

# **TEXAS ENGINEERING FIRM F-1386**

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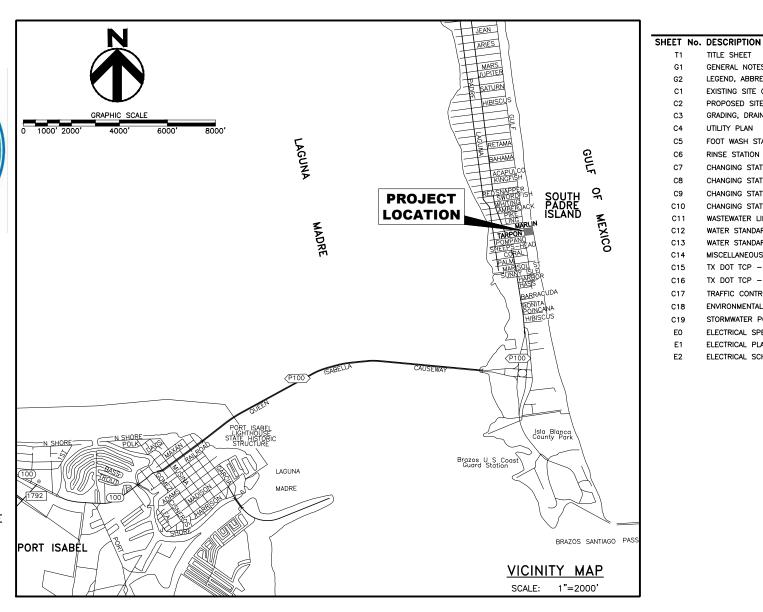
# **CONSTRUCTION PLANS FOR SOUTH PADRE ISLAND, TEXAS** 2300 GULF BOULEVARD **SEA ISLAND CIRCLE BEACH ACCESS AMENITY IMPROVEMENTS**

# TDLR REGISTRATION No. TABS2023004564









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BEACH C275-2118

PROJECT No.:

**JANUARY 2023** 

## **CONSTRUCTION NOTES:**

#### PROJECT CONTROL INFORMATION:

PROJECT CONTROL IS A 5/8" IRON ROD NORTHING = 16564368.571 EASTING = 1422621.282

PROJECT CONTROL IS A MAGNAIL NORTHING = 16564360 289 EASTING = 1422557.197

FLEVATION = 7.73

FLEVATION = 8.52

ALL HORIZONTAL INFORMATION SHOWN IS IN N.A.D. 83 DATUM, TEXAS SOUTH ZONE 4205, AS OBSERVED BY GPS. ALL VERTICAL INFORMATION SHOWN IS IN N.A.D. 88 DATUM, U.S. SURVEY FEET

#### **EXISTING UTILITIES AND STRUCTURES:**

EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE BASED ON CITY'S GIS MAP AS WELL AS AN ON THE GROUND SURVEY PERFORMED BY LIA ENGINEERING, INC. EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE FOR REFERENCE ONLY AND DO NOT NECESSARILY REPRESENT THE EXACT LOCATION OF SUCH FACILITIES, NOR IS IT IMPLIED THAT ALL EXISTING UTILITIES ARE SHOWN ON THE DRAWINGS, LJA ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR THE EXISTENCE OR LOCATION OF ANY SUBSURFACE LITH ITIES OR STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY OWNERS AND LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCING WITH ANY CONSTRUCTION OPERATIONS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL UTILITIES AND PRIVATE OR PUBLIC PROPERTY ON OR NEAR THE PROJECT FROM DAMAGE DURING CONSTRUCTION, ANY DAMAGE TO EXISTING LITHLITIES AND PRIVATE OR PUBLIC PROPERTY SHALL BE REMEDIED AND PAID FOR IN WHOLE BY THE CONTRACTOR

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE OR OTHERWISE PROVIDE FOR THE ADJUSTMENT OR RELOCATION OF ANY UTILITIES AS REQUIRED TO COMPLETE THE PROPOSED CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES AS NECESSARY TO IMPLEMENT THE PROPOSED CONSTRUCTION, NO SEPARATE PAYMENT WILL BE MADE FOR ANY SUCH ADJUSTMENTS OF RELOCATIONS, FORESEEN OR UNFORESEEN.

CONTRACTOR TO REPLACE ALL SIGNS, CULVERTS, FENCES, AND OTHER APPURTENANCES REMOVED DURING CONSTRUCTION. NO SEPARATE PAY.

CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES 48 HOURS PRIOR TO THE START OF CONSTRUCTION:

TEXAS 611	
LJA ENGINEERING, INC.	- (361) 991-8550
PARKS AND RECREATION	- (956) 761-8168
PUBLIC WORKS	- (956) 761-8159
SHORELINE MANAGEMENT	- (956) 761-8111
CITY (HALL) OF SOUTH PADRE ISLAND	- (956) 761-6456
LAGUNA MADRE WATER DIST. OFFICE	- (956) 943-2626
LAGUNA MADRE WATER DIST. EMERGENCIES AFTER HOURS	- (956) 572-1716
TXDOT BROWNSVILLE OFFICE	- (956) 542-2260
TEXAS GAS SERVICE	- (800) 700-2443
SPECTRUM/TIMEWARNER CABLE/AT&T/VERIZON/CHARTER CO	MMUNICATIONS/FROM

COMMUNICATIONS

AMERICAN ELECTRIC AND POWER (AEP) TEXAS/MAGIC VALLEY ELECTRICAL COOPERATIVE

#### EXPLORATORY EXCAVATION:

TEVA0 044

PRIOR TO ANY CONSTRUCTION WHATEVER ON THE PROJECT, CONTRACTOR SHALL EXCAVATE AND EXPOSE ALL EXISTING PIPELINES AND UTILITIES ON THE PROJECT THAT CROSS OR RUN WITHIN 6' PARALLEL TO. THE PROPOSED CULVERT CROSSINGS OF THE PROJECT AND CONTRACTOR SHALL SURVEY THE EXACT VERTICAL AND HORIZONTAL LOCATION OF EACH CROSSING AND POTENTIALLY CONFLICTING PIPELINE

THE WORK SHALL BE PERFORMED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND CONFLICTS WITH PROPOSED CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER.

CONTRACTOR SHALL THEN PREPARE A SET OF MARKED PLANS AND SUBMIT IT TO THE ENGINEER FOR APPROVAL INDICATING THE OWNER OF PIPELINES AND LITILITIES EXCAVATED AND SURVEYED AS WELL AS THE APPROXIMATE STATION THEREOF, DISTANCE TO THE PROPOSED IMPROVEMENTS AND ELEVATIONS OF THE TOP OF EXISTING PIPELINES AND PROPOSED PROFILE OF NEW MPROVEMENTS IF DIFFERENT FROM THAT SHOWN ON THE PLANS. THE ENGINEER WILL REQUIRE 10

MATERIALS AND WORKMANSHIP: WORKING DAYS AFTER RECEIPT IN HIS OFFICE OF THE MARKED PLANS TO REVIEW, ANALYZE AND, IF NECESSARY, MAKE CHANGES IN ALIGNMENT AND/OR ELEVATION.

CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM ANY CONSTRUCTION WORK ON THE PROJECT UNTIL ALL EXPLORATORY EXCAVATIONS HAVE BEEN MADE IN THEIR ENTIRETY, THE RESULTS THEREOF REPORTED TO THE ENGINEER AND UNTIL CONTRACTOR RECEIVES ENGINEER'S APPROVAL OF REPORT.

#### STORM WATER POLLUTION PREVENTION:

CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SILT AND DEBRIS FROM CONSTRUCTION OPERATIONS DOES NOT FLOW ONTO THE ADJACENT PRIVATE PROPERTY NOR ENTER INTO ADJACENT DRAINAGE AND IRRIGATION DITCHES AND CANALS AS SHOWN IN THE STORM WATER MEASURES AND DETAILS. THE PROJECT SITE IS LESS THAN A 1/4 ACRE THEREFORE A NOTICE OF INTENT (NOI) PERMIT IS NOT REQUIRE.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF HIS EMPLOYEES AND THE PUBLIC DURING ALL PHASES OF THE CONSTRUCTION. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL STATE AND LOCAL SAFETY REGULATIONS.

TRENCHING OPERATIONS SHALL COMPLY WITH WORKER SAFETY REQUIREMENTS FOR EXCAVATION AND TRENCHING OPERATIONS. WORKER SAFETY IN EXCAVATIONS AND TRENCHES SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS 29 CFR PART 1926 SUBPART P-EXCAVATIONS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND NOT THE CITY OF SOUTH PADRE ISLAND OR CONSULTING ENGINEER. TO DETERMINE AND MONITOR SPECIFIC APPLICABILITY OF THE SAFETY SYSTEM TO THE FIELD CONDITIONS. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE TEXAS FACILITY COMMISSION AND CONSULTING ENGINEER FROM ANY AND ALL DAMAGES AND COSTS THAT MAY RESULT FROM FAILURE OF METHODS OR EQUIPMENT USED BY THE CONTRACTOR TO PROVIDE FOR WORKER SAFETY.

DURING CONSTRUCTION. CONTRACTOR SHALL MAINTAIN A SAFE DISTANCE AWAY FROM EXISTING LINES TO KEEP THE EXISTING LINES FROM COLLAPSING.

#### EARTHWORK:

AREAS THAT RECEIVE FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% OF THE STANDARD PROCTOR DENSITY PER ASTM D-698 AND A MOISTURE CONTENT WITHIN +3% TO -1% OF OPTIMUM. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8" ON UNDISTURBED SOIL FREE OF DEBRIS AND ORGANIC MATERIALS. TEST REPORTS FOR COMPACTED FILL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL

CONTRACTOR TO REMOVE ALL EXCESS SPOIL STRIPPED MATERIAL AND DEBRIS WITHIN LIMITS OF PROPOSED CONSTRUCTION OR AS SHOWN ON PLANS. DISPOSAL SHALL BE CONTRACTOR'S

ALL TESTING SHALL BE PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE

#### **COORDINATION:**

ALL PUBLIC UTILITIES WORK SHALL BE COORDINATED WITH THE CITY'S INSPECTOR AND ENGINEER AND SHALL BE PERFORMED IN ACCORDANCE WITH THEIR REQUIREMENTS.

#### STANDARD SPECIFICATIONS:

CONSTRUCTION MATERIALS AND EXECUTION SHALL BE GOVERNED BY THE APPLICABLE CITY OF PADRE ISLAND STANDARD CONSTRUCTION SPECIFICATIONS. THE TERM 'ENGINEER' AS USED IN THE SPECIFICATIONS REFERS TO THE CITY OF PADRE ISLANDDIRECTOR OF ENGINEERING SERVICES.

#### UTILITIES CONDUITS:

CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH OWNER AND ARCHITECT FOR THE EXACT LOCATION OF CONDUITS ENTERING THE BUILDING. THE LOCATIONS SHOWN ON THE PLANS ARE FOR

#### **REPAIR OF DAMAGED FACILITIES:**

CONTRACTOR SHALL REPAIR OR REPLACE, AT CONTRACTOR'S EXPENSE, ANY AND ALL EXISTING UTILITIES, DRAINAGE FACILITIES, ELECTRICAL DUCT BANKS OR CABLES, PAVEMENTS, SIDEWALKS, CURBS, PIPELINES, SIGNS, LIGHTS, FENCES, GATES, PROPERTY PINS OR OTHER ITEMS DAMAGED OR DISTURBED BY CONTRACTOR'S OPERATIONS

ANY DAMAGE TO EXISTING PAVEMENT, DRAINAGE, UTILITIES, OR EXISTING STRUCTURES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO COMPLETE THE PROPOSED CONSTRUCTION

A PERMIT IS REQUIRED FOR ANY PUBLIC UTILITY CONSTRUCTION DONE IN A PUBLIC RIGHT OF WAY OR PUBLIC EASEMENT (WASTE WATER CONNECTION). CONTACT BUILDING INSPECTIONS DIVISION OF THE PUBLIC WORKS DEPARTMENT

ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT STANDARD SPECIFICATIONS. ANY DEVIATION OF THESE PLANS AND SPECIFICATIONS FROM SUCH STANDARDS AND PRACTICES THAT WILL AFFECT THE PROJECT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AT LEAST 10 DAYS FOR REVIEW AND ACTION.

#### **ENGINEER'S RESPONSIBILITY DURING CONSTRUCTION:**

THE ENGINEER OR ENGINEER'S REPRESENTATIVE SHALL BE AT THE SITE SOLELY FOR THE PURPOSE OF PROVIDING GENERAL OBSERVATION OF THE CONTRACTOR'S COMPLIANCE WITH THE DESIGN, PROGRESS REVIEW AND DESIGN PROBLEM RESOLUTION. THE ENGINEER SHALL NOT SUPERVISE THE CONSTRUCTION OR BE RESPONSIBLE FOR SAFETY PRECAUTIONS OR COMPLIANCE

#### TRAFFIC CONTROL:

IF TRAFFIC CHANNELIZATION AND BARRICADES ARE REQUIRED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS

CONTRACTOR SHALL PROVIDE PROTECTIVE DEVICES SUCH AS SIGNS, LIGHTS, AND SIGNALS FOR THE SAFETY OF THE PUBLIC AND WORKERS, AS REQUIRED.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND SAFETY OF THE WORK, WORKERS. SUBCONTRACTORS, MATERIALS AND EQUIPMENT.

TEMPORARY TRAFFIC CONTROL PLANS AND TRAFFIC CONTROL DEVICES SHALL CONFORM WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST EDITION (EDITION 2011, REVISION 2, OCTOBER 2014, AS OF THE DATE OF THESE PLANS).

THE CONTRACTOR SHALL SUBMIT THE TEMPORARY TRAFFIC CONTROL PLANS TO THE CITY'S TRAFFIC ENGINEERING DEPARTMENT (STREET OPERATIONS) FOR APPROVAL AT LEAST 14 WORKING DAYS PRIOR TO THE ANTICIPATED START DATE.

FOLLOWING CITY APPROVAL OF THE TEMPORARY TRAFFIC CONTROL PLANS, THE CONTRACTOR SHALL PROVIDE A 72 HOUR NOTICE TO THE CITY'S TRAFFIC ENGINEERING DEPARTMENT (STREET OPERATIONS), AS WELL AS AFFECTED BUSINESSES AND RESIDENCES, PRIOR TO IMPLEMENTING THE TEMPORARY TRAFFIC CONTROL PLAN AND COMMENCING CONSTRUCTION ACTIVITIES

#### **CONCRETE NOTES:**

- CONCRETE DESIGN AND INSTALLATION SHALL CONFORM TO THE LATEST OF THE ACI MANUAL AND THE IBC CODE.
- CONTRACTOR SHALL SUBMIT TO LJA ENGINEERING, INC. FOR APPROVAL THE CONCRETE MIX
- THE CONTRACTOR SHALL GIVE THE OWNER'S REPRESENTATIVE A MINIMUM OF 48 HOURS NOTICE FOR PRE-POUR REINFORCING STEEL INSPECTION, NO CONCRETE SHALL BE PLACED. WITHOUT A PRE-POUR INSPECTION UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI MIX AT 28 DAYS UNLESS NOTED OTHERWISE, DO NOT INCLUDE ANY FLY ASH, ADMIXTURE, WATER, ETC. VITHOUT THE OWNER'S PRIOR APPROVAL
- AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON
- A. ASTM C 143 'STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE', ALL CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPERPLASTERCIZING ADMIXTURE
- B. ASTM C 39 STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS'. A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:
  - (1) AT 7 DAYS (1) AT 14 DAYS
  - (1) AT 28 DAYS
- C. ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED. IF 28 DAYS STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S)
- 6. CONCRETE FINISHES ON ALL EXPOSED EDGES OF CONCRETE FOUNDATIONS AND STRUCTURES SHALL HAVE A 3/4" CHAMFER, UNLESS NOTED OTHERWISE
- ALL REINFORCEMENT SHALL BE GRADE EPOXY COATED 60 KSI CONFORMING TO ASTM A775(U.N.O.). REINFORCEMENT SHALL BE SUPPORTED, SECURED AND OR TIED WITH APPROVED DEVICES OR IN AN APPROVED MANNER
- FIELD FLAME CUTTING, FLAME BENDING AND OR WELDING OF REINFORCEMENT IS NOT
- ALL COLD BENDING, SPLICES, EMBEDMENTS AND LAPS OF REINFORCEMENT SHALL BE PER THE LATEST EDITION OF THE ACI-318 MANUAL
- 10. ALL CONCRETE INSTALLATION, CURING, FINISHING, REPAIRS, ETC SHALL BE IN ACCORDANCE THE LATEST EDITION OF ACI-318
- 11. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS AND, SITE CONDITIONS
- 12. ALL REINFORCEMENT SPLICES SHALL BE STAGGERED AND OVERLAPPED IN ACCORDANCE WITH

#### PIPE FOR WASTEWATER LINES:

- WASTEWATER LINE AND FITTINGS TO BE ASTM D-3034 PVC. SDR 26. FOR DIAMETERS OF 4" THROUGH 15". PIPE AND FITTINGS SHALL HAVE A PUSH-ON COMPRESSION GASKET JOINTS IN
- ALL WASTEWATER LINE UNDER PROPOSED PAVEMENT. TO BE BACKFILLED ACCORDING TO THE WASTEWATER DETAIL SHEETS ON THESE PLANS. NO SEPARATE PAY. INCLUDE COST IN PRICE BID PER LINEAR FOOT OF WASTEWATER LINE IMPROVEMENTS. ANY SETTLEMENT OF PAVEMENT DURING CONTRACTOR'S WARRANTY PERIOD SHALL BE CAUSE FOR INVOKING WARRANTY CONDITIONS AND CONTRACTOR SHALL RECOMPACT AND RELAY BASE AND ASPHALT AND/OR CONCRETE SURFACES.
- PIPES AND FITTINGS FOR WASTEWATER SERVICE LINE SHALL BE PVC IN ACCORDANCE WITH ASTM D2665 AND D331 WITH A MINIMUM SIZE OF 4 INCHES OR AS DESIGNATED ON THE PLANS
- 4 PIPE AND FITTINGS FOR NEW WASTEWATER SERVICES LINE SHALL MEET THE REQUIREMENTS OF THE CITY OF PADRE ISLAND STANDARD DETAILS AND SPECIFICATIONS

#### WATERLINES:

- PIPE AND FITTINGS FOR NEW SERVICE LINE SHALL MEET THE REQUIREMENTS OF THE CITY OF PADRE ISLAND STANDARD DETAILS AND SPECIFICATIONS
- WHERE SANITARY SEWER AND WATERLINES CROSS, THE WATERLINE SHALL BE PLACED OVER THE SEWER WITH A MINIMUM SEPARATION OF 2 FEET. IF THIS IS NOT POSSIBLE, THE WASTEWATER LINE SHALL BE C900, FOR LINES 4"-12" IN DIAMETER, OR C905 FOR LINES OVER 1 IN DIAMETER, WITH A MINIMUM PRESSURE RATING OF 150 PSI, OR SHALL BE ENCASED WITH A STANDARD 20-FT, LENGTH OF PRESSURE PIPE. THE CASING PIPE SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE SUBSIDIARY TO THE CARRIER PIPE
- PIPE BETWEEN FITTINGS AT VERTICAL AND HORIZONTAL CHANGES IN ALIGNMENT SHALL BE DUCTILE IRON PIPE WITH RESTRAINT DEVICES. (NO EXTRA PAY), UNLESS OTHERWISE SHOWN
- 4. ALL POWER POLES IN VICINITY OF CONSTRUCTION OF WATERLINES SHALL BE PROPERLY BRACED AND PROTECTED AGAINST MOVEMENT DURING WATERLINE CONSTRUCTION. NO SEPARATE PAY
- WHERE EXISTING WATER SERVICE LINE CONNECTS TO EXISTING WATER MAIN TO BE REMOVED OR REPLACED, PROVIDE NEW WATER SERVICE LINE OF SAME SIZE FROM NEW PVC WATER MA TO EXISTING WATER METER
- ALL LINES TO BE INSTALLED SO AS TO NOT EXCEED THE MANUFACTURER'S MAXIMUM RECOMMENDED DEFLECTION PER JOINT. THE CONTRACTOR IS RESPONSIBLE FOR CALCULATION OF THE MINIMUM DEFLECTION DISTANCES REQUIRED FOR UTILITY CLEARANCES
- 7. CONTRACTOR TO INSURE A "DRY DITCH" CONDITION PRIOR TO THE PLACEMENT OF
- 8. CONTRACTOR TO MAINTAIN ADEQUATE PIPE, MISCELLANEOUS FITTINGS, SUPPLIES, AND PUMP ON THE PROJECT TO INSURE WATER LINE BREAKS WILL BE REPAIRED RAPIDLY. CONTRACTOR SHALL OPERATE NO VALVES WITHOUT CONSENT OF THE CITY OF PADRE ISLAND WATER

