

CITY OF MANHATTAN BEACH

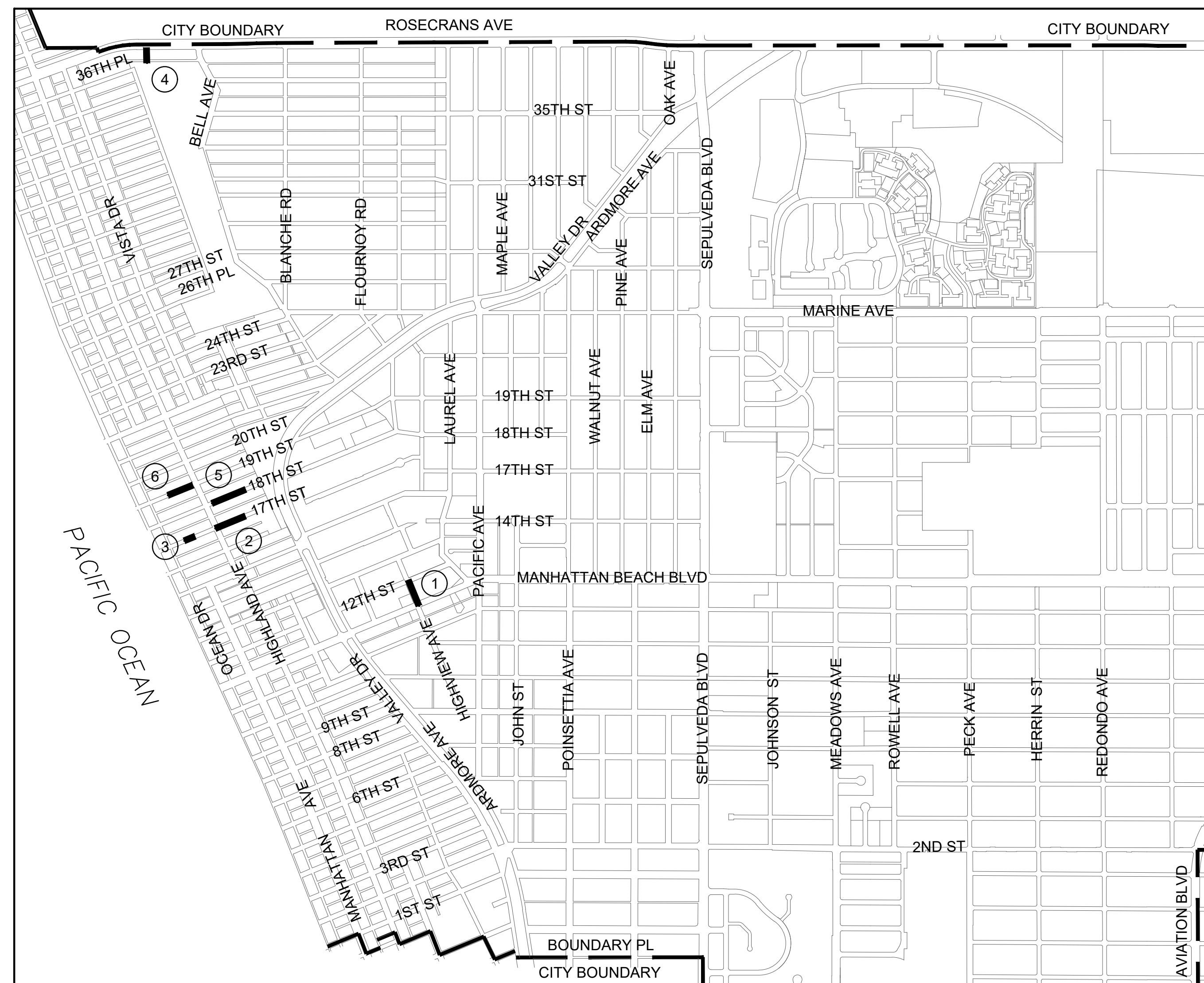
PLANS FOR CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS

UTILITY CONTACTS

| UTILITY AGENCY | CONTACT | PHONE |
|---|----------------------------|---------------------------------------|
| CITY OF MANHATTAN BEACH (PUBLIC WORKS DEPARTMENT) | ERICK LEE | (310) 802-5300 |
| CITY OF MANHATTAN BEACH (POLICE DEPARTMENT) | RACHEL JOHNSON | (310) 545-4566 |
| CITY OF MANHATTAN BEACH (FIRE DEPARTMENT) | MIKE LANG | (310) 802-5200 |
| COUNTY SANITATION DISTRICT (COMPTON) | ENGINEERING COUNTER | (562) 908-4288 (EXT. 1204 OR 1205) |
| AT&T DISTRIBUTION SUBSTRUCTURE RECORDS REQUEST | CONSTRUCTION & ENGINEERING | (510) 645-2929 |
| CALIFORNIA WATER SERVICE | FRANK SCOTTY | (310) 257-1400 |
| CHEVRON | JASON DOWNS | (310) 669-4005 |
| CITY OF EL SEGUNDO | LIFAN XU | (310) 524-2368 |
| CITY OF REDONDO BEACH | JAVIER URISTA | (310) 372-1171 |
| FRONTIER COMMUNICATION (PREVIOUSLY VERIZON) | DAN HAYES | (310) 793-4159 |
| LA COUNTY PUBLIC WORKS FLOOD MAINTENANCE | ADAM LEE | (626) 458-6185 |
| LA COUNTY PUBLIC WORKS ROAD DEPARTMENT | JEFFREY MAGALLANES | (626) 458-1709 |
| LOS ANGELES DEPARTMENT OF WATER AND POWER | EVERETT BURNETT | (213) 367-2659 |
| MCI - VERIZON BUSINESS COMMUNICATIONS | UTILITY COORDINATOR | (800) 289-3427 |
| METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | DANIEL DIAZ | (213) 217-7663 |
| NEXT GLAVEN NETWORK (CROWN CASTLE) | NICK BELINSKY | (800) 654-3110 |
| SOUTHERN CALIFORNIA GAS COMPANY (DISTRIBUTION) | JASON SUM | (310) 687-2011 |
| SOUTHERN CALIFORNIA GAS COMPANY (TRANSMISSION) | ERIC CASARES | (818) 701-4546 |
| SOUTHERN CALIFORNIA EDISON | KIMBERLIE GURULE | (714) 796-9999 |
| SPECTRUM (TIME WARNER CABLE) | ABRAHAM RODRIGUEZ | (951) 406-1601 |
| T-MOBILE | SHAWN HENDERSON | (818) 840-0808 |
| WEST BASIN MUNICIPAL WATER DISTRICT | FRANK FUCHS | (310) 680-6255 |
| ZENITH ENERGY WEST COAST TERMINALS | BECKY SITTON | (562) 263-3919 |



PUBLIC WORKS DEPARTMENT
3621 BELL AVENUE
MANHATTAN BEACH, CALIFORNIA 90266



LOCATION MAP
NOT TO SCALE

THOMAS GUIDE:
PAGE 732, GRID 6F

WORK SITE LOCATION

| INDEX OF DRAWINGS | |
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| SHEET | DESCRIPTION |
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| 11 OF 11 | DETAILS |
| TOTAL SHEETS = 11 | |

| SITE | DESCRIPTION |
|------|--|
| 1 | HIGHVIEW AVE. (BETWEEN MANHATTAN BEACH BLVD. AND 12TH ST.) - SHEET 6 |
| 2 | 17TH ST. (BETWEEN HIGHLAND AVE. AND LIVE OAK PARK) - SHEET 7 |
| 3 | 17TH ST. (BETWEEN OCEAN DR. AND HIGHLAND AVE.) - SHEET 8 |
| 4 | EASEMENT (BETWEEN 36TH PL. AND ROSECRANS AVE., EAST OF GRANDVIEW AVE.) - SHEET 8 |
| 5 | 18TH ST. (BETWEEN HIGHLAND AVE. AND LIVE OAK PARK) - SHEET 9 |
| 6 | 19TH ST. (BETWEEN OCEAN DR. AND HIGHLAND AVE.) - SHEET 10 |

PROFESSIONAL ENGINEER'S NOTE:

THE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY THE ENGINEER OF RECORD USING AVAILABLE RECORD PLANS AND MAPS AND BASED ON FIELD RECONNAISSANCE OF EXISTING CONDITIONS. KNOWN UTILITIES AND OWNERS OF OTHER STRUCTURES HAVE BEEN GIVEN WRITTEN NOTICE OF THE PROJECT. HOWEVER, THE ENGINEER OF RECORD AND CITY OF MANHATTAN BEACH ARE NOT RESPONSIBLE FOR THE TOTAL ACCURACY AND/OR CORRECTNESS OF THE SHOWN INFORMATION. THE CONTRACTOR, BY SIGNING THE CONSTRUCTION CONTRACT FOR THIS PROJECT, ACCEPTS AND ASSUMES FULL RESPONSIBILITY FOR THE WORK AND ITS IMPACT ON THE EXISTING FACILITIES WHETHER SHOWN OR NOT ON THESE PLANS AND DESCRIBED IN THE SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE TO MAKE HIS OWN INVESTIGATION AND INSPECTION INCLUDING POTHOLING AND SUCH OTHER METHODS HE DEEMS NECESSARY TO ALLOW HIM TO PROCEED ON THE CONSTRUCTION OF THIS PROJECT IN COMPLIANCE WITH THE LAWS, ORDINANCES, REGULATIONS AND CITY STANDARDS APPLICABLE TO THE PROJECT, INCLUDING STATE SAFETY ORDERS AND PROCEDURES OF USA.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY SURVEYS REQUIRED TO ESTABLISH HORIZONTAL AND VERTICAL CONTROLS PRIOR TO AND DURING CONSTRUCTION, AND TO REPLACE DISTURBED OR COVERED EXISTING SURVEY MONUMENTS AT HIS EXPENSE. MONUMENT RESTORATION/REPLACEMENT TO BE RECORDED.

DECLARATION OF DESIGN ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH CHECK DOES NOT, THEREFORE RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS.



SIGNATURE DATE 1/16/2024

THE PLANS HAVE BEEN APPROVED BY THE MANHATTAN BEACH PUBLIC WORKS DIRECTOR.

PUBLIC WORKS DIRECTOR DATE
ERICK LEE

STANDARD PLANS:

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

- 2000-1 LEGEND FOR SANITARY SEWER PLANS AND PROFILES AND DISTRICT MAPS.
- 2002-1 PRECAST CONCRETE SHALLOW MANHOLE.
- 2003-2 REINFORCED PRECAST CONCRETE MANHOLE.
- 2004-1 RECTANGULAR SHALLOW MANHOLE.
- 2014-1 RECTANGULAR MANHOLE FRAME AND COVER.
- 2015-1 STANDARD MANHOLE STEP.
- 2021-1 BEDDING FOR SEWER PIPE.
- 2023-2 CRADLING AND ENCASEMENT.
- 2024-1 WYE OR TEE SUPPORT.
- 2026-1 EROSION PROTECTION IN STEEP SLOPES.
- 2027-1 ALLOWABLE TRENCH WIDTHS.
- 6008-1 MINIMUM PUBLIC SAFETY REQUIREMENTS.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

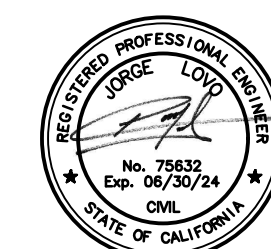
- 122-2 CROSS AND LONGITUDINAL GUTTERS
- 201-2 PRECAST CONCRETE SHALLOW MANHOLE
- 202-2 DROP SEWER MANHOLE
- 204-2 TERMINAL CLEANOUT STRUCTURE
- 207-2 PRECAST REINFORCED CONCRETE MANHOLE BASE
- 208-2 BREAKING INTO EXISTING MANHOLES
- 210-3 MANHOLE FRAME AND COVER LOCKING TYPE
- 220-3 CHIMNEYS
- 221-2 PIPE ANCHORS AND BACKFILL STABILIZERS
- 222-2 HOUSE CONNECTION SEWER
- 223-2 HOUSE CONNECTION REMODELING



NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE. TWO WORKING DAYS BEFORE YOU DIG.

SUPPLEMENTAL NOTES:

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.



01-16-24 DATE SIGNED

SA ASSOCIATES

CONSULTING ENGINEERS
1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

| REVIEWED BY | DATE |
|-------------|------|
| | |

| REVISIONS | | | |
|-----------|-------------|----|------|
| NO. | DESCRIPTION | BY | DATE |
| | | | |

| REFERENCES | | | |
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CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

| TITLE SHEET | |
|--|------------------------------------|
| REVIEWED BY | RECOMMENDED BY |
| PROJECT MANAGER TIM BIRTHISEL, P.E. | CITY ENGINEER KATHERINE DOHERTY |
| DESIGNED BY SA ASSOCIATES | DATE 01-16-24 |
| DATE 01-16-24 | DATE 01-16-24 |
| SHEET 1 OF 11 | DRAWING NO. S-267 |


GENERAL NOTES:

- ALL WORK SHALL CONFORM TO THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF MANHATTAN BEACH, LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND CALTRANS STANDARDS AS APPLICABLE. ALL WORK SHALL BE SUBJECT TO THE CITY ENGINEER'S ACCEPTANCE AS A CONDITION OF COMPLETION OF WORK BY THE CONTRACTOR.
- WORK NOT DONE IN THE PRESENCE OF THE CITY INSPECTOR IS SUBJECT TO REJECTION.
- WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE COMPLETED WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO TRAVELING PUBLIC.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH PROJECT CONSTRUCTION.
- ANY WALLS, FENCE STRUCTURES AND/OR APPURTENANCE ADJACENT TO THIS PROJECT SHALL BE PROTECTED IN PLACE. IF THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
- ALL DAMAGED AND/OR REMOVED DRIVEWAY APPROACH, P.C.C. SIDEWALK OR CURB AND GUTTER SHALL BE RECONSTRUCTED ACCORDING TO THE CITY OF MANHATTAN BEACH STANDARD DRAWINGS ST-1, ST-2 AND ST-3, RESPECTIVELY (UNLESS NOTED OTHERWISE).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING OF THE PROPOSED WORK AREA.
- THE CONTRACTOR IS RESPONSIBLE FOR OVERALL JOBSITE MAINTENANCE, INCLUDING, BUT NOT LIMITED TO: STREET/SITE SWEEPING, TRASH AND/OR CONSTRUCTION-RELATED DEBRIS/WASTE, STORMWATER POLLUTION PREVENTION BMP, ETC...
- NO TRENCHES MAY BE LEFT OPEN OVERNIGHT UNLESS APPROVED IN WRITING BY THE CITY ENGINEER. SHOULD THE CONTRACTOR REQUEST TO LEAVE THE TRENCHES OPEN A PLAN FOR PROTECTING THE TRENCH AND THE PUBLIC SHALL BE SUBMITTED TO THE CITY ENGINEER IN WRITING FOR APPROVAL BEFORE BEING IMPLEMENTED. PLATING IS REQUIRED.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AS REQUIRED PRIOR TO THE START OF THE WORK. UPON EXPOSING ANY UTILITY'S UNDERGROUND FACILITY, THE CONTRACTOR SHALL NOTIFY THAT UTILITY IMMEDIATELY. IF ANY UTILITIES OR FACILITIES CONFLICT WITH PROPOSED IMPROVEMENTS, THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE IN PLACE PRIOR TO BEGINNING OF EXCAVATION. TRAFFIC CONTROL SHALL BE APPROVED BY THE CITY ENGINEER. STREET STRIPING SHALL BE COMPLETED PRIOR TO STREET OPENING.
- CONSTRUCTION SITE SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORM WATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/ EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
- THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR PERFORM ANY WORK PERTAINING TO THE PROJECT BETWEEN 4:30 P.M. AND 7:30 A.M. ON ANY WEEK DAY AND NOT ON SATURDAY, OR SUNDAY, OR HOLIDAYS AT ANY TIME EXCEPT AS APPROVED IN WRITING BY THE CITY ENGINEER.
- CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY/SUBSTRUCTURE CROSSINGS AND WITHIN THE ALIGNMENT OF THE PROPOSED IMPROVEMENTS BEFORE CONSTRUCTING ANY UTILITIES. THE CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING UTILITIES/SUBSTRUCTURES ON THESE PLANS AND THOSE FOUND DURING CONSTRUCTION (SEE GENERAL NOTE NO 32).
- THE CONTRACTOR IS ADVISED THAT ALL EXCAVATED MATERIALS SHALL BECOME HIS PROPERTY FOR BACKFILL SUBJECT TO APPROVAL OF SOILS ENGINEER AND ANY UNUSED MATERIAL SHALL BE REMOVED FROM THE JOB UNLESS INSTRUCTED BY THE CITY ENGINEER TO DO OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE DURING ALL PHASES OF THE WORK TO PROVIDE FOR PUBLIC SAFETY AND CONVENIENCE. THE CONTRACTOR SHALL ESTABLISH ADEQUATE ACCESS TO ALL ENTRIES/DRIVEWAYS/GARAGES AND PARKING LOTS DURING THE WORKING DAY TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL GIVE COURTESY NOTICE (KNOCK ON DOOR) TO AN ADJACENT PROPERTY IMMEDIATELY PRIOR TO BLOCKING ENTRY/DRIVEWAY/GARAGE ACCESS. PEDESTRIAN ACCESS IS TO BE PROVIDED AND MAINTAINED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL ADJUST MANHOLES AND VALVE COVERS TO FINISHED GRADE. THE CONTRACTOR SHALL ADJUST, TIGHTEN AND/OR REPAIR MANHOLES, LIDS AND COVERS BY THE END OF EACH WORKING DAY TO ENSURE MINIMAL IMPACT (NOISE AND OTHERWISE) TO ADJACENT PROPERTY OWNERS.
- THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR THE COMPLETION OF THE PROPOSED IMPROVEMENTS PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CALIFORNIA (LATEST EDITION) TO THE SATISFACTION OF THE CITY ENGINEER. ALL STREETS IN THE PROJECT HAVE AT LEAST 2 LANES (1 LANE IN EACH DIRECTION) WITH EITHER CURB SIDE OPEN PARKING OR CURB SIDE LIMITED PARKING OR NO PARKING.
THE CONTRACTOR CAN INCLUDE IN THE PLAN THE ELIMINATION OF PARKING ON ONE SIDE OF THE STREET DURING THE CONSTRUCTION DAY, CLOSURE OF THE ONE TRAFFIC LANE DURING THE CONSTRUCTION DAY ONE BLOCK AT A TIME. THE SIDE OF THE STREET WHERE PARKING IS ELIMINATED CAN BE USED DURING THE CONSTRUCTION TIME OF THE DAY FOR LOCAL ONE WAY TRAFFIC WITH THE ASSISTANCE OF CONTRACTOR PROVIDED FLAG PERSONNEL ALL SUCH STREETS SHALL BE OPEN TO THE TRAFFIC AND CURB PARKING BETWEEN 5:00 PM AND 7:30 AM DAILY (MONDAY – FRIDAY, ALL STREETS SHALL BE OPEN ON HOLIDAYS AND SATURDAY & SUNDAY). IT IS THE CONTRACTOR'S RESPONSIBILITY TO POST "NO PARKING-TOW AWAY" SIGNS WITH SPECIFIC DATES/TIMES AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ACTUAL WORK.
- USE OF TRENCH PLATING MAY BE APPROVED BY THE CITY ENGINEER UPON SUBMITTAL OF A PLATING PLAN AND APPROVAL OF PLAN BY THE CITY ENGINEER. ALL PLATES SHALL BE FIRMLY SUPPORTED ON ADJACENT PAVEMENT OR BEAMS. ALL PLATES IN A.C. PAVEMENT SHALL BE STUDDED INTO PAVEMENT WITH TOP OF PLATES FLUSH WITH PAVEMENT SURFACE. THERE SHALL BE NO OPENINGS BETWEEN PLATES. PLATES SUPPORTED ON BEAMS SHALL BE BOLT TO OR WELDED TO BEAMS BY TACK WELDING. TACK WELDING SHALL BE REQUIRED OF CONTIGUOUS PLATES. PLATES SHALL BE SECURED SO AS TO NOT MOVE, SLIP OR SLIDE AND CAPABLE OF CARRYING H-20 LOADING. ALL PLATE SURFACES SHALL BE ROUGHENED OR RAISED TO MINIMIZE TIRE SLIPPAGE. FOR CONCRETE SECTION OF STREETS THE PLATES MAY BE PLACED ON SURFACE AND HELD IN PLACE WITH ASPHALT CONCRETE EDGE BERMS AND STUDS INTO DRILLED HOLES.
- THE CONTRACTOR SHALL PROVIDE A 72-HOUR WRITTEN NOTIFICATION TO AFFECTED PROPERTIES (IN A DOOR-HANGER FORMAT), POLICE DEPARTMENT, AND FIRE DEPARTMENT IN THE EVENT OF A STREET CLOSURE TO TRAFFIC AND/OR PUBLIC SAFETY VEHICLES OR IMPLEMENTATION OF PARKING RESTRICTIONS. THE CONTRACTOR SHALL COORDINATE THE PROJECT WORK AND ASSOCIATED PICK-UP ROUTES WITH THE CITY REFUSE COLLECTION COMPANY (WASTE MANAGEMENT) PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL FURNISH AND OPERATE A SELF-LOADING STREET SWEEPER WITH SPRAY NOZZLES AT LEAST TWICE EACH WORKING DAY TO KEEP PAVED AREAS ACCEPTABLY CLEAN WHEREVER CONSTRUCTION, INCLUDING RESTORATION, IS IN PROGRESS OR INCOMPLETE.
- ALL PORTLAND CEMENT CONCRETE (P.C.C.) AND ASPHALT CONCRETE (A.C.) SHALL BE REMOVED TO A SAWCUT, COLD JOINT, SCORE MARK OR EDGE OF PAVEMENT. NO "FLOATER" SLABS WILL BE PERMITTED. SAWCUT SLURRY SHALL BE REMOVED WITH A VACUUM MACHINE AND DISPOSED OF PROPERLY. NO SLURRY SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM.
- A PERMIT IS REQUIRED FOR ALL WORK ON CITY STREETS. THE CITY WILL ISSUE A "NO FEE" PERMIT TO THE CONTRACTOR. SHOULD THE CONTRACTOR OPERATION INVOLVE ANOTHER AGENCY'S JURISDICTION OR INFRASTRUCTURE A PERMIT AND INSPECTION SHOULD BE OBTAINED THEREFOR FROM THAT AGENCY. THERE MAY BE A FEE THEREFOR PAYABLE BY CONTRACTOR.
- IN SOME CASES MATCH LINES MAY OVERLAP FROM PLAN SHEET TO PLAN SHEET. CONTRACTOR SHOULD REVIEW PLANS THOROUGHLY.
- ALL PORTIONS OF STREET AFFECTED BY CONSTRUCTION, AS DETERMINED BY CITY ENGINEER, OUTSIDE OF TRENCH INCLUDING T-CUT SHALL BE RESTORED PER CITY OF MANHATTAN BEACH STD DWG ST-10. SHOULD ANY LINEAR OR AREA TRENCH JOINT BE LOCATED WITHIN 36" OF AN EXISTING PAVEMENT PATCH AND/OR CURB AND GUTTER ALIGNMENT, THE ADJACENT PAVEMENT SECTION/PATCH MUST BE REMOVED AND REPAVED ALONG WITH THE TRENCH PAVEMENT RESTORATION. ALL STRIPING & PAVEMENT MARKING SHALL BE REPLACED IN EXISTING & IN NEW PAVEMENT. GRINDING TO BE PERFORMED PER CITY ENGINEER INSTRUCTION. ALL TRAFFIC SIGNAL LOOPS DAMAGED BY PROJECT WORK SHALL BE REPLACED IN THEIR ENTIRETY BACK TO CONTROL PANEL. CONTRACTOR SHALL TUNNEL UNDER AND PROTECT IN PLACE STAMPED CONCRETE OR PAVERS, CROSSWALKS, CURB & GUTTERS. SHOULD CROSSWALKS BE DAMAGED ENTIRE CROSSWALK FROM CURB TO CURB SHALL BE REPLACED IN KIND WITHOUT ANY ADDITIONAL COMPENSATION TO THE CONTRACTOR.

