Subdivision Construction Application Packet

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Section 101: Subdivision Construction Plan Prerequisites.

A preliminary plat must be approved before any subdivision construction application can be filed with the City.

Section 102: Establishment Order for Platting of Land.

Generally, the subdivision process is comprised of several individual steps as denoted below:

A. *Lack of performance fiscal filed with the City:*
   1. Concept plan filing and approval *(May not be required to complete).*
   2. Preliminary plat filing and approval.
   3. Final plat filing and approval.
   4. Subdivision construction plans filing and approval.
   5. As-built filing and approval.
   6. Final plat recording.
   7. Acceptance of subdivision improvements filing. *(May not be required to complete).*

B. *Performance fiscal filed with the City:*
   1. Concept plan filing and approval *(May not be required to complete).*
   2. Preliminary plat filing and approval.
   3. Subdivision construction plans filing.
   4. Final plat filing and approval.
   5. Posting of performance fiscal.
   6. Final plat recording.
   7. Subdivision construction plans approval.
   8. As-built filing and approval.
   9. Acceptance of subdivision improvements filing *(May not be required to complete).*

C. Each step of the establishment order has deadlines and expirations that must be met in order for the application and any approval(s) granted to remain valid, in effect, and eligible to continue to the next step of, or to complete, the establishment order.

Section 103: Required Pre-Application Meeting

Before the application packet can be submitted to the City, **a pre-application meeting must be set up with the City.** This meeting must be attended at minimum by the contact person and the project engineer. Items as listed with the application must be provided at the time of meeting or the meeting may be rescheduled by the City. The purpose of this meeting is to discuss a proposed project in general terms. It is not regarded as an official filing of the application. A short period of time should transpire between the pre-application meeting and the filing of an application. **Any timeframe longer than two (2) weeks between the pre-application meeting and application filing and the City may request another pre-application meeting.**

Section 104: Application Submission Requirements:

A. Submittal of appropriate filing fees for the application. New: 3.5% of infrastructure cost estimate of infrastructure conveyed to the City + 115% for any City third-party review, as needed (this will be charged later in the process); Amendment: 1.5% of infrastructure cost estimate of infrastructure conveyed to the City + 115% for any City third-party review, as needed (this will be charged later in the process); Inspections: $100.00 (this will be charged at a later date) + 115% for any City third-party review, as needed (this will be charged later in the process)

B. A copy of all items in the attached Subdivision Construction Plan Review Checklist for Completeness Review to the satisfaction of the City. All items shall be submitted in electronic format to planninganddevelopment@ci.elgin.tx.us.

Section 105: Completeness Review

Once items have been submitted to the City, it shall have ten (10) business days to review for completeness. Completeness shall be determined by the City reviewing all items submitted and verifying all applicable items are present. If the City determines it compliant under this review, then it moves to a submittal review. If deemed noncompliant by the Administrator, the applicant will be notified in writing of the reasons for noncompliance. The applicant shall have one (1) opportunity to submit information within six (6) calendar months of the date. Failure to meet the deadline date or address all Administrator issues within the one (1) opportunity shall expire the application. Submittal of the application for a completeness review is not regarded as an official filing of the application.

Section 106: Submittal Review

After the application is determined complete then the items will go through a submittal review. This review is conducted by the Development Review Committee (DRC). Submittals shall be as outlined below:

A. First (1st) submittal. The DRC shall review the first (1st) submittal within thirty (30) calendar days of the compliant completeness review and submit comments to the applicant in writing by the end of this timeframe.

B. Response of Applicant. The applicant shall address all individual comments from the DRC by copying each open comment(s) and providing response(s) to each open comment on official letterhead. This shall also include revised documentation showing the comments have been addressed by the applicant. **If necessary, the DRC can meet with the applicant to thoroughly go through their comments, if desired and contracted by the applicant.**

C. Second (2nd) & third (3rd) submittals. The second (2nd) and third (3rd) submittals, if needed, shall be reviewed by the DRC within thirty (30) calendar days of the applicant's submittal to the City. For these submittals, response shall be required as stated in subsection (B). **If necessary, on the second (2nd submittal) the DRC can meet with the applicant to thoroughly go through their comments, if desired and contracted by the applicant.**

Section 107: Administrative Consideration.

The DRC shall approve if no other outstanding comments remain and deny if there are outstanding comments after the applicant has submitted for the third (3rd) submittal. Upon denial, the application expires.

Section 108: Request for Finalized Copies & Transmittal of Approved Subdivision Construction Plans.

City Staff will request a paper print off of the first (1st) page of the approved plan after approval by the DRC through the applicant.

Once this is provided to the City, the City signatories will sign off the document. After scanning this 1st page to the approved plan set, the City will transmit electronically the entire approved plan set to the applicant and retain the set for its records.

Section 109: Modification of Approved Plans.

Any proposed changes to the approved plans shall require a modification to that approved plan which follows this application. Any modifications to plans may necessitate filing of additional applications, in which they must be approved before a plan modification can be approved by the City.

Section 110: Required Pre-Construction Meeting.

A pre-construction meeting is required after approval of construction plans. Required items to be brought to the meeting is in accordance with the City's agenda for the meeting. Failure to provide this information at the time of meeting is grounds for cancelation and rescheduling. The application with this packet must be completed and turned into the City before the meeting can be scheduled.

Section 111: Inspection of Improvements.

Inspections shall occur as outlined below:

A. Inspections list and inspections required. The City shall inspect all required improvements, to insure compliance with City requirements and the approved plans. A list of applicable inspections shall be more fully covered during the pre-construction meeting.

