

**ZEBULON
BOARD OF COMMISSIONERS
AGENDA
September 13, 2021
7:00pm**

Due to COVID-19 we have limited in-person seating. If you would like to attend, please email Stacie Paratore (sparatore@townofzebulon.org) by 12:00pm on September 13, 2021 to reserve your seat.

All meetings are live streamed on our Facebook (@TownofZebulon) and YouTube (@TownofZebulon) pages.

I. PLEDGE OF ALLEGIANCE

II. APPROVAL OF AGENDA

III. PUBLIC COMMENT PERIOD

If you wish to present in-person, please contact Stacie Paratore at sparatore@townofzebulon.org to reserve your seat. If you would like to submit comments to be read into the record at the meeting, please send comments, of 400 words or less, to Stacie Paratore (sparatore@townofzebulon.org) by 3:00pm on September 13, 2021.

IV. CONSENT

A. Minutes

1. May 27, 2021 – Work Session
2. August 2, 2021 – Regular Meeting
3. August 18, 2021 – Special Called Meeting
4. August 25, 2021 – Work Session

B. Finance

1. Monthly Items
 - a. Wake County Tax Report – June 2021
 - b. Monthly Financial Report
2. Budget Amendments
 - a. Ordinance 2022-12 – Establishing a Grant Special Project Fund for the American Rescue Plan Funds

C. Administration

1. Amendment of Work Session Meeting Schedule

V. OLD BUSINESS

A. Parks and Recreation

1. Adoption of Parks Master Plan

B. Administration

1. Board Appointments

C. Finance

1. Ordinance 2022-03A – Amended Fire Station Capital Project
2. Resolution 2022-04 – Lease Purchase Award (Leaf Truck & Payloader)

D. Budget

1. Recycling Fee

VI. NEW BUSINESS

A. Public Works

1. Resolution 2022-05 – Autumn Lakes - Phase 3 Infrastructure Acceptance
2. Rotary Club – “Flags for Heroes” Zebulon Municipal Complex Facility Use Application

VII. BOARD COMMENTS

VIII. MANAGER’S REPORT

Zebulon Board of Commissioners
Work Session
Minutes
May 27, 2021

Present: Robert S. Matheny, Beverly Clark, Annie Moore, Glenn York, Shannon Baxter, Larry Loucks, Joe Moore-Town Manager, Lisa Markland-Town Clerk, Chris Perry-Fire, Michael Clark-Planning, Sheila Long-Parks and Recreation, Chris Ray-Public Works, Bobby Fitts-Finance, Jacqui Boykin-Police, Eric Vernon-Attorney

Mayor Matheny called the meeting to order at 6:00pm.

APPROVAL OF AGENDA

Commissioner Loucks made a motion, second by Commissioner York to approve the agenda. There was no discussion and the motion passed unanimously.

WORK SESSION #2 FOLLOW-UP

Bobby Fitts provided follow-up from the second work session on the general fund fund balance. The spending projections for the year and the operating and recurring expenditures were given.

STREETS AND SIGNALS

Chris Ray stated streets and traffic signals will be a big challenge over the next five to ten years and was trying to get ahead of the Town's needs. Chris Ray stated the Town had 28.70 miles of streets and paved 1.44 miles annually. The Town had a 50% increase in streets since 2015. Chris Ray spoke about street health and the streets to be paved in 2022.

The Shepard School roadway and traffic signal project and Green Pace and Arendell Avenue roadway and signal project timelines and costs were given.

Commissioner York asked how much the Popeye's restaurant was contributing to the cost. Staff stated Popeyes was widening the road to the property lines.

The LED lighting conversion Phase II project was explained. This project included 182 high pressure sodium lights in Weavers Pond I and II, Braemar and some spot locations.

The Jones Street connector project was explained. The project would ease traffic congestion on Arendell Avenue. The Cook-out fee-in-lieu was approximately \$285,000 toward the project.

Mayor Matheny inquired about the Powell Bill balance. Bobby Fitts stated the Powell Bill revenue was \$127,000 and \$220,000 would come from Powell Bill reserves.

PARKS AND RECREATION MASTER PLAN IMPLEMENTATION PREVIEW AND CAPITAL IMPROVEMENT PLAN

Sheila Long stated Parks and Recreation projects were being pulled from Property Management and added to the Parks and Recreation department. This change would help the Town with grant

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agencies and gave transparency of the cost to operate the Parks and Recreation projects. Sheila Long spoke about how the budget requests met the Town's goals of the 2030 Strategic Plan.

The FY 22 highlights included adopting and implementing the Parks and Recreation Master Plan and creating and adopting a Parks and Recreation CIP. Sheila Long gave a preview of the Parks and Recreation Master Plan. The vision of the plan was given. The vision subsystems were given and Ms. Long spoke about each subsystem which were:

- Neighborhood parks and open spaces
- Community parks and athletic facilities
- Natural areas and sustainability
- Programs, community health and special events
- Connectivity and access

One project requested in the FY22 budget was a renovation to Gill Street Park. The request included a basketball court renovation and dispersed picnic areas.

Commissioner Baxter asked how many picnic areas were included. The proposed estimate included three picnic areas.

The next project was Little River Park. A Phase 2 archaeological study was a required next step for FEMA funding. The request also included eradicating eight acres of kudzu to make the area usable for the community.

Commissioner Baxter inquired about the type of herbicide that would be used to treat the kudzu. Sheila Long would follow-up with the types of herbicides recommended from the forestry service.

There was discussion about using goats to eradicate the kudzu and maintain the area. The Tree Board was in support of eradicating the kudzu.

Sheila Long stated the Whitewater Park Feasibility study was not recommended in the budget. Staff had discussions with the City of Raleigh Park Planner, Wake County's Parks and Recreation Director, and consultants from McLaughlin Whitewater and Restoration Systems regarding the possibility of a whitewater park. The costs to construct a whitewater park were very high. The City of Raleigh had moved from the whitewater park concept to focus on a river park concept.

There was discussion about water play options at Little River Park.

Staff spoke about the recommended infield rehab rotation schedule at Community Park to address safety concerns from wear.

The Master Plan implementation was requested in the FY22 budget. The Board would decide how they wanted to approach the project and the phasing for the plan. Possible uses for FY22 would be branded park signs, grant development and/or match, project design, and to advance a project noted in the outyears.

Commissioner York suggested using parks or open spaces for cultural opportunities.

MARKET STUDY

Joe Moore stated the market study was not included in the FY22 budget but may come before the Board mid-year. The study began in FY21. The consultant was hired through TJCOG, questionnaires were completed by employees, and employees had an option to talk with the consultant.

Each department was affected differently. Some departments had issues with turnover, career progression and succession planning. Joe Moore spoke about the capital budget history and how the Town faced shortcomings in various years.

The Fire Department's labor shed was shown. Most Fire Department applicants were from East and South of Zebulon. The department has had fluctuations of turnover over the years. The reasons for fire turnover included more money, closer to home, desire to work for a larger department and medical reasons.

Commissioner Loucks asked if the turnover total of 11 employees included Fire Department employees who had retired. Staff would follow-up with the retirement number.

The high cost of turnover was explained, and examples were given. Fire recruitment had decreased over the years. Out of the 14 hires since August 2013, only six remained employed by the Town of Zebulon. It was stated 78% of employees hired since 2019 were from outside Wake County.

Increasing the starting salary would make the Town more attractive to potential applicants, reduce likelihood of personnel leaving for more money, reduce time spent in recruiting and new employee training, and allowed staff to become more experienced, seasoned, and prepared for staff succession.

Mayor Matheny asked if Wake County was helping fund the Fire Department positions. Wake County was contractually required to increase their budget when the Town increased salaries.

It was explained the Town did advertise positions all over the state and exit interviews were done for all employees.

PUBLIC INPUT

No one was present to speak, and no comments were submitted.

QUESTIONS, COMMENTS, REQUESTS

Commissioner York asked about the cemetery plot fee. Bobby Fitts stated the cemetery fees have been the same for the last 20+ plus years. There were approximately 10 to 20 plots left. Most of the remaining plots were unusable because of large tree roots and rocks. There was discussion about the cost of the cemetery plots. Staff would look into cemetery fees in surrounding towns.

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MANAGERS COMMENTS

Joe Moore stated the Budget Ordinance would be in the June 7, 2021 agenda packet.

Commissioner Loucks made a motion, second by Commissioner Baxter to adjourn. There was no discussion and the motion passed unanimously.

Adopted this the 13th day of September 2021.

Robert S. Matheny—Mayor

SEAL

Lisa M. Markland, CMC—Town Clerk

Zebulon Board of Commissioners
Minutes
August 2, 2021

Present: Robert S. Matheny, Beverly Clark, Annie Moore, Larry Loucks, Shannon Baxter, Joe Moore-Town Manager, Lisa Markland-Town Clerk, Chris Ray-Public Works, Jacqui Boykin-Police, Chris Perry-Fire, Sheila Long-Parks & Recreation, Bobby Fitts-Finance, Michael Clark-Planning, Meade Bradshaw-Planning, Morgan Rowden-Planning, Eric Vernon-Town Attorney

Absent: Glenn York

Mayor Matheny called the meeting to order at 7:00pm.

PLEDGE OF ALLEGIANCE

The pledge of allegiance was led by Commissioner Baxter.

APPROVAL OF AGENDA

Mayor Matheny stated there was a minor change to Ordinance 2022-04 and a copy was passed out to the Board.

Mayor Matheny asked to amend the agenda to add a meeting schedule change under Old Business and under New Business to put the Streetscape Match Request before the Streetscape Match Grant Revision.

Commissioner Baxter made a motion, second by Commissioner Clark to approve the agenda as amended. There was no discussion and the motion passed unanimously.

Mayor Matheny stated Mayor Pro Tem York was attending the advanced leadership class at the UNC School of Government all week.

SPECIAL RECOGNITION

A. Bennie Holder's Retirement

Mayor Matheny read the Proclamation for Bennie Holder's retirement.

Commissioner Clark made a motion, second by Commissioner Loucks to adopt the Proclamation for Bennie Holder's retirement. There was no discussion and the motion passed unanimously.

B. Retirement of K-9 Pas

Mayor Matheny read the Proclamation for the Retirement of K-9 Pas.

Commissioner Baxter made a motion, second by Commissioner Clark to adopt the Proclamation for the Retirement of K-9 Pas. There was no discussion and the motion passed unanimously.

PUBLIC COMMENT PERIOD

No comments were submitted.

CONSENT

A. Minutes

Commissioner Clark made a motion, second by Commissioner Moore to approve the minutes of the May 6, 2021 special called meeting. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve the minutes of the May 10, 2021 Joint Public Hearing. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve the minutes of the June 7, 2021 regular meeting. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve the minutes of the June 23, 2021 special called meeting. There was no discussion and the motion passed unanimously.

B. Finance

Commissioner Clark made a motion, second by Commissioner Moore to approve the Wake County tax report – May 2021. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve the financial report as of July 19, 2021. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-01. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-02. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-03. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-04. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-05. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-06. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-07. There was no discussion and the motion passed unanimously.

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Commissioner Clark made a motion, second by Commissioner Moore to approve transfer of ownership of K-9 Pas. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Resolution 2022-01. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Ordinance 2022-08. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Moore to approve Resolution 2022-02. There was no discussion and the motion passed unanimously.

OLD BUSINESS

A. Planning

1. Ordinance 2022-09 – Comprehensive Transportation Plan

Michael Clark spoke about the Transportation Plan and some of the changes that came from the Public Hearing and Planning Board.

The old draft and the new draft of the proposed bypass were shown. It was stated the original bypass ran between Braemar and Laurel Leaf subdivisions. Due to oppositions of the location, the line was pushed upward to connect to Water Plant Road then connect to Wendell. Staff would work with developers to ensure the roads were installed in the best way possible.

The Planning Board voted unanimously to recommend approval at their June 14, 2021 meeting.

Commissioner Baxter made a motion, second by Commissioner Clark to approve Ordinance 2022-09 – Comprehensive Transportation Plan. There was no discussion and the motion passed unanimously.

2. CAMPO Northeast Area Study

Michael Clark explained the study was necessary for funding purposes and would make Zebulon more competitive to receive grants.

Some of the near and mid-term projects included NC 96 Arendell Ave. access management, Beaverdam Creek Greenway, NC 97 (Gannon Rd.) and NC 96 (Arendell Avenue) and Proctor St. Center turn lane.

It was stated the CAMPO plan was completed before the Zebulon Bypass was removed from the plan, but the motion could exclude any amendments that were approved.

Staff recommended approval of the CAMPO Northeast Area Study without the Zebulon Bypass.

Commissioner Clark made a motion, second by Commissioner Baxter to approve the draft of the CAMPO Northeast Area Study, except for project A588a (Zebulon Bypass).

Commission Baxter stated the plan was critical for Zebulon and thanked Planning staff for their hard work.

There was no further discussion and the motion passed unanimously.

3. Ordinance 2022-10 – Planned Development – Pony Road

Meade Bradshaw explained the applicant, TMTLA Associates, requested to rezone three parcels to a Planned Development (PD) district. The parcels located at 0 Harmonica Drive, 0 Mack Todd Road, and 705 Pony Road were approximately 166 acres and were currently zoned as Heavy Commercial (HC), Residential-2 (R2) and Residential-4 (R4) districts. The concept plan, aerial map, zoning map, land use map and site pictures were shown.

It was stated there would be four entrances total with two in the Pineview subdivision and two from Pony Road. Some of the proposed amenities included a greenway trail, amenity center, pool, open space, dog park and a tot lot.

Staff previously had the following issues:

- Commitment to the Residential Design Guidelines
- Traffic calming
- Timing of construction of the pool and amenity center
- Street sections meeting Emergency Medical Services roadway widths
- Language in the homeowner's covenants that no more than 10% of the dwellings would be rental units

Staff worked with the applicant and were now in agreement with the items.

The standards for a conditional rezoning were as follows:

1. Whether the proposed conditional rezoning advances the public health, safety, or welfare;
2. Whether the extent to which the proposed conditional rezoning is appropriate for its proposed location, and is consistent with the purposes, goals, objectives, and policies of the Town's adopted policy guidance;
3. Whether an approval of the conditional rezoning is reasonable and in the public interest;
4. Whether the extent to which the concept plan associated with the conditional rezoning is consistent with this Ordinance; and
5. Any other factors as the Board of Commissioners may determine to be relevant.

The Planning Board voted for approval with a 5 to 1 vote at the May 17, 2021 meeting. Staff also recommended approval of the development.

It was stated all on street parking would be in marked spaces and the applicant was meeting the Town's design guidelines as set in the UDO.

There was discussion about the roundabout installation on HWY 96 and Pony Road. Commissioner Loucks asked to make the roundabout installation, once 25% building permits were completed, as a condition of approval.

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There was discussion about rental restrictions. Staff explained the Homeowner's Association would take over once the plat was recorded and the 10% rental restriction would be included as a condition in the Homeowner's Agreement and enforced by the Homeowner's Association. Meade Bradshaw stated no more than 10% of the units could be rentals units would be added as condition 17.

Pam Porter with TMTLA Associates agreed to the 10% rental restriction where no more than 10% of the units could be rentals units.

