



Transportation & Infrastructure Development Department
105-B Upchurch Street
PO Box 250
Apex, NC 27502
919-249-1106

**For Water/Sewer
Emergency Only
(919) 372-7475**

Town of Apex Pre-Construction Meeting

This list is not all inclusive and is meant to be used as a guide. Additional requirements may be identified by your site inspector(s) or other Town or government agency representatives during the construction and platting stages.

INVITEES

- Town of Apex
 - Infrastructure Inspections Manager, Inspector(s) – Transportation & Infrastructure Development Department
 - Erosion Control/Stormwater – Water Resources Department
 - Water & Sewer Utilities Operations Manager – Water Resources Department
 - Operations Manager – Public Works Department
 - Development Services Manager – Transportation & Infrastructure Development Department
 - Zoning Compliance Officer(s) – Planning Department
 - Fire Marshal
 - Representative(s) from any other affected utilities (Town of Apex Electric, Town of Cary, Gas, Cable)
- Owner/Developer and/or Design Engineer
- Contractor (preferably the foreman or site superintendent that will be on the job)

GENERAL INFORMATION

1. Approved, TOWN SIGNED Construction Plans with the latest revisions shall be used for construction.
2. Copies of all applicable local, State, and Federal permits (Water/Sewer, Fast-Track, etc.), NCDOT permits (Driveway/Encroachments if applicable), and environmental permits shall be available on the job site for review.
3. All work shall be completed per the version of the Town of Apex Specifications and Standard Details Manual listed on the cover sheet of the Construction Plans, unless an exception has been approved in writing by the appropriate Town Director. See here for the latest [Standard Specifications and Standard Details](#).
4. Pre-construction photos and videos should be taken by the Developer or Contractor prior to the start of construction to document existing conditions. Make sure infrastructure inspector is aware of any existing damage that was found. All damaged items along the property frontage (asphalt, curb, sidewalk, etc.) shall be replaced and in acceptable condition prior to plat approval for subdivisions or issuance of Certificate of Occupancy or final acceptance by the Town of Apex for Site Plan projects.
5. Any conflicts, deviations, or field changes/Construction Plan revisions must be brought to the attention of your infrastructure inspector. If the infrastructure inspector agrees, all changes **must be approved by the Engineer of Record**. Revisions shall be uploaded by the Engineer of Record to IDT/GeoCivix for review and approval by the appropriate Town staff before any work for the requested change can proceed.

SOIL & EROSION CONTROL

1. Submit the applicable S&E Performance Guarantee to Development Services. An invoice will be issued at your request. If paying by Letter of Credit, contact Christine Masney at christine.masney@apexnc.org prior to issuance. Per ordinance, Surety Bonds are not allowed for S&E Performance Guarantees.
2. Request a **Letter of Plan Approval** for sedimentation and erosion control measures from Water Resources staff at (919) 372-7470. Submit the [Financial Responsibility/Ownership](#) (FRO) form and [Request for Plan Approval](#) form at the pre-construction meeting or within seven (7) days prior.

3. Complete and submit an electronic **Notice of Intent** (e-NOI) form with NCDEMLR requesting a **Certificate of Coverage** (COC) under the NCGO1 Construction Stormwater General Permit. Visit the following website: <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/stormwater-permits/construction-sw>
4. COC must be sent to Stormwater Engineering before moving to next step.
5. Complete Grading Permit Application and receive a Grading Permit from the Building Inspections and Permitting Department as required by the North Carolina Building Code Appendix J for Grading. **Both the Grading Permit and Certificate of Coverage from NCDEMLR must be submitted to the Environmental Field Services Supervisor prior the commencement of any land disturbing activity.**
6. Complete a [Tree/Protection Fencing Installation Permit Application](#) through the Planning Department.
7. Have a surveyor flag property lines, easements, buffers, tree protection areas, and flag the protection limits.
8. Contact an Apex Planning Department Zoning Compliance Officer at (919) 249-3426 to request approval for tree protection fencing locations.
9. Install approved tree protection fencing, signs, and/or any other protection measures that may be required. Call Planning at (919) 249-3426 for a final inspection of protection measures. Planning will forward approval to Stormwater Engineering Erosion Control field staff.
10. Install gravel construction entrance, temporary diversions, silt fencing, sediment basins, bypass channels, and/or other measures as shown on the approved plans. Clear only as necessary to install these devices.
11. When completed, call Stormwater Engineering Erosion Control field staff at (919) 372-7470 for an on-site inspection and to request a **Certificate of Compliance**. Water Resources will also forward a copy to the Building Inspections & Permitting Department.
12. Post Grading Permit prominently on site at all times.
13. Once the tree fencing has been approved by the Zoning Compliance Officer and the Performance Guarantee has been received, the Letter of Plan Approval (erosion control permit) will be issued, and Town of Apex site waste management plan will be issued also at this time.
14. Logging and grubbing are only allowed in areas that are related to the installation of temporary erosion control measures (stone construction entrances, temporary diversion ditches, silt fencing, sediment basins, by-pass channels, etc.).
15. Per the Town's UDO, no more than 20 acres of disturbance is allowed at one time. Coordinate your grading and utility work to comply with this requirement. A deviation from the approved phasing plan may be required in order to complete the proposed grading work.
16. At the start of grading work, the self-monitoring inspection reports must be completed after every 1" rain event and at least once per week. Reports will be maintained for the life of the project and will be made available for inspection if requested. The reports can be completed by the owner, developer, builder or 3rd party inspector.
17. Contact the Erosion Control Inspector when temporary measures have been installed. The site can be inspected as each basin is installed or after all basins are installed (not disturbing more than 20 acres). Where applicable, the riser/outlet structure and outlet pipe need to be installed during the installation of the sediment basin(s). A Certificate of Compliance will not be issued with the installation of the riser, outlet pipe and skimmer attached. After a successful inspection, the certificate of compliance will be issued and grading/utility work is then allowed within the drainage area of the basin.
18. Contact the Building Inspections Department to coordinate the issuance of a site grading permit and/or site plumbing permit (for private storm drainage) if required.
19. After the completion of any grading phase, provide vegetative cover on all slopes steeper than 3:1 within 7 days and all other slopes within 14 days.
20. A proper construction entrance (as per the approved S&E plan) shall be maintained daily. Any trash or debris tracked onto a public road shall be removed and swept immediately. Maintain all temporary measures for the life of the project.
21. Concrete wash-out areas shall not be located within the public right-of-way and shall not drain into the public street and/or storm drainage system.

22. Coordinate with the Erosion Control Inspector prior to removing any temporary erosion control measure.
23. At the completion of the project, all disturbed areas must be stabilized with seed, sod or landscaping. Remove all temporary measures and install all permanent measures. Contact the Erosion Control Inspector to conduct a final inspection. After a successful inspection, the certificate of completion will be issued and permit will be closed. The Performance Guarantee will be refunded at this time.
24. See the Erosion Control checklist for additional requirements (Exhibit B).

