RFP # 250502

INDEX DATA
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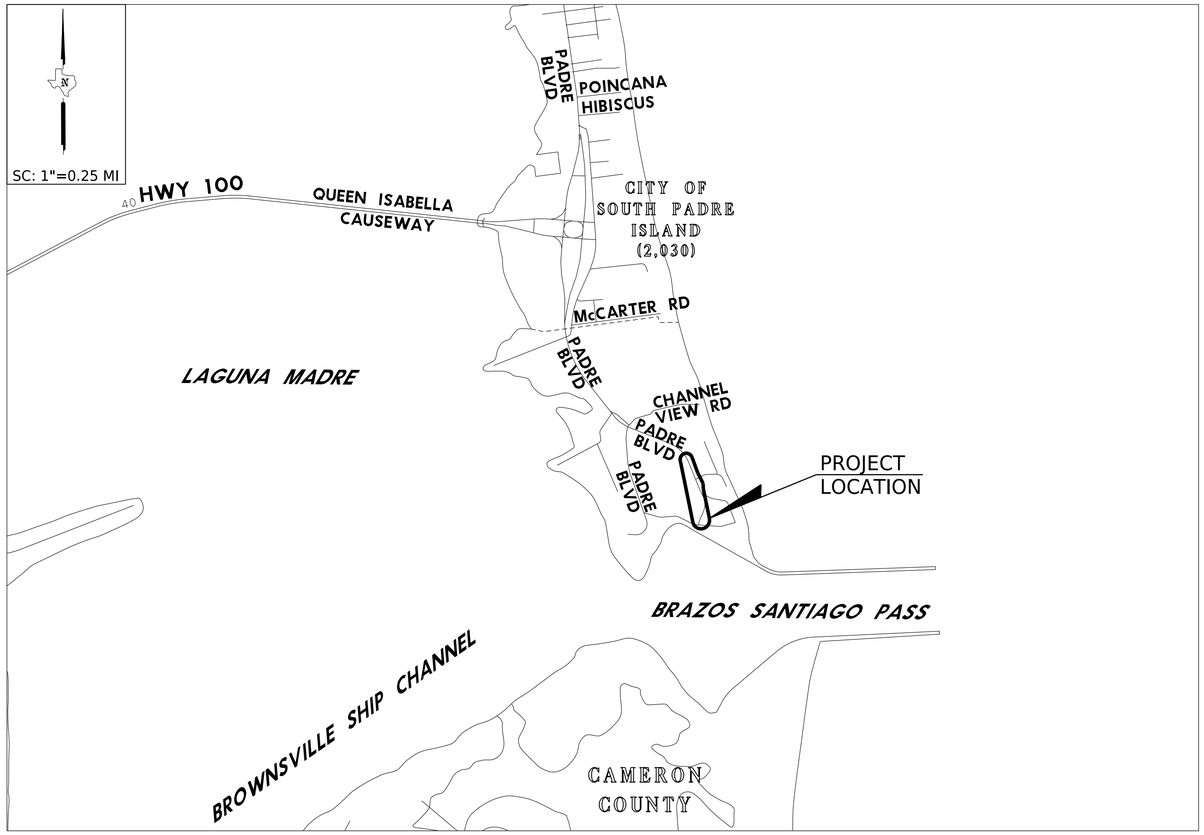
CAMERON COUNTY

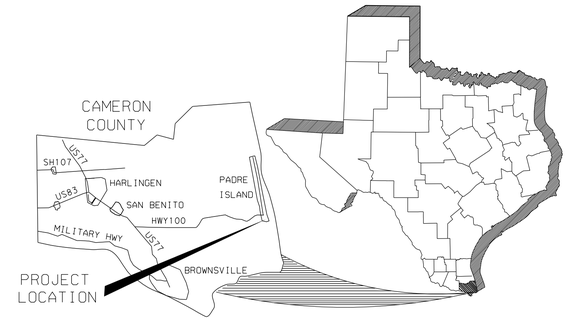
PLANS OF PROPOSED
RV LOT IMPROVEMENTS
CITY OF SOUTH PADRE ISLAND
RV LOT AND UTILITIES PROJECT

NET LOTS OF PROJECT:
DODSON ST. = 61
EMERALD SEA ST. = 14

LIMITS: 0.24 MILES ALONG DODSON ST & 0.10 MILES ALONG EMERALD SEA ST

CONSTRUCTION OF RV LOTS
WILL INCLUDE: BALLAST ROCK PAD, CONCRETE PATIO & RIBBON PAD, ELECTRICAL UTILITIES, WATER UTILITIES, AND WASTEWATER UTILITIES.





APPROVED FOR CONSTRUCTION

BENJAMIN L. WORSHAM, P.E. DATE
COUNTY ENGINEER, CAMERON COUNTY

CAMERON COUNTY COMMISSIONERS COURT

EDDIE TREVIÑO, JR.	COUNTY JUDGE
SOFIA C. BENAVIDES	COMMISSIONER PCT. 1
JOEY LOPEZ	COMMISSIONER PCT. 2
DAVID A. GARZA	COMMISSIONER PCT. 3
GUSTAVO RUIZ	COMMISSIONER PCT. 4

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION ON NOVEMBER 1, 2014 AND OTHER SPECIFICATION ITEMS LISTED AND DATED SHALL GOVERN ON THIS PROJECT.

ISLA BLANCA RV PARK

COUNTY CAMERON PROJ. NO.
HWY. NO. LETTING DATE
DATE ACCEPTED

P:\Clients\Counties\Cameron\Isla Blanca Replat and Improvements\1 - Design\Plan Set\1. General\01 Title Sheet\Isla Blanca*Title*RV.dgn

RFP # 250502

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2	INDEX OF SHEET
3	RV PROJECT LAYOUT
4-6	HORIZONTAL & VERTICAL CONTROL SHEET
7	PROPOSED RV TYPICAL SECTION
8	ESTIMATED QUANTITIES
9	GENERAL NOTES
	TRAFFIC CONTROL PLAN
10	TRAFFIC CONTROL PLAN GENERAL NOTES/SEQUENCE OF CONSTRUCTION
11	TRAFFIC CONTROL PLAN CLOSURE LAYOUT
	REMOVAL DETAILS
12	RV REMOVAL LAYOUT
	ENVIRONMENTAL
13-17	EPIC
18-19	SW3P SHEETS
20	RV SW3P LAYOUT
	UTILITY WASTEWATER / WATER
21	G2 - TYPICAL LEGEND SHEET
22	G3 - GENERAL NOTES
23	G4 - GENERAL NOTES
24	G5 - WASTEWATER OVERALL PLAN
25	G6 - WATER OVERALL PLAN
26	C1 - WWL- A PLAN AND PROFILE STA 10+00 TO STA 20+00
27	C2 - WWL- A PLAN AND PROFILE STA 20+00 TO STA 30+00
28	C3 - WWL- A PLAN AND PROFILE STA 30+00 TO STA 39+59
29	C4 - WWL- A1 PLAN AND PROFILE STA 10+00 TO STA 15+56
30	C5 - WWL- B PLAN AND PROFILE STA 10+00 TO STA 20+60
31	C6 - WWL- C PLAN AND PROFILE STA 10+00 TO STA 20+00
32	C7 - WWL- C PLAN AND PROFILE STA 20+00 TO STA 24+46
33	C8 - WWL- D PLAN AND PROFILE STA 10+00 TO STA 20+00
	C9 - WWL- D PLAN AND PROFILE STA 20+00 TO STA 23+09.44
34	C9 - WWL- D1 PLAN AND PROFILE STA 10+00 TO STA 10+70
	C9 - WWL- D2 PLAN AND PROFILE STA 10+00 TO STA 10+50
35	C10 - WWL- E PLAN AND PROFILE STA 10+00 TO STA 18+00
36	C11 - WWL- E PLAN AND PROFILE STA 18+00 TO STA 24+50
37	C12 - WWL- E PLAN AND PROFILE STA 24+50 TO STA 27+98.69
38	C13 - WWL- F PLAN AND PROFILE STA 10+00 TO STA 12+35
39	C14 - WWL- G PLAN AND PROFILE STA 10+00 TO STA 12+82
40	C15 - WWL- H PLAN AND PROFILE STA 10+00 TO STA 13+62
41	C16 - WWL- I PLAN AND PROFILE STA 10+00 TO STA 15+43
42	C17 - WWL- K PLAN AND PROFILE STA 10+00 TO STA 20+00
43	C18 - WWL- K PLAN AND PROFILE STA 20+00 TO STA 22+85
44	C19 - WWL- L PLAN AND PROFILE STA 10+00 TO STA 20+00
45	C20 - WWL- L PLAN AND PROFILE STA 10+00 TO STA 23+17
46	C21 - WWL- M PLAN AND PROFILE STA 20+00 TO STA 25+38
	C21 - WWL- M1 PLAN AND PROFILE STA 10+00 TO STA 12+60
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48	C23 - WWL- N PLAN AND PROFILE STA 10+00 TO STA 18+35
49	C24 - WWL- O PLAN AND PROFILE STA 10+00 TO STA 16+72
50	C25 - WWL- P PLAN AND PROFILE STA 10+00 TO STA 14+88.49
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70	E201 - ELECTRICAL SITE PLAN - ZONE CV1
71	E202 - ELECTRICAL SITE PLAN - ZONE CV2
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73	E204 - ELECTRICAL SITE PLAN - ZONE CV4
74	E205 - ELECTRICAL SITE PLAN - ZONE CV5 AND CV6
75	E206 - ELECTRICAL SITE PLAN - ZONE CT1
76	E207 - ELECTRICAL SITE PLAN - ZONE CT2
77	E208 - ELECTRICAL SITE PLAN - ZONE DTP
78	E209 - ELECTRICAL SITE PLAN - ZONE DT1
79	E210 - ELECTRICAL SITE PLAN - ZONE DT2
80	E211 - ELECTRICAL SITE PLAN - ZONE DT3
81	E212 - ELECTRICAL SITE PLAN - ZONE P1
82	E213 - ELECTRICAL SITE PLAN - ZONE P2
83	E214 - ELECTRICAL SITE PLAN - ZONE POF
84	E215 - ELECTRICAL SITE PLAN - ZONE OF
85	E216 - ELECTRICAL SITE PLAN - ZONE CI
86	E217 - ELECTRICAL SITE PLAN - ZONE HP
87	E218 - ELECTRICAL SITE PLAN - ZONE I
88	E400 - ELECTRICAL POWER RISER DIAGRAM - PHASE A
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99	E605 - PANELBOARD SCHEDULES
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	STANDARDS
101-112	[S] BC (1-12) - 21
113	[S] EC (1) - 16
114	[S] EC (3) - 16

[S] - DENOTES STATE STANDARD

GDJ Engineering
2805 Fountain Plaza Blvd. Ste A Edinburg, TX Ph: (956)600-2025 | Firm No. 20061
Planning & Airport Transportation Environmental Drainage Construction Administration

CCDOT

Cameron County Parks and Recreation

STATE OF TEXAS
CHRISTOPHER R. RODRIGUEZ
107692
LICENSED
PROFESSIONAL ENGINEER
06/19/2025

CAMERON COUNTY
CLIENT

PROJECT NUMBER

6/19/2025
DATE

GDJ ENGINEERING
DRAWN BY

GDJ ENGINEERING
CHECKED BY

REVISIONS

No.	Description	Date

ISLA BLANCA PARK
INDEX

SHEET 1 OF 1

SHEET NO. 2

6/19/2025 P:\Clients\Counties\Cameron\Isla Blanca Repair and Improvements\1 - Design\Plan Set\1. General\02 Index\ISLA BLANCA•INDEX•RV.dgn

RFP # 250502

NOTE:
1. SEE ELECTRICAL, WATER, AND WASTEWATER PLANS FOR LIMITS OF UTILITY ADJUSTMENTS.

14 RV LOTS

EMERALD SEA

STATE PARK RD 100

28 RV LOTS

DODSON ST

33 RV LOTS

RV PROJECT LOCATION

YGNACIO GARZA JR ST

CHANNEL VIEW RD

TURNER ST

TURNER ST

CARRIZALES ST

PADRE BLVD

6/19/2025 P:\Clients\Counties\Cameron\Isla Blanca Replat and Improvements\1 - Design\Plan Set\1. General\03 Proj Layout\ISLA BLANCA+PRJ+RV.dgn

GDJ Engineering
2965 Fountain Plaza Blvd. Ste A Edinburg, TX Ph: (956)600-2025 | Firm No. 20061
Planning & Project Development Engineering Construction Management

CCDOT

CAMERON COUNTY Parks and Recreation

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LICENSED PROFESSIONAL ENGINEER
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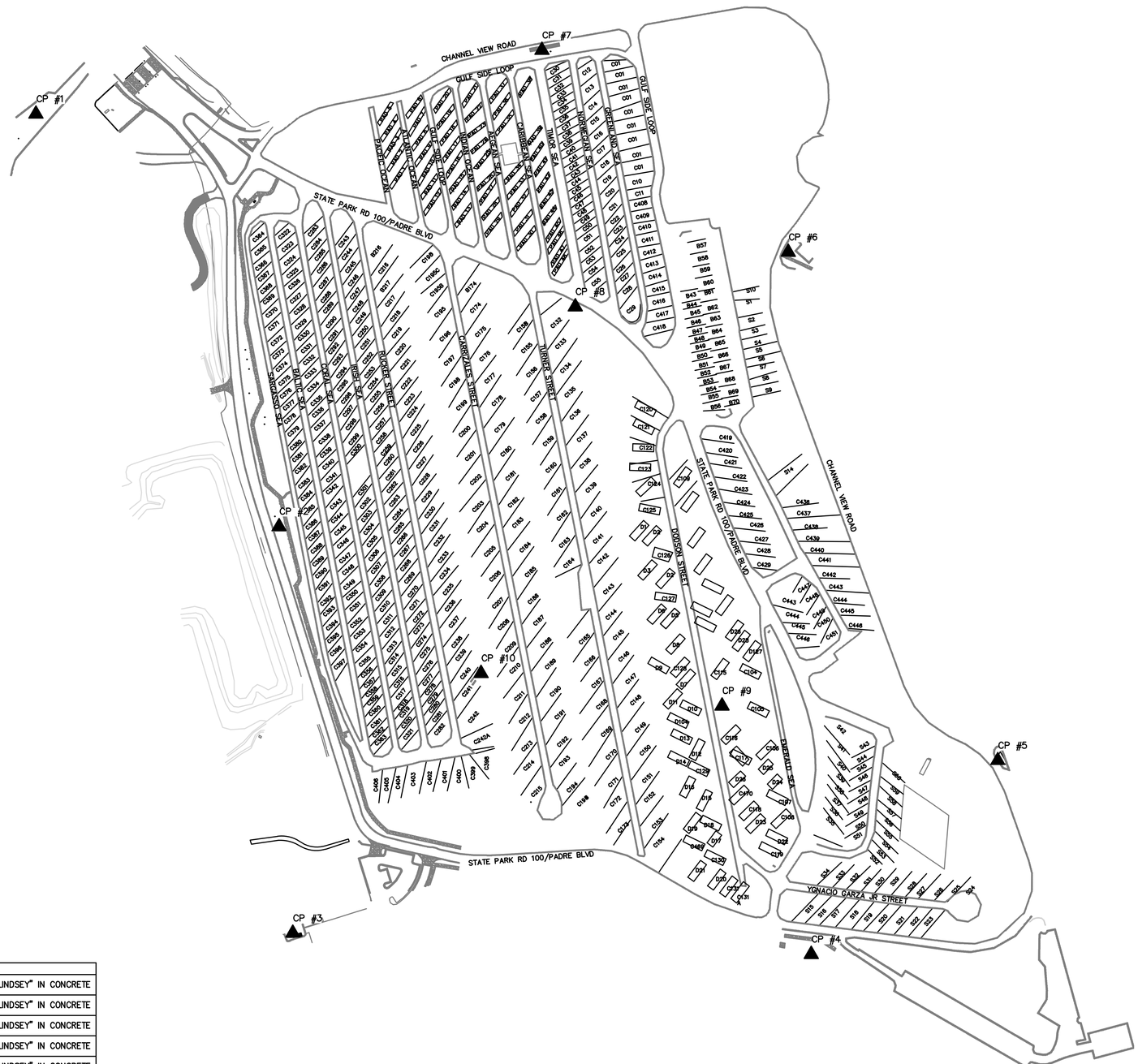
No.	Description	Date

ISLA BLANCA PARK RV PROJECT LAYOUT

SCALE: 1"=50'

SHEET 1 OF 1

SHEET NO. 3



NOTES:

COORDINATES AND DISTANCES ARE U.S. SURVEY FEET. DISPLAYED IN SURFACE VALUES AND MAY BE CONVERTED TO GRID BY DIVIDING BY THE TXDOT SURFACE ADJUSTMENT FACTOR OF 0.99996.

ALL HORIZONTAL VALUES ARE NAD 83 STATE PLANE COORDINATES, TEXAS SOUTH ZONE AND WERE ESTABLISHED BY RTK GPS METHODS.

VERTICAL DATUM IS BASED ON NAVD88 ESTABLISHED FROM A DIGITAL LEVEL LOOP THROUGH CONTROL POINTS.

N

GRAPHIC SCALE

0' 125' 250' 500'

SCALE: 1"= 300'

CONTROL POINT INDEX

POINT ID	NORTHING	EASTING	ELEV.	DESCRIPTION
1	16,554,997.00	1,422,863.00	5.08	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
2	16,554,000.00	1,423,472.00	4.93	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
3	16,553,008.00	1,423,521.00	4.33	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
4	16,552,977.00	1,424,787.00	7.82	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
5	16,553,458.00	1,425,240.00	8.69	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
6	16,554,689.00	1,424,704.00	10.56	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
7	16,555,172.00	1,424,095.00	8.14	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
8	16,554,547.00	1,424,186.00	7.99	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
9	16,553,579.00	1,424,559.00	8.04	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE
10	16,553,649.00	1,423,970.00	6.93	SET 5/8" IR W/BLUE CAP STAMPED "KANE-LINDSEY" IN CONCRETE

STATE OF TEXAS
REGISTERED
KURT SCHUMACHER
6333
PROFESSIONAL
LAND SURVEYOR

12-30-2024

LEGEND

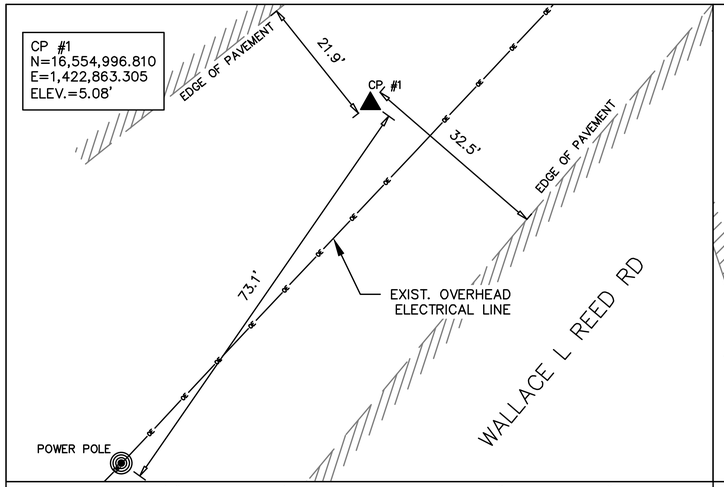
▲ – CONTROL POINT

HORIZONTAL/VERTICAL CONTROL INDEX

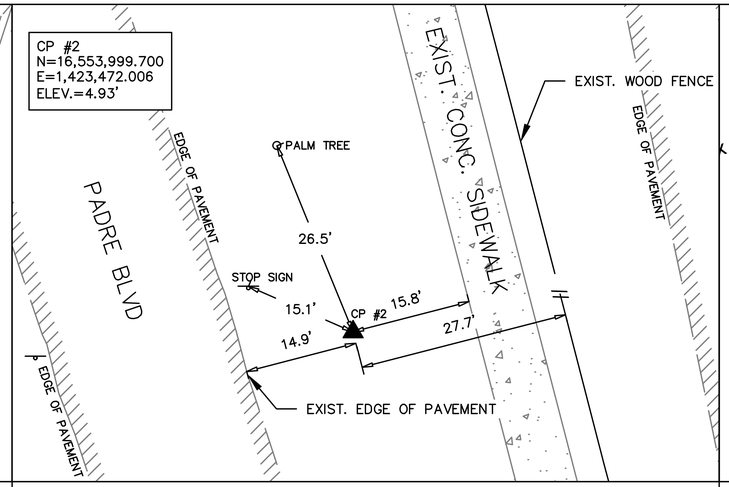
KANE - LINDSEY LLC
LAND SURVEYING CONSULTANTS
2805 FOUNTAIN PLAZA BLVD., SUITE B
EDINBURG, TX 78539
(956) 458-8391
TBPELS FIRM NO. 10194676

ISLA BLANCA PARK IMPROVEMENTS PROJECT HORIZONTAL & VERTICAL CONTROL

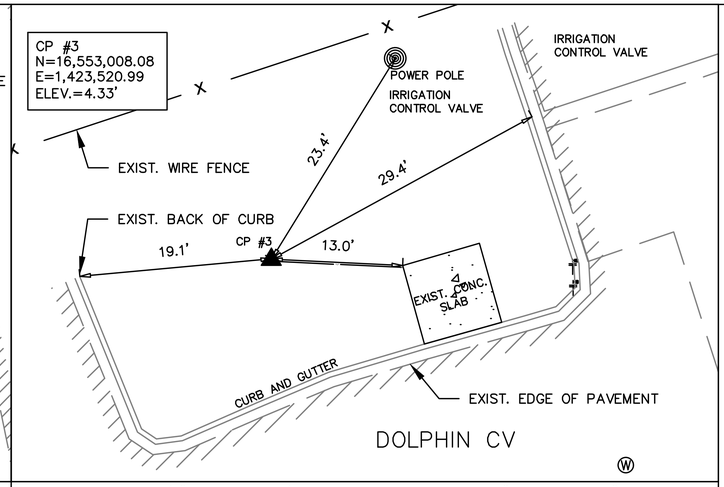
SHEET NO. 4



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 265' WEST FROM THE INTERSECTION OF PADRE BOULEVARD AND VALLACE L. REED ROAD.



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 1130' SOUTH FROM THE INTERSECTION OF PADRE BOULEVARD AND CHANNELVIEW LOOP ROAD.



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 430' WEST FROM THE INTERSECTION OF PADRE BOULEVARD AND CHANNELVIEW LOOP ROAD.

NOTES:

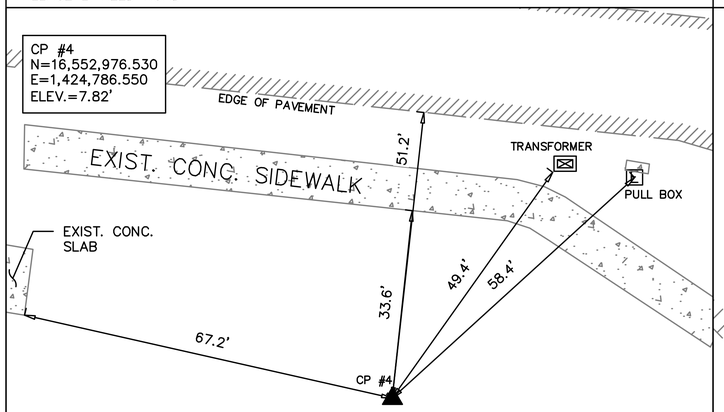
1. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET. DISPLAYED IN SURFACE VALUES AND MAY BE CONVERTED TO GRID BY DIVIDING BY THE TXDOT SURFACE ADJUSTMENT FACTOR OF 0.99996.

2. ALL HORIZONTAL VALUES ARE NAD 83 STATE PLANE COORDINATES, TEXAS SOUTH ZONE AND WERE ESTABLISHED BY RTK GPS METHODS.

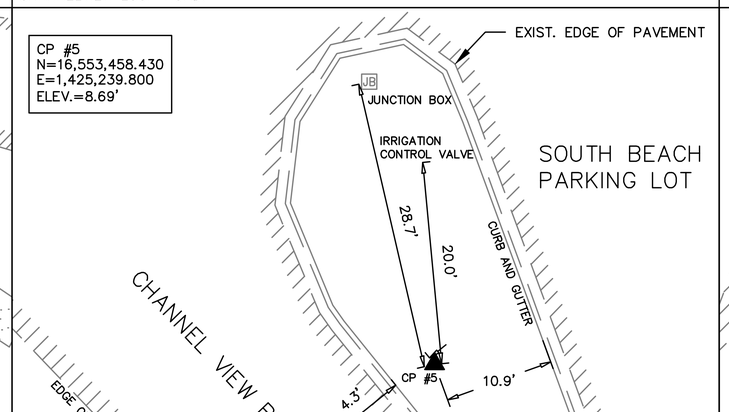
3. VERTICAL DATUM IS BASED ON NAVD88 ESTABLISHED FROM A DIGITAL LEVEL LOOP THROUGH CONTROL POINTS.

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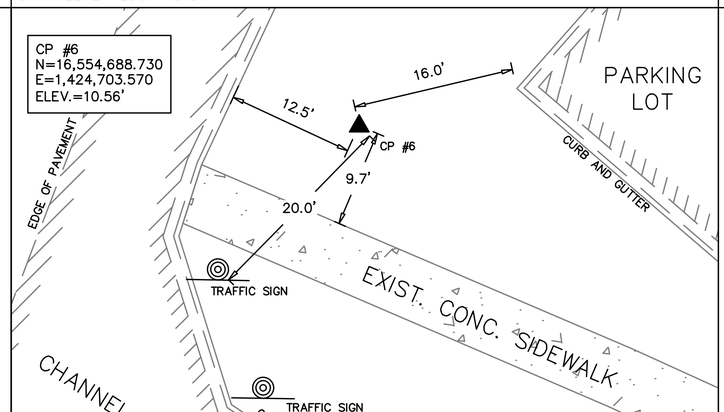
NOT TO SCALE



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 60' WEST FROM THE INTERSECTION OF JETTIES LOOP ROAD AND CHANNELVIEW LOOP.



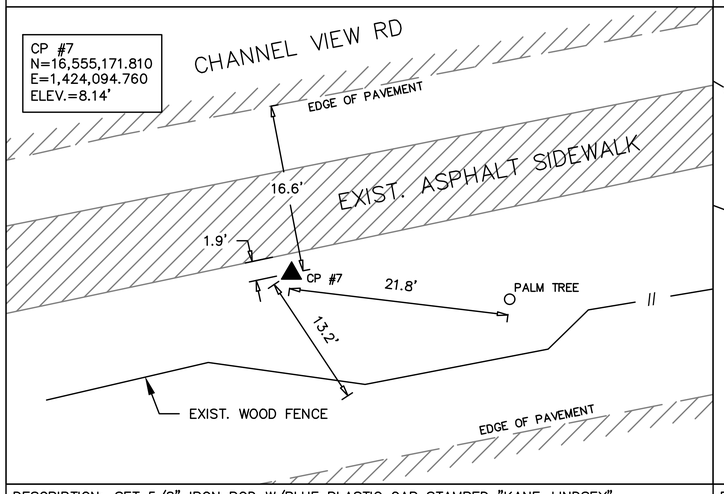
DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 420' NORTH FROM THE INTERSECTION OF PADRE BOULEVARD AND JETTIES LOOP ROAD.



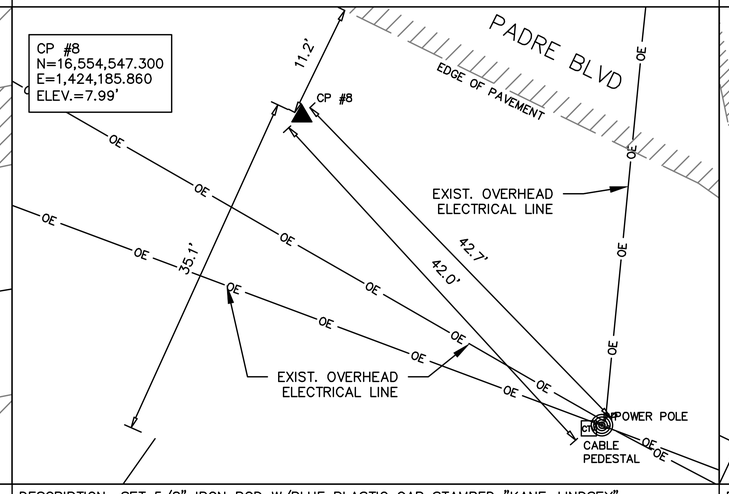
DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 1820' SOUTH FROM THE INTERSECTION OF PADRE BOULEVARD AND JETTIES LOOP ROAD.

LEGEND

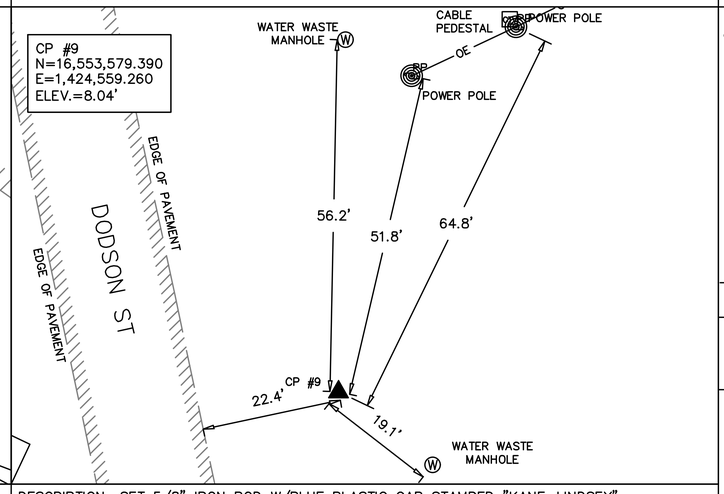
▲	– CONTROL POINT
	– FIRE HYDRANT
◉	– MANHOLE
●	– POWER POLE
	– TRAFFIC SIGN
☼	– LGHT POLE
	– FIBER OPTIC PEDESTAL
JB	– JUNCTION BOX
EB	– ELECTRIC BOX
T	– TELEPHONE PEDESTAL
CTV	– CABLE PEDESTAL
W	– WASTEWATER MANHOLE
	– TRANSFORMER
— // —	– WOOD FENCE
— x —	– WIRE FENCE



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 710' EAST FROM THE INTERSECTION OF GULF SIDE LOOP AND PADRE BOULEVARD.



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 130' WEST FROM THE INTERSECTION OF PADRE BOULEVARD AND TURNER STREET.



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 750' SOUTH FROM THE INTERSECTION OF DODSON STREET AND PADRE BOULEVARD.

12-30-2024

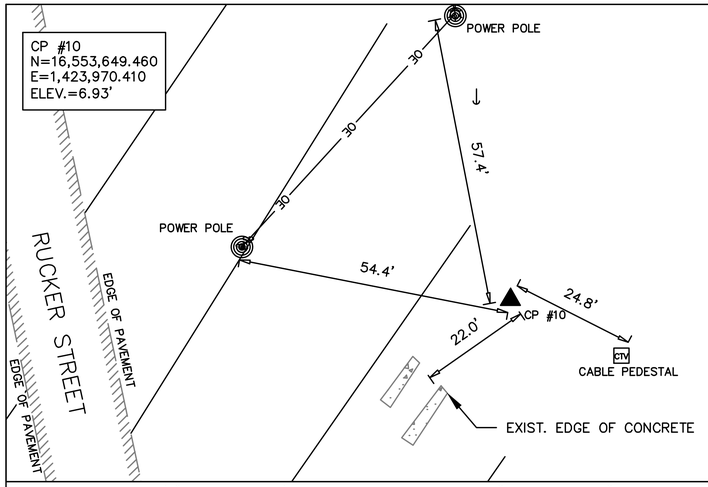
STATE OF TEXAS
REGISTERED
KURT SCHUMACHER
6333
PROFESSIONAL
LAND SURVEYOR

KURT SCHUMACHER, RPLS #6333

KANE - LINDSEY LLC
LAND SURVEYING CONSULTANTS
2805 Fountain Plaza Blvd., Suite B
Edinburg, TX 78539
(956) 458-8391
TBPELS FIRM NO. 10194676

ISLA BLANCA PARK IMPROVEMENTS PROJECT HORIZONTAL & VERTICAL CONTROL

SHEET NO. 5



DESCRIPTION: SET 5/8" IRON ROD W/BLUE PLASTIC CAP STAMPED "KANE–LINDSEY", APPROXIMATELY 1160' SOUTH FROM THE INTERSECTION OF PADRE BOULEVARD AND RUCKER STREET.

NOTES:

1. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET. DISPLAYED IN SURFACE VALUES AND MAY BE CONVERTED TO GRID BY DIVIDING BY THE TXDOT SURFACE ADJUSTMENT FACTOR OF 0.99996.

2. ALL HORIZONTAL VALUES ARE NAD 83 STATE PLANE COORDINATES, TEXAS SOUTH ZONE AND WERE ESTABLISHED BY RTK GPS METHODS.

3. VERTICAL DATUM IS BASED ON NAVD88 ESTABLISHED FROM A DIGITAL LEVEL LOOP THROUGH CONTROL POINTS.

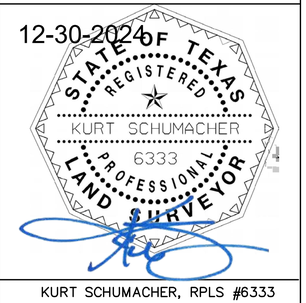


NOT TO SCALE

LEGEND

- ▲ – CONTROL POINT
- – FIRE HYDRANT
- – MANHOLE
- – POWER POLE
- – TRAFFIC SIGN
- – LGHT POLE
- – FIBER OPTIC PEDESTAL
- JB – JUNCTION BOX
- EB – ELECTRIC BOX
- T – TELEPHONE PEDESTAL
- CTV – CABLE PEDESTAL
- Ⓦ – WASTEWATER MANHOLE
- – TRANSFORMER
- — // — – WOOD FENCE
- — x — – WIRE FENCE

12-30-2024



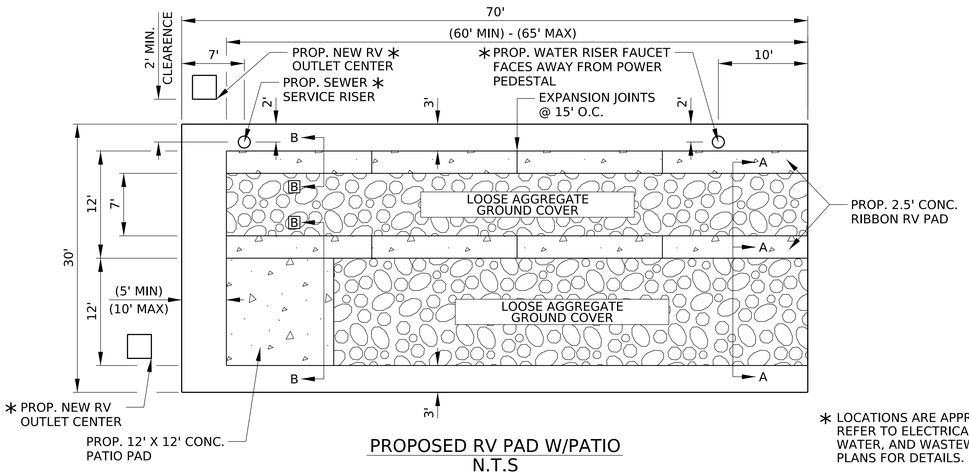
KURT SCHUMACHER, RPLS #6333

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2805 Fountain Plaza Blvd., Suite B
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TBPELS Firm No. 10194676

ISLA BLANCA PARK IMPROVEMENTS PROJECT
HORIZONTAL & VERTICAL CONTROL

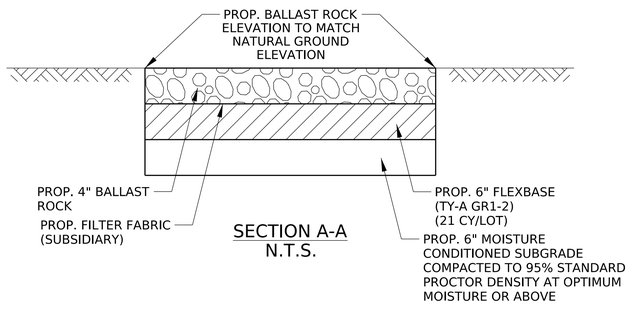
SHEET NO. 6 SHEET 3 OF 3

RFP # 250502

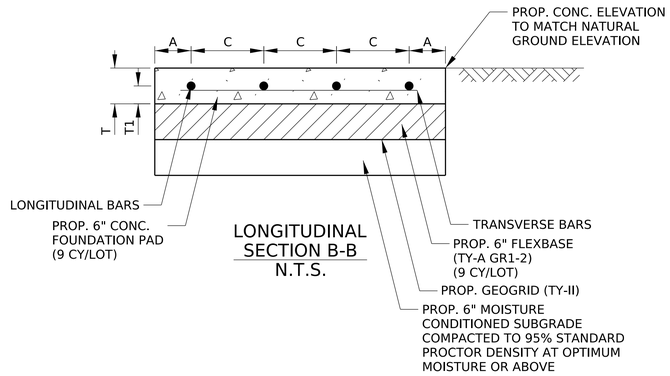


PROPOSED RV PAD W/PATIO
N.T.S

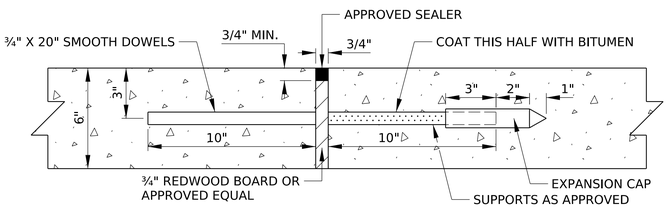
⁎ LOCATIONS ARE APPROX: REFER TO ELECTRICAL, WATER, AND WASTEWATER PLANS FOR DETAILS.



SECTION A-A
N.T.S.



LONGITUDINAL SECTION B-B
N.T.S.



EXPANSION JOINT
N.T.S.

TABLE NO.1 LONGITUDINAL STEEL				
SLAB THICKNESS AND BAR SIZE		LONGITUDINAL STEEL BARS	FIRST SPACING AT EDGE OR JOINT	LONG. STEEL VERTICAL POSITION FROM BOTTOM OF PAVEMENT
T (IN.)	BAR SIZE	SPACING C (IN.)	SPACING A (IN.)	T1 (IN.)
6.0	#5	8.0	3 TO 4	3

TABLE NO.2 TRANSVERS STEEL AND TIE BARS				
SLAB THICKNESS (IN.)	TRANSVERSE STEEL		TIE BARS AT LONGITUDINAL CONTRACTION JOINT	
	BAR SIZE	SPACING (IN.)	BAR SIZE	SPACING (IN.)
6.0	#5^	36.0	#5^	36.0

^CONTRACTOR MAY USE #6 REINFORCING STEEL INSTEAD OF #5 REINFORCING STEEL OR COMBINATION OF EACH SIZE

CONCRETE SLAB AND REBAR NOTES:

1. TYPICAL SLAB THICKNESS 6"
2. TYPICAL REBAR SIZE AND SPACING ARE:
   A. #5 BAR @ 8" C-C LONGITUDINAL
   B. #5 BAR @ 36" C-C TRANSVERSE
3. REBAR SHALL NOT BE PLACED WITHIN 3" TO 4" FROM THE EDGE OF PAVEMENT
4. CONCRETE SHALL BE CLASS A WITH A MIN. COMPRESSIVE STRENGTH OF 4000 PSI

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Planning & Aviation Transportation Environmental Drainage Construction Management

CCDOT

Cameron County Parks and Recreation

STATE OF TEXAS
CHRISTOPHER R. RODRIGUEZ
107692
LICENSED PROFESSIONAL ENGINEER
06/19/2025

CAMERON COUNTY
CLIENT

PROJECT NUMBER

6/19/2025
DATE

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No.	Description	Date

ISLA BLANCA PARK
PROPOSED RV TYPICAL SECTION

SHEET 1 OF 1

SHEET NO. 7

6/19/2025 I:\Clients\Counties\Cameron\Isla Blanca Repiar and Improvements\ - Design\Plan Set\1. General\04 Typical Sections\IslaBlancaRVTypical.dgn

RFP # 250502

ITEM AND CODE	ITEM DESCRIPTION	UNITS	BID QUANTITY
100 7001	PREPARING ROW	AC	51.00
104 7023	REMOV CONC (FOUNDATIONS)	SY	2,303.00
132 7006	EMBANKMENT (FNL)(DC)(TY C)	CY	2,362.50
192 7901	LOOSE AGGR GRND COVER	CY	1,012.50
247 7176	FL BS (CMP IN PLC)(TY A GR 1-2)(FNL POS)	CY	2,362.50
250 7002	GEOGRID BASE REINFORCEMENT (TYPE 2)	SY	6,300.00
500 7001	MOBILIZATION	LS	1.00
502 7001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	12.00
503 7002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	2.00
506 7021	CONSTRUCTION EXITS (INSTALL)(TY 2)	SY	312.00
506 7024	CONSTRUCTION EXITS (REMOVE)	SY	312.00
506 7039	TEMP SEDMT CONT FENCE (INSTALL)	LF	5,127.00
506 7041	TEMP SEDMT CONT FENCE (REMOVE)	LF	5,127.00
530 7901	DRIVEWAYS (CONC RIBBONS)	SY	2,708.00
530 7902	DRIVEWAYS (CONC PATIO)	SY	1,200.00
CC 001	SANITARY SEWER LINE TESTING	LF	17,000.00
CC 002	WATERLINE TESTING	LF	3,269.00
CC 003	GROUNDWATER DEWATERING INCLUDING WELLPOINTING	LF	20,350.00
CC 004	SURGE, CAP, AND ABANDON EXISTING SANITARY SEWER PIPE	LS	1.00
CC 005	FILL, SEAL, AND ABANDON EXISTING BRICK MANHOLES	EA	65.00
CC 006	TIE INTO EXISTING MANHOLE	EA	3.00
CC 007	8" PVC SANITARY SEWER LINE (SDR-26) ALL DEPTHS	LF	13,935.00
CC 008	12" PVC SANITARY SEWER LINE (SDR-26) ALL DEPTHS	LF	2,658.00
CC 009	15" PVC SANITARY SEWER LINE (SDR-26) ALL DEPTHS	LF	488.00
CC 010	CEMENT STABILIZED ENCASEMENT (AS SHOWN ON PLANS)	LF	517.00
CC 011	SANITARY SEWER MANHOLE (ALL DEPTH - 48"DIA)	EA	82.00
CC 012	SANITARY SEWER CLEANOUT	EA	9.00
CC 013	4" SERVICE RECONNECTIONS ALL LENGTHS SHORT/LONG	EA	667.00
CC 014	TRENCH SAFETY	LF	17,000.00
CC 015	REMOVE AND REPLACE FLEXIBLE PAVEMENT	SY	1,250.00
CC 016	FURNISH AND INSTALL 4" DIAM. C900 DR18 PVC WATERLINE	LF	114.00
CC 017	FURNISH AND INSTALL 8" DIAM. C900 DR18 PVC WATERLINE	LF	3,155.00
CC 018	FURNISH AND INSTALL 8" 11.25 DEG. BEND (MJ WITH MEGA LUG JOINT RESTRAINT FITTING)	EA	3.00
CC 019	FURNISH AND INSTALL 8" 45 DEG. BEND (MJ WITH MEGA LUG JOINT RESTRAINT FITTING)	EA	8.00
CC 020	FURNISH AND INSTALL 10" X 8" TEES (MJ WITH MEGA LUG JOINT RESTRAINT FITTING)	EA	4.00
CC 021	FURNISH AND INSTALL 8" SLEEVES	EA	2.00
CC 022	FURNISH AND INSTALL 10" SLEEVES	EA	2.00
CC 023	INSTALL 8" DUCTILE IRON END PLUG WITH THRUST RESTRAINT	EA	2.00
CC 024	8" GATE VALVE W VALVE BOX	EA	10.00
CC 025	SINGLE WATER SERVICE: FURNISH AND INSTALL 3/4" COPPER OR HDPE SERVICE TO ALL RV SITES	EA	75.00
CC 026	PROVIDE 4" WATER SERVICE CONNECTION INCLUDING TAP INTO NEW 8" MAIN	EA	1.00
CC 027	CONNECT NEW 8" WATERLINE TO EXISTING 8" WATERLINE	EA	2.00
CC 028	CONNECT NEW 8" WATERLINE TO EXISTING 10" WATERLINE	EA	4.00
CC 029	FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY	EA	7.00
CC 030	FURNISH AND INSTALL 8" DIA. COUPLING ADAPTER	EA	4.00
CC 031	TRENCH SAFETY	LF	4,149.00
CC 032	REMOVE AND REPLACE FLEXIBLE PAVEMENT	SY	575.00
CC 033	ELECTRICAL IMPROVEMENTS	LS	1.00

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Cameron County Parks and Recreation

CAMERON COUNTY
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No.	Description	Date

ISLA BLANCA PARK ESTIMATED QUANTITIES

SHEET 1 OF 1

SHEET NO. 8

6/19/2025
P:\Clients\Counties\Cameron\Isla Blanca Repair and Improvements\1 - Design\Plan Set\1 General\05 E&O\ISLA BLANCA RV_EQ.dgn

GENERAL NOTES:

THE RV LOT CONSTRUCTION SHALL USE THE TEXAS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES" (NOVEMBER 2024) FOR ITEM SPECIFICATIONS INFORMATION AND REQUIREMENTS. THE SPECIFICATION BOOK SHALL READ "CAMERON COUNTY" IN LIEU OF "THE TEXAS DEPARTMENT OF TRANSPORTATION" AND/OR "THE DEPARTMENT".

THE ELECTRICAL SPECIFICATIONS, NOTES, STANDARDS, AND REQUIREMENTS AS OUTLINED IN THE PLANS AND ACCOMPANYING DOCUMENTS SHALL GOVERN THE CONSTRUCTION OF THE NEW ELECTRICAL INFRASTRUCTURE AND / OR ADJUSTMENTS.

THE WATER AND WASTEWATER SPECIFICATIONS, NOTES, STANDARDS, AND REQUIREMENTS AS OUTLINED IN THE PLANS AND ACCOMPANYING DOCUMENTS SHALL GOVERN THE CONSTRUCTION OF THE NEW WATER AND WASTEWATER INFRASTRUCTURE AND / OR ADJUSTMENTS.

****

GENERAL REQUIREMENTS

FOR ALL PITS OR QUARRIES, COMPLY WITH THE "TEXAS AGGREGATE QUARRY AND PIT SAFETY ACT."

CONTACT THE 1-800 CALL SERVICES FOR LOCATIONS OF UTILITIES BEFORE BEGINNING ANY SCARIFYING OR EXCAVATING OPERATIONS. VERIFY UTILITY LOCATIONS, DEPTH, AND EXERCISE EXTREME CAUTION WHEN EXCAVATING AND/OR SCARIFYING AROUND THESE UTILITIES.

ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF CAMERON COUNTY.

LOCATIONS OF UNDERGROUND FACILITIES ARE FROM BEST KNOWN INFORMATION AVAILABLE. NEITHER THE OWNER NOR ENGINEER, WARRANT THE ACCURACY OF THE INFORMATION PROVIDED. ANY DEVIATIONS SHALL BE CALLED TO THE PROJECT MANAGER AND ENGINEER'S ATTENTION IMMEDIATELY.

AS DIRECTED BY THE COUNTY, THE CONTRACTOR SHALL INSTALL APPROPRIATE TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE TXMUTCD LATEST EDITION, AND AS APPROVED BY THE ENGINEER.

ALL EXCESS MATERIALS AND DEBRIS RESULTING FROM THE PROPOSED IMPROVEMENTS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THESE MATERIALS AND DEBRIS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED AT THE COST OF THE CONTRACTOR.

ANY DAMAGES TO EXISTING FENCES, WALKS, OR PRIVATE PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

NO OPEN EXCAVATION SHALL BE LEFT OPEN OVERNIGHT. ALL EXCAVATIONS WHICH CANNOT BE BACKFILLED OVERNIGHT SHALL BE PROTECTED AT ALL TIMES WITH LONGITUDINAL CHANNELIZING DEVICES THAT CONFORM TO THE TXMUTCD REQUIREMENTS, OR AS APPROVED BY THE ENGINEER.

THE PREPERATION OF THESE PLANS REFLECTS INFORMATION, PROVIDED BY OTHERS, ON THE APPROXIMATE LOCATION AND EXISTENCE OF EXISTING UTILITY AND ADJACENT PHYSICAL FEATURES. HOWEVER, THEY DO NOT IMPLY OR AFFIRM THAT ALL UTILITIES OR PHYSICAL FEATURES ARE SHOWN. GENERALLY, UTILITY SERVICE CONNECTIONS ARE NOT INDICATED ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS OF THE OWNER IMMEDIATELY UPON ENCOUNTERING UNFORESEEN CONFLICTS.

PUBLIC AND PRIVATE UTILITY LINES AND CUSTOMER SERVICE LINES MAY EXIST THAT ARE NOT SHOWN ON THE CONSTRUCTION DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILTY TO LOCATE, MAITAIN, AND PROTECT THE INTEGRITY OF THESE LINES. HAND EXCAVATION MAY BE REQUIRED. THIS OPERATION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.

THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY SURFACE IRREGULARITIES, AS DIRECTED BY THE COUNTY, CAUSED BY THE CONTRACTOR'S WORKING OPERATIONS.

DEWATERING MAY BE REQUIRED DURING THE DURATION OF THE PROJECT. SAID WATERING SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT'S BID ITEMS.

THE CONTRACTOR SHALL CLEANUP AND RESTORE THE AREA OF OPERATIONS TO A CONDITION AS GOOD OR BETTER THAN THAT WHICH EXISTED PRIOR TO INSTALLATION OF ALL ITEMS TO BE CONSTRUCTED.

ALL DRAINAGE PIPES SHALL REMAIN IN PLACE UNLESS SHOWN TO BE REPLACED ON THE PLANS. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO NOT DAMAGE ANY EXISTING PIPES. ALL DAMAGES CAUSED AS A RESULT OF THE CONTRACTOR'S WORKING OPERATIONS SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

ITEM 100: PREPARING RIGHT OF WAY

REMOVAL OF ALL EXISTING VEGETATION AND TREES WITHIN THE PROJECT LIMITS OR IN CONFLICT WITH THE PROPOSED RV AND UTILITY CONSTRUCTION AND / OR ADJUSTMENTS SHALL BE SUBSIDIARY TO PREP ROW.

ALL REMOVAL OF TREES, SHRUBS, BRUSH, AND VEGETATION SHALL BE COORDINATED AND APPROVED WITH THE COUNTY PRIOR TO REMOVAL.

ITEM 110: EXCAVATION

ALL PROJECT GRADING AND EXCAVATION SHALL NOT BE PAID DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY.

ALL EXCESS MATERIALS AND DEBRIS RESULTING FROM THE PROPOSED IMPROVEMENTS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND THE REMOVAL OF THIS EXCESS MATERAIAL SHALL NOT BE PAID DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO PERTINENT ITEMS.

ITEM 132: EMBANKMENT

EMBANKMENT (DENS CONT) SHALL BE TYPE C WITH A MAX. PI OF 40. MATERIAL USED AS EMBANKMENT MATERIAL IN THE TOP TWO FEET BELOW THE BOTTOM OF FLEXIBLE BASE SHALL MEET THE FOLLOWING REQUIREMENTS BASED ON PRELIMINARY TESTS AND SUCH OTHER TESTS FOUND NECESSARY BY THE ENGINEER.

1. THE MATERIAL SHALL BE SUCH AS TO PRODUCE A WELL-BONDED EMBANKMENT AND SHALL HAVE A MINIMUM PI OF 8 AND A MAXIMUM PI OF 30.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADVISE THE ENGINEER OF THE LOCATION OF THE SOURCE SUFFICIENTLY IN ADVANCE TO AVOID DELAY.

ITEM 192: LANDSCAPE PLANTING

LOOSE AGGREGATE ROCK GROUND COVER SHALL BE A BLEND OF 1 TO 3 IN. ROCK COMPOSED OF MARBLE, RIVER ROCK, CRUSHED STONE, OR OTHER LANDSCAPE ROCK.

THE CONTRACTOR SHALL SUBMIT THE AGRREGATE ROCK TO THE COUNTY FOR APPROVAL PRIOR TO PURCHASING, STOCKPILING, AND INSTALLING.

INSTALL COMMERCIAL GRADE FILTER FABRIC PRIOR TO INSTALLING THE AGGREGATE ROCK AS PER THE SPECIFICATION AND AS REQUIRED BY THE AGGREGATE ROCK SUPPLIER. SUPPLY AND INSTALLATION OF THE FILTER FABRIC SHALL NOT BE PAID DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO PERTINENT ITEMS.

ITEM 247: FLEXIBLE BASE

THE PROJECT SHALL UTILIZE FLEXIBLE BASE TYPE A GR 1-2 AS OUTLINED IN THE SPECIFICATIONS.

THE WET BALL TEST (TEX-116-E) SHALL BE RUN AND THE PLASTICITY INDEX OF THE MATERIAL PASSING THE NO. 40 SIEVE SHALL BE DETERMINED (WET BALL PI).

THE PERCENT OF DENSITY AS DETERMINED BY COMPACTION RATIO (TEX-113-E) FOR THE NEW FLEXIBLE BASE SHALL BE A MINIMUM OF 98%.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT CERTAIN EXISTING AND/OR PROPOSED STRUCTURES MAY BE WITHIN THE LIMITS OF THE FLEXIBLE BASE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION OPERATIONS WITHOUT DAMAGE TO THESE STRUCTURES.

FOR WATER ADDED UNDER ITEM 247, THE SULFATE CONTENT WILL NOT EXCEED 3000-PPM AND THE CHLORIDE CONTENT WILL NOT EXCEED 3000-PPM.

THE CONTRACTOR SHALL PROOF ROLL CONSTRUCTED FLEXIBLE BASE IN ACCORDANCE WITH ITEM 216, "PROOF ROLLING" WHEN TY A GR 1 BASE IS UTILIZED AND CORRECT SOFT SPOTS AS DIRECTED.

ITEM 250: GEOGRID BASE REINFORCEMENT

PROVIDE A CONSTRUCTION PLAN TO THE ENGINEER DETAILING HOW THE BASE WILL BE LIME TREATED WITHOUT DAMAGING THE GEOGRID BASE REINFORCEMENT PLACED ON TOP OF THE SUBGRADE.

ITEM 502: BARRICADES, SIGNS, AND TRAFFIC HANDLING

REPLACE/RELOCATE ALL REGULATORY SIGNS REMOVED DUE TO CONSTRUCTION OPERATIONS WITH THE SAME SIGN ON FIXED SUPPORT(S) IMMEDIATELY UPON ITS REMOVAL. FIRST OBTAIN PROJECT ENGINEER APPROVAL BEFORE RE-MOVING ANY REGULATORY ROADWAY SIGN. REQUIRED FLAGGERS ARE TO BE AVAILABLE TO DIRECT TRAFFIC DURING SIGN INTERMEDIATE DOWN TIME.

FROM THE BEGINNING TO THE END OF THE PROJECT, ALL TRAFFIC CONTROL DEVICES NEED TO BE IN ACCEPTABLE CONDITION AS PER THE TEXAS QUALITY GUIDELINES FOR WORK ZONE TRAFFIC CONTROL DEVICES.

ITEM 503 PORTABLE CHANGEABLE MESSAGE SIGN

THE CONTRACTOR SHALL FURNISH 2 PORTABLE MESSAGE SIGNS THROUGHOUT THE DURATION OF THE PROJECT.

THE CONTRACTOR SHALL ENSURE THE MESSAGE SIGNS ARE IN WORKING CONDITION THROUGHOUT THE DURATION OF THE PROJECT. ANY REPAIRS OR MAINTENANCE TO THE MESSAGE SIGNS WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO PERTINENT ITEMS.

ITEM 504: FIELD OFFICE AND LABORATORY

FOR THIS PROJECT, A FIELD OFFICE WILL NOT BE REQUIRED AT THE PROJECT SITE.

ITEM 505: TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR (TA)

FOR THIS PROJECT, USE OF TMA AND TA'S WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY.

ADDITIONAL ELECTRICAL GENERAL NOTES:

CERTAIN EXISTING MATERIALS, SWITCHGEAR AND OUTLET CENTERS ARE TO BE REMOVED. SWITCHGEAR AND OUTLET CENTERS WHICH ARE SELECTED BY THE OWNER SHALL REMAIN THE PROPERTY OF THE OWNER. SUCH SWITCHGEAR AND OUTLET CENTERS SHALL BE DELIVERED BY THE CONTRACTOR TO A DESIGNATED LOCATION WITHIN TWO MILES OF THE SITE OF RENOVATION. SWITCHGEAR AND OUTLET CENTERS WHICH ARE NOT SELECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR. SUCH SWITCHGEAR AND OUTLET CENTERS SHALL BE REMOVED FROM THE PREMISES BY THE CONTRACTOR. CONTRACTOR SHALL EXERCISE EXTREME CARE IN REMOVING ANY SWITCHGEAR AND OUTLET CENTERS TO BE RETAINED BY THE OWNER.

ALL REMOVED ELECTRICAL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. SUCH MATERIALS SHALL BE REMOVED FROM THE SITE OF CONSTRUCTION AND PROPERLY DISPOSED OF.

ALL REMOVAL OF EXISTING ELECTRICAL INFRASTRUCTURE AND COMPONENTS SHALL NOT BE PAID DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY.

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Planning & Project Management Environmental Design Construction Phase Administration

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Cameron County Parks and Recreation

CAMERON COUNTY
CLIENT

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DRAWN BY

GDJ ENGINEERING
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REVISIONS

No.	Description	Date

ISLA BLANCA PARK RV GENERAL NOTES

SHEET 1 OF 1

SHEET NO.
9

GENERAL NOTES AND SPECIFICATIONS DATA:

USE A POWER-BROOM WHEN CLEANING THE ROADWAY AS NEEDED.

REMOVE & DISPOSE ALL MATERIAL NOT DEEMED SALVAGEABLE BY THE COUNTY, UNLESS OTHERWISE SHOWN ON THE PLANS.

DO NOT BLOCK DRAINAGE WHEN HANDLING & STOCKPILING EXCAVATED MATERIAL.

MAINTAIN ACCESS TO DRIVEWAYS AND INTERSECTIONS THROUGH ALL PHASES OF CONSTRUCTION.

MAINTAIN POSITIVE DRAINAGE DURING ALL PHASES OF CONSTRUCTION.

TRAFFIC CONTROL DEVICES:

AT THE COMMENCEMENT OF THE PROJECT, ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCEPTABLE CONDITION, AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AS PER GUIDELINES FOR TEMPORARY TRAFFIC CONTROL DEVICES AND FEATURES.

THE COUNTY SHALL CONDUCT A NIGHT INSPECTION ON THE SAID TCP AND TRAFFIC CONTROL DEVICES.

CONTRACTOR SHALL HAVE A SUFFICIENT AMOUNT OF TRAFFIC CONTROL DEVICES IN ACCEPTABLE CONDITION TO REPLACE ANY DAMAGED TRAFFIC CONTROL DEVICE WITHIN 24 HOURS OF NOTIFICATION.

PROVIDE ADDITIONAL SIGNS AND BARRICADES AS NECESSARY TO ADDRESS FIELD CONSTRUCTIBILITY & VISIBILITY. THESE ADDITIONAL SIGNS WILL BE CONSIDERED SUBSIDIARY TO ITEM 502.

REMOVE OR COMPLETELY COVER ALL EXISTING SIGNS WHICH ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLAN.

ADJUST STOP SIGNS AS NEEDED ON INTERSECTING STREETS DURING THE VARIOUS CONSTRUCTION PHASES. DO NOT REMOVE ANY EXISTING STOP SIGNS UNTIL TEMPORARY SIGNS ARE IN PLACE.

COORDINATE THE TRAFFIC CONTROL PLAN AND THE VARIOUS SEQUENCES OF CONSTRUCTION WITH ADJACENT CONSTRUCTION PROJECTS IF APPLICABLE, TO ENSURE THE UNINTERRUPTED AND SAFE FLOW OF TRAFFIC.

ALL WORK ZONE PAVEMENT MARKINGS FOR THIS PROJECT SHALL BE 0.100 INCHES (100 MIL) THICK THERMOPLASTIC.

SAFETY:

PROTECT EXPOSED PITS THAT MUST REMAIN OPEN DURING NON-WORKING HOURS AS PER OSHA REQUIREMENTS.

PROJECT SPECIFIC NOTES

1. MAINTAIN ACCESS TO ISLA BLANCA PARK, PADRE ISLAND RD , AND CHANNEL VIEW ROAD EXCEPT AS OTHERWISE SHOWN. REGULATE CONSTRUCTION TRAFFIC SO AS TO CAUSE A MINIMUM INCONVENIENCE TO THE TRAVELLING PUBLIC. AT TIMES WHERE IT IS NECESSARY FOR EQUIPMENT TO STOP, UNLOAD, OR CROSS ROADWAYS UNDER TRAFFIC, PROVIDE WARNING SIGNS AND FLAGGERS AS NEEDED UTILIZING THE TCP STANDARDS OR AS DIRECTED TO PROTECT THE TRAVELING PUBLIC. IF ADVERSE WEATHER CONDITIONS WARRANT CONTRACTOR SHALL PROVIDE ADDITIONAL FLAGGERS AS NEEDED.
2. ADDITIONAL SIGNS, BARRICADES, AND CHANNELIZING DEVICES MAY BE REQUIRED TO MAINTAIN TRAFFIC, AS SHOWN ON THE TCP STANDARDS. PLACEMENT AND MAINTENANCE OF ADDITIONAL SIGNS, BARRICADES, ETC (IF ANY) REQUIRED BY THE COUNTY OR ENGINEER WILL BE SUBSIDIARY TO ITEM 502 "BARRICADES, SIGNS AND TRAFFIC HANDLING".
3. INSTALL ADVANCE WARNING SIGNS AS SHOWN ON THE ADVANCE WARNING SIGN LAYOUTS AND TCP BC STANDARDS.
4. COORDINATE WITH UTILITY COMPANIES TO FIELD VERIFY UTILITY LOCATIONS AND/OR ADJUSTMENTS PRIOR TO ANY EXCAVATION, GRADING, OR DIGGING OPERATIONS.
5. THE CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING AROUND OR NEAR EXISTING STREETS AND STRUCTURES. DAMAGE TO EXISTING STREETS AND / OR STRUCTURES AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE PAID AT THE CONTRACTORS EXPENSE.

SEQUENCE OF CONSTRUCTION

1. INSTALL PROJECT LIMIT AND ADVANCE WARNING SIGNS AS SHOWN ON THE TRAFFIC CONTROL PLANS AND STANDARDS, IN ACCORDANCE WITH THE LATEST (TxMUTCD) AND/OR AS DIRECTED BY THE COUNTY. COORDINATE WITH THE COUNTY ON CONSTRUCTION OPERATIONS AND PHASING PRIOR TO STARTING CONSTRUCTION.
2. COORDINATE WITH UTILITY COMPANIES TO FIELD VERIFY UTILITY LOCATIONS AND/OR ADJUSTMENTS PRIOR TO ALL EXCAVATION, GRADING, OR DIGGING OPERATIONS.
3. THE CONTRACTOR SHALL CLOSE THE RV PARKING SECTIONS OF THE PARK AND SHALL RESTRICT CONSTRUCTION OPERATIONS WITHIN THE RV AREAS. THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS TO ISLA BLANCA PARK AND THE PERIMETER ROADWAYS LEADING UP TO ISLA BLANCA PARK.
4. PREPARE THE RIGHT OF WAY AND CLEAR AREAS OF THE PARK WHERE CONSTRUCTION OPERATIONS SHALL TAKE PLACE. COORDINATE WITH THE COUNTY FOR APPROVAL ALL TREES, BRUSH, AND VEGETATION TO BE CLEARED PRIOR TO REMOVAL.
5. CONSTRUCT ALL UTILITIES AS PER THE PLANS, STANDARDS, AND SPECIFICATIONS.
6. CONSTRUCT THE NEW RV LOTS AS PER THE PLANS, STANDARDS, AND SPECIFICATIONS.
7. REMOVE TRAFFIC CONTROL BARRICADES AND REOPEN ISLA BLANCA PARK TO THE PUBLIC AND ALL TRAFFIC UPON APPROVAL AND ACCEPTANCE BY THE COUNTY.

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Cameron County Parks and Recreation

STATE OF TEXAS
CHRISTOPHER R. RODRIGUEZ
107692
PROFESSIONAL LICENSED ENGINEER
06/19/2025

CAMERON COUNTY	CLIENT
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GDJ ENGINEERING	CHECKED BY

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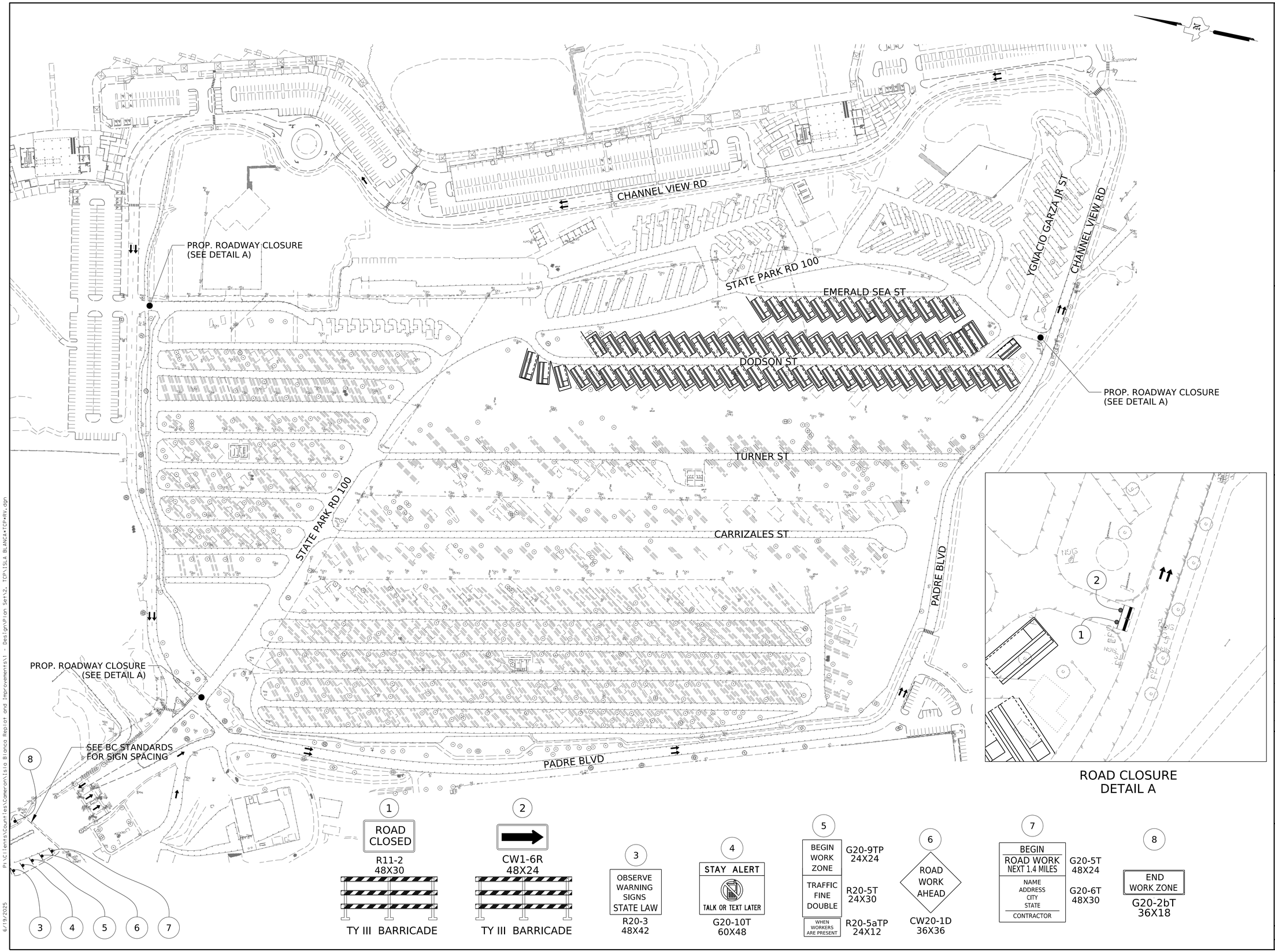
No.	Description	Date

ISLA BLANCA PARK RV TCP GENERAL NOTES AND SOC

SHEET 1 OF 1 | SHEET NO. 10

6/19/2025 P:\Clients\Counties\Cameron\Isla Blanca Replat and Improvements\1 - Design\Plan Set\2. TCP\00 NOTE-SEQ\ISLA BLANCA RV_GEN-SOC.dgn

RFP # 250502



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ISLA BLANCA PARK TRAFFIC CONTROL PLAN CLOSURE LAYOUT

SCALE: 1"=100'

SHEET 1 OF 1

SHEET NO. 11

RFP # 250502

SHEET SUMMARY

ITEM	DESCRIPTION	UNIT	QUANTITY
104	REMOV. CONC. FOUNDATION	SY	2,303

LEGEND

- EXISTING TRAFFIC FLOW
- REMOVE CONCRETE FOUNDATION
- REMOVE TREE / SHRUB

NOTES:
1. FOR UTILITY REMOVAL AND ADJUSTMENTS SEE UTILITY LAYOUT SHEETS FOR DETAILS.
2. CONTRACTOR TO ACCEPT OWNERSHIP OF REMOVED MATERIAL AND PROPERLY DISPOSED OF MATERIAL IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
3. ALL TREES, SHRUBS, AND OTHER BRUSH VEGETATION TO BE REMOVED AND PAID UNDER SITE PREP. (SUBSIDIARY)

EXIST. TREE / SHRUB (TO BE REMOVED) (4 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (650 SY)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (175 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (1 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (71 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (1 EA) (SEE NOTE NO.3)
EXIST. TREE / SHRUB (TO BE REMOVED) (2 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (44 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (4 EA) (SEE NOTE NO.3)
EXIST. TREE / SHRUB (TO BE REMOVED) (3 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (38 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (1 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (263 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (4 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (204 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (5 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (302 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (3 EA) (SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (193 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (1 EA) (SEE NOTE NO.3)
EXIST. TREE / SHRUB (TO BE REMOVED) (1 EA)(SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (182 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (4 EA)(SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (115 SY)
EXIST. TREE / SHRUB (TO BE REMOVED) (4 EA)(SEE NOTE NO.3)
EXIST. CONC. FOUNDATION (TO BE REMOVED) (70 SY)

STATE PARK RD 100
EMERALD SEA
YGNACIO GARZA JR ST
CHANNEL VIEW RD
DODSON ST
TURNER ST
TURNER ST
CARRIZALES ST
PADRE BLVD

GDJ Engineering
2805 Fountain Plaza Blvd. Ste. A Edinburg, TX Ph: (956)600-2025 | Firm No. 20061
Planning • Airport Transportation Environmental Drainage Construction Water Wastewater

CCDOT

Cameron County Parks and Recreation

STATE OF TEXAS
CHRISTOPHER R. RODRIGUEZ
107692
LICENSED PROFESSIONAL ENGINEER
06/19/2025

CAMERON COUNTY
CLIENT

PROJECT NUMBER

6/18/2025
DATE

GDJ ENGINEERING
DRAWN BY

GDJ ENGINEERING
CHECKED BY

REVISIONS

No.	Description	Date

ISLA BLANCA PARK RV REMOVAL LAYOUT

SCALE: 1"=50'

SHEET 1 OF 1

SHEET NO. 12

6/18/2025 P:\Clients\Counties\Cameron\Isla Blanca Repair and Improvements\1 - Design\Plan Sets\3. Roadway\06 Removal\RV\IslaBlancaREMOVARV.dgn

During the planning phase of project development, the following Environmental Permits, Issues and Commitments have been developed during coordination with resource agencies, local governmental entities and the general public. Any change orders and/or deviations from the final design must be reported to the Engineer prior to the commencement of construction activities as additional environmental clearances may be required.

I. Clean Water Act, Section 402; Stormwater Pollution Prevention

Action Items Required : ☐ *No Action Required*

1. ☒ *The contractor must implement the SWP3 by installing Best Management Practices (BMPs) as indicated in the construction plans and maintained appropriately throughout construction. BMPs must be in place prior to the start of construction. The SWP3 may need to be revised as necessary as construction progresses.*
2. ☒ *For all construction PSL's off the ROW, the contractor must certify compliance with all applicable laws, rules and regulations pertaining to the preservation of cultural resources, natural resources and the environment.*
3. ☒ *Based on the acreage of impact, select the appropriate box below:*
   - ☐ *This project will disturb less than 1 acre of soil and is not part of a larger common plan of development; therefore, a NOI and TPDES Site Notice are not required for this project.*
   - *or*
   - ☐ *This project will disturb equal to or more than 1 acre of soil but less than 5 acres; therefore a NOI is not required but a TPDES Site Notice is required. The Construction Site Notice (CSN) is required to be posted at the construction site in a publicly accessible location for review by the public, TCEQ, EPA and other Inspectors.*
   - *or*
   - ☒ *This project will disturb equal to or more than 5 acres of soil and will require a NOI and TPDES Site Notice. The NOI and Site Notice are required to be posted at the construction site in a publicly accessible location.*
4. ☒ *Need to address MS4 requirements (Cameron & Hidalgo Counties only)* ☐ *MS4 requirements not needed*

II. Clean Water Act, Sections 401 and 404 Compliance

Action Items Rquired : ☐ *No Action Required*

1. ☒ *Filling, dredging or excavating in any water bodies, rivers, creeks, streams, wetlands or wet areas is prohibited unless specified in the USACE permit and approved by the Engineer. The contractor shall adhere to all agreements, mitigation plans, and BMPs required by the NWP as regulated by the USACE.*

   The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

   - ☐ *No Permit Required*
   - ☐ *Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)*
   - ☐ *Nationwide Permit 14 - PCN Required (1/10th to <1/2 acre, 1/3 in tidal waters)*
   - ☐ *Individual 404 Permit Required*
   - ☐ *Other Nationwide Permit Required: NWP#_____*

2. ☒ *The contractor is responsible for obtaining new or revised Section 404 permit(s) for Contractor initiated changes in construction methods that change Impacts To Waters Of The U.S., including wetlands. The Contractor will ensure that the water quality of the State will be maintained and not degraded.*
3. ☒ *Best Management Practices for applicable Section 401 General Conditions:*

General Condition 12 - Categories I and II BMPs required

Category I (Erosion Control)

☐ Temporary Vegetation	☐ Interceptor Swale	☐ Mulch Filter Berms and/or Socks
☐ Blankets, Matting	☐ Diversion Dike	☐ Compost Filter Berms and/or Socks
☐ Mulch	☐ Erosion Control Compost	☐ Compost Blankets
☐ Sodding		

Category II (Sedimentation Control)

☒ Silt Fence	☐ Hay (Straw) Bale Dike	☐ Mulch Filter Berms and/or Socks
☐ Rock Berm	☐ Brush Berms	☐ Compost Filter Berms and/or Socks
☐ Triangular Filter Dike	☐ Sediment Basins	☐ Stone Outlet Sediment Traps
☐ Sand Bag Berm	☐ Erosion Control Compost	

General Condition 21 - Category III BMPs required

Category III (Post-Construction TSS Control)

☐ Vegetative Filter Strips	☐ Wet Basins	☐ Mulch Filter Berms and/or Socks
☐ Retention/Irrigation	☐ Grassy Swales	☐ Compost Filter Berms and/or Socks
☐ Extended Detention Basin	☐ Vegetation-Lined Ditches	☐ Sand Filter Systems
☐ Constructed Wetlands	☐ Erosion Control Compost	☐ Sedimentation Chambers

II. Clean Water Act, Sections 401 and 404 Compliance - Continued:

4. ☒ *The Contractor's designated and qualified Contractor Responsible Person Environmental (CRPe) will monitor the project site daily to ensue compliance with SWP3 and TPDES General Permit TXR 150000. Daily Monitoring Reports shall be provided to TxDOT within 48 hours, in accordance with Item 506.3.1.*
5. ☐ *Other Project Specific Actions:*

III. Cultural Resources

Action Items Required : ☐ *No Action Required*

1. ☒ *Refer to the 2024 TxDOT Standard Specifications For Construction And Maintenance Of Highways, Streets, And Bridges, Item 7.7.1., 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.*
2. ☐ *Other Project Specific Actions:*
   - ☐

IV. Vegetation Resources

Action Items Required : ☐ *No Action Required*

1. ☒ *In accordance with the 2024 TxDOT Standard Specifications; Item 164 - Seeding For Erosion Control; provide and install temporary or permanent seeding for erosion control as shown on the plans or as directed by the Engineer for all seeding and replanting of right of way where possible. (Required for Urban Settings)*
2. ☐ *In accordance with Executive Order 13112 on invasive species and the Executive Memorandum on Beneficial Landscaping, native species of plants shall be used for all seeding and replanting of right of way where possible for rural roadways. (Required for Rural Settings)*
3. ☒ *Preserve vegetation where possible throughout the project and minimize clearing, grubbing and excavation within stream banks, bed and approach sections.*
4. ☐ *Other Project Specific Actions:*

Pharr District Contact No. 956-702-6100 *Revised 09/18/2024*

List of Abbreviations

BMP: Best Management Practice
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DSHS: Texas Department of State Health Services
FEMA: Federal Emergency Management Agency
FHWA: Federal Highway Administration
MOA: Memorandum of Agreement
MOU: Memorandum of Understanding
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MSAT: Mobile Source Air Toxic
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TPDES:Texas Pollutant Discharge Elimination System
TPWD: Texas Parks and Wildlife Department
TxDOT:Texas Department of Transportation
T&E: Threatened and Endangered Species
USACE:U.S. Army Corp of Engineers
USFWS:U.S. Fish and Wildlife Service

Texas Department of Transportation
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PHARR DISTRICT

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 1 OF 2

FED.RD. DIV.NO.	PROJECT NO.		HIGHWAY NO.
6			
STATE	DISTRICT	COUNTY	
TEXAS	PHR	CAMERON	SHEET NO.
CONTROL	SECTION	JOB	
			13

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V. Federal Listed, and Proposed Threatened and Endangered Species, Critical Habitat, State Listed Species, Candidate Species and Migratory Birds

Action Items Required : ☐ No Action Required

1. ☒ Under the Migratory Bird Treaty Act (MBTA) of 1918, codified at 16 U.S.C. 703-712 and as enforced by the USFWS, the proposed construction work will not remove active nests from bridges, trees, ground and other structures during migratory bird nesting season, (February 15th. through October 1st.). If the Contractor needs to perform work within the right of way during nesting season, a qualified Biologist shall conduct a survey to determine if active nests are present. If present, the Contractor shall maintain a buffer zone around the nest(s) as directed by the Biologist. The buffer zone will be protected from clearing and disturbance until such time as the Biologist has determined that the nest(s) is no longer active. Prior to the nesting season, existing bridges and culverts should be treated against migratory bird nesting by utilizing Bird Exclusion Methods. Bird Exclusion Methods should be monitored and maintained throughout the nesting season. Refer to Standard Bird Exclusion Details.

2. ☒ There is the potential for the presence of state-listed species & species of concern in the project area and state law prohibits the taking (incidental or otherwise) of state-listed species. Taking is defined as the collection, hooking, hunting, netting, shooting, or share by any means or devices. If any listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately.

3. ☐ Other Project Specific Actions:

VI. Hazardous Materials on Contamination Issues

Action Items Required : ☐ No Action Required

General (applies to all projects):

Comply with the Hazard Communication Act (HCA) 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, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the HCA.

Maintain an adequate supply of on-site spill response materials as indicated in the MSDS. In the event of a spill, take immediate action to mitigate the spill as indicated in the MSDS and in accordance with safe work practices. Contact the TxDOT Pharr District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

* Dead or distressed vegetation (identified as not normal)
* Trash piles, drums, canisters, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of contaminant substances

Any other evidence indicating possible hazardous materials or contamination discovered on site.

1. ☒ If potentially hazardous material and/or contaminated media (i.e.: soil, groundwater, surface water, sediment, building materials) are unexpectedly encountered during construction, assure that such materials and contamination are handled according to applicable federal and state regulations, cease work in the immediate area and contact the Engineer immediately.

VI. Hazardous Materials on Contamination Issues - Continued:

2. Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

   Yes ☐ No ☒

   If "No", then no further action required.
   If "Yes", then TxDOT is responsible for completing an asbestos assessment/inspection.

3. Are the results of the asbestos inspection positive (is asbestos present)?

   Yes ☐ No ☒

   If "Yes", then TxDOT must retain a Texas Department of State Health Services (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 to scheduled abatement activities and/or demolition.

   If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

4. ☒ The Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and an Asbestos Consultant in order to minimize construction delays and subsequent claims.

VII. Other Environmental Issues

Action Items Required : ☐ No Action Required

1. ☒ Noise

   Contractor shall make every reasonable effort to minimize construction noise through abatement measures such as work hour controls and proper maintenance of equipment mufflers.

2. ☒ Air

   Contractor shall practice common dust control techniques such as surface chemical treatment or watering of unpaved road surfaces and vehicle speed reduction shall be implemented to minimize and prevent airborne dust during construction.

   Contractor should minimize MSAT by utilizing measures to encourage use of EPA required cleaner diesel fuels, limits on idling, increase use of cleaner burning diesel engines, and other emission limitation techniques, as appropriate.

Pharr District Contact No. 956-702-6100 Revised 09/18/2024

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Texas Department of Transportation
PHARR DISTRICT

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 2 OF 2

FED.RD. DIV.NO.	PROJECT NO.		HIGHWAY NO.
6			
STATE	DISTRICT	COUNTY	
TEXAS	PHR	CAMERON	SHEET NO.
CONTROL	SECTION	JOB	
			14

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TPWD BMPs

Under Section 12.0011 of the Texas Parks and Wildlife Code, Texas Parks and Wildlife Department (TPWD) is charged with "providing recommendations that will protect fish and wildlife resources to local, state, and federal agencies that approve, permit, license, or construct developmental projects" and "providing information on fish and wildlife resources to any local, state, and federal agencies or private organizations that make decisions affecting those resources."

The purpose of this section is to provide beneficial management practices (BMP) that should be implemented during construction, and maintenance activities statewide for transportation projects with the goal of avoidance and minimization of impacts to natural resources. Statewide Standard BMP pertain to all fish and wildlife species, including state-listed species and other Species of Greatest Conservation Need (SGCN). Implementing the recommendations as outlined below will improve conservation of species and their habitat.