B. Setting up inspections, payment, and timeframes. An applicant shall contact the City to set up any required inspections and pay any required fees. The City shall inspect the improvement within three (3) business days of contact to the City.

C. City response to inspection. The City shall issue written approval or denial of an improvement. If denied a checklist will be created that lists all deficiencies to be corrected. The applicant will be responsible for rescheduling an inspection in accordance with subsection (B).

D. Disclaimer and responsibility of applicant. Inspection by the City, or a failure of the City to inspect construction as required herein, shall not in any way impair or diminish the obligation of the applicant to install improvements in the subdivision in accordance with the City's Construction Standards Manual or to the standards of the City Engineer.

Section 112: As-Builts.

At the time all inspections have been approved by the City, the applicant's engineer shall provide the As-builts as indicated in attached TRC Subdivision Construction Plan Review Checklist for Completeness Review to the satisfaction of the City. All items shall be submitted in electronic format to planninganddevelopment@ci.elgin.tx.us.

Section 113: Approval of Subdivision Infrastructure.

Approval occurs only when the as-builts have been approved and signed by the City. This signifies that infrastructure can be used by the public.

Section 114: Maintenance Fiscal.

A. Requirement. A maintenance fiscal shall be required when facilities are requested for City acceptance.

B. Minimum amount and statement of construction value. Shall be in an amount equal to twenty percent (20%) of the cost of improvements for the first two (2) calendar years. An Engineer's Opinion of Probable Construction Cost, with affixed engineers seal, shall be provided to the City to support fiscal amount.

C. Use of fiscal. In an instance where a fiscal has been posted and a defect or failure of any required improvement occurs within the period of coverage, the City may call said bond or surety instrument in accordance with its terms and complete or repair the improvements.

D. Extension of fiscal time frame and new fiscal required when defect/failure occurs. Whenever a defect or failure of any required improvement occurs within the period of coverage and less than one (1) full year of coverage remains, the City shall require that a new fiscal be posted for a period of one (1) full calendar year sufficient to cover the corrected defect or failure.

Section 115: Acceptance of Subdivision Infrastructure.

Once the City has signed off on the as-builts the applicant may petition the City to accept portions or all of the approved subdivision infrastructure within the City limits. The City shall not own, repair, or maintain infrastructure improvements in any subdivision unless a Resolution has been adopted by the City Council that accepts these specified infrastructure improvements and the City has acquired maintenance fiscals before the Council hearing.

CITY OF ELGIN

SUBDIVISION CONSTRUCTION PLANS CHECKLIST FOR COMPLETENESS REVIEW
(REVISED April 15, 2020)

Development Name: _____

NOTE: THE SUBDIVISION CONSTRUCTION PLANS WILL NOT BE CONSIDERED COMPLETE UNLESS THE FOLLOWING COMPLETENESS REVIEW REQUIREMENTS ARE MET. **IF AN ITEM IS MISSING FROM THE APPLICATION THE SUBDIVISION CONSTRUTION PLANS WILL BE REJECTED IN THE COMPLETENESS REVIEW.** THE CHECKLIST MUST BE COMPLETELY FILLED OUT WITH A Y (YES), N (NO) OR N/A (NOT APPLICABLE) IN EACH BLANK. THIS CHECKLIST MUST BE INCLUDED WITH THE INITIAL SUBMITTAL.

_____ Completeness review date.

_____ Submittal date _____ (formal submittal after everything is provided per completeness review).

1. Application Requirements

_____ One (1) electronic version of all items in this checklist emailed to the City at planninganddevelopment@ci.elgin.tx.us Information to be forwarded by City onto third parties after receiving it.

_____ Ensure that sheets are legible.

_____ Copy of the pre-application meeting application with signed City staff signatures indicating the meeting has been conducted or documentation from the City the pre-application meeting is not needed for this project. (Should be within a two-week window of submitting application for completeness review or City may request another pre-application meeting during the completeness review comments).

_____ Copy of the application with all information completely filled out and all applicable signatures.

_____ Copy of owner's authorization for agent giving the applicant permission to file on behalf of the owner or the signatory authority if it is a corporation. This must be submitted on letterhead.

_____ Narratives indicating all design professionals with postal address and contact information (phone & e-mail) associated with the application, not including the applicant.

_____ On the first sheet, a title including the name of the project with the words “Subdivision Construction Plan” included in the title.

_____ On the first sheet, the following verbiage: “This Subdivision Construction Plan was approved by the City of Elgin on the _____ day of _____, 20____”. Also, provide separate individual signatory blocks for the Aqua Water Supply Corporation (as applicable), City Engineer, & City Development Services Director.

_____ Voluntary annexation application if under an annexation development agreement, if applicable.

- *Each Plan Sheet Shall Include*

_____ North arrow.

_____ Bar scale and written numerical scale.

_____ Legend defining line-types and symbols shown.

_____ Engineer seal, signature, and date.

_____ Dated submitted & revision block (each revision shall bear a new date).

2. Drainage Plan

- *Hydrology*

_____ Provide all hydrologic calculations prepared by engineer.

_____ Provide source and/or detailed calculations of referenced values used in drainage calculations, including but not limited to precipitation data, runoff coefficients, intensity (IDF curves), type of rainfall distribution, hydrologic soil group, curve number, etc.

_____ Confirm that post-development runoff is less than or equal to pre-development runoff at any point of discharge from the site.