- CONTRACTOR AND ALL SUBCONTRACTORS PERFORMING WORK SHOWN OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS". PRIOR TO COMMENCING THE EXCAVATION OF A TRENCH 5 FEET IN DEPTH OR GREATER AND INTO WHICH A PERSON WILL BE REQUIRED TO DESCEND, THE CONTRACTOR SHALL FIRST OBTAIN A PERMIT TO DO SO FROM THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA (CAL OSHA) PURSUANT TO 7-10.4.1. CONTRACTOR SHALL SUBMIT A COPY OF THE SHORING PLAN SIGNED AS REQUIRED AND PERMIT TO THE ENGINEER PRIOR TO EXCAVATION.
- THE CITY ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTOR'S AND SUBCONTRACTORS' COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS".
- THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 732.05, 1492-5, 1810-5 OF THE STREETS AND HIGHWAY CODE REQUIRE THAT EXISTING SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED. IF DAMAGED THEY ARE TO BE REPLACED AND A RECORD OF SURVEY IS TO BE PREPARED BY THE PROJECT SURVEYOR AND FILED WITH THE CITY ENGINEER AND THE COUNTY SURVEYOR.
- CONTRACTOR MUST HOLD A VALID CALIFORNIA CONTRACTOR'S LICENSE FOR THE APPLICABLE SCOPE OF WORK. ALL SUBCONTRACTOR'S MUST BE LICENSED.
- THERE SHALL BE A MINIMUM OF 1 CERTIFIED EMPLOYEE ON SITE AT ALL TIMES OF CONSTRUCTION WITH RED CROSS FIRST AID TRAINING INCLUDING CPR TRAINING FOR THIS PROJECT. ALL EMPLOYEES ON THE PROJECT ARE TO HAVE CERTIFIED TRAINING FOR CONFINED SPACE WORK IN VICINITY OF SEWER. COPIES OF THE EMPLOYEE CERTIFICATES SHALL BE PROVIDED TO THE CITY ENGINEER. ALL EQUIPMENT NEEDED TO ENTER CONFINED SPACE/SEWER MANHOLES SHALL BE STORED ON THE PROJECT SITE AND USED FOR ANY AND ALL SUCH INSTANCES.
- BASED ON INFORMATION OBTAINED FROM UTILITY/SUBSTRUCTURE OWNERS POSSIBLE CONFLICT LOCATIONS HAVE BEEN SHOWN ON THE PLANS. HOWEVER, THERE MAY BE OTHER CONFLICT LOCATIONS. THE INFORMATION PROVIDED BY UTILITY/SUBSTRUCTURE OWNERS IN VARIOUS INSTANCES DOES NOT INDICATE DEPTHS TO THEIR FACILITIES. WHERE DEPTH INFORMATION WAS NOT AVAILABLE, ENGINEER HAS PLOTTED THE UTILITIES/SUBSTRUCTURES AT DEPTHS AT WHICH SUCH UTILITIES/SUBSTRUCTURES ARE COMMONLY FOUND. HOWEVER, ENGINEER CANNOT VERIFY SUCH LOCATION AND ENGINEER DID NOT PERFORM ANY POT-HOLING. IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE CITY.
- TREES, FOLIAGE, SIGNS, PARKING METERS AND OTHER IMPROVEMENTS SHALL BE PROTECTED IN PLACE AND ANY DAMAGE TO EXISTING IMPROVEMENTS, PUBLIC OR PRIVATE, SHALL BE REPLACED IN KIND.
- THE CONTRACTOR IS ADVISED TO POT-HOLE WHERE HE BELIEVES NECESSARY IN ADVANCE OF OPENING A TRENCH TO VERIFY LOCATIONS OF UTILITY/SUBSTRUCTURES AND ADJACENT WALL FOOTINGS AT NO EXTRA COST TO THE CITY.
- ENGINEER HAS NOT OBTAINED PLANS FOR THE UNDERGROUND FACILITIES OF LOOPS, CONDUITS, ETC. NOR HAVE SUCH FACILITIES BEEN FULLY PLOTTED ON THE PLANS. THE CONTRACTOR IS ADVISED TO LOCATE THE TRAFFIC SIGNAL UNDERGROUND FACILITIES BEFORE EXCAVATION OF THE TRENCH AND PROTECT IN PLACE. CONTRACTOR SHOULD CONTACT THE LOS ANGELES COUNTY'S TRAFFIC SIGNAL MAINTENANCE DEPARTMENT AND COORDINATE THE WORK.
- FOR WORK UNDER ANY EXISTING CONCRETE (PCC) BUS PADS THE CONTRACTOR SHALL REMOVE BUS PAD AND REPLACE AFTER INSTALLATION OF SEWER PIPES (SEE SSPWC FOR DETAILS OF REPLACEMENT BUS PAD). TRENCH LESS METHOD MAY BE USED TO CROSS UNDER BUS PAD.
- FOR ANY UNDER CROSSINGS ENTRY OF APPROACHES TO STORM DRAIN CATCH BASINS CONTRACTOR SHALL TUNNEL UNDER THESE AND SUPPORT APPROACH. UPON INSTALLATION OF SEWER AND COMPACTION OF TRENCH A 2 SACK SAND CEMENT SLURRY SHALL BE PLACED UNDER THE APPROACH.
- IN SHOWING UTILITIES ENGINEER HAS PROVIDED INFORMATION RECEIVED FROM THE UTILITIES. IN SOME CASES SERVICE CONNECTIONS ARE SHOWN. HOWEVER PLANS FROM UTILITIES MAY NOT HAVE INCLUDED ALL SERVICE CONNECTIONS AND OTHER FEATURES SUCH AS FIRE HYDRANT LATERALS AND VAULTS AND BOXES. CONTRACTOR SHOULD BE PREPARED TO LOCATE SUCH AND TO PROTECT IN PLACE.
- ABANDONMENT AND/OR REMOVAL OF CONDUITS AND STRUCTURES SHALL BE PER SECTION 306-5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- LATERALS FOR STORM DRAIN SYSTEM AND EXISTING SEWER MAY BE CONCRETE ENCASED (OVERPOUR). AS PART OF TRENCHING WORK CONTRACTOR SHALL REMOVE AND REPLACE ENCASEMENT (OVERPOUR) AS PART OF UNIT OR FIXED PRICE FOR INSTALLATION OF SEWER.


PRIVATE ENGINEERS NOTICE TO CONTRACTOR:

- ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS". THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.
- CONTRACTOR FURTHER 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 SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- UTILITIES: THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS AND BEST RECOLLECTION OF FACILITY STAFF. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATIONS OF SAID LINES NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY AND IRRIGATION COMPANIES PRIOR TO WORK OR POT-HOLE TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OR PROTECTION OF ALL EXISTING UTILITY LINES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF THE SITE AND SHALL REMOVE AND DISPOSE OF ALL STRUCTURES ABOVE AND/OR BELOW GROUND UNLESS OTHERWISE NOTED. ANY HAZARDOUS MATERIALS ENCOUNTERED SHALL BE HANDLED AND REMOVED AS REQUIRED BY LOCAL AND/OR STATE LAWS AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDSCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS.
- ALL JOIN LINES SHALL BE SAWCUT ON A NEAT, STRAIGHT LINE PARALLEL WITH THE JOIN. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO JOINING.
- ALL EXISTING OBJECTIONABLE MATERIALS THAT CONFLICT WITH PROPOSED IMPROVEMENT INCLUDING, BUT NOT LIMITED TO, BUILDING FOUNDATIONS, UTILITIES AND APPURTENANCES, TREES, SIGNS, AND STRUCTURES, ETC. SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR AT NO COST TO THE OWNER, UNLESS OTHERWISE INDICATED HEREIN, OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY HIS OPERATIONS. ANY CURBS DAMAGED DURING HIS OPERATIONS SHALL BE SAWCUT AND REPLACED AT NO COST TO THE OWNER. ANY EXISTING PAVING IDENTIFIED AS POTENTIALLY NEEDING TO BE REPLACED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PERFORM AND BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OPERATIONS AS NECESSARY TO COMPLETE THE WORK, INCLUDING TRANSPORTATION AND DISPOSAL OF ALL MATERIALS, AND ALL ASSOCIATED COSTS.
- DEMOLITION PLAN BY SEPARATE PERMIT.


Know what's below.
Call before you dig.
NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE. TWO WORKING DAYS BEFORE YOU DIG.

SUPPLEMENTAL NOTES:

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SOE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.


DATE SIGNED: 01-16-24

SA ASSOCIATES
CONSULTING ENGINEERS
1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

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REFERENCES

PROJECT MANAGER
TIM BIRTHISEL, P.E.

DESIGNED BY

SA ASSOCIATES

01-16-24

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

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| REVISIONS | GENERAL NOTES |
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CITY ENGINEER
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SHEET 2 of 11

NPDES NOTES:

- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE. DESIGNATED TRUCK WASHOUT AREA REQUIRED.
- TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION BY RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORM WATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 2003, OR THE LATEST REVISED EDITION, MAY APPLY DURING CONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY INSPECTOR).

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| NS-2 | DEWATERING OPERATIONS | SC-21 | VEHICLE AND EQUIPMENT CLEANING |
| NS-3 | PAVING & GRINDING OPERATIONS | SC-20 | VEHICLE AND EQUIPMENT FUELING |
| WM-1 | MATERIAL DELIVERY AND STORAGE | SC-22 | VEHICLE AND EQUIPMENT REPAIRS |
| WM-2 | MATERIAL USE | EC-2 | PRESERVATION OF EXISTING VEGETATION |
| WM-4 | SPILL PREVENTION AND CONTROL | WE-1 | WIND EROSION CONTROL |
| WM-5 | SOLID WASTE MANAGEMENT | SE-8 | SAND BAG BARRIER |
| WM-8 | CONCRETE WASTE MANAGEMENT | SE-10 | STORM DRAIN INLET PROTECTION |
| | | WM-9 | SANITARY / SEPTIC WASTE MANAGEMENT |

AMERICANS WITH DISABILITIES NOTES:

- ALL SLOPES IN DIRECTION OF TRAVEL SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUM ALLOWED GRADES BY THE AMERICAS WITH DISABILITIES ACT ACCESS GUIDE (ADAAG), AND THE CALIFORNIA BUILDING CODE (CBC). IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO FAMILIARIZE THEMSELVES WITH THE ADAAG AND CBC AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE DESIGN ENGINEER SHALL BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
- THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO ADAAG AND CBC ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR A CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY ADAAG AND CBC ARE SUBJECT TO REJECTION BY THE INSPECTOR AND ANY MAY BE REQUIRED TO BE REMOVED AND REPLACED.
- SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUB-CONTRACTORS DURING THE GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF ADAAG OR CBC RELATED ITEMS OF THIS PROJECT BY THE INSPECTING AUTHORITY OR OTHER AFFECTED PARTIES.
- COMPLIANCE WITH ADAAG AND CBC CONSTRUCTION REQUIREMENTS AND CALIFORNIA TITLE 24 WILL BE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS.

UTILITY NOTES:

- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CALL DIG ALERT TO IDENTIFY THE LOCATION OF ALL UTILITIES
- NO DISCHARGE OF CONSTRUCTION WASTEWATER, BUILDING MATERIALS, DEBRIS, OR SEDIMENT FROM THE SITE IS PERMITTED. NO REFUSE OF ANY KIND GENERATED ON A CONSTRUCTION SITE MAY BE DEPOSITED IN RESIDENTIAL, COMMERCIAL, OR PUBLIC REFUSE CONTAINER AT ANY TIME. THE UTILIZATION OF WEEKLY REFUSE COLLECTION SERVICE BY THE CITY'S HAULER FOR ANY REFUSE GENERATED AT THE CONSTRUCTION SITE IS STRICTLY PROHIBITED. FULL DOCUMENTATION OF ALL MATERIALS/TRASH LANDFILLED AND RECYCLED MUST BE SUBMITTED TO THE PERMITS DIVISION IN COMPLIANCE OF THE CITY'S CONSTRUCTION AND DEMOLITION RECYCLING ORDINANCE.
- A CLAY 6" PROPERTY LINE CLEANOUP MUST BE INSTALLED ON A CLAY 6" SANITARY SEWER LATERAL. IF THERE IS NO 6" SEWER LATERAL, THEN A NEW ONE MUST BE INSTALLED. THE PROPERTY LINE CLEANOUP MUST STAY WITHIN THE JOB SITES PROPERTY LINES. SEE CITY STANDARD PLAN ST-5. CLEANOUP MUST BE ADDED TO THE SITE PLAN.
- A BACKWATER VALVE IS REQUIRED ON THE SANITARY SEWER LATERAL IF THE DISCHARGES FROM FIXTURES WITH FLOOD LEVEL RIMS ARE LOCATED BELOW THE NEXT UPSTREAM MANHOLE COVER OF THE PUBLIC SEWER. SEE CITY STANDARD PLAN ST-24. MUST BE SHOWN ON THE PLAN IF APPLICABLE.
- IF ANY EXISTING SEWER LATERAL IS USED, IT MUST BE TELEVISED TO CHECK ITS STRUCTURAL INTEGRITY. THE TAPE MUST BE MADE AVAILABLE FOR REVIEW BY THE PUBLIC WORKS DEPARTMENT AND MUST SHOW PROOF OF THE LOCATION OF WHERE IT WAS SHOT. THE PUBLIC WORKS DEPARTMENT WILL REVIEW THE TAPE AND DETERMINE AT THAT TIME IF THE SANITARY LATERAL NEEDS REPAIRING, REPLACED, OR THAT IT IS STRUCTURALLY SOUND AND CAN BE USED IN ITS PRESENT CONDITION. VIDEOING OF LATERAL MUST BE IN ITS ORIGINAL STATE. NO CLEANING FLUSHING OR ALTERING PRIOR TO VIDEOING IS PERMITTED.
- ANY UNUSED WATER OR SANITARY SEWER LATERALS MUST BE ABANDONED AT THE CITY MAIN.
- RESIDENTIAL PROPERTIES MUST PROVIDE AN ENCLOSED STORAGE AREA FOR REFUSE CONTAINERS. THESE AREAS MUST BE CONSTRUCTED TO MEET THE REQUIREMENTS OF M.B.M.C. 5.24.030. THE AREA MUST BE SHOWN IN DETAIL ON THE PLANS BEFORE A PERMIT IS ISSUED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL THE STREET SIGNS, STREET LAMPS/LIGHTS, PARKING METERS, AND/OR TREES AROUND THE PROPERTY. IF THEY ARE DAMAGED, LOST OR REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE THEM AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ANY STREET MARKINGS THAT ARE DAMAGED OR REMOVED BY THE CONTRACTOR'S OPERATIONS. CONTACT THE PUBLIC WORKS INSPECTOR FOR SIGN SPECIFICATION AND SUPPLIERS.
- THE BACK OF DRIVEWAY APPROACH MUST BE SIX INCHES HIGHER THAN THE FLOW LINE ON THE STREET. M.B.M.C. 9.76.030. THE PARKWAY OR PARKING ENCROACHMENT AREA, DRIVEWAY APRON ALONG 24" PLACE MUST BE IMPROVED PER CITY STANDARD PLANS.
- SIDEWALK, DRIVEWAY, CURB, AND GUTTER REPAIR OR REPLACEMENT MUST BE COMPLETED PER PUBLIC WORKS SPECIFICATIONS. SEE CITY STANDARD PLAN ST-1, ST-2, ST-3 AND ST-10. THE PLANS MUST HAVE A PROFILE OF THE DRIVEWAY, PERCENTAGE (%) OF SLOPE ON DRIVEWAY, AND DRIVEWAY ELEVATIONS FOR EACH SIDE AND THE MIDDLE. IN THE CASE WHERE THE GARAGE LEVEL IS BELOW THE STREET DRAINAGE FLOW LINES, THE COMBINED SLOPE OF PUBLIC AND PRIVATE APPROACH SHALL NOT EXCEED 15% (CITY RECOMMENDS THAT GARAGE FINISH FLOOR ELEVATIONS SLOPE AT 1% MINIMUM TO THE PROPERTY LINE AT THE DRIVEWAY APPROACH WHICH WOULD MINIMIZE POSSIBILITY OF ANY FUTURE FLOODING IN THE GARAGE). CITY PLANS/SURVEYS MUST SHOW ELEVATIONS FOR EACH ADJOINING PROPERTY. NO DEVIATIONS IN ELEVATIONS BETWEEN PROPERTIES SHALL EXCEED MORE THAN ¼".

SEWER NOTES:

1. THE CONTRACTOR'S ATTENTION IS CALLED TO CONTRACT SPECIFICATION'S SPECIAL PROVISION, PART 3, SECTION 306-1.2.15 CONVEYANCE OF SEWAGE FLOWS.
2. THE LOCATIONS OF EXISTING UTILITIES AND HOUSE LATERALS SHOWN ARE BASED ON CCTV INSPECTIONS AND PREVIOUS RECORDS. IT MAY OR MAY NOT BE ACCURATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND EXPOSE ALL EXISTING LATERALS TO DETERMINE EXACT LOCATION AND DEPTHS TO WHICH THE CONNECTIONS ARE TO BE MADE.
3. AN EXISTING SEWER TO BE REPLACED SHALL BE CUT AND PLUGGED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 306-5 AND 306-6.
4. EXISTING DOWNSTREAM MANHOLES SHALL BE BULKHEADED WITH BRICK AND MORTAR OR PLUGS APPROVED BY THE ENGINEER AT NEW INLET DURING CONSTRUCTION OF NEW UPSTREAM LINES. BRICK AND MORTAR OR PLUG SHALL BE REMOVED IN THE PRESENCE OF THE ENGINEER DURING CLEARING OF THE FIRST UPSTREAM SECTION OF THE NEW SYSTEM.
5. THE NEW MAIN AND LATERALS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 306.1.4.4 OF THE STANDARD SPECIFICATIONS.
6. MANHOLE FRAMES AND COVERS SHALL HAVE NO LOCKING FEATURES AND CONFORM TO THE CITY OF MANHATTAN BEACH STANDARD DWG. ST-19. A FOUNDRY IDENTIFICATION MARK SHALL BE LOCATED ON THE BOTTOM OF THE COVER AND INSIDE THE FRAME.
7. WHENEVER THE INVERT ELEVATION OF THE EXISTING AND THE NEW SEWER ARE THE SAME, THE LATERALS SHALL BE ANGLED TOWARD THE DOWNSTREAM DIRECTION AT THE MAXIMUM SLOPE POSSIBLE.
8. THE CONTRACTOR SHALL ADJUST ALL NEW SEWER MANHOLE FRAME COVERS TO FINISHED PAVEMENT GRADE.
9. ALL LATERAL LOCATIONS SHALL BE CLEARLY MARKED WITH A 2 INCH HIGH "S" CHISELED IN THE CURB FACE BY THE CONTRACTOR, WITH EXCEPTION AT PRIVATE IMPROVEMENTS IN ENCROACHMENT AREAS.
10. STATIONS SHOWN THUS 0+00 AS SHOWN ON THE PLAN AND PROFILE ARE SEWER STATIONS FROM RECORDED DRAWINGS AND ARE INDEPENDENT OF STREET STATIONS AND ARE STATIONS ALONG CENTERLINE OF SEWER. THESE MAY VARY FROM CCTV DERIVED DISTANCES.
11. SEWER LINE DISTANCE SHOWN IN PLAN AND PROFILE IS THE HORIZONTAL DISTANCE MEASURED BETWEEN MANHOLES.
12. SEWER MAIN CONSTRUCTION SHALL BE MONITORED BY VIDEOTAPE EQUIPMENT & THE VIDEOTAPE SHALL BE PROVIDED TO CITY ENGINEER. STATIONING IS TO SHOW ON VIDEOTAPE.
13. MANHOLE CONES FOR REPLACEMENT MANHOLES SHALL BE SET STRAIGHT SIDE UPSTREAM. MANHOLE STEPS SHALL BE MADE OF STEEL REINFORCED POLYPROPYLENE.
14. ALL VCP AND FITTINGS SHALL BE CLASS DESIGNATED "EXTRA-STRENGTH" AND TESTED IN ACCORDANCE WITH ASTM C-700 AND PER CITY STANDARDS.
15. IF A POWERPOLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED PER LACDPW STANDARD PLAN 2023-2, CASE II, TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
16. ALL JOINTS BETWEEN VITRIFIED CLAY PIPE AND OR PVC SEWER PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "D" (WITH BUSHING IF NECESSARY) PER "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" SECTION 208-2.
17. WYE FITTINGS SHALL BE USED FOR LATERAL CONNECTIONS TO THE MAINLINE SEWERS EXCEPT AS NOTED.
18. NEW PIPE AND NEW MANHOLE BEDDING SHALL BE INSTALLED PER CITY OF MANHATTAN BEACH STANDARD DWG ST-10.
19. CONTRACTOR TO COAT OUTSIDE OF ALL NEW SANITARY SEWER MANHOLES WITH WATERPROOF MEMBRANES.
20. ALL NEW SANITARY SEWER MANHOLE FRAMES AND COVERS SHALL BE WATERTIGHT.
21. PRIOR TO ACCEPTANCE OF ANY SANITARY SEWER LINE BY THE CITY OF MANHATTAN BEACH, AN INSPECTION OF SAID LINE BY VIDEO INCLUDING MANHOLES SHALL BE REQUIRED PER PROVISIONS OF SECTION 500-1.1.15 OF THE SSPWC. THE RESULTS OF THE VIDEO AND MANDREL INSPECTION SHALL BE RECORDED IN DVD FORMAT AND A COPY SHALL BE PROVIDED TO THE CITY. THIS INCLUDES REPAIRED, LINED & REPLACED SEWERS.

