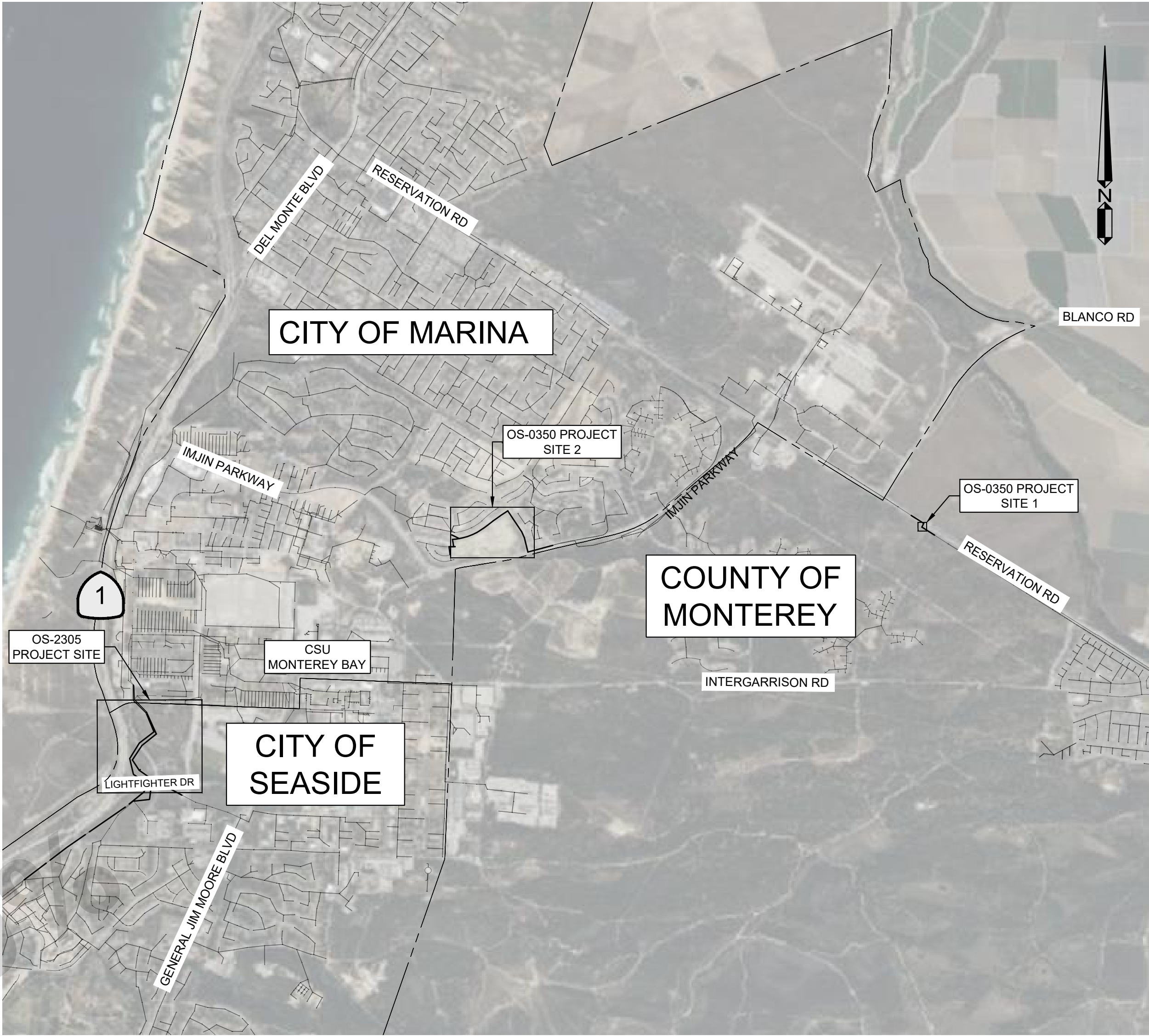


GENERAL NOTES

- THESE PLANS ARE PART OF A SET OF CONTRACT DOCUMENTS AND SHALL NOT BE CONSIDERED THE SOLE SOURCE OF CONSTRUCTION INFORMATION. ALL CONSTRUCTION WORK AND INSTALLATIONS SHALL CONFORM TO THE MARINA COAST WATER DISTRICT (MCWD/OWNER), THE CITY OF MARINA, THE CITY OF SEASIDE, AND THE COUNTY OF MONTEREY (COUNTY) STANDARD DRAWINGS AND SPECIFICATIONS. THE CONTRACT DOCUMENTS, AND WORK SHALL BE SUBJECT TO THE APPROVAL OF MCWD, THE COUNTY, AND THE CITIES OF MARINA AND SEASIDE.
- THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED CONTRACT DOCUMENTS FOR THIS PROJECT ON SITE AT ALL TIMES AND SHALL BE FAMILIAR WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE DURING THE COURSE OF THE 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 ENGINEER AND OWNER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER, OR THIRD PARTY IN VIOLATION OF THE LAW OR IN TRESPASS. THE CONTRACTOR SHALL PRACTICE SAFETY AT ALL TIMES AND SHALL FURNISH, ERECT, AND MAINTAIN, SUCH FENCES, BARRICADES, LIGHTS, AND SIGNS NECESSARY TO GIVE ADEQUATE PROTECTION TO THE PUBLIC AT ALL TIMES.
- INFORMATION PERTAINING TO EXISTING UNDERGROUND FACILITIES IS BASED ON RECORD INFORMATION AND IS AS SHOWN FOR INFORMATIONAL PURPOSES ONLY. UNDERGROUND FEATURES SHOWN IN PLAN VIEW ON THE PLANS ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT, AND MAY NOT APPEAR IN PROFILE OR SECTION VIEWS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL AGENCIES INVOLVED AND SHALL LOCATE ALL FACILITIES PRIOR TO EXCAVATION IN ANY AREA. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA), TOLL FREE AT 1-800-642-2444, MCWD, THE CITY OF MARINA, THE CITY OF SEASIDE, AND THE COUNTY (COLLECTIVELY REFERRED TO AS THE AGENCIES), 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTINUALLY REVIEW JOB SITE CONDITIONS. CONDITIONS REQUIRING CONSTRUCTION DIFFERENT FROM THAT SHOWN ON THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY AND PRIOR TO PROCEEDING WITH THE AFFECTED CONSTRUCTION.
- THESE DRAWINGS REPRESENT THE FINISHED CONDITION AND UNLESS OTHERWISE INDICATED, THEY DO NOT SHOW THE METHOD OF CONSTRUCTION.
- ALL IMPROVEMENTS SHOWN OR INDICATED ON THESE DRAWINGS ARE TO BE CONSTRUCTED AND/OR INSTALLED BY THE CONTRACTOR IN THIS PROJECT, UNLESS THEY ARE CALLED OUT AS: "EXISTING", "FUTURE", "NIC", "NOT A PART", OR HAVE SOME OTHER EXCLUDING NOTATION.
- THE CONTRACTOR SHALL KEEP A SET OF PROJECT DRAWINGS ON WHICH RECORD INFORMATION SHALL BE PLACED NOTING DEVIATIONS FROM THE PLANS IN THE LOCATION, GRADE, SIZE, TYPE, AND SCOPE OF WORK WHICH IS CONSTRUCTED.
- OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REQUIREMENTS AND STANDARDS SHALL BE OBSERVED AT THE JOB SITE AT ALL TIMES.
- CONTRACTOR SHALL ORGANIZE A PRE-CONSTRUCTION MEETING PRIOR TO COMMENCEMENT OF WORK. THE MEETING SHALL INCLUDE (AT A MINIMUM) THE OWNER/REPRESENTATIVE, CONTRACTORS, ENGINEER OF RECORD, SOILS ENGINEER, PERTINENT UTILITY COMPANIES, AND SURVEYOR.
- NO TOPOGRAPHIC INFORMATION HAS BEEN DELINEATED ON THESE PLANS.
- NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS APPROVED BY THE AGENCIES. THE AGENCIES SHALL BE NOTIFIED AT LEAST 3 WORKING DAYS PRIOR TO START OF CONSTRUCTION. ANY CONSTRUCTION DONE WITHOUT APPROVED PLANS OR PRIOR NOTIFICATION TO THE AGENCIES WILL BE REJECTED AND WILL BE AT THE CONTRACTOR'S RISK.
- SOILS TESTS SHALL BE DONE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. ALL TESTS MUST BE MADE WITHIN 15 DAYS PRIOR TO THE PLACEMENT OF MATERIAL. THE TEST RESULTS SHALL CLEARLY INDICATE THE LOCATION AND SOURCE OF THE MATERIAL.
- COMPACTION TESTS SHALL BE MADE ON SUB-GRADE MATERIAL AND MATERIAL IN ACCORDANCE WITH THESE DRAWINGS AND THE SPECIFICATIONS. SAID TESTS SHALL BE MADE PRIOR TO THE PLACEMENT OF THE NEXT MATERIAL.
- THE ENGINEER OF RECORD SHALL PERFORM PERIODIC REVIEWS OF COMPLETED WORK TO DETERMINE GENERAL CONFORMANCE WITH THE APPROVED PLANS. THE CONTRACTOR SHALL CORRECT ANY DIFFERENCES FOUND BY SUCH SURVEY AND WILL PROVIDE ALL CONTRACTOR'S RECORDS KEPT DURING THE COURSE OF CONSTRUCTION TO THE ENGINEER OF RECORD FOR PREPARATION OF RECORD DRAWINGS.
- THE MCWD INSPECTOR ACTING ON BEHALF OF MCWD MAY REQUIRE REVISIONS IN THE PLANS TO RESOLVE UNFORESEEN PROBLEMS THAT MAY ARISE IN THE FIELD. ALL REVISIONS SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OF RECORD.
- THE ENGINEER OF RECORD MUST VERIFY THAT THE IMPROVEMENTS, WHEN COMPLETED, ARE IN CONFORMANCE WITH THE PLANS PRIOR TO THE REQUEST FOR FINAL INSPECTION. RECORD DRAWINGS ARE TO BE PREPARED FOLLOWING THE REQUIREMENTS DEFINED IN THE TECHNICAL SPECIFICATIONS. THE CIVIL ENGINEER PREPARING THE RECORD DRAWING PLANS WILL BE PRESENT WHEN THE FINAL INSPECTION IS MADE.
- ALL PERTINENT UTILITY COMPANIES SHALL BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION.
- ENCROACHMENT PERMITS ARE REQUIRED FROM THE AGENCY HAVING JURISDICTION FOR ALL WORK DONE WITHIN ANY ROAD RIGHT-OF-WAY (COUNTY OF MONTEREY, CITY OF MARINA, AND/OR CITY OF SEASIDE).
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE HOURS OF 8:00AM TO 5:00PM MONDAY THROUGH FRIDAY UNLESS APPROVED BY MCWD.

MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
CIP OS-0350 / OS-2305
MARINA, CA 93933
MONTEREY COUNTY



VICINITY MAP
NTS

APPROVED BY:

JACK GAO, PMP
SENIOR PROJECT MANAGER
MARINA COAST WATER DISTRICT



Know what's below.
Call before you dig.

Rev.	Date	Description of Revisions	By

Sheet List Table	
Sheet Number	Sheet Title
C-1.0	COVER AND NOTES
C-1.1	CIP OS-0350 SITE PLAN
C-1.2	CIP OS-2305 SITE PLAN
C-2.0	DETAILS
C-2.1	MCWD STANDARD DETAILS
C-2.2	AGENCY STANDARD DETAILS
C-3.0	EROSION CONTROL PLAN
C-3.1	EROSION CONTROL PLAN DETAILS
C-3.2	EROSION CONTROL PLAN BMPs

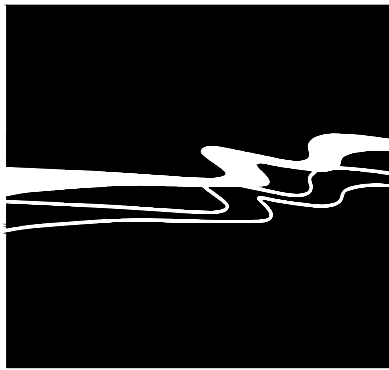
LEGEND

EXISTING	PROPOSED	DESCRIPTION
(100.0 FS)	101.50 FS	SPOT ELEVATIONS
		SEWER MANHOLE
		SEWER CLEANOUT
		SERVICE LATERAL (W=WATER, G=GAS, U=UTILITIES)
		SEWER LATERAL
		SURVEY MONUMENT
		BENCH MARK
		SLOPE PERCENTAGE
		POWER POLE
		ABANDON UTILITY
		EDGE OF PAVEMENT
		OVERHEAD UTILITY LINE
		WATER LINE
		SEWER FORCE MAIN
		GRAVITY SEWER LINE
		STORM DRAIN
		UNDERGROUND GAS LINE
		UNDERGROUND UTILITY LINE LOCATION
		UNDERGROUND ELECTRICAL LINE
		UNDERGROUND CABLE TELEVISION LINE
		UNDERGROUND TELEPHONE LINE
		RIGHT OF WAY
		EASEMENT
		CENTERLINE
		BARBED WIRE FENCE
		CHAIN LINK FENCE
		PRIVATE FENCE

ABBREVIATIONS

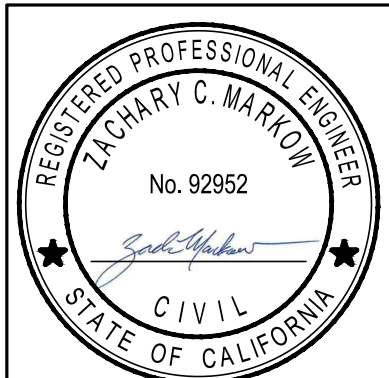
AC	ASPHALTIC CONCRETE	NGVD	NATIONAL GEODETIC VERTICAL DATUM
ACP	ASBESTOS CEMENT PIPE	NIC	NOT IN CONTRACT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	NO	NORMALLY OPEN
AVG	AVERAGE	NTS	NOT TO SCALE
BLDG	BUILDING	OD	OUTSIDE DIAMETER
BM	BENCH MARK	PCC	PORTLAND CEMENT CONCRETE
C	CURB	PH	POTHOLE (UTILITY WAS POTHOLED)
CL	CENTERLINE	POC	POINT OF CONNECTION
CL	CLASS	PP	POWER POLE
CMP	CORRUGATED METAL PIPE	PSF	POUND PER SQUIRE FOOT
CO	CLEANOUT	PSI	POUND PER SQUARE INCH
CONC	CONCRETE	PVC	POLY VINYL CHLORIDE
CONST	CONSTRUCTION	R	RADIUS
CONT	CONTINUOUS	RC	REINFORCED CONCRETE
CP	CATHODIC PROTECTION	RCP	REINFORCED CONCRETE PIPE
CPLG	COUPLING	REQD	REQUIRED
CY	CUBIC YARD	RT	RIGHT
DET	DETAIL	R/W	RIGHT OF WAY
DI	DUCTILE IRON (PIPE)	SS	SANITARY SEWER
DIA	DIAMETER	SCH	SCHEDULE
DIM	DIMENSION	SD	STORM DRAIN
D/W	DRIVEWAY	SHT	SHEET
EA	EACH	SPEC	SPECIFICATIONS
ELE	ELEVATION	SSFM	SANITARY SEWER FORCE MAIN
EP	EDGE OF PAVEMENT	STA	STATION
EX	EXISTING	STD	STANDARD
EG	EXISTING GROUND	STL	STEEL
FCA	FLANGE COUPLING ADAPTOR	SV	SOLENOID VALVE
FF	FINISH FLOOR	SW	SIDEWALK
FG	FINISH GRADE	T	TELEPHONE
FL	FLOW LINE	TB	THRUST BLOCK
FLG	FLANGE	TB	TOP OF BANK
FS	FINISH SURFACE	TC	TOP OF CURB
FT	FEET	TF	TOP OF FOOTING
G	GAS	TG	TOP OF GRATE
GA	GAGE	TP	TOP OF PAVEMENT
GAL	GALLON	TYP	TYPICAL
GALV	GALVANIZED	TW	TOP WALL
GB	GRADE BREAK	UTL	COMMON TRENCH UTILITIES
GPD	GALLONS PER DAY	VAR	VARIES
GPM	GALLONS PER MINUTE	VC	VERTICAL CURVE
HDPE	HIGH DENSITY POLYETHYLENE	VIC	VICTAULIC COUPLING
HGL	HYDRAULIC GRADE LINE	VERT	VERTICAL
ID	INSIDE DIAMETER	W	WATER
IN	INCHES	WF	WIDE FLANGE
INV	INVERT	WL	WATER LINE
L	LENGTH	WM	WATER METER
LAT	LATERAL	WS	WATER SERVICE
LF	LINEAL FEET	WV	WATER VALVE
LP	LIGHT POLE	WWM	WELDED WIRE MESH
LT	LEFT	WW	WET WELL
M	METER		
MAX	MAXIMUM		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MH	MANHOLE		
N/A	NOT APPLICABLE		
NC	NORMALLY CLOSED		

*NOTE: THIS IS A STANDARD SET OF ABBREVIATIONS.
NOT ALL ABBREVIATIONS SHOWN WILL APPLY TO THIS WORK.