Bryant Spencer was in agreement to install the roundabout once 25% of the building permits were received.

In accordance with Section 2.2.6 of the Town of Zebulon Unified Development Ordinance and NCGS 160D-703, the following conditions were agreed upon for CZ 2020-06.

1. Uses shall be limited to single family detached, single family attached, and permitted accessory uses.
2. Minimum driveway stem length shall be 20'.
3. The portion of the new road (called out as Street A1 on the PD plans) to the Southland Road shall be a modified local road with a 60' right-of-way and 35' B-B.
4. Deviation from prescribed street sections to allow for a 60' Public ROW and 37' B-B for entrance in single family attached portion of the development to allow for the construction of a landscape median.
5. Pony Road – dedicate 20' of right of way. Build ½ of 44' paved section plus Proposed improvements in TIA document. Roadway section will include ditch and 5' wide sidewalk for the full length of property.
6. To minimize stream impacts at roadway crossings, roadway section for local streets shall be 26' back-to-back of curb. At Southland Drive, where a portion of roadway will meet a modified local street, the roadway section shall be 31' back-to-back of curb at the stream crossing.
7. This project shall utilize mass grading.
8. Single family detached lots shall have a minimum lot size of 5,000 sf. and a minimum depth of 100'.
9. Single family attached lots shall have a minimum lot size of 1,700 sf. and a minimum depth of 75'.
10. Single family lots will have driveways off the local streets, with building setbacks of 20' from the right of way.
11. Landscape buffer – Natural riparian buffer would be provided along the boundary of single family detached units in lieu of a planted landscape buffer.
12. Minimum centerline radius for the proposed streets shall be 100' as this is the minimum allowed per NCDOT.
13. Three or four evergreen trees (depending on plant) shall be installed at 6' in height where there is an alley dead end in the single family attached portion of the development. Trees shall be any of the following varieties and may more than one type may be utilized based on availability of plant material. Groupings of trees shall be the same species:
Plant Three:

- Emily Bruner Holly (Ilex x 'Emily Bruner')
- Green Giant Arborvitae (Thuja standishii x plicata 'Green Giant')
- Green Sport Western Red Cedar (Thuja plicata 'Green Sport')
- Oakleaf Red Holly (Ilex x 'Conaf')

Plant Four:

- Degroot's Spire Arborvitae (Thuja occidentalis 'Degroot's Spire')
 - Compact Carolina Cherry Laurel (Prunus caroliniana 'Compacta')
14. Raised slab foundation shall be permitted.
 15. Vinyl siding shall not be permitted but vinyl accents, such as windows, decorative trim, and other elements shall be permitted.
 16. Where street trees cannot be located in the prescribed planting strip due to on-street guest parking, street trees shall be located in a 10' landscape easement on the adjacent lot.
 17. No more than 10% of the units could be rental units.
 18. Install the roundabout once 25% of the building permits were received.

(Conditions amended to add 17 and 18)

*All other applicable Unified Development Ordinance requirements shall remain as written and the requirements by other agencies will be reviewed and regulated at the time of Technical Review Committee review process.

Commissioner Loucks made a motion, second by Commissioner Clark to approve Ordinance 2022-10 – Planned Development – Pony Road with the added conditions of no more than 10% of the units could be rental units and install the roundabout once 25% of the building permits were received. There was no discussion and the motion passed unanimously.

B. Administration

1. Meeting Date Change

Commissioner Baxter asked to change the date of the August 19, 2021 work session due to an Artist Meet and Greet being on that same day.

Commissioner Baxter made a motion, second by Commissioner Clark to move the Work Session from August 19, 2021 at 6:00pm to August 25, 2021 at 6:00pm. There was no discussion and the motion passed unanimously.

NEW BUSINESS

A. Planning

1. Streetscape Match Request – Pots of Love

Morgan Rowden explained the Zebulon Women's Club requested a match of \$500 under the Town's Streetscape Match Policy. The funds would go towards the Pots of Love Program. The program started in 2018 with 22 flowerpots and had grown to 48 flowerpots. Morgan Rowden explained what the matching grant. Staff recommended acceptance of the request.

Commissioner Baxter made a motion, second by Commissioner Loucks to approve the Streetscape Match Request – Pots of Love. There was no discussion and the motion passed unanimously.

2. Streetscape Match Grant Revision

Michael Clark explained the background of the grant policy and the differences of the current and proposed plan. The new plan would expand the policy to include downtown businesses and would be reviewed by the economic development committee. Staff recommended approval as drafted.

The Board of Commissioner would be notified when a new Streetscape Match Grant was approved.

Commissioner Clark made a motion, second by Commissioner Moore to approve the Streetscape Match Grant Revision.

There was discussion about adding a Board member to the Economic Development Committee. Commissioner Loucks volunteered to serve on the Committee.

Joe Moore advised against mixing governing and administrative functions by keeping both Boards separate.

Commissioner Baxter made a motion, second by Commissioner Loucks to appoint Larry Loucks to the Economic Development Committee. There was no discussion and the motion passed with a vote 3 to 1 with Commissioners Baxter, Loucks and Moore voting in favor and Commissioner Clark voting in opposition.

There was no further discussion about the Streetscape Match Grant Revision and the motion passed unanimously.

B. Administration

1. Board Appointments

Lisa Markland stated there was one in-Town vacancy and one ETJ vacancy on the Planning Board. The positions were three-year terms expiring on June 30, 2024. Applications were submitted by Gene Blount, Genia LaRese Newkirk and Domenick Schilling all in-Town and by Laura Johnson and David Hughes for the ETJ vacancy.

The Board of Adjustment had two in-Town vacancies and one ETJ regular vacancy and one ETJ alternate vacancy. All positions were a three-year term and expired on June 30, 2024. Jay Estes and Genia LaRese Newkirk. Jay Estes was not present at the meeting.

Gene Blount, Genia LaRese Newkirk, Domenick Schilling, Laura Johnson and David Hughes were present and spoke to the Board about why they wanted to serve on the Planning Board.

Commissioner Baxter made a motion, second by Commissioner Clark to move Board Appointments to the September 13, 2021 meeting. There was no discussion and the motion passed unanimously.

C. Public Works

1. Ordinance 2022-11 – Environmental Phase II of Eastern Wake EMS Property

Chris Ray asked the Board to consider budgeting a Phase II Environmental Site Assessment of the Eastern Wake EMS Property being considered for acquisition. The property was occupied by a dry cleaner from 1967 to 1975 and used hazardous materials. Chris Ray spoke about the findings of the Phase I Environmental Site Assessment. The decision for the Board was whether to proceed with the Phase II Environmental Site Assessment of the EMS station property prior to a decision on the purchase of the property.

Staff recommended approval of Ordinance 2022-11.

Commissioner Baxter inquired about the size of drycleaner. Staff estimated the dry cleaner was between five to nine employees which would be considered a medium sized dry cleaner.

There was discussion about an Historical Recognized Environmental Condition (HREC) which referred to a past release that had been remediated to below "residential" standards and given regulatory closure with no use restrictions. Eric Vernon spoke about the State's program for remediation.

Mayor Matheny inquired about the liquid in the storage tank being classified as non-hazardous. Chris Ray stated the assessment did not identify the liquid but conformed it was non-hazardous.

There was discussion about the depth of the samplings and the boring samples taken around the tanks.

Commissioner Baxter made a motion, second by Commissioner Clark to approve Ordinance 2022-11 – Environmental Phase II of Eastern Wake EMS Property. There was no discussion and the motion passed unanimously.

D. Parks and Recreation

1. Zebulon Municipal Complex Facility Use Application – ERA Parrish Realty
Sheila Long stated ERA Parrish Realty Legacy Group submitted an application to use the facilities at the Zebulon Municipal Complex on September 25, 2021. The event would be free to the public and would include music, food, and family-friendly entertainment. There would also be an auction with proceeds going to the Zebulon Boys and Girls Club. The Events Committee reviewed the application and offered comments. Sheila Long spoke about the fees and responsibilities of ERA Parrish Realty.

A rain date had not been requested. The Town offered no guarantees with the possibility of future COVID restrictions.

Commissioner Clark made a motion, second by Commissioner Baxter to approve the Zebulon Municipal Complex Facility Use Application – ERA Parrish Realty with an added rain date, if necessary. There was no discussion and the motion passed unanimously.

BOARD COMMENTS

Commissioner Loucks asked citizens to get vaccinated and wear a mask.

Commissioner Moore reiterated Commissioner Loucks' comments about getting vaccinated.

Commissioner Baxter commended the downtown business owners who were making sure their facades were in compliance and encouraged others to do so.

MANAGER'S REPORT

Joe Moore stated he would check with the branding consultant to make sure they would be able to attend the August 25, 2021 work session. The meeting would give an overview of the branding project, the Parks and Rec Master Plan and upcoming text amendments. It was explained COVID was still present, and staff would present some options for the Tree lighting.

Michael Clark introduced the new Code Enforcement Officer, Brad Pleasant.

CLOSED SESSION

Mayor Matheny stated they needed a motion to go into closed session as permitted by N.C. General Statute § 143-318.11(a)(5): "... to instruct the [Town] staff or negotiating agents concerning the position to be taken by or on behalf of the [Town] in negotiating the price and other material terms of a contract or proposed contract for the acquisition of real property by purchase, option, exchange, or lease; ..."

Commissioner Loucks made a motion, second by Commissioner Baxter to go into closed session. There was no discussion and the motion passed unanimously.

NOTE: In closed session, Commissioner Loucks made a motion, second by Commissioner Baxter to come out of closed session. There was no discussion and the motion passed unanimously.

Commissioner Clark made a motion, second by Commissioner Baxter to adjourn. There was no discussion and the motion passed unanimously.

Adopted this the 13th day of September 2021.

Robert S. Matheny—Mayor

SEAL

Lisa M. Markland, CMC—Town Clerk

Zebulon Board of Commissioners
Special Called Meeting
Minutes
August 18, 2021

Present: Robert S. Matheny, Beverly Clark, Annie Moore, Shannon Baxter, Glenn York, Larry Loucks, Joe Moore-Town Manager, Lisa Markland-Town Clerk, Michael Clark-Planning, Sheila Long-Parks and Recreation, Jacqui Boykin-Police, Morgan Rowden-Planning

Teresa Piner - DAC Coordinator, Sherry Adams - NC Main Street, Chuck Halsall - NC Main Street

Teresa Piner, the Downtown Associate Community Coordinator, introduced Mayor Robert Matheny. Mayor Matheny welcomed all who were in attendance and introduced the NC Main Street representatives, Sherry Adams and Chuck Halsall, to give the instructions and guidance for the evening.

Brandon McCraney, owner of Olde Raleigh Distillery, thanked everyone for coming out and stated he was honored to host the event in the new event space created when the distillery opened.

Sherry Adams and Chuck Halsall gave a brief overview of who the NC Main Street Program was and what their mission was as well as spoke about the DAC Program and its goals.

There were various activities for each table to discuss and then share their thoughts with the rest of the group. The activities discussed were Economic Assets, S.W.O.T analysis and Development of a Downtown Mission Statement.

There were great ideas shared by all the tables.

Sherry Adams explained that they would take all of the information from the evening, and staff and the NC Main Street group would meet with the Chamber to discuss what the main points that groups had in common to determine where to go from there.

The meeting wrapped up at 8:00pm

Adopted this the 13th day of September 2021.

Robert S. Matheny-Mayor

SEAL

Lisa M. Markland, CMC-Town Clerk

Zebulon Board of Commissioners
Work Session
Minutes
August 25, 2021

Present: Robert S. Matheny, Beverly Clark, Annie Moore, Glenn York, Shannon Baxter, Larry Loucks, Joe Moore-Town Manager, Lisa Markland-Town Clerk, Chris Perry-Fire, Michael Clark-Planning, Sheila Long-Parks and Recreation, Chris Ray-Public Works, Bobby Fitts-Finance, Jacqui Boykin-Police, Amy Hayden-Parks and Recreation, Eric Vernon-Attorney

Mayor Matheny called the meeting to order at 6:00pm.

APPROVAL OF AGENDA

Commissioner Loucks made a motion, second by Commissioner Clark to approve the agenda. There was no discussion and the motion passed unanimously.

Joe Moore gave an overview of the topics to be discussed at the meeting.

BRANDING OVERVIEW

Aaron Arnett from Arnett Muldrow & Associates spoke about his company and the other municipalities and companies they have worked with. The objectives of the branding process were stated, and numerous branding examples were shown. Mr. Arnett also gave an overview of how communities develop, extend, and apply a brand identity.

It was stated the branding process would take approximately four to six months.

PARKS AND RECREATION MASTER PLAN

Sheila Long stated the Parks and Recreation Advisory Board recommended approval of the Master Plan at their August 16, 2021 meeting.

Drew Crumpton, Landscape Architect and Park Planner at AECOM spoke about the Parks and Recreation Master Plan. The project process included system inventory and analysis, community needs assessment, vision development and recommendations and implementation strategies.

The vision statement and vision goals were discussed. The vision map was shown. The objectives of the plan included:

- neighborhood parks and open spaces
- community parks and athletic facilities
- natural areas and sustainability
- programs, community health and special events
- connectivity and access.

The total park system was estimated to cost \$59,362,992.

The priority projects included:

- Focus on improving existing parks
- East/West greenway connection – Green Spine
- Cohesive park branding/signage
- Downtown park and alleyways
- Greenway access in neighborhoods
- Community park expansion-athletics consolidation
- Activate parks with programs
- Little River corridor

Commissioner Baxter inquired about the prioritization of the projects. The priority for the projects came from the Parks and Recreation Advisory Board, park staff and was formed by community input.

Mr. Crumpton spoke about the phasing plan, future funding considerations, programming and policy recommendations.

Sheila Long shared the next steps for the Parks and Rec Master Plan. The Plan would go before the Board at their September 13 meeting for adoption. There would be a Public Hearing for the impact fee study on September 20 and the budget and fee schedule change would go before the Board at their October 4 meeting.

DEVELOPMENT ORDINANCE TEXT AMENDMENTS

Michael Clark spoke about proposed amendments to the following:

- Downtown building design
- New use classifications (e.g., pawn shops, vape shops, art galleries, artisan studios)
- Residential guest parking requirements
- Design of auto-oriented developments (e.g., drive-thrus, automotive service).

The corrections to chapter 4 and 5 were discussed. The changes would allow clarification and design guidelines.

Mayor Matheny asked about the 300' separation of uses restriction. This limitation allowed the separation of uses in the downtown area to avoid a concentration of uses downtown. It was explained how the concentration of uses next to each other could be a negative economic impact.

The text amendments would go before the Board at the September 20 Joint Public Hearing with a possible adoption at the October 4 meeting.

There was discussion about the possible legalization of CBD and medical marijuana and what other states have done.

DOWNTOWN TREE LIGHTING

Board of Commissioners
Minutes
August 25, 2021

Sheila Long gave options on how, or if, to host the downtown tree lighting event with current COVID restrictions.

The options included:

- The full event with a band, amusements, vendors, food trucks, beer garden, local performances
- Scaled back ceremony on E. Sycamore only, local performers and no amusements or vendors
- Virtual – pre-filed lighting with partners and Santa
- Do nothing

There were concerns expressed about having a large crowd downtown. There was discussion about the possibility of having tickets for the event and suggestions to have the event virtual to maintain safety and public health.

