### GENERAL NOTES:

- 1. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST PROVIDE SUBMITTALS OF PROPOSED CONSTRUCTION MATERIALS FOR REVIEW BY THE DESIGN ENGINEER A MINIMUM OF 14 DAYS PRIOR TO REQUIRED USE. 2. A PRE-CONSTRUCTION MEETING WILL BE HELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. TIME AND
- LOCATION TO BE DETERMINED BY THE OWNER, ASHTON SHERMAN. 3. ALL BOUNDARY, TOPOGRAPHIC INFORMATION, AND SURVEY CONTROL WAS COMPLETED IN APRIL 2024 BY GESSNER
- ENGINEERING. CHANGES IN SITE OR FIELD CONDITIONS MAY HAVE OCCURRED. 4. THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION, BENCHMARKS, AND MARKERS DURING
- CONSTRUCTION. 5. THE CONTRACTOR MUST PROVIDE CONSTRUCTION STAKING SERVICES BASED ON THE INFORMATION PROVIDED IN
- 6. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH FACILITY/PROPERTY OWNERS. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING FACILITIES, PAVEMENT, ETC. AS A RESULT OF CONSTRUCTION
- 7. ALL ITEMS SHOWN ON THESE PLANS ARE ASSUMED NEW/PROPOSED UNLESS DESIGNATED OR SHOWN AS EXISTING AND SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR INCLUSIVE OF ANY MATERIALS, LABOR, EQUIPMENT, AND OTHER REQUIREMENTS FOR A COMPLETE AND FUNCTIONING SITE ELEMENT. ALL ITEMS NECESSARY FOR PROPER COMPLETION OF THE WORK NOT SPECIFICALLY CALLED FOR OR SPECIFIED ON THE PLANS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND CONSIDERED SUBSIDIARY TO THE WORK.
- 8. ALL UTILITIES AND SERVICE LINES SHOWN ARE TAKEN FROM RECORD INFORMATION SUPPLIED BY THE UTILITY OWNER OR HORIZONTALLY LOCATED BY INDEPENDENT LOCATORS. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS BETWEEN PLAN AND ACTUAL CONDITIONS PRIOR TO CONSTRUCTION. OWNER, SURVEYOR, AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF INFORMATION OR DATA RELIED ON TO DEPICT UNDERGROUND FACILITIES. CONTRACTOR IS TO VERIFY THE EXACT LOCATION AND VERTICAL POSITIONING OF ALL PIPELINES, COMMUNICATION LINES, ELECTRICAL LINES, EXISTING UTILITIES, AND SERVICE LINES WITHIN THE PROJECT AREA, WHETHER SHOWN ON THE PLANS OR NOT, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. CONTRACTOR IS TO CONTACT OWNERS OF ALL UTILITIES AND SERVICE LINES WITHIN THE PROJECT AREA AND NOTIFY OF INTENT AT LEAST 1 WEEK PRIOR TO CONSTRUCTION.
- 9. CONTRACTOR IS TO MAINTAIN STRUCTURAL INTEGRITY OF ALL PIPELINES, ELECTRIC TRANSMISSION POLES AND LINES, PERMANENT AND TEMPORARY UTILITIES, AND UTILITY SERVICES.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES OR SERVICE LINES DURING THE CONSTRUCTION PROCESS. WHERE EXISTING UTILITIES OR SERVICE LINES ARE DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE UTILITY OR SERVICE LINE WITH THE SAME TYPE OF MATERIAL AND CONSTRUCTION, OR BETTER. ALL MATERIAL AND LABOR SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 11. CONTRACTOR SHALL NOTIFY TEXAS811 AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITY AT 811 OR HTTP://WWW.TEXAS811.ORG. THE CONTRACTOR SHALL ALSO NOTIFY APPLICABLE UTILITY COMPANIES THAT HAVE UTILITY LINES ON OR IN THE GENERAL VICINITY OF THIS PROJECT SITE AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL STANDARDS, SPECIFICATIONS, AND REGULATIONS. WHERE CONSTRUCTION DOCUMENTS CONFLICT WITH THOSE GUIDELINES, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
- 12. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ONSITE FIELD CONDITIONS OR SPECIFICATIONS OF OTHER DISCIPLINES. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS WITHIN PLANS OR SPECIFICATIONS AND AWAIT WRITTEN INSTRUCTION FROM ENGINEER OR ARCHITECT PRIOR TO STARTING CONSTRUCTION.
- 13. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS, AS WELL AS INSPECTION APPROVALS. 14. A COPY OF APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON SITE AT ALL TIMES THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS TO RECORD AS-BUILT CONDITIONS. 15. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN AN ORDERLY PROJECT SITE. THE CONTRACTOR SHALL CLEAN, REMOVE, AND PROPERLY DISPOSE OF ANY SURPLUS OR DISCARDED MATERIALS, TEMPORARY STRUCTURES,
- AND DEBRIS FROM THE PROJECT SITE. 16. THE CONTRACTOR IS RESPONSIBLE FOR STORAGE AND SAFE-GUARDING OF ALL MATERIALS AND EQUIPMENT AT THE PROJECT SITE TO MAINTAIN A SAFE AND SECURE PROJECT.
- 17. THE CONTRACTOR SHALL COORDINATE SITE STORAGE WITH THE PROPERTY OWNER.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTAINMENT AND PROPER DISPOSAL OF ALL LIQUID AND SOLID WASTE ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT THE OCCURRENCE OF WIND BLOWN LITTER FROM THE PROJECT SITE. THE SITE IS REQUIRED TO PROVIDE CONTAINMENT FOR WASTE PRIOR TO AND DURING DEMOLITION. SOLID WASTE ROLL OFF BOXES AND/OR METAL DUMPSTER SHALL BE SUPPLIED BY THE CONTRACTOR.
- 19. CONTRACTOR IS TO CONFINE ALL WORK TO OWNER'S PROPERTY. NO CONSTRUCTION ACTIVITY IS ALLOWED ON OR THROUGH PRIVATE PROPERTY UNLESS COVERED BY A PUBLIC UTILITY EASEMENT OR OTHER DOCUMENTED AGREEMENT. ANY ADJACENT RIGHT-OF-WAY (R.O.W.) OR PROPERTY AFFECTED DURING CONSTRUCTION SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.
- 20. ALL EXISTING UTILITY APPURTENANCES (VALVE BOXES, FIRE HYDRANTS, MANHOLE RING AND COVER, JUNCTION BOX RING AND COVER, ETC) SHALL BE ADJUSTED TO FINAL GRADES.
- 21. ALL CONSTRUCTION OPERATIONS FOR THIS PROJECT SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE UNITED STATES OCCUPATIONAL AND HEALTH ADMINISTRATION (OSHA)
- 22. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND FEDERAL REGULATIONS REGARDING CONSTRUCTION ACTIVITIES NEAR ENERGIZED OVERHEAD ELECTRIC LINES.
- 23. THESE PLANS, PREPARED BY GESSNER ENGINEERING, DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR HIS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK.
- 24. CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ALL JOB SITE SAFETY, FOR MANAGEMENT OF JOB SITE PERSONNEL. FOR SUPERVISION OF THE USE OF JOB SITE EQUIPMENT AND FOR DIRECTION OF ALL CONSTRUCTION PROCEDURES, METHODS, AND ELEMENTS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

