

Capital Improvement Project General Construction Notes

Capital Improvement Project General Construction Notes Revised October 11, 2022

General Notes:

1. General Contractor shall call for all utility locates prior to any construction. Contractor shall delineate areas of excavation using white paint (white lining) in accordance with 16 TAC 18.3. Water & wastewater owned by the City of Cedar Park can be located by calling Texas 811 at 1-800-344-8377. Allow three business days for utility locates by the City of Cedar Park.
2. All construction shall be in accordance with the latest City of Austin Standard Specifications. City of Austin standards shall be used unless otherwise noted.
3. Prior to City acceptance of all improvements, all graded and disturbed areas inside the right of way between the property line and edge of pavement / back of curb shall be revegetated according to COA specification 602S and 606S; all graded and disturbed areas outside of the right of way shall be re-vegetated in accordance with the City of Austin Specification Item #604 native mix unless another re-vegetation specification is specifically identified in the plans and/or bid form.
4. The Contractor shall provide the City of Cedar Park copies of all test results prior to acceptance of this project.
5. City, owner, engineer, contractor, representatives of all utility companies, and a representative from the testing lab shall attend pre-construction conference prior to start of construction. The contractor shall schedule the meeting with the City of Cedar Park Engineering Department 48 hours prior to this pre-construction meeting (512-401-5000).
6. Excess soil shall be removed at the contractor's expense. Notify the City of Cedar Park for approval if the disposal site is inside the City's jurisdictional boundaries.
7. Burning is prohibited.
8. No blasting is allowed on this project.
9. Any changes or revisions to these plans must first be submitted to the City by the design engineer for review and written approval. All changes and revisions made to the design of utilities or impacts utilities shall use revision clouds to highlight all revisions or changes with each submittal. Revision triangles shall be used to mark revisions. All clouds and triangle markers from previous revisions may be removed. Revision information shall be updated in the appropriate areas of the Title Block.
10. The Contractor will reimburse the City for all cost incurred as a result of any damage to any City utility by the Contractor, regardless of these plans.
11. An engineer's concurrence letter and electronic 22"x34" record drawings shall be submitted to the Engineering Department prior to the issuance of final acceptance. The Engineer and Contractor shall verify that all final revisions and changes have been made to record drawings prior to City submittal. Record construction drawings, including roadway and all utilities, shall be provided to the City in AutoCad ".dwg" files and ".PDF" format on a CD, DVD, or USB Flash Drive. Line weights, line types and text size shall be such that if half-size prints (11"x 17") were produced, the plans would still be legible. All required digital files shall contain a minimum of two (2) control points referenced to the State Plane Grid Coordinate System – Texas Central Zone (4203), in US feet and shall include rotation information and scale factor required to reduce surface coordinates to grid coordinates in US feet.

12. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF CEDAR PARK MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
13. A traffic control plan sign and sealed by a Licensed Texas Professional Engineer, in accordance with the Texas Manual on Uniform Traffic Control Devices, shall be submitted to the City for review and approval prior to any partial or complete roadway closures.
14. The contractor shall keep the site clean and maintained at all times, to the satisfaction of the City. This project will not be accepted until the site has been cleaned and re-vegetated to the satisfaction of the City.
15. Signs are not permitted in Public Utility Easements, Set Backs or Drainage Easements.
16. Inspect temporary erosion controls on a daily basis. Adjust the controls and/or remove any sediment buildup as necessary.
17. Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment and debris. Contractor will not remove soil, sediment or debris from any area or vehicle by means of water, only shoveling and sweeping will be allowed. Contractor will be responsible for dust control from the site.
18. The Contractor shall be responsible for all damage to private property, which occurred as a result of any portion of this project. Any damage to private property shall be repaired to equal or better condition. The Contractor shall coordinate all repairs to private property with the property owner. Contractor shall pay and/or settle with private property owner for all costs related to any damage. The City will not provide separate pay for repair of any damages, reimbursements or settlements.
19. Contractor shall provide the services of the City's approved SCADA consultant and controls instrumentation consultant. (When applicable to SCADA) The cost of the consultant and/or any equipment shall be subsidiary to the cost of the project (no separate pay) unless specifically identified on the bid form.
20. The contractor shall make applications to Pedernales Electric Cooperative for electric service if new service is required. The City will assume the service upon acceptance of the project (if required). The contractor will pay for electric power until the meter is transferred to the City of Cedar Park. Impact fees and Application Fees required by PEC will be the responsibility of the Contractor unless specifically identified in the contract.
21. The contractor shall provide combination locks for all gates, hatches, vaults, and MCC boxes. Each lock shall be pre-approved and set to the City's requirements. (No separate pay)
22. All work on these plans shall be performed. Pay for work shown on these plans, which are not identified in the contract, shall be considered incidental to the items specifically identified for payment.
23. The contractor shall provide a competent and qualified superintendent to supervise all work. The superintendent shall be present during all construction activities.
24. Any survey monuments damaged or moved as a result of this project shall be replaced to equal or better condition. A Texas Registered Professional Land Surveyor shall oversee the replacement and certify the replacement for its intended use. No separate pay will be provided.
25. Adequate drainage conditions, in accordance with the City of Austin Drainage Criteria Manual, shall be maintained at all times.
26. Any tree removed or damaged by this project, which is not specifically identified to be removed by the plans, will be replaced according to the requirements of the City of Cedar Park Code of Ordinances. No separate pay will be provided.
27. The contractor shall uncover all utilities within the limits of construction and verify their horizontal and vertical location prior to any construction activities. The contractor shall notify

the City and the Engineer, IN WRITING, of any conflicts prior to any other construction including but not limited to exact locations of conflicts with proposed or existing utilities. No additional pay unless specifically identified for payment in the contract documents. The contractor shall also make his own sub-surface investigation prior to bid.

28. Only stainless steel casing spacers are allowed in encasement pipe(s).
29. No separate pay will be given to de-water trenches or other excavated areas.
30. Soil material, of sufficient organic content, imported for re-vegetation of disturbed areas shall be approved by the Engineering Department prior to placement. A sample (submittal) is required. Sandy-loam and/or soils with high clay content will not be accepted.
31. The contractor shall perform pumping stations and/or lift station start-up independently: prior to requesting witness or acceptance by the City. When a final start-up fails to be complete and acceptable and when City personnel are present at start-up, each additional start-up will be charged to the contractor, as liquidated damages, \$500.00 per additional meeting.
32. Shutout of any customers of the City's utility due to tie-ins shall only be scheduled for nighttime work unless approved by the Public Works Department. The City's field representative shall coordinate and inspect all nighttime shutouts and tie-ins. The contractor shall request shutouts two weeks in advance. Shutouts will only be allowed in the following times and are subject to approval by the City: 10 PM - 6 AM; beginning on Tuesday, Wednesday or Thursday night(s). No extra time will be granted to the contract for unscheduled work in the time period allowed or due to requests outside the approved time periods.
33. All construction and construction related activities shall be performed Monday thru Friday from 7:00 A.M. to 6:00 P.M. However, construction activities within five hundred feet (500') of a dwelling or dwelling unit shall be performed between the hours of 8:00 a.m. and 6:00 p.m. Otherwise all construction and construction related activities shall conform to City of Cedar Park Code of Ordinances, specifically ARTICLE 8.08.
34. Approval for construction activities performed on Owner's Holidays, and/or Saturdays, outside of Monday through Friday 8 am to 5 pm, or in excess of 8 hours per day shall be obtained in writing 48 hours in advance, and inspection fees at 1.5 times the hourly inspection rate shall be billed directly to the contractor. There shall be no construction or construction related activities performed on Sunday. The City reserves the right to require the contractor to uncover all work performed without City inspection.
35. Temporary rock crushing operations are not allowed. All sources for flexible base material are required to be approved by the City. Prior to base placement all current triaxial test reports for the proposed stockpiles are to be submitted to the City's project representative for review and approval.
36. There shall be no water or wastewater appurtenances, including but not limited to, valves, fittings, meters, clean-outs, manholes, or vaults in any driveway, sidewalk, traffic or pedestrian area.
37. Sidewalks shall not use curb inlets as a partial walking surface. Sidewalks shall not use traffic control boxes, meter or check valve vaults, communication vaults, or other buried or partially buried infrastructure as a vehicular or pedestrian surface.