There was a consensus among the Board to not have the full event. Staff would present options and more detail to the Board at their September meeting.

Joe Moore spoke about the upcoming meeting schedule. Town Hall would be closed September 6 for the Labor Day holiday. The next regular meeting was scheduled for September 13 at 7:00pm. The Joint Public Hearing was scheduled for September 20 at 7:00pm and the work session was scheduled for September 22 at 6:00pm.

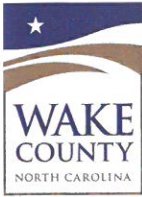
Commissioner Loucks made a motion, second by Commissioner Clark to adjourn. There was no discussion and the motion passed unanimously.

Adopted this the 13th day of September 2021.

Robert S. Matheny—Mayor

SEAL

Lisa M. Markland, CMC—Town Clerk



Board of Commissioners
P.O. Box 550 • Raleigh, NC 27602

TEL 919 856 6180
FAX 919 856 5699

MATT CALABRIA, CHAIR
VICKIE ADAMSON, VICE-CHAIR
MARIA CERVANIA
SUSAN EVANS
SIG HUTCHINSON
SHINICA THOMAS
JAMES WEST

August 17, 2021

Ms. Lisa Markland
Town Clerk
Town of Zebulon
1003 North Arendell Avenue
Zebulon, North Carolina 27597

Dear Ms. Markland:

The Wake County Board of Commissioners, in regular session on August 16, 2021, approved and accepted the enclosed tax report for the Town of Zebulon.

The attached adopted actions are submitted for your review; no local board action is required.

Sincerely,

A handwritten signature in black ink that reads "Yvonne Gilyard". The signature is fluid and cursive, with the first name being the most prominent.

Yvonne Gilyard
Deputy Clerk to the Board
Wake County Board of Commissioners

Enclosure(s)



Wake County Tax Administration

Rebate Details

06/01/2021 - 06/30/2021

ZEBULON

DATE
07/04/2021

TIME
9:43:07 PM

PAGE
1

REBATE NUMBER	PROPERTY	CITY TAG	LATE LIST	BILLED INTEREST	TOTAL REBATED	PROCESS DATE	ACCOUNT NUMBER	TAX YEAR	YEAR FOR	BILLING TYPE	OWNER
INDIVIDUAL PROPERTY ACCOUNTS											
789234	44.88	30.00	0.00	0.00	74.88	06/30/2021	0006937533	2021	2020	000000	KELLY, CLARA DEE
SUBTOTALS FOR INDIVIDUAL PROPERTY ACCOUNTS 44.88 30.00 0.00 0.00 74.88 1 Properties Rebated											
WILDLIFE BOAT ACCOUNTS											
788341	16.12	0.00	1.61	0.00	17.73	06/21/2021	0004195631	2020	2020	000000	MOORE, RALPH DENNIE
788340	19.06	0.00	1.91	0.00	20.97	06/21/2021	0004195631	2019	2019	000000	MOORE, RALPH DENNIE
SUBTOTALS FOR WILDLIFE BOAT ACCOUNTS 35.18 0.00 3.52 0.00 38.70 2 Properties Rebated											
TOTAL REBATED FOR ZEBULON 80.06 30.00 3.52 0.00 113.58 3 Properties Rebated for City											



Wake County Tax Administration
Rebate Details
06/01/2021 - 06/30/2021
ZEBULON

DATE
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TIME
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PAGE
1

REBATE NUMBER	PROPERTY	CITY TAG	LATE LIST	BILLED INTEREST	TOTAL REBATED	PROCESS DATE	ACCOUNT NUMBER	TAX YEAR	BILLING YEAR	BILLING TYPE	OWNER
Grand Total:	7,506.07	380.00	72.82	0.00	7,958.89			40	Properties Rebated for All Cities		

Topic: FY 2022 Monthly Financial Statement Update

Speaker: Bobby Fitts, Finance Director (if pulled from Consent)

Prepared by: Bobby Fitts, Finance Director

Approved by:  Joseph M. Moore II, PE, Town Manager

Executive Summary:

This monthly report summarizes the status of the Town's revenues and expenditures.

Background:

The attached financials are a summary of revenues and expenditures to date. These are provided to keep the Board informed, on a monthly basis, of how revenues and expenditures are trending throughout the year. The enclosed statements are through August 27, 2021.

Information:

Expenditures

With Fiscal Year 2021 almost closed with only one more month of sales tax and the final quarter of utilities sales tax remaining, the revenues and expenditures appear to be the following approximately:

- o Revenues: \$13,145,000 (up 9.3% from FY 2020)
- o Expenditures: \$11,022,000 (up 8.2% from FY 2020)

With approximately 2 months into Fiscal Year 2022 expenditures complete, the Town has spent approximately 11% (~ \$1,809,000) of its General Fund budget of \$16,623,562. It is important to note some larger early year expenditures – debt service payments have been made on the fire pumper truck (approximately \$83,000) and some vehicle purchases have been made across departments. Also, all the annual property & liability as well as the workers compensation premiums have been paid. This is why these departments have higher amounts of percent of budget spent at this early point in the year. Some discussion on some early revenue activity such as zoning fees and property taxes are below. The revenue and expenditure statements are included for your review.

Revenues

- Property Tax (largest revenue stream)
 - + Final FY 2022 collections: \$316,560 collected to date (4% of budgeted revenues (\$7,628,000)).
 - + 13.3% more than collected last fiscal year (\$279,441).
 - + Observations:
 - # One month of vehicle taxes have been received for FY 2022.
- Sales Tax (second largest revenue stream)
 - + Monthly comparisons (May's sales (reports lag 3-months)):
 - # \$26,926 (28.7%) more collected than last May for all sales tax.
 - # \$13,364 (32.2%) more collected than last May for "local" sales tax.

- + Year-to-Date comparisons (sales through the first eleven months of the fiscal year)
 - # \$165,731 (+15.9%) more collected than at this time last for all sales tax
 - # Collections are 114% of budgeted revenues (ahead of schedule through conservative budgeting and robust sales).
- Utilities Sales Tax (5% of revenue stream): fourth quarterly disbursement to be received September 15
 - + The first distribution for FY 2022 will not be received until December 15
- Permits & Zoning
 - + \$17,763 collected total (8% of budgeted revenues (\$220,000))
 - + 10.8% more than what was collected this time last fiscal year (\$16,033).
 - + An indication of development activity and corresponding support services.
- Transportation Impact Fees
 - + \$21,392 collected total (10.7% of budgeted revenues (\$200,000)).
 - + 6% less than what was collected last fiscal year (\$22,815).
 - + Revenue placed in reserve for transportation projects to be spent within 10 years

Large revenues such as sales tax and utilities sales tax for FY 2022 will not be received until starting in October. As usual, the majority of property taxes for FY 2022 will be received later in the year as well (November – December). It is too early in the year to discuss trends in revenues or expenditures. The revenue and expenditure statements are still included for your review, however.

Policy Analysis: N/A

Financial Analysis: Budgeted revenue in FY 2022 was \$16,623,562 while year to date revenue collected was \$612,803 (3.7% of budgeted). As shown in the chart on the Revenue Statement, 58% of year-to-date revenues come from property taxes as the total for the year has been collected.

Staff Recommendation:

No staff recommendation or Board action is necessary. These are informational only.

Attachments:

1. General Fund Fiscal Year **2022** Expenditure Statement and Revenue Statement (as of August 27, 2021)
2. Sales Tax – FY 2021

ZEBULON

NORTH CAROLINA

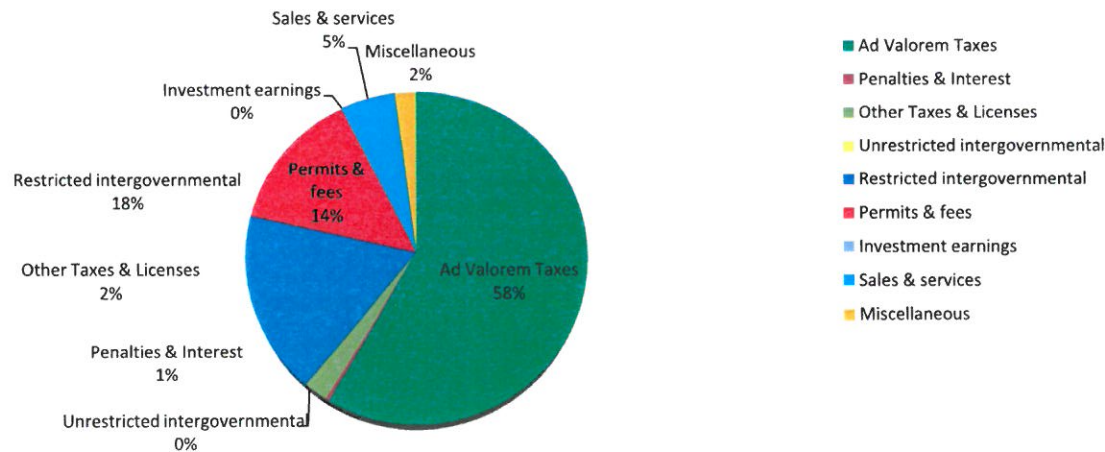
TOWN OF ZEBULON

Revenue Statement: 2021 - 2022
for Accounting Period 6/30/2022
GENERAL FUND

As of 8/27/2021

<u>Revenue Categories</u>	<u>Estimated Revenue</u>	<u>Revenue YTD</u>	<u>% Collected</u>	<u>% of Total Revenue YTD</u>
Ad Valorem Taxes	\$7,672,000	\$357,547	4.7%	58.3%
Penalties & Interest	\$13,500	\$2,387	17.7%	0.4%
Other Taxes & Licenses	\$145,400	\$13,805	9.5%	2.3%
Unrestricted intergovernmental	\$1,927,500	\$0	0.0%	0.0%
Restricted intergovernmental	\$926,500	\$107,693	11.6%	17.6%
Permits & fees	\$551,500	\$85,940	15.6%	14.0%
Investment earnings	\$3,500	\$122	3.5%	0.0%
Sales & services	\$931,400	\$32,828	3.5%	5.4%
Miscellaneous	\$67,840	\$12,483	18.4%	2.0%
Other Financing Sources (Lease Purchase)	\$315,000	\$0	0.0%	0.0%
Fund Balance Appropriated	\$4,069,422	\$0	0.0%	0.0%
Total Revenues	\$16,623,562	\$612,803	3.7%	100%

Town of Zebulon General Fund % of Total Revenue To Date - FY 2022



ZEBULON

NORTH CAROLINA

TOWN OF ZEBULON
Expenditure Statement:2021 - 2022
for Accounting Period 6/30/2022
GENERAL FUND

As of 8/27/2021

<u>Dept #</u>	<u>Department</u>	<u>Approp Amount</u>	<u>Expenditure YTD</u>	<u>% Exp.</u>
410	GOVERNING BODY	\$435,015	\$46,837	10.8%
420	FINANCE	\$407,016	\$60,165	14.8%
430	ADMINISTRATION	\$1,021,700	\$140,251	13.7%
490	PLANNING AND ZONING	\$652,366	\$106,261	16.3%
500	PUBLIC WORKS-PROPERTY & PROJECT MGMT	\$2,488,915	\$119,876	4.8%
510	POLICE	\$2,746,880	\$562,743	20.5%
520	PUBLIC WORKS-OPERATIONS	\$3,333,400	\$261,772	7.9%
530	FIRE	\$3,038,614	\$372,456	12.3%
570	POWELL BILL	\$351,500	\$1,653	0.5%
620	PARKS & RECREATION	\$1,783,011	\$137,194	7.7%
690	COMMUNITY & ECONOMIC DEVELOPMENT	\$365,145	\$0	0.0%
	Total Expenditures	\$16,623,562	\$1,809,207	10.9%

Sales Tax

FY 2021

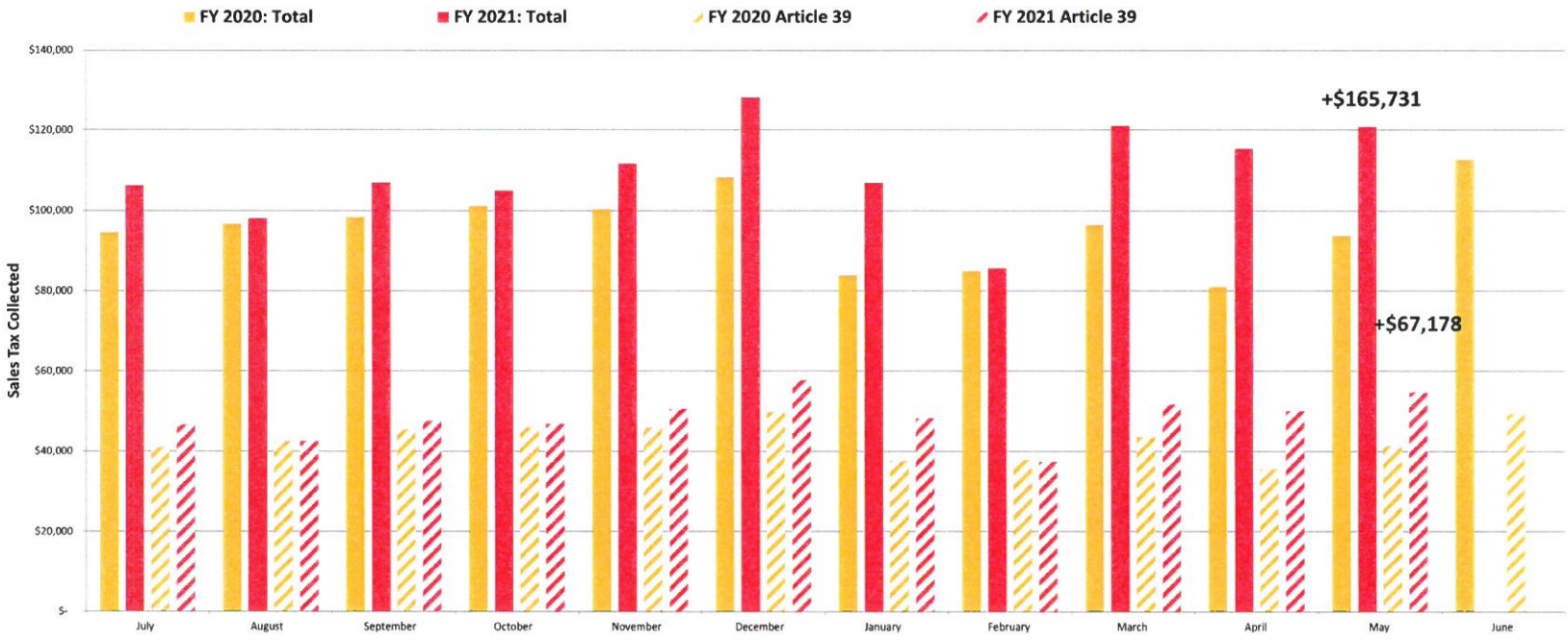
Month	Article 39 (1) *	Article 40 (1/2)	Article 42 (1/2)	Article 44 (1/2)	City Hold Harmless	FY 21 Totals	Prior Year (FY 2020)	% Inc (Dec) from Prior Yr
July	\$ 46,727	\$ 19,891	\$ 23,331	\$ (7)	\$ 16,351	\$ 106,293	\$ 94,711	12.2%
August	42,713	18,626	21,327	11	15,457	98,134	96,820	1.4%
September	47,770	19,733	23,858	(2)	15,658	107,017	98,482	8.7%
October	46,956	19,326	23,433	(13)	15,354	105,056	101,205	3.8%
November	50,717	20,199	25,285	(2)	15,574	111,773	100,498	11.2%
December	58,329	23,016	29,146	10	17,704	128,204	108,478	18.2%
January	48,410	19,425	24,185	1	15,012	107,034	84,115	27.2%
February	37,570	16,223	18,734	1	13,282	85,810	85,027	0.9%
March	51,917	23,270	25,950	(2)	20,007	121,143	96,647	25.3%
April	50,198	21,765	25,058	(3)	18,418	115,436	81,112	42.3%
May	54,888	21,736	27,402	0	16,841	120,866	93,940	28.7%
June	-	-	-	-	-	-	112,742	-100.0%
Total	\$ 536,195	\$ 223,209	\$ 267,709	\$ (6)	\$ 179,659	\$ 1,206,766	\$ 1,041,036	15.9%