PRIOR TO THE ACCEPTANCE OF ANY SANITARY SEWER LINE BY THE CITY OF MANHATTAN BEACH AN INSPECTION OF SAID LINE BY VIDEO SHALL BE REQUIRED AS PART OF COST FOR PROJECT TO THE CITY. ALL NEW REPAIRED & LINED SEWERS SHALL BE VIDEO INSPECTED. THE CCTV INSPECTION SHALL BE COMPLETED BY A CERTIFIED NATIONAL ASSOCIATION OF SEWER SERVICE COMPANY (NASSCO). PIPELINE ASSESSMENT AND CERTIFICATION PROGRAM (PACP) SHALL BE PERFORMED BY TRAINED OPERATORS(S) USING ESTABLISHED PACP CODING AND OBSERVATIONS. THE RESULTS OF THE VIDEO INSPECTION SHALL BE RECORDED IN DVD FORMAT AND A COPY SHALL BE PROVIDED TO THE CITY DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL. ANY NOTED DEFICIENCIES SHALL BE CORRECTED, THEN FOLLOWED BY A POST CORRECTION VIDEO TO BE SUBMITTED FOR REVIEW AND APPROVAL. THE CONTRACTOR OF THE PROJECT SHALL NOTIFY THE CITY OF MANHATTAN BEACH IN WRITING AT LEAST 48 HOURS (2 WORKING DAYS) IN ADVANCE OF THE SCHEDULED DATE AND TIME OF ANY VIDEO INSPECTIONS.

22. THE CONTRACTOR SHALL CHECK EACH LATERAL FOR THE PRESENCE OF A BACKWATER VALVE. WHICH SHALL BE REPLACED IF DAMAGED.
23. THE CONTRACTOR SHALL REVIEW CCTV TO LOCATE EXISTING SEWER LATERALS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
24. WHERE KNOWN, LOCATIONS OF SEWER LATERALS ARE SHOWN ON PLANS. HOWEVER, CONTRACTOR SHALL RECONNECT ALL FOUND LATERALS.
25. AS DIRECTED BY THE ENGINEER, CONTRACTOR SHALL SALVAGE ALL EXISTING MANHOLE COVERS AND FRAMES AND DELIVER THEM TO THE CITY YARD.
26. CONNECTION TO EXISTING CITY MANHOLES, WHERE STUBS DO NOT EXIST OF CORRECT SIZE, SHALL BE DONE BY CORE DRILLING.
27. MAINTAIN SEWER FLOW AT ALL TIMES DURING CONSTRUCTION IN SEWER MAINS AND LATERALS BY USE OF BYPASS SYSTEM INCLUDING PUMPING.
28. ANY EXISTING BACKWATER VALVE BWV SHALL BE REPLACED AS PART OF THIS PROJECT. INSTALL NEW BWV WHERE REQUIRED PER SECTION 710 OF THE PLUMBING CODE.

ROADWAY RECONSTRUCTION GENERAL NOTES:

1. CURB AND GUTTER AND RAMP TO BE REPLACED TO MATCH EXISTING AND IN ACCORDANCE WITH CITY STANDARD DRAWING AND "GREEN BOOK" STANDARDS.
2. JOIN NEW CURB AND GUTTER TO ASPHALT PAVEMENT PER DETAILS SHOWN OR REFERENCED. CONSTRUCT CURB AND GUTTER PER THE "GREEN BOOK" STD PLAN 120-2 AND CITY REQUIREMENTS UNLESS OTHERWISE SHOWN.
3. JOIN NEW ASPHALT PAVING TO CURB AND GUTTER PER DETAILS SHOWN OR REFERENCED. PRIME ALL AREAS TO BE JOINED. SAW CUT ALL CONCRETE AND ASPHALT PAVING TO BE JOINED PRIOR TO DEMOLITION AND REMOVALS.
4. ANY NEW CURB AND GUTTER CONSTRUCTED AT EXISTING ASPHALT WEARING COURSE SHALL BE JOINED WITH A MINIMUM SIX INCH NOTCH PER STANDARD DETAIL.
5. DRIVEWAY APPROACHES DISTURBED BY THE WORK SHALL BE REPLACED PER DETAILS HEREIN OR GREEN BOOK STANDARDS.
6. STREET EXCAVATION AND PAVEMENT RESTORATION SHALL BE PER CITY OF MANHATTAN BEACH STANDARD DRAWING ST-10 AND ALL REFERENCED STANDARDS. AC SHALL BE SAW CUT. ALL STREET TRENCHING SHALL RE RESTORED USING "T" CUT.
7. PCC STREET EXCAVATION AND PCC PAVEMENT RESTORATION IN PCC ROADWAY AND WALKING STREETS SHALL BE EXTENDED TO THE SCORE LINES IN THE PAVEMENT. ALL SECTIONS TO BE REMOVED SHALL BE SAW CUT PRIOR TO DEMOLITION AND REMOVAL. NEW PCC SHALL BE CONSTRUCTED ON NATIVE SUBGRADE COMPACTED TO 90% FINISH SHALL MATCH CITY SIDEWALK STANDARDS OR AS DIRECTED BY THE ENGINEER. EXPANSION JOINTS AND CONTRACTION JOINTS AS DIRECTED BY THE ENGINEER, AND AT MAXIMUM OF 20 FEET. SCORE PATTERN AS DIRECTED.
8. MANHOLE FRAME AND COVERS, UTILITY VAULTS, VALVE BOXES, AND OTHER UTILITY ACCESS STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH SURFACE IN ACCORDANCE WITH STANDARD SPECIFICATIONS, CITY, AND COUNTY REQUIREMENTS.
9. BLUE REFLECTORS SHALL BE INSTALLED ON THE ROADWAY SURFACE AT THE REQUIRED LOCATIONS TO INDICATE THE LOCATION OF EACH HYDRANT. REFLECTORS SHALL BE IN ACCORDANCE WITH FIRE DEPARTMENT REGULATIONS.
10. THE EXISTENCE AND LOCATION OF MANHOLE, UTILITIES, VAULTS, BOXES, WATER METERS, VALVES AND OTHER STRUCTURES AND UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS AND SURFACE SURVEY PERFORMED. THESE ARE TO BE PROTECTED AND RESTORED/REPLACED IF DAMAGED OR DISTURBED AT CONTRACTOR'S SOLE EXPENSE.
11. TRAFFIC STRIPING AND PAVEMENT MARKING REPAIR SHALL BE THERMOPLASTIC AS SPECIFIED, PER CAL TRANS 98 AND PER CITY REQUIREMENTS.
12. THICKNESS OF PAVEMENT SHOWN IN THE PAVEMENT RESURFACING SCHEDULE APPLIES WITHIN THE LIMITS OF EXCAVATION. THE CONTRACTOR SHALL NOTE THAT FAILED PCC PAVEMENT SUBGRADE MAY BE PRESENT. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO PAVEMENT OUTSIDE THE LIMITS OF EXCAVATION AS A RESULT OF HEAVY TRAFFIC LOADING AND/OR INADEQUATE SHORING.
13. CONTRACTOR SHALL NOTE THAT FOR WALKWAY STREETS CONTRACTOR SHALL AT MINIMUM, REPLACE 2 OF 3 WALKWAY PANELS ALONG THE SEWER LINE CONSTRUCTION. LOCAL AREAS OF WORK MAY REQUIRE RECONSTRUCTION OF ENTIRE WALKWAY WIDTH. RESURFACING PAVEMENTS SECTION SHALL BE DOWELED INTO EXISTING PAVEMENT WITH # 4 REBAR @ 24" O.C..
14. STRAND WALKWAY SHALL BE RECONSTRUCTED IN FULL PANEL FROM JOINT TO JOINT. RESURFACING PAVEMENT SECTION SHALL BE FULLY REINFORCED AND DOWELED INTO EXISTING PAVEMENT WITH #4-EPOXY COATED REBAR @ 12" O.C. EACH WAY (MIN. 6" EMBEDMENT).
15. ALL WALKWAY RESURFACING SHALL MATCH EXISTING FINISHES TO THE SATISFACTION OF THE ENGINEER.





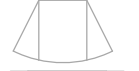





GENERAL SIGNAGE AND STRIPING NOTES:


1. ALL STRIPING AND SIGNAGE REQUIRED TO RESTORE DAMAGE TO EXISTING SHALL BE DONE IN CONFORMANCE WITH THE APPLICABLE CALTRANS STANDARD PLANS AND PROVISIONS OF THE CALTRANS STANDARD SPECIFICATIONS, INCLUDING SECTION 84 AND CITY AND COUNTY STANDARDS AND REQUIREMENTS.
2. COMPLY WITH ALL MARKING REQUIREMENTS OF AGENCY HAVING JURISDICTION. PAVEMENT LEGENDS SHALL CONFORM TO CITY OR AGENCY STENCILS. SIGNS, STRIPES, AND PAVEMENT LEGENDS SHALL BE REFLECTORIZED.
3. TRAFFIC STRIPING AND PAVEMENT MARKING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 84 AND PROJECT BID DOCUMENTS.
4. REPLACE ALL SIGNAGE DAMAGED BY THE WORK IN KIND WITH NEW PER CITY, AGENCY, JURISDICTION REQUIREMENTS.

CONSTRUCTION NOTES

- P PROTECT IN PLACE
- 1 REMOVE & REPLACE EXISTING SEWER MAIN WITH NEW 6" EXTRA STRENGTH VCP SEWER MAIN IN TRENCH PER DETAIL 1, SHEET 11. BACKFILL PER CITY STD MBSI-132A-0 (ST-10). LIMITS SHOWN ON PROFILE.
- 2 FURNISH & INSTALL NEW 8" EXTRA STRENGTH VCP SEWER MAIN IN TRENCH PER CITY STD MBSI-132A-0 (ST-10).
- 3 ABANDON IN PLACE EXISTING SEWER MANHOLE. SEE DETAIL 6, SHEET 11.
- 4 REMOVE ALL EXISTING SURFACE IMPROVEMENTS IN LINE OF PROJECT. EXCAVATE TRENCH. INSTALL TEMPORARY CLOSED SHORING. SUPPORT IN TRENCH OTHER SUBSTRUCTURES/UTILITIES. RESTORE IN KIND ALL EXISTING SURFACE IMPROVEMENTS.
- 5 REMOVE & DISPOSE OF EXISTING SEWER MANHOLE AND BASE, AND FURNISH & INSTALL CONCRETE MANHOLE AND BASE PER SPPWC STD 200-3 AND EPOXY COAT.
- 6 REMOVE & DISPOSE OF EXISTING SEWER DROP MANHOLE AND BASE, AND FURNISH & INSTALL CONCRETE DROP MANHOLE AND BASE PER SPPWC STD 202-2 AND EPOXY COAT.
- 7 REMOVE & REPLACE EXISTING PAVERS IN KIND
- 8 FURNISH & INSTALL CIPP LINER IN EXISTING 6" VCP SEWER PIPE PER LIMITS SHOWN ON PLANS AFTER COMPLETION OF ALL OTHER REPAIRS AND PIPE CLEANING. SEE DETAIL 5, SHEET 11.
- 9 RESTORE EXISTING WATER VALVE TO THE SATISFACTION OF THE CITY ENGINEER
- 10 RECONNECT SEWER LATERAL TO NEW SEWER MAIN PER DETAIL 2, SHEET 11. INSTALL NEW WYE, AND RECONSTRUCT LATERAL AS NECESSARY PER CITY STD ST-5. IF EXISTING LATERAL IS 4", INSTALL 4"X6" ECCENTRIC REDUCER.
- 11 FURNISH & INSTALL TOP HAT ON SEWER LATERAL.
- 12 SAWCUT, REMOVE, & REPLACE EXISTING CONCRETE CROSS GUTTER TO THE NEAREST JOINT PER SPPWC STD 122-2.
- 13 RECONNECT EXISTING SEWER MAIN TO MANHOLE PER DETAIL 3, SHEET 11.
- 14 ABANDON IN PLACE EXISTING SEWER PER DETAIL 4, SHEET 11.
- 15 REMOVE AND REPLACE BOLLARD
- 16 REMOVE & REPLACE SIDEWALK TO NEAREST JOINT PER CITY STD MBSI-112A-0 (ST-2).
- 17 RESTORE EXISTING WATER METERS PER CITY STD ST-15.
- 18 FURNISH & INSTALL CONCRETE MANHOLE AND BASE PER SPPWC STD 200-3 AND EPOXY COAT.
- 19 MANHOLE - 10'X10' TRENCH BOX WITH 18" TEE CUT AT PERIMETER PER CITY STD MBSI-132A-0
- 20 BORE HOLE THROUGH CIPP LINER INTO LATERAL USING REMOTE ROBOTIC CUTTING DEVICE. ENSURE NO ROUGH EDGES OR IMPEDED FLOW. REMOVE EXCESS MATERIALS.
- 21 EXTEND LATERAL.
- 22 REPLACE EXISTING CURB RAMP WITH ADA COMPLIANT CURB RAMP.
- 23 REMOVE, PROTECT, AND REPLACE OVERHEAD STRING LIGHTS.

LEGEND:

| | | | |
|----------------------------------|---|-----------------|---|
| EXISTING GAS | — G — | UTILITY VALVE |  |
| EXISTING RIGHT-OF-WAY/PROP. LINE | — — — | FIRE HYDRANT |  |
| EXISTING SANITARY SEWER | — SS — | MANHOLE |  |
| EXISTING STORM DRAIN | — SD — | POWER POLE |  |
| EXISTING WATER MAIN | — W — | RAMP |  |
| PROPOSED SEWER | — — — | DRIVEWAY |  |
| STREET CENTERLINE | — — — | CATCH BASIN |  |
| LANDSCAPE |  | SURVEY MONUMENT |  |
| WATER METER |  | | |




Know what's below.
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE. TWO WORKING DAYS BEFORE YOU DIG.

SUPPLEMENTAL NOTES:

1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SOE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.



01-16-24
DATE SIGNED

SA ASSOCIATES

CONSULTING ENGINEERS
1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

| REVIEWED | BY | DATE |
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| REVISIONS | | | |
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| NO. | DESCRIPTION | BY | DATE |
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CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