☒ General Design/Construction BMPs

- ☒ *Prior to start of construction, information will be provided to personnel of the potential for all state-listed threatened species or other SGCN to occur within the project area and should be advised of relevant rules and regulations to protect plants, fish, and wildlife.*
- ☒ *Contractor should avoid harming all wildlife species if encountered and allow them to safely leave the project site. Due diligence should be used to avoid killing or harming any wildlife species in the implementation of transportation projects.*
- ☒ *Contractors should install wildlife exclusion fencing and should examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities.*
- ☒ *Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas around wetlands and in riparian areas.*
- ☒ *Contractor should use woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.*
- ☒ *Project staging areas, stockpiles, temporary construction easements, and other project related sites should be situated in previously disturbed areas to avoid or minimize impacts to sensitive or unique habitats including intact native vegetation, floodplains, riparian corridors, wetlands, playa lakes, and habitat for wildlife species.*
- ☒ *When lighting is added, consider wildlife impacts from light pollution and incorporating dark-sky practices into design strategies. Minimize sky glow by focusing light downward, with full cutoff luminaries to avoid light emitting above the horizontal. The minimum amount of night-time lighting needed for safety and security should be used.*

☒ Vegetation BMPs

- ☒ *Minimize the amount of vegetation cleared. Removal of native vegetation, particularly mature native trees and shrubs should be avoided. Impacted vegetation should be replaced with in-kind on- site replacement /restoration of native vegetation.*
- ☒ *It is strongly recommended that trees greater than 12 inches in diameter at breast height (DBH) that are removed be replaced. TPWD's experience indicates that for ecologically effective replacement, a ratio of three trees for every one (3:1) lost should be provided to either on-site or off-site. Trees less than 12 inches DBH should be replaced at a 1:1 ratio.*
- ☒ *The use of any non-native vegetation in landscaping and revegetation is discouraged. Locally adapted native species should be used.*
- ☒ *The use of seed mix that contains seeds from only regional ecotype native species is recommended*

☐ Invasive Species BMPs

- ☐ *For all work in water bodies designated as "infested" or "positive" for invasive zebra (Dreissena polymorpha) OR quagga mussels (Dreissena bugensis) as well as waters downstream of these lakes, all machinery, equipment, vessels, or vehicles coming in contact with such waters should be cleaned prior to leaving the site to remove any mud, plants, organisms, or debris, water drained (if applicable), and dried completely before use in another water body to prevent the potential spread of invasive mussels.*
- ☐ *Care should be taken to prevent the spread of aquatic and terrestrial invasive plants during construction activities.*
- ☐ *Care should be taken to avoid the spread of aquatic invasive plants such as giant Salvinia (Salvinia molesta), common salvinia (Salvinia minima), hydrilla (Hydrilla verticillata), water hyacinth (Eichhornia spp.), Eurasian watermilfoil (Myriophyllum spicatum), water lettuce (Pistia stratiotes), and alligatorweed (Alternanthera philoxeroides) from infested water bodies into areas not currently infested. All machinery, equipment, vessels, boat trailers, or vehicles coming in contact with waters containing aquatic invasive plant species should be cleaned prior to leaving the site to remove all aquatic plant material and dried completely before use on another water body to prevent the potential spread of invasive plants. Removed plants should be transported for disposal in a secure manner to prevent dispersal.*
- ☐ *Only native or non-invasive plants should be planted. Care should be taken to avoid mowing invasive giant reed (Arundo donax), which spreads by fragmentation, and to clean equipment if inadvertently mowed to prevent spread. If using hay bales for sediment control, use locally grown weed-free hay to prevent the spread of invasive species. Leave the hay bales in place and allow them to break down, as this acts as mulch assisting in revegetation.*

☐ Stream Crossings BMPs

- ☐ *Riparian buffer zones should remain undisturbed.*

☐ Dewatering BMPs

- ☐ *Impact avoidance measures for aquatic organisms, including all native fish and freshwater mussel species, regardless of state-listing status, should be considered during project planning and construction activities.*

☐ Wildlife Crossing BMPs

- ☐ *Incorporate wildlife crossings with fencing, particularly in areas that bisect wildlife travel corridors or seasonal movement routes to avoid further habitat fragmentation and minimize wildlife-vehicle interactions.*

☐ Rare Plant BMPs

- ☐ *Avoid impacts and minimize unavoidable impacts. Plant locations should be protected with temporary barrier fencing and contractors should be instructed to avoid protected areas. Conducting construction outside of the growing season or after a plant has produced mature fruit is the preferred way to avoid/minimize impacts to SGCN plant populations. Staging areas, stockpiles, and other project related sites on TxDOT ROW should not impact SGCN plant populations. After construction begins, minimize herbicide use near SGCN plant populations (if possible, use hand-held spot sprayers, several meters from rare plants, on still or days with little wind).*

☐ Rare Plants BMPs (Continued)

- ☐ *If there are unintended impacts to SGCN populations, these impacts should be reported to TPWD Transportation Staff.*
- ☐ *During project period, conduct work during times of the year when plants are dormant and/or conditions minimize disturbance of the habitat.*

☐ Bird BMPs

- ☐ *Avoid vegetation clearing activities during the general bird nesting season, February 15th to October 1st to minimize adverse impacts to birds.*
- ☐ *Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.*
- ☐ *Minimize extended human presence near nesting birds during construction and maintenance activities. Protect sensitive habitat areas with temporary barriers or fencing to limit human foot- traffic and off-road vehicle use to alert and discourage contractors from causing any unintentional impacts.*
- ☐ *Minimize construction noise above ambient levels during general bird nesting season to minimize adverse impacts on birds.*
- ☐ *Minimize construction lighting during the general bird nesting season by scheduling work activities between dawn and dusk.*

☐ Rookeries BMPs

- ☐ *In general, nesting dates for herons and egrets range from early February to late August in Texas, depending on the species. Great blue herons (GBHE) (Ardea herodis) are usually the first to nest. When GBHE get disrupted from the nest and abandon nesting, then the other species of herons and egrets may not attempt to nest at the colony that year.*
- ☐ *If rookeries are encountered, avoid and minimize disturbance during nesting to protect rookery species and their habitat.*
- ☐ *Vegetation clearing in a primary buffer area of 300 meters (984 feet) from a rookery or heronry periphery should be avoided. Utilizing areas that have already been cleared within this buffer area may be acceptable depending on site-specific characteristics. Additionally, human foot-traffic or machinery use should not occur within this buffer area during the nesting season.*
- ☐ *Clearing activities or construction using heavy machinery in a secondary buffer area of 1000 meters (3281 feet) from the heronry periphery should be avoided during the breeding season (courting and nesting).*

Pharr District Contact No. 956-702-6100

Revised 09/18/2024

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USFWS:U.S. Fish and Wildlife Service

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PHARR DISTRICT

EPIC SHEET SUPPLEMENTALS

TPWD BMPs

SHEET 1 OF 3

FED.RD. DIV.NO.	PROJECT NO.		HIGHWAY NO.
6			
STATE	DISTRICT	COUNTY	
TEXAS	PHR	CAMERON	SHEET NO.
CONTROL	SECTION	JOB	
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☐ **Fish BMPs**

- ☐ *The following Fish BMP apply to projects for all fish species in waters of the state to minimize impacts to water quality and aquatic passage from transportation projects.*
- ☐ *For projects in waters of the state and work is adjacent to water: follow Water Quality and Stream Crossing BMPs.*
- ☐ *For projects in waters of the state and work is in the water: follow Water Quality, Stream Crossing, and Dewatering BMP.*

☐ **Aquatic Invertebrate BMPs**

- ☐ *For projects within the range of a SGCN or state-listed species and work is adjacent to water: Water Quality and Stream Crossing BMP*
- ☐ *For projects within the range of a SGCN or state-listed species and work is in the water: Water Quality, Stream Crossing, and Dewatering BMP.*
- ☐ *For spring-seep associated caddisflies (Cheumatopsyche morsei, Chimarra holzenthali, and Hydroptila ouachita): Avoid or minimize impacts to the natural riparian buffer along stream channel including native shrubs and trees.*

☐ **Crayfish BMP**

- ☐ *For projects within the range of a SGCN or state-listed species and work is adjacent to water: Water Quality and Stream Crossing BMP.*
- ☐ *For projects within the range of a SGCN or state-listed species and work is in the water: Water Quality, Stream Crossing, and Dewatering BMP.*
- ☐ *Avoid or minimize impacts to the natural riparian buffer that provides terrestrial and aquatic plant matter for the diet of most crayfish species.*

☐ **Freshwater Mussel BMP**

- ☐ *In addition to Water Quality and Stream Crossing BMP, follow the most recent, TPWD TxDOT Annual Work Plan for Pre-Construction Surveys, Aquatic Resources Relocations, and Other Best Management Practices to Avoid, Minimize, and Mitigate Impacts to Freshwater Resources.*
- ☐ *When work is adjacent to the water: Water Quality BMP implemented as part of the Texas Commission on Environmental Quality (TCEQ) Stormwater Pollution Prevention Plan (SWPPP) for a construction general permit or any conditions of the 401 Water Quality Certification for the project will be implemented.*

☐ **Insect Pollinator BMP**

- ☐ *Deep soil disturbances, such as, tilling or deep disking in areas that host aggregations of ground- nesting bees should be avoided. Tilling and disking also may promote the invasion or germination of non-native plants. Different species of native ground-nesting bees prefer different soil conditions, although research suggests that many ground nesting bees prefer sandy, loamy sand or sandy loam soils. In areas with these soil types consider leaving open patches of soil.*
- ☐ *Allow dead trees to stand (so long as they do not pose a risk to property or people) and protect shrubs and herbaceous plants with pithy or hollow stems (e.g., cane fruits, sumac, elderberry), as these provide nesting habitat for tunnel-nesting native bees.*
- ☐ *Retain dead or dying branches whenever it is safe and practical at the edges of the ROW. Wood- boring beetle larvae often fill dead trees and branches with narrow tunnels into which tunnel- nesting bees will establish nests. Additionally, bumble bees may choose to nest in wood piles.*
- ☐ *Retain rotting logs at edges of the ROW where some bee species may burrow tunnels in which to nest.*

☐ **Insect Pollinator BMP (Continued)**

- ☐ *Protect sloped or well-drained ground sites where plants are sparse and direct access to soil is available. These are the areas where ground-nesting bees may dig nests. Turning the soil destroys all ground nests that are present at that depth and hinders the emergence of bees that are nesting deeper in the ground.*
- ☐ *Protect grassy thickets, or other areas of dense, low cover from mowing or other disturbance. These are the sites where bumble bees might find the nest cavities they need, as well as annual and perennial wildflowers that can provide important food resources.*
- ☐ *Where available and economical, native plants and seed should be procured from local eco-type providers. Seed mixes should be diverse and include as many ecoregion natives as possible ensuring full season floral resources. Species by Texas ecoregion can be found in the Texas Management Recommendations for Native Insect Pollinators in Texas document: https://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_w7000_1813.pdf*
- ☐ *Planting at least three different native flowering plants within each of three blooming periods are recommended (spring, summer, early fall) in high rainfall regions of Texas. In drier regions of the state, a target of three native flowering plants within each of two blooming periods can be used.*

☐ **Small Mammal BMP**

For Coues' rice rat (Oryzomys couesi aquaticus):

- ☐ *Minimize impacts to wetland, resaca, oxbow Conversion of property containing cave or cliff features to transportation purposes should be avoided.lake, and marsh habitats Water Quality BMP*
- ☐

☐ **Fossorial Mammal BMP**

- ☐ *When a construction zone is adjacent to active BTPD burrows or pocket gopher mounds, erect barriers to discourage individuals moving through or into the construction area.*
- ☐ *When seeding or revegetation is planned in an area adjacent to BTPD burrows or pocket gopher mounds, a vegetative barrier should be considered in the planting to discourage dispersal into the ROW.*

☐ **Bat BMP**

- ☐ *For activities that have the potential to impact structures, cliffs or caves, or trees; a qualified biologist will perform a habitat assessment and occupancy survey of the feature(s) with roost potential as early in the planning process as possible or within one year before project letting.*
- ☐ *For roosts where occupancy is strongly suspected but unconfirmed during the initial survey, revisit feature(s) at most four weeks prior to scheduled disturbance to confirm absence of bats.*
- ☐ *If bats are present or recent signs of occupation (i.e., piles of guano, distinct musky odor, or staining and rub marks at potential entry points) are observed, take appropriate measures to ensure that bats are not harmed, such as implementing non-lethal exclusion activities or timing or phasing of construction.*
- ☐ *Exclusion devices can be installed by a qualified individual between September 1 and March 31. Exclusion devices should be used for a minimum of seven days when minimum nighttime temperatures are Prior to exclusion, ensure that alternate roosting habitat is available in the immediate area. If no suitable roosting habitat is available, F loss of an occupied roost. If alternate roost sites are not provided, bats may seek shelter in other inappropriate sites, such as buildings, in the surrounding area.*

☐ **Bat BMP (Continued)**

- ☐ *If feature(s) used by bats are removed as a result of construction, replacement structures should incorporate bat-friendly design or artificial roosts should be constructed to replace these features.*
- ☐ *Avoid unnecessary removal of dead fronds on native and ornamental palm trees in south Texas (Cameron, Hidalgo, Willacy, Kenedy, Brooks, Kleberg, Nueces, and San Patricio counties) from April 1 through October 31. If removal of dead fronds is necessary at other times of the year, limit frond removal to extended warms periods (nighttime temperatures so bats can move away from the disturbance and find new roosts.*
- ☐ *Large hollow trees, snags (dead standing trees), and trees with shaggy bark should be surveyed for colonies and, if found, should not be disturbed until the bats are no longer occupying these features. Post-occupancy surveys should be conducted by a qualified biologist prior to tree removal from the landscape.*
- ☐ *Retain mature, large diameter hardwood forest species and native/ornamental palm trees.*
- ☐ *In all instances, avoid harm or death to bats. Bats should only be handled as a last resort and after communication with TPWD.*

☒ **Aquatic Amphibian and Reptile BMP**

For projects within existing right-of-way (ROW) when work is in water or will permanently impact a water feature and potential habitat exists for the target species complete the following:

- ☒ *Minimize impacts to wetlands, temporary and permanent open water features, including depressions, and riverine habitats.*
- ☒ *Maintain the existing hydrologic regime and any connections between wetlands and other aquatic features.*
- ☒ *Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.*
- ☒ *Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas around wetlands and in riparian areas. If erosion control blankets or mats will be used, the product should not contain netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.*
- ☒ *Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features.*
- ☒ *When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and refugia/overwinter sites (e.g., brush and debris piles, crayfish burrows, aquatic logjams, and leaf packs).*

Pharr District Contact No. 956-702-6100

Revised 09/18/2024

List of Abbreviations

BMP: Best Management Practice
CGP: Construction General Permit
CRPe: Contractor Responsible Person Environmental
DSHS: Texas Department of State Health Services
FEMA: Federal Emergency Management Agency
FHWA: Federal Highway Administration
MOA: Memorandum of Agreement
MOU: Memorandum of Understanding
MS4: Municipal Separate Stormwater Sewer System
MSAT: Mobile Source Air Toxic
MBTA: Migratory Bird Treaty Act
NOI: Notice of Intent
NOT: Notice of Termination
NWP: Nationwide Permit
PCN: Pre-Construction Notification
PSL: Project Specific Location
SPCC: Spill Prevention Control and Countermeasure
SWP3: Storm Water Pollution Prevention Plan
TCEQ: Texas Commission on Environmental Quality
THC: Texas Historical Commission
TPDES:Texas Pollutant Discharge Elimination System
TPWD: Texas Parks and Wildlife Department
TxDOT:Texas Department of Transportation
T&E: Threatened and Endangered Species
USACE:U.S. Army Corp of Engineers
USFWS:U.S. Fish and Wildlife Service

Texas Department of Transportation
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PHARR DISTRICT

EPIC SHEET SUPPLEMENTALS

TPWD BMPs

SHEET 2 OF 3

FED.RD. DIV.NO.	PROJECT NO.		HIGHWAY NO.
6			
STATE	DISTRICT	COUNTY	
TEXAS	PHR	CAMERON	SHEET NO.
CONTROL	SECTION	JOB	
			16

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☒ ***Aquatic Amphibian and Reptile BMP (Continued)***

☒ *If gutters and curbs are part of the roadway design, install gutters that do not include the side box inlet and include sloped (i.e., mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.*

For projects that require acquisition of additional ROW and work within that new ROW is in water or will permanently impact a water feature, implement BMP for projects within existing ROW above plus those below:

☐ *For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80 feet long in each direction, or whichever is the lesser of the two.*

☐ *For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs.*

☐ *When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Biotechnical streambank stabilization methods using live native vegetation, or a combination of vegetative and structural materials should be used.*

☒ ***Terrestrial Amphibian and Reptile BMP***

☒ *For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Visually inspect excavation areas for trapped wildlife prior to backfilling*

☒ *Avoid or minimize disturbing or removing cover objects, such as downed trees, rotting stumps, brush piles, and leaf litter. If avoidance or minimization is not practicable, consider removing cover objects prior to the start of the project and replace them at project completion.*

☒ *Examine heavy equipment stored on site before use, particularly after rain events when reptile and amphibian movements occur more often, to ensure use will not harm individuals that might be seeking temporary refuge.*

☒ *Due to increased activity (mating) of reptiles and amphibian during the spring, construction activities like clearing or grading should attempt to be scheduled outside of the spring (March-May) season. Also, timing ground disturbing activities before October when reptiles and amphibians become less active and may be using burrows in the project area is also encouraged.*

☒ *If Texas tortoises (Gopherus berlandieri) or box turtles (Terrepene spp.) are present in a project area, they should be removed from the area and relocated between 100 and 200 meters from the project area. After removal of the individuals, the area that will be disturbed during active construction and project specific locations should be fenced off to exclude reentry by turtles, tortoises, and other reptiles. The exclusion fence should be constructed and maintained as follows:*

- *The exclusion fence should be constructed with metal flashing or drift fence material.*
- *Rolled erosion control mesh material should not be used.*
- *The exclusion fence should be buried at least 6 inches deep and be at least 24 inches high.*
- *The exclusion fence should be maintained for the life of the project and only removed after the construction is completed and the disturbed site has been revegetated.*

☒ ***Terrestrial Amphibian and Reptile BMP (Continued)***

☒ *After project is complete, revegetate disturbed areas with an appropriate locally sourced native seed mix. If erosion control blankets or mats will be used, the product should not contain nylon netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.*

☒ ***Black-spotted newt/Mexican Burrowing toad/ Mexican treefrog/ Strecker's chorus frog/White-lipped frog/Woodhouse's toad***

☒ *Aquatic Amphibian and Reptile BMP*
☒ *Terrestrial Amphibian and Reptile BMP*
☒ *Water Quality BMP*
☒ *Vegetation BMP*

☒ ***Sheep Frog***

☒ *Minimize disturbance to burrows or downed woody debris*
☒ *Aquatic Amphibian and Reptile BMP*
☒ *Terrestrial Amphibian and Reptile BMP*
☒ *Water Quality BMP*
☒ *Vegetation BMP*

☒ ***South Texas Siren (Large Form)***

☒ *Minimize impacts to warm, shallow waters with vegetative cover such as ponds and ditches*
☒ *Aquatic Amphibian and Reptile BMP*
☒ *Water Quality BMP*

☒ ***Black-striped snake/ Eastern box turtle/Northern cat-eyed snake/Plateau spot-tailed earless lizard/ Reticulate collared lizard/ Slender glass lizard/ Speckler racer/Tamaulipan spot-tailed earless lizard/ Texas Indigo snake/ Western box turtle/Western hognose snake/Western massasauga***

☒ *Terrestrial Amphibian and Reptile BMP*
☒ *Vegetation BMP*

☐ ***Rio Grande River Cooter***

☐ *Aquatic Amphibian and Reptile BMP*
☐ *Water Quality BMP*

☐ ***Texas Horned Lizard***

☐ *Avoid harvester ant mounds in the selection of Project Specific Locations (PSLs).*
Terrestrial Amphibian and Reptile BMP
☐ *Vegetation BMP*
☐

☐ ***Texas Tortoise***

☐ *Utility trenches should be covered overnight or visually inspected before filling to avoid burial of the species*
☐ *Terrestrial Amphibian and Reptile BMP*
☐ *Vegetation BMP*

OTHER PERTINENT INFORMATION

☐ ***Trifold Available***

☐ *Ocelot information*
☐ *Pelican information*
☐ *Ashy dogweed*

☐ ***Stockcards Available***

☐ *Mitigatory Bird Treaty Act*
☐ *Texas Tortoise*
☐ *Harvester Ants and Horn Lizards*

Pharr District Contact No. 956-702-6100

Revised 09/18/2024

List of Abbreviations

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USFWS:U.S. Fish and Wildlife Service

Texas Department of Transportation
PHARR DISTRICT

EPIC SHEET SUPPLEMENTALS

TPWD BMPs

SHEET 3 OF 3

FED.RD. DIV.NO.	PROJECT NO.		HIGHWAY NO.
6			
STATE	DISTRICT	COUNTY	
TEXAS	PHR	CAMERON	SHEET NO.
CONTROL	SECTION	JOB	
			17

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STORMWATER POLLUTION PREVENTION PLAN (SWP3):

This SWP3 has been developed in accordance with the TPDES Construction General Permit TXR150000 (CGP). The Texas Department of Transportation (TxDOT) ensures that project specifications include adequate best management practices (BMPs) for this project.

For all projects with soil disturbing activity and for projects that have Environmental, Permits, Issues, and Commitments (EPICs) dependent on stormwater controls and water quality measures TxDOT will maintain a SWP3 with all pertinent records, correspondence, environmental documents, etc. at the project field office, Area Office, or electronically.

This SWP3 is consistent with requirements specified in applicable stormwater plans and the projects environmental permits, issues, and commitments (EPICs). A copy of the CGP is included in Attachment 2.12 of the SWP3 binder.

1.0 SITE/PROJECT DESCRIPTION

1.1 PROJECT CONTROL SECTION JOB (CSJ):

N/A

1.2 PROJECT LIMITS:

From: DODSON ST

To: EMERALD SEA

1.3 PROJECT COORDINATES:

BEGIN: (Lat) 26.0714239° ,(Long) -097.1592449°

END: (Lat) 26.0682916° ,(Long) -097.1585127°

1.4 TOTAL PROJECT AREA (Acres): 7.0

1.5 TOTAL AREA TO BE DISTURBED (Acres): 6.5

1.6 NATURE OF CONSTRUCTION ACTIVITY:

CONSTRUCTION OF RV LOTS

1.7 MAJOR SOIL TYPES:

Soil Type	Description
GALVESTON FINE SAND	SOMEWHAT EXCESSIVELY DRAINED, VERY LOW RUNOFF W/ HIGH TO VERY HIGH CAPACITY

1.8 PROJECT SPECIFIC LOCATIONS (PSLs):

PSLs must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. PSLs may be identified during preconstruction meetings or during the construction process. Please choose from the options below:

- ☐ PSLs determined during preconstruction meeting
- ☐ PSLs determined during construction
- ☒ No PSLs planned for construction

Type	Sheet #s
N/A	

All off-ROW PSLs required by the Contractor are the Contractor's responsibility. The Contractor shall secure all permits required by local, state, federal laws for off-ROW PSLs. The contractor shall provide diagrams, areas of disturbance, acreage, and BMPs for all off-ROW PSLs within one mile of the project.

1.9 CONSTRUCTION ACTIVITIES:

(Use the following list as a starting point when developing the Construction Activity Schedule and Ceasing Record in Attachment 2.5.)

- ☒ Mobilization
- ☒ Install sediment and erosion controls
- ☒ Blade existing topsoil into windrows, prep ROW, clear and grub
- ☒ Remove existing pavement
- ☒ Grading operations, excavation, and embankment
- ☒ Excavate and prepare subgrade for proposed pavement widening
- ☐ Remove existing culverts, safety end treatments (SETs)
- ☐ Remove existing metal beam guard fence (MBGF), bridge rail
- ☒ Install proposed pavement per plans
- ☐ Install culverts, culvert extensions, SETs
- ☐ Install mow strip, MBGF, bridge rail
- ☒ Place flex base
- ☒ Rework slopes, grade ditches
- ☐ Blade windrowed material back across slopes
- ☐ Revegetation of unpaved areas
- ☒ Achieve site stabilization and remove sediment and erosion control measures
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.10 POTENTIAL POLLUTANTS AND SOURCES:

- ☐ Sediment laden stormwater from stormwater conveyance over disturbed area
- ☒ Fuels, oils, and lubricants from construction vehicles, equipment, and storage
- ☒ Solvents, paints, adhesives, etc. from various construction activities
- ☐ Transported soils from offsite vehicle tracking
- ☒ Construction debris and waste from various construction activities
- ☐ Contaminated water from excavation or dewatering pump-out water
- ☒ Sanitary waste from onsite restroom facilities
- ☒ Trash from various construction activities/receptacles
- ☒ Long-term stockpiles of material and waste
- ☒ Discharges from concrete washout activities, runoff from concrete cutting activities, and other concrete related activities.
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.11 RECEIVING WATERS:

Receiving waters must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. Include Segment # for receiving waters.

Tributaries	Classified Waterbody
	EXISTING ROADSIDE DITCHES
	LAGUNA MADRE

* Add (*) for impaired waterbodies with pollutant in ().

1.12 ROLES AND RESPONSIBILITIES: TxDOT

- ☒ Development of plans and specifications
- ☒ Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- ☒ Post Construction Site Notice
- ☒ Submit NOI/CSN to local MS4
- ☒ Perform SWP3 inspections
- ☒ Maintain SWP3 records and update to reflect daily operations
- ☒ Complete and submit Notice of Termination to TCEQ
- ☒ Maintain SWP3 records for 3 years
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.13 ROLES AND RESPONSIBILITIES: CONTRACTOR

- ☒ Day To Day Operational Control
- ☒ Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- ☒ Post Construction Site Notice
- ☒ Submit NOI/CSN to local MS4
- ☒ Maintain schedule of major construction activities
- ☒ Install, maintain and modify BMPs
- ☒ Complete and submit Notice of Termination to TCEQ
- ☒ Maintain SWP3 records for 3 years
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.14 LOCAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OPERATOR COORDINATION:

MS4 Entity
LAGUNA MADRE STORM

STATE OF TEXAS
CHRISTOPHER R. RODRIGUEZ
107692
LICENSED PROFESSIONAL ENGINEER
06/19/2025

STORMWATER POLLUTION PREVENTION PLAN (SWP3)

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July 2023 Sheet 1 of 2

Texas Department of Transportation

FED. RD. DIV. NO.	PROJECT NO.	SHEET NO.
6		18

STATE	STATE DIST.	COUNTY	
TEXAS	PHARR	CAMERON	
CONT.	SECT.	JOB	HIGHWAY NO.

STORMWATER POLLUTION PREVENTION PLAN (SWP3):

2.0 BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS, INSPECTION, AND MAINTENANCE

The Contractor shall be the responsible party for implementing the BMPs described herein and for complying with the SWP3 for control of erosion and sedimentation during day-to-day operations. The Contractor shall implement changes to this SWP3 approved by TxDOT within the times specified in this SWP3 or the CGP.

2.1 EROSION CONTROL AND SOIL STABILIZATION BMPs:

T / P

- ☐ ☐ Protection of Existing Vegetation
- ☐ ☐ Vegetated Buffer Zones
- ☐ ☐ Soil Retention Blankets
- ☐ ☐ Geotextiles
- ☐ ☐ Mulching/ Hydromulching
- ☐ ☐ Soil Surface Treatments
- ☐ ☐ Temporary Seeding
- ☐ ☐ Permanent Planting, Sodding or Seeding
- ☐ ☐ Biodegradable Erosion Control Logs
- ☐ ☐ Rock Filter Dams/ Rock Check Dams
- ☐ ☐ Vertical Tracking
- ☐ ☐ Interceptor Swale
- ☐ ☒ Riprap
- ☐ ☐ Diversion Dike
- ☐ ☐ Temporary Pipe Slope Drain
- ☐ ☐ Embankment for Erosion Control
- ☐ ☐ Paved Flumes
- ☐ ☐ Other: _____
- ☐ ☐ Other: _____
- ☐ ☐ Other: _____
- ☐ ☐ Other: _____

2.2 SEDIMENT CONTROL BMPs:

T / P

- ☐ ☐ Biodegradable Erosion Control Logs
- ☐ ☐ Dewatering Controls
- ☐ ☐ Inlet Protection
- ☐ ☐ Rock Filter Dams/ Rock Check Dams
- ☐ ☐ Sandbag Berms
- ☒ ☐ Sediment Control Fence
- ☒ ☐ Stabilized Construction Exit
- ☐ ☐ Floating Turbidity Barrier
- ☐ ☐ Vegetated Buffer Zones
- ☐ ☐ Vegetated Filter Strips
- ☐ ☐ Other: _____
- ☐ ☐ Other: _____
- ☐ ☐ Other: _____
- ☐ ☐ Other: _____

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

Sediment control BMPs requiring design capacity calculations (See SWP3 Attachment 1.3.):

T / P

- ☒ ☐ Sediment Trap
  - ☐ Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
  - ☐ 3,600 cubic feet of storage per acre drained
- ☐ ☐ Sedimentation Basin
  - ☒ Not required (<10 acres disturbed)
  - ☐ Required (>10 acres) and implemented.
    - ☐ Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
    - ☐ 3,600 cubic feet of storage per acre drained
  - ☐ Required (>10 acres), but not feasible due to:
    - ☐ Available area/Site geometry
    - ☐ Site slope/Drainage patterns
    - ☐ Site soils/Geotechnical factors
    - ☐ Public safety
    - ☐ Other: _____

2.3 PERMANENT CONTROLS:

(Coordinate post-construction BMPs with appropriate TxDOT maintenance sections.)

BMPs To Be Left In Place Post Construction:

Type	Stationing	
	From	To

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.4 OFFSITE VEHICLE TRACKING CONTROLS:

- ☒ Excess dirt/mud on road removed daily
- ☐ Haul roads dampened for dust control
- ☒ Loaded haul trucks to be covered with tarpaulin
- ☒ Stabilized construction exit
- ☐ Daily street sweeping
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

2.5 POLLUTION PREVENTION MEASURES:

- ☒ Chemical Management
- ☒ Concrete and Materials Waste Management
- ☒ Debris and Trash Management
- ☒ Dust Control
- ☒ Sanitary Facilities
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

2.6 VEGETATED BUFFER ZONES:

Natural vegetated buffers shall be maintained as feasible to protect adjacent surface waters. If vegetated natural buffer zones are not feasible due to site geometry, the appropriate additional sediment control measures have been incorporated into this SWP3.

Type	Stationing	
	From	To
N/A		

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.7 ALLOWABLE NON-STORMWATER DISCHARGES:

- ☒ Fire hydrant flushings
- ☐ Irrigation drainage
- ☒ Pavement washwater (where spills or leaks have not occurred, and detergents are not used)
- ☒ Potable water sources
- ☐ Springs
- ☐ Uncontaminated groundwater
- ☒ Water used to wash vehicles or control dust
- ☒ Other allowable non-stormwater discharges as allowed by TPDES GP TXR150000.

2.8 DEWATERING:

Dewatering discharges of accumulated stormwater, groundwater, and surface water including discharges from dewatering of trenches, excavations, foundations, vaults, and other points of accumulation are prohibited unless managed by appropriate controls to prevent and minimize the offsite discharge of sediment and other pollutants.

2.9 INSPECTIONS:

All disturbed areas and erosion and sediment control devices shall be inspected at least once every seven (7) days. Inspections shall be performed by TxDOT as indicated on the Field Inspection and Maintenance Report Form 2118 and retained in Attachment 2.5 of this SWP3.

When dewatering activities are present, a daily inspection will be conducted once per day during those activities and documented in accordance with CGP and TxDOT requirements.

2.10 MAINTENANCE:

Control measures shall be properly installed according to specifications. If it is determined that a BMP or control measure is not operating effectively, maintenance must be accomplished as soon as possible and before the next anticipated rain event, but in no case later than 7 calendar days after being able to access the site. Maintenance shall be performed by the Contractor as indicated on the Field Inspection and Maintenance Report Form 2118 and retained in Attachment 2.5 of this SWP3.

STATE OF TEXAS
CHRISTOPHER R. RODRIGUEZ
107692
LICENSED PROFESSIONAL ENGINEER
06/19/2025

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STORMWATER POLLUTION PREVENTION PLAN (SWP3)

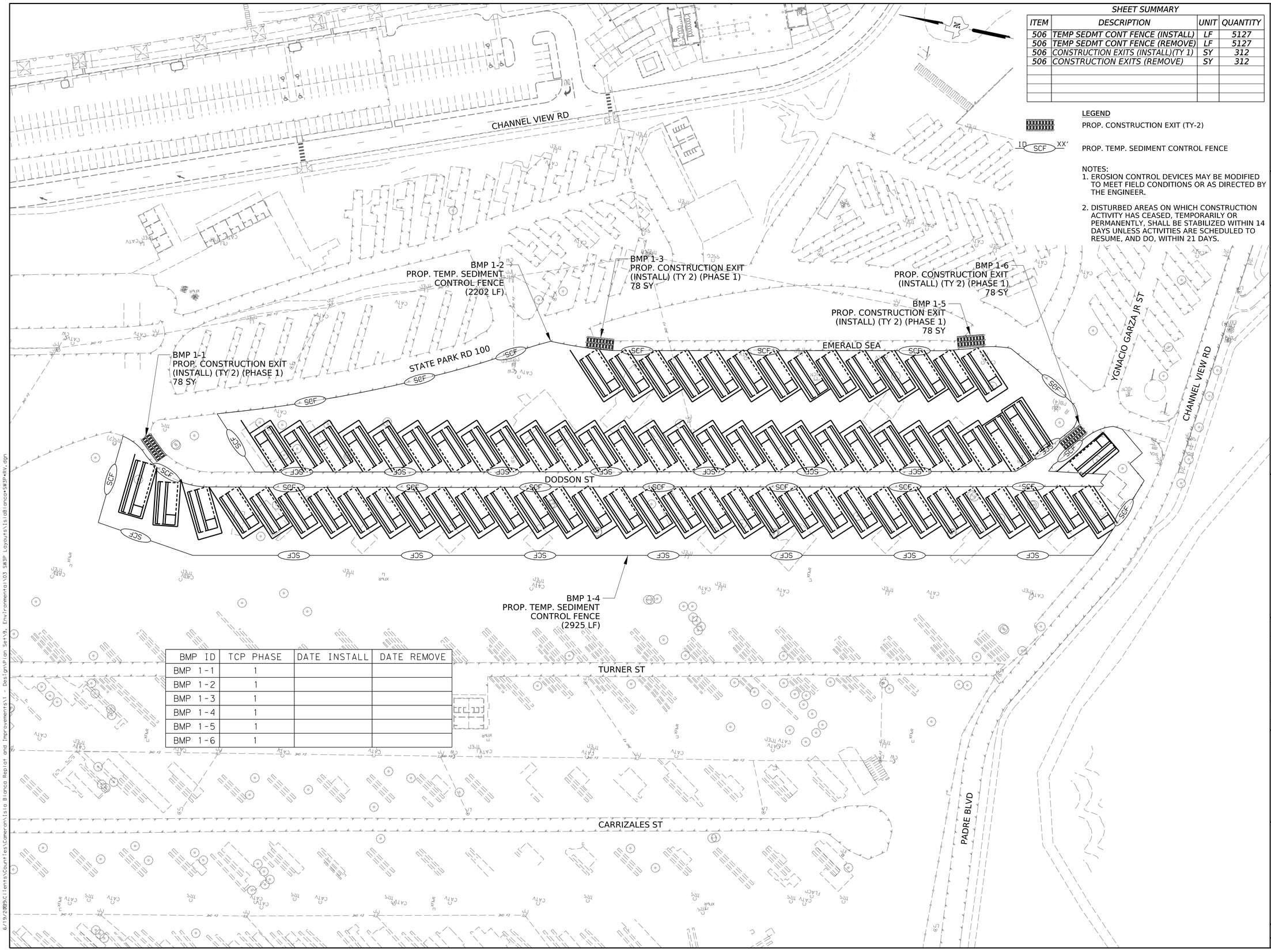
July 2023 Sheet 2 of 2

Texas Department of Transportation

FED. RD. DIV. NO.	PROJECT NO.	SHEET NO.
6		19

STATE	STATE DIST.	COUNTY	
TEXAS	PHARR	CAMERON	
CONT.	SECT.	JOB	HIGHWAY NO.

RFP # 250502



SHEET SUMMARY

ITEM	DESCRIPTION	UNIT	QUANTITY
506	TEMP SEDMT CONT FENCE (INSTALL)	LF	5127
506	TEMP SEDMT CONT FENCE (REMOVE)	LF	5127
506	CONSTRUCTION EXITS (INSTALL)(TY 1)	SY	312
506	CONSTRUCTION EXITS (REMOVE)	SY	312

LEGEND

PROP. CONSTRUCTION EXIT (TY-2)

ID SCF XX'

PROP. TEMP. SEDIMENT CONTROL FENCE

NOTES:
1. EROSION CONTROL DEVICES MAY BE MODIFIED TO MEET FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
2. DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED, TEMPORARILY OR PERMANENTLY, SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITIES ARE SCHEDULED TO RESUME, AND DO, WITHIN 21 DAYS.

BMP ID	TCP PHASE	DATE INSTALL	DATE REMOVE
BMP 1-1	1		
BMP 1-2	1		
BMP 1-3	1		
BMP 1-4	1		
BMP 1-5	1		
BMP 1-6	1		

GDJ Engineering
2805 Fountain Plaza Blvd. Ste A Edinburg, TX Ph: (956)600-2025 | Firm No. 20061
Planning & Transportation Environmental Drainage Construction Water Wastewater

CCDOT

CAMERON COUNTY Parks and Recreation

STATE OF TEXAS
CHRISTOPHER R. RODRIGUEZ
107692
LICENSED PROFESSIONAL ENGINEER
06/19/2025

CAMERON COUNTY
CLIENT

PROJECT NUMBER

6/19/2025
DATE

GDJ ENGINEERING
DRAWN BY

GDJ ENGINEERING
CHECKED BY

REVISIONS

No.	Description	Date

ISLA BLANCA PARK RV SW3P LAYOUT

SCALE: 1"=50'

SHEET 1 OF 1

SHEET NO. 20

6/19/2025\Clients\Counties\Cameron\Isla Blanca Repair and Improvements\1 - Design\Plan Set\9- Environmental\03 SW3P Layouts\IslaBlanca-SW3P-RV.dgn

TYPICAL LEGEND/SYMBOLS

LINETYPES

PLAN VIEW

S	WASTEWATER LINE
W	WATERLINE
G	GAS LINE
	STORMWATER PIPE
RCP	
PIPE	PIPE LINE
CABLE	CABLE LINE
FO	FIBER OPTIC
FM	FORCE MAIN
T	TELEPHONE LINE
OHP	OVERHEAD POWER
E	ELECTRIC LINE
TOP	TOP OF BANK/SLOPE
BOS	BOTTOM OF SLOPE
EOW	EDGE OF WATER
	CL of DITCH
8.0	CONTOURS
	BRUSHLINE
	EDGE OF PAVEMENT
	WOOD FENCE
X	FENCE
	GUARD RAIL
	GATE
PL	PROPERTY LINE
UE	UTILITY EASEMENT
DE	DRAINAGE EASEMENT
YR	YARD REQUIREMENT
BL	BUILDING LINE
TCE	TEMPORARY CONSTRUCTION EASEMENT

PLAN VIEW CONTINUED

	TRACKS
ROW	RIGHT OF WAY
	BUILDING
	CASING

PROFILE VIEW

NG	NATURAL GROUND
ROW LT	NG @ ROW LT
ROW RT	NG @ ROW RT
TOC LT	TOP OF CURB LEFT
TOC RT	TOP OF CURB RIGHT
HGL	HYDRAULIC GRADE LINE
EOP LT	EDGE OF PAVEMENT LEFT
EOP RT	EDGE OF PAVEMENT RIGHT

PIPE	PIPE 12" AND SMALLER
	PIPE LARGER THAN 12"

HATCH PATTERNS

EXISTING (PLAN)

- EXIST CONC

PROPOSED (PLAN)

- CONCRETE PAVEMENT
- BASE PAVEMENT
- CRUSHED GRANITE
- LANDSCAPED AREA
- STONE PAVING
- ARTIFICIAL GRASS
- CONCRETE PAVING
- LIMITS OF DEMO TO BE REMOVED
- DEMOLITION

SECTION/PROFILE

- ASPHALT PAVEMENT
- LIMESTONE BASE
- ASPHALT TREATED BASE
- COMPACTED SUBGRADE
- CONCRETE PAVEMENT
- EXISTING GRADE

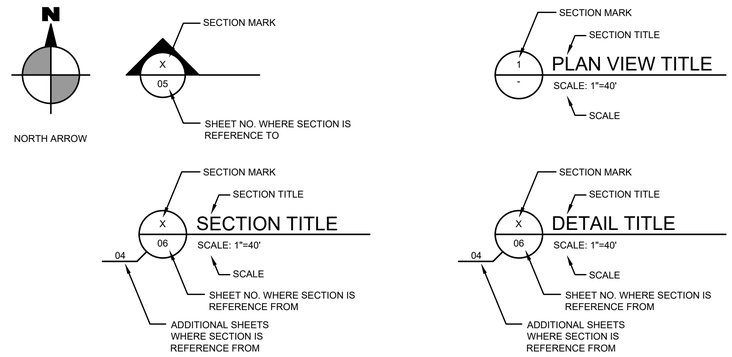
SYMBOLS

BENCHMARK POINT	SANITARY SEWER MH	MAIL BOX	
CONTROL POINT	CLEANOUT	GUARD POST/BOLLARD	
MONUMENT/POST	STORM WATER MH	GUY ANCHOR	
CORNER	GRATE INLET	POWER POLE	
PK NAIL	GAS VALVE	LIGHT POLE	
BORE HOLE	GAS METER		
FIRE HYDRANT	ELECTRIC MH	PHONE BOX JUNCTION BOX	
WATER VALVE	TELEPHONE MH	SHRUB	
AIR RELEASE VALVE	ANTENNAE	TREE	
WATER METER	SIGN		
WATER FAUCET	PIPELINE MARKER	× 11.50	SPOT ELEVATION
WATER VAULT	MONITORING WELL		

GENERAL ABBREVIATIONS

	@	AT (MEASUREMENT)
A	APPROX	APPROXIMATE
	ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
	ASSY	ASSEMBLY
	AVG	AVERAGE
	AIP	ABANDONED IN PLACE
B	B-B	BACK TO BACK OF CURB
	BFV	BUTTERFLY VALVE
	BLDG	BUILDING
C	CC	CENTER OF CURVATURE, CENTER TO CENTER
	CF	CUBIC FEET
	CFM	CUBIC FEET PER MINUTE
	CFS	CUBIC FEET PER SECOND
	C&G	CURB AND GUTTER
	CIP	CAST IRON PIPE
	CIPP	CURED IN PLACE PIPE
	CJ	CONTROL JOINT
	CL or C L	CENTER LINE
	CLR	CLEAR
	CMP	CORRUGATED METAL PIPE
	CO	CLEAN OUT
	CONC	CONCRETE
	CRS	COURSE
	CY	CUBIC YARD
D	DB	DUCT BANK
	DEG or °	DEGREE
	DIA or Ø	DIAMETER
	DIM	DIMENSION
	DIP	DUCTILE IRON PIPE
	DI	DUCTILE IRON
	D/S	DOWNSTREAM
	DWG(S)	DRAWING(S)
E	EAE	ENGINEER APPROVED EQUAL
	EFF	EFFLUENT
	EFM	EFFLUENT FORCE MAIN
	EL	ELEVATION
	EQ SP	EQUALLY SPACED
	EST	ESTIMATED
	EXIST or EX	EXISTING
F	FG	FINISH GRADE
	FH	FIRE HYDRANT
	FL	FLOW LINE ELEVATION
	FM	FORCEMAIN
	FT or '	FOOT, FEET
G	GA	GAUGE or GAGE
	GAL	GALLONS
	GALV	GALVANIZE(D) GALVANIZED
	GB	GRADE BREAK
	GPM	GALLONS PER MINUTE
H	HDG	HOT DIPPED GALVANIZED
	HDPE	HIGH DENSITY POLYETHYLENE
	HGL	HYDRAULIC GRADE LINE
	HMACP	HOT MIX ASPHALT CONCRETE PAVEMENT
	HP	HORSEPOWER, HIGH PRESSURE, HIGH POINT
	HWL	HIGH WATER LEVEL
I	ID	INSIDE DIAMETER, INSIDE DIMENSION
	IN or "	INCHES
	INV	INVERT
	IPS	IRON PIPE SIZE
J	JB	JUNCTION BOX
L	LB(S)	POUNDS
	LF	LINEAR FEET
	LG	LONG
	LS	LIFT STATION
	LT	LEFT
	LWL	LOW WATER LEVEL
M	MAX	MAXIMUM
	MFR	MANUFACTURER
	MGD	MILLION GALLONS PER DAY
	MH	MANHOLE
	M.E.	MATCH EXISTING
	MIN	MINIMUM
	MFR	MANUFACTURE
	MISC	MISCELLANEOUS
	MJ	MECHANICAL JOINT
N	N	NORTH
	NG	NATURAL GROUND
	NO, #	NUMBER
	NTS	NOT TO SCALE
O	OCEW	ON CENTER EACH WAY
	OCST	ONE COURSE SURFACE TREATMENT
	OD	OUTSIDE DIAMETER, OUTSIDE DIMENSION
	OHP	OVERHEAD POWER
P	PC	POINT OF CURVATURE
	PI	POINT OF INTERSECTION
	PL	PROPERTY LINE
	PP	POWER POLE
	PS	PUMP STATION
	PSI	POUNDS PER SQUARE INCH
	PT	POINT OF TANGENCY
	PVC	POLYVINYL CHLORIDE
	PVMT	PAVEMENT
	PROP or PR	PROPOSED
Q	QTY	QUANTITY
R	RCP	REINFORCED CONCRETE PIPE
	REINF	REINFORC(ED)(ING)(EMENT)
	REHAB	REHABILITATION
	RIM	ELEVATION AT MANHOLE COVER
	ROW	RIGHT OF WAY
	R&R	REMOVE AND REPLACE
	RT	RIGHT
	RTU	REMOTE TERMINAL UNIT
S	S	SOUTH
	SHT	SHEET
	SL	SLOPE
	SY	SQUARE YARDS
	SPEC	SPECIFICATION
	SS	STAINLESS STEEL OR SANITARY SEWER
	STA	STATION
	STD(S)	STANDARDS(S)
	SW	SIDEWALK
T	TCE	TEMPORARY CONSTRUCTION EASEMENT
	TEMP	TEMPORARY
	TGV	TAPPING GATE VALVE
	TOC	TOP OF CONCRETE
	TYP	TYPICAL
U	UG	UNDERGROUND ELECTRIC
	UE	UTILITY EASEMENT
	U/S	UPSTREAM
V	VAR	VARIES
	VCP	VITRIFIED CLAY PIPE
W	WWTP	WASTEWATER TREATMENT PLANT

DETAIL/SECTION ID SYSTEM



TESTING SCHEDULE

DESCRIPTION	RATE	EST. QUANTITY
SOILS:		
STANDARD PROCTOR - TRENCH BACKFILL	PER MATERIAL SOURCE	4
STANDARD PROCTOR - SUBGRADE	PER STREET	-
DENSITIES - TRENCH BACKFILL	PER 200 LF TRENCH/LIFT	300
DENSITIES - SUBGRADE (STREET)	PER 310 SY	-
DENSITIES - SUBGRADE (DRIVEWAYS)	PER 2 DRIVEWAYS	-
DENSITIES - SUBGRADE (SIDEWALKS)	PER 5000 SF	-
FLEXIBLE BASE:		
SIEVE ANALYSIS	PER 3000 CY	1
ATTERBERG LIMITS	PER 3000 CY	1
MODIFIED PROCTOR	PER 3000 CY	1
L.A. ABRASION		1
CBR (STANDARD)	PER MATERIAL SOURCE	1
DENSITIES OF COMPACTED BASE	PER 310 SY/LIFT	20
WET BALL MILL TEST	PER MATERIAL SOURCE	1
TRIAXIAL TEST	PER MATERIAL SOURCE	1
HOT-MIX ASPHALT CONCRETE (HMAC):		
EXTRACTION, SIEVE ANALYSIS	PER 500 TONS OR DAY	1
LAB DENSITY & STABILITY	PER 500 TONS OR DAY	1
THEORETICAL DENSITY (RICE METHOD)	PER 500 TONS OR DAY	1
TEMPERATURE - DURING LAY-DOWN	CONTINUOUS AS NEEDED	-
THICKNESS - IN PLACE (CORE)	PER 1000 LF STREET	5
% AIR VOIDS - IN PLACE (CORE)	PER 1000 LF STREET	5
% THEORETICAL DENSITY - IN PLACE (CORE)	PER 1000 LF STREET	5
CONCRETE:		
(UNCONFINED COMPRESSION, 7, 14, & 28 DAY)		
HEADER CURB	PER 500 LF CURB	-
SIDEWALKS AND CURB RAMPS	PER 4000 SF	-
DRIVEWAYS	PER 2500 SF	-
CURB, POST & GRATE INLETS	PER 6 EACH	-
BOX CULVERTS (CAST-IN-PLACE)	PER 100 LF	-
STORM SEWER MANHOLES (CAST-IN-PLACE)	PER 2 EACH	-
RIPRAP, APRONS & S.E.T.s	PER 4000 SF	-
MANHOLE BASE/FOOTING	PER 10 EACH	-
RIGID PAVEMENT:		
FLEXURAL (BEAM) STRENGTH (7 & 28 DAY)	PER 2500 SY OR DAY	-
AIR CONTENT	PER 2500 SY OR DAY	-
SLUMP	PER 2500 SY OR DAY	-

* THE ABOVE TESTING RATES ARE ONLY ANTICIPATED GUIDELINES. THE ENGINEER RESERVES THE RIGHT TO CONDUCT ADDITIONAL TESTING AT THEIR DISCRETION.

NOTE:

- ALL THE LINETYPES, SYMBOLS, HATCHES, PATTERNS AND GENERAL ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR INFORMATIONAL PURPOSES ONLY. NOT ALL OF THESE ENTITIES MAY APPEAR ON THIS PLAN SET. SOME LINETYPES, OR SYMBOLS MAY APPEAR ON THE PLAN SET THAT ARE NOT NOTED HERE BUT WILL BE CALLED OUT ACCORDINGLY.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

TYPICAL LEGEND SHEET

6909 Springfield Avenue, Suite 303
Lubbock, Texas 79424
Phone: 806.407.3511
www.Ardurra.com

Engineering License #F-10053

ARDURRA
COLLABORATE. INNOVATE. CREATE.

DRAWING NO.: G2 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GIS | Engineering\240052 Sheet-Cameron Co - Isla Blanca RV Park\000\02\Drawings\Plans\Cvil\240052 - CVR.dwg
Wednesday, June 04, 2025, 1:27pm

SCOPE OF PROJECT

GENERAL SITE IMPROVEMENTS

1. PROVIDE MOBILIZATION
2. PROVIDE PAVEMENT REPAIR AT ALL ROAD CROSSINGS.
3. ALL WATER AND SEWER SERVICES TO RV PADS SHALL BE BORED AND NOT OPEN CUT. MINIMIZE ANY DAMAGE TO EXISTING STREETS AND ASPHALT.

WASTEWATER COLLECTION SYSTEM IMPROVEMENTS

1. FILL, SEAL, AND ABANDON EXISTING BRICK MANHOLE
2. PROVIDE 8"–15" PVC SANITARY SEWER LINE INCLUDING TIE–INS TO EXISTING MANHOLES AND PLACING NEW MANHOLES
3. PROVIDE SANITARY SEWER CLEANOUTS
4. PROVIDE SERVICE RECONNECTIONS ALL LENGTHS SHORT/LONG
5. PROVIDE WELLPOINT GROUNDWATER DEWATERING
6. PROVIDE TRENCH SAFTEY, MEETING ALL CODES AND REQUIREMENTS
7. PROVIDE FLEXIBLE PAVEMENT REPAIR
8. PROVIDE FIBERGLASS SANITARY SEWER MANHOLES (IN FLOOD AREA,PROVIDE WATER TIGHT RING AND COVERS)

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

1. FURNISH AND INSTALL 4"–8" WATERLINE COMPLETE WITH REQUIRED FITTINGS
2. PROVIDE FITTINGS INCLUDING ALL BENDS AND GATE VALVES
3. PROVIDE WATER SERVICE; FURNISH AND INSTALL 5/8" TO 3/4" COPPER OR HDPE SERVICE TO ALL RV SITES
4. CONNECT NEW 8" WATERLINE TO EXISTING 10" WATERLINE
5. PROVIDE EXISTING METER AND NEW METER BOX LOCATIONS
6. PROVIDE FIRE HYDRANTS (FIELD VERIFY)
7. PROVIDE WELL POINT GROUNDWATER DEWATERING
8. PROVIDE TRENCH SAFETY, MEETING ALL CODES AND REQUIREMENTS

STORMWATER POLLUTION PREVENTION PLAN

1. PROVIDE SILT FENCE OR OTHER BEST MANAGEMENT PRACTICES, AS REQUIRED
2. PROVIDE CONCRETE WASHOUT PIT

THE FOLLOWING NOTES AND INFORMATION APPLY TO ALL PLANS AND CONTRACT DOCUMENTS FOR THIS PROJECT.

NOTICE - CAUTION

1. OVERHEAD/UNDERGROUND/WIRING/PIPING/TOWERS/UTILITY LINES EXIST ON PROJECT SITE. EXERCISE EXTREME CAUTION DURING THE EXECUTION OF CONSTRUCTION OF THIS PROJECT. CONTRACTOR MUST NOTIFY AND COORDINATE ALL WORK WITH GOVERNMENTAL ENTITIES AND APPROPRIATE COMPANIES TO ASSURE NO DAMAGE OCCURS DURING CONSTRUCTION. NOTIFICATION OF AFFECTED INSTALLATION COMPANY OR ENTITY MUST OCCUR TWO (2) WEEKS PRIOR TO ANY CONSTRUCTION. IMMEDIATELY ADVISE THE CITY/COUNTY AND ENGINEER OF ANY UNANTICIPATED CONFLICTS.
2. COORDINATE WITH CITY/COUNTY AND UTILITY OPERATORS FOR ALL CONSTRUCTION ACTIVITY.
3. EXERCISE CARE WHEN DEMOLISHING EXISTING UTILITIES AND RE–CONNECTING PIPING TO EXISTING AND PROPOSED SERVICES.
4. HIGH PRESSURE GAS LINES AND PRODUCT PIPELINES MAY BE LOCATED WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL NOTIFY THE CITY/COUNTY, LOCAL GAS DEPARTMENT AND OR APPROPRIATE PIPELINE COMPANIES 72 HOURS PRIOR TO ACTUAL START OF CONSTRUCTION, AND HAVE ALL PIPELINES LOCATED PRIOR TO BEGINNING CONSTRUCTION. IMMEDIATE ADVISE ENGINEER OF ANY CONFLICTS.

WORK AND SAFETY PLAN

1. PRIOR TO ANY WORK, CONSTRUCTION OR DEMOLITION, THE CONTRACTOR SHALL SUBMIT PROPOSED WORK AND SAFETY PLAN WITH THE FOLLOWING MINIMUM REQUIREMENTS. ALLOW TWO (2) WEEKS FOR CITY/COUNTY AND ENGINEER REVIEW AND APPROVE.
   a. MEET ALL TCEQ AND OSHA RULES AND REGULATIONS FOR THIS TYPE OF CONSTRUCTION.
   b. PROVIDE SEQUENCE OF CONSTRUCTION, HAULING OFF DEBRIS, MINIMIZATION OF IMPACTS TO THE PRV PARK RESIDENTS.
   c. PRE–CONSTRUCTION MEETING (2) WEEKS PRIOR TO ANY WORK, MUST BE CONDUCTED BY THE CONTRACTOR AND PRESENT THE PROPOSED SEQUENCE OF CONSTRUCTION.
   d. SAFETY PLAN TO BE IMPLEMENTED DURING CONSTRUCTION TO ENSURE SAFETY OF WORKERS, CITY/COUNTY PERSONNEL, AND RV PARK RESIDENTS.
   e. PROVIDE DUST CONTROL DURING CONSTRUCTION, AS DIRECTED.
   f. UTILITY LOCATION AND DISCONNECTION PLAN SEQUENCE OF CONSTRUCTION AND MUST BE APPROVED BY THE CITY/COUNTY AND MEET ALL CODES AND REGULATIONS.
   g. PROVIDE PAVEMENT REPAIR AT ALL ROAD CROSSINGS.

ADDITIONAL GENERAL NOTES

1. DUE TO LIMITED RIGHT–OF–WAY AND NUMBER OF UTILITIES, PROPOSED UTILITIES MAY BE IN CLOSE PROXIMITY OF EXISTING AND OTHER PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING AND PROTECTING ALL UTILITIES AND MAINS WITHIN AND ADJACENT TO CONSTRUCTION TRENCHES TO PREVENT ANY UNDUE STRESSES AND/OR DAMAGE TO THE UTILITIES AND MAINS AS TO MAINTAIN CONTINUAL SERVICE.
2. WHERE WATER MAINS AND SEWER MAINS ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E. WATER MAINS CROSSING SEWER MAINS, WATER MAINS PARALLELING SEWER MAINS, OR WATER MAINS NEXT TO MANHOLES) THE INSTALLATION MUST MEET REQUIREMENT OF 30 TAC 217.53(D) (PIPE DESIGN) AND 30 TAC 290.44(E) WATER DISTRIBUTION).
3. THE CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.
4. WATER SYSTEM TO BE RESTRAINED. RESTRAINED LENGTH CALCULATIONS ARE FOR P.V.C. PIPE BEDDED IN COMPACTED GRANULAR MATERIAL EXTENDING TO THE TOP OF THE PIPE. THE NATIVE SOIL MATERIAL IS ASSUMED TO BE INORGANIC CLAY OF HIGH PLASTICITY. DEPTH OF BURY IS ASSUMED TO BE 4 FEET. NOTE: THE RESTRAINED LENGTHS SHALL BE DESIGNED BASED UPON THE CONDITIONS ENCOUNTERED DURING THE INSTALLATION.
5. CONTRACTOR TO DISINFECT ALL NEW WATER MAINS IN ACCORDANCE WITH TCEQ REQUIREMENTS.
6. NSPI STANDS FOR NO SEPARATE PAY ITEM.
7. ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED FOR.
8. ALL WORK SHALL BE PERFORMED DURING DAYLIGHT HOURS UNLESS AUTHORIZED IN WRITING BY CITY/COUNTY/ENGINEER.
9. CONSTRUCTION FENCES SHALL BE PLACED AS DIRECTED BY THE ENGINEER. AND THE CITY/COUNTY OPERATIONS.

CONSTRUCTION NOTES

1. CONTRACTOR SHALL NOT START, STOP, OR OPERATE ANY EXISTING PUMP, MOTOR VALVE, EQUIPMENT, SWITCH, BREAKER, CONTROLS, OR ANY OTHER ITEM RELATED TO CAMERON COUNTY FACILITIES AT ANY TIME. ALL SUCH ITEMS MUST BE COORDINATED WITH AND OPERATED BY A CAMERON COUNTY UTILITIES DEPARTMENT OPERATOR. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY CAMERON COUNTY AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
   A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
   B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
   C. CURRENT "CAMERON COUNTY STANDARD TECHNICAL SPECIFICATION MANUAL"
2. THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH CAMERON COUNTY AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND TWO (2) WEEKS PRIOR TO EXCAVATION.
3. IF NECESSARY, CONTRACTOR WILL COORDINATE USE OF CAMERON COUNTY PREMISES AT NO ADDITIONAL COST TO CAMERON COUNTY.
4. LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO CAMERON COUNTY.
5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. AS–BUILTS FOR CAMERON COUNTY INFRASTRUCTURE CAN BE OBTAINED FOR CAMERON COUNTY STAFF. CONTRACTOR SHALL COORDINATE PHYSICAL LOCATES FOR CAMERON COUNTY INFRASTRUCTURE THROUGH CAMERON COUNTY STAFF.. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

   TEXAS STATEWIDE ONE CALL LOCATOR 1–800–545–6005 OR 811

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING, AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION AT NO SEPARATE PAY ITEM (NSPI)
7. CONTRACTOR SHALL NOT MAKE USE OF DUMPSTERS OR WASTE BINS THAT ARE INTENDED TO SERVE RESIDENTS AND/OR BUSINESSES.
8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION RIGHT–OF–WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.
9. THE CONTRACTOR SHALL COMPLY WITH GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
10. ALL WORK WITHIN THE 100–YEAR FLOODPLAIN SHALL BE DONE IN ACCORDANCE WITH FLOODPLAIN DEVELOPMENT PERMIT.
11. ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY CAMERON COUNTY.
12. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM WORK ON CAMERON COUNTY RECOGNIZED HOLIDAYS.

    WEEKEND WORK: CONTRACTORS ARE REQUIRED TO SUBMIT REQUEST TO THE CAMERON COUNTY BY 12:00PM ON THE WEDNESDAY PRIOR TO THE WEEKEND BEING REQUESTED.

    ANY AND ALL CAMERON COUNTY UTILITY WORK INSTALLED WITHOUT WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION AT NO COST TO CAMERON COUNTY.
13. POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY CITY/COUNTY. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.
14. CONSTRUCTION SEQUENCING: IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED UTILITIES IN CONJUNCTION WITH GENERAL PROJECT CONSTRUCTION. SEQUENCE OF CONSTRUCTION ACTIVITIES SHALL BE CONSIDERED IN ORDER TO MINIMIZE THE EXTENT AND DURATION OF DISTURBANCES.
15. CONTRACTOR SHALL COMPLY WITH APPLICABLE REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE OVERSEEN BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). OSHA INFORMATION AND RELATED MATERIALS MAY BE OBTAINED AT HTTPS://WWW.OSHA.GOV/ .
16. TRENCH EXCAVATION SAFETY PROTECTION: CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREAS IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
17. CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES IN CONFLICT WITH THE PROPOSED IMPROVEMENTS AT NO ADDITIONAL COST AS PER TECHNICAL SPECIFICATIONS SECTION 40 – CLEARING AND GRUBBING.

THE EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE BASED UPON RECORD INFORMATION ONLY AND ARE APPROXIMATE. THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL ALSO CONTACT THE UTILITY PURVEYORS BEFORE BEGINNING WORK. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES THAT MIGHT OCCUR BY HIS FAILURE TO ACCURATELY LOCATE ALL EXISTING UNDERGROUND UTILITIES AND PRESERVE EXISTING CONDITIONS.

UTILITY NOTES

1. PRIOR TO TIE–INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH CAMERON COUNTY AT LEAST TWENTY–FIVE (25) CALENDAR DAYS IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE–INS; THIS IS AT NO ADDITIONAL COST TO CAMERON COUNTY OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
2. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)
3. DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY CAMERON COUNTY.CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE COUNTY A MINIMUM OF TWENTY–FIVE (25) CALENDAR DAYS IN ADVANCE TO START THE COORDINATION PROCESS AND WILL BE INFORMED BY THE COUNTY WHEN THE DIVISION VALVE WILL BE OPERATED BY THE STAFF. THE DIVISION VALVE CAN ONLY BE OPERATED BY CAMERON COUNTY STAFF MEMBER NOT THE INSPECTOR OR THE CONTRACTOR. OPERATION OF A DIVISION VALVE WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE COUNTY WILL CONSTITUTE A MATERIAL BREACH OF ANY WRITTEN CAMERON COUNTY CONTRACT OR PERMIT IN ADDITION TO SUBJECTING THE CONTRACTOR TO LIABILITY FOR ANY AND ALL FINES, FEES, OR OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, THAT MAY ARISE FROM OR BE CAUSED BY THE OPERATION OF THE VALVE WITHOUT PRIOR WRITTEN PERMISSION. PLEASE BE INFORMED THAT THE APPROVAL OF THE OPERATION OR OPENING OR CLOSING OF A DIVISION VALVE CAN TAKE SEVERAL WEEKS FOR APPROVAL. DIVISION VALVES WILL ALSO HAVE A VALVE LID LABELED DIVISION VALVE AND A LOCKING MECHANISM INSTALLED WITH A KEY. THE LOCK AND KEY MECHANISM WILL BE PAID FOR BY THE CONTRACTOR BUT WILL BE INSTALLED BY CAMERON COUNTY STAFF.
4. PROVIDE RESTRAINED JOINTS AT ALL VERTICAL/HORIZONTAL BENDS, TEES, REDUCERS, AND PLUGGED PIPE END POINTS. RESTRAIN SYSTEM SHALL BE DESIGNED BY THE PIPE MANUFACTURER. PIPE SHALL BE RESTRAINED WITH MECHANICAL RESTRAINED JOINTS. NO THURST BLOCKING IS ALLOWED.
5. ABOVE GRADE PROCESS PIPING SHALL BE FLANGED PIPE. AIR PIPING SHALL BE AS SHOWN AND/OR SPECIFIED. BURIED PIPING SHALL BE RESTRAINED MECHANICAL JOINT, RESTRAINED PUSH–ON GASKETED OR AS SHOWN.
6. DO NOT EXCEED 75% OF MANUFACTURES RECOMMENDED MAXIMUM DEFLECTION FOR PIPE, JOINTS UNLESS NOTED OTHERWISE.
7. EXTERNALLY COAT BURIED FITTINGS, VALVES, BOLTS, NUTS, GASKETS, AND APPURTENANCES WITH AB EPOXY OR BITUMASTIC COATING. WRAP BURIED VALVES, DI PIPE IF USED, FITTINGS, AND PLUGS IN POLYETHYLENE ENCASEMENT.

WATERLINES NOTES

1. WATERLINES TO BE PVC AND COMPLY WITH AWWA C900 DR18, CLASS 235, BLUE IN COLOR AND EACH LENGTH BEAR IDENTIFICATION MARKING IN CONFORMANCE WITH AWWA.
2. WATER METERS SHALL BE ACCESSIBLE DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL COORDINATE WITH UTILITIES DEPARTMENT PERSONNEL TO SCHEDULE AND SEQUENCE OPTIMUM TIME FOR WATER CONNECTION TIE–INS.
4. VALVE BOXES AND METER BOXES TO REMAIN IN SERVICE SHALL BE ADJUSTED TO FINISH GRADE.
5. ABANDONED WATER FITTINGS, VALVES, FIRE HYDRANTS, ETC. SHALL BE RECOVERED AND STOCKPILED AT A SECURE LOCATION BY THE CONTRACTOR FOR SALVAGE BY THE CITY/COUNTY. HOWEVER, ALL RELATED ITEMS THAT ARE UNWANTED BY THE CITY/COUNTY SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
6. WHERE A WASTEWATER LINE AND A WATERLINE CROSS, THE WATERLINE SHALL BE PLACED OVER THE WASTEWATER LINE WITH A VERTICAL CLEARANCE OF 2 FEET. IF THIS IS NOT POSSIBLE, THE WASTEWATER LINE 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.
7. CONNECTIONS TO THE EXISTING WATER SYSTEM WILL BE PAID FOR AS INDICATED IN THE BID PROPOSAL.
8. EXISTING ASBESTOS–CEMENT WATERLINES MAY BE REMOVED OR GROUTED & ABANDONED IN PLACE, AT THE CONTRACTOR'S OPTION. HOWEVER, THERE ARE SOME AREAS WHERE THE EXISTING WATERLINE MUST BE REMOVED IN ORDER TO ACCOMMODATE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. ALL ASBESTOS–CEMENT (AC) PIPE DESIGNATED FOR REMOVAL SHALL BE DISPOSED OF IN STRICT COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AND STANDARDS GOVERNING ASBESTOS HANDLING, REMOVAL AND DISPOSAL. COMPLY WITH TITLE 29 CFR SECTION 1926 SAFETY HEALTH REGULATIONS FOR CONSTRUCTION AND EPA TITLE 40 CFR PART 61 SUBPART M–NATIONAL EMISSION STANDARDS FOR ASBESTOS. DISPOSAL OF AC PIPE WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY WORK, MANIFEST ALL DISPOSAL.
9. UNLESS OTHERWISE INDICATED, EXISTING WATERLINES AND APPURTENANCES TO BE REMOVED WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY WORK.
10. THE EXACT LOCATION AND SIZE OF EACH INDIVIDUAL WATER SERVICE CONNECTION SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR PRIOR TO INSTALLATION OF THE PROPOSED WATERLINES. CONTRACTOR SHALL INSTALL THE APPROPRIATE SIZE WATER SERVICE FROM THE MAIN TO THE EXISTING WATER METER IN ACCORDANCE WITH CITY/COUNTY STANDARD WATER DETAILS.
11. FIRE HYDRANT LEADS LONGER THAN 20 FEET MAY UTILIZE C900 PVC (DR 18) PIPE UP TO THE GATE VALVE. PROVIDE RESTRAINT AS REQUIRED.
12. WATER SERVICES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH SAME QUALITY OF EXISTING SERVICE LINE WITH NO SEPARATE PAY.
13. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH RESIDENTS AND CITY/COUNTY PERSONNEL ON ANY WATER SERVICE WORK PERFORMED OUTSIDE THE SCOPE OF THIS PROJECT.
14. WATERLINES SHALL BE PLACED A MIN. OF 3 FEET BELOW FINAL GRADE. HOWEVER, DUE TO POTENTIAL CONFLICTS, IT MUST BE PLACED DEEPER AT CRITICAL LOCATIONS ONLY AS SHOWN IN THE PLANS. IT IS NOT INTENDED THAT THE LINES BE PLACED AT THESE DEPTHS FOR LONG DISTANCES. THESE DEPTHS ARE TYPICALLY TO BE ATTAINED BY VERTICAL OFFSETS WITH BENDS AND EXTEND SHORT DISTANCES. THIS WORK SHALL BE COORDINATED WITH THE CITY/COUNTY WATER DEPARTMENT.
15. DISPOSAL OF HIGHLY CHLORINATED WATER SHALL BE IN ACCORDANCE WITH EPA AND TCEQ REGULATIONS.
16. THE CONTRACTOR SHALL ADJUST THE PROPOSED WATER LINES ACCORDINGLY TO AVOID UNFORESEEN OBSTRUCTIONS AND ELEVATION DIFFERENCE. THIS SHALL BE CONSIDERED SUBSIDIARY TO THE APPROPRIATE BID ITEMS.
17. THE PROPOSED WATER LINE IMPROVEMENTS SHALL CONFORM TO ANSI/NSF 61 AND SHALL BE CERTIFIED AS PER TCEQ'S CHAPTER 290.44 (a)(1).
18. HYDROSTATIC LEAKAGE RATES SHALL CONFORM TO AWWA FORMULAS AND AS PER TCEQ'S CHAPTER 290.44(a)(5).
19. PIPE AND FITTINGS TO CONTAIN NO MORE THAN 0.25% LEAD AS PER TCEQ'S CHAPTER 290.44(b)(1).
20. SEPARATION DISTANCE FOR WATER LINES, WASTEWATER LINES, MANHOLES, AND FIRE HYDRANTS SHALL BE ACCORDANCE WITH TCEQ'S CHAPTER 290.44(e).
21. DISINFECTION ON THIS PROJECT SHALL BE IN ACCORDANCE TCEQ'S CHAPTER 290 AND AWWA STANDARD C651.
22. WATER SERVICES SHALL BE REPAIRED WITH SAME QUALITY MATERIAL AS EXISTING SERVICE LINE WITH NO SEPARATE PAY.
23. CONTRACTOR SHALL COORDINATE WATERLINE HYDROSTATIC TESTING AND BACTERIOLOGICAL TESTING WITH THE PROPOSED CONSTRUCTION SEQUENCING FOR THIS PROJECT.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

GENERAL NOTES

6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 763-5511
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Engineering License #F-10053

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APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday June 04, 2025, 1:26pm

WASTEWATER (SANITARY SEWER) NOTES

1. WASTEWATER GRAVITY PIPE MATERIAL TO BE AS SPECIFIED, AND BE GREEN IN COLOR. (WHITE MAY BE APPROVED BY THE ENGINEER UNDER SPECIAL CONDITIONS HOWEVER GREEN PLASTIC WRAPPING OF PIPE WILL BE REQUIRED).
2. ALL PVC SEWER PIPE,FITTINGS AND SADDLES USED IN THIS PROJECT SHALL BE MADE OF PLASTIC, MEETING THE THE REQUIREMENTS OF ASTM D3034 AND SHALL BE SDR–26.
3. WHERE A NEW WASTEWATER LINE IS TO BE PLACED ADJACENT TO A NEW OR EXISTING WATERLINE AT A LATERAL CLEARANCE OF LESS THAN 9 FEET, THAT SECTION OF WASTEWATER LINE SHALL BE PRESSURE RATED PVC, AWWA C900 OR C905, DR 25, NON–BLUE COLORED PIPE. THIS ACTIVITY SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE SUBSIDIARY TO THE PROPOSED WASTEWATER IMPROVEMENTS. FOLLOW TCEQ RULE 290.44.
4. ALL NEW AND EXISTING WASTEWATER MANHOLES SHALL BE ADJUSTED TO FINISH GRADE PER CITY/COUNTY SPECIFICATION SECTION SHOWN IN THE CONTRACT DOCUMENTS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY/COUNTY SPECIFICATIONS AND SHALL BE WATERTIGHT. CONTRACTOR SHALL CONDUCT A LEAKAGE TEST OF ALL NEW MANHOLES IN ACCORDANCE WITH TCEQ REQUIREMENT SECTION 217.58.
5. CLEANING OR PURGING OF EXISTING SANITARY SEWER LINES REQUIRED FOR CONNECTING INTO NEW WASTEWATER LINES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO SEPARATE PAYMENT WILL BE MADE TO THE CONTRACTOR FOR CLEANING OR PURGING OF THESE LINES.
6. FOR FIBERGLASS MANHOLES AND RING/COVER, THE MANUFACTURER SHALL PROVIDE CERTIFICATION AND DESIGN CALCULATIONS TO THE CITY/COUNTY SHOWING THAT THE MANHOLES ARE DESIGNED FOR H20 TRAFFIC LOADING AND THE APPLICABLE SOIL AND HYDROSTATIC PRESSURE LOADING CONDITIONS. MINIMUM WALL THICKNESS SHALL BE 0.50 INCH. IF REQUIRED BY THE MANUFACTURER'S DESIGN, HORIZONTAL RIBS AND/OR VERTICAL STIFFENERS MAY BE UTILIZED TO ACHIEVE THE REQUIRED DESIGN CHARACTERISTICS.
7. WHERE A NEW PVC WASTEWATER LINE IS TO BE CONNECTED TO AN EXISTING VITRIFIED CLAY PIPE SANITARY SEWER LINE, THE CONNECTION SHALL BE MADE WITH ONE OF THE FOLLOWING APPROVED COUPLING ADAPTERS:
   –MISSION RUBBER COMPANY FLEX–SEAL ADJUSTABLE REPAIR COUPLING (ARC)
   –FERNCO 5000 SERIES REPAIR COUPLING (RC)
   NO SEPARATE PAYMENT WILL BE MADE TO THE CONTRACTOR FOR THE COUPLING ADAPTER. PROVIDE CONCRETE ENCASEMENT.
8. WHERE EXISTING SANITARY SEWER SERVICE LINE CONNECTS TO EXISTING SANITARY SEWER TO BE REPLACED, PROVIDE NEW WASTEWATER SERVICE LINE OF SAME SIZE FROM NEW PVC WASTEWATER MAIN TO EXISTING SEWER LINE AT THE PROPERTY LINE.
9. THE EXACT LOCATION AND SIZE OF EACH INDIVIDUAL WASTEWATER SERVICE CONNECTION SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR PRIOR TO INSTALLATION OF THE PROPOSED WASTEWATER LINES. CONTRACTOR SHALL ALSO DETERMINE THE APPROPRIATE TYPE OF WASTEWATER SERVICE CONNECTION TO BE USED AND INSTALL NEW WASTEWATER SERVICE IN ACCORDANCE WITH CITY/COUNTY SANITARY SEWER STANDARD DETAILS OR AS SHOWN IN THE DRAWINGS.
10. CONTRACTOR SHALL PROVIDE FOR TEMPORARY BYPASS OF SEWERAGE INTO DOWNSTREAM MANHOLE WHEN REPLACING EXISTING SANITARY SEWER MAINS WITH NEW PVC WASTEWATER PIPE, REHABILITATING EXISTING MANHOLES OR CONSTRUCTING NEW MANHOLES. CONTRACTOR TO COORDINATE OPERATION WITH THE CITY/COUNTY AS NEEDED AND REQUIRED.
11. DEFLECTION TESTING OF PVC WASTEWATER LINES SHALL FOLLOW BACKFILL OPERATIONS BY NOT LESS THAN 30 DAYS.
12. SEWER SERVICES DAMAGED BY CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY CONTRACTOR. REPLACEMENT LENGTH IS DEPENDENT ON EXTENT OF DAMAGE. REPLACEMENT PIPE SHALL BE 4" PVC (OR LARGER) SDR 26 PVC OR SCHEDULE 40 PVC PIPE AND ATTACHED TO EXISTING SERVICE WITH FLEXIBLE FERNCO CONNECTIONS WITH STAINLESS STEEL CLAMPS OR APPROVED EQUAL, WITH NO SEPARATE PAY.
13. EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCING CONSTRUCTION. IMMEDIATELY ADVISE ENGINEER OF ANY CONFLICTS.

WASTEWATER (SANITARY SEWER) BYPASS NOTES

1. THE CONTRACTOR SHALL DEVELOP AND SUBMIT, IN WRITING, THE ACTUAL BYPASS PUMPING PLAN TO THE ENGINEER AND COUNTY TO REVIEW & APPROVE A MINIMUM OF 30 DAYS PRIOR TO INSTALLATION. CONTRACTOR MUST MEET ALL TCEQ AND OSHA REQUIREMENTS AND REGULATIONS.
2. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR DESIGNING, SCHEDULING, PROVIDING, INSTALLING, OPERATING, FUELING AND MAINTAINING THE CAPACITY BYPASS PUMPING SYSTEM IN A MANNER THAT DOES NOT CAUSE OR CONTRIBUTE TO OVERFLOWS, RELEASES, OR SPILLS OF WASTEWATER FROM THE COLLECTION OR BYPASS SYSTEM. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR WASH DOWN, CLEAN–UP AND DISINFECTION OF SAID SPILLAGES OR OVERFLOWS TO CITY'S SATISFACTION AT NO ADDITIONAL COST TO THE CITY. THE CONTRACTOR SHALL NEITHER ANTICIPATE NOR EXPECT ANY ASSISTANCE FROM THE CITY DEPARTMENTS FOR ANY OF THE BYPASS OPERATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PRESSURE WASHING OF MANHOLES OR COLLECTIONS LINES TO GAIN PROPER ACCESS OF THE WORK AND PROVIDE REQUIRED PLUGGING OF LINES.
3. ONCE INITIATED, BYPASS PUMPING WILL BE A CONTINUOUS OPERATION. ALL BYPASS PUMPING EQUIPMENT SHALL BE APPROPRIATELY SIZED TO HANDLE THE AVERAGE DAILY AND PEAK FLOWS. THE COUNTY IS PERMITTED THROUGH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY TO OPERATE THE WASTEWATER SYSTEM. THE FINAL AUTHORITY COMES FROM THE COUNTY AS TO THE OPERATION OF THE WASTEWATER SYSTEM AND AS SUCH IT RESERVES THE RIGHT TO HALT THE BYPASSING OPERATION AT ANY TIME IN ORDER TO MAINTAIN PUBLIC HEALTH AND SAFETY.
4. BYPASS PUMPS SHALL BE CRITICALLY SILENCED AND SHALL BE SET UP TO OPERATE AUTOMATICALLY.
5. THE CONTRACTOR SHALL PROVIDE ENGINEER AND THE COUNTY CONTACT INFORMATION OF THE CONTRACTOR PERSONNEL MANNING THE BYPASS SYSTEM.
6. CONTRACTOR SHALL PROVIDE A RESPONSIBLE EMPLOYEE TO MAN THE BYPASS SYSTEM 24 HOURS PER DAY, 7 DAYS PER WEEK DURING BYPASS OPERATION. THE MONITORING EMPLOYEE(S) SHALL BE PROPERLY TRAINED, EXPERIENCED, AND MECHANICALLY QUALIFIED SUCH THAT THEY CAN QUICKLY AND EFFECTIVELY ADDRESS ANY POTENTIAL EMERGENCY AND NON–EMERGENCY SITUATIONS ASSOCIATED WITH THE BYPASS SYSTEM WHICH MUST REMAIN IN OPERATION. THE WASTEWATER AND BYPASS SYSTEMS SHOULD BE INSPECTED AT LEAST ONCE EVERY 2 HOURS.
7. IN THE EVENT OF AN EMERGENCY OR BREAKDOWN THE THE CONTRACTOR SHALL HAVE ADEQUATE STANDBY EQUIPMENT AVAILABLE AND READY FOR IMMEDIATE OPERATION AND USE. IF THE PROJECT WORK IS NEGATIVELY IMPACTED BY THIS, IT SHALL BE REPAIRED, REINSTALLED AND/OR RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE COUNTY.
8. THE CONTRACTOR WILL PLUG THE DOWNSTREAM COLLECTION SYSTEM, AS NEEDED, AND REQUIRED TO PROVIDE COMPLETE CONTROL OF FLOWS BYPASS DURING ALL CONSTRUCTION OPERATIONS.

TRAFFIC NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROLS THROUGHOUT THE DURATION OF THE CONTRACT FOR ALL PHASES OF THE WORK, IN ACCORDANCE WITH THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (LATEST EDITION), TRAFFIC CONTROL PLAN, AND BARRICADE AND CONSTRUCTION STANDARDS. THIS WORK WILL NOT BE PAID DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
2. THE CONTRACTOR SHALL NOTIFY ALL RESIDENTS AND BUSINESS OWNERS WITHIN THE CONSTRUCTION AREA 5 DAYS PRIOR TO PLACING CONSTRUCTION SIGNS.
3. REFLECTORIZED PAVEMENT MARKINGS FOR STREETS SHALL BE TYPE I THERMOPLASTIC 90 MILLS THICK WITH GLASS BEADS.
4. PAVEMENT MARKING WORDS, SHAPES, SYMBOLS, STOP LINES AND CROSSWALKS SHALL BE PRE–FABRICATED THERMOPLASTIC.
5. CONCRETE PAVEMENTS SHALL BE SEALED WITH TYPE II MARKINGS OR ACRYLIC OR EPOXY PRIMER–SEALER PRIOR TO PLACING TYPE I MARKINGS. PRIMER–SEALER WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
6. OBLITERATING EXISTING PAVEMENT MARKINGS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE SUBSIDIARY TO THE PAVEMENT MARKING PAY ITEMS.
7. TABS, TRAFFIC BUTTONS AND OTHER TEMPORARY OR ABBREVIATED PAVEMENT MARKINGS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE SUBSIDIARY TO THE PAY ITEMS FOR PAVEMENT MARKING AND TRAFFIC CONTROL.
8. AT LEAST 48 HOURS PRIOR TO APPLYING PERMANENT PAVEMENT MARKINGS, THE CONTRACTOR SHALL NOTIFY THE CITY/COUNTY TRAFFIC ENGINEERING DEPARTMENT AND OBTAIN CITY/COUNTY APPROVAL FOR THE LOCATION, ALIGNMENT AND LAYOUT OF THE PAVEMENT MARKINGS.

TRAFFIC NOTES (CON'T)

9. ALL–WEATHER ACCESS TO LOCAL RESIDENCES AND BUSINESSES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
10. THE CONTRACTOR MAY USE EXCAVATED BASE MATERIAL FOR TEMPORARY TRANSITIONS TO EXISTING DRIVEWAYS DURING CONSTRUCTION, IF MATERIAL IS APPROVED BY THE ENGINEER. THIS MATERIAL MUST BE REMOVED DURING FINAL CONSTRUCTION.
11. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF PVC ELECTRICAL CONDUIT FOR STREET LIGHTING WITH A.E.P. FOR CONFIRMATION OF THE LOCATION AND REQUIRED MINIMUM GROUND COVER.
12. CONTRACTOR SHALL NOTIFY THE CITY/COUNTY TRAFFIC ENGINEERING DEPARTMENT AT LEAST 72 HOURS PRIOR TO ANY REQUIRED RE–PROGRAMMING AND/OR TIMING ADJUSTMENTS FOR TRAFFIC SIGNALS. ALL WORK RELATING TO COVERING ("BAGGING") SIGNS AND TRAFFIC SIGNALS FOR TEMPORARY LANE CLOSURES, AND MOVING OR ADJUSTING VIDEO DETECTION CAMERAS, WILL BE DONE BY THE CONTRACTOR AND COORDINATED WITH THE CITY/COUNTY TRAFFIC ENGINEERING DEPARTMENT. THE TRAFFIC CONTROLLER WILL BE PROGRAMMED BY CITY/COUNTY TRAFFIC ENGINEERING DEPARTMENT PERSONNEL INCLUDING THE TIMING OF EACH PHASE FOR VEHICLES AND PEDESTRIANS, AS WELL AS PROGRAMMING THE VIDEO DETECTION ZONES FOR EACH CAMERA.
13. CONTRACTOR SHALL ALSO NOTIFY AND COORDINATE WITH TEXAS DEPARTMENT OF TRANSPORTATION FOR ADJUSTMENTS TO TRAFFIC SIGNALS AT ALL HIGHWAY FRONTAGE ROADS.
14. CONTRACTOR SHALL PROTECT TRAFFIC GROUND BOXES AND TRAFFIC SIGNALS DURING CONSTRUCTION. CONTRACTOR SHALL CLEANOUT, REPAIR AS NEEDED, AND ADJUST TRAFFIC GROUND BOXES TO FINISH GRADE AND PULL TRAFFIC SIGNAL CABLES AS REQUIRED TO COMPLETE TRAFFIC SIGNAL ADJUSTMENTS. CONTACT THE CITY/COUNTY TRAFFIC ENGINEERING DEPARTMENT AT 826–3540 FOR TRAFFIC SIGNAL CABLE LINE LOCATE ASSISTANCE.
15. CONTRACTOR SHALL REROUTE FIBER OPTIC (F.O.) CABLE AND TRAFFIC SIGNAL CONDUIT AS NEEDED FOR TRAFFIC SIGNAL BOX ADJUSTMENTS AND RELOCATIONS. IF THERE IS INSUFFICIENT CABLE SLACK FOR RELOCATION, THE CITY/COUNTY WILL DISCONNECT THE F.O. CABLE AND SUPPLY ADDITIONAL CABLE IF NEEDED, AND WILL SPLICE AND TERMINATE THE CABLE. CONTRACTOR SHALL TAKE PRECAUTIONS TO ENSURE THAT NO DAMAGE OCCURS TO TRAFFIC SIGNAL CONDUIT AND F.O. CABLE INCLUDING DUCT–TAPING THE ENDS OF CONDUIT. IF DAMAGE OCCURS, CONTRACTOR SHALL MAKE REPAIRS PROMPTLY.
16. ALL TRAFFIC SIGNS ON THIS PROJECT SHALL HAVE ANTI–GRAFFITI FILM ON BOTH SIDES.
17. CONTRACTOR SHALL PROTECT ADJACENT PAVEMENT FROM DAMAGE.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING STREET PAVEMENT THAT IS DAMAGED AS DETERMINED BY CONTRACTOR.

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].
3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF–PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [§290.44(A)(2)].
4. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY, AS REQUIRED BY 30 TAC §290.44(A)(3).
5. WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [§290.44(A)(4)].
6. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [§290.44(B)].
7. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16–MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].
8. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].
9. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI–PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [§290.44(F)(2)].
10. PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS. THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR O RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C–605 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

    $Q = \frac{LD\sqrt{P}}{148{,}000}$

    WHERE:
    Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
    L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
    D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
    P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

    THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C–600 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

    $L = \frac{SD\sqrt{P}}{148{,}000}$

    WHERE:
    L = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
    S = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
    D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
    P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

11. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED MUST MEET §290.44(E)(1)–(4).
12. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE–FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE–FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT [§290.44(E)(5)].
13. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION [§290.44(E)(6)].

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES (CON'T)

14. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE [§290.44(E)(7)].
15. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAINFIELDS [§290.44(E)(8)].
16. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C–651, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].

TOTAL ESTIMATED QUANTITIES SUMMARY

ITEM		UNIT	TOTAL QUANTITIES
GENERAL SITE IMPROVEMENTS			
1	MOBILIZATION	LS	1
2	RIGHT OF WAY, COMPLETE IN PLACE	STA	203
3	SANITARY SEWER LINE TESTING	LF	17,000
4	WATERLINE LINE TESTING	LF	3,269
5	TRAFFIC CONTROL	MO	4
6	GROUNDWATER DE–WATERING INCLUDING WELL POINTING	LF	20,350
WASTEWATER COLLECTION SYSTEM IMPROVEMENTS			
1	SURGE, CAP, AND ABANDON EXISTING SANITARY SEWER PIPE	LS	1
2	FILL, SEAL, AND ABANDON EXISTING BRICK MANHOLES	EA	65
3	TIE INTO EXISTING MANHOLE	EA	3
4	8" PVC SANITARY SEWER LINE (SDR–26) ALL DEPTHS	LF	13,935
5	12" PVC SANITARY SEWER LINE (SDR–26) ALL DEPTHS	LF	2,658
6	15" PVC SANITARY SEWER LINE (SDR–26) ALL DEPTHS	LF	488
7	CEMENT STABILIZED ENCASEMENT (AS SHOWN ON PLANS)	LF	517
8	SANITARY SEWER MANHOLE. ALL DEPTHS IN FLOOD AREA, PROVIDE WATER TIGHT RING AND COVERS	EA	82
9	SANITARY SEWER CLEANOUTS	EA	9
10	SINGLE SANITARY SERVICE CONNECTIONS ALL LENGTHS	EA	667
11	PROVIDE WELL POINT GROUND WATER DEWATERING	LS	1
12	TRENCH SAFTEY	LF	17,000
13	REMOVE AND REPLACE FLEXIBLE PAVEMENT	SY	1,250
WATER DISTRIBUTION SYSTEM IMPROVEMENTS			
1	FURNISH AND INSTALL 4" DIAM. C900 DR18 PVC WATERLINE	LF	114
2	FURNISH AND INSTALL 8" DIAM. C900 DR18 PVC WATERLINE	LF	3,155
3	FURNISH AND INSTALL 8" 11.25 DEG. BEND (MJ WITH MEGA LUG JOINT RESTRAINT FITTING)	EA	3
4	FURNISH AND INSTALL 8" 45 DEG. BEND (MJ WITH MEGA LUG JOINT RESTRAINT FITTING)	EA	8
5	FURNISH AND INSTALL 10" X 8" TEE (MJ WITH MEGA LUG JOINT RESTRAINT FITTING)	EA	4
6	FURNISH AND INSTALL 8" SLEEVES	EA	2
7	FURNISH AND INSTALL 10" SLEEVES	EA	2
8	INSTALL 8" D.I. END PLUG WITH THRUST RESTRAINT	EA	2
9	8" GATE VALVES	EA	10
10	SINGLE WATER SERVICE: FURNISH AND INSTALL 3/4" COPPER OR HDPE SERVICE TO ALL RV SITES	EA	75
11	PROVIDE 4" WATER SERVICE CONNECTION	EA	1
12	CONNECT NEW 8" WATERLINE TO EXISTING 8" WATERLINE	EA	2
13	CONNECT NEW 8" WATERLINE TO EXISTING 10" WATERLINE	EA	4
14	FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY	EA	7
15	FURNISH AND INSTALL 8" DIA. COUPLING ADAPTER	EA	2
16	TRENCH SAFTEY	LF	4,149
17	REMOVE AND REPLACE FLEXIBLE PAVEMENT	SY	575
STORMWATER POLLUTION PREVENTION PLAN			
1	STORM WATER POLLUTION PREVENTION	LS	1

NOTE:

1. QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

GENERAL NOTES

6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 645-5511
www.Ardurra.com

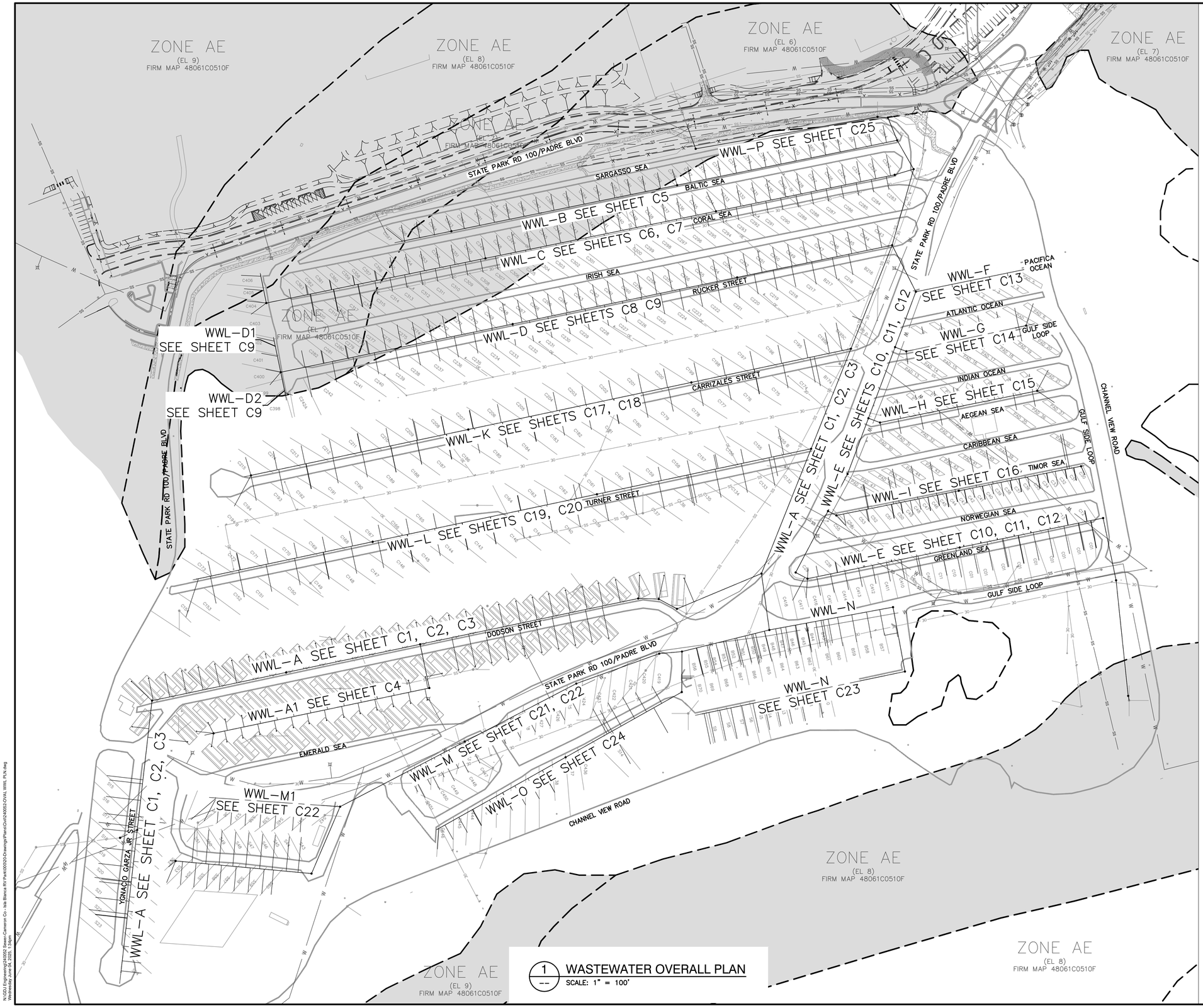
Engineering License #F-10053

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DRAWING NO.: G4 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDL\Engineering\240052 Sweetwater\Cameron Co - Isla Blanca RV Park\600\620\Drawings\Plans\Civil\240052 - CVR.dwg
Wednesday June 04, 2025, 1:29pm



1 WASTEWATER OVERALL PLAN
SCALE: 1" = 100'

100 50 0 100'
1" = 100'

LEGEND

100 YEAR FLOOD PLAIN

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING ALL LEGALLY REQUIRED PERMITS AND LICENSES, PAY ALL CHARGES AND FEES, GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK, AND ARRANGE FOR ALL INSPECTIONS.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR ACQUIRING ANY NECESSARY OFF-SITE LOCATIONS FOR STORAGE OF ALL EQUIPMENT AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PROJECT AT NO EXTRA PAY. WHEN THESE LOCATIONS ARE ADJACENT TO CITY STREETS, THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED TO THOSE STREETS BY CONSTRUCTION TRAFFIC. THIS WORK SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. UTILITIES SHOWN WERE LOCATED BY KANE-LINDSEY, LLC AND BEST AVAILABLE RECORD INFORMATION. NOT ALL UTILITIES WERE LOCATED.
4. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.
5. FOR 100 YEAR FLOOD PLAIN AREAS, PROVIDE WATER-TIGHT, GASKETED AND BOLTED RING AND COVERS FROM EJ IRON WORKS OR APPROVED EQUAL.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WASTEWATER OVERALL PLAN

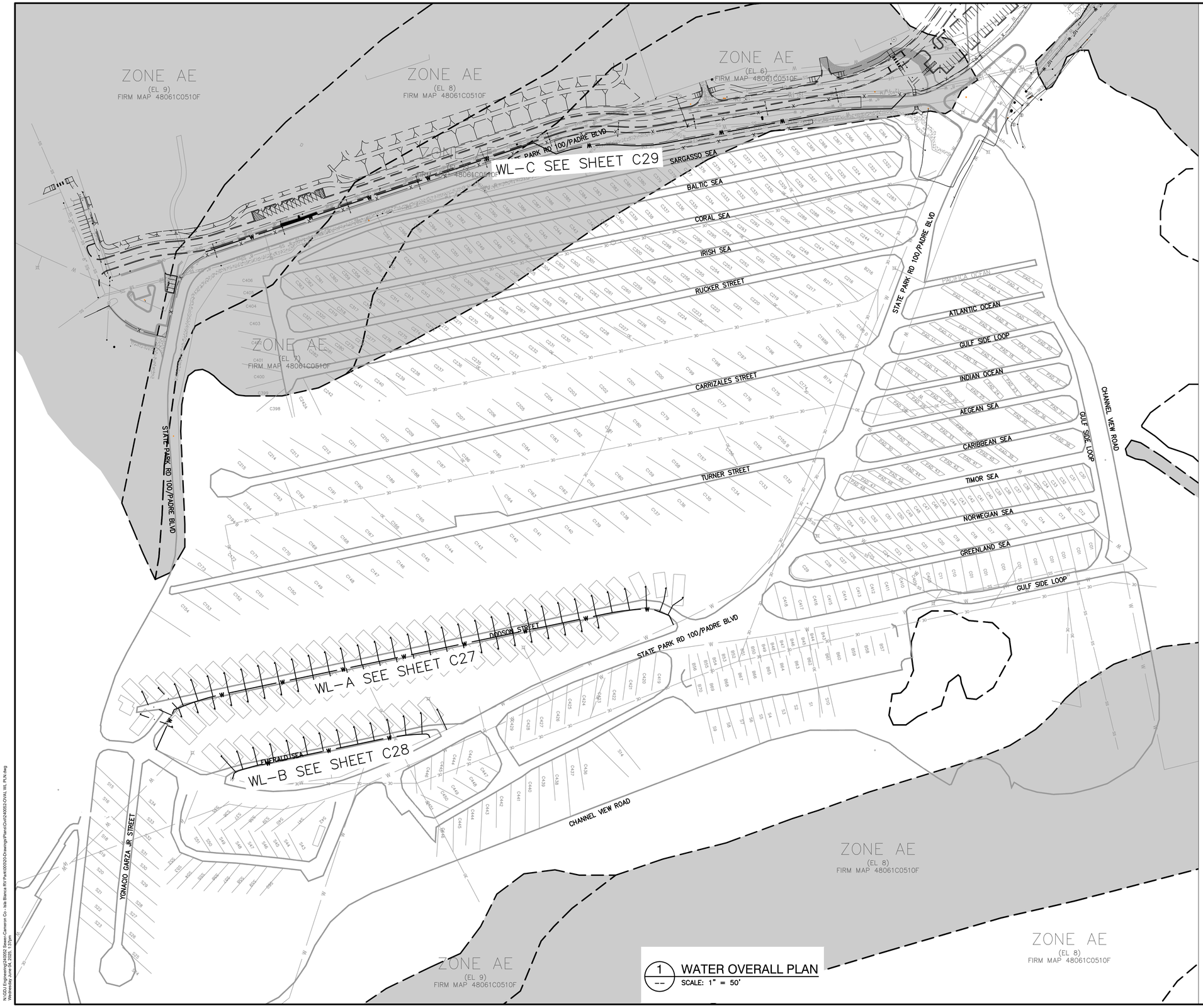
6909 Springfield Avenue, Suite 103
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www.Ardurra.com
Engineering License #F-10055

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DRAWING NO.: G5 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDU-Engineering\240052 Sweet-Cameron Co - Isla Blanca RV Park\000\02\0-Drawings\Plans\Civil\240052-OVAL WWL P-N.dwg
Wednesday, June 04, 2025, 1:34pm



1 WATER OVERALL PLAN
SCALE: 1" = 50'

N:\GDJ-Engineering\240052 Sewer-Cameron Co - Isla Blanca RV Park\000\20\2-Drawings\Plans\Civil\240052-OVAL WL PLN.dwg
Wednesday, June 04, 2025, 1:37pm

100 50 0 100'
1" = 100'

LEGEND

100 YEAR FLOOD PLAIN

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING ALL LEGALLY REQUIRED PERMITS AND LICENSES, PAY ALL CHARGES AND FEES, GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK, AND ARRANGE FOR ALL INSPECTIONS.
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4. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.
5. FOR 100 YEAR FLOOD PLAIN AREAS, PROVIDE WATER-TIGHT, GASKETED AND BOLTED RING AND COVERS FROM EJ IRON WORKS OR APPROVED EQUAL.
6. REFER TO GDJ ENGINEERING PLANS FOR ELECTRICAL SERVICE REQUIREMENTS.
7. EXISTING ELECTRICAL TO REMAIN OR BE RELOCATED AS SHOWN ON GDJ ENGINEERING PLANS.
8. REFER TO GDJ ENGINEERING PLANS FOR RV PAD LAYOUT. RV PAD LAYOUT SHOWN ON REFERENCE ONLY.
9. INSTALL BEW WATER AND SEWER SERVICES FOR ALL PROPOSED RC ADS. INSTALLATION OF SERVICES SHALL MEET ALL PLUMBING CODES.
10. SEE DETAIL 3 ON SHEET C31 FOR ALL REQUIRED SERVICE CONNECTIONS.
11. REFER TO GDJ ENGINEERING PLANS FOR DEMOLITION OF EXISTING RV PAD SITES.

