<u>City of Mebane Project Requirements and Related Timing of Procedures</u>

1. Preconstruction checklist

- Water permit
- Sewer permit
- Buffer authorization
- Erosion control permit
- Engineering Construction Plan Review and Inspection Fees paid
- NCDOT driveway permit
- DOT encroachment/bond in place
- Submittals prior to placement
- · Geotechnical spreadsheet approved
- Any special provisions

2. As-Builts

- List as-built condition of utility separations verified by pictures or survey during construction
- Sewer grades and CO locations
- Storm drain grades
- Hydrant location and grades as well as water meter locations
- Lot and drainage swale grades
- TOC shots at lot lines and mid lot as well as along radii at crosswalk locations
- Provide valve and blow off "tie down" sheets with as-built submittal
- Provide CAD files with as-built submittal

3. Certification Process

- Complete utility installation and testing
- Submit as-builts for City approval
- Once as-builts have been approved the water line can then be chlorinated.
- Submit certification package for City signature
- Certification package should include a site map highlighting items covered by the certification
- Once signed by the City the package will be returned to the design engineer for submission to the State
- State will provide letter of final acceptance for water
- Design engineer to provide proof of submission to the State for sewer
- Once final acceptance or proof of submission is received by the City the line can be placed into service.

4. Roadway

- All conduit crossings to be placed prior to preparing for curb or roadway installation
- Curb stakes and string line
- Curb grade check / handicap ramp locations to be staked
- Densities under curb
- Proof roll subgrade for curb
- Curb installation

- Grade check on road subgrade
- Dirt subgrade densities in roadway
- Proof roll subgrade
- Stone placement*
- *Any excavation between back of curbs after stone placement will require diggable flowable fill for backfill
- Stone grade check
- Stone densities
- Proof roll stone base
- Asphalt placement
- Asphalt cores

5. Grading (Once curb is installed)

- Have pad corners and swells staked with C/F to finish grades and hub elevations
- If crawl lots stake approx. house corners and swells
- Borrow pits to be surveyed prior to backfill
- ROW graded at 2% to property corners prior to 3rd party utility placement

6. Utilities (sewer, storm drain, water)

- Deepest utility installed first
- MH maximum grade ring adjustment 8" otherwise should be adjusted via riser section
- Separations documented via survey or pictures with labels of locations
- All third-party utilities not obtaining encroachment agreement to have roadway conduits installed prior to curb installation

7. Testing – after all utilities installed

- Sewer Pressure test lines, vacuum test MH's, mandrel PVC, jet and video main and services
- Water Pressure test, obtain as-builts, chlorinate and bac-t, obtain certification prior to activation
- Storm Drain Video
- Pre-testing required on all utilities prior to requesting official test
- Pre-testing water main prior to service installation
- Complete all testing prior to curb installation

8. Geotechnical

- Geotechnical spreadsheet to be completed and approved prior to start of construction.
- All test below subgrade to be completed during installation of associated utility.
- All subgrade testing to be completed once fine grade of subgrade has been achieved (ex. After placement of string line for curb and prior to requesting proof roll)
- Contractor and Geotech shall proof roll and make all necessary repairs prior to proof roll being conducted by the City
- Geotechnical testing daily field reports should be provided on a weekly basis during construction. Tests conducted and reported on the daily field reports should be updated on the geotechnical spreadsheet which should accompany the daily field reports.
- No geogrid or fabric allowed within the right of way without approval by the City Engineer