



SAFETY NOTES FOR DESIGN & CONSTRUCTION OF ANY INFRASTRUCTURE

WITHIN

RAILROAD RIGHT OF WAY

CMTA GENERAL NOTES:

1. TO WORK IN THE RAILROAD RIGHT OF WAY (ROW) ALWAYS FOLLOW TRACK SAFETY STANDARDS IN RAILROAD RIGHT OF WAY PER 49 CFR, CHAPTER 2, PART 213.
2. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE APPROVED PLANS. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE PLAN REVISIONS AND APPROVAL BY CAPITAL METRO (CMTA).
3. THE EXISTING UTILITIES SHALL BE LOCATED PRIOR TO COMMENCING ANY EXCAVATIONS. APPROVAL OF THE PROJECT BY CMTA DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF LOCATION OR THE EXISTENCE OR NON-EXISTENCE OF ANY UTILITIES OR STRUCTURES WITHIN THE LIMITS OF THIS PROJECT. THE APPROPRIATE REGIONAL NOTIFICATION CENTER [TEXAS EXCAVATION SAFETY SYSTEM SERVICE ALERT (ONE CALL) AT (800)344-8377, TEXAS811.org], RAILWAY COMPANIES AND UTILITY COMPANIES SHALL BE NOTIFIED PRIOR TO PERFORMING ANY EXCAVATION CLOSE TO ANY UNDERGROUND PIPELINE, CONDUIT, DUCT, WIRE OR OTHER STRUCTURE. REFER TO CMTA'S WEBSITE (CapMetro.org/RailROW) TO ENSURE PROPER CONTACT INFORMATION AND PHONE NUMBERS.

CMTA IS NOT A MEMBER OF ONE CALL. IT IS THEREFORE NECESSARY TO CALL HERZOG TRANSIT SERVICES (JUSTON SMITH AT 512-963-4615) TO HAVE SIGNAL SUPPORT SERVICES MARK, AT THE CONTRACTOR'S EXPENSE, SIGNAL AND COMMUNICATION CABLES AND CONDUITS IF WORKING IN THE CENTRAL SUBDIVISION. **CALL WATCO (DELMER ARMENTROUT AT 512-701-1644 AND KEN VEENSEN OF CDL, INC., AT 620- 687-7393) TO MARK, AT THE CONTRACTOR'S EXPENSE, SIGNAL AND COMMUNICATION CABLES AND CONDUITS IF WORKING IN THE EAST & WEST SUBDIVISIONS.**

IN CASE OF SIGNAL EMERGENCIES OR ROADWAY-RAIL GRADE CROSSING PROBLEMS, THE CONTRACTOR SHALL CALL CMTA'S 24-HOUR SIGNAL EMERGENCY NUMBER (800-772-7677).

WHEN THE NEW CROSSINGS INVOLVE GATES, THE MINIMUM REQUIRED CLEARANCE FROM EXISTING OVERHEAD WIRES SHALL BE MAINTAINED, AND GATE FOUNDATIONS CHECKED FOR UTILITIES. IF UTILITIES CANNOT BE LOCATED, POTHOING SHALL BE DONE TO LOCATE THE UTILITIES. CMTA AND THE APPROPRIATE UTILITY OWNERS SHALL BE NOTIFIED IMMEDIATELY WHEN UTILITY LINES NOT KNOWN OR INDICATED ON THE DRAWINGS ARE ENCOUNTERED. NO SERVICE SHALL BE DISRUPTED UNTIL THE UTILITY OWNER AND CMTA HAVE DETERMINED THE REQUIRED ACTION ON SUCH LINES.