_____ Delineate existing 100-year FEMA floodplain on the plans (if applicable).

_____ Clearly delineate all watershed areas on the plans.

_____ Display the extent of pre-development and post-development impervious cover for all basins.

_____ Note the source of existing contours.

_____ Provide pre-development and post-development hydrologic calculations.

_____ Provide time of concentration calculations for all basins.

_____ Clearly show time of concentration flow paths.

_____ Provide flow routing analysis using detailed hydrographs for each detention pond design.

- *Storm Drain*

_____ Ensure that the minimum pipe size is 18 inches for all pipes that are integrated with the public system.

_____ Show storm drain layout in both plan and profile views.

_____ Provide design capacity, design flow, and velocities for 25-year and 100-year storm events.

_____ Show hydraulic grade lines for 25-year and 100-year storm events.

_____ Ensure that the 100-year hydraulic grade line is always below the gutter flow line.

_____ Verify that storm drain pipes are made of reinforced concrete and have a minimum class rating of III per ASTM C76.

_____ Provide bedding and backfill details per construction standards.

_____ Show amount of cover/fill over pipe.

_____ Space structures to provide a minimum of one access point for every 1,000 feet on straight lines.

_____ Provide junction boxes or manholes at all changes in grade or alignment and intersections.

_____ Provide storm drain manhole details per construction standards.

_____ Confirm all curb inlets are a minimum 10-foot length with 6-inch throat opening.

_____ Ensure that headwalls and wingwalls are per TxDOT standards.

_____ Provide calculations showing spacing of inlets is sufficient to conform with the street capacity standards.

_____ Ensure that inlets are sized for capacity of 1 cfs per linear foot of opening for a throat height of 5 inches.

_____ Incorporate clogging factors into design calculations for inlets in sag configurations. The clogging factor shall be 50% for grate inlets and 25% for curb inlets.

_____ Provide inlet details per construction standards.

_____ Provide a minimum 32-inch manway opening for access into each structure.

- *Culvert, Driveway Crossings and Bridge Crossings*

_____ Provide headwater and tailwater depth and velocity calculations.

_____ Provide construction details.

_____ Specify bedding material.

_____ Show structure layouts in both plan and profile views.

_____ Ensure that culverts are made of reinforced concrete and have a minimum class rating of III per ASTM C76.

_____ Ensure that minimum design elevation for bridges is at least 2 feet above the highest water level elevation.

_____ Ensure that the design meets AASHTO requirements.

_____ Provide pedestrian access design.

_____ Provide scour analysis.

_____ Provide erosion protection through the use of energy dissipation devices, if outlet velocity exceeds 5 fps.

- *Detention Ponds*

_____ Provide one-foot minimum freeboard for earthen berms.

_____ Provide half-foot minimum freeboard for concrete walls or curbs.

_____ Design outlet structure for 2, 10, 25, and 100-year events.

_____ Provide outfall structure details.

_____ Denote that Ponds shall be sod covered or hydro-mulched.

_____ Provide 3-foot wide concrete trickle channel with toe downs at swale flowlines when grades are less than 2.00%. Trickle channel shall be able to withstand vehicular loadings.

_____ Ensure side slopes are no steeper than 3:1 for earthen slopes.

_____ Provide exit velocities at pond discharge locations.

_____ Provide a sufficient number of access points for maintenance.

_____ Provide erosion control (matting, rock riprap, etc.).

_____ Provide flow spread calculations at pond discharge locations.

_____ Provide pond inlet structure details.

- *Channels*

_____ Ensure that publicly maintained channels are concrete lined. Privately maintained channels can be earthen.

_____ Show hydraulic grade lines for 25-year and 100-year storm events.

_____ Provide design capacity, design flow and velocity for 25-year and 100-year storm events.

_____ Ensure a minimum 2 feet of freeboard for earthen channels and a minimum of 6 inches of freeboard for concrete lined channels.

_____ Provide adequate erosion control at discharge (if necessary).

_____ Provide construction details.

_____ Ensure a maximum 3:1 side slope for earthen channels.

_____ Ensure a minimum longitudinal grade of 0.40% for each channel.

_____ Provide typical sections that include width of right of way or easement.

- *Site Grading*

_____ Provide 1-foot contours for existing grade (dashed lines).

_____ Provide 1-foot contours for finished grade (solid lines).

_____ Ensure finished grading shows runoff from houses draining towards street (not towards other houses).

_____ Ensure that there is no offsite drainage onto proposed lots.

_____ Provide means for conveying upstream runoff around site if proposed development raises natural ground elevations. “Damming” of water on adjacent properties will not be allowed.

- *Street Capacity*

_____ Verify that 100-year storm event is contained with the right of way.

_____ Verify that local streets have a minimum capacity 10-year storm from curb to curb.

_____ Verify that alleys have a minimum capacity 10-year storm from curb to curb.

_____ Verify that collector streets have a minimum capacity 25-year storm from curb to curb.

_____ Verify that all other streets shall have a minimum capacity 50-year storm from curb to curb.

_____ Confirm storm water at street intersections shall not flow across a street that is a collector or higher classification.

_____ Provide a 12-foot wide path, free of inundation, on all streets of a higher classification than a local street, for emergency response purposes. Streets with medians shall provide a 12-foot wide path, free of inundation, in each direction.

