# DEVELOPMENT PLANS FOR

# DOLLAR GENERAL

# FM 43 (WEBER RD.) & BRATTON RD.
# CORPUS CHRISTI (NUECES COUNTY), TEXAS
# DOLLAR GENERAL #31090

**DOLLAR GENERAL STORE NUMBER: 31090**

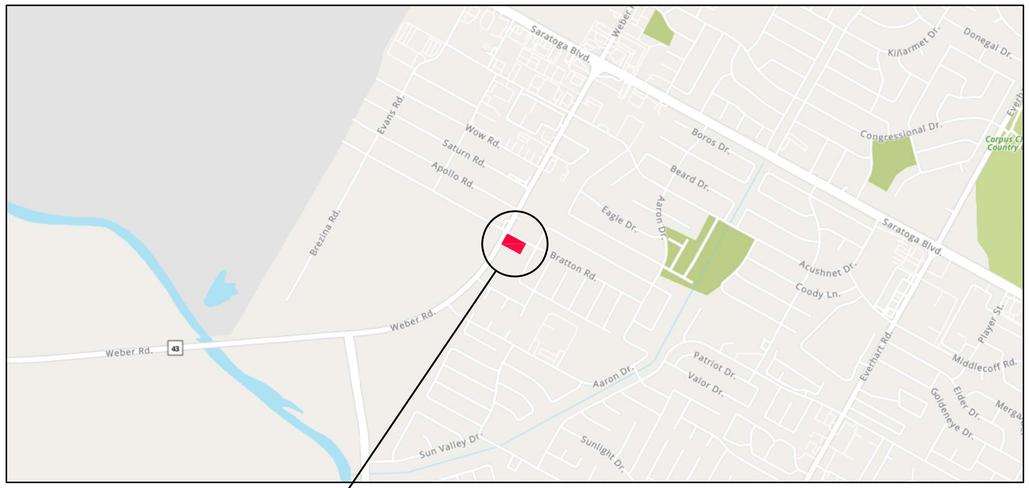
**DRAWINGS LIST**



CITY OF CORPUS CHRISTI STANDARD DETAILS:
- STORM WATER POLLUTION PREVENTION STANDARD DETAILS (3 SHEETS)
- STORM WATER STANDARD DETAILS (3 SHEETS)
- WASTEWATER STANDARD DETAILS (4 SHEETS)
- WATER STANDARD DETAILS (4 SHEETS)

TXDOT STANDARD DETAILS:
- EC(1)-16 TXDOT TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES (FENCE AND VERTICAL TRACKING)
- EC(3)-16 TXDOT TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES (CONSTRUCTION EXITS)
- EC(6)-16 TXDOT TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES (EARTHWORK FOR EROSION CONTROL)

TOTAL: 32 SHEETS




PROJECT LOCATION
FM 43 (WEBER RD.)

VICINITY MAP
SCALE: 1"=1,000'

## AGENCY CONTACT LIST

**ELECTRIC**
RUBEN NUNEZ
AEP ENERGY
(361) 889-3862

**TELEPHONE**
JESSICA PENA
AT&T
(361) 881-2148

**WATER**
CORPUS CHRISTI
EDWARD VILLARREAL
(361) 826-3254

**FIRE MARSHAL**
CORPUS CHRISTI FIRE CHIEF
ROBERT ROCHA
(361) 826-3932

**SEWER**
EDWARD VILLARREAL
CORPUS CHRISTI
(361) 826-3254

**ROADWAY**
ERNEST LONGORIA
TXDOT - CORPUS CHRISTI AREA OFFICE
(361) 808-2500

**BUILDING PERMIT**
CORPUS CHRISTI
DEVELOPMENT SERVICES
(361) 826-4375

## TEAM MEMBERS

THE OVERLAND GROUP
1903 EAST BATTLEFIELD
SPRINGFIELD, MO 65804
JACOB STAUFFER
TEL: (417) 293-3332

LINFIELD, HUNTER & JUNIUS, INC.
3608 18TH ST.
SUITE 200
METAIRIE, LA 70002
CASEY GENOVESE, P.E.
TEL: (504) 833-5300
FAX: (504) 833-5350

KINETIC DESIGN+DEVELOPMENT
2215 W. CHESTERFIELD BLVD.
SUITE 01
SPRINGFIELD, MO 65807
MIKE SEBBEN
TEL: (417) 530-4321

## SITE STATISTICAL DATA

| | |
|---|---|
| EXISTING USE: | VACANT |
| PROPOSED USE: | RETAIL |
| DG SITE AREA: | 1.188 ACRES |
| BUILDING AREA: | 10,640 SQ. FT. (GROSS) |
| SALES FLOOR AREA: | 8,409 SQ. FT. |
| PARKING REQ'D: | 34 SPACES (1/250 S.F. NET RETAIL) |
| PARKING PROVIDED: | 35 SPACES (33 REGULAR SPACES) |
| HANDICAP SPACES PROVIDED: | 2 W/2 VAN ACCESSIBLE |
| BUILDING HEIGHT PROPOSED: | 18'± |
| TRUCK TYPE: | WB-67 |

# LINFIELD, HUNTER & JUNIUS, INC.
# PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS
# METAIRIE, LOUISIANA


LINFIELD, HUNTER & JUNIUS, INC.
PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS
3608 18th Street, Suite 200
Metairie, Louisiana 70002
PHONE: (504) 833-5300
FAX: (504) 833-5350
T.R.P.E. FIRM NO. 11654




SEAL
STATE OF TEXAS
CASEY M. GENOVESE
112246
LICENSED
PROFESSIONAL ENGINEER
11/27/24

| REV. NO. | DATE |
|---|---|
| 1 SITE SHIFT TO LOT 3B | 10/02/24 |
| 2 DETENTION/DRAIN CALCS | 11/27/24 |

DOLLAR GENERAL - FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: TITLE SHEET

PROJ. NO. 24-065
DATE 07/09/24

**C-1**

# ALTA/NSPS LAND TITLE SURVEY FOR THE OVERLAND GROUP, LLC SHOWING PART OF THE ENRIQUEZ VILLAREAL SURVEY, ABSTRACT NO. 1, NUECES COUNTY, TEXAS

## GENERAL NOTES

1. LEGAL DESCRIPTION SHOWN HEREON.
2. BEARINGS ARE ORIENTED TO GRID NORTH OF THE TEXAS STATE PLANE COORDINATE SYSTEM, NAD 83, TEXAS SOUTH ZONE 4205, SURVEY FEET.
3. SITE ELEVATION DATUM IS NAVD 88.
4. CONTOUR INTERVAL = 1.0'
5. SITE BENCHMARK 1
   TOP OF 1/2" IRON ROD (SET)
   BEING S 38°25'57" W 109.99' FROM
   THE NORTH CORNER OF TRACT
   ELEVATION = 24.00'

   SITE BENCHMARK 2
   TOP OF 1/2" IRON ROD (SET)
   BEING N 16°23'24" E 72.67' FROM
   THE WEST CORNER OF TRACT
   ELEVATION = 24.69'

## FLOOD NOTE

THE SUBJECT TRACT LIES IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 48355C0510G WITH A MAP EFFECTIVE DATE OF OCTOBER 13, 2022, COUNTY OF NUECES, TEXAS.

## ZONING

1. LAND USE: VACANT

## SCHEDULE B NOTES

ALLIANT NATIONAL TITLE INSURANCE COMPANY, INC
TITLE COMMITMENT NO: 24-0592

RESTRICTIONS, COVENANTS, TERMS, CONDITIONS, PROVISIONS AND STIPULATIONS RECORDED IN VOLUME 65, PAGES 158 AND 159, PLAT RECORDS; AND RECORDED UNDER COUNTY CLERK'S FILE NO. 2006038052, OFFICIAL PUBLIC RECORDS OF NUECES COUNTY, TEXAS, DO AFFECT THIS TRACT.

10.f TERMS, CONDITIONS, STIPULATIONS AND OBLIGATIONS OF INSTRUMENT RECORDED IN VOLUME 65, PAGES 158 AND 159, PLAT RECORDS; AND RECORDED UNDER COUNTY CLERK'S FILE NO. 2006038052, OFFICIAL PUBLIC RECORDS OF NUECES COUNTY, TEXAS, DO AFFECT THIS TRACT.

10.h A 25 FOOT YARD REQUIREMENT ALONG THE NORTHEAST SIDE(S), AS SHOWN BY PLAT FILED FOR RECORD UNDER VOLUME 65, PAGES 158 AND 159, PLAT RECORDS OF NUECES COUNTY, TEXAS, DOES NOT AFFECT THIS TRACT.

10.i A 20 FOOT YARD REQUIREMENT ALONG THE NORTHWEST SIDE(S), AS SHOWN BY PLAT FILED FOR RECORD UNDER VOLUME 65, PAGES 158 AND 159, PLAT RECORDS OF NUECES COUNTY, TEXAS, DOES AFFECT THIS TRACT AS SHOWN.

10.j A 15 FOOT UTILITY EASEMENT ALONG THE NORTHWEST SIDE(S), AS SHOWN BY PLAT FILED FOR RECORD UNDER VOLUME 65, PAGES 158 AND 159, PLAT RECORDS OF NUECES COUNTY, TEXAS, DOES AFFECT THIS TRACT AS SHOWN.

10.k A 20 FOOT DRAINAGE EASEMENT ALONG THE NORTHWEST SIDE(S), AS SHOWN BY PLAT FILED FOR RECORD UNDER VOLUME 65, PAGES 158 AND 159, PLAT RECORDS OF NUECES COUNTY, TEXAS, DOES AFFECT THIS TRACT AS SHOWN.

10.l A 7.5 FOOT UTILITY EASEMENT ALONG THE SOUTHEAST SIDE(S), AS SHOWN BY PLAT FILED FOR RECORD UNDER VOLUME 65, PAGES 158 AND 159, PLAT RECORDS OF NUECES COUNTY, TEXAS, DOES AFFECT THIS TRACT AS SHOWN.

10.m SHARED VEHICULAR ACCESS ACROSS PROPERTY LINES SHALL NOT BE OBSTRUCTED, AS SHOWN BY PLAT FILED FOR RECORD UNDER VOLUME 65, PAGES 158 AND 159, PLAT RECORDS OF NUECES COUNTY, TEXAS, DOES AFFECT THIS TRACT.

10.n EASEMENTS RECORDED UNDER VOLUME 854, PAGE 290, OF THE DEED RECORDS OF NUECES COUNTY, TEXAS; AND ALSO TERMINATION OF EASEMENT RECORDED UNDER COUNTY CLERK'S FILE NO. 2006038049, OFFICIAL PUBLIC RECORDS OF NUECES COUNTY, TEXAS, DOES NOT AFFECT THIS TRACT.

10.o EASEMENTS RECORDED UNDER VOLUME 854, PAGE 292, OF THE DEED RECORDS OF NUECES COUNTY, TEXAS, CANNOT BE LOCATED FROM DESCRIPTION.

10.p EASEMENTS RECORDED UNDER COUNTY CLERK'S FILE NO. 2006033340, OFFICIAL PUBLIC RECORDS OF NUECES COUNTY, TEXAS, DOES NOT AFFECT THIS TRACT.

10.q DEFERMENT AGREEMENT, RECORDED UNDER COUNTY CLERK'S FILE NO. 2007036385, OFFICIAL PUBLIC RECORDS OF NUECES COUNTY, TEXAS, DO AFFECT THIS TRACT.

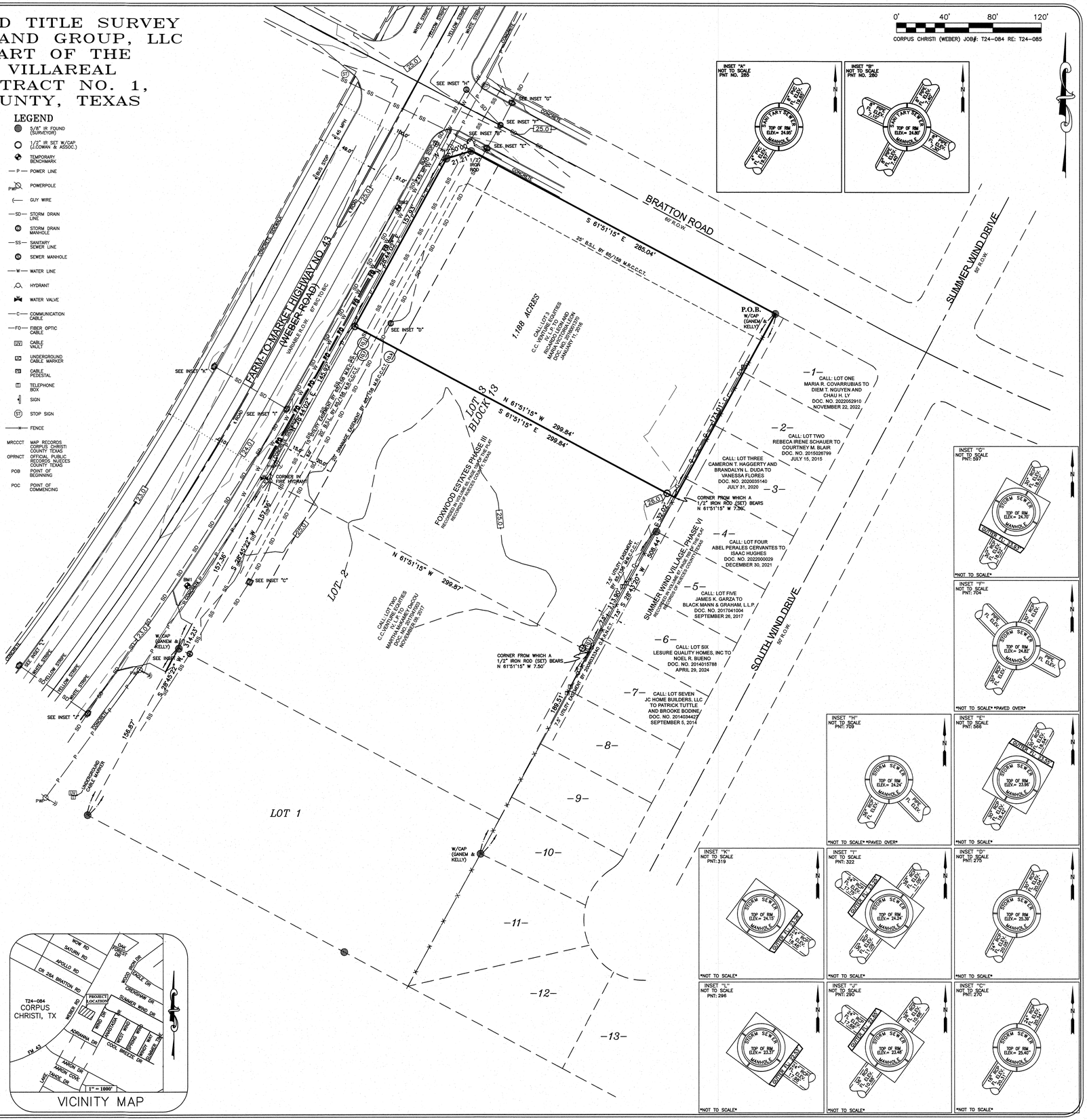
## UTILITY NOTES

1. The contractor(s) shall be responsible for confirming the location (horizontal & vertical) of any buried cables, conduits, pipes, and structures (storm sewer, sanitary sewer and water). The contractor(s) shall be responsible for confirming the location (horizontal & vertical) of gas, television, telephone and other utility easements which impact the construction site. The contractor(s) shall notify the owner if any discrepancies are found between the actual conditions and the data contained in the construction plans. Any costs incurred as a result of not verifying the actual location (horizontal & vertical) of said cables, conduits, pipes and structures shall be borne by the contractor(s).
2. Adequate research to determine the location of intended boundary lines was made. In accordance with the Texas Board of Professional Land Surveyors, General Rules and Practices, Section 663.16 (c), research to support the delineation of easements, rights-of-way and restrictive covenants was not performed. The location of utilities shown hereon are from observed evidence of above ground appurtenances only. The surveyor was not provided with underground plans or surface ground markings to determine the location of any subterranean uses.

## LEGEND

- 5/8" IR FOUND (SURVEYOR)
- 1/2" IR SET W/CAP (J.COWAN & ASSOC.)
- TEMPORARY BENCHMARK
- —P— POWER LINE
- PWP POWERPOLE
- GUY WIRE
- —SD— STORM DRAIN LINE
- STORM DRAIN MANHOLE
- —SS— SANITARY SEWER LINE
- SEWER MANHOLE
- —W— WATER LINE
- HYDRANT
- WATER VALVE
- —C— COMMUNICATION CABLE
- —FO— FIBER OPTIC CABLE
- CABLE VAULT
- UNDERGROUND CABLE MARKER
- CABLE PEDESTAL
- TELEPHONE BOX
- SIGN
- STOP SIGN
- —x— FENCE

MRCCCT MAP RECORDS CORPUS CHRISTI COUNTY, TEXAS
OPRNCT OFFICIAL PUBLIC RECORDS NUECES COUNTY, TEXAS
POB POINT OF BEGINNING
POC POINT OF COMMENCING







## AS SURVEYED LEGAL DESCRIPTION

All that certain lot, tract, or parcel of land, being a part of the Enriquez Villareal Survey, Abstract No. 1, Nueces County, Texas, and being part of Lot 3, Block 13 of Foxwood Estates, Phase III, as shown by plat of same recorded in Volume 65, Page 158 of the Plat Records of Nueces County, Texas, and being more completely described as follows, to-wit:

BEGINNING at a 5/8" iron rod (found) for the East corner of the above mentioned Lot 3, the North corner of Block 1 of Summer Wind Village, Phase VI, as shown by plat of same recorded in Volume 67, Page 769, in the Southwest right of way of Bratton Road;

THENCE South 28 deg. 43 min. 20 sec. West with the Northwest line of Block 1, the Southeast line of Lot 3, a distance of 173.01 ft. to a corner;

THENCE North 61 deg. 51 min. 15 sec. West, at 7.50 ft. pass a ½" iron rod (set) for reference, and continue a total distance of 299.84 ft. to ½" iron rod (set) for corner in the Northwest line of Lot 3, the Southeast right of way of Farm to Market Highway No. 43 (Weber Road);

THENCE northeasterly with the Southeast right of way of Farm to Market Highway No. 43, the Northwest line of Lot 3, North 28 deg. 44 min. 02 sec. East a distance of 157.93 ft. to a ½" iron rod (found) for corner and North 72 deg. 50 min. 00 sec. East a distance of 21.21 ft. to a ½" iron rod (found) for corner in the Southwest right of way of Bratton Road;

THENCE South 61 deg. 51 min. 15 sec. East with the Southwest right of way of Bratton Road, the Northeast line of Lot 3, a distance of 285.04 ft. to the place of beginning, containing 1.188 acres of land.

## ALTA / NSPS LAND TITLE SURVEY

1. I, PHILIP W. CORNETT, REGISTERED PROFESSIONAL LAND SURVEYOR DO HEREBY CERTIFY TO THE OVERLAND NATIONAL TITLE INSURANCE COMPANY, INC AND/OR ASSIGNS; RICARDO LEON; MARIA VICTORIA LEON; AND THE ALLIANT NATIONAL TITLE INSURANCE COMPANY, INC AS OF THE DATE HEREOF THAT I HAVE MADE A CAREFUL SURVEY OF A TRACT OF LAND DESCRIBED AS FOLLOWS:
2. THE ACCOMPANYING SURVEY WAS MADE ON THE GROUND AND CORRECTLY SHOWS THE LOCATION OF ALL BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS SITUATED ON THE ABOVE PREMISES AND THE COURSES AND DISTANCES SHOWN THEREON ARE CORRECT; AND THERE ARE NO VISIBLE ENCROACHMENTS ON THE SUBJECT PROPERTY OR UPON ADJACENT AND ABUTTING SAID PROPERTY EXCEPT AS SHOWN HEREON.
3. THE TITLE LINES AND THE LINES OF ACTUAL POSSESSION ARE THE SAME, EXCEPT AS SHOWN.
4. THE PROPERTY DESCRIBED HEREON IS THE SAME AS THE PROPERTY DESCRIBED IN TITLE COMMITMENT NO. 24-0592 (THE COMMITMENT), WITH AN EFFECTIVE DATE OF MARCH 14, 2024 AND AN ISSUED DATE OF MARCH 21, 2024 THAT ALL EASEMENTS, COVENANTS AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT ARE APPARENT FROM A PHYSICAL INSPECTION OF THE SITE OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE SUBJECT PROPERTY.
5. THE SUBJECT TRACT LIES IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 48355C0510G WITH A MAP EFFECTIVE DATE OF OCTOBER 13, 2022, COUNTY OF NUECES, TEXAS, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED.
6. FARM-TO-MARKET HIGHWAY NO. 43 (WEBER ROAD) IS A PUBLIC DEDICATED RIGHT-OF-WAY AND IS IMMEDIATELY ADJACENT AND SERVES AS DIRECT ACCESS TO THE SUBJECT PROPERTY AND NO STRIPS, GORES OR GAPS ARE PRESENT.
7. THE FIELD-MEASURED DESCRIPTION OF THE SUBJECT PROPERTY FORMS A MATHEMATICALLY CLOSED FIGURE.
8. THE LEGAL DESCRIPTION SHOWN ON THIS PLAN DESCRIBES THE SAME PROPERTY AS THAT IN THE COMMITMENT.
9. THERE ARE NO GAPS, GORES, OR STRIPS IN THE PARCELS OR LOTS THAT CONSTITUTE THE SUBJECT PROPERTY.
10. THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2021, AND INCLUDES ITEMS 1, 2, 3, 4, 6(A), 6(B), 7(A), 7(B)(1), 8, 9, 11, 13, 16, AND 18 OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF TEXAS, THE MAXIMUM RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

STATE OF TEXAS
PHILIP W. CORNETT
5515
REGISTERED
PROFESSIONAL
LAND SURVEYOR

PHILIP W. CORNETT
REGISTRATION NO. 5515 WITHIN THE STATE OF TEXAS
DATE OF SURVEY: JUNE 07, 2024 "ON-THE GROUND"
DATE OF LAST REVISION: OCTOBER 09, 2024

SURVEY PREPARED BY:
JOHN COWAN & ASSOCIATES, INC.
10147 CR 135,
FLINT, TEXAS 75762
PHONE: 903-581-2238
WEBSITE: www.txsurveys.com
E-MAIL: pcornett@jcowaninc.com
TEXAS REGISTRATION CERTIFICATION NO. 10025500

SHEET 1 OF 1


JOHN COWAN & ASSOCIATES, INC.
10147 CR 135 FLINT, TEXAS 75762
PH: (903) 581-2238 WWW.TXSURVEYS.COM
FIRM REGISTRATION CERTIFICATION NO. 10025500


JOB NO. T24-084 RE: T24-085

T:\2024\T24-084 CORPUS CHRISTI (WEBER)

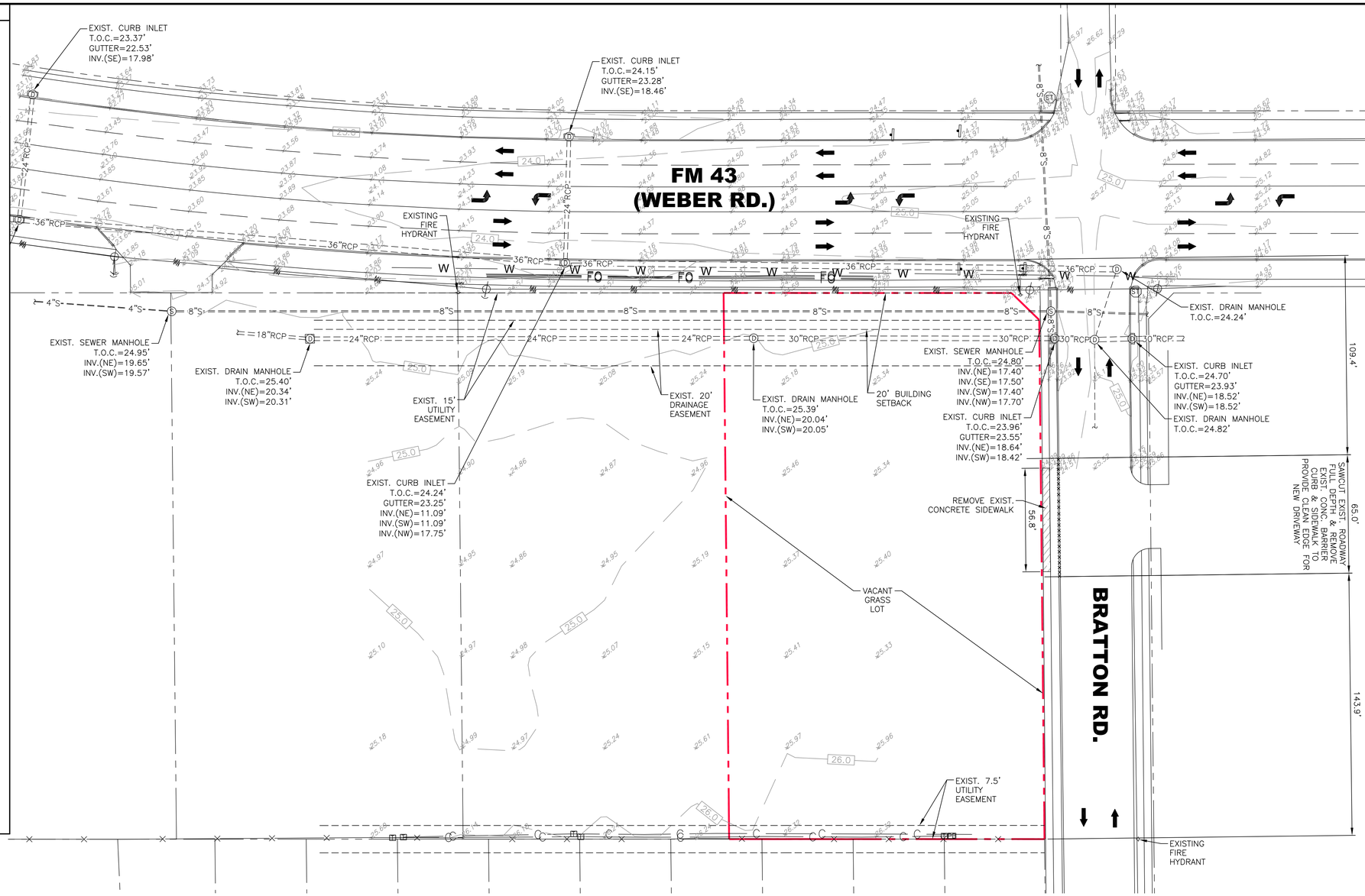
## LEGEND

### EXISTING FEATURES

| | |
|---|---|
| OR | EXIST. DROP INLET |
| —C | EXIST. GUY WIRE |
| — — W(SIZE) — — | EXIST. WATERLINE |
| — — G(SIZE) — — | EXIST. GAS LINE |
| — — E — — E — — | EXIST. UNDERGROUND ELECTRIC LINE |
| — — S — — S — — | EXIST. SEWER LINE |
| — — T — — T — — | EXIST. TELEPHONE LINE |
| (SIZE) | EXIST. DRAIN LINE |
| T.B.M. | TEMPORARY BENCHMARK |
| CS | THE POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL |
| T.C. | TOP OF CASTING/CURB ELEVATION |
| EL. | ELEVATION |
| HC | HANDICAP |
| SMH | SEWER MANHOLE |
| S | EXIST. SEWER MANHOLE |
| D | EXIST. DRAIN MANHOLE |
| | EXIST. FIRE HYDRANT |
| WV | EXIST. WATER VALVE |
| WM | EXIST. WATER METER |
| GM | GAS METER |
| GV | GAS VALVE |
| C | EXIST. SEWER CLEANOUT |
| | EXIST. SIGN |
| | EXIST. BOLLARD |
| | EXIST. FUEL FILLER LIDS |
| | EXIST. LIGHT POLE |
| | EXIST. TRAFFIC LIGHT |
| | HOSE BIB |
| | EXIST. TRAFFIC SIGNALBOX |
| | EXIST. RIGHT-OF-WAY MARKER |
| | EXIST. POWER OR TELEPHONE POLE |
| | EXIST. CATCH BASIN |
| XCUT | CROSS CUT IN CONC. |
| | EXIST. BOUNDARY LINE |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| INV. | INVERT ELEVATION |
| CONC. | CONCRETE |
| S/W | SIDEWALK |
| ×24.95 | EXIST. SPOT ELEVATION |
| FND | FOUND |
| | OVERHEAD ELECTRIC |
| | EXIST. TREE OR SHRUB |
| | EXIST. DITCH |
| | EXIST. VINYL FENCE |
| | EXIST. CHAINLINK FENCE |
| | EXIST. MAILBOX |
| | EXIST. TELEPHONE PEDESTAL |
| | EXIST. ELECTRICAL TRANSFORMER |
| AC | EXIST. AC UNIT |
| | EXIST. STEEL POLE |

### NEW FEATURES

| | |
|---|---|
| | CONCRETE PAVEMENT REMOVAL |




NOTES:

1. CONTRACTOR SHALL COMPLETELY REMOVE ALL EXISTING ABOVE AND BELOW GRADE STRUCTURES INCLUDING FOOTINGS, SLABS AND GRADE BEAMS, AND UTILITIES FROM THE PROJECT SITE. ANY DEBRIS OR UTILITIES THAT ARE PRESENT WITHIN RECOMMENDED CUT OR FILL ZONES MUST BE REMOVED. IF THESE ELEMENTS ARE BELOW ANY CUT/FILL, THEY MAY REMAIN IN PLACE PROVIDED THEY DO NOT INTERFERE WITH THE PIPELINES. HOWEVER, IF THE UTILITY IS A SEWER LINE, THEN IT SHALL BE FILLED WITH A CEMENTITIOUS GROUT MATERIAL AS PART OF THE ABANDONMENT. CONTRACTOR SHALL FILL TRENCHES/VOIDS CREATED BY REMOVAL OF PIPES, DROP INLETS, BOLLARDS, TREES, LIGHT PEDESTALS, STRUCTURES, SEPTIC TANKS, ETC. WITH SELECT FILL MATERIAL COMPACTED IN ACCORDANCE WITH SPECIFICATIONS OR A FLOWABLE FILL MATERIAL IN ACCORDANCE WITH TXDOT ITEM 401. FLOWABLE FILL DOES NOT NEED TO BE PLACED IN LIFTS, COMPACTED, OR TESTED.
2. CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY AGENCIES TO VERIFY UTILITY SERVICES HAVE BEEN TERMINATED OR DISCONNECTED PRIOR TO REMOVAL OF STRUCTURES (BUILDINGS), WATER METERS, GAS METERS, ETC.
3. THE LOCATIONS OF UNDERGROUND AND OTHER NONVISIBLE UTILITIES SHOWN HEREON HAVE BEEN PLOTTED BASED UPON DATA EITHER FURNISHED BY THE AGENCIES CONTROLLING SUCH DATA AND/OR OBTAINED FROM RECORDS MADE AVAILABLE TO USE BY THE AGENCIES CONTROLLING SUCH RECORDS. WHERE FOUND, THE SURFACE FEATURES OF UTILITIES ARE SHOWN. THE ACTUAL NONVISIBLE LOCATIONS MAY VARY FROM THOSE SHOWN HEREON. EACH AGENCY SHALL BE CONTACTED RELATIVE TO THE PRECISE LOCATION OF ITS UNDERGROUND INSTALLATIONS PRIOR TO ANY RELIANCE UPON THE ACCURACY OF SUCH LOCATIONS SHOWN HEREON. PRIOR TO EXCAVATION AND DIGGING CALL TEXAS 811.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION AND SHALL IMMEDIATELY REPORT ANY DAMAGES TO THE UTILITY ENTITIES. ALL REPAIRS OF THE DAMAGED UTILITIES SHALL BE DONE BY THE RESPECTIVE UTILITY ENTITY. ALL REPAIRS SHALL BE DONE AT THE CONTRACTORS EXPENSE.
5. ANY WORK IN THE ROADWAY OR ADJACENT TO THE ROADWAY CAUSING AN INTERFERENCE TO VEHICULAR TRAFFIC REQUIRES PRIOR NOTIFICATION TO THE CITY OF CORPUS CHRISTI AND CONFORMITY TO THE REQUIREMENTS OF THE UNIFORM MANUAL ON TRAFFIC CONTROL DEVICES OF THE STATE OF TEXAS. THE CONTRACTOR MUST FURNISH ALL TRAFFIC SIGNS AND/OR BARRICADES AND MAINTAIN THEM DURING CONSTRUCTION ACTIVITY. CONTRACTOR WILL BE RESPONSIBLE FOR THE PREPARATION, AND IMPLEMENTATION OF ANY REQUIRED TRAFFIC CONTROL PLANS, & SUBMITTAL OF THE TRAFFIC CONTROL PLAN TO THE CITY OF CORPUS CHRISTI FOR IMPROVEMENTS WITHIN ADJACENT RIGHT-OF-WAY.
6. PRIOR TO PLACING ANY FILL, ALL VEGETATION, TOPSOIL, POSSIBLE FILL MATERIAL AND ANY OTHERWISE UNSUITABLE MATERIALS SHALL BE STRIPPED (6 INCHES MINIMUM). THE STRIPPED MATERIALS CONSISTING OF VEGETATION AND ORGANIC MATERIALS SHALL BE WASTED OFF SITE, OR USED FOR LANDSCAPED AREAS.
7. WATER SHALL NOT BE ALLOWED TO COLLECT IN FOUNDATION EXCAVATIONS OR ON PREPARED SUBGRADE OF THE CONSTRUCTION AREA EITHER DURING OR AFTER CONSTRUCTION. UNDERCUT OR EXCAVATED AREAS SHALL BE SLOPED TOWARD ONE CORNER TO FACILITATE REMOVAL OF ANY COLLECTED RAINWATER, GROUNDWATER, OR SURFACE RUNOFF. POSITIVE SITE SURFACE DRAINAGE SHALL BE PROVIDED TO REDUCE INFILTRATION OF SURFACE WATER AROUND THE PERIMETER OF THE FOUNDATION. THE GRADES SHALL BE SLOPED AWAY FROM THE FOUNDATION AND SURFACE DRAINAGE AND ROOF DRAINAGE SHALL BE COLLECTED AND DISCHARGED SUCH THAT WATER IS NOT PERMITTED TO INFILTRATE AND/OR ACCUMULATE WITHIN THE FOUNDATION OR ANY BACKFILL AREAS.
8. TEMPORARY EXCAVATIONS SHALL BE IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
9. CONTRACTOR IS TO PROVIDE TO DEVELOPER/OWNER A UNIT PRICE FOR THE REMOVAL OF UNSUITABLE SOILS AND REPLACING WITH SELECT FILL WITH THE BID.
10. WHERE TREES ARE REMOVED, ALL ROOTS GREATER THAN ONE INCH IN DIAMETER SHALL BE REMOVED AND REPLACED WITH SELECT FILL AND COMPACTED IN ACCORDANCE WITH SPECIFICATIONS.
11. THE ROADWAYS SHALL BE KEPT CLEAN AND FREE OF DEBRIS, MUD, SAND, ETC. AT ALL TIMES.
12. THE CONTRACTOR SHALL NOTE THE CONDITION OF THE ADJACENT RIGHT-OF-WAY FRONTING THE SITE PRIOR TO BEGINNING CONSTRUCTION. AFTER DEMOLITION AND CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL PROMPTLY RESTORE AND REGRADE TO ITS ORIGINAL CONDITION ANY DAMAGE CAUSED TO THE ADJACENT RIGHT-OF-WAY AND STABILIZE WITH FILL MATERIAL AND SOD IN ACCORDANCE WITH ITEM 162 OF THE 2014 TXDOT STANDARDS SPECIFICATIONS.