STORMWATER

1. The Town will not accept any slopes that are inconsistent with the approved construction drawings and/or deviate from the State's Minimum Design Criteria (MDC). In the past, the Town had situations in which steeper slopes were allowed (particularly in residential subdivisions) if a letter was provided by the HOA indicating they were aware of the steeper slopes and were willing to maintain them. Ultimately, this is not good practice as it places an undue burden on the HOA to maintain such slopes in perpetuity. This process has also led to significant staff time being spent responding to unnecessary meetings and emails back and forth, and will no longer be an option. Additionally, for clarification, SCMs constructed with insufficient surface area and/or water quality volume will not be accepted. The State's MDC must be met when designing, permitting, constructing and certifying all SCMs in Apex. No exceptions. To avoid approval issues and delays on the release of SCM Performance Guarantees, the designer will likely need to determine up front the level of due diligence necessary between engineer, developer and contractor to ensure as-built certifications meet minimum requirements.

PLANNING DEPARTMENT (SEE EXHIBIT A FOR ADDITIONAL REQUIREMENTS)

1. A [Tree Protection Fencing Installation Permit](#) is required prior to starting any work.
2. Have the project surveyor flag property lines, easements, buffers, tree protection areas and flag the protection limits.
3. Contact the Zoning Compliance Officer to request approval for the tree protection fencing locations.
4. Install the approved tree protection fencing, signs and/or any other protection measures that are called out on the plans.
5. Contact the Zoning Compliance Officer to request approval of the tree protection installation.
6. Maintain tree protection fencing for the life of the project or until directed by the Zoning Compliance Officer to remove it.
7. Coordinate with the Zoning Compliance Officer during the construction of all items related to the landscape buffers, required landscape plantings, site lighting, parking, RCA, required site features, etc.
8. A final inspection of the site will be done prior to the issuance of the project CO. Remove all temporary tree fencing and any other temporary measures.

RETAINING WALLS

1. Cast-in-place or precast concrete headwalls/endwalls are the only approved materials with in a public right-of-way or public drainage easement. If any other type of wall such as segmented or gravity walls are planned to be utilized as part of site work, each wall MUST obtain written approval from the Transportation & Infrastructure Development, Water Resources, and Public Works Departments prior to obtaining a building permit.

FIRE DEPARTMENT

1. Install all perimeter silt fence near existing fire hydrants and electric transformers so that there is a minimum clearance of 5 feet around fire hydrants and electric transformers, and so that fire hydrants and electric transformers are clearly visible from the existing roadway.
2. Install temporary roadway signage so that road names are clearly visible in case of an emergency.
3. Allow vehicular parking on only one side of the roadway to ensure clear passage for emergency vehicles.

4. Coordinate with the Apex Fire Marshal for the placement of the FDC, required signage and sprinkler system approval.
5. Any building constructed that is over 7,500 square feet is required to have a BDA survey conducted once the building envelope is complete.

PARKS, RECREATION & CULTURAL RESOURCES

1. Fixed bollards shall be TrafficGuard model RFP4560R; removeable bollards shall be TrafficGuard model TL1004RL, or approved alternate. Bollards shall be finished with powder coated black paint. Removeable bollards shall be installed utilizing the lidded ground sleeve only.
2. Benches shall be Kay Park Recreation model 6CB2SYPIG or equivalent. Trash receptacle shall be OCC Outdoors model REC-S8331A-00-092 (black) with dome lid and push door (black) or equivalent. Recycling receptacle shall be OCC Outdoors REC-S8331A-00-055 (blue) with dome lid and push door (blue) or equivalent.
3. Dog station shall be Crown Products Regal Pet Waste Station, model PP-H-DSP, color hunter green, or equivalent. The Pet Waste Station shall be mounted on a 2"x2"x6' U-channel post, color black.
4. Trailhead amenities shall be installed with the bench on the right side of the greenway and the trash, recycling, and dog waste receptacles on the left. When wayfinding greenway signage is installed, the large ID sign shall be placed left of the trail and medium directional signage shall be placed on the right. This orientation is based on walking from the access point to the greenway. Instances where bollards are co-located with these amenities, only one removeable bollard is needed in the center of the greenway.
5. Greenway Record drawings will be required prior to acceptance of routine maintenance/warranty of the greenway by the Town (refer to Unified Development Ordinance Section 14.1.5.C.5 Performance Guarantee). Here is a link to the Greenway Record Drawing Checklist: [Record-Drawing-Checklist-Greenways-December2020V1](#)
6. The trail centerline shall be staked at 50-foot intervals in the field. The staking shall be approved by the Parks Planning Manager or designee.
7. Additional culverts will be added as needed during construction to prevent erosion and standing water on the greenway trail.
8. The contractor shall ensure that all access points leading to the trail are posted with signs that read Trail Closed for Construction. Barriers shall be installed at the ends of any incomplete greenway segments that have a longitudinal slope greater than 3:1, or other hazardous conditions.
9. The Infrastructure Inspector shall oversee the proof-roll of all asphalt portions of public greenways. The proof-roll shall be done in accordance with Town of Apex Specifications and Standard Details.
10. In the event that the Town Council authorizes the developer to construct required public recreation improvements in lieu of or in combination with the required dedication or fee-in-lieu, then such construction must be completed prior to the first final plat or first building permit approval or such performance must be guaranteed in accordance with the Town of Apex's Unified Development Ordinance Section 14.1.5.C.5.
11. Refer to Section 900 of the Town's Standard Specifications and Details for all applicable Greenway related construction.

WORK HOURS

1. **Hours for construction related activities are Monday through Friday 7:00 AM – 7:00 PM., Saturday and holidays observed by the state 9:00 AM - 7:00 PM (see below for exceptions)** for on-site work within Town of Apex Corporate Limits. **No work is allowed on Sundays, New Year's Day, Thanksgiving Day, or Christmas Day.** Approved Construction Plan, Site Plan, or Master Subdivision Plan may have different conditions (check notes). Refer to DOT agreements for work hours within DOT rights of way.
2. **After Hours Construction Prohibited, Except by Permit:** Per Town Ordinance, the erection (including excavating), demolition, alteration or repair of any building or other structure in a residential or business district outside the hours above is prohibited except by permit from the building inspector when, in their opinion, such work will not create objectionable noise. This includes Sundays and the following holidays: New Year's Day, Thanksgiving Day, or Christmas Day. The building inspector may permit emergency work in the preservation of public health or safety at any time
3. **Infrastructure Inspector Hours:** Normal work hours for Town of Apex Infrastructure Inspectors is Monday through Friday, 7:00 AM to 3:30 PM. Any work requiring inspections outside of these hours may be allowed based on the availability of inspection personnel. However, it must be approved a minimum of 48 hours prior to the needed inspection.

