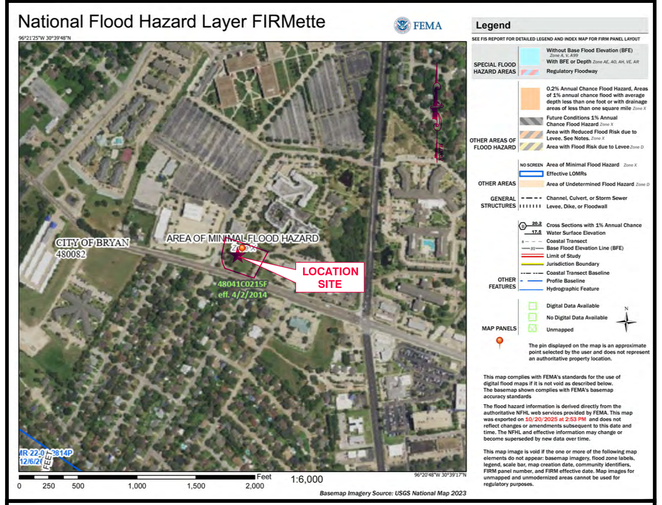
SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

FLOOD MAP (FIRMette)



VICINITY MAP

MAP ID #546-224

INDEX

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FLOOD INFORMATION:

COMMUNITY	480082 CITY OF BRYAN
PANEL	48041C0215F
EFFECTIVE DATE	04-02-2014
ZONE	"X"

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
ISSUED FOR PERMIT	12/29/2025	0
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN
2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

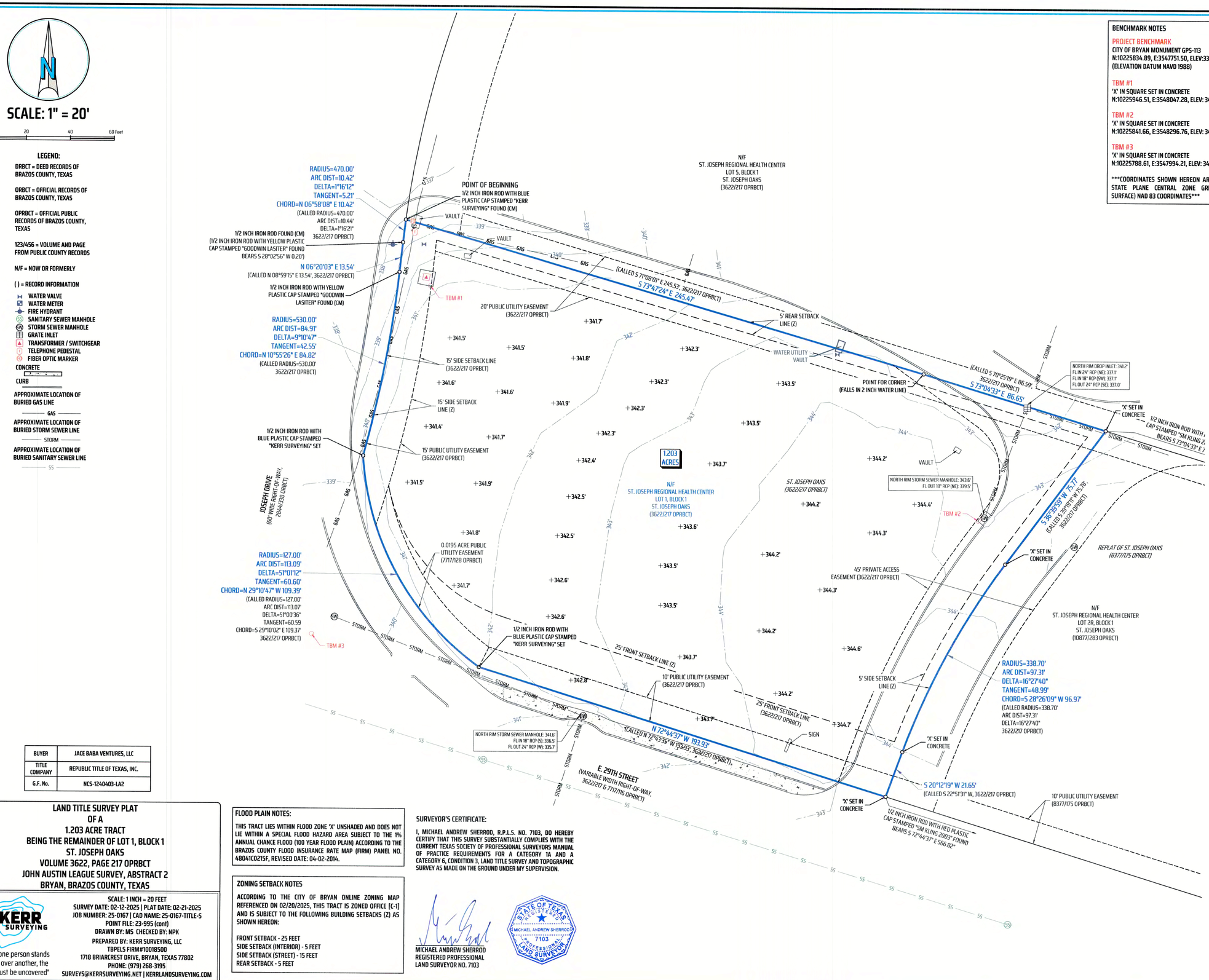
PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
COVER SHEET

SHEET NUMBER:
T-1

PROJECT #
25-865



BUYER	JACE BABA VENTURES, LLC
TITLE COMPANY	REPUBLIC TITLE OF TEXAS, INC.
G.F. No.	NCS-1240403-LA2

LAND TITLE SURVEY PLAT
OF A
1.203 ACRE TRACT
BEING THE REMAINDER OF LOT 1, BLOCK 1
ST. JOSEPH OAKS
VOLUME 3622, PAGE 217 OPRBCT
JOHN AUSTIN LEAGUE SURVEY, ABSTRACT 2
BRYAN, BRAZOS COUNTY, TEXAS

KERR SURVEYING
"When one person stands to gain over another, the facts must be uncovered"
SCALE: 1 INCH = 20 FEET
SURVEY DATE: 02-12-2025 | PLAT DATE: 02-21-2025
JOB NUMBER: 25-0167 | CAD NAME: 25-0167-TITLE-S
POINT FILE: 23-995 (cont)
DRAWN BY: MS CHECKED BY: NPK
PREPARED BY: KERR SURVEYING, LLC
TBPELS FIRM#10018500
1718 BRIARCREST DRIVE, BRYAN, TEXAS 77802
PHONE: (979) 268-3195
SURVEYS@KERRSURVEYING.NET | KERRLANDSURVEYING.COM

FLOOD PLAIN NOTES:

THIS TRACT LIES WITHIN FLOOD ZONE 'X' UNSHADED AND DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA SUBJECT TO THE 1% ANNUAL CHANCE FLOOD (100 YEAR FLOOD PLAIN) ACCORDING TO THE BRAZOS COUNTY FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 48041C0215F, REVISED DATE: 04-02-2014.

ZONING SETBACK NOTES

ACCORDING TO THE CITY OF BRYAN ONLINE ZONING MAP REFERENCED ON 02/20/2025, THIS TRACT IS ZONED OFFICE (C-1) AND IS SUBJECT TO THE FOLLOWING BUILDING SETBACKS (Z) AS SHOWN HEREON:

FRONT SETBACK - 25 FEET
SIDE SETBACK (INTERIOR) - 5 FEET
SIDE SETBACK (STREET) - 15 FEET
REAR SETBACK - 5 FEET

SURVEYOR'S CERTIFICATE:

I, MICHAEL ANDREW SHERROD, R.P.L.S. NO. 7103, DO HEREBY CERTIFY THAT THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS MANUAL OF PRACTICE REQUIREMENTS FOR A CATEGORY 1A AND A CATEGORY 6, CONDITION 3, LAND TITLE SURVEY AND TOPOGRAPHIC SURVEY AS MADE ON THE GROUND UNDER MY SUPERVISION.

MICHAEL ANDREW SHERROD
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 7103

STATE OF TEXAS
REGISTERED
MICHAEL ANDREW SHERROD
7103
PROFESSIONAL
LAND SURVEYOR

GENERAL NOTES

BEARING SYSTEM SHOWN HEREON IS BASED ON TEXAS COORDINATE SYSTEM OF 1983, CENTRAL ZONE (4203), GRID NORTH AS ESTABLISHED FROM GPS OBSERVATION USING THE LEICA SMARTNET NAD83 (NA2011) EPOCH 2010 MULTI-YEAR CORS SOLUTION 2 (MYCS2).

DISTANCES SHOWN HEREON ARE SURFACE DISTANCES UNLESS OTHERWISE NOTED. TO OBTAIN GRID DISTANCES (NOT AREAS) DIVIDE BY A COMBINED SCALE FACTOR OF 1.00011239513625 (CALCULATED USING GEOID12B).

(CM) INDICATES CONTROLLING MONUMENT FOUND AND USED TO ESTABLISH PROPERTY BOUNDARIES.

THIS SURVEY PLAT WAS PREPARED TO REFLECT THE TITLE COMMITMENT ISSUED BY REPUBLIC TITLE OF TEXAS, INC., GF NO. NCS-1240403-LA2, EFFECTIVE DATE: 01/24/2025. ITEMS LISTED ON SCHEDULE B ARE ADDRESSED AS FOLLOWS:

- ITEM 10f: BLANKET EASEMENT TO LONE STAR GAS COMPANY RECORDED IN VOLUME 71, PAGE 585 (DRBCT) DOES AFFECT THIS TRACT. THIS EASEMENT IS BLANKET IN NATURE AND NOT PLOTTABLE.
- ITEM 10g: EASEMENT TO LONE STAR GAS COMPANY RECORDED IN VOLUME 71, PAGE 616 (DRBCT) DOES AFFECT THIS TRACT. THIS EASEMENT IS BLANKET IN NATURE AND NOT PLOTTABLE.
- ITEM 10h: EASEMENT TO THE CITY OF BRYAN RECORDED IN VOLUME 227, PAGE 157 (DRBCT) DOES NOT AFFECT THIS TRACT.
- ITEM 10i: EASEMENT TO THE CITY OF BRYAN RECORDED IN VOLUME 7717, PAGE 128 (OPRBCT) DOES CROSS THIS TRACT AS SHOWN HEREON.
- ALL OTHER ITEMS ARE NOT SURVEY ITEMS AND/OR ARE NOT ADDRESSED BY THIS PLAT.

UNDERGROUND UTILITIES ARE APPROXIMATED BASED ON ABOVE GROUND FEATURES, AVAILABLE MAPS AND MARKINGS BY UTILITY PROVIDERS. ADDITIONAL UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THIS SURVEY.

GENERAL NOTES – SIGNALS:

THE CONSTRUCTION, OPERATION AND MAINTENANCE OF THIS PROPOSED PROJECT WILL BE CONSISTENT WITH THE STATE IMPLEMENTATION PLAN AS PREPARED BY THE TEXAS AIR CONTROL BOARD.

THE CONTRACTOR'S REPRESENTATIVE WHO WILL BE DIRECTLY RESPONSIBLE FOR CONSTRUCTION OF THIS PROJECT WILL NEED TO ATTEND THE PRE– CONSTRUCTION MEETING.

THE SIGNAL INSTALLATION WILL CONSIST OF THE FOLLOWING PRINCIPAL ITEMS FOR EACH INTERSECTION IN THE PLANS:

1. FURNISHING AND INSTALLING NEMA TS2 TYPE 2 SIGNAL CONTROLLER LINUX M60 SERIES 5.2 OR HIGHER SOFTWARE..
2. FURNISHING AND INSTALLING TRAFFIC SIGNAL CABINET ASSEMBLY THAT MEETS ALL CURRENT ATCC STANDARDS
3. FURNISHING AND INSTALLING A CONFLICT MONITOR (EDI 16–CHANNEL MMU–16LEIP SMARTMONITOR WITH ETHERNET PORT).
4. FURNISHING AND INSTALLING ELECTRICAL SERVICE EQUIPMENT, INCLUDING ELECTRICAL PANEL TYPE D(120/240)070(NS)GS(E)PS(U). THE CONTRACTOR SHALL COORDINATE WITH BRYAN TEXAS UTILITIES (979–821–5770) TO OBTAIN POWER FOR THE PANEL (LEAD–TIMES CAN BE AS LONG AS 60–90 DAYS).
5. FURNISHING AND INSTALLING BATTERY BACK–UP UNINTERRUPTED POWER SUPPLY (UPS) SYSTEM (MYERS MP SERIES MP2000E–TEB), INCLUDING MANUAL BYPASS SWITCH – P/N722535M – (4) 8A30 HEI BATTERIES. WIRING MUST ADHERE TO THE SPECIFICATIONS OF THE MANUFACTURER (MYERS).
6. FURNISHING AND INSTALLING ALL SIGNS. THE CONTRACTOR SHALL PROVIDE ALL SIGN MOUNTING HARDWARE. ALL SIGNS INSTALLED ON MAST ARMS POLES SHALL BE MOUNTED AS SHOWN ON THE PLANS USING "ASTRO–BRAC" TYPE MOUNTING BRACKET ASSEMBLY. ALL SIGN MOUNTING HARDWARE SHALL BE APPROVED BY THE ENGINEER.
7. FURNISH AND INSTALLING PEDESTRIAN LED COUNTDOWN SIGNAL MODULES AS PER THE PLANS. REFER TO MATERIAL PRODUCER LIST FOR TXDOT DMS–11131.
8. FURNISHING AND INSTALLING ALL PROPOSED PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS.
9. REMOVING AND SALVAGING EXISTING SIGNS. ALL SALVAGED MATERIAL SHALL BE RETURNED TO THE CITY OF BRYAN.
10. FURNISH AND INSTALLING DETECTION COMMUNICATION AND CABINET INTERFACE.
11. FURNISHING AND INSTALLING OPTICOM EMERGENCY PREEMPTION AS FOLLOWS PER TRAFFIC SIGNAL:

 –TWO (2) OPTICOM MODEL 721 INFRARED DETECTORS
 –ONE (1) OPTICOM MODEL 764 AUXILIARY INTERFACE PANEL
 –ONE (1) OPTICOM MODEL 138 DETECTOR CABLE

12. FURNISHING AND INSTALLING ALL STEEL TRAFFIC SIGNAL POLE AND PEDESTRIAN POLE ASSEMBLIES. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MOUNTING HARDWARE, MISCELLANEOUS SIGNS, LUMINAIRE FIXTURES AND LAMPS, AND ALL MATERIALS AND EQUIPMENT NECESSARY FOR THE COMPLETE SIGNAL POLE ASSEMBLIES.
13. FURNISHING AND INSTALLING ALL SIGNAL HEADS WITH 12–INCH LED LAMP UNITS. LED LAMP UNITS SHALL BE THE TYPE WITH AN INCANDESCENT APPEARANCE. REFER TO MATERIAL PRODUCER LIST FOR TXDOT DMS–11121. FURNISH AND INSTALL SIGNAL HEADS USING SUPPORT ARMS WITH CGB FITTINGS. REFER TO ITEM 682
14. FURNISHING AND INSTALLING AUDIBLE PEDESTRIAN DETECTORS AS PER THE PLANS (CAMPBELL COMPANY GUARDIAN SYSTEM/APS)
15. FURNISHING AND PLACING ALL CONCRETE, REINFORCING STEEL, AND GROUND RODS FOR THE ELECTRICAL SERVICE, FOUNDATIONS AND GROUND BOXES.
16. FURNISHING AND INSTALLING MISCELLANEOUS ITEMS ESSENTIAL FOR COMPLETE TRAFFIC SIGNAL INSTALLATION AND OPERATION.
17. FURNISHING AND INSTALLING MISCELLANEOUS ITEMS ESSENTIAL FOR THE INSTALLATION OR AN AXIS COMMUNICATIONS AXIS Q 6155–E PTZ OUTDOOR PTZ DOME SECURITY CAMERA 0934–004.
18. FURNISHING AND INSTALLING MISCELLANEOUS ITEMS ESSENTIAL FOR THE INSTALLATION OF A CISCO IE 4000–8GT4G–E E IE 4000 8XRJ45 10/100/1000 4X1G COMBO

IF ANY REPAIRS TO EXISTING CURBS, SIDEWALKS, AND SIDEWALK RAMPS SHOULD BE NEEDED AFTER DRILLING FOUNDATIONS, INSTALLING GROUND BOXES, OR CONDUIT, THE REPAIRS SHALL BE MADE BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER AND SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

UNLESS OTHERWISE SHOWN ON THE PLANS, THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAL EQUIPMENT AS DIRECTED BY THE ENGINEER, AT THE TIME THE NEW SIGNAL IS PLACED IN TO FULL STOP–AND–GO OPERATION. THE CONTRACTOR SHALL DELIVER THE SIGNAL EQUIPMENT FROM BOTH INTERSECTIONS TO THE CITY OF BRYAN MUNICIPAL SERVICE CENTER, 1111 WACO STREET, BRYAN, TEXAS. PAYMENT FOR SAID WORK SHALL BE CONSIDERED SUBSIDIARY TO ITEM 680.

EXACT LOCATIONS OF THE CABINET, MAST ARM POLES, GROUND BOXES, ETC. SHALL BE APPROVED BY THE ENGINEER IN THE FIELD.

SIGNAL TECHNICIAN – A REPRESENTATIVE FROM THE CITY OF BRYAN SHALL BE PRESENT WHEN THE NEW SIGNAL IS PLACED IN OPERATION. THE CONTRACTOR SHALL NOTIFY THE CITY APPROXIMATELY 48 HOURS IN ADVANCE OF THE SIGNAL TURN–ON.

TEST PERIOD FOR SIGNAL – ONCE THE NEW SIGNAL AT EACH PROJECT INTERSECTION HAS BEEN INSTALLED AND PLACED IN TO OPERATION, THE INSTALLATION SHALL OPERATE CONTINUOUSLY FOR A MINIMUM OF 30 CALENDAR DAYS IN A SATISFACTORY MANNER. EQUIPMENT FAILURES DURING THIS 30 DAY TEST PERIOD WILL CAUSE THE TEST PERIOD TO START OVER FOR THE FAILED INTERSECTION.

PHASES OF SIGNAL OPERATION – THE SIGNAL INSTALLATIONS SHALL BE WIRED TO OPERATE IN ACCORDANCE WITH PHASE DIAGRAMS SHOWN ON THE PLANS. TIME INTERVALS SHALL BE ADJUSTED AND SET AS DIRECTED BY THE ENGINEER.

WIRING – EXTRA CABLE LENGTH SHALL BE INCLUDED IN EACH RUN TO PROVIDE ADEQUATE SLACK, AS DETERMINED BY THE ENGINEER, AT EACH GROUND BOX OR FOUNDATION.

REFER TO TXDOT STANDARD SPECIFICATIONS BOOK, VERSION 2004, FOR THE FOLLOWING ITEMS.

ITEM 416, DRILLED SHAFT FOUNDATIONS:

THE TOP TWO (2) INCHES OF THE DRILL SHAFTS SHALL BE FORMED TO PROVIDE A SMOOTH FINISH SATISFACTORY TO THE ENGINEER. THE COST OF THE WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THIS ITEM.

A 3/4 INCH CHAMFER SHALL BE FORMED ON THE TOP EDGE OF EACH TRAFFIC SIGNAL FOUNDATION.

THE CONTRACTOR SHALL PROBE BEFORE DRILLING OR EXCAVATING FOR FOUNDATIONS TO DETERMINE THE LOCATIONS OF UTILITIES AND STRUCTURES. FOUNDATIONS SHALL BE PAID FOR ONCE REGARDLESS OF EXTRA WORK CAUSED BY OBSTRUCTIONS.

ALL EXPOSED SIGNAL POLE AND CONTROLLER FOUNDATIONS SHALL RECEIVE A CLASS C FINISH AS PER ITEM 427, "SURFACE FINISHES FOR CONCRETE."

THE CITY MAY TEST, BY ULTRASONIC METHODS, THE ANCHOR BOLTS FOR TRAFFIC SIGNAL POLES AFTER THEY HAVE BEEN PLACED. FAULTY ANCHOR BOLTS SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. ANCHOR BOLTS SHALL NOT BE WELDED.

ITEM 502, BARRICADES, SIGNS, AND TRAFFIC HANDLING:

THE TRAFFIC CONTROL PLAN (TCP) FOR THIS PROJECT SHALL BE AS DETAILED ON STANDARD PLAN SHEETS WZ (BTS–1)–03, WZ (BTS– 2)–03 AND AS PROVIDED FOR IN THE CURRENT VERSION OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," OR TEXAS MUTCD.

ALL BARRICADES AND WARNING SIGNS SHALL HAVE TYPE C – HIGH SPECIFIC INTENSITY SHEETING. ALL WARNING SIGNS FOR BARRICADES SHALL BE 36 INCH X 36 INCH. EXCEPT FOR SHORT–DURATION WORK, ALL CONSTRUCTION–RELATED SIGNS SHALL MEET THE MOUNTING HEIGHTS DEFINED AS PER TXDOT'S COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICE LIST (AUGUST 2011 OR MORE RECENT).

BARRICADES AND WARNING SIGNS, AS APPROPRIATE, ARE TO BE PLACED AT STOCKPILES TO ADEQUATELY WARN MOTORISTS. AT ALL STOCKPILE SITES THAT ARE LESS THAN 30 FEET FROM THE EDGE OF ANY TRAVELED LANE, A CLASS III BARRICADE SHALL BE ERECTED IMMEDIATELY IN FRONT OF OR AT EACH END, IF REQUIRED. WHEN A STOCKPILE SITE EQUALS OR EXCEEDS 100 FEET IN LENGTH, ONE OBJECT MARKER (OM–2HP) PER 100 FEET SHALL BE PLACED ALONGSIDE THE STOCKPILE.

TRAFFIC CONES AT LEAST 28 INCHES IN HEIGHT MAY BE USED FOR CHANNELIZING PURPOSES. FOR NIGHTTIME USE, CONES OR OTHER CHANNELIZING DEVICES SHALL BE RETROREFLECTORIZED WITH TWO WHITE BANDS (6–INCH AND 4–INCH) SEPARATED BY 3 TO 4 INCHES. REFER TO PART 6 OF THE CURRENT VERSION OF THE TEXAS MUTCD FOR MORE INFORMATION.

THE CONTRACTOR SHALL PLAN HIS/HER WORK SEQUENCE IN A MANNER THAT WILL CAUSE THE MINIMUM INTERFERENCE WITH TRAFFIC DURING CONSTRUCTION OPERATIONS. BEFORE BEGINNING WORK ON THIS PROJECT, THE CONTRACTOR SHALL SUBMIT, FOR APPROVAL BY THE ENGINEER, A PLAN OF CONSTRUCTION OPERATIONS OUTLINING IN DETAIL A SEQUENCE OF WORK TO BE FOLLOWED, SETTING OUT THE METHOD OF HANDLING TRAFFIC ALONG, ACROSS, AND ADJACENT TO THE WORK.

IF AT ANY TIME DURING CONSTRUCTION THE CONTRACTOR'S PROPOSED PLAN OF OPERATIONS FOR HANDLING TRAFFIC DOES NOT PROVIDE FOR SAFE, COMFORTABLE MOVEMENT, THE CONTRACTOR SHALL IMMEDIATELY CHANGE HIS/HER OPERATIONS TO CORRECT THE UNSATISFACTORY CONDITION.

SUBJECT TO THE APPROVAL OF THE ENGINEER, PORTIONS OF THIS PROJECT WHICH ARE NOT AFFECTED BY OR IN CONFLICT WITH THE PROPOSED METHOD OF HANDLING TRAFFIC OR UTILITY ADJUSTMENTS CAN BE CONSTRUCTED DURING ANY PHASE.

BARRICADES AND SIGNS SHALL BE PLACED IN SUCH A MANNER AS TO NOT INTERFERE WITH THE SIGHT DISTANCE OF DRIVERS ENTERING THE ROADWAY FROM DRIVEWAYS OR SIDE STREETS. TO FACILITATE SHIFTING, BARRICADES AND SIGNS USED IN LANE CLOSURES OR TRAFFIC STAGING MAY BE ERECTED AND MOUNTED ON PORTABLE SUPPORTS. THE DESIGN OF THESE SUPPORTS IS SUBJECT TO THE APPROVAL OF THE ENGINEER.