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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WATER OVERALL PLAN

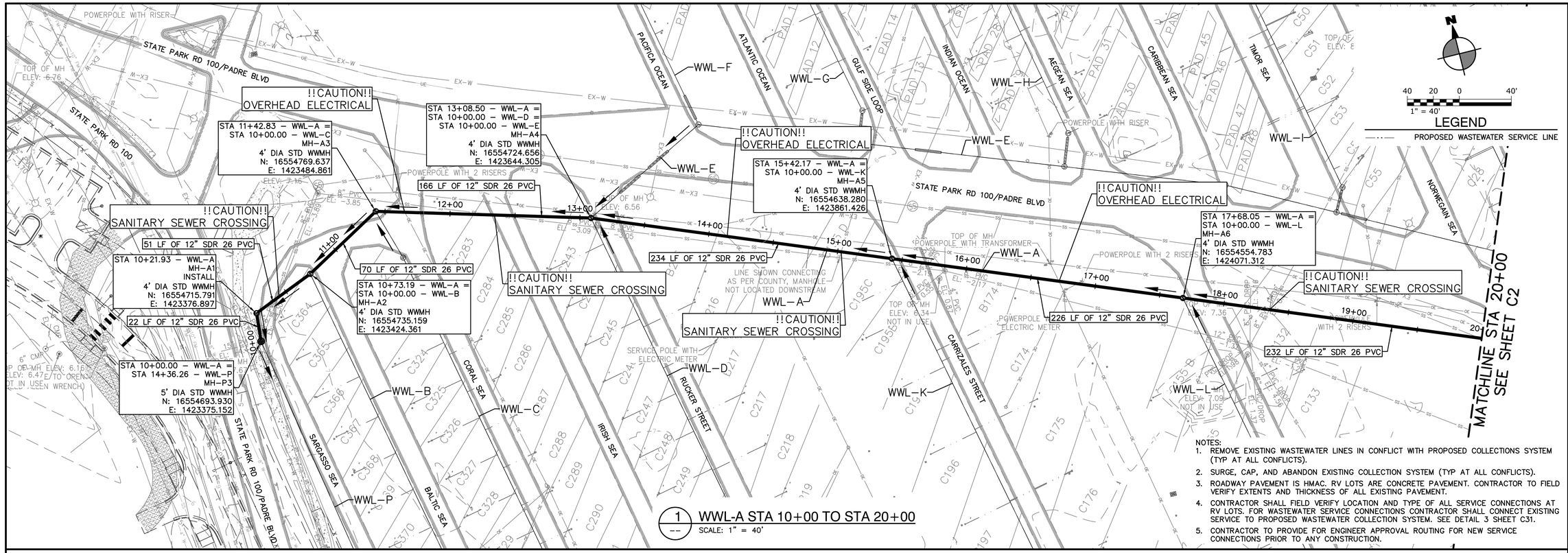
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Laredo, Texas 78041
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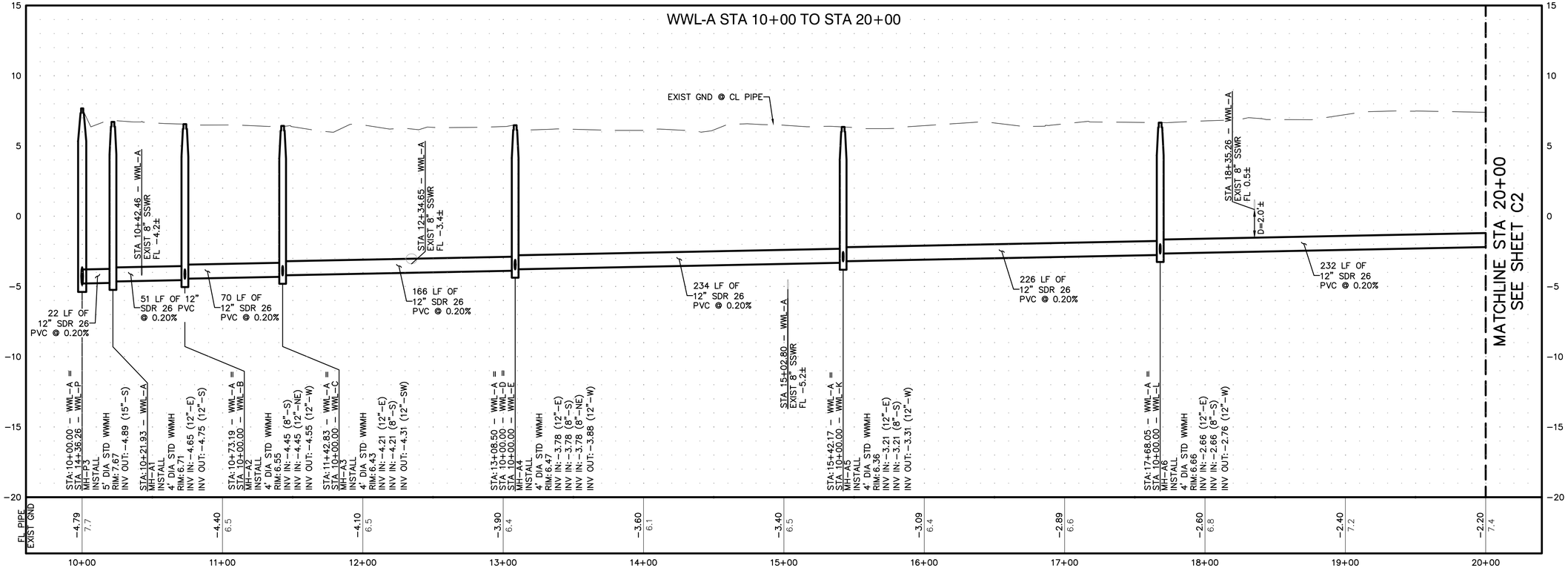
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DRAWING NO.: G6 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000



1 WWL-A STA 10+00 TO STA 20+00
SCALE: 1" = 40'



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

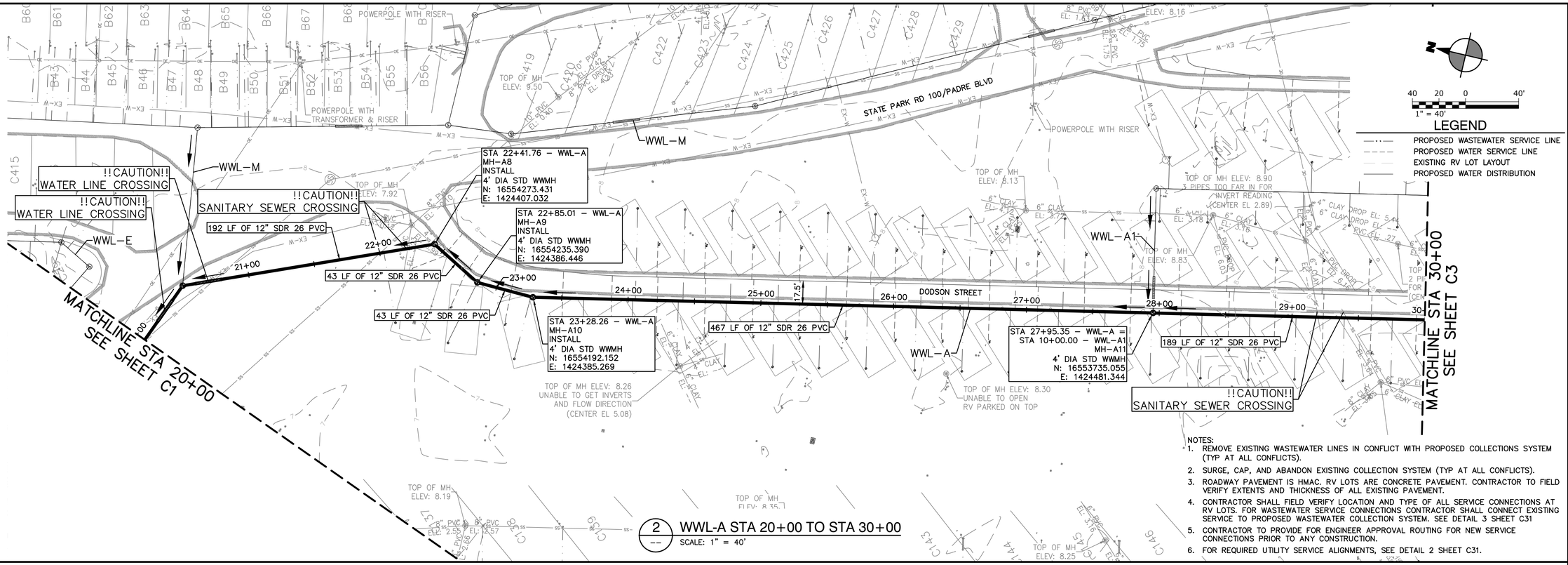
CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-A PLAN AND PROFILE
STA 10+00 TO STA 20+00

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	of 48
DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\CIVIL\Engineering\240052 Sewer-Cameron Co - Isla Blanca RV Park\600\00\00\Drawings\PlansCivil\240052LINE A PNP.dwg
Wednesday, June 04, 2025, 1:41pm

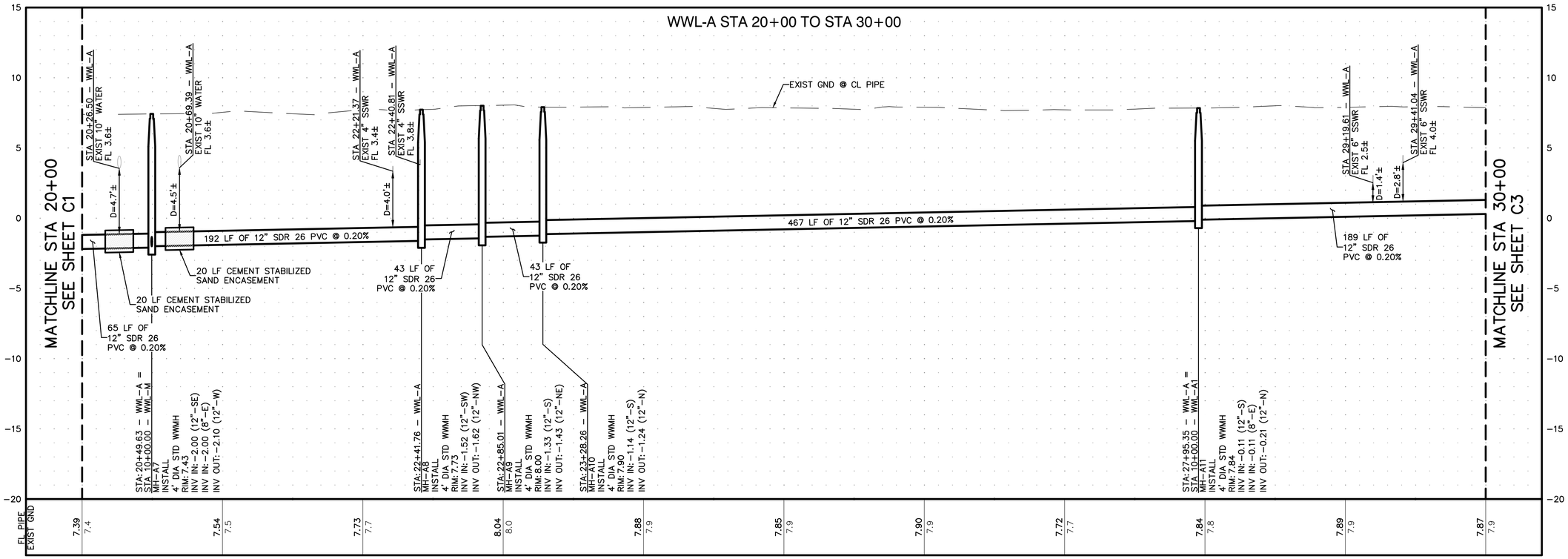


2 WWL-A STA 20+00 TO STA 30+00
SCALE: 1" = 40'

N
40 20 0 40'
1" = 40'

LEGEND
- PROPOSED WASTEWATER SERVICE LINE
- PROPOSED WATER SERVICE LINE
- EXISTING RV LOT LAYOUT
- PROPOSED WATER DISTRIBUTION

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL SERVICE CONNECTIONS AT RV LOTS. FOR WASTEWATER SERVICE CONNECTIONS CONTRACTOR SHALL CONNECT EXISTING SERVICE TO PROPOSED WASTEWATER COLLECTION SYSTEM. SEE DETAIL 3 SHEET C31
5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.
6. FOR REQUIRED UTILITY SERVICE ALIGNMENTS, SEE DETAIL 2 SHEET C31.



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-A PLAN AND PROFILE STA 20+00 TO STA 30+00

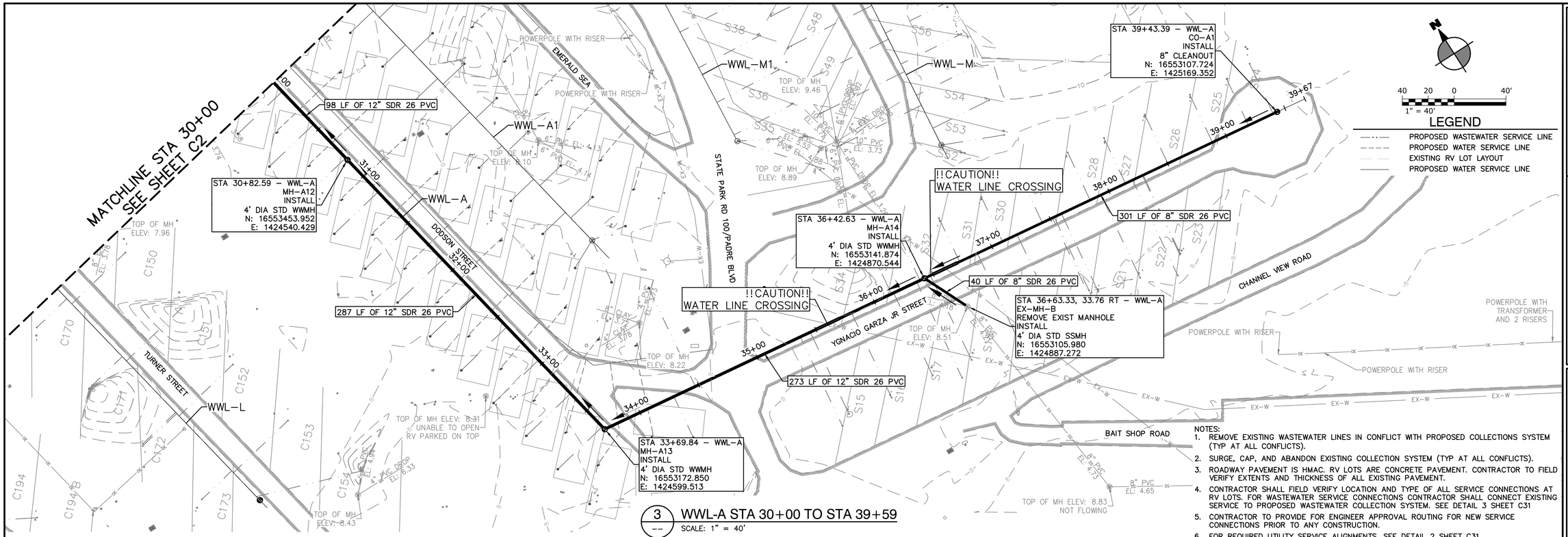
6909 Springfield Avenue, Suite 303
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www.Ardurra.com
Engineering License #F-10053

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DRAWING NO.: C2 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GIS\ Engineering\240052 Sosa-Cameron Co - Isla Blanca RV Park\000\026\Drawings\Plans\Civil\240052-LINE A PNP.dwg
Wednesday June 04, 2025, 1:44pm

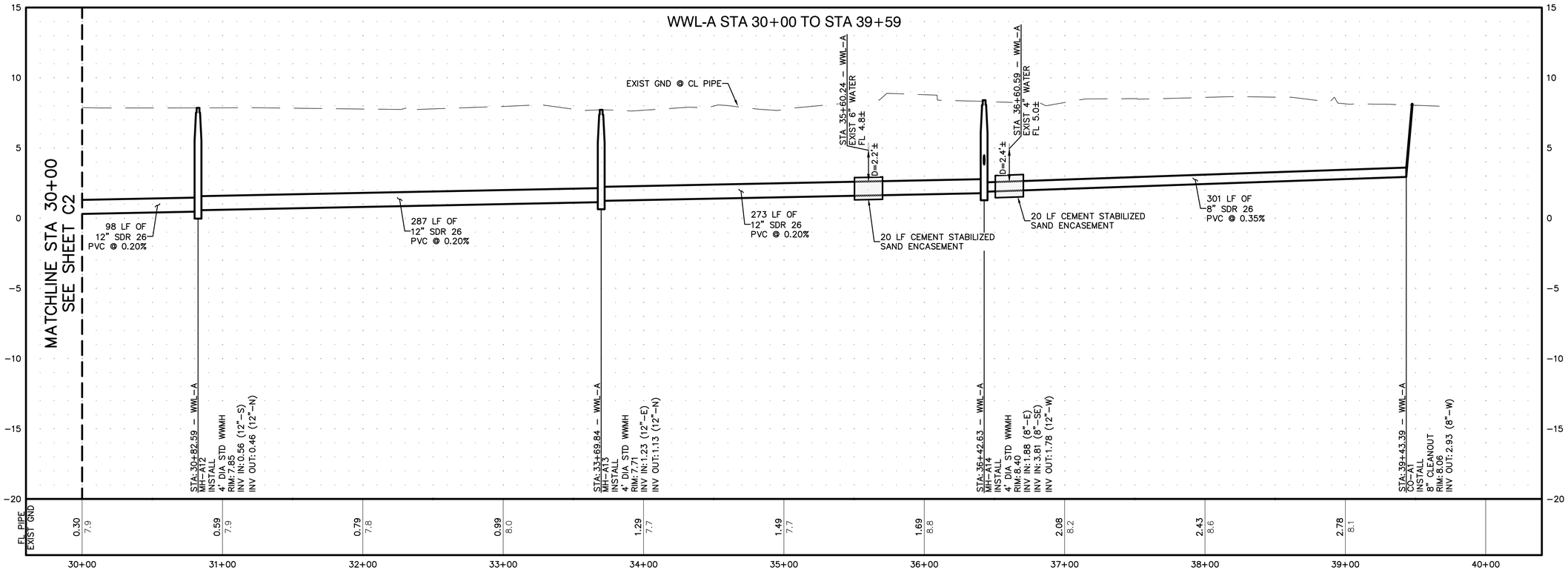


3 WWL-A STA 30+00 TO STA 39+59
SCALE: 1" = 40'

LEGEND

- PROPOSED WASTEWATER SERVICE LINE
- PROPOSED WATER SERVICE LINE
- EXISTING RV LOT LAYOUT
- PROPOSED WATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL SERVICE CONNECTIONS AT RV LOTS. FOR WASTEWATER SERVICE CONNECTIONS CONTRACTOR SHALL CONNECT EXISTING SERVICE TO PROPOSED WASTEWATER COLLECTION SYSTEM. SEE DETAIL 3 SHEET C31
5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.
6. FOR REQUIRED UTILITY SERVICE ALIGNMENTS, SEE DETAIL 2 SHEET C31.



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

BY	DESCRIPTION	NO	DATE

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-A PLAN AND PROFILE
STA 30+00 TO STA 39+59

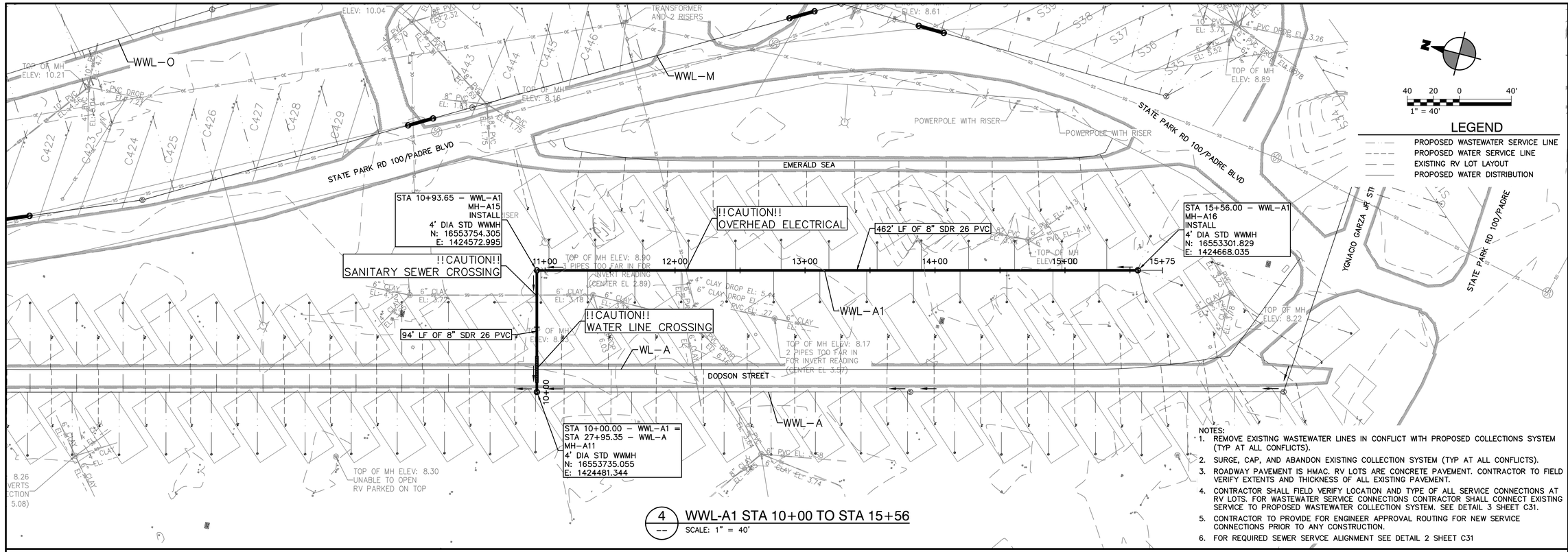
6909 Springfield Avenue, Suite 303
Lincoln, Texas 78641
Phone: (936) 462-5511
www.Ardurra.com
Engineering License #F-10053

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DRAWING NO.: C3 of 48

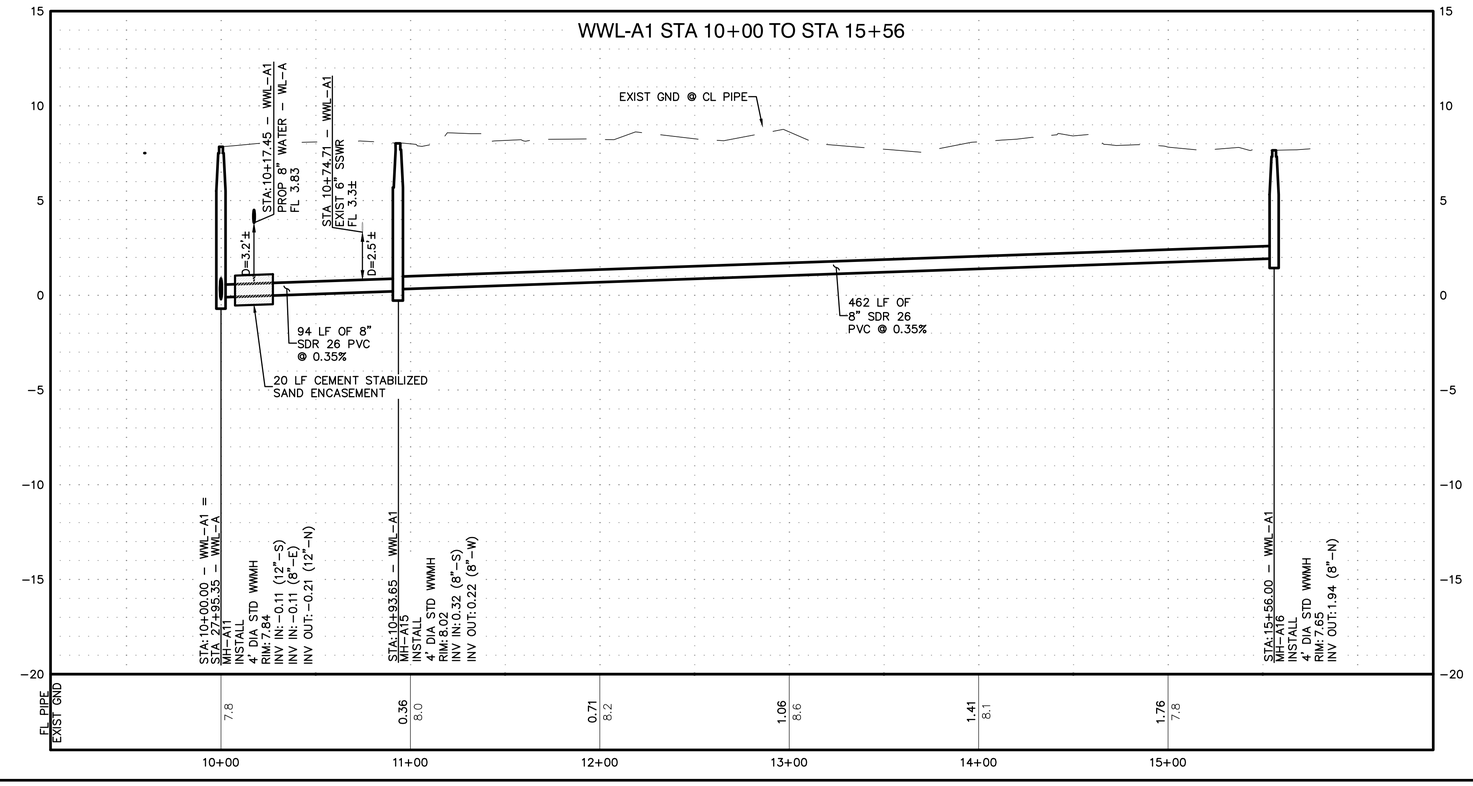
DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 1:45pm



4 — WWL-A1 STA 10+00 TO STA 15+56
SCALE: 1" = 40'

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
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5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.
6. FOR REQUIRED SEWER SERVCE ALIGNMENT SEE DETAIL 2 SHEET C31



LEGEND
- PROPOSED WASTEWATER SERVICE LINE
- PROPOSED WATER SERVICE LINE
- EXISTING RV LOT LAYOUT
- PROPOSED WATER DISTRIBUTION

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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-A1 PLAN AND PROFILE
STA 10+00 TO STA 15+56

6909 Springfield Avenue, Suite 303
Lubbock, Texas 79424
Phone: (806) 543-3511
www.Ardurra.com

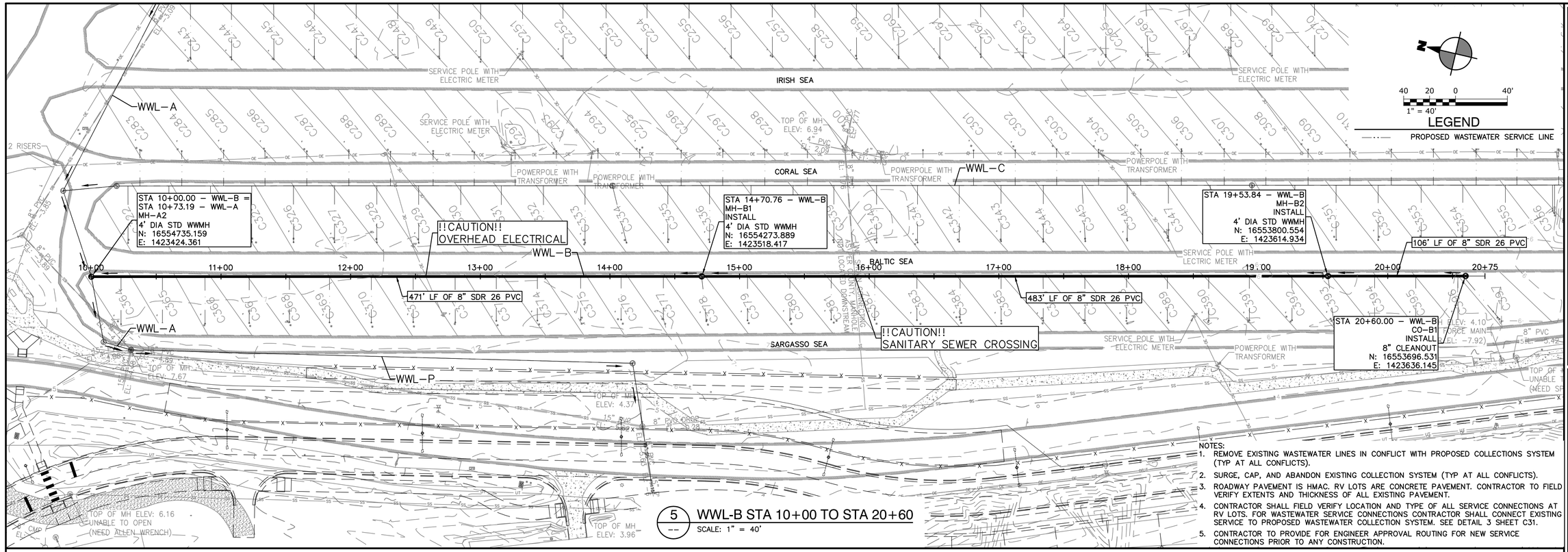
Engineering License #F-10053

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DRAWING NO.: C4 of 48

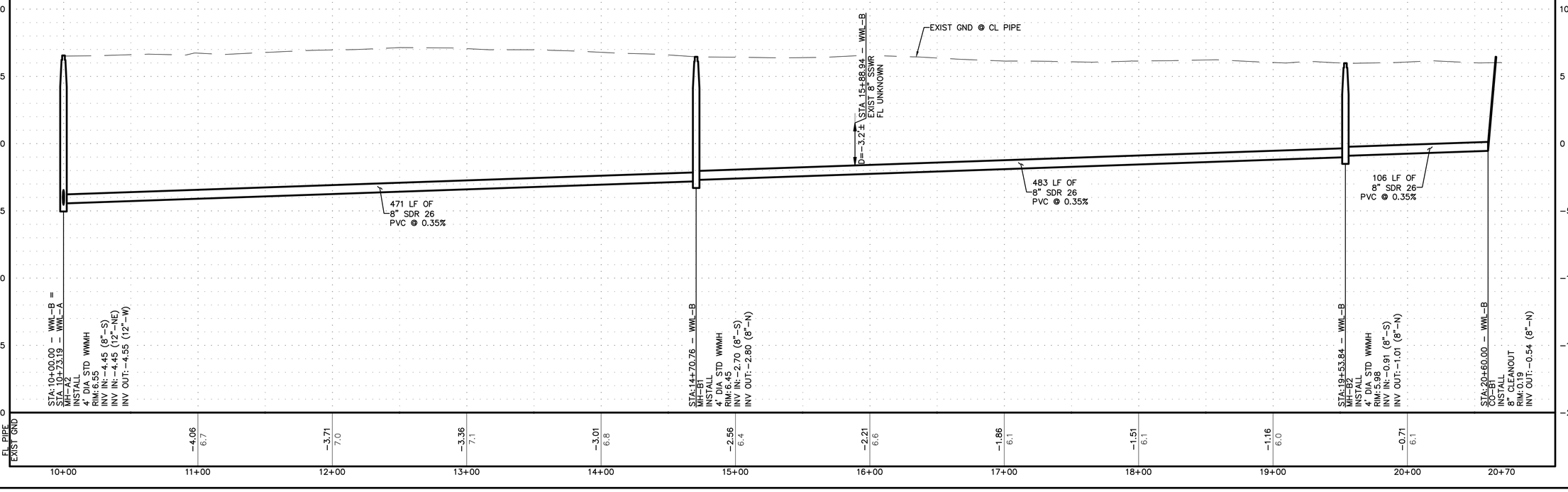
DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDU Engineering\240052 Brewer,Cameron Co - Isla Blanca RV Park\030\020\Drawings\PlanSht\240052-LINE A1 PNP.dwg
Wednesday, June 04, 2025, 1:48pm



5 WWL-B STA 10+00 TO STA 20+60
SCALE: 1" = 40'

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-B PLAN AND PROFILE
STA 10+00 TO STA 20+60

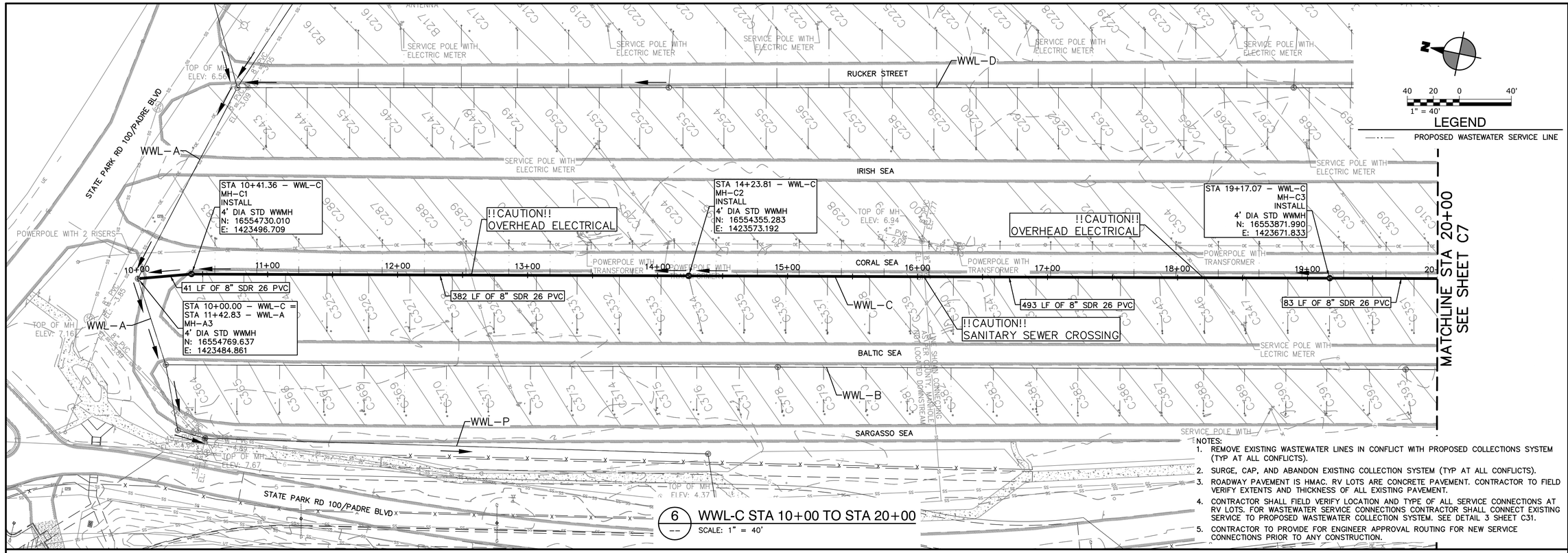
6909 Springfield Avenue, Suite 303
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Phone: (806) 535-3511
www.Ardurra.com
Engineering License #F-10053

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DRAWING NO.: C5
of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDU Engineering\240052.Brewo,Cameron Co - Isla Blanca RV Park\000\026\Drawings\Plans\Civil\240052-LINE B PNP.dwg
Wednesday, June 04, 2025, 1:54pm

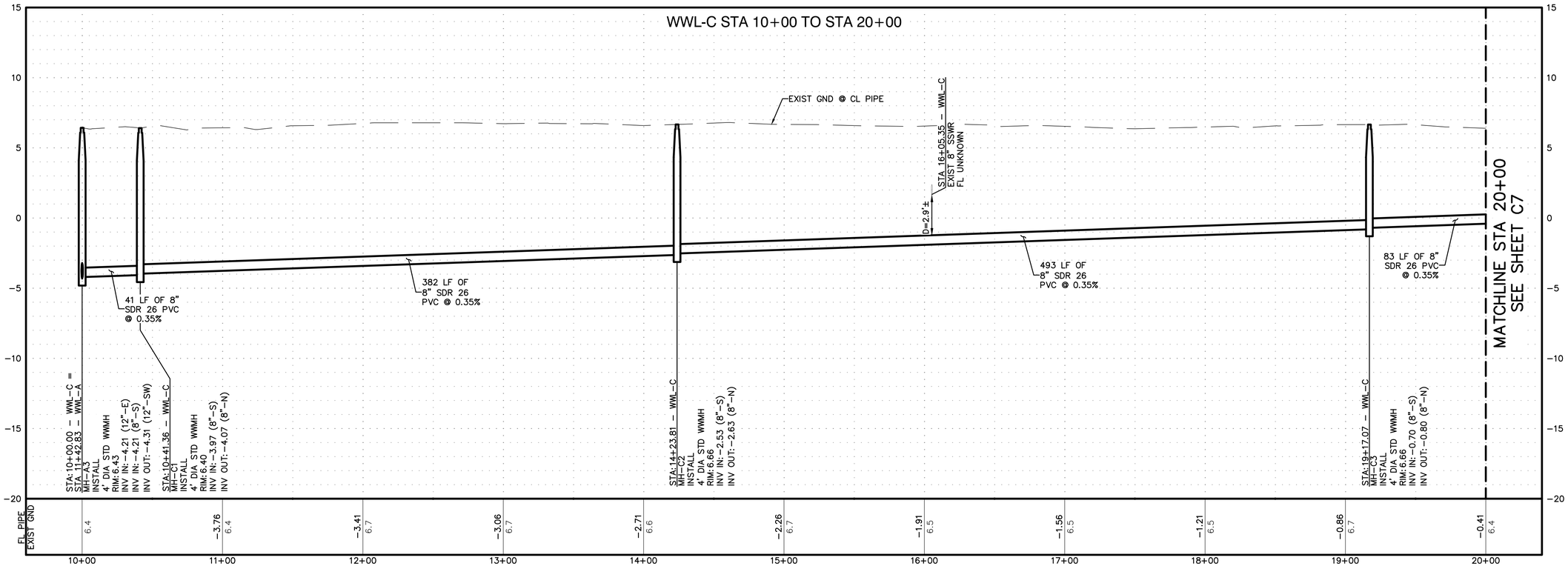


6 WWL-C STA 10+00 TO STA 20+00
SCALE: 1" = 40'

40 20 0 40'
1" = 40'

LEGEND
PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL SERVICE CONNECTIONS AT RV LOTS. FOR WASTEWATER SERVICE CONNECTIONS CONTRACTOR SHALL CONNECT EXISTING SERVICE TO PROPOSED WASTEWATER COLLECTION SYSTEM. SEE DETAIL 3 SHEET C31.
5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-C PLAN AND PROFILE STA 10+00 TO 20+00

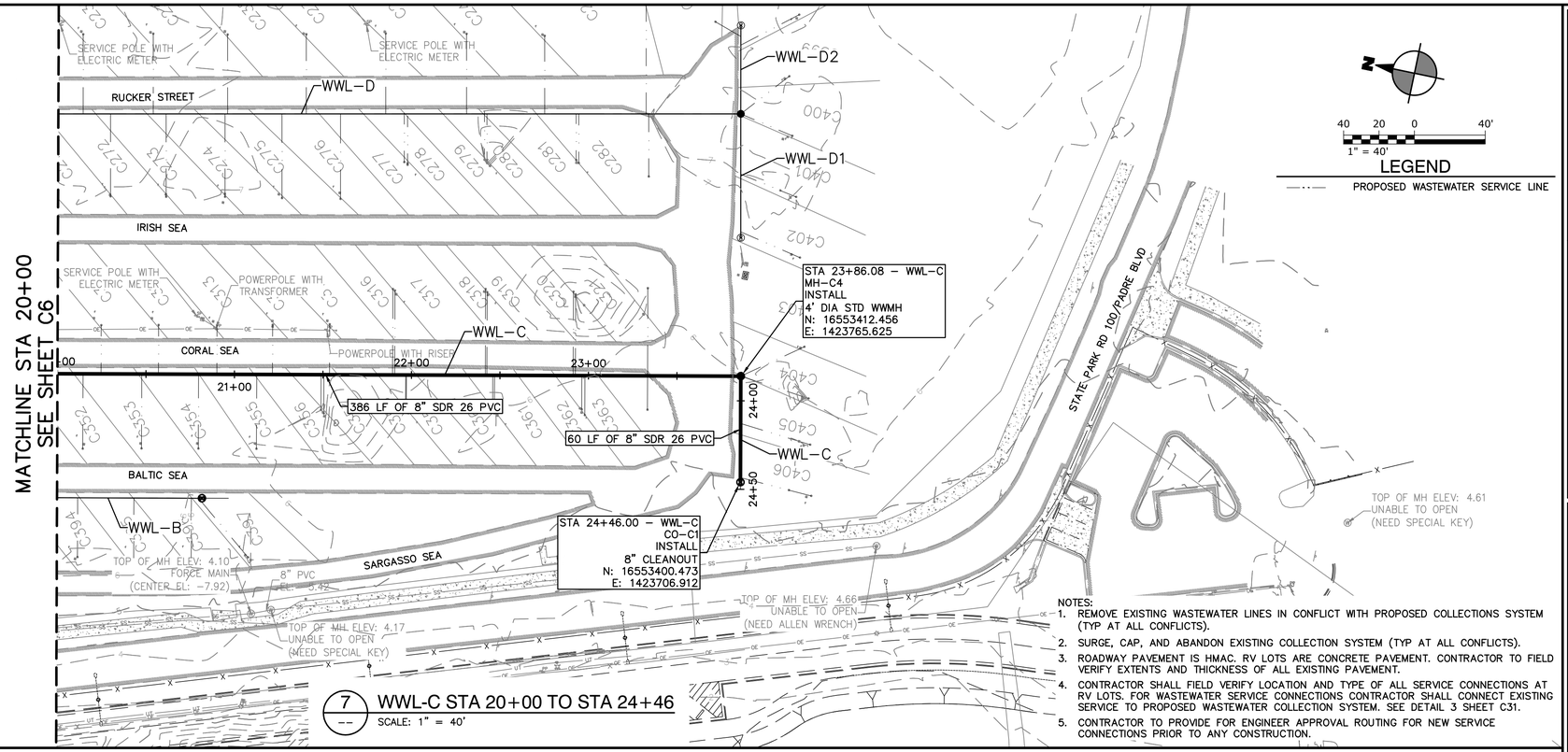
6909 Springfield Avenue, Suite 303
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DRAWING NO.: C6 of 48

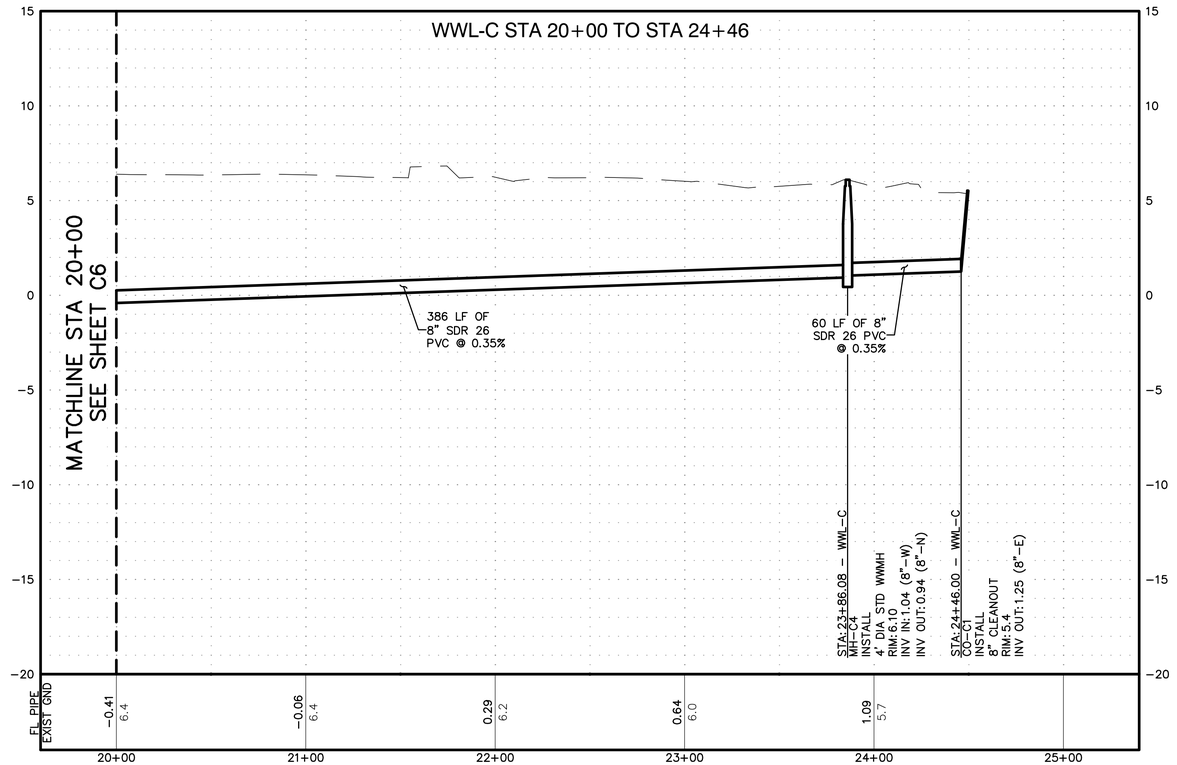
DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday June 04, 2025, 2:00pm



7 WWL-C STA 20+00 TO STA 24+46
SCALE: 1" = 40'

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-C PLAN AND PROFILE
STA 20+00 TO STA 24+46

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Lubbock, Texas 79424
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DRAWING NO.:	C7
	of 48
DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 2:02pm

CARRIZALES STREET

ATLANTIC OCEAN

PACIFICA OCEAN

STATE PARK RD 100/PADRE BLVD

RUCKER STREET

IRISH SEA

CORAL SEA

ELEV: 6.34
NOT IN USE

LINE SHOWN CONNECTING AS PER COUNTY, MANHOLE NOT LOCATED DOWNSTREAM

WWL–A

WWL–C

WWL–D

WWL–E

WWL–K

STA 10+08.13 – WWL–D
EX–MH–A3
REMOVE EXIST MANHOLE
CUT AND PLUG EXIST PIPES
N: 16554716.760
E: 1423646.268

STA 10+00.00 – WWL–D =
STA 13+08.50 – WWL–A =
STA 10+00.00 – WWL–E
MH–A4
4' DIA STD WWMH
N: 16554724.656
E: 1423644.305

STA 13+31.90 – WWL–D
MH–D1
INSTALL
4' DIA STD WWMH
N: 16554399.693
E: 1423711.830

STA 18+12.69 – WWL–D
MH–D2
INSTALL
4' DIA STD WWMH
N: 16553928.961
E: 1423809.645

TOP OF MH
ELEV: 6.56

TOP OF MH
ELEV: 6.94

332 LF OF 8" SDR 26 PVC

481 LF OF 8" SDR 26 PVC

187 LF OF 8" SDR 26 PVC

POWERPOLE WITH ANTENNA

POWERPOLE WITH TRANSFORMER

SERVICE POLE WITH ELECTRIC METER

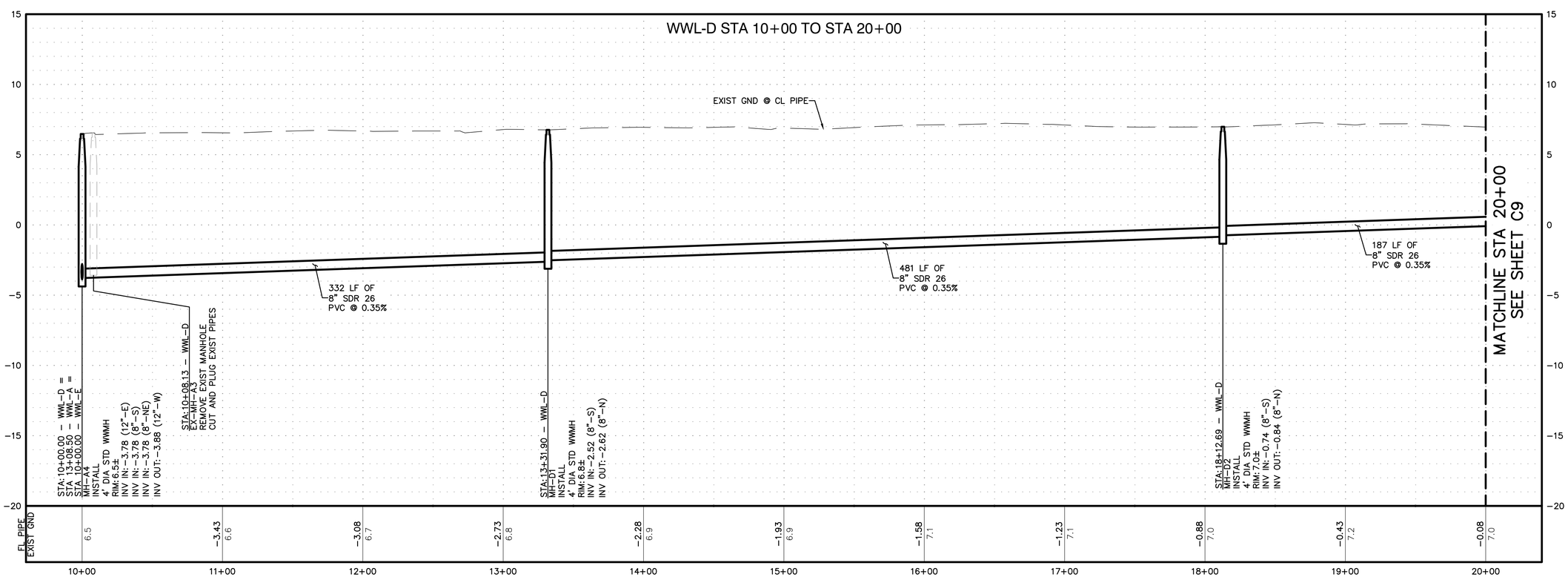
MATCHLINE STA 20+00
SEE SHEET C9

40 20 0 40'
1" = 40'

LEGEND
PROPOSED WASTEWATER SERVICE LINE

NOTES:
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8
WWL-D STA 10+00 TO STA 20+00
SCALE: 1" = 40'



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-D PLAN AND PROFILE
STA 10+00 TO 20+00

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Lubbock, Texas 79424
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www.Ardurra.com
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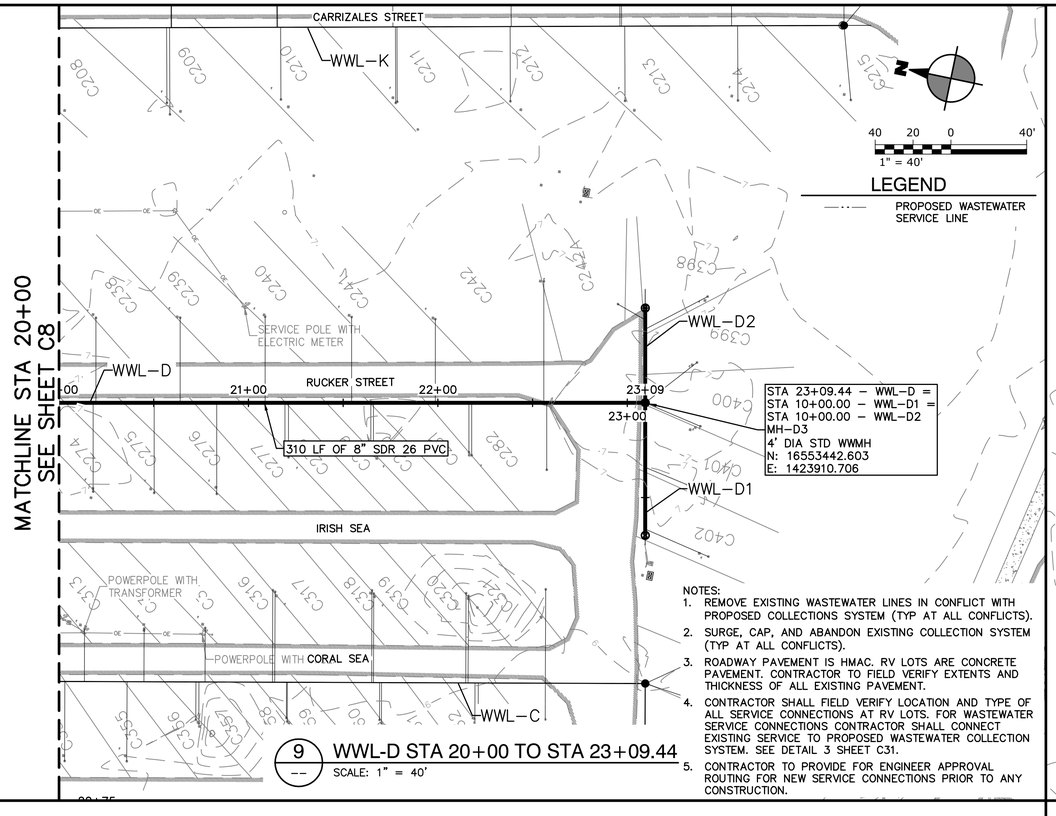
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DRAWING NO.: C8 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

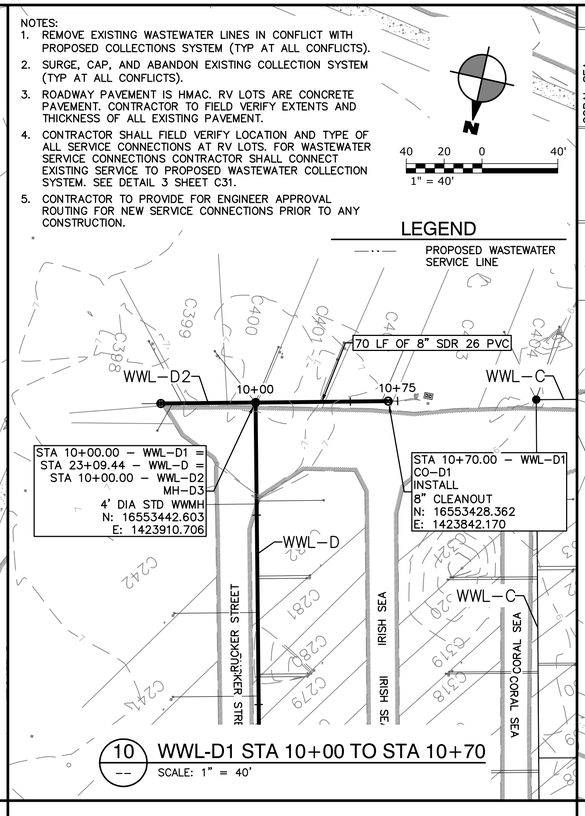
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Wednesday, June 04, 2025, 2:05pm

RFP # 250502

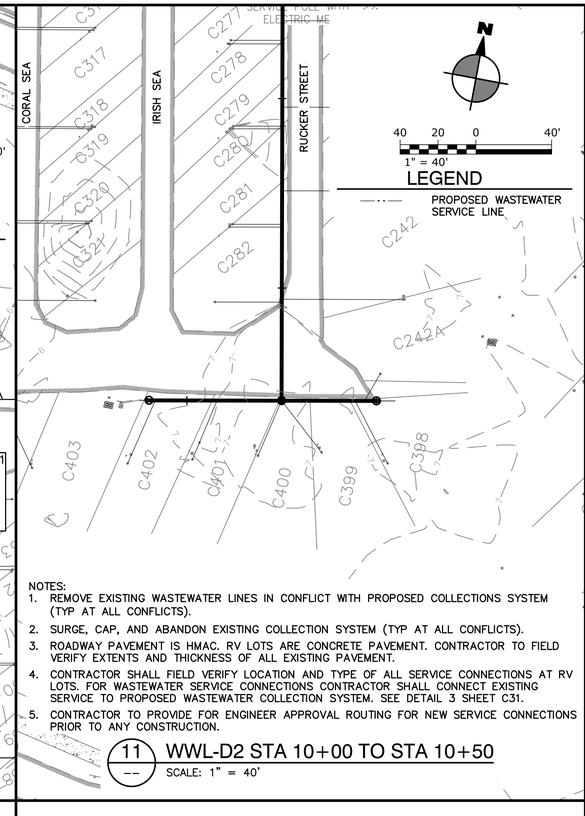


NOTES:
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9 -- WWL-D STA 20+00 TO STA 23+09.44
SCALE: 1" = 40'

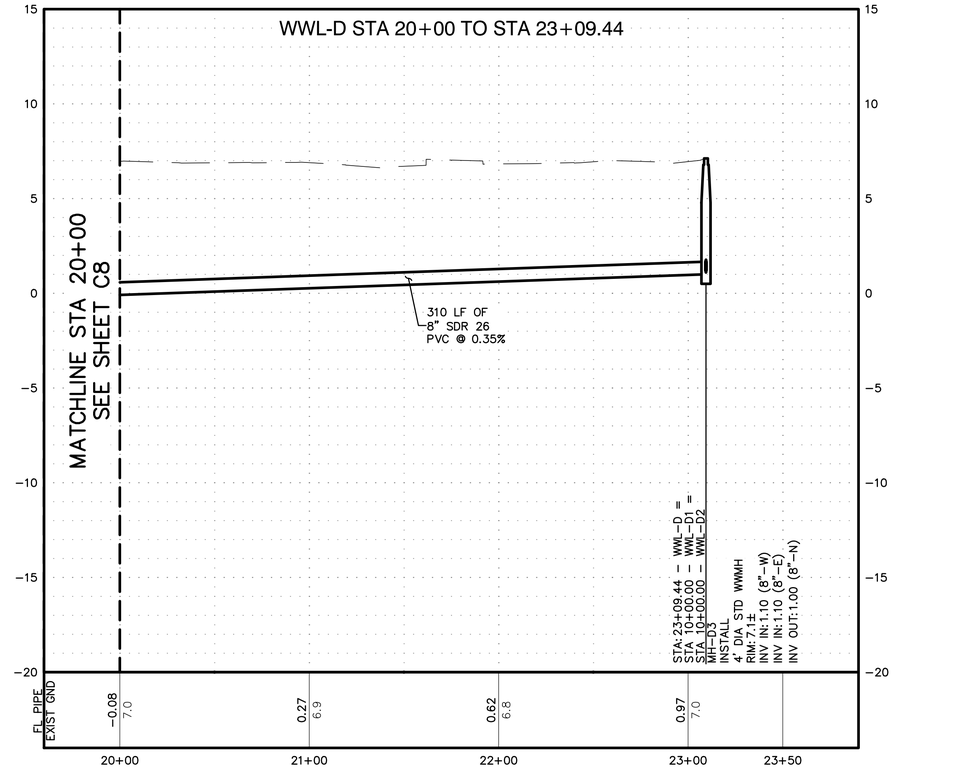


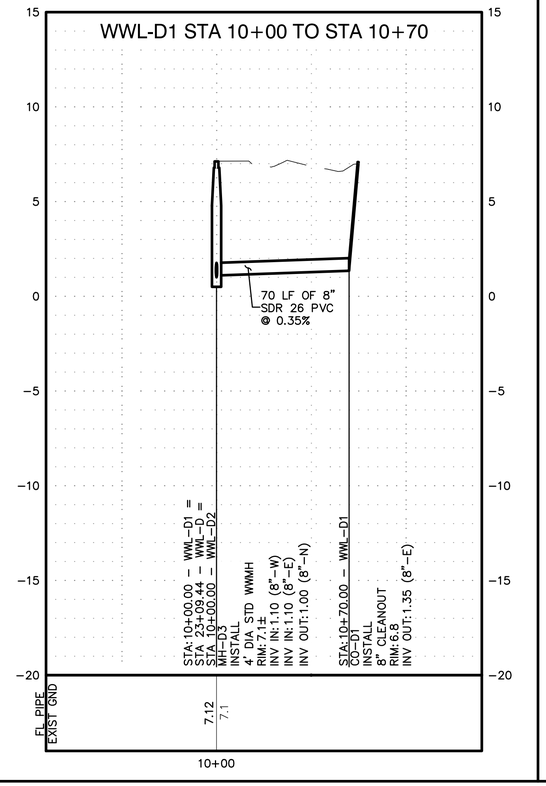
10 -- WWL-D1 STA 10+00 TO STA 10+70
SCALE: 1" = 40'

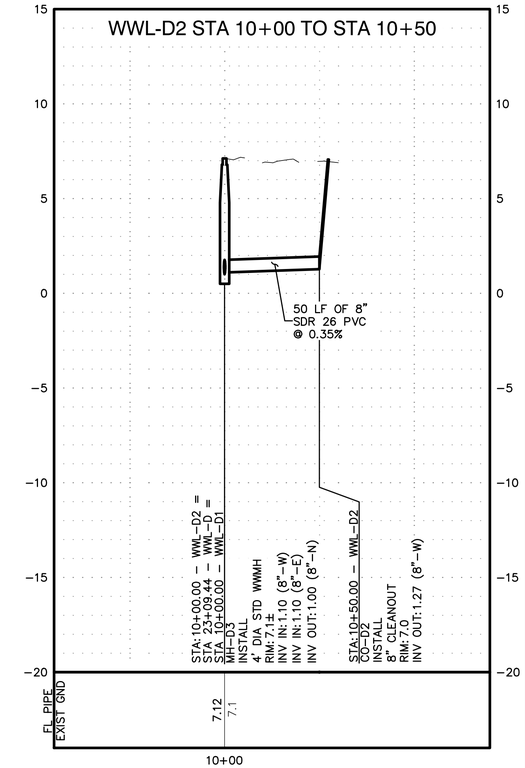


NOTES:
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11 -- WWL-D2 STA 10+00 TO STA 10+50
SCALE: 1" = 40'







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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT
WWL-D PLAN AND PROFILE STA 20+00 TO STA 23+09.44
WWL-D1 PLAN AND PROFILE STA 10+00 TO STA 10+70
WWL-D2 PLAN AND PROFILE STA 10+00 TO STA 10+50

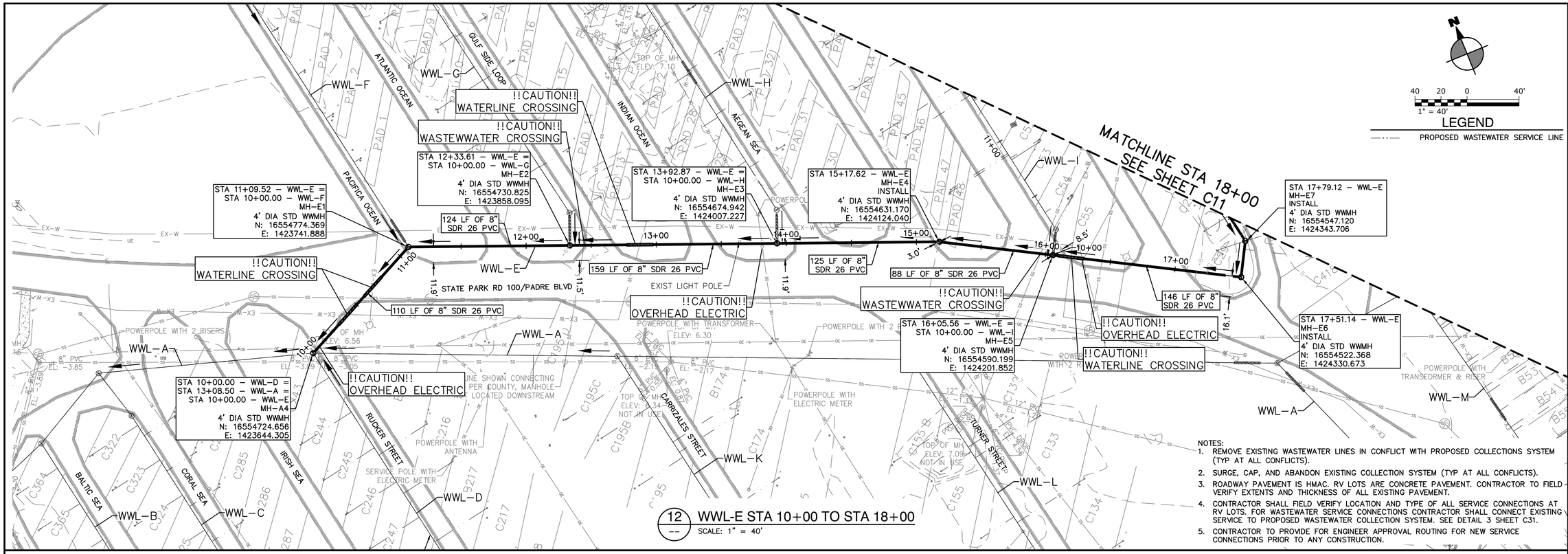
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Laredo, Texas 78041
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Engineering License #F-10053
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DRAWING NO.: C9 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

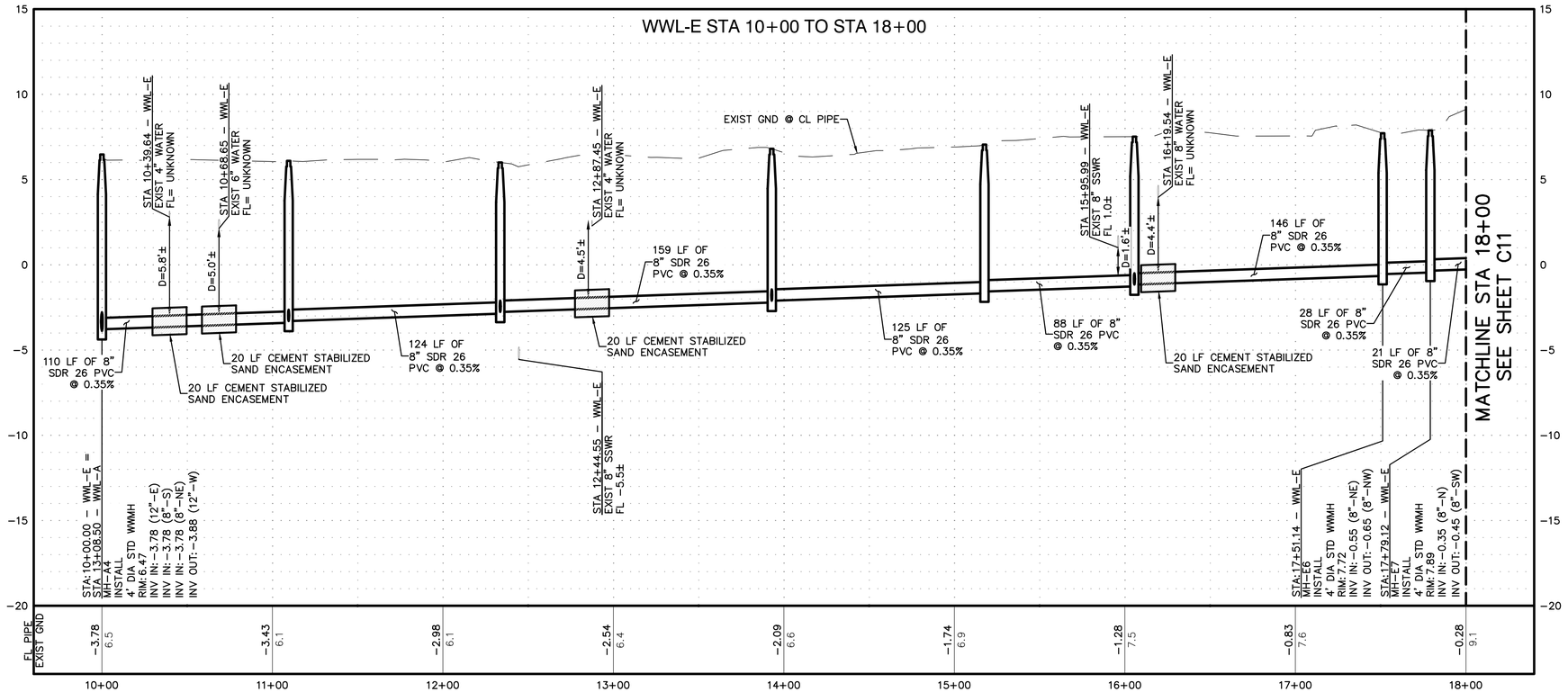
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Wednesday, June 04, 2025, 2:09pm

RFP # 250502



12 WWL-E STA 10+00 TO STA 18+00
SCALE: 1" = 40'

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

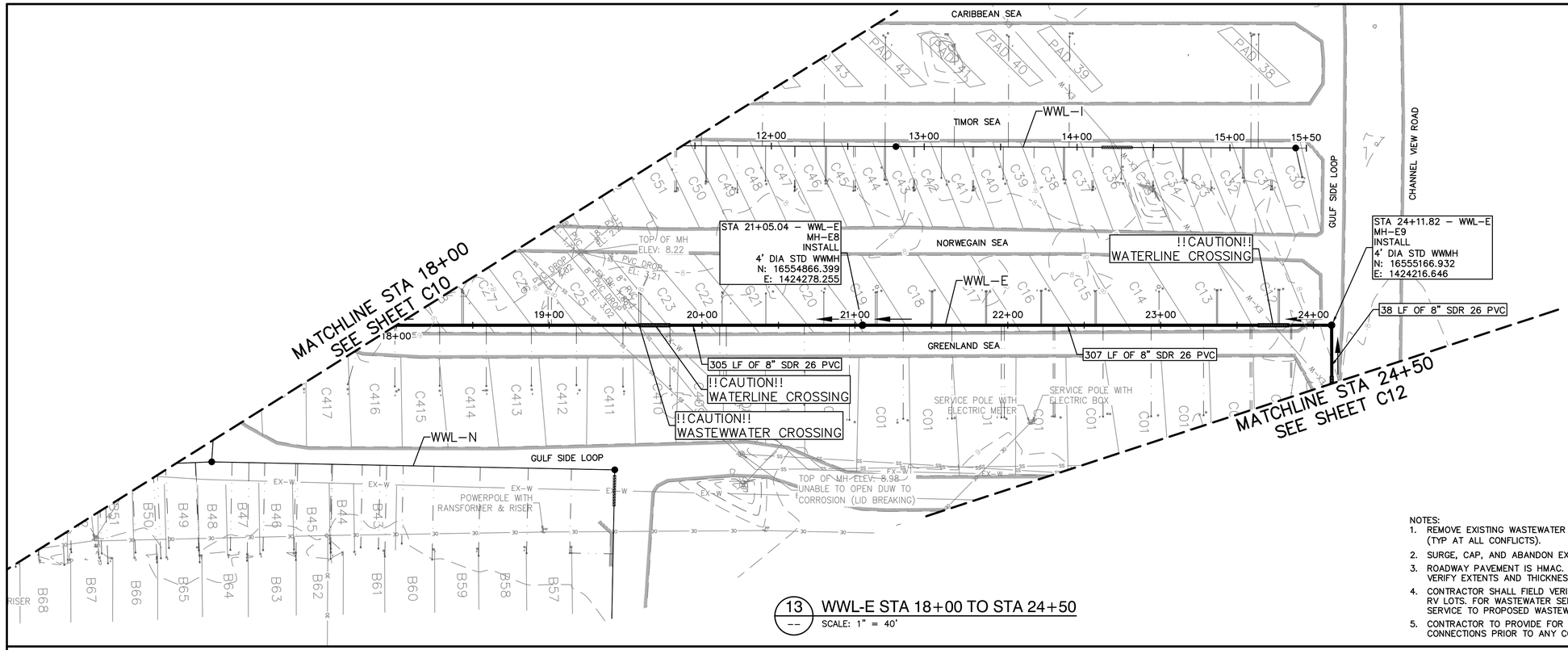
WWL-E PLAN AND PROFILE STA 10+00 TO 18+00

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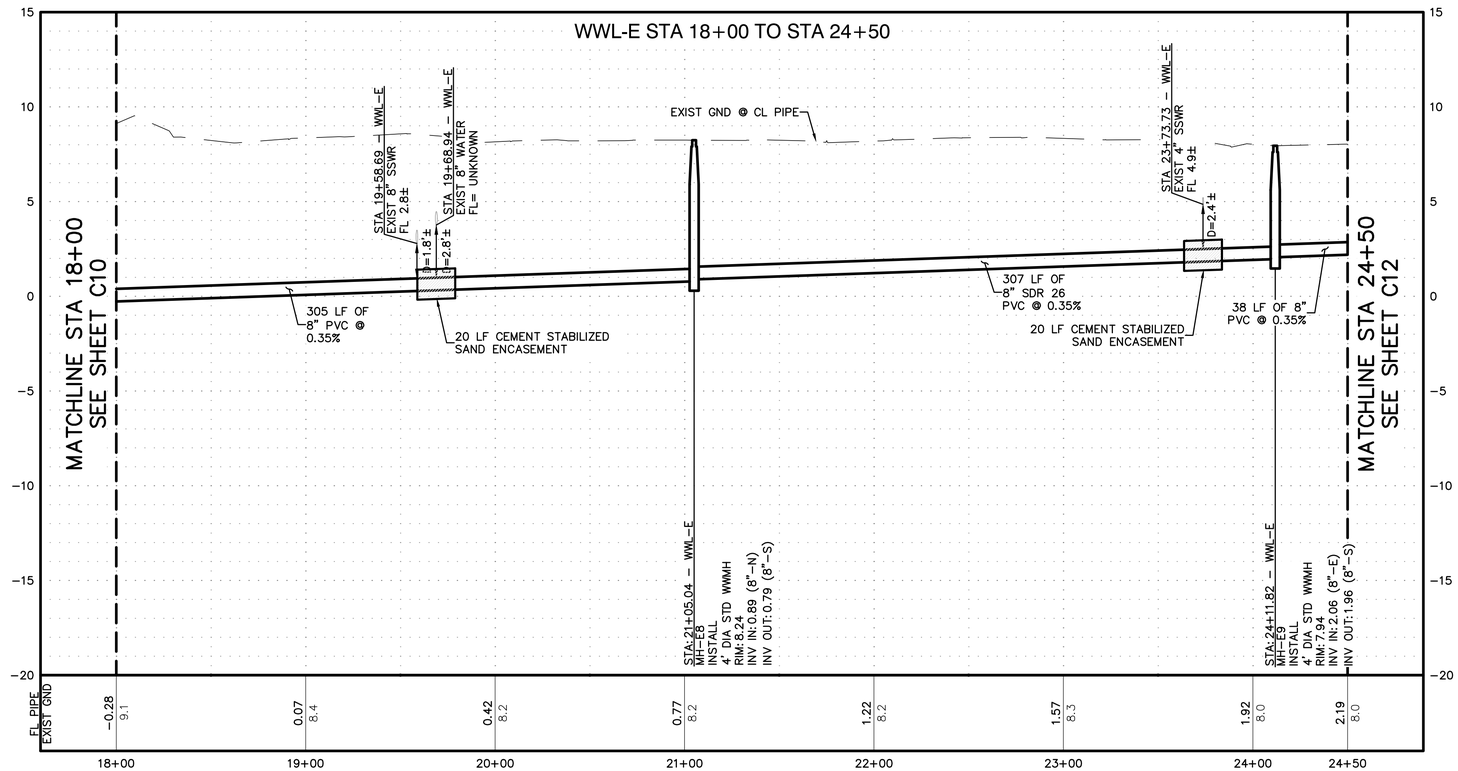
DRAWING NO.: C10 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GIS Engineering\240052 Sheet-Cameron Co- Isla Blanca RV Park\000\026\Drawings\Plans\Civil\240052-LINE E PNP.dwg
Wednesday June 04, 2025, 2:12pm



13 WWL-E STA 18+00 TO STA 24+50
SCALE: 1" = 40'



NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

40 20 0 40'
1" = 40'

LEGEND
PROPOSED WASTEWATER SERVICE LINE

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-E PLAN AND PROFILE STA 18+00 TO 24+50

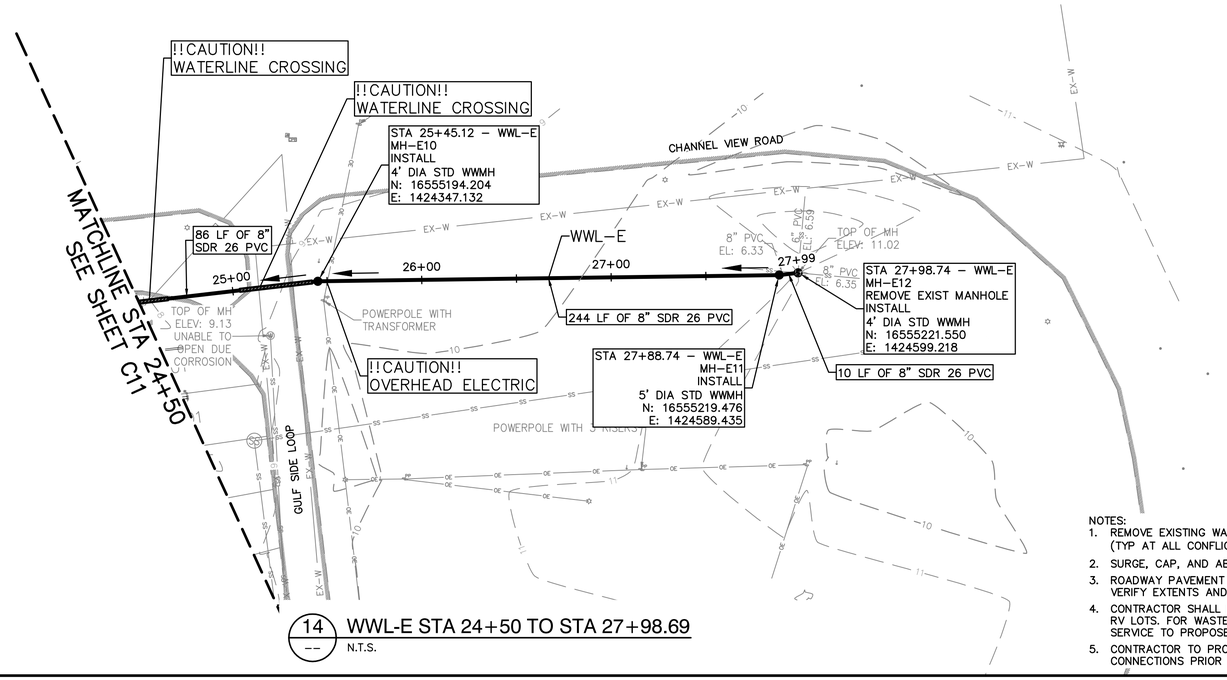
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DRAWING NO.: C11 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday June 04, 2025, 2:13pm



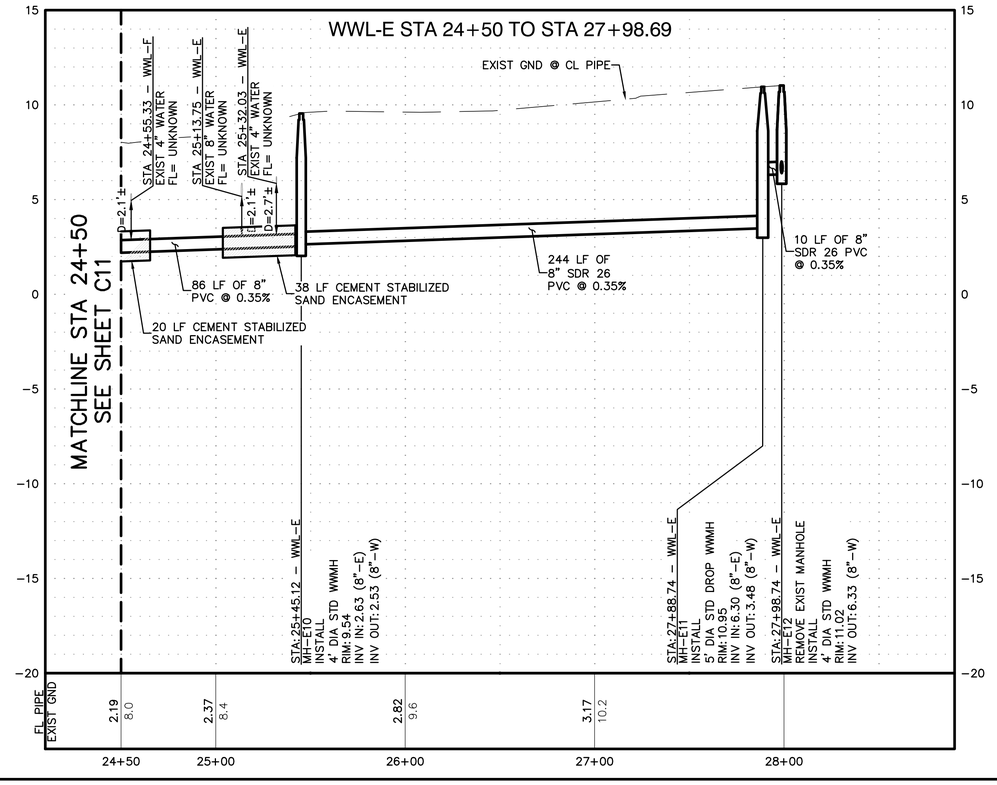
14 WWL-E STA 24+50 TO STA 27+98.69
N.T.S.



LEGEND

—·—·— PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
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ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

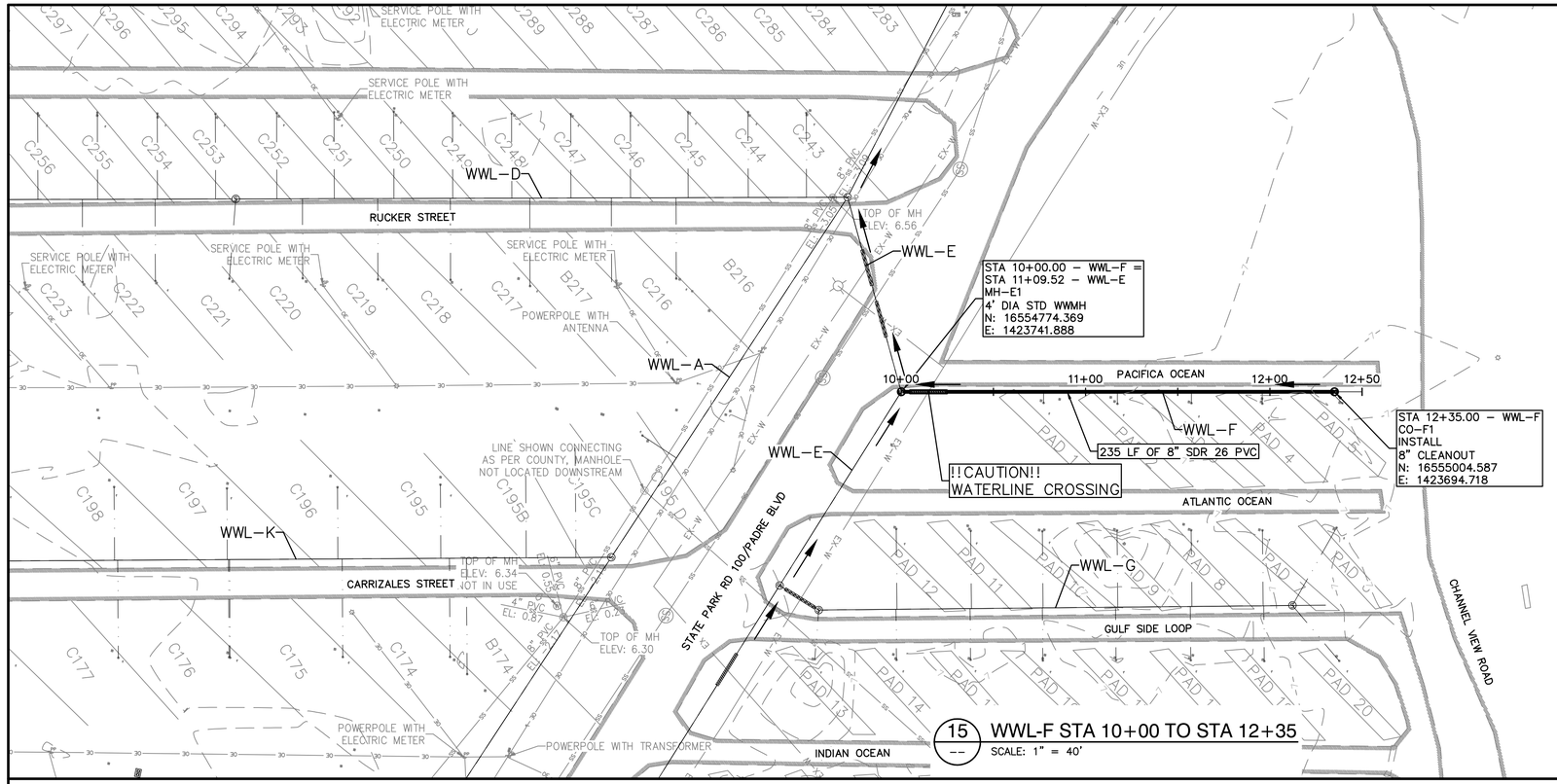
WWL-E PLAN AND PROFILE
STA 24+50 TO STA 27+98.69

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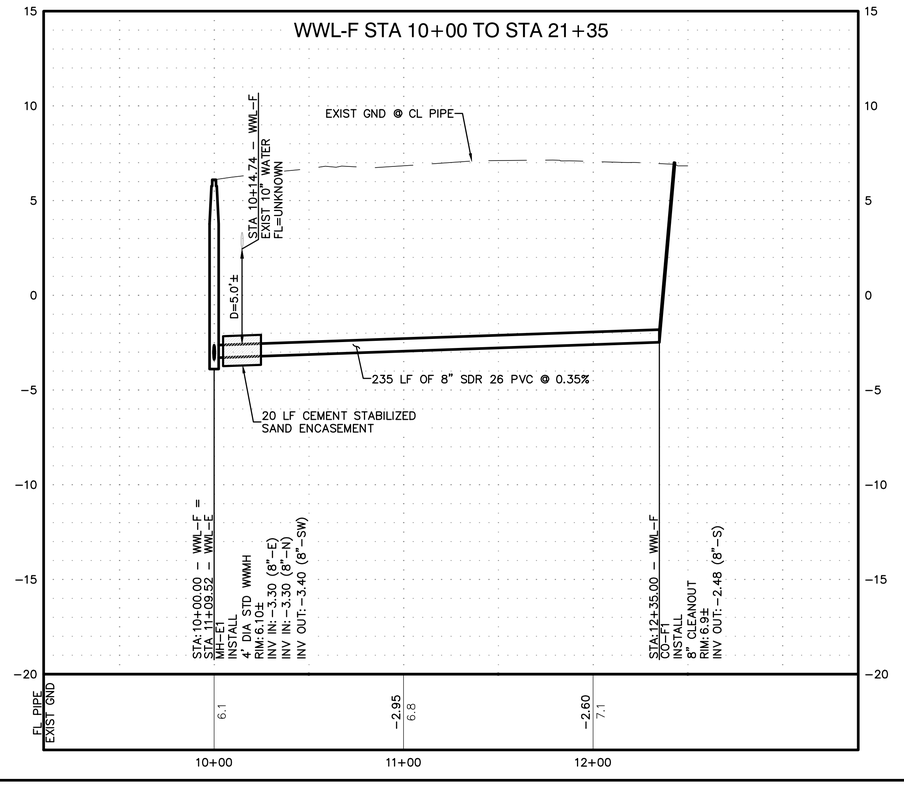
DRAWING NO.: C12 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 2:14pm



15 WWL-F STA 10+00 TO STA 12+35
SCALE: 1" = 40'



NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL SERVICE CONNECTIONS AT RV LOTS. FOR WASTEWATER SERVICE CONNECTIONS CONTRACTOR SHALL CONNECT EXISTING SERVICE TO PROPOSED WASTEWATER COLLECTION SYSTEM. SEE DETAIL 3 SHEET C31.
5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.