# TRAFFIC CONTROL NOTES

- 1. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN, AS REQUIRED, FOR REVIEW IN THE SUBMITTAL PROCESS OR AS THE NEED ARISES. 2. ALL TRAFFIC CONTROL DEVICES AND TRAFFIC MANAGEMENT SHALL BE IN ACCORDANCE WITH THE LATEST VERSION
- OF TMUTCD PART VI.
- 3. ALL CONSTRUCTION BARRICADES, SIGNS, MARKINGS, CHANNELIZING DEVICES, AND SPACING SHALL BE IN ACCORDANCE TO THE LATEST VERSION OF TXDOT BARRICADE AND CONSTRUCTION STANDARDS BC (1-12).
- 4. ALL EXISTING TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE MAINTAINED ON VISIBLE LOCATIONS DURING CONSTRUCTION UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. THE CONTRACTOR SHALL RESTORE OR REPLACE (AT THE DISCRETION OF THE ENGINEER) SIGNS AND PAVEMENT MARKING OR SIGNALS DAMAGED DURING CONSTRUCTION OPERATIONS, INCLUDING RAISED PAVEMENT MARKERS (RPMS) AND CHIP SEAL MARKERS.
- 5. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAYS, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM ENGINEER.

6. AT THE END OF EACH WORK DAY, DURING NON-ACTIVE CONSTRUCTION PERIODS, AND AT ANY TIME A FLAGGER IS

- NOT PRESENT, TCP DEVICES SHALL BE REMOVED. 7. CONTRACTOR TO COORDINATE ANY NECESSARY ROAD CLOSURES WITH LOCAL RESIDENTS, BUSINESSES, AND
- EMERGENCY SERVICES.