## DEMOLITION PLAN

24" x 36" SCALE: 1" = 30'

**DEVELOPER:**
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293-3332

**DOLLAR GENERAL**
10,640 SQ. FT.
STORE NUMBER: 31090
FM 43 (WEBER RD.) &
BRATTON RD.
CORPUS CHRISTI
(NUECES COUNTY), TX


LINFIELD, HUNTER & JUNIUS, INC.
PROFESSIONAL ENGINEERS,
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3608 18th Street, Suite 200
Metairie, Louisiana 70002
PHONE: (504) 833-5300
FAX: (504) 833-5350
T.B.P.E. FIRM NO. 11654




SEAL
STATE OF TEXAS
CASEY M. GENOVESE
112246
LICENSED
PROFESSIONAL ENGINEER
10/02/24

| REV. NO. | DATE |
|---|---|
| 1 | 10/02/24 |
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| | |
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DOLLAR GENERAL - FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: DEMOLITION PLAN

PROJ. NO. 24-065
DATE 07/09/24

C-2

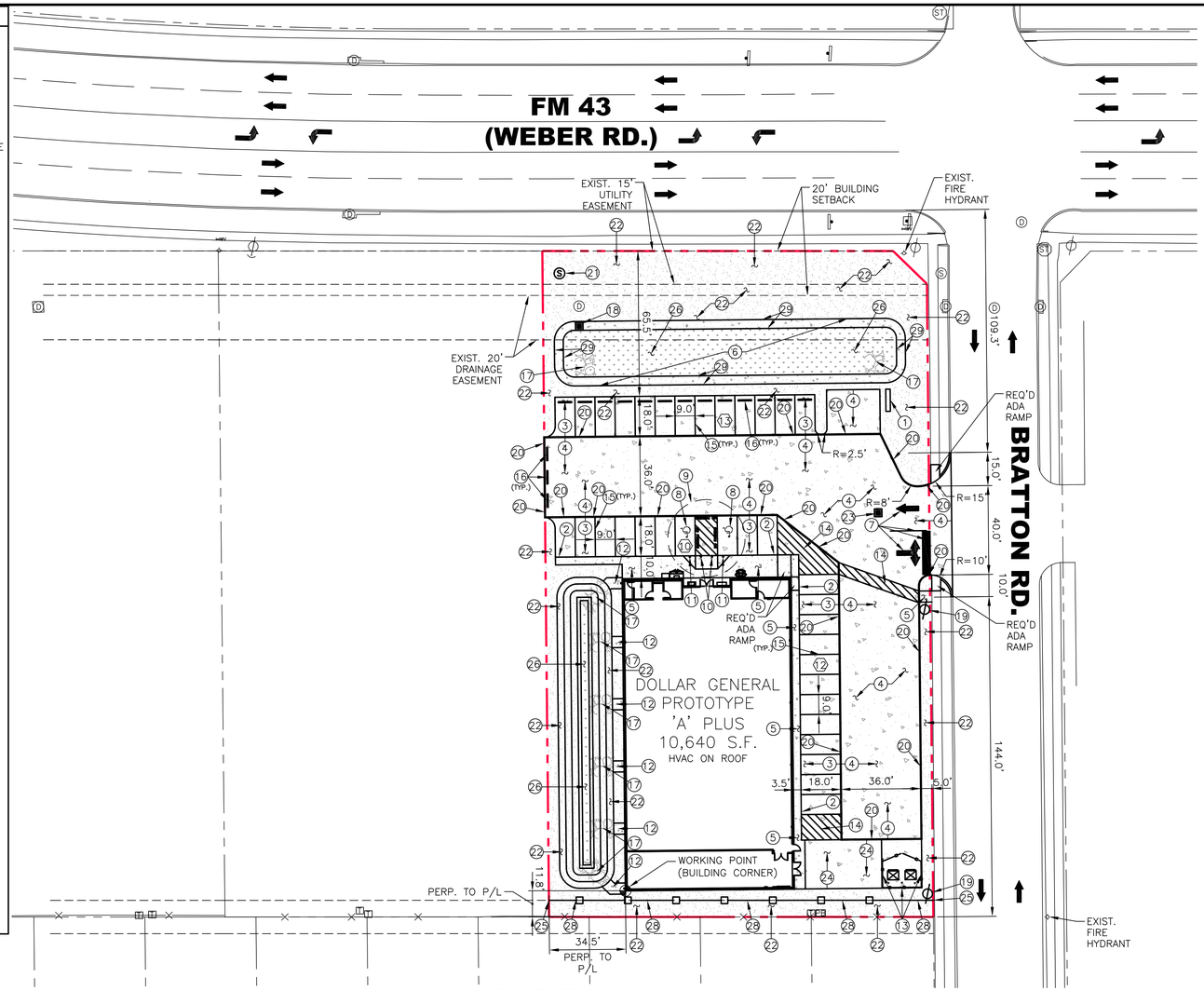
## LEGEND

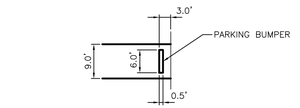
### EXISTING FEATURES

| | |
|---|---|
| ◍ OR ▥ | EXIST. DROP INLET |
| —C | EXIST. GUY WIRE |
| — — — W(SIZE) — — — | EXIST. WATERLINE |
| — — — G(SIZE) — — — | EXIST. GAS LINE |
| — — —E— —E— — — | EXIST. UNDERGROUND ELECTRIC LINE |
| — — —S— —S— — — | EXIST. SEWER LINE |
| — — —T— —T— — — | EXIST. TELEPHONE LINE |
| — — — (SIZE) — — — | EXIST. DRAIN LINE |
| T.B.M. | TEMPORARY BENCHMARK |
| CS | THE POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL |
| T.C. | TOP OF CASTING/CURB ELEVATION |
| EL. | ELEVATION |
| HC | HANDICAP |
| SMH | SEWER MANHOLE |
| Ⓢ | EXIST. SEWER MANHOLE |
| Ⓓ | EXIST. DRAIN MANHOLE |
| | EXIST. FIRE HYDRANT |
| ⋈WV | EXIST. WATER VALVE |
| WM | EXIST. WATER METER |
| GM | GAS METER |
| ⋈GV | GAS VALVE |
| C⊗O | EXIST. SEWER CLEANOUT |
| | EXIST. SIGN |
| | EXIST. BOLLARD |
| | EXIST. FUEL FILLER LIDS |
| | EXIST. LIGHT POLE |
| ⊗ | EXIST. TRAFFIC LIGHT |
| ⊠ | HOSE BIB |
| TS | EXIST. TRAFFIC SIGNALBOX |
| | EXIST. RIGHT-OF-WAY MARKER |
| | EXIST. POWER OR TELEPHONE POLE |
| | EXIST. CATCH BASIN |
| XCUT | CROSS CUT IN CONC. |
| | EXIST. BOUNDARY LINE |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| INV. | INVERT ELEVATION |
| CONC. | CONCRETE |
| S/W | SIDEWALK |
| | OVERHEAD ELECTRIC |
| | EXIST. TREE OR SHRUB |
| | EXIST. DITCH |
| | EXIST. CHAINLINK FENCE |
| | FOUND IRON PIPE |
| | DENOTES 1/2 IRON ROD SET |

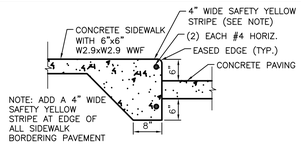
### NEW FEATURES

| | |
|---|---|
| | REQ'D POWER POLE |
| | REQ'D RIPRAP |
| | REQ'D DROP INLET |
| Ⓢ | REQ'D SEWER MANHOLE |

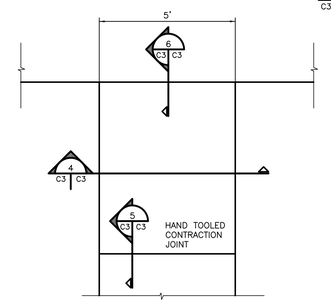


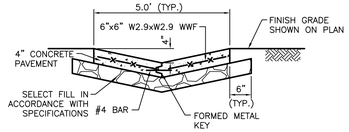

1 PARKING BUMPER DETAIL
C3 | C3 SCALE: N.T.S.



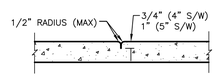

2 6" (MIN.) INTEGRAL CURB
C3 | C3 SCALE: N.T.S.



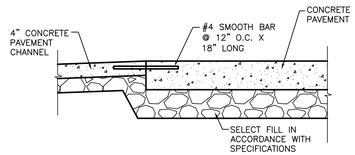

3 CONCRETE DRAINAGE CHANNEL
C3 | C3 SCALE: N.T.S.




4 SECTION
C3 | C3 SCALE: N.T.S




5 HAND TOOLED CONTRACTION JOINT
C3 | C3 (MAXIMUM SPACING 4'-0") SCALE: N.T.S.




6 SECTION
C3 | C3 SCALE: N.T.S.

## SITE PLAN STATISTICS

| | |
|---|---|
| EXISTING USE: | VACANT |
| PROPOSED USE: | RETAIL |
| DG SITE AREA: | 1.188 ACRES |
| BUILDING AREA: | 10,640 SQ. FT. (GROSS) |
| SALES FLOOR AREA: | 8,409 SQ. FT. |
| PARKING REQ'D: | 34 SPACES (1/250 S.F. NET RETAIL) |
| PARKING PROVIDED: | 35 SPACES (33 REGULAR SPACES) |
| HANDICAP SPACES PROVIDED: | 2 W/2 VAN ACCESSIBLE |
| BUILDING HEIGHT PROPOSED: | 18'± |
| TRUCK TYPE: | WB-67 |

NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK, VERIFYING ALL MEASUREMENTS AND GRADES AND REPORTING ANY DISCREPANCIES TO THE ENGINEER BEFORE STARTING CONSTRUCTION.
2. ANY WORK IN THE ROADWAY OR ADJACENT TO THE ROADWAY CAUSING AN INTERFERENCE TO VEHICULAR TRAFFIC REQUIRES PRIOR NOTIFICATION TO THE CITY OF CORPUS CHRISTI AND CONFORMITY TO THE REQUIREMENTS OF THE UNIFORM MANUAL ON TRAFFIC CONTROL DEVICES OF THE STATE OF TEXAS. THE CONTRACTOR MUST FURNISH ALL TRAFFIC SIGNS AND/OR BARRICADES AND MAINTAIN THEM DURING CONSTRUCTION ACTIVITY. CONTRACTOR WILL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF ANY REQUIRED TRAFFIC CONTROL PLANS FOR IMPROVEMENTS WITHIN ADJACENT RIGHT OF WAY.
3. REFER TO BOUNDARY SURVEY FOR EXISTING MONUMENTS TO LAYOUT PROPERTY LINE.
4. BRING UP GRADE UNDER ALL PAVEMENT WITH STRUCTURAL FILL COMPACTED IN ACCORDANCE WITH SPECIFICATIONS.

LEGAL DESCRIPTION:
ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND, BEING A PART OF THE ENRIQUEZ VILLAREAL SURVEY, ABSTRACT NO. 1, NUECES COUNTY, TEXAS, AND BEING PART OF LOT 3, BLOCK 13 OF FOXWOOD ESTATES, PHASE III, AS SHOWN BY PLAT OF SAME RECORDED IN VOLUME 65, PAGE 158 OF THE PLAT RECORDS OF NUECES COUNTY, TEXAS, AND BEING MORE COMPLETELY DESCRIBED AS FOLLOWS, TO-WIT:
COMMENCING AT A 5/8" IRON ROD (FOUND) FOR THE EAST CORNER OF THE ABOVE MENTIONED LOT 3, THE NORTH CORNER OF BLOCK 1 OF SUMMER WIND VILLAGE, PHASE VI, AS SHOWN BY PLAT OF SAME RECORDED IN VOLUME 67, PAGE 769, IN THE SOUTHWEST RIGHT OF WAY OF BRATTON ROAD;
THENCE SOUTH 28 DEG. 43 MIN. 20 SEC. WEST WITH THE NORTHWEST LINE OF BLOCK 1, THE SOUTHEAST LINE OF LOT 3, A DISTANCE OF 140.93 FT. TO A CORNER AND THE PLACE OF BEGINNING;
THENCE SOUTH 28 DEG. 43 MIN. 20 SEC. WEST WITH THE NORTHWEST LINE OF BLOCK 1, THE SOUTHEAST LINE OF LOT 3, A DISTANCE OF 178.00 FT. TO THE SOUTH CORNER OF SAME, THE EAST CORNER OF LOT 2;
THENCE NORTH 61 DEG. 51 MIN. 15 SEC. WEST WITH THE NORTHEAST LINE OF LOT 2, THE SOUTHWEST LINE OF LOT 3, AT 7.50 FT. PASS A ½" IRON ROD (SET) FOR REFERENCE, AND CONTINUE A TOTAL DISTANCE OF 299.87 FT. TO THE WEST CORNER OF SAME IN THE BASE OF A FIRE HYDRANT, THE NORTH CORNER OF LOT 2, IN THE SOUTHEAST RIGHT OF WAY OF FARM TO MARKET HIGHWAY NO. 43 (WEBER ROAD);
THENCE NORTH 28 DEG. 44 MIN. 02 SEC. EAST WITH THE SOUTHEAST RIGHT OF WAY OF FARM TO MARKET HIGHWAY NO. 43, THE NORTHWEST LINE OF LOT 3, A DISTANCE OF 178.00 FT. TO A ½" IRON ROD (SET) FOR CORNER;
THENCE SOUTH 61 DEG. 51 MIN. 15 SEC. EAST, AT 292.33 PASS A ½" IRON ROD (SET) FOR REFERENCE, AND CONTINUE A TOTAL DISTANCE OF 299.83 FT. TO THE PLACE OF BEGINNING, CONTAINING 1.225 ACRES OF LAND.

5. ALL DIMENSIONS SHOWN ARE FROM:
   - FACE OF CURB/EDGE OF PAVEMENT TO FACE OF CURB/EDGE OF PAVEMENT
   - FACE OF CURB/EDGE OF PAVEMENT TO PROPERTY LINE
   - FACE OF CURB/EDGE OF PAVEMENT TO CENTER OF STRUCTURE (DROP INLET, MANHOLE, ETC.)
   - PROPERTY LINE TO BUILDING FACE
6. ALL CONSTRUCTION SHALL CONFORM WITH APPLICABLE CITY, STATE, AND COUNTY CONSTRUCTION STANDARDS AS IDENTIFIED IN THESE PLANS. THE CONTRACTOR SHALL MAINTAIN A CURRENT RELEASE OF THE CITY, STATE, AND COUNTY LAND DEVELOPMENT STANDARDS MANUAL ON THE PROJECT SITE FOR REFERENCE DURING CONSTRUCTION OF THE PROJECT.
7. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" OR AS OTHERWISE SPECIFIED. ALL REFERENCED SIGN STANDARDS ARE TAKEN FROM THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". ALL NEW SIGNS SHALL BE MOUNTED ON GALVANIZED POSTS AND IN ACCORDANCE WITH CITY, STATE, AND COUNTY REGULATIONS.
8. CONTRACTOR SHALL INSTALL ACCESSIBLE RAMPS PER THE CITY OF CORPUS CHRISTI AND TAS/ADA STANDARDS AT ALL DRIVE AND BUILDING LOCATIONS AS REQUIRED.
9. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHOWN ON THE APPROVED PLANS FOR THE DURATION OF CONSTRUCTION OR UNTIL FINAL INSPECTION.
10. A SIGN PERMIT MUST BE OBTAINED PRIOR TO INSTALLATION OF STANDARD SIGN.
11. CONTRACTOR IS RESPONSIBLE FOR VERIFYING POSTAL DELIVERY METHOD WITH THE CITY OF CORPUS CHRISTI. IF A PHYSICAL MAILBOX IS REQUIRED, THE CONTRACTOR IS RESPONSIBLE FOR THE PURCHASE, LOCATION PLACEMENT, AND INSTALLATION.
12. ALL CURB RADII SHALL BE 5 FEET UNLESS OTHERWISE NOTED ON THIS PLAN.
13. DRIVEWAYS, CURBS AND SIDEWALKS INSPECTION IN THE RIGHT-OF-WAY, PLEASE CONTACT ED SANCHEZ WITH CONSTRUCTION INSPECTION AT 361-826-1738

### CONSTRUCTION LEGEND

1. REQ'D DOLLAR GENERAL SIGN, PERMITTING AND INSTALLATION TO BE PERFORMED BY CONTRACTOR
2. REQ'D 6" INTEGRAL CURB W/ 4" WIDE SAFETY YELLOW STRIPE (SEE DETAIL 2, THIS SHEET)
3. REQ'D LIGHT DUTY PORTLAND CEMENT CONCRETE PAVEMENT (SEE DETAIL 2A, DWG. C-6)
4. REQ'D HEAVY DUTY PORTLAND CEMENT CONCRETE PAVEMENT (SEE DETAIL 2B, DWG. C-6)
5. REQ'D CONCRETE SIDEWALK (SEE DETAIL 7, DWG. C-6)
6. REQ'D DETENTION POND (SEE DWG. C-4)
7. REQ'D PAVEMENT MARKINGS (SEE DETAILS 1 & 3, DWG. C-6)
8. REQ'D HANDICAP SYMBOL (SEE DETAIL 10, DWG. C-6)
9. REQ'D HANDICAP PARKING DETAIL (SEE DETAIL 5, DWG. C-6)
10. REQ'D PIPE BOLLARD (SEE DETAIL 8, DWG. C-6)
11. REQ'D HANDICAP PARKING SIGN (SEE DETAIL 4, DWG. C6)
12. REQ'D CONCRETE DRAINAGE CHANNEL (SEE DETAIL 3, THIS SHEET)
13. REQ'D DUMPSTER / COMPACTOR ENCLOSURE (SEE DETAIL 1, DWG. C-6B)
14. REQ'D 4" WIDE YELLOW STRIPING @ 45° @ 4' O.C.
15. REQ'D 4" WIDE YELLOW STRIPING
16. REQ'D CONCRETE PARKING BUMPER (SOLID YELLOW) (SEE DETAIL 1, THIS SHEET)
17. REQ'D 12" STONE RIPRAP (UNDERLAIN W/GEOTEXTILE FABRIC IN ACCORDANCE W/TXDOT ITEM 432)
18. REQ'D STORMWATER OUTFALL CONTROL STRUCTURE (SEE DETAIL 13, DWG. C-6)
19. REQ'D NEW UTILITY POLE BY ELECTRIC COMPANY AT CONTRACTOR'S EXPENSE (EXACT LOCATION TO BE DETERMINED IN THE FIELD, SEE SHT. C-5)
20. REQ'D FIRE LANE STRIPING (4" WIDE RED STRIPING) W/ 3" WHITE LETTERS: "NO PARKING FIRE LANE TOW AWAY ZONE" EVERY 25'
21. REQ'D SEWER MANHOLE (SEE DETAIL 14, DWG. C-6)
22. REQ'D BERMUDA SOD (SEE DWG. L-1)
23. REQ'D DROP INLET (SEE DETAIL 11, DWG. C-6)
24. REQ'D 8" PORTLAND CEMENT CONCRETE PAVEMENT (SEE DETAIL 1, DWG. C-6A)
25. BEGIN/END REQ'D 6' TALL WOODEN FENCE
26. REQ'D BERMUDA SEED (SEE DWG. L-1)
27. REQ'D 8" PORTLAND CEMENT CONCRETE PAVEMENT (SEE DETAIL 1, DWG. C-6A)
28. REQ'D 6' TALL WOODEN FENCE (SEE DETAIL 4, DWG. C-6A)
29. REQ'D CONCRETE SLOPE PAVING (SEE DETAIL 5, DWG. C-6A)

| PAVING LEGEND | |
|---|---|
| CONCRETE PAVING | |
| STRIPED ISLAND | |

| LANDSCAPING LEGEND | |
|---|---|
| REQ'D BERMUDA SOD | |
| REQ'D BERMUDA HYDROSEED | |

CIVIL SITE PLAN
24" x 36" SCALE: 1" = 30'

### STRIPING LEGEND

| | |
|---|---|
| YELLOW CURBING & BOLLARDS – PARKING LOT | SURFACES SHALL BE CLEAN, DRY AND METAL SURFACES FREE OF HEAVY RUST<br>2 COATS SHERWIN WILLIAMS – KEM 4000 ACRYLIC ALKYD ENAMEL SAFETY YELLOW B55Y300 |
| STRIPING – PARKING LOT | SURFACES SHALL BE CLEAN AND DRY<br>TOP COAT SHERWIN WILLIAMS – PROMAR TRAFFIC MARKING PAINT YELLOW TM5495 |
| HANDICAP STRIPING – PARKING LOT | SURFACES SHALL BE CLEAN AND DRY<br>TOP COAT SHERWIN WILLIAMS – PROMAR TRAFFIC MARKING PAINT "H.C." BLUE |

**DEVELOPER:**
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293-3332

**DOLLAR GENERAL**
10,640 SQ. FT.
STORE NUMBER: 31090
FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI
(NUECES COUNTY), TX


LINFIELD, HUNTER & JUNIUS, INC.
PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS
3608 18th Street, Suite 200
Metairie, Louisiana 70002
PHONE: (504) 833-5300
FAX: (504) 833-5350
T.B.P.E. FIRM NO. 11654




SEAL
STATE OF TEXAS
CASEY M. GENOVESE
112246
LICENSED
PROFESSIONAL ENGINEER
11/27/24

| REV. NO. | DATE |
|---|---|
| 1 | 10/02/24 |
| 2 | 11/27/24 |

DOLLAR GENERAL - FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: CIVIL SITE PLAN

PROJ. NO. 24-065
DATE 07/09/24

C-3

## LEGEND

### EXISTING FEATURES

| | |
|---|---|
| OR | EXIST. DROP INLET |
| —C | EXIST. GUY WIRE |
| — — — W(SIZE) — — — | EXIST. WATERLINE |
| — — — G(SIZE) — — — | EXIST. GAS LINE |
| — — E — — E — — | EXIST. UNDERGROUND ELECTRIC LINE |
| — — S — — S — — | EXIST. SEWER LINE |
| — — T — — T — — | EXIST. TELEPHONE LINE |
| (SIZE) | EXIST. DRAIN LINE |
| T.B.M. | TEMPORARY BENCHMARK |
| CS | THE POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL |
| T.C. | TOP OF CASTING/CURB ELEVATION |
| EL. | ELEVATION |
| HC | HANDICAP |
| SMH | SEWER MANHOLE |
| S | EXIST. SEWER MANHOLE |
| D | EXIST. DRAIN MANHOLE |
| | EXIST. FIRE HYDRANT |
| W | EXIST. WATER VALVE |
| WM | EXIST. WATER METER |
| GM | GAS METER |
| GV | GAS VALVE |
| C O | EXIST. SEWER CLEANOUT |
| | EXIST. SIGN |
| | EXIST. BOLLARD |
| | EXIST. FUEL FILLER LIDS |
| | EXIST. LIGHT POLE |
| | EXIST. TRAFFIC LIGHT |
| | HOSE BIB |
| | EXIST. TRAFFIC SIGNALBOX |
| | EXIST. RIGHT–OF–WAY MARKER |
| | EXIST. POWER OR TELEPHONE POLE |
| | EXIST. CATCH BASIN |
| XCUT | CROSS CUT IN CONC. |
| | EXIST. BOUNDARY LINE |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| INV. | INVERT ELEVATION |
| CONC. | CONCRETE |
| S/W | SIDEWALK |
| ×24.95 | EXIST. SPOT ELEVATION |
| FND | FOUND |
| | OVERHEAD ELECTRIC |
| | EXIST. TREE OR SHRUB |
| | EXIST. DITCH |
| | EXIST. VINYL FENCE |
| | EXIST. CHAINLINK FENCE |
| | FOUND IRON PIPE |
| | EXIST. MAILBOX |
| | EXIST. TELEPHONE PEDESTAL |
| | EXIST. ELECTRICAL TRANSFORMER |
| AC | EXIST. AC UNIT |
| | EXIST. STEEL POLE |
| ELEV | EXIST. CONTOURS |

### NEW FEATURES

| | |
|---|---|
| | DRAINAGE ARROW |
| 25.95 / 26.45 | GUTTER ELEVATION / TOP OF CURB ELEVATION |
| T.O.C. 24.80 | TOP OF CASTING ELEVATION |
| G.L. | GRADE LINE |
| T.O.C. | TOP OF CASTING |
| F.P.G. | FINISHED PAVEMENT GRADE |
| T.O.D. | TOP OF DITCH |
| B.O.D. | BOTTOM OF DITCH |

## GENERAL NOTES:

1. SEE DRAWING C–3 FOR GEOMETRY ASSOCIATED WITH NEW CONSTRUCTION.
2. ELEVATIONS SHOWN REFER TO NAVD88 DATUM.
3. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST CITY OF CORPUS CHRISTI AND STANDARDS AND SPECIFICATIONS.
4. CONCRETE TO DRAIN AS SHOWN.
5. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES WHEN FIELD CONDITIONS WARRANT OFF SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
6. CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPOSED GRADES AND OTHER IMPROVEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH ADA & TAS ACCESSIBILITY STANDARDS CRITERIA.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND VERIFYING ALL MEASUREMENTS AND GRADES AND REPORTING ANY DISCREPANCIES TO THE ENGINEER BEFORE STARTING CONSTRUCTION.
8. THE GRADE IN THE GRASS AND LANDSCAPED AREAS SHALL COME TO THE TOP OF THE PAVEMENT UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
9. CONTRACTOR SHALL CONFIRM ALL EXISTING SLOPES FOR ACCESSIBLE ROUTES AS WELL AS THE ACCESSIBLE PARKING STALLS AND ACCESSIBLE AISLES WITH A SLOPE METER TO CONFIRM MAXIMUM SLOPES ARE NOT EXCEEDED.
10. CONTRACTOR IS REQUIRED TO PROVIDE AS–BUILT SPOT ELEVATIONS ALONG THE ACCESSIBLE ROUTES SHOWN ON THIS PLAN EVERY 10' IN ORDER TO CONFIRM MAXIMUM (2%) CROSS–SLOPE AND MAXIMUM (5%) SLOPES IN THE DIRECTION OF TRAVEL. IN ADDITION, SPOT ELEVATIONS ARE REQUIRED ON ALL CORNERS AND MIDPOINTS OF ACCESSIBLE PARKING STALLS AND ACCESSIBLE AISLES TO CONFIRM MAXIMUM 2% SLOPES ARE NOT EXCEEDED IN ALL DIRECTIONS. THIS INFORMATION SHALL BE PROVIDED A MINIMUM OF 4 WEEKS BEFORE STORE TURNOVER.
11. AT ADJOINING MATERIALS THERE IS TO BE A SMOOTH AND LEVEL TRANSITION OF NO MORE THAN 1/4" VERTICAL CHANGE.
12. CONTRACTOR TO CHECK EXISTING SPOT GRADES AT AREAS OF NEW AND ADJACENT EXISTING SIDEWALK AND/OR PAVING PRIOR TO BEGINNING OF CONSTRUCTION TO VERIFY THAT COMPLIANCE WITH SLOPE LIMITS CAN BE MET.
13. THE ABOVE MAXIMUM SLOPES ARE BASED OFF THE 2012 TAS/ADA REQUIREMENTS WHILE THE DESIGN IS PROPOSED AT LESS THAN THE REQUIREMENTS TO ACCOUNT FOR MINOR GRADING ERRORS IN THE FIELD.
14. SEE MEP DRAWINGS FOR UTILITY LOCATIONS.
15. A TCEQ COMPLIANT STORM WATER POLLUTION PREVENTION PLAN WILL BE PROVIDED TO THE CITY PRIOR TO ANY CONSTRUCTION ACTIVITIES.

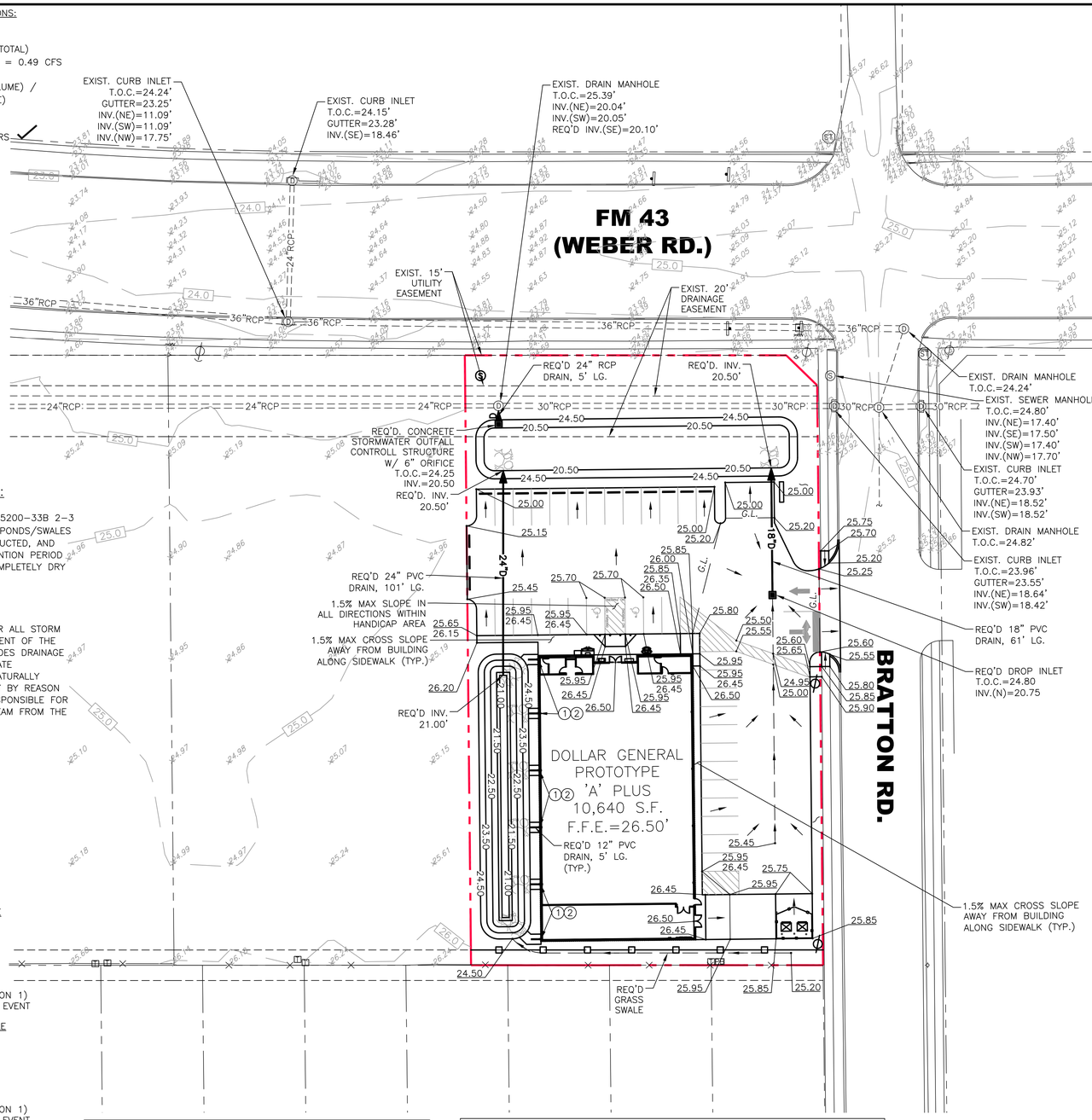
### CONSTRUCTION LEGEND

1. SEE MEP DRAWINGS FOR UTILITY LOCATION
2. REQ'D MIN. 5' LONG, 4" PERFORATED LANDSCAPE PIPE STRAPPED TO A 12"X24" CONCRETE SPLASH BLOCK (SEE DETAIL 3, DWG. C–6A)

DETENTION POND DRAWDOWN TIME CALCULATIONS:

100–YR STORM MAX HGL = EL. 24.02 FT
100–YR STORM MAX VOLUME = 18,045 CF (TOTAL)
AVERAGE 100–YR FLOW THROUGH 6" ORIFICE = 0.49 CFS

DRAWDOWN TIME = (100–YR STORM MAX VOLUME) / (AVERAGE 100–YR FLOW THROUGH 6" ORIFICE)
DRAWDOWN TIME = 18,045 CF / 0.49 CFS
= 36,827 SEC
= 10.2 HOURS < 48 HOURS ✓




## FAA ADVISORY CIRCULAR NOTE:

PURSUANT TO FAA ADVISORY CIRCULAR 150/5200–33B 2–3 SUB–SECTION B: "STORM WATER DETENTION PONDS/SWALES SHOULD BE DESIGNED, ENGINEERED, CONSTRUCTED, AND MAINTAINED FOR A MAXIMUM 48–HOUR DETENTION PERIOD AFTER THE DESIGN STORM AND REMAINS COMPLETELY DRY BETWEEN STORMS."

## CORPUS CHRISTI NOTES:

THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL STORM WATER DRAINAGE CAUSED BY THE DEVELOPMENT OF THE PROPERTY. THIS RESPONSIBILITY ALSO INCLUDES DRAINAGE DIRECTED TO THAT PROPERTY BY THE ULTIMATE DEVELOPMENT AS WELL AS THE DRAINAGE NATURALLY FLOWING ONTO THE THROUGH THE PROPERTY BY REASON OF TOPOGRAPHY. THE OWNER SHALL BE RESPONSIBLE FOR ANY SILT OR SOILS TRANSPORTED DOWNSTREAM FROM THE PROPERTY BY DRAINAGE.

PERIMETER SWALE CAPACITY:

SECTION 1 CAPACITY
$V = (1.486/N)*(R_H)^{2/3}*S^{1/2}$
N = 0.025
$R_H = A/P_W$ = 7.54 FT$^2$ / 11.07 FT
= 0.68 FT
S = 0.00504 FT/FT
Q = VA

$V = (1.486/0.025)*(0.68)^{2/3}*(0.00504)^{1/2}$
V = 3.26 FT/S
Q = 3.26 * 7.54 = 24.58 CFS

25 YEAR DESIGN FLOW TO PERIMETER SWALE

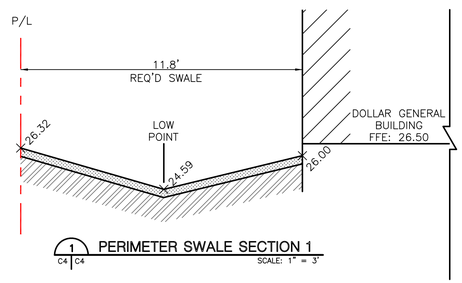
Q = C*I*A
C = 0.30
I = 9.37 IN/HR
A = 0.039 AC.

Q = 0.30*9.37*0.039
Q = 0.11 CFS ⟶ PERIMETER SWALE (SECTION 1) HAS CAPACITY TO HANDLE 25 YEAR STORM EVENT

100 YEAR DESIGN FLOW TO PERIMETER SWALE

Q = C*I*A
C = 0.30
I = 11.90 IN/HR
A = 0.039 AC.

Q = 0.30*11.90*0.039
Q = 0.14 CFS ⟶ PERIMETER SWALE (SECTION 1) HAS CAPACITY TO HANDLE 100 YEAR STORM EVENT




1 C4 PERIMETER SWALE SECTION 1 C4 SCALE: 1" = 3'

SUMMARY OF DETENTION ANALYSIS:

THE DETENTION POND AND RESTRICTOR ORIFICE AS DESIGNED ARE SUFFICIENT TO PREVENT THE TOTAL POST–DEVELOPED PEAK FLOWS FROM EXCEEDING THE PRE–DEVELOPED PEAK RUNOFF RATES FOR THE 5 YEAR, 10 YEAR, 25 YEAR, AND 100 YEAR DESIGN STORM FREQUENCIES. TWO DETENTION PONDS WITH A COMBINED STORAGE VOLUME OF ±21,664 C.F. (3.50' TO 4.00' DEEP) WITH A 6" INCH ORIFICE WILL BE PROVIDED TO MEET THESE REQUIREMENTS.

PRE–DEVELOPED RUNOFF VALUES

| STORM EVENT | COMPOSITE C | INTENSITY (IN/HR) | AREA (ACRE) | Q (CFS) |
|---|---|---|---|---|
| 5 YEAR | 0.30 | 4.07 | 1.188 | 1.45 |
| 10 YEAR | 0.30 | 4.79 | 1.188 | 1.71 |
| 25 YEAR | 0.30 | 5.75 | 1.188 | 2.05 |
| 100 YEAR | 0.30 | 7.25 | 1.188 | 2.59 |

FLOW RATE VALUES (PRIOR TO DETENTION)

| STORM EVENT | PREDEVELOPED RUNOFF (CFS) | POST–DEVELOPED RUNOFF (PRIOR TO DETENTION) (CFS) | INCREASE IN OVERALL RUNOFF FROM PREDEVELOPED TO POST–DEVELOPED (CFS) |
|---|---|---|---|
| 5 YEAR | 1.45 | 5.77 | 4.32 |
| 10 YEAR | 1.71 | 6.83 | 5.12 |
| 25 YEAR | 2.05 | 8.24 | 6.19 |
| 100 YEAR | 2.59 | 10.48 | 7.89 |

POST–DEVELOPED RUNOFF VALUES (PRIOR TO DETENTION)

| DRAINAGE AREA | | COMPOSITE C | INTENSITY$_{5YR}$ (IN/HR) | Q$_{5YR}$ (CFS) | INTENSITY$_{10YR}$ (IN/HR) | Q$_{10YR}$ (CFS) | INTENSITY$_{25YR}$ (IN/HR) | Q$_{25YR}$ (CFS) | INTENSITY$_{100YR}$ (IN/HR) | Q$_{100YR}$ (CFS) |
|---|---|---|---|---|---|---|---|---|---|---|
| DA 1 | 0.410 | 0.75 | 6.56 | 2.02 | 7.76 | 2.39 | 9.37 | 2.88 | 11.90 | 3.66 |
| DA 2 | 0.261 | 0.90 | 6.56 | 1.54 | 7.76 | 1.82 | 9.37 | 2.20 | 11.90 | 2.80 |
| DA 3 | 0.467 | 0.69 | 6.56 | 2.11 | 7.76 | 2.50 | 9.37 | 3.02 | 11.90 | 3.84 |
| DA 4 | 0.050 | 0.30 | 6.56 | 0.10 | 7.76 | 0.12 | 9.37 | 0.14 | 11.90 | 0.18 |
| TOTAL | 1.188 | 0.74 | VARIES | 5.77 | VARIES | 6.83 | VARIES | 8.24 | VARIES | 10.48 |

FLOW RATE VALUES (WITH DETENTION)

| STORM EVENT | PREDEVELOPED RUNOFF (CFS) | POST–DEVELOPED RUNOFF (WITH DETENTION) (CFS) | REDUCTION IN OVERALL RUNOFF FROM PREDEVELOPED TO POST–DEVELOPED (CFS) |
|---|---|---|---|
| 5 YEAR | 1.45 | 1.40 | 0.05 |
| 10 YEAR | 1.71 | 1.56 | 0.15 |
| 25 YEAR | 2.05 | 1.69 | 0.36 |
| 100 YEAR | 2.59 | 1.94 | 0.65 |

## GRADING & DRAINAGE PLAN

24" x 36" SCALE: 1" = 30'


LINFIELD, HUNTER & JUNIUS, INC.
PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS
3608 18th Street, Suite 200
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T.B.P.E. FIRM NO. 11654




SEAL — STATE OF TEXAS — CASEY M. GENOVESE — 112246 — LICENSED PROFESSIONAL ENGINEER — 11/27/24

| REV. NO. | DATE |
|---|---|
| 1 | 10/02/24 |
| 2 | 11/27/24 |

DEVELOPER:
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293–3332

DOLLAR GENERAL
10,640 SQ. FT.
STORE NUMBER: 31090
FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI
(NUECES COUNTY), TX

DOLLAR GENERAL – FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: GRADING & DRAINAGE PLAN

PROJ. NO. 24–065
DATE 07/09/24

C–4

## LEGEND

### EXISTING FEATURES

| | |
|---|---|
| ◍ OR ◍ | EXIST. DROP INLET |
| —< | EXIST. GUY WIRE |
| — — — W(SIZE) — — — | EXIST. WATERLINE |
| — — — G(SIZE) — — — | EXIST. GAS LINE |
| — — —E— — —E— — — | EXIST. UNDERGROUND ELECTRIC LINE |
| — — —S— — —S— — — | EXIST. SEWER LINE |
| — — —T— — —T— — — | EXIST. TELEPHONE LINE |
| — — — — — — (SIZE) — — — — — — | EXIST. DRAIN LINE |
| T.B.M. | TEMPORARY BENCHMARK |
| CS | THE POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL |
| T.C. | TOP OF CASTING/CURB ELEVATION |
| EL. | ELEVATION |
| HC | HANDICAP |
| SMH | SEWER MANHOLE |
| Ⓢ | EXIST. SEWER MANHOLE |
| Ⓓ | EXIST. DRAIN MANHOLE |
| | EXIST. FIRE HYDRANT |
| ⋈WV | EXIST. WATER VALVE |
| WM | EXIST. WATER METER |
| GM | GAS METER |
| ⋈GV | GAS VALVE |
| C⊗O | EXIST. SEWER CLEANOUT |
| | EXIST. SIGN |
| | EXIST. BOLLARD |
| | EXIST. FUEL FILLER LIDS |
| | EXIST. LIGHT POLE |
| ⊗ | EXIST. TRAFFIC LIGHT |
| ⊠ | HOSE BIB |
| TS | EXIST. TRAFFIC SIGNALBOX |
| | EXIST. RIGHT-OF-WAY MARKER |
| | EXIST. POWER OR TELEPHONE POLE |
| | EXIST. CATCH BASIN |
| XCUT | CROSS CUT IN CONC. |
| | EXIST. BOUNDARY LINE |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| INV. | INVERT ELEVATION |
| CONC. | CONCRETE |
| S/W | SIDEWALK |
| ×21.81 | EXIST. SPOT ELEVATION |
| FND | FOUND |
| | OVERHEAD ELECTRIC |
| | EXIST. TREE OR SHRUB |
| | EXIST. DITCH |
| | EXIST. VINYL FENCE |
| | EXIST. CHAINLINK FENCE |
| | EXIST. MAILBOX |
| | EXIST. TELEPHONE PEDESTAL |
| | EXIST. ELECTRICAL TRANSFORMER |
| AC | EXIST. AC UNIT |
| | EXIST. STEEL POLE |

### NEW FEATURES

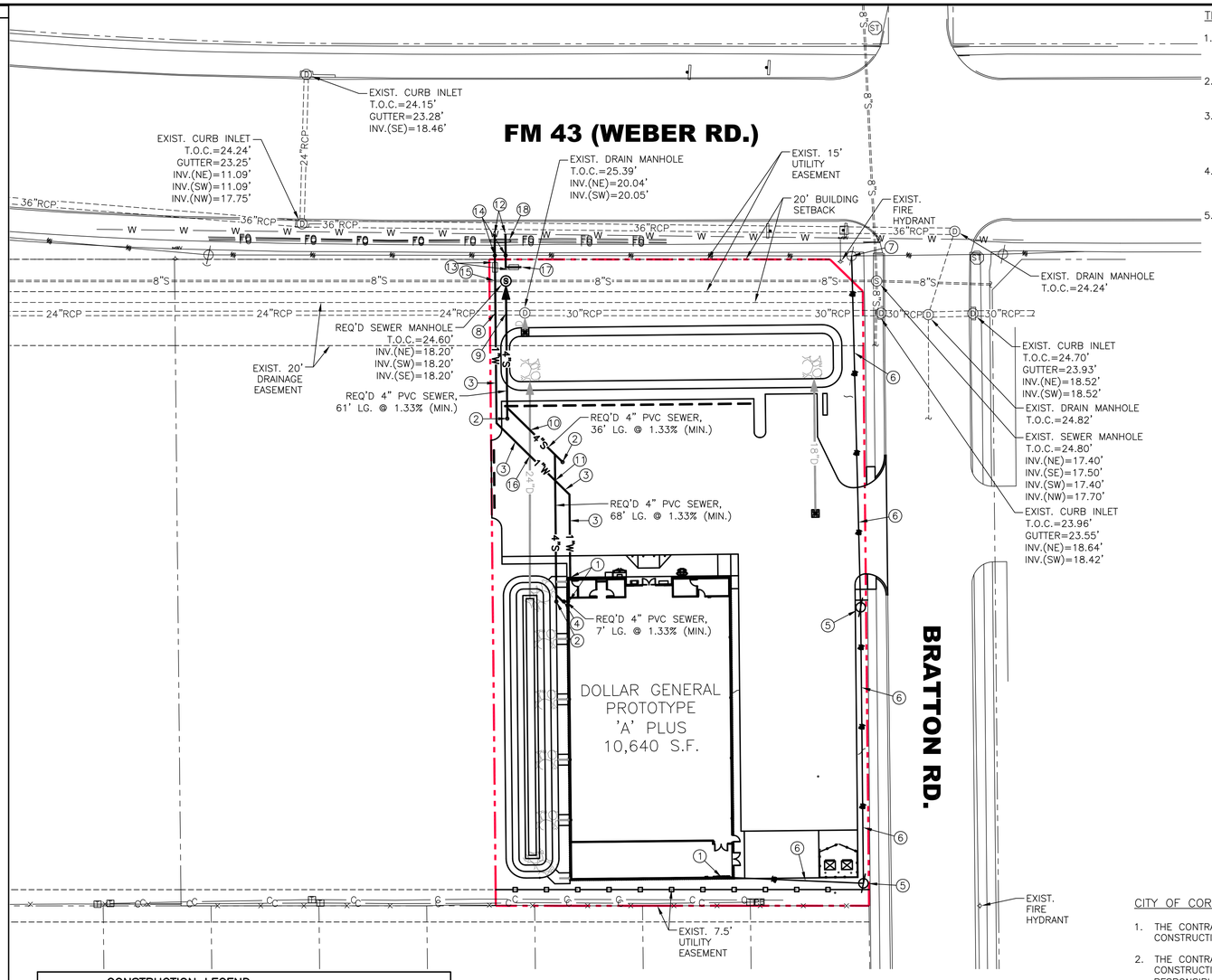
| | |
|---|---|
| | REQ'D SEWER CLEANOUT |
| X"G | REQ'D GAS LINE |
| X"D | REQ'D DRAIN LINE |
| X"S | REQ'D SEWER LINE |
| E | REQ'D ELECTRICAL CONDUIT |
| T | REQ'D TELEPHONE CONDUIT |
| X"W | REQ'D WATERLINE |
| | REQ'D OVERHEAD ELECTRIC |
| PVC | POLYVINYL CHLORIDE |
| RCP | REINFORCED CONCRETE PIPE |
| RCPA | REINFORCED CONCRETE PIPE ARCH |
| Ⓦ | REQ'D WATER WELL |
| Ⓓ | REQ'D DRAIN MANHOLE |
| | REQ'D POWER POLE |

GENERAL NOTES:

1. ALL PVC DRAIN PIPE SHALL BE A-2000 (SEE DETAIL 12, DWG. C-6)
2. ALL RCP DRAIN PIPE SHALL BE CLASS IV, WALL TYPE B
3. ALL ABOVE GROUND PIPES & CONDUITS SHALL BE PROPERLY INSULATED

GENERAL NOTES FOR DRAIN OR SEWER TIE-IN TO EXIST. STRUCTURES:

1. FOR CONCRETE STRUCTURES, CORE-DRILL THE REQUIRED OPENING OR DRILL HOLES AROUND THE PERIMETER OF THE REQUIRED OPENING UNTIL THE SECTION CAN BE TAKEN OUT WITHOUT DAMAGE TO THE STRUCTURE. FOR LARGE STRUCTURES, SAW-CUTTING MAY BE REQUIRED. FOR ANY METHOD, ALLOW ADEQUATE SPACING FOR PLACING NON-SHRINK GROUT. ANY REINFORCEMENT LEFT IN-PLACE SHALL BE INCORPORATED IN THE PATCH WORK.
2. PROPOSED PLASTIC PIPE FOR THE DRAIN TIE-IN SHALL BE COATED WITH AN APPROVED EPOXY AND ROLLED IN MORTAR SAND TO PROVIDE A BONDING SURFACE BETWEEN THE OUTER PIPE WALL AND THE PATCH MATERIAL. CONTRACTOR HAS THE OPTION OF PURCHASING PIPE STUBS WITH PREPARED SURFACES FROM SUPPLIERS.