INFRASTRUCTURE INSPECTIONS - UTILITIES

1. All existing underground utilities shall be located prior to beginning any excavation or underground construction. All underground utility locates shall be ordered no less than 3 days prior and no more than 12 days prior to the beginning of said excavation or underground construction.
2. Contractor shall provide traffic and/or pedestrian access during construction, where applicable. Loading and unloading areas shall be properly identified and not obstruct traffic and/or pedestrians.
3. Contractors are **NOT** allowed to operate any Town of Apex water valves. All existing valves within the Town water system shall be operated only by Town personnel. Existing valves will not be operated without a minimum notice of 24 hours. Town personnel shall operate all new valves once they have been tested, certified, and accepted.
4. Specific installations are required to have an inspector present (Exhibit C). Town of Apex Infrastructure Inspections requests may be scheduled by contacting the Infrastructure Inspector Monday through Friday from 7:00 AM to 3:30 PM. An automated scheduling system for permitted inspections is not currently in operation.
5. Contractor/Developer is responsible for contacting the inspector. A minimum of 48 hours advanced notice is required when inspections are needed. Inspector shall witness water, sewer, and storm drain installation, thrust blocking and collars, all tests, any water or sewer taps, meter boxes, hydrants, re-bar mats at doghouse manholes, public sidewalks and accessible ramps, proof rolls, curb grades, driveways, etc. See Exhibit C for a detailed list of required inspections.
6. Contractor shall contact the Town of Apex Water Resources Operations Department to have existing valves on or near waterlines serving the proposed project located and checked for accessibility and operation no less than 48 hours prior to construction.
7. **PLANNED SHUTDOWN PROCEDURES:** Please see Exhibit E for the Planned Shutdown Procedures.
8. **SEWER PLUGS:** Contractors shall make all requests for Sewer Plug inserts and removals via the [online form](#). The online form **must** be completed and submitted for all concrete and mortar plug inserts and removals. The Construction Plan Manhole Number, adjacent address or nearest lot number, Subdivision name and phase, and the Construction Plan Sheet number are **required** on the form. **If the required information is not entered, the form will be returned for incomplete information causing work to be delayed.** A separate form is required for each manhole where concrete and mortar plugs are being installed or removed. All concrete and mortar sewer plug installations and removals shall be witnessed by the Town Infrastructure Inspector, **no exceptions.** **No additional concrete and mortar plugs shall be installed without form submittal and approval from the Town Infrastructure Inspector.** The Town of Apex shall reserve the right to assess the contractor or developer a fine to cover any remediation costs borne by the Town of Apex due to the contractor's or developer's failure to adhere to these requirements as outlined in Section 700 of the Town of Apex Standard Specifications & Standard

Details Manual. **Please note: The Financially Responsible Party will ultimately be responsible for any sewer spills and/or fines from the Town of Apex or State of North Carolina for plugs not removed or added without the proper approvals from the Town Infrastructure Inspector.**

9. **METER BOXES:** All meter box lids shall have a 4-1/8" diameter RECESSED hole for the meter transmitter (See [Standard Detail 600.01](#) and [Approved Material List; Section 600](#)).
10. Contractor shall coordinate all water and sewer testing with the Infrastructure Inspector, including pressure and vacuum tests, chlorination, pulling water samples, water main pigging, mandrel tests, etc.
11. Contractor shall identify the geotechnical engineering firm, prior to starting work, which will be onsite monitoring and testing throughout the project.
12. No additional fill is to be placed on utility easements without prior written approval from the Water Resources Department. Developer must make builder aware of this requirement.
13. Contractor to verify all hydrant locations and elevations in with inspector prior to installation.
14. All storm drainage to be installed within the public right-of-way shall be inspected by the Town Infrastructure Inspector. All material shall be inspected for damage or defects prior to installation and shall be inspected during installation. HPPP Storm pipe may be used when approved by the Engineer of Record and Town of Apex Public Works Director and shall be installed in strict accordance with the manufacturer's specifications.
15. All utilities (new and existing) are required to be located within the Town of Apex right-of-way or public easements. All water meters and sewer cleanouts are to be placed 1 foot behind the right-of-way line in the 5 foot public utility easement. Any utilities placed in the NCDOT right-of-way shall be in a publicly dedicated easement outside of the right-of-way UNLESS otherwise noted on the approved plan and NCDOT Encroachment Agreement.
16. All entrances with irrigation systems shall require a trench drain directly behind the curb and gutter. The trench shall be a minimum of 12 inches wide and 18 inches deep. A 4-inch perforated pipe shall be laid at the bottom of the ditch in the center. The ditch shall then be backfilled with washed stone wrapped in the appropriate geotextile fabric. The perforated pipe shall drain to a catch basin.
17. Sanitary sewer outfalls shall be smooth graded, mowed, and accessible for Utility Maintenance personnel. All manholes in outfalls shall have locking lids.
18. See list of required inspections (Exhibit C).

INFRASTRUCTURE INSPECTIONS – ROADS AND SIDEWALKS

1. ALL pavement striping shall be approved by and coordinated through Traffic Engineering - Transportation & Infrastructure Development Department prior to installation. Do not assume striping shown on the plans is correct.
2. Unless an alternative phasing plan is approved by Town Council, all project frontage road widening including pavement markings, curb and gutter, traffic calming devices, etc. shall be installed prior to Temporary or Permanent Certificate of Occupancy for site plans or first Subdivision Plat for subdivision projects.
3. Sidewalks internal to the project shall be installed lot line to lot line prior to a Certificate of Occupancy being issued in subdivisions.
4. DOT road frontage common area sidewalk shall be installed prior to first plat of the subdivision and prior to first Certificate of Occupancy for site plan projects.
5. Please note: All sidewalks and curb ramps shall conform PROWAG and ADA standards.
6. **Sidewalks shall be installed in common areas after Town of Apex Electric has been installed (confirm with Jared Harris at (919) 372-7466, if needed).** However, common area sidewalk shall be installed no later than adjacent lot sidewalk prior to Certificate of Occupancy being issued.
7. Parking spaces shall be installed after Town of Apex Electric has been installed (confirm with Jared Harris if needed). However, parking spaces shall be installed no later than adjacent lot driveway/sidewalk prior to Certificate of Occupancy being issued.
8. All entrances with irrigation systems shall require a trench drain directly behind the curb and gutter. The trench shall be a minimum of 12 inches wide and 18 inches deep. A 4-inch perforated pipe shall be laid at the bottom of

the ditch in the center. The ditch shall then be backfilled with washed stone wrapped in the appropriate geotextile fabric. The perforated pipe shall drain to a catch basin.

9. Final (end of warranty) acceptance of a project will not be issued without the final lift of asphalt installed and approved by the Town of Apex and DOT (if applicable).

STREET SIGNS

1. The Town requires developers to install permanent street signs (including, but not limited to, traffic control and street names) according to the Town's Standard Specifications & Standard Details prior to plat approval for subdivisions or certificate of occupancy for commercial projects. The developer is also responsible for maintaining these signs within their development plan throughout the warranty period, consistent with other private development infrastructure responsibilities. In the event a sign replacement needs to be completed by Town staff due to inability of the developer to repair or replace in a timely manner, the developer shall be invoiced according to the Town's fee schedule.