# DEMOLITION NOTES:

- 1. AREAS BENEATH REMOVED PAVEMENT SHALL BE CLEARED OF ALL LOOSE OR DISTURBED MATERIAL AND WATER. THE AREA SHALL BE PROOF-ROLLED AND MANUALLY COMPACTED OR REPLACED WITH SIMILAR MATERIALS PRIOR TO NEW PAVEMENT PLACEMENT PER SPECIFICATIONS.
- 2. UNDER ALL IMPROVEMENTS, ALL ITEMS ARE TO BE REMOVED UNLESS OTHERWISE INDICATED. REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS BUT ALL UNDERGROUND ELEMENTS FOR UTILITIES UNLESS OTHERWISE INDICATED. DURING CLEARING AND GRUBBING ACTIVITIES WHERE TREES AND BRUSH ARE TO BE REMOVED, REMOVE THE TOTAL EXTENT OF THEIR ROOT SYSTEMS.
- UNLESS OTHERWISE DIRECTED BY THE OWNER, ALL MATERIALS AND DEBRIS DEMOLISHED AND/OR REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER SATISFACTORY TO THE OWNER, ARCHITECT, & ENGINEER, ON-SITE BURNING WILL NOT BE PERMITTED.
- ALL EXCESS TOPSOIL AND CUT MATERIAL IS TO BE HAULED OFF AND DISPOSED OF OFF-SITE. CONTRACTOR SHALL PREVENT TRANSPORT OF SEDIMENT TO ADJACENT PROPERTIES AND PUBLIC OR PRIVATE
- RIGHT OF WAYS AND IS RESPONSIBLE FOR CLEANUP IF SUCH OCCURS. CONTRACTOR IS TO ENSURE NO CONSTRUCTION DEBRIS OR MUD IS TRACKED OR DISCARDED ON TO ANY PUBLIC OR PRIVATE STREETS OR LAND AND IS RESPONSIBLE FOR SITE CLEANUP AFTER EACH DAYS WORK. CONTRACTOR IS TO MAKE USE OF BEST MANAGEMENT PRACTICES TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING EXISTING STORM SEWER OR DOWNSTREAM CHANNEL AREAS. CONTRACTOR SHALL MAINTAIN EROSION CONTROL THROUGHOUT CONSTRUCTION PERIOD AND UNTIL GRASS IS ESTABLISHED.
- CONTRACTOR TO PROTECT ALL EXISTING TREES TO REMAIN DURING DEMOLITION AND CONSTRUCTION ACTIVITIES. 7. CONTRACTOR IS TO PROTECT ALL EXISTING TREES INDICATED TO REMAIN DURING DEMOLITION AND CONSTRUCTION ACTIVITIES UNLESS OTHERWISE NOTED IN THE PLANS.

## **DIMENSION CONTROL NOTES:**

- 1. THE CONTRACTOR MAY OBTAIN AN ELECTRONIC COPY OF PROJECT PLANS FOR CONSTRUCTION PURPOSES, WITH THE PERMISSION OF THE OWNER. THE ELECTRONIC FILE AND INFORMATION GENERATED, BY GESSNER ENGINEERING, FOR THIS PROJECT IS CONSIDERED BY GESSNER ENGINEERING, TO BE CONFIDENTIAL. WHEN ISSUED, ITS USE IS INTENDED SOLELY FOR THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. THE MATERIAL IS INTENDED FOR USE BY THE RECIPIENT NAMED, ONLY, AND PERMISSION IS NOT GRANTED TO THE RECIPIENT FOR DISTRIBUTION OF THIS DOCUMENTS IN ANY FORM OR FASHION. THE RECIPIENT UNDERSTANDS THAT THIS DATA IS AUTHORIZED "AS IS" WITHOUT ANY WARRANTY AS TO ITS PERFORMANCE, ACCURACY, FREEDOM FROM ERROR, OR AS TO ANY RESULTS GENERATED THROUGHOUT ITS USE. THE RECIPIENT ALSO UNDERSTANDS AND AGREES THAT GESSNER ENGINEERING, UPON RELEASE OF SUCH DATA, IS NOT LONGER RESPONSIBLE FOR THEIR USE OR MODIFICATION. THE USER AND RECIPIENT OF THE ELECTRONIC DATA ACCEPTS FULL RESPONSIBILITY AND LIABILITY FOR ANY CONSEQUENCES ARISING OUT OF THEIR USE.
- ALL DIMENSIONS SHOWN ARE TO BE USED IN CONJUNCTION WITH THE PLANS FOR LOCATING ALL IMPROVEMENTS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR FOR WORKABILITY PRIOR TO CONSTRUCTION OF THE
- REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING DIMENSIONS.

## **GRADING NOTES**

- ALL UNPAVED AREAS SHALL BE ADEQUATELY GRADED TO DRAIN AT A MINIMUM OF 2.0% SLOPE, UNLESS OTHERWISE NOTED, SO THAT NO PONDING OCCURS.
- WHEN TOP OF CURB ELEVATIONS ARE SHOWN, THE CURB IS A STANDARD 6" CURB, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL FOLLOW THE GENERAL INTENT OF THE GRADING PLANS. MINOR ADJUSTMENTS TO THE ACTUAL ELEVATIONS SHOWN ON THE GRADING PLAN MAY BE REQUIRED TO MATCH EXISTING GROUND ELEVATIONS
- AND STRUCTURES. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO ANY MODIFICATIONS. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
- CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM AFFECTED PROPERTY OWNER(S). ANY ADJACENT PROPERTY OR RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION SHALL BE RETURNED 4. TO EXISTING CONDITIONS OR BETTER.