### CONSTRUCTION LEGEND

1. SEE MEP DRAWINGS FOR UTILITY LOCATION
2. REQ'D CLEANOUT (SEE DETAIL 2, DWG. C-6A)
3. REQ'D 1" PVC WATER LINE (SEE DETAIL 9, DWG. C-6) (SEE CITY OF CORPUS CHRISTI WATER STANDARD DETAIL SHEET 1 OF 4 "TYP. PIPE TRENCHING, BEDDING AND BACKFILL FOR WATER LINE")
4. REQ'D TWO-WAY SEWER CLEANOUT, SEE MEP DRAWINGS FOR DETAILS
5. REQ'D UTILITY POLE INSTALLED BY AEP AT CONTRACTOR'S EXPENSE. EXACT LOCATION TO BE DETERMINED IN THE FIELD. (SEE ELECTRIC NOTE 1)
6. REQ'D OVERHEAD ELECTRIC LINE TO BE INSTALLED BY AEP AT CONTRACTOR'S EXPENSE (SEE ELECTRICAL NOTE 1)
7. ELECTRICAL CONNECTION AT UTILITY POLE TO BE PERFORMED BY AEP (SEE ELECTRIC NOTE 1)
8. INSTALL NEW WATER LINE ABOVE EXIST. DRAIN LINE WITH A MINIMUM VERTICAL CLEARANCE OF 18"
9. INSTALL NEW SEWER LINE BELOW EXIST. DRAIN LINE WITH A MINIMUM VERTICAL CLEARANCE OF 12"
10. INSTALL NEW SEWER LINE BELOW NEW DRAIN LINE WITH A MINIMUM VERTICAL CLEARANCE OF 12"
11. INSTALL NEW SEWER LINE BELOW NEW WATER LINE WITH A MINIMUM VERTICAL CLEARANCE OF 12"
12. REQ'D 1" DOMESTIC WATER TIE-IN & 1" IRRIGATION WATER TIE-IN TO EXISTING 8" WATER MAIN W/ TS&V (SEE GENERAL UTILITY NOTE 9)
13. REQ'D ABOVE-GROUND 1" RPZ BACKFLOW PREVENTER WITHIN A GORILLA CAGE ON A 4" CONCRETE PAD (SEE GENERAL UTILITY NOTE 8)
14. REQ'D 1" WATER METER & COPPER WATER LINE EXTENSION UP TO METER. METER INSTALLED BY CITY OF CORPUS CHRISTI AT CONTRACTOR'S EXPENSE & METER BOX FURNISHED & INSTALLED BY CONTRACTOR (SEE GENERAL UTILITY NOTE 9)
15. INSTALL NEW WATER LINE ABOVE EXIST. SEWER LINE WITH A MIN. VERTICAL CLEARANCE OF 24"
16. INSTALL NEW WATER LINE ABOVE NEW DRAIN LINE WITH A MIN. VERTICAL CLEARANCE OF 18"
17. REQ'D 1" IRRIGATION STUB
18. INSTALL NEW WATER LINE ABOVE/BELOW EXIST. FIBER OPTIC LINE WITH A MINIMUM VERTICAL CLEARANCE OF 18"

UTILITY PLAN
24" x 36" SCALE: 1" = 30'

TELEPHONE NOTES:

1. CONTACT AT&T 1-888-944-0447 FOR COORDINATION AND REQUIREMENTS TO OBTAIN TELEPHONE SERVICE.
2. AT&T WILL PROVIDE COPPER AND FIBER CABLE AT CONTRACTOR'S EXPENSE.
3. A 2" (MIN.) CONDUIT FROM EQUIPMENT ROOM TO RIGHT-OF-WAY WITH PULL STRING INSIDE CONDUIT TO BE INSTALLED BY CONTRACTOR.
4. A 4' x 8' x 3/4" PLYWOOD BACKBOARD TO BE INSTALLED BY CONTRACTOR INSIDE EQUIPMENT ROOM.
5. CONTRACTOR TO INSTALL A #6 WIRE FROM POWER GROUND SYSTEM TO PLYWOOD BACKBOARD.

GENERAL UTILITY NOTES:

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST TXDOT, CITY OF CORPUS CHRISTI AND NUECES COUNTY STANDARDS AND SPECIFICATIONS.
2. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER IMMEDIATELY FOR DIRECTIONS.
3. CONTRACTOR SHALL COORDINATE ANY INTERRUPTION OF UTILITY SERVICE WITH OWNER AND UTILITY COMPANY.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION, AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING OR CONSTRUCTION ACTIVITY THE CONTRACTOR SHALL NOTIFY TEXAS 811 FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.
5. ANY PLANNED INTERRUPTION OF UTILITY SERVICE SHALL BE GIVEN A 48 HOUR NOTICE TO THE UTILITY COMPANY AND THE OWNER.
6. CONTRACTOR SHALL SAW CUT, REMOVE, AND REPLACE ASPHALT/CONCRETE PAVEMENT AS NECESSARY TO INSTALL UNDERGROUND ELECTRIC, TELEPHONE, SEWER, WATER, AND COMMUNICATION CONDUITS.
7. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL AND TELEPHONE SERVICE WITH APPROPRIATE LOCAL UTILITY.
8. CROSS CONNECTION CONTROL AND BACKFLOW PREVENTION SHALL BE IN ACCORDANCE WITH THE UNIFORM STATEWIDE BUILDING CODE. ALL BACKFLOW PREVENTERS SHALL BE ABOVE-GROUND AND PROPERLY INSULATED.
9. CONTRACTOR SHALL CONTACT EDWARD VILLARREAL W/ CITY OF CORPUS CHRISTI AT (361) 826-3254 FOR THE INSTALLATION OF WATER METERS AND NEW TAPS TO EXISTING WATER LINES.
10. CONTRACTOR MUST FIELD VERIFY EXISTING TELEPHONE/FIBER OPTIC LINE INVERTS/DEPTHS. IF CONFLICT EXISTS, CONTACT AT&T.
11. CONTRACTOR SHALL REFERENCE MEP PLANS FOR UTILITY CONNECTIONS INSIDE BUILDING.
12. INSTALL ALL BENDS, FITTINGS, AND ADAPTERS FOR SEWER LINES AS SHOWN ON PLAN.
13. CONTRACTOR SHALL CONTACT TEXAS 811 PRIOR TO PERFORMING ANY EXCAVATION WORK. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES.
14. CONTRACTOR MUST FIELD VERIFY ALL EXISTING DRAINAGE & SEWER INVERTS. NOTIFY ENGINEER OF ANY PROBLEMS BEFORE CONSTRUCTION BEGINS.

CITY OF CORPUS CHRISTI CONTRACTOR NOTES:

1. THE CONTRACTOR SHALL ACQUIRE THE REQUIRED CITY OF CORPUS CHRISTI PERMIT'S BEFORE STARTING ANY CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND PROTECTING, SAFEGUARDING ALL EXISTING UTILITIES. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY, AND ALL, DAMAGE TO EXISTING PUBLIC/PRIVATE UTILITIES. ALL DAMAGES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND IN ACCORDANCE WITH THE UTILITY OWNER STANDARDS AND SPECIFICATIONS.
3. THE CONTRACTOR SHALL NOTIFY SEVENTY-TWO (72) HOURS PRIOR TO BEGINNING ANY EXCAVATION, TRENCHING, OR DIGGING, USING POWERED EQUIPMENT OR HAND TOOLS, WHICH MAY DAMAGE A PIPELINE. ANY PERSON WITHIN THE CITY'S JURISDICTION SHALL BE REQUIRED TO CONTACT 1-800-545-6005 OR ONLINE AT HTTPS://WWW.TEXAS811.ORG TO DETERMINE IF THERE ARE ANY PIPELINES OR PUBLIC UTILITIES IN THE VICINITY OF THE PROPOSED ACTIVITIES.
4. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCY AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE START OF CONSTRUCTION: CORPUS CHRISTI UTILITY DEPARTMENT AT 1-361-826-1877.
5. THE MINIMUM DEPTH FROM THE BOTTOM OF THE PAVEMENT TO TOP OF THE FIBER OPTIC IS 3-FEET.
6. A PERMIT IS REQUIRED FOR ANY PUBLIC CONSTRUCTION DONE IN A PUBLIC RIGHT OF WAY OR PUBLIC EASEMENT. CONTACT TRAFFIC ENGINEERING AT ROWManagement@cctexas.com.

ELECTRIC NOTES:

1. CONTACT RUBEN NUNEZ WITH AEP AT (361) 889-3862 FOR COORDINATION AND REQUIREMENTS TO OBTAIN ELECTRICAL SERVICE.
2. CONTRACTOR SHALL PROVIDE A 4" PVC (SCH 40) GRAY CONDUIT WITH A PULL STRING FROM TRANSFORMER LOCATION TO DIP POLE. CONDUIT SHALL MEET NEMA TC-2 REQUIREMENT AND BE LABELED AS "ELECTRICAL....NEMA TC-2."
3. A MINIMUM COVER OF 48" SHALL BE MAINTAINED FOR ALL BURIED CONDUIT.
4. ALL 90 DEGREE CONDUIT BENDS SHALL HAVE A RADIUS OF CURVATURE OF AT LEAST 48".
5. A MINIMUM HORIZONTAL CLEARANCE OF 24" SHALL BE MAINTAINED FROM ALL SEWER LINES. ALL OTHER UTILITIES RUNNING PARALLEL TO PRIMARY UNDERGROUND ELECTRICAL LINES SHALL MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 12" OR A MINIMUM HORIZONTAL CLEARANCE OF 24".

**DEVELOPER:**
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293-3332

**DOLLAR GENERAL**
10,640 SQ. FT.
STORE NUMBER: 31090
FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI (NUECES COUNTY), TX


LINFIELD, HUNTER & JUNIUS, INC.
PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS
3608 18th Street, Suite 200
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PHONE: (504) 833-5300
FAX: (504) 833-5350
T.B.P.E. FIRM NO. 11654




SEAL
STATE OF TEXAS
CASEY M. GENOVESE
112246
LICENSED PROFESSIONAL ENGINEER
11/27/24

| REV. NO. | DATE |
|---|---|
| 1 | 10/02/24 |
| 2 | 11/27/24 |
| | |
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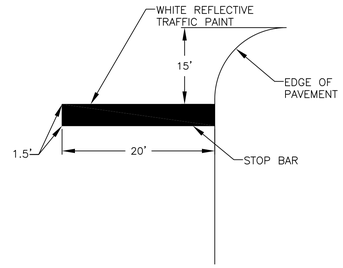
| | |

DOLLAR GENERAL - FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI (NUECES COUNTY), TX

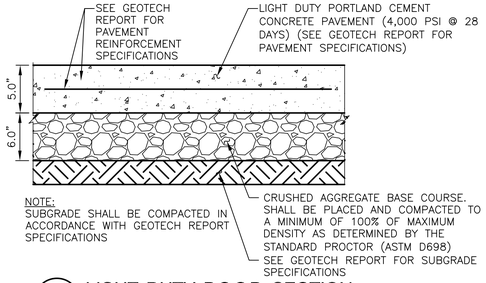
THIS SHEET: UTILITY PLAN

PROJ. NO. 24-065
DATE 07/09/24

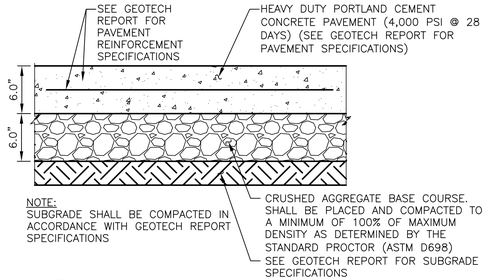
**C-5**




1 TYPICAL PAVEMENT MARKINGS
C3 | C6 NOT TO SCALE

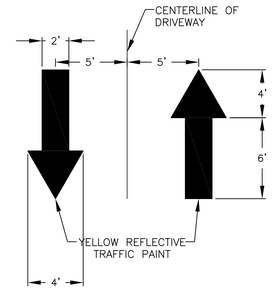



2A LIGHT DUTY P.C.C.P. SECTION
C3 | C6 NOT TO SCALE

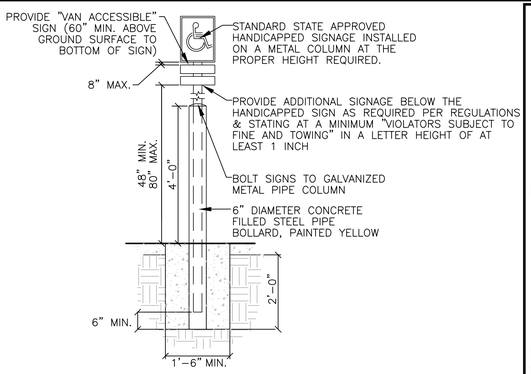



2B HEAVY DUTY P.C.C.P. SECTION
C3 | C6 NOT TO SCALE

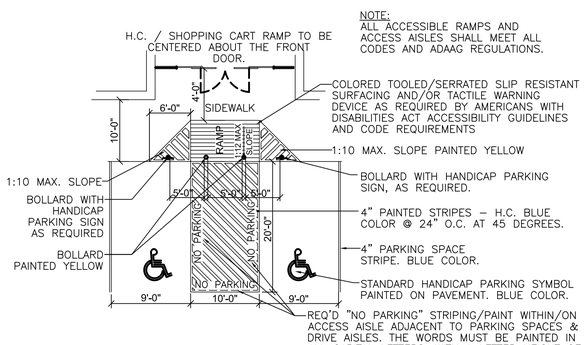
NOTE: TEMPLATE AVAILABLE FROM MALTISE SIGNS. CONTACT THE DOLLAR GENERAL CONSTRUCTION PROJECT MANAGER FOR MORE INFORMATION




3 DRIVEWAY TRAFFIC FLOW DIRECTIONAL ARROW DETAIL
C3 | C6 NOT TO SCALE




4 HANDICAP PARKING SIGN DETAIL
C3 | C6 NOT TO SCALE



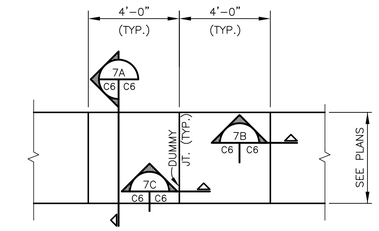

5 HANDICAP PARKING DETAIL
C3 | C6 NOT TO SCALE

SEE CITY OF CORPUS CHRISTI WASTEWATER STANDARD DETAILS SHEET 4 OF 4, "TRENCH BACKFILL FOR WASTEWATER LINES AND PAVEMENT REPAIR FOR UTILITIES"

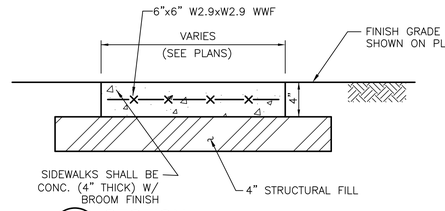
6 TYPICAL SANITARY SEWER PVC PIPE TRENCH DETAIL
C5 | C6 NOT TO SCALE

SEE CITY OF CORPUS CHRISTI WATER STANDARD DETAIL SHEET 1 OF 4 "TYP. PIPE TRENCHING, BEDDING AND BACKFILL FOR WATER LINE"

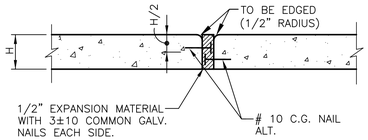
9 TYPICAL WATER PVC PIPE TRENCH DETAIL
C5 | C6 NOT TO SCALE



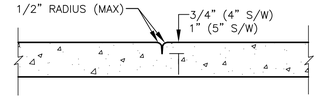

7 SIDEWALK DETAIL
C3 | C6 NOT TO SCALE



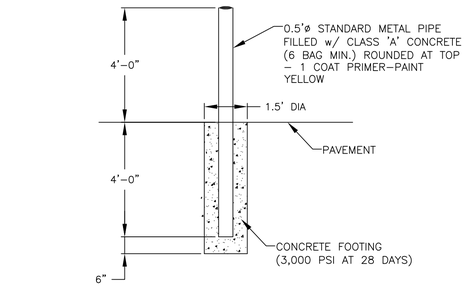

7A SECTION
C6 | C6 NOT TO SCALE



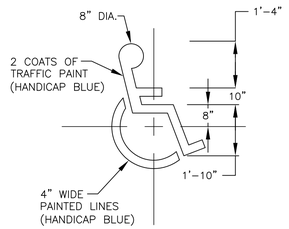

7B EXPANSION JOINT (TYPE "A")
C6 | C6 (MAXIMUM SPACING 20'-0") NOT TO SCALE




7C HAND TOOLED CONTRACTION JOINT
C6 | C6 (MAXIMUM SPACING 4'-0") NOT TO SCALE



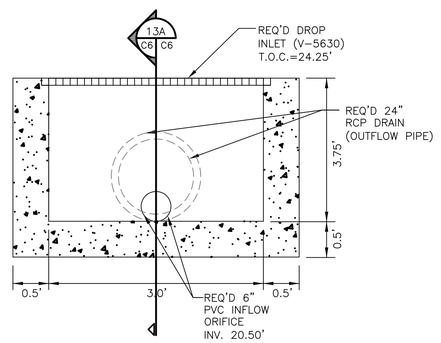

8 PIPE BOLLARD
C3 | C6 NOT TO SCALE



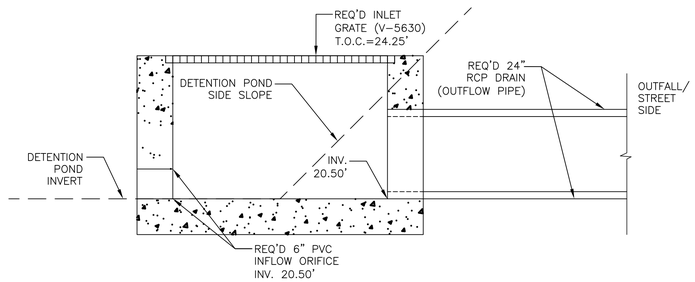

10 HANDICAP SYMBOL
C3 | C6 NOT TO SCALE

SEE CITY OF CORPUS CHRISTI STORM WATER STANDARD DETIALS

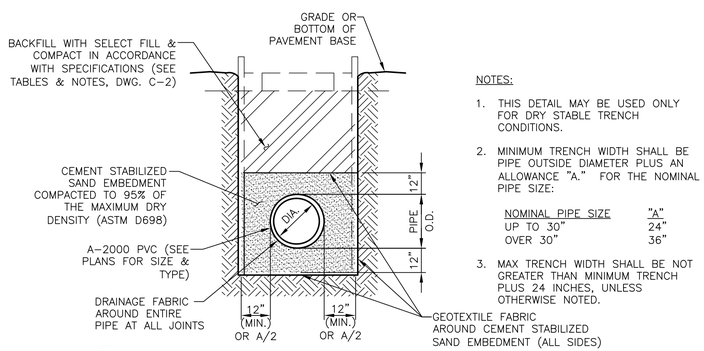
11 DETAIL OF DROP INLET
C3 | C6 NOT TO SCALE




13 OUTFALL CONTROL STRUCTURE
C3,C4 | C6 NOT TO SCALE




13A OUTFALL CONTROL STRUCTURE SECTION 13A
C3,C4 | C6 NOT TO SCALE




NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS.
2. MINIMUM TRENCH WIDTH SHALL BE PIPE OUTSIDE DIAMETER PLUS AN ALLOWANCE "A." FOR THE NOMINAL PIPE SIZE:

| NOMINAL PIPE SIZE | "A" |
|---|---|
| UP TO 30" | 24" |
| OVER 30" | 36" |

3. MAX TRENCH WIDTH SHALL BE NOT GREATER THAN MINIMUM TRENCH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.

12 TYPICAL A-2000 PVC PIPE TRENCH DETAIL
C5 | C6 NOT TO SCALE

SEE CITY OF CORPUS CHRISTI WASTEWATER STANDARD DETAIL SHEET 1 OF 4

14 DETAIL OF SEWER MANHOLE
C3,C5 | C6 NOT TO SCALE

**DEVELOPER:**
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293–3332

**DOLLAR GENERAL**
10,640 SQ. FT.
STORE NUMBER: 31090
FM 43 (WEBER RD.) & BRATTON RD.
CORPUS CHRISTI
(NUECES COUNTY), TX

LINFIELD, HUNTER & JUNIUS, INC.
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3608 18th Street, Suite 200
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T.R.P.E. FIRM NO. 11654



SEAL
STATE OF TEXAS
CASEY M. GENOVESE
112246
LICENSED PROFESSIONAL ENGINEER
11/27/24

| REV. NO. | DATE |
|---|---|
| 1 | 10/02/24 |
| 2 | 11/27/24 |

DOLLAR GENERAL - FM 43 (WEBER RD.) & BRATTON RD.
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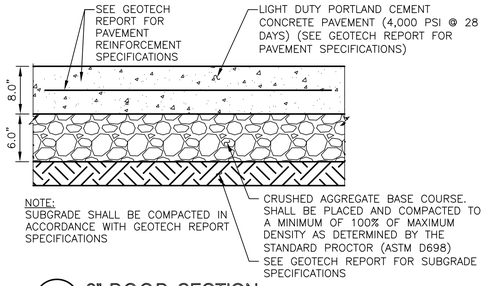
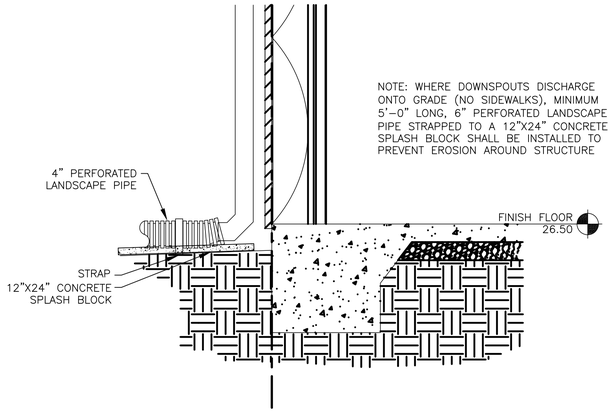
THIS SHEET: CONSTRUCTION DETAILS

PROJ. NO. 24–065
DATE 07/09/24

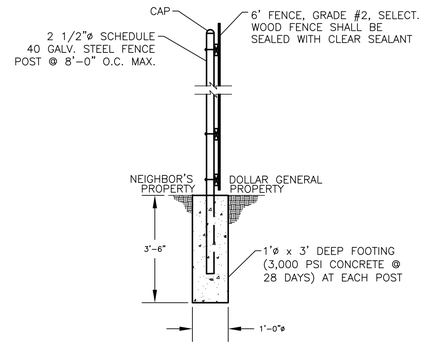
C-6



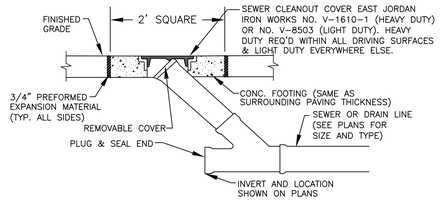

1 8" P.C.C.P. SECTION
C3 | C6A NOT TO SCALE



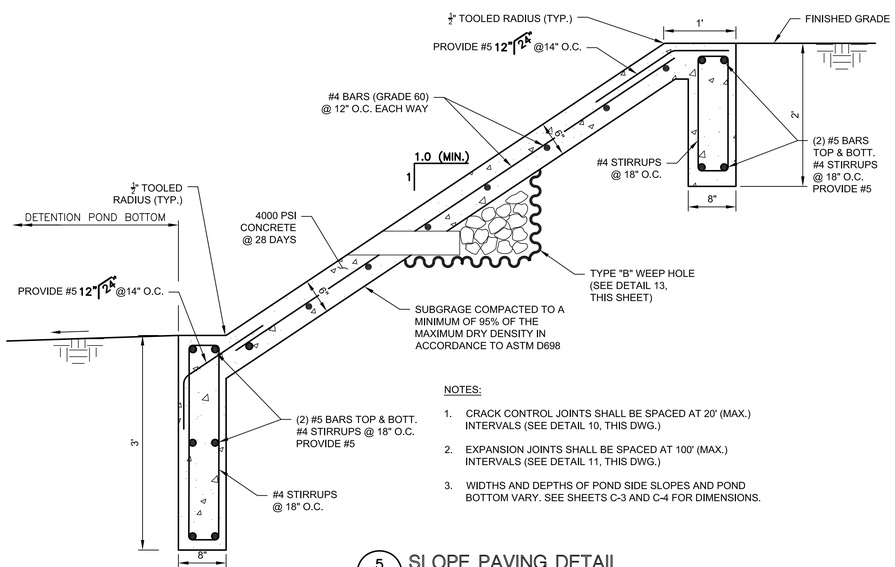

3 DOWNSPOUT DETAIL
C4 | C6A NOT TO SCALE




4 PERIMETER FENCE DETAIL
C3 | C6A NOT TO SCALE




2 CLEANOUT DETAIL
C5 | C6A NOT TO SCALE




NOTES:

1. CRACK CONTROL JOINTS SHALL BE SPACED AT 20' (MAX.) INTERVALS (SEE DETAIL 10, THIS DWG.)
2. EXPANSION JOINTS SHALL BE SPACED AT 100' (MAX.) INTERVALS (SEE DETAIL 11, THIS DWG.)
3. WIDTHS AND DEPTHS OF POND SIDE SLOPES AND POND BOTTOM VARY. SEE SHEETS C-3 AND C-4 FOR DIMENSIONS.

5 SLOPE PAVING DETAIL
C3 | C6A NOT TO SCALE

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DEVELOPER:
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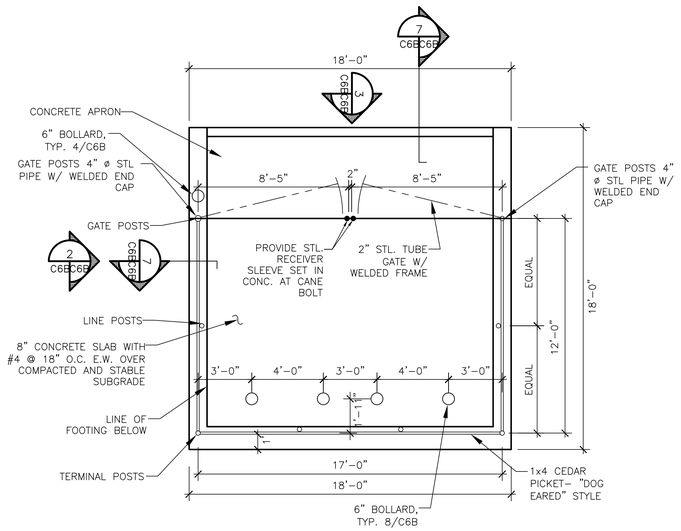
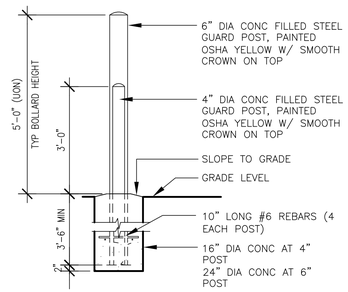
C-6A



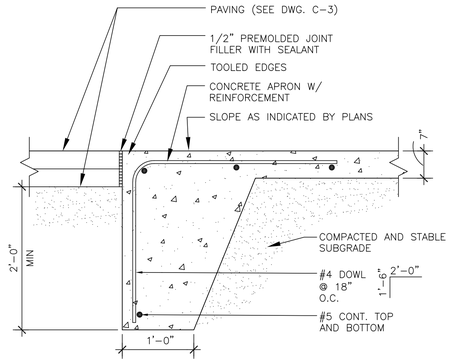

## 1 ENCLOSURE PLAN - DUMPSTER/COMPACTOR

C3 | C6B SCALE: 1/4" = 1'-0"



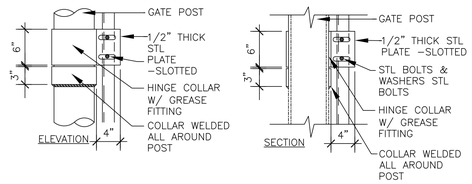

## 4 EXTERNAL BOLLARD DETAIL

C6B | C6B SCALE: 1/2" = 1'-0"



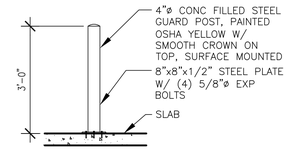

## 7 CONCRETE APRON DETAIL

C6B | C6B SCALE: 1" = 1'-0"



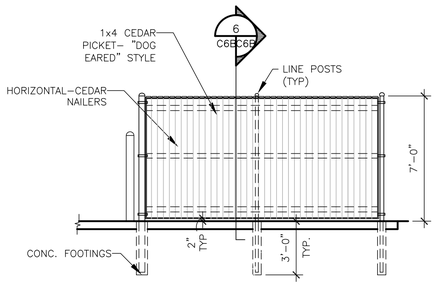

## 5 GATE HINGE DETAIL

C6B | C6B SCALE: 1" = 1'-0"



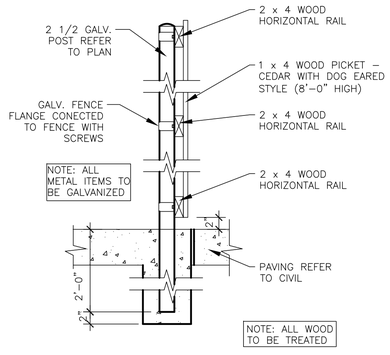

## 8 INTERNAL BOLLARD DETAIL

C6B | C6B SCALE: 1/2" = 1'-0"



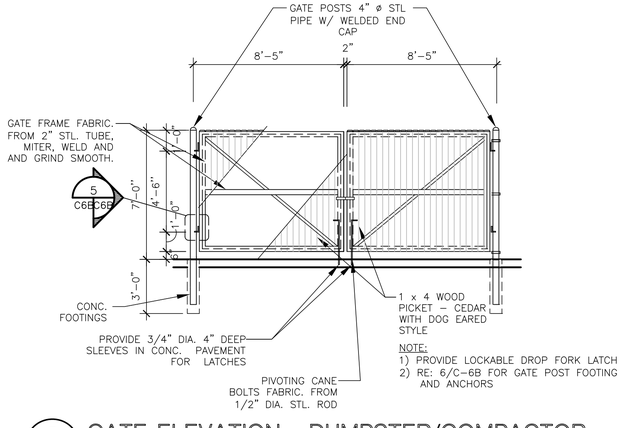

## 2 ENCLOSURE ELEVATION - DUMPSTER/COMPACTOR

C6B | C6B SCALE: 1/4" = 1'-0"




## 6 DUMPSTER FENCE DETAIL

C6B | C6B SCALE: 1" = 1'-0"




## 3 GATE ELEVATION - DUMPSTER/COMPACTOR

C6B | C6B SCALE: 1/4" = 1'-0"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PROJ. NO. 24-065
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**C-6B**

**DEVELOPER:**
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293-3332

**DOLLAR GENERAL**
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STORE NUMBER: 31090
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BRATTON RD.
CORPUS CHRISTI
(NUECES COUNTY), TX

