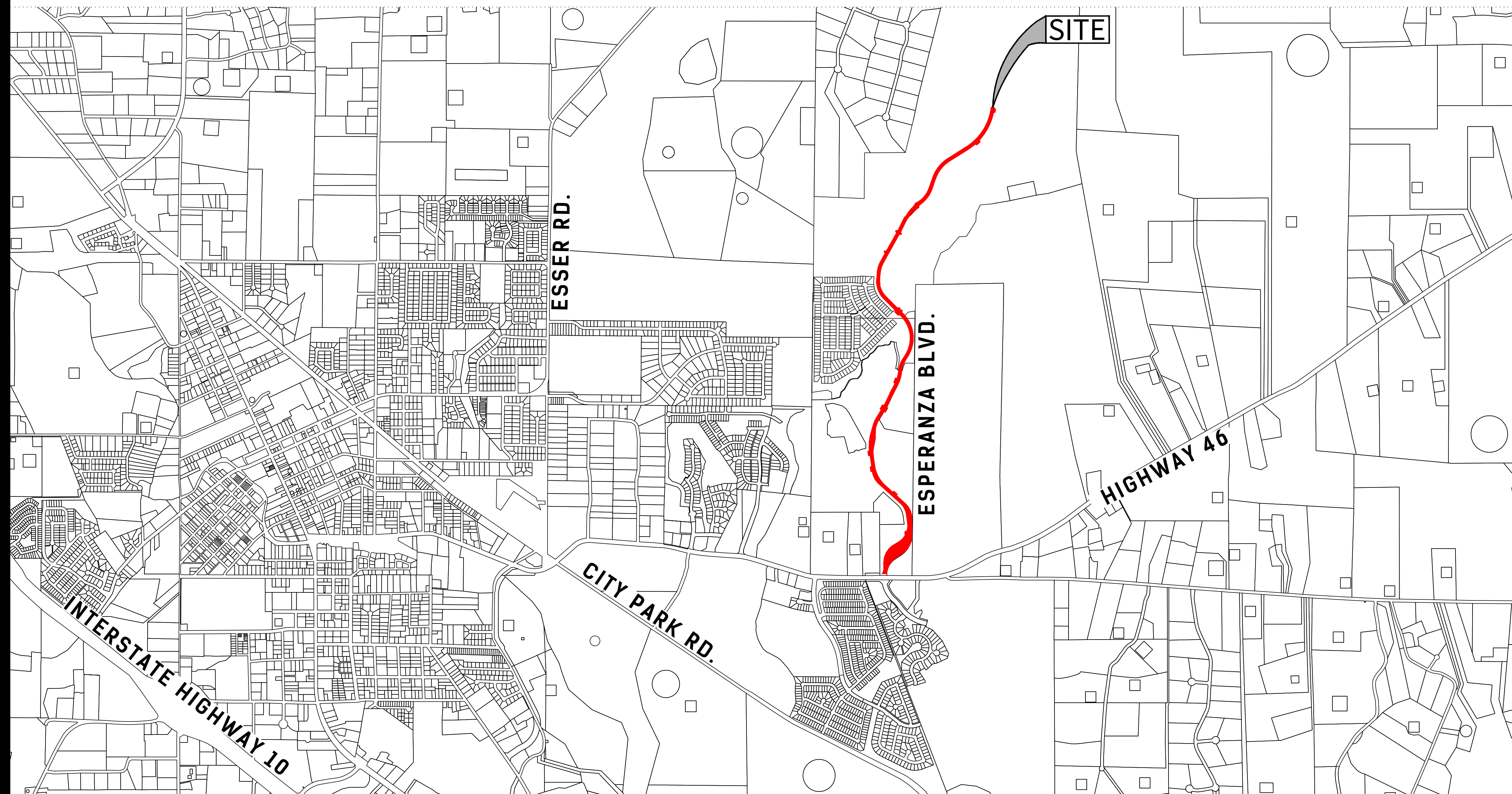


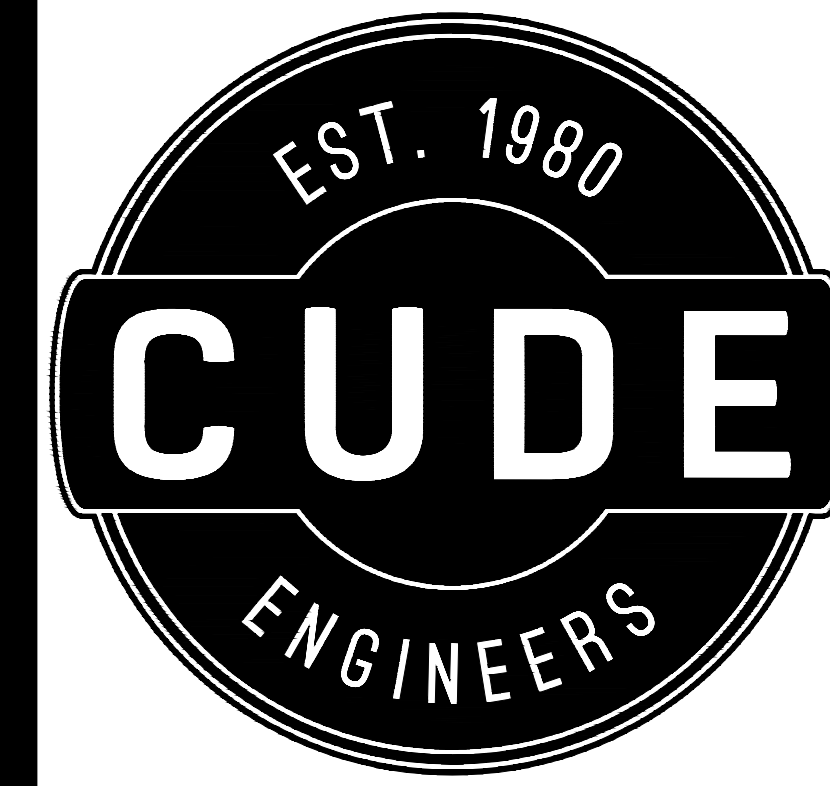
SHEET LIST	
SHEET #	SHEET TITLE
C0	COVERSHEET
C1	GENERAL CONSTRUCTION NOTES
C2	ESPERANZA BLVD. PAVEMENT REPAIR PLAN 1 OF 6
C3	ESPERANZA BLVD. PAVEMENT REPAIR PLAN 2 OF 6
C4	ESPERANZA BLVD. PAVEMENT REPAIR PLAN 3 OF 6
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C8	TxDOT DETAILS - BARRICADES & CONSTRUCTION 1 OF 3 *
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C11	TxDOT DETAILS - TRAFFIC CONTROL PLAN 1 OF 2 *
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C20	TxDOT DETAILS - PAVEMENT MARKINGS AND RPMs - 1 OF 2 *
C21	TxDOT DETAILS - PAVEMENT MARKINGS AND RPMs - 2 OF 2 *

* - DENOTES STANDARD DETAILS ADOPTED FOR USE ON THIS PROJECT

CONSTRUCTION OF ALL FACILITIES TO BE DEDICATED TO THE PUBLIC SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY OF BORENE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.



VICINITY MAP



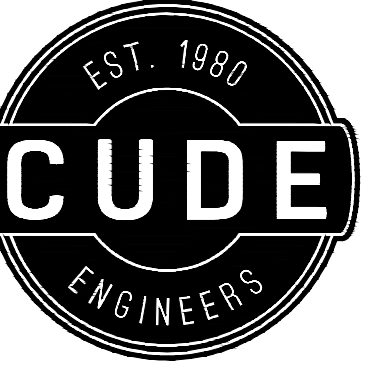
ESPERANZA BLVD. PAVEMENT REPAIR AND RESTRIPIING - PHASE III
 PAVEMENT REPAIR AND RESTRIPIING CONSTRUCTION PLANS

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DRAWN BY A.B.B.	DATE 05/23/2025
CHECKED BY W. PATRICK MURPHY, P.E.	PROJECT NO. P03154.009

4/15/2026
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ESPERANZA BOULEVARD - PHASE III

GENERAL CONSTRUCTION NOTES

CITY OF BOERNE

GENERAL CONSTRUCTION NOTES

REV. 06/21/2024

GENERAL NOTES

- CONSTRUCTION OF ALL FACILITIES TO BE DEDICATED TO THE PUBLIC SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AND ANY OTHER GOVERNING AGENCY SUCH AS THE TCEQ, TxDOT, ETC., AS APPLICABLE.
- IF ANY CONFLICT ARISES BETWEEN THESE GENERAL NOTES AND ANY OTHER NOTES FOUND IN THE PLANS, THE CITY OF BOERNE'S GENERAL NOTES SHALL TAKE PRECEDENCE. HOWEVER, THE CITY ENGINEER HAS THE AUTHORITY TO REVIEW AND APPROVE LEGITIMATE CONFLICTING PROJECT SPECIFIC NOTES, IF NEEDED.
- ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE INFRASTRUCTURE DRAWINGS REMAINS WITH THE ENGINEER OF RECORDS. IN APPROVING THESE INFRASTRUCTURE DRAWINGS, THE CITY OF BOERNE MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.
- PRIOR TO A CONSTRUCTION RELEASE PERMIT AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE CITY OF BOERNE ENGINEERING AND MOBILITY DEPARTMENT TO SCHEDULE A PRE-CONSTRUCTION MEETING. A SEPARATE ON-SITE PRE-CONSTRUCTION MEETING MAY BE REQUIRED WITH THE CONTRACTOR AND ANY SUBCONTRACTORS PRIOR TO STARTING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AT (830) 248-1538.
- THE CONTRACTOR IS REQUIRED TO SCHEDULE ALL NECESSARY INSPECTIONS AT LEAST 24 HOURS IN ADVANCE. FEES MAY BE ASSESSED FOR WORK THAT IS NOT READY AT THE TIME OF THE INSPECTION OR NO-SHOWS FOR SCHEDULED INSPECTIONS.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES; THE APPROVED INFRASTRUCTURE DRAWINGS, INCLUDING ALL APPROVED REVISIONS; THE CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION; ALL NECESSARY PERMITS; NOTICE OF INTENT; EROSION CONTROL PLANS; AND SWPPP. IT IS ENCOURAGED TO KEEP AN EXTRA COPY OF APPROVED SUBMITTALS ON-SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC UTILITIES DURING CONSTRUCTION OF THE PROJECT.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH AND LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATING, TRENCHING, OR DRILLING AND SHALL BE REQUIRED TO TAKE ANY PRECAUTIONARY MEASURES TO PROTECT ALL LINES SHOWN AND/OR ANY OTHER UNDERGROUND UTILITIES NOT OF RECORD OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PUBLIC AGENCIES AND FRANCHISE UTILITIES 48 HOURS PRIOR TO CONSTRUCTION (TEXAS811 1-800-344-8377). THE CONTRACTOR MAY BE REQUIRED TO EXPOSE THESE FACILITIES AT THEIR OWN COST.
- THE CONTRACTOR MUST CONTACT CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT IMMEDIATELY IF ANY DAMAGE TO EXISTING UTILITIES OCCURS. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THEIR EXPENSE. IF DAMAGE TO A LIVE GAS MAIN OCCURS, CALL 911 IMMEDIATELY PRIOR TO CALLING CITY OF BOERNE UTILITIES DEPARTMENT.
- THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PUBLIC AND PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEM AT THEIR OWN COST. ANY PERMITTED WORK LOCATED WITHIN EASEMENTS ON PRIVATE PROPERTY WILL REQUIRE A LETTER OF APPROVAL FROM EACH AFFECTED LANDOWNER PRIOR TO FINAL ACCEPTANCE OF CONSTRUCTION.
- ANY DISCREPANCIES ON THE INFRASTRUCTURE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER AND CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM THE INFRASTRUCTURE DRAWINGS ARE PERMITTED WITHOUT WRITTEN APPROVAL FROM THE CITY.
- STORMWATER MANAGEMENT FACILITIES SHALL BE PROVIDED PRIOR TO SITE CONSTRUCTION OR CLEARING AND BE MAINTAINED DURING THE PROGRESS OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. ALL WORK REQUIRED SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS PROJECT.
- THE CONTRACTOR SHALL PROVIDE THE CITY ACCESS TO CITY PROPERTY, EASEMENTS, UTILITIES, AND FACILITIES AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL FOLLOW THE CITY'S CURRENT NOISE ORDINANCE, ANY EXCEPTIONS OF WHICH MAY BE REQUESTED IN WRITING TO THE CITY OF BOERNE PERMITTING AND CODE COMPLIANCE DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR REQUIRED CONSTRUCTION SURVEYING AND STAKING AND SHALL NOTIFY THE CITY OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH ANY WORK.
- THE CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUMS PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL SURVEY MARKERS INCLUDING IRON RODS, PROPERTY CORNERS, OR SURVEY MONUMENTS WITHIN THE LIMITS OF THE CONSTRUCTION SITE AND OUTSIDE THE RIGHT-OF-WAY DURING CONSTRUCTION. ANY SURVEY MARKERS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT THEIR OWN COST.
- ALL CONCRETE SHALL BE PLANT MIXED MEETING CITY SPECIFICATIONS WITH A MINIMUM OF 4,000 PSI AT 28 DAYS COMPRESSIVE STRENGTH UNLESS OTHERWISE SPECIFIED. ANY CONCRETE INSTALLED WITHOUT AN APPROVED MIX DESIGN SUBMITTAL WILL BE REMOVED AT CONTRACTOR'S EXPENSE.
- CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS, AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THESE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS, AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS, SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
- CONTRACTOR SHALL FURNISH A SET OF "AS-BUILT" DRAWINGS TO THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT AT THE TIME OF FINAL INSPECTION. CONTRACTOR SHALL GIVE CITY AT LEAST TWO WORKING DAYS NOTICE PRIOR TO FINAL INSPECTION.

GEOTECHNICAL TESTING

- ALL COMPACTION, CONCRETE, AND OTHER REQUIRED TEST RESULTS SHALL BE SENT TO THE DESIGN ENGINEER AND CITY DIRECTLY FROM THE TESTING AGENCY. CITY OF BOERNE INSPECTORS SHALL BE PROVIDED A MINIMUM OF 24-HOUR NOTICE AND PROVIDED THE OPPORTUNITY TO OBSERVE ALL REQUIRED TESTING.
- ALL PROCTOR TESTING SHALL BE COMPLETED PER ASTM D1557 (MODIFIED PROCTOR) AND PROCTOR SHALL BE SUBMITTED TO THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT PRIOR TO COMPACTION.
- UPON COMPLETION OF CONSTRUCTION, A COPY OF ALL TESTING REPORTS SHALL BE COMPILED AND FORWARDED TO THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT PRIOR TO FINAL ACCEPTANCE.
- IT IS THE RESPONSIBILITY OF THE DEVELOPER, CONTRACTOR, SUBCONTRACTORS, BUILDERS, GEOTECHNICAL ENGINEER, AND DESIGN ENGINEER TO IMMEDIATELY NOTIFY THE CITY AND

DESIGN ENGINEER IF THE PRESENCE OF GROUNDWATER WITHIN THE SITE IS EVIDENT. UPON NOTIFICATION, THE DESIGN ENGINEER SHALL RESPOND WITH PLAN REVISIONS FOR THE MITIGATION OF THE GROUNDWATER ISSUE. ALL CONSTRUCTION ACTIVITY IMPACTED BY THE DISCOVERY OF GROUNDWATER SHALL BE SUSPENDED UNTIL THE CITY APPROVES THE GROUNDWATER MITIGATION PLAN IN WRITING.

TRAFFIC CONTROL

- CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE LATEST REVISION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) AND TxDOT BARRICADE AND CONSTRUCTION STANDARDS.
- CONTRACTOR SHALL NOT IMPEDE TRAFFIC ON EXISTING STREETS, DRIVEWAYS, OR FIRE LANES OPEN TO THE PUBLIC.
- CONTRACTOR TO PROVIDE TRAFFIC CONTROL PLAN TO CITY AT LEAST 3 BUSINESS DAYS IN ADVANCE OF COMPLETING WORK IN A CITY RIGHT-OF-WAY.
- TEMPORARY LANE CLOSURES DURING THE HOURS OF 9AM TO 3PM MAY BE PERMITTED WHERE SHOWN AS NECESSARY WITHIN THE TRAFFIC CONTROL PLAN WITH PRIOR APPROVAL BY THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT. NO LANE CLOSURES ARE PERMITTED ON WEEKENDS OR HOLIDAYS WITH PRIOR WRITTEN APPROVAL.
- TEMPORARY STEEL PLATES MAY BE UTILIZED AS PERMITTED BY THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT FOR A MAXIMUM OF TWO (2) WEEKS UNLESS PRIOR WRITTEN APPROVAL OF AN EXTENDED TIME IS PROVIDED.
- ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER MISCELLANEOUS TRAFFIC CONTROL MEASURES SHALL NOT BE INSTALLED EARLIER THAN 24 HOURS BEFORE THE CONTRACTOR IS READY TO PROCEED WITH CONSTRUCTION FOR THAT SITE.
- ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER MISCELLANEOUS TRAFFIC CONTROL MEASURES SHALL BE REMOVED AND ORIGINAL TRAFFIC CONTROL MEASURES REPLACED AT THE END OF THE CONTRACTOR'S CONSTRUCTION OPERATION.

EROSION CONTROL NOTES

- ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING IS COMPLETE AND VEGETATION IS ESTABLISHED WITH 85% COVERAGE ACHIEVED.
- CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. EROSION CONTROLS SHALL BE REPAIRED OR REPLACED AS INSPECTION DEEMS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED SILT IN ANY EROSION CONTROL DEVICE SHALL BE REMOVED AND SHALL BE DISTRIBUTED ON-SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT EROSION CONTROL MEASURES AND STORMWATER CONTROL IS SUFFICIENT TO MITIGATE OFF-SITE IMPACTS ARE IN PLACE AT ALL STAGES OF CONSTRUCTION.
- THE CITY INSPECTOR HAS THE AUTHORITY TO HAVE THE CONTRACTOR MODIFY THE EROSION CONTROLS AT THE DEVELOPER'S EXPENSE. THE DEVELOPER SHALL BE NOTIFIED OF THESE MODIFICATIONS PRIOR TO COMMENCEMENT OF THE MODIFICATIONS.
- CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH TOPSOIL AND VEGETATION.
- CONTRACTOR TO REMOVE GRASS AND STRIP TOPSOIL TO DEPTHS ENCOUNTERED AND STOCKPILE TOPSOIL TO BE DISTRIBUTED DURING FINAL GRADING OF THE DISTURBED AREAS.
- CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION TRAFFIC UTILIZES THE STABILIZED CONSTRUCTION ENTRANCES AT ALL TIMES FOR INGRESS/EGRESS TO THE SITE.
- CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS AND DRIVEWAYS ADJACENT TO THE PROJECT FREE FROM ROCK, MUD, TRASH AND DEBRIS AT ALL TIMES. CONTRACTOR SHALL CLEAN AND REMOVE ALL LOOSE MATERIAL RESULTING FROM CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST.
- AS INLETS ARE COMPLETED, TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED. PRIOR TO FINAL ACCEPTANCE BY THE CITY OF BOERNE, ALL TEMPORARY INLET BARRIERS SHALL BE REMOVED. REPLACED WITH CONTROLS TO PREVENT SEDIMENT FROM ENTERING THE STREET ROW. CITY STREETS SHALL NOT BE USED AS SEDIMENT TRAPS WITHOUT WRITTEN APPROVAL FROM THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT.
- THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
- DISTURBED PORTIONS OF THE SITE MUST BE STABILIZED. STABILIZATION PRACTICES MUST BE INITIATED WITHIN 14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS BEEN EITHER TEMPORARILY OR PERMANENTLY CEASED, UNLESS EXCEPTED WITHIN THE TPOES PERMIT.
- CONTRACTOR SHALL INSPECT DISTURBED AREAS, MATERIAL STORAGE AREAS EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND VEHICLE ENTRY AND EXIT AREAS AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER.
- ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE CITY OF BOERNE.

GRADING NOTES

- CONTRACTOR IS REQUIRED TO OBTAIN AN APPROVED GRADING PERMIT FROM THE CITY, IF APPLICABLE.
- CONTRACTOR TO ENSURE POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
- GRADING WORK SHALL BE COMPLETED TO WITHIN 0.10 FEET OF THE FINAL GRADE PRIOR TO INSTALLATION OF UTILITIES INCLUDING ANY UTILITY TYPE INSTALLATION OUTSIDE OF THE ROW TO ENSURE DEPTHS ARE APPROPRIATE FROM FINAL GRADE.
- CONTRACTOR SHALL NOT PLACE ANY FILL OR WASTE MATERIAL IN THE LOCAL OR 100-YEAR FLOODPLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOODPLAIN DEVELOPMENT PERMIT.

PAVING NOTES

- ALL CONSTRUCTION AND TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- SUBMITTALS FOR LIME, BASE, PRIME COAT, TACK COAT, AND ASPHALT, AS APPLICABLE, SHALL BE APPROVED PRIOR TO INSTALLATION. INSTALLATION PRIOR TO SUBMITTAL APPROVAL MY REQUIRE REMOVAL/REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- NO EARTHWORK, LIME APPLICATION, OR OTHER PREPARATION OF THE SUBGRADE FOR PAVING OF STREETS SHALL BE INITIATED WITHOUT AUTHORIZATION FROM THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT. THE CITY WILL AUTHORIZE THE SUBGRADE WORK IN PREPARATION FOR THE PAVING AFTER UTILITY TRENCH BACKFILL TESTING IS COMPLETE AND VERIFIED TO MEET CITY REQUIREMENTS.
- EMBANKMENT/FILL MATERIAL UNDER PROPOSED STREETS MUST BE FREE OF LARGE STONES (4" WHEN BACKFILL IS 12" OR GREAT IN DEPTH OR 2.5" WHEN FILL IS LESS THAN 12" IN DEPTH), HAVE A PLASTICITY INDEX (PI) LESS THAN 20 PER ASTM D4318, AND BE COMPACTED TO 95% PER ASTM D1557 (MODIFIED PROCTOR).

- UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
- FLEXIBLE BASE UNDER ROADWAYS REQUIRES 100% COMPACTION MEETING ASTM D1557 (MODIFIED PROCTOR) AND MUST EXTEND AT LEAST 18 INCHES BEHIND THE BACK OF CURB.
- TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF PAVING IMPROVEMENTS SHALL BE PERFORMED BY A GEOTECHNICAL TESTING COMPANY AND PROVIDE OPPORTUNITY TO BE WITNESSED BY A CITY INSPECTOR. ALL TESTING MUST BE SCHEDULED WITH THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT.

PEDESTRIAN NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING ALL STREETS, CROSSWALKS, SIDEWALKS AND CURB RAMPS, DRIVEWAYS, AND ANY OTHER SURFACE RELATED TO AN "ACCESSIBLE ROUTE" PER THE TEXAS ACCESSIBILITY STANDARDS (TAS), LATEST EDITION AND PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), LATEST EDITION. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY CONSTRUCTED OR INSTALLED ITEMS NOT MEETING THE CURRENT TAS REQUIREMENTS AT THEIR OWN COST.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING PEDESTRIAN ROUTES AND ACCESS WITHIN AND ADJACENT TO THE SITE DURING THE DURATION OF CONSTRUCTION. A TEMPORARY PEDESTRIAN ROUTE SHALL BE PROVIDED WHEN ANY EXISTING SIDEWALK IS CLOSED DUE TO ANY CONSTRUCTION ACTIVITY. ANY SIGNAGE REQUIRED FOR THE DESIGNATION OF A TEMPORARY PEDESTRIAN ROUTE SHALL BE INCLUDED ON THE APPROVED TRAFFIC CONTROL PLAN. ANY TEMPORARY CLOSURES OF EXISTING SIDEWALKS MUST BE APPROVED BY THE CITY OF BOERNE ENGINEERING & MOBILITY DEPARTMENT IN ADVANCE OF CONSTRUCTION AND AN ALTERNATE ADA COMPLIANT PATH MUST BE PROVIDED IN THE INTERIM IN ACCORDANCE OF PROWAG.