#### **BUILDING PAD PREPARATION:**

- REMOVAL OF THE EXISTING SOILS, EXTENDING TO AT LEAST 5-FT. BEYOND THE OUTSIDE
- 2. AFTER ACHIEVING SPECIFIED SUBGRADE ELEVATION, PROOF-ROLL EXPOSED SUBGRADE AND
- 3 AFTER TESTING AND ACCEPTANCE OF SUBGRADE IMMEDIATELY PLACE AND COMPACT SIVE STRUCTURAL SELECT FILL MATERIAL TO AT LEAST 5-FT BEYOND THE OUTSIDE PERIMETER OF THE FOUNDATION
- 4. MAINTAIN MOISTURE IN SELECT FILL PAD UNTIL THE CONCRETE FOUNDATION IS CONSTRUCTE
- 5. SELECT FILL BE USED FOR ELEVATION OF THE BUILDING PAD ABOVE EXISTING GRADE AT LEAS 6 INCHES TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- 6 SPECIAL CARE SHALL BE TAKEN NOT TO ALLOW THE EXPOSED SUBGRADE SOILS TO BECOME UNUSUALLY WET OR DRY OF THE EXISTING MOISTURE CONTENT. DELAYS BETWEEN EXCAVATION AND FILL PLACEMENT SHOULD BE AVOIDED. IF CONSTRUCTION OCCURS DURING WET WEATHER AND THE EXPOSED SUBGRADE SOILS ARE ALLOWED TO BECOME WET OF SATURATED REMOVAL AND REPLACEMENT OF EXCESSIVELY SOFT WET SOILS OR LIME-STABILIZATION SHOULD BE ANTICIPATED. THE DEPTH OF UNDERCUTTING SHOULD BE

#### SUBGRADE PREPARATION AND STRUCTURAL SELECT FILL:

- AREAS DESIGNATED FOR NEW CONSTRUCTION SHOULD BE STRIPPED OF ALL SURFACE VEGETATION, LOOSE TOPSOIL AND MAJOR ROOT SYSTEMS. TREE STUMPS SHALL BE COMPLETELY REMOVED AND BACKFILLED, IF APPLICABLE. AFTER PLANNED SUBGRADE ELEVATION HAS BEEN REACHED. THE EXPOSED SUBGRADE SHOULD THEN BE PROOF ROLLED WITH AT LEAST A 20-TON PNEUMATIC ROLLER, LOADED DUMP TRUCK, OR EQUIVALENT, TO DETECT WEAK AREAS. SUCH WEAK AREAS SHOULD BE REMOVED AND REPLACED WITH SOILS EXHIBITING SIMILAR CLASSIFICATION, MOISTURE CONTENT, AND DENSITY AS THE ADJACENT IN-PLACE SOILS. SUBSEQUENT TO PROOF ROLLING, AND JUST PRIOR TO PLACEMENT OF SELECT FILL, THE UPPER 6-IN OF THE EXPOSED SUBGRADE IN FOUNDATION AREAS SHOULD B COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AT OR ABOVE (0 TO +4 PERCENT) OPTIMUM MOISTURE IN ACCORDANCE WITH STANDARD PROCTOR (ASTM D 698)
- 2. PROPER SITE DRAINAGE SHOULD BE MAINTAINED DURING CONSTRUCTION SO THAT PONDING OF SURFACE RUNOFF DOES NOT OCCUR AND CAUSE CONSTRUCTION DELAYS AND/OR INHIBI
- NON-EXPANSIVE, SELECT FILL FOR THIS PROJECT SHOULD CONSIST OF A CLEAN LOW-PLASTICITY SANDY CLAY (CL) OR CLAYEY SAND (SC) MATERIAL WITH A LIQUID LIMIT OF LESS THAN 40 AND A PLASTICITY INDEX BETWEEN 7 AND 20. THE SELECT FILL SHOULD BE PLACED IN THIN LIFTS, NOT EXCEEDING THE MAXIMUM LIFT THICKNESS INDICATED ABOVE IN TABLE 7-1 LOOSE MEASURE, MOISTURE CONDITIONED TO BETWEEN ±2% OF OPTIMUM MOISTURE CONTENT, AND COMPACTED TO A MINIMUM 95% OF THE MAXIMUM DRY DENSITY A DETERMINED BY ASTM D 698 (STANDARD PROCTOR).
- PRIOR TO ANY FILLING OPERATIONS, SAMPLES OF THE PROPOSED BORROW MATERIALS SHOULD BE OBTAINED FOR SOIL CLASSIFICATION AND LABORATORY MOISTURE-DENSITY TESTING, THE TESTS WILL PROVIDE A BASIS FOR EVALUATION OF FILL COMPACTION BY IN-PLACE DENSITY TESTING. A QUALIFIED SOIL TECHNICIAN SHOULD PERFORM SUFFICIENT IN-PLACE DENSITY TESTS DURING THE FARTHWORK OPERATIONS TO VERIFY THAT PROPER LEVELS OF COMPACTION ARE BEING ATTAINED.

#### **BUILDING CODE:**

1. THE CONTRACTOR SHALL COMPLY WITH CITY'S ADOPTED 2018 INTERNATIONAL BUILDING CODI

 $\star$ SENIA SINGLE 102398

PROJECT No.:





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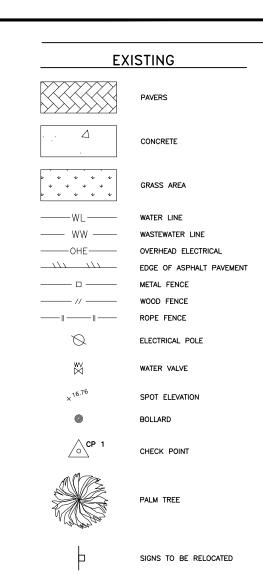
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**G**1



**LEGEND** 

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CONCRETE FOUNDATION

5' PAVER WALKWAY WITH

6" HEADER CURB

FOOT WASH STATION

BUILDING WALLS

PAVEMENT REPAIR

WASTEWATER LINE

ROOF OVERHANG

ELECTRICAL POLE

CLEANOUT

OVERHEAD ELECTRICAL

WATER LINE

RIVER ROCK

#### **PROPOSED ABBREVIATIONS**

AFF - AT FINISH FLOOR NG - NATURAL GROUND ASPHT - ASPHALT PAVEMENT O.C. - ON CENTER OCEW - ON CENTER EACH WAY C&G - CURB AND GUTTER CONC - CONCRETE PVMT - PAVEMENT C TO C - CENTER TO CENTER R - RADIUS ELEV -ELEVATION S - SLOPE EXIST - EXISTING RT - RIGHT FF - FINISH FLOOR S/W - SIDEWALK G - GUTTER EL 00.00 - PROPOSED ELEVATION LP - LIGHT POLE TYP - TYPICAL LT - LEFT WTR - WATER MIN. - MINIMUM WW - WASTEWATER MAX. - MAXIMUM

# TYPICAL SECTION AND DETAIL SYMBOLS

DIRECTION

-SHEET WHERE

CUT IS DRAWN

SECTION CUT-

(BY LETTER)

ADDITIONAL — <u>3,5,7,9</u>

SHEET REFERENCES

INDICATION

SHEET WHERE-

CUT IS SHOWN



PROJECT No.:

C275-21181

RCLE IMPROVEMENTS EVARD

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BEACH,

SCALE:

DRAWN BY: APPROVED BY

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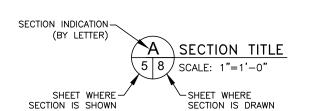
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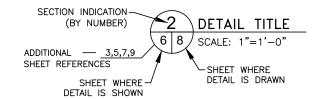
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-SECTION CUT **NORTH ARROW** 



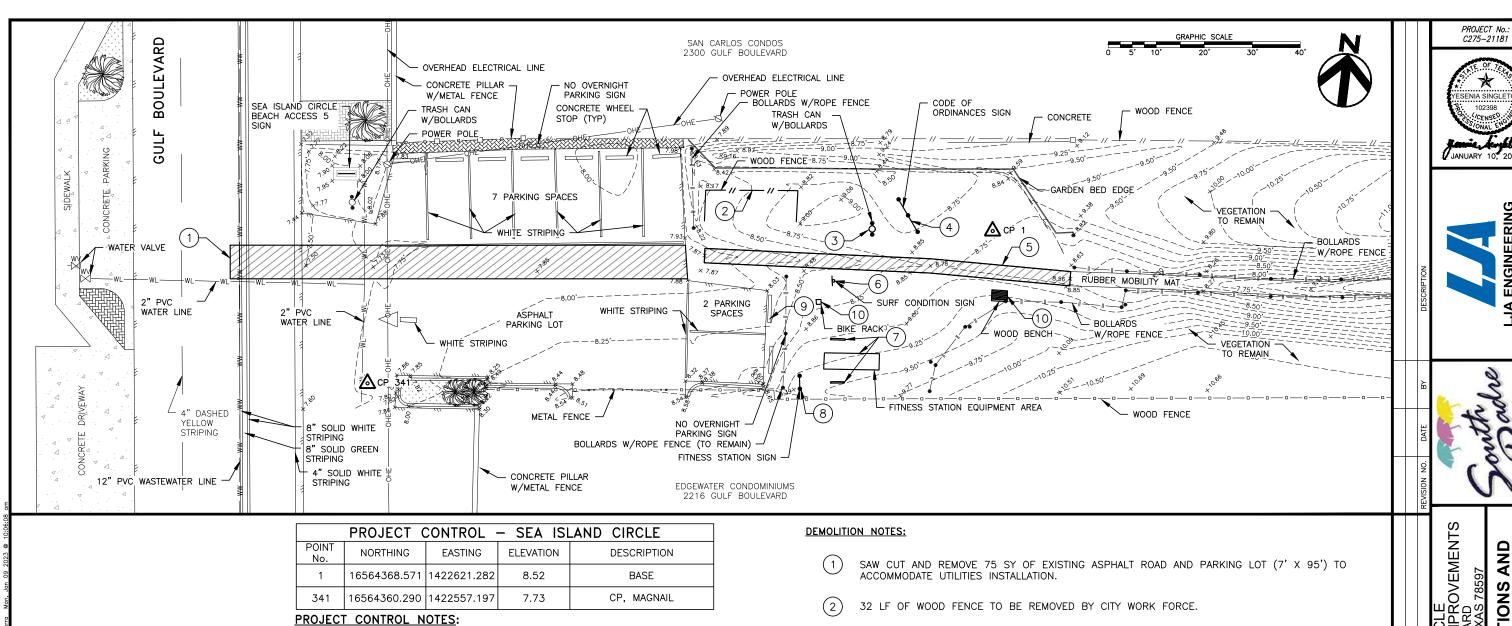
**SECTION CUTS** 



# **NOTES:**

- 1. TESTING REQUIREMENT: TESTING FOR CRITICAL TEMPERATURES WILL BE PROVIDED BY THE CITY INSPECTOR. CONTRACTOR WILL MONITOR AND INCLUDE IN DAILY REPORTS. REPORTS SHOULD INCLUDE TEMPERATURE FOR INSTALLATION/CONSTRUCTION AND COMPACTION FOR HMAC PER TXDOT ITEM 340, TABLE 9. CITY INSPECTOR AND/OR ENGINEER WILL VERIFY CONTRACTOR MONITORING PROCEDURES.
- 2. THE TESTING SCHEDULE ON THE RIGHT APPLIES TO ENTIRE PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE THE FREQUENCY OF TESTING REQUIRED FOR EACH STREET BASED ON THE ABOVE AND BE APPROVED BY THE ENGINEER AT THE PRE-CONSTRUCTION MEETING.
- 3. THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR AND ENGINEER'S REPRESENTATIVE PRIOR TO PERFORMING ANY MATERIAL TESTING. THE CITY'S INSPECTOR OR ENGINEER'S REPRESENTATIVE NEED TO BE PRESENT FOR ALL TESTING
- 4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND COORDINATING ALL THE MATERIALS TESTING WITH THE SELECTED LABORATORY
- 5. IF TXDOT SPECIFICATIONS ARE REFERENCED FOR MATERIAL, CONTRACTOR SHALL PERFORM TESTING REQUIRED BY THAT SPECIFICATION AS PART OF SUBMITTALS.

TESTING SCHEDULE *				
DESCRIPTION	RATE			
SOILS:				
STANDARD PROCTOR - SUBGRADE	PER MATERIAL SOURCE			
DENSITIES - SUBGRADE (WALKWAY)	PER 5,000 SF			
FLEXIBLE BASE:				
SIEVE ANALYSIS	PER 3,000 CY			
ATTERBURG LIMITS	PER 3,000 CY			
MODIFIED PROCTOR	PER 3,000 CY			
L.A. ABRASION	PER 3,000 CY			
CBR (STANDARD)	PER MATERIAL SOURCE			
WET BALL MILL TEST	PER MATERIAL SOURCE			
TRIAXIAL TEST	PER MATERIAL SOURCE			
DENSITIES OF COMPACTED BASE (CONCRETE TO	RAIL) PER 5,000 SF			
HOT-MIX ASPHALT (HMA):				
EXTRACTION, SIEVE ANALYSIS	PER 500 TONS OR DAY			
LAB DENSITY & STABILITY	PER 500 TONS OR DAY			
THEORETICAL DENSITY (RICE METHOD)	PER 500 TONS OR DAY			
TEMPERATURE - DURING LAY-DOWN	CONTINUOUS AS NEEDED			
THICKNESS - IN PLACE (CORE)	PER 1,000 LF STREET			
% AIR VOIDS - IN PLACE (CORE)	PER 1,000 LF STREET			
% THEORETICAL DENSITY - IN PLACE (CORE)	PER 1,000 LF STREET			
CONCRETE:				
(UNCONFINED COMPRESSION, 7, 14, & 28 DA	Y)			
SIDEWALK/TRAIL AND CURB RAMPS	PER 4,000 SF			
NOTE: THE ENINGEER MAY REQUIRE ADDITIONAL TESTI	NG AS HE/SHE DEEMS NECESSARY.			



	PROJECT CONTROL - SEA ISLAND CIRCLE						
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION			
1	16564368.571	1422621.282	8.52	BASE			
341	16564360.290	1422557.197	7.73	CP, MAGNAIL			

#### PROJECT CONTROL NOTES:

- ALL HORIZONTAL INFORMATION SHOWN IS IN N.A.D. 83 DATUM, TEXAS SOUTH ZONE 4205, AS OBSERVED BY GPS.
- 2. ALL VERTICAL INFORMATION SHOWN IS IN N.A.D. 88 DATUM, U.S. SURVEY FEET.

#### **GENERAL NOTES:**

DEMOLITION NOTES 2-11 ARE TO BE DONE BY CITY WORK FORCES. ANY ITEMS CALLED TO BE RELOCATED WILL ALSO BE DONE BY CITY WORK FORCES AFTER CONTRACTOR COMPLETES THE PROJECT.

- SAW CUT AND REMOVE 75 SY OF EXISTING ASPHALT ROAD AND PARKING LOT (7' X 95') TO ACCOMMODATE UTILITIES INSTALLATION.
- 32 LF OF WOOD FENCE TO BE REMOVED BY CITY WORK FORCE.
- EXISTING TRASH CAN W/BOLLARDS TO BE RELOCATED BY CITY WORK FORCE.
- EXISTING CODE OF ORDINANCES SIGN TO BE RELOCATED BY CITY WORK FORCE.
- 77 LF OF EXISTING 3' WIDE RUBBER MOBILITY MAT TO BE REMOVED BY CITY WORK FORCE.
- (6) EXISTING SURF CONDITION SIGN TO BE RELOCATED BY CITY WORK FORCE.
- EXISTING FITNESS STATION TO BE REMOVED AND RELOCATED BY CITY WORK FORCE.
- EXISTING FITNESS STATION SIGN TO BE REMOVED AND RELOCATED BY CITY WORK FORCE.
- EXISTING CONCRETE WHEEL STOP TO BE REMOVED BY CITY WORK FORCE.
- EXISTING BIKE RACK TO BE REMOVED AND RELOCATED BY CITY WORK FORCE.
- EXISTING WOOD BENCH TO BE RELOCATED BY CITY WORK FORCE.

A STING SITE CONDITIONS DEMOLITION PLAN ACC BEACH,

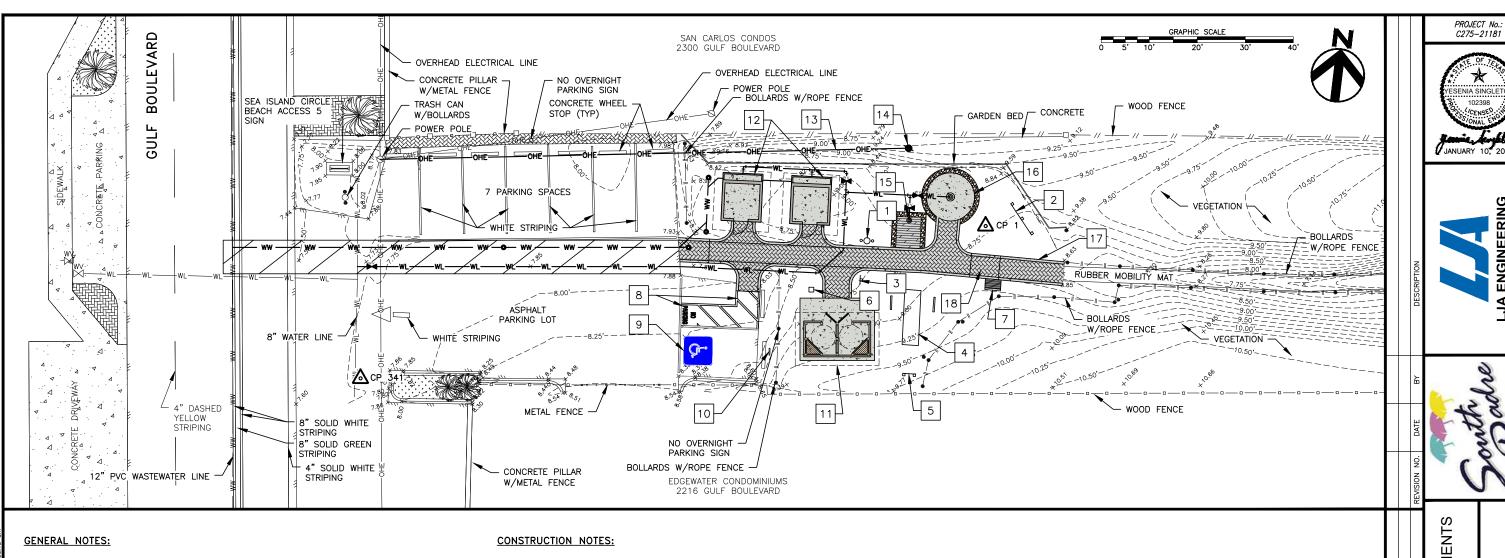
JOB NO. C275-2118

AS NOTE

SCALE:

DRAWN BY

APPROVED B



#### **GENERAL NOTES:**

- 1. PROPOSED ELEVATIONS SHOWN ARE ESTABLISHED FROM EXISTING CONDITIONS AND ARE SHOWN TO ASSIST CONTRACTOR, HOWEVER, EXISTING CONDITIONS SHALL CONTROL. CONTRACTOR SHALL ESTABLISH FINAL ELEVATIONS IN FIELD TO PREVENT PONDING AND PROVIDE POSITIVE DRAINAGE, I.E. GRADES MAY BE ADJUSTED IF NECESSARY, WHILE MAINTAINING CONFORMANCE WITH ADA SLOPE REQUIREMENTS, AND AFTER CONTACTING ENGINEER.
- 2. PROVIDE SLOPES ADJACENT TO PROPOSED PAVERS/CONCRETE TO 1% MIN.
- 3. DRAIN TO DAYLIGHT ALLOWING POSITIVE DRAINAGE.
- 4. EXCESS MATERIAL FROM EXCAVATION SHALL BE USED TO GRADE AREAS ADJACENT TO PROPOSED PAVERS/CONCRETE.
- 5. ADA RAMP AND CURB HIGH-POINT ELEVATIONS SHOWN ARE ESTABLISHED FROM EXISTING CONDITIONS AND ARE SHOWN TO ASSIST CONTRACTOR, HOWEVER, EXISTING CONDITIONS SHALL PREVAIL. CONTRACTOR SHALL ESTABLISH FINAL ELEVATIONS IN FIELD TO PREVENT PONDING AND PROVIDE POSITIVE DRAINAGE, GRADES MAY BE ADJUSTED IF NECESSARY AFTER CONTACTING THE ENGINEER FOR APPROVAL (DO NOT EXCEED ADA SLOPE REQUIREMENTS AT RAMPS).