- *Drainage Easements*

_____ Show existing easements.

_____ Show proposed easements. Not recommended between properties.

- *Miscellaneous*

_____ Confirm house finished floor elevation is 1-foot above top of curb.

_____ Clearly show and label all buffer zones.

3. Streets Plan

- *Street Widths and Right of Way*

  o *Verify that each street meets the following criteria:*

_____ Major arterial (60' face to face of curb) (90' right of way).

_____ Minor arterial (60' face to face of curb) (80' right of way).

_____ Collector (40' face to face of curb) (60' right of way).

_____ Local (30' face to face of curb) (50' right of way).

_____ Alley per construction standards.

_____ Cul-de-sac streets (80' face to face of curb) (100' right of way).

_____ 600-foot maximum allowable length for cul-de-sac streets.

_____ All streets must terminate with a concrete header and barricade.

- *Curb Design*

_____ Specify spill or catch curb design (if curb and gutter).

_____ Specify left and right curb elevations.

_____ Provide construction details per construction standards.

_____ Provide expansion joints per construction standards.

- *Street Design*

_____ Provide geotechnical report with pavement design recommendations.

_____ Specify sub-grade preparation per geotechnical report. Sub-grade design shall meet minimum design standards in construction standards.

_____ Specify base type and depth per geotechnical report. Base design shall meet minimum design standards in construction standards.

_____ Specify roadway surface type and depth per construction standards.

_____ Specify base course compacted to density (100%).

_____ Specify sub-grade compacted to density (100%).

_____ Provide minimum 0.4% slope for longitudinal grades.

_____ Provide vertical curves for all grade changes greater than 1.0%.

_____ Ensure minimum 4" crown or ¼" per foot slope whichever is greater for local streets.

_____ Ensure minimum 5" crown or ¼" per foot slope, whichever is greater for collector streets.

_____ Ensure minimum 6" crown or ¼" per foot slope, whichever is greater for arterial streets.

_____ Show centerline line and curve information.

_____ Verify that horizontal curves shall meet construction standards.

_____ Show radii on all curves and cul-de-sacs.

- *Sidewalks*

_____ Provide sidewalk details per construction standards.

_____ Sidewalks meet ADA design criteria (minimum width, ramps, maximum slopes, etc.).

_____ Expansion joints at 24-foot intervals.

_____ 1-inch deep dummy joints at 8-foot intervals.

_____ Minimum compressive strength of 4,000 psi.

_____ Provide approval letter from Registered Accessibility Specialist.

- *Concrete Valley Gutters*

_____ Provided valley gutters at all street intersections where water flows across traffic lanes.

_____ Provide concrete valley gutter detail per construction standards.

_____ Ensure minimum compressive strength of 4,000 psi.

- *Miscellaneous*

_____ Ensure that each driveway is NOT tied to a collector or larger street.

_____ Provide typical section of street with all utilities shown to confirm no conflicts will occur.

_____ Provide existing pavement repair detail for utility cuts (if applicable).

_____ Denote that densities must be taken minimum every 200 feet per lift and subgrade for street construction.

_____ Denote that city inspector must be present for all tests.

_____ Provide Traffic Impact Analysis, this shall be consistent with the initial one approved with the concept plan and preliminary plat.

4. Water Plan

- *Water Mains*

_____ Provide a minimum dynamic pressure of 35 psi at a demand of 2 gpm per connection.

_____ Specify pipe material (PVC, steel, ductile iron, etc.).

_____ Verify 8-inch minimum size for all water mains.

_____ Ensure that minimum pipeline cover is 42 inches.

_____ Provide bedding and backfill details per construction standards.

_____ Provide bore and casing details per construction standards.

_____ Provide thrust blocking details per construction standards.

- *Water Supply Availability*

_____ Provide proof of sufficient water supply in accordance with ISO standards for fire protection. These standards govern the amount of water needed based on location of adjacent structures (houses). Typically, 1,000 gpm minimum at each fire hydrant.

_____ Provide existing fire flow calculations. An existing fire hydrant can be tested for basis of flow. (Located per City).

_____ Label owner of existing water lines (City of Elgin, Aqua, etc.).

- *Fire Hydrants*

_____ Ensure spacing meets construction standards.

_____ Locate at street intersections, if possible.

_____ Provide documentation showing approval from the City Fire Marshal for fire hydrant locations.

_____ Provide fire hydrant detail per construction standards.

- *Service Connection*

_____ Specify single vs. double.

_____ Provide service connection details per construction standards.

- *Valves*

_____ Specify type and style.

_____ Provide sufficient valving so that only one block is out of service for leak repairs.

_____ Provide two valves for a “tee” connection and three valves for a “cross” connection.

_____ Provide concrete encasement details per construction standards.

- *Miscellaneous*

_____ Provide recorded easement documents for proposed lines not located within the right of way.

_____ Show and label existing water system, size, etc.

_____ Provide separation distance from sewer lines and ensure that it meets TCEQ requirements.

_____ Show sewer line crossings per TCEQ requirements.

_____ Denote the requirement for water leak and disinfection tests for water per TCEQ requirements.

_____ Provide profile views for water lines greater than or equal to 12 inches.

_____ Denote that the city inspector must be present for all tests and connections to existing utilities.

5. Sewer Plan

- *Sewer and Force Mains*

_____ Show piping layout in both plan and profile views.

_____ Verify that gravity pipe slope meets TCEQ requirements. It is preferred that minimum slope be used.

_____ Provide bedding and backfill details per construction standards.

_____ Provide thrust blocking details per construction standards (if applicable).

_____ Provide air and vacuum release valve detail per construction standards.

_____ Verify that gravity pipe meets material specification per construction standards.

_____ Verify that any force main meets material specification per construction standards.

_____ Specify dry weather flow and wet weather flow for sewer system.

_____ Specify proposed capacity and velocities for sewer system

_____ Show existing capacities (if applicable).

_____ Denote waste water valves shall operate in opposite turn direction as water valves.

- *Manholes*

_____ Ensure that location and spacing requirements are per construction standards.

_____ Denote that ring and cover shall be 32" ERGO XL assembly or approved equal and marked "City of Elgin Sewer".

_____ Provide concrete encasement details per construction standards.

_____ Provide manhole construction details per construction standards.

_____ Provide drop manhole construction details per construction standards (if applicable).

_____ Ensure that manholes located within the 100-year floodplain or areas prone to standing water are bolted and gasketed.