Street Notes:

1. No trenching of compacted base will be allowed. A penalty and/or fine may be imposed to the general contractor if trenching of compacted base occurs without City approval, regardless of who performed the trenching.
2. All sidewalks shall comply with the Americans With Disabilities Act and the Texas Architectural Barriers Act. The City of Cedar Park has NOT reviewed these plans for compliance with the

Americans With Disabilities Act, Texas Architectural Barriers Act, or any other accessibility legislation, and does not warranty or approve these plans for any accessibility standards. However, prior to project acceptance, the Contractor shall submit to the COCP documentation that the project was inspected by the Texas Department of Licensing and Regulation or a Registered Accessibility Specialist and the project is in compliance with the requirements of the Texas Architectural Barriers Act.

3. Street barricades shall be installed on all dead end streets and as necessary during construction to maintain job safety.
4. Any damage caused to existing pavement, curbs, sidewalks, ramps, etc., shall be repaired by the contractor to the satisfaction of the City prior to acceptance of this project.
5. Density testing of compacted subgrade material, first course and second course compacted base, shall be made at 500 foot intervals. Any failed tests will be re-tested at the expense of the contractor.
6. The contractor shall coordinate with the City's field representative 48 hours prior to scheduled density testing. The City's field representative shall witness all testing.
7. The City will notify the contractor of the name, contact and phone number of the testing laboratory for this job. The City will pay for all tests that pass the specifications the first time. The CONTRACTOR shall schedule the testing with the laboratory and notify the City's field representative of the time and location of all tests.
8. Traffic control signs and pavement markings in accordance with the Texas Manual on Uniform Traffic Control Devices to be installed as directed by the City of Cedar Park prior to City acceptance of this project.
9. Slope of natural ground adjacent to the right-of-way shall not exceed 3:1. If a 3:1 slope is not possible, a retaining wall or some other form of slope protection approved by the City shall be placed in a location acceptable to the City.
10. The City, engineer, contractor, and a representative from the asphalt-testing lab shall attend a pre-paving conference prior to the start of HMAC paving. The contractor shall give the City's field representative 48 hours notice prior to this meeting.
11. Re-testing of the asphalt pavement shall be limited to one retest per project. Failed tests shall be the financial responsibility of the contractor.
12. All pavement markings and signage shall comply with MUTCD standards.
13. Pavement markings shall be thermoplastic unless otherwise noted.
14. Street name signs shall be provided and installed in accordance with Street Name Sign Pole detail provided by the City of Cedar Park.
15. All street name signs shall be high intensity retro grade.
16. A minimum of seven days of cure time is required for HMAC prior to the introduction of vehicular traffic to any streets.
17. No Fencing or Wall is allowed to be constructed so that it obstructs the sight lines of drivers from an intersecting public roadway or from an intersecting private driveway. Sight lines are to be maintained as described in City Code Section 14.05.007. Installing a fence or wall which does not comply with the City's Sight Distance Requirements or Fencing Regulations is a violation of the City's Ordinance and may be punishable pursuant to Section 1.01.009 of City Code.
18. Utility service boxes or other utility facilities shall not be installed within areas determined to be required sight lines of two intersecting public streets or within sight lines of a private driveway. Sight lines are to be maintained compliant with Table 1-1 of the Austin Transportation Criteria Manual. Utilities determined by the Director of Engineering to be placed within required sight lines may be required to be relocated at the expense of the contractor prior to the City issuing a Certificate of Occupancy or prior to the City's Acceptance of the Project Improvements.

19. All lane closures shall occur only between the hours of 9 AM and 4 PM. Any night time lane closures require approval by the Director of Engineering and shall occur between the hours of 8 PM and 6 AM. Lane closures observed by City during the peak hours of 6 AM to 9 AM, or 4 PM to 8 PM will be subject to fine per Chapter 1 of City Ordinance, and/or subsequent issuance of Work Stoppage.
20. Improvements that include reconstruction of an existing Type II driveway shall be done in a manner which retains operations of not less than half of the driveway at all times. Full closure of such driveway can be considered with written authorization retained by the Contractor from the property owner(s) or access easement right holder(s) of the driveway allowing full closure of the driveway.
21. Trees must not overhang within 10' vertically of a sidewalk, or 18' vertically of a roadway or driveway.