FY 2020

Month	Article 39 (1) *	Article 40 (1/2)	Article 42 (1/2)	Article 44 (1/2)	City Hold Harmless	FY 20 Totals	Prior Year (FY 2019)	% Inc (Dec) from Prior Yr
July	\$ 41,205	\$ 17,900	\$ 20,548	\$ 43	\$ 15,016	\$ 94,711	\$ 82,490	14.8%
August	42,670	18,069	21,290	1	14,791	96,820	90,393	7.1%
September	45,534	17,330	22,718	1	12,899	98,482	89,061	10.6%
October	46,223	17,994	23,069	(1)	13,920	101,205	89,671	12.9%
November	46,102	17,842	22,999	9	13,546	100,498	97,904	2.6%
December	50,451	18,922	25,168	2	13,935	108,478	104,983	3.3%
January	37,739	15,421	18,827	0	12,127	84,115	76,871	9.4%
February	38,082	15,647	18,979	0	12,318	85,027	75,834	12.1%
March	43,777	17,750	21,887	(1)	13,235	96,647	104,736	-7.7%
April	35,710	15,381	17,829	(0)	12,193	81,112	97,795	-17.1%
May	41,524	17,658	20,749	(0)	14,009	93,940	101,771	-7.7%
June	49,544	21,107	24,751	(0)	17,341	112,742	105,892	6.5%
Total	\$ 518,561	\$ 211,021	\$ 258,812	\$ 54	\$ 165,330	\$ 1,153,778	\$ 1,117,401	3.3%


* Net proceeds of the Article 39 tax are returned to the county of origin.

Monthly Summary of Sales Tax Collected



STAFF REPORT
ORDINANCE 2022-03A
AMENDING FIRE STATION CAPITAL PROJECT FUND ORDINANCE
SEPTEMBER 13, 2021

Topic: Ordinance 2022-03A – Fire Station – Capital Project Fund

Speaker: Bobby Fitts (if pulled from Consent)
From: Bobby Fitts, Finance Director
Prepared by: Bobby Fitts, Finance Director
Approved by:  Joseph M. Moore II, PE, Town Manager

Executive Summary:

The Board of Commissioners will consider amending the ordinance which established a capital project fund for the Fire Station project at the August meeting.

Background:

At the August meeting, the Board of Commissioners approved an ordinance establishing a capital project fund for the fire station project. The ordinance, however, contained an error in the Land Acquisition amount causing the ordinance to be out of balance. In consultation with the School of Government, they recommended presenting the corrected ordinance for Board approval.

Discussion:

Ordinance 2022-03A would correct the ordinance that was approved at the August meeting and Ordinance 2022-03 would be void.

Policy Analysis:

Governmental Accounting Standards Board (GASB) statement number 54 allows capital project funds to account for and report financial resources that are restricted, committed or assigned to expenditure for capital outlays including the acquisition or construction of capital facilities and other capital assets.

Staff Recommendation:

Staff recommends approval of Ordinance 2022-03A.

Attachments:

1. Ordinance 2022-03A

ORDINANCE 2022-03A
ESTABLISHING A CAPITAL PROJECT FUND FOR
THE FIRE STATION CAPITAL PROJECT

BE IT ORDAINED by the Board of Commissioners of the Town of Zebulon, that pursuant to §159-13.2 of the North Carolina General Statutes, the following Capital Project Ordinance is hereby adopted.

Section 1. The project authorized is the Fire Station Capital Project.

Section 2. The officers of this unit are hereby directed to proceed with the capital project within the terms of the grant agreement and the budget contained herein.

Section 3. The following amounts are appropriated for the project.

Fire Station Design	\$310,700.00
Land Acquisition	\$626,200.00
Fire Station P.E.R.	<u>\$50,000.00</u>
Total	\$986,900.00

Section 4. The following revenues are anticipated to be available to complete this project.

Transfer from General Fund	<u>\$986,900.00</u>
Total	\$986,900.00

Section 5. The Finance Officer is hereby directed to maintain within the Capital Project Fund sufficient specific detailed accounting records to satisfy the requirements of the grant and state regulations.

Section 6. Funds may be advanced from the General Fund for the purpose of making payments as due.

Section 7. The Finance Officer is directed to include a detailed analysis of past and future costs and revenues on this capital project in every budget submission made to the Board.

Section 8. The Finance Officer is directed to report on a quarterly basis on the financial status of each project element in Section 3.

Section 9. Copies of this Capital Project Ordinance shall be furnished to the Town Clerk, to the Governing Body, the Budget Officer, and to the Finance Officer for direction in carrying out this project.

Adopted this 13th day of September, 2021.


Robert S. Matheny, Mayor

ATTEST

Lisa M. Markland, Town Clerk

STAFF REPORT
ORDINANCE 2022-12
ESTABLISHING A GRANT SPECIAL PROJECT FUND FOR AMERICAN RESCUE
PLAN FUNDS
SEPTEMBER 13, 2021

Topic: Ordinance 2022-12 – American Rescue Plan Funds – Grant Project Fund

Speaker: Bobby Fitts (if pulled from Consent)
From: Bobby Fitts, Finance Director
Prepared by: Bobby Fitts, Finance Director
Approved by:  Joseph M. Moore II, PE, Town Manager

Executive Summary:

The Board of Commissioners will consider adopting the ordinance which establishes a special grant project fund for the American Rescue Plan Funds that the Town is receiving.

Background:

At the August meeting, the Board of Commissioners approved accepting American Rescue Plan funds from the United States Treasury.

Discussion:

Ordinance 2022-12 would recognize the revenue and generally appropriate the funds for expenditure. Once firmer direction is established on the eligible use of the funds, Staff will present options for the Board to consider in finding specific programs and projects.

Policy Analysis:

Governmental Accounting Standards Board (GASB) statement number 54 allows capital project funds to account for and report financial resources that are restricted, committed or assigned to expenditure for capital outlays including the acquisition or construction of capital facilities and other capital assets.

Staff Recommendation:

Staff recommends approval of Ordinance 2022-12.

Attachments:

1. Ordinance 2022-12
2. Handout: "Treasury Guidance: Eligible Uses"

ORDINANCE 2022-12
ESTABLISHING A GRANT PROJECT FUND FOR THE TOWN OF ZEBULON
CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS

BE IT ORDAINED by the Board of Commissioners of the Town of Zebulon, that pursuant to Section 13.2 of Chapter 159 of the North Carolina General Statutes, the following grant project ordinance is hereby adopted.

Section 1: This ordinance is to establish a budget for a project to be funded by the Coronavirus State and Local Fiscal Recovery Funds of H.R. 1319 American Rescue Plan Act of 2021 (CSLRF). The Town of Zebulon has received the first tranche in the amount of \$942,866.39 of CSLRF funds. The total allocation is \$1,885,732.78, with the remainder to be distributed to the town within 12 months. These funds may be used for the following categories of expenditures, to the extent authorized by state law.

1. Support public health expenditures, by funding COVID-19 mitigation efforts, medical expenses, behavioral healthcare, and certain public health and safety staff;
2. Address negative economic impacts caused by the public health emergency, including economic harms to workers, households, small businesses, impacted industries, and the public sector;
3. Replace lost public sector revenue, using this funding to provide government services to the extent of the reduction in revenue experienced due to the pandemic;
4. Provide premium pay for essential workers, offering additional support to those who have borne and will bear the greatest health risks because of their service in critical infrastructure sectors; and,
5. Invest in water, sewer, and broadband infrastructure, making necessary investments to improve access to clean drinking water, support vital wastewater and stormwater infrastructure, and to expand access to broadband internet.

Section 2: The following amounts are appropriated for the project and authorized for expenditure:

CSLRF Project	\$1,885,733*
---------------	--------------

[*Once it determines how it will spend all or a portion of the ARP funds, the governing board will amend this section to authorize appropriations for specific programs, services, projects, and activities. A board also may appropriate some or all of these funds to an enterprise fund in an annual budget ordinance for a water, wastewater, or stormwater infrastructure project.]

Section 3: The following revenues are anticipated to be available to complete the project:

CSLRF Funds	\$1,885,733
-------------	-------------

Section 4: The Finance Officer is hereby directed to maintain sufficient specific detailed accounting records to satisfy the requirements of the grantor agency and the grant agreements.

Section 5: The Finance Officer is hereby directed to report the financial status of the project to the governing board on a quarterly basis.

Section 6: Copies of this grant project ordinance shall be furnished to the Budget Officer, the Finance Officer and to the Town Clerk.

Section 7: This grant project ordinance expires on December 31, 2026, or when all the CSLRF funds have been obligated and expended by the town, whichever occurs sooner.

Adopted this 13th day of September, 2021.

Robert S. Matheny - Mayor

ATTEST

Lisa M. Markland, CMC - Town Clerk

Office of Recovery Programs

Treasury Guidance: Eligible Uses



Support Public Health Response

Fund COVID-19 mitigation efforts, medical expenses, behavioral healthcare, and certain public health and safety staff



Address Negative Economic Impacts

Respond to economic harms to workers, families, small businesses, impacted industries, and the public sector



Replace Public Sector Revenue Loss

Use funds to provide government services to the extent of the reduction in revenue experienced due to the pandemic



Premium Pay for Essential Workers

Offer additional support to those who have and will bear the greatest health risks because of their service in critical infrastructure sectors



Water and Sewer Infrastructure

Make necessary investments to improve access to clean drinking water and invest in wastewater and stormwater infrastructure



Broadband Infrastructure

Make necessary investments to provide unserved or underserved locations with new or expanded broadband access



U.S. Dept. of the Treasury Quick Reference Guide

Office of Recovery Programs

Treasury Guidance: Examples

Support Public Health Response

- **Services to contain and mitigate the spread of COVID-19**, including vaccination, medical expenses, testing, contact tracing, quarantine costs, capacity enhancements, and many related activities
- **Behavioral healthcare services**, including mental health or substance misuse treatment, crisis intervention, and related services
- **Payroll and covered benefits** for public health, healthcare, human services, and public safety staff to the extent that they work on the COVID-19 response

Replace Public Sector Revenue Loss

- **Ensure continuity of vital government services** by filling budget shortfalls
- **Revenue loss is calculated** relative to the expected trend, beginning with the last full fiscal year pre-pandemic and adjusted annually for growth
- **Recipients may re-calculate revenue loss** at multiple points during the program, supporting those entities that experience revenue loss with a lag

Address Negative Economic Impacts

- **Deliver assistance to workers and families**, including support for unemployed workers, aid to households, and survivor's benefits for families of COVID-19 victims
- **Support small businesses** with loans, grants, in-kind assistance, and counseling programs
- **Speed the recovery of impacted industries**, including the tourism, travel, and hospitality sectors
- **Rebuild public sector capacity** by rehiring staff, replenishing state unemployment insurance funds, and implementing economic relief programs

Premium Pay for Essential Workers

- **Provide premium pay to essential workers**, both directly and through grants to third-party employers
- **Prioritize low- and moderate-income workers**, who face the greatest mismatch between employment-related health risks and compensation
- **Key sectors include** healthcare, grocery and food services, education, childcare, sanitation, and transit
- **Must be fully additive** to a worker's wages



Office of Recovery Programs

Treasury Guidance: Eligible Uses



Water & Sewer Infrastructure

- **Includes improvements to infrastructure**, such as building or upgrading facilities and transmission, distribution, and storage systems
- **Eligible uses aligned to Environmental Protection Agency project categories** for the Clean Water State Revolving Fund and Drinking Water State Revolving Fund



Equity-Focused Services

- **Additional flexibility for the hardest-hit communities and families** to address health disparities, invest in housing, address educational disparities, and promote healthy childhood environments
- **Broadly applicable** to Qualified Census Tracts, other disproportionately impacted areas, and when provided by Tribal governments



Broadband Infrastructure

- **Focus on households and businesses** without access to broadband and those with connections that do not provide minimally acceptable speeds
- **Fund projects that deliver reliable service** with minimum 100 Mbps download / 100 Mbps upload speeds unless impracticable
- **Complement broadband investments** made through the Capital Projects Fund



Ineligible Uses

- **Changes that reduce net tax revenue** must not be offset with American Rescue Plan funds
- **Extraordinary payments into a pension fund** are a prohibited use of this funding
- **Other restrictions apply** to eligible uses



STAFF REPORT
 RESOLUTION 2022-04
 FY 2022 LEASE PURCHASE AWARD – LEAF TRUCK & PAYLOADER
 SEPTEMBER 13, 2021

Topic: Resolution 2022-04 – Lease Purchase Award (Leaf Truck & Payloader)

Speaker: Bobby Fitts, Finance Director (if pulled from Consent)

From: Bobby Fitts, Finance Director

Prepared by: Bobby Fitts, Finance Director

Approved by:  Joseph M. Moore II, PE, Town Manager**Executive Summary:**

The Board will consider a lease purchase of a leaf truck and compact payloader.

Background:

The purchase of a leaf truck and compact payloader were approved with adoption of the FY 2022 Budget. Staff subsequently solicited proposals from lenders to finance the acquisitions through an installment-purchase agreement with a term of 5 years.

Requests for Proposals were sent to eight lending institutions on July 29, 2021. Proposals were due by 11:00 AM on Monday, August 12, 2021. Two bids were received (see the enclosed bid tabulation).

Discussion:

The discussion before the Board is whether to approve the attached resolution recommending Truist Bank as the lender on the purchase of the equipment.

Policy Analysis:

NCGS 160A-20 authorizes local governments to purchase real or personal property by installment contracts. This purchase is consistent with the expenditures approved by adopting the FY 2022 Budget Ordinance.

Financial Analysis:

The following table summarizes the rates, fees and total costs (five annual payments) received by each lending institution (both proposals are within budgeted amounts):

<u>Company:</u>	<u>Rate</u>	<u>Fees</u>	<u>Total Cost</u>
Truist Bank	1.43%	None	\$313,722.10
Signature Public Funding Corp	1.448%	\$250.00	\$314,081.88

The Residential Garbage Rate fee adopted in the FY '22 Budget Fee Schedule will generate enough revenue to cover the debt service payments on the leaf truck and payloader, and the increase in billing services charged by the City of Raleigh.

