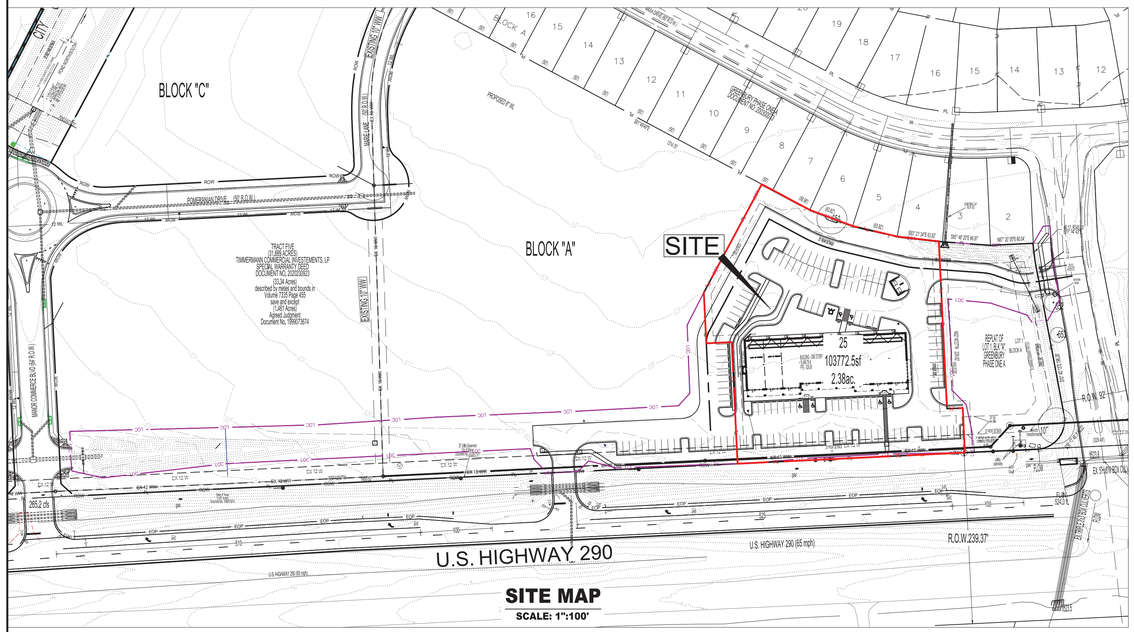
MANOR NE 25A
SITE DEVELOPMENT PLAN
Project #2025-P-1778-SP
LOT 25, BLOCK A,
MANOR NE COMMERCIAL
_____ E US 290 HWY
MANOR, TEXAS 78653


BLOCK "C"
BLOCK "A"
SITE
25
103772.5sf
2.38ac.
U.S. HIGHWAY 290
U.S. HIGHWAY 290 (65 mph)
R.O.W.239.37'
TRACT FIVE-
31.889 ACRES
TIMMERMANN COMMERCIAL INVESTMENTS, LP
SPECIAL WARRANTY DEED
DOCUMENT NO. 2020230923
(33.34 Acres)
described by metes and bounds in
Volume 7335 Page 495
save and except
(1.661 Acres)
Agreed Judgment
Document No. 1999073674
MANOR COMMERCE BLVD (R.O.W. 81')
BOASTING TRUMP WAY
ROADWAY SIGN
ROW
R.O.W. 92'
FIRE LANE
ACCESS EASEMENT
LOT 1 BLK F
GREENBURY
PHASE ONE A
LOT 2 BLK F
GREENBURY
PHASE ONE A
DRAINAGE EASEMENT
DOCUMENT NO. 2025-P-1717-CO
DRAINAGE EASEMENT
DOCUMENT NO. 2025-P-1717-CO
BLOCK A
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
S 89° 27' 39" W
N 89° 27' 39" E
N 89° 46' 25" E
S 89° 46' 25" W

CITY OF MANOR STANDARD CONSTRUCTION NOTES

GENERAL NOTES

1. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND APPLICABLE STATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.). COPIES OF O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. @ 611 EAST 6TH STREET, ROOM 303, AUSTIN, TEXAS.
2. THE CONTRACTOR SHALL CONTACT THE 1-800-DIG-TESS AND CITY OF MANOR FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO ANY EXCAVATION. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED-TO, CROSSED, OR ALTERED; OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THIS PROJECT. THIS INCLUDES GAS, WATER, WASTEWATER, ELECTRICAL, TELEPHONE, CABLE TELEVISION, PETROLEUM PIPELINES AND STREET & DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT INSPECTOR WITHIN TWENTY-FOUR (24) HOURS.
4. THE RAISING OF MANHOLE FRAMES, COVER, AND WATER VALVE TO THE FINISHED PAVEMENT GRADE WILL NOT BE MEASURED AND PAID FOR, BUT WILL BE SUBSIDIARY TO OTHER BID ITEMS, UNLESS LISTED SEPARATELY AS A BID ITEM. ALL UTILITY ADJUSTMENTS WILL BE COMPLETED AND INSPECTED PRIOR TO FINAL PAVING OPERATIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOILS MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE.THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING APPROVAL FOR THE SITE; AND SHALL NOTIFY THE CITY AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL. THIS ITEM WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE SUBSIDIARY TO THE VARIOUS BID ITEMS.
6. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN BARRICADES, WARNING SIGNS, FLASHERS AND OTHER DEVICES OF THE TYPE AND SIZE AS INDICATED IN THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE ENGINEER.
7. ANY VARIATION FROM THE APPROVED PLANS MUST BE APPROVED BY THE CITY ENGINEER IN WRITING FIRST.
8. THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING AND FUNDING SUFFICIENT TESTING TO ESTABLISH ACCEPTABLE LEVELS OF EFFORT FOR CONFORMANCE WITH SPECIFICATIONS FOR DENSITIES. THE CITY OF MANOR RESERVES THE RIGHT TO PERFORM ADDITIONAL DENSITY TESTING TO CONFIRM CONTRACTOR'S TEST RESULTS.

STANDARD ENVIRONMENTAL NOTES

1. TEMPORARY EROSION/SEDIMENTATION CONTROL AND TREE/NATURAL AREA PROTECTION MEASURES:
   - A. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING OR EXCAVATION).
   - B. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN.
   - C. ANY SIGNIFICANT VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THAT SHOWN ON THE PLANS MUST BE APPROVED BY THE CITY ENGINEER.
   - D. THE CONTRACTOR IS TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS OR AFTER EVERY 1" OR MORE RAINFALL TO INSURE THEY HAVE NOT BEEN SUBSTANTIALLY DISTURBED. THE PERSON(S) OR FIRM(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL BE IMMEDIATELY DIRECTED TO MAKE ANY NECESSARY REPAIRS.
   - E. ANY SEDIMENT BUILD-UP OCCURRING AFTER A SIGNIFICANT RAIN SHALL BE REMOVED AND PLACED IN THE DESIGNATED SPOIL DISPOSAL SITE.
   - F. THE CITY WILL INSPECT THE EROSION CONTROLS BIWEEKLY AND AFTER AND AFTER EVERY 1" OR GREATER RAINFALL EVENT. MS4 VIOLATIONS WILL NEED TO BE CORRECTED/FIXED WITHIN 5 BUSINESS DAYS.

2. PERMANENT EROSION CONTROL:
   - A. ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.
   - B. THE CONTRACTOR SHALL HYDROMULCH OR SOD ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION, EXCEPT WHERE CUTS ARE MADE IN SOLID ROCK.
   - C. THE SEEDING FOR EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS:

   I. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 1 POUND OF UNHULLED BERMUDA AND 7 POUNDS OF WINTER RYE PER 1000 SQUARE FEET WITH A PURITY OF 95% WITH 90% GERMINATION.
   II. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA GRASS (CYNODEN DACTOLYN) AT A RATE OF 1 POUND PER 1000 SQUARE FEET WITH A PURITY OF 95% WITH 85% GERMINATION.

   - D. FERTILIZER SHALL HAVE AN ANALYSIS OF 15-15-15 AND SHALL BE APPLIED AT THE RATE OF 288 POUNDS PER ACRE.
   - E. THE PLANTED AREA MUST BE IRRIGATED USING A PERMANENT OR TEMPORARY IRRIGATION SYSTEM UTILIZING SPRINKLER HEADS, DRIP IRRIGATION OR ANOTHER ACCEPTABLE DISTRIBUTION SYSTEM THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER SHALL POSTPONE THE WATERING SCHEDULE ONE WEEK.
   - F. MULCH TYPE USED SHALL BE EITHER CELLULOSE FIBER MULCH APPLIED AT A RATE OF 2000 POUNDS PER ACRE, OR WOOD FIBER MULCH APPLIED AT A RATE OF 2500 POUNDS PER ACRE.
   - G. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2" HIGH WITH 95% COVERAGE, PROVIDED THAT NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST (SEE ITEM 604.7 OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS).

CONTRACTOR RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO CITY UTILITIES, PUBLIC AND PRIVATE PROPERTIES. AT THEIR OWN EXPENSE.

WATER & WASTEWATER CONSTRUCTION NOTES

1. GBA (737-247-7500) AND CITY OF MANOR (512-272-5555) MUST BE CONTACTED WHEN THE CONTRACTOR MAKES A TAP, AND/OR ASSOCIATED TESTS. A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED.
2. WHEN AN EXISTING WATERLINE INTERRUPTION OF SERVICE IS NECESSARY AND POSSIBLE, THE CONTRACTOR SHALL NOTIFY THE MANOR DIRECTOR OF PUBLIC WORKS. THE CITY REQUIRES A MINIMUM OF SEVENTY-TWO (72) HOURS ADVANCE NOTICE FOR ALL INTERRUPTIONS OF WATER SERVICE.
3. FIRE HYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLYETHYLENE WRAP BAG AND TAPED INTO PLACE. THE POLYETHYLENE WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED IN SERVICE. ALL FIRE HYDRANTS SHALL BE PAINTED WITH HIGH GLOSS ENAMEL, RED COLOR, OR APPROVED EQUAL PRIOR TO ACCEPTANCE FOR OPERATION & MAINTENANCE ALL FIRE HYDRANTS MUST BE NATIONAL STANDARD HOSE THREAD.
4. THE ALIGNMENT SHOWN ON THE PLANS SHALL BE ACHIEVED BY DEFLECTION. EXCEPT WHERE SPECIFIC FITTINGS ARE CALLED FOR ON THE PLANS. THERE WILL BE NO ADDITIONAL PAYMENTS FOR FITTINGS USED FOR DEFLECTION PURPOSES. UNDER NO CONDITIONS SHALL THE CONTRACTOR EXCEED THE MAXIMUM DEFLECTION ANGLE RECOMMENDED BY THE PIPE MANUFACTURER.
5. THE CONTRACTOR SHALL NOTIFY CITY OF MANOR @ 512-272-5555 SEVENTY TWO (72) HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METER. THE CONTRACTOR SHALL CAREFULLY REMOVE ALL METERS AND METER BOXES WHICH ARE INDICATED TO BE RELOCATED OR SALVAGED. THE CONTRACTOR SHALL INSTALL THE REMOVED METER AND METER BOX OR THE CITY PROVIDED METER AND METER BOX AT THE LOCATION INDICATED ON THE CONSTRUCTION PLANS. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING SERVICE LINE OR FIRE LINE TO THE RELOCATED METER.
6. THE CONTRACTOR SHALL RECORD AND SUPPLY TO THE CITY ENGINEER THE FOLLOWING INFORMATION:
   - A. ANY UTILITY LINE OR MANHOLE LOCATION/ELEVATION THAT DIFFERS FROM THE PLANS.
   - B. HOUSE CONNECTION LOCATIONS, INCLUDING DISTANCE FROM PROPERTY LINE, DISTANCE FROM NEAREST PROPERTY CORNER, AND ELEVATION AND DEPTH OF STUB FLOW LINE.
   - C. AS-BUILT MANHOLE TOP AND FLOW LINE ELEVATIONS.
   - D. AS-BUILT PLAN AND PROFILE OF ALL RELOCATED AND/OR ADJUSTED UTILITY LINES OR STORM SEWERS, WITH FLOW LINE ELEVATIONS GIVEN AT FIFTY FT. INTERVALS.
7. BEFORE DISCONNECTING ANY WASTEWATER LINE, CONTRACTOR MUST PROVIDE AN ALTERNATE MEANS OF WASTEWATER CONVEYANCE FOR THE INTERRUPTED SECTION.
8. ANY EXISTING IMPROVEMENTS, INCLUDING DRAINAGE FACILITIES, DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR, AT HIS EXPENSE, TO A CONDITION EQUAL TO, OR BETTER THAN, PRECONSTRUCTION CONDITION.
9. THE CONE SECTION OF MANHOLES ALONG EXISTING WASTEWATER LINES THAT WILL BE ABANDONED SHALL BE REMOVED BY THE CONTRACTOR. ALL PIPE OPENINGS IN THE MANHOLE SHALL BE SEALED WITH CONCRETE OR OTHER MATERIAL APPROVED BY THE ENGINEER. THE MANHOLES SHALL THEN BE FILLED WITH SAND AND BROUGHT TO GRADE WITH BACKFILL IN ACCORDANCE WITH SPECIFICATIONS.
10. ANY PORTION OF THIS PROJECT WHICH IS IMPROPERLY PLACED AND/OR CONFLICTS WITH ANY ROADWAY STRUCTURE SHALL BE REMOVED AND CORRECTLY PLACED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS.
11. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO PROTECT ROADWAY FACILITIES AT ALL TIMES.
12. PIPES INDICATED TO BE ABANDONED SHALL BE CUT AND PLUGGED.
13. ALL VALVE COVER LIDS TO BE PAINTED SAFETY BLUE.
14. PIPE MATERIAL FOR WATER MAINS TO BE AWWA C-900 PVC DR-18 PRESSURE CLASS 235, OR C-100 DUCTILE IRON CLASS 50.
15. ALL VALVES MUST BE LOCATED OPPOSITE THE TANGENT POINT OF THE STREET CURB RADIUS.
16. PIPE MATERIAL FOR FIRE HYDRANT LEADS TO BE AWWA C-100 DUCTILE IRON CLASS 50.
17. MINIMUM CLEARANCE BETWEEN WATER LINES AND SEWER LINES IS NINE (9) FEET MEASURED BETWEEN PIPE OUTSIDE DIAMETERS.
18. LINE FLUSHING OR ANY ACTIVITY USING LARGE QUANTITIES OF WATER MUST BE SCHEDULED WITH THE DIRECTOR OF PUBLIC WORKS.
19. THE CONTRACTOR, AT THEIR EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINE CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIALS), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY THE CITY OF MANOR PERSONNEL. WATER SAMPLES (BAC-T) WILL BE COLLECTED BY THE CONTRACTOR TO VERIFY EACH TESTED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PM UNDER OBSERVATION BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER TREATMENT AND DISPOSAL OF ANY CHLORINATED WATER.

   SAMPLING TAPS SHALL BE BROUGHT UP TO THREE (3) FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE. SAMPLES FOR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY THE CONTRACTOR NO LESS THAN 24 HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF THE CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY. THE CONTRACTOR SHALL SEND THE WATER SAMPLES TO AN ACCREDITED LAB FOR TESTING AT THIER OWN COST AND PROVIDE THE TEST RESULTS TO THE CITY.

   THE WATER LINES WILL BE PLACED IN SERVICE ONLY AFTER ANALYTICAL RESULTS OF THE WATER SAMPLES SHOWING THE WATER IS FREE OF FECAL COLIFORMS HAVE BEEN SUBMITTED TO THE CITY OF MANOR FOR REVIEW.
20. PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS MUST BE SDR-26 PVC, ASTM 3034. PIPE MATERIAL FOR WASTEWATER FORCE MAINS MUST BE SDR-26 PVC, PRESSURE CLASS , 160 PSI, PER ASTM 2241.
21. TESTING OF ALL PUBLIC UTILITY LINES AND APPURTENANCES FOR CONFORMANCE WITH CITY REQUIREMENTS SHALL BE CONDUCTED AFTER THE INSTALLATION AND BACKFILLING OF ALL PUBLIC UTILITIES WITHIN A RIGHT-OF-WAY OR EASEMENT.
22. ALL WATER LINES SHALL BE TESTED AT A PRESSURE OF 200 PSI FOR A SUFFICIENT PERIOD (APPROXIMATELY 10 MINUTES) TO DISCOVER ALL LEAKING OR DEFECTIVE MATERIALS. A LEAKAGE TEST WILL FOLLOW THE PRESSURE TEST AND BE CONDUCTED ON THE ENTIRE PROJECT OR EACH VALVED SECTION. THE LEAKAGE TEST SHALL BE AT 150 PSI FOR AT LEAST 1 HOUR. ALLOWABLE LEAKAGE SHALL BE DEFINED AS THE QUANTITY OF WATER THAT MUST BE SUPPLIED INTO ANY TEST SECTION OF PIPE TO MAINTAIN THE SPECIFIED LEAKAGE TEST PRESSURE AFTER THE AIR IN THE PIPELINE HAS BEEN EXPELLED AND THE PIPE HAS BEEN FILLED WITH WATER. NO PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE EXCEEDS THE LIMIT AS CALCULATED BY THE FORMULA Q=LD √P/148,000 WHERE Q=QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR; L=LENGTH OF PIPE BEING TESTED IN FEET;D=DIAMETER OF PIPE IN INCHES; AND P=AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH.

    IF THE PRESSURE PIPE LEAKAGE TEST DISCLOSES LEAKAGE IN EXCESS OF THE SPECIFIED ALLOWABLE, THE CONTRACTOR, AT HIS EXPENSE, SHALL LOCATE AND CORRECT ALL DEFECTS IN THE PIPE UNTIL THE LEAKAGE IS WITHIN THE INDICATED ALLOWANCE. ALL VISIBLE LEAKAGE IN PIPE SHALL ALSO BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.
23. STEEL ENCASEMENT PIPE FOR BORES OR TRENCHED ENCASEMENT MUST BE A MINIMUM OF TWO PIPE SIZES LARGER THAN THE CARRIER PIPE AND IN ACCORDANCE WITH ASTM A134. CASING SPACERS MUST BE STAINLESS STEEL AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS. ENCASEMENT PIPE ENDS MUST BE SEALED WITH END SEALS.
24. BEDDING FOR WATER MAIN, SEWER WATER MAIN AND WASTEWATER MAIN PIPES MUST BE CLEAN 3/8" TYPE F ROCK AND FREE OF MUD, CLAY, VEGETATION OR OTHER DEBRIS.
25. WASTEWATER MANHOLES MUST CONFORM TO ASTM C-478 AND BE COATED PER CITY OF AUSTIN STANDARDS.

TRENCH SAFETY NOTES

1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER FIVE (5) FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOILS SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN FIVE (5) FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
2. IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN EMPLOYEES ARE REQUIRED TO BE IN TRENCHES FOUR (4) FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN TWENTY-FIVE (25) FEET OF LATERAL TRAVEL.
3. TRENCH SAFETY PLANS, SEALED BY A LICENSED PROFESSIONAL ENGINEER MUST BE SUBMITTED FOR ALL CONSTRUCTION ACTIVITIES WHERE EXCAVATION DEPTHS ARE FIVE (5) FEET OR GREATER. IF A TRENCH SAFETY PLAN WAS NOT PROVIDED WITH THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN FIVE (5) FEET IN DEPTH AND DURING CONSTRUCTION IT WAS FOUND THAT TRENCHES ARE IN FACT FIVE (5) FEET OR MORE IN DEPTH, OR ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE CITY NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL A TRENCH SAFETY PLAN IS SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

26. ALLOWABLE LEAKAGE SHALL BE 50 GALLONS PER 24 HOURS PER INCH OF INSIDE DIAMETER PER MILE OF PIPELINE. AFTER COMPLETING BACKFILL OF EACH SECTION OF WASTEWATER LINE CONTRACTOR SHALL, AT HIS EXPENSE, CONDUCT A LINE ACCEPTANCE TEST USING LOW-PRESSURE AIR. PERFORM TEST USING EQUIPMENT AND PROCEDURES SPECIFIED BELOW, UNDER SUPERVISION OF OWNER.

    1. EQUIPMENT - MINIMUM REQUIREMENTS:
       - A. PNEUMATIC PLUGS SHALL HAVE A SEALING LENGTH TO OR GREATER THAN DIAMETER OF PIPE TO BE INSPECTED.
       - B. PNEUMATIC PLUGS SHALL RESIST INTERNAL TEST PRESSURE WITHOUT REQUIRING EXTERNAL BRACING OR BLOCKING.
       - C. AIR SHALL PASS THROUGH A SINGLE CONTROL PANEL.
       - D. THREE INDIVIDUAL HOSES SHALL BE USED FOR THE FOLLOWING CONNECTIONS:
         (1) FROM CONTROL PANEL TO PNEUMATIC PLUGS FOR INFLATION.
         (2) FROM CONTROL PANEL TO SEALED LINE FOR INTRODUCING LOW-PRESSURE AIR.
         (3) FROM SEALED LINE TO CONTROL PANEL FOR CONTINUALLY MONITORING AIR PRESSURE RISE IN SEALED LINE.

    2. PROCEDURES -
       - A. PNEUMATIC PLUG SHALL BE SEAL-TESTED BEFORE BEING USED IN ACTUAL TEST INSTALLATION. LAY ON LENGTH OF PIPE ON GROUND AND SEAL AT BOTH ENDS WITH PNEUMATIC PLUGS TO BE CHECKED. INFLATE AIR PLUGS TO 25 PSIG. PRESSURIZE SEALED PIPE TO 5 PSIG. PLUGS SHALL HOLD AGAINST THIS PRESSURE WITHOUT BRACING AND WITHOUT MOVEMENT OF PLUGS OUT OF PIPE.
       - B. AFTER A MANHOLE-TO-MANHOLE SECTION OF PIPE HAS BEEN BACKFILLED AND CLEANED, AND PNEUMATIC PLUGS HAVE BEEN CHECKED BY ABOVE PROCEDURES, PLACE PLUGS IN LINE AT EACH MANHOLE AND INFLATE PLUGS TO 25 PSIG. INTRODUCE LOW PRESSURE AIR INTO THIS SEALED LINE UNTIL INTERNAL AIR PRESSURE REACHES 4 PSIG GREATER THAN AVERAGE BACK PRESSURE OF GROUND WATER THAT MAY BE OVER PIPE. ALLOW AT LEAST 2 MINUTES FOR AIR PRESSURE TO STABILIZE. AFTER THE STABILIZATION PERIOD (3.5 PSIG MINIMUM PRESSURE IN THE PIPE), DISCONNECT AIR HOSE FROM CONTROL PANEL TO AIR SUPPLY. TERM PORTION OF LINE BEING TESTED "ACCEPTABLE" IF TIME REQUIRED FOR PRESSURE DROP FROM 3.5 TO 2.5 PSIG GREATER THAN AVERAGE BACK PRESSURE OF GROUND WATER THAT MAY BE OVER PIPE IS NOT LESS THAN SHOWN IN THE FOLLOWING TABLE.

PIPE SIZE	MINUTES	SECONDS	MINIMUM TIME
4"		5	0
6"		5	0
8"		5	0
10"		5	0
12"		5	30
15"		7	5
18"		8	30
21"		9	50
24"		11	20

    - C. IN AREAS WHERE GROUND WATER IS KNOWN TO EXIST, INSTALL A 1/2" DIAMETER CAPPED PIPE NIPPLE, APPROXIMATELY 10" LONG, THROUGH MANHOLE WALL ON TOP OF ONE WASTEWATER LINE ENTERING MANHOLE. IMMEDIATELY PRIOR TO PERFORMANCE OF LINE ACCEPTANCE TEST, DETERMINE GROUND WATER BY REMOVING PIPE CAP, BLOWING AIR THROUGH PIPE NIPPLE TO CLEAR IT, AND CONNECTING A CLEAR PLASTIC TUBE TO PIPE NIPPLE. SUPPORT HOSE VERTICALLY AND MEASURE HEIGHT (IN FEET) OF WATER OVER INVERT OF PIPE AFTER WATER STOPS RISING IN PLASTIC TUBE. DIVIDE THIS HEIGHT BY 2.3 FEET TO ESTABLISH PSI TO BE ADDED TO READINGS.

    3. REPAIR OR REPLACEMENT - IF TEST DETERMINES INSTALLATION UNACCEPTABLE, CONTRACTOR SHALL LOCATE SOURCE OF LEAKAGE AND REPAIR OR REPLACE DEFECTIVE MATERIALS AND/OR WORKMANSHIP TO PRINCIPLE SATISFACTORY TO OWNER.

27. **FOLLOWING LEAKAGE TESTING, THE PIPES WILL BE CCTV INSPECTED.** WATER SHALL BE FLOWED INTO THE PIPE TO PROVIDE MEANINGFUL INSPECTION FOR SETTLEMENT. ANY PIPE SETTLEMENT WHICH CAUSES EXCESSIVE PONDING OF WATER IN THE PIPE SHALL BE CAUSE FOR REJECTION. EXCESSIVE PONDING SHALL BE DEFINED AS A GOLF BALL (1-5/8" DIAMETER) SUBMERGED AT ANY POINT.
28. MANDREL TESTING : ALL GRAVITY LINES UTILIZING FLEXIBLE PIPE MUST BE TESTED FOR DEFLECTION BY PULLING A RIGID MANDREL THROUGH THE INSTALLED PIPE. THE TEST MUST BE CONDUCTED AT LEAST 30 DAYS AFTER PLACEMENT AND COMPACTION OF FINAL BACKFILL. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. THE TEST MUST BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. THE TEST MANDREL MUST HAVE AN OUTSIDE DIAMETER EQUAL TO 95% OF THE PIPE INSIDE DIAMETER. SHOULD THE MANDREL REACH AN IMPASSE, THE LINE SHALL BE UNCOVERED AND REPAIRED. A TELEVISION TEST IS NOT AN ACCEPTABLE SUBSTITUTE FOR THE DEFLECTION TEST. DEFLECTOMETERS MAY BE APPROVED FOR USE ON A CASE BY CASE BASIS.
29. ALL WATER AND WASTEWATER IMPROVEMENTS MUST CONFORM TO APPLICABLE CITY OF MANOR ORDINANCES.
30. AFTER A MANHOLE-TO-MANHOLE SECTION OF PIPE HAS BEEN BACKFILLED AND CLEANED, AND PNEUMATIC PLUGS HAVE BEEN CHECKED BY PER STANDARD PROCEDURES, PLACE PLUGS IN LINE AT EACH MANHOLE AND INFLATE PLUGS TO 25 PSIG. INTRODUCE LOW PRESSURE AIR INTO THIS SEALED LINE UNTIL INTERNAL AIR PRESSURE REACHES 4 PSIG GREATER THAN AVERAGE BACK PRESSURE OF GROUND WATER THAT MAY BE OVER PIPE. ALLOW AT LEAST 2 MINUTES FOR AIR PRESSURE TO STABILIZE. AFTER THE STABILIZATION PERIOD (3.5 PSIG MINIMUM PRESSURE IN THE PIPE), DISCONNECT AIR HOSE FROM CONTROL PANEL TO AIR SUPPLY. TERM PORTION OF LINE BEING TESTED "ACCEPTABLE" IF TIME REQUIRED FOR PRESSURE DROP FROM 3.5 TO 2.5 PSIG GREATER THAN AVERAGE BACK PRESSURE OF GROUND WATER THAT MAY BE OVER PIPE IS NOT LESS THAN 5 MINUTES.
31. MANHOLES AND WET WELLS WILL REQUIRE JOINT PIPE WRAPPING AS PER SPECS.

STREET AND DRAINAGE NOTES

1. STREET AND DRAINAGE SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH ADOPTED CITY OF MANOR STANDARDS AND GEOTECHNICAL REPORT RECOMMENDATIONS.
2. ALL MATERIAL AND DENSITY TESTING MUST BE PERFORMED BY AN INDEPENDENT LABORATORY, ACCEPTABLE TO THE CITY AND FUNDED BY THE DEVELOPER. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. THE CITY INSPECTOR MUST BE NOTIFIED AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF ANY TESTING.
3. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% OF MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. BACKFILL MATERIAL SHALL BE GRANULAR MATERIAL WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE TOP 3" OF BACKFILL SHALL BE CLEAN TOPSOIL, FREE FROM CLODS AND ROCKS AND BE CAPABLE OF SUSTAINING PLANT LIFE.
4. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE, WATER AND WASTEWATER SERVICE MUST BE A MINIMUM OF 30" BELOW SUBGRADE.
5. STREET RIGHT OF WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. IN NO CASE SHALL THE WIDTH OF THE SLOPED RIGHT OF WAY OUTSIDE THE CURB BE LESS THAN 10 FEET.
6. BARRICADES MUST BE INSTALLED AT ALL DEAD END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN SITE AND PUBLIC SAFETY.
7. ALL STORM SEWER PIPE MUST BE CLASS III RCP IN CONFORMANCE WITH ASTM C-76.
8. ALL STORM SEWER MANHOLES MUST BE MINIMUM 48" DIAMETER RCP IN ACCORDANCE WITH ASTM C-478. MANHOLE RINGS AND COVERS TO BE 32" DIAMETER MARKED STORM SEWER.
9. ALL STREET AND DRAINAGE IMPROVEMENTS MUST CONFORM TO APPLICABLE CITY OF MANOR ORDINANCES.
10. **ALL STORM SEWER LINES ARE REQUIRED TO BE CCTV INSPECTED**. COPIES OF VIDEO FOOTAGE TO BE DELIVERED TO CITY OF MANOR.

NOTE: 3/8 INCH TYPE F BEDDING IS REQUIRED TO BE USED FOR ALL WATER, WASTEWATER AND STORM SEWER PIPE TRENCHES.

TRAFFIC CONTROL PLAN NOTES

1. THE CONTRACTOR SHALL CONTACT THE CITY A MINIMUM OF TWO (2) WORKING DAYS IN ADVANCE OF BLOCKING TRAFFIC LANES AND A MINIMUM OF SIX (6) DAYS IN ADVANCE OF SCHEDULED DETOURING OF TRAFFIC LANES.
2. THE CONTRACTOR SHALL NOTIFY ALL OTHER GOVERNMENTAL AGENCIES WHO'S RIGHT-OF-WAYS ARE AFFECTED BY HIS WORK ZONE TRAFFIC CONTROLS. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL TRAFFIC CONTROL DEVICES THAT THEY MAY REQUIRE.
3. THE CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES WHILE CROSSING EXISTING ROADWAYS UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. IF ACCESS CAN NOT BE MAINTAINED, AT LEAST 24 HOUR WRITTEN NOTICE WILL BE GIVEN TO AFFECTED PROPERTY OWNERS.
5. ALL TRENCHES SHALL BE EITHER BACKFILLED, PLATED OR FENCED WITH SAFETY FENCING.
6. THE CONTRACTOR SHALL MAKE INSPECTION OF ALL TRAFFIC CONTROL DEVICES AT LEAST TWO TIMES A DAY (ONCE AT THE BEGINNING OF THE DAY AND ONCE AT THE END OF THE WORK DAY) INCLUDING NON-WORKING DAYS. TO ENSURE THAT ALL DEVICES ARE IN PROPER WORKING ORDER.
7. ALL TRAFFIC CONTROL DEVICES USED SHALL CONFORM TO THE CURRENT EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
8. ALL SIGNS USED AT NIGHT SHALL BE REFLECTORIZED AND SHALL HAVE A TYPE A FLASHER LIGHT.
9. ALL CHANNELIZING DEVICES USED AT NIGHT SHALL HAVE A TYPE C STEADY BURN LIGHT.
10. SIGN MOUNTING HEIGHTS SHALL BE ONE (1) FOOT MINIMUM ABOVE THE GROUND FOR DAYTIME OPERATIONS AND THREE (3) FEET MINIMUM ABOVE THE GROUND FOR NIGHTTIME OPERATIONS.
11. ALL PERSONS WORKING WITHIN THE RIGHT-OF-WAY SHALL WEAR AN ORANGE COLORED SAFETY VEST. THE SAFETY VEST SHALL BE REFLECTORIZED WHILE WORKING AT NIGHT.
12. ALL FLAGGERS SHALL WEAR ORANGE COLORED SAFETY VESTS AND SHALL HAVE EITHER AN ORANGE FLAG OR A SIGN PADDLE WHILE ON DUTY. FLAGGERS SHALL NOT PERFORM ANY WORK NOT RELATED TO FLAGGING WHILE ON DUTY.
13. A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND REVIEWED BY THE CITY OF MANOR CITY ENGINEER PRIOR TO CONSTRUCTION IN ANY RIGHT OF WAY.

CRITERIA FOR ACCEPTANCE

THE PROCEDURE FOR ACCEPTANCE REQUIRES THAT ALL IMPROVEMENTS FIRST BE COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER. ONCE ALL IMPROVEMENTS HAVE BEEN SATISFACTORILY COMPLETED, THE FOLLOWING DOCUMENTS MUST BE SUBMITTED FOR REVIEW:

1. ELECTRONIC COPY OF ALL PUBLIC IMPROVEMENTS SHOWN ON THE RECORD DRAWINGS (AUTOCAD 2016 FORMAT OR

TRAVIS COUNTY EMERGENCY SERVICES DISTRICT No. 12

FIRE DEPARTMENT

TRAVIS COUNTY EMERGENCY SERVICES DISTRICT No. 12 (TCESD No. 12) NOTES

1)The owner and/or developer shall be responsible for contacting Travis County ESD No. 12 to ensure compliance with all codes, ordinances, statutes and permitting requirements prior to construction.

2)Prior to beginning any construction, the appropriate Travis County ESD No. 12 permit/approval shall be obtained. The approved permit shall be readily available on site to Travis County ESD No. 12.

3)Phased occupancy shall be permitted only with prior approval from Travis County ESD No. 12, the building department, and other related agencies, as applicable. REQUESTS FOR PHASED OCCUPANCY SHALL BE MADE PRIOR TO START OF CONSTRUCTION ONLY.

4)Phased installation of fire access roads shall require an access phasing plan approved by Travis County ESD No. 12.

5)Phased construction of buildings shall require a construction phasing plan approved Travis County ESD No. 12.

6)An all-weather fire lane/fire apparatus access road shall be constructed to support the imposed load of a fire apparatus weighing 75,000 pounds.

7)The fire lane/fire apparatus access road shall provide fire department access to all parts of combustible structures within 150 feet of the fire lane. The approved fire lane/fire apparatus access road must be installed prior to and maintained during construction of any combustible structure, unless otherwise approved by Travis County ESD No. 12.

8)Where a fire hydrant is located on a fire lane/fire apparatus access road, the minimum road width shall be 26 feet, exclusive of shoulders. If no fire hydrant is provided, the minimum fire lane/fire apparatus access road width shall be 25 feet.

9)Fire lane width is measured from top face of curb to top face of curb for fire lanes with standard curbs and gutters and from flow- line to flow-line for fire lanes with modified curb designs (e.g. rolled, ramped).

10) The developer is responsible to verify that all approved public works, street improvement and precise grading plans conform to the minimum street width requirements set forth by the fire code and adopted by Travis County ESD No. 12.

11) A minimum vertical clearance of 14' shall be provided for all fire lanes/fire apparatus access roads.

12) Inside turning radius of fire lanes/fire apparatus access roads shall be a minimum of 25 feet. The outside radius shall be 50 feet.

13) Dead-end fire lanes/fire apparatus access roads in excess of 150 feet shall be provided with approved turnaround per 2015 IFC Appendix D, Table D103.4.

14) The diameter of a cul-de-sac shall be 100 feet minimum per City of Manor specifications.

15) Access gates shall be approved by Travis County ESD No. 12 prior to installation.

16) All gates in construction fencing shall be equipped with a Knox or breakaway padlock.

17) If building exceeds 30 feet in height from grade plane, an aerial fire apparatus road, 15-30 feet parallel to one entire side of the building shall be in place. (2015 IFC, Appendix D105)

18) Fire lanes shall be marked with FIRE LANE - TOW AWAY ZONE. The curbs shall be painted red and the lettering shall be 4” in height and painted white. The stencil shall be placed at intervals of 35 feet.

19) The minimum required fire flow shall meet or exceed the requirements of Appendix B of the 2015 International Fire Code.

20) The maximum fire flow reduction for a sprinkler system shall be 50%.

21) All fire hydrants that are approved and installed as a part of the proposed project shall be part of a fire protection system.

22) The utility contractor shall consult Travis County ESD No. 12 regarding any requirements for utility contractors.

23) The appropriate individual shall consult with Travis County ESD No. 12 for requirements related to the underground water main line and subsequent installation of the water main/fire hydrant line.

24) The submission of an underground water line (utility) plan sheet with the site plan does not alleviate the need to have a separate underground plan submitted and approved by Travis County ESD No. 12. The approval of a site plan does not constitute the approval of an underground system.

25) Underground mains feeding hydrants shall be installed and tested in accordance with NFPA 24, the fire code and Travis County ESD No. 12 adopted amendments, by a contractor licensed to perform the installation. The entire main must be hydrostatically tested at one time unless isolation valves are provided between tested sections.

26)Travis County ESD No. 12 considers the piping from the point of connection at the municipal water supply to the fire hydrants and the base of any fire sprinkler riser part of a fire protection system.