#### CONSTRUCTION NOTES:

- EXISTING TRASH CAN W/BOLLARDS TO BE RELOCATED BY THE CITY WORK FORCE.
- EXISTING CODE OF ORDINANCES SIGN TO BE RELOCATED BY THE CITY WORK FORCE.
- EXISTING SURF CONDITION SIGN TO BE RELOCATED BY THE CITY WORK FORCE.
- EXISTING FITNESS STATION TO BE REMOVED AND RELOCATED BY THE CITY WORK FORCE.
- EXISTING FITNESS STATION SIGN TO BE REMOVED AND RELOCATED BY THE CITY WORK FORCE.
- EXISTING BIKE RACK TO BE REMOVED AND RELOCATED BY THE CITY WORK FORCE.
- EXISTING WOOD BENCH TO BE RELOCATED BY THE CITY WORK 7 FORCE.
- PROPOSED 50 LF OF 4" STRIPING AND "NO PARKING" LETTERING 8 (SEE DETAIL ON SHEET C14).
- PROPOSED PAVEMENT HANDICAP ACCESSIBLE SYMBOL 9 (SEE DETAIL ON SHEET C14).
- PROPOSED HANDICAP PARKING STALL SIGN (SEE DETAIL ON SHEET C14).

- PROPOSED CHANGING ROOM (DOUBLE UNIT) (SEE DETAILS ON SHEETS C7-C10).
- 12 PROPOSED RESTROOMS (SEE SPECIFICATIONS).
- 13 PROPOSED ELECTRICAL LINE (SEE SHEETS E0-E2).
- 14 PROPOSED POWER POLE (SEE SHEETS E0-E2).
- 15 PROPOSED ADA FOOT BATH STATION (SEE DETAIL ON SHEET C5).
- 16 PROPOSED RINSE STATION (SEE DETAIL ON SHEET C6).
- 17 PROPOSED 185 LF OF RIBBON CURB (SEE DETAIL ON SHEET C14).
- PROPOSED 477 SF OF 5' WIDE PAVER WALKWAY (SEE DETAIL ON SHEET C14).

RCLE IMPROVEME VARD TEXAS 78597 SC AM SEACCE BEACH

SCALE:

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JOB NO.

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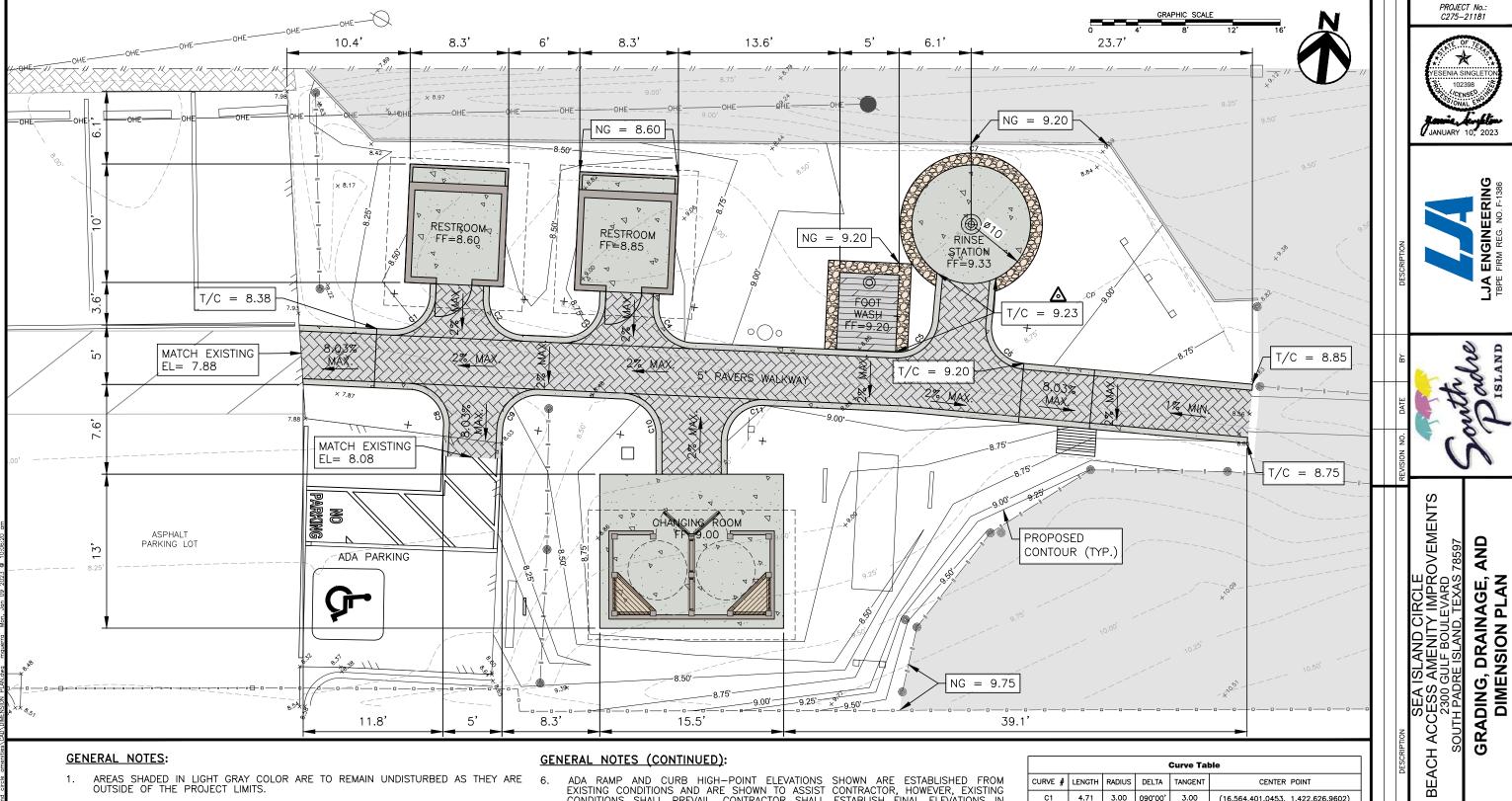
PLAN

SITE

PROPOSED

AS NOTE

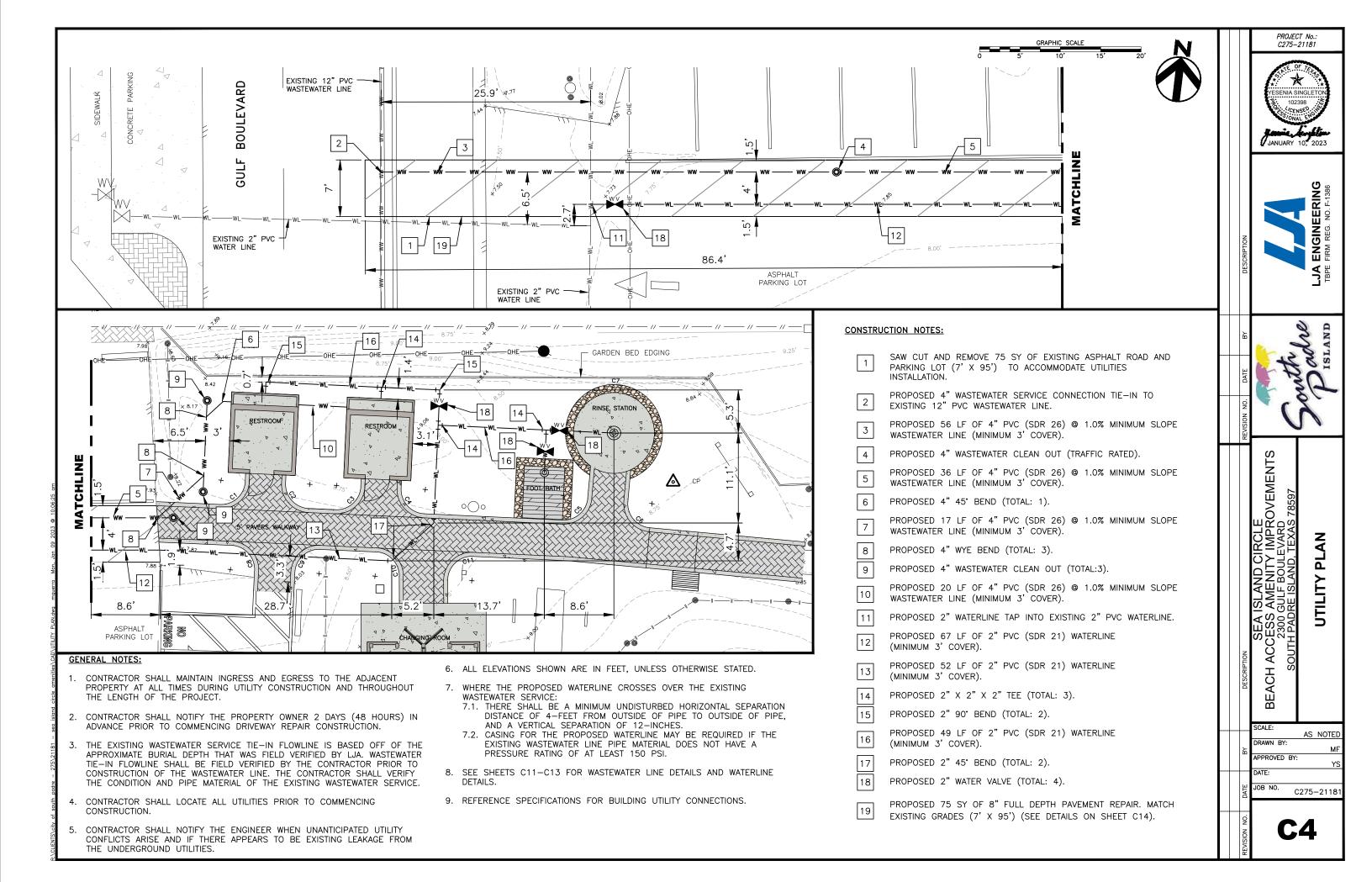
C275-2118

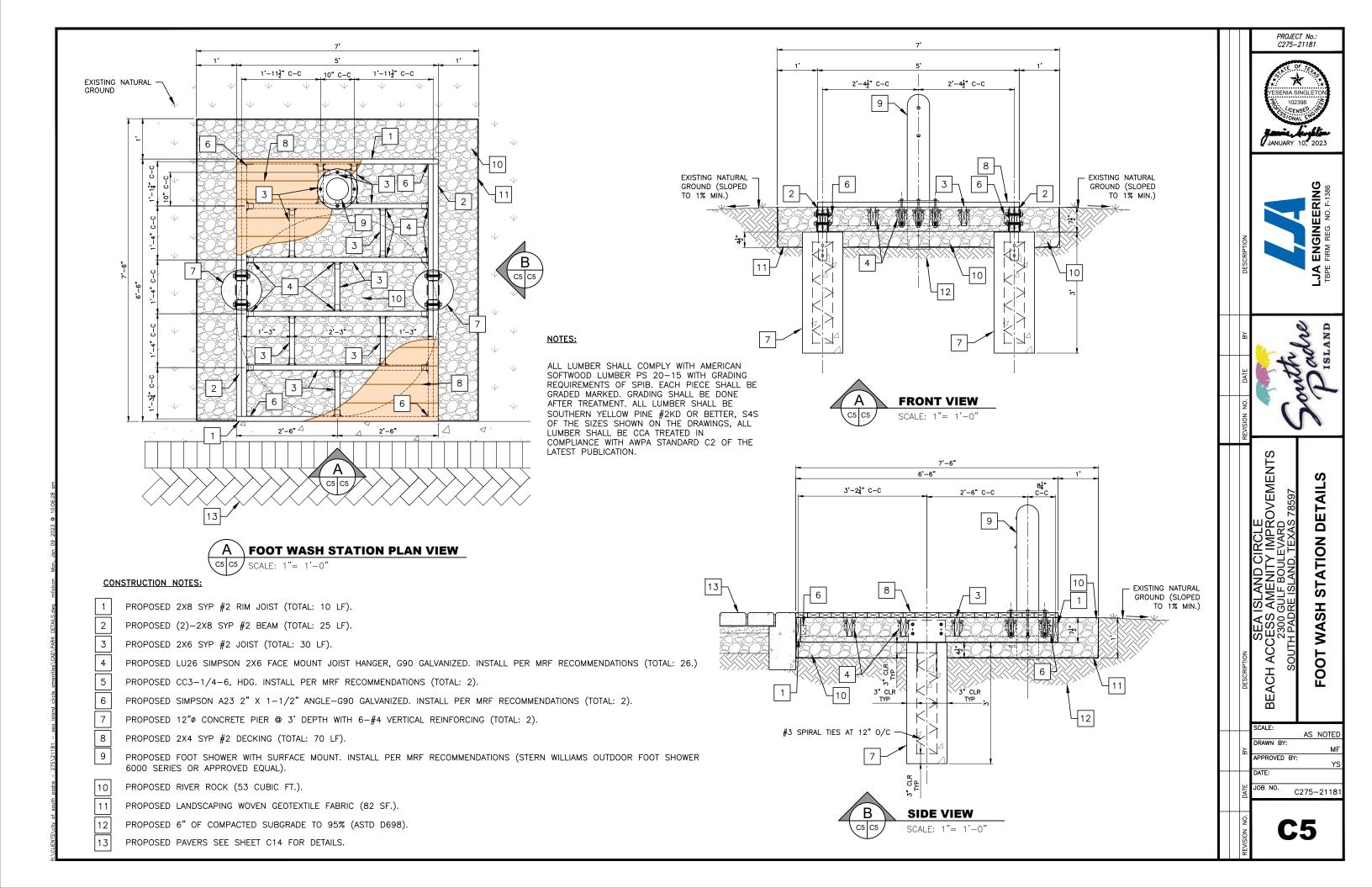


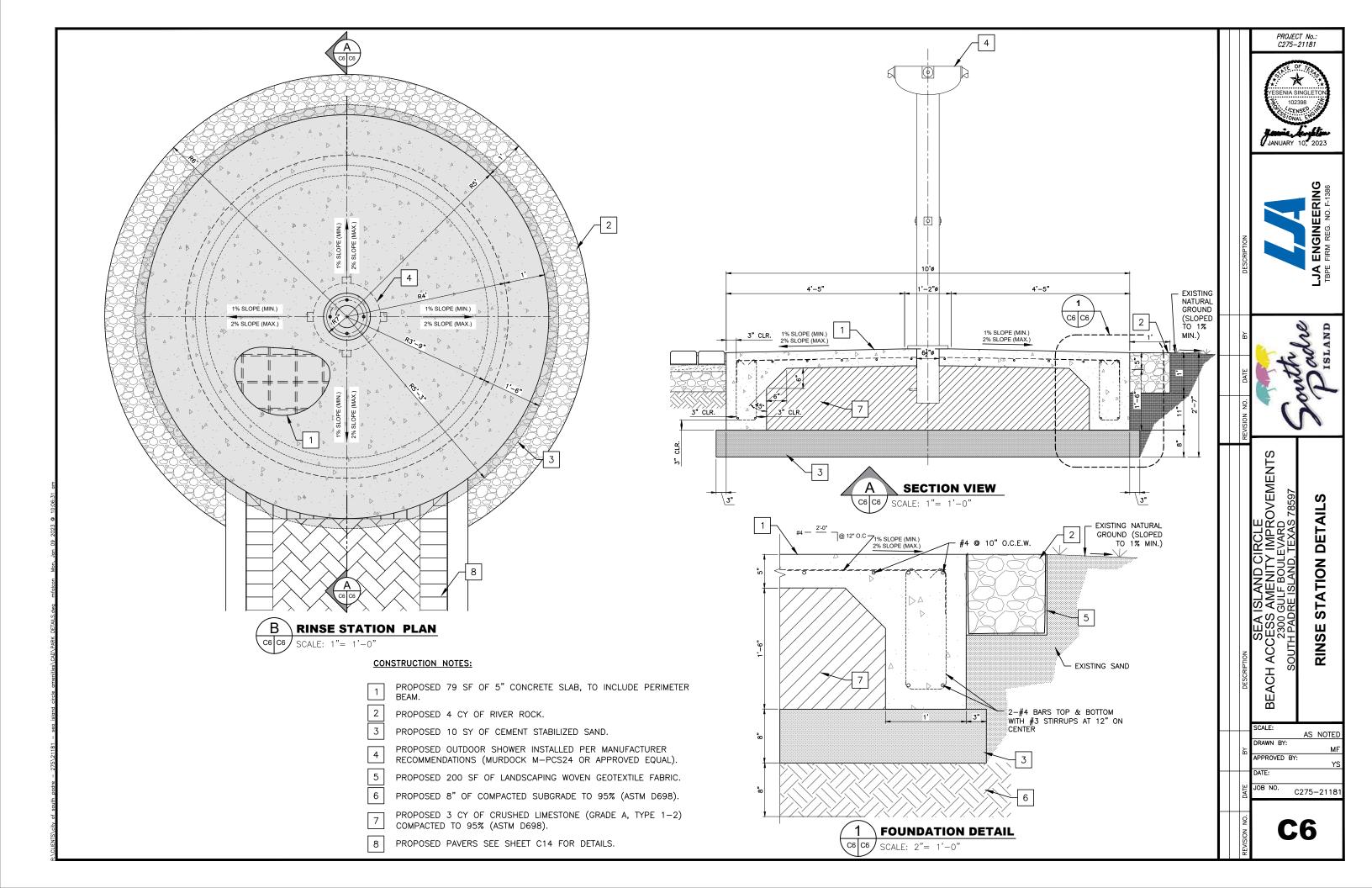
- 2. PROPOSED ELEVATIONS SHOWN ARE ESTABLISHED FROM EXISTING CONDITIONS AND ARE SHOWN TO ASSIST CONTRACTOR, HOWEVER, EXISTING CONDITIONS SHALL CONTROL. CONTRACTOR SHALL ESTABLISH FINAL ELEVATIONS IN FIELD TO PREVENT PONDING AND PROVIDE POSITIVE DRAINAGE, I.E. GRADES MAY BE ADJUSTED IF NECESSARY, WHILE MAINTAINING CONFORMANCE WITH ADA SLOPE REQUIREMENTS, AND AFTER CONTACTING ENGINEER.
- 3. PROVIDE SLOPES ADJACENT TO PROPOSED PAVERS/CONCRETE TO 1% MIN. SLOPES ADJACENT TO PROPOSED BUILDINGS SHALL BE 5% MIN. FOR PERVIOUS AREAS, AND 2% MIN. FOR IMPERVIOUS AREAS.
- 4. DRAIN TO DAYLIGHT ALLOWING POSITIVE DRAINAGE.
- 5. EXCESS MATERIAL FROM EXCAVATION SHALL BE USED TO GRADE AREAS ADJACENT TO PROPOSED PAVERS/CONCRETE.
- 6. ADA RAMP AND CURB HIGH-POINT ELEVATIONS SHOWN ARE ESTABLISHED FROM EXISTING CONDITIONS AND ARE SHOWN TO ASSIST CONTRACTOR, HOWEVER, EXISTING CONDITIONS SHALL PREVAIL. CONTRACTOR SHALL ESTABLISH FINAL ELEVATIONS IN FIELD TO PREVENT PONDING AND PROVIDE POSITIVE DRAINAGE, GRADES MAY BE ADJUSTED IF NECESSARY AFTER CONTACTING THE ENGINEER FOR APPROVAL (DO NOT EXCEED ADA SLOPE REQUIREMENTS AT RAMPS).
- 7. NG = PROPOSED NATURAL GROUND ELEVATION T/C = PROPOSED TOP OF CONCRETE ELEVATION FF = FINISHED FLOOR ELEVATION