- *Service Connections*

_____ Denote that double sewer services are not allowed.

_____ Provide cleanout detail per construction standards.

_____ Provide service connection detail per construction standards.

_____ Show services in plan view.

- *Miscellaneous*

_____ Provide recorded easement documents for proposed lines not located within the right of way.

_____ Denote trench safety (OSHA) requirements.

_____ Denote that the contractor is to perform sanitary sewer mandrel and leakage test per TCEQ requirements.

_____ Denote that the city inspector must be present for all tests and connections to existing utilities.

_____ Provide separation distance from water lines per TCEQ requirements.

_____ Ensure that Water line crossings are per TCEQ requirements.

_____ Provide bore and casing details per construction standards.

6. Lift Stations

- *Provide Design Calculations for the Following:*

_____ Wet well size.

_____ Pump size.

_____ Pump cycle time.

_____ 2-hour storage calculations per TCEQ requirements.

_____ Duty/standby pumps.

The following items shall be required for public lift stations.

- *Pump Type/Style*

_____ Ensure that type of Pump is either KSB, Hydromatic, or Flygt.

- *Wet Well*

_____ Provide wet well construction details.

_____ Ensure that the wet well bedding is a minimum 18" ASTM C-33 crushed stone #57 base or otherwise stated in geotechnical report.

_____ Ensure that all wet well components (other than pump and piping) are stainless steel including rails, chains, grip eye, etc.

_____ Specify that access doors are a minimum 72"x48" (or larger if required for pump removal) double leaf aluminum access frame and cover with padlock (W2S Series, Model W2S7248 by Halliday Products or equivalent) for both the wet well and valve vault. In addition, a safety grate shall be installed on the wet well (Typical details and specifications may be provided by City Engineer upon request).

_____ Specify cast-in-place concrete design (rebar spacing, concrete strength, etc.). Pre-cast design is acceptable.

_____ Show piping layout in plan view and section views.

_____ Specify that concrete shall have a minimum compressive strength of 4,000 psi. Structures shall be in accordance with ASTM C858.

_____ Ensure wet wells are coated inside and outside. Inside coating shall meet a minimum of 120 MILS of Raven Ultra High Build Sprayable Epoxy or equal. Outside coating shall meet manufacturers recommendation or coal tar epoxy.

- *Valve Vault*

_____ Provide valve vault construction details.

_____ Ensure a pipe and floor drain with p-trap is provided and sloped to drain back to the wet well. Provide a corrosion resistant flap valve at the outlet. The opening to the drain shall be covered with a stainless steel screen.

_____ Specify concrete design (rebar spacing, concrete strength, etc.). Pre-cast design is acceptable.

_____ Show all valves for piping layout in plan view and section view. Ensure the valve vault is sized large enough to provide at least 1 foot of clearance around all valves and 6 inches of clearance to all flanges.

_____ Ensure valve vaults are coated inside and outside. Inside coating shall meet a minimum of 120 MILS of Raven Ultra High Build Sprayable Epoxy or equal. Outside coating shall meet manufacturers recommendation or coal tar epoxy.

_____ Ensure the discharge line from each pump is fitted with a check valve and eccentric plug valve, with the check valve on the pump side of the eccentric plug valve. Air release valves shall be installed downstream of the eccentric plug valve if necessary.

- *Jib Crane and Hoist*

_____ Provide one jib crane and lifting system with a 0.5-ton minimum capacity (or larger per pump manufacturer).

_____ Denote that the crane shall be pedestal-mounted and have a 360-degree rotating horizontal arm with a spring loaded rotation lock and stop block that is readily movable when carrying its design load and a nominal span that covers the entirety of the wet well and valve vault.

_____ Denote that the crane shall be equipped with an electric chain hoist and link chain and have a push button control on a cable long enough to operate the hoist from at least 10 feet away from a point directly beneath the hoist. The hoist shall have a mechanical load brake and be equipped with an upper and lower control circuit limit switch. The hoist shall have a lift speed of at least 8 feet per minute. The hoist shall be high enough and have sufficient lift to raise the bottom of the pump 4 feet above the wet well top slab. The hoist and controls shall be suitable for installation in an outdoor location and shall meet all applicable ANSI standards.

_____ Denote that the crane shall be of heavy-duty welded steel construction. Crane shall include mast assembly, boom assembly with end stops, head and pivot assembly and heavy walled trunnion rollers. Mast shall be thick-walled seamless tubing; boom shall be AISC standard wide flange or S-section.

_____ Denote that a hook shall be a drop forged steel hook with safety latch to revolve 360° on anti-friction thrust bearings.

_____ Denote that motors for hoists shall be high slip, high torque type manufactured to meet NEMA standards and rated to operate hoist at full load without overheating

_____ Denote that the contractor must furnish trolley with lug for mounting hoist. The trolley shall be installed to move freely between stops at either end of its design travel range. Both sides of trolley shall receive signs or other means of identification to indicate the maximum load capacity of the trolley.

_____ Denote that the jib crane, hoist and components shall be weatherized for continuous outdoor use.

- *Electrical Details*

_____ Provide a meter panel, main breaker, distribution panel and lift station control panel mounted on Unistrut type framing with 3/8" stainless steel bolts, nuts, and washers. The panels shall be located adjacent to the valve vault with a minimum vertical clearance of 3'-6" from the top of the valve vault to the bottom the panels.