40 20 0 40'
1" = 40'

LEGEND
PROPOSED WASTEWATER SERVICE LINE

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-F PLAN AND PROFILE STA 10+00 TO STA 12+35

6909 Springfield Avenue, Suite 303
Lubbock, Texas 79413
Phone: 806.543.3511
www.Ardurra.com
Engineering License #F-10053

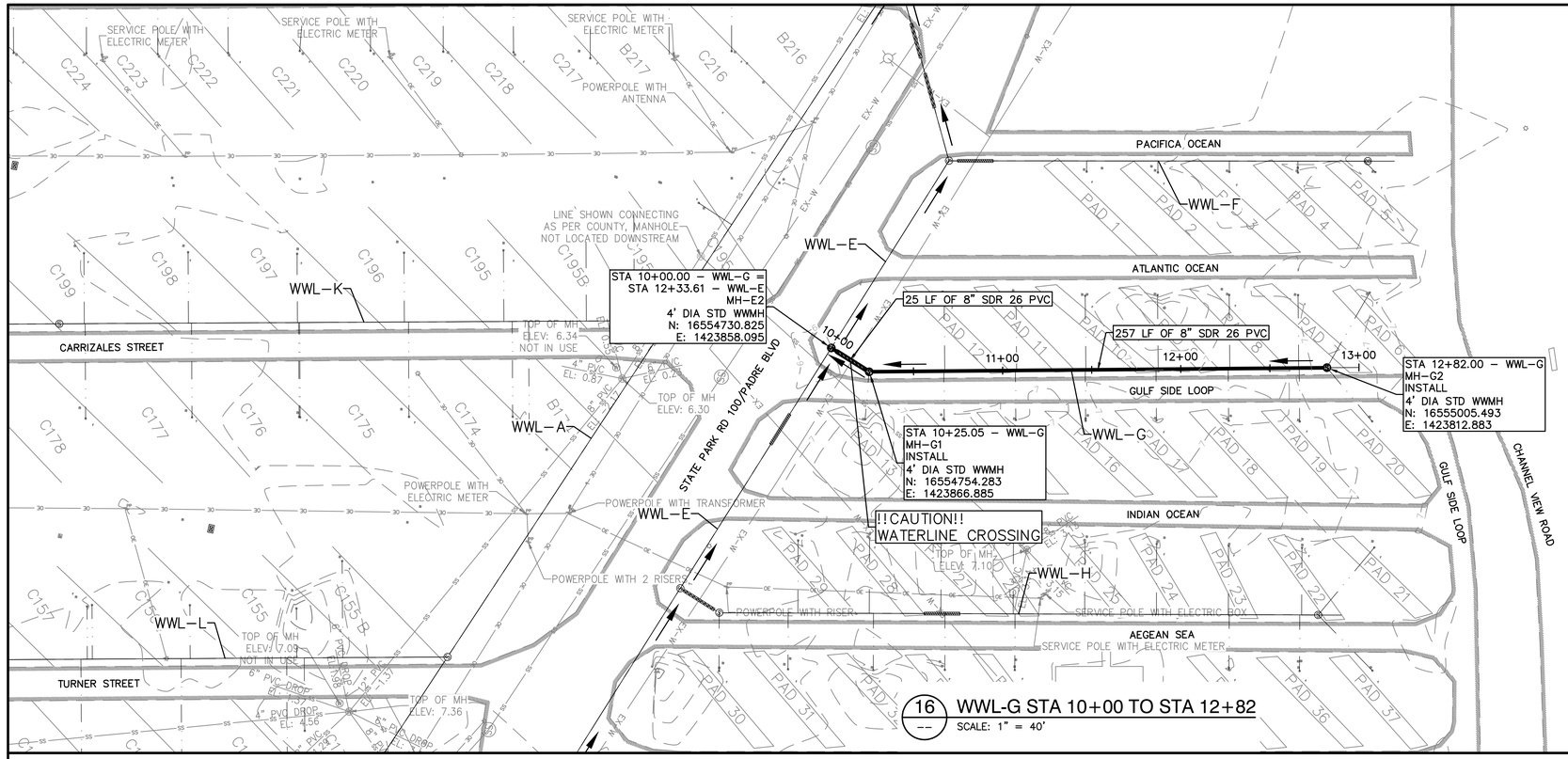
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DRAWING NO.: C13 of 48

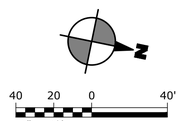
DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 2:16pm

RFP # 250502



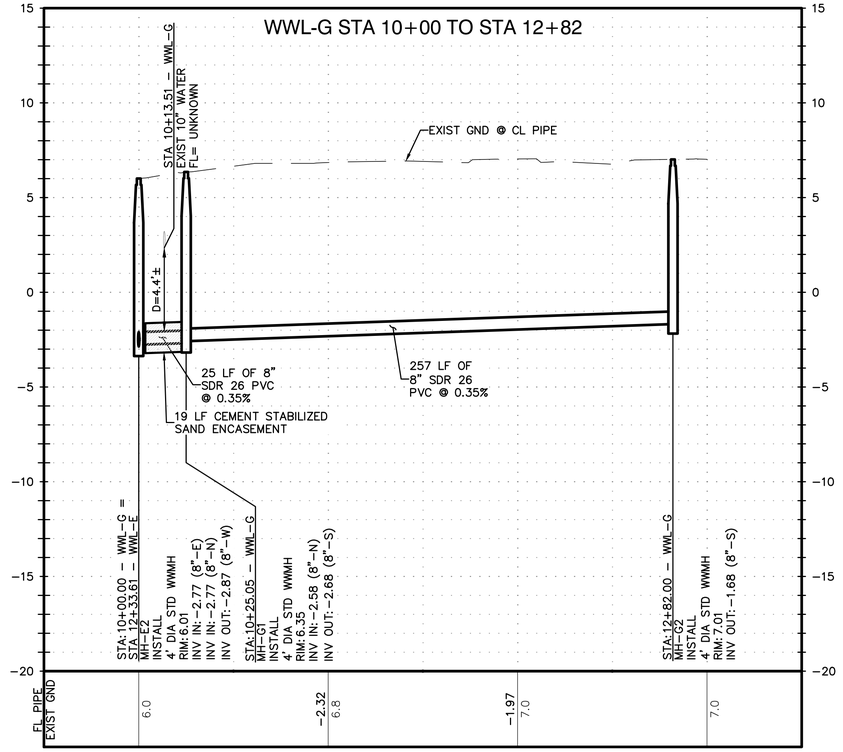
16 WWL-G STA 10+00 TO STA 12+82
SCALE: 1" = 40'



LEGEND

—·—·— PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
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5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-G PLAN AND PROFILE
STA 10+00 TO STA 12+82

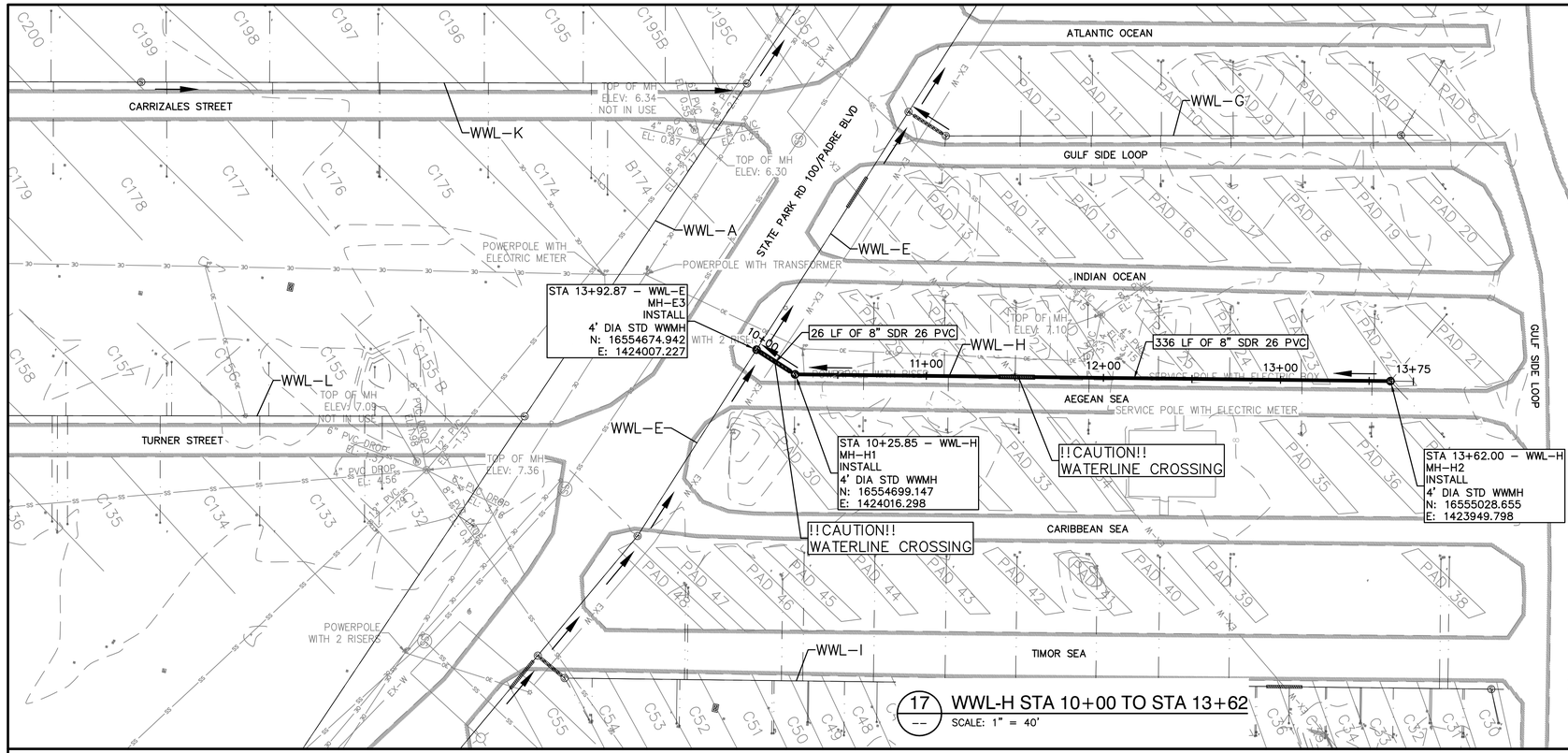
6909 Springfield Avenue, Suite 303
Lubbock, Texas 79424
Phone: (806) 632-5511
www.Ardurra.com
Engineering License #F-10033

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DRAWING NO.: C14 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 2:23pm

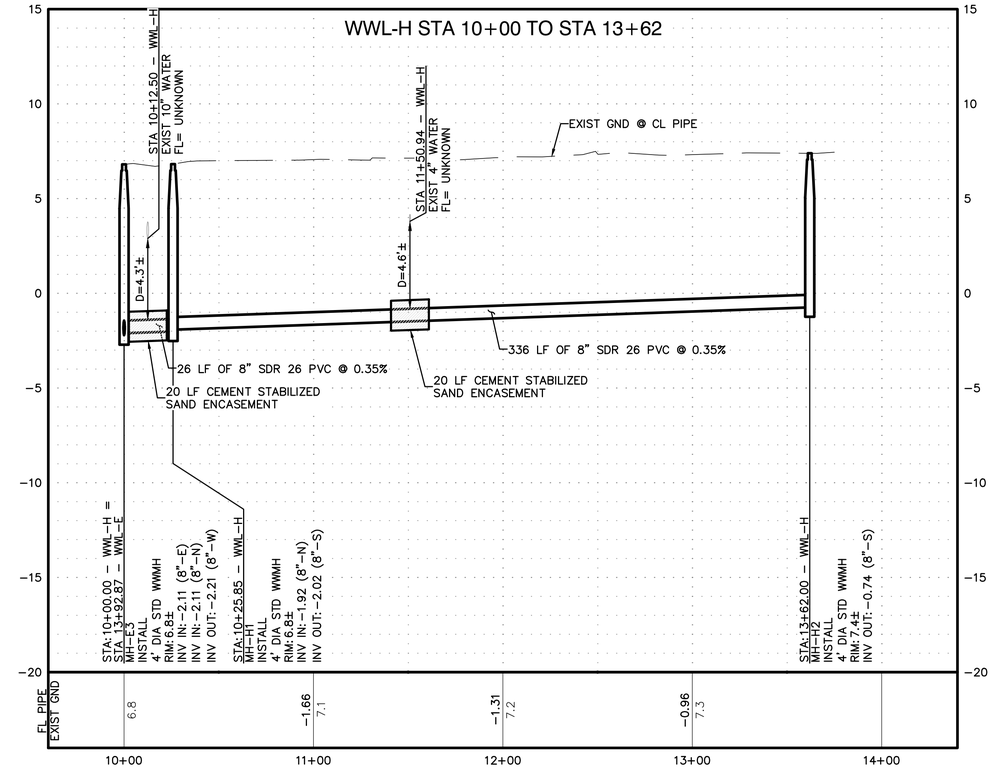


17 WWL-H STA 10+00 TO STA 13+62
SCALE: 1" = 40'

40 20 0 40'
1" = 40'

LEGEND
PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-H PLAN AND PROFILE
STA 10+00 TO STA 13+62

6909 Springfield Avenue, Suite 303
Lubbock, Texas 79424
Phone: (956) 642-5511
www.Ardurra.com

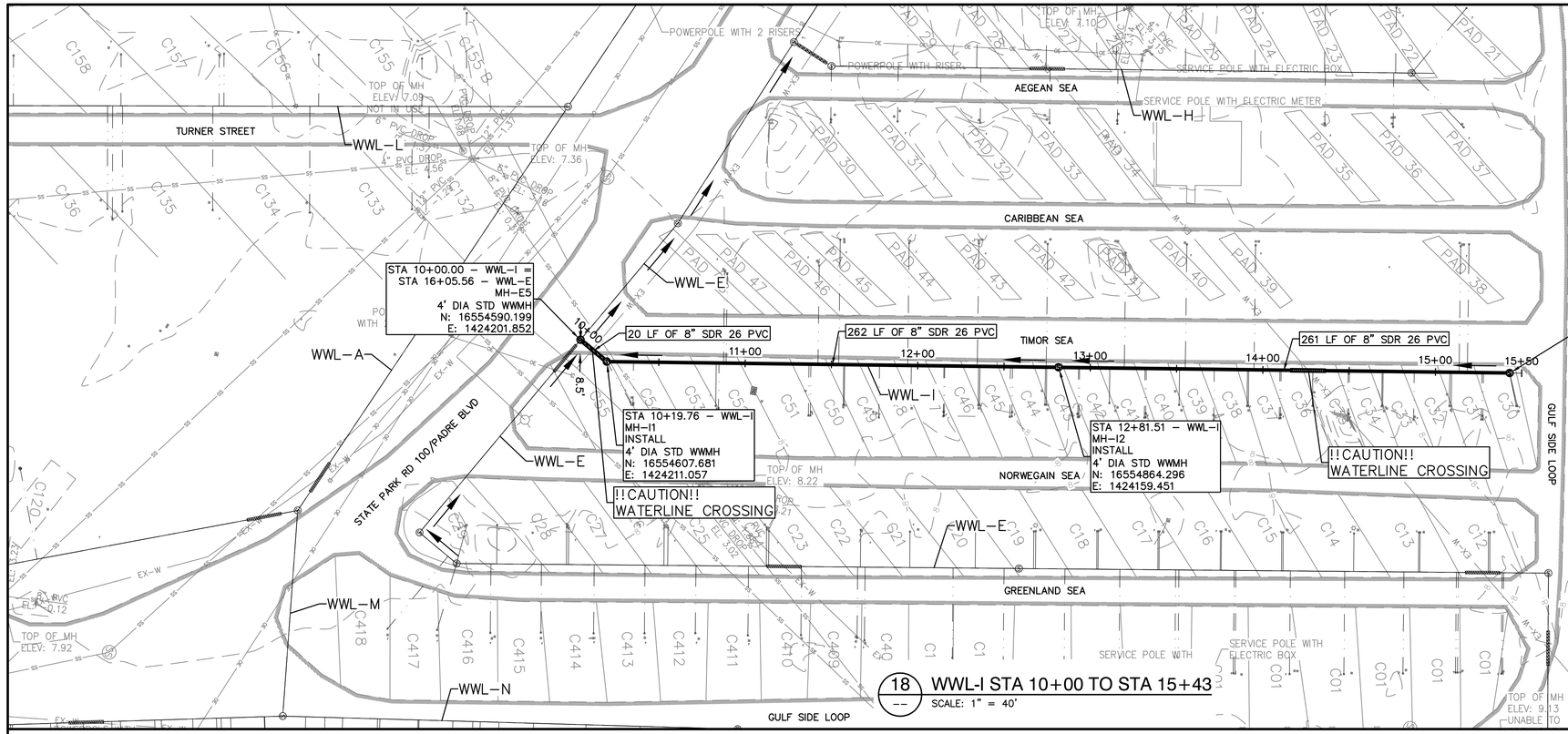
Engineering License #F-10653

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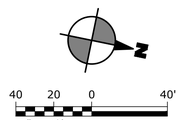
DRAWING NO.: C15
of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday June 04, 2025, 2:28pm



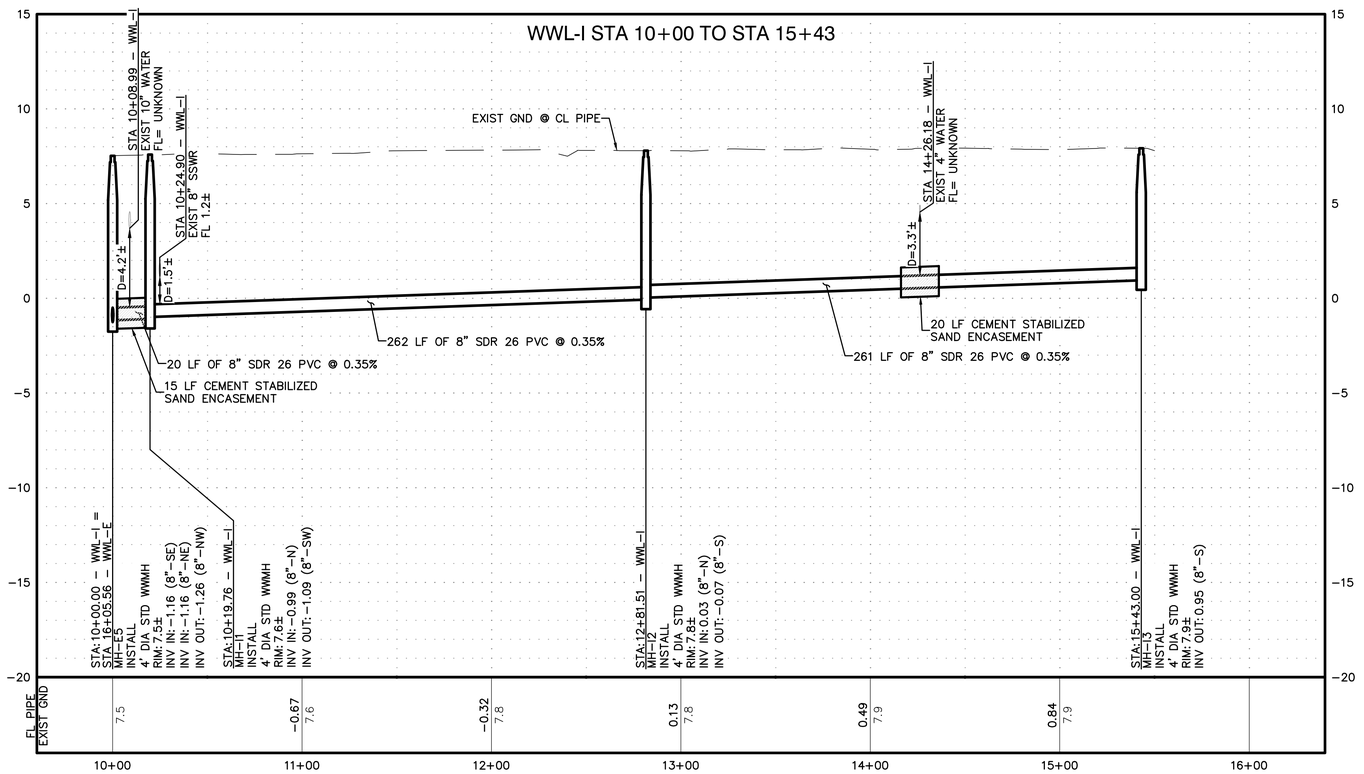
18 -- WWL-I STA 10+00 TO STA 15+43
SCALE: 1" = 40'



LEGEND

—··— PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
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5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-I PLAN AND PROFILE STA 10+00 TO STA 15+43

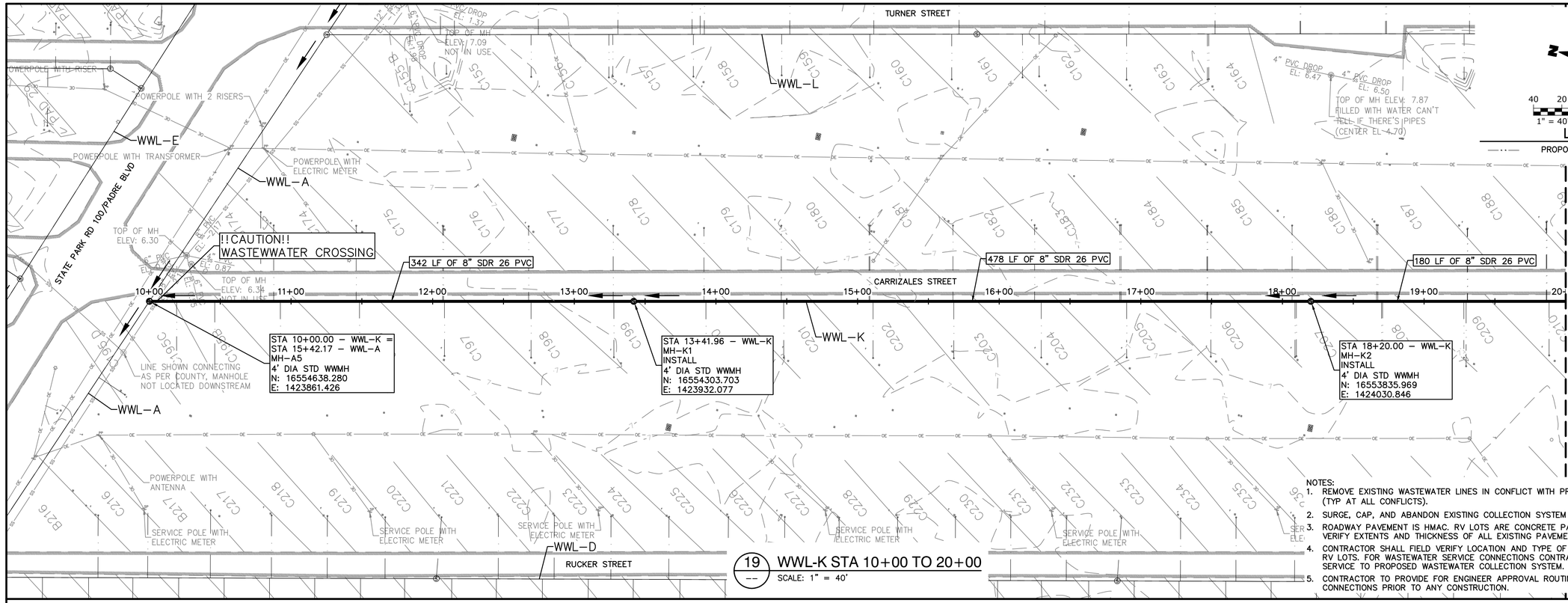
6909 Springfield Avenue, Suite 303
Lubbock, Texas 79413
Phone: (956) 423-5311
www.Ardurra.com
Engineering License #F-10653

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DRAWING NO.: C16 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 2:23pm

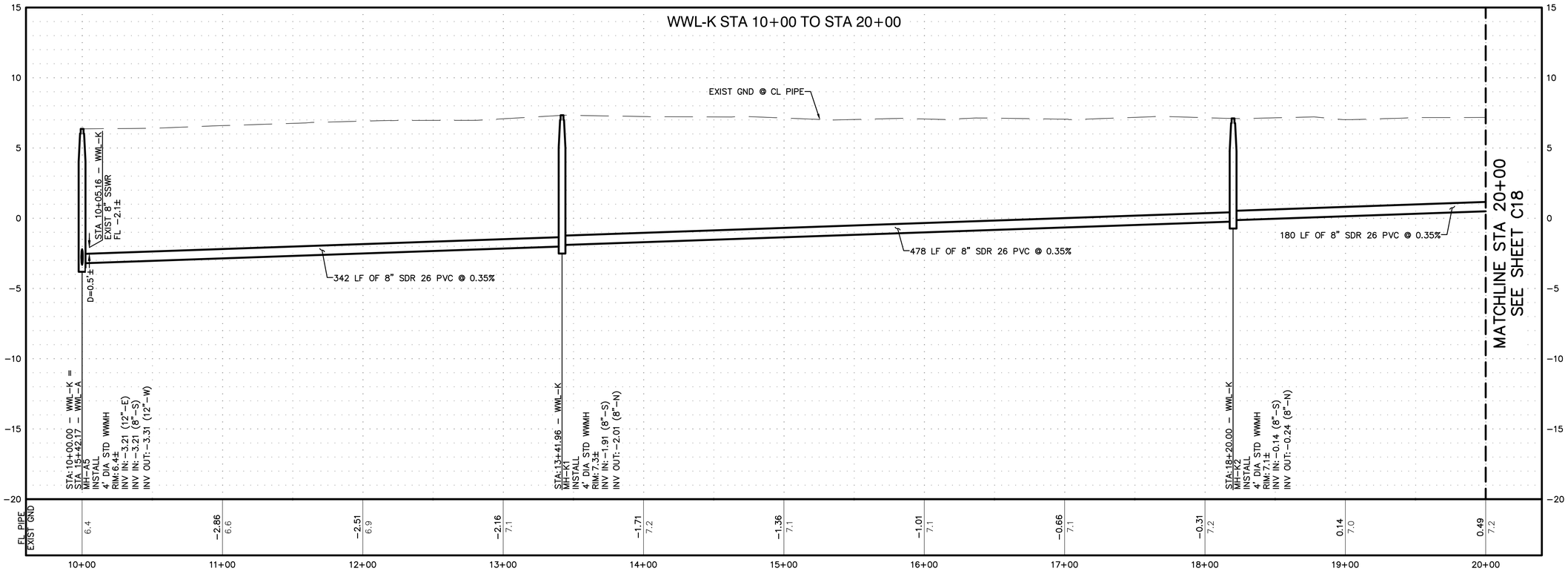


19 WWL-K STA 10+00 TO 20+00
SCALE: 1" = 40'

40 20 0 40'
1" = 40'

LEGEND
PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-K PLAN AND PROFILE STA 10+00 TO 20+00

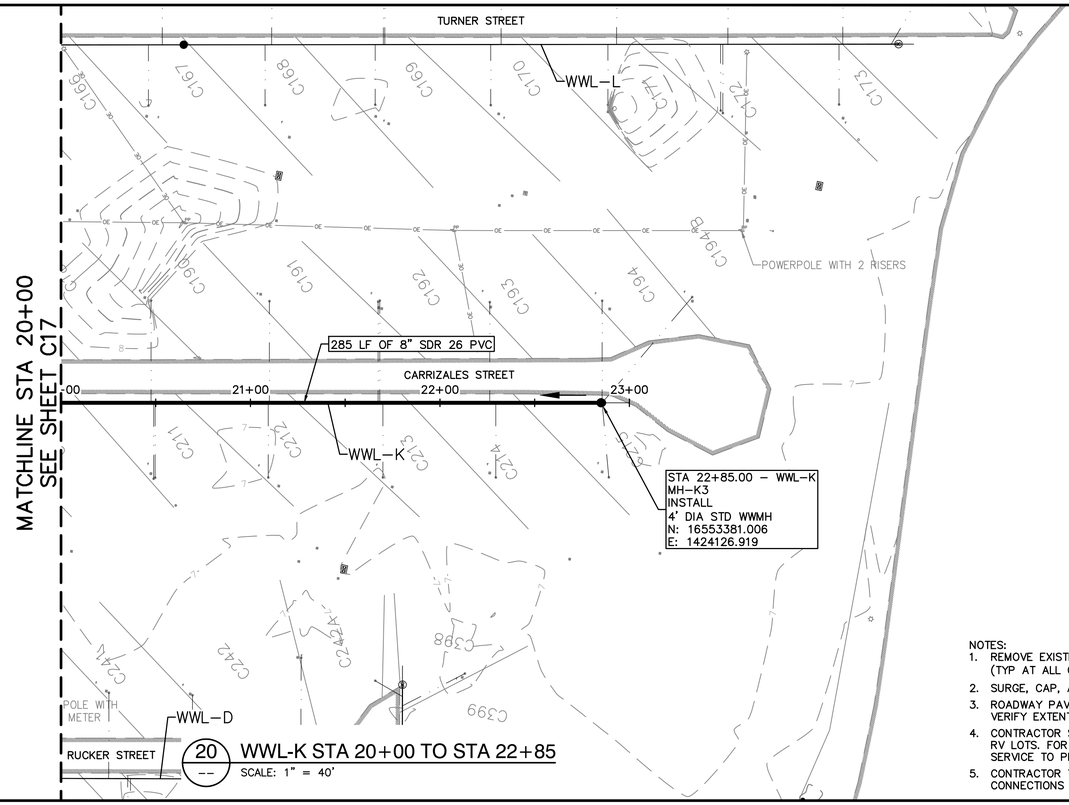
6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 763-5511
www.Ardurra.com
Engineering License #F-10053

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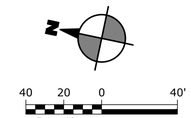
DRAWING NO.: C17 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday June 04, 2025, 2:36pm



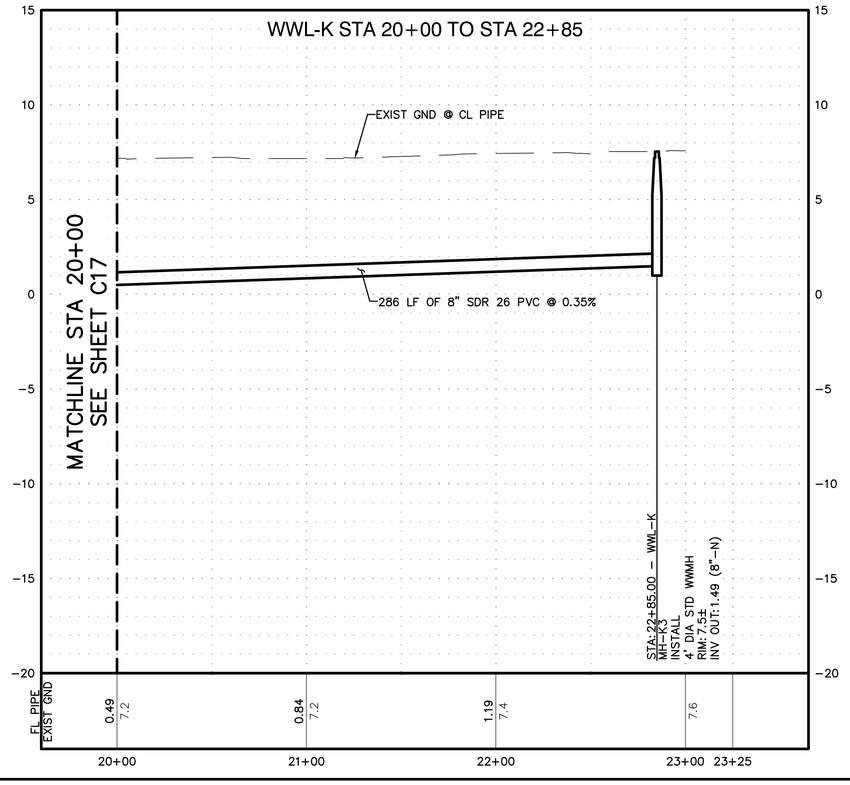
20 WWL-K STA 20+00 TO STA 22+85
SCALE: 1" = 40'



LEGEND

PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-K PLAN AND PROFILE
STA 20+00 TO STA 22+85

6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 645-5511
www.Ardurra.com
Engineering License #F-10053

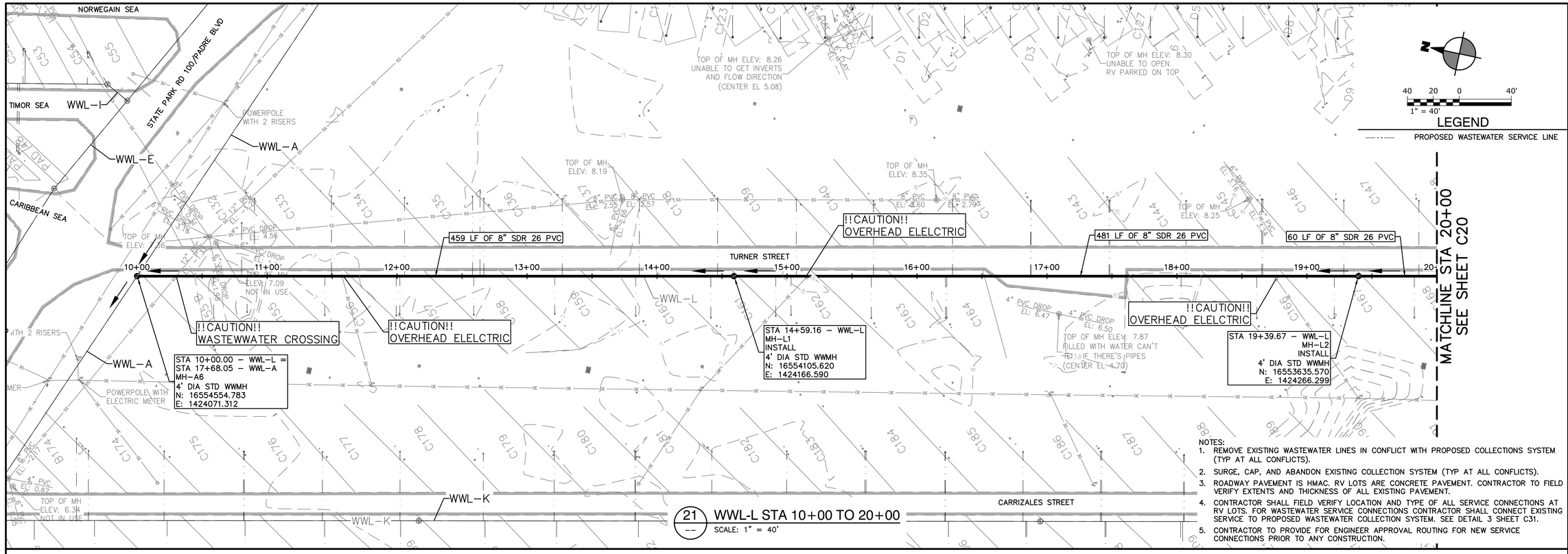
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DRAWING NO.: C18 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 2:39pm

RFP # 250502

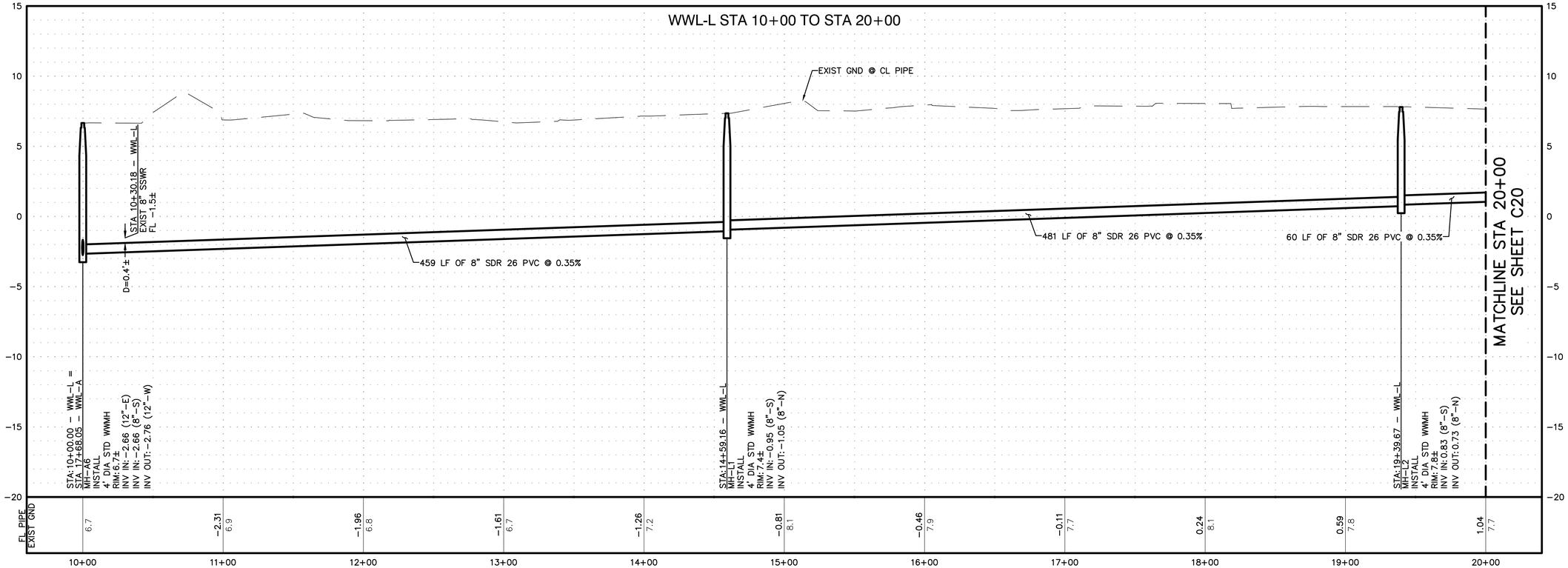


21 WWL-L STA 10+00 TO 20+00
SCALE: 1" = 40'

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
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40 20 0 40'
1" = 40'

LEGEND
PROPOSED WASTEWATER SERVICE LINE



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

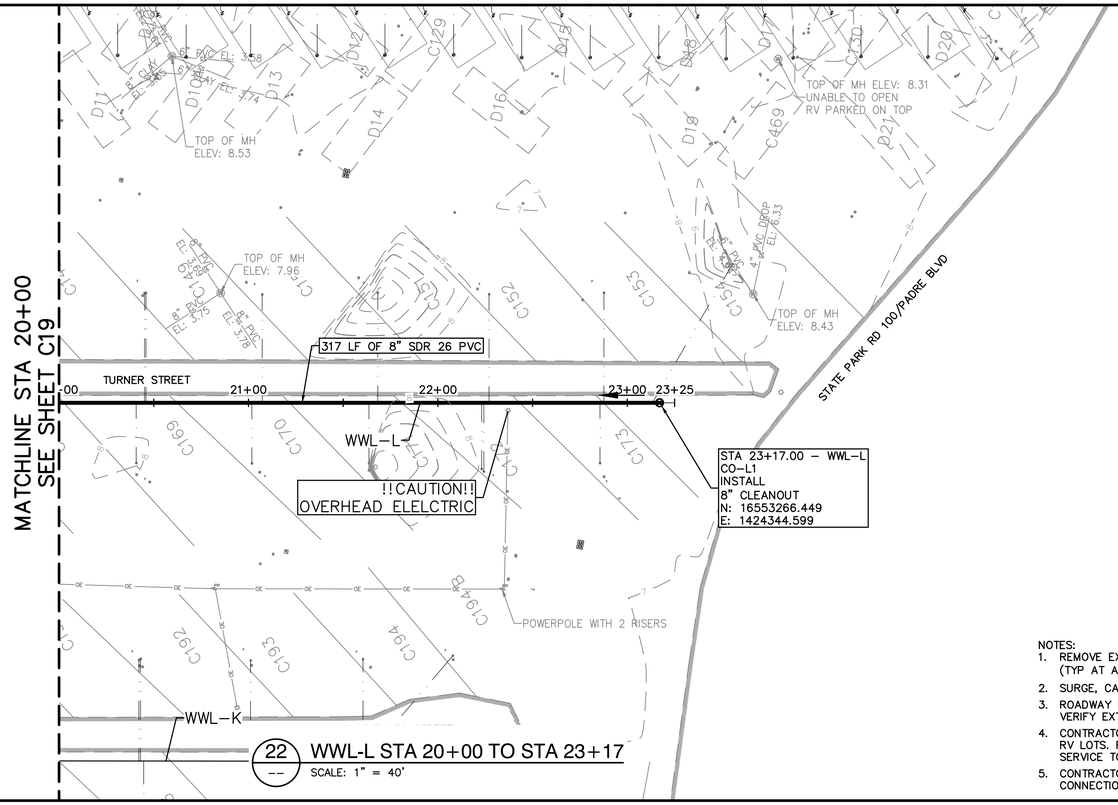
WWL-L PLAN AND PROFILE STA 10+00 TO 20+00

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Lubbock, Texas 79413
Phone: (806) 535-3511
www.Ardurra.com
Engineering License #F-10053
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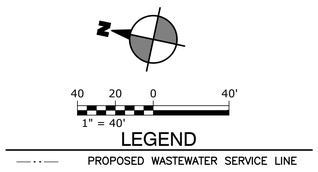
DRAWING NO.: C19 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

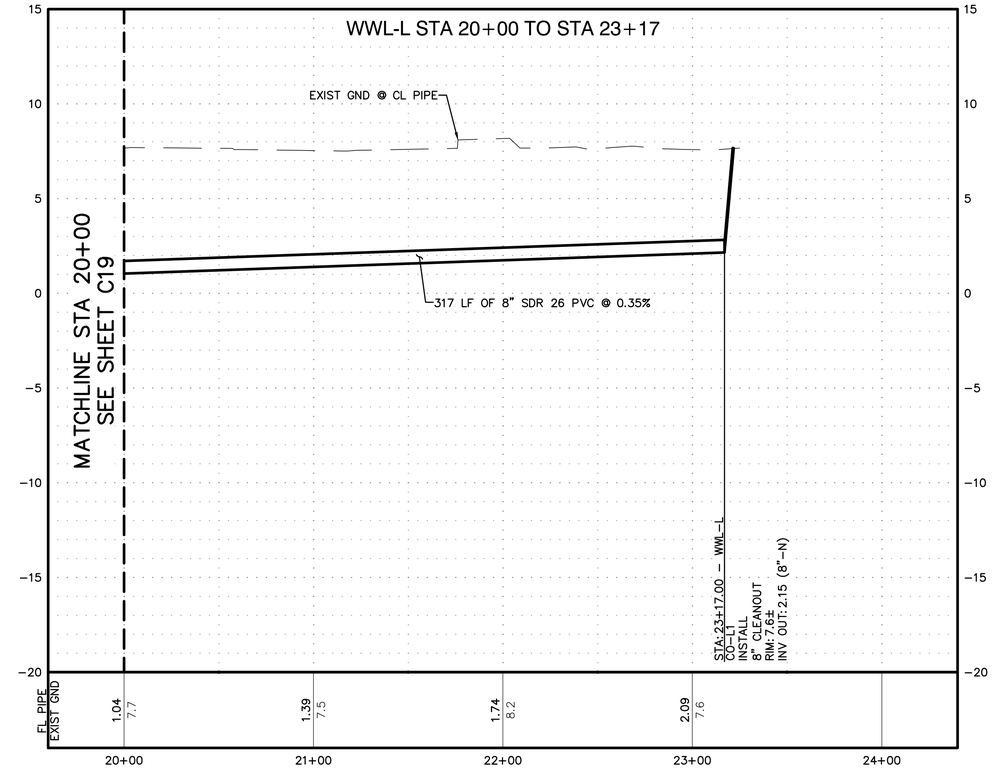
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Wednesday June 04, 2025, 2:44pm



22 WWL-L STA 20+00 TO STA 23+17
SCALE: 1" = 40'



NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-L PLAN AND PROFILE
STA 10+00 TO STA 23+17

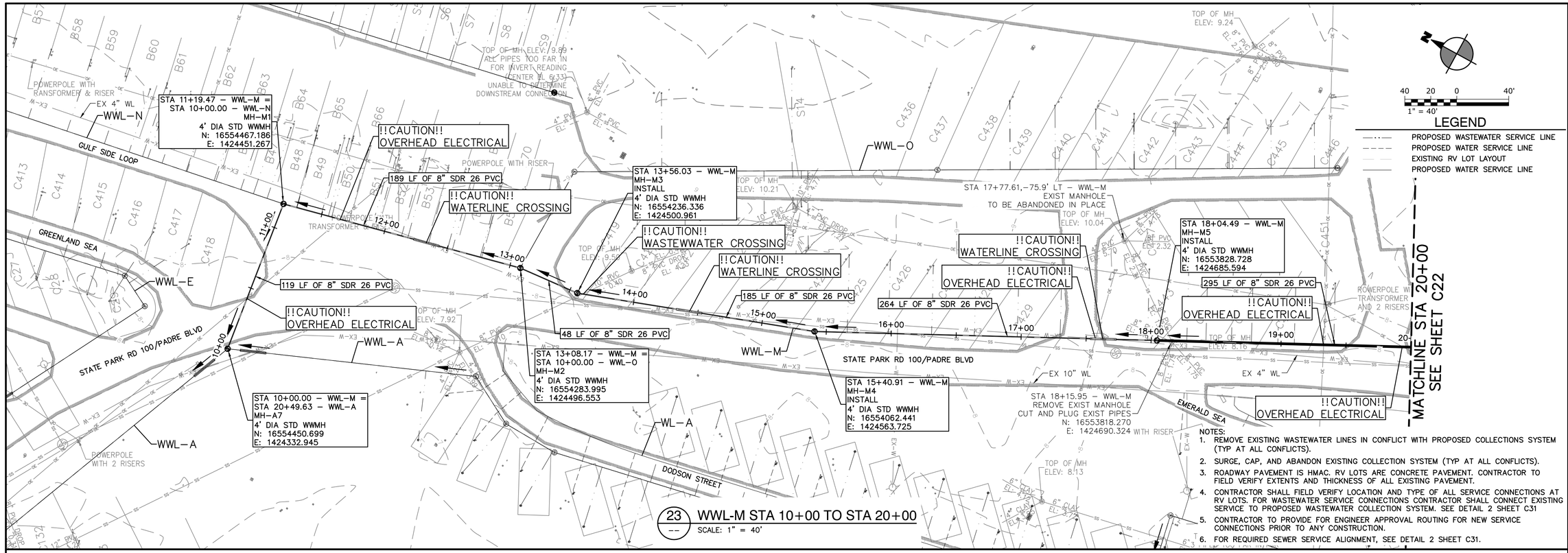
6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 645-3551
www.Ardurra.com
Engineering License #F-10053

ARDURRA
COLLABORATE. INNOVATE. CREATE.

DRAWING NO.: C20 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDJ\Engineering\240052.Sceex-Cameron Co - Isla Blanca RV Park\000\026\Drawings\Plans\Civil\240052-LINE L PNP.dwg
Wednesday, June 04, 2025, 2:46pm



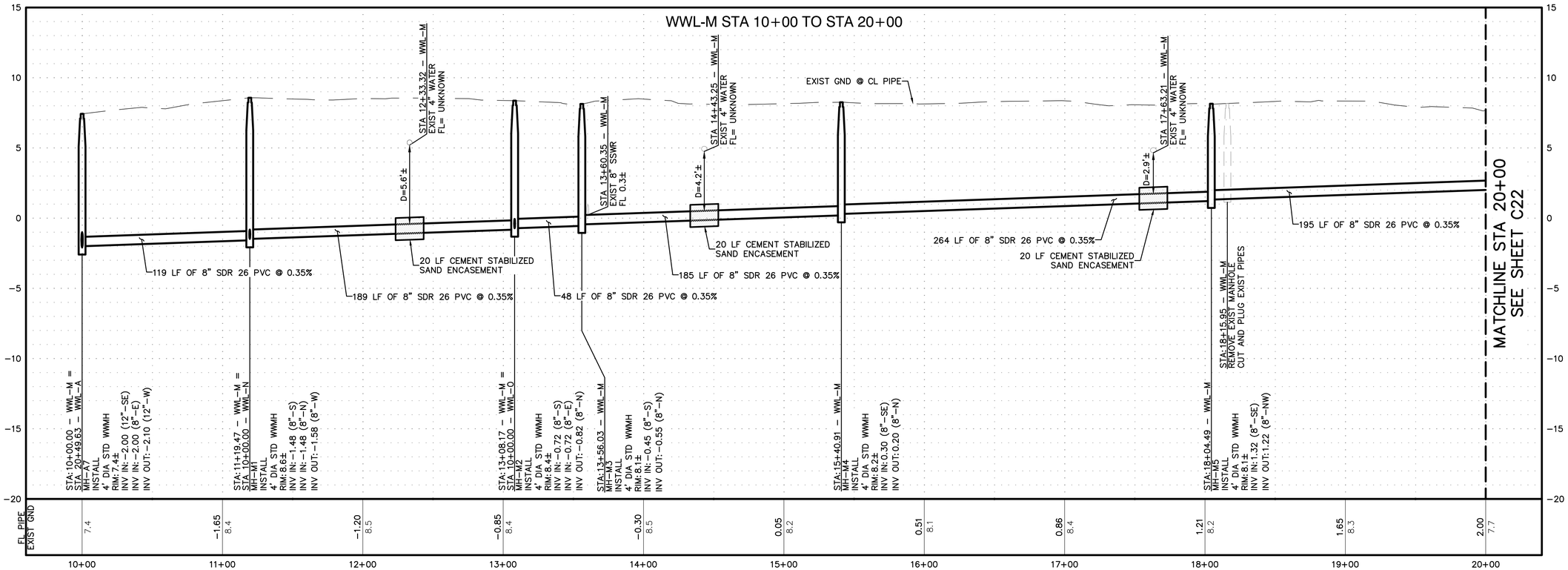
LEGEND

- PROPOSED WASTEWATER SERVICE LINE
- PROPOSED WATER SERVICE LINE
- EXISTING RV LOT LAYOUT
- PROPOSED WATER SERVICE LINE

NOTES:

1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL SERVICE CONNECTIONS AT RV LOTS. FOR WASTEWATER SERVICE CONNECTIONS CONTRACTOR SHALL CONNECT EXISTING SERVICE TO PROPOSED WASTEWATER COLLECTION SYSTEM. SEE DETAIL 2 SHEET C31
5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.
6. FOR REQUIRED SEWER SERVICE ALIGNMENT, SEE DETAIL 2 SHEET C31.

23 -- WWL-M STA 10+00 TO STA 20+00
SCALE: 1" = 40'



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

DATE	NO	DESCRIPTION	BY

ISSUES / REVISIONS

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-M PLAN AND PROFILE STA 10+00 TO 20+00

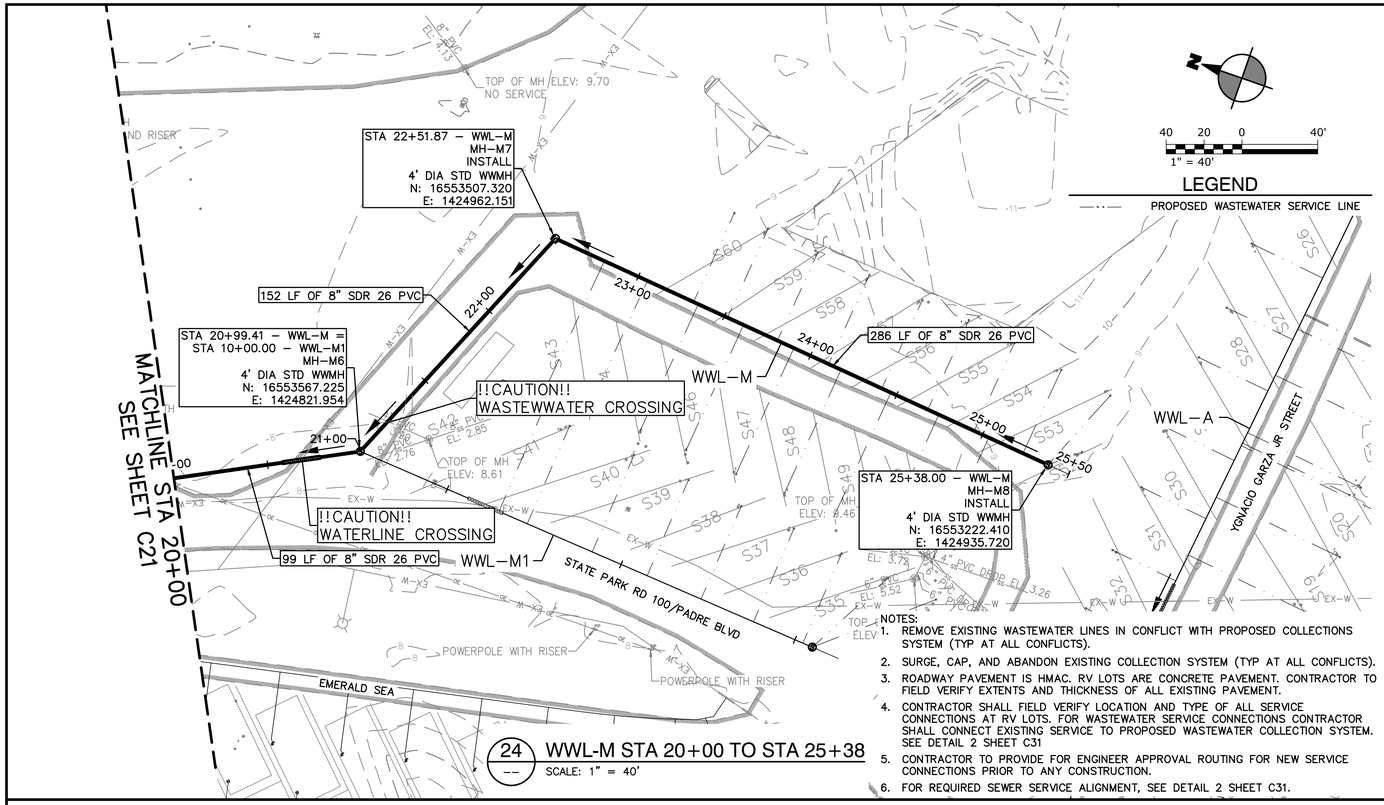
6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 763-5311
www.Ardurra.com
Engineering License #F-10053

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DRAWING NO.:	C21
	of 48
DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

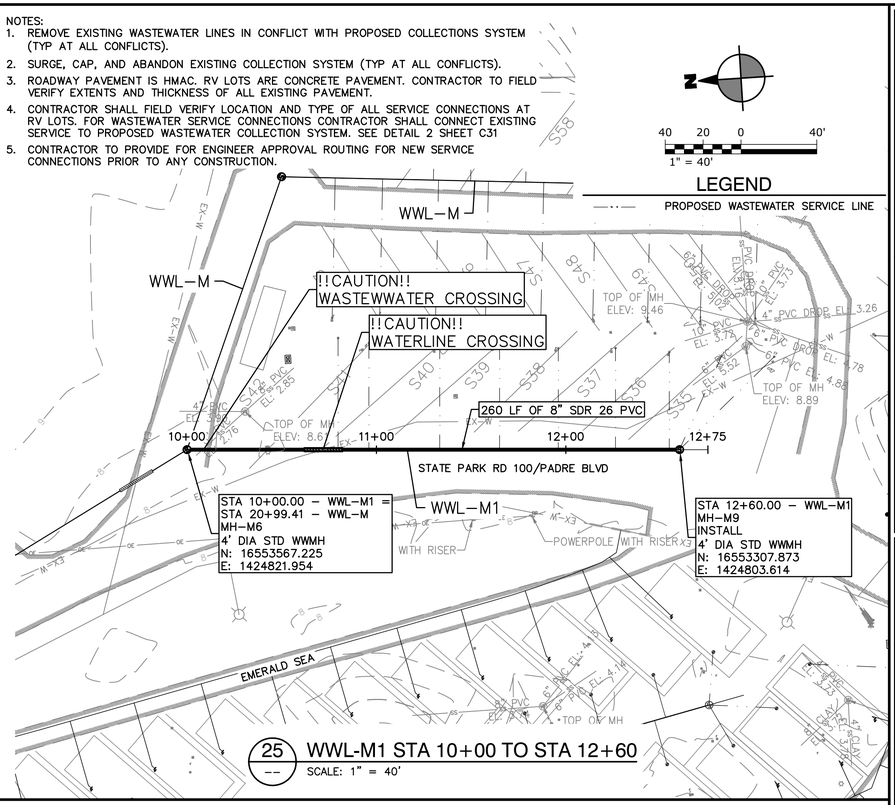
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Wednesday June 04, 2025, 2:50pm

RFP # 250502



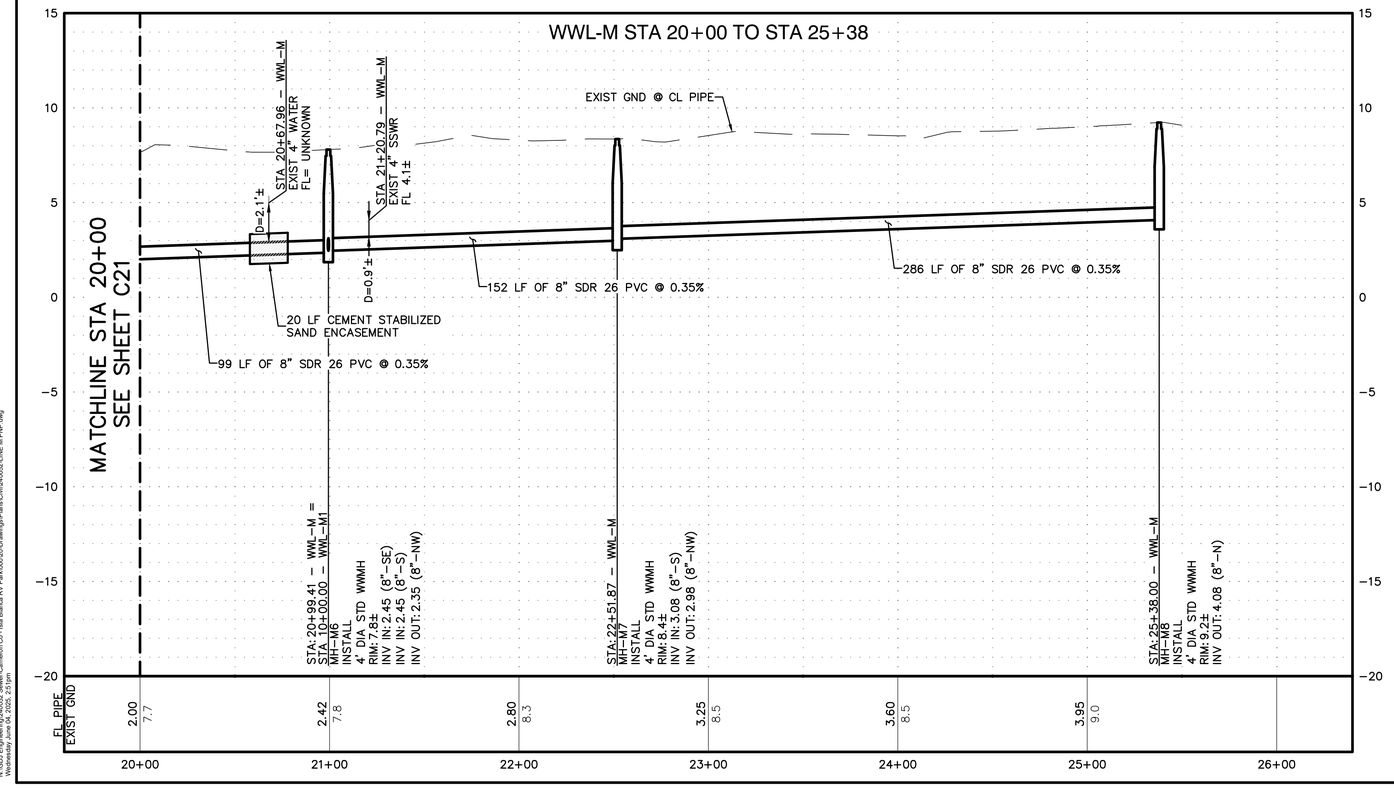
NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL SERVICE CONNECTIONS AT RV LOTS. FOR WASTEWATER SERVICE CONNECTIONS CONTRACTOR SHALL CONNECT EXISTING SERVICE TO PROPOSED WASTEWATER COLLECTION SYSTEM. SEE DETAIL 2 SHEET C31
5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.
6. FOR REQUIRED SEWER SERVICE ALIGNMENT, SEE DETAIL 2 SHEET C31.

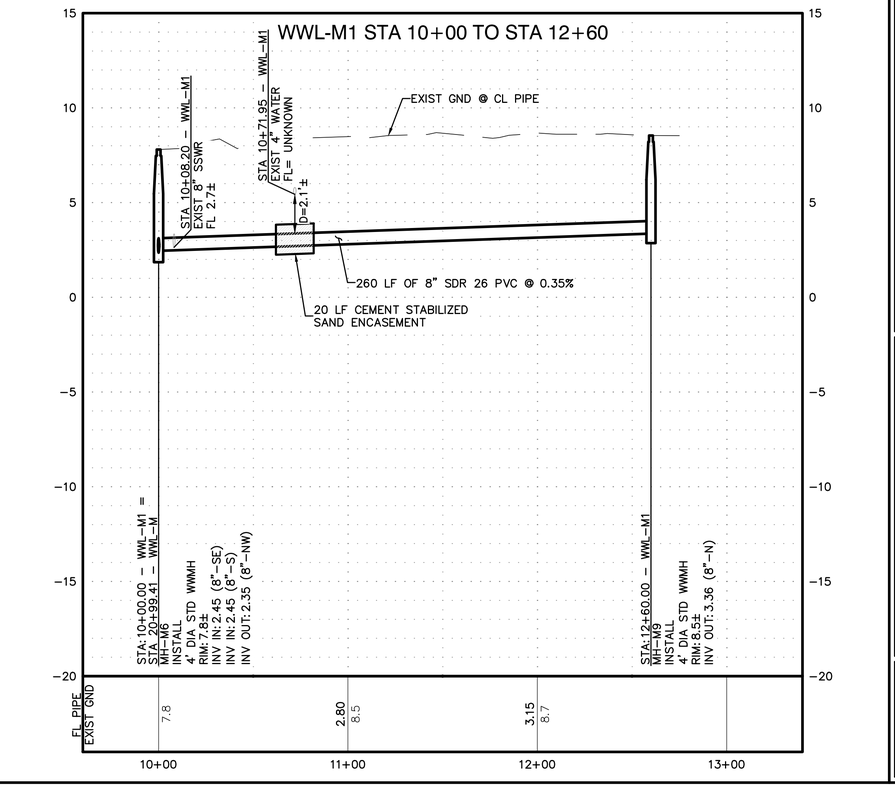
24 WWL-M STA 20+00 TO STA 25+38
SCALE: 1" = 40'



NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
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5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.

25 WWL-M1 STA 10+00 TO STA 12+60
SCALE: 1" = 40'





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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

NO.	DATE	DESCRIPTION	BY

ISSUES / REVISIONS

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-M PLAN AND PROFILE STA 20+00 TO STA 25+38
WWL-M1 PLAN AND PROFILE STA 10+00 TO STA 12+60

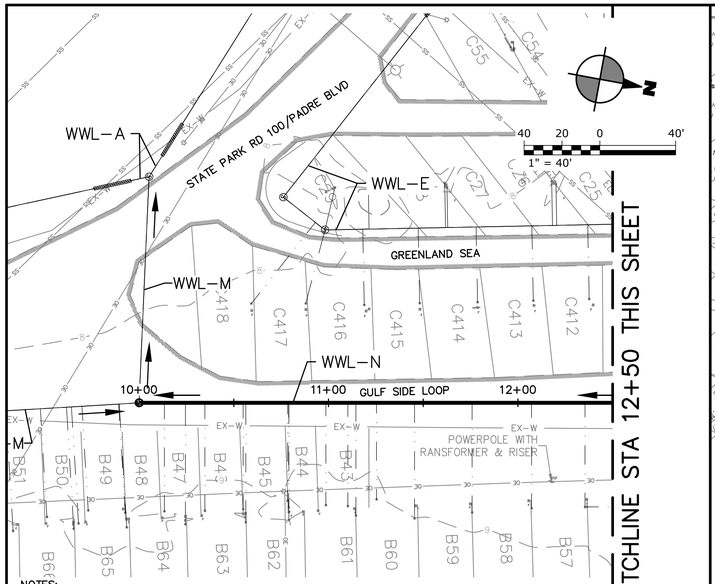
6909 Springfield Avenue, Suite 303
Lubbock, Texas 79413
Phone: (806) 687-3551
www.Ardurra.com
Engineering License #F-10653
ARDURRA
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DRAWING NO.: C22 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

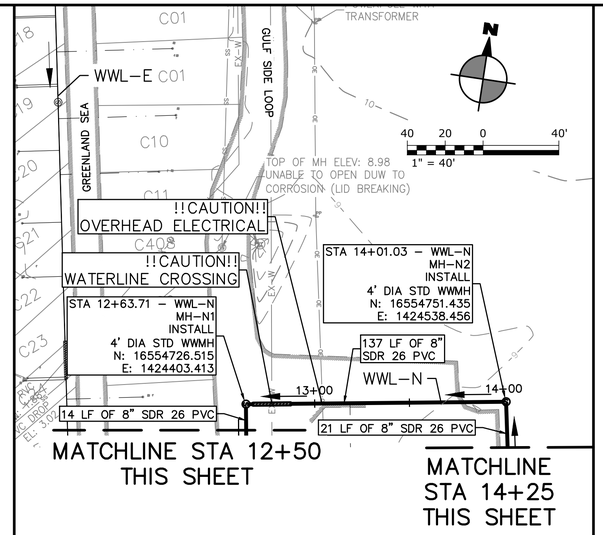
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Wednesday, June 04, 2025, 2:51pm

RFP # 250502



NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
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5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.

26 WWL-N STA 10+00 TO 12+50
SCALE: 1" = 40'

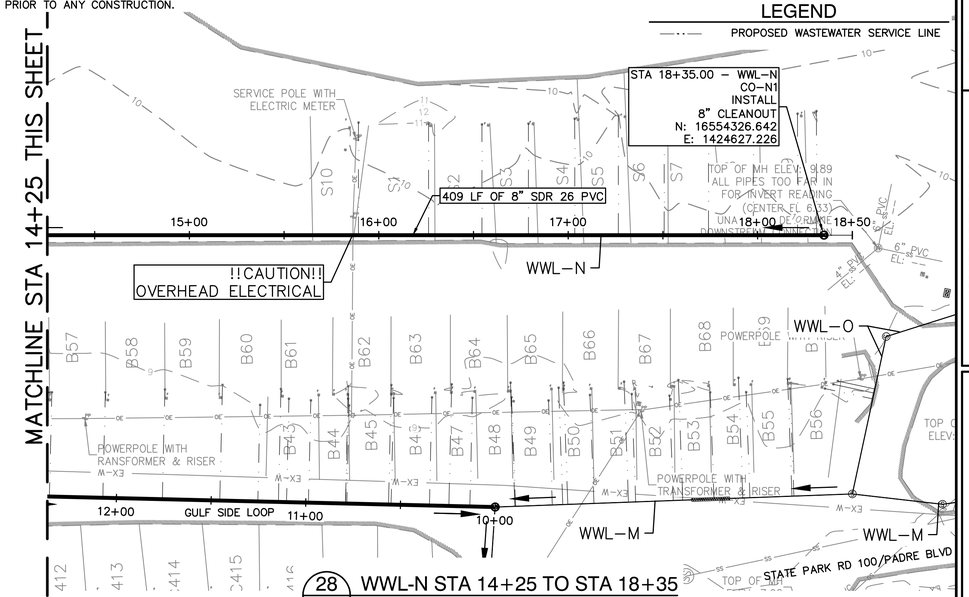


NOTES:
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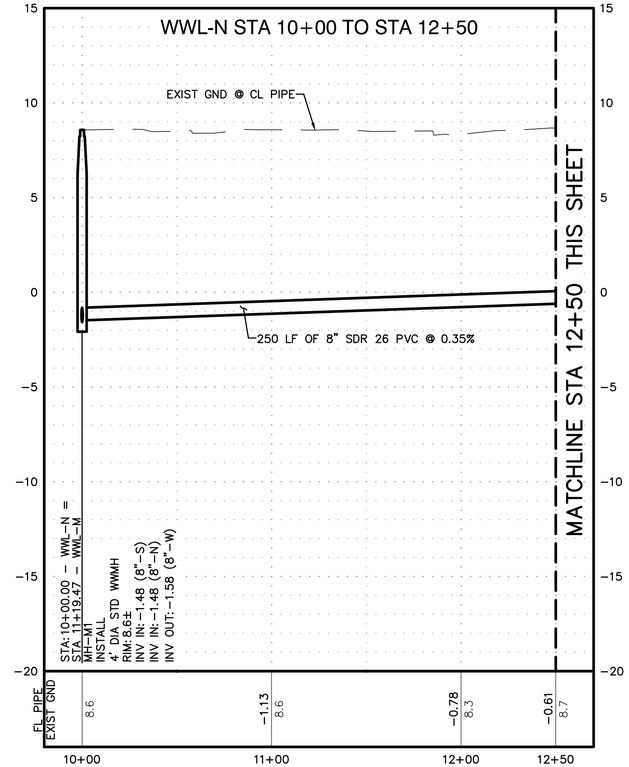
27 WWL-N STA 12+50 TO 14+25
SCALE: 1" = 40'

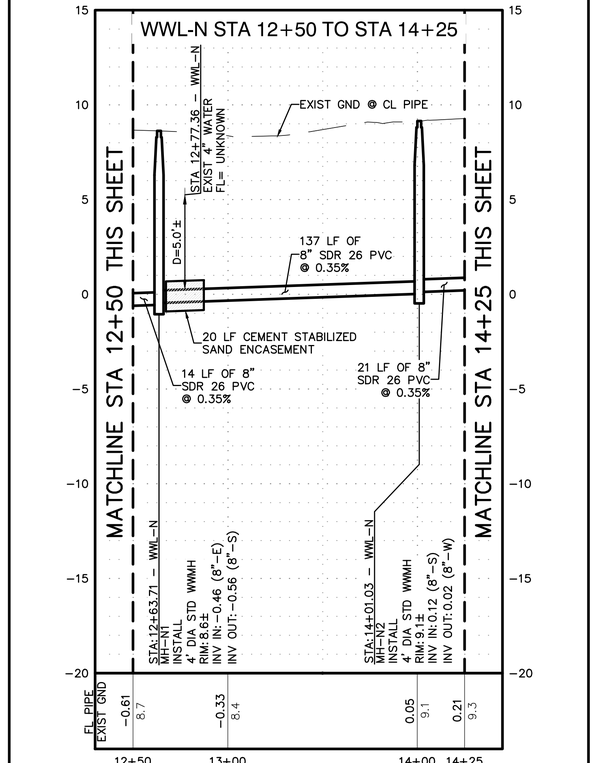
NOTES:
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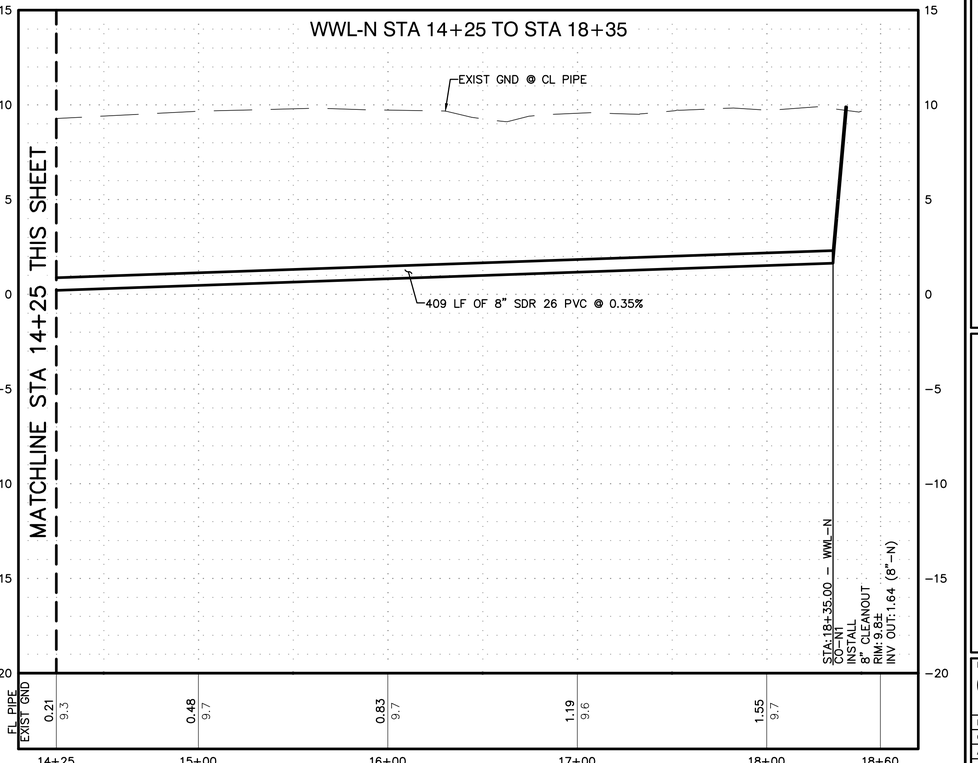
LEGEND
PROPOSED WASTEWATER SERVICE LINE



28 WWL-N STA 14+25 TO STA 18+35
SCALE: 1" = 40'







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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS			
DESCRIPTION	NO	DATE	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-N PLAN AND PROFILE STA 10+00 TO STA 18+35

6909 Springfield Avenue, Suite 303
Lubbock, Texas 79706
Phone: (806) 632-5511
www.Ardurra.com
Engineering License #F-10655

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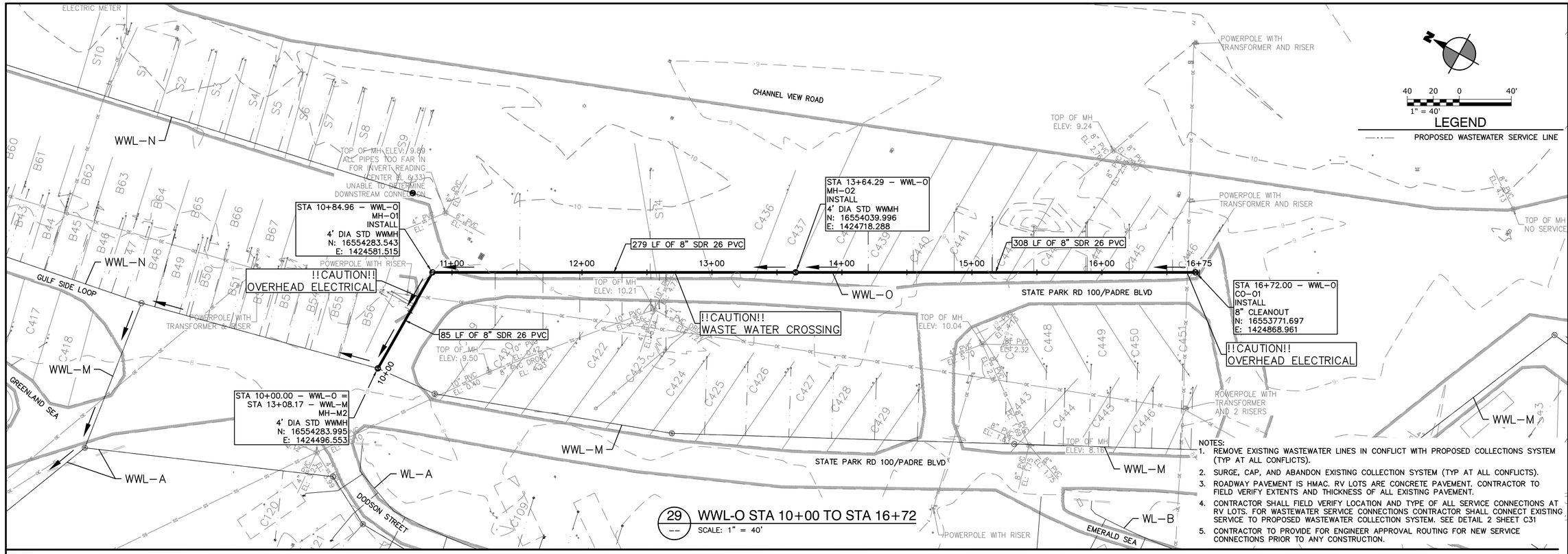
DRAWING NO.: C23 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDL\Engineering\240052 Steve-Cameron Co - Isla Blanca RV Park\000\020\Drawings\PlansCivil\240052-LINE N PNP.dwg
Wednesday, June 04, 2025, 2:55pm

SHEET NO. 48

RFP # 250502



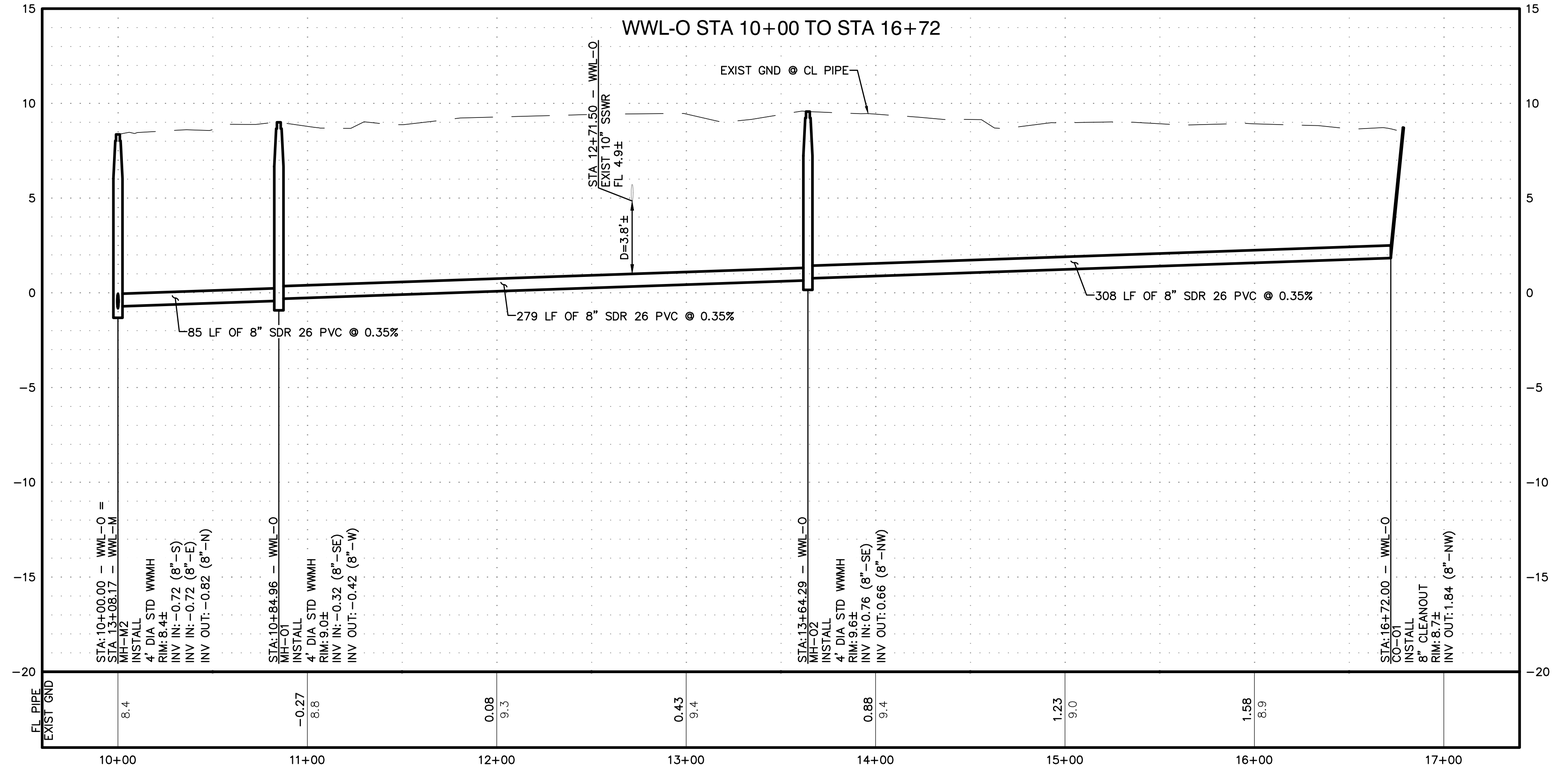
40 20 0 40'
1" = 40'

LEGEND

PROPOSED WASTEWATER SERVICE LINE

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL SERVICE CONNECTIONS AT RV LOTS. FOR WASTEWATER SERVICE CONNECTIONS CONTRACTOR SHALL CONNECT EXISTING SERVICE TO PROPOSED WASTEWATER COLLECTION SYSTEM. SEE DETAIL 2 SHEET C31
5. CONTRACTOR TO PROVIDE FOR ENGINEER APPROVAL ROUTING FOR NEW SERVICE CONNECTIONS PRIOR TO ANY CONSTRUCTION.

29 -- WWL-O STA 10+00 TO STA 16+72
SCALE: 1" = 40'



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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WWL-O PLAN AND PROFILE STA 10+00 TO STA 16+72

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Lubbock, Texas 79424
Phone: (956) 624-5511
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Engineering License #F-10033
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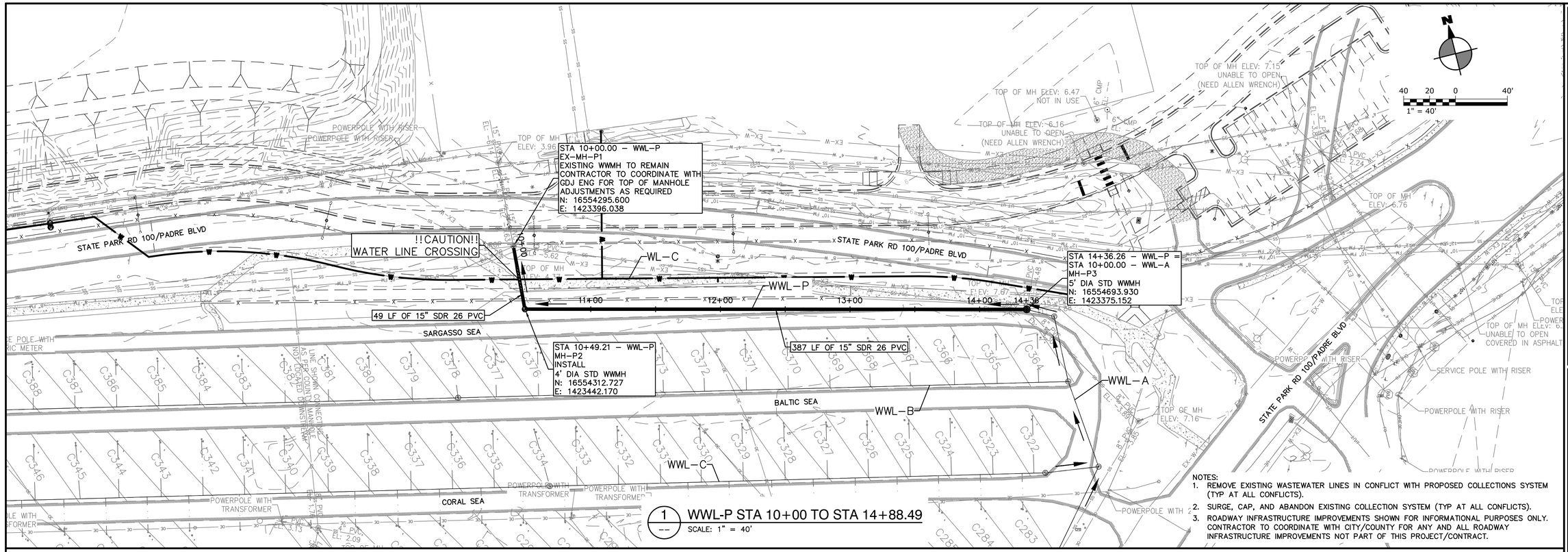
DRAWING NO.: C24 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday June 04, 2025, 2:05pm

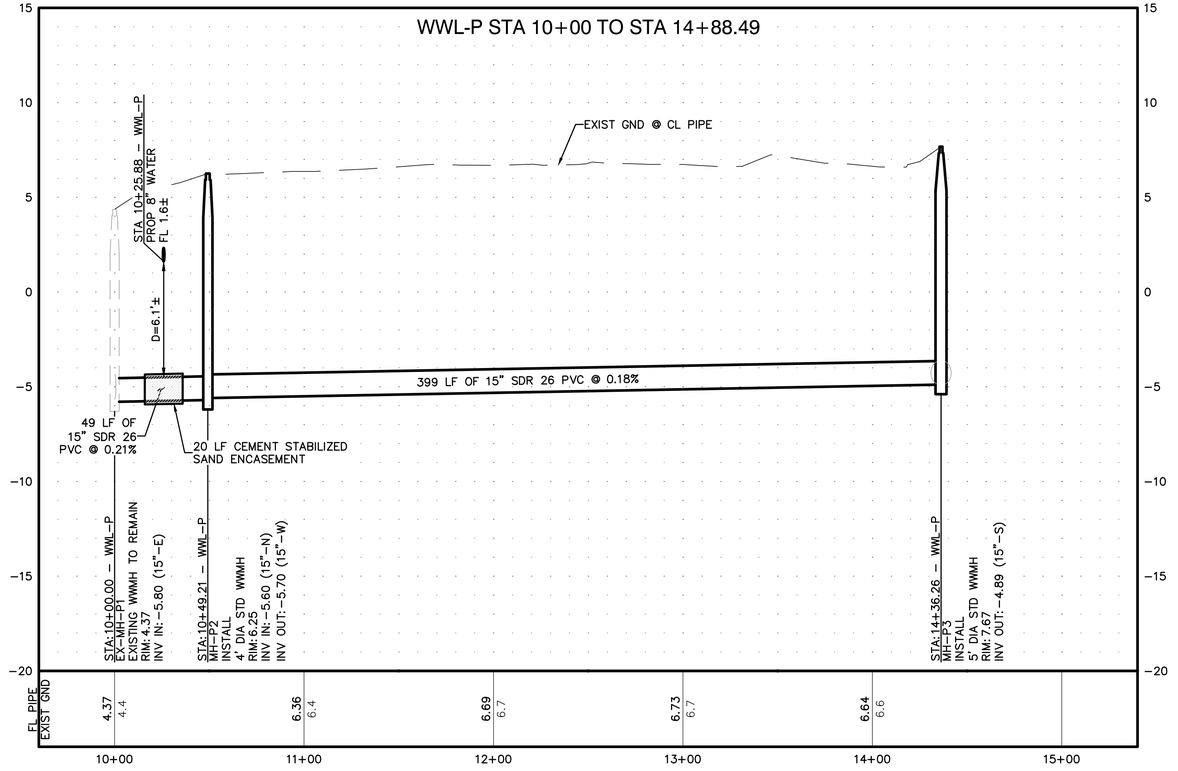
SHEET NO. 49

RFP # 250502



1 WWL-P STA 10+00 TO STA 14+88.49
SCALE: 1" = 40'

NOTES:
1. REMOVE EXISTING WASTEWATER LINES IN CONFLICT WITH PROPOSED COLLECTIONS SYSTEM (TYP AT ALL CONFLICTS).
2. SURGE, CAP, AND ABANDON EXISTING COLLECTION SYSTEM (TYP AT ALL CONFLICTS).
3. ROADWAY INFRASTRUCTURE IMPROVEMENTS SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH CITY/COUNTY FOR ANY AND ALL ROADWAY INFRASTRUCTURE IMPROVEMENTS NOT PART OF THIS PROJECT/CONTRACT.