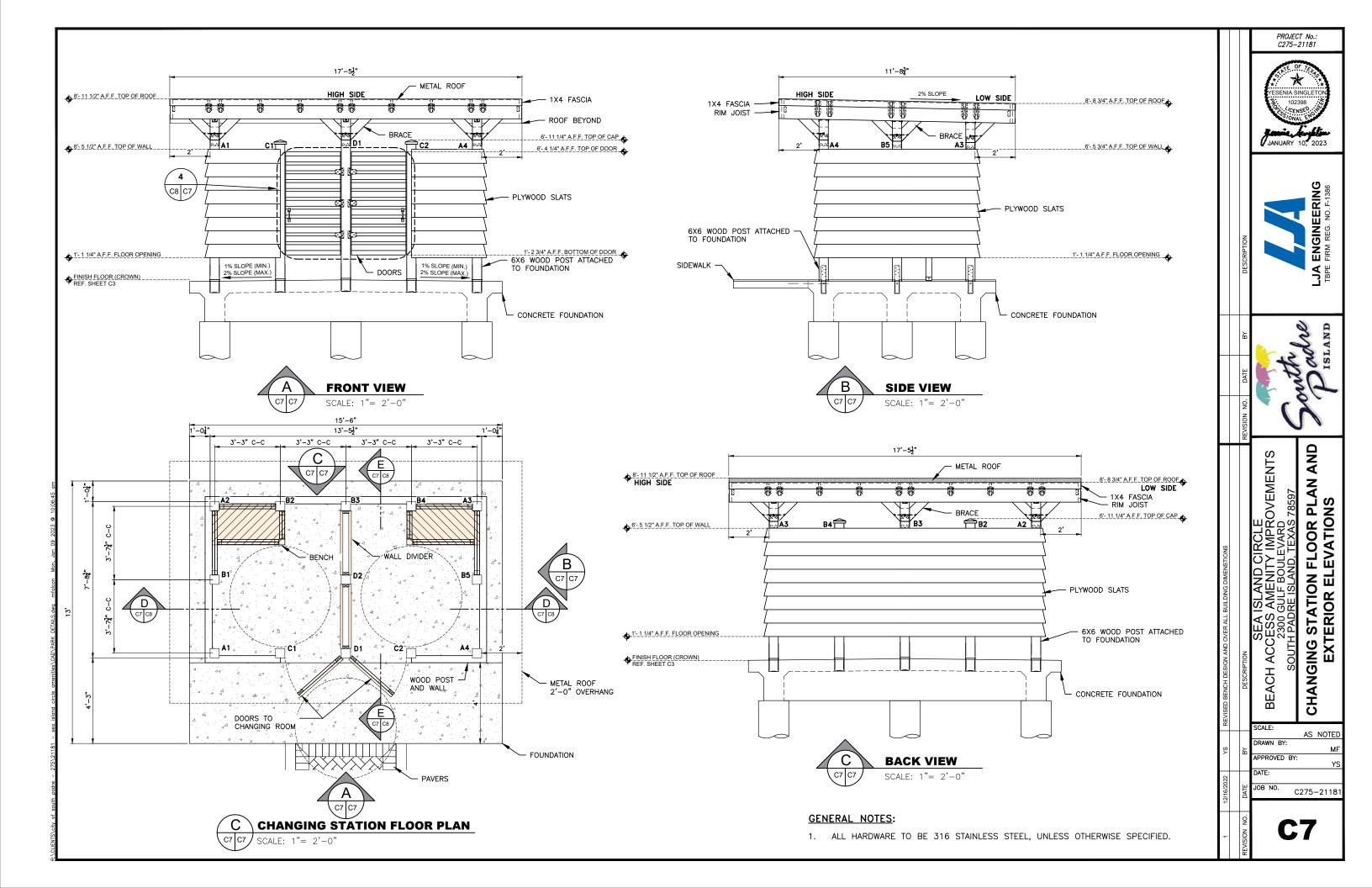
	Curve Table					
CURVE #	LENGTH	RADIUS	DELTA	TANGENT	CENTER POINT	
C1	4.71	3.00	090,00,	3.00	(16,564,401.0453, 1,422,626.9602)	
C2	4.71	3.00	090,00,	3.00	(16,564,401.8877, 1,422,637.9279)	
СЗ	4.71	3.00	090,00,	3.00	(16,564,402.1428, 1,422,641.2481)	
C4	4.71	3.00	090,00,	3.00	(16,564,402.9852, 1,422,652.2158)	
C5	4.57	3.00	087*22'	2.87	(16,564,404.2985, 1,422,669.3141)	
C6	4.71	3.00	090.00,	3.00	(16,564,404.6839, 1,422,680.3074)	
C7	32.54	6.00	310'45'	2.75	(1,656,4412.7836, 1,422,674.5553)	
C8	4.74	3.00	090*28'	3.02	(16,564,390.2043, 1,422,629.4511)	
C9	4.69	3.00	089'32'	2.98	(16,564,391.0467, 1,422,640.4192)	
C10	4.57	3.00	087'14'	2.86	(16,564,391.5785, 1,422,647.3429)	
C11	4.86	3.00	092'46'	3.15	(16,564,392.4985, 1,422,659.3211)	

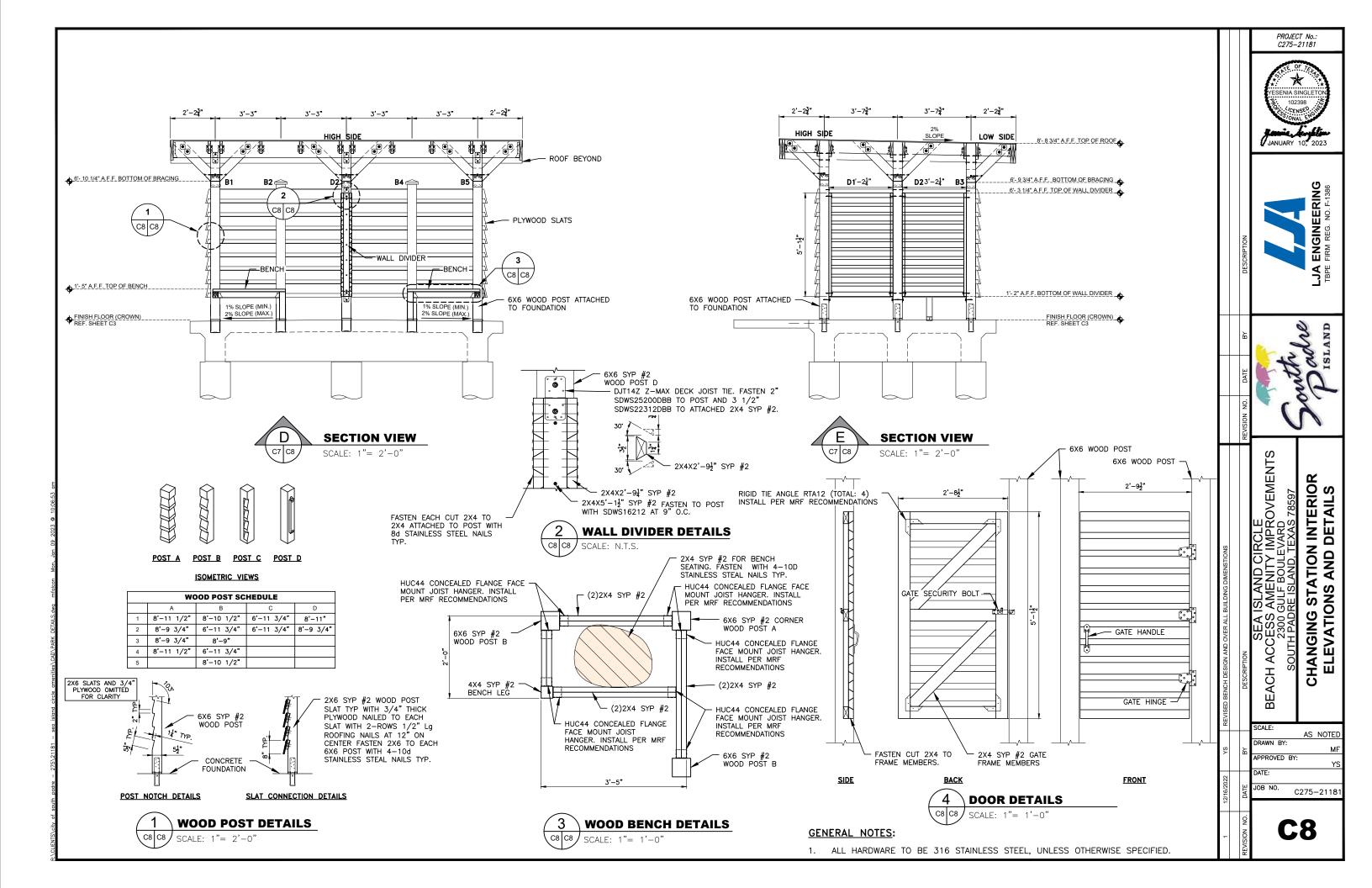
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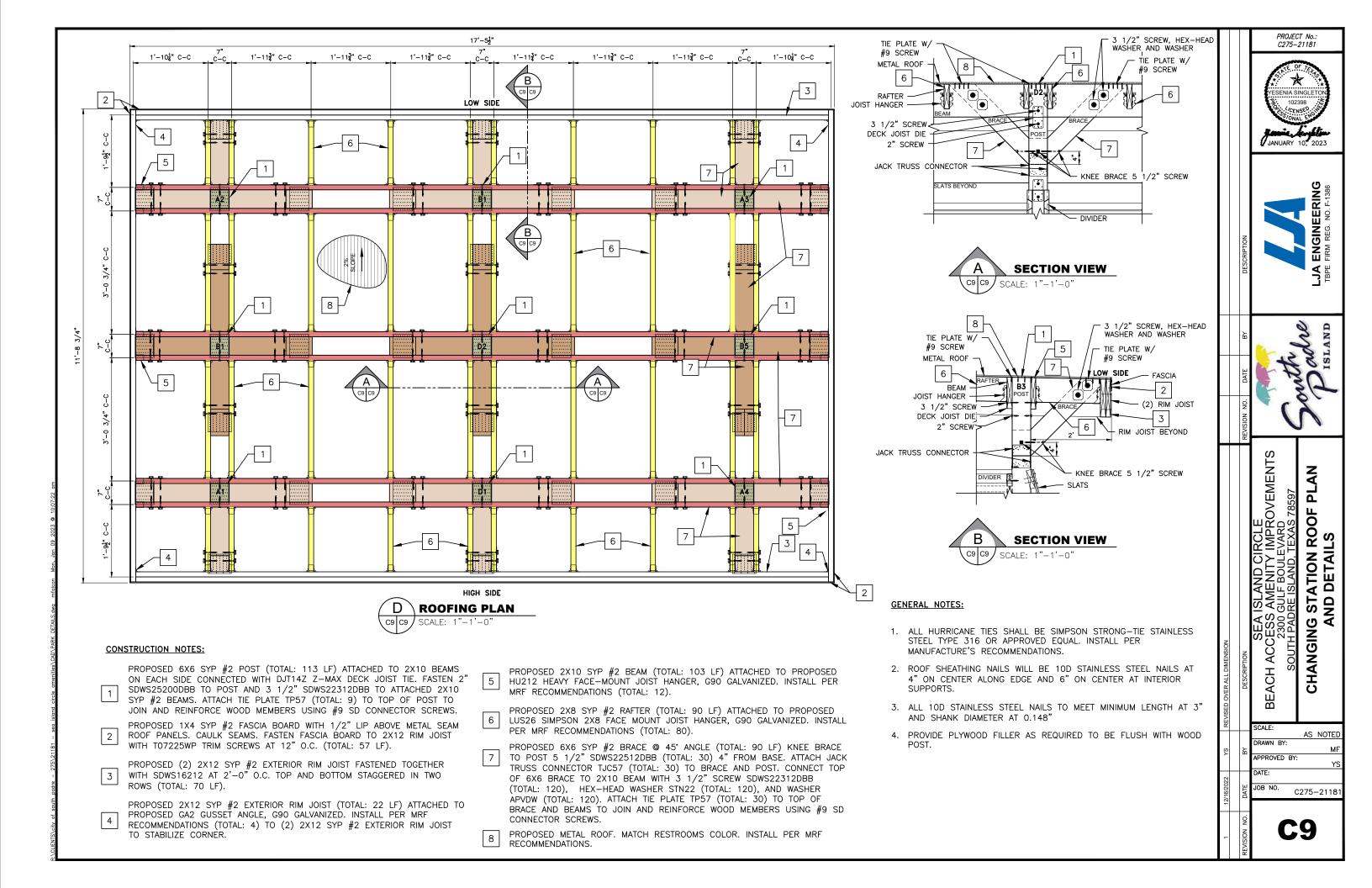


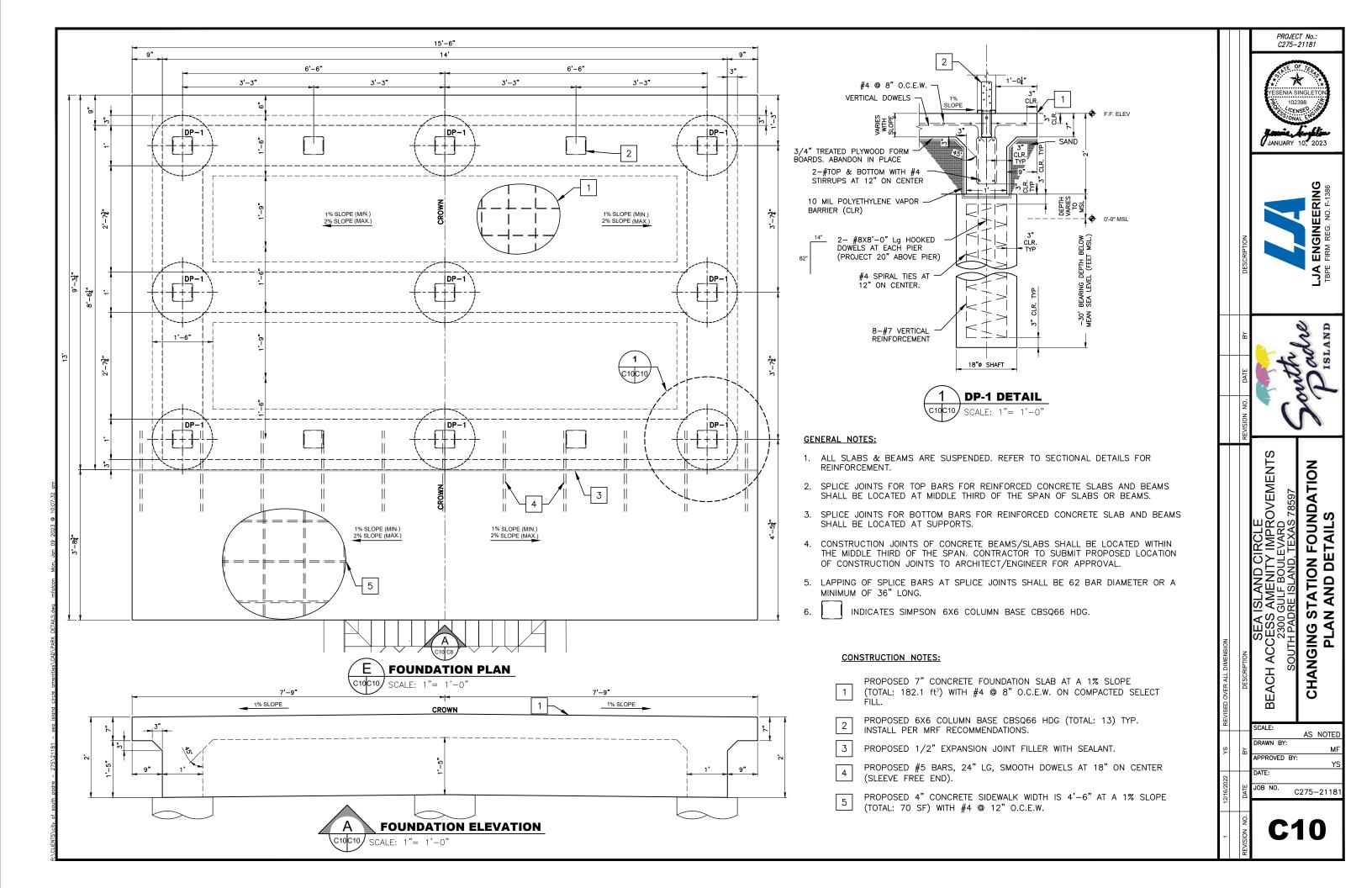


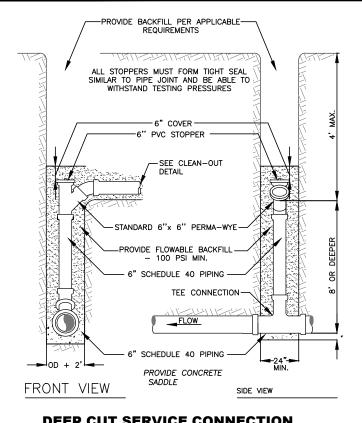












## **DEEP CUT SERVICE CONNECTION**

NOT TO SCALE

UNPAVED -

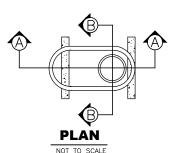
#### RIGHT-OF-WAY OR EASEMENT \_\_\_THREADED\_PLUG -SIDEWALK PROVIDE SERVICE-REMOVE/REPLACE MARKER PROVIDE CLEANOUT WHERE REQUIRED - 4"-WYF PROVIDE FITTINGS -ENCASE THE PIPE W/6" OF AS NEEDED AS SAND LOCATION AND SIZE OF MAIN VARIES-USE MISSION RUBBER CO. SEE NOTE 6 -45° BEND #MR01 OR #MR02 ARC COUPLING WITH STAINLESS STEEL SHEAR RING, OR 5° OR 90° 90 PREFERED) **FERNCO** PROVIDE SAND WASTEWATER MAIN W/REGULAR SADDLE, WYE, OR TEE (TIGRE GPK OR EAE) (SDR 35 FOR HDPE OR SDR 26 FOR PVC)

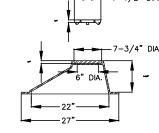
## **SERVICE CONNECTION DETAILS**

NOT TO SCALE

#### SERVICE CONNECTION NOTES:

- CONTRACTOR TO PROVIDE SERVICE CONNECTION TAP TO THE R.O.W. LINE & CONNECT EXIST, SERVICE LINE OUTSIDE EASEMENT AS SHOWN AND REQUIRED.
  ALL SERVICE PIPE AND FITTINGS TO BE SOLVENT WELD SCH 40 PVC UNLESS SHOWN OTHERWISE IN THE PLANS.
- FOR EXISTING MAIN PIPE MATERIAL PVC AND/OR VCP USE PUBLIC WORKS DEPARTMENT APPROVED CONNECTOR. FOR NEW PVC MAIN AND SERVICE, USE PVC WYE OR TEE AS DIRECTED AT SERVICE CONNECTION.
- IF PIPE LENGTH, ON SERVICE LINE, IS GREATER THAN 50', USE 6" PVC SCH 40 FROM CLEANOUT WYE TO THE MAIN LINE.