UTILITIES

GENERAL

- ALL CONSTRUCTION, TESTING, CLEANING, AND DISINFECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- CONTRACTOR SHALL NOT OPERATE AN EXISTING VALVES. THE CITY MUST BE PRESENT DURING ANY WORK COMPLETED ON EXISTING CITY UTILITIES. THE CONTRACTOR IS NOT PERMITTED TO COMPLETE GAS WORK ON EXISTING CITY GAS MAINS AT ANY TIME.
- THE CONTRACTOR MUST COORDINATE AND SCHEDULE ALL UTILITY TIE-INS WITH THE CITY. NO TIE-INS SHALL BE MADE TO THE EXISTING UTILITY SYSTEM UNTIL ALL TEST RESULTS HAVE BEEN PROVIDED TO THE CITY AND ARE VERIFIED.
- UNLESS THE DEVELOPER HAS RECEIVED PRIOR WRITTEN PERMISSION BY THE CITY OF BOERNE, ALL UTILITIES, INCLUDING BUT NOT LIMITED TO WATER, RECLAIMED WATER, SEWER, GAS, AND ELECTRIC UTILITIES MUST BE INSTALLED AND TESTED PRIOR TO THE PAVING OF A STREET OR ALLEY OR PORTION THEREOF.
- PRIOR TO RECEIVING BULK WATER, THE CONTRACTOR MUST SUBMIT APPLICATION TO THE UTILITIES DEPARTMENT FOR A BULK WATER METER. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING A CITY APPROVED BACKFLOW DEVICE OR AIR GAP ON ALL JUMPERS PRIOR TO LOADING WATER IN UNAPPROVED MAINS.
- ALL MANHOLES, END OF MAIN CLEANOUTS, VALVES, AND BLOW-OFFS SHALL HAVE CONCRETE ENCASMENTS INSTALLED. ANY ENCASMENTS IN PAVEMENT WILL BE DIAGONAL FROM THE DIRECTION OF TRAFFIC.
- ONE DENSITY TEST PER 8-INCH LIFT IS REQUIRED EVERY 500 FEET FOR TRENCHES UP TO 12 FEET IN DEPTH AND EVERY 300 FEET FOR TRENCHES 12 FEET AND DEEPER. DENSITY TESTING MUST BE COMPLETED FOR EACH LIFT PRIOR TO COMMENCING INSTALLATION OF THE NEXT LIFT. POTHOLES AND STAIR STEPPING IS NOT PERMITTED.
- ALL VALVE BOXES, METER BOXES, FIRE HYDRANTS, MANHOLES, ETC. ARE REQUIRED TO BE ADJUSTED AS REQUIRED TO MATCH FINAL GRADES.
- THE CONTRACTOR IS RESPONSIBLE FOR STAKING UTILITIES AND INSTALLING PROPERTY PINS PRIOR TO THE FINAL INSPECTION TO VERIFY LOCATION, FINISH GRADE, AND DEPTH.
- TRACER WIRE LOCATE BOX SHALL BE INSTALLED PER CITY REQUIREMENTS AT ALL VALVES INCLUDING GAS, RECLAIMED WATER, FIRE HYDRANT VALVES AND BLOWOFFS. FOR GROUPING OF VALVES AT ONE GENERAL LOCATION, ONE LOCATE BOX MAY BE USED.
- WHERE THE MINIMUM NINE (9) FEET SEPARATION BETWEEN WATER AND SANITARY SEWER LINES CANNOT BE MAINTAINED, THE CONTRACTOR MUST MEET THE REQUIREMENTS OF 30 TAC 217.53(d) AND 30 TAC 290.44(e).
- ALL WATER LINES SHALL BE INSTALLED BETWEEN FOUR (4) AND SIX (6) FEET OR AS SHOWN ON THE APPROVED INFRASTRUCTURE DRAWINGS. DEVIATIONS FROM THESE DEPTHS REQUIRES PRIOR APPROVAL.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED BY THE CONTRACTOR PER CITY REQUIREMENTS.
- THE USE OF TEMPORARY JUMPERS IS REQUIRED FOR NEW WATER MAIN INSTALLATION.
- SAMPLE TEST PORTS FOR BACTERIOLOGICAL TESTING SHALL BE PROVIDED ALONG THE WATER MAIN AT THE FREQUENCY AND LOCATION REQUIRED BY THE CITY OF BOERNE OR AT A MINIMUM PER THE TCEQ REQUIREMENTS.
- FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, PASSED BACTERIOLOGICAL TESTING AND THE CITY OF BOERNE RELEASED THE MAIN FOR TIE-IN AND USE.
- BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED WITHIN 40 FEET F THE WATER MAIN.
- NO VALVES OR APPURTENANCES SHALL BE CONSTRUCTED WITHIN CURBS, CURB RAMPS OR LANDINGS. ADDITIONALLY, HYDRANTS AND BLOWOFFS SHALL NOT BE INSTALLED WITHIN SIDEWALKS OR DRIVEWAYS WITHOUT PRIOR AUTHORIZATION.
- ALL FIRE HYDRANTS SHALL BE INSTALLED WITH THE MAIN PUMPER NOZZLE A MINIMUM OF 18", AND A MAXIMUM OF 24" FROM FINISH GRADE, HYDRANTS IN THE RIGHT OF WAY SHALL BE INSTALLED FROM 1' MINIMUM TO 7' MAXIMUM FROM THE FACE OF THE CURB.
- SEWER
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING NO SANITARY SEWER OVERFLOWS (SSOS) OCCUR AS A RESULT OF WORK. CONTRACTOR SHALL CONTACT THE CITY IMMEDIATELY UPON FINDING A SSO.
- ALL PVC SEWER PIPE WITH OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH, SDR 26 MINIMUM PIPE STIFFNESS OF 115 PSI FROM MANHOLE TO MANHOLE.
- ALL SANITARY SEWER MANHOLES REQUIRE CHIMNEY SEALS AND INTERIOR/EXTERIOR COATINGS PER CITY REQUIREMENTS.
- ALL SANITARY SEWER MANHOLES MUST INCLUDE AT LEAST TWO (2) GRADE ADJUSTMENT RINGS FOR A MINIMUM OF FOUR (4) INCHES BUT NO MORE THAN FOUR (4) ADJUSTMENT RINGS FOR A MAXIMUM OF TWELVE (12) INCHES. IF MORE THAN 12 INCHES IS REQUIRED FOR ADJUSTMENT, A SECTION OF THE EXISTING MANHOLE MUST BE REPLACED TO ADJUST THE MANHOLE TO GRADE WITH THE MINIMUM OF 2 ADJUSTMENT RINGS FOR A MINIMUM OF 4 INCHES BEING PROVIDED.
- AFTER COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL THOROUGHLY CLEAN THE SEWER MAINS AND SERVICE LINES AND TESTING WILL BE DONE BY TV CAMERA AND OBSERVED BY THE WASTEWATER ENGINEERING PERSONNEL, AND CONTRACTOR AS THE CAMERA IS RUN. ANY ABNORMALITIES, SUCH AS BROKEN PIPE OR MISALIGNED JOINTS, MUST BE REPLACED BY THE CONTRACTOR AT THEIR OWN EXPENSE. THE CITY WILL REVIEW THE VIDEOS AND PROVIDE REVIEW COMMENTS FOR ACCEPTANCE.
- WHEN SEWER LATERALS ARE TO BE CONNECTED TO EXISTING SEWER MAINS AND NO STUB-OUT HAS BEEN EARLIER PROVIDED, THE CONNECTION MUST BE MADE WITH AN APPROVED SERVICE SADDLE PER CITY REQUIREMENTS.
- NO TESTING WILL BE PERFORMED PRIOR TO 30 DAYS FROM COMPLETE INSTALLATION OF THE

- SANITARY SEWER LINES. THE FOLLOWING SEQUENCE WILL BE STRICTLY ADHERED TO: (1) MANDREL TEST; (2) AIR TEST; (3) TELEVISION. GAS
- ONLY THE CITY OF BOERNE SHALL OPERATE VALVES ON ANY ACTIVE GAS MAIN. IF A VALVE MUST BE OPERATED DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL SCHEDULE THE OPERATION IN ADVANCE THROUGH ENGINEERING & MOBILITY DEPARTMENT.
- ONLY THE CITY OF BOERNE MAY PERFORM WORK ON ANY ACTIVE GAS MAIN.
- GAS VALVE BOXES ON ACTIVE GAS MAINS MUST BE PROTECTED AND REMAIN ACCESSIBLE AT ALL TIMES DURING AND AFTER CONSTRUCTION.
- BEFORE SCHEDULING THE CITY TO PERFORM ANY GAS SYSTEM TIE-IN, THE DESIGN ENGINEER MUST TURN IN PRELIMINARY GAS AS-BUILT RECORD DRAWINGS WITH ALL REQUIRED POLYETHYLENE PRINTLINE DATA INCLUDED FOR ENGINEERING & MOBILITY DEPARTMENT TO REVIEW. APPROVAL OF AS-BUILT RECORD DOCUMENTS IS REQUIRED PRIOR TO ANY TIE-IN BEING PERFORMED.
- PRINTLINE DATA MUST INCLUDE SERIAL NUMBERS, LOCATION AND FOOTAGE OF ALL MAIN LINE PIPE INSTALLED, SERIAL NUMBER, LOCATION AND FOOTAGE FOR EACH LOT ON ALL SERVICE PIPE, SERIAL NUMBER AND LOCATION OF ALL VALVES, AND LOCATION OF ALL TRACER WIRE LOCATE BOXES.
- RECLAIMED WATER
- ALL PORTIONS OF THE RECLAIMED SYSTEM WILL BE MANUFACTURED, PAINTED OR COVERED IN PURPLE MATERIAL TO BE EASILY IDENTIFIABLE.
- ALL FITTINGS, VALVES AND OTHER UNDERGROUND APPURTENANCES NOT EASILY PAINTED MUST BE THOROUGHLY AND SECURELY COVERED IN AN APPROVED PURPLE POLYWRAP MATERIAL. ALL SERVICE FITTINGS, AIR RELEASE VALVES, ETC. MUST BE PAINTED WITH AN APPROVED PAINT, COLOR TO BE PANTONE 522C.
- ALL PLASTIC METER BOX LIDS TO BE MANUFACTURED OF AN APPROVED PURPLE MATERIAL, NO PAINTING OF PLASTIC LIDS ALLOWED.
- ALL DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF 30 TAC 217.69
- A MINIMUM OF 4 FT HORIZONTAL SEPARATION IS TO BE MAINTAINED BETWEEN POTABLE AND RECLAIMED WATER LINES AND SERVICES. WHERE THE MINIMUM 4 FT HORIZONTAL DISTANCE CANNOT BE MAINTAINED, EMBED THE RECLAIMED MAIN IN AN APPROVED CEMENT STABILIZED SAND WITHIN 4 FT OF THE POTABLE WATER LINE OR SERVICE.
- WHERE RECLAIMED WATER MAINS CROSS POTABLE WATER MAINS AND SERVICES AND THE 4 FT MINIMUM DISTANCE CANNOT BE MAINTAINED, CENTER A JOINT OF THE RECLAIMED WATER ON THE POTABLE WATER PIPE, INSTALL THE RECLAIMED WATER MAIN BELOW THE POTABLE WATER WITH A MINIMUM OF 6 IN CLEARANCE, EMBED THE RECLAIMED MAIN IN AN APPROVED CEMENT STABILIZED SAND WITHIN 4 FT OF THE POTABLE WATER LINE OR SERVICE.
- FINAL CONNECTION TO THE EXISTING RECLAIMED SYSTEM MAY NOT OCCUR UNTIL THE RECLAIMED MAINS AND SERVICES HAVE PASSED PRESSURE TESTING, CROSS CONNECTION TESTING AND ARE APPROVED FOR FINAL CONNECTION AND OPERATION BY THE CITY OF BOERNE.
- ELECTRIC
- ALL RIGID NON-METALLIC PIPE, FITTING AND SOLVENT CEMENT FOR UNDERGROUND PRIMARY INSTALLATION SHALL BE SUPPLIED BY THE SAME MANUFACTURER.
- LONG SWEEP ELBOWS SHALL HAVE A MINIMUM 24 IN RADIUS.
- THE CITY OF BOERNE MUST BE PRESENT TO INSPECT AT EACH STAGE OF CONDUIT INSTALLATION, BACKFILL, AND COMPACTION.
- TORCH OR LOW FIRE BENDING OF CONDUITS WILL NOT BE ACCEPTED.
- ALL MANDREL TESTING MUST BE COMPLETED PRIOR TO PROJECT ACCEPTANCE.
- STREETLIGHTS, IF REQUIRED, MUST BE INSTALLED BEFORE ACCEPTANCE ON ALL ELECTRIC SYSTEMS NOT UNDER THE JURISDICTION OF THE CITY OF BOERNE.
- EXCAVATION ADJACENT TO EXISTING POWER POLES WILL REQUIRE TEMPORARY BRACING AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO PROVIDE BRACING PLAN FOR UTILITY DEPARTMENT APPROVAL PRIOR TO EXCAVATION.

TREES

- A TREE REMOVAL PERMIT IS REQUIRED PRIOR TO REMOVAL OF ANY TREE WITHIN THE CITY LIMITS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN PROTECTIVE FENCING AT THE DRIP LINE OF ALL PROTECTED EXISTING TREES, UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DRAWINGS. ANY DAMAGE TO ON-SITE OR OFF-SITE PRESERVED TREES DURING CONSTRUCTION RESULTING IN >25% CANOPY LOSS OR ROOT/TRUNK DAMAGE THAT WILL RESULT IN TREE MORTALITY SHALL BE MITIGATED ACCORDING TO SECTION 8.3.E OF THE CITY OF BOERNE UNIFIED DEVELOPMENT CODE AT THE CONTRACTOR'S EXPENSE.
- ALL PROTECTIVE MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY SITE OR GRADING WORK AND REMAIN IN PLACE UNTIL ALL EXTERIOR WORK HAS BEEN COMPLETED.
- THE CITY URBAN FORESTER SHALL BE CONTACTED TO APPROVE THE PLACEMENT OF THE TREE PRESERVATION FENCING PRIOR TO BEGINNING OF SITE WORK ON PROPERTY.
- THE FOLLOWING ACTIVITIES SHALL BE PROHIBITED WITHIN THE LIMITS OF THE PRIMARY ROOT ZONE: MATERIAL STORAGE, EQUIPMENT CLEANING/LIQUID DISPOSAL, AND CONSTRUCTION EQUIPMENT/VEHICULAR TRAFFIC. NO SIGNS OR WIRES SHALL BE ATTACHED TO TREES.
- UNLESS SPECIFICALLY ALLOWED, NO GRADE CHANGES SHALL BE ALLOWED WITHIN THE LIMITS OF THE ROOT PROTECTION ZONE OF ANY PROTECTED TREE UNLESS THE CITY URBAN FORESTER APPROVES ADEQUATE CONSTRUCTION METHODS.
- NO TRIMMING OF TREES MAY OCCUR WITHIN THE TREE PRESERVATION FENCING LIMITS WITHOUT PRIOR CONSENT OF THE CITY URBAN FORESTER.

REVEGETATION

- ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE CONTRACTOR MUST LOOSEN THE SURFACE OF THE SOIL TO A DEPTH OF 2 INCHES AND REMOVE ALL STONES AND DEBRIS OVER 2 INCHES IN ANY DIMENSION. ALL AREAS FOR REVEGETATION REQUIRE A MINIMUM OF 4 INCHES OF SOIL, OVERCUTTING OF ROCK SUBGRADE MAY BE REQUIRED. ADDITIONAL TOPSOIL FROM THE STOCKPILED TOPSOIL MAY BE NECESSARY TO BRING TO REQUIRED GRADES AND FOR RE-ESTABLISHING VEGETATION. THE AREA SHALL THEN BE REVEGETATED AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREA DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR.
- THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTIVE COVER (GRASS) FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION OF THE PERMITTED PROJECT. THE PROTECTIVE COVER MUST BE INSTALLED WITHIN 14 DAYS AFTER FINAL GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER MUST BE ESTABLISHED WITHIN 60 DAYS OF ITS INSTALLATION.
- AT LEAST 85% OF ALL DISTURBED AREAS MUST HAVE VEGETATION ESTABLISHED PRIOR TO ACCEPTANCE BY THE CITY OF BOERNE.
- DISTURBED AREAS THAT ARE SEEDED OR SODDED SHALL BE CHECKED PERIODICALLY TO SEE THAT GRASS COVERAGE IS PROPERLY MAINTAINED. DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND RE-SEED OR RE-SODDED IF NECESSARY.

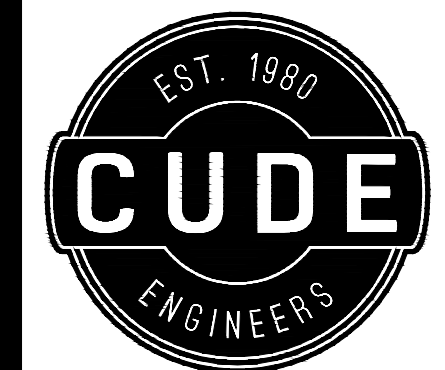
RECORD DRAWINGS

- UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER A COPY OF AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.
- THE DESIGN ENGINEER SHALL PROVIDE TO THE CITY OF BOERNE THE "PLAN OF RECORD", SIGNED AND SEALED BY THE DESIGN ENGINEER.
- THE "PLAN OF RECORD" MUST INCLUDE PRINT LINE DATA AND PIPE TESTING INFORMATION FOR ALL GAS MAINS AND SERVICE LINES.

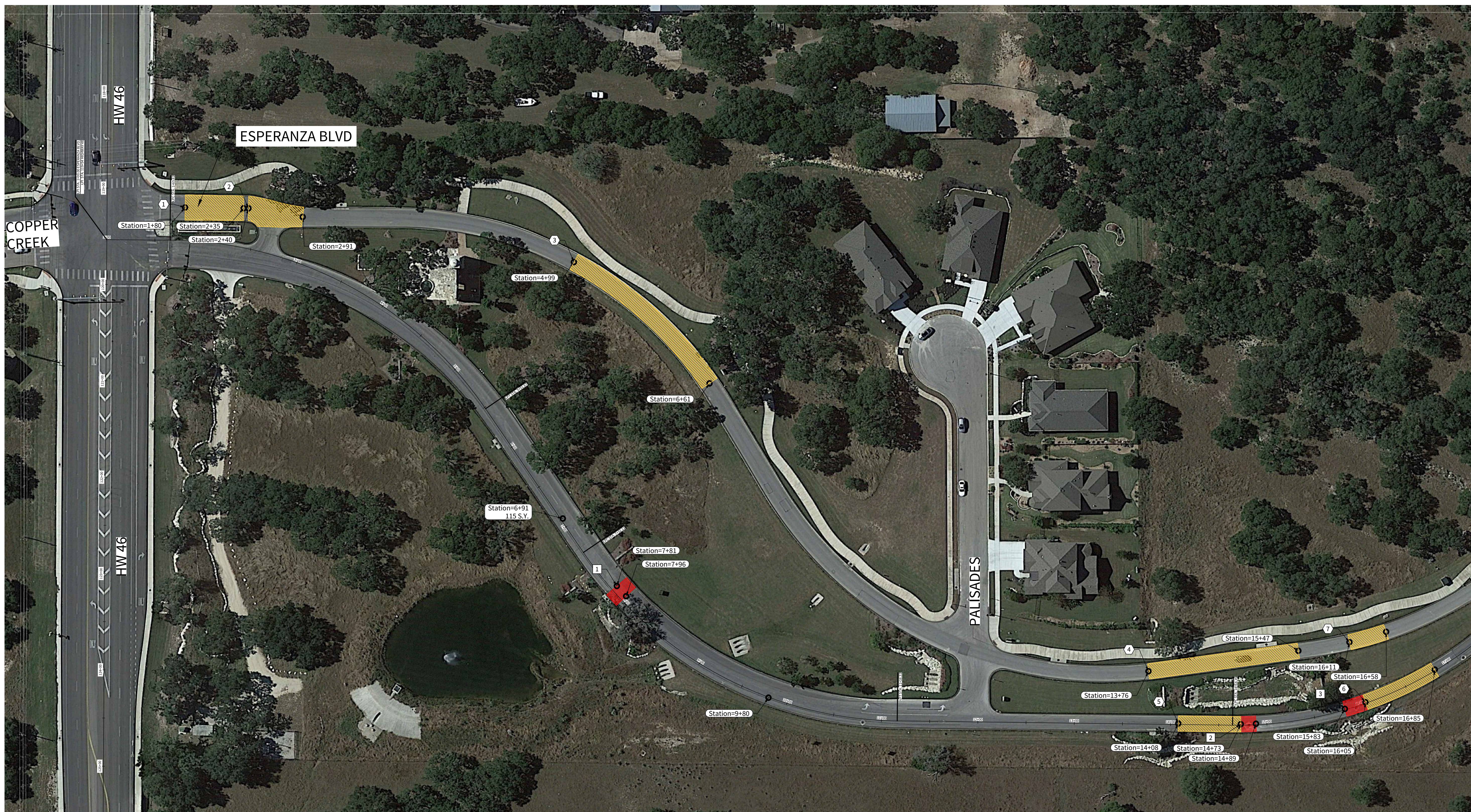
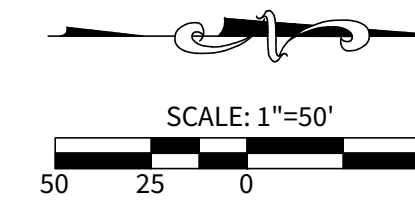
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4/15/2026
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 TBPE No. 455
 TBPLS No. 10048500

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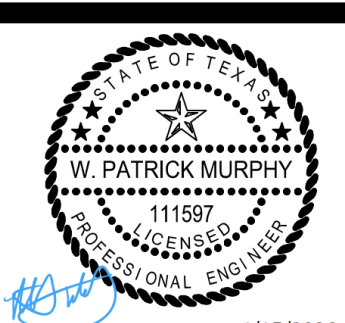


NOTES:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION
COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

ESPERANZA BOULEVARD - PHASE III
ESPERANZA BLVD. PAVEMENT REPAIR PLAN 1 OF 6

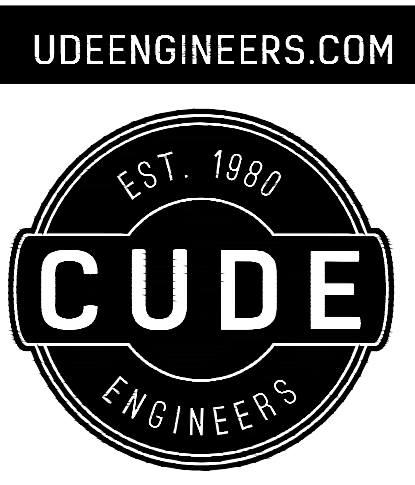
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4/15/2026
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

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ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT REPAIR PLAN 2 OF 6

DATE
04/13/2026

PROJECT NO.
03154.009

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4/15/2026
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TBPLS No. 10048500

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MATCHLINE STA. 17+50

MATCHLINE STA. 35+25

SHEET INDEX



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ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT REPAIR PLAN 3 OF 6

DATE
04/13/2026

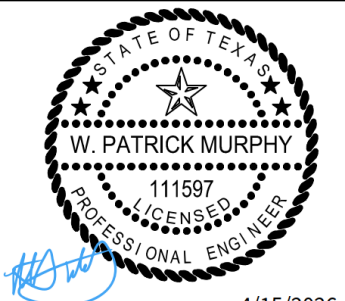
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4/15/2026
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

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MATCHLINE STA. 35+25

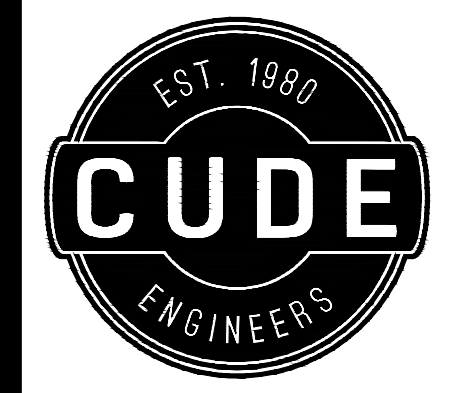


MATCHLINE STA. 52+00

SHEET INDEX



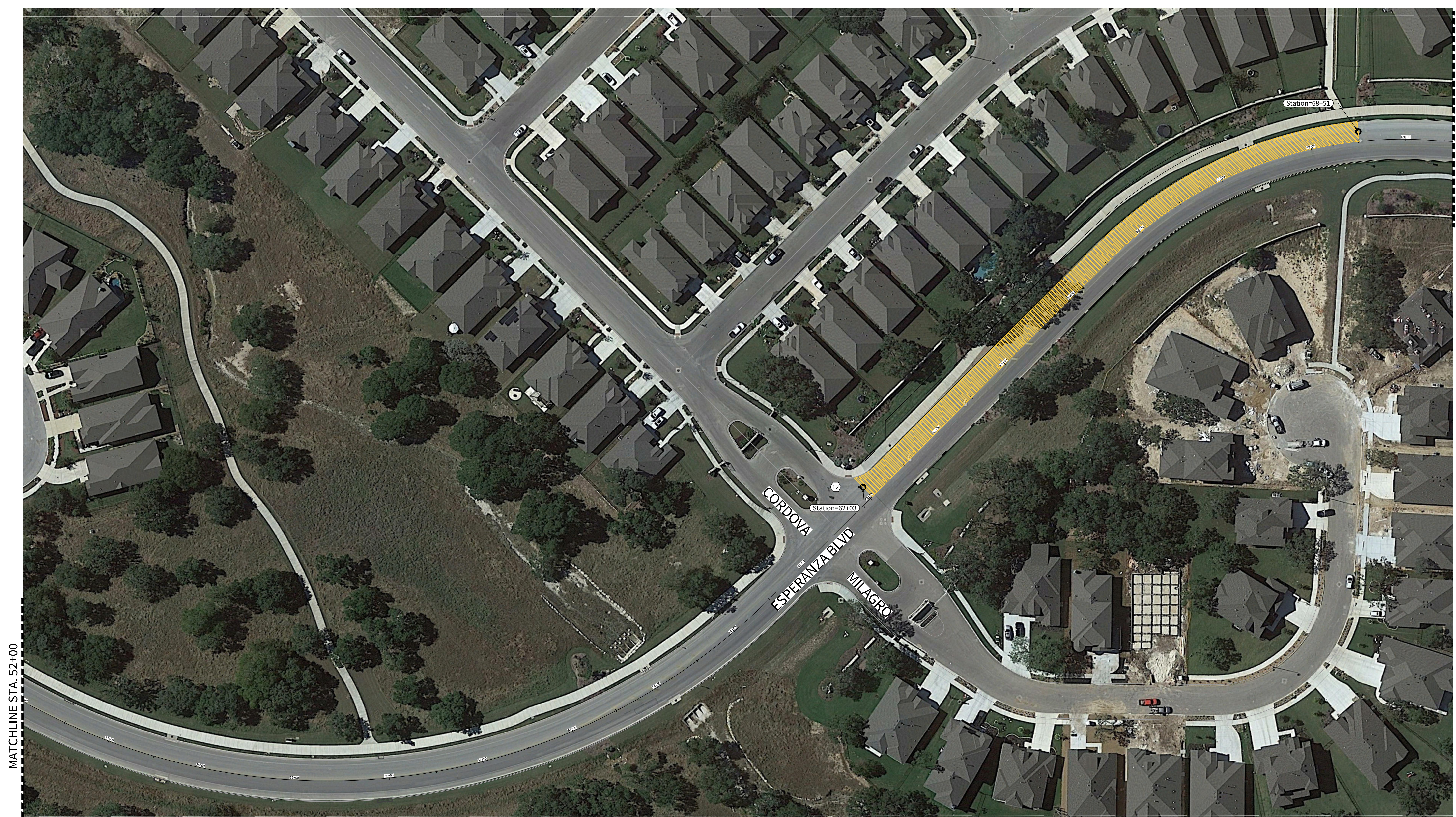
NOTES:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION
COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.