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

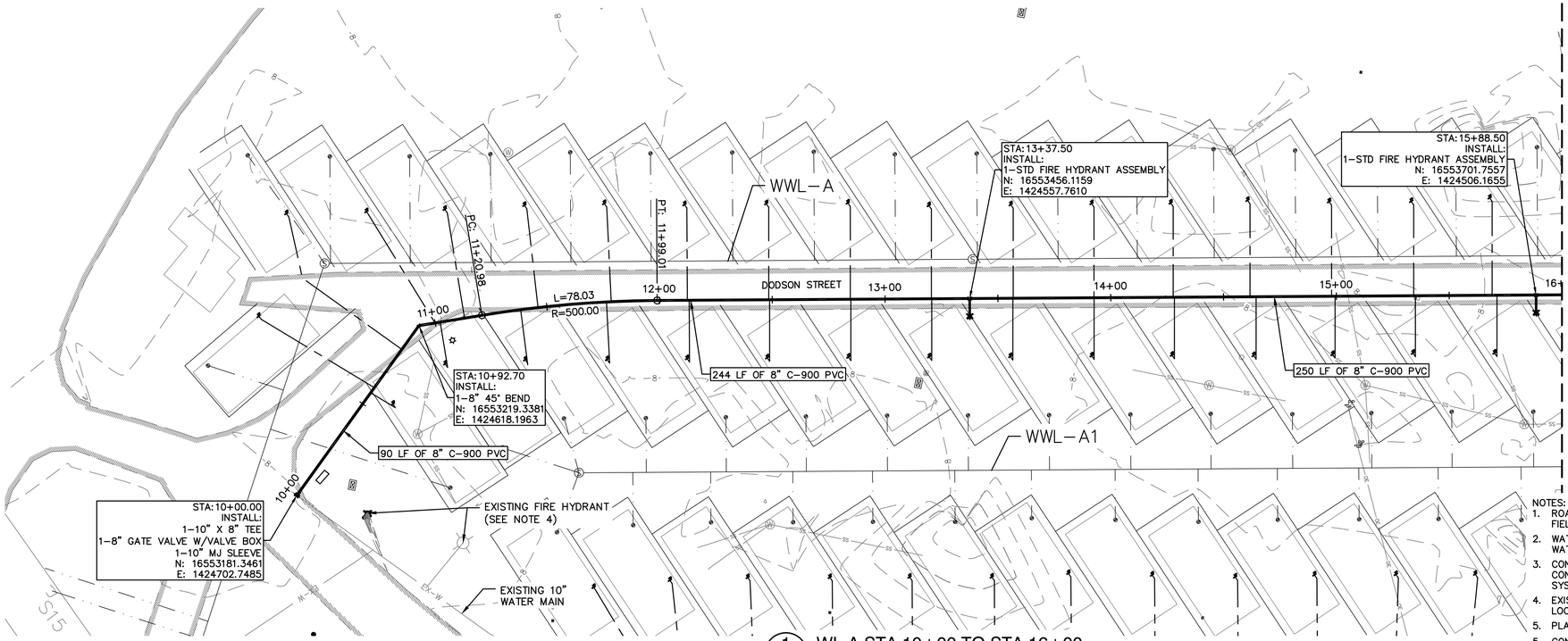
WWL-P PLAN AND PROFILE STA 10+00 TO STA 14+88.49

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Laredo, Texas 78041
Phone: (956) 240-3551
www.Ardurra.com
Engineering License #F-10053
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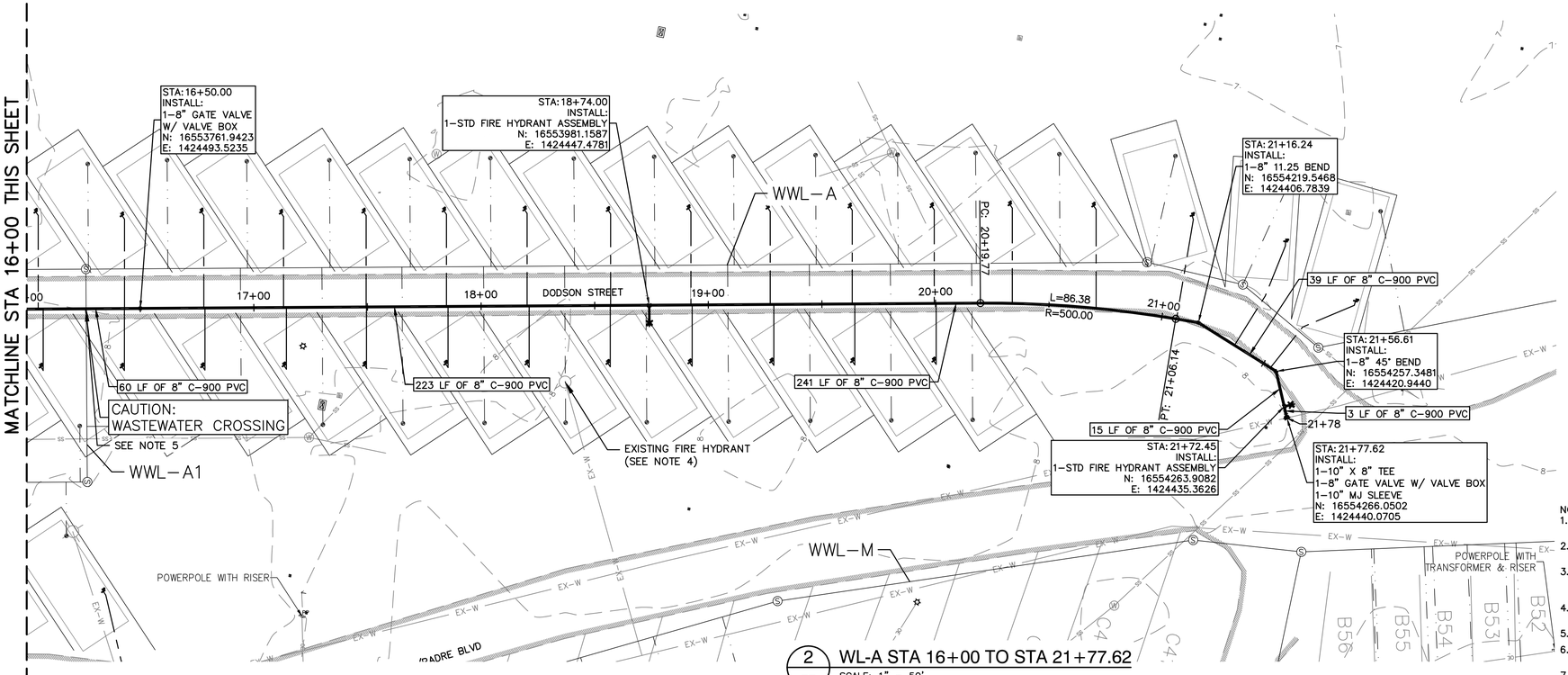
DRAWING NO.: C25 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDJ Engineering\240052 Sweet Cameron Co - Isla Blanca RV Park\000\026\Drawings\Plans\Civil\240052-LINE P PNP.dwg
Wednesday, June 04, 2025, 3:06pm



1 WL-A STA 10+00 TO STA 16+00
SCALE: 1" = 50'



2 WL-A STA 16+00 TO STA 21+77.62
SCALE: 1" = 50'

20 10 0 20'
1" = 20'

LEGEND

- PROPOSED WASTEWATER SERVICE LINE
- PROPOSED WATER SERVICE LINE
- PROPOSED RV LOT LAYOUT
- PROPOSED WATER DISTRIBUTION

NOTES:
1. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
2. WATER SERVICE CONNECTIONS, CONTRACTOR SHALL CONNECT SERVICE TO PROPOSED WATER SYSTEM.
3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL WATER SERVICE CONNECTIONS AT RV LOTS FOR WATER SERVICE CONNECTIONS TO PROPOSED WATER SYSTEM.
4. EXISTING FIRE HYDRANTS ARE GIS LOCATED. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO COMMENCING ANY CONSTRUCTION WORK.
5. PLACE ONE FULL LENGTH OF C900 PIPE CENTERED AT WASTEWATER CROSSING.
5. CONTRACTOR TO PROVIDE PAVEMENT REPAIR ON DODSON STREET (5.0' MAX WIDTH) AS REQUIRED AND DIRECTED BY ENGINEER.
6. FOR REQUIRED WATER SERVICE ALIGNMENT, SEE DETAIL 3 SHEET C31.

NOTES:
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3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND TYPE OF ALL WATER SERVICE CONNECTIONS AT RV LOTS FOR WATER SERVICE CONNECTIONS TO PROPOSED WATER SYSTEM.
4. EXISTING FIRE HYDRANTS ARE GIS LOCATED. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO COMMENCING ANY CONSTRUCTION WORK.
5. PLACE ON FULL PIPE LENGTH OF C900 PIPE CENTERED AT WASTEWATER CROSSING.
6. CONTRACTOR TO PROVIDE PAVEMENT REPAIR ON DODSON STREET (5.0' MAX WIDTH) AS REQUIRED AND DIRECTED BY ENGINEER.
7. FOR REQUIRED WATER SERVICE ALIGNMENT, SEE DETAIL 3 SHEET C31.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WL-A LAYOUT PLAN
STA 10+00 TO STA 21+77.62

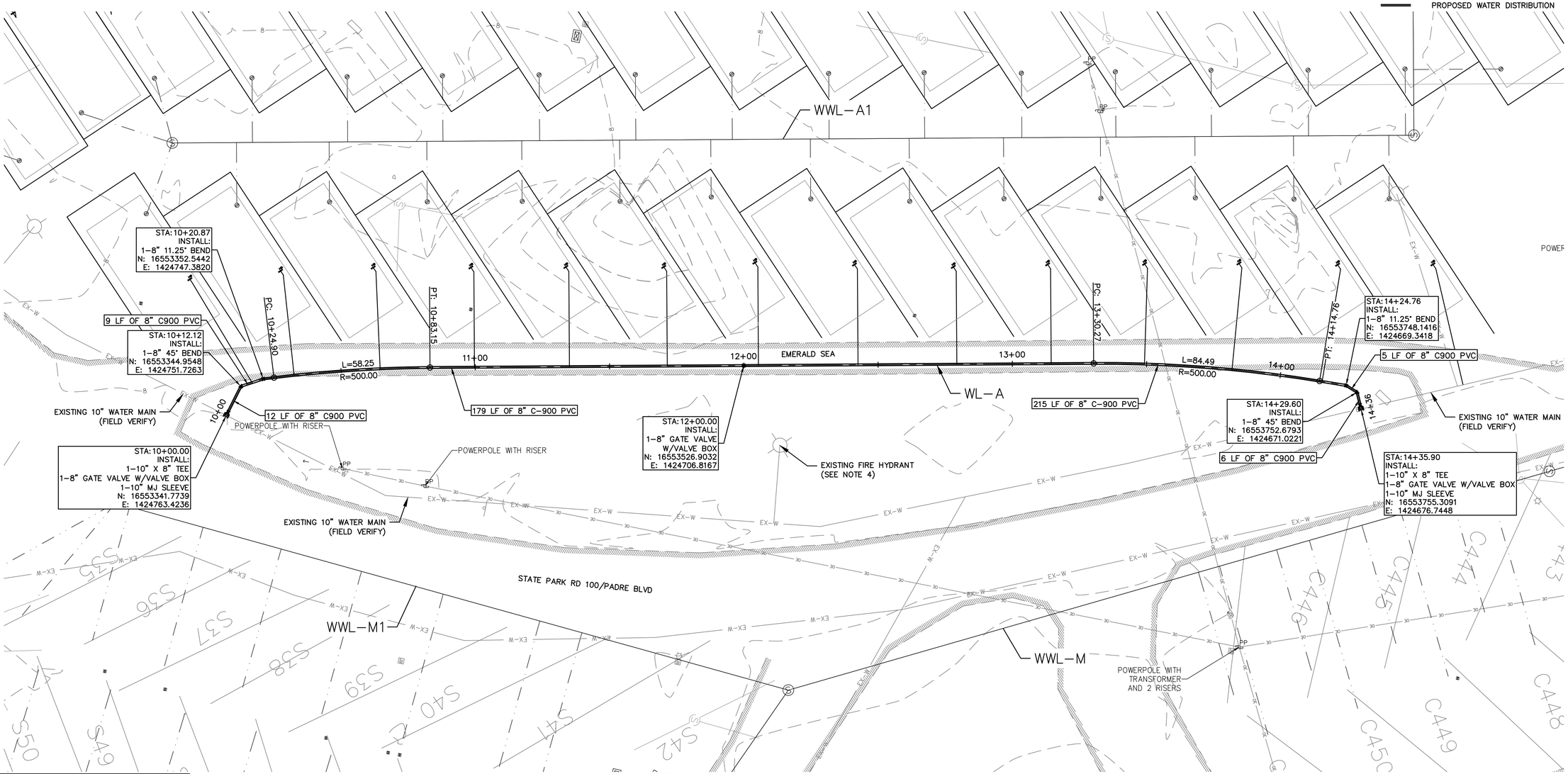
6909 Springfield Avenue, Suite 303
Lubbock, Texas 79424
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Engineering License #F-10653

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DRAWING NO.: C26 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GDL\Engineering\240052.Sheets\Cameron Co- Isla Blanca RV Park\000\020\Drawings\Plan\Civil\240052-WL A PLN.dwg
Wednesday, June 04, 2025, 3:06pm



1 WL-B STA 10+00 TO STA 14+35.90
SCALE: 1" = 30'

NOTE:
1. FOR REQUIRED SEWER SERVICE ALIGNMENT, SEE SHEETS G6 AND ###

NOTES:
1. ROADWAY PAVEMENT IS HMAC. RV LOTS ARE CONCRETE PAVEMENT. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
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5. CONTRACTOR TO PROVIDE PAVEMENT REPAIR ON DODSON STREET (5.0' MAX WIDTH) AS REQUIRED AND DIRECTED BY ENGINEER.
6. FOR REQUIRED WATER SERVICE ALIGNMENT, SEE DETAIL 3 SHEET C31.

N
20 10 0 20'
1" = 20'

LEGEND
- PROPOSED WASTEWATER SERVICE LINE
- PROPOSED WATER SERVICE LINE
- PROPOSED RV LOT LAYOUT
- PROPOSED WATER DISTRIBUTION

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WL-B LAYOUT PLAN STA 10+00 TO STA 14+88.26

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Lubbock, Texas 79424
Phone: (956) 423-5511
www.Ardurra.com
Engineering License #F-10033

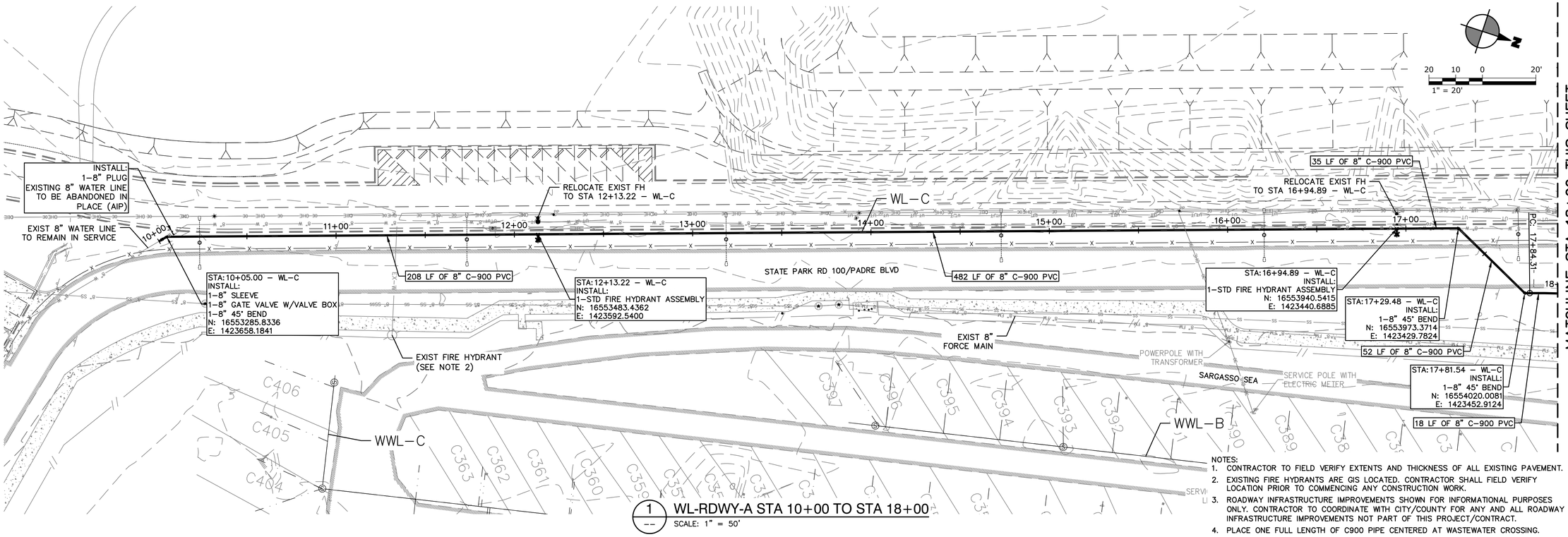
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DRAWING NO.: C27 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 1:51pm

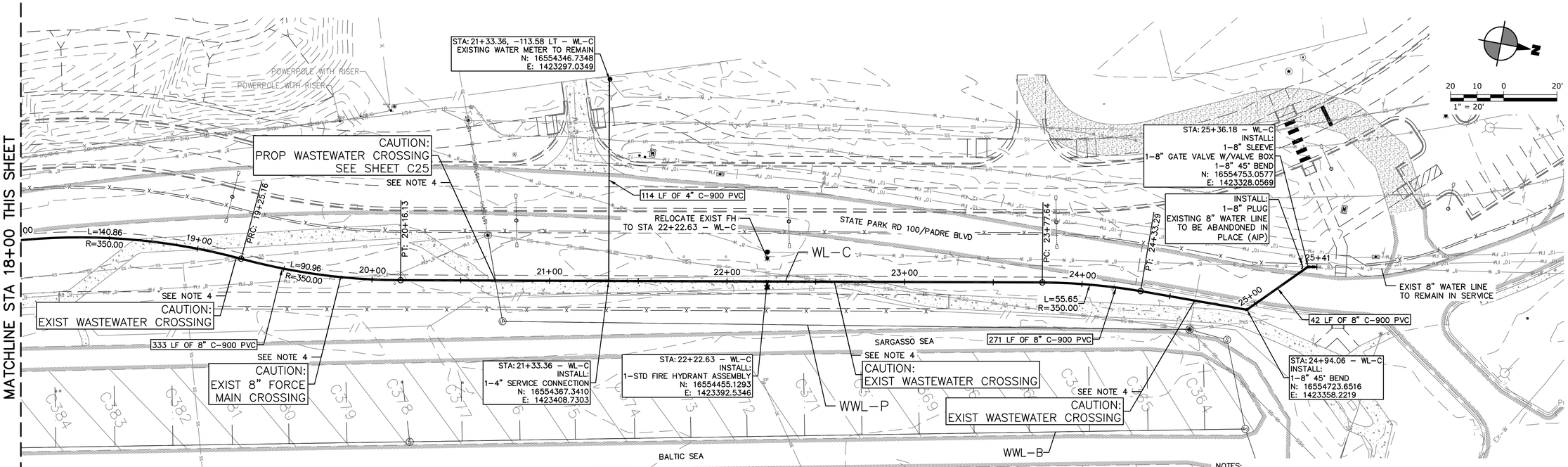
RFP # 250502



1 WL-RDWY-A STA 10+00 TO STA 18+00
SCALE: 1" = 50'

NOTES:
1. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
2. EXISTING FIRE HYDRANTS ARE GIS LOCATED. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO COMMENCING ANY CONSTRUCTION WORK.
3. ROADWAY INFRASTRUCTURE IMPROVEMENTS SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH CITY/COUNTY FOR ANY AND ALL ROADWAY INFRASTRUCTURE IMPROVEMENTS NOT PART OF THIS PROJECT/CONTRACT.
4. PLACE ONE FULL LENGTH OF C900 PIPE CENTERED AT WASTEWATER CROSSING.

MATCHLINE STA 18+00 THIS SHEET



2 WL-RDWY-A STA 18+00 TO STA 25+31.27
SCALE: 1" = 50'

NOTES:
1. CONTRACTOR TO FIELD VERIFY EXTENTS AND THICKNESS OF ALL EXISTING PAVEMENT.
2. EXISTING FIRE HYDRANTS ARE GIS LOCATED. CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO COMMENCING ANY CONSTRUCTION WORK.
3. ROADWAY INFRASTRUCTURE IMPROVEMENTS SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH CITY/COUNTY FOR ANY AND ALL ROADWAY INFRASTRUCTURE IMPROVEMENTS NOT PART OF THIS PROJECT/CONTRACT.
4. PLACE ONE FULL LENGTH OF C900 PIPE CENTERED AT WASTEWATER CROSSING.

MATCHLINE STA 18+00 THIS SHEET

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY ABDULLAH ALBRINJI, P.E. NO. 150626 ON 6/4/2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DESCRIPTION	DATE	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WL-C LAYOUT PLAN STA 10+00 TO STA 25+31.27

6909 Springfield Avenue, Suite 303
Lincoln, Nebraska 68506
Phone: 531.562.5511
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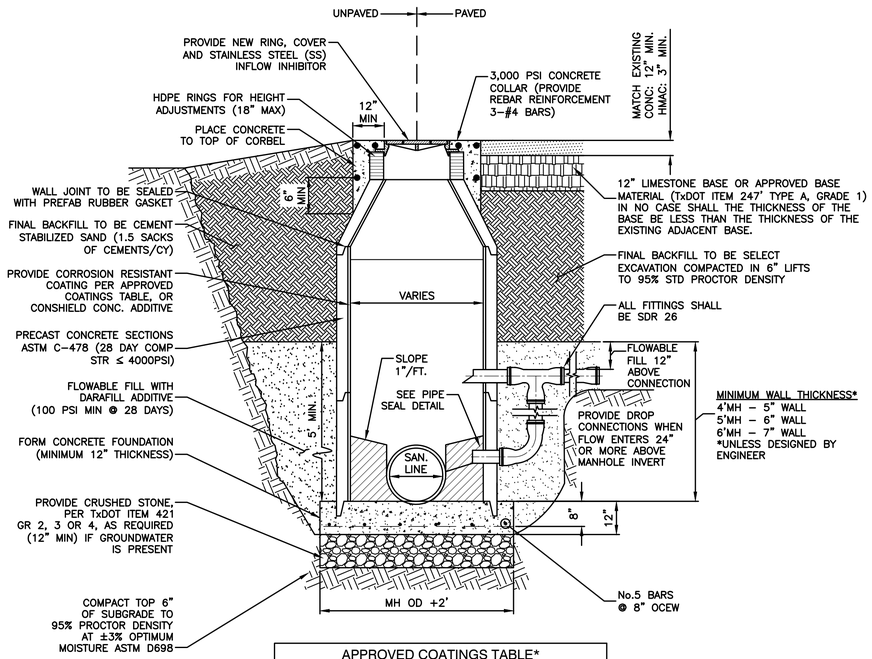
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DRAWING NO.: C28 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

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Wednesday, June 04, 2025, 3:13pm



APPROVED COATINGS TABLE*	
MANUFACTURER	MODEL NAME
STANDARD CEMENT	RELINER MSP
RAVEN LINING SYSTEM	RAVEN 405
VORTEX	STRUCTURE GUARD–QS
CARBOLINE	PLASITE 4500S

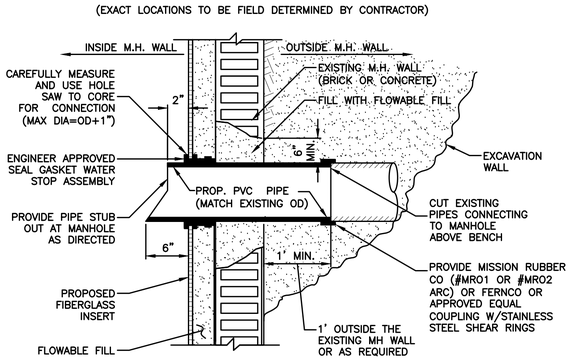
*OR ENGINEER APPROVED EQUAL

NOTE:
COAT ALL CONCRETE SURFACES INCLUDING BENCH & WALLS.

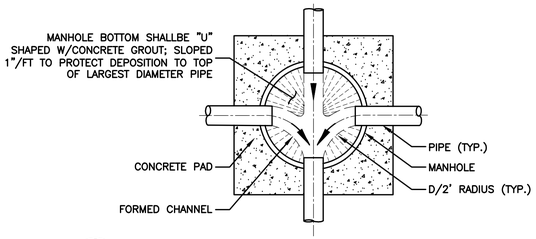
1 CONCRETE MANHOLE DETAIL
SCALE: NTS

FRP INSERT REHABILITATION OF EXISTING MANHOLE NOTES:

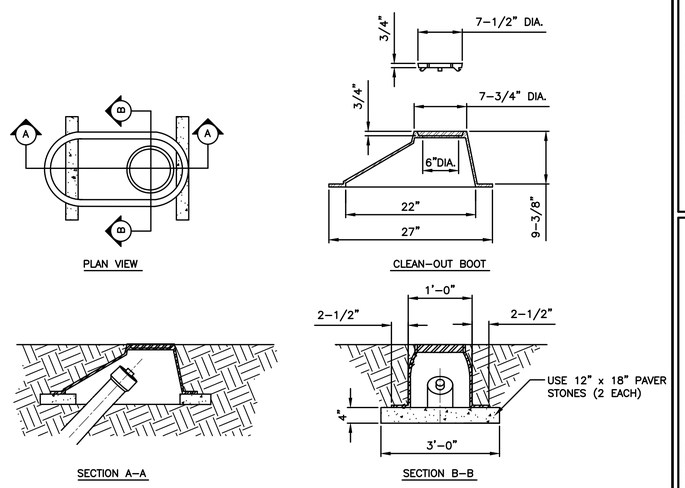
1. THE CONTRACTOR SHALL FIELD–VERIFY THE EXISTING MANHOLE DIAMETER, FLOW LINE, RIM ELEVATION, NUMBER OF LATERALS, LOCATIONS, SIZES, AND OTHER INFORMATION NEEDED TO REHABILITATE EACH MANHOLE.
2. PRIOR TO INSTALLING CONTROL OF FLOW OR INITIATING MANHOLE REPAIRS, THE CONTRACTOR SHALL PLACE BARRICADES AND SIGNS TO DIVERT TRAFFIC AND PEDESTRIANS PER THE APPROVED TRAFFIC CONTROL PLAN, AS REQUIRED.
3. THE CONTRACTOR SHALL PREPARE THE INTERIOR OF THE EXISTING FOUNDATION STRUCTURE BY REMOVING ALL DEFECTIVE GROUT AND DEBRIS/BLOCKAGES, MECHANICALLY ROUGHEN THE ENTIRE INVERT, AND CLEAN THE INTERIOR WITH A HIGH–PRESSURE WATER JET.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF THE RESULTING SLUDGE AND DEBRIS AT AN APPROVED SITE, ACCORDING TO ALL PERTINENT WASTE DISPOSAL REGULATIONS.
   THE CONTRACTOR SHALL USE QUICK–SETTING, NON–SHRINK CONCRETE GROUT TO SEAL AND RESHAPE THE BOTTOM. SUBMIT PROPOSED MATERIALS TO BE USED TO THE ENGINEER FOR APPROVAL.
5. PROVIDE COATING TO EXPOSED CONCRETE SURFACES WITH APPROVED SYSTEM TO PREVENT CORROSION.
6. FRP INSERT SHALL COMPLY WITH ASTM D3753 WITH SINGLE PIECE MONOLITHIC BARREL AND CORBEL CONSTRUCTION WITHOUT SEAMS, JOINTS OR SECTIONS. WALL THICKNESS SHALL PROVIDE AN AASHTO H–20 LOAD RATING AND WALL STIFFNESS OF 36 PSI MIN.
7. CUT BOTTOM OF FRP INSERT TO FIT EVENLY ON BENCHES OR CHIP BENCHES OUT TO EVENLY SUPPORT INSERT.
8. SEAL ANNULAR SPACE AROUND EXIST LINES WITH JUTE ROPE AND CHEMICAL GROUT.



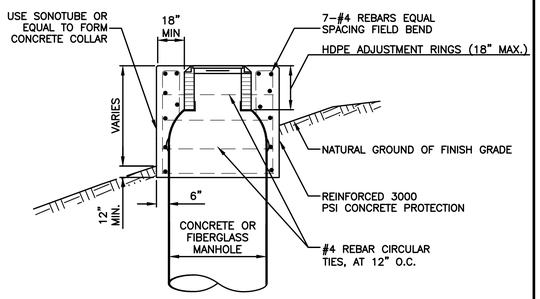
2 FRP INSERT PIPE SECTION DETAIL
SCALE: NTS



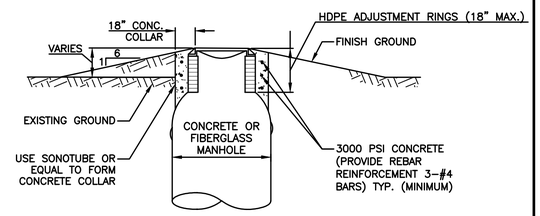
3 WASTEWATER MANHOLE BOTTOM DETAIL
SCALE: NTS



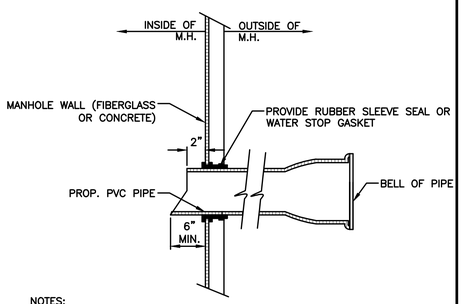
4 TYPICAL CAST IRON CLEANOUT BOOT DETAIL
SCALE: NTS



MANHOLE PROTECTION IN UNPAVED AREAS (CULTIVATED/SPECIAL)
SCALE: NTS

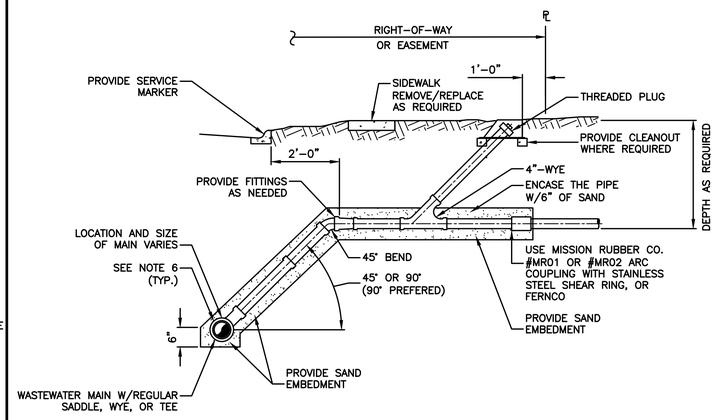


5 MANHOLE PROTECTION IN UNPAVED AREAS (RESIDENTIAL)
SCALE: NTS



NOTES:
1. INSTALL SEAL IN ACCORDANCE WITH MFGS. SPECS.
2. USE RUBBER SEAL ASSEMBLY APPROVED BY ENGINEER.

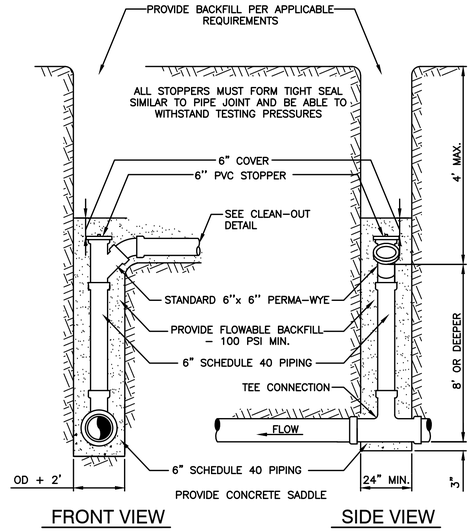
6 PIPE SEAL DETAIL
SCALE: NTS



SERVICE CONNECTION NOTES:

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

7 WASTEWATER SERVICE CONNECTION DETAIL
SCALE: NTS



8 WASTEWATER DEEP SERVICE CONNECTION DETAIL
SCALE: NTS

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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

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CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

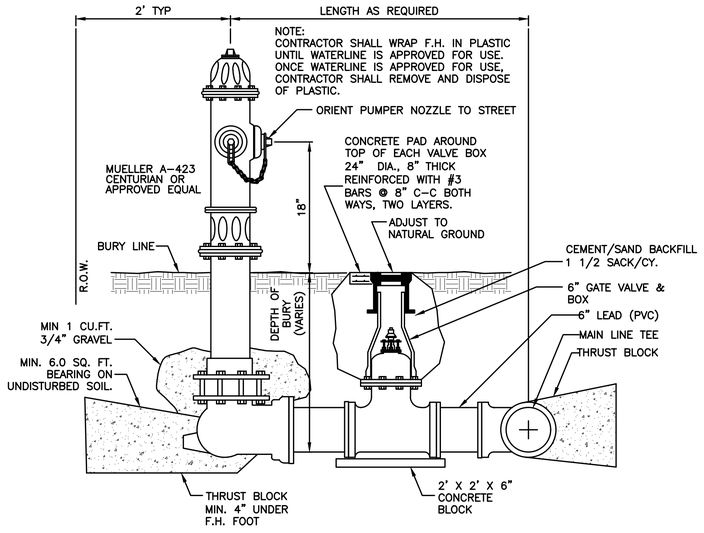
WASTEWATER UTILITIY DETAILS 1 OF 1

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DRAWING NO.:	C29
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DRAWN BY:	JRF/AM
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APPROVED BY:	AA
JOB NO.:	240052.000

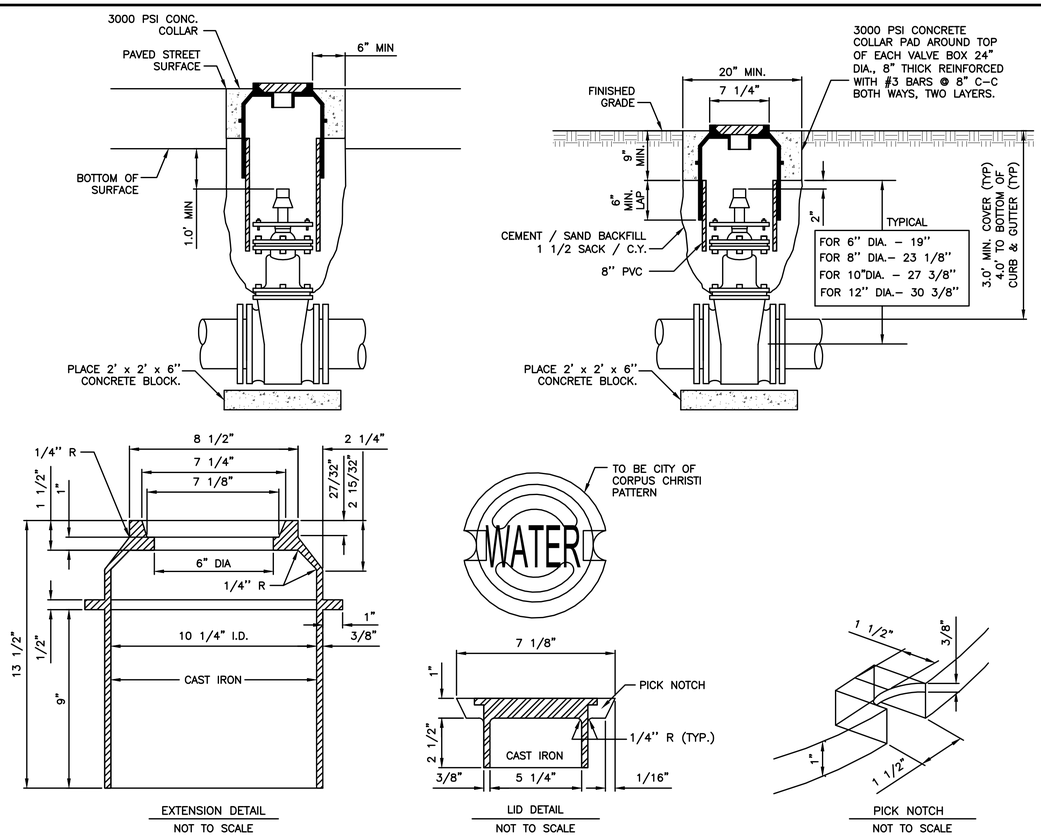
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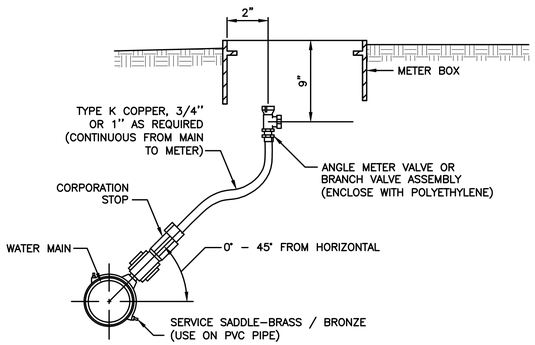
FIRE HYDRANTS:

1. DRAINAGE BED SHALL CONSIST OF CRUSHED STONE OR COARSE GRAVEL W/ COARSE SAND, MIN. VOLUME 7 CU. FT., DRAIN BED SHALL EXTEND A MIN. 6" ABOVE DRAIN OUTLET.
2. ALL FIRE HYDRANT FITTINGS SHALL BE LOCKED TOGETHER BY LOCKING RETAINER GLANDS.
3. FIRE HYDRANT TO BE BLOCKED AGAINST FIRM SOIL AS SHOWN.
4. ALL HYDRANTS SHALL BE INSTALLED PLUMB.
5. LARGE NOZZLE FACES ROAD, UNLESS OTHERWISE NOTED. ROTATE BARREL AS REQUIRED.
6. HYDRANT SHOULD NOT BE SET CLOSER THAN 4' TO OBSTRUCTIONS THAT ARE IN LINE WITH NOZZLE.
7. FIRE HYDRANT SHALL BE SET TO MANUFACTURER'S BURY LINE AT PROPOSED/EXISTING GRADE PLUS 1".
8. NO TAPS ARE TO BE MADE ON FIRE HYDRANT LEAD.
9. FIRE HYDRANT ASSEMBLY SHALL INCLUDE FIRE HYDRANT, THRUST BLOCK, VALVE, 6" LINE, MAIN LINE TEE, etc.

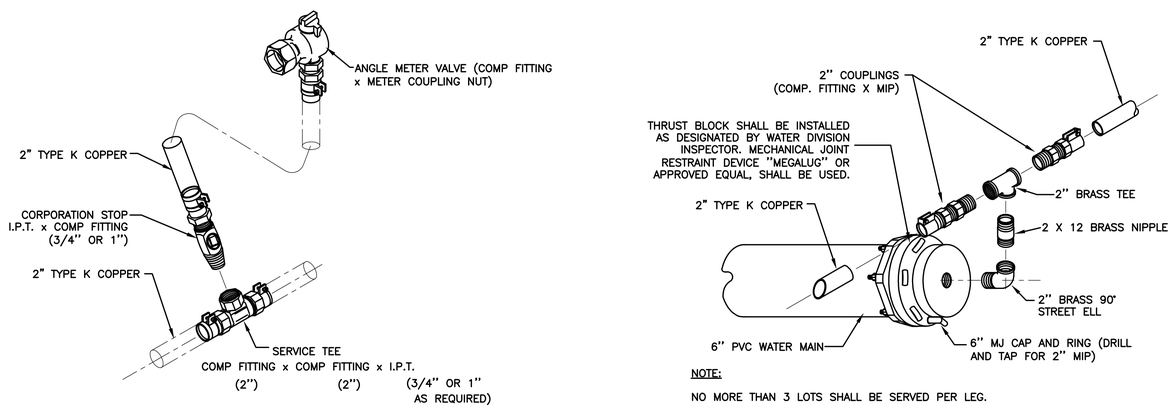
1 TYPICAL FIRE HYDRANT ASSEMBLY
SCALE: NTS



2 VALVE BOX DETAIL @ NATURAL GROUND
SCALE: NTS



3 TYPICAL SERVICE DETAIL
SCALE: NTS



NOTE:
NO MORE THAN 3 LOTS SHALL BE SERVED PER LEG.

4 TYPICAL CONNECTION DETAIL
SCALE: NTS

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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

WATER UTILITIY DETAILS 1 OF 3

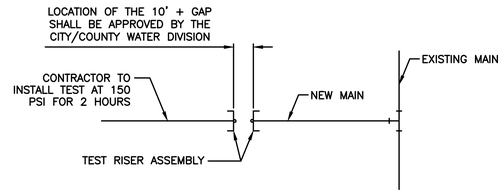
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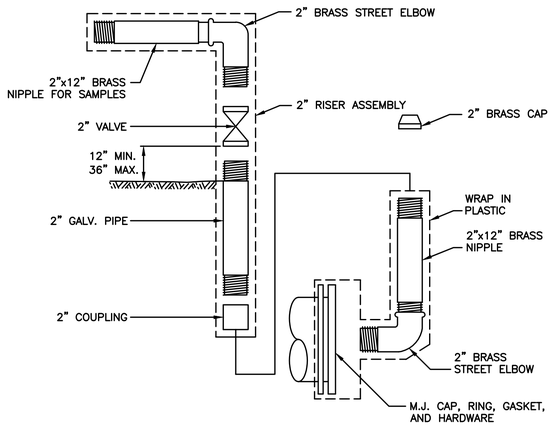
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APPROVED BY:	AA
JOB NO.:	240052.000

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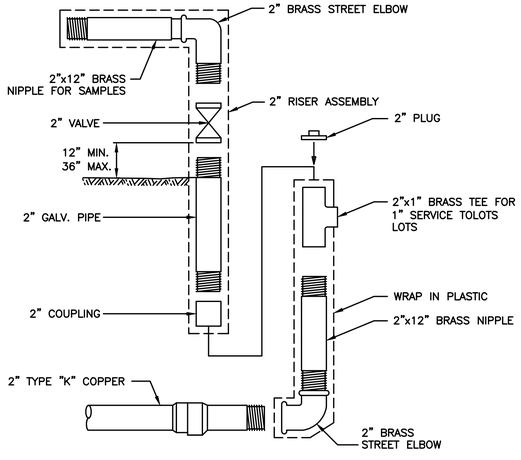
1. HYDROSTATIC TEST: WATER FOR FILLING THE NEW WATER LINE AND PERFORMING TESTS WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY/COUNTY THROUGH A STANDARD WATER CONSTRUCTION METER CONNECTION. STANDARD WATER CONSTRUCTION METER AND GAUGE WILL BE SUPPLIED BY THE CITY/COUNTY AFTER THE CONTRACTOR HAS PAID ALL 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 SQUARE INCH AND FURNISHED BY THE CITY (48 HOURS NOTIFICATION).
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 WATER DIVISION INSPECTOR. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT THAT IS REQUIRED TO MAKE TIE / CONNECTION. CONTRACTOR WILL SCHEDULE & COORDINATE WITH WATER DIVISION INSPECTOR ON DATE & TIME OF TIE-IN. (24 HOURS NOTIFICATION)
3. CONTRACTOR SHALL FURNISH AND INSTALL TAPPING SLEEVE OR SADDLE AND TAPPING GATE VALVE AND VALVE BOX COMPLETE. CITY/COUNTY TO MAKE TAP (72 HOURS NOTIFICATION)

DETAIL "A" TEST RISER ASSEMBLY CONNECTION



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

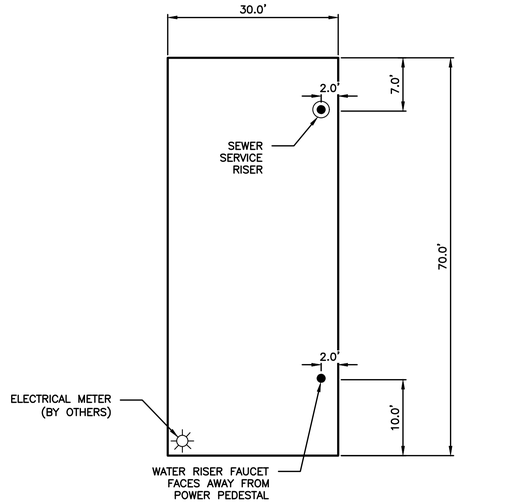
DETAIL "B" TEST RISER ASSEMBLY
FURNISHED AND INSTALLED BY CONTRACTOR



NOTE:
CONTRACTOR WILL REMOVE RISER ASSEMBLY AND INSTALL 2" BRASS PLUG ON 2"x1" BRASS TEE AFTER SAMPLE PASSES

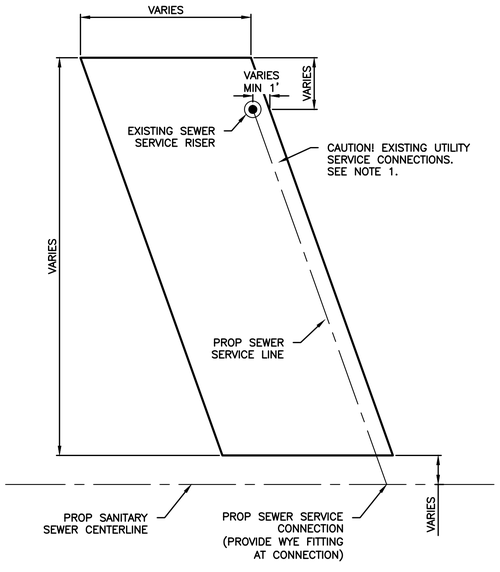
DETAIL "C" TEST RISER ASSEMBLY
FURNISHED AND INSTALLED BY CONTRACTOR

1 TYPICAL TEST RISER ASSEMBLY DETAIL
SCALE: NTS



NOTE:
1. CONTRACTOR TO COORDINATE WITH ENGINEER AND UTILITY DEPARTMENT FOR EXACT SERVICE LAYOUT FOR WATER, SEWER, AND ELECTRICAL.
2. REFER TO GDJ ENGINEERING PLANS FOR ADDITIONAL INFORMATION FOR RV LOT PAD DESIGN

2 BACK-IN RV PAD SITE UTILITY LAYOUT DETAIL
SCALE: NTS



NOTE:
1. CONTRACTOR TO LOCATE ALL EXISTING UTILITY SERVICE CONNECTIONS AND ADJUST AS NECESSARY TO INSTALL PROPOSED SEWER SERVICE LINE. CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR EXACT SERVICE LAYOUT.

3 EXISTING RV PAD SITE UTILITY LAYOUT DETAIL
SCALE: NTS

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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED PROFESSIONAL ENGINEER
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ISSUES / REVISIONS

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CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

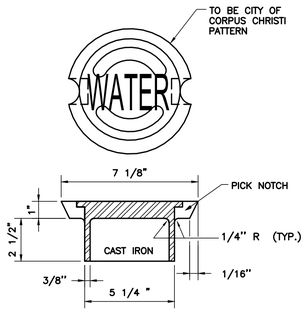
WATER UTILITIY DETAILS 2 OF 3

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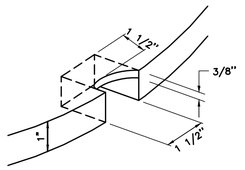
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DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
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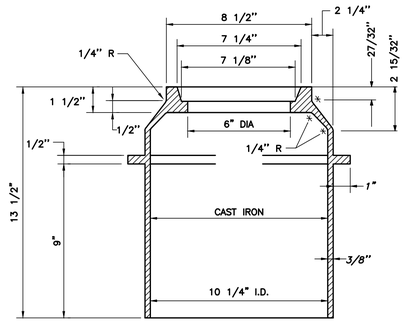
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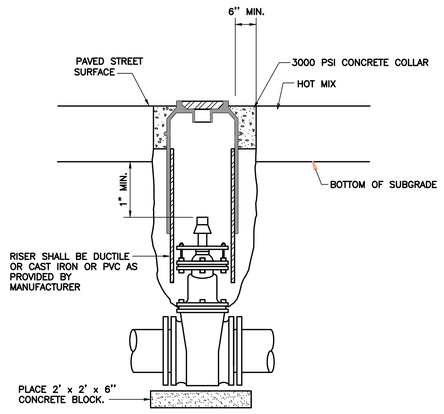
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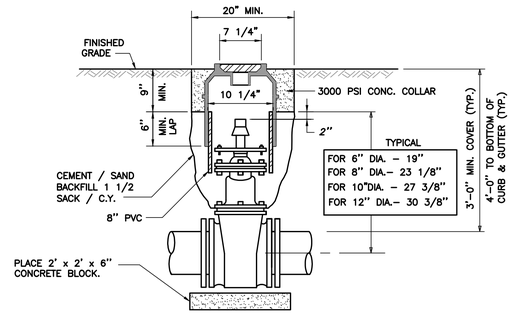
PICK NOTCH
NOT TO SCALE



EXTENSION DETAIL
NOT TO SCALE



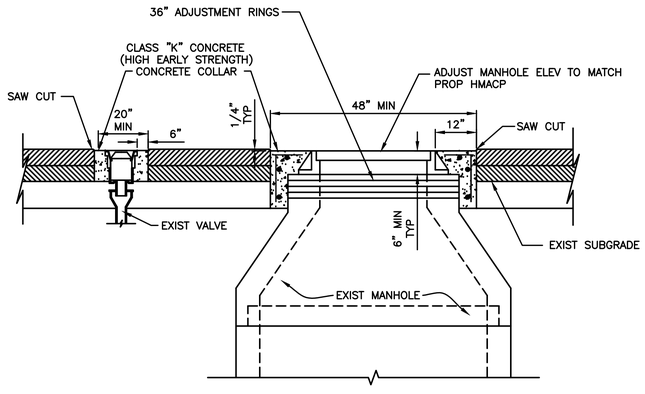
VALVE BOX DETAIL
@ PAVEMENT
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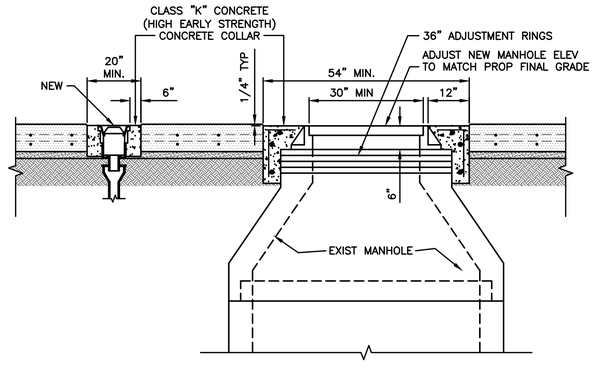


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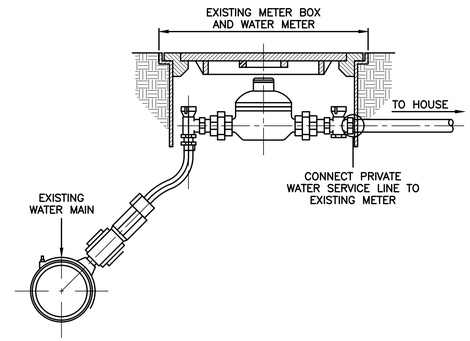
ALL VALVES SHALL BE HOUSED IN APPROVED VALVE BOXES

1 BURIED VALVE DETAIL
SCALE: NTS





3 MANHOLE & VALVE ADJUSTMENT DETAILS
SCALE: NTS



2 TYPICAL WATER SERVICE DETAIL
SCALE: NTS

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WATER UTILITIY DETAILS 3 OF 3

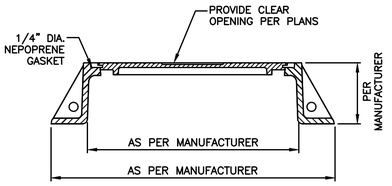
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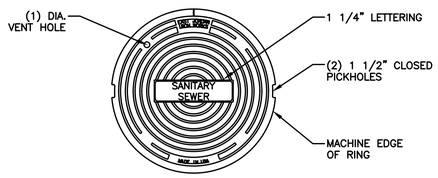
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SECTION VIEW

PROVIDE WATERTIGHT GASKETED AND BOLTED APPROVED RING AND COVER ASSEMBLY MEETING ALL TCEQ REQUIREMENTS



PLAN VIEW

ROADWAY/TRAFFIC RATED (H20) MANHOLE RING AND COVER)

RING & COVER APPROVED LIST

CLEAR OPENING	MANUFACTURER(1)	MODEL NUMBER(1)
30"	EAST JORDAN IRON WORKS	COVER– V1430 FRAME– V1420
	U.S. FOUNDRY	COVER– #9210048 FRAME– #8021361
	NEENAH FOUNDRY	DF–1274

(1) OR APPROVED EQUAL (MADE IN THE USA)

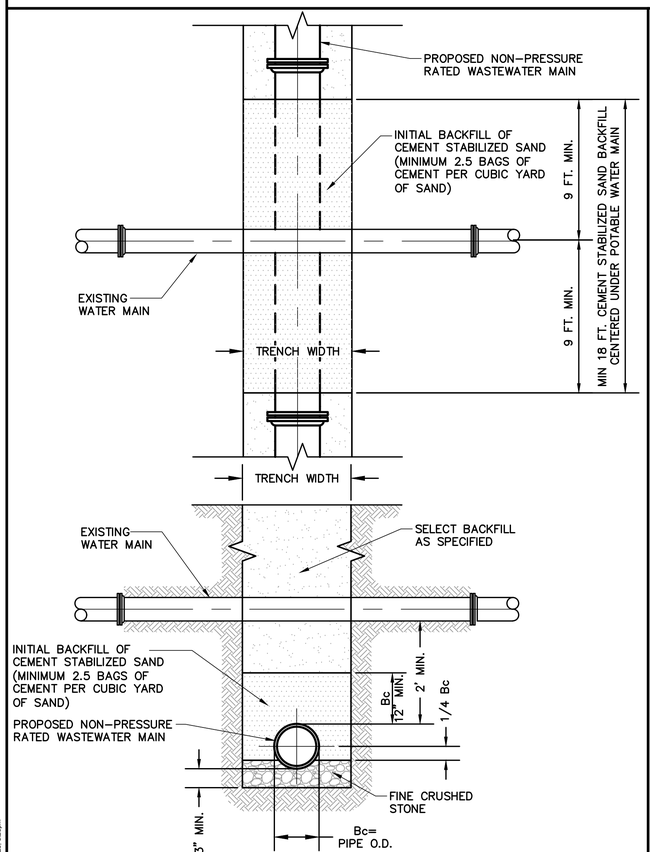
(2) RING AND COVER TO BE DIPPED WITH BLACK ASPHALTED COATING.

ROADWAY MANHOLE RING & COVER NOTES:

1. TRAFFIC SHALL BE RESTRICTED FROM MANHOLE FOR 48 HOURS AFTER THE PLACEMENT OF CONCRETE COLLAR.
2. MEET ASTM A48 AND AASHTO–M–306 (LATEST REVISION) PROOF LOAD TESTING IS REQUIRED (40,000 LBS) AND MUST BE INSPECTED. PRIOR TO INSTALLATION, THE RESULTS OF THE TEST SHALL BE SUBMITTED TO THE CITY.
3. THE MANUFACTURING FACILITIES FOR ALL PROVIDED RING AND COVER ASSEMBLIES SHALL MEET OR EXCEED ALL EPA ENVIRONMENTAL STANDARDS AND OSHA SAFETY STANDARDS. THE CASTINGS SHALL BE MANUFACTURED FROM RECYCLED MATERIALS. THE CONTRACTOR SHALL PROVIDE CERTIFICATION.
4. PROVIDE NEOPRENE GASKET AND 316 STAINLESS STEEL BOLTS 1/2" WITH REQUIRED WASHERS

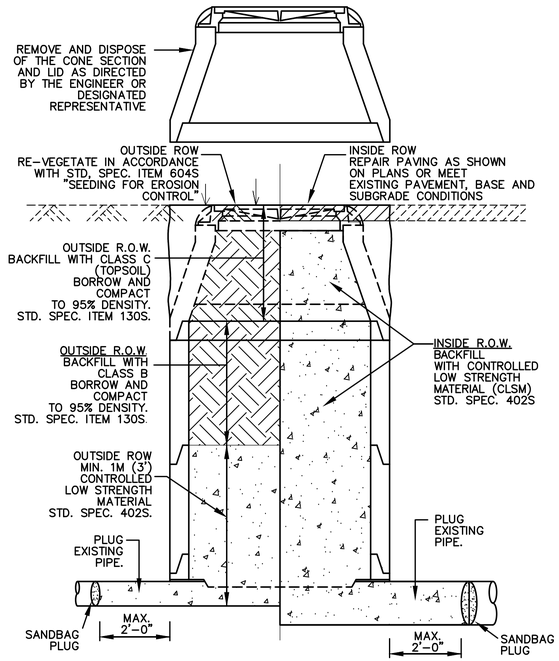
1 WATERTIGHT CAST IRON RING AND COVER DETAIL

SCALE: NTS



2 TYPICAL CEMENT STABILIZED SAND ENCASEMENT DETAIL

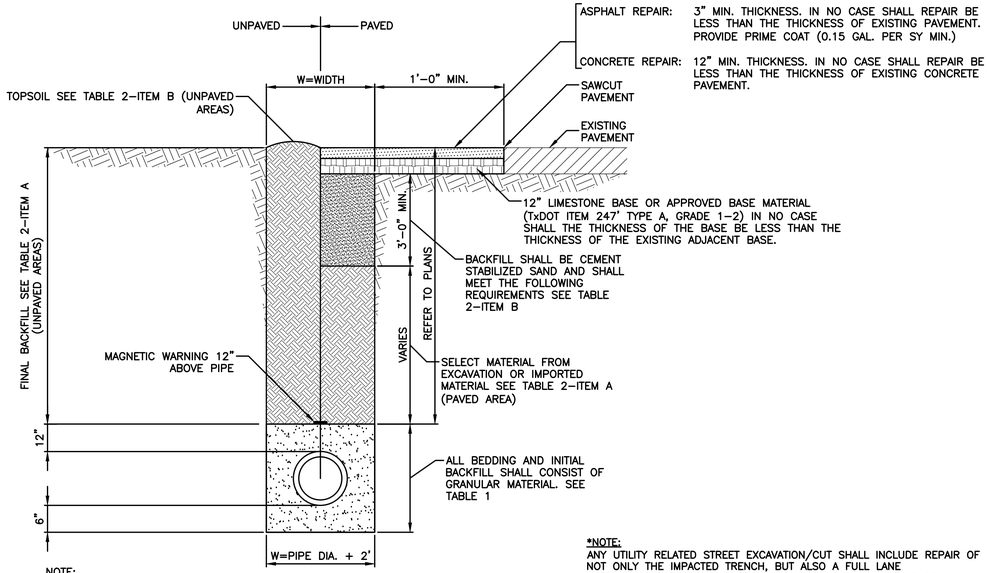
SCALE: NTS



NOTES:
1. THE PLUG SHOULD BE COMPOSED OF A SANDBAG OR SIMILAR TYPE PLUG TO HOLD CLSM UNTIL SET. CLSM IS CONTROLLED LOW STRENGTH MATERIAL, STD. SPEC 402S.
2. CLSM SHALL COMPLETELY FILL VOID TO SANDBAG OR SIMILAR TYPE PLUG.

3 MANHOLE ABANDONMENT

SCALE: NTS



NOTE:
ANY OVER EXCAVATION MUST BE CORRECTED WITH GRANULAR MATERIAL SHOWN IN TABLE 1.

*NOTE:
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 OF 12' WIDE OR PERPENDICULAR CUTS ON ASPHALT STREETS, AND FULL PANEL REPLACEMENT ON CONCRETE STREETS. A SITE SPECIFIC PAVEMENT CUT AND RESTORATION PLAN THAT INDICATED 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 APPLICATION.

GENERAL NOTES FOR BACKFILL

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

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: SEWER LINES:

1. EXCAVATIONS <20 FT. 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%
   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.

   OR

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

TABLE 2
FINAL BACKFILL
(GREATER THAN 12" ABOVE PIPE)

UNPAVED AREAS

A. FROM 12" ABOVE PIPE TO 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.

B. 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)

PAVED AREAS

A. 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:

   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 DOES NOT
   MEET REQUIREMENTS, THEN USE CEMENT STABILIZED SAND.
   SEE TABLE 2–ITEM B BELOW.

B. 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 55–100
   #10 40–100
   #40 25–100
   #200 10–20
   PI NP–10

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

4 TRENCH BACKFILL FOR WASTEWATER LINES AND PAVEMENT REPAIR FOR UTILITIES

SCALE: NTS

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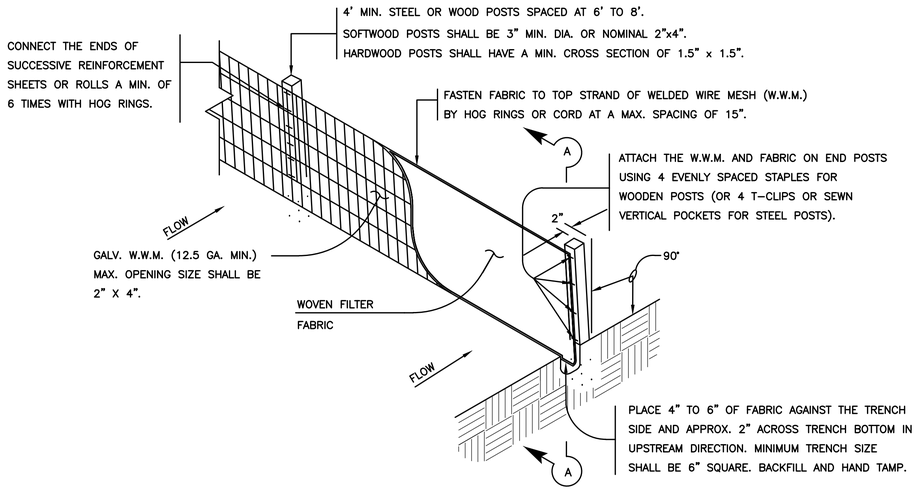
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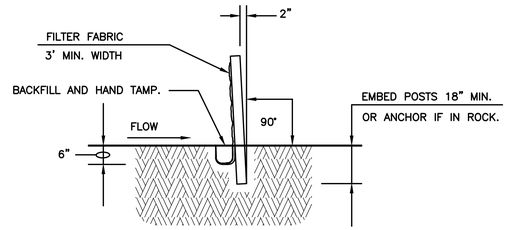
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SEDIMENT CONTROL FENCE USAGE GUIDELINES

A SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED.

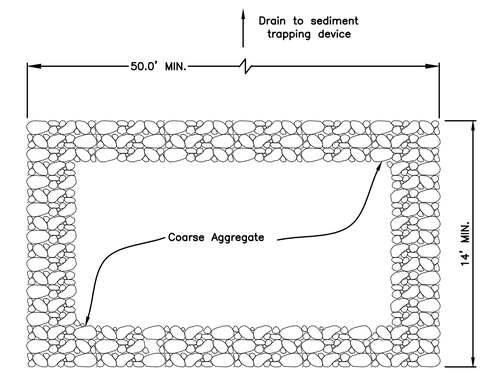
SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAX. FLOW THOUGH RATE OF 100 GPM/FT. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA LARGER THAN 2 ACRES.



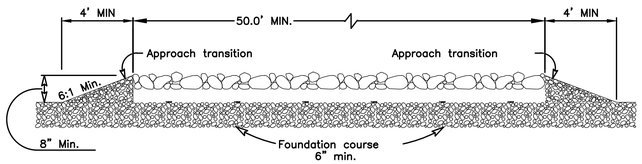
1 TYPICAL SILT FENCE DETAILS
SCALE: NTS

STABILIZED CONSTRUCTION EXIT NOTES

1. THE LENGTH OF THE TYPE 1 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
3. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ODR.
4. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ODR.
5. THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
6. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ODR.

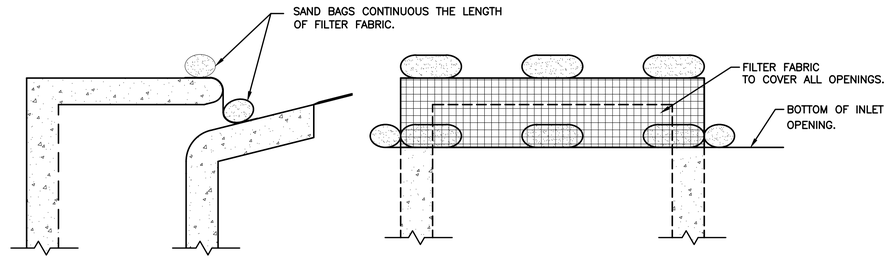


TYPICAL STABILIZED CONSTRUCTION EXIT



TYPICAL CONSTRUCTION EXIT SECTION

2 TYPICAL CONSTRUCTION EXIT DETAILS
SCALE: NTS



CURB INLET POST INLET

ALL CURB, POST AND GATE INLETS WITHIN THE CONSTRUCTION AREA SHALL HAVE TEMPORARY SEDIMENT CONTROL.

3 TYPICAL INLET SEDIMENT CONTROL DETAILS
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EROSION AND SEDIMENTATION DETAILS 1 OF 2

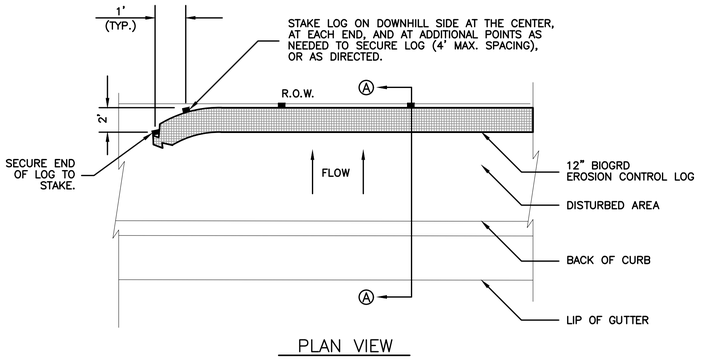
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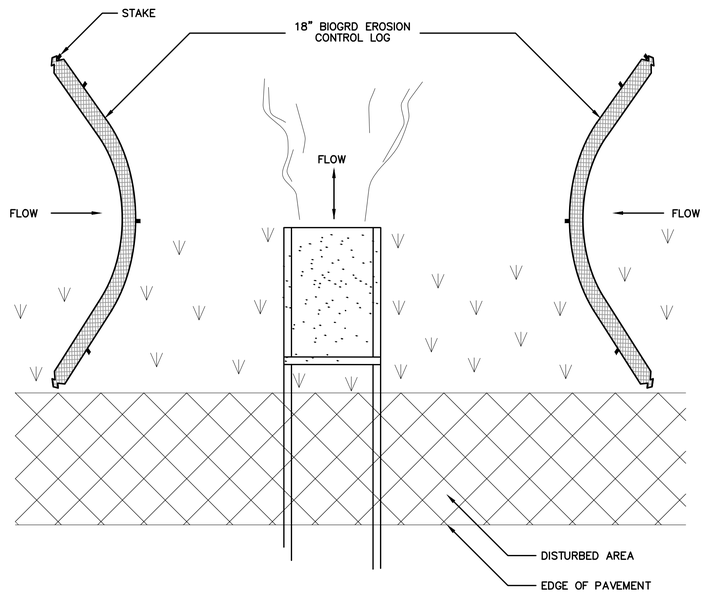
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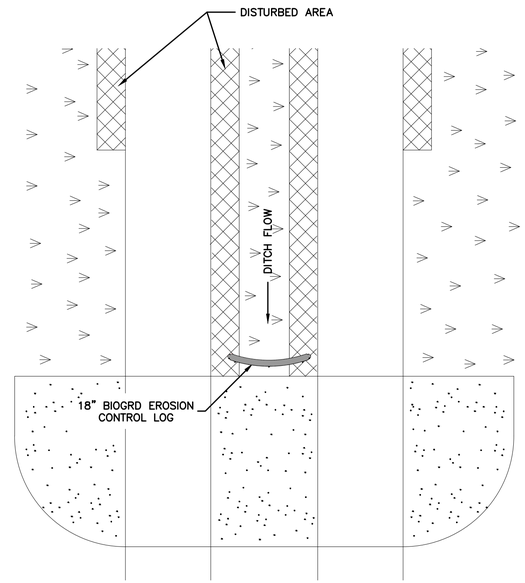
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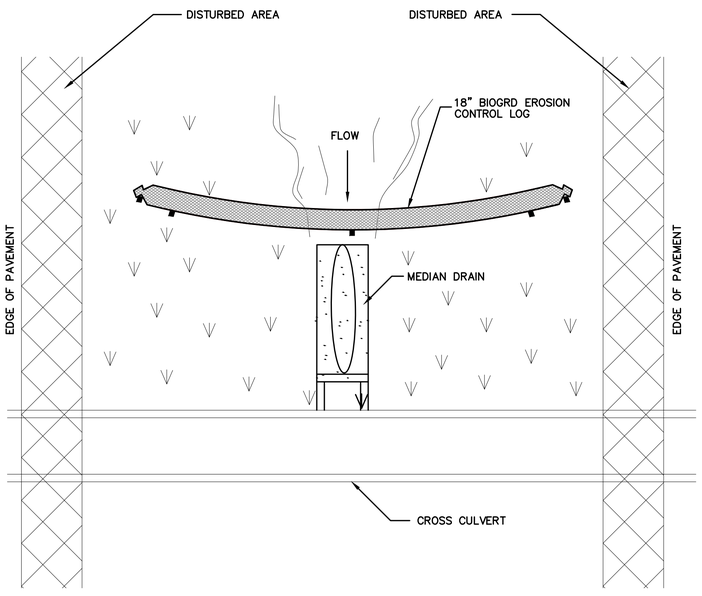
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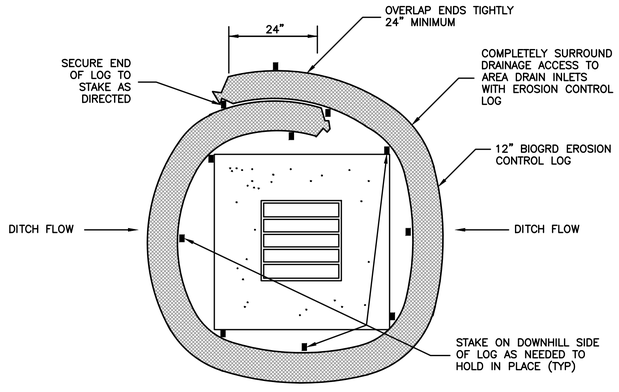
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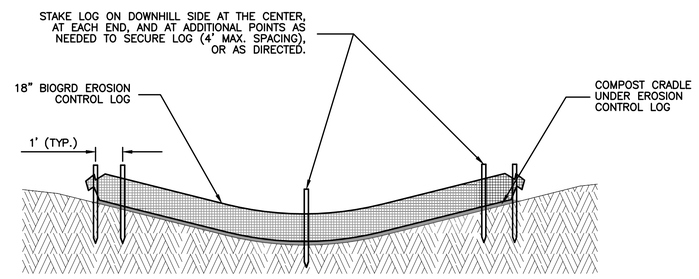
3 SEDIMENT TRAP AT BRIDGE MEDIAN DETAIL
SCALE: NTS



4 SEDIMENT TRAP AT MEDIAN DRAINS DETAIL
SCALE: NTS



5 SEDIMENT TRAP AT DROP INLETS DETAIL
SCALE: NTS



6 SEDIMENT TRAP LOG ELEVATION DETAIL
SCALE: NTS

GENERAL NOTES (APPLY TO ALL DETAILS SHOWN ON THIS SHEET):

1. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED. MAXIMUM LENGTH OF LOGS SHALL BE 60' FOR 18" DIAMETER OR 30' FOR 12" DIAMETER LOGS.
2. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
3. STUFF LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE DENSITY THAT WILL HOLD SHAPE WITHOUT EXCESSIVE DEFORMATION.
4. STAKES SHALL BE 2" x 2" WOOD OR #3 REBAR, 4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG, OR AS DIRECTED.
5. COMPOST CRADLE MATERIAL IS INCIDENTAL AND WILL NOT BE PAID FOR SEPARATELY.
6. SANDBAGS SHALL BE SUBSIDIARY TO ITEM BIODEGRADABLE EROSION CONTROL LOGS.

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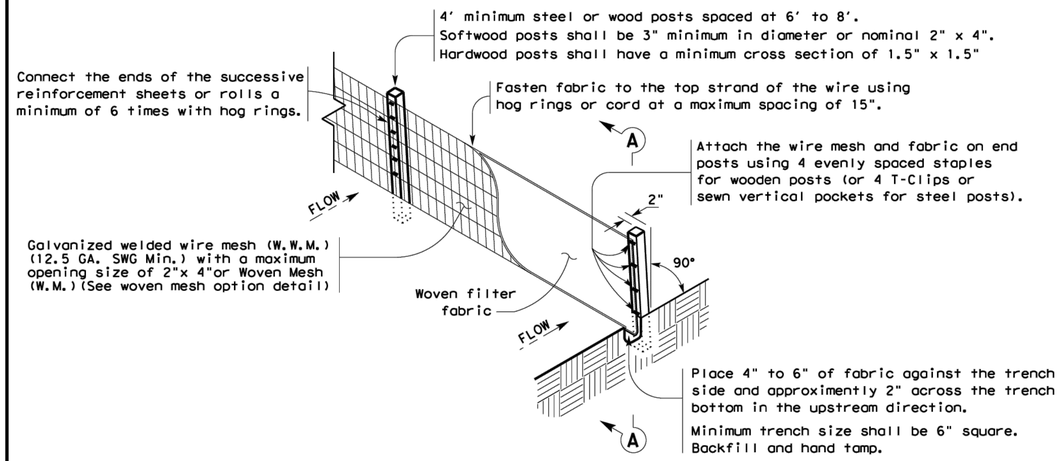
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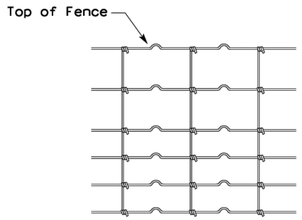
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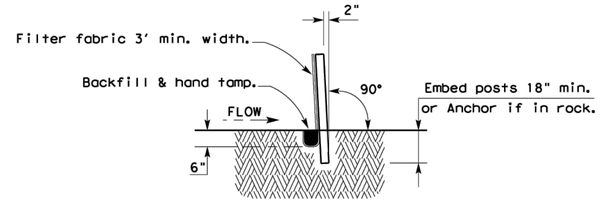
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TEMPORARY SEDIMENT CONTROL FENCE

SCF





SECTION A-A

HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

Galvanized hinge joint knot woven mesh (12.5 GA.SWG Min.) requires a minimum of five horizontal wires spaced at a maximum of 12 inches apart and all vertical wires spaced at a maximum of 12 inches apart.

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a maximum flow through rate of 100 GPM/FT^2. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

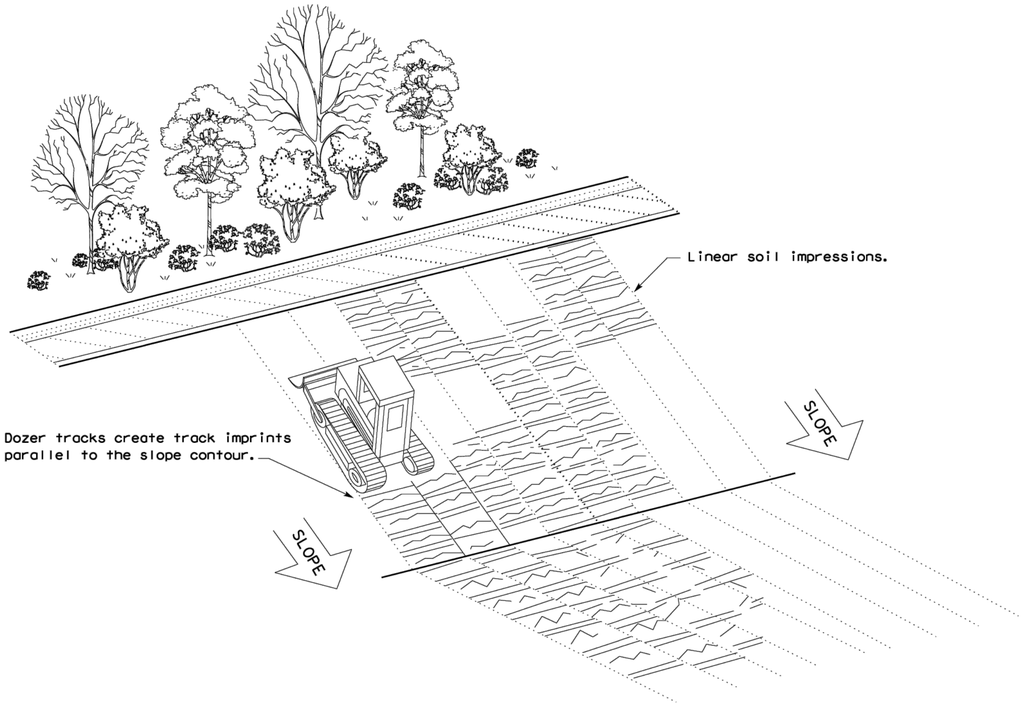
LEGEND

Sediment Control Fence

SCF

GENERAL NOTES

1. Vertical tracking is required on projects where soil distributing activities have occurred unless otherwise approved.
2. Perform vertical tracking on slopes to temporarily stabilize soil.
3. Provide equipment with a track undercarriage capable of producing linear soil impressions measuring a minimum of 12" in length by 2" to 4" in width by 1/2" to 2" in depth.
4. Do not exceed 12" between track impressions.
5. Install continous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.



VERTICAL TRACKING

Texas Department of Transportation — Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES
FENCE & VERTICAL TRACKING
EC(1)-16

FILE: ec116	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS	
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY	
REVISIONS	DIST	COUNTY		SHEET NO.	

DATE
FILE

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

TEMP EROS,SED & WTR POLL CONT
MEAS FENCE & VERT TRACK EC(1)-16

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STATE OF TEXAS — ABDULLAH ALBRINJI — 150626 — LICENSED PROFESSIONAL ENGINEER — 6/4/2025

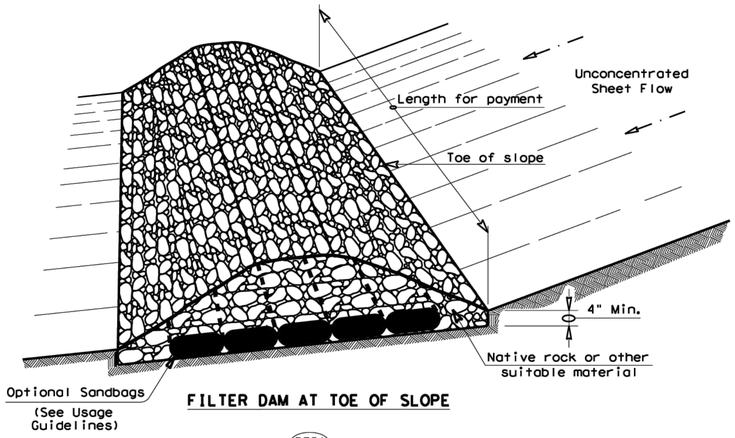
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DRAWING NO.: C36 of 48

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APPROVED BY:	AA
JOB NO.:	240052.000

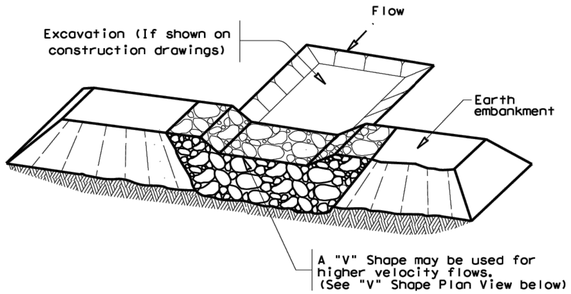
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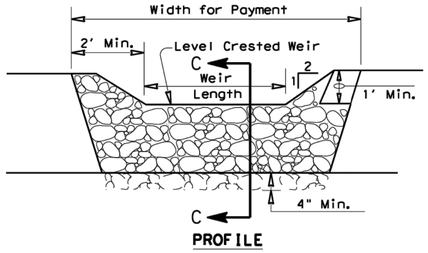
FILTER DAM AT TOE OF SLOPE

RFD1

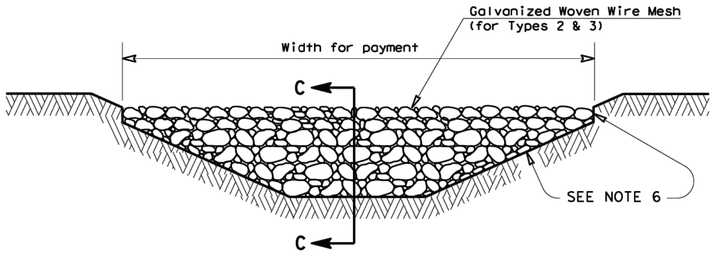


FILTER DAM AT SEDIMENT TRAP

RFD1 OR RFD2

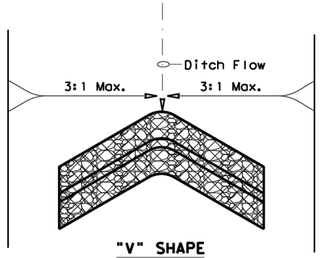


PROFILE

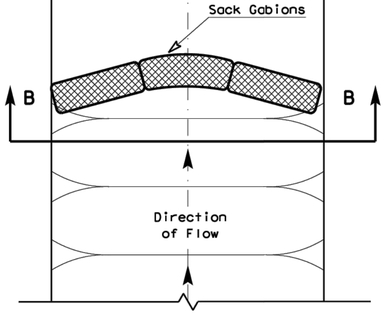


FILTER DAM AT CHANNEL SECTIONS

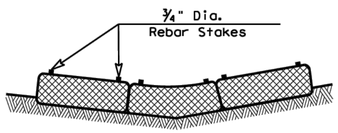
RFD1 OR RFD2 OR RFD3



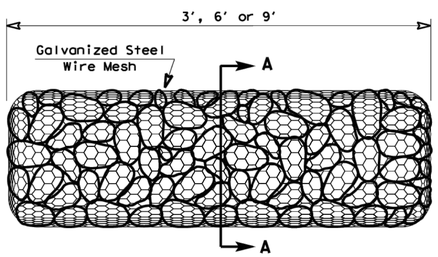
"V" SHAPE PLAN VIEW



PLAN VIEW

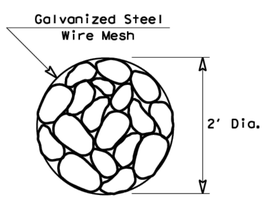


SECTION B-B

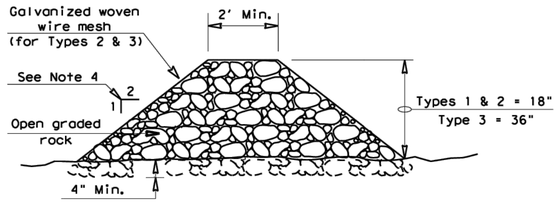


TYPE 4 (SACK GABIONS)

RFD4



SECTION A-A



SECTION C-C

ROCK FILTER DAM USAGE GUIDELINES

Rock Filter Dams should be constructed downstream from disturbed areas to intercept sediment from overland runoff and/or concentrated flow. The dams should be sized to filter a maximum flow through rate of 60 GPM/FT^2 of cross sectional area. A 2 year storm frequency may be used to calculate the flow rate.

Type 1 (18" high with no wire mesh) (3" to 6" aggregate): Type 1 may be used at the toe of slopes, around inlets, in small ditches, and at dike or swale outlets. This type of dam is recommended to control erosion from a drainage area of 5 acres or less. Type 1 may not be used in concentrated high velocity flows (approximently 8 Ft/Sec or more) in which aggregate wash out may occur. Sandbags may be used at the embedded foundation (4" deep min.) for better filtering efficiency of low flows if called for on the plans or directed by the Engineer.

Type 2 (18" high with wire mesh) (3" to 6" aggregate): Type 2 may be used in ditches and at dike or swale outlets.

Type 3 (36" high with wire mesh) (4" to 8" aggregate): Type 3 may be used in stream flow and should be secured to the stream bed.

Type 4 (Sack gabions) (3" to 6" aggregate): Type 4 May be used in ditches and smaller channels to form an erosion control dam.

Type 5: Provide rock filter dams as shown on plans.

GENERAL NOTES

1. If shown on the plans or directed by the Engineer, filter dams should be placed near the toe of slopes where erosion is anticipated, upstream and/or downstream at drainage structures, and in roadway ditches and channels to collect sediment.
2. Materials (aggregate, wire mesh, sandbags, etc.) shall be as indicated by the specification for "Rock Filter Dams for Erosion and Sedimentation Control".
3. The rock filter dam dimensions shall be as indicated on the SW3P plans.
4. Side slopes should be 2:1 or flatter. Dams within the safety zone shall have sideslopes of 6:1 or flatter.
5. Maintain a minimum of 1' between top of rock filter dam weir and top of embankment for filter dams at sediment traps.
6. Filter dams should be embedded a minimum of 4" into existing ground.
7. The sediment trap for ponding of sediment laden runoff shall be of the dimensions shown on the plans.
8. Rock filter dam types 2 & 3 shall be secured with 20 gauge galvanized woven wire mesh with 1" diameter hexagonal openings. The aggregate shall be placed on the mesh to the height & slopes specified. The mesh shall be folded at the upstream side over the aggregate and tightly secured to itself on the downstream side using wire ties or hog rings. For in stream use, the mesh should be secured or staked to the stream bed prior to aggregate placement.
9. Sack Gabions should be staked down with ¾" dia. rebar stakes, and have a double-twisted hexagonal weave with a nominal mesh opening of 2 ½" x 3 ¼"
10. Flow outlet should be onto a stabilized area (vegetation, rock, etc.).
11. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

PLAN SHEET LEGEND

Type 1 Rock Filter Dam	RFD1
Type 2 Rock Filter Dam	RFD2
Type 3 Rock Filter Dam	RFD3
Type 4 Rock Filter Dam	RFD4

Texas Department of Transportation — Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES
ROCK FILTER DAMS
EC(2)-16

FILE: ec216	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS
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ISSUES / REVISIONS

NO.	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

TEMP EROS,SED & WTR POLL CONT
MEAS FENCE & VERT TRACK EC(2)-16

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I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

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 Item 506.

List MS4 Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

1. CITY OF SOUTH PADRE ISLAND, TEXAS
2. CAMERON COUNTY, TEXAS

☐ No Action Required ☒ Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000
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 public and TCEQ, EPA or other inspectors.
4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, submit NOI to TCEQ and the Engineer.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

☒ No Permit Required
☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
☐ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
☐ Individual 404 Permit Required
☐ Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1.
2.
3.
4.

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.

Best Management Practices:

Erosion	Sedimentation	Post-Construction TSS
☐ Temporary Vegetation	☒ Silt Fence	☐ Vegetative Filter Strips
☒ Blankets/Matting	☒ Rock Berm	☐ Retention/Irrigation Systems
☐ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☐ Sodding	☒ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☒ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☐ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	☐ Grassy Swales

DATE:
FILE:

III. CULTURAL RESOURCES

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

Action No.

1. If contracter encounters any items, contact engineer.
2.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.
Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

☐ No Action Required ☒ Required Action

Action No.

1. Areas within the ROW, but outside the limits of construction, should not be disturbed to the extent practical. Every effort should be made to preserve vegetation where it would neither safety nor substantially interfere with proposed project.
2. Be advised of the potential occurrence of Texas Ayenia in the project area. This plant can be found on well-drained soils in subtropical thorny woodlands and tall shrublands of the Rio Grande delta: known site soils include well-drained, calcareous, sandy clay loam (Hidalgo Series) and neutral to moderately alkaline, fine sandy loam (Willacy Series): also under or among taller shrubs in thorn woodland/thorn shrubland: flowering throughout the year with sufficient rainfall
3. Be advised of the potential occurrence of South Texas ambrosia in the project area. South Texas ambrosia occurs in grasslands and mesquite-dominated shrublands on various soils ranging from heavy clays to lighter textured sandy loams, mostly over the Beaumont Formation on the Coastal Plain in modified unplowed sites such as railroad and highway right-of-ways, cemeteries, mowed fields, erosional areas along small creeks: Perennial: Flowering July-November

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☐ No Action Required ☒ Required Action

Action No.

1. The Federal Migratory Bird Act (MBTA) states that it is unlawful to pursue, hunt, take, kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg in part or in whole, without a federal permit. this project does not have a federal permit therefore, in accordance with this regulation, the Contractor will avoid disturbing, destroying, removing, or relocating migratory birds and active nests found in trees, culverts, bridges, on the ground, etc. Typical breeding season occurs from March through August: therefore, tree trimming and other vegetation clearing activities that may disturb breeding birds should be done in the non-breedingseason (September-February), when possible. If work must be performed during the breeding season 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 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 compliance with the MBTA. The Contractor can discuss other preventative measures with the Project Engineer and/or District Environmental Staff.
2. Be advised of the potential occurrence of northern aplomado falcon in the project area. This species prefers open country, especially savanna and open woodland, and sometimes in very barren areas: grassy plains and valleys with scattered mesquite, yucca, and cactus: nests in old stick nests of other bird species Avoid harming this species if encountered.
3. Be advised of the potential occurrence of Cactus ferruginous pygmy-owl in the project area. This species occurs in mesquite, ebony, and oak communities. Avoid harming this species if encountered.
4. Be advised of the potential occurrence of black rail in the project area. This species prefers salt, brackish, and freshwater marshes, pond borders, wet meadows, and grassy swamps: nests in or along edge of marsh, sometimes on damp ground, but usually on mat of previous years dead grasses: nest usually hidden in marsh grass or at base of Salicornia Avoid harming this species if encountered.
5. Due to the increased activity (mating) of reptiles during the spring, construction activities like clearing or grading should attempt to be scheduled outside of the spring (April-May) season. It is also encouraged to conduct ground disturbing activities before October to prevent disturbing reptiles that become less active and may be using burrows in the project area.
6. If reptiles are found on project site allow species to safely leave the project area. Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter where feasible.
7. Do not attempt to handle or catch any of these species. Report all sightings and/or impacts to the Engineer.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediate area, and contact the Engineer immediately.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

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 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.

Contact the Engineer if any of the following are detected:

- Dead or distressed vegetation (not identified as normal)
- Trash piles, drums, canister, barrels, etc.
- Undesirable smells or odors
- Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

☐ Yes ☐ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

☐ Yes ☐ No

If "Yes", then contractor 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 to scheduled demolition.

If "No", then contractor is still required to notify DSHS 15 working days prior to any scheduled demolition.

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 consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

Action No.

1. ANY CHANGES ORDERS AND/OR DEVIATIONS FROM THE DESIGN MUST BE REPORTED TO THE ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION AS ENVIRONMENTAL CLEARANCE MAY BE REQUIRED.
2. CONTRACTOR MUST COMPLY WITH ALL APPICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
3.

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☒ No Action Required ☐ Required Action

Action No.

1.
2.
3.

Texas Department of Transportation — Design Division Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: epic.dgn	DN: TxDOT	CK: RG	DW: VP	CK: AR
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REVISIONS				
12-12-2011 (DS)	DIST	COUNTY		SHEET NO.
05-07-14 ADDED NOTE SECTION IV.				
01-23-2015 SECTION I CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.				

