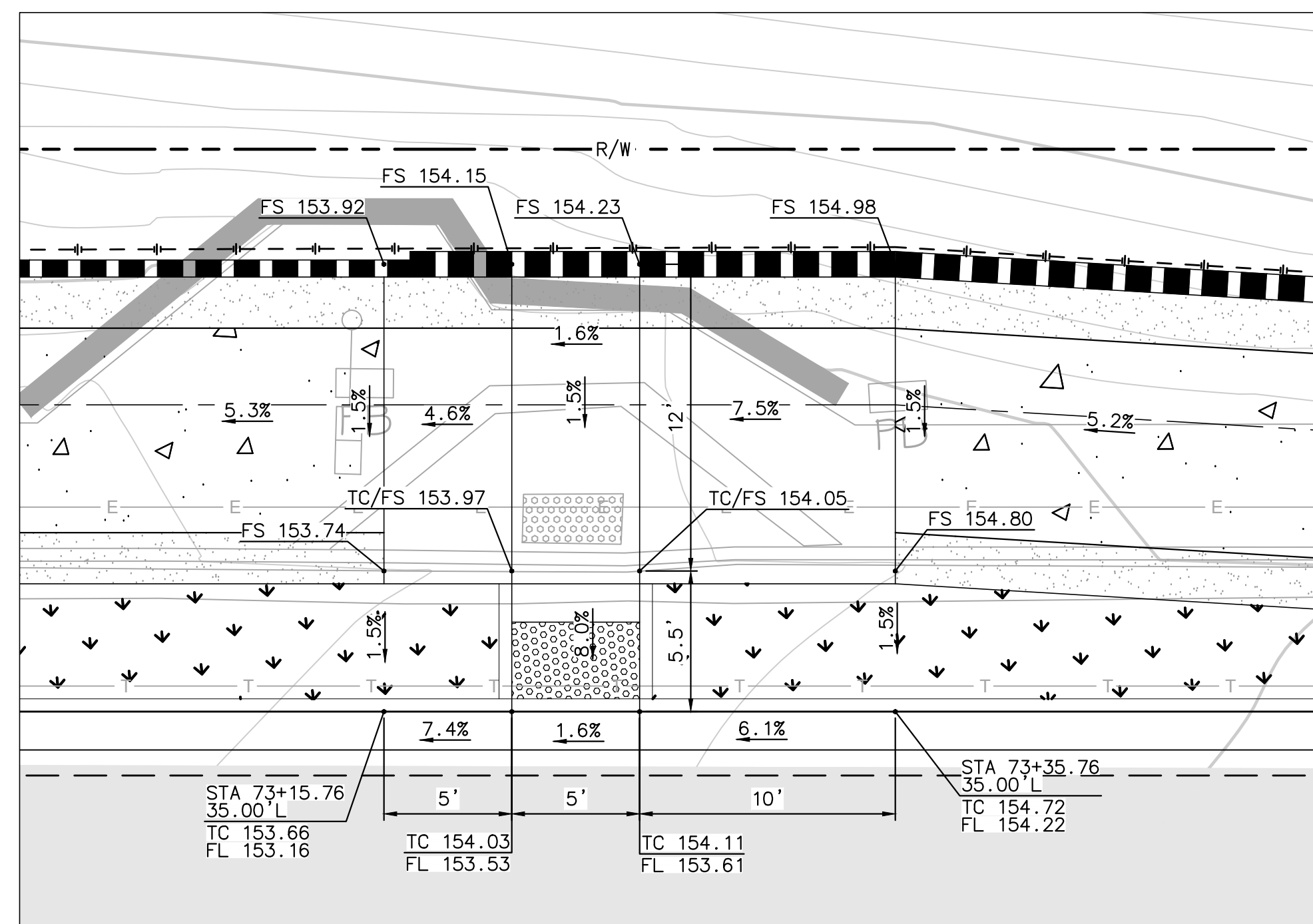
CITY APPROVED CHANGES	APP'D	DATE

RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION
Don Goldberg
By: _____ Date: 05/01/2025
Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION: _____
LOCATION: _____
ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH
IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR
ENGINEERING DEPARTMENT
IMPROVEMENT PLAN & PROFILE
DRAWING NO. **CG-3185**
Sheet 16 of 54



SCALE: 1"=5'

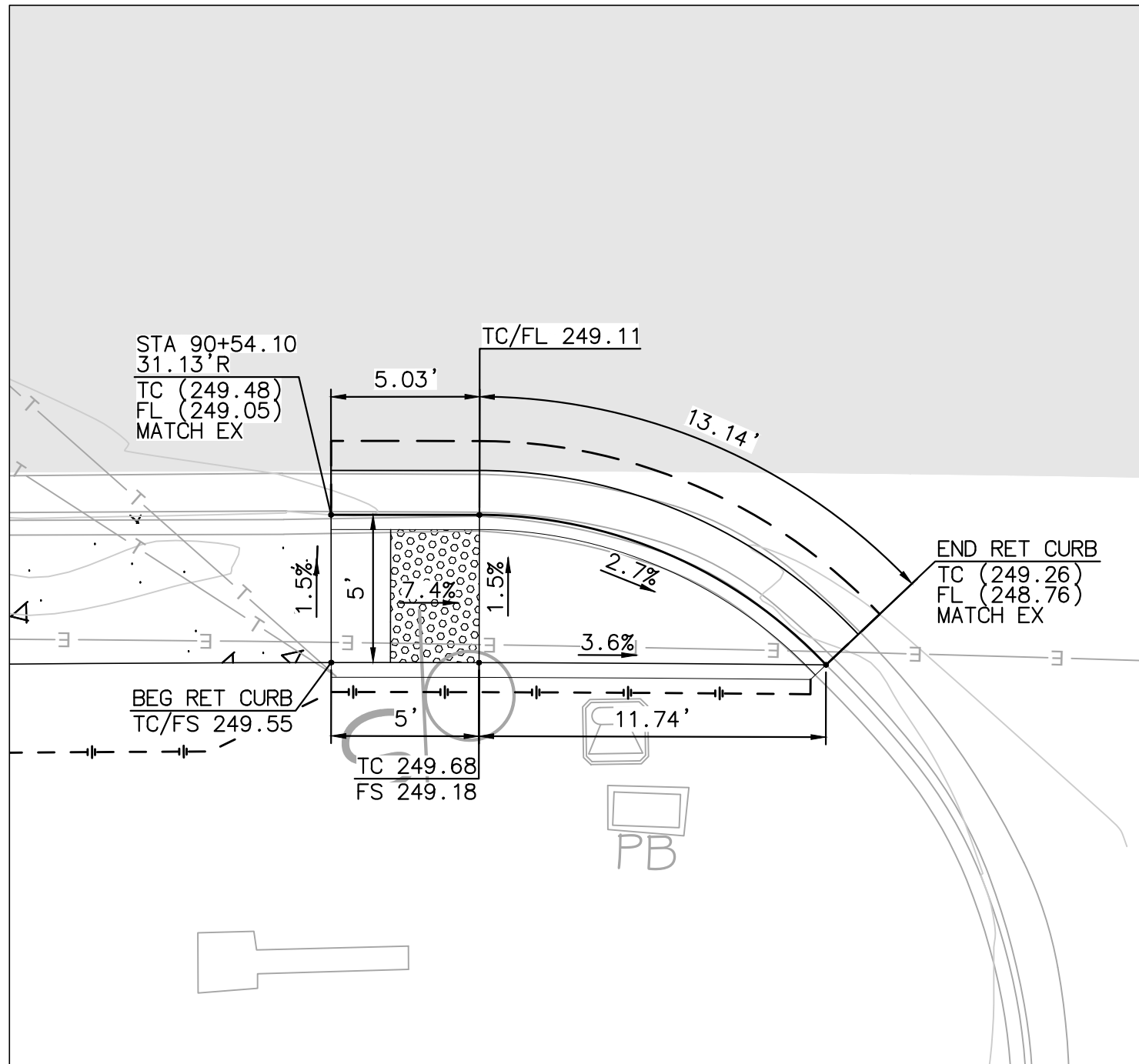
PLAN CODE
CD-1

AS-BUILT

By: _____ Date: _____

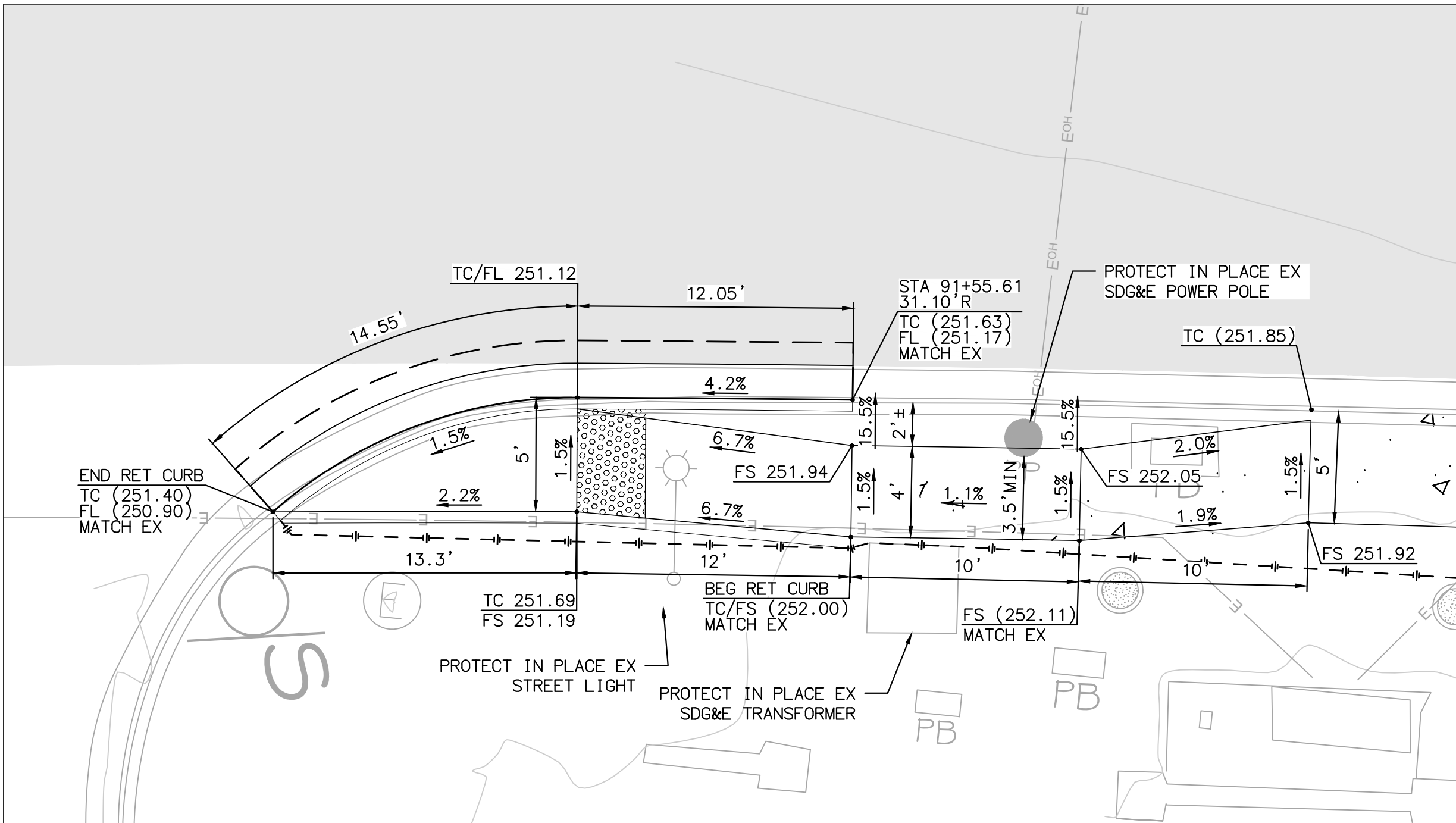
R.C.E.: _____ Exp: _____

Michael Baker 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 INTERNATIONAL MBAKERINTL.COM		ENGINEER OF WORK	CITY APPROVED CHANGES	APP'D	DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH	ENGINEERING DEPARTMENT	DRAWING NO.
		 GEOFFREY H. RETEMEYER RCF 90577 12/2/2024 DATE				By: _____ Date: _____	By:  Date: 05/01/2025	DESCRIPTION: LOCATION:	IMPROVEMENT PLANS FOR:	CONSTRUCTION DETAILS	CG-3185 Sheet 17 of 54
						R.C.E.: _____ Exp: _____	Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25 ELEV.: _____ DATUM: M.S.L.	LOMAS SANTA FE CORRIDOR			



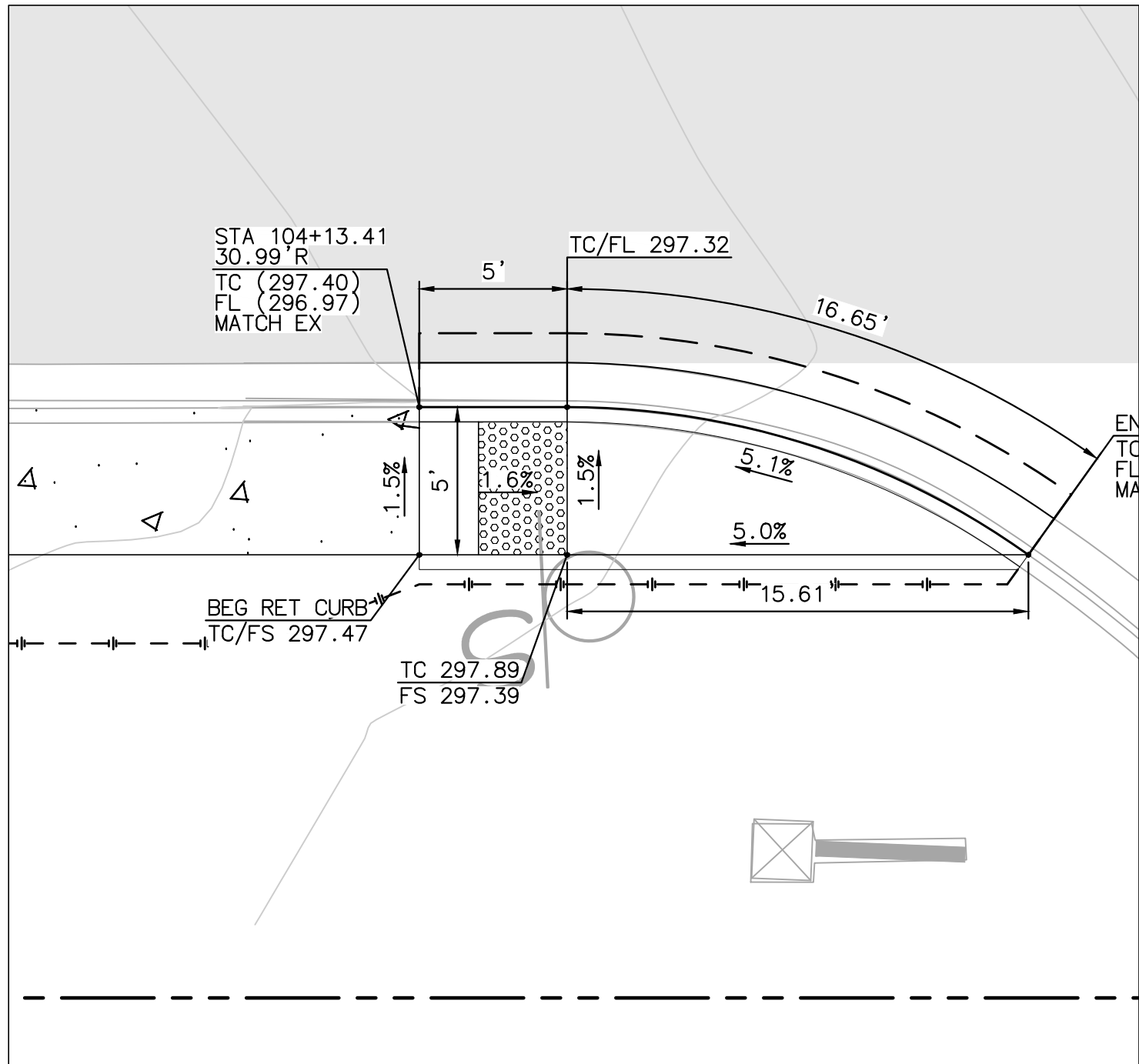
CURB RAMP 33 (TYPE D-4)
LOMAS SANTA FE/CAMINO DE LAS VILLAS (WEST)
SW CORNER (SEE SHEET IMP-6)

SCALE: 1"=5'



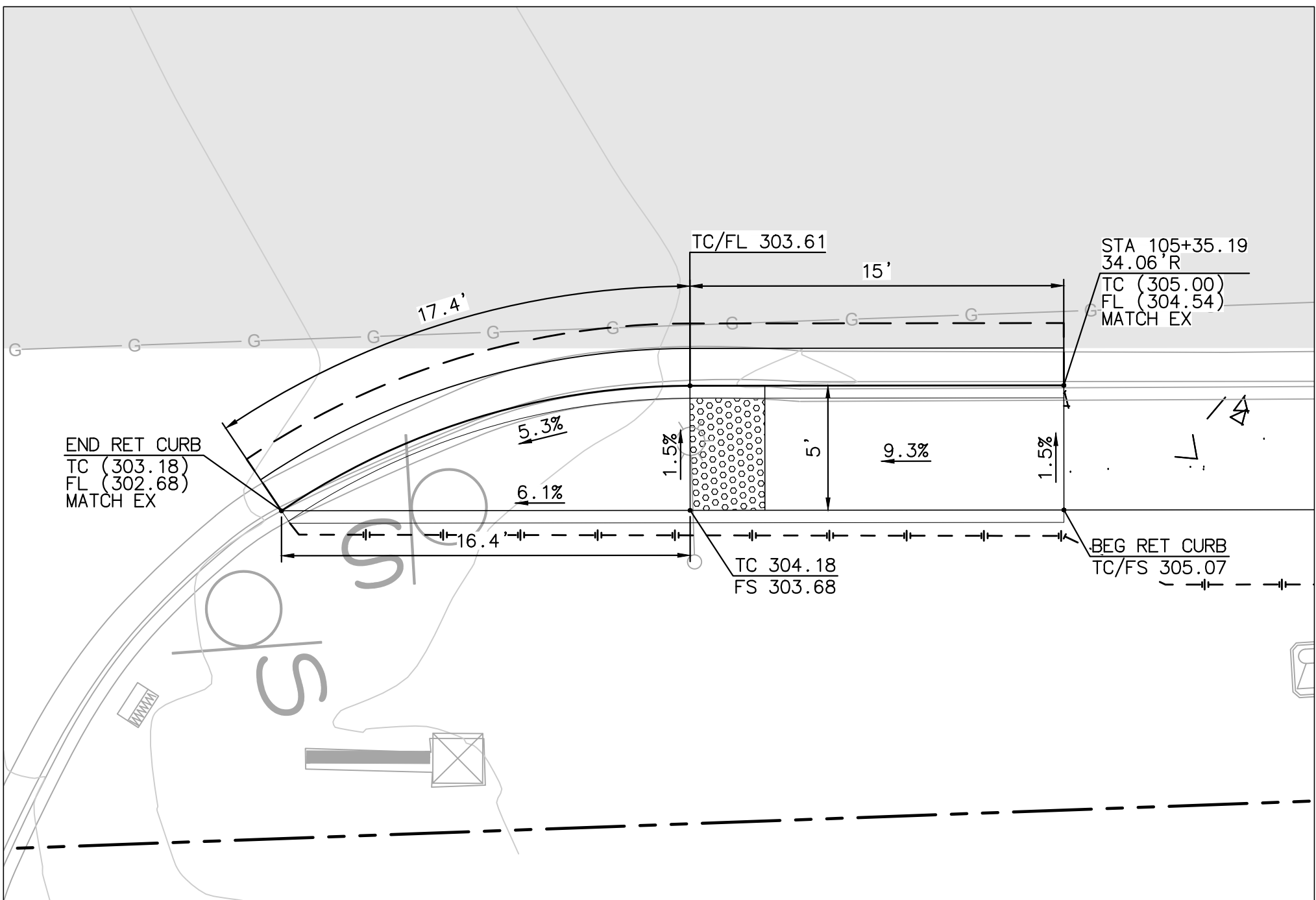
CURB RAMP 34 (TYPE D-4)
LOMAS SANTA FE/CAMINO DE LAS VILLAS (WEST)
SE CORNER (SEE SHEET IMP-6)

SCALE: 1"=5'



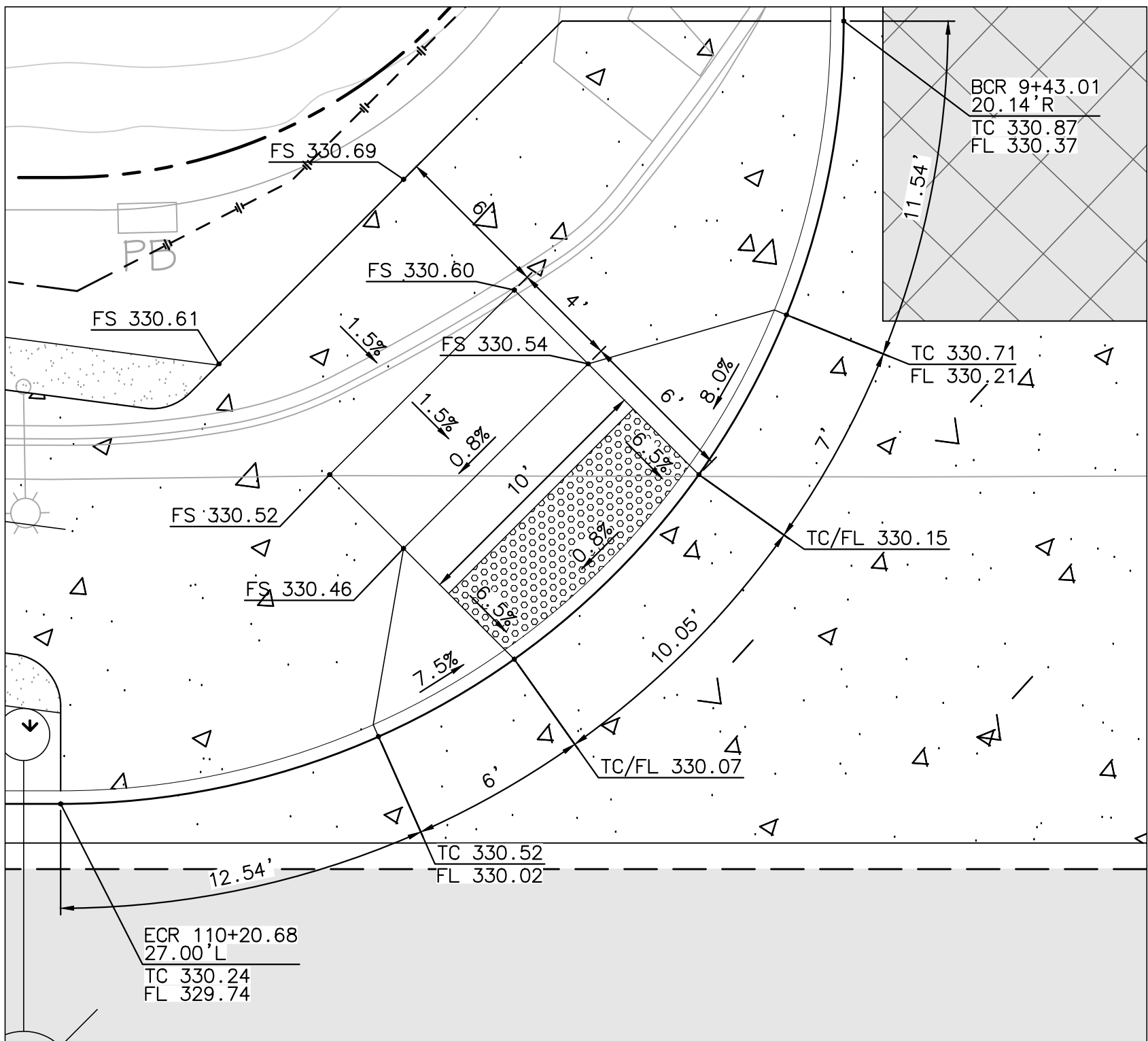
CURB RAMP 35 (TYPE D-4)
LOMAS SANTA FE/CAMINO DE LAS VILLAS (EAST)
SW CORNER (SEE SHEET IMP-9)

SCALE: 1"=5'



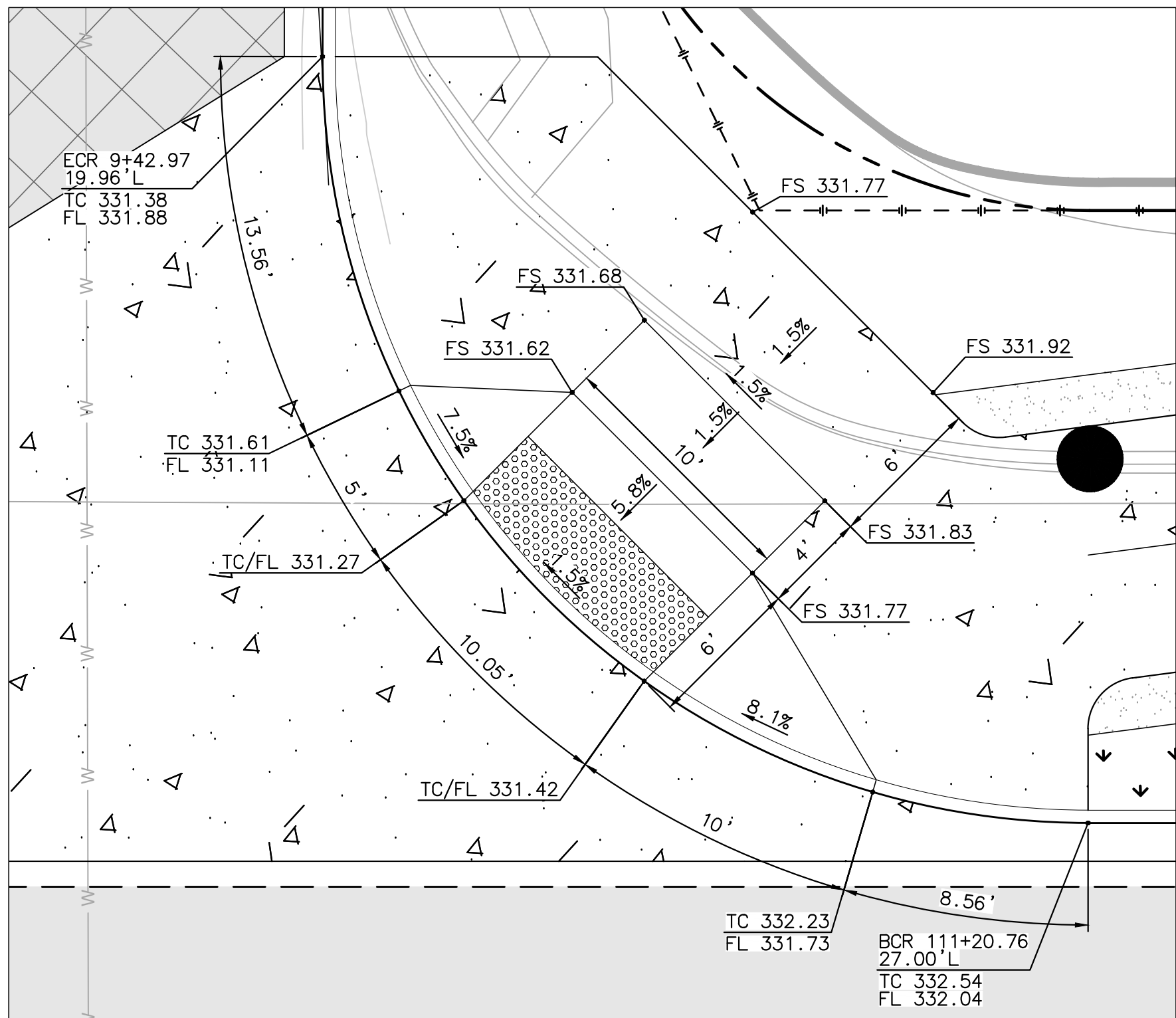
CURB RAMP 36 (TYPE D-4)
LOMAS SANTA FE/CAMINO DE LAS VILLAS (EAST)
SE CORNER (SEE SHEET IMP-9)

SCALE: 1"=5'



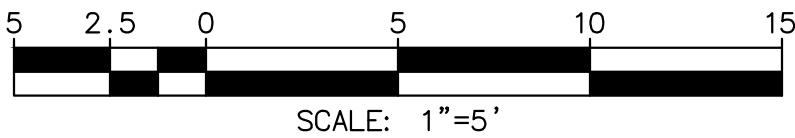
CURB RAMP 37 (TYPE A)
LOMAS SANTA FE/VIA MIL CUMBRES (EAST)
NW CORNER (SEE SHEET IMP-10)

SCALE: 1"=5'

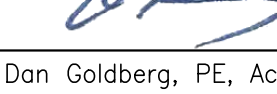


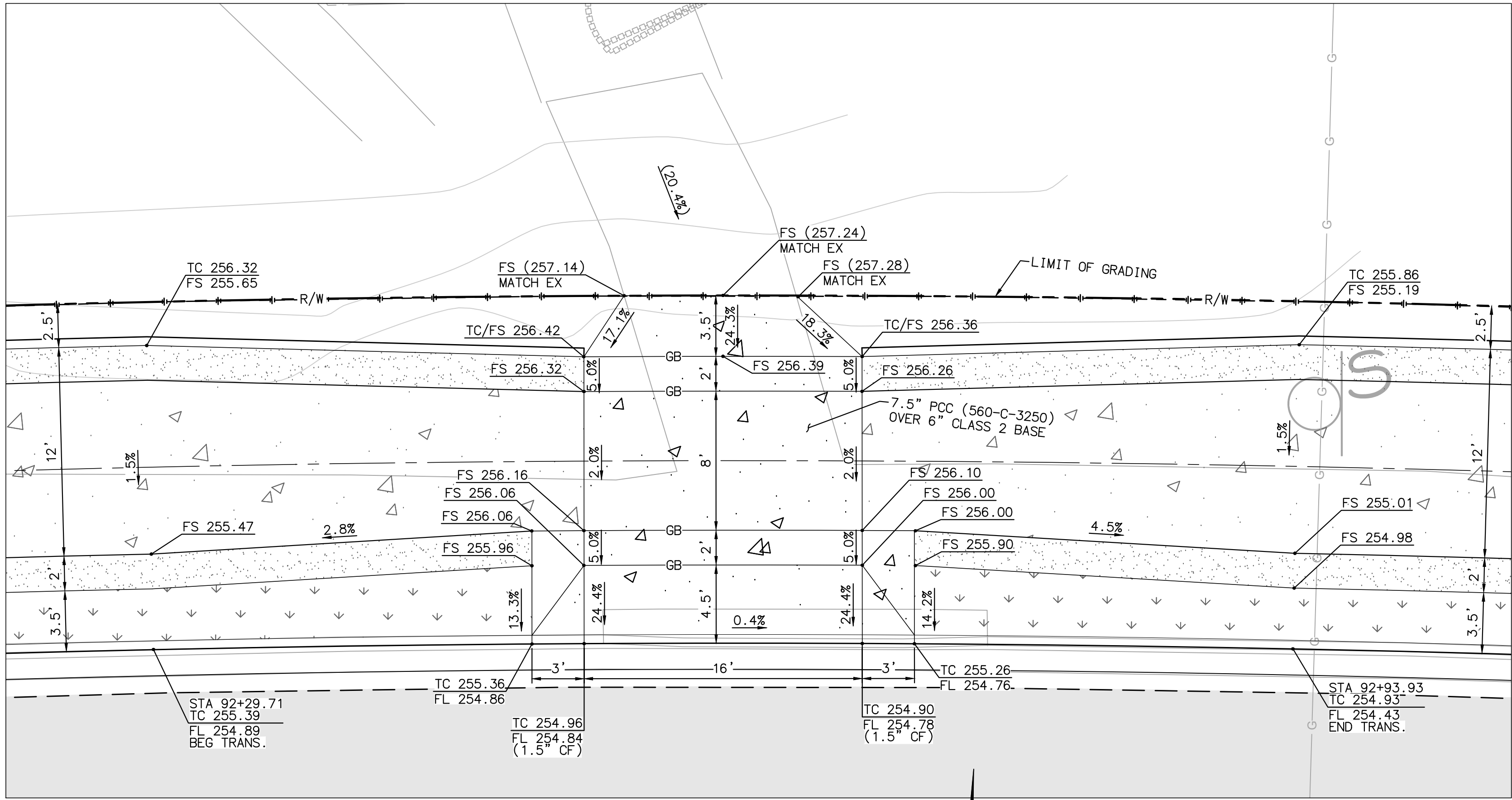
CURB RAMP 38 (TYPE A)
LOMAS SANTA FE/VIA MIL CUMBRES (EAST)
NE CORNER (SEE SHEET IMP-10)

SCALE: 1"=5'



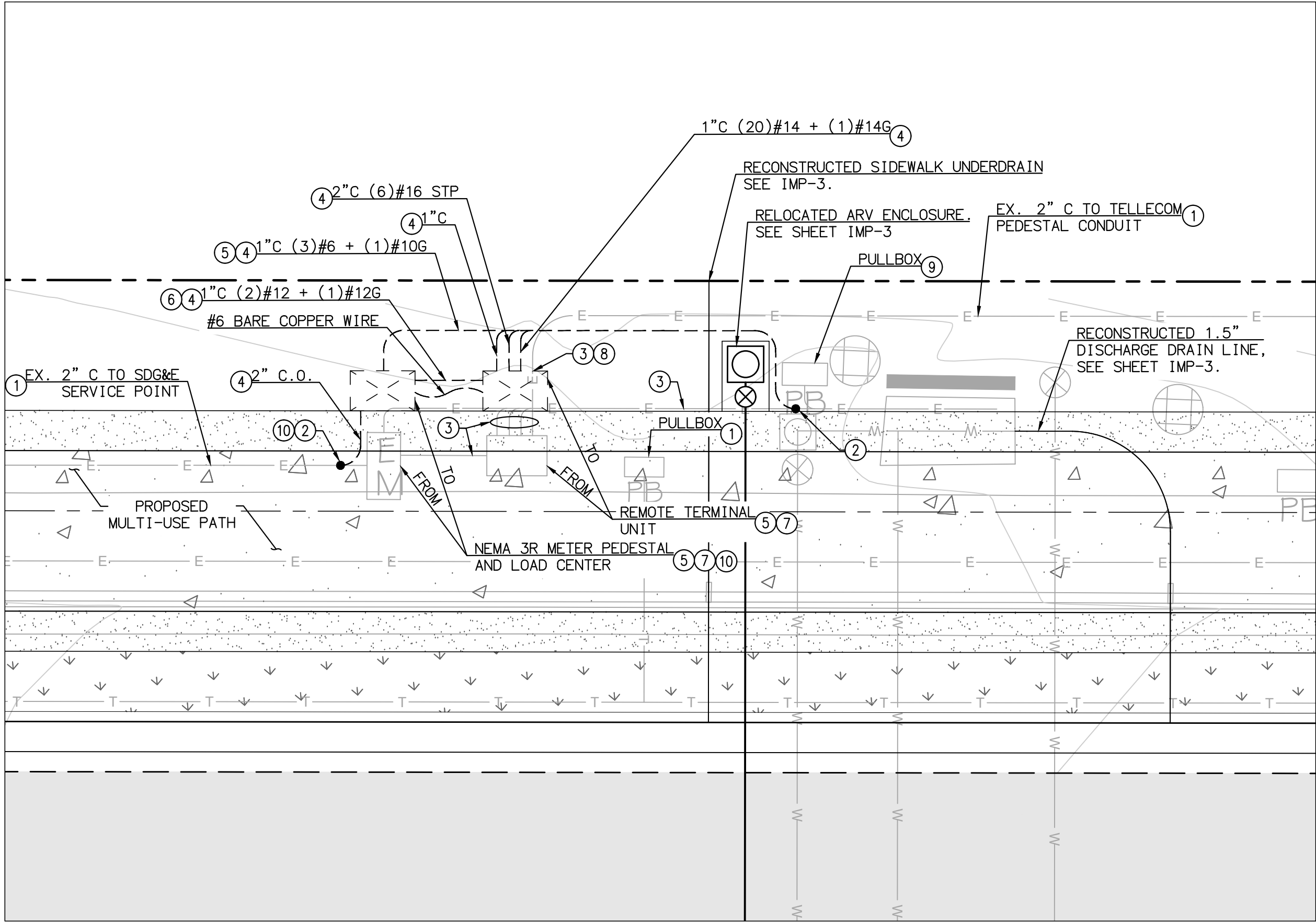
AS-BUILT
By: _____ Date: _____
R.C.E.: _____ Exp: _____
CD-2

Michael Baker INTERNATIONAL 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBakerINTL.COM		ENGINEER OF WORK	CITY APPROVED CHANGES	APP'D	DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	ENGINEERING DEPARTMENT	DRAWING NO.
		 GEOFFREY H. RETEMEYER RCE 90577			12/2/2024	By: _____ Date: _____ R.C.E.: _____ Exp: _____	By:  Date: 05/01/2025 Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25			CONSTRUCTION DETAILS	CG-3185



DRIVEWAY DETAIL
LOMAS SANTA FE, STA 92+61.82
SEE SHEET IMP-6

SCALE: 1"=5'



SFID UTILITY RELOCATION DETAIL
LOMAS SANTA FE, STA 77+25
SEE SHEET IMP-3

SCALE: 1"=5'

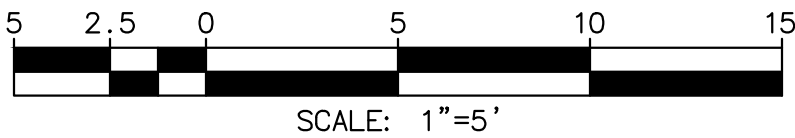


CONSTRUCTION NOTES

- PROTECT IN PLACE
- CONNECT PROPOSED CONDUIT TO EXISTING CONDUIT. SPLICE NEW TO EXISTING CONDUIT TO MAINTAIN CONNECTION
- ABANDONED EXISTING CONDUIT
- SEAL CONDUITS ENTERING THE VAULT WITH DUCT SEAL TO PREVENT ENTRY OF WATER, SILT, AND DEBRIS.
- INSTALL EQUIPMENT PAD PER DETAIL 6 ON SHEET 20
- INSTALL CONCRETE ENCASED CONDUIT PER DETAIL 7 ON SHEET 20
- RELOCATE EXISTING PAD-MOUNTED ENCLOSURE TO NEW LOCATION AT BACK OF SIDEWALK AS SHOWN. CONTRACTOR TO MAINTAIN FUNCTIONALITY OF RELOCATED EQUIPMENT AND PRESSURE REDUCING STATION PER SFID STANDARDS AND REQUIREMENTS
- CONNECT EXISTING CONDUIT TO RELOCATED UTILITY CABINET
- ADJUST TO FINISHED GRADE
- CONTRACTOR TO COORDINATE WITH SDGE FOR RE-ESTABLISHING CONNECTION TO PAD-MOUNTED METER PEDESTAL.

NOTES

- CONTRACTOR TO COORDINATE WITH SFID PRIOR TO RELOCATION OF PAD MOUNTED ENCLOSURES. CONNECTION TO PRESSURE REDUCING STATION TO BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE AUTHORIZED BY SFID REPRESENTATIVE
- CONTRACTOR TO PROTECT ALL EXISTING EQUIPMENT IN PLACE IN THE PAD-MOUNTED ENCLOSURES. FOLLOWING RELOCATION, CONTRACTOR TO VERIFY WITH SFID REPRESENTATIVE FUNCTIONALITY OF SYSTEM.



PLAN CODE
CD-3

AS-BUILT

By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker
INTERNATIONAL

5050 Avenida Encinas
Suite 260
Carlsbad, CA 92008
Phone: (760) 476-9193
MBAKERINTL.COM



ENGINEER OF WORK

GEOFFREY H. RETEMEYER RCE 90577
12/2/2024 DATE

CITY APPROVED CHANGES
APP'D DATE
By: _____ Date: _____
R.C.E.: _____ Exp: _____

RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION

Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

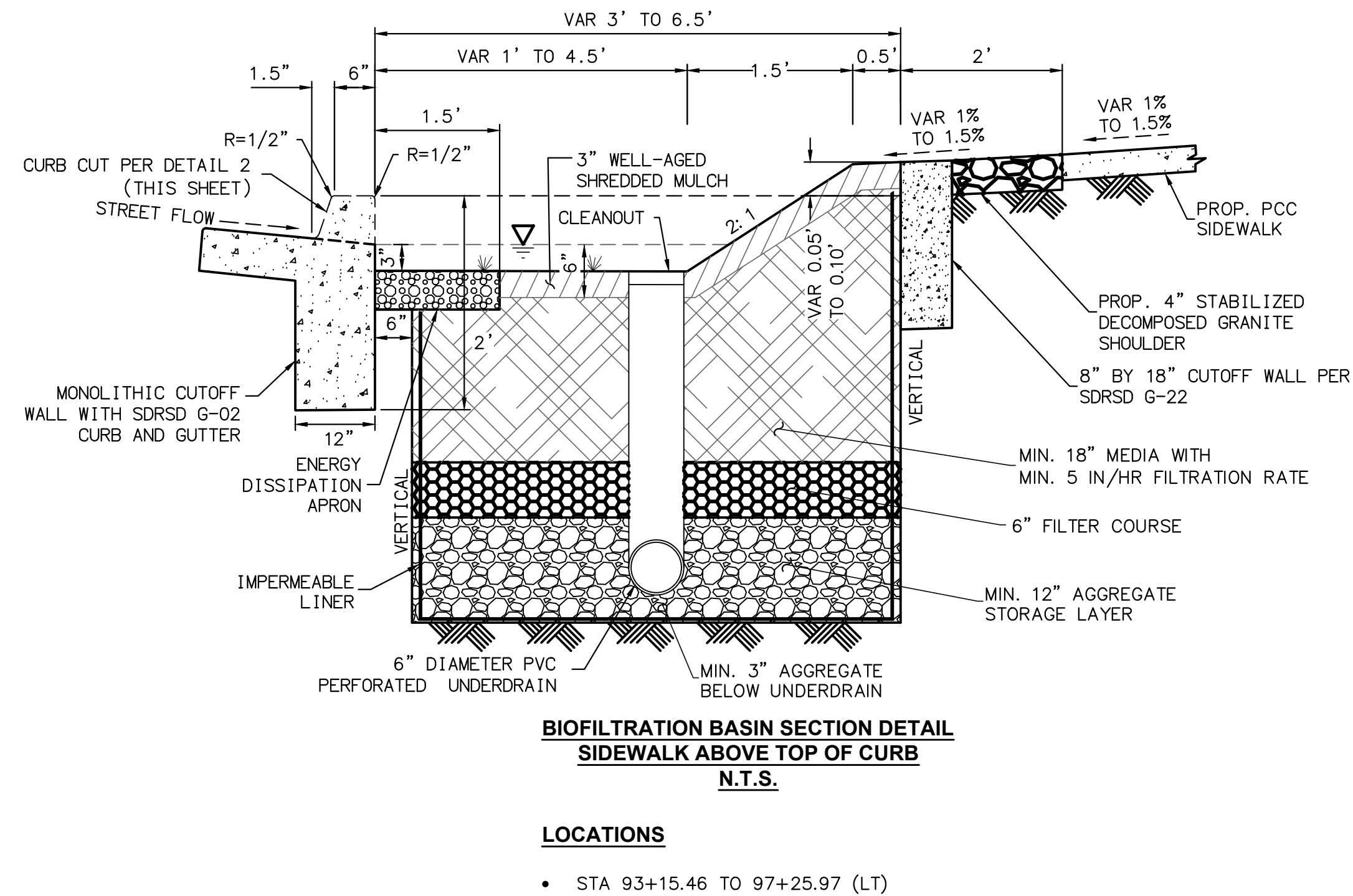
BENCH MARK
DESCRIPTION:
LOCATION:
ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH
IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

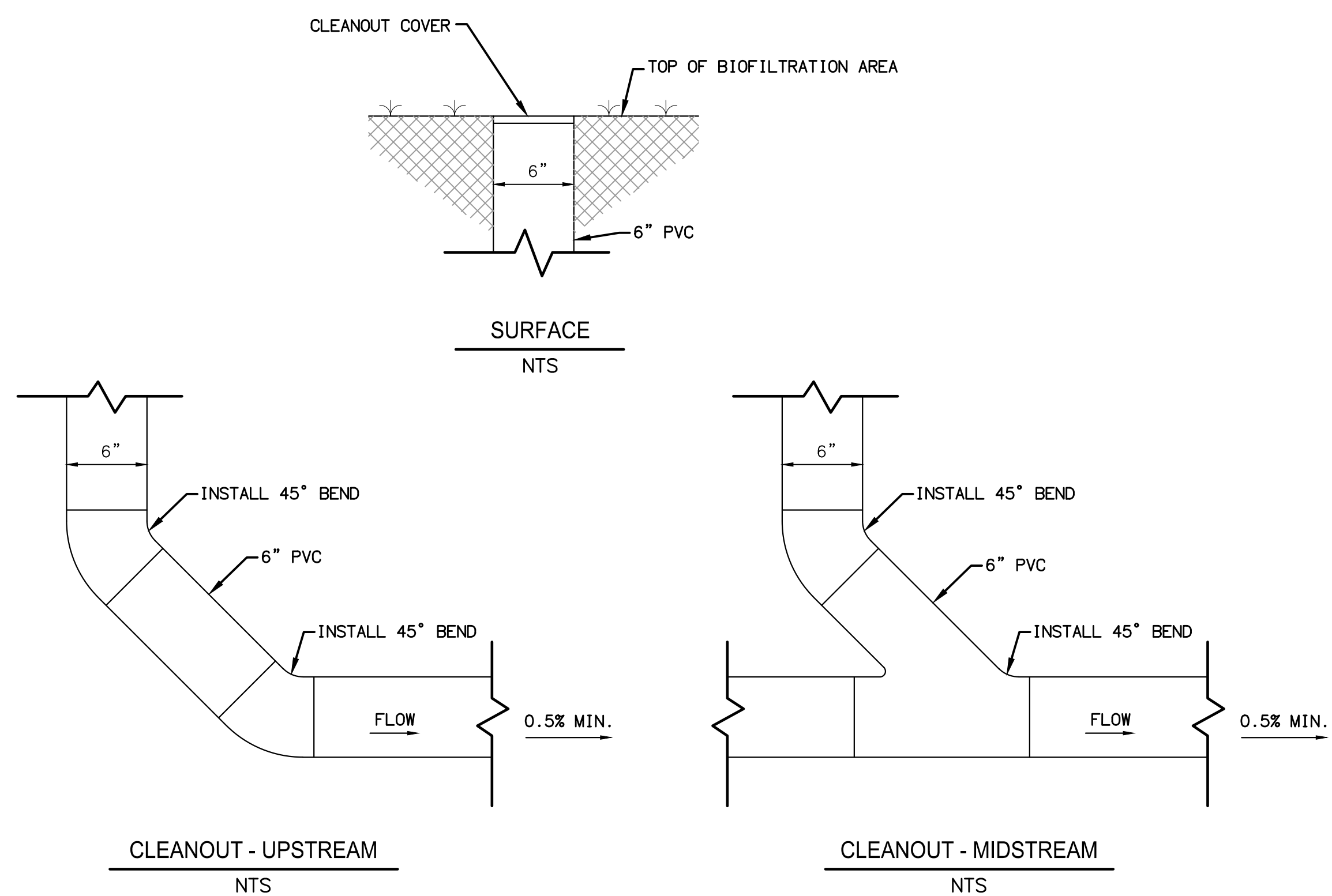
ENGINEERING DEPARTMENT
CONSTRUCTION DETAILS

DRAWING NO.
CG-3185
Sheet 19 of 54

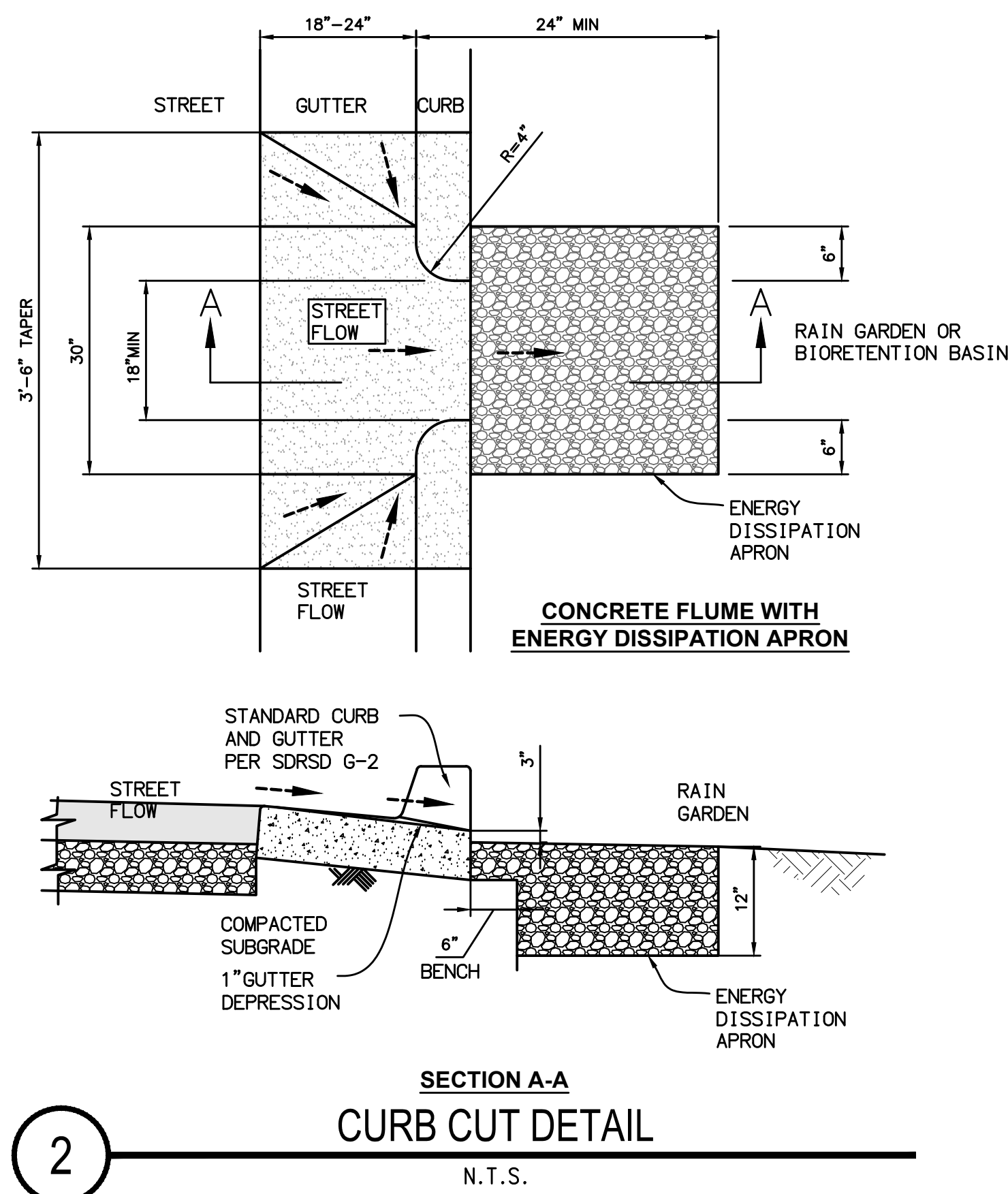




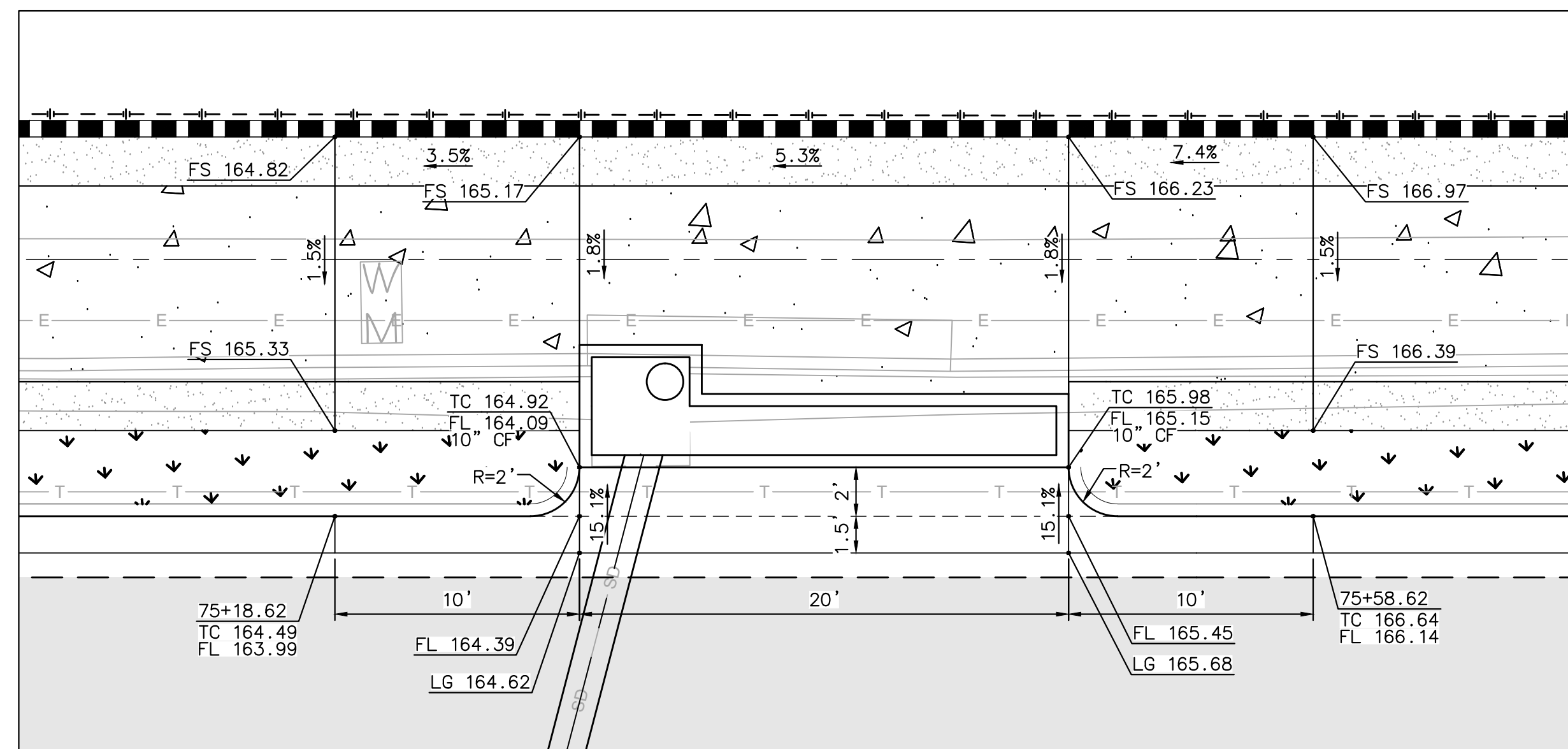
1 PLANTER BOX/BIOFILTRATION BASIN DETAIL
N.T.S.