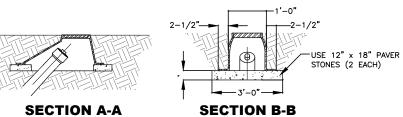
# **CLEAN-OUT BOOT**

NOT TO SCALE

TABLE 2

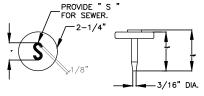
FINAL BACKFILL

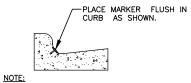
NOT TO SCALE



#### **TYPICAL CAST IRON CLEAN-OUT BOOT**

NOT TO SCALE





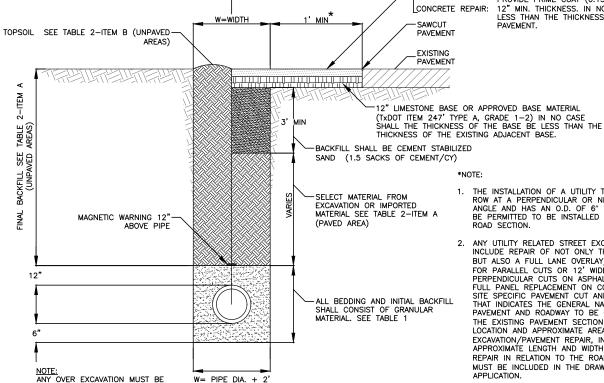
BRASS - ONE REQUIRED EACH STREET TAP

IF NO CURB BURY 12" PIECE OF REBAR WITH POLY PROTECTIVE END CAP ON EACH END.

# **STANDARD SERVICE MARKER**

NOT TO SCALE

GENERAL NOTES FOR BACKFILL



W= PIPE DIA. + 2'

CORRECTED WITH GRANULAR MATERIAL

- PAVED

ASPHALT REPAIR: 3" MIN. THICKNESS. IN NO CASE SHALL REPAIR BE LESS THAN THE THICKNESS OF EXISTING PAVEMENT PROVIDE PRIME COAT (0.15 GAL. PER SY MIN.) 12" MIN. THICKNESS. IN NO CASE SHALL REPAIR BE LESS THAN THE THICKNESS OF EXISTING CONCRETE

TABLE 1 BEDDING AND INITIAL BACKFILI (BELOW PIPE TO 12" ABOVE PIPE)

(GREATER THAN 12" ABOVE PIPE) UNPAVED AREAS

ALL BEDDING AND INITIAL BACKFILL SHALL CONSIST OF THE FOLLOWING OR REFER TO DESIGN ENGINEER REQUIREMENTS: GRANULAR BACKFILL CONSISTING OF EITHER NATURAL SAND OR SANDY GRAVEL, OR MATERIAL PRODUCED BY CRUSHING OF NATURAL STONE OR GRAVEL:

(1) EXCAVATIONS <20 FT. DEEP AND ABOVE WATER TABLE, USE MATERIAL MEETING THE FOLLOWING CRITERIA.

MEETING REQUIREMENTS OF ASTM D2487 FOR:

SP-SM SW-SM GW-GM

AND IN ADDITION: PASSING 1/2" SIEVE - 100% PASSING #4 SIEVE - 30% MINIMUM PLASTICITY INDEX (PI) - NP TO 10 MAX.

(2) IN DEEP EXCAVATIONS (>20') OR BELOW WATER TABLE, USE CRUSHED STONE OR CRUSHED GRAVEL MEETING GRADATION OF:

> A. CONCRETE COARSE AGGREGATE; TxDOT ITEM 421; GRADE 2, 3, OR 4.

B. CRUSHED LIMESTONE PER TxDOT ITEM 421' GRADE 2, 3, OR 4.

FROM 12" ABOVE PIPE TO BOTTOM OF TOPSOIL BACKFILL SHALL BE APPROVED SELECT MATERIAL FROM THE EXCAVAT- ION IMPORTED MATERIAL; ALL TO BE FREE OF ROCKS, DEBRÍS, OR ANY DIAMETER: LOOSE LIFTS TO BE PLACED 10" MAX.

COMPACT MATERIAL TO 95% STD. PROCTOR (D698).

MOISTURE TO BE ADJUSTED TO ± 3% OF OPTIMUM.

TOPSOIL TO BE PROVIDED EQUAL OR BETTER THAN EXISTING; AND MATCH EXISTING TOPSOIL DEPTH. COMPACT TO EXISTING ADJACENT TOP-SOIL THICKNESS. (CONSTRUCTION TO BE PERFORMED BY "DOUBLE DITCH" METHOD-TOP SOIL SALVAGED TO BE PLACED ON TOP)

FROM 12" ABOVE PIPE TO 3' BELOW BOTTOM OF ROAD BASE: BACKFILL SHALL BE SELECT MATERIAL FROM EXCAVATION OR IMPORTED MATERIAL. IN EITHER CASE, ALL MATERIAL SHALL MEET THE FOLLOWING:

PAVED AREAS

LL<35 PI 8-20 NO CLUMPS > 2" DIA.
MOISTURE - 1 TO +3%
COMPACT 95% D698 STD PROCTOR

LOOSE LIFTS OF 12" MAX
OR IF SELECT MATERIAL FROM EXCAVATION MEET REQUIREMENTS, THEN USE CEMENT STABILIZED SAND. SEE TABLE 2-ITEM B BELOW.

FROM 3' BELOW BOTTOM OF ROAD BASE TO BOTTOM OF ROAD BASE:

BACKFILL SHALL BE CEMENT STABILIZED SAND (1.5 SK/C.Y.) AND SHALL MEET THE FOLLOWING REQUIREMENTS:

SAND GRADATION % PASSING

#4 #10 55-100 40-100 #40 25-100 10-20 NP-10 #200

COMPACT TO 95% OF D588. MOISTURE TO BE ADJUSTED TO TO (+/-2%) OF OPTIMUM.

RCLE IMPROVEMENTS EVARD TEXAS 78597 LINE **WASTEWATER** SI AM Julia 14 W ACC BEACH

**DETAILS** 

PROJECT No.:

\*

SENIA SINGLE

102398

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GINEEF 1 REG. NO.1

SCALE AS NOTE DRAWN BY APPROVED B JOB NO. C275-2118

C11

THE INSTALLATION OF A UTILITY THAT CROSSES THE ROW AT A PERPENDICULAR OR NEAR PERPENDICULAR ANGLE AND HAS AN O.D. OF 6" OR LESS WILL NOT BE PERMITTED TO BE INSTALLED BY CUTTING THE ROAD SECTION. 2. ANY UTILITY RELATED STREET EXCAVATION/CUT SHALL INCLUDE REPAIR OF NOT ONLY THE IMPACTED TRENCH, BUT ALSO A FULL LANE OVERLAY/PAVEMENT REPAIR FOR PARALLEL CUTS OR 12' WIDE FOR PERPENDICULAR CUTS ON ASPHALT STREETS, AND FULL PANEL REPLACEMENT ON CONCRETE STREETS. A SITE SPECIFIC PAVEMENT CUT AND RESTORATION PLAN THAT INDICATES THE GENERAL NATURE OF THE PAVEMENT AND ROADWAY TO BE CUT AND RESTORED, THE EXISTING PAVEMENT SECTION (IF KNOWN), THE LOCATION AND APPROXIMATE AREA OF THE EXCAVATION/PAVEMENT REPAIR, INCLUDING THE APPROXIMATE LENGTH AND WIDTH OF THE PAVEMENT REPAIR IN RELATION TO THE ROADWAY TRAVEL LANE(S), MUST BE INCLUDED IN THE DRAWINGS/PERMIT TRENCH BACKFILL FOR WASTEWATER LINES AND PAVEMENT REPAIR FOR UTILITIES

#### **WATER DISTRIBUTION SYSTEM GENERAL NOTES**

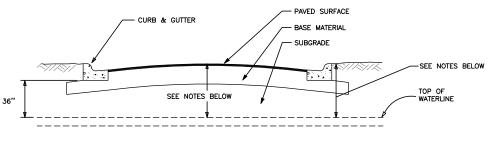
- PROPOSED WATER DISTRIBUTION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SOUTH PADRE ISLAND PUBLIC WORKS DISTRIBUTION SYSTEM STANDARDS.
- 2. THE CITY RESERVES THE RIGHT TO ACCEPT THE SYSTEM FOR OPERATION AT ANY TIME. BUT THE DATE OF OFFICIAL ACCEPTANCE OF THE SYSTEM WILL BE UPON COMPLETION OF THE PROJECT AND SATISFACTORY
- THE EXISTING SYSTEM SHALL REMAIN IN SERVICE LINTIL THE PROPOSED SYSTEM IS PUT INTO SERVICE. 3. THE CONTRACTOR SHALL PROTECT THE EXISTING SYSTEM UNTIL IT IS TAKEN OUT OF SERVICE.
- THE CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT REQUIRED TO INSTALL THE
- TESTING OF LINES (STERILIZATION AND PRESSURED) SHALL BE DONE BY THE CONTRACTOR LINDER THE 5. SUPERVISION OF PUBLIC WORKS DEPARTMENT. WATER FOR FILLING THE NEW WATER LINE AND PERFORMING TESTS WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY OF SOUTH PADRE ISLAND THROUGH A STANDARD WATER CONSTRUCTION METER CONNECTION. STANDARD WATER CONSTRUCTION METER AND GAUGE WILL BE SUPPLIED BY THE CITY AFTER THE CONTRACTOR HAS PAID ALL APPLICABLE FEES FOR THE WATER CONSTRUCTION METER. ALL WATER DISCHARGE MUST BE DECHLORINATED IN ACCORDANCE WITH TCEQ & NPDES REGULATIONS.
- THE CONTRACTOR SHALL RECOVER AND STOCK-PILE AT A LOCATION DESIGNATED BY THE PUBLIC WORKS INSPECTOR, ALL FIRE HYDRANTS, VALVES, AND FITTINGS THAT ARE TAKEN OUT OF SERVICE . THESE MATERIALS MAY BE SALVAGED BY THE CITY . HOWEVER, ALL ITEMS NOT CLAIMED BY THE CITY PRIOR TO THE FINAL INSPECTION SHALL BE DISPOSED OF BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BEAR ALL COST ASSOCIATED WITH WATERLINE REPAIRS (WHICH RESULT FROM DAMAGE CAUSED BY THE CONTRACTOR) UPON COMPLETION OF PROJECTS. ALL WATER LINES SHALL BE FREE OF ALL PATCHES AND SPLICES
- ALL PHYSICAL TIES OF THE PROPOSED SYSTEM INTO THE EXISTING WATERLINE SHALL BE RECONNECTED AND BE MADE UNDER SUPERVISION OF THE PUBLIC WORKS INSPECTOR. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND ALL EQUIPMENT THAT IS REQUIRED TO MAKE TIE-INS. CITY PUBLIC WORKS CREWS WILL MAKE TAPS ON CITY MAINS ARRANGED THROUGH PUBLIC WORKS INSPECTOR (72 HOUR NOTIFICATION).
- ALL EXISTING SERVICE CONNECTIONS TIFD ONTO THE EXISTING WATERLINE SHALL BE RECONNECTED BY THE 9. CONTRACTOR, INCLUDING RELOCATING EXISTING WATER METERS. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY AND COORDINATE WITH THE PUBLIC WORKS INSPECTOR SAID RECONNECTIONS / RELOCATIONS IN ADVANCE OF CONSTRUCTION TO AVOID DELAYS. (NO SEPARATE COSTS)
- MINOR LENGTH OF DUCTILE IRON PIPE ADJACENT TO FITTINGS MAY BE REQUIRED AS DIRECTED BY THE PUBLIC WORKS INSPECTOR BASED ON CONDITIONS ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL USE D.I.P. AS DIRECTED AND SHALL BE PAID AT THE UNIT PRICE BID FOR THE APPROPRIATE SIZE WATERLINE. A MINOR LENGTH IS DEFINED AS A SINGLE LOCATION REQUIRING THE USE OF TWO JOINTS OR
- MINOR ADJUSTMENTS IN THE LOCATIONS OF FITTINGS, VALVES, FIRE HYDRANTS, ETC. CAN BE ANTICIPATED. THE CONTRACTOR SHALL MAKE SAID MINOR ADJUSTMENTS AS DIRECTED BY THE ENGINEER AND/OR PUBLIC WORKS INSPECTOR AT NO INCREASE OF CONTRACT PRICE. PUBLIC WORKS WILL BE NOTIFIED PRIOR TO ALL CHANGES
- ALL NIPPLES BETWEEN FITTINGS AND VALVES ALONG MAINS SHALL BE DUCTILE IRON.
- ALL DUCTILE IRON PIPES, VALVES, AND FITTINGS SHALL BE WRAPPED WITH (2) THICKNESSES OF 8 MIL. POLYETHYLENE AND SHALL BE RESTRAINED WITH "MEGALUG", MECHANICAL JOINT RESTRAINT OR ENGINEER APPROVED EQUAL AT ALL FITTINGS. CONCRETE THRUST BLOCKS SHALL BE PLACED BEHIND ALL FIRE HYDRANTS AS SHOWN ON DETAIL EXCEPT WHERE LOCKING OR SWIVEL FITTINGS ARE UTILIZED, UNLESS OTHERWISE SPECIFIED BY THE PUBLIC WORKS DEPARTMENT.
- ALL OFFSETS ARE TO BE DUCTILE IRON PIPE ASSEMBLIES LOCKED TOGETHER BY RETAINER GLANDS. DUCTILE IRON BENDS SHALL BE UTILIZED FOR ANY CHANGES IN ALIGNMENT OR GRADE.
- IF A WATER LINE IS TO BE ABANDONED, THE CONTRACTOR WILL FILL WITH CONTROLLED LOW STRENGTH MATERIAL, "DARAFILL" BRAND OR ENGINEER APPROVED EQUAL, VALVES WILL BE REMOVED OR FILLED AS REQUIRED BY PUBLIC WORKS INSPECTOR.
- CONTRACTOR SHALL COORDINATE WITH PUBLIC WORKS INSPECTOR AND NOTIFY ALL AFFECTED CUSTOMERS 24 HOURS PRIOR TO KILLOUT OF EXISTING WATER SYSTEM.
- WATER DISTRIBUTION SYSTEM STANDARDS CALL FOR MAXIMUM 48" COVER ON WATERLINES. WHEN DEPTHS EXCEED 48" COVER TO AVOID OBSTRUCTION, THE USES OF BENDS COULD BE REQUIRED.
- CONTRACTOR SHALL KEEP ALL EXISTING VALVES ACCESSIBLE DURING ALL PHASES OF CONSTRUCTION.
- 19. ALL NEW WATER MAINS SHALL BE INSTALLED SO THAT PIPE IDENTIFICATION MARKINGS ARE LOCATED ON THE
- ALL SERVICE LINES UNDER PAVEMENT SHALL BE ONE INCH, INSIDE DIAMETER, MINIMUM, UNLESS SPECIFIED OTHERWISE.

#### **SEPARATION OF WATER AND WASTEWATER LINES**

- THE SEPARATION OF WATER AND WASTEWATER LINES AND THE MATERIAL USED SHALL BE IN ACCORDANCE WITH THE "RULES & REGULATIONS FOR PUBLIC WATER SYSTEMS" OF TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND THE CITY WATER DETAILS.
- 2. WHENEVER WATER & WASTEWATER LINES CROSS, ONE JOINT OF C900 PVC WATER LINE SHALL BE CENTERED OVER THE WASTEWATER LINE IN ADDITION TO ANY REQUIREMENTS AS DICTATED BY ITEM 1

#### NOTES:

CONTRACTOR MAY BE REQUIRED BY THE PUBLIC WORKS DEPARTMENT INSPECTOR TO INSTALL CENTERED JOINTS OF DUCTILE IRON PIPE AT WATERLINE CROSSINGS OF EXISTING HAZARDOUS PRODUCT FLOWLINES.



#### **WATERLINE MINIMUM COVER REQUIREMENTS**

#### NOTES:

- 1. ALL MAINS IN THE STREET SHALL HAVE A MINIMUM OF 36" OF COVER AND BE 12" MINIMUM BELOW SUBGRADE AT ALL POINTS AND HAVE VALVE CLEARANCES IN ACCORDANCE WITH THE VALVE DETAIL.
- 2. ALL TRANSMISSION MAINS (12" DIAMETER & ABOVE) IN THE STREET SHALL HAVE 48" OF COVER AT ALL POINTS.
- 3. ALL MAINS NOT UNDER THE STREET SHALL HAVE A MINIMUM OF 36" COVER AT ALL POINTS.

# **UNPAVED AREAS PAVED AREAS** TOPSOIL TO BE PROVIDED SELECT BACKELL MATERIAL FROM-EXIST. (4" MIN. DEPTH) EXCAVATION COMPACTED TO 95% STD. PROCTOR DENSITY (ASTM D698) SEE TABLE 2 - ITEM A - ASPHALT OR CONCRETE PAVEMENT SECTION - CEMENT-STABILIZED SAND (2 SACKS CEMENT/C.Y. OF SAND) COMPACTED TO 95% STD. PROCTOR 2.2 DENSITY (ASTM D698) SEE TABLE 2 - ITEM B PIPES PIPES ် 등 , ° MAGNETIC WARNING TAPE 12" ABOVE PIPE SAND ENCASE WATERLINE X=8" MIN. FOR PIPES <16" DIA. X=12" MIN. FOR PIPES ≥16" DIA.