START OF WARRANTY INSPECTIONS

1. It is highly recommended for all **commercial projects** that a pre-certificate of occupancy (CO) meeting be scheduled with Development Services **at least 2-3 months prior to your anticipated temporary or permanent CO date** in order to coordinate all CO requirements. A pre-subdivision plat meeting for residential or non-residential subdivisions may also be requested. Please contact christine.masney@apexnc.org to schedule pre-CO or pre-plat meetings.
2. **START OF WARRANTY WALK THROUGH:** At or near the end of construction, the contractor shall coordinate with the Infrastructure Inspector to perform a preliminary walk-through of the new utilities, public roads, and sidewalks. Please see additional information in Exhibit D for the Start of Warranty and End of Warranty checklist.
3. **HYDRANT AND VALVE INSPECTIONS:** Please request the Hydrant and Valve inspection via the [online form](#). After necessary repairs are made, the contractor shall reschedule the inspection via the [online form](#) and the Infrastructure Inspector.
4. **CCTV INSPECTIONS:** All gravity sewer mains, sewer services, and storm drain lines are required to be inspected by CCTV by a third party and coordinated with your infrastructure inspector. Request for 3rd party CCTV inspections shall be made via the [online form](#). All 3rd Party CCTV inspection videos must be provided on a USB drive and deposited in the drop box located near the main entrance of the Water Resources Administration Building, 105-B Upchurch Street, Apex, NC. The following files must be included on the USB drive: Video files for sanitary sewer main lines and services and storm sewer (if applicable); Sanitary Sewer Reports; and the [3rd Party CCTV Inspection Report Form](#).
5. **SIGN INSPECTIONS:** All street and traffic signs shall comply with Town of Apex and MUTCD Standards. Please use the [online form](#) to request start of warranty street sign inspections.

START OF WARRANTY REQUIREMENTS (PRIOR TO PLAT SIGNING FOR SUBDIVISIONS OR PERMANENT CO FOR COMMERCIAL PROJECTS)

In addition to the Start of Warranty inspections above, the following requirements must be met prior to Start of Warranty, Certificate of Occupancy for Commercial Projects, or Subdivision Plat. **Please note: Additional requirements may be identified during site construction and inspections.**

1. Record Drawings shall be approved by the Town of Apex following the [Record Drawing Checklist](#). Record Drawings shall be submitted via [IDT/GeoCivix](#).
2. Water and sewer certifications are required by the Engineer of Record (if applicable). The certifications shall be uploaded to IDT/GeoCivix along with the Record Drawings. Certifications on private or public force mains and pump stations shall also be submitted. Public pump station design calculations, record drawings, certified pump curves, and start up report shall also be submitted and approved by the Town.
3. The engineer shall submit warranty and performance bond estimates (if applicable) of all public infrastructure

along with the Record Drawings. The estimates shall be submitted using the Town's [Warranty and Performance Bond Worksheets](#). All guarantees must be submitted to the Town prior to plat or TCO approval.

4. SCM performance and maintenance estimates (if applicable) shall be submitted by the engineer via e-mail to christine.masney@apexnc.org. For commercial projects, SCM Performance guarantees are only required if the SCM is not converted, as-built certified, and approved by the Town prior to CO. If the SCM does not receive approval, the commercial project can only receive a Temporary CO. For subdivision projects, both SCM performance and maintenance estimates shall be submitted. Only the SCM Performance bond will be required prior to subdivision plat, and the SCM Maintenance bond will be required after conversion and prior to the Town's approval of the conversion.
5. O&M Agreement for SCM(s) must be reviewed and approved prior to eRecording. Please e-mail a draft O&M Agreement to christine.masney@apexnc.org. Once approved, please deliver the original signed agreement to Development Services for eRecording.
6. All fees shall be paid including, but not limited to: Infrastructure inspections, electric underground, water purity sampling, bulk water, record drawing review, bond administration, eRecording, fee-in-lieu, fee-in-lieu administration, etc.
7. Inspections must pass with Infrastructure Inspections Manager, Utilities Operations, and Traffic Engineer.

TEMPORARY CERTIFICATE OF OCCUPANCY REQUIREMENTS FOR COMMERCIAL PROJECTS

If a developer/contractor requests a Temporary Certificate of Occupancy, the following minimum requirements must be met. **Please note: Additional requirements may be identified during site construction and inspections.**

1. All new public easements and/or public right of way shall be dedicated to the Town of Apex via deed with language approved by the or a Town approved right of way/easement plat recorded with Wake County Register of Deeds.
2. Record Drawings for public water and/or sewer main extensions shall be approved by the Town of Apex following the [Record Drawing Checklist](#).
3. Backflow preventer must be approved by an authorized tester and submitted to the Town via BSI Online.
4. Water and sewer certifications are required by the Engineer of Record (if applicable). The certifications shall be uploaded to IDT/GeoCivix along with the Record Drawings. Certifications on private or public force mains and pump stations shall also be submitted. Public pump station design calculations, record drawings, certified pump curves, and start up report shall also be submitted and approved by the Town.
8. Inspections must pass with Infrastructure Inspections Manager, Utilities Operations, and Traffic Engineer.
9. All other requirements in the Start of Warranty checklist must be met prior to a permanent Certificate of Occupancy being issued by the Town.

I hereby acknowledge that I have read and understand this document and that the items listed herein (as applicable) were discussed during the pre-construction meeting.

Signature by Owner or Owner Representative

Date

Print Name

****Please also have the property owner sign the Consent for Launch, Recovery, and Use of Unmanned Aircraft System document on Page 9****



Consent for Launch, Recovery, and Use of Unmanned Aircraft System

Property Address: _____

Property PIN(s): _____

Property Owner: _____

The Owner of the property located at _____ ("Property") hereby grants, acknowledges, and consents to the photography, filming, and/or recording of the Property (collectively "Recording" hereinafter) by the Town of Apex for the following purposes: observation of construction activity and inspection of utilities. The Owner further provides the following specific consent and permissions:

1. Owner's consent is hereby specifically provided to allow the Town of Apex to launch and recover an unmanned aircraft system from the Property in accordance with N.C.G.S. 15A-300.2.
2. Permission is granted for the recording to be used by the Town of Apex for the purposes described herein, in whole or in part, in conjunction with other images, graphics, or text, without restriction.
3. Owner recognizes that the Recording may be a public record pursuant to North Carolina Law.