27)The presence of domestic water supply taps off of the main water line or a shared supply line with fire sprinkler riser does not override any requirements of Travis County ESD No. 12 or NFPA 24. NFPA 24 shall apply to all underground installations and installations shall be permitted and inspected by Travis County ESD No. 12.

28)Fire hydrants shall meet the minimum standard of the City of Manor and Travis County ESD No. 12. (M511S-17A) and painted red.

29)The 4.5” fire hydrant outlet must face the fire lane.

30)The hydrants shall be installed with the center of the 4.5” opening at least 18” above finished grade.

31)Hydrants shall be placed within 100 feet of an FDC.

32)Hydrants shall be located so that a hose line running between the hydrant and the fire department connection(s) will not cross driveways, obstruct roads or fire lanes, or otherwise interfere with emergency vehicle response and evacuation of a site.

33)All fire hydrants shall have a “Blue Reflective Pavement Marker” indicating their location.

34)Hydrants shall be placed at no more than 500 feet apart, unless otherwise approved by Travis County ESD No. 12. (2015 IFC, Table C102.1)

35)Hydrants and fire department connections shall not be located behind parking stalls or in other locations where they are likely to be blocked by vehicles or other objects. Whenever possible, hydrants shall be placed in landscape islands/peninsulas, street and drive aisle intersections in preference to mid-block locations.

36)Hydrants must be located within three to six feet of the edge of a fire access roadway.

37)Hydrants shall not be located in areas where they will be visually or operationally obstructed (behind fences or walls, in bushes, behind parking spaces, etc).

38)A minimum 3-foot clearance shall be provided around the circumference of the hydrant.

39)Approved fire hydrants are to be considered part of a fire protection system and shall not be removed or tampered with unless approved by Travis County ESD No. 12. Tampering shall include, but is not limited to, painting, modifying, and obstructing access.

40)Fire sprinkler riser rooms shall be provided with exterior access. No interior access shall be provided. The exterior access door shall face a designated fire lane, unless otherwise approved by Travis County ESD No. 12.

41)Any fire hydrants that have not passed an acceptance test in the presence of a Travis County ESD No. 12 inspector or temporarily inoperative should be wrapped with a black bag.

42)The building address shall be clearly visible from the street to which it is addressed. Final numbers have to be at least 6” in height and of contrasting color with the background upon which they are placed.

43)Temporary fuel tanks of 60 or more gallons shall be inspected by Travis County ESD No. 12 to ensure the appropriate requirements are met.

44)Prior to occupancy, a close out inspection test of fire hydrant flow is required by Travis County ESD No. 12. The contractor shall contact Travis County ESD No. 12 to schedule the acceptance test. If any hydrant fails the fire flow test, the entire system fails the fire flow test.

45)Approval of this plan submittal does not constitute a verification of all data, codes, information, and calculations supplied by the applicant. The licensed designer and/or professional engineer of record is solely responsible for the completeness, accuracy, and adequacy of the submittal whether or not the plan submittal is reviewed and approved for code compliance by Travis County Emergency Services District No. 12.

no	date	Revisions	appv.
1	5-21-14	LEAK FORMULA	DTS
2	3-4-15	ESD #12 NOTES	FTP
3	10-31-17	STREET NOTES	FTP
4	12-26-18	ACCEPTANCE NOTES	FTP
5	10-2-19	ENVIRONMENTAL NOTES	PMG
6	8-11-2020	ESD #12 NOTES	PMG
7	2-2-2022	ENVIRONMENTAL NOTES	PMG
8	2-2-2022	ESD #12 NOTES	PMG
9	11-30-2022	WATER AND WASTEWATER CONSTRUCTION NOTES	FTP
9	12-14-2022	WATER AND WASTEWATER CONSTRUCTION NOTES	PMG

PROJECT NAME
MANOR NE 25A SDP

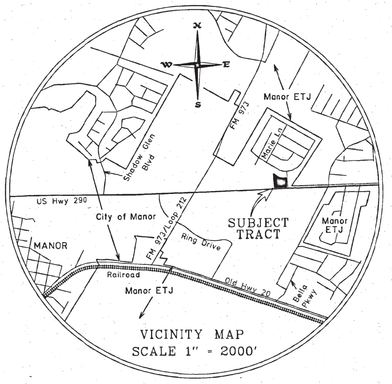
CITY OF MANOR, TEXAS

SCALE: AS NOTED
DWG. NO. AS NOTED
DESIGN:
DWN:
DATE:
JOB NO.

Sheet

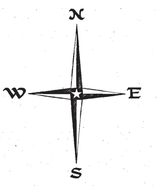
MANOR COMMONS NE PHASE 3
REPLAT OF LOT 1, BLOCK "A"
GREENBURY PHASE ONE-A

PREPARED: SEPTEMBER 12, 2025



VICINITY MAP
SCALE 1" = 2000'

GRAPHIC SCALE
0 100 200 300
SCALE: 1"= 100'



Legend

- ◇ ½" Capped Iron Rod Found "as noted"
- △ Calculated Point
- □ Concrete Highway Monument Found
- ⊕ ½" Capped Iron Rod Set imprinted "Holt Carson, Inc."
- ..... Proposed 5' Concrete Sidewalk
- B.L. = Building Line
- D.E. = Drainage Easement
- (Record Bearing and Distance)

BEARING BASIS:
Orientation for this survey is based upon the State Plane Coordinate System (4203 - Texas Central Zone) All distances shown hereon are surface values.

NAVD 1988 Elevations shown hereon are based upon post processed static GPS observations.

Site Benchmark (BM#1) Triangle cut on East side of concrete drainage apron on North side of U.S. Highway 290 approximately 600 feet East of F.M. 973.

North: 10,101,966.17'
East: 3,178,812.43'
NAVD 1988 Elevation: 518.73 ft.

LOT SUMMARY

Total Number of Lots = 2
Number of Blocks = 1

Lot 1A, Block A: Commercial (C-1) 0.952 Acre
Lot 25, Block A: Commercial (C-1) 2.382 Acres

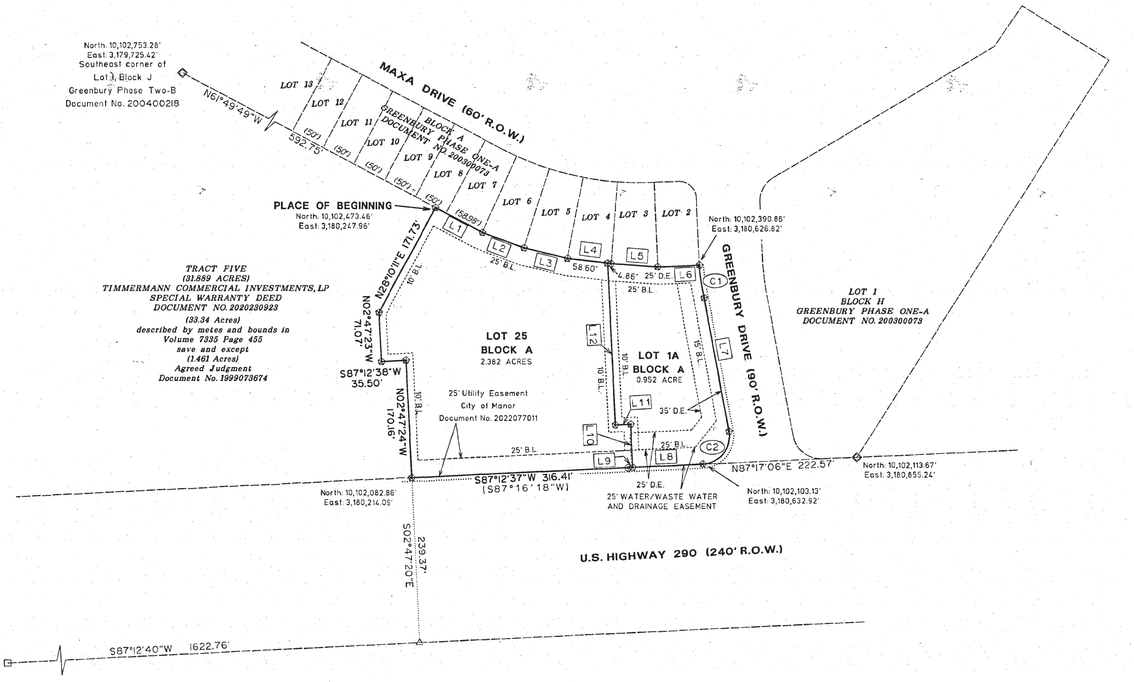
Total Acreage: 3.334 Acres

OWNER/SUBDIVIDER: Timmermann Commercial Investments, LP
Greenview /Development Greenbury, LP
501 Vale Street
Austin, Texas 78746

ENGINEER: ALM ENGINEERING, INC. F-3565
P.O. Box 536
Dripping Springs, Texas 78620

SURVEYOR: HOLT CARSON, INC.
1904 Fortview Road
Austin, Texas 78704
Firm Registration No. 10050700

NUMBERED COURSES	RECORD COURSES
L1 S 61°49'49" E - 76.09'	(S 58°34'00" E)
L2 S 69°28'10" E - 63.90'	(S 66°25'25" E 63.82')
L3 S 76°42'07" E - 63.92'	(S 73°26'19" E 63.92')
L4 S 83°21'33" E - 63.92'	(S 80°06'03" E 63.92')
L5 S 85°43'09" E - 66.50'	(S 82°30'54" E 66.96')
L6 N 87°20'00" E - 60.00'	(N 89°24'25" E 60.00')
L7 S 10°36'59" E - 196.28'	(S 07°24'25" E 196.28')
L8 S 87°17'06" W - 101.27'	(S 89°28'24" W)
L9 S 87°17'06" W - 1.65'	(S 89°28'24" W)
L10 N 02°47'23" W - 62.50'	
L11 S 87°12'36" W - 22.05'	
L12 N 02°47'23" W - 234.24	



CURVE DATA

C1
Δ= 7°57'57"
R= 345.00' (345.00')
T= 24.02'
C= 47.93' (48.13')
A= 47.96' (48.17')
CB= S08°47'49"E (S08°48'55"E)

C2
Δ= 97°54'05"
R= 40.00' (40.00')
T= 45.93'
C= 60.33' (60.35')
A= 68.35' (68.37')
CB= S38°20'03"W (S41°33'36"W)

HOLT CARSON, INCORPORATED
PROFESSIONAL LAND SURVEYORS
1904 FORTVIEW ROAD
AUSTIN, TX 78704
(512) 442-0990
email: hci@austin.rr.com
Texas Licensed Surveying Firm Registration No. 10050700

A 1130016 (Phase 3) PAGE 1 OF 2

MANOR COMMONS NE PHASE 3
REPLAT OF LOT 1, BLOCK "A"
GREENBURY PHASE ONE-A

PREPARED: JANUARY 20, 2025

OWNER'S CERTIFICATE AND DEDICATION:

THE STATE OF TEXAS ×
THE COUNTY OF TRAVIS ×

WHEREAS, TIMMERMANN COMMERCIAL INVESTMENTS, LP ACTING BY AND THROUGH IT'S GENERAL PARTNER, TIMMERMANN GP, LLC, OWNER OF 2.315 ACRES OF LAND OUT OF THE GREENBURY GATES SURVEY NO.63, ABSTRACT NO.315, IN THE CITY OF MANOR, TRAVIS COUNTY, TEXAS, AND BEING A PORTION OF THAT CERTAIN (31.889 ACRE) TRACT OF LAND RECORDED IN DOCUMENT NO.2020230923 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, TOGETHER WITH GREENVIEW DEVELOPMENT GREENBURY, LP, ACTING BY AND THROUGH ITS ITS PARTNER, GREENVIEW DEVELOPMENT CORPORATION, OWNER OF 0.969 ACRE OF LAND BEING ALL OF LOT 1, BLOCK A, GREENBURY PHASE ONE-A, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN DOCUMENT NO. 200300073 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, SAID LOT HAVING BEEN CONVEYED BY DEED RECORDED IN DOCUMENT NO. 2002157134 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS AND DOES HEREBY REPLAT SAID 3.284 ACRE TRACT, HAVING BEEN APPROVED FOR SUBDIVISION PURSUANT TO THE PUBLIC NOTIFICATION AND HEARING PROVISIONS OF CHAPTER 212 AND 232 OF THE LOCAL GOVERNMENT CODE.

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT THE UNDERSIGNED OWNERS OF THE LAND SHOWN ON THIS PLAT AND DESIGNATED HEREIN AS "MANOR COMMONS NE, REPLAT OF LOT 1, BLOCK A, GREENBURY PHASE ONE-A" OF THE CITY OF MANOR, TRAVIS COUNTY, TEXAS, AND WHOSE NAME IS SUBSCRIBED HERETO, HEREBY SUBDIVIDES SAID 4.482 ACRES OF LAND IN ACCORDANCE WITH THE ATTACHED MAP OR PLAT TO BE KNOWN AS "MANOR COMMONS NE PHASE 3, REPLAT OF LOT 1, BLOCK A, GREENBURY PHASE ONE-A" AND DO HEREBY DEDICATE TO THE USE OF THE PUBLIC FOREVER ALL STREETS AND PUBLIC EASEMENTS THEREON SHOWN FOR THE PURPOSE AND CONSIDERATION THEREIN EXPRESSED SUBJECT TO ANY EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND this the 6th day of November, A.D., 2025

Timmermann Commercial Investments, LP
By: Timmermann GP, LLC, General Partner
By: Barth Timmermann, Managing Partner
501 Vale Street
Austin, Texas 78746

Greenview Development Greenbury, LP
By: Greenview Development Corporation, General Partner
By: Barth Timmermann, President
501 Vale Street
Austin, Texas 78746

THE STATE OF TEXAS
THE COUNTY OF TRAVIS

I, the undersigned authority, on this the 6th day of November, A.D., 2025 did personally appear Barth Timmermann, known to me to be the person whose name is subscribed to the foregoing instrument of writing, and he acknowledged before me that he executed the same for the purposes and considerations therein expressed.

NOTARY PUBLIC
Printed Name Layla Hanna
Commission Expires 11/12/25

LAYLA HANNA NOTARY PUBLIC ID# 133438101 State of Texas Comm. Exp. 11-12-2025

SURVEYOR'S CERTIFICATION:

THE STATE OF TEXAS ×
THE COUNTY OF TRAVIS ×

I, Holt Carson, am authorized by the State of Texas to practice the profession of Surveying and hereby certify that this plat complies with the Survey related portions of the City of Manor, Texas Subdivision Ordinance, is true and correct and was prepared from an actual survey of the property on the ground under my direct supervision.

7-31-2025
Date

Holt Carson
Registered Professional Land Surveyor No. 5166
HOLT CARSON, INC.
1904 Fortview Road Austin, Texas 78704
(512) 442-0990

STATE OF TEXAS REGISTERED HOLT CARSON 5166 PROFESSIONAL LAND SURVEYOR

ENGINEER'S CERTIFICATION:

THE STATE OF TEXAS ×
THE COUNTY OF TRAVIS ×

I, the undersigned, a Registered Professional Engineer in the State of Texas, hereby certify that proper engineering consideration has been given to this plat.

No portion of the tract is within the designated flood hazard area as shown in the Letter of Map Revision (L.O.M.R.) 19-06-2660P, Effective: June 1, 2020 for FIRM Panel No. 48453C0485J, Travis County, Texas dated August 18, 2014.

10/22/2025
Date

Matthew Mitchell P.E. No. 83335
ALM ENGINEERING, INC. F-3565
P.O. Box 536
Dripping Springs, Texas 78620
(512) 431-9600

STATE OF TEXAS MATTHEW MITCHELL 83335 LICENSED PROFESSIONAL ENGINEER

LEGAL DESCRIPTION:

FIELD NOTE DESCRIPTION OF 3.277 ACRES OF LAND OUT OF THE GREENBURY GATES SURVEY NO. 63, ABSTRACT NO. 315, IN TRAVIS COUNTY, TEXAS, BEING A PORTION OF THAT CERTAIN (31.889 ACRE) TRACT OF LAND AS CONVEYED TO TIMMERMANN COMMERCIAL INVESTMENTS, LP, BY SPECIAL WARRANTY DEED RECORDED IN DOCUMENT NO. 2020230923 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, TOGETHER WITH ALL OF LOT 1, BLOCK A, GREENBURY PHASE ONE-A, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN DOCUMENT NO. 200300073 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, SAID LOT HAVING BEEN CONVEYED TO GREENVIEW DEVELOPMENT GREENBURY, LP BY DEED RECORDED IN DOCUMENT NO. 2021157134 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2" iron rod with a plastic cap imprinted "Holt Carson, Inc." set in the Southwest line of Lot 9, Block A, Greenbury Phase One-A, a subdivision in Travis County, Texas, according to the map or plat thereof recorded in Document No. 200300073 of the Official Public Records of Travis County, Texas, same being a point in the Northeast line of that certain (31.889 acre) tract of land as conveyed to Timmermann Commercial Investments, LP, by Special Warranty Deed recorded in Document No. 2020230923 of the Official Public Records of Travis County, Texas, and being the Northwest corner and the PLACE OF BEGINNING of the herein described tract;
THENCE with the Southwest line of Block A, Greenbury Phase One-A and with the Northeast line of said (31.889 acre) Timmermann Commercial Investments, LP tract, S 61 deg 49'49" E 132.57 ft. to a 1/2" iron rod with a plastic cap imprinted "Holt Carson, Inc." set at the Northwest corner of Lot 1, Block A, Greenbury Phase, One-A, and being an angle corner of the herein described tract;
THENCE leaving the Northeast line of said (31.889 acre) Timmermann Commercial Investments, LP tract with the North line Lot 1, Block A, Greenbury Phase One-A, the following five (5) courses:
1.) S 69 deg. 28'10" E 63.90 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc.";
2.) S 76 deg. 42'07" E 63.92 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc.";
3.) S 83 deg. 21'33" E 63.92 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc.";
4.) S 85 deg. 43'09" E 66.50 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc.";
5.) N 87 deg. 20'00" E 60.00 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc." in the West right-of-way line of Greenbury Drive at the Northeast corner of said Lot 1, same being the Northeast corner of the herein described tract;
THENCE with the East line of Lot 1, Block A, Greenbury Phase One-A, the following three (3) courses:
1.) Along a curve to the left with a radius of 345.00 ft. for an arc length of 47.96 ft. and which chord bears, S 80 deg. 47'49" E 47.93 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc.";
2.) S 10 deg. 36'59" E 196.28 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc." at a point of curvature;
3.) Along a curve to the right with a radius of 40.00 ft. for an arc length of 68.35 ft. and which chord bears, S 38 deg. 20'03" W 60.33 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc." in the North right-of-way line of U.S. Highway 290 and being the Southeast corner of the herein described tract, from which a capped iron rod found at the Southeast corner of Lot 1, Block H, Greenbury Phase One-A bears, N 87 deg. 17'06" E 222.57 ft.;
THENCE with the North right-of-way line of U.S. Highway 290 and with the South line of Lot 1, Block A, Greenbury Phase One-A and with the South line of said (31.889 acre) Timmermann Commercial Investments, LP tract, the following three (3) courses:
1.) S 87 deg. 17'06" W 101.27 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc.";
2.) S 87 deg. 17'06" W 1.65 ft. to a 1/2" iron rod found at the Southwest corner of said Lot 1, same being the Southeast corner of said (31.889 acre) Timmermann Commercial Investments, LP tract;
3.) S 87 deg. 12'37" W 310.92 ft. to a 1/2" iron rod set with a plastic cap imprinted "Holt Carson, Inc." for the Southwest corner of the herein described tract;
THENCE leaving the North right-of-way line of U.S. Highway 290 and crossing the interior of said (31.889 acre) Timmermann Commercial Investments, LP tract, N 02 deg. 56'14" W 417.55 ft. to the PLACE OF BEGINNING and containing 3.277 acres of land.

GENERAL NOTES:

1.) Water and wastewater systems serving this subdivision shall be designed and installed in accordance with the City of Manor and State Health Department plans and Specifications and specifications shall be submitted to the City of Manor, Water and Wastewater Department for review.
2.) All water and wastewater construction must be inspected by the City of Manor
3.) No lot in this subdivision shall be occupied until connected to the City of Manor water and wastewater.
4.) Prior to construction, a site development permit must be obtained from the City of Manor.
5.) Prior to construction on lots in this subdivision, drainage plans will be submitted to the City of Manor for review.
6.) The property owner shall provide for access to drainage easements as may be necessary and shall not prohibit access by governmental authorities.
7.) All building set-back lines shall be in accordance with the City of Manor current Zoning Ordinance.
8.) This plat is subject to easements and restrictions as set forth on the plat of Greenbury Phase One-A recorded in Document No. 200300073 of the Official Public Records of Travis County, Texas

ZONING NOTE:

C-1 - Light Commercial

CITY OF MANOR ACKNOWLEDGMENTS

THIS SUBDIVISION IS LOCATED WITHIN THE CITY OF MANOR CORPORATE CITY LIMITS AS OF THIS DATE 9th DAY OF October 2025 A.D.

ACCEPTED AND AUTHORIZED for record by the Planning and Zoning Commission of the City of Manor, Texas, on this the 9th day of October 2025, A.D.

Approved:
Felix Paiz, Chairperson

Attest:
Lluvia T. Almaraz, TRMC, City Secretary

ACCEPTED AND AUTHORIZED for record by the City Council of the City of Manor, Texas, on this the 9th day of October 2025 A.D.

Approved:
Dr. Christopher Harvey, Mayor

Attest:
Lluvia T. Almaraz, TRMC, City Secretary

CITY OF MANOR TEXAS

THE STATE OF TEXAS
THE COUNTY OF TRAVIS

I, Dyana Limon-Mercado, Clerk of Travis County, Texas, do hereby certify that the foregoing instrument of Writing and its Certificate of Authentication was filed for record in my office on the 14th day of November A.D., at 12 o'clock PM and duly recorded on the 14th day of November, A.D., at 12 o'clock P.M. in the Official Public Records of said County and State in Document No. 2025200181

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK OF SAID COUNTY this the 14th day of November 2025 A.D.

DYANA LIMON-MERCADO, COUNTY CLERK TRAVIS COUNTY, TEXAS

BY: Janelle Guy, Deputy

JANELLE GUY

HOLT CARSON, INCORPORATED
PROFESSIONAL LAND SURVEYORS
1904 FORTVIEW ROAD
AUSTIN, TX 78704
(512) 442-0990
email: survey@hciaustin.com
Texas Licensed Surveying Firm Registration No. 10050700

A 1130016 (Phase 3) PAGE 2 OF 2

BLOCK "C"

BLOCK "A"

ZONING SF-2

ZONING C-1

ZONING C-2

ZONING A

ZONING SF-2

ZONING C-1

ZONING C-1

ZONING SF-2

ZONING C-2

ZONING C-2

ZONING C-2

ROW

POMERANIAN DRIVE (50' R.O.W.)

MARIE LANE (50' R.O.W.)

MANOR COMMERCE BLVD (64' R.O.W.)

MARIA DRIVE (60' R.O.W.)

GREENBURY PHASE ONE A DOCUMENT NO. 2200000013

GREENBURY DRIVE

R.O.W. 92'

R.O.W.239.37'

TRACT FIVE
(31.959 ACRES)
TIMMERMANN COMMERCIAL INVESTEMENTS, LP
SPECIAL WARRANTY DEED
DOCUMENT NO. 2020230923
(33.34 Acres)
described by metes and bounds in
Volume 7335 Page 455
save and except
(1.461 Acres)
Agreed Judgment
Document No. 1999073674

EXISTING 10" WW

EX 10" WW

EXISTING 10" WASTEWATER LINE

EXISTING 12" WATER LINE

EXISTING WASTEWATER MANHOLE

EXISTING 12" WASTEWATER LINE

CITY OF MANOR WATER LINE EASEMENT

EXISTING WASTEWATER MANHOLE

EX 12" W

EX 12" WW

EX 12 W

EX 12 WW

REPLAT OF LOT 1 BLK "A", GREENBURY PHASE ONE A

LOT 1 BLOCK A

LOT 2 MANOR MINI STORAGE

(29.335 Acres) Remainder Richard Rodriguez and wife, Mary L. Rodriguez Volume 10819 Page 32

(19.335 Acres) Remainder Margarito J. Rivera and wife, Janie R. Rivera Volume 10819 Page 27

(Acres) Odeen
Document No.
2010174

U.S. HIGHWAY 290 (65 mph)

EOP

PL

ROW

EX 12 W

EX 12 WW

EX 10 WW

25
103772.5sf
2.38ac.

632

633

643

651

LEGEND

EX. WASTEWATER

EX. WATER

GAS LINE

1"=60'

ALM

#	REVISION	DATE

SCALE: 1"=60'
DATE: 2/27/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3665
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED
PROFESSIONAL ENGINEER
2-27-2026

EXISTING CONDITIONS
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

BLOCK "A"

TRACT FIVE
(31.889 ACRES)
TIMMERMANN COMMERCIAL INVESTEMENTS, LP
SPECIAL WARRANTY DEED
DOCUMENT NO. 2020230923
(33.34 Acres)
described by metes and bounds in
Volume 7335 Page 455
save and except
(1.461 Acres)
Agreed Judgment
Document No. 1999073674

POMERANIAN DRIVE (50' R.O.W.)

MARIE LANE (50' R.O.W.)

MANOR COMMERCE BLVD (64' R.O.W.)

GREENBURY DRIVE

R.O.W. 92

REPLAT OF LOT 1 BLK "A", GREENBURY PHASE ONE A

DOCUMENT NO. 202030073

BUILDING - ONE STORY
15,685.76 sf
FFE - 529.00

25
103772.5sf
2.38ac.

265.2 cfs

TREE PROTECTION

SILT FENCE

CONSTRUCTION ENTRANCE

TREE PROTECTION

SILT FENCE

SILT FENCE

20lf TEMP. ROCK BERM

20lf TEMP. ROCK BERM

INLET PROTECTION

State of Texas
(1.461 Acres)
Document No. 1999073674

25' Utility Easement
Document No. 2020230911

(29.335 Acres) Remainder Richard Rodriguez and wife, Mary L. Rodriguez Volume 10819 Page 32

LOT 2 MANOR MINI STORAGE

NOTE:
SEE CITY OF MANOR STANDARD CONSTRUCTION NOTES (pg.2) FOR PLAN FOR RESTORATION AND FOR THE MITIGATION OF EROSION IN ALL AREAS DISTURBED DURING CONSTRUCTION.

THE ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENT CONTROLS ON SITE TO KEEP THE PROJECT IN COMPLIANCE WITH THE CITY OF MANOR RULES AND REGULATIONS.

LEGEND

- WW — EX. WASTEWATER
- WW — PROPOSED WASTEWATER
- W — EX. WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- W.L.E. — WATERLINE EASEMENT
- LOC — LIMITS OF CONSTRUCTION (4.23 AC.)
- SF — SILT FENCE
- TREE PROTECTION

50 25 0 50 100
1"=50'

ALM

#	REVISION	DATE

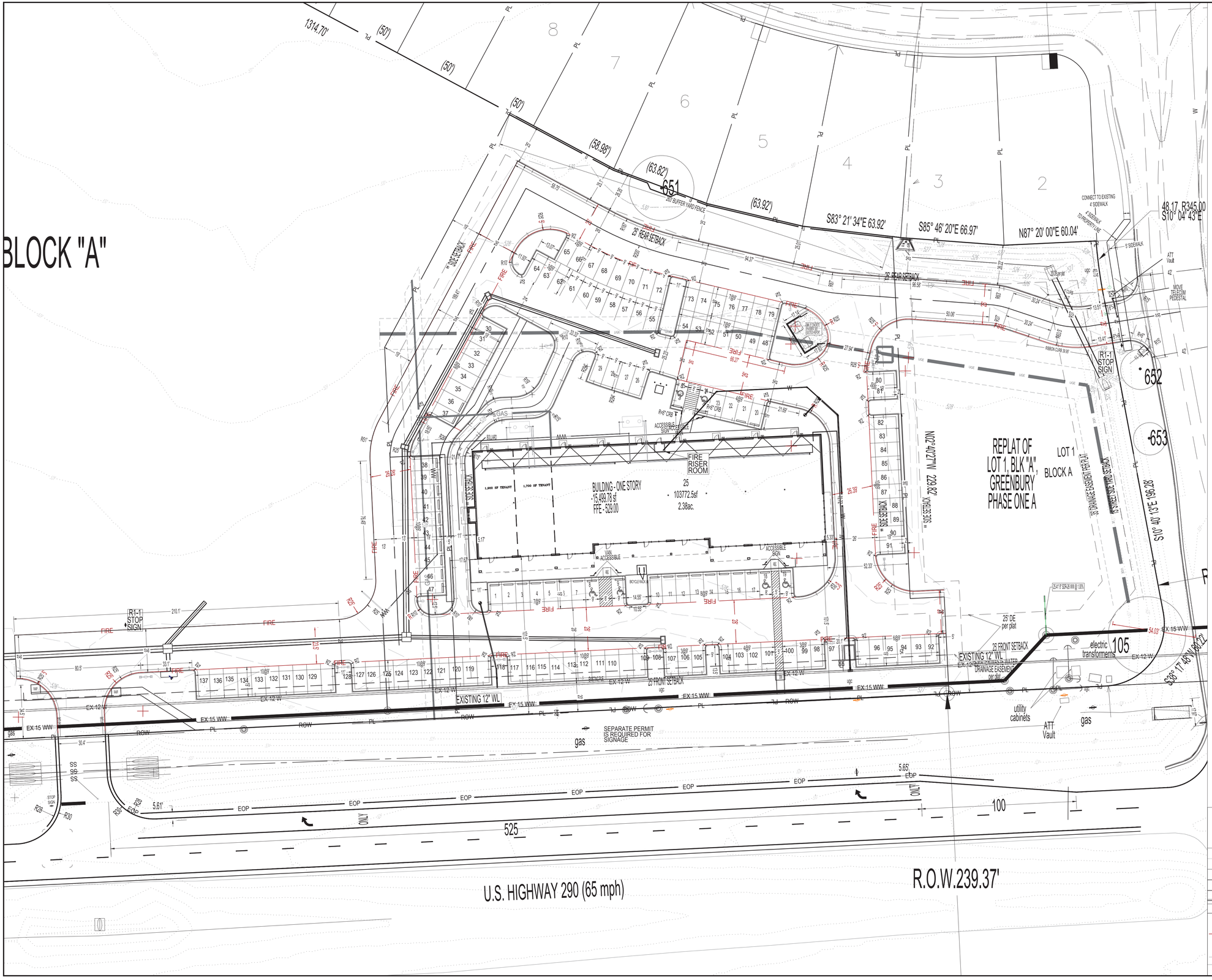
SCALE: 1"=50'
DATE: 2/27/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3665
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED PROFESSIONAL ENGINEER
2-27-2026

EROSION CONTROL PLAN
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

BLOCK "A"



BUILDING TYPE: II-B

SPRINKLER SYSTEM: YES

TOTAL SITE NET SITE AREA				
Total site area =				2.382 Acres
Landscape Area Required	15.0%	% X NSA =		0.357 Acres
Landscape Area Provided	26,272	SF =		0.603 Acres
Impervious Cover	77,501	SF =		1.779 Acres
	74.7%			
Building Area	15499.78	SF =		0.356 Acres
Building Height		ht.		
F.A.R.	0.149			

LOT 25A MULTI-TENANT					
	AREA	RATE	REQUIRED	TOTAL	PERCENT
				PROVIDED	
RESTAURANT	11,396	100	114		
MEDICAL	2,104	200	11		
RETAIL	2,000	250	8		
REGULAR				131	
COMPACT				-	
HANDICAPPED - STANDARD			4	4	
HANDICAPPED - VAN ACCESSIBLE			1	2	
TOTAL	-		133	137	103%
			ADDED	6	
OPTIONAL SPACES					0.0%

ADA RAMPS
ALL ADA RAMPS WILL BE CONSTRUCTED BY THE SITE CONTRACTOR.

CONCRETE PRIVACY FENCE

OWNER TO INSTALL A 6' TALL CONCRETE PRIVACY FENCE IN THE LOCATION AS SHOWN ON THE SITE DEVELOPMENT PERMIT PLANS. VENDOR SHALL BE CONCRETEX, LLC, USING THE VERTICAL FENCING STYLE AND THE "MENDOZA" COLOR.

ALL DIMENSION FOR PAVEMENT MARKING AND STRIPING ARE FROM FACE OF CURB OR CENTER OF STRIPING. ALL STRIPING DIMENSIONS MUST COMPLY WITH TDLR AND MUTCD STANDARDS AND SPECIFICATIONS.

THE MAXIMUM SLOPE FOR AN ACCESSIBLE STALL AND AISLE FOR PARKING CAN NOT EXCEED 2% SLOPE IN ANY DIRECTION. THE MAXIMUM SLOPE FOR ANY SIDEWALK CAN NOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE. IT IS RECOMMENDED THAT SIDEWALKS NOT EXCEED 4% RUNNING SLOPE AND CROSS SLOPES NOT EXCEED 1.5% SLOPE AT ANY LOCATION. CURB RAMPS MUST NOT EXCEED 0.5 FEET IN RISE AND HAVE A SLOPE NO GREATER THAN 1:12. ALL ACCESSIBLE IMPROVEMENTS MUST COMPLY WITH ALL TDLR REQUIREMENTS. IT'S THE CONTRACTOR'S RESPONSIBILITY TO ADVISE THE ENGINEER WHERE ANY MAXIMUM SLOPE WILL BE EXCEEDED PRIOR TO PROCEEDING WITH ANY RELATED SITEWORK. REQUIRED RE-WORK OF IMPLEMENTED WORK WITHOUT ADVANCE NOTIFICATION TO THE ENGINEER IS THE CONTRACTOR'S SOLE FINANCIAL RESPONSIBILITY.

30 15 0 30 60
1"=30'

LEGEND

- EX. WASTEWATER
- PROPOSED WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- FIRE LANE
- GAS LINE
- ELECTRIC

DATE	REVISION	#

SCALE: 1"=30'
DATE: 4/10/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3665
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

MATTHEW MITCHELL 83335 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
4-10-2026

SITE PLAN
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

LEGEND

- EX. WASTEWATER
- PROPOSED WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- WATERLINE EASEMENT
- FIRE LANE

EXISTING 24" RCP SS

651

652

653

263' BUFFER YARD FENCE

CONNECT TO EXISTING 4' SIDEWALK

4' SIDEWALK TO PROPERTY LINE

5' SIDEWALK

5' CURB CUT

RIBBON CURB 39.95'

R1-1 STOP SIGN

R1-1 STOP SIGN

MIN 6" CONCRETE PAVEMENT PER GEOTECH REPORT

ACCESSIBLE SIGN

ACCESSIBLE SIGN

VAN ACCESSIBLE

ACCESSIBLE SIGN

BOLLARD

BUILDING - ONE STORY
15,499.78 sf
FFE - 529.00

1,900 SF TENANT

1,700 SF TENANT

25
103772.5sf
2.38ac.

REPLAT OF
LOT 1, BLK "A",
GREENBURY
PHASE ONE A

1"=20'

ALM

MATCHLINE

MATCHLINE

electric transformers

105

gas

gas

FLOW

EX 15 WW

EX 12 W

ROW

PL

FIRE

#	REVISION	DATE

SCALE: 1"=20'
DATE: 2/27/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3665
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED
PROFESSIONAL ENGINEER
2-27-2026

DIMENSION PLAN
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

LEGEND

- WW — EX. WASTEWATER
- WW — PROPOSED WASTEWATER
- W — EX. WATER
- W — PROPOSED WATER
- S — STORM SEWER
- C C C — 6" CURB (C)-CATCH/(S)-SPILL
- R R R — RIBBON CURB
- W.L.E. — WATERLINE EASEMENT
- GAS — GAS — GAS LINE

BUILDING/SITE	USE	METER	LUE
BLDG 25A	REST/RETAIL	1 1/2"	5

WASTEWATER FLOWS					
L.U.E.'s	GPD	INFILT/AC	ACRES	INFILT cfs	
5.00	245	750	1.113	0.0013	
				DRY	WET
GPD	GPM	GPD(PEAK)	GPM(PEAK)	CFS	CFS
1225	0.85	3125.6	2.17	0.005	0.006

WATER DEMAND			
L.U.E.'s	AVERAGE	PEAK	PEAK
	DAY	DAY	HOUR
	gpd	gpd	gpd
5.00	1000	2650	4500

NOTE: A TIE-IN TO AN EXISTING WASTEWATER MANHOLE WILL REQUIRE THE MANHOLE TO BE RECOATED WITH APPROVED LINING PER CAO SPL WW-511 OR OBIC COATING BY ADVANCED REHABILITATION TECHNOLOGY. CEMENTITIOUS COATING IS NOT ALLOWED. SEWPERCOAT IS NOT ACCEPTED.

ALL UTILITIES ARE PRIVATELY OWNED AND MAINTAINED.