GENERAL NOTES (CONT.), LEGEND & CONSTRUCTION NOTES

REVIEWED BY: _____ DATE: _____

PROJECT MANAGER: TIM BIRTHESEL, P.E. DATE: _____

DESIGNED BY: SA ASSOCIATES DATE: 01-16-24

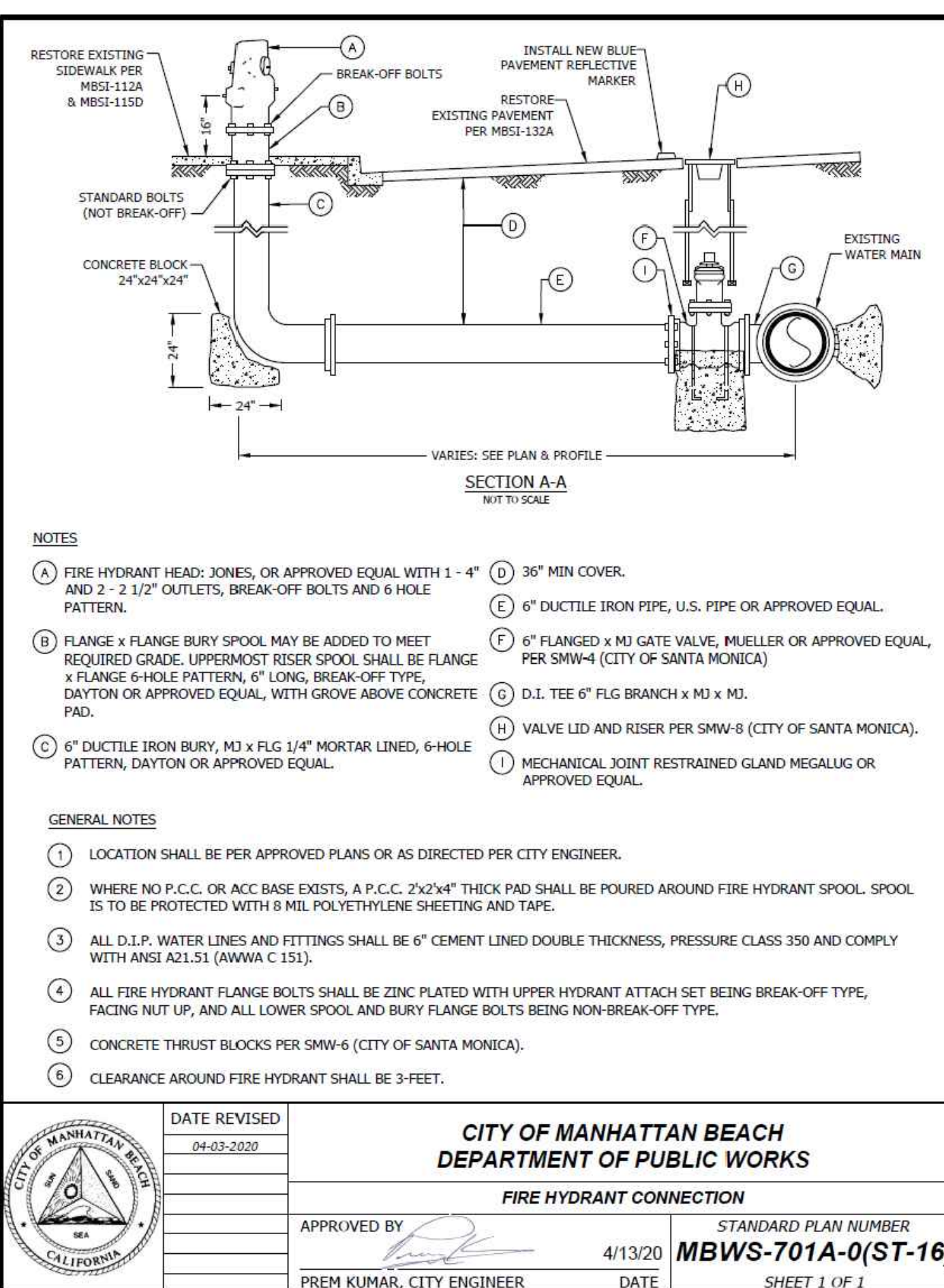
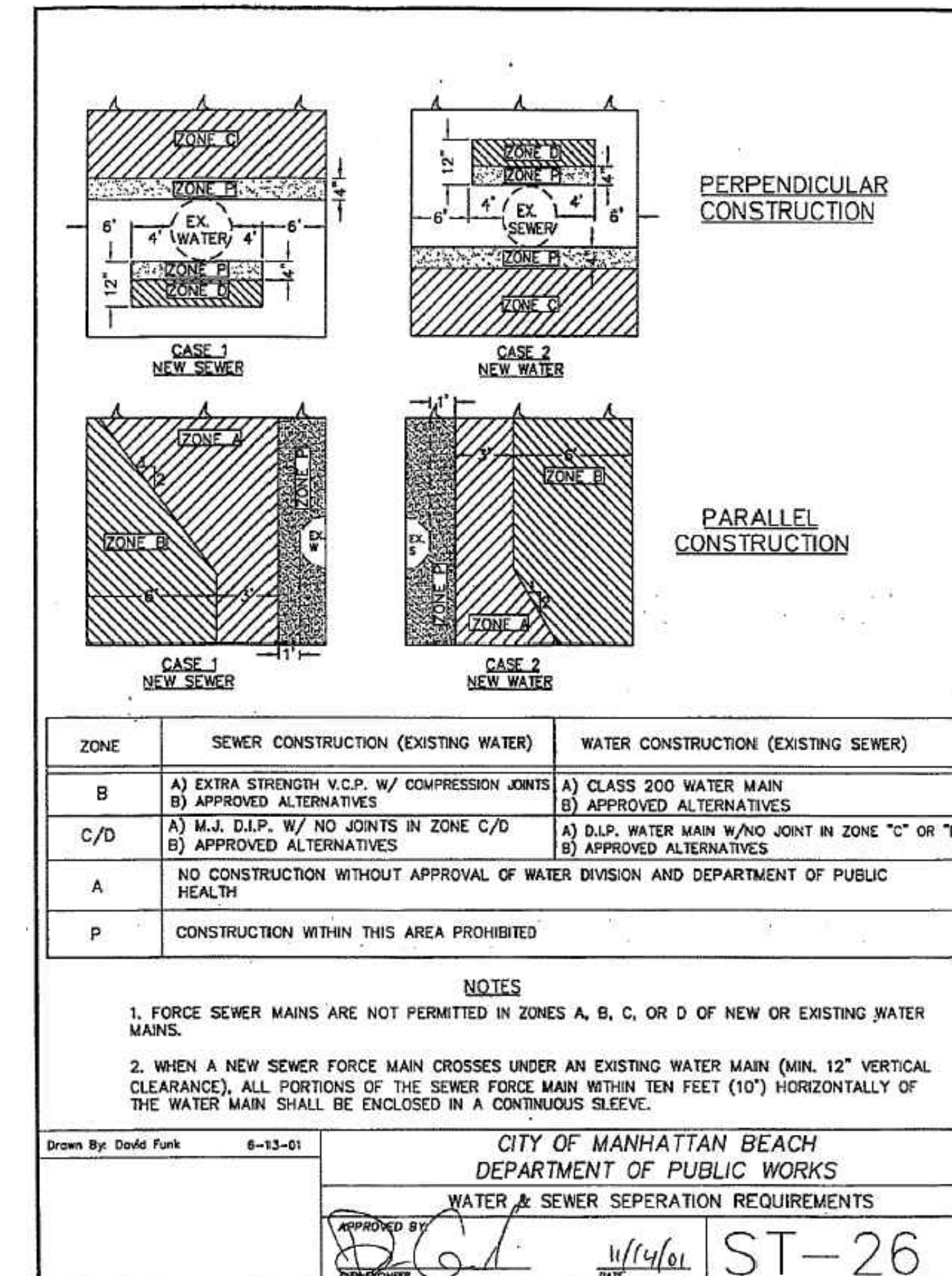
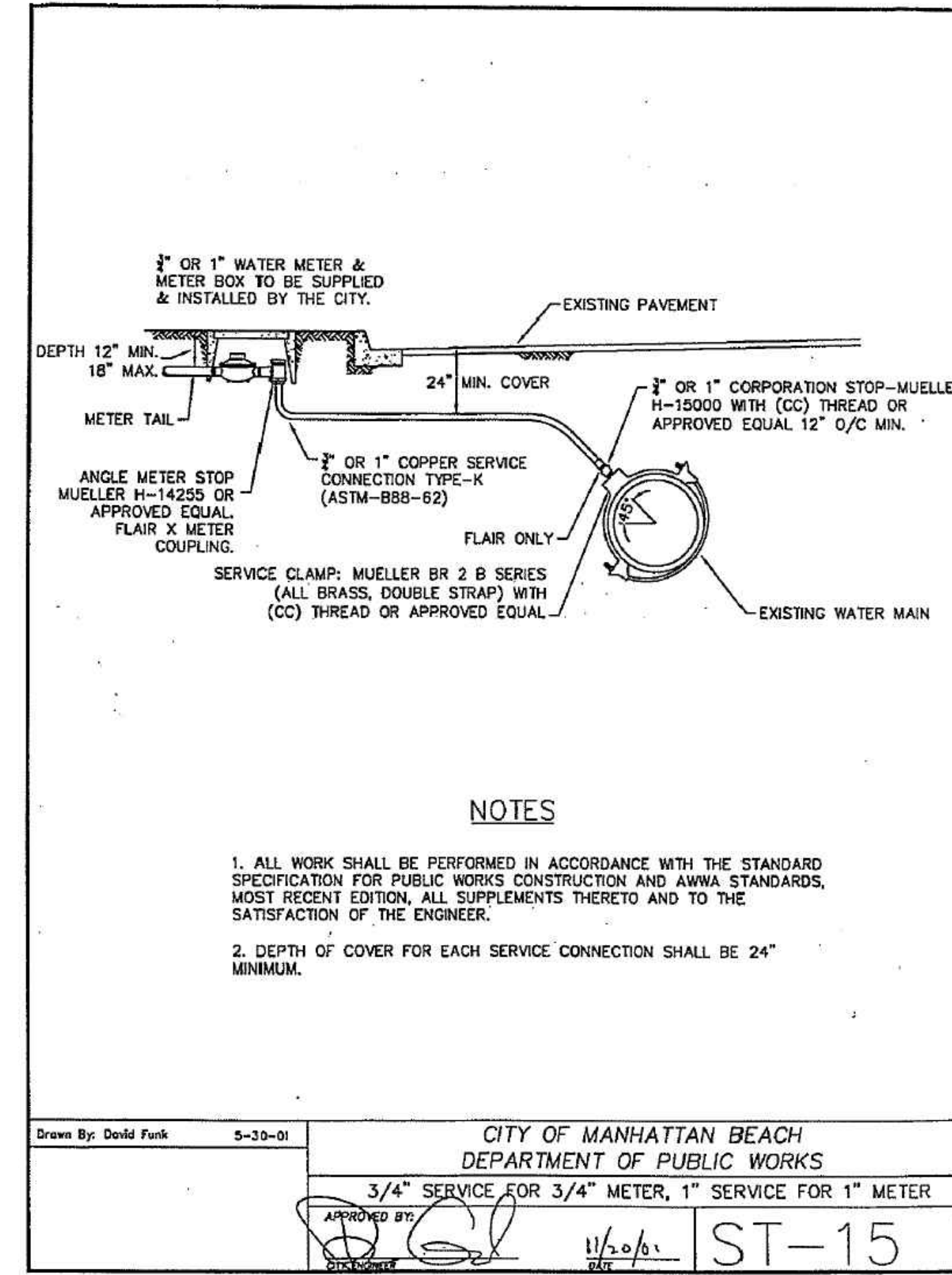
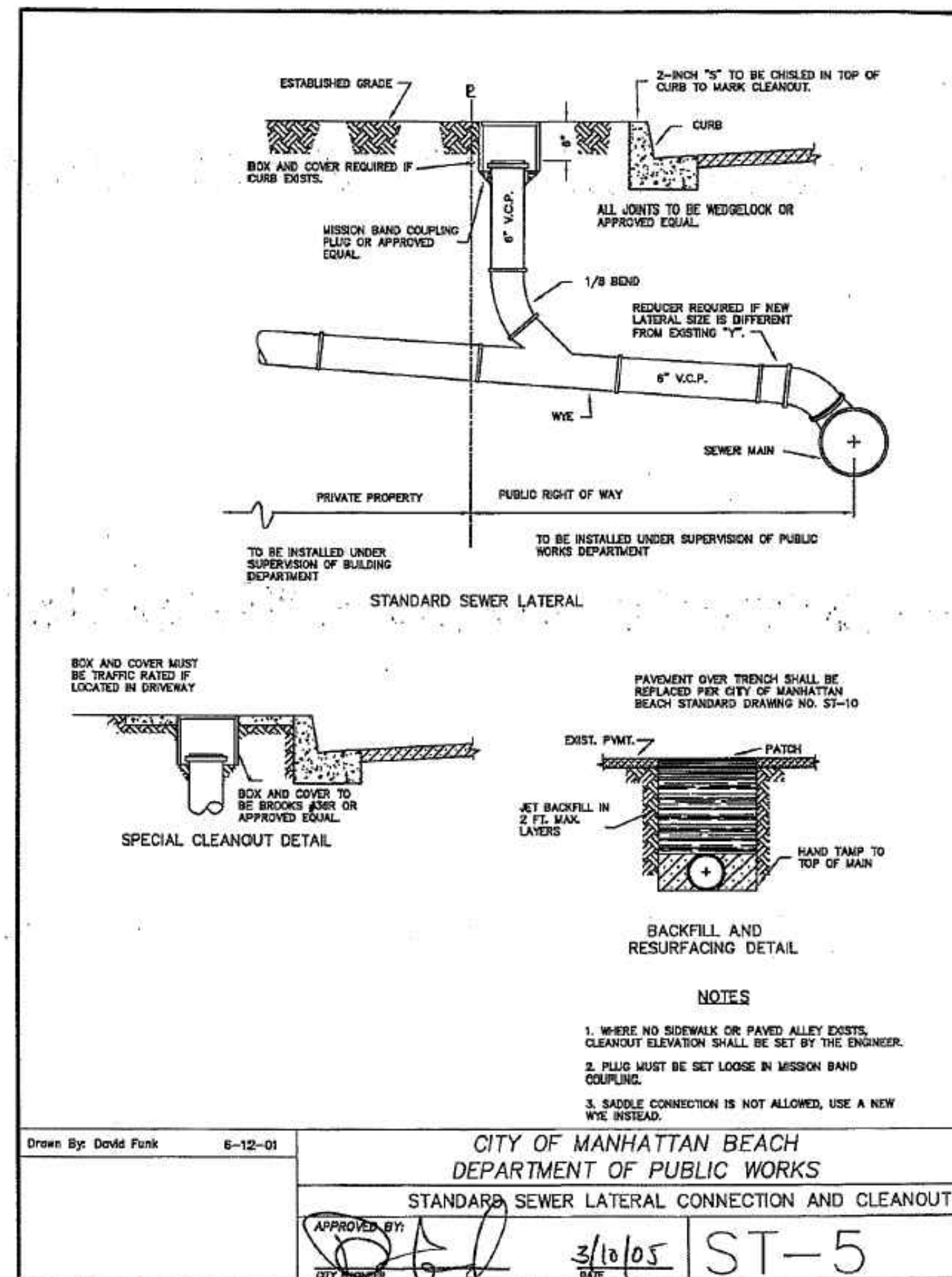
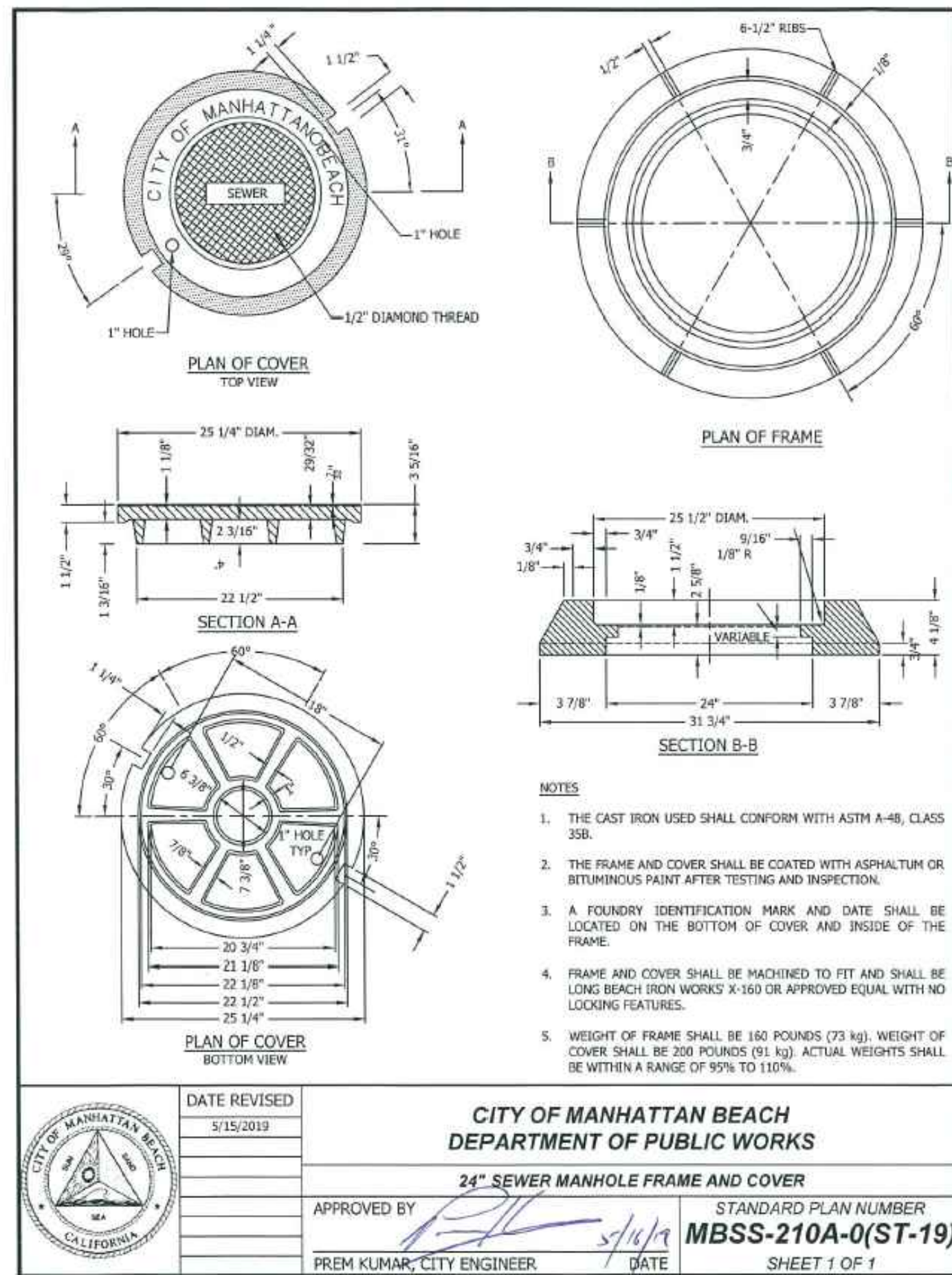
RECOMMENDED BY: KATHERINE DOHERTY DATE: _____

SCALE: 1"=40'

DATE: 01-16-24

DRAWING NO. **S-267**

SHEET 3 OF 11



811
Know what's below.
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

SUPPLEMENTAL NOTES

1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

SA ASSOCIATES
CONSULTING ENGINEERS
1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

REVIEWED BY _____ **DATE** _____

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

CITY STANDARD DETAILS

REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|-----|-------------|----|------|
| | | | |

REFERENCES

REVIEWED BY: _____ DATE: _____
RECOMMENDED BY: _____ DATE: _____

PROJECT MANAGER: TIM BIRTHESEL, P.E.
DESIGNED BY: SA ASSOCIATES
DATE: 01-16-24

CITY ENGINEER: KATHERINE DOHERTY
SCALE: 1"=40'
DATE: 01-16-24
DRAWING NO.: S-267
SHEET 5 OF 11

CONSTRUCTION NOTES

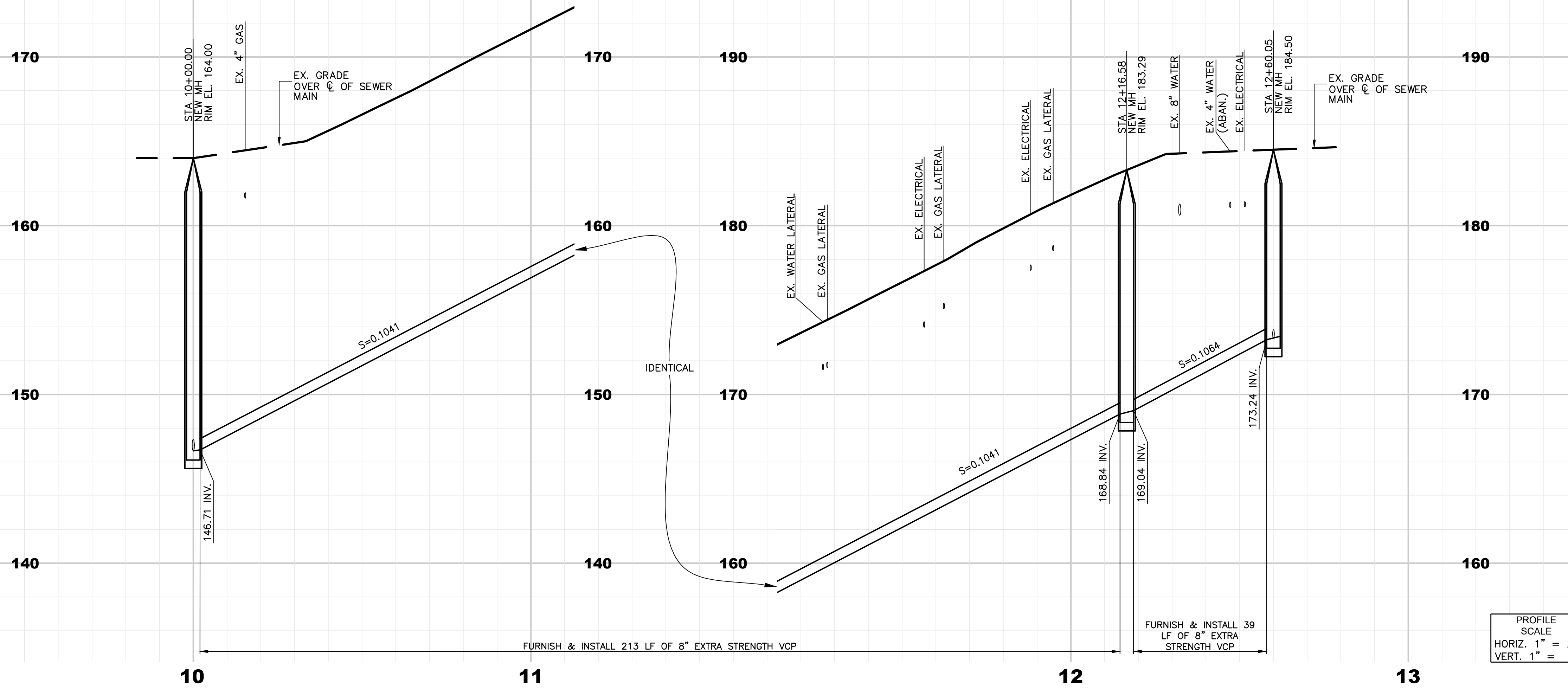
- ① PROTECT IN PLACE
- ② FURNISH & INSTALL NEW 8" EXTRA STRENGTH VCP SEWER MAIN IN TRENCH PER CITY STD MBSI-132A-0 (ST-10).
- ③ ABANDON IN PLACE EXISTING SEWER MANHOLE. SEE DETAIL 6, SHEET 11.
- ⑦ REMOVE & REPLACE EXISTING PAVERS IN KIND
- ⑨ RESTORE EXISTING WATER VALVE TO THE SATISFACTION OF THE CITY ENGINEER
- ⑩ RECONNECT SEWER LATERAL TO NEW SEWER MAIN PER DETAIL 2, SHEET 11. INSTALL NEW WYE, AND RECONSTRUCT LATERAL AS NECESSARY PER CITY STD ST-5. IF EXISTING LATERAL IS 4", INSTALL 4"x6" ECCENTRIC REDUCER.
- ⑫ SAWCUT, REMOVE, & REPLACE EXISTING CONCRETE CROSS GUTTER TO THE NEAREST JOINT PER SPPWC STD 122-2.
- ⑬ RECONNECT EXISTING SEWER MAIN TO MANHOLE PER DETAIL 3, SHEET 11.
- ⑭ ABANDON IN PLACE EXISTING SEWER PER DETAIL 4, SHEET 11.
- ⑯ REMOVE & REPLACE SIDEWALK TO NEAREST JOINT PER CITY STD MBSI-112A-0 (ST-2).
- ⑰ FURNISH & INSTALL CONCRETE MANHOLE AND BASE PER SPPWC STD 200-3 AND EPOXY COAT.
- ⑲ MANHOLE - 10"x10" TRENCH BOX WITH 18" TEE CUT AT PERIMETER PER CITY STD MBSI-132A-0
- ⑳ EXTEND LATERAL.
- ㉑ REPLACE EXISTING CURB RAMP WITH ADA COMPLIANT CURB RAMP.

SITE NOTES

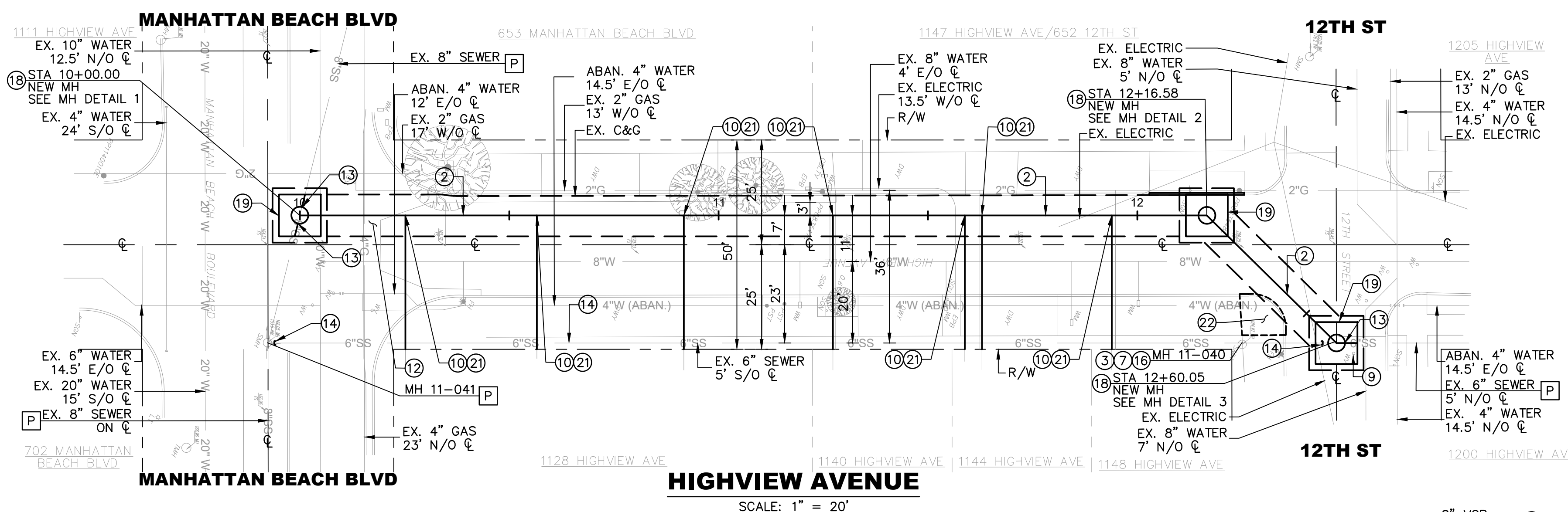
- A) EXISTING VCP SEWER PIPE IS LOCATED IN CITY OF MANHATTAN BEACH'S RIGHT-OF-WAY (ENCROACHMENT AREA).
- B) CONTRACTOR SHALL NOTE EXISTING ENCROACHMENT AREAS INCLUDE PRIVATE IMPROVEMENTS AND APPURTENANCES INCLUDING, BUT NOT LIMITED TO: AC/PCC PAVEMENT, DECORATIVE OR INTEGRAL-COLORED STAMPED PAVING, PAVERS, BRICKS, STONE TILE, WOOD, STONES/ROCKS, FENCING, FINISHED WALLS & FOOTINGS (RETAINING OR OTHERWISE), STAIRS, VARIOUS LANDSCAPING AND IRRIGATION, SYNTHETIC LAWNS, ETC.
- C) PROTECT IN PLACE EXISTING UTILITIES INCLUDING POWER POLES, STREET LIGHTS, PARKING METERS, GAS LAMPS, ETC.
- D) SUPPORT AND PROTECT IN PLACE EXISTING IMPROVEMENTS. WHERE THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT ANY PRIVATE IMPROVEMENTS, THE CONTRACTOR SHALL PROVIDE AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
- E) CONTRACTOR SHALL PROVIDE ADEQUATE TRENCHING SHORING (CONVENTIONAL AND/OR CUSTOM) FOR ALL WORK AREAS. CONTRACTOR SHALL NOTE THAT CLEAN RUNNING SAND IS ANTICIPATED TO BE ENCOUNTERED DURING EXCAVATION OPERATIONS AT THESE SITES AND SHOULD BE READILY EXCAVATED BY CONVENTIONAL, CUSTOM AND/OR MANUAL EARTHMOVING EQUIPMENT. NO GROUNDWATER IS ANTICIPATED AT THESE SITES.
- F) SAWCUT AND REMOVE EXISTING AC AND/OR PCC PAVEMENT, CURB AND GUTTER, SIDEWALK, DRIVEWAY CROSS GUTTER TO LIMITS APPROVED BY ENGINEER TO ACCOMMODATE SEWER LATERAL CONNECTIONS. RECONSTRUCT AFFECTED IMPROVEMENTS PER CITY OF MANHATTAN BEACH STANDARD DRAWING AND ENGINEER'S INSTRUCTION TO MATCH EXISTING.
- G) MAINTAIN SEWER FLOWS DURING PROJECT DURATION. FLOW CAN NOT BE INTERRUPTED. INSTALL BYPASS AS NECESSARY.
- H) NOTIFY CITY OF ANY MAJOR DEFICIENCIES (LARGE JOINT OFFSETS, ETC.) DISCOVERED FOLLOWING THE PRE-CONSTRUCTION CCTV VIDEO.