5. THE APPROVAL OF THE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD

- FILL MATERIAL FOR NON-STRUCTURAL AREAS (5 FOOT OUTSIDE OF EDGE OF PAVEMENT, BACK OF CURB, OR IMPROVED AREAS) SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D698) WITH A
- MOISTURE CONTENT OF +/- 2% OF OPTIMUM. COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT, 1 TEST PER
- 4,000 SF OF FILL PLACED, WITH A MINIMUM OF 1 TEST PER LIFT. PRIOR TO REVEGETATION OPERATIONS. CONTRACTOR TO SPREAD/REPLACE AND CONSOLIDATE TOPSOIL TO A
- 9. CONTRACTOR IS RESPONSIBLE FOR WATERING (INCLUDING TEMPORARY IRRIGATION IN AREAS NOT RECEIVING PERMANENT IRRIGATION), MAINTENANCE, AND ESTABLISHMENT OF VEGETATION FOR A PERIOD OF 90 DAYS. CONTRACTOR TO GUARANTEE ALL PLANTED MATERIAL GROWTH AND COVERAGE FOR A PERIOD OF 6 MONTHS. GROWTH AND COVERAGE SHALL BE DEFINED AS 95% OF THE PLANTED AREA WITH UNIFORM COVERAGE OF GRASS GREATER THAN 1" IN HEIGHT WITH NO BARE SPOTS GREATER THAN 2 SQUARE FEET. SECOND APPLICATION OF SEED OR HYDROMULCH IS REQUIRED FOR BARE SPOTS NOT MEETING COVERAGE REQUIREMENT WITHIN 30 DAYS OF
- 10. ALL DISTURBED AREAS NOT TO BE PAVED OR NOT INCLUDED IN THE LANDSCAPE SCOPE ARE TO BE PREPARED AND HYDROMULCH OR SEEDED FOR PERMANENT ESTABLISHMENT OF VEGETATION. PRIOR TO OPERATIONS, CONTRACTOR IS TO REPLACE AND CONSOLIDATE TOPSOIL TO A DEPTH OF 6" MINIMUM. TOPSOIL TO BE HARLEYRAKE/TILLED TO A DEPTH OF 4" PRIOR TO SEEDING OR INSTALLATION OF SOD. FINAL GRADES WITH ESTABLISHED VEGETATION SHALL PROVIDE POSITIVE DRAINAGE.
- 11. CONTRACTOR SHALL MAINTAIN EROSION CONTROL UNTIL ALL LANDSCAPE AREAS ARE ESTABLISHED. CONTRACTOR IS RESPONSIBLE FOR CLEANUP FROM LANDSCAPING MATERIALS. MULCH OR LANDSCAPE SEDIMENT TRANSPORT THAT MAY OCCUR AFTER LANDSCAPE INSTALLATION INCLUDING MAINTENANCE OF GRATES AND TRENCH DRAINS.
- 12. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING N.O.I./N.O.T. (IF NECESSARY) TO T.C.E.Q & PROVIDING
- DOCUMENTATION OF SUBMISSION TO THE AUTHORITY HAVING JURISDICTION 13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES,
- FIRE HYDRANTS, ETC. WITHIN THE AREA OF CONSTRUCTION. THEY MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PAVEMENT AND GRADING.
- 14. SIDEWALKS SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS SLOPE NOT GREATER THAN 2%, UNLESS
- 15. HANDICAP ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS PER TAS REQUIRMENTS.
- 16. CONTRACTOR SHALL CONTACT GESSNER ENGINEERING IF DISCREPANCIES EXIST AT EXISTING GRADE TIE-INS. 17. CONTRACTOR TO VERIFY WITH ADJACENT PROPERTY OWNER WHEN GRADING ON ADJACENT PROPERTY.