Owner's Signature: _____
Sign and Print

Title: _____

Date: _____

TOWN OF APEX
STAFF CONTACT LIST

BUILDING INSPECTIONS & PERMITTING DEPARTMENT

Physical Address: 322 N. Mason Street
Apex, NC 27502
Mailing Address: PO Box 250

Main Phone: (919) 249-3418
Automated Inspections
Request Line: (919) 249-3388
Fax: (919) 249-3407

DEVELOPMENT SERVICES

Physical Address: 105-B Upchurch Street
Apex, NC 27502
Mailing Address: PO Box 250
Main Phone: (919) 249-3355

**Christine Masney, Development Services
Manager**

Direct Phone: (919) 249-3394
E-Mail: christine.masney@apexnc.org

**Mason Lane, Development Services
Technician**

Direct Phone: (919) 372-7467
E-Mail: mason.lane@apexnc.org

Development Services Specialist

ELECTRIC DEPARTMENT

Physical Address: 2850 Milano Avenue
Apex, NC 27502
Mailing Address: PO Box 250
Main Phone: (919) 249-3437

Jared Harris, Electric Technical Services Manager

Direct Phone: (919) 372-7466
E-Mail: jared.harris@apexnc.org

FIRE DEPARTMENT

Physical Address: 315 W. Williams Street
Apex, NC 27502
Mailing Address: PO Box 250
Main Phone: (919) 362-4001

Karl Huegerich, Fire Marshal

Direct Phone: (919) 367-4055
E-Mail: karl.huegerich@apexnc.org

David Dillon, Deputy Fire Marshal

Direct Phone: (919) 367-4062
E-Mail: david.dillon@apexnc.org

INFRASTRUCTURE INSPECTIONS

Physical Address: 105-B Upchurch Street
Apex, NC 27502
Mailing Address: PO Box 250
Main Phone: (919) 372-7467

Bryce Bernard, Infrastructure Inspections Manager

Direct Phone: (919) 249-1167
Cell Phone: (919) 548-1743
E-Mail: bryce.bernard@apexnc.org

Alex Lanferman, Capital Projects Inspector

Direct Phone: (919) 249-3515
Cell Phone: (919) 594-3723
E-Mail: alex.lanferman@apexnc.org

Chad Dusenberry, Capital Projects Inspector

Direct Phone: (919) 249-3510
Cell Phone: (919) 210-8633
E-Mail: chad.dusenberry@apexnc.org

Brian Ennis, Infrastructure Inspector

Cell Phone: (919) 219-5818
E-Mail: brian.ennis@apexnc.org

Brian Spear, Capital Projects Inspector

Direct Phone: (919) 249-3424
Cell Phone: (919) 548-0438
E-Mail: brian.spear@apexnc.org

Dillon Blackman, Infrastructure Inspector

Direct Phone: (919) 249-1037
Cell Phone: (919) 548-6126
E-Mail: dillon.blackman@apexnc.org

Paul Leon, Infrastructure Inspector

Direct Phone: (919) 249-3378
Cell Phone: (919) 337-7881
E-Mail: paul.leon@apexnc.org

Alvin Wolf, Infrastructure Inspector

Direct Phone: (919) 249-1151
Cell Phone: (919) 548-1314
E-Mail: alvin.wolf@apexnc.org

Ben Prose, Infrastructure Inspector

Cell Phone: (919) 548-1542
E-Mail: ben.prose@apexnc.org

PARKS, RECREATION AND CULTURAL RESOURCES

Physical Address: 53 Hunter Street
Apex, NC 27502
Mailing Address: PO Box 250
Main Phone: (919) 249-3402

**Angela Reincke, Assistant PRCR
Director**
Direct Phone: (919) 372-7468
E-mail: angela.reincke@apexnc.org

**Bradley Cole, Senior Parks Project
Supervisor**
Direct Phone: (919) 805-1403
E-mail: bradley.cole@apexnc.org

**Tyler Gumpright, Parks & Greenways
Planning Technician**
Direct Phone: (919) 372-7353
E-mail: tyler.gumpright@apexnc.org

PLANNING DEPARTMENT/ZONING COMPLIANCE OFFICERS

Physical Address: 322 N. Mason Street
Apex, NC 27502
Mailing Address: PO Box 250

Main Phone: (919) 249-3426
Fax: (919) 249-3338

**Joe Curtin, Zoning Compliance
Supervisor**
Direct Phone: (919) 249-1125
E-Mail: joe.curtin@apexnc.org

**Gary Reeder, Senior Zoning Compliance
Officer**
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E-Mail: gary.reeder@apexnc.org

**Trevor Johnson, Senior Zoning
Compliance Officer**
Direct Phone: (919) 249-3333
E-Mail: trevor.johnson@apexnc.org

**Mark Siburt, Senior Zoning Compliance
Officer**
Direct Phone: (919) 249-3335
E-Mail: mark.siburt@apexnc.org

**Cliff Joyner, Senior Zoning Compliance
Officer - Landscaping**
Direct Phone: (919) 249-3433
E-Mail: cliff.joyner@apexnc.org

SOIL & EROSION CONTROL

Physical Address: 105-B Upchurch Street
Apex, NC 27502
Mailing Address: PO Box 250

Main Phone: (919) 362-8166
Fax: (919) 387-7055

James Misciagno, Environmental Field Services Supervisor

Direct Phone: (919) 372-7470
E-Mail: james.misciagno@apexnc.org

TRAFFIC ENGINEERING

Physical Address: 105-B Upchurch Street
Apex, NC 27502
Mailing Address: PO Box 250

Sajid Hassan, PE

Traffic Engineer

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Jessica McClure, PE

Traffic Engineer

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E-mail: jessica.mcclure@apexnc.org



EXHIBIT A

1. **Tree Protection Fencing Installation Permit** is required prior to any site development activity such as but not limited to testing, clearing, grading, pond draining, utility work, and demolition. The [application](#) is available on line or at the Planning Department offices, 73 Hunter Street, 2nd Floor. After the application is approved, complete the following in the order listed:
 - a. **Survey and Flag** - Survey and flag property lines and easements adjacent to protection areas such as saved trees, resource conservation areas (RCA), wooded buffers, riparian buffers, etc., and flag the limits of the protection fencing.
 - b. **Contact ZCO** - Contact the project Zoning Compliance Officer (ZCO) at 919 249-3426 at least 24 hours in advance to schedule an on-site meeting with your representative.
 - c. **Other Protection Measures** – If additional tree protection measures are required to be done by a certified arborist to protect existing saved trees such as root-pruning, air spading of roots, or fertilization, then this work needs to be coordinated now.
 - d. **Install Fencing** - Once limits are inspected and approved by the Zoning Compliance Officer and any other required protection measures are complete, then fencing and signs may be installed.
 - e. **Final Inspection** - Contact the project Zoning Compliance Officer for a final inspection of installed protection measures.

Tree Protection Fencing and any other required protection measures must be installed, inspected, and approved before obtaining approval to install S&E measures, grading permits, demolition permits, and building permits. Tree Protection Fencing must remain in place and maintained properly during the entirety of the project and all protected areas must remain undisturbed. Failure to do so will result in the issuance of civil penalties and other measures such as a stop work orders and/or permit revocations.