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ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT REPAIR PLAN 4 OF 6

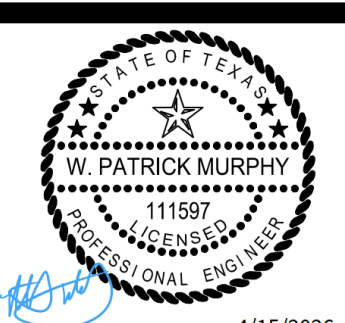


MATCHLINE STA. 52+00

MATCHLINE STA. 69+50

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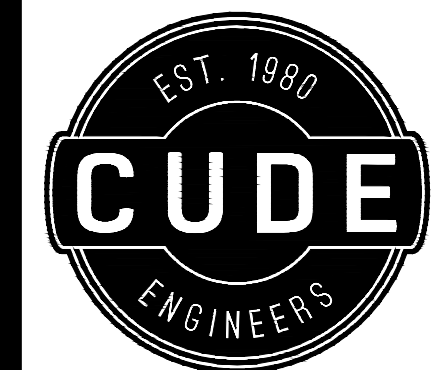
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NOTES:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

SHEET INDEX



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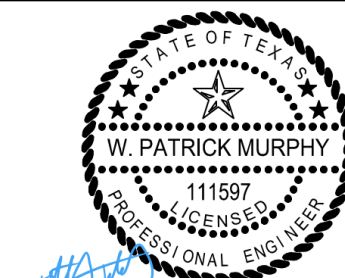
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ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT REPAIR PLAN 5 OF 6

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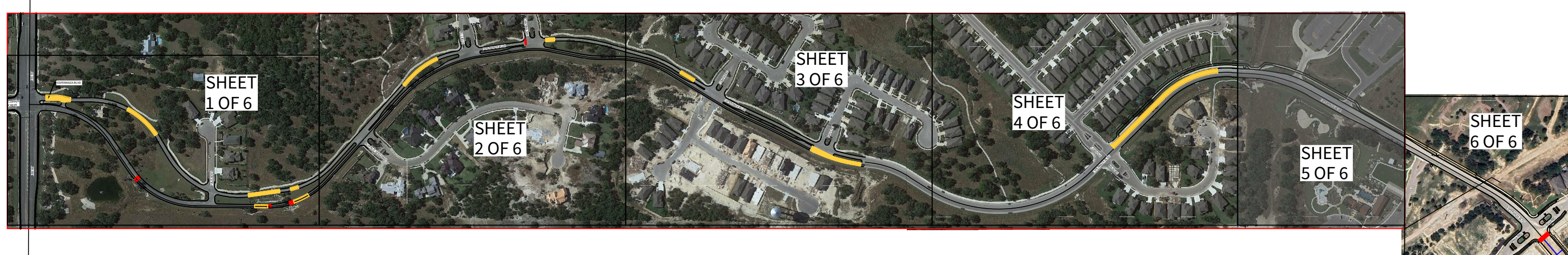


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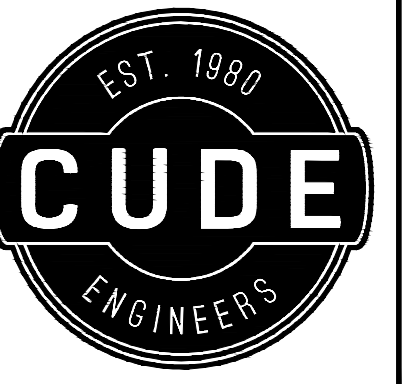
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SHEET INDEX



NOTES:
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COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.



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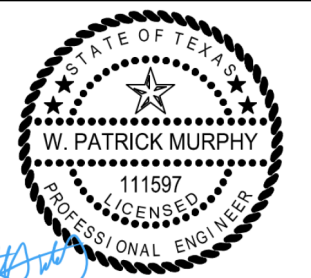
ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT REPAIR PLAN 5 OF 6

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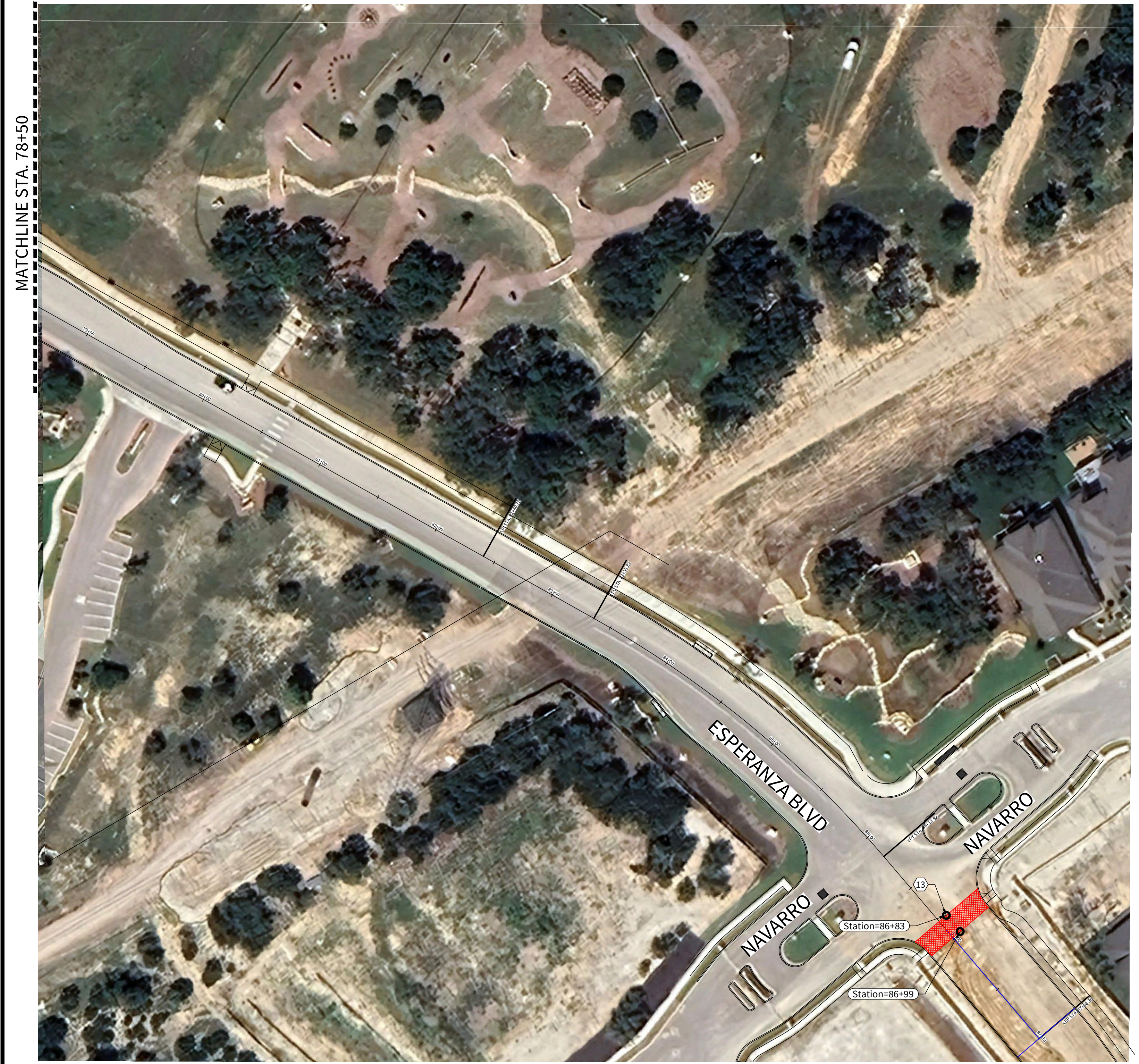


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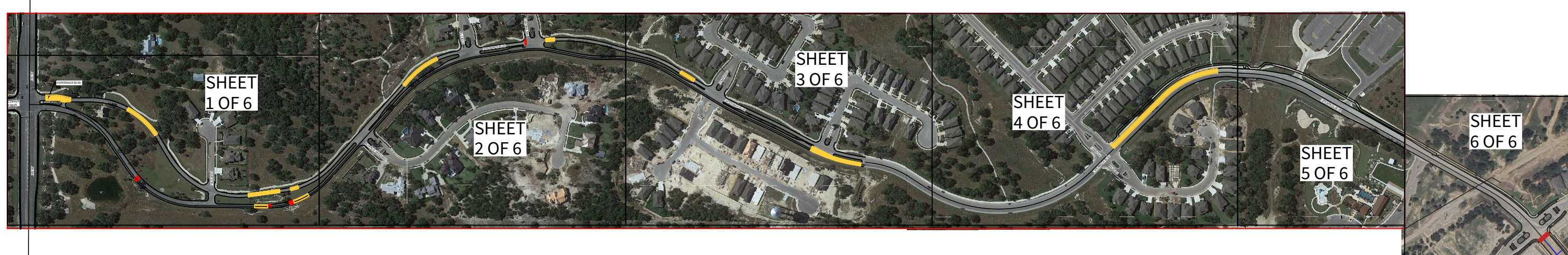
BASE BID ITEM REPAIRS	RT-Northbound Lane / LT-Southbound Lane	Approx. Start Station	Location Description	Repair Needed	Quantity
712		1+80 LT	Pavement Cracking	Crack Seal	.01 MI ①
712		2+40 LT	Pavement Cracking	Crack Seal	.01 MI ②
712		4+99 LT	Pavement Cracking	Crack Seal	.04 MI ③
712		13+76 LT	Pavement Cracking	Crack Seal	.03 MI ④
712		14+08 LT	Pavement Cracking	Crack Seal	.01 MI ⑤
712		16+06 RT	Pavement Cracking	Crack Seal	.02 MI ⑥
712		16+11 LT	Pavement Cracking	Crack Seal	.01 MI ⑦
712		24+01 LT	Pavement Cracking	Crack Seal	.04 MI ⑧
712		31+21 LT	Pavement Cracking	Crack Seal	.01 MI ⑨
712		38+00 LT	Pavement Cracking	Crack Seal	.01 MI ⑩
712		45+50 RT	Pavement Cracking	Crack Seal	.05 MI ⑪
712		62+03 LT	Pavement Cracking	Crack Seal	.12 MI ⑫
351		86+83 LT & RT	Hump In Pavement	Flexible Pavement structure Repair	102 SY ⑬

ALTERNATE BID ITEM REPAIRS	RT-Northbound Lane / LT-Southbound Lane	Approx. Start Station	Location Description	Repair Needed	Quantity
351		7+81 RT	Pavement Failure	Flexible Pavement structure Repair	44 SY ①
7196		7+81 RT	Valve Box Damaged	Reconstruct Valve Box	1 EA ②
351		14+73 RT	Pavement Failure	Flexible Pavement structure Repair	25 SY ③
479		14+73 RT	Manhole Encasement Damaged	Reconstruct Manhole Encasement	1 EA ④
351		15+83 RT	Pavement Failure	Flexible Pavement structure Repair	40 SY ⑤
479		15+83 RT	Manhole Encasement Damaged	Reconstruct Manhole Encasement	1 EA ⑥
351		30+29 LT	Pavement Failure at Joint	Flexible Pavement structure Repair	14 SY ⑦

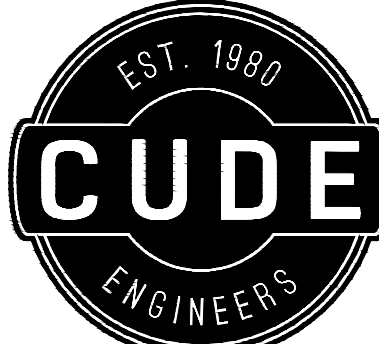


MATCHLINE STA. 78+50

SHEET INDEX

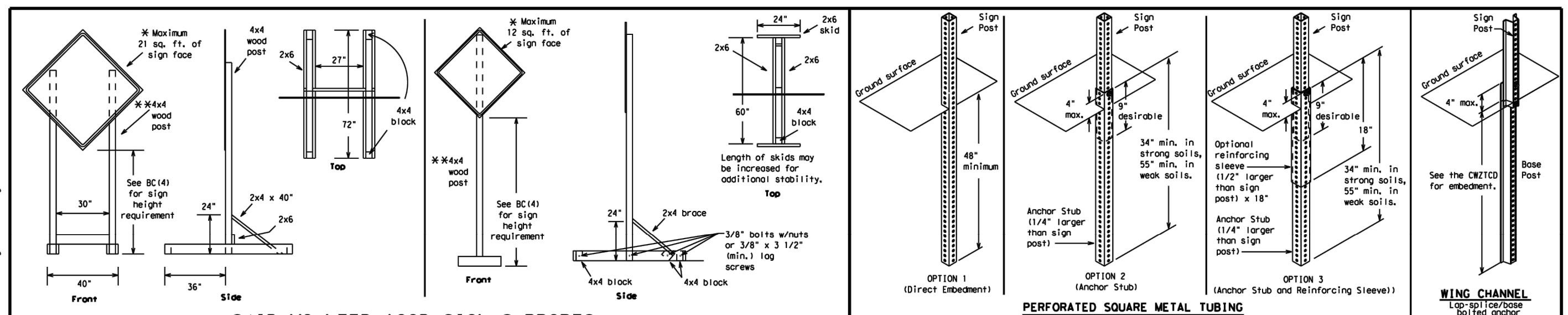


NOTES:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

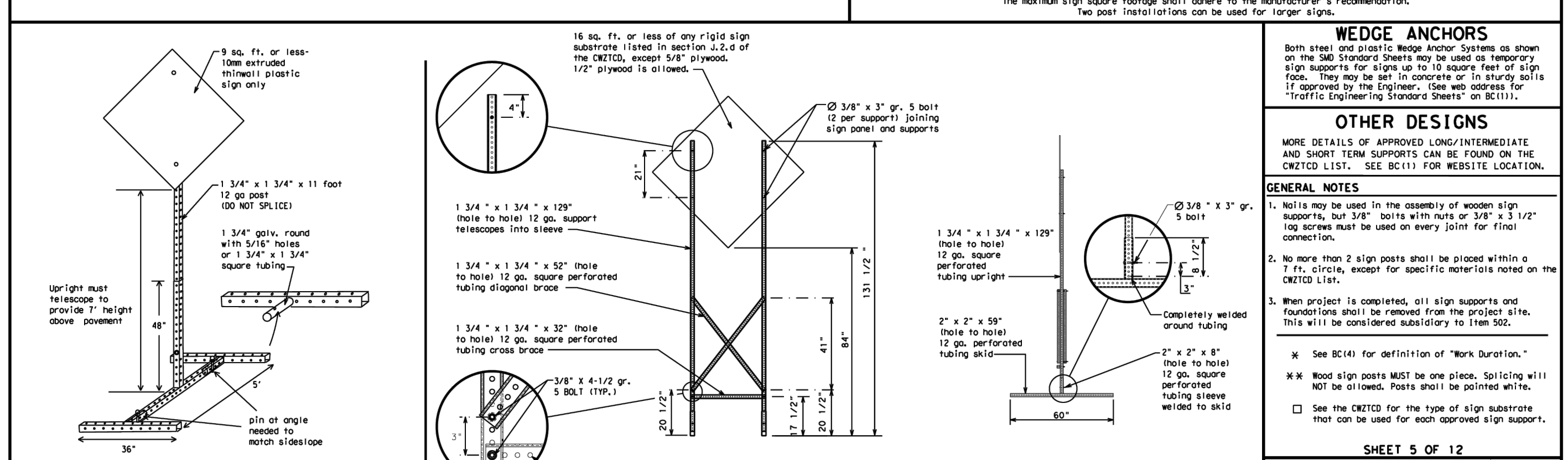


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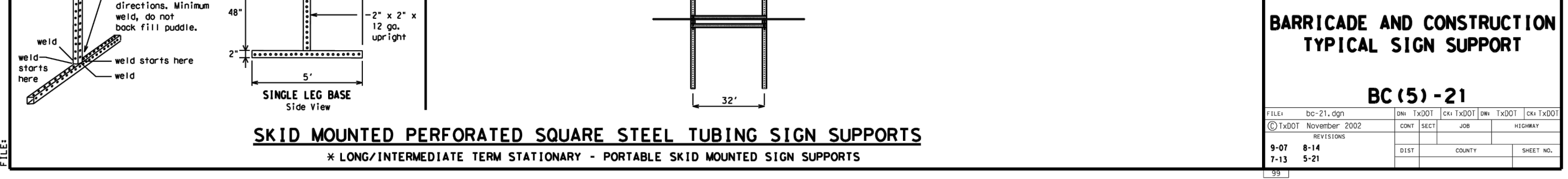
ESPERANZA BOULEVARD - PHASE III
TXDOT DETAILS - BARRICADES & CONSTRUCTION 1 OF 3



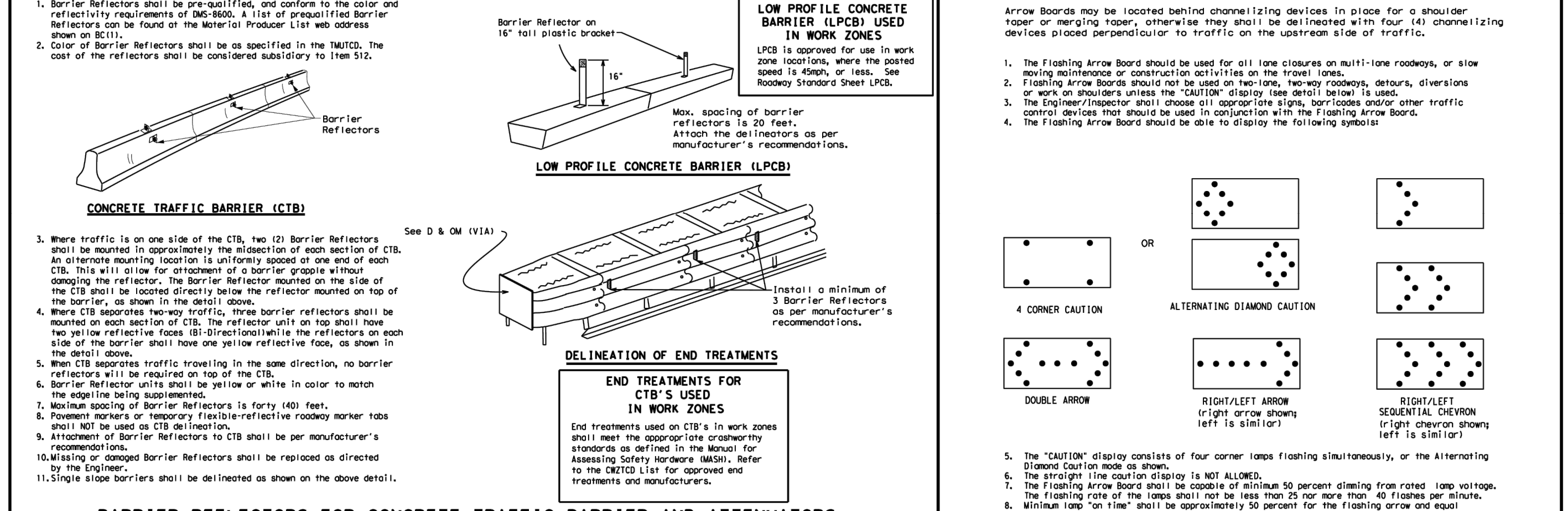
SKID MOUNTED WOOD SIGN SUPPORTS
LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS



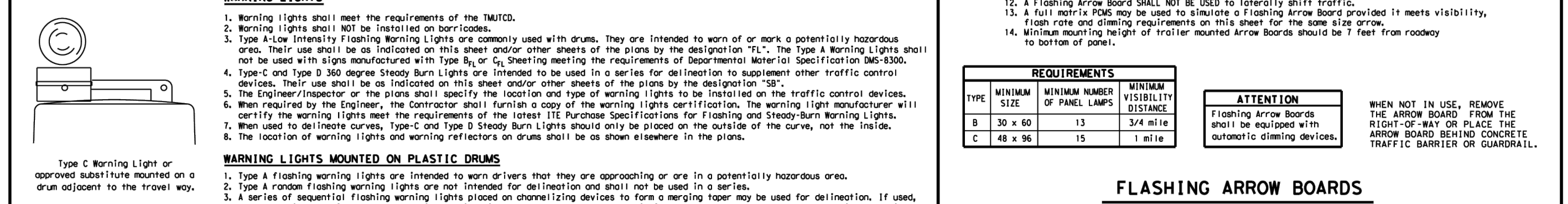
SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS
LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS



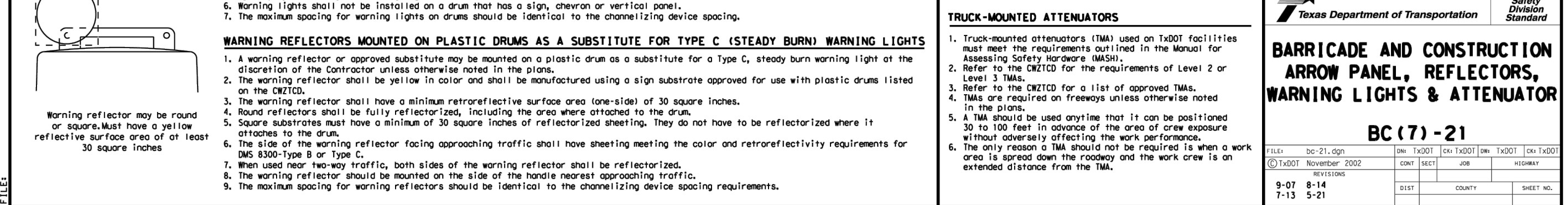
BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT
BC (5) - 21



BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



FLASHING ARROW BOARDS



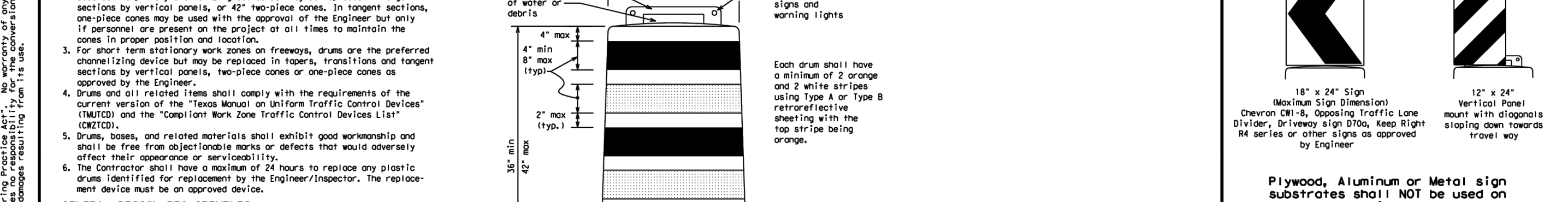
BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR
BC (7) - 21

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES
(The Engineer may approve other messages not specifically covered here.)

Table with columns for Phase 1: Condition Lists, Phase 2: Possible Component Lists, and various message formats like MERGE, DETOUR, etc.

Table with columns for WORD OR PHASE, ABBREVIATION, WORD OR PHASE, ABBREVIATION, and a list of traffic signs with their abbreviations.

GENERAL NOTES



GENERAL DESIGN REQUIREMENTS

- List of design requirements for signs on plastic drums, including material, mounting, and visibility criteria.

RETROREFLECTIVE SHEETING

- Requirements for retroreflective sheeting, including material type, application, and maintenance.

DETECTABLE PEDESTRIAN BARRICADES

- Requirements for detectable pedestrian barricades, including material, height, and placement.

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES
BC (8) - 21

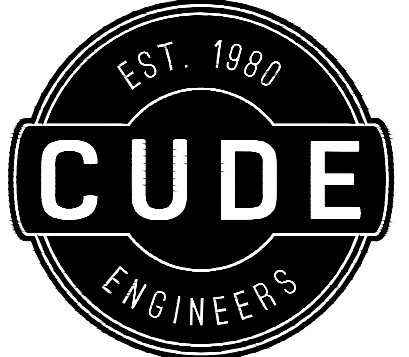
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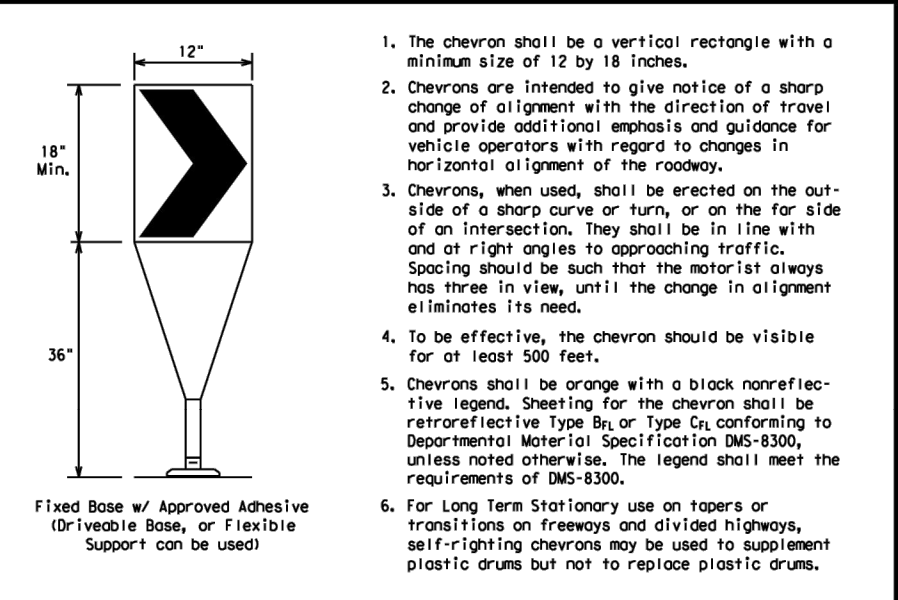
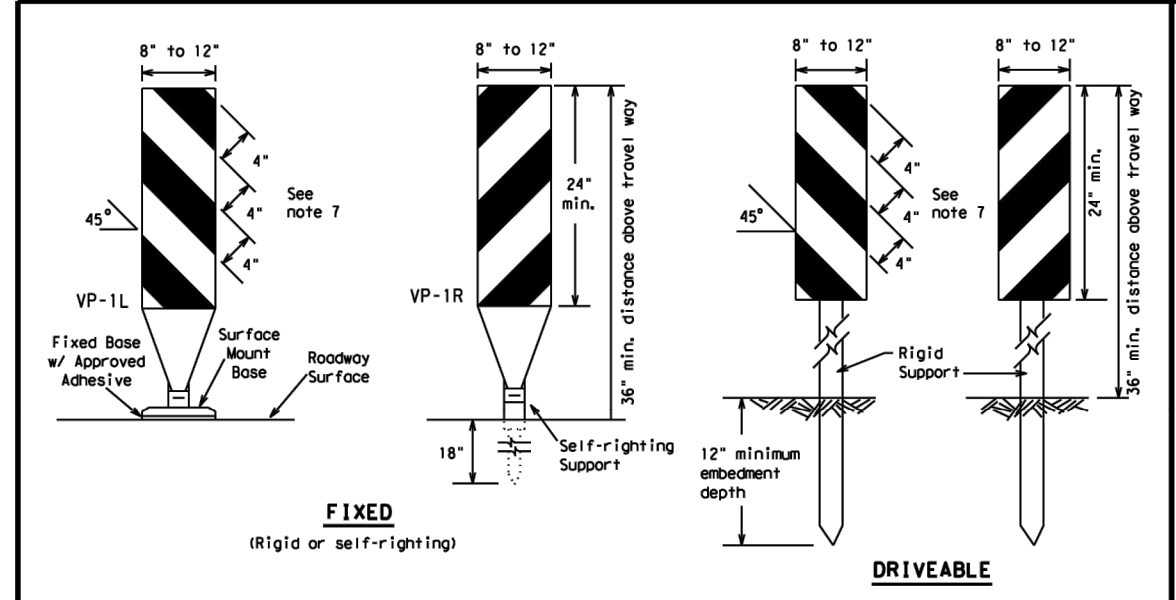
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7 OF 12

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1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment...
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn...
4. To be effective, the chevron should be visible for at least 300 feet.
5. Chevrons shall be orange with a black non-reflective legend...
6. For long term stationary use on topers or transitions on freeways and divided highways, self-lighting chevrons may be used to supplement plastic drums but not to replace plastic drums.