3 BIOFILTRATION AREA CLEANOUT
N.T.S.



2 CURB CUT DETAIL
N.T.S.

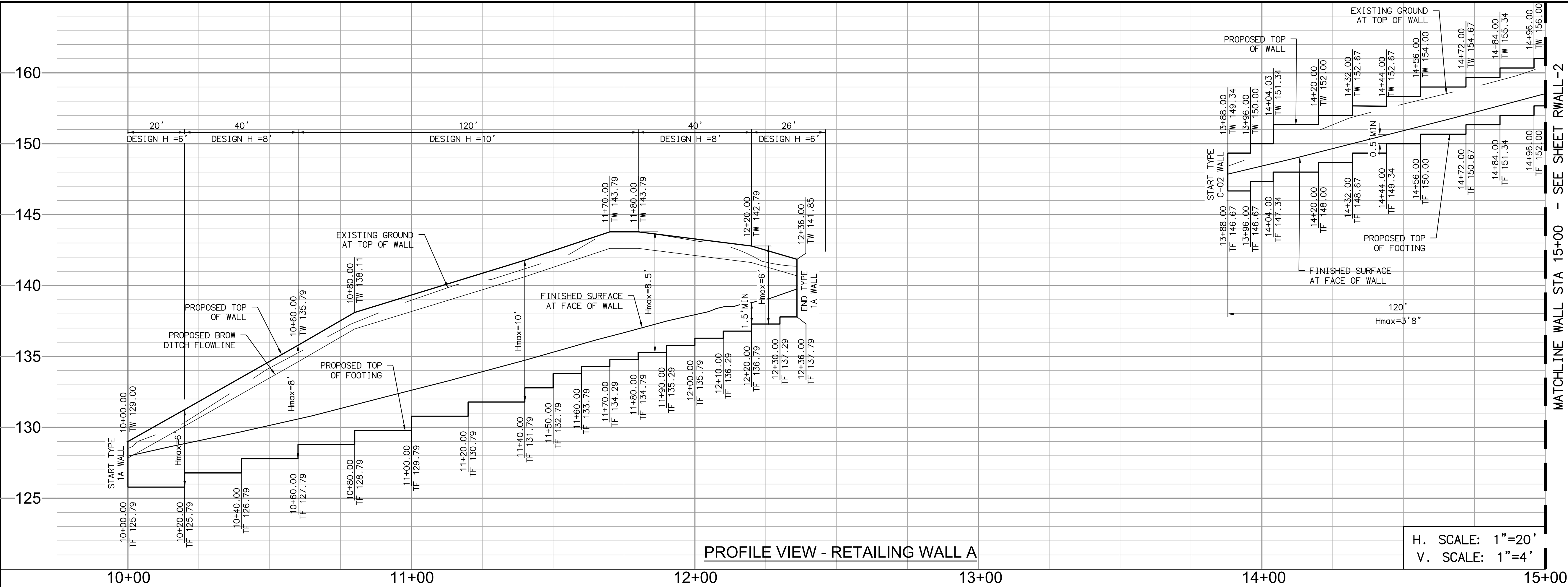


4 TYPE B CURB INLET CHANNEL
N.T.S.

PLAN CODE
CD-5

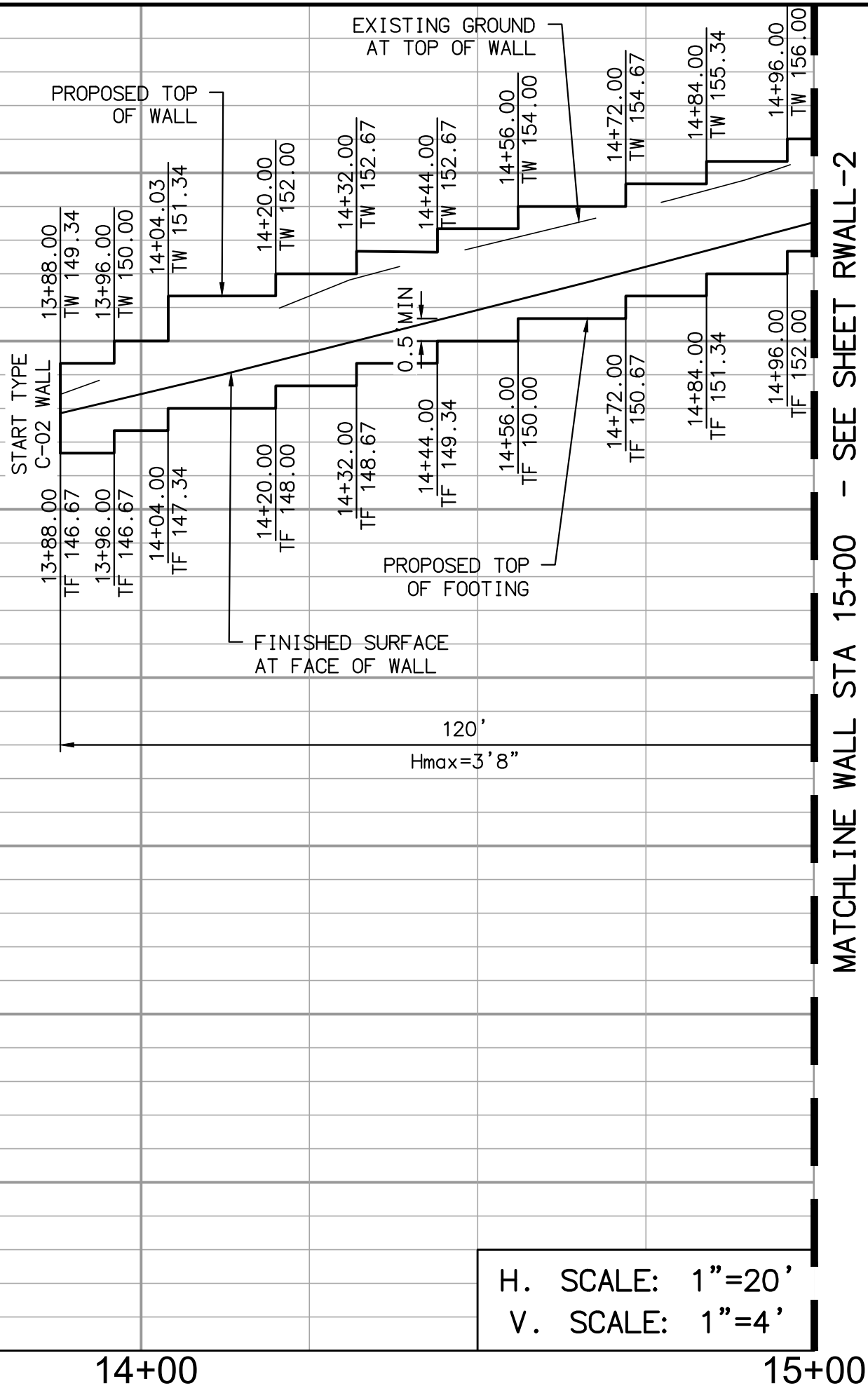
AS-BUILT
By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 M.BAKER@INTL.COM		ENGINEER OF WORK Geoffrey H. Retemeyer RCE 90577 12/2/2024 DATE	CITY APPROVED CHANGES APP'D DATE	RECOMMENDED FOR APPROVAL By: _____ Date: _____ R.C.E.: _____ Exp: _____	APPROVED FOR CONSTRUCTION By: _____ Date: 05/01/2025 Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	BENCH MARK DESCRIPTION: _____ LOCATION: _____ ELEV.: _____ DATUM: M.S.L.	CITY OF SOLANA BEACH IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	ENGINEERING DEPARTMENT CONSTRUCTION DETAILS	DRAWING NO. CG-3185 Sheet 21 of 54
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PROFILE VIEW - RETAILING WALL A

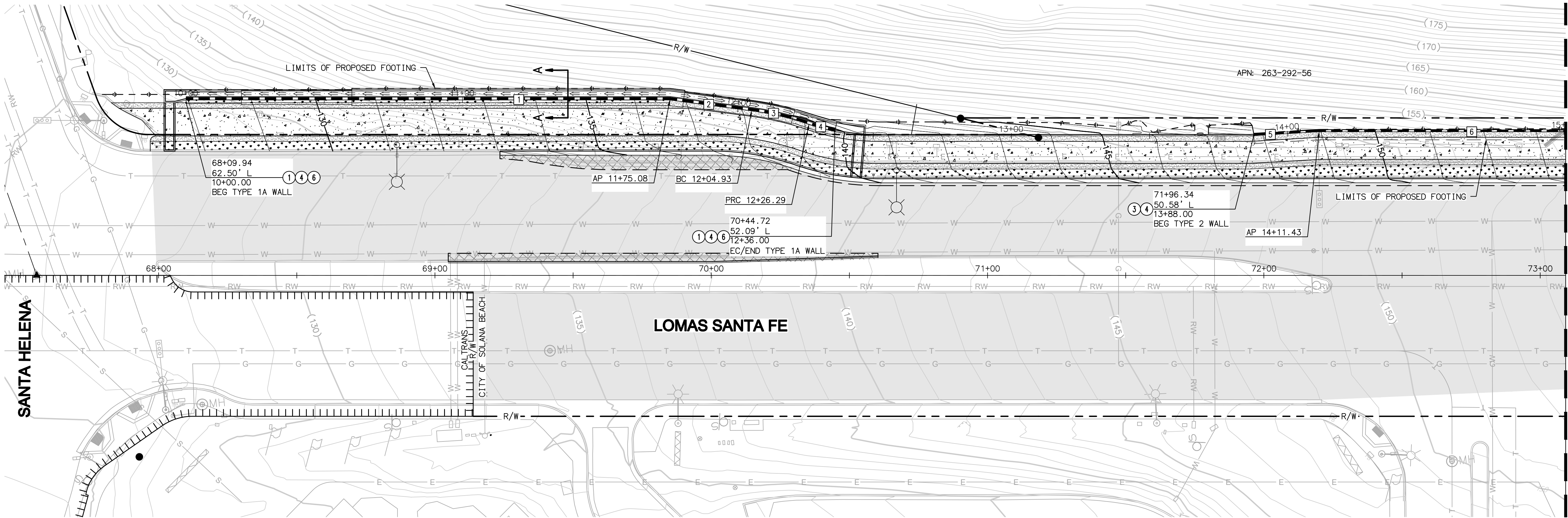
H. SCALE: 1"=20'
V. SCALE: 1"=4'



- CONSTRUCTION NOTES
- ① CONSTRUCT TYPE 1A REINFORCED CONCRETE RETAINING WALL PER SDRSD C-12A AND C-12B
 - ③ CONSTRUCT TYPE 2 MASONRY WALL PER SDRSD C-02
 - ④ CONSTRUCT PROTECTIVE RAILING ON TOP OF RETAINING WALL PER SDRSD M-24
 - ⑥ CONSTRUCT TYPE B BROW DITCH AT BACK OF RETAINING WALL PER SDRSD D-75

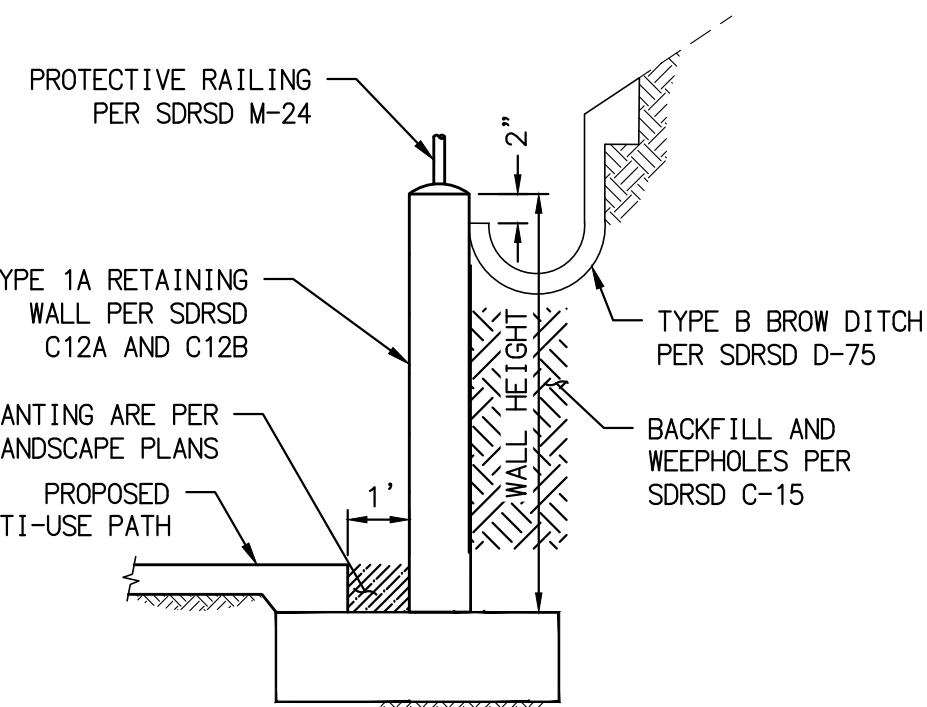
RETAINING WALL DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N84°43'48"W	--	175.06'	TYPE 1A RET WALL
2	N77°08'11"W	--	29.87'	TYPE 1A RET WALL
3	11°19'48"	108.00'	21.36'	TYPE 1A RET WALL
4	7°13'48"	77.00'	9.71'	TYPE 1A RET WALL
5	N88°09'49"W	--	25.04'	TYPE 2 RET WALL
6	N84°43'48"W	--	88.78'	TYPE 2 RET WALL

NOTE:
REFER TO IMPROVEMENT PLAN SHEETS
FOR ALL UTILITIES TO BE RELOCATED
OR PROTECTED IN PLACE.

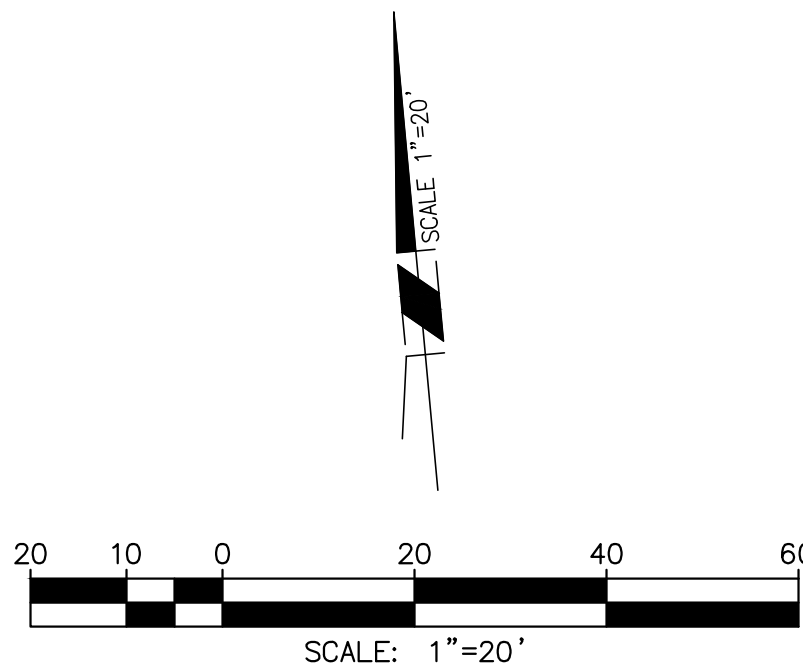


PLAN VIEW - RETAINING WALL A

SCALE: 1"=20'



SECTION A-A
NO SCALE



AS-BUILT
By: _____ Date: _____
R.C.E.: _____ Exp: _____

PLAN CODE
RWALL-1

Michael Baker
INTERNATIONAL
5050 Avenida Encinas
Suite 260
Carlsbad, CA 92008
Phone: (760) 476-9193
MBAKERINTL.COM



ENGINEER OF WORK
GEOFFREY H. RETEMEYER RCE 90577
12/2/2024
DATE

CITY APPROVED CHANGES

APP'D DATE

RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

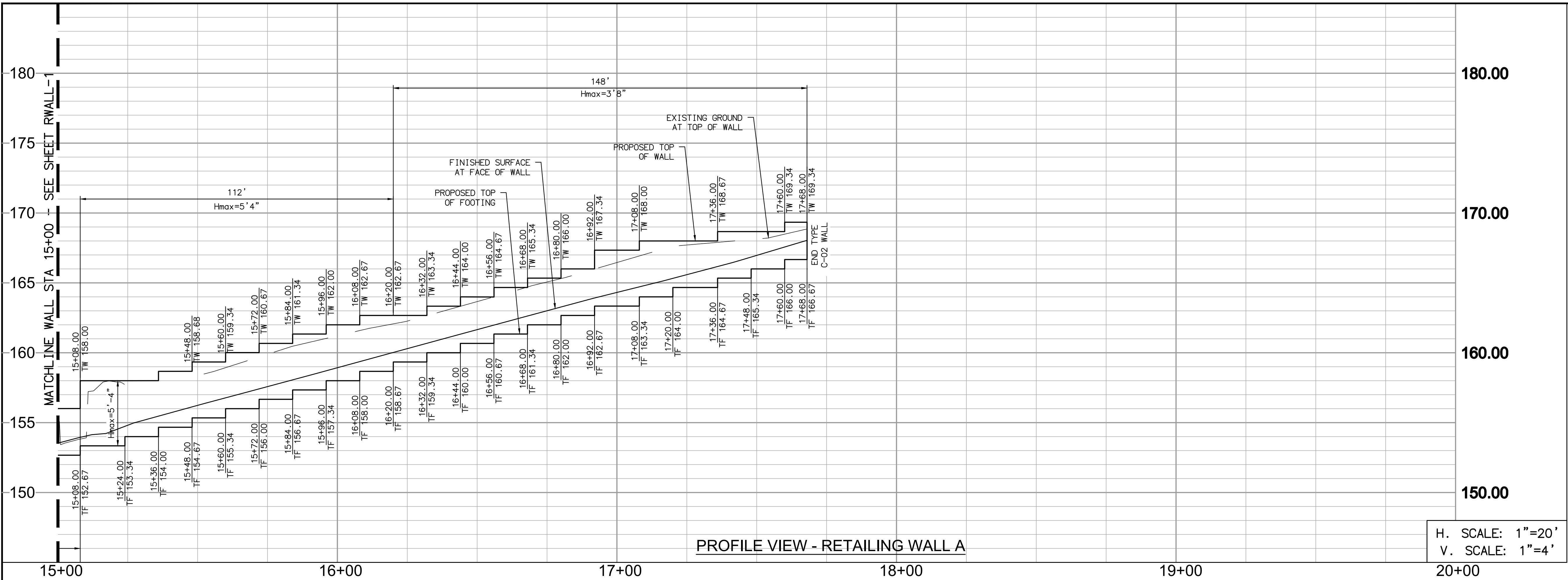
APPROVED FOR CONSTRUCTION
By: _____ Date: 05/01/2025
Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION:
LOCATION:
ELEV.: _____ DATUM: M.S.L.

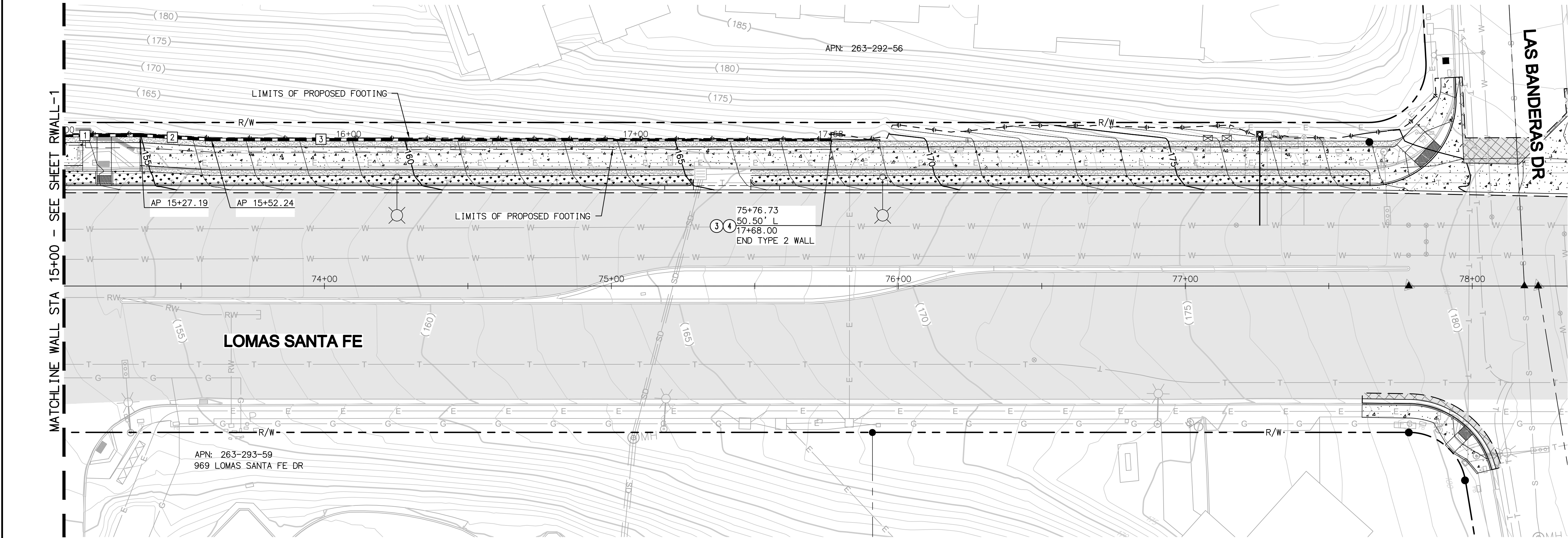
CITY OF SOLANA BEACH
IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

ENGINEERING DEPARTMENT
RETAINING WALL PLAN & PROFILE

DRAWING NO.
CG-3185
Sheet 22 of 54

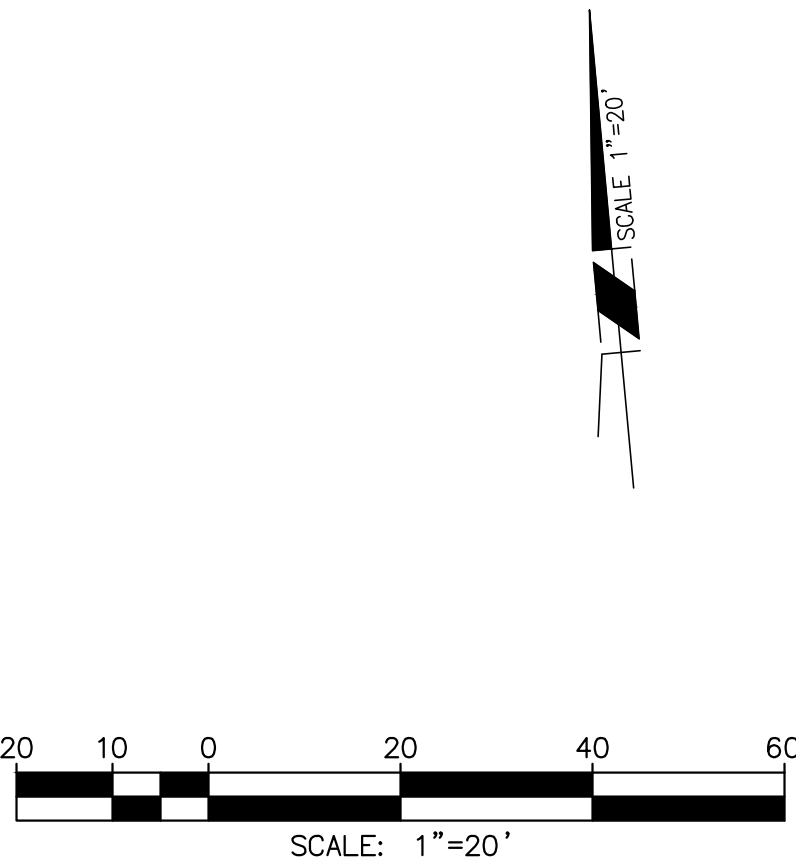


- CONSTRUCTION NOTES
- ③ CONSTRUCT TYPE 2 MASONRY WALL PER SDRSD C-02
- ④ CONSTRUCT PROTECTIVE RAILING ON TOP OF RETAINING WALL PER SDRSD M-24



RETAINING WALL DATA TABLE				
NO	BEARING/Delta	RADIUS	LENGTH	NOTE
1	N84°43'48"W	--	26.98'	TYPE 2 RET WALL
2	N81°17'47"W	--	25.04'	TYPE 2 RET WALL
3	N84°43'48"W	--	215.97'	TYPE 2 RET WALL

NOTE:
REFER TO IMPROVEMENT PLAN SHEETS
FOR ALL UTILITIES TO BE RELOCATED
OR PROTECTED IN PLACE.



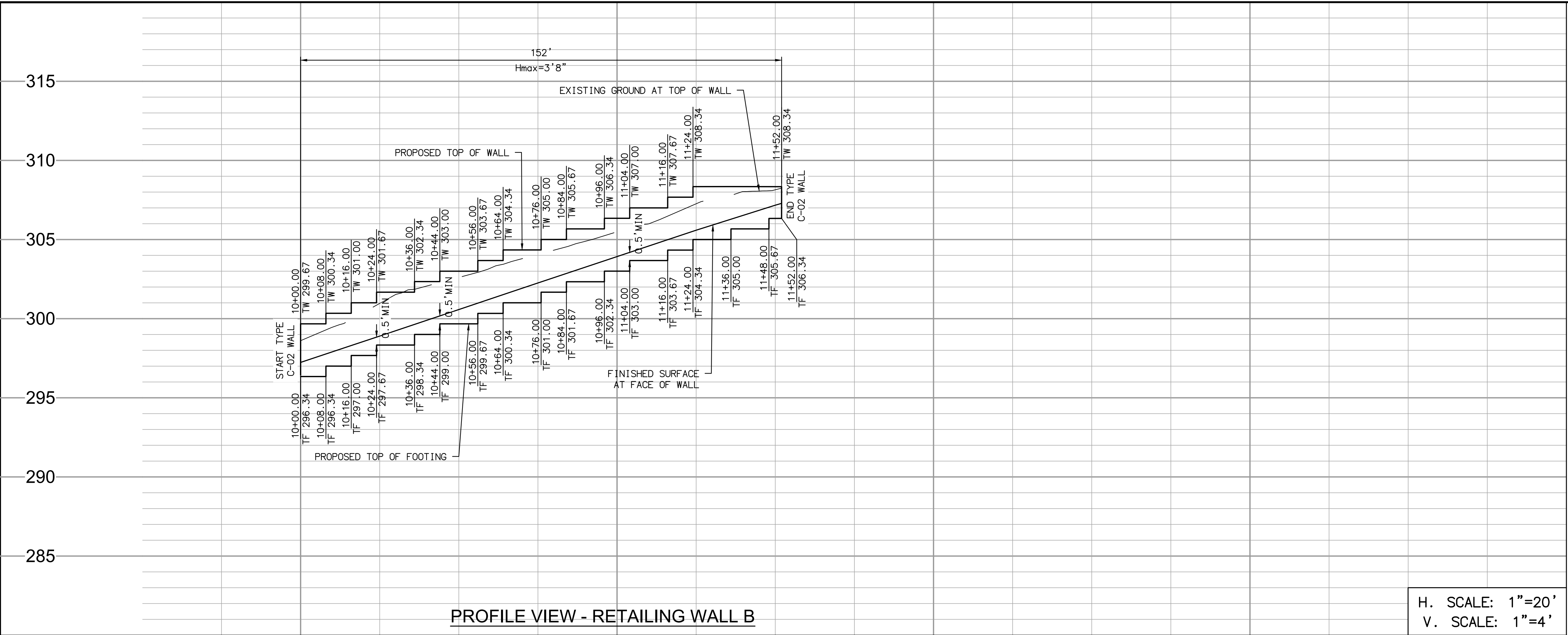
AS-BUILT

By: _____ Date: _____

RWALL-2

R.C.E.: _____ Exp: _____

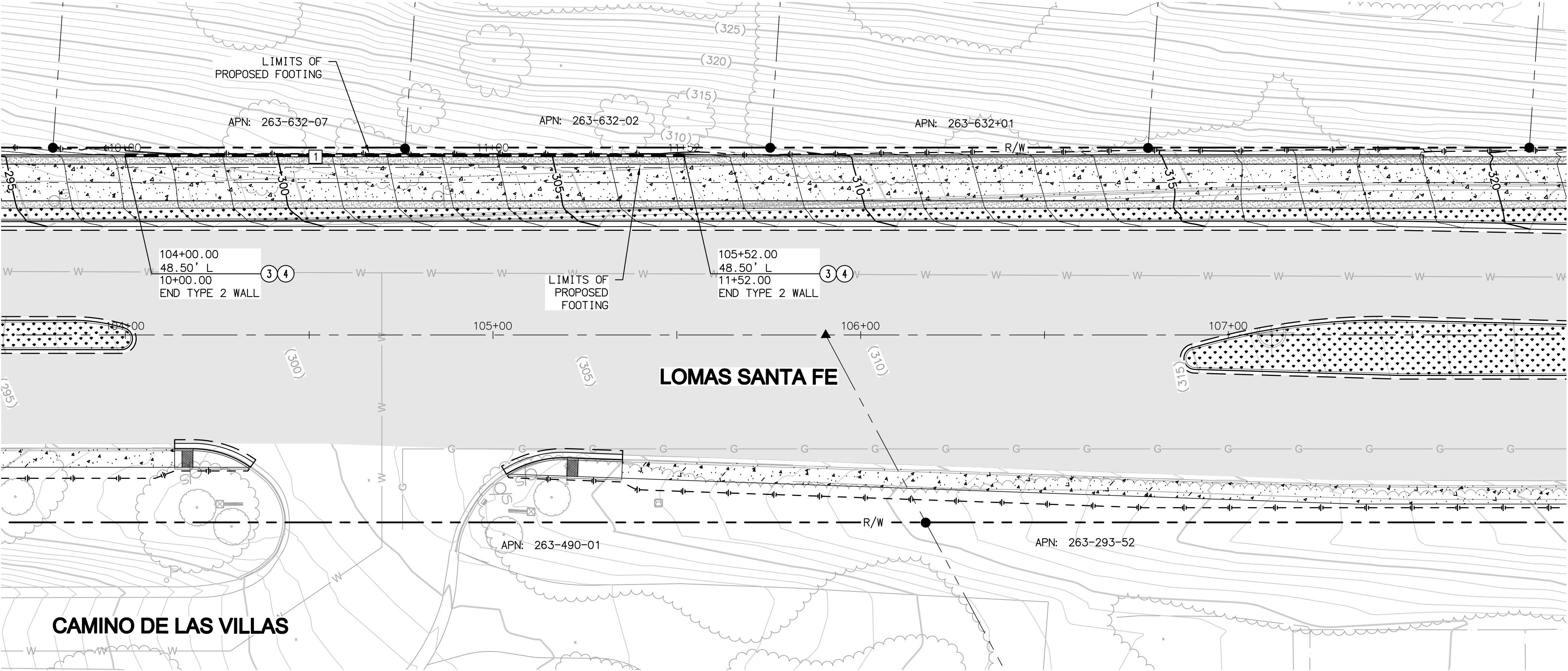
Michael Baker INTERNATIONAL	5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBAKERINTL.COM		ENGINEER OF WORK		CITY APPROVED CHANGES		APP'D	DATE	RECOMMENDED FOR APPROVAL		APPROVED FOR CONSTRUCTION		BENCH MARK		CITY OF SOLANA BEACH		ENGINEERING DEPARTMENT	DRAWING NO.	
			 GEOFFREY H. RETEMEYER RCE 90577 DATE 12/2/2024						By: _____ Date: _____		By: Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25		DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L. _____		IMPROVEMENT PLANS FOR: RETAINING WALL PLAN & PROFILE		CG-3185		
																			Sheet 23 of 54



- CONSTRUCTION NOTES
- ③ CONSTRUCT TYPE 2 MASONRY WALL PER SDRSD C-02
 - ④ CONSTRUCT PROTECTIVE RAILING ON TOP OF RETAINING WALL PER SDRSD M-24

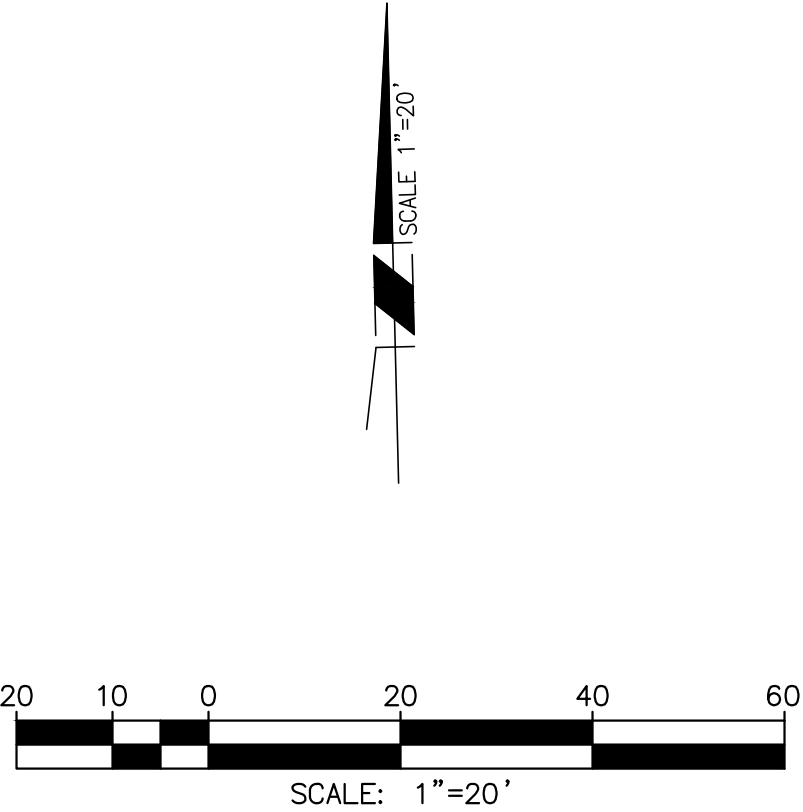
PROFILE VIEW - RETAILING WALL B

H. SCALE: 1"=20'
V. SCALE: 1"=4'



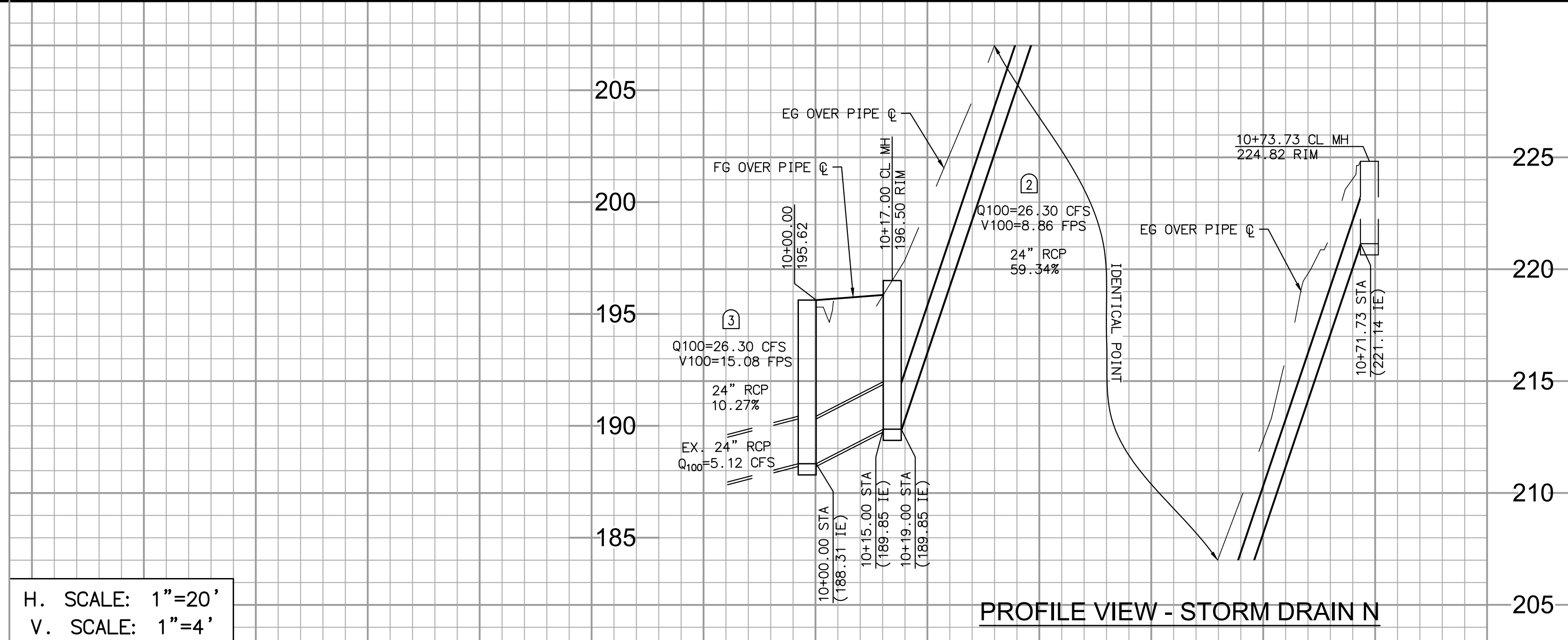
RETAINING WALL DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N88°36'30"W	--	152.00'	TYPE 2 RET WALL

NOTE:
REFER TO IMPROVEMENT PLAN SHEETS
FOR ALL UTILITIES TO BE RELOCATED
OR PROTECTED IN PLACE.



PLAN VIEW - RETAINING WALL B
SCALE: 1"=20'

AS-BUILT
By: _____ Date: _____
R.WALL-3 R.C.E.: _____ Exp: _____

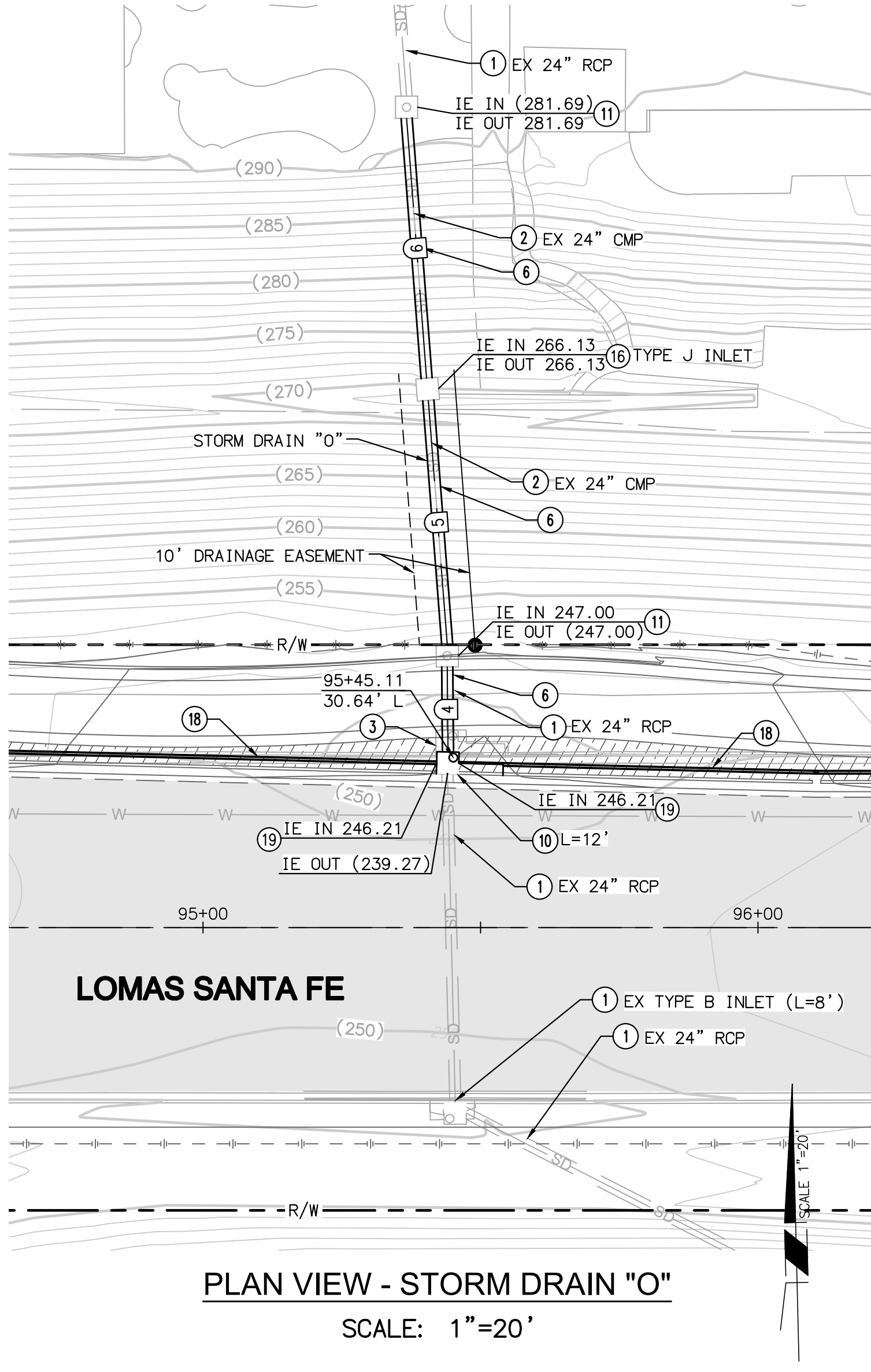
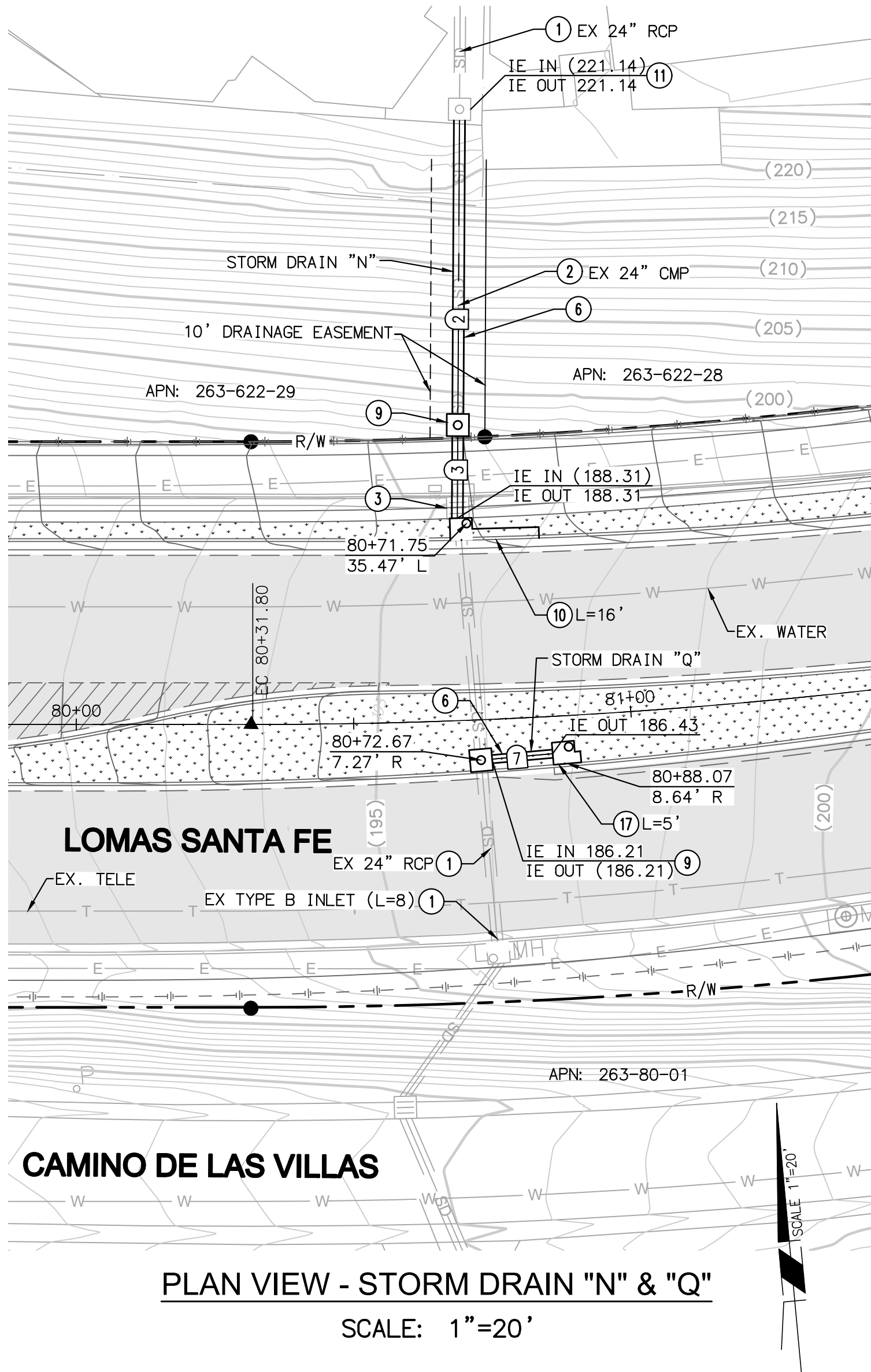
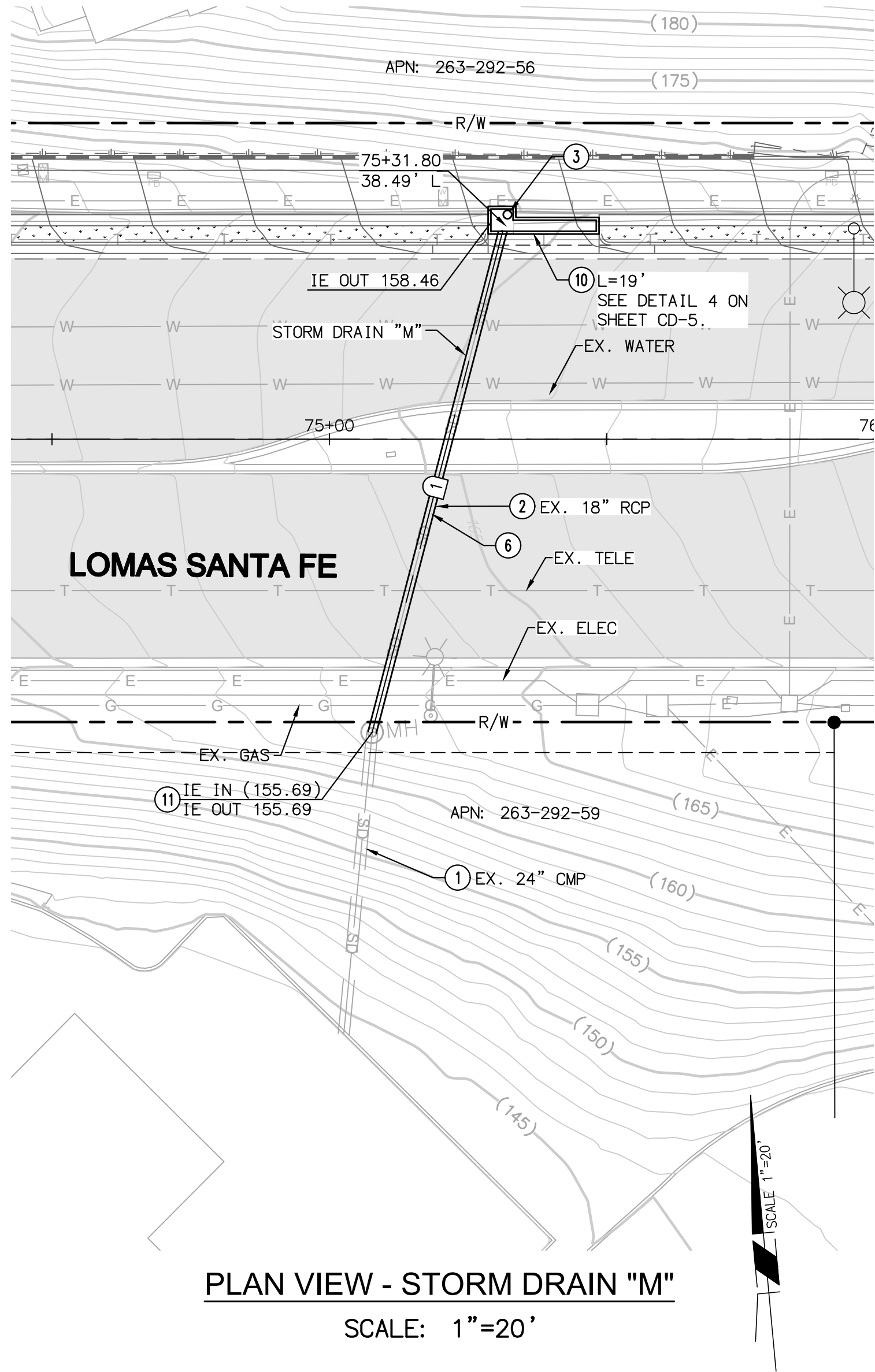


- ## CONSTRUCTION NOTES
- ① PROTECT IN PLACE
 - ② REMOVE EXISTING STORM DRAIN PIPE
 - ③ REMOVE EXISTING STORM DRAIN INLET
 - ⑥ INSTALL 24" RCP STORM DRAIN
 - ⑨ CONSTRUCT TYPE A STORM DRAIN CLEANOUT PER SDRSD D-09
 - ⑩ CONSTRUCT TYPE B CURB INLET PER SDRSD D-02
 - ⑪ CONNECT PROPOSED STORM DRAIN TO EXISTING CLEANOUT
 - ⑫ CONNECT PROPOSED STORM DRAIN TO EXISTING TYPE J INLET.
 - ⑬ CONSTRUCT TYPE J MEDIAN INLET WITH 5' WING PER SDRSD D-45.
 - ⑮ CONSTRUCT 6" PVC PERFORATED UNDERDRAIN.
 - ⑯ CONNECT PROPOSED PVC UNDERDRAIN TO PROPOSED STORM DRAIN INLET.