20 10 0 20 40

1"=20' ALM

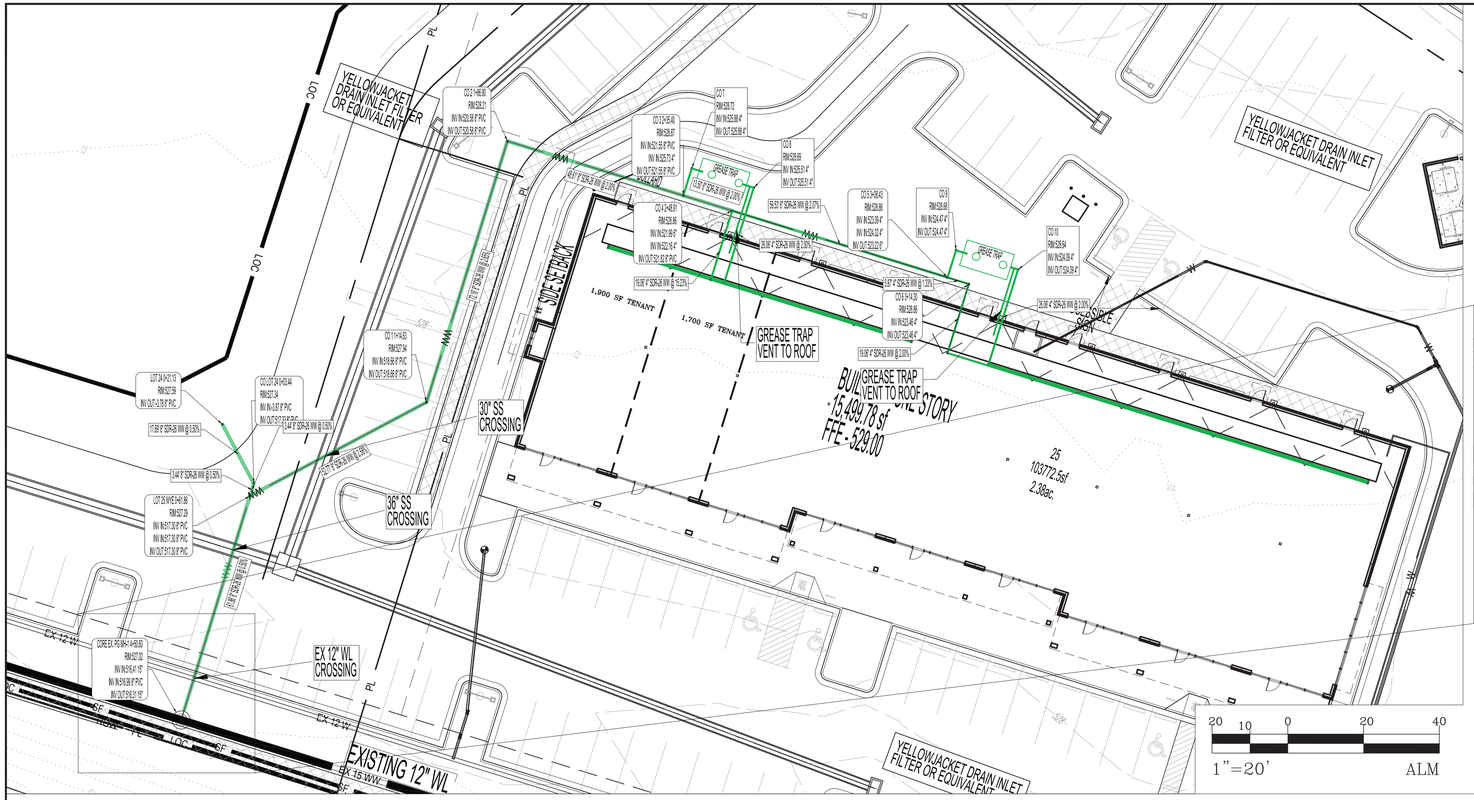
DATE	REVISION	#

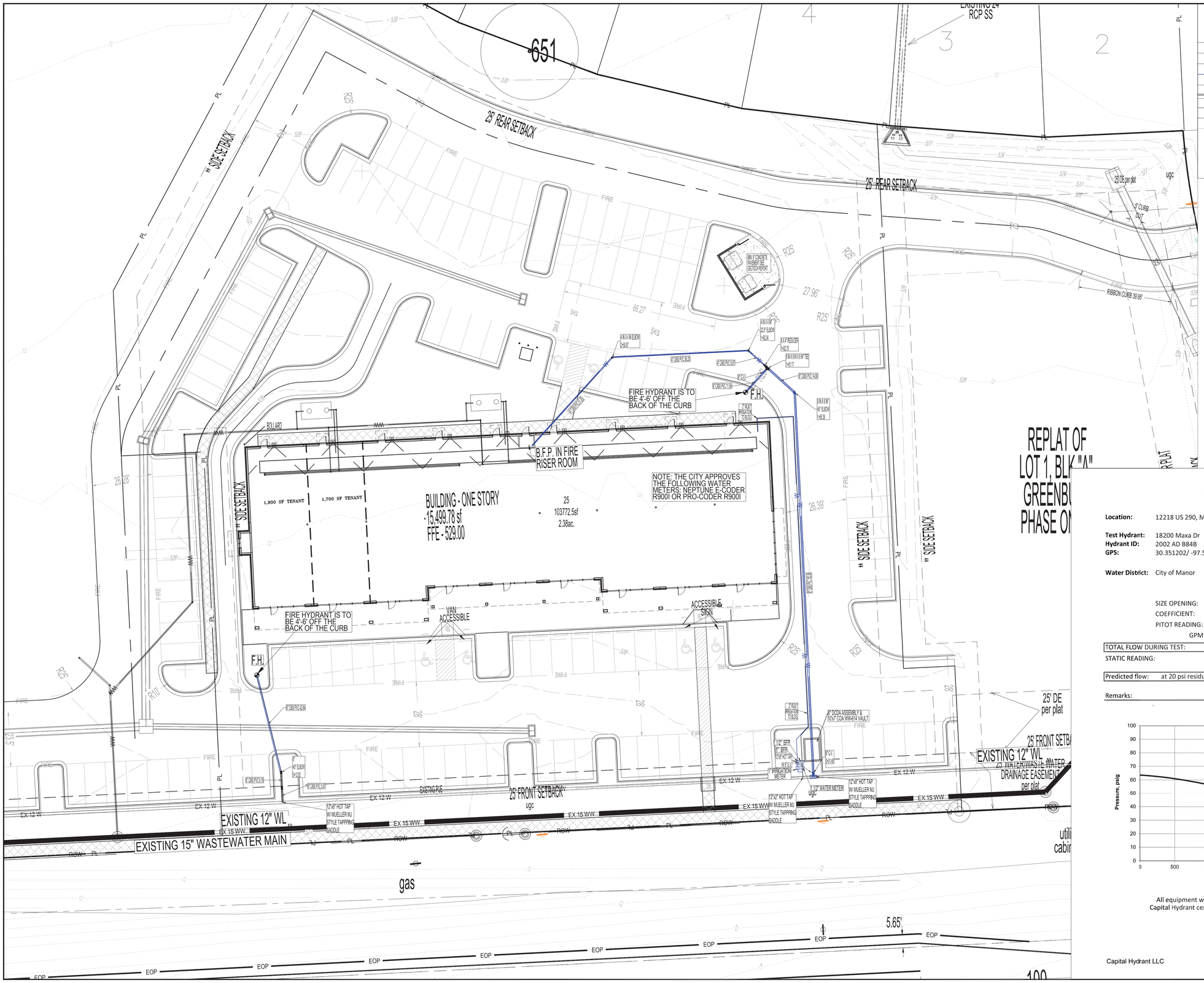
SCALE: 1"=20'
DATE: 2/27/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
F-3665
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED
PROFESSIONAL ENGINEER
2-27-2026

WASTEWATER SERVICE
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS


YELLOWJACKET DRAIN INLET FILTER OR EQUIVALENT
YELLOWJACKET DRAIN INLET FILTER OR EQUIVALENT
YELLOWJACKET DRAIN INLET FILTER OR EQUIVALENT
1" SIDE SETBACK
1" SIDE SETBACK
GREASE TRAP VENT TO ROOF
GREASE TRAP VENT TO ROOF
GREASE TRAP
GREASE TRAP
1,900 SF TENANT
1,700 SF TENANT
BUILDING ONE STORY
15,499.78 sf
FFE - 529.00
25
103772.5sf
2.38ac.
30" SS CROSSING
36" SS CROSSING
EX 12" WL CROSSING
EXISTING 12" WL
EX 12" W
EX 18 WW
CORE EX PG1864 1+55.00
RIM=527.02
INV IN=516.41 15"
INV IN=516.08 8" PVC
INV OUT=516.01 15"
CO 1+74.83
RIM=527.54
INV IN=516.68 8" PVC
INV OUT=516.68 8" PVC
CO 1+74.83
RIM=527.54
INV IN=516.68 8" PVC
INV OUT=516.68 8" PVC
CO 2+48.00
RIM=528.21
INV IN=520.69 8" PVC
INV OUT=520.69 8" PVC
CO 2+48.00
RIM=528.21
INV IN=520.69 8" PVC
INV OUT=520.69 8" PVC
CO 3+25.40
RIM=528.67
INV IN=521.69 8" PVC
INV OUT=521.69 8" PVC
CO 3+25.40
RIM=528.67
INV IN=521.69 8" PVC
INV OUT=521.69 8" PVC
CO 4+48.91
RIM=528.86
INV IN=521.09 8"
INV IN=521.19 4"
INV OUT=521.09 8" PVC
CO 5+48.43
RIM=528.86
INV IN=523.09 4"
INV IN=523.32 4"
INV OUT=523.22 8"
CO 6
RIM=528.68
INV IN=524.47 4"
INV OUT=524.47 4"
CO 10
RIM=528.64
INV IN=524.08 4"
INV OUT=524.08 4"
CO 10 3+94.93
RIM=528.64
INV IN=524.08 4"
INV OUT=524.08 4"
CO 11 3+62.87
RIM=528.00
INV IN=524.81 4"
INV OUT=524.81 4"
LOT 24 PVC 1+55.00
RIM=527.54
INV OUT=516.78 8" PVC
LOT 25 HHE 0+40.86
RIM=527.25
INV IN=517.00 8" PVC
INV IN=517.00 8" PVC
INV OUT=517.00 8" PVC
LOT 25 HHE 0+40.86
RIM=527.25
INV IN=517.00 8" PVC
INV IN=517.00 8" PVC
INV OUT=517.00 8" PVC
CO LOT 24 PVC 0+40.44
RIM=527.24
INV IN=3.58'8" PVC
INV OUT=516.66 8" PVC
17.89' 8" SDR-26 WW @ 0.50%
14.47' SDR-26 WW @ 0.50%
14.47' SDR-26 WW @ 0.50%
14.47' SDR-26 WW @ 0.50%
10.97' SDR-26 WW @ 0.50%
10.97' SDR-26 WW @ 0.50%
10.97


651
EXISTING 24" RCP SS
25' REAR SETBACK
25' REAR SETBACK
5' SIDE SETBACK
5' SIDE SETBACK
5' SIDE SETBACK
5' SIDE SETBACK
25' FRONT SETBACK
25' FRONT SETBACK
25' DE per plat
FIRE HYDRANT IS TO BE 4'-6' OFF THE BACK OF THE CURB
FIRE HYDRANT IS TO BE 4'-6' OFF THE BACK OF THE CURB
F.H.
F.H.
B.F.P. IN FIRE RISER ROOM
BOLLARD
1,900 SF TENANT
1,700 SF TENANT
BUILDING - ONE STORY
15,499.78 sf
FFE - 529.00
25
103772.5sf
2.38ac.
NOTE: THE CITY APPROVES THE FOLLOWING WATER METERS: NEPTUNE E-CODER R900I OR PRO-CODER R900I
VAN ACCESSIBLE
ACCESSIBLE SIGN
RIBBON CURB 39.95'
5' CURB CUT
25DE per det
ugc
EXISTING 12" WL
EXISTING 15" WASTEWATER MAIN
EXISTING 12" WL
25' WATER/WASTE WATER DRAINAGE EASEMENT per plat
EXISTING P/E
12"X8" HOT TAP W/ MUELLER MJ STYLE TAPPING SADDLE
12"X8" HOT TAP W/ MUELLER MJ STYLE TAPPING SADDLE
12"X8" HOT TAP W/ MUELLER MJ STYLE TAPPING SADDLE
8" DOMESTIC METER
8" IRRIGATION METER
8" DCDA ASSEMBLY X 10'X7' CVA W/H&H VAULT
8" DCDA ASSEMBLY X 10'X7' CVA W/H&H VAULT
12"X8" TEE
8" GATE VALVE
8" GATE VALVE
8" GATE VALV

DETENTION FOR ALL LOTS WITHIN THE SUBDIVISION PROVIDED BY THE DRAINAGE & DETENTION INFRASTRUCTURE IS BEING CONSTRUCTED UNDER 2025-P-1717-CO. ANALYSIS WAS PROVIDED BY THE DRAINAGE REPORT DATED JULY 2, 2025 INCLUDED WITH THE CONSTRUCTION PLAN PERMIT 2025-P-1717-CO.

BLOCK "A"

LEGEND

- WW — EX. WASTEWATER
- WW — PROPOSED WASTEWATER
- W — EX. WATER
- W — PROPOSED WATER
- SS — STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- W.L.E. — WATERLINE EASEMENT

REPLAT OF LOT 1, BLK "A", GREENBURY PHASE ONE A

BUILDING - ONE STORY
15,608.75 sf
FFE - 526.00

25
-103772.5sf -
2.38ac.

GREENBURY DRIVE

EXISTING 24" RCP SS

EXISTING GREENBURY OUTFLOW 1=85.46
ENERGY DISSIPATOR MUST COMPLY WITH
COA Energy Dissipator Detail SS85-13
IN/ OUT 525.56 24" RCP

25' REAR SETBACK

25' FRONT SETBACK

25' DE per plat

25' WATER/WASTE WATER DRAINAGE EASEMENT per plat

25' Utility Easement
City of Manor
Document No. 2022077011

State of Texas
11.451 Acres
Document No. 1999070674

MATCHLINE

MANOR COMMERCE BLVD (64' R.O.W.)

FLOW FL(IN)525.0 ft.

EX. 5'Hx8'W BOX CULVERT

FL(IN) 524.0 ft.

EX. TRIPLE 5'X8' BOX CULVERTS

box culvert 5'H X 8'W

CONNECT TO EX RCP 22x13 SL

CONNECT TO DITCH OUT

utility cabinets

electric transformers

ATT Vault

MOVE TELECOM PEDESTAL

concrete drain

SEPT-CLN MH (TYPE II) W/NS(S) 60 W/12 CONC ARCH

SEPT-CLN MH (TYPE II) W/OUT(S)4 64 W/12 CONC ARCH

97.300' 36x22 CONC ARCH (S)(S)(S) 75%

ACCESSIBLE RAMP

CONCRETE SIDEWALK

SCALE:	1"=40'
DATE:	2/27/2026
JOB:	
DRAWN BY:	
CHECKED BY:	

#	REVISION	DATE

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3565
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED PROFESSIONAL ENGINEER
2-27-2026

STORM SEWER LAYOUT
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

40 20 0 40 80
1"=40'
ALM

DETENTION FOR ALL LOTS WITHIN THE SUBDIVISION PROVIDED BY THE DRAINAGE & DETENTION INFRASTRUCTURE IS BEING CONSTRUCTED UNDER 2025-P-1717-CO. ANALYSIS WAS PROVIDED BY THE DRAINAGE REPORT DATED JULY 2, 2025 INCLUDED WITH THE CONSTRUCTION PLAN PERMIT 2025-P-1717-CO.

TIMMERMANN COMMERCIAL INVESTEMENTS, LP
SPECIAL WARRANTY DEED
DOCUMENT NO. 2020230923
(33.34 Acres)
described by metes and bounds in
Volume 7335 Page 455
save and except
(1.461 Acres)
Agreed Judgment
Document No. 1999073674

CONTRACTOR TO INSTALL ALL STORM SEWER STUB OUTS AND WITH TEMPORARY PLUG FOR FUTURE EXTENSION 4"x4" PRESSURE TREATED STAKE MIN. 4' ABOVE GRADE TO MARK END OF PIPE.

CONTRACTOR TO INSTALL ALL STORM SEWER STUB OUTS AND WITH TEMPORARY PLUG FOR FUTURE EXTENSION 4"x4" PRESSURE TREATED STAKE MIN. 4' ABOVE GRADE TO MARK END OF PIPE.

MANOR COMMERCE BLVD (R64' R.O.W.)

EXISTING 10" WW

MATCHLINE

25' Utility Easement
City of Manor
Document No. 2022227011

State of Texas
11.451 Acres)
Document No. 1999073674

265.2 cfs

510

100

S87°42'37"W 1455.52'

LEGEND

- EX. WASTEWATER
- PROPOSED WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL RIBBON CURB
- WATERLINE EASEMENT

SS LINE C - Q 25

#Line	Struct. ID	D (ft)	Q (cu. ft/sec)	L (ft)	V (ft/s)	d (ft)
0	SS C OUTFLOW					
1	JOINT C-2	5	86.58	36.11	9.818	2.3
2	INLET C6 STUB	2.5	3.44	19.32	0.701	2.5
3	JB C-5 8x8	5	83.14	44.99	4.234	5
4	JB C7 7x7	4.5	79.7	150.69	5.011	2.14
5	INLET C7 STUB	2	2.7	26.21	3.334	0.61
6	C8 WYE	4.5	77	173.57	8.966	2.39
7	JB C9 7x7	4.5	74	102.43	8.879	2.33
8	JB C10 7x7	4.5	68.28	220.79	7.169	2.6
9	EX JB C-15 6x6	4	64.2	69.64	6.462	2.95
10	CONNECT TO STUB OUT	4	53.16	27.01	6.256	2.56
11	C15 5x5 JB	4	53.16	158.65	4.23	2.58
12	C15 STUB	2	11.43	12.31	3.638	0.94
13	C16 5x5 JB	3.5	41.73	222.83	6.052	2.36
14	C17 5x5 JB	3.5	33.29	181.05	6.689	1.8
15	C18 5x5 JB	3	29.65	138.74	4.899	2.4
16	C20 JB	3	21.57	154.56	4.597	1.89
17	C22 5x3 INLET	2.5	14.24	122.9	4.845	1.44
18	C23 5X3 INLET	2.5	14.24	111.51	4.129	1.66
19	C24 5X3 INLET	2	6.45	148.84	4.664	0.91
20	C21 5x3 INLET	2	7.33	166.22	2.333	1.11
21	INLET C18	2	2.7	21.01	4.848	0.47
22	C19 STUB	2	5.38	20.68	5.815	0.67
23	C17 STUB	2	3.64	23.15	3.22	0.78
24	C16 STUB	2	8.44	30.64	4.448	1.16
25	INLET C14 STUB	2	3.4	10	4.044	0.63
26	INLET C13 STUB	2	7.64	13.5	4.424	1.08
27	WYE C-11	2	4.08	29.43	4.256	0.69
28	Structure - (172)	2	2.34	10.11	3.636	0.52
29	INLET C12	2	2.34	20.95	9.677	0.26
30	INLET C11	2	1.74	35.03	7.469	0.25
31	INLET C9 STUB	2	5.72	37.1	3.847	0.96
32	INLET C8 STUB	2	3	19.7	3.435	0.64
33	INLET C5 STUB	1.5	3.44	8.58	1.947	1.5

*URBAN DRAINAGE DESIGN MANUAL - Hydraulic Engineering Circular No.22 Third Edition

#Line	Struct. ID	D (ft)	Q (cu. ft/sec	L (ft)	V (ft/s)	d (ft)
0	SS C OUTFLOW					
1	JOINT C-2	5	134.19	36.11	6.834	5
2	INLET C6 STUB	2.5	5.28	19.32	1.076	2.5
3	JB C-5 8x8	5	128.91	44.99	6.565	5
4	JB C7 7x7	4.5	123.52	150.69	7.766	4.5
5	INLET C7 STUB	2	4.18	26.21	1.331	2
6	C8 WYE	4.5	119.34	173.57	7.504	3.21
7	JB C9 7x7	4.5	114.7	102.43	7.212	4.5
8	JB C10 7x7	4.5	105.86	220.79	6.656	3.62
9	EX JB C-15 6x6	4	99.55	69.64	7.922	4
10	CONNECT TO STUB OUT	4	82.24	27.01	6.544	4
11	C15 5x5 JB	4	82.24	158.65	6.544	4
12	C15 STUB	2	17.92	12.31	5.704	2
13	C16 5x5 JB	3.5	64.32	222.83	6.685	3.5
14	C17 5x5 JB	3.5	51.27	181.05	5.329	3.5
15	C18 5x5 JB	3	45.65	138.74	6.458	3
16	C20 JB	3	33.11	154.56	4.684	3
17	C22 5x3 INLET	2.5	21.78	122.9	4.437	2.5
18	C23 5X3 INLET	2.5	21.78	111.51	4.437	2.5
19	C24 5X3 INLET	2	10.18	148.84	3.24	2
20	C21 5x3 INLET	2	11.33	166.22	3.606	2
21	INLET C18	2	4	21.01	1.273	2
22	C19 STUB	2	8.54	20.68	2.718	2
23	C17 STUB	2	5.62	23.15	1.789	2
24	C16 STUB	2	13.05	30.64	4.154	2
25	INLET C14 STUB	2	5.31	10	1.69	2
26	INLET C13 STUB	2	12	13.5	3.82	2
27	WYE C-11	2	6.31	29.43	2.009	2
28	Structure - (172)	2	3.61	10.11	1.149	2
29	INLET C12	2	3.61	20.95	1.149	0.32
30	INLET C11	2	2.7	35.03	0.859	0.31
31	INLET C9 STUB	2	8.84	37.1	2.814	2
32	INLET C8 STUB	2	4.64	19.7	1.477	2
33	INLET C5 STUB	1.5	5.39	8.58	3.05	1.5

*URBAN DRAINAGE DESIGN MANUAL - Hydraulic Engineering Circular No.22 Third Edition

SS C - 25A PROFILE

Elevation

PROPOSED

EXISTING

MATCHLINE

100 HGL

25 YR

ALL UTILITIES OUTSIDE OF THE CITY OF MANOR EASEMENT ARE PRIVATELY OWNED AND MAINTAINED.

40 20 0 40 80
1"=40' ALM

DATE	REVISION	#

SCALE: 1"=40'
DATE: 2/27/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
F-3565
CONSULTING ENGINEERS
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

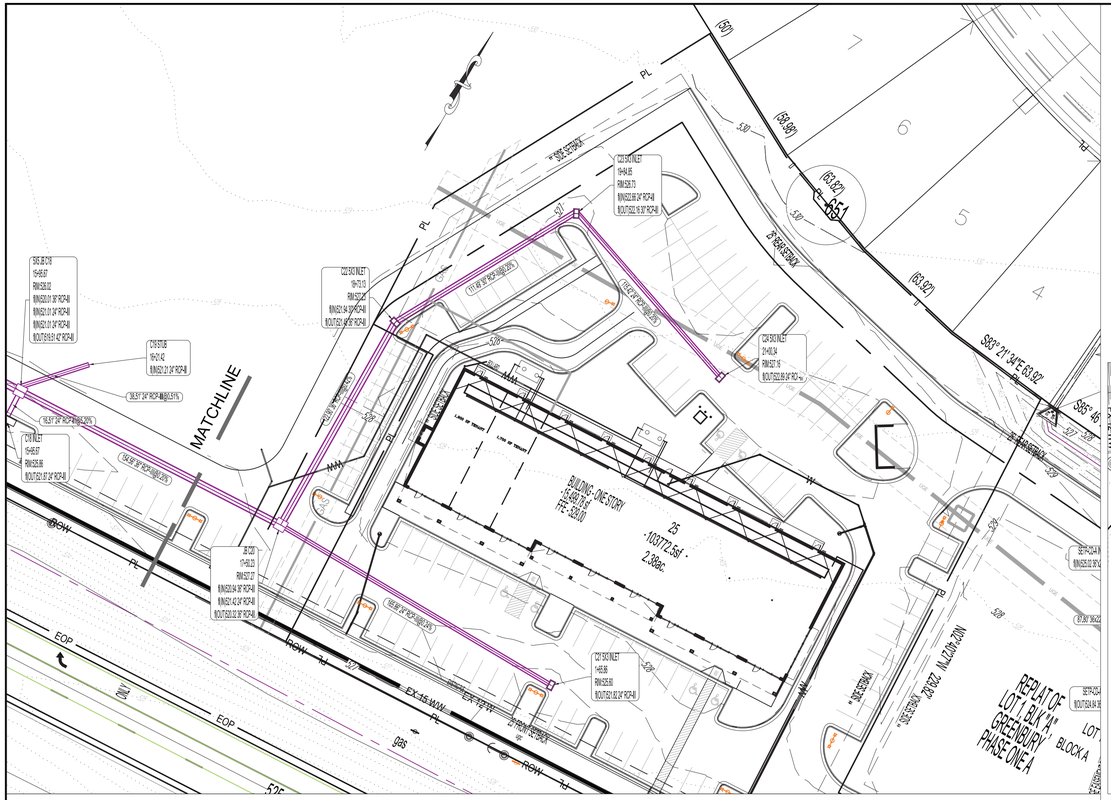
STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED
PROFESSIONAL ENGINEER
2-27-2026

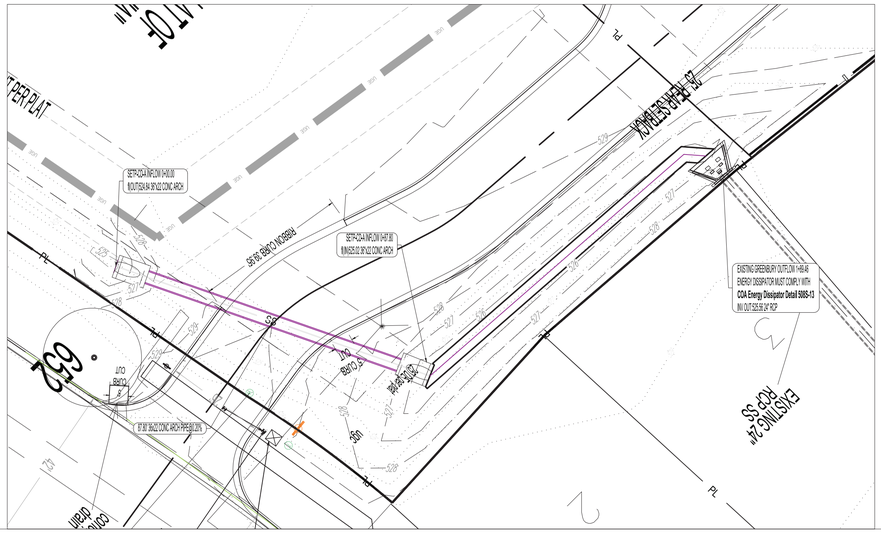
STORM SEWER C P&P 8+94.40 - 17+00
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

DETENTION FOR ALL LOTS WITHIN THE SUBDIVISION PROVIDED BY THE DRAINAGE & DETENTION INFRASTRUCTURE IS BEING CONSTRUCTED UNDER 2025-P-1717-CO. ANALYSIS WAS PROVIDED BY THE DRAINAGE REPORT DATED JULY 2, 2025 INCLUDED WITH THE CONSTRUCTION PLAN PERMIT 2025-P-1717-CO.

LEGEND

- EX. WASTEWATER
- PROPOSED WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- WATERLINE EASEMENT


MATCHLINE
REPLAT OF LOT 1, BLK "A", GREENBURY PHASE ONE A
BLOCK A
LOT
BUILDING - ONE STORY
15,499.76 sf
FFE - 529.00
25
103772.5sf
2.38ac.
EX-12"WW
EX-15 WW
EX-8"W
EX-12"W
20' PUBLIC SEWER
EOP
ROW
PL
gas
MOR
SS
C23 5X3 INLET
C21 5X3 INLET
C21 4X4 AREA INLET
CONNECT TO STUB OUT
C15 STUB
C16 STUB
JB C20
JB C21
JB C22
JB C23
C22 5X3 INLET
C24 5X3 INLET
C17 STUB
C18 STUB
C19 STUB
C20 JB
JB C15
C15 5X5 JB
C16 5X5 JB
C17 5X5 JB
C18 5X5 JB
C8 WYE
JB C9 7x7
JB C10 7x7
EX JB C-15 6x6
C5 STUB
C8 STUB
C9 STUB
C10 STUB
C11 STUB
C12 STUB
C13 STUB
C14 STUB
C-11 WYE
JOINT C-2
INLET C5 STUB
INLET C8 STUB
INLET C9 STUB
INLET C10 STUB
INLET C11 STUB
INLET C12 STUB
INLET C13 STUB
INLET C14 STUB
INLET C16 STUB
INLET C17 STUB
INLET C18 STUB
INLET C19 STUB
INLET C20 JB
INLET C21 5X3
INLET C22 5X3
INLET C23 5X3
INLET C24 5X3
INLET C15 5X5 JB
INLET C16 5X5 JB
INLET C17 5X5 JB
INLET C18 5X5 JB
INLET C20 JB
INLET C21 5X3
INLET C22 5X3
INLET C23 5X3
INLET C24 5X3
INLET C8 WYE
INLET C9 7x7
INLET C10 7x7
INLET C15 6x6


SETP-CD-A INFLOW (1-#7.88)
8.0LF/SQ.IN 60"H.D. CONC ARCH
SETP-CD-A INFLOW (1-#7.88)
8.0LF/SQ.IN 60"H.D. CONC ARCH
EXISTING GREENBURY OUTFLOW (1-#9.46)
ENERGY DISSIPATOR MUST COMPLY WITH
COA Energy Dissipator Detail S605-13
8.0LF/SQ.IN 54" RCP
EXISTING 24" RCP SS
EXISTING 24" RCP SS
PL
PL
PL
PL
632
632
632

NOTE:
All earthen embankments shall be compacted to 95% of maximum density in accordance with COA standard specifications.
Earthen embankment side slopes shall be no steeper than 3 horizontal to 1 vertical.

LEGEND

- EX. WASTEWATER
- PROPOSED WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- W.L.E. WATERLINE EASEMENT
- FIRE LANE

EXISTING 24" RCP SS

R1-1 STOP SIGN

MATCHLINE

651

652

653

105

BUILDING - ONE STORY
15,499.78 sf
FFE - 529.00

1,900 SF TENANT

1,700 SF TENANT

25
103772.5sf
2.38ac.

REPLAT OF
LOT 1, BLK "A",
GREENBURY
PHASE ONE A

RIBBON CURB 39.95'

5' CURB CUT

6'>R

R15

R25

BOLLARD

EX 12 W

EX 15 WW

ROW

PL

gas

electric transformers

FLOW

20 10 0 20 40
1"=20' ALM

DATE	#	REVISION

SCALE: 1"=20'
DATE: 2/27/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC. F-3665
CONSULTING ENGINEERS
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED
PROFESSIONAL ENGINEER
2-27-2026

GRADING PLAN
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

LEGEND

- WW — EX. WASTEWATER
- WW — PROPOSED WASTEWATER
- W — EX. WATER
- W — PROPOSED WATER
- S — STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL RIBBON CURB
- W.L.E. — WATERLINE EASEMENT
- FIRE — FIRE LANE

EXISTING 24" RCP SS

R1-1 STOP SIGN

MATCHLINE

651

652

653

BUILDING - ONE STORY
15,499.78 sf
FFE - 529.00

1,900 SF TENANT

1,700 SF TENANT

25
103772.5sf
2.38ac.

ACCESSIBLE SIGN

BOLLARD

MIN 6" CONCRETE PAVEMENT SEE GEOTECH REPORT

5' CURB CUT

RIBBON CURB 39.95'

27.96'

66.27'

26.28'

26.39'

23.5'

EX 12" W

EX 15" WW

gas

ROW

PL

FIRE

WW

R25'

R10'

R15'

R30'

R5'

R35'

20'

28'

REPLAT OF LOT 1, BLK "A", GREENBURY PHASE ONE A

1"=20'

FIRE LANE TOW AWAY ZONE

FIRE LANE MUST BE MARKED "FIRE LANE TOW AWAY ZONE". SPACING SHALL NOT EXCEED 35 FEET BETWEEN MARKINGS

ALL ACCESSIBLE ROUTES MUST COMPLY WITH TDLR LICENSING AND REGULATIONS

ALL DIMENSION FOR PAVEMENT MARKING AND STRIPING ARE FROM FACE OF CURB OR CENTER OF STRIPING. ALL STRIPING DIMENSIONS MUST COMPLY WITH TDLR AND MUTCD STANDARDS AND SPECIFICATIONS.

THE MAXIMUM SLOPE FOR AN ACCESSIBLE STALL AND AISLE FOR PARKING CAN NOT EXCEED 2% SLOPE IN ANY DIRECTION. THE MAXIMUM SLOPE FOR ANY SIDEWALK CAN NOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE. IT IS RECOMMENDED THAT SIDEWALKS NOT EXCEED 4% RUNNING SLOPE AND CROSS SLOPES NOT EXCEED 1.5% SLOPE AT ANY LOCATION. CURB RAMPS MUST NOT EXCEED 0.5 FEET IN RISE AND HAVE A SLOPE NO GREATER THAN 1:12. ALL ACCESSIBLE IMPROVEMENTS MUST COMPLY WITH ALL TDLR REQUIREMENTS. IT'S THE CONTRACTOR'S RESPONSIBILITY TO ADVISE THE ENGINEER WHERE ANY MAXIMUM SLOPE WILL BE EXCEEDED PRIOR TO PROCEEDING WITH ANY RELATED SITEWORK. REQUIRED RE-WORK OF IMPLEMENTED WORK WITHOUT ADVANCE NOTIFICATION TO THE ENGINEER IS THE CONTRACTOR'S SOLE FINANCIAL RESPONSIBILITY.

PYLON SIGN REQUIRES SEPARATE PERMIT AND WILL BE DESIGNED BY OTHERS

#	REVISION	DATE

SCALE: 1"=20'
DATE: 2/27/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3665
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

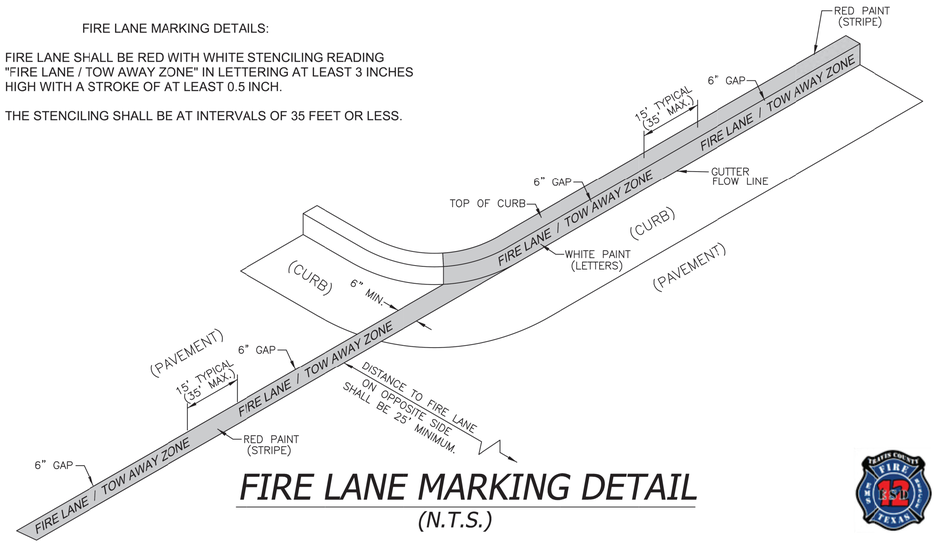
MATTHEW MITCHELL 83335 LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
2-27-2026

SIGNAGE PLAN
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

FIRE LANE MARKING DETAILS:

FIRE LANE SHALL BE RED WITH WHITE STENCILING READING "FIRE LANE / TOW AWAY ZONE" IN LETTERING AT LEAST 3 INCHES HIGH WITH A STROKE OF AT LEAST 0.5 INCH.

THE STENCILING SHALL BE AT INTERVALS OF 35 FEET OR LESS.



FIRE LANE MARKING DETAIL

(N.T.S.)

Fire Hydrant Flow Test Report

Date: 1/15/2025, 1545 hrs

Location: 12218 US 290, Manor, TX 78653

Test Hydrant:	18200 Maxa Dr	**Flow Hydrant:**	18000 Blk Maxa Dr
Hydrant ID:	2002 AD B848	**Hydrant ID:**	2002 AD B848
GPS:	30.351202/ -97.531062	**GPS:**	30.351847/ -97.532378

Water District: City of Manor

Flow Data

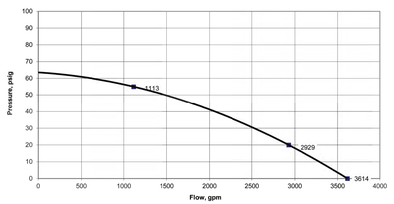
SIZE OPENING:	2.5
COEFFICIENT:	0.9
PITOT READING:	44
GPM:	1113

TOTAL FLOW DURING TEST: 1113 GPM

STATIC READING: 62 PSI RESIDUAL: 55 PSI

Predicted flow: at 20 psi residual --- 2929 GPM | at 0 psi residual --- 3614 GPM

Remarks:



All equipment was left in operational condition upon completion of testing.
Capital Hydrant certifies the test results only on the date and time listed above.