Table with 3 columns: POSTAL SPEED, Formula, and Suggested Maximum Spacing of Channelizing Devices. Includes a note: 'All taper lengths have been rounded off. Lengths of taper (T.L.) within 0.01 ft. tapered speed (mph)'. Includes a 'SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS' table.

Table with 4 columns: POSTAL SPEED, Formula, and Suggested Maximum Spacing of Channelizing Devices. Includes a 'SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS' table.

Table with 4 columns: DATE, TIME, and SHEET NO. Includes 'BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES' and 'BC (9) - 21'.

1. Vertical Panels (VPs) are normally used to channelize traffic or device spacing lanes of traffic.
2. VPs may be used in daytime or nighttime situations...
3. VP's should be mounted back to back if used on the edge of cuts adjacent to two-way two lane roadways...
4. VPs used on expressways and freeways or other high speed roadways...
5. Self-lighting supports are available with portable bases...
6. Sheeting for VPs shall be retroreflective Type A or Type B conforming to Departmental Material Specification DM-8300...
7. Where the height of reflective material on the vertical panel is 16 inches or greater, a panel stripe of 6 inches shall be used.

1. LDs are crowfoot, lightweight, deformable devices that are highly visible, have good target value and can be connected together...
2. LDs may be used instead of a line of cones or drums...
3. LDs shall be placed in accordance to application and installation requirements specific to the device...
4. LDs should not be used to provide positive protection for obstacles, pedestrians or workers...
5. LDs shall be supplemented with retroreflective delineation as required for temporary workers on BCTI...
6. LDs used as barriers placed perpendicular to traffic should have at least one end of reflective sheeting meeting the requirements for barrier rolls as shown on BCTI...
7. Where the height of reflective material on the vertical panel is 16 inches or greater, a panel stripe of 6 inches shall be used.

1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to separate a normal one-way roadway section to two-way operation...
2. The OTLD shall be placed in accordance to application and installation requirements...
3. Spacing between the OTLD shall not exceed 500 feet...
4. The OTLD shall be orange with a black non-reflective legend...
5. When used on a 'tope' in a closed area, the taper length shall be increased and the taper length should be designed to optimize road user operations considering the available geometric conditions.

1. Water ballasted systems used as barriers shall not be used solely to channelize road users...
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation...
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements...
4. Water ballasted systems used on barriers should not be used for a merging taper...
5. When water ballasted systems used as barriers have burst and exposed to traffic, they should be attenuated as per manufacturer's recommendations or fixed to a solid surface.

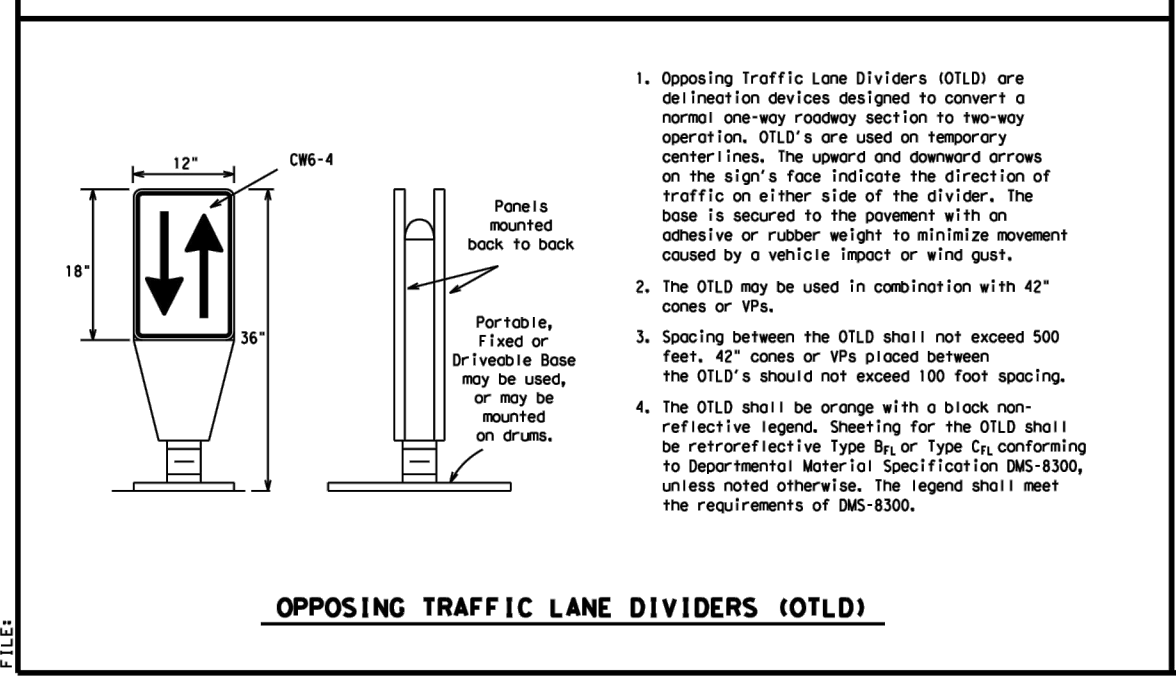
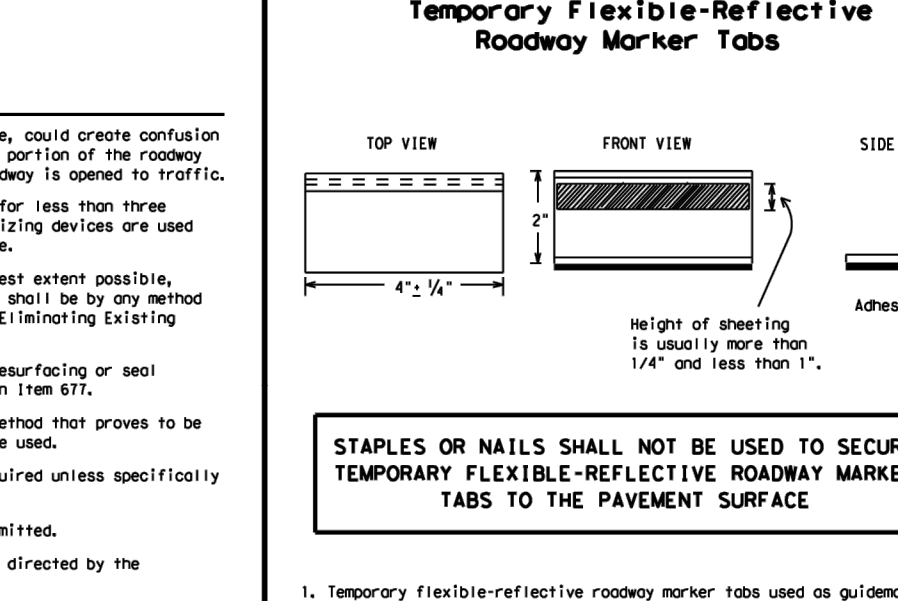


Table with 4 columns: DATE, TIME, and SHEET NO. Includes 'BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES' and 'BC (9) - 21'.

1. The contractor shall be responsible for maintaining work zone and existing pavement markings...
2. Color, patterns and dimensions shall be in accordance with the 'Texas Manual on Uniform Traffic Control Devices' (TMUD)...
3. Additional supplemental pavement markings shall be used in the plans or specifications...
4. Pavement markings shall be installed in accordance with the TMUD and as shown on the plans...
5. When short term markings are required on the plans, short term markings shall conform with the TMUD...
6. When standard pavement markings are not in place and the roadway is closed to traffic, 30 inch PASS signs shall be erected to mark the beginning of the sections where passing is prohibited...
7. All work zone pavement markings shall be installed in accordance with Item 662, 'Work Zone Pavement Markings'.



1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DM-8245...
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative...
3. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division...
4. See Standard Sheet R212T-1 for tab placement on seal coat work.

1. Raised pavement markers used as guidemarks shall be from the approved product list...
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer...
3. Adhesive for guidemarks shall be continuous material not applied or built rubber pad for all surfaces...
4. Guidemarks shall be designated as: WHITE - low silver reflective surface with white body; BLACK - black reflective surface with black body.

Table with 4 columns: DATE, TIME, and SHEET NO. Includes 'BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS' and 'BC (11) - 21'.

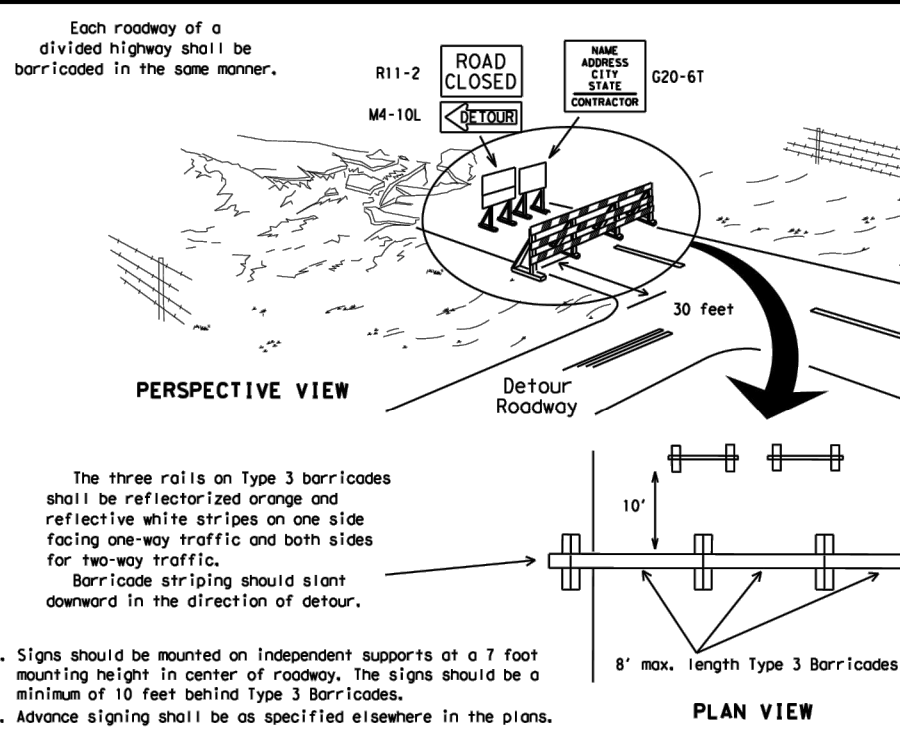
1. Raised pavement markers are to be placed according to the patterns on BC112...
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, 'RAISED PAVEMENT MARKERS' and Departmental Material Specification DM-4200 or DM-4300.

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits...
2. Work zone pavement markings shall be installed in accordance with the frequency and spacing requirements of work zone traffic control device instructions as required by Form 595...
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by auxiliary low-beam headlights at night...
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the contractor as per Specification Item 662.

1. Reflective pavement markers used as guidemarks shall be from the approved product list...
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer...
3. Adhesive for guidemarks shall be continuous material not applied or built rubber pad for all surfaces...
4. Guidemarks shall be designated as: WHITE - low silver reflective surface with white body; BLACK - black reflective surface with black body.

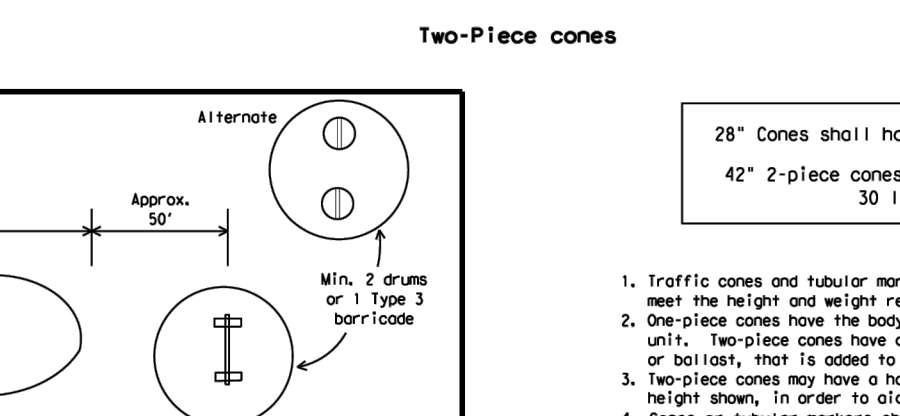
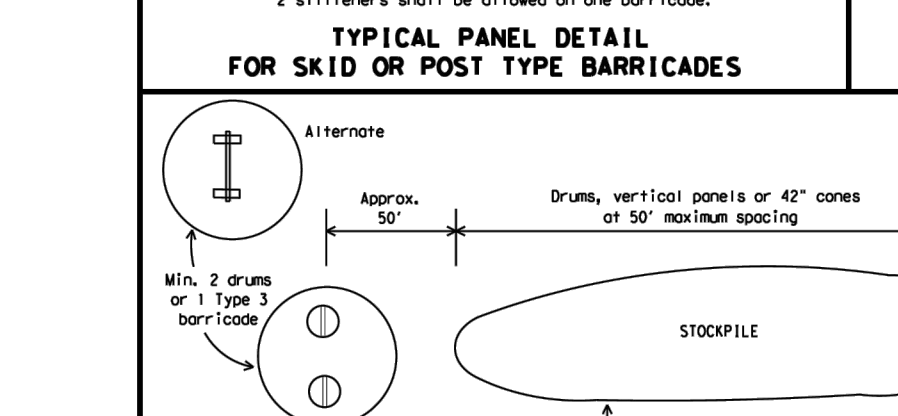
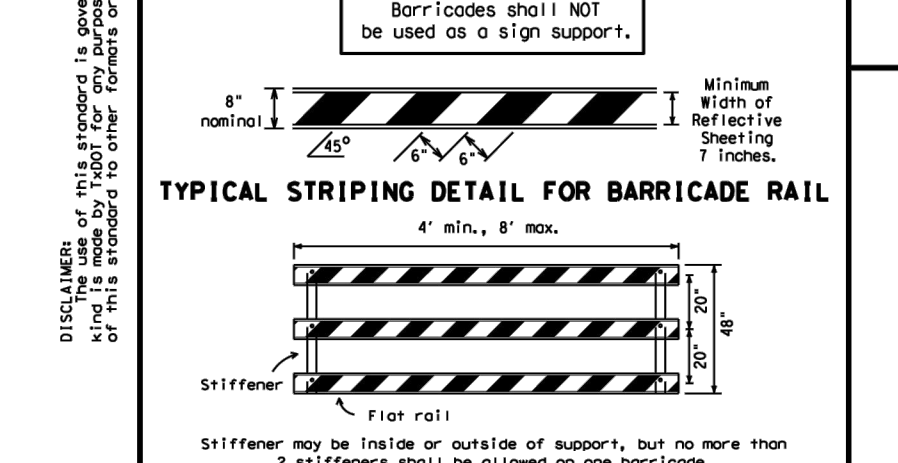
Table with 4 columns: DATE, TIME, and SHEET NO. Includes 'BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS' and 'BC (11) - 21'.

1. Refer to the Companion Work Zone Traffic Control Devices List (CWZCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades...
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic...
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring...
4. Striping of rolls, for the right side of the roadway, should slope downward in the direction toward the center of the roadway...
5. Identification markings may be shown only on the back of the barricade rolls...
6. Barricades shall be placed parallel to traffic unless an adequate warning lights shall be installed on barricades...
7. Barricades require the use of weights to keep from turning over...
8. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesive, the fixed mount bases and the pavement surface...
9. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surface...
10. The Engineer/Inspector shall approve all application and removal procedures of Fixed Bases.

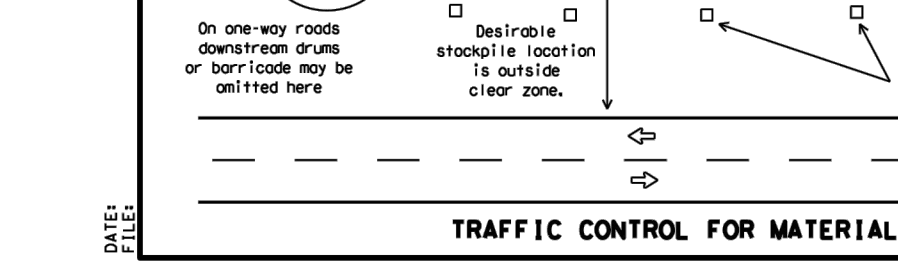


1. Where positive reflective capability is provided, drums may be omitted...
2. Plastic construction fencing may be used with drums for safety as required in the plans...
3. Vertical poles on flexible support may be substituted for drums when the shoulder width is less than 4 feet...
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used...
5. Drums must extend the length of the curbed widening.

1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway...
2. Advance signing shall be as specified elsewhere in the plans.



1. Traffic cones and tubular markers shall be predominantly orange and meet the height and weight requirements shown above...
2. One-piece cones have the body and base of the cone formed in one consolidated unit...
3. Two-piece cones may have a handle or loop extending up to 6 inches above the minimum height shown...
4. Cones or tubular markers shall have white or white orange reflective bands as shown above...
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work...
6. 42" non-reflective cones, vertical panels or drums are suitable for all work zone durations...
7. Cones or tubular markers used on each project should be of the same size and shape.



28" Cones shall have a minimum weight of 9 1/2 lbs. 42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

Table with 4 columns: DATE, TIME, and SHEET NO. Includes 'BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES' and 'BC (10) - 21'.

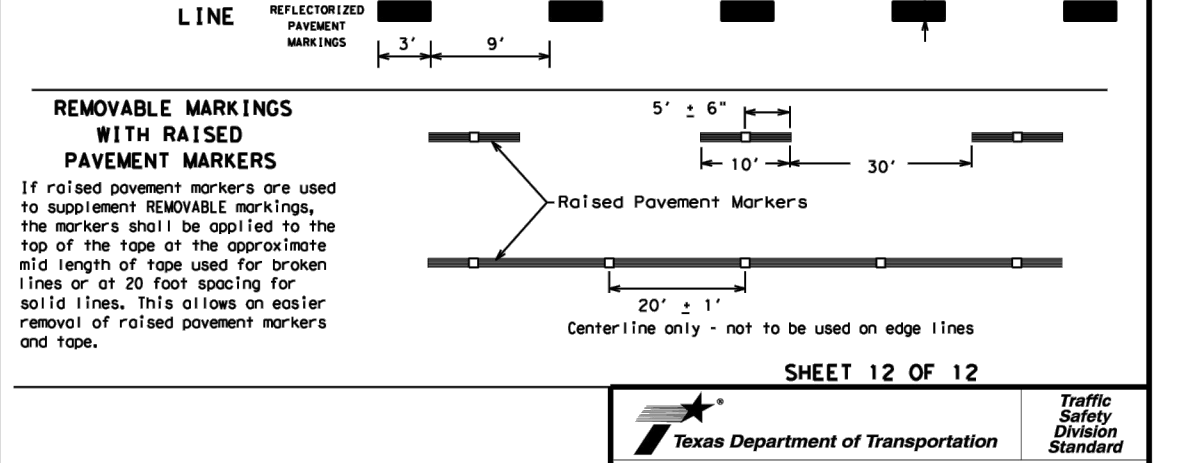
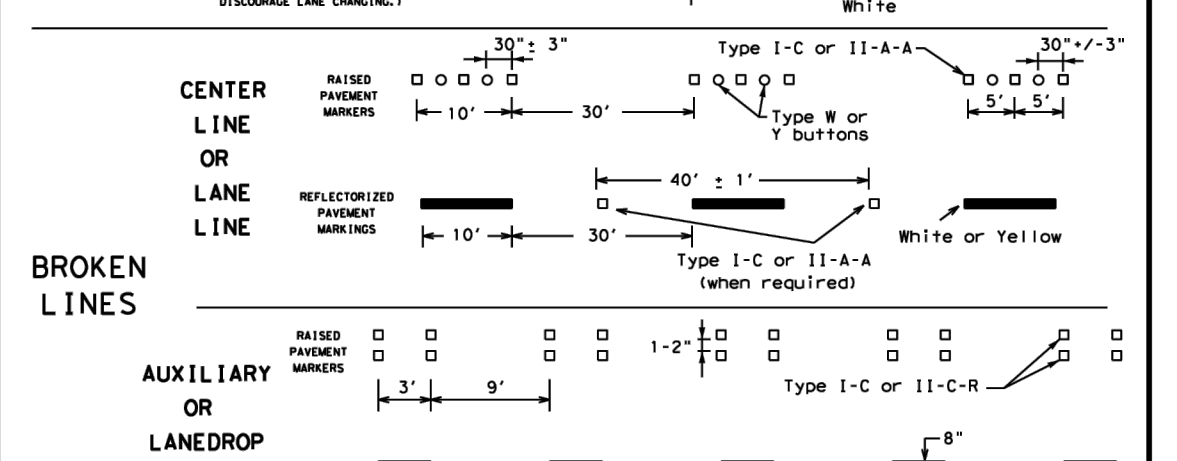
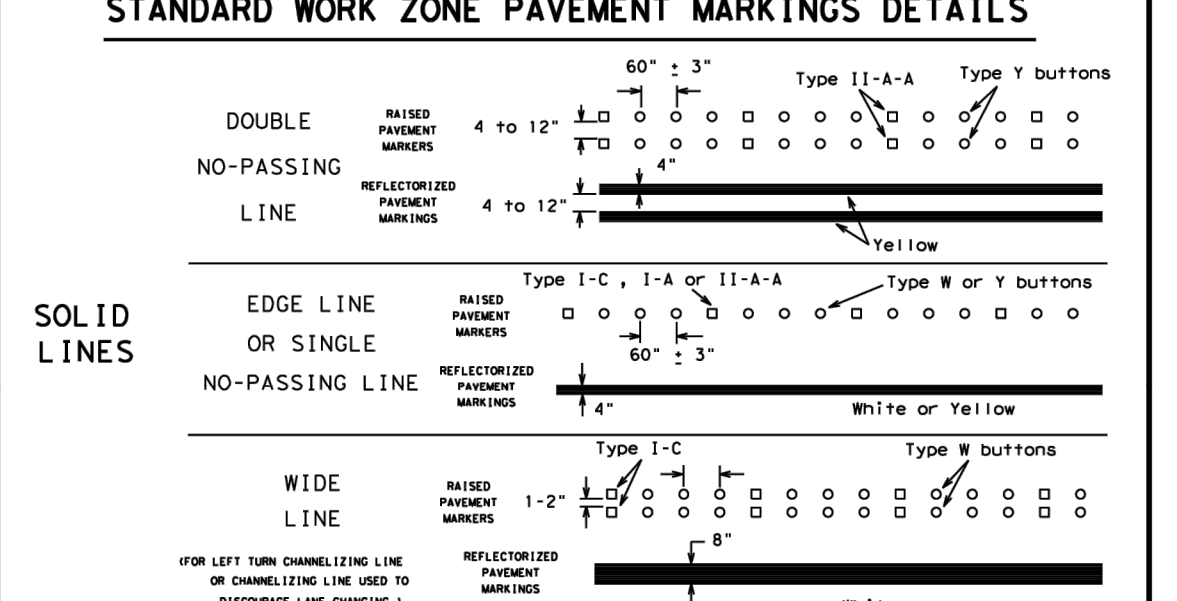
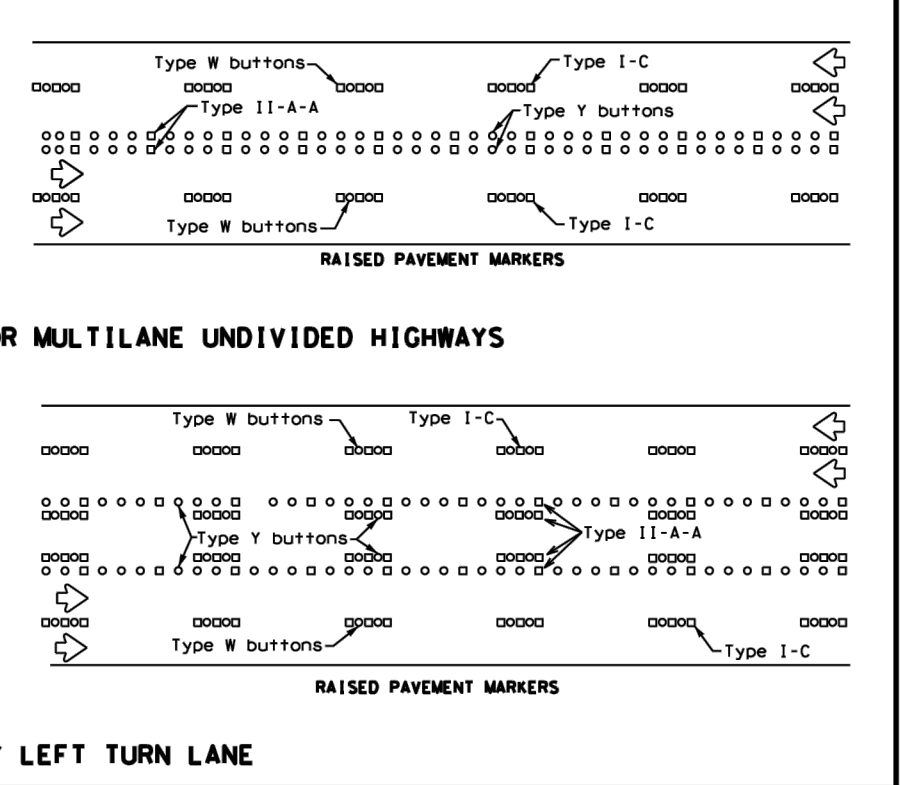
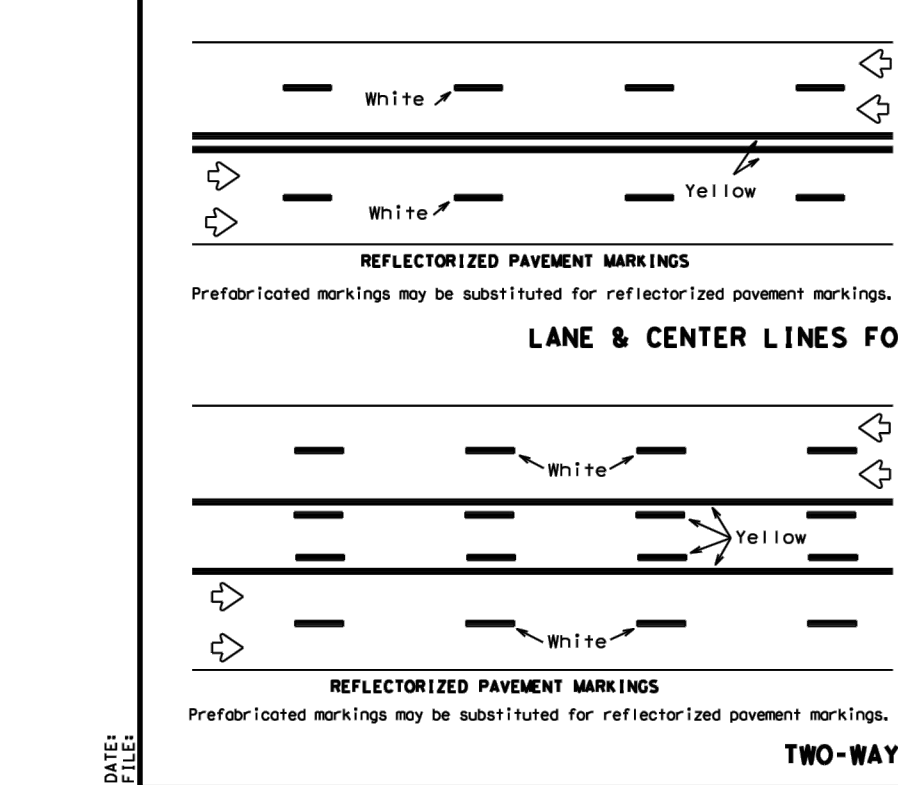
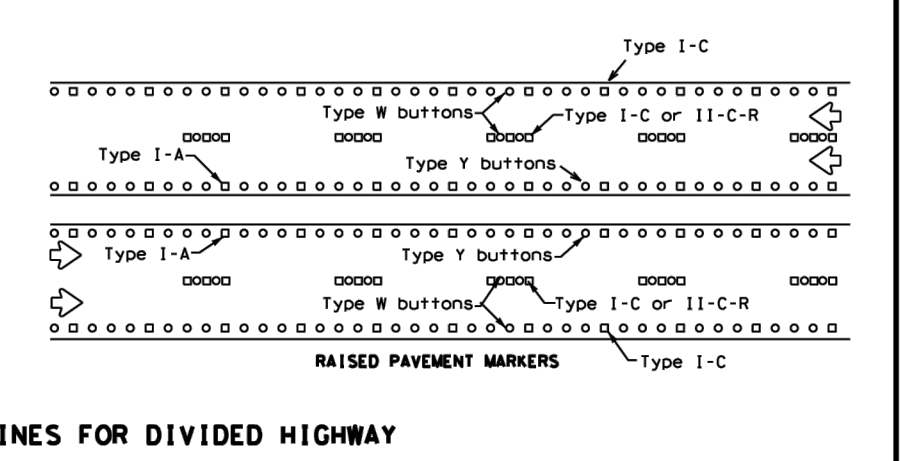
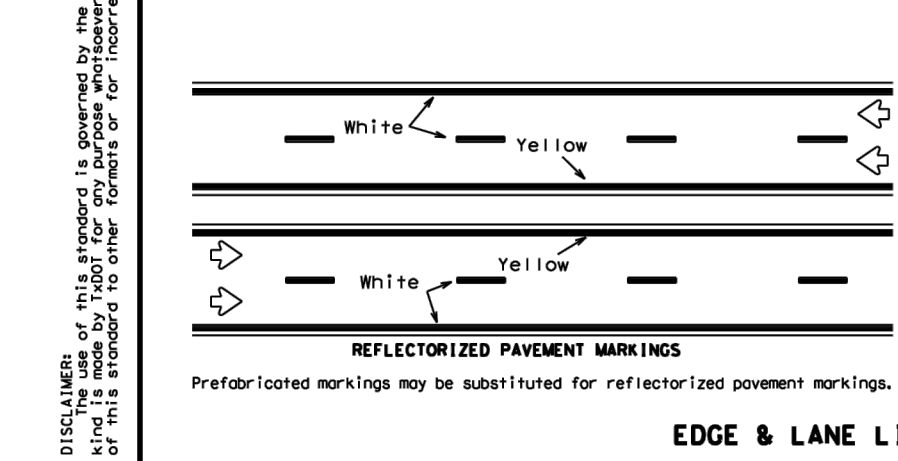
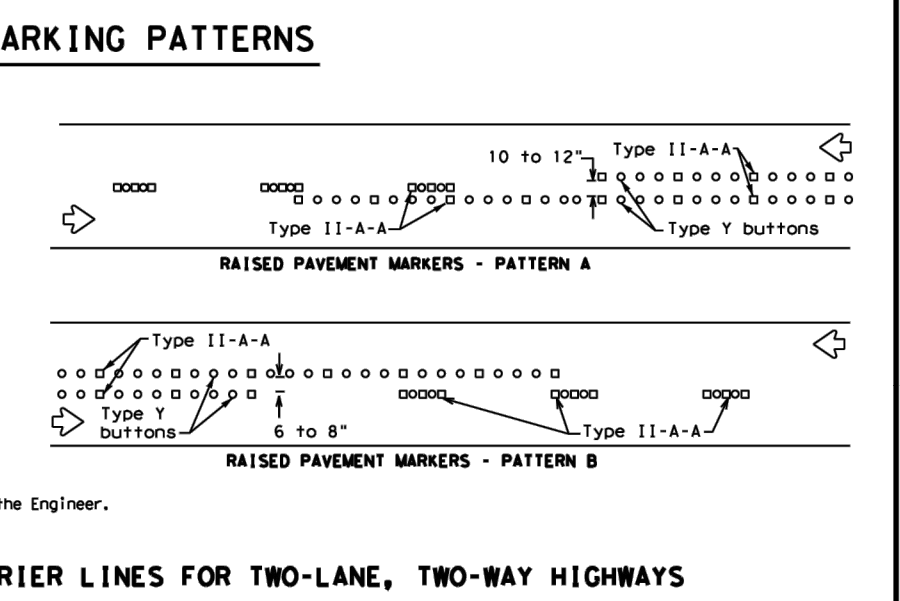
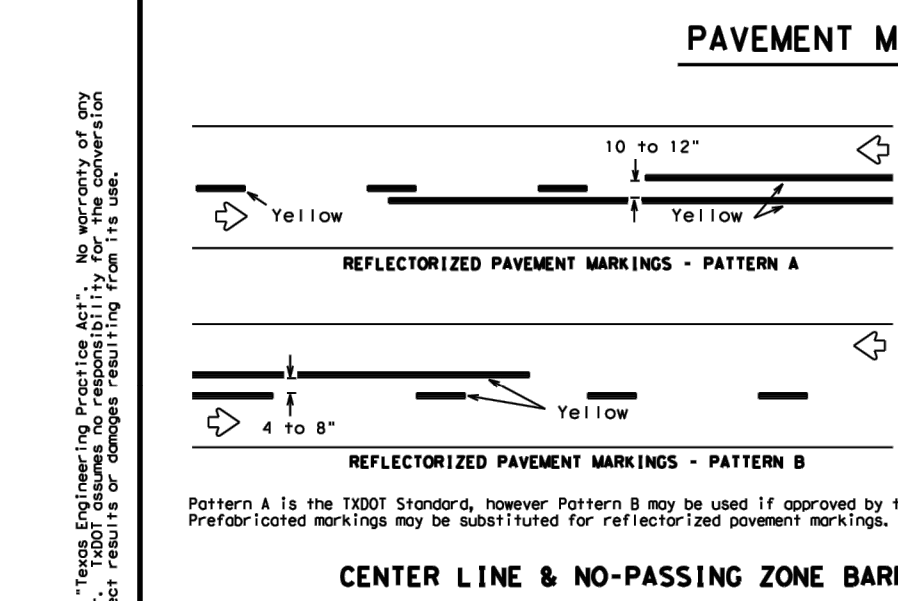
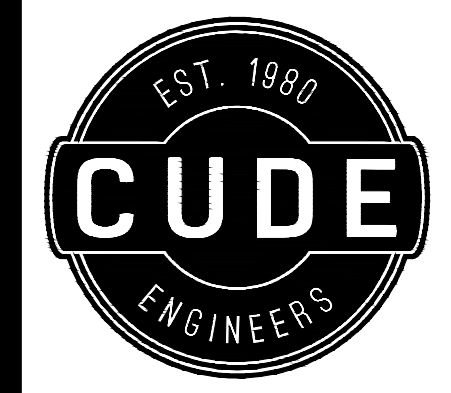