Wastewater Notes:

1. Refer to the City of Cedar Park Public Works Utility Policy and Specifications manual.
2. The contractor, with City approval, shall raise manhole frames and covers and water valve boxes to finished pavement grade at the contractor's expense. All utility adjustments shall be completed prior to final paving construction.
3. The location of any existing utility lines shown on these plans may not be accurate. Any damage to existing utility lines, both known and unknown, shall be repaired at the expense of the contractor. The contractor shall make his own sub-surface investigation prior to bid. The contractor shall uncover all utilities within the limits of construction and verify their horizontal and vertical location prior to any construction activities.
4. All iron pipe and fittings shall be wrapped with at least 8-mil polyethylene wrap, according to the COA Specification. All metallic pipe shall be cathodically protected.
5. All water mains, wastewater mains and service lines shall meet City of Austin minimum cover specifications. All streets are to be cut to subgrade prior to installation of water mains.
6. Where 48-inches of cover below subgrade cannot be achieved for wastewater service lines alternate materials shall be used. A minimum of 36-inches of cover below subgrade shall be achieved. Any wastewater service line with cover between 36-inch and 48-inches shall be SDR-26 PVC pressure pipe.
7. Gasketed PVC sewer main fittings shall be used to connect SDR-35 PVC to SDR-26 PVC pressure pipe or C-900.
8. SDR-35 WW is not allowed.
9. Force mains shall be epoxy lined ductile iron.
10. All sanitary sewers, excluding service lines, shall be mandrel tested per TCEQ (Texas Commission on Environmental Quality) criteria. A mandrel test will not be performed until backfill has been in place for a minimum of 30 days.
11. All sanitary sewers, including service lines, shall be air tested per City of Austin Standard Specifications.
12. Density testing of compacted backfill shall be made at a rate of one test per two foot lifts per 500 feet of installed pipe, unless specified otherwise by the City.
13. City to be given 48 hours notice prior to all testing of water and wastewater lines. City inspection is required for all testing of water and wastewater lines.
14. Where a water or wastewater line crosses above (or below) a storm sewer structure and the bottom (or top) of the pipe is within 18 inches of the top (or bottom) of the utility structure, the pipe shall be encased with concrete for a distance of at least 1 ft. on either side of the ditch line of the utility structure or the storm sewer. Concrete encasement will not be required for ductile

iron (thickness Class 50), AWWA C-900 (SDR-14) 200 psi rated PVC in sizes to 12 inches or AWWA C-905 (SDR-25) 165 psi rated PVC in sizes larger than 12 inches. Concrete encasement shall conform to C.O.A. standard detail 505-1.

15. The allowable (maximum) adjustment for a manhole shall be 12" (inches) or less.
16. Where a sewer line crosses a water line, the sewer line shall be one 20 ft. joint of 150 psi (or greater if specified in the plans) rated PVC centered on crossing.
17. All manhole and inlet covers shall read "City of Cedar Park".
18. All manhole lids outside the pavement shall be bolted. Security bolts per City specifications shall be used.
19. Contractor to notify City of Cedar Park 48 hours prior to connecting to existing utilities. Inspection of connections to existing utilities is required.
20. All pipe bedding material shall conform to City of Austin Standard Specifications.
21. Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
22. All wastewater manholes to be coated with organic materials and procedures listed in City of Austin Qualified Products List No. WW-511 (WW-511A and WW-511B are not allowed unless manhole is being structurally rehabilitated with approval by Public Works). All manholes will be pre-coated or coated AFTER testing.
23. Polybrid Coatings on wastewater manholes will not be allowed without pre-approval from the project manager. Any other manhole coating product appearing on the CoA SPL WW-511 is acceptable and required.
24. All manholes will be vacuum tested only.
25. Tracer tape shall be installed on all water and wastewater mains in accordance with City of Austin Standards regardless of the type of pipe or depth of pipe.
26. Piping in and around lift station valve vaults will be painted and/or coated to the City's specifications.
27. MCC's, junction boxes or any housing for electrical components shall be NEMA 4X stainless steel. Painted metal or any other type of box will not be accepted unless specifically identified in the plans.
28. All wastewater lines 10" and larger shall be video inspected in accordance with City of Cedar Park Public Works Department Utility Policy and Standard Specifications Manual Appendix E: Requirements for Video Inspection of Wastewater Lines at the Contractor's expense. No separate pay unless noted on the bid form.
29. Calcutta MH rings are not allowed in the TX DOT ROW.
30. All pressure pipe shall have mechanical restraint and concrete thrust blocking at all valves, bends, tees, plugs, and other fittings.