THE CONTRACTOR WILL ONLY BE ALLOWED TO WORK ON THIS PROJECT FROM 7:00 A.M. TO 7:00 P.M., MONDAY THROUGH FRIDAY. NIGHT WORK (BETWEEN 7:00 P.M. AND 7:00 A.M.) OR WORK ON SATURDAY AND SUNDAY MAY BE ALLOWED WITH THE APPROVAL OF THE ENGINEER. NO LANE CLOSURES WILL BE ALLOWED PRIOR TO 9:00 A.M.OR AFTER 4:00 P.M., MONDAY THROUGH FRIDAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE CONTRACTOR WILL NOT BE PERMITTED TO COMMENCE WORK ON THE ROAD BEFORE SUNRISE AND SHALL ARRANGE HIS/HER WORK SO THAT NO MACHINERY OR EQUIPMENT SHALL BE CLOSER THAN 30 FEET TO THE TRAVELED ROADWAY AFTER SUNSET, EXCEPT AS AUTHORIZED BY THE ENGINEER.

THE CONTRACTOR SHALL KEEP TRAVELED SURFACES USED IN HIS/HER HAULING OPERATION CLEAR AND FREE OF DIRT OR OTHER MATERIAL. THE USE OF RUBBER–TIRED EQUIPMENT WILL BE REQUIRED FOR MOVING DIRT AND OTHER MATERIALS ALONG OR ACROSS PAVED SURFACES.

IF APPLICABLE, AFTER SIGNAL CONSTRUCTION HAS BEEN COMPLETED, THE SIGNAL SHALL OPERATE IN A FLASHING MODE FOR TWO OR THREE DAYS (AS DIRECTED BY THE ENGINEER) PRIOR TO THE BEGINNING OF THE TEST PERIOD FOR FULL SIGNAL OPERATION. THE CONTRACTOR WILL NOT BE CHARGED WORKING DAYS DURING THE FLASHING OPERATION.

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THE NEW SIGNAL SHALL BE PLACED IN TO FULL STOP–AND–GO OPERATION BETWEEN 9:00 A.M. – 12:00 (NOON) ON A TUESDAY, WEDNESDAY, OR THURSDAY ONLY.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HIRE OFF–DUTY LAW ENFORCEMENT PERSONNEL TO ASSIST WITH ANY TRAFFIC CONTROL DURING THE EXISTING SIGNAL DEMOLITION, NEW SIGNAL CONSTRUCTION, WHEN PLACING THE NEW SIGNAL IN FLASHING MODE, AND/OR WHEN PLACING THE NEW SIGNAL IN TO FULL STOP–AND–GO OPERATION.

IF APPLICABLE (FOR NEW SIGNAL INSTALLATIONS ONLY), THE CONTRACTOR SHALL PROVIDE TWO (2) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) FOR USE FOR WHEN THE SIGNAL IS IN FLASHING MODE AND FOR THREE TO FOUR DAYS AFTER THE SIGNAL IS PLACED IN TO FULL STOP–AND–GO OPERATION (BUT NOT TO EXCEED ONE FULL WEEK), TO PROVIDE SUPPLEMENTAL WARNING OF THE NEW TRAFFIC SIGNAL. THE LOCATION AND MESSAGE CONTENT OF EACH PCMS SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.

AREAS WITHIN THE RIGHT OF WAY DISTURBED BY THE CONSTRUCTION SHALL BE RESTORED TO EQUAL OR BETTER CONDITIONS THAN EXISTING PRIOR TO CONSTRUCTION.

ITEM 506, TEMPORARY EROSION, SEDIMENTATION AND ENVIRONMENTAL CONTROLS:

THE SW3P FOR THIS PROJECT SHALL CONSIST OF USING THE FOLLOWING ITEMS AS DIRECTED BY THE ENGINEER: ITEM 506, BALED HAY FOR EROSION AND SEDIMENTATION CONTROL
ITEM 506, EARTHWORK FOR EROSION CONTROL
ITEM 506, TEMPORARY SEDIMENT CONTROL FENCE

THIS WORK SHALL BE COMPLETED IN ACCORDANCE TO THEIR RESPECTIVE BID ITEMS. MEASUREMENT AND PAYMENT SHALL BE CONSIDERED SUBSIDIARY TO TXDOT BID ITEM 680.

ANY OBSTRUCTIONS TO EXISTING DRAINAGE DUE TO THE CONTRACTOR'S OPERATIONS WILL BE REMOVED BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER AT THE CONTRACTOR'S ENTIRE EXPENSE.

ITEM 610, ROADWAY ILLUMINATION ASSEMBLIES:

THE CONTRACTOR SHALL INSTALL NEW 250 WATT EQUIVALENCE LED ILLUMINATION ASSEMBLIES (CONSISTING OF LUMINAIRE HEAD, A RIPLEY LONG LIFE PHOTOCELL (6390LL), 8–FOOT MAST ARM, CONDUIT, WEATHERHEAD, WIRING, EQUIPMENT AND MISCELLANEOUS COMPONENTS) ON THE NEW STEEL MAST ARM SIGNAL POLES, AS DESIGNATED ON THE PLANS.

LUMINAIRE BALLASTS FOR FIXTURES LOCATED ON TRAFFIC SIGNAL POLES SHALL BE RATED FOR OPERATION AT 110 VOLTS. ALL LUMINAIRE ARMS SHALL BE POWDER–COATED BLACK TO MATCH THE POLES, MAST ARMS, AND PEDESTRIAN POLES.

ITEM 618, CONDUIT:

THE LOCATION OF CONDUCTORS, CONDUIT AND GROUND BOXES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE ENGINEER TO ACCOMMODATE FIELD CONDITIONS.

POLYVINYLCHLORIDE (PVC) OR RIGID METAL (FERROUS) CONDUIT (RMC) MAY BE USED. A CONTINUOUS BARE OR GREEN INSULATED COPPER WIRE (NO. 6 AWG OR LARGER) SHALL BE INSTALLED IN EVERY PVC AND RMC CONDUIT THROUGHOUT THE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE ELECTRICAL DETAIL SHEETS, AND THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), EXCEPT FOR CONDUIT RUNS CONTAINING LOOP DETECTOR CONDUCTORS ONLY.

CONDUIT SIZES ARE AS FOLLOWS:

- 2 INCH CONDUIT FOR ELECTRICAL SERVICES
- 2 INCH CONDUIT FOR VIDEO DETECTION
- 4 INCH CONDUIT FOR FIELD WIRING RUN FROM THE SIGNAL CABINET TO SIGNAL HEADS

ALL BORES MUST BE AT LEAST 24" DEEP.

WHEN CONDUITS ARE BORED, THE VERTICAL AND HORIZONTAL TOLERANCES SHALL NOT EXCEED 18" AS MEASURED FROM THE INTENDED TARGET POINT.

PVC CONDUIT SHALL BE HEAVY WALL SCHEDULE 40, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

CONDUIT SHALL BE PLACED UNDER EXISTING PAVEMENT BY AN APPROVED JACKING OR BORING METHOD UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PITS FOR JACKING OR BORING SHALL NOT BE CLOSER THAN TWO (2) FEET FROM THE EDGE OF THE PAVEMENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WATER JETTING WILL NOT BE PERMITTED.

THE CONTRACTOR SHALL INSTALL A NON–METALLIC PULL ROPE IN CONDUIT RUNS IN EXCESS OF FIFTY (50) FEET. A CLEANER–PRIMER SHALL BE USED ON ALL PVC TO PVC JOINTS BEFORE APPLICATION OF PVC CEMENT.

ITEM 620, ELECTRICAL CONDUCTORS:

ALL ELECTRICAL CONNECTORS FOR BREAKAWAY POLES SHALL BE BREAKAWAY (BUCHANAN 65U, BUSSMAN HEBW, LITTLEFUSE LEB, OR EQUAL) IN ACCORDANCE WITH STANDARD SHEET RID(LUM2)–07. ALL ELECTRICAL CONNECTIONS FOR NEUTRALS SHALL BE BREAKAWAY, SHALL HAVE A WHITE COLOR MARKING, AND SHALL HAVE PERMANENTLY INSTALLED SOLID NEUTRAL (BUCHANAN 20U, BUSSMAN HET, LITTLEFUSE LET, OR EQUAL).

GROUNDING CONDUCTORS THAT SHARE THE SAME CONDUIT, JUNCTION BOX, GROUND BOX OR STRUCTURE SHALL BE BONDED TOGETHER AT EVERY ACCESSIBLE POINT IN ACCORDANCE WITH THE NEC.

THE SINGLE CONDUCTOR NO. 8 AWG (XHHW) USED FOR THE ILLUMINATION CIRCUIT BETWEEN THE SERVICE ENCLOSURE AND SIGNAL POLE, SHALL BE MARKED WITH A YELLOW COLORED TAPE MARKER AT EVERY ACCESSIBLE POINT. THE COLORED TAPE MARKER SHALL CONSIST OF A HALF–LAP OF TAPE COVERING A 6–INCH LENGTH OF CONDUCTOR.

A SINGLE CONDUCTOR NO. 12 AWG (XHHW) SHALL BE USED BETWEEN THE LUMINAIRE AND THE TERMINAL STRIP IN THE POLE BASE.

WHEN THE SPECIFICATIONS FOR ELECTRICAL ITEMS REQUIRE UL LISTED PRODUCTS, IT WILL BE CONSTRUED TO MEAN UL LISTED OR CSA LISTED.

ITEM 624, GROUND BOXES:

THE CONTRACTOR SHALL FURNISH AND INSTALL NEW GROUND BOXES AND LIDS WITH CONCRETE APRONS AT THE LOCATIONS SHOWN ON THE PLANS. NEW GROUND BOXES FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE TYPE D GROUND BOXES WITH HEAVY–DUTY COVERS AND CONCRETE APRONS. GROUND BOXES USED FOR SIGNALS SHALL HAVE THE LEGEND "SIGNALS–DANGER HIGH VOLTAGE" STAMPED OR IMPRINTED ON THE COVER.

ITEM 628, ELECTRICAL SERVICES:

THE CONTRACTOR IS INSTRUCTED TO EXERCISE CAUTION WHEN CONNECTING SERVICE WIRES IN THE METER BASE; THESE WIRES SHOULD NOT BE CROSSED.

THE NEW ELECTRICAL SERVICE FOR EACH INTERSECTION SHALL BE BILLED IN THE NAME OF THE CITY OF BRYAN. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR NEW ELECTRICAL SERVICE OR CHANGES TO EXISTING SERVICES. THE CONTRACTOR SHALL NOTIFY BRYAN TEXAS UTILITIES (979–821–5770) A MINIMUM OF 30 DAYS IN ADVANCE OF THE NEED FOR ELECTRICAL SERVICE.

THE NEW PEDESTAL TRAFFIC SIGNAL SERVICE ENCLOSURE AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC AND BRYAN TEXAS UTILITY REQUIREMENTS. THE PEDESTAL SERVICE ENCLOSURE AND EQUIPMENT SHALL CONFORM TO REQUIREMENTS OF DETAILS DEPICTED ON STANDARD SHEETS ED (7) – 03 AND ED (8) – 03. THE CONTRACTOR MAY SUBMIT AN ALTERNATE BUT EQUIVALENT PEDESTAL SERVICE ENCLOSURE DESIGN FOR THE ENGINEER'S APPROVAL. NEW SERVICE FEED CONDUCTORS SHALL BE INSTALLED BETWEEN THE METER BASE AND THE ELECTRIC SERVICE POLE BY THE ELECTRICAL SERVICE PROVIDER.

ALL CIRCUIT BREAKERS SHALL BE UL LISTED TO UL489. ALL CIRCUIT BREAKERS SHALL BE SWITCH DUTY.

ITEM 636, ALUMINUM SIGNS (TYPE A):

SIGNS SHALL BE GROUND–MOUNTED OR MOUNTED ON THE MAST ARM PER THE PROJECT PLANS. THIS ITEM WILL BE MEASURED AND PAID FOR UNDER THE BID PRICE FOR "ALUMINUM SIGNS.|"

SIGN SUBSTRATE (EXCEPT STREET NAME SIGNS) SHALL MEET REQUIREMENTS FOR ASTM B 209 AND HAVE THE FOLLOWING THICKNESSES: 0.080" FOR SIGNS LESS THAN 7.5 SQ. FEET, 0.100" FOR SIGNS 7.5 TO 15 SQ. FEET, AND 0.125" FOR SIGNS GREATER THAN 15 SQ. FEET.

ALL SIGN SHEETING MATERIALS SHALL MEET THE REQUIREMENTS OF ASTM D 4956 TYPE, AS FOLLOWS:

RED BACKGROUND – ASTM TYPE VII, VIII, IX, OR X (OR TXDOT TYPE D), WITH ASTM TYPE III OR IV (TXDOT TYPE C) LEGEND/BORDER WHITE BACKGROUND – ASTM TYPE III OR IV (TXDOT TYPE C), WITH BLACK ACRYLIC LEGEND/BORDER

YELLOW BACKGROUND – ASTM TYPE VII, VIII, IX, OR X (OR TXDOT TYPE E), WITH BLACK ACRYLIC LEGEND/BORDER OR ASTM TYPE VII, VIII, IX, OR X (OR TXDOT TYPE D) LEGEND/SYMBOL

FLUORESCENT YELLOW–GREEN BACKGROUND – ASTM TYPE VII, VIII, IX, OR X (TXDOT TYPE E), WITH BLACK ACRYLIC LEGEND/BORDER (SCHOOL–RELATED WARNING SIGNS)

GREEN, BROWN, BLUE BACKGROUNDS – ASTM TYPE III OR IV (TXDOT TYPE C), WITH WHITE ASTM TYPE VII, VIII, IX, OR X (TXDOT TYPE D) LEGEND/BORDER.

CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL STREET NAME SIGNS FOR APPROVAL BY THE ENGINEER.

ALL SIGN POSTS SHALL BE 13 BWG GALVANIZED STEEL TUBING (AS PER ASTM 123 OR ASTM A653 G210), AND HAVE 2.375" OUTSIDE DIAMETER AND 0.095" NOMINAL WALL THICKNESS. POST SHALL BE BLACK POWDER–COATED WHEN SPECIFIED. PAINTED OR SPLICED POSTS ARE NOT ACCEPTABLE. POSTS SHALL BE SEAMLESS STEEL TUBING, WITH 50,000 PSI MINIMUM YIELD STRENGTH, AND 70,000 PSI MINIMUM TENSILE STRENGTH. LENGTH SHALL BE DETERMINED AS PER TEXAS MUTCD SIGN HEIGHT REQUIREMENTS.

ALL SIGN POSTS SHALL BE DELINEATED WITH A 12–INCH RETROREFLECTIVE STRIP (YELLOW OR RED) AS PER SECTION 2A.21 OF THE 2011 TEXAS MUTCD.

SIGN SUPPORTS SHALL MEET CRASHWORTHY REQUIREMENTS OF NCHRP 350, AND UNLESS OTHERWISE SPECIFIED, SHALL BE THE STEEL "WEDGE ANCHOR SYSTEM."

USE GALVANIZED STEEL, STAINLESS STEEL, OR DICHROMATE–SEALED ALUMINUM FOR BOLTS, NUTS, WASHERS, LOCK WASHERS, SCREWS, AND OTHER SIGN ASSEMBLY HARDWARE. USE PLASTIC OR NYLON WASHERS TO AVOID TEARING THE SHEETING MATERIAL.

ALL SIGN COMPONENTS (SUBSTRATE, SHEETING, POST, SUPPORT, MOUNTING HARDWARE, ETC.) WILL NOT BE MEASURED OR PAID FOR DIRECTLY BUT WILL BE SUBSIDIARY TO EACH UNIT SIGN.

ITEM 656, FOUNDATIONS FOR TRAFFIC CONTROL DEVICES:

PAYMENT FOR FURNISHING AND INSTALLING ANCHOR BOLTS MOUNTED IN DRILLED SHAFTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS DRILLED SHAFTS.

ITEM 666, REFLECTORIZED PAVEMENT MARKINGS:

THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE I THERMOPLASTIC PAVEMENT MARKINGS. APPLICATION AND PERFORMANCE OF TYPE I MARKINGS SHALL BE IN ACCORDANCE WITH THE SPECIFICATION OF THIS ITEM. THIS ITEM WILL BE MEASURED AND PAID FOR UNDER THE BID PRICE FOR "REFLECTORIZED PAVEMENT MARKINGS." IF A PAVEMENT SEALER IS REQUIRED AS PER THIS SPECIFICATION, IT MAY BE EITHER A TYPE II MARKING OR AN ACRYLIC OR EPOXY SEALER UNLESS OTHERWISE SHOWN ON THE PLANS. THE SEALER WILL BE MEASURED AND PAID FOR SEPARATELY UNDER THE BID PRICE FOR ITEM 666.

ITEM 672, RAISED PAVEMENT MARKERS:

PLACE ALL ADHESIVE MATERIAL DIRECTLY FROM THE HEATED DISPENSER TO THE PAVEMENT. DO NOT USE NON–HEATED CONTAINERS. USE ADHESIVE OF SUFFICIENT THICKNESS SO THAT WHEN THE MARKER IS PRESSED INTO THE ADHESIVE, 1/8" OR MORE ADHESIVE WILL REMAIN UNDER 100% OF THE MARKER. THE ADHESIVE SHOULD EXTEND NOT LESS THAN 1/2" BUT NOT MORE THAN 1 1/2" BEYOND THE PERIMETER OF THE MARKER.

ITEM 677, ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS:

EXISTING PAVEMENT MARKINGS AND MARKERS THAT ARE REQUIRED TO BE REMOVED SHALL BE REMOVED BY SUCH METHODS THAT WILL CAUSE THE LEAST POSSIBLE DAMAGE TO THE PAVEMENT OR SURFACING. MARKINGS SHALL BE REMOVED SO THAT THEY ARE NO LONGER LEGIBLE AND TO THE SATISFACTION OF THE ENGINEER.

THE CONTRACTOR SHALL OBTAIN THE ENGINEER'S APPROVAL TO UTILIZE THE MECHANICAL METHOD FOR ELIMINATING EXISTING THERMOPLASTIC PAVEMENT MARKINGS PRIOR TO EMPLOYING THIS METHOD.

ITEM 678, PAVEMENT SURFACE PREPARATION FOR MARKINGS:

BLAST CLEANING OF CONCRETE PAVEMENT WILL BE THE REQUIRED CLEANING METHOD FOR PERMANENT PAVEMENT MARKINGS. CONCRETE PAVEMENT SHALL NOT BE CLEANED BY GRINDING. ASPHALTIC CONCRETE PAVEMENT WILL NOT REQUIRE BLAST CLEANING, BUT SHALL BE CLEANED AS REQUIRED UNDER THE APPLICABLE SPECIFICATIONS, OR AS DIRECTED BY THE ENGINEER. MEASUREMENT AND PAYMENT FOR THIS PAY ITEM SHALL BE CONSIDERED SUBSIDIARY TO THE RESPECTIVE BID ITEM 666, REFLECTORIZED PAVEMENT MARKINGS.

ITEM 680, INSTALLATION OF HIGHWAY TRAFFIC SIGNALS:

AT THIS LOCATION THE PROJECT SHALL CONSIST OF FURNISHING AND INSTALLING ALL MATERIALS AND EQUIPMENT NECESSARY FOR THE COMPLETE SIGNAL SYSTEM. IN ADDITION TO THESE ITEMS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:

1. FURNISHING AND INSTALLING SIGNAL CONTROLLER, CONFLICT MONITOR, AND BASE–MOUNTED SIGNAL CONTROLLER CABINET EQUIPMENT. SIGNAL CONTROLLER CABINET BASES WITH A BREAKAWAY BASE DESIGN SHALL NOT BE INSTALLED.
2. FURNISHING AND INSTALLING VIDEO DETECTION EQUIPMENT, COMMUNICATION MODULES, AND VIDEO DETECTION CABLE. THE CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE.
3. FURNISH AND INSTALLING PEDESTRIAN LED COUNTDOWN SIGNAL MODULES AS PER THE PLANS.
4. FURNISHING AND INSTALLING WIRELESS RADIO COMMUNICATION EQUIPMENT. THE CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE. (ENCOM WIRELESS RADIO, E–LITE 2.4 GHZ––300 MBPS)
5. FURNISHING AND INSTALLING BACK–UP BATTERY UNINTERRUPTED POWER SUPPLY (UPS), BATTERIES, AND BATTERY MANAGEMENT SYSTEM.
6. FURNISHING AND INSTALLING EMERGENCY PREEMPTION EQUIPMENT AND CABLE. THE CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE.
7. FURNISHING AND INSTALLING WHITE INDICATION CONFIRMATION LIGHTS. THE CONTRACTOR SHALL PROVIDE SUBMITTAL DOCUMENTATION TO THE ENGINEER FOR APPROVAL, AND ALL MOUNTING HARDWARE AND CABLING.
8. DURING THE THIRTY (30) DAY TEST PERIOD, THE CONTRACTOR SHALL UTILIZE QUALIFIED PERSONNEL TO RESPOND TO ALL TROUBLE CALLS AND TO REPAIR ANY MALFUNCTIONS TO NEW CONTROL EQUIPMENT. A LOCAL TELEPHONE NUMBER (NOT SUBJECT TO FREQUENT CHANGES) WHERE TROUBLE CALLS ARE TO BE RECEIVED BY THE CONTRACTOR ON A 24–HOUR BASIS SHALL BE PROVIDED TO THE ENGINEER BY THE CONTRACTOR. THE CONTRACTOR'S RESPONSE TO REPORTED TROUBLE CALLS SHALL BE WITHIN A REASONABLE TRAVEL TIME FROM A BRYAN ADDRESS, BUT NOT MORE THAN TWO (2) HOURS MAXIMUM. APPROPRIATE REPAIRS SHALL BE MADE WITHIN 24 HOURS. THE CONTRACTOR SHALL PLACE A LOG BOOK IN THE CONTROLLER CABINET(S) AND KEEP A RECORD OF EACH TROUBLE CALL REPORTED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF EACH TROUBLE CALL. THE ERROR LOGIN IN THE CONFLICT MONITOR (MMU) SHALL NOT BE CLEARED DURING THE THIRTY–DAY TEST PERIOD WITHOUT THE APPROVAL OF THE ENGINEER.
9. SUBMITTAL LITERATURE SHALL BE PROVIDED FOR ALL NEW TRAFFIC SIGNAL EQUIPMENT FURNISHED BY THE CONTRACTOR PRIOR TO INSTALLATION.
10. THE CONTRACTOR SHALL PLACE DUCT SEAL AT THE ENDS OF ALL CONDUITS AFTER CABLES HAVE BEEN INSTALLED. ALL EMPTY CONDUITS INSTALLED BY THE CONTRACTOR SHALL BE CAPPED WITH A SUITABLE PVC PLUG.
11. FURNISHING AND INSTALLING LUMINAIRES WITH 250 WATT EQUIVALENCE LUMINESCENCE PER THE PLANS.
12. FURNISHING AND INSTALLING BALED HAY, EARTHWORK, AND FENCING FOR TEMPORARY EROSION AND SEDIMENTATION CONTROL.
13. FURNISHING AND INSTALLING ALL MAST ARM MOUNTED ALUMINUM SIGNS (INCLUDING PEDESTRIAN PUSH BUTTON SIGNS).

NO EXTRA COMPENSATION WILL BE ALLOWED FOR FULFILLING THE REQUIREMENTS STATED ABOVE UNLESS OTHERWISE PROVIDED FOR IN THE PLANS.

ITEM 682, VEHICLE AND PEDESTRIAN SIGNAL HEADS:

ALL SIGNAL HEAD ATTACHMENTS ON MAST ARMS FURNISHED BY THE CONTRACTOR SHALL HAVE A CABLE DRIP LOOP RUNNING FROM THE CGB FITTING ON THE BOTTOM OF THE MAST ARM INTO THE SIDE OF THE SIGNAL HEAD AS SHOWN ON THE PLANS. SUPPORT ARMS WITH CGB FITTINGS SHOULD BE USED (ASTO–BRAC ARM KIT, AB–4001–PELCO).

THE SIGNAL–TO–MAST ARM CONNECTION MUST ALLOW FOR ADJUSTMENT ABOUT THE HORIZONTAL AND VERTICAL AXIS. THE HANGER TERMINAL HOUSING SHALL HAVE A TWELVE (12) CIRCUIT TERMINAL BLOCK WITH SPADE SCREW TERMINALS.

FOR THIS PROJECT, AN "ASTRO–BRAC" TYPE SIGNAL HEAD MOUNTING BRACKET ASSEMBLY (BOTH HORIZONTAL AND VERTICAL MOUNTING POSITIONS) WILL BE REQUIRED. NEW VEHICLE AND PEDESTRIAN SIGNAL HEADS FOR THIS PROJECT SHALL BE BLACK POLYCARBONATE WITH BLACK POLYCARBONATE BACK PLATES. VEHICLE SIGNAL LENSES SHALL BE POLYMERIC. THE NEW SIGNAL HEADS SHALL BE COVERED WITH BURLAP OR OTHER MATERIAL APPROVED BY THE ENGINEER UNTIL PLACED INTO OPERATION. INCANDESCENT TYPE LED LAMP UNITS FOR VEHICLE SIGNAL FACES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AND SHALL HAVE THE FOLLOWING WATTAGE: RED – 12.5 WATT ; YELLOW – 36.0 WATT ; GREEN – 19.0 WATT ; YELLOW ARROW –
10.0 WATT ; GREEN ARROW – 6.5 WATT.