Table with 4 columns: DATE, TIME, and SHEET NO. Includes 'BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS' and 'BC (12) - 21'.

DATE: 04/15/2026
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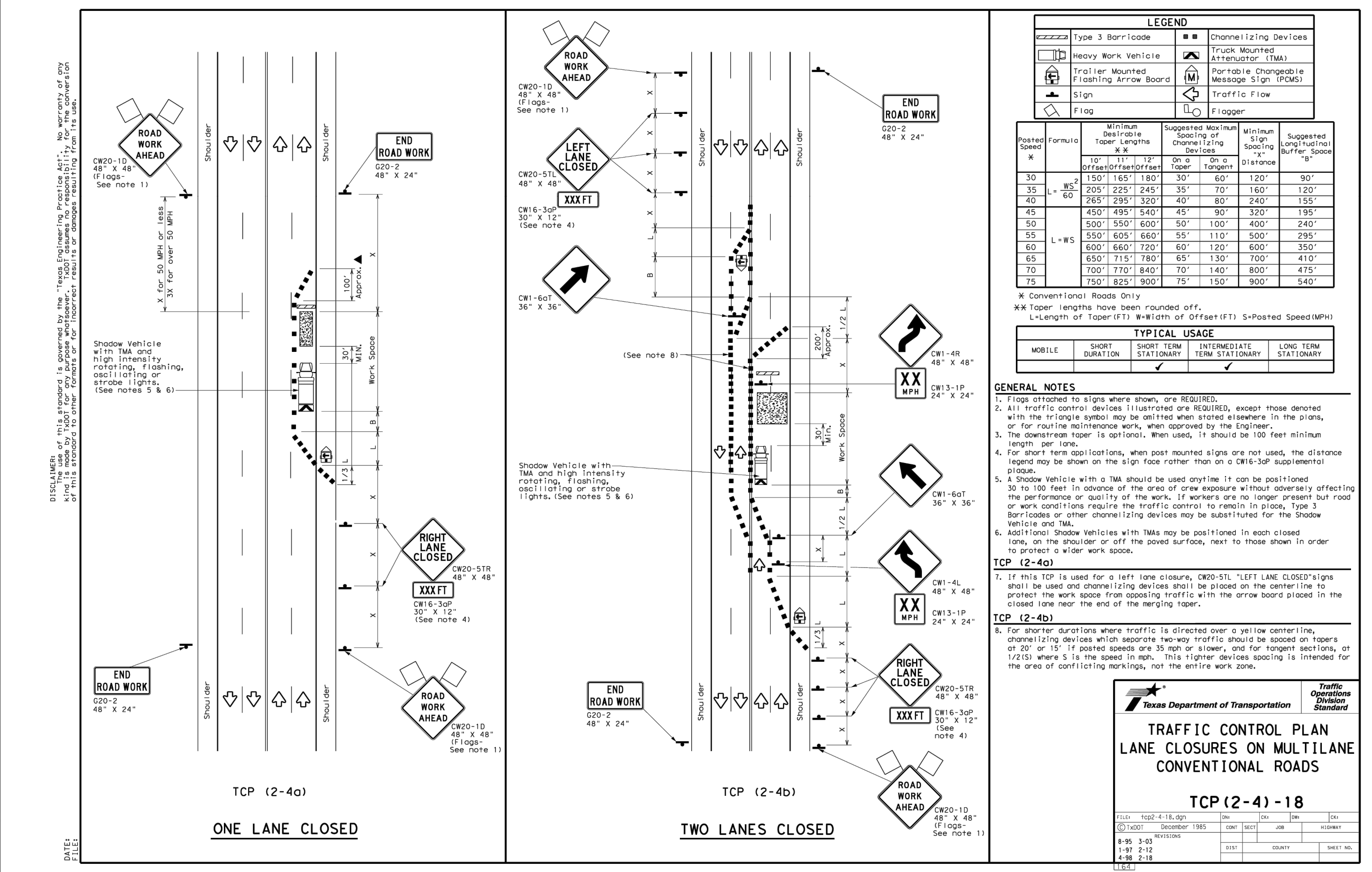
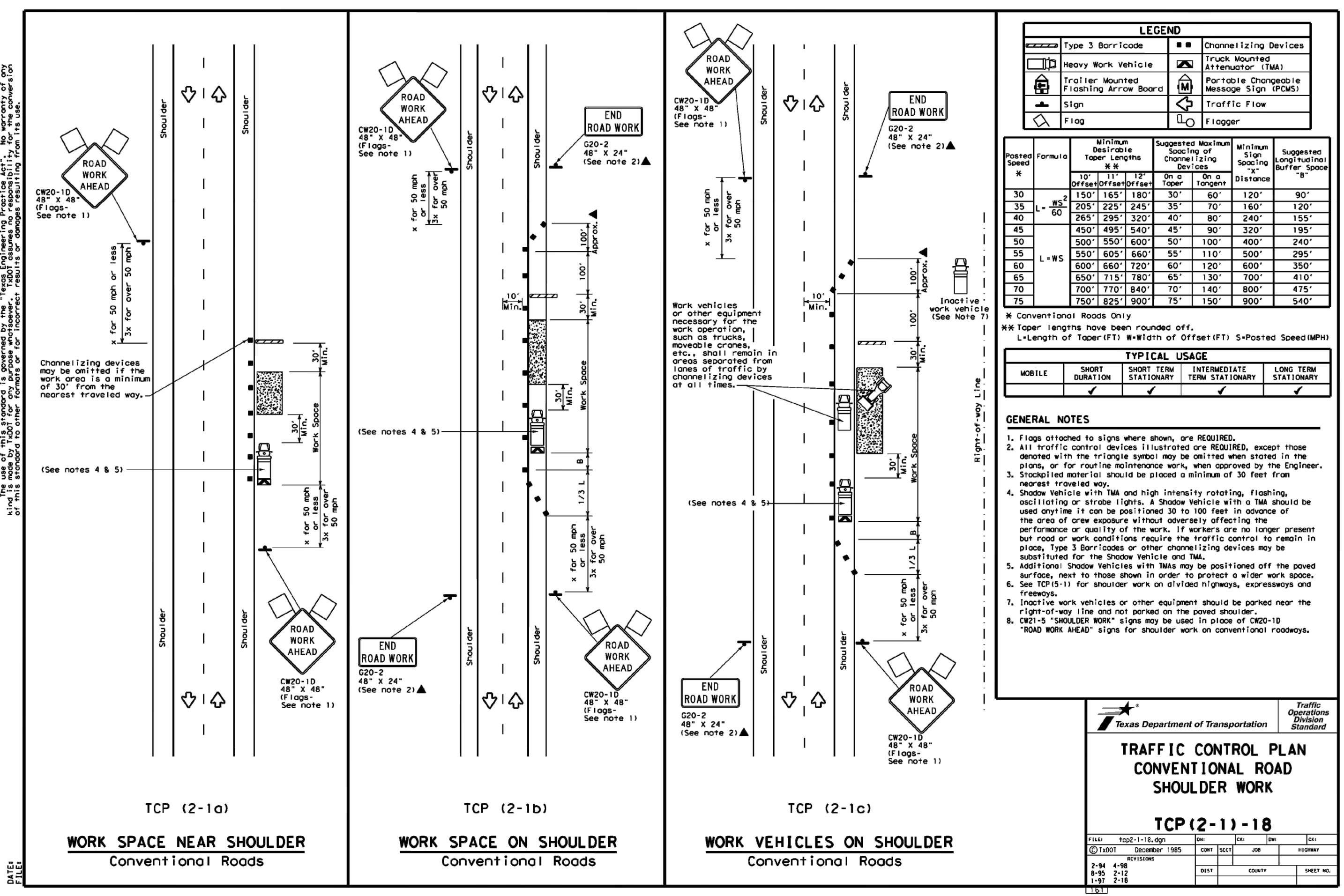
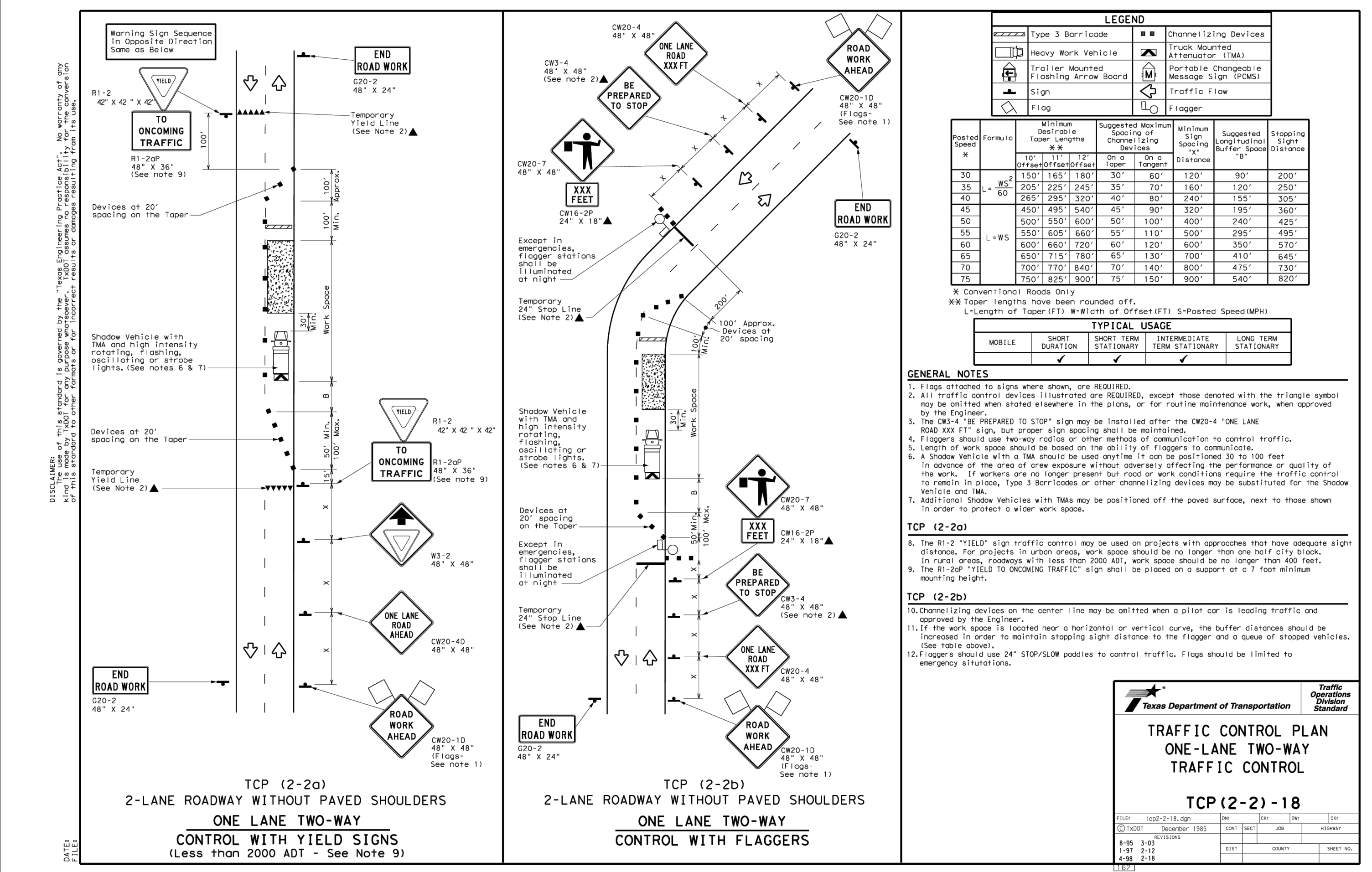
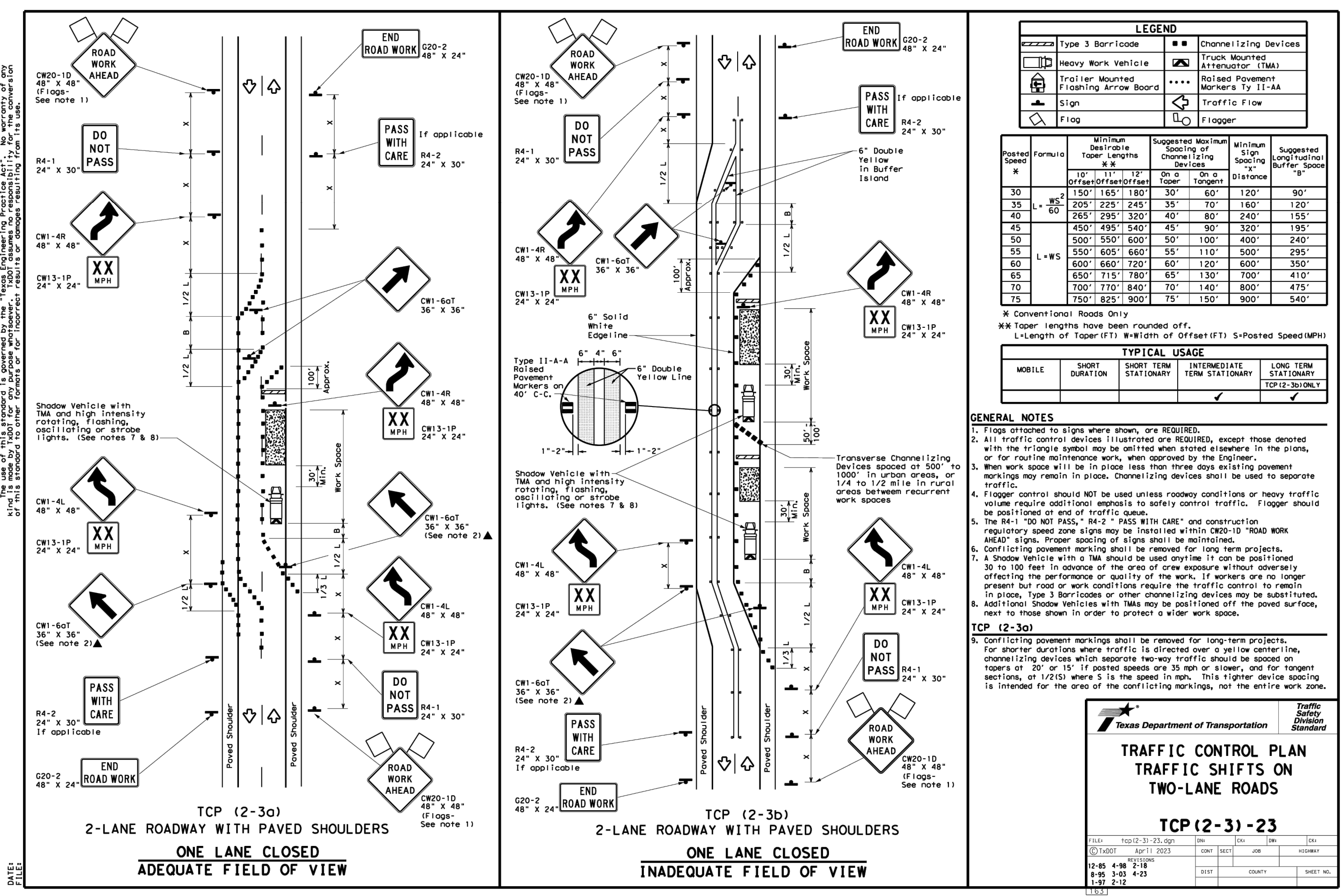
Table with 2 columns: NO. and REVISIONS. Includes revision 1: 'REVISED PAVEMENT MARKING PATTERNS'.