Any additional revenue, collected through the growth in customers, will be placed into reserves to fund the upcoming replacement of other medium-duty equipment and vehicles within our Fleet (e.g., backhoes, knucklebooms and street sweepers).

STAFF REPORT
RESOLUTION 2022-04
FY 2022 LEASE PURCHASE AWARD – LEAF TRUCK & PAYLOADER
SEPTEMBER 13, 2021

Staff Recommendation:

Staff recommends approval of Truist Bank for this lease purchase project through the attached resolution.

Attachments:

1. Resolution 2022-04
2. Bid Tabulation - FY 2022 Lease Purchase Funding Agreement-Leaf Truck and Payloader

RESOLUTION 2022-04

WHEREAS, The Town of Zebulon (“Borrower”) has previously determined to undertake a project for the financing of various equipment (the “Project”), and the Finance Officer has presented a proposal for the financing of such Project; and

WHEREAS, the Town has received multiple bids,

NOW, THEREFORE BE IT RESOLVED by the Board of Commissioners of the Town of Zebulon, as follows:

1. The Borrower hereby determines to finance the Project through Truist Bank (“Lender”), in accordance with the proposal dated August 12, 2021. The amount financed shall not exceed \$305,000.00, the annual interest rate (in the absence of default or change in tax status) shall not exceed 1.43%, and the financing term shall not exceed four (4) years from closing.
2. All financing contracts and all related documents for the closing of the financing (the “Financing Documents”) shall be consistent with the foregoing terms. All officers and employees of the Borrower are hereby authorized and directed to execute and deliver and Financing Documents, and to take all such further action as they may consider necessary and desirable, to carry out the financing of the Project as contemplated by the proposal and this resolution.
3. The Finance Officer is hereby authorized and directed to hold executed copies of the Financing Documents until the conditions for the delivery of the Financing Documents have been completed to such officer’s satisfaction. The Finance Officer is authorized to approve changes to any Financing Documents previously signed by Borrower officers or employees, provided that such changes shall not substantially alter the intent of such documents or certificates from the intent expressed in the forms executed by such officers. The Financing Documents shall be in such final forms as the Finance Officer shall approve, with the Finance Officer’s release of any Financing Document for delivery constituting conclusive evidence of such officer’s final approval of the Document’s final form.
4. The Borrower shall not take or omit to take any action the taking or omission of which shall cause its interest payments on this financing to be includable in the gross income for federal income tax purposes of the registered owners of the interest payment obligations. The Borrower hereby designates its obligations to make principal and interest payments under the Financing Documents as “qualified tax-exempt obligations” for the purpose of the Internal Revenue Code Section 265(b)(3).
5. The Borrower intends that the adoption of this resolution will be a declaration of the Borrower’s official intent to reimburse expenditures for the project that is to be financed from the proceeds of the Regions financing described above. The

Borrower intends that funds that have been advanced, or that may be advanced, from the Borrower's general fund, or any other Borrower fund related to the project, for project costs may be reimbursed from the financing proceeds.

6. All prior actions of the Borrower officers in furtherance of the purposes of this resolution are hereby ratified, approved, and confirmed. All other resolutions (or parts thereof) in conflict with this resolution are hereby repealed, to the extent of the conflict. This resolution shall take effect immediately.

Adopted this 13th day of September 2021 by the Board of Commissioners of the Town of Zebulon.

Robert S. Matheny – Mayor

SEAL

Lisa M. Markland, CMC – Town Clerk

**TOWN OF ZEBULON
BID TABULATION
FY 2022 LEASE PURCHASE FUNDING AGREEMENT (LEAF TRUCK &
PAYLOADER)
AUGUST 12, 2021
11:00 AM at TOWN HALL**

COMPANY	RATE	FEES	CONTACT
1. Truist Bank	1.43%	None	Andrew Smith 803-413-4991
2. Signature Public Funding Corp.	1.448%	\$250.00	Dennis McDermott 404-658-4751
3.			
4.			
5.			

Bid Tab Completed By

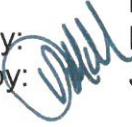
Name: Bobby Fitts

Title: Finance Director

Signature: _____

STAFF REPORT
AMENDMENT OF WORK SESSION
MEETING SCHEDULE
SEPTEMBER 13, 2021

Topic: Amendment of Work Session Meeting Schedule

Speaker: Joseph M. Moore II, PE - Town Manager (if pulled from Consent)
From: Lisa M. Markland – Town Clerk
Prepared by: Lisa M. Markland – Town Clerk
Approved by:  Joseph M. Moore II, PE, Town Manager

Executive Summary:

The Board of Commissioners will consider amending their 2021 Meeting Schedule by rescheduling the work sessions scheduled for October, November, and December.

Background:

The Town of Zebulon work session meeting schedule has traditionally been held on the third Wednesday after the Board of Commissioners regular meeting at 7pm. The Board moved up the start-time of work sessions to 6pm with the adoption of the 2021 Meeting Schedule.

Due to conflicts with CAMPO meetings the Wednesday at 6pm meeting time did not allow for the Town of Zebulon to be represented well at the CAMPO meeting.

Staff offers changing the remaining work sessions to Thursday at 6pm as a means to ensure that Zebulon is well represented at CAMPO meetings. The thought is that this change would continue for the 2022 meeting schedule.

Discussion:

The discussion before the Board is whether to amend the Board of Commissioners remaining work session meeting schedule for 2021.

Policy Analysis:

The Board of Commissioners adopts the annual meeting schedule at their December Regular Board meeting for the upcoming year.

Staff Recommendation:

Staff recommends amending the 2021 meeting schedule by moving the work session meetings scheduled for October, November and December one day forward to Thursday's at 6pm (September's work session scheduled for Wednesday, September 22 at 6pm is not in conflict with the CAMPO meeting).

Attachments:

1. Amended Meeting Schedule


**Day and Date of Board of
Commissioners Work Session**

All meetings begin at 6:00pm

Wednesday	January 20, 2021	2pm
No Meeting in February		
Wednesday	March 17, 2021	
Wednesday	April 21, 2021	
Tuesday	May 11, 2021	} Budget - No Additional Items
Wednesday	May 18, 2021	
Thursday	May 27, 2021	
Wednesday	June 16, 2021	
No Meeting in July		
Wednesday	August 18, 2021	
Wednesday	September 22, 2021	
Thursday	October 21, 2021	
Thursday	November 18, 2021	
Thursday	December 16, 2021	

STAFF REPORT
PLAY ZEBULON:
PARKS & RECREATION MASTER PLAN
SEPTEMBER 13, 2021

Topic: PARKS & RECREATION COMPREHENSIVE MASTER PLAN

Speaker: Sheila Long, Parks and Recreation Director
From: Sheila Long, Parks and Recreation Director
Prepared by: Sheila Long, Parks and Recreation Director
Approved by:  Joseph M. Moore II, PE, Town Manager

Executive Summary:

The Board of Commissioners will consider adopting Play Zebulon: Parks & Recreation Master Plan.

Background:

The Town does not have a plan to guide park development and recreation programming decisions and initiatives as our community grows and diversifies.

To both understand the status of the current parks and recreation programming, and the future needs of a quickly growing and diversifying community, the Town undertook an extensive community engagement campaign over the past 18 months. This community engagement, inclusive of online surveys, a statistically valid survey, community meetings, stakeholder interviews, focus groups, and meetings in a box, lead to the creation of the Play Zebulon: Parks and Recreation Comprehensive Master Plan.

This Plan thoroughly reviewed the parks system and assessed the programs, operations, and staffing. The plan includes cost estimates and a proposed implementation plan to demonstrate how projects could be accomplished.

Discussion:

The discussion before the Board of Commissioners is to consider adoption of Play Zebulon: Parks and Recreation Comprehensive Master Plan.

Policy Analysis:

Adopting this Plan creates the Town's Parks and Recreation policy. The Plan will guide the Board in their decisions on which projects and programs to pursue, and pass-by, in meeting the Town's Parks and Recreation goals.

Financial Analysis:

Adopting this Plan offers the following financial support:

- Identifies where and how the Town can leverage the work of future developments.
- Increases the competitiveness of grant applications.
- Structures the capital and operational costs of future projects and programs.
- Provides the legal framework and rationale to adopt a Recreation Impact Fee.
- Identifies recreation opportunities for private investors and operators.

STAFF REPORT
PLAY ZEBULON:
PARKS & RECREATION MASTER PLAN
SEPTEMBER 13, 2021

Parks & Recreation Advisory Board Recommendation:

At the August 16th, 2021, Parks and Recreation Advisory Board Meeting, the Advisory Board recommended the Board of Commissioners approve the proposed Play Zebulon: Parks and Recreation Master Plan.


Staff Recommendation:

Staff recommends adoption of the Play Zebulon: Parks and Recreation Master Plan subject to final edits and corrections.

Attachments:

1. Proposed Play Zebulon: Parks and Recreation Master Plan
(Please reference the Plan distributed at the August Work Session)

Topic: Board Appointments

Speaker: Lisa M. Markland, CMC, Town Clerk
From: Stacie Paratore, CMC, Deputy Town Clerk
Prepared by: Stacie Paratore, CMC, Deputy Town Clerk
Approved by:  Joseph M. Moore, II, PE, Town Manager

Executive Summary:

The Board of Commissioners will consider persons interested in serving on the Planning Board, Board of Adjustment and Parks and Recreation Advisory Board.

Background:

The Board of Commissioners appoints In-Town seats, and recommends appointments to the Wake County Board of Commissioners for ETJ seats, to Boards (Planning Board, Board of Adjustment, Parks and Recreation Advisory Board). These Boards make recommendations or decisions in their respective areas. Persons interested in serving on these appointed Boards submit applications, and may also offer presentations, to the Board of Commissioners for consideration.

Discussion:

The discussion before the Board is whether to appoint those interested to the Planning Board, Parks & Recreation Board, and Board of Adjustment, and to recommend to Wake County that they be appointed (if they reside in the ETJ).

The following Boards have vacancies:

Planning Board (2 vacancies)

There is **one** in-Town vacancy and **one** ETJ vacancy. The positions are three-year terms expiring on June 30, 2024. The following have submitted an application for appointment:

In Town Seats

- Gene Blount is seeking reappointment
- Genia LaRese Newkirk (1st choice)
- Domenick Schilling (1st choice)

ETJ Seats

- Laura Johnson is seeking reappointment
- David Hughes (1st choice)

Board of Adjustment (4 vacancies)

There are **two** in-Town vacancies, **one** ETJ regular vacancy and **one** ETJ alternate vacancy. All positions are three-year terms expiring on June 30, 2024. The following have submitted an application for appointment:

In Town Seats

- Jay Estes is seeing reappointment
- Genia LaRese Newkirk (3rd choice)

Parks and Recreation Advisory Board (3 vacancies)

- Garrett Underhill is seeking reappointment
- Genia LaRese Newkirk (2nd choice)

Policy Analysis:

The Code of Ordinances states that there will be seven members on the Planning Board and Parks & Recreation Board and five members on the Board of Adjustment.

Staff Recommendation:

If the Board chooses to make appointments staff requests that the persons be appointed to the specific terms per position.

Attachments:

1. Applications

TOWN OF ZEBULON Application for Board Appointments

Please indicate which board you are interested in serving on. If you are interested in more than one board please list them by preference by using numbers (1,2,3). Please attach a copy of your driver's license for proof of eligibility to serve.

Board of Adjustment
 Planning Board
 Parks & Recreation Advisory

Name EUGENE W. BLOUNT, Jr

Address 601 STRATFORD DR.

E-mail genebcr2017@gmail.com Date of Birth (month & Day) 05/08/1953

Phone (Home) 919 426 8192 (Work) SAME (Cell) SAME

Employer SUNPRO SOLAR Occupation REP.

Do you live in the Zebulon Corporate Limits Yes ETJ --- Years in Zebulon 26+

Do you currently, or have you previously, served on any Town of Zebulon, or other municipal board, commission or committee? Yes No If you answered yes, please list them below (use the back if necessary).

Board/Commission/Committee	From	To
<u>PLANNING BOARD OVER 15 years</u>		

Have you taken the opportunity to attend any previous board meetings prior to the notice of this vacancy? Yes No

Describe extent and meetings attended CHAIRMAN CURRENT

Why do you want to serve on this board or commission? ENJOY HELPING MY TOWN.

Why would you be an asset to this board or commission? I BRING A 67 YEAR OLD PERSPECTIVE.

What are your qualifications? MANAGEMENT RETAIL, SALE, AND DEALING WITH PEOPLE.

What areas of concern would you like to see the Board or Commission address? DEVELOPMENT

I certify that the above information is correct. I understand that this is an application to be considered for appointment to a Town of Zebulon board, commission or committee and that final appointment is made by the Zebulon Board of Commissioners. I also understand that any service, if appointed, would be without compensation. This application will remain on file for a period of 6-months from the date of application.

Date 05/04/2021 Signature Eugene W. Blount, Jr.

Please fill out the form completely and return it to Stacie Paratore at Town Hall. If you have any question call 919-823-1802.

TOWN OF ZEBULON

Application for Board Appointments

Please indicate which board you are interested in serving on. If you are interested in more than one board please list them by preference by using numbers (1,2,3). Please attach a copy of your driver's license for proof of eligibility to serve.

Board of Adjustment
 Planning Board
 Parks & Recreation Advisory

Name Laura J. Johnson

Address 2424 Morpheus Bridge Rd, Zebulon, NC 27597

E-mail ljjohns@gmail.com Date of Birth (month & Day) 1/23

Phone (Home) (919) 404-0661 (Work) _____ (Cell) (919) 414-0477

Employer Retired Occupation _____

Do you live in the Zebulon Corporate Limits _____ ETJ Years in Zebulon 36 yrs

Do you currently, or have you previously, served on any Town of Zebulon, or other municipal board, commission or committee? Yes No _____ If you answered yes, please list them below (use the back if necessary).

Board/Commission/Committee	From	To
<u>Planning Board</u>	_____	_____
<u>Board of adjustment</u>	_____	_____
_____	_____	_____

Have you taken the opportunity to attend any previous board meetings prior to the notice of this vacancy? Yes No _____

Describe extent and meetings attended Joint Board meetings

Why do you want to serve on this board or commission? To be able to assist in the development of the town.

Why would you be an asset to this board or commission? Prior experience.

What are your qualifications? Prior member of the Above named boards

What areas of concern would you like to see the Board or Commission address? Revitalizing downtown, bringing in new businesses.

I certify that the above information is correct. I understand that this is an application to be considered for appointment to a Town of Zebulon board, commission or committee and that final appointment is made by the Zebulon Board of Commissioners. I also understand that any service, if appointed, would be without compensation. This application will remain on file for a period of 6-months from the date of application.

Date 4/7/2021 Signature Laura Johnson

Please fill out the form completely and return it to Stacie Paratore at Town Hall. If you have any question call 919-823-1802.

TOWN OF ZEBULON
Application for Board Appointments

Please indicate which board you are interested in serving on. If you are interested in more than one board please list them by preference by using numbers (1,2,3). Please attach a copy of your driver's license for proof of eligibility to serve.