A PEDESTRIAN SIGNAL HEAD ASSEMBLY HAVING A ONE–PIECE REFLECTOR ASSEMBLY, SYMBOLIC "WALK" AND "DON'T WALK" INDICATIONS WITH COUNTDOWN DISPLAY, AND A FLUSH, "EGG–CRATED" VISOR WILL BE REQUIRED. PEDESTRIAN SIGNAL HEAD ASSEMBLIES SHALL BE DRILL MOUNTED TO THE SIGNAL POLES. INCANDESCENT LED LAMP UNITS FOR PEDESTRIAN SIGNAL FACES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM 684, TRAFFIC SIGNAL CABLES:

THE CONDUCTORS IN THE TRAFFIC SIGNAL CABLE SHALL BE STRANDED FOR THIS PROJECT. INDIVIDUAL CONDUCTORS SHALL BE NO. 14 AWG IN GROUPS OF 2 (FOR LUMINAIRE WIRING), AND 7 AND 9 (FOR FIELD WIRING FROM SIGNAL CABINET TO SIGNAL HEADS).

A SEPARATE MULTI–CONDUCTOR CABLE (NO. 14 AWG) SHALL BE USED INSIDE THE MAST ARM SIGNAL POLE SHAFT FROM THE TERMINAL STRIP TO EACH SIGNAL HEAD AND PEDESTRIAN PUSH BUTTON UNIT AS SHOWN IN THE CONDUIT AND CABLE CHARTS ON THE PLANS.

EACH CABLE SHALL BE IDENTIFIED, AS SHOWN ON THE SCHEMATIC DRAWINGS MAINTAINED BY THE ENGINEER FOR MAINTENANCE DOCUMENTATION, WITH PERMANENT MARKING LABELS (PANDUIT TYPE PLM STANDARD SINGLE MARKER TIE, THOMAS & BETTS TYPE 548M OR EQUIVALENT) AT EACH GROUND BOX, POLE BASE, AND CONTROLLER CABINET WHERE THE CONTRACTOR PERFORMS WORK.

SPLICES IN THE CONDUCTORS INSIDE STEEL SIGNAL POLES FROM THE TERMINAL STRIP AT THE HAND HOLE TO THE SIGNAL HEADS WILL NOT BE PERMITTED IN THE POLE SHAFT OR IN THE MAST ARM.

ITEM 686, TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL ROUND POLES):

TRAFFIC SIGNAL POLES, MAST ARM ASSEMBLIES, PEDESTRIAN POLES, AND LUMINAIRE ARMS FOR THIS PROJECT SHALL BE GALVANIZED ON THE EXTERIOR FACE. COLOR SELECTION SHALL BE BLACK POWDER COATING. THE POWDER COATING SHALL MEET THE FOLLOWING SPECIFICATIONS:

EXTERIOR FACE OF POLES, EXPOSED ARM, ARM ASSEMBLIES AND OTHER HARDWARE SUCH AS ANCHOR BOLTS, BRACKETS, NUTS, NUT COVERS, CLAMPS, BOLTS, CONNECTION OR PIN BOLTS, ETC. SHALL BE COATED WITH HIGH DENSITY LOW GLOSS POLYESTER THERMOSETTING RESIN, MINIMUM OF 4 MILS.

COATING SHALL BE ELECTROSTATICALLY SPRAYED ON THE SUBSTRATE AND FUSED IN A HIGH TEMPERATURE OVEN. ADHESION SHALL MEET THE 5A OR 5B CLASSIFICATION OF ASTM D3359. OUTSIDE COATING SHALL BE UNIFORM IN APPEARANCE AND FREE OF SCRATCHES. INSIDE OF THE POLE SHALL BE

COATED THE SAME AS THE OUTSIDE OR MAY BE PAINTED WITH A ZINC RICH PRIMER COAT. PAINTING MATERIALS INFORMATION INCLUDING COLOR SAMPLE AND APPLICATION PROCEDURES SHALL BE SUBMITTED TO THE ENGINEER WITH POLE SHOP DRAWINGS FOR APPROVAL.

TERMINAL STRIPS IN THE SIGNAL POLE ACCESS COMPARTMENT SHALL BE 12–CIRCUIT BUCHANAN TYPE 112SN, KULKA TYPE 985–GP–12 OR EQUIVALENT. WHEN MORE THAN 12 CIRCUITS ARE REQUIRED, ADDITIONAL TERMINAL STRIPS OF 8 CIRCUITS EACH SHALL BE ADDED.

ALL POLE SHAFTS AND MAST ARMS FOR THIS PROJECT SHALL BE MARKED WITH THE IDENTIFICATION NUMBERS FROM THE INTERSECTION LAYOUT SHEETS (POLES P–1, ETC.) TO FACILITATE ASSEMBLY OF THESE ITEMS IN THE FIELD. THE IDENTIFICATION NUMBERS SHALL BE MARKED ON THE POLE SHAFTS AND MAST ARMS PRIOR TO THE SHIPMENT FROM THE FABRICATOR. THE POLE SHAFTS AND MAST ARMS SHALL ALSO BE IDENTIFIED BY INTERSECTION ON MULTIPLE INTERSECTION PROJECTS.

POLES WILL REQUIRE NUTS ON THE TOP AND BOTTOM (DOUBLE NUTS) OF THE SHAFT BASE PLATE. ANCHOR BOLTS SHALL BE SET SO THAT TWO ARE IN TENSION AND TWO ARE IN COMPRESSION. ALL SIGNAL POLE AND MAST ARM NUTS AND BOLTS SHALL REMAIN EXPOSED.

THE TRAFFIC SIGNAL POLE HEIGHTS AND LENGTHS SHOWN IN THE PLANS AND IN THE MATERIAL SUMMARY ARE TO BE USED FOR BIDDING PURPOSES ONLY. PRIOR TO FABRICATION, THE CONTRACTOR, IN COOPERATION WITH THE ENGINEER, SHALL MAKE FIELD MEASUREMENTS TO DETERMINE THE ACTUAL POLE HEIGHT NECESSARY TO ENSURE A VERTICAL CLEARANCE OF 18 FEET MINIMUM, 19 FEET MAXIMUM FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE LOWEST POINT ON THE SIGNAL HEAD ASSEMBLY OR MAST ARM AND TO DETERMINE THE MAST ARM LENGTHS REQUIRED TO MOUNT THE TRAFFIC SIGNAL HEADS OVER THE TRAFFIC LANES. THE MAST ARM SHALL BE STRAIGHT AND LEVEL IN THE SPAN AREA WHERE THE SIGNAL HEADS ARE ATTACHED. THESE FIELD MEASUREMENTS AND ELEVATIONS SHALL BE DETERMINED FROM THE ACTUAL LOCATION OF THE POLE FOUNDATIONS, CONSIDERING ALL ABOVE AND BELOW GROUND UTILITIES AND THE EXISTING ROADWAY ELEVATIONS AND LANE WIDTHS.

ALL STEEL MAST ARMS SHALL BE PROVIDED WITH APPROVED VIBRATION DAMPERS FABRICATED FROM 0.125 INCH MINIMUM THICKNESS, 4 FEET MINIMUM LENGTH BY 12 INCH MINIMUM WIDTH T–6 ALUMINUM. DAMPERS SHALL BE INSTALLED USING AN "ASTRO–BRAC" SIGN BRACKET OR A SIGNFIX ALUMINUM CHANNEL OR EQUAL, A MAXIMUM OF 3 FEET FROM THE END OF THE MAST ARM. MEASUREMENT AND PAYMENT FOR DAMPERS SHALL BE CONSIDERED SUBSIDIARY TO ITEM 686.

ITEM 688, PEDESTRIAN DETECTORS:

PEDESTRIAN PUSHBUTTONS SHALL BE ADA COMPLIANT (AND MOUNTED AT A HEIGHT OF THREE (3) FEET – SIX (6) INCHES ABOVE THE SIDEWALK UNLESS OTHERWISE NOTED AND SHALL BE OF THE TYPE THAT HAVE PERMANENT–TYPE SIGNS WITHIN THE PUSHBUTTON ASSEMBLY WHICH EXPLAINS THEIR PURPOSE AND INDICATES WHICH CROSSWALK SIGNAL IS ACTUATED.(ON BUTTON ACTUATION A AUDIBLE WARRING SHALL SPECIFY LOCATION TO BE CROSSED, EXAMPLE: "WAIT TO CROSS (STREET TO BE CROSSED) AT (INTERSECTING STREET)."

THE PUSHBUTTON SHALL BE ACTIVATED BY A MINIMUM TWO (2) INCH DIAMETER CONVEX PLUNGER. A PROTECTIVE SHROUD SHALL ENCIRCLE THE PLUNGER TO DETER VANDALISM. THE SHROUD SHALL BE CAST AS PART OF THE HOUSING COVER. THE PLUNGER SHALL PROTRUDE BEYOND THE PROTECTIVE SHROUD A DISTANCE ADEQUATE TO ACCOMMODATE THE SWITCH TRAVEL.

WHILE STAKING THE POLE LOCATIONS, THE CONTRACTOR ALONG WITH THE ENGINEER SHALL VERIFY THE LOCATION OF THE PUSHBUTTONS AND THE DIRECTION OF THE ARROWS ON THE SIGNS PRIOR TO INSTALLATION.

ITEM 6266, VEHICLE DETECTION SYSTEM:

THE CONTRACTOR SHALL FURNISH AND INSTALL THE DETECTION SYSTEM, COMMUNICATION MODULES, CABLE, AND ALL MOUNTING HARDWARE.

ELECTRICAL TESTING:

ALL SIGNAL CABLES AND POWER CONDUCTORS SHALL BE CHECKED FOR INSULATION RESISTANCE UPON INSTALLATION AND PRIOR TO TERMINATION. THE TESTS SHALL BE MADE WITH A TEST SET OPERATING AT A MINIMUM OF 500 VOLTS D.C. APPLIED TO THE CONDUCTORS.

EACH CONDUCTOR IN THE MULTICONDUCTOR SIGNAL CABLES SHALL BE TESTED FOR INSULATION RESISTANCE RELATIVE TO EACH OTHER AND TO THE OUTER COVERING OF THE CABLE. THE MINIMUM ACCEPTABLE VALUE FOR INSULATION RESISTANCE SHALL BE 50 MEGOHMS.

GENERAL PROJECT NOTES:

THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL TREES WITHIN THE PROJECT LIMITS OR ADJACENT TO ALL CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL REPAIR ANY TREE SCARS CAUSED BY CONSTRUCTION OPERATIONS WITH AN APPROVED PRUNING PAINT. ANY AND ALL TREES AND SHRUBS THAT ARE MOVED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED WITH IDENTICAL SPECIES AND EQUAL SIZE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY PROTECTING EXISTING STRUCTURES, UTILITIES, TREES, SHRUBS, SPRINKLER SYSTEMS, AND OTHER ADJOINING FACILITIES, AND REPAIR OR REPLACE DUE TO DAMAGE CAUSED BY THE CONTRACTOR, AT HIS/HER OWN EXPENSE.

ANY PERMANENT RELOCATION OF EXISTING UTILITY NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO RELOCATION AND SHALL CONFORM TO THE APPLICABLE GOVERNING STANDARDS AND SPECIFICATIONS OF THE CITY OF BRYAN.

EXISTING UTILITIES SHALL REMAIN IN SERVICE AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL LIMIT OPERATIONS TO WITHIN THE CONFINES OF THE CONSTRUCTION WORK LIMITS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

UTILITY CONSTRUCTION NOTES:

UTILITY SERVICE LINES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING THE TYPE AND LOCATION OF ALL UTILITIES UNDERGROUND, ABOVE GROUND OR OVERHEAD IS NOT GUARANTEED TO BE ACCURATE OR ALL–INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS/HER OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL ANTICIPATE THAT SUCH SERVICE LINES EXIST AND REPAIR THEM IN A TIMELY MANNER IF DAMAGED DURING CONSTRUCTION. NO SEPARATE PAY WILL BE MADE FOR REPAIRS. THE COST SHALL BE INCIDENTAL TO THE WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS WITH THE OWNERS OF SUCH UTILITIES PRIOR TO WORKING IN THE AREA TO CONFIRM THEIR EXACT LOCATIONS AND/OR DEPTHS, AND TO DETERMINE WHETHER ANY ADDITIONAL UTILITIES OTHER THAN THOSE SHOWN ON THESE PLANS MAY BE PRESENT. THE CONTRACTOR SHALL DETERMINE FOR HIMSELF IF ANY OF THESE UTILITIES ARE CLEAR, AND SHALL PRESERVE AND PROTECT ALL OF THESE UTILITIES SHOWN OR FOUND. IF PROBLEMS ARISE REGARDING PUBLIC UTILITIES, THE CONTRACTOR SHOULD IMMEDIATELY NOTIFY MR. UDAY KARI WITH THE CITY OF BRYAN AT (979) 209–5900.

PRIOR TO BEGINNING ANY EXCAVATION WORK IN THE AREA OF EXISTING UTILITIES, THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATIONS TO PREVENT ANY DAMAGE OR INTERFERENCE WITH PRESENT FACILITIES. FOR UTILITIES LOCATES, CONTRACTOR SHALL CALL:

- LONE STAR 8–1–1 – CALL BEFORE YOU DIG AT TOLL FREE 1–800–669–8344
- CITY WATER AND SANITARY SEWER AT 979–209–5900
- CITY STORM SEWER AT 979–209–5900
- CITY TRAFFIC OPERATIONS AT 979–209–5900
- DIGTESS AT TOLL FREE 1–800–344–8377

VERIZON–SPRINT–NEXTEL–SUDDENLINK

1. CONTRACTOR SHALL HAND DIG WITHIN ONE (1) FOOT OF UNDERGROUND CONDUIT OR CABLE SYSTEMS.
2. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BY CALLING 1–800–DIG–TESS BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.

BRYAN TEXAS UTILITIES – ELECTRIC

1. OVERHEAD AND UNDERGROUND LINES EXIST ON THE PROPERTY. THE CONTRACTOR SHALL LOCATE THE EXISTING OVERHEAD AND UNDERGROUND LINES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION.
2. THE CONTRACTOR SHALL HAND DIG WITHIN ONE (1) FOOT OF TXU UNDERGROUND CONDUIT OR CABLE SYSTEMS.
3. THE CONTRACTOR SHALL NOTIFY BRYAN TEXAS UTILITIES (979–821–5770) A MINIMUM OF 30 DAYS IN ADVANCE OF THE NEED FOR ELECTRICAL SERVICE.

ATMOS ENERGY – GAS

1. THE CONTRACTOR SHALL HAND DIG WITHIN ONE (1) FOOT OF ATMOS UNDERGROUND GAS LINES.
2. THE CONTRACTOR SHALL CONTACT ATMOS AT LEAST 72 HOURS PRIOR TO ANY WORK BEING ACCOMPLISHED IN THE CONSTRUCTION AREA TO VERIFY ACTUAL LOCATIONS AND DEPTHS OF GAS MAINS AND SERVICE LINES. ADJUSTMENTS TO EXISTING GAS MAIN AND SERVICE LINES MAY BE REQUIRED.

SCHEDULING:

COORDINATION OF CONSTRUCTION ACTIVITIES BETWEEN THE CONTRACTOR AND THE ENGINEER WORKS TO THE BENEFIT OF ALL PARTIES INVOLVED. DETAILED TIME TABLES OR SCHEDULES MUST BE SUBMITTED IN ADVANCE BY THE CONTRACTOR FOR APPROVAL BY THE PROJECT ENGINEER. A TYPICAL CONSTRUCTION SEQUENCE FOR TRAFFIC SIGNAL INSTALLATION IS:

UNDERGROUND	ABOVEGROUND
1. CONDUIT	6. VERTICAL SIGNAL SUPPORT
2. POLE FOUNDATION	7. MAST ARMS
3. GROUND BOXES	8. SIGNAL HEADS
4. GROUNDING	9. FINAL WIRING
5. PRELIMINARY WIRING	10. CABINET AND CONTROL EQUIPMENT
	11. ELECTRICAL SERVICE
	12. VIDEO DETECTION
	13. TESTING

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
ISSUED FOR PERMIT	12/29/2025	0
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

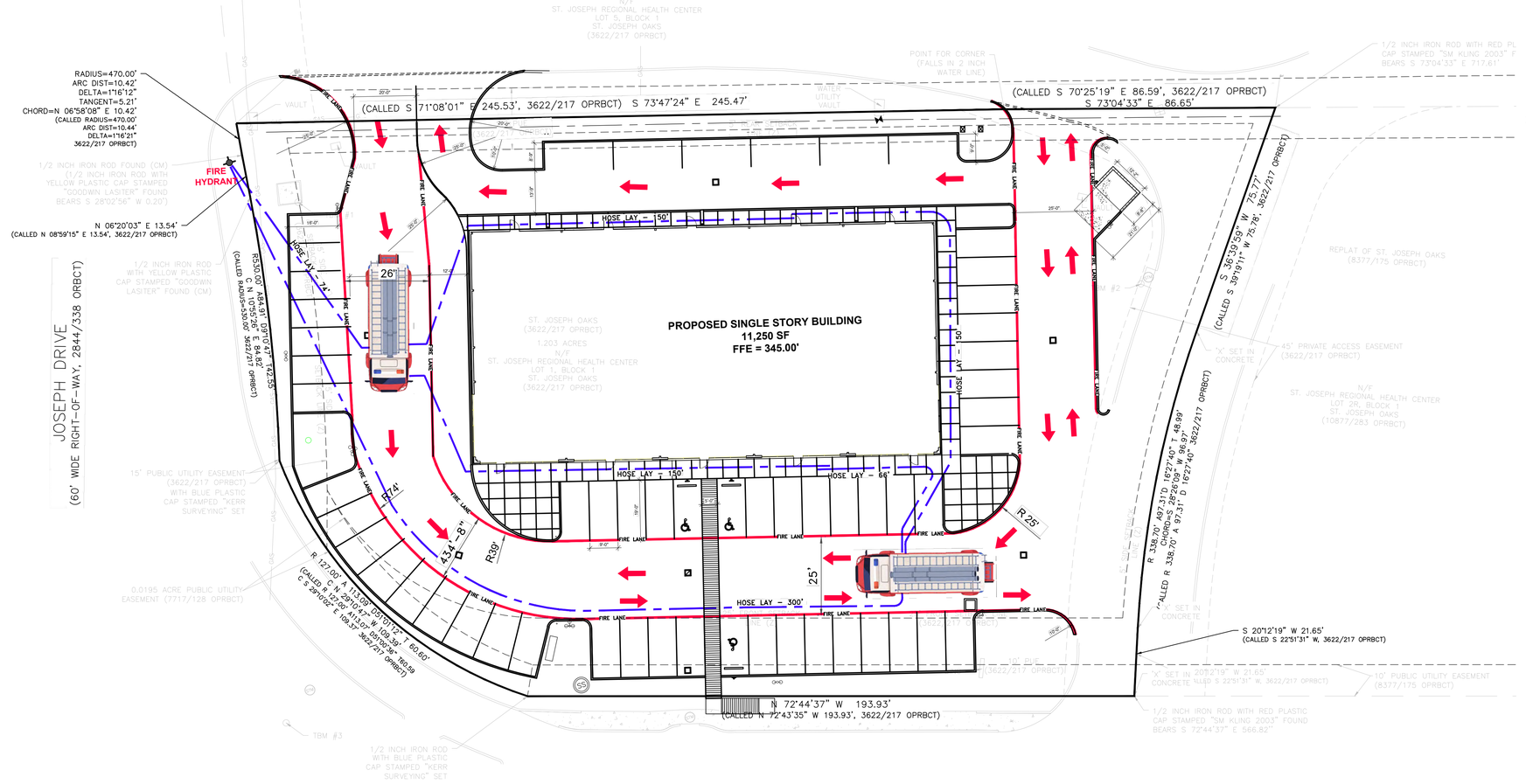
2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER: HL
PROJECT DESIGNER: AVB
APPROVED BY: JSA
CLIENT APPROVAL:
PLOT SCALE:
PROJECT INFORMATION:

DRAWING NAME:
GENERAL NOTES
SHEET NUMBER:
GN-1
PROJECT #
25-865



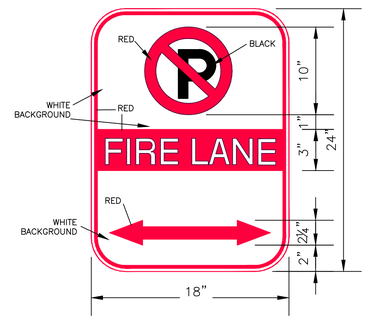
FIRE LANE STRIPING & SIGN REQUIREMENTS:

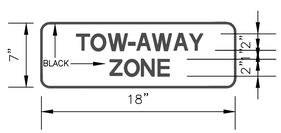
CURBS LOCATED ON EITHER SIDE OF A FIRE LANE SHALL BE PAINTED RED OR A RED STRIPE SHALL BE PLACED ALONG THE PAVEMENT WHERE THERE IS NO CURB. WHERE A FIRE LANE PASSES BETWEEN HEAD-IN PARKING SPACES, THE RED STRIPE SHOULD BE PLACED ALONG THE REAR OF THESE SPACES CLEARLY DEFINING THE FIRE LANE. PAINTED CURBS AND FIRE LANE STRIPES SHALL ALSO BE CONSPICUOUSLY AND LEGIBLY MARKED WITH THE WARNING "FIRE LANE" IN WHITE LETTERS AT LEAST THREE (3) INCHES IN HEIGHT, AT INTERVALS NOT EXCEEDING TWENTY (50) FEET. WHERE FIRE LANES ARE CLEARLY DEFINED BY CURB/PAVEMENT STRIPING, FIRE LANE SIGNS ARE NOT REQUIRED. FIRE LANE SIGNS SHOULD BE PLACED EVERY (75) FEET ALONG ANY FIRE LANE WHERE PAVEMENT OR CURB STRIPPING IS NOT PRACTICAL.