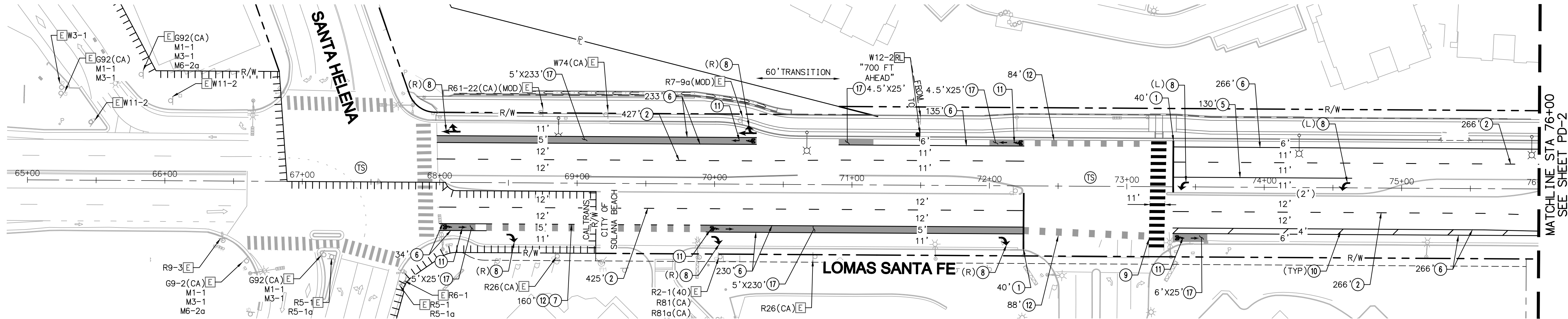
STORM DRAIN NOTE

ELEVATIONS ARE BASED ON AS-BUILT PLANS. CONTRACTOR TO FIELD VERIFY ELEVATIONS PRIOR TO CONSTRUCTION. IF THERE ARE DISCREPANCIES , THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO INSTALLING NEW PIPES.

STORM DRAIN DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N19°52'01"E	---	93.36'	24" RCP ~ 1350-D
2	N05°34'30"E	---	52.94'	24" RCP ~ 1350-D
3	N05°34'30"E	---	14.79'	24" RCP ~ 1350-D
4	N00°52'01"E	---	15.34'	24" RCP ~ 1350-D
5	N03°02'14"W	---	44.18'	24" RCP ~ 1350-D
6	N03°00'00"W	---	47.00'	24" RCP ~ 1350-D
7	N89°51'11"W	---	11.00'	24" RCP ~ 1350-D



PLAN CODE By: _____ Date: _____
SD-1 R.C.E.: _____ Exp: _____



MATCHLINE STA 76+00
SEE SHEET PD-2

LEGEND

- [E] EXISTING SIGN TO REMAIN (UNLESS OTHERWISE NOTED)
[TS] FURNISH & INSTALL SIGN(S) & POST (IF APPLICABLE)
[RP] REFRESH EXISTING PAVEMENT MARKINGS
[RP] REMOVE EXISTING, CONFLICTING PAVEMENT MARKINGS
[TS] EXISTING TRAFFIC SIGNAL
[RS] REMOVE AND SALVAGE SIGN
[RL] RELOCATE EXISTING TRAFFIC SIGN
[E] EXISTING SIGN
[P] PROPOSED SIGN
[P] PROPOSED SIGN (ON STREET LIGHT)
(12') EXISTING LANE WIDTH
12' PROPOSED LANE WIDTH
SNS STREET NAME SIGN
(R) RIGHT
(L) LEFT
(W) WHITE
(Y) YELLOW

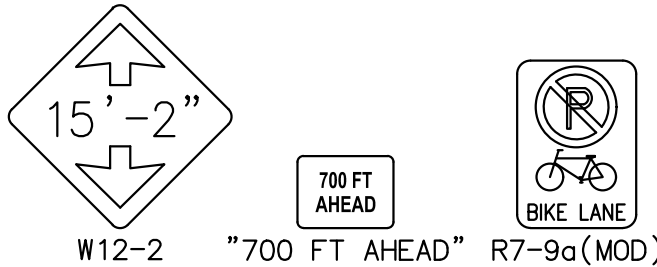
CONSTRUCTION NOTES

- 1) INSTALL 12" WHITE LIMIT LINE PER CALTRANS STD PLAN A24E.
2) INSTALL 6" WHITE LANE LINE PER CALTRANS STD PLAN A20A, DETAIL 9.
5) INSTALL 8" WHITE CHANNELIZING LINE PER CALTRANS STD PLAN A20D, DETAIL 38.
6) INSTALL 6" WHITE BIKE LANE LINE PER CALTRANS STD PLAN A20D, DETAIL 39.
7) INSTALL 6" WHITE INTERSECTION BIKE LANE LINE PER CALTRANS STD PLAN A20D, DETAIL 39A.
8) INSTALL WHITE TYPE IV ARROW PAVEMENT MARKING PER CALTRANS STD PLAN A24A.
9) INSTALL 24" WHITE CONTINENTAL CROSSWALK PER CALTRANS STD PLAN A24F.
10) INSTALL 4" WHITE ANGLED HATCHING AT 45 DEGREES, AT 40' SPACING.
11) INSTALL BIKE LANE LEGEND WITH ARROW MARKING PER DETAIL "A" ON SHEET PD-1.
12) INSTALL GREEN BIKE LANE SKIP ADJACENT TO DETAIL 39A PER DETAIL "B" ON SHEET PD-1.
17) INSTALL GREEN BIKE LANE PAINT.

GENERAL SIGNING AND STRIPING NOTES

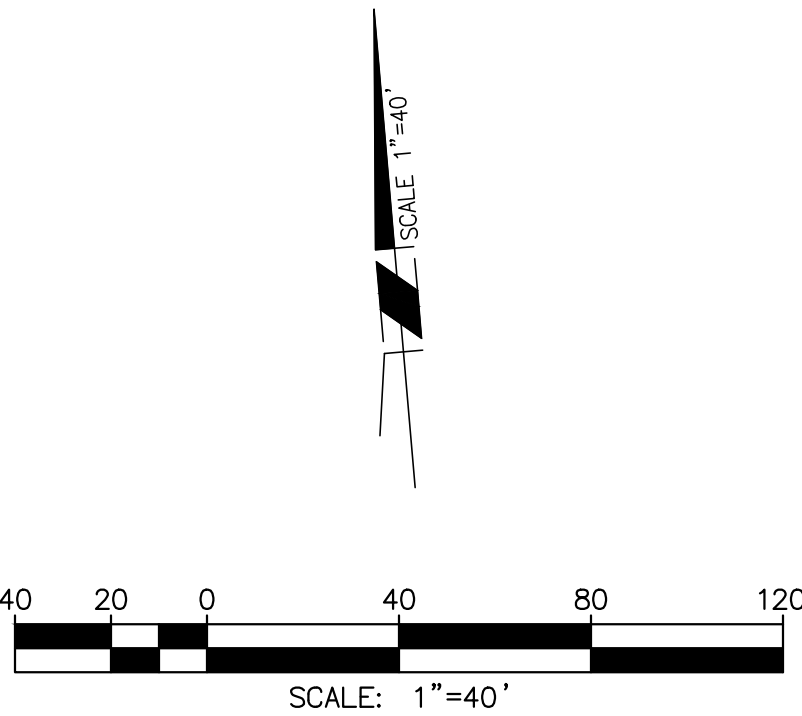
1. REMOVE EXISTING PAVEMENT MARKINGS AND STRIPING BEFORE AC OVERLAY
2. TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL NOT BE APPLIED OVER EXISTING STRIPES THAT ARE TO BE REMOVED. EXISTING STRIPES SHALL BE FIRST REMOVED BEFORE ANY NEW APPLICATION.
3. REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED BY CONTRACTOR ON PERMANENT STRIPING. SIGN SPECIFICATIONS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION SPECIFICATION FOR REGULATORY, WARNING AND GUIDE SIGNS.
4. EXISTING CURB PAINT TO BE REPLACED IN KIND AS DIRECTED BY THE ENGINEER.

SIGN LEGEND



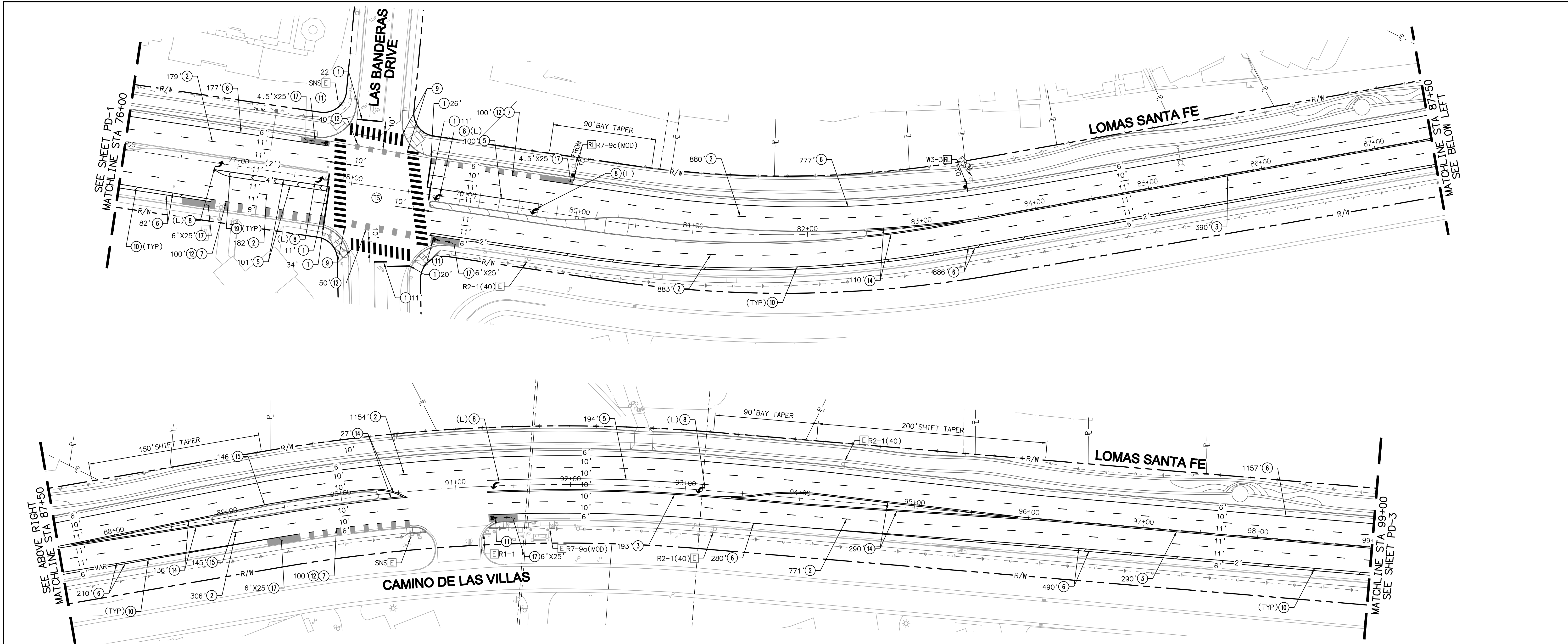
RIGHT OF WAY NOTE

RIGHT-OF-WAY AND PROPERTY BOUNDARY INFORMATION SHOWN ON WEST OF INTERSTATE 5 ON THIS SHEET IS DERIVED FROM SANGIS PARCEL DATA AND IS NOT THE RESULT OF A FIELD SURVEY.



AS-BUILT
PLAN CODE PD-1
By: _____ Date: _____
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL 5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 mbakerintl.com		ENGINEER OF WORK	CITY APPROVED CHANGES	APP'D	DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH ENGINEERING DEPARTMENT IMPROVEMENT PLANS FOR: PAVEMENT DELINEATION PLAN LOMAS SANTA FE CORRIDOR	DRAWING NO.
						By: _____ Date: _____	By: Date: 05/01/2025			CG-3185
		GEOFFREY H. RETEMEYER RCE 90577				R.C.E.: _____ Exp: _____	Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	ELEV.: _____ DATUM: M.S.L.		



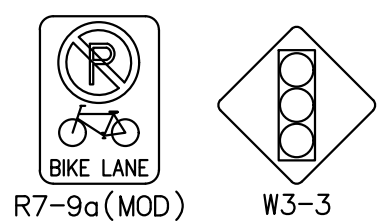
LEGEND

- [E] EXISTING SIGN TO REMAIN (UNLESS OTHERWISE NOTED)
- [S] FURNISH & INSTALL SIGN(S) & POST (IF APPLICABLE)
- [R] REFRESH EXISTING PAVEMENT MARKINGS
- [R] REMOVE EXISTING, CONFLICTING PAVEMENT MARKINGS
- [S] EXISTING TRAFFIC SIGNAL
- [R] REMOVE AND SALVAGE SIGN
- [RL] RELOCATE EXISTING TRAFFIC SIGN
- [+/-] EXISTING SIGN
- [P] PROPOSED SIGN
- [P] PROPOSED SIGN (ON STREET LIGHT)
- (12') EXISTING LANE WIDTH
- 12' PROPOSED LANE WIDTH
- SNS STREET NAME SIGN
- (R) RIGHT
- (L) LEFT
- (W) WHITE
- (Y) YELLOW

GENERAL SIGNING AND STRIPING NOTES

1. REMOVE EXISTING PAVEMENT MARKINGS AND STRIPING BEFORE AC OVERLAY
2. TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL NOT BE APPLIED OVER EXISTING STRIPES THAT ARE TO BE REMOVED. EXISTING STRIPES SHALL BE FIRST REMOVED BEFORE ANY NEW APPLICATION.
3. REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED BY CONTRACTOR ON PERMANENT STRIPING. SIGN SPECIFICATIONS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION SPECIFICATION FOR REGULATORY, WARNING AND GUIDE SIGNS.
4. EXISTING CURB PAINT TO BE REPLACED IN KIND AS DIRECTED BY THE ENGINEER.

SIGN LEGEND

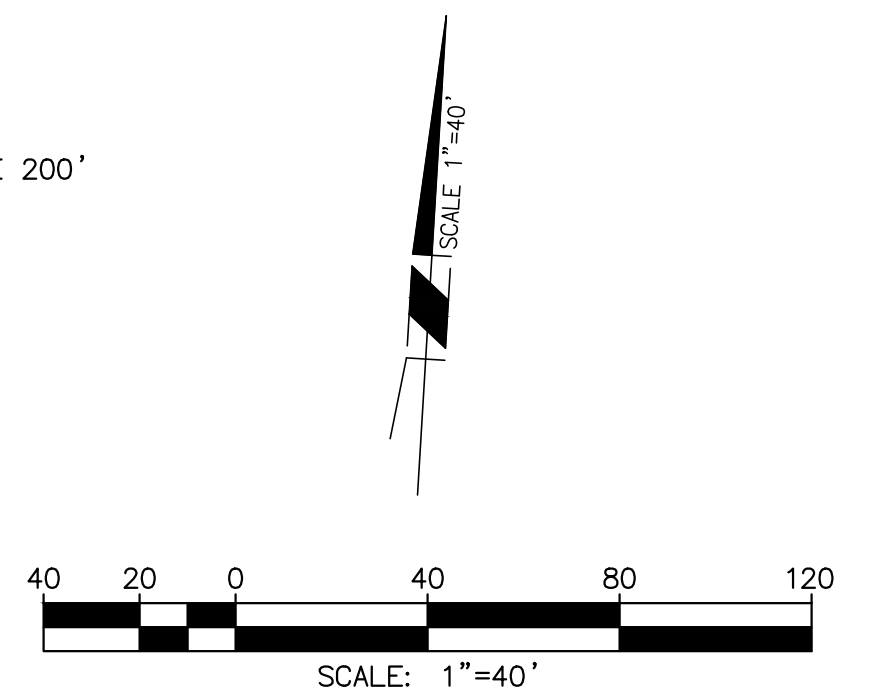


CONSTRUCTION NOTES

- ① INSTALL 12" WHITE LIMIT LINE PER CALTRANS STD PLAN A24E.
- ② INSTALL 6" WHITE LANE LINE PER CALTRANS STD PLAN A20A, DETAIL 9.
- ③ INSTALL 6" DOUBLE YELLOW LINE PER CALTRANS STD PLAN A20A, DETAIL 22.
- ⑤ INSTALL 8" WHITE CHANNELIZING LINE PER CALTRANS STD PLAN A20D, DETAIL 38.
- ⑥ INSTALL 6" WHITE BIKE LANE LINE PER CALTRANS STD PLAN A20D, DETAIL 39.
- ⑦ INSTALL 6" WHITE INTERSECTION BIKE LANE LINE PER CALTRANS STD PLAN A20D, DETAIL 39A.
- ⑧ INSTALL WHITE TYPE IV ARROW PAVEMENT MARKING PER CALTRANS STD PLAN A24A.
- ⑨ INSTALL 24" WHITE CONTINENTAL CROSSWALK PER CALTRANS STD PLAN A24F.
- ⑩ INSTALL 4" WHITE ANGLED HATCHING AT 45 DEGREES, AT 40' SPACING.
- ⑪ INSTALL BIKE LANE LEGEND WITH ARROW MARKING PER DETAIL "A" ON SHEET PD-1.
- ⑫ INSTALL GREEN BIKE LANE SKIP ADJACENT TO DETAIL 39A PER DETAIL "B" ON SHEET PD-1.
- ⑭ INSTALL 6" YELLOW MEDIAN ISLAND STRIPING PER CALTRANS STD PLAN A20B, DETAIL 29.
- ⑮ INSTALL 6" YELLOW LEFT EDGELINE PER CALTRANS STD PLAN A20B, DETAIL 24.
- ⑯ INSTALL GREEN BIKE LANE PAINT.
- ⑰ INSTALL 4" WHITE CHEVRON STRIPING, AT 20' SPACING.

TAPER LENGTH CALCULATION

1. SHIFT TAPER
 $L = WS^2/60 = 5 \times 40^2/60 = 133.3'$ USE 150'
L=LENGTH OF TRANSITION
W=OFFSET
S=DESIGN SPEED
2. SHIFT TAPER
 $L = WS^2/60 = 5.5 \times 40^2/60 = 146.7'$ USE 200'
L=LENGTH OF TRANSITION
W=OFFSET
S=DESIGN SPEED



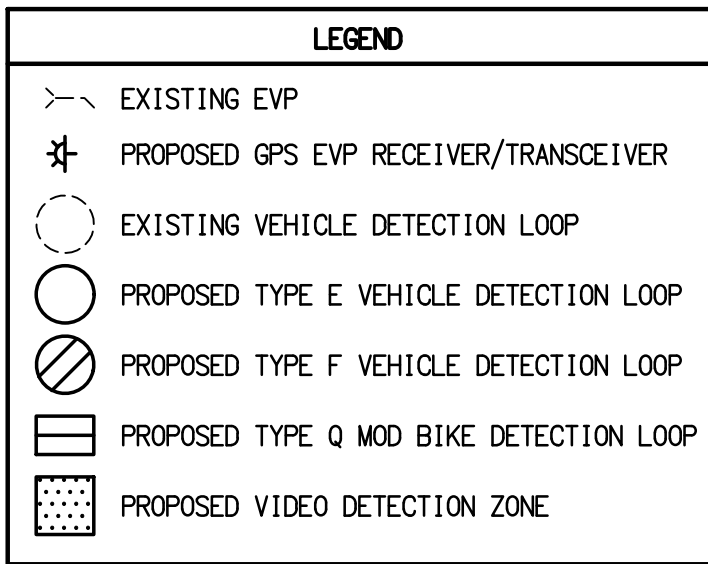
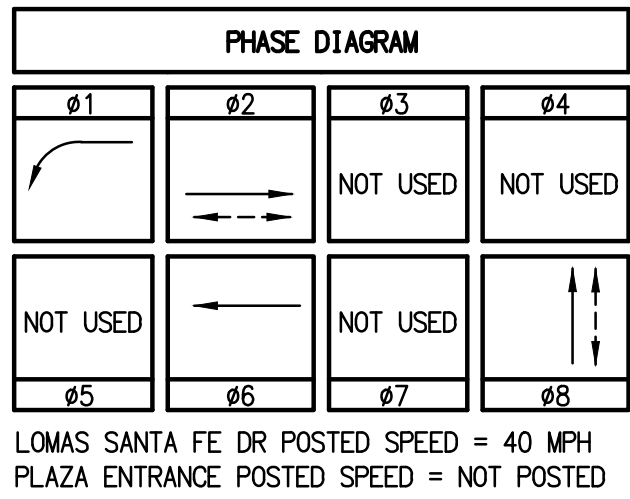
AS-BUILT
By: _____ Date: _____
PLAN CODE PD-2
R.C.E.: _____ Exp: _____

Michael Baker INTERNATIONAL	5050 Avenida Encinas Suite 260 Carlsbad, CA 92008 Phone: (760) 476-9193 MBAKERINTL.COM		ENGINEER OF WORK GEOFFREY H. RETEMEYER RCE 90577		CITY APPROVED CHANGES	APP'D DATE	RECOMMENDED FOR APPROVAL By: _____ Date: _____ R.C.E.: _____ Exp: _____	APPROVED FOR CONSTRUCTION Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	BENCH MARK DESCRIPTION: _____ LOCATION: _____ ELEV.: _____ DATUM: M.S.L.	CITY OF SOLANA BEACH IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	ENGINEERING DEPARTMENT PAVEMENT DELINEATION PLAN	DRAWING NO. CG-3185 Sheet 27 of 54
			12/2/2024 DATE									

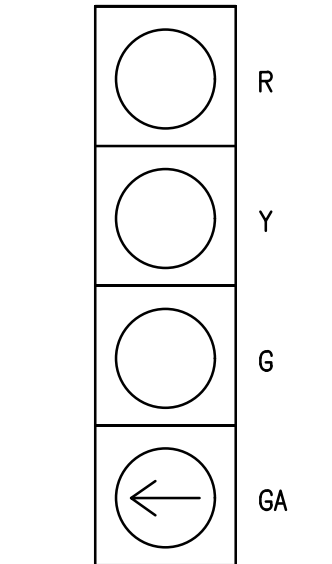
Jan 16, 2025 - 8:51am R:\Shared With Me\STC Data\Projects\Michael Baker\23.0853_Final Lomas Santa Fe TS Plans\07_Engineering\CADD\DLV 20 0583_DL_V_05_TS.dwg jwallers

* CONDUCTOR SCHEDULE									
AWG OR CABLE SIZE	POLE OR CIRCUIT	CONDUIT RUNS							
		1	2	3	4	5	6		
12 CSC	POLE A' #1, #6, #8	1	1				1	1	
	POLE B' #8, #8P						1	1	
	POLE C' #8PPB						1	1	
	POLE D #2, #2P, #8P, #2PPB, #8PPB						1	1	
	POLE E #1, #2P, #2PPB						1	1	
3 CSC	TOTAL	1	2	1	1	1	4	4	4
#10	SAFETY LIGHTING (LTG)	2	2	2	2				
#8	GROUND (GND)	1	1	1	1	1	1		
#6	SERVICE (SVC)						2	2	
TYPE B DLC	#1		1				1	1	
	#2				6		6	6	
	#6		5				5	5	
	TOTAL DLCs		6		6		12	12	
EVP CABLE (3M MODEL 138 CABLE)		1	2				3	3	
GPS EVP CABLE (CAT6)							1	1	
VIDEO DETECTION (VANTAGE NEXT CAT6 CABLE)		1					1	1	
SIGNAL INTERCONNECT (BPR#20)					1	2	2		
CONDUIT SIZE (INCHES)		3"	3"	3"	3"	2-2"	2-2"	2-2"	
CONDUIT FILL (%)		9	28	10	18	21	21	21	

*ALL CONDUIT AND CONDUCTORS ARE EXISTING UNLESS NOTED:
(●) = NEW



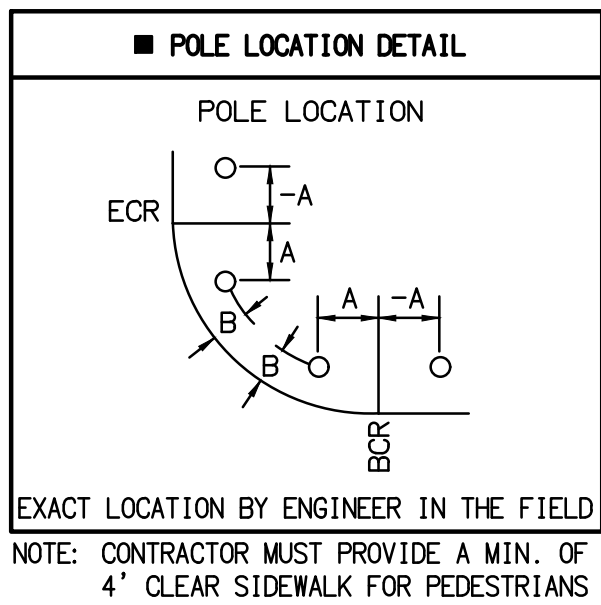
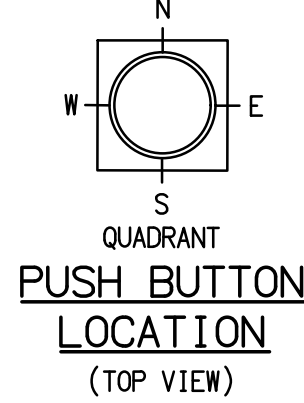
AS FIRST ORDER OF WORK, THE CONTRACTOR SHALL POTHOLE POLE LOCATIONS PRIOR TO ORDERING POLES. IF CONFLICTS ARE FOUND DURING POTHOLING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD. FAILURE TO COMPLY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR FOR ANY LOSS OF TIME, ADDITIONAL COST, AND DAMAGE.



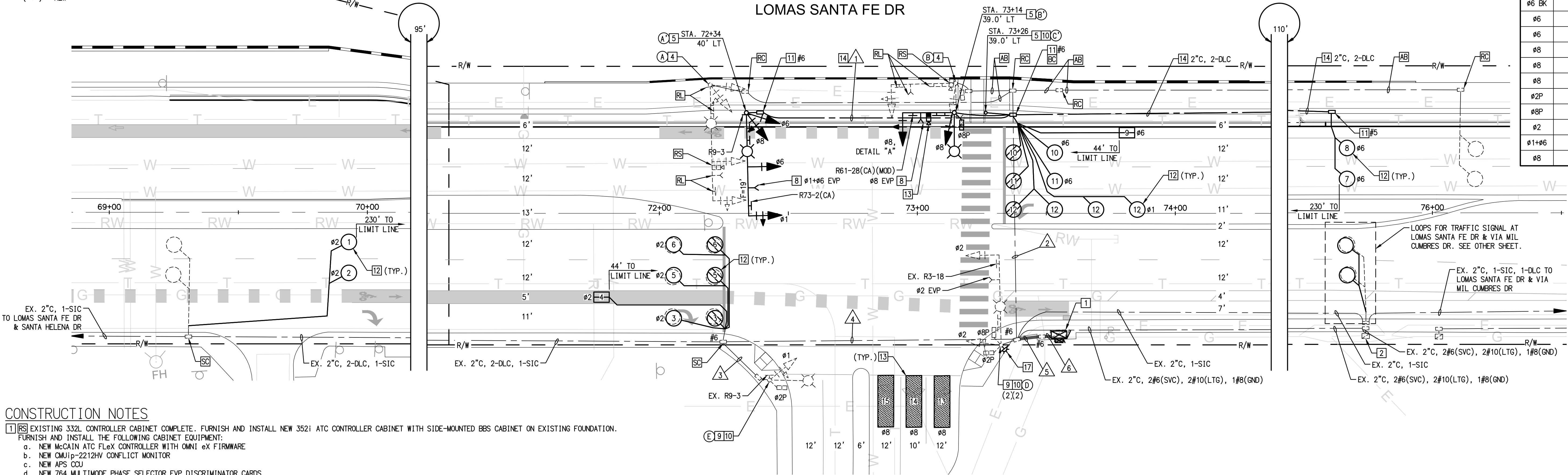
* POLE AND EQUIPMENT SCHEDULE														
No.	TYPE	HEIGHT	SIG. M.A.	LUM. M.A.	LED LUMINAIRE	SIGNAL MOUNTING		PHASE	QUAD	POLE LOCATION		MAST ARM MOUNTED SNS	REMARKS	
						VEHICLE	PED			A	B			
(A)	26-4-100	30'	40'	15'	101 W	2-MAS	SV-2-T			SEE PLAN	4'	Plaza Entrance	POLE MOUNTED R9-3	
(B)	19-4-100	30'	20'	15'	101 W	1-MAS	SV-1-T	SP-1-T		SEE PLAN	4'	Lomas Santa Fe Dr	ROTATE LUMINAIRE 90° AS SHOWN	
(C)	PPB POST	5'-7'								SEE PLAN	4'			
(D)	24-3-129	30'	35'	15'	101 W	1-MAS	SV-1-T	SP-2-T	Ø2, Ø8	N, W		EXISTING	Plaza Entrance	
(E)	15TS	30'		15'	101 W		SV-1-T	SP-1-T	Ø2	N		EXISTING		

*ALL EQUIPMENT IS EXISTING UNLESS NOTED:
(●) = NEW
(♦) = EXISTING PEDESTRIAN INDICATIONS ARE LED COUNTDOWN TYPE.
(▲) = PEDESTRIAN PUSHBUTTON ASSEMBLY SHALL BE APS AND ADA COMPLIANT.
(+) = RELOCATED

POLES TO BE			
No.	TYPE	HEIGHT	SIG. M.A.
(A)	26-4-129	30'	45'
(B)	19-3-129	30'	25'



DETECTOR ASSIGNMENT				
PHASE	DETECTOR	INPUT ASSEMBLY	FITA	
Ø1	12	IA1 - I/O 6	FITA1, FIT1, 1-2	
Ø2 ADV	1	IA1 - I/O 8	FITA1, FIT2, 1-2	
Ø2 ADV	2	IA1 - I/O 9	FITA1, FIT2, 6-7	
Ø2 RT	3	IA1 - I/O 10	FITA1, FIT3, 1-2	
Ø2 BK	4	IA1 - I/O 11	FITA1, FIT3, 6-7	
Ø2	5	IA1 - I/O 12	FITA1, FIT4, 1-2	
Ø2	6	IA1 - I/O 13	FITA1, FIT4, 6-7	
Ø6 ADV	7	IA2 - I/O 8	FITA2, FIT2, 1-2	
Ø6 ADV	8	IA2 - I/O 9	FITA2, FIT2, 6-7	
Ø6 BK	9	IA2 - I/O 10	FITA2, FIT3, 1-2	
Ø6	10	IA2 - I/O 12	FITA2, FIT4, 1-2	
Ø6	11	IA2 - I/O 13	FITA2, FIT4, 6-7	
Ø8	13	IA2 - I/O 16	VIDEO	
Ø8	14	IA2 - I/O 17	VIDEO	
Ø8	15	IA2 - I/O 18	VIDEO	
Ø2P	PPB	IA1 - I/O 26	FITA1, FIT11, 1-2	
Ø8P	PPB	IA1 - I/O 29	FITA1, FIT12, 6-7	
Ø2	EVA	IA2 - I/O 24	FITA2, FIT10, 1-2-5	
Ø1+Ø6	EVC	IA2 - I/O 25	FITA2, FIT10, 6-7-10	
Ø8	EVD	IA2 - I/O 27	FITA2, FIT11, 6-7-10	



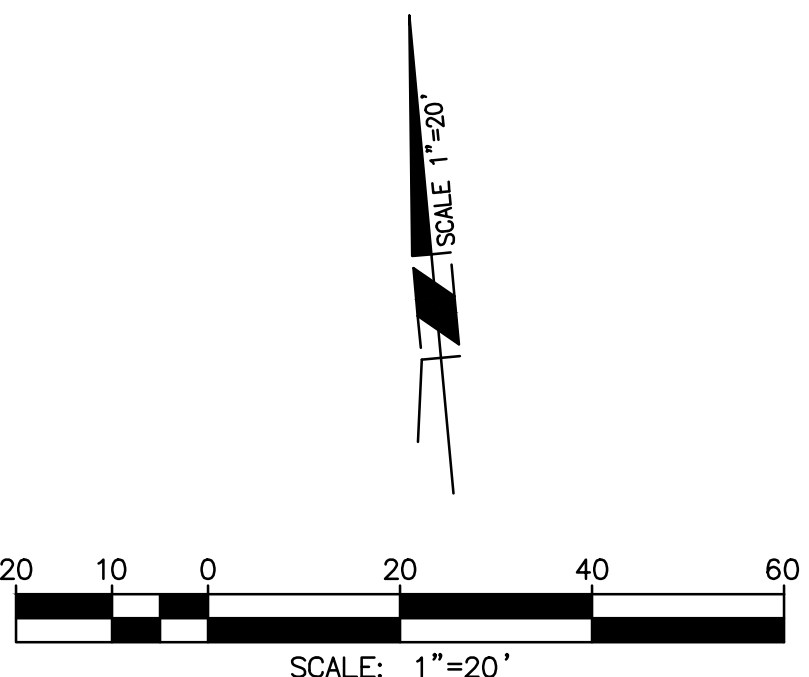
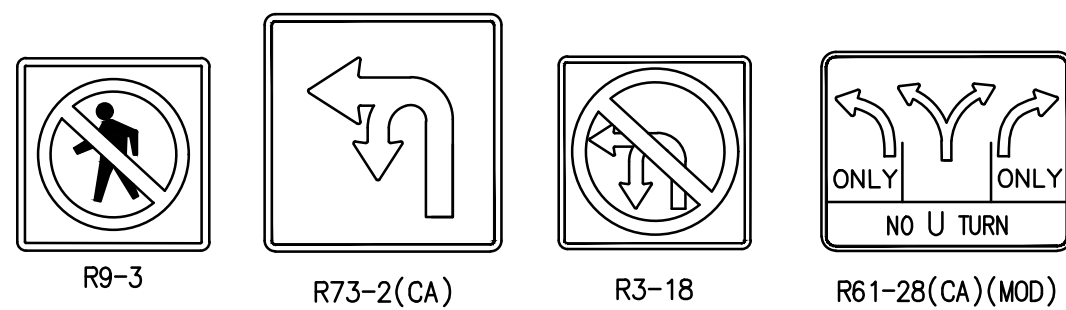
CONSTRUCTION NOTES

- EXISTING 332L CONTROLLER CABINET COMPLETE. FURNISH AND INSTALL NEW 352i ATC CONTROLLER CABINET WITH SIDE-MOUNTED BBS CABINET ON EXISTING FOUNDATION. FURNISH AND INSTALL THE FOLLOWING CABINET EQUIPMENT:
 - NEW McCain ATC Flex CONTROLLER WITH OMNI eX FIRMWARE
 - NEW CMU-P-2212HV CONFLICT MONITOR
 - NEW APS COU
 - NEW 764 MULTIMODE PHASE SELECTOR EVP DISCRIMINATOR CARDS
 - NEW EBERLE RENO 222 DETECTOR CARDS
 - NEW 2216-24 CABINET POWER SUPPLY
 - NEW ALPHAGUARD CHARGE MANAGEMENT SYSTEM
 - (4) NEW BBS BATTERIES
- THE FOLLOWING EQUIPMENT FROM EXISTING CABINET TO NEW:
 - EXISTING ALPHA FXM 1100 BBS
 - EXISTING ITERIS NEXT VIDEO DETECTION EQUIPMENT INCLUDING COU, LCD DISPLAY, AND DETECTION CARD
- EXISTING SERVICE PEDESTAL TO REMAIN.
- EXISTING TRAFFIC SIGNAL POLE. BREAK DOWN FOUNDATION 36" BELOW GRADE. EQUIPMENT PER PLAN AND POLE AND EQUIPMENT SCHEDULE.
- FURNISH AND INSTALL NEW TRAFFIC SIGNAL POLE WITH FOUNDATION COMPLETE PER POLE AND EQUIPMENT SCHEDULE.
- EXISTING EVP DETECTOR ASSEMBLY TO NEW MAST ARM LOCATION PER PLAN. INCLUDE ALL NECESSARY MOUNTING AND CABLING.
- EXISTING PEDESTRIAN PUSHBUTTON ASSEMBLY.
- FURNISH AND INSTALL NEW APS PEDESTRIAN PUSHBUTTON ASSEMBLY.
- FURNISH AND INSTALL NEW PULL BOX PER PLAN. PULL BOX SHALL BE STAMPED "TRAFFIC SIGNAL".
- FURNISH AND INSTALL NEW 6" DIAMETER INDUCTION DETECTOR LOOP TYPE E PER CALTRANS STD PLAN ES-58. LIMIT LINE LOOPS SHALL BE TYPE F. BIKE LOOPS SHALL BE 4'x6" MODIFIED TYPE Q. PLACE IN CENTER OF LANES.
- FURNISH AND INSTALL NEW ITERIS NEXT VIDEO DETECTION CAMERA WITH 6' PELCO EXTENSION POLE. INCLUDE ALL NECESSARY MOUNTING, CABLING, AND PROGRAM TO ADD DETECTION ZONES AS SHOWN ON THE PLAN.
- FURNISH AND INSTALL PVC CONDUIT WITH MULE TAPE, SIZE PER PLAN.
- FURNISH AND INSTALL NEW GTT OPTICOM 3101 GPS RADIO UNIT WITH GPS RECEIVER AND TRANSCIVER.

ABBREVIATIONS

AB	ABANDON
ADV	ADVANCE
APS	ACCESSIBLE PEDESTRIAN SIGNAL
BBS	BATTERY BACKUP SYSTEM
BK	BIKE
C	CONDUIT
COU	CENTRAL CONTROL UNIT
DLC	DETECTOR LOOP CABLE
EVP	EMERGENCY VEHICLE PREEMPTION
EX	EXISTING
FITA	FIELD INPUT TERMINAL ASSEMBLY
IA	INPUT ASSEMBLY
LT	LEFT
NTS	NOT TO SCALE
TYP	TYPICAL
RWC	RIGID METALLIC CONDUIT
RT	RIGHT
SNS	STREET NAME SIGN
SC	SPLICE NEW TO EXISTING CONDUCTORS

SIGN LEGEND



PLAN CODE
TS-1

AS-BUILT

By: _____ Date: _____
R.C.E.: _____ Exp: _____

5973 AVENIDA ENCINAS, #218
CARLSBAD, CA 92008
PH: 760-602-4290
WWW.STCTRAFFIC.COM



ENGINEER OF WORK
CHRISTIAN J. LAMBARTH RCE 86675
12/12/2024
DATE

CITY APPROVED CHANGES	APP'D	DATE

RECOMMENDED FOR APPROVAL
By: _____ Date: _____
R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION
By: _____ Date: 05/01/2025
Dan Goldberg, Deputy Director of Engineering
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION: _____
LOCATION: _____
ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH
TRAFFIC SIGNAL MODIFICATION PLAN FOR:
LOMAS SANTA FE & PLAZA ENTRANCE

ENGINEERING DEPARTMENT
DRAWING NO.
CG-3185
Sheet 29 of 54

Jan 16, 2025 - 8:52am R:\Shared With Me\STC Data\Projects\Michael Baker\23.0853_Final Lomas Santa Fe TS Plans\07_Engineering\CADD\DLV\20.0583_DL\06_TS.dwg jwallers

* CONDUCTOR SCHEDULE										
AWG OR CABLE SIZE	POLE OR CIRCUIT	CONDUIT RUNS								
		1	2	3	4	5	6	7	8	9
12 CSC	POLE A	Ø4, Ø4P, Ø8, Ø2PPB							1	1
	POLE B	Ø1, Ø2P, Ø4PPB							1	1
	POLE C'	Ø1, Ø6, Ø6P, Ø4PPB	1	1	1	1	1	1	1	1
	POLE D'	Ø8, Ø4P, Ø6PPB	1	1	1	1	1	1	1	1
	POLE E'	Ø8, Ø8P, Ø6PPB				1	1	1	1	1
	POLE F'	Ø5, Ø6P, Ø8PPB					1	1	1	1
	POLE G	Ø2, Ø5, 2P, Ø8PPB						2	2	2
3 CSC	POLE H	Ø4, Ø8P, Ø2PPB							1	1
	TOTAL		2	2	2	3	4	6	8	9
#12	IISNS		2	2	2	2	2	2	2	
#10	SAFETY LIGHTING (LTG)		2	2	2	2	2	2	2	
#8	GROUND (GND)		1			1				
#6	SERVICE (SVC)									2
TYPE B DLC	Ø1						1	1	1	1
	Ø2									5
	Ø4		2	2	2	2	2	2	2	2
	Ø5									1
	Ø6						5	5	5	5
	Ø8							2	2	2
	TOTAL DLCs		2	2	2	8	8	10	10	16
EVP CABLE (3M MODEL 138 CABLE)		1	1	1	2	2	3	3	4	4
GPS EVP CABLE (CAT6)									1	1
SIGNAL INTERCONNECT (6PR#20)										1
CONDUIT SIZE (INCHES)		3"	3" RMC	3" RMC	3"	3" RMC	2" & 3" RMC	2-3" RMC	2-3" RMC	2-3" RMC
CONDUIT FILL (%)		20	21	20	31	45	42	35	40	49

*ALL CONDUIT AND CONDUCTORS ARE EXISTING UNLESS NOTED:
(●) = NEW
(RMC) = RIGID METALLIC CONDUIT

LOOPS FOR TRAFFIC SIGNAL AT LOMAS SANTA FE DR & PLAZA ENTRANCE. SEE OTHER SHEET.

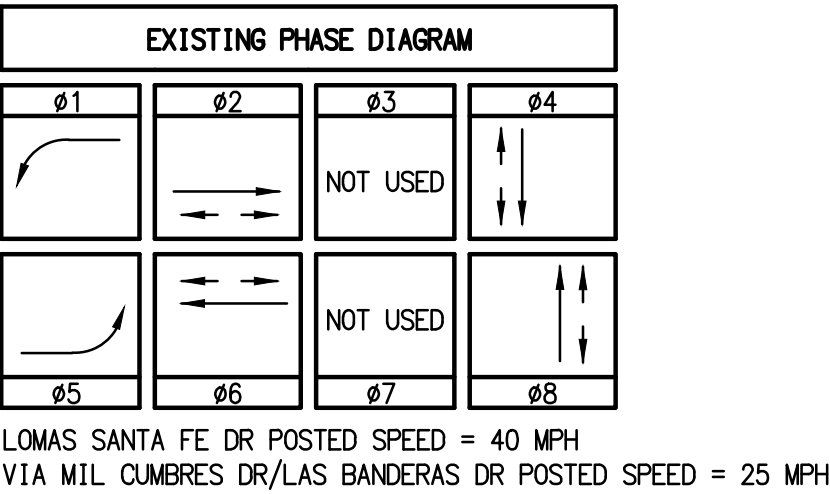
EX. 2"C, 1-SIC, 1-DLC, TO LOMAS SANTA FE DR & PLAZA ENTRANCE

EX. 2" RMC, 2#6(SVC), 2#10(LTG), 2#12(IISNS)

EX. 2" RMC, 1-SIC, 2-DLC

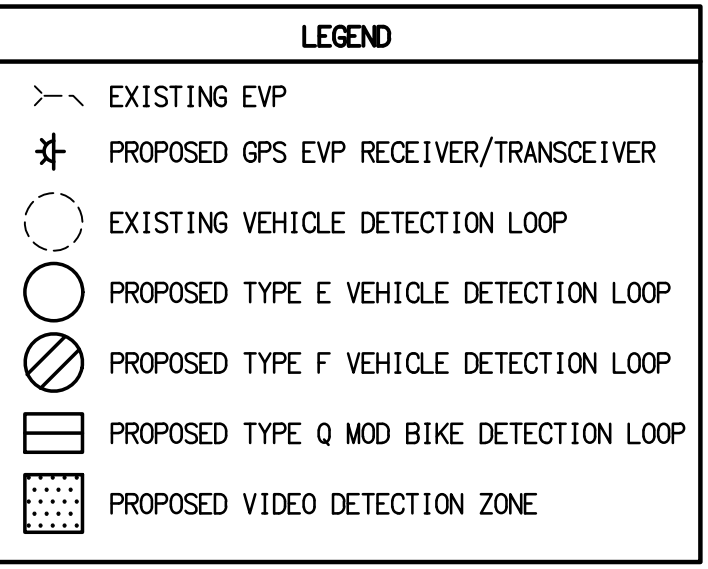
CONSTRUCTION NOTES

- EXISTING 332L CONTROLLER CABINET COMPLETE. FURNISH AND INSTALL NEW 352i ATC CONTROLLER CABINET WITH SIDE-MOUNTED BBS CABINET ON EXISTING FOUNDATION. FURNISH AND INSTALL THE FOLLOWING CABINET EQUIPMENT:
 - NEW McCain ATC Flex CONTROLLER WITH OMNI ex FIRMWARE
 - NEW CMUip-2212HV CONFLICT MONITOR
 - NEW APS COU
 - NEW 764 MULTIMODE PHASE SELECTOR EVP DISCRIMINATOR CARDS
 - NEW EBERLE RENO 222 DETECTOR CARDS
 - NEW 2216-24 CABINET POWER SUPPLY
 - NEW ALPHAGUARD CHARGE MANAGEMENT SYSTEM
 - (4) NEW BBS BATTERIES
- THE FOLLOWING EQUIPMENT FROM EXISTING CABINET TO NEW:
 - EXISTING ALPHA FXM 1100 BBS
- EXISTING SERVICE PEDESTAL TO REMAIN.
- EXISTING TRAFFIC SIGNAL POLE. BREAK DOWN FOUNDATION 36" BELOW GRADE. EQUIPMENT PER PLAN AND POLE AND EQUIPMENT SCHEDULE.
- FURNISH AND INSTALL NEW TRAFFIC SIGNAL POLE WITH FOUNDATION COMPLETE PER POLE AND EQUIPMENT SCHEDULE.
- EXISTING PEDESTRIAN HEAD MODULE. FURNISH AND INSTALL NEW LED COUNTDOWN TYPE PEDESTRIAN HEAD MODULE IN EXISTING HOUSING.
- FURNISH AND INSTALL MAST ARM MOUNTED SIGN PER CALTRANS STANDARD PLAN ES-7N, DETAIL "U". SIGN PER PLAN.
- EXISTING EVP DETECTOR ASSEMBLY TO NEW MAST ARM LOCATION PER PLAN. INCLUDE ALL NECESSARY MOUNTING AND CABLING.
- EXISTING PEDESTRIAN PUSHBUTTON ASSEMBLY.
- FURNISH AND INSTALL NEW APS PEDESTRIAN PUSHBUTTON ASSEMBLY.
- FURNISH AND INSTALL NEW PULL BOX PER PLAN. PULL BOX SHALL BE STAMPED "TRAFFIC SIGNAL".
- FURNISH AND INSTALL NEW 6" DIAMETER INDUCTION DETECTOR LOOP TYPE E PER CALTRANS STD PLAN ES-5B. LIMIT LINE LOOPS SHALL BE TYPE F. BIKE LOOPS SHALL BE 4"x6" MODIFIED TYPE Q. PLACE IN CENTER OF LANES.
- FURNISH AND INSTALL PVC CONDUIT WITH MULE TAPE, SIZE PER PLAN.
- FURNISH AND INSTALL NEW GTT OPTICOM 3101 GPS RADIO UNIT WITH GPS RECEIVER AND TRANSCEIVER.



LOMAS SANTA FE DR POSTED SPEED = 40 MPH
VIA MIL CUMBRES DR/LAS BANDERAS DR POSTED SPEED = 25 MPH

AS FIRST ORDER OF WORK, THE CONTRACTOR SHALL POTHOLE POLE LOCATIONS PRIOR TO ORDERING POLES. IF CONFLICTS ARE FOUND DURING POTHOLING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD. FAILURE TO COMPLY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR FOR ANY LOSS OF TIME, ADDITIONAL COST, AND DAMAGE.

