



**CITY OF MCKINNEY
ENGINEERING DEPARTMENT
CIVIL ENGINEERING DEVELOPMENT
PROCESS and REQUIREMENTS**

INTRODUCTION:

The City of McKinney's Engineering Department is responsible for the review and approval of all new public improvement construction and reconstruction projects within the City limits as well as within its ETJ. The Engineering Department assists Developers and Design Engineers in assuring that all public improvements for construction are designed to meet current City specifications.

The following information is intended as a guide to aid Developers/engineers/architects through the City of McKinney's Civil Engineering Development process ensuring that all approval requirements are met.

The City of McKinney's Engineering Department reserves the right to request additional information necessary to complete the review of specific development projects in addition to the information list here within.

CIVIL ENGINEERING PRE-DEVELOPMENT AND PLANNING APPLICATION PROCESS:

- 1. Schedule a Pre-Development Meeting** - A pre-development meeting is encouraged for all projects, and especially if you are new to McKinney or have a complicated development proposal. A pre-development meeting will be scheduled with representatives from the Fire, Engineering, Planning, Parks, and Building Inspection departments to meet with the applicant or Developer prior to the formal submittal of development plans. Contact the Planning Department to schedule a pre-development meeting by emailing Contact-Planning@mckinneytexas.org or call 972-547-2000 for any additional information.

- 2. Obtain Record Drawings** - The Design Engineer or licensed professional is responsible for obtaining and reviewing record drawings of all existing improvements and shall verify information related to paving and underground utilities within, adjacent to, and associated to the project area. Record Drawings may be obtained using the [Record Drawing and Other GIS Information Request Form](#). Record drawing information should be field verified as necessary.

Additional record drawings may need to be obtained from other governmental agencies or franchise utility companies.

- 3. Obtain and Review Design Manuals** - The Design Engineer is responsible for obtaining and reviewing all City of McKinney design manuals and related documents as well as all federal, state and local project specific associated documents.
 - [Engineering Design Manual](#) (5 MB file)
 - [Stormwater Design Manual](#) (5 MB file)
 - [Streamline Bank Stabilization Manual](#)
 - [Subdivision Regulations](#)

- 4. Obtain Planning Applications** - All necessary City of McKinney planning applications must be submitted prior to construction plan review. A conditional approval letter may be granted by the Planning Department to allow the civil engineering plan review process to begin.

Planning applications include, but are not limited to annexations, rezoning requests, general development plans, plats, and site plans. Please email Contact-Planning@mckinneytexas.org or call 972-547-2000 for more information.

Once the plan applications are approved, the Civil Engineering Development process begins and will continue until circumstances prevent the project from moving forward.

CIVIL ENGINEERING PLAN CONTENT AND SUBMITTAL PROCESS:

Note: All plan submittals (initial and subsequent, fire and engineering) shall be submitted through the [Citizen Self Service \(CSS\) portal](#).

- 1. Civil Engineering Plan Contents** - All civil engineering plans and related reports submitted for review and approval must be prepared under the direct supervision of a licensed Professional Engineer registered in the State of Texas and shall bear the seal of the Engineer of Record. All plans shall include site specific civil sheets (per Art. III, Sec. 142-76, 8) in addition to the following mandatory sheets:

- Cover Sheet
- Plat (recorded or pending version)
- Site Plan (commercial only)
- City of McKinney General Notes - Revised October 2011
- Tree Survey & Tree Preservation Plans (if any trees onsite)
- [City of McKinney Standard Details for Construction](#)

All projects shall be tied to at least one of the City of McKinney's [GPS Monuments](#) with horizontal and vertical control points clearly defined in the plans. Should a construction project require the interruption of traffic on any existing roadway, a detailed traffic control plan shall be included in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and the City's [Engineering Design Manual](#) (5 MB file).

All work and materials shall be in accordance with the [City of McKinney Standard Details for Construction](#) and the [North Central Texas Council of Governments \(NCTCOG\) Public Works Construction Standards](#). Should a conflict be found between publications, the City of McKinney Standards and Specifications shall take precedence. In the event that an item is not covered by the City of McKinney Construction Standards and Specifications, the most current edition of NCTCOG Public Works Construction Standards shall apply with concurring notification by the contractor to and with approval from the City Engineering Department and Consulting Engineer.

The Director of Engineering shall make the final decision regarding all construction materials, methods, and procedures specified in construction plans. Reference to any other documents contained in the project specifications shall be made to the latest edition of such documents and shall include the referenced specification in its entirety.

Every attempt by the Design Engineer shall be made to ensure that all civil engineering plans are complete and comprehensible. Clean and concise plans are necessary for an efficient review, and to minimize confusion during construction.