CCTV FINDINGS

- FROM MH 11-041 TO MH 11-040 (GOING UPSTREAM):
- JOINT OFFSET (MEDIUM AND LARGE), ROOT INTRUSION, CRACKS MULTIPLE AND LONGITUDINAL (MEDIUM), AND FRACTURE CIRCUMFERENTIAL (MEDIUM)

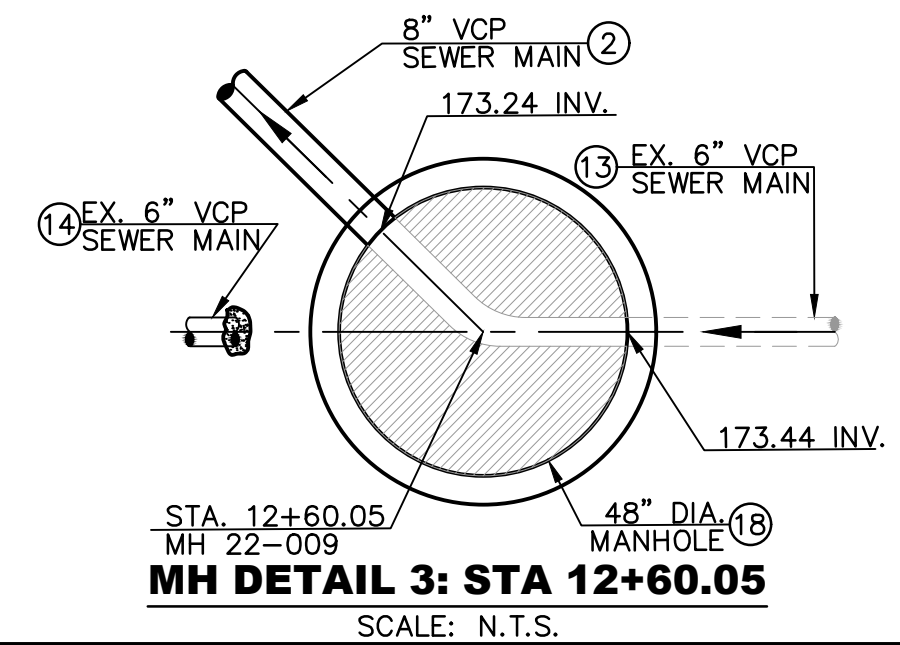
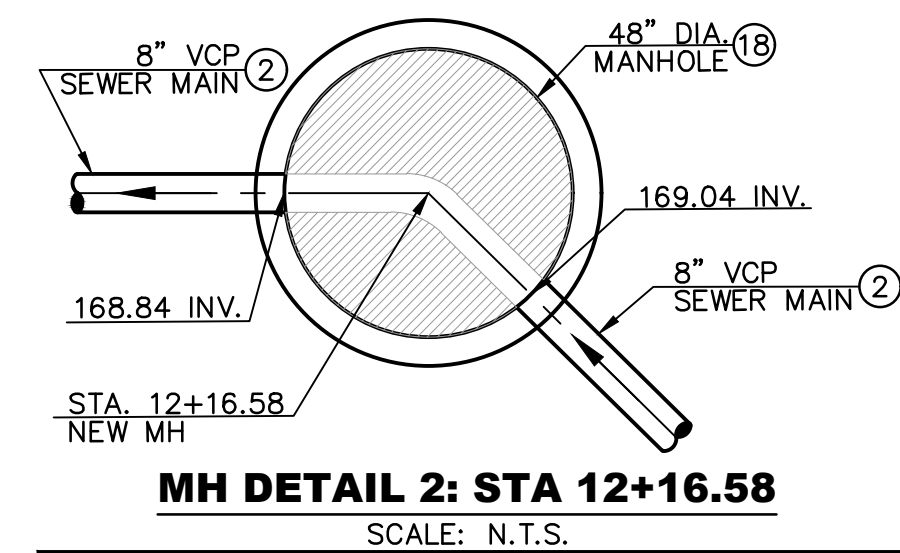
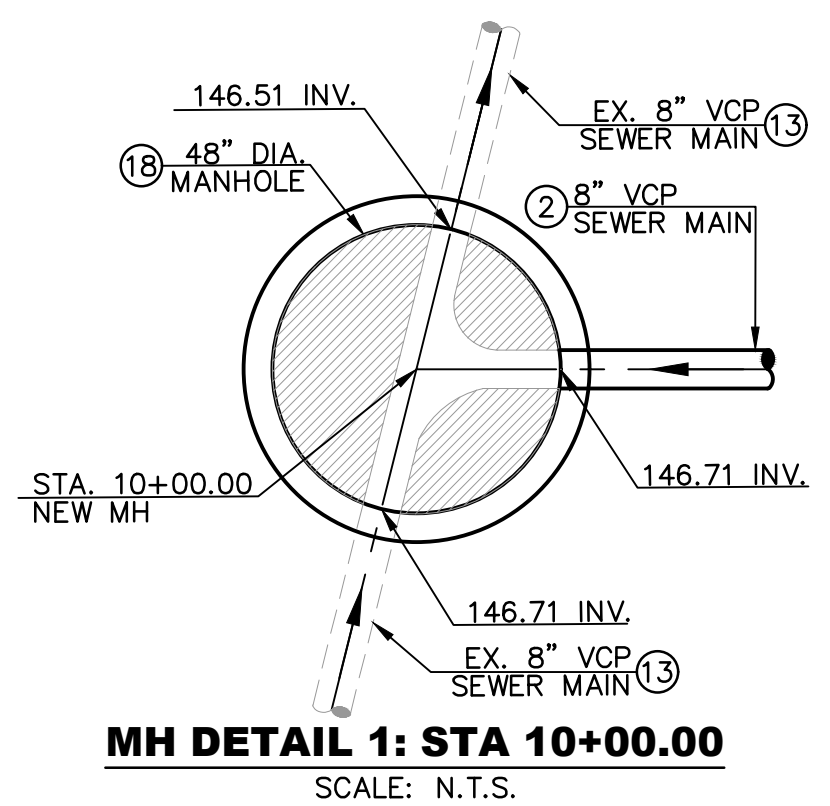


PROFILE SCALE
HORIZ. 1" = 20'
VERT. 1" = 4'



SEWER NOTES:

1. CONTRACTOR SHALL VERIFY ALL ACTIVE LATERALS AS ACTUAL FIELD CONDITIONS MAY VARY.
2. FOR FULL REPLACEMENT, CONTRACTOR SHALL POTHOLE EVERY UTILITY AND PROVIDE ALL PROFILE CLEARANCES TO THE CITY FOR REVIEW PRIOR TO PROPOSED SEWER MAIN EXCAVATION.
3. CONTRACTOR TO PROVIDE PRE AND POST CCTV INSPECTION AS SPECIFIED AND IN COMPLIANCE WITH THE NASSCO PACP REPORTING FORMAT AND CODING STANDARDS. CONTRACTOR SHALL SUBMIT TO THE CITY FOR REVIEW PRIOR TO ANY SEWER INSTALLATION.
4. CONTRACTOR TO FURNISH TO THE CITY A CONTINUOUS COLOR AUDIO VIDEO RECORDING OF ALL SURFACE FEATURES AND IMPROVEMENT OF THE ENTIRE CONSTRUCTION AREA.



SUPPLEMENTAL NOTES:

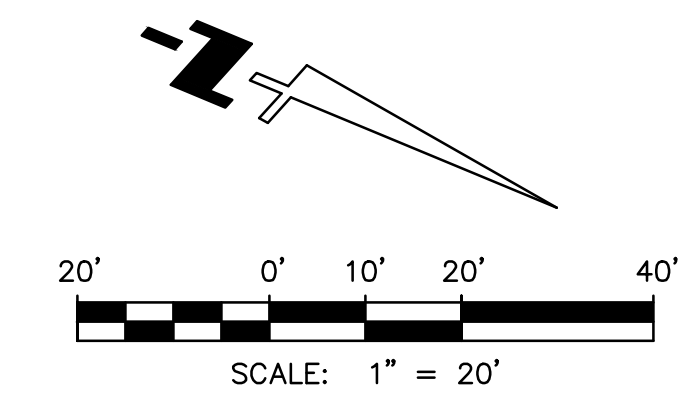
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811
Know what's below.
Call before you dig.

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SA ASSOCIATES
CONSULTING ENGINEERS
1661 N. RAYMOND AVE, SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

01-16-24
DATE SIGNED



CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

PLAN & PROFILE: HIGHVIEW AVE. (BETWEEN MANHATTAN BEACH BLVD. AND 12TH ST.)

| REVISIONS | | | |
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| REFERENCES | |
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| DESIGNED BY SA ASSOCIATES | DATE 01-16-24 | RECOMMENDED BY CITY ENGINEER KATHERINE DOHERTY | DATE |
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SCALE: 1" = 40'
DATE: 01-16-24
DRAWING NO.: S-267
SHEET 6 OF 11

CONSTRUCTION NOTES

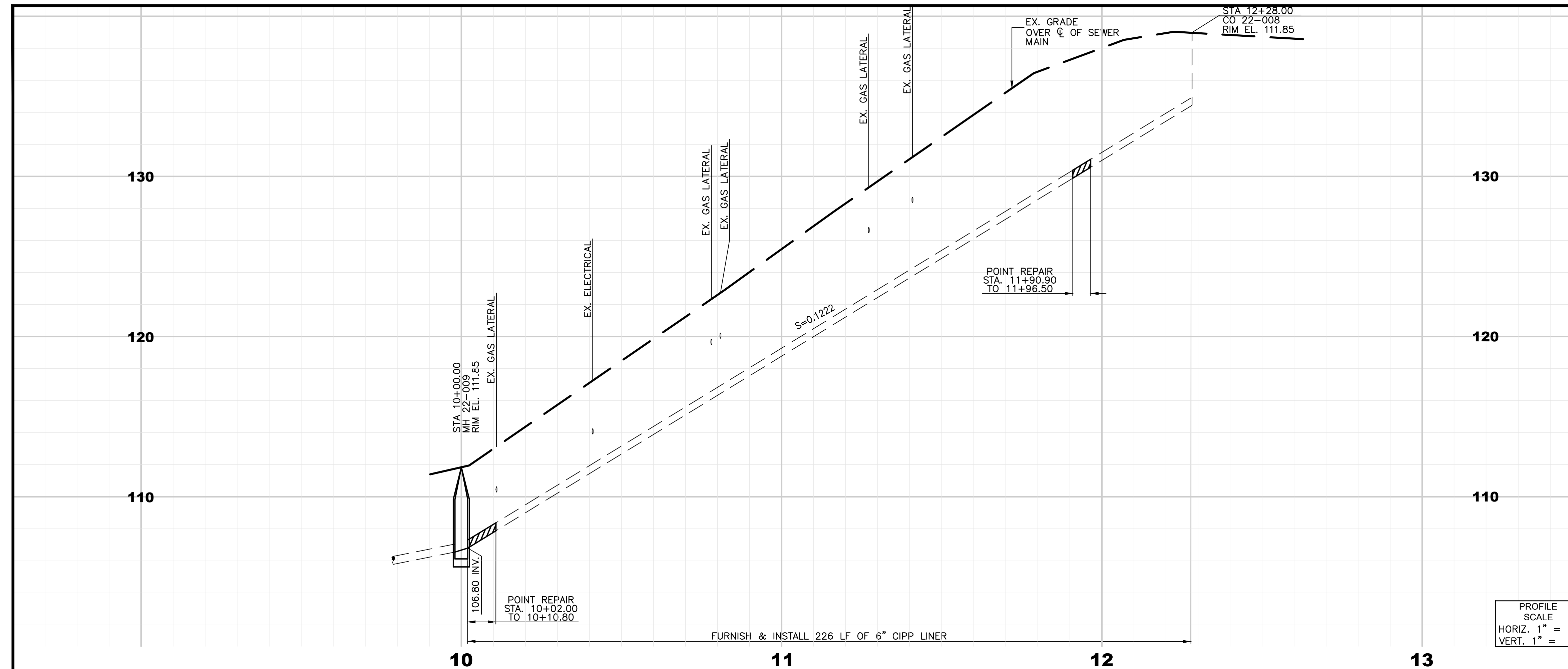
- P PROTECT IN PLACE
- 1 REMOVE & REPLACE EXISTING SEWER MAIN WITH NEW 6" EXTRA STRENGTH VCP SEWER MAIN IN TRENCH PER DETAIL 1, SHEET 11. BACKFILL PER CITY STD MBSI-132A-0 (ST-10). LIMITS SHOWN ON PROFILE.
- 4 REMOVE ALL EXISTING SURFACE IMPROVEMENTS IN LINE OF PROJECT. EXCAVATE TRENCH. INSTALL TEMPORARY CLOSED SHORING. SUPPORT IN TRENCH OTHER SUBSTRUCTURES/UTILITIES. RESTORE IN KIND ALL EXISTING SURFACE IMPROVEMENTS.
- 5 REMOVE & DISPOSE OF EXISTING SEWER MANHOLE AND BASE, AND FURNISH & INSTALL CONCRETE MANHOLE AND BASE PER SPPWC STD 200-3 AND EPOXY COAT.
- 8 FURNISH & INSTALL CIPP LINER IN EXISTING 6" VCP SEWER PIPE PER LIMITS SHOWN ON PLANS AFTER COMPLETION OF ALL OTHER REPAIRS AND PIPE CLEANING. SEE DETAIL 5, SHEET 11.
- 10 RECONNECT SEWER LATERAL TO NEW SEWER MAIN PER DETAIL 2, SHEET 11. INSTALL NEW WYE, AND RECONSTRUCT LATERAL AS NECESSARY PER CITY STD ST-5. IF EXISTING LATERAL IS 4", INSTALL 4"x6" ECCENTRIC REDUCER.
- 13 RECONNECT EXISTING SEWER MAIN TO MANHOLE PER DETAIL 3, SHEET 11.
- 15 REMOVE AND REPLACE BOLLARD
- 16 REMOVE & REPLACE SIDEWALK TO NEAREST JOINT PER CITY STD MBSI-112A-0 (ST-2).
- 20 BORE HOLE THROUGH CIPP LINER INTO LATERAL USING REMOTE ROBOTIC CUTTING DEVICE. ENSURE NO ROUGH EDGES OR IMPEDED FLOW. REMOVE EXCESS MATERIALS.
- 23 REMOVE, PROTECT, AND REPLACE OVERHEAD STRING LIGHTS.

SITE NOTES

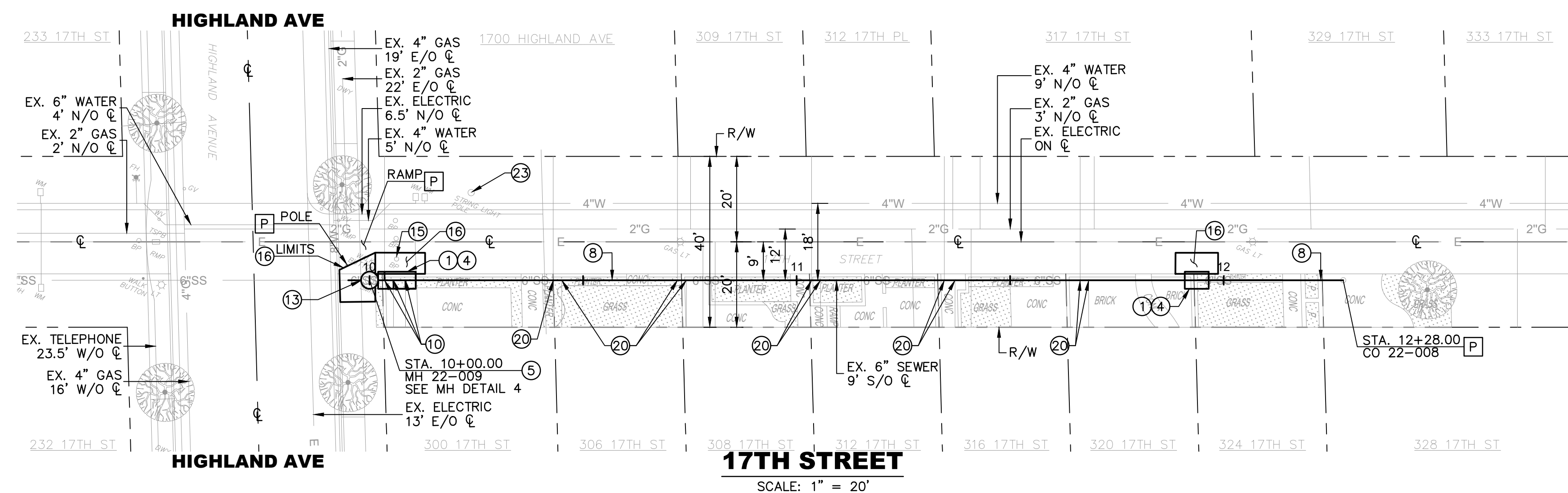
- A) EXISTING VCP SEWER PIPE IS LOCATED IN CITY OF MANHATTAN BEACH'S RIGHT-OF-WAY (ENCROACHMENT AREA).
- B) CONTRACTOR SHALL NOTE EXISTING ENCROACHMENT AREAS INCLUDE PRIVATE IMPROVEMENTS AND APPURTENANCES INCLUDING, BUT NOT LIMITED TO: AC/PCC PAVEMENT, DECORATIVE OR INTEGRAL-COLORED STAMPED PAVING, PAVERS, BRICKS, STONE TILE, WOOD, STONES/ROCKS, FENCING, FINISHED WALLS & FOOTINGS (RETAINING OR OTHERWISE), STAIRS, VARIOUS LANDSCAPING AND IRRIGATION, SYNTHETIC LAWNS, ETC.
- C) PROTECT IN PLACE EXISTING UTILITIES INCLUDING POWER POLES, STREET LIGHTS, PARKING METERS, GAS LAMPS, ETC.
- D) SUPPORT AND PROTECT IN PLACE EXISTING IMPROVEMENTS. WHERE THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT ANY PRIVATE IMPROVEMENTS, THE CONTRACTOR SHALL PROVIDE AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
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- F) SAWCUT AND REMOVE EXISTING AC AND/OR PCC PAVEMENT, CURB AND GUTTER, SIDEWALK, DRIVEWAY CROSS GUTTER TO LIMITS APPROVED BY ENGINEER TO ACCOMMODATE SEWER LATERAL CONNECTIONS. RECONSTRUCT AFFECTED IMPROVEMENTS PER CITY OF MANHATTAN BEACH STANDARD DRAWING AND ENGINEER'S INSTRUCTION TO MATCH EXISTING.
- G) MAINTAIN SEWER FLOWS DURING PROJECT DURATION. FLOW CAN NOT BE INTERRUPTED. INSTALL BYPASS AS NECESSARY.
- H) NOTIFY CITY OF ANY MAJOR DEFICIENCIES (LARGE JOINT OFFSETS, ETC.) DISCOVERED FOLLOWING THE PRE-CONSTRUCTION CCTV VIDEO.

CCTV FINDINGS

- FROM MH 22-009 TO CO 22-008 (GOING UPSTREAM):
- STA 10+02.00 TO 10+10.80 - JOINT OFFSET (MEDIUM AND LARGE), ROOT INTRUSION, AND BROKEN / SOIL VISIBLE
 - STA 11+90.90 TO 11+96.50 - JOINT OFFSET (MEDIUM) AND CRACK MULTIPLE (MEDIUM)

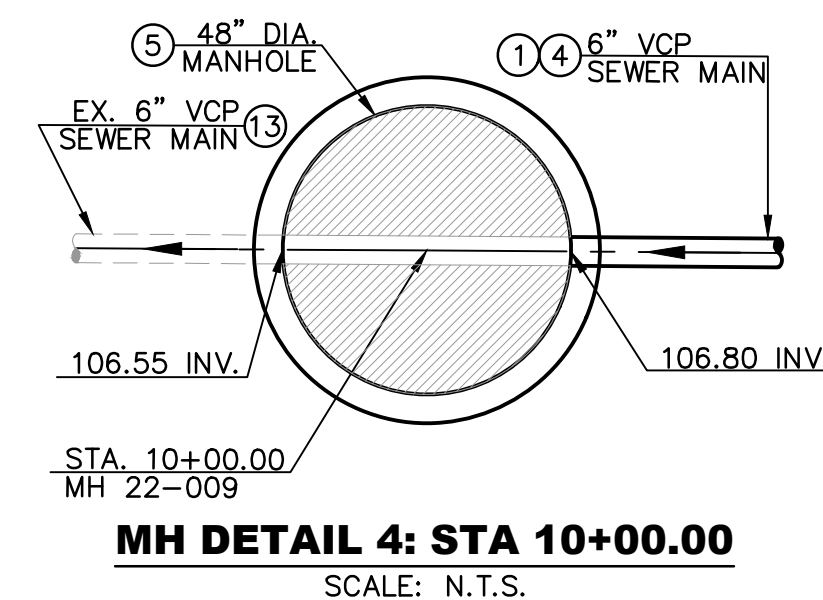


PROFILE SCALE
HORIZ. 1" = 20'
VERT. 1" = 4'



SEWER NOTES:

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3. CONTRACTOR TO PROVIDE PRE AND POST CCTV INSPECTION AS SPECIFIED AND IN COMPLIANCE WITH THE NASSCO PACP REPORTING FORMAT AND CODING STANDARDS. CONTRACTOR SHALL SUBMIT TO THE CITY FOR REVIEW PRIOR TO ANY CIPP INSTALLATION.
4. CONTRACTOR TO FURNISH TO THE CITY A CONTINUOUS COLOR AUDIO VIDEO RECORDING OF ALL SURFACE FEATURES AND IMPROVEMENT OF THE ENTIRE CONSTRUCTION AREA.
5. CONTRACTOR TO PROTECT/SUPPORT GAS LAMPS AND COORDINATE PEDESTRIAN CLOSURE/ACCESS DURING CONSTRUCTION. MAIL IS DROPPED FROM WALK STREET SIDE.



MH DETAIL 4: STA 10+00.00
SCALE: N.T.S.