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ISSUES / REVISIONS

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CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

ENVIRONMENTAL PERMITS, ISSUES, AND COMMITMENTS EPIC

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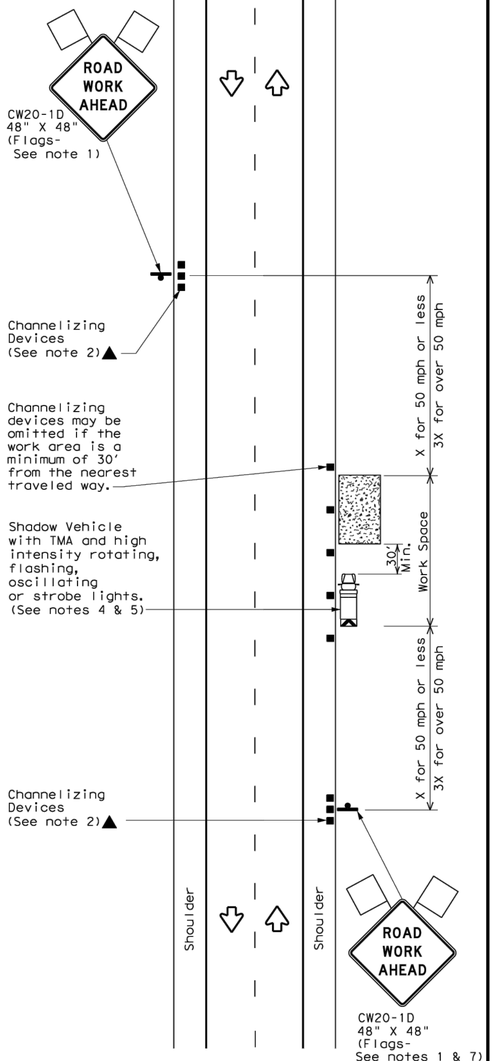
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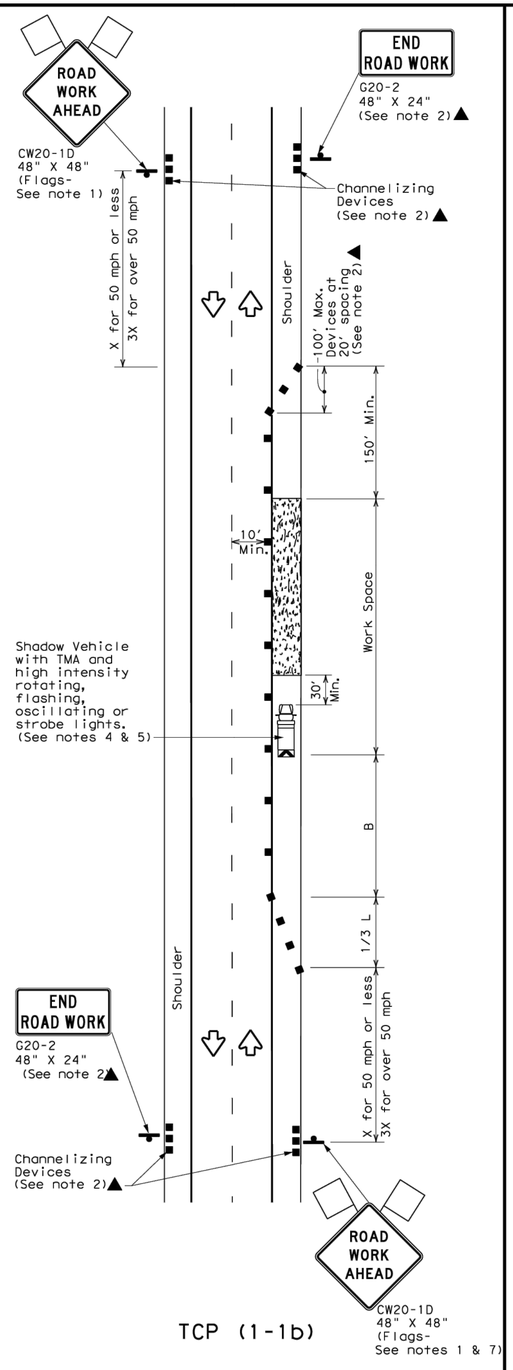
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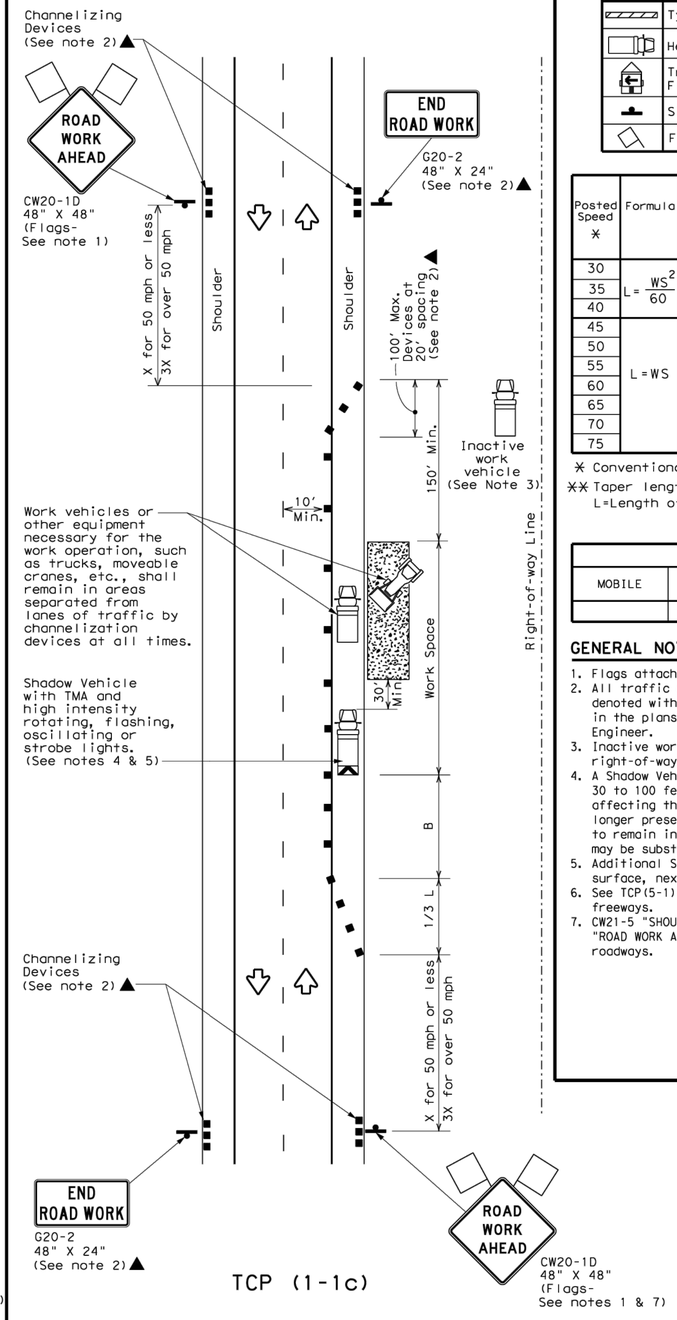
TCP (1-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads



TCP (1-1b)

WORK SPACE ON SHOULDER
Conventional Roads



TCP (1-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
6. See TCP(5-1)for shoulder work on divided highways, expressways and freeways.
7. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP(1-1)-18

FILE: tcp1-1-18.dgn	DN:	CK:	DW:	CK:
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REVISIONS				
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 2-12				
1-97 2-18				

151

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STATE OF TEXAS — ABDULLAH ALBRINJI — 150626 — LICENSED PROFESSIONAL ENGINEER — 6/4/2025

ISSUES / REVISIONS			
DATE	NO	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

TRAFFIC CONTROL PLAN CONV ROAD
SHOULDER WORK TCP (1-1) - 18

6909 Springfield Avenue, Suite 303
Lubbock, Texas 79413
Phone: (806) 445-5511
www.Ardurra.com
Engineering License #F-10653

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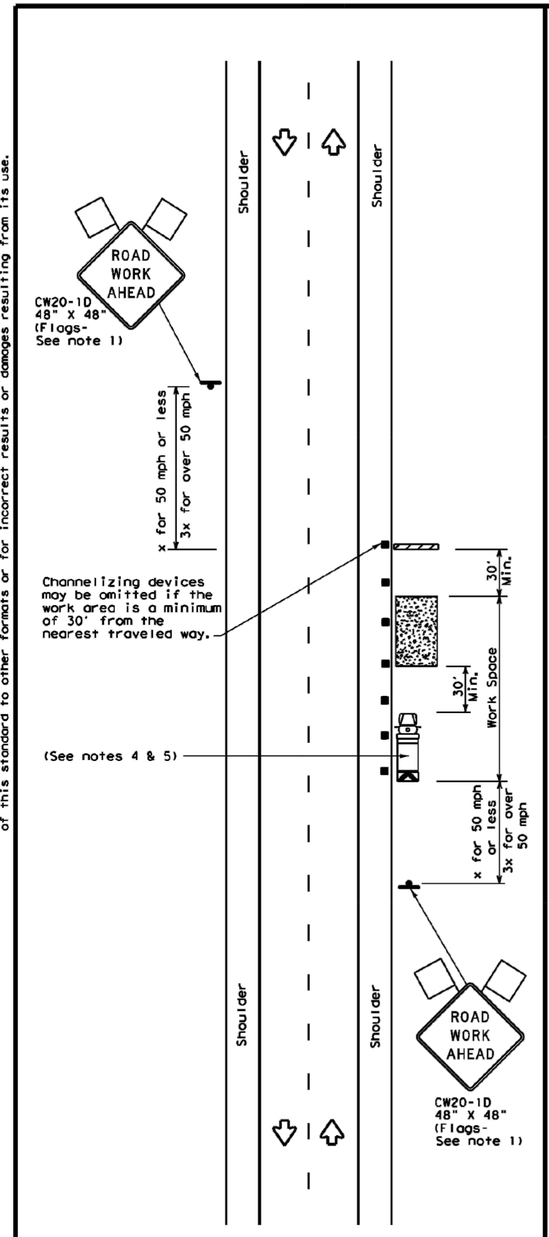
DRAWING NO.: C39 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

DATE:
FILE:

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Wednesday, June 04, 2025, 3:32pm

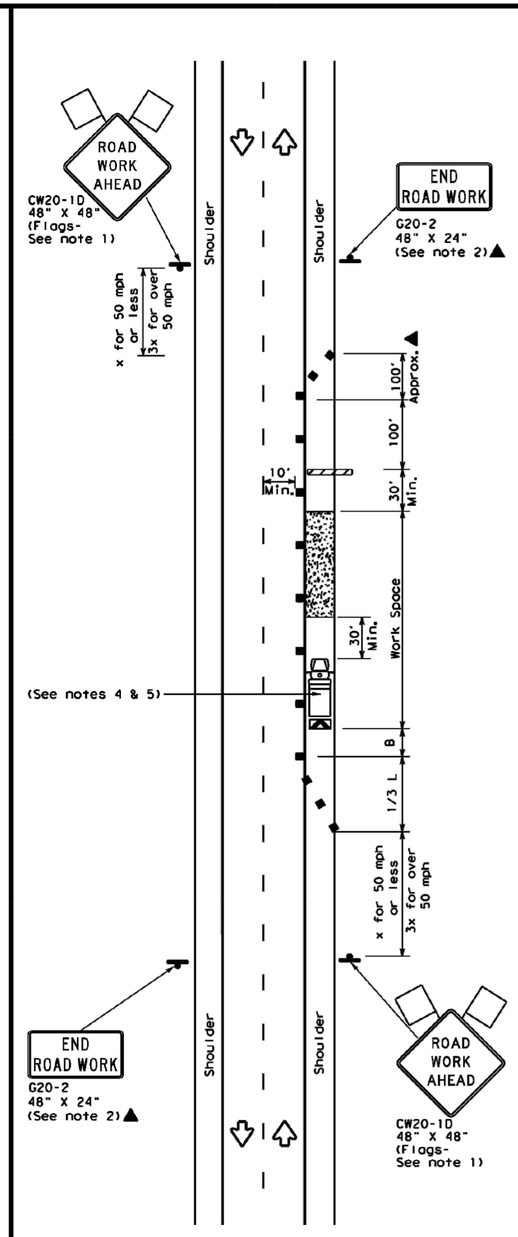
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TCP (2-1a)

WORK SPACE NEAR SHOULDER

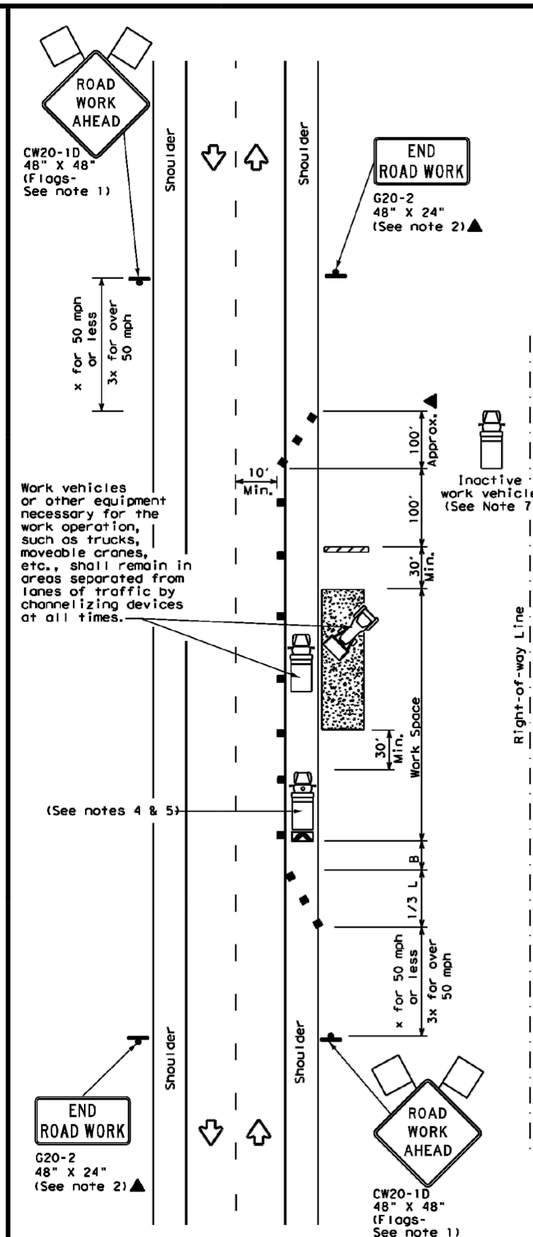
Conventional Roads



TCP (2-1b)

WORK SPACE ON SHOULDER

Conventional Roads



TCP (2-1c)

WORK VEHICLES ON SHOULDER

Conventional Roads

DATE:
FILE:

N:\GIS Engineering\240052 Seven Cameron Co - Isla Blanca RV Park\00000\Drawings\Plans\Civil\240052-STTDT15.dwg
Wednesday, June 04, 2025, 3:34pm

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
3. Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
6. See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
7. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
8. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP(2-1)-18

FILE: tcp2-1-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	DIST	COUNTY		SHEET NO.

161

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STATE OF TEXAS
ABDULLAH ALBRINJI
150626
LICENSED
PROFESSIONAL ENGINEER
6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT

TRAFFIC CONTROL PLAN CONV ROAD
SHOULDER WORK TCP (2 - 1) - 18

6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 763-2511
www.Ardurra.com

Engineering License #F-10053

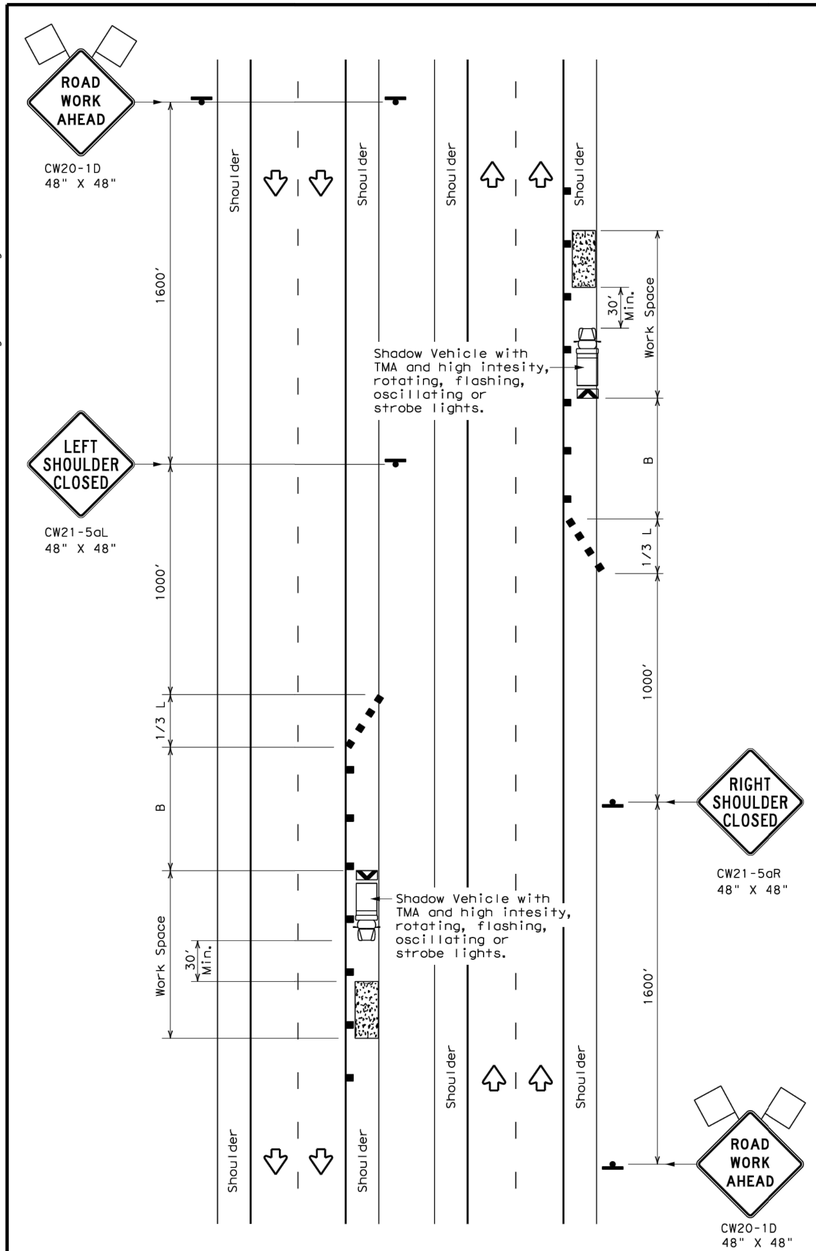
ARDURRA
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DRAWING NO.: C40 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

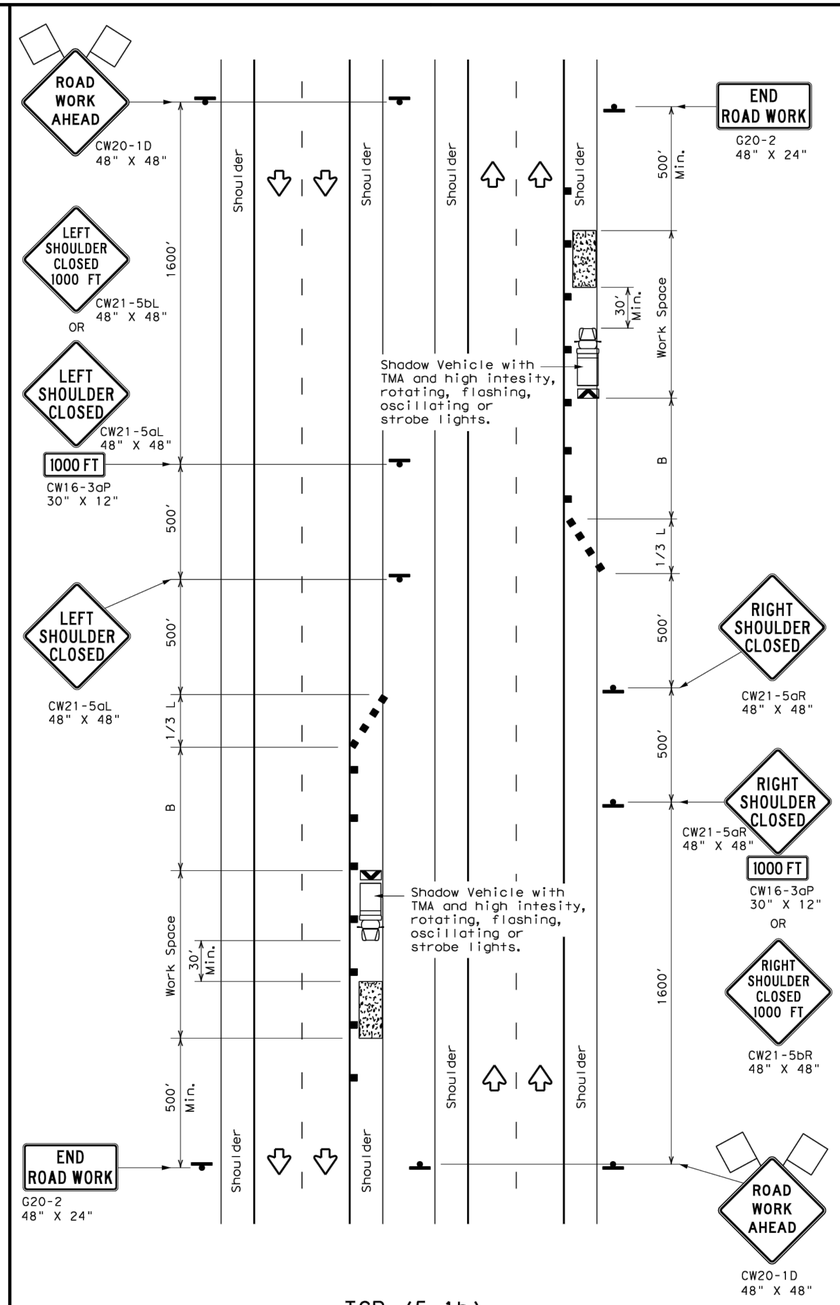
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DATE:
FILE:



TCP (5-1a)

WORK AREA ON SHOULDER



TCP (5-1b)

WORK AREA ON SHOULDER

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	90'
35		205'	225'	245'	35'	70'	120'
40		265'	295'	320'	40'	80'	155'
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	TCP(5-1a)	TCP(5-1b)	TCP(5-1b)	

GENERAL NOTES

1. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30' to 100' in advance of the area of crew exposure without adversely effecting the performance or quality of the work. Type 3 barricades or drums may be substituted when workers on foot are no longer present when approved by the Engineer.
2. 28" tall or taller one-piece cones will be allowed only for Short Duration or Short Term stationary operations when workers are present to maintain the devices upright and in proper location. Intermediate Term stationary work areas should use Drums, Vertical Panels or 42" tall two-piece cones.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN SHOULDER WORK FOR FREEWAYS / EXPRESSWAYS

TCP(5-1)-18

FILE: tcp5-1-18.dgn	DN:	CK:	DW:	CK:
©TxDOT February 2012	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-18	DIST	COUNTY		SHEET NO.

190

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STATE OF TEXAS — ABDULLAH ALBRINJI — 150626 — LICENSED PROFESSIONAL ENGINEER — 6/4/2025

ISSUES / REVISIONS

NO	DATE	DESCRIPTION	BY

CAMERON COUNTY
ISLA BLANCA RV PARK
UTILITY IMPROVEMENT PROJECT
EXPRESS SHLDR WORK TCP (5 - 1) - 18

6909 Springfield Avenue, Suite 303
Laredo, Texas 78041
Phone: (956) 465-5511
www.Ardurra.com
Engineering License #F-10053

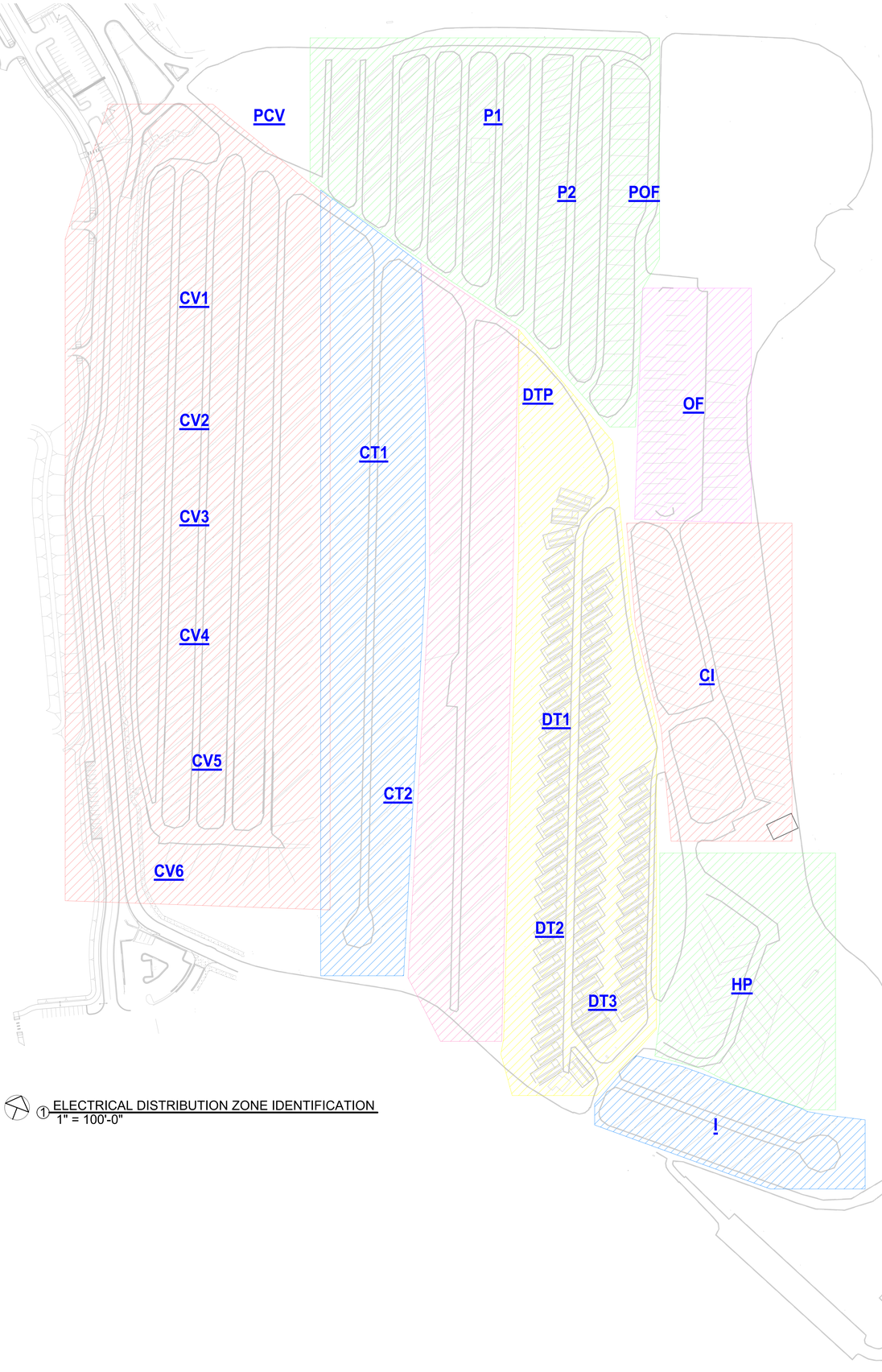
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DRAWING NO.: C41 of 48

DRAWN BY:	JRF/AM
CHECKED BY:	JL/JT
APPROVED BY:	AA
JOB NO.:	240052.000

N:\GIS Engineering\240052.Sweet,Cameron Co.- Isla Blanca RV Park\000\200\Drawings\Plans\Civil\240052-STD013.dwg
Wednesday, June 04, 2025, 3:36pm

REP # 250502



① ELECTRICAL DISTRIBUTION ZONE IDENTIFICATION
1" = 100'-0"

DISTRIBTUION ZONE LEGEND

ABBREVIATION	NAME	COLOR
C	CARRIZALLAS	BLUE
CI	CONEY ISLAND	RED
CV	CHANNEL VIEW	RED
D	DODSON	YELLOW
HP	HELI PAD	GREEN
I	IGNASIO	BLUE
OF	OVER FLOW AREA	PURPLE
P	PAN AMERICAN LAB	GREEN
T	TURNER	PINK

COMBINATION / OVERLAP ZONE LEGEND

PCV - PAN AMERICAN AND CHANNEL VIEW
CT - CARRIZALES AND TURNER
DTP - DODSON, TURNER, AND PAN AMERICAN
DT - DODSON AND TURNER
POF - PAN AMERICAN AND OVER FLOW

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL DISTRUBUTION ZONE IDENTIFICATION

Key Plan

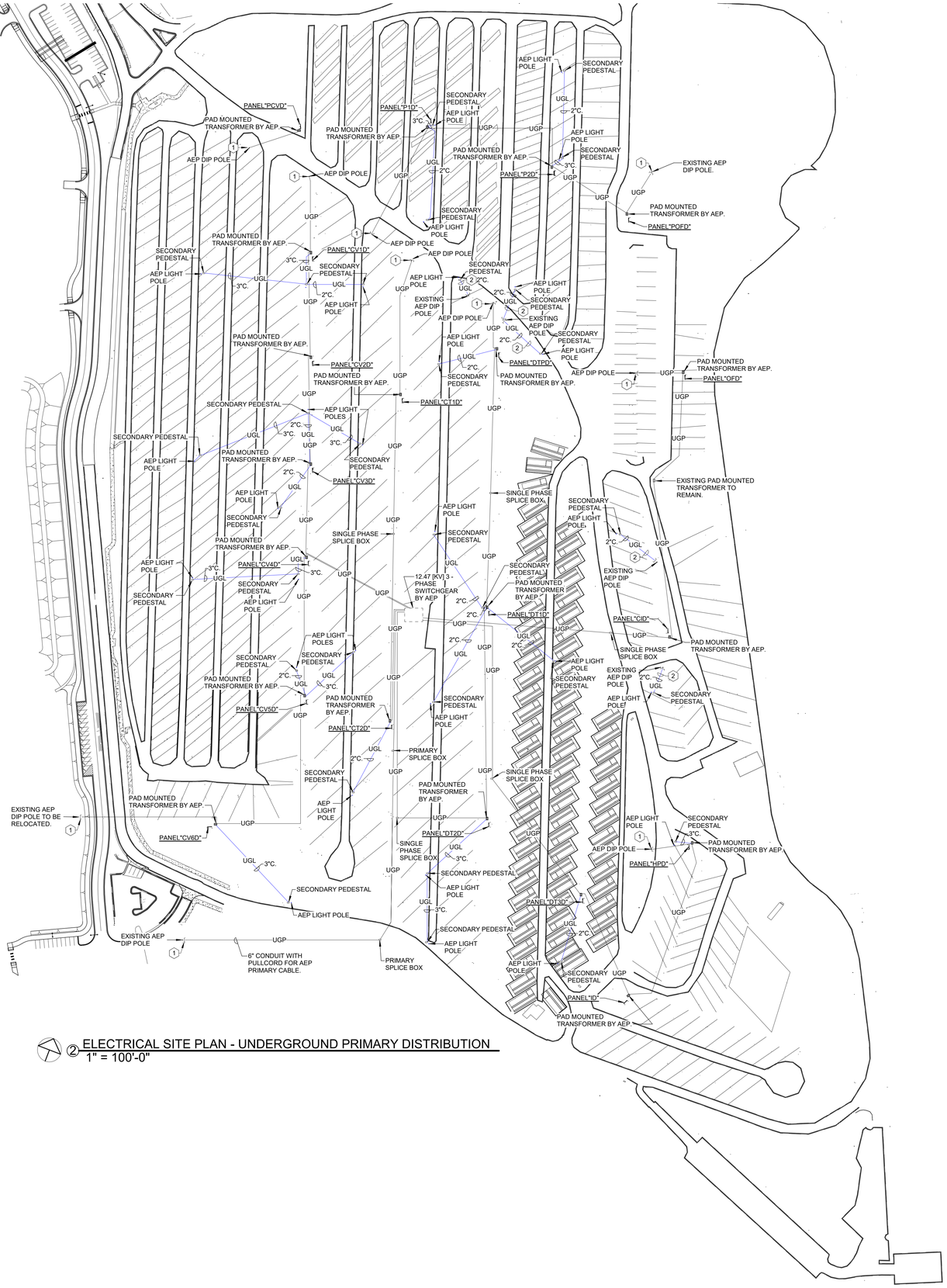
Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9173
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84331
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E100

SHEET NO. 67



② ELECTRICAL SITE PLAN - UNDERGROUND PRIMARY DISTRIBUTION
1" = 100'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. CONDUIT SIZES ARE INDICATED ON THIS DRAWING ARE FOR AEP LIGHTING CIRCUITS ONLY. REFER TO POWER RISER DIAGRAMS FOR PRIMARY AND SECONDARY DISTRIBUTION CONDUIT SIZES.

KEYED NOTES:

1. TERMINATE CONDUIT AT DIP POLE AS DIRECTED BY AEP.
2. 2" CONDUIT WITH PULLCORD BY CONTRACTOR FOR LIGHTING CIRCUIT CONDUCTORS BY AEP. STUB CONDUIT AT DIP POLE / SECONDARY PEDESTAL AS REQUIRED BY AEP.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL OVERALL SITE PLAN / UNDERGROUND PRIMARY DISTRUBUTION

Key Plan:

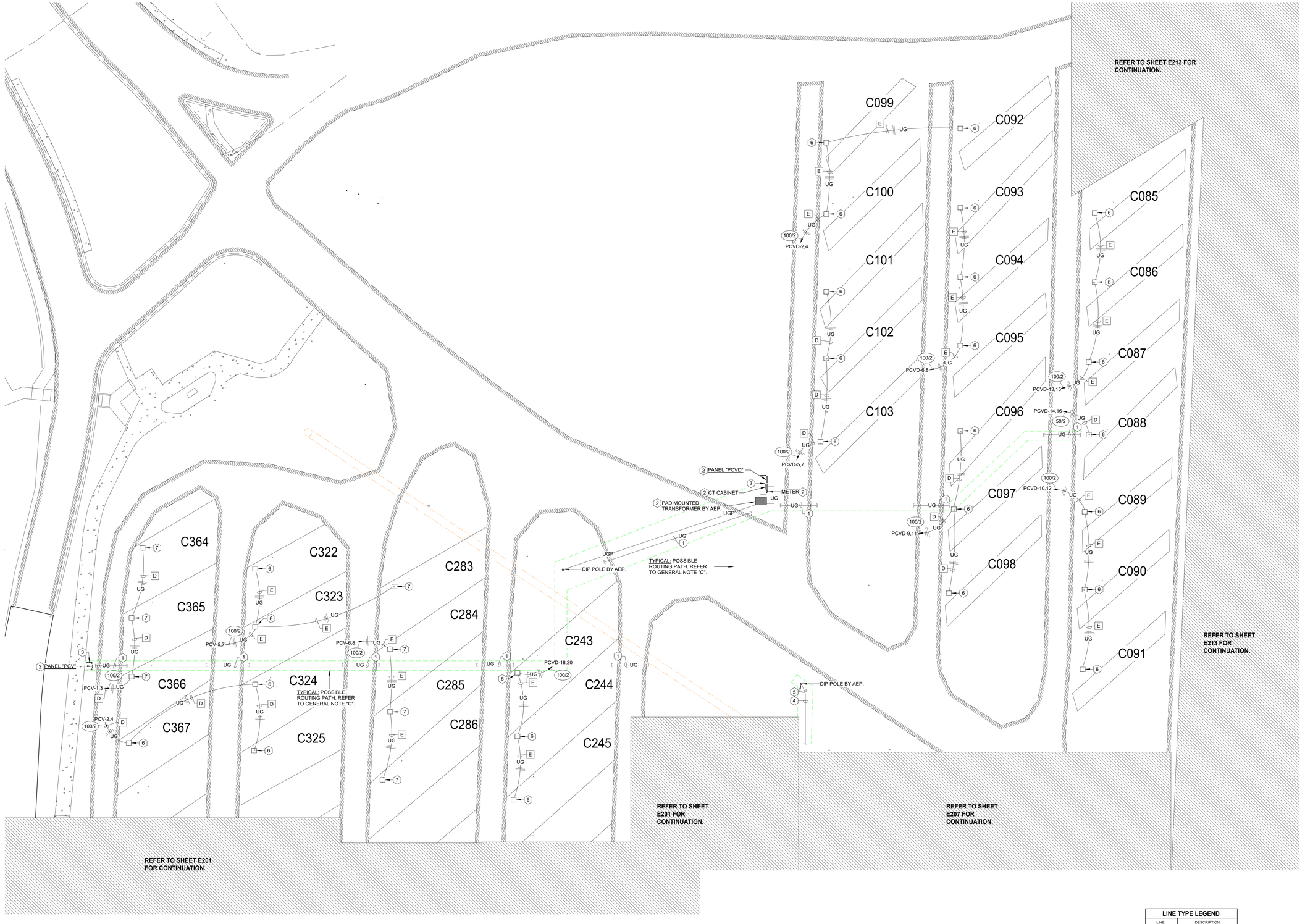
Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal:
STATE OF TEXAS
SCOTT EL STRIDDE
84631
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	Author
Chkd. By:	Checker
Scale:	1" = 100'-0"

Sheet No:
E101

SHEET NO. 68



ELECTRICAL SITE PLAN - ZONE PCV
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E201 FOR CONTINUATION.
5. TERMINATE CONDUIT AT DIP POLE AS DIRECTED BY AEP.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE PCV

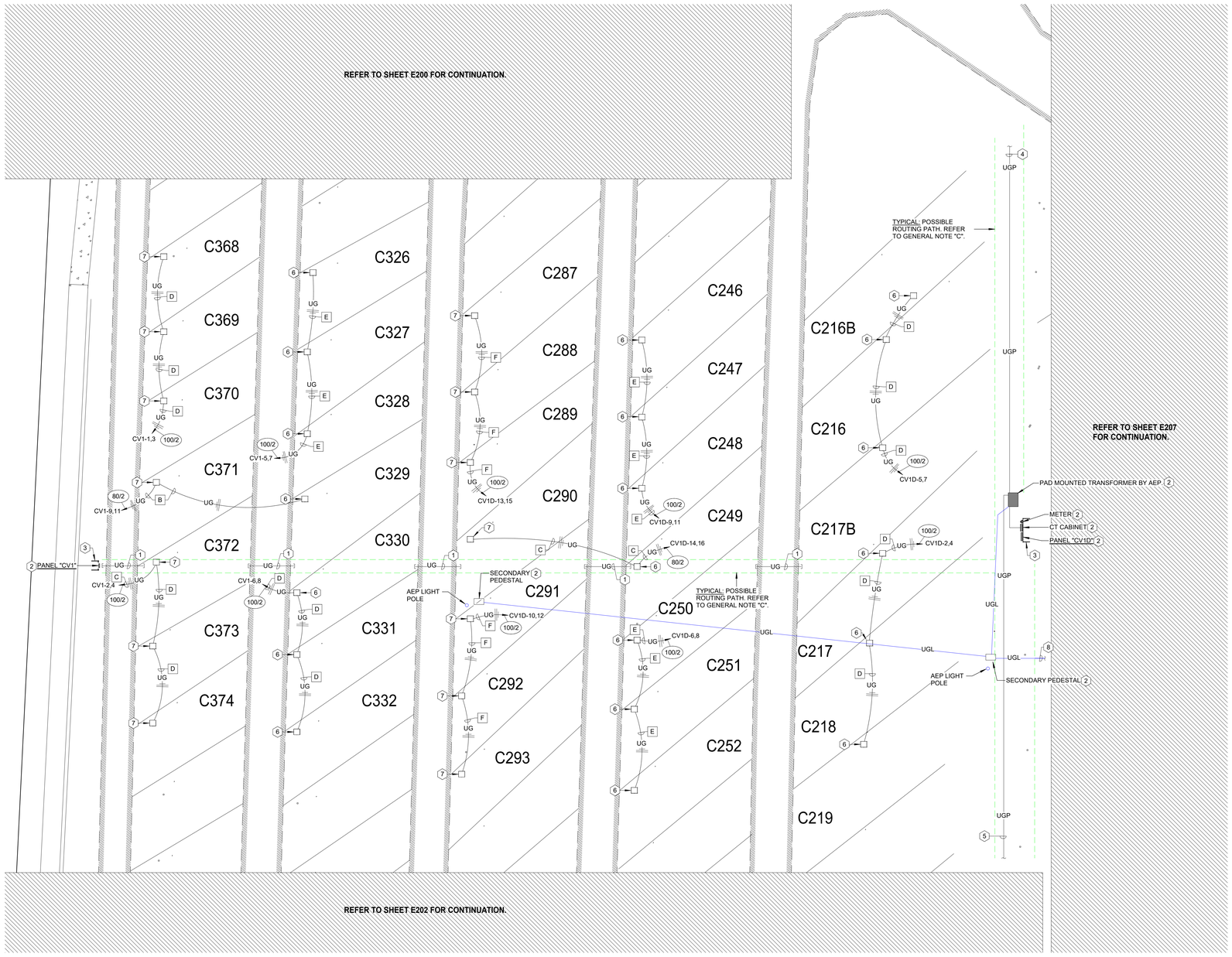
Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9197
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

Seal:
STATE OF TEXAS
SCOTT EL STRIDDE
84831
LICENSED PROFESSIONAL ENGINEER
06/04/2025

Project No.	24156
Date Drwn.	06/04/2025
Drwn. By	B.T.
Chkd. By	S.S.
Scale	As indicated

Sheet No:
E200



① ELECTRICAL SITE PLAN - ZONE CV1
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E200 FOR CONTINUATION.
5. REFER TO KEYED NOTE 4 ON SHEET E202 FOR CONTINUATION.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
8. REFER TO KEYED NOTE 13 ON SHEET E206 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CV1

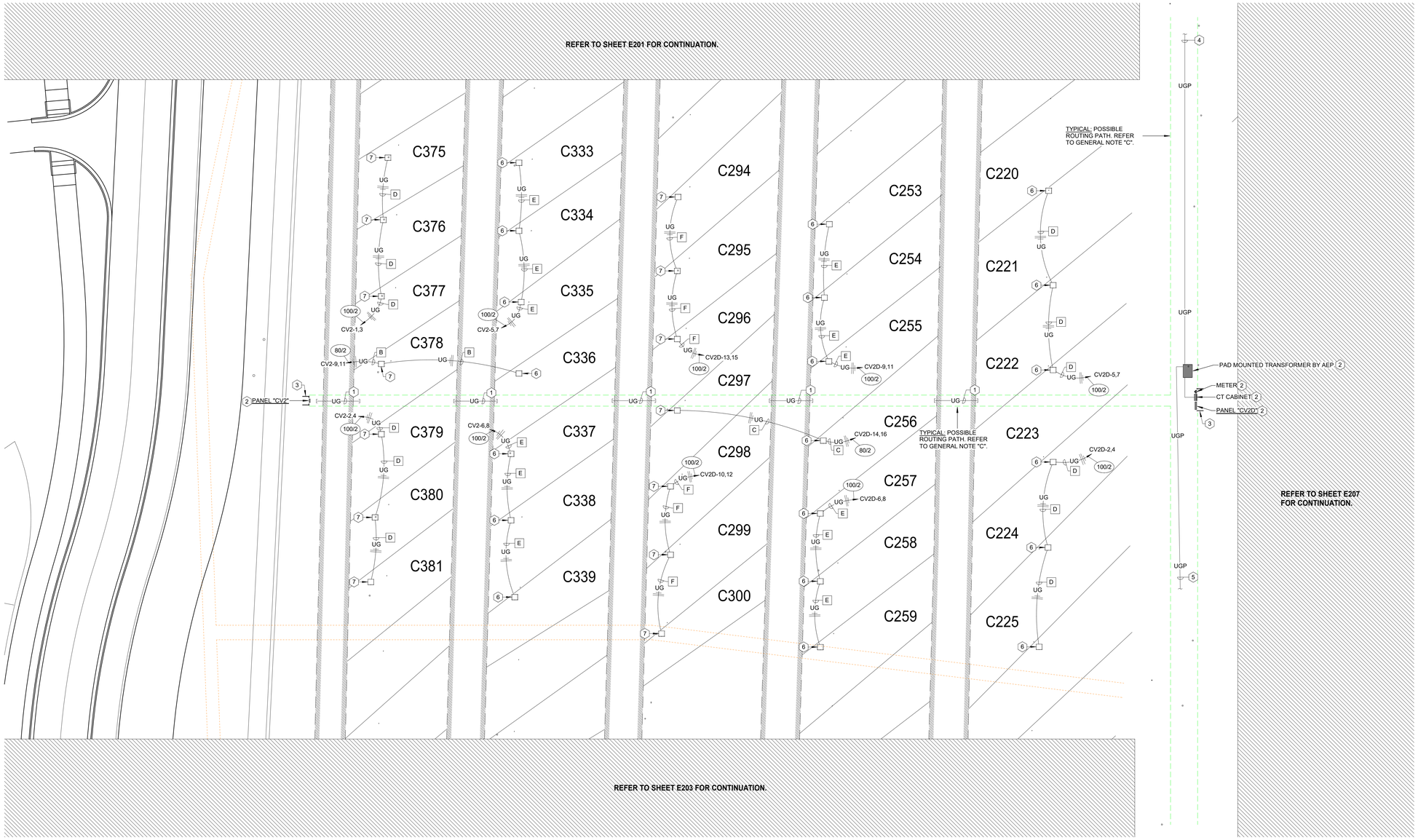
Key Plan

Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9172
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84331
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E201



ELECTRICAL SITE PLAN - ZONE CV2
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 5 ON SHEET E201 FOR CONTINUATION.
5. REFER TO KEYED NOTE 4 ON SHEET E203 FOR CONTINUATION.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CV2

Key Plan

Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9197
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

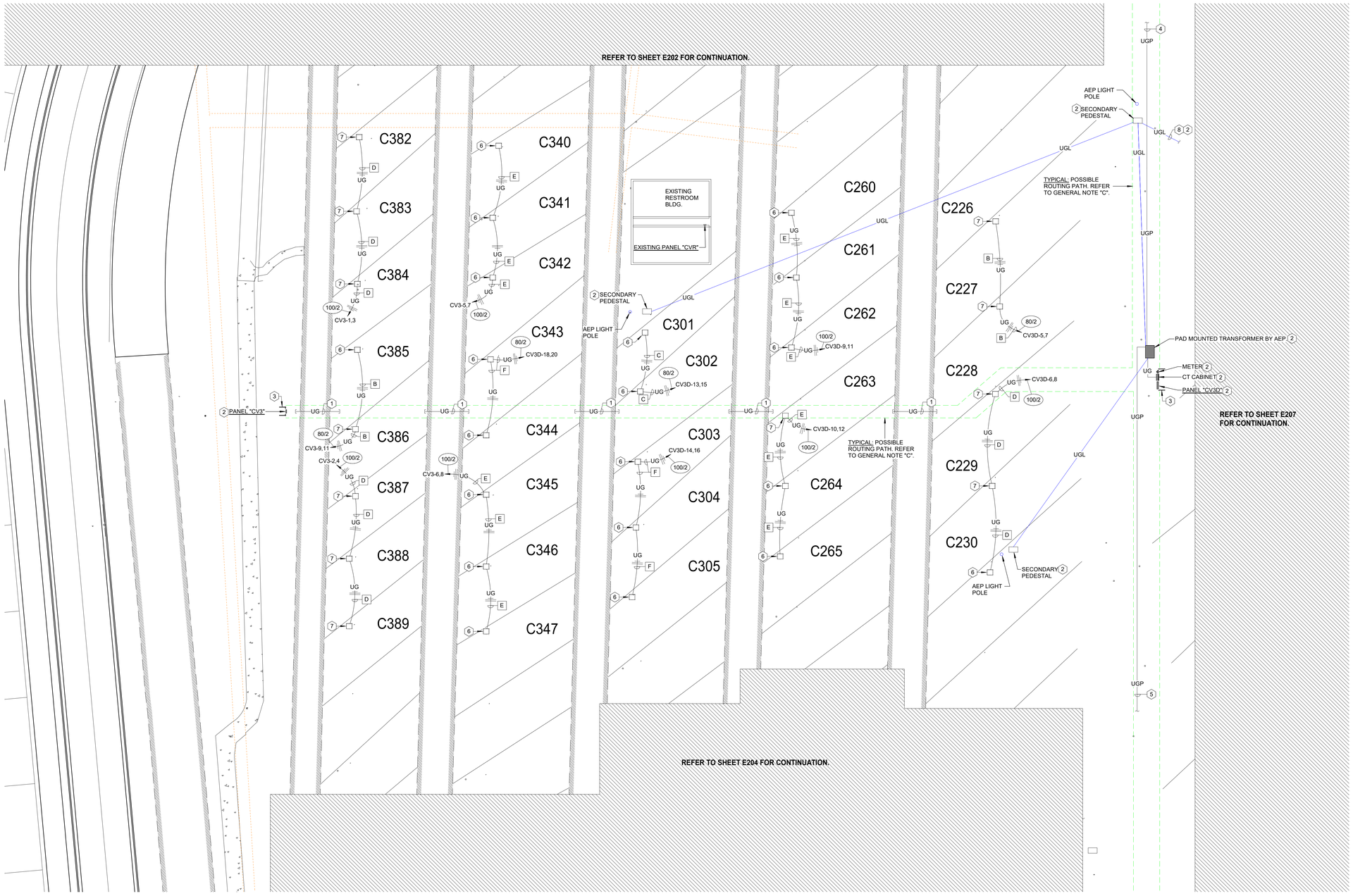
Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E202

SHEET NO. 71

REP # 250502



ELECTRICAL SITE PLAN - ZONE CV3
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 5 ON SHEET E202 FOR CONTINUATION.
5. REFER TO KEYED NOTE 4 ON SHEET E204 FOR CONTINUATION.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
8. REFER TO KEYED NOTE 14 ON SHEET E206 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CV3

Key Plan

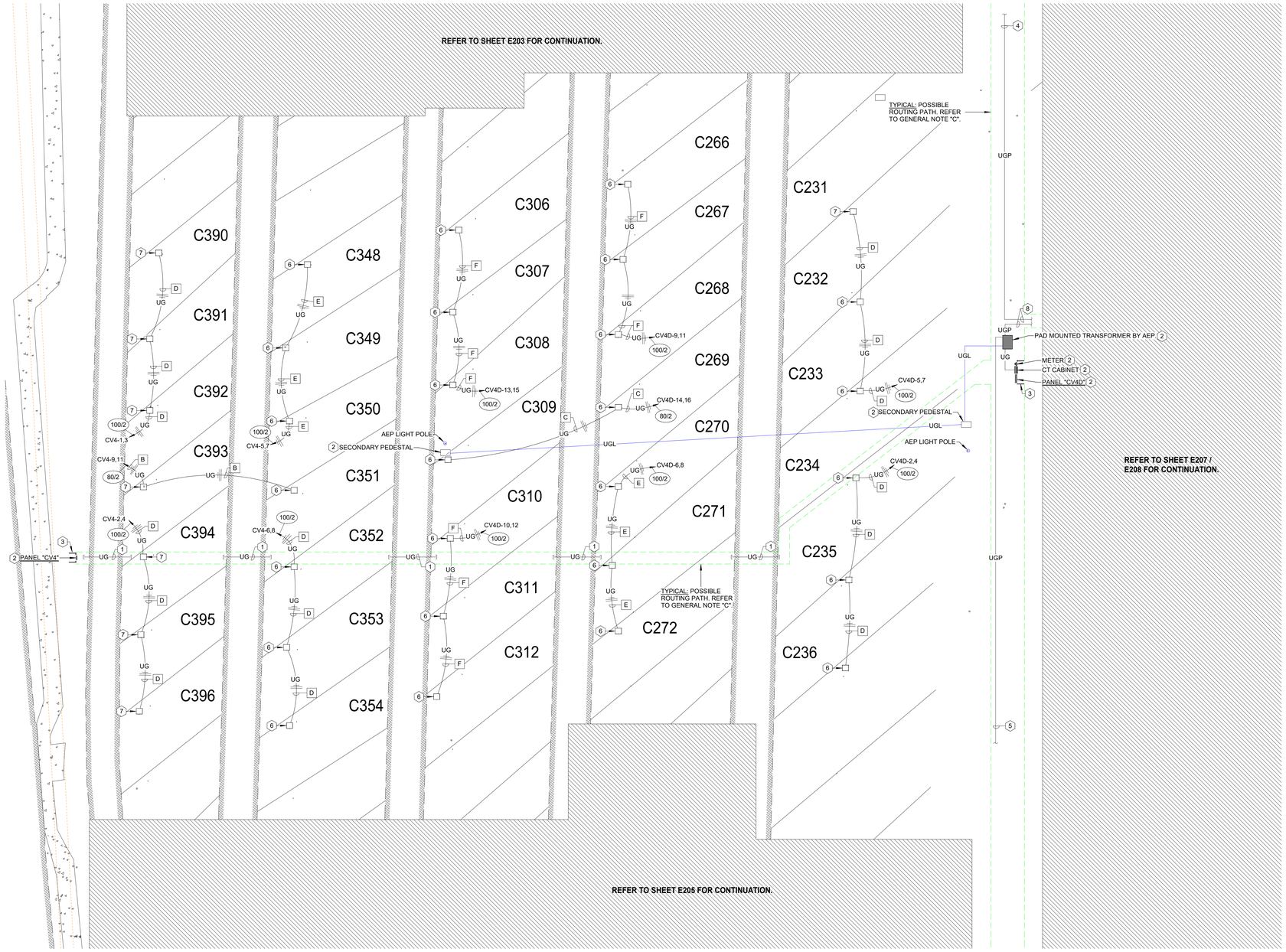
Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9196
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E203

SHEET NO. 72



LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

1 ELECTRICAL SITE PLAN - ZONE CV4
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 5 ON SHEET E203 FOR CONTINUATION.
5. REFER TO KEYED NOTE 4 ON SHEET E205 FOR CONTINUATION.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
8. REFER TO KEYED NOTE 14 ON SHEET E207 FOR CONTINUATION.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CV4

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9122
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

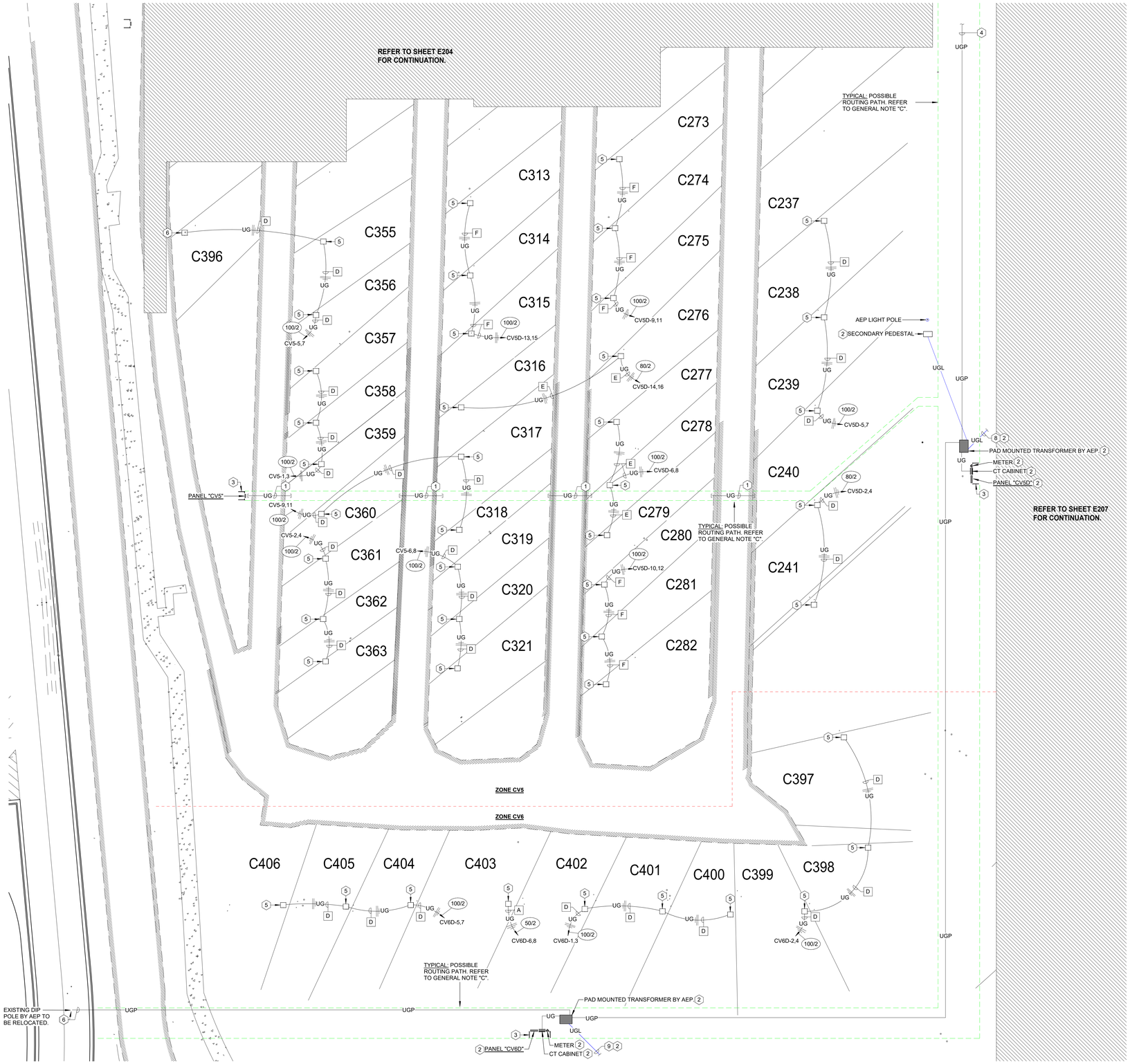
Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E204

SHEET NO. 73

REP # 250502



1 ELECTRICAL SITE PLAN - ZONE CV5 AND CV6
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 5 ON SHEET E204 FOR CONTINUATION.
5. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
6. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
7. REFER TO KEYED NOTE 4 ON SHEET E206 FOR CONTINUATION.
8. REFER TO KEYED NOTE 19 ON SHEET E207 FOR CONTINUATION.
9. REFER TO SHEET E101 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CV5 AND CV6

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9123
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

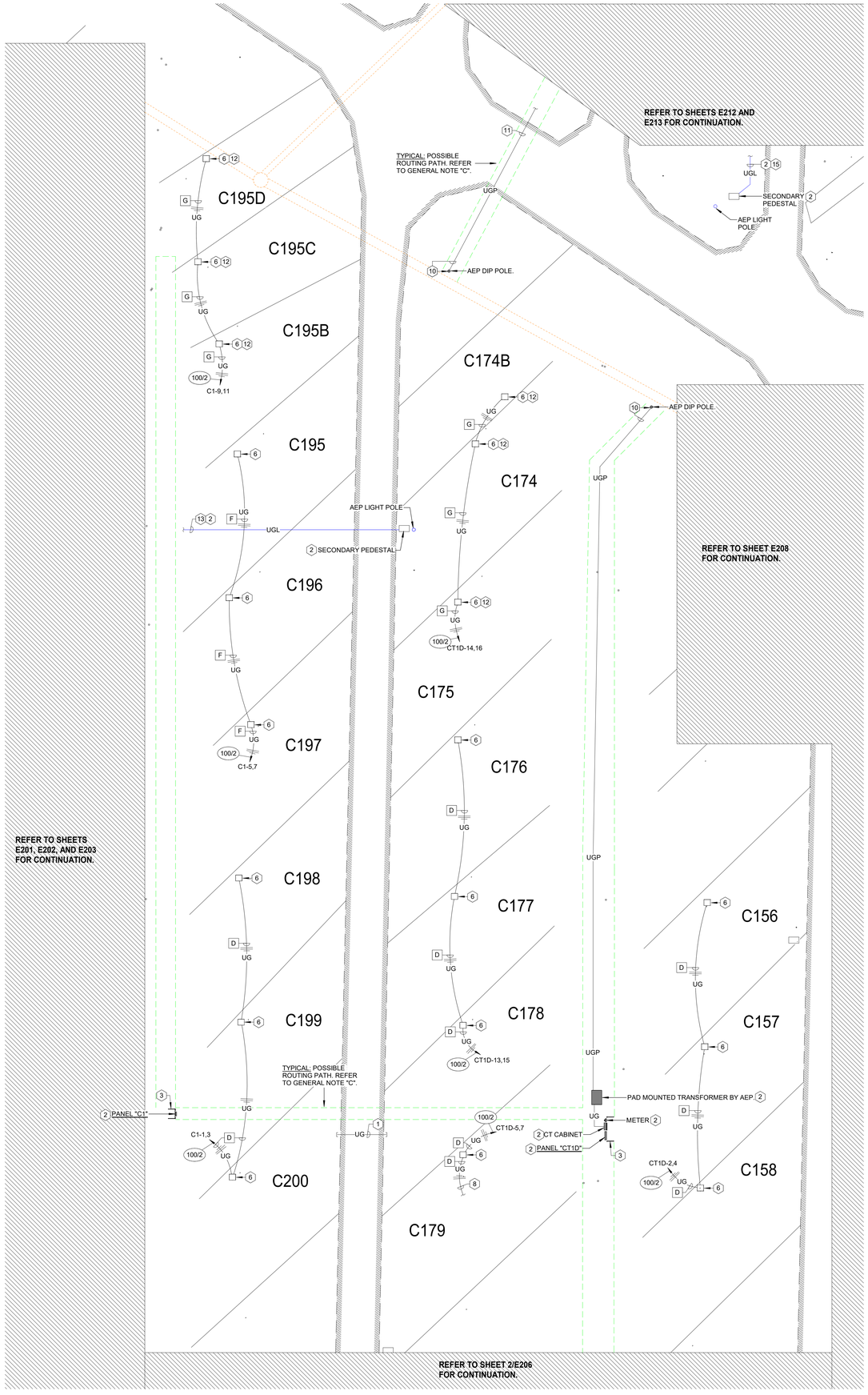
Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

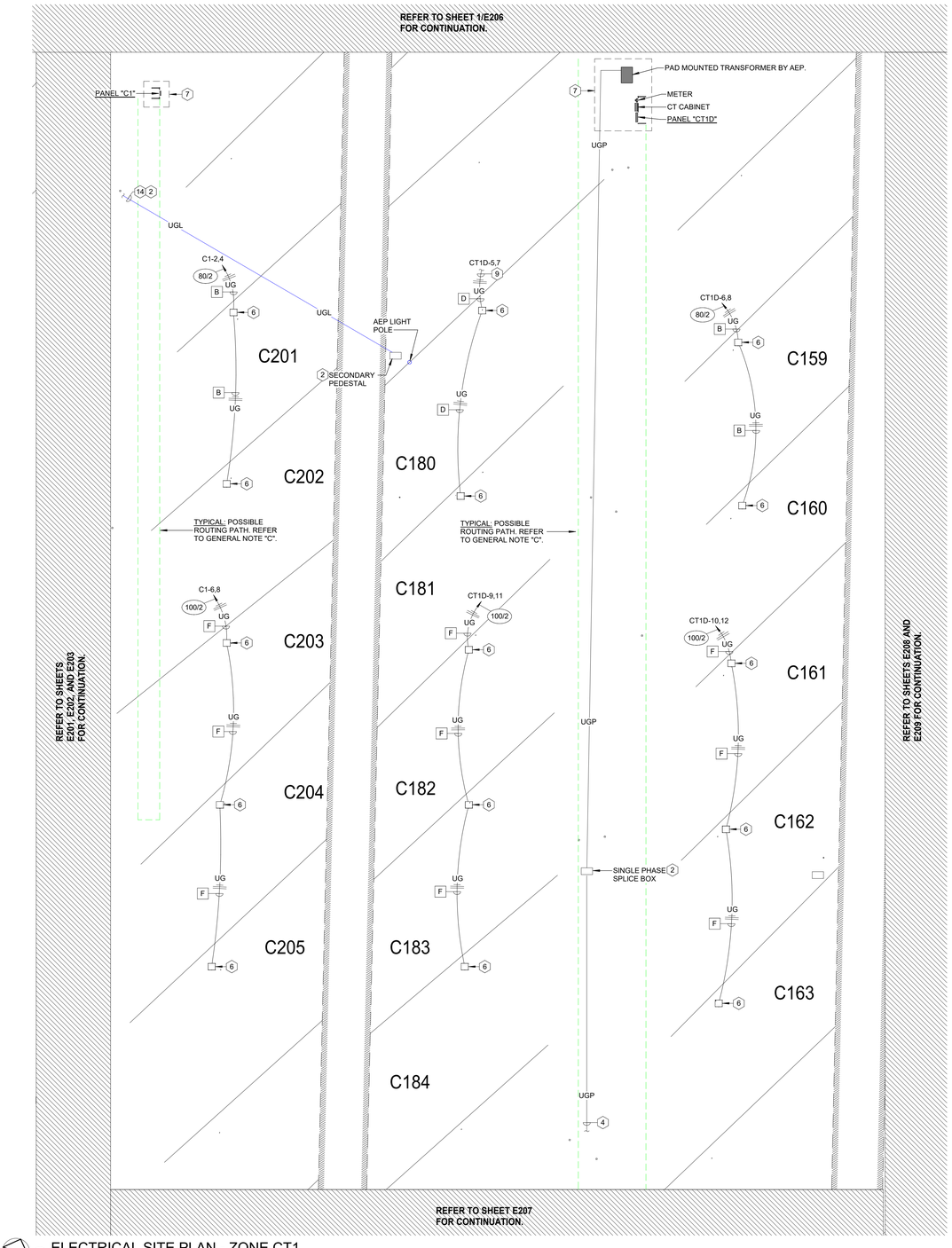
Sheet No:
E205

SHEET NO. 74

REP # 250502



① ELECTRICAL SITE PLAN - ZONE CT1
1" = 20'-0"



② ELECTRICAL SITE PLAN - ZONE CT1
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E207 FOR CONTINUATION.
5. NOT USED.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. SWITCHGEAR AND SWITCHGEAR RACK DUPLICATED FROM 1/E206 FOR LOCATION ONLY.
8. REFER TO KEYED NOTE 9 FOR CONTINUATION.
9. REFER TO KEYED NOTE 8 FOR CONTINUATION.
10. TERMINATE CONDUIT AT DIP POLE AS DIRECTED BY AEP.
11. REFER TO KEYED NOTE 4 ON SHEET E212 FOR CONTINUATION.
12. PROVIDE THREE (3) - BARREL LUGS SIZED FOR 2/0 WIRE. ATTACH BARRELS LUGS TO EXISTING LUGS IN NEW METER CENTER AS REQUIRED.
13. REFER TO KEYED NOTE 8 ON SHEET E201 FOR CONTINUATION.
14. REFER TO KEYED NOTE 8 ON SHEET E203 FOR CONTINUATION.
15. REFER REFER TO KEYED NOTE 7 ON SHEET E212 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
- - - - -	POSSIBLE CONDUIT ROUTING
- - - - -	SANITARY
———	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CT1

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9125
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84531
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24150
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E206

SHEET NO. 75

REP # 250502

REFER TO SHEET E206
FOR CONTINUATION.

REFER TO SHEETS E204 AND
E205 FOR CONTINUATION.

C206
C207
C208
C209
C210
C211
C185
C186
C187
C188
C189
C190
C164
C165
C166
C167

UGP
UG
UGL
F
D
E
A
5
100/2
C2-5,7
C2-1,3
CT2D-18,20
CT2D-13,15
CT2D-5,7
CT2D-6,8
PANEL "C2"
PANEL "CT2D"
METER
CT CABINET
PAD MOUNTED TRANSFORMER BY AEP
AEP LIGHT POLE
2 SECONDARY PEDESTAL
2 EXISTING PANEL "T2R"
EXISTING R.R.
FOOTPRINT
TYPICAL: POSSIBLE
ROUTING PATH. REFER
TO GENERAL NOTE "C".
6" CONDUIT WITH
PULLCORD FOR AEP
PRIMARY CABLE.
2 PRIMARY SPLICE BOX

REFER TO
SHEETS E210 AND
E211 FOR
CONTINUATION.

REFER TO SHEET 2/E207
FOR CONTINUATION.

① ELECTRICAL SITE PLAN - ZONE CT2
1" = 20'-0"

REFER TO SHEET 1/E207
FOR CONTINUATION.

REFER TO SHEETS E204 AND
E205 FOR CONTINUATION.

C212
C213
C214
C215
C191
C192
C193
C194
C168
C169
C170
C171
C172
C173

PAD MOUNTED TRANSFORMER BY AEP
TYPICAL: POSSIBLE
ROUTING PATH. REFER
TO GENERAL NOTE "C".
PANEL "C2"
METER
CT CABINET
PANEL "CT2D"
C2-2,4
CT2D-5,7
CT2D-10,12
PRIMARY
2 SPLICE BOX
C2-6,8
2 SECONDARY PEDESTAL
AEP LIGHT POLE
CT2D-9,11
SINGLE PHASE
SPLICE BOX
CT2D-14,16
TYPICAL: POSSIBLE
ROUTING PATH. REFER
TO GENERAL NOTE "C".
6" CONDUIT WITH PULLCORD
FOR AEP PRIMARY CABLE.

REFER TO SHEETS E209, E210,
AND E211 FOR CONTINUATION.

② ELECTRICAL SITE PLAN - ZONE CT2
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
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F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E206 FOR CONTINUATION.
5. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
6. SWITCHGEAR AND SWITCHGEAR RACK DUPLICATED FROM 1/E207 FOR LOCATION ONLY.
7. REFER TO KEYED NOTE 8 FOR CONTINUATION.
8. REFER TO KEYED NOTE 7 FOR CONTINUATION.
9. JOBSITE LOCATE AND INTERCEPT EXISTING UNDERGROUND CONDUIT. TERMINATE NEW CONDUIT AS REQUIRED AND ROUTE NEW CONDUCTORS THRU EXISTING AND NEW CONDUIT. REMOVE EXISTING PVC PIPE BEING USED AS SPLICE BOX. ALL EXISTING CONDUCTORS SHALL BE REMOVED TO SOURCE. REFER TO 1/E402 AND 2/E402 FOR ADDITIONAL REQUIREMENTS.
10. APPROXIMATE LOCATION OF AEP SWITCHGEAR. COORDINATE EXACT LOCATION WITH AEP.
11. REFER TO KEYED NOTE 7 ON E210 FOR CONTINUATION.
12. REFER TO KEYED NOTE 13 FOR CONTINUATION.
13. REFER TO KEYED NOTE 12 FOR CONTINUATION.
14. REFER TO KEYED NOTE 8 ON SHEET E204 FOR CONTINUATION.
15. REFER TO KEYED NOTE 16 FOR CONTINUATION.
16. REFER TO KEYED NOTE 15 FOR CONTINUATION.
17. REFER TO SHEET E101 FOR ADDITIONAL ROUTING REQUIREMENTS.
18. REFER TO KEYED NOTE 7 ON SHEET E209 FOR CONTINUATION.
19. REFER TO KEYED NOTE 8 ON SHEET E205 FOR CONTINUATION.

LINE TYPE LEGEND	
LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CT2

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
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MECHANICAL ELECTRICAL
(361) 883-9196
Fax (361) 883-9172
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

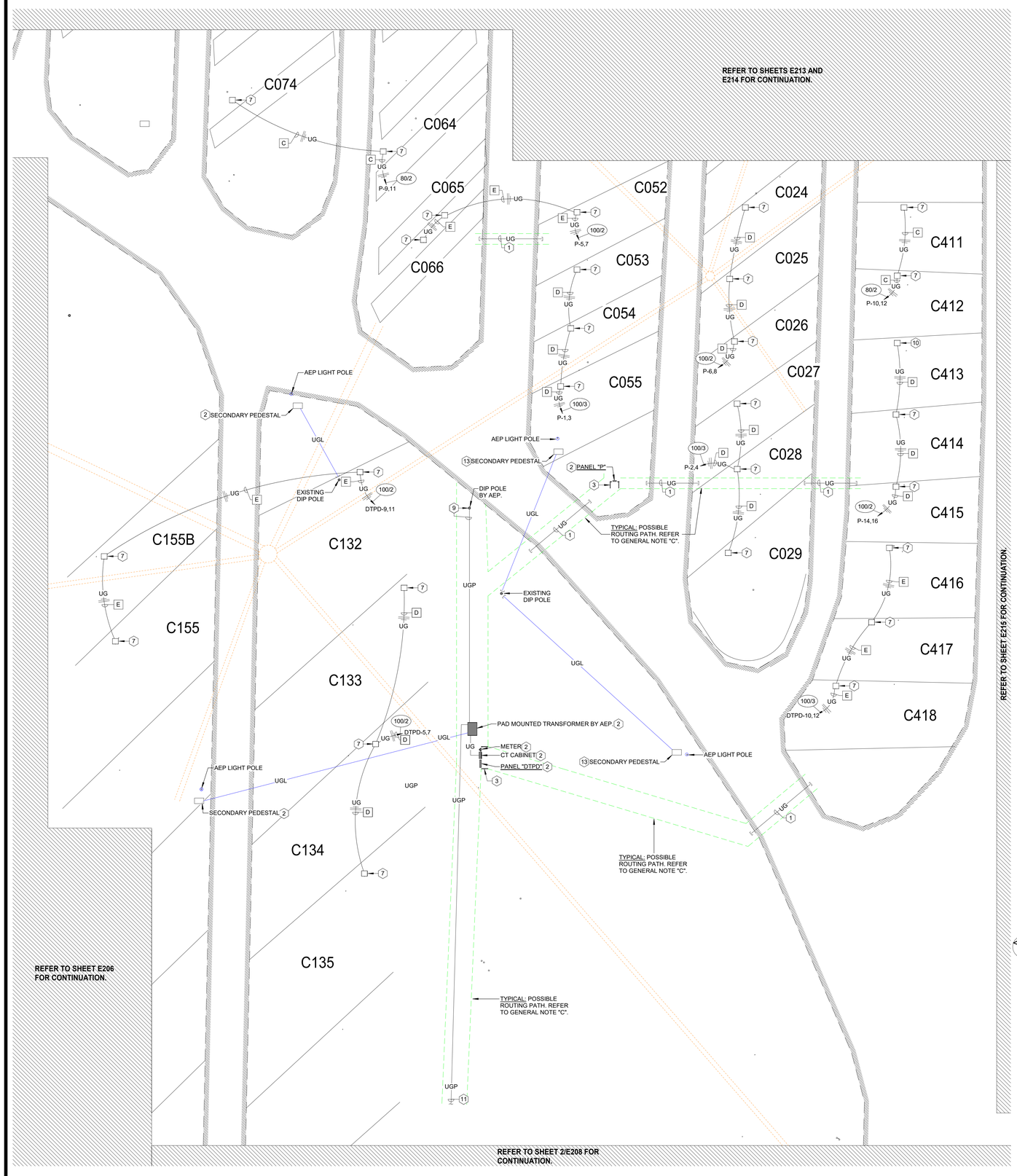
Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As Indicated

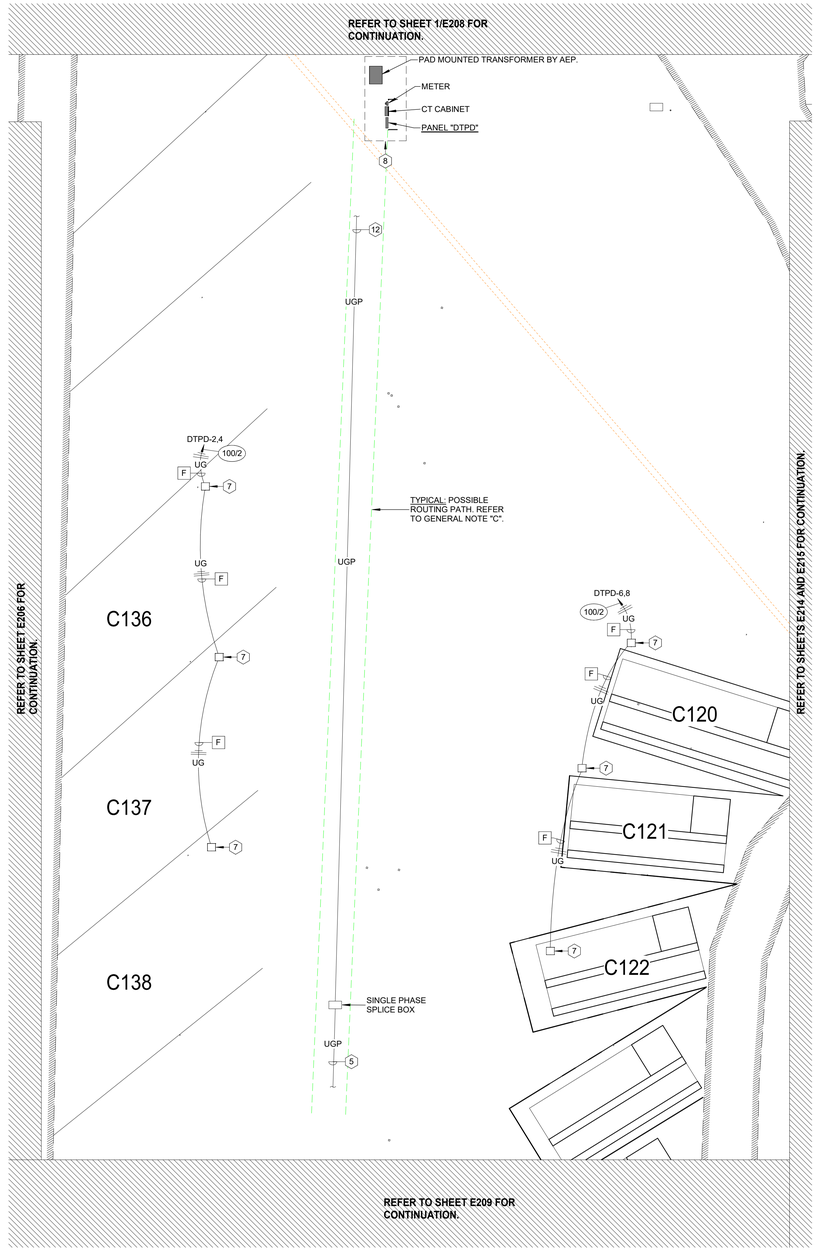
Sheet No:
E207

SHEET NO. 76

REP # 250502



① ELECTRICAL SITE PLAN - ZONE DTP
1" = 20'-0"



② ELECTRICAL SITE PLAN - ZONE DTP
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. NOT USED.
5. REFER TO KEYED NOTE 4 ON SHEET E209 FOR CONTINUATION.
6. NOT USED.
7. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. UI075CTLO10. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
8. SWITCHGEAR AND SWITCHGEAR RACK DUPLICATED FROM 1/E208 FOR LOCATION ONLY.
9. TERMINATE CONDUIT AT DIP POLE AS DIRECTED BY AEP.
10. NOT USED.
11. REFER TO KEYED NOTE 12 ON SHEET 2/E208 FOR CONTINUATION.
12. REFER TO KEYED NOTE 11 ON SHEET 1/E208 FOR CONTINUATION.
13. PEDESTAL BY AEP. REFER TO E101 FOR CONDUIT SIZES.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE DTP

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

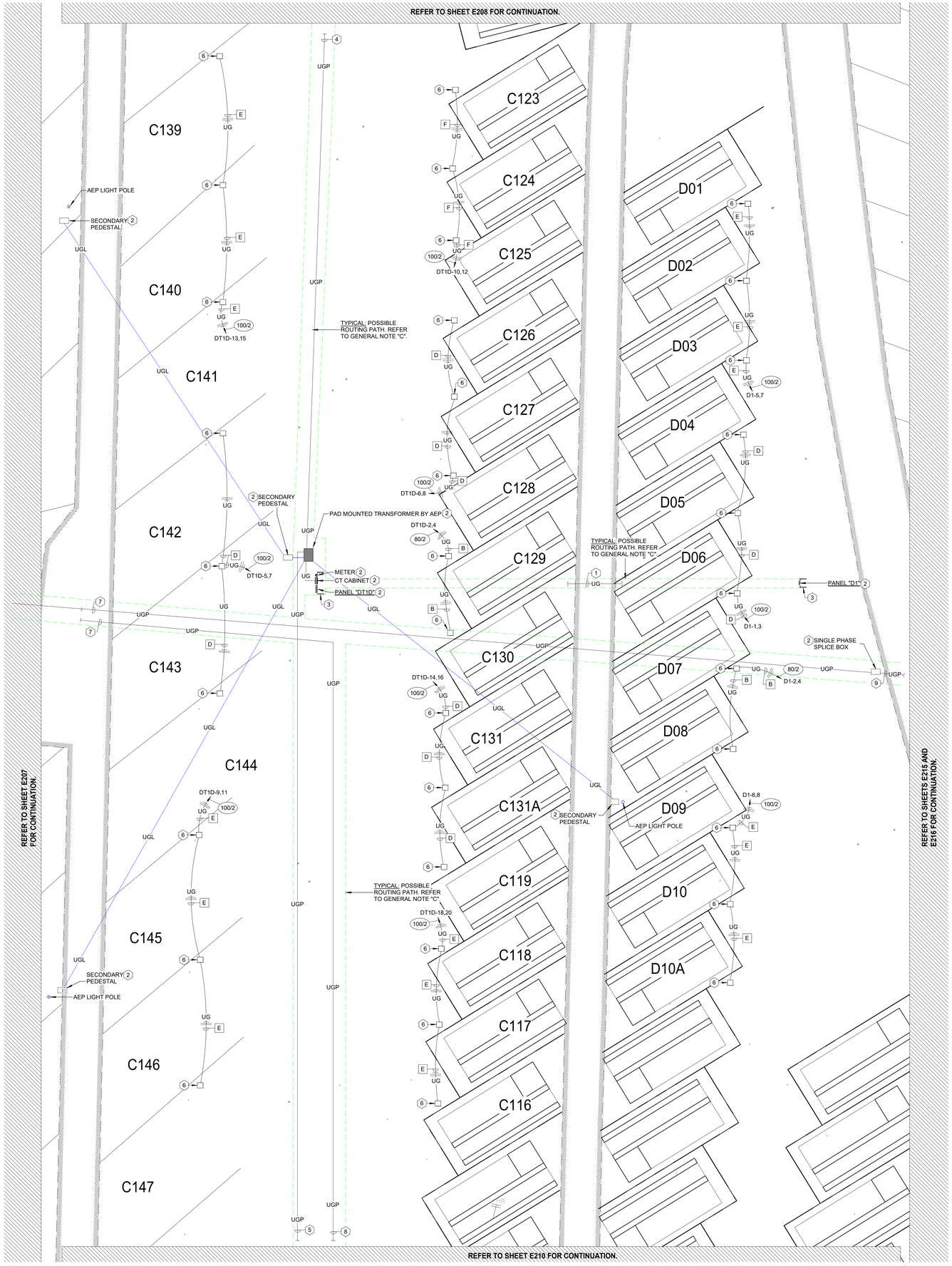
Seal:
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E208

SHEET NO. 77

REP # 250502



GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 5 ON SHEET E208 FOR CONTINUATION.
5. REFER TO KEYED NOTE 4 ON SHEET E210 FOR CONTINUATION.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. REFER TO KEYED NOTE 18 ON SHEET E207 FOR CONTINUATION.
8. REFER TO KEYED NOTE 8 ON SHEET E210 FOR CONTINUATION.
9. REFER TO KEYED NOTE 5 ON SHEET E216 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
———	POSSIBLE CONDUIT ROUTING
- - - - -	SANITARY
———	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

① ELECTRICAL SITE PLAN - ZONE DT1
1" = 20'-0"

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE DT1

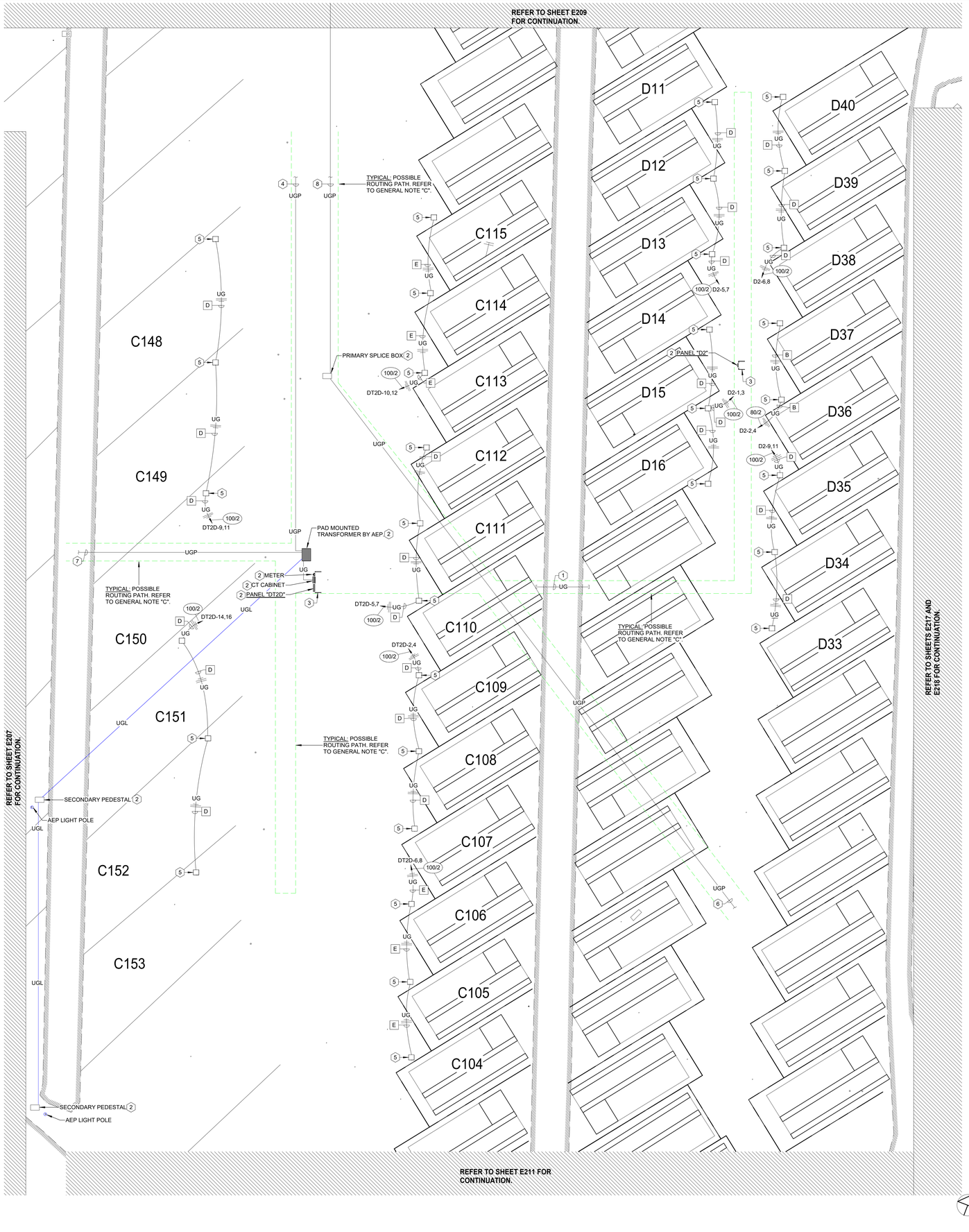
Key Plan

Firm Address and Name
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342 S. Navigation Blvd.
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Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84531
LICENSED PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated
Sheet No:	E209

SHEET NO. 78



GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCH GEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 5 ON SHEET E209 FOR CONTINUATION.
5. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
6. REFER TO KEYED NOTE 4 ON SHEET E211 FOR CONTINUATION.
7. REFER TO KEYED NOTE 11 ON SHEET 2/E207 FOR CONTINUATION.
8. REFER TO KEYED NOTE 8 ON SHEET E209 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

1 ELECTRICAL SITE PLAN - ZONE DT2
1" = 20'-0"

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE DT2

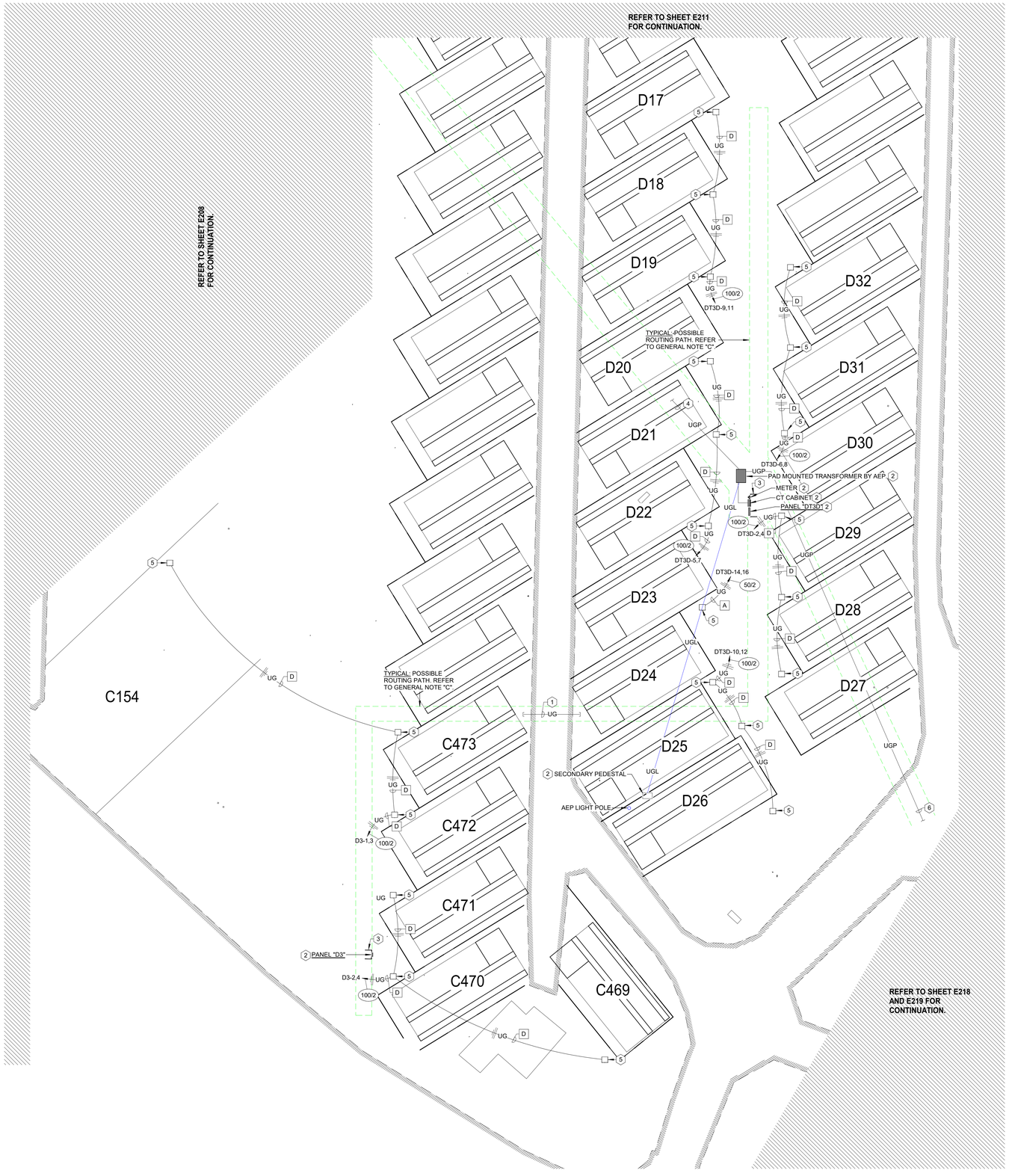
Key Plan

Firm Address and Name:
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Fax (361) 883-9197
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84631
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated
Sheet No:	E210

SHEET NO. 79



1 ELECTRICAL SITE PLAN - AREA DT3
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCH GEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 6 ON SHEET E210 FOR CONTINUATION.
5. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
6. REFER TO KEYED NOTE 8 ON SHEET E218 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE DT3