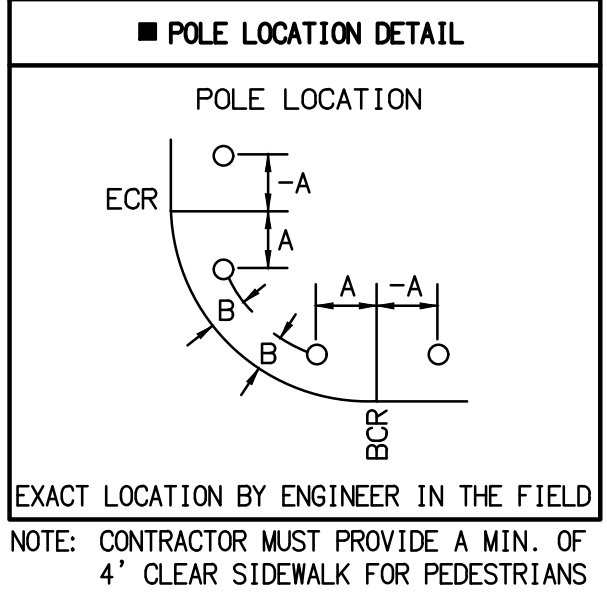
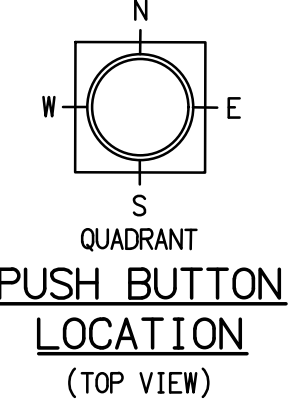


* POLE AND EQUIPMENT SCHEDULE													
No.	STANDARD				LED LUMINAIRE	SIGNAL MOUNTING		▲ PPB	■ POLE LOCATION	IISNS		REMARKS	
	TYPE	HEIGHT	SIG. M.A.	LUM. M.A.		VEHICLE	◆ PED			A	B		
(A)	17-3-70	30'	20'	15'	101 W	1-MAS	SV-2-T	SP-1-T (EX. CD)	Ø2P	N	EXISTING	Lomas Santa Fe Dr	
(B)	1-A	10'					SV-1-T	SP-1-T (EX. CD)	Ø4P	E	EXISTING		
(C)	26-4-100	30'	45'	15'	101 W	2-MAS	SV-1-T	SP-1-T	Ø4P	E	10'	5'	Via Mil Cumbres Dr + POLE MOUNTED SIGN "A" @ 17', F=18'
(D)	1-A	10'					TV-1-T	SP-1-T	Ø6P	S	8'	5'	
(E)	17-3-100	30'	20'	15'	101 W	1-MAS	SV-1-T	SP-1-T	Ø6P	S	9'	5'	Lomas Santa Fe Dr +
(F)	1-A	10'					TV-1-T	SP-1-T	Ø8P	W	8'	8'	
(G)	29-5-70	30'	50'	15'	101 W	2-MAS	SV-1-T	SP-1-T	Ø8P	W	EXISTING	Las Banderas Dr	
(H)	1-A	10'					TV-1-T	SP-1-T	Ø2P	N	EXISTING		

*ALL EQUIPMENT IS EXISTING UNLESS NOTED:

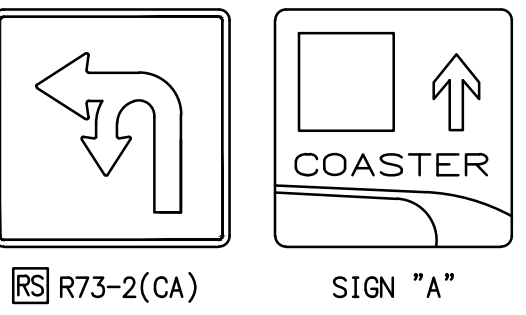
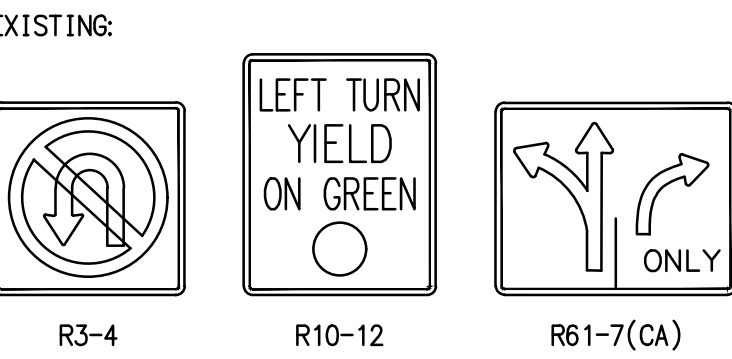
- (●) = NEW
- (◆) = PEDESTRIAN INDICATIONS SHALL BE LED COUNTDOWN (CD) TYPE.
- (▲) = PEDESTRIAN PUSHBUTTON ASSEMBLY SHALL BE APS AND ADA COMPLIANT.
- (+) = RELOCATED

POLES TO BE [RS]				
No.	TYPE	HEIGHT	SIG. M.A.	
(C)	26-4-70	30'	45'	
(D)	1-A	10'		
(E)	19-4-70	30'	25'	
(F)	1-A	10'		



DETECTOR ASSIGNMENT				
PHASE	DETECTOR	INPUT ASSEMBLY	FITA	
Ø1	14	IA1 - I/O 6	FITA1, FIT1, 1-2	
Ø2 ADV	1	IA1 - I/O 8	FITA1, FIT2, 1-2	
Ø2 ADV	2	IA1 - I/O 9	FITA1, FIT2, 6-7	
Ø2 BK	3	IA1 - I/O 10	FITA1, FIT3, 1-2	
Ø2	4	IA1 - I/O 12	FITA1, FIT4, 1-2	
Ø2	5	IA1 - I/O 13	FITA1, FIT4, 6-7	
Ø4	7	IA1 - I/O 16	FITA1, FIT6, 1-2	
Ø4	8	IA1 - I/O 17	FITA1, FIT6, 6-7	
Ø5	6	IA2 - I/O 6	FITA2, FIT1, 1-2	
Ø6 ADV	9	IA2 - I/O 8	FITA2, FIT2, 1-2	
Ø6 ADV	10	IA2 - I/O 9	FITA2, FIT2, 6-7	
Ø6 BK	11	IA2 - I/O 10	FITA2, FIT3, 1-2	
Ø6	12	IA2 - I/O 12	FITA2, FIT4, 1-2	
Ø6	13	IA2 - I/O 13	FITA2, FIT4, 6-7	
Ø8	15	IA2 - I/O 16	FITA2, FIT6, 1-2	
Ø8	16	IA2 - I/O 17	FITA2, FIT6, 6-7	
Ø2P	PPB	IA1 - I/O 26	FITA1, FIT11, 1-2	
Ø4P	PPB	IA1 - I/O 27	FITA1, FIT11, 6-7	
Ø6P	PPB	IA1 - I/O 28	FITA1, FIT12, 1-2	
Ø8P	PPB	IA1 - I/O 29	FITA1, FIT12, 6-7	
Ø2+Ø5	EVA	IA2 - I/O 24	FITA2, FIT10, 1-2-5	
Ø4	EVb	IA2 - I/O 26	FITA2, FIT11, 1-2-5	
Ø1+Ø6	EVC	IA2 - I/O 25	FITA2, FIT10, 6-7-10	
Ø8	EVD	IA2 - I/O 27	FITA2, FIT11, 6-7-10	

SIGN LEGEND



ABBREVIATIONS

- AB ABANDON
- ADV ADVANCE
- APS ACCESSIBLE PEDESTRIAN SIGNAL
- BK BIKE
- BBS BATTERY BACKUP SYSTEM
- C CONDUIT
- CUU CENTRAL CONTROL UNIT
- DLC DETECTOR LOOP CABLE
- EVP EMERGENCY VEHICLE PREEMPTION
- EX EXISTING
- FITA FIELD INPUT TERMINAL ASSEMBLY
- IA INPUT ASSEMBLY
- LT LEFT
- NTS NOT TO SCALE
- TYP TYPICAL
- RMC RIGID METALLIC CONDUIT
- RT RIGHT
- SNS STREET NAME SIGN
- SC SPLICE NEW TO EXISTING CONDUCTORS



PLAN CODE
TS-2

AS-BUILT

By: _____ Date: _____

R.C.E.: _____ Exp: _____

5973 AVENIDA ENCINAS, #218
CARLSBAD, CA 92008
PH: 760-602-4290
WWW.STCTRAFFIC.COM



ENGINEER OF WORK

CHRISTIAN J. LAMBARTH RCE 86675

12/12/2024
DATE

CITY APPROVED CHANGES

APP'D DATE

RECOMMENDED FOR APPROVAL

By: _____ Date: _____

R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION

By: _____ Date: 05/01/2025

Dan Goldberg, Deputy Director of Engineering
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK

DESCRIPTION:
LOCATION:
ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH

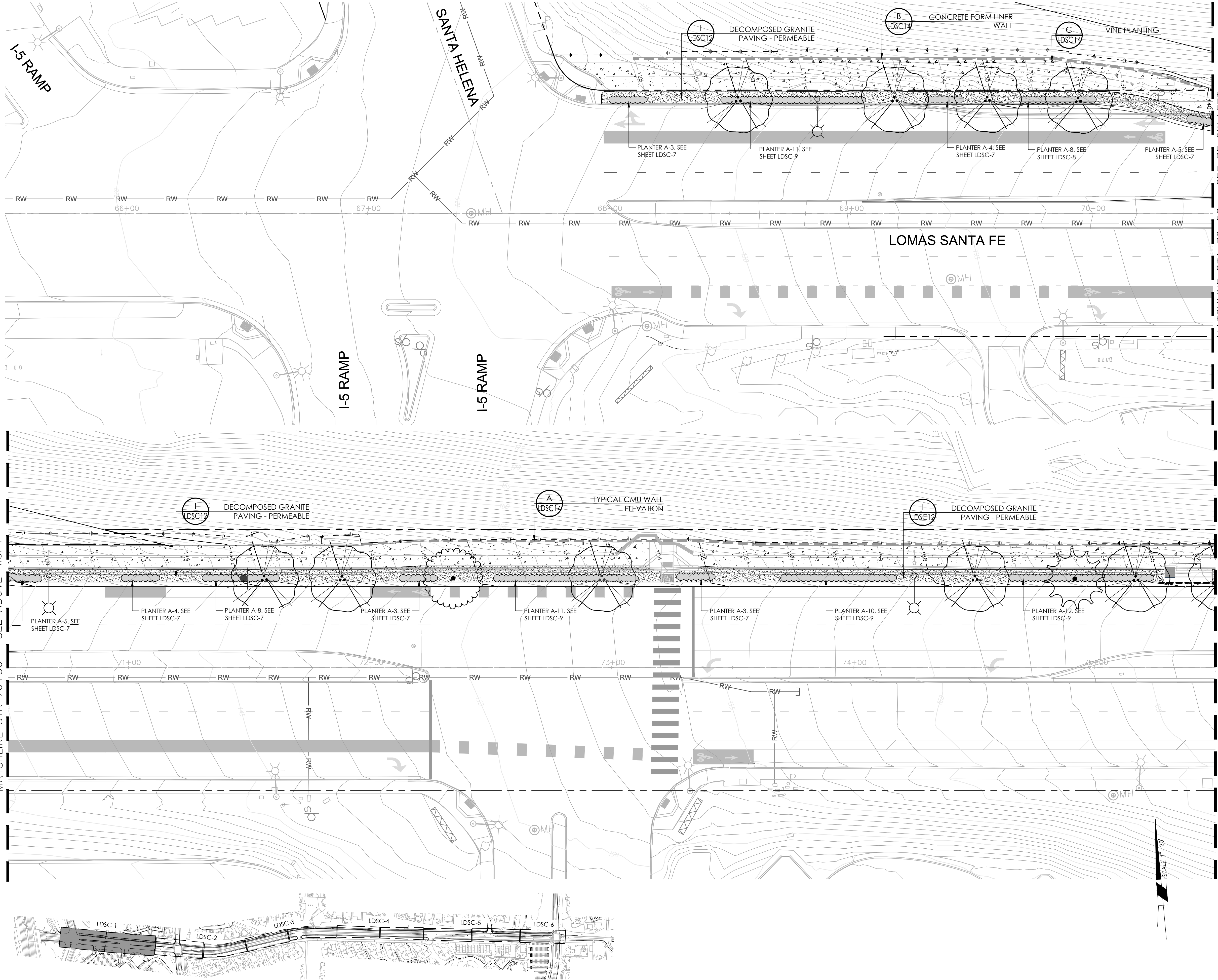
ENGINEERING DEPARTMENT

TRAFFIC SIGNAL MODIFICATION PLAN FOR:
LOMAS SANTA FE & LAS BANDERAS

DRAWING NO.

CG-3185

Sheet 30 of 54



PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	QTY
TREES				
	(E) PALM TREE	TO BE RELOCATED	15 GAL	13
	ARBUTUS X 'MARINA'	ARBUTUS STANDARD	24"BOX	51
	BAUHINIA X BLAKEANA	HONG KONG ORCHID TREE	15 GAL	32
	JACARANDA MIMOSIFOLIA	JACARANDA MULTI-TRUNK	15 GAL	65
SHRUBS				
	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	5 GAL	56
	AEONIU ARBOREUM	TREE AEONIU	5 GAL	6
	AEONIU ARBOREUM 'ATROPURPUREUM'	TREE AEONIU	5 GAL	3
	AGAVE AMERICANA	CENTURY PLANT	5 GAL	6
	AGAVE VILMORINIANA	OCTOPUS AGAVE	5 GAL	1
	AGAVE X 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	22
	ALOE STRIATA	CORAL ALOE	5 GAL	7
	ANIGOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW	5 GAL	33
	BULBINELLA FLORIBUNDA	BULBINELLA	5 GAL	175
	CAREX TUMULICOLA	FOOTHILL SEDGE	5 GAL	62
	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	24
	CYCAS REVOLUTA	SAGO PALM	5 GAL	1
	FESTUCA RUBRA 'MOLATE'	MOLATE RED FESCUE	5 GAL	126
	FICUS PUMILA	CREEPING FIG	1 GAL	36
	IRIS DOUGLASIANA	DOUGLAS IRIS	5 GAL	48
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	41
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE	1 GAL	28
	LIMONIUM PEREZII	STATICE	5 GAL	61
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	22
	MUHLBERGIA RIGENS	DEER GRASS	1 GAL	64
	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM	5 GAL	278
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX	5 GAL	49
	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO	1 GAL	207
	SISYRINCHIUM BELLUM	BLUE EYED GRASS	5 GAL	113
	YUCCA FLACCIDA 'GOLDEN SWORD'	GOLDEN SWORD YUCCA	5 GAL	7
VINES				
	FICUS PUMILA	CREEPING FIG	1 GAL	24

SYMBOL LEGEND

	A: 30-24\"/>	- SEE DETAIL F ON PAGE LDSC12
	B: 18-12\"/>	- SEE DETAIL F ON PAGE LDSC12
	6-9\"/>	- SEE DETAIL E ON PAGE LDSC12
	ACKERSTONE SERPENTINE PAVERS, TERRACOTTA, HERRINGBONE PATTERN	- SEE DETAILS G/H ON PAGE LDSC12
	CALIFORNIA GOLD DECOMPOSED GRANITE	- SEE DETAIL I ON PAGE LDSC12
	WOOD MULCH	- CITY PREFERRED MULCH, INSTALL PER MANUFACTURER'S RECOMMENDATIONS
	3-5\"/>	- SEE DETAIL E ON PAGE LDSC12
	PLANTER AREA - REFER TO SHEET LISTED FOR DETAILS	

KEY PLAN- NTS

LOMAS SANTA FE-PLAN

SCALE: 1"=20'

PLAN CODE

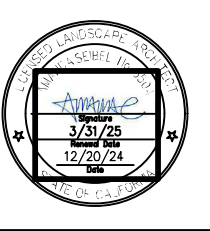
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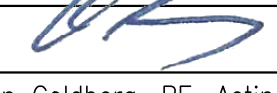
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LANDSCAPE ARCHITECT OF WORK
AMANDA SEIBEL **PLA 6504** **12/20/2024**
DATE

CITY APPROVED CHANGES	APP'D	DATE

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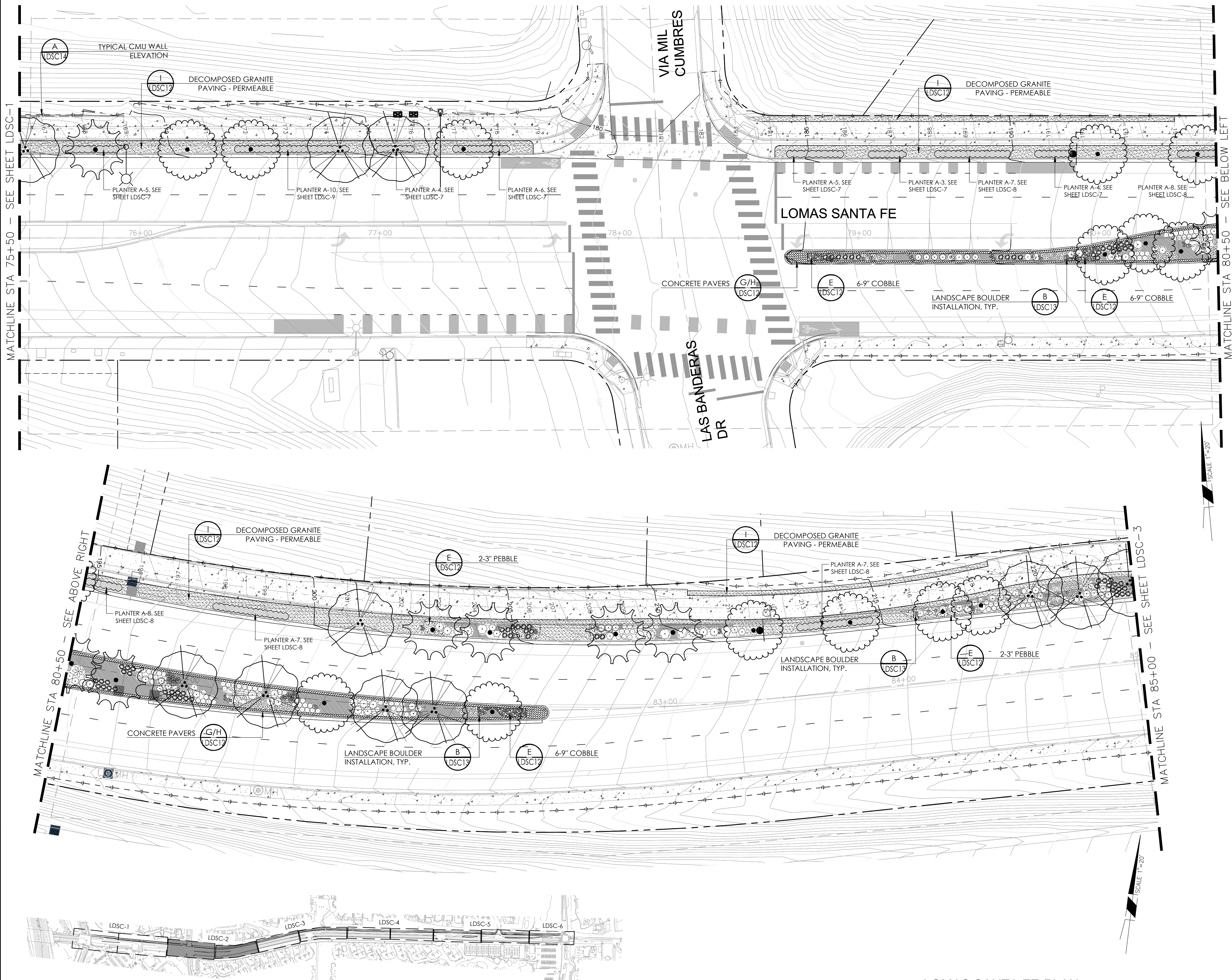
APPROVED FOR CONSTRUCTION
By:  Date: 05/01/2025
Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25

BENCH MARK
DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH
IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

ENGINEERING DEPARTMENT
LANDSCAPE & PLANTING PLAN

DRAWING NO.
CG-3185
Sheet 31 of 54



KEY PLAN- NTS

LOMAS SANTA FE-PLAN
SCALE: 1"=20'

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	QTY
TREES				
(E)	(E) PALM TREE	TO BE RELOCATED	15 GAL	13
(A)	ARBUS X 'MARINA'	ARBUS STANDARD	24"BOX	51
(B)	BAUHINIA X BLAKEANA	HONG KONG ORCHID TREE	15 GAL	32
(C)	JACARANDA MIMOSIFOLIA	JACARANDA MULTI-TRUNK	15 GAL	65
SHRUBS				
(D)	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	5 GAL	56
(E)	AEONIU ARBOREUM	TREE AEONIU	5 GAL	6
(F)	AEONIU ARBOREUM 'ATROPURPUREUM'	TREE AEONIU	5 GAL	3
(G)	AGAVE AMERICANA	CENTURY PLANT	5 GAL	6
(H)	AGAVE VILMORINIANA	OCTOPUS AGAVE	5 GAL	1
(I)	AGAVE X 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	22
(J)	ALOE STRIATA	CORAL ALOE	5 GAL	7
(K)	ANIGOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW	5 GAL	33
(L)	BULBINELLA FLORIBUNDA	BULBINELLA	5 GAL	175
(M)	CAREX TUMULICOLA	FOOTHILL SEDGE	5 GAL	62
(N)	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	24
(O)	CYCAS REVOLUTA	SAGO PALM	5 GAL	1
(P)	FESTUCA RUBRA 'MOLATE'	MOLATE RED FESCUE	5 GAL	126
(Q)	FICUS PUMILA	CREEPING FIG	1 GAL	36
(R)	IRIS DOUGLASIANA	DOUGLAS IRIS	5 GAL	48
(S)	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	41
(T)	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE	1 GAL	28
(U)	LIMONIU PEREZII	STATICE	5 GAL	61
(V)	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	22
(W)	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	64
(X)	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM	5 GAL	278
(Y)	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX	5 GAL	49
(Z)	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO	1 GAL	207
(AA)	SISYRINCHIUM BELLUM	BLUE EYED GRASS	5 GAL	113
(AB)	YUCCA FLACCIDA 'GOLDEN SWORD'	GOLDEN SWORD YUCCA	5 GAL	7
VINES				
(AC)	FICUS PUMILA	CREEPING FIG	1 GAL	24

SYMBOL LEGEND

(A)	A: 30-24", B: 24-18" C: 18-12"	- SEE DETAIL F ON PAGE LDSC12
(B)	GAUMBERG GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE	- SEE DETAIL F ON PAGE LDSC12
(C)	6-9" MEXICAN BEACH PEBBLE/ COBBLE, MIXED FROM SOUTHWEST BOULDER & STONE	- SEE DETAIL E ON PAGE LDSC12
(D)	ACKERSTONE SERPENTINE PAVERS, TERRACOTTA, HERRINGBONE PATTERN	- SEE DETAILS G/H ON PAGE LDSC12
(E)	CALIFORNIA GOLD DECOMPOSED GRANITE	- SEE DETAIL I ON PAGE LDSC12
(F)	WOOD MULCH	- CITY PREFERRED MULCH, INSTALL PER MANUFACTURER'S RECOMMENDATIONS
(G)	3-5" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE	- SEE DETAIL E ON PAGE LDSC12
(H)	PLANTER AREA - REFER TO SHEET LISTED FOR DETAILS	

AS-BUILT
By: _____ Date: _____
R.C.E.: _____ Exp: _____

PLAN CODE
LDSC-2

CITY OF SOLANA BEACH	ENGINEERING DEPARTMENT	DRAWING NO.
IMPROVEMENT PLANS FOR:	LANDSCAPE & PLANTING PLAN	CG-3185
LOMAS SANTA FE CORRIDOR		Sheet 32 of 54

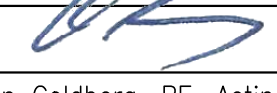


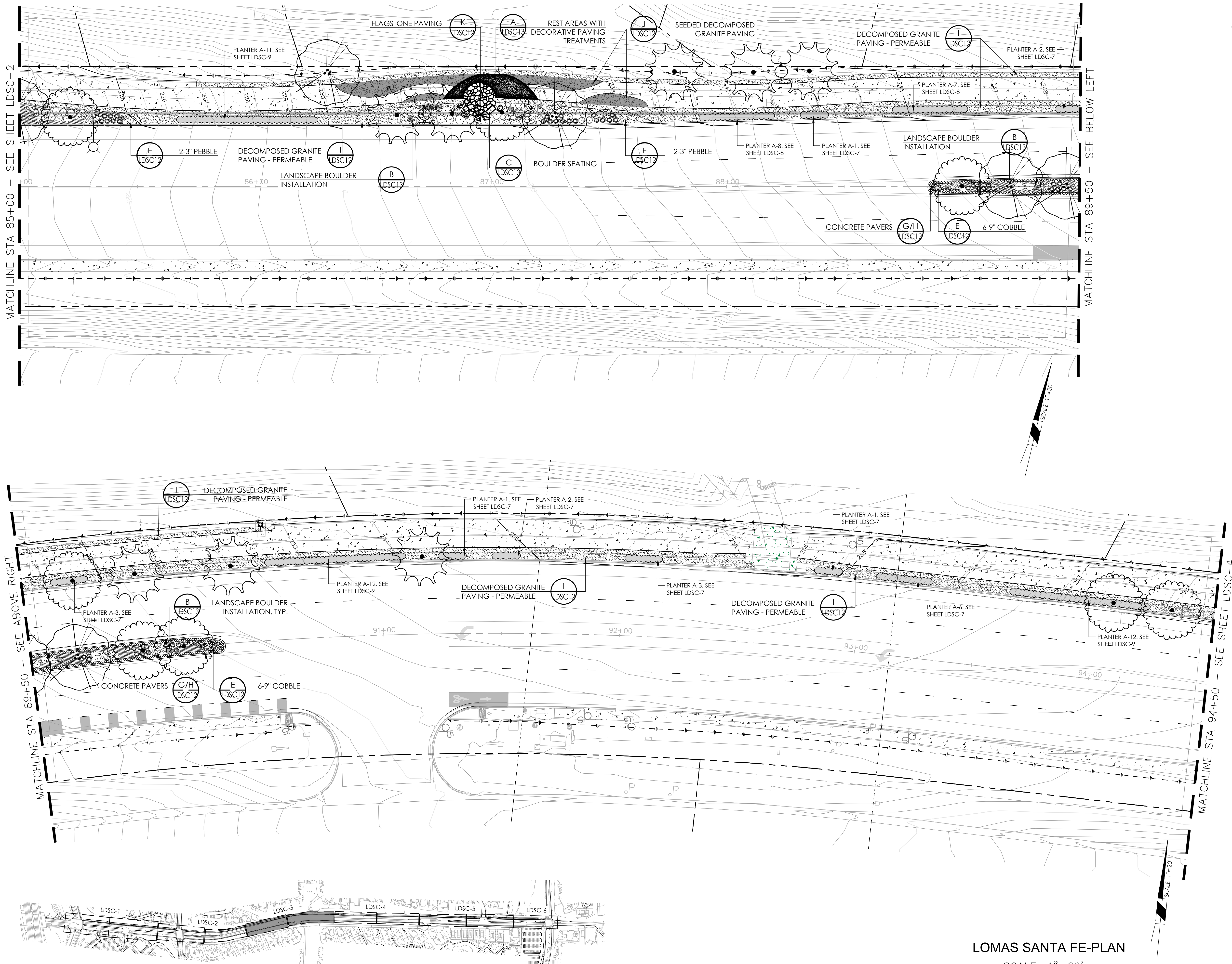
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AMANDA SEIBEL PLA 6504 12/20/2024 DATE

LANDSCAPE ARCHITECT OF WORK	CITY APPROVED CHANGES	APP'D	DATE
AMANDA SEIBEL PLA 6504 12/20/2024 DATE			

RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK
By: _____ Date: _____ R.C.E.: _____ Exp: _____	By:  Date: 05/01/2025 Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	DESCRIPTION: _____ ELEV.: _____ DATUM: M.S.L.



KEY PLAN- NTS

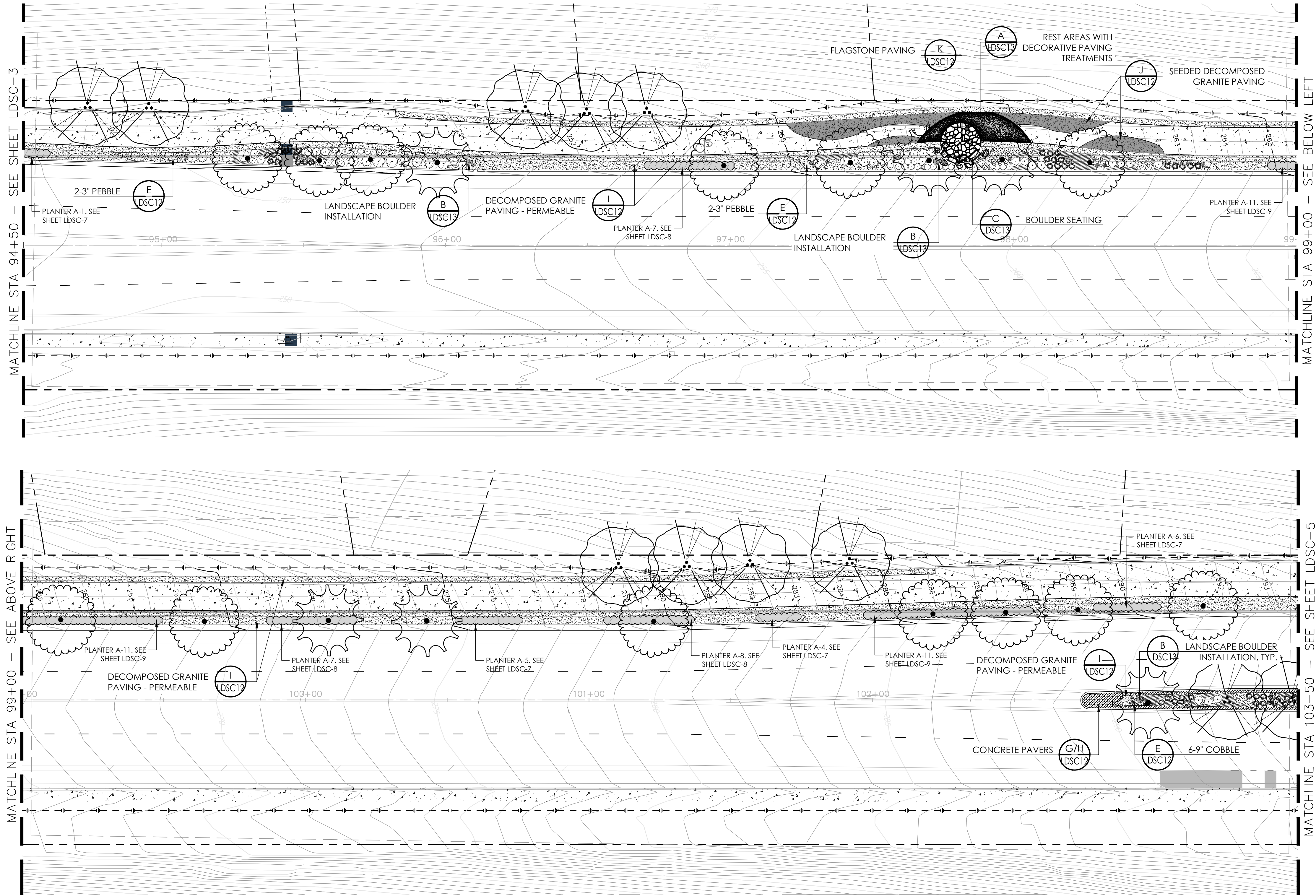
LOMAS SANTA FE-PLAN
SCALE: 1"=20'

PLANT SCHEDULE				
SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	QTY
TREES				
	(E) PALM TREE	TO BE RELOCATED	15 GAL	13
	ARBUTUS X 'MARINA'	ARBUTUS STANDARD	24"BOX	51
	BAUHINIA X BLAKEANA	HONG KONG ORCHID TREE	15 GAL	32
	JACARANDA MIMOSIFOLIA	JACARANDA MULTI-TRUNK	15 GAL	65
SHRUBS				
	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	5 GAL	56
	AEONIUM ARBOREUM	TREE AEONIUM	5 GAL	6
	AEONIUM ARBOREUM 'ATROPURPUREUM'	TREE AEONIUM	5 GAL	3
	AGAVE AMERICANA	CENTURY PLANT	5 GAL	6
	AGAVE VILMORINIANA	OCTOPUS AGAVE	5 GAL	1
	AGAVE X 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	22
	ALOE STRIATA	CORAL ALOE	5 GAL	7
	ANIGOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW	5 GAL	33
	BULBINELLA FLORIBUNDA	BULBINELLA	5 GAL	175
	CAREX TUMULICOLA	FOOTHILL SEDGE	5 GAL	62
	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	24
	CYCAS REVOLUTA	SAGO PALM	5 GAL	1
	FESTUCA RUBRA 'MOLATE'	MOLATE RED FESCUE	5 GAL	126
	FICUS PUMILA	CREeping FIG	1 GAL	36
	IRIS DOUGLASIANA	DOUGLAS IRIS	5 GAL	48
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	41
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE	1 GAL	28
	LIMONIUM PERREII	STATICE	5 GAL	61
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	22
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	64
	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM	5 GAL	278
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX	5 GAL	49
	SENECIO MANDRAUSCAE 'BLUE CHALK STICKS'	SENECIO	1 GAL	207
	SISYRINCHIUM BELLUM	BLUE EYED GRASS	5 GAL	113
	YUCCA FLACCIDA 'GOLDEN SWORD'	GOLDEN SWORD YUCCA	5 GAL	7
VINES				
	FICUS PUMILA	CREeping FIG	1 GAL	24

SYMBOL LEGEND	
	A: 30-24", B: 24-18" C: 18-12" GAMBLER'S GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE - SEE DETAIL F ON PAGE LDSC12
	6"-9" MEXICAN BEACH PEBBLE/ COBBLE MIXED FROM SOUTHWEST BOULDER & STONE - SEE DETAIL E ON PAGE LDSC12
	ACKERTONE SERPENTINE PAVERS, TERRACOTTA, HERRINGBONE PATTERN - SEE DETAILS G/H ON PAGE LDSC12
	CALIFORNIA GOLD DECOMPOSED GRANITE - SEE DETAIL I ON PAGE LDSC12
	WOOD MULCH - CITY PREFERRED MULCH, INSTALL PER MANUFACTURER'S RECOMMENDATIONS
	3"-5" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE - SEE DETAIL E ON PAGE LDSC12
	PLANTER AREA - REFER TO SHEET LISTED FOR DETAILS

AS-BUILT
PLAN CODE
LDSC-3
By: _____ Date: _____
R.C.E.: _____ Exp: _____

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		AMANDA SEIBEL PLA 6504			By: _____ Date: _____	By: _____ Date: 05/01/2025	DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.		
		12/20/2024			R.C.E.: _____ Exp: _____	Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25			

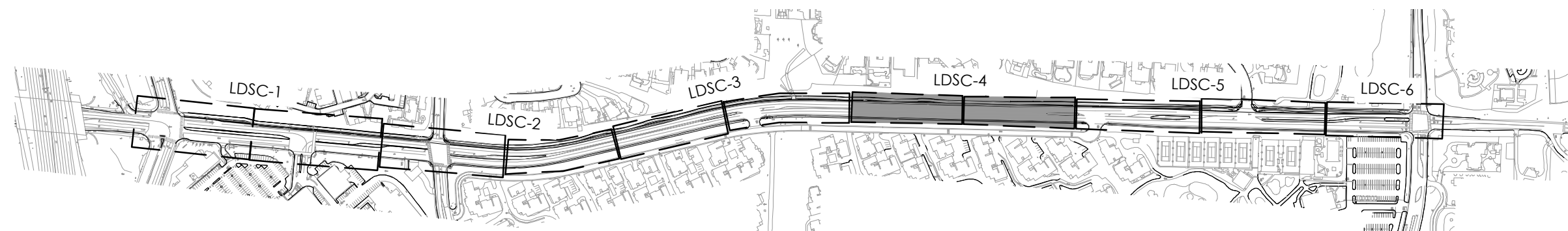


MATCHLINE STA 99+00 - SEE ABOVE RIGHT

MATCHLINE STA 94+50 - SEE SHEET LDSC-3

MATCHLINE STA 99+00 - SEE BELOW LEFT

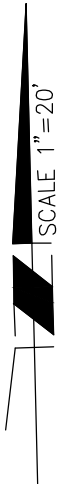
MATCHLINE STA 103+50 - SEE SHEET LDSC-5



KEY PLAN- NTS

LOMAS SANTA FE-PLAN

SCALE: 1"=20'



PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	QTY
TREES				
	(E) PALM TREE	TO BE RELOCATED	15 GAL	13
	ARBUTUS X 'MARINA'	ARBUTUS STANDARD	24"BOX	51
	BAUHINIA X BLAKEANA	HONG KONG ORCHID TREE	15 GAL	32
	JACARANDA MIMOSIFOLIA	JACARANDA MULTI-TRUNK	15 GAL	65
SHRUBS				
	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	5 GAL	56
	AEONIUM ARBOREUM	TREE AEONIUM	5 GAL	6
	AEONIUM ARBOREUM 'ATROPURPUREUM'	TREE AEONIUM	5 GAL	3
	AGAVE AMERICANA	CENTURY PLANT	5 GAL	6
	AGAVE VILMORINIANA	OCTOPUS AGAVE	5 GAL	1
	AGAVE X 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	22
	ALOE STRIATA	CORAL ALOE	5 GAL	7
	ANIGOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW	5 GAL	33
	BULBINELLA FLORIBUNDA	BULBINELLA	5 GAL	175
	CAREX TUMULICOLA	FOOTHILL SEDGE	5 GAL	62
	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	24
	CYCAS REVOLUTA	SAGO PALM	5 GAL	1
	FESTUCA RUBRA 'MOLATE'	MOLATE RED FESCUE	5 GAL	126
	FICUS PUMILA	CREEPING FIG	1 GAL	36
	IRIS DOUGLASIANA	DOUGLAS IRIS	5 GAL	48
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	41
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE	1 GAL	28
	LIMONIUM PEREZII	STATICE	5 GAL	61
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	22
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	64
	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM	5 GAL	278
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX	5 GAL	49
	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO	1 GAL	207
	SISYRINCHIUM BELLUM	BLUE EYED GRASS	5 GAL	113
	YUCCA FLACCIDA 'GOLDEN SWORD'	GOLDEN SWORD YUCCA	5 GAL	7
VINES				
	FICUS PUMILA	CREEPING FIG	1 GAL	24

SYMBOL LEGEND

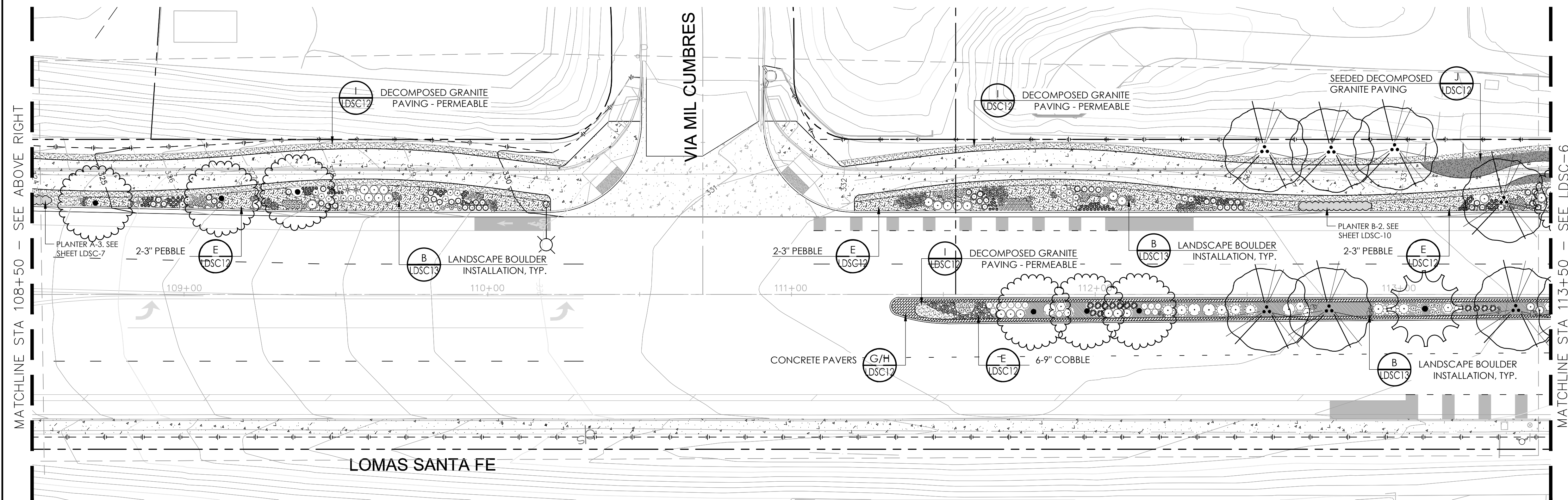
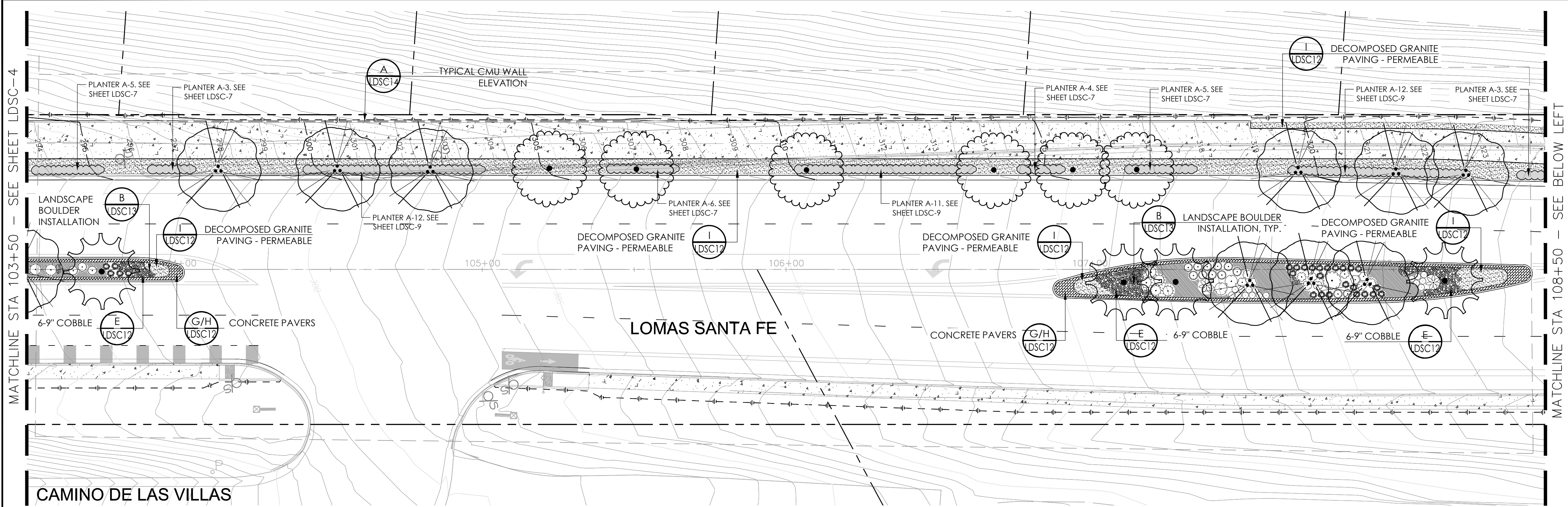
	A: 30-24" B: 24-18" C: 18-12" GAMBLER'S GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE	- SEE DETAIL F ON PAGE LDSC12
	6-9" MEXICAN BEACH PEBBLE/ COBBLE, MIXED FROM SOUTHWEST BOULDER & STONE	- SEE DETAIL E ON PAGE LDSC12
	ACKERSTONE SERPENTINE PAVERS, TERRACOTTA, HERRINGBONE PATTERN	- SEE DETAILS G/H ON PAGE LDSC12
	CALIFORNIA GOLD DECOMPOSED GRANITE	- SEE DETAIL I ON PAGE LDSC12
	WOOD MULCH	- CITY PREFERRED MULCH, INSTALL PER MANUFACTURER'S RECOMMENDATIONS
	3-5" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE	- SEE DETAIL E ON PAGE LDSC12
	PLANTER AREA - REFER TO SHEET LISTED FOR DETAILS	

AS-BUILT

PLAN CODE
LDSC-4

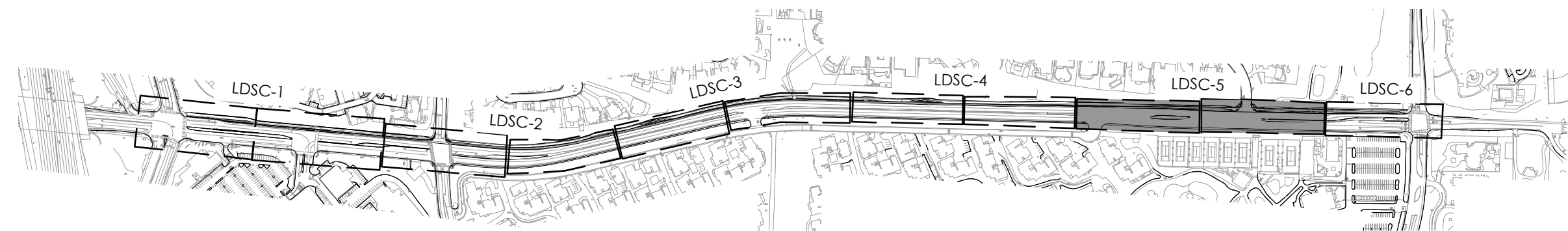
By: _____ Date: _____
R.C.E.: _____ Exp: _____

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		AMANDA SEIBEL PLA 6504 12/20/2024 DATE			By: _____ Date: _____ R.C.E.: _____ Exp: _____	By: Date: 05/01/2025 Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	DESCRIPTION: LOCATION: ELEV.: _____ DATUM: M.S.L.		