_____ The lift station control panel shall be provided with all necessary controls for automatic and manual operation of the lift station pumps and include an alarm/service beacon (exterior mounted), Hand-Off-Auto switches, elapsed time meters, pump running pilot lights, fault reset push button and a 20-amp duplex receptacle. Pump controls shall include applicable pump motor protective features, including seal failure alarm and overtemperature interlocks.

_____ The lift station control panel shall be UL Listed, include a main breaker and individual feeder breakers for each pump. The control panel shall carry a short circuit current rating (SCCR) greater than the short circuit fault current available at the electrical service.

_____ Provide two (2) 300-Watt exterior floodlights with photocell to illuminate the lift station equipment. The exterior floodlights shall be fed from dedicated breaker(s) in the distribution panel. (Typical details and specifications may be provided by the City Engineer upon request).

_____ Provide engineered steel frame canopy for lift station panels. All fabricated steel components shall be hot-dipped galvanized after fabrication. All fasteners shall be stainless steel.

_____ Provide NEMA 4X (stainless steel) rated electrical/control panels.

_____ Provide permanently installed emergency diesel generator with integral fuel tank capable of starting and continuously operating the full electrical load of the facility. The fuel tank shall be sized to provide 24 hours of continuous lift station operation without refueling. An automatic transfer switch (ATS) shall be provided to provide automated call to run and transfer to generator power upon failure of the utility power source.

_____ Electrical equipment and components located within the wet well or near wet well vents or openings shall be Listed for use within a Class I, Division 1, Group D atmosphere.

_____ Provide provisions for future lift station interface to the City Supervisory Control and Data Acquisition (SCADA) system.

_____ Provide a lift station Auto Dialer mounted in the lift station control panel to provide remote notification of critical control system alarms.

_____ Provide Listed conduit seal fittings on all conduits passing from the wet well to the lift station control panel or other electrical equipment at the site. Identify the location of all seal fittings on the plans.

_____ Provide a Surge Protective Device (SPD) at the service entrance main disconnect and the lift station control panel.

_____ All electrical equipment shall be grounded and bonded in accordance with the latest adopted addition of the National Electrical Code (NEC). The location of the system grounded conductor (neutral) connection to ground for the service and for any separately derived systems shall be clearly identified on the plans.

_____ Provide electrical demand load calculations on the plans.

_____ Provide telecommunications to the site as required for remote monitoring or SCADA communications. Identify service point of connection on the plans.

- *Miscellaneous*

_____ Obtain easements to allow access to the lift station (if applicable).

_____ Provide a minimum 12' wide access road with 8" of crushed stone base material TxDOT Item 247; Type A, Grade 2 compacted to 100% Density (Tex 113E). Road shall end in a 20' square pad in front of the lift station. Provide details on plans.

_____ Provide geotechnical report verifying structural loads.

_____ Provide O&M manual requirements (4 copies).

_____ Confirm the lift station site is out of the 100-year flood plain or operational during a 100-year storm event, and site is accessible during 100-year storm event (TCEQ Requirement).

_____ Require the contractor to slope natural ground away from lift station to drain, at a slope of 4:1.

_____ Provide fencing per TCEQ requirements. Fencing shall be 8' high masonry with one 16' gate with two 8' wrought iron doors supplied by Fencrete America LTD. or approved equal of fencing and gates. The City shall select the color of the fence and gates from the manufacturer's standard color chart. Fence panels (each 5' section) located on the downhill of the fenced area shall include 3" wide x 9" long slots, with the bottom of the slot being flushed with the rock surface inside of the fenced area, to release stormwater runoff from inside the fenced area.

_____ Show that vehicular gate has a minimum 16-foot wide opening.

_____ Denote that odor control measures shall be implemented, as necessary, to prevent a lift station from becoming a nuisance.

_____ Provide area light. Lighting shall be a pole mounted luminaire mounted on a 16' high round aluminum or steel pole with photocell and manual control.

_____ Provide 3” of 1” gravel on top of separation fabric (Class 2, >50% per AASHTO M288-06) in all non-concrete areas within the lift station walls.

7. Stormwater Pollution Prevention Plan (SWPPP)

_____ Provide a stormwater pollution prevention plan prepared in accordance with Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code. Construction General Permit No. TXR150000 is required for 1-acre (or more) disturbance.

_____ Submit erosion and sedimentation control plan.

8. Electrical Plan

- Reviewed by City Engineer

_____ Show location and size of all conductors, cables, conduits, transformers and other appurtenances within the proposed limits of work and the methods for connecting the proposed electrical system to the existing electrical distribution system.

_____ Show routing of all underground ducts and conductors and provide referenced installation details which specify proposed burial depth and installation methods.

_____ Provide approval from the applicable utility provider that the proposed service equipment and load characteristics are compatible with the utility’s infrastructure and service requirements.

9. Street Lighting Plan

- Reviewed by City Engineer.

_____ Show location, size and type of streetlights, fixtures, lamps, poles and other applicable appurtenances. Plans shall show installation details and method(s) of connecting the proposed lighting system to the existing or proposed electrical distribution system.

_____ Submit lighting calculations and a photometric plan which demonstrate that the proposed street or parking area lighting system(s) conform to the latest edition of the Illuminating Engineering Society (IES) Handbook.