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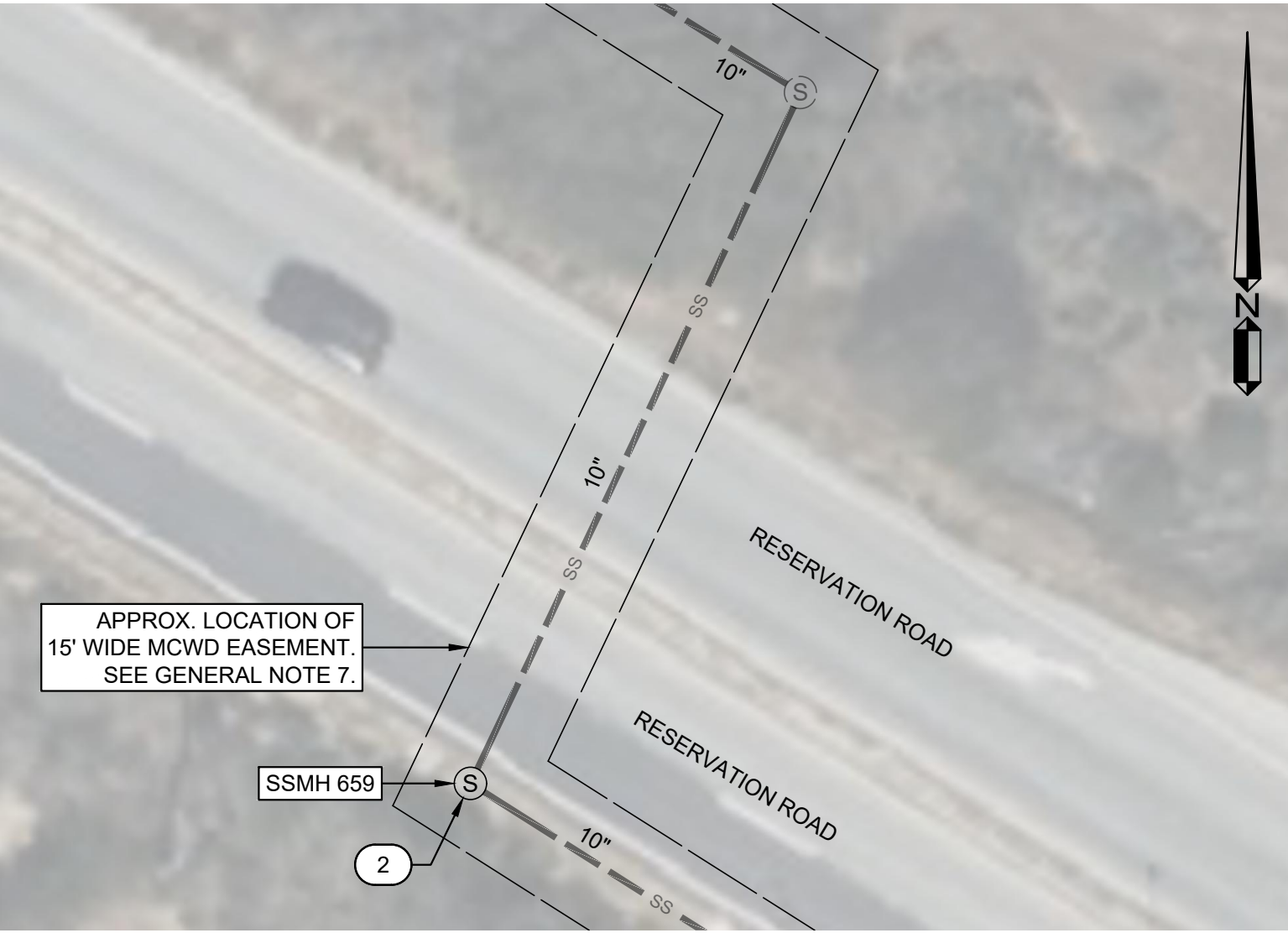
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MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
COVER AND NOTES

JOB #:	1045-0006-00
DESIGNERS:	ZCM
DRAWN BY:	ZCM
DATE:	02/13/25
DRAWING NO.	
C-1.0	
1 OF 9 SHEETS	



1 CIP OS-0350 PROJECT SITE 1 - IMPROVEMENT PLAN
SCALE: 1" = 20'

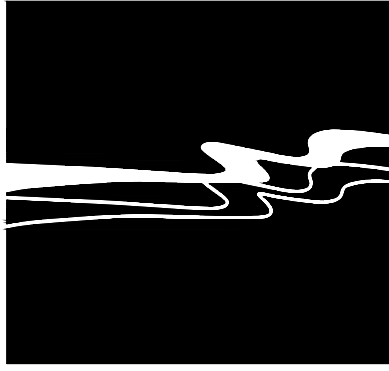
MANHOLE REHABILITATION			
MANHOLE ID	LEGACY ID	DIA (IN)	DEPTH (FT)
2457	MHI1.12	48	ASSUME 10.0 FT. SEE GENERAL NOTE 4.
133	MHI1.13	48	ASSUME 10.0 FT. SEE GENERAL NOTE 4.
134	MHI1.14	48	ASSUME 10.0 FT. SEE GENERAL NOTE 4.
2367	MHI1.15	48	ASSUME 10.0 FT. SEE GENERAL NOTE 4.
135	MHI1.16	48	ASSUME 10.0 FT. SEE GENERAL NOTE 4.
136	MHI1.17	48	ASSUME 10.0 FT. SEE GENERAL NOTE 4.
2459	MHI1.18	48	10.7
652	MHI1.19	48	12.0
659	P24	48	ASSUME 10.0 FT. SEE GENERAL NOTE 4

REFERENCE NOTES: (XX)	
1	PROVIDE NEW POLYMER CONCRETE MANHOLE REHABILITATION INSERTS PER SPECIFICATION SECTION 33 01 30.84. REFER TO DETAILS 1, 2, AND 3, SHEET C-2.0, FOR DEMOLITION AND INSTALLATION REQUIREMENTS.
2	LINE EX. MANHOLE WITH EPOXY COATING PER SPECIFICATION SECTION 09 90 00. REMOVE AND REPLACE EX. MANHOLE FRAME, COVER, AND CONCRETE COLLAR PER SPECIFICATION SECTION 33 31 30.81 AND MCWD STANDARD DETAILS S-1 AND S-3. REFER TO SHEET C-2.1. PAVEMENT RESTORATION, IF NECESSARY, SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF MARINA STANDARD PLAN ST-3. REFER TO SHEET C-2.2.
3	EX. TREE, PROTECT-IN-PLACE. IF CONTRACTOR DEEMS TREE-TRIMMING IS NECESSARY, COORDINATE WITH CITY OF MARINA FOR TREE-TRIMMING REQUIREMENTS. REFER TO SPECIFICATION SECTION 01 35 00.
4	PROTECT-IN-PLACE EX. CURB, GUTTER, AND SIDEWALK. CONTRACTOR SHALL REPLACE ANY DAMAGED SECTIONS IN KIND PER CITY OF MARINA STANDARDS. SEE SHEET C-2.2. CONCRETE REPAIR SHALL BE MONOLITHIC, FROM EX. JOINT TO EX. JOINT.

- GENERAL NOTES:
- WORK SHOWN IN OS-0250 PROJECT SITE 1 OCCURS WITHIN THE COUNTY OF MONTEREY. WORK SHON IN OS-0350 PROJECT SITE 2 OCCURS WITHIN THE CITY OF MARINA.
 - AERIAL IMAGERY IS SOURCED FROM ESRI LANDSAT IMAGING, AND IS PROVIDED FOR REFERENCE ONLY.
 - SEWER INFRASTRUCTURE LOCATIONS AND SIZES ARE BASED ON AVAILABLE GIS DATA PROVIDED BY MARINA COAST WATER DISTRICT. CONTRACTOR TO VERIFY ALL DIMENSIONS, DEPTHS, AND MEASUREMENTS PRIOR TO SUBMITTAL AND ORDERING.
 - EX. SSMH COVER WAS STUCK DURING FIELD INVESTIGATION. DEPTH COULD NOT BE CONFIRMED. ASSUMED DEPTH BASED ON AVAILABLE GIS DATA PROVIDED BY MARINA COAST WATER DISTRICT. CONTRACTOR TO REMOVE EX. COVER AND FRAME AND VERIFY DEPTH PRIOR TO SUBMITTAL AND ORDERING. CONTRACTOR TO INSTALL TRENCH PLATE OVER OPEN MANHOLE WHILE EXPLORATORY WORK IS PERFORMED. PLACE COLD-MIX ASPHALT AROUND LIP OF TRENCH PLATE.
 - WORK OCCURS WITHIN THE RIGHTS-OF-WAY OF THE COUNTY OF MONTEREY (PROJECT SITE 1) AND THE CITY OF MARINA (PROJECT SITE 2), RESPECTIVELY. CONTRACTOR SHALL PROCURE THE NECESSARY ENCROACHMENT PERMITS FROM THE AGENCY HAVING JURISDICTION, PER SPECIFICATION SECTION 01 11 00 AND RELATED SECTIONS.
 - ANTICIPATED SEWER BYPASS FLOWS PROVIDED BELOW. FLOWS BASED ON PEAK DRY WEATHER FLOW CRITERIA OF THE 2020 MARINA COAST WATER DISTRICT SEWER MASTER PLAN. CONTRACTOR TO VERIFY FLOWS AS PART OF SEWER BYPASS PLAN PER SPECIFICATION SECTION 33 31 20:
 - PROJECT SITE 1: 500 GPM
 - PROJECT SITE 2: 1,100 GPM
 - 15' WIDE MCWD EASEMENT, CENTERED ON CL OF EX. SANITARY SEWER MAINS. ALL EASEMENTS ARE SHOWN AS APPROXIMATE.



2 CIP OS-0350 PROJECT SITE 2 - IMPROVEMENT PLAN
SCALE: 1" = 80'



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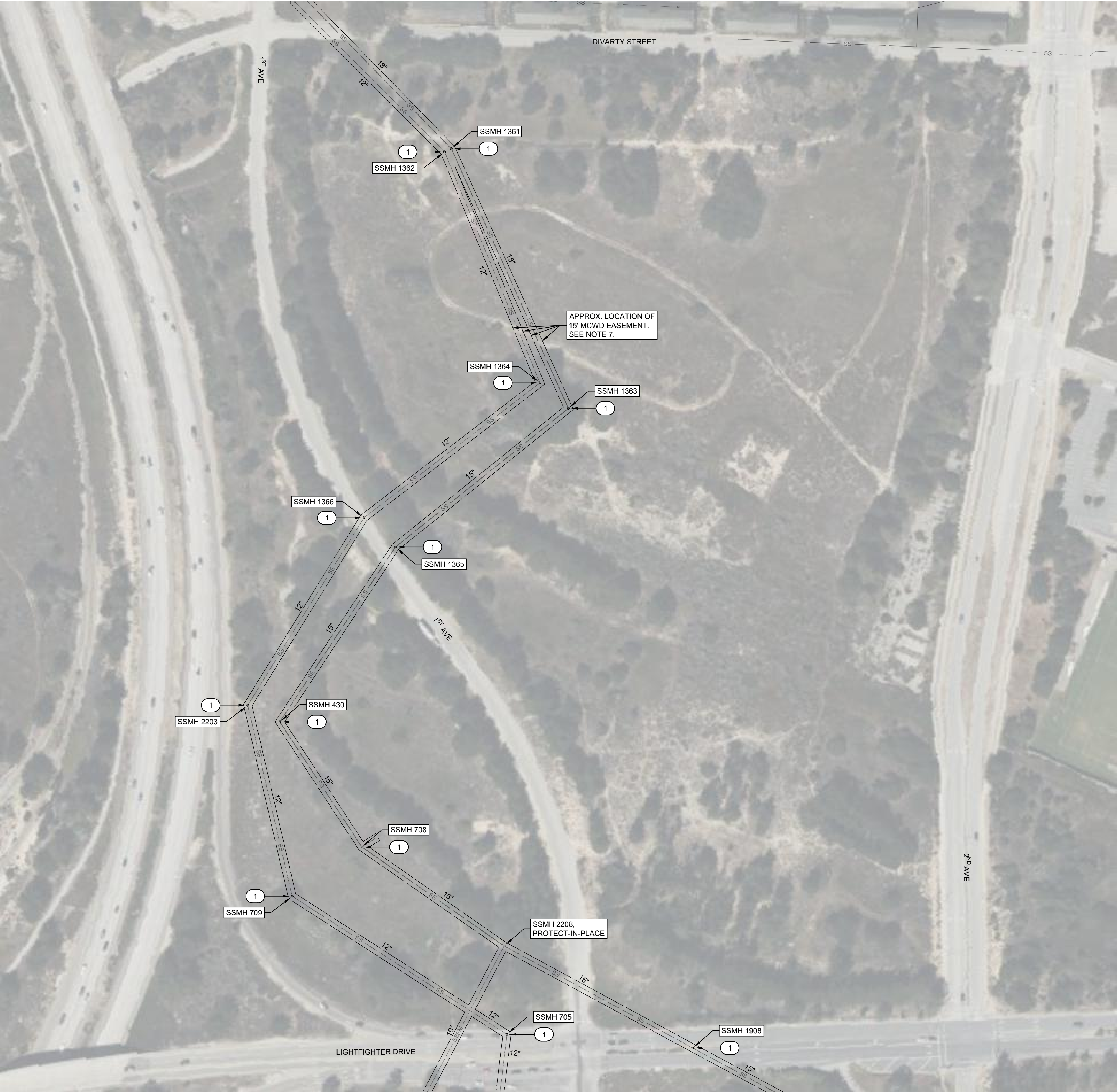
MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
CIP OS-0350 SITE PLAN

JOB #: 1045-0006-00
DESIGNERS: ZCM
DRAWN BY: ZCM
DATE: 02/13/25

DRAWING NO.

C-1.1

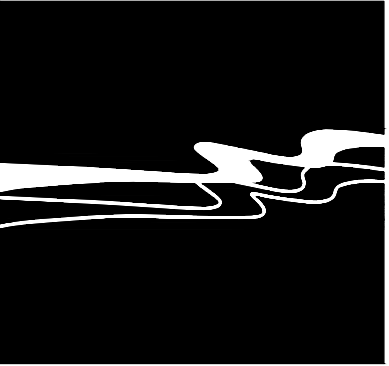
2 OF 9 SHEETS



REFERENCE NOTES: (XX)	
1	LINE EX. MANHOLE WITH EPOXY COATING PER SPECIFICATION SECTION 09 90 00. REMOVE AND REPLACE EX. MANHOLE RING AND COVER PER SPECIFICATION SECTION 33 31 30.81. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SUBMITTAL AND ORDERING. REFER TO SPECIFICATION SECTION 33 31 20 FOR SEWAGE BYPASSING REQUIREMENTS.

MANHOLE REHABILITATION			
MANHOLE ID	LEGACY ID	DIA (IN)	DEPTH (FT)
1361	G446	48	ASSUME 9.0 FT. SEE NOTE 3.
1362	D457	48	ASSUME 9.0 FT. SEE NOTE 3.
1363	G445	48	ASSUME 9.0 FT. SEE NOTE 3.
1364	D458	48	ASSUME 9.0 FT. SEE NOTE 3.
1365	G444	48	ASSUME 9.0 FT. SEE NOTE 3.
1366	D459	48	ASSUME 9.0 FT. SEE NOTE 3.
2203	D460	48	ASSUME 9.0 FT. SEE NOTE 3.
430	G443	48	ASSUME 9.0 FT. SEE NOTE 3.
708	G442	48	ASSUME 9.0 FT. SEE NOTE 3.
709	D461	48	ASSUME 9.0 FT. SEE NOTE 3.
705	D462	48	ASSUME 9.0 FT. SEE NOTE 3.
1908	G440	48	ASSUME 9.0 FT. SEE NOTE 3.