Water Notes:

1. Refer to the City of Cedar Park Public Works Utility Policy and Specifications manual.
2. The top of valve stems shall be at least 18", and no more than 36", below finished grade. Valve stem risers shall be welded on each end to the City's satisfaction.
3. Fire hydrant leads to be ductile iron, Class 350, and installed per City of Austin standard specifications and City of Cedar Park detail.
4. The contractor shall provide cuts for all water lines and fire hydrant bury lines in accordance with the contract.
5. Approved 5 ¼" fire hydrants:
 - American Flow Control, B84B
 - Mueller Company, Super Centurion 250

- Clow Medallion Hydrant
 - American AVK Company, Series 27 (Model 2780)
 - All fire hydrants must meet City of Cedar Park thread specifications (National Thread)
 - Blue reflector markers shall be located on the centerline of the pavement across from all fire hydrants. Pavement markers at intersections shall be four-sided.
6. Should a Tapping Saddle be approved by Public Works, the saddle shall be Smith-Blair 662 Stainless Steel Tapping Sleeves with all stainless hardware, or approved equal. Requests for alternate providers shall be made to the City of Cedar Park Public Works. No tap exceeding 2" in diameter will be approved.
 7. All water lines, including service lines, shall be pressure and leak tested per City of Austin Standard Specifications and witnessed by the City of Cedar Park representative. All failed tests shall be the fiscal responsibility of the contractor, and the contractor may be required to re-test lines if the testing is not witnessed by the City. Contractor must notify the City of Cedar Park 48 hours prior to any testing.
 8. All water lines shall be sterilized and bacteriologically tested in accordance with City of Austin Standards. The contractor is responsible for sterilization and the City of Cedar Park is responsible for submitting bacteriological samples to the State unless otherwise approved by the Public Works department. Public Works will require a contractor specialized in disinfection for large diameter lines or critical infrastructure, subsidiary to pipe installation.
 9. All water valve risers not in pavement shall be set in concrete in accordance with the City's specifications and details. The standard detail is available on the City's web site.
 10. Density testing of compacted backfill shall be made at a rate of one test per two foot lifts per 500 feet of installed pipe unless otherwise approved by the Engineering Department.
 11. Contractor to obtain a water meter from the City of Cedar Park for any water that may be required during construction. (512-401-5000)
 12. All water meter boxes shall be Ford Gulf Meter Box with locking lid.
 - SINGLE G-148-233
 - DUAL DG-148-243
 - 1" METER YL111 - 444
 - 1 ½" – 2" METER 1730-R (LID) & 1730-12 (BOX)/ACCEPTABLE BOXES FOR THIS SIZE OF METER
 13. Manhole frames and covers and water valve boxes shall be raised to finished pavement grade at the contractor's expense with City inspection. All utility adjustments shall be completed prior to final paving construction.
 14. The location of any existing utility lines shown on these plans is the best available and may not be totally accurate. Any damage to existing utility lines, both known and unknown shall be repaired at the expense of the contractor. The Engineer and/or the City make no guarantee or warranty to the accuracy of these plans. The contractor shall make his own sub-surface investigation prior to bid. The contractor shall uncover all utilities within the limits of construction and verify their horizontal and vertical location prior to any construction activities.
 15. All iron pipe and fittings shall be wrapped with at least 8-mil polyethylene wrap in accordance with the COA specification. All metallic pipe shall be cathodically protected.
 16. All water mains, wastewater mains and service lines shall meet City of Austin Specifications for minimum cover requirements. All streets are to be cut to subgrade prior to installation of water mains.
 17. City to be given 48 hours notice prior to all testing of water and wastewater lines. City inspection is required for all testing of water and wastewater lines.