ANY COLOR OTHER THAN RED IN "NO PARKING" AREA THAT ARE NOT APPROVED FIRE LANES. RED COLORED CURBS, PAVEMENT STRIPING OR WHEEL STOPS SHALL BE USED ONLY TO DESIGNATE APPROVED FIRE LANES

LEGEND :

- FIRE TRUCK ACCESS ROUTE
- EXISTING FIRE HYDRANT
- FIRE LANE — FIRE LANE MARKING
- NO PARKING SIGN





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THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:

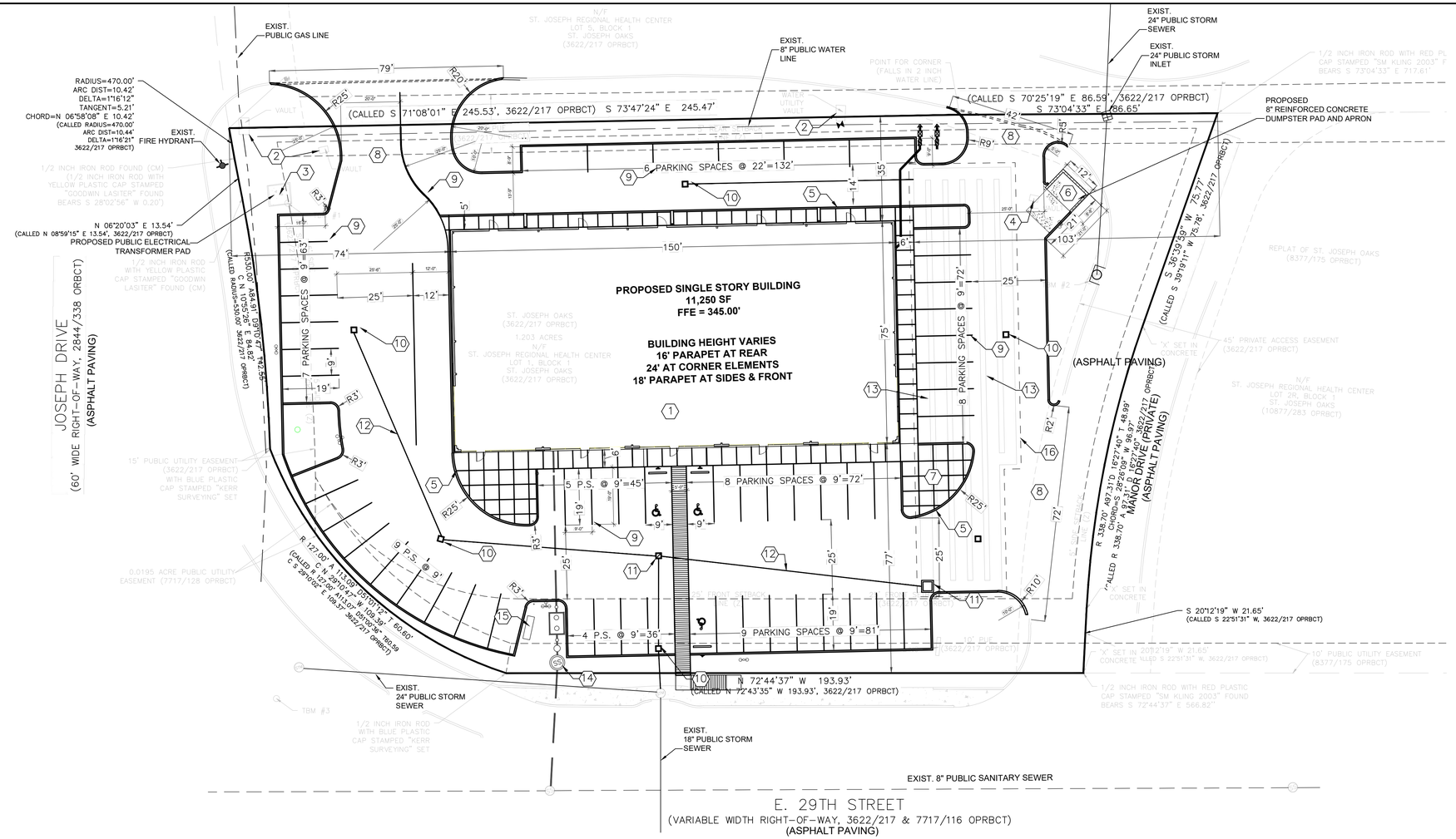
FIRE APPARATUS ACCESS PLAN

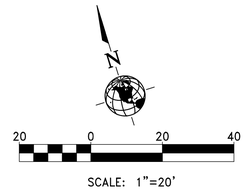
SHEET NUMBER:

F-01

PROJECT #

25-865





SITE PLAN KEY NOTES

1. PROPOSED BUILDING PER STRUCTURAL AND ARCHITECTURAL DRAWINGS.
2. EXISTING VAULT TO REMAIN. PROTECT IN PLACE.
3. EXISTING CONCRETE PAD TO REMAIN. PROTECT IN PLACE.
4. EXISTING VAULT TO BE REMOVED/RELOCATED. COORDINATE WITH PROJECT MANAGER
5. PROPOSED 6" CONCRETE CURB.
6. PROPOSED DUMPSTER LOCATION BY OTHERS.
7. PROPOSED 4 ½" THICK PRIVATE CONCRETE SIDEWALK.
8. PROPOSED CONCRETE DRIVEWAY. REF. TO SHEET C-12.
9. PROPOSED 4" WHITE STRIPPING. REF. TO SHEET C-11.
10. PROPOSED PRIVATE STORM SEWER INLET TYPE "A". REF. SHEET C-13.
11. PROPOSED PRIVATE STORM SEWER J/B. REF. TO SHEET C-13.
12. PROPOSED PRIVATE STORM SEWER LINES
13. PROPOSED PRIVATE UNDERGROUND STORMWATER DETENTION AREA
14. PROPOSED PRIVATE SANITARY SEWER MANHOLE. REF. SHEET C-13.
15. PROPOSED MONUMENT SIGN (7'-10"W x 2'-4"D x 19'-0" H), COORDINATE LOCATION WITH ARCHITECT AND LANDSCAPE.
16. PROPOSED PRIVATE DRAINAGE EASEMENT

PARKING ANALYSIS:
BUILDING USE: SHOPPING CENTER
REQUIRED PARKING RATE: 1 PER 275 SF OF GFA
REQUIRED PARKING : 11,250 X 1/275 = **41** SPACES
PROVIDED: **55** SPACES INCLUDING 3-HC ASSESSABLE

GENERAL NOTES:
A. ALL MINIMUM BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH THE CITY OF BRYAN CODE OF ORDINANCES.
B. PROPOSED BUSINESS DEVELOPMENT.
C. OWNERS NAME AND ADDRESS
JACE BABA VENTURES
2415 TOWN CENTER DRIVE, SUITE 150
SUGAR LAND, TEXAS 77478
D. CURRENT ZONING : RETAIL DISTRICT (C-2)
PROPOSED ZONING : RETAIL DISTRICT (C-2)
E. SIGNAGE WILL BE PERMITTED SEPARATELY

FLOOD PLAIN NOTES:
THIS TRACT LIES WITHIN FLOOR ZONE "X" UN-SHADED AND DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA SUBJECT TO THE 1% ANNUAL CHANCE FLOOD (100 YEAR FLOOD PLAIN) ACCORDING TO THE BRAZOS COUNTY FLOOD INSURANCE RATE MAP FIRM PANEL NO. 48041C0215F, REVISED DATE: 04/02/2014

BRYAN TEXAS UTILITY (BTU) NOTE:
Where electric facilities are installed, BTU has the right to install, operate, relocate, construct, reconstruct, add to, maintain, inspect patrol, enlarge, repair, remove and replace said facilities upon, over, under and across the property included in the PUE, and right of ingress and egress on property adjacent to PUE to access electric facilities.

CITY OF BRYAN PUBLIC WORKS
919-209-5900
TEXAS ONE-CALL DOES NOT MARK UTILITIES OWNED BY THE CITY OF BRYAN

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
ISSUED FOR PERMIT	12/29/2025	0
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

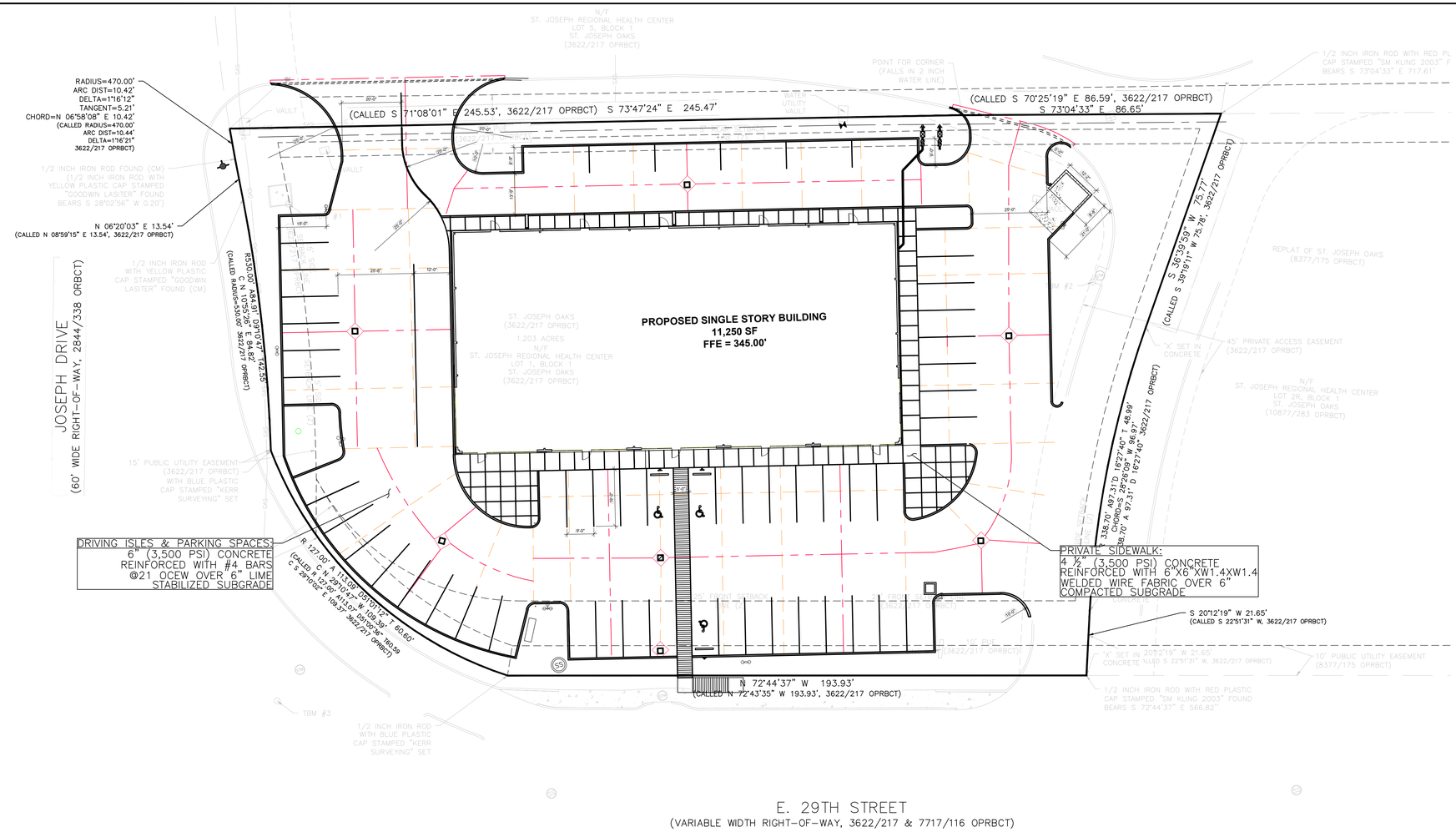
STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

PLOT SCALE:
PROJECT INFORMATION:

DRAWING NAME:
SITE PLAN
SHEET NUMBER:
C-01
PROJECT #
25-865



N

20 0 20 40

SCALE: 1"=20'

REINFORCING STEEL NOTES:

ALL REINFORCING BARS SHALL CONFORM TO ASTM A-615, GRADE 60. BARS SHOULD BE NEW, CLEAN AND FREE OF DIRT, RUST OR OIL.

DETAILING AND FABRICATION OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE, ACI 315-80. UNLESS SHOWN OTHERWISE CONTINUOUS BARS 30 BAR DIAMETERS AT SPLICES, 12" MIN.

REINFORCING BARS MAY NOT BE WELDED WITHOUT APPROVAL OF THE CIVIL ENGINEER.

PROVIDE NECESSARY TIES AND BAR SUPPORTS AS REQUIRED BY THE MANUAL OF STANDARD PRACTICE, ACI 315-80, CHAPTER 3. BRICK, ROCK, OR MASONRY BLOCKS ARE NOT ACCEPTABLE SUPPORTS. CHAIRS AND BOLSTERS FOR DIRECTLY OVER EARTH, POLY SHEETS SHALL BE EQUIPPED WITH BOTTOM BEARING PLATES.

CONCRETE COVERAGE FOR THE REINFORCING STEEL SHALL COMPLY WITH THE ACI 318-95 CODE, ARTICLE 7.7.1, EXCEPT WHERE STATED SPECIFICALLY OTHERWISE.

CONCRETE NOTES:

ALL CONCRETE SHALL BE IN ACCORDANCE THE BUILDING CODE REQUIREMENT CONTAINED IN THE ACI 318-95. ALL CONCRETE SHALL MEET THESE MINIMUM SPECIFICATION:
PAVING:
- CONCRETE STRENGTH:
  3,500 PSI AT 28 DAYS PARKING LOT
  SLUMP: 3-4"
  SIZE MAX COARSE AGGREGATE: 1"

FORMWORK DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT BE REMOVED UNTIL THE CONCRETE HAS GAINED SUFFICIENT STRENGTH TO CARRY ITS OWN WEIGHT PLUS APPLIED CONSTRUCTION LOADS.

CONCRETE PLACEMENT SHALL BE ACCOMPLISHED BY DIRECT CHUTE FROM THE MIXER TRUCK, CRANE, AND BUCKET OR BY PUMPING TO ITS FINAL POINT OF DEPOSIT. CONCRETE SHALL NOT BE DRUG BY HAND MORE THAN 5 FEET.

TO PREVENT EXCESS AND UNCONTROLLED CRACKING, CONTROL JOINTS SHOULD BE PROVIDED AT 30' MAX. SPACING IN EACH DIRECTION. CONTROL JOINTS MAY BE SAWCUT, METAL KEYWAY OR OF REMOVABLE STRIP TYPE. EXPANSION JOINT SHALL BE PLACED NO MORE THAN 90' MAX. EXPANSION JOINTS SHALL THEN BE FILLED WITH AN ELASTOMERIC JOINT FILLER MATERIAL. SEE PLAN FOR EXACT LOCATION OF JOINTS. FOR SIDEWALKS PROVIDE EXPANSION JOINTS @ 20' O.C., AND CONTROL JOINTS @ 5' O.C. MAX.

PAVING METHODS FOR THIS PROJECT:

* DRIVING ISLES & PARKING SPACES: 6". CONCRETE REINFORCED WITH #4 BARS @ 21" O.C.E.W.
* SIDEWALKS: 4 1/2" CONCRETE REINFORCED WITH 6X6-W1.4XW1.4 WELDED WIRE FABRIC

LEGEND:

EXPANSION JOINT

CONTROL JOINT

PAVING QUANTITIES			
ITEM	DESCIPTION	UNIT	QUANTITY
A	Concrete Paving /Walks On Site	SF	21,996

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SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED PROFESSIONAL ENGINEER

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ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

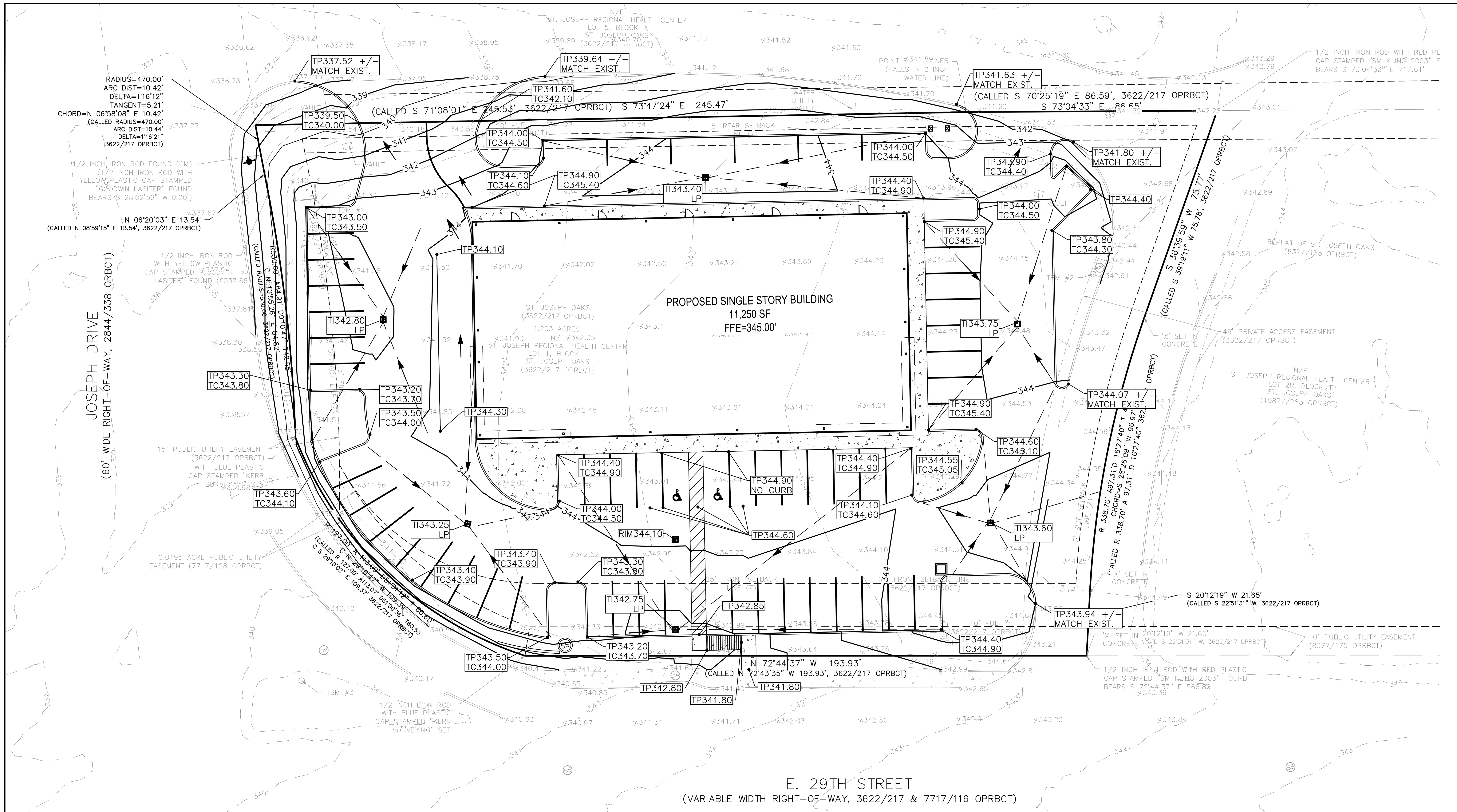
PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
PAVING PLAN

SHEET NUMBER:
C-02

PROJECT #
25-865



GRADING PLAN NOTES

1. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ECT. WITHIN THE AREA OF CONSTRUCTION THAT ARE TO REMAIN. THEY MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PAVING AND GRADING. AT NO ADDITIONAL COST TO THE OWNER.
2. ALL INLETS AND MANHOLES SHALL MEET THE REQUIREMENTS OF THE LOCAL GOVERNING AGENCY.
3. SIDEWALKS SHALL HAVE A SLOPE NO GREATER THAN 5% IN THE DIRECTION OF TRAVEL AND A CROSS SLOPE NO GREATER THAN 2%.

DETENTION NOTES

1. SUBSURFACE DRAINAGE SYSTEMS MUST DRAIN ITSELF WITHIN 48 HOURS AFTER RAINSTORM AND MUST STAY DRY BETWEEN STORMS.

FLOOD INFORMATION:

COMMUNITY	480082 CITY OF BRYAN
PANEL	48041C0215F
EFFECTIVE DATE	04-02-2014
ZONE	"X"

PROP. STORM WATER FLOW DIRECTION
EXISTING STORM WATER FLOW DIRECTION

ABBREVIATIONS

TP TOP OF PAVEMENT ELEVATION
TI TOP OF INLET
FG FINISHED GRADE ELEVATION
FFE FINISHED FLOOR ELEVATION
BFE BASE FLOOD ELEVATION
FL FLOWLINE ELEVATION

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SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

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PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY: JSA	CLIENT APPROVAL:

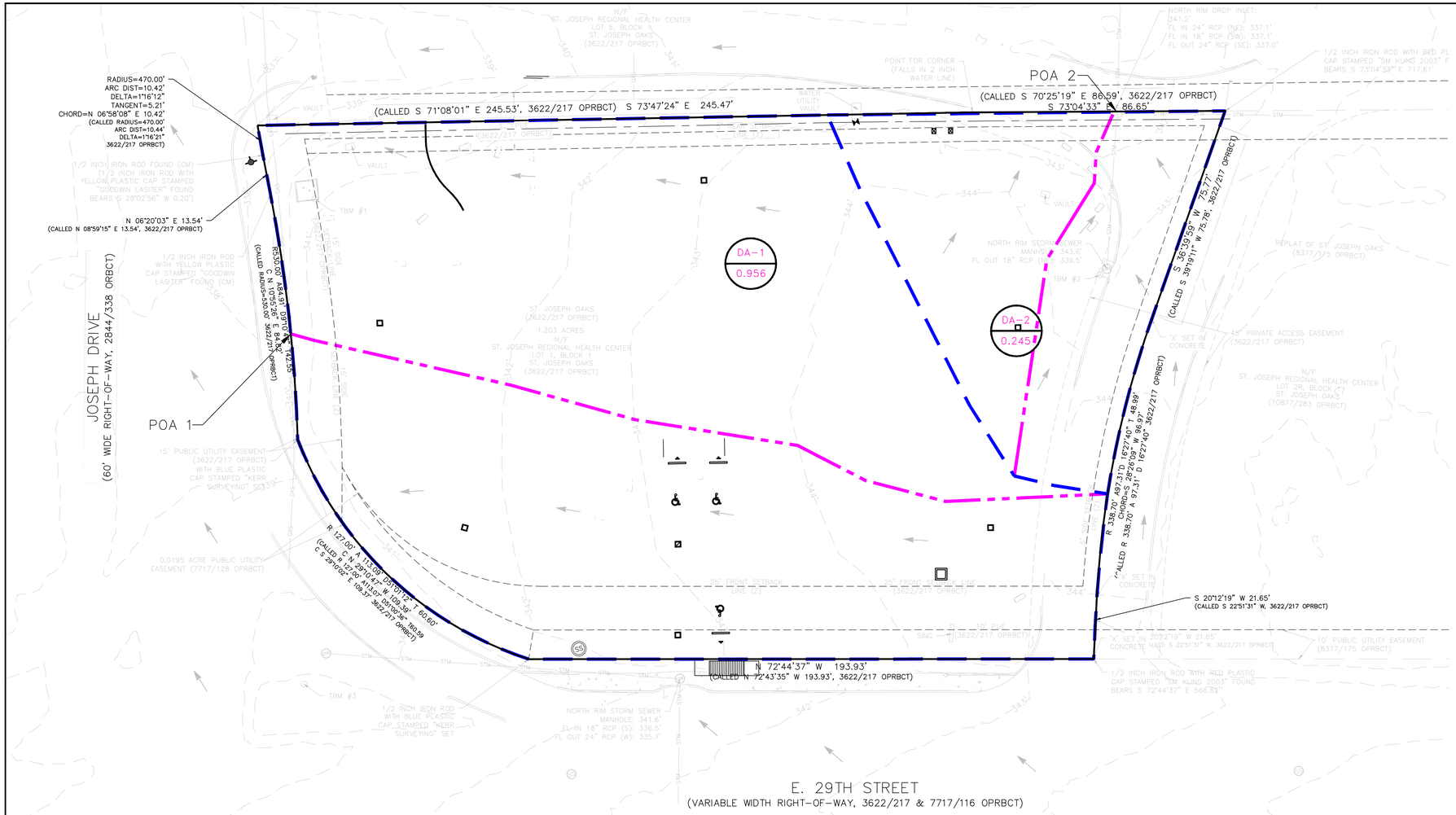
PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
GRADING PLAN

SHEET NUMBER:
C-03

PROJECT #
25-865



DA1 / 0.01	DRAINAGE SUB-AREA / DRAINAGE SUB-AREA ACREAGE
	FLOW PATH
	DRAINAGE AREA LIMITS
	PROP. STORM WATER FLOW DIRECTION
	EXISTING STORM WATER FLOW DIRECTION
	EXISTING TYPE 'A' INLET
EESF	EXTREME EVENT SHEET FLOW

FLOOD INFORMATION:

COMMUNITY	480082 CITY OF BRYAN
PANEL	48041C0215F
EFFECTIVE DATE	04-02-2014
ZONE	"X"

SCS TIME OF CONCENTRATION FROM TR 55

Existing Conditions

	OVERLAND FLOW				SHALLOW CONCENTRATED GRASS SURFACE			SHALLOW CONCENTRATED PAVED SURFACE			CONCENTRATED S.S. OR CHANNEL			CONCENTRATED FLOW MAIN CHANNEL			TOTAL	LAG TIME	**LAG TIME**
	2yr, 24hr rainfall (P) =		4.5	[inches]															
	n	L	S	Tt	L	V	Tt	L	V	Tt	L	V	Tt	L	V	Tt	Tc	(0.6 * Tc)	
D.A.		[ft]	[ft/ft]	[hr]	[ft]	[fps]	[hr]	[ft]	[fps]	[hr]	[ft]	[fps]	[hr]	[ft]	[fps]	[hr]	[hr]	[hr]	**[min]**
DA-1	0.011	100	0.004	0.031	189	1.7	0.031	0	8.0	0.000	0	8.0	0.000	0	0.0	0.000	0.06	0.04	**2.2**
DA-2	0.240	100	0.005	0.355	31	1.7	0.005	0	8.0	0.000	0	8.0	0.000	0	0.0	0.000	0.36	0.22	**13.0**

HEC-HMS STORMWATER RUNOFFSUMMARY

Project:	Area	Area	I.C.	I.C.	Tc	T lag	2-year Q	10-year Q	25-year Q	100-year Q
SHOP AT BLINN	(acres)	sq.mi.	(acres)	(%)	(min)	(min)	(cfs)	(cfs)	(cfs)	(cfs)
Drainage Areas:										
Pre Developed:										
DA-1	**0.956**	0.001494	0.03	2.64%	5.0	3.0	3.34	5.26	5.94	7.89
			Predeveloped Q at POA 1:				**3.34**	**5.26**	**5.94**	**7.89**
DA-2	**0.245**	0.000383	0.07	30.44%	21.6	13.0	0.75	1.08	1.25	1.55
			Predeveloped Q at POA 2:				**0.75**	**1.08**	**1.25**	**1.55**
Total Existing Condtions	**1.20**	0.00188	**0.100**	8.3%						