Capital Hydrant LLC www.capitalhydrant.com

LEGEND

- EX. WASTEWATER
- PROPOSED WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- W.L.E. WATERLINE EASEMENT
- FIRE LANE

30 15 0 30 60

1"=30' ALM

FIRE LANE TOW AWAY ZONE

FIRE LANE MUST BE MARKED "FIRE LANE TOW AWAY ZONE". SPACING SHALL NOT EXCEED 35 FEET BETWEEN MARKINGS

BUILDING - ONE STORY
-15,499.78 sf
FFE - 529.00

25
103772.5sf
2.38ac.

REPLAT OF LOT 1, BLK "A", GREENBURY PHASE ONE A

GREENBURY DRIVE

EXISTING 24" RCP SS

EX. 5'Hx8'W BOX CULVERTS

FL(IN) 524.0 ft.

DATE	REVISION	#

SCALE: 1"=20'
DATE: 4/10/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com
F-3665

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED PROFESSIONAL ENGINEER
4-10-2026

FIRE PROTECTION SHEET
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

Driveway and Parking Areas – Light Vehicular with Light Delivery Truck Traffic

A. Asphalt Option

Material	Thickness
Lime Stabilized Subgrade	8.0 inches
Crushed Limestone Base	10.0 inches
Hot Mix Asphaltic Concrete	2.0 inches

B. Reinforced Concrete Option

Material	Thickness
Lime Stabilized Subgrade	8.0 inches
Crushed Limestone Base	6.0 inches*
Reinforced Concrete	5.0 inches

*Note: Base may be omitted if concrete is increased to 6.0 inches. If base is omitted, additional distress and cracking in the pavement section and curb should be expected.

DUMPSTER PADS SHOULD BE A MINIMUM OF 6 INCHES OF REINFORCED CONCRETE OVER A MINIMUM OF 6 INCHES OF CRUSHED LIMESTONE BASE.
ALL PAVEMENT MUST BE CONSTRUCTED PER THE SPECIFICATIONS PROVIDED IN THE
HOLT ENGINEERING, INC. F-430, FOUNDATION AND PAVEMENT RECOMMENDATIONS FILE NO. 08-20525, DATED AUGUST 27, 2025.

BLOCK "A"

LEGEND

- EX. WASTEWATER
- PROPOSED WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL
- RIBBON CURB
- W.L.E. WATERLINE EASEMENT
- FIRE LANE

30 15 0 30 60
1"=30' ALM

SIDEWALK

DUMPSTER PAD

EXISTING 24" RCP SS

HMAC PAVEMENT

HMAC PAVEMENT

HMAC PAVEMENT

HMAC PAVEMENT

REPLAT OF LOT 1, BLK "A", GREENBURY PHASE ONE A

BUILDING - ONE STORY
15,499.78 sf
FFE - 529.00

25
103772.5sf
2.38ac.

1,800 SF TENANT
1,700 SF TENANT

651
652
653

concrete drain

R.O.W. 92'

electric transformers

105

gas

FLOW

EX. 5'Hx8'W BOX CULVERT

box culvert 5'H X 8'W

EX. TRIPLE 3'x3' BOX CULVERTS

FLOW

FL(IN) 524.0 ft.

FL 523.8

525

100

5.61'

5.65'

EOP

ONLY

STOP SIGN

R28 R30 R26 R26

EX 15 WW

EX 12 W

EX 42 W

ROW

PL

W

WW

S

C

FIRE

DATE	
REVISION	
#	
SCALE:	1"=20'
DATE:	2/27/2026
JOB:	
DRAWN BY:	
CHECKED BY:	

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3665
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED PROFESSIONAL ENGINEER
2-27-2026

PAVMENT PLAN
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

25 year											
Results	ATLAS14-25YRDEV (C15)	ATLAS14-25YRDEV (C16)	ATLAS14-25YRDEV (C17)	ATLAS14-25YRDEV (C18)	ATLAS14-25YRDEV (C21)	ATLAS14-25YRDEV (C22)	ATLAS14-25YRDEV (C23)	ATLAS14-25YRDEV (C24)	ATLAS14-25YRDEV (SSD INFLOW)	ATLAS14-10YRDEV (GBD DITCH)	
Minimum Inflow (cfs)	0	0	0	0	0	0	0	0	0	0	
Maximum Inflow (cfs)	11.43	8.44	3.64	8.08	7.33	1.78	9.15	6.47	19	19.89	
Time to Peak (hrs)	12.08	12.08	12.08	12.08	12.08	12.08	12.17	12.17	12.33	12.25	
Inflow Volume (ac-ft)	1.217	0.865	0.366	0.808	0.689	0.178	1.066	0.689	2.524	2.331	
Inflow Depth (in)	8.22	8.22	8.22	8.1	8.15	8.22	7.94	7.99	7.35	5.58	
Inflow Average (cfs)	0.61	0.43	0.18	0.41	0.35	0.09	0.54	0.35	1.26	1.17	
Maximum Outflow (cfs)	11.43	8.44	3.64	8.08	7.33	1.78	9.15	6.47	19	19.89	
Outflow Volume (ac-ft)	1.217	0.865	0.366	0.808	0.689	0.178	1.066	0.689	2.524	2.331	
Outflow Depth (in)	8.22	8.22	8.22	8.1	8.15	8.22	7.94	7.99	7.35	5.58	
Outflow Average (cfs)	0.61	0.43	0.18	0.41	0.35	0.09	0.54	0.35	1.27	1.17	

100 year										
Results	ATLAS14-100YRDEV (C15)	ATLAS14-100YRDEV (C16)	ATLAS14-100YRDEV (C17)	ATLAS14-100YRDEV (C18)	ATLAS14-100YRDEV (C21)	ATLAS14-100YRDEV (C22)	ATLAS14-100YRDEV (C23)	ATLAS14-100YRDEV (C24)	ATLAS14-100YRDEV (SSD INFLOW)	
Minimum Inflow (cfs)	0	0	0	0	0	0	0	0	0	
Maximum Inflow (cfs)	17.92	13.05	5.62	12.54	11.33	2.75	13.98	10.11	28.77	
Time to Peak (hrs)	12.17	12.08	12.08	12.08	12.08	12.08	12.17	12.17	12.33	
Inflow Volume (ac-ft)	1.752	1.245	0.526	1.167	0.995	0.256	1.548	1	3.746	
Inflow Depth (in)	11.84	11.84	11.84	11.71	11.76	11.84	11.53	11.59	10.91	
Inflow Average (cfs)	0.88	0.63	0.26	0.59	0.5	0.13	0.78	0.5	1.88	
Maximum Outflow (cfs)	17.92	13.05	5.62	12.54	11.33	2.75	13.98	10.11	28.77	
Outflow Volume (ac-ft)	1.752	1.245	0.526	1.167	0.995	0.256	1.548	1	3.746	
Outflow Depth (in)	11.84	11.84	11.84	11.71	11.76	11.84	11.53	11.59	10.91	
Outflow Average (cfs)	0.88	0.63	0.26	0.59	0.5	0.13	0.78	0.5	1.88	

DETENTION FOR ALL LOTS WITHIN THE SUBDIVISION PROVIDED BY THE DRAINAGE & DETENTION INFRASTRUCTURE IS BEING CONSTRUCTED UNDER 2025-P-1717-CO. ANALYSIS WAS PROVIDED BY THE DRAINAGE REPORT DATED JULY 3, 2025 INCLUDED WITH THE CONSTRUCTION PLAN PERMIT 2025-P-1717-CO.

LEGEND

- EX. WASTEWATER
- EX. WATER
- PROPOSED WATER
- STORM SEWER
- 6" CURB (C)-CATCH/(S)-SPILL RIBBON CURB
- W.L.E. — WATERLINE EASEMENT

60 30 0 60 120

1"=60' ALM

	Q25	Q100
GREENBURY DRIVE	2.95	4.63
W14A4	108.9	160.85
W14A2	41.54	59.62
W14-290 MEDIAN	6.49	9.85
W14-C24 OFFSITE	1.35	2.11
W14-C23 OFFSITE	2.42	3.8
W14-S1 SITE	21.12	32
W14-S3 SITE	41.68	64.49
W14-C6 SITE	3.44	5.28
W14-C15 SITE	11.43	17.92
W14-C21 SITE	7.33	11.33
W14-C24 SITE	5.12	8
W14-C23 SITE	6.76	10.29
W14-C22 SITE	1.78	2.75
W14-C18&19 SITE	8.08	12.54
W14-C16 SITE	8.44	13.05
W14-C13&14 SITE	11.04	17.31
W14-C17 SITE	3.64	5.62
W14-C11 SITE	1.74	2.7
W14-C5 SITE	3.44	5.39
W14-C12 SITE	2.34	3.61
W14-C9 SITE	5.72	8.84
W14-C8 SITE	3	4.64
W14-C7 SITE	2.7	4.18
W14-S2A (HWY 290)	8.13	12.86
W14-S2B (HWY 290)	8.54	13.51
W14-S2C (HWY 290)	6.49	10.43
W15A	121.13	181.27
W16A	279.86	412.16
W16B	63.94	98.34
W16C	177.92	258.24
W 14A3	338.13	499.51
W 15B2	100.19	151.56
W 15C	381.25	550.1
W-14	639.6	935.36
W-14-S6 SITE	23.17	35.75
W-14-S8 SITE	15.72	24.41
W-14-S5 SITE	7.42	11.29
W-14-S8-OFFSITE	4.91	7.67
W-14-S6-OFFSITE	2.6	3.93
W-14A W/ SITE POND	62.69	94.25
W-15D-3	17.07	25.85
W-15D-1	2.43	3.84
W-15D-2	2.11	3.29
W-15B	144.82	211.66
W-15D SITE	2.97	4.66
6x3 BOX	177.71	187.69
6x3 DIVERSION	177.71	187.69
290 BOX CULVERTS	1363.02	2141.7
290 DRV SS	87.04	134.23
290 EAST DRIVEWAY	109.16	236.28
290 GB CULVERT PIPE	333.57	375.62
290 WEST DRIVEWAY	119.98	253.18
C15	11.43	17.92
C16	8.44	13.05
C17	3.64	5.62
C18	8.08	12.54
C21	7.33	11.33
C22	1.78	2.75
C23	9.15	13.98
C24	6.47	10.11
GB 290 CULVERT	333.57	375.62
GBD DITCH	22.77	34.22
MANOR COMMERCE	116.91	248.52
SS C COMMERCE	64.7	101.4
SS D INFLOW	19	28.77
WB TRIB 1	1088.28	1597.63
WB TRIB 3	1143.96	1668.19
WB TRIB 4	1159.78	1691.85

DATE

REVISION

#	

SCALE: 1"=60'
DATE: 3/12/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC. F-3565
CONSULTING ENGINEERS
PO Box 536
Dripping Springs, Texas, 78620
(512) 431-9600 * matt@almengr.com

STATE OF TEXAS
MATTHEW MITCHELL
83335
LICENSED
PROFESSIONAL ENGINEER
3-12-2026

SITE DRAINAGE MAP
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS

POA SE PL		
	EXISTING	DEVELOPED
2 YR cfs	14.03	2.37
10 YR cfs	23.8	3.64
25 YR cfs	27.15	3.79
100 YR cfs	41.71	5.94

POA W14-S7 PL		
	EXISTING	DEVELOPED
2 YR cfs	11.34	0
10 YR cfs	21.15	0
25 YR cfs	23.89	0
100 YR cfs	38.97	0

POA W14-S2B-2 PL		
	EXISTING	DEVELOPED
2 YR cfs	18.8	0
10 YR cfs	36.33	0
25 YR cfs	42.11	0
100 YR cfs	68.58	0

POA WEST DRIVEWAY PL		
	EXISTING	DEVELOPED
2 YR cfs	9.93	0
10 YR cfs	18.63	0
25 YR cfs	21.63	0
100 YR cfs	34.61	0

POA 290 BOX CULVERTS		
	EXISTING	DEVELOPED
2 YR cfs	518.4	517.37
10 YR cfs	975.5	966.12
25 YR cfs	1368.03	1353.24
100 YR cfs	2165.86	2143.21

ATLAS14-2YREX

Watershed Summary

Subbasin ID	Drainage Area (acres)	Initial Abstraction (in)	Curve Number	Impervious Surface (%)	Lag Time (minutes)	Peak Discharge (cfs)
OFFSITE W14-S4	0.596	N/A	80	50.00	7.74	1.96
OFFSITE W14-S7	0.724	N/A	80	50.00	5.7	2.51
OFFSITE W14A	14.013	N/A	80	50.00	17.89	32.4
OFFSITE W14-S2B	1.198	N/A	80	50.00	58.18	1.41
OFFSITE W-15D	4.825	N/A	80	50.00	14.87	12.03
SITE W14-S4	4.130	N/A	80	0.00	13.1	8.22
SITE W14-S7	3.710	N/A	80	0.00	8.36	8.83
SITE W14-S2B	7.996	N/A	80	0.00	8.87	18.41
SITE W-14-A	2.534	N/A	80	4.00	11.32	5.58
SITE W-14-B	11.845	N/A	80	3.20	12.02	25.3
SITE W-15D	0.951	N/A	80	0.00	8.29	2.27
SITE WB TRIB 5	1.822	N/A	80	10.00	9.86	4.3
W14A4	38.874	N/A	80	3.25	40.7	43.41
W14A2	12.278	N/A	80	50.00	33.5	20.27
W14-290 MEDIAN	1.541	N/A	80	35.00	15.35	3.54
W14-52B (HWY 290)	1.693	N/A	80	24.30	5.05	5.17
W14-52A (HWY 290)	1.545	N/A	80	18.20	4.15	4.89
W14-52C (HWY 290)	1.160	N/A	80	21.30	10.03	2.91
W15A	28.009	N/A	80	50.00	18.92	62.63
W16A	104.675	N/A	80	2.55	44.35	110.39
W16B	16.516	N/A	80	2.33	19.91	27.66
W16C	51.539	N/A	80	36.82	30.68	83.87
W 14A3	81.708	N/A	80	50.00	21.37	173.39
W 15B	41.621	N/A	80	31.66	29.38	67.34
W 15C	142.674	N/A	80	24.57	48.24	164.13
W-14	263.050	N/A	80	9.28	54.01	255.17
W-15B2	22.881	N/A	80	42.75	17.78	51.12

Nodes

Element ID	Element Type	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Diverted Flow (cfs)
6x3 BOX	Junction	83.83	83.83	
6x3 DIVERSION	Diversion	110.39	83.83	26.56
290 EAST DRIVEWAY	Junction	14.16	14.16	
290 GB CULVERT PIPE	Junction	222.04	222.04	
290 WEST DRIVEWAY	Junction	54.02	54.02	
GB 290 CULVERT	Diversion	222.79	222.04	0.75
MANOR COMMERCE	Junction	40.85	40.85	
POA 290 BOX CULVERTS	Junction	518.89	518.89	
POA SE PL	Junction	14.03	14.03	
POA W14-S2B-2 PL	Junction	18.80	18.80	
POA W14-S7 PL	Junction	11.34	11.34	
POA WEST DRIVEWAY PL	Junction	9.93	9.93	
WB TRIB 1	Junction	453.21	453.21	
WB TRIB 2	Junction	468.13	468.13	
WB TRIB 3	Junction	477.42	477.42	
WB TRIB 4	Junction	482.09	482.09	

ATLAS14-10YREX

Watershed Summary

Subbasin ID	Drainage Area (acres)	Initial Abstraction (in)	Curve Number	Impervious Surface (%)	Lag Time (minutes)	Peak Discharge (cfs)
OFFSITE W14-S4	0.596	N/A	80	50.00	7.74	3.24
OFFSITE W14-S7	0.724	N/A	80	50.00	5.7	4.15
OFFSITE W14A	14.013	N/A	80	50.00	17.89	53.82
OFFSITE W14-S2B	1.198	N/A	80	50.00	58.18	2.38
OFFSITE W-15D	4.825	N/A	80	50.00	14.87	19.88
SITE W14-S4	4.130	N/A	80	0.00	13.1	15.84
SITE W14-S7	3.710	N/A	80	0.00	8.36	16.99
SITE W14-S2B	7.996	N/A	80	0.00	8.87	35.57
SITE W-14-A	2.534	N/A	80	4.00	11.32	10.49
SITE W-14-B	11.845	N/A	80	3.20	12.02	47.87
SITE W-15D	0.951	N/A	80	0.00	8.29	4.37
SITE WB TRIB 5	1.822	N/A	80	10.00	9.86	7.88
W14A4	38.874	N/A	80	3.25	40.7	83.68
W14A2	12.278	N/A	80	50.00	33.5	33.91
W14-290 MEDIAN	1.541	N/A	80	35.00	15.35	6.07
W14-52B (HWY 290)	1.693	N/A	80	24.30	5.05	9.06
W14-52A (HWY 290)	1.545	N/A	80	18.20	4.15	8.88
W14-52C (HWY 290)	1.160	N/A	80	21.30	10.03	5.16
W15A	28.009	N/A	80	50.00	18.92	104.23
W16A	104.675	N/A	80	2.55	44.35	213.49
W16B	16.516	N/A	80	2.33	19.91	52.46
W16C	51.539	N/A	80	36.82	30.68	144.5
W 14A3	81.708	N/A	80	50.00	21.37	287.85
W 15B	41.621	N/A	80	31.66	29.38	117.37
W 15C	142.674	N/A	80	24.57	48.24	295.59
W-14	263.050	N/A	80	9.28	54.01	485.25
W-15B2	22.881	N/A	80	42.75	17.78	86.45

Nodes

Element ID	Element Type	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Diverted Flow (cfs)
6x3 BOX	Junction	169.93	169.93	
6x3 DIVERSION	Diversion	213.49	169.93	43.56
290 EAST DRIVEWAY	Junction	61.00	61.00	
290 GB CULVERT PIPE	Junction	304.57	304.57	
290 WEST DRIVEWAY	Junction	100.98	100.98	
GB 290 CULVERT	Diversion	359.21	304.57	54.64
MANOR COMMERCE	Junction	78.31	78.31	
POA 290 BOX CULVERTS	Junction	975.50	975.50	
POA SE PL	Junction	23.80	23.80	
POA W14-S2B-2 PL	Junction	36.33	36.33	
POA W14-S7 PL	Junction	21.15	21.15	
POA WEST DRIVEWAY PL	Junction	18.63	18.63	
WB TRIB 1	Junction	820.44	820.44	
WB TRIB 2	Junction	842.74	842.74	
WB TRIB 3	Junction	863.07	863.07	
WB TRIB 4	Junction	872.40	872.40	

ATLAS14-25YREX

Watershed Summary

Subbasin ID	Drainage Area (acres)	Initial Abstraction (in)	Curve Number	Impervious Surface (%)	Lag Time (minutes)	Peak Discharge (cfs)
OFFSITE W14-S4	0.596	N/A	80	50.00	7.74	3.52
OFFSITE W14-S7	0.724	N/A	80	50.00	5.7	4.43
OFFSITE W14A	14.013	N/A	80	50.00	17.89	62.04
OFFSITE W14-S2B	1.198	N/A	80	50.00	58.18	3.04
OFFSITE W-15D	4.825	N/A	80	50.00	14.87	22.61
SITE W14-S4	4.130	N/A	80	0.00	13.1	18.57
SITE W14-S7	3.710	N/A	80	0.00	8.36	19.46
SITE W14-S2B	7.996	N/A	80	0.00	8.87	40.99
SITE W-14-A	2.534	N/A	80	4.00	11.32	12.04
SITE W-14-B	11.845	N/A	80	3.20	12.02	55.28
SITE W-15D	0.951	N/A	80	0.00	8.29	5
SITE WB TRIB 5	1.822	N/A	80	10.00	9.86	9.05
W14A4	38.874	N/A	80	3.25	40.7	108.9
W14A2	12.278	N/A	80	50.00	33.5	41.55
W14-290 MEDIAN	1.541	N/A	80	35.00	15.35	6.98
W14-52B (HWY 290)	1.693	N/A	80	24.30	5.05	9.97
W14-52A (HWY 290)	1.545	N/A	80	18.20	4.15	9.95
W14-52C (HWY 290)	1.160	N/A	80	21.30	10.03	5.84
W15A	28.009	N/A	80	50.00	18.92	120.99
W16A	104.675	N/A	80	2.55	44.35	279.86
W16B	16.516	N/A	80	2.33	19.91	63.94
W16C	51.539	N/A	80	36.82	30.68	177.92
W 14A3	81.708	N/A	80	50.00	21.37	338.13
W 15B	41.621	N/A	80	31.66	29.38	144.76
W 15C	142.674	N/A	80	24.57	48.24	381.29
W-14	263.050	N/A	80	9.28	54.01	639.67
W-15B2	22.881	N/A	80	42.75	17.78	100.19

Nodes

Element ID	Element Type	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Diverted Flow (cfs)
6x3 BOX	Junction	177.71	177.71	
6x3 DIVERSION	Diversion	279.86	177.71	102.15
290 EAST DRIVEWAY	Junction	117.32	117.32	
290 GB CULVERT PIPE	Junction	333.93	333.93	
290 WEST DRIVEWAY	Junction	156.88	156.88	
GB 290 CULVERT	Diversion	441.92	333.93	107.99
MANOR COMMERCE	Junction	142.47	142.47	
POA 290 BOX CULVERTS	Junction	1368.03	1368.03	
POA SE PL	Junction	27.15	27.15	
POA W14-S2B-2 PL	Junction	42.11	42.11	
POA W14-S7 PL	Junction	23.89	23.89	
POA WEST DRIVEWAY PL	Junction	21.63	21.63	
WB TRIB 1	Junction	1088.35	1088.35	
WB TRIB 2	Junction	1114.09	1114.09	
WB TRIB 3	Junction	1142.59	1142.59	
WB TRIB 4	Junction	1155.87	1155.87	

ATLAS14-100YREX

Watershed Summary

Subbasin ID	Drainage Area (acres)	Initial Abstraction (in)	Curve Number	Impervious Surface (%)	Lag Time (minutes)	Peak Discharge (cfs)
OFFSITE W14-S4	0.596	N/A	80	50.00	7.74	5.57
OFFSITE W14-S7	0.724	N/A	80	50.00	5.7	7.09
OFFSITE W14A	14.013	N/A	80	50.00	17.89	93.27
OFFSITE W14-S2B	1.198	N/A	80	50.00	58.18	4.29
OFFSITE W-15D	4.825	N/A	80	50.00	14.87	34.34
SITE W14-S4	4.130	N/A	80	0.00	13.1	29.83
SITE W14-S7	3.710	N/A	80	0.00	8.36	31.88
SITE W14-S2B	7.996	N/A	80	0.00	8.87	66.9
SITE W-14-A	2.534	N/A	80	4.00	11.32	19.47
SITE W-14-B	11.845	N/A	80	3.20	12.02	89.19
SITE W-15D	0.951	N/A	80	0.00	8.29	8.2
SITE WB TRIB 5	1.822	N/A	80	10.00	9.86	14.52
W14A4	38.874	N/A	80	3.25	40.7	160.85
W14A2	12.278	N/A	80	50.00	33.5	59.63
W14-290 MEDIAN	1.541	N/A	80	35.00	15.35	10.71
W14-52B (HWY 290)	1.693	N/A	80	24.30	5.05	16.1
W14-52A (HWY 290)	1.545	N/A	80	18.20	4.15	16.08
W14-52C (HWY 290)	1.160	N/A	80	21.30	10.03	9.25
W15A	28.009	N/A	80	50.00	18.92	181.07
W16A	104.675	N/A	80	2.55	44.35	412.16
W16B	16.516	N/A	80	2.33	19.91	98.34
W16C	51.539	N/A	80	36.82	30.68	258.24
W 14A3	81.708	N/A	80	50.00	21.37	499.51
W 15B	41.621	N/A	80	31.66	29.38	211.59
W 15C	142.674	N/A	80	24.57	48.24	550.16
W-14	263.050	N/A	80	9.28	54.01	935.47
W-15B2	22.881	N/A	80	42.75	17.78	151.56

Nodes

Element ID	Element Type	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Diverted Flow (cfs)
6x3 BOX	Junction	187.69	187.69	
6x3 DIVERSION	Diversion	412.16	187.69	224.46
290 EAST DRIVEWAY	Junction	248.89	248.89	
290 GB CULVERT PIPE	Junction	376.00	376.00	
290 WEST DRIVEWAY	Junction	301.31	301.31	
GB 290 CULVERT	Diversion	610.74	376.00	234.74
MANOR COMMERCE	Junction	282.53	282.53	
POA 290 BOX CULVERTS	Junction	2165.86	2165.86	
POA SE PL	Junction	41.71	41.71	
POA W14-S2B-2 PL	Junction	68.58	68.58	
POA W14-S7 PL	Junction	38.97	38.97	
POA WEST DRIVEWAY PL	Junction	34.61	34.61	
WB TRIB 1	Junction	1597.74	1597.74	
WB TRIB 2	Junction	1636.53	1636.53	
WB TRIB 3	Junction	1679.88	1679.88	
WB TRIB 4	Junction	1702.11	1702.11	

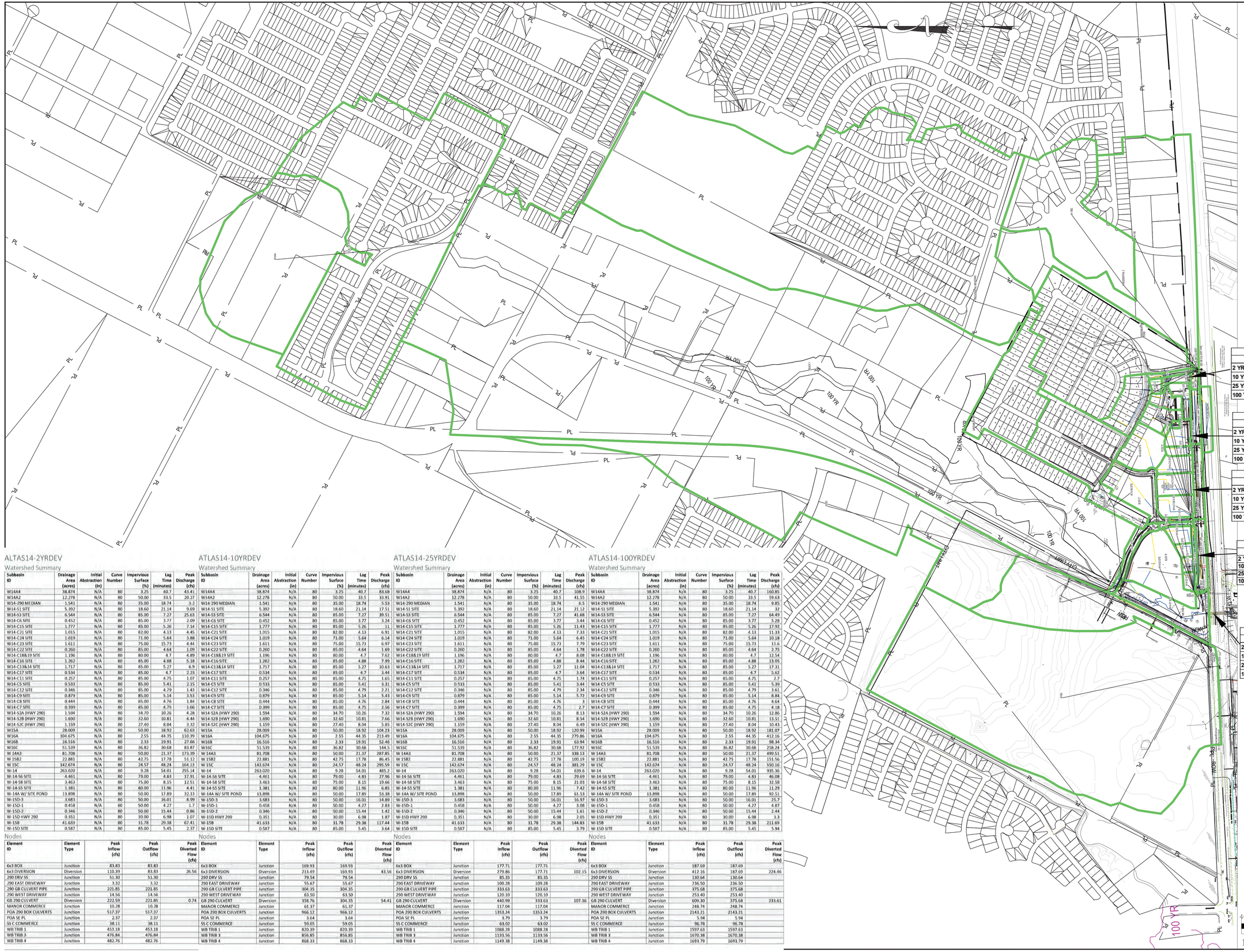
#	REVISION	DATE

SCALE: 1"=400'
DATE: 10/15/2025
JOB: SITE
DRAWN BY: MM
CHECKED BY: MM

ALM ENGINEERING, INC.
F-3565
CONSULTING ENGINEERS
PO Box 536
Dripping Springs, Texas, 78620
(512) mail@almengr.com

MATTHEW MITCHELL 83335 LICENSED PROFESSIONAL ENGINEER
11-18-2025

MANOR NE SDP 25A
ON-SITE & OFF-SITE DRAINAGE CALCULATIONS FOR EXISTING CONDITIONS
MANOR, TX


PL
100 YR
OAK CREEK
OAK CREEK TRIB 1
OAK CREEK TRIB 2
OAK CREEK TRIB 3
OAK CREEK TRIB 4
OAK CREEK TRIB 5
OAK CREEK TRIB 6
OAK CREEK TRIB 7
OAK CREEK TRIB 8
OAK CREEK TRIB 9
OAK CREEK TRIB 10
OAK CREEK TRIB

V1432 V1432-1 Assembly

ej

Product Number
NPR23-004215-52621

Design Features
-Materials
Frame
Gray Iron (CL350)
Cover
Ductile Iron (90-55-06)

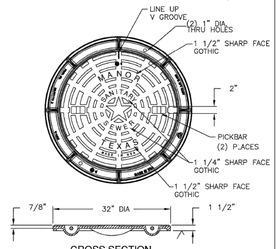
-Load Rating
Heavy Duty
-Open Area
n/a
-Coating
Undipped
-✓ Designates Machined Surface

Certification
-
-ASTM A536
-ASTM A48
-Country of Origin USA

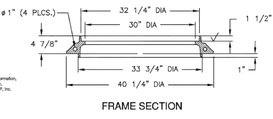
Major Components
4143201/2
4143203XX

Drawing Revision
9/28/2023 Designer: MAH
Revised By:

Disclaimer
Weights (lbs./kg.) dimensions (inches/mm) and drawings are to be used as guidelines only. We reserve the right to revise our product without prior notice.
CONFIDENTIAL: "The drawing is the property of EJ GROUP, Inc., and websites confidential information, and is loaned subject to the return upon request and/or know how that is the property of EJ GROUP, Inc. Copyright © 2012 EJ GROUP, Inc.
All rights reserved.
Contact
800 626 4653
ejco.com

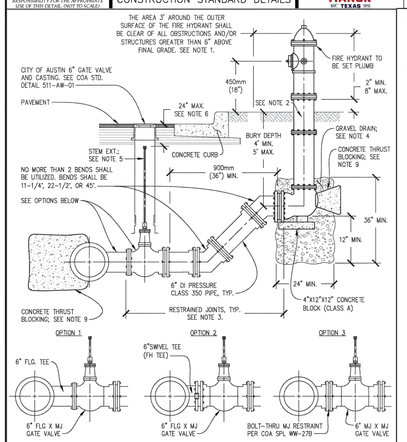


CROSS SECTION



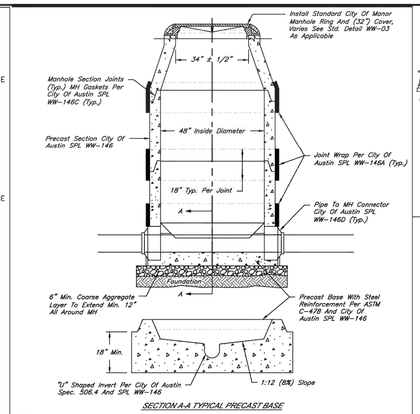
FRAME SECTION

Approved 05/08/2024 Date	CITY OF MANOR	Detail No. WW-01
	WASTEWATER MANHOLE RING AND (32") COVER	WW-01.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL, (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	MANOR TEXAS MR



THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 10/16/20 Date	Drawn by: PMG
WATER / WASTEWATER DOUBLE SERVICE DETAIL		Detail No.



SECTION A-A TYPICAL PRECAST BASE

Notes:
1. *The Manhole Base Shall Be Bedded On 6" Coarse Aggregate. The Contractor Shall Level And Plumb The Base Prior To Setting The Precast Manhole Riser Sections On The Precast Concrete Base.*
2. *MH Foundation Shall Meet Or Exceed City Of Austin Std. Spec. 506.5B.*

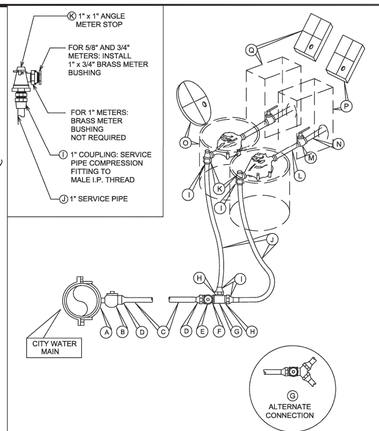
Approved 05/08/2024 Date	CITY OF MANOR	Detail No. WW-05
	WATER TIGHT WASTEWATER MANHOLE ON PRECAST BASE	WW-05.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL, (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	MANOR TEXAS MR

NOTES:
1. DIMENSION FROM GUTTER FACE OF CURB TO OUTERMOST PART OF ANY NOZZLE CAP SHALL BE NOT LESS THAN 3', NOR MORE THAN 6'. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6" OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' TO 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE CITY OF AUSTIN SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 2' IN DIAMETER AND 1' DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL OF 6" ABOVE THE HYDRANT DRAIN OPENING (SEE COA STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC TO PREVENT BLOCKAGE OF VOIDS IN THE GRAVEL BY MIGRATION OF BACKFILL MATERIAL. THE BOWL OF EACH HYDRANT SHALL BE WELL BRACED AGAINST UNEXCAVATED EARTH AT THE END OF THE TRENCH TAKING CARE NOT TO OBSTRUCT THE HYDRANT DRAIN HOLES, IF THE HYDRANT LEAD IS NOT RESTRAINED TO THE MAIN.
5. WELD SOCKET 2-1/2" X 2" TO 1" SCH. 40 ROUND STEM EXTENSION, FIT ON OPERATING NUT. USE SCH. 80 ROUND STEM EXTENSION FOR LENGTHS OVER 10'. VALVE STEM EXTENSIONS SHALL CONSIST OF A SINGLE PIECE OF REQUIRED LENGTH WITH A SOCKET ON ONE END AND A NUT ON THE OTHER.
6. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE STEM EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18" AND 24" FROM FINISHED GRADE.
7. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLANGE X FLANGE REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
8. WRAP 8 mil POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
9. THRUST BLOCKING REQUIRED FOR FIRE SUPPLY IN ALL SOIL CONDITION (SEE STD. DETAIL W-11).
10. STEAMER NOZZLE TO BE 4.5" NST FIRE THREAD CONNECTION.
11. FIRE HYDRANTS SHALL BE PAINTED RED.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 10/16/20 Date	Drawn by: VDI
FIRE HYDRANT DETAIL (1 OF 2)		Detail No. W-1

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 10/16/20 Date	Drawn by: VDI
FIRE HYDRANT DETAIL (2 OF 2)		Detail No. W-1



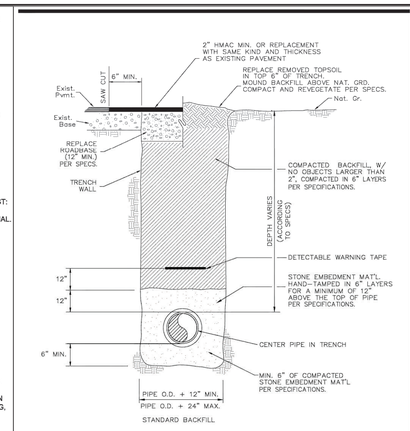
CITY RESPONSIBILITY ENDS ON THE CUSTOMER SIDE OF THE METER BOX

CITY OF MANOR	INSTALLATION DETAIL FOR TWO 16mm (5/8"), 19mm (3/4") & 25mm (1") METERS	STANDARD NO.
RECORD COPY SIGNED BY FRANK T. PHELAN, P.E. 08-09-2016	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	M 520S-9
		1 OF 2

MATERIAL LIST
- (A) SERVICE CLAMP REQUIRED ON ALL PLASTIC AND ASBESTOS CEMENT PIPE AND ON ALL IRON PIPE 300mm (12") AND SMALLER.
- (B) 38mm (1-1/2") CORPORATION STOP-SERVICE PIPE OUTLET. SPL WW-68
- (C) 38mm (1-1/2") SERVICE PIPE
- (D) 38mm (1-1/2") COUPLING: SERVICE PIPE TO MALE I.P.T. (COMPRESSION FITTING)
- (E) 38mm (1-1/2") BALL VALVE. SEE SPL WW-275; SEE NOTE 8
- (F) 38mm (1-1/2") CLOSE NIPPLE. BRONZE I.P. THREAD
- (G) 38mm (1-1/2") BRONZE TEE. SPL WW-68 OR 38mm (1-1/2") BRONZE WYE SPL WW-68
- (H) BRONZE BUSHING, 38mm x 25mm (1-1/2"x1"), I.P. THREADS
- (I) 25mm (1") COUPLING: SERVICE PIPE TO MALE I.P. THREAD, COMPRESSION FITTING
- (J) 25mm (1") SERVICE PIPE
- (K) 25mm (1") ANGLE METER STOP; SERVICE PIPE INLET x SWIVEL COUPLING NUT OUTLET AND BRASS BUSHING:
  - -FOR 16mm AND 19mm (5/8" AND 3/4") METERS 25mm x19mm (1"x3/4") BRASS METER BUSHING
  - -FOR 25mm (1") METERS BRASS METER BUSHING NOT REQUIRED.
  - -FOR ALL, SEE SPL WW-68
- (L) WATER METER COUPLING: MALE I.P.T. x SWIVEL COUPLING NUT:
  - -FOR 16mm (5/8") AND 19mm (3/4") METERS: 19mm x 213mm (3/4"x8-1/2") LONG
  - -FOR 25mm (1") METERS: 25mm x 213mm (1"x8-1/2") LONG
- (M) 25mm (1") BALL VALVE. SEE SPL WW-276
- (N) 25mm (1") PIPE MEETING CITY OF AUSTIN PLUMBING CODE REQUIREMENTS
- (O) AMR/AMI READY ROUND METER BOX AND LID (SINGLE OR DOUBLE) PER STANDARD PRODUCTS LIST: SPL WW-145A W/ HDPE RETROFIT POLYMER AMR/AMI COVER.
- (P) PROPERTY OWNERS BALL VALVE BOX AND LID, RECTANGULAR PLASTIC BOX, DFW #D1200 OR EQUAL.