# PAVEMENT NOTES

- 1.A. EXISTING VEGETATION, TREES, STUMPS, AND ROOTS SHALL BE GRUBBED AND REMOVED. THE TOP 6" OF TOPSOIL AND SUBGRADE STRIPPED FROM THE AREAS TO BE COVERED BY PAVEMENT.
- 1.B. PAVING AREAS SHALL BE PROOF-ROLLED WITH A 20 TON COMPACTOR AND, IF REQUIRED AT THE TIME OF CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE WEAK AREAS BY OVER EXCAVATING AND BACKFILLING WITH SPECIFIED MATERIALS.
- 1.C. FILL MATERIAL FOR AREAS UNDER PAVEMENT AND EXTENDING 5 FOOT BEYOND EDGE OF PAVEMENT OR BACK OF CURB, SHALL MEET THE SPECIFIED MATERIALS, BE PLACED IN 8" MAXIMUM LOOSE LIFTS, AND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD
- PROCTOR (ASTM D698) WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM. 1.D. COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT FOR EVERY 200 LINEAR FEET OF PAVEMENT OR EVERY 4,000 SF OF FILL PLACED, WHICH EVER WOULD PRODUCE THE
- GREATER TESTING FREQUENCY, WITH A MINIMUM OF ONE TEST PER LIFT. 1.E. SOILS SHALL BE STABILIZED WITH LIME TREATMENT IF PAVEMENT SUBGRADE SOILS CONSIST OF CLAYS OR
- CLAYEY SANDS OF HIGH PLASTICITY (PI>20).
- 1.F. SOILS SHALL BE STABILIZED WITH CEMENT TREATMENT IF PAVEMENT SUBGRADE SOILS CONSIST OF SANDS OR SILTS WITH LOW PLASTICITY (PI <= 15).
- 1.G. STABILIZATION SHALL BE ACCOMPLISHED SUCH THAT A UNIFORM SUBGRADE MIX IS OBTAINED AND SHALL EXTEND TO 2 FOOT BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT. PRIOR TO THE APPLICATION OF LIME OR CEMENT TO THE SUBGRADE, THE OPTIMUM PERCENTAGE TO BE ADDED SHALL BE DETERMINED BASED ON TEX-121-E LABORATORY TESTS (LIME) AND TEX-120-E LABORATORY TESTS (CEMENT) CONDUCTED ON MIXTURES OF THE SUBGRADE SOILS WITH VARYING PERCENTAGES. SUBGRADE SOIL SAMPLES SHOULD BE OBTAINED FROM THE PAVEMENT AREA AT THE PROPOSED FINAL SUBGRADE ELEVATION. THE LIME OR CEMENT SHOULD INITIALLY BE BLENDED WITH A MIXING DEVICE SUCH AS PULVERIZER OR MIXER AND SUFFICIENT WATER ADDED.
- 1.H. THE AMOUNT OF LIME REQUIRED FOR STABILIZATION SHOULD BE THE PERCENT REQUIRED BY WEIGHT TO PRODUCE A PH NOT LESS THAN 12.4 AND TO PROVIDE A PI VALUE OF LESS THAN OR EQUAL TO 18.
- THE AMOUNT OF CEMENT REQUIRED FOR STABILIZATION SHOULD BE THE PERCENT REQUIRED BY WEIGHT TO PRODUCE A MINIMUM COMPRESSION STRENGTH OF 50 PSI PRIOR TO BEING OPEN TO LOCAL OR CONSTRUCTION
- 1.J. A STABILIZATION DEPTH CHECK SHALL BE PERFORMED WITH EACH DENSITY TEST FOR THE STABILIZED LIFT.

# 2. CRUSHED LIMESTONE BASE:

- 2.A. CRUSHED LIMESTONE BASE SHALL CONFORM TO STANDARDS SPECIFIED IN TXDOT ITEM 247, 2004 SPECIFICATION, TYPE A/B AND GRADE 1
- CRUSHED LIMESTONE BASE SHALL BE COMPACTED TO A UNIFORM DENSITY OF AT LEAST 95% OF THE MAXIMUM
- DRY DENSITY AS DETERMINED BY ASTM D1557, METHOD C, WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM. COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EVERY 4,000 SF OF
- CRUSHED LIMESTONE BASE MATERIAL WITH A MINIMUM OF THREE (3) TESTS BEING PERFORMED. 2.D. THE BASE SHALL BE BLADED SMOOTH, TO THE SATISFACTION OF THE ENGINEER, BEFORE PRIMING.

- 3.A. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- 3.B. ALL CONCRETE SHALL BE VIBRATED WHEN PLACED. 3.C. PAVEMENT CONTRACTION JOINTS SHALL BE INSTALLED PER PLAN AND DETAIL SHEET, WITH A MAXIMUM SPACING
- OF 24 TIMES THE THICKNESS OF THE PAVEMENT (12' FOR 6" PAVEMENT). CONTRACTION JOINTS SHALL BE INSTALLED AS SOON AS CONCRETE CURING ALLOWS AND SHALL BE CUT 1/4 OF THE THICKNESS OF THE PAVEMENT. AN EARLY ENTRY SAW IS PREFERRED. TOOLED OR FORMED JOINTS ARE NOT ALLOWED.
- 3.D. PAVEMENT EXPANSION JOINTS SHALL BE SPACED AS SHOWN ON THE PLANS AND INSTALLED PER DETAIL SHEET. CONSTRUCTION SHALL BE STOPPED AT EXPANSION JOINTS. IF CONDITIONS REQUIRE, CONSTRUCTION TO BE STOPPED AT OTHER LOCATIONS, A COLD JOINT SHALL BE CONSTRUCTED.
- 3.E. ISOLATION JOINTS SHALL BE PLACED AT ALL IN-PAVEMENT OBJECTS INCLUDING INLETS, LIGHT POLE FOOTINGS, CLEANOUTS, ETC. 3.F. ALL JOINTS SHALL BE SEALED. PROVIDE EXPANSION JOINT WATER STOP CAPS AT NEW CONCRETE. PROVIDE
- EXPANSION JOINT SEALANT AT NEW TO EXISTING PAVEMENT. 3.G. REFERENCE DETAIL SHEET FOR PAVEMENT AND SIDEWALK CONSTRUCTION DETAILS.

3.H. TRANSPORTATION AND PLACEMENT OF THE CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301. A TEST SET CONSISTING OF 4 CYLINDERS SHALL BE TAKEN FOR EVERY 75 CUBIC YARDS OF CONCRETE.