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SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

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ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:

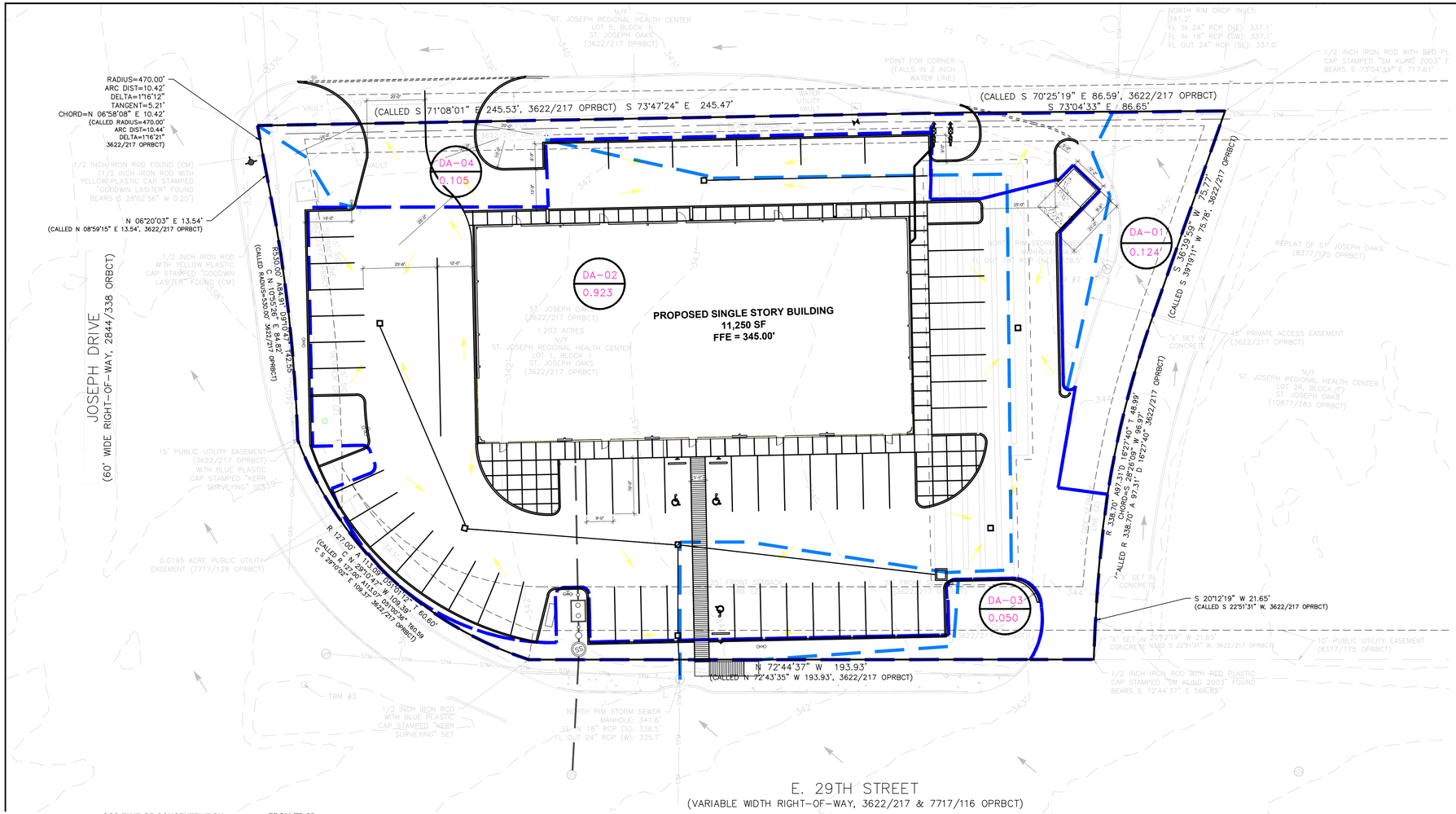
EXISTING DRAINAGE PLAN

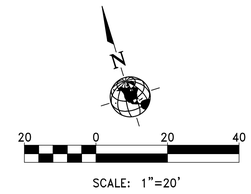
SHEET NUMBER:

C-04

PROJECT #

25-865





DA1 / 0.01 — DRAINAGE SUB-AREA / DRAINAGE SUB-AREA ACREAGE

FLOW PATH

DRAINAGE AREA LIMITS

PROP. STORM WATER FLOW DIRECTION

EXISTING STORM WATER FLOW DIRECTION

EXISTING TYPE 'A' INLET

EESF — EXTREME EVENT SHEET FLOW

DETENTION NOTES

1. PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF DETENTION POND.
2. SUBSURFACE DRAINAGE SYSTEMS MUST DRAIN ITSELF WITHIN 48 HOURS AFTER RAINSTORM AND MUST STAY DRY BETWEEN STORMS.

FLOOD INFORMATION:

COMMUNITY	480082 CITY OF BRYAN
PANEL	48041C0215F
EFFECTIVE DATE	04-02-2014
ZONE	"X"

SCS TIME OF CONCENTRATION FROM TR 55

Ultimate Developed Conditions

D.A.	OVERLAND FLOW 2yr, 24hr rainfall (P) = 4.5 [inches] n	L [ft]	S [ft/ft]	Tt [hr]	SHALLOW CONCENTRATED GRASS SURFACE L [ft]	V [fps]	Tt [hr]	SHALLOW CONCENTRATED PAVED SURFACE L [ft]	V [fps]	Tt [hr]	CONCENTRATED S.S. OR CHANNEL L [ft]	V [fps]	Tt [hr]	CONCENTRATED FLOW MAIN CHANNEL L [ft]	V [fps]	Tt [hr]	TOTAL Tc [hr]	LAG TIME (0.6 * Tc) [hr]	LAG TIME [min]
DA - 01	0.24	100	0.028	0.175	374	1.7	0.061	0	8.00	0.000	0	8.00	0.000	0	0.0	0.000	0.24	0.14	**8.5**
DA - 02	0.11	57	0.007	0.104	0	1.7	0.000	0	8.00	0.000	383	8.00	0.013	0	0.0	0.000	0.12	0.07	**4.2**
DA - 03	0.24	91	0.017	0.196	0	1.7	0.000	0	8.00	0.000	0	8.00	0.000	0	0.0	0.000	0.20	0.12	**7.1**
DA - 04	0.24	45	0.110	0.054	0	1.7	0.000	0	8.00	0.000	0	8.00	0.000	0	0.0	0.000	0.05	0.03	**1.9**

HEC-HMS STORMWATER RUNOFFSUMMARY

Project: SHOP AT BLINN	Curve Number	Area (acres)	Area sq.mi.	I.C. (acres)	I.C. (%)	Tc (min)	T lag (min)	2-year Q (cfs)	10-year Q (cfs)	25-year Q (cfs)	100-year Q (cfs)
Drainage Areas:											
Developed:											
DA - 02	85	**0.923**	0.00144	0.913	98.95%	7.05	4.23	4.49	5.72	6.34	7.79
DA - 03	85	**0.050**	0.00008	0.000	0.00%	11.78	7.07	0.18	0.26	0.3	0.38
DA - 04	85	**0.105**	0.00016	0.033	31.64%	5.00	3.00	0.47	0.65	0.72	0.92
				Developed Q at POA 1:				**2.58**	**2.97**	**3.21**	**3.58**
DA - 01	85	**0.124**	0.00019	0.094	75.86%	14.19	8.51	0.49	0.64	0.73	0.90
				Developed Q at POA 2:				**0.49**	**0.64**	**0.73**	**0.90**
Total Developed Condtions		**1.20**	0.00188	**1.041**	87%						

Summary Routing table (Stage / Storage / Discharge)				POA -1
	Pre-Dev	Developed flows	Routed flows	Dev
Storm	(Allowable)	(to det. pond)	(leaving pond)	(Routed)
Event	Qa - cfs	Q - cfs	Q - cfs	Qa - cfs
	POA - 1			**POA-1**
2-yr	3.3	4.49	2.11	2.58
10-yr	5.3	5.72	2.34	2.97
25-yr	5.9	6.34	2.49	3.21
100-yr	7.9	7.79	2.72	3.58

Summary Routing table (Stage / Storage / Discharge)				POA -2
	Pre-Dev	Developed flows	Routed flows	Dev
Storm	(Allowable)	(to det. pond)	(leaving pond)	(Routed)
Event	Qa - cfs	Q - cfs	Q - cfs	Qa - cfs
	POA - 2			**POA-2**
2-yr	0.8			0.49
10-yr	1.1			0.64
25-yr	1.3			0.73
100-yr	1.6			0.90

DETENTION VOLUME STORED IN PIPES			
SIZE (IN)	**Sec. Area (S.F.)**	**LENGTH (ft)**	**VOLUME (CF)**
24	3.1416	220	692
36	7.0686	974	6,887
TOTAL VOLUME PROVIDED IN PIPES		**7,579**	**(CF)**
		0.02	**(AC-FT)**

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PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS — JOSEPH S. ABBOUD — 69894 — LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

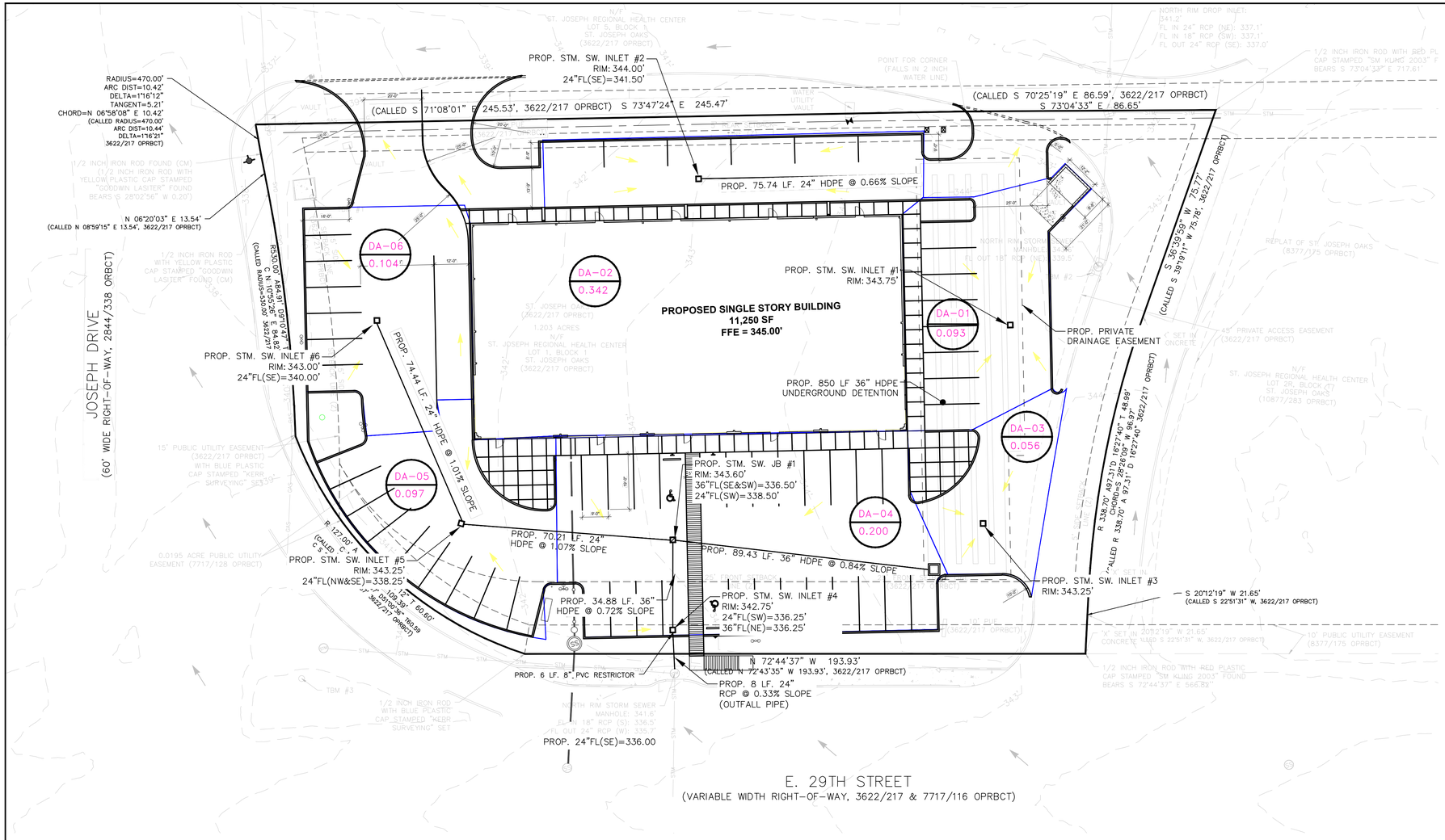
PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
DRAINAGE PLAN

SHEET NUMBER:
C-05

PROJECT #
25-865



DA1
0.01
DRAINAGE SUB-AREA
DRAINAGE SUB-AREA ACREAGE
FLOW PATH
DRAINAGE AREA LIMITS
PROP. STORM WATER FLOW DIRECTION
EXISTING STORM WATER FLOW DIRECTION
EXISTING TYPE 'A' INLET
EESF
EXTREME EVENT SHEET FLOW

DETENTION NOTES

1. PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF DETENTION POND.
2. SUBSURFACE DRAINAGE SYSTEMS MUST DRAIN ITSELF WITHIN 48 HOURS AFTER RAINSTORM AND MUST STAY DRY BETWEEN STORMS.

FLOOD INFORMATION:

COMMUNITY	480082 CITY OF BRYAN
PANEL	48041C0215F
EFFECTIVE DATE	04-02-2014
ZONE	"X"

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
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SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

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PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
DRAINAGE PLAN (STORM)

SHEET NUMBER:
C-06

PROJECT #
25-865

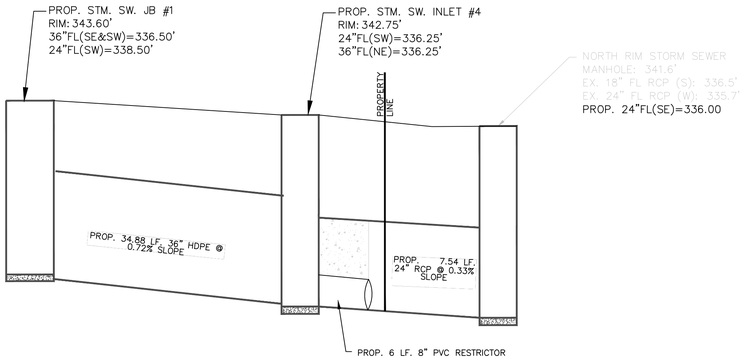
DETENTION VOLUME STORED IN PIPES			
SIZE (IN)	Sec. Area (S.F.)	LENGTH (ft)	VOLUME (CF)
24	3.1416	220	692
36	7.0686	974	6,887
TOTAL VOLUME PROVIDED IN PIPES		7,579	(CF)
		0.02	(AC-FT)

2Yr RATIONAL METHOD

From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Total Drop	Average Slope	Pipe Shape	Pipe Diameter or Height	Manning's Roughness	Peak Flow	Time of Peak Flow Occurrence	Max Velocity	Travel Time	Design Capacity	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time	Max Surcharged	Max Depth	Reported Condition	HGL UPSTREAM	HGL DOWNSTREAM
		(ft)	(ft)	(ft)	(ft)	(%)		(inches)		(cfs)	(min)	(ft/sec)	(min)	(cfs)			(min)	(ft)				
Inlet-02	Stor-01	75.74	338.75	338.25	0.50	0.660	CIRCULAR	24.00	0.011	0.93	23	3.51	0.36	21.72	0.04	0.14	0.00	0.28	Calculated	339.03	337.53
Stor-01	Inlet-04	89.43	337.25	336.50	0.75	0.840	CIRCULAR	36.00	0.011	1.29	24	3.89	0.38	72.19	0.02	0.09	0.00	0.28	Calculated	337.53	338.70
Inlet-06	Inlet-05	74.44	340.00	339.25	0.75	1.010	CIRCULAR	24.00	0.011	0.29	22	2.81	0.44	26.84	0.01	0.07	0.00	0.15	Calculated	340.15	339.45
Inlet-05	Inlet-04	70.21	339.25	338.50	0.75	1.070	CIRCULAR	24.00	0.011	0.56	22	3.46	0.34	27.63	0.02	0.10	0.00	0.20	Calculated	339.45	338.70
Inlet-04	64	34.88	336.50	336.25	0.25	0.720	CIRCULAR	36.00	0.011	2.36	22	4.45	0.13	66.73	0.04	0.13	0.00	0.38	Calculated	338.70	336.75
64	Out-01	7.54	336.25	336.00	0.25	3.320	CIRCULAR	8.04	0.011	2.36	22	8.44	0.01	2.60	0.91	0.75	0.00	0.50	Calculated	336.75	336.50

2Yr RATIONAL METHOD

Element ID	Area	Drainage Node ID	Impervious Area	Impervious Coefficient	Accumulated Precipitation	Total Runoff	Peak Runoff	Rainfall Intensity	Time of Concentration
	(acres)		(%)		(inches)	(inches)	(cfs)	(inches/hr)	(min)
DA-01	0.09	Stor-01	45.00	0.80	1.27	1.01	0.26	3.534	21.57
DA-02	0.34	Inlet-02	45.00	0.80	1.32	1.06	0.93	3.401	23.27
DA-03	0.06	Stor-01	45.00	0.80	1.25	1.00	0.16	3.581	21.02
DA-04	0.20	Inlet-04	45.00	0.80	1.30	1.04	0.55	3.457	22.52
DA-05	0.10	Inlet-05	45.00	0.80	1.28	1.02	0.27	3.530	21.62
DA-06	0.10	Inlet-06	45.00	0.80	1.27	1.02	0.29	3.523	21.70



RESTRICTOR CROSS SECTION
N.T.S.

100Yr RATIONAL METHOD

From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Total Drop	Average Slope	Pipe Shape	Pipe Diameter or Height	Manning's Roughness	Peak Flow	Time of Peak Flow Occurrence	Max Velocity	Travel Time	Design Capacity	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time	Max Surcharged	Max Depth	Reported Condition	HGL UPSTREAM	HGL DOWNSTREAM
		(ft)	(ft)	(ft)	(ft)	(%)		(inches)		(cfs)	(min)	(ft/sec)	(min)	(cfs)			(min)	(ft)				
Inlet-02	Stor-01	75.74	338.75	338.25	0.50	0.660	CIRCULAR	24.00	0.011	1.77	23	4.18	0.30	21.72	0.08	0.19	0.00	0.39	Calculated	339.14	337.63
Stor-01	Inlet-04	89.43	337.25	336.50	0.75	0.840	CIRCULAR	36.00	0.011	2.48	24	4.78	0.31	72.19	0.03	0.13	0.00	0.38	Calculated	337.63	338.77
Inlet-06	Inlet-05	74.44	340.00	339.25	0.75	1.010	CIRCULAR	24.00	0.011	0.56	22	3.38	0.37	26.84	0.02	0.10	0.00	0.20	Calculated	340.21	339.52
Inlet-05	Inlet-04	70.21	339.25	338.50	0.75	1.070	CIRCULAR	24.00	0.011	1.08	22	4.26	0.27	27.63	0.04	0.13	0.00	0.27	Calculated	339.52	338.77
Inlet-04	JB-01	34.88	336.50	336.25	0.25	0.720	CIRCULAR	36.00	0.011	4.53	22	5.35	0.11	66.73	0.07	0.18	0.00	0.53	Calculated	338.77	343.00
JB-01	Out-01	7.54	336.25	336.00	0.25	3.320	CIRCULAR	8.04	0.011	2.79	32	8.65	0.01	2.60	1.07	1.00	18.00	0.67	SURCHARGED	343.00	336.67

100Yr RATIONAL METHOD

Element ID	Area	Drainage Node ID	Impervious Area	Impervious Coefficient	Accumulated Precipitation	Total Runoff	Peak Runoff	Rainfall Intensity	Time of Concentration
	(acres)		(%)		(inches)	(inches)	(cfs)	(inches/hr)	(min)
DA-01	0.09	Stor-01	45.00	0.80	2.43	1.94	0.50	6.777	21.57
DA-02	0.34	Inlet-02	45.00	0.80	2.53	2.03	1.78	6.510	23.27
DA-03	0.06	Stor-01	45.00	0.80	2.41	1.92	0.31	6.872	21.02
DA-04	0.20	Inlet-04	45.00	0.80	2.48	1.99	1.06	6.624	22.52
DA-05	0.10	Inlet-05	45.00	0.80	2.44	1.96	0.52	6.769	21.62
DA-06	0.10	Inlet-06	45.00	0.80	2.44	1.95	0.56	6.755	21.70

25Yr RATIONAL METHOD

From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Total Drop	Average Slope	Pipe Shape	Pipe Diameter or Height	Manning's Roughness	Peak Flow	Time of Peak Flow Occurrence	Max Velocity	Travel Time	Design Capacity	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time	Max Surcharged	Max Depth	Reported Condition	HGL UPSTREAM	HGL DOWNSTREAM
		(ft)	(ft)	(ft)	(ft)	(%)		(inches)		(cfs)	(min)	(ft/sec)	(min)	(cfs)			(min)	(ft)				
Inlet-02	Stor-01	75.74	338.75	338.25	0.50	0.660	CIRCULAR	24.00	0.011	1.48	23	3.95	0.32	21.72	0.07	0.18	0.00	0.35	Calculated	339.11	337.60
Stor-01	Inlet-04	89.43	337.25	336.50	0.75	0.840	CIRCULAR	36.00	0.011	2.07	24	4.52	0.33	72.19	0.03	0.12	0.00	0.35	Calculated	337.60	338.75
Inlet-06	Inlet-05	74.44	340.00	339.25	0.75	1.010	CIRCULAR	24.00	0.011	0.47	22	3.24	0.38	26.84	0.02	0.09	0.00	0.18	Calculated	340.19	339.50
Inlet-05	Inlet-04	70.21	339.25	338.50	0.75	1.070	CIRCULAR	24.00	0.011	0.90	22	4.06	0.29	27.63	0.03	0.12	0.00	0.25	Calculated	339.50	338.75
Inlet-04	JB-01	34.88	336.50	336.25	0.25	0.720	CIRCULAR	36.00	0.011	3.78	22	5.11	0.11	66.73	0.06	0.16	0.00	0.48	Calculated	338.75	343.00
JB-01	Out-01	7.54	336.25	336.00	0.25	3.320	CIRCULAR	8.04	0.011	2.79	30	8.65	0.01	2.60	1.07	1.00	13.00	0.67	SURCHARGED	343.00	336.67

25Yr RATIONAL METHOD

Element ID	Area	Drainage Node ID	Impervious Area	Impervious Coefficient	Accumulated Precipitation	Total Runoff	Peak Runoff	Rainfall Intensity	Time of Concentration
	(acres)		(%)		(inches)	(inches)	(cfs)	(inches/hr)	(min)
DA-01	0.09	Stor-01	45.00	0.80	2.03	1.62	0.42	5.655	21.57
DA-02	0.34	Inlet-02	45.00	0.80	2.11	1.69	1.49	5.435	23.27
DA-03	0.06	Stor-01	45.00	0.80	2.01	1.61	0.26	5.733	21.02
DA-04	0.20	Inlet-04	45.00	0.80	2.07	1.66	0.88	5.529	22.52
DA-05	0.10	Inlet-05	45.00	0.80	2.04	1.63	0.44	5.648	21.62
DA-06	0.10	Inlet-06	45.00	0.80	2.04	1.63	0.47	5.637	21.70

10Yr RATIONAL METHOD

From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Total Drop	Average Slope	Pipe Shape	Pipe Diameter or Height	Manning's Roughness	Peak Flow	Time of Peak Flow Occurrence	Max Velocity	Travel Time	Design Capacity	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time	Max Surcharged	Max Depth	Reported Condition	HGL UPSTREAM	HGL DOWNSTREAM
		(ft)	(ft)	(ft)	(ft)	(%)		(inches)		(cfs)	(min)	(ft/sec)	(min)	(cfs)			(min)	(ft)				
Inlet-02	Stor-01	75.74	338.75	338.25	0.50	0.660	CIRCULAR	24.00	0.011	1.28	23	3.79	0.33	21.72	0.06	0.16	0.00	0.33	Calculated	339.08	337.57
Stor-01	Inlet-04	89.43	337.25	336.50	0.75	0.840	CIRCULAR	36.00	0.011	1.78	24	4.15	0.36	72.19	0.02	0.11	0.00	0.33	Calculated	337.57	338.73
Inlet-06	Inlet-05	74.44	340.00	339.25	0.75	1.010	CIRCULAR	24.00	0.011	0.40	22	3.11	0.40	26.84	0.02	0.09	0.00	0.17	Calculated	340.17	339.48
Inlet-05	Inlet-04	70.21	339.25	338.50	0.75	1.070	CIRCULAR	24.00	0.011	0.78	22	3.90	0.30	27.63	0.03	0.11	0.00	0.23	Calculated	339.48	338.73
Inlet-04	JB-01	34.88	336.50	336.25	0.25	0.720	CIRCULAR	36.00	0.011	3.25	22	4.92	0.12	66.73	0.05	0.15	0.00	0.45	Calculated	338.73	343.00
JB-01	Out-01	7.54	336.25	336.00	0.25	3.320	CIRCULAR	8.04	0.011	2.79	27	8.65	0.01	2.60	1.07	1.00	8.00	0.67	SURCHARGED	343.00	336.67