CUDE ENGINEERS
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TBPLS No. 10048500



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ESPERANZA BOULEVARD - PHASE III
TXDOT DETAILS - TRAFFIC CONTROL PLAN 1 OF 2

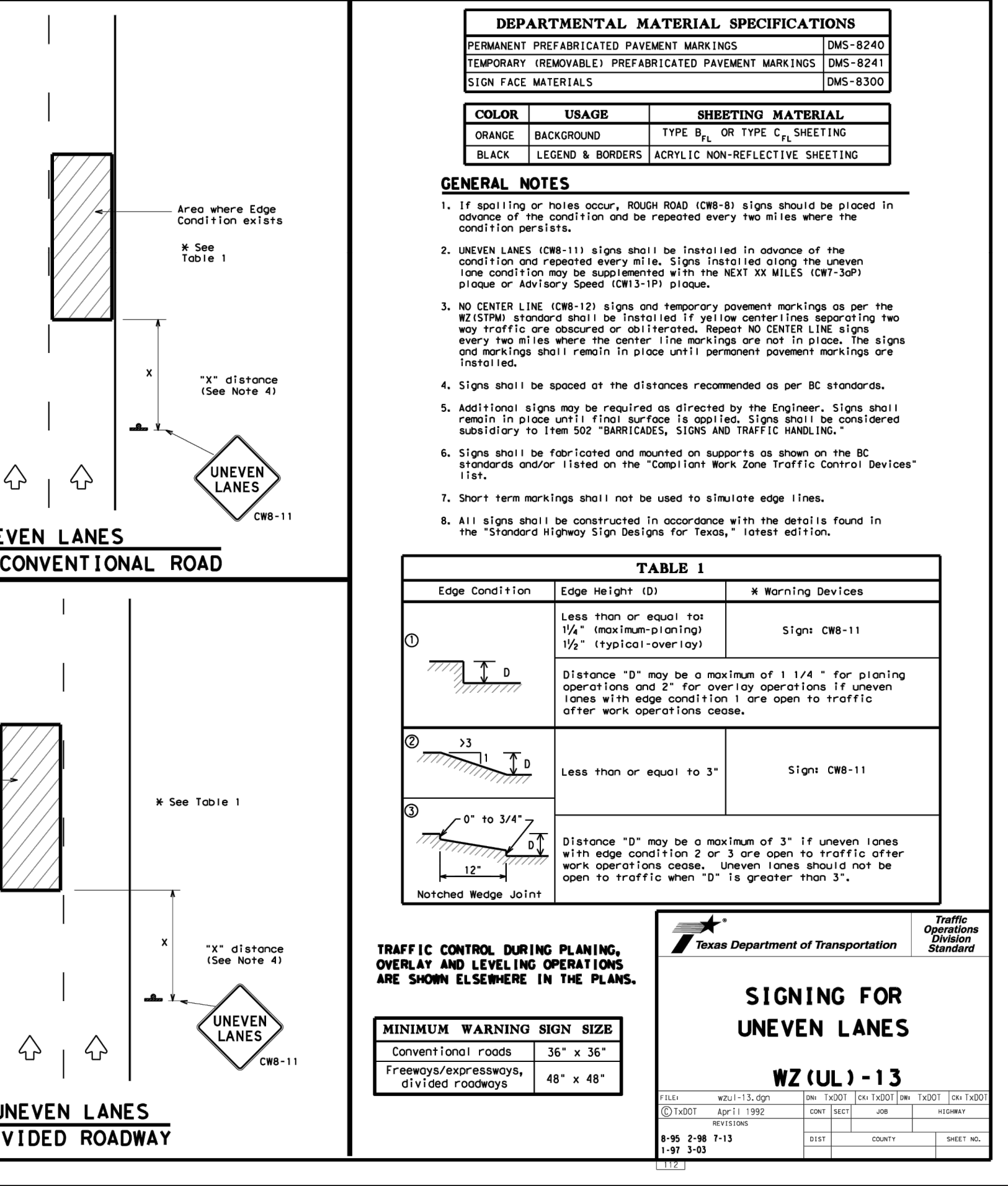
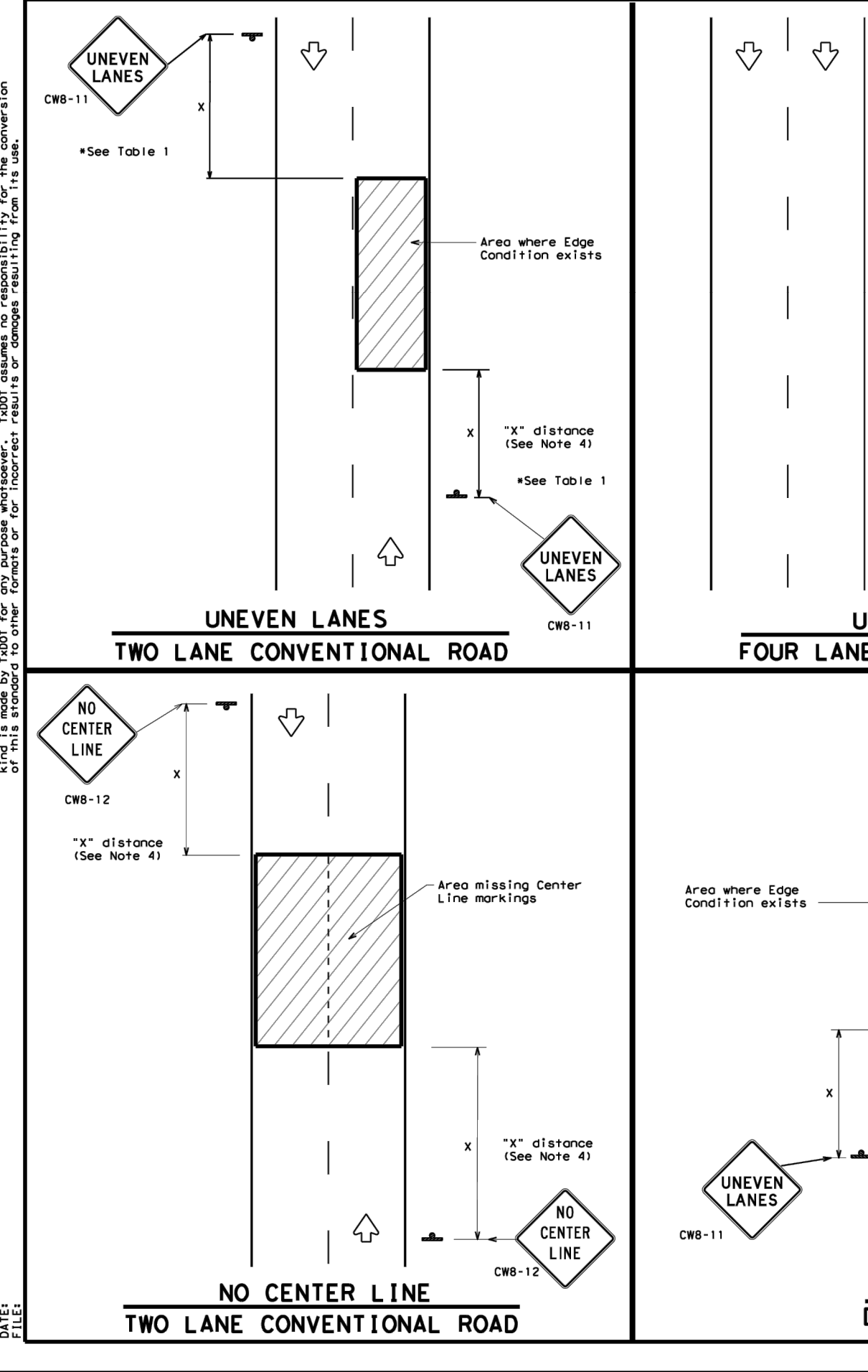
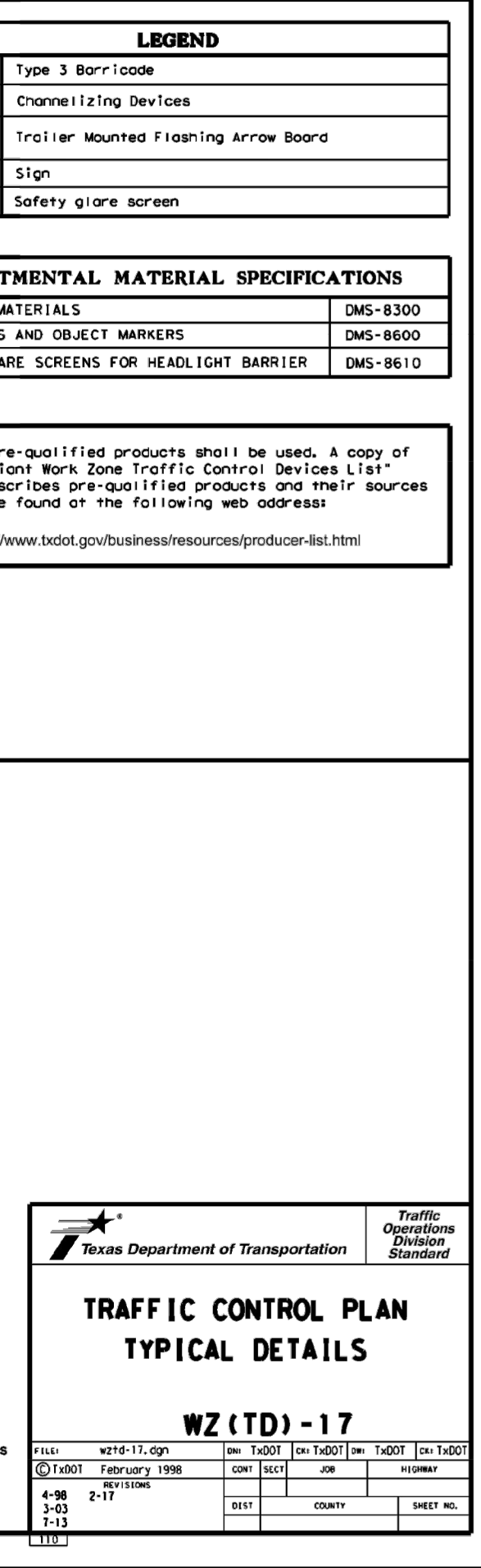
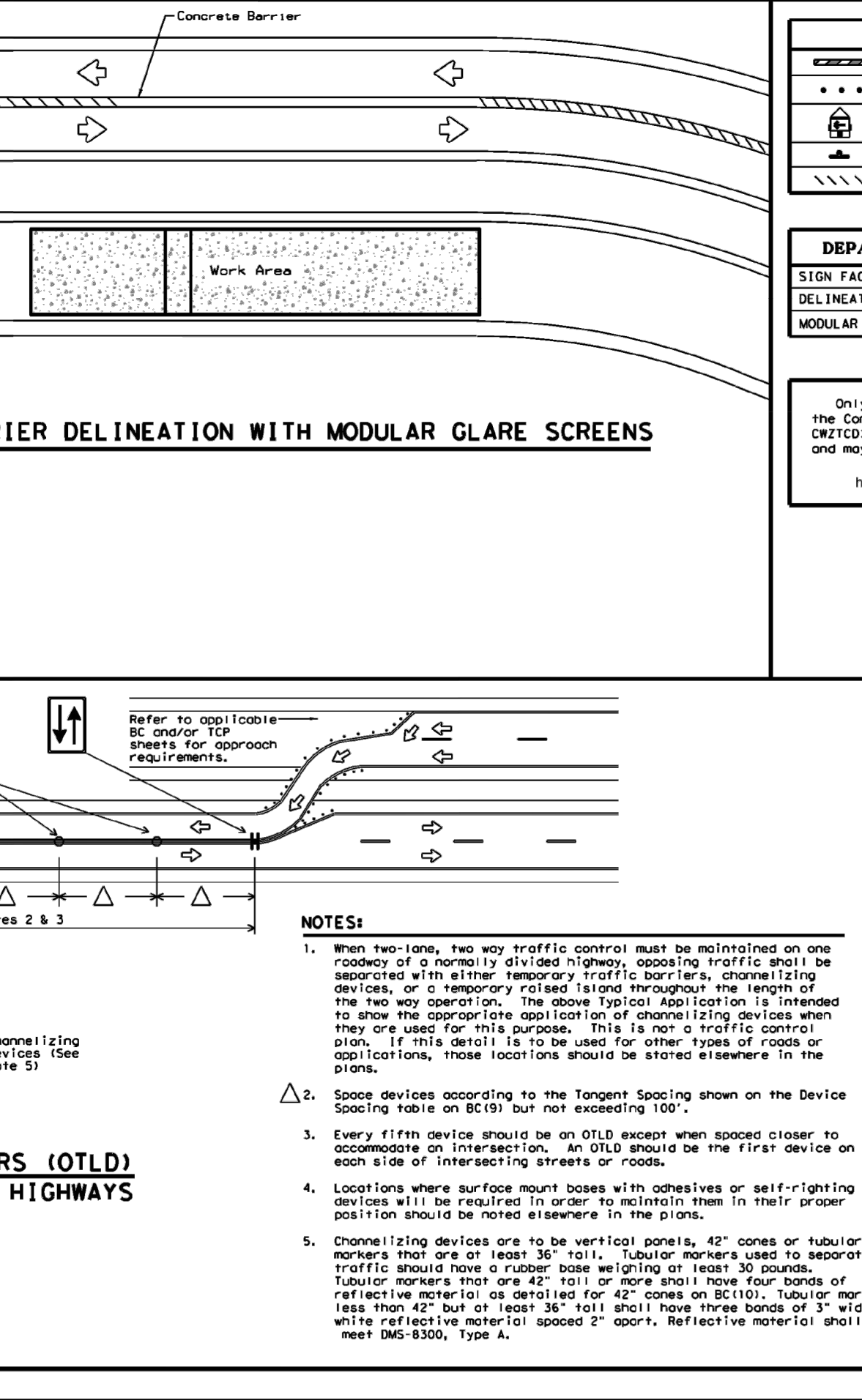
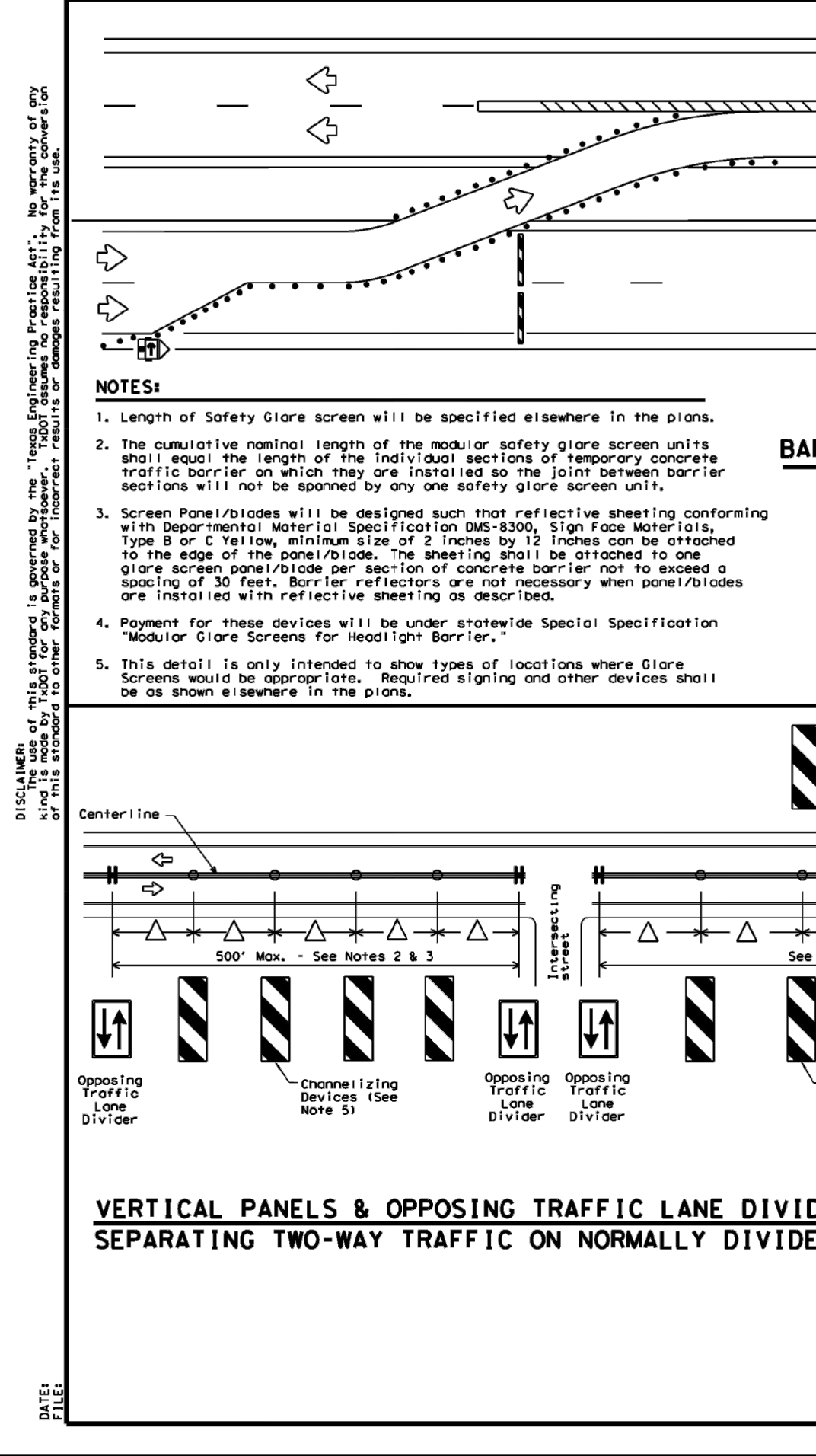
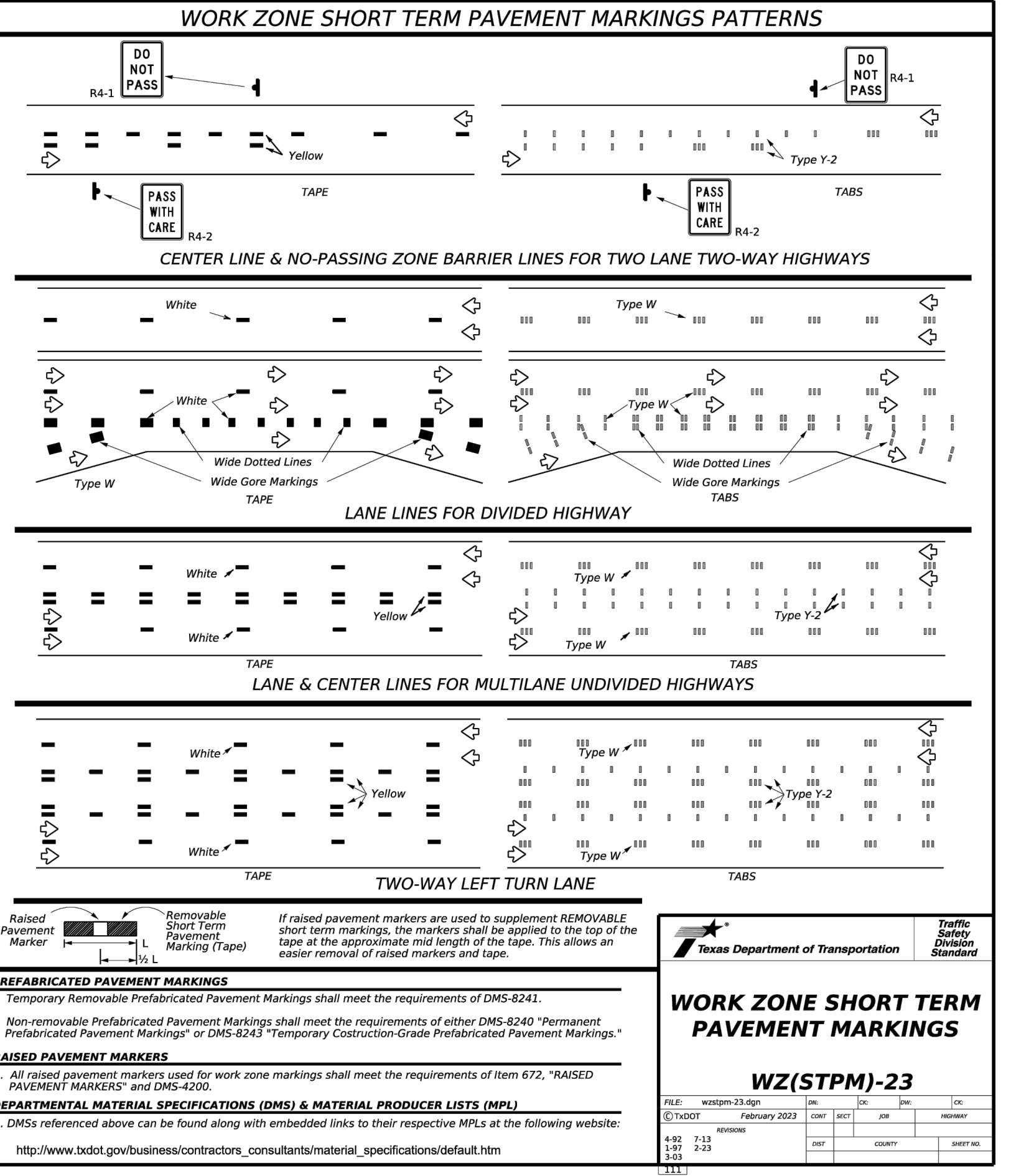
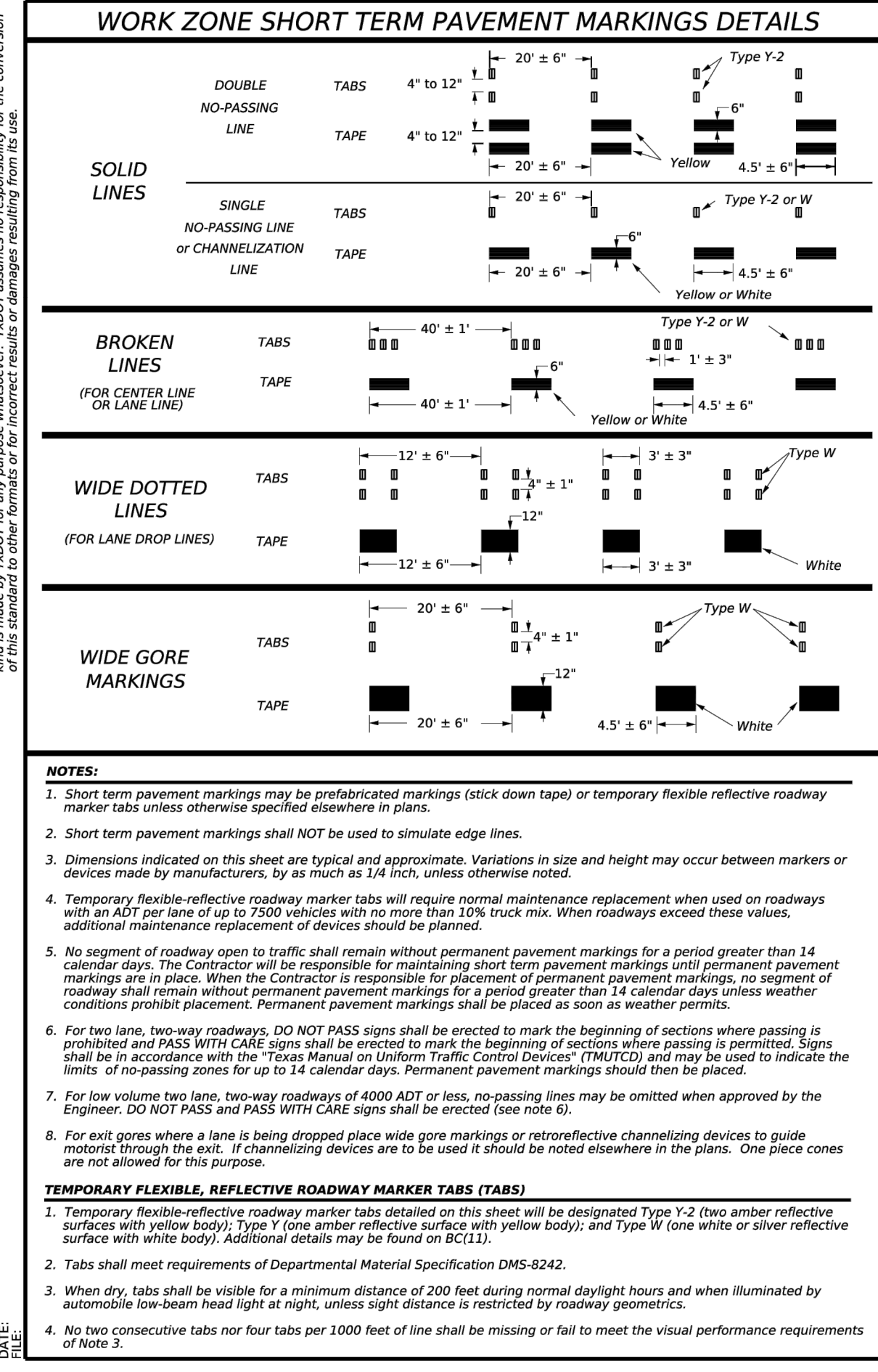
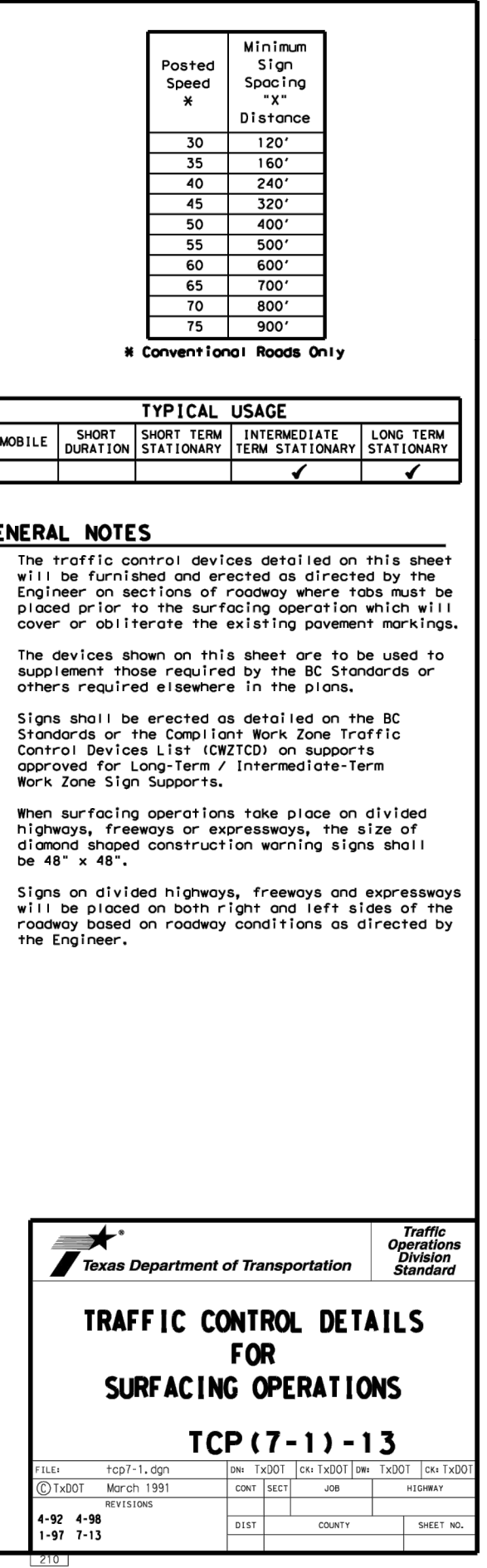
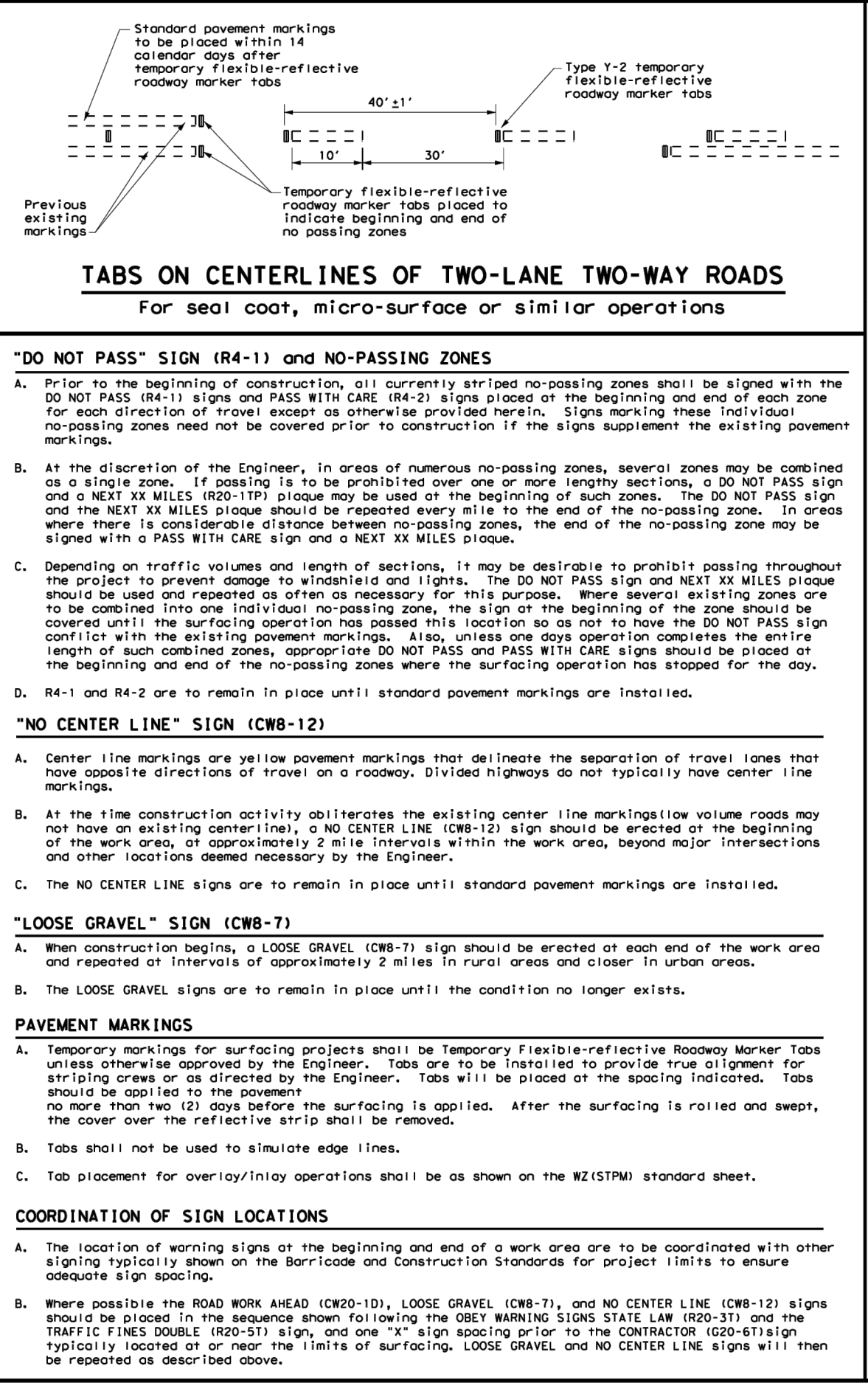
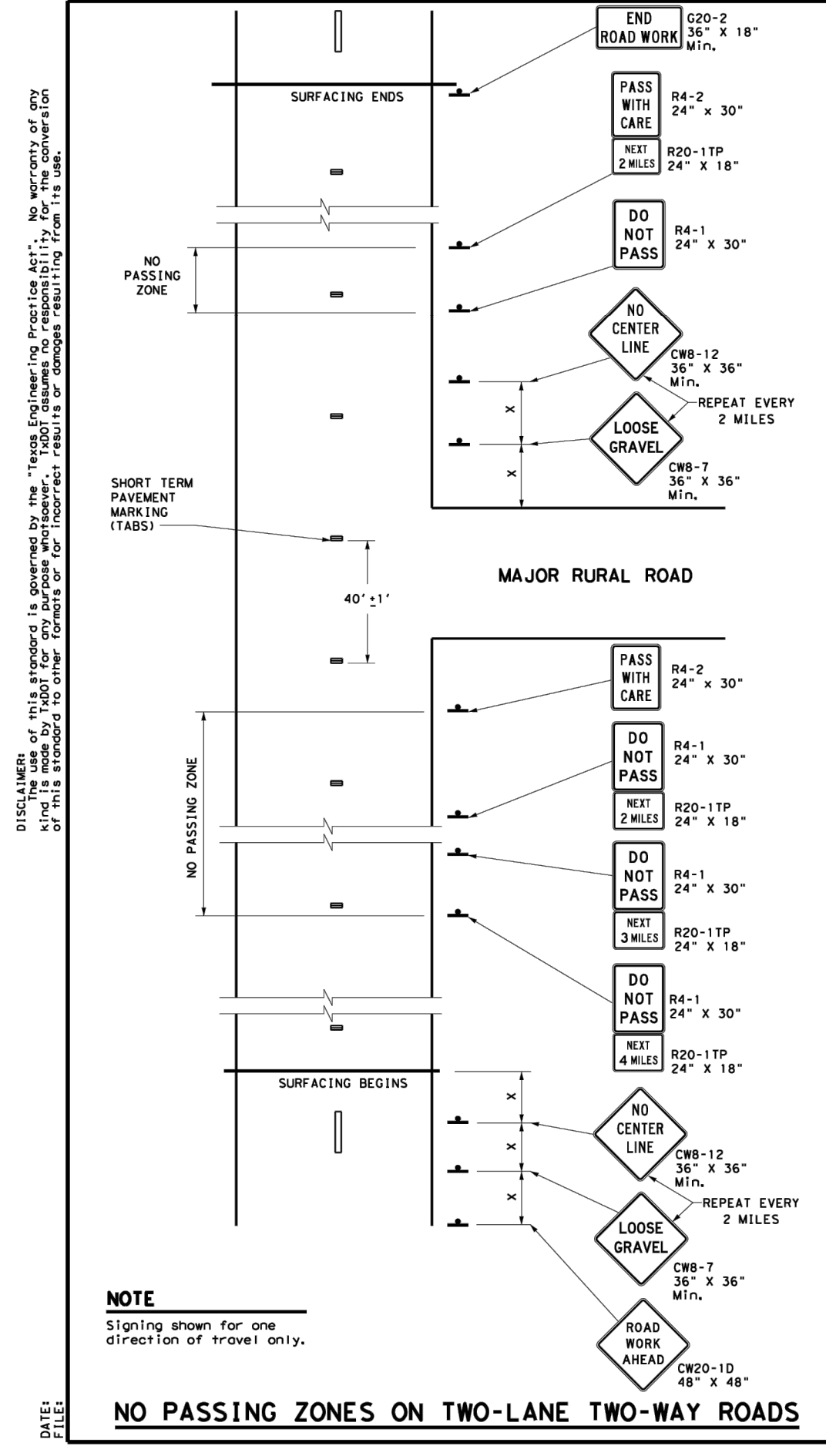