18. Where a water or wastewater line crosses above (or below) a storm sewer structure and the bottom (or top) of the pipe is within 18 inches of the top (or bottom) of the utility structure, the pipe shall be encased with concrete for a distance of at least 1 ft. on either side of the ditch line of the utility structure or the storm sewer. Concrete encasement may not be required for ductile iron (thickness Class 50), AWWA C-900 (SDR-14) 200 psi rated PVC in sizes to 12 inches or AWWA C-905 (SDR-25) 165 psi rated PVC in sizes larger than 12 inches. Concrete encasement shall conform to C.O.A. standard detail 505-1. This note does not allow for pipe that would otherwise have a higher maximum operating pressure.
19. Contractor to notify City of Cedar Park 48 hours prior to connecting to existing utilities. Inspection is required.
20. All pipe bedding material shall conform to City of Austin Standard Specifications.
21. Tracer tape shall be installed on all water and wastewater mains regardless of the type of pipe or depth of pipe installed.
22. Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
23. The City considers protection of its water system paramount to construction activities. City personnel will operate, or authorize the contractor to operate, all water valves that will pass through the City's potable water. The contractor may not operate any water valve, existing or proposed, that will allow water from the City's water system to flow to a proposed or existing water system without the express consent of the City. Notify the City two business days in advance of any request to operate a water valve. The general contractor may be fined \$500 or more, including additional theft of water fines, if a water valve is operated in an unauthorized manner, regardless of who operated the valve.
24. All water valves over 24" in size shall have a by-pass line and valve installed. By-pass valves and lines are subsidiary to the cost of the valve unless specifically identified on the bid form.
25. All water pipe and appurtenances larger than 12" shall have a maximum operating pressure greater than 250 psi unless specifically identified on the bid form.
26. A.Y. McDonald "T" series compression fittings will not be accepted by the City of Cedar Park. Mac-Pak compression fittings, or another type listed on the COA SPL is acceptable.
27. All potable water system components installed after January 4, 2014, shall be "lead free" according to the United States Safe Drinking Water Act. The only components exempt from this requirement are fire hydrants. Components that are not clearly identified by the manufacturer as meeting this requirement by marking, or on the product packaging, or by pre-approved submittal, will be rejected for use. A NSF certification will be adequate if the certification has not expired as of January 4, 2014 and remains unexpired at the time of construction.
28. All pressure pipe shall have mechanical restraint and concrete thrust blocking at all valves, bends, tees, plugs, and other fittings.

Storm Sewer Notes:

1. The contractor with City inspection shall raise manhole frames and covers and water valve boxes to finished pavement grade at the contractor's expense. All utility adjustments shall be completed prior to final paving construction. The contractor shall backfill around manholes and junction boxes with Class A concrete. All utility adjustments shall be completed prior to final paving construction.
2. All manhole lids shall be 32" or larger, unless expressly approved in writing by the Public Works Department. All lids outside the pavement will be bolted.

3. The location of any existing utility lines shown on these plans is the best available and may not be totally accurate. Any damage to existing utility lines, both known and unknown, shall be repaired at the expense of the contractor.
4. Corrugated Metal Pipe is not permitted.
5. All manhole and inlet covers shall read "City of Cedar Park ".
6. Contractor to notify City of Cedar Park 48 hours prior to connecting to existing utilities.
7. All pipe bedding material shall conform to City of Austin Standard Specifications.
8. Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
9. Contractor to install and maintain geo-textile fabric barrier (inlet protection) around storm sewer leads and inlets to prevent silt and other material from entering the storm sewer collection system.
10. All curb inlets shall have an Almetek 4" Disc "No Dumping Drains to Waterway" marker.