PLANT SCHEDULE				
SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	QTY
TREES				
(E)	(E) PALM TREE	TO BE RELOCATED	15 GAL	13
	ARBUS X 'MARINA'	ARBUS STANDARD	24"BOX	51
	BAUHINIA X BLAKEANA	HONG KONG ORCHID TREE	15 GAL	32
	JACARANDA MIMOSIFOLIA	JACARANDA MULTI-TRUNK	15 GAL	65
SHRUBS				
	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	5 GAL	56
	AEONIUM ARBOREUM	TREE AEONIUM	5 GAL	6
	AEONIUM ARBOREUM 'ATROPURPUREUM'	TREE AEONIUM	5 GAL	3
	AGAVE AMERICANA	CENTURY PLANT	5 GAL	6
	AGAVE VILMORINIANA	OCTOPUS AGAVE	5 GAL	1
	AGAVE X 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	22
	ALOE STRIATA	CORAL ALOE	5 GAL	7
	ANIGOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW	5 GAL	33
	BULBINELLA FLORIBUNDA	BULBINELLA	5 GAL	175
	CAREX TUMULICOLA	FOOTHILL SEDGE	5 GAL	62
	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	24
	CYCAS REVOLUTA	SAGO PALM	5 GAL	1
	FESTUCA RUBRA 'MOLATE'	MOLATE RED FESCUE	5 GAL	126
	FICUS PUMILA	CREEPING FIG	1 GAL	36
	IRIS DOUGLASIANA	DOUGLAS IRIS	5 GAL	48
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	41
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE	1 GAL	28
	LIMONIUM PEREZII	STATICE	5 GAL	61
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	22
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	64
	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM	5 GAL	278
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX	5 GAL	49
	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO	1 GAL	207
	SISYRINCHIUM BELLUM	BLUE EYED GRASS	5 GAL	113
	YUCCA FLACCIDA 'GOLDEN SWORD'	GOLDEN SWORD YUCCA	5 GAL	7
VINES				
	FICUS PUMILA	CREEPING FIG	1 GAL	24

SYMBOL LEGEND	
	A: 30-24\"/>
	6-9\"/>
	ACKERSTONE SERPENTINE PAVERS, TERRACOTTA, HERRINGBONE PATTERN
	CALIFORNIA GOLD DECOMPOSED GRANITE
	WOOD MULCH
	3-5\"/>
	PLANTER AREA - REFER TO SHEET LISTED FOR DETAILS



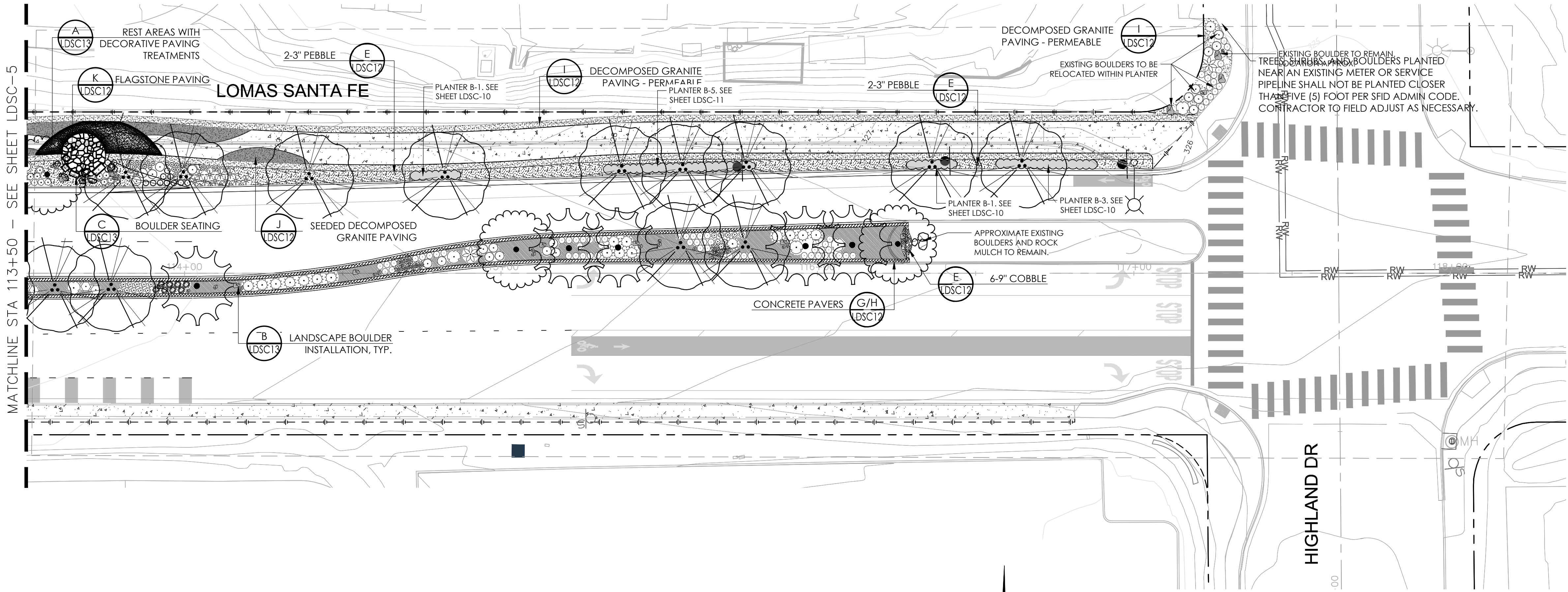
KEY PLAN- NTS

LOMAS SANTA FE-PLAN

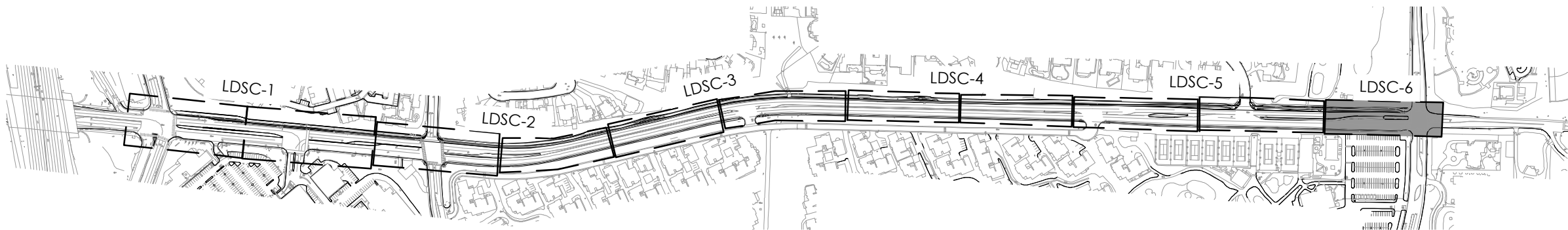
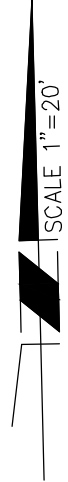
SCALE: 1"=20'

AS-BUILT

PLAN CODE
LDSC-5
By: _____ Date: _____
R.C.E.: _____ Exp: _____



LOMAS SANTA FE-PLAN
SCALE: 1"=20'



KEY PLAN- NTS

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	QTY
TREES				
(E)	PALM TREE	TO BE RELOCATED	15 GAL	13
ARBUS	ARBUS X 'MARINA'	ARBUS STANDARD	24"BOX	51
BAUHIN	BAUHINIA X BLAKEANA	HONG KONG ORCHID TREE	15 GAL	32
JACAR	JACARANDA MIMOSIFOLIA	JACARANDA MULTI-TRUNK	15 GAL	65
SHRUBS				
ACHIL	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	5 GAL	56
AEONI	AEONIUM ARBOREUM	TREE AEONIUM	5 GAL	6
AEONI	AEONIUM ARBOREUM 'ATROPURPUREUM'	TREE AEONIUM	5 GAL	3
AGAVE	AGAVE AMERICANA	CENTURY PLANT	5 GAL	6
AGAVE	AGAVE VILMORINIANA	OCTOPUS AGAVE	5 GAL	1
AGAVE	AGAVE X 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	22
ALOE	ALOE STRIATA	CORAL ALOE	5 GAL	7
ANGIO	ANGIOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW	5 GAL	33
BULBIN	BULBINELLA FLORIBUNDA	BULBINELLA	5 GAL	175
CAREX	CAREX TUMULICOLA	FOOTHILL SEDGE	5 GAL	62
CHONDR	CHONDRPETALUM TECTORUM	CAPE RUSH	5 GAL	24
CYCAS	CYCAS REVOLUTA	SAGO PALM	5 GAL	1
FESTUC	FESTUCA RUBRA 'MOLATE'	MOLATE RED FESCUE	5 GAL	126
FICUS	FICUS PUMILA	CREEPING FIG	1 GAL	36
IRIS	IRIS DOUGLASIANA	DOUGLAS IRIS	5 GAL	48
JUNCUS	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	41
LEYMUS	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE	1 GAL	28
LIMONI	LIMONIUM PEREZII	STATICE	5 GAL	61
LOMAND	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	22
MUHLEN	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	64
MYOPOR	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM	5 GAL	278
PHORMI	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX	5 GAL	49
SENECIO	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO	1 GAL	207
SISYRIN	SISYRINCHIUM BELLUM	BLUE EYED GRASS	5 GAL	113
YUCCA	YUCCA FLACCIDA 'GOLDEN SWORD'	GOLDEN SWORD YUCCA	5 GAL	7
VINES				
FICUS	FICUS PUMILA	CREEPING FIG	1 GAL	24

SYMBOL LEGEND

A: 30-24" B: 24-18" C: 18-12" GAMBLERS GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE

- SEE DETAIL F ON PAGE LDSC12

6-9" MEXICAN BEACH PEBBLE/ COBBLE, MIXED FROM SOUTHWEST BOULDER & STONE

- SEE DETAIL E ON PAGE LDSC12

ACKERSTONE SERPENTINE PAVERS, TERRACOTTA, HERRINGBONE PATTERN

- SEE DETAILS G/H ON PAGE LDSC12

CALIFORNIA GOLD DECOMPOSED GRANITE

- SEE DETAIL I ON PAGE LDSC12

WOOD MULCH

- CITY PREFERRED MULCH, INSTALL PER MANUFACTURER'S RECOMMENDATIONS

3-5" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE

- SEE DETAIL E ON PAGE LDSC12

PLANTER AREA - REFER TO SHEET LISTED FOR DETAILS

AS-BUILT

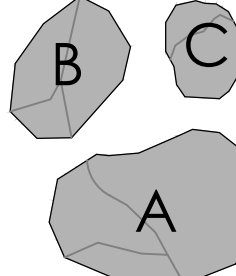
PLAN CODE
LDSC-6

By: _____ Date: _____
R.C.E.: _____ Exp: _____

PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME
	AEONIUM ARBOREUM 'ATROPURPUREUM'	TREE AEONIUM
	ALOE STRIATA	CORAL ALOE
	ANIGOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH
	MUHLENBERGIA DUBIA	PINE MUHLY
	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX
	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO

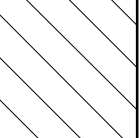
SYMBOL LEGEND



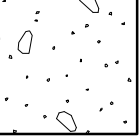
A: 30'-24", B: 24'-18" C: 18'-12" GAMBLERS GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE



DECOMPOSED GRANITE CALIFORNIA GOLD



WOOD MULCH



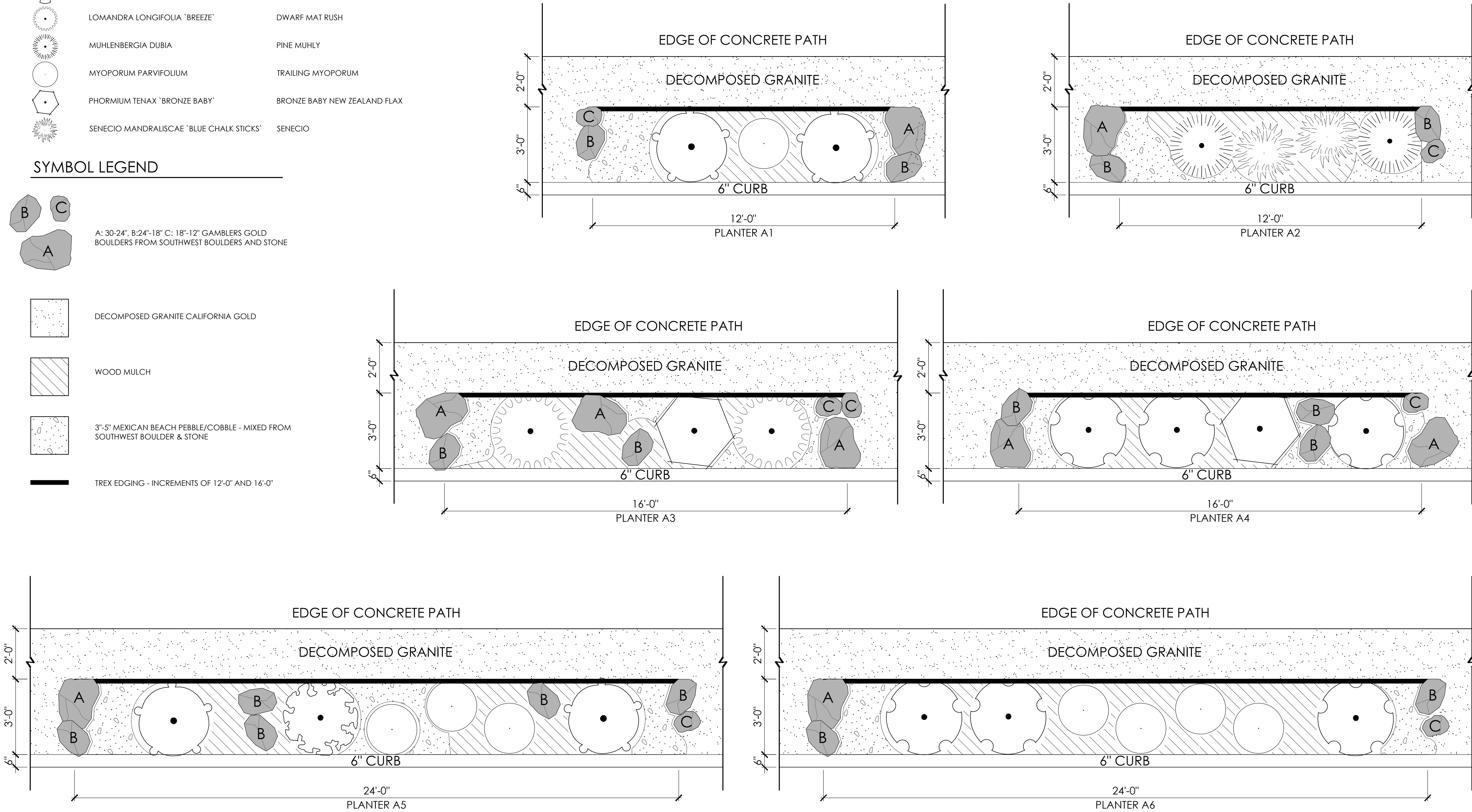
3"-5" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE



TREX EDGING - INCREMENTS OF 12'-0" AND 16'-0"

NOTES:

1. ADJUST OR REMOVE PLANT, WHERE TREE MAY OCCUR. SEE PLANS FOR TREE LOCATIONS.
2. PROVIDE A PHOTOGRAPH OF EACH COMPLETED PLANTER TYPE, TO RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH FURTHER PLANTER CONSTRUCTION. PLANTER TYPES INCLUDE: PARKWAY, WATER QUALITY, MEDIAN AND BULBOUT.



A PARKWAY PLANTER
1/2" = 1'-0"

RRM-0401-0416.03-14

AS-BUILT

PLAN CODE
LDSC-7

By: _____ Date: _____
R.C.E.: _____ Exp: _____



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group

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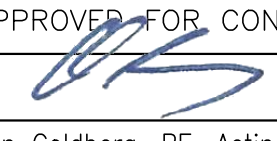
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LANDSCAPE ARCHITECT OF WORK		
AMANDA SEIBEL	PLA 6504	12/20/2024
		DATE

CITY APPROVED CHANGES	APP'D	DATE

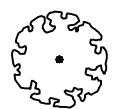
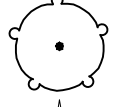
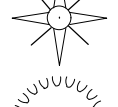
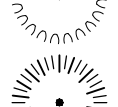
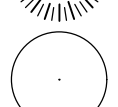
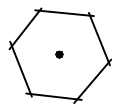
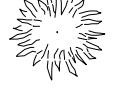
RECOMMENDED FOR APPROVAL	
By: _____	Date: _____
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Don Goldberg, PE, Acting City Engineer	R.C.E.: 57292 Exp: 12/31/25

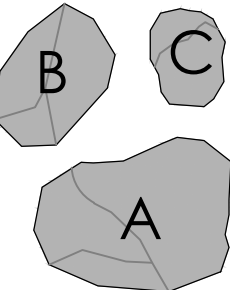
BENCH MARK	
DESCRIPTION:	
LOCATION:	
ELEV.: _____	DATUM: M.S.L.

CITY OF SOLANA BEACH	
IMPROVEMENT PLANS FOR:	LANDSCAPE & PLANTING DETAILS
LOMAS SANTA FE CORRIDOR	
DRAWING NO.	CG-3185
Sheet 37 of 54	

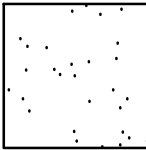
PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME
	AEONIUM ARBOREUM 'ATROPURPUREUM'	TREE AEONIUM
	ALOE STRIATA	CORAL ALOE
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH
	MUHLENBERGIA DUBIA	PINE MUHLY
	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX
	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO

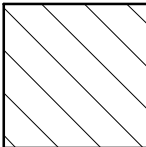
SYMBOL LEGEND



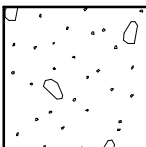
A: 30-24", B:24"-18" C: 18"-12" GAMBLERS GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE



DECOMPOSED GRANITE CALIFORNIA GOLD



WOOD MULCH



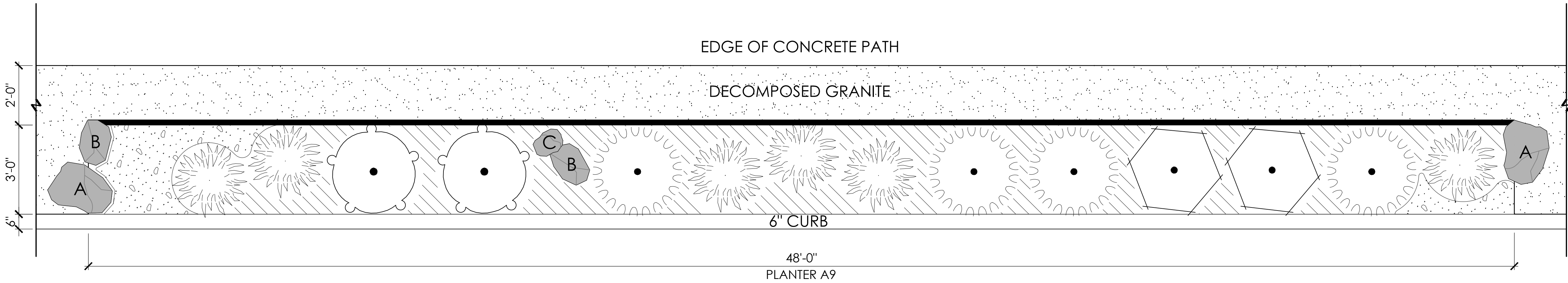
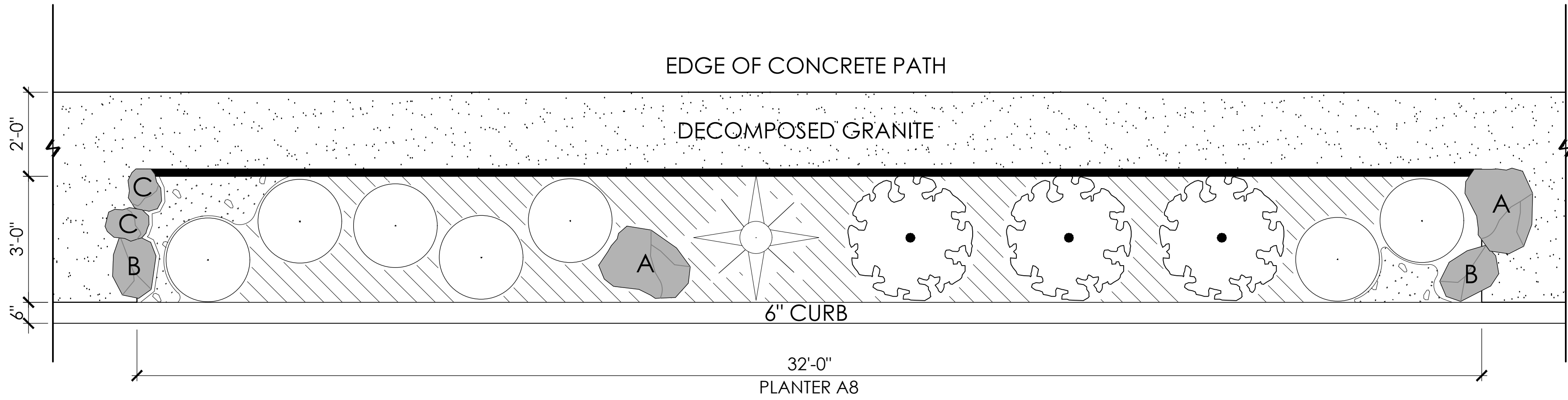
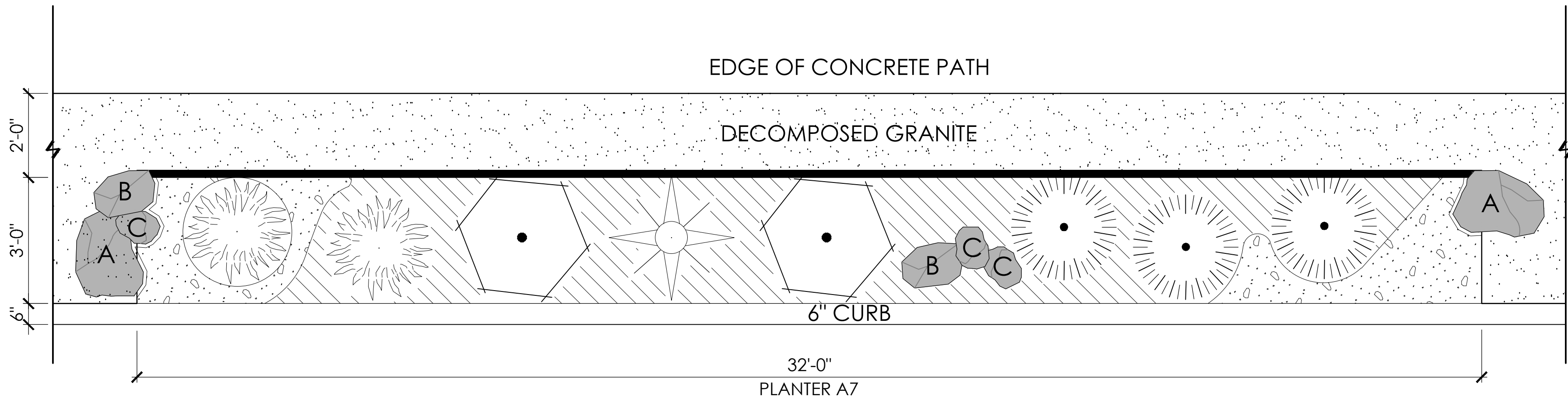
3"-5" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE



TREX EDGING - INCREMENTS OF 12'-0" AND 16'-0"

NOTES:

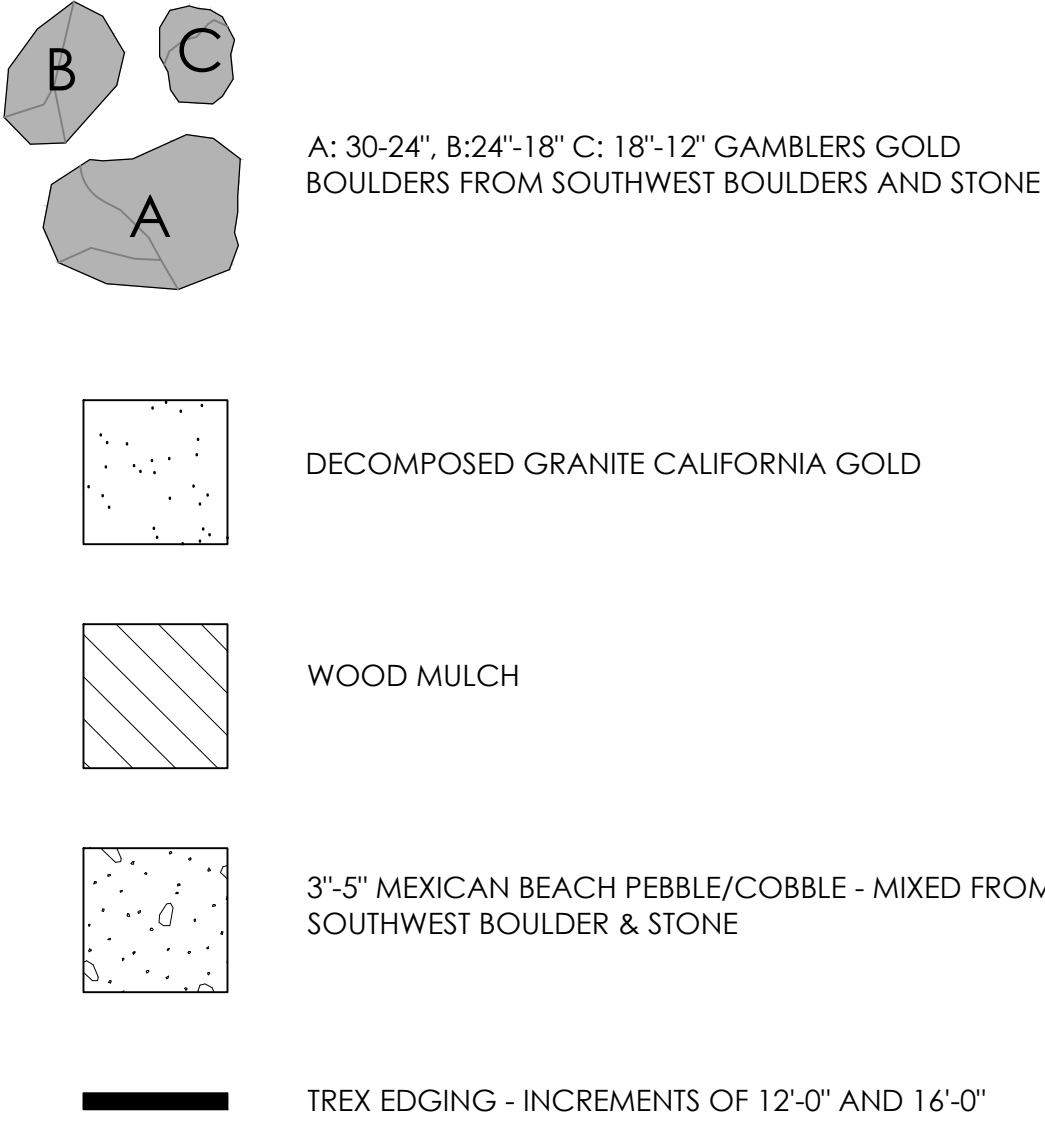
1. ADJUST OR REMOVE PLANT, WHERE TREE MAY OCCUR. SEE PLANS FOR TREE LOCATIONS.
2. PROVIDE A PHOTOGRAPH OF EACH COMPLETED PLANTER TYPE, TO RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH FURTHER PLANTER CONSTRUCTION. PLANTER TYPES INCLUDE: PARKWAY, WATER QUALITY, MEDIAN AND BULBOUT.



A PARKWAY PLANTER
1/2" = 1'-0"

RRM-0401-0416.03-13
AS-BUILT
PLAN CODE LDSC-8
By: _____ Date: _____
R.C.E.: _____ Exp: _____

SYMBOL LEGEND

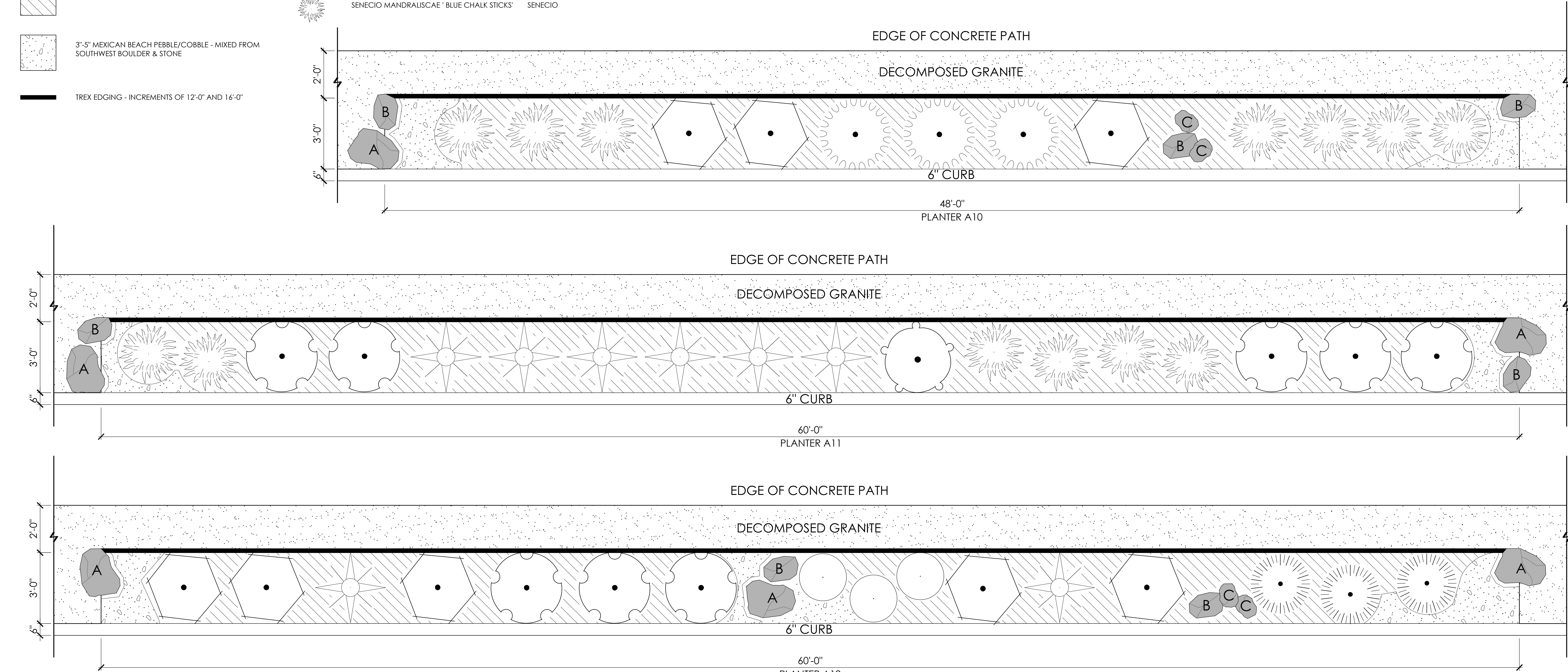


PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME
	ALOE STRIATA	CORAL ALOE
	ANIGOZANTHOS X 'BIG RED'	BIG RED KANGAROO PAW
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE
	MUHLENBERGIA DUBIA	PINE MUHLY
	MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX
	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO

NOTES:

- ADJUST OR REMOVE PLANT, WHERE TREE MAY OCCUR. SEE PLANS FOR TREE LOCATIONS.
- PROVIDE A PHOTOGRAPH OF EACH COMPLETED PLANTER TYPE, TO RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH FURTHER PLANTER CONSTRUCTION. PLANTER TYPES INCLUDE: PARKWAY, WATER QUALITY, MEDIAN AND BULBOUT.



A PARKWAY PLANTER
1/2" = 1'-0"

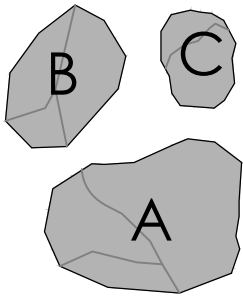
RRM-0401-0416.03-15

AS-BUILT
PLAN CODE LDSC-9
By: _____ Date: _____
R.C.E.: _____ Exp: _____

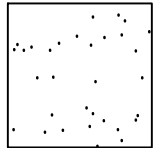
PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME
	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW
	CAREX TUMULICOLA	FOOTHILL SEDGE
	CHONDROPETALUM TECTORUM	CAPE RUSH
	FESTUCA RUBRA 'MOLATE'	MOLATE RED FESCUE
	IRIS DOUGLASIANA	DOUGLAS IRIS
	JUNCUS PATENS	CALIFORNIA GRAY RUSH
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE
	PHORMIUM TENAX 'BRONZE BABY'	BRONZE BABY NEW ZEALAND FLAX
	SISYRINCHIUM BELLUM	BLUE EYED GRASS

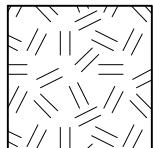
SYMBOL LEGEND



A: 30"-24" B: 24"-18" C: 18"-12" GAMBLERS GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE



DECOMPOSED GRANITE, CALIFORNIA GOLD



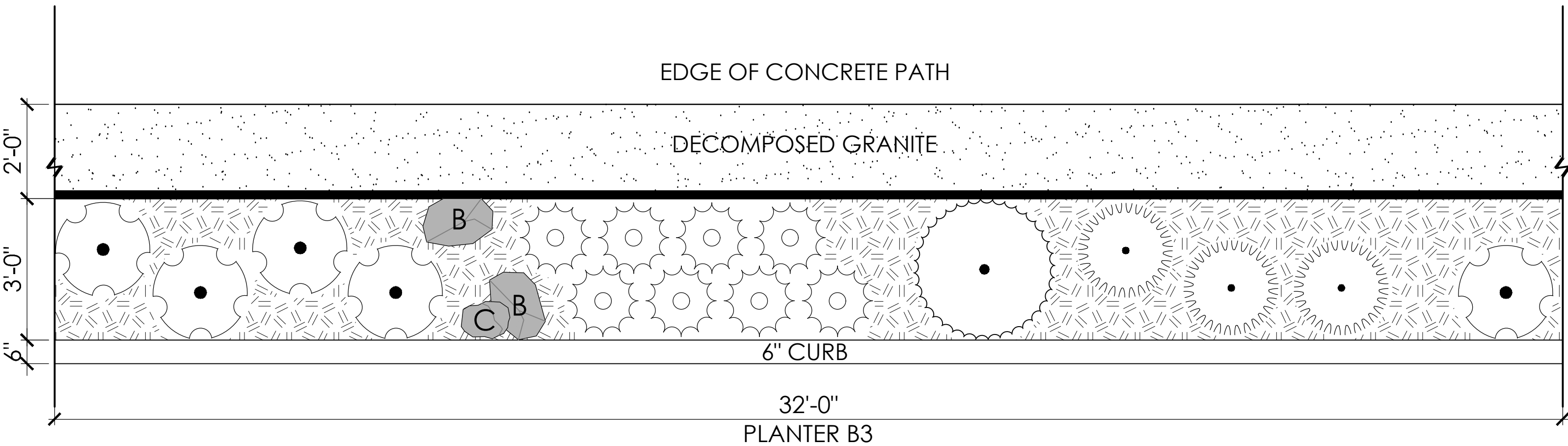
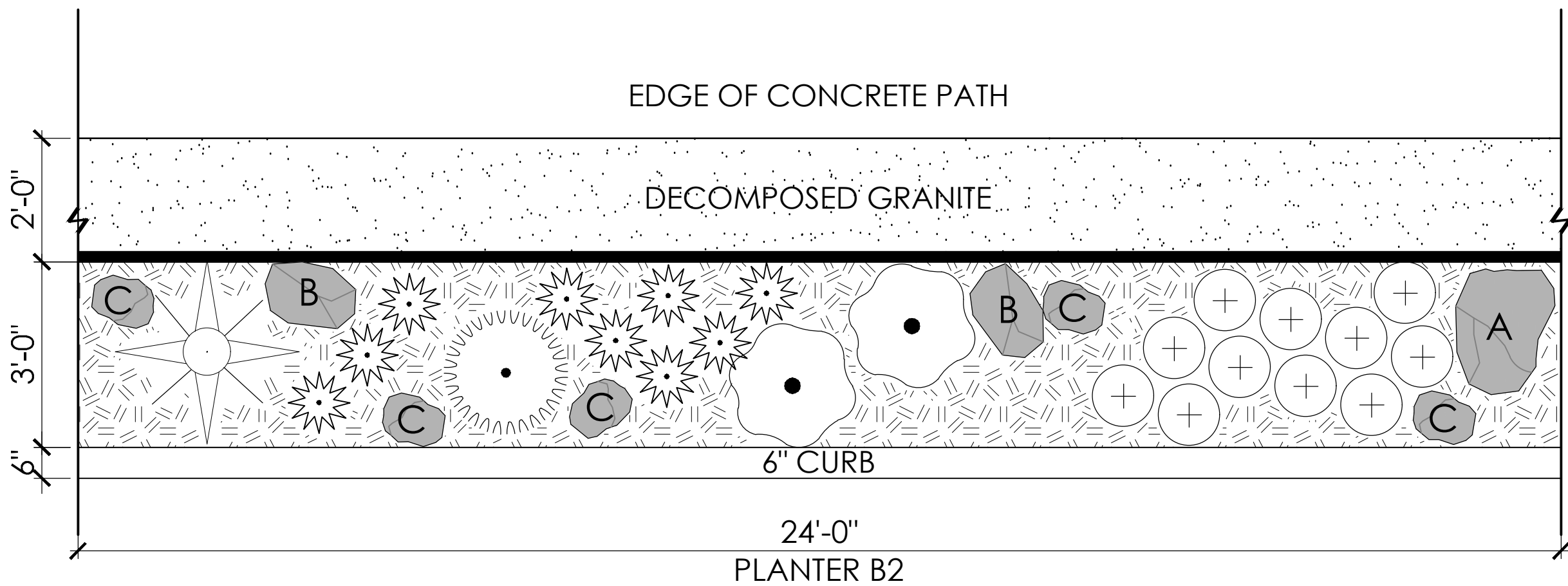
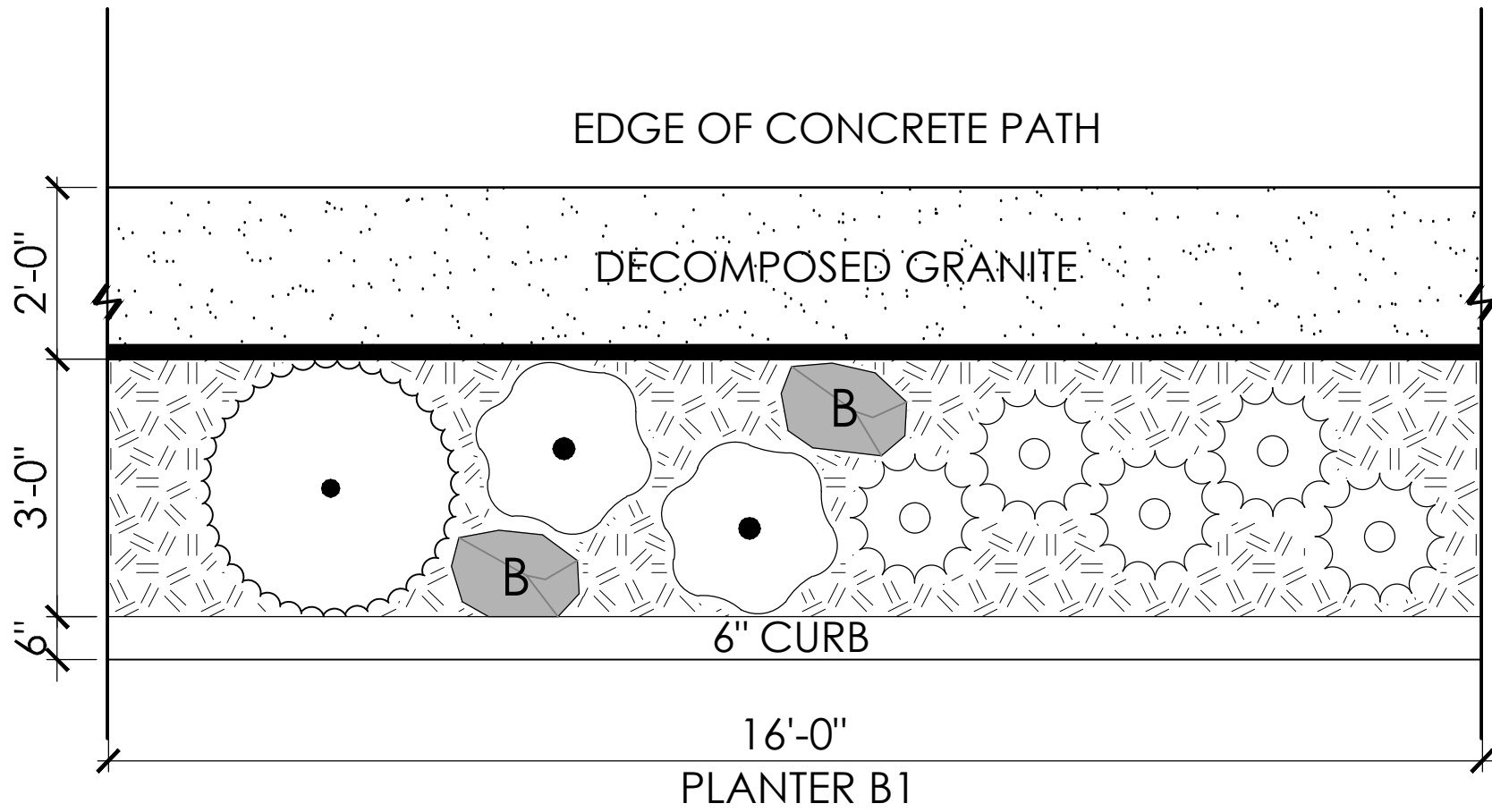
1"-2" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE



TREX EDGING - INCREMENTS OF 12'-0" AND 16'-0"

NOTES:

1. ADJUST OR REMOVE PLANT, WHERE TREE MAY OCCUR. SEE PLANS FOR TREE LOCATIONS.
2. PROVIDE A PHOTOGRAPH OF EACH COMPLETED PLANTER TYPE, TO RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH FURTHER PLANTER CONSTRUCTION. PLANTER TYPES INCLUDE: PARKWAY, WATER QUALITY, MEDIAN AND BULBOUT.



A WATER QUALITY PLANTER
1/2" = 1'-0"

RRM-0401-0416.03-12

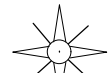
PLAN CODE LDSC-10

AS-BUILT

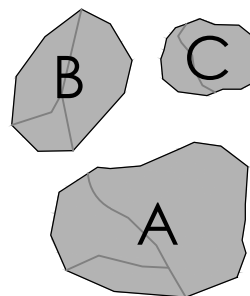
By: _____ Date: _____

R.C.E.: _____ Exp: _____

PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME
	ACHILLEA X "MOONSHINE"	MOONSHINE YARROW
	CAREX TUMULICOLA	FOOTHILL SEDGE
	CHONDROPETALUM TECTORUM	CAPE RUSH
	FESTUCA RUBRA "MOLATE"	MOLATE RED FESCUE
	IRIS DOUGLASIANA	DOUGLAS IRIS
	JUNCUS PATENS	CALIFORNIA GRAY RUSH
	LEYMUS CONDENSATUS "CANYON PRINCE"	NATIVE BLUE RYE
	SISYRINCHIUM BELLUM	BLUE EYED GRASS

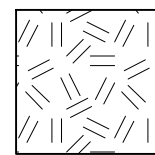
SYMBOL LEGEND



A: 30-24" B: 24"-18" C: 18"-12" GAMBLERS GOLD BOULDERS FROM SOUTHWEST BOULDERS AND STONE



DECOMPOSED GRANITE CALIFORNIA GOLD



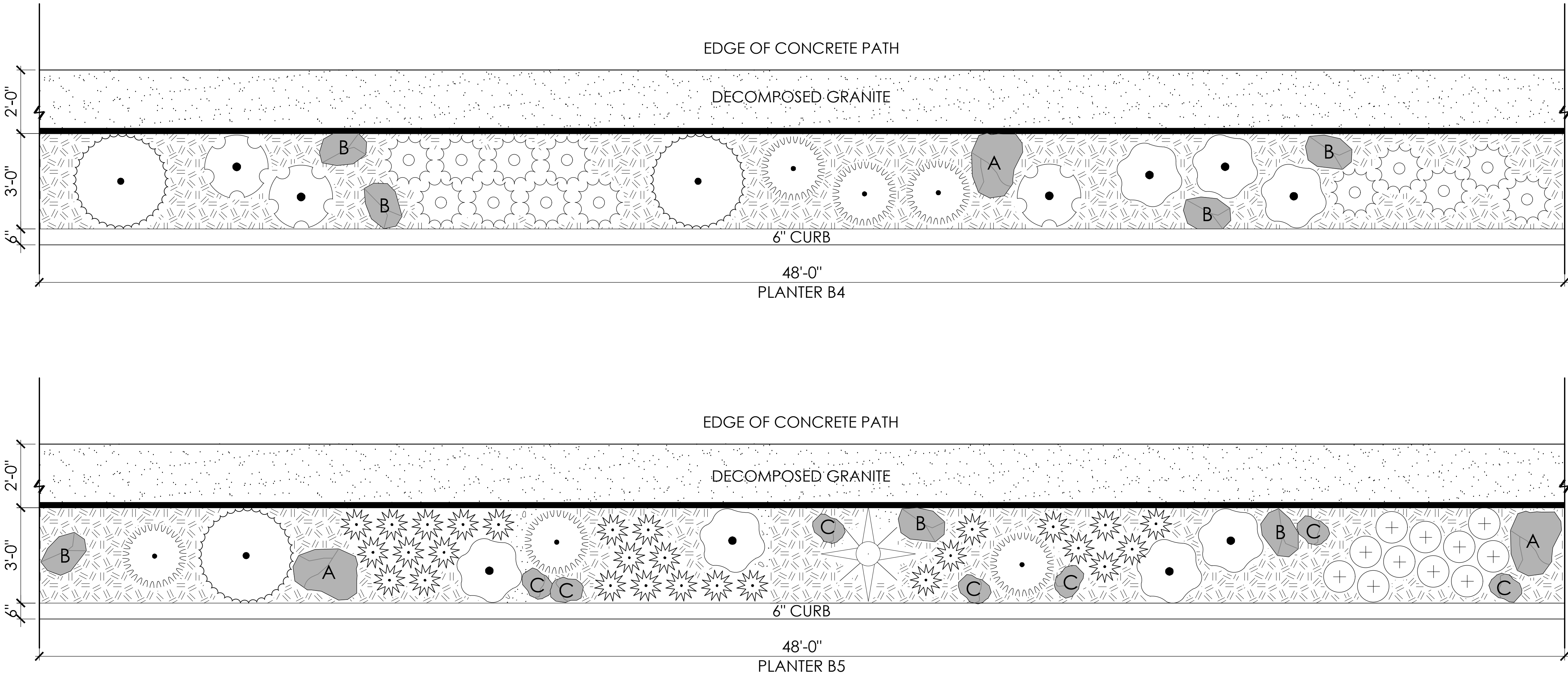
1"-2" MEXICAN BEACH PEBBLE/COBBLE - MIXED FROM SOUTHWEST BOULDER & STONE



TREX EDGING - INCREMENTS OF 12'-0" AND 16'-0"

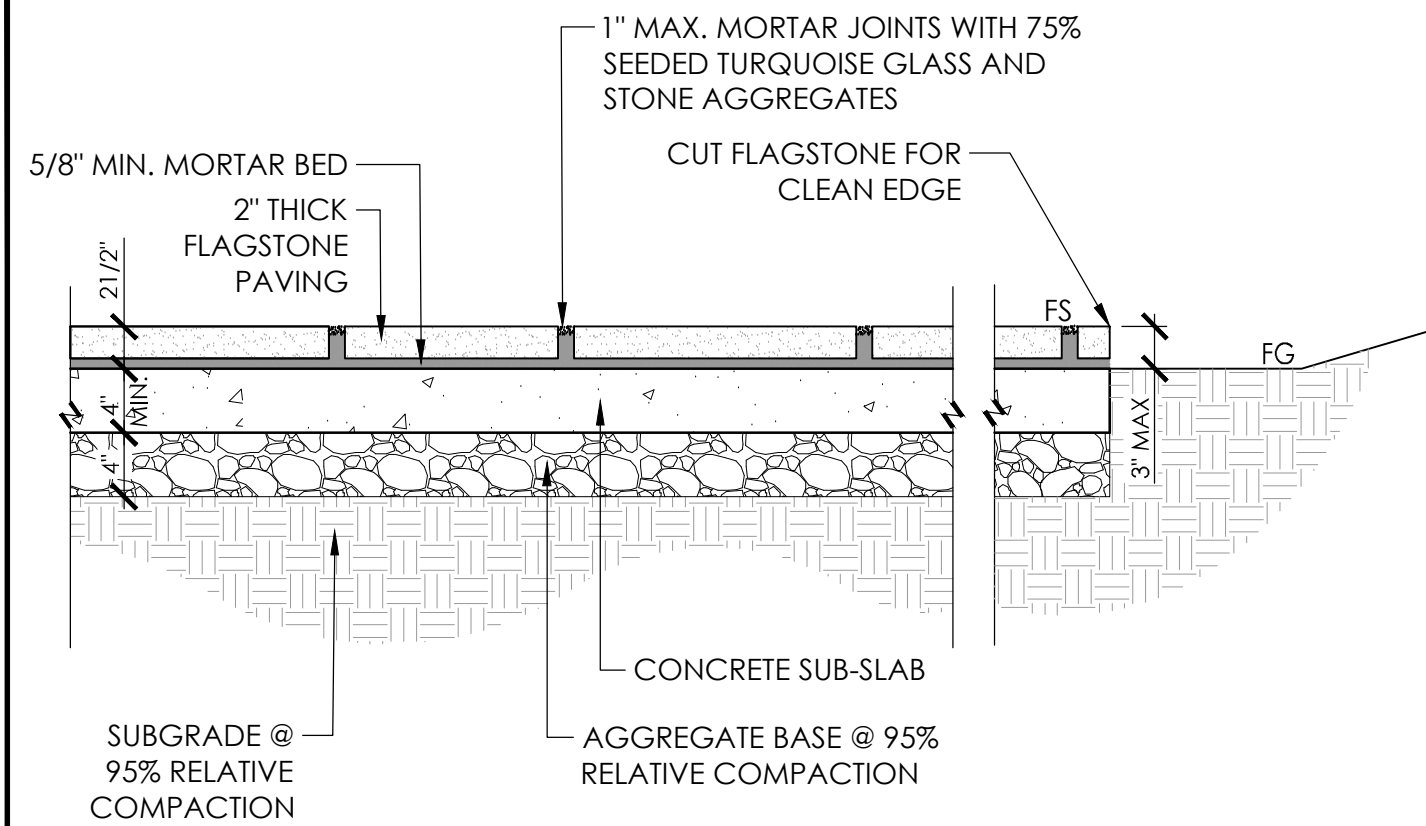
NOTES:

- ADJUST OR REMOVE PLANT, WHERE TREE MAY OCCUR. SEE PLANS FOR TREE LOCATIONS.
- PROVIDE A PHOTOGRAPH OF EACH COMPLETED PLANTER TYPE, TO RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH FURTHER PLANTER CONSTRUCTION. PLANTER TYPES INCLUDE: PARKWAY, WATER QUALITY, MEDIAN AND BULBOUT.