- GENERAL NOTES:**
- AERIAL IMAGERY IS SOURCED FROM ESRI LANDSAT IMAGING, AND IS PROVIDED FOR REFERENCE ONLY.
 - SEWER INFRASTRUCTURE LOCATIONS AND SIZES ARE BASED ON AVAILABLE GIS DATA PROVIDED BY MARINA COAST WATER DISTRICT. CONTRACTOR TO VERIFY ALL DIMENSIONS AND MEASUREMENTS PRIOR TO SUBMITTAL AND ORDERING.
 - ASSUMED DEPTH BASED ON AVAILABLE GIS DATA PROVIDED BY MARINA COAST WATER DISTRICT. CONTRACTOR TO VERIFY DEPTH PRIOR TO SUBMITTAL AND ORDERING PER REFERENCE NOTE 1.
 - WORK OCCURS WITHIN THE CITY LIMITS OF CITY OF SEASIDE. CONTRACTOR TO PROCURE ENCROACHMENT PERMIT FROM CITY OF SEASIDE PER SPECIFICATION SECTION 01 11 00 AND RELATED SECTIONS.
 - PROTECT-IN-PLACE ALL EX. CURB, SIDEWALK, AND GUTTERS. REPLACE ANY DAMAGED PORTIONS IN KIND PER CITY OF SEASIDE STANDARDS. REFER TO SHEET C-2.2.
 - ANTICIPATED SEWER BYPASS FLOWS PROVIDED BELOW. FLOWS BASED ON PEAK DRY WEATHER FLOW CRITERIA OF THE 2020 MARINA COAST WATER DISTRICT SEWER MASTER PLAN. CONTRACTOR TO VERIFY FLOWS AS PART OF SEWER BYPASS PLAN PER SPECIFICATION SECTION 33 31 20:
 - FOR 12" LINE: 800 GPM
 - FOR 15" AND 18" LINE: 1,800 GPM
 - 15' WIDE MCWD EASEMENT, CENTERED ON CL OF EX. SANITARY SEWER MAINS. ALL EASEMENTS ARE SHOWN AS APPROXIMATE.



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MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
CIP OS-2305 SITE PLAN

JOB #: 1045-0006-00
DESIGNERS: ZCM
DRAWN BY: ZCM
DATE: 02/13/25

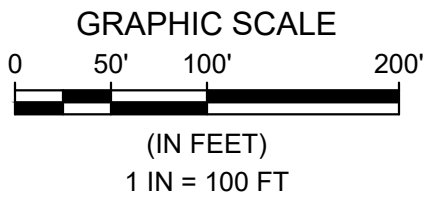
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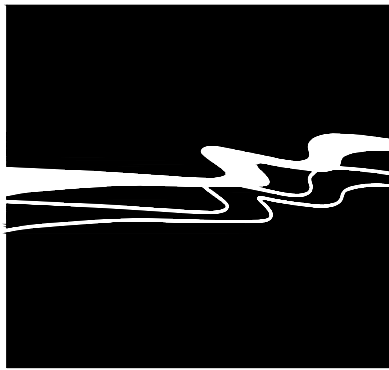
C-1.2

3 OF 9 SHEETS

1 CIP OS-2305 - IMPROVEMENT PLAN

SCALE: 1" = 100'





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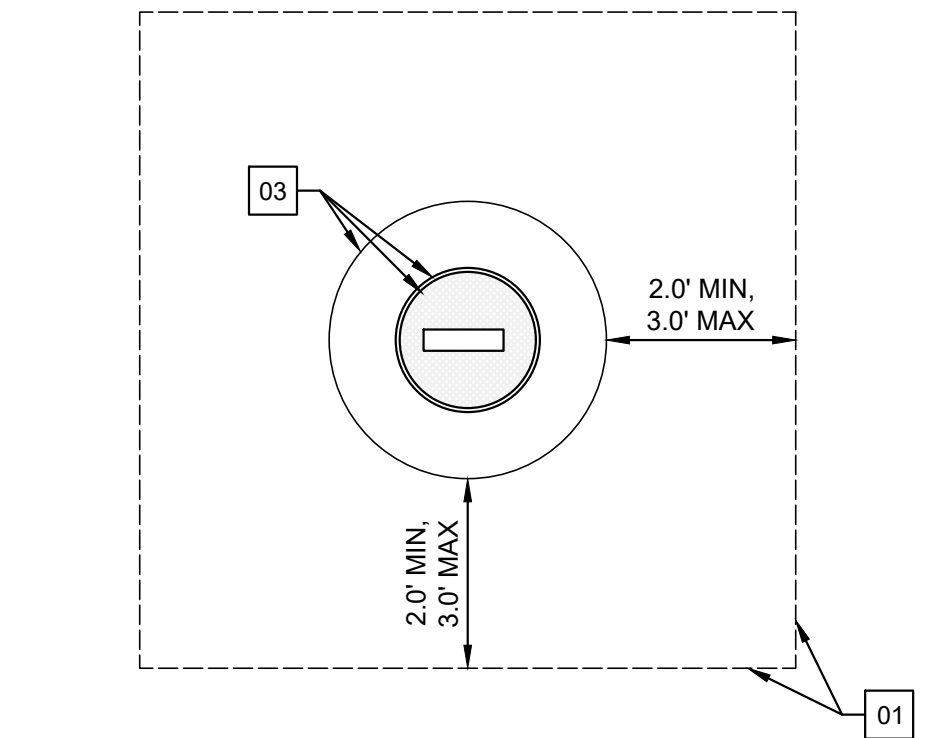
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DATE SIGNED

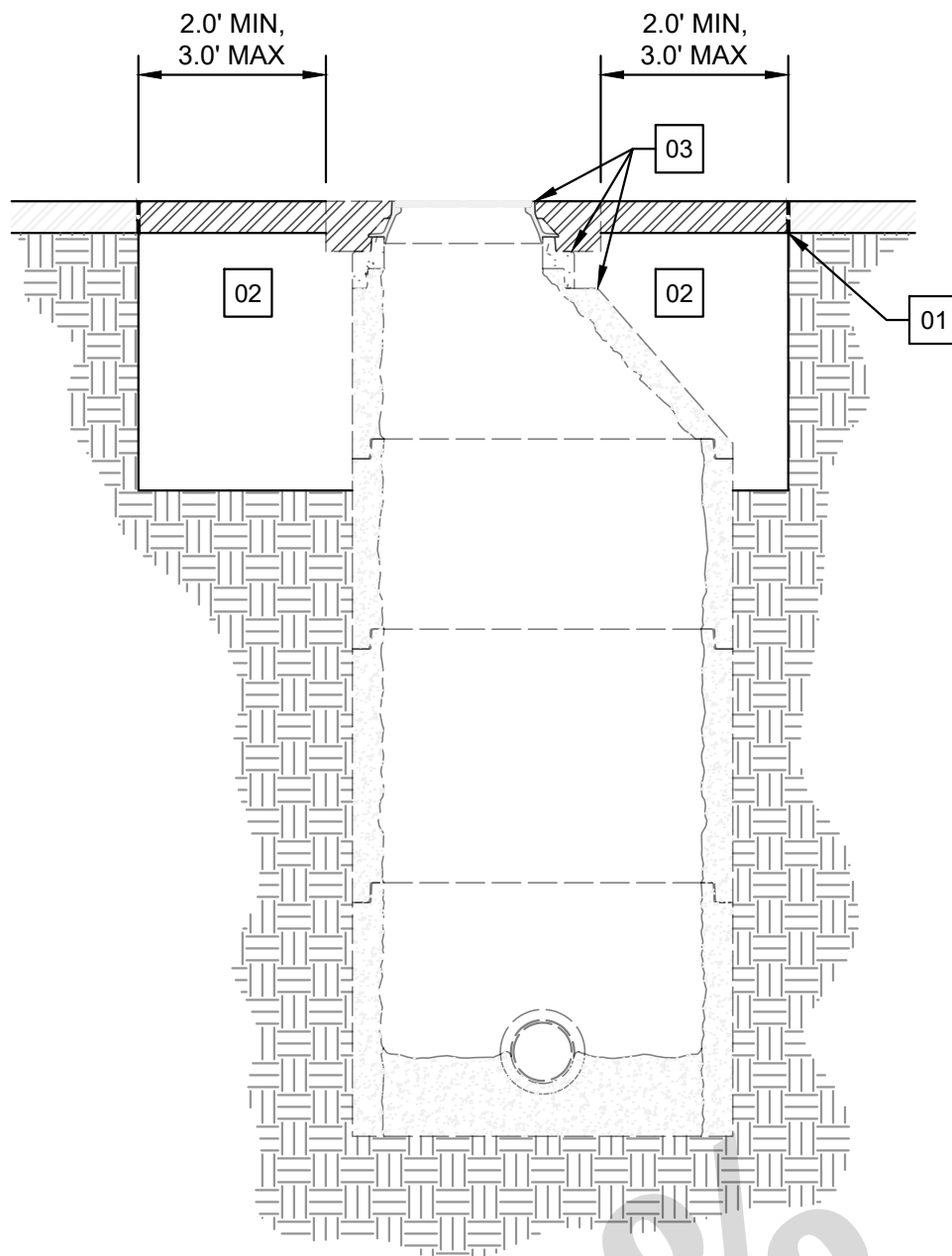
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MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
DETAILS

JOB #: 1045-0006-00
DESIGNERS: ZCM
DRAWN BY: ZCM
DATE: 02/13/25
DRAWING NO.
C-2.0
4 OF 9 SHEETS



PLAN VIEW



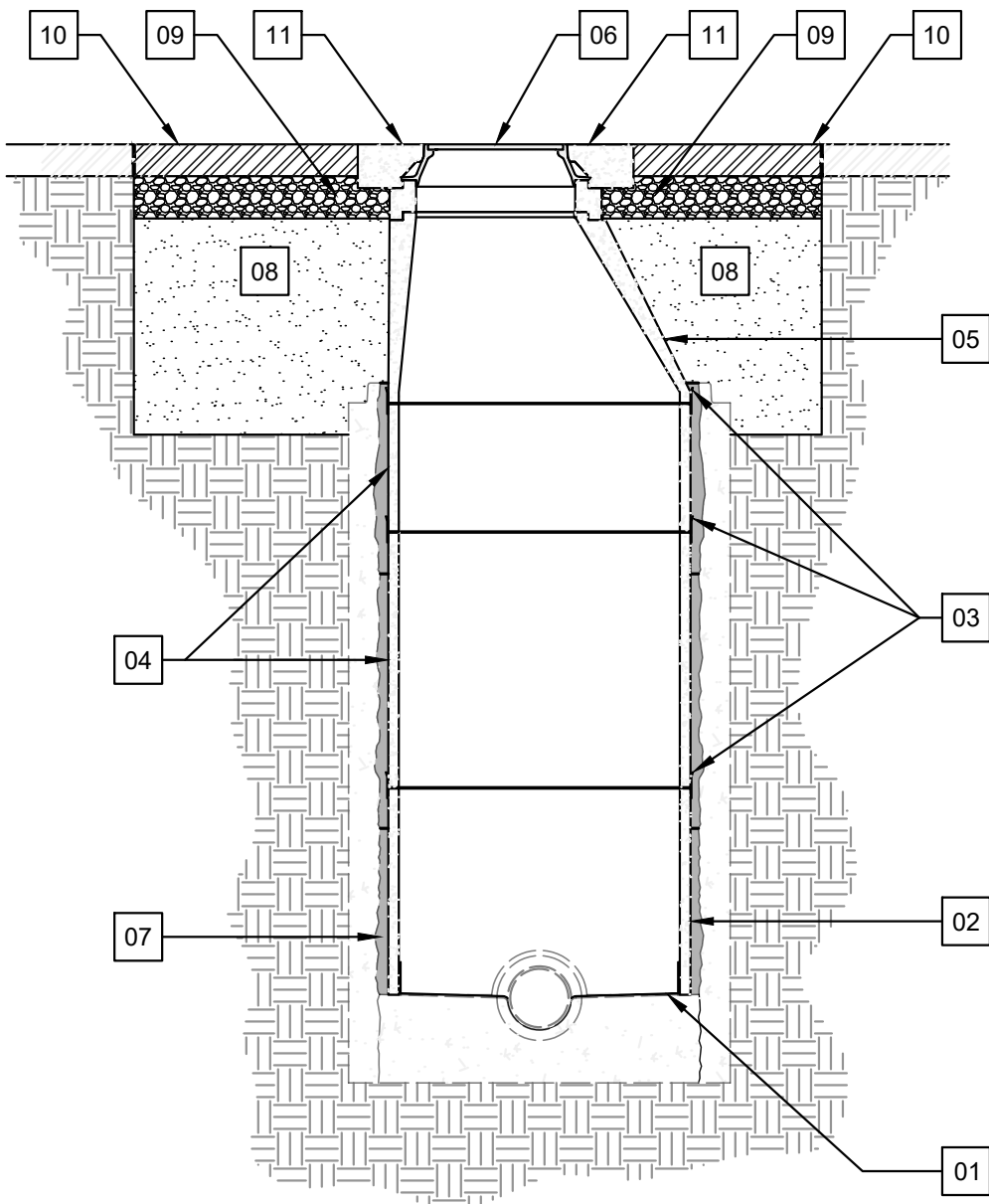
PROFILE VIEW

DEMOLITION NOTES:

1. SAW CUT AND REMOVE EXISTING AC PAVEMENT. SAW CUTS SHALL BE VERTICAL AND LOCATED 4.0 FT MIN. FROM THE EDGE OF THE EX. MANHOLE COVER. SAW CUTS SHALL BE PARALLEL OR PERPENDICULAR TO EX. ROAD ALIGNMENT, WHERE POSSIBLE.
2. REMOVE EX. SUBGRADE AND NATIVE SOIL SUCH THAT EX. MANHOLE CONE CAN BE REMOVED.
3. REMOVE EX. MANHOLE COVER, RING, GRADE RING(S), AND CONE.

1 MANHOLE INSERT DEMOLITION DETAIL

SCALE: NTS

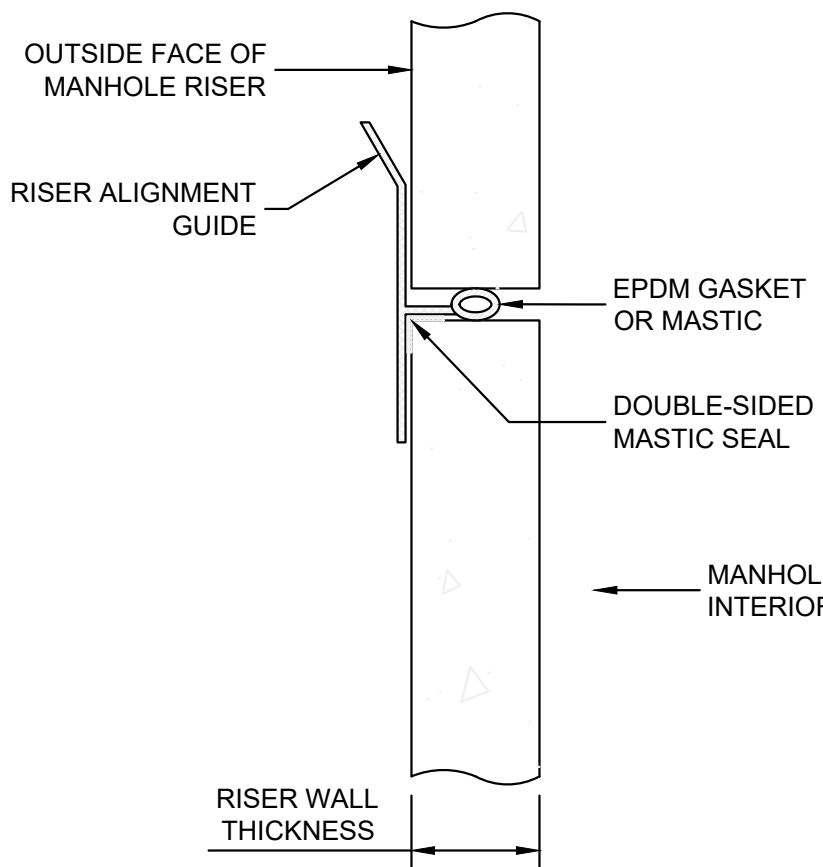


INSTALLATION NOTES:

1. REPAIR EX. BASE AND MH CHANNEL WITH EPOXY GROUT PER SPECIFICATION SECTION 33 01 30.81, MANHOLE REHABILITATION.
2. PROVIDE NEW POLYMER MANHOLE BASE RISER AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. CORE, DRILL/CUT, AND LEVEL THE BASE RISER AS REQUIRED TO ACCOMMODATE ALL INCOMING SEWER MAINS.
3. PROVIDE MANHOLE RISER ALIGNMENT GUIDE WITH MASTIC. REFER TO DETAIL 3, THIS SHEET.
4. PROVIDE ADDITIONAL POLYMER MANHOLE RISERS, AS REQUIRED, PER MANUFACTURER'S RECOMMENDATIONS. INSTALL ALIGNMENT GUIDES BETWEEN EACH RISER. SEE NOTE 3.
5. PROVIDE POLYMER CONCRETE ECCENTRIC CONE SECTION AND GRADE RINGS AS REQUIRED BY THE MANHOLE DEPTH SO THAT FRAME AND COVER SIT FLUSH WITH EX. GRADE. CONE AND GRADE RINGS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONE SHALL BE ORIENTED IN SAME DIRECTION AS EX. CONE.
6. PROVIDE NEW RING AND COVER PER MCWD STANDARD DETAIL S-3, SHEET C-2.1.
7. FILL ANNULAR SPACE BETWEEN EX. MANHOLE AND NEW INSERT WITH 1-SACK CEMENT SLURRY. CONTRACTOR TO CALCULATE VOLUME OF 1-SACK SLURRY REQUIRED BASED ON FIELD MEASUREMENTS PRIOR TO ORDERING, AND SHALL MEASURE VOLUME OF SLURRY PLACED TO VERIFY NO VOIDS EXIST BETWEEN INSERT AND EX. MANHOLE.
8. BACKFILL SUBGRADE UP TO EX. BASE LAYER WITH SAND BACKFILL MATERIAL. SAND BACKFILL SHALL HAVE A MINIMUM SAND EQUIVALENT OF 30. COMPACT WITH VIBRATORY COMPACTION TO 95% MIN. RC.
9. CLASS II AGGREGATE BASE LAYER. MIN THICKNESS PER CITY OF MARINA STANDARD ST-3, SHEET C-2.2. ASSUME TI OF 6, CONTRACTOR TO VERIFY TI WITH CITY OF MARINA. COMPACT FILL MATERIAL TO 95% RC.
10. ASPHALT CEMENT (AC) LAYER. AC SHALL BE HOT PLANT ASPHALT MIX. MIN THICKNESS PER CITY OF MARINA STANDARD ST-3, SHEET C-2.2. ASSUME TI OF 6, CONTRACTOR TO VERIFY TI WITH CITY OF MARINA.
11. PROVIDE CONCRETE COLLAR PER MCWD STANDARD DETAIL S-1, SHEET C-2.1.
12. EXCAVATIONS TO COMPLY WITH CAL-OSHA REQUIREMENTS AND REGULATIONS. SLOPED EXCAVATION ALLOWED WITH APPROVAL OF DISTRICT ENGINEER.
13. RESTORE THERMOPLASTIC STRIPING, PER SPEC. SECT. 32 17 23, PAVEMENT MARKINGS, WHERE EX. STRIPING WAS REMOVED DURING EXCAVATION.

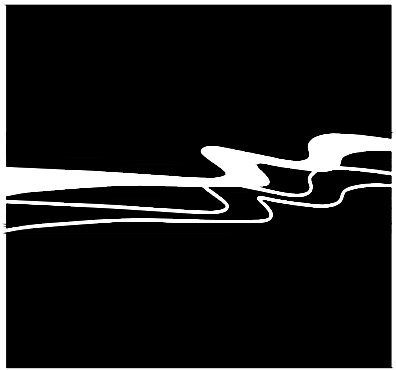
2 MANHOLE INSERT INSTALLATION DETAIL

SCALE: NTS



3 RISER JOINT DETAIL

SCALE: NTS



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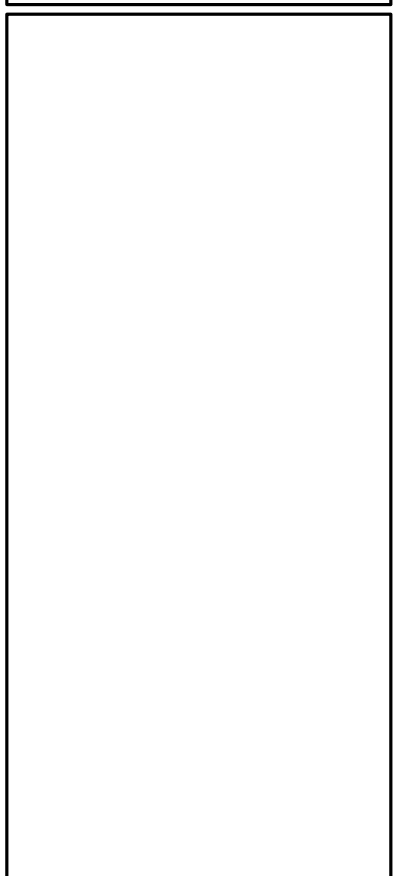
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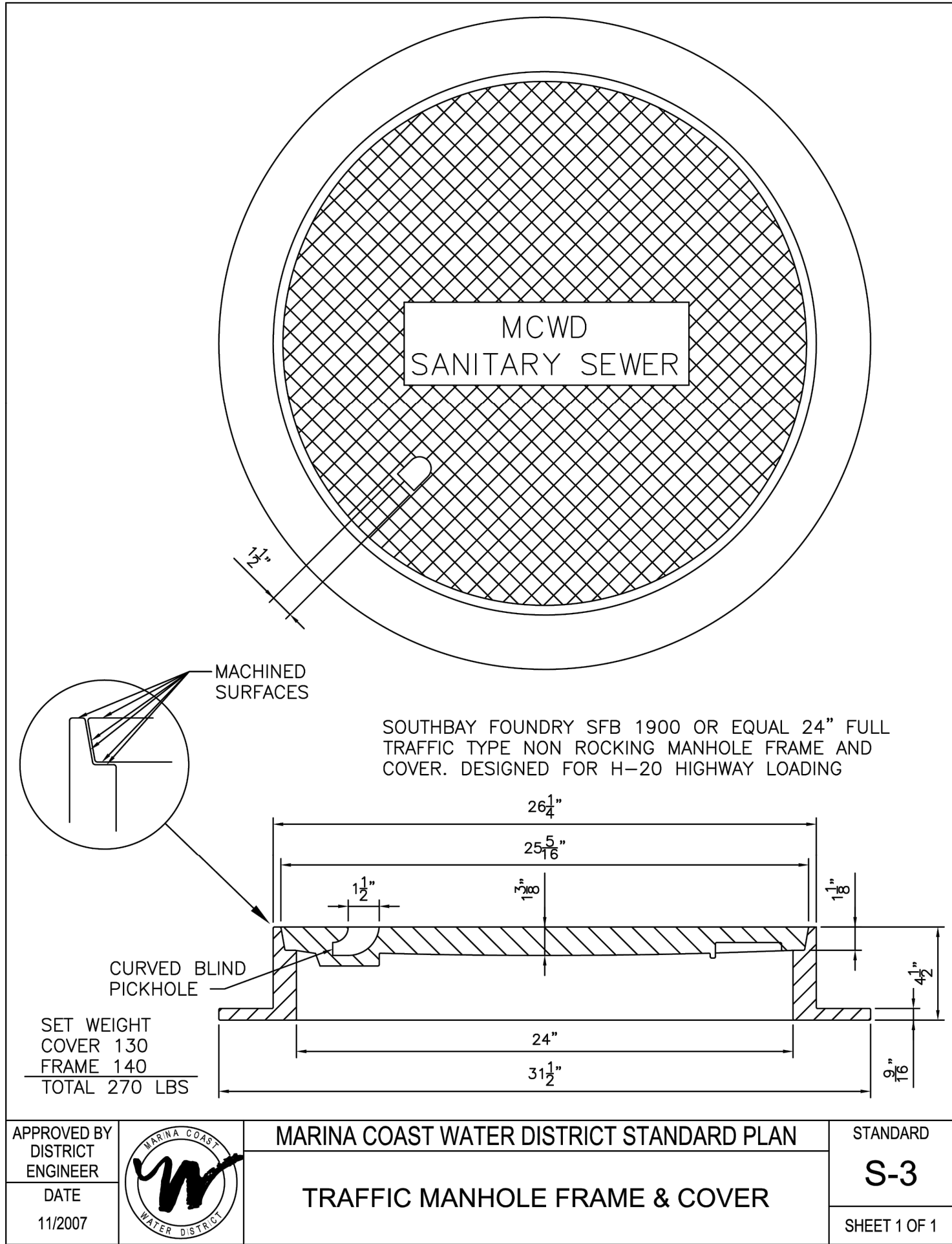
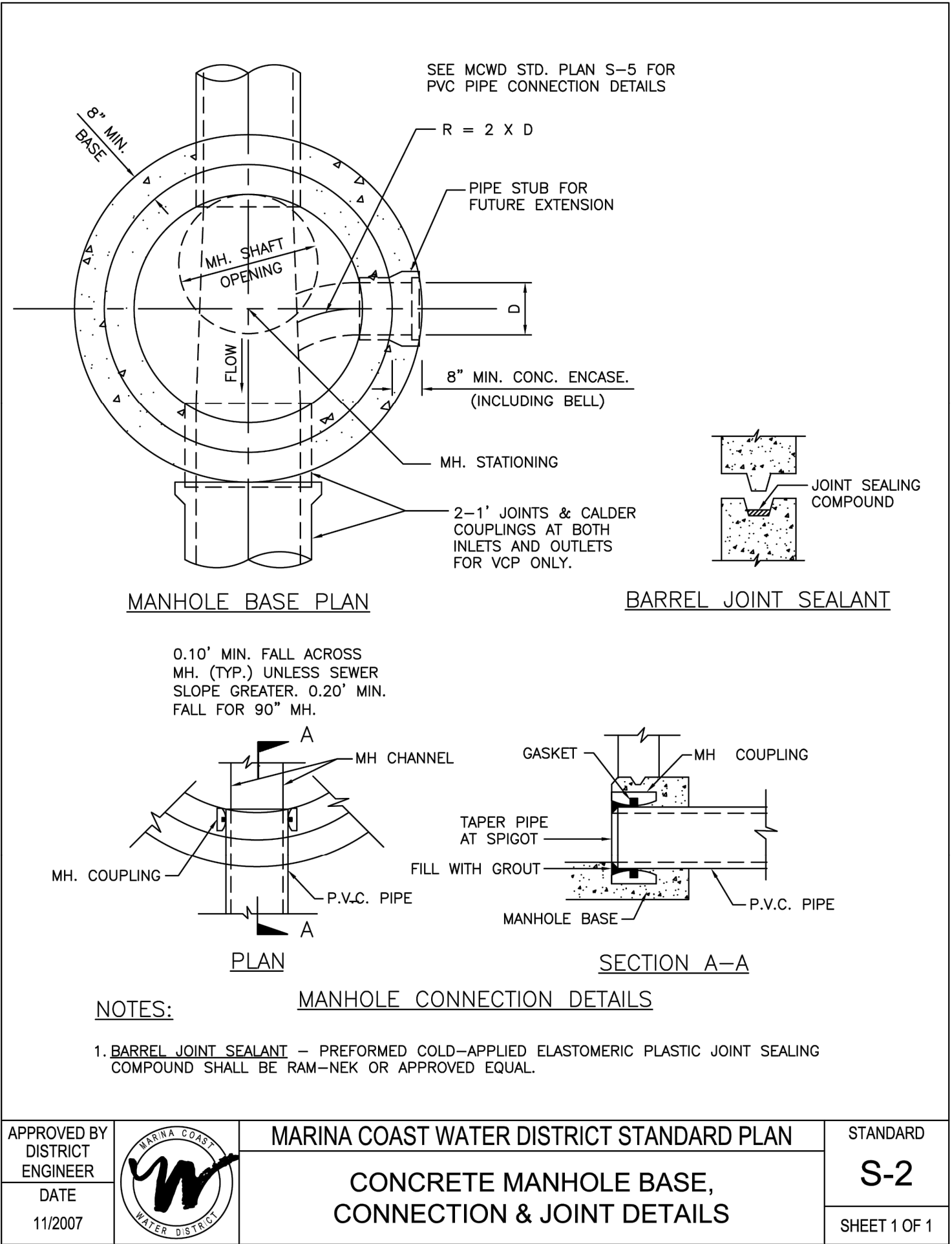
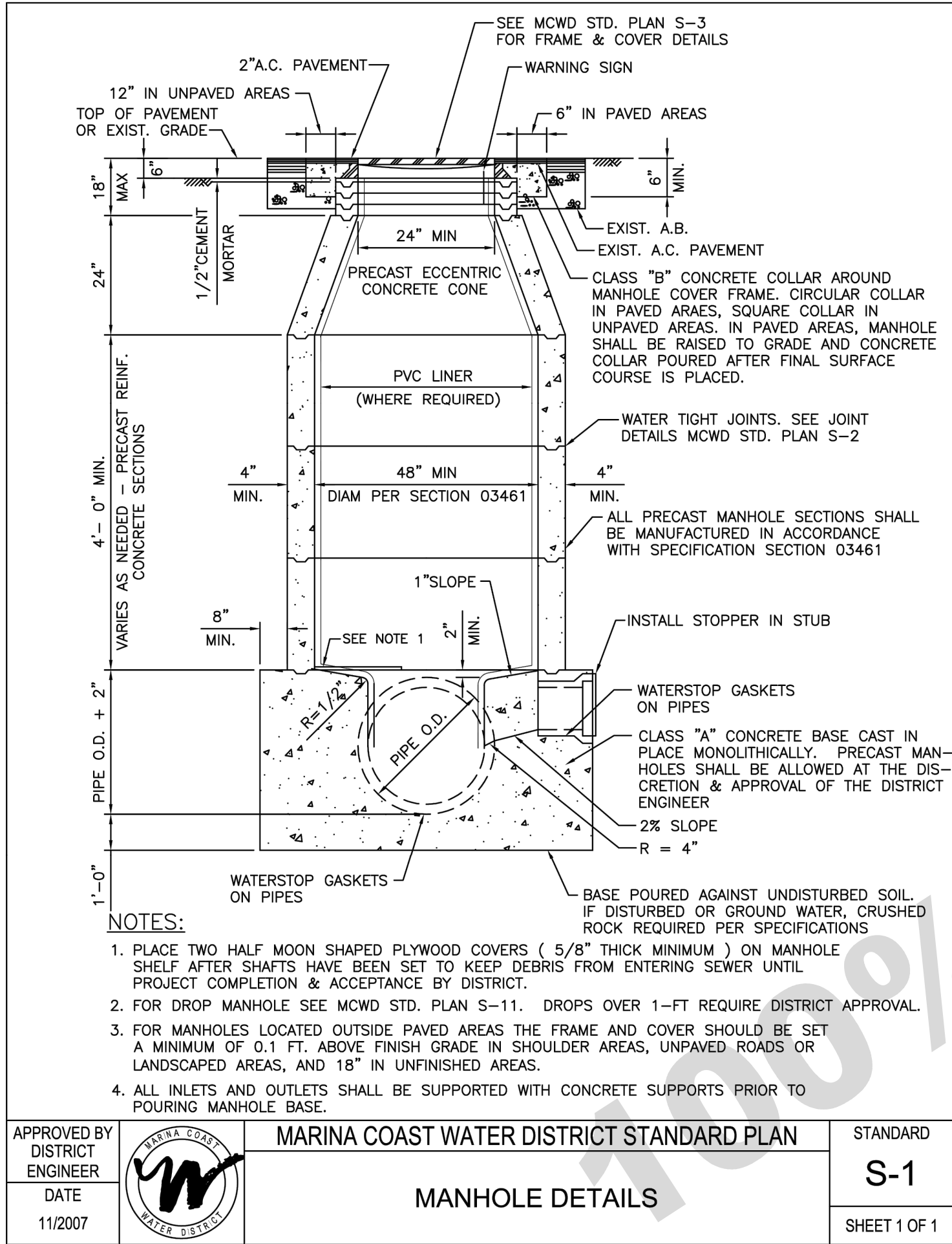
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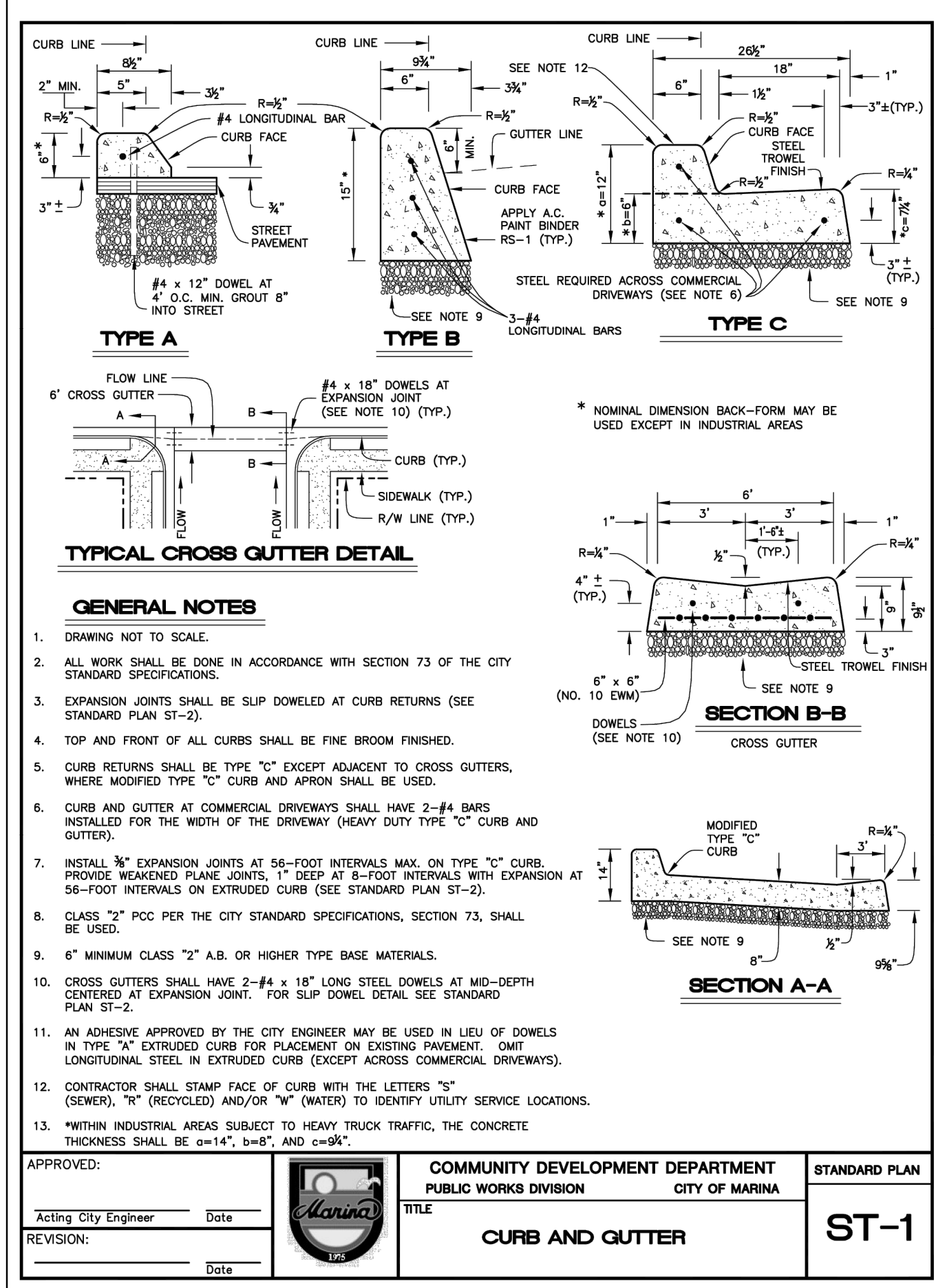
MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
MCWD STANDARD DETAILS