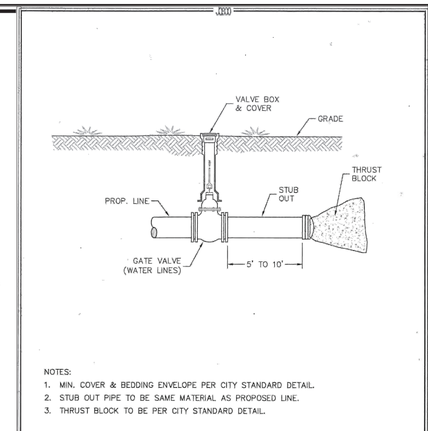
NOTES:
1. SERVICE PIPE SHALL BE POLYETHYLENE TUBING PER SPL WW-65
2. SERVICE SADDLE SHALL BE WRAPPED COMPLETELY WITH 0.2 mm (8 MIL) POLYETHYLENE FILM.
3. BRANCH CONNECTION AND BOTH ANGLE METER STOPS MUST BE INSTALLED PRIOR TO FIRST METER INSTALLATION EVEN THOUGH SECOND PROPERTY MAY NOT BE READY FOR SERVICE.
4. TOP OF BOXES SHOULD BE 25mm (1") ABOVE GROUND OR FLUSH WITH PAVEMENT SURFACE.
5. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS: BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
6. BOX MUST BE BEHIND CURB, NEXT TO PROPERTY LINE OR EASEMENT, AND OUT OF SIDEWALK AND VEHICULAR TRAFFIC AREA.
7. BALL VALVE E SHALL NOT BE LOCATED MORE THAN 36" (914mm) BELOW METER OR MORE THAN 24" (610mm) HORIZONTALLY FROM METER. BALL VALVE E MAY NOT BE LOCATED UNDER PAVING, SIDEWALK, OR DRIVEWAY.
8. A METER BOX IS REQUIRED FOR EACH 25mm (1") METER.

CITY OF MANOR	INSTALLATION DETAIL FOR TWO 16mm (5/8"), 19mm (3/4") & 25mm (1") METERS	STANDARD NO.
RECORD COPY SIGNED BY FRANK T. PHELAN, P.E. 08-09-2016	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	M 520S-9
		2 OF 2



STANDARD BACKFILL

Approved 05/02/2025 Date	CITY OF MANOR	Detail No. XX-##
	TYPICAL PIPE TRENCH AND EMBEDMENT CONSTRUCTION STANDARD DETAILS	Trench.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL, (NOT TO SCALE)		MANOR TEXAS MR



NOTES:
1. MIN. COVER & BEDDING ENVELOPE PER CITY STANDARD DETAIL.
2. STUB OUT PIPE TO BE SAME MATERIAL AS PROPOSED LINE.
3. THRUST BLOCK TO BE PER CITY STANDARD DETAIL.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved Date	Drawn By: VDI
PIPE STUB		Detail No.

Grease Trap Manufacturers List

The following companies are familiar with the City of Austin's requirements and may be able to supply City of Austin approved grease traps (please reference grease trap design criteria). HOWEVER, DO NOT PURCHASE ANY GREASE TRAP WITHOUT FIRST VERIFYING WITH OUR OFFICE THAT THE SPECIFIC MODEL WILL BE APPROVED FOR INSTALLATION!

Please contact our office if you would like to add your company's name to this list (Office of Industrial Waste / 3907 South Industrial Dr., #100 / Austin, TX 78744 / Ph. (512) 972-1060, Fax (512) 972-1260).

Affordable Concrete Products, Inc.
P. O. Box 1377
Buda, Texas 78610
(512) 312-2121 / Fax: (512) 295-5534
Email: ACP500@aol.com

CAPITAL Concrete Products
(formerly Texas Concrete Tank)
5264 Highway 71 E
Del Valle, Tx 78617
(512) 247-4193 / Fax: (512) 247-4163

Comal Concrete Products
4222 FM 282
New Braunfels, Texas 78132
(830) 606-4732

Hill Country Concrete Products
P.O. Box 357
Kyle, Texas 78640
(512) 476-5838
Website: www.hillcountryconcrete.com

Josam Company
c/o Pwl Sales & Marketing Services, Inc.
1769 Shipman / San Antonio, TX 78219
(210) 223-6975 or (800) 486-0251 / Fax: (210) 271-9054
Email: SAQuotations@pmreps.com
Websites: www.pmreps.com / www.josam.com

Mifab, Inc.
c/o Steve Mechler & Associates, Inc.
10737 Gulfdale
San Antonio, Texas 78216
(210) 545-0084 / (210) 545-7535 (Fax)
Email: sales@mechler.com
Website: www.mifab.com

ParkUSA
7015 Fairbanks N. Houston Rd.
Houston, Texas 77040
(713) 937-7602
Email: sales@park-usa.com
Website: www.park-usa.com

Rockford Separators
c/o PWI Sales & Marketing Services, Inc.
1769 Shipman / San Antonio, TX 78219
(210) 223-6975 or (800) 486-0251 / (210) 271-9054 (Fax)
Email: mlkern@pmreps.com
Websites: www.pmreps.com / www.rkfdseparators.com

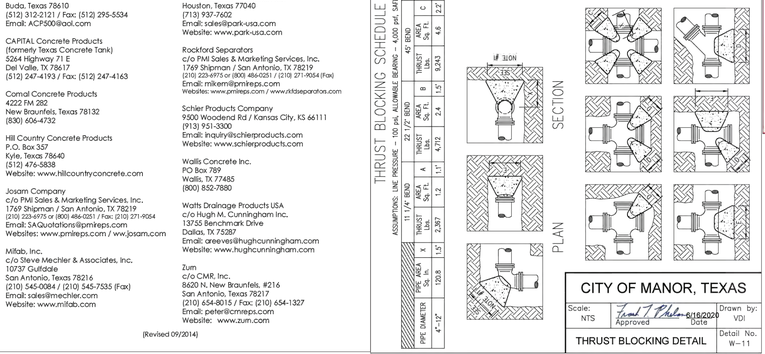
Schier Products Company
9500 Woodend Rd / Kansas City, KS 66111
(913) 951-3300
Email: inquiry@schierproducts.com
Website: www.schierproducts.com

Wallis Concrete Inc.
PO Box 789
Wallis, TX 77485
(800) 852-7880

Watts Drainage Products USA
c/o Hugh M. Cunningham Inc.
13755 Benchmark Drive
Dallas, TX 75287
Email: areeves@hughcunningham.com
Website: www.hughcunningham.com

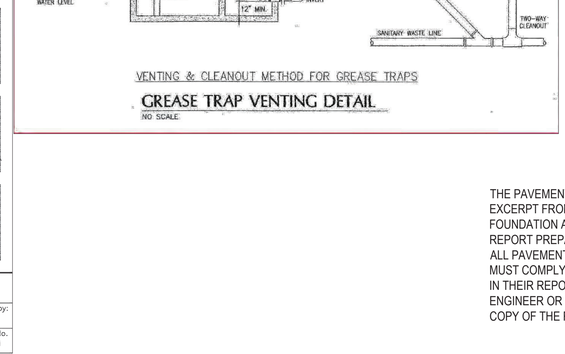
Zum
c/o CMR, Inc.
8620 N. New Braunfels, #216
San Antonio, Texas 78217
(210) 654-8015 / Fax: (210) 654-1327
Email: peter@cmreps.com
Website: www.zum.com

(Revised 09/2014)



THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.

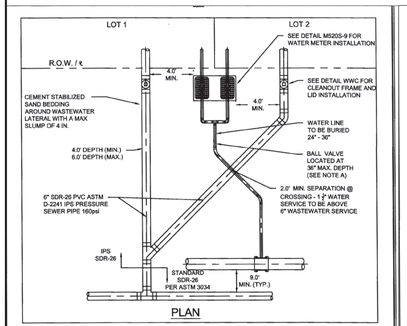
CITY OF MANOR, TEXAS		
Scale: NTS	Approved 6/16/2020 Date	Drawn by: VDI
THRUST BLOCKING DETAIL		Detail No. W-11



VENTING & CLEANOUT METHOD FOR GREASE TRAPS

GREASE TRAP VENTING DETAIL

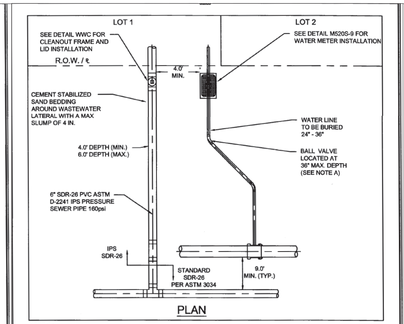
NO SCALE.



NOTE A :
BALL VALVE SHALL NOT BE LOCATED UNDER CURB OR PAVEMENT AND NOT BE LOCATED MORE THAN 24" HORIZONTAL FROM METER BOX.

1. WASTEWATER SERVICE SDR-26 ASTM D-2241 IPS PVC PRESSURE RATED 160 psi.
2. WASTEWATER IN SEPARATE TRENCH FROM WATER WITH WASTEWATER LINE ENCASED WITH CEMENT STABILIZED SAND WITH A SLUMP OF 4-INCHES OR LESS. THE CEMENT STABILIZED SAND SHALL HAVE A MIN. OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MIN. OF 6" ABOVE AND 4" BELOW THE WASTEWATER SERVICE LINE.
3. WATER IS 2.0' ABOVE WASTEWATER AT ALL POINTS EXCEPT CLEANOUT OPENING.
4. WATER METERS PLACED IN TYPICAL SERVICE BOXES WITH LIPS 3" ABOVE CLEANOUT OPENING.
5. IF WATER SERVICE DEPTH IS GREATER THAN 24". WASTEWATER SERVICE DEPTH MUST BE SUFFICIENT TO PROVIDE MINIMUM OF 2.0' VERTICAL SEPARATION.
6. THE WATER SADDLE TAP IS 9.0' FROM THE WASTEWATER SERVICE LATERAL, CROSSING IT AT 90° AND 2.0' ABOVE THE WYE WASTEWATER SERVICE LATERAL.
7. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN 9.0' VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION.

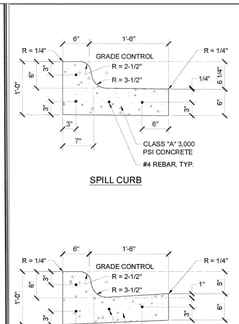
CITY OF MANOR, TEXAS		
Scale: NTS	Approved 5/11/18 Date	Drawn by: PMG
WATER / WASTEWATER DOUBLE SERVICE DETAIL		Detail No.



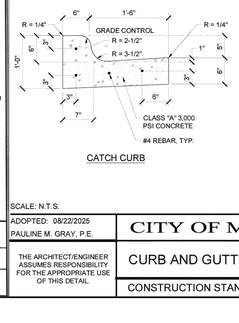
NOTE A :
BALL VALVE SHALL NOT BE LOCATED UNDER CURB OR PAVEMENT AND NOT BE LOCATED MORE THAN 24" HORIZONTAL FROM METER BOX.

1. WASTEWATER SERVICE SDR-26 ASTM D-2241 IPS PVC PRESSURE RATED 160 psi.
2. WASTEWATER IN SEPARATE TRENCH FROM WATER WITH WASTEWATER LINE ENCASED WITH CEMENT STABILIZED SAND WITH A SLUMP OF 4-INCHES OR LESS. THE CEMENT STABILIZED SAND SHALL HAVE A MIN. OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MIN. OF 6" ABOVE AND 4" BELOW THE WASTEWATER SERVICE LINE.
3. WATER IS 2.0' ABOVE WASTEWATER AT ALL POINTS EXCEPT CLEANOUT OPENING.
4. WATER METER PLACED IN TYPICAL SERVICE BOX WITH LIP 3" ABOVE CLEANOUT OPENING.
5. IF WATER SERVICE DEPTH IS GREATER THAN 24". WASTEWATER SERVICE DEPTH MUST BE SUFFICIENT TO PROVIDE MINIMUM OF 2.0' VERTICAL SEPARATION.
6. THE WATER SADDLE TAP IS 9.0' FROM THE WASTEWATER SERVICE LATERAL.
7. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN 9.0' VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 5/11/18 Date	Drawn by: PMG
WATER / WASTEWATER SHARED LOT LINE SINGLE SERVICE DETAIL		Detail No.



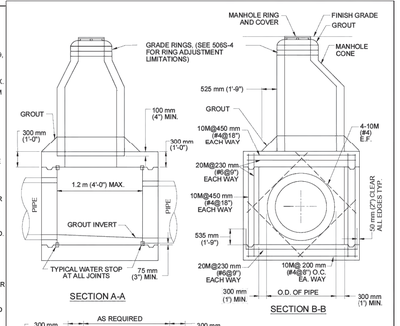
SPILL CURB



CATCH CURB

SCALE: N.T.S.

ADOPTED: 08/22/2025	CITY OF MANOR	ST-003
PAULINE M. GRAY, P.E.	CURB AND GUTTER DETAILS	1 OF 1
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.	CONSTRUCTION STANDARD DETAILS	MANOR TEXAS MR



1. BOX WALLS MUST BE FORMED INSIDE AND OUTSIDE WITH APPROVED MATERIALS.
2. USE CLASS "A" CONCRETE.
3. TYPICAL CAST IN PLACE BOX FOR 760 mm (30") OR LARGER PIPE.
4. REINFORCING STEEL SHALL MEET ITEM 406, REINFORCING STEEL.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY		TYPICAL BOX MANHOLE 760 mm (30") & LARGER PIPE
RECORD COPY SIGNED BY KATHI F. PAYNE	2/17/00 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.
		STANDARD NO. 506S-5 1 OF 1

Driveway and Parking Areas – Light Vehicular with Light Delivery Truck Traffic

A. Asphalt Option

Material	Thickness
Lime Stabilized Subgrade	8.0 inches
Crushed Limestone Base	10.0 inches
Hot Mix Asphaltic Concrete	2.0 inches

B. Reinforced Concrete Option

Material	Thickness
Lime Stabilized Subgrade	8.0 inches
Crushed Limestone Base	6.0 inches*
Reinforced Concrete	5.0 inches

*Note: Base may be omitted if concrete is increased to 6.0 inches. If base is omitted, additional distress and cracking in the pavement section and curb should be expected.

THE PAVEMENT RECOMMENDATIONS SHOWN ARE AN EXCERPT FROM THE SURFANCE INVESTIGATION AND FOUNDATION AND PAVEMENT RECOMMENDATIONS REPORT PREPARED BY HOLT ENGINEERING, INC. ALL PAVEMENT CONSTRUCTION AND INSTALLATION MUST COMPLY WITH THE RECOMMENDATIONS FOUND IN THEIR REPORT 08-20525. PLEASE CONTACT THE SITE ENGINEER OR HOLT ENGINEERING, INC. FOR A FULL COPY OF THE REPORT PRIOR TO CONSTRUCTION.

SUBSURFACE INVESTIGATION
AND
FOUNDATION AND PAVEMENT RECOMMENDATIONS

FOR

MANOR COMMERCIAL DEVELOPMENT
US HIGHWAY 290 WEST AND GREENBURY DRIVE
MANOR, TEXAS

REPORT FOR:

TIMMERMANN COMMERCIAL INVESTMENTS, LP
501 VALE STREET
AUSTIN, TEXAS 78746

PREPARED BY:

TRAVIS H. BRYANT, P.E.
PRINCIPAL ENGINEER

HOLT ENGINEERING, INC.
TBPE FIRM REGISTRATION NO. F-430

FILE NO. 08-20525
27 AUGUST 2025

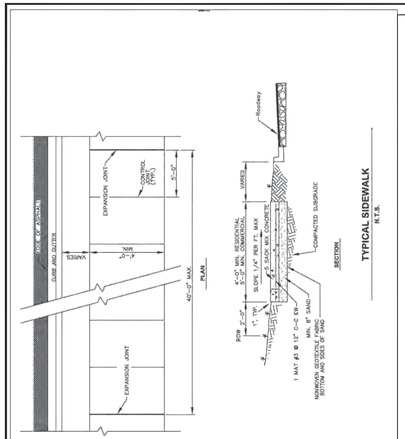
HOLT ENGINEERING, INC. 2220 Barton Skyway ~ Austin, Texas ~ 78704 ~ Ph. (512) 447-8166 ~ Fax (512) 447-0852

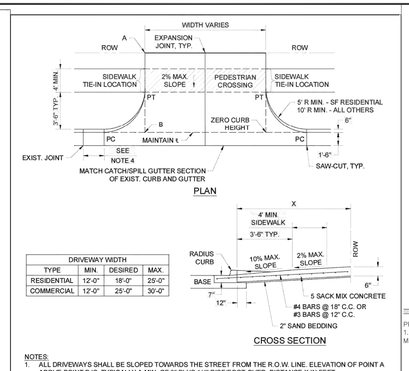
SCALE:	NA
DATE:	2/26/2026
JOB:	
DRAWN BY:	
CHECKED BY:	

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
PO Box 536
Dripping Springs, Texas 78620
(512) 431-9600 * matt@almengr.com

#	REVISION	DATE

DETAIL SHEET 1
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS





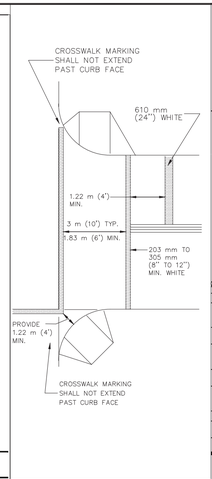
DRIVEWAY WIDTH			
TYPE	MIN.	DESIRED	MAX.
RESIDENTIAL	12'-0"	18'-0"	25'-0"
COMMERCIAL	12'-0"	25'-0"	30'-0"

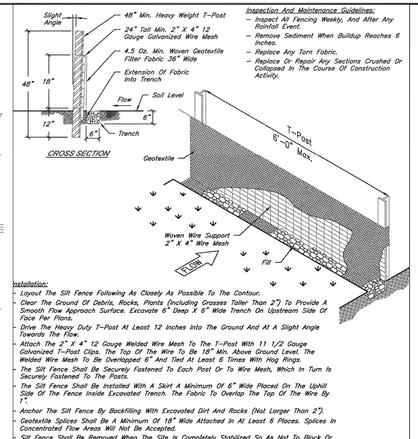
NOTES:
1. ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT A ABOVE POINT B IS, TYPICALLY A MIN. OF 6" PLUS 1/4" RISE/FOOT OVER. DISTANCE X IN FEET.
2. "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST. THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITIONED INTO THE SIDEWALK TIE-IN LOCATION BEGINNING AT THE RADIUS PC LINE.
3. PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY.
4. IF DIMENSION IS LESS THAN 5 FEET, REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
5. USE 1/2" ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS, SIDEWALK, AT THE R.O.W. LINE AND AT MIDWIDTH, SEE NOTE 3.

SCALE: N.T.S.

ADOPTED: 12/15/2025 PAULINE M. GRAY, P.E.	CITY OF MANOR DRIVEWAY DETAIL CONSTRUCTION STANDARD DETAILS	ST-006 1 OF 1

CITY OF MANOR, TEXAS			
Scale: NTS	Approved 1/8/17 Date	Drawn by: FTP	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.
CONCRETE SIDEWALK		Detail No.	



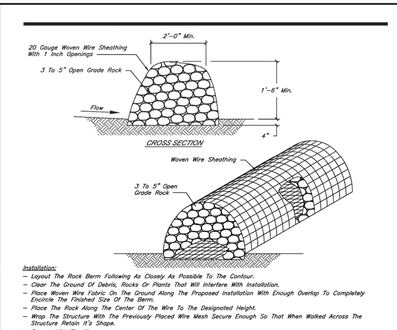


Inspection And Maintenance Guidelines:
- Inspect All Fencing Weekly, And After Any Rainfall Event.
- Remove Sediment When Buildup Reaches 6 Inches.
- Replace Any Torn Fabric.
- Replace Or Repair Any Sections Crushed Or Collapsed In The Course Of Construction Activity.

Installation:
- Layout The Silt Fence Following As Closely As Possible To The Contour.
- Clear The Ground Of Debris, Rocks, Plants (including Grasses Taller Than 2") To Provide A Smooth Flow Approach Surface. Excavate 6" Deep X 8" Wide Trench On Upstream Side Of Face Per Plans.
- Drive The Heavy Duty T-Post At Least 12 Inches Into The Ground And At A Slight Angle Towards The Flow.
- Attach The 2" X 4" 12 Gauge Welded Wire Mesh To The T-Post With 11 1/2 Gauge Galvanized T-Post Clips. The Top Of The Wire To Be 18" Min. Above Ground Level. The Welded Wire Mesh To Be Overlapped 6" And Tied At Least 6 Times With Hog Rings.
- The Silt Fence Shall Be Securely Fastened To Each Post Or To Wire Mesh, Which In Turn Is Securely Fastened To The Posts.
- The Silt Fence Shall Be Installed With A Skirt A Minimum Of 6" Wide Placed On The Uphill Side Of The Fence Inside Excavated Trench. The Fabric To Overlap The Top Of The Wire By 1".
- Anchor The Silt Fence By Backfilling With Excavated Dirt And Rocks (Not Larger Than 2").
- Geotextile Splices Shall Be A Minimum Of 18" Wide Attached In At Least 6 Places. Splices In Concentrated Flow Areas Will Not Be Accepted.
- Silt Fence Shall Be Removed When The Site Is Completely Stabilized So As Not To Block Or Impede Storm Flow Or Drainage.

Approved 05/08/2024 Date	CITY OF MANOR SILT FENCE CONSTRUCTION STANDARD DETAILS	Detail No. EC-01 EC-01.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

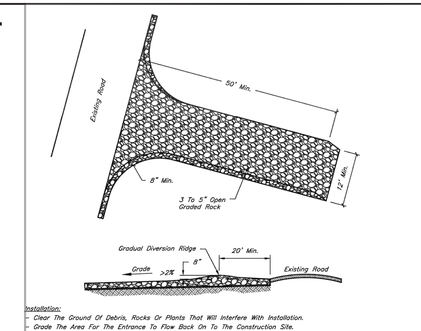


Installation:
- Layout The Rock Berm Following As Closely As Possible To The Contour.
- Clear The Ground Of Debris, Rocks Or Plants That Will Interfere With Installation.
- Place Woven Wire Fabric On The Ground Along The Proposed Installation With Enough Overlap To Completely Encircle The Finished Size Of The Berm.
- Place The Rock Along The Center Of The Wire To The Designated Height.
- Wrap The Structure With The Previously Placed Wire Mesh Secure Enough So That When Walked Across The Structure Retain It's Shape.
- Secure With Tie Wire.
- The Ends Of The Berm Should Be Tied Into Existing Upslope Grade And The Berm Shall Be Buried In A Trench Approx. 4 Inches Deep To Prevent Failure Of The Control.
- The Rock Berm Shall Be Left In Place Until All Upstream Areas Are Stabilized And Accumulated Silt Removed.

Inspection And Maintenance Guidelines:
- Inspection Shall Be Made Weekly And After Each Rainfall Event By The Responsible Party. For Installations In Streambeds, Additional Daily Inspections Shall Be Made.
- Remove Sediment And Other Debris When Buildup Reaches 6 Inches And Dispose Of The Accumulated Silt In An Approved Manner.
- Repair Any Loose Wire Sheathing.
- The Berm Shall Be Reshaped As Needed During Inspection.
- The Berm Shall Be Replaced When The Structure Ceases To Function As Intended Due To Silt Accumulation Among The Rocks, Washout, Construction Traffic Damage, Etc.

Approved 05/08/2024 Date	CITY OF MANOR ROCK BERM CONSTRUCTION STANDARD DETAILS	Detail No. EC-02 EC-02.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

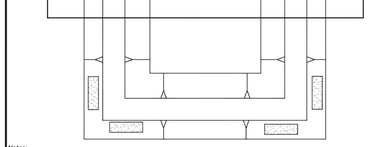


Installation:
- Clear The Ground Of Debris, Rocks Or Plants That Will Interfere With Installation.
- Grade The Area For The Entrance To Flow Back On To The Construction Site.
- Place Rock As Approved By The City Engineer.
- Entrance Not To Be Less Than 8" Thick.

Inspection And Maintenance Guidelines:
- The Entrance Shall Be Maintained In A Condition, Which Will Prevent Tracking Or Flowing Of Sediment Onto Public Rights-Of-Way. This May Require Periodic Top Dressing With Additional Stone As Conditions Demand And Repair And/Or Cleanout Of Any Measures Used To Trap Sediment.
- All Sediment Spilled, Dropped, Washed Or Tracked Onto Public Rights-Of-Way Shall Be Removed Immediately By Contractor.
- When Necessary, Wheels Shall Be Cleaned To Remove Sediment Prior To Entrance Onto Public Rights-Of-Way.
- When Washing Is Required, It Shall Be Done On An Area Stabilized With Crushed Stone That Drains Into An Approved Sediment Trap Or Sediment Basin.
- All Sediment Shall Be Prevented From Entering Any Storm Drain, Ditch Or Water Course By Using Approved Methods.

Approved 05/08/2024 Date	CITY OF MANOR STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTION STANDARD DETAILS	Detail No. EC-03 EC-03.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)



Notes:
1. Set Length And Width As Necessary To Provide Adequate Space For Washout Activities.
2. If Restricted By Depth Due To Below Grade Appurtenances, Place Earthen Berms At Grade.
3. Use Excavated Material To Create Earthen Berms Surrounding The Area To Be Designated As A Concrete Washout.
4. Place 10Mil Or Greater Plastic Sheeting.
5. Secure Sheeting On Outside Of Berm Area Using Sand Bags Or Rock Equivalent.

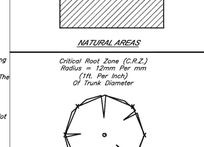
Approved 05/08/2024 Date	CITY OF MANOR CONCRETE WASHOUT CONSTRUCTION STANDARD DETAILS	Detail No. EC-04 EC-04.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

Notes:
1. Tree Protection Fences Shall Be Installed Prior To Commencement Of Any Site Preparation Work (Clearing, Grubing Or Grading).
2. Fences Shall Completely Surround The Tree, Or Clusters Of Trees; Shall Be Located At The Outermost Limit Of The Tree Branches (Dripline), And Shall Be Maintained Throughout The Construction Project In Order To Prevent The Following:
   2.A. Soil Compaction In The Root Zone Area Resulting From Vehicular Traffic, Or Storage Of Equipment Or Materials.
   2.B. Root Zone Disturbances Due To Grade Changes (Greater Than Six Inches (6")), Cut Or Fill, Or Trenching Not Reviewed And Authorized By The City.
   2.C. Wounds To Exposed Root, Trunks Or Limbs By Mechanical Equipment.
   2.D. Other Activities Detrimental To Trees, Such As Chemical Storage, Cement Truck Cleaning And Fire.
3. Exceptions To Installing Fences At Tree Driplines May Be Permitted In The Following Cases:
   3.A. Where Permeable Paving Is To Be Installed, Erect The Fence At The Outer Limits Of The Permeable Paving Area.
   3.B. Where Trees Are Close To Proposed Buildings, Erect The Fence No Closer Than Six Feet (6'-0") To Building.

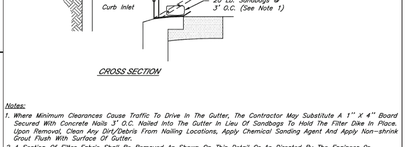
Approved 05/08/2024 Date	CITY OF MANOR TREE PROTECTION – CHAIN LINK FENCE CONSTRUCTION STANDARD DETAILS	Detail No. EC-06 EC-06.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)



Approved 05/08/2024 Date	CITY OF MANOR TREE PROTECTION FENCE LOCATIONS CONSTRUCTION STANDARD DETAILS	Detail No. EC-07 EC-07.dwg

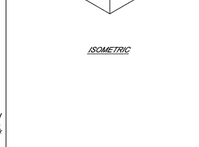
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)



Notes:
1. Where Minimum Clearances Cause Traffic To Drive In The Gutter, The Contractor May Substitute A 1" X 4" Board Secured With Concrete Nails 3" O.C. Nailed Into The Gutter In Lieu Of Sandbags To Hold The Filter Dike In Place. Upon Removal, Clean Any Dirt/Debris From Hailing Locations, Apply Chemical Sanding Agent And Apply Non–shrink Grout Flush With Surface Of Gutter.
2. A Section Of Filter Fabric Shall Be Removed As Shown On This Detail Or As Directed By The Engineer Or Designated Representative. Fabric Must Be Secured To Wire Backing With Clips Or Hog Rings At This Location.
3. Daily Inspection Shall Be Made By The Contractor And Silt Accumulation Must Be Removed When Depth Reaches 2".
4. Contractor Shall Monitor The Performance Of Inlet Protection During Each Rainfall Event And Immediately Remove The Inlet Protections If The Storm–water Begins To Overtop The Curb.
5. Inlet Protections Shall Be Removed As Soon As The Source Of Sediment Is Stabilized.

Approved 05/08/2024 Date	CITY OF MANOR CURB INLET PROTECTION CONSTRUCTION STANDARD DETAILS	Detail No. EC-09 EC-09.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)



Notes:
1. Daily Inspection Shall Be Made By The Contractor And Silt Accumulation Must Be Removed When Depth Reaches 2".
2. Contractor Shall Monitor The Performance Of Inlet Protection During Each Rainfall Event And Immediately Clean The Inlet Protection If Excessive Ponding Occurs.
3. Inlet Protections Shall Be Removed As Soon As The Source Of Sediment Is Stabilized.

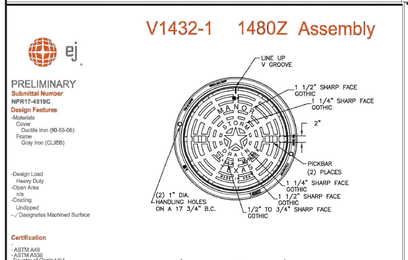
Approved 05/08/2024 Date	CITY OF MANOR AREA INLET PROTECTION CONSTRUCTION STANDARD DETAILS	Detail No. EC-10 EC-10.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

Notes:
1. Install 4" Diameter Stainless Steel "No Dumping – Drains To Creek" Marker, Factory Painted Blue As Shown, 2" Above Vertical Face Of Inlet At Midpoint Of All Inlets.
2. Marker Shall Be Affixed To Surface With Adhesive Per Manufacturer's Recommendations.
3. Marker Shall Be Manufactured By Almetek Industries Or Approved Equal:
   Almetek Industries, Inc.
   2 Joy Drive
   Hackettstown, NJ 07840
   (800) 248–2080
   www.Almetek.com

Approved 05/08/2024 Date	CITY OF MANOR STORM DRAIN MARKERS CONSTRUCTION STANDARD DETAILS	Detail No. EC-08 EC-08.dwg

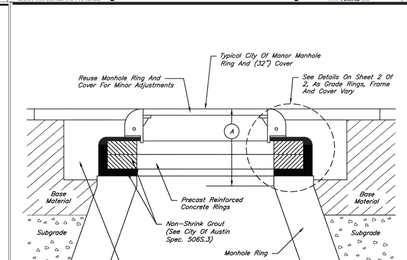
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)



PRELIMINARY
Submittal Number
NPR17-4519G
Design Features
-Materials
Cover
Ductile Iron (80-55-06)
Frame
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
n/a
-Coating
Undipped
-✓ Designates Machined Surface
Certification
- ASTM A48
- ASTM A536
- Country of Origin USA
Major Components
414320XX
00148011
Drawing Revision
12/07/2017 Designer: MAH
Revised By:
Disclaimer
Weights (lbs.) & dimensions (w/tolerance) are approximate and not for exact purpose. We reserve the right to modify specifications without notice.
CONFIDENTIAL This drawing is the property of EJ GROUP, Inc., and embodies confidential information, and is submitted on the express condition that neither know how that is the property of EJ GROUP, Inc. Copyright © 2013 EJ GROUP, Inc. All rights reserved.
Contact
800 626 4653
ejco.com

Approved 05/08/2024 Date	CITY OF MANOR STORM DRAIN MANHOLE RING AND (32") COVER CONSTRUCTION STANDARD DETAILS	Detail No. SD–01 SD–01.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

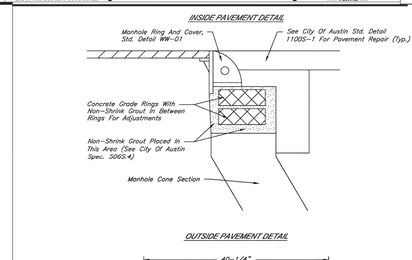


Ⓐ Vertical Face = Allowable Throat Or Chimney Height
= New Construction = 21" Max.
= Existing Construction = 27" Max.

Notes:
1. Non–shrink Grout Shall Not Exceed 1" In Any Dimension.
2. Sub–grade And Base Materials Shall Be Compacted According To Items 201S And 210S, Respectively, Of The City Of Austin Standard Specifications.
3. Refer To City of Austin Standard 1100S–1 For Repairs Around Manholes.

Approved 05/08/2024 Date	CITY OF MANOR MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION CONSTRUCTION STANDARD DETAILS	Detail No. WW–03 (1 of 2) WW–03.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)



Notes:
1. For Use In Unpaved Areas Only
2. When Used Within 100–year Floodplain, See Std. Detail WW–05 For Additional M.H. Requirements.
3. Dimension B=6"–12" For M.H. Located In 100–yr Flood Plain; B=2"–12" For M.H. Outside 100–yr Flood Plan.

Approved 05/08/2024 Date	CITY OF MANOR MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION CONSTRUCTION STANDARD DETAILS	Detail No. WW–03 (2 of 2) WW–03.dwg

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

reTHINK ACCESS

CLINT RYAN, RAS 1333
REGISTERED ACCESSIBILITY SPECIALIST
RETHINKACCESS.COM

2012 TAS
ACCESSIBLE PARKING SPACES
RULE CHANGE

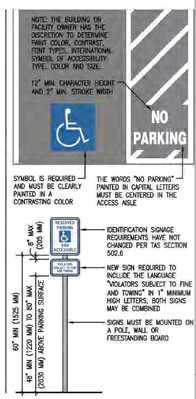
TEXAS ACCESSIBILITY STANDARDS
CHAPTER 68 ADMINISTRATIVE RULES

68.104. Accessible Parking Spaces
(a) A paved accessible parking space must include:
(1) the International Symbol of Accessibility painted conspicuously on the surface in a color that contrasts the pavement;
(2) the words "NO PARKING" painted on any access aisle adjacent to the parking space. The words must be painted:
(A) in all capital letters;
(B) with a letter height of at least twelve inches, and a stroke width of at least two inches; and
(C) centered within each access aisle adjacent to the parking space; and
(3) a sign identifying the consequences of parking illegally in a paved accessible parking space. The sign must:
(A) at a minimum state "Violators Subject to Fine and Towing" in a letter height of at least one inch;
(B) be mounted on a pole, post, wall or freestanding board;
(C) be no more than eight inches below a sign required by Texas Accessibility Standards, 502.6; and
(D) be installed so that the bottom edge of the sign is no lower than 48 inches and no higher than 80 inches above ground level.
(b) A parking space identification sign that complies with Texas Accessibility Standards, 502.6, that includes the requirements in subsection (a)(3)(A) satisfies subsection (a)(3).

EFFECTIVE DATE:

If TDLR Project Registration was required, then any project registered on or after 08/01/2020 shall comply with Rule 68.104.

If TDLR Project Registration was not required, then any project where Commencement of Construction occurs on or after 08/01/2020 shall comply with Rule 68.104.