4.A. ALL REINFORCEMENT SHALL BE ASTM A-615, GRADE 60. THE PAVEMENT REINFORCEMENT SHALL BE PER DETAILS. 4.B. LAPS AND SPLICES IN REINFORCING BARS SHALL BE A MINIMUM OF 30 BAR DIAMETERS IN LENGTH. BARS SHALL BE SECURED AT EVERY OTHER INTERSECTION.

## CURB AND GUTTER SECTION:

- 5.A. EXPANSION JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' AND AT ALL RADIUS POINTS, PT'S AND PC'S AND SHALL BE SEALED.
- 5.B. CONTRACTION JOINTS SHALL BE SPACED AT A MAXIMUM OF 10' AND SHALL BE SEALED. TOOLED OR FORMED JOINTS ARE NOT ALLOWED.

## PAINTING AND STRIPING:

- 6.A. CONTRACTOR SHALL PAINT STRIPING FOR THE PARKING AREA AS INDICATED ON THE PLAN. THE SOLID LINE REPRESENTS A 4" WIDE SOLID WHITE LINE TO BE PAINTED. CONTRACTOR IS RESPONSIBLE TO PAINT HANDICAP MARKINGS AND LOADING ZONES IN CONFORMANCE WITH CURRENT ADA/TAS STANDARDS AND ALL FIRE LANE MARKINGS IN ACCORDANCE WITH AUTHORITY HAVING JURISDICTION REQUIREMENTS.
- 6.B. MATERIAL AND METHODS FOR PAVEMENT MARKINGS SHALL CONFORM TO ITEM 666 AND DMS-8200 OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES.

- 1. THE CONTRACTOR SHALL NOTIFY TEXAS 811 AND THE APPROPRIATE UTILITY COMPANY 48 HOURS PRIOR TO
- EXCAVATION, AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS. 2. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND FEDERAL REGULATIONS REGARDING
- CONSTRUCTION ACTIVITIES NEAR ENERGIZED OVERHEAD ELECTRIC LINES. 3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF ALL FRANCHISE & PRIVATE
- UTILITIES WITH EARTHWORK & PAVEMENT CONSTRUCTION. GENERAL CONTRACTOR IS RESPONSIBLE FOR FURNISHING & INSTALLING ANY NECESSARY UTILITY CONDUIT PRIOR
- TO SUBGRADE PREPARATION & PAVING OPERATION. GENERAL CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF UTILITY INSTALLATION ORDER.
- 6. ALL PIPES AND APPURTENANCES SHALL BE KEPT FREE OF DIRT AND OTHER DEBRIS. STORE ALL MATERIALS PER MANUFACTURERS RECOMMENDATIONS. ANY DAMAGED MATERIALS SHALL BE REMOVED FROM THE SITE AND
- TRENCH BACKFILL FOR ALL UTILITIES SHALL MEET THE DETAILS, SPECIFIED MATERIALS, AND BE FREE OF DEBRIS, TRASH, VEGETATION, AND ROCKS LARGER THAN 2" IN DIAMETER OR MATERIAL AS OUTLINED IN THE GEOTECHNICAL REPORT. UNDER AREAS TO BE PAVED & WITHIN 5' OF EDGE OF PAVING, THE BACKFILL SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR(D698) OR BE CEMENT STABILIZED SAND COMPACTED TO A UNIFORM DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D558 WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM. ALL OTHER AREAS SHALL BE COMPACTED TO A UNIFORM DENSITY OF AT LEAST
- 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR(D698). COMPACTION AND MOISTURE CONTROL SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT FOR EVERY 100 LINEAR FEET OF TRENCH PLACED, WITH A MINIMUM OF ONE TEST PER LIFT.

- 1. ALL STORM SEWER IS PROPOSED, UNLESS OTHERWISE NOTED.
- TRENCH BACKFILL SHALL BE PER DETAILS.
- STORM SEWER MATERIAL SHALL BE AS FOLLOWS FOR THE FOLLOWING INSTALLATIONS:
- 4. CONCRETE FOR STRUCTURES (INLETS, CATCH BASINS, JUNCTIONS, ETC.)
- 4.A. MIN 4000 PSI-28 DAY STRENGTH FOR ITEMS UP TO 10' DIMENSION
- 4.B. MIN 5000 PSI-28 DAY STRENGTH FOR ITEMS WITH GREATER THAN 10' DIMENSION
- CONTRACTOR IS TO USE SILT FENCING AROUND INLET AND JUNCTION BOXES AND GRAVEL FILLED PERMEABLE BAGS AROUND INLET BOXES (AS NECESSARY) TO PREVENT SEDIMENT FROM ENTERING STORM SEWER SYSTEM. PRIOR TO ACCEPTANCE OF PROJECT FOR SUBSTANTIAL COMPLETION, CONTRACTOR IS TO CLEAN ALL STORM SEWER FACILITIES OF SEDIMENT. CONTRACTOR TO USE EROSION CONTROL LOGS AROUND CULVERT INLETS AND OUTLETS TO PREVENT SEDIMENT FROM ENTERING THE CULVERTS. PRIOR TO ACCEPTANCE OF PROJECT FOR SUBSTANTIAL COMPLETION, CONTRACTOR IS TO CLEAN ALL CULVERTS AND STORM FACILITIES OF SEDIMENT
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 12 INCH CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS AND A MINIMUM OF 6 INCH CLEARANCE AT STORM AND SANITARY SEWER CROSSINGS.