Key Plan

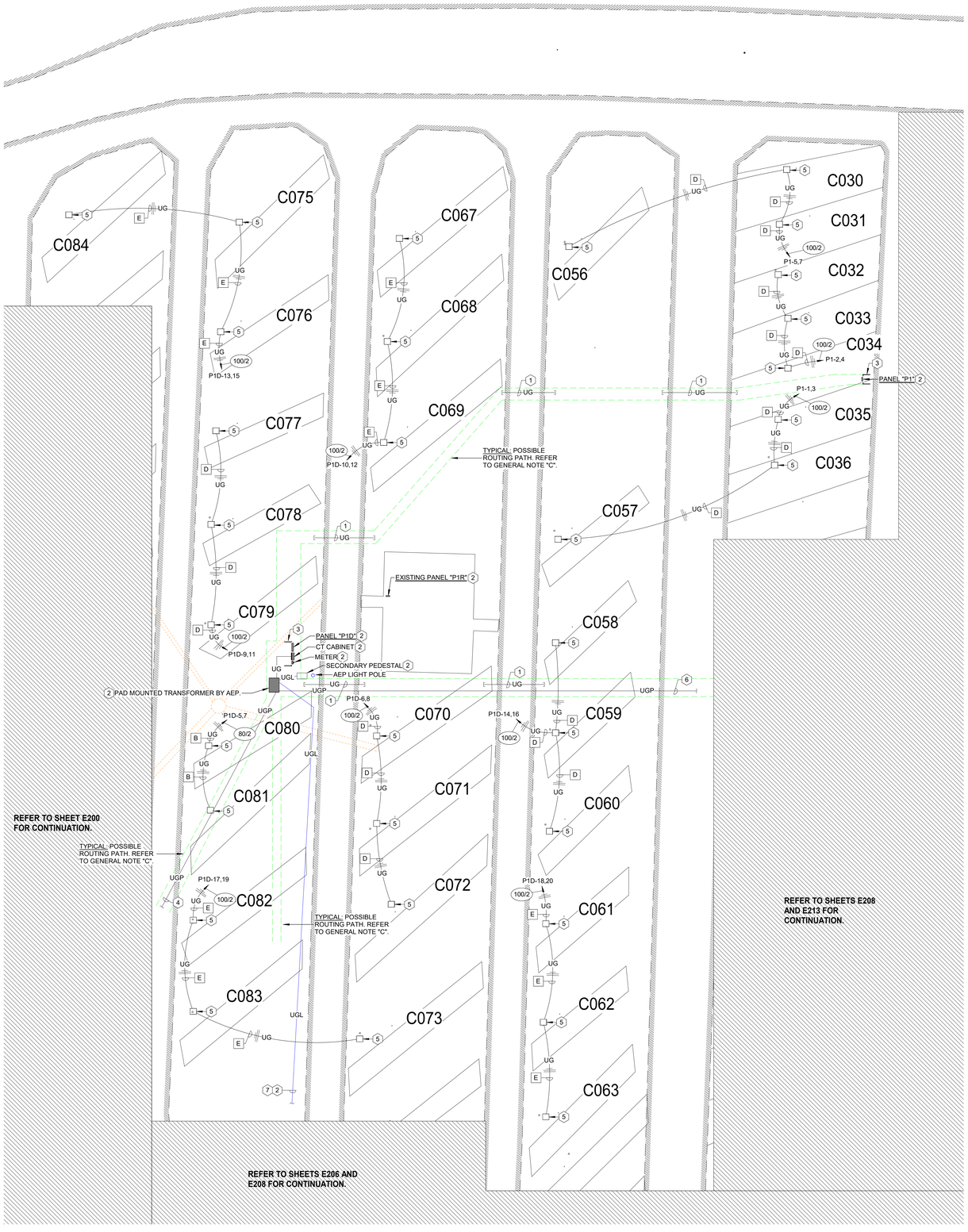
Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
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342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

Seal:
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E211

REP # 250502



1 ELECTRICAL SITE PLAN - ZONE P1
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 11 ON SHEET E206 FOR CONTINUATION.
5. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
6. REFER TO KEYED NOTE 10 ON SHEET E213 FOR CONTINUATION.
7. REFER TO KEYED NOTE 15 ON SHEET E206 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE P1

Key Plan

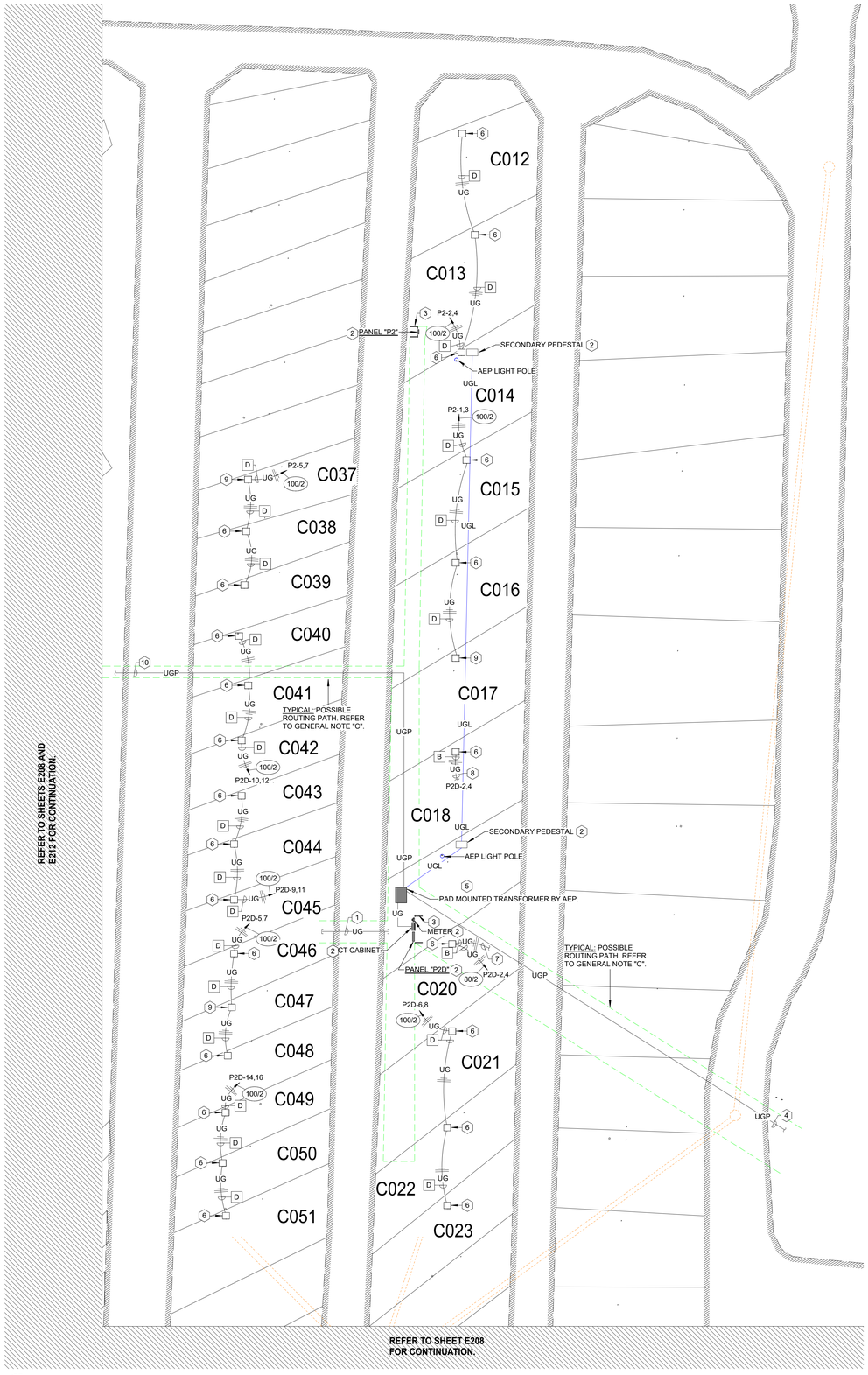
Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E212

SHEET NO. 81



1 ELECTRICAL SITE PLAN - ZONE P2
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E214 FOR CONTINUATION.
5. EXISTING RV SLIP TO BE ABANDONED TO PROVIDE SPACE FOR NEW SWITCHGEAR. REMOVE EXISTING RV OUTLET CENTER. REMOVE EXISTING CONDUCTORS TO SOURCE. REMOVE VERTICAL CONDUIT. ABANDON LATERAL CONDUIT (BELOW GRADE) IN PLACE.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. REFER TO KEYED NOTE 8 FOR CONTINUATION.
8. REFER TO KEYED NOTE 7 FOR CONTINUATION.
9. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
10. REFER TO KEYED NOTE 6 ON SHEET E212 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE P2

Key Plan

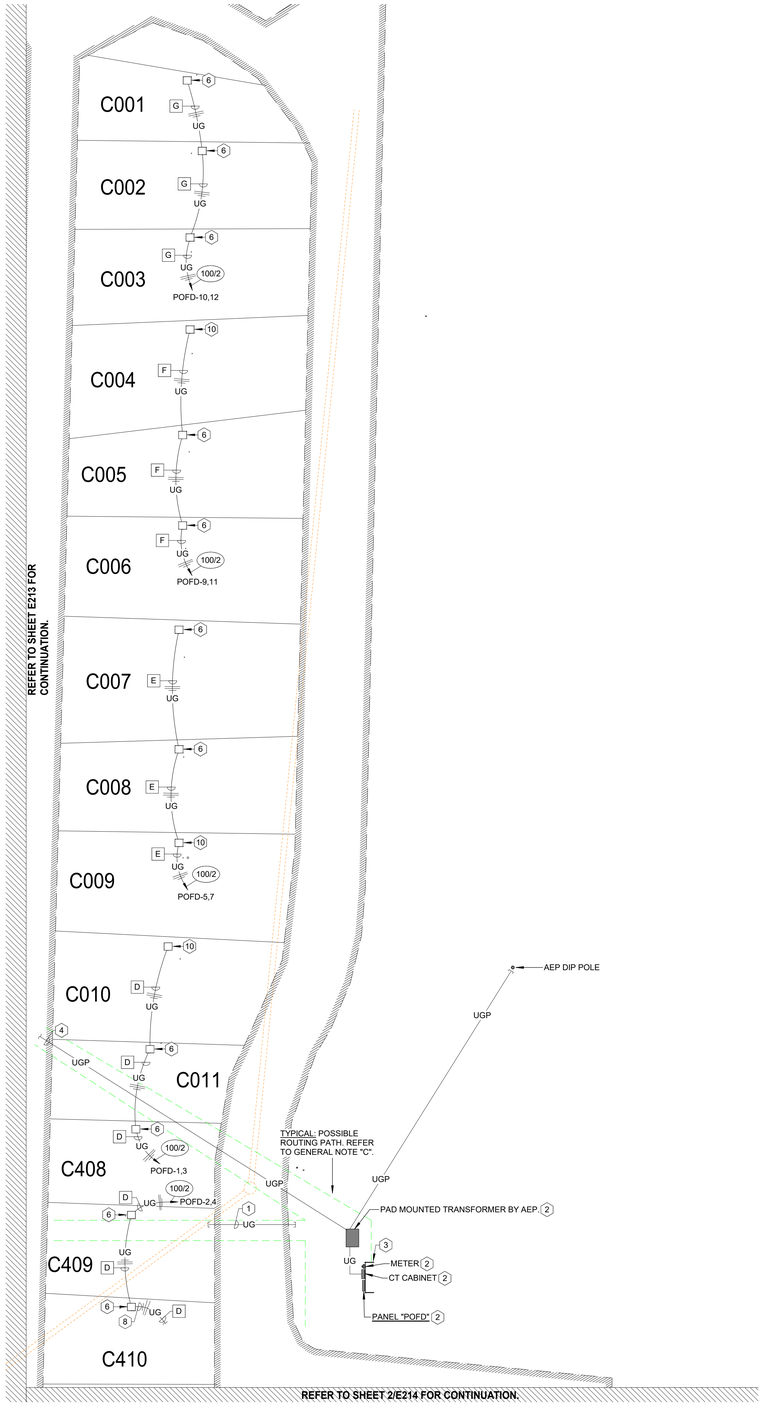
Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9122
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84531
LICENSED PROFESSIONAL ENGINEER
06/04/2025

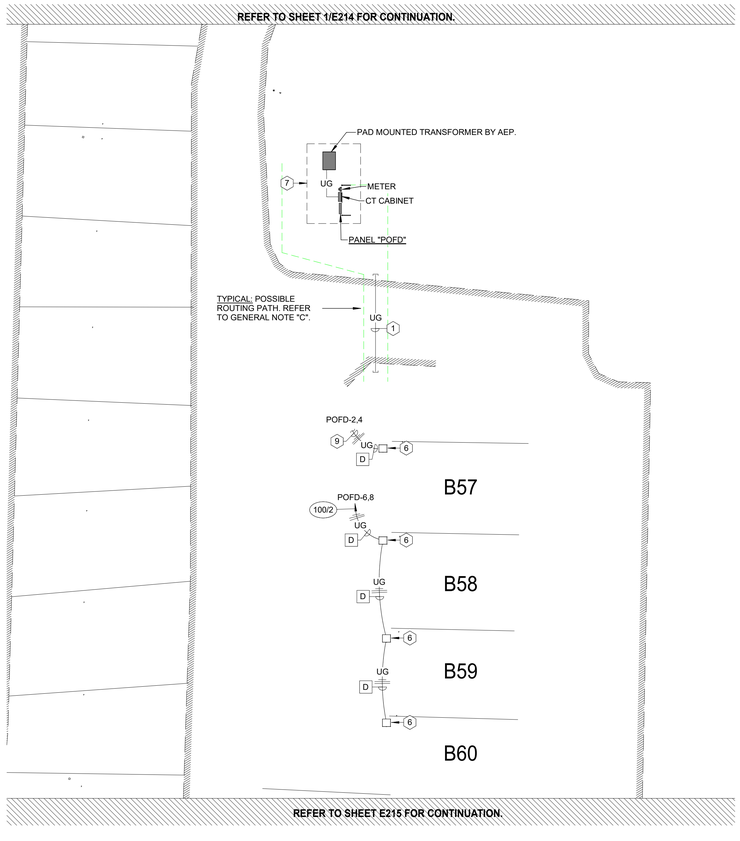
Project No.	24156
Date Drwn.	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E213

SHEET NO. 82



① ELECTRICAL SITE PLAN - ZONE POF
1" = 20'-0"



② ELECTRICAL SITE PLAN - ZONE POF
1" = 20'-0"

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E213 FOR CONTINUATION.
5. NOT USED.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. SWITCHGEAR AND SWITCHGEAR RACK DUPLICATED FROM 1/E213 FOR LOCATION ONLY.
8. REFER TO KEYED NOTE 9 FOR CONTINUATION.
9. REFER TO KEYED NOTE 8 FOR CONTINUATION.
10. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE POF

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9172
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

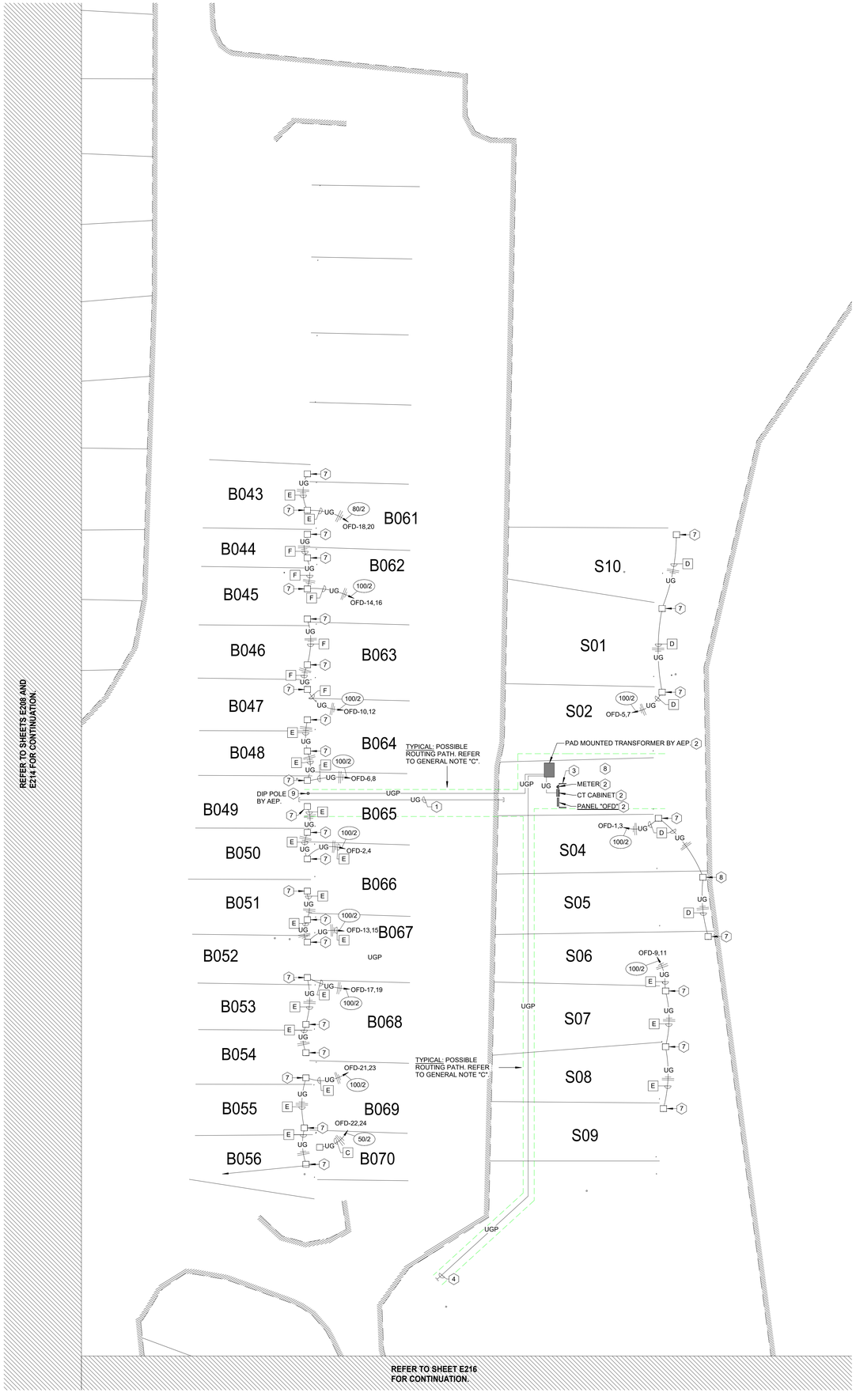
Seal:
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As Indicated

Sheet No:
E214

SHEET NO. 83

REP # 250502



GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E216 FOR CONTINUATION.
5. NOT USED.
6. NOT USED.
7. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
8. EXISTING RV SLIP TO BE ABANDONED TO PROVIDE SPACE FOR NEW SWITCHGEAR. REMOVE EXISTING RV OUTLET CENTER. REMOVE EXISTING CONDUCTORS TO SOURCE. REMOVE VERTICAL CONDUIT. ABANDON LATERAL CONDUIT (BELOW GRADE) IN PLACE.
9. TERMINATE PRIMARY CONDUIT AT DIP POLE AS DIRECTED BY AEP.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

① ELECTRICAL SITE PLAN - ZONE OF
1" = 20'-0"

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE OF

Key Plan

Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

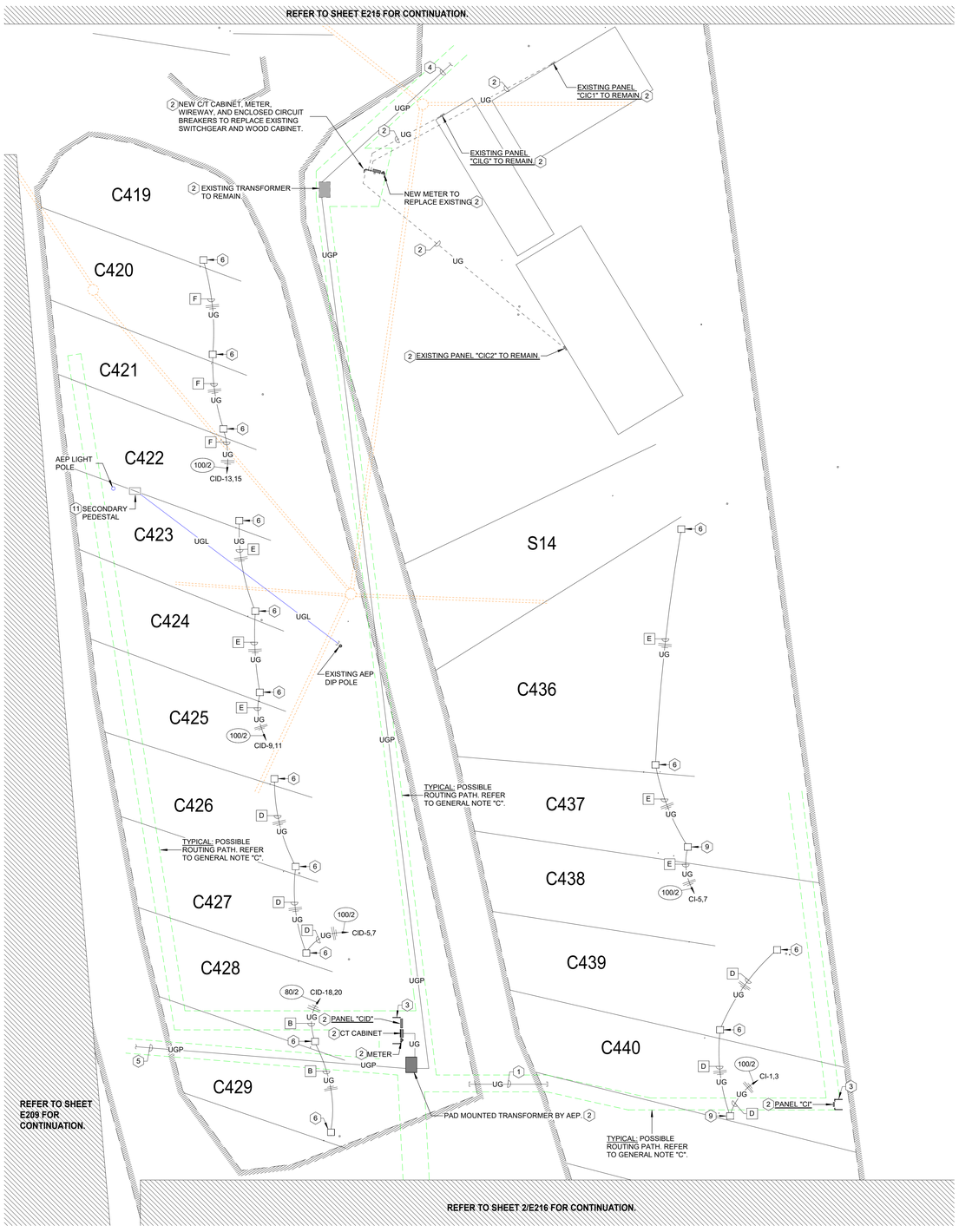
Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84531
REGISTERED PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E215

SHEET NO. 84

REP # 250502



① ELECTRICAL SITE PLAN - ZONE CI
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

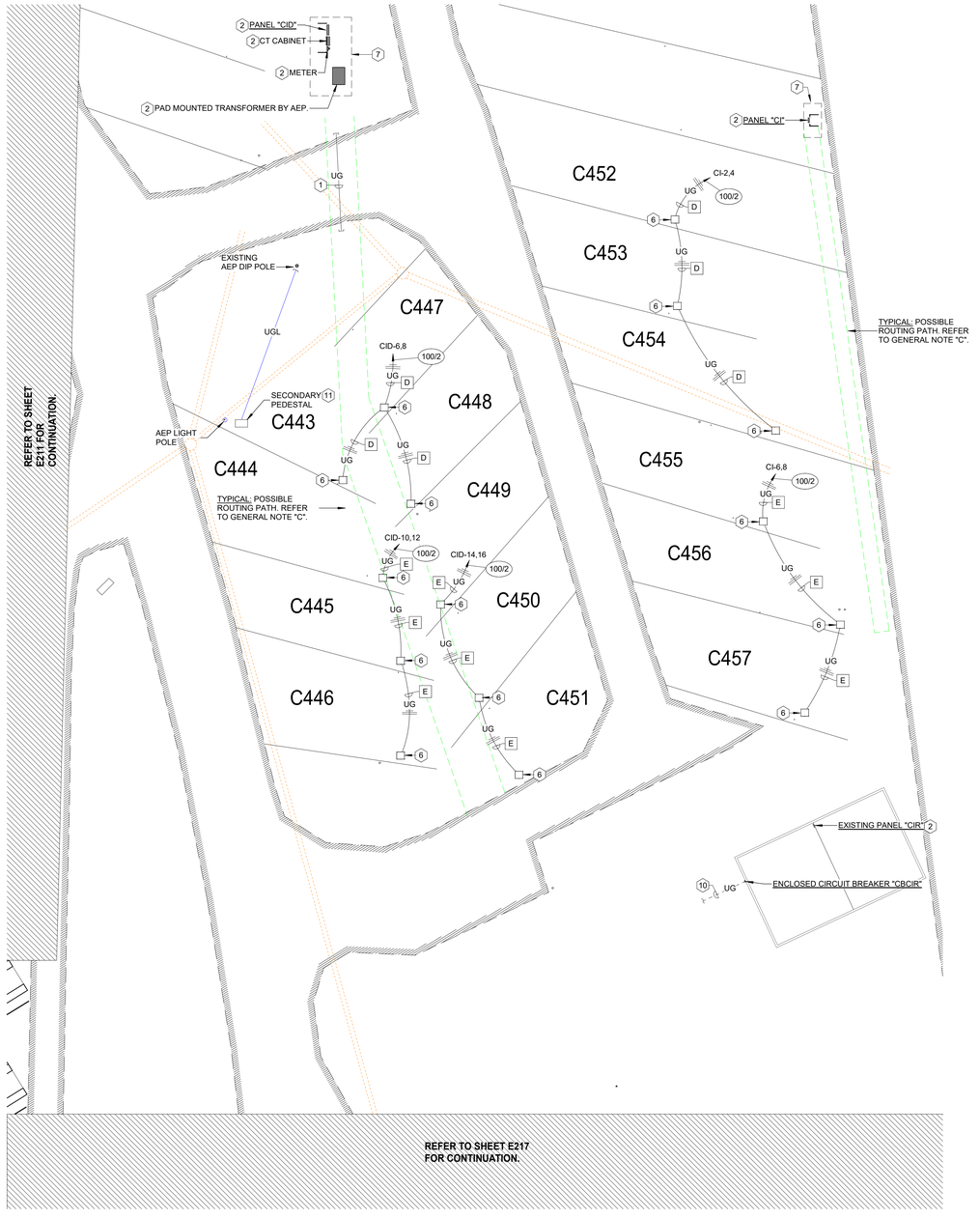
KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 4 ON SHEET E215 FOR CONTINUATION.
5. REFER TO KEYED NOTE 9 ON SHEET E209 FOR CONTINUATION.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. UO75CTLO10. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. SWITCHGEAR AND SWITCHGEAR RACK DUPLICATED FROM 1/E215 FOR LOCATION ONLY.
8. NOT USED.
9. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
10. JOBSITE LOCATE AND INTERCEPT EXISTING UNDERGROUND CONDUIT. REFER TO POWER RISER DIAGRAM ON SHEET E402 FOR ADDITONAL REQUIREMENTS.
11. PEDESTAL BY AEP. REFER TO E101 FOR CONDUIT SIZES.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.



② ELECTRICAL SITE PLAN - ZONE CI
1" = 20'-0"

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE CI

Key Plan

Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

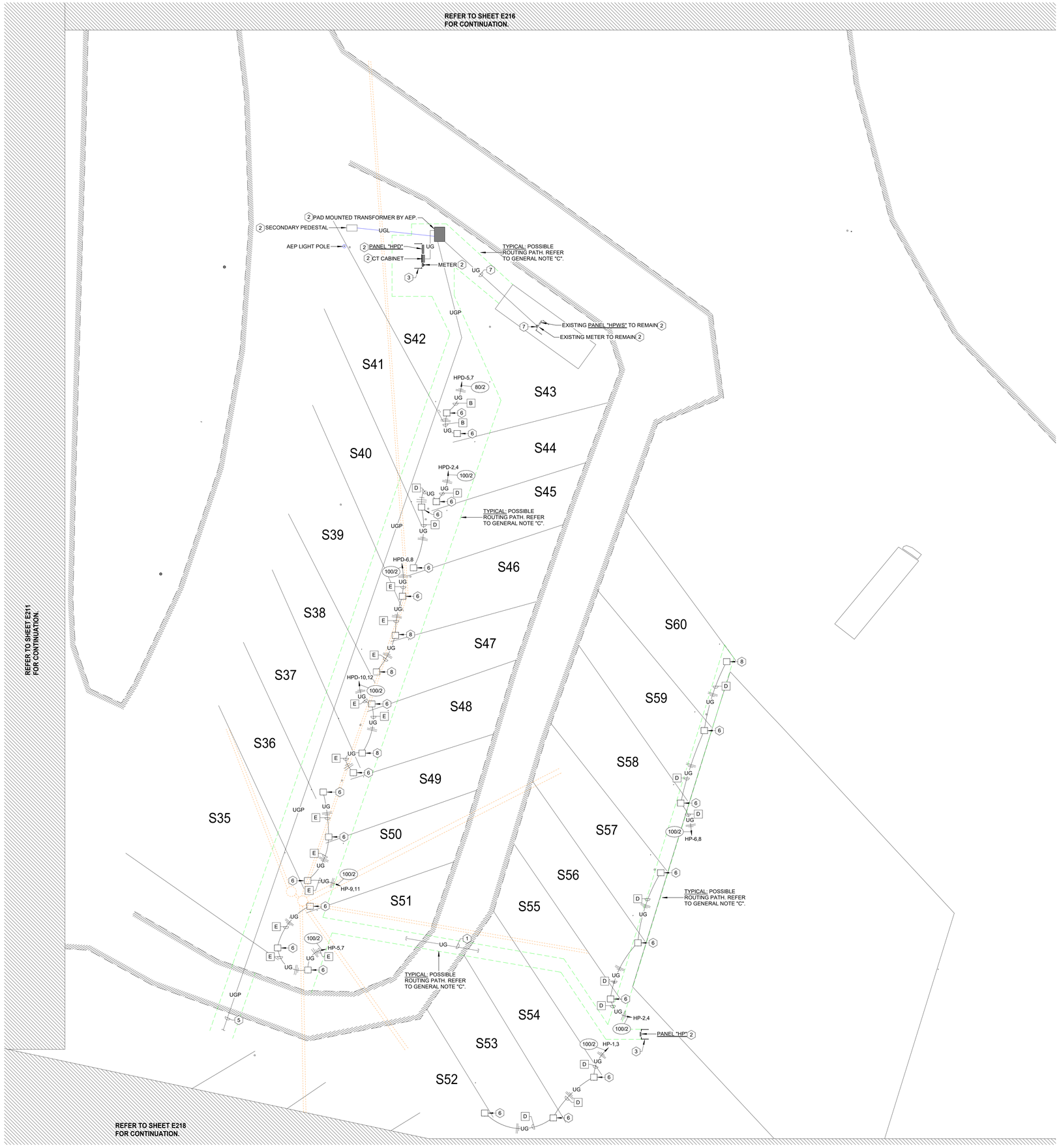
Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As indicated

Sheet No:
E216

SHEET NO. 85

REFER TO SHEET E216
FOR CONTINUATION.



REFER TO SHEET E211
FOR CONTINUATION.

REFER TO SHEET E218
FOR CONTINUATION.

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. NOT USED.
5. REFER TO KEYED NOTE 4 ON SHEET E218 FOR CONTINUATION.
6. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
7. PROVIDE THREE (3) - #3, #8 GRND., 1 1/4" C. ROUTE CONDUIT AND CONDCUTORS FROM SECONDARY LUGS OF NEW TRANSFORMER TO BELOW EXISTING METER TO REMAIN AND TERMINATE AS REQUIRED.
8. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
9. ROUTE WITHIN CORRIDOR / EASEMENT. COORDINATE ROUTING AND DEPTH WITH WATER, AND SANITARY SEWER PIPING. REFER TO CIVIL DRAWINGS. MAINTAIN 18" MINIMUM LATERAL CLEARENCE FROM ALL PIPING.

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

① ELECTRICAL SITE PLAN - ZONE HP
1/16" = 1'-0"

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE HP

Key Plan

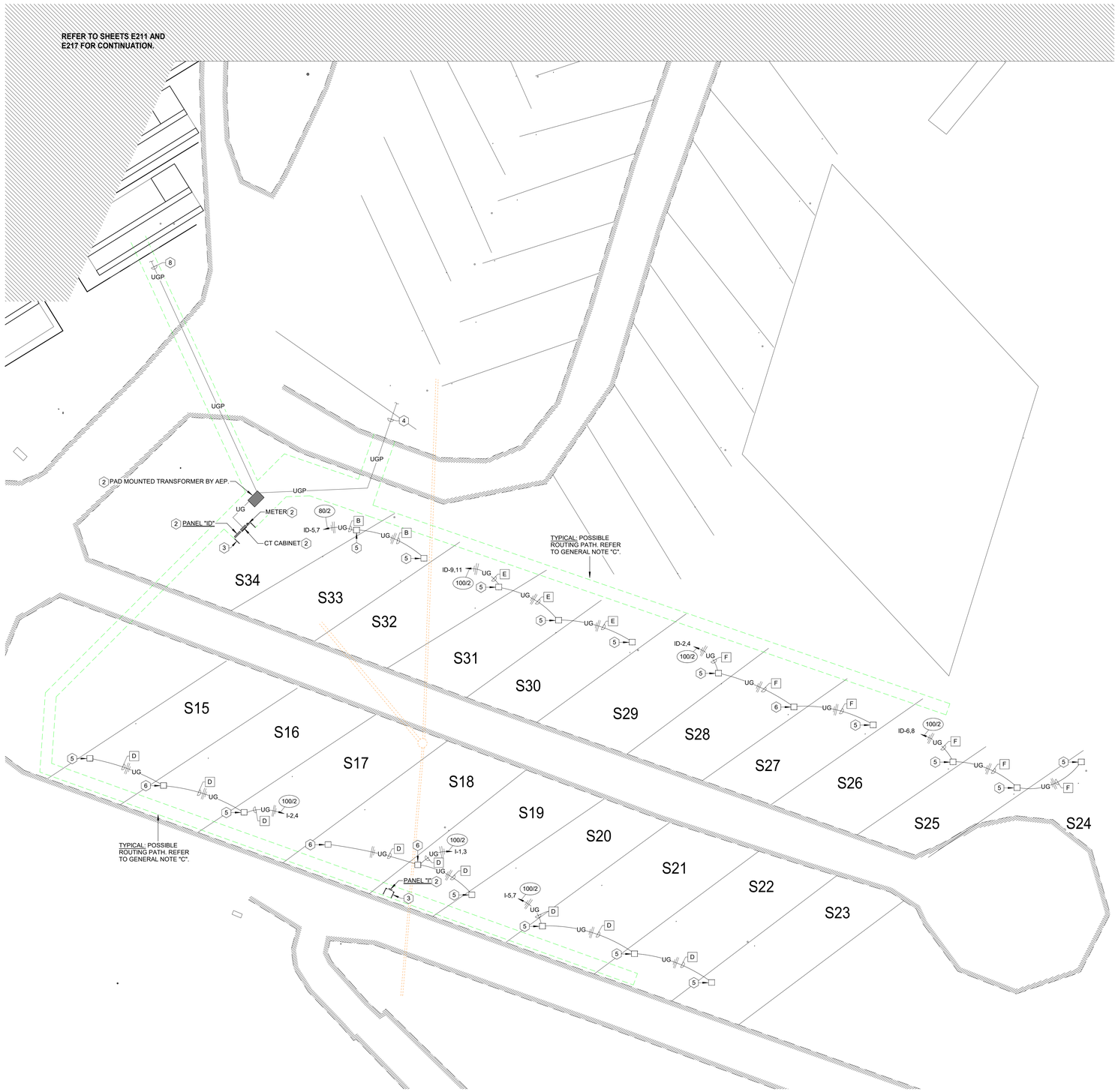
Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal:
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	As Indicated

Sheet No:
E217

SHEET NO. 86



1 ELECTRICAL SITE PLAN - ZONE I
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. ELECTRICAL DESIGN IS BASED UPON 2014 NEC.
C. EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING, DIGGING, OR DRILLING.
D. WHERE NEW RV OUTLET CENTERS ARE REQUIRED, SUCH OUTLET CENTERS SHALL REPLACE EXISTING OUTLET CENTERS AT APPROXIMATE SAME LOCATIONS. SUCH EXISTING OUTLET CENTERS SHALL BE REMOVED. EXISTING LINE SIDE CONDUCTORS SHALL BE REMOVED TO SOURCE. JOBSITE LOCATE SOURCE. EXISTING VERTICAL LINE SIDE RACEWAY SHALL BE REMOVED TO LATERAL RUN BELOW GRADE AT LINE AND LOAD END. EXISTING UNDERGROUND LATERAL RACEWAYS MAY BE ABANDONED IN PLACE.
E. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
F. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.

KEYED NOTES:

1. PROVIDE 4" CONDUIT SLEEVE BELOW ROAD. STUB AND CAP BELOW GRADE 5' BEYOND ROADWAY. REFER TO SPECIFICATIONS FOR STUB / CAP REQUIREMENTS.
2. REFER TO POWER RISER DIAGRAM FOR FEEDER / CONDUIT REQUIREMENTS.
3. REFER TO DETAILS 1/E500 AND/OR 2/E500 FOR SWITCHGEAR RACK REQUIREMENTS.
4. REFER TO KEYED NOTE 5 ON SHEET E217 FOR CONTINUATION.
5. PROVIDE NEW RV OUTLET CENTER. RV OUTLET CENTER SHALL BE MIDWEST NO. U075CTL010. PROVIDE 4" X 6" PTP POST AND INSTALL OUTLET CENTER ON POST. REFER TO 3/E500 FOR GENERAL REQUIREMENTS.
6. EXISTING RV OUTLET CENTER TO REMAIN. REMOVE EXISTING CONDUIT AND CONDUCTORS TO NEAREST JUNCTION / SOURCE. TERMINATE NEW CONDUIT AND CONDUCTORS AS REQUIRED BY EXISTING OUTLET CENTER POINT OF TERMINATION. REMOVE EXISTING METER FROM EXISTING METER SOCKET AND DELIVER TO OWNER. PROVIDE TESCO 4 - BLADE METER JUMPER COVER COMPATIBLE WITH EXISTING SOCKET TO BYPASS METER FUNCTION.
7. TERMINATE PRIMARY CONDUIT AT DIP POLE AS DIRECTED BY AEP.
8. REFER TO KEYED NOTE 6 ON SHEET E211 FOR CONTINUATION.

LINE TYPE LEGEND

LINE	DESCRIPTION
- - - -	POSSIBLE CONDUIT ROUTING
- - - -	SANITARY
———	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL SITE PLAN - ZONE I

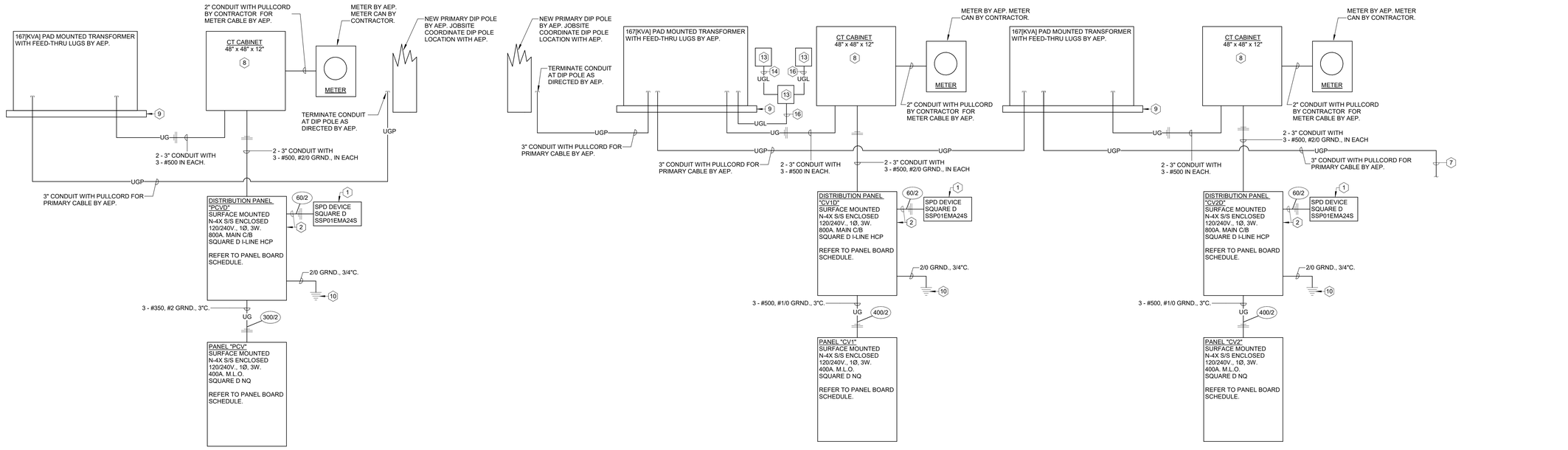
Key Plan

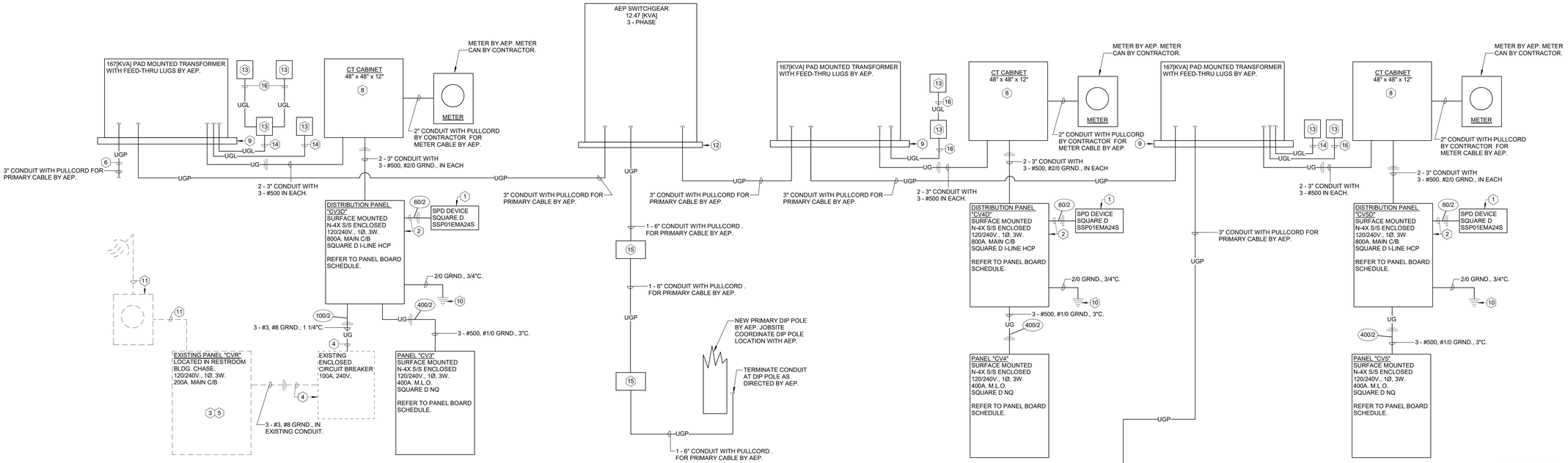
Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84331
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

		Sheet No:
Project No.:	24156	E218
Date Drwn.:	06/04/2025	
Drwn. By:	B.T.	
Chkd. By:	S.S.	
Scale:	As indicated	

REP # 250502





1 POWER RISER DIAGRAM - WEST
N.T.S.

GENERAL NOTES:

A. ALL ELECTRICAL GEAR INDICATED SHALL BE INSTALLED ON FREE-STANDING SUPPORTS. REFER TO DETAILS 1/E500 AND 2/E500 FOR ADDITIONAL REQUIREMENTS.
B. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
C. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.
D. **ALL CIRCUIT BREAKERS 400A. AND GREATER SHALL BE 100% RATED.**
E. **ALL DISTRIBUTION PANELBOARDS (PANELBOARDS WITH LAST CHARACTER "D") SHALL BE 22 [KA] AIC RATED. ALL MAIN CIRCUIT BREAKERS AND BRANCH CIRCUIT BREAKERS IN DISTRIBUTION PANELS SHALL BE 22 [KA] AIC RATED. ALL BRANCH CIRCUIT PANELBOARDS (LAST CHARACTER OTHER THAN "D") SHALL BE 10 [KA] AIC RATED. ALL BRANCH CIRCUIT BREAKERS IN BRANCH CIRCUIT PANELS SHALL BE 10 [KA] AIC RATED.**

KEYED NOTES:

1. MOUNT ADJACENT TO OR ABOVE GEAR TO BE PROTECTED. CONDUCTOR LENGTH SHALL BE SHORT AS POSSIBLE.
2. PROVIDE CIRCUIT BREAKER, CONDUIT, AND CONDUCTORS AS REQUIRED BY SURGE PROTECTION DEVICE.
3. DISCONNECT EXISTING LOAD CENTER FROM EXISTING LINE SIDE CONDUCTORS. RECONNECT NEW CONDUCTORS TO EXISTING MAIN CIRCUIT BREAKER LINE SIDE LUGS.
4. JOBSITE LOCATE EXISTING ENCLOSED CIRCUIT BREAKER. ROUTE NEW CONDUIT UNDERGROUND, UP WALL TO BOTTOM OF ENCLOSED CIRCUIT BREAKER. INSTALL NEW CONDUCTORS INDICATED IN NEW AND EXISTING CONDUIT.
5. PROVIDE NEW 1/8" THICK WHITE PHENOLIC LABEL WITH BLACK SUNKEN LETTER (1/2" FONT) TO READ NEW PANEL DESIGNATION INDICATED ON RISER DIAGRAM.
6. REFER TO KEYED NOTE 7 FOR CONTINUATION.
7. REFER TO KEYED NOTE 6 FOR CONTINUATION.
8. PROVIDE NEW C/T CABINET AS REQUIRED BY AEP FOR C/T'S BY AEP. CABINET SHALL BE 316 STAINLESS STEEL.
9. REFER TO DETAIL 1/E501 FOR TRANSFORMER PAD REQUIREMENTS.
10. PROVIDE TWO(2) - 3/4" X 10' COPPER GROUND RODS SPACED 10'-0" APART.
11. REMOVE EXISTING LINE SIDE FEEDER, METER, CONDUIT, AND WEATHERHEAD.
12. REFER TO DETAIL 2/E502 FOR SWITCHGEAR PAD REQUIREMENTS.
13. SECONDARY PEDESTAL BY AEP.
14. 2" CONDUIT WITH PULLCORD BY CONTRACTOR FOR LIGHTING CIRCUIT CONDUCTORS BY AEP. STUB CONDUIT AT PEDESTAL AS REQUIRED BY AEP.
15. CONCRETE ENCLOSURE / GRADE BEAM BY CONTRACTOR FOR THREE PHASE SPLICE BOX BY AEP. REFER TO DETAIL 1/E502 FOR REQUIREMENTS.
16. 3" CONDUIT WITH PULLCORD BY CONTRACTOR FOR LIGHTING CIRCUIT BY AEP. STUB CONDUIT AT PEDESTAL AS REQUIRED BY AEP.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL POWER RISER DIAGRAM - PHASE A

Key Plan

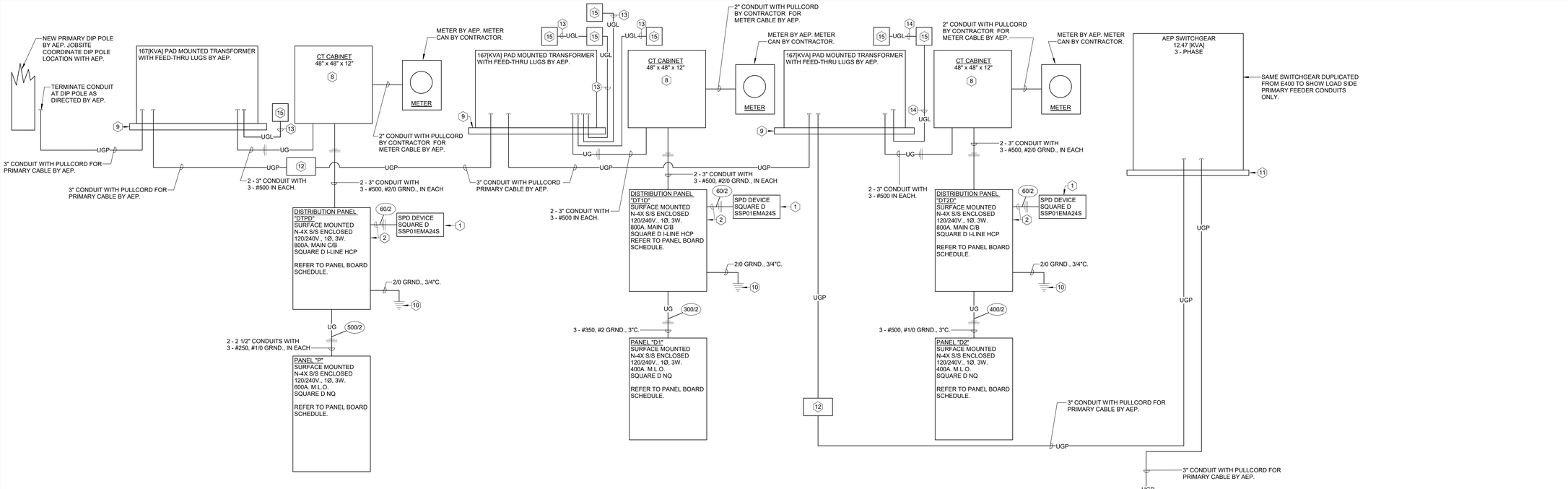
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STRIDDE, CALLINS & ASSOCIATES INC.
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STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	N.T.S.

Sheet No:
E400

REP # 250502



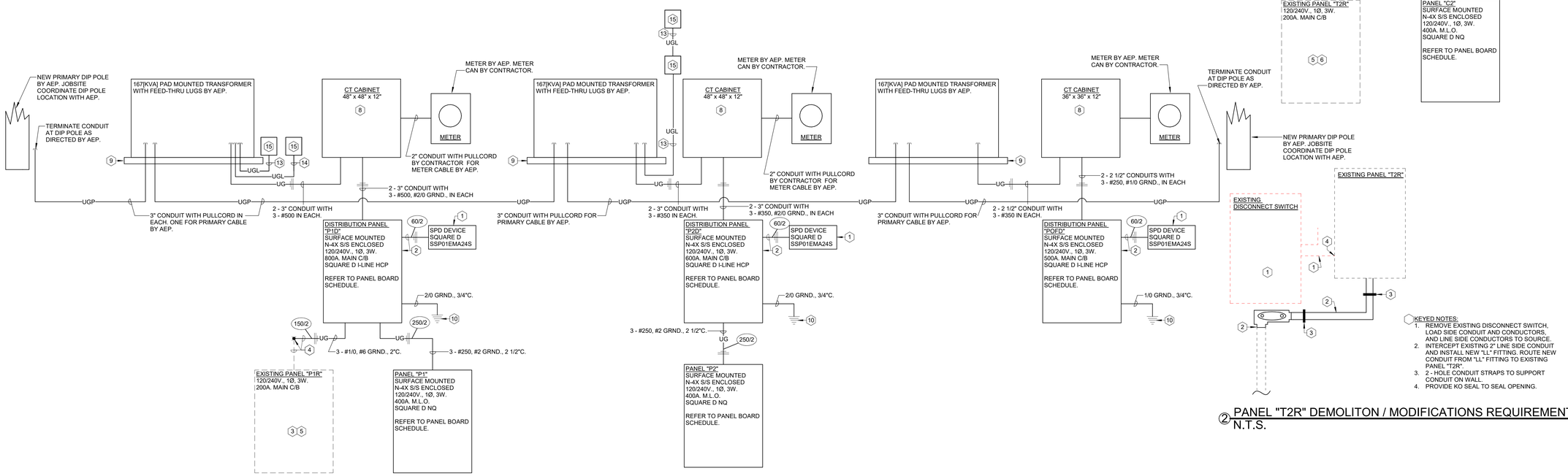
1 POWER RISER DIAGRAM - CENTRAL
N.T.S.

GENERAL NOTES:

A. ALL ELECTRICAL GEAR INDICATED SHALL BE INSTALLED ON FREE-STANDING SUPPORTS. REFER TO DETAILS 1/E500 AND 2/E500 FOR ADDITIONAL REQUIREMENTS.
B. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
C. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.
D. **ALL CIRCUIT BREAKERS 400A, AND GREATER SHALL BE 100% RATED.**
E. **ALL DISTRIBUTION PANELBOARDS (PANELBOARDS WITH LAST CHARACTER "D") SHALL BE 22 [KA] AIC RATED. ALL MAIN CIRCUIT BREAKERS AND BRANCH CIRCUIT BREAKERS IN DISTRIBUTION PANELS SHALL BE 22 [KA] AIC RATED. ALL BRANCH CIRCUIT PANELBOARDS (LAST CHARACTER OTHER THAN "D") SHALL BE 10 [KA] AIC RATED. ALL BRANCH CIRCUIT BREAKERS IN BRANCH CIRCUIT PANELS SHALL BE 10 [KA] AIC RATED.**

KEYED NOTES:

1. MOUNT ADJACENT TO OR ABOVE GEAR TO BE PROTECTED. CONDUCTOR LENGTH SHALL BE SHORT AS POSSIBLE.
2. PROVIDE CIRCUIT BREAKER, CONDUIT, AND CONDUCTORS AS REQUIRED BY SURGE PROTECTION DEVICE.
3. DISCONNECT EXISTING LOAD CENTER FROM EXISTING LINE SIDE CONDUCTORS. RECONNECT NEW CONDUCTORS TO EXISTING MAIN CIRCUIT BREAKER LINE SIDE LUGS.
4. JOBSITE LOCATE EXISTING UNDERGROUND LINE SIDE CONDUIT BEYOND BUILDING FOOTPRINT. PROVIDE CONNECTION OF EXISTING CONDUIT TO NEW. INSTALL NEW CONDUCTORS INDICATED IN NEW AND EXISTING CONDUIT.
5. PROVIDE NEW 1/8" THICK WHITE PHENOLIC LABEL WITH BLACK SUNKEN LETTER (1/2" FONT) TO READ NEW PANEL DESIGNATION INDICATED ON RISER DIAGRAM.
6. JOBSITE LOCATE EXISTING UNDERGROUND LINE SIDE CONDUIT BEYOND BUILDING FOOTPRINT. PROVIDE CONNECTION OF EXISTING CONDUIT TO NEW. INSTALL NEW CONDUCTORS INDICATED IN NEW AND EXISTING CONDUIT. TERMINATE NEW CONDUCTORS AT EXISTING 100A/3P CIRCUIT BREAKER LUGS. REFER TO SHEET E207 AND DETAIL 2/E401 FOR ADDITIONAL REQUIREMENTS.
7. NOT USED.
8. PROVIDE NEW C/T CABINET AS REQUIRED BY AEP FOR C/T'S BY AEP. CABINET SHALL BE 316 STAINLESS STEEL.
9. REFER TO DETAIL 1/E501 FOR TRANSFORMER PAD REQUIREMENTS.
10. PROVIDE TWO(2) - 3/4" X 10' COPPER GROUND RODS SPACED 10'-0" APART.
11. REFER TO DETAIL 2/E502 FOR SWITCHGEAR PAD REQUIREMENTS.
12. CONCRETE ENCLOSURE / GRADE BEAM BY CONTRACTOR FOR SINGLE PHASE SPLICE BOX BY AEP. REFER TO DETAIL 3/E502 FOR REQUIREMENTS.
13. 2" CONDUIT WITH PULLCORD BY CONTRACTOR FOR LIGHTING CIRCUIT CONDUCTORS BY AEP. STUB CONDUIT AT PEDESTAL AS REQUIRED BY AEP.
14. 3" CONDUIT WITH PULLCORD BY CONTRACTOR FOR LIGHTING CIRCUIT BY AEP. STUB CONDUIT AT PEDESTAL AS REQUIRED BY AEP.
15. SECONDARY PEDESTAL BY AEP.



2 PANEL "T2R" DEMOLITON / MODIFICATIONS REQUIREMENTS
N.T.S.

KEYED NOTES:

1. REMOVE EXISTING DISCONNECT SWITCH, LOAD SIDE CONDUIT AND CONDUCTORS, AND LINE SIDE CONDUCTORS TO SOURCE.
2. INTERCEPT EXISTING 2" LINE SIDE CONDUIT AND INSTALL NEW "LL" FITTING. ROUTE NEW CONDUIT FROM "LL" FITTING TO EXISTING PANEL "T2R".
3. 2 - HOLE CONDUIT STRAPS TO SUPPORT CONDUIT ON WALL.
4. PROVIDE KO SEAL TO SEAL OPENING.

NO	REVISION	DATE

Project Name and Address: ISLA BLANCA RV PARK RENOVATION — 33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title: ELECTRICAL POWER RISER DIAGRAM - PHASE B

Key Plan

Firm Address and Name:
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(361) 883-9196
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342 S. Navigation Blvd.
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Registration # F-006328

Seal: STATE OF TEXAS — SCOTT E. STRIDDE — 84331 — LICENSED PROFESSIONAL ENGINEER

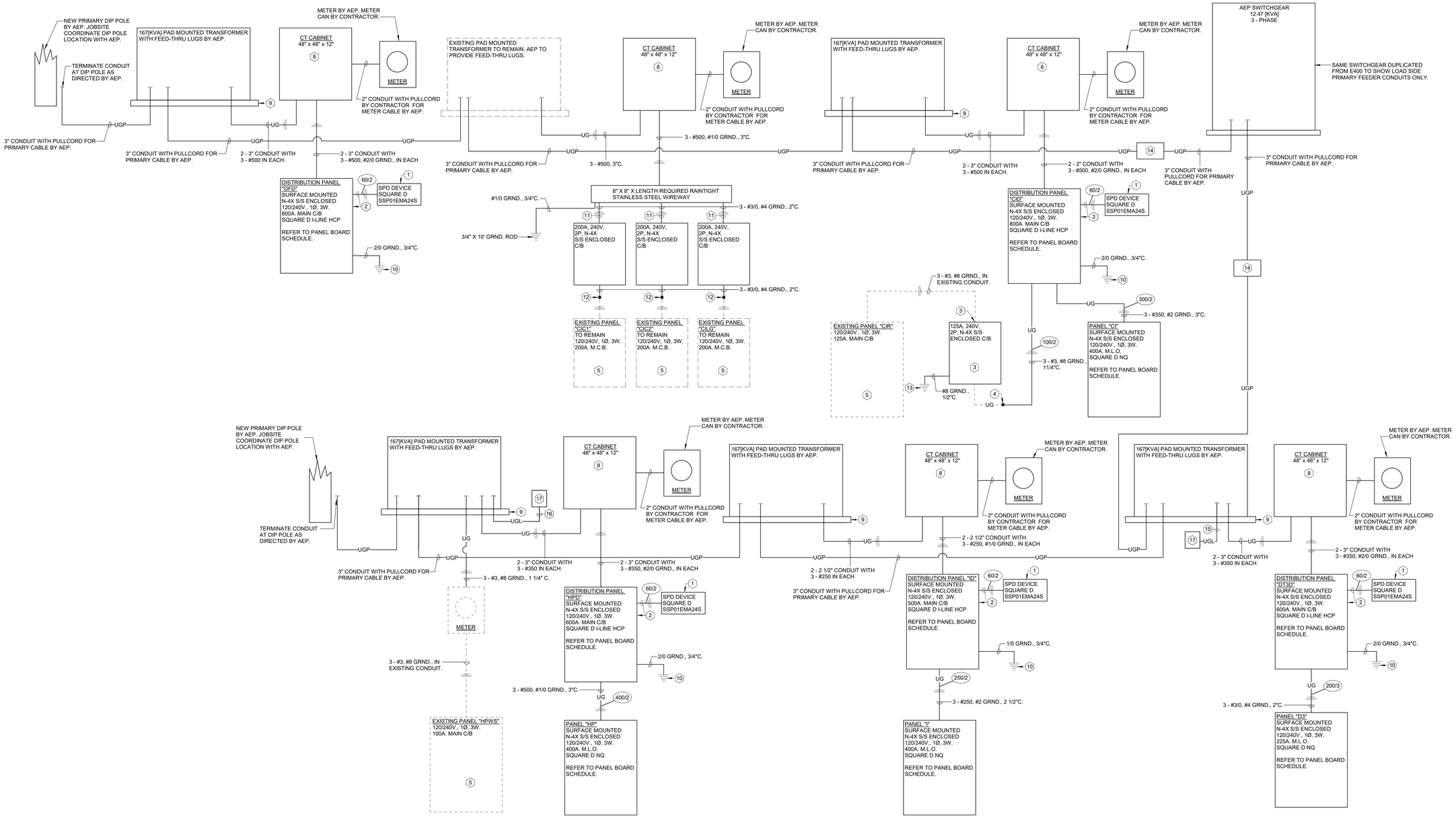
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	N.T.S.

Sheet No: E401

SHEET NO. 89

REP # 250502



1 POWER RISER DIAGRAM - EAST
N.T.S.

GENERAL NOTES:

A. ALL ELECTRICAL GEAR INDICATED SHALL BE INSTALLED ON FREE-STANDING SUPPORTS. REFER TO DETAILS 1/E500 AND 2/E500 FOR ADDITIONAL REQUIREMENTS.
B. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM OWNED BY CAMERON COUNTY SHALL BE DEMOLISHED BY THE CONTRACTOR. REFER TO SPECIFICATION SECTION 26 00 05, PARAGRAPH 1.13.A.
C. THE EXISTING PRIMARY DISTRIBUTION SYSTEM OWNED BY AEP SHALL BE REPLACED AND / OR MODIFIED BY AEP. COORDINATE PHASING AND LOGISTICS OF PRIMARY DISTRIBUTION SYSTEM DEMOLITION WITH AEP.
D. **ALL CIRCUIT BREAKERS 400A, AND GREATER SHALL BE 100% RATED.**
E. **ALL DISTRIBUTION PANELBOARDS (PANELBOARDS WITH LAST CHARACTER "D") SHALL BE 22 [KA] AIC RATED. ALL MAIN CIRCUIT BREAKERS AND BRANCH CIRCUIT BREAKERS IN DISTRIBUTION PANELS SHALL BE 22 [KA] AIC RATED. ALL BRANCH CIRCUIT PANELBOARDS (LAST CHARACTER OTHER THAN "D") SHALL BE 10 [KA] AIC RATED. ALL BRANCH CIRCUIT BREAKERS IN BRANCH CIRCUIT PANELS SHALL BE 10 [KA] AIC RATED.**

KEYED NOTES:

1. MOUNT ADJACENT TO OR ABOVE GEAR TO BE PROTECTED. CONDUCTOR LENGTH SHALL BE SHORT AS POSSIBLE.
2. PROVIDE CIRCUIT BREAKER, CONDUIT, AND CONDUCTORS AS REQUIRED BY SURGE PROTECTION DEVICE.
3. INSTALL ENCLOSED CIRCUIT BREAKER AT SAME APPROXIMATE LOCATION AS EXISTING ENCLOSED CIRCUIT BREAKER TO BE DEMOLISHED. RECONNECT EXISTING CONDUIT AS REQUIRED BY ENCLOSED CIRCUIT BREAKER LOCATION. PULL NEW WIRE THRU EXISTING CONDUIT AND TERMINATE AT EXISTING PANEL.
4. JOBSITE LOCATE EXISTING UNDER GROUND LINE SIDE CONDUIT. PROVIDE CONNECTION OF EXISTING CONDUIT TO NEW. INSTALL NEW CONDUCTORS INDICATED IN NEW AND EXISTING CONDUIT.
5. PROVIDE NEW 1/8" THICK WHITE PHENOLIC LABEL WITH BLACK SUNKEN LETTER (1/2" FONT) TO READ NEW PANEL DESIGNATION INDICATED ON RISER DIAGRAM.
6. NOT USED.
7. NOT USED.
8. PROVIDE NEW C/T CABINET AS REQUIRED BY AEP FOR C/T'S BY AEP. CABINET SHALL BE 316 STAINLESS STEEL.
9. REFER TO DETAIL 1/E501 FOR TRANSFORMER PAD REQUIREMENTS.
10. PROVIDE TWO(2) - 3/4" X 10' COPPER GROUND RODS SPACED 10'-0" APART.
11. THREE (3) - #3/0, #4 GROUND, IN 2" CONDUIT.
12. JOBSITE LOCATE AND VERIFY CONDUIT ROUTE. EXTEND NEW CONDUIT TO EXISTING UNDERGROUND CONDUIT AS REQUIRED BY NEW ENCLOSED CIRCUIT BREAKER POINT OF TERMINATION. PULL NEW WIRE THRU NEW AND EXISTING CONDUIT AND TERMINATE AT PANEL LINE SIDE LUGS.
13. PROVIDE ONE(1) - 3/4" X 10' COPPER GROUND ROD.
14. CONCRETE ENCLOSURE / GRADE BEAM BY CONTRACTOR FOR SINGLE PHASE SPLICE BOX BY AEP. REFER TO DETAIL 3/E502 FOR REQUIREMENTS.
15. 2" CONDUIT WITH PULLCORD BY CONTRACTOR FOR LIGHTING CIRCUIT CONDUCTORS BY AEP. STUB CONDUIT AT PEDESTAL AS REQUIRED BY AEP.
16. 3" CONDUIT WITH PULLCORD BY CONTRACTOR FOR LIGHTING CIRCUIT BY AEP. STUB CONDUIT AT PEDESTAL AS REQUIRED BY AEP.
17. SECONDARY PEDESTAL BY AEP.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL POWER RISER DIAGRAM - PHASE C

Key Plan

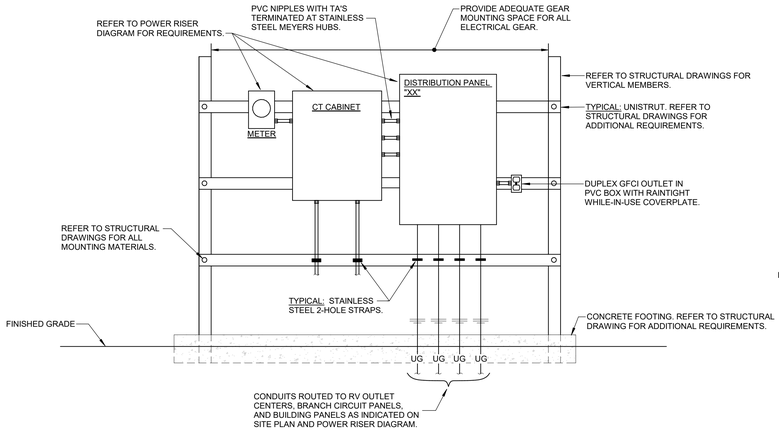
Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
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Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84331
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

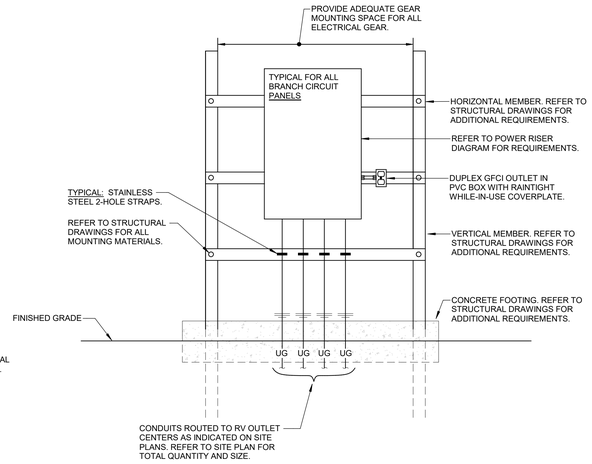
Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	N.T.S.

Sheet No:
E402

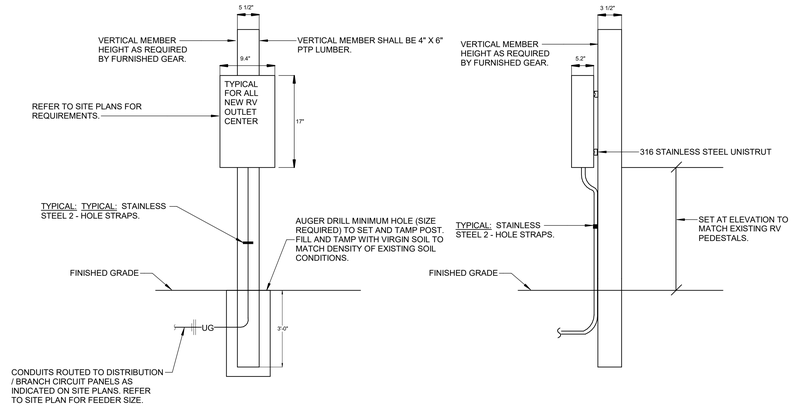
SHEET NO. 90



① DISTRIBUTION PANEL / CT CABINETSUPPORT DETAIL
N.T.S.



② PANEL SUPPORT DETAIL
N.T.S.



③ RV PEDESTAL SUPPORT DETAIL
N.T.S.

FEEDER / BRANCH CIRCUIT SCHEDULE

240V., RV SERVICES

FEEDER MARK	FEEDER SIZE	DISTANCE LIMITATION (FEET)
A	3 - #8, #10 GRND., 3/4" C.	108'
B	3 - #4, #10 GRND., 1 1/4" C.	170'
C	3 - #2, #8 GRND., 1 1/2" C.	271'
D	3 - #3, #8 GRND., 1 1/2" C.	*172'
E	3 - #1, #6 GRND., 1 1/2" C.	*274'
F	3 - #1/0, #6 GRND., 1 1/2" C.	*345'
G	3 - #2/0, #6 GRND., 2" C.	*436'

* DISTANCE LIMITATION TO CENTER PEDESTAL (LOAD MIDPOINT).

WIRING DEVICE LEGEND AND SCHEDULE

SYMBOL	CHARACTERISTICS	RATING		DESCRIPTION	MANUFACTURER'S REFERENCE			REMARKS
		VOLTS	AMPS		P. & S.	HUBBELL	LEVITON	
WP GFI	NEMA 5-20R	125	20	WEATHERPROOF GFI CONVENIENCE RECEPTACLE	2095	GF5362	7899	

NOTE: THIS IS A STANDARD LEGEND. ALL SYMBOLS AND ABBREVIATIONS HEREIN MAY NOT BE APPLICABLE TO THIS PROJECT.

ELECTRICAL LEGEND

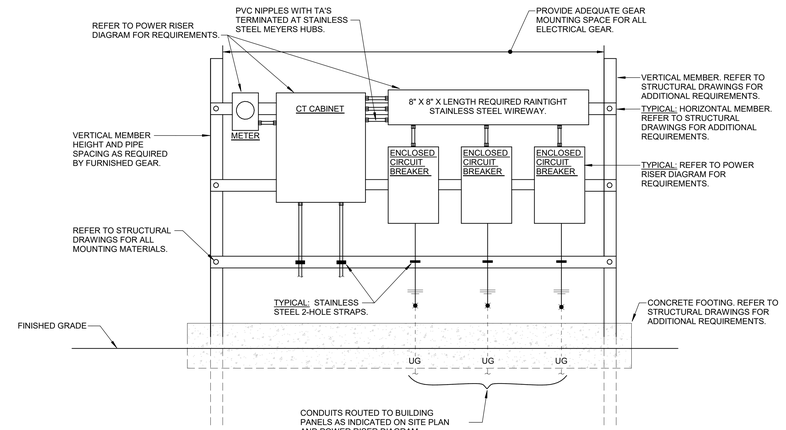
NOTE: THIS IS A STANDARD LEGEND. ALL SYMBOLS AND ABBREVIATIONS HEREIN MAY NOT BE APPLICABLE TO THIS PROJECT.

SYMBOL	DESCRIPTION
	RACEWAY WITH NUMBER OF CONDUCTORS INDICATED
UGP	UNDERGROUND AEP PRIMARY CONDUIT
UG	UNDERGROUND RACEWAY
UGL	UNDERGROUND AEP LIGHTING CONDUIT
LA1.2	PANEL AND CIRCUIT NUMBERS
	ARROWS INDICATE HOME RUN TO PANEL
1"	CONDUIT SIZE IF INDICATED
30/2	BRANCH CIRCUIT BREAKER SIZE IN PANEL INDICATED IF OTHER THAN 1P20A
	NEUTRAL CONDUCTOR
	UNGROUNDED CONDUCTORS
#1/0	CONDUCTOR SIZE INDICATED IF OTHER THAN NO. 12 AWG
	CONDUCTORS SHALL BE SIZE INDICATED FOR ENTIRE LENGTH OF CIRCUIT
	CONDUIT CONTINUATION TO POINT NOTED
	ELECTRICAL BRANCH CIRCUIT PANEL AS NOTED
	DISTRIBUTION PANEL OR SWITCHBOARD AS NOTED

LINE TYPE LEGEND

LINE	DESCRIPTION
	POSSIBLE CONDUIT ROUTING
	SANITARY
	AEP LIGHTING UNDERGROUND CONDUIT

NOTE: ALL UTILITIES MARKED ON DRAWINGS ARE APPROXIMATE LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO JOBSITE LOCATE AND PROTECT EXISTING AND NEW UTILITIES AS REQUIRED.



④ ENCLOSED CIRCUIT BREAKER SUPPORT DETAIL
N.T.S.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL DETAILS, LEGENDS, AND SCHEDULES

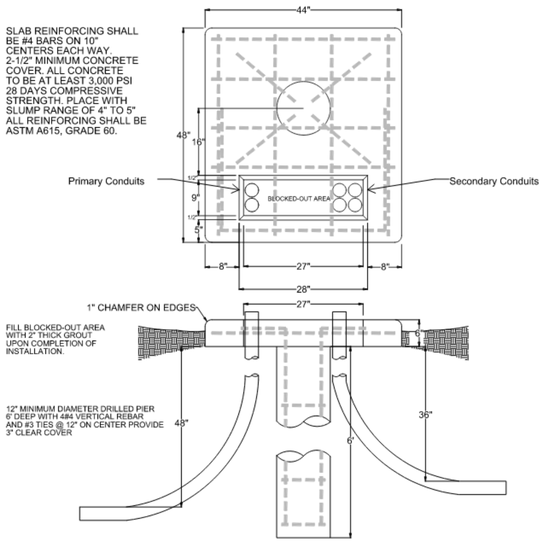
Key Plan

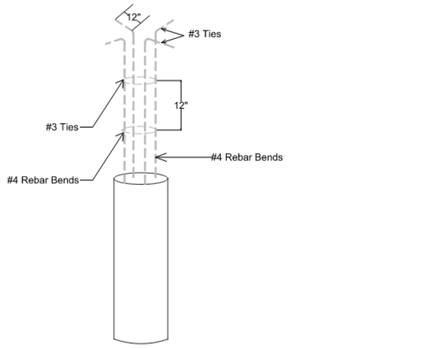
Firm Address and Name:
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Seal
STATE OF TEXAS
SCOTT EL STRIDDE
84331
LICENSED PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	12" = 1'-0"

Sheet No:
E500

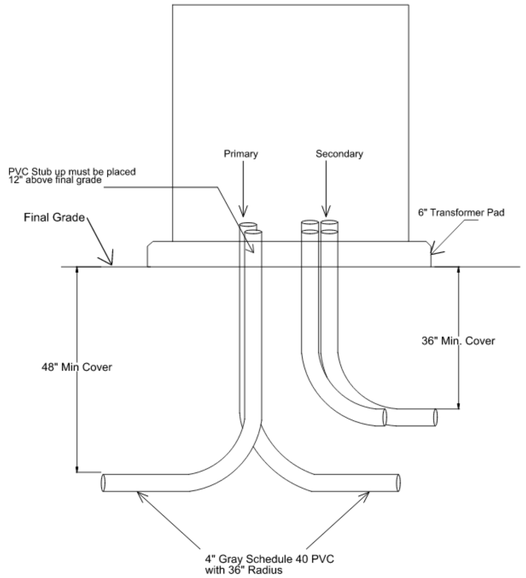


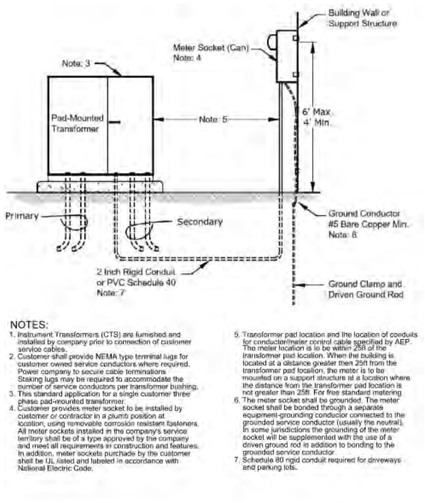


Detail "B"
Pier Rebar Installation

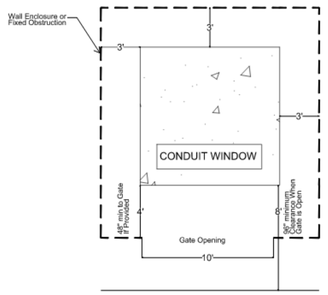
NOTES:
1. Final Grade shall be established before installation of Pad.
2. Concrete Pad will be installed with pier.
3. Piers shall be 12" Minimum in Diameter, 6 Feet Deep with 4 - #4 Verticle Rebar and #3 Ties at 12" On Center (O/C), and provide a Minimum 3" Cover. The #4 Bend Bars should be 12" Long in the Horizontal Direction.
4. Pier Rebar bent in the horizontal direction so that it may tie in with Pad Rebar.
5. Burial depth for Conduit is defined as the distance between final grade and the top of the Conduit. Unless otherwise designated by Engineering, Conduits shall be installed at a burial depth of not less than 4'-0" and secondary conduits shall be installed at a burial depth of not less than 3'0". These initial depth are to allow for changes to the surface conditions. Local agreements and codes may require additional depth. If there are known extensive changes to the final grade such that their depths are not maintained, corrective action shall be taken.

Front View of Transformer





NOTES:
1. Instrument Transformers (CTS) are furnished and installed by company prior to connection of customer service cables.
2. Customer shall provide NEMA type terminal lugs for customer owned service conductors where required. Power company to secure cable terminations. Staking lugs may be required to accommodate the number of service conductors per transformer bushing.
3. This standard application for a single customer three phase pad-mounted transformer.
4. Customer provides meter socket to be installed by customer or contractor in a plumb position at location, using removable corrosion resistant fasteners. All meter sockets installed in the company's service territory shall be of a type approved by the company and meet all requirements in construction and features. In addition, meter sockets purchase by the customer shall be UL listed and labeled in accordance with National Electric Code.
5. Transformer pad location and the location of conduits for conductor/meter control cable specified by AEP. The meter location is to be within 25ft of the transformer pad location. When the building is located at a distance greater then 25ft from the transformer pad location, the meter is to be mounted on a support structure at a location where the distance from the transformer pad location is not greater than 25ft. For free standard metering.
6. The meter socket shall be grounded. The meter socket shall be bonded through a separate equipment-grounding conductor connected to the grounded service conductor (usually the neutral). In some jurisdictions the grounding of the meter-socket will be supplemented with the use of a driven ground rod in addition to bonding to the grounded service conductor.
7. Schedule 80 rigid conduit required for driveways and parking lots.



1. Transformer location must allow for access by service vehicles and must provide a minimum unobstructed clearance of 10 feet in front of primary cable compartment and 3 feet ventilation space on other 3 sides. Access area must sustain a minimum of _____lbs.* for the combined weight of the transformer and service vehicle.

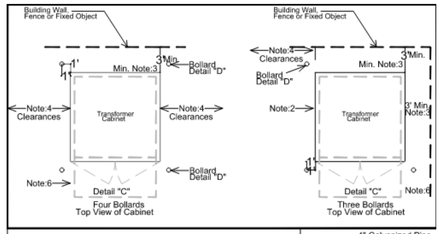
   Access to transformer must be available to AEP at all times. Locked gates shall Allow for AEP padlock as well as the owner's padlock

   if the location would allow possible damage to installation from vehicle traffic, 48 inch minimum height bollards (see page 6 of 7) or a protective enclosure shall be provided.

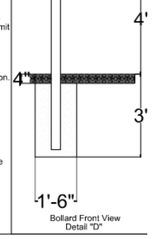
2. A fence or protective Enclosure is not required around the Transformer Installation by the Company or industry safety codes, however, if one is to be installed, it must comply with AEP safety requirements and shall be submitted for approval prior to construction.

   Any enclosure and/or shrubbery must allow for adequate air movement for cooling requirements of the transformer and all masonry enclosures should have pierced openings for ventilation, and should not be over 8 feet in height.

   *As specified by AEP Engineering for each transformer location.

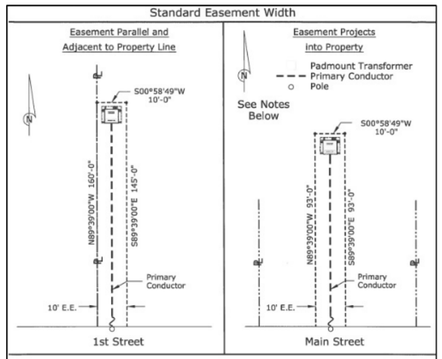


NOTES:
1. Bollards shall be used where vehicular traffic may cause damage to the padmount, i.e. parking lots, loading areas, driveways, ect.
2. When additional protection is required, guy wire or rails may be installed between bollards.
3. The pad should be located 4'0" from the building on the side where the metering equipment is located or the conduits enter the building to permit free spacing for conduit bends.
4. Doors, window, window walls, fire escapes, entrances and ventilating ducts located at ground floor, and at multiple stories as well, should be avoided in the location of pad. Avoiding placing pad under building overhang such as wide eaves unless building is of fire proof construction. Recommended minimum lateral clearances:
   Clearances to doors, windows, entrances and ventilating ducts-5'-0"
   Clearance to fire escapes-20'-0"
5. In non-paved areas use crushed stone or sod to provide for a 4" covering over the concrete encircling the bollard.
6. Maintain clear area in front of padmount transformer doors at least as wide as the doors and 8 feet deep. Also, if padmount transformer has current limiting fuses at the side of live front cabinet, maintain adequate opening space for these as well.
7. Paint bollards "Safety Yellow" and install reflective safety tape.



Bollard Front View
Detail "D"

Standard Easement Width



Notes:
1. Maintain clear area to front of Transformer Doors at least as wide as the doors and 10 feet deep.
2. Use Bollard where vehicles could be close to Transformer Pad, i.e., parking lots, loading areas, driveways, etc.
3. Minimum Easement width for an AEP Primary run is 10 feet.
4. Minimum Easement width for an AEP Single Phase Transformer Pad is 10 feet by 10 feet.
5. Easements above are required to be surveyed by Certified Surveyor; Metes & Bounds description of the Easement Area must accompany these.

① SINGLE PHASE PAD MOUNTED TRANSFORMER DETAILS
N.T.S.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL AEP DETAILS

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9197
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

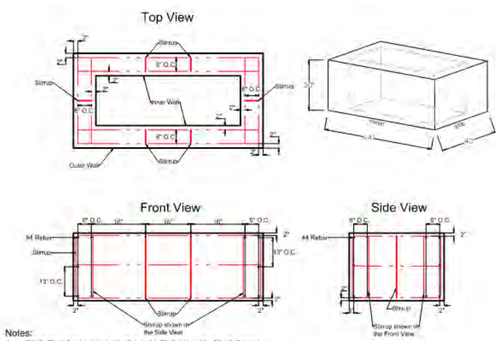
Seal



06/04/2025

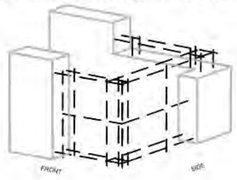
Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	N.T.S.

Sheet No:
E501

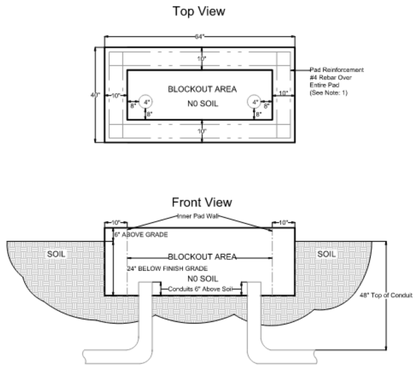


Notes:

1. Slab Reinforcement shall be #4 Rebars with 2" of Cover.
   Reinforcing Bars shall conform to ASTM A615 Grade 60.
   Concrete shall have a Minimum Compressive Strength 0f 4000 PSI after 28 days.
2. Final Grade shall be established before installation of Pad.
3. Outside Walls shall have 3 sections of #4 Rebar going parallel to the ground, and the Inner Wall will have 2 secti
   #4 Rebar going parallel to the wall.
4. Stirrups will also be #4 Rebar, and must set 2" chairs on the ground to hold up the form.

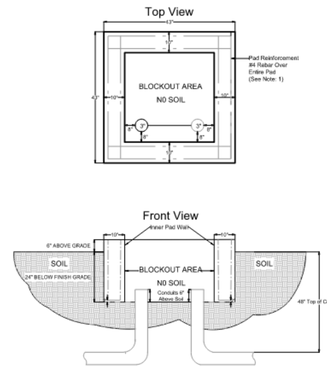


① THREE PHASE ENCLOSURE BLOCKOUT DETAIL
N.T.S.



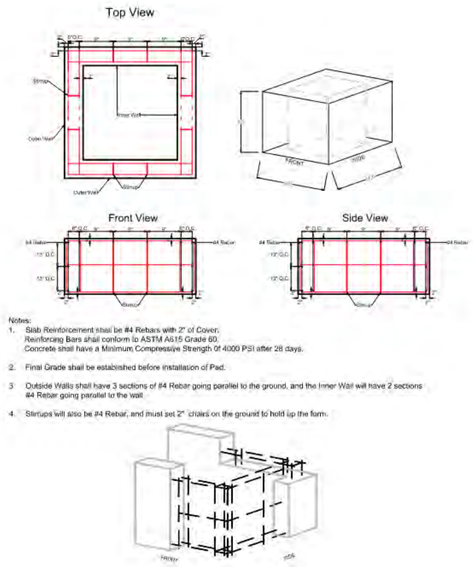
Notes:

1. Slab Reinforcement shall be #4 Rebars with 2" of Cover.
   Reinforcing Bars shall conform to ASTM A615 Grade 60.
   Concrete shall have a Minimum Compressive Strength 0f 4000 PSI after 28 days.
2. Final Grade shall be established before installation of Pad.
3. The number and placements of Primary Conduits to be determined by AEP Engineering.
   Conduit may extend in any direction as required by the Customer.
4. Burial depth for Grey Electrical PVC Conduit is defined as the distance between Final Grade and the top of the Conduit. Unless otherwise designated by AEP Engineering, Conduits shall be installed at a Burial Depth of not less than 4'-0". These initial depths are to allow for changes to the Surface Conditions. Local Agreements and Codes may require additional depth.
5. If there are known extensive changes to the Final Grade such that their depths are not maintained, the company will require corrective action to be taken.



Notes:

1. Slab Reinforcement shall be #4 Rebars with 2" of Cover.
   Reinforcing Bars shall conform to ASTM A615 Grade 60.
   Concrete shall have a Minimum Compressive Strength 0f 4000 PSI after 28 days.
2. Final Grade shall be established before installation of Pad.
3. The number and placements of Primary Conduits to be determined by AEP Engineering.
   Conduit may extend in any direction as required by the Customer.
4. Burial depth for Grey Electrical PVC Conduit is defined as the distance between Final Grade and the top of the Conduit. Unless otherwise designated by AEP Engineering, Conduits shall be installed at a Burial Depth of not less than 4'-0". These initial depths are to allow for changes to the Surface Conditions. Local Agreements and Codes may require additional depth.
5. If there are known extensive changes to the Final Grade such that their depths are not maintained, the company will require corrective action to be taken.

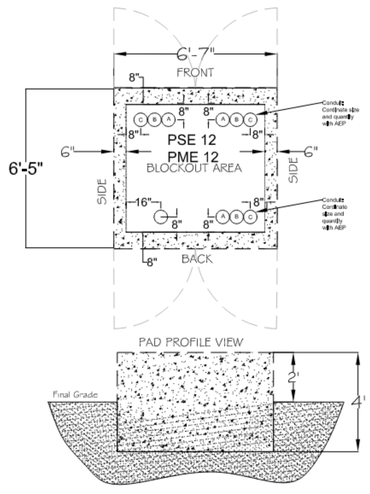


Notes:

1. Slab Reinforcement shall be #4 Rebars with 2" of Cover.
   Reinforcing Bars shall conform to ASTM A615 Grade 60.
   Concrete shall have a Minimum Compressive Strength 0f 4000 PSI after 28 days.
2. Final Grade shall be established before installation of Pad.
3. Outside Walls shall have 3 sections of #4 Rebar going parallel to the ground, and the Inner Wall will have 2 sections #4 Rebar going parallel to the wall.
4. Stirrups will also be #4 Rebar, and must set 2" chairs on the ground to hold up the form.

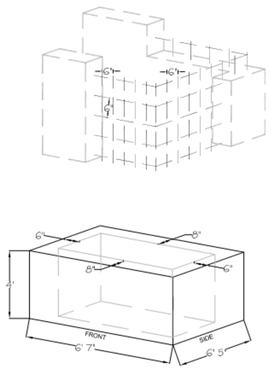
③ SINGLE PHASE ENCLOSURE BLOCKOUT DETAIL
N.T.S.

PSE 12 - PME 12 [Coastal Area]
Switchgear Dead Front Pad Specs
Federal Pacific / S&C



② AEP SWITCHGEAR PAD DETAIL
N.T.S.

Switchgear Dead Front Pad Specs
Federal Pacific & S&C



Notes:

1. The number of conduits and placement to be determined by engineering.
2. Reinforcing wire to cover entire pad and be centered in concrete
3. Final Grade shall be established before installation of pad
4. In order to achieve cable flexibility conduit extending into concrete box is to be cut as shown.
5. Primary conduit number, size, location and direction to be specified by engineering conduit with 90, 36 inch radius bends to avoid disturbing the ground under the rear of the pad and to mmimze settling, bring conduits to the front or sides whenever possible and mark the conduit end locations.
6. Burial depth is defined as the distance between final grade and the top of the buried cable or conduit. Primary cables shall be installed at a burial depth of not less than 4'-0".
7. Final pad installation shall be level as measured by carpenter's level for all directions
8. For guard post locations, refer to D.5.2050
9. All rebars are size #3 centered in concrete. Horizontal and Vertical rebars to be placed on 6" centers. All concrete to be at least 3,000 PSI strength with slump range of 4" to 5". All reinforcing shall be ASTM A615 Grade 60.