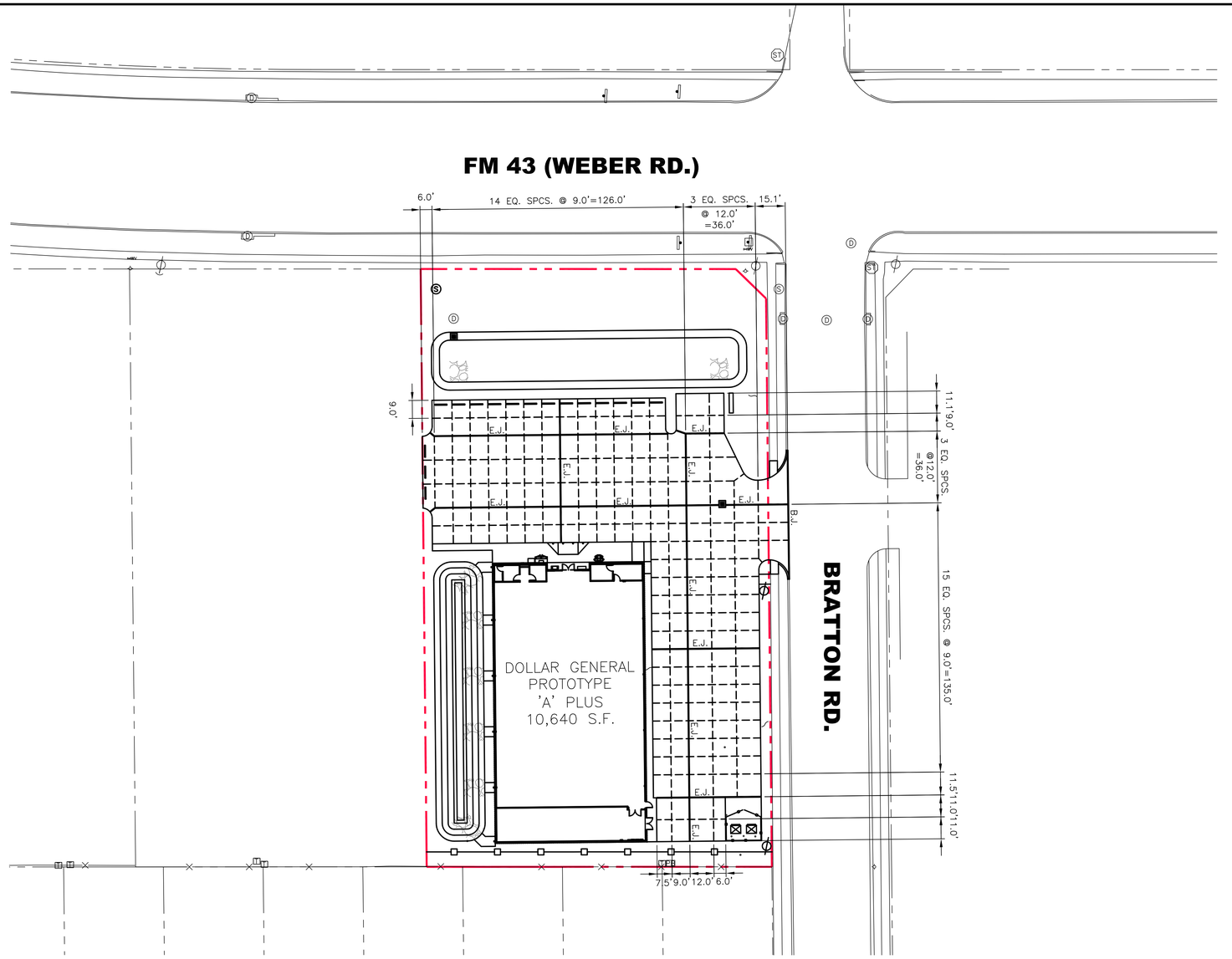
## LEGEND

### EXISTING FEATURES

| | |
|---|---|
| ◍ OR ▥ | EXIST. DROP INLET |
| —< | EXIST. GUY WIRE |
| — — — W(SIZE) — — | EXIST. WATERLINE |
| — — — G(SIZE) — — | EXIST. GAS LINE |
| — —E— —E— — | EXIST. UNDERGROUND ELECTRIC LINE |
| — —S— —S— — | EXIST. SEWER LINE |
| — —T— —T— — | EXIST. TELEPHONE LINE |
| = = = (SIZE) = = = | EXIST. DRAIN LINE |
| T.B.M. | TEMPORARY BENCHMARK |
| CS | THE POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL |
| T.C. | TOP OF CASTING/CURB ELEVATION |
| EL. | ELEVATION |
| HC | HANDICAP |
| SMH | SEWER MANHOLE |
| Ⓢ | EXIST. SEWER MANHOLE |
| Ⓓ | EXIST. DRAIN MANHOLE |
| | EXIST. FIRE HYDRANT |
| WV | EXIST. WATER VALVE |
| WM | EXIST. WATER METER |
| GM | GAS METER |
| GV | GAS VALVE |
| C O | EXIST. SEWER CLEANOUT |
| | EXIST. SIGN |
| | EXIST. BOLLARD |
| | EXIST. FUEL FILLER LIDS |
| | EXIST. LIGHT POLE |
| | EXIST. TRAFFIC LIGHT |
| | HOSE BIB |
| TS | EXIST. TRAFFIC SIGNALBOX |
| | EXIST. RIGHT-OF-WAY MARKER |
| | EXIST. POWER OR TELEPHONE POLE |
| | EXIST. CATCH BASIN |
| XCUT | CROSS CUT IN CONC. |
| | EXIST. BOUNDARY LINE |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| INV. | INVERT ELEVATION |
| CONC. | CONCRETE |
| S/W | SIDEWALK |
| FND | FOUND |
| | OVERHEAD ELECTRIC |
| | EXIST. TREE OR SHRUB |
| | EXIST. DITCH |
| | EXIST. VINYL FENCE |
| | EXIST. CHAINLINK FENCE |
| | EXIST. MAILBOX |
| | EXIST. TELEPHONE PEDESTAL |
| | EXIST. ELECTRICAL TRANSFORMER |
| AC | EXIST. AC UNIT |
| | EXIST. STEEL POLE |

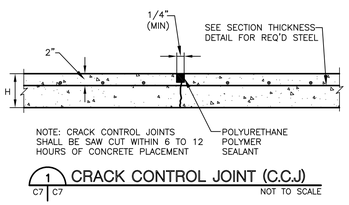
### NEW FEATURES

| | |
|---|---|
| | REQ'D DROP INLET |
| Ⓢ | REQ'D SEWER MANHOLE |
| | REQ'D POWER POLE |

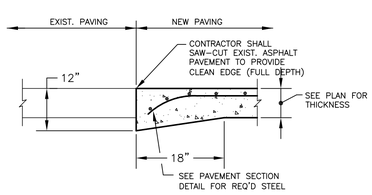



## LEGEND

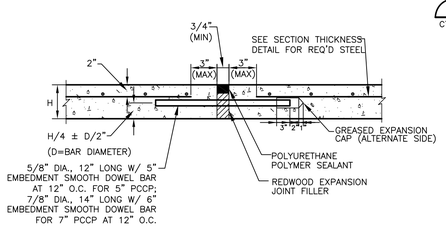
| | |
|---|---|
| C.C.J. | CRACK CONTROL JOINT (SEE DETAIL 1, THIS DWG.) |
| E.J. | EXPANSION JOINT (SEE DETAIL 2, THIS DWG.) |
| B.J. | BUTT JOINT (SEE DETAIL 3, THIS DWG.) |




1 CRACK CONTROL JOINT (C.C.J)
C7 | C7 NOT TO SCALE




3 BUTT JOINT (B.J.)
C7 | C7 NOT TO SCALE




2 EXPANSION JOINT (E.J)
C7 | C7 NOT TO SCALE

JOINT LAYOUT
24" x 36" SCALE: 1" = 30'

**DEVELOPER:**
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THIS SHEET: JOINT LAYOUT

PROJ. NO. 24-065
DATE 07/09/24

C-7

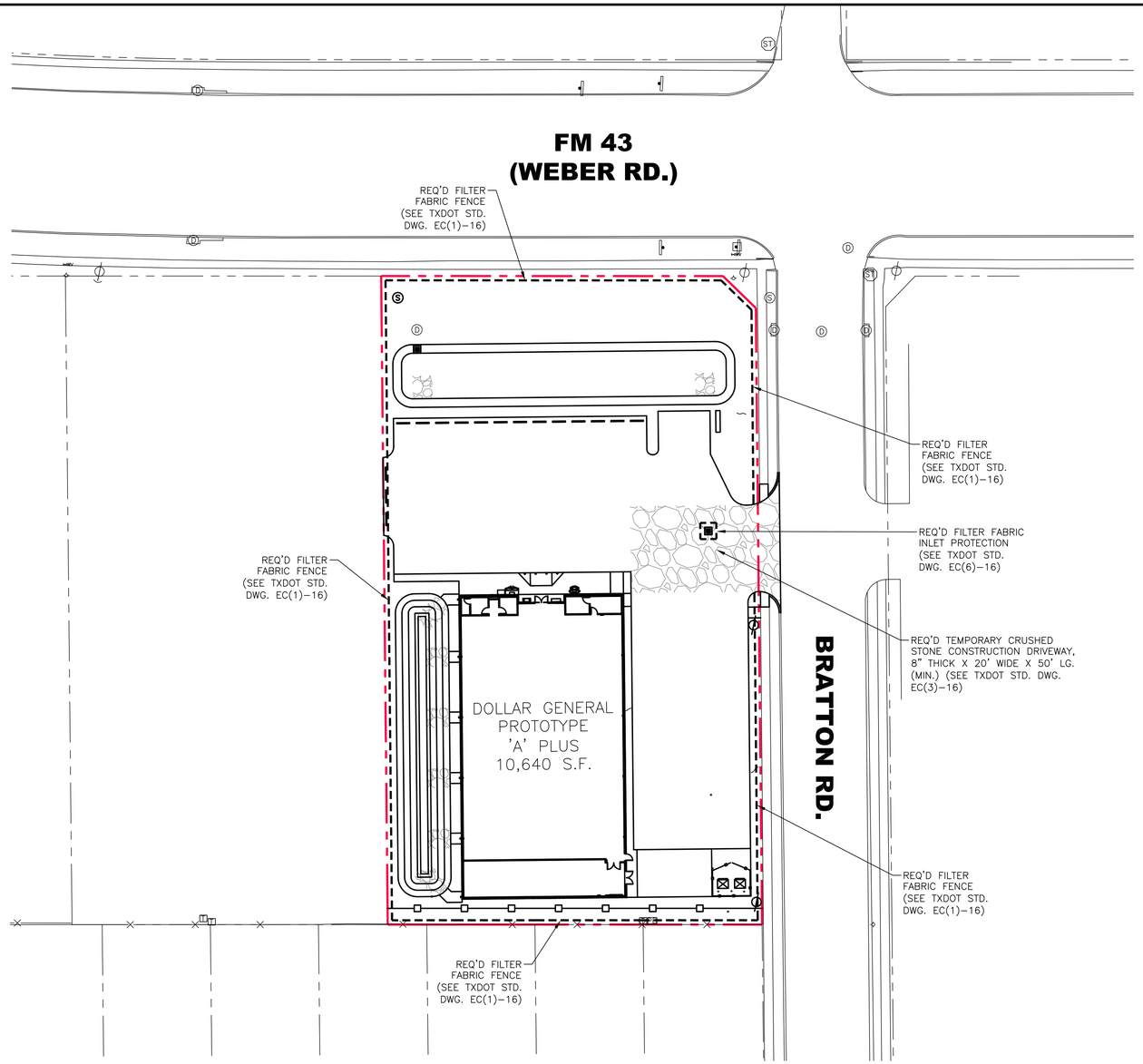
## LEGEND

### EXISTING FEATURES

| | |
|---|---|
| Ⓘ OR Ⓘ | EXIST. DROP INLET |
| —< | EXIST. GUY WIRE |
| — — — W(SIZE) — — | EXIST. WATERLINE |
| — — — G(SIZE) — — | EXIST. GAS LINE |
| — —E— —E— — | EXIST. UNDERGROUND ELECTRIC LINE |
| — —S— —S— — | EXIST. SEWER LINE |
| — —T— —T— — | EXIST. TELEPHONE LINE |
| (SIZE) | EXIST. DRAIN LINE |
| T.B.M. | TEMPORARY BENCHMARK |
| CS | THE POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL |
| T.C. | TOP OF CASTING/CURB ELEVATION |
| EL. | ELEVATION |
| HC | HANDICAP |
| SMH | SEWER MANHOLE |
| Ⓢ | EXIST. SEWER MANHOLE |
| Ⓓ | EXIST. DRAIN MANHOLE |
| | EXIST. FIRE HYDRANT |
| WV | EXIST. WATER VALVE |
| WM | EXIST. WATER METER |
| GM | GAS METER |
| GV | GAS VALVE |
| C | EXIST. SEWER CLEANOUT |
| | EXIST. SIGN |
| | EXIST. BOLLARD |
| | EXIST. FUEL FILLER LIDS |
| | EXIST. LIGHT POLE |
| | EXIST. TRAFFIC LIGHT |
| | HOSE BIB |
| TS | EXIST. TRAFFIC SIGNALBOX |
| | EXIST. RIGHT-OF-WAY MARKER |
| | EXIST. POWER OR TELEPHONE POLE |
| | EXIST. CATCH BASIN |
| XCUT | CROSS CUT IN CONC. |
| | EXIST. BOUNDARY LINE |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| INV. | INVERT ELEVATION |
| CONC. | CONCRETE |
| S/W | SIDEWALK |
| × 1330.81 | EXIST. SPOT ELEVATION |
| FND | FOUND |
| | OVERHEAD ELECTRIC |
| | EXIST. TREE OR SHRUB |
| | EXIST. DITCH |
| | EXIST. CHAINLINK FENCE |
| | EXIST. VINYL FENCE |
| | EXIST. MAILBOX |
| | EXIST. TELEPHONE PEDESTAL |
| | EXIST. ELECTRICAL TRANSFORMER |
| AC | EXIST. AC UNIT |
| | EXIST. STEEL POLE |

### NEW FEATURES

| | |
|---|---|
| | REQ'D FILTER FABRIC FENCE |




## EROSION CONTROL PLAN

24" x 36" SCALE: 1" = 30'

## SWPPP NOTES:

1. CONTRACTOR SHALL INSTALL ALL PERIMETER FILTER FENCES AND SEDIMENT CONTROL BARRIERS PRIOR TO CLEARING OR GRADING.
2. CONTRACTOR SHALL INSTALL ADDITIONAL SEDIMENT CONTROL BARRIERS AS NECESSARY TO CONTAIN ALL CONSTRUCTION SEDIMENT ON SITE.
3. CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL BARRIERS DURING CONSTRUCTION.
4. CONTRACTOR SHALL PROVIDE A TEMPORARY GRAVEL DRIVE FOR ALL CONSTRUCTION ACCESS ONTO EXISTING PAVED ROADS.
5. CONTRACTOR SHALL REMOVE ALL SEDIMENT CONTROL MEASURES AFTER FINAL STABILIZATION IS ACHIEVED.
6. EARTH CONTAINMENT BERM TO BE LOCATED ALONG PERIMETER OF ALL AREAS OF FUEL STORAGE AND HANDLING.
7. ANY MODIFICATION OF THE STORM WATER POLLUTION PLAN FOR CONSTRUCTION SEQUENCING SHALL REQUIRE ADHERENCE TO TCEQ & TPDES GENERAL PERMIT GUIDELINES.
8. ALL WASH WATER SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT BETWEEN WASH WATER POLLUTANTS AND STORM RUNOFF DISCHARGED FROM THIS SITE. CONCRETE WASH WATERS AND LEACHATES MAY NOT BE ALLOWED TO ENTER THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, CITY STREETS, THE WATERS OF THE UNITED STATES, OR GROUND WATERS.
9. OIL AND GREASE ABSORBING MATERIAL SHALL BE READILY AVAILABLE ON-SITE AND SHALL BE PROMPTLY USED TO CONTAIN AND CLEAN UP ALL FUEL AND CHEMICAL SPILLS OR LEAKS.
10. DUST CONTROL SHALL BE ACCOMPLISHED BY WATERING DRY EXPOSED AREAS ON A REGULAR BASIS.
11. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY CEASED FOR 21 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED.
12. ALL VEHICLES SHALL BE CLEANED AT THE CONSTRUCTION EXIT POINTS.
13. ALL MATERIALS SPILLED, WASHED OR TRACKED ONTO ADJACENT ROADWAYS BY CONSTRUCTION VEHICLES SHALL BE CLEANED OR REMOVED IMMEDIATELY.
14. SILT FENCES SHALL BE PLACED AROUND ANY STOCKPILED MATERIALS.
15. CONTRACTOR SHALL REMOVE ALL ACCUMULATED SILT IN ANY STORM SEWER INLETS AND PIPES WITHIN 48 HOURS.
16. ADDITIONAL EROSION CONTROL MEASURES MAY BE IMPLEMENTED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
17. ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE WITHIN THIRTY DAYS OF STABILIZATION OF ALL SURFACES.
18. THE CONTRACTOR SHALL ASSUME LIABILITY FOR DAMAGE OF ADJACENT PROPERTIES AND ADJACENT RIGHT-OF-WAY RESULTING FROM FAILURE TO FULLY IMPLEMENT AND EXECUTE ALL EROSION CONTROL PROCEDURES SHOWN AND NOTED IN THESE PLANS.
19. THE CONTRACTOR SHALL PERFORM ALL REQUIRED INSPECTIONS OF STORM WATER CONTROLS AND PRACTICES AT FREQUENCIES OUTLINED BY TCEQ & IN THE TPDES GENERAL PERMIT AND SHALL FILL OUT APPROPRIATE INSPECTION FORMS.
20. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR COMPLIANCE WITH ALL TCEQ & TPDES STORM WATER REQUIREMENTS FOR ALL DIRT OR ROCK IMPORTED AND EXPORTED FROM THE SITE. CONTRACTOR SHALL FURNISH THE ENGINEER WITH A COPY OF WRITTEN AGREEMENT WITH THE LANDOWNER OF THE REMOTE SITE INDICATING PERMITTING AND EROSION CONTROL MEASURES WILL BE IMPLEMENTED THEREON.
21. CONTRACTOR IS RESPONSIBLE FOR PREPARING SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AS MAY BE REQUIRED BY TCEQ, TPDES, CITY OF CORPUS CHRISTI, OR OTHER AGENCIES.
22. A TCEQ COMPLIANT STORM WATER POLLUTION PREVENTION PLAN WILL BE PROVIDED TO THE CITY PRIOR TO ANY CONSTRUCTION ACTIVITIES.

**DEVELOPER:**
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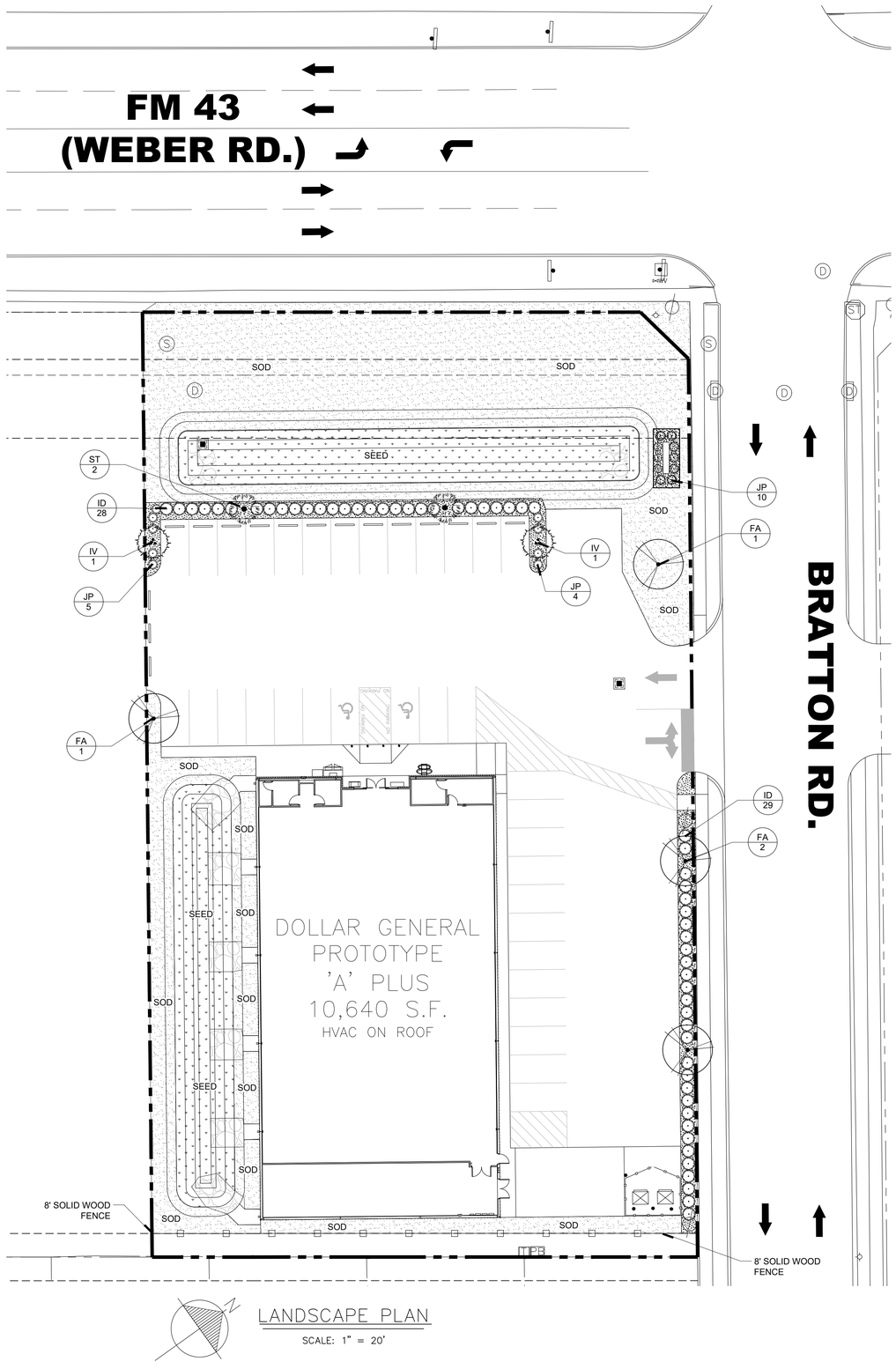
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: EROSION CONTROL PLAN

PROJ. NO. 24-065
DATE 07/09/24

**C-8**




LANDSCAPE PLAN

SCALE: 1" = 20'

## PLANT SCHEDULE

| SYMBOL | CODE | QTY | BOTANICAL / COMMON NAME | CONT | CAL | SIZE | POINTS | TOTAL |
|---|---|---|---|---|---|---|---|---|
| TREES | | | | | | | | |
| | FA | 4 | Fraxinus velutina `Arizona` / Velvet Ash | Gallon or B&B | 2.50" Cal, Single Trunk | 10` - 12` Ht. | 40 | 160 |
| | IV | 2 | Ilex vomitoria / Yaupon Holly | Gallon or B&B | 1" Cal. per Trunk 3 Trunk Min. | 8` Min. Ht. | 40 | 80 |
| | ST | 2 | Sabal texana / Texas Palmetto | Gallon or B&B | 5` C.T. | Matching | 100 | 200 |

| SYMBOL | CODE | QTY | BOTANICAL / COMMON NAME | CONT | SIZE | | |
|---|---|---|---|---|---|---|---|
| SHRUBS | | | | | | | |
| | ID | 57 | Ilex cornuta `Dwarf Burford` / Dwarf Burford Holly | 7-Gal. | 2` ht. at the time of planting | 3 | 165 |
| | JP | 19 | Juniperus chinensis `Parsonii` / Parsoni Juniper | 3-Gal. | 12"ht. 12"spd. | 2 | 38 |
| | | | | | | | 643 TOTAL POINTS |

| SYMBOL | CODE | QTY | BOTANICAL / COMMON NAME | CONT | REMARKS | SPACING |
|---|---|---|---|---|---|---|
| GROUND COVERS | | | | | | |
| | SEED | 4,422 sf | Cynodon dactylon / Bermuda Grass Seed | SF | Hydroseeding | |
| | SOD | 12,350 sf | Cynodon dactylon / Bermuda Grass | Squares or Mini Rolls | Class `A` | |
| | MULCH | 989 sf | Mulch Area / Gravel Mulch | Round Brown Gravel | 4" Depth with Filter Fabric | |

Landscape Calculations (Street Yards)

| |
|---|
| Primary Street Yard: Weber Road |
| 26,138 Square Feet |
| .02 Points per Square Foot |
| 522 Required Points |
| |
| |
| 522 Total Required Points (50% Points Shall Be Trees) |
| 643 Provided Points (See Plant Schedule) |

Vehicle Use Areas (Screen)

| Required: | Provided: |
|---|---|
| Continuous 5' Avg. Width Screen | Continuous 5' Avg. Width Screen |

Vehicle Use Areas (Parking)

| Required: | Provided: |
|---|---|
| 35 Parking Spaces | 8,474 Square Feet |
| 20 Square Feet per Space | |
| 700 Square Feet Required | |

Buffer Yard

| Required: | Provided: |
|---|---|
| Buffer Yard B – 5' Wide | 8 Foot Solid Wood Screening Fence–10 Points |

Irrigation: Irrigation will be provided via an automated irrigation system.

**DEVELOPER:**
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293–3332

**DOLLAR GENERAL**
10,640 SQ. FT.
STORE NUMBER: 00000

FM 43 (WEBER RD.)
CORPUS CHRISTI
(NUECES COUNTY), TX

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T.R.P.E. FIRM NO. 1164


SEAL
REGISTERED LANDSCAPE ARCHITECT
STATE OF TEXAS
13576

| REV. NO. | DATE |
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DOLLAR GENERAL - FM 43 (WEBER RD.)
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: LANDSCAPE PLANTING PLAN

PROJ. NO. 24–065
DATE 10/22/24

LS–1

SECTION 02900 – LANDSCAPING

1.1 GENERAL

A. Submittals: In addition to product certificates, submit the following where applicable:

1. Certification of grass seed/sod from seed/sod vendor for each seed mixture, or for sod.
2. List of plant suppliers and anticipated delivery dates.
3. Provide sample or product data of planting mix, top soil, fertilizers, pre–emergent and mulch or any other amendment required for project.

B. Quality Assurance: Provide trees, shrubs, ground covers, and plants of quality, size, genus, species, and variety indicated, complying with applicable requirements of ANSI Z60.1 "American Standard for Nursery Stock." Materials that do not meet the afore mentioned requirements may be rejected.

C. Special Warranty: Warrant trees, shrubs and ground covers for a period of one year after date of Substantial Completion, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, abnormal weather conditions unusual for warranty period, or incidents which are beyond Contractor's control.

1. Remove and replace any unhealthy and dead trees and shrubs within the warranty period.

D. Maintain and establish lawns by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations to produce a uniformly smooth lawn for not less than the following:

1. Sodded Lawns: 30 days after date of Substantial Completion.

1.2 PRODUCTS

A. Trees and Shrubs: Well–shaped, fully branched, healthy, vigorous nursery–grown stock of sizes and grades indicated, free of disease, insects, eggs, larvae, and defects, conforming to ANSI Z60.1.

1. Provide balled and burlapped trees and shrubs (as per plan), or
2. Provide container grown trees and shrubs (as per plan).

B. Ground Covers and Plants: Established and well rooted in removable containers or integral peat pots and with not less than the minimum number and length of runners required by ANSI Z60.1 for the pot size indicated.

C. Sod: Certified turfgrass sod complying with ASPA specifications for machine–cut thickness, size, strength, moisture content, and mowed height, and free of weeds and undesirable native grasses. Provide viable sod of uniform density, color, and texture, strongly rooted, and capable of vigorous growth and development when planted.

1. Species: Provide sod grass species and varieties, proportions by weight, and minimum percentages of purity, germination, and maximum percentage of weed seed as indicated per plans.

D. Planting mix: ASTM D 5268, pH range of 5.5 to 7, 4 percent organic material minimum, free of stones 1 inch (25 mm) or larger in any dimension, and other extraneous materials harmful to plant growth.

1. Planting mix: Equal parts of sharp sand, peat moss and composted bark.

E. Lime: ASTM C 602, Class T, agricultural limestone. Add 1,000 – 2,000 lbs/acre as required according to soil sample.

F. Peat Humus: Finely divided or granular texture, with a pH range of 6 to 7.5, composed of partially decomposed moss peat (other than sphagnum), peat humus, or reed–sedge peat.

G. Sawdust or Ground–Bark Humus: Decomposed, nitrogen–treated, of uniform texture, free of chips, stones, sticks, soil, or toxic materials.

H. Bonemeal: Commercial, raw, finely ground; minimum of 4 percent nitrogen and 20 percent phosphoric acid. Regulate Ph as needed via soil sample.

I. Superphosphate: Commercial, phosphate mixture, soluble; minimum of 20 percent available phosphoric acid. Regulate Ph as needed via soil sample.

J. Lawn fertilizer: Once lawn is established, apply 1–1–1 commercial–grade quick release fertilizer. Apply according to manufacturer's recommendations.

K. Planting bed fertilizer: Osmacote classic 13–13–13 8 to 9 month longevity or Siera Tabs at planting. Apply in accordance to manufacturer's specifications.

L. Pre–Emergent Herbicide: FreeHand, Barricade G, Pendulum 2G, or Sanpshot. Apply according to manufacturer's recommendations for pre and post planting.

M. Organic Mulch: Organic mulch, free from deleterious materials and suitable as a top dressing, consisting of ground or shredded bark, wood or bark chips, or pine straw, or shredded hardwood.

N. Mineral Mulch: Hard, durable riverbed gravel or crushed stone, washed free of loam, sand, clay, and other foreign substances.

1. Size Range: 1–1/2 inches (38 mm) maximum, 3/4 inch (19 mm) minimum.

O. Steel Edging: ASTM A 569 (ASTM A 569M), standard painted comercial grade steel edging and accessories, fabricated in sections with loops stamped from or welded to face of sections approximately 30 inches (760 mm) apart to receive stakes. Cuts required to install edging to be sanded and painted to match factory finish.

1. Edging Size: 3/16 inch (4.8 mm) wide by 4 inches (102 mm) deep.

1.3 EXECUTION

A. Planting Mix Preparation: Before mixing, clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful to plant growth. Mix soil amendments and fertilizers with topsoil at rates indicated.

B. Lawn Planting Preparation (Distrurbed): Loosen subgrade to a minimum depth of 6 inches (150 mm ). Remove stones larger than 1–1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous materials.

1. Incorporate topsoil soil mixture into existing soil to depth required to meet thickness, grades, and elevations shown, after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen.
2. Till surface soil to a depth of at least 6 inches (150 mm). Apply soil amendments and initial fertilizers and mix thoroughly into top 6 inches (150 mm) of soil. Trim high areas and fill in depressions. Till soil to a homogenous mixture of fine texture.

C. Lawn Planting Preparation (Undisturbed): Where lawns are to be planted in areas unaltered or undisturbed by excavating, grading, or surface soil stripping operations, remove and dispose of existing grass, vegetation, and turf.

1. Till surface soil to a depth of at least 6 inches (150 mm). Apply soil amendments and initial fertilizers and mix thoroughly into top 6 inches (150 mm) of soil. Trim high areas and fill in depressions. Till soil to a homogenous mixture of fine texture.

D. Moisten prepared lawn areas before planting when soil is dry and allow surface to dry before planting.

E. Ground Cover and Plant Bed Preparation: Loosen subgrade of planting bed areas to a minimum depth of 6 inches (150 mm). Remove stones larger than 1–1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous materials.

1. Spread planting soil mixture to depth required to meet thickness, grades, and elevations shown, after light rolling and natural settlement. Place approximately 1/2 the thickness of planting soil mixture required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil mixture.

F. Excavation for Trees and Shrubs: Excavate pits with vertical sides and with bottom of excavation slightly raised at center to assist drainage. Excavate approximately 1–1/2 times as wide as ball diameter and deep enough to allow placing of root ball on a setting layer of planting soil. Loosen hard subsoil in bottom of excavation.

G. Planting Trees and Shrubs: Set stock plumb and in center of pit or trench with top of ball raised above adjacent finish grades.

1. Place a setting layer of compacted planting soil.
2. Cut burlap and wire baskets from tops of balls and pull partially from sides, but do not remove from under balls. Do not use planting stock if ball is cracked or broken before or during planting operation.
3. Place backfill around ball in layers, tamping to settle backfill and eliminate voids and air pockets.
4. Dish and tamp top of backfill to form a 3–inch– (75–mm–) high mound around the rim of the pit. Do not cover top of root ball with backfill.

H. Tree and Shrub Pruning: Prune, thin, and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are size after pruning.

I. Planting Ground Cover and Plants: Plant spacing according to plan, unless otherwise indicated. Dig holes large enough to allow spreading of roots, and backfill with planting soil. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

J. Planting Bed Fertilizer: Install per manufactures recommendations.

K. Pre–Emergent Herbicide: Install per manufactures recommendations.

L. Mulching: Completely cover area to be mulched. Apply mulch and finish level with adjacent finish grades. Do not place mulch against trunks or stems.

1. Mulch Type and Thickness: Hardwood Mulch (Trees only), 4 inch depth
   Gravel Mulch (Bed areas) 4 inch depth

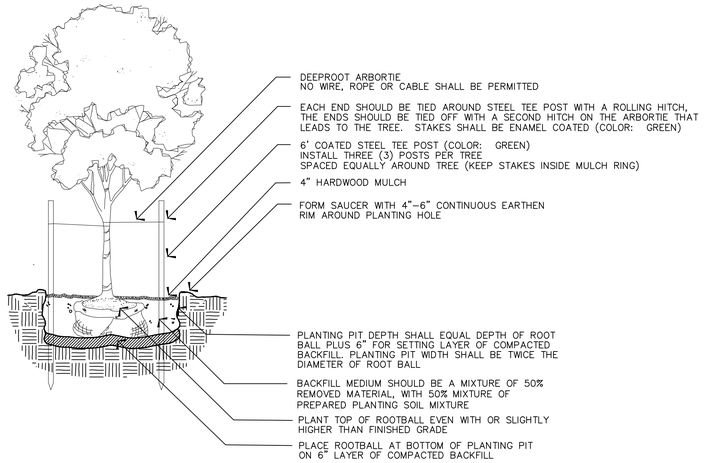
M. Sodding Lawns: Lay sod to form a solid mass with tightly fitted joints within 24 hours of stripping. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.

1. Anchor sod on slopes exceeding 1:6 with wood pegs spaced as recommended by sod manufacturer.
2. Saturate sod with fine water spray within 2 hours of planting. During first week, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1–1/2 inches (38 mm) below the sod.

N. Edgings: Install edgings where indicated and anchor with stakes driven below top elevation of edging according to manufacturer's recommendations.

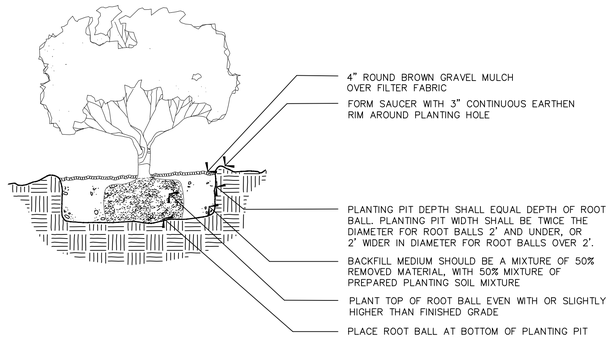
O. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of it off the Owner's property.

END OF SECTION 02900




TREE PLANTING DETAIL

SCALE: NOT TO SCALE




SHRUB PLANTING DETAIL

SCALE: NOT TO SCALE

NOTES:
1. All required landscaped areas shall be maintained so as to present a healthy, neat and orderly appearance conforming with Chapter 53, of the Municipal Code (trimming of trees and shrubs overhanging streets and sidewalks) at all times and shall keep all landscaping free from refuse and debris.
2. Diseased, dead or missing required plant material shall be satisfactorily treated or replaced within 30 days or a date approved by the Assistant City Manager of Development Services with the same plan variety and size.
3. All landscaping must be installed in accordance with the approved landscape plan before a certificate of occupancy is issued for any construction on the lot or parcel except as otherwise provided.

**DEVELOPER:**
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293–3332

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SEAL
REGISTERED LANDSCAPE ARCHITECT
STATE OF TEXAS
13576

| REV. NO. | DATE |
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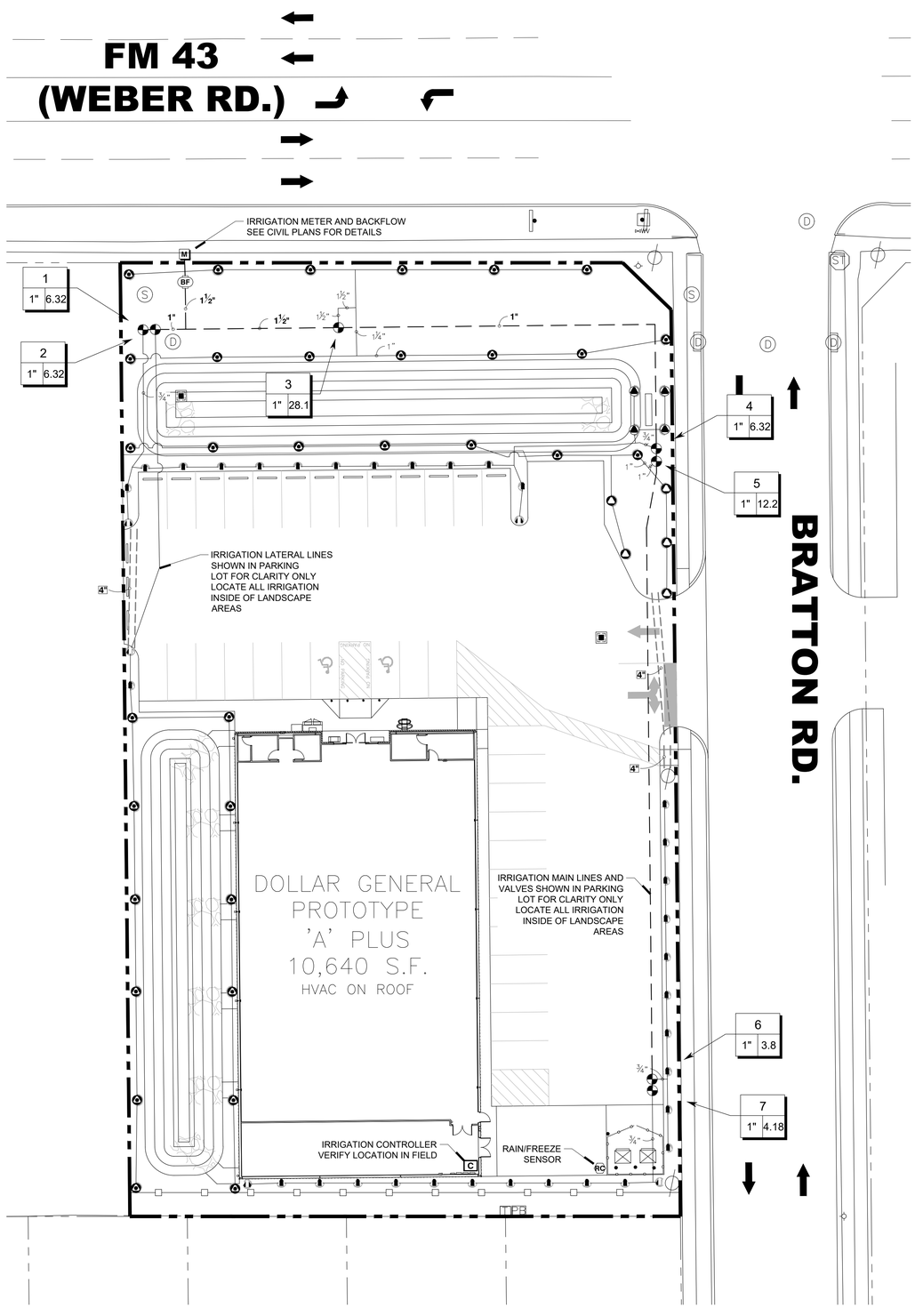
DOLLAR GENERAL - FM 43 (WEBER RD.)
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: LANDSCAPE SPECS AND DETAILS

PROJ. NO. 24–065
DATE 10/22/24

LS–2




IRRIGATION PLAN

SCALE: 1" = 20'

## IRRIGATION SCHEDULE

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY | PSI |
|---|---|---|---|
| LST SST RST | Hunter MP Strip PROS-06-PRS30-CV<br>Turf Rotator, 6in. pop-up with factory installed check valve, pressure regulated to 30 psi, MP Rotator nozzle on PRS30 body. LST=Ivory left strip, SST=Brown side strip, RST=Copper right strip. | 38 | 30 |
| 1000 | Hunter MP1000 PROS-06-PRS30-CV<br>Turf Rotator, 6in. pop-up with check valve, pressure regulated to 30 psi, MP Rotator nozzle on PRS30 body. M=Maroon adj arc 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc. | 4 | 30 |
| 2000 | Hunter MP2000 PROS-06-PRS30-CV<br>Turf Rotator, 6in. pop-up with factory installed check valve, pressure regulated to 30 psi, MP Rotator nozzle on PRS30 body. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc. | 5 | 30 |
| 3000 | Hunter MP3000 PROS-06-PRS30-CV<br>Turf Rotator, 6in. pop-up with factory installed check valve, pressure regulated to 30 psi, MP Rotator nozzle on PRS30 body. B=Blue adj arc 90-210, Y=Yellow adj arc 210-270, A=Gray 360 arc. | 32 | 30 |

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
|---|---|---|
| | Rain Bird DVF<br>Standard configuration, electric remote control valve. Plastic residential in 1in.. With Flow Control. | 7 |
| BF | Febco 765 1"<br>Pressure Vacuum Breaker, brass with ball valve SOV. Install 12in. above highest downstream outlet and the highest point in the downstream piping. | 1 |
| C | Rain Bird ESP4ME3 with (1) ESP-SM3<br>7 Station, Hybrid Modular Outdoor Controller. For Residential or Light Commercial Use. LNK WiFi Module and Flow Sensor Ready. | 1 |
| RC | Rain Bird WR2-RFC<br>Wireless Rain and Freeze Sensor Combo, includes 1 receiver and 1 rain/freeze sensor transmitter. | 1 |
| M | Water Meter 1" | 1 |
| | Irrigation Lateral Line: PVC Class 200 SDR 21 | 1,626 l.f. |
| | Irrigation Mainline: PVC Class 200 SDR 21 | 425.7 l.f. |
| | Pipe Sleeve: PVC Schedule 40 | 44.3 l.f. |

Valve Callout




## VALVE SCHEDULE

| NUMBER | MODEL | SIZE | TYPE | GPM | WIRE | PSI | PSI @ POC | PRECIP |
|---|---|---|---|---|---|---|---|---|
| 1 | Rain Bird DVF | 1" | Turf Rotary | 6.32 | 464.5 | 36.0 | 39.8 | 0.52 in/h |
| 2 | Rain Bird DVF | 1" | Turf Rotary | 6.32 | 460.6 | 35.8 | 39.6 | 0.52 in/h |
| 3 | Rain Bird DVF | 1" | Turf Rotary | 28.14 | 403.1 | 38.1 | 48.9 | 0.28 in/h |
| 4 | Rain Bird DVF | 1" | Turf Rotary | 6.32 | 264.5 | 35.2 | 39.8 | 0.52 in/h |
| 5 | Rain Bird DVF | 1" | Turf Rotary | 12.22 | 260.5 | 37.0 | 45.0 | 0.23 in/h |
| 6 | Rain Bird DVF | 1" | Turf Rotary | 3.8 | 66.0 | 33.9 | 38.2 | 0.69 in/h |
| 7 | Rain Bird DVF | 1" | Turf Rotary | 4.18 | 66.0 | 34.5 | 39.0 | 0.75 in/h |
| | Common Wire | | | | 425.7 | | | |

## CRITICAL ANALYSIS

| | |
|---|---|
| Generated: | 2024-10-22 13:13 |
| P.O.C. NUMBER: 01 | |
| Water Source Information: | |
| FLOW AVAILABLE | |
| Water Meter Size: | 1" |
| Flow Available | 37.5 GPM |
| PRESSURE AVAILABLE | |
| Static Pressure at POC: | 55 PSI |
| Elevation Change: | 5.00 ft |
| Service Line Size: | 3" |
| Length of Service Line: | 20 ft |
| Pressure Available: | 53 PSI |
| DESIGN ANALYSIS | |
| Maximum Station Flow: | 28.14 GPM |
| Flow Available at POC: | 37.5 GPM |
| Residual Flow Available: | 9.36 GPM |
| Design Pressure: | 30 PSI |
| Friction Loss: | 1.8 PSI |
| Fittings Loss: | 0.18 PSI |
| Elevation Loss: | 0 PSI |
| Loss through Valve: | 6.16 PSI |
| Pressure Req. at Critical Station: | 38.1 PSI |
| Loss for Fittings: | 0.11 PSI |
| Loss for Main Line: | 1.11 PSI |
| Loss for POC to Valve Elevation: | 0 PSI |
| Loss for Backflow: | 4.79 PSI |
| Loss for Water Meter: | 4.7 PSI |
| Critical Station Pressure at POC: | 48.9 PSI |
| Pressure Available: | 53 PSI |
| Residual Pressure Available: | 4.15 PSI |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SEAL

REGISTERED LANDSCAPE ARCHITECT
STATE OF TEXAS
13576

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DOLLAR GENERAL - FM 43 (WEBER RD.)
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: IRRIGATION PLAN

PROJ. NO. 24-065

DATE 10/22/24

IR-1

DEVELOPER:
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293-3332

DOLLAR GENERAL
10,640 SQ. FT.
STORE NUMBER: 00000

FM 43 (WEBER RD.)
CORPUS CHRISTI
(NUECES COUNTY), TX

SECTION 02810– LANDSCAPE IRRIGATION

1.0 GENERAL

1.1 DESCRIPTION OF WORK:
A. Furnish all labor, materials, equipment and services necessary for the complete installation of a landscape irrigation system to provide 100% coverage of the landscape areas identified on the plans as specified. The work includes, but is not limited to:
1. Trenching, backfill and compaction for irrigation lines.
2. Automatically controlled landscape irrigation system: Backflow prevention; water tap; water meter; pressure regulator; drain valves and isolation gate valves; piping and sleeves under paving and sidewalks, repair of paving, main and lateral lines; electrical valves and wiring, valve boxes and controllers; sprinklers, couplings, connectors and fittings.
3. Test all systems and make operative.
4. Submit Record Drawings.
5. One–year Guarantee Period.