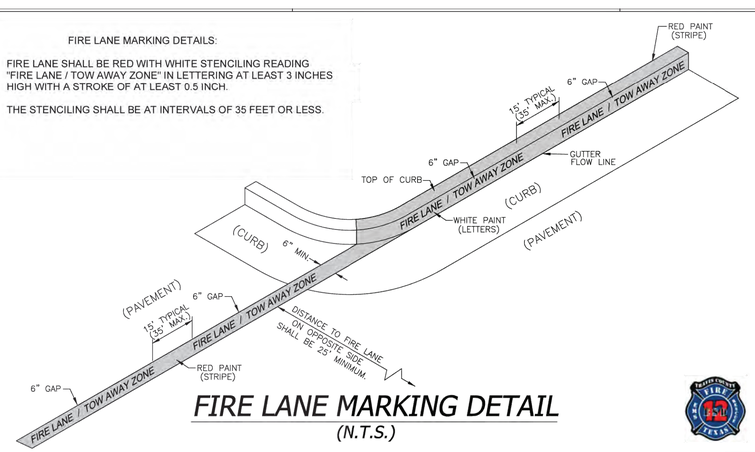


© 2020 reThink Access AUGUST 2020

FIRE LANE MARKING DETAILS:

FIRE LANE SHALL BE RED WITH WHITE STENCILING READING "FIRE LANE / TOW AWAY ZONE" IN LETTERING AT LEAST 3 INCHES HIGH WITH A STROKE OF AT LEAST 0.5 INCH.

THE STENCILING SHALL BE AT INTERVALS OF 35 FEET OR LESS.



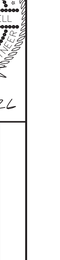
FIRE LANE MARKING DETAIL
(N.T.S.)

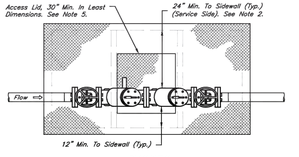
NOTE:
ALL STRIPING, SIGNAGE, AND GRADING FOR THE PROJECT MUST COMPLY WITH TAS/TDLR RULES AND REGULATIONS.

			REVISION	DATE
SCALE: NA	#			
DATE: 2/26/2026				
JOB:				
DRAWN BY:				
CHECKED BY:				

ALM ENGINEERING, INC.
CONSULTING ENGINEERS F-3565
PO Box 536
Dripping Springs, Texas 78620
(512) 431-9600 * matt@almengr.com

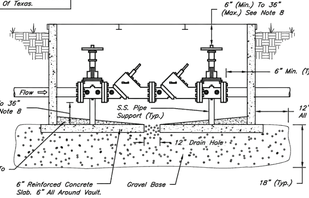
DETAIL SHEET 2
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS





PLAN VIEW

Restrained Ductile Iron Pipe And Fittings Required From Backflow Assembly To City Main. Restrain Each Way As Designed And Required By an Engineer Licensed By The State Of Texas.



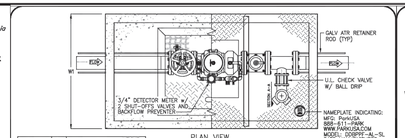
PROFILE VIEW

Notes:

1. All Backflow Prevention Assemblies Shall Have Lab And Field Approval From The University Of Southern California Foundation For Cross Connection Control And Hydraulic Research.
2. All Test Ports Shall Be Directed Upward And Plugged. Test Ports Are Located On Service Side. Plugs Shall Be Non-ferrous.
3. Backflow Prevention Assemblies Shall Be Installed In The Upright Horizontal Position, Unless Otherwise Approved.
4. Backflow Prevention Assemblies Shall Not Be Rotated On Their Axis.
5. Clearance Shall Be As Indicated, And In The City of Austin Standard Cross Connection Ordinances And UCM.
6. Access Opening Must Be Large Enough To Remove Largest Portion Of Backflow Preventer, But Not Less Than 750 Mm (30") In Least Dimension.
7. Test And Maintenance Report Shall Be Received By City of Manor Utility Department Within 5 Days After Being Installed.
7. Vault Shall Not Be Installed In Traffic Area.
8. Vault Depth May Not Exceed 1.8m (72"), Bottom Of Lid To Top Of Floor.
9. Hand Wheels Shall Be Horizontally Located Within 300mm (12") Of Access Opening.
10. For Access Doors See City of Austin SPL WW-614 Or Approved Equal (H20 Loading Required).
11. For Vault See City of Austin SPL WW-298 Or Approved Equal (H20 Loading Required).
12. Vault Pipe Wall Voids Shall Be Sealed With Non-shrink Grout Or Sealant Per City of Austin SPL WW-146a Or Approved Equal.
13. The Top Of The Meter Vault Shall Be At An Elevation Such That The Surrounding Ground Slopes Away From The Vault. Additional Drainage Consideration Such As Connection Of Vault To Storm Sewer, Lateral Drain Lines From Gravel Bed Or Other Means Shall Be Required If Conditions Cause Water To Collect In Vault.

Approved 05/08/2024 Date	CITY OF MANOR	Detail No. W-12 (1 of 2)
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL, DO NOT SCALE!	STANDARD BACKFLOW PREVENTER ON FIRE LINE WITH MASTER METER CONSTRUCTION STANDARD DETAILS	W-12.dwg

Approved 05/08/2024 Date	CITY OF MANOR	Detail No. W-12 (2 of 2)
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL, DO NOT SCALE!	STANDARD BACKFLOW PREVENTER ON FIRE LINE WITH MASTER METER CONSTRUCTION STANDARD DETAILS	W-12.dwg



MODEL	SIZE	L1	W1	H1	WEIGHT LBS.
DDBPPF-04	4"	7'-10"	4'-4"	5'-6"	11,000
DDBPPF-06	6"	7'-10"	4'-4"	5'-6"	12,000
DDBPPF-08	8"	6'-8"	5'-0"	5'-6"	14,000
DDBPPF-10	10"	9'-2"	5'-4"	5'-6"	18,000
DDBPPF-12	12"	X'-X"	X'-X"	X'-X"	XX,000

Specifications

CONCRETE: Class 1/5 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at four 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.

ACCESS COVER: 1/4" steel skid-resistant, floor plate welded to 3" angle frame with (2) 3"x3-3/8" I-beam supports. Hatch to be furnished with 316 stainless steel bolts and hinges

HATCH/KEY: 1/4". Aluminum diamond plate cover with extruded aluminum frame. Hatch to be furnished with 316 stainless steel slam lock & hinges.

Engineering Data

The junction box shall be factory assembled in vault & hydrostatically tested prior to delivery. Field assembly & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

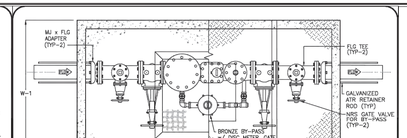
PROJECT:
CUSTOMER:
ENGINEER:
ARCHITECT:
ORDER #:
DATE: PM

BBB.611.PARK www.parkusa.com

PARK USA DESIGN FOR WATER

DETECTOR CHECK BACKFLOW PREVENTER ASSEMBLY w/ PIV or TSV 10"-12" MODEL DDBPPF-AL-SL

PM	DRN	ENG	DWG. NO.	REV.
DATE 2018			DDBPPF-AL-SL	A



MODEL	SIZE	BY-PASS SIZE	L1	W1	H1	WEIGHT LBS.
FMC-04	4"	2"	11'-6"	6'-0"	4'-4"	18,000
FMC-06	6"	3"	11'-6"	6'-0"	4'-8"	18,000
FMC-08	8"	3"	12'-0"	8'-0"	4'-8"	20,000
FMC-10	10"	4"	18'-0"	9'-0"	5'-0"	40,000

Specifications

CONCRETE: Class 1/5 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at four 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.

ACCESS COVER: 1/4" steel skid-resistant, floor plate welded to 3" angle frame with (2) 3"x3-3/8" I-beam supports. Hatch to be furnished with 316 stainless steel bolts and hinges

ACCESS HATCH/KEY: 1/4". Aluminum diamond plate cover with extruded aluminum frame. Hatch to be furnished with 316 stainless steel slam lock & hinges.

Engineering Data

The meter assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field assembly & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

PROJECT:
CUSTOMER:
ENGINEER:
ORDER #:
PROJ #:
DATE:

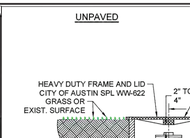
BBB.611.PARK www.parkusa.com

PARK USA DESIGN FOR WATER

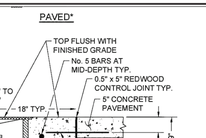
FIRE & DOMESTIC COMBINATION WATER METER ASSEMBLY MODEL FMC - 4" THRU 10"

PM	DRN	ENG	DWG. NO.	REV.
DATE 08/2017			FMC-AL-SL	A

UNPAVED



PAVED*



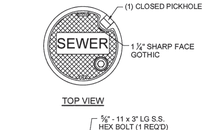
* CLEAN-OUTS MAY NOT BE PLACED IN PAVED AREAS - I.E. SIDEWALKS, DRIVEWAYS, OR PARKING LOTS, UNLESS APPROVED BY THE CITY OF MANOR AND MUST BE LOCATED A MINIMUM OF 6" FROM ALL PAVED AREAS.

NOTES:

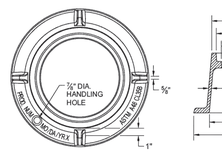
1. SUB-GRADE SHALL BE COMPACTED AS PER STD. SPEC. 201S, SUB-GRADE PREPARATION.
2. REINFORCING STEEL SHALL MEET ITEM 406S, REINFORCING STEEL.
3. CONCRETE SHALL MEET ITEM 403S CLASS "A".
4. ALL PVC SHALL BE SDR 26.

CLEAN-OUT FRAME AND LID

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	CITY OF MANOR, TEXAS	Scale: NTS 1/09/19 Approved Date Drawn by: PMG
	WASTEWATER CLEANOUT FRAME AND LID	Detail No. WWC

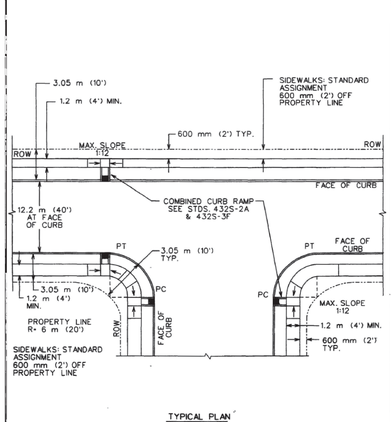


CLEAN-OUT LID



THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	CITY OF MANOR, TEXAS	Scale: NTS 1/09/19 Approved Date Drawn by: PMG
	WASTEWATER CLEANOUT FRAME AND LID	Detail No. WWC

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	COMBINED CURB RAMPS- "T" INTERSECTION	STANDARD NO. 432S-3E
Bill Gardner 3/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	1 OF 2



TYPICAL PLAN

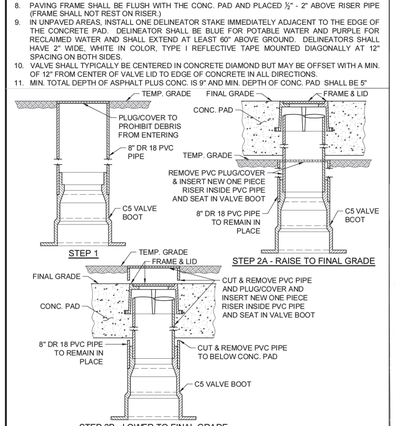
GENERAL NOTES:

1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION WITHIN RIGHT-OF WAY OR EASEMENT ONLY.
2. THIS STANDARD REPRESENTS A TYPICAL CURB RAMP DESIGN FOR A NEWLY CONSTRUCTED INTERSECTION WITH A 6 m (20') RADIUS. LARGER RADII, STREET GRADES, LIMITED SIGHT DISTANCES, STREET CLASSIFICATION, SIGNALIZATION AND OTHER FACTORS MAY REQUIRE THE ENGINEER OR DESIGNATED REPRESENTATIVE TO MODIFY THIS STANDARD. SUFFICIENT RIGHT-OF-WAY SHALL BE DEDICATED SUCH THAT THE ENTIRE CURB RAMP, INCLUDING LANDING, AND THE INTER-CONNECTING SIDEWALK ARE CONTAINED WITHIN THE RIGHT-OF-WAY.
3. THE CURB, GUTTER AND RAMP SYSTEM SHALL BE CONFIGURED TO MAINTAIN ALL RUNOFF FROM A 25 YEAR FREQUENCY STORM WITHIN THE RIGHT-OF-WAY. (DRAINAGE CRITERIA MANUAL SECTION 1.2.2.B). WHEN THERE IS AN ELEVATION DIFFERENCE BETWEEN THE BOTTOM OF RAMPS (IE. ELEVATION AT THE GUTTER) WITHIN A QUADRANT OF AN INTERSECTION, THE LOWER ELEVATION RAMP SHALL BE CONSTRUCTED WITH A POSITIVE RAMP SLOPE OF 1:12 IN ACCORDANCE WITH STANDARDS 432S-5, 432S-5A AND 432S-5B.
4. STANDARD ASSIGNMENT OF SIDEWALKS IS 600 mm (2') OFF PROPERTY LINE, EXCEPT AS INDICATED ON THE DRAWINGS.
5. ALTHOUGH CURB RAMPS MAY BE PLACED WITHIN THE RADIUS, PLACING THE RAMP OUTSIDE OF THE RADIUS WILL ALLOW FOR THE GREATEST DIFFERENCE IN ELEVATION BETWEEN THE RAMPS.
6. WINGS ARE REQUIRED ONLY IF PEDESTRIANS WOULD NORMALLY CROSS THE RAMP.
7. LANDINGS SHALL BE FLAT AND MATCH PT, PC OR TOP OF CURB ELEVATION.
8. CURB RAMPS WILL BE PERPENDICULAR TO ROADWAY CENTERLINES AND SHALL ALIGN WITH EACH OTHER.
9. GRADES ON SIDEWALKS LEADING TO OR FROM THE RAMPS SHALL FOLLOW CURB GRADES.
10. THE SLOPE OF THE SIDEWALK WHICH IS LOCATED WITHIN THE RADIUS AND CONNECTS TWO CURB RAMPS SHALL NOT EXCEED 1:20. THE DEVELOPER, AS PART OF THE CURB RAMP INSTALLATION, SHALL CONSTRUCT THIS CONNECTING SIDEWALK.
11. STRIPING AND SIGNAGE NOT REQUIRED IN ALL INSTANCES. STOP BARS, IF REQUIRED, SHALL BE LOCATED 1.2 m (4') FROM CROSSWALK.
12. IF A MEDIAN EXTENDS INTO THE CROSSWALK AREA, AN OPENING SHALL BE PROVIDED IN THE MEDIAN THE SAME WIDTH AS THE CURB RAMP.
13. CURB INLETS SHALL NOT BE LOCATED WITHIN 3.0 m (10') OF A CURB RAMP.
14. GUTTER SHALL PROVIDE SMOOTH TRANSITION TO RAMPS.

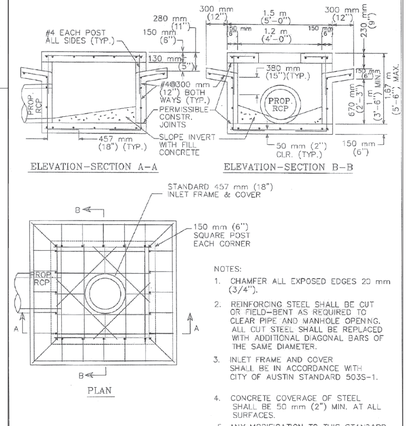
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	COMBINED CURB RAMPS- "T" INTERSECTION	STANDARD NO. 432S-3E
Bill Gardner 3/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	2 OF 2

NOTES (CONT):

8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT REST ON RISER.)
9. IN UNPAVED AREAS, INSTALL ONE DELINEATOR STAKE IMMEDIATELY ADJACENT TO THE EDGE OF THE CONCRETE PAD. DELINEATOR SHALL BE BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER AND SHALL EXTEND AT LEAST 4'-0" ABOVE GROUND. COLORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES.
10. VALVE SHALL TYPICALLY BE CENTERED IN CONCRETE DIAMOND BUT MAY BE OFFSET WITH A MIN. OF 12" FROM CENTER OF VALVE LID TO EDGE OF CONCRETE IN ALL DIRECTIONS.
11. MIN. TOTAL DEPTH OF ASPHALT PLUS CONC. IS 9" AND MIN. DEPTH OF CONC. PAD SHALL BE 5"



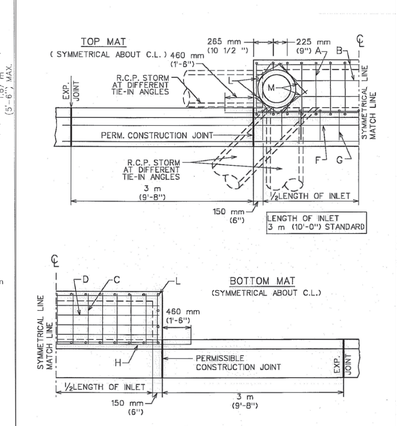
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-01 4 OF 4



NOTES:

1. CHAMFER ALL EXPOSED EDGES 20 mm (3/4").
2. REINFORCING STEEL SHALL BE CUT OR FIELD-BENT AS REQUIRED TO CLEAR PIPE AND MANHOLE OPENING. ALL CUT STEEL SHALL BE REPLACED WITH ADDITIONAL DIAGONAL BARS OF THE SAME DIAMETER.
3. INLET FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 503S-1.
4. CONCRETE COVERAGE OF STEEL SHALL BE 50 mm (2") MIN. AT ALL SURFACES.
5. ANY MODIFICATION TO THIS STANDARD SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	4-SIDED AREA INLET	
Kathi C. Flowers, P.E. 5/18/2016 AS TO FORM	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD	STANDARD NO. 508S-9

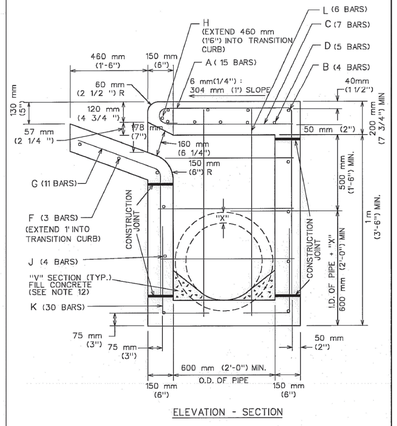


NOTES:

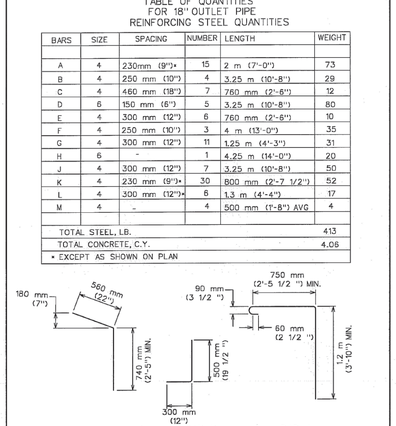
1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT. [SCH. 80 FOR LENGTHS OVER 10']
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 2' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 1 OF 4



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 2 OF 4



NOTES:

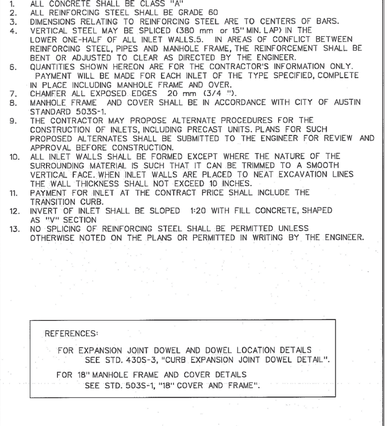
1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:

C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE 1 ½" 2 PICK BAR SLOTS REQUIRED

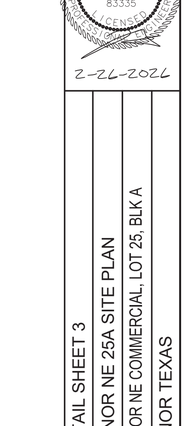
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-01 2 OF 4



NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18" BELOW SUB-GRADE. THE INSIDE "LIP" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT, OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE: FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE. NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-01 3 OF 4



GENERAL NOTES:

1. RACKS SHALL COMPLY WITH CITY STANDARD DETAIL 710S-1 OR 710S-2.
2. RACK PLACEMENT SHALL COMPLY WITH APPLICABLE CITY STANDARD DETAILS 710S-6A, 710S-6B, OR 710S-6C AND IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25-6-477 OR ITS SUCCESSOR.

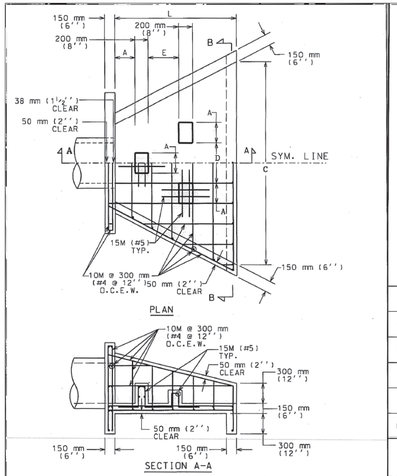
*TO PREVENT THEFT OF BICYCLE RACK OR BIKES, EXPOSED BOLTS MUST BE DEFORMED AND NUTS RE-TIGHTENED TO PREVENT THEM FROM BEING EASILY UNTHREADED. NUTS SHOULD BE TESTED TO ENSURE THAT THEY CANNOT BE EASILY REMOVED AFTER DEFORMATION.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	BICYCLE RACK INSTALLATION IN CONCRETE SIDEWALK-ALTERNATE 1	
7/16/12 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 710S-4 1 OF 1

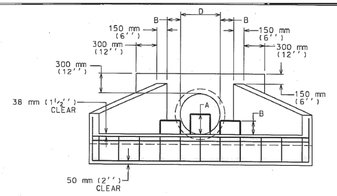
TABLE OF QUANTITIES
FOR 18" OUTLET PIPE
REINFORCING STEEL QUANTITIES

BARS	SIZE	SPACING	NUMBER	LENGTH	WEIGHT
A	4	230mm (9")*	15	2 m (7'-0")	73
B	4	250 mm (10")	4	3.25 m (10'-8")	29
C	4	460 mm (18")	7	760 mm (2'-6")	12
D	6	150 mm (6")	5	3.25 m (10'-8")	80
E	4	300 mm (12")	6	760 mm (2'-6")	10
F	4	250 mm (10")	3	4 m (13'-0")	35
G	4	300 mm (12")	11	1.25 m (4'-3")	31
H	6	-	1	4.25 m (14'-0")	20
J	4	300 mm (12")	7	3.25 m (10'-8")	50
K	4	230 mm (9")*	30	800 mm (2'-7 1/2")	52
L	4	300 mm (12")*	6	1.3 m (4'-4")	17
M	4	-	4	500 mm (1'-8") AVG	4
TOTAL STEEL, LB.					413
TOTAL CONCRETE, C.Y.					4.06

* EXCEPT AS SHOWN ON PLAN



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STANDARD HEADWALL AND ENERGY DISSIPATORS	
Bill Bardon 8/26/97 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-13 1 OF 2



SECTION B-B

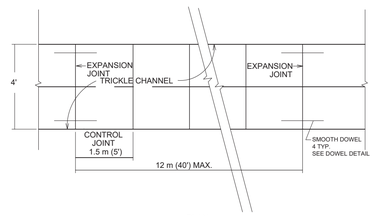
NOTES:

1. ALL CONCRETE SHALL BE TYPE "C" AS PER SPEC. 403S. CONCRETE FOR STURCTURES.
2. CHAMFER ALL EXTERNAL VISIBLE CORNERS.
3. DISSIPATOR BLOCKS REQUIRED ON DISCHARGE HEADWALLS ONLY.

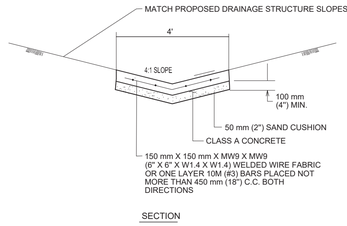
D	457 mm (18'')	533 mm (21'')	610 mm (24'')	685 mm (27'')	765 mm (30'')	838 mm (33'')	914 mm (36'')	1.067 m (42'')	1.219 m (48'')	1.372 m (54'')	1.524 m (60'')
A	225 mm (9'')	250 mm (10'')	300 mm (12'')	350 mm (14'')	375 mm (15'')	400 mm (16'')	450 mm (18'')	525 mm (21'')	600 mm (24'')	675 mm (27'')	750 mm (30'')
B	150 mm (6'')	175 mm (7'')	200 mm (8'')	225 mm (9'')	250 mm (10'')	275 mm (11'')	300 mm (12'')	350 mm (14'')	400 mm (16'')	450 mm (18'')	500 mm (20'')
C	2.29 m (90'')	2.67 m (105'')	3.05 m (120'')	343 m (135'')	3.81 m (150'')	4.19 m (165'')	4.57 m (180'')	5.33 m (210'')	6.10 m (240'')	6.86 m (270'')	7.62 m (300'')
L	1.37 m (54'')	1.60 m (63'')	1.83 m (72'')	2.06 m (81'')	2.29 m (90'')	2.51 m (99'')	2.74 m (108'')	3.20 m (126'')	3.66 m (144'')	4.11 m (162'')	4.57 m (180'')
E	300 mm (12'')	350 mm (14'')	400 mm (16'')	450 mm (18'')	500 mm (20'')	550 mm (22'')	600 mm (24'')	700 mm (28'')	800m (32'')	900 mm (36'')	1000 mm (40'')

DIMENSIONS IN MILLIMETERS, METERS AND (INCHES).
DISCHARGE VELOCITIES GREATER THAN 3 METERS/SECOND (10 fps) REQUIRE ROCK OUTLET PROTECTION.

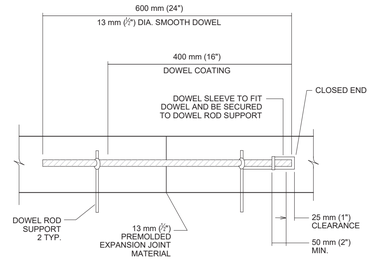
CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STANDARD HEADWALL AND ENERGY DISSIPATORS	
Bill Bardon 8/26/97 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-13 2 OF 2



PLAN

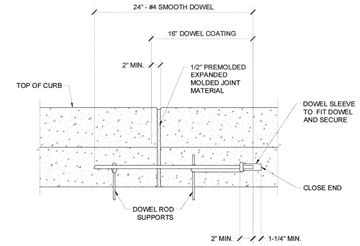


SECTION



DOWEL DETAIL

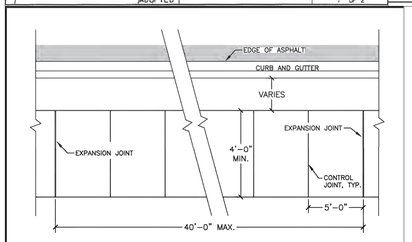
CONCRETE TRICKLE CHANNEL



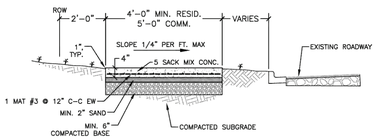
NOTES:
1. EXPANSION JOINT INTERVALS NOT TO EXCEED 4'-0".

SCALE: N.T.S.

ADOPTED: 12/15/2025 PAULINE M. GRAY, P.E.	CITY OF MANOR	ST-005 1 OF 1
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.	CURB EXPANSION JOINT DOWEL DETAILS CONSTRUCTION STANDARD DETAILS	MANOR TEXAS



PLAN



SECTION

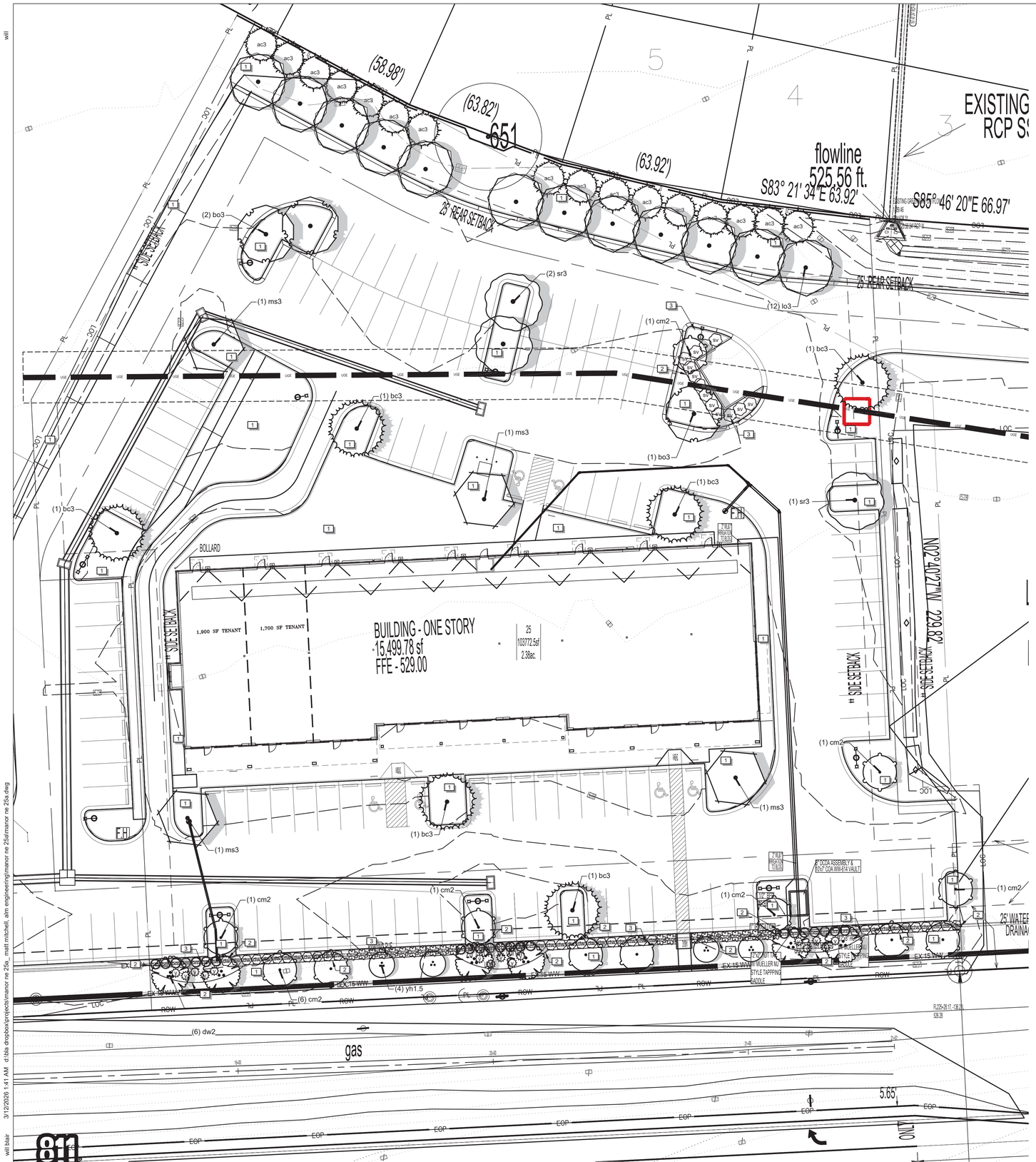
Approved 02/27/2026 Date	CITY OF MANOR TYPICAL SIDEWALK STANDARD CONSTRUCTION DETAIL	Detail No. ST-008 ST-008.dwg MANOR TEXAS
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)		

#	REVISION	DATE

SCALE: NA
DATE: 2/26/2026
JOB:
DRAWN BY:
CHECKED BY:

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
PO Box 536
Dripping Springs, Texas 78620
(512) 431-9600 * matt@almengr.com
F-3565

DETAIL SHEET 4
MANOR NE 25A SITE PLAN
MANOR NE COMMERCIAL, LOT 25, BLK A
MANOR TEXAS



LANDSCAPE CALCULATIONS

LANDSCAPE	REQUIRED	PROVIDED
• Total Site Area		103,604sf
• Landscaped Area	15,541sf (15%)	25,760sf
••Trees (2 per 600sf)	52	52
••• Large Trees: 43 X 1ea= 43		
••• Small Trees: 21 X .5 ea=10.5		
••• Ex. 8" to 17" 1 ea. X --= -- trees		
•••• Ex--Ex. Trees + -- Proposed Trees= -- Provided Trees		
••Shrubs (4 per 600sf)	104	104

STREETSCAPE YARD	REQUIRED	PROVIDED
• Trees (Hwy 290 frontage 318 l.f.)		
••Type A or B (1 per 40 l.f.)		
••or Type C (1 per 20 l.f.)	16	16
••• where utilities are present		

PARKING LOT	REQUIRED	PROVIDED
• Trees	15	15
••(1 within 50' of each stall)		

SCREENING	REQUIRED	PROVIDED
• Parking, Docks, Trash Containers, Storage		
••Shrubs	318 l.f.	318 l.f.

BUILDING FOUNDATION LANDSCAPING	REQUIRED	PROVIDED
Total Hwy 290 Facade Coverage:--	N/A	
• Not applicable per development agreement		

BUFFERYARD	REQUIRED	PROVIDED
• Trees (Northern P.L. 260 l.f.)	10	10+
••Large or Medium Evergreen Trees (4 per 100 l.f.)		

TREE MITIGATION AND REPLACEMENT
- Required caliper inches replaced:
  - ••Existing 8"-17" Caliper Tree Replacement:
    - ••• --" total X 100%=--" Replacement
  - ••Existing 18"+ Caliper Tree Replacement:
    - ••• --"X 200%=--" Replacement
  - ••Total Required = --"
- Number & Size of replacement tree total:
  - ••---" by proposed trees
    - ••• -- trees @ 4"caliper = --"
    - ••• -- trees @ 2"caliper = --"
  - ••Less Required Tree Inches
    - ••• -- trees @ 2" caliper = ---"
  - ••Total Provided = --"

0" to be mitigated by payment to the City of Manor

NOTES

1. No tree shall be closer than 5ft from an underground public water/wastewater line.
2. No tree shall be planted closer than 4ft from impervious cover.
3. Irrigation sleeves shall be run to all landscaped areas prior to concrete pour.
4. All new plant material shall meet the latest requirements of the American Standard for Nursery Stock (ANSI Z60.1).
5. All new plant material shall be planted and maintained in accordance with the latest edition of the American National Standards Institute requirements for Tree, Shrub, and Other Woody Plant Maintenance (ANSI A300 Parts 1 through 6).
6. Provide adjustable flood bubblers on all trees in order to meet the specific hydrologic requirements of newly planted trees in accordance with the TCEQ and Chapter 113.36, Section D, and the Tree Technical Manual Section 3.10.
7. Drip emitters (bubblers) shall be installed at each tree location and operate on valves separate from the spray zones.
8. All landscaping and irrigation shall be installed according to the City of Manor requirements.
9. Fences, landscaping and other items will not be installed in locations where they will obstruct the visibility of, or access to, fire hydrants or Fire Department Connections (FDC).
10. All mechanical equipment shall be screened in accordance with UDC 11.8.

NORTH

0 20 40 60 feet

SCALE: 1" = 20'

REFERENCE NOTES SCHEDULE

CODE	DESCRIPTION
1	Lawn, Sod
2	Steel Edge
3	Mulch

PLANT SCHEDULE

SYMBOL	CODE	COMMON NAME	BOTANICAL NAME	CONT	CAL	SIZE	QTY
TYPE A							
	bc3	Bald Cypress	Taxodium distichum	-	3"Cal	6` H min	6
	bo3	Burr Oak	Quercus macrocarpa	-	3"Cal	6` H min	3
	lo3	Live Oak	Quercus virginiana	-	3"Cal	6` H min	12
	ms3	Mexican Sycamore	Platanus mexicana	-	3"Cal	6` H min	4
	sr3	Shumard Red Oak	Quercus shumardii	-	3"Cal	6` H min	3
TYPE B							
ac3	ac3	Arizona Cypress	Cupressus arizonica	-	3"Cal	6` H min	16
TYPE C							
	cm2	Crape Myrtle, Muskogee	Lagerstroemia indica `Muskogee`	30 gal	2"Cal	6` H min	12
	dw2	Desert Willow	Chilopsis linearis	30 gal	2"Cal	6` H min	6
	yh1.5	Yaupon Holly	Ilex vomitoria	30 gal	2"Cal	6` H min	4

SYMBOL	CODE	COMMON NAME	BOTANICAL NAME	CONT	SIZE	QTY
SHRUBS						
bm	bm	Big Muhly	Muhlenbergia lindheimeri `Big`	3 gal		22
dw	dw	Dwarf Southern Wax Myrtle	Myrica pusilla	3 gal		35
so	so	Sotol	Dasylirion texanum	3 gal		22
sv	sv	Sandankwa Viburnum	Viburnum suspensum	3 gal		13
y	y	Soft Leaf Yucca	Yucca pendula	3 gal		15

	Species %	Genus %
bc3	9%	9%
bo3	4.5%	
lo3	18%	27%
ms3	6%	6%
sr3	4.5%	
ac3	24%	24%
cm2	13%	13%
dw2	9%	9%
yh1.5	6%	6%

Know what's below. Call before you dig.