4. THE CONTRACTOR SHALL NOTIFY CAPITAL METRO AT LEAST THREE WEEKS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN RAILROAD RIGHT-OF-WAY.
5. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST 48 HOURS PRIOR TO STARTING ANY WORK ON CITY RIGHT OF WAY. THE CONTRACTOR SHALL NOTIFY TXDOT AT LEAST FOUR WEEKS PRIOR TO STARTING ANY WORK ON STATE RIGHT OF WAY. A CHANGEABLE MESSAGE BOARD SHALL BE PLACED ALONG THE ROADWAY A MINIMUM OF SEVEN DAYS PRIOR TO BEGINNING THE WORK IN ORDER TO NOTIFY THE TRAVELING PUBLIC OF THE FUTURE ROAD WORK.
6. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA) (COPIES OF THESE STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIAL MAY BE PURCHASED FROM OSHA, 903 SAN JACINTO, RM. 319, AUSTIN, TEXAS 78701), AS WELL AS FRA (FEDERAL RAILROAD ADMINISTRATION) REQUIREMENTS FOR ROADWAY WORKERS.
7. TRENCH EXCAVATION PROTECTION:
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORKING AREA IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S PLANS SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY EXCAVATIONS, ESPECIALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS, COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION. THE CONTRACTOR PLANS AND OUTLINE FOR TRENCH SAFETY PROGRAM SHALL BE FURNISHED BY THE CONTRACTOR TO THE OWNER, PRIOR TO EXECUTION OF THE CONTRACT, FOR INCLUSION AS PART OF THE CONTRACT DOCUMENTS. THE DOCUMENTS FURNISHED TO THE OWNER ARE NOT FOR THE OWNER'S REVIEW, APPROVAL OR ENDORSEMENT OF THE CONTRACTOR'S PLAN AND TRENCH SAFETY PROGRAM, BUT SOLELY FOR THE PURPOSE OF INCLUDING DETAILED TRENCH SAFETY PLANS FOR THE PROJECT IN DOCUMENTS.
8. SEE CONSTRUCTION SEQUENCING PLAN AND TRAFFIC CONTROL AND CLOSURE PLANS FOR DETAILS ON PROJECT PHASING AND DETAILS ON TRAFFIC CONTROL AND CLOSURE ITEMS. THE CITY SHALL BE CONTACTED 48 HOURS PRIOR TO INSTALLATION OF TRAFFIC CONTROL AND CLOSURES AS APPLICABLE FOR EACH AFFECTED ROADWAY.
9. ALL EXCESS MATERIAL WILL BE DISPOSED OF OFF SITE. CONTRACTOR SHALL NOT DISPOSE OF SURPLUS MATERIAL FROM THE SITE WITHOUT NOTIFYING CMTA 48 HOURS PRIOR TO



THE REMOVAL. THE NOTIFICATION SHALL INCLUDE THE DISPOSAL LOCATION. CONTRACTOR SHALL DISPOSE OF CONTAMINATED SOIL IN ACCORDANCE WITH FEDERAL AND STATE REQUIREMENTS FOR APPROPRIATE DISPOSAL BASED ON ENVIRONMENTAL REQUIREMENTS.

10. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF ANY AND ALL EXISTING STRUCTURES ON SITE AS NOTED IN THE PLANS. CONTRACTOR SHALL REMOVE ITEMS AS DETAILED IN THE PLANS. CONTRACTOR SHALL REMOVE GRADE CROSSING EQUIPMENT, CONCRETE GRADE CROSSING PANELS AND SIGNAL HOUSES AND STOCKPILE USABLE TRACK MATERIALS AT CEDAR PARK YARD AND USABLE SIGNAL MATERIALS ABBOTT YARD.
11. ALL CONCRETE WORK SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF ACI 301-10 AND CONTRACT SPECIFICATIONS.
12. ALL EXPOSED CORNERS FOR CONCRETE WORK SHALL BE CHAMFERED 1 INCH.
13. THE INFORMATION CONTAINED ON THESE DRAWINGS IN REGARD TO EXISTING UTILITIES, TOPOGRAPHY, CONTOURS OR SUBSURFACE CONDITIONS IS FURNISHED SOLELY AS THE BEST INFORMATION AVAILABLE AT THIS TIME. ITS ACCURACY IS NOT GUARANTEED AND ITS USE IN NO WAY RELIEVES THE CONTRACTOR OF ANY RESPONSIBILITY FOR LOSSES DUE TO ANY INACCURACIES.
14. THE CONTRACTOR SHALL NOTIFY CAPITAL METRO BEFORE BEGINNING ANY UTILITY CONSTRUCTION IN PUBLIC ROW OR PUBLIC EASEMENT. NO PIPE SHALL BE LAID UNTIL CMTA OR ITS REPRESENTATIVE HAS MET WITH THE CONTRACTOR OR HIS REPRESENTATIVE AT THE PROJECT SITE.
15. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITIONS, INCLUDING REVEGETATION (HYDROMULCH) AND GRADING TO DRAIN AS REQUIRED BY THE CITY AT NO ADDITIONAL COST TO CAPITAL METRO.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR ITS OWN SURVEY.
17. NO WORK SHALL BE PERMITTED WITHOUT A ROADWAY WORKER IN CHARGE (RWIC) WHEN WORK IS WITHIN 25 FEET OF THE FOUL ZONE/ROW OR EQUIPMENT HAS THE POTENTIAL TO ENTER THE FOUL ZONE. WORK WITHIN THE FOUL ZONE MAY REQUIRE A NIGHT OR WEEKEND SCHEDULE IF A FORM B CANNOT BE USED.
18. ALL CONTRACTORS WILL NEED TO SUBMIT AN ONLINE APPLICATION TO CMTA'S REAL ESTATE DEPARTMENT FOR DEPLOYMENT OF RWIC, AT THE REQUIRED LOCATION OF THEIR WORK, WITHIN THE ROW. WHEN WORKING DIRECTLY ON CMTA PROJECTS RWIC FEES SHALL BE WAIVED UPON APPROVAL FROM LISTED CMTA PROJECT MANAGER AND THE INTERNAL PROJECT NUMBER INCLUDED IN THE ONLINE REQUEST. FOR THIRD PARTY