## **TYP. PIPE TRENCHING BEDDING AND BACKFILL FOR WATERLINE**

NOTE: (CONCRETE PAVEMENT ONLY)

CONTRACTOR HAS OPTION TO USE CEMENT STABILIZED SAND OR BACKFILL WITH SELECT BACKFILL MATERIAL

GENERAL	NOTES FOR BACKFILL
TABLE 1	TABLE 2
BEDDING AND INITIAL BACKFILL	FINAL BACKFILL
(BELOW PIPE TO 12" ABOVE PIPE)	(GREATER THAN 12" ABO
	UNPAVED AREAS PAV
ALL BEDDING AND INITIAL BACKFILL SHALL CONSIST OF THE FOLLOW REFER TO DESIGN ENGINEER REQUIREMENTS:  GRANULAR BACKFILL CONSISTING OF EITHER NATURAL SAND OR SAN GRAVEL, OR MATERIAL PRODUCED BY CRUSHING OF NATURAL STONE GRAVEL.  WATER LINES:  1. EXCAVATIONS <20FT. DEEP AND ABOVE WATER TABLE, USE MATERIAL MEETING THE FOLLOWING CRITERIA.  MEETING REQUIREMENTS OF ASTM D2487 FOR:  SP GP SW GW SP-SM GP-GM SW-SM GW-GM AND IN ADDITION: PASSING 1/2" SIEVE — 100%	BOTTOM OF TOPSOIL  BOTTOM OF TOPSOIL  BACKFILL SHALL BE APPROVED SELECT MATERIAL FROM THE EXCAVATION; OR IMPORTED MATERIAL; ALL TO BE FREE OF ROCKS, DEBRIS, OR ANY CLUMPS GREATER THAN 2" IN DIAMETER; LOOSE LIFTS TO BE PLACED 10" MAX.  COMPACT MATERIAL TO 95% STD. PROCTOR (D698).  MOISTURE TO BE ADJUSTED TO ± 3% OF OPTIMUM.  BOTTOM OF R BE SELECT MA TO BE SELECT MA TO LOWING: CASE, ALL MA FOLLOWING: PI 8-20 NO CLUMPS > MOISTURE 0 TO COMPACT 95% STD. PROCTOR (D698).  MOISTURE TO BE ADJUSTED TO ± 3% OF OPTIMUM.  BET REQUIRE STABILIZED SA BELOW (OR PI
PASSING 1/2 SIEVE — 100% MINIMUM PLASTICITY INDEX (PI) — NP TO 10 MAX.	B. TOPSOIL TO BE PROVIDED EQUAL OR BETTER THAN EXISTING; AND MATCH EXISTING TOPSOIL DEPTH.  B. FOR 3' BELOW BOTTOM OF RO

- 2. IN DEEP EXCAVATIONS (>20') OR BELOW WATER TABLE, USE CRUSHED STONE OR CRUSHED GRAVEL MEETING GRADATION OF:
- A. CONCRETE COARSE AGGREGATE; TxDOT ITEM 421; GRADE 2, 3, OR 4

OVE PIPE) **VED AREAS** 

COMPACT TO FIX CONFLICT TO EXISTING ADJACENT TOPSOIL. (CONSTRUCTION TO BE PERFORMED BY "DOUBLE DITCH" METHOD TOP SOIL SALVAGED TO BE PLACED ON

- OVE PIPE TO 3' BELOW ROAD BASE: BACKFILL SHALL MATERIAL FROM EXCAVATION OR RTED MATERIAL IN FITHER
- > 2" DIA. TO +3% % D698 STD PROCTOR

OF 10" MAX OR IF SELECT OM EXCAVATION DOES NOT REMENTS, THEN USE CEMENT SAND SEE TABLE 2-ITEM B PER DESIGN ENGINEER)

OW BOTTOM OF ROAD BASE TO

BACKFILL SHALL BE CEMENT STABILIZED SAND (2 SK/C.Y.) AND SHALL MEET THE FOLLOWING REQUIREMENTS:

# SAND GRADATION: % PASSING

55-100 40-100 25-100 10-20

(OR AS PER DESIGN ENGINEER)

COMPACT TO 95% OF D698, MOISTURE TO

SENIA SINGLE 102398

PROJECT No.:





**ENTS** 

ഗ AIL. DET, STANDARD

RCLE IMPROVEME VARD TEXAS 78597 SL/ AM PE-I V O WATER ACC CH BEA(

SCALE AS NOTE DRAWN BY APPROVED B

JOB NO. C275-2118

#### **SERVICE LINE MATERIALS**

SERVICE CLAMPS

FOR 3/4", 1", 1 1/2" I.P. THREAD TAPS FOR 6" MAINS; 2" I.P. THREAD CLAMP TAP CONNECTION ALLOWED FOR 8" AND LARGER MAINS.

 $\frac{\text{CORPORATION STOPS}}{3/4", 1", 1 \ 1/2". \text{ and } 2" \text{ required with } \text{ i.p. } \text{ thread inlet by copper compression outlet with clamp - corporation stop required at all service taps.}$ 

ONE PIECE SDR9 POLYETHYLENE TUBING OR TYPE K COPPER REQUIRED FOR ALL SERVICE LINES BETWEEN MAIN TO METER - SIZES REQUIRED 3/4", 1", 1 1/2",

ANGLE METER STOP

REQUIRED AT ALL METERS - SIZES 3/4" & 1" - INSTALL 3/4" UNLESS DIRECTED OTHERWISE 
COPPER COMPRESSION W/ CLAMP INLET BY METER COUPLING NUT OUTLET.

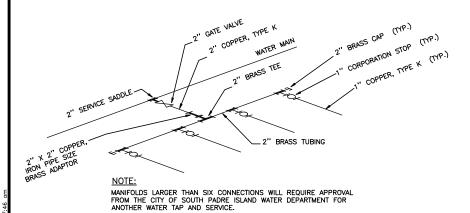
METER ADAPTER AND CHECK VALVE (BY OTHERS)
REQUIRED AT ALL METERS - SIZES 3/4" & 1" - INSTALL 3/4" UNLESS DIRECTED OTHERWISE -METER NUT INLET BY 3/4" MALE I.P. OUTLET.

ADAPTER COUPLING (BY OTHERS)
REQUIRED AT ALL METERS - 3/4" & 1" - FEMALE I.P. BY PVC COMPRESSION.

METER BOX

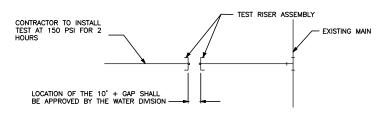
CAST IRON W/ HOT TAR DIP SHALL BE PROVIDED BY THE CONTRACTOR FOR 3/4" METER SETTINGS, IF EXISTING STRUCTURE DOES NOT HAVE ONE. BOXES FOR LARGER (1" & UP) METER SETTINGS, I BE FURNISHED BY THE CITY.

BRASS FITTINGS
BRASS FITTINGS SHALL COMPLY WITH A.W.W.A. C800-66 AND BE WRAPPED IN POLYETHYLENE.



## THREE TO SIX WATER CONNECTIONS

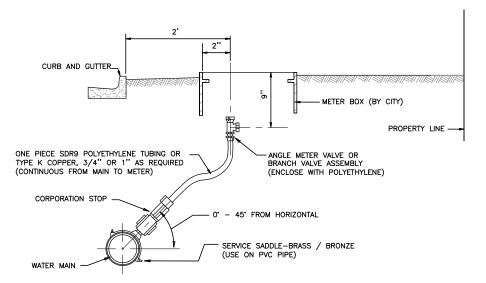
NOT TO SCALE



- 1. HYDROSTATIC TEST: WATER FOR FILLING THE NEW WATER LINE AND PERFORMING TESTS WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY OF SOUTH PADRE ISLAND THROUGH A STANDARD WATER CONSTRUCTION METER CONNECTION. STANDARD WATER CONSTRUCTION METER AND GAUGE WILL BE SUPPLIED BY THE CITY AFTER THE CONTRACTOR HAS PAID ALL APPLICABLE FEES FOR THE WATER CONSTRUCTION METER. THE TEST PUMP WITH APPROPRIATE CONNECTION POINTS AS APPROVED BY THE WATER SUPERINTENDENT FOR THE INSTALLATION OF METER AND GAUGE SHALL BE FURNISHED BY THE CONTRACTOR. THE METER SHALL BE DIRECTLY CONNECTED TO THE MAIN OR PIPE BEING TESTED BY THE USE OF COPPER TUBING OR AN APPROVED REINFORCED HOSE. THE METER SHALL BE PROTECTED AGAINST EXTREME PRESSURES BY THE USE OF A ONE (1") INCH SAFETY RELIEF VALVE SET AT THE TEST PRESSURE PLUS TEN POUNDS PER SOUARE INCH AND FURNISHED BY THE COURT (48 HOURS PRESSURE PLUS TEN POUNDS PER SQUARE INCH AND FURNISHED BY THE CITY (48 HOURS
- 2. BACTERIOLOGICAL TEST: CONTRACTOR SHALL FURNISH AND INSTALL TEST RISER ASSEMBLY.
  AFTER BACTERIOLOGICAL SAMPLE PASSES TEST, CONTRACTOR SHALL REMOVE TEST RISER
  ASSEMBLIES AND TIE NEW SYSTEM TO EXISTING UNDER THE SUPERVISION OF THE PUBLIC
  WORKS DEPARTMENT INSPECTOR. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND
  EQUIPMENT THAT IS REQUIRED TO MAKE TIE / CONJECTION. CONTRACTOR WILL SCHEDULE &
  COORDINATE WITH PUBLIC WORKS DEPARTMENT INSPECTOR ON DATE & TIME OF TIE—IN. (24 HOURS NOTIFICATION)
- CONTRACTOR SHALL FURNISH AND INSTALL TAPPING SLEEVE OR SADDLE AND TAPPING GATE VALVE AND VALVE BOX COMPLETE. CITY TO MAKE TAP (72 HOURS NOTIFICATION)

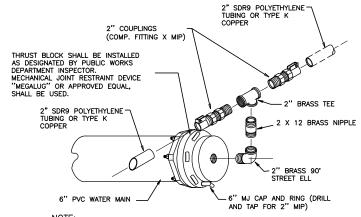
# **DETAIL "A" TEST RISER ASSEMBLY CONNECTION**

NOT TO SCALE



#### **SERVICE WITHOUT SIDEWALK**

NOT TO SCALE



NOTE:

NO MORE THAN 3 LOTS SHALL BE SERVED PER LEG.

## TYPICAL CONNECTION DETAIL

2"x12" BRASS

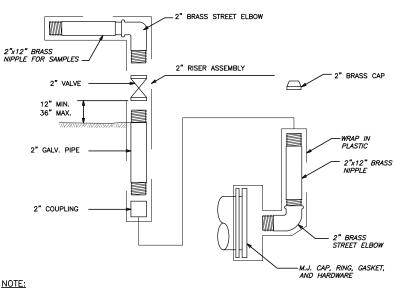
NIPPLE FOR SAMPLES

36" MAX.

2" GALV. PIPE

2" COUPLING

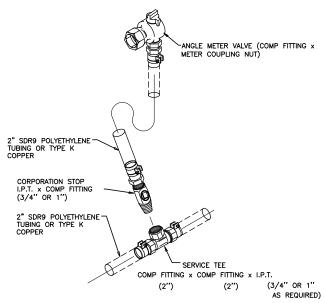
NOTE:

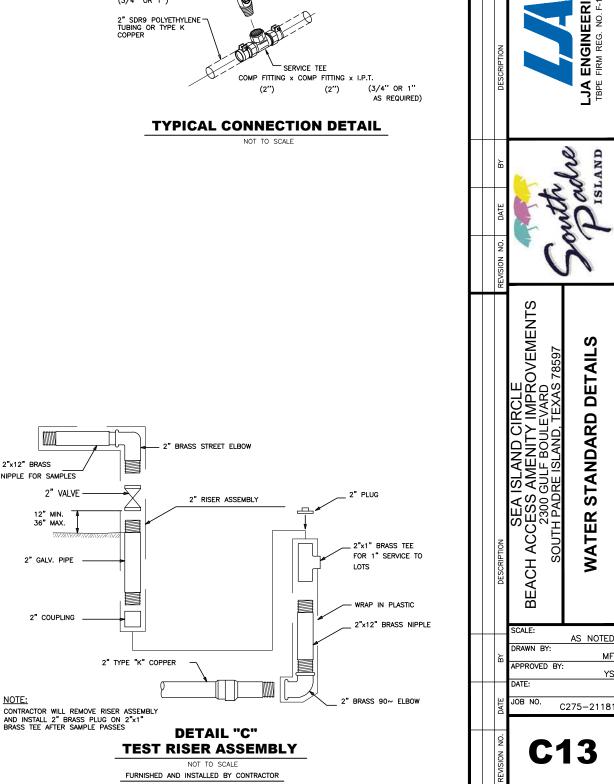


AFTER BACTERIOLOGICAL SAMPLE PASSES TEST, CONTRACTOR WILL REMOVE RISER ASSEMBLY AND INSTALL 2" BRASS CAP

#### **DETAIL "B" TEST RISER ASSEMBLY**

FURNISHED AND INSTALLED BY CONTRACTOR

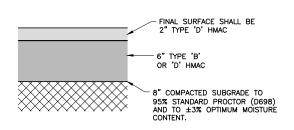


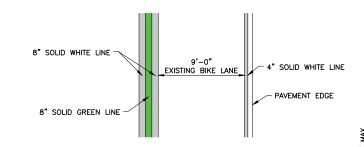


PROJECT No.:

SENIA SINGLE

102398





#### 8" FULL DEPTH PAVEMENT REPAIR (FDPR)

## **BIKE LANE PAVEMENT MARKINGS**

NOT TO SCALE

# CONCRETE RIBBON CURB CONCRETE PAVER 2" SAND BEDDING COMPACTED SUBBASE (6" LIMESTONE, COMPACTED) COMPACTED SUBGRADE POLYMERIC SAND (ALL JOINTS)

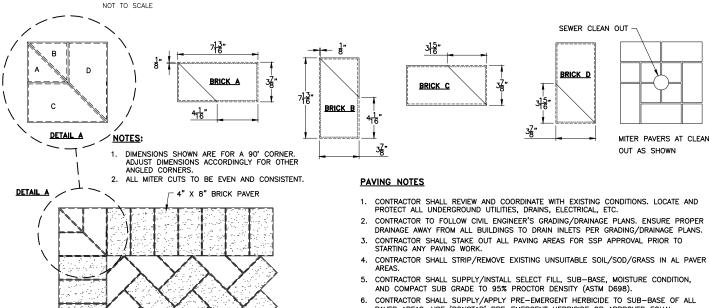
**PAVER INSTALLATION DETAIL** 

#### **GENERAL SPECIFICATIONS INSTALLATION**

- EXCAVATE UNSUITABLE, UNSTABLE OR UNCONSOLIDATED SUBGRADE MATERIAL AND COMPACT THE AREA WHICH HAS BEEN CLEARED. THEN BACKFILL AND LEVEL WITH DENSE GRADED AGGREGATE SUITABLE FOR SUBBASE MATERIAL (6" OF COMPACTED LIMESTONE)
- 2. PLACE BEDDING COURSE OF WASHED CONCRETE SAND CONFORMING TO THE GRADING REQUIREMENTS OF ASTM C33 TO A UNIFORM DEPTH OF 1" TO 1 1/2" (25-38MM) SCREEDED TO THE GRADE AND PROFILE REQUIRED.
- 3. INSTALL PAVERS WITH JOINTS APPROXIMATELY 1/8" (3MM). (PAVERS WITH SPACER RIBS AUTOMATICALLY PROVIDE MINIMUM JOINT WIDTH.)
- 4. WHERE REQUIRED, CUT PAVERS WITH AN APPROVED CUTTER TO FIT ACCURATELY, NEATLY AND WITHOUT DAMAGED
- 5. TAMP PAVERS WITH A PLATE COMPACTOR, UNFORMILY LEVEL, TRUE TO GRADE AND FREE OF MOVEMENT.
- 6. FILL JOINTS WITH POLYMERIC SAND BINDER (SANDLOCK OR APPROVED EQUAL.)

#### <u>NOTES</u>

- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. DO NOT SCALE DRAWINGS.
- 3. CONFIRM COLOR AND SIZE WITH OWNER PRIOR TO INSTALLATION
- 4. CONTRACTOR TO PROVIDE 6'x6' MOCKUP OF PAVING TO INCLUDE FIELD PATTERN, BORDER PATTERN AND COLORS.



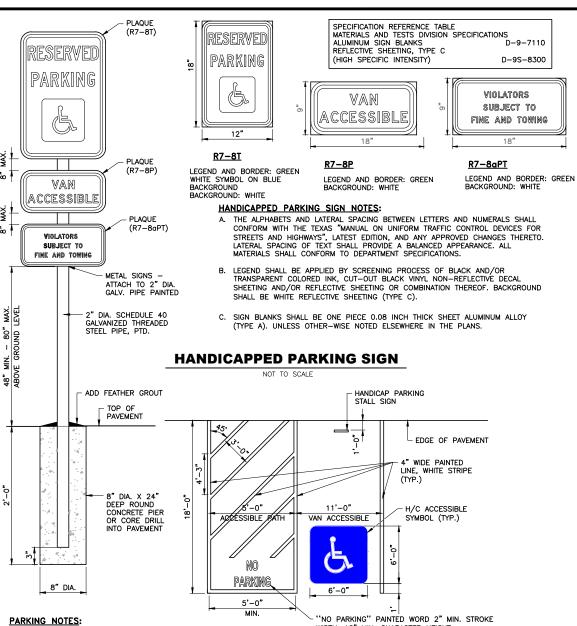
HERRINGBONE

# **PAVER DETAIL - 90° MITER**

- PAVER AREAS. USE 'RONSTAR' PRE-EMERGENT HERBICIDE OR APPROVED EQUAL. 7. CONTRACTOR SHALL SUPPLY/INSTALL PAVERS AS INDICATED IN SCHEDULE
- 8. CONTRACTOR SHALL CUT/MITRE ALL RADII AND CORNERS USING MASONRY SAW AS
- 9. CONTRACTOR SHALL FILL/SWEEP AL JOINTS WITH MIXTURE OF JOINT SAND AND 'SANDLOCK' JOINT STABILIZER. MI. 3-4 LBS. OF 'SANDLOCK' PER 100 LBS OF JOINT SAND. SWEEP ADDITIONAL 'SANDLOCK' ONTO FINAL SURFACE AND INTO AL JOINTS THEN SATURATE WITH WATER TO ACTIVATE STABILIZER.
- 10. CONTRACTOR SHALL NOTIFY SSP BEFORE INSTALLATION FOR INSPECTIONS/APPROVALS OF
- 11. CONTRACTOR SHALL WARRANTY ALL MATERIALS AND LABOR FOR A PERIOD OF TWO YEARS, WARRANTY
- 12. INCLUDED RE-SANDING IF REQUIRED, HERBICIDE TREATMENT AND REPAIR OF ALL SUBGRADE FAILURES IF REQUIRED.

PAVING MATERIAL SCHEDULE				
DESCRIPTION	NOTES	QUANTITY		
BRICK PAVERS	4"X8" MM KEYSTONE HOLLANDSTONE BRICK PAVERS BAND (LIGHT BROWN/TAN MIX)			
BRICK PAVERS BAND	4"X8" MM KEYSTONE HOLLANDSTONE BRICK PAVERS BAND (DARK BROWN)			

NOTE CONTRACTOR TO PROVIDE AVAILABLE PAVER COLORS FOR APPROVAL BY CITY BEFORE OFFERING MATERIAL



1. ALL PARKING SPACE LIMIT LINES SHALL BE 4" SOLID WHITE LINES.

2. AISLE MARKINGS SHOWN ARE EXAMPLES ONLY. OTHER METHODS TO INDICATE A NO PARKING AREA ARE ACCEPTABLE. AISLE MARKINGS

WIDTH, 12" MIN. CHARACTER HEIGHT

(PER TDLR ADMINISTRATIVE RULE §68.104)

- 3. DIMENSIONS OF LIMIT LINES, AISLE MARKINGS AND SYMBOLS (WITH OR WITHOUT BACKGROUND) MAY VARY + 10%.
- 4. PAVEMENT MARKING SYMBOLS (WITH BACKGROUND):
- ARE REQUIRED UNLESS STATED ELSEWHERE IN THE PLANS,
  SHOULD BE PLACED TOWARD THE FAR END OF THE PARKING SPACES SO AS TO BE VISIBLE TO MOTORISTS IN THE TRAVEL LANE,
  MAY BE PAINTED OR PREFABRICATED MATERIAL AND
- 5. WITH APPROVAL OF THE ENGINEER, PREFABRICATED PAVEMENT MARKING SYMBOLS WITH BACKGROUND OF OTHER DIMENSIONS EXCEEDING THE 30"X30" MINIMUM MAY BE USED. ALTERNATIVE DESIGNS SHALL INCLUDE A PROPORTION SIZED SYMBOL OF ACCESSIBILITY AND SHALL CONFORM TO THE ILLUSTRATED COLORS FOR BACKGROUND, SYMBOL AND BORDER.