Contractors:
email info@blairla.com with RFIs, submittals, & inspection scheduling
Schedule inspections at least 2 weeks in advance

Date | Description | Rev

Consultant Seal

Company Name and Address
William S. Blair
info@BlairLA.com
www.BlairLA.com
2128 E Ben White Blvd
#240-7873
Austin TX 78741

BLAIR LANDSCAPE ARCHITECTURE, LLC
QUALITY. INTEGRITY. RELIABILITY.

REGISTERED LANDSCAPE ARCHITECT WILLIAM S. BLAIR STATE OF TEXAS

William S. Blair
March 12, 2026

Project Name and Address
Manor NE 25A
Hwy 290
Manor, Texas

Sheet Title
Landscape Plan

Design By: Will Blair
Checked By: xxxx
Issue Date: 11/03/2025
Project Number: 25075-LP

L1
OF 2

will blair 3/12/2026 1:41 AM d:\bla dropbox\projects\manor ne 25a_ matt mitchell, alm engineering\manor ne 25a\manor ne 25a.dwg

LANDSCAPE PLANTING SPECIFICATIONS

1) Guarantee - All labor, materials and plants will be guaranteed for a period of twelve (12) months after the final acceptance of work by Owner. All plants that have died or are unhealthy shall be replaced no later than 30 days from the anniversary date of the final acceptance. This guarantee does not apply to plant material that dies due to abnormal freezes, hail, abnormal high winds, or other acts of God, vandalism or lack of normal maintenance and watering. This guarantee does not apply to annual plantings.
2) Contractor is to verify all site dimensions and layout prior to the commencement of landscape construction. Any discrepancies between the drawings and the actual site conditions shall be brought to the attention of the owner's representative immediately.
3) Contractor is responsible for verification of the location of all underground utilities, repair to said utilities as a result of the work of the contractor shall be the responsibility of the contractor. Refer to the drawing for any additional information.
4) Contractor is responsible for maintaining positive drainage in all shrub and turf planting areas.
5) Tree pits are to be the same depth as the root ball and 24" wider. Prior to planting the tree pit should be filled with water to check for good drainage. If water does not drain the Contractor should check with the Landscape Architect to relocate the tree.
6) Trees should be positioned in the center of the tree pits, back filled with soil that was excavated from the pit until the surface is level with the surrounding area and the crown of the plant is at the finished grade. Build a water basin around the tree (36" dia.). Water until planting pit is soaked and soil has settled. Add soil necessary to bring soil level flush with surrounding ground. Fill the basin with three (3) inches of compost.
7) All plant material shall conform to the standards of the latest edition of "American Standard for Nursery Stock" by The American Association of Nurserymen and "Grades and Standards" by The Texas Association of Nurserymen. A plant shall be dimensioned as it stands in its natural position. All plants shall be at least the minimum size indicated. Larger stock is acceptable at no additional cost, and providing that the larger plants will not be cut back to size indicated.
8) It is the landscape contractor's responsibility to provide plants free of disease or pests.
9) Space specified quantity of plant materials to evenly fill designated areas, adjusting spacing indicated on the drawings as required. Landscape architect or owner to have final approval of locations of all trees, shrubs and groundcover beds.
10) Contractor is responsible for removing all clods, rocks, concrete, trash and any other debris from beds prior to adding soil ix or plant material.
11) All planting beds should have three (3) inches of compost tilled into them to a depth of six (6) inches. A three (3) inch layer of shredded hardwood bark mulch should be applied to all beds after planting is completed. Four (4) inch pots and ground cover may be planted through the mulch.
12) Contractor is responsible for removal of trash and repair of hazardous conditions (tools, open holes, et.) on a daily basis by the end of the work day.
13) Water all plantings in bed areas thoroughly on a daily basis until final acceptance.
14) To prepare turf areas treat them with a selective herbicide two weeks prior to sodding or seeding. Then rake area to remove stones, sticks and other debris. Add two (2) inches of topsoil to the turf area. Rake area to a finish grade (1" below walks and curbs).
15) If sodding is to take place the sod should be gathered and planted within a 48 hour period. Lay the sod to form a solid mass with tight fitting joints. Butt ends and sides of sod and offset joints in adjacent courses. Roll sod to ensure good contact with soil. If planting on a slope be sure to lay courses parallel to the contours and secure sod with pins if necessary. Site preparation and maintenance will be the same for hydromulching.
16) Water sod daily so as to not allow turf blades to wilt. If necessary water twice per day.
17) Apply slow release fertilizer 15-15-15 or equal at a rate of 2 lbs. per 100 s.f. to all turf or planted areas.

REFERENCE NOTE SPECIFICATIONS

LAWN AREAS - SOD / HYDROMULCH / SEED MIX

1. Lawn, Bermuda "Tif 419" Sod. Provide spray irrigation. Temporary irrigation only within septic fields or Right of Way (R.O.W.). Pre emergent weed treatment recommended.

STEEL EDGE

2. Steel edge, 3/16" x 4" landscape edging as manufactured by Ryerson, or equal, dark green and furnished with steel stakes. Install edging in smooth curves free of kinks. Final height of edging to be 1" above height of soil mat of sod.

MULCHES / GRAVELS / RIVER ROCK / BOULDERS

3. Mulch, Native Hardwood. 3" deep with drip irrigation. Ensure that drip line is placed above rootballs.

The developer and subsequent owners of the landscaped property, or the manager or agent of the owner, shall be responsible for the maintenance of all landscape areas. Said areas shall be kept free of refuse and debris. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of the Ordinance.

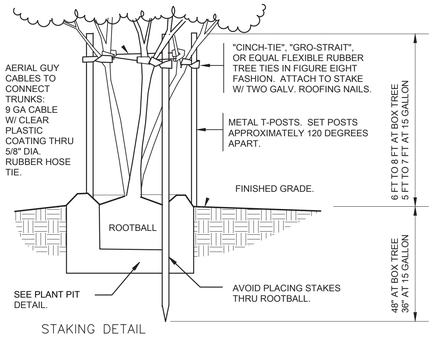
18) Contractor shall keep all construction areas and public streets free from accumulation of waste material. Upon completion of construction and prior to final approval contractor shall thoroughly clean the site of all trash, spilled soil, and litter, etc. that has resulted from landscape construction operations. Repair all damage to finish grade including tailings from excavations, wheel ruts, etc. caused from construction. All debris, trash and excess materials and equipment shall be removed from the site prior to final acceptance.
19) Remove all tags, ribbons and wires from all newly installed plant material.

LANDSCAPE MAINTENANCE REQUIREMENTS

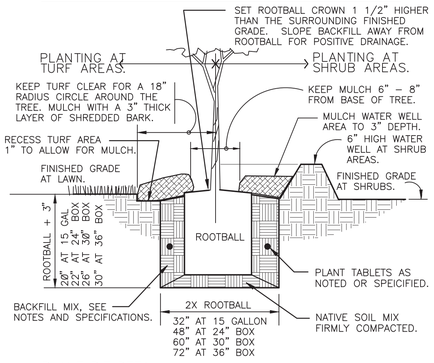
The owner shall be responsible for:
1) Regular maintenance of all required landscape areas and plant materials in a vigorous and healthy condition, free from diseases, pests, weeds, and litter. This maintenance shall include weeding, watering, fertilization, pruning, mowing, edging, mulching or other needed maintenance, in accordance with generally accepted horticultural practice.
2) The repair or replacement of required landscape structures (walls, fences, etc.) to a structurally sound condition.
3) The regular maintenance, repair, or replacement, where necessary, of any required screening or buffering.
4) All open space areas that are to be preserved as natural plant communities shall be trimmed, at least once a year, of all exotic vegetation, lawn grasses, trash, or other debris. Natural area should be mulched, pruned and otherwise maintained so that plants are vigorous.

IRRIGATION SPECIFICATIONS

1) Irrigation contractor will provide pipes for sleeves and specify locations for placement of sleeves by general contractor prior to pouring concrete or laying asphalt.
2) Irrigation contractor will install all backflow prevention devices and all piping between the point of connection and the backflow preventer as per local governing authorities.
3) Find location of backflow preventer, and automatic controller location shall be approved by the owner's authorized representative.
4) 120 VAC electrical power source at controller location shall be provided by others. The irrigation contractor shall make the final connection from the electrical source to the controller.
5) All sprinkler heads shall be set perpendicular to finish grade unless otherwise specified.
6) The irrigation contractor shall flush and adjust all sprinkler heads and valves for optimum coverage with minimal overspray onto walks, streets, walls, etc.
7) Head location is the responsibility of the irrigation contractor, with the understanding that all landscape areas will receive adequate water to provide for vigorous growth of vegetation.
8) Irrigation contractor will replace or repair all items damaged by his work.
9) All work shall be installed in accordance with applicable codes and ordinances for the City of Manor, Texas and the National Electrical Code and all governing authorities.
10) The irrigation contractor is responsible for reporting any deficiency in water pressure that would affect the operation of the irrigation system.
11) The irrigation contractor shall be a Registered Licensed Irrigator in the State of Texas. Contractor must conform to all codes as stated in section 34 of the Texas Water Code and TNRCC.
12) All remote control valves, gate valves, quick couplers and control wire and computer cable pull pints shall be installed in approved valve boxes.
13) Irrigation Contractor shall procure all permits, licenses, and pay all charges and fees and give all necessary notices for the completion of work.
14) Contractor shall not disturb roots of existing trees. There shall be no machine trenching below the dripline of existing trees.
15) Extreme care shall be exercised in excavating and working near utilities. Contractor shall verify the location and condition of all utilities and be responsible for damage to any utilities.
16) Contractor shall clearly mark all exposed excavations, materials, and equipment. Cover or barricade trenches when the contractor is not on the site. Take all necessary precautions to protect and prevent injury to any persons on the site.
17) All automatic irrigation systems shall be equipped with a controller of dual or multiple programming. Controllers shall have multiple cycle start capacity and a flexible calendar program, including the capacity of being set to water every five days. All automatic irrigation systems shall be equipped with a rain sensor shutoff device.
18) Irrigation in Texas is regulated by the Texas Commission on Environmental Quality, www.tceq.texas.gov, (512) 239-1000

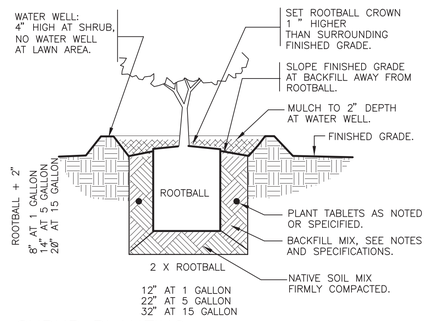


STAKING DETAIL



PLANT PIT DETAIL

1 TREE PLANTING MULTI-STAKE
1" = 1'-0"

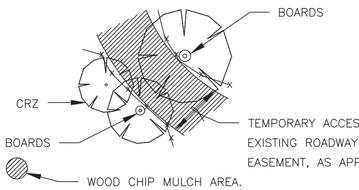


2 SHRUB PLANTING
1" = 1'-0"

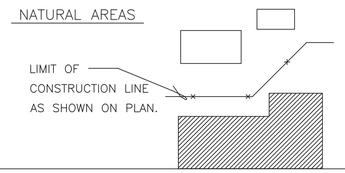
TREE PROTECTION FENCE LOCATIONS

NO SCALE

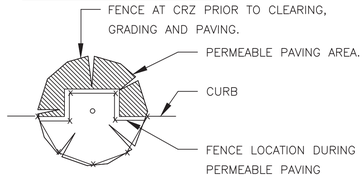
LINEAR CONSTRUCTION THROUGH TREES



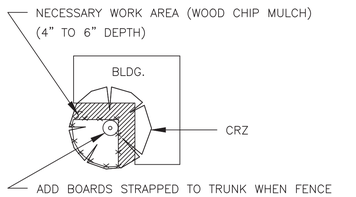
NATURAL AREAS



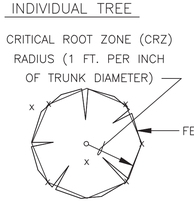
TREES IN PAVING AREA



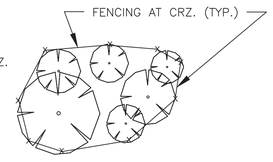
TREES NEAR CONSTRUCTION ACTIVITY



INDIVIDUAL TREE



GROUP OF TREES

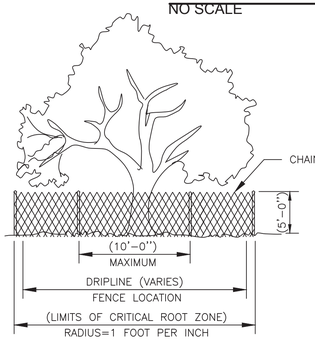


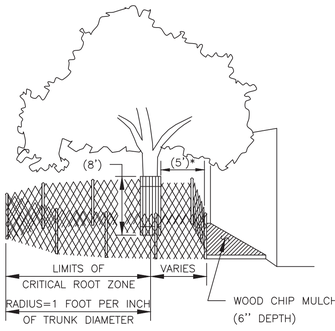
NOTE:

LIMITS OF MULCH AREAS AND DISTANCE FROM TRUNKS TO WORK/ PERMEABLE PAVING AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE FORESTRY MANAGER.

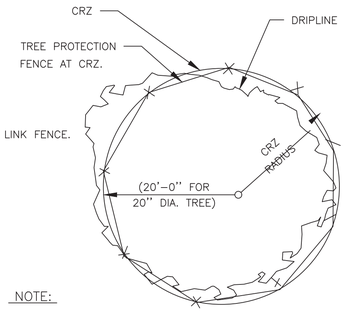
TREE PROTECTION FENCE - CHAIN LINK

NO SCALE



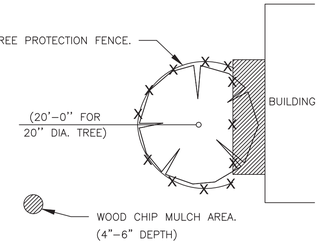


*AS NEEDED TO PROVIDE NECESSARY WORK SPACE. IF LESS THAN 5', THEN ADD BOARDS STRAPPED TO TRUNK.



NOTE:

LIMITS OF WOOD CHIP MULCH AREA AND DISTANCE FROM TRUNK TO WORK AREA SHALL BE SUBJECT TO THE APPROVAL OF THE FORESTRY MANAGER.



Contractors:
email info@blairla.com with RFIs, submittals, & inspection scheduling
Schedule inspections at least 2 weeks in advance

Date | Description | Rev

Consultant Seal

Company Name and Address
William S. Blair
info@BlairLA.com
www.BlairLA.com
2026 E Ben White Blvd
#240-7873
Austin TX 78741

BLAIR LANDSCAPE ARCHITECTURE, LLC
QUALITY. INTEGRITY. RELIABILITY.

REGISTERED LANDSCAPE ARCHITECT WILLIAM S. BLAIR 2741 STATE OF TEXAS

William S. Blair
March 12, 2026

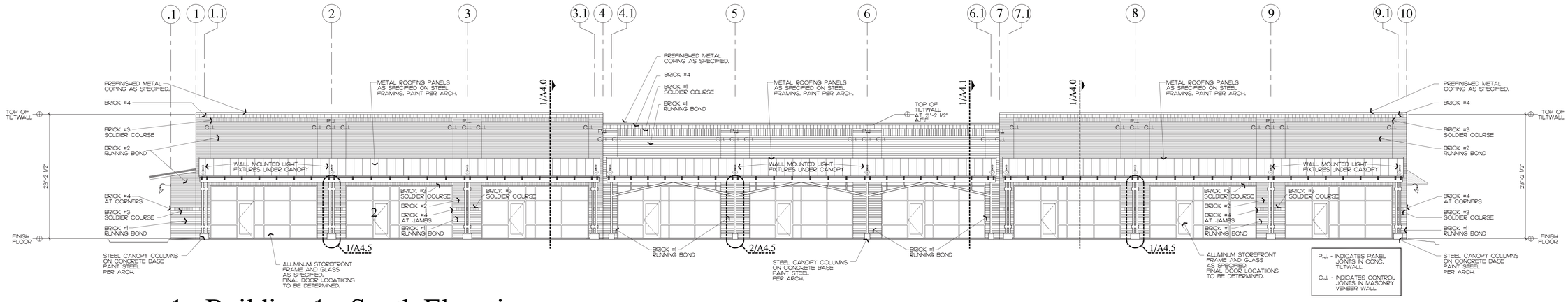
Project Name and Address
Manor NE 25A
Hwy 290
Manor, Texas

Sheet Title
Landscape Details & Specifications

Design By: Will Blair
Checked By: xxxx
Issue Date: 11/03/2025
Project Number: 25075-LP

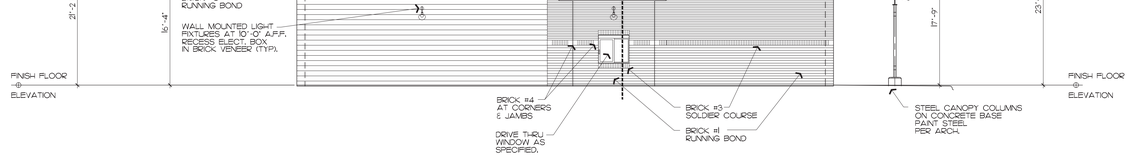
L2
OF 2

will
3/12/2026 1:37 AM d:\bla dropbox\projects\manor ne 25a_ matt mitchell, alm engineering\manor ne 25a\manor ne 25a.dwg
will blair



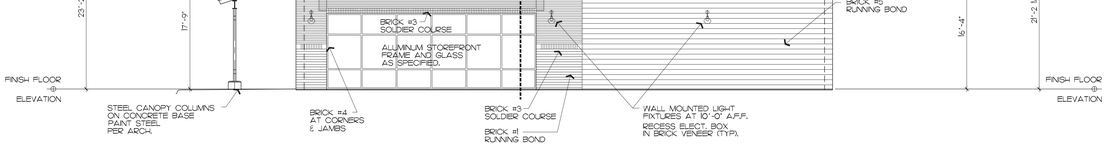
1 Building 1 - South Elevation

SCALE: 1/8" = 1'-0"



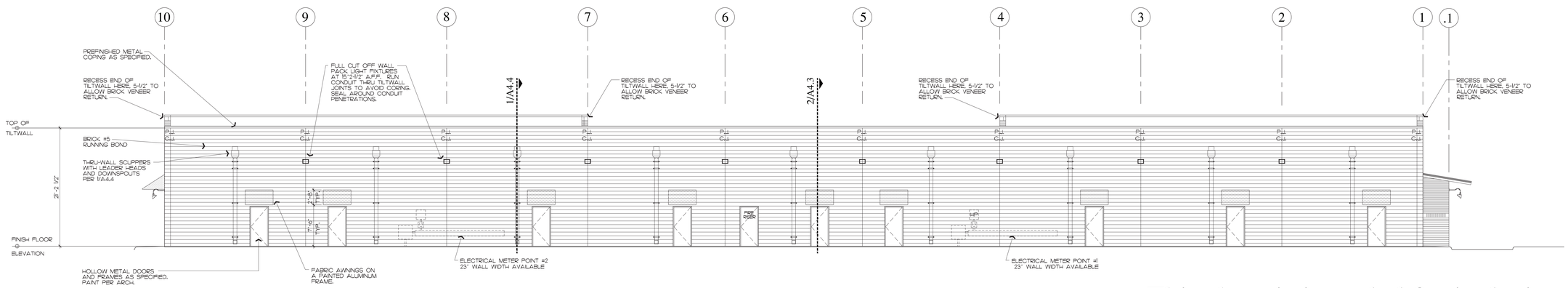
2 Building 1 - West Elevation

SCALE: 1/8" = 1'-0"



3 Building 1 - East Elevation

SCALE: 1/8" = 1'-0"



4 Building 1 - North Elevation

SCALE: 1/8" = 1'-0"

This sheet is intended for inclusion in the Site Development Permit set. It is not for construction without the rest of the sealed Building Permit set.

RC Architects, Inc.
14620 Echo Bluff
Austin, Texas 78737
(512) 913-0597
rickcanales.architects@gmail.com

11/5/25

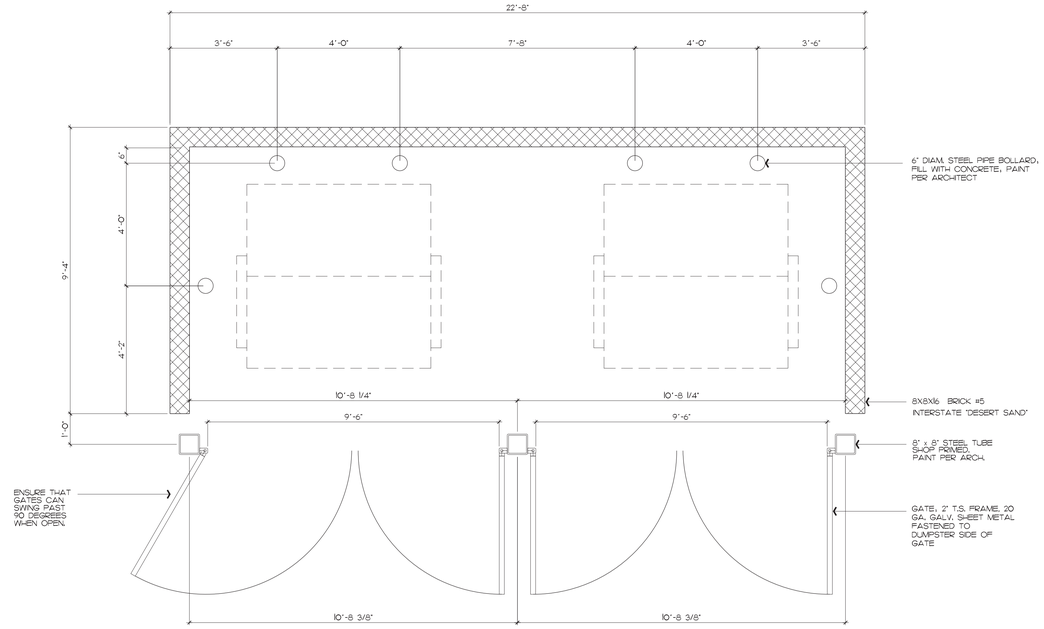
MANOR COMMONS NORTH - BLDG. 1 - MANOR, TEXAS

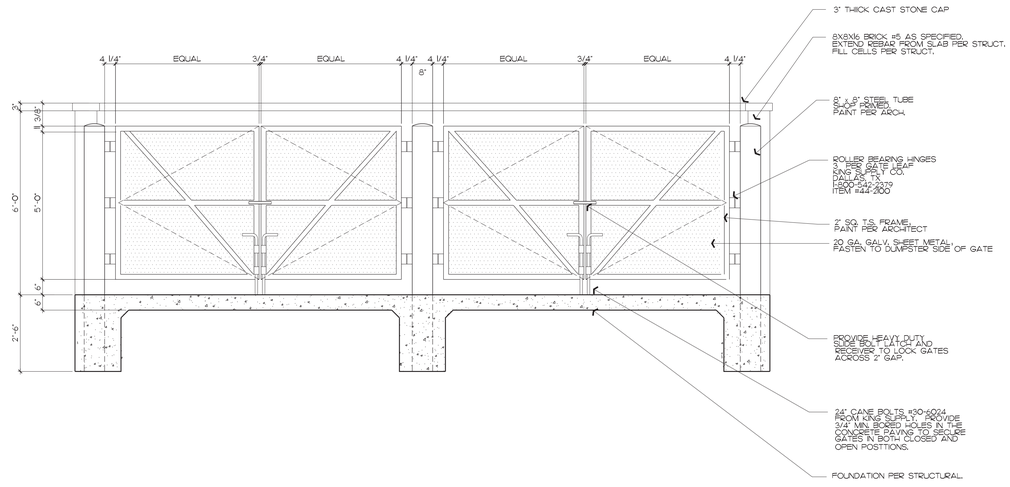
RC Architects, Inc.

Revisions

Date
11/5/25

Sheet
A3.0





TRASH ENCLOSURE

ONE THUS

S C A L E : 3/4" = 1'-0"

RC Architects, Inc.
14620 Echo Bluff
Austin, Texas 78737
(512) 913-0597
rickcanales.architects@gmail.com

11/4/25

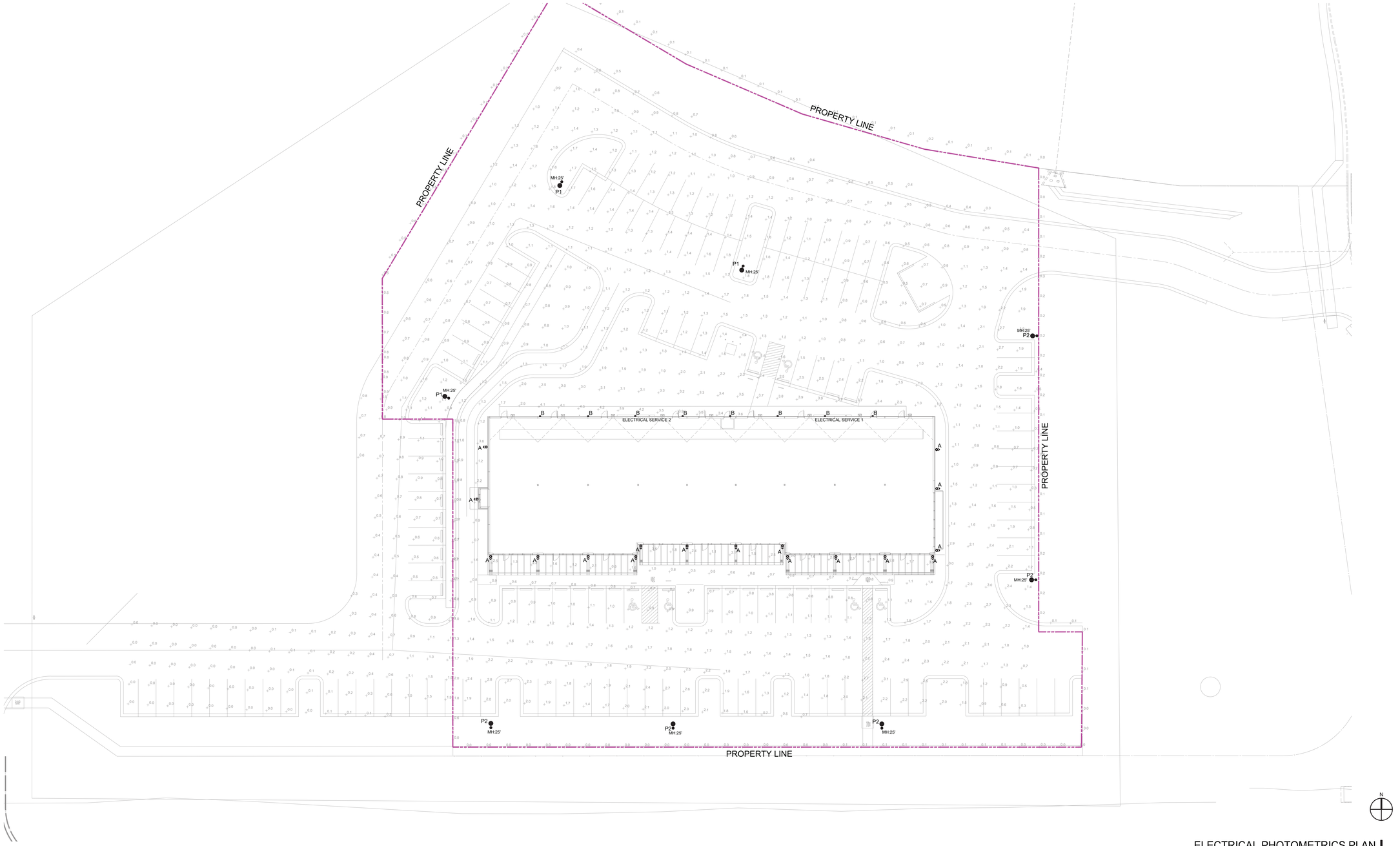
MANOR COMMONS NORTH - BLDG. 1

RC Architects, Inc.

Revisions

Date
11/4/25

Sheet
A5.0



ELECTRICAL PHOTOMETRICS PLAN 1

1" = 20'-0"

GENERAL NOTES:

A. PHOTOMETRIC PLANS ARE BASED ON MANUFACTURER'S IES FOR ALL EXTERIOR LUMINAIRES.

B. ACTUAL LUMEN OUTPUT, INSTALLATION LOCATION AND AIMING WILL CAUSE SOME DEVIATIONS BETWEEN THIS PLAN AND THE ACTUAL FOOT-CANDLE LEVELS OBSERVED IN THE FIELD.

C. POINT VALUES SHOWN ARE THE CALCULATED FOOT-CANDLE LEVELS AT THAT LOCATION.

Lumen Compliance Chart: Manor Retail Shopping Center

(Exterior Luminaire Schedule)

Complete Fixture Ordering Number	Label	Kelvin	B-U-G Rating	Mtg Height [ft]	Qty	Luminaire Lumens Initial Lumens	Loc*	LLF**	Total	Other Notes
RLM-RA11-GNA22X-FR-TL9 HO-DB	A	4000	N/A	10 & 13.5	17	2,179	1.00	0.95	35,190.85	
WPX1-LED-P1-40K-MVOLT-DDBXD	B	4000	N/A	15	8	1,550	1.00	0.95	11,780.00	
DSXO-LED-P6-40K-70CRI-T5W-MVOLT-SPA-PIR-HS-DDBXD	P1	4000	B5-U0-G3	25	3	18,183	1.00	0.95	51,821.55	Shielded
DSXO-LED-P6-40K-70CRI-BLC4-MVOLT-SPA-PIR-HS-DDBXD	P2	4000	B0-U0-G4	25	5	12,873	1.00	0.95	61,146.75	Shielded
						Total Initial Luminaire Lumens			159,939.15	
						Site Allowed Total Initial Lumens			199,432.97	
						Is Project Within Lumen Limits?			YES	

Illuminated Acres (Note 1 acre = 43,560 sq ft)

Allowance Description	Square Feet	Allowed per Sq Ft	Allowed
Gross square footage of portion of site to be illuminated. See Site Sq Ft Note below.	102323		
Square footage of building footprints within part of site to be illuminated.	15450		
Calculated Square footage of area to be illuminated	86873	2.29568411	199,432.97
Site Allowed Total Initial Lumens			199,432.97

RC Architects, Inc.
14620 Echo Bluff
Austin, Texas 78737
(512) 913-0597
rickcanales.architects@gmail.com

STATE OF TEXAS
BUCKLEY H. PARKS
106223
LICENSED
PROFESSIONAL ENGINEER
03.10.2026

MANOR COMMONS NORTH - BLDG. 1 - MANOR, TEXAS

RC Architects, Inc.

Revisions

CAPITAL CONSULTING ENGINEERS
CAPCONSULTING.COM TX FIRM # 18111

03/10/2026

Project Number 25-144
Drawn By DGO
Checked By BPA

ELECTRICAL PHOTOMETRICS PLAN

E1.02

ALL LIGHTING AND PHOTOMETRIC DESIGNS, DETAILS AND CALCULATIONS ARE THE RESPONSIBILITY OF THE DESIGNER. THE DETAILS PROVIDED BELOW ARE ASSOCIATED WITH THE PHOTOMETRY PLAN PREPARED BY SPECTRUM LIGHTING AND ALM ASSUMES NO RESPONSIBILITY OF ANY OF THE DESIGNS OR SPECIFICATIONS PROVIDED.

WPX LED
Wall Packs

SPECTRUM LIGHTING AUSTIN
WPX1 LED P2 XX MVOLT [E4WH] XX

Ame:
Fpr:

For DLC listing of recommended lifting and distribution fixtures.

Specifications

Front View Side View

Luminaire	Weight (LB)	Width (W)	Height (H)	Total Current (amps) vs. Input Voltage				Weight
				120V	208V	240V	277V	
WPX1	8.7" (220.6 mm)	11.1" (28.3 mm)	12.3" (31.1 mm)	4.0"(10.1 mm)	0.46" (11.6 mm)	0.41" (10.4 mm)	0.36" (9.2 mm)	6.1 lbs (2.7kg)
WPX2	8.7" (221.1 mm)	13.2" (331.1 mm)	12.3" (31.1 mm)	4.1"(10.5 mm)	0.49" (12.4 mm)	0.42" (10.7 mm)	0.37" (9.4 mm)	6.2 lbs (2.7kg)
WPX3	8.7" (221.1 mm)	13.8"(35.0 mm)	12.3" (31.1 mm)	4.7"(12.0 mm)	0.55" (14.0 mm)	0.47" (12.0 mm)	0.41" (10.4 mm)	7.1 lbs (3.2kg)

Ordering Information

EXAMPLE: WPX2 LED 40K MVOLT DDBXD

Series	Color Temperature	Voltage	Optics	Finish
WPX1 LED P1	5,000 Lumens, 3AF	40K 4000K	MVOLT 120V-277V	DDBXD Dark bronze
WPX2 LED P2	10,000 Lumens, 3AF	50K 5000K	347 347V*	DWHXD White
WPX3 LED	15,000 Lumens, 4AF			DBLXD Black
WPX3 LED	20,000 Lumens, 4AM			DNAXD Natural Aluminum

Motion/Ambient Sensor	Mounting Option	Shipping
Blank None	Blank Surface mounting (3/4" conduit entry, included)	Blank Standard packaging
MS/8 Motion sensor, 8' mounting height, ambient sensor enabled at 5fc	PE Photocell**	
MS/20 Motion sensor, 20' mounting height, ambient sensor enabled at 5fc		
E4WH Emergency battery backup, CEC compliant (4W, CRI only)*		

*Not for use with fixtures with integral battery.
**Must be ordered as a separate line item for shipment with fixture.

Note: The lumen output and input power shown in the ordering tree are average representations of all configuration options. Specific values are available on request.

NOTES
1. All WPX wall packs come with 60A surge protection standard, except WPX1 LED P1 package which comes with 2.5kV surge protection standard. Add SPDXD option to get WPX1 LED P1 with 10kV surge protection.
   Sample number/description: WPX1 LED P1 40K MVOLT SPDXD DDBXD
2. Battery pack options only available on WPX1 and WPX2.
3. Battery pack options not available with 347V or PE options.

FEATURES & SPECIFICATIONS

INTENDED USE
The WPX LED wall packs are designed to provide a cost-effective, energy-efficient solution for the one-for-one replacement of existing HID wall packs. The WPX1, WPX2 and WPX3 are ideal solutions for 250W, 400W and 1000W HID applications respectively. WPX luminaires deliver a uniform, wide distribution. WPX is rated for -40°C to 40°C.

CONSTRUCTION
WPX features a die-cast aluminum main body with optimal thermal management that both enhances LED efficacy and extends component life. The luminaires are IP66 rated, and sealed against moisture or environmental contaminants.

ELECTRICAL
Available in standard configurations consist of high-efficacy LEDs and LED Lumen maintenance of 10K/50,000 hours. Color temperature (CCT) options of 3000K, 4000K and 5000K with minimum CRI of 70. Electronic drivers ensure system power factor >90% and THD <20%. All luminaires have been tested in accordance with IEC standards and have standard surge protection rating of 2.5kV. It can be ordered with an optional 4kV surge protection kit.
All photocell (PE) operate on MVOLT (120V - 277V) input.

Note: The standard WPX LED wall pack luminaires come with field-adjustable dim current feature. This feature allows tuning the output current of the LED drivers to adjust the lumen output to dim the luminaire.

INSTALLATION
WPX can be mounted directly over a standard electrical junction box. Three 1/2-inch conduit ports on three sides allow for surface conduit wiring. A port on the back surface allows pass-through wiring for continuous runs. Internal wiring is rated for 90°C or greater to ensure code compliance. The integral wiring compartment is IP rated. WPX1 is recommended for installation with LEDs facing downwards. The WPX is intended for installation on flat wall surfaces. Other applications may void warranty.

LISTINGS
CSA listed to meet U.S and Canadian standards. Suitable for wet locations. IP66 Rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. Fixture Seal of Approval (FSA) is available for all products on this page utilizing 5000K color temperature only. U.S. Patent No. D882, 965.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at www.lithonia.com/support-terms-conditions-sales.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

Performance Data

Electrical Load

Luminaire	Input Power(W)	120V	208V	240V	277V	347V
WPX1 LED P1	111W	0.99	0.55	0.51	0.46	0.35
WPX1 LED P2	240W	0.20	0.12	0.10	0.09	0.07
WPX2	47W	0.39	0.23	0.20	0.17	0.14
WPX3	69W	0.58	0.33	0.29	0.25	0.20

Projected LED Lumen Maintenance

Data references the extrapolated performance projections in 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).
To calculate L70, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.94	>0.92	>0.90

HID Replacement Guide

Luminaire	Equivalent HID Fixture	HPS Input Power
WPX1 LED P1	100W	119W
WPX1 LED P2	150W	248W
WPX2	250W	476W
WPX3	400W	698W

Lumen Output

Luminaire	Color Temperature	Lumens (Output)
WPX1 LED P1	3000K	5,537
	4000K	5,568
	5000K	5,602
WPX1 LED P2	3000K	2,748
	4000K	2,972
	5000K	2,954
WPX2	3000K	5,719
	4000K	5,906
	5000K	6,201
WPX3	3000K	8,569
	4000K	9,268
	5000K	8,930

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for ambient temperatures other than 25°C.