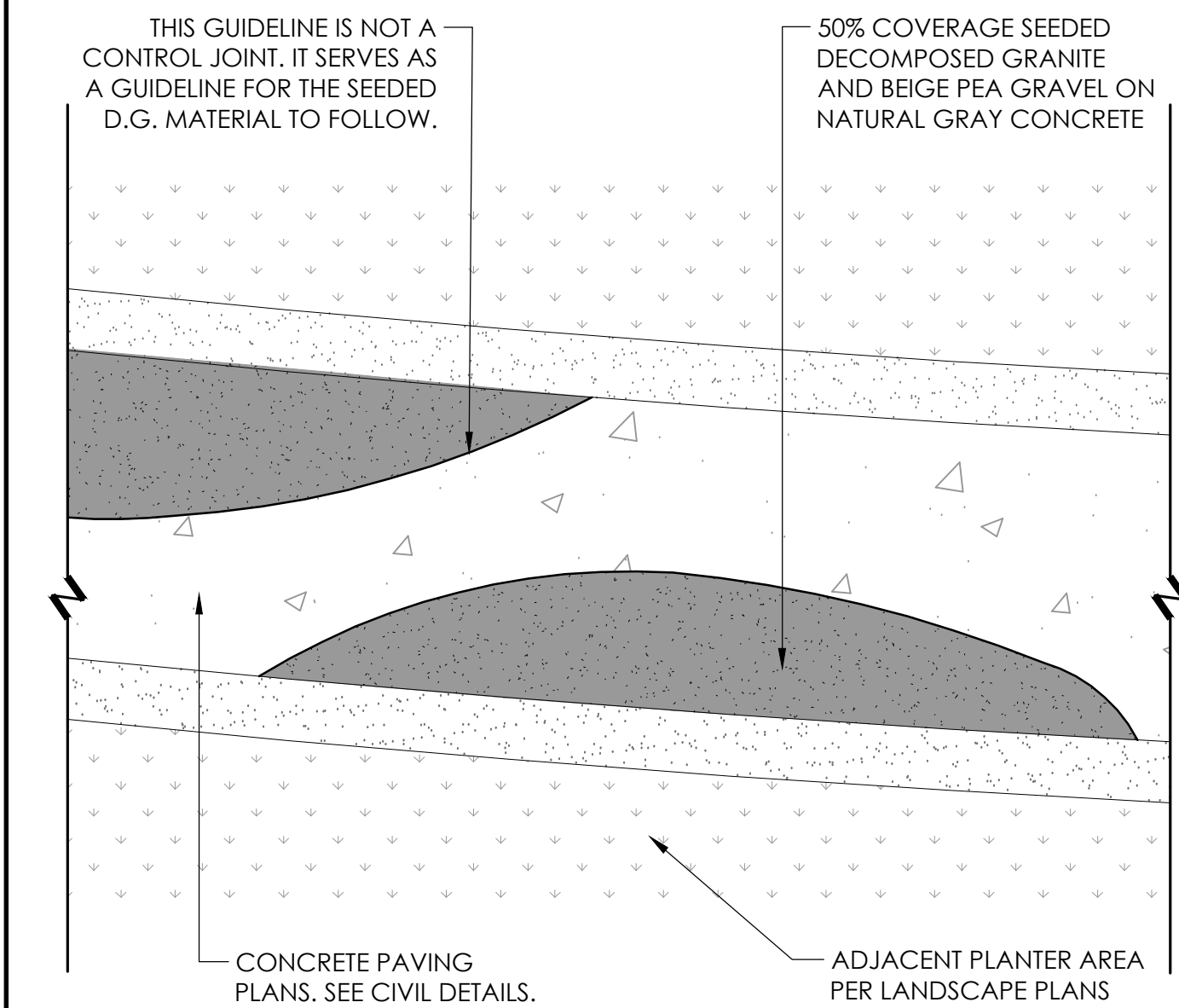
A WATER QUALITY PLANTER
1/2" = 1'-0"

AS-BUILT
PLAN CODE LDSC-11
By: RRM-0401-Q416.03-23
R.C.E.: Exp:



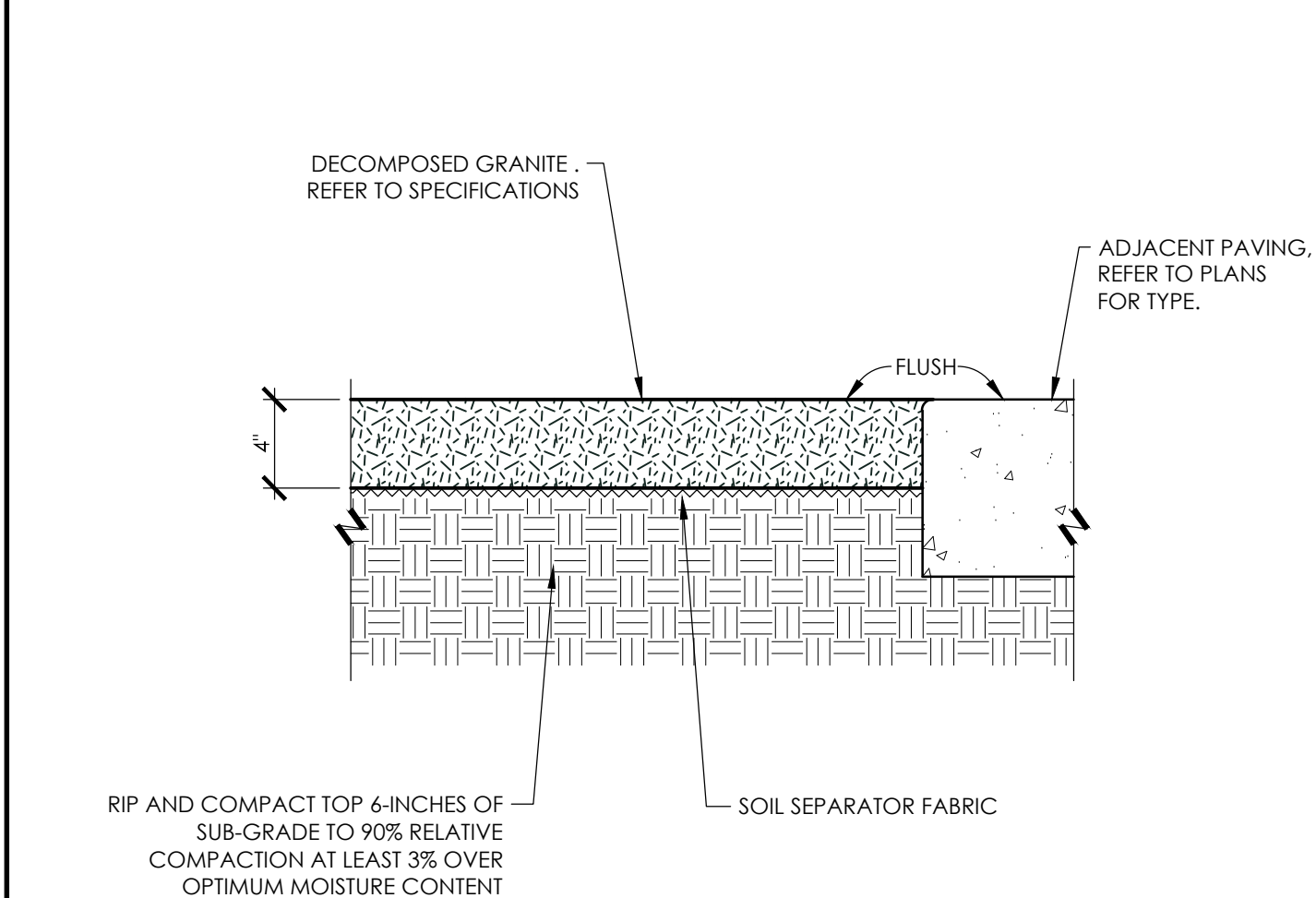
K FLAGSTONE PAVING
1" = 1'-0"

RRM-0401-0416.03-65



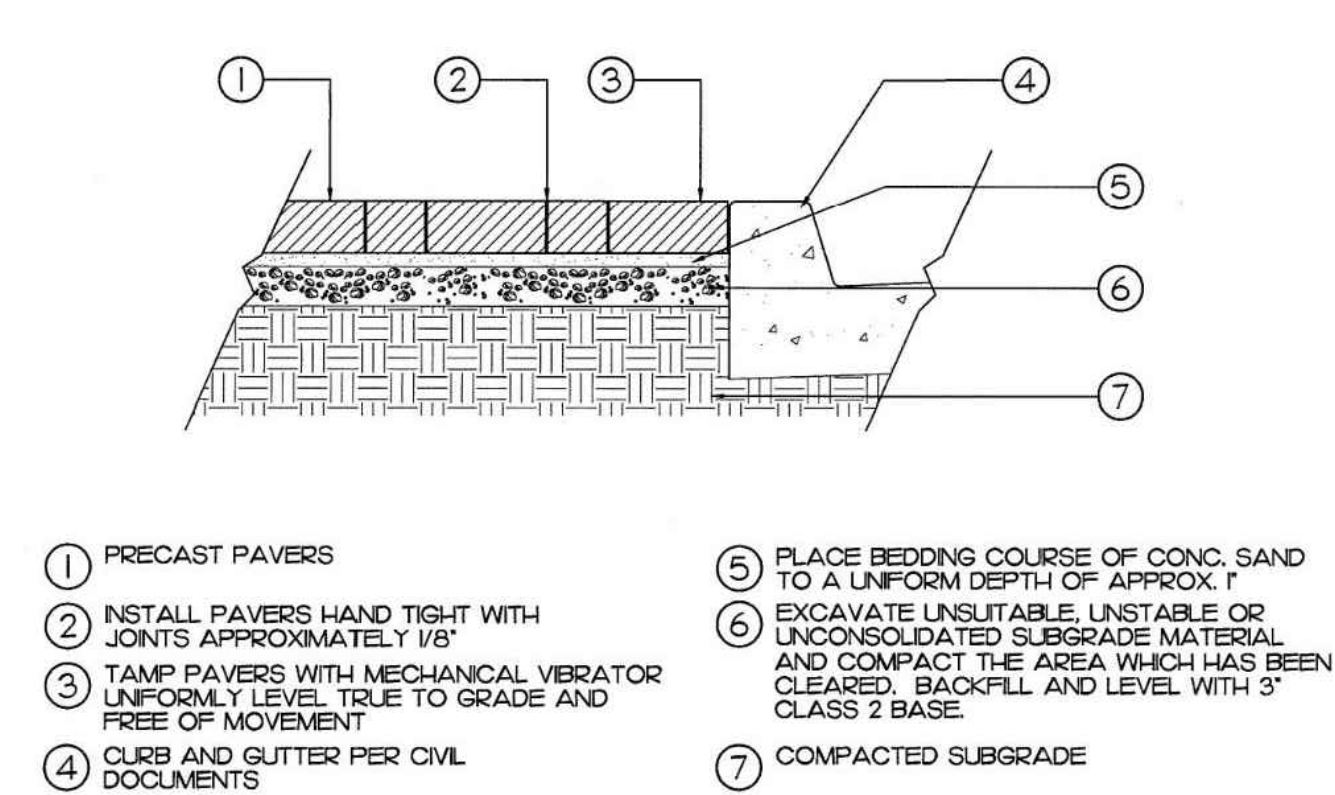
J SEEDED DECOMPOSED GRANITE PAVING
3/16" = 1'-0"

RRM-0401-0416.03-92



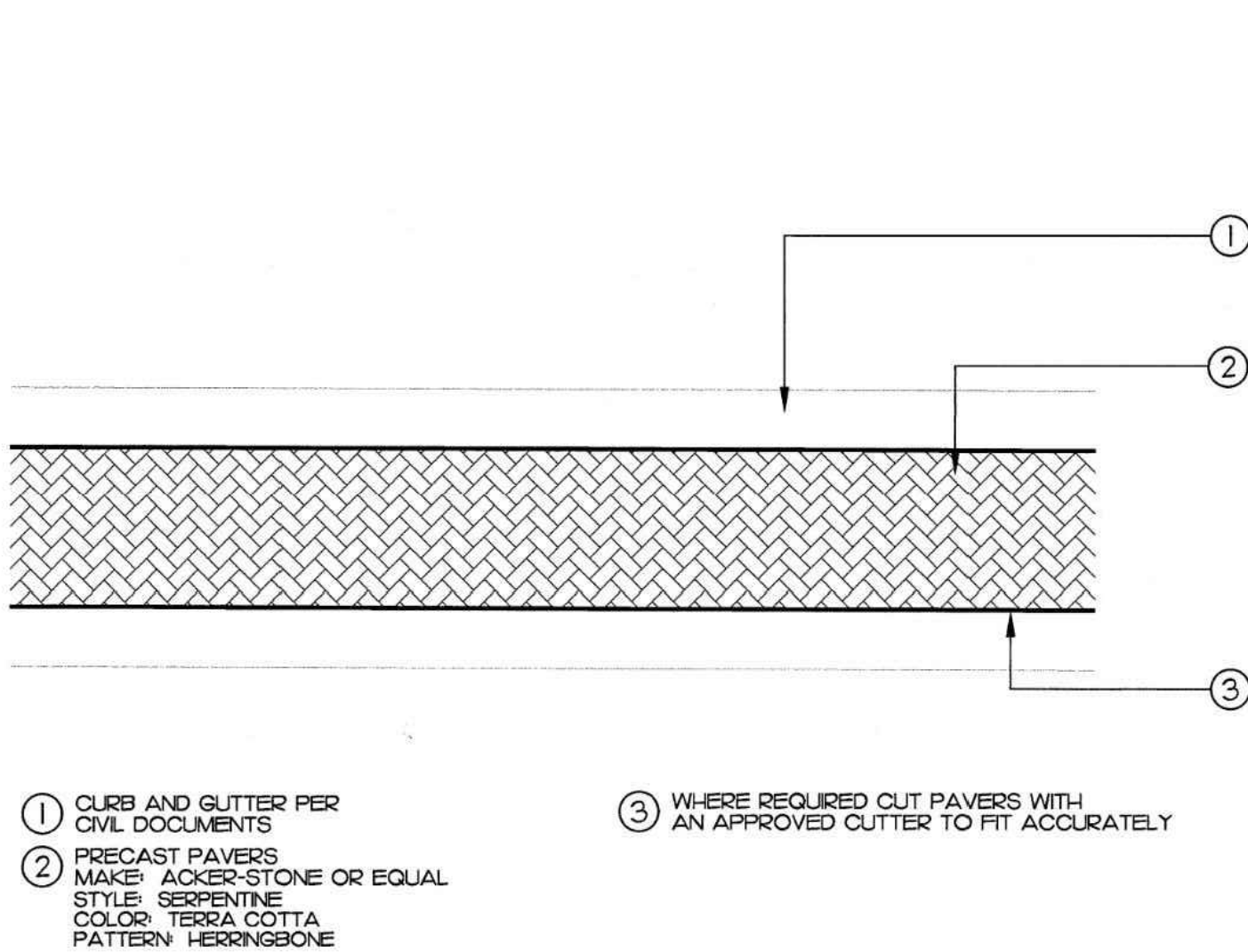
I DECOMPOSED GRANITE PAVING - PERMEABLE
1 1/2" = 1'-0"

RRM-0401-0416.03-63



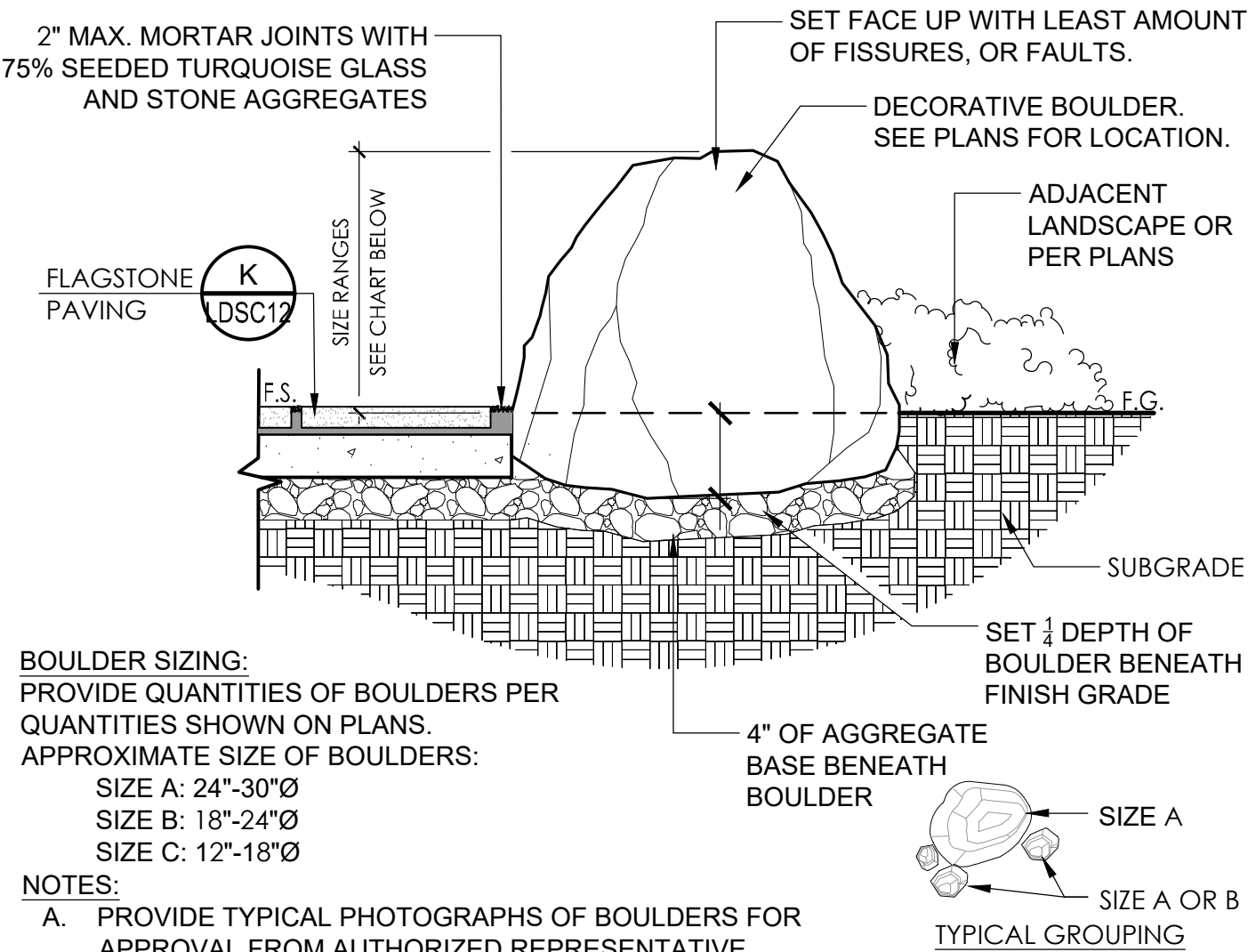
H CONCRETE PAVERS SECTION
NTS

DETAIL-FILE



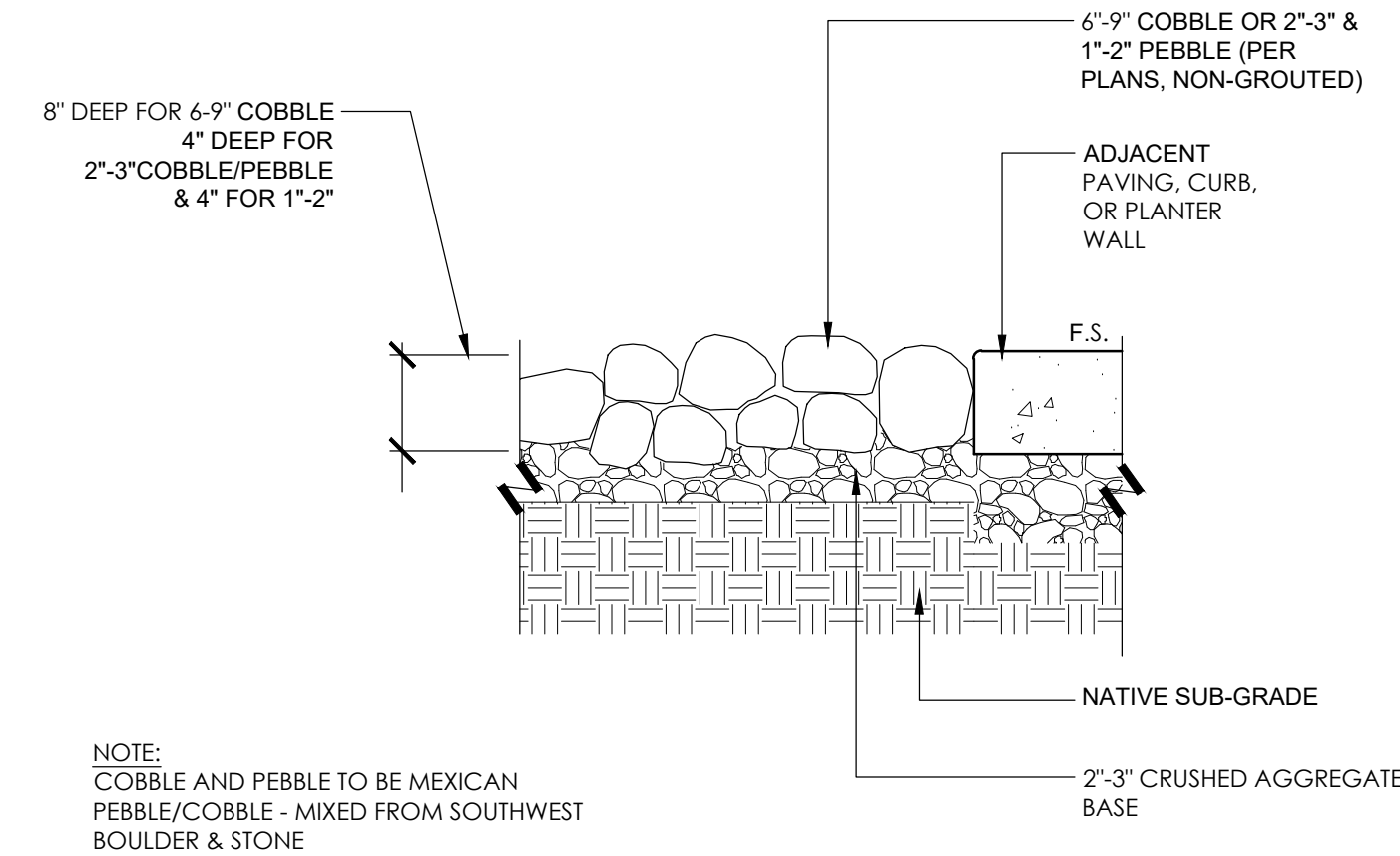
G CONCRETE PAVERS PLAN
NTS

DETAIL-FILE



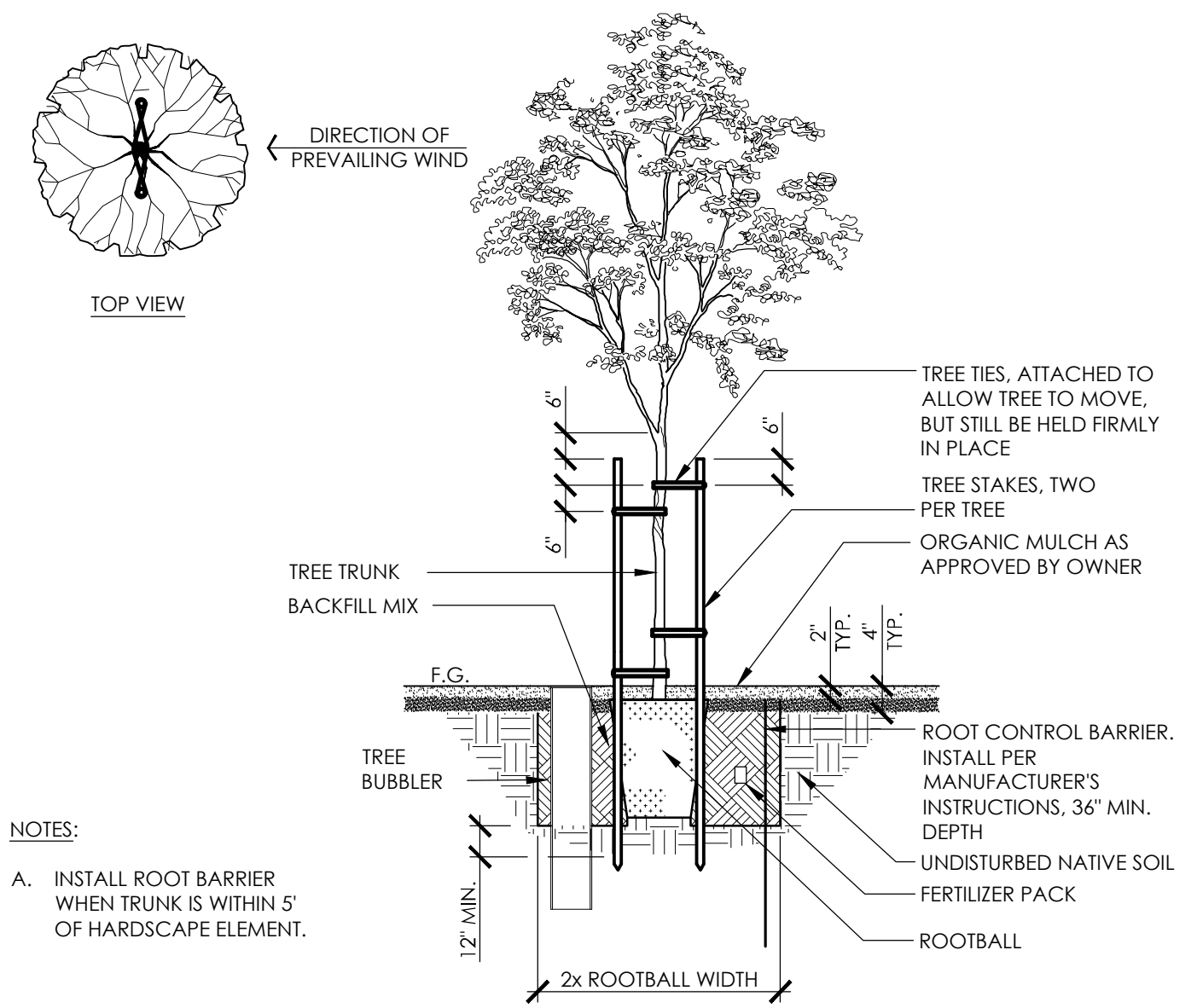
F LANDSCAPE BOULDER INSTALLATION
3/4" = 1'-0"

RRM-0401-0416.03-22



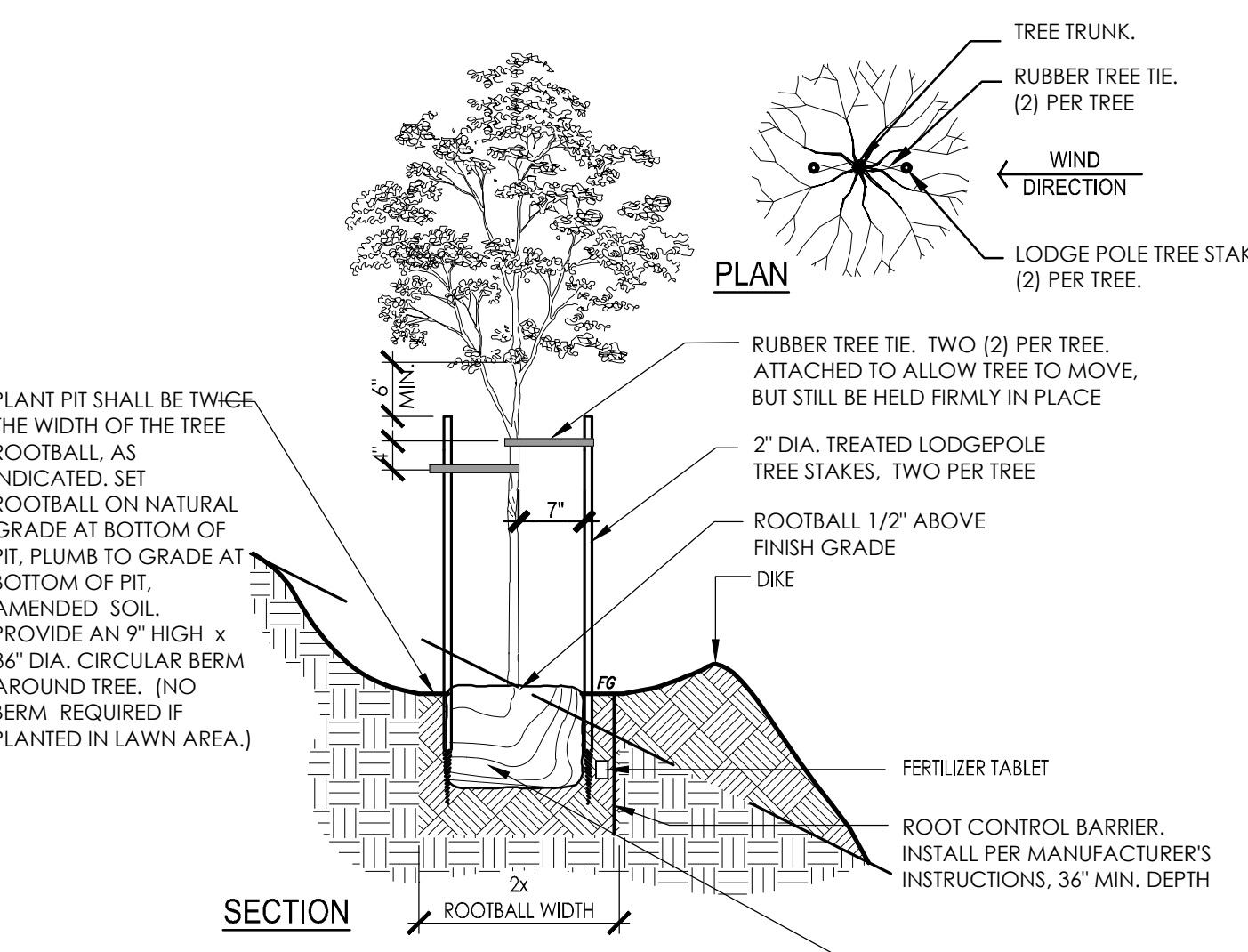
E 2-3" PEBBLE & 6-9" COBBLE
1" = 1'-0"

RRM-0401-0416.03-16



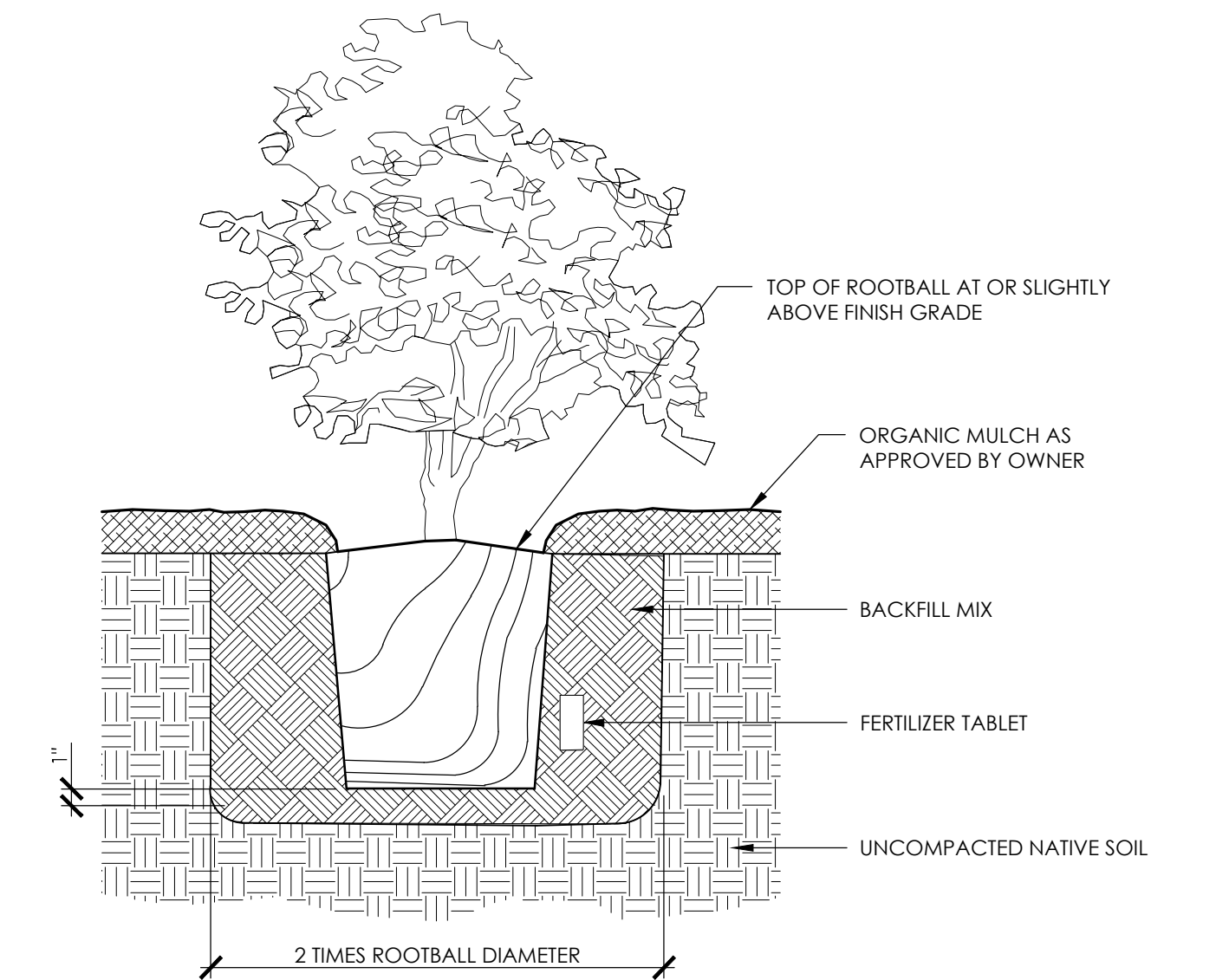
D TREE PLANTING WITH WOOD STAKES
1/2" = 1'-0"

RRM-0401-0416.03-21



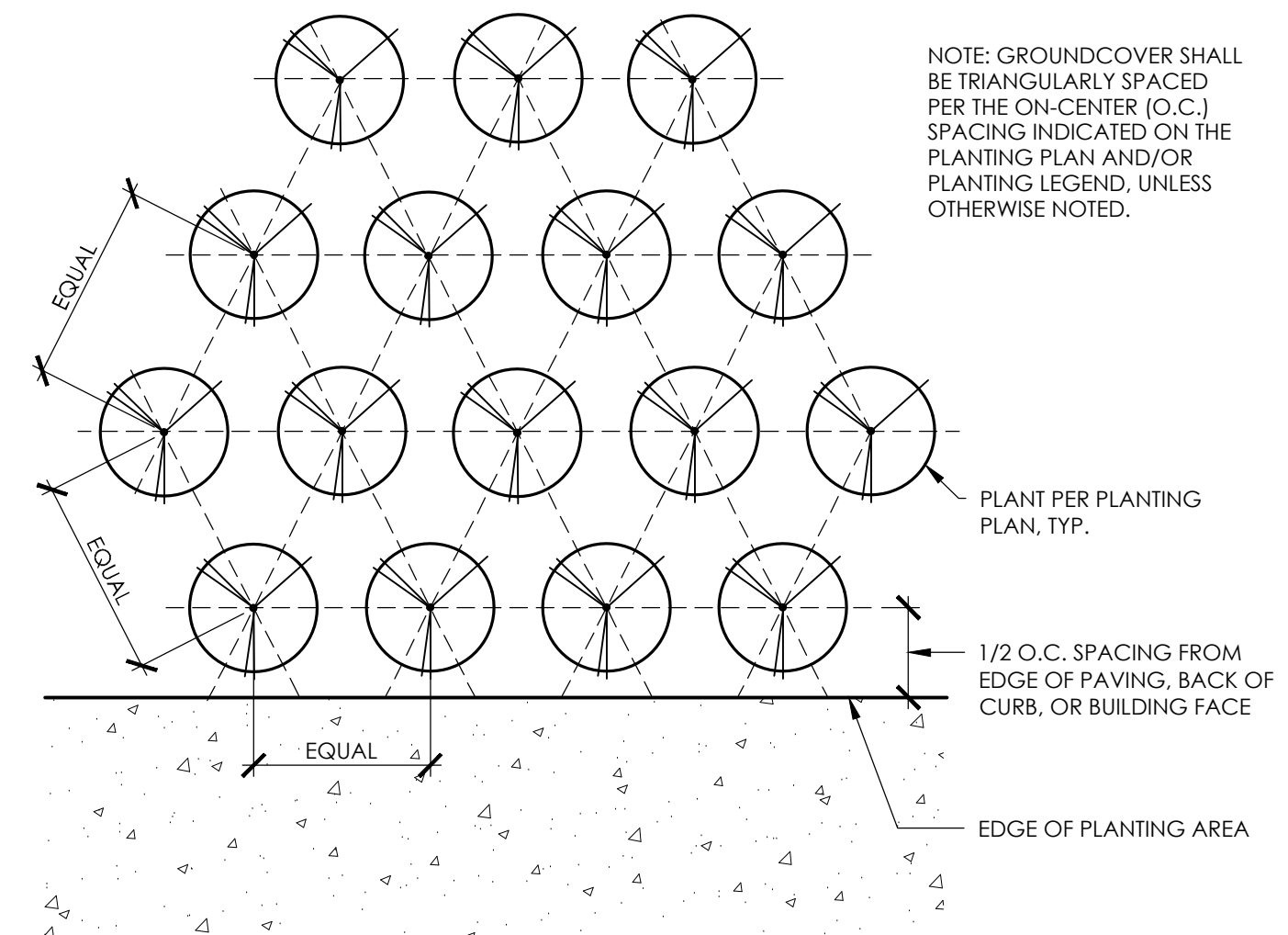
C TREE PLANTING ON SLOPE
1/2" = 1'-0"

RRM-0401-0416.03-20



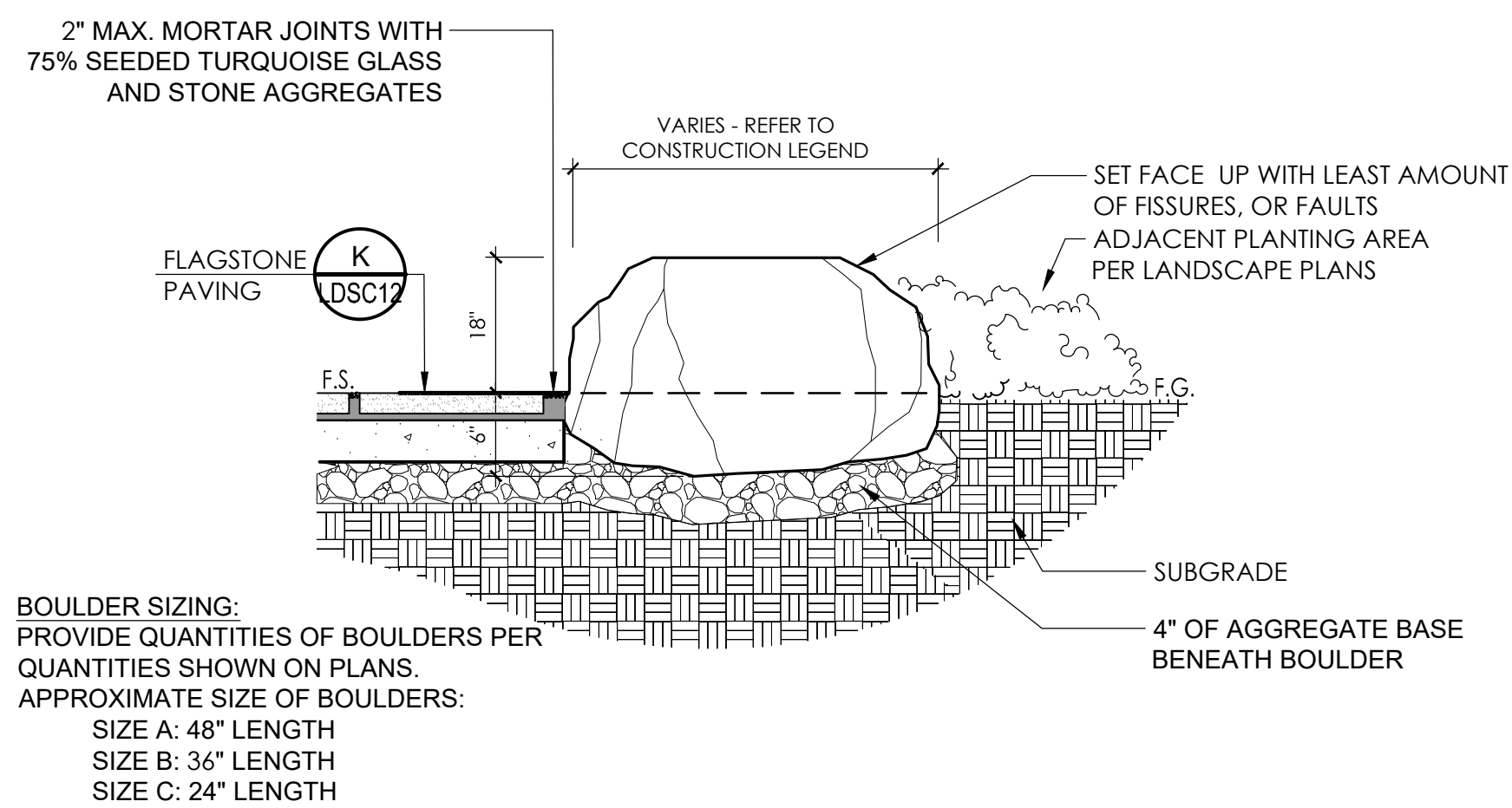
B SHRUB PLANTING
1 1/2" = 1'-0"

RRM-0401-0416.03-18



A GROUNDCOVER SPACING
1 1/2" = 1'-0"

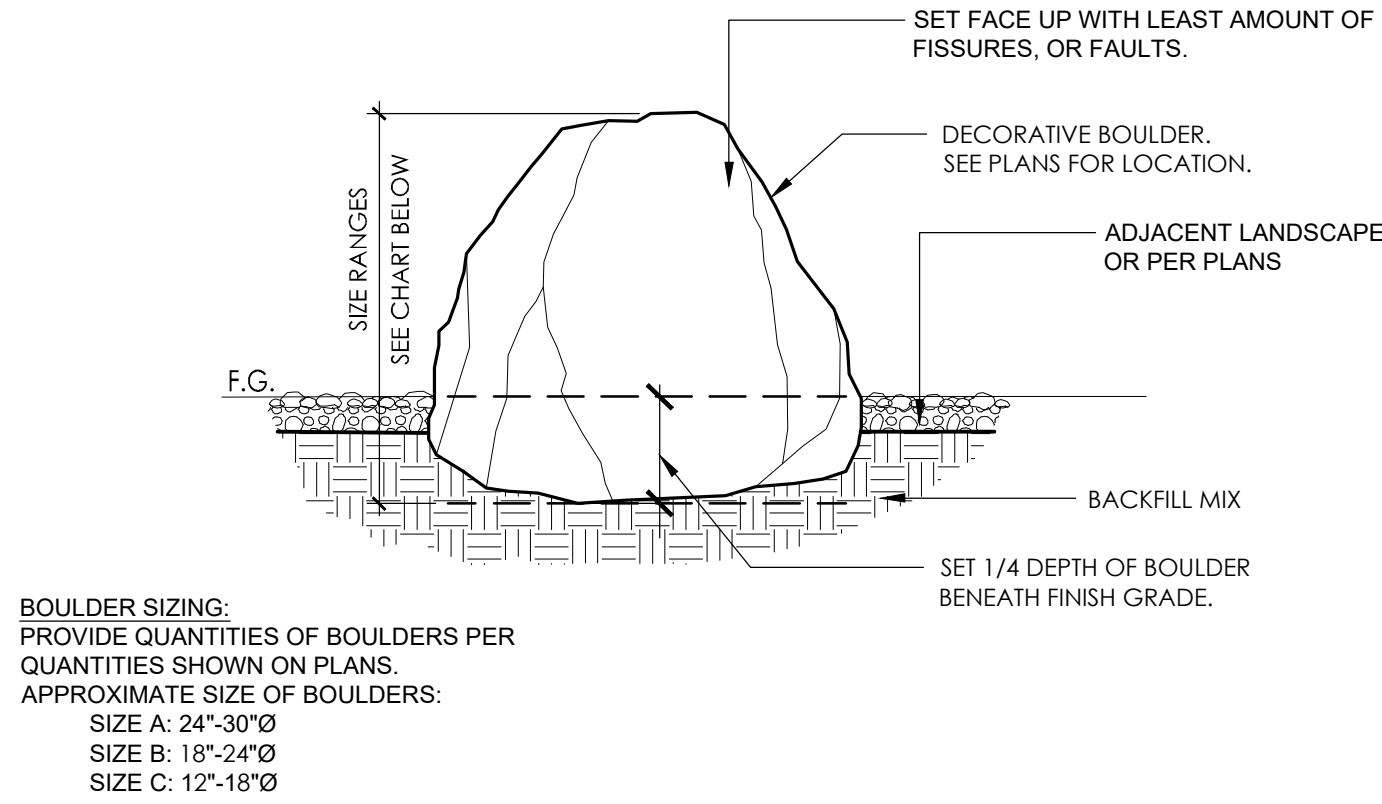
RRM-0401-0416.03-19



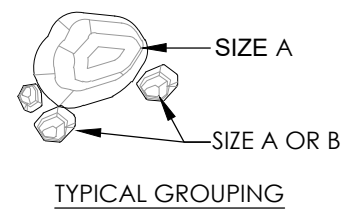
- NOTES:
- A. PROVIDE TYPICAL PHOTOGRAPHS OF BOULDERS FOR APPROVAL FROM AUTHORIZED REPRESENTATIVE PRIOR TO PURCHASING
 - B. SEE CONSTRUCTION PLANS FOR SURROUNDING PAVING TYPE.
 - C. ALL SPECIMEN STONES SHALL BE LOCATED UNDER THE OBSERVATION OF THE LANDSCAPE ARCHITECT

C BOULDER SEATING
3/4" = 1'-0"

RRM-0401-0416.03-72

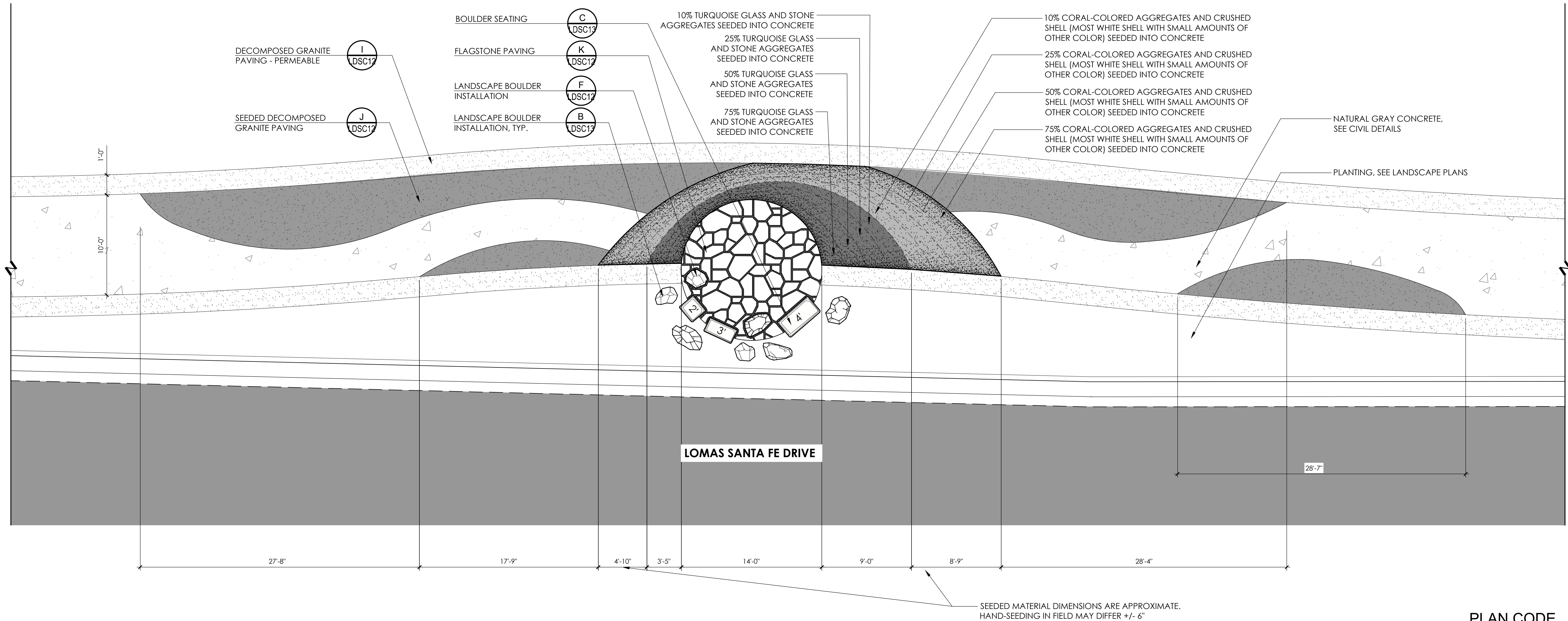
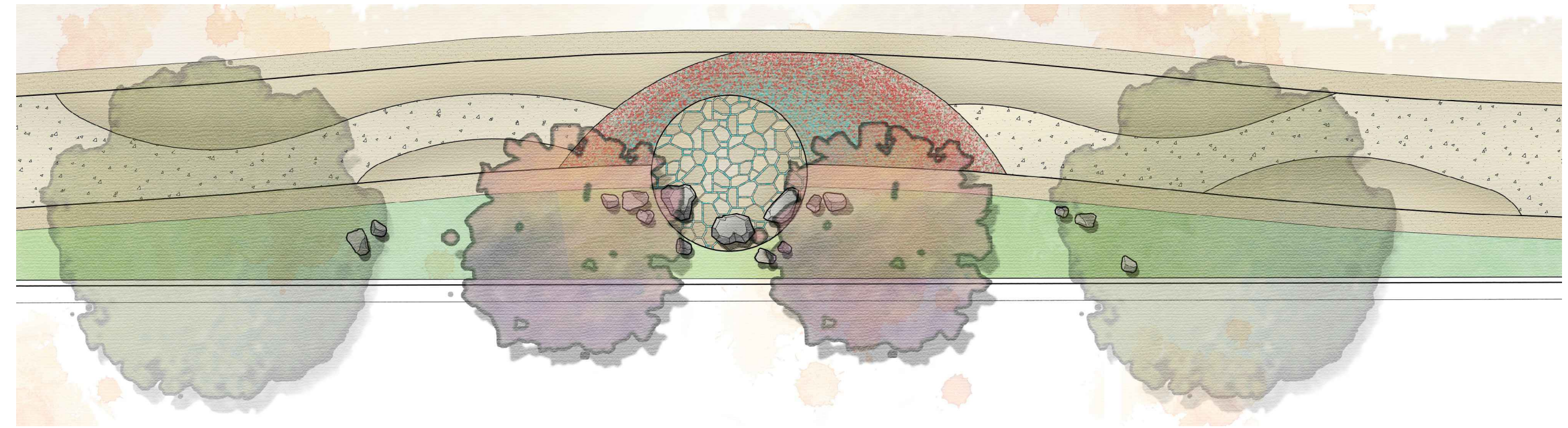


- NOTES:
- A. PROVIDE TYPICAL PHOTOGRAPHS OF BOULDERS FOR APPROVAL FROM AUTHORIZED REPRESENTATIVE PRIOR TO PURCHASING
 - B. SEE CONSTRUCTION PLANS FOR SURROUNDING PAVING TYPE.



B BOULDER INSTALLATION
3/4" = 1'-0"

RRM-0401-0416.03-75



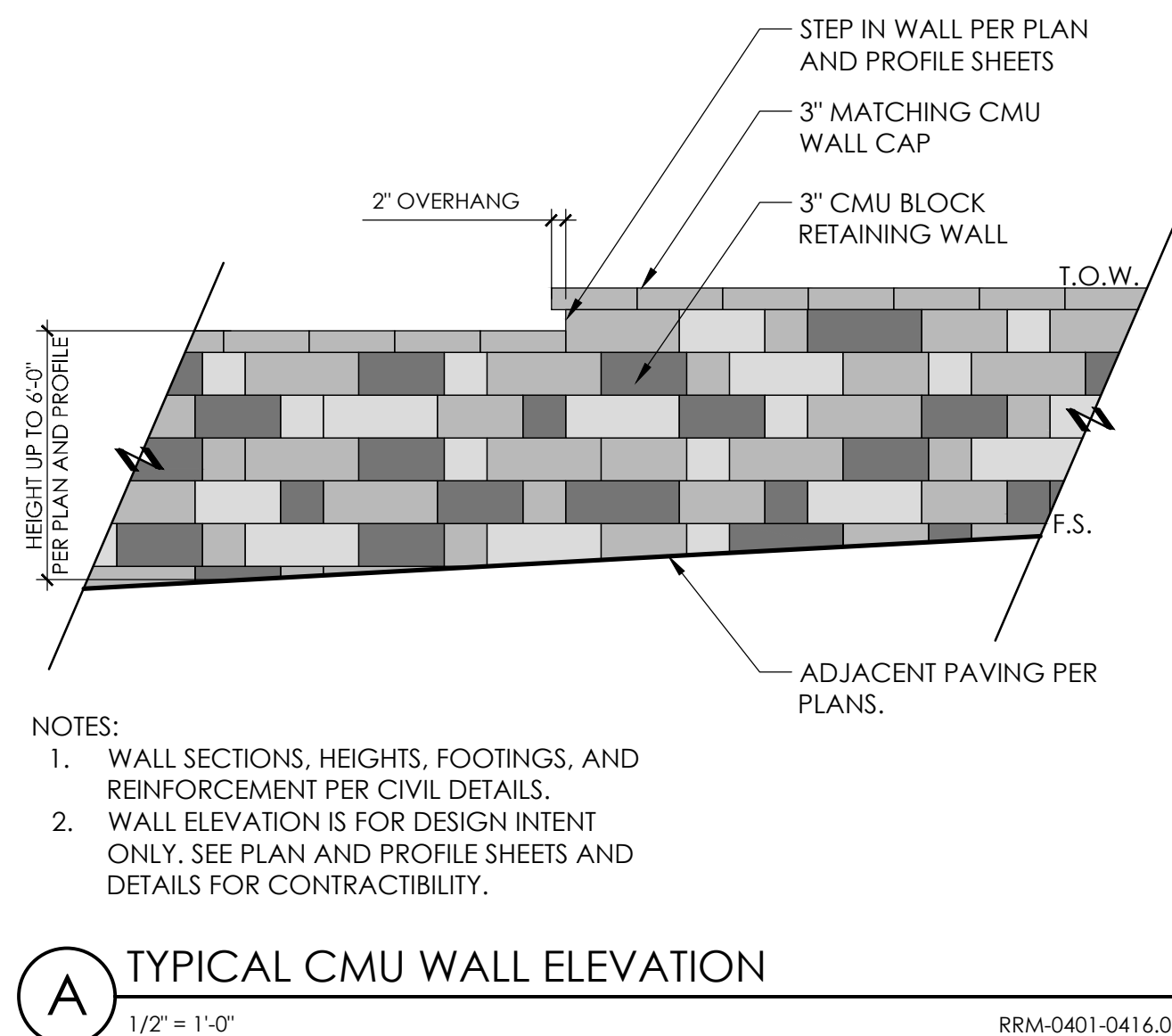
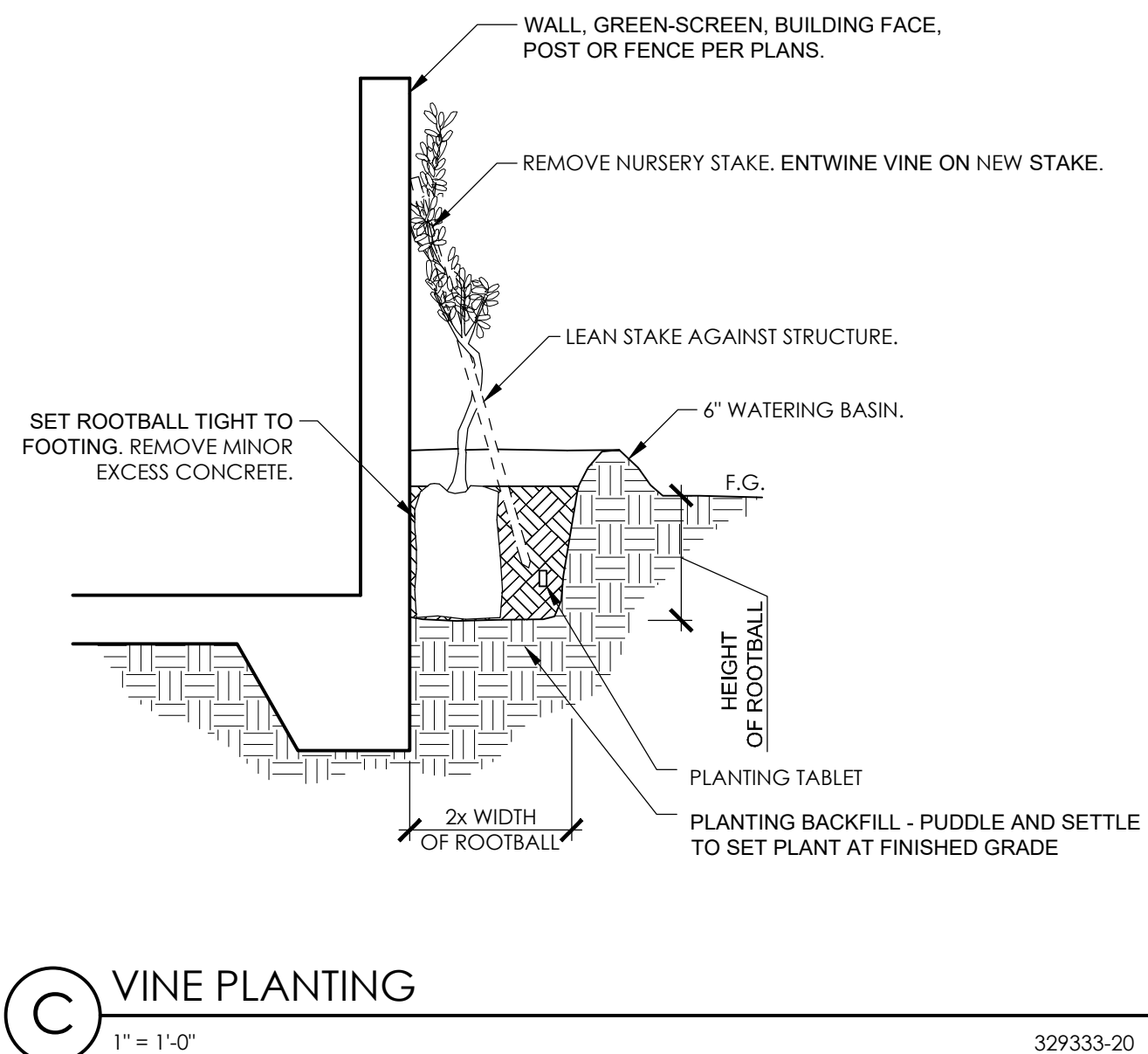
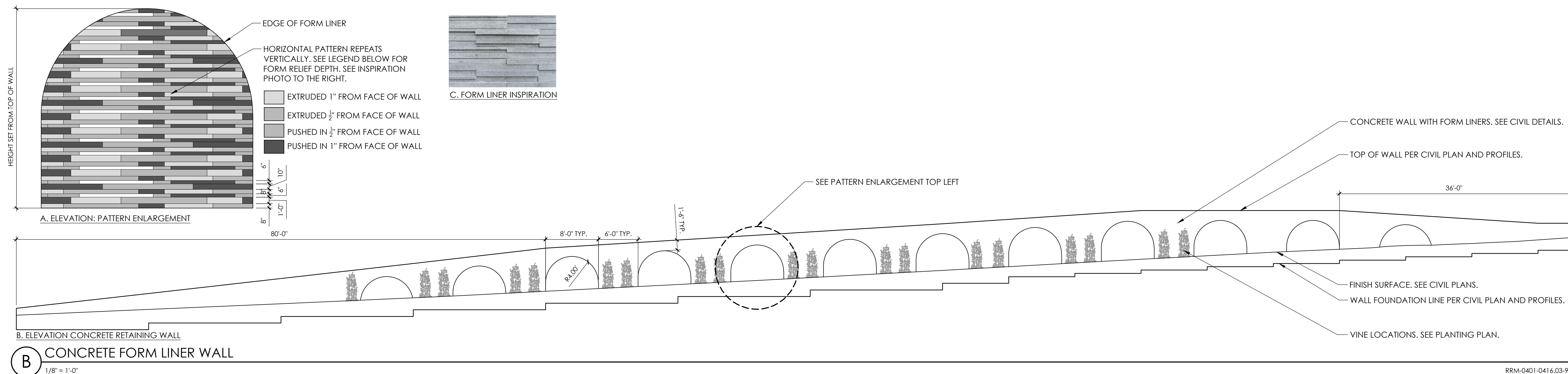
A REST AREAS WITH DECORATIVE PAVING TREATMENTS
3/16" = 1'-0"

AS-BUILT

PLAN CODE LDSC 13

By: _____ Date: _____

R.C.E.: _____ Exp: _____



PLAN CODE

LDSC-14

AS-BUILT

By: _____ Date: _____

R.C.E.: _____ Exp: _____



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LANDSCAPE ARCHITECT OF WORK

AMANDA SEIBEL PLA 6504 12/20/2024 DATE

CITY APPROVED CHANGES	APP'D	DATE

RECOMMENDED FOR APPROVAL

By: _____ Date: _____

R.C.E.: _____ Exp: _____

APPROVED FOR CONSTRUCTION

By: _____ Date: 05/01/2025

Don Goldberg, PE, Acting City Engineer
R.C.E.: 57292 Exp: 12/31/25

BENCH MARK

DESCRIPTION: _____

LOCATION: _____

ELEV.: _____ DATUM: M.S.L.