10. Permitting Documentation

- Provide TxDOT Permit Submittal and Approval

_____ For connection to TxDOT Highway.

_____ For utility installation within TxDOT right of way.

_____ For Drainage Improvements within TxDOT right of way.

- Provide TCEQ Submittal and Approval

_____ For water.

_____ For sewer.

_____ Other Permitting - USCOE, THC, USFWL, EPA, etc. (if required)

- Provide City Submittal and Approval

_____ Sidewalk in lieu of fees. The option of In-lieu fees must be approved by the City.

_____ All applicable development fees agreed to within a Development Agreement (DA) with the City unless required earlier or later by the DA.

11. Signage and Striping

_____ Submit primary and/or secondary signage to the Development Services Department for review.

_____ Provide street identification signs per TMUTCD (latest version) and City specifications.

_____ Provide traffic control signs per TMUTCD (latest version).

_____ Provide all traffic striping per TMUTCD (latest version).

_____ Show TxDOT requirements (if applicable).

12. Landscaping

- All plans must be prepared by a licensed landscape architect with seal affixed to each page.

- Plan Details

_____ The date, scale, north point, title and legal name of the owner.

_____ The location of existing boundary lines and dimensions of the tract.

_____ The approximate centerline of existing watercourses.

_____ The approximate location of significant drainage features.

_____ The location and size of existing and proposed streets and alleys, existing and proposed easements on or adjacent to the lots, and existing and proposed sidewalks adjacent to the street.

_____ The location and species of:
Existing trees (other than Celtis occidentalis (hackberry) and Juniperus ashei (common cedar) having trunks of eight (8) inches caliper or larger DBH and the approximate size of their crowns; and

_____ Stands of trees.

_____ The location, size, and type of tree or shrub, ground cover, or grass existing in proposed landscaped areas and the location and size of proposed landscaped areas.

_____ Information necessary for verifying whether the required minimum percent of landscaped area has been met, including a plant schedule with the proposed planting sizes and names of species of trees, shrubs, etc.

_____ Indication of meeting Code standards in Chapter 44, City Code for landscaping in street yards, perimeter parking lot, interior parking lot, screening of refuse containers. Also any screening of detention/water quality ponds, ground mounted equipment (i.e. mechanical), infrastructure substations, outdoor storage, loading docks with landscaping or fencing.

_____ Provide location and depth of any fill within the critical root zone of preserved trees. This should be limited to no more than (5) inches of fill.

_____ Provide location of all cut and fill activities.

_____ Provide schematics of proposed tree protection barriers.

_____ Provide schematics of how all new materials will be planted into ground.

_____ Provide schematics of how new trees will be supported at time of placement.

_____ Provide schematics of any required landscape fencing or walls.

_____ Provide schematics of any tree root barriers, tree wells, vertical tile, drain tile, and include locations on plans as well.

_____ Elevation contours provided in a minimum of one (1) foot intervals.

_____ Certification that all newly planted tree species meet City Code standards and any additional non-tree related plantings are as listed within the latest edition of Native and Adapted Landscape Plants, An Earthwise Guide for Central Texas, from the Texas AgriLife Extension.

13. Irrigation

- All plans must be prepared by a licensed landscape architect or irrigator with seal affixed to each page.

- Plan Details

_____ Sprinkler head spacing shall be designed for head-to-head coverage and adjusted for prevailing winds. The system shall promote minimum runoff and minimum over spray onto non-irrigated areas (i.e., paving, walkways, buildings and other impervious areas).

_____ Sprinkler heads shall have matched precipitation rates within each control valve circuit.

_____ Adjustable flow controls shall be required on circuit remote control valves. Pressure regulation components shall be required where static pressure exceeds the manufacturer's recommended operating range.

_____ Valves and circuits shall be separated based on water use requirements, so that turf areas can be watered separately from trees, shrubs and ground cover.

_____ Serviceable check valves shall be required where elevation differentials may cause low head drainage adjacent to paving areas.

_____ All automatic irrigation systems shall be equipped with an electronic controller capable of dual or multiple programming. Controllers shall have multiple cycle start capacity and a flexible calendar program, including the capability of being set to water every five (5) days. All automatic irrigation systems shall be equipped with a rain and freeze sensor shut-off device.

14. Miscellaneous

_____ Provide statement on front cover of plans, as follows:
"All construction activities shall meet the City of Elgin Construction Standards."

_____ Provide a vicinity map on the front cover of plans.

_____ Denote that contractor is to provide a maintenance guarantee (bond) in construction documents for 2 years.

_____ Provide an Environmental Site Assessment.

_____ Provide a jurisdictional determination under section 404 of the Clean Water Act. If proposed construction crosses and/or is adjacent to geographical water features.

_____ Provide documentation showing approval from Fire Marshal for site access.

_____ Provide stakeholder approval documents.

_____ Submit Engineer's Opinion of Probable Construction Cost, with affixed engineers seal. This should designate the portions of infrastructure that will be owned by the City to determine filing fees.

_____ Ensure all utilities are placed underground.

_____ Indicate the current zoning of the proposed site on the cover sheet.

15. As-builts

- *The following documents and information shall be provided to the City as part of the required as-built submittal at the time of final inspection approval of the Plan.*

_____ Provide one (1) electronic record drawings on 24' x 36" format in PDF form. Construction plans require contractor to prepare record drawings to Engineer. Engineer shall revise the original construction drawings to reflect the field revisions and submit completed "as-built" drawings, to the City for their records. On the cover sheet page place the following note: "This As-built was approved by the City of Elgin on this _____ day of _____, 20____." Also provide individual signatory block for the Aqua Water Supply Corporation (as applicable), City Development Services Director & City Engineer

_____ Provide as-built CAD drawings to the satisfaction of the City.

_____ Provide GIS vector data of as-built infrastructure improvements. Infrastructure items shall include all wet and dry utilities, center line of roadways, drainage channels, culverts, street signage/signal location, sidewalk alignment, parcel boundaries and easements. Data shall include design information (i.e. pipe size, material, flowline, manhole size, depth, horizontal information, etc.) to the satisfaction of the City.