CONTRACTORS WORKING IN THE RAILROAD ROW, THERE WILL BE A CHARGE FOR RWIC DEPLOYMENT AT \$100/HOUR.

19. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL QUANTITIES.

20. DESIGN AND CONSTRUCTION OF RAILROAD PROJECTS WITHIN THE ROW SHALL BE IN ACCORDANCE WITH THE AREMA MANUAL FOR RAILWAY ENGINEERING AND CMTA GUIDELINES FOR RAILROAD GRADE SEPARATION PROJECTS (AS ANNOTATED BY TXDOT), OR KANSAS CITY SOUTHERN GUIDELINES FOR THE DESIGN AND CONSTRUCTION OF OVERPASSES AND UNDERPASSES AND TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES.

GRADING NOTES:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MAKE CERTAIN THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

2. BARRICADING, TRAFFIC CONTROL AND PROJECT SIGNS SHALL CONFORM TO STATE AND CITY BARRICADING AND CONSTRUCTION STANDARDS AS APPLICABLE AND THE CONTRACT SPECIFICATIONS.

3. THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS, INCLUDING GRADES AND DIMENSIONS, BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES. MINOR ADJUSTMENT TO FINISH GRADE TO ACCOMPLISH SPOT DRAINAGE IS ACCEPTABLE, IF NECESSARY, UPON PRIOR APPROVAL OF THE ENGINEER. PAVING INSTALLED SHALL MATCH EXISTING PAVING AT JOINTS AND NOT CREATE PUDDLES.

4. PROPOSED SPOT ELEVATION AND DESIGNATED GRADIENT ARE TO BE USED IN THE EVENT OF ANY DISCREPANCIES.

5. SITE PREPARATION AND GRADING AND FILL COMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT.

RAILROAD NOTES:



ALL INFORMATION ASSOCIATED WITH CAPITAL METRO ROW REQUESTS CAN BE LOCATED [AT](https://capmetro.org/row) [CAPMETRO.ORG/ROW](https://capmetro.org/row).

1. ANY WORKERS WORKING WITHIN THE RAILROAD RIGHT OF WAY NEED TO GET RAILROAD WORKERS SAFETY TRAINING AND RECEIVE A YELLOW CARD AS A PROOF OF THAT TRAINING. ANY WORKERS WORKING IN THE RAILROAD ROW NEED TO CARRY THE YELLOW CARD AT ALL TIMES.
2. CAPITAL METRO MUST APPROVE ALL ACCESS TO AND ACTIVITIES WITHIN THE CAPITAL METRO ROW PRIOR TO ENTERING INTO THE RAILROAD ROW OR THE PERFORMANCE OF ANY WORK. ALL INDIVIDUALS OR CONTRACTORS REQUIRING ACCESS TO THE RAILROAD ROW MUST HAVE AN APPROVED LICENSE AGREEMENT AND/OR WORK PERMIT PRIOR TO ANY WORK WITHIN THE RAILROAD ROW. INDIVIDUALS OR CONTRACTORS SHALL FOLLOW ALL SAFETY REQUIREMENTS OF CAPITAL METRO AND ALL WORKERS PERFORMING WORK IN THE RAILROAD ROW MUST SUCCESSFULLY COMPLETE THE CAPITAL METRO ROADWAY WORKER CERTIFICATION, AT ALL TIMES, A VALID CERTIFICATION CARD MUST BE IN THEIR POSSESSION WHILE IN THE RAILROAD ROW.
3. ANY WORK WITHIN THE FOUL ZONE (DEFINED AS 25 FEET FROM THE CENTER OF THE NEAREST TRACK) OF THE RAILROAD ROW CAN ONLY PROCEED WITH THE PRESENCE OF A QUALIFIED RWIC. ANY WORK INVOLVING EQUIPMENT THAT HAS THE POTENTIAL TO ENTER THE FOUL ZONE MAY ONLY BE PERFORMED WITH THE PROTECTION OF A QUALIFIED RWIC. SCHEDULING OF RWICS IS COORDINATED BY CAPITAL METRO RAIL OPERATIONS.
4. CONTRACTOR SHALL NOTIFY CMTA AND ITS OPERATIONS & MAINTENANCE CONTRACTOR, HERZOG TRANSIT SERVICES (IF WORKING IN THE CENTRAL SUBDIVISION) OR WATCO (IF WORKING IN EAST OR WEST SUBDIVISION), THREE WEEKS BEFORE COMMENCING WORK WITHIN THE CMTA RIGHT-OF-WAY IN ORDER TO SCHEDULE ROADWAY WORKER TRAINING CLASS, TRACK ACCESS AND RWIC SERVICES IF NEEDED AND SCHEDULE TRACK OUTAGES.