CITY OF SOLANA BEACH

IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

ENGINEERING DEPARTMENT

LANDSCAPE & PLANTING DETAILS

DRAWING NO.

CG-3185

Sheet 44 of 54

CITY OF SOLANA BEACH
LOMAS SANTA FE CORRIDOR EAST IMPROVEMENTS (IRRIGATION)
LOMAS SANTA FE FROM SANTA HELENA TO HIGHLAND DRIVE

SAN DIEGO COUNTY RECYCLED WATER
STANDARD NOTES

- All work shall be done in accordance with the SANTA FE IRRIGATION DISTRICT's Rules and Regulations.
 - Any adjacent drinking water fountains and designated outdoor eating areas shall be protected against contact with recycled water spray, mist, or runoff.
 - Best management practices shall be used to eliminate or control to the best extent possible ponding, runoff, overspray and misting.
 - Hose bibs are strictly prohibited.
 - Cross-connections between recycled water lines and potable water lines are strictly prohibited.
 - No substitutions of pipe materials will be allowed without prior approval of the SANTA FE IRRIGATION DISTRICT.
 - All mainline pipes shall have warning tape per SANTA FE IRRIGATION DISTRICT's Rules and Regulations.
 - Hours for irrigation with recycled water are from 9:00 p.m. to 6:00 a.m. The hours for irrigation with disinfected tertiary recycled water may be modified by the local authority. Irrigation during public use periods with disinfected tertiary recycled water shall be under the supervision of the designated user supervisor. Irrigation with water of a lesser quality than disinfected tertiary recycled water shall be between the hours of 9:00 p.m. and 6:00 a.m. burial of all wiring and piping shall meet SANTA FE IRRIGATION DISTRICT's Rules and Regulations.
 - Non-designated use areas shall be protected from contact with recycled water, whether by winddown spray or by direct application through irrigation or other use. Lack of protection, whether by design, construction practice or system operation, is strictly prohibited.
 - Irrigation heads shall be relocated or adjusted to minimize or eliminate over-spraying on sidewalks, streets and non-designated use areas.
 - Recycled water quick coupling valves shall be of a type designed for the use on recycled water distribution systems per SANTA FE IRRIGATION DISTRICT's Rules and Regulations.
 - On recycled water systems, all appurtenances (sprinkler heads, valve boxes, etc.) shall be color-coded purple per AWWA guidelines and Section 116815 of the California Health and Safety Code.
 - All irrigation pipes shall be stenciled with the warning, "NON-POTABLE or RECYCLED WATER," color-coded (purple) and laid with warning tape and stenciling oriented toward the top of the trench per the SANTA FE IRRIGATION DISTRICT's Rules and Regulations.
 - On new on-site systems (post-meter), potable water, constant pressure recycled water and sewer lines should be placed a minimum of four feet apart or as directed by the project engineer and/or regulatory agency. Measurements shall be between facing surfaces, not pipe center lines.
 - Constant pressure recycled water lines shall cross at least twelve inches below potable water lines and maintain at least twelve inches crossing separation between other utilities.
 - If a constant pressure recycled water line must be installed above a potable water line or less than twelve inches below a potable water line, then the recycled water line shall be installed within an approved protective sleeve as per the SANTA FE IRRIGATION DISTRICT's Rules and Regulations.
 - Developer/contractor shall conduct a cross-connection test and coverage test as directed by the SANTA FE IRRIGATION DISTRICT and/or the San Diego County Department of Environmental Health prior to any use of recycled water.
 - The required cross-connection inspection shall be done by either the SANTA FE IRRIGATION DISTRICT and/or the San Diego County Department of Environmental Health. Copies of inspection reports will be forwarded to the non-inspecting party.
 - The design and locations proposed for recycled water "Do Not Drink" signs shall be called out on the plans.
 - When recycled water becomes available, an on-site user supervisor shall be designated in writing. This individual shall be familiar with plumbing systems within the property, with the basic concepts of backflow/cross-connection protection, the recycled purveyor's rules and regulations and the specific requirements of a recycled water system. Copies of the designation, with contact phone numbers shall be provided to the SANTA FE IRRIGATION DISTRICT and/or the San Diego County Department of Environmental Health. On-site user supervisor will need to attend recycled water site supervisor certification webinar and receive certification to be considered a site supervisor. Training webinar is listed under "Training" at <https://www.sandiego.gov/public-utilities/sustainability/recycled-water>
- In case of emergency contact City of Solana Beach Public Works Department at 858-720-2470
- Or after hours contact City of Solana Beach Public Works Department at 858-756-3006

- Educate all maintenance personnel on a continuous basis of the presence of recycled water. Personnel must be informed that recycled water is meant for irrigation purposes only, and is not approved for drinking purposes, hand washing, cleaning of tools, etc. Given the high turnover rate of employees in the landscape industry it is important this information be disseminated on an almost daily basis.
- A physical separation shall be provided between adjacent areas irrigated with recycled water and potable water. Separation shall be provided by distance, concrete mow strips or other approved methods.
- There shall be no direct (pipe-to-pipe) drainage of recycled water into the storm drains.
- Brow ditches and/or catch basins are required to minimize recycled water runoff into storm drains.
- All recycled water sprinkler control valves shall be tagged with identification tags. Tags shall be weatherproof plastic 3" x 4", purple in color, with words "Warning Recycled Water - Do Not Drink" imprinted on one side, and "Aviso - Agua Impura - No Tomar" on the other side. Imprinting shall be permanent and black in color.

One tag shall be attached to each valve as follows:

- Attach to valve stem directly or with plastic tie wrap;
- Attach to solenoid wire directly or with plastic tie wrap.

IRRIGATION NOTES

- CONTRACTOR SHALL SLEEVE UNDER PAVING PER PLANS AND SPECIFICATIONS. TWICE (2X) THE SIZE OF PIPE ENCLOSED. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLING TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND ALL SLEEVES 18" BEYOND EDGE OF PAVING. SLEEVES SHALL BE PROVIDED FOR CONTROLLER WIRES ALONG MAINLINE, TYPICAL.
- IRRIGATION PLAN IS DIAGRAMMATIC. FINAL LOCATION OF PIPING WILL BE DETERMINED AT THE TIME OF INSTALLATION. MAINLINE AND LATERALS SHALL BE PLACED IN THE SAME TRENCH WHEN POSSIBLE. ALL G.C. VALVES ARE TO BE LOCATED 12" FROM SIDEWALKS, CURBS, ASPHALT & CONCRETE SURFACES.
- ALL EQUIPMENT REQUIRED BUT NOT SPECIFIED ON THE DRAWING, TO COMPLETE THE WORK, SHALL BE PROVIDED BY THE IRRIGATION CONTRACTOR.
- CONTACT WATER DEPARTMENT REGARDING INSPECTION, PERMIT, LOCATION AND INSTALLATION REQUIREMENTS FOR BACKFLOW PREVENTION DEVICES AND WATER SOURCES/METERS AND PIPELINE INSPECTION AND ASSOCIATED APPURTENANCES.
- INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND/OR SPECIFICATIONS.
- CONTRACTOR SHALL INSTALL SOLAR PANEL TO PROVIDE POWER TO CONTROLLER. THE AUTHORIZED REPRESENTATIVE SHALL REVIEW CONTROLLER LOCATIONS PRIOR TO INSTALLATION. HOOK-UP TO THE CONTROLLER SHALL BE COMPLETED BY A LICENSED ELECTRICAL CONTRACTOR. THIS COST IS TO BE A PART OF THE LANDSCAPE CONTRACTOR'S BID.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SITE CONDITIONS PRIOR TO BEGINNING WORK. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTION.
- DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO EXPENSE TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL MATERIAL APPEARING ON PLAN.
- PROVIDE PVC SHUTOFF VALVE FOR EACH VALVE MANIFOLD.
- ALL EXISTING UTILITIES, WATER LINES AND FIRE HYDRANTS SHALL REMAIN CONNECTED AND IN FULL CONTINUOUS OPERATION DURING AND FOLLOWING ALL CONTRACT WORK.
- CONTRACTOR SHALL MAKE ALL NECESSARY ADJUSTMENTS TO THE IRRIGATION SYSTEM FOLLOWING A PRECIPITATION TEST PER THE OWNER. ADJUSTMENTS SHALL INCLUDE BUT WILL NOT BE LIMITED TO: HEAD RELOCATION, CHANGING NOZZLES, AND ADJUSTING ARC PATTERNS TO ATTAIN 65% EFFICIENT UNIFORMITY AS REQUIRED BY THE OWNER.
- ALL NEW IRRIGATION BOXES, AND ADDITIONAL BOXES NECESSARY FOR RETROFITS SHALL BE LOCATED IN PLANTING AREAS 18" MIN. AWAY FROM ADJACENT PAVING AND 5' MIN.
- FOR DRIP AREAS: CONTRACTOR TO INSTALL CHECK VALVES, AIR RELIEF VALVES, OPERATION INDICATORS, AND FLUSH VALVES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL NOT INSTALL ANY PLANTING UNTIL THE FOLLOWING ARE COMPLETED:
 - THE IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL.
 - HYDROSTATIC PRESSURE TESTS SHALL BE PERFORMED ON MAIN AND LATERAL LINES.
 - ALL ZONES SHALL PASS A COVERAGE TEST.
 - CONTROLLERS SHALL BE FULLY OPERATIONAL.
- ASSUMED AVAILABLE PRESSURE FOR THE IRRIGATION SYSTEM IS NOTED ON PLANS. CONTRACTOR TO VERIFY PRESSURE AT EACH POINT OF CONNECTION, AND CONSTRUCT A PRIVATE BOOSTER PUMP FOR THE IRRIGATION SYSTEM IF THE ASSUMED PRESSURE IS FOUND TO BE LOWER THAN SPECIFIED OR OTHERWISE INSUFFICIENT.
- TWO "SPARE" WIRES SHALL RUN FROM THE CONTROLLER TO THE FARTHEST IRRIGATION VALVE(S). LOOP WIRES INTO VALVE BANKS ALONG THE RUN, TYPICAL. (ONE EXTRA TWO-WIRE SYSTEM SPARE.)
- THE SOLAR PANEL SHALL BE INSTALLED FACING SOUTH AT AN ANGLE OF AROUND 35 DEGREES. THE SOLAR PANEL SHALL BE INSTALLED IN A CLEAR OPEN AREA NOT EFFECTED BY SHADE FROM TREES OR BUILDINGS PREVENTING DIRECT SUNLIGHT FROM DAWN TO DUSK. ALL SOLAR PANEL WIRING SHALL BE CONCEALED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- DISTANCE OF CONTROLLER TO SOLAR PANEL NOT TO EXCEED 30' UNLESS A SPLICE IS INSTALLED BETWEEN THE SOLAR POLE AND THE CONTROLLER ASSEMBLY. NEVER EXCEED 60'.
- CONTACT WATER DEPARTMENT REGARDING INSPECTION, PERMIT, LOCATION AND INSTALLATION REQUIREMENTS FOR BACKFLOW PREVENTION DEVICES AND WATER SOURCES/METERS AND PIPELINE INSPECTION AND ASSOCIATED APPURTENANCES.
- ALL RECYCLED WATER IRRIGATION COMPONENTS SHALL BE IDENTIFIED AND PROPERLY TAGGED PER SAN DIEGO COUNTY DEH AND CITY REQUIREMENTS.
- THE INITIAL INSPECTION AND CROSS CONNECTION TEST MUST BE COMPLETED WITH AN ALTERNATE POTABLE WATER SOURCE, TYPICALLY FED BY A HIGHLINE CONNECTED TO A FIRE HYDRANT WITH A TEMPORARY METER AND BACKFLOW ASSEMBLY. ONCE ALL INSPECTIONS AND CROSS CONNECTION TESTING HAVE BEEN COMPLETED AND APPROVED BY SANTA FE IRRIGATION DISTRICT, SAN ELIJO JOINT POWERS AUTHORITY, AND DEHQ, THE SITE WILL BE APPROVED TO CONNECT TO RECYCLED WATER.
- POTABLE HIGHLINE: THE CONTRACTOR IS REQUIRED TO INSTALL A POTABLE HIGHLINE TO SUPPLY WATER TO THE NEW RECYCLED WATER IRRIGATION SYSTEM, BEFORE UTILIZING THE RECYCLED WATER. THE CONTRACTOR MUST ENSURE THAT A SHUTDOWN TEST IS COMPLETED WITH THE DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH) IN THE CONSTRUCTION AREA.
- ALL IRRIGATION LIDS SHALL BE BRANDED WITH CONTROLLER ID AND STATION NUMBER.

IRRIGATION 2-WIRE NOTES

- ALL VALVES LOCATED TO BE INSTALLED ON A 2-WIRE PATH AND RECEIVE DECODER MODULES.
- 2-WIRE CONDUIT SHALL BE LOCATED ALONG ALL IRRIGATION MAINLINE, TYPICAL.
- INSTALL POC DECODER AT EACH PAIR OF PROPOSED MASTER VALVE AND FLOW SENSORS.
- GROUNDING RODS TO BE INSTALLED ALONG 2-WIRE PATH PER MANUFACTURER'S INSTRUCTIONS AND DETAIL K ON LDSC-22.
- DECODER GROUNDING HARDWARE SHOULD ALWAYS BE CONNECTED AND PLACED AT RIGHT ANGLES TO THE RUN OF THE TWO-WIRE PATH.
- THE 2-WIRE DECODERS SHALL USE #14 AWG DIRECT BURIAL WIRES TO CONNECT TO REMOTE CONTROL VALVES.
- MAXIMUM RECOMMENDED DISTANCE BETWEEN SOLENOID AND DECODER IS 100'.
- THE 2-WIRE CABLE SHALL EITHER BE PAIGE P7354D OR REGENCY'S HUNTER DECODER CABLE WITH A MAXIMUM LENGTH OF 7,000 FT.
- ALL CONNECTIONS AND SPLICES IN THE RED/BLUE TWO-WIRE PATH (IDWIRE) MUST BE WATERPROOF AND MOISTURE-RESISTANT AND SHALL BE DONE WITH 3M™ SCOTCHCAST™ 3570G CONNECTOR SEALING PACKS WITH WIRE NUT ONLY. ALL UNUSED DECODER AND SLICE WIRES MUST GET A CONNECTOR PACK.
- WHENEVER A SPLICE OR CONNECTION IS MADE, IT IS IMPORTANT TO LEAVE ADEQUATE SLACK IN THE WIRES. LEAVE 5 FT/1.5 M SLACK TO PREVENT CONTRACTION OF THE WIRE FROM DAMAGING THE CONNECTIONS, AND TO ALLOW THE SPLICES TO BE REMOVED FROM THE VALVE BOX FOR SERVICE OR INSPECTION.
- INSTALL THE GROUNDING WIRE AND EARTH GROUND HARDWARE AT RIGHT ANGLES FROM THE TWO-WIRE PATHS, WHEN POSSIBLE.
- ALL CONTROL WIRES LEADING FROM VALVES TO CONTROLLER SHALL BE LOOPED-UP A MINIMUM OF 30" INTO EVERY VALVE BOX INTERCEPTED ON THE WAY TO THE CONTROLLER. WIRE SHALL BE PER MANUFACTURER'S RECOMMENDATION. ALL WIRE INSULATION SHALL BE INTACT AND FREE OF NICKS AND CUTS. ALL WIRE CONNECTIONS NEED TO BE ABSOLUTELY WATER TIGHT. EACH CONTROLLER SHALL HAVE A DIFFERENT WIRE JACKET COLOR, AND THAT COLOR SHALL BE INDICATED BY CONTRACTOR ON THE AS-BUILT DRAWINGS.
- USE #6 AWG SOLID COPPER WIRE FROM THE COPPER ROD TO THE FIELD COMMON WHITE WIRES IN THE BLACK HARNESS) OF THE CONTROLLER.
- PROVIDE A 1" ELECTRICAL CONDUIT FOR EACH SET OR PAIR OF TWO-WIRE PATH. INCREASE THE CONDUIT BY 1/2" INCREMENT FOR EACH ADDITIONAL PAIR OF TWO WIRES.

DECLARATIONS OF RESPONSIBILITY

I HEREBY DECLARE THAT I AM THE LANDSCAPE ARCHITECT OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6730 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

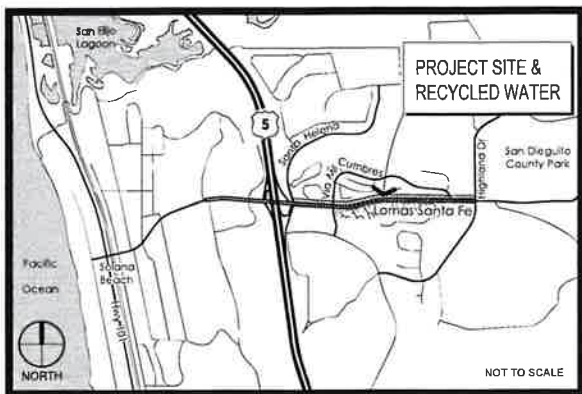
I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SOLANA BEACH AND THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS THE LANDSCAPE ARCHITECT OF WORK OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

RRM DESIGN GROUP
FIRM
32332 CAMINO CAPISTRANO, STE 205,
SAN JUAN CAPISTRANO, CA
ADDRESS
858-922-7457
PHONE

AMANDA SEIBEL
LANDSCAPE ARCHITECT
LA6504
LICENSE NO. & EXPIRATION DATE
03/31/25

THE LOMAS SANTA FE SITE WILL BE MAINTAINED BY THE CITY OF SOLANA BEACH PUBLIC WORKS DEPARTMENT

VICINITY MAP



SHEET INDEX

LDSC-15	IRRIGATION SCHEDULE AND NOTES
LDSC-16	IRRIGATION PLAN
LDSC-17	IRRIGATION PLAN
LDSC-18	IRRIGATION PLAN
LDSC-19	IRRIGATION PLAN
LDSC-20	IRRIGATION PLAN
LDSC-21	IRRIGATION PLAN
LDSC-22	IRRIGATION DETAILS
LDSC-23	IRRIGATION DETAILS
LDSC-24	IRRIGATION DETAILS

COMPLIANCE WITH MWEO

- PROJECT INFORMATION - SEE COVER PAGE OF THIS DRAWING SET FOR ALL INFORMATION INCLUDING DATE, PROJECT APPLICANT AND OWNER, AND ADDRESS.
- TOTAL LANDSCAPE AREA:
 - SHRUBS, GROUND COVER AND TREES - 22,000 SF
 - TURF - 0 SF
- PROJECT TYPE - REHAB
- WATER SUPPLY - NON-POTABLE
- CHECKLIST OF ALL DOCUMENTS IN LANDSCAPE DOCUMENT PACKAGE:
 - LANDSCAPE DESIGN PLAN - INCLUDED IN THESE LANDSCAPE DRAWINGS
 - IRRIGATION DESIGN PLAN - INCLUDED IN THESE LANDSCAPE DRAWINGS
 - GRADING DESIGN PLAN - PER CIVIL SHEETS
- SEE SHEET BELOW FOR WATER EFFICIENT LANDSCAPE WORKSHEET
- SEE SHEET BELOW FOR WATER BUDGET CALCULATIONS (MAWA) AND (ETWU)
- I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE COMPLIANCE OPTION TO THE MWEO

AMANDA SEIBEL - CA RLA #6504

California Code of Regulations, Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance as available from: Thomson Reuters Westlaw.

CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING ITEMS:

- SOILS MANAGEMENT REPORT
 - Submit soil samples to a laboratory for analysis and recommendations. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.
 - The soil analysis may include: soil texture; infiltration rate determined by laboratory test or soil texture infiltration rate table; pH; total soluble salts; sodium; percent organic matter; and recommendations.
 - The soil analysis report shall be submitted to the local agency as part of the Certificate of Completion. The soil analysis report shall be made available, in a timely manner, to the professional preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design.
 - The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.
- CERTIFICATE OF COMPLETION - SEE APPENDIX C OF THE MWEO
- IRRIGATION SCHEDULING - PER SECTION 492.10 OF THE MWEO
- SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE - PER SECTION 492.11 OF THE MWEO
- IRRIGATION AUDIT REPORT - PER SECTION 492.12 OF THE MWEO

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Document Package

Reference Evapotranspiration (Eto)		41					
Hydrozone # /Planting Description*	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (Sq. ft)	ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Areas							
N/A							
				Totals			
Special Landscape Areas							
Recycled Water			1		22000		559,240
				Totals	22000		559,240
						ETWU Total	559,240
						Maximum Allowed Water Allowance (MAWA)	559,240

*MAWA (Annual Gallons Allowed)
(Eto) (0.62) [(ETAF x LA)] + [(1-ETAF) x SLA]
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year. LA is the total landscape area in square feet. SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETWU (Annual Gallons Required)
Eto x 0.62 x (ETAF x Area)
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

AS-BUILT

PLAN CODE

LDSC-15

By: _____ Date: _____

R.C.E.: _____ Exp: _____

SAN ELIJO JOINT POWERS AUTHORITY SHEETS 45-54		SHEETS 45-54	
SAN ELIJO WATER RECLAMATION FACILITIES Reviewed by: Christopher A. Trees 1/27/2025 DATE		COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH AND QUALITY (DEHQ) Reviewed by: Jenna Lepore 2/2/2025 DATE	
SANTA FE IRRIGATION DISTRICT Reviewed by: [Signature] 2/2/25 DATE		SANTA FE IRRIGATION DISTRICT Reviewed by: [Signature] 2/2/25 DATE	
rrm design group rrmdesign.com (805) 963-8283 RRM DESIGN GROUP COPYRIGHT 2024. RRM IS A CALIFORNIA CORPORATION		LANDSCAPE ARCHITECT OF WORK AMANDA SEIBEL PLA 6504 12/20/2024 DATE	
CITY APPROVED CHANGES		APPR'D DATE	
RECOMMENDED FOR APPROVAL By: _____ Date: _____ R.C.E.: _____ Exp: _____		APPROVED FOR CONSTRUCTION By: [Signature] Date: 05/01/2025 Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	
BENCH MARK		DESCRIPTION: LOCATION ELEV: _____ DATUM: M.S.L. _____	

CITY OF SOLANA BEACH

ENGINEERING DEPARTMENT

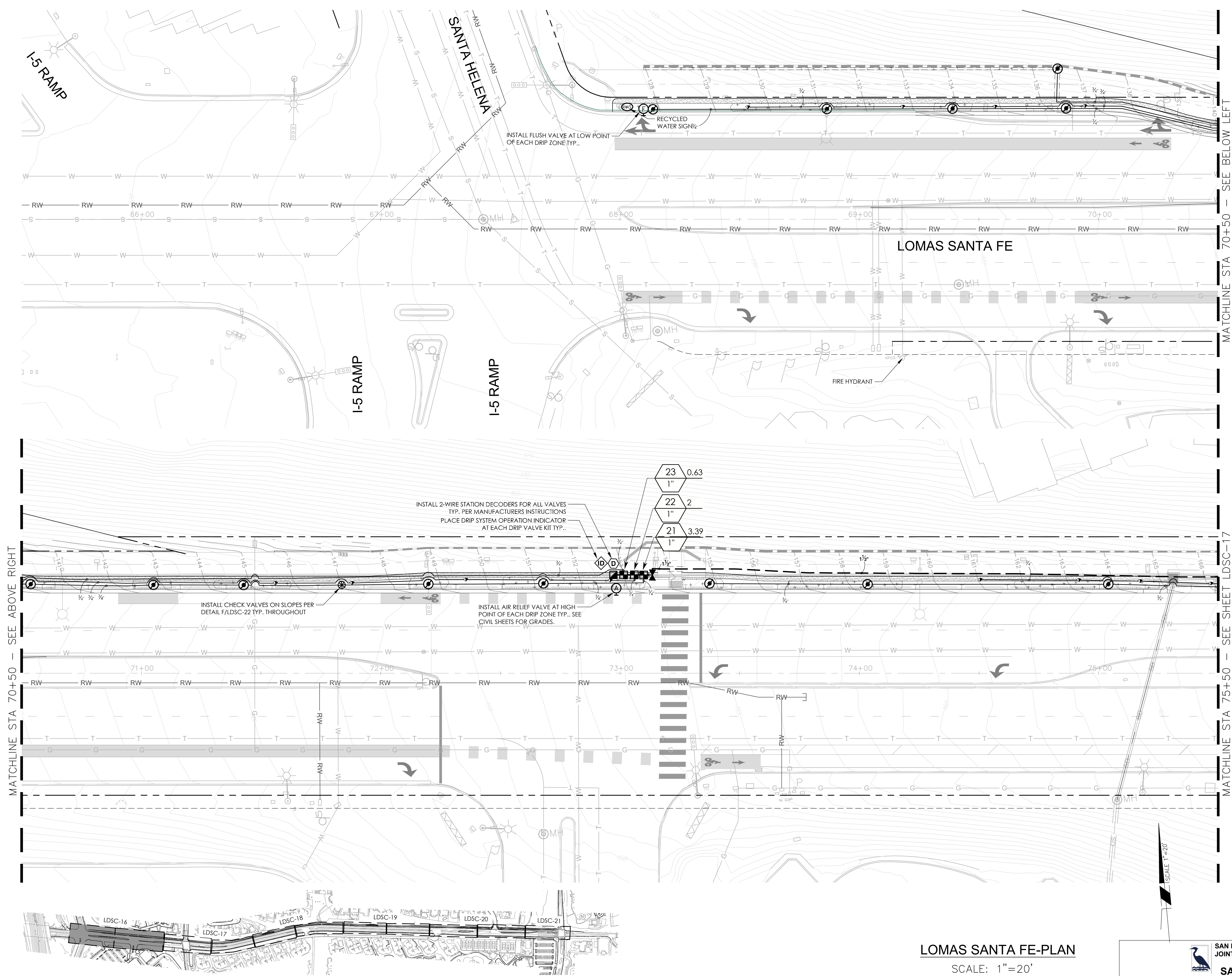
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IMPROVEMENT PLANS FOR:
LOMAS SANTA FE CORRIDOR

IRRIGATION SCHEDULE AND NOTES

CG-3185

Sheet 45 of 54

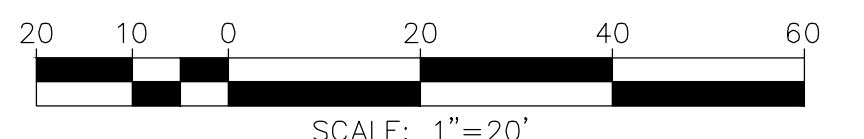


KEY PLAN- NTS

LOMAS SANTA FE-PLAN
SCALE: 1"=20'

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	ARC	PSI	RADIUS	DETAIL
	HUNTER RZWS-18-CV 25	360	50	3'	I/LDSC-22
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION				DETAIL
	HUNTER IBZ-101-40 DRIP CONTROL ZONE KIT. 1" IBV BRASS GLOBE VALVE WITH FILTER SENTRY MECHANISM AND 1" HFR-100-075 FILTER REGULATOR, AND 1" OUTLET 40 PSI REGULATOR FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN. EACH VALVE TO RECEIVE LIT-700 (RECYCLED WATER ID TAG) WHEN OPERATING PRESSURE AT THE VALVE EXCEEDS 50 PSI, CONTRACTOR TO INSTALL HUNTER ACCU-SYNC PER MANUFACTURER'S INSTRUCTIONS.				F/LDSC-22
	PIPE TRANSITION POINT ABOVE GRADE HUNTER AFV-075 AUTOMATIC FLUSH VALVE WITH 3/4IN. FNPT CONNECTION. VALVE SHALL BE PLACED ON LOW POINT OF EACH DRIP ZONE TO FLUSH PIPELINES AND PREVENT BLOCKAGE.				B/LDSC-22 D/LDSC-23
	HUNTER PLD-AVR PLD-AVR ALLOWS FOR AIR TO ESCAPE A DRIP IRRIGATION SYSTEM TO PREVENT BLOCKAGE AND WATER HAMMERING. 1/2IN. MPT CONNECTION WITH 80 PSI MAXIMUM RATING. VALVE SHALL BE PLACED ON THE HIGH POINT OF EACH DRIP ZONE.				E/LDSC-23
	HUNTER ECO-ID-12-R ECO-ID: 1/2IN. FPT CONNECTION WITH 15 PSI - 100 PSI OPERATING PRESSURE. SPECIFY WITH HUNTER SJ SWING JOINT, RECLAIMED. INDICATOR SHALL BE INSTALL ON EACH DRIP ZONE AT THE VALVES FOR VISIBILITY.				
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SYMBOL	MANUFACTURER/MODEL/DESCRIPTION				DETAIL
	NELSON 7645 1" BRASS QUICK COUPLER VALVE WITH ACME THREADS FOR SLOW FLOW CONTROL, WITH LOCKING RUBBER COVER AND PURPLE CAP WITH RECYCLED WATER WARNING.				H/LDSC-22
	NIBCO T-560 BALL VALVE BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. LINE SIZE. PURPLE HANDLE AND VALVE BOXES SHALL HAVE PURPLE LIDS TO RECYCLED WATER.				C/LDSC-22
	BUCKNER SUPERIOR 3100-RW 1-1/2" NORMALLY OPEN BRASS MASTER VALVE THAT PROVIDES DIRTY WATER PROTECTION. SIZE 1-1/2IN. WITH PURPLE CROSS HANDLE FOR RECYCLED WATER USE.				E/LDSC-22
	KBI SPRING CHECK VALVE LINE SIZE CHECK VALVE. INSTALL A (SLIP X SLIP) SPRING CHECK VALVE FOR FLOWS DOWNHILL FROM RCV. INSTALL IN ACCORDANCE WITH IRRIGATION DETAIL AND MANUFACTURER'S INSTRUCTIONS.				C/LDSC-23
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	WATTS LF223 1 1/2" LEAD FREE BRASS, HIGH CAPACITY WATER PRESSURE REDUCING VALVE. SIZE 1 1/2" PRESSURE REGULATION SET TO: 60 PSI NPT FEMALE INLET AND OUTLET. EACH VALVE TO RECEIVE RECYCLED WATER ID TAG.				B/LDSC-22
	CALSENSE CS3-SL CALSENSE CS3000 2-WIRE SOLAR POWERED CONTROLLER WITHIN A DOUBLE WIDE STAINLESS STEEL PEDESTAL ENCLOSURE.				G/LDSC-23
NO SYM.	CALSENSE CS3-GR-BUNDLE-2 4G LTE CELLULAR MODEM FOR CS3000 TO PROVIDE COMMUNICATION WITH CLOUD-BASED COMMAND AND CENTER ONLINE WEB APPLICATION, INCLUDES GRSTUBBY ANTENNA AND PREPAID 10 YEAR DATA PLAN FOR 1-CELLULAR MODEM COMMUNICATING WITH 1 OR 2 CONTROLLERS. NONCANCELLABLE AND NONREFUNDABLE. MUST INCLUDE CUSTOMER/JOB LOCATION.				G/LDSC-23
NO SYM.	CALSENSE CS3-POC-KIT CS3000 POC CARD AND TERMINAL BOARD. USED TO ADD A CONVENTIONALLY WIRED POC (MASTER VALVE AND FLOW METER) TO A 2-WIRE CONTROLLER.				G/LDSC-23
	CALSENSE CS3-SL-POLE CALSENSE 16FT. POLE FOR MOUNTING CALSENSE SOLAR PANEL. INCLUDES MOUNTING EQUIPMENT FOR CEMENT BASE AND PANEL. SOLAR ASSEMBLY FOR CALSENSE CONTROLLER SOLAR RECHARGEABLE BATTERIES, POWER INVERTER, BLUETOOTH POWER MONITOR, SMART SOLAR CHARGE CONTROLLER, CIRCUIT BREAKERS, AND SOLAR PANEL.				J/LDSC-22
	CALSENSE CS-2W-2ST CALSENSE 2-WIRE STATION DECODER WITH 2-STATION OUTPUTS. CONTRACTOR TO INSTALL REQUIRED 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				I/LDSC-23
	CALSENSE CS-2W-POC CALSENSE 2-WIRE POC DECODER WITH 1 FLOW METER INPUT AND 1 MASTER VALVE OUTPUT. CONTRACTOR TO INSTALL 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				
	CALSENSE FM 1.5U CALSENSE ULTRASONIC FLOW SENSOR. 1.5IN. PVC SCH 80 TEE-MOUNTED. 0.55-82 GPM.				D/LDSC-22
	GROUNDING ROD INSTALL 5/8" BY 8" COPPER GROUND ROD AT THE FOLLOWING LOCATIONS, ONE AT CONTROLLER, ONE EVERY 300 FT ALONG 2-WIRE PATH OR THE NEXT CLOSEST DECODER AND ONE AT END OF EACH TWO WIRE CABLE RUN.				J/LDSC-23 K/LDSC-23
	INSTALL 1 1/2" WATER METER AT POINT OF CONNECTION. CONNECT TO 12" RECYCLED WATER LINE. AVAILABLE PRESSURE 92 PSI.				
	IRRIGATION LATERAL LINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
	IRRIGATION MAINLINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
	PIPE SLEEVE: PVC SCHEDULE 40				A/LDSC-22
	RECYCLED WATER SIGN PER				A/LDSC-24

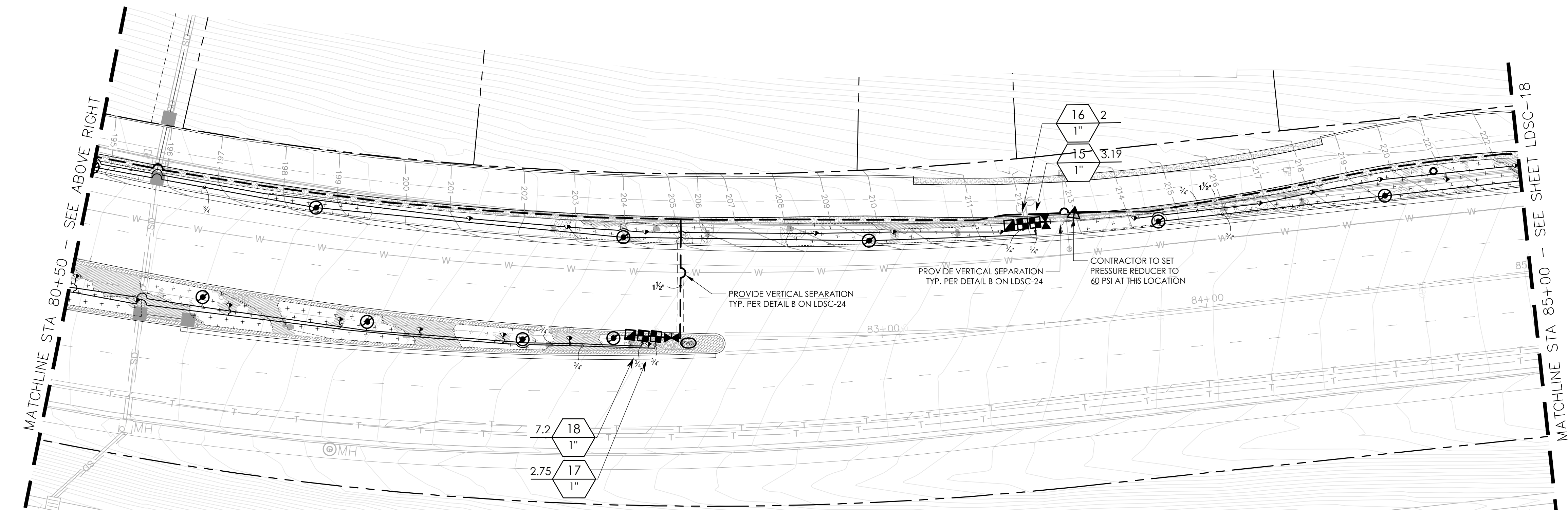
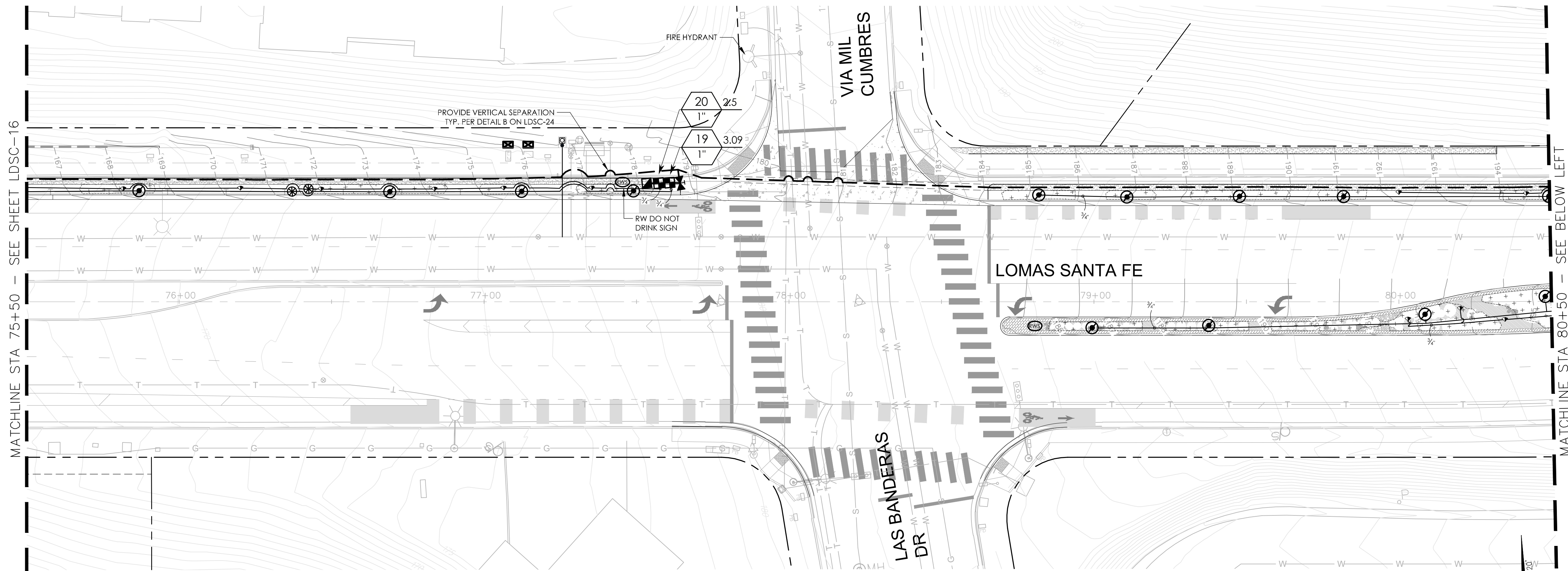


AS-BUILT

PLAN CODE
LDSC-16

By: _____ Date: _____
R.C.E.: _____ Exp: _____

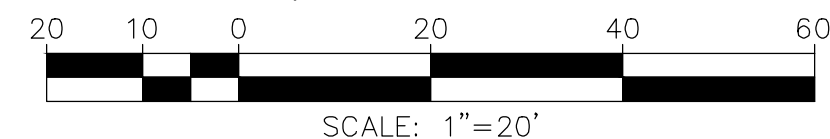
	rrmdesign.com (805) 963-8283 THE ILLUSTRATED MANUALS, SPECIFICATIONS, DETAILS, AND STANDARDIZED THERMAL AND AIR QUALITY REMAIN THE PROPERTY OF RRM DESIGN GROUP AND NO PART THEREOF SHALL BE COPIED, REPRODUCED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF RRM DESIGN GROUP. RRM DESIGN GROUP COPYRIGHT 2024. RRM IS A CALIFORNIA CORPORATION		LANDSCAPE ARCHITECT OF WORK	CITY APPROVED CHANGES	APP'D DATE	RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	BENCH MARK	CITY OF SOLANA BEACH IMPROVEMENT PLANS FOR: LOMAS SANTA FE CORRIDOR	ENGINEERING DEPARTMENT IRRIGATION PLAN	DRAWING NO. CG-3185 Sheet 46 of 54
			AMANDA SEIBEL PLA 6504 12/20/2024 DATE			By: _____ Date: _____ R.C.E.: _____ Exp: _____	By: Date: 05/01/2025 Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25				



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LOMAS SANTA FE-PLAN
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	CALSENSE CS3-2W-SL CALSENSE CS3000 2-WIRE SOLAR POWERED CONTROLLER WITHIN A DOUBLE WIDE STAINLESS STEEL PEDESTAL ENCLOSURE.				G/LDSC-23
NO SYM.	CALSENSE CS3-GR-BUNDLE-2 4G LTE CELLULAR MODEM FOR CS3000 TO PROVIDE COMMUNICATION WITH CLOUD-BASED COMMAND CENTER ONLINE WEB APPLICATION. INCLUDES GRSTUBBY ANTENNA AND PREPAID 10 YEAR DATA PLAN FOR 1-CELLULAR MODEM COMMUNICATING WITH 1 OR 2 CONTROLLERS. NONCANCELLABLE AND NONREFUNDABLE. MUST INCLUDE CUSTOMER/JOB LOCATION.				G/LDSC-23
NO SYM.	CALSENSE CS3-POC-KIT CS3000 POC CARD AND TERMINAL BOARD. USED TO ADD A CONVENTIONALLY WIRED POC (MASTER VALVE AND FLOW METER) TO A 2-WIRE CONTROLLER.				G/LDSC-23
	CALSENSE CS3-SL-POLE CALSENSE 16FT. POLE FOR MOUNTING CALSENSE SOLAR PANEL. INCLUDES MOUNTING EQUIPMENT FOR CEMENT BASE AND PANEL. SOLAR ASSEMBLY FOR CALSENSE CONTROLLER SOLAR RECHARGEABLE BATTERIES, POWER INVERTER, BLUETOOTH POWER MONITOR, SMART SOLAR CHARGE CONTROLLER, CIRCUIT BREAKERS, AND SOLAR PANEL.				J/LDSC-22
	CALSENSE CS-2W-2ST CALSENSE 2-WIRE STATION DECODER WITH 2-STATION OUTPUTS. CONTRACTOR TO INSTALL REQUIRED 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				I/LDSC-23
	CALSENSE CS-2W-POC CALSENSE 2-WIRE POC DECODER WITH 1 FLOW METER INPUT AND 1 MASTER VALVE OUTPUT. CONTRACTOR TO INSTALL 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				
	CALSENSE FM 1.5U CALSENSE ULTRASONIC FLOW SENSOR. 1.5IN. PVC SCH 80 TEE-MOUNTED. 0.55-82 GPM.				D/LDSC-22
	GROUNDING ROD INSTALL 5/8" BY 8' COPPER GROUND ROD AT THE FOLLOWING LOCATIONS, ONE AT CONTROLLER, ONE EVERY 300 FT ALONG 2-WIRE PATH OR THE NEXT CLOSEST DECODER AND ONE AT END OF EACH TWO WIRE CABLE RUN.				J/LDSC-23 K/LDSC-23
	INSTALL 1 1/2" WATER METER AT POINT OF CONNECTION. CONNECT TO 12" RECYCLED WATER LINE. AVAILABLE PRESSURE 92 PSI.				
					DETAIL
	IRRIGATION LATERAL LINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
	IRRIGATION MAINLINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
	PIPE SLEEVE: PVC SCHEDULE 40				A/LDSC-22
	RECYCLED WATER SIGN PER				A/LDSC-24
			</		



**SAN ELIJO
JOINT POWERS AUTHORITY**

**SAN ELIJO
WATER RECLAMATION FACILITIES**

Christopher A. Trees
SIGNATURE

SHEETS 45-54

1/27/2025
DATE

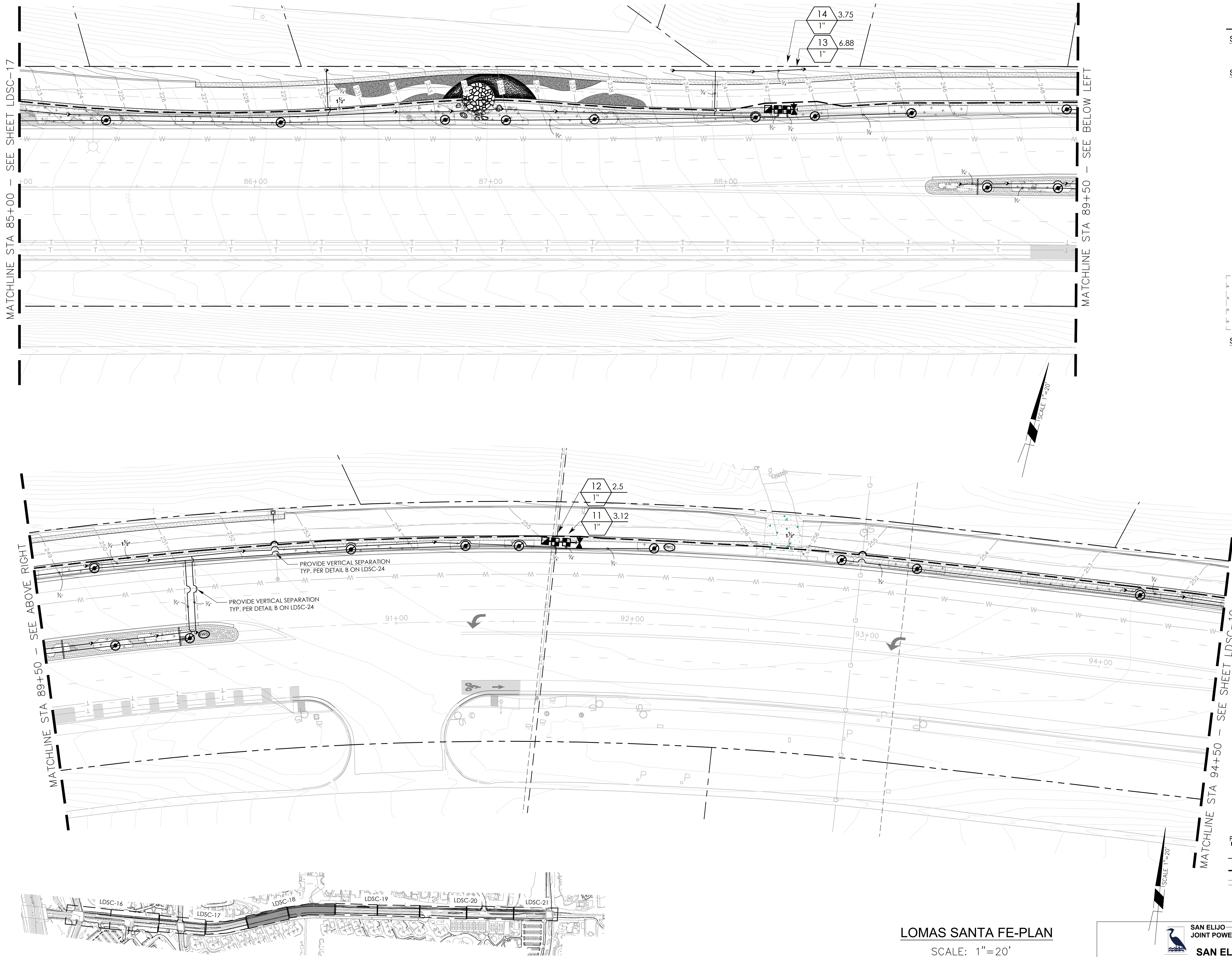
AS-BUILT

By: _____ Date: _____

R.C.E.: _____ Exp: _____

PLAN CODE

LDSC-17



KEY PLAN- NTS

LOMAS SANTA FE-PLAN
SCALE: 1"=20'

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	ARC	PSI	RADIUS	DETAIL
	HUNTER RZWS-18-CV 25	360	50	3'	I/LDSC-22