2. **Landscape Installation and Inspection** – Landscaping must meet approved plans and UDO standards and generally accepted green industry standards. Plants of inferior quality or size will be rejected. Improper installation methods will not be accepted such as aggressive pruning, planting in compacted, rocky or clay soils, planting too high or too low, and over mulching. Landscape installation inspections must follow this basic sequence:
 - a. **Residential** –
 - **Buffer and common area landscaping** installed prior to subdivision plat approval for each Phase (note that areas with site plans such as the amenity center follow the non-residential process)
 - **Individual lot landscaping** installed on each lot prior to the home's C.O.
 - b. **Non-Residential** –
 - Install before final C. O.

Special plantings such as but not limited to street trees within rights-of-way that require additional measures such as root trenches and root-barriers will need to be coordinated with other Town departments (Engineering, Water Resources, etc.).

3. **Site Elements and Amenities** such as but not limited to retaining walls, berms, fences, mail kiosk, dumpster/trash enclosures, parking, sidewalks, and exterior site lighting must meet the approved plan, UDO standards, TOA engineering specifications, and state/federal codes. Any proposed deviations from or additions to the plans related to site elements must receive prior approval by all relevant departments. Some basic standards required by Planning are:



- a. **Retaining Walls** – Before installation, stake locations in the field and contact the project ZCO for inspection. Provide a sample of the wall material such as a cap block showing the color.
 - **Segmental retaining walls** must be medium/dark brown or rust colored only – no gray or other colors allowed, and the color must be integral to the wall material, not applied per the detail in the site or subdivision plans.
 - **Gravity and cast in place structures** must meet UDO standards and follow the detail approved in the site or subdivision plans.
 - b. **Berms** must blend with the overall landscape and undulate to imitate the surrounding topography. They shall be constructed to drain well and be composed of soils suitable to grow and sustain plants with at least the top foot consisting of good quality topsoil; the slope of a berm shall not exceed a 3/1 run to rise ratio.
 - c. **Slopes** equal to or steeper than a 3/1 run to rise ratio must be planted with something other than turf grass (trees, shrubs, groundcovers); and in addition to plantings, slopes equal to or steeper than a 2/1 run to rise ratio may require other soil stabilization measures such as but not limited to matting and geo-textiles.
 - d. **Fences** are not allowed within buffers, RCA, or landscaped areas unless approved as part of the subdivision or site plan. There are also height and style restrictions and standards for fences so contact the project ZCO prior to installation.
 - e. **Site Lighting** must adhere to the approved plans. Fixtures and poles must be black, dark brown or architectural bronze only. Poles cannot encroach upon or interfere with required trees and must be at least 10 feet away from small type trees and at least 20 feet away from large type trees.
 - f. **Signs** require separate sign permits issued by the Planning Department. Signs proposed within buffers or other areas such as easements and medians require prior approval from the Town and if approved may require a separate sign easement. Signs are not allowed within sight triangles along roadways.
4. **Elevations, Materials, Finishes and Colors** – House and building elevations, materials, finishes and colors must meet the approved subdivision or site plan; any proposed changes will require amending the approved plans. Other typical Planning requirements:
- a. **HVAC, Mechanical and Other Utility Equipment** - Ground located or roof-top mounted HVAC, mechanical and other utility equipment for multi-family and non-residential buildings, must be screened from off-site view.
 - b. **Smaller Electrical/Mechanical/Plumbing Devices** - Electrical/mechanical/plumbing devices, panel boxes, piping, conduit, vents and similar items must be incorporated into the architectural design of the building. Where it is impractical to physically screen these devices they may be painted to match and blend with the primary building color or material of the wall they are affixed to.
 - c. **Residential Exterior Steps** – Some subdivisions may have conditions requiring minimum floor height and step requirements. If this requirement is not detailed on the approved plans you will be required to submit a standard detail showing how this condition will be met prior to the start of construction of the first house.
5. **Changes or Deviations** – Any proposed changes or additions to or deviations from the approved subdivision or site plan must be submitted for review and approval by all relevant town departments before they can be implemented. Some very minor changes such as substituting plant material may be approved in the field, but most will require plan amendment and some substantial changes may require resubmittal and approval by the Apex Town Council.



6. Final Inspections

a. **Residential** –

- **A final landscape inspection** will be conducted by the project ZCO prior to subdivision plat approval for each phase to ensure that all landscaping within buffers and common areas adhere to the approved plan and town standards (see item 2 above).
- **A final overall site inspection** will be conducted by the project ZCO prior to the issuance of the last C.O. within a phase to ensure that all site elements within common areas adhere to the approved plan and town standards (see item 3 above).

b. **Non-Residential** – A final overall site inspection will be conducted by the project ZCO prior to the issuance of the C. O. The Zoning Compliance Officer will inspect all landscaping, site elements and amenities, building elevations/materials/finishes/colors, and site lighting for adherence to the approved plan and UDO standards (see items 2, 3, and 4 above). Other items:

- **Lighting Certification** –All site lighting requires a Lighting Certification letter from a registered engineer, architect or qualified lighting design professional certifying that the site lighting as installed meets the approved plans and the Town's UDO standards. The letter must include a report of a night-time site inspection made by the engineer/architect/lighting professional detailing how the installed lighting does or does not meet the approved plan and UDO standards, and if it does not meet the plan or standards, what steps will be required to bring the lighting into compliance. The report must be accompanied by a lighting photometric plan showing all installed lights, sample foot-candle readings juxtaposed with the original approved foot-candle levels. The letter must be sealed and signed.
- **Plats and Fees** – Before a C. O. is released the final plat must be submitted and accepted by the Planning Department and all required outstanding fees must be paid (i.e.: transportation fees, etc.).
- **Landscape Delay Bonds** – The Planning Department only accepts cash bonds and this is primarily for landscaping installation that needs to be delayed due to inappropriate planting season (i.e.: during the middle of the summer, extremely hot/cold, or very wet/dry weather conditions) or a serious lack of plant inventory from nursery growers. Bonding will not be allowed to be used to cover for scheduling problems and workloads of landscape contractors. If it is the right time of year to plant and plants are available then bonding will not be approved. If approved, the bond must be a cash bond at 150% of the cost to install the remaining plant material (all material and labor). The request must be in writing and include the original quote and material/labor costs breakdown from the landscape contractor. Delays in planting are typically to the next appropriate planting season or in 30 day increments.



Preconstruction Meeting

EXHIBIT B

Soil Erosion and Sedimentation Control Requirements

Project Name: _____ Project Number: _____
Date: _____

Please note that NO development work is allowed until the Certificate of Compliance is issued.

Has the \$x,xxx performance guarantee been paid to Development Services (105-B Upchurch Street)? If not, coordinate any questions with Neisha Maynard at 919-372-7467 or by email at neisha.maynard@apexnc.org for the approved wording if using a letter of credit.