1.2 QUALITY CONTROL:
A. Installer Qualifications: Firms experienced in the successful installation of a minimum of five projects within the past five years similar in scope, quality, and contract value to that indicated for this project. Firm shall have sufficient manpower, equipment and financial resources to complete the Work of the Section.
B. The Owner and the Landscape Architect reserve the right to reject any and all materials and workmanship which they deem to be not in accordance with the Specifications. Rejected materials and work shall be removed from site immediately and replaced with that of the specified quality.
C. Applicable Standards:
ASTM
D2241–Poly (Vinyl Chloride) (PVC) Plastic Pipe, SDR/PR, Class 200 and 160.
D1785–Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedule 40.
D2464–Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Threaded, Schedule 40.
D2466–Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Socket Type, Schedule 40.
D2564–Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings.
D. Applicable Codes:
1. Most current edition of Uniform Plumbing Code.
2. Applicable Building Code.
3. All applicable local codes and ordinances.
4. National Electrical Code.
5. Should Specification's requirements differ from local requirements, consider Contract Document requirements to be minimum acceptable and comply with any more stringent local requirements.
E. Permits and Fees:
1. Obtain all permits and pay required fees to any agency having jurisdiction over the work.
2. Arrange inspections required by local ordinances during the course of construction.
3. Upon completion of the work, furnish satisfactory evidence to show that all work has been installed in accordance with the ordinances and code requirements.
F. Testing:
1. Perform testing and inspections required by specifications and by regulating authorities.
2. Give 24 hours notice that such tests are to be conducted.

1.3 SUBMITTALS:
A. Product Data: Include pressure rating, rated capacity, settings, and electrical data of selected models for the following:
1. Valves. Include above ground and underground; general–duty, manual and automatic control, and quick–coupler types.
2. Valve boxes.
3. Sprinklers.
4. Specialties. Include emitters, drip tubes, and other devices.
5. Controllers. Include wiring diagrams.
B. Record Drawings:
1. Prepare and submit a reproducible Record Drawing showing the complete layout of the main line pipe, controller location, valve locations, and all sprinkler head locations. Record Drawings shall also indicate and show all materials, and manufacturer's name and catalog number and name.

1.5 SITE INSPECTION
A. Become familiar with all site conditions.
B. Locate all existing utilities prior to start of construction.
C. Make necessary adjustments in the layout as may be required, 1) to connect to existing stubouts (should such stubs not be located exactly as shown) or 2) to work around existing work. Such adjustments shall be make with no increase in cost to the Owner.

1.6 PROTECTION OF EXISTING CONDITIONS:
A. Take necessary precautions to protect site conditions to remain.
B. Should damage be incurred, repair the work to its original condition at no additional cost to the Owner.

2.0 PRODUCTS

2.1 PIPE AND FITTINGS:
A. Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes will be permitted, but substitutions of larger size may be approved. All pipe damaged or rejected because of defects shall be removed or the site at the time of said rejection.
B. All Piping three inch (3") and larger will be equipped with gaskets.
C. All fittings for pipes three inches (3") or larger will be equipped with gaskets.
D. All piping downstream of electric valves, sizes (3) inches and smaller, shall be rigid unplasticized PVC–Class 200 PSI working pressure extruded from virgin parent material of the type specified on the drawings. The pipe shall be homogenous throughout and free from visible cracks, holes, foreign materials, blisters, wrinkles and permanently marked with the manufacturer's name, material size, and schedule type. Pipe must bear the NFS seal.
E. All mainline piping and underground piping under continuous pressure shall be rigid unplasticized PVC–Class 200 PSI working pressure extruded from virgin parent material of the type specified on the drawings. The pipe shall be homogenous throughout and free from visible cracks, holes, and foreign materials, blisters, wrinkles and dents.
F. All plastic fittings to be installed shall be molded fittings manufactured of the same material as the pipe and shall be suitable for solvent weld, slip joint ring tight seal, or screwed connections NO fitting made of other material shall be used except as hereinafter specified.
G. Slip fitting socket tapers shall be so sized that a dry unsoftened pipe end conforming to these special provisions can be inserted no more than halfway into the socket. Plastic saddle and flange fittings will not be permitted. Only schedule 80 pipe may be threaded.

2.2 SLEEVES:
A. All sleeves shall be Schedule 40 PVC or stronger. All sleeves are required at every crossing indicated on drawings. (Size Noted)
B. All sleeves shall be installed under proposed pavement areas prior to subgrade and base.
C. Sleeves shall have a minimum horizontal separation of 18" and a maximum of twenty–four (24) inch clearance below bottom of curb.
D. The location of all sleeves shown on the plans is schematic. The contractor shall make any adjustments necessary to accommodate existing vegetation, utilities, or other existing conditions.
E. If the road crossings are designated as being bore locations the bore must be ample size to accommodate the size sleeve specified.

2.3 CONTROL SYSTEM:
A. The automatic controller shall be made by the same manufacturer as valves.
B. Install a wireless weather station device to override the control timer in the event of freeze or rain.
C. 120–volt power shall be supplied by the Owner or General Contractor as part of the electrical panel installation.

2.4 CONTROL WIRE:
A. Control wire shall be type UF, UL approved, for direct burial and shall be gauge 14 or larger solid core twisted wire.
B. Joining of underground wires shall be made with watertight connectors in valve boxes. No splicing between boxes is acceptable. Only use 3M DBR/Y–6 waterproof connectors.
C. All wire connections in valve boxes.

2.5 IRRIGATION VALVES:
A. Zone Control Valves
1. Globe–type diaphragm valves of normally closed design, with PVC bodies and covers. Operation accomplished by means of an integrally mounted heavy–duty 24 volt AC solenoid complying with National Electrical Code, Class II Circuit, solenoid coil potted in epoxy resin within a plastic–coated stainless steel housing: Solenoids shall be completely waterproof, suitable for direct underground burial. Provide a flow stem adjustment in each valve.

2.6 VALVE BOXES:
A. All valves shall be installed in thermoplastic valve access boxes of the size required to permit access to the valve. Valve boxes shall include black thermoplastic locking covers. Manufacturer– Ametek or approved equal.
B. All valve boxes shall be installed on at least a two (2) cubic foot gravel base to provide foundation and drainage.
C. All valve box elevations shall be 1/2" below finished grade.

2.7 THRUST BLOCKS:
A. Place one cubic ft. of concrete for each inch of pipe diameter for thrust block. Thrust shall not allow vertical or horizontal movement of pipe in any direction unless otherwise noted on design. Thrust blocking shall be provided on all piping three (3) inch diameter and larger.

2.8 SURGE PROTECTION: Contractor to provide electrical surge protection for the system controller.

2.9 BACKFLOW PREVENTION: As determined by Municipality/Local regulations.

2.10 PRESSURE REGULATOR: As determined by Contractor.

3.0 EXECUTION

3.1 EXCAVATION AND BACKFILL:
A. Trenches for pipe sprinkler lines shall be excavated of sufficient depth and width to permit proper handling and installation by any other method the Contractor may desire if approved by the Owner, pipe manufacturer, and Designer. The backfill shall be thoroughly compacted and evened off with the adjacent soil level. Selected fill dirt or sand shall be used if soil conditions are rocky. In rocky areas the trenching depth shall be two (2) inches below normal trenching depth to allow for this bedding. The fill dirt or sand shall be used in filling (4) inches above the pipe. The remainder of the backfill shall contain no lumps or rocks larger than three (3) inches. The top twelve (12) inches of backfill shall be topsoil, free of rocks, subsoil, or trash. Any open trenches or partially backfilled trenches left overnight or left unsupervised shall be barricaded to prevent undue hazard to the public space.
B. The Contractor shall backfill in six (6) inch compacted lifts as needed to bring the soil to its original density.

3.2 INSTALLATION OF PLASTIC PIPE:
A. Plastic pipe shall be installed in a manner that permits expansion and contraction as recommended by the manufacturer.
B. Plastic pipe shall be cut with a handsaw or hacksaw with the assistance of a square in sawing vice or in a manner so as to ensure a square cut. Burrs at cut ends shall be removed prior to installation so that a smooth unobstructed flow will be obtained.
C. All plastic–to–plastic joints shall be solvent weld joints or slip seal joints. Only the solvent recommended for the pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer. The Contractor shall assume full responsibility for the correct installation.
D. The joints shall be allowed to set at least twenty–four (24) hours before pressure is applied to the system on PVC pipe.

3.3 CONTROLLER AND ELECTRICAL CONNECTIONS:
A. All electrical connections shall conform to the National Electrical Code, latest edition.
B. Control wires installed beneath walks, drives, or other permanent surfaces shall be placed in sleeves.
C. Wires shall be spliced only at valve boxes.
D. Leave twenty–four (24) inch loop of wire at each valve for expansion/contraction and servicing.
E. Controllers and valves shall be from the same company e.g. (Rain Bird, Toro or approved equal).
F. 120 VAC electrical power supply to the controller location shall be supplied by others.

3.4 FLUSHING AND TESTING:
A. After all new sprinkler piping and risers are in place and connected for a given section and all necessary division work has been completed and prior to the installation of sprinkler heads all control valves shall be opened and a full head of water used to flush out the system.
B. Sprinkler main shall be tested under normal water pressure for a period of twelve (12) hours. If leaks occur, repair and repeat the test. Give Landscape Architect forty–eight hours notice prior to testing.
C. Testing of the system shall be performed after completion of the entire installation and any necessary repairs shall be made at the Contractor's expense to put the system in good working order before final payment by the Owner.
D. Adjustment of the sprinkler heads and automatic equipment will be done by the Contractor upon completion of installation to provide optimum performance. Minor adjustments during the guarantee period will be made by the Owner.
E. After completion, testing, and acceptance of the system, the Contractor will instruct the Owner's personnel in the operation and maintenance of the system.

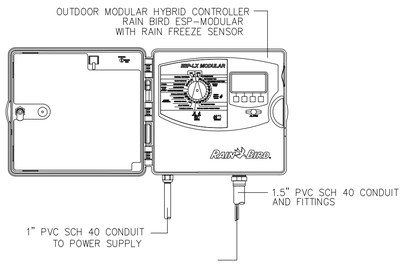
4.0 ACCEPTANCE AND GUARANTEE

4.1 SUBSTANTIAL COMPLETION:
A. Submit request for inspection for Substantial completion to the Landscape Architect at least forty–eight hours prior to anticipated date of inspection and testing (refer to Paragraph 3.3 TESTING, herein).
B. Submit Record Drawings and Maintenance Manual to the Landscape Architect with request for inspection (refer to Paragraph 3.4 FLUSHING AND TESTING, herein).
C. Review the work jointly with the Owner and Landscape Architect for Substantial Completion.
D. Upon completion of repairs and replacements found necessary at time of review, the Owner and Landscape Architect will confirm the date of Substantial Completion of the work.
E. The date of Substantial Completion will constitute the beginning date of the One–Year Guarantee.

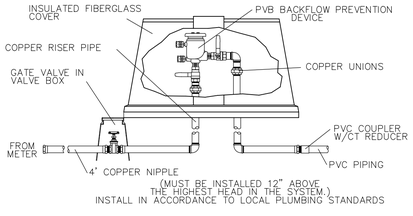
4.2 GUARANTEE:
A. Guarantee all work, products, equipment, and materials for one(1) year, beginning at Date of Substantial Completion.
B. During the period of the Guarantee, replace immediately, with no additional compensation, all work not functioning correctly; make adjustments as necessary to maintain complete coverage; make good any other damage, loss, destruction, or failure. Repairs and replacements shall be done promptly and at no additional cost to the Owner.
C. Repair damage to grade, plants, and other work or property as necessitated due to irrigation defects, repairs, replacement or adjustment.
D. If the replacement is not acceptable during or at the end of the Guarantee Period, the owner may elect either subsequent replacement or credit. Replacement products shall have a similar one–year guarantee from time of replacement.
E. Guarantee applies to all losses with the exception of those due to Acts of God, vandalism, or Owner neglect, as determined by the Landscape Architect.

4.3 FINAL INSPECTION AND ACCEPTANCE:
A. At end of Guarantee Period and upon request for inspection, jointly review all guaranteed work for Final Acceptance.
B. Submit written request for inspection for Final Acceptance to the Landscape Architect at least two weeks prior to anticipated date of inspection; include list of work provisionally accepted and list of work replace during Guarantee Period.
C. Upon completion by the Contractor of all required repairs and replacements, the Owner and the Landscape Architect will confirm the date of Final Acceptance of the work.

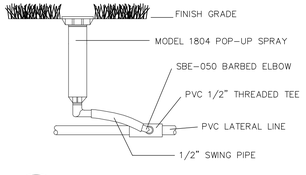
END OF SECTION 02810.



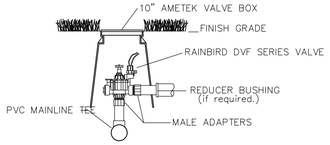

1 HYBRID CONTROLLER
N.T.S.



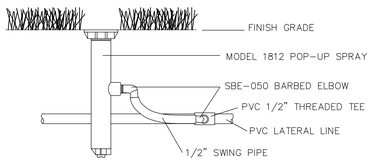

2 BACKFLOW DETAIL
N.T.S.




3 4" POP–UP TURF SPRAY
N.T.S.

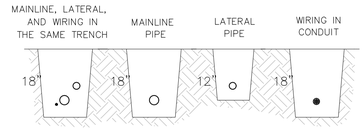



4 DVF VALVE DETAIL
N.T.S.

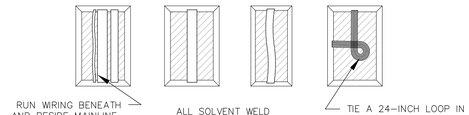



5 12" POP–UP SHRUB SPRAY
N.T.S.

SECTION VIEW




PLAN VIEW




6 PIPING DIAGRAM
N.T.S.

LINFIELD, HUNTER & JUNIUS, INC.
PROFESSIONAL ENGINEERS,
ARCHITECTS AND SURVEYORS
3608 18th Street, Suite 200
Metairie, Louisiana 70002
PHONE: (504) 833–5300
FAX: (504) 833–5350
T.B.P.E. FIRM NO. 11664


SEAL
REGISTERED LANDSCAPE ARCHITECT
STATE OF TEXAS
13576

| REV. NO. | DATE |
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| | |

DOLLAR GENERAL - FM 43 (WEBER RD.)
CORPUS CHRISTI (NUECES COUNTY), TX

THIS SHEET: IRRIGATION SPECS AND DETAILS

DEVELOPER:
THE OVERLAND GROUP
1906 EAST BATTLEFIELD
SPRINGFIELD, MO 65804

TEL: (417) 293–3332

DOLLAR GENERAL
10,640 SQ. FT.
STORE NUMBER: 00000

FM 43 (WEBER RD.)
CORPUS CHRISTI
(NUECES COUNTY), TX

PROJ. NO. 24–065
DATE 10/22/24

IR–2

## SITE DESCRIPTION

**PROJECT LIMITS:** GEO ID: 2608-0013-0030 SOUTH CORNER OF FM 43 (WEBER RD. & BRATTON RD., CORPUS CHRISTI, TX
PART OF LOT 3, BLOCK 13 OF FOXWOOD ESTATES, PHASE 3 – 1.188 AC.

PROJECT IS LOCATED INSIDE OF CITY OF CORPUS CHRISTI LIMITS

**PROJECT DESCRIPTION:** CONSTRUCTION OF A NEW 10,640 S.F. DOLLAR GENERAL STORE ON THE SOUTH CORNER OF FM 43 (WEBER RD.) & BRATTON RD. IN CORPUS CHRISTI, TX. CONSTRUCTION TO INCLUDE DETENTION POND, CONCRETE PARKING PARKING LOT, COMMERCIAL DRIVEWAY OFF OF BRATTON RD., STORM WATER DRAIN LINES, TIE– IN NEW 1" PVC TIE–IN INTO EXIST. 8" WATER LINE
TIE–IN NEW 4" SEWER LINE INTO NEW SANITARY SEWER MANHOLE INSTALLED ON EXIST. 8" SEWER MAIN LOCATED WITHIN THE PROJECT SITE NEAR THE WEST PROPERTY LINE

**MAJOR SOIL DISTURBING ACTIVITIES:** INSTALLATION OF EROSION AND SEDIMENT CONTROLS; CLEARING, GRUBBING, AND EXCAVATION OF THE EXISTING SOIL & VEGETATIVE GROUND COVER FOR NEW BUILDING FOUNDATION AND NEW PAVEMENT SUBGRADES WILL BE PERFORMED. UTILITY TRENCHES WILL BE EXCAVATED FOR INSTALLATION OF UTILITIES & STORM DRAINAGE.

**TOTAL PROJECT AREA:** 1.118 ACRES

**TOTAL AREA TO BE DISTURBED:** 1.118 ACRES

**WEIGHTED RUNOFF COEFFICIENT: (AFTER CONSTRUCTION):** 0.67

**EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER:**

**NAME OF RECEIVING WATERS:** OSO CREEK

## EROSION AND SEDIMENT CONTROLS

### SOIL STABILIZATION PRACTICES:

- [X] TEMPORARY SEEDING
- [X] PERMANENT PLANTING, SODDING, OR SEEDING
- [X] MULCHING
- [ ] SOIL RETENTION BLANKET
- [X] BUFFER ZONES
- [X] PRESERVATION OF NATURAL RESOURCES

**OTHER:**

### STRUCTURAL PRACTICES:

- [X] SILT FENCES
- [ ] HAY BALES
- [ ] ROCK BERMS
- [ ] DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- [X] DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- [ ] DIVERSION DIKE AND SWALE COMBINATIONS
- [ ] PIPE SLOPE DRAINS
- [ ] PAVED FLUMES
- [X] ROCK BEDDING AT CONSTRUCTION EXIT
- [ ] TIMBER MATTING AT CONSTRUCTION EXIT
- [ ] CHANNEL LINERS
- [ ] SEDIMENT TRAPS
- [ ] SEDIMENT BASINS
- [ ] STORM INLET SEDIMENT TRAP
- [X] STONE OUTLET STRUCTURES
- [ ] CURBS AND GUTTERS
- [X] STORM SEWERS
- [ ] VELOCITY CONTROL DEVICES
- [ ] EROSION CONTROL LOGS

**OTHER:** RIP–RAP PLACED IN THE DETENTION POND WHERE THE DRAINAGE PIPE FROM THE BUILDING DOWNSPOUTS OUTFALLS INTO THE DETENTION POND.

**NARRATIVE – SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:**

THE FIRST PHASE OF THE PROJECT WILL BE THE INSTALLATION OF EROSION PREVENTION AND SEDIMENT CONTROLS. THESE EROSION PREVENTION AND SEDIMENT CONTROLS WILL BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN. ALL STATE TPDES PERMITS SHALL BE OBTAINED BEFORE ANY LAND IS DISTURBED. ONCE ALL EXISTING FEATURES HAVE BEEN DEMOLISHED AND REMOVED, CLEARING, GRUBBING, & EXCAVATION OF THE EXISTING SOIL & VEGETATIVE GROUND COVER FOR NEW BUILDING FOUNDATION AND NEW PAVEMENT SUBGRADES WILL BE PERFORMED. PRE–CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED, OR DISTURBED MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA IS SEEDED AND/OR MULCHED.
NEXT, THE BUILDING FOUNDATION WILL BE FORMED UP/CONSTRUCTED AND ALL UTILITY TRENCHES WILL BE EXCAVATED FOR PLACEMENT OF NEW UTILITY LINES (TELEPHONE DRAINAGE, ELECTRIC, WATER AND SEWER) AND DRAIN INLETS WILL BE INSTALLED. THE BUILDING STRUCTURE AND ALL OF THE ARCHITECTURAL ELEMENTS WILL THEN BE CONSTRUCTED. ONCE ALL UTILITIES AND STRUCTURES ARE IN PLACE, THE NEW CONCRETE PAVEMENT WILL BE POURED FOR THE SITE. FINALLY, SITE LANDSCAPING WILL BE PLANTED ONCE ALL PAVEMENT HAS BEEN POURED. ANY MODIFICATION OF THE STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SEQUENCING SHALL REQUIRE ADHERENCE TO THE TCEQ'S TPDES GENERAL PERMIT GUIDELINES.

**STORM WATER MANAGEMENT:** THE USAGE OF A ±6,609 CUBIC FOOT DETENTION POND & A ±10,375 CUBIC FOOT DETENTION POND TO DETAIN POST DEVELOPED RUNOFF. THE THE DETENTION PONDS AND 8" RESTRICTOR ORIFICE AS DESIGNED ARE SUFFICIENT TO PREVENT THE TOTAL POST–DEVELOPED PEAK FLOWS FROM EXCEEDING THE PRE–DEVELOPED PEAK RUNOFF RATE FOR THE 5 YEAR, 10 YEAR, 25 YEAR, AND 100 YEAR DESIGN STORM FREQUENCIES.

### OTHER EROSION AND SEDIMENT CONTROLS:

**MAINTENANCE:** ANY DAMAGE TO STRUCTURAL PRACTICES INCLUDING SILT FENCES, DIVERSION, INTERCEPTOR OR PERIMETER SWALES, ROCK BEDDING AT CONSTRUCTION EXIT, STONE OUTLET STRUCTURES SHALL BE REPAIRED AS SOON AS POSSIBLE.

**INSPECTION:** VISUAL INSPECTION OF THE DETENTION BASIN & EROSION AND SEDIMENT STRUCTURAL PRACTICES TO OCCUR WEEKLY WITH ON–GOING CONSTRUCTION. QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL.

**WASTE MATERIALS:** ALL CONSTRUCTION WASTE & TRASH GENERATED BY THE CONTRACTOR & HIS SUBCONTRACTORS SHALL BE COLLECTED & STORED IN A SECURELY LIDDED METAL DUMPSTER APPROVED BY THE CITY OF CORPUS CHRISTI, PLACED AWAY FROM STORMWATER CONVEYANCES & DRAINS, & MEETING ALL LOCAL & STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL WASTE/DEBRIS SHALL BE CLEANED UP AFTER EACH SPECIFIC JOB HAS COMPLETED & AT THE END OF EACH WORK WEEK, WHICHEVER COMES FIRST. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON ANY PROPERTY.

**HAZARDOUS WASTE (INCLUDING SPILL REPORTING):** ALL HAZARDOUS WASTE MATERIALS SUCH AS OIL FILTERS, PETROLEUM PRODUCTS, PAINT & EQUIPMENT MAINTENANCE FLUIDS SHALL BE STORED IN STRUCTURALLY SOUND & SEALED SHIPPING CONTAINERS, WITHIN THE HAZARDOUS MATERIALS STORAGE AREA. HAZARDOUS WASTE MATERIALS SHALL BE STORED IN APPROPRIATE & CLEARLY MARKED CONTAINERS & SEGREGATED FROM OTHER NON–WASTE MATERIALS.

**SANITARY WASTE:** TEMPORARY SANITARY FACILITIES (PORTABLE TOILETS) SHALL BE PROVIDED AT THE SITE IN THE COMBINED STAGING AREA. THE TOILETS SHALL BE PLACED AWAY FROM CONCENTRATED FLOW PATHS & TRAFFIC FLOW & SHALL HAVE COLLECTION PANS UNDERNEATH AS SECONDARY CONTAINMENT. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE TOILETS A MINIMUM OF THREE TIMES PER WEEK. THE TOILETS SHALL BE INSPECTED WEEKLY FOR EVIDENCE OF LEAKING HOLDING TANKS. TOILETS WITH LEAKING HOLDING TANKS SHALL BE REMOVED FROM THE SITE & REPLACED W/NEW PORTABLE TOILETS.

**OFFSITE VEHICLE TRACKING:**

- [X] HAUL ROADS DAMPENED FOR DUST CONTROL
- [X] LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- [X] EXCESS DIRT ON ROAD REMOVED DAILY
- [X] STABILIZED CONSTRUCTION ENTRANCE

**OTHER:**

**REMARKS:**

**PERMITS:**

CONTRACTOR SHALL UTILIZE THE STORM WATER POLLUTION PREVENTION PLAN AND SHALL OBTAIN ALL PERMITS AND FULFILL ALL PERMIT REQUIREMENTS, INCLUDING FEES, FOR T.C.E.Q. GENERAL PERMIT NO. TXR 150000 RELATING TO DISCHARGES FROM CONSTRUCTION ACTIVITIES. THESE ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO NOTICE OF INTENT (NOI, REQUIRED SITE POSTINGS AND NOTICE OF TERMINATION (NOT). ALL ACTIVITIES WILL BE PERFORMED AT THE MILESTONES REQUIRED BY THE T.C.E.Q. NO SEPARATE PAYMENT WILL BE MADE FOR SUCH PERMITS.

| REVISION NO. | DATE | BY | DESCRIPTION |
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CONSULTANT'S SHEET No.

CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
STORM WATER POLLUTION PREVENTION PLAN NOTES
1 OF 3

SHEET ____ of ____
RECORD DRAWING NO.

CITY PROJECT # ____

## 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 distrubed soil. Projects with any disturbed soil must protect for erosion and sedimentation.

☒ 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.

## Work in or near Streams, Waterbodies and Wetlands Clean Water Act Sections 401 & 404

No Permit Required
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):

☐
☐ 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.

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 | |

## III. Cultural Resources

In the event historical issues or archeological artifacts (bones, burnt rock, flint, pottery, etc.) are found during construction, cease work in the immediate area and contact the Engineer immediately.

☒ No Action Required ☐ Required Action

Action No.

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5.

## IV. Vegetation Resources

Preserve native vegetation to the extent practical.

☒ No Action Required ☐ Required Action

Action No.

1.
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## V. Federal Listed, and Proposed Threatened and Endangered Species, Critical Habitat, State Listed Species, Candidate Species and Migratory Birds.

☒ No Action Required ☐ Required Action

Action No.

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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 immediated area, and contact the Engineer immediately.

## VI. Hazardous Materials or Contamination Issues

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropiate 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 Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with 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 follwing 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

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

Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

Action No.

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## VII. Other Environmental Issues

(Include applicable regional or site specific enviromental issues.)

☒ No Action Required ☐ Required Action

Action No.

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REVISION NO. | DATE | BY | DESCRIPTION

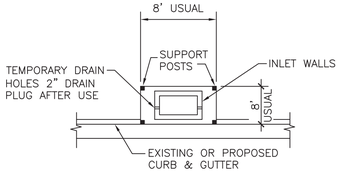
CONSULTANT'S SHEET No.

CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
STORM WATER ENVIRONMENTAL PERMITS
ISSUED AND COMMENTS (EPIC) 2 OF 3

SHEET ____ of ____
RECORD DRAWING NO.

CITY PROJECT # ____

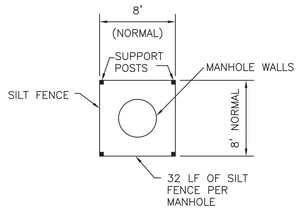



NOTE:

TYPICAL SILT FENCE INSTALLATION AT CURB INLET PRIOR TO PLACEMENT OF CURB AND INLET TOP.

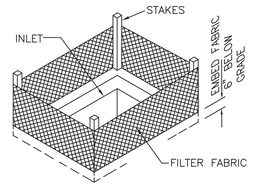
## CURB INLET - PLAN

NOT TO SCALE




## MANHOLE - PLAN

NOT TO SCALE

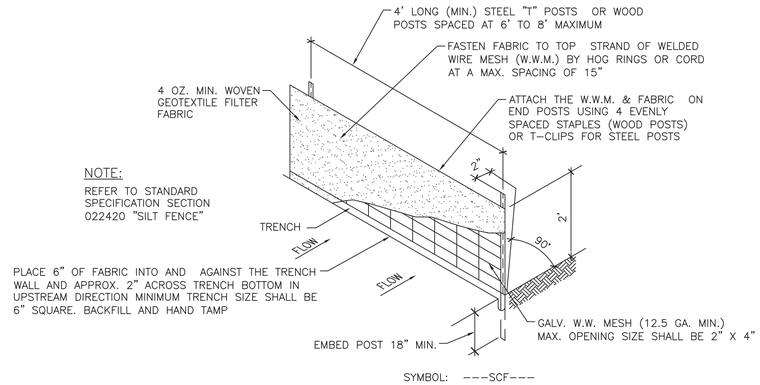



NOTES:

1. FILTER FABRIC INLET PROTECTION SHALL BE USED DURING CONSTRUCTION TO CONTROL SEDIMENTATION.
2. PERIMETER SILT FENCING AROUND INLET LOCATIONS SHALL BE INSTALLED AFTER PIPE IS PLACED.
3. FABRIC MATERIAL SHALL BE A NET–REINFORCED FENCE, USING WOVEN GEOTEXTILE FABRIC.
4. FENCE SHOULD BE REMOVED UPON COMPLETION OF CONSTRUCTION.

## TEMPORARY FILTER FABRIC INLET PROTECTION DETAIL

NOT TO SCALE




NOTE:

REFER TO STANDARD SPECIFICATION SECTION 022420 "SILT FENCE"

## TEMPORARY SEDIMENT CONTROL FENCE DETAIL

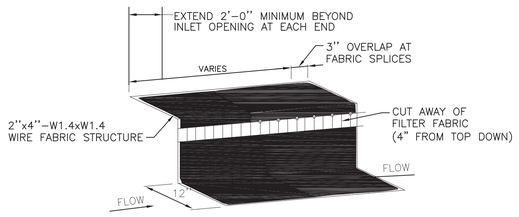
NOT TO SCALE

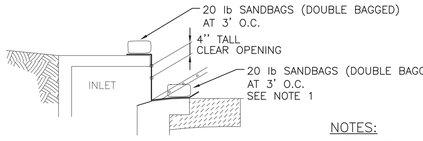
SEDIMENT CONTROL FENCE USAGE GUIDELINES:

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 THROUGH RATE OF 100 GPM/FT. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE LARGER THEN 2 ACRES.

* THE GUIDELINES SHOWN HERE ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.




NOTES:

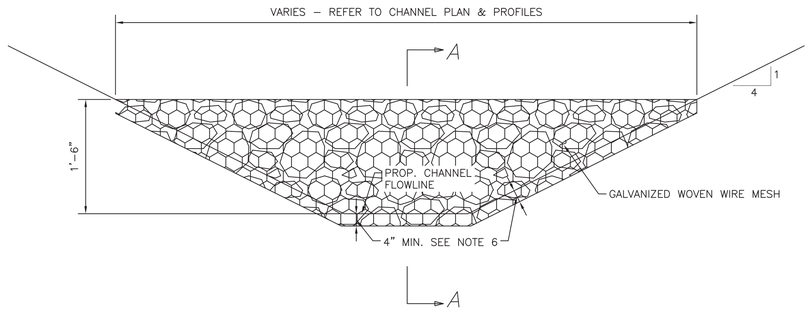
TYPICAL EROSION CONTROL INSTALLATION AT CURB INLET AFTER PLACEMENT OF CURB AND INLET TOP.

## CURB INLET PROTECTION DETAIL

NOT TO SCALE

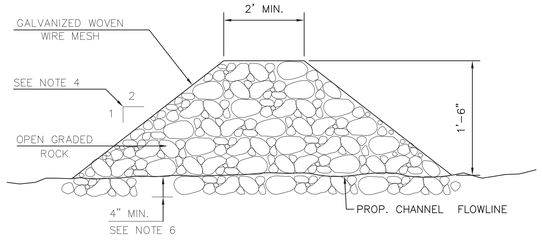
CURB INLET PROTECTION NOTES:

1. TO HOLD THE FILTER DIKE IN PLACE, 20 LB SANDBAGS SHALL BE USED AT 3' O.C. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1"X4" BOARD, SECURED WITH 1/4" OR 3/8" CONCRETE SCREWS. THE 1/4" OR 3/8" CONCRETE SCREWS SHALL BE ATTACHED TO THE GUTTER BY DRILLING AN APPROPRIATE PILOT HOLE WITH A CONCRETE BIT AND INSERT PLASTIC FASTENERS. THE TOP OF THE SCREW SHALL BE RECESSED BELOW THE TOP OF THE BOARD. THE SCREWS SHALL BE PLACED ON 3' O.C. THIS METHOD IS USED IN LIEU OF SANDBAGS, IN THE GUTTER ONLY, TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, EITHER LEAVE THE PLASTIC FASTENERS IN PLACE, OR REMOVE THE PLASTIC FASTENERS, CLEAN ANY DIRT/DEBRIS FROM THE SCREW LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON–SHRINK GROUT FLUSH WITH THE SURFACE OF THE GUTTER. THIS METHOD SHALL NOT BE USED ON THE INLET IN LIEU OF SANDBAGS.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2". INLET PROTECTION SHALL BE REPLACED AS NECESSARY DURING CONSTRUCTION DUE TO DAMAGE OR DETERIORATION (SUBSIDIARY TO INLET PROTECTION).
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND ONLY REMOVE INLET PROTECTION IF DIRECTED BY THE CITY OF CORPUS CHRISTI, OR IF CONTRACTOR OBSERVES AN IMMINENT THREAT OF FLOODING OF SURROUNDING PROPERTY.
5. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.




## ROCK FILTER DAM AT EARTHEN BOTTOM CHANNEL

NOT TO SCALE

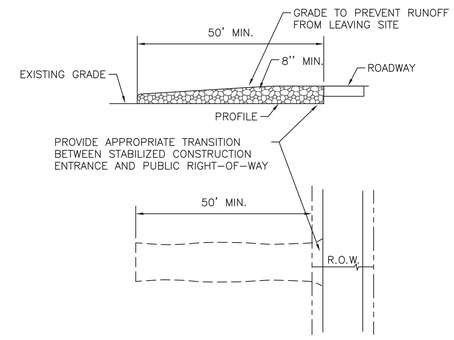



## SECTION A-A

NOT TO SCALE

ROCK FILTER DAM 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 SPECIFICATIONS FOR "ROCK FILTER DAMS FOR EROSION AND SEDIMENT CONTROL."
3. THE ROCK FILTER DAM DIMENSIONS SHALL BE AS INDICATED ON THE PLANS.
4. SIDE SLOPES SHOULD BE 2:1 OR FLATTER.
5. ROCK FILTER DAM SHALL BE A MINIMUM OF TWO FEET IN THICKNESS AT TOP OF DAM.
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 SHALL BE SECURED WITH 20 GUAGE GALVANIZED WOVEN WIRE MESH WITH 1" DIAMETER HEXAGONAL OPENINGS. THE AGGREGATE SHALL BE PLACED ON THE MESH TO THE HEIGHT & SLOPE 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. IN STREAM USE THE MESH SHOULD BE SECURED OR STAKED TO THE STREAM BED PRIOR TO AGGREGATE PLACEMENT.
9. FLOW OUTLET SHOULD BE ONTO A STABILIZED AREA (VEGETATION, ROCK, ETC.)
10. THE GUIDLELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.




## STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: 3–5" OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 50'.
3. THICKNESS: NOT LESS THAN 8".
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CONSULTANT'S SHEET No.

| REVISION NO. | DATE | BY | DESCRIPTION |
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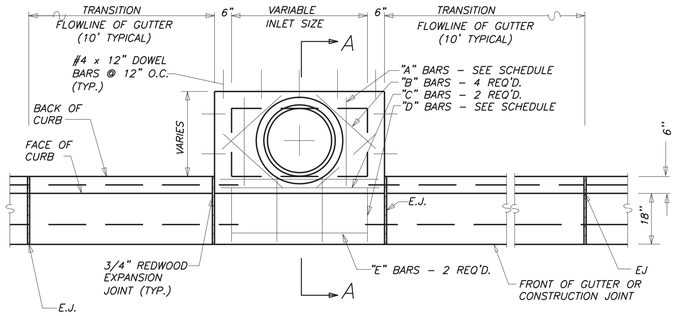
CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
STORM WATER POLLUTION PREVENTION
STANDARD DETAILS
3 OF 3

SHEET _____ of _____
RECORD DRAWING NO.

CITY PROJECT # _____

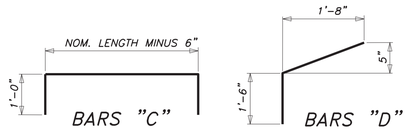



## PLAN OF 5' STANDARD INLET

NOT TO SCALE

**SPECIAL NOTE:**

1. CONTRACTOR TO PROVIDE #4 x 12" DOWELS @ 12" O.C. WHERE PROP. SIDEWALK ABUTS INLET. (NO SEPARATE PAYMENT)
2. FOR CURB INLET THROAT EXTENSION DETAILS REFER TO STORM WATER STANDARD DETAIL SHEET 3 OF 3.

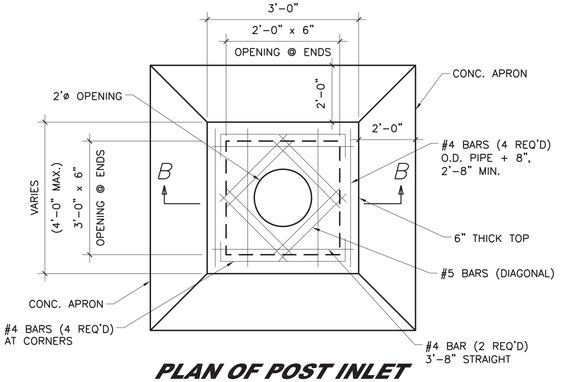



** THROAT OPENINGS SHALL HAVE A 6" X 6" CONCRETE SUPPORT PLACED AT MID-THROAT

* NOMINAL LENGTH OF INLET SHALL BE DESIGNATED AS THE CLEAR WIDTH OPENING.

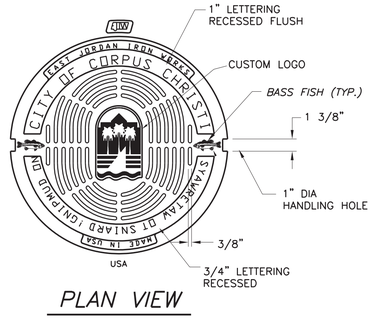
| STANDARD CURB INLET STEEL SCHEDULE | | | | | |
|---|---|---|---|---|---|
| ALL BARS No. 4 PREFORMED | | | | | |
| INLET SIZE (Nom. Length) | NO. REQ'D./LENGTH | | | | |
| | "A" BARS | "B" BARS | "C" BARS | "D" BARS | "E" BARS |
| 4' | 2/a | 4/1'-10" | 2/5'-6" | 4/3'-2" | 2/4'-6" |
| 5' | 2/a | 4/3'-2" | 2/6'-6" | 4/3'-2" | 2/5'-6" |
| 6' | 4/a | 4/4'-0" | 2/7'-6" | 6/3'-2" | 2/6'-6" |
| * * 8' | 4/a | 4/4'-0" | 2/9'-6" | 6/3'-2" | 2/8'-6" |
| * * 10' | 6/a | 4/4'-0" | 2/11'-6" | 7/3'-2" | 2/10'-6" |
| BENDING | STRAIGHT | STRAIGHT | SEE DET. | SEE DET. | STRAIGHT |

a = O.D. + 8", 2'-8" MIN. MAX. PIPE I.D. = 48 INCHES

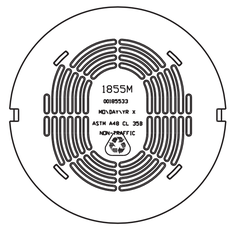



## PLAN OF POST INLET

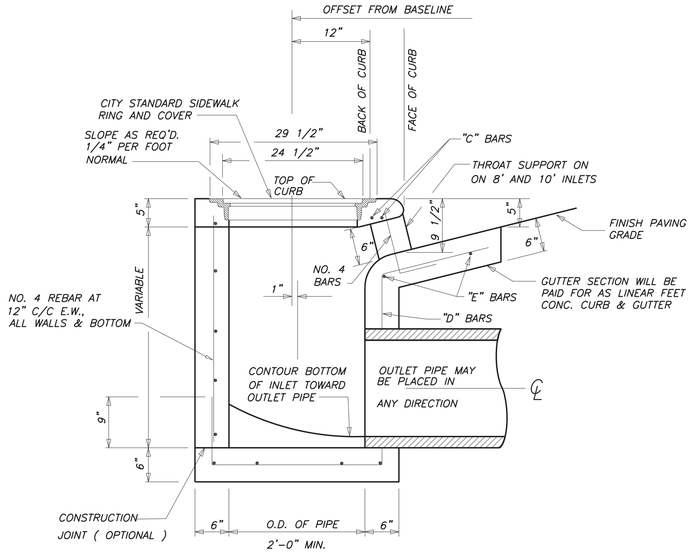
NOT TO SCALE




PLAN VIEW

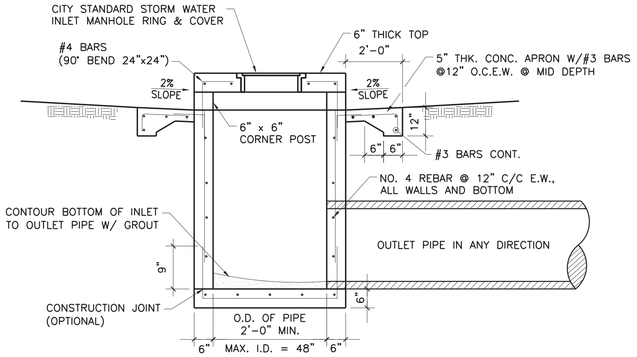



GRATE BLOCK



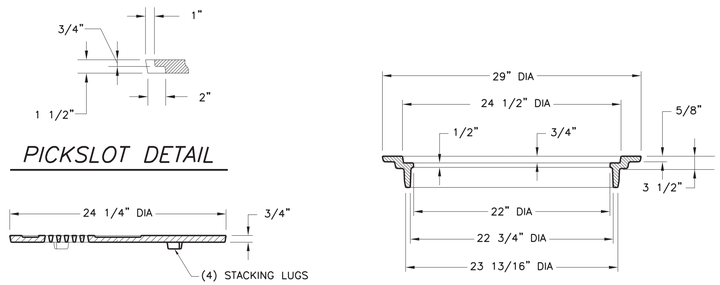

## SECTION A-A

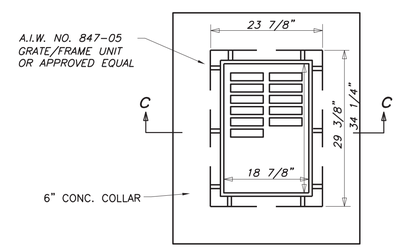
NOT TO SCALE




## SECTION B-B

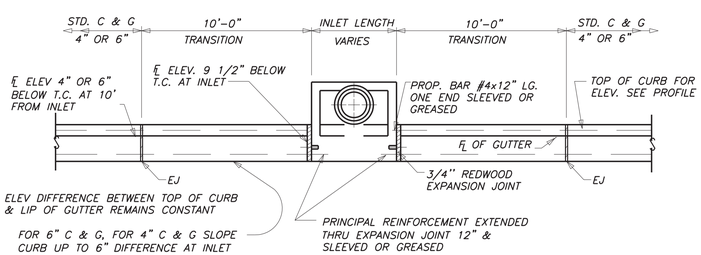
NOT TO SCALE




## PLAN OF STANDARD GRATE INLET

NOT TO SCALE




## FLOWLINE TRANSITION AT INLET FOR 4" OR 6" STD. CURB AND GUTTER

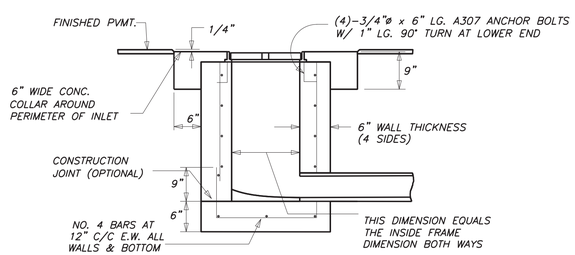
NOT TO SCALE

## CITY STANDARD INLET AND SIDWALK MANHOLE RING & COVER CASTING DETAILS

NOT TO SCALE

**INLET AND SIDEWALK MANHOLE RING & COVER NOTES**

1. MANHOLE RING & COVER SHALL BE EAST JORDAN MANHOLE ASSEMBLY FOR LOAD RATING NON-TRAFFIC.
2. THESE DETAILS SHOW GREY-IRON CASTINGS, FILLETED AT ANGLES WITH SHARP AND PERFECT ARISES.
3. CASTING SHALL BE TRUE TO PATTERN, FORM, AND DIMENSIONS, FREE FROM CRACKS, SPONGINESS AND BLOWHOLES.
4. MACHINE SURFACES TO YIELD FIT WHICH WILL NOT RATTLE WITH PASSING TRAFFIC LOAD.
5. TRAFFIC SHALL BE RESTRICTED FROM M.H. FOR 36 HOURS AFTER PLACEMENT OF RING.
6. RING AND COVER SHALL BE DIPPED IN COAL TAR OR ASPHALT.
7. OTHER CASTING PATTERNS FOR RING & COVERS MAY BE SUBMITTED FOR APPROVAL PROVIDED THE PLAN PATTERN OF COVER IS THE SAME AS SHOWN ON THIS SHEET AND PROVIDED OTHER CASTINGS SHALL BE COMPLETELY INTERCHANGEABLE, I.E., THE COVERS OF THIS SHEET SHALL FIT PROPERLY, THE RINGS OF OTHER CASTING DETAILS AND THE COVERS OF OTHER CASTINGS SHALL FIT THE RINGS OF THIS SHEET.
8. MINIMUM WEIGHTS OF FINISHED CASTINGS: THE COVER = 60 POUNDS, THE RING = 135 POUNDS.




## SECTION C-C

NOT TO SCALE

CONSULTANT'S SHEET No.

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CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
STORM WATER STANDARD DETAILS
1 OF 3

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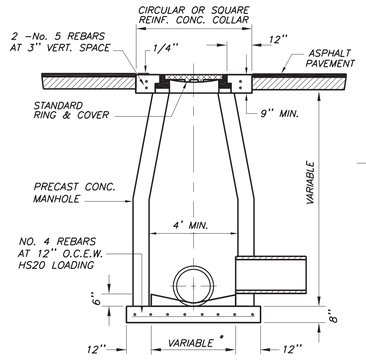
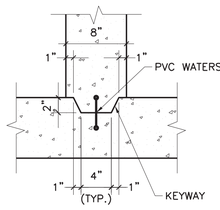
CITY PROJECT #_____




## KEYWAY DETAIL

NOT TO SCALE

**PRE-CAST CONC. MANHOLE NOTES:**

HS20 LOADING

CONCRETE 28 DAY COMPRESSIVE STRENGTH - 5000 PSI

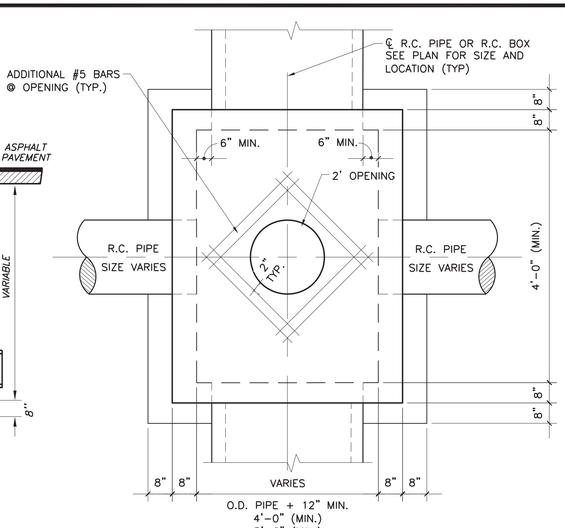
REINFORCEMENT STEEL - 60,000 PSI

REBAR MIN. SPLICE LENGTHS: #4-22" #5-28" #6-33"

MANHOLE WALL/RISER REINFORCED PER ASTM C-478

## TYPE "A" MANHOLE

NOT TO SCALE

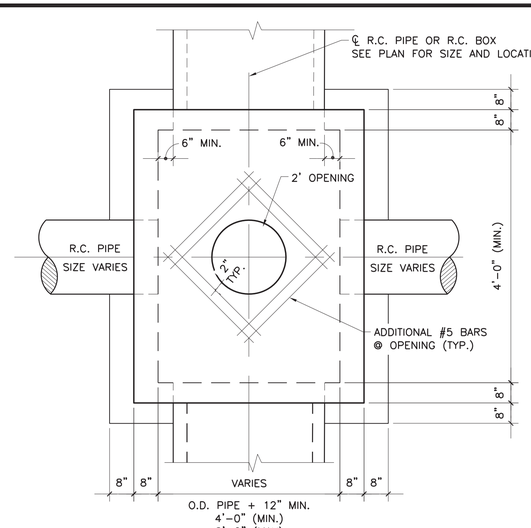



**NOTE:**

FOR R.C. PIPE SIZES, DIRECTION, AND FLOWLINES, REFER TO STREET AND STORM WATER PLAN AND PROFILES

## PLAN
## TYPE 'B' MANHOLE

NOT TO SCALE

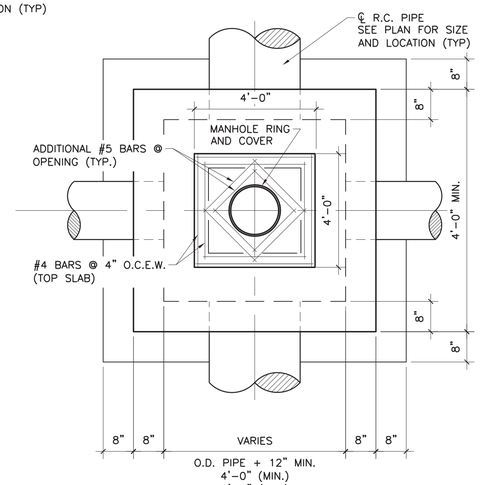



**NOTE:**

FOR R.C. PIPE SIZES, DIRECTION, AND FLOWLINES, REFER TO STREET AND STORM WATER PLAN AND PROFILES

## PLAN
## TYPE 'C' MANHOLE

NOT TO SCALE

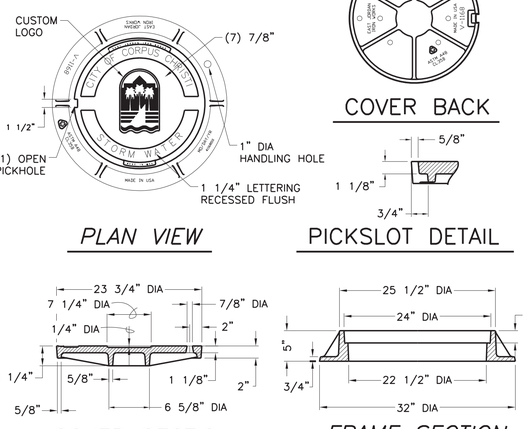


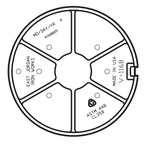

**NOTE:**

FOR R.C. PIPE SIZES, DIRECTION, AND FLOWLINES, REFER TO STREET AND STORM WATER PLAN AND PROFILES

## PLAN
## TYPE 'D' MANHOLE

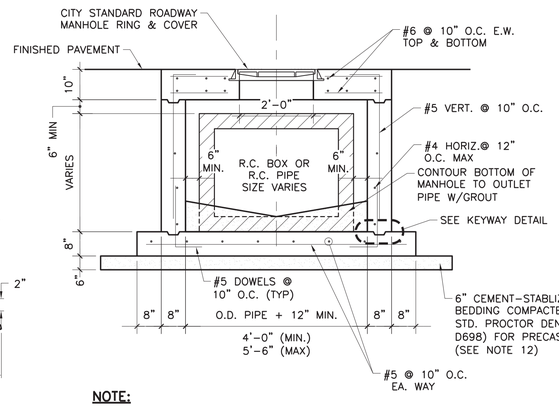
NOT TO SCALE




## CITY STANDARD ROADWAY MANHOLE RING & COVER CASTING DETAIL

NOT TO SCALE

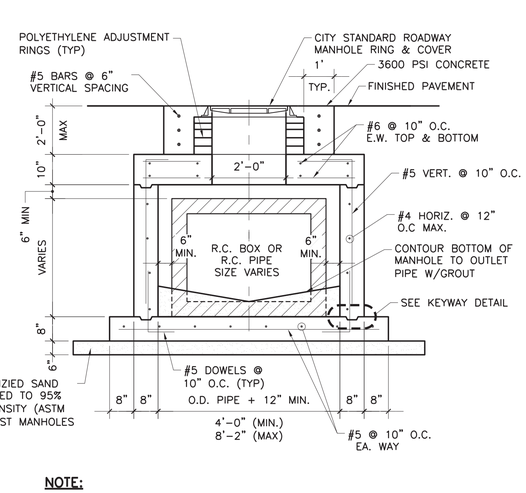



## SECTION
## TYPE 'B' MANHOLE

NOT TO SCALE

**NOTE:**

LATERAL PIPES NOT SHOWN FOR CLARITY

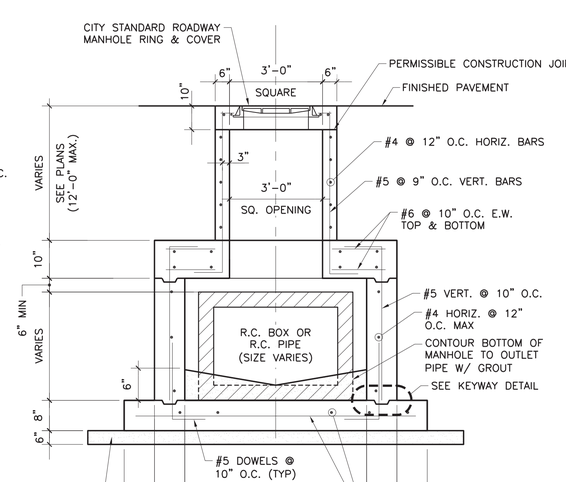



## SECTION
## TYPE 'C' MANHOLE

NOT TO SCALE

**NOTE:**

LATERAL PIPES NOT SHOWN FOR CLARITY




6" CEMENT-STABLIZIED SAND BEDDING COMPACTED TO 95% STD. PROCTOR DENSITY (ASTM D698) FOR PRECAST MANHOLES (SEE NOTE 12)

## SECTION
## TYPE 'D' MANHOLE

NOT TO SCALE

**NOTE:**

LATERAL PIPES NOT SHOWN FOR CLARITY

### ROADWAY MANHOLE RING & COVER NOTES

1. MANHOLE RING & COVER SHALL BE EAST JORDAN V 1168 ASSEMBLY AND FOR SCHOOL ZONE SHALL BE EAST JORDAN BOLTED-IN 1168 ASSEMBLY LOAD RATING HEAVY DUTY.
2. THESE DETAILS SHOW GREY-IRON CASTINGS, FILLETED AT ANGLES WITH SHARP AND PERFECT ARISES.
3. CASTING SHALL BE TRUE TO PATTERN, FORM, AND DIMENSIONS, FREE FROM CRACKS, SPONGINESS AND BLOWHOLES.
4. MACHINE SURFACES TO YIELD FIT WHICH WILL NOT RATTLE WITH PASSING TRAFFIC LOAD.
5. TRAFFIC SHALL BE RESTRICTED FROM M.H. FOR 36 HOURS AFTER PLACEMENT OF RING.
6. RING AND COVER SHALL BE DIPPED IN COAL TAR OR ASPHALT.
7. OTHER CASTING PATTERNS FOR RING & COVERS MAY BE SUBMITTED FOR APPROVAL PROVIDED THE PLAN PATTERN OF COVER IS THE SAME AS SHOWN ON THIS SHEET AND PROVIDED OTHER CASTINGS SHALL BE COMPLETELY INTERCHANGEABLE, I.E., THE COVERS OF THIS SHEET SHALL FIT PROPERLY, THE RINGS OF OTHER CASTING DETAILS AND THE COVERS OF OTHER CASTINGS SHALL FIT THE RINGS OF THIS SHEET.
8. MINIMUM WEIGHTS OF FINISHED CASTINGS : THE COVER = 160 POUNDS, THE RING = 180 POUNDS.
9. POLYETHYLENE MANHOLE ADJUSTMENT RINGS SHALL BE DESIGNED TO SUPPORT HS 20 TRAFFIC LOADING.

### GENERAL NOTES FOR CONCRETE DRAINAGE STRUCTURES:

1. ALL CONCRETE SHALL BE CLASS "C" (3600 PSI) EXCEPT CITY STANDARD CURB INLETS AND CONCRETE COLLARS MAY BE CLASS "A".
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
4. VERTICAL STEEL MAY BE SPLICED (15" MIN. LAP) IN THE LOWER ONE-HALF OF ALL INLET WALLS.
5. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, PIPES AND MANHOLE FRAME, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
6. CHAMFER ALL EXPOSED EDGES 3/4".
7. PROVIDE CITY STANDARD SIDEWALK MANHOLE RING AND COVER FOR CITY STANDARD CURB INLET. PROVIDE CITY STANDARD ROADWAY STORM WATER MANHOLE RING AND COVER FOR SPECIAL CURB INLET.
8. THE CONTRACTOR MAY PROPOSE ALTERNATE PROCEDURES FOR THE CONSTRUCTION OF INLETS AND MANHOLES, INCLUDING PRECAST UNITS. PLANS FOR SUCH PROPOSED ALTERNATES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE CONSTRUCTION. PRECAST MANHOLE WITHIN THE ROADWAY SHAL BE DESIGNED TO SUPPORT HS 20 TRAFFIC LOADING AND SEALED BY A LICENSED ENGINEER.
9. ALL INLET WALLS SHALL BE FORMED EXCEPT WHERE THE NATURE OF THE SURROUNDING MATERIAL IS SUCH THAT IT CAN BE TRIMMED TO A SMOOTH VERTICAL FACE. WHEN INLET WALLS ARE PLACED TO NEAT EXCAVATION LINES THE WALL THICKNESS SHALL NOT EXCEED 10 INCHES. PAYMENT FOR INLET AT THE CONTRACT PRICE SHALL INCLUDE THE TRANSITION CURB.
10. INVERT OF INLET SHALL BE SLOPED 1:20 WITH GROUT.
11. NO SPLICING OF REINFORCING STEEL SHALL BE PERMITTED EXCEPT WHERE OTHERWISE NOTED ON THE PLANS OR PERMITTED IN WRITING BY THE ENGINEER.
12. IN DEEP EXCAVATIONS (> 20') OR BELOW WATER TABLE, USE CRUSHED STONE OR CRUSHED GRAVEL MEETING GRADATION OF CONCRETE COARSE AGGREGATE; TxDOT ITEM 421; GRADE 2, 3, OR 4.

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CITY of CORPUS CHRISTI
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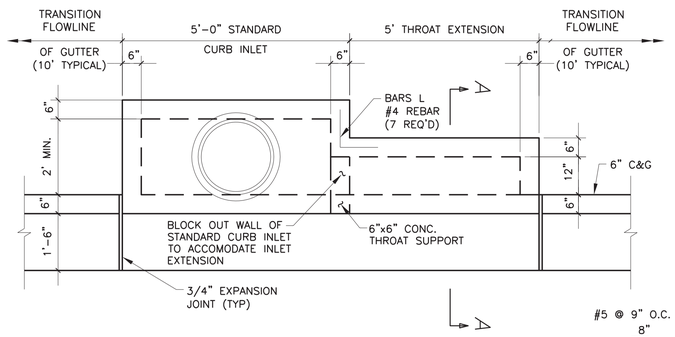
Department of Engineering Services

CITY OF CORPUS CHRISTI
STORM WATER STANDARD DETAILS
2 OF 3

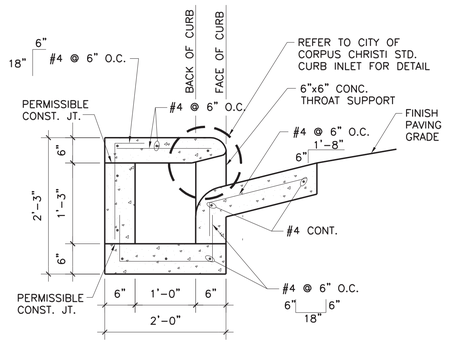
SHEET _____ of _____
RECORD DRAWING NO.

CITY PROJECT # _____



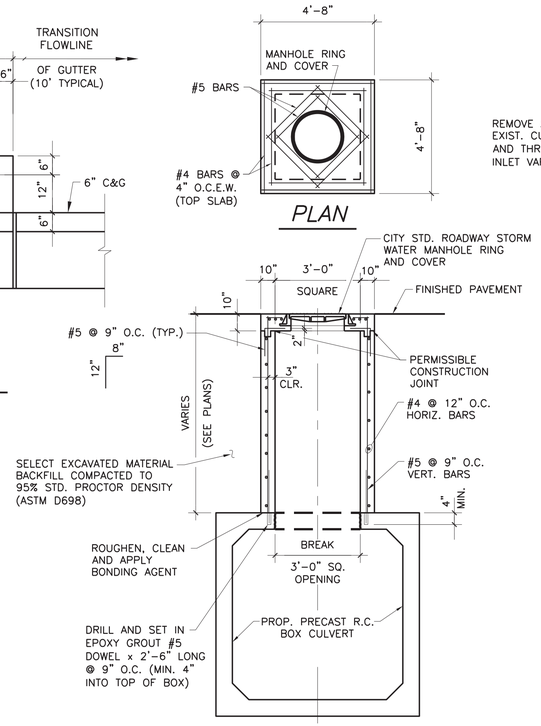

## CURB INLET THROAT EXTENSION PLAN

NOT TO SCALE



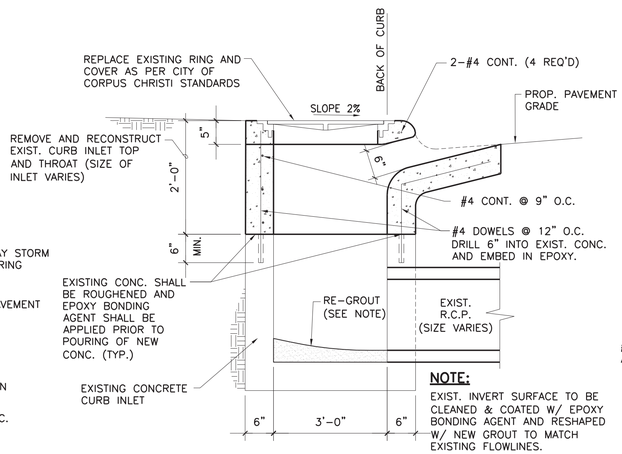

## SECTION A-A

NOT TO SCALE



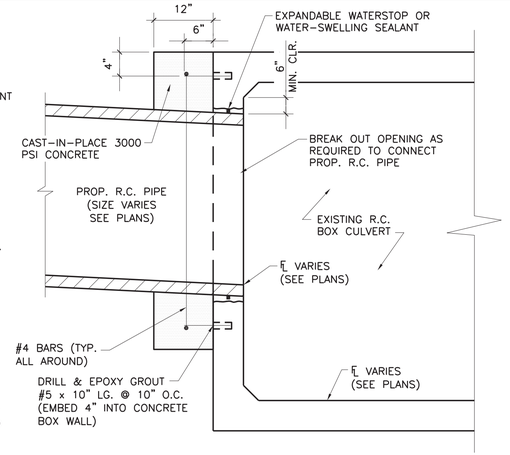

## MANHOLE RISER DETAIL

NOT TO SCALE



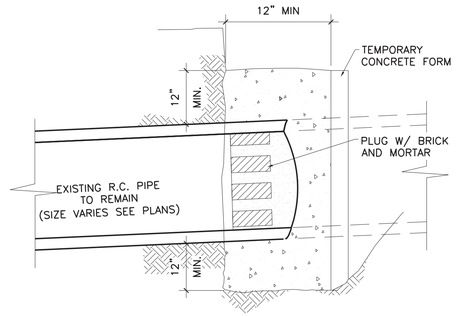

## REMOVE AND REPLACE TOP OF EXISTING CURB INLET DETAIL

NOT TO SCALE



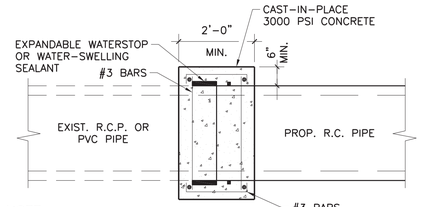

## PROP. PIPE TO EXISTING R.C. BOX CONNECTION DETAIL

NOT TO SCALE




## EXISTING R.C. PIPE PLUG

NOT TO SCALE

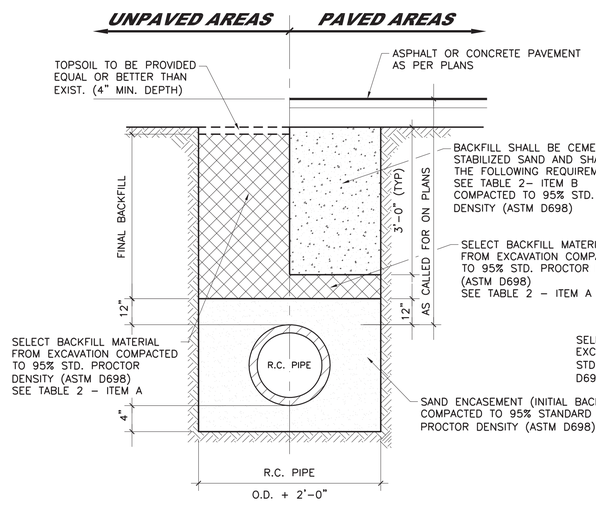



NOTE:

PIPE COLLAR SHALL BE USED WHERE A TIGHT JOINT CANNOT BE PLACED, SUCH AS A BREAK IN ALIGNMENT, DAMAGED PIPE ENDS OR TIE-IN TO EXISTING PIPE OR STRUCTURES.

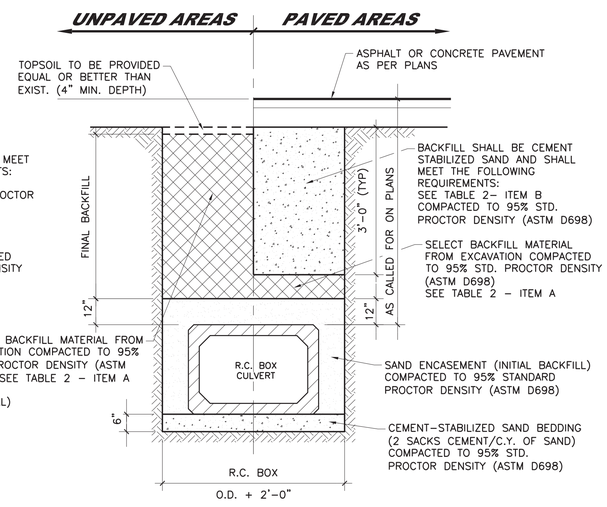
## CONCRETE COLLAR DETAIL

NOT TO SCALE




## TRENCH BACKFILL FOR STORM WATER PIPES

NOT TO SCALE




NOTE: (CONCRETE PAVEMENT ONLY)

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

## TRENCH BACKFILL FOR STORM WATER R.C. BOX CULVERTS

NOT TO SCALE

## GENERAL NOTES FOR BACKFILL

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

*ALL BEDDING AND INITIAL BACKFILL SHALL CONSIST OF GRANULAR MATERIAL CONSISTING OF EITHER NATURAL SAND OR SANDY GRAVEL, OR MATERIAL PRODUCED BY CRUSHING OF NATURAL STONE OR GRAVEL. SEWER LINES:*

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

   *MEETING REQUIREMENTS OF ASTM D2487 FOR:*

   | | |
   |---|---|
   | SP | GP |
   | SW | GW |
   | SP-SM | GP-GM |
   | SW-SM | GW-GM |

   *AND IN ADDITION:*
   *PASSING 1/2" SIEVE - 100%*
   *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.*

*FOR ALL UTILITIES:*

1. *FOR PIPE DIAMETER EQUAL TO OR SMALLER THAN 16", USE 4" MINIMUM BEDDING UNDER PIPE.*
2. *FOR PIPE DIAMETER GREATER THAN 16", USE 6" MINIMUM BEDDING UNDER PIPE.*

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

### UNPAVED AREAS

A. *FOR 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. (4" MIN.) COMPACT TO FIX CONFLICT TO EXISTING ADJACENT TOPSOIL. (CONSTRUCTION TO BE PERFORMED BY "DOUBLE DITCH" METHOD TOP SOIL SALVAGED TO BE PLACED ON TOP)*

### PAVED AREAS

A. *FOR 12" ABOVE PIPE TO 3' BELOW BOTTOM OF ROAD BASE: BACKFILL SHALL BE SELECT MATERIAL FROM EXCAVATION OR TO BE IMPORTED MATERIAL AND SHALL MEET THE FOLLOWING:*

   *LL<35*
   *PI 8-20*
   *NO CLUMPS > 2" DIA.*
   *MOISTURE 0 TO +3%*
   *COMPACT 95% D698 STD PROCTOR*

   *LOOSE LIFTS OF 10" MAX OR IF SELECT MATERIAL FROM EXCAVATION DOES NOT MEET REQUIREMENTS, THEN USE CEMENT STABILIZED SAND SEE TABLE 2-ITEM B*

B. *FOR 3' BELOW BOTTOM OF ROAD BASE TO BOTTOM OF ROAD BASE:*

   *BACKFILL SHALL BE CEMENT STABILIZED SAND AND SHALL MEET THE FOLLOWING REQUIREMENTS:*

   *SAND GRADATION:*
   *% PASSING*

   | | |
   |---|---|
   | 1/2" | 100% |
   | #4 | 55-100 |
   | #10 | 40-100 |
   | #40 | 25-100 |
   | #200 | 10-20 |
   | PI | NP-10 |

   *2 SACKS CEMENT/C.Y. OF SAND.*

   *COMPACT TO 95% OF D698. MOISTURE TO BE ADJUSTED TO (+/-2%) OF OPTIMUM.*

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STORM WATER STANDARD DETAILS
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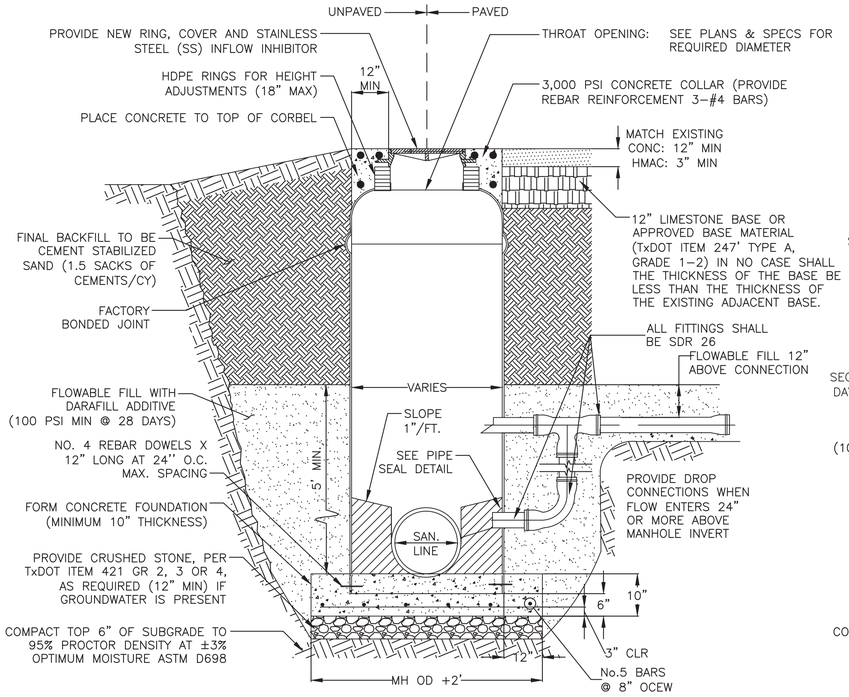
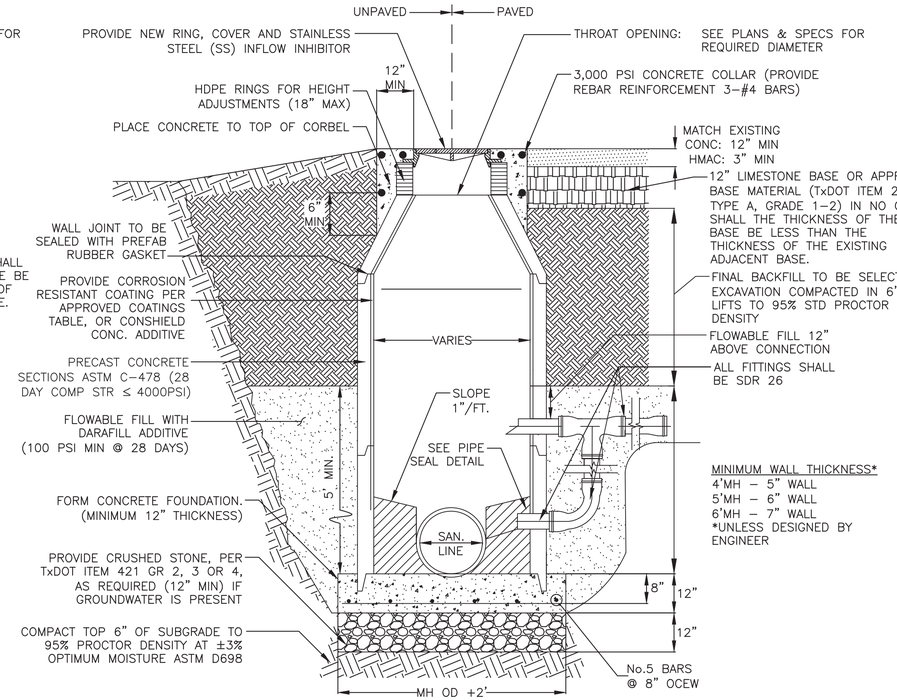



## FIBERGLASS MANHOLE

NOT TO SCALE




## CONCRETE MANHOLE

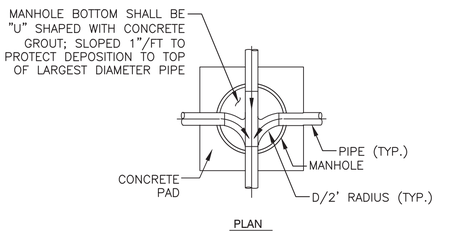
NOT TO SCALE

MINIMUM WALL THICKNESS*
4'MH – 5" WALL
5'MH – 6" WALL
6'MH – 7" WALL
*UNLESS DESIGNED BY ENGINEER

| MANHOLE REQUIREMENTS | |
|---|---|
| PIPE DIAMETER | MANHOLE DIAMETER |
| ≤18" | 4' |
| 18"< TO ≤36" | 5' |
| 36"< TO ≤42" | 6' |

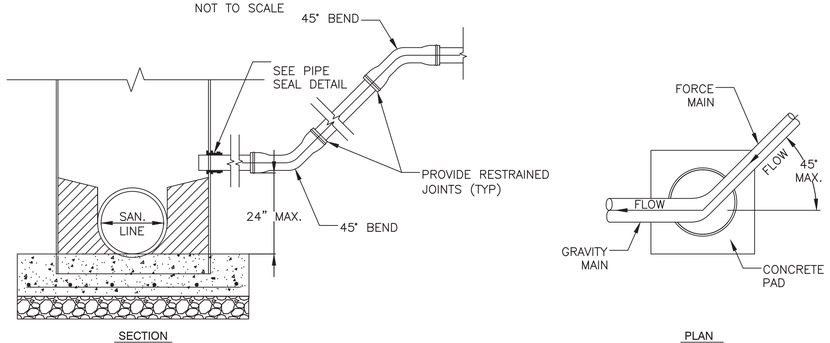
| APPROVED COATINGS TABLE | |
|---|---|
| MANUFACTURER | MODEL NAME |
| JEFFCOAT | JEFFCOAT 326 |
| RAVEN LINING SYSTEM | RAVEN 405 |
| SHERWIN WILLIAMS | DURAPLATE 5800 |
| CARBOLINE | PHENOLINE 309 |

NOTE:
COAT ALL CONCRETE SURFACES INCLUDING BENCH & WALLS.