Board of Adjustment Planning Board Parks & Recreation Advisory

Name DAVID A. HUGHES

Address 900 E. HORTON ST ZEBULON, NC 27597

E-mail dauidahughes43.dh@gmail.com Date of Birth (month & Day) 06/26

Phone (Home) _____ (Work) _____ (Cell) 919 817 3058

Employer SELF Occupation RESIDENTIAL DESIGNER

Do you live in the Zebulon Corporate Limits _____ ETJ Years in Zebulon 51 yrs

Do you currently, or have you previously, served on any Town of Zebulon, or other municipal board, commission or committee? Yes No _____ If you answered yes, please list them below (use the back if necessary).

Board/Commission/Committee	From	To
<u>PLANNING BO. Vice chair (2) chairwoman</u>	<u>7/30/01</u>	<u>12/2011</u>
<u>8/02/11/14 2/13/04</u>		
<u>BOA</u>	<u>11/5/12</u>	<u>REAPPOINTED 6/15</u>

Have you taken the opportunity to attend any previous board meetings prior to the notice of this vacancy? Yes No _____

Describe extent and meetings attended (SEE ABOVE)

Why do you want to serve on this board or commission? BOA DOESN'T MEET OFTEN, WHEN THEY DO SOMETIMES DOESN'T WORK FOR ME. NEED MORE STRUCTURED SCHEDULE LIKE PLANNING BO.

Why would you be an asset to this board or commission? EXPERIENCE AND KNOWLEDGE OF THE TOWN AND WHERE WE ARE HEADED.

What are your qualifications? KNOWLEDGE OF MAPS, HOUSING OF ALL TYPES, MY DESIGN EXPERIENCE FOR OVER 35 YEARS

What areas of concern would you like to see the Board or Commission address? HOME AT THIS TIME

I certify that the above information is correct. I understand that this is an application to be considered for appointment to a Town of Zebulon board, commission or committee and that final appointment is made by the Zebulon Board of Commissioners. I also understand that any service, if appointed, would be without compensation. This application will remain on file for a period of 6-months from the date of application.

Date 9/3/20 Signature [Signature]

Please fill out the form completely and return it to Stacie Paratore at Town Hall. If you have any question call 919-823-1802.

TOWN OF ZEBULON
Application for Board Appointments

Please indicate which board you are interested in serving on. If you are interested in more than one board please list them by preference by using numbers (1,2,3). Please attach a copy of your driver's license for proof of eligibility to serve.

Board of Adjustment Planning Board Parks & Recreation Advisory

Name (Jay) James K. Estes

Address 513 W. Franklin St. Zebulon, NC 27597 (P. O. Box 369)

E-mail 7734jke@gmail.com Date of Birth (month & Day) 04/04

Phone (Home) _____ (Work) _____ (Cell) (919) 210-5271

Employer Retired Occupation Industrial Designer / Instructor

Do you live in the Zebulon Corporate Limits ETJ _____ Years in Zebulon 61

Do you currently, or have you previously, served on any Town of Zebulon, or other municipal board, commission or committee? Yes No _____ If you answered yes, please list them below (use the back if necessary)

Board/Commission/Committee	From	To
<u>Board of Adjustment</u>	<u>2008</u>	<u>Present</u>

Have you taken the opportunity to attend any previous board meetings prior to the notice of this vacancy? Yes No _____
Served for the past thirteen years as a member of the BOA including one term as Vice Chair.

Describe extent and meetings attended _____

Why do you want to serve on this board or commission? **To give back to my community through service while trying to maintain harmony in the community and ensure that the future growth of the town is in compliance with the vision of the Unified Development Ordinance.**

Why would you be an asset to this board or commission? **Have working knowledge of Quasi Judicial Law as it applies to the Board of Adjustment through thirteen years of service. Have a BSBA degree along with a Master of Industrial Design degree.**

What are your qualifications? **I have a Diploma from Zebulon High School. I began at Wakelon and went through integration in the sixth grade. I was very fortunate to have learned and understand the importance and value of diversity first hand as well as making many lifelong new friends in the process. I also have vested interest in Commercial property in the Downtown District.**

What areas of concern would you like to see the Board or Commission address? **Assure that the infrastructure for future growth is in place before rapid growth occurs. Find reasonable balance between Historical preservation without stunting future growth. Provide recreational amenities geographically per capita.**

I certify that the above information is correct. I understand that this is an application to be considered for appointment to a Town of Zebulon board, commission or committee and that final appointment is made by the Zebulon Board of Commissioners. I also understand that any service, if appointed, would be without compensation. This application will remain on file for a period of 6-months from the date of application.

Date 7/22/21 Signature James K. Estes

Please fill out the form completely and return it to Town Vacators at Town Hall. If you have any question call 919-823-1802

TOWN OF ZEBULON Application for Board Appointments

Please indicate which board you are interested in serving on. If you are interested in more than one board please list them by preference by using numbers (1,2,3). Please attach a copy of your driver's license for proof of eligibility to serve.

3 Board of Adjustment 1 Planning Board 2 Parks & Recreation Advisory

Name Genia LaRese Newkirk

Address 897 Golden Plum Ln Zebulon NC 27597

E-mail geniadn@live.com Date of Birth (month & Day) 2-28

Phone (Home) 910 289 1767 (Work) 919 608 3830 (Cell) 910 289 1767

Employer NC DOT / DMV Occupation School Bus + Traffic Safety

Do you live in the Zebulon Corporate Limits ETJ _____ Years in Zebulon 6 months

Do you currently, or have you previously, served on any Town of Zebulon, or other municipal board, commission or committee? Yes _____ No If you answered yes, please list them below (use the back if necessary).

Board/Commission/Committee	From	To

Have you taken the opportunity to attend any previous board meetings prior to the notice of this vacancy? Yes _____ No

Describe extent and meetings attended N/A

Why do you want to serve on this board or commission? I would like to get involved with the

events and activities within the town of Zebulon to acclimate to the town, and

be apart of the town I intend to make my permanent home.

Why would you be an asset to this board or commission? I enjoy meeting new people, learning new

things, and being involved in positive improvements and growth

What are your qualifications? I have 20+ years of customer service, military, + State Government

What areas of concern would you like to see the Board or Commission address? New business/industry

Transportation

I certify that the above information is correct. I understand that this is an application to be considered for appointment to a Town of Zebulon board, commission or committee and that final appointment is made by the Zebulon Board of Commissioners. I also understand that any service, if appointed, would be without compensation. This application will remain on file for a period of 6-months from the date of application.

Date 6-14-2021 Signature Genia L. Newkirk

Please fill out the form completely and return it to Stacie Paratore at Town Hall. If you have any question call 919-823-1802.

TOWN OF ZEBULON

Application for Board Appointments

Please indicate which board you are interested in serving on. If you are interested in more than one board please list them by preference by using numbers (1,2,3). Please attach a copy of your driver's license for proof of eligibility to serve.

Board of Adjustment
 Planning Board
 Parks & Recreation Advisory

Name DOMENICK W. SCHILLING

Address 207 NOSTALGIA LN ZEBULON NC 27597

E-mail DWSCHILLING711 @ GMAIL . COM Date of Birth (month & Day) 07/11

Phone (Home) NA (Work) NA (Cell) 919.413.7600

Employer COLDWELL BANKER HPW Occupation REAL ESTATE AGENT

Do you live in the Zebulon Corporate Limits ETJ Years in Zebulon 2 yr 6 months

Do you currently, or have you previously, served on any Town of Zebulon, or other municipal board, commission or committee? Yes No If you answered yes, please list them below (use the back if necessary).

Board/Commission/Committee	From	To
N/A		

Have you taken the opportunity to attend any previous board meetings prior to the notice of this vacancy? Yes No

Describe extent and meetings attended HAVE ATTENDED A NUMBER OF COMMISSIONER MTGS ! SPOKE AT RE. ZONING MEETING FOR PROPERTY BEHIND WAKELOON TOWN HOMES .

Why do you want to serve on this board or commission? I STRONGLY BELIEVE ZEBULON HAS GREAT UNREALIZED POTENTIAL ! WOULD LOVE TO HAVE A SMALL PART IN SEEING THAT COME TO FRUITION .

Why would you be an asset to this board or commission? I AM A BIG PICTURE , LONG-TERM THINKER WHO ALSO UNDERSTANDS THAT SMALL DAILY DECISIONS LEAD TO THE DESIRED VISION ! PLAN EXECUTION .

What are your qualifications? NO FORMAL TRAINING , BUT 17 YEARS EXPERIENCE IN REAL ESTATE SALES .

What areas of concern would you like to see the Board or Commission address? TRAFFIC IMPACT OF GROWTH . TYPES OF BUSINESSES COMING TO THE TOWN . PARKS , REC ! TOWN AMENITIES .

I certify that the above information is correct. I understand that this is an application to be considered for appointment to a Town of Zebulon board, commission or committee and that final appointment is made by the Zebulon Board of Commissioners. I also understand that any service, if appointed, would be without compensation. This application will remain on file for a period of 6-months from the date of application.

Date 7/23/21 Signature DW Schilling

Please fill out the form completely and return it to Stacie Paratore at Town Hall. If you have any question call 919-823-1802.

TOWN OF ZEBULON Application for Board Appointments

Please indicate which board you are interested in serving on. If you are interested in more than one board please list them by preference by using numbers (1,2,3). Please attach a copy of your driver's license for proof of eligibility to serve.

Board of Adjustment

 Planning Board

 Parks & Recreation Advisory

Name Garrett Underhill

Address 120 West North St., Zebulon, NC, 27597

E-mail glunderhill@yahoo.com Date of Birth (month & Day) 09/30/1991

Phone (Home) 919-255-2284 (Work) _____ (Cell) _____

Employer Beazer Homes Occupation Purchasing Agent

Do you live in the Zebulon Corporate Limits Yes ETJ _____ Years in Zebulon 4

Do you currently, or have you previously, served on any Town of Zebulon, or other municipal board, commission or committee? Yes No _____ If you answered yes, please list them below (use the back if necessary).

Board/Commission/Committee	From	To
Parks & Recreation Advisory Board	Jan. 2020	Now

Have you taken the opportunity to attend any previous board meetings prior to the notice of this vacancy? Yes ___ No ___

Describe extent and meetings attended _____

Why do you want to serve on this board or commission? The reason why I want to serve on this board is to help our town grow the right way, to help serve the needs of our community with fun and enjoyable parks, outdoor spaces, and activities.

Why would you be an asset to this board or commission? I grow up in this community and I worked in the Parks & Recreation before so I understand the small items that makes up the department and it's needs.

What are your qualifications? Currently a board member, worked for Parks & Recreation, and in a industry that looks for items when building a community

What areas of concern would you like to see the Board or Commission address? What are the needs of the community and how we can grow the right way to meet those needs. Which I believe we as a board are working toward and meeting that concern very well.

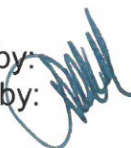
I certify that the above information is correct. I understand that this is an application to be considered for appointment to a Town of Zebulon board, commission or committee and that final appointment is made by the Zebulon Board of Commissioners. I also understand that any service, if appointed, would be without compensation. This application will remain on file for a period of 6-months from the date of application.

Date 05/24/2021 Signature Garrett Underhill

Please fill out the form completely and return it to Stacie Paratore at Town Hall. If you have any question call 919-823-1802.

STAFF REPORT
RESOLUTION 2022-05
AUTUMN LAKES PHASE III ROADWAY AND
STORM DRAINAGE ACCEPTANCE
SEPTEMBER 13, 2021

Topic: Resolution 2022-05 – Autumn Lakes - Phase 3 Infrastructure Acceptance

Speaker: Chris D. Ray, Public Works Director
From: Chris D. Ray, Public Works Director
Prepared by: Chris D. Ray, Public Works Director
Approved by:  Joseph M. Moore II, PE, Town Manager

Executive Summary:

The Board of Commissioners will consider acceptance of roadway, greenway and storm-drain infrastructure within Autumn Lakes Phase 3 for ownership and maintenance per the executed Special Use Agreement.

Background:

The Town of Zebulon follows a practice where the Board considers acceptance (i.e. ownership and maintenance) of roadway and storm-drain infrastructure installed in new subdivisions. In advance of this consideration, staff determines whether the infrastructure complies and meets the conditions of permits and standards.

Autumn Lakes Development has completed the construction of Phase 3 in accordance with the Special Use Permit 2017-02 (March 6, 2017), the latest version of Town of Zebulon Street and Storm Drainage Standards, and the City of Raleigh Utility Standards. Phase 3 includes 157 lots (with a total of 466 lots for all phases).

Staff and third-party inspectors/engineers have certified all completed work meets or exceeds Town standards and requirements.

Discussion:

The discussion before the Board is whether to accept the dedication of street, sidewalks, curb and gutter, street signage, and storm drainage in Autumn Lakes Phase 3 for ownership and maintenance.

Policy Analysis:

The infrastructure was installed per approved Special Use Permit 2017-02. The infrastructure complies with the latest version of the "Town of Zebulon Street & Storm Drainage Standards and Specifications."

Fiscal Analysis:

Autumn Lakes Phase 3 development will dedicate 7 streets totaling 5,724 linear feet (approximately 1.08 miles), 2,166 linear feet (.41 miles) of greenway, and 6,233 linear foot of storm drainage valued at \$991,279.10. The infrastructure will be added to the Town's Capital assets (re. Comprehensive Annual Financial Report).

The Town has received a one-year warranty on all the dedicated assets. Staff will conduct an 11-month warranty inspection prior to the final overlay to ensure any issues or failures are repaired prior to the final asphalt overlay by the developer.

STAFF REPORT
RESOLUTION 2022-05
AUTUMN LAKES PHASE III ROADWAY AND
STORM DRAINAGE ACCEPTANCE
SEPTEMBER 13, 2021

The Town has received a Subdivision Bond for \$576,663.42 (# 0800416 from IAT Insurance Group Surety) to ensure the final completion of outstanding items (e.g., final overlay, striping, 5' sidewalks with handicap ramps, greenway amenities, mail kiosks, street trees and stormwater pond conversion).

The Subdivision Bond is automatically renewed or revised annually to reflect items completed. The Subdivision Bond will remain active until all items have been completed. All inspection and development fees were collected from the developer.

Staff Recommendation:

Staff conditionally recommends approval of Resolution 2022-05 for acceptance of Autumn Lakes Phase 3 roadway and storm drainage infrastructure and associated bonds.

The recommendation is conditioned upon receipt of the City of Raleigh's Conditional Acceptance (re Attachment #13). Staff will request the Board have the item pulled from the agenda if this acceptance is not received by their meeting date.