As of April 1, 2019, all new construction activities are required to complete and submit an electronic Notice of Intent (NOI) form requesting (<https://edocs.deq.nc.gov/Forms/NCG01-NOI>) a Certificate of Coverage under the NCG010000 Construction Stormwater General Permit. This form **MUST** be submitted to the Town of Apex prior to the issuance of a Certificate of Compliance.

Prior to the start of work, a construction entrance must be installed and maintained throughout the life of the project per Town of Apex Detail #400.06. Mud that is dragged into the roadway must be cleaned ASAP or it will be cleaned by the Town of Apex and then billed back to the owner.

Prior to the issuance of the Certificate of Compliance, the permanent outlet structure for all permanent basins must be installed with the skimmer attached to the bottom drain.

Prior to the issuance of the Certificate of Compliance, all discharge points must have the FES installed and appropriate sized rip-rap must be installed per Town of Apex Standard #400.18.

Prior to the issuance of the Certificate of Compliance, all sediment basins and diversion ditches must be seeded, mulched and/or matted. All perimeter silt fence must be properly installed.

Prior to the issuance of the Certificate of Compliance, all clean water by-pass piping (if designed) must be installed unless site restrictions require it to be installed at a later date.

If the project is designed in phases, individual Certificates of Compliance will be issued based on the phase. If requested, Certificates of Compliance can be issued in stages even if the project is not phased. Submit your site specific staging sequence to Stan Fortier prior to starting any work.

Prior to the issuance of the Certificate of Compliance, the permit box and rain gauge must be in place. Refer to the Town of Apex Standard Details for the installation of all approved measures.

After the issuance of the Certificate of Compliance, the financial responsible party is fully responsible to complete the NCDENR self monitoring/inspection reports at least once per wk and after every 1." rain event. These records must be available for Town and/or NCDENR inspection.

As owner/developer/contractor you have read the S&E requirements as listed above and are expected to fully comply.

If there are any questions or concerns on how to move forward please contact James Misciagno at **919-372-7470** or at **james.misciagno@apexnc.org**



**INFRASTRUCTURE INSPECTIONS DIVISION
REQUIRED INSPECTIONS**

Sewer, Water, Streets, Pump Station, Force Main and Greenway Construction

Required inspections include, but are not limited to, the items listed herein. Required inspections must be approved by a Town of Apex inspector before completion. The contractor shall coordinate all work accordingly. All work shall be completed in accordance with the Town of Apex Standard Specifications and Standard Details (version as listed on the cover sheet of the Construction Plans), unless specific deviation has been identified and approved by the Town in the most recent approved plans.

To schedule an inspection please call your infrastructure inspector directly. All inspections require a minimum 24-hour notice unless otherwise noted.

Sanitary Sewer Installation

1. Existing sewer connection
2. By-pass pumping (minimum 5-day notice)
3. Foundations for manholes and other structures
4. Plug installation
5. Road bores (minimum 2-day notice)
6. Backfill and street patching
7. Service taps & laterals
 - a. Town of Apex Infrastructure Inspectors can only inspect the lateral within the public right-of-way or easement limits to the first clean out.
 - b. Any lateral on private property requires a plumbing permit and must be inspected by the Code Enforcement Inspector in the Permits and Inspections Department.
8. Special bedding
9. Undercut of unsuitable material
10. Stream crossings
11. Air testing of mainlines and services
12. Vacuum testing manholes
13. Mandrel test
14. Final adjustments
15. Flushing and cleaning of lines
16. CCTV inspections by a third party (minimum 3-day notice)
17. Final inspection
18. Sewer plug removal

Water Distribution Installation

1. Shutdown of existing line (minimum 5-day notice)
2. Existing waterline connection
3. Road bores (minimum 2-day notice)
4. Backfill and street patching
5. Undercut of unsuitable material



6. Valve operation on existing water system
7. Inserting/Removing pig
8. Thrust collar assemblies
9. Thrust blocking
10. Rodding and restrained joint systems
11. Blow off valves
12. Air-relief valves
13. Main line valves
14. Fire hydrants
15. Sewer and storm drain crossings
16. Hydrostatic pressure test
17. Chlorine injection
18. Blow off chlorine
19. Bac-T test (minimum 24-hour notice)
20. Service taps and laterals
 - a. Town of Apex Infrastructure Inspectors can only inspect the lateral/service within the public right-of-way or easement limits to the meter.
 - b. Any lateral/service on private property requires a plumbing permit and must be inspected by the Code Enforcement Inspector in the Permits and Inspections Department.
21. Final adjustments
22. Final inspection

Fire Sprinkler Lines, Fire Department Connections (FDC), Post Indicator Valves (PIV) are to be scheduled and inspected through the Town Fire Marshal at 919-362-4001.

Public Storm Drainage Installation

1. Existing storm drainage system connection
2. Road bores (minimum 2-day notice)
3. Backfill and street patching
4. Undercut of unsuitable material
5. Masonry and pre-cast box installation
6. Pipe bedding drain
7. Headwalls/Endwalls
8. Concrete slabs
9. Final adjustments
10. Flushing and cleaning of lines
11. CCTV inspections by a third party (minimum 3-day notice)
12. Final inspection



Street Installation

1. Undercut or geotextile material placement
2. Proof roll
3. Curb string line
4. Subgrade and crown grade
5. Proof-roll
6. Stone grade and crown
7. Paving
8. Road-widening lap-joints
9. Sidewalk forms and subgrade
10. Driveway aprons
11. Final Inspection

Greenway Installation

1. Greenway staking
2. Storm drainage crossings
3. Subgrade inspection
4. Subgrade proof roll
5. Stone base proof roll
6. Paving installation
7. Safety railings, driveway aprons, handicap ramps, entrance gates/bollards, benches and signage prior to setting or constructing

Pump Station Installation and Site Work

1. Foundations for manholes, wet wells, or other structures
2. Undercut of unsuitable materials
3. Structure delivery
4. Exterior/interior coatings
5. Underground pipe on pump station site
6. Thrust blocking, rodding, other specified reinforcement
7. Electrical and mechanical component delivery
8. Electrical and mechanical installation
9. Pump, rail, level control, SCADA installation, other accessories, etc.
10. Site drainage
11. Access drive
12. Subgrade inspection
13. Subgrade proof roll
14. Stone base proof roll
15. Paving installation
16. Fence
17. Startup test
18. Final inspection



Force Main Installation

1. Existing sewer connection
2. Thrust blocking, rodding, other specified reinforcement
3. Undercut of unsuitable material
4. Material transitions
5. Road bores (minimum 2-day notice)
6. Backfill and street patching
7. Thrust collar assemblies
8. Thrust blocking
9. Rodding and restrained joint systems
10. Water, sewer and storm drainage crossings
11. Hydrostatic pressure test
12. Air relief valves
13. Main line valves
14. Final adjustments
15. Final inspection

EXHIBIT D

START OF WARRANTY AND END OF WARRANTY

WALK THRU INSPECTION SUBDIVISIONS & SITES CHECKLIST

Below is a checklist of items that must be completed before a final walk thru inspection will be scheduled and performed. **Additional items may be identified during the construction and platting phases. Please coordinate all inspections and requirements with your infrastructure inspector.**

START OF WARRANTY

TESTING

Testing shall be scheduled and performed by the Infrastructure Inspector.