## WASTEWATER MANHOLE (BOTTOM)

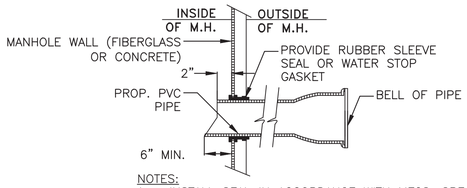
NOT TO SCALE




NOTES:
1. ALL BENDS SHALL BE DUCTILE IRON WITH RESTRAINED JOINTS.
2. INFLUENT FORCE MAIN MUST BE NO MORE THAN 45° FROM PARALLEL WITH DOWNSTREAM FLOW DIRECTION.

## FORCE MAIN DISCHARGE MANHOLE DETAIL

NOT TO SCALE



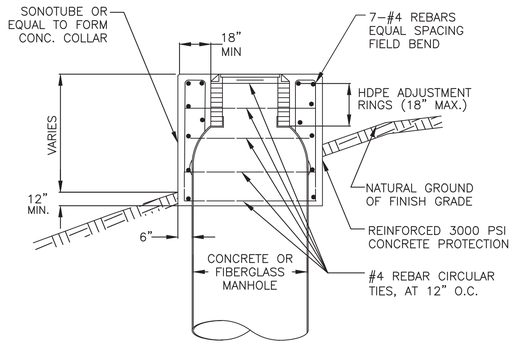

NOTES:
1. INSTALL SEAL IN ACCORDANCE WITH MFGS. SPECS.
2. USE RUBBER SEAL ASSEMBLY APPROVED BY UTILITY DEPARTMENT. (TPSMHA OR PIPECONX OR INSERT A TEE)

## PIPE SEAL DETAIL

NOT TO SCALE

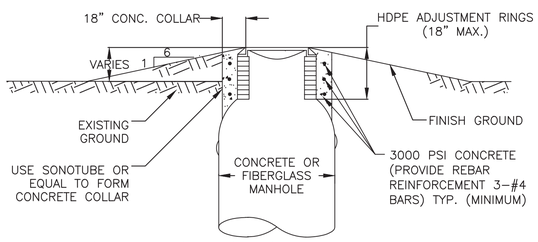
## GENERAL WASTEWATER CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND EXAMINE LOCAL CONDITIONS TO BE ENCOUNTERED, IMPROVEMENTS TO BE PROTECTED, AND PERMITS AND FEES TO BE REQUIRED, ALONG WITH OTHER RESEARCH THAT IS NECESSARY TO ENSURE THAT THE CONTRACTOR THOROUGHLY UNDERSTANDS THE PROJECT AND IS FULLY AWARE OF ALL THE CONDITIONS AND CONSTRAINTS THAT MAY BE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL ADHERE TO ALL TCEQ REGULATIONS PER 30 TAC CHAPTER 217 AND TRENCH SAFETY FOR EXCAVATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL AND MUST ADHERE TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. ALL FIBERGLASS MANHOLES SHALL BE MONOLITHIC WITH 0.50" MINIMUM WALL THICKNESS. IF PROVIDED OR REQUIRED, FIBERGLASS BOTTOM SHALL BE DESIGNED TO WITHSTAND HYDROSTATIC HEAD PRESSURE UNDER ALL CONDITIONS.
5. THE MANHOLE WALL PENETRATIONS FOR PIPE (8"–15" DIAMETER PIPE) ABOVE THE FLOWLINE OF THE MANHOLE SHALL BE CORED AND SEALED WITH APPROVED SEAL GASKET WATER STOP ASSEMBLY.
6. FOR FIBERGLASS MANHOLES, THE MANHOLE FOUNDATION MAY BE PRECAST ON GROUND SURFACE. (PROCEDURE MUST BE SUBMITTED TO THE ENGINEERING SERVICES CONSTRUCTION ENGINEER FOR APPROVAL.)
7. THE CONTRACTOR SHALL PROVIDE PROTECTIVE COATING ON ALL EXPOSED CONCRETE SURFACES, INCLUDING CORBEL AREA, MANHOLE WALLS AND MANHOLE BENCH.
8. FOR FIBERGLASS MANHOLES WITH WATERTIGHT BOTTOM, ADHERE TO ALL MANUFACTURER REQUIREMENTS. FIBERGLASS BOTTOM AND BENCH MUST ALSO BE FACTORY INSTALLED.




## MANHOLE PROTECTION IN UNPAVED AREAS (CULTIVATED/SPECIAL)

NOT TO SCALE




## MANHOLE PROTECTION IN UNPAVED AREAS (RESIDENTIAL)

NOT TO SCALE

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CITY OF CORPUS CHRISTI
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Department of Engineering Services

CITY OF CORPUS CHRISTI
WASTEWATER STANDARD DETAILS
MANHOLE INSTALLATION

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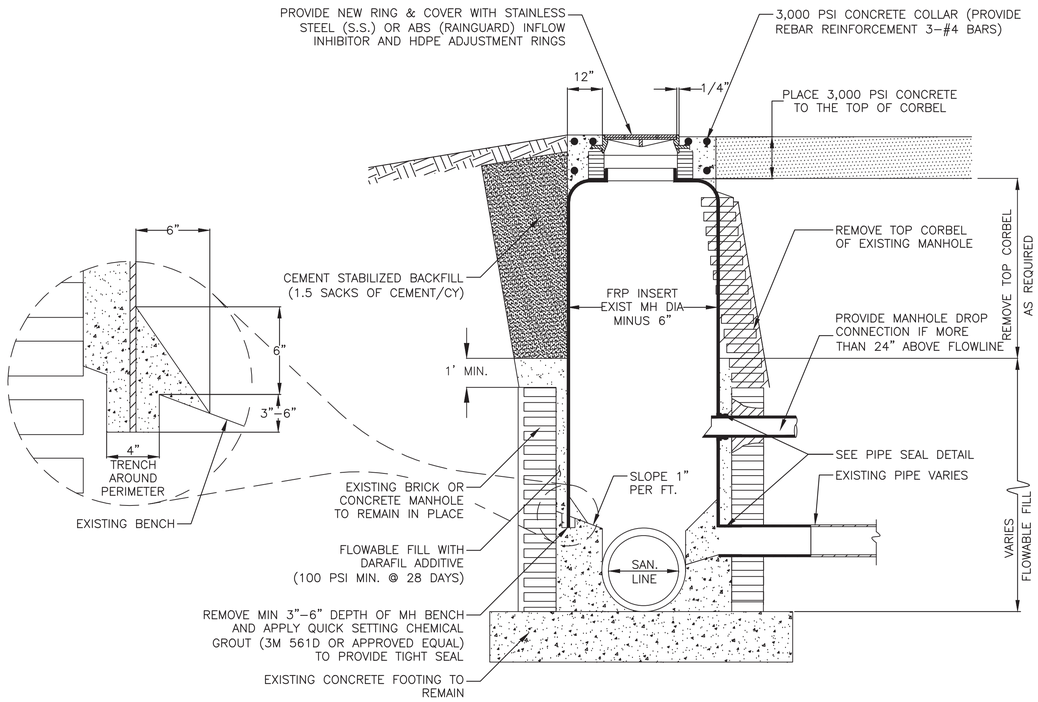
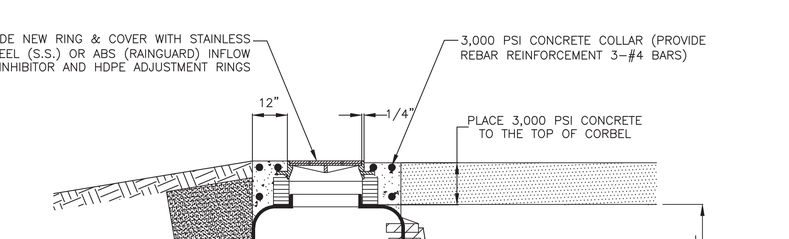



## FRP INSERT REHABILITATION OF EXISTING MANHOLE

NOT TO SCALE




## COVER PLAN VIEW

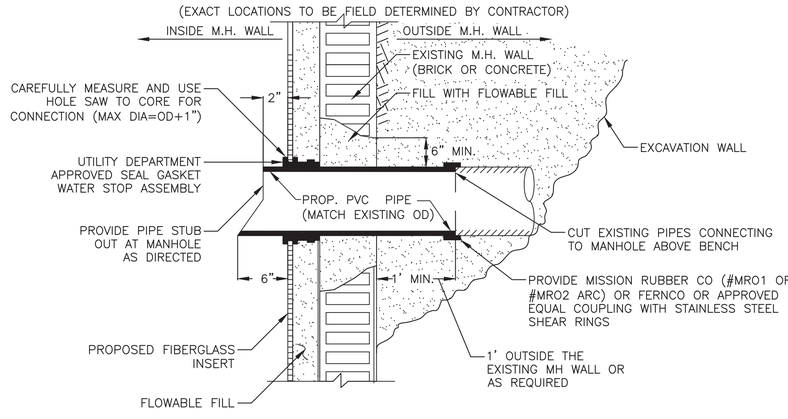
NOT TO SCALE

## SECTION OF RING & COVER

NOT TO SCALE

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.
5. 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.
6. PROVIDE COATING TO EXPOSED CONCRETE SURFACES WITH APPROVED SYSTEM TO PREVENT CORROSION.
7. 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.
8. CUT BOTTOM OF FRP INSERT TO FIT EVENLY ON BENCHES OR CHIP BENCHES OUT TO EVENLY SUPPORT INSERT.
9. SEAL ANNULAR SPACE AROUND EXIST LINES WITH JUTE ROPE AND CHEMICAL GROUT.




## FRP INSERT PIPE SEAL DETAIL

NOT TO SCALE

ROADWAY MANHOLE RING AND COVER:

1. THE CONTRACTOR SHALL PROVIDE STAINLESS STEEL (S.S.) INFLOW INHIBITOR WITH SS TETHER SECURED TO MANHOLE WALL, SUCH THAT THE INNER LID IS FLUSH WITH THE OUTER LID.
2. TRAFFIC SHALL BE RESTRICTED FROM MANHOLE FOR 48 HOURS AFTER THE PLACEMENT OF CONCRETE, AND COLLAR SHALL PROVIDE A SUFFICIENT, CLEAR OPENING TO ACCOMMODATE THE SPECIFIED MANHOLE COVER.
3. 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.
4. 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.

| CLEAR OPENING | MANUFACTURER (1) | MODEL NUMBER* | INFLOW INHIBITOR |
|---|---|---|---|
| 24" | EAST JORDAN IRON WORKS | V–1168 | REQUIRED ON ALL INSTALLATIONS PER CITY SPECIFICATIONS |
| | U.S. FOUNDRY | COVER– #8018538 FRAME– #8022247 | |
| | NEENAH FOUNDRY | R–1930–24 | |
| 30" (2) | 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) UNLESS NOTED IN THE PLANS, ALL COVERS SHALL BE 24" DIAMETER AND NOT INTENDED FOR MANNED ENTRY.

## RING & COVER APPROVED LIST

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CITY OF CORPUS CHRISTI
WASTEWATER STANDARD DETAILS
REHABILITATION OF EXISTING MANHOLE & MANHOLE RING AND COVER DETAILS
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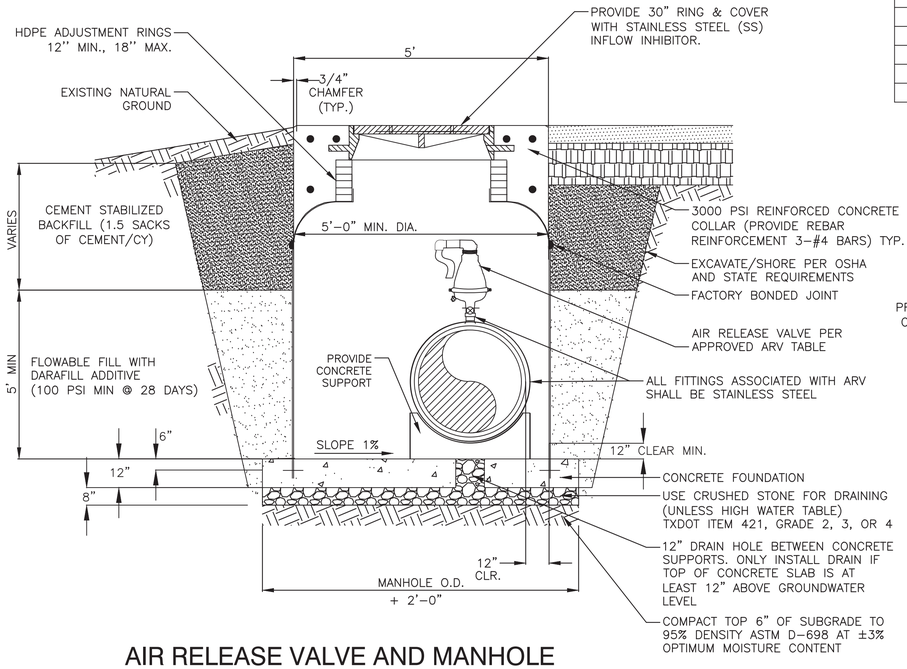
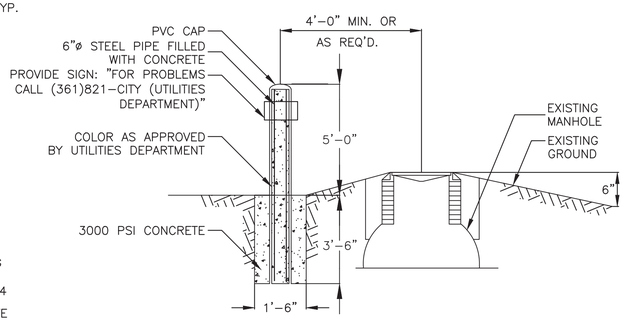



## AIR RELEASE VALVE AND MANHOLE

NOT TO SCALE

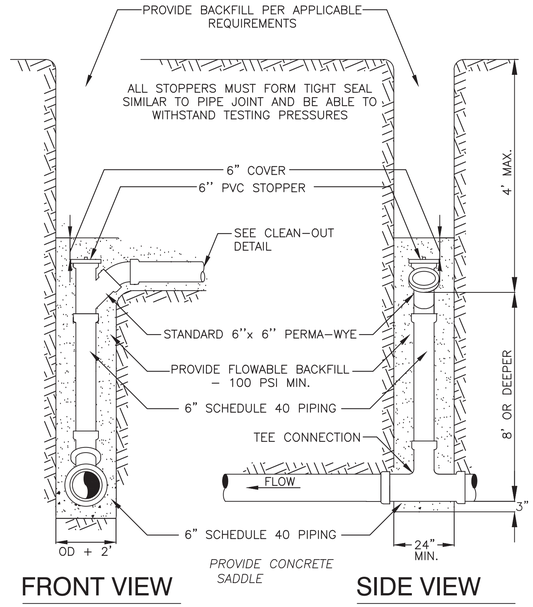
| APPROVED ARVs | | |
|---|---|---|
| MANUFACTURER | MODEL NAME | MATERIAL |
| A.R.I. | D-025 OR D-025 SHORT | 316 SS |
| H-TEC | MODEL 986 (SS) AND 988 | |
| VENT OMAT | MODEL RGXII (ST. STEEL) | |
| VALMATIC | VM 48AS OR VM 49AS | |




NOTE:
FOR BOLLARD LOCATION AND QUANTITY, SEE CONSTRUCTION PLANS

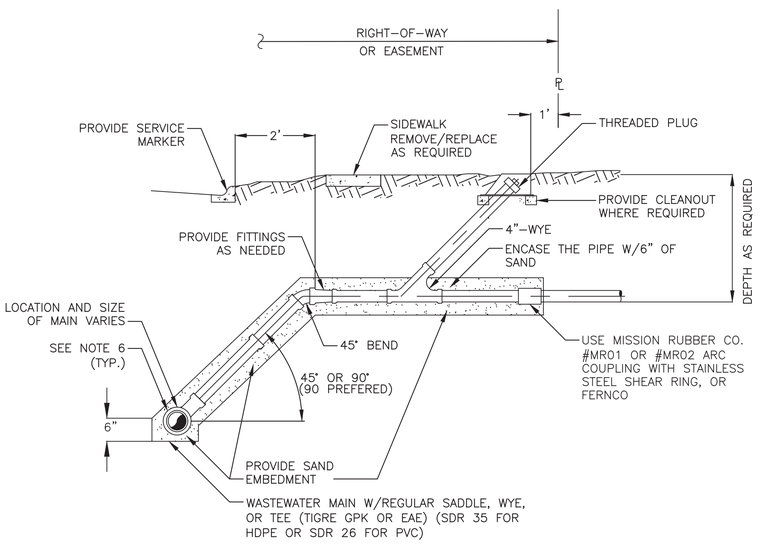
## BOLLARD DETAIL

NOT TO SCALE




## DEEP CUT SERVICE CONNECTION

NOT TO SCALE

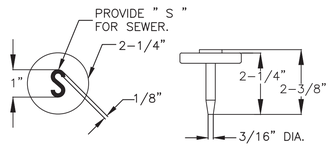



## SERVICE CONNECTION DETAILS

NOT TO SCALE

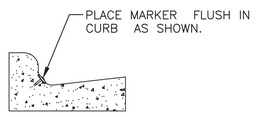
## SERVICE CONNECTION NOTES:

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.

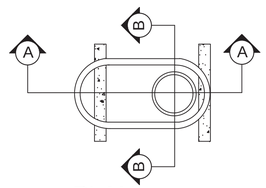



## STANDARD SERVICE MARKER

BRASS – ONE REQUIRED EACH STREET TAP
NOT TO SCALE

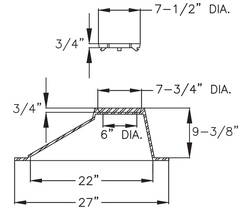



NOTE:
IF NO CURB BURY 12" PIECE OF REBAR WITH POLY PROTECTIVE END CAP ON EACH END.



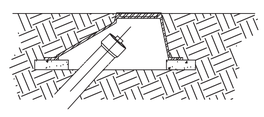

## PLAN

NOT TO SCALE



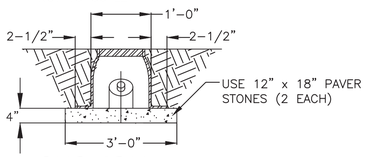

## CLEAN-OUT BOOT

NOT TO SCALE



## SECTION A-A

NOT TO SCALE




## SECTION B-B

NOT TO SCALE

## TYPICAL CAST IRON CLEAN-OUT BOOT

NOT TO SCALE

CONSULTANT'S SHEET NO.

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CITY OF CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
WASTEWATER STANDARD DETAILS
AIR RELEASE VALVE, BOLLARD AND SERVICE CONNECTION DETAILS

3 OF 4

SHEET _____ of _____
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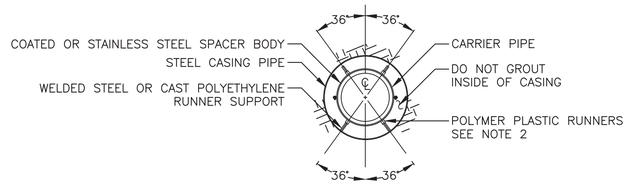
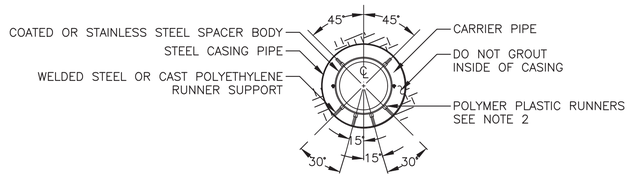


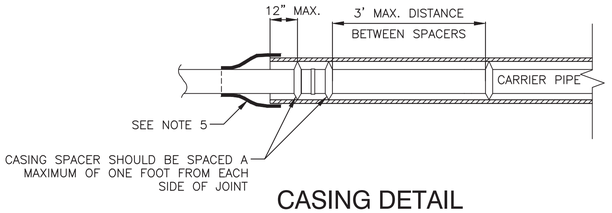

## 4" TO 10" CASING DETAIL

NOT TO SCALE




## 12" TO 36" CASING DETAIL

NOT TO SCALE

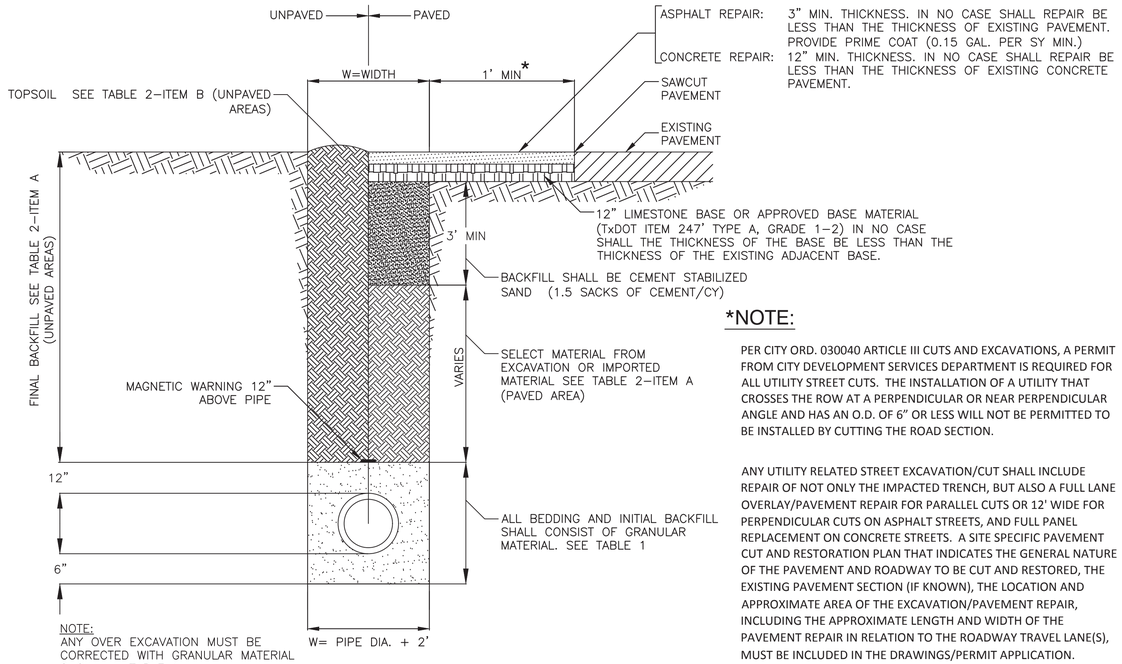



## CASING DETAIL

NOT TO SCALE

## CASING NOTES:

1. CASING DIAMETER, LENGTH, LOCATION, AND WALL THICKNESS SHALL BE PER PROJECT SPECIFIC REQUIREMENTS. (MINIMUM SCHEDULE 40)
2. ALL CARRIER PIPES IN INSTALLED CASINGS SHALL BE SUPPORTED BY BOLT–ON STYLE CASING SPACERS ("ADVANCED PRODUCTS" OR APPROVED EQUAL).
3. THE CONTRACTOR SHALL PROVIDE MECHANICALLY RESTRAINED JOINTS FOR FORCE MAINS ONLY ON CARRIER PIPES. "MEGALUG" TYPE JOINT RESTRAINTS OR APPROVED EQUAL SHALL BE USED.
4. CASING SPACERS SHALL BE SIZED TO SECURELY FASTEN TO THE CARRIER PIPE O.D. AND SHALL BE FURNISHED WITH A MINIMUM RUNNER HEIGHT TO MAINTAIN SEPARATION BETWEEN THE MAXIMUM O.D. OF THE CARRIER PIPE AND THE CASING WALL.
   A. POSITIONING OF THE SPACERS SHALL ENSURE THAT THE CARRIER PIPE IS ADEQUATELY SUPPORTED THROUGHOUT ITS LENGTH.
   B. SPACERS AT EACH END SHALL NOT BE FURTHER THAN 12" FROM THE END OF THE CASING.
   C. CASING SPACERS SHALL BE INSTALLED IN THE CENTER OF THE PIPE SECTION. THE MAXIMUM SPACING OF THE CASING SPACERS SHALL BE 3 FEET.
5. THE TWO ENDS OF THE CASING PIPE SHALL BE SEALED WATERTIGHT WITH AN ADVANCED PRODUCTS SYSTEM, INC. MODEL AZ – ZIPPER, PSI MODEL C END SEAL, OR AN APPROVED EQUAL.




## TRENCH BACKFILL FOR WASTEWATER LINES AND PAVEMENT REPAIR FOR UTILITIES

NOT TO SCALE

## *NOTE:

PER CITY ORD. 030040 ARTICLE III CUTS AND EXCAVATIONS, A PERMIT FROM CITY DEVELOPMENT SERVICES DEPARTMENT IS REQUIRED FOR ALL UTILITY STREET CUTS. THE INSTALLATION OF A UTILITY THAT CROSSES THE ROW AT A PERPENDICULAR OR NEAR PERPENDICULAR ANGLE AND HAS AN O.D. OF 6" OR LESS WILL NOT BE PERMITTED TO BE INSTALLED BY CUTTING THE ROAD SECTION.

ANY UTILITY RELATED STREET EXCAVATION/CUT SHALL INCLUDE REPAIR OF NOT ONLY THE IMPACTED TRENCH, BUT ALSO A FULL LANE OVERLAY/PAVEMENT REPAIR FOR PARALLEL CUTS OR 12' WIDE FOR PERPENDICULAR CUTS ON ASPHALT STREETS, AND FULL PANEL REPLACEMENT ON CONCRETE STREETS. A SITE SPECIFIC PAVEMENT CUT AND RESTORATION PLAN THAT INDICATES THE GENERAL NATURE OF THE PAVEMENT AND ROADWAY TO BE CUT AND RESTORED, THE EXISTING PAVEMENT SECTION (IF KNOWN), THE LOCATION AND APPROXIMATE AREA OF THE EXCAVATION/PAVEMENT REPAIR, INCLUDING THE APPROXIMATE LENGTH AND WIDTH OF THE PAVEMENT REPAIR IN RELATION TO THE ROADWAY TRAVEL LANE(S), MUST BE INCLUDED IN THE DRAWINGS/PERMIT 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:

(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
TO (+/–2%) OF OPTIMUM.

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CONSULTANT'S SHEET NO.

CITY OF CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
WASTEWATER STANDARD DETAILS
PAVEMENT REPAIR/BACKFILL/GENERAL NOTES/CASING DETAILS

4 OF 4

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CITY PROJECT #_____

## WATER DISTRIBUTION SYSTEM GENERAL NOTES

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

**SPECIAL NOTE:**

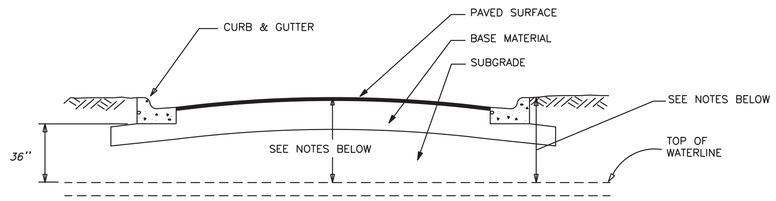
ENGINEER SHALL CONTACT THE UTILITY DEPARTMENT FOR WATER VAULT DESIGN COORDINATION.

## SEPARATION OF WATER AND WASTEWATER LINES

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

**NOTES:**

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

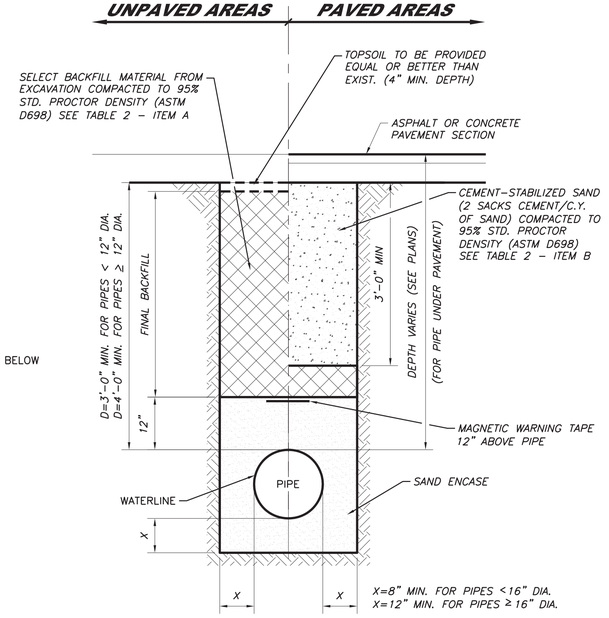



## WATERLINE MINIMUM COVER REQUIREMENTS

NOT TO SCALE

**NOTES:**

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




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

NOT TO SCALE

**NOTE: (CONCRETE PAVEMENT ONLY)**

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

## 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.

WATER LINES:

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

   MEETING REQUIREMENTS OF ASTM D2487 FOR:

   | | |
   |---|---|
   | SP | GP |
   | SW | GW |
   | SP-SM | GP-GM |
   | SW-SM | GW-GM |

   AND IN ADDITION:
   PASSING 1/2" SIEVE - 100%
   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.

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

**UNPAVED AREAS**

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

**PAVED AREAS**

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

   LL<35
   PI 8-20
   NO CLUMPS > 2" DIA.
   MOISTURE 0 TO +3%
   COMPACT 95% D698 STD PROCTOR

   LOOSE LIFTS OF 10" MAX OR IF SELECT MATERIAL FROM EXCAVATION DOES NOT MEET REQUIREMENTS, THEN USE CEMENT STABILIZED SAND SEE TABLE 2-ITEM B BELOW (OR PER DESIGN ENGINEER)

B. FOR 3' BELOW BOTTOM OF ROAD BASE TO BOTTOM OF ROAD BASE:

   BACKFILL SHALL BE CEMENT STABILIZED SAND (2 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 |

   (OR AS PER DESIGN ENGINEER)

   COMPACT TO 95% OF D698. MOISTURE TO BE ADJUSTED TO (+/-2%) OF OPTIMUM.

CONSULTANT'S SHEET No.

REVISION NO. | DATE | BY | DESCRIPTION

CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
WATER STANDARD DETAILS
WATER DISTRIBUTION SYSTEM GENERAL NOTES & BACKFILL AND EMBEDMENT DETAILS
1 OF 4

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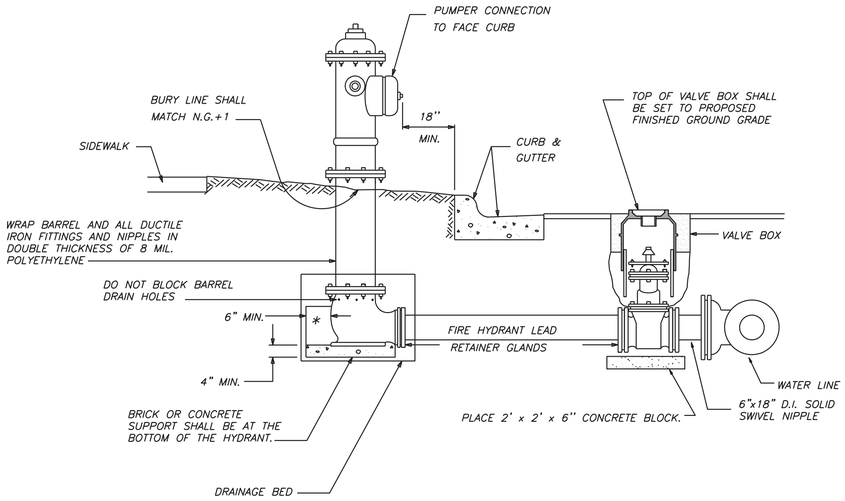
RECORD DRAWING NO.

CITY PROJECT #




*** NOTE:**

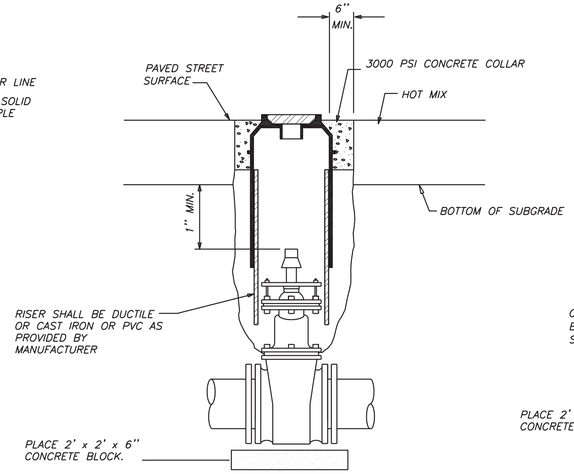
1. ANYTHING LESS THAT 20' WILL BE DUCTILE IRON LOCKED TO THE VALVE.
2. ANYTHING MORE THAN 20' SHALL REQUIRE CONCRETE THRUST BLOCK BEHIND HYDRANT AGAINST UNDISTURBED SOIL.

## FIRE HYDRANT ASSEMBLY DETAIL (TYPE 1)

NOT TO SCALE

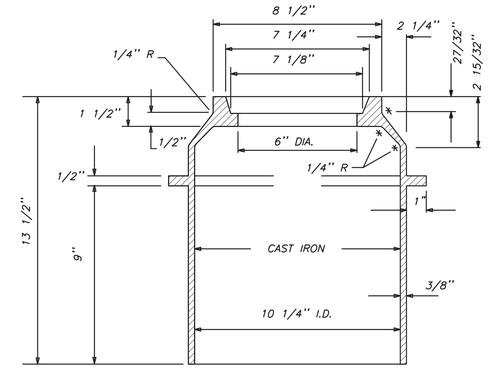
**FIRE HYDRANTS:**

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.



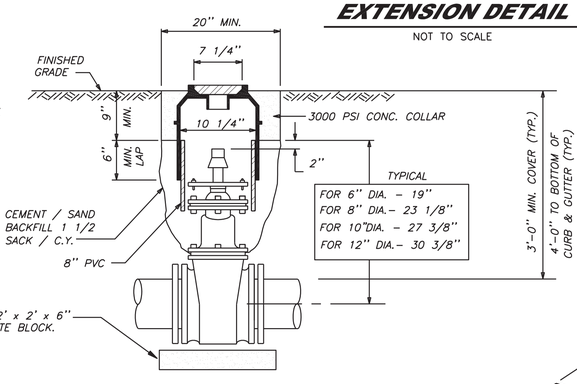

## VALVE BOX DETAIL @ PAVEMENT

NOT TO SCALE




## EXTENSION DETAIL

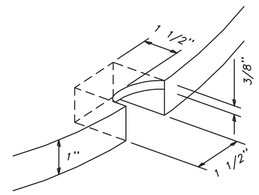
NOT TO SCALE




## VALVE BOX DETAIL @ NATURAL GROUND

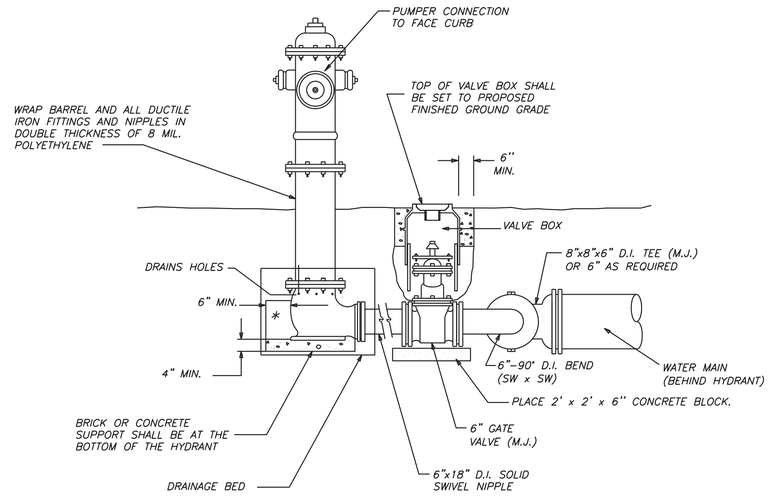
NOT TO SCALE

ALL VALVES SHALL BE HOUSED IN APPROVED VALVE BOXES




## PICK NOTCH

NOT TO SCALE



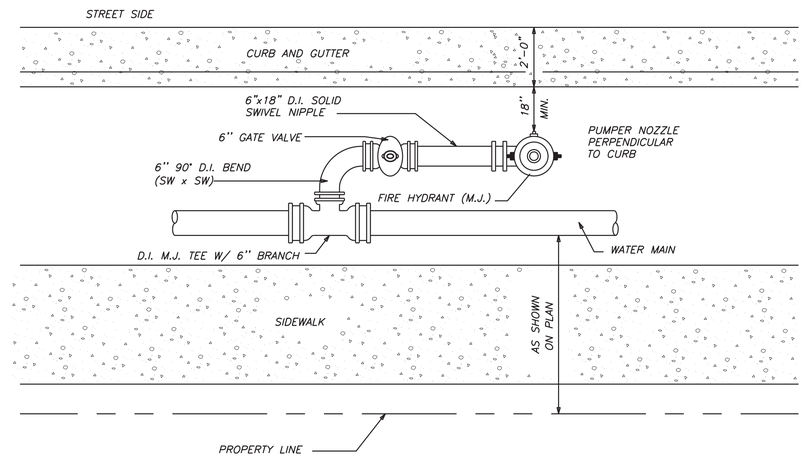

*** NOTE:**

1. ANYTHING LESS THAT 20' WILL BE DUCTILE IRON LOCKED TO THE VALVE.
2. ANYTHING MORE THAN 20' SHALL REQUIRE CONCRETE THRUST BLOCK BEHIND HYDRANT AGAINST UNDISTURBED SOIL.