811
Know what's below.
Call before you dig.

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SUPPLEMENTAL NOTES:

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SA ASSOCIATES
CONSULTING ENGINEERS
1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

01-16-24
DATE SIGNED

| REVIEWED BY | DATE |
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CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

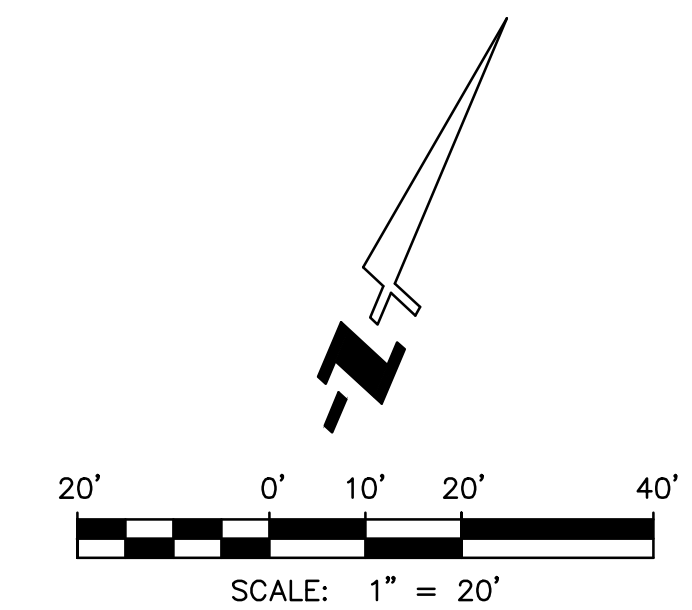
CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

PLAN & PROFILE: 17TH ST. (BETWEEN HIGHLAND AVE. AND LIVE OAK PARK)

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REVIEWED BY: _____ DATE: _____
PROJECT MANAGER: TIM BIRTHESEL, P.E. DATE: _____
DESIGNED BY: SA ASSOCIATES DATE: 01-16-24

CITY ENGINEER: KATHERINE DOHERTY DATE: _____
SCALE: 1"=40' DATE: 01-16-24 DRAWING NO.: S-267
SHEET 7 OF 11



CONSTRUCTION NOTES

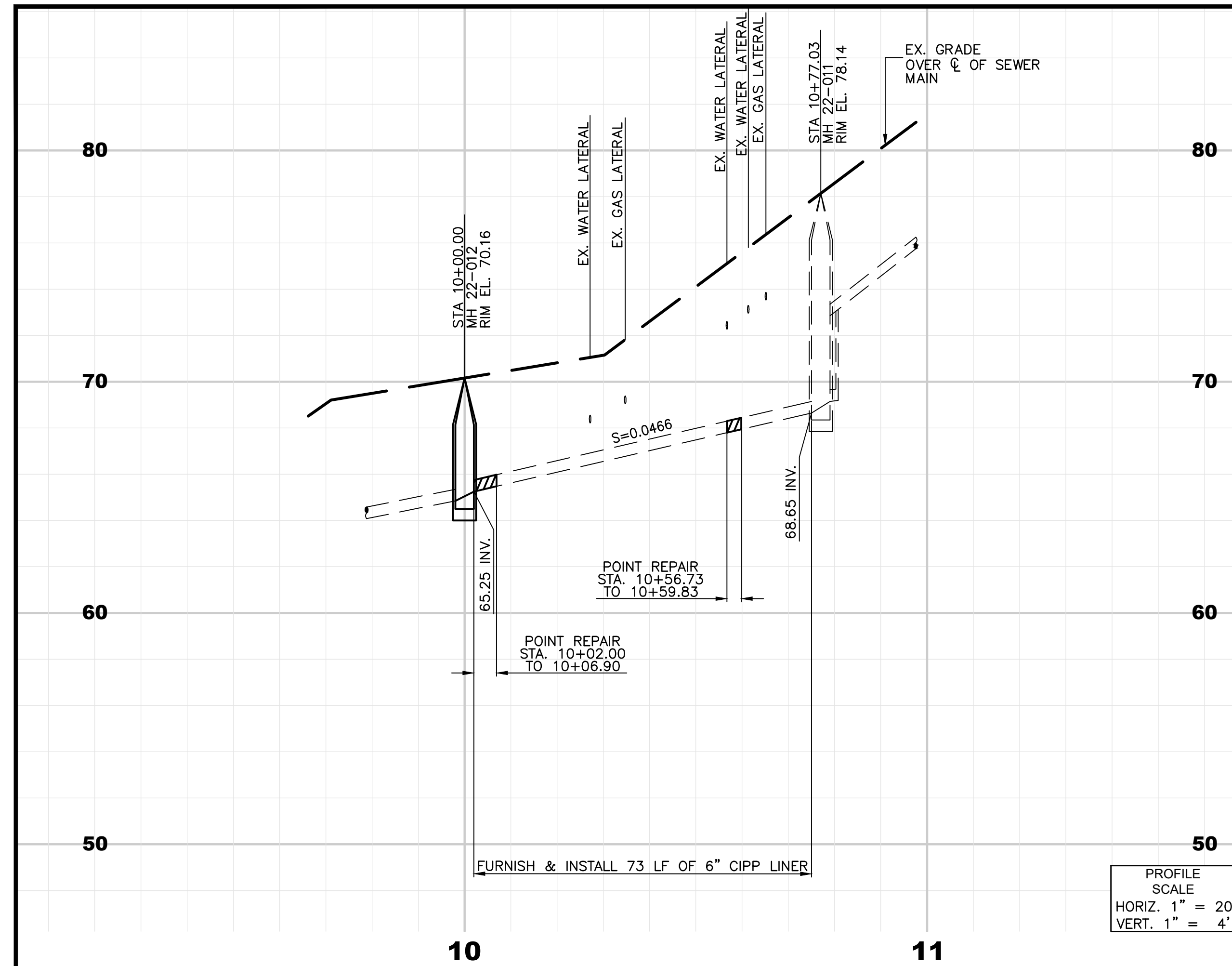
- P PROTECT IN PLACE
- 1 REMOVE & REPLACE EXISTING SEWER MAIN WITH NEW 6" EXTRA STRENGTH VCP SEWER MAIN IN TRENCH PER DETAIL 1, SHEET 11. BACKFILL PER CITY STD MBSI-132A-0 (ST-10). LIMITS SHOWN ON PROFILE.
- 4 REMOVE ALL EXISTING SURFACE IMPROVEMENTS IN LINE OF PROJECT. EXCAVATE TRENCH. INSTALL TEMPORARY CLOSED SHORING. SUPPORT IN TRENCH OTHER SUBSTRUCTURES/UTILITIES. RESTORE IN KIND ALL EXISTING SURFACE IMPROVEMENTS.
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- 8 FURNISH & INSTALL CIPP LINER IN EXISTING 6" VCP SEWER PIPE PER LIMITS SHOWN ON PLANS AFTER COMPLETION OF ALL OTHER REPAIRS AND PIPE CLEANING. SEE DETAIL 5, SHEET 11.
- 10 RECONNECT SEWER LATERAL TO NEW SEWER MAIN PER DETAIL 2, SHEET 11. INSTALL NEW WYE, AND RECONSTRUCT LATERAL AS NECESSARY PER CITY STD ST-5. IF EXISTING LATERAL IS 4", INSTALL 4"x6" ECCENTRIC REDUCER.
- 11 FURNISH & INSTALL TOP HAT ON SEWER LATERAL.
- 13 RECONNECT EXISTING SEWER MAIN TO MANHOLE PER DETAIL 3, SHEET 11.
- 16 REMOVE & REPLACE SIDEWALK TO NEAREST JOINT PER CITY STD MBSI-112A-0 (ST-2).
- 17 RESTORE EXISTING WATER METERS PER CITY STD ST-15.
- 19 MANHOLE - 10'x10' TRENCH BOX WITH 18" TEE CUT AT PERIMETER PER CITY STD MBSI-132A-0
- 20 BORE HOLE THROUGH CIPP LINER INTO LATERAL USING REMOTE ROBOTIC CUTTING DEVICE. ENSURE NO ROUGH EDGES OR IMPEDED FLOW. REMOVE EXCESS MATERIALS.

SITE NOTES

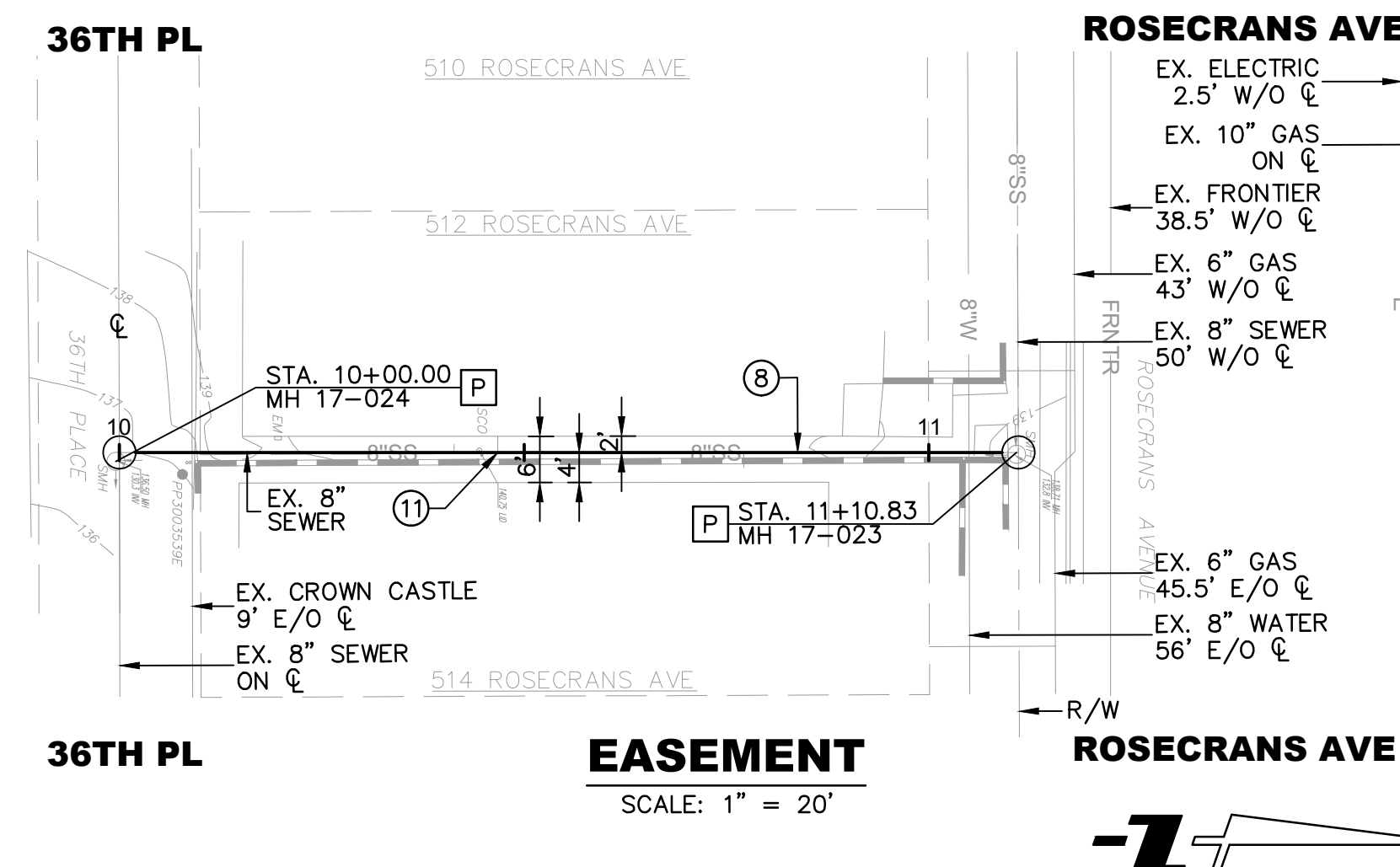
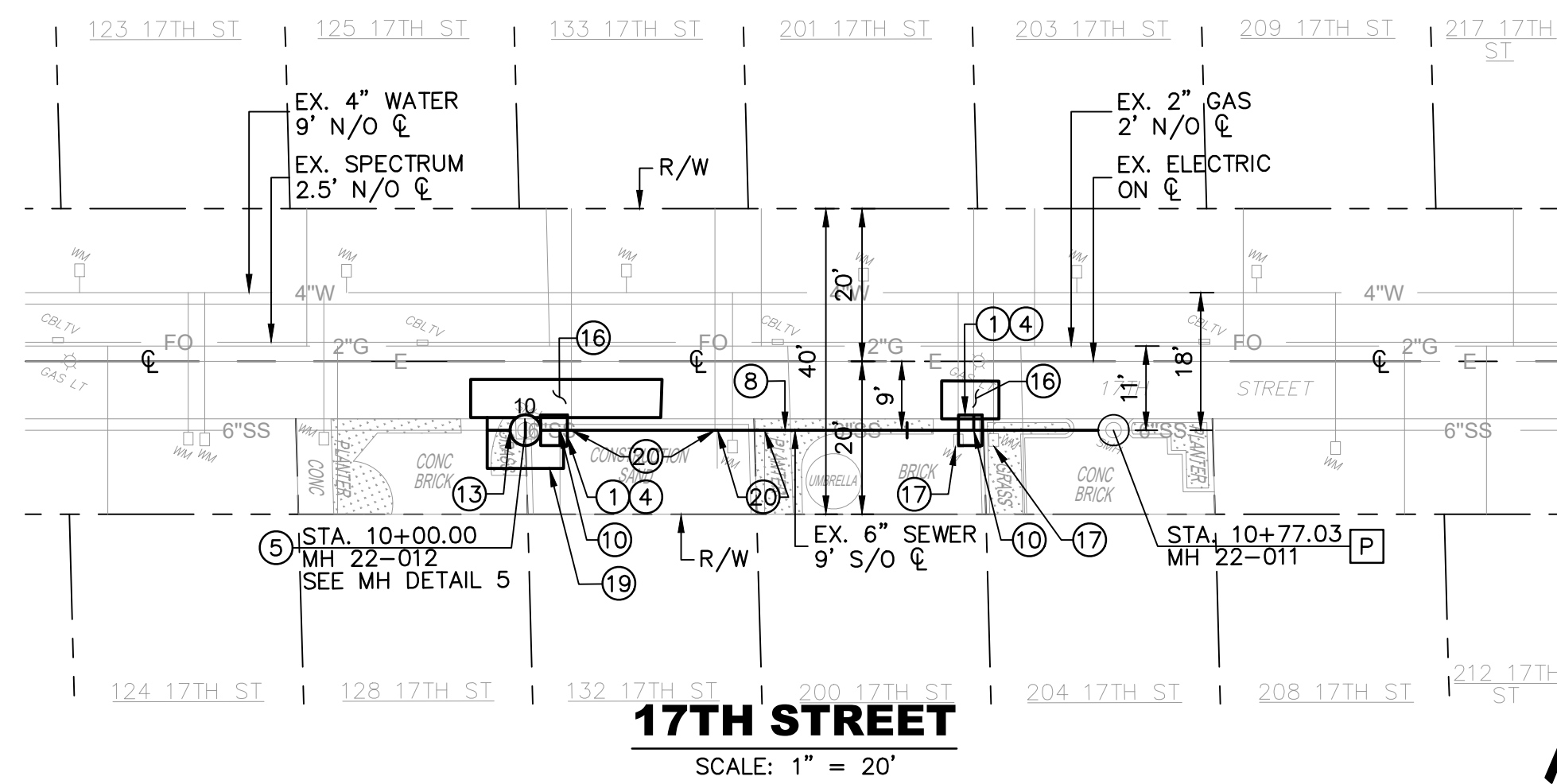
- A) EXISTING VCP SEWER PIPE IS LOCATED IN CITY OF MANHATTAN BEACH'S RIGHT-OF-WAY (ENCROACHMENT AREA).
- B) CONTRACTOR SHALL NOTE EXISTING ENCROACHMENT AREAS INCLUDE PRIVATE IMPROVEMENTS AND APPURTENANCES INCLUDING, BUT NOT LIMITED TO: AC/PCC PAVEMENT, DECORATIVE OR INTEGRAL-COLORED STAMPED PAVING, PAVERS, BRICKS, STONE TILE, WOOD, STONES/ROCKS, FENCING, FINISHED WALLS & FOOTINGS (RETAINING OR OTHERWISE), STAIRS, VARIOUS LANDSCAPING AND IRRIGATION, SYNTHETIC LAWNS, ETC.
- C) PROTECT IN PLACE EXISTING UTILITIES INCLUDING POWER POLES, STREET LIGHTS, PARKING METERS, GAS LAMPS, ETC.
- D) SUPPORT AND PROTECT IN PLACE EXISTING IMPROVEMENTS. WHERE THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT ANY PRIVATE IMPROVEMENTS, THE CONTRACTOR SHALL PROVIDE AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
- E) CONTRACTOR SHALL PROVIDE ADEQUATE TRENCHING SHORING (CONVENTIONAL AND/OR CUSTOM) FOR ALL WORK AREAS. CONTRACTOR SHALL NOTE THAT CLEAN RUNNING SAND IS ANTICIPATED TO BE ENCOUNTERED DURING EXCAVATION OPERATIONS AT THESE SITES AND SHOULD BE READILY EXCAVATED BY CONVENTIONAL CUSTOM AND/OR MANUAL EARTHMOVING EQUIPMENT. NO GROUNDWATER IS ANTICIPATED AT THESE SITES.
- F) SAWCUT AND REMOVE EXISTING AC AND/OR PCC PAVEMENT, CURB AND GUTTER, SIDEWALK, DRIVEWAY CROSS GUTTER TO LIMITS APPROVED BY ENGINEER TO ACCOMMODATE SEWER LATERAL CONNECTIONS. RECONSTRUCT AFFECTED IMPROVEMENTS PER CITY OF MANHATTAN BEACH STANDARD DRAWING AND ENGINEER'S INSTRUCTION TO MATCH EXISTING.
- G) MAINTAIN SEWER FLOWS DURING PROJECT DURATION. FLOW CAN NOT BE INTERRUPTED. INSTALL BYPASS AS NECESSARY.
- H) NOTIFY CITY OF ANY MAJOR DEFICIENCIES (LARGE JOINT OFFSETS, ETC.) DISCOVERED FOLLOWING THE PRE-CONSTRUCTION CCTV VIDEO.

CCTV FINDINGS

- FROM MH 22-012 TO MH 22-011 (GOING UPSTREAM):
- STA 10+02.00 TO 10+06.90 - ROOT INTRUSION, JOINT OFFSET (LARGE), AND BROKEN / SOIL VISIBLE
 - STA 10+56.73 TO 10+59.83 - CRACK CIRCUMFERENTIAL (LARGE)

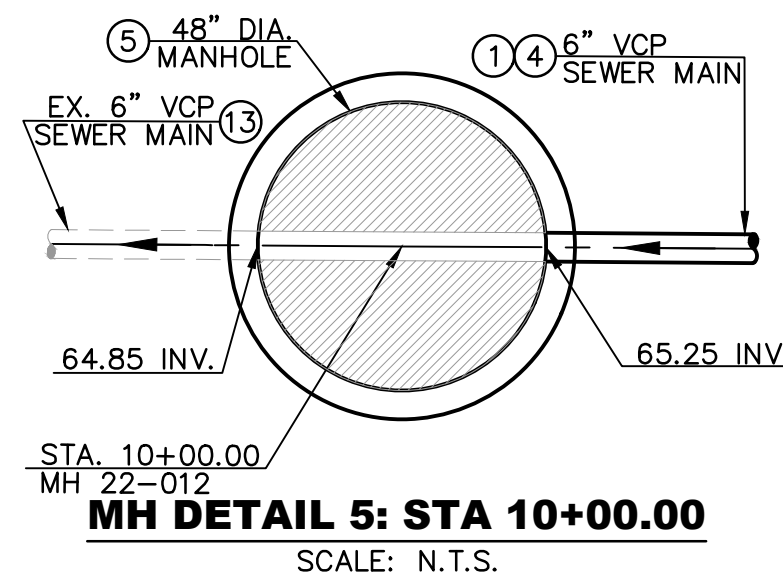


PROFILE SCALE
HORIZ. 1" = 20'
VERT. 1" = 4'



SEWER NOTES:

1. CONTRACTOR SHALL VERIFY ALL ACTIVE LATERALS AS ACTUAL FIELD CONDITIONS MAY VARY.
2. FOR FULL REPLACEMENT, CONTRACTOR SHALL POTHOLE EVERY UTILITY AND PROVIDE ALL PROFILE CLEARANCES TO THE CITY FOR REVIEW PRIOR TO PROPOSED SEWER MAIN EXCAVATION.
3. CONTRACTOR TO PROVIDE PRE AND POST CCTV INSPECTION AS SPECIFIED AND IN COMPLIANCE WITH THE NASSCO PACP REPORTING FORMAT AND CODING STANDARDS. CONTRACTOR SHALL SUBMIT TO THE CITY FOR REVIEW PRIOR TO ANY CIPP INSTALLATION.
4. CONTRACTOR TO FURNISH TO THE CITY A CONTINUOUS COLOR AUDIO VIDEO RECORDING OF ALL SURFACE FEATURES AND IMPROVEMENT OF THE ENTIRE CONSTRUCTION AREA.
5. CONTRACTOR TO PROTECT/SUPPORT GAS LAMPS AND COORDINATE PEDESTRIAN CLOSURE/ACCESS DURING CONSTRUCTION. MAIL IS DROPPED FROM WALK STREET SIDE.