Attachments:

1. Engineer Certification of Roadway lengths
2. Engineer Certification of Dedicated infrastructure
3. Engineering Estimate for Letter of Credit/Bond
4. Bond or Letter of Credit
5. Developer warranty and guaranty – Street and Stormwater
6. Developer warranty and guaranty – Water and Sewer
7. Third party engineering reports for sub-grade, stone, and asphalt (thickness and density) for Roadways
8. Engineering certification – Potable Water
9. Engineering certification – Sanitary Sewer
10. Lien Waivers – Developer
11. Lien Waiver – Contractor
12. Proof of payment for streetlights
13. City of Raleigh Conditional Acceptance -pending
14. Completion of Punch List items
15. As-built drawings
16. Payment of construction inspection and planning fees
17. Illustrative Concept Plan
18. Phasing diagram
19. Resolution 2022-05

May 21, 2021
Via Electronic Mail

*OPR
APPROVED
AS
Submitted
7/1/21*

RE: Autumn Lakes Subdivision-Phase III
0 Old Bunn Road
Zebulon, NC 27597
BE # NCR162057
Roadway Lengths

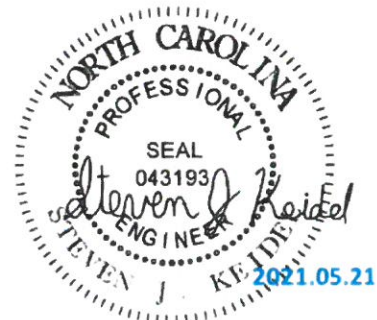
I, Steven Keidel, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically the construction of the project segments as listed below:

Autumn Lakes Subdivision Phase III

For LGI Homes, hereby state that, to the best of my abilities; the following table reflects accurate and true information about the roadways installed on Autumn Lakes Subdivision Phase III.

ROADWAY DATA TABLE				
STREET NAME	CLASSIFICATION	DESIGN/ POSTED SPEED	PUBLIC OR PRIVATE	LENGTH OF NEW ROAD
CRACKLING COURT	RESIDENTIAL COLLECTOR	30/25	PUBLIC	378'
TURNING LAKE DRIVE	LOCAL STREET	30/25	PUBLIC	2,004'
LITTLE PATCH STREET	LOCAL STREET	30/25	PUBLIC	641'
CIDER MILL WAY	LOCAL STREET	30/25	PUBLIC	825'
FAUNA STREET	LOCAL STREET	30/25	PUBLIC	405'
INDIAN SUMMER STREET	LOCAL STREET	30/25	PUBLIC	816'
GUSTY LANE	LOCAL STREET	30/25	PUBLIC	655'
TOTAL		5,724'		

Signature Steven Keidel Registration No. 043193



BOHLER //

4140 Parklake Avenue, Suite 130
Raleigh, NC 27612
919 578 9000

Engineer's Dedicated Infrastructure Cost Estimate	
Project Name	
Project Location:	Old Bunn Road, Zebulon, NC
Plan Name/Number:	Autumn Lakes Subdivision Phase III
Prepared For:	LGI Homes
Prepared By:	Bohler Engineering NC, PLLC
Date of Cost Estimate:	June 24, 2021
Preliminary Pricing Provided By:	
Date of Plan:	

Engineer's Note

On behalf of LGI Homes, an engineer's opinion of cost is herein provided for the total cost of the site improvements for Autumn Lakes Subdivision, Phase III, that is to be dedicated to the Town of Zebulon. The developer wishes to enact a financial guarantee for items yet installed in order to move forward with recordation of the Phase III subdivision plat. It is anticipated that the site improvements will be completed within one year and dedicated to the Town then.

Item	Quantity	Unit	Unit Cost	Total	Notes
Storm Drainage					
Storm Sewer					
15 inch dia. RCP Pipe	1,970	L.F.	\$28.00	\$55,160.00	
18 inch dia. RCP Pipe	907	L.F.	35.00	\$31,745.00	
24 inch dia. RCP Pipe	1,336	L.F.	\$41.00	\$54,776.00	
30 inch dia. RCP Pipe	1,294	L.F.	\$60.00	\$77,640.00	
36 inch dia. RCP Pipe	269	L.F.	\$75.00	\$20,175.00	
42 inch dia. RCP Pipe	13	L.F.	\$100.00	\$1,300.00	
48 inch dia. RCP pipe	148	L.F.	\$115.00	\$17,020.00	
Flared end sections for 24" - 48" pipe	11	EACH	\$1,100.00	\$12,100.00	
Drainage Structures					
Curb Inlet/Yard Inlet	95	EACH	\$2,250.00	\$213,750.00	
Sub-total for all of Storm Drainage				\$483,666.00	
Paving and Parking Lot					
Paving					
2.5" SF9.5 Asphalt Initial Lift (Residential Collector)	1,260	S.Y.	\$8.30	\$10,458.00	
2" SF9.5 Asphalt Initial Lift (Local)	12,474	S.Y.	\$8.30	\$103,534.20	
8" CABC	13,734	S.Y.	\$12.50	\$171,675.00	
30" Standard Curb and gutter	11,448	L.F.	\$14.80	\$169,430.40	
Phase 3 Greenway Asphalt Pavement (2" SF9.5)	1,750	S.Y.	\$13.25	\$23,187.50	
Phase 3 Greenway Base Course (6" CABC)	1,880	S.Y.	\$13.60	\$25,568.00	
Phase 3 Greenway Geotextile Fabric	1,880	S.Y.	\$2.00	\$3,760.00	
Sub-total for all Paving				\$507,613.10	
Total				\$991,279.10	

ROWADWAY DATE TABLE

STREET NAME	CLASSIFICATION	ROADWAY LENGTH	ROW WIDTH
CARACKLING COURT	RESIDENTIAL COLLECTOR	378'	60'
TURNING LAKE DRIVE	LOCAL STREET	2004'	50'
LITTLE PATCH STREET	LOCAL STREET	641'	50'
CIDER MILL WAY	LOCAL STREET	825'	50'
FAUNA STREET	LOCAL STREET	405'	50'
INDIAN SUMMER STREET	LOCAL STREET	816'	50'
GUSTY LANE	LOCAL STREET	655'	50'



6-24-21

Approved AS Submitted. 6-29-21

June 24, 2021

RE: Autumn Lakes Subdivision-Phase III
 0 Old Bunn Road
 Zebulon, NC 27597
 BE # NCR162057
 Completion Bond

On behalf of LGI Homes, an engineer's opinion of cost is herein provided for the remaining site improvements for Autumn Lakes Subdivision, Phase III. The developer wishes to enact a financial guarantee for the remaining site work in order to move forward with recordation of the Phase III subdivision plat. It is anticipated that the site improvements will be completed within one year.

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
Asphalt Pavement Final Lift (1.5" S9.5) Residential Collector	1,260	SY	\$ 8.30	\$ 10,458.00
Asphalt Pavement Final Lift (1" S9.5) Local Streets	12,474	SY	\$ 8.30	\$ 103,534.20
BMP Conversion to Wet Ponds	2	EA	\$ 6,000.00	\$ 12,000.00
ADA Ramps	27	EA	\$ 1,700.00	\$ 45,900.00
Mail Kiosk	1	LS	\$ 14,577.68	\$ 14,577.68
Street Trees	107	EA	\$ 350.00	\$ 37,450.00
Sidewalk	3,904	SY	\$ 31.50	\$ 122,976.00
Street Signs	1	LS	\$ 27,515.50	\$ 27,515.50
Greenway Amenities	1	LS	\$ 2,500.00	\$ 2,500.00
Subtotal				\$ 376,911.38

LEDA
APPROVED
AS
Submitted
6-29-21

Design/Construction Administration @20%	\$ 75,382.28
Construction CPI @ 15%	\$ 56,536.71
Geotechnical Services Allowance @ 1%	\$ 3,769.11
Construction Inspection - 12 Days @ \$720/day	\$ 8,640.00
Construction Staking Allowance	\$ 3,000.00
Construction Total	\$ 524,239.48
Bond Amount @110%	\$ 576,663.42

The financial guarantee amount for remaining improvements totals **\$576,663.42**.

Upon your approval of the above estimate, the developer will move forward with obtaining the required financial guarantee. If you have any questions or require additional information, please feel free to contact me at 919-578-9000, or skeidel@bohlereng.com

Respectfully submitted:
 Steven Keidel, PE



6-24-21



Sub
7-14-21
Approved
AS
to form

Confirmed
by MB
Organization
F.I.C.S
Planners

SUBDIVISION BOND

AMOUNT: \$ 576,663.42

BOND NO. 0800416

KNOW ALL MEN BY THESE PRESENTS: THAT WE, LGI Homes - NC, LLC

as Principal, and Harco National Insurance Company, a Illinois corporation authorized to do business in the state of North Carolina with its main bonding office at 702 Oberlin Road, Raleigh, North Carolina 27605 as surety, are held and firmly bound unto the Town of Zebulon

as Oblige, in the full and just sum of Five Hundred Seventy Six Thousand Six Hundred Sixty Three and 42/100

DOLLARS (\$ 576,663.42) lawful money of the United States, to the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

SIGNED, SEALED AND DATED THIS 8th day of July, 20 21

WHEREAS, the Principal has entered into an agreement with the Town of Zebulon as Oblige, guaranteeing that the principal will construct, install and complete the improvements

At certain land known as, "Autumn Lakes Section 3" all of which improvements Shall be maintained and completed on or before July 8, 2023.

A condition of this bond that it shall expire on the Expiry Dated listed, provided it will be deemed automatically extended without amendment for 1 year from the present and future date of this Bond unless at least 60 days prior to the then expiration date we notify the beneficiary by registered letter or other receipt means of postal deliver that we elect not to consider this bond renewed for such a period. If such notice is given, then during such notice period(i.e, the 60 day period commencing on the date of such notice and end with the applicable expiration date of this bond), this bond shall remain in full force and effect and beneficiary may draw up the full amount of the sum.



NOW, THEREFORE THE CONDITION OF THIS OBLIGATION IS SUCH, THAT IF THE principal shall carry out all the terms of said agreement and perform all the work as set forth therein, all within the time set for in said agreement, then this obligation shall be null and void; otherwise to remain in full force and effect. FURTHERMORE, the rights of the Obligee hereunder are exclusive to it and the surety shall have no obligation hereunder to any person or entity other than the named Obligee herein. The rights of such Obligee are not assignable.

Witness: _____

Principal: LGI Homes -NC, LLC

BY: _____
Charles Merdian, Chief Financial Officer

Harco National Insurance Company

Witness: Ken C. Bernard

BY: Grace J. Gray
Grace J. Gray Attorney-in-Fact

POWER OF ATTORNEY
HARCO NATIONAL INSURANCE COMPANY
INTERNATIONAL FIDELITY INSURANCE COMPANY

Bond # 0800416

Member companies of IAT Insurance Group, Headquartered: 702 Oberlin Road, Raleigh, North Carolina 27605

KNOW ALL MEN BY THESE PRESENTS: That **HARCO NATIONAL INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of Illinois, and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of New Jersey, and having their principal offices located respectively in the cities of Rolling Meadows, Illinois and Newark, New Jersey, do hereby constitute and appoint

ERIC P. PRATT, GRACE J. GRAY, KATHLEEN M. O'BRIEN, DONNA M. BISHOP, DIANE J. WOJCIK

North Adams, MA

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** and is granted under and by authority of the following resolution adopted by the Board of Directors of **INTERNATIONAL FIDELITY INSURANCE COMPANY** at a meeting duly held on the 13th day of December, 2018 and by the Board of Directors of **HARCO NATIONAL INSURANCE COMPANY** at a meeting held on the 13th day of December, 2018.

"**RESOLVED**, that (1) the Chief Executive Officer, President, Executive Vice President, Senior Vice President, Vice President, or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** have each executed and attested these presents on this 31st day of December, 2018



STATE OF NEW JERSEY
County of Essex

Kenneth Chapman

Executive Vice President, Harco National Insurance Company
and International Fidelity Insurance Company

STATE OF ILLINOIS
County of Cook



On this 31st day of December, 2018, before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY**; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.



IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

Shirelle A. Outley a Notary Public of New Jersey
My Commission Expires April 4, 2023

CERTIFICATION

I, the undersigned officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand on this day, July 08, 2021

A00757

Irene Martins, Assistant Secretary



LGI Homes, Inc. – Raleigh Corporate
6501 Creedmoor Road Suite 112
Raleigh, NC 27613-1685

Approved as submitted 7/1/21

DEVELOPERS GUARANTY

Re: Town of Zebulon, N.C.
Autumn Lakes Phase 3

LGI Homes – NC, LLC provides the following statement of warranty for the below referenced project:
Autumn Lakes Phase 3

LGI Homes – NC, LLC guarantees and warrants that all roadways and storm sewer infrastructure installed within the Autumn Lakes Phase 2 Subdivision conforms with the Town of Zebulon requirements, and that this warranty remain in full force and effect for a period of one year from the date of the acceptance of the work. LGI-NC, LLC hereby agrees to indemnify, defend and hold harmless the Town form and against all costs, loss and damages, including attorney fees, arising from the failure of the Work to conform to the Town’s standards.

LGI Homes – NC, LLC has executed this guarantee this 6th day of June 2021.

Josh Spiegel
Josh Spiegel, V.P. Land Development
LGI Homes – NC, LLC Raleigh Corporate

Sworn to and subscribed before me this
6th day of June 2021.

[Signature]
NOTARY PUBLIC

Commission Expires: 11-19-2024





LGI Homes, Inc. – Raleigh Corporate
6501 Creedmoor Road Suite 112
Raleigh, NC 27613-1685

Edt
Approved AS
Submitted
7/1/21

DEVELOPERS GUARANTY

Attn: Mike Fowler
City OF Raleigh Inspections

RE: **Autumn Lakes Phase 3**

LGI Homes – NC, LLC provides the following statement of warranty for the below referenced project:
Autumn Lakes Phase 3

LGI Homes – NC, LLC guarantees and warrants that all public water, public sewer and mains have been installed within the Autumn Lakes Phase 2 Subdivision adhering to the City Of Raleigh requirements, and that this warranty remain in full force and effect for a period of one year from the date of the acceptance of the work. LGI-NC, LLC hereby agrees to indemnify, defend and hold harmless the City Of Raleigh against all costs, loss and damages, including attorney fees, arising from the failure of the Work to conform to the City of Raleigh standards.

LGI Homes – NC, LLC has executed this guarantee this 6th day of June 2021.

Josh Spiegel

Josh Spiegel, V.P. Land Development
LGI Homes – NC, LLC Raleigh Corporate

Sworn to and subscribed before me this

6th day of June 2021.

[Signature]

NOTARY PUBLIC

Commission Expires: 1/19/2024



July 23, 2021

Chris Ray
 Zebulon Director of Public Works
 1003 N. Arendell Ave
 Zebulon, NC 27597

*APPROVED
 AS
 SUBMITTED
 7/26/21*

Re: Autumn Lakes Phase 3 – Core Thickness

Dear Mr. Ray,

After meeting with Town inspectors Jason Brown and Roger Silvers on site this morning at Autumn Lakes Phase 3, I believe that achieving an overall asphalt thickness of 3" is very possible in the three locations where cores showed the thickness of our first lift to be slightly less than 1.5". I request that we are permitted to leave the first lift as-is and pave the final lift slightly thicker to create a total asphalt thickness of at least 3". If final cores show a total asphalt thickness less than 3", we will remove and replace the area(s) that fall short. If all final cores show that the total asphalt thickness is equal to or greater than 3", the pavement structure will be at or exceeding the approved plan design as well as the requirements (Density and Thickness) of the Town so an extended warranty should not be necessary.