- 2. Initial Plan Submittal** – A complete set of all the civil engineering plans shall be submitted to the City Engineering Department for review and approval through the [Citizen Self Service portal](#). The

initial submittal shall include a completed and signed [Civil Engineering Plan Review Development Checklist](#). Each submittal shall be checked for completeness. Plans not meeting the above requirements will be returned without a review and marked “**Incomplete**”.

All submittals (initial and subsequent,) must be submitted through the [CSS](#) portal using the eReviews link.

3. Additional Submittal Requirements

- Tree Surveys and Tree Preservation Plans shall be submitted with all civil engineering plans for review. An [Affidavit of No Trees](#) may only be used if a property contains **NO** trees on site. Construction Tree Permits are required prior to the issuance of a development permit and building permit. Refer to the [Tree Permit Requirements](#) document. A tree permit may be applied for at the same time as the development permit through the [CSS](#) portal.
- If there are studies associated with the proposed development, please submit the study and/or report completed in support of the project through the “Plan” module of the CSS system. These include, but are not limited to: Traffic Impact Analyses, Flood Studies, Utility Studies, etc. Geotechnical Reports may be submitted as part of the initial development permit request or as an attachment to an existing development permit application.
- If routing software is used to design any detention basin (i.e. HEC-HMS), submit a CD to the Engineering Department located on the second floor at 221 N. Tennessee Street, McKinney Texas 75069.
- Note that if civil plans are submitted for review prior to site plan/plat approval, changes to the plans may be required as a result of site plan/plat approval conditions. If a site plan/plat has not been conditionally approved by Staff, we reserve the right to stop the review of civil plans until that has occurred.
- Provide room (3” in height x 5” in width) for the [City Approval Block](#) in the lower right-hand corner for electronic approval signatures once plans are approved.
- Facility Agreements - Per Article II, Section 142-37, a Facility Agreement is required for all improvements required by the City of McKinney subdivision regulations for platting, if said improvements will not be complete prior to filing a record plat, a minor plat, a minor re-plat or a final plat.

Development projects where off-site extensions of public utilities are required in accordance with the Subdivision Ordinance, may be eligible for reimbursements or proration and will be documented in the Facility Agreement. The original Developer will provide the city with acceptable documentation of actual construction costs and quantities and this will be used to calculate the reimbursable or proration amounts. The Facility Agreement must be filed prior to the collection of any reimbursements. Finalization of the Facility Agreement shall be done prior to filing of the Record Plat.

In the event that the original Developer does not wish to create a Facility Agreement for Pro-Rata reimbursement, a [waiver letter](#) shall be submitted to the City. Please refer to Section 142-39 of the Subdivision Ordinance for more information on Pro-Rata and Section 142-37 of the Subdivision Ordinance for more information on Facility Agreements.

- Easements by Separate Instrument (Offsite Easements) - All easements by separate instrument as necessary for the completion of all improvements shown in the construction drawings must be submitted to the City for review prior to filing at the County. All offsite easements must be executed prior to the release of a construction permit. Refer to the [Easement Document Templates and Instructions](#)
- **Storm Water Pollution Prevention Plan** - The Owner is responsible for the preparation of the storm water pollution prevention plan (SWPPP) per federal, state and City of McKinney

guidelines. Copies of the filed Notice of Intent (N.O.I.) and Notice of Termination (N.O.T.) must be provided to the City of McKinney's Engineering Department through the "attachments" section of [CSS](#).

CIVIL ENGINEERING PLAN REVIEW AND APPROVAL PROCESS:

- 1. Civil Engineering Plan Review & Resubmittals** - The City of McKinney Engineering staff will review plans on a first in, first out basis. Initial review times will typically take up to 15 business days. Depending on complexity of project and/or case loads, additional time may be needed for review. Applicant will typically be notified electronically via email when review is complete. All plan submittals shall be made through the [CSS portal](#) under the permit number, eReviews tab with all construction drawings submitted as a single file. *It is important that each individual drawing is named based on the City's naming convention.*

Subsequent submittals shall include a complete set of civil engineering plans. The city will already have the original City mark-ups, so resubmittal of these original drawings is not necessary. Provide written responses and/or explanations to any comments that need further clarification or are unable to be addressed. This can be done via a formal letter submitted with the construction drawings. Communication with the City Engineering staff via email is encouraged to help provide clarifications and address any questions throughout the review process. If a face-to-face meeting is deemed necessary, contact the City Engineering Department at 972-547-7475, to schedule a meeting. When requesting a meeting, an agenda must be included so City Staff can prepare for a productive and efficient meeting.

- 2. Fire Department Review** – The Fire Marshal's Office will review the civil construction drawings submitted electronically to the City. From there, the review and any subsequent submittals may be independent of the Engineering Department's review, and any questions regarding Fire Department comments shall be directed to the Fire Marshal's Office. Submittal requirements along with the most current adopted codes and ordinances can be found on the City of McKinney Fire Department's webpage in the [Community Risk Reduction Section](#).