SUPPLEMENTAL NOTES:

1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS GSE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

811
Know what's below.
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

SA ASSOCIATES
CONSULTING ENGINEERS
1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

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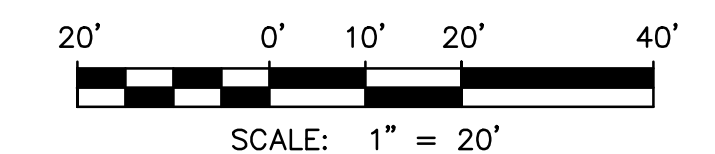
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| SA ASSOCIATES | 01-16-24 |

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT
PLAN & PROFILE: 17TH ST. (BETWEEN OCEAN DR. AND HIGHLAND AVE.)
EASEMENT (BETWEEN 36TH PL. AND ROSECRANS AVE., EAST OF GRANDVIEW AVE.)

| | | | |
|--------------------------------------|------------------|------------------------------------|---------------|
| PROJECT MANAGER TIM BIRTHEL, P.E. | DATE | CITY ENGINEER KATHERINE DOHERTY | DATE |
| SCALE 1"=40' | DATE 01-16-24 | DRAWING NO. S-267 | SHEET 8 OF 11 |



CONSTRUCTION NOTES

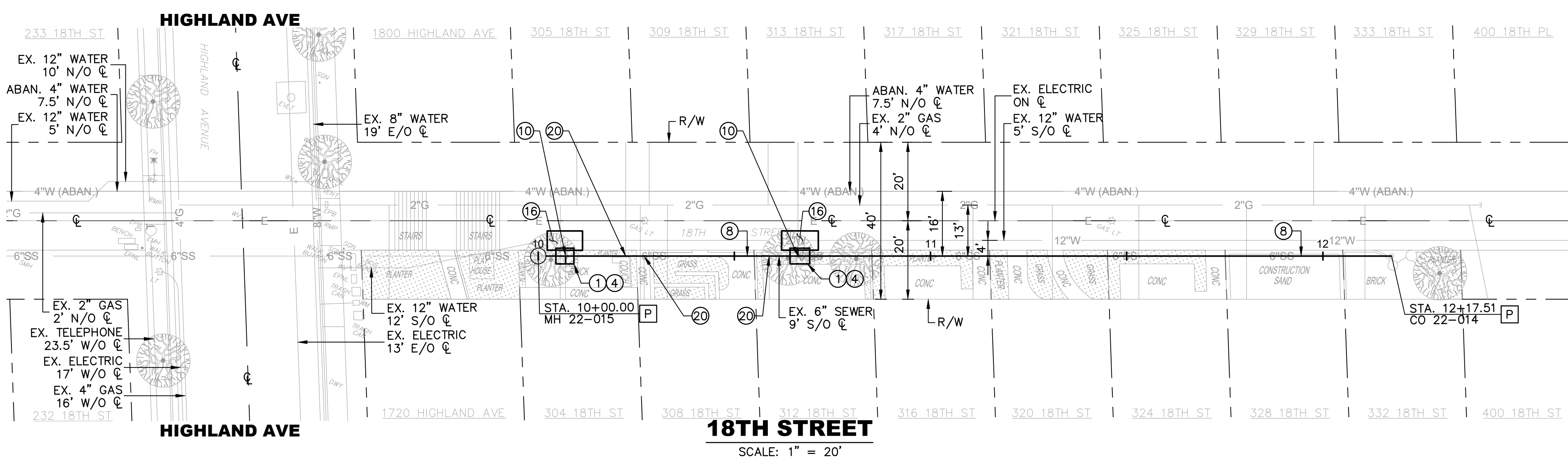
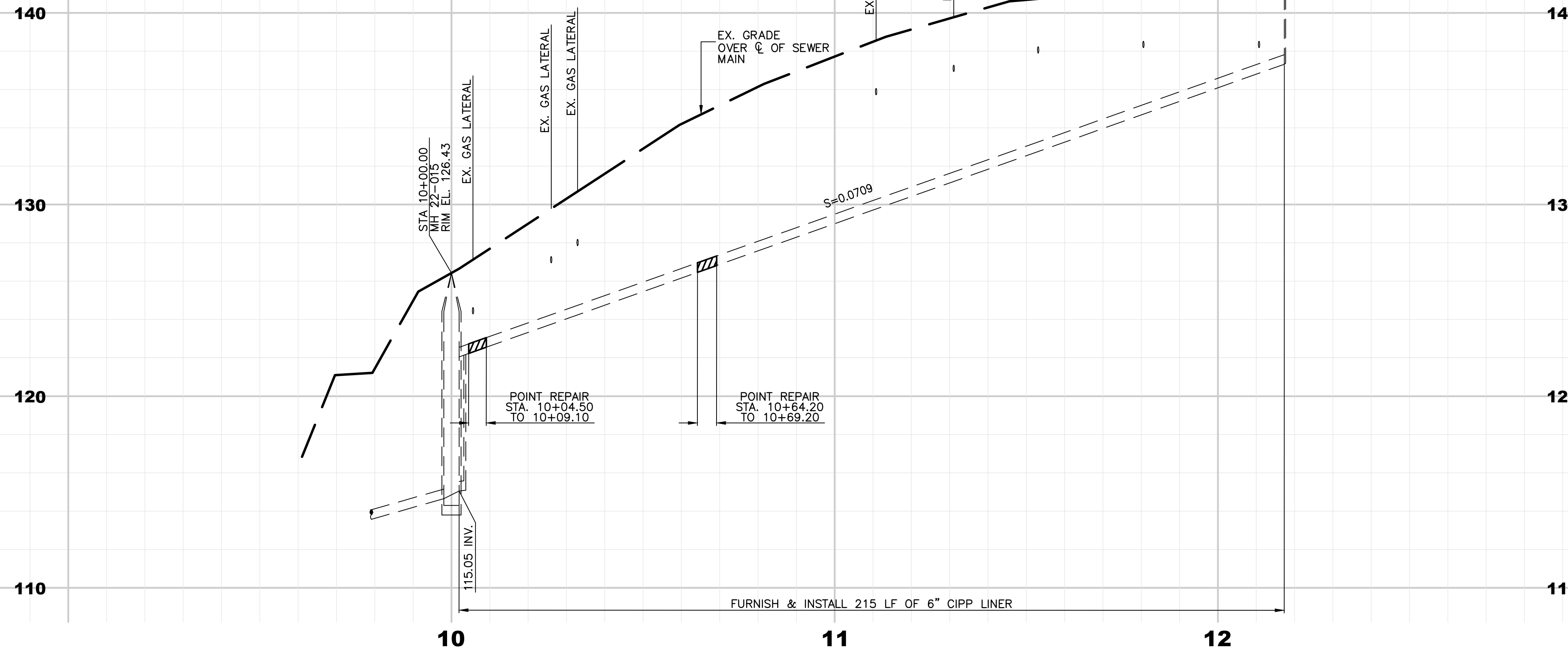
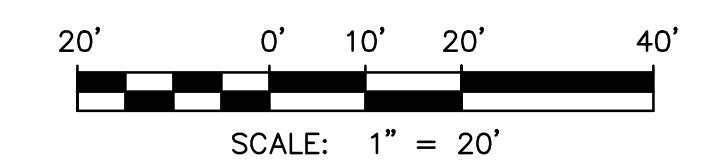
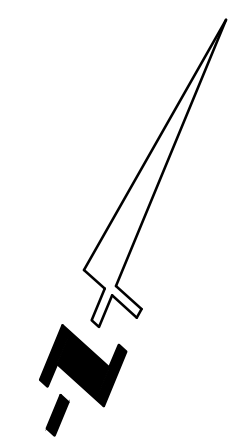
- P PROTECT IN PLACE
- 1 REMOVE & REPLACE EXISTING SEWER MAIN WITH NEW 6" EXTRA STRENGTH VCP SEWER MAIN IN TRENCH PER DETAIL 1, SHEET 11. BACKFILL PER CITY STD MBSI-132A-0 (ST-10). LIMITS SHOWN ON PROFILE.
- 4 REMOVE ALL EXISTING SURFACE IMPROVEMENTS IN LINE OF PROJECT. EXCAVATE TRENCH. INSTALL TEMPORARY CLOSED SHORING. SUPPORT IN TRENCH OTHER SUBSTRUCTURES/UTILITIES. RESTORE IN KIND ALL EXISTING SURFACE IMPROVEMENTS.
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- H) NOTIFY CITY OF ANY MAJOR DEFICIENCIES (LARGE JOINT OFFSETS, ETC.) DISCOVERED FOLLOWING THE PRE-CONSTRUCTION CCTV VIDEO.

CCTV FINDINGS

- FROM MH 22-015 TO CO 22-014 (GOING UPSTREAM):
- STA 10+04.50 TO 10+09.10 - JOINT OFFSET (MEDIUM AND LARGE), CRACK LONGITUDINAL, BROKEN / SOIL VISIBLE, AND ROOT INTRUSION
 - STA 10+64.20 TO 10+69.20 - JOINT OFFSET (LARGE)



SEWER NOTES:

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NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE. TWO WORKING DAYS BEFORE YOU DIG.

SUPPLEMENTAL NOTES:

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3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

01-16-24
DATE SIGNED

SA ASSOCIATES
CONSULTING ENGINEERS
1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

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| REVIEWED BY | DATE |
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CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

PLAN & PROFILE: 18TH ST. (BETWEEN HIGHLAND AVE. AND LIVE OAK PARK)

| <table border="1"> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> | REVISIONS | | | | NO. | DESCRIPTION | BY | DATE | | | | | <table border="1"> <tr> <th colspan="2">REFERENCES</th> </tr> <tr> <td> </td> <td> </td> </tr> </table> | REFERENCES | | | |
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| REVISIONS | | | | | | | | | | | | | | | | | |
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| <table border="1"> <tr> <td>REVIEWED BY</td> <td>DATE</td> </tr> <tr> <td> </td> <td> </td> </tr> </table> | REVIEWED BY | DATE | | | <table border="1"> <tr> <td>RECOMMENDED BY</td> <td>DATE</td> </tr> <tr> <td>PROJECT MANAGER TIM BIRTHESEL, P.E.</td> <td> </td> </tr> <tr> <td>DESIGNED BY SA ASSOCIATES</td> <td>01-16-24</td> </tr> </table> | RECOMMENDED BY | DATE | PROJECT MANAGER TIM BIRTHESEL, P.E. | | DESIGNED BY SA ASSOCIATES | 01-16-24 | | | | | | |
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| PROJECT MANAGER TIM BIRTHESEL, P.E. | | | | | | | | | | | | | | | | | |
| DESIGNED BY SA ASSOCIATES | 01-16-24 | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>CITY ENGINEER KATHERINE DOHERTY</td> <td>DATE</td> </tr> <tr> <td> </td> <td> </td> </tr> </table> | CITY ENGINEER KATHERINE DOHERTY | DATE | | | <table border="1"> <tr> <td>SCALE 1"=40'</td> <td>DATE 01-16-24</td> <td>DRAWING NO. S-267</td> </tr> <tr> <td>SHEET 9</td> <td>OF 11</td> <td> </td> </tr> </table> | SCALE 1"=40' | DATE 01-16-24 | DRAWING NO. S-267 | SHEET 9 | OF 11 | | | | | | | |
| CITY ENGINEER KATHERINE DOHERTY | DATE | | | | | | | | | | | | | | | | |
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| SCALE 1"=40' | DATE 01-16-24 | DRAWING NO. S-267 | | | | | | | | | | | | | | | |
| SHEET 9 | OF 11 | | | | | | | | | | | | | | | | |

CONSTRUCTION NOTES

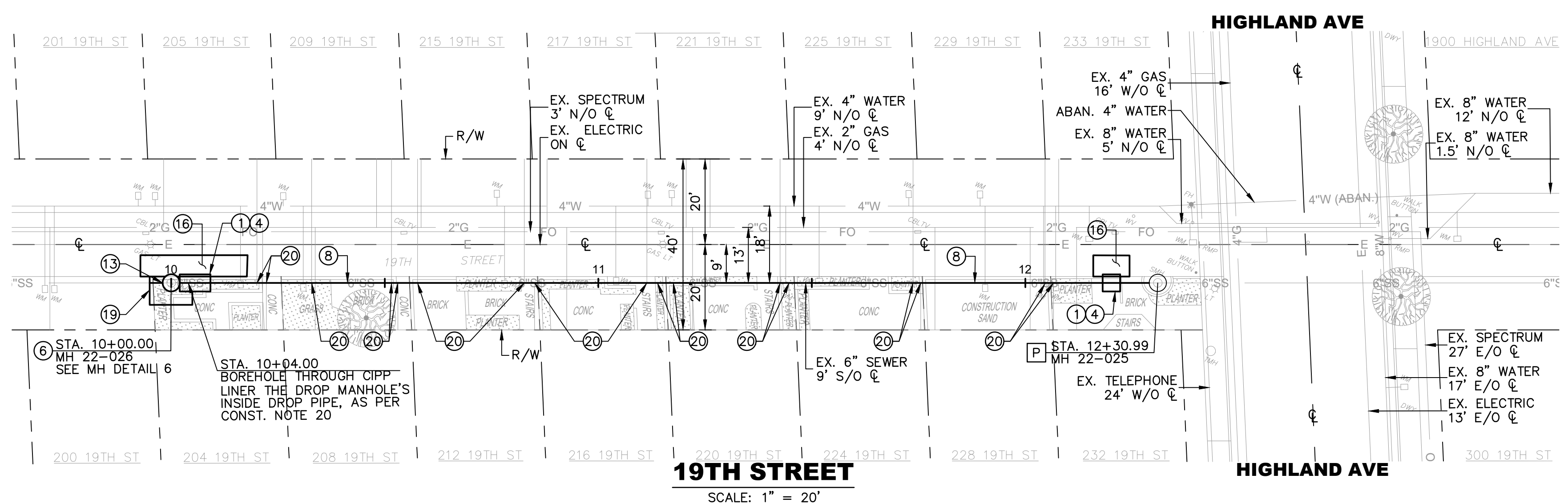
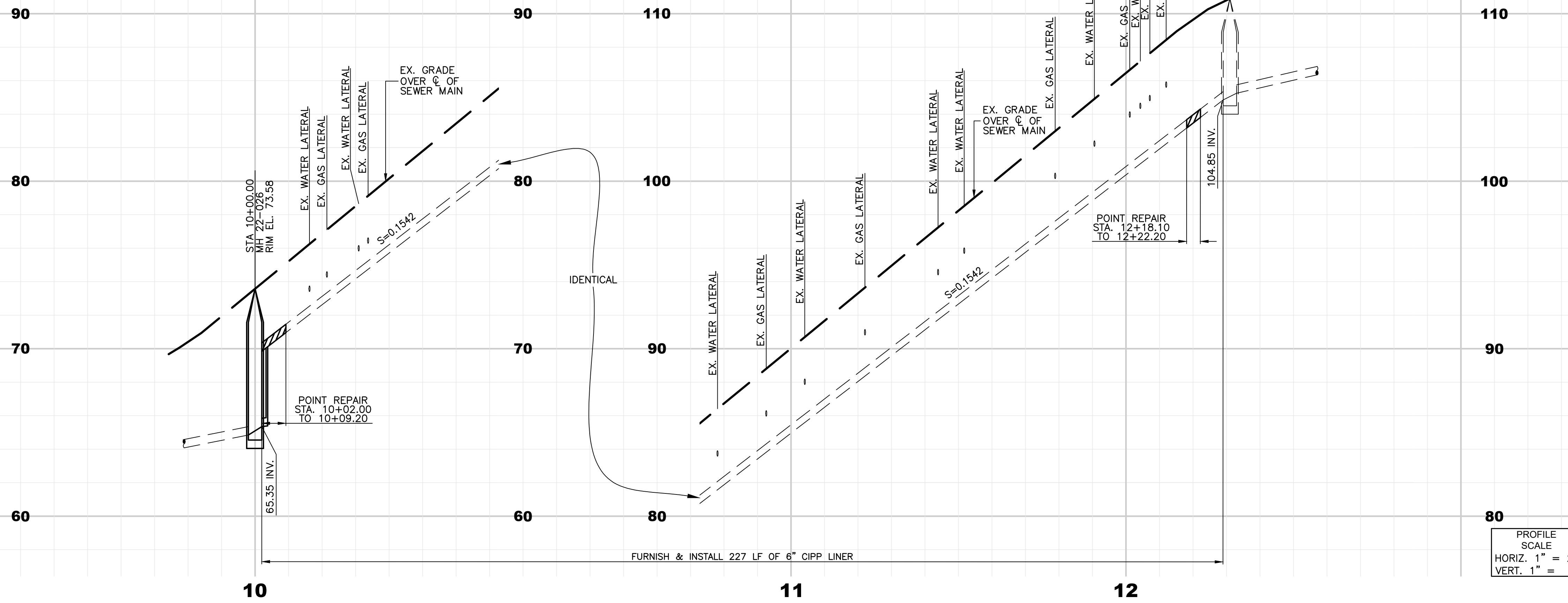
- P PROTECT IN PLACE
- 1 REMOVE & REPLACE EXISTING SEWER MAIN WITH NEW 6" EXTRA STRENGTH VCP SEWER MAIN IN TRENCH PER DETAIL 1, SHEET 11. BACKFILL PER CITY STD MBSI-132A-0 (ST-10). LIMITS SHOWN ON PROFILE.
- 4 REMOVE ALL EXISTING SURFACE IMPROVEMENTS IN LINE OF PROJECT. EXCAVATE TRENCH. INSTALL TEMPORARY CLOSED SHORING. SUPPORT IN TRENCH OTHER SUBSTRUCTURES/UTILITIES. RESTORE IN KIND ALL EXISTING SURFACE IMPROVEMENTS.
- 6 REMOVE & DISPOSE OF EXISTING SEWER DROP MANHOLE AND BASE, AND FURNISH & INSTALL CONCRETE DROP MANHOLE AND BASE PER SPPWC STD 202-2 AND EPOXY COAT.
- 8 FURNISH & INSTALL CIPP LINER IN EXISTING 6" VCP SEWER PIPE PER LIMITS SHOWN ON PLANS AFTER COMPLETION OF ALL OTHER REPAIRS AND PIPE CLEANING. SEE DETAIL 5, SHEET 11.
- 13 RECONNECT EXISTING SEWER MAIN TO MANHOLE PER DETAIL 3, SHEET 11.
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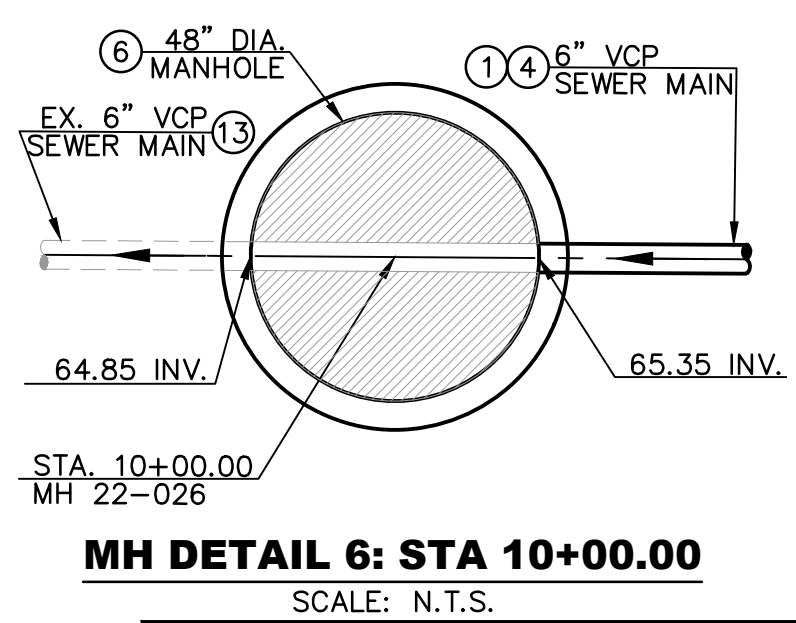
CCTV FINDINGS

- FROM MH 22-026 TO MH 22-025 (GOING UPSTREAM):
- STA 10+02.00 TO 10+09.20 - JOINT OFFSET (LARGE) AND BROKEN
 - STA 12+18.10 TO 12+22.20 - ROOT INTRUSION, FRACTURE AND CRACK CIRCUMFERENTIAL



SEWER NOTES:

1. CONTRACTOR SHALL VERIFY ALL ACTIVE LATERALS AS ACTUAL FIELD CONDITIONS MAY VARY.
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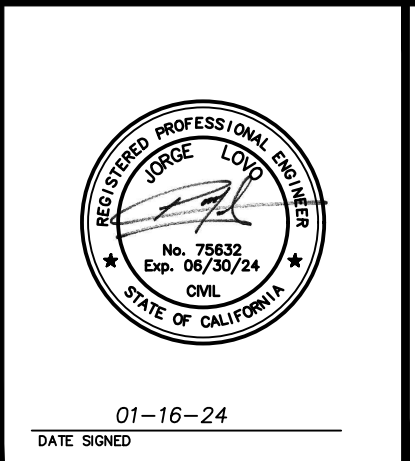
MH DETAIL 6: STA 10+00.00
SCALE: N.T.S.

811
Know what's below.
Call before you dig.

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TEL. 714-871-9083 FAX 714-871-3652

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CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

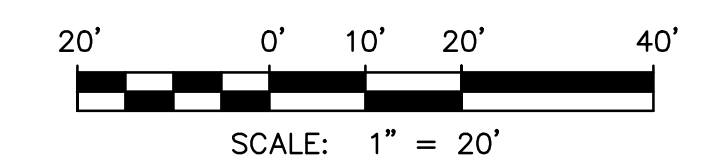
CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

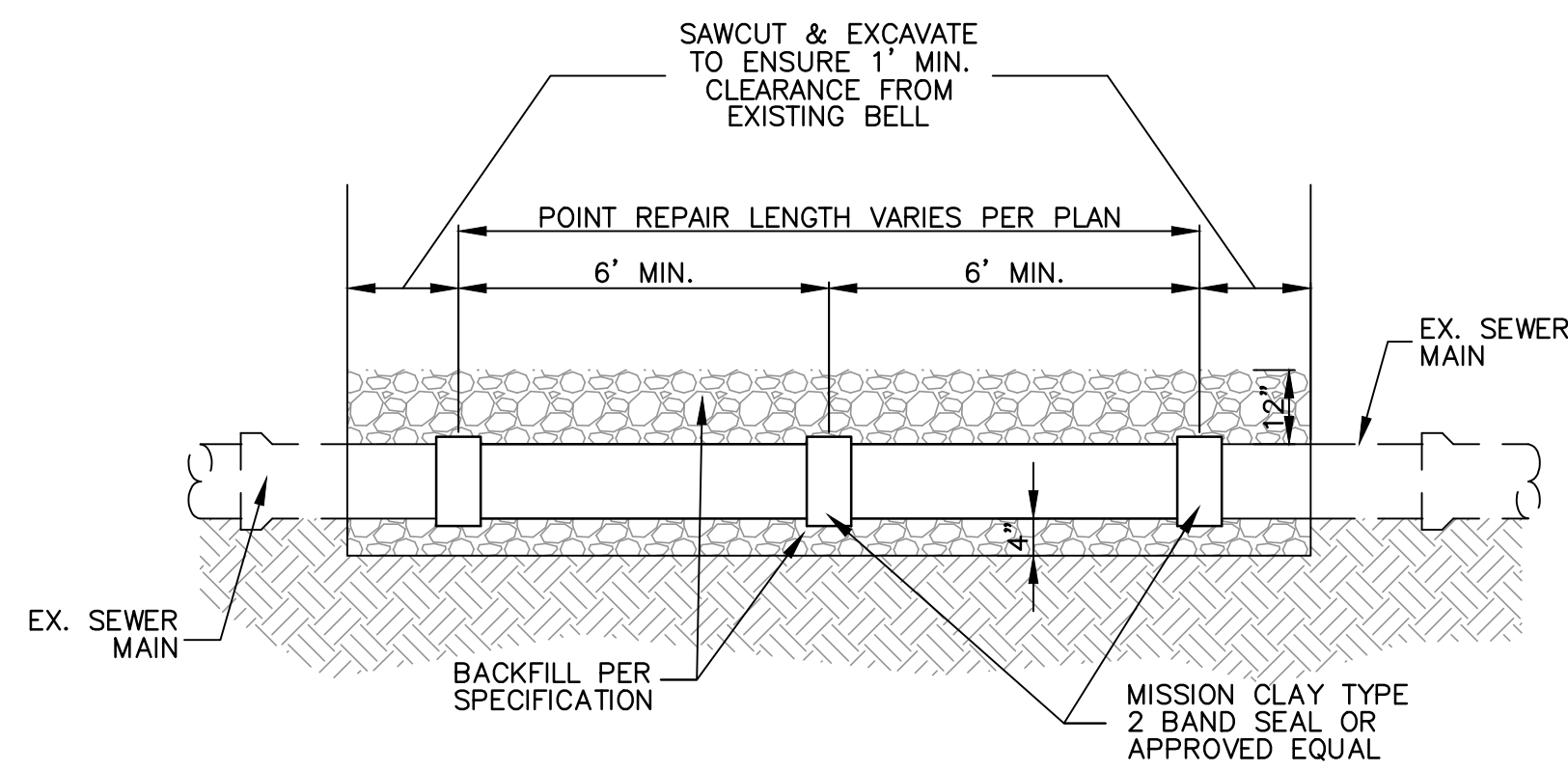
PLAN & PROFILE: 19TH ST. (BETWEEN OCEAN DR. AND HIGHLAND AVE.)