_____ Provide all testing reports to the satisfaction of the City.

_____ Provide hydrologic and hydraulic floodplain management models to the satisfaction of the City.

DISCLAIMER

THIS CHECKLIST IS USED BY THE ELGIN CITY ENGINEER (TRC) FOR THE REVIEW OF PROPOSED DEVELOPMENTS IN THE CITY OF ELGIN. THIS DOCUMENT DOES NOT GOVERN OVER OR SUPERSEDE ANY REQUIREMENTS OF THE CITY'S SUBDIVISION ORDINANCE OR CONSTRUCTION STANDARDS. ALL REQUIREMENTS IN THE ORDINANCE AND STANDARDS MUST BE MET BY THE DEVELOPER AND THE DEVELOPER'S ENGINEER.

SUBDIVISION REQUIREMENTS CAN BE FOUND AT:
https://library.municode.com/tx/elgin/codes/code_of_ordinances?nodeId=PTIICOOR_CH36SU_ARTIINGE

THE LATEST PARKLAND DEDICATION AND FEES ORDINANCE CAN BE FOUND AT:
https://library.municode.com/tx/elgin/ordinances/code_of_ordinances?nodeId=891710

THE COMPLETE CONSTRUCTION STANDARDS CAN BE FOUND AT:
http://elgintx.com/DocumentCenter/View/100/Construction-Standards

"This institution is an equal opportunity provider"

Created: 1-8-2020

PRE-APPLICATION MEETING REQUEST

This is mandatory for subdivision construction plans

Date: _____

REQUESTED MEETING DATE/DAY/TIME

Requested Meeting Date(s) or Day(s): _____

Requested Meeting Time(s): _____

PROJECT LOCATION

Parcel ID's from County Appraiser: _____

_____

Postal Address: _____

_____

LAND USE / ZONING / DEVELOPMENT

Current Land Use: _____

Proposed Land Use: _____

Current Zoning: _____**; Proposed Zoning:** _____

Approx. Sq. Ft of Non-Residential Improvements: _____

Number of Residential Units: _____

REQUIRED ITEMS AT MEETING

Full List of Meeting Attendees and Their Project Role (Contact & Engineer are mandatory).

Checklist of Meeting Topics and Questions to Discuss

Additional Narrative of Proposed Project

Site Location Map or Tax Map Indicating Project Location

Proposed Site Plan, Sketch, or Other Information Depicting Proposed Project

Failure to provide items is grounds to decline meeting.

310 North Main Street
P.O. Box 591
Elgin, Texas, 78621
(512) 281-0119
www.elgintx.com

CONTACT INFORMATION

Contact Name: _____

Contact Role (e.g. owner, agent, developer): _____

Contact Phone: _____; **Contact E-Mail:** _____

I, the undersigned, request a pre-application meeting for the purpose of discussing a proposed project in general terms. I have provided the information requested in this form and understand that this meeting does not constitute City review for the purposes of approval or permit issuance. A licensed professional engineer should be consulted independently by the applicant regarding potential utility, drainage, and floodplain impact issues prior to making any decisions regarding real estate or other business transactions.

Upon submittal of the appropriate application(s), additional comments from City staff should be expected in addition to those that were discussed in this meeting.

Furthermore, I understand that this meeting is not a development permit application and does not constitute the first in a series of permits or projects for this proposed project. Plans shall be prepared in accordance with the City Code, as well as any international, federal, state, or local codes incorporated or referenced therein.

Furthermore, Staff reserves the right to request another pre-application meeting if there has been longer than two (2) weeks since this meeting and applicable application packet being submitted to City.

_____ _____

Contact Signature **Date**

FOR OFFICE USE ONLY

Application Received	Date: _____	
	Yes: _____	No: _____
Meeting Conducted	Date: _____	Reason for Not Conducting Meeting: _____

Staff Signature: _____

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Revised: 04-13-2020

SUBDIVSION CONSTRUCTION APPLICATION

Date: _____ **New** ____ **Modification** ____

Modification of _____

SITE INFORMATION

Project Address: _____

Parcel Identification Number (if no address): _____

APPLICANT

Name: _____

Postal Address: _____

_____

E-Mail Address: _____; **Phone Number:** _____

The information given on this application is accurate to the best of my knowledge. All provisions of laws and ordinances governing this work will be complied with, whether specified on this application or not.

_____ _____ _____

Signature **Printed Name** **Date**

Project Description:

_____

_____

_____

_____

_____

_____

_____

_____

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Created: 1-8-2020

PRE-CONSTRUCTION MEETING REQUEST

This is mandatory for subdivision construction plans

Date: _____

REQUESTED MEETING DATE/DAY/TIME

Requested Meeting Date(s) or Day(s): _____

Requested Meeting Time(s): _____

PROJECT LOCATION

Parcel ID's from County Appraiser: _____

_____

Postal Address: _____

_____

CONTACT INFORMATION

Contact Name: _____

Contact Role (e.g. owner, agent, developer): _____

Contact Phone: _____; **Contact E-Mail:** _____

I, the undersigned, request a pre-construction meeting for the purpose of discussing a proposed construction project in general terms.

_____ _____

Contact Signature **Date**

FOR OFFICE USE ONLY

	Yes: _____	No: _____
Meeting Conducted	Date: _____	Reason for Not Conducting Meeting: _____

Staff Signature: _____

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