10Yr RATIONAL METHOD

Element ID	Area	Drainage Node ID	Impervious Area	Impervious Coefficient	Accumulated Precipitation	Total Runoff	Peak Runoff	Rainfall Intensity	Time of Concentration
	(acres)		(%)		(inches)	(inches)	(cfs)	(inches/hr)	(min)
DA-01	0.09	Stor-01	45.00	0.80	1.75	1.40	0.36	4.873	21.57
DA-02	0.34	Inlet-02	45.00	0.80	1.82	1.46	1.28	4.685	23.27
DA-03	0.06	Stor-01	45.00	0.80	1.73	1.38	0.22	4.939	21.02
DA-04	0.20	Inlet-04	45.00	0.80	1.79	1.43	0.76	4.765	22.52
DA-05	0.10	Inlet-05	45.00	0.80	1.76	1.41	0.38	4.867	21.62
DA-06	0.10	Inlet-06	45.00	0.80	1.75	1.40	0.40	4.858	21.70

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
ISSUED FOR PERMIT	12/29/2025	0
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

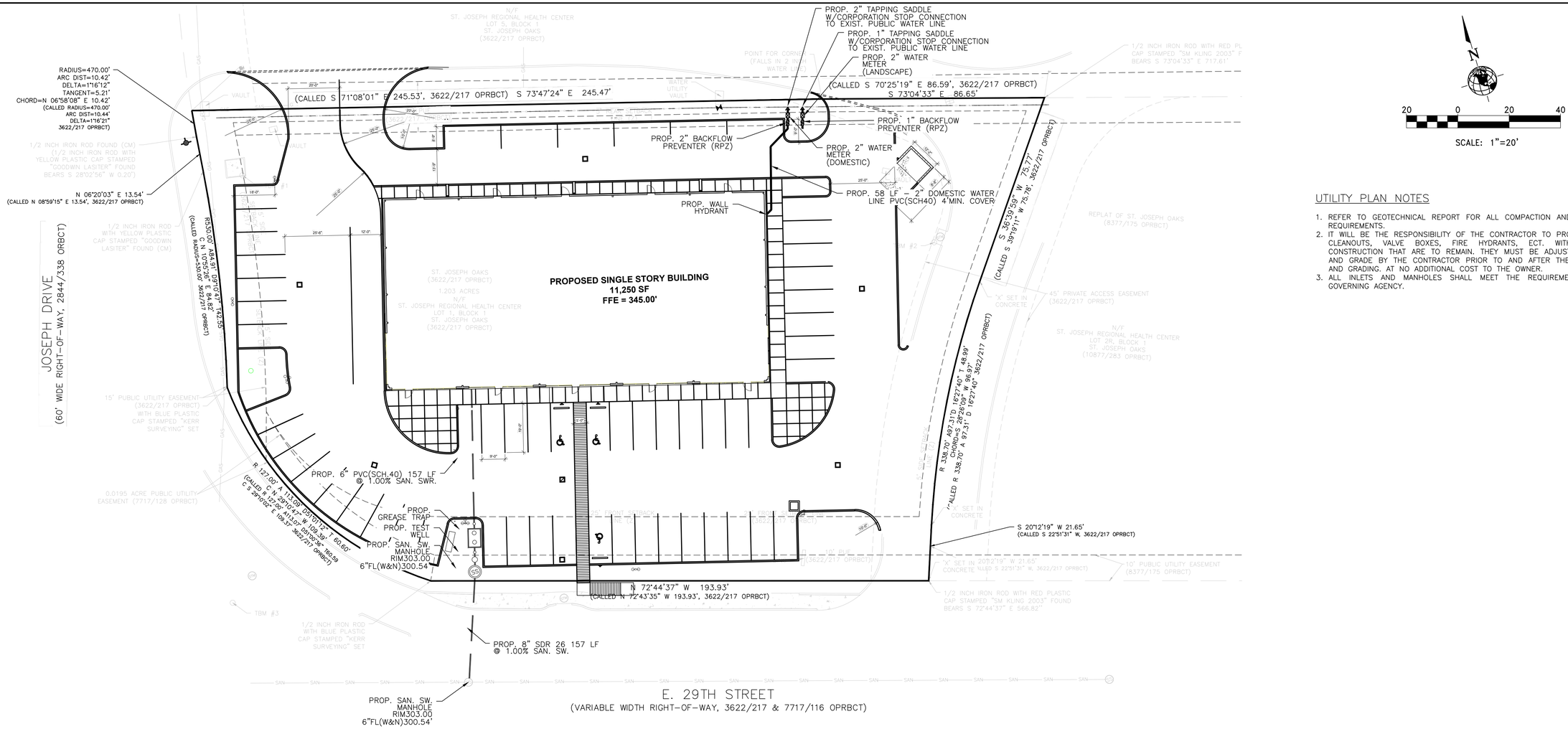
PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
DRAINAGE CALCULATIONS

SHEET NUMBER:
C-07

PROJECT #
25-865



UTILITY PLAN NOTES

1. REFER TO GEOTECHNICAL REPORT FOR ALL COMPACTION AND MOISTURE CONTENT REQUIREMENTS.
2. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ECT. WITHIN THE AREA OF CONSTRUCTION THAT ARE TO REMAIN. THEY MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PAVING AND GRADING. AT NO ADDITIONAL COST TO THE OWNER.
3. ALL INLETS AND MANHOLES SHALL MEET THE REQUIREMENTS OF THE LOCAL GOVERNING AGENCY.

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
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BRYAN, TX 77802

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HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

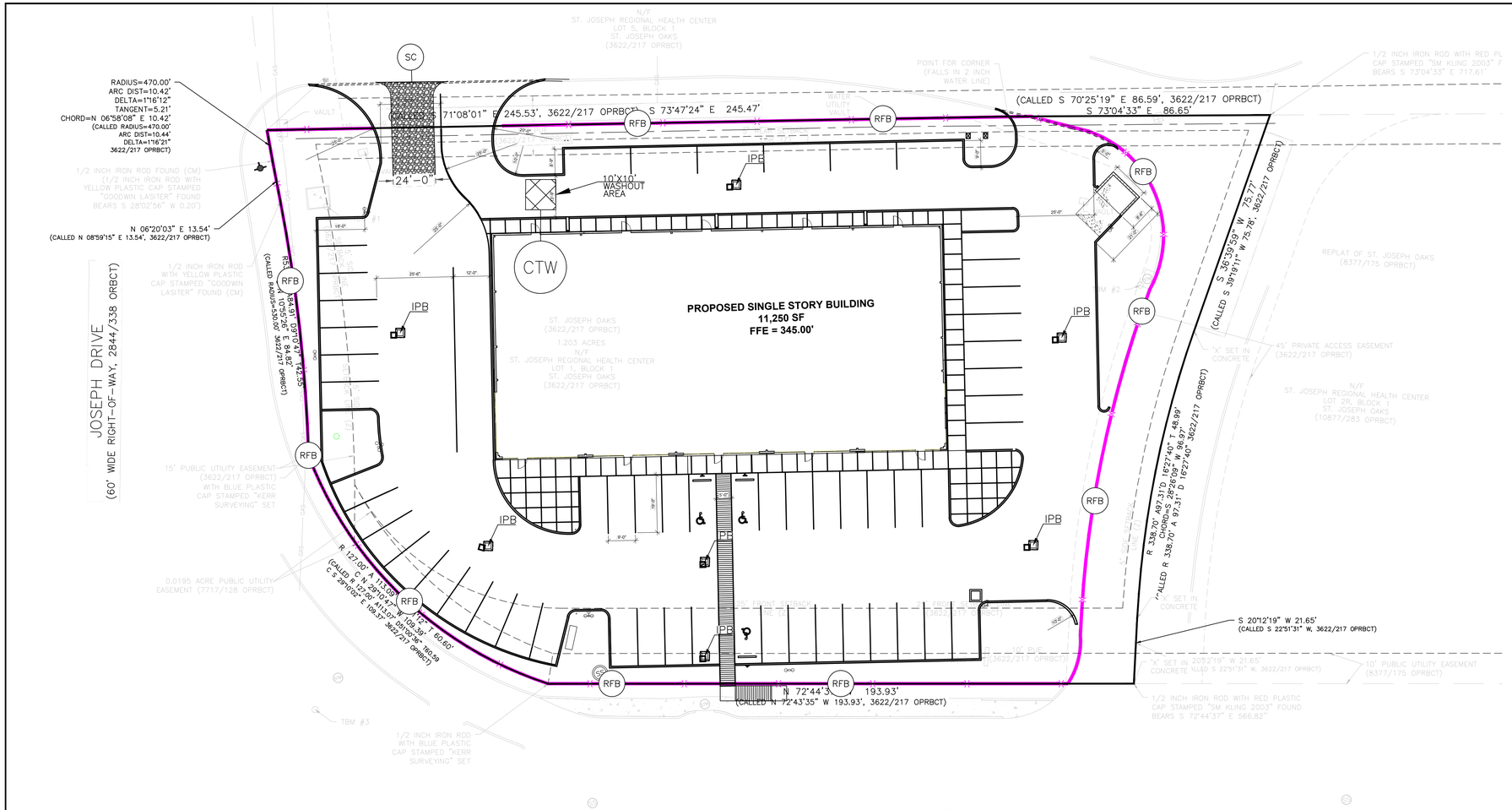
PLOT SCALE:

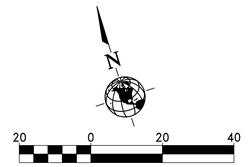
PROJECT INFORMATION:

DRAWING NAME:
UTILITY PLAN

SHEET NUMBER:
C-08

PROJECT #
25-865





SWPPP CONSTRUCTION NOTES

1. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATION SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPPP) PLANS TO KEEP SILT AND /OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.

2. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATED MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.

3. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREA.

4. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.

5. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.

- 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.

6. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND/ OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEPPER SHALL BE REPLACED BY CLOCK SODDING.

TRUCK/EQUIPMENT WASH OUT

1. CONTRACTOR(S) SHALL NOT WASH OUT CONCRETE TRUCKS OR EQUIPMENT INTO STREET DEAD ENDS, RIGHT-OF-WAYS, GUTTERS, STORM SEWER INLETS, WATERWAYS, CREEKS OR ANY LOCATION WHERE THE MATERIALS COULD REACH THE STORM SEWER (MS4) SYSTEM. ROCKED CUL-DE-SACS ARE NOT APPROVED WASH OUT AREAS. ALL DEPOSITED MATERIALS SHALL BE REMOVED AND PROPERLY DISPOSED OF AT THE COMPLETION OF WORK.

2. WASH OUT CONCRETE TRUCKS AND/OR EQUIPMENT ONLY IN A DESIGNATED, CONFINED WASHOUT AREA WHERE THE WATER WILL FLOW INTO A TEMPORARY PIT IN A DIRT AREA OR ONTO STOCKPILES OF AGGREGATE BASE OR SAND. THIS AREA MUST BE AN IDENTIFIED LOCATION.

3. COLLECT AND RETURN SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE TO A STOCKPILE OR DISPOSE OF THE WASTE IN A TRASH CONTAINER.

SWPPP LEGEND

RFB — REINFORCED FILTER FABRIC BARRIER.

SC — STABILIZED CONSTRUCTION EXIT.

INLET PROTECTION BARRIER (IPB).
STAGE I: PRIOR TO PAVING PLACEMENT
STAGE II: AFTER PAVING PLACEMENT

CTW — CONCRETE TRUCK WASHOUT AREA.

ABBOUD ENGINEERING, LLC
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ON 03/18/2026

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HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
SWPP PLAN

SHEET NUMBER:
C-09

PROJECT #
25-865

NOTE:

TEMPORARY DEVICES AROUND STORMS DRAINS ARE USED TO DETAIN AND/OR FILTER SEDIMENT-LADEN RUNOFF. THE PROTECTION ALLOWS SEDIMENT TO SETTLE PRIOR TO DISCHARGE INTO A STORM DRAIN INLET OR CATCH BASIN.

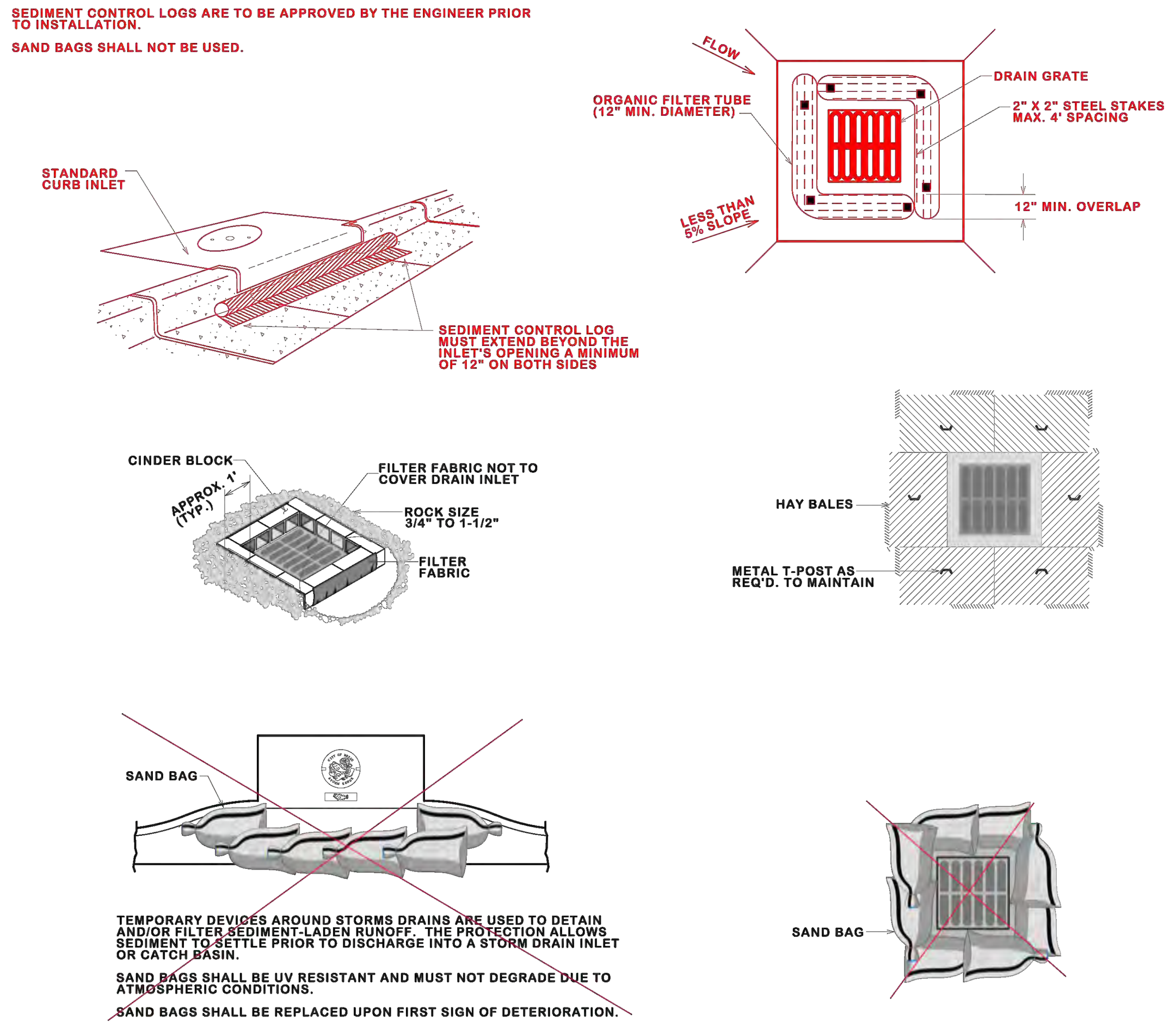
SEDIMENT CONTROL LOGS ARE TO BE USED ON EXISTING CURB INLETS WHICH ARE LOCATED ADJACENT TO OCCUPIED TRAVEL LANES WITHIN THE DISTURBED LIMITS OF A PROJECT AS SHOWN ON THE PLANS.

SEDIMENT CONTROL LOGS ARE TO BE INSTALLED AND MAINTAINED PER THE MANUFACTURER'S INSTRUCTIONS AND PROPERLY WEIGHTED IN ORDER TO REMAIN SECURELY IN PLACE. INSTALLATION MUST MEET THE CONSTRUCTION INSPECTOR'S APPROVAL.

SEDIMENT CONTROL LOGS ARE TO BE CONSTRUCTED OF WOOD FIBERS, SYNTHETIC FIBERS OR OTHER SUITABLE MATERIAL SUFFICIENT TO RETAIN ITS SHAPE AND ENCASED IN A UV STABILIZED FILTERING MEDIA OF SUFFICIENT STRENGTH TO RETAIN SEDIMENT.

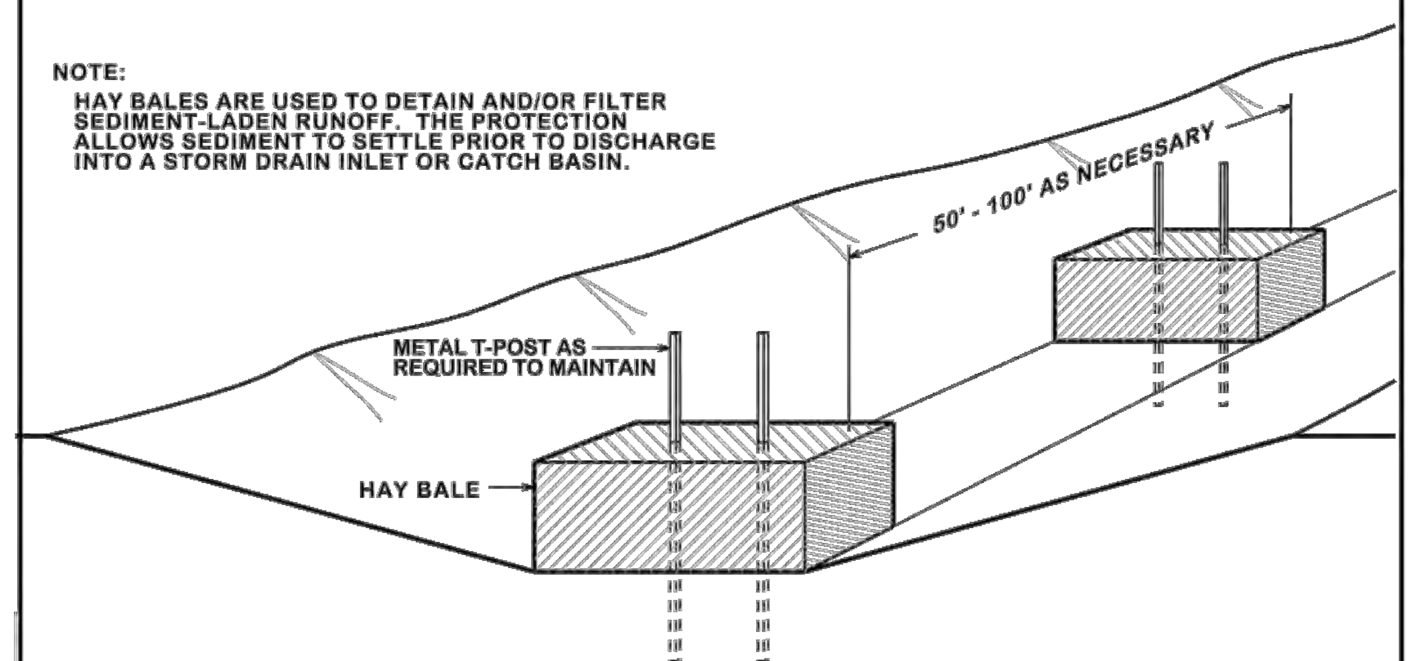
SEDIMENT CONTROL LOGS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

SAND BAGS SHALL NOT BE USED.

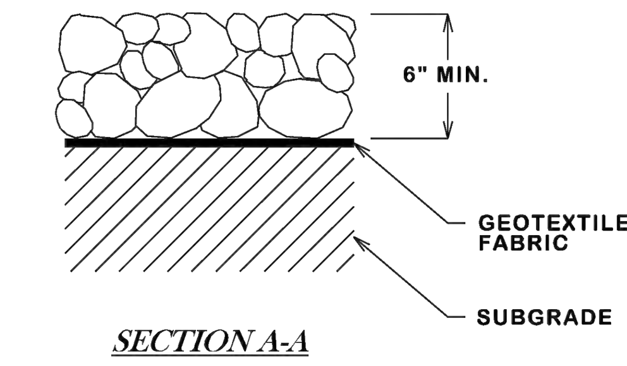


CITY OF BRYAN *The Good Life, Texas Style.*	STORM DRAIN INLET PROTECTION			CITY OF COLLEGE STATION
	DATE DECEMBER 2020	B/CS UNIFIED STANDARD DETAIL	DETAIL NO. SWPP1-00	

NOTE:
HAY BALES ARE USED TO DETAIN AND/OR FILTER SEDIMENT-LADEN RUNOFF. THE PROTECTION ALLOWS SEDIMENT TO SETTLE PRIOR TO DISCHARGE INTO A STORM DRAIN INLET OR CATCH BASIN.

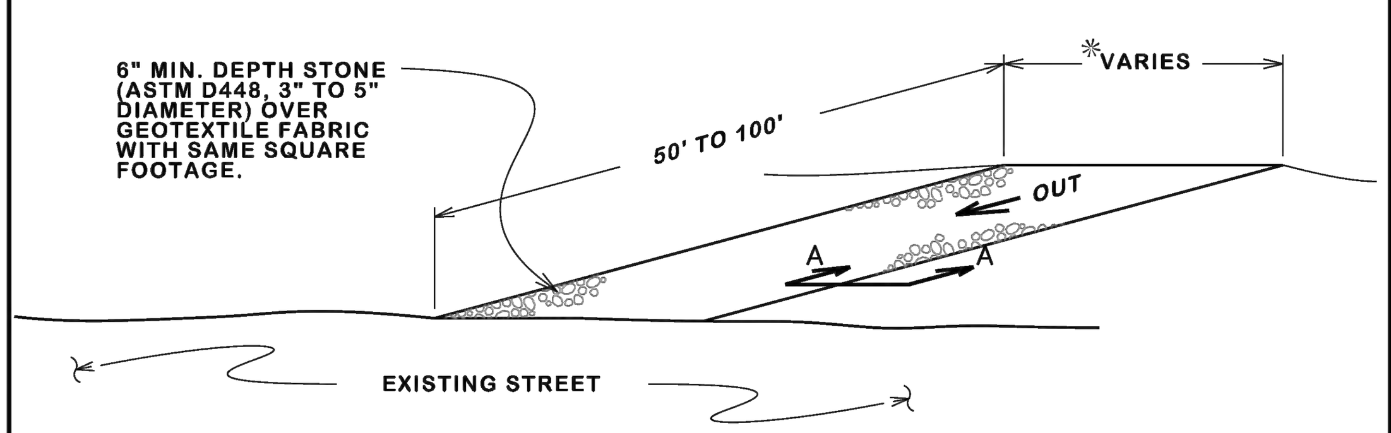


CITY OF BRYAN *The Good Life, Texas Style.*	EROSION CONTROL ALONG DITCH			CITY OF COLLEGE STATION
	DATE AUG. 2012	B/CS UNIFIED STANDARD DETAIL	DETAIL NO. SWPP1-01	



NOTE:
DRESS WITH ADDITIONAL STONE AS NEEDED. STONE IS TO BE MAINTAINED SO AS TO PREVENT CONSTRUCTION TRAFFIC FROM TRACKING MUD ONTO ADJACENT PUBLIC STREETS.

* MINIMUM 12' SHALL BE FULL WIDTH OF SITE ENTRANCE



CITY OF BRYAN *The Good Life, Texas Style.*	CONSTRUCTION EXIT SLIT CONTROL			CITY OF COLLEGE STATION
	DATE AUG. 2012	B/CS UNIFIED STANDARD DETAIL	DETAIL NO. SWPP1-02	

NOTE:

POST A SIGN READING "CONCRETE WASH OUT PIT" NEXT TO THE PIT.

VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASH OUT THEIR TRUCKS IN THE PIT AND NO WHERE ELSE.

NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS IS ALLOWED.

EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.

ON-SITE TEMPORARY CONCRETE WASHOUT AREAS WILL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES AS DETERMINED IN THE FIELD.

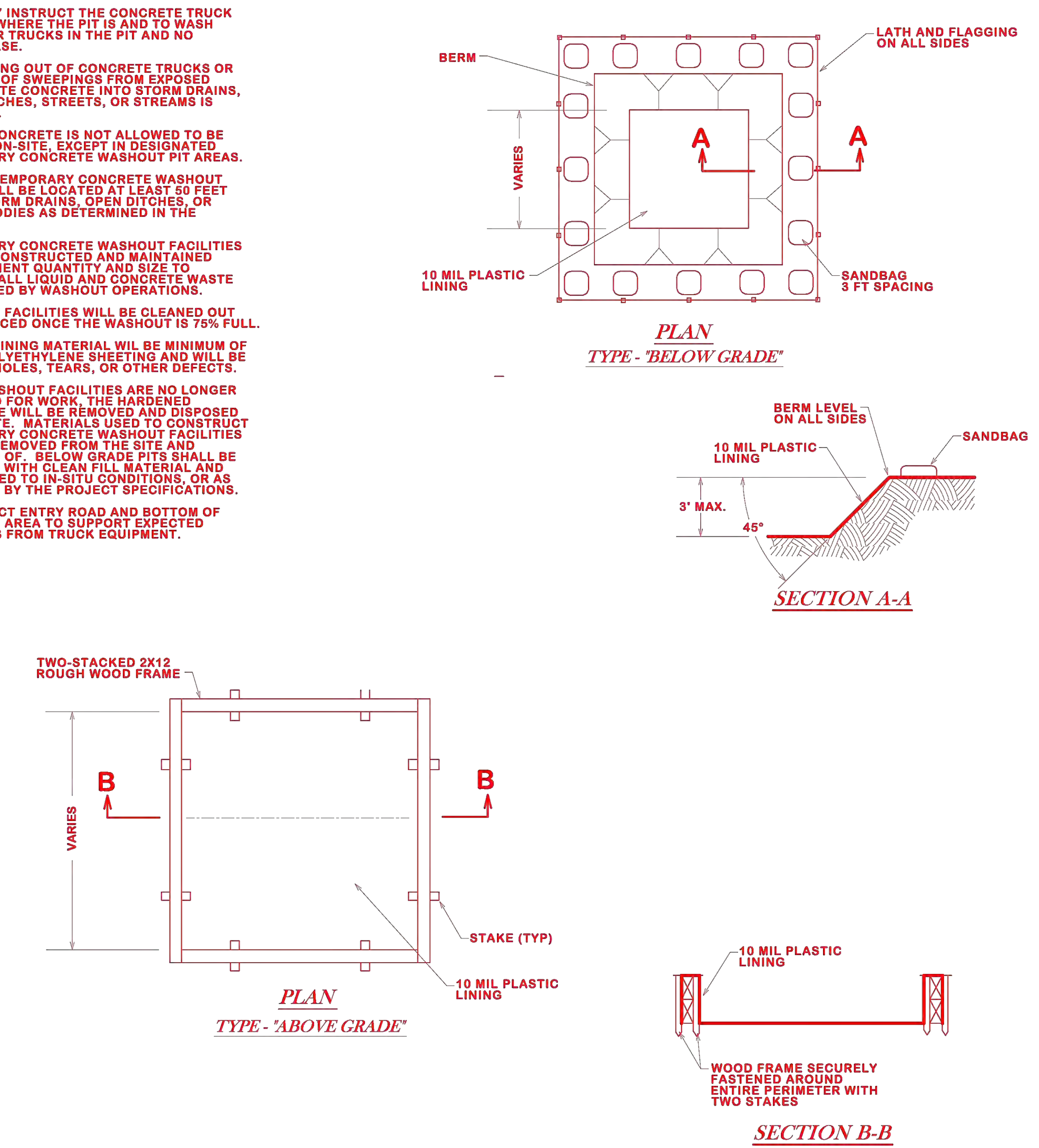
TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

WASHOUT FACILITIES WILL BE CLEANED OUT OR REPLACED ONCE THE WASHOUT IS 75% FULL.

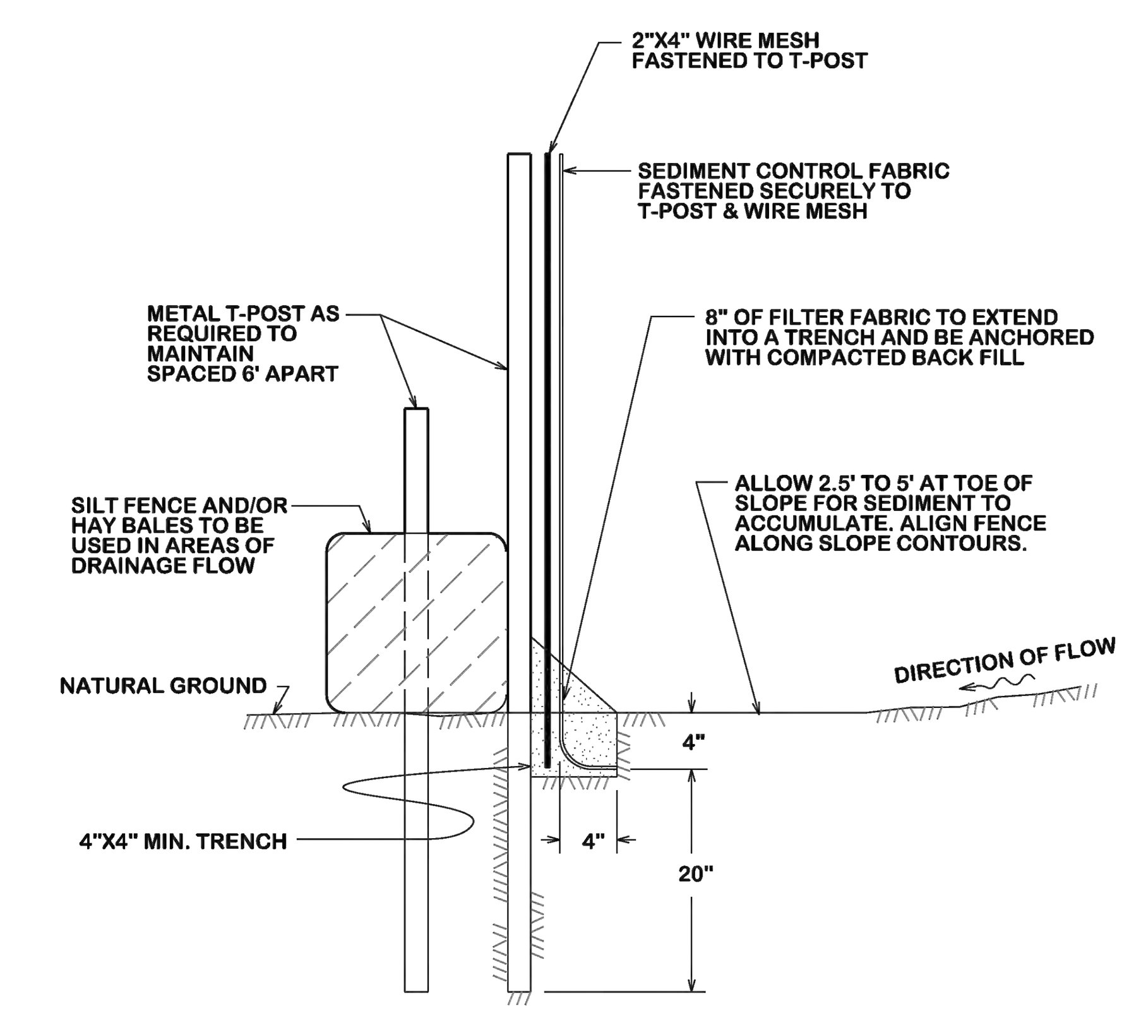
PLASTIC LINING MATERIAL WIL BE MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND WILL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS.

WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE WILL BE REMOVED AND DISPOSED OF OFFSITE. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF. BELOW GRADE PITS SHALL BE BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.

CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCK EQUIPMENT.



CITY OF BRYAN *The Good Life, Texas Style.*	CONCRETE WASHOUT			CITY OF COLLEGE STATION
	DATE DECEMBER 2020	B/CS UNIFIED STANDARD DETAIL	DETAIL NO. SWPP1-04	



CITY OF BRYAN *The Good Life, Texas Style.*	SILT FENCE ASSEMBLY			CITY OF COLLEGE STATION
	DATE AUG. 2012	B/CS UNIFIED STANDARD DETAIL	DETAIL NO. SWPP1-03	

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
ISSUED FOR PERMIT	12/29/2025	0
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

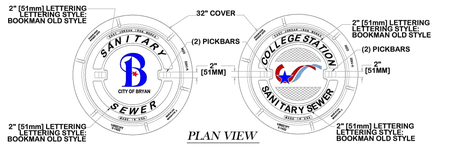
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY: JSA	CLIENT APPROVAL:
PLOT SCALE:	
PROJECT INFORMATION:	

DRAWING NAME:
SWPPP DETAILS

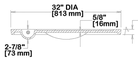
SHEET NUMBER:
C-10

PROJECT #
25-865

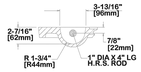


PLAN VIEW

BOTTOM VIEW OF COVER

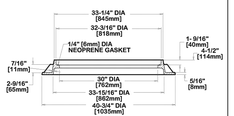


COVER SECTION

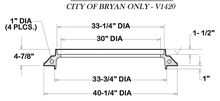


PICKBAR DETAIL

NOTE:
CITY SPECIFIC SANITARY SEWER LIDS TO BE USED FOR PUBLIC SEWER SYSTEMS ONLY. NOT TO BE USED ON PRIVATE SEWER SYSTEMS.



FRAME SECTION
CITY OF BRYAN ONLY - V-1420



DUCTILE IRON V-1432

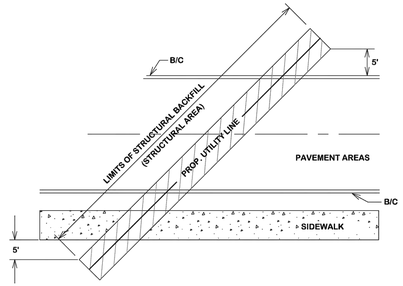
FRAME SECTION
CITY OF COLLEGE STATION ONLY
MACHINED SURFACE

CITY OF BRYAN — The Good Life, Texas Style.

STANDARD MANHOLE RING AND COVER		
DATE: JUL 2022	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.: S4-01

CITY OF COLLEGE STATION

STRUCTURAL BACKFILL AREA INCLUDES ALL PAVED AREAS (SIDEWALKS, STREETS, ALLEYS, DRIVEWAYS,AND PARKING AREAS) AND SHALL EXTEND 5' BEYOND THE CURB LINE. STRUCTURAL BACKFILL SHALL BE CEMENT STABILIZED (OPTION NO. 2 IN S1-01) OR EXCAVATED SOIL COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 WITHIN OPTIMUM TO +4% WET OF OPTIMUM (OPTION NO. 1 IN S1-01)



CITY OF BRYAN — The Good Life, Texas Style.

STRUCTURAL BACKFILL AREA FOR SEWER MAIN		
DATE: AUG. 2012	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.: S5-00

CITY OF COLLEGE STATION

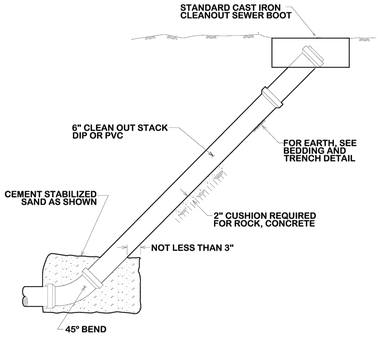
GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ESTABLISHMENT OF VEGETATION MAY BE A WARRANTY ITEM.



CITY OF BRYAN — The Good Life, Texas Style.

STANDARD CLEAN OUT FOR MAIN LINE		
DATE: DEC 2020	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.: S5-01

CITY OF COLLEGE STATION

GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

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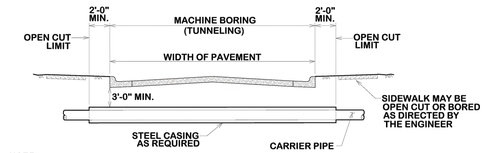


NOTE:
1. FOR MORE INFORMATION ON WATER AND SEWER LINE CROSSING SEE CITY STANDARD SPECIFICATION FOR WATER AND SEWER LINE CONSTRUCTION.
2. STEEL CASING SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
3. DRY BORING PREFERRED, WET BORING ALLOWED ONLY WHEN APPROVED BY THE CITY ENGINEER.

CITY OF BRYAN — The Good Life, Texas Style.

TYPICAL URBAN CITY STREET CROSSING		
DATE: DEC 2020	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.: S5-04

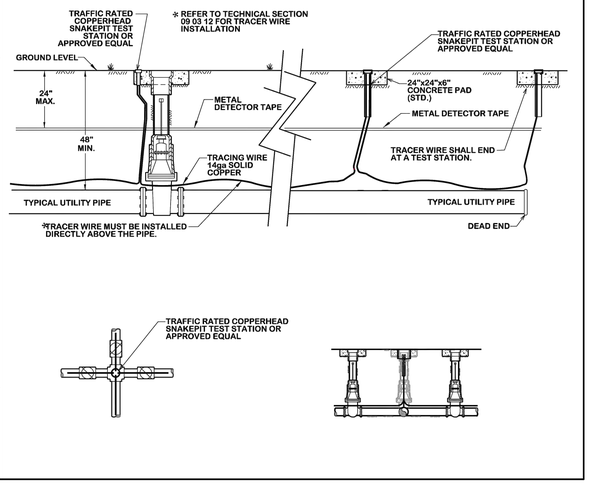
CITY OF COLLEGE STATION

CITY OF BRYAN — The Good Life, Texas Style.

DATE: AUG. 2012 | B/CS UNIFIED STANDARD DETAIL | DET. NO.: W1-03

UTILITY LOCATION MATERIALS

CITY OF COLLEGE STATION



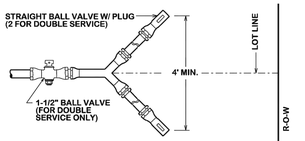
CITY OF BRYAN — The Good Life, Texas Style.

DATE: APR 2024 | B/CS UNIFIED STANDARD DETAIL | DET. NO.: W2-01

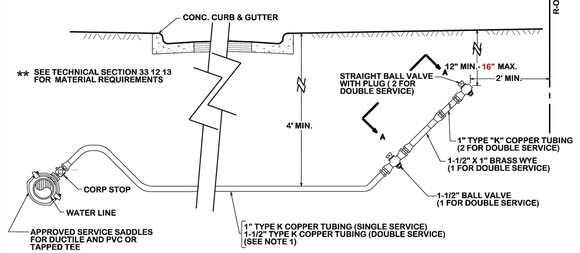
NEW WATER SERVICE (SHORT AND LONG)

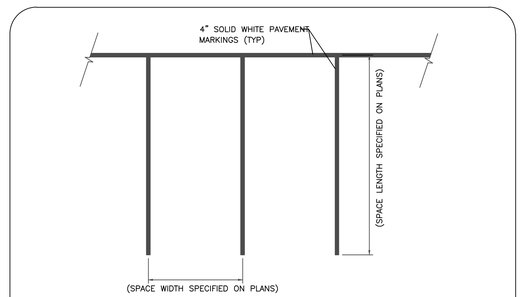
CITY OF COLLEGE STATION

NOTES:
1. NO SPLICES IN COPPER TUBING WILL BE ALLOWED BETWEEN THE SERVICE SADDLE AND THE CURB STOP FOR SINGLE SERVICE OR BETWEEN THE SERVICE SADDLE AND THE WYE FOR DOUBLE SERVICE.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESSURE TEST LINE IMMEDIATELY AFTER THE STREET CROSSINGS HAVE BEEN INSTALLED.
3. MARK EACH SERVICE END WITH METAL "T" POST PAINTED BLUE.
4. MATERIAL USED SHALL BE AS SPECIFIED OR AN APPROVED EQUAL.
5. ALL CONNECTIONS TO BE COMPRESSION TYPE.
6. ALL SERVICE WYES & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.
7. METERS AND VALVE BOXES SHALL BE PLACED BY THE CITY UPON PAYMENT OF FEE.
8. LOT CORNERS SHALL BE MARKED WITH A LATH UNDER THE SUPERVISION F A RPLS UPON COMPLETION OF CONSTRUCTION.



VIEW A-A
DOUBLE SERVICE





TYPICAL PARKING SPACE DIMENSIONING
SCALE: N.T.S.

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
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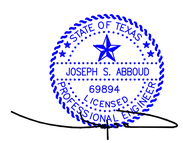
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
CIVIL DETAILS

SHEET NUMBER:
C-11

PROJECT #
25-865

GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

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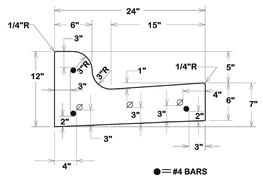
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ALL TRAFFIC SIGNALS AND APPURTENANCES, AND ALL PAVEMENT MARKINGS AND MARKERS SHALL BE IN ACCORDANCE WITH TXDOT STANDARDS

REFER TO SPEC 31 17 23.23 (PAVEMENT MARKINGS) FOR ADDITIONAL LOCAL REQUIREMENTS.

NOTE:
TYPE "G" EXPANSION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, P.T.'S AND P.C.'S. TYPE "B" CONTRACTION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' APART.

28-DAY CONCRETE STRENGTH=3500 psi.



CITY OF BRYAN *The Good Life, Texas Style.*

TYPICAL COMBINED CURBS & GUTTER SECTION

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
FEB. 2021		ST1-01

CITY OF COLLEGE STATION

GENERAL NOTES:

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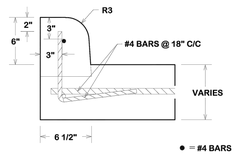
REFER TO SPEC 31 17 23.23 (PAVEMENT MARKINGS) FOR ADDITIONAL LOCAL REQUIREMENTS.

28-DAY CONCRETE STRENGTH=3500 psi.



CITY OF BRYAN *The Good Life, Texas Style.*

DOWELLED IN CURBS DETAIL

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
FEB. 2021		ST1-02

CITY OF COLLEGE STATION

GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

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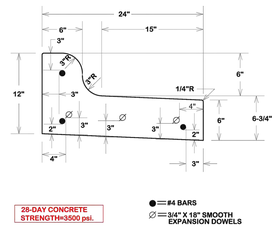


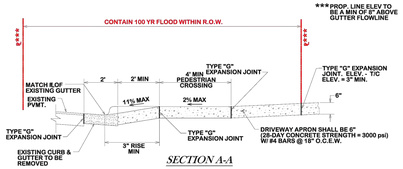
28-DAY CONCRETE STRENGTH=3500 psi.

CITY OF BRYAN *The Good Life, Texas Style.*

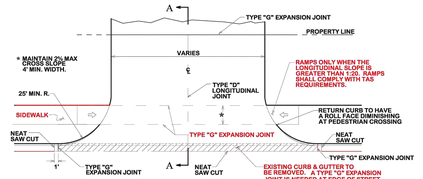
TYPICAL COMBINED SPILL CURB

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
FEB. 2021		ST1-04

CITY OF COLLEGE STATION



SECTION A-A

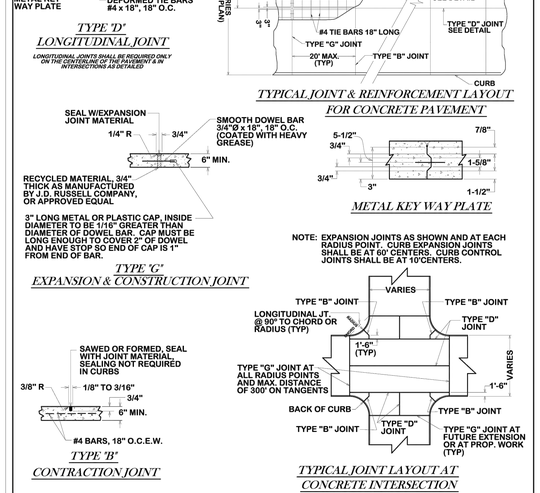


CITY OF BRYAN *The Good Life, Texas Style.*

COMMERCIAL DRIVEWAY

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
FEB. 2021		ST2-03

CITY OF COLLEGE STATION



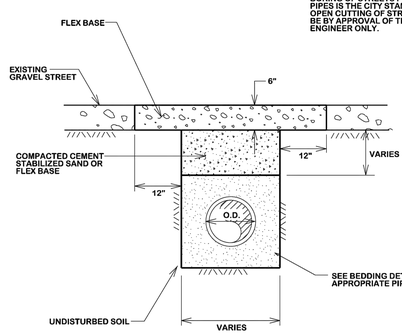
CITY OF BRYAN *The Good Life, Texas Style.*

CONCRETE PAVEMENT JOINT LAYOUT

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
FEB. 2018		ST3-00

CITY OF COLLEGE STATION

NOTE:
BORING OF STREETS FOR UTILITY PIPES IS THE CITY STANDARD. OPEN CUTTING OF STREETS SHALL BE BY APPROVAL OF THE CITY ENGINEER ONLY.

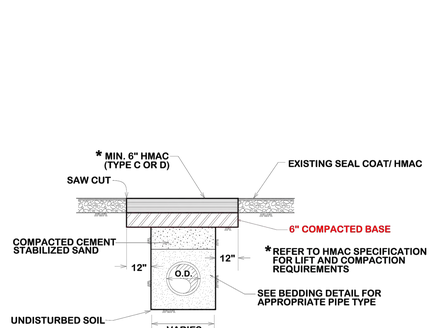


CITY OF BRYAN *The Good Life, Texas Style.*

OPEN CUT GRAVEL STREET

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
AUG. 2012		ST4-00

CITY OF COLLEGE STATION



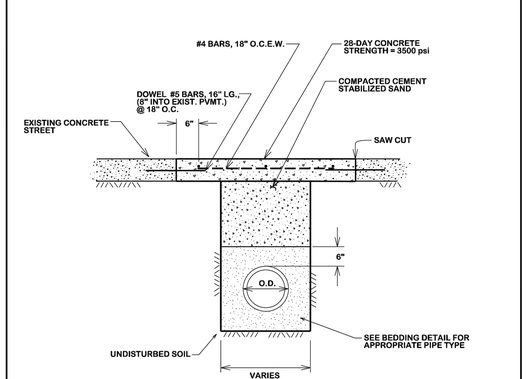
BORING OF STREETS FOR UTILITY PIPE IS THE CITY STANDARD. OPEN CUTTING OF STREETS SHALL BE BY APPROVAL OF THE CITY ENGINEER ONLY.