JOB #: 1045-0006-00
DESIGNERS: ZCM
DRAWN BY: ZCM
DATE: 02/13/25
DRAWING NO.
C-2.1
5 OF 9 SHEETS

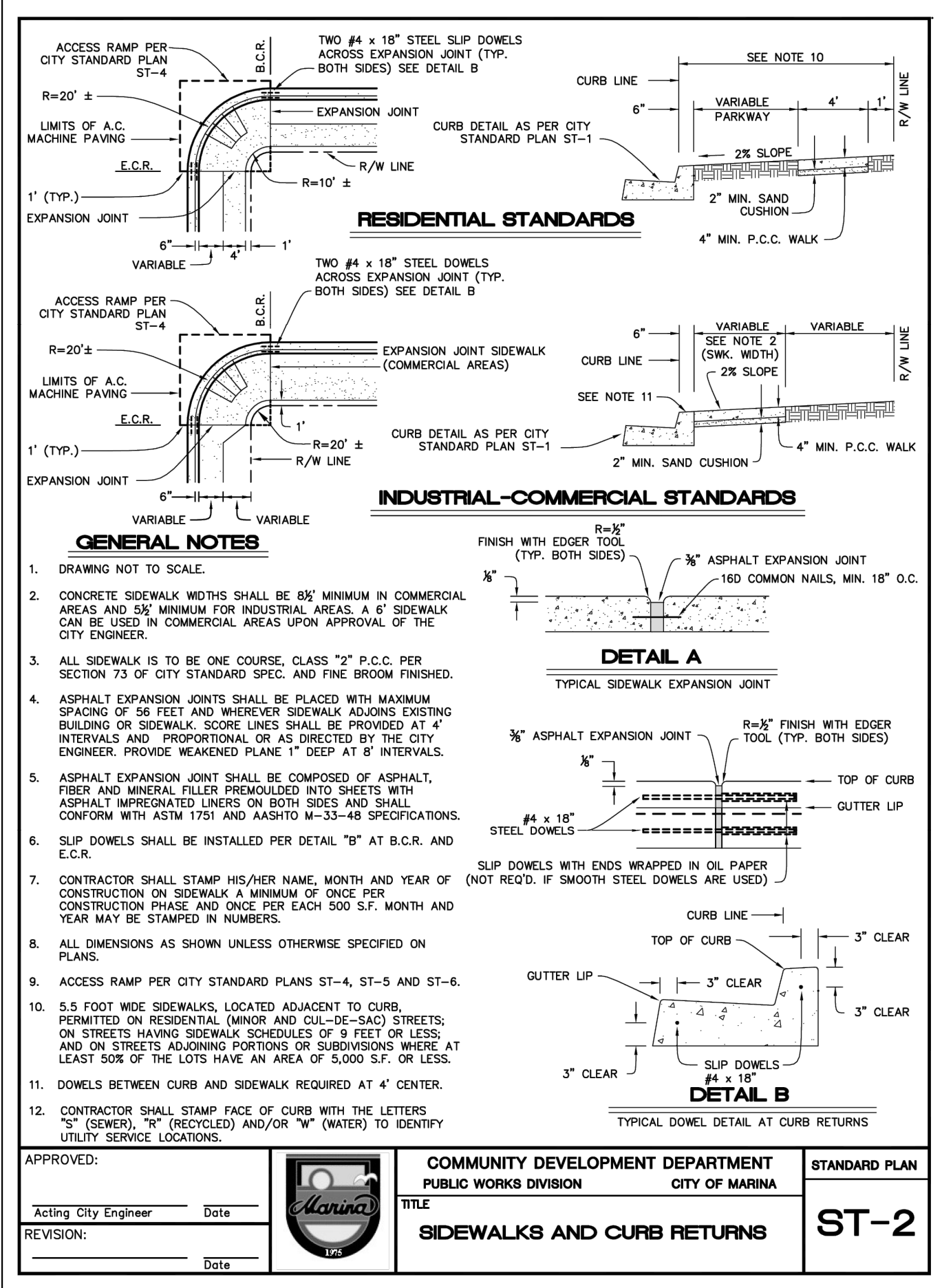


1 MARINA COAST WATER DISTRICT STANDARD SEWER DETAILS

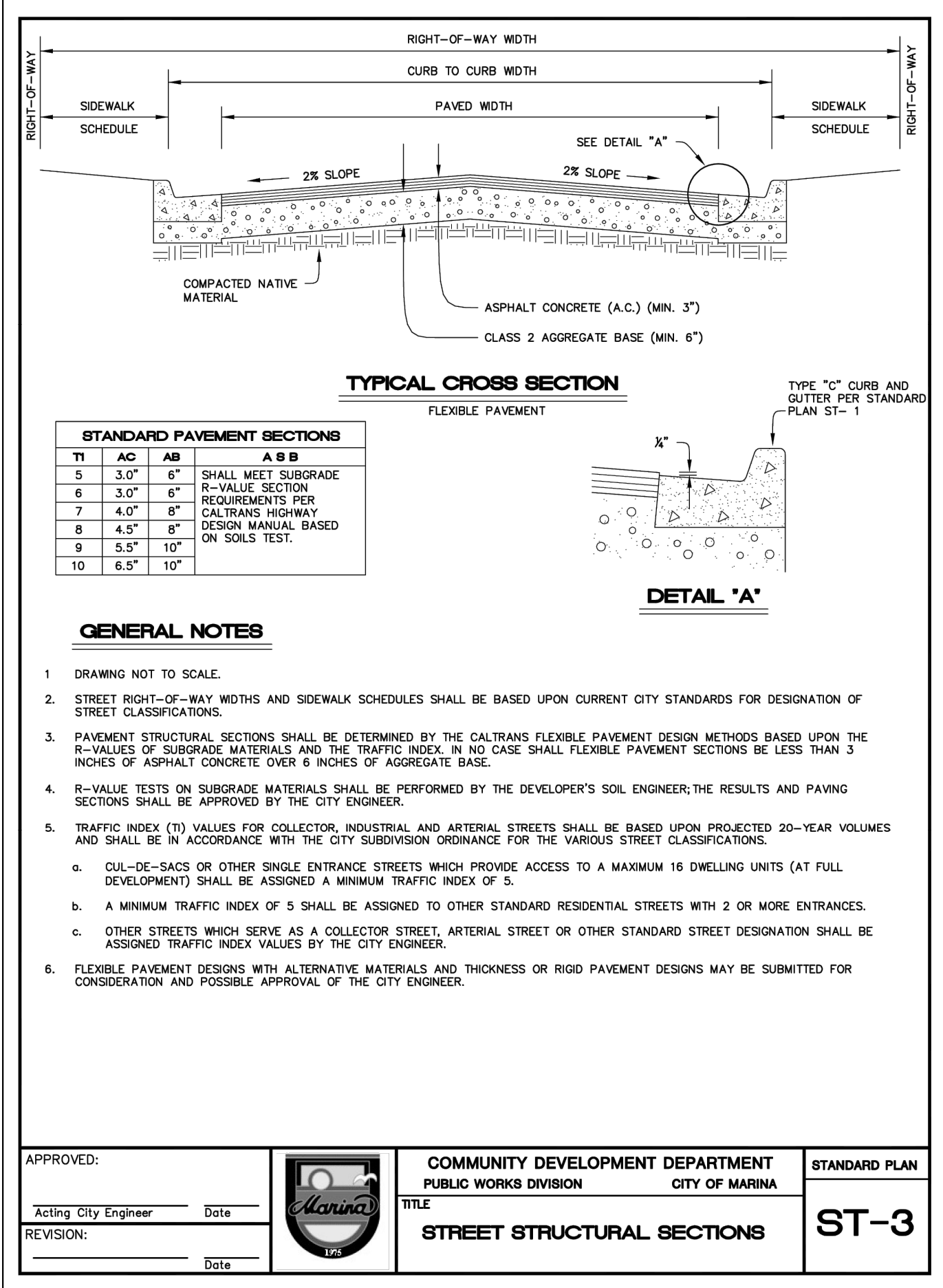
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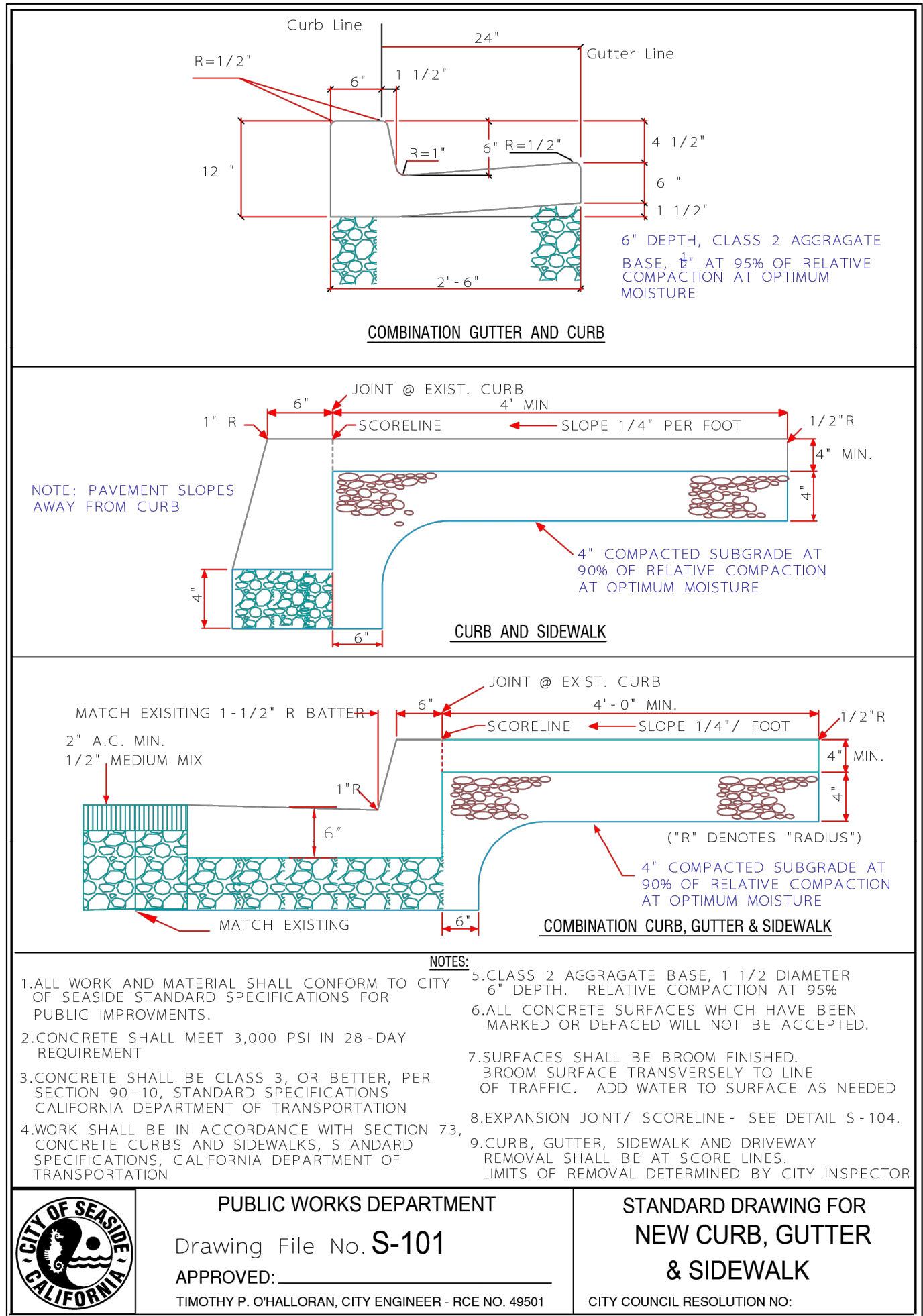
1 CITY OF MARINA STANDARD DETAILS