- Plan Submittal Information
- Plan Submittal Guidelines
- Codes and Standards

Civil Engineering Plan Approval - Once all of the City Engineering and Fire Department comments have been appropriately addressed and the plans are deemed complete, City Staff will place an "approved" stamp on the drawings, break out the single file into individual sheets, and upload them to the "Attachments" section of the permit file. The applicant will then be able to download the drawings with the City approval stamp from the "Attachments" section of CSS. The Developer is responsible for making enough copies of the signed Master Civil Set for all necessary contractors, sub-contractors, construction staking surveyors and private consultants whom the Developer deems essential to have a copy.

CIVIL ENGINEERING PERMIT PROCESS:

Prior to the start of any construction, the Developer is responsible for obtaining all necessary permits. Letter(s) of permission from other public agencies including, but not limited to TxDOT, NTMWD, USACOE, TCEQ and FEMA may also be required. Copies of these permits shall be submitted to the City for review and record retention.

The standard permits required for construction of public improvements are as follows:

1. **City of McKinney Permits** - All development or re-development within the City of McKinney requires a permit prior to the start of any construction. You must apply for all permits through our [Customer Service Portal \(CSS\)](#).

Below is a list of the more frequently needed permit applications for construction that you will need to apply for in [CSS](#) and the contacts should you have any questions:

- [Development Permit](#) and [Grading Permit](#) (Please contact the [Engineering Department](#) at 972-547-7475)
 - [Tree Permit](#) (Please contact [Planning Department](#) at 972-547-2000)
 - [Building Permit](#) (Please contact the [Permits Technician](#) at 972-547-7400)
2. **Grading Permits** - In order for an early Grading permit to be issued, an applicant must have the following submitted and approved by the appropriate City department:
 - Grading Plans approved by the Engineering Department
 - Erosion Control Plans approved by the Engineering Department
 - Tree Permit and Tree Preservation Plan approved by the City Landscape Architect
 - Offsite drainage easements as needed
 - If it is for a commercial project (as opposed to just public improvements required by the Subdivision Ordinance), a site plan must be approved with a conditional approval letter issued by the Planning Department – note that all conditions required prior to issuance of a grading permit must be met
 - Pending record plat or minor plat approved with letter issued by the Planning Department, or copy of plat if on existing platted lot
 3. **Retaining Walls** - Retaining walls greater than 15” in height require a separate permit from the [Building Inspections Department](#). Retaining walls over 2’ must be structurally designed by an engineer registered in the State of Texas. The design must be reviewed and permitted by Building Inspections.
 4. **Texas Department of Transportation (TxDOT) Permits** - All TxDOT permits are issued to the City of McKinney and not the private Developer. Permit plans shall be submitted to the Engineering Department for review and processing. All TxDOT permits shall be obtained prior to construction. Refer to the [TxDOT Submittal Process](#) for detailed requirements for this permit process.
 5. **Texas Department of Licensing and Regulation (TDLR)** – The Developer shall submit a set of plans with the required review and inspection fees to TDLR. Proof shall be provided to the City Engineering Department that all fees have been paid and that all construction meets TDLR criteria. If not required, Developer shall provide verification. The TDLR website is <http://www.license.state.tx.us/>.

CIVIL ENGINEERING PRE-CONSTRUCTION PROCESS:

1. **Prior to Construction** - Once plans are approved and all permits have been issued, a Pre-Construction Conference meeting must take place. To schedule the Pre-Construction meeting, the Developer shall contact the [Engineering Department](#) at 972-547-7475 to schedule this meeting. Once a date has been set, the Developer is responsible for contacting all of his/her contractors and consultants to inform them of the meeting time and location.

All required permit and inspection fees shall be due prior to the Pre-Construction Conference meeting, along with a detailed breakdown of the public infrastructure construction costs (per Art. I,

Sec. 2-1, b). Inspection fees shall be 3.5% of the cost of all public infrastructure. These costs will be on an electronic invoice available through [CSS](#). The applicant will be notified by email when the invoice is ready for payment. Payment may then be made through [CSS](#) or at 221 N. Tennessee Street, McKinney Texas if paying by check.

All erosion control and tree preservation fencing shall be installed and approved prior to any site work commencing on project. Contractor shall notify the City 48 hours prior to any weekend work and 72 hours for work on a City Holiday. Weekend and holiday work is not guaranteed and contingent on Inspector's availability.