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	HUNTER IBZ-101-40 DRIP CONTROL ZONE KIT, 1" IBV BRASS GLOBE VALVE WITH FILTER SENTRY MECHANISM AND 1" HFR-100-075 FILTER REGULATOR, AND 1" OUTLET 40 PSI REGULATOR FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN. EACH VALVE TO RECEIVE LIT-700 (RECYCLED WATER ID TAG) WHEN OPERATING PRESSURE AT THE VALVE EXCEEDS 50 PSI, CONTRACTOR TO INSTALL HUNTER ACCU-SYNC PER MANUFACTURER'S INSTRUCTIONS.	F/LDSC-22
	HUNTER AFV-075 AUTOMATIC FLUSH VALVE WITH 3/4IN. FNPT CONNECTION. VALVE SHALL BE PLACED ON LOW POINT OF EACH DRIP ZONE TO FLUSH PIPELINES AND PREVENT BLOCKAGE.	B/LDSC-22
	HUNTER PLD-AVR PLD-AVR ALLOWS FOR AIR TO ESCAPE A DRIP IRRIGATION SYSTEM TO PREVENT BLOCKAGE AND WATER HAMMERING. 1/2IN. MPT CONNECTION WITH 80 PSI MAXIMUM RATING. VALVE SHALL BE PLACED ON THE HIGH POINT OF EACH DRIP ZONE.	D/LDSC-23
	HUNTER ECO-ID-12-R ECO-ID: 1/2IN. FPT CONNECTION WITH 15 PSI - 100 PSI OPERATING PRESSURE. SPECIFY WITH HUNTER SJ SWING JOINT, RECLAIMED. INDICATOR SHALL BE INSTALL ON EACH DRIP ZONE AT THE VALVES FOR VISIBILITY.	E/LDSC-23
	HUNTER HE-8 (AREA TO RECEIVE DRIP EMITTERS) SELF-PIERCING 1/4" BARB SOURCE DRIP EMITTER WITH 1.0 GPH FLOW RATE. PRESSURE COMPENSATING FROM 15 PSI-50 PSI. DIFFUSER CAP (HE) AVAILABLE FOR HIGHER FLOWS AND CLOG PROTECTION. HDL-BLANK-R 1/2" PURPLE DISTRIBUTION DRIP TUBING Emitter Notes: 05HE-T emitters (1 assigned to each flat plant, 1 gal plant, and Field Grown plant) 05HE-T emitters (2 assigned to each 5 gal plant, 15 gal plant, 24" box plant & 60" box plant)	A/LDSC-23
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	NELSON 7645 1" BRASS QUICK COUPLER VALVE WITH ACME THREADS FOR SLOW FLOW CONTROL, WITH LOCKING RUBBER COVER AND PURPLE CAP WITH RECYCLED WATER WARNING.	H/LDSC-22
	NIBCO T-560 BALL VALVE BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. LINE SIZE, PURPLE HANDLE AND VALVE BOXES SHALL HAVE PURPLE LIDS TO RECYCLED WATER.	C/LDSC-22
	BUCKNER SUPERIOR 3100-RW 1-1/2" NORMALLY OPEN BRASS MASTER VALVE THAT PROVIDES DIRTY WATER PROTECTION. SIZE 1-1/2IN. WITH PURPLE CROSS HANDLE FOR RECYCLED WATER USE.	E/LDSC-22
	KBI SPRING CHECK VALVE LINE SIZE CHECK VALVE. INSTALL A (SLIP X SLIP) SPRING CHECK VALVE FOR FLOWS DOWNHILL FROM RCV. INSTALL IN ACCORDANCE WITH IRRIGATION DETAIL AND MANUFACTURER'S INSTRUCTIONS.	C/LDSC-23
	KBI SWING CHECK VALVE LINE SIZE CHECK VALVE. INSTALL A (SLIP X SLIP) SWING CHECK VALVE FOR FLOWS UPHILL OF RCV. INSTALL IN ACCORDANCE IRRIGATION DETAIL AND MANUFACTURER.	C/LDSC-23
	WATTS LF223, 1 1/2 LEAD FREE BRASS HIGH CAPACITY WATER PRESSURE REDUCING VALVE, SIZE 1 1/2" PRESSURE REGULATION SET TO: 60 PSI NPT FEMALE INLET AND OUTLET. EACH VALVE TO RECEIVE RECYCLED WATER ID TAG.	B/LDSC-22
	CALSENSE CS3-2W-SL CALSENSE CS3000 2-WIRE SOLAR POWERED CONTROLLER WITHIN A DOUBLE WIDE STAINLESS STEEL PEDESTAL ENCLOSURE.	G/LDSC-23
NO SYM.	CALSENSE CS3-GR-BUNDLE-2 4G LTE CELLULAR MODEM FOR CS3000 TO PROVIDE COMMUNICATION WITH CLOUD-BASED COMMAND CENTER ONLINE WEB APPLICATION. INCLUDES GRSTUBBY ANTENNA AND PREPAID 10 YEAR DATA PLAN FOR 1-CELLULAR MODEM COMMUNICATING WITH 1 OR 2 CONTROLLERS. NONCANCELLABLE AND NONREFUNDABLE. MUST INCLUDE CUSTOMER/JOB LOCATION.	G/LDSC-23
NO SYM.	CALSENSE CS3-POC-KIT CS3000 POC CARD AND TERMINAL BOARD. USED TO ADD A CONVENTIONALLY WIRED POC (MASTER VALVE AND FLOW METER) TO A 2-WIRE CONTROLLER.	G/LDSC-23
	CALSENSE CS3-SL-POLE CALSENSE 14FT. POLE FOR MOUNTING CALSENSE SOLAR PANEL. INCLUDES MOUNTING EQUIPMENT FOR CEMENT BASE AND PANEL. SOLAR ASSEMBLY FOR CALSENSE CONTROLLER SOLAR RECHARGEABLE BATTERIES, POWER INVERTER, BLUETOOTH POWER MONITOR, SMART SOLAR CHARGE CONTROLLER, CIRCUIT BREAKERS, AND SOLAR PANEL.	J/LDSC-22
	CALSENSE CS-2W-2ST CALSENSE 2-WIRE STATION DECODER WITH 2-STATION OUTPUTS. CONTRACTOR TO INSTALL REQUIRED 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)	I/LDSC-23
	CALSENSE CS-2W-POC CALSENSE 2-WIRE POC DECODER WITH 1 FLOW METER INPUT AND 1 MASTER VALVE OUTPUT. CONTRACTOR TO INSTALL 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)	I/LDSC-23
	CALSENSE FM 1.5U CALSENSE ULTRASONIC FLOW SENSOR, 1.5IN. PVC SCH 80 TEE-MOUNTED, 0.55-82 GPM.	D/LDSC-22
	GROUNDING ROD INSTALL 5/8" BY 8' COPPER GROUND ROD AT THE FOLLOWING LOCATIONS, ONE AT CONTROLLER, ONE EVERY 300 FT ALONG 2-WIRE PATH OR THE NEXT CLOSEST DECODER AND ONE AT END OF EACH TWO WIRE CABLE RUN.	J/LDSC-23 K/LDSC-23
	INSTALL 1 1/2" WATER METER AT POINT OF CONNECTION. CONNECT TO 12" RECYCLED WATER LINE. AVAILABLE PRESSUE 92 PSI.	
DETAIL		
	IRRIGATION LATERAL LINE: PURPLE PVC SCHEDULE 40-NP	A/LDSC-22
	IRRIGATION MAINLINE: PURPLE PVC SCHEDULE 40-NP	A/LDSC-22
	PIPE SLEEVE: PVC SCHEDULE 40	A/LDSC-22
	RECYCLED WATER SIGN PER	A/LDSC-24



SAN ELIJO
JOINT POWERS AUTHORITY

SHEETS 45-54

SAN ELIJO
WATER RECLAMATION FACILITIES

1/27/2025

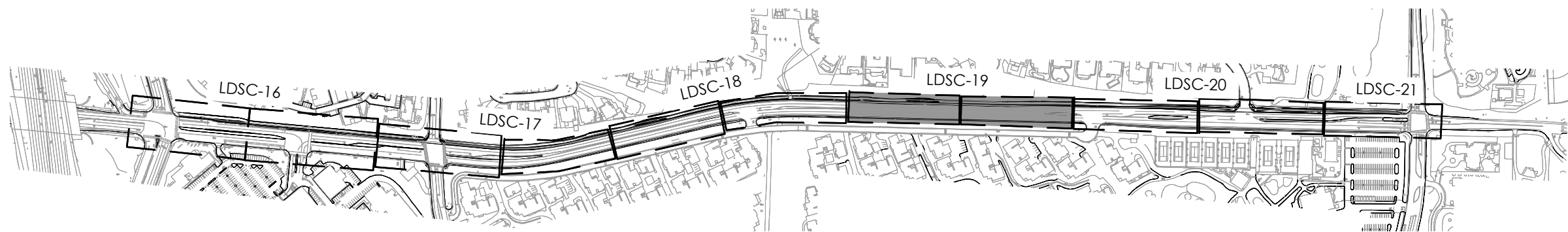
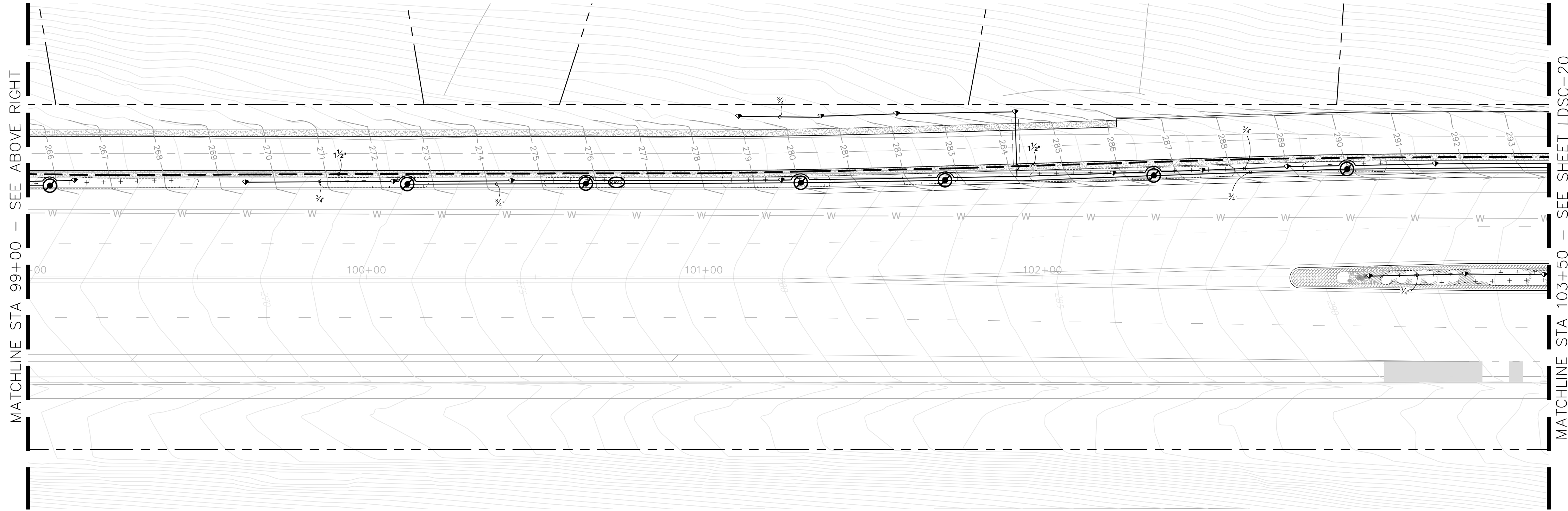
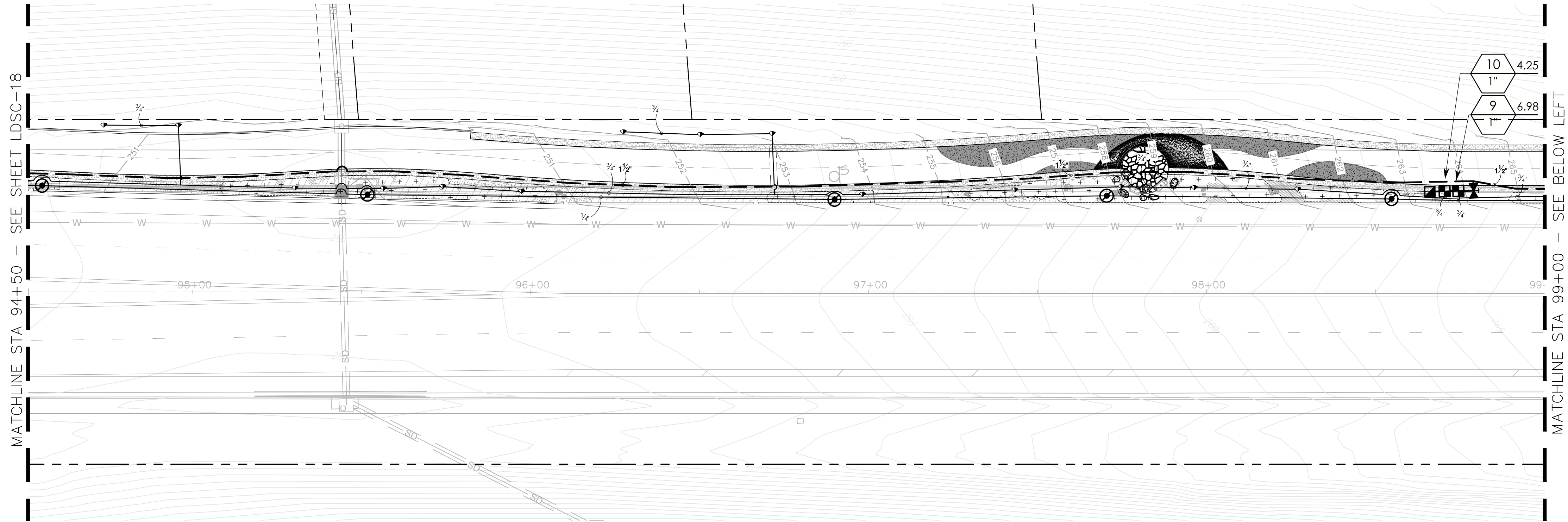
SIGNATURE DATE

AS-BUILT

PLAN CODE LDSC-18

By: _____ Date: _____

R.C.E.: _____ Exp: _____



KEY PLAN- NTS

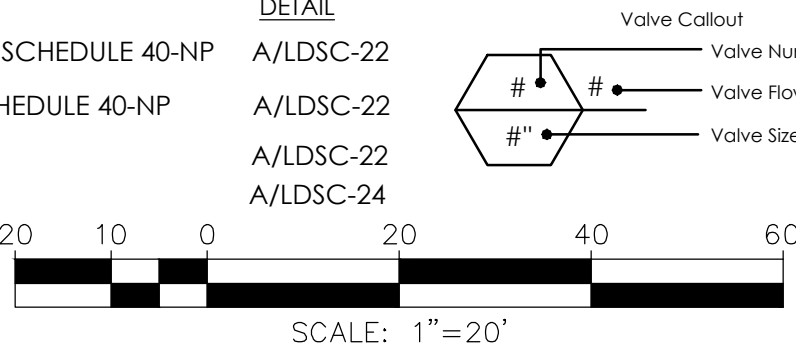
LOMAS SANTA FE-PLAN

SCALE: 1"=20'



IRRIGATION SCHEDULE

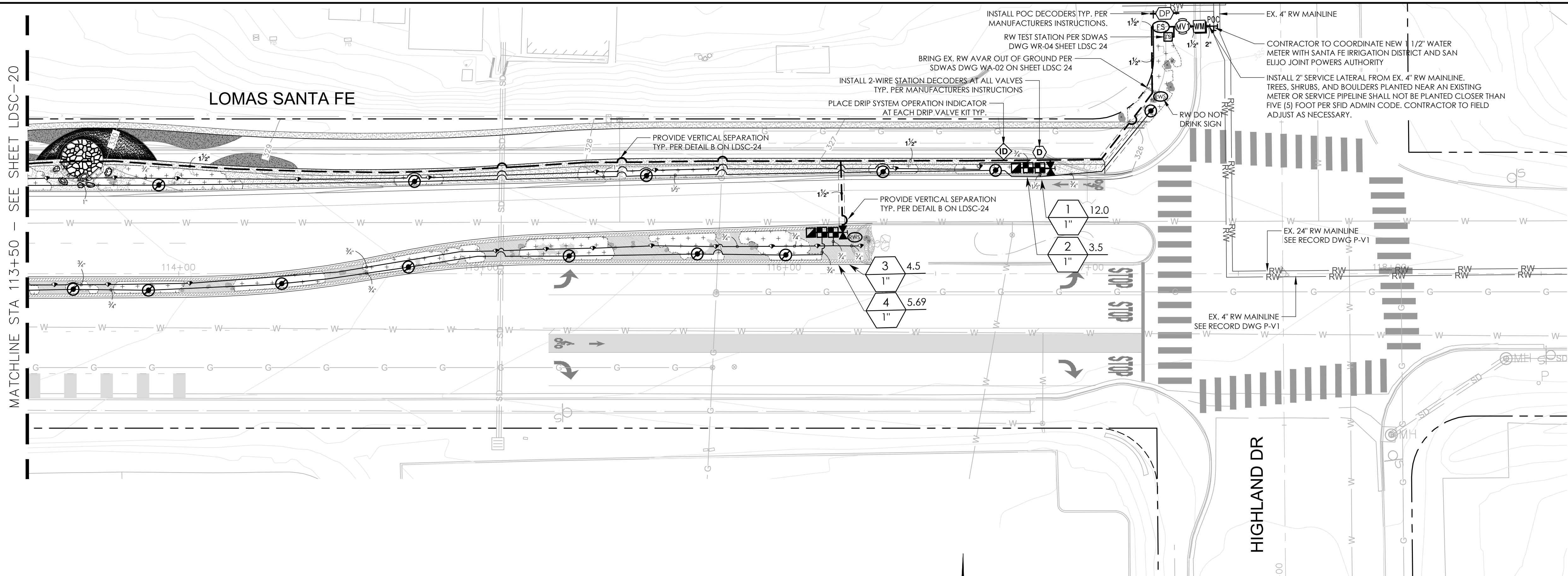
SYMBOL	MANUFACTURER/MODEL	ARC	PSI	RADIUS	DETAIL
	HUNTER RZWS-18-CV 25	360	50	3'	I/LDSC-22
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION				DETAIL
	HUNTER IBZ-101-40 DRIP CONTROL ZONE KIT. 1" IBV BRASS GLOBE VALVE WITH FILTER SENTRY MECHANISM, AND 1" HFR-100-075 FILTER REGULATOR, AND 1" OUTLET 40 PSI REGULATOR FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN, EACH VALVE TO RECEIVE LIT-700 (RECYCLED WATER ID TAG) WHEN OPERATING PRESSURE AT THE VALVE EXCEEDS 50 PSI, CONTRACTOR TO INSTALL HUNTER ACCU-SYNC PER MANUFACTURER'S INSTRUCTIONS.				F/LDSC-22
	PIPE TRANSITION POINT ABOVE GRADE PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP TUBING WITH RISER TO ABOVE GRADE INSTALLATION.				B/LDSC-22
	HUNTER AFV-075 AUTOMATIC FLUSH VALVE WITH 3/4IN. FNPT CONNECTION. VALVE SHALL BE PLACED ON LOW POINT OF EACH DRIP ZONE TO FLUSH PIPELINES AND PREVENT BLOCKAGE.				D/LDSC-23
	HUNTER PLD-AVR PLD-AVR ALLOWS FOR AIR TO ESCAPE A DRIP IRRIGATION SYSTEM TO PREVENT BLOCKAGE AND WATER HAMMERING. 1/2IN. MPT CONNECTION WITH 80 PSI MAXIMUM RATING. VALVE SHALL BE PLACED ON THE HIGH POINT OF EACH DRIP ZONE.				E/LDSC-23
	HUNTER ECO-ID-12-R ECO-ID: 1/2IN. FPT CONNECTION WITH 15 PSI - 100 PSI OPERATING PRESSURE. SPECIFY WITH HUNTER SJ SWING JOINT. RECLAIMED. INDICATOR SHALL BE INSTALL ON EACH DRIP ZONE AT THE VALVES FOR VISIBILITY.				
	HUNTER HE-B (AREA TO RECEIVE DRIP EMITTERS) SELF-PIERCING 1/4" BARB SOURCE DRIP EMITTER WITH 1.0 GPH FLOW RATE. PRESSURE COMPENSATING FROM 15 PSI-50 PSI. DIFFUSER CAP (HE) AVAILABLE FOR HIGHER FLOWS AND CLOG PROTECTION. HDL-BLANK-R 1/2" PURPLE DISTRIBUTION DRIP TUBING Emitter Notes: 05HE-T emitters (1 assigned to each flat plant, 1 gal plant, and Field Grown plant) 05HE-T emitters (2 assigned to each 5 gal plant, 15 gal plant, 24" box plant & 60" box plant)				A/LDSC-23
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION				DETAIL
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	NIBCO T-560 BALL VALVE BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE. SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. LINE SIZE. PURPLE HANDLE AND VALVE BOXES SHALL HAVE PURPLE LIDS TO RECYCLED WATER.				C/LDSC-22
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	KBI SPRING CHECK VALVE LINE SIZE CHECK VALVE. INSTALL A (SLIP X SLIP) SPRING CHECK VALVE FOR FLOWS DOWNHILL FROM RCV. INSTALL IN ACCORDANCE WITH IRRIGATION DETAIL AND MANUFACTURER'S INSTRUCTIONS.				C/LDSC-23
	KBI SWING CHECK VALVE LINE SIZE CHECK VALVE. INSTALL A (SLIP X SLIP) SWING CHECK VALVE FOR FLOWS UPHILL OF RCV. INSTALL IN ACCORDANCE IRRIGATION DETAIL AND MANUFACTURER.				C/LDSC-23
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	CALSENSE CS3-2W-SL CALSENSE CS3000 2-WIRE SOLAR POWERED CONTROLLER WITHIN A DOUBLE WIDE STAINLESS STEEL PEDESTAL ENCLOSURE.				G/LDSC-23
NO SYM.	CALSENSE CS3-GR-BUNDLE-2 4G LTE CELLULAR MODEM FOR CS3000 TO PROVIDE COMMUNICATION WITH CLOUD-BASED COMMAND CENTER ONLINE WEB APPLICATION. INCLUDES GRSTUBBY ANTENNA AND PREPAID 10 YEAR DATA PLAN FOR 1-CELLULAR MODEM COMMUNICATING WITH 1 OR 2 CONTROLLERS. NONCANCELLABLE AND NONREFUNDABLE. MUST INCLUDE CUSTOMER/JOB LOCATION.				G/LDSC-23
NO SYM.	CALSENSE CS3-POC-KIT CS3000 POC CARD AND TERMINAL BOARD. USED TO ADD A CONVENTIONALLY WIRED POC (MASTER VALVE AND FLOW METER) TO A 2-WIRE CONTROLLER.				G/LDSC-23
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	CALSENSE CS-2W-2ST CALSENSE 2-WIRE STATION DECODER WITH 2-STATION OUTPUTS. CONTRACTOR TO INSTALL REQUIRED 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				I/LDSC-23
	CALSENSE CS-2W-POC CALSENSE 2-WIRE POC DECODER WITH 1 FLOW METER INPUT AND 1 MASTER VALVE OUTPUT. CONTRACTOR TO INSTALL 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				
	CALSENSE FM 1.5U CALSENSE ULTRASONIC FLOW SENSOR. 1.5IN. PVC SCH 80 TEE-MOUNTED. 0.55-82 GPM.				D/LDSC-22
	GROUNDING ROD INSTALL 5/8" BY 8' COPPER GROUND ROD AT THE FOLLOWING LOCATIONS, ONE AT CONTROLLER, ONE EVERY 300 FT ALONG 2-WIRE PATH OR THE NEXT CLOSEST DECODER AND ONE AT END OF EACH TWO WIRE CABLE RUN.				J/LDSC-23 K/LDSC-23
	INSTALL 1 1/2" WATER METER AT POINT OF CONNECTION. CONNECT TO 12" RECYCLED WATER LINE. AVAILABLE PRESSURE 92 PSI.				
					DETAIL
	IRRIGATION LATERAL LINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
	IRRIGATION MAINLINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
	PIPE SLEEVE: PVC SCHEDULE 40				A/LDSC-22
	RECYCLED WATER SIGN PER				A/LDSC-24
					 Valve Callout Valve Number Valve Flow Valve Size



	SAN ELIJO JOINT POWERS AUTHORITY	SHEETS 45-54
SAN ELIJO WATER RECLAMATION FACILITIES		
Christopher A. Trees	1/27/2025	
SIGNATURE	DATE	

AS-BUILT	By: _____ Date: _____
PLAN CODE	R.C.E.: _____ Exp: _____
LDSC-19	

MATCHLINE STA 113+50 - SEE SHEET LDSC-20



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	ARC	PSI	RADIUS	DETAIL
▼	HUNTER RZWS-18-CV 25	360	50	3'	I/LDSC-22
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION				DETAIL
■	HUNTER I8Z-101-40 DRIP CONTROL ZONE KIT. 1" IBV BRASS GLOBE VALVE WITH FILTER SENTRY MECHANISM AND 1" HFR-100-075 FILTER REGULATOR, AND 1" OUTLET 40 PSI REGULATOR FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN. EACH VALVE TO RECEIVE LIT-700 (RECYCLED WATER ID TAG) WHEN OPERATING PRESSURE AT THE VALVE EXCEEDS 50 PSI, CONTRACTOR TO INSTALL HUNTER ACCU-SYNC PER MANUFACTURER'S INSTRUCTIONS.				F/LDSC-22
⊙	PIPE TRANSITION POINT ABOVE GRADE PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP TUBING WITH RISER TO ABOVE GRADE INSTALLATION.				B/LDSC-22
⊙	HUNTER AFV-075 AUTOMATIC FLUSH VALVE WITH 3/4IN. FNPT CONNECTION. VALVE SHALL BE PLACED ON LOW POINT OF EACH DRIP ZONE TO FLUSH PIPELINES AND PREVENT BLOCKAGE.				D/LDSC-23
⊙	HUNTER PLD-AVR PLD-AVR ALLOWS FOR AIR TO ESCAPE A DRIP IRRIGATION SYSTEM TO PREVENT BLOCKAGE AND WATER HAMMERING. 1/2IN. MPT CONNECTION WITH 80 PSI MAXIMUM RATING. VALVE SHALL BE PLACED ON THE HIGH POINT OF EACH DRIP ZONE.				E/LDSC-23
⊙	HUNTER ECO-ID-12-R ECO-ID: 1/2IN. FPT CONNECTION WITH 15 PSI - 100 PSI OPERATING PRESSURE. SPECIFY WITH HUNTER SJ SWING JOINT. RECLAIMED. INDICATOR SHALL BE INSTALL ON EACH DRIP ZONE AT THE VALVES FOR VISIBILITY.				
+	HUNTER HE-B (AREA TO RECEIVE DRIP EMITTERS) SELF-PIERCING 1/4" BARB SOURCE DRIP EMITTER WITH 1.0 GPH FLOW RATE. PRESSURE COMPENSATING FROM 15 PSI-50 PSI. DIFFUSER CAP (HE) AVAILABLE FOR HIGHER FLOWS AND CLOG PROTECTION. HDL-BLANK-R 1/2" PURPLE DISTRIBUTION DRIP TUBING Emitter Notes: 05HE-T emitters (1 assigned to each flat plant, 1 gal plant, and Field Grown plant) 05HE-T emitters (2 assigned to each 5 gal plant, 15 gal plant, 24" box plant & 60" box plant)				A/LDSC-23
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION				DETAIL
■	NELSON 7645 1" BRASS QUICK COUPLER VALVE WITH ACME THREADS FOR SLOW FLOW CONTROL, WITH LOCKING RUBBER COVER AND PURPLE CAP WITH RECYCLED WATER WARNING.				H/LDSC-22
⊙	NIBCO T-560 BALL VALVE BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. LINE SIZE. PURPLE HANDLE AND VALVE BOXES SHALL HAVE PURPLE LIDS TO RECYCLED WATER.				C/LDSC-22
⊙	BUCKNER SUPERIOR 3100-RW 1-1/2" NORMALLY OPEN BRASS MASTER VALVE THAT PROVIDES DIRTY WATER PROTECTION. SIZE 1-1/2"IN. WITH PURPLE CROSS HANDLE FOR RECYCLED WATER USE.				E/LDSC-22
⊙	KBI SPRING CHECK VALVE LINE SIZE CHECK VALVE. INSTALL A (SLIP X SLIP) SPRING CHECK VALVE FOR FLOWS DOWNHILL FROM RCV. INSTALL IN ACCORDANCE WITH IRRIGATION DETAIL AND MANUFACTURER'S INSTRUCTIONS.				C/LDSC-23
⊙	KBI SWING CHECK VALVE LINE SIZE CHECK VALVE. INSTALL A (SLIP X SLIP) SWING CHECK VALVE FOR FLOWS UPHILL OF RCV. INSTALL IN ACCORDANCE IRRIGATION DETAIL AND MANUFACTURER.				C/LDSC-23
⊙	WATTS LF223 1 1/2 LEAD FREE BRASS HIGH CAPACITY WATER PRESSURE REDUCING VALVE. SIZE 1 1/2" PRESSURE REGULATION SET TO: 60 PSI NPT FEMALE INLET AND OUTLET. EACH VALVE TO RECEIVE RECYCLED WATER ID TAG.				B/LDSC-22
⊙	CALSENSE CS3-2W-SL CALSENSE CS3000 2-WIRE SOLAR POWERED CONTROLLER WITHIN A DOUBLE WIDE STAINLESS STEEL PEDESTAL ENCLOSURE.				G/LDSC-23
NO SYM.	CALSENSE CS3-GR-BUNDLE-2 4G LTE CELLULAR MODEM FOR CS3000 TO PROVIDE COMMUNICATION WITH CLOUD-BASED COMMAND CENTER ONLINE WEB APPLICATION. INCLUDES GRSTUBBY ANTENNA AND PREPAID 10 YEAR DATA PLAN FOR 1-CELLULAR MODEM COMMUNICATING WITH 1 OR 2 CONTROLLERS. NONCANCELLABLE AND NONREFUNDABLE. MUST INCLUDE CUSTOMER/JOB LOCATION.				G/LDSC-23
NO SYM.	CALSENSE CS3-POC-KIT CS3000 POC CARD AND TERMINAL BOARD. USED TO ADD A CONVENTIONALLY WIRED POC (MASTER VALVE AND FLOW METER) TO A 2-WIRE CONTROLLER.				G/LDSC-23
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⊙	CALSENSE CS-2W-2ST CALSENSE 2-WIRE STATION DECODER WITH 2-STATION OUTPUTS. CONTRACTOR TO INSTALL REQUIRED 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				I/LDSC-23
⊙	CALSENSE CS-2W-POC CALSENSE 2-WIRE POC DECODER WITH 1 FLOW METER INPUT AND 1 MASTER VALVE OUTPUT. CONTRACTOR TO INSTALL 3570G-N WIRE CONNECTORS (SOLD SEPARATELY)				I/LDSC-23
⊙	CALSENSE FM 1.5U CALSENSE ULTRASONIC FLOW SENSOR. 1.5IN. PVC SCH 80 TEE-MOUNTED. 0.55-82 GPM.				D/LDSC-22
⊙	GROUNDING ROD INSTALL 5/8" BY 8" COPPER GROUND ROD AT THE FOLLOWING LOCATIONS, ONE AT CONTROLLER, ONE EVERY 300 FT ALONG 2-WIRE PATH OR THE NEXT CLOSEST DECODER AND ONE AT END OF EACH TWO WIRE CABLE RUN.				J/LDSC-23 K/LDSC-23
⊙	INSTALL 1 1/2" WATER METER AT POINT OF CONNECTION. CONNECT TO 12" RECYCLED WATER LINE. AVAILABLE PRESSURE 92 PSI.				
⊙	IRRIGATION LATERAL LINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
⊙	IRRIGATION MAINLINE: PURPLE PVC SCHEDULE 40-NP				A/LDSC-22
⊙	PIPE SLEEVE: PVC SCHEDULE 40				A/LDSC-22
⊙	RECYCLED WATER SIGN PER				A/LDSC-24

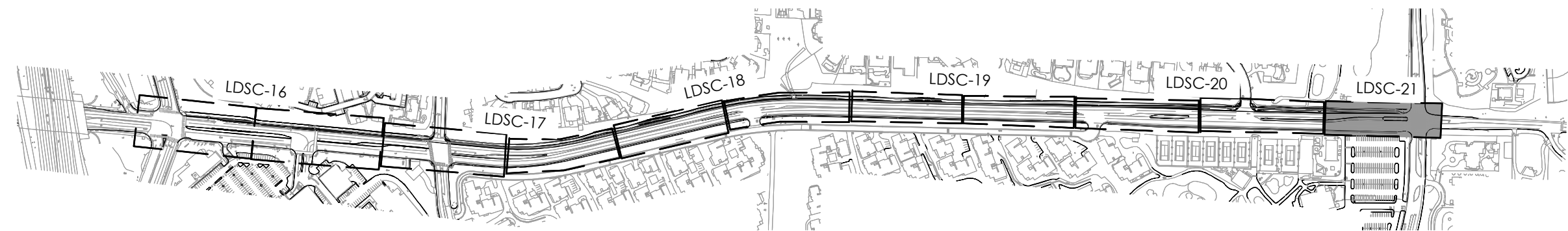


AS-BUILT

PLAN CODE
LDSC-21

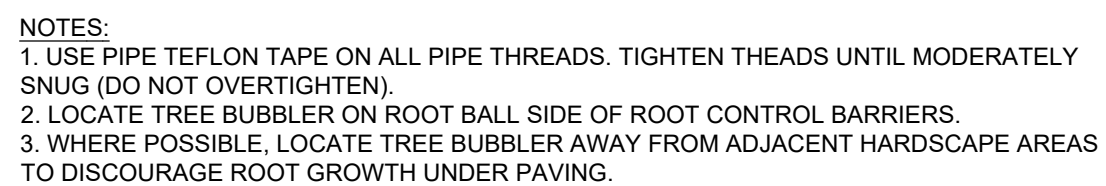
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R.C.E.: _____ Exp: _____

KEY PLAN- NTS

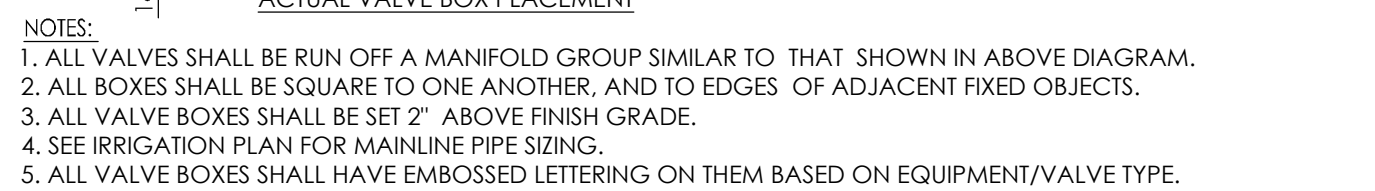


	SAN ELIJO JOINT POWERS AUTHORITY	SHEETS 45-54
SAN ELIJO WATER RECLAMATION FACILITIES		
Christopher A. Trees	12/27/2025	
SIGNATURE	DATE	

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			AMANDA SEIBEL PLA 6504 12/20/2024 DATE			By: _____ Date: _____ R.C.E.: _____ Exp: _____	By: _____ Date: 05/01/2025 Don Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25				



H QUICK COUPLER (RECYCLED WATER)
1 1/2" = 1'-0" RRM-0401-0416.03-50



CITY ARCHITECT OF WORK		CITY APPROVED CHANGES	APP'D	DATE	By _____
EL	PLA 6504	12/20/2024			
		DATE			



MASTER VALVE (2-WIRE RECYCLED WATER)
3/4" = 1'-0" RRM-0401-0416.03-67



RECOMMENDED FOR APPROVAL	APPROVED FOR CONSTRUCTION	
Date: _____	By:  Date: 05/01/2025	DESCRIPTION LOCATION
Exp: _____	Dan Goldberg, PE, Acting City Engineer R.C.E.: 57292 Exp: 12/31/25	ELEV.: _____



2 MIN.

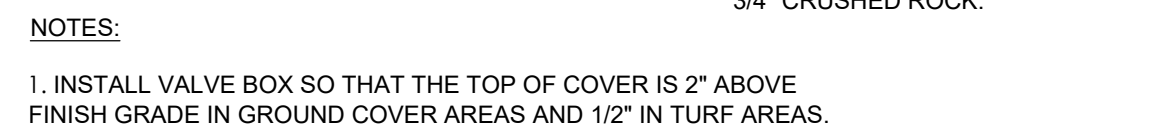
MAINLINE COMBINED WITH LATERAL LINE

SAND BED

TO MAINLINE.



BENCH MARK	CITY OF SOLANA BEACH
	IMPROVEMENT PLANS FOR:
DATUM: M.S.L.	LOMAS SANTA FE CORRID



NOTES:

1. PIPE BEDDING AND BACKFILL SHALL BE MECHANICALLY COMPACTED TO ACHIEVE PROPER DENSIFICATION.
2. PIPE AND CONTROL WIRE CROSSING VEHICULAR ROADWAY SHALL BE SLEEVED PER PLANS AND THIS DETAIL
3. ELECTRICAL SLEEVE: 3" MIN; LARGER IF REQUIRED BY INSPECTOR.
4. IRRIGATION SLEEVE: TWO PIPE SIZES LARGER THAN WATER PIPE SIZE.
5. SHOW ALIGNMENT OF ALL CONTROL WIRE NOT INSTALLED WITH MAINLINE ON AS-BUILT DRAWINGS.



OR	ENGINEERING DEPARTMENT	DRAWING NO.
	IRRIGATION DETAILS	CG-3185
		Sheet 52 of 54

ENGINEERING DEPARTMENT	DRAWING NO.
IRRIGATION DETAILS	CG-318
	Sheet 53 of 53

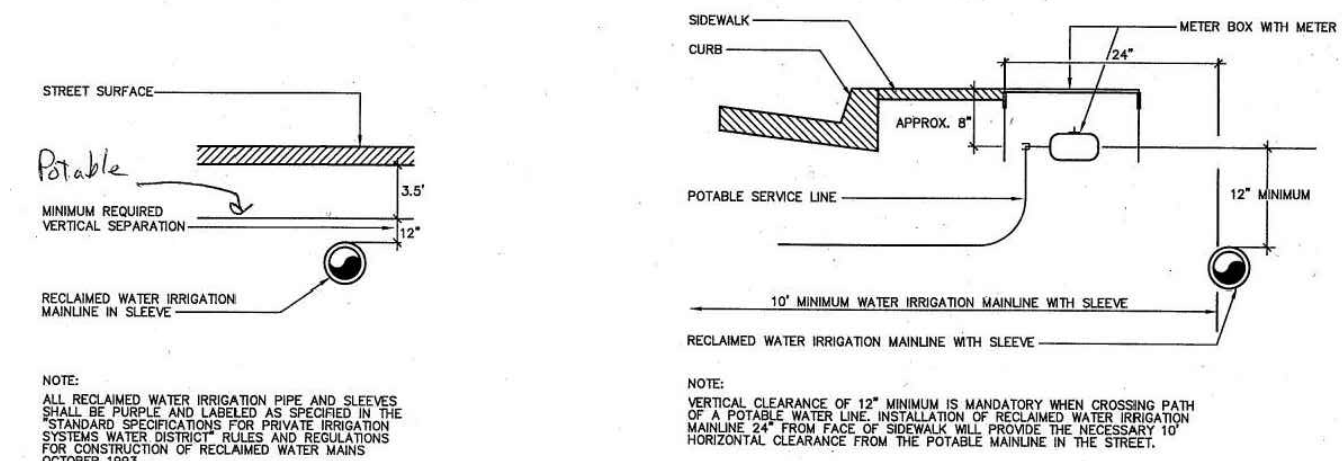
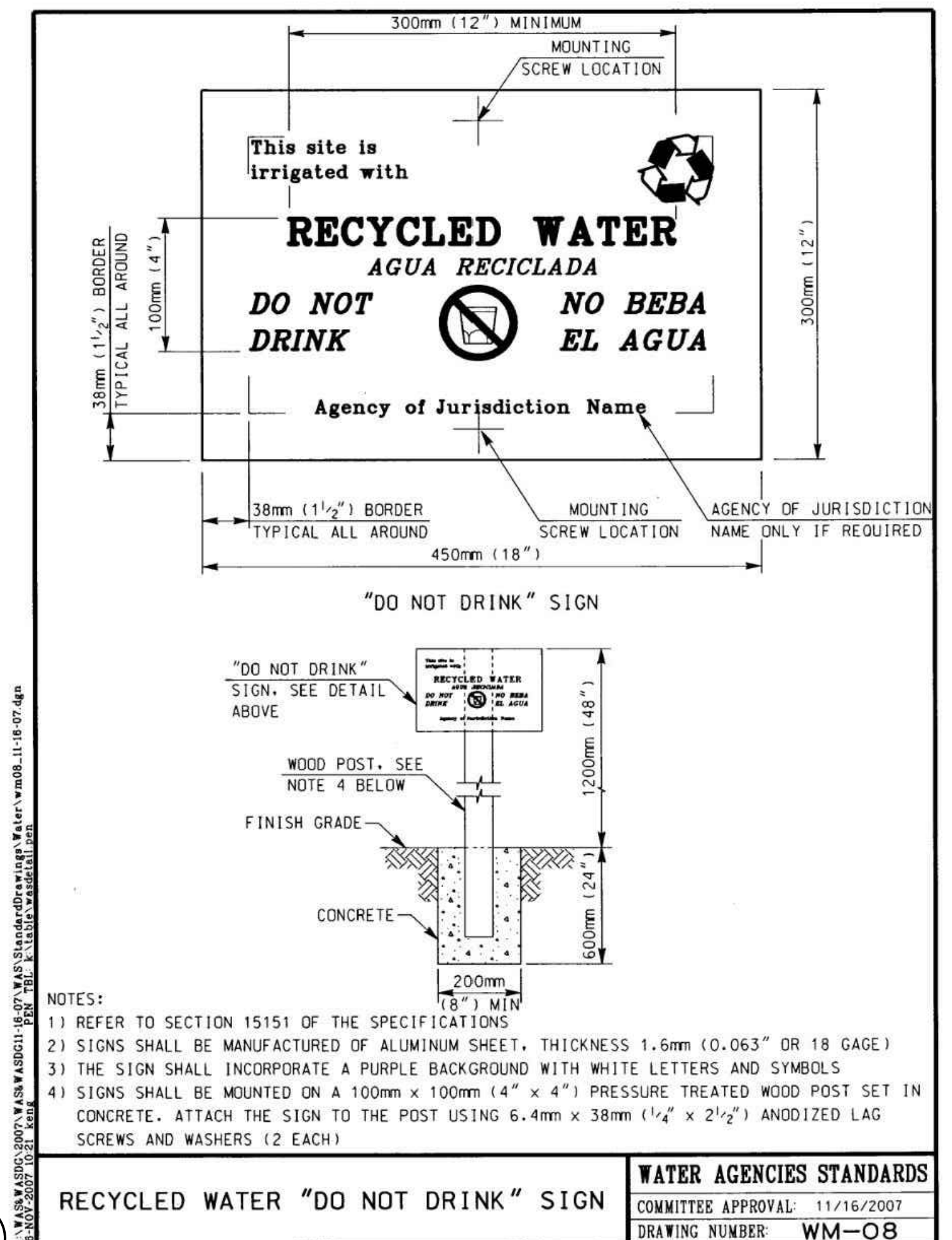
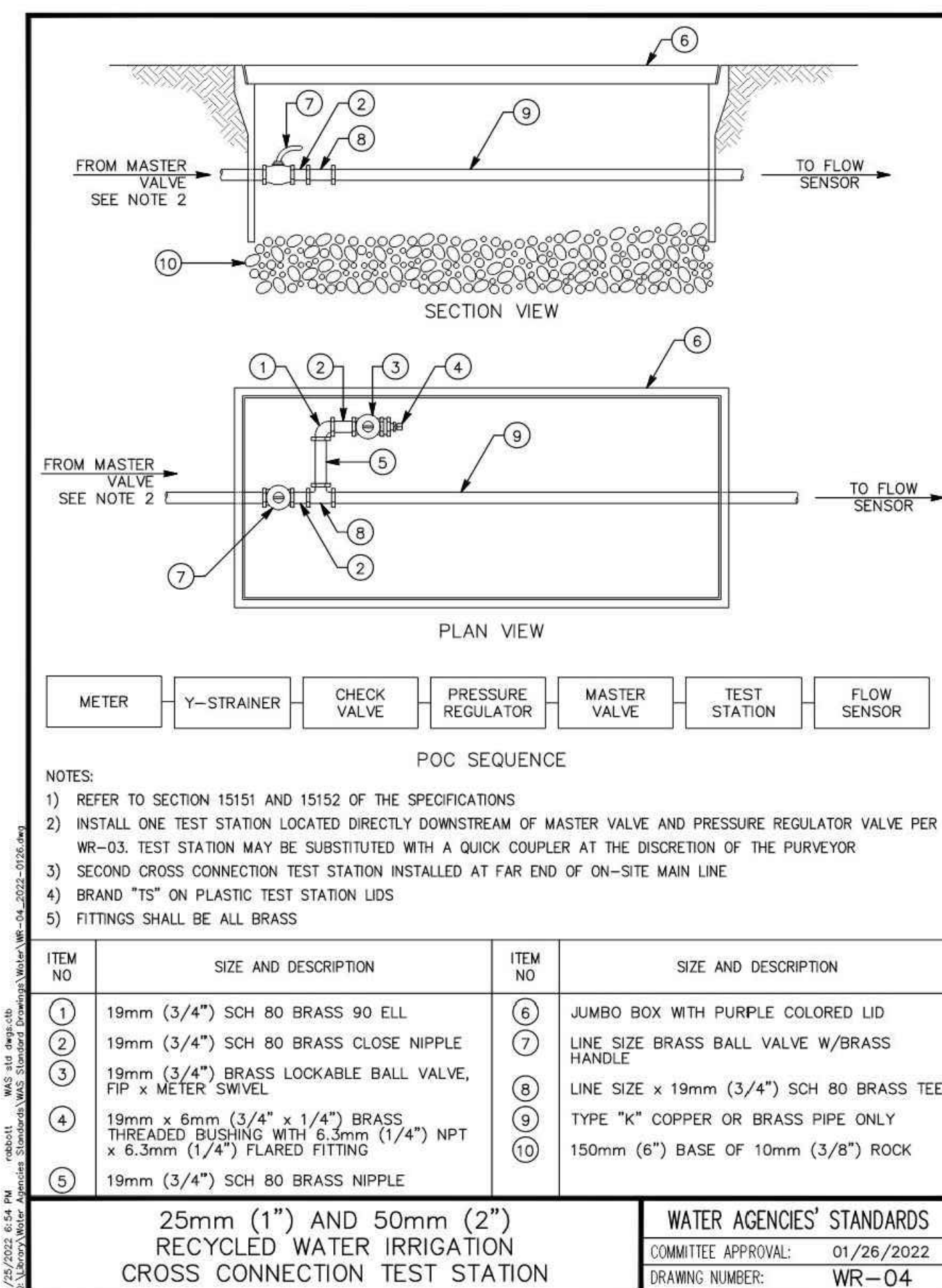
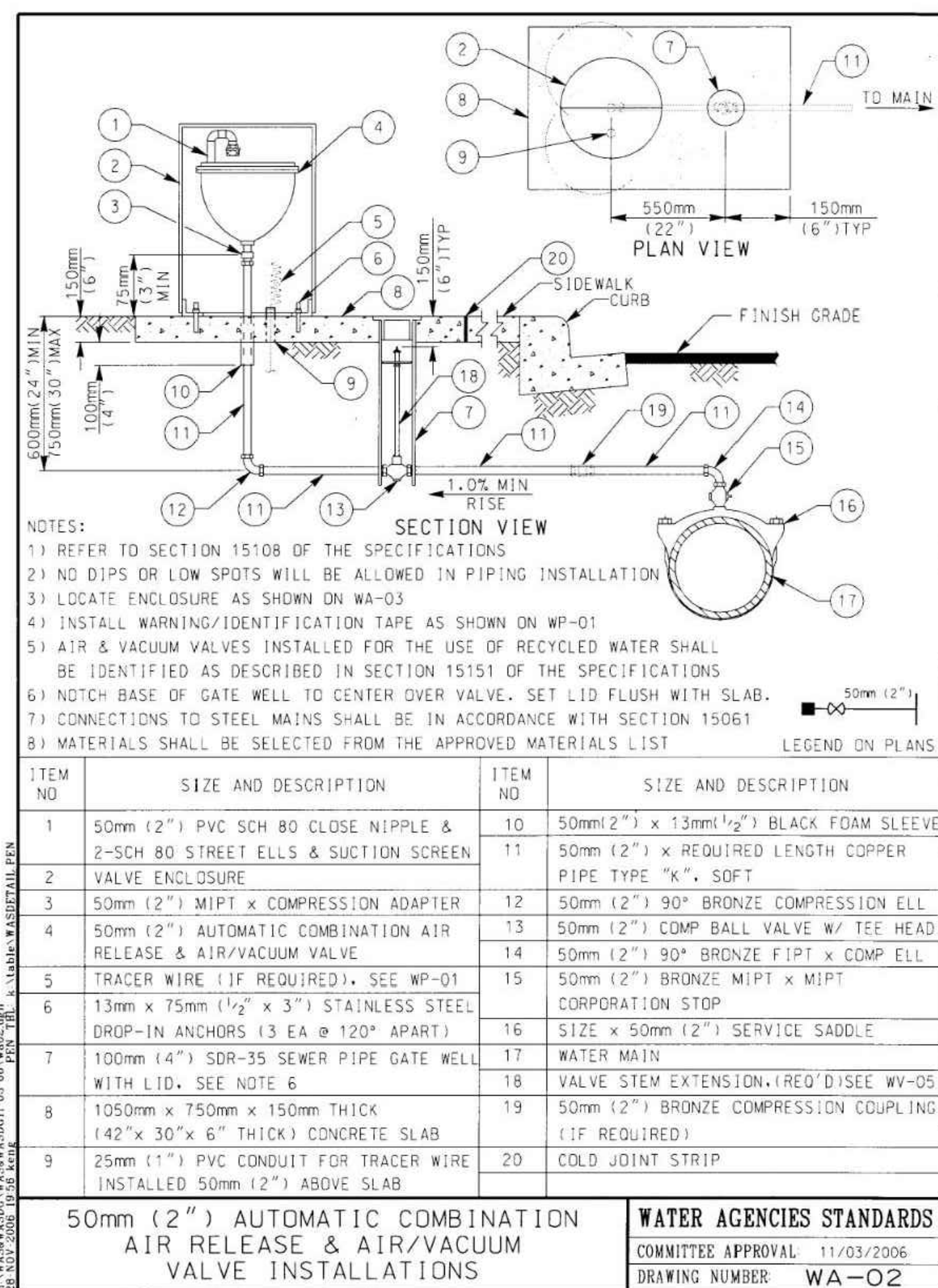


TABLE SERVICE LINE CROSSING POTABLE MAINLINE CROSSING

POTABLE MAINLINE CROSSING



SAN ELIJO JOINT POWERS AUTHORITY
SHEETS 45-54
SAN ELIJO
WATER RECLAMATION FACILITIES
Christopher A. Trees
1/27/2025
DATE

AS-BUILT
By: _____ Date: _____
PLAN CODE LDSC-24
R.C.E.: _____ Exp: _____