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04/15/2026
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03154.009
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CHECKED BY
KMH/WPM

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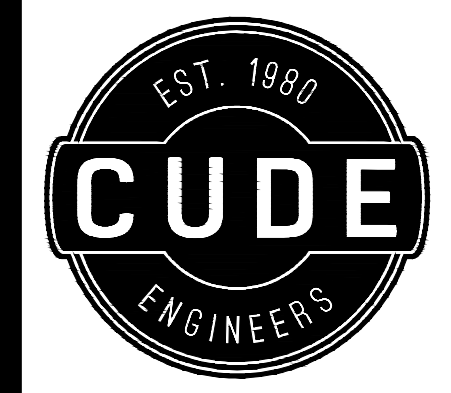
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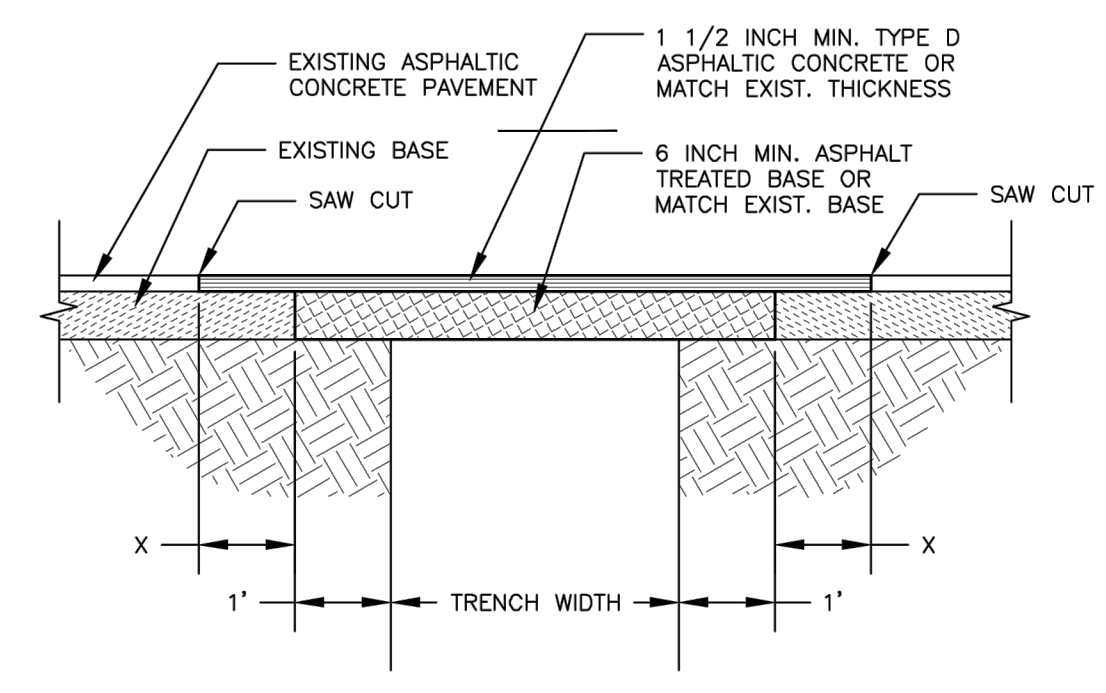
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ESPERANZA BOULEVARD - PHASE III

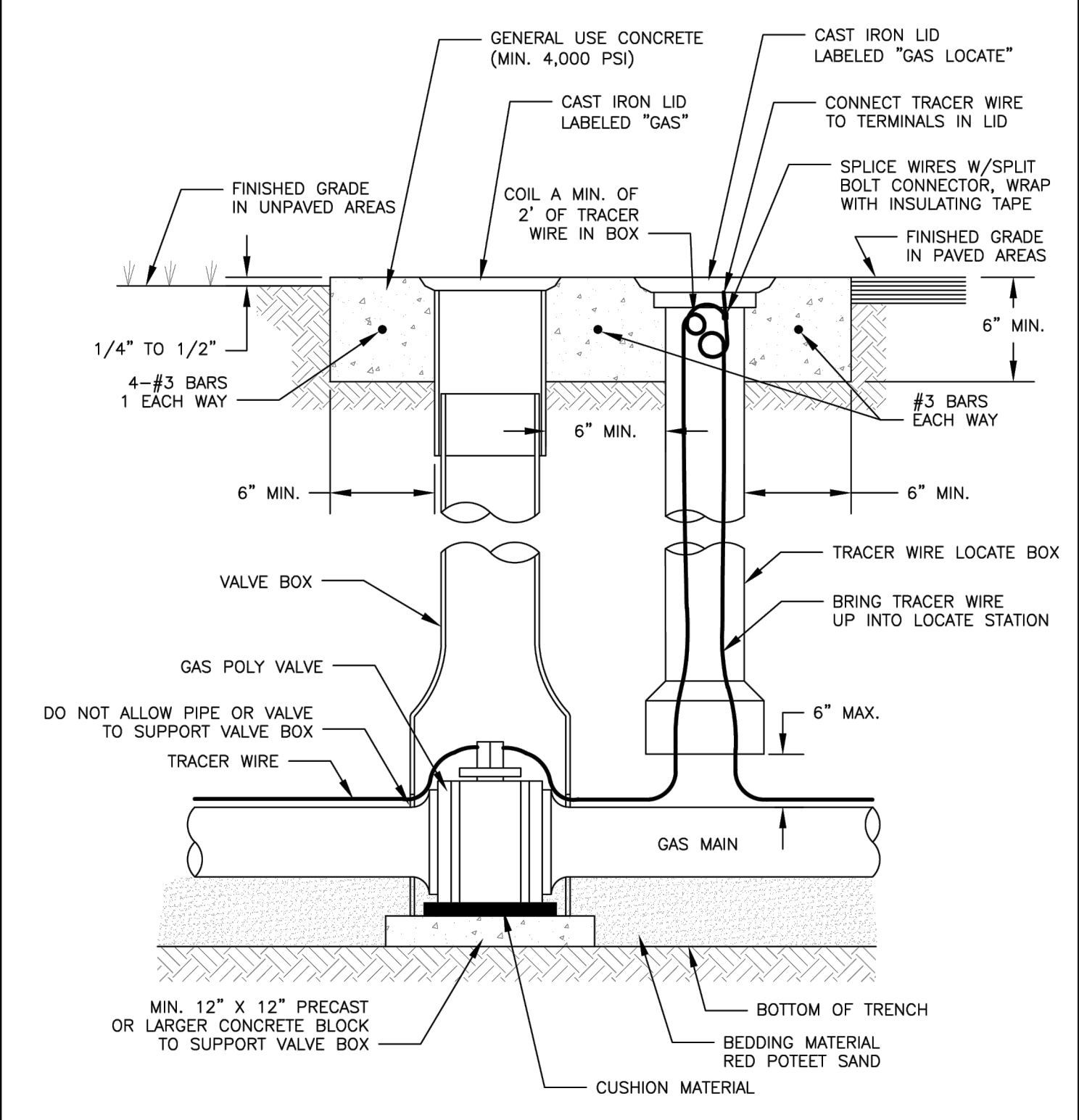
CITY OF BOERNE STANDARD DETAILS



PCI RANGE	ADDITIONAL WIDTH OF ASPHALT REPAIR
PCI<50	X=1'
50≤PCI<85	X=10' and CURB-TO-CURB
85≤PCI≤100	CURB-TO-CURB and BLOCK-TO-BLOCK

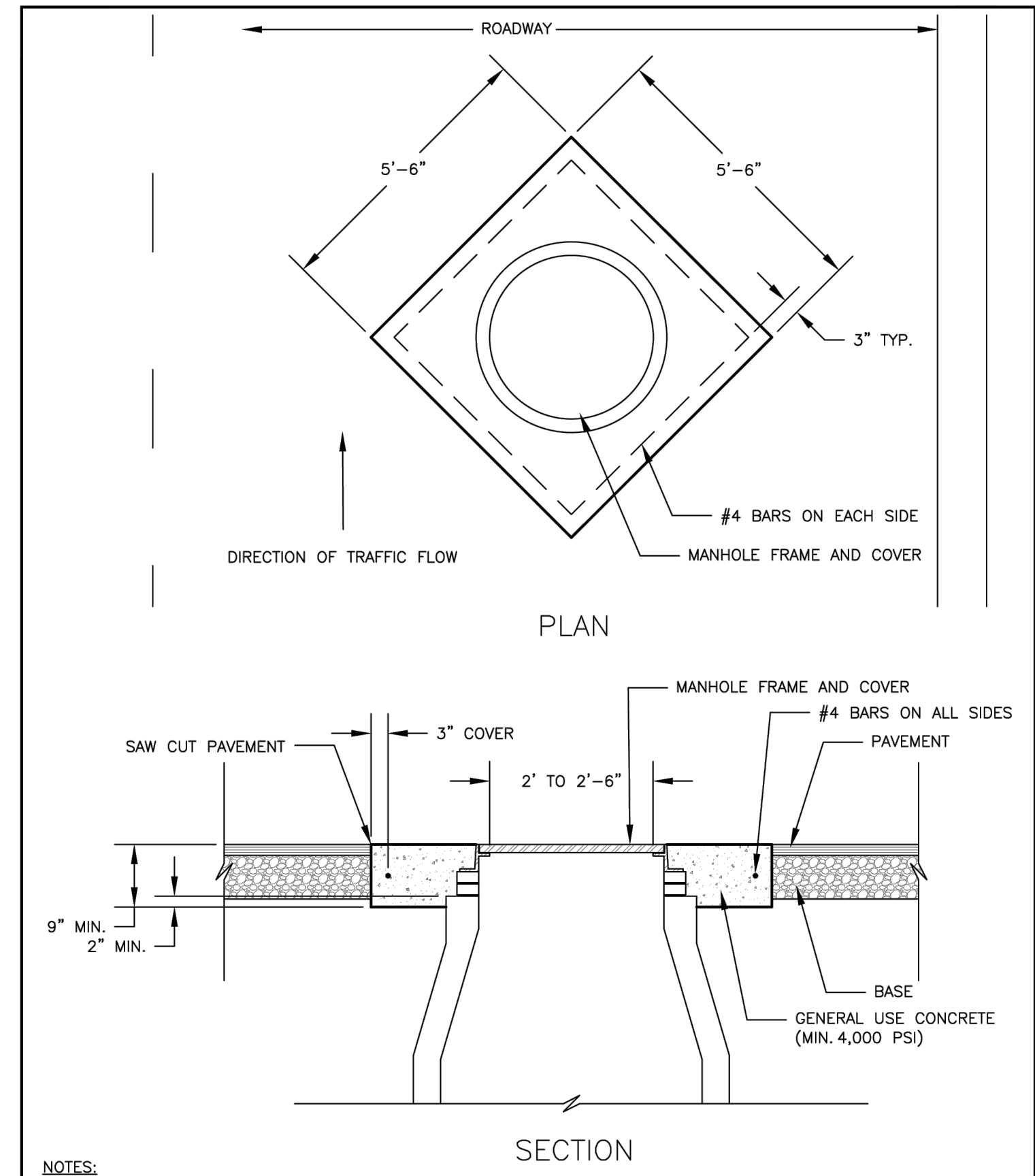
NOTES:
1. STREET PCI VALUES MAY BE PROVIDED BY THE ENGINEERING AND MOBILITY DEPARTMENT UPON REQUEST.

CITY OF BOERNE
ASPHALTIC CONCRETE PAVEMENT REPAIR
SCALE: N.T.S. DRAWING No. 02513-1.1 DATE: MAY 2024



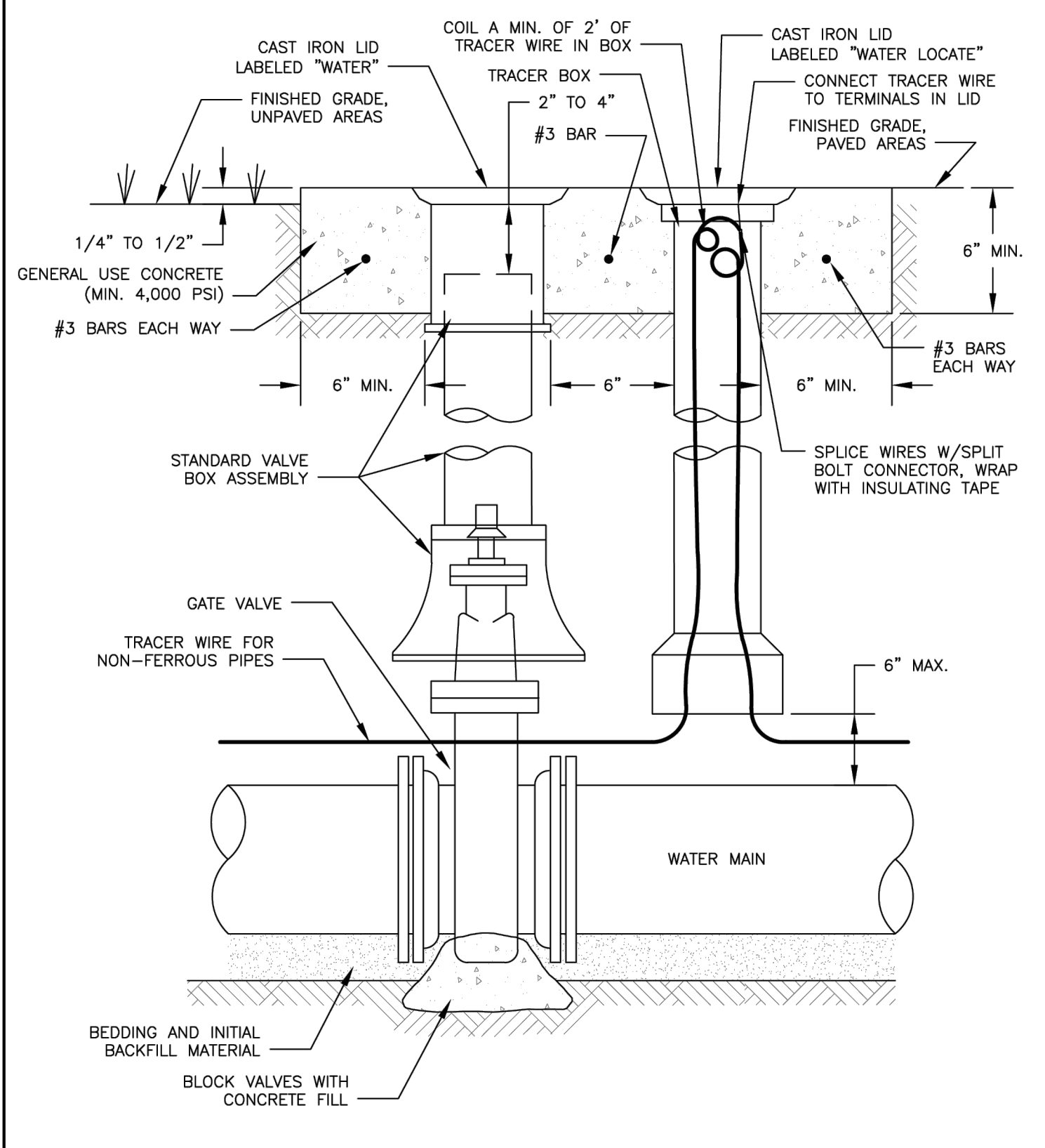
NOTES:
1. WHERE MULTIPLE VALVES ARE PROPOSED WITHIN 10- FEET OF EACH OTHER, MAY ROUTE TO A SINGLE TRACER WIRE LOCATE BOX; OTHERWISE A LOCATE BOX IS REQUIRED FOR EACH INDIVIDUAL VALVE OR EVERY 500- FEET.
2. ALL BACKFILL SHALL BE MOISTURE CONDITIONED AND COMPACTED TO 95% COMPACTION PER ASTM D1557 (MODIFIED PROCTOR).

CITY OF BOERNE
GAS VALVE AND VALVE BOX
SCALE: N.T.S. DRAWING No. 02560-1.0 DATE: MAY 2024



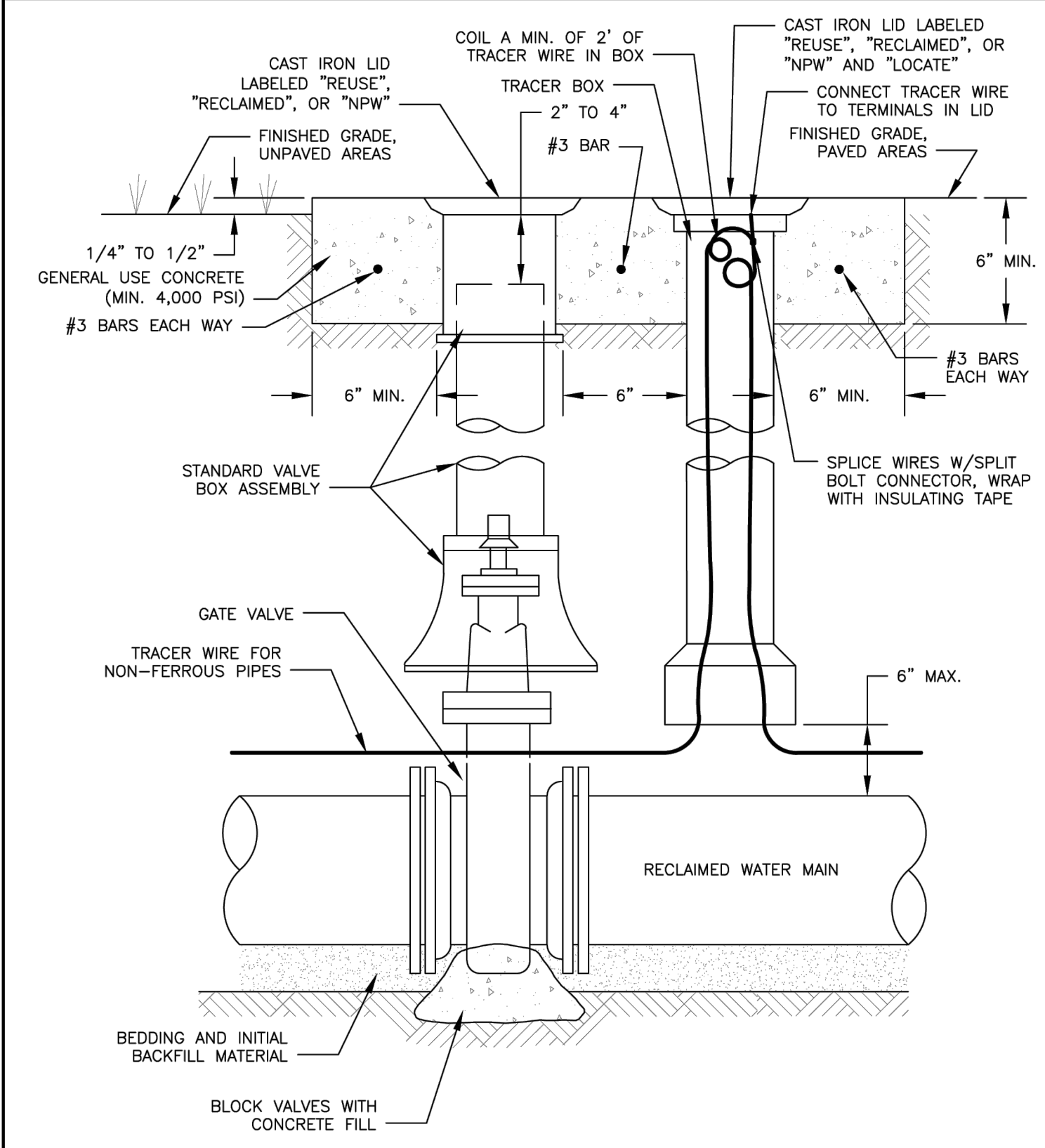
NOTES:
1. IN PAVED AREAS, SET TOP OF FRAME TO MATCH PAVEMENT GRADES AND FINISH CONCRETE FLUSH WITH TOP OF FRAME.
2. IN UNPAVED AREAS, SET TOP OF FRAME 1\"/>

CITY OF BOERNE
MANHOLE RING ENCASEMENT
SCALE: N.T.S. DRAWING No. 02530-2.2 DATE: MAY 2024



NOTES:
1. ENCASE VALVES IN POLYETHYLENE.
2. PROVIDE STEM EXTENSIONS FOR OPERATING NUT WHEN NUT IS MORE THAN 4\"/>

CITY OF BOERNE
WATER GATE VALVE AND VALVE BOX
SCALE: N.T.S. DRAWING No. 02660-1.0 DATE: MAY 2024



NOTES:
1. ENCASE VALVES IN PURPLE POLYETHYLENE.
2. PROVIDE STEM EXTENSIONS FOR OPERATING NUT WHEN NUT IS MORE THAN 4\"/>

CITY OF BOERNE
RECLAIMED WATER GATE VALVE AND VALVE BOX
SCALE: N.T.S. DRAWING No. 02670-1.0 DATE: MAY 2024

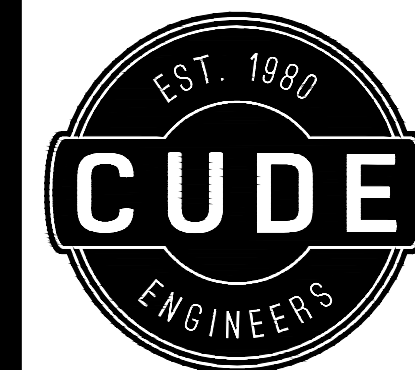
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PROJECT NO.: 03154.009
DRAWN BY: ABB
CHECKED BY: WPM

REVISIONS

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CUDE ENGINEERS
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TBPLS No. 10048500

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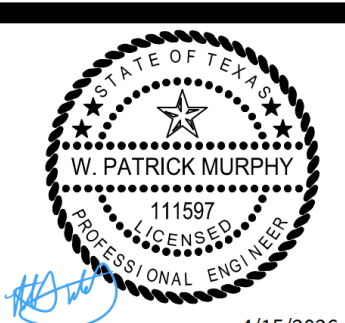
MATCHLINE STA. 17+50

ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT RESTRIPIING PLAN I OF 6

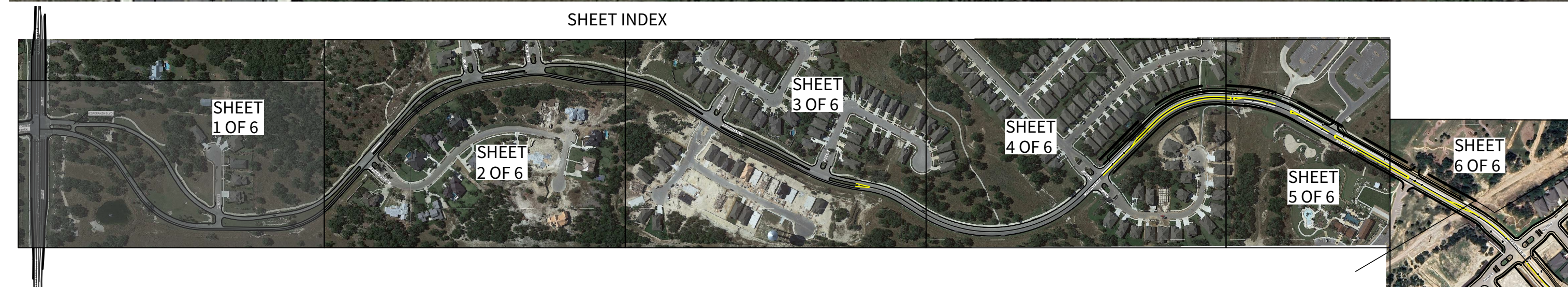
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DRAWN BY: MGM/ABB
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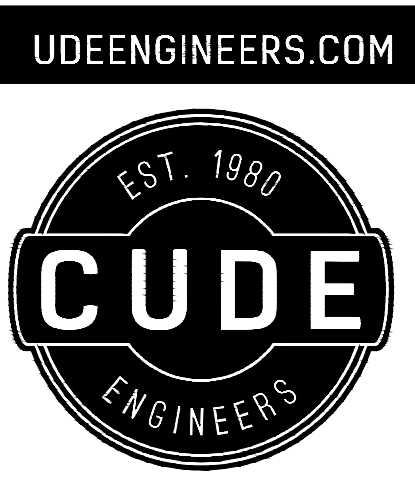
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

C14



NOTE:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

- NOTES:**
1. ALL PAVEMENT MARKINGS SHALL BE HOT-APPLIED THERMOPLASTIC MARKING PER TxDOT ITEM NO. 666, 100 MIL THICKNESS.
 2. ALL EXISTING PAVEMENT MARKING SHALL BE REMOVED IN ACCORD WITH TxDOT ITEM NO. 677.
 3. ALL RAISED PAVEMENT MARKERS (REFLECTORS) SHALL BE INSTALLED IN ACCORD WITH TxDOT ITEM NO. 672.
 4. — DENOTES CURB TO BE POWERWASHED AS ALTERNATE BID ITEM #5.