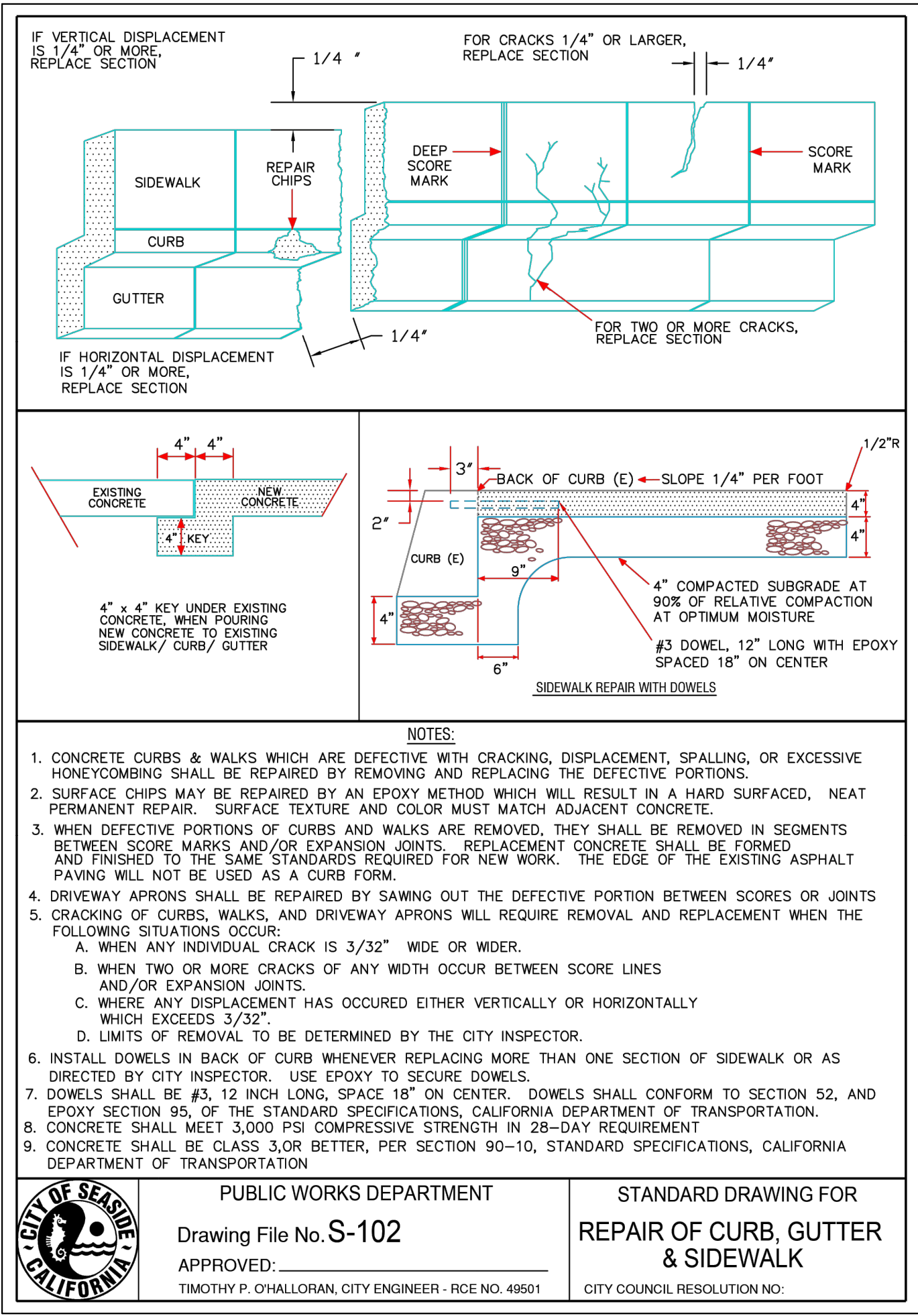
1 CITY OF MARINA STANDARD DETAILS



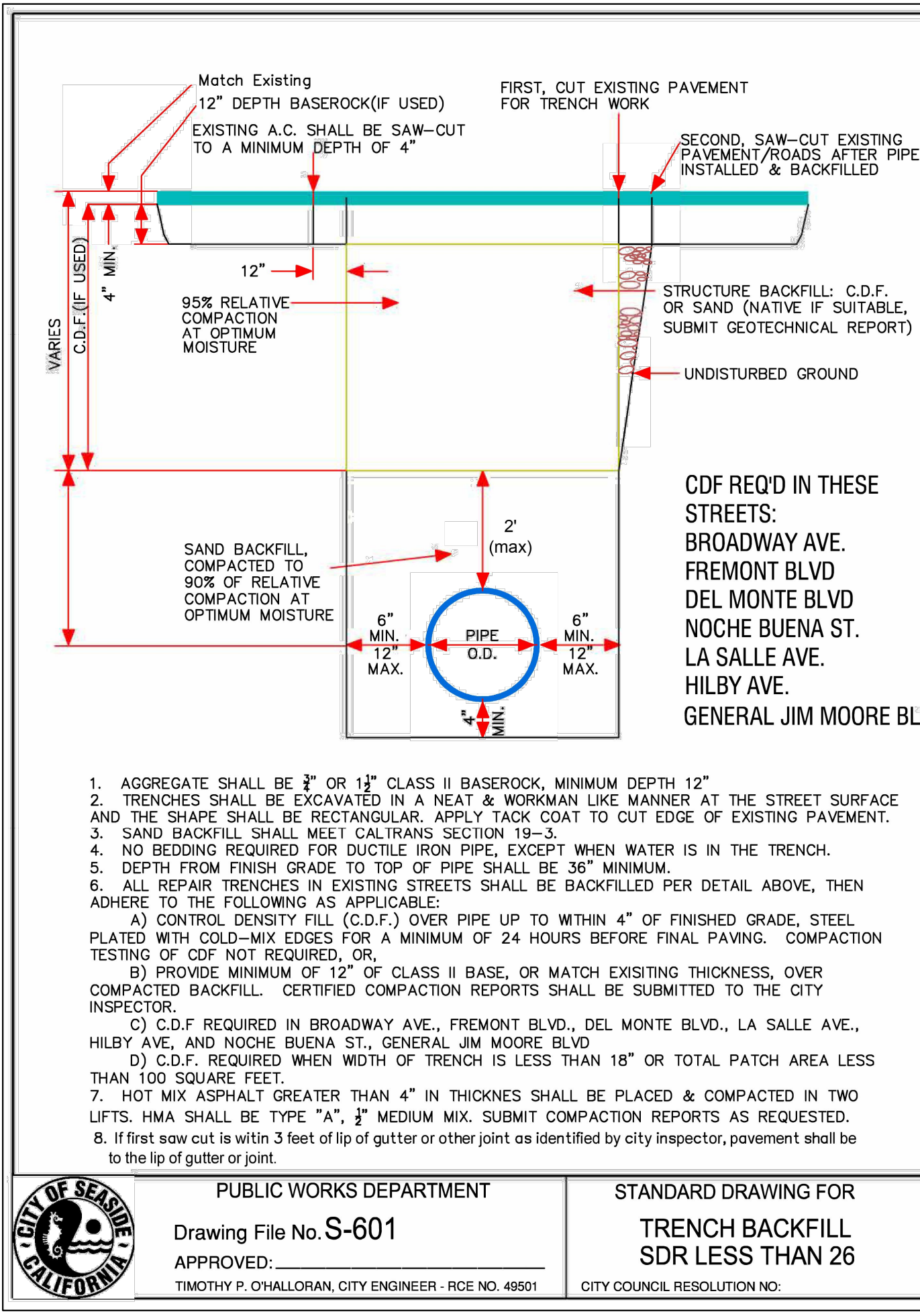
1 CITY OF MARINA STANDARD DETAILS



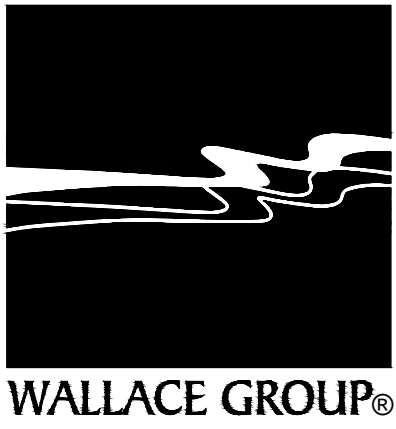
1 CITY OF SEASIDE STANDARD DETAILS



1 CITY OF SEASIDE STANDARD DETAILS



1 CITY OF SEASIDE STANDARD DETAILS



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APPROVED: _____
Acting City Engineer Date
REVISION: _____
Date

CITY OF SEASIDE
PUBLIC WORKS DEPARTMENT
Drawing File No. S-601
CITY ENGINEER
TITLE: TRENCH BACKFILL
SDR LESS THAN 26

1 CITY OF SEASIDE STANDARD DETAILS

SCALE: NTS

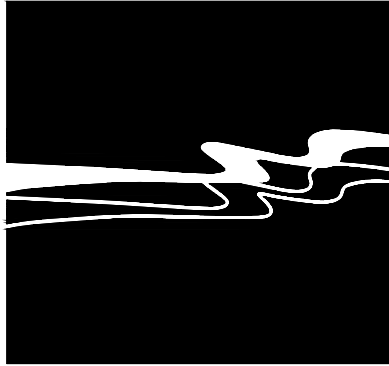
MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
AGENCY STANDARD DETAILS

JOB #: 1045-0006-00
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C-2.2
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MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
EROSION CONTROL PLAN

JOB #: 1045-0006-00

DESIGNERS: ZCM

DRAWN BY: ZCM

DATE: 02/13/25

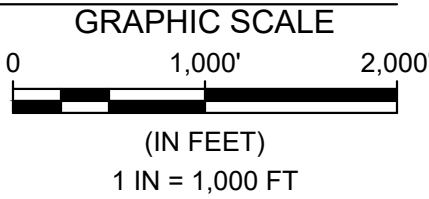
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C-3.0

7 OF 9 SHEETS



1 EROSION, SEDIMENT, AND WATER POLLUTION CONTROL PLAN



PROJECT SCOPE

- REHABILITATION OF TWENTY-ONE (21) EXISTING SANITARY SEWER MANHOLES. REHABILITATION EFFORTS INCLUDE:
 - PROVIDING POLYMER CONCRETE MANHOLE INSERTS IN EIGHT (8) OF THE MANHOLES, AS SHOWN IN THE PLANS.
 - EPOXY-LINING THE INTERIOR OF THIRTEEN MANHOLES, AS SHOWN IN THE PLANS.
 - PROVIDING NEW COVERS, FRAMES, AND CONCRETE COLLARS FOR ALL TWENTY-ONE MANHOLES.

DISTURBED AREA

144 SF PER MANHOLE X 21 MANHOLES = 3,024 SF
TOTAL DISTURBED AREA = 3,024 SF (0.07 AC)

GENERAL NOTES:

- ALL BMP'S SHALL BE INSTALLED PER THE LATEST VERSION OF THE CALTRANS CONSTRUCTION SITE BEST MANAGEMENT PRACTICES (BMP) MANUAL AND DETAILS SHOWN IN SHEETS C-3.1 AND C-3.2.

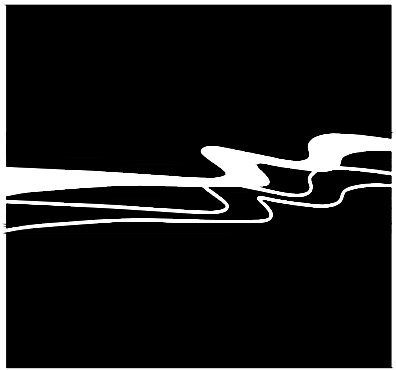
EROSION AND SEDIMENT CONTROL NOTES:

- CONSTRUCTION EQUIPMENT PARKING AND STORAGE, DRIP PANS REQUIRED. FOR FUELING AND MAINTENANCE. SEE REQUIRED BMP'S NS-9 AND NS-10. SHEET C-3.2.
- CONSTRUCTION TRASH RECYCLING MUST BE COVERED WITH WATERTIGHT COVER AT ALL TIMES, WITH NO OVERFLOWS ALLOWED PER REQUIRED BMP WM-5. SEE SHEET C-3.2.
- FUEL STORAGE/HAZMAT AREA WITH SECONDARY CONTAINMENT PER REQUIRED BMP'S PER REQUIRED BMP'S WM-1, WM-2, WM-4, WM-5, WM-6, WM-7, AND WM-10. SEE SHEET C-3.2.
- CONCRETE WASHOUT PER REQUIRED DETAIL WM-8. SEE SHEET C-3.2.
- INSTALL PROTECTION AT ALL STORM DRAIN INLETS WITHIN 50' OF PROJECT DISTURBANCE PER REQUIRED BMP'S SE-10. SEE SHEET C-3.2.
- STOCKPILE MANAGEMENT PER BMP WM-3. SEE SHEET C-3.2.
- STREET SWEEPING TO BE CONDUCTED TO REMOVE ANY SEDIMENT ON IMPERVIOUS SURFACES WITHIN 50' OF DISTURBANCE AND EQUIPMENT TRAVEL WAYS PER BMP SE-7. SHEET C-3.2. CONTRACTOR RESPONSIBLE FOR INSPECTING SITE DAILY AND REMOVING SEDIMENT AS REQUIRED.

DUST CONTROL NOTES:

- THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM THEIR FAILURE TO DO SO. CONTRACTOR SHALL AT A MINIMUM PERFORM THE FOLLOWING MITIGATION MEASURES:
 - WATERING OF DISTURBED AREAS DURING CONSTRUCTION TO MINIMIZE AIRBORNE DUST.
 - STABILIZE DISTURBED AREA WITH EROSION CONTROL MEASURES DURING AND FOLLOWING CONSTRUCTION.
 - TEMPORARY CONSTRUCTION ENTRANCE / EXIT INSTALLED AT ALL UNPAVED ACCESS ROADS. ENTRANCE AND EXIT TO UNPAVED AREAS SHOULD BE LIMITED TO ONE PER SITE.