## FIRE HYDRANT ASSEMBLY DETAIL (TYPE 2)

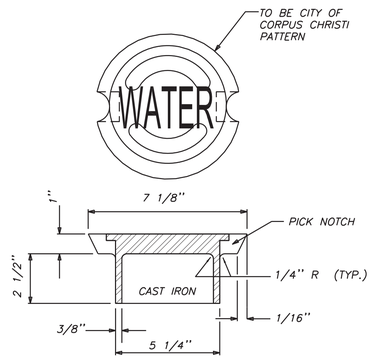
WATER LINE BEHIND CURB

NOT TO SCALE




## FIRE HYDRANT ASSEMBLY DETAIL (TYPE 2)

NOT TO SCALE




## LID DETAIL

NOT TO SCALE

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CONSULTANT'S SHEET No.

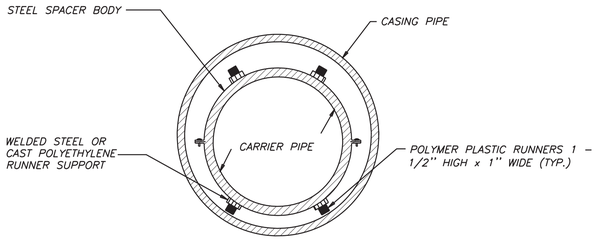
CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
WATER STANDARD DETAILS
FIRE HYDRANT, VALVE BOX AND LID

2 OF 4

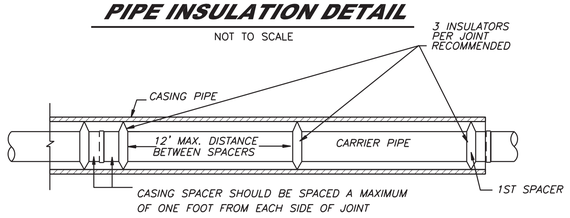
SHEET ____ of ____
RECORD DRAWING NO.

CITY PROJECT # ____



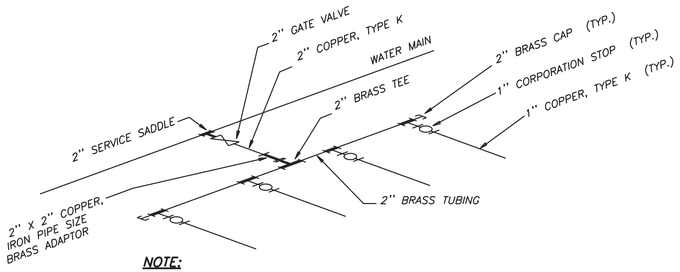

## PIPE INSULATION DETAIL

NOT TO SCALE




## INSULATOR SPACING DETAIL

NOT TO SCALE




**NOTE:**

MANIFOLDS LARGER THAN SIX CONNECTIONS WILL REQUIRE APPROVAL FROM THE CITY OF CORPUS CHRISTI WATER DEPARTMENT FOR ANOTHER WATER TAP AND SERVICE.

## THREE TO SIX WATER CONNECTIONS

NOT TO SCALE

## CASING SPACERS

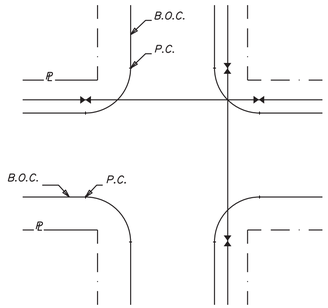
A. ALL CARRIER PIPE IN CASING INSTALLED BY JACKING OR BORING SHALL BE SUPPORTED BY BOLT–ON STYLE CASING SPACERS, AS MANUFACTURED BY ADVANCE PRODUCTS INC. OR ENGINEER APPROVED EQUAL.

B. CASING SPACERS FOR PIPE INSTALLED IN CASING SHALL HAVE A FUSION BONDED EPOXY CARBON STEEL BODY, NEOPRENE OR PVC LINER. STEEL SUPPORTS AND U.H.M.W. POLYETHYLENE RUNNERS.

C. CASING SPACERS SHALL BE SIZED TO SECURELY FASTEN ON TO THE CARRIER PIPE BARRIER O.D. AND SHALL BE FURNISHED WITH A MINIMUM RUNNER HEIGHT TO PREVENT THE PIPE FROM RESTING OR SLIDING ON ITS JOINTS DURING THE INSTALLATION.

1. POSITIONING OF SPACERS SHOULD ENSURE THAT THE CARRIER PIPE IS ADEQUATELY SUPPORTED THROUGHOUT ITS LENGTH.
2. SPACERS AT EACH END SHALL NOT BE FURTHER THAN 6" FROM THE END OF CASING REGARDLESS OF SIZE OF CASING AND CARRIER PIPE OR TYPE OF SPACER USED.

D. FOR PIPE WITH MECHANICAL JOINTS, FLANGES OR BELL AND SPIGOT JOINTS, CASING SPACERS SHALL BE INSTALLED WITHIN ONE FOOT ON EACH SIDE OF THE BELL OR FLANGE AND ONE IN THE CENTER OF THE JOINT WHEN 18 TO 20 FOOT LONG JOINTS ARE USED. MAXIMUM SPACING FOR SPACERS IS 12 FEET.

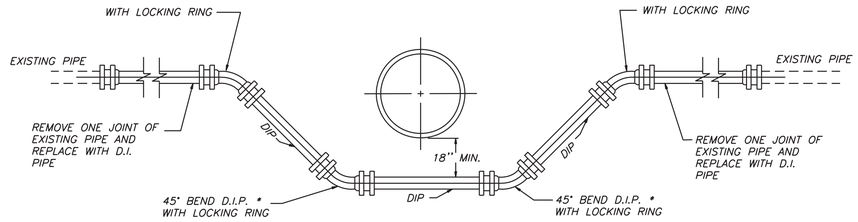



**NOTE:**

VALVES SHALL BE INSTALLED AT THE POINT OF CURVATURE (P.C.) OF THE CURB WHENEVER POSSIBLE.

## TYPICAL VALVE INSTALLATION AT INTERSECTIONS

NOT TO SCALE




* ALL BENDS TO BE MECH. JOINT FITTING

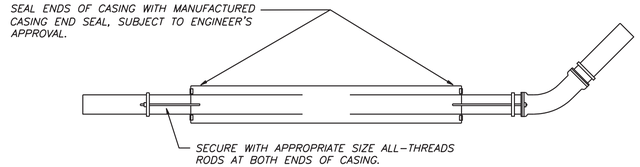
* ALL FITTINGS SHALL BE RESTRAINED BY MECHANICAL JOINT RESTRAINT DEVICE "MEGALUG" AS INDICATED BY PLANS AND SPECS., OR ENGINEER APPROVED EQUAL, AND CONCRETE THRUST BLOCK, AS DESIGNATED BY WATER DIVISION INSPECTOR

## WATERLINE ADJUSTMENT DETAIL

NOT TO SCALE

**NOTE:**

SEE #18 UNDER GENERAL NOTES

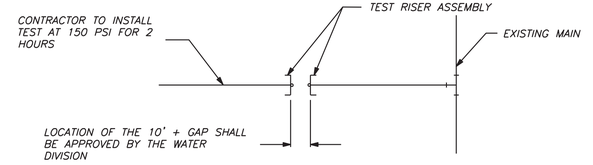



**NOTE:**

CASING SHALL BE STEEL.

## TYPICAL CASING DETAIL

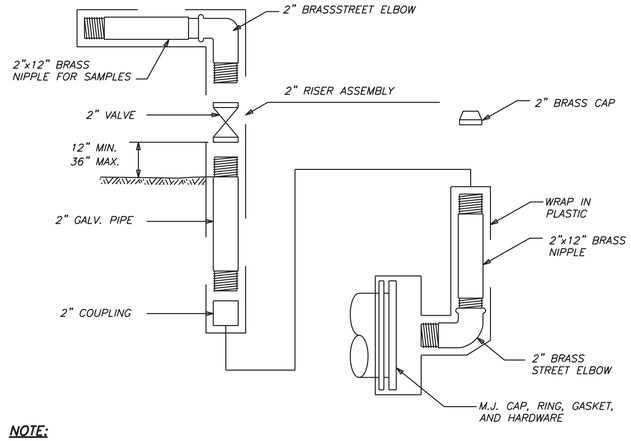
NOT TO SCALE




1. HYDROSTATIC TEST: WATER FOR FILLING THE NEW WATER LINE AND PERFORMING TESTS WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY OF CORPUS CHRISTI THROUGH A STANDARD WATER CONSTRUCTION METER CONNECTION. STANDARD WATER CONSTRUCTION METER AND GAUGE WILL BE SUPPLIED BY THE CITY AFTER THE CONTRACTOR HAS PAID ALL APPLICABLE FEES FOR THE WATER CONSTRUCTION METER. THE TEST PUMP WITH APPROPRIATE CONNECTION POINTS AS APPROVED BY THE WATER SUPERINTENDENT FOR THE INSTALLATION OF METER AND GAUGE SHALL BE FURNISHED BY THE CONTRACTOR. THE METER SHALL BE DIRECTLY CONNECTED TO THE MAIN OR PIPE BEING TESTED BY THE USE OF COPPER TUBING OR AN APPROVED REINFORCED HOSE. THE METER SHALL BE PROTECTED AGAINST EXTREME PRESSURES BY THE USE OF A ONE (1") INCH SAFETY RELIEF VALVE SET AT THE TEST PRESSURE PLUS TEN POUNDS PER 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 TO MAKE TAP (72 HOURS NOTIFICATION)

## DETAIL "A" TEST RISER ASSEMBLY CONNECTION

NOT TO SCALE



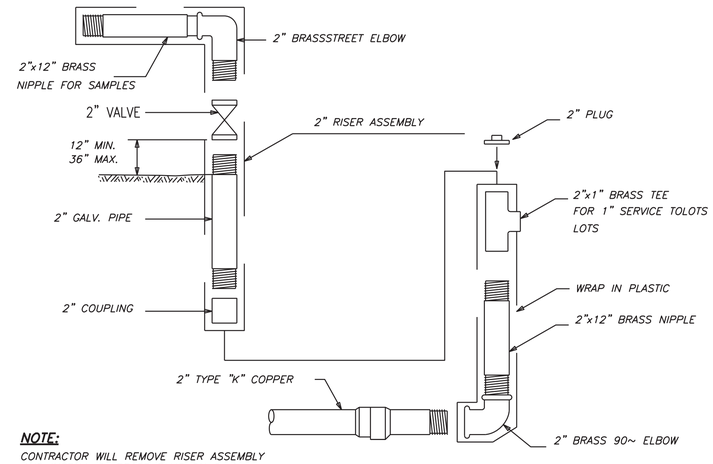

**NOTE:**

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

## DETAIL "B" TEST RISER ASSEMBLY

NOT TO SCALE

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

NOT TO SCALE

FURNISHED AND INSTALLED BY CONTRACTOR

| REVISION NO. | DATE | BY | DESCRIPTION |
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CONSULTANT'S SHEET No.

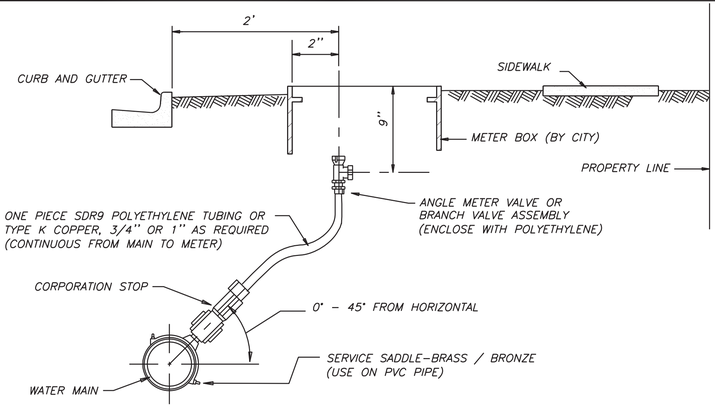
CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
WATER STANDARD DETAILS
ADJUSTMENTS, CASING DETAILS, RISER DETAILS & TYP. VALVE LAYOUT

3 OF 4

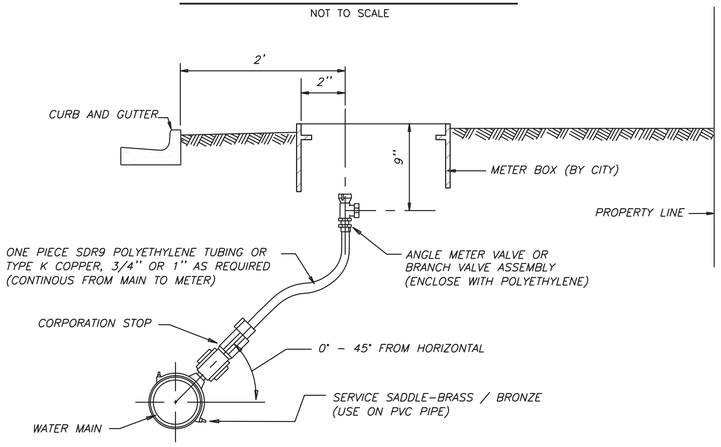
SHEET _____ of _____
RECORD DRAWING NO.

CITY PROJECT # _____



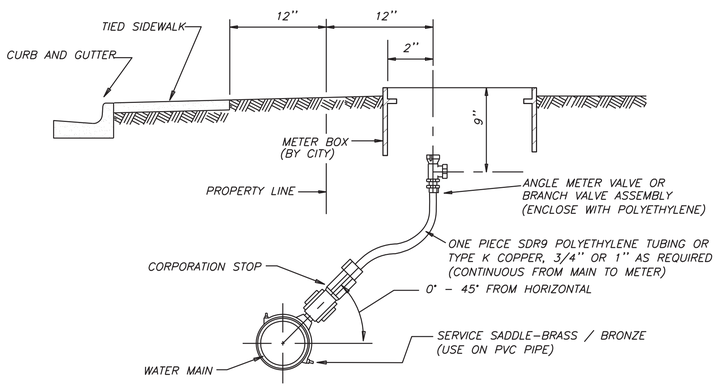

## SERVICE WITH SIDEWALK

NOT TO SCALE




## SERVICE WITHOUT SIDEWALK

NOT TO SCALE

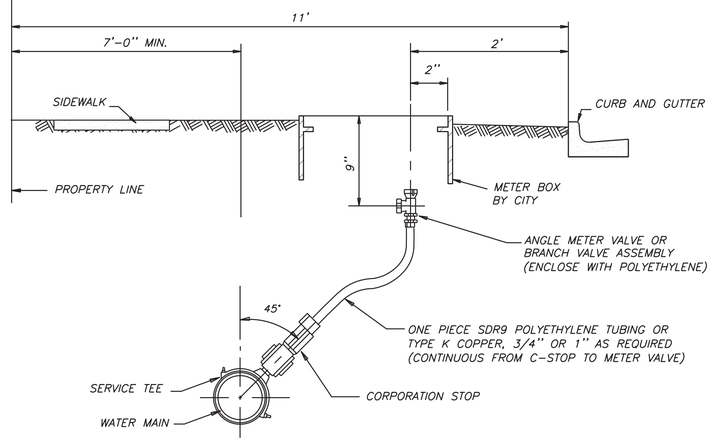



## SERVICE WITH SIDEWALK TIED TO CURB

NOT TO SCALE

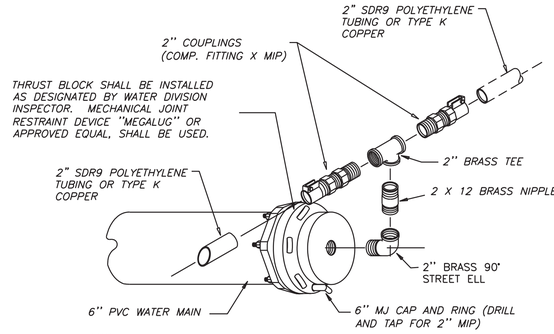
**NOTES:**

1. IF THERE IS LESS THAN 2' FROM BACK OF SIDEWALK TO PROPERTY LINE, THE METER BOX SHALL BE PLACED 1' BEHIND PROPERTY LINE AND UTILITY EASEMENT WILL BE REQUIRED.
2. IF THERE IS MORE THAN 2' FROM BACK OF SIDEWALK TO PROPERTY LINE, THE METER BOX SHALL BE PLACED BEHIND SIDEWALK.
3. THE WATER DIVISION WILL APPROVE ANY PLACEMENT OF A SERVICE LINE IN A TIEDISIDEWALK SITUATION.




## TYPICAL CUL-DE-SAC SERVICE

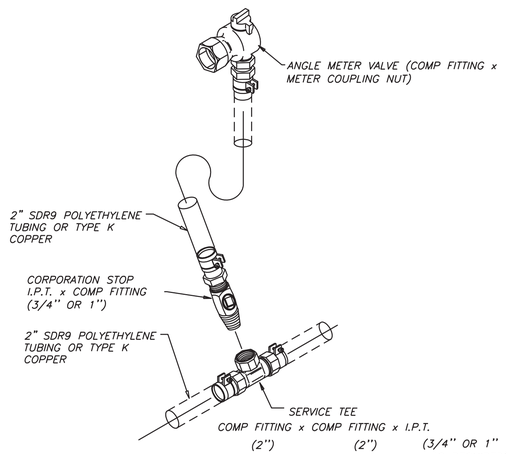
NOT TO SCALE




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

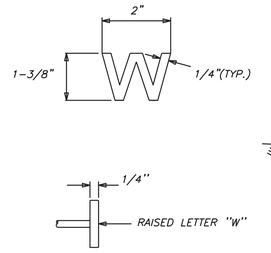
## TYPICAL CONNECTION DETAIL

NOT TO SCALE



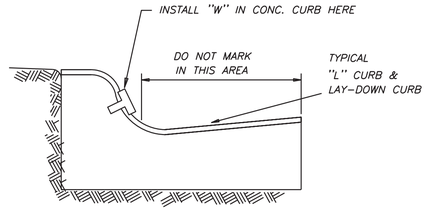

## TYPICAL CONNECTION DETAIL

NOT TO SCALE




## BRASS "W" DETAIL

**NOTE:**
USED BY CONTRACTOR FOR PRE–SET TAP LOCATION IN NEW SUBDIVISION.




## MARKER LOCATION

## PRE-SET SERVICE LINE MARKER DETAILS

NOT TO SCALE

## SERVICE LINE MATERIALS

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

CORPORATION STOPS
3/4", 1", 1 1/2", AND 2" REQUIRED WITH I.P. THREAD INLET BY COPPER COMPRESSION OUTLET WITH CLAMP – CORPORATION STOP REQUIRED AT ALL SERVICE TAPS.

ONE PIECE SDR9 POLYETHYLENE TUBING OR TYPE K COPPER
REQUIRED FOR ALL SERVICE LINES BETWEEN MAIN TO METER – SIZES REQUIRED 3/4", 1", 1 1/2", AND 2" (NO SPLICES ALLOWED)

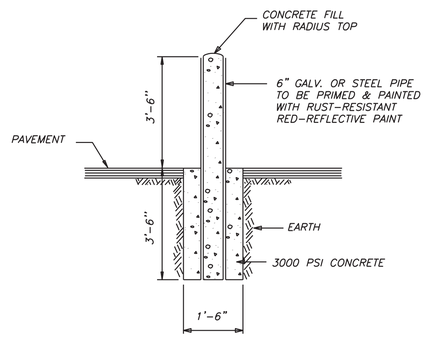
ANGLE METER STOP
REQUIRED AT ALL METERS – SIZES 3/4" & 1" – INSTALL 3/4" UNLESS DIRECTED OTHERWISE – COPPER COMPRESSION W/ CLAMP INLET BY METER COUPLING NUT OUTLET.

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

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

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

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




**NOTE:**
DO NOT PLACE BOLLARD IN FRONT OF HOSE OUTLETS

## BOLLARD DETAIL

NOT TO SCALE

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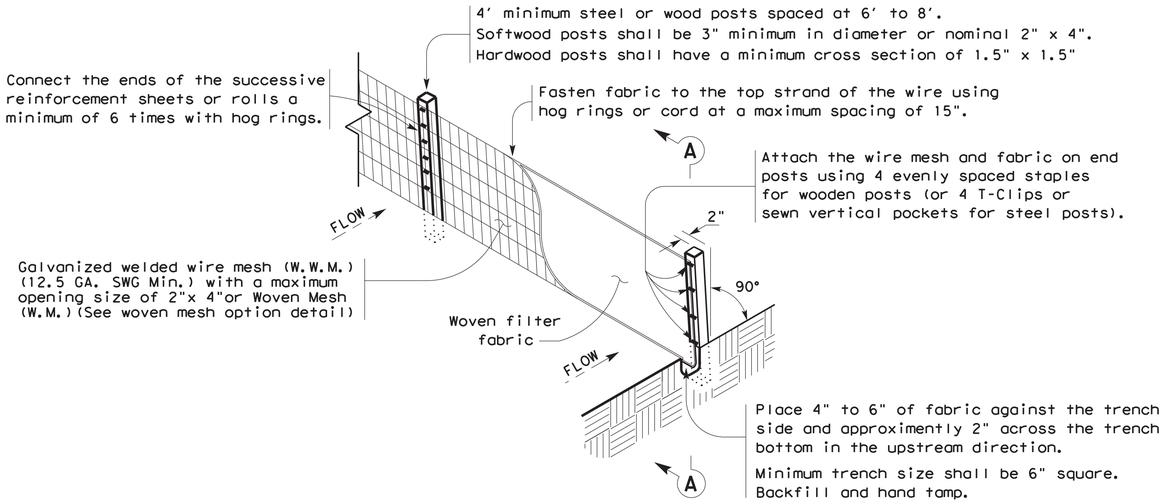
CITY of CORPUS CHRISTI
TEXAS
Department of Engineering Services

CITY OF CORPUS CHRISTI
WATER STANDARD DETAILS
MAIN TO SERVICE DETAILS AND OTHERS

4 OF 4

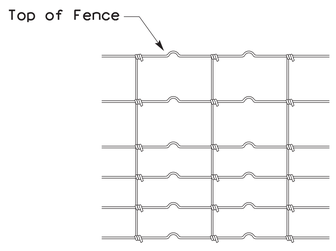
SHEET ____ of ____
RECORD DRAWING NO.

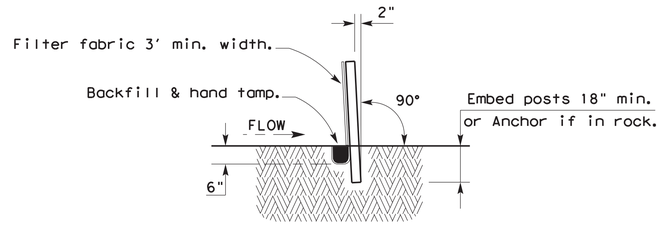
CITY PROJECT #




## 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.

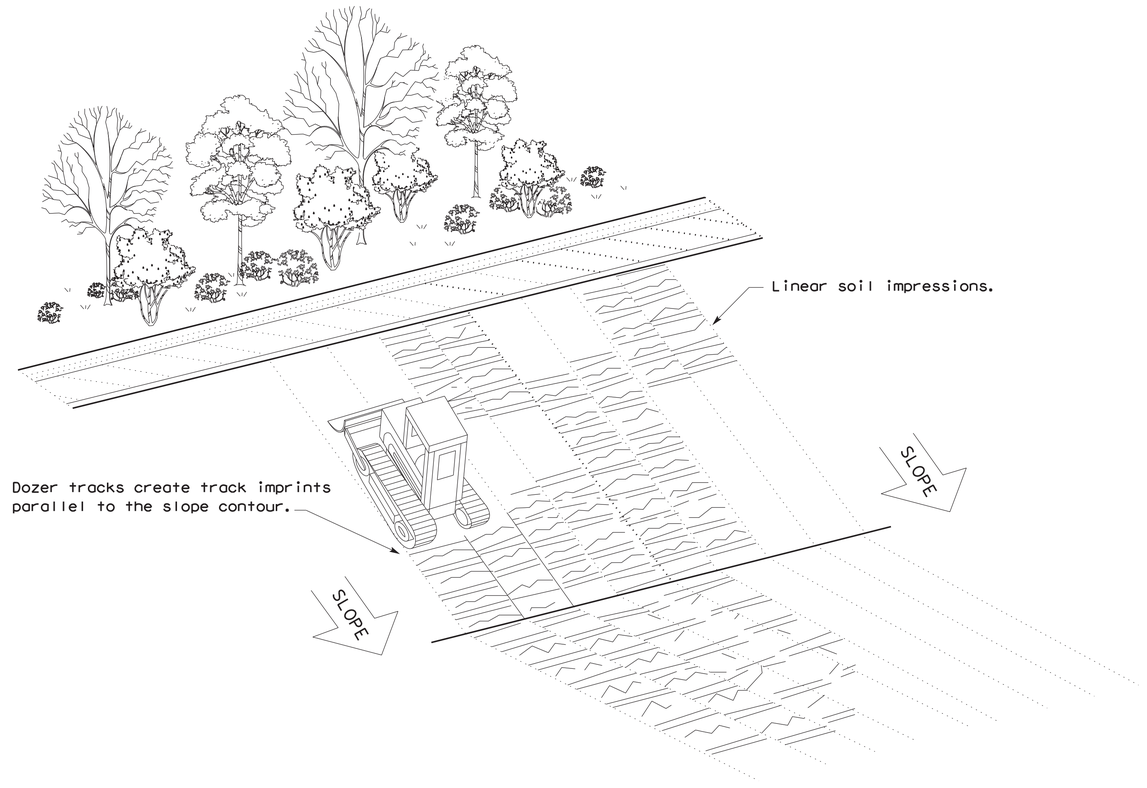
### LEGEND

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

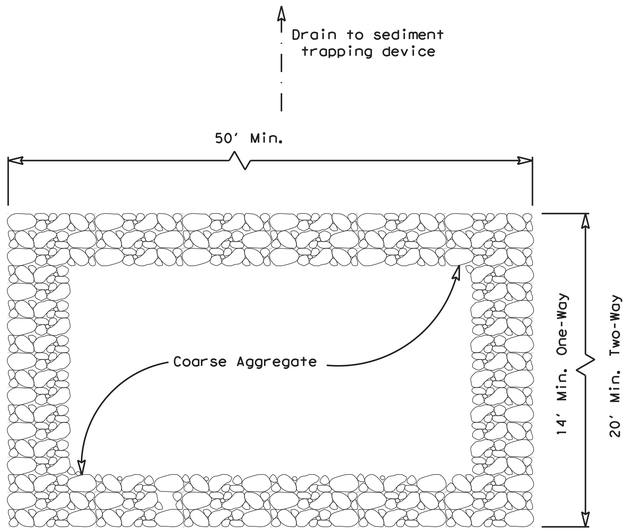
# TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

## FENCE & VERTICAL TRACKING

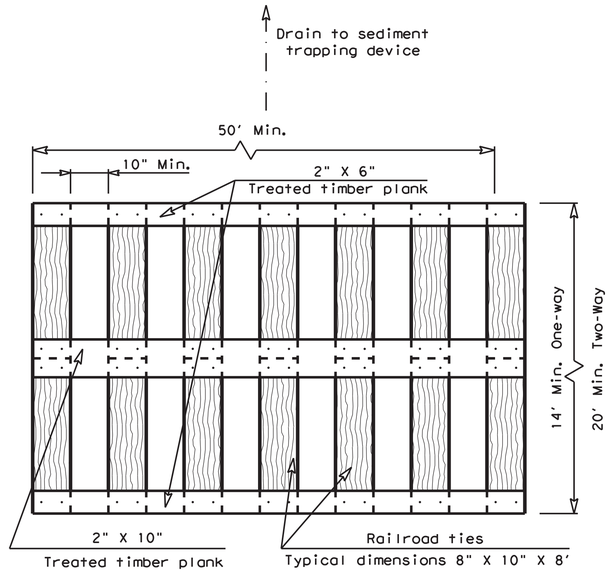
## EC(1)-16

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

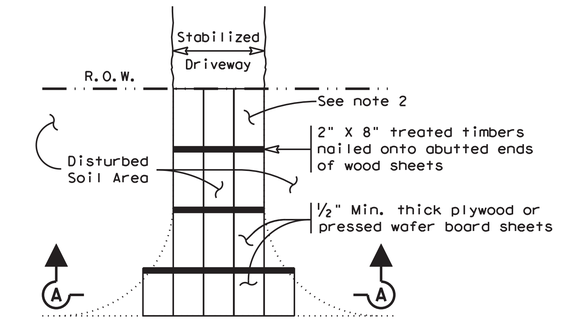
DATE
FILE



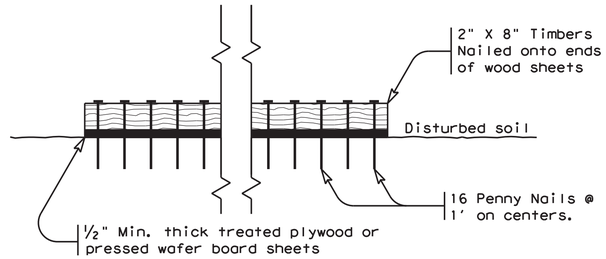

PLAN VIEW




PLAN VIEW



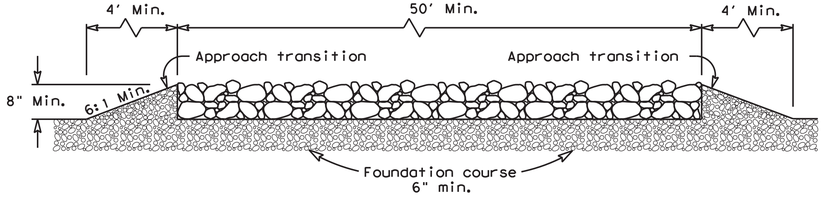

PLAN VIEW




SECTION A-A

CONSTRUCTION EXIT (TYPE 3)

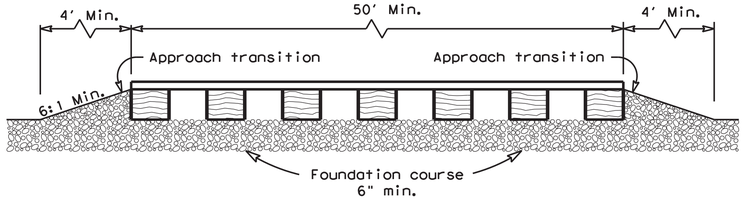
SHORT TERM




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 | |
| ©TxDOT: JULY 2016 | CONT | SECT | JOB | HIGHWAY | |
| REVISIONS | $C$ | $S$ | $J$ | $HWY$ | |
| | DIST | COUNTY | | SHEET NO. | |
| | $DST$ | $CTY$ | $EC(3)-16$ | | |

DATE: $DATE$
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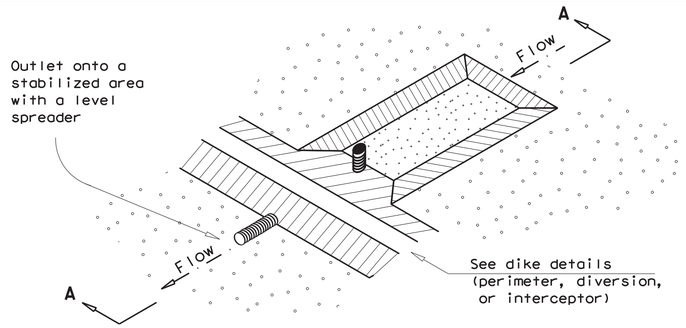
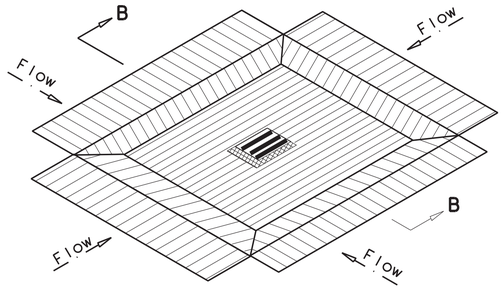
DATE:
FILE:



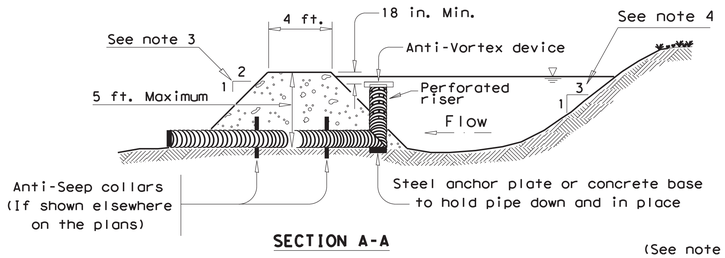

## SEDIMENT BASIN AND/OR TRAP WITH PIPE OUTLET

ST/PO

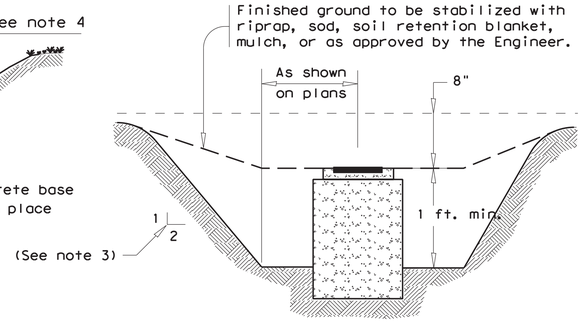



## DROP INLET SEDIMENT TRAP

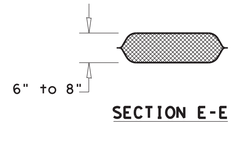
ST-DI



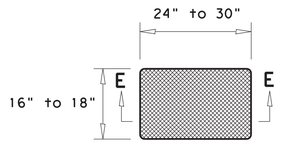

## SECTION A-A



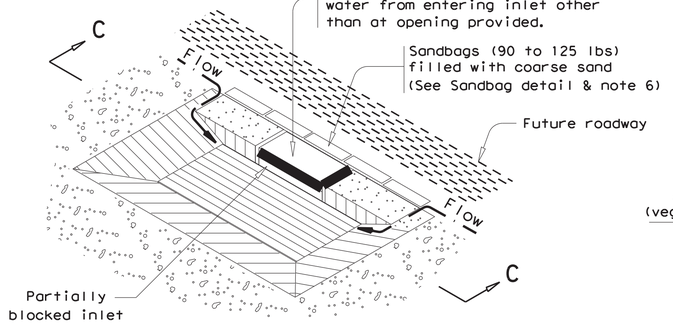

## SECTION B-B




## SECTION E-E

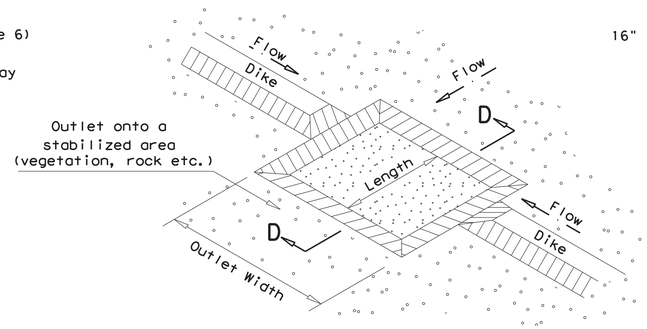



## SANDBAG DETAIL



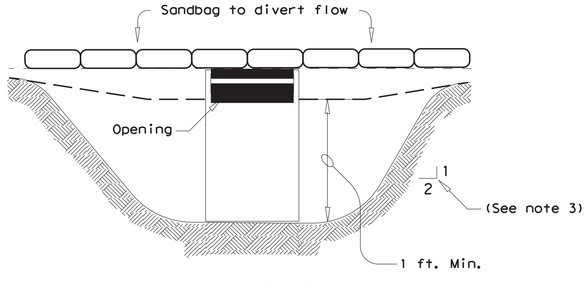

## CURB INLET SEDIMENT TRAP

ST-CI

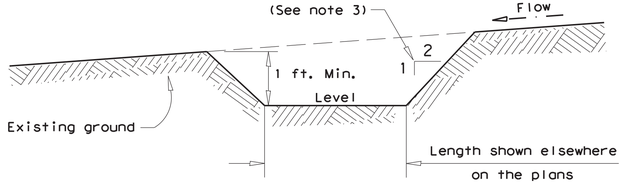



## SEDIMENT TRAP WITH LEVEL STABILIZED OUTLET

ST




## SECTION C-C




## SECTION D-D

## GENERAL NOTES

1. Pipe outlet material shall conform to the Item "Pipe Underdrains" or as accepted by the Engineer.
2. All pipe connections shall be watertight.
3. Side slopes within the safety clear zone of a roadway shall be 6:1 or flatter. Protect the traveling public from inlet stacks within the clear zone.
4. Sediment basins shall have side slopes of 3:1 or flatter.
5. The dimensions and limits of excavation for sediment basins and traps will be as shown elsewhere on the plans.
6. The sandbag material shall be made of polypropylene, polyethylene or polyamide woven fabric, min. unit weight 4 ounces /SY, Mullen burst strength exeeding 300 psi and ultraviolet stability exeeding 70%.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

## SEDIMENT BASIN & TRAP USAGE GUIDELINES

A sediment basin and/or trap may be used to precipitate sediment out of runoff draining from an unstabilized area.

Basins: The drainage area for a sediment basin should not exceed 100 acres. The basin capacity shall be at least 1800 CF/Acre of drainage area (0.5" over the drainage area). If the disturbed area draining to the basin is larger than 10 acres, the basin capacity should be 3600 CF/Acre (1.0" over the drainage area).

The basin should have a 40 hour draw-down time with an emergency spillway. The spillway may be designed to pass the peak rate of runoff from a 25 year frequency storm. The 100 year storm should be investigated to consider possible flooding impacts.

The entrance into the basin should be protected from erosion. The basin should be cleaned when the capacity has been reduced by 1/3.

Traps: The drainage area for a sediment trap should not exceed 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).

Sediment traps should be placed in the following locations:

1. Within drainage ditches spaced @ 500′± on center
2. Immediately preceding ditch inlets
3. Just before the drainage enters a water course
4. Just before the drainage leaves the right of way

The trap outlet may either be through a perforated riser and pipe assembly designed to achieve a 40 hour draw-down time or over a level stabilized area (vegetation, rock, etc.).

The trap should be cleaned when the capacity has been reduced by ½ or the sediment has accumulated to a depth of 1′, whichever is less.

## PLANS SHEET LEGEND

ST/PO — Sediment Basin and / or Trap with Pipe Outlet

ST-DI — Drop Inlet Sediment Trap

ST-CI — Curb Inlet Sediment Trap

ST — Sediment Trap with Level Stabilized Outlet

Texas Department of Transportation

Design Division Standard

# TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

## SEDIMENT BASINS AND TRAPS (EARTHWORK FOR EROSION CONTROL)

## EC(6)-16

| FILE: ec616 | DN: TxDOT | CK: KM | DW: VP | DN/CK: LS |
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| © TxDOT: JULY 2016 | CONT | SECT | JOB | HIGHWAY |
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| | DIST | COUNTY | | SHEET NO. |