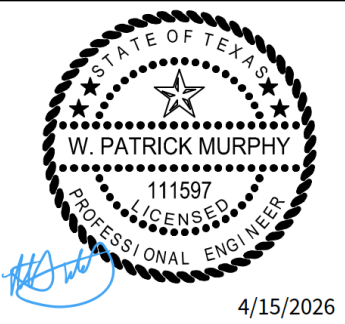
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ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT RESTRIPING PLAN 2 OF 6

DATE
04/15/2026
PROJECT NO.
03154.009
DRAWN BY
MGM/ABB
CHECKED BY
WPM

NO.	REVISIONS
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4/15/2026
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

C15

2 OF 8



MATCHLINE STA. 17+50

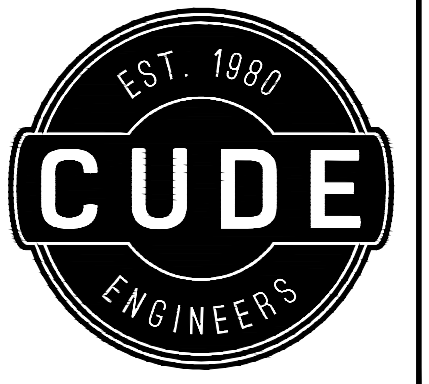
MATCHLINE STA. 35+25

SHEET INDEX



NOTE:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

- NOTES:**
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 3. ALL RAISED PAVEMENT MARKERS (REFLECTORS) SHALL BE INSTALLED IN ACCORD WITH TxDOT ITEM NO. 672.
 4. ——— DENOTES CURB TO BE POWERWASHED AS ALTERNATE BID ITEM #5.



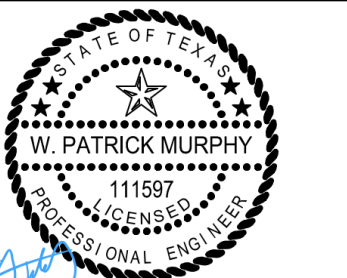
ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT RESTRIPIING PLAN 3 OF 6

DATE
04/15/2026
PROJECT NO.
03154.009
DRAWN BY
MGM/ABB
CHECKED BY
WPM

REVISIONS

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4/15/2026
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

C16



MATCHLINE STA. 35+25

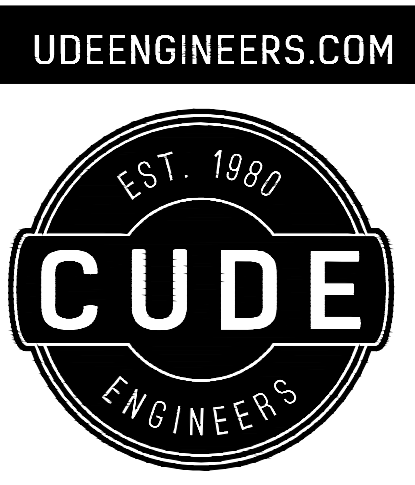
MATCHLINE STA. 52+00

SHEET INDEX



NOTE:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

- NOTES:**
1. ALL PAVEMENT MARKINGS SHALL BE HOT-APPLIED THERMOPLASTIC MARKING PER TxDOT ITEM NO. 666, 100 MIL THICKNESS.
 2. ALL EXISTING PAVEMENT MARKING SHALL BE REMOVED IN ACCORD WITH TxDOT ITEM NO. 677.
 3. ALL RAISED PAVEMENT MARKERS (REFLECTORS) SHALL BE INSTALLED IN ACCORD WITH TxDOT ITEM NO. 672.
 4. ——— DENOTES CURB TO BE POWERWASHED AS ALTERNATE BID ITEM #5.



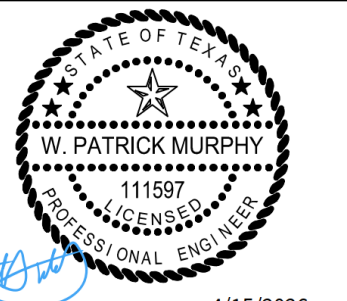
4122 Pond Hill Road, Suite 101
San Antonio, Texas 78231
P: (210) 681.2951 F: (210) 523.7112

ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT RESTRIPING PLAN 4 OF 6

DATE
04/15/2026
PROJECT NO.
03154.009
DRAWN BY
MGM/ABB
CHECKED BY
WPM

NO.	REVISIONS
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CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

C17



MATCHLINE STA. 52+00

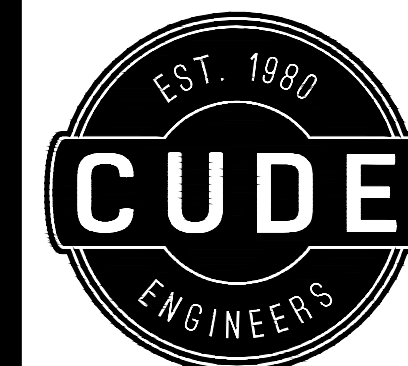
MATCHLINE STA. 69+50

SHEET INDEX



NOTES:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

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 4. - DENOTES CURB TO BE POWERWASHED AS ALTERNATE BID ITEM #5.



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ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT RESTRIPING PLAN 5 OF 6

DATE

04/15/2026

PROJECT NO.

03154.009

DRAWN BY

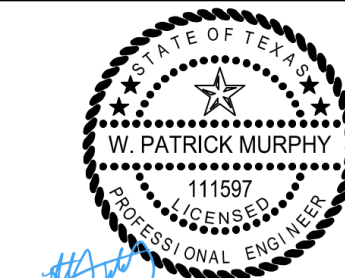
MGM/ABB

CHECKED BY

WPM

REVISIONS

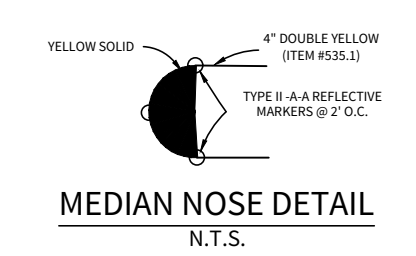
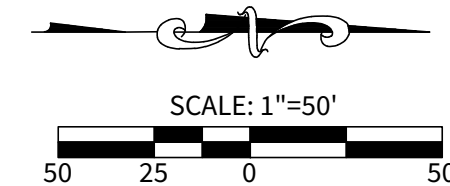
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4/15/2026
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

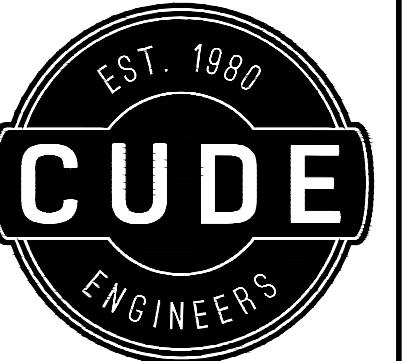
C18

5 OF 8



NOTE:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

- NOTES:**
1. ALL PAVEMENT MARKINGS SHALL BE HOT-APPLIED THERMOPLASTIC MARKING PER TxDOT ITEM NO. 666, 100 MIL THICKNESS.
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 4. - DENOTES CURB TO BE POWERWASHED AS ALTERNATE BID ITEM #5.



ESPERANZA BOULEVARD - PHASE III

ESPERANZA BLVD. PAVEMENT RESTRIPIING PLAN 6 OF 6

DATE
04/15/2026
PROJECT NO.
03154.009
DRAWN BY
MGM/ABB
CHECKED BY
WPM

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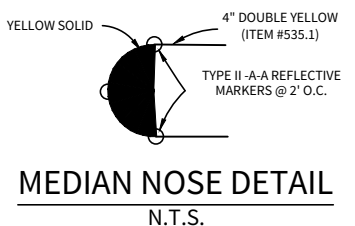
4/15/2026
W. PATRICK MURPHY
CIVIL ENGINEER
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500



#	TxDOT SPEC. Number	RT-Northbound Lane / LT-Southbound Lane		
		Approx. Station	Location Description	Quantity / Unit
#1	666	80+37	LEFT ARROW	1 EA
	677	80+37	REMOVE EXISTING ARROW	1 EA
	672	80+37	RAISED PAVEMENT MARKERS TYPICAL 10	10 EA
#2	666	81+82	4\"/>	
	677	81+82	REMOVE EXISTING DOUBLE 4\"/>	
	672	81+82	RAISED PAVEMENT MARKERS TYPICAL 30	30 EA
#3	666	83+51	8\"/>	
	677	83+51	REMOVE EXISTING 8\"/>	
	672	83+51	RAISED PAVEMENT MARKERS TYPICAL 15	15 EA
#4	666	82+55	LEFT ARROW	1 EA
	677	82+55	REMOVE EXISTING ARROW	1 EA
	672	82+55	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#5	666	83+37	LEFT ARROW	1 EA
	677	83+37	REMOVE EXISTING ARROW	1 EA
	672	83+37	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#6	666	83+83	4\"/>	
	677	83+83	REMOVE EXISTING DOUBLE 4\"/>	
	672	83+83	RAISED PAVEMENT MARKERS TYPICAL 240	240 EA
#7	666	86+75	MEDIAN NOSE	1 EA
	677	86+75	REMOVE EXISTING MEDIAN NOSE	1 EA
	672	86+75	RAISED PAVEMENT MARKERS TYPICAL 8	8 EA
#8	666	86+88	MEDIAN NOSE	1 EA
	677	86+88	REMOVE EXISTING MEDIAN NOSE	1 EA
	672	86+88	RAISED PAVEMENT MARKERS TYPICAL 6	6 EA
#9	666	86+93	4\"/>	
	677	86+93	REMOVE EXISTING DOUBLE 4\"/>	
	672	86+93	RAISED PAVEMENT MARKERS TYPICAL 10	10 EA
#10	666	70+42	8\"/>	
	677	70+42	REMOVE EXISTING 8\"/>	
	672	70+42	RAISED PAVEMENT MARKERS TYPICAL 6	6 EA
#11	666	70+43	4\"/>	
	677	70+43	REMOVE EXISTING DOUBLE 4\"/>	
	672	70+43	RAISED PAVEMENT MARKERS TYPICAL 16	16 EA
#12	666	70+83	LEFT ARROW	1 EA
	677	70+83	REMOVE EXISTING ARROW	1 EA
	672	70+83	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#13	666	71+66	LEFT ARROW	1 EA
	677	71+66	REMOVE EXISTING ARROW	1 EA
	672	71+66	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#14	666	72+78	8\"/>	
	677	72+78	REMOVE EXISTING 8\"/>	
	672	72+78	RAISED PAVEMENT MARKERS TYPICAL 10	10 EA
#15	666	72+83	MEDIAN NOSE	1 EA
	677	72+83	REMOVE EXISTING MEDIAN NOSE	1 EA
	672	72+83	RAISED PAVEMENT MARKERS TYPICAL 8	8 EA
#16	666	72+88	4\"/>	
	677	72+88	REMOVE EXISTING DOUBLE 4\"/>	
	672	72+88	RAISED PAVEMENT MARKERS TYPICAL 10	10 EA
#17	666	73+20	RIGHT ARROW	1 EA
	677	73+20	REMOVE EXISTING ARROW	1 EA
	672	73+20	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#18	666	73+34	8\"/>	
	677	73+34	REMOVE EXISTING 8\"/>	
	672	73+34	RAISED PAVEMENT MARKERS TYPICAL 9	9 EA
#19	666	73+38	4\"/>	
	677	73+38	REMOVE EXISTING DOUBLE 4\"/>	
	672	73+38	RAISED PAVEMENT MARKERS TYPICAL 16	16 EA
#20	666	73+75	LEFT ARROW	1 EA
	677	73+75	REMOVE EXISTING ARROW	1 EA
	672	73+75	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#21	666	74+54	RIGHT ARROW	1 EA
	677	74+54	REMOVE EXISTING ARROW	1 EA
	672	74+54	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#22	666	74+62	LEFT ARROW	1 EA
	677	74+62	REMOVE EXISTING ARROW	1 EA
	672	74+62	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#23	666	75+37	MEDIAN NOSE	1 EA
	677	75+37	REMOVE EXISTING MEDIAN NOSE	1 EA
	672	75+37	RAISED PAVEMENT MARKERS TYPICAL 8	8 EA
#24	666	75+38	8\"/>	
	677	75+38	REMOVE EXISTING 8\"/>	
	672	75+38	RAISED PAVEMENT MARKERS TYPICAL 17	17 EA
#25	666	75+42	4\"/>	
	677	75+42	REMOVE EXISTING DOUBLE 4\"/>	
	672	75+42	RAISED PAVEMENT MARKERS TYPICAL 500	500 EA
#26	666	77+24	REMOVE EXISTING 2\"/>	
	677	77+24	REMOVE EXISTING 2\"/>	
	672	77+24	RAISED PAVEMENT MARKERS TYPICAL 15	15 EA
#27	666	78+10	RIGHT ARROW	1 EA
	677	78+10	REMOVE EXISTING ARROW	1 EA
	672	78+10	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#28	666	79+63	MEDIAN NOSE	1 EA
	677	79+63	REMOVE EXISTING MEDIAN NOSE	1 EA
	672	79+63	RAISED PAVEMENT MARKERS TYPICAL 8	8 EA
#29	666	79+63	4\"/>	
	677	79+63	REMOVE EXISTING DOUBLE 4\"/>	
	672	79+63	RAISED PAVEMENT MARKERS TYPICAL 20	20 EA
#30	666	79+97	LEFT ARROW	1 EA
	677	79+97	REMOVE EXISTING ARROW	1 EA
	672	79+97	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA

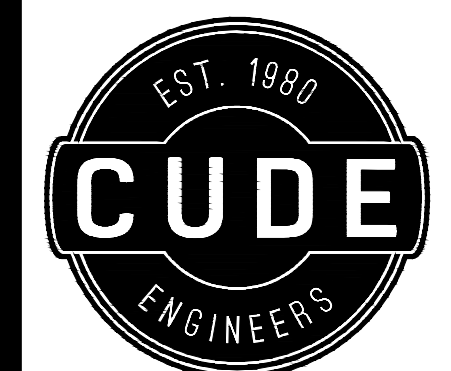
#	TxDOT SPEC. Number	RT-Northbound Lane / LT-Southbound Lane		
		Approx. Station	Location Description	Quantity / Unit
#31	666	80+37	LEFT ARROW	1 EA
	677	80+37	REMOVE EXISTING ARROW	1 EA
	672	80+37	RAISED PAVEMENT MARKERS TYPICAL 10	10 EA
#32	666	81+82	4\"/>	
	677	81+82	REMOVE EXISTING DOUBLE 4\"/>	
	672	81+82	RAISED PAVEMENT MARKERS TYPICAL 30	30 EA
#33	666	83+51	8\"/>	
	677	83+51	REMOVE EXISTING 8\"/>	
	672	83+51	RAISED PAVEMENT MARKERS TYPICAL 15	15 EA
#34	666	83+51	8\"/>	
	677	83+51	REMOVE EXISTING 8\"/>	
	672	83+51	RAISED PAVEMENT MARKERS TYPICAL 11	11 EA
#35	666	83+06	LEFT ARROW	1 EA
	677	83+06	REMOVE EXISTING ARROW	1 EA
	672	83+06	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#36	666	84+54	8\"/>	
	677	84+54	REMOVE EXISTING 8\"/>	
	672	84+54	RAISED PAVEMENT MARKERS TYPICAL 5	5 EA
#37	666	84+59	RIGHT ARROW	1 EA
	677	84+59	REMOVE EXISTING ARROW	1 EA
	672	84+59	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#38	666	85+39	RIGHT ARROW	1 EA
	677	85+39	REMOVE EXISTING ARROW	1 EA
	672	85+39	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#39	666	85+39	LEFT ARROW	1 EA
	677	85+39	REMOVE EXISTING ARROW	1 EA
	672	85+39	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#40	666	86+88	10\"/>	
	677	86+88	REMOVE EXISTING 10\"/>	
	672	86+88	RAISED PAVEMENT MARKERS TYPICAL 100	100 LF
#41	666	86+95	4\"/>	
	677	86+95	REMOVE EXISTING DOUBLE 4\"/>	
	672	86+95	RAISED PAVEMENT MARKERS TYPICAL 24	24 EA
#42	666	86+95	8\"/>	
	677	86+95	REMOVE EXISTING 8\"/>	
	672	86+95	RAISED PAVEMENT MARKERS TYPICAL 103	103 LF
#43	666	86+95	8\"/>	
	677	86+95	REMOVE EXISTING 8\"/>	
	672	86+95	RAISED PAVEMENT MARKERS TYPICAL 233	233 LF
#44	666	86+96	RIGHT ARROW	1 EA
	677	86+96	REMOVE EXISTING ARROW	1 EA
	672	86+96	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#45	666	86+97	LEFT ARROW	1 EA
	677	86+97	REMOVE EXISTING ARROW	1 EA
	672	86+97	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#46	666	87+81	RIGHT ARROW	1 EA
	677	87+81	REMOVE EXISTING ARROW	1 EA
	672	87+81	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA
#47	666	87+81	LEFT ARROW	1 EA
	677	87+81	REMOVE EXISTING ARROW	1 EA
	672	87+81	RAISED PAVEMENT MARKERS TYPICAL 1	1 EA

SHEET INDEX



NOTES:
CONTRACTOR TO FIELD-VERIFY QUANTITIES PRIOR TO CONSTRUCTION COMMENCEMENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

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4122 Pond Hill Road, Suite 101
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ESPERANZA BOULEVARD - PHASE III

TXDOT DETAILS - PAVEMENT MARKINGS AND RPMs - I OF 2

EDGE LINE AND LANE LINES WITH OR WITHOUT SHOULDERS

TYPICAL TWO-LANE, TWO-WAY PAVEMENT MARKINGS THROUGH INTERSECTIONS

CENTERLINE AND LANE LINES FOUR LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS

TWO LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS

FOUR LANE DIVIDED ROADWAY CROSSOVERS

GENERAL NOTES

MATERIAL SPECIFICATIONS

YIELD LINES

GUIDE FOR PLACEMENT OF STOP LINES, EDGE LINE & CENTERLINE

TYPICAL STANDARD PAVEMENT MARKINGS PM(1)-22

REFLECTIVE RAISED PAVEMENT MARKERS FOR VEHICLE POSITIONING GUIDANCE

CENTERLINE FOR ALL TWO LANE TWO-WAY ROADWAYS

CENTERLINE AND LANE LINES FOR TWO-WAY LEFT TURN LANE

CENTERLINE & LANE LINES FOR FOUR LANE TWO-WAY ROADWAYS

LANE LINES FOR ONE-WAY ROADWAY (NON-FREEWAY FACILITIES)

RAISED PAVEMENT MARKERS

POSITION GUIDANCE USING RAISED PAVEMENT MARKERS REFLECTORIZED PROFILE MARKINGS PM(2)-22

GENERAL NOTES

MATERIAL SPECIFICATIONS

LANE REDUCTION

TYPICAL TWLTL AT ONE-WAY STREET AND RIGHT TURN AUXILIARY LANE

TYPICAL TWLTL AT TWO-WAY CROSS STREET AND RIGHT TURN LANE DROP

TYPICAL TRANSITION FOR TWLTL AND DIVIDED HIGHWAY

TYPICAL TWO-LANE ROADWAY INTERSECTION WITH LEFT TURN BAYS

TWO-WAY LEFT TURN LINES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS PM(3)-22

ADVANCED WARNING SIGN DISTANCE (D)

GENERAL NOTES

MATERIAL SPECIFICATIONS

HIGH-VISIBILITY LONGITUDINAL CROSSWALK AT CONTROLLED APPROACH

UNSIGNALIZED MIDBLOCK HIGH-VISIBILITY LONGITUDINAL CROSSWALK

CROSSWALK PAVEMENT MARKINGS PM(4)-22A

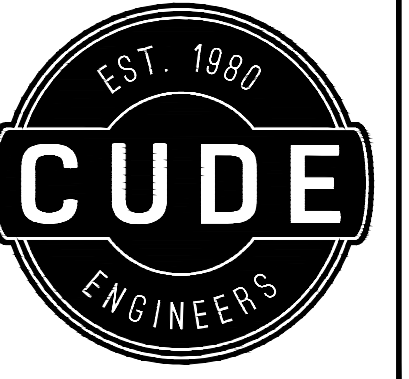
GENERAL NOTES

MATERIAL SPECIFICATIONS

DATE 04/15/2026
PROJECT NO. 03154.009
DRAWN BY MGM/ABB
CHECKED BY WPM

- REVISIONS**
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CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500



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San Antonio, Texas 78231
P: (210) 681.2951 F: (210) 523.7112

ESPERANZA BOULEVARD - PHASE III

TXDOT DETAILS - PAVEMENT MARKINGS AND RPMs - 2 OF 2

DATE
04/15/2026
PROJECT NO.
03154.009
DRAWN BY
MGM/ABB
CHECKED BY
WPM

REVISIONS

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CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

C21

DATE: _____ FILE: _____

DISCLAIMER: The use of this drawing is limited to the project and location specified. No responsibility is assumed by the engineer for any errors or omissions in the drawing or for any consequences arising from its use.

GENERAL NOTES

- Minimum 8 foot white markings should be used, unless otherwise noted. If message consists of more than one word, it should be placed with first word nearest the driver.
- These details are standard size for normal traffic volume. Size may be reduced approximately one-third for low speed urban conditions. Larger sizes may be needed for freeways, above average speed conditions or other critical locations.
- The longitudinal space between markings should be at least four times the height of the markings, on low speed roads, but should not exceed ten times the height under any condition.
- Markings considered appropriate for use when warranted include the following:
 - A. Regulatory
 - STOP
 - RIGHT (LEFT) TURN ONLY
 - 25 MPH
 - SYMBOL ARROWS
 - B. Warning
 - STOP AHEAD
 - SCHOOL AHEAD
 - SCHOOL
 - SCHOOL X-ING
 - PEDESTRIAN
 - R 8 R (see MCM standards)
 - GO AHEAD
 - ROAD NARROWING
 - STATE XXXX
 Other words or symbols may be necessary under certain conditions.
- Uncontrolled use of pavement markings can result in or contribute to confusion. Word and symbol markings should be no more than three lines.
- The word "STOP" shall not be used on the pavement unless accompanied by a STOP line and stop sign. The word "STOP" shall not be placed on the pavement in connection with a stop line, unless every vehicle is required to stop at all times.
- Pavement markings should generally be no more than one lane in width, with School messages being the exception. For details of School and School crossing pavement markings, refer to Part VII of the Texas Manual on Uniform Traffic Control Devices.
- Spacing between letters should be approximately 4 times the width of the letters.
- Line use or arrow markings may be used to convey other guidance or mandatory messages. Arrows used to convey a mandatory movement must be accompanied by stoppage signs and the pavement marking word "ONLY".
- Pavement markings are to be located at specified elevations in the plans.

SPACING BETWEEN LINES OF PAVEMENT MARKINGS

MPH	SPACING
≤ 45	MINIMUM 4 TIMES THE LETTER HEIGHT
> 45	MINIMUM 4 TIMES THE LETTER HEIGHT MAXIMUM 10 TIMES THE LETTER HEIGHT

Texas Department of Transportation
Traffic Operations Division

STANDARD PAVEMENT MARKINGS (ARROWS)

PM(6)-01

DATE	REVISED	BY	DATE	BY	DATE

22H