Rev.	Date	Description of Revisions	By



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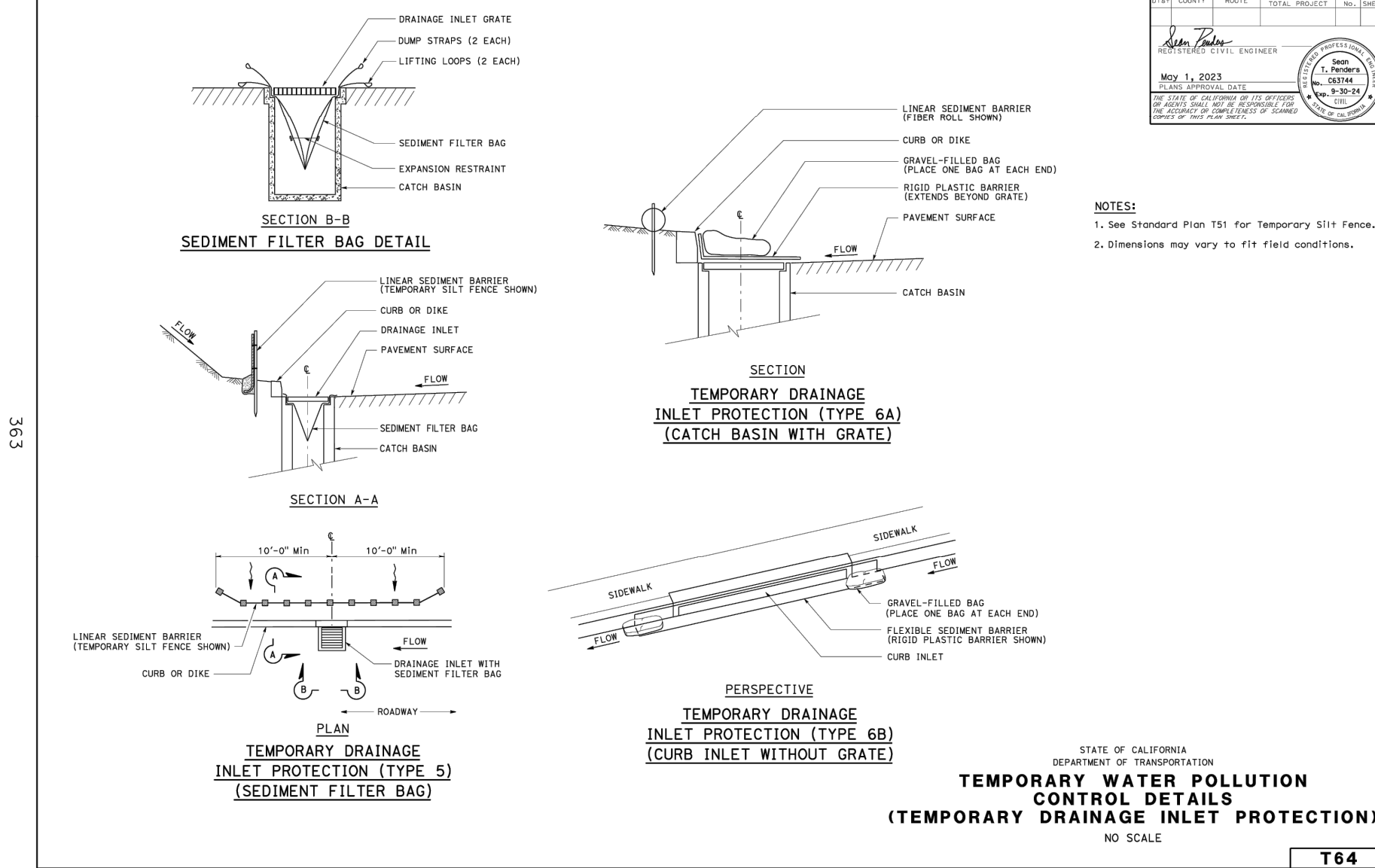
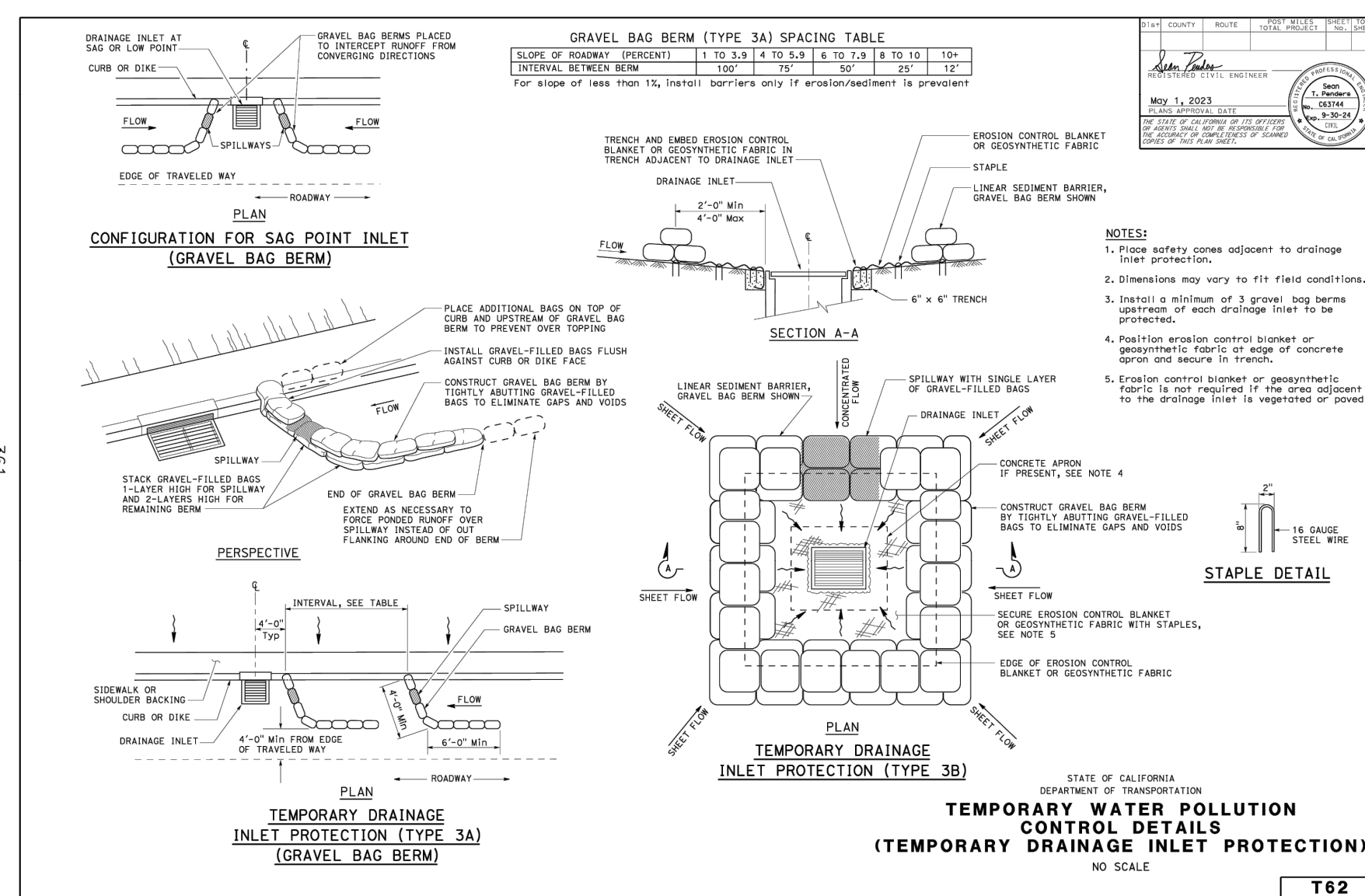
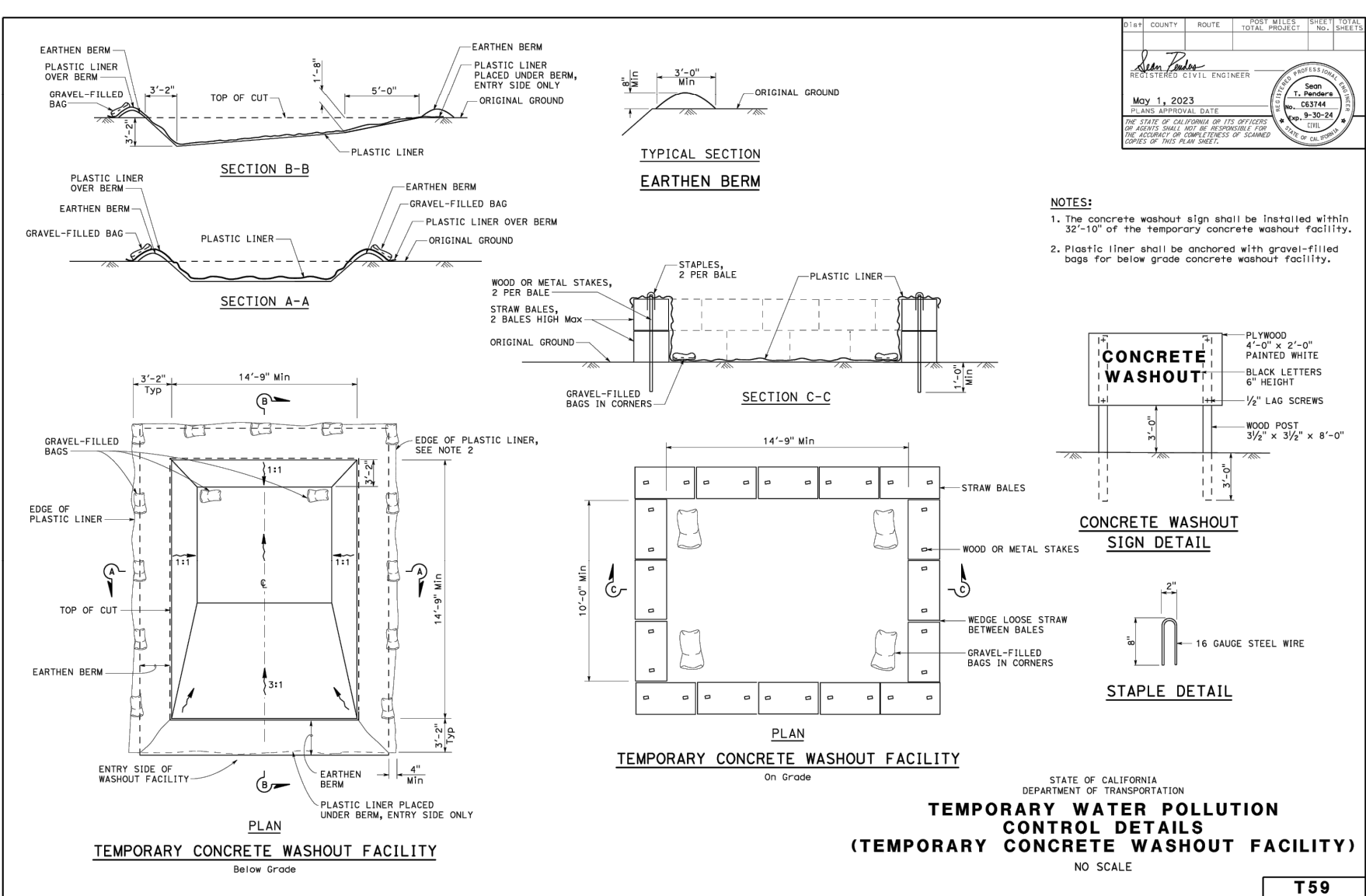
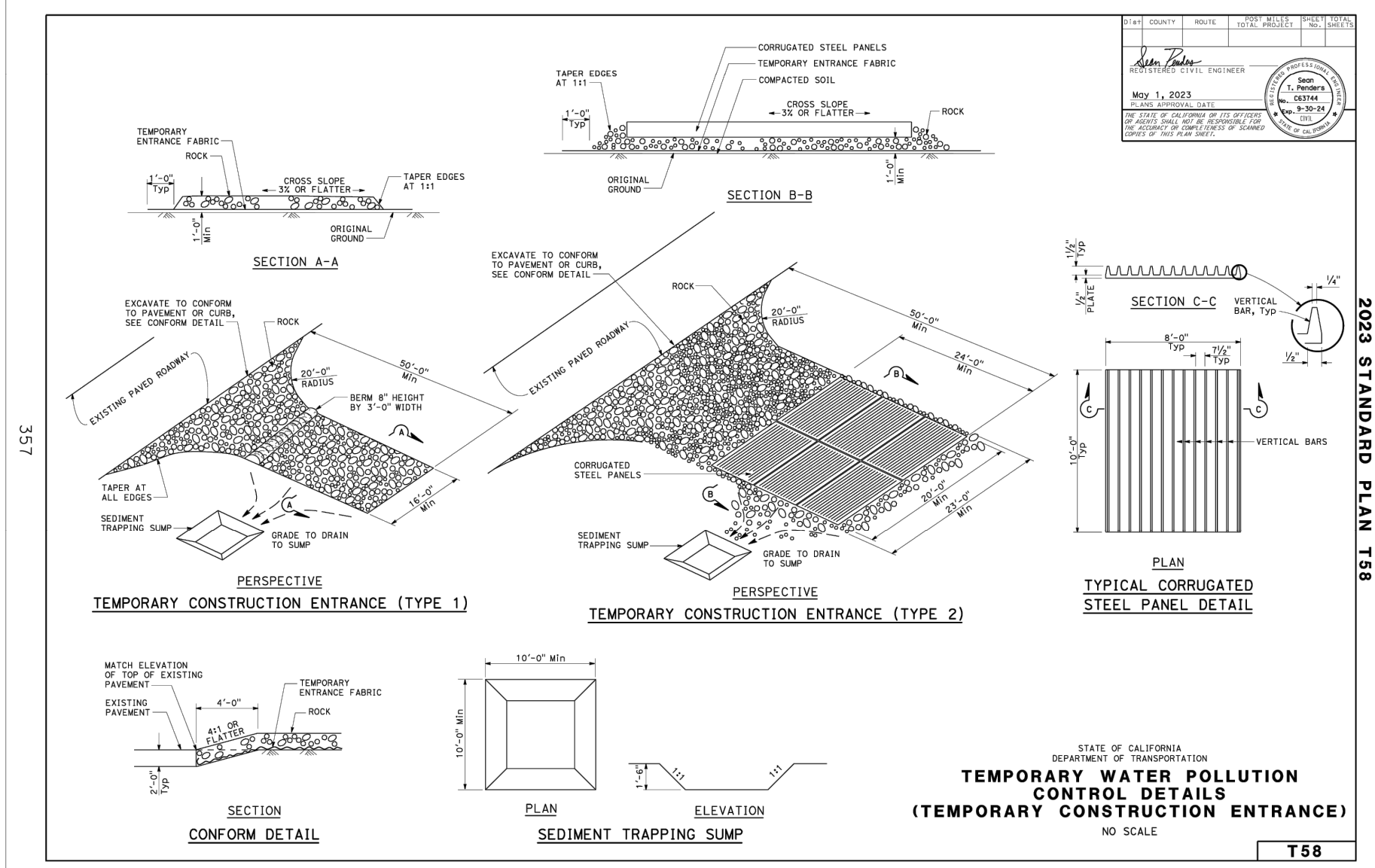
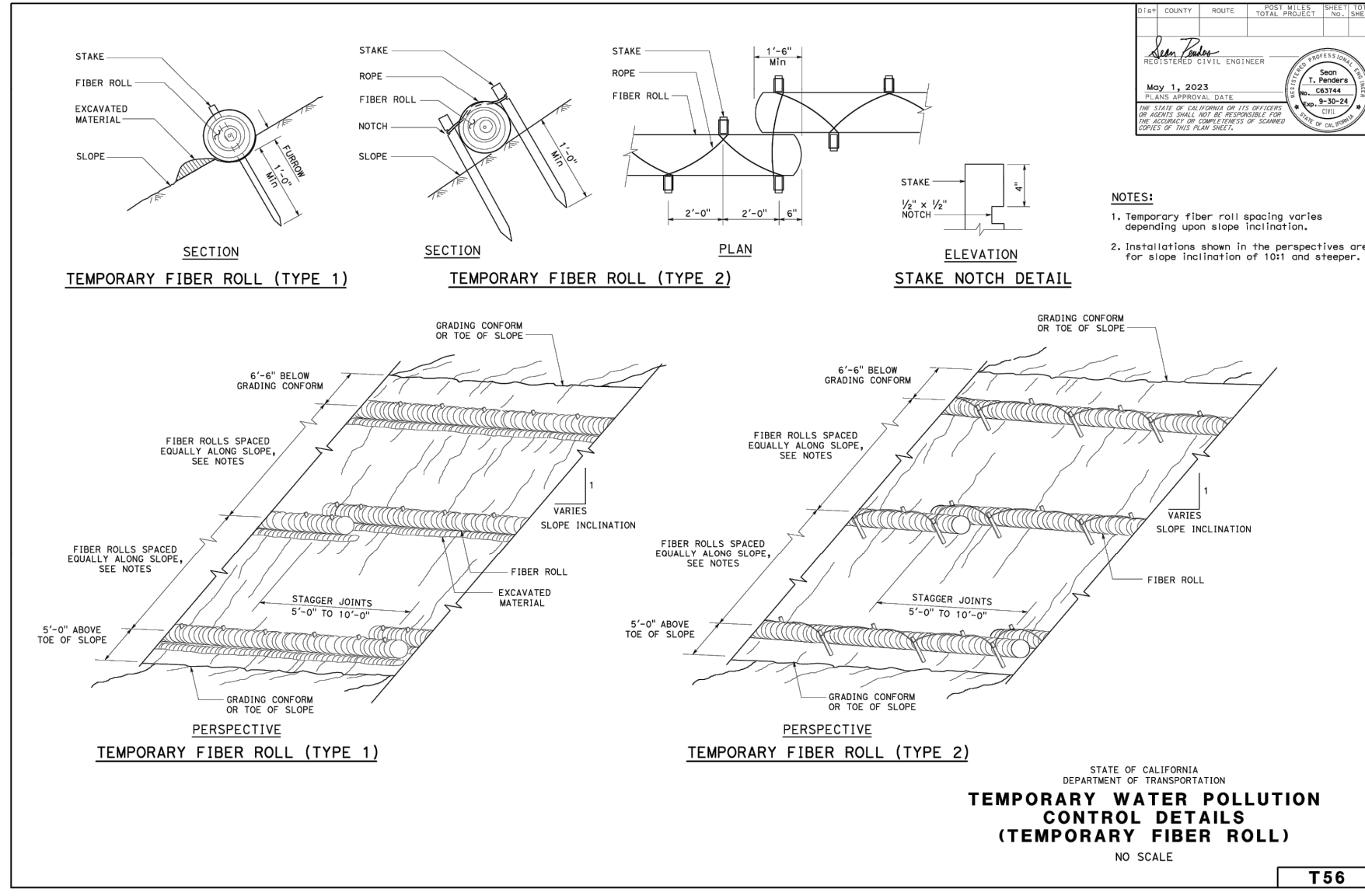
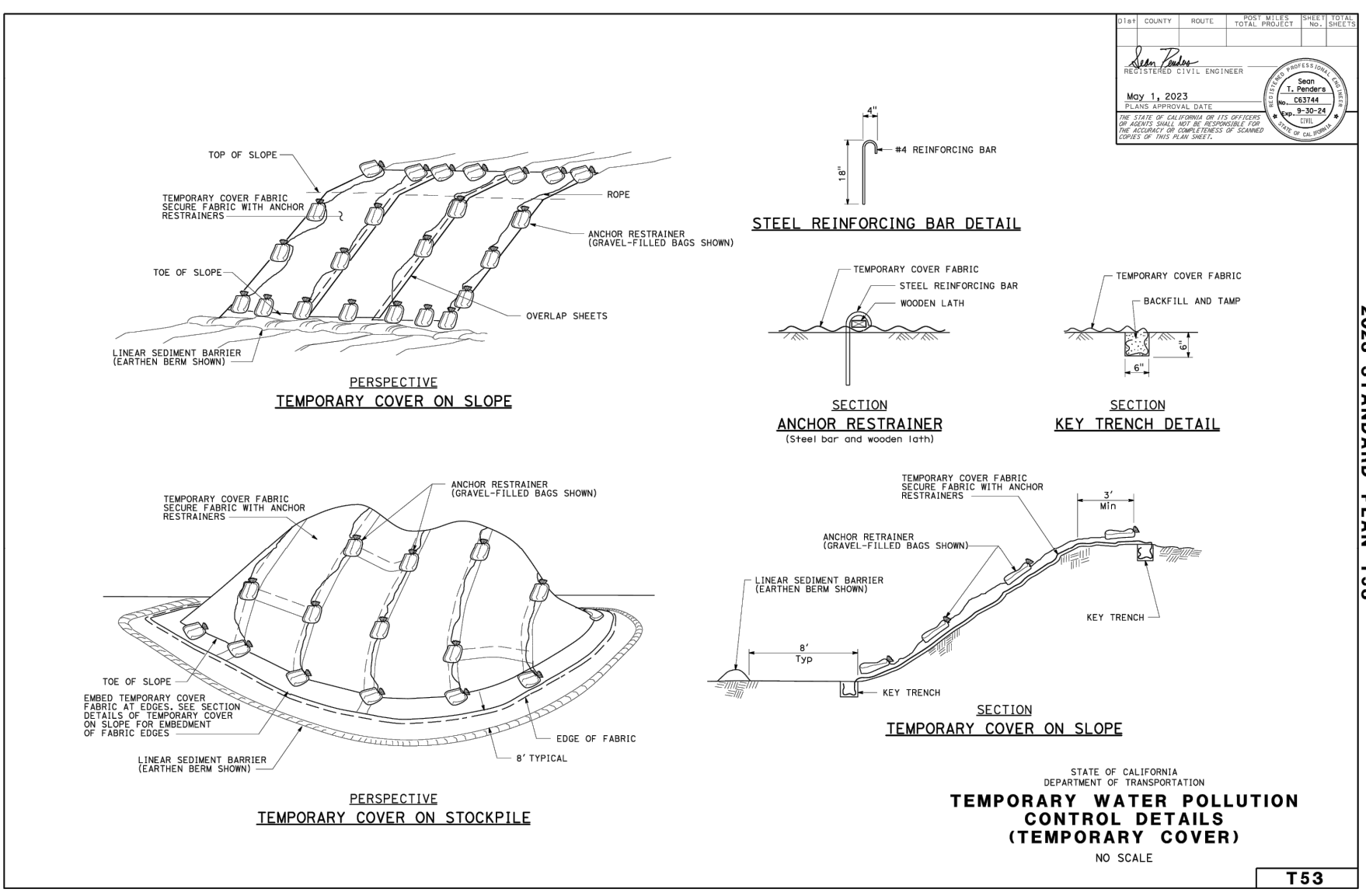
MARINA COAST WATER DISTRICT
SANITARY SEWER MANHOLE REHABILITATION
EROSION CONTROL PLAN DETAILS

JOB #: 1045-0006-00
DESIGNERS: ZCM
DRAWN BY: ZCM
DATE: 02/13/25

DRAWING NO.