Working Hours:

M-F 6:00 am – 9:00 pm

Sat 8:00 am – 5:00 pm - [Request for Overtime Construction Inspection Service form](#)

Sun 1:00 pm – 5:00 pm - [Request for Overtime Construction Inspection Service form](#)

CIVIL ENGINEERING CONSTRUCTION PROCESS

- 1. Onsite during Construction** - Each contractor or subcontractor must possess a copy of the stamped approved Master Civil set at the project site. At least one (1) copy of the SWPPP, the NOI, and TxDOT Permits as applicable, shall be onsite at all times.
- 2. Revisions during Construction** - All changes to plans and specifications must be routed through the City of McKinney Engineering Department. The Design Engineer shall provide a sealed drawing of the requested change for review. Not until the City Engineering Department has approved the revision, will work commence on said revision with the exception of emergency situations.
- 3. Final Acceptance Paperwork Preparation** – The Developer is responsible for obtaining and completing all forms and checklists for [Commercial Project Final Acceptance](#) or [Residential Subdivision Final Acceptance](#). It is highly recommended that the Developer begin compiling and completing this paperwork as soon as practical. For question and assistance with this, contact the Engineering Department [Engineering Department](#) at 972-547-7477.

REQUIREMENTS FOR FINAL PROJECT ACCEPTANCE:

1. Pre-Walk Inspection -

When project utilities, paving and final grading nears 95% completion, the Developer or representative will schedule a Pre-Walk Inspection of the site with the City Inspector to review the project completion status and discuss final acceptance requirements. This meeting is a mandatory requirement for final project acceptance.

Upon completion of this Pre-Walk Inspection, the Design Engineer shall submit one set of preliminary record drawings for review to the City Inspector. The record drawing set shall include any field changes and show actual built conditions.

The City of McKinney Inspectors shall review this set for accuracy and use it during the Final Walk-through Inspection.

The preliminary record drawings prepared by the contractor and design engineer must be submitted and reviewed prior to the scheduling of the Final Walk-through/Punch List Walk.

It is strongly recommended that the Developer begin organizing the [Commercial or Residential Project Final Acceptance paperwork](#) for ultimate submittal to the Engineering Department Construction Technician. Call 972-547-7477 for any questions regarding this submittal.

2. Final Walk-through/Punch List Walk –

Once the preliminary record drawings have been submitted to and reviewed by the City Inspector, the Developer can schedule a Final Walk-through/punch list walk with the City Inspector.

The preliminary record drawings prepared by the contractor and design engineer will be used at the Final Walk-through to verify all public improvements.

The Developer must provide sufficient notice when requesting the walk-through date and is responsible for contacting all relevant non-city personnel.

Upon completion of the Final Walk-through, the City Inspector will issue the punch list to the Developer. The City Inspector will verify that the punch list items are complete before recommending final project acceptance.

3. Project Closure –

The Developer must contact the City Senior Erosion Control Inspector to review and approve screening and buffering. If approved, the Senior Erosion Control Inspector will sign-off electronically through the EnerGov system. See step 4 below for checklists.

The Developer must confirm completion of all erosion control BMPs with the Erosion Control Inspector who will sign-off on the final checklist. See step 4 below for checklists.

The City Inspector will verify completion of all public improvements as identified in the approved plans including the completion of all punch list items.

4. Record Drawings –

In order to receive final acceptance of a project, the Design Engineer must submit single-sheet .pdf files of the final record drawings, including revisions per comments made during the final walk-through, in the “Attachments” section of [CSS](#). The Design Engineer shall submit a CD with single-sheet .pdf and .dwg files to the Construction Technician, Development Services Building – 2nd floor, located at 221 N. Tennessee, McKinney, Texas 75069. The Construction Technician will log receipt of these and forward to the Chief Construction Inspector.

The City Chief Construction Inspector will review and approve the final record drawings. Record drawing requirements are provided on the website: [Record Drawing Submittal Process](#)

5. Final Acceptance –

For final acceptance, the Developer must have completed all final acceptance checklists and forms and submit through CSS. These include:

- [Commercial Project Final Acceptance Checklist](#)
- [Residential Subdivision Final Acceptance Checklist](#)
- [Pro Rata Waiver Letter \(copy and paste sample\)](#)
- [Infrastructure Inventory](#)
- [Affidavit of Value Form](#)
- [All Bills Paid Affidavit \(copy and paste sample\)](#)
- [Maintenance Bond \(copy and paste sample\)](#)
- Final Bid Tabs to verify final inspections fees
- Accurate and complete Record Drawings/As-built CD containing CAD and pdf files as required by the City of McKinney. Refer to the [Record Drawing Requirements](#).

The Construction Technician will verify accuracy and completeness of all necessary checklists, forms and documentation submitted. Once approved by the Construction Technician a final acceptance letter will be generated stating that the inspection and testing of the project have met the standards of the City of McKinney and the City Engineer will electronically sign this letter.

The final acceptance letter will be forwarded to the Planning Department who may file the record plat if all other plat filing requirements are met. Once Building Inspections gets all department approvals for commercial projects, they will issue the actual Certificate of Occupancy.

CITY OF MCKINNEY ENGINEERING DEVELOPMENT PROCESS