# WATER NOTES

- ALL WATER LINES TO BE POLYVINYL CHLORIDE (PVC), AWWA C-900, DR 14.
- 2. POTABLE WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT TCEQ REGULATIONS, CHAPTER 290, LOCAL JURISDICTIONAL REGULATIONS, AND IN ACCORDANCE WITH THE 2012 INTERNATIONAL PLUMBING CODE
- SEPARATION OF PUBLIC WATER AND WASTEWATER MAINS SHALL BE CONSISTENT WITH THE CURRENT RULES & REGULATIONS FOR PUBLIC WATER SYSTEMS OF THE TCEQ.
- 4. WATER SERVICE LINES SHALL MAINTAIN A MINIMUM COVER OF FOUR (4) FEET AND A MAXIMUM COVER OF FIVE (5) FEET UNLESS OTHERWISE SPECIFIED ON PLANS AND/ OR REQUIRED FOR UTILITY CROSSINGS.
- 5. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
- 6. ALL PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST ALSO BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD
- DIMENSION RATION OF 26 OR LESS. 7. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.
- 8. LEAD BAN SHALL BE FOLLOWED PER CURRENT TCEQ 290.44 (B) REGULATIONS 9. POTABLE WATER DISTRIBUTION LINES AND WASTEWATER MAINS OR LATERALS THAT FORM PARALLEL UTILITY LINES SHALL BE INSTALLED IN SEPARATE TRENCHES.
- 10. NO PHYSICAL CONNECTION SHALL BE MADE BETWEEN A DRINKING WATER SUPPLY AND A SEWER LINE. ANY APPURTENANCES SHALL BE DESIGNED AND CONSTRUCTED SO AS TO PREVENT ANY POSSIBILITY OF SEWAGE ENTERING THE DRINKING WATER SYSTEM.
- 11. ALL SECTIONS OF THE POTABLE WATER DISTRIBUTION SYSTEM SHALL BE INSTALLED NO CLOSER THAN NINE FEET ON ALL DIRECTIONS TO THE SANITARY SEWER COLLECTION FACILITIES. ALL SEPARATION DISTANCES SHALL BE MEASURED FROM THE OUTSIDE SURFACE OF EACH OF THE RESPECTIVE PIECES. IF THE NINE FOOT SEPARATION CAN NOT BE MET, FOLLOW CURRENT TCEQ CHAPTER 217.53 (D) AND 290.44 (E) REGULATIONS. IF CONFLICTS OCCUR,
- 12. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO A SEPTIC TANK OR DRAIN FIELD.
- 13. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER MAIN, LATERAL, OR SERVICE.
- 14. SANITARY PRECAUTIONS, FLUSHING, DISINFECTION PROCEDURES, AND MICROBIAL SAMPLING SHALL BE AS PRESCRIBED IN AWWA STANDARDS OR LOCAL JURISDICTIONAL REQUIREMENTS. ALL TEST AND FLUSHING WATER SHALL BE POTABLE AND OF A KNOWN SOURCE.
- 15. AFTER THE PIPE HAS BEEN LAID AND BACKFILLED, BUT PRIOR TO THE REPLACEMENT OF PAVEMENT, EACH VALVED SECTION OF NEWLY LAID PIPE SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE TEST. TESTING PROCEDURES SHALL BE PER SPECIFICATION OR LOCAL JURISDICTION WITH A MINIMUM PRESSURE OF 150 PSI, WHICHEVER IS MORE STRINGENT. ADJUSTMENT SHALL BE MADE FOR DIFFERENTIAL IN ELEVATION BETWEEN THE LOW POINT OF THE SECTION BEING TESTED AND THE CENTERLINE OF THE PRESSURE TEST GAUGE.
- 16. EACH VALVED SECTION OF PIPE SHALL BE SLOWLY FILLED WITH WATER TO THE SPECIFIED TEST PRESSURE, MEASURED TO THE POINT OF LOWEST ELEVATION. WATER SHALL BE SUPPLIED BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A SATISFACTORY AND SANITARY MANNER. PRESSURE SHALL BE HELD FOR A MINIMUM OF 2 HOURS WITHOUT PRESSURE LOSS OR PER LOCAL JURISDICTION. THE PUMP, PIPE CONNECTION, AND ALL NECESSARY
- APPARATUS, INCLUDING GAUGES AND METERS SHALL BE FURNISHED BY THE CONTRACTOR. 17. NO PIPE INSTALLATION WILL BE ACCEPTED UNTIL THE LEAKAGE OR PRESSURE LOSS IS LESS THAN REQUIRED. 18. THE WATER LINES SHALL BE FLUSHED AND THOROUGHLY STERILIZED. STERILIZATION SHALL FOLLOW THE PROCEDURES AS OUTLINED IN CURRENT AWWA C651, OR PER LOCAL JURISDICTION, WHICHEVER IS MORE STRINGENT. A MINIMUM OF ONE SAMPLE FOR MICROBIAL TESTING SHALL BE COMPLETED PER 1,000 FEET OF COMPLETE WATERLINE.