- 6. AN R7-8 SIGN:
  A. SHALL BE REQUIRED FOR EACH ACCESSIBLE PARKING SPACE,
  B. SHALL NOT BE PLACED BETWEEN TWO ACCESSIBLE PARKING SPACES,
  C. SHALL NOT BE PLACED IN A LOCATION THAT RESTRICTS MOVEMENT OF WHEELCHAIRS WITHIN THE ADJACENT SIDEWALK, AND
  D. SHALL HAVE MINIMUM MOUNTING HEIGHT OF 7 FEET. IF MOUNTED TO WALL OR LOCATED SO AS NOT TO BE NEAR PEDESTRIAN TRAFFIC
- 7. POST MOUNTED SIGNS SHOULD BE PLACED APPROXIMATELY 1 FOOT (OR GREATER) BEHIND THE CURB TO PREVENT DAMAGE FROM VEHICLE
- 8. SIGNS MAY BE MOUNTED DIRECTLY TO AN ADJACENT WALL OF A BUILDING WHEN POST MOUNTING IS IMPRACTICAL.

#### STRIPING NOTES:

- 1. PAINT FOR STRIPING PER SPECIFICATION SECTION 025807, PAVEMENT MARKINGS (S-45) PAINT AND THERMOPLASTIC.
- 2. PAINT SHALL BE APPLIED UNIFORMLY BY SUITABLE EQUIPMENT AT A RATE OF NOT LESS THAN 105 NOR MORE THAN 115 SQUARE FEET
- 3. AFTER APPLICATION, ALL MARKINGS SHALL BE PROTECTED WHILE DRYING. THE FRESH MARKINGS SHALL BE PROTECTED FROM DAMAGE OF ANY KIND.

#### TYPICAL ACCESS PARKING

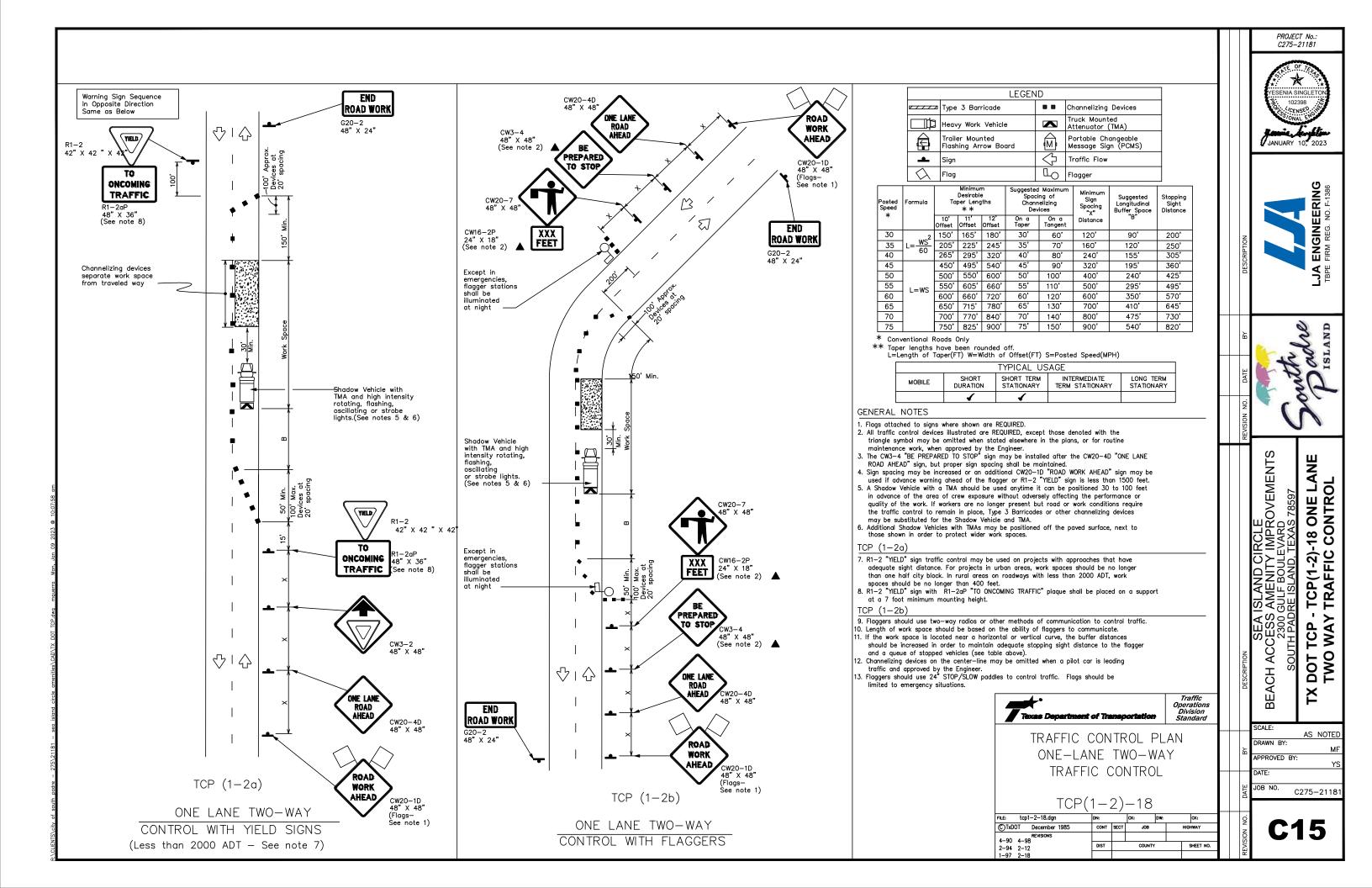
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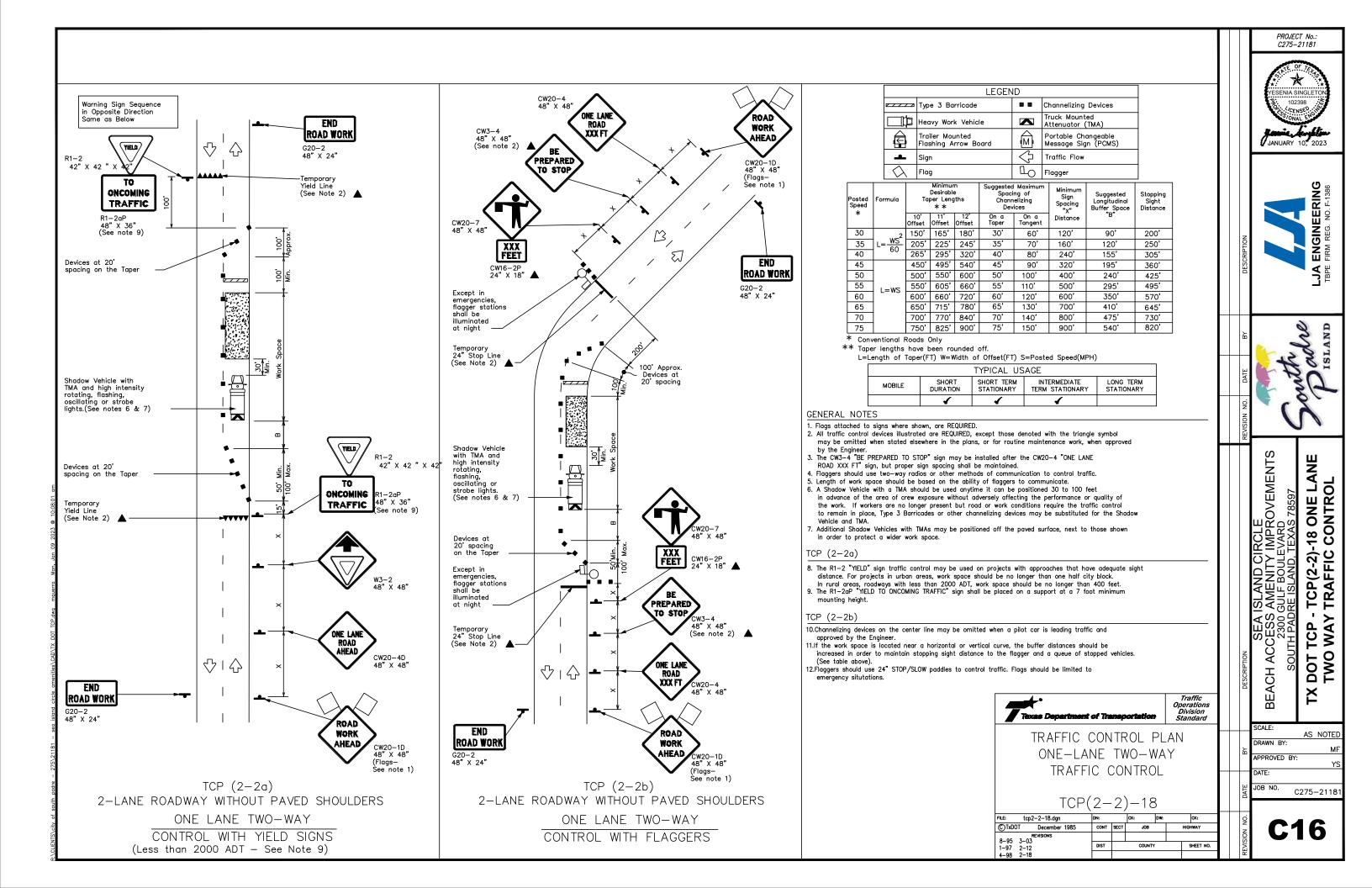
PROJECT No.:

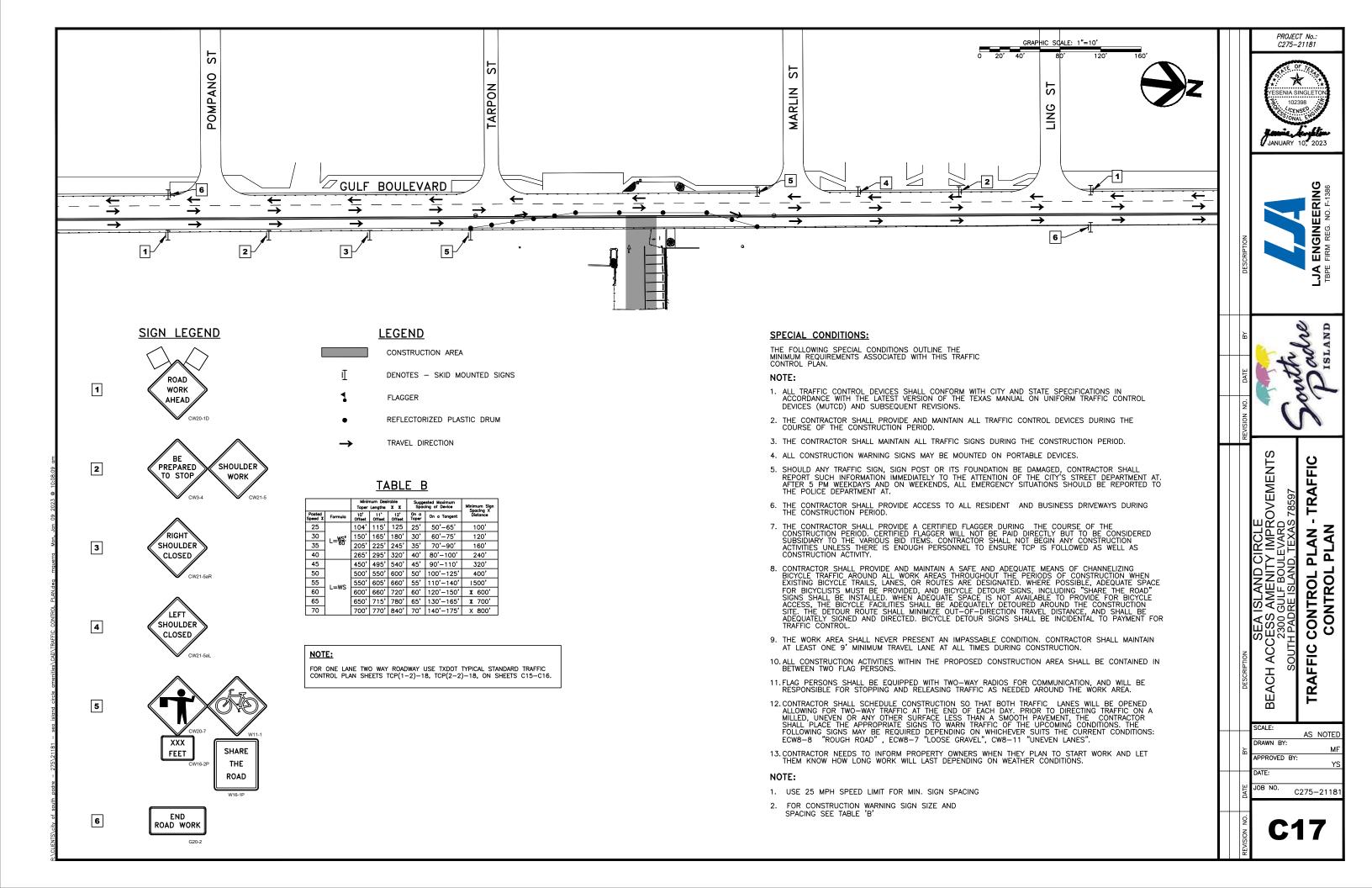
APPROVED BY JOB NO.