CITY OF BRYAN *The Good Life, Texas Style.*

OPEN CUT SEAL COAT/ OVERLAY STREET

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
FEB. 2021		ST4-01

CITY OF COLLEGE STATION



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CITY OF BRYAN *The Good Life, Texas Style.*

OPEN CUT CONCRETE STREET

DATE	B/CS UNIFIED STANDARD DETAIL	DETAIL NO.
AUG. 2012		ST4-02

CITY OF COLLEGE STATION

ABBOUD ENGINEERING, LLC

13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100

TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
ISSUED FOR PERMIT	12/29/2025	0
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894
ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY:	CLIENT APPROVAL:
JSA	

PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:

CIVIL DETAILS

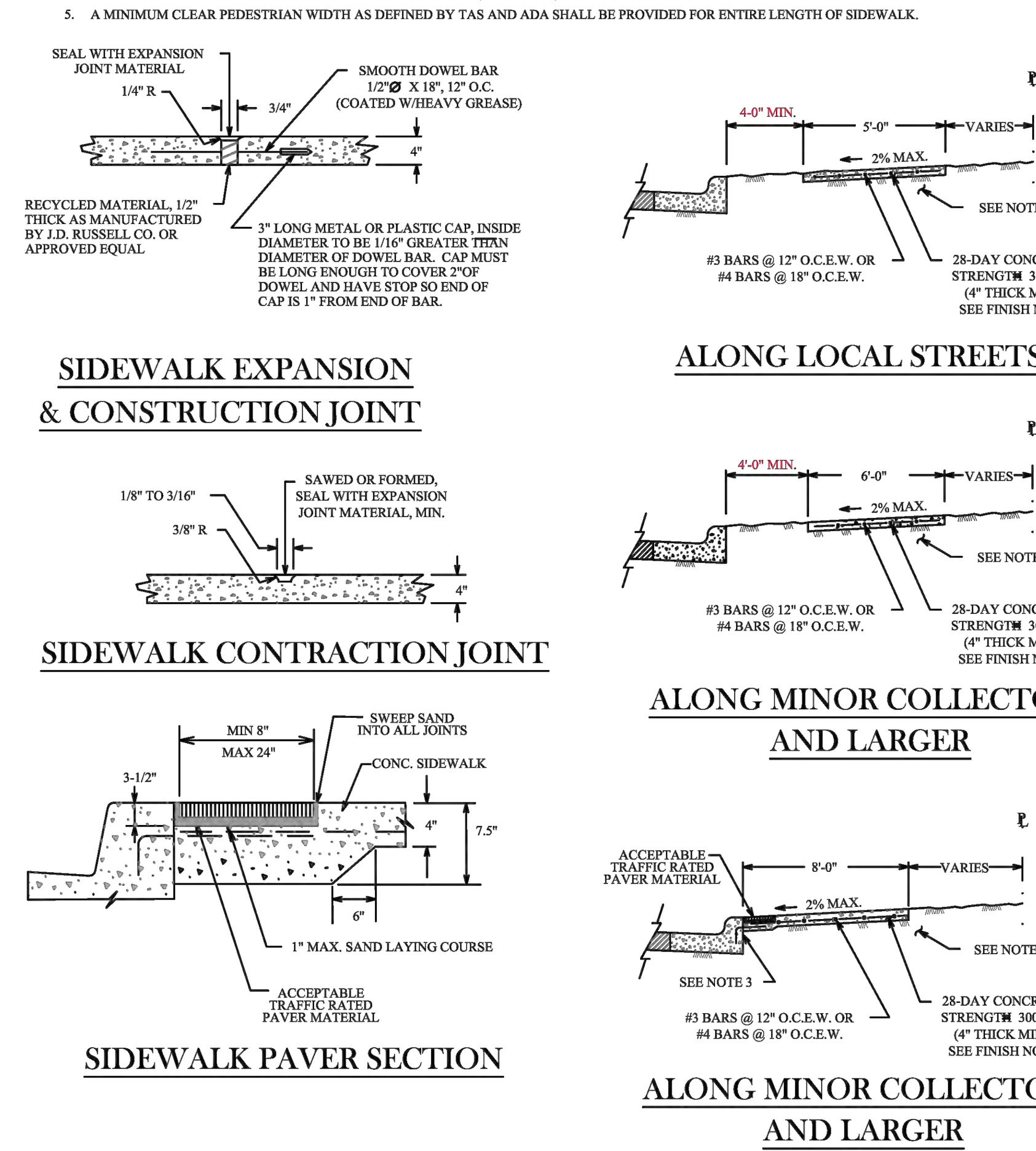
SHEET NUMBER:

C-12

PROJECT #

25-865

NOTES:
1. SIDEWALK PLACEMENT SHALL BE IN ACCORDANCE WITH B/CS UNIFIED DESIGN GUIDELINES.
2. FINISH: LIGHT BROOM FINISH. JOINTS TO BE TOOLED 1" DEEP AT AN INTERVAL EQUAL TO THE SIDEWALK WIDTH. EXPANSION JOINTS @ 40' O.C.,CONTRACTION JOINTS @ 4' O.C.
3. DOWEL IN AND TIE TO ANY CONCRETE STRUCTURE ADJACENT TO SIDEWALK (DRIVEWAY, INLET BOX, CURB, JUNCTION BOX, ETC.) WITH #3 x 12" BARS @ 12" O.C. OR #4 x 12" BARS @ 18" O.C.
4. COMPACTION: COMPACTED SUBGRADE MATERIAL COMPACTED TO A DENSITY AT LEAST 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY PROCTOR COMPACTION TEST ASTM D698 (STANDARD) AND SHALL BE 0-4% WET OF THE OPTIMUM MOISTURE CONTENT
5. A MINIMUM CLEAR PEDESTRIAN WIDTH AS DEFINED BY TAS AND ADA SHALL BE PROVIDED FOR ENTIRE LENGTH OF SIDEWALK.



CITY OF BRYAN
The Good Life, Texas Style.

CONCRETE SIDEWALK

DATE		DETAIL NO.
DECEMBER 2020	B/CS UNIFIED STANDARD DETAIL	SW1-02

CITY OF COLLEGE STATION

CROSSWALKS GENERAL NOTES

1. CROSSWALK MARKINGS ARE IMPORTANT TRAFFIC CONTROL DEVICES AT CONTROLLED INTERSECTIONS. THESE DEVICES IDENTIFY THE APPROPRIATE LOCATION FOR PEDESTRIANS TO CROSS THE INTERSECTION AS WELL AS INFORMING DRIVERS WHERE PEDESTRIANS MAYBE PRESENT. NOT ALL LOCATIONS NEED THE CROSSWALKS MARKED; HOWEVER, TYPICALLY COLLECTOR AND ARTERIAL STREETS DO. AS STATED IN THE TMUTCD, AN ENGINEERING STUDY SHOULD BE PERFORMED BEFORE CROSSWALKS ARE INSTALLED AT LOCATIONS OTHER THAN CONTROLLED INTERSECTIONS.
2. THE CITY OF BRYAN'S PREFERENCE FOR MARKING CROSSWALKS IS THE LONGITUDINAL (OR "LADDER" STYLE). THE CITY OF COLLEGE STATION'S PREFERENCE IS THE TYPICAL "TRANSVERSE" STYLE; HOWEVER, IN THE NORTHGATE AREA, ADJACENT TO SCHOOL OR SCHOOL ZONES, AND OTHER HIGH PEDESTRIAN CROSSINGS, THE LONGITUDINAL (OR "LADDER" STYLE) IS PREFERRED. DEVIATION FROM THESE PREFERENCES WILL BE ALLOWED ONLY WITH THE APPROVAL OF THE CITY ENGINEER.
3. THE LONGITUDINAL "LADDER" STYLE MARKING SHALL BE 24" WIDE AND 8 FEET IN LENGTH, SPACED 48-INCHES APART. CONSIST OF 12-INCH WIDE, WHITE LONGITUDINAL LINES SPACED 24-INCHES APART. LONGITUDINALLY, THESE MARKINGS SHALL EXTEND 8 FEET. THE TRANSVERSE MARKINGS SHALL CONSIST OF TWO 12-INCH WIDE LINES SEPARATED BY 6 FEET OF UNMARKED PAVEMENT. ALL CROSSWALK PAVEMENT MARKINGS SHALL ALWAYS MEET TxDOT'S SPECIFICATION FOR TYPE I MARKINGS UNLESS OTHERWISE BE THERMOPLASTIC, UNLESS A DIFFERENT MATERIAL IS APPROVED BY THE CITY ENGINEER.
4. ADDITIONAL INFORMATION ABOUT CROSSWALK MARKINGS CAN BE FOUND IN THE TMUTCD.
5. CROSSWALKS WITH BRICK PAVERS, STAMPED ASPHALT, STAMPED CONCRETE, ETC., SHALL ALSO REQUIRE RETRO-REFLECTIVE, THERMOPLASTIC TRANSVERSE STRIPING.

CITY OF BRYAN
The Good Life, Texas Style.

CROSSWALK GENERAL NOTES

DATE		DETAIL NO.
DECEMBER 2020	B/CS UNIFIED STANDARD DETAIL	SW2-GN01

CITY OF COLLEGE STATION

PEDESTRIAN FACILITIES GENERAL NOTES

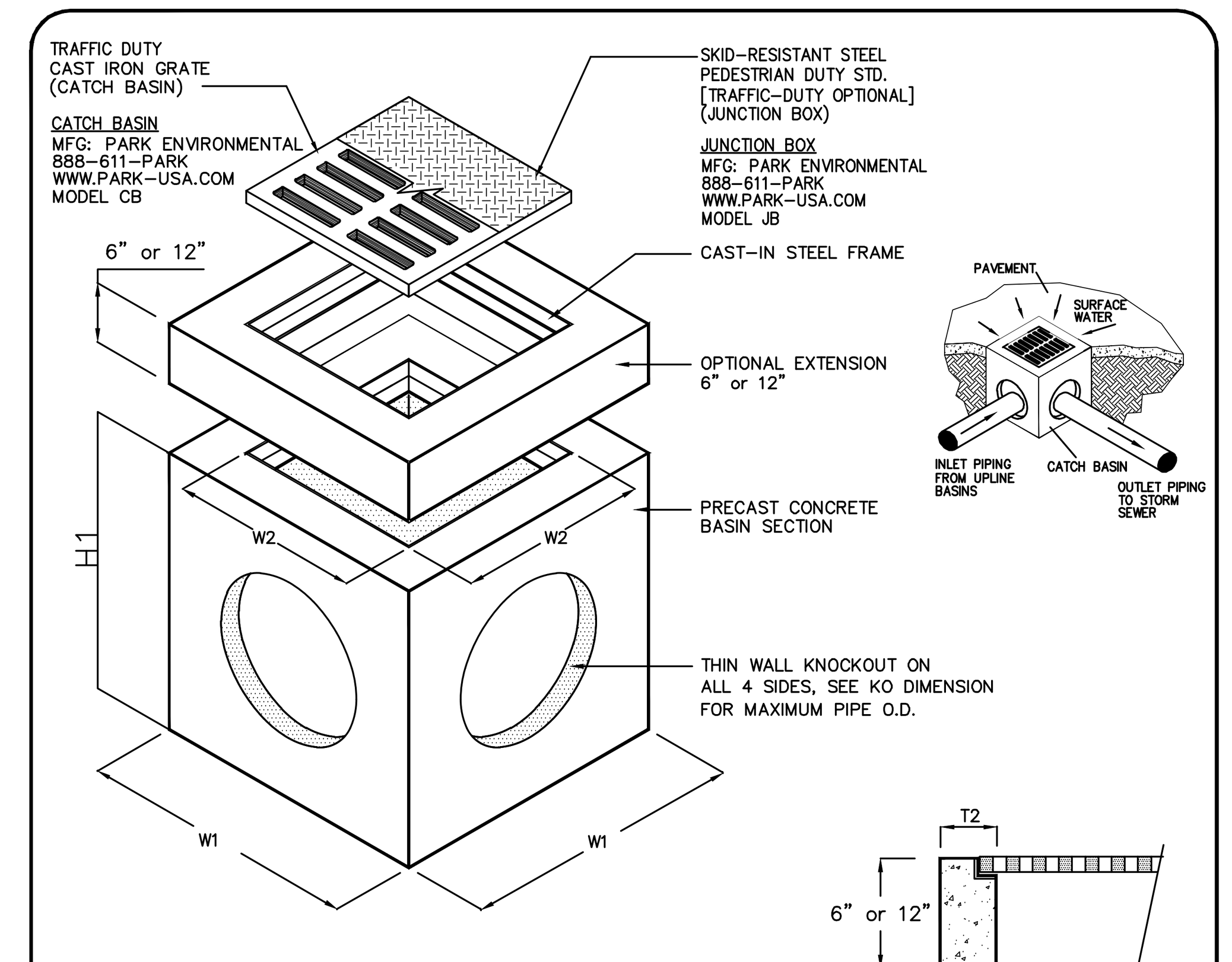
1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.
2. LANDINGS SHALL BE A 5' X 5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
3. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 4' X 4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
4. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP IS 2%.
5. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, EITHER BECAUSE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR BECAUSE THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED. OTHERWISE, PROVIDE FLARED SIDES.
6. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT RELECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC 68.102.
7. TO SERVE AS A PEDESTRIAN REFUGE AREA, THE MEDIAN SHOULD BE A MINIMUM OF 5' WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
8. CROSSWALK DIMENSIONS, CROSSWALK MARKINGS AND STOP BAR LOCATIONS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS. AT INTERSECTIONS WHERE CROSSWALK MARKINGS ARE NOT REQUIRED, CURB RAMPS SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE ENGINEER.
9. EXISTING FEATURES THAT COMPLY WITH TAS MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
10. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. PROVIDE CURB RAMPS WHEREVER ON ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
11. SEPARATE CURB RAMP AND LANDINGS FROM ADJACENT SIDEWALK AND ANY OTHER ELEMENTS WITH PREMOLD OR BOARD JOINT OF 3/4" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
12. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE STREET.
13. FLARE SLOPE SHALL NOT EXCEED 10% MEASURED ALONG CURB LINE.

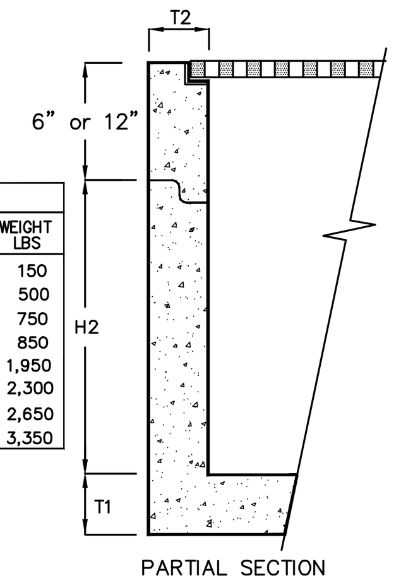
CITY OF BRYAN
The Good Life, Texas Style.

PEDESTRIAN FACILITIES GENERAL NOTES

DATE		DETAIL NO.
DECEMBER 2020	B/CS UNIFIED STANDARD DETAIL	SW2-GN02

CITY OF COLLEGE STATION





MODEL #		DIMENSIONS								
CATCH BASIN	JUNCTION BOX[2]	W1	W2	H1	H2	T1	T2	KO	GRATE SIZE	WEIGHT LBS
CB-12[1]	JB-12	15"	10"	21"	18"	3"	2i"	10"	12"x12"x1"	150
CB-14	JB-14	20"	14"	28"	24"	4"	3"	12"	14"x14"x1i"	500
CB-18	JB-18	24"	16"	34"	30"	4"	4"	15"	18"x18"x1i"	750
CB-20	JB-20	26"	18"	34"	30"	4"	4"	17"	20"x20"x1i"	850
CB-24	JB-24	32"	22"	41"	36"	5"	5"	22"	24"x24"x2"	1,950
CB-27	JB-27	37"	25"	42"	36"	6"	6"	24"	27"x27"x2"	2,300
CB-30	JB-30	42"	30"	42"	36"	6"	6"	30"	32"x32"x2"	2,650
CB-36	JB-36	48"	36"	42"	36"	6"	6"	32"	38"x38"x2"	3,350

1. CB12 CATCHBASIN IS RATED FOR PEDESTRIAN LOADING. ALL OTHERS ARE TRAFFIC DUTY.
2. ALL JUNCTION BOXES ARE STANDARD PEDESTRIAN DUTY OR OPTIONAL TRAFFIC DUTY.

NPCA CERTIFIED PLANT ASTM C-913 ASPE MEMBER

SPECIFICATIONS

CONCRETE : Class II concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 35.

CATCH BASIN MODEL CB – 12" THRU 36"
JUNCTION BOX MODEL JB – 12" THRU 36"

SCALE NONE	DWG. NO. CBJB36	REV. A
DATE 2010		

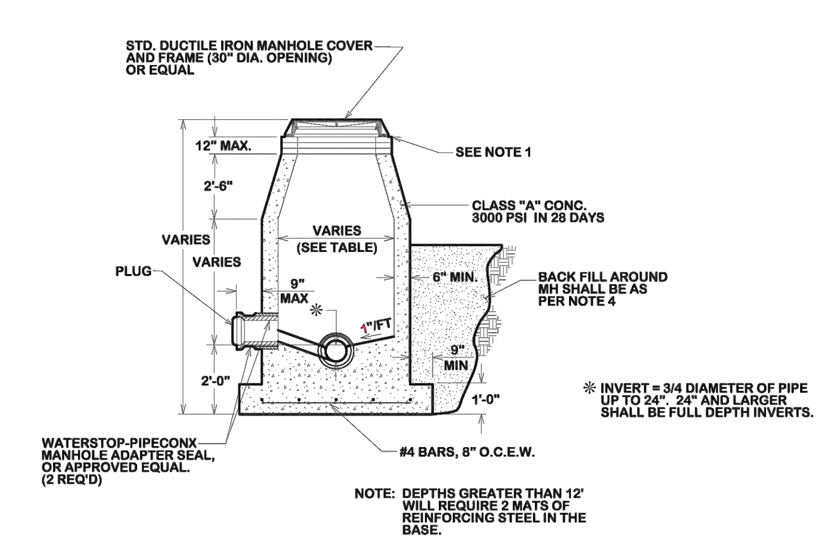
NOTES:
1. A MAX. OF 4 AND A MIN. OF 2 THROAT RINGS SHALL BE USED AT EACH MANHOLE IN NEW OR EXISTING RIGHT-OF-WAY.
2. USE NP 1 SEALANT OR APPROVED EQUAL BETWEEN RING/COVER, ADJUSTMENT AND CHIMNEY OR CORBEL/CONE SECTION.
3. MANHOLE BASE THICKNESS AND FOUNDATION FROM FLOWLINE TO RIM AS FOLLOWS:

MANHOLE DEPTH (FT.)	BASE THICKNESS
0 - 12	8"
12 AND OVER	12"

4. MANHOLE LOCATION AND COMPACTION AS FOLLOWS:

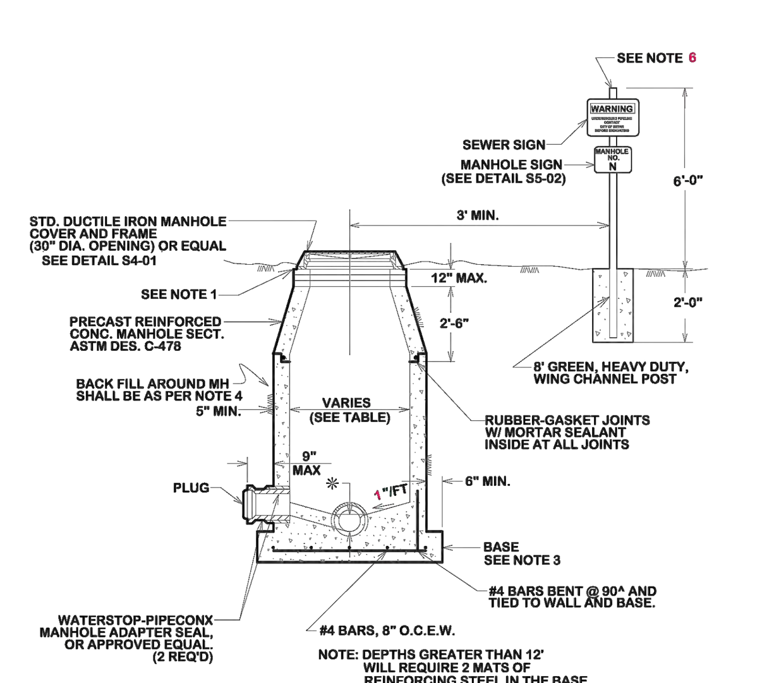
LOCATION	COMPACTION REQUIREMENT
PAVEMENT	98 % STANDARD PROCTOR - ASTM D 698
LANDSCAPE AREA	90 % STANDARD PROCTOR - ASTM D 698

5. IN FLOODPLAINS OR AREAS OF CONCENTRATED FLOW, THE CONE SHALL EXTEND 1 FOOT ABOVE THE BASE FLOOD ELEVATION OR A BOLT DOWN WATER-TIGHT RING AND COVER SHALL BE USED, VENTED WHERE REQUIRED.
6. WARNING SIGN ONLY TO BE PLACED WHERE SEWER CROSSES OPEN FIELDS.



CAST IN PLACE MANHOLE

MANHOLE DIA.	MAIN SIZE
4 FT	<18in.
5 FT	≥18in. <30in.
6 FT	≥36in.



PRE-CAST MANHOLE

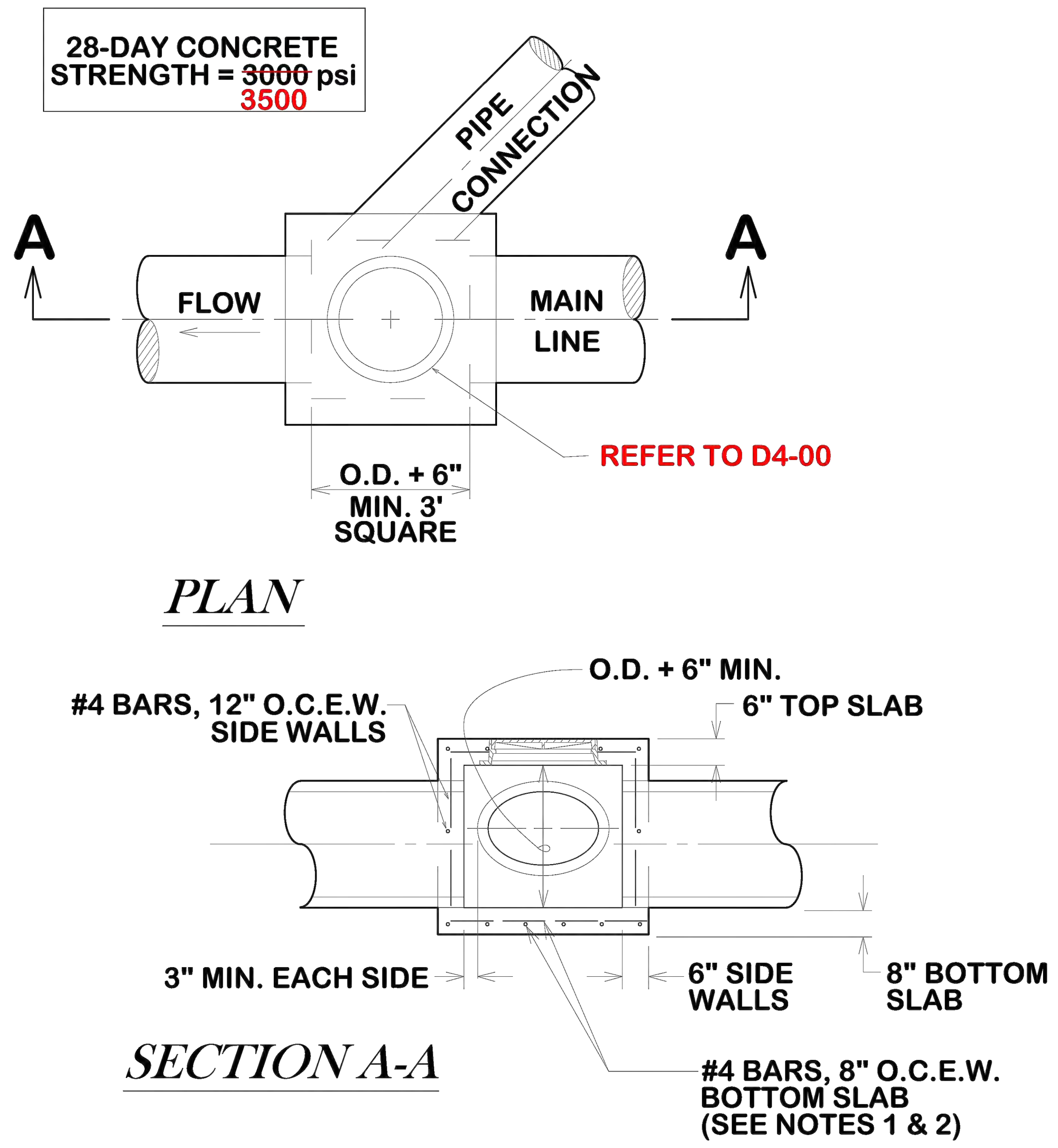
CITY OF BRYAN
The Good Life, Texas Style.

STANDARD MANHOLE

DATE		DETAIL NO.
APR 2024	B/CS UNIFIED STANDARD DETAIL	S1-00

CITY OF COLLEGE STATION

28-DAY CONCRETE STRENGTH = ~~3000~~ 3500 psi



CITY OF BRYAN
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STORM SEWER JUNCTION BOX

DATE		DETAIL NO.
DECEMBER 2020	B/CS UNIFIED STANDARD DETAIL	D1-02

CITY OF COLLEGE STATION

ABBOUD ENGINEERING, LLC
13511 Lew Briggs Road
Houston, Texas 77047
Tel. 713-562-6100
TXPE Firm Reg. # F-15913

ISSUE:	DATE:	NO:
ISSUED FOR PERMIT	12/29/2025	0
PER ARCH. REVIEW	03/18/2026	1

SHOPS AT BLINN

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2100 E. 29TH STREET
BRYAN, TX 77802

STATE OF TEXAS
JOSEPH S. ABBOUD
69894
LICENSED
PROFESSIONAL ENGINEER

[illegible]

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH S. ABBOUD, P.E. 69894 ON 03/18/2026

PROJECT MANAGER:	PROJECT DESIGNER:
HL	AVB
APPROVED BY: JSA	CLIENT APPROVAL:

PLOT SCALE:

PROJECT INFORMATION:

DRAWING NAME:
CIVIL DETAILS

SHEET NUMBER:
C-13

PROJECT #
25-865