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
ELECTRICAL AEP DETAILS

Key Plan

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9178
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84531
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	N.T.S.

Sheet No:
E502

RFP #250502

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: PCVD | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "PCV"	300/2	92,360	2	RV SLIPS: C092, C099, C100,	100/2	23,040
3				4			
5	RV SLIPS: C101, C102, C103	100/2	23,040	6	RV SLIPS: C093, C094, C095	100/2	23,040
7				8			
9	RV SLIPS: C096, C097, C098	100/2	23,040	10	RV SLIPS: C089, C090, C091	100/2	23,040
11				12			
13	RV SLIPS: C085, C086, C087	100/2	23,040	14	RV SLIP: C088	50/2	9,600
15				16			
17	GFCI RECEPTACLE	20/1	200	18	RV SLIPS: C243, C244, C245	100/2	23,040
19	SPARE	20/1		20			
21	SPD DEVICE	60/2		22	SPACE		
23				24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		161,680		SUBTOTAL		101,760
					TOTAL LOAD		263,440

TOTAL CONNECTED LOAD (VA) 263,440
DEMAND LOAD (VA) 137,288
AMPACITY DEMAND 572.0 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: PCV | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C364, C365, C366	100/2	23,040	2	RV SLIPS: C324, C325, C367	100/2	23,040
3				4			
5	RV SLIPS: C283, C322, C323	100/2	23,040	6	RV SLIPS: C284, C285, C286	100/2	23,040
7				8			
9	GFCI RECEPTACLE	20/1	200	10	SPARE	20/1	
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,280		SUBTOTAL		46,080
					TOTAL LOAD		92,360

TOTAL CONNECTED LOAD (VA) 92,360
DEMAND LOAD (VA) 57,800
AMPACITY DEMAND 240.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CV1D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "CV1"	400/2	109,640	2	RV SLIPS: C117, C118, C119	100/2	23,040
3				4			
5	RV SLIPS: C216, C216B, C217B	100/2	23,040	6	RV SLIPS: C250, C251, C252	100/2	23,040
7				8			
9	RV SLIPS: C246, C247, C248	100/2	23,040	10	RV SLIPS: C291, C292, C293	100/2	23,040
11				12			
13	RV SLIPS: C287, C288, C289	100/2	23,040	14	RV SLIPS: C249, C290	80/2	17,280
15				16			
17	SPARE	20/1		18	GFI RECEPTACLE	20/1	200
19	SPD DEVICE	60/2		20	SPACE		
21				22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		178,760		SUBTOTAL		86,600
					TOTAL LOAD		265,360

TOTAL CONNECTED LOAD (VA) 265,360
DEMAND LOAD (VA) 137,488
AMPACITY DEMAND 572.9 A

PANELBOARD SCHEDULE

JOB: 24156 | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: CV1 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C368, C369, C370	100/2	23,040	2	RV SLIPS: C372, C373, C374	100/2	23,040
3				4			
5	RV SLIPS: C326, C327, C328	100/2	23,040	6	RV SLIPS: C330, C331, C332	100/2	23,040
7				8			
9	RV SLIPS: C329, C371	80/2	17,280	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		63,360		SUBTOTAL		46,280
					TOTAL LOAD		109,640

TOTAL CONNECTED LOAD (VA) 109,640
DEMAND LOAD (VA) 64,712
AMPACITY DEMAND 269.6 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CV2D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "CV2"	400/2	109,640	2	RV SLIPS: C223, C224, C225	100/2	23,040
3				4			
5	RV SLIPS: C220, C221, C222	100/2	23,040	6	RV SLIPS: C257, C258, C259	100/2	23,040
7				8			
9	RV SLIPS: C253, C254, C255	100/2	23,040	10	RV SLIPS: C298, C299, C300	100/2	23,040
11				12			
13	RV SLIPS: C294, C295, C296	100/2	23,040	14	RV SLIPS: C256, C297	80/2	17,280
15				16			
17	SPARE	20/1		18	GFI RECEPTACLE	20/1	200
19	SPD DEVICE	60/2		20	SPACE		
21				22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		178,760		SUBTOTAL		86,600
					TOTAL LOAD		265,360

TOTAL CONNECTED LOAD (VA) 265,360
DEMAND LOAD (VA) 137,488
AMPACITY DEMAND 572.9 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: CV2 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C375, C376, C377	100/2	23,040	2	RV SLIPS: C379, C380, C381	100/2	23,040
3				4			
5	RV SLIPS: C333, C334, C335	100/2	23,040	6	RV SLIPS: C337, C338, C339	100/2	23,040
7				8			
9	RV SLIPS: C336, C378	80/2	17,280	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		63,360		SUBTOTAL		46,280
					TOTAL LOAD		109,640

TOTAL CONNECTED LOAD (VA) 109,640
DEMAND LOAD (VA) 64,712
AMPACITY DEMAND 269.6 A

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
PANELBOARD SCHEDULES

Key Plan

Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84331
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	

Sheet No:
E600

SHEET NO. 94

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CV3D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "CV3"	400/2	109,640	2	EXISTING PANEL "CVR" (RESTROOM BUILDING)	100/2	16,200
3				4			
5	RV SLIPS: C226, C227	80/2	23,040	6	RV SLIPS: C228, C229, C230	100/2	23,040
7				8			
9	RV SLIPS: C260, C261, C262	100/2	23,040	10	RV SLIPS: C263, C264, C265	100/2	23,040
11				12			
13	RV SLIPS: C301, C302	80/2	17,280	14	RV SLIPS: C303, C304, C305	100/2	23,040
15				16			
17	GFI RECEPTACLE	20/1	200	18	RV SLIPS: C343, C344	80/2	17,280
19	SPARE	20/1		20			
21	SPD DEVICE	60/2		22	SPACE		
23				24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		173,200		SUBTOTAL		102,600
					TOTAL LOAD		275,800

TOTAL CONNECTED LOAD (VA) 275,800
DEMAND LOAD (VA) 145,624
AMPACITY DEMAND 606.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: CV3 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C382, C383, C384	100/2	23,040	2	RV SLIPS: C387, C388, C389	100/2	23,040
3				4			
5	RV SLIPS: C340, C341, C342	100/2	23,040	6	RV SLIPS: C345, C346, C347	100/2	23,040
7				8			
9	RV SLIPS: C385, C386	80/2	17,280	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		63,360		SUBTOTAL		46,280
					TOTAL LOAD		109,640

TOTAL CONNECTED LOAD (VA) 109,640
DEMAND LOAD (VA) 64,712
AMPACITY DEMAND 269.6 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCE RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CV4D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "CV4"	400/2	109,640	2	RV SLIPS: C234, C235, C236	100/2	23,040
3				4			
5	RV SLIPS: C231, C232, C233	100/2	23,040	6	RV SLIPS: C270, C271, C272	100/2	23,040
7				8			
9	RV SLIPS: C266, C267, C268	100/2	23,040	10	RV SLIPS: C310, C311, C312	100/2	23,040
11				12			
13	RV SLIPS: C306, C307, C308	100/2	23,040	14	RV SLIPS: C269, C309	80/2	17,280
15				16			
17	SPARE	20/1		18	GFI RECEPTACLE	20/1	200
19	SPD DEVICE	60/2		20	SPACE		
21				22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		178,760		SUBTOTAL		86,600
					TOTAL LOAD		265,360

TOTAL CONNECTED LOAD (VA) 265,360
DEMAND LOAD (VA) 137,488
AMPACITY DEMAND 572.9 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: CV4 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C390, C391, C392	100/2	23,040	2	RV SLIPS: C394, C395, C396	100/2	23,040
3				4			
5	RV SLIPS: C348, C349, C350	100/2	23,040	6	RV SLIPS: C352, C353, C354	100/2	23,040
7				8			
9	RV SLIPS: C393, C351	80/2	17,280	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		63,360		SUBTOTAL		46,280
					TOTAL LOAD		109,640

TOTAL CONNECTED LOAD (VA) 109,640
DEMAND LOAD (VA) 64,712
AMPACITY DEMAND 269.6 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CV5D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "CV5"	400/2	115,400	2	RV SLIPS: C240, C241	80/2	17,280
3				4			
5	RV SLIPS: C237, C238, C239	100/2	23,040	6	RV SLIPS: C277, C278, C279	100/2	23,040
7				8			
9	RV SLIPS: C273, C274, C275	100/2	23,040	10	RV SLIPS: C280, C281, C282	100/2	23,040
11				12			
13	RV SLIPS: C313, C314, C315	100/2	23,040	14	RV SLIPS: C276, C316	80/2	17,280
15				16			
17	SPARE	20/1		18	GFI RECEPTACLE	20/1	200
19	SPD DEVICE	60/2		20	SPACE		
21				22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		184,520		SUBTOTAL		80,840
					TOTAL LOAD		265,360

TOTAL CONNECTED LOAD (VA) 265,360
DEMAND LOAD (VA) 137,488
AMPACITY DEMAND 572.9 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: CV5 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C357, C358, C359	100/2	23,040	2	RV SLIPS: C361, C362, C363	100/2	23,040
3				4			
5	RV SLIPS: C355, C356, C396	100/2	23,040	6	RV SLIPS: C319, C320, C321	100/2	23,040
7				8			
9	RV SLIPS: C317, C318, C360	100/2	23,040	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		69,120		SUBTOTAL		46,280
					TOTAL LOAD		115,400

TOTAL CONNECTED LOAD (VA) 115,400
DEMAND LOAD (VA) 69,320
AMPACITY DEMAND 288.8 A

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
PANELBOARD SCHEDULES

Key Plan:

Firm Address and Name:
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal:
STATE OF TEXAS
SCOTT E. STRIDDE
84331
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	

Sheet No:
E601

RFP # 250502

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 250 [A]

PANEL: CV6D | SPECIAL FEATURES: SQAURE D NQ N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C400, C401, C402	100/2	23,040	2	RV SLIPS: C397, C398, C399	100/2	23,040
3				4			
5	RV SLIPS: C404, C405, C406	100/2	23,040	6	RV SLIPS: C403	50/2	9,600
7				8			
9	SPARE	20/1		10	GFI RECEPTACLE	20/1	200
11	SPD DEVICE	60/2		12	SPACE		
13				14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,080		SUBTOTAL		32,840
					TOTAL LOAD		78,920

TOTAL CONNECTED LOAD (VA) 78,920
DEMAND LOAD (VA) 48,200
AMPACITY DEMAND 200.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CT1D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "C1"	400/2	109,640	2	RV SLIPS: C156, C157, C158	100/2	23,040
3				4			
5	RV SLIPS: C179, C180, C181	100/2	23,040	6	RV SLIPS: C159, C160	80/2	17,280
7				8			
9	RV SLIPS: C182, C183, C184	100/2	23,040	10	RV SLIPS: C161, C162, C163	100/2	23,040
11				12			
13	RV SLIPS: C176, C177, C178	100/2	23,040	14	RV SLIPS: C174B, C174, C175	100/2	23,040
15				16			
17	SPARE	20/1		18	GFI RECEPTACLE	20/1	200
19	SPD DEVICE	60/2		20	SPACE		
21				22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		178,760		SUBTOTAL		86,600
					TOTAL LOAD		265,360

TOTAL CONNECTED LOAD (VA) 265,360
DEMAND LOAD (VA) 137,488
AMPACITY DEMAND 572.9 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CT2D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "C2"	400/2	78,920	2	EXISTING PANEL "T2R" (RESTROOM BUILDING)	100/2	16,200
3				4			
5	RV SLIPS: C190, C191, C192	100/2	23,040	6	RV SLIPS: C165, C166, C167	100/2	23,040
7				8			
9	RV SLIPS: C193, C194	80/2	17,280	10	RV SLIPS: C168, C169, C170	100/2	23,040
11				12			
13	RV SLIPS: C187, C188, C189	100/2	23,040	14	RV SLIPS: C171, C172, C173	100/2	23,040
15				16			
17	GFI RECEPTACLE	20/1	200	18	RV SLIPS: C164, C185, C186	100/2	23,040
19	SPARE	20/1		20			
21	SPD DEVICE	60/2		22	SPACE		
23				24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		142,480		SUBTOTAL		108,360
					TOTAL LOAD		250,840

TOTAL CONNECTED LOAD (VA) 250,840
DEMAND LOAD (VA) 149,656
AMPACITY DEMAND 623.6 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: DTPD | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "P"	500/2	165,080	2	RV SLIPS: C136, C137, C138	100/2	23,040
3				4			
5	RV SLIPS: C133, C134, C135	100/2	23,040	6	RV SLIPS: C120, C121, C122	100/2	23,040
7				8			
9	RV SLIPS: C132, C155, C155B	100/2	23,040	10	RV SLIPS: C416, C417, C418	100/2	23,040
11				12			
13	SPARE	20/1		14	GFI RECEPTACLE	20/1	200
15	SPD DEVICE	60/2		16	SPACE		
17				18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		211,160		SUBTOTAL		69,320
					TOTAL LOAD		280,480

TOTAL CONNECTED LOAD (VA) 280,480
DEMAND LOAD (VA) 137,488
AMPACITY DEMAND 572.9 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: C1 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C198, C199, C200	100/2	23,040	2	RV SLIPS: C201, C202	80/2	17,280
3				4			
5	RV SLIPS: C195, C196, C197	100/2	23,040	6	RV SLIPS: C203, C204, C205	100/2	23,040
7				8			
9	RV SLIPS: C195D, C195C, C195B	100/2	23,040	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		69,120		SUBTOTAL		40,520
					TOTAL LOAD		109,640

TOTAL CONNECTED LOAD (VA) 109,640
DEMAND LOAD (VA) 64,712
AMPACITY DEMAND 269.6 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: C2 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C209, C210, C211	100/2	23,040	2	RV SLIP: C212	50/2	9,600
3				4			
5	RV SLIPS: C206, C207, C208	100/2	23,040	6	RV SLIPS: C213, C214, C215	100/2	23,040
7				8			
9	SPARE	20/1		10	GFI RECEPTACLE	20/1	200
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,080		SUBTOTAL		32,840
					TOTAL LOAD		78,920

TOTAL CONNECTED LOAD (VA) 78,920
DEMAND LOAD (VA) 60,104
AMPACITY DEMAND 250.4 A

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
PANELBOARD SCHEDULES

Key Plan

Firm Address and Name
STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9122
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84931
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.	24156
Date Drwn.	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	

Sheet No:
E602

SHEET NO. 96

RFP #250502

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: DT1D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "D1"	300/2	86,600	2	RV SLIP: C129, C130	80/2	17,280
3				4			
5	RV SLIPS: C142, C143, C144	100/2	23,040	6	RV SLIPS: C126, C127, C128	100/2	23,040
7				8			
9	RV SLIPS: C145, C146, C147	100/2	23,040	10	RV SLIPS: C123, C124, C125	100/2	23,040
11				12			
13	RV SLIPS: C139, C140, C141	100/2	17,280	14	RV SLIPS: C119, C131, C131A	100/2	23,040
15				16			
17	GFI RECEPTACLE	20/1	200	18	RV SLIPS: C116, C117, C118	100/2	23,040
19	SPARE	20/1		20			
21	SPD DEVICE	60/2		22	SPACE		
23				24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		150,160		SUBTOTAL		109,440
					TOTAL LOAD		259,600

TOTAL CONNECTED LOAD (VA) 259,600
DEMAND LOAD (VA) 137,488
AMPACITY DEMAND 572.9 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: D1 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: D04, D05, D06	100/2	23,040	2	RV SLIPS: D07, D08	80/2	17,280
3				4			
5	RV SLIPS: D01, D02, D03	100/2	23,040	6	RV SLIPS: D09, D10, D10A	100/2	23,040
7				8			
9	SPARE	20/1		10	GFI RECEPTACLE	20/1	200
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,080		SUBTOTAL		40,520
					TOTAL LOAD		86,600

TOTAL CONNECTED LOAD (VA) 86,600
DEMAND LOAD (VA) 53,000
AMPACITY DEMAND 220.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: DT2D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "D2"	400/2	109,640	2	RV SLIPS: C107, C108, C109	100/2	23,040
3				4			
5	RV SLIPS: C110, C111, C112	100/2	23,040	6	RV SLIPS: C104, C105, C106	100/2	23,040
7				8			
9	RV SLIPS: C148, C149, C150	100/2	23,040	10	RV SLIPS: C113, C114, C115	100/2	23,040
11				12			
13	GFI RECEPTACLE	20/1	200	14	RV SLIPS: C151, C152, C153	100/2	23,040
15	SPARE	20/1		16			
17	SPD DEVICE	60/2		18	SPACE		
19				20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		155,920		SUBTOTAL		92,160
					TOTAL LOAD		248,080

TOTAL CONNECTED LOAD (VA) 248,080
DEMAND LOAD (VA) 129,424
AMPACITY DEMAND 539.3 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: D2 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: D14, D15, D16	100/2	23,040	2	RV SLIPS: D36, D37	80/2	17,280
3				4			
5	RV SLIPS: D11, D12, D13	100/2	23,040	6	RV SLIPS: D38, D39, D40	100/2	23,040
7				8			
9	RV SLIPS: D33, D34, D35	100/2	23,040	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		69,120		SUBTOTAL		40,520
					TOTAL LOAD		109,640

TOTAL CONNECTED LOAD (VA) 109,640
DEMAND LOAD (VA) 64,712
AMPACITY DEMAND 269.6 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 600 [A]

PANEL: DT3D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "D3"	200/2	46,280	2	RV SLIPS: D27, D28, D29	100/2	23,040
3				4			
5	RV SLIPS: D20, D21, D22	100/2	23,040	6	RV SLIPS: D30, D31, D32	100/2	23,040
7				8			
9	RV SLIPS: D17, D18, D19	100/2	23,040	10	RV SLIPS: D24, D25, D26	100/2	23,040
11				12			
13	GFI RECEPTACLE	20/1	200	14	RV SLIPS: D23	50/2	9,600
15	SPARE	20/1		16			
17	SPD DEVICE	60/2		18	SPACE		
19				20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		92,560		SUBTOTAL		78,720
					TOTAL LOAD		171,280

TOTAL CONNECTED LOAD (VA) 171,280
DEMAND LOAD (VA) 91,216
AMPACITY DEMAND 380.1 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 225 [A]

PANEL: D3 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C154, C472, C473	100/2	23,040	2	RV SLIPS: C469, C470, C471	100/2	23,040
3				4			
5	SPARE	20/1		6	GFI RECEPTACLE	20/1	200
7	SPACE			8	SPACE		
9	SPACE			10	SPACE		
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		23,040		SUBTOTAL		23,240
					TOTAL LOAD		46,280

TOTAL CONNECTED LOAD (VA) 46,280
DEMAND LOAD (VA) 34,760
AMPACITY DEMAND 144.8 A

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
PANELBOARD SCHEDULES

Key Plan

Firm Address and Name
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CONSULTING ENGINEERS
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342 S. Navigation Blvd.
Corpus Christi, TX 78405-3615
Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	

Sheet No:
E603

SHEET NO. 97

RFP #250502

PANELBOARD SCHEDULE

JOB: ISLA BLANCE RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: P1D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "P1"	250/2	69,320	2	EXISTING PANEL "P1R" (RESTROOM BUILDING)	150/2	28,000
3				4			
5	RV SLIPS: C080, C081	80/2	17,280	6	RV SLIPS: C070, C071, C072	100/2	23,040
7				8			
9	RV SLIPS: C077, C078, C079	100/2	23,040	10	RV SLIPS: C067, C068, C069	100/2	23,040
11				12			
13	RV SLIPS: C075, C076, C084	100/2	23,040	14	RV SLIPS: C058, C059, C060	100/2	23,040
15				16			
17	RV SLIPS: C073, C082, C083	100/2	23,040	18	RV SLIPS: C061, C062, C063	100/2	23,040
19				20			
21	SPARE	20/1		22	GFI RECEPTACLE	20/1	200
23	SPD DEVICE	60/2		24	SPACE		
25				26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		155,720		SUBTOTAL		120,360
					TOTAL LOAD		276,080

TOTAL CONNECTED LOAD (VA) 276,080
DEMAND LOAD (VA) 157,424
AMPACITY DEMAND 655.9 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: P1 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C035, C036, C057	100/2	23,040	2	RV SLIPS: C032, C033, C034	100/2	23,040
3				4			
5	RV SLIPS: C030, C031, C056	100/2	23,040	6	GFI RECEPTACLE	20/1	200
7				8	SPARE	20/1	
9	SPACE			10	SPACE		
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,080		SUBTOTAL		23,240
					TOTAL LOAD		69,320

TOTAL CONNECTED LOAD (VA) 69,320
DEMAND LOAD (VA) 47,720
AMPACITY DEMAND 198.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 600 [A]

PANEL: P2D | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "P2"	250/2	69,320	2	RV SLIPS: C018, C020	80/2	17,280
3				4			
5	RV SLIPS: C046, C047, C048	100/2	23,040	6	RV SLIPS: C021, C022, C023	100/2	23,040
7				8			
9	RV SLIPS: C043, C044, C045	100/2	23,040	10	RV SLIPS: C040, C041, C042	100/2	23,040
11				12			
13	GFI RECEPTACLE	20/1	200	14	RV SLIPS: C049, C050, C051	100/2	23,040
15	SPARE	20/1		16			
17	SPD DEVICE	60/2		18	SPACE		
19				20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		115,600		SUBTOTAL		86,400
					TOTAL LOAD		202,000

TOTAL CONNECTED LOAD (VA) 202,000
DEMAND LOAD (VA) 105,232
AMPACITY DEMAND 438.5 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: P2 | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C015, C016, C017	100/2	23,040	2	RV SLIPS: C012, C013, C014	100/2	23,040
3				4			
5	RV SLIPS: C037, C038, C039	100/2	23,040	6	GFI RECEPTACLE	20/1	200
7				8	SPARE	20/1	
9	SPACE			10	SPACE		
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,080		SUBTOTAL		23,240
					TOTAL LOAD		69,320

TOTAL CONNECTED LOAD (VA) 69,320
DEMAND LOAD (VA) 47,720
AMPACITY DEMAND 198.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 600 [A]

PANEL: P | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C053, C054, C055	100/2	23,040	2	RV SLIPS: C027, C028, C029	100/2	23,040
3				4			
5	RV SLIPS: C052, C065, C066	100/2	23,040	6	RV SLIPS: C024, C025, C026	100/2	23,040
7				8			
9	RV SLIPS: C064, C074	80/2	17,280	10	RV SLIPS: C411, C412	80/2	17,280
11				12			
13	GFI RECEPTACLE	20/1	200	14	RV SLIPS: C413, C414, C415	100/2	15,120
15	SPARE	20/1		16			
17	SPACE			18	SPACE		23,040
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		63,560		SUBTOTAL		101,520
					TOTAL LOAD		165,080

TOTAL CONNECTED LOAD (VA) 165,080
DEMAND LOAD (VA) 82,280
AMPACITY DEMAND 342.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 500 [A]

PANEL: POFD | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C010, C011, C408	100/2	23,040	2	RV SLIPS: B057, C409, C410	100/2	23,040
3				4			
5	RV SLIPS: C007, C008, C009	100/2	23,040	6	RV SLIPS: B058, B059, B060	100/2	23,040
7				8			
9	RV SLIPS: C004, C005, C006	100/2	23,040	10	RV SLIPS: C001, C002, C003	100/2	23,040
11				12			
13	SPARE	20/1		14	GFI RECEPTACLE	20/1	200
15	SPD DEVICE	60/2		16	SPACE		
17				18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		69,120		SUBTOTAL		69,320
					TOTAL LOAD		138,440

TOTAL CONNECTED LOAD (VA) 138,440
DEMAND LOAD (VA) 81,416
AMPACITY DEMAND 339.2 A

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
PANELBOARD SCHEDULES

Key Plan

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Seal
STATE OF TEXAS
SCOTT E. STRIDDE
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LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	

Sheet No:
E604

SHEET NO. 98

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: OFD | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: S04, S05, S06	100/2	23,040	2	RV SLIPS: B049, B050, B066	100/2	23,040
3				4			
5	RV SLIPS: S01, S02, S10	100/2	23,040	6	RV SLIPS: B048, B064, B065	100/2	23,040
7				8			
9	RV SLIPS: S07, S08, S09	100/2	23,040	10	RV SLIPS: B046, B047, B063	100/2	23,040
11				12			
13	RV SLIPS: B051, B052, B067	100/2	23,040	14	RV SLIPS: B044, B045, B062	100/2	23,040
15				16			
17	RV SLIPS: B053, B054, B068	100/2	23,040	18	RV SLIPS: B043, B061	80/2	17,280
19				20			
21	RV SLIPS: B055, B056, B069	100/2	23,040	22	RV SLIPS: B070	50/2	9,600
23				24			
25	SPARE	20/1		26	GFI RECEPTACLE	20/1	200
27	SPD DEVICE	60/2		28	SPACE		
29				30	SPACE		
	SUBTOTAL		138,240		SUBTOTAL		119,240
					TOTAL LOAD		257,480

TOTAL CONNECTED LOAD (VA) 257,480
DEMAND LOAD (VA) 133,256
AMPACITY DEMAND 555.2 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 600 [A]

PANEL: HPD | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "HP"	400/2	115,400	2	RV SLIPS: S041, S044, S045	100/2	23,040
3				4			
5	RV SLIPS: S042, S043	80/2	17,280	6	RV SLIPS: S039, S040, S046	100/2	23,040
7				8			
9	GFI RECEPTACLE	20/1	200	10	RV SLIPS: S038, S047, S048	100/2	23,040
11	SPD DEVICE	60/2		12			
13				14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		132,880		SUBTOTAL		69,120
					TOTAL LOAD		202,000

TOTAL CONNECTED LOAD (VA) 202,000
DEMAND LOAD (VA) 105,232
AMPACITY DEMAND 438.5 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: BREAKER | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 800 [A]

PANEL: CID | SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL "CI"	300/2	92,360	2	EXISTING PANEL "CIR" (RESTROOM BUILDING)	100/2	16,200
3				4			
5	RV SLIPS: C425, C426, C427	100/2	23,040	6	RV SLIPS: C443, C447, C448	100/2	23,040
7				8			
9	RV SLIPS: C422, C423, C424	100/2	23,040	10	RV SLIPS: C444, C445, C446	100/2	23,040
11				12			
13	RV SLIPS: C419, C420, C421	100/2	23,040	14	RV SLIPS: C449, C450, C451	100/2	23,040
15				16			
17	GFI RECEPTACLE	20/1	200	18	RV SLIPS: C428, C429	80/2	17,280
19	SPARE	20/1		20			
21	SPD DEVICE	60/2		22	SPACE		
23				24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		161,680		SUBTOTAL		102,600
					TOTAL LOAD		264,280

TOTAL CONNECTED LOAD (VA) 264,280
DEMAND LOAD (VA) 145,624
AMPACITY DEMAND 606.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: HP | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: S052, S053, S054	100/2	23,040	2	RV SLIPS: S055, S056, S057	100/2	23,040
3				4			
5	RV SLIPS: S035, S050, S051	100/2	23,040	6	RV SLIPS: S058, S059, S060	100/2	23,040
7				8			
9	RV SLIPS: S036, S037, S049	100/2	23,040	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		69,120		SUBTOTAL		46,280
					TOTAL LOAD		115,400

TOTAL CONNECTED LOAD (VA) 115,400
DEMAND LOAD (VA) 69,320
AMPACITY DEMAND 288.8 A

PANELBOARD SCHEDULE

JOB: ISLA BLACNA RV PARK | CABINET: SURFACE | MAINS: LUGS | VOLTAGE: 120/240 | SINGLE PHASE | CAPACITY: 400 [A]

PANEL: CI | SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: C438, C439, C440	100/2	23,040	2	RV SLIPS: C452, C453, C454	100/2	23,040
3				4			
5	RV SLIPS: C436, C437, S14	100/2	23,040	6	RV SLIPS: C455, C456, C457	100/2	23,040
7				8			
9	SPARE	20/1		10	GFI RECEPTACLE	20/1	200
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,080		SUBTOTAL		46,280
					TOTAL LOAD		92,360

TOTAL CONNECTED LOAD (VA) 92,360
DEMAND LOAD (VA) 57,800
AMPACITY DEMAND 240.8 A

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
PANELBOARD SCHEDULES

Key Plan:

Firm Address and Name:
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342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

Seal:
STATE OF TEXAS
SCOTT E. STRIDDE
84531
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	

Sheet No:
E605

REP # 250502

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK CABINET: SURFACE MAINS: BREAKER VOLTAGE: 120/240 SINGLE PHASE CAPACITY: 500 [A]

PANEL: ID SPECIAL FEATURES: SQAURE D I-LINE HCP N-4X S/S ENCLOSED

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	PANEL"I"	250/2	69,320	2	RV SLIPS: S029, S028, S027	100/2	23,040
3				4			
5	RV SLIPS: S033, S034	80/2	17,280	6	RV SLIPS: S026, S025, S024	100/2	23,040
7				8			
9	RV SLIPS: S032, S031, S030	100/2	23,040	10	GFI RECEPTACLE	20/1	200
11				12	SPARE	20/1	
13	SPD DEVICE	60/2		14	SPACE		
15				16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		109,640		SUBTOTAL		46,280
					TOTAL LOAD		155,920

TOTAL CONNECTED LOAD (VA) 155,920
DEMAND LOAD (VA) 86,800
AMPACITY DEMAND 361.7 A

PANELBOARD SCHEDULE

JOB: ISLA BLANCA RV PARK CABINET: SURFACE MAINS: LUGS VOLTAGE: 120/240 SINGLE PHASE CAPACITY: 400 [A]

PANEL: I SPECIAL FEATURES: SQAURE D NQ N-4X S/S

CKT	LOAD	C/B	LEFT PHASE LOAD	CKT	LOAD	C/B	RIGHT PHASE LOAD
1	RV SLIPS: S018, S019, S020	100/2	23,040	2	RV SLIPS: S015, S016, S017	100/2	23,040
3				4			
5	RV SLIPS: S021, S022, S023	100/2	23,040	6	GFI RECEPTACLE	20/1	200
7				8	SPARE	20/1	
9	SPACE			10	SPACE		
11	SPACE			12	SPACE		
13	SPACE			14	SPACE		
15	SPACE			16	SPACE		
17	SPACE			18	SPACE		
19	SPACE			20	SPACE		
21	SPACE			22	SPACE		
23	SPACE			24	SPACE		
25	SPACE			26	SPACE		
27	SPACE			28	SPACE		
29	SPACE			30	SPACE		
	SUBTOTAL		46,080		SUBTOTAL		23,240
					TOTAL LOAD		69,320

TOTAL CONNECTED LOAD (VA) 69,320
DEMAND LOAD (VA) 47,720
AMPACITY DEMAND 198.8 A

NO	REVISION	DATE

Project Name and Address:
ISLA BLANCA RV PARK RENOVATION
33174 STATE PARK RD 100, SOUTH PADRE ISLAND, TX 78597

Sheet Title:
PANELBOARD SCHEDULES

Key Plan

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Registration # F-006328

Seal
STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER
06/04/2025

Project No.:	24156
Date Drwn.:	06/04/2025
Drwn. By:	B.T.
Chkd. By:	S.S.
Scale:	

Sheet No:
E606

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DATE:
FILE:

BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).

2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.

3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.

4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.

5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.

6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.

7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.

8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.

10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.

11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.

12. The Engineer has the final decision on the location of all traffic control devices.

13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.

2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.

2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

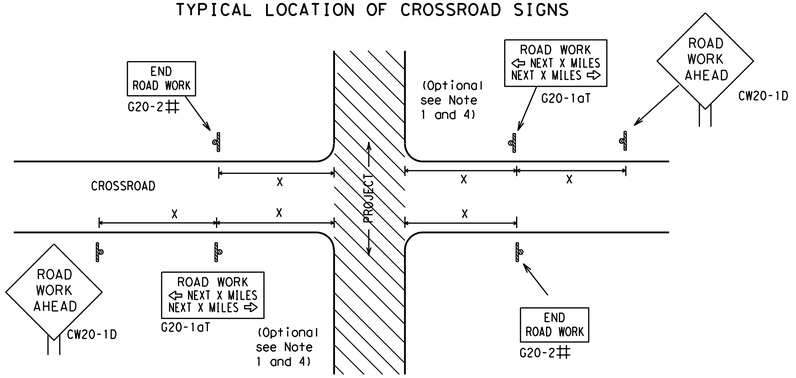
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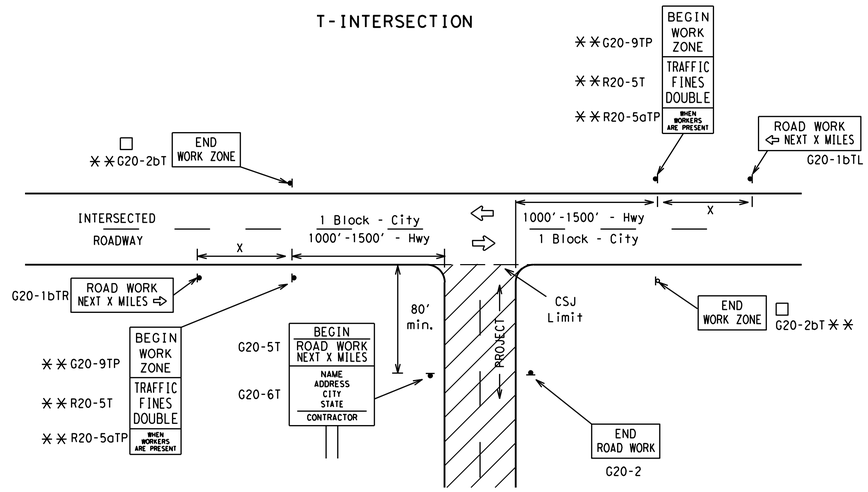
TYPICAL LOCATION OF CROSSROAD SIGNS



May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume as per TMUTCD Part 5. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection, the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING[1,5,6]

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign △ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
70	800[2]
75	900[2]
80	1000[2]
✳	✳[3]

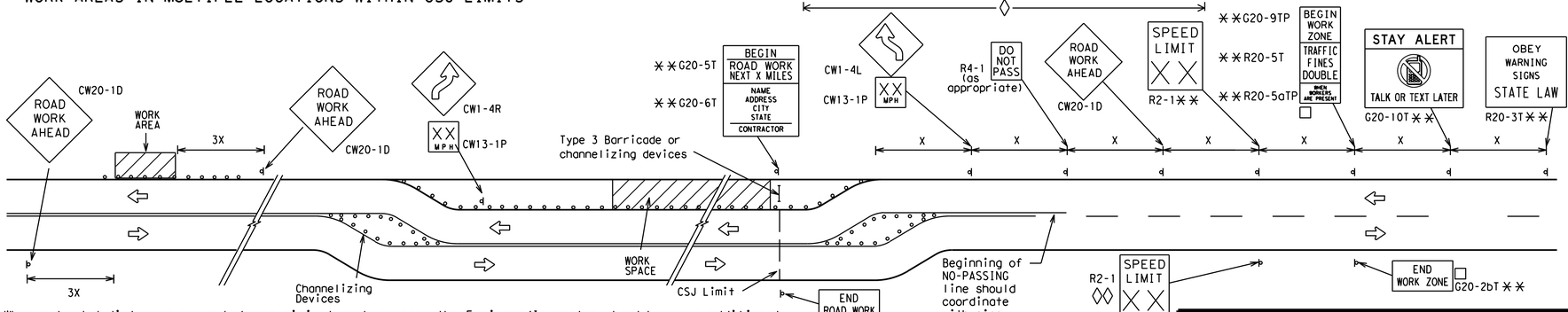
✳ For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

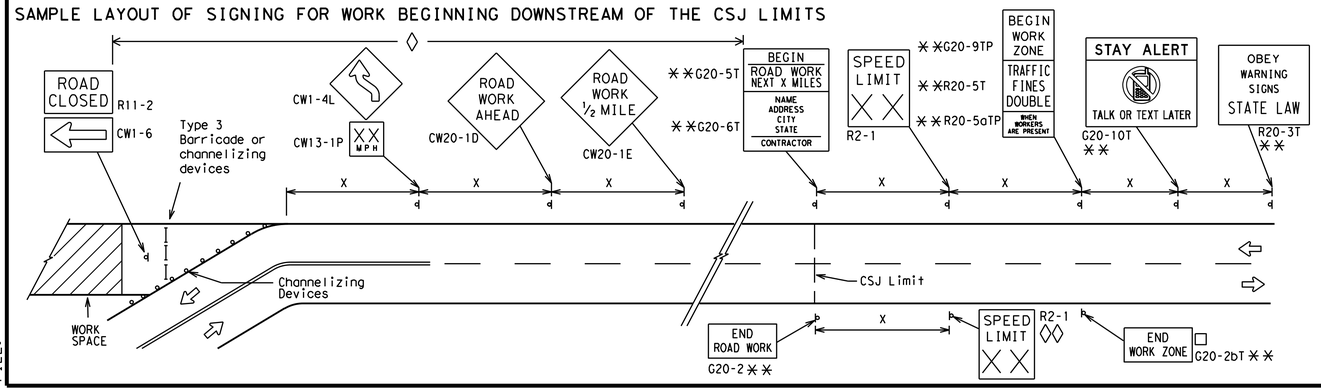
1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer as per TMUTCD Part 5. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS



When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS

NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

☐ The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

✳✳ CSJ limit signing is required for highway construction and maintenance work, with the exception of mobile operations.

◊ Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

◊◊ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND	
⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▬	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-21

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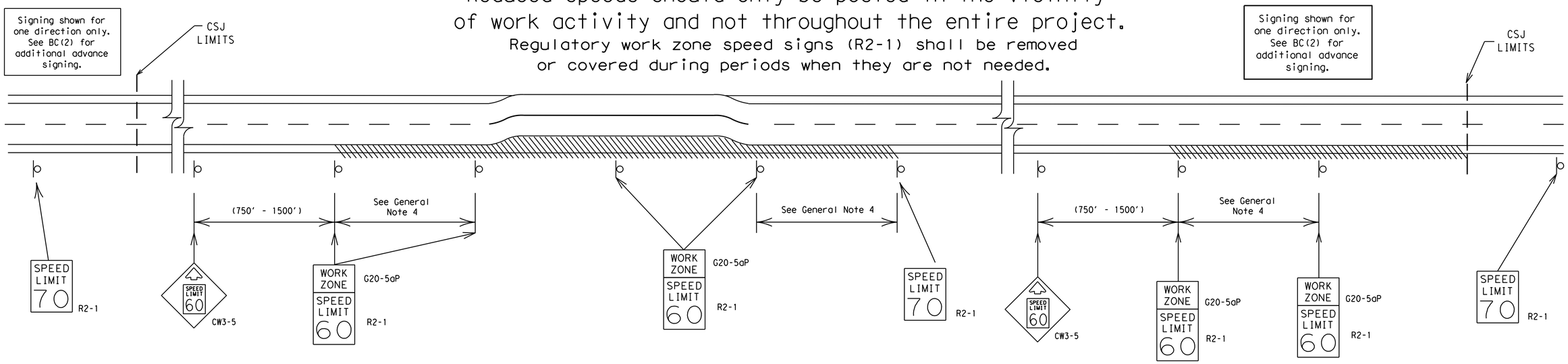
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TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within Incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.

Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, erection and maintenance of the"ADVANCE SPEED LIMIT"(CW3-5)sign, "WORK ZONE"(G20-5aP) plaque and the "SPEED LIMIT"(R2-1)signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC(3)-21

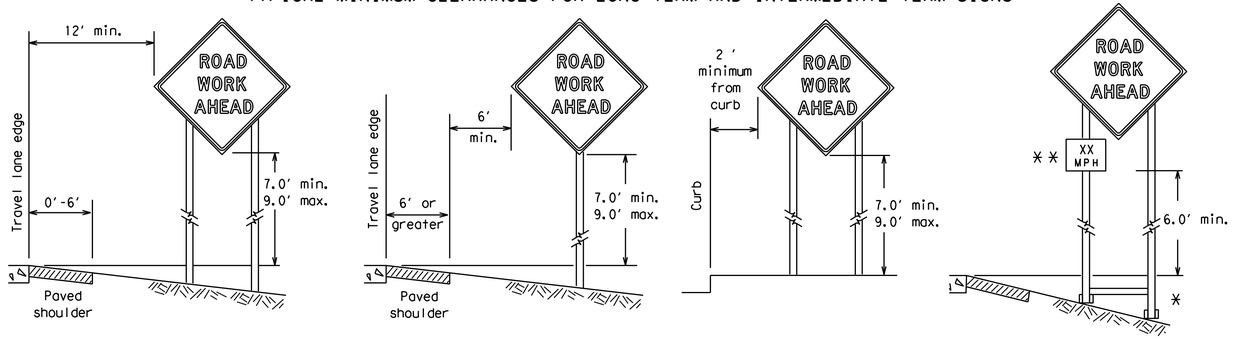
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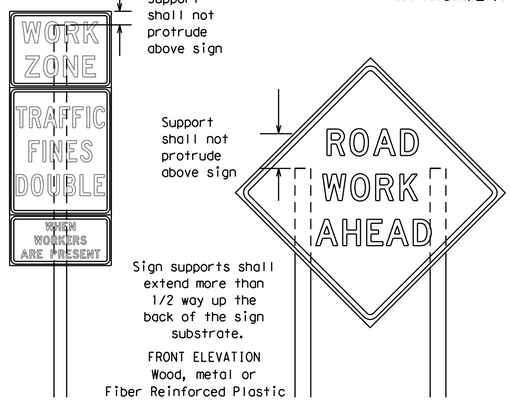
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

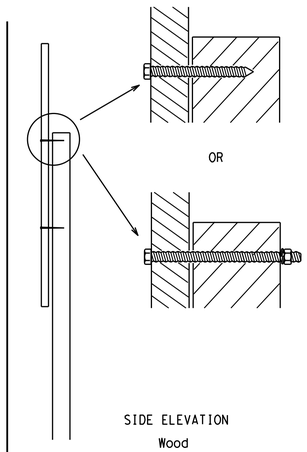


⁎ When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

⁎⁎ When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS





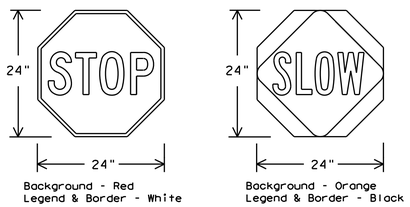
Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
2. STOP/SLOW paddles shall be retroreflectorized when used at night.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6′ to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets. The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

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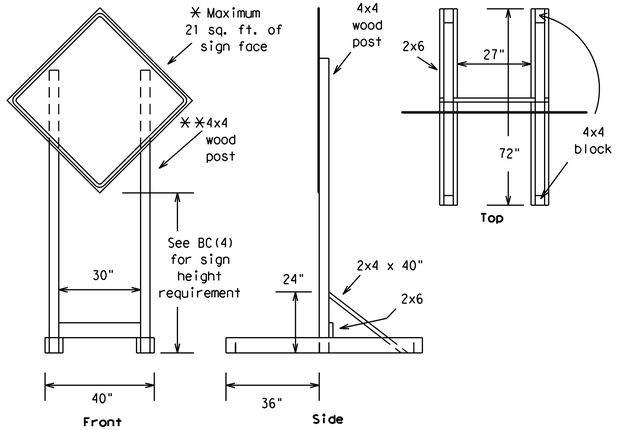
BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

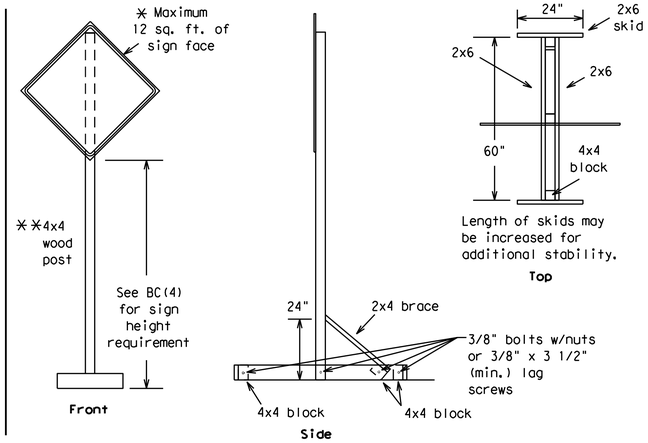
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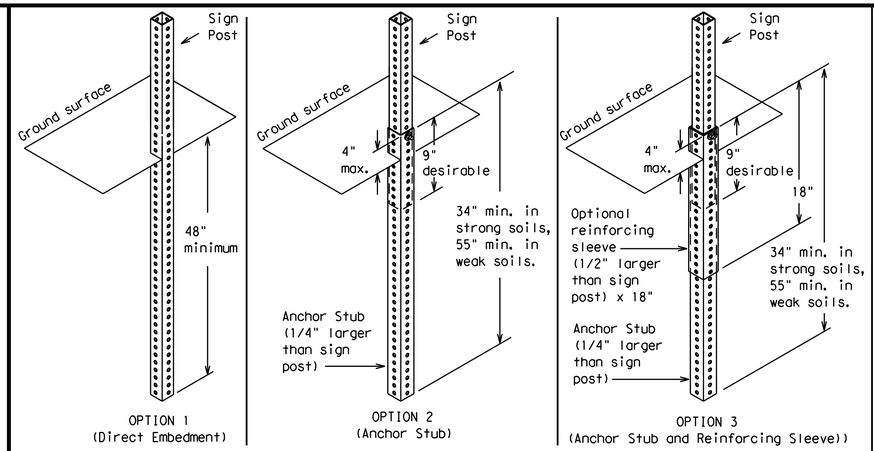
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SKID MOUNTED WOOD SIGN SUPPORTS

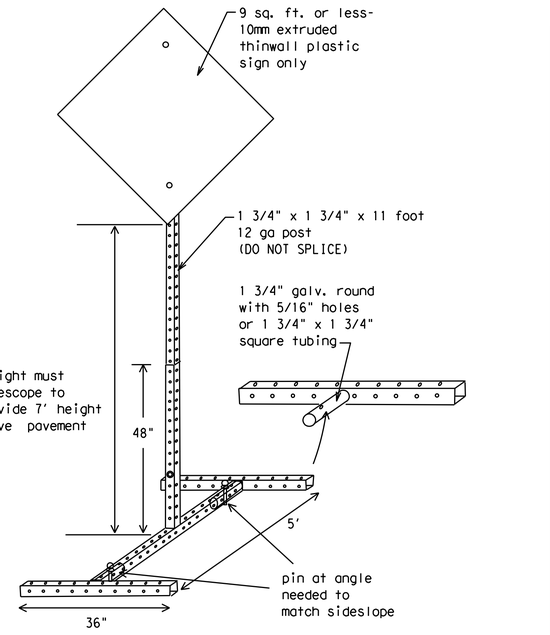
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

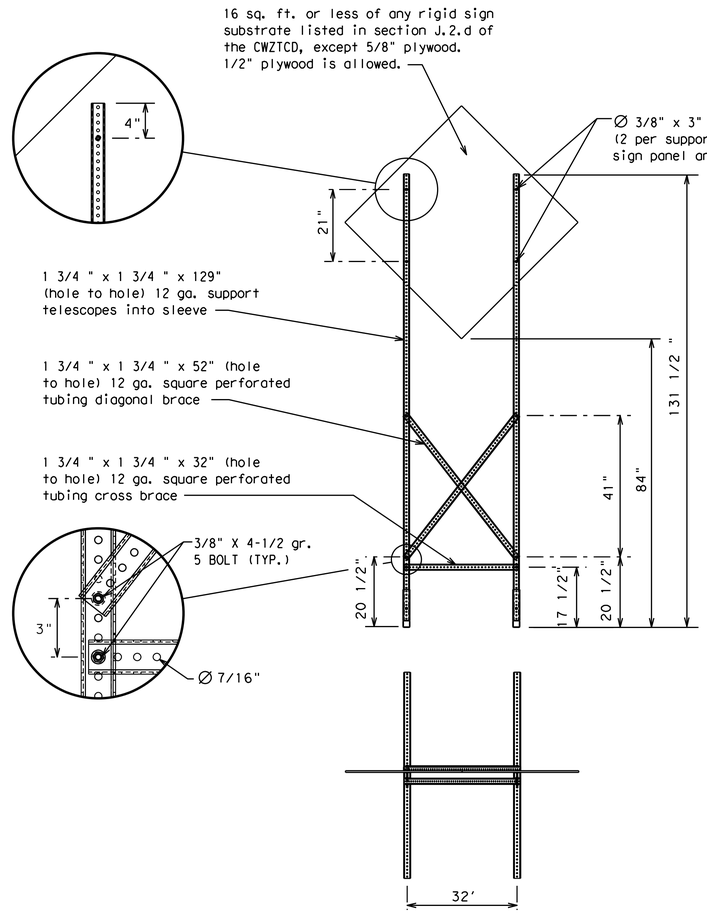


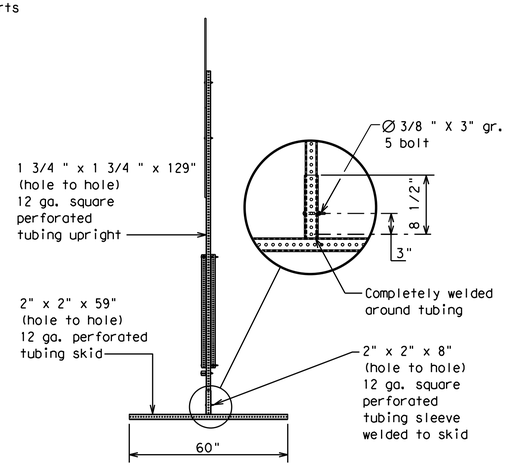
PERFORATED SQUARE METAL TUBING

GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.







SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

* See BC(4) for definition of "Work Duration."

** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

□ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

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WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD
Alternate	ALT
Avenue	AVE
Best Route	BEST RTE
Boulevard	BLVD
Bridge	BRDG
Cannot	CANT
Center	CTR
Construction Ahead	CONST AHD
CROSSING	XING
Detour Route	DETOUR RTE
Do Not	DONT
East	E
Eastbound	(route) E
Emergency	EMER
Emergency Vehicle	EMER VEH
Entrance, Enter	ENT
Express Lane	EXP LN
Expressway	EXPWY
XXXX Feet	XXXX FT
Fog Ahead	FOG AHD
Freeway	FRWY, FWY
Freeway Blocked	FWY BLKD
Friday	FRI
Hazardous Driving	HAZ DRIVING
Hazardous Material	HAZMAT
High-Occupancy	HOV
Vehicle Highway	HWY
Hour(s)	HR, HRS
Information	INFO
It Is	ITS
Junction	JCT
Left	LFT
Left Lane	LFT LN
Lane Closed	LN CLOSED
Lower Level	LWR LEVEL
Maintenance	MAINT

WORD OR PHRASE	ABBREVIATION
Major	MAJ
Miles	MI
Miles Per Hour	MPH
Minor	MNR
Monday	MON
Normal	NORM
North	N
Northbound	(route) N
Parking	PKING
Road	RD
Right Lane	RT LN
Saturday	SAT
Service Road	SERV RD
Shoulder	SHLDR
Slippery	SLIP
South	S
Southbound	(route) S
Speed	SPD
Street	ST
Sunday	SUN
Telephone	PHONE
Temporary	TEMP
Thursday	THURS
To Downtown	TO DWNTN
Traffic	TRAF
Travelers	TRVLRS
Tuesday	TUES
Time Minutes	TIME MIN
Upper Level	UPR LEVEL
Vehicles (s)	VEH, VEHS
Warning	WARN
Wednesday	WED
Weight Limit	WT LIMIT
West	W
Westbound	(route) W
Wet Pavement	WET PVMT
Will Not	WONT

Roadway designation # IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

- FREEWAY CLOSED X MILE
- FRONTAGE ROAD CLOSED
- ROAD CLOSED AT SH XXX
- SHOULDER CLOSED XXX FT
- ROAD CLSD AT FM XXXX
- RIGHT LN CLOSED XXX FT
- RIGHT X LANES CLOSED
- RIGHT X LANES OPEN
- CENTER LANE CLOSED
- DAYTIME LANE CLOSURES
- NIGHT LANE CLOSURES
- I-XX SOUTH EXIT CLOSED
- VARIOUS LANES CLOSED
- EXIT XXX CLOSED X MILE
- EXIT CLOSED
- RIGHT LN TO BE CLOSED
- MALL DRIVEWAY CLOSED
- X LANES CLOSED TUE - FRI
- XXXXXXXX BLVD CLOSED

Other Condition List

- ROADWORK XXX FT
- ROAD REPAIRS XXXX FT
- FLAGGER XXXX FT
- LANE NARROWS XXXX FT
- RIGHT LN NARROWS XXXX FT
- TWO-WAY TRAFFIC XX MILE
- MERGING TRAFFIC XXXX FT
- CONST TRAFFIC XXX FT
- LOOSE GRAVEL XXXX FT
- UNEVEN LANES XXXX FT
- DETOUR X MILE
- ROUGH ROAD XXXX FT
- ROADWORK PAST SH XXXX
- ROADWORK NEXT FRI-SUN
- BUMP XXXX FT
- US XXX EXIT X MILES
- TRAFFIC SIGNAL XXXX FT
- LANES SHIFT *

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List

- MERGE RIGHT
- FORM X LINES RIGHT
- DETOUR NEXT X EXITS
- USE XXXXX RD EXIT
- USE EXIT XXX
- USE EXIT I-XX NORTH
- STAY ON US XXX SOUTH
- USE I-XX E TO I-XX N
- TRUCKS USE US XXX N
- WATCH FOR TRUCKS
- WATCH FOR TRUCKS
- EXPECT DELAYS
- EXPECT DELAYS
- PREPARE TO STOP
- REDUCE SPEED XXX FT
- END SHOULDER USE
- USE OTHER ROUTES
- WATCH FOR WORKERS
- STAY IN LANE *

Location List

- AT FM XXXX
- BEFORE RAILROAD CROSSING
- NEXT X MILES
- PAST US XXX EXIT
- XXXXXXX TO XXXXXXX
- US XXX TO FM XXXX

Warning List

- SPEED LIMIT XX MPH
- MAXIMUM SPEED XX MPH
- MINIMUM SPEED XX MPH
- ADVISORY SPEED XX MPH
- RIGHT LANE EXIT
- USE CAUTION
- DRIVE SAFELY
- DRIVE WITH CARE

** Advance Notice List

- TUE-FRI XX AM- X PM
- APR XX-XX X PM-X AM
- BEGINS MONDAY
- BEGINS MAY XX
- MAY X-X XX PM - XX AM
- NEXT FRI-SUN
- XX AM TO XX PM
- NEXT TUE AUG XX
- TONIGHT XX PM- XX AM

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

** See Application Guidelines Note 6.

APPLICATION GUIDELINES

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the "Flagger Symbol"(CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC(6)-21

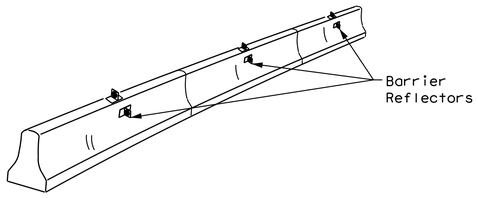
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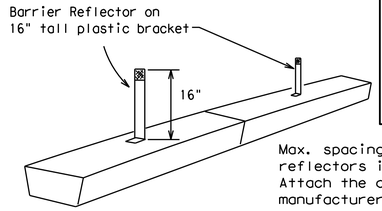
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1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



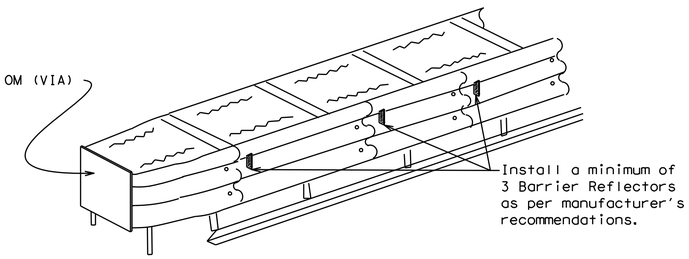
CONCRETE TRAFFIC BARRIER (CTB)

3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional)while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.



Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

LOW PROFILE CONCRETE BARRIER (LPCB)



DELINEATION OF END TREATMENTS

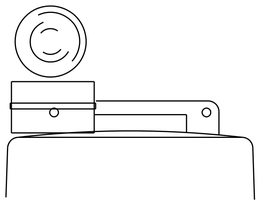
LOW PROFILE CONCRETE BARRIER (LPCB) USED IN WORK ZONES

LPCB is approved for use in work zone locations, where the posted speed is 45mph, or less. See Roadway Standard Sheet LPCB.

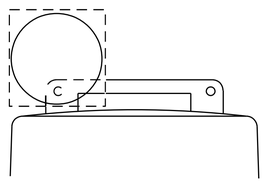
END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet the apppropriate crashworthy standards as defined in the Manual for Assessing Safety Hardware (MASH). Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.



Warning reflector may be round or square.Must have a yellow reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B_{FL} or C_{FL} Sheeting meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

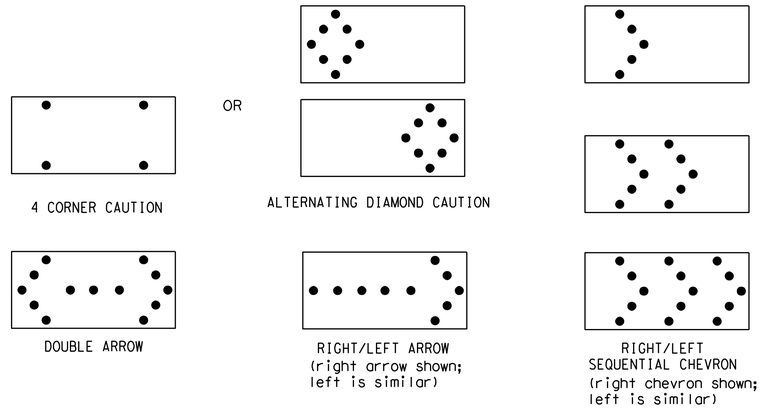
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
4. The Flashing Arrow Board should be able to display the following symbols:



5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential chevron display may be used during daylight operations.
11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS			
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION

Flashing Arrow Boards shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the CWZTCD for a list of approved TMAs.
4. TMAs are required on freeways unless otherwise noted in the plans.
5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
6. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC(7)-21

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GENERAL NOTES

1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections, one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Pre-qualified plastic drums shall meet the following requirements:

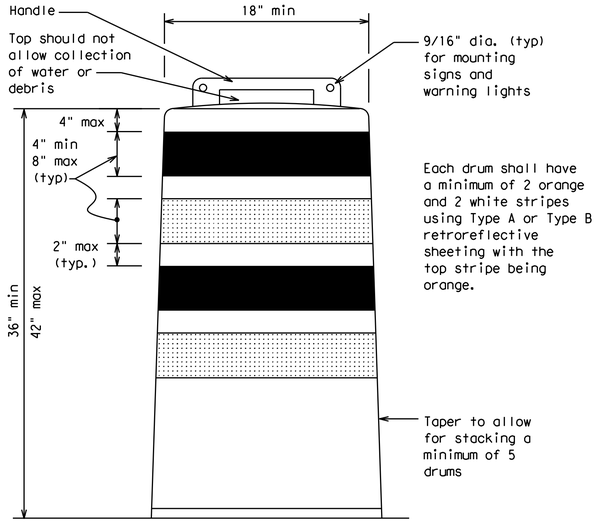
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in width.
7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
9. Drum body shall have a maximum unballasted weight of 11 lbs.
10. Drum and base shall be marked with manufacturer's name and model number.

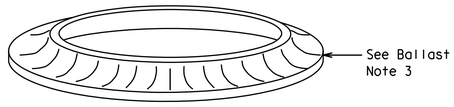
RETROREFLECTIVE SHEETING

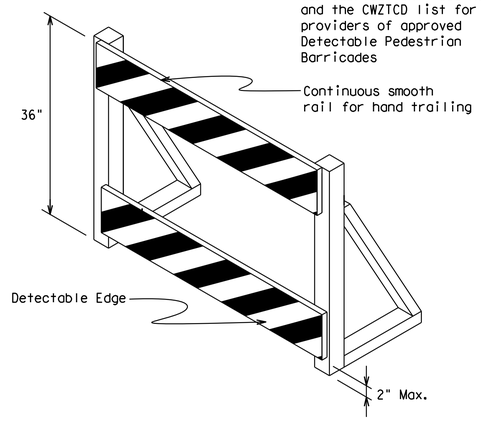
1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Sign Face Materials," Type A or Type B reflective sheeting shall be supplied unless otherwise specified in the plans.
2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

BALLAST

1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
3. Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
4. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
5. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
6. Ballast shall not be placed on top of drums.
7. Adhesives may be used to secure base of drums to pavement.

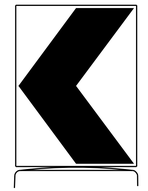




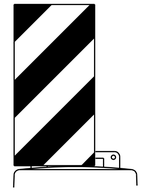


DETECTABLE PEDESTRIAN BARRICADES

1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Refer to WZ(BTS-2) for Pedestrian Control requirements for Sidewalk Diversions, Sidewalk Detours and Crosswalk Closures.
2. Where pedestrians with visual disabilities normally use the closed sidewalk, a Detectable Pedestrian Barricade shall be placed across the full width of the closed sidewalk instead of a Type 3 Barricade.
3. Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.
4. Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)" and should not be used as a control for pedestrian movements.
5. Warning lights shall not be attached to detectable pedestrian barricades.
6. Detectable pedestrian barricades should use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign
(Maximum Sign Dimension)
Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24"
Vertical Panel
mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
2. Chevrons and other work zone signs with an orange background shall be manufactured with Type B_{FL} or Type C_{FL} Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A or Type B. Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
6. Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations, they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

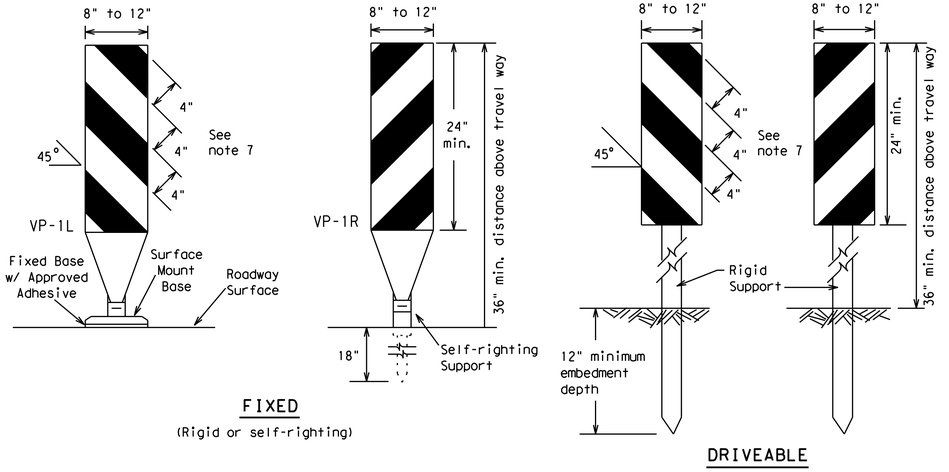
BC(8)-21

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©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
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9-07 5-21	PHR	CAMERON		108
7-13				

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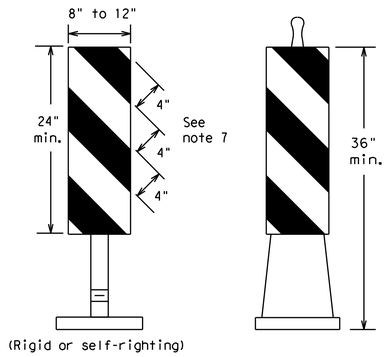
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FILE:



FIXED
(Rigid or self-righting)

DRIVEABLE

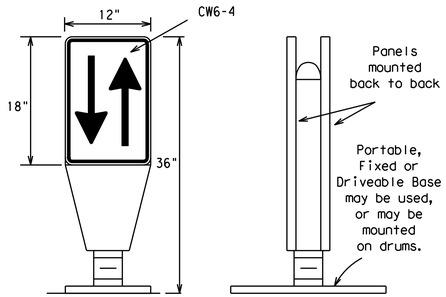


(Rigid or self-righting)

PORTABLE

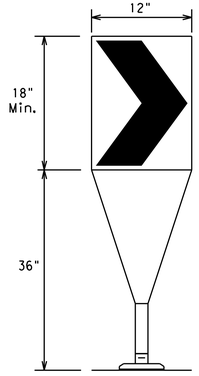
1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.

VERTICAL PANELS (VPs)



1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with 42" cones or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



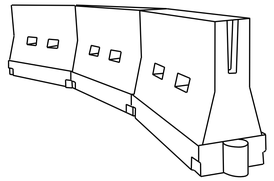
Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways, self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS

GENERAL NOTES

1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.



LONGITUDINAL CHANNELIZING DEVICES (LCD)

1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. LCDs may be used instead of a line of cones or drums.
3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10). Place reflective sheeting near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate Manual for Assessing Safety Hardware (MASH) crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

Posted Speed	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'
35		205'	225'	245'	35'	70'
40		265'	295'	320'	40'	80'
45	$L=WS$	450'	495'	540'	45'	90'
50		500'	550'	600'	50'	100'
55		550'	605'	660'	55'	110'
60		600'	660'	720'	60'	120'
65		650'	715'	780'	65'	130'
70		700'	770'	840'	70'	140'
75		750'	825'	900'	75'	150'
80		800'	880'	960'	80'	160'

** Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(9)-21

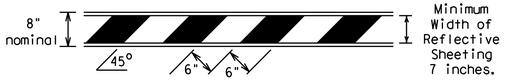
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© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
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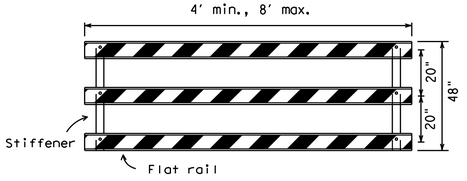
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



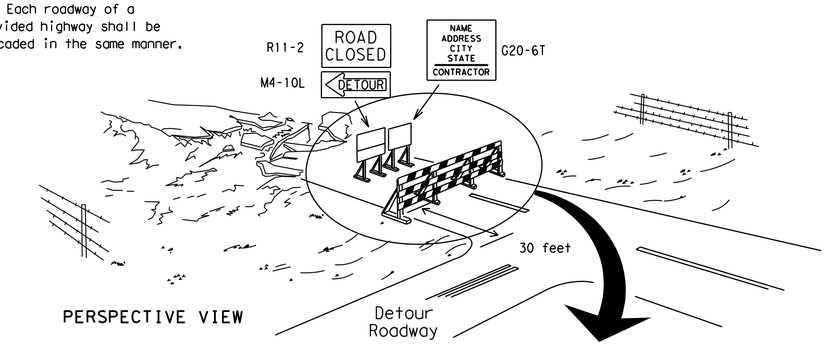
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

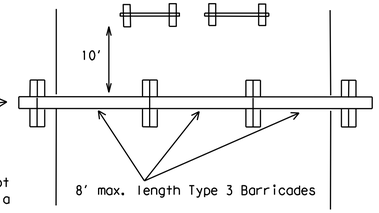
Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.

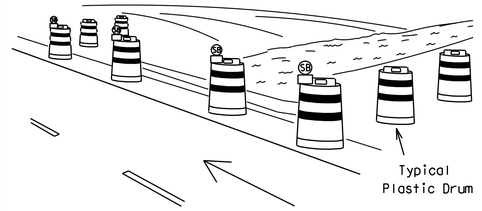
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

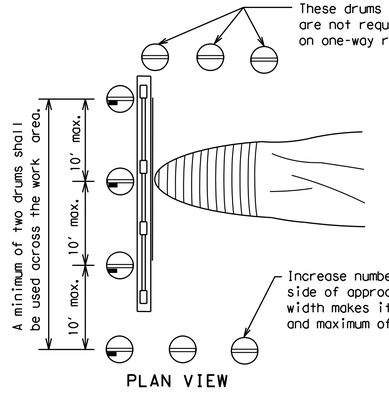
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

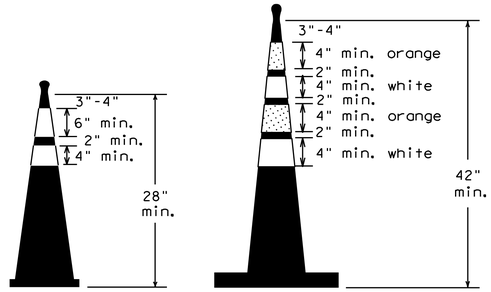
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



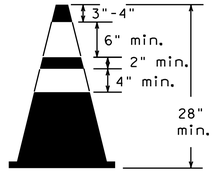
PLAN VIEW

LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

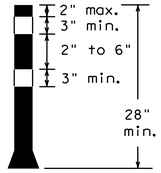
CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



Two-Piece cones



One-Piece cones

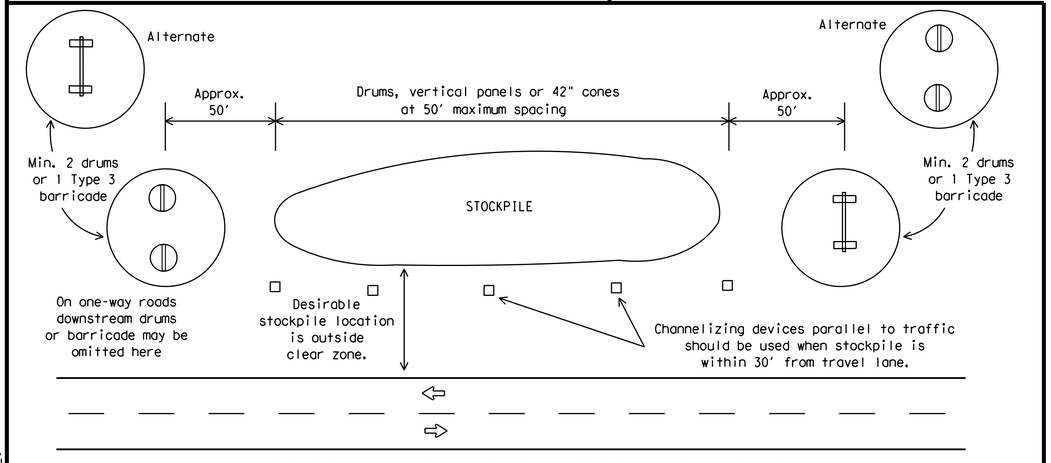


Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.

42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

DATE:
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Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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9-07 8-14	DIST	COUNTY		SHEET NO.
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RFP # 250502

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WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

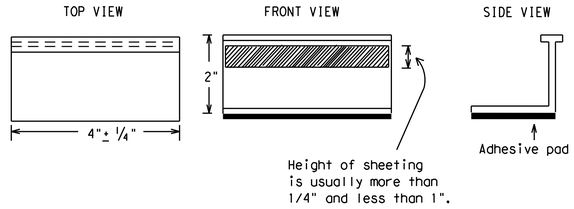
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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1-02 7-13	DIST	COUNTY		SHEET NO.
11-02 8-14	PHR	CAMERON		111

RFP # 250502

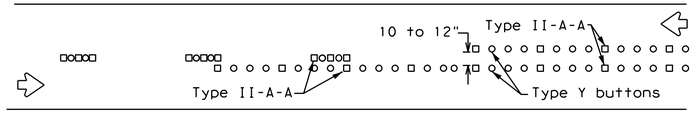
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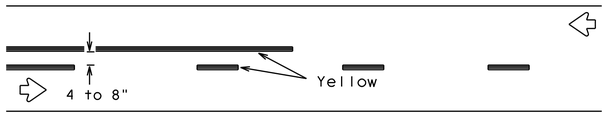
PAVEMENT MARKING PATTERNS



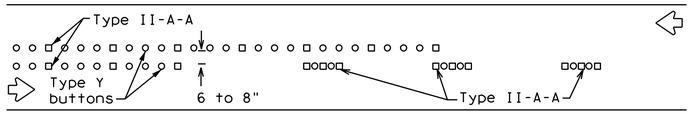
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



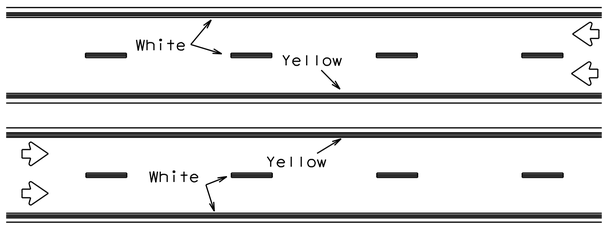
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



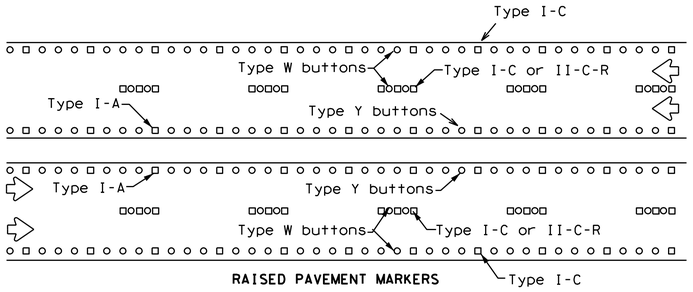
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer.
Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



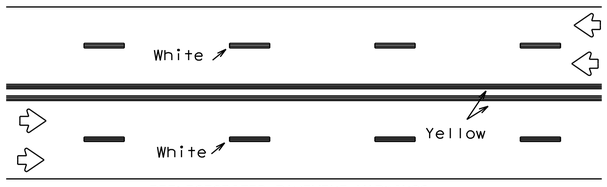
REFLECTORIZED PAVEMENT MARKINGS



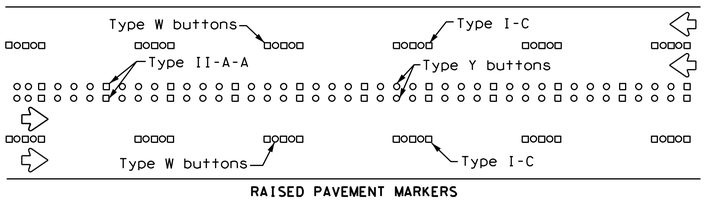
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



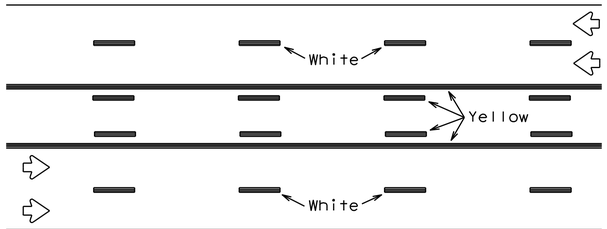
REFLECTORIZED PAVEMENT MARKINGS



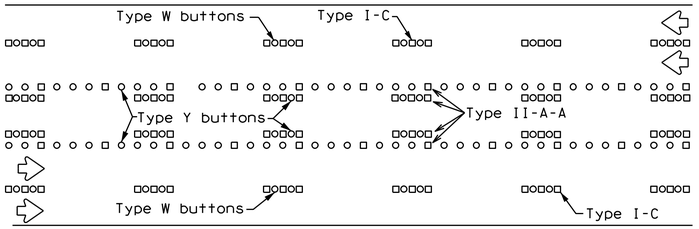
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS

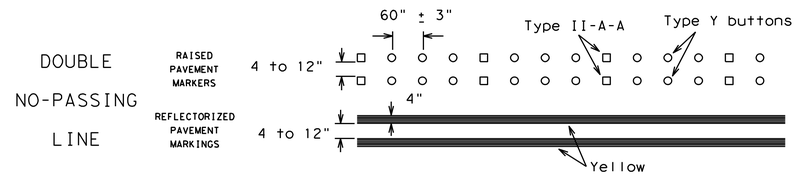
Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

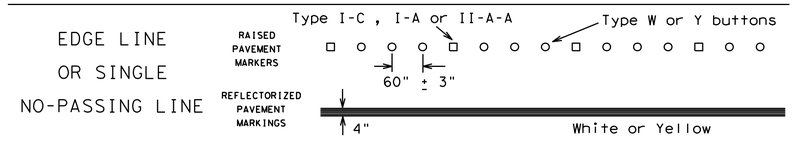
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

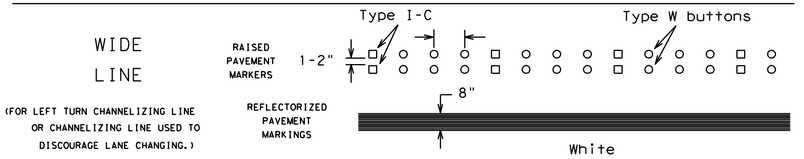


EDGE LINE OR SINGLE NO-PASSING LINE



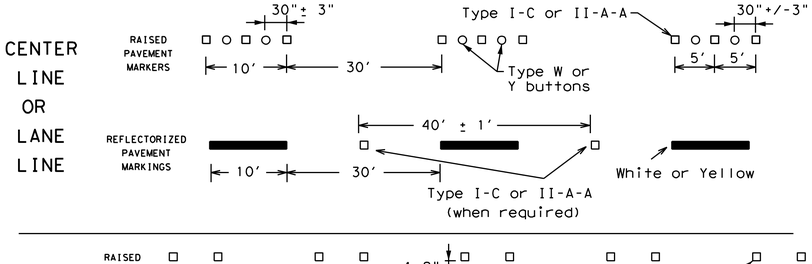
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)

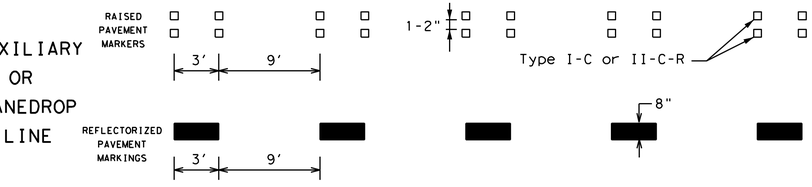


BROKEN LINES

CENTER LINE OR LANE LINE

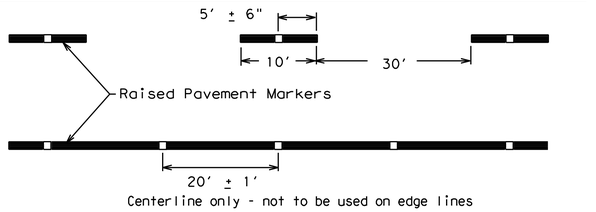


AUXILIARY OR LANEDROP LINE



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

SHEET 12 OF 12

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

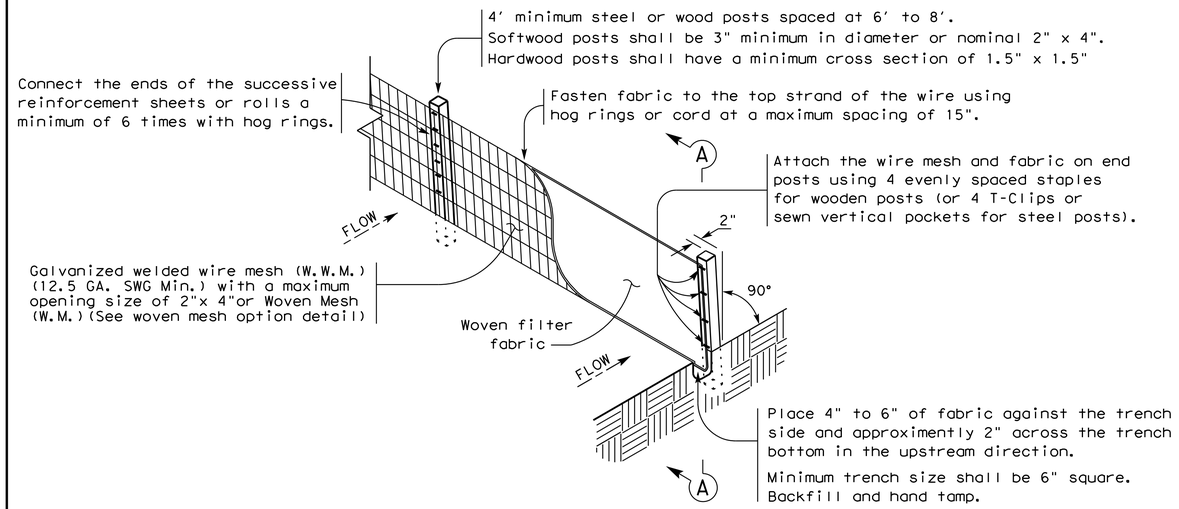
BC(12)-21

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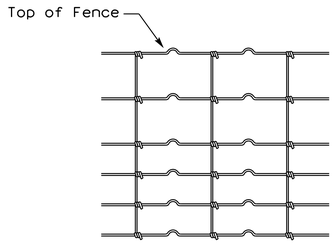
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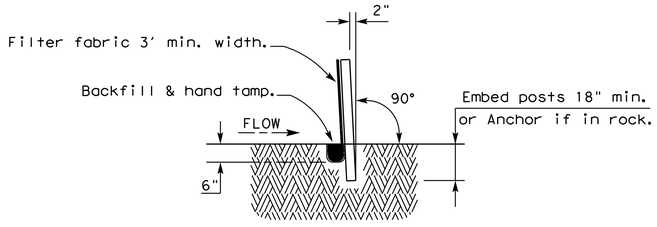
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FILE



TEMPORARY SEDIMENT CONTROL FENCE

SCF





SECTION A-A

HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

Galvanized hinge joint knot woven mesh (12.5 GA.SWG Min.) requires a minimum of five horizontal wires spaced at a maximum of 12 inches apart and all vertical wires spaced at a maximum of 12 inches apart.

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a maximum flow through rate of 100 GPM/FT^2. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

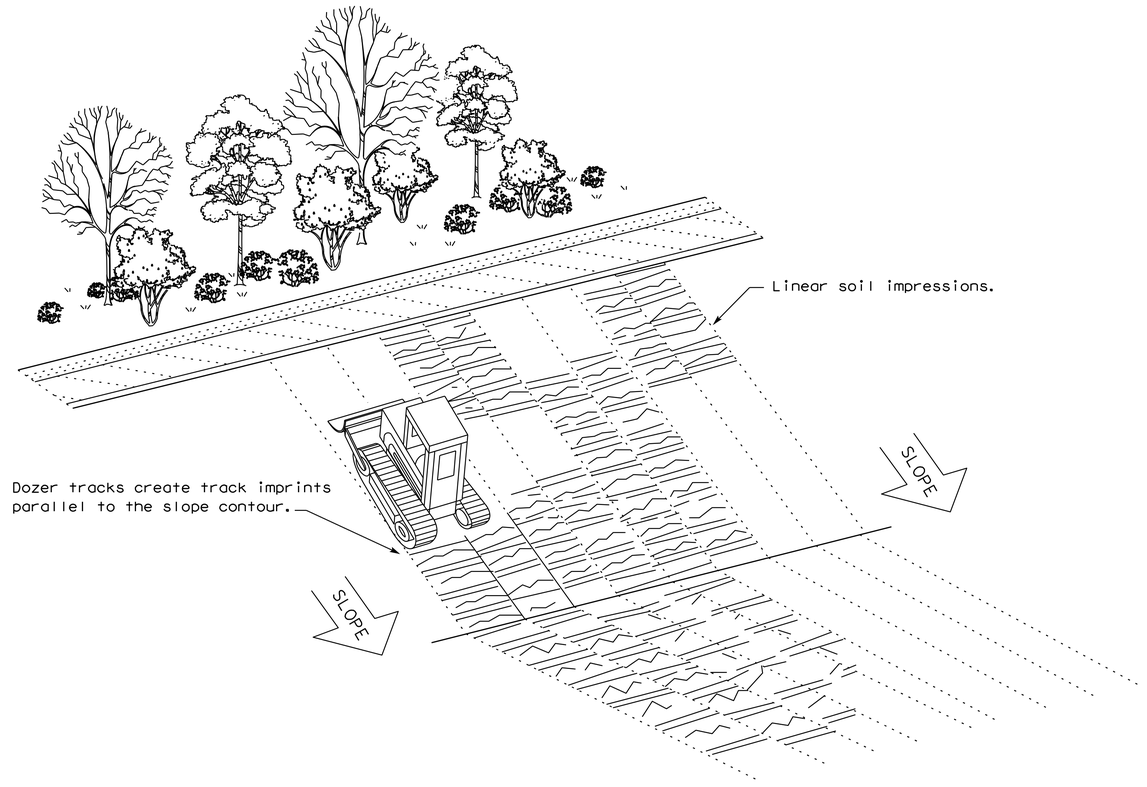
LEGEND

Sediment Control Fence

SCF

GENERAL NOTES

1. Vertical tracking is required on projects where soil distributing activities have occurred unless otherwise approved.
2. Perform vertical tracking on slopes to temporarily stabilize soil.
3. Provide equipment with a track undercarriage capable of producing linear soil impressions measuring a minimum of 12" in length by 2" to 4" in width by 1/2" to 2" in depth.
4. Do not exceed 12" between track impressions.
5. Install continous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.



VERTICAL TRACKING

Texas Department of Transportation

Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

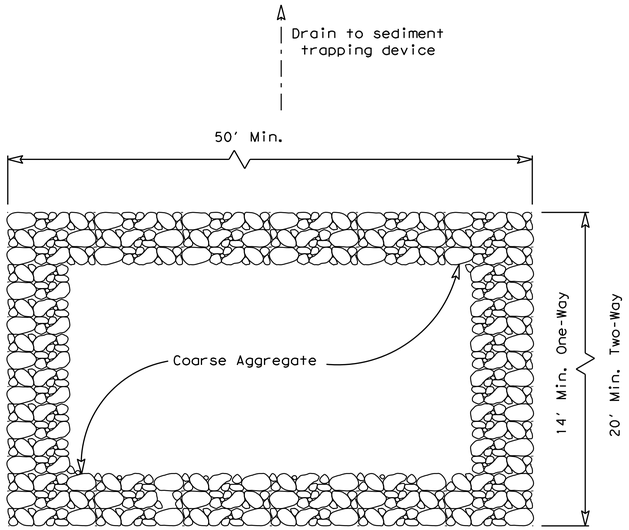
FENCE & VERTICAL TRACKING

EC(1)-16

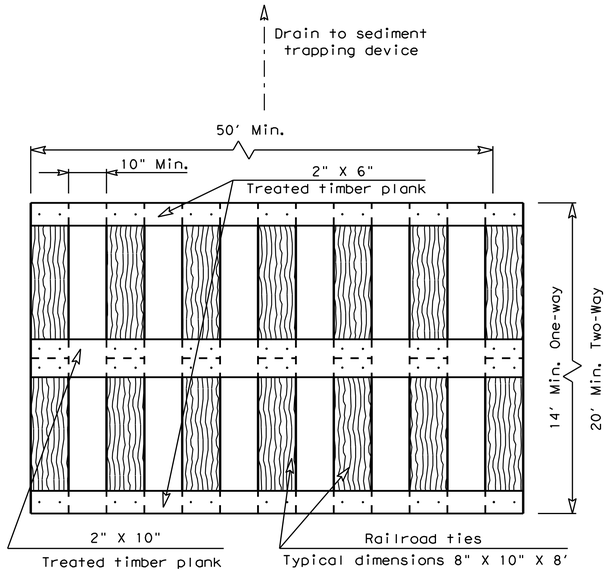
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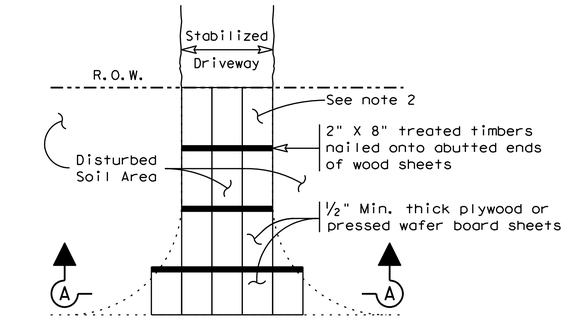
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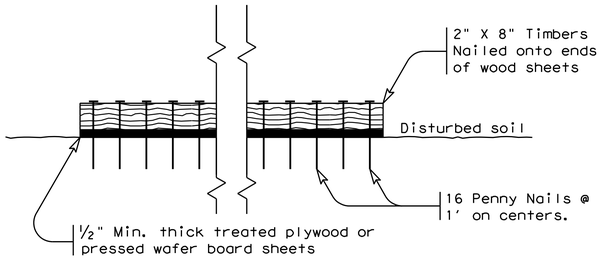
PLAN VIEW



PLAN VIEW



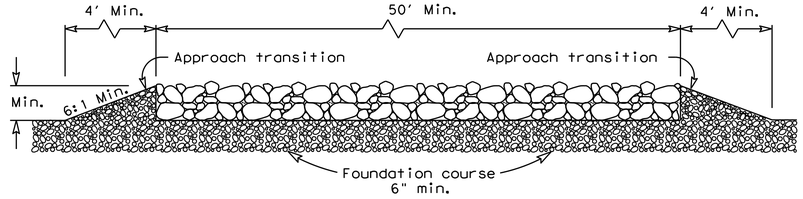
PLAN VIEW



SECTION A-A

CONSTRUCTION EXIT (TYPE 3)

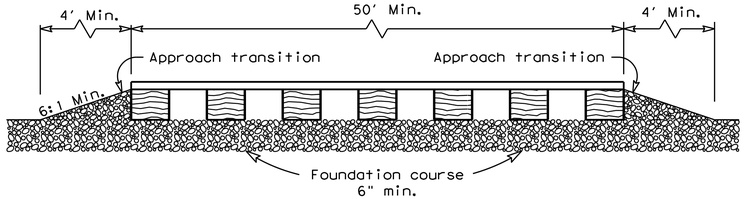
SHORT TERM



ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 1)

ROCK CONSTRUCTION (LONG TERM)



ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 2)

TIMBER CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 1)

1. The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
2. The coarse aggregate should be open graded with a size of 4" to 8".
3. The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
4. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other materialas approved by the Engineer.
5. The construction exit shall be graded to allow drainage to a sediment trapping device.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
7. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.

GENERAL NOTES (TYPE 2)

1. The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
2. The treated timber planks shall be attached to the railroad ties with ½"x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
5. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
6. The construction exit should be graded to allow drainage to a sediment trapping device.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
8. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.

GENERAL NOTES (TYPE 3)

1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

Texas Department of Transportation

Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

CONSTRUCTION EXITS

EC(3)-16

FILE: ec316	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS
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