C14

C275-2118







1. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402	3. CULTURAL RESOURCES	6. HAZARDOUS MATERIAL OR CONTAMINATION ISSUES	4	PROJECT No.: C275-21181
TPDES TXR 150000: STORMWATER DISCHARGE PERMIT OR CONSTRUCTION GENERAL PERMIT REQUIRED FOR PROJECTS WITH 1 OR MORE ACRES DISTURBED SOIL. PROJECTS WITH ANY DISTURBED SOIL MUST PROTECT FOR EROSION AND SEDIMENTATION IN ACCORDANCE WITH THE SPECIFICATIONS.  LIST MS4 OPERATOR(S) THAT MAY RECEIVE DISCHARGE FROM THIS PROJECT. THEY MAY NEED TO BE NOTIFIED PRIOR TO CONSTRUCTION ACTIVITIES.  1. THIS PROJECT IS LOCATED WITHIN THE BOUNDARIES OF THE CORPUS CHRISTI MUNICIPAL SEPARATE STORM SEWER	REFER TO TXDOT STANDARD SPECIFICATIONS IN THE EVENT HISTORICAL ISSUES OR ARCHEOLOGICAL ARTIFACTS ARE FOUND DURING CONSTRUCTION. UPON DISCOVERY OF ARCHEOLOGICAL ARTIFACTS (BONES, BURNT ROCK, FLINT, POTTERY, ETC.) CEASE WORK IN THE IMMEDIATE AREA AND CONTACT THE ENGINEER IMMEDIATELY.    NO ACTION REQUIRED   REQUIRED ACTION	GENERAL (APPLIES TO ALL PROJECTS):  COMPLY WITH THE HAZARD COMMUNICATION ACT (THE ACT) FOR PERSONNEL WHO WILL BE WORKING WITH HAZARDOUS MATERIALS BY CONDUCTING SAFETY MEETINGS PRIOR TO BEGINNING CONSTRUCTION AND MAKING WORKERS AWARE OF POTENTIAL HAZARDS IN THE WORKPLACE. ENSURE THAT ALL WORKERS ARE PROVIDED WITH PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE FOR ANY HAZARDOUS MATERIALS USED.  OBTAIN AND KEEP ON—SITE MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL HAZARDOUS PRODUCTS USED ON THE PROJECT, WHICH MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING CATEGORIES: PAINTS, ACIDS,		YESENIA SINGLETON 102398 102398 102398
SYSTEM, AND WOULD COMPLY WITH ALL APPLICABLE MS4 REQUIREMENTS.	ACTION NO.	SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES, FUELS AND CONCRETE CURING COMPOUNDS OR ADDITIVES. PROVIDE PROTECTED STORAGE, OFF BORE GROUND AND COVERED, FOR PRODUCTS WHICH MAY BE HAZARDOUS.		James Lington
▼ NO ACTION REQUIRED ☐ REQUIRED ACTION	1.	MAINTAIN PROPUCT LABELING AS REQUIRED BY THE ACT.  MAINTAIN AN ADEQUATE SUPPLY OF ON-SITE SPILL RESPONSE MATERIALS, AS INDICATED IN THE MSDS. IN THE  EVENT OF A SPILL. TAKE ACTIONS TO MITIGATE THE SPILL AS INDICATED IN THE MSDS. IN ACCORDANCE WITH		JANUARY 10, 2023
ACTION NO.	2. 3.	SAFE WORK PRACTICES, AND CONTACT THE DISTRICT SPILL COORDINATOR IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CONTAINMENT AND CLEANUP OF ALL PRODUCT SPILLS.		
PREVENT STORMWATER POLLUTION BY CONTROLLING EROSION AND SEDIMENTATION IN ACCORDANCE WITH TPDES PERMIT TXR 150000.	4.	CONTACT THE ENGINEER IF ANY OF THE FOLLOWING ARE DETECTED:		<b>9</b> 88
2. COMPLY WITH THE SW3P AND REVISE WHEN NECESSARY TO CONTROL POLLUTION OR REQUIRED BY THE ENGINEER.  3. POST CONSTRUCTION SITE NOTICE (CSN) WITH SW3P INFORMATION ON OR NEAR THE SITE, ACCESSIBLE TO THE	4. VEGETATION RESOURCES	DEAD OR DISTRESSED VEGETATION (NOT IDENTIFIED AS NORMAL)     TRASH PILES, DRUMS, CANISTERS, BARRELS, ETC.		ERIN
PUBLIC AND TCEQ, EPA OR OTHER INSPECTORS.  4. WHEN CONTRACTOR PROJECT SPECIFIC LOCATIONS (PSL's) INCREASE DISTURBED SOIL AREA TO 5 ACRES OR	PRESERVE NATIVE VEGETATION TO THE EXTENT PRACTICAL.	UNDESIRABLE SMELLS OR ODORS     EVIDENCE OF LEACHING OR SEEPAGE OF SUBSTANCES		N E
MORE, SUBMIT NOI TO TCEQ AND THE ENGINEER.	▼ NO ACTION REQUIRED	DOES THE PROJECT INVOLVE ANY BRIDGE CLASS STRUCTURE REHABILITATION OR REPLACEMENTS (BRIDGE CLASS STRUCTURES NOT INCLUDING BOX CULVERTS)?	RIPTION	ENGIN FIRM REG.
	ACTION NO.	☐ YES 🗹 NO	DESCF	1 <b>A E</b>
	1.	IF "NO", THEN NO FURTHER ACTION IS REQUIRED.		]
2. WORK IN OR NEAR STREAMS, WATER BODIES AND WETLANDS CLEAN WATER ACT SECTIONS	2. 5. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE	IF "YES', THEN TXDOT IS RESPONSIBLE FOR COMPLETING ASBESTOS ASSESSMENT/INSPECTION.  ARE THE RESULTS OF THE ASBESTOS INSPECTION POSITIVE (IS ASBESTOS PRESENT)?		
401 AND 404.	LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.	YES 🗹 NO		Ø 0
USACE PERMIT REQUIRED FOR FILLING, DREDGING, EXCAVATING OR OTHER WORK IN ANY WATER BODIES, RIVERS, CREEKS, STREAMS, WETLANDS OR WET AREAS.	☐ NO ACTION REQUIRED	IF "YES", THEN TXDOT MUST RETAIN A DSHS LICENSED ASBESTOS CONSULTANT TO ASSIST WITH THE NOTIFICATION, DEVELOP ABATEMENT/MITIGATION PROCEDURES, AND PERFORM MANAGEMENT ACTIVITIES AS NECESSARY. THE NOTIFICATION FORM TO DSHS MUST BE POSTMARKED AT LEAST 15 WORKING DAYS PRIOR	<u> </u>	STAN STAN
THE CONTRACTOR MUST ADHERE TO ALL OF THE TERMS AND CONDITIONS ASSOCIATED WITH THE FOLLOWING PERMIT(S):	THE FEDERAL MIGRATORY BIRD TREATY ACT (MBTA) STATES THAT IT IS UNLAWFUL TO KILL, CAPTURE, COLLECT, POSSESS, BUY, SELL, TRADE OR TRANSPORT ANY MIGRATORY BIRD, NEST, YOUNG, FEATHER, OR EGG IN PART OR	TO SCHEDULED DEMOLITION.  IF "NO", THEN TXDOT IS STILL REQUIRED TO NOTIFY DSHS 15 WORKING DAYS PRIOR TO ANY SCHEDULED	DATE	130°
☑ NO PERMIT REQUIRED	IN WHOLE, WITHOUT A FEDERAL PERMIT. IN ACCORDANCE WITH THIS REGULATION, THE CONTRACTOR WILL AVOID DISTURBING, DESTROYING, REMOVING, OR RELOCATING ACTIVE NESTS FOUND IN TREES, CULVERTS, BRIDGES, ON THE GROUND, ETC. TYPICAL BREEDING SEASON OCCURS FROM MARCH THROUGH AUGUST; THEREFORE, TREE	DEMOLITION.	O	18/2
NATIONWIDE PERMIT 14 - PCN NOT REQUIRED (LESS THAN 1/10TH ACRE WATERS OR WETLANDS AFFECTED)	TRIMMING AND OTHER ACTIVITIES THAT MAY DISTURB BREEDING BIRDS SHOULD BE DONE I THE NON-BREEDING SEASON (SEPTEMBER-FEBRUARY), WHEN POSSIBLE. IF WORK MUST BE PERFORMED DURING THE BREEDING	IN EITHER CASE, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE DATE(S) FOR ABATEMENT ACTIVITIES AND/OR DEMOLITION WITH CAREFUL COORDINATION BETWEEN THE ENGINEER AND ASBESTOS	NOIS	(1)
NATIONWIDE PERMIT 14 - PCN REQUIRED (1/10 TO <1/2 ACRE, 1/3 IN TIDAL WATERS)	SEASON, THE CONTRACTOR SHALL HAVE A QUALIFIED BIOLOGIST CONDUCT A SURVEY OF THE RIGHT OF WAY TO DETERMINE IF BIRD NESTS ARE PRESENT. IN THE EVENT THAT ACTIVE NESTS ARE ENCOUNTERED ON-SITE DURING	CONSULTANT IN ORDER TO MINIMIZE CONSTRUCTION DELAYS AND SUBSEQUENT CLAIMS.  ANY OTHER EVIDENCE INDICATING POSSIBLE HAZARDOUS MATERIALS OR CONTAMINATION DISCOVERED ON	REVI	
☐ INDIVIDUAL 404 PERMIT REQUIRED	CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND MEASURES SHALL BE TAKEN TO AVOID DISTURBANCE OF THESE BIRDS, THEIR OCCUPIED NEST, EGGS, AND/OR YOUNG, IN ACCORDANCE WITH THE MBTA. PHASING OF WORK DURING CONSTRUCTION MAY BE NECESSARY TO STAY IN COMPULANCE WITH THE MBTA. THE	SITE. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES SPECIFIC TO THIS PROJECT:		<b>္</b>
OTHER NATIONWIDE PERMIT REQUIRED: NWP#	CONTRACTOR CAN DISCUSS OTHER PREVENTATIVE MEASURES WITH THE PROJECT ENGINEER AND/OR DISTRICT ENVIRONMENTAL STAFF.	NO ACTION REQUIRED REQUIRED ACTION		ED E
REQUIRED ACTIONS: LIST WATERS OF THE US PERMIT APPLIES TO, LOCATION IN PROJECT AND CHECK BEST	2. TO PROTECT TREE ROOSTING BATS, INCLUDING THE STATE—THREATENED SOUTHERN YELLOW BAT, THE CONTRACTOR WILL AVOID UNNECESSARY REMOVAL OF DEAD FRONDS ON NATIVE AND ORNAMENTAL PALM TREES.	ACTION NO.		'EMI <b>SUI</b>
MANAGEMENT PRACTICES PLANNED TO CONTROL EROSION, SEDIMENTATION AND POST—PROJECT TSS.	IN THE EVENT THAT PALM TREES MUST BE REMOVED OR TRIMMED, THESE ACTIVITIES WILL NOT OCCUR BETWEEN MAY 1ST AND AUGUST 1ST.  3. BE ADVISED OF THE POTENTIAL OCCURRENCE OF PLAINS SPOTTED SKUNK IN THE PROJECT AREA. THIS SPECIES	2. 3.		E S 186
1. 2. 3.	3. BE ADVISED OF THE POTENTIAL OCCURRENCE OF PLAINS SPOTTED SKUNK IN THE PROJECT AREA. THIS SPECIES PREFERS WOODED, BRUSHY AREAS AND TALL-GRASS PRAIRIES, BUT MAY ALSO OCCUR IN OPEN FIELDS, FARMYARDS, AND ALONG FENCE ROWS. THE SPECIES IS ALMOST ENTIRELY NOCTURNAL, BUT BECOMES MORE			
4.	ACTIVE DURING ITS MATING SEASON, MARCH-AUGUST. AVOID UNNECESSARY IMPACTS TO DENS IF ENCOUNTERED.  AVOID HARMING THIS SPECIES IF ENCOUNTERED.	7. OTHER ENVIRONMENTAL ISSUES		
THE ELEVATION OF THE ORDINARY HIGH WATER MARKS OF ANY AREAS REQUIRING WORK TO BE PERFORMED IN THE WATERS OF THE US REQUIRING THE USE OF A NATIONWIDE PERMIT CAN BE FOUND ON THE BRIDGE LAYOUTS.	4. BE ADVISED OF THE POTENTIAL OCCURRENCE OF SHEEP FROG IN THE PROJECT AREA. THIS SPECIES OCCURS AT MOIST SITES IN ARID AREAS. AVOID HARMING THIS SPECIES IF ENCOUNTERED.		1	
		(INCLUDES REGIONAL ISSUES SUCH AS EDWARDS AQUIFER DISTRICT, ETC.)  NO ACTION REQUIRED  REQUIRED ACTION		SEA ISLAN ESS AMEN 2300 GULF B I PADRE ISLA IENTAL P
		DUNE PERMIT AND BEACH FRONT CONSTRUCTION CERTIFICATE PROVIDED BY THE CITY OF SOUTH PADRE.		S A IS
		2. 3.		SEA CES: 230( 230( TH PA MEN
BEST MANAGEMENT PRACTICES:			NO NO	0 5 <b>Z</b>
EROSION SEDIMENTATION POST—CONSTRUCTION TSS    Temporary vegetation   Silt fence   vegetative filter strips		-	CRIPTIC	
BLANKETS/MATTING ROCK BERM RETENTION/IRRIGATION SYSTEMS	LIST OF ABBREVIATIONS		DES	EAC
MULCH TRIANGULAR FILTER DIKE EXTENDED DETENTION BASIN	BMP: BEST MANAGEMENT PRACTICE SPCC: SPILL PREVENTION CONTROL AND COUNTERMEASURE CGP: CONSTRUCTION GENERAL PERMIT SW3P: STORM WATER POLLUTION PREVENTION PLAN			
SODDING SAND BAG BERM CONSTRUCTED WETLANDS INTERCEPTOR SWALE STRAW BALE DIKE WET BASIN	DSHS: TEXAS DEPARTMENT OF STATE HEALTH SERVICES PCN: PRE-CONSTRUCTION NOTIFICATION FHWA: FEDERAL HIGHWAY ADMINISTRATION PSL: PROJECT SPECIFIC LOCATION FOR THE PROJECT SPECIFIC			SCALE: AS NOTED
DIVERSION DIKE BUSH BERMS EROSION CONTROL COMPOST	MOA: MEMORANDUM OF AGREEMENT  MOU: MEMORANDUM OF UNDERSTANDING  MS4: MUNICIPAL SEPARATE STORMWATER SEWER SYSTEM  TEQ5: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  TPDES: TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM  TPWD: TEXAS PARKS AND WILDLIFE DEPARTMENT	4		DRAWN BY:
☐ EROSION CONTROL COMPOST ☐ EROSION CONTROL COMPOST ☐ MULCH FILTER BERM & SOCKS ☐ COMPOST FILTER BERM & SOCKS ☐ COMPOST FILTER BERM & SOCKS	MBTA: MIGRATORY BIRD TREATY ACT TXDOT: TEXAS DEPARTMENT OF TRANSPORTATION  NOT: NOTICE OF TERMINATION T&E: THREATENED AND ENDANGERED SPECIES			APPROVED BY: YS DATE:
COMPOST FILTER BERM & SOCKS COMPOST FILTER BERM & SOCKS VEGETATION LINED DITCHES	NWP: NATIONWIDE PERMIT USACE: U.S. ARMY CORPS OF ENGINEERS NOI: NOTICE OF INTENT USFWS: U.S. FISH AND WILDLIFE SERVICE		4TE	JOB NO. C275-2118
☐ STONE OUTLET SEDIMENT TRAPS ☐ SAND FILTER SYSTEMS ☐ SEDIMENT BASINS				0270 2110
☐ SENIMENT DASINS			ON P	C18
			FVISIOF	<b>U</b> 10
			%	

#### STORM WATER POLLUTION PREVENTION PLAN GENERAL NOTES:

PROJECT SITE IS LOCATED AT THE SOUTH PADRE ISLAND BEACH ACCESS #5 THE SITE IS ACCESSIBLE VIA GULF BOULVARD. PROJECT CONSISTS OF IMPROVEMENTS TO THE PARK FACILITIES INCLUDING UPGRADED WALKWAY TO BEACH, MEN AND WOMEN RESTROOMS, CHANGING STATION, FOOT RINSE STATION, AND RINSE STATION.

- LONG, W97'40'59'

MAJOR SOIL DISTURBING ACTIVITIES: INSTALLATION OF UNDERGROUND UTILITIES, SITE GRADING & PAVING.

TOTAL PROJECT AREA: .18 ACRES.

TOTAL AREA TO BE DISTURBED: .06 ACRES.

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): UNCHANGED.

EXISTING CONDITION OF SOIL AND VEGETATIVE COVER AND PERCENTAGE OF EXISTING VEGETATIVE COVER: 5%. NAME OF RECEIVING WATERS: THE RECEIVING WATER FOR THE STORM WATER RUNOFF FROM THIS PROPERTY IS GULF OF MEXICO (SEGMENT ID <del>2492</del>). TCEQ CATEGORIZED THE GULF OF MEXICO AS AQUATIC LIFE USE, CONTACT RECREATION USE, GENERAL USE, FISH CONSUMPTION USE, OYSTER WATERS USE.

#### 2. STORM WATER MANAGEMENT:

STORM WATER DRAINAGE WILL BE PROVIDED BY SURFACE DRAINAGE DITCH CARRYING DRAINAGE DIRECTLY INTO EXISTING GULF OF

#### 3. OTHER EROSION AND SEDIMENT CONTROLS:

MAINTENANCE: ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE.

#### INSPECTION:

AN INSPECTION WILL BE PERFORMED BY THE CONTRACTOR AND/OR THE OWNER EVERY WEEK AS WELL AS AFTER EVERY HALF INCH OR MORE OF RAIN (AS RECORDED ON A RAIN GAUGE TO BE LOCATED AT THE PROJECT SITE). AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE MADE PER EACH INSPECTION, AND CONTROLS SHALL BE REVISED AS INDICATED BY THIS INSPECTION REPORT.

#### 5. WASTE MATERIALS:

WASHOUT AREAS FOR CONCRETE TRUCKS WILL NOT BE ALLOWED AT THE PROJECT SITE. ALL MEASURES SHALL BE TAKEN TO PROTECT THE SURROUNDING AREA FROM CONTAMINATION. ALL WASTE MATERIAL SHALL BE COLLECTED AND SECURELY STORED UNTIL REMOVED FROM JOBSITE. NO CONSTRUCTION WASTE MATERIAL SHALL BE BURIED ON SITE.

#### 6. HAZARDOUS WASTE (INCLUDING SPILL REPORTING):

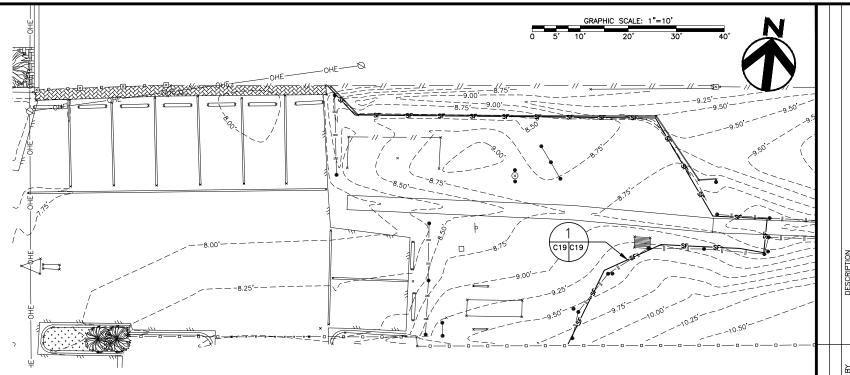
AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, ADHESIVES, PETROLEUM PRODUCTS, CLEANING SOLVENTS, ASPHALT PRODUCTS, OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE SPILL COORDINATOR SHALL BE CONTACTED IMMEDIATELY. ALL PRODUCTS USED SHALL BE STORED IN PROPERLY LABELED CONTAINERS, AND REMOVED FROM THE JOBSITE WHEN NO LONGER NEEDED.

#### 7. SANITARY WASTE:

ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS AS NECESSARY; OR AS REQUIRED BY LOCAL REGULATION, BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

#### BEST MANAGEMENT PRACTICES NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF A SWPPP AND FILING A NOTICE OF INTENT WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND OBTAINING A TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMIT. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE TPDES PERMIT ON SITE AT ALL TIMES DURING CONSTRUCTION.
- 2. THE CONTRACTOR SHALL ABIDE BY THE PROVISIONS OF TCEQ STORM WATER POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS CONCERNING PERMITS FOR CONSTRUCTION ACTIVITIES, INCLUDING IMPLEMENTATION OF THE POLLUTION PREVENTION PLAN AND BEST
- 3. FUELING AND MAINTENANCE OF VEHICLES AND EQUIPMENT SHALL BE PERFORMED IN COMPLIANCE WITH EPA AND ALL OTHER FEDERAL
- ALL TEMPORARY EROSION/SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE EROSION/ SEDIMENTATION CONTROL MEASURES TO PROTECT ADJACENT PROPERTIES, STORM SEWERS AND DRAINAGEWAYS.
- NATURAL AND CULTIVATED VEGETATION SHALL BE LEFT UNDISTURBED AS MUCH AS POSSIBLE.
- 6. THE CONTRACTOR SHALL CONSTRUCT STRUCTURAL BEST MANAGEMENT PRACTICES AS NEEDED AND AS REQUIRED TO PREVENT SILT AND DEBRIS FROM ENTERING INTO THE STORM SEWER SYSTEM
- 7. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT SUFFICIENT LOCATIONS (AS NEC.) TO PREVENT VEHICLES AND EQUIPMENT FROM TRACKING MUD ONTO EXISTING STREETS.
- 8. THE CONTRACTOR SHALL BE REQUIRED TO SPRINKLE FOR DUST CONTROL AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- 9. THE CONTRACTOR SHALL INSPECT TEMPORARY EROSION/SEDIMENTATION CONTROLS PERIODICALLY TO ENSURE THAT THE CONTROLS HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY SEDIMENT OR DEBRIS THAT HAS ACCUMULATED SHALL BE REMOVED AND PLACED IN A
- 10. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING OR OTHER APPROVED MEANS. WHERE CONDITIONS PREVENT INSTALLING TEMPORARY FENCING AT LEAST 4 FEET FROM THE TREE TRUNK, THE CONTRACTOR SHALL PROTECT THE TREE TRUNK WITH STRAPPED-ON PLANKING. USE OF NAILS IS PROHIBITED.
- 11 THE CONTRACTOR SHALL NOT USE MECHANICAL EXCAVATORS TO THE MAXIMUM EXTENT PRACTICAL WITHIN THE CRITICAL ROOT ZONE OF TREES TO AVOID DAMAGE TO THE TREE'S ROOT SYSTEM. THE CONTRACTOR SHALL DIRECTIONAL BORE UTILITY LINES OR HAND DIG UTILITY LINES WITHOUT DAMAGING ROOTS.
- 12. ALL DISTURBED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE PLACED IN ALL DISTURBED AREAS. THE CONTRACTOR SHALL BEGIN RESTORATION AS SOON AS FINAL SHAPING OR USE OF THE AREA IS COMPLETE, PRIOR TO FINAL COMPLETION OF ALL IMPROVEMENTS. RESTORATION SHALL INCLUDE HYDRO MULCHING, SEEDING OR SODDING, FERTILIZING, FIBER MULCHING AND WATERING (REFER TO SPECIFICATIONS). RESTORATION SHALL BE ACCEPTABLE ONLY WHEN THE GRASS HAS REACHED A HEIGHT OF AT LEAST 1 INCH WITH 85 PERCENT COVERAGE, AND NO BARE SPOTS GREATER THAN 10
- 13. ALL NEW GRASS SOD AREAS SHALL BE IRRIGATED OR SPRINKLED IN A MANNER WHICH WILL NOT ERODE THE TOPSOIL BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF 6 INCHES.

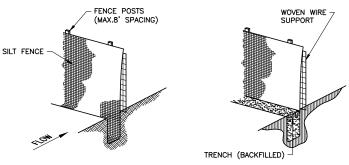


# CONSTRUCTION SITE DATA

- 1. NATURE OF CONSTRUCTION ACTIVITY: SITE CONSTRUCTION
- 2. TOTAL AREA OF PROJECT: APPROX. .18 ACRES
- 3. TOTAL AREA OF SITE EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES: APPROX.
- 4. ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: UNCHANGED.
- 5. EXISTING SOIL IS TYPICALLY FINE SAND.
- 6. DISCHARGE FROM THE SITE WILL BE FILTERED.
- 7. WATER BODY RECEIVING STORMWATER RUNOFF IS GULF OF MEXICO.

CONTRACTOR/OPERATOR IS RESPONSIBLE FOR PREPARATION AND IMPLEMENTATION OF A SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH TCEQ REQUIREMENTS PRIOR TO COMMENCING WORK. THE SWPPP SHOULD INCLUDE THIS SHEET TO DEFINE THE TYPE AND LOCATION OF PROPOSED BMP'S.







- NOTES:

  1. POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE.
- THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
- THE TRENCH SHOULD BE A MINIMUM OF 6 INCHES DEEP AND 4-8 INCH WIDE TO ALLOW FOR THE SILT FENCE TO BE LAID IN THE GROUND AND BACKFILLED.
- SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POSTS.
- 5. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY
- 6. SILT FENCE SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS, SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- 7. SEDIMENT TRAPPED BY THIS PRACTICE SHALL BE DISPOSED OF IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.
- 8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES.

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PROJECT No.:

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