# DRAINAGE AREA MAP NOTES:

1. THIS SHEET IS FOR SITE PLANNING PURPOSES ONLY. IT IS NOT TO BE USED AS A DOCUMENT FOR CONSTRUCTION. 2. DRAINAGE CALCULATIONS WERE PERFORMED UTILIZING NRCS METHODOLOGIES.

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ISSUE DATE: 07/31/2024

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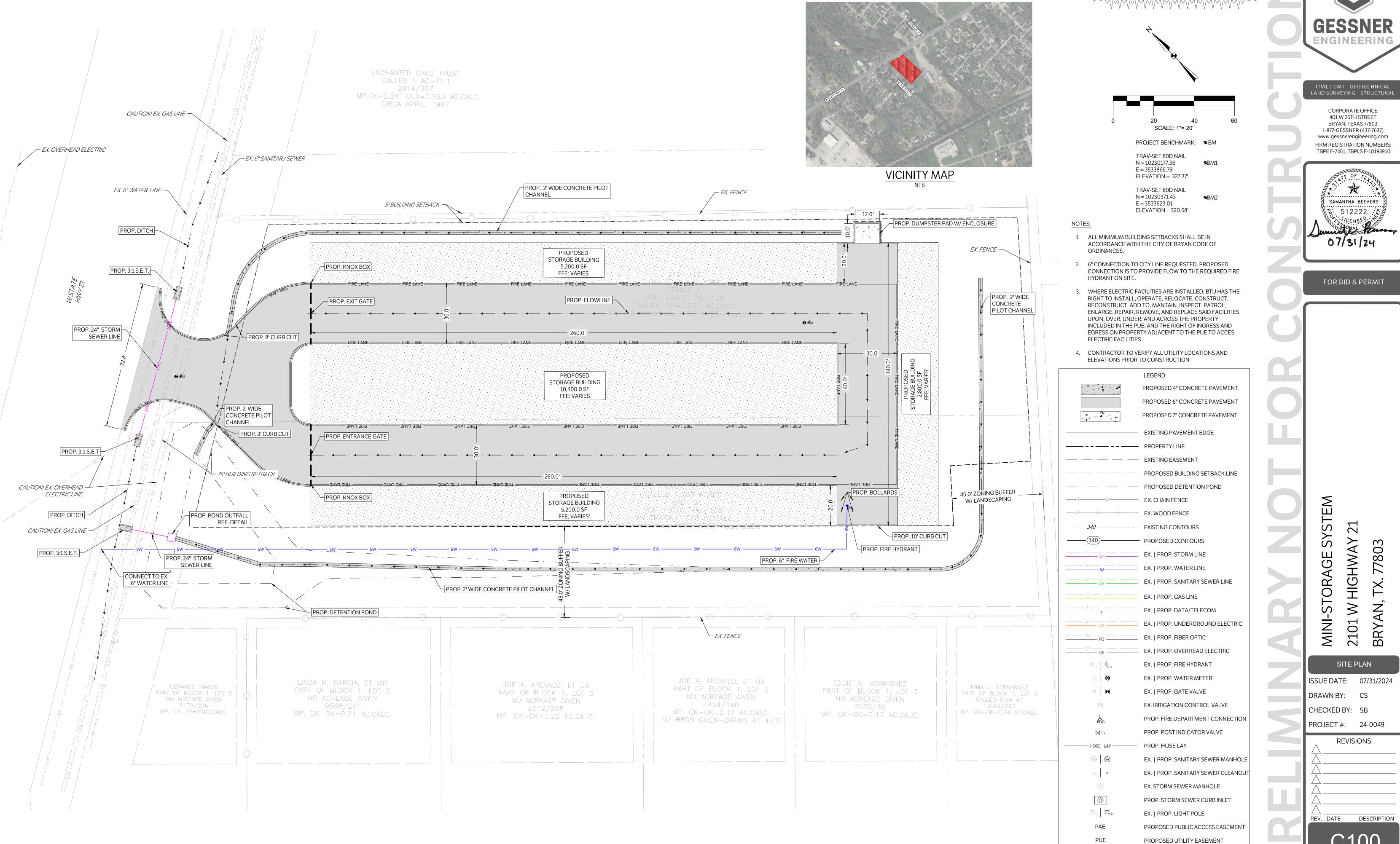
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| CHECKED BY: SB PROJECT #: 24-0049

REVISIONS DESCRIPTION REV. DATE



CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO >CONSTRUCTION. CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR. 