Sewer Testing: Pressure, Vacuum, and Mandrel testing. The lines must be flushed prior to mandrel testing and camera inspection.

Water Testing: Pigging, Chlorination, Hydrostatic Testing, and Bacteriological Samples (2 samples collected for each dead end or 2 per 1,000 feet). All testing must be completed prior to installation of services.

CAMERA INSPECTION

The first lift of asphalt must be down before camera inspection for sanitary **and** storm sewer (flush lines and inject dye-water prior to camera) will be conducted. **3rd party CCTV shall be conducted by a NAASCO PACP certified company.** Fill out this form when 3rd party CCTV is being scheduled: [CCTV Request](#)

The CCTV company is responsible for providing highlighted plan sheets of the area to be inspected via email to the parties listed below 48 hours prior to the scheduled camera inspection date. The plan sheets should include the project name and phase, water, sanitary and storm sewer lines and structures.

Infrastructure Inspections Manager:

Bryce Bernard bryce.bernard@apexnc.org

Infrastructure Inspectors:

Dillon Blackman dillon.blackman@apexnc.org

Paul Leon paul.leon@apexnc.org

Brian Ennis brian.ennis@apexnc.org

Ben Prose ben.prose@apexnc.org

Capital Project Inspectors:

Chad Dusenberry chad.dusenberry@apexnc.org

Brian Spear brian.spear@apexnc.org

Alex Lanferman alex.lanferman@apexnc.org

NCDOT RIGHT-OF-WAY IMPROVEMENTS

All NCDOT right-of-way improvements must be completed and inspected by the NCDOT and Town of Apex, Sajid Hassan (Traffic Engineer) sajid.hassan@apexnc.org .

STORM SEWER

All storm sewer infrastructure shall be constructed and inspected per the Town of Apex Standard Specifications [Storm Drainage Sections 507 and 508](#). All catch basins must be clear of debris and ensure the correct grates are installed and welded spacer is completed prior to inspection.

INFRASTRUCTURE IMPROVEMENTS

The following infrastructure must be constructed prior to final walk thru:

Sidewalk on road frontage improvements, multi-use trail, and curb ramps, roads (1st lift of asphalt) and curb and gutter, and street signs.

□ RECORD DRAWINGS

Record Drawings shall be approved by the Town of Apex following the [Record Drawing Checklist](#). Record Drawings shall be submitted via [IDT/GeoCivix](#).

□ MISCELLANEOUS WATER and SEWER

All valves and hydrants will be visually inspected. All valves shall be open and 6-inch hydrant risers installed upon inspection.

Once the checklist items above have been performed you can contact your Infrastructure Inspector to schedule the Final Walk Thru Inspection. If during the Final Walk Thru, 20 or more punch list item are discovered the inspector will stop the inspection and you be required to reschedule the Final Walk Thru.

All items on the punch list must be completed, re-inspected, and approved to receive the Water Resources sign off on plats or certificate of occupancy. The Infrastructure Inspector will notify Development Services when the Final Walk Thru Inspection has passed.

□ STREET SIGN INSPECTIONS

All street and traffic signs shall comply with Town of Apex and MUTCD Standards. Please use the [online form](#) to request start of warranty street sign inspections. Please use the [online form](#) to request start of warranty sign inspections.

END OF WARRANTY

□ CAMERA INSPECTION

The first lift of asphalt must be down before camera inspection for sanitary sewer will be conducted. Flushing lines prior to camera inspection may be required by Water Resources staff.

The Infrastructure Inspector will notify you when the site is ready for camera inspection. Upon notification from the Infrastructure Inspector, schedule End of Warranty CCTV via the [online form](#).

The Developer/General Contractor is responsible for providing highlighted plan sheets of the area to be inspected via email to the parties listed below 48 hours prior to the scheduled camera inspection date. The plan sheets should include the project name and phase, water, and sanitary sewer lines and structures.

Infrastructure Inspectors:

Bryce Bernard bryce.bernard@apexnc.org
Dillon Blackman dillon.blackman@apexnc.org
Chad Dusenberry chad.dusenberry@apexnc.org
Alex Lanferman alex.lanferman@apexnc.org
Paul Leon paul.leon@apexnc.org
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Brian Ennis brian.ennis@apexnc.org
Ben Prose ben.prose@apexnc.org

Water Resources Operations:

David Watkins david.watkins@apexnc.org

□ NCDOT RIGHT-OF-WAY IMPROVEMENTS

All NCDOT right-of-way improvements must be completed and inspected by the NCDOT and Town of Apex, Sajid Hassan (Traffic Engineer) sajid.hassan@apexnc.org.

□ MISCELLANEOUS WATER and SEWER

All manholes, valves, and hydrants will be visually inspected.

□ STREET SIGN INSPECTIONS

Please use the [online form](#) to request end of warranty sign inspections.



EXHIBIT E - PLANNED SHUTDOWN PROCEDURE

1. Schedule an on-site meeting with the Contractor, Town Inspector, and Water Quality Supervisor. The Water Quality supervisor will provide a map of the area that will be affected by the work.
 - Work must be completed per Town of Apex Specifications and performed within a four (4) hour period.
2. Prior to setting the work date the contractor must contact commercial businesses that will be affected by the shutdown to determine possible hard ships as a result of the proposed shutdown.
3. Contractor prepare and email Shutdown Notification letter to Lindley Paynter, Jessica Sloan, Town Inspector and Water Quality Supervisor for approval.
4. Once approved by the Town notices to residents and businesses must be distributed by the contractor one week prior to the shutdown date. In the event of weather where work cannot be performed the following business day the contractor shall be responsible for distributing a second notice with the proposed shutdown date.
5. Contractor call in Locate Ticket for work within a reasonable time of the date of work.
6. Contractor is responsible for pre-mobilization, materials, and installation prior to date of work to help ensure work is completed within the four (4) hour shutdown period. Precautionary measures should be considered including necessary backup materials and other equipment that may be required to perform the work.
7. Contractor is responsible for scheduling an on-site inspection with the Town Infrastructure Inspector, Water Quality Supervisor, or Water and Sewer Operations Manager one day prior to the scheduled shutdown to check for job preparedness.
8. Prior to start time the Water Quality division will be responsible for closing the valves necessary for shutdown. After work is completed the Water Quality division will reopen the valves, flush the lines, and sample the water.

TOWN OF APEX CONTACTS

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Bryce.bernard@apexnc.org

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Senior Infrastructure Inspector
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Paul.leon@apexnc.org

Brian Ennis
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Chad Dusenberry
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Jimmy Cornell
Utilities Operations Manager
919-249-3536
Jimmy.cornell@apexnc.org