ROADWAY WORKER TRAINING IS PROVIDED BY HERZOG TRANSIT SERVICES. CONTACT HTSI'S MANAGER OF SAFETY AND TRAINING (PHILLIS WORTHY) AT 505-353-1357 FOR INFORMATION REGARDING TRAINING.

5. COMPLY WITH ALL CONDITIONS OF PERMIT FOR CONSTRUCTION IN RAILROAD ROW.
6. CONSTRUCTION IN RAILROAD ROW SHALL NOT PROGRESS UNTIL PROOF OF INSURANCE IS PROVIDED TO CMTA.
7. THE CONTRACTOR MUST REQUEST THAT ALL RAILROAD SIGNAL GRADE CROSSING AND COMMUNICATION CABLES WITHIN THE LIMITS OF CONSTRUCTION BE LOCATED AND TAKE CARE



NOT TO DAMAGE THEM. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN MARKING OF CABLES AND FOR THE REPAIR OF ANY DAMAGE TO CAPITAL METRO SIGNAL FACILITIES.

8. CONTRACTOR SHALL MAINTAIN A MINIMUM CONSTRUCTION CLEARANCE OF 23'-7" VERTICALLY ABOVE THE PLANE OF THE TOP OF RAIL (TOR).
9. ANY CONSTRUCTION FEATURE WILL HAVE 10' HORIZONTAL CLEARANCE FROM THE CENTER OF THE TRACK
10. TRENCHING FOR THE UNDERGROUND CABLE OR UTILITY PIPE PARALLEL TO THE TRACK SHOULD BE PROVIDED TOWARD THE EDGE OF THE ROW.
11. BEFORE ANY EXCAVATION ON THE ROW GET DETAILS OF THE EMBEDDED PTC FIBER IN TERMS OF THE OFFSET & DEPTH OF THE FIBER OPTIC LINE IF WORKING WITHIN CENTRAL SUBDIVISION.

GENERAL SHORING REQUIREMENTS

1. RAILROAD REVIEW AND APPROVAL OF SHORING, ERECTION, DEMOLITION AND FALSEWORK IS REQUIRED. ALLOW A MINIMUM OF FOUR WEEKS FOR THE REVIEW AND APPROVAL OF EACH SUBMITTAL.
2. THE PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES. IN THE RARE EVENT THAT A GRADE SEPARATION PROJECT WILL INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF FLOW IN SUCH ELEMENTS, SUCH A DESIGN MUST BE REVIEWED AND APPROVED BY THE RAILROAD.
3. VERIFY THE ELEVATION OF THE EXISTING TOR PROFILE BEFORE BEGINNING CONSTRUCTION. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION
4. SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL FOR APPROVAL BY THE RAILROAD.
5. DESIGN AND CONSTRUCT ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD'S EMBANKMENT PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
6. COMPLY WITH RAILROAD DEMOLITION GUIDELINES FOR ALL DEMOLITIONS WITHIN THE RAILROAD ROW AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATION.
7. DESIGN ERECTION METHODS OVER THE RAILROAD ROW TO CAUSE NO INTERRUPTION TO THE RAIL OPERATIONS, ENABLING THE TRACK TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S



REQUIREMENT. COORDINATE CONSTRUCTION WORK WINDOWS WITH RAILROAD REPRESENTATIVE.

8. DESIGN ALL CONSTRUCTION PHASING THAT MAY IMPACT THE RAILROAD OPERATIONS TO CAUSE NO INTERRUPTION TO THE RAILROAD OPERATION, ENABLING THE TRACK TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENT. COORDINATE CONSTRUCTION WORK WINDOWS WITH THE RAILROAD'S REPRESENTATIVE.
9. COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES FOR FALSEWORK OUTLINED IN THE RAILROAD GUIDELINES.
10. VERIFY ALL PERMANENT CLEARANCES BEFORE PROJECT CLOSING.
11. FOR RAILROAD COORDINATION LIAISE WITH THE RAILROAD REPRESENTATIVE.