C-3.1

8 OF 9 SHEETS



A	12/23/2024	ADDENDUM 2 - WELL 5 IMPROVEMENTS	ZCM
Rev.	Date	Description of Revisions	By

Vehicle and Equipment Fueling

NS-9



Definition and Purpose

Vehicle and equipment fueling procedures and practices are designed to minimize or eliminate the discharge of fuel spills and leaks into storm drain systems or to receiving waters.

Appropriate Applications

These procedures are applied on all construction sites where vehicle and equipment fueling takes place.

Limitations

This BMP may be limited or disallowed under regulatory agency permits, particularly near Environmentally Sensitive Areas (ESAs).

Onsite vehicle and equipment fueling should only be used where it's impractical to send vehicles and equipment off-site for fueling.

Standards and Specifications

When fueling must occur onsite, the contractor shall select and designate an area or areas to be used, subject to approval of the RE.

Dedicated fueling areas shall be protected from stormwater run-on and runoff, and shall be located at least 50 feet from downstream drainage facilities and watercourses. Fueling must be performed on level-grade areas. Protect fueling areas with berms or dikes to prevent run-on, runoff, and to contain spills.



Material Delivery and Storage

WM-1



Definition and Purpose

Procedures and practices for the proper handling and storage of materials in a manner that minimizes or eliminates the discharge of these materials to the storm drain system or to receiving waters.

Appropriate Applications

These procedures are implemented at all construction sites with delivery and storage of the following:

- Hazardous chemicals such as:
 - Acids
 - Lime
 - Glues
 - Adhesives
 - Paints
 - Solvents
- Curing compounds
- Soil stabilizers and binders
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease
- Asphalt and concrete components
- Pesticides and herbicides
- Other materials that may be detrimental if released to the environment



Hazardous Waste Management

WM-6



Definition and Purpose

These are procedures and practices to minimize or eliminate the discharge of pollutants from construction site hazardous waste to the storm drain systems or to watercourses.

Appropriate Applications

This best management practice (BMP) applies to all construction projects. Hazardous waste management practices are implemented on construction projects that generate waste from the use of:

- Petroleum Products
- Asphalt Products
- Concrete Curing Compounds
- Pesticides
- Palliatives
- Acids
- Paints
- Stains
- Solvents
- Septic Wastes
- Wood Preservatives
- Roofing Tar, or
- Any materials deemed a hazardous waste in California, Title 22 Division 4.5, or listed in 40 CFR Parts 110, 117, 261, or 302.



Vehicle and Equipment Maintenance

NS-10



Definition and Purpose

Procedures and practices to minimize or eliminate the discharge of pollutants to the storm drain systems or to receiving waters from vehicle and equipment maintenance activities.

Appropriate Applications

These procedures apply on all construction projects where an onsite uncovered yard area is necessary for storage and maintenance of heavy equipment and vehicles.

Limitations

This BMP may be limited or disallowed under regulatory agency permits, particularly near Environmentally Sensitive Areas (ESAs).

Onsite vehicle and equipment maintenance should only be used where it's impractical to send vehicles and equipment off-site for fueling.

Standards and Specifications

When maintenance must occur onsite, the contractor shall select and designate an area to be used, subject to approval of the RE and implement appropriate controls for the activities to be performed. Dedicated maintenance areas shall be on level ground and protected from storm water run-on and runoff, and shall be located at least 50 ft from downstream drainage facilities and receiving waters.

Protect maintenance areas with berms or dikes to prevent run-on, runoff, and to contain spills.



Material Use

WM-2



Definition and Purpose

These are procedures and practices for use of construction materials in a manner that minimizes or eliminates the discharge of these materials to the storm drain system or to receiving waters.

Appropriate Applications

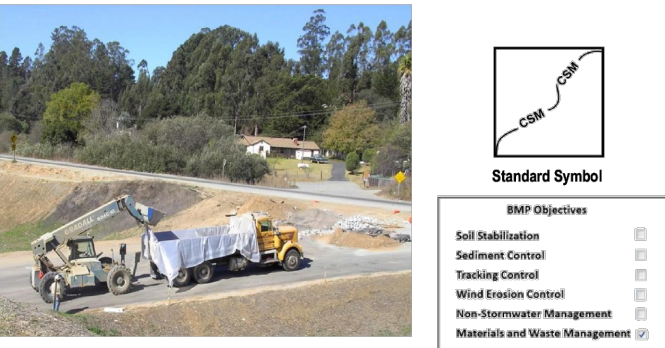
This BMP applies to all construction projects. These procedures apply when the following materials are used or prepared on site:

- Hazardous chemicals such as:
 - Acids
 - Lime
 - Glues
 - Adhesives
 - Paints
 - Solvents
- Curing compounds
- Soil stabilizers and binders
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease
- Asphalt and concrete components
- Pesticides and herbicides
- Other materials that may be detrimental if released to the environment



Contaminated Soil Management

WM-7



Definition and Purpose

These are procedures and practices to minimize or eliminate the discharges of pollutants to the drainage system or to receiving waters from contaminated soil.

Appropriate Applications

Contaminated soils are often identified during project planning and development with known locations identified in the plans and specifications. The contractor shall review applicable reports and examine applicable call-outs in the plans and specifications. It may also apply to highway widening projects in older areas where median and shoulder soils may have been contaminated by aerially deposited lead (ADL).

Limitations

The procedures and practices presented in this best management practice (BMP) are general. The contractor shall identify appropriate practices and procedures consistent with the plans and specifications for the specific contaminants known to exist or discovered on site.

Standards and Specifications

Identifying Contaminated Areas

Contaminated soils are often identified during project planning and development with known locations identified in the plans and specifications. The contractor shall review applicable reports and examine applicable call-outs in the plans and specifications.

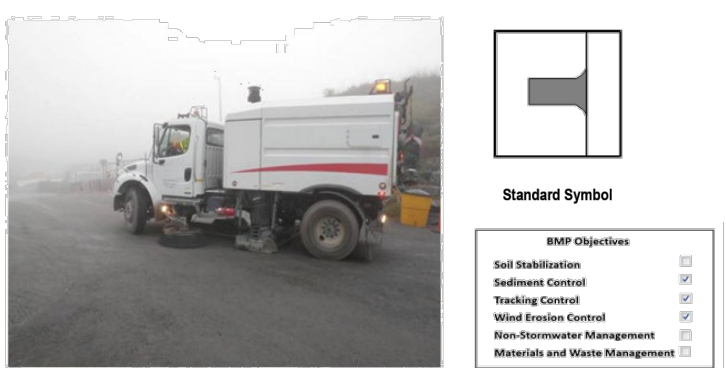
The contractor may discover contaminated soils not identified in the plans and specifications by observing:

Spills and leaks, discoloration, odors or abandoned underground tanks or pipes.



Street Sweeping

SC-7



Definition and Purpose

Practices to remove tracked sediment to prevent the sediment from entering a storm drain or receiving waters.

Appropriate Applications

These practices are implemented anywhere sediment is tracked from the project site onto public or private paved roads, typically at jobsite entrances and exits.

Limitations

Sweeping and vacuuming may not be effective when soil is wet or muddy.

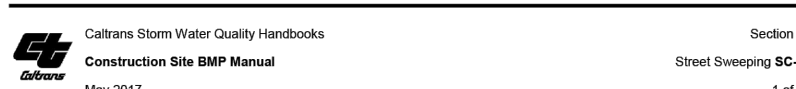
Standards and Specifications

General Requirements

Sweep by hand or mechanical methods, such as vacuuming. Kick brooms or sweeper attachments may not be used.

At least one street sweeper in good working order must be at the job site at all times when street sweeping work is required.

Use one of the following types of street sweepers:



Stockpile Management

WM-3



Definition and Purpose

Stockpile management procedures and practices are designed to reduce or eliminate air and storm water pollution from stockpiles of soil, and paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate subbase or pre-mixed aggregate, asphalt binder (so called "cold mix" asphalt) and pressure treated wood.

Appropriate Applications

Implemented in all projects that stockpile soil and other materials.

Limitations

Use of plastic cover might be restricted depending on the location of the site and regulatory permits.

Standards and Specifications

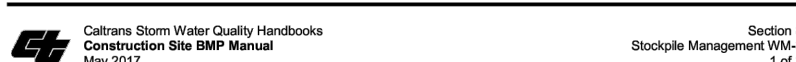
Stockpiles must comply with Standard Specification 13-4.03C (3) Stockpile Management.

Protection of stockpiles is a year-round requirement.

Locate stockpiles a minimum of 50 ft. away from concentrated flows of storm water, drainage courses, and inlets.

Utilize run-on and run-off BMPs to ensure stockpile materials are protected and do not have the potential to discharge material.

Implement wind erosion control practices as appropriate on all stockpiled material. For specific information see WE-1, "Wind Erosion Control."



Concrete Waste Management

WM-8



Definition and Purpose

These are procedures and practices that are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or to watercourses.

Appropriate Applications

Concrete waste management procedures and practices are implemented on construction projects where concrete is used as a construction material or where concrete dust and debris result from demolition activities.

Where slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from sawcutting, coring, grinding, grooving, and hydro-concrete demolition.

Where concrete trucks and other concrete-coated equipment are washed on site, when approved by the Resident Engineer (RE). See also NS-8, "Vehicle and Equipment Cleaning."

Where mortar-mixing stations exist.

Limitations

None identified.

Standards and Specifications

Education

Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.

The WPC Manager shall oversee and enforce concrete waste management procedures.



Temporary Drainage Inlet Protection

SC-10



Definition and Purpose

Temporary drainage inlet protection consists of devices used at storm drain inlets that detain and/or filter sediment-laden runoff prior to discharge into storm drainage systems. This is achieved by allowing sediment to settle and/or filtering sediment upstream of a linear sediment barrier.

Appropriate Applications

Where ponding will not encroach into highway traffic.

Where sediment laden surface runoff may enter an inlet.

Where disturbed drainage areas have not yet been permanently stabilized.

Where the drainage area is 1 ac or less.

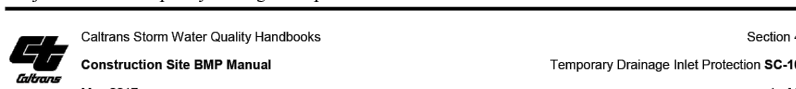
Used year-round.

Limitations

Requires an adequate area for water to pond without encroaching upon traveled way and should not present an obstacle to oncoming traffic.

May require other methods of temporary protection to prevent sediment-laden stormwater and non-stormwater discharges from entering the storm drain system.

Sediment removal may be difficult in high flow conditions or if runoff is heavily sediment laden. If high flow conditions are expected, use other on-site sediment trapping techniques, such as SC-4 "Check Dams," in conjunction with temporary drainage inlet protection.



Spill Prevention and Control

WM-4



Definition and Purpose

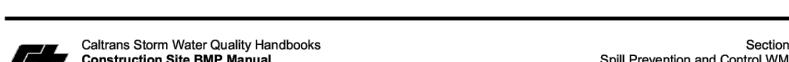
These procedures and practices are implemented to prevent and control spills in a manner that minimizes or prevents the discharge of spilled material to the drainage system or watercourses.

Appropriate Applications

This best management practice (BMP) applies to all construction projects. Spill control procedures are implemented anytime chemicals and/or hazardous substances are stored. Substances may include, but are not limited to:

- Soil stabilizers/binders.
- Dust Palliatives.
- Herbicides.
- Growth inhibitors.
- Fertilizers.
- Dicing/splitting chemicals.
- Fuels.
- Lubricants.
- Other petroleum distillates.

To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110, 117, and 302, and sanitary and septic wastes shall be contained and cleaned up immediately.



Sanitary and Septic Waste Management

WM-9



Definition and Purpose

Procedures and practices to minimize or eliminate the discharge of construction site sanitary and septic waste materials to the storm drain system or to receiving waters.

Appropriate Applications

Sanitary/septic waste management practices are implemented on all construction sites that use temporary or portable sanitary and septic waste systems.

Limitations

None identified.

Standards and Specifications

Education

Educate employees, subcontractors, and suppliers of potential dangers to humans and the environment from sanitary/septic wastes.

Educate employees, subcontractors, and suppliers in identification of sanitary/septic waste.

Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular safety meetings and trainings).

Establish a continuing education program to indoctrinate new employees.



Temporary Construction Entrance/Exit

TC-1



Definition and Purpose

A temporary construction entrance/exit is defined by a point of entrance/exit to a construction site that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

Appropriate Applications

Where dirt or mud can be tracked onto public roads.

Adjacent to water bodies.

Where poor soils are encountered.

Where dust is a problem during dry weather conditions.

Limitations

Site conditions will dictate design and need.

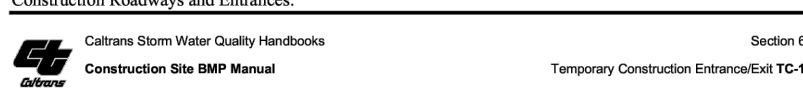
Limit the points of entrance/exit to the construction site.

Limit speed of vehicles to control dust.

Standards and Specifications

General Requirements

Temporary construction entrance/exit must comply with Standard Specification Section 13-7.03 Temporary Construction Roadways and Entrances.



Solid Waste Management

WM-5



Definition and Purpose

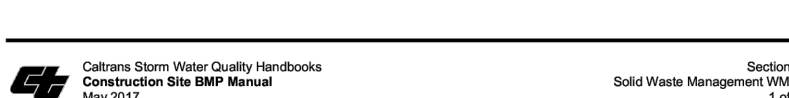
Solid waste management procedures and practices are designed to minimize or eliminate the discharge of pollutants to the drainage system or to water bodies as a result of the creation, stockpiling, or removal of construction site wastes.

Appropriate Applications

Solid waste management procedures and practices are implemented on all construction projects that generate solid wastes.

Solid wastes include but are not limited to:

- Construction wastes including brick, mortar, timber, steel and metal scraps, sawdust, pipe and electrical fittings, non-hazardous equipment parts, styrofoam and other materials used to transport and package construction materials.
- Highway painting wastes, including negative material, plant containers, and packaging materials.
- Litter, including food containers, beverage cans, coffee cups, paper bags, plastic wrappers, and smoking materials, including litter generated by the public.



Liquid Waste Management

WM-10



Definition and Purpose