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.01
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

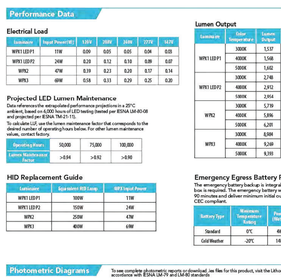
Emergency Egress Battery Packs

The emergency battery backup is integral to the luminaire — no external housing or back box is required. The battery pack is mounted in the back of the luminaire. Provides a minimum of 90 minutes and deliver minimum initial output of 700 lumens. Both battery pack options are CEC compliant.

Battery Type	Recharge Temperature/ Ranking	Power (Watts)	Ordering Options	Ordering Example
Standard	0°C	4W	E4WH	WPX2 LED 40K MVOLT E4WH DDBXD
Cold Weather	-20°C	14W	E14WC	WPX2 LED 40K MVOLT E14WC DDBXD

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting® WPX LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.



RSX1 LED
Area Luminaire

SPECTRUM LIGHTING AUSTIN
R3: RSX1 LED P4 XX R3 MVOLT SPA XX XX
R4: RSX1 LED P4 XX R4 MVOLT SPA XX XX
R5: RSX1 LED P4 XX R5 MVOLT SPA XX XX

Ame:
Fpr:

For DLC listing of recommended lifting and distribution fixtures.

Specifications

EPA (WxDxH): 0.57 ft² (0.05 m²)
Length: 21.8" (55.4 cm) (33% mount)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body, 7.2" (18.4 cm) Arm
Weight (SPA mount): 22.0 lbs (10.0 kg)

Design Select option indicator in the color background.

Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A must arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

design select

Items marked in a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

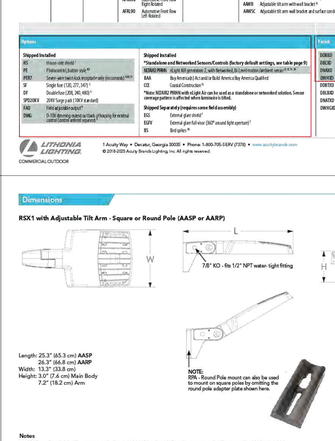
RSX1 LED						
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1	30K 3000K	T1S Type 1 Short	MVOLT 120V-277V*	SPA Square pole mounting (3.0" min. dia. pole required for 1 at 90°, 2,3 at 120°). Requires square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for 1 at 90°, 2, 3, 4 at 120°. Not for use in 480V.
	P2	40K 4000K	T2S Type 2 Short	HVOLT 347V-480V†	
	P3	50K 5000K	T3S Type 3 Short	347 347V†	RPA Round pole universal mounting adaptor (fits 2-3/8" to 4" O.D. tenon)
	P4		T4S Type 4 Short	480 480V†	WBA Wall bracket
			T5S Type 5 Short	*Not available with P4 package.	WBASC Wall bracket with surface conduction
			T5W Type 5 Wide	†Not available with P1 package.	AASP Adjustable tilt arm square pole mounting*
			BLC Type 3 Backlight Control		AARP Adjustable tilt arm round pole mounting*
			LCCO Type 4 Low Cutoff		AAWB Adjustable tilt arm wall bracket*
			RCCO Type 5 Rectangular Cutoff		AAWSC Adjustable tilt arm wall bracket and surface conduction*
			RGS Type 5 Short*		
			AFR Automotive Front Row Optic		
			AFRR90 Automotive Front Row Optic Rotated		
			AFRL90 Automotive Front Row Optic Rotated		

Options	Finish
Shipped Installed	DDBXD Dark Bronze
PE Photocell, Button style**	DBLXD Black
PER7 Seven wire locking photocell-style (NEMA® 3)	DNAXD Natural Aluminum
SF Single fuse (120, 277, 347)	DWHXD White
DF Double fuse (208, 240, 480)*	
SPD20KV 20KV Surge pack (10KV standard)	
FAO Field adjustable output*	
DMG 0-10V dimming wires pulled to driver compartment for external control (standard)	

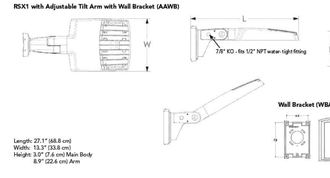
Shipped Installed
**Standalone and Networked Sensors/Controls (factory default settings, see table page 3)
NLTAIR2 PIRHN nLight Air generation 2 with Networked, bi-level motion and ambient sensor***,**,†
BAA Buy American Act Assembled (Buy America Qualified)
CCE Coastal Construction*

*Note: NLTAIR2 PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted.

Shipped Separately (requires same field assembly)
BSS External glare shield*
EGFR External glare full visor (360° around light aperture)*
BS Bird spikes.*



Notes
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.
AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.



Wall Bracket (WBA) Mounting Detail

Ordering Information

Accessories

Ordered and shipped separately.

RSX1EGFR	EGF Round external glare shield (1 required)
RSX1EGFRSQ	EGF Square external glare shield (1 required)
RSX1EGFRHS	External glare full visor (specify finish)
RSX1HS/[FINISH]	BS External round pole shield (specify finish)
RSXWBA [FINISH]	WBA Wall bracket (specify finish)
RSXWBASC [FINISH]	WBASC Wall bracket with surface conduction (specify finish)
RSXAWBA [FINISH]	AWBA Wall bracket (specify finish)
RSXAWBASC [FINISH]	AWBASC Wall bracket with surface conduction (specify finish)
RSXAFRL90 [FINISH]	Retrofit (1) field-rotate (1) AFR 90°
RSXAFRR90 [FINISH]	Retrofit (1) field-rotate (1) AFR 90°
RSXAFRL180 [FINISH]	Retrofit (1) field-rotate (2) AFR 90°
RSXREFSM U	Shatterguard*

NOTES
1. Type 5 distribution is not available with WBA.
2. Not for use with 480V systems. Not for use with Nos. 120/277V (D860 HV).
3. HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
4. 347/277 driver not available with P1 or P2. 347/277 driver operates on any line voltage from 277-347V (50/60 Hz). For 347V, 347VOLT not available with Sentry 20 or DTL unit or available with PE.
5. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
6. Maximum 40% CCT allowed for field adjustment.
7. Not to be ordered as an accessory.
8. Requires DMG option.
9. Type 4 and Type 5 flat lensing options cannot be combined including FE, DMG, PIRT, NLTAIR2 PIRHN, Clearview. PE and NLTAIR2 can be combined with DMG, PIRT or Clearview.
10. Compatible with most of standard pole drilling patterns. Not for use in shoe-box style luminaires or where pole is used to house operation or advanced control modules that provide 0-10V dimming signals. Write Athlon Sales for dimming leads on driver. Wiring May not be compatible with all control systems. Not for use with Sentry. Not for use with Dot Spot, Sentry Controls, Tate accessories, Shorting Cap included.
11. Not available with PIRBT. The mounting must be restricted to +/- 45° from horizontal on pre-AMI (T3) fixtures.
12. Must be ordered with PIRHN.
13. Must be ordered with PE.
14. Must be ordered with NLTAIR2 PIRHN. For additional information see PIRHN Guide.
15. Not available with HVOLT.
16. Luminaire not available with WBA, WBASC, AASP, AARP, AAWBC, SCE, SCEP and SCS.
17. Must be ordered with fixture for luminaire plus drilling.
18. Not available with P1 or P2. Not available with AFR. Ordered and shipped as a separate line item from Acuity Brands Controls.

Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

HANDHOLE ORIENTATION

RSX POLE DRILLING

RSX STANDARD ARM & ADJUSTABLE ARM

Round Tenon Mount - Pole Top Slipfitters

Quantity	Tenon O.D.	Height	A (0°)	B (90°)	C (180°)	D (270°)
1	2-3/8"	RPL 4.0"	RSX-1RA	RSX-1RA	RSX-1RA	RSX-1RA
2	2-3/8"	RPL 4.0"	RSX-2RA	RSX-2RA	RSX-2RA	RSX-2RA
4	4"	RPL 4.0"	RSX-4RA	RSX-4RA	RSX-4RA	RSX-4RA

Drill/Side Location by Fixture Type

Drilling Template	Mounting Option	Height	A (0°)	B (90°)	C (180°)	D (270°)
	Round Location	See Ref.	Side A & D	Side B & C	Round Pole Only	Side A & C & D
#8	Non-Drill Location	(Min 4.0")	(Min 4.0")	(Min 4.0")	(Min 4.0")	(Min 4.0")

RSX1 - Luminaire EPA

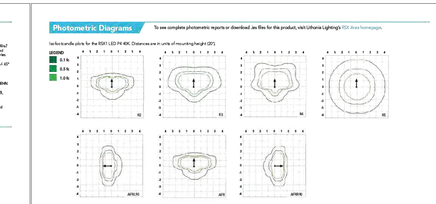
*Includes luminaire and mounting/accessory arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Number of Luminaires per Pole	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90° & 270°	4 at 90°	4 at 90°, 180° & 270°
Mounting Type	EPA						
SPA - Square Pole Adapter	0.57	1.65	1.05	1.52	1.56	2.05	3.11	3.7	2.26
RPA - Round Pole Adapter	0*	0.62	1.08	1.11	1.62	1.46	2.13	1.36	1.8	2.26
BA - Wall Arm Adapter		0.41	0.93	0.89	1.36	1.2	1.87	1.23	1.64	2.1
D - Integral Slipfitter (ASP/AARP - Adjustable Arm Square/Round Pole	0°	0.57	1.65	1.05	1.52	1.56	2.05	3.11	3.7	2.26
	15°	0.68	1.74	1.22	2	1.74	2.49	3.15	3.83	2.79
	30°	0.82	1.71	1.73	2.06	2.16	2.42	3.15	2.62	3.49
	45°	1.01	2.01	2.08	2.85	2.85	3.48	3.58	3.62	4.59
	60°	1.01	2.68	2.08	3.85	3.48	5.08	3.62	5.45	7.28
	75°	2.11	3.22	3.66	4.2	4.68	5.77	4.22	6.03	8.08
	90°	2.11	3.17	3.72	4.52	4.48	6.26	4.42	6.94	9.21
	0°	2.71	3.66	4.28	5.21	5.15	7.24	5.45	8.14	10.86
	75°	2.78	3.98	4.54	5.67	5.47	7.95	5.52	8.27	11.01
	90°	2.76	4.15	4.62	5.97	5.76	8.15	5.51	8.27	11.03
	90°	2.71	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting® RSX Area homepage.

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').



Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

RSX1 LED						
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1	30K 3000K	T1S Type 1 Short	MVOLT 120V-277V*	SPA Square pole mounting (3.0" min. dia. pole required for 1 at 90°, 2,3 at 120°). Requires square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for 1 at 90°, 2, 3, 4 at 120°. Not for use in 480V.
	P2	40K 4000K	T2S Type 2 Short	HVOLT 347V-480V†	
	P3	50K 5000K	T3S Type 3 Short	347 347V†	RPA Round pole universal mounting adaptor (fits 2-3/8" to 4" O.D. tenon)
	P4		T4S Type 4 Short	480 480V†	WBA Wall bracket
			T5S Type 5 Short	*Not available with P4 package.	WBASC Wall bracket with surface conduction
			T5W Type 5 Wide	†Not available with P1 package.	AASP Adjustable tilt arm square pole mounting*
			BLC Type 3 Backlight Control		AARP Adjustable tilt arm round pole mounting*
			LCCO Type 4 Low Cutoff		AAWB Adjustable tilt arm wall bracket*
			RCCO Type 5 Rectangular Cutoff		AAWSC Adjustable tilt arm wall bracket and surface conduction*
			RGS Type 5 Short*		
			AFR Automotive Front Row Optic		
			AFRR90 Automotive Front Row Optic Rotated		
			AFRL90 Automotive Front Row Optic Rotated		

Options	Finish
Shipped Installed	DDBXD Dark Bronze
PE Photocell, Button style**	DBLXD Black
PER7 Seven wire locking photocell-style (NEMA® 3)	DNAXD Natural Aluminum
SF Single fuse (120, 277, 347)	DWHXD White
DF Double fuse (208, 240, 480)*	
SPD20KV 20KV Surge pack (10KV standard)	
FAO Field adjustable output*	
DMG 0-10V dimming wires pulled to driver compartment for external control (standard)	

Shipped Installed
**Standalone and Networked Sensors/Controls (factory default settings, see table page 3)
NLTAIR2 PIRHN nLight Air generation 2 with Networked, bi-level motion and ambient sensor***,**,†
BAA Buy American Act Assembled (Buy America Qualified)
CCE Coastal Construction*

*Note: NLTAIR2 PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted.

Shipped Separately (requires same field assembly)
BSS External glare shield*
EGFR External glare full visor (360° around light aperture)*
BS Bird spikes.*

Surface Conduit Box (SCB) Mounting Detail

Automotive Front Row - Rotated Optics (AFRL90/R90)

(Example: 26180 - arrows indicate direction of light exiting the luminaire)

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting® RSX Area homepage.

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').

Performance Data

Lumen Output

Ratings and published data are tested by manufacturer in accordance with IESNA LM-79-19. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Values calculated using high performance data; see our website for more information.

Performance Package	System Watts	Total Nominal Lumens	40K 4000K, 70 CRI				50K 5000K, 70 CRI			
			Lumens	B	U	G	Lumens	B	U	G
P1 15W	15W	R2	6,882	1	0	1	7,135	1	0	1
		R3	6,619	1	0	1	7,096	1	0	1
		R4	6,667	1	0	1	7,096	1	0	1
		R5	6,667	1	0	1	7,096	1	0	1
		R6	6,313	1	0	1	6,916	1	0	1
		R5	6,611	1	0	1	7,108	1	0	1
		R3	6,667	1	0	1	7,096	1	0	1
		AFR	6,673	1	0	1	7,112	1	0	1
		AFRR90	6,510	1	0	1	7,179	1	0	1
		AFRL90	6,562	2	0	1	7,250	2	0	1
P2 28W	28W	R2	6,991	2	0	2	7,515	2	0	2
		R3	6,959	2	0	2	9,965	2	0	2
		R4	9,798	2	0	2	10,106	2	0	2
		R5	9,877	2	0	2	9,953	2	0	2
		R6	9,272	2	0	2	9,962	2	0	2
		R5	9,798	4	0	2	10,106	4	0	2
		R3	9,877	2	0	2	9,953	2	0	2
		AFR	9,879	2	0	2	9,962	2	0	2
		AFRR90	9,864	3	0	2	9,949	3	0	2
		AFRL90	9,743	3	0	2	10,001	3	0	2
P3 35W	35W	R2	12,888	2	0	2	14,872	2	0	2
		R3	12,743	2	0	2	14,833	2	0	2
		R4	12,584	2	0	2	14,197	2	0	2
		R5	12,584	4	0	2	14,296	4	0	2
		R6	12,471	2	0	2	13,797	2	0	2
		R5	12,584	4	0	2	14,197	4	0	2
		R3	12,812	3	0	2	14,779	3	0	2
		AFR	12,791	3	0	2	14,853	3	0	2
		AFRR90	12,913	3	0	2	14,167	3	0	2
		AFRL90	12,967	3	0	2	14,247	3	0	2
P4 55W	55W	R2	16,940	2	0	2	19,477	2	0	2
		R3	16,752	2	0	2	19,461	2	0	2
		R4	16,590	2	0	2	18,796	2	0	2
		R5	16,590	4	0	2	18,934	4	0	2
		R6	16,446	2	0	2	18,276	2	0	2
		R5	16,590	4	0	2	18,796	4	0	2
		R3	16,898	3	0	2	19,578	3	0	2
		AFR	16,860	3	0	2	19,676	3	0	2
		AFRR90	16,708	3	0	2	18,677	3	0	2
		AFRL90	16,825	3	0	2	18,805	3	0	2

Electrical Load

Performance Package	System Watts (W)	Current (A)				
		120V	208V	240V	277V	347V
P1	113W	0.95	0.55	0.50	0.42	0.33
P2	249W	2.08	1.20	1.04	0.91	0.72
P3	349W	2.91	1.68	1.46	1.27	1.01
P4	556W	4.64	2.68	2.32	2.02	1.60

Projected LED Lumen Maintenance

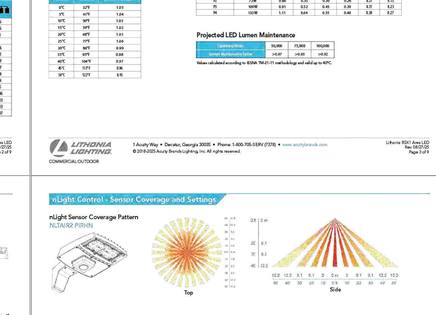
Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.93

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Multiplier	Ambient	Multiplier
0°C	1.04	25°C	1.00
5°C	1.03	30°C	0.99
10°C	1.02	35°C	0.98
15°C	1.01	40°C	0.97
20°C	1.00	50°C	0.96

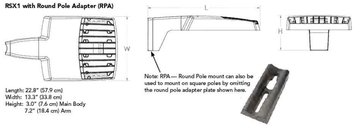


Dimensions & Weights

Luminaire Weight by Mounting Type

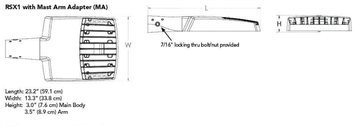
Mounting Option	Total Luminaire Weight
WBA	24 lbs
SPA	24 lbs
RPA	22 lbs
WBA	25 lbs
WBASC	25 lbs
A	23 lbs
AASP	23 lbs
AARP	23 lbs
AAWB	25 lbs
AAWBC	25 lbs

RSX1 with Round Pole Adapter (RPA)



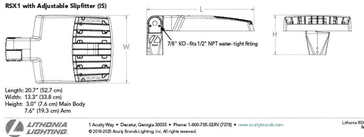
Length: 22.8" (57.9 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.4 cm) Arm

RSX1 with Mast Arm Adapter (MA)



Length: 23.2" (59.1 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm

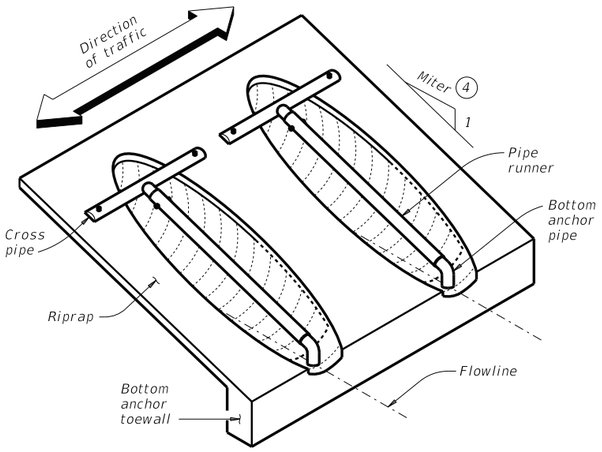
RSX1 with Adjustable Slipfitter (IS)



Length: 20.7" (52.7 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3

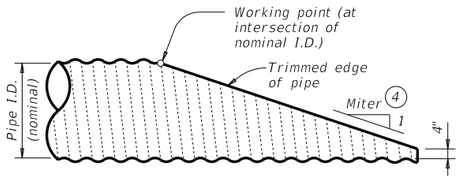
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:



ISOMETRIC VIEW OF TYPICAL INSTALLATION

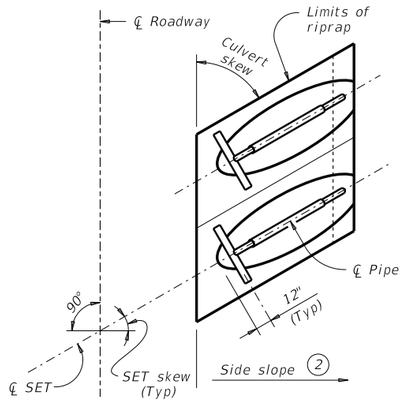
(Showing installation with no skew.)



NOTE: All pipe runners, calculations, and dimensions are based on the pipe culverts mitered as shown in this detail. Alternate styles of mitered ends will require that appropriate adjustments be made to the values presented on this standard.

SIDE ELEVATION OF TYPICAL PIPE CULVERT MITER

(Showing corrugated metal pipe (CMP) culvert. Details of reinforced concrete pipe (CMP) culvert are similar.)



PLAN OF SKEWED INSTALLATION

CROSS PIPE LENGTHS AND PIPE RUNNER LENGTHS (1) (3)

Corrugated Metal Pipe (CMP) Culverts

Design	Pipe Culvert Span	Pipe Culvert Rise	Pipe Culvert Spa ~ G	Cross Pipe Length	Pipe Runner Length											
					3:1 Side Slope				4:1 Side Slope				6:1 Side Slope			
					0° Skew	15° Skew	30° Skew	45° Skew	0° Skew	15° Skew	30° Skew	45° Skew	0° Skew	15° Skew	30° Skew	45° Skew
1	17"	13"	1' – 0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	21"	15"	1' – 2"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	28"	20"	1' – 5"	3' – 9"	N/A	N/A	3' – 5"	4' – 7"	N/A	N/A	4' – 11"	6' – 5"	N/A	N/A	7' – 11"	10' – 2"
4	35"	24"	1' – 8"	4' – 4"	3' – 10"	4' – 0"	4' – 7"	6' – 0"	5' – 5"	5' – 8"	6' – 6"	8' – 4"	8' – 8"	9' – 1"	10' – 3"	12' – 11"
5	42"	29"	1' – 11"	4' – 11"	5' – 1"	5' – 4"	6' – 1"	7' – 10"	7' – 2"	7' – 5"	8' – 6"	10' – 9"	11' – 2"	11' – 8"	13' – 2"	16' – 6"
6	49"	33"	2' – 2"	5' – 6"	6' – 2"	6' – 5"	7' – 4"	N/A	8' – 6"	8' – 10"	10' – 0"	N/A	13' – 3"	13' – 9"	15' – 6"	N/A
7	57"	38"	2' – 5"	6' – 2"	7' – 6"	7' – 9"	N/A	N/A	10' – 2"	10' – 7"	N/A	N/A	15' – 9"	16' – 4"	N/A	N/A

Reinforced Concrete Pipe (RCP) Culverts

Design	Pipe Culvert Span	Pipe Culvert Rise	Pipe Culvert Spa ~ G	Cross Pipe Length	Pipe Runner Length											
					3:1 Side Slope				4:1 Side Slope				6:1 Side Slope			
					0° Skew	15° Skew	30° Skew	45° Skew	0° Skew	15° Skew	30° Skew	45° Skew	0° Skew	15° Skew	30° Skew	45° Skew
1	22"	13 ½"	1' – 0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	26"	15 ½"	1' – 2"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	28 ½"	18"	1' – 5"	3' – 9 ½"	N/A	N/A	2' – 10"	3' – 10"	N/A	N/A	4' – 2"	5' – 5"	N/A	N/A	6' – 9"	8' – 9"
4	36 ¼"	22 ½"	1' – 8"	4' – 5 ¼"	3' – 5"	3' – 7"	4' – 2"	5' – 6"	4' – 11"	5' – 1"	5' – 11"	7' – 7"	7' – 11"	8' – 3"	9' – 5"	11' – 11"
5	43 ¾"	26 ⅝"	1' – 11"	4' – 0 ¾"	4' – 6"	4' – 8"	5' – 5"	6' – 11"	6' – 4"	6' – 7"	7' – 6"	9' – 7"	10' – 0"	10' – 5"	11' – 9"	14' – 10"
6	51 ⅛"	31 5/16"	2' – 2"	5' – 8"	5' – 9"	6' – 0"	6' – 10"	N/A	7' – 11"	8' – 3"	9' – 4"	N/A	12' – 4"	12' – 10"	14' – 6"	N/A
7	58 ½"	36"	2' – 5"	6' – 3 ½"	6' – 11"	7' – 3"	N/A	N/A	9' – 6"	9' – 11"	N/A	N/A	14' – 9"	15' – 4"	N/A	N/A

TYPICAL PIPE CULVERT MITERS (4)

Side Slope	0° Skew	15° Skew	30° Skew	45° Skew
3:1	3:1	3.106:1	3.464:1	4.243:1
4:1	4:1	4.141:1	4.619:1	5.657:1
6:1	6:1	6.212:1	6.928:1	8.485:1

STANDARD PIPE SIZES AND MAX PIPE RUNNER LENGTHS (1)

Pipe Size	Pipe O.D.	Pipe I.D.	Max Pipe Runner Length
2" STD	2.375"	2.067"	N/A
3" STD	3.500"	3.068"	10' – 0"
4" STD	4.500"	4.026"	19' – 8"
5" STD	5.563"	5.047"	34' – 2"

CONDITIONS WHERE PIPE RUNNERS ARE NOT REQUIRED (3)

Design	Single Pipe Culvert	Multiple Pipe Culverts
1 and 2	Skews thru 45°	Skews thru 45°
3	Skews thru 35°	Skews thru 10°
4	Normal (no skew)	Always required
5 thru 7	Always required	Always required

(1) Provide pipe runner of the size shown in the tables. Provide cross pipe of the same size as the pipe runner. Provide cross pipe stub out and bottom anchor pipe of the next smaller size pipe as shown in the Standard Pipe Sizes and Max Pipe Runners Lengths table.

(2) Recommended values of slope are 3:1, 4:1, and 6:1. All quantities, calculations, and dimensions shown herein are based on these recommended values. Slope of 3:1 or flatter is required for vehicle safety.

(3) This standard allows for the placement of only one pipe runner across each culvert pipe opening. In order to limit the clear opening to be traversed by an errant vehicle, the following conditions must be met:

For Design 1 through 5 culvert pipe sizes, the skew must not exceed 45°.
For Design 6 culvert pipes, the skew must not exceed 30°.
For Design 7 culvert pipes, the skew must not exceed 15°.

If the above conditions cannot be met, the designer should consider using a safety end treatment with flared wings. For further information, refer to the TxDOT "Roadway Design Manual."

(4) Miter = slope of mitered end of pipe culvert.

MATERIAL NOTES:

Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.

Provide pipe runners, cross pipes, and anchor pipes that meet the requirements of ASTM A53 (Type E or S, Gr B), ASTM A500 Gr B, or API 5LX52.

Provide ASTM A307 bolts and nuts.

Galvanize all steel components, except concrete reinforcing, after fabrication. Repair galvanizing damaged during transport or construction in accordance with the specifications.

GENERAL NOTES:

Pipe runners are designed for a traversing load of 1,800 pounds at yield as recommended by Research Report 280-1, "Safety Treatment of Roadside Cross-Drainage Structures", Texas Transportation Institute, March 1981.

Safety end treatments (SET) shown herein are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the Pipe Runners.

Construct concrete riprap and all necessary inverts in accordance with the requirements of Item 432, "Riprap."

Payment for riprap and toewall is included in the price bid for each safety end treatment.

Texas Department of Transportation

Bridge Division Standard

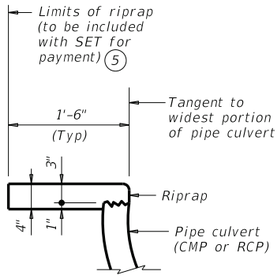
SAFETY END TREATMENT
FOR DESIGN 1 TO 7
ARCH PIPE CULVERTS
TYPE II ~ CROSS DRAINAGE

SETP-CD-A

FILE: CD-SETP-CDA-20.dgn	DN: GAF	CK: CAT	DW: JRP	CK: GAF
©TxDOT February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	DIST	COUNTY		SHEET NO.

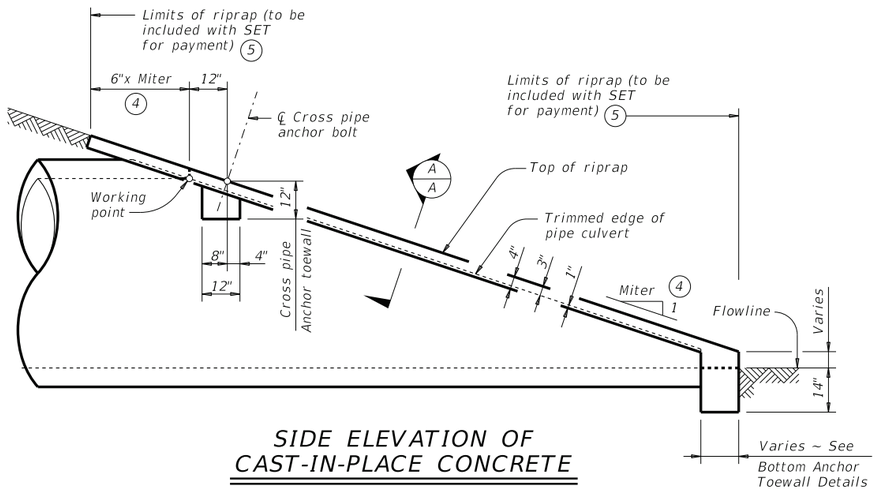
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:



SHOWING TYPICAL PIPE CULVERT AND RIPRAP

SECTION A-A



SIDE ELEVATION OF CAST-IN-PLACE CONCRETE

(Showing reinforced concrete pipe (RCP) culvert. Details of corrugated metal pipe (CMP) culvert are similar. Pipe runners not shown for clarity.)

ESTIMATED CONCRETE RIPRAP QUANTITIES (CY) (6)

FOR BOTH CORRUGATED METAL PIPE CULVERTS AND CONCRETE PIPE CULVERTS

Design	3:1 Side Slope				4:1 Side Slope				6:1 Side Slope			
	0° Skew	15° Skew	30° Skew	45° Skew	0° Skew	15° Skew	30° Skew	45° Skew	0° Skew	15° Skew	30° Skew	45° Skew
1	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.9
2	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	1.0
3	0.6	0.6	0.7	0.8	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.2
4	0.7	0.7	0.8	0.9	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.4
5	0.8	0.8	0.9	1.0	1.0	1.0	1.1	1.2	1.3	1.3	1.4	1.7
6	0.9	1.0	1.0	N/A	1.1	1.1	1.2	N/A	1.4	1.5	1.6	N/A
7	1.0	1.1	N/A	N/A	1.3	1.3	N/A	N/A	1.7	1.7	N/A	N/A

(4) Miter = slope of mitered end of pipe culvert.

(5) Riprap placed beyond the limits shown will be paid for as concrete riprap in accordance with Item 432, "Riprap."

(6) Quantities shown are for one end of one pipe culvert. For multiple pipe culverts, quantities will need to be adjusted. Riprap quantities are for Contractor's information only.

Texas Department of Transportation

Bridge Division Standard

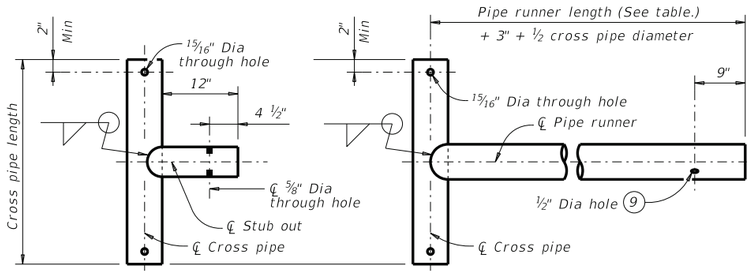
SAFETY END TREATMENT
FOR DESIGN 1 TO 7
ARCH PIPE CULVERTS
TYPE II ~ CROSS DRAINAGE

SETP-CD-A

FILE: CD-SETP-CDA-20.dgn	DN: GAF	CK: CAT	DW: JRP	CK: GAF
©TxDOT February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	DIST	COUNTY		SHEET NO.

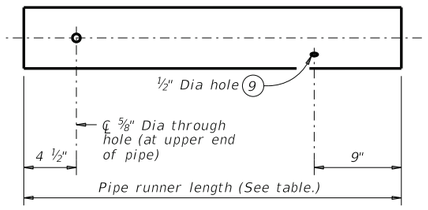
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:



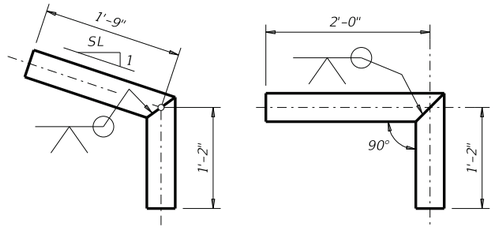
OPTION A1 OPTION A2

CROSS PIPE AND CONNECTIONS DETAILS



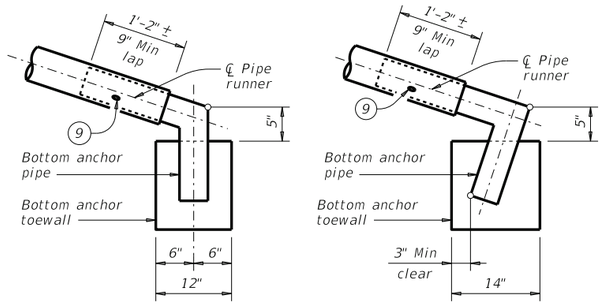
NOTE: The separate pipe runner shown is required when Cross Pipe Connection Option A1 is used.

PIPE RUNNER DETAILS



OPTION B1 OPTION B2

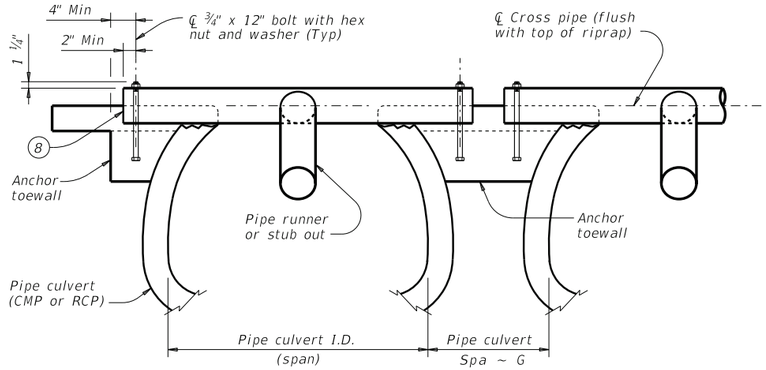
BOTTOM ANCHOR PIPE DETAILS (10)



OPTION B1 OPTION B2

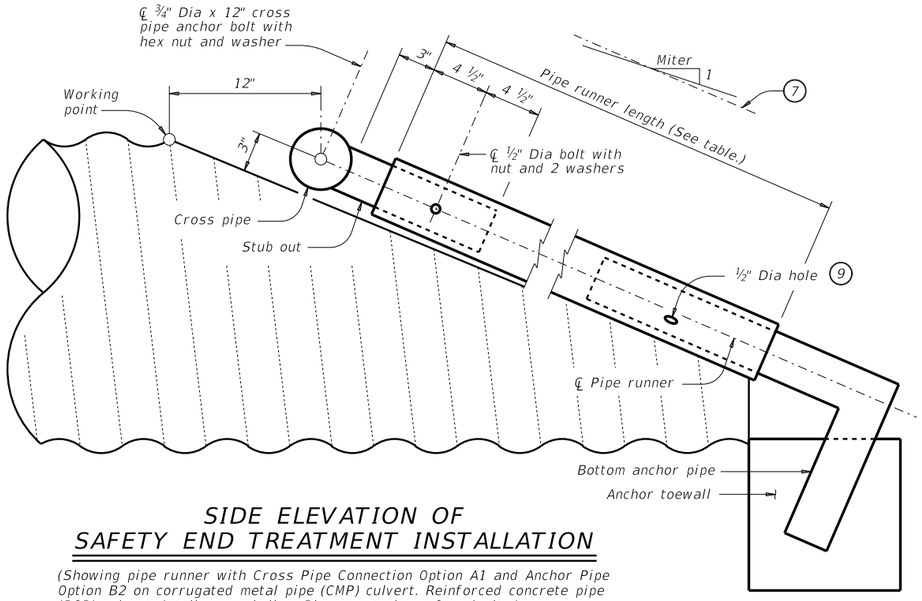
BOTTOM ANCHOR TOEWALL DETAILS

(Culvert and riprap not shown for clarity.)



SHOWING CROSS PIPE AND ANCHOR TOEWALL

SECTION A-A



SIDE ELEVATION OF SAFETY END TREATMENT INSTALLATION

(Showing pipe runner with Cross Pipe Connection Option A1 and Anchor Pipe Option B2 on corrugated metal pipe (CMP) culvert. Reinforced concrete pipe (RCP) culvert details are similar. Riprap not shown for clarity.)

(7) Note that actual slope of pipe runner may vary slightly from side slope of riprap and trimmed culvert pipe edge.

(8) Ensure that riprap concrete does not flow into the cross pipe so as to permit disassembly of the bolted connection to allow cleanout access.

(9) After installation, inspect the 1#2" hole to ensure that the lap of the pipe runner with the bottom anchor pipe is adequate.

(10) At fabricator's option, a heat bend to a smooth 5" radius or a manufactured elbow (of the same material as the runner) may be substituted for the mitered and welded joint in the bottom anchor pipe.

Texas Department of Transportation

Bridge Division Standard

SAFETY END TREATMENT
FOR DESIGN 1 TO 7 ARCH PIPE CULVERTS TYPE II ~ CROSS DRAINAGE

SETP-CD-A

FILE: CD-SETP-CDA-20.dgn	DN: GAF	CK: CAT	DW: JRP	CK: GAF			
©TxDOT February 2020	CONT	SECT	JOB		HIGHWAY		
REVISIONS							
	DIST	COUNTY			SHEET NO.		