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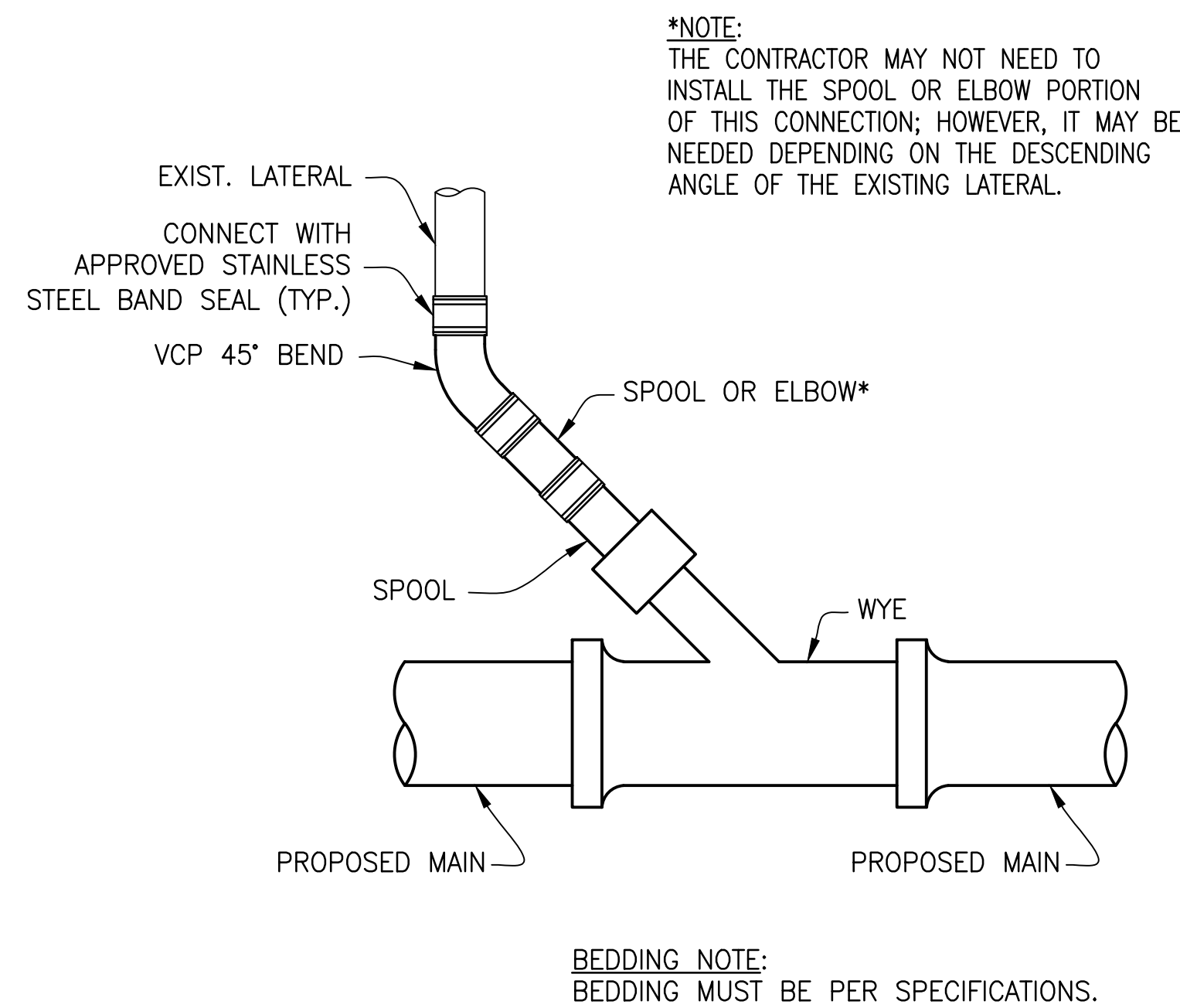
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| PROJECT MANAGER TIM BIRTHESEL, P.E. | | CITY ENGINEER KATHERINE DOHERTY | |
| DESIGNED BY SA ASSOCIATES | DATE 01-16-24 | SCALE 1"=40' | DATE 01-16-24 |
| | | SHEET 10 OF 11 | DRAWING NO. S-267 |

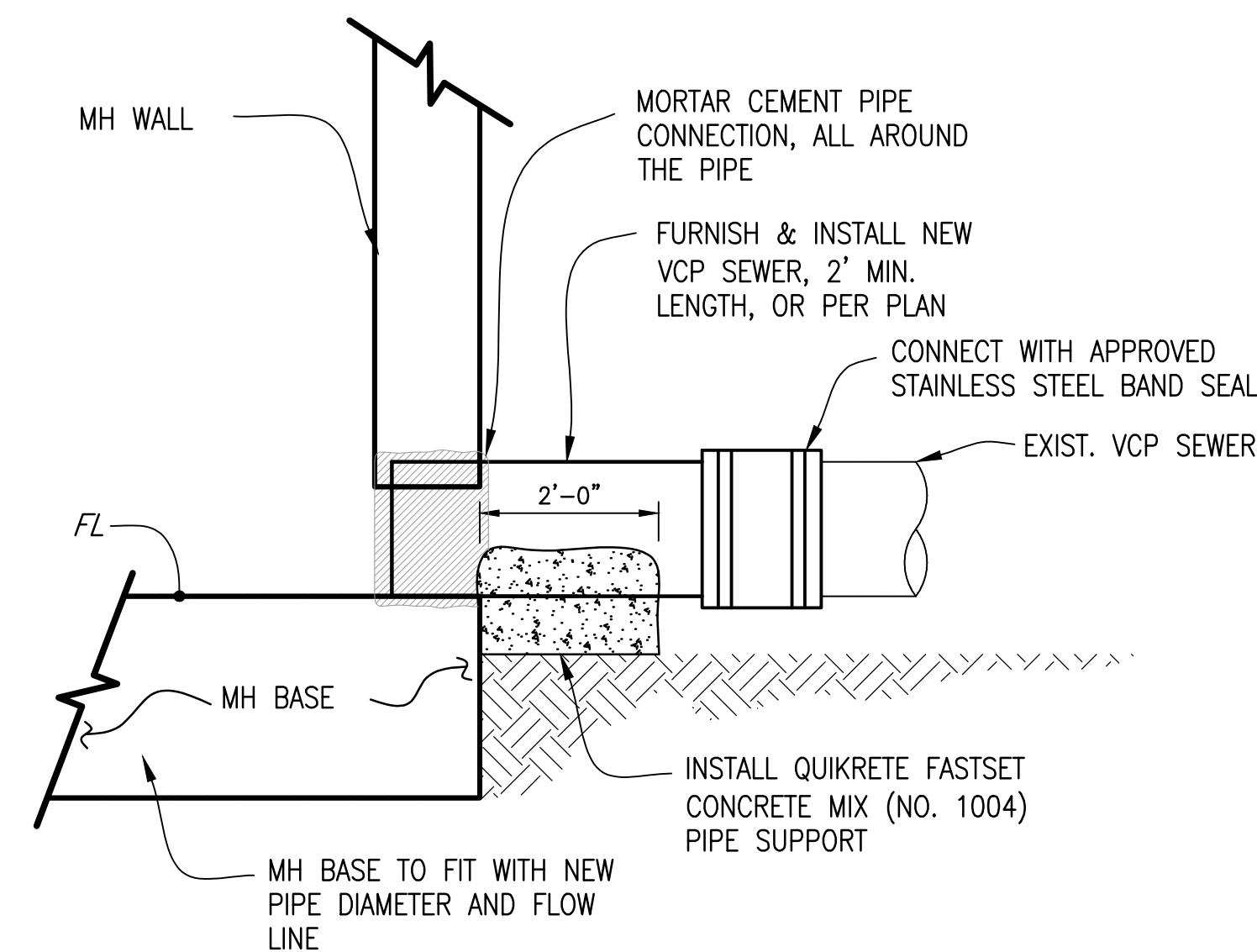




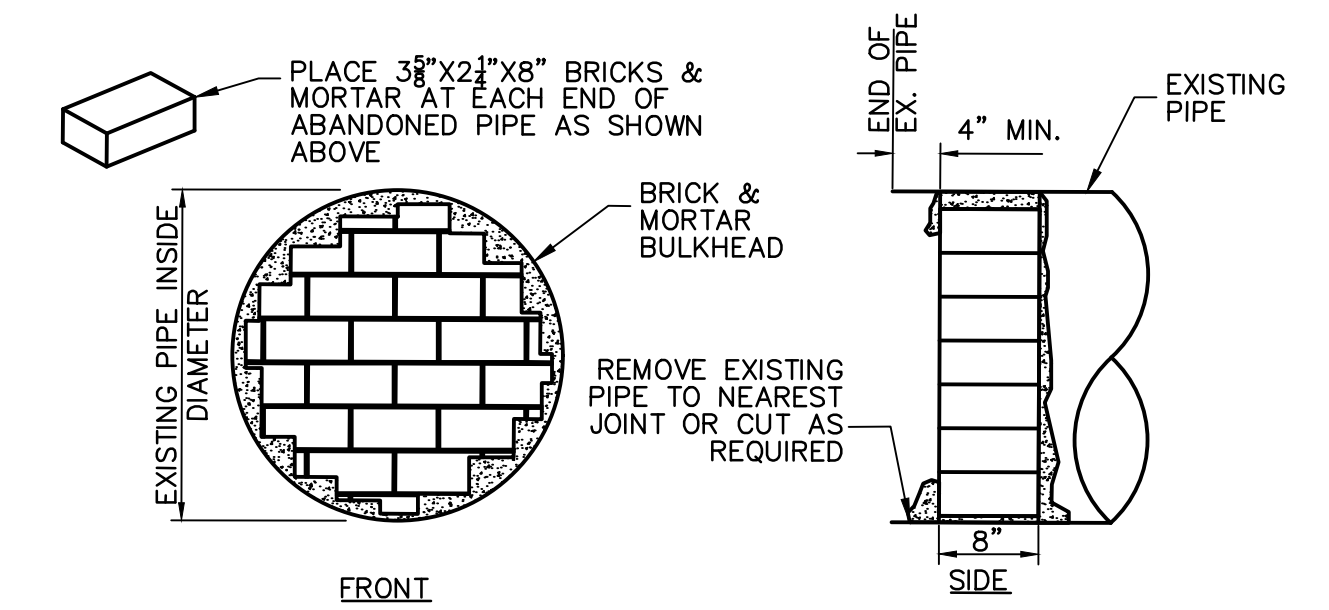
DETAIL 1: TYPICAL POINT REPAIR DETAIL
SCALE: N.T.S.



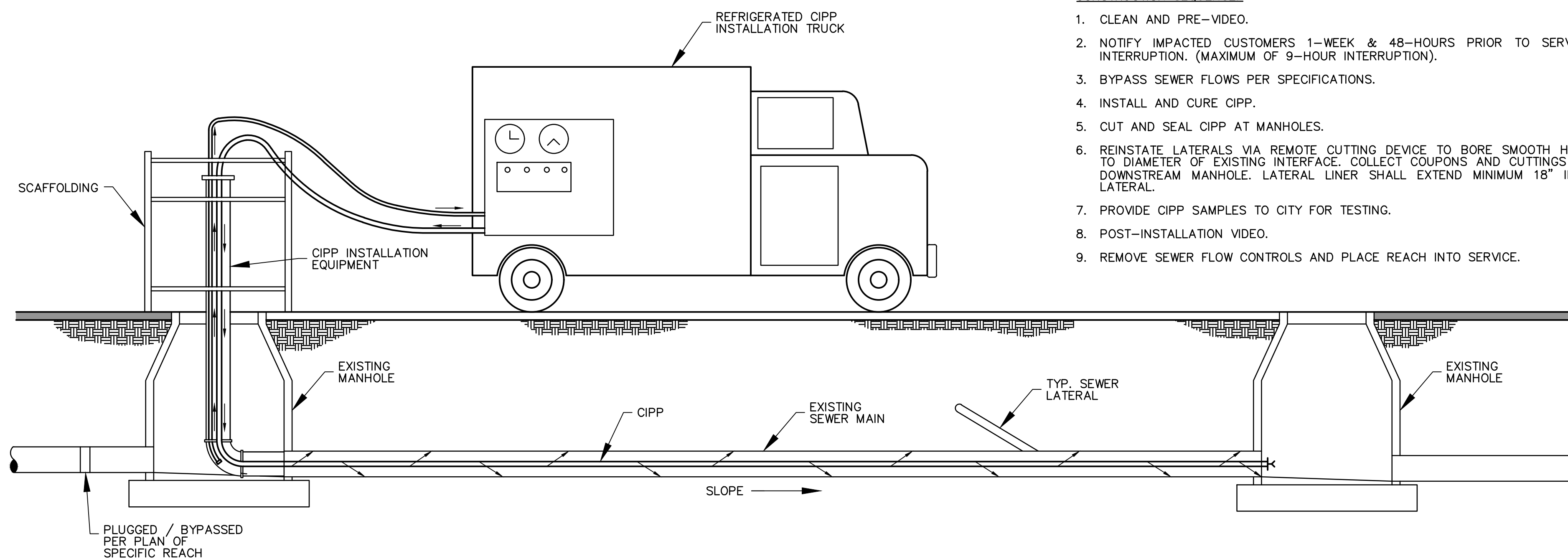
DETAIL 2: TYPICAL SEWER LATERAL RECONNECTION
SCALE: N.T.S.



DETAIL 3: EXISTING SEWER MAIN CONNECTION TO PROPOSED MANHOLE
SCALE: N.T.S.

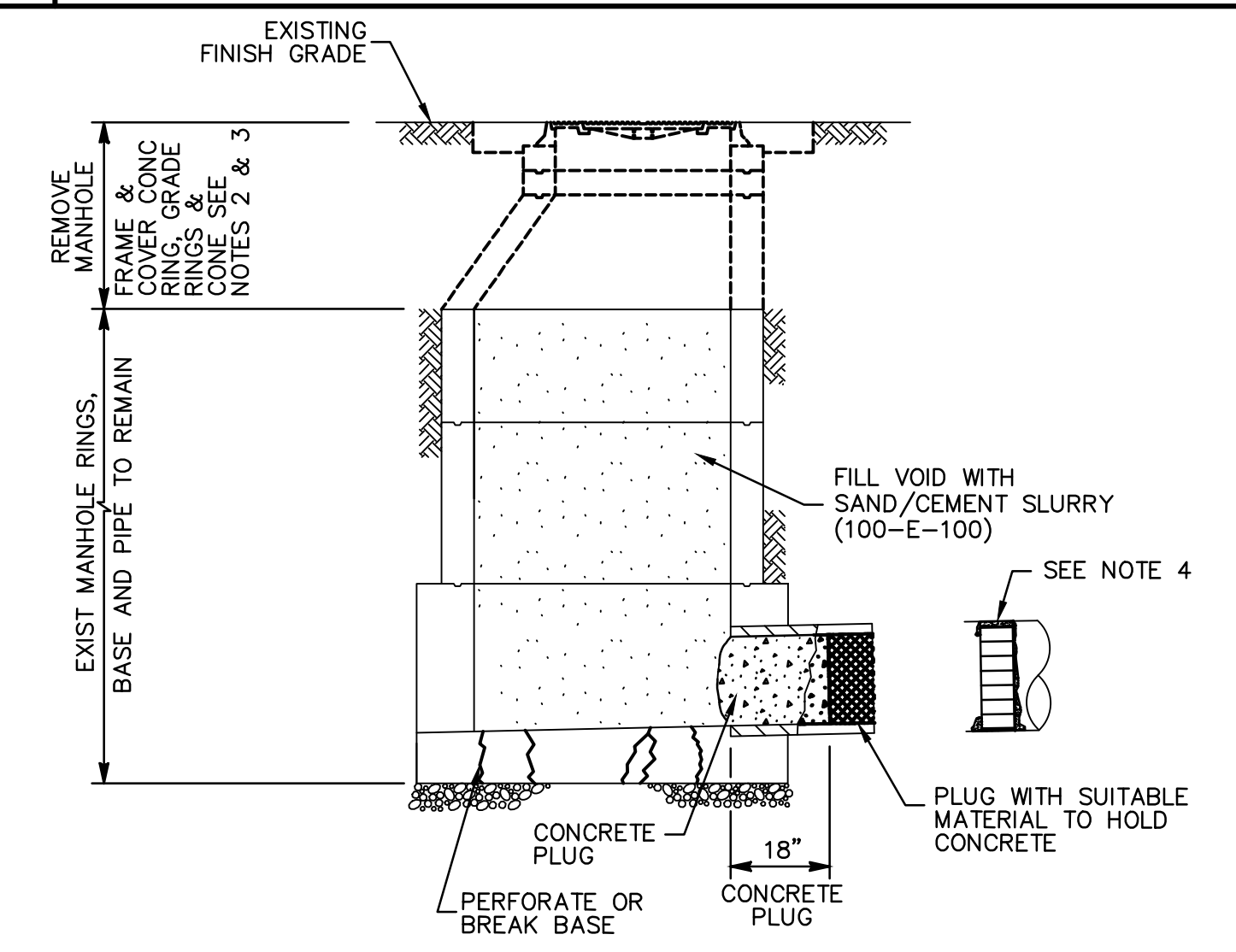


DETAIL 4: TYPICAL SEWER MAIN ABANDONMENT
SCALE: N.T.S.



DETAIL 5: TYPICAL CIPP INSTALLATION
SCALE: N.T.S.

- CONSTRUCTION SEQUENCE:**
1. CLEAN AND PRE-VIDEO.
 2. NOTIFY IMPACTED CUSTOMERS 1-WEEK & 48-HOURS PRIOR TO SERVICE INTERRUPTION. (MAXIMUM OF 9-HOUR INTERRUPTION).
 3. BYPASS SEWER FLOWS PER SPECIFICATIONS.
 4. INSTALL AND CURE CIPP.
 5. CUT AND SEAL CIPP AT MANHOLES.
 6. REINSTATE LATERALS VIA REMOTE CUTTING DEVICE TO BORE SMOOTH HOLE TO DIAMETER OF EXISTING INTERFACE. COLLECT COUPONS AND CUTTINGS AT DOWNSTREAM MANHOLE. LATERAL LINER SHALL EXTEND MINIMUM 18" INTO LATERAL.
 7. PROVIDE CIPP SAMPLES TO CITY FOR TESTING.
 8. POST-INSTALLATION VIDEO.
 9. REMOVE SEWER FLOW CONTROLS AND PLACE REACH INTO SERVICE.



- NOTES:**
- 1) REFER TO MANHATTAN BEACH SPECIFICATIONS WHERE APPLICABLE
 - 2) ALL SALVAGED MATERIAL BECOMES PROPERTY OF MANHATTAN BEACH
 - 3) BACKFILL PER MANHATTAN BEACH'S STANDARDS
 - 4) FOR CUTTING & PLUGGING ABANDONED SEWER MAINS SEE DETAIL 4 ON SHEET 11

DETAIL 6: EXISTING MANHOLE ABANDONMENT
SCALE: N.T.S.

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

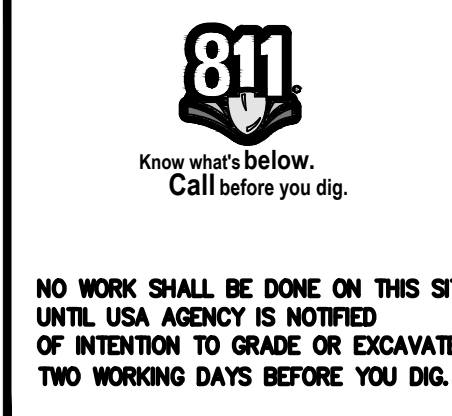
CYCLE 3 SEWER INFRASTRUCTURE IMPROVEMENTS PROJECT

| REVISIONS | | | |
|-----------|-------------|----|------|
| NO. | DESCRIPTION | BY | DATE |
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| REFERENCES | | | |
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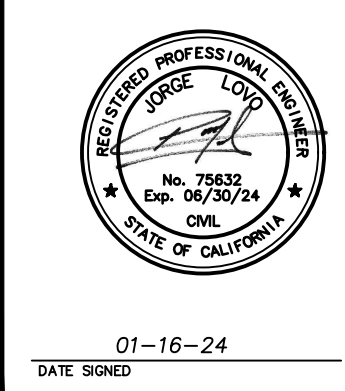
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| REVIEWED BY | DATE |
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| DESIGNED BY | DATE |
| SA ASSOCIATES | 01-16-24 |

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| RECOMMENDED BY | DATE |
| CITY ENGINEER KATHERINE DOHERTY | |
| PROJECT MANAGER TIM BIRTHISEL, P.E. | |
| SCALE | DATE |
| 1"=40' | 01-16-24 |
| SHEET 11 OF 11 | DRAWING NO. |
| | S-267 |



SUPPLEMENTAL NOTES:

1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS, SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.



SA ASSOCIATES
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1661 N. RAYMOND AVE., SUITE 100
ANAHEIM, CA 92801
TEL. 714-871-9083 FAX 714-871-3652

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| REVIEWED BY | DATE |
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