Respectfully,



Nick Beach, PE
 Paving Construction Manager



3 Locations Less Than 1.5"

	Core #	Street Name	Ave Thickness (in.)	Plan Depth 1 st layer	Final overlay Depth
1	C8, C8A, C8B	Little Patch Street	1.40	1.5 inches	3 inches
2	C11, C11A, C11B	Cider Mill Way	1.40	1.5 inches	3 inches
3	C12, C12A, C12B	Fauna Street	1.20	1.5 inches	3 inches

Note: Requirements for density were met and 16 of the 19 core locations equal to or greater than 1.5" – See Geotechnical Report

June 4, 2021

Mr. Josh Spiegel
 LGI Homes – Southeast Division
josh.spiegel@lgihomes.com

*✓ All
 Appr'd
 AS
 Submitted
 7/20/21*

**Report of Asphalt Core Testing
 Autumn Lakes Phase 3
 Zebulon, North Carolina
 Our Project Number 121-20-92322**

Gentlemen:

As requested, TerraTech Engineers, Inc. has performed thickness and density testing of asphalt core samples obtained from the recently placed initial lift along the roadways at the above referenced project. Per the Town of Zebulon's specifications, an asphalt core sample was taken every 300 linear feet of roadway with a minimum of two cores on every street. We understand that intermediate course asphalt was used in the area of Crackling Court and was sampled at core locations C15 and C16. The core locations are approximately shown on the enclosed Figure 1. The results of our laboratory thickness and density tests are provided below.

Core Location	Thickness (in.)	Density (pcf)	Compaction %
C1	2.00	138.5	92.0
C2	2.30	140.9	93.6
C3	1.60	140.1	93.0
C4	1.65	141.8	94.2
C5	1.70	142.6	94.7
C6	1.50	136.5	90.7
C7	1.50	136.1	90.4
C8	1.35	136.5	90.7
C9	1.65	137.4	91.3
C10	1.85	135.4	89.9
C11	1.45	140.4	93.2
C12	1.20	137.4	91.3
C13	1.75	140.1	93.1
C14	1.85	141.8	94.2
C17	1.70	139.4	92.5
C18	1.70	139.0	92.3
C19	2.30	140.8	93.5
Average	1.71	139.1	92.4

Core Location	Thickness (in.)	Density (pcf)	Compaction %
C15	2.75	142.7	92.1
C16	2.30	144.8	93.5
Average	2.53	143.8	92.8

The reported compaction percentages are based on mix design information for the RS9.5B surface mix 18-1416-151 and the I19.0C Intermediate mix 18-0549-151 provided to us by the asphalt supplier. RS9.5B surface course and I19.0C intermediate course asphalt mixes requires an average compaction of 90 and 92 percent per NCDOT Standard Specifications, respectively. The cores that we obtained and tested met this compaction criteria.

If you have any questions concerning this information for the Autumn Lakes Phase 3 Project, please contact us.

Sincerely,
TerraTech Engineers, Inc. (F-1333)



William D. Oakes, P.G.
Project Manager



Digitally signed by
Chris Pilz
Date: 2022.06.04

13:33:58-0400 SEAL
33173

Christopher S Pilz, P.E.
Principal Geotechnical Engineer





Base Map obtained
from client

Figure 1. Asphalt Core Locations



Not to Scale

N|V|5

July 1, 2021

Mr. Josh Spiegel
LGI Homes – Southeast Division
josh.spiegel@lgihomes.com

*Not Approved
AS
Submitted
7-14-21*

**Report of Observations
Autumn Lakes Phase 3
Zebulon, North Carolina
Our Project Number 121-20-92322**

*- subgrade reports
- ABC*

Gentlemen:

As requested, representatives of NV5 Engineers and Consultants, Inc. were periodically present at the above referenced project from April 2021 through May 2021 to perform evaluations of the soil subgrade and prepared ABC stone for the roadways at the above referenced project. More specifically, our evaluations included Turning Lake Drive, Little Patch Street, Cider Mills Way, Fauna Street, Indian Summer Street, Gusty Lane and the greenway trails at the above referenced project. Our evaluations consisted of visual observations, hand rod probing, and proofrolling observations. Proofrolling was performed with a fully loaded tandem axle dump truck or a motor grader to delineate unstable areas prior to placement of aggregate base course (ABC) stone and asphaltic concrete.

After all recommended remedial measures were performed, the soil subgrade experienced no excessive rutting or deflection beneath the proofroll load in the areas referenced above. Our representative also performed density testing on subgrade soils in the proofrolled areas. The results of our testing, which are enclosed with this report, indicated that the soils at the subgrade elevation and at the locations tested were compacted to at least 100% of their standard Proctor (ASTM D-698) maximum dry density.

Additionally, our representative was periodically present during the referenced time period to evaluate the ABC stone base in the above mentioned areas. Our evaluations consisted of visual observations and proofrolling observations. Proofrolling was performed with a fully loaded tandem axle dump truck to delineate unstable areas prior to placement of asphaltic concrete. The ABC stone base experienced no excessive rutting or deflection beneath the proofroll load in the areas referenced above. Our representative also performed density testing on the ABC stone base in the proofrolled areas. The results of our density testing, which are enclosed with this report, indicated that the ABC stone base at the locations and elevations tested was compacted to at least 98% of its NCDOT modified Proctor maximum dry density. In addition, the thickness of the ABC stone was measured to be at least 8 inches at the tested locations.

If you have any questions concerning this information for the Autumn Lakes Phase 3 project, please contact us.

Sincerely,
NV5 Engineers and Consultants, Inc. (F-1333)



William D. Oakes, P.G.
Project Manager

Digitally signed by
Chris Pilz
Date: 2021.07.02
11:04:07-04'00'
SEAL
33173
NORTH CAROLINA
PROFESSIONAL
ENGINEER
CHRISTOPHER S. PILZ

Christopher S. Pilz, P.E.
Principal Geotechnical Engineer

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Subdivision Streets Date: 4/20/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
477	120.0	22.6	98.0	98.5	22.1	92320-2	D-2937	100	100
478	120.3	22.8	98.0	98.5	22.1	92320-2	D-2937	100	100
479	120.2	22.5	98.1	98.5	22.1	92320-2	D-2937	100	100
480	120.4	22.6	98.2	98.5	22.1	92320-2	D-2937	100	100
481	120.1	22.3	98.2	98.5	22.1	92320-2	D-2937	100	100
482	120.2	22.1	98.4	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
477	Turning Lake Dr., station 12+50	Subgrade
478	Fauna St., station 13+00	Subgrade
479	Indian Summer St., station 17+00	Subgrade
480	Crackling Ct., station 29+00	Subgrade
481	Cider Mill Way, station 14+50	Subgrade
482	Cider Mill Way, station 16+50	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

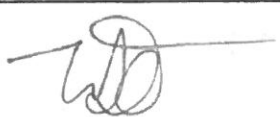
Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Subdivision Streets Date: 4/23/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
483	119.9	22.3	98.0	98.5	22.1	92320-2	D-2937	100	100
484	120.2	22.0	98.5	98.5	22.1	92320-2	D-2937	100	100
485	120.0	22.2	98.2	98.5	22.1	92320-2	D-2937	100	100
486	120.2	22.4	98.2	98.5	22.1	92320-2	D-2937	100	100
487	119.9	22.2	98.1	98.5	22.1	92320-2	D-2937	100	100
488	120.4	22.5	98.3	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
483	Turning Lake Dr., station 15+00	Subgrade
484	Cider Mill Way, station 13+00	Subgrade
485	Fauna Street, station 11+50	Subgrade
486	Crackling Ct., station 27+00	Subgrade
487	Indian Summer St., station 13+00	Subgrade
488	Indian Summer St., station 15+50	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Subgrade Soil Date: 4/26/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
489	120.2	22.5	98.1	98.5	22.1	92320-2	D-2937	100	100
490	120.1	22.1	98.4	98.5	22.1	92320-2	D-2937	100	100
491	120.3	22.1	98.5	98.5	22.1	92320-2	D-2937	100	100
492	120.2	22.3	98.2	98.5	22.1	92320-2	D-2937	100	100
493	120.0	22.0	98.4	98.5	22.1	92320-2	D-2937	100	100
494	120.2	22.4	98.2	98.5	22.1	92320-2	D-2937	100	100
495	120.3	22.4	98.3	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
489	Road, station 18+50	Subgrade
490	Road, station 21+50	Subgrade
491	Road, station 24+50	Subgrade
492	Road, station 26+00	Subgrade
493	Road, station 28+50	Subgrade
494	Road, station 30+50	Subgrade
495	Center if cul de sac	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans


Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Gusty Lane & Little Patch Street Date: 4/26/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
496	119.9	21.9	98.3	98.5	22.1	92320-2	D-2937	100	100
497	120.1	22.2	98.3	98.5	22.1	92320-2	D-2937	100	100
498	120.0	22.0	98.4	98.5	22.1	92320-2	D-2937	100	100
499	120.2	22.3	98.3	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
496	Gusty Ln., station 11+00	Subgrade
497	Gusty Ln., station 14+00	Subgrade
498	Gusty Ln. cul de sac	Subgrade
499	Little Patch St., station 13+50	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

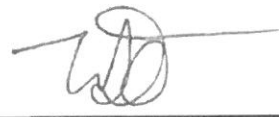
Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 1 of 2
 Location: Streets Stone Base Date: 5/14/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
503	141.0	2.4	137.7	138.1	5.4	QC-0304	D-6938	100	98
504	142.4	2.7	138.7	138.1	5.4	QC-0304	D-6938	100	98
505	142.8	2.5	139.3	138.1	5.4	QC-0304	D-6938	100	98
506	142.3	2.6	138.7	138.1	5.4	QC-0304	D-6938	100	98
507	142.3	2.5	138.8	138.1	5.4	QC-0304	D-6938	100	98
508	143.4	3.0	139.2	138.1	5.4	QC-0304	D-6938	100	98
509	142.1	2.9	138.1	138.1	5.4	QC-0304	D-6938	100	98
510	142.4	3.2	138.0	138.1	5.4	QC-0304	D-6938	100	98
511	141.6	2.9	137.6	138.1	5.4	QC-0304	D-6938	100	98
512	143.0	3.3	138.4	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
503	Crackling Ct., at Lot 364	Stone SG
504	Crackling Ct., at Lot 366	Stone SG
505	Crackling Ct., at Lot 368	Stone SG
506	Gusty Ln., at Lot 322	Stone SG
507	Gusty Ln., at Lot 325	Stone SG
508	Gusty Ln., at Lot 328	Stone SG
509	Gustly Ln., center of cul de sac	Stone SG
510	Indian Summer St., station 11+50	Stone SG
511	Indian Summer St., station 13+00	Stone SG
512	Indian Summer St., station 14+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans


Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 2 of 2
 Location: Streets Stone Base Date: 5/14/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
513	142.1	2.8	138.2	138.1	5.4	QC-0304	D-6938	100	98
514	141.5	3.0	137.4	138.1	5.4	QC-0304	D-6938	100	98


Test No.	LOCATION OF TESTS	Elevation
513	Indian Summer St., station 16+00	Stone SG
514	Indian Summer St., station 17+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 1 of 2
 Location: Streets Stone Base Date: 5/17/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
515	142.4	2.4	139.1	138.1	5.4	QC-0304	D-6938	100	98
516	141.6	2.5	138.1	138.1	5.4	QC-0304	D-6938	100	98
517	142.0	2.6	138.4	138.1	5.4	QC-0304	D-6938	100	98
518	141.2	2.5	137.8	138.1	5.4	QC-0304	D-6938	100	98
519	140.9	2.6	137.3	138.1	5.4	QC-0304	D-6938	100	98
520	142.4	2.8	138.5	138.1	5.4	QC-0304	D-6938	100	98
521	141.5	2.6	137.9	138.1	5.4	QC-0304	D-6938	100	98
522	142.0	2.4	138.7	138.1	5.4	QC-0304	D-6938	100	98
523	141.4	2.7	137.7	138.1	5.4	QC-0304	D-6938	100	98
524	142.6	2.8	138.7	138.1	5.4	QC-0304	D-6938	100	98


Test No.	LOCATION OF TESTS	Elevation
515	Fauna St., station 11+50	Stone SG
516	Fauna St., station 13+00	Stone SG
517	Cider Mill Way, station 11+50	Stone SG
518	Cider Mill Way, station 13+00	Stone SG
519	Cider Mill Way, station 14+50	Stone SG
520	Cider Mill Way, station 16+00	Stone SG
521	Cider Mill Way, station 17+50	Stone SG
522	Little Patch St., station 11+50	Stone SG
523	Little Patch St., station 13+00	Stone SG
524	Little Patch St., station 14+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 2 of 2
 Location: Streets Stone Base Date: 5/17/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
525	141.0	2.5	137.6	138.1	5.4	QC-0304	D-6938	100	98
526	142.5	2.6	138.9	138.1	5.4	QC-0304	D-6938	100	98
527	140.8	2.8	137.0	138.1	5.4	QC-0304	D-6938	99	98
528	142.1	2.6	138.5	138.1	5.4	QC-0304	D-6938	100	98
529	141.5	2.5	138.0	138.1	5.4	QC-0304	D-6938	100	98
530	142.4	2.8	138.5	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
525	Little Patch St., station 16+00	Stone SG
526	Turning Lake Dr., station 11+50	Stone SG
527	Turning Lake Dr., station 13+00	Stone SG
528	Turning Lake Dr., station 14+50	Stone SG
529	Turning Lake Dr., station 16+00	Stone SG
530	Turning Lake Dr., station 17+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

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 Raleigh, North Carolina 27609
 Phone (919) 876-9799 Fax (919) 876-8291
www.nv5.com

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 1 of 1
 Location: Streets Stone Base Date: 5/17/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
531	140.9	2.7	134.2	138.1	5.4	QC-0304	D-6938	99	98
532	141.5	2.5	138.0	138.1	5.4	QC-0304	D-6938	100	98
533	142.0	2.8	138.1	138.1	5.4	QC-0304	D-6938	100	98
534	141.7	2.7	138.0	138.1	5.4	QC-0304	D-6938	100	98
535	140.8	2.5	137.4	138.1	5.4	QC-0304	D-6938	100	98
536	142.0	2.6	138.4	138.1	5.4	QC-0304	D-6938	100	98
537	141.4	2.7	137.7	138.1	5.4	QC-0304	D-6938	100	98
538	141.7	2.5	138.2	138.1	5.4	QC-0304	D-6938	100	98
539	142.0	2.6	138.4	138.1	5.4	QC-0304	D-6938	100	98
540	141.6	2.7	137.9	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
531	Turning Lake Dr., station 19+00	Stone SG
532	Turning Lake Dr., station 20+50	Stone SG
533	Turning Lake Dr., station 22+00	Stone SG
534	Turning Lake Dr., station 23+50	Stone SG
535	Turning Lake Dr., station 25+00	Stone SG
536	Turning Lake Dr., station 26+50	Stone SG
537	Turning Lake Dr., station 28+00	Stone SG
538	Turning Lake Dr., station 29+50	Stone SG
539	Turning Lake Dr. cul de sac, NE side	Stone SG
540	Turning Lake Dr. cul de sac, SW side	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Walking Trail Date: 5/21/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
541	120.0	21.9	98.4	98.5	22.1	92320-2	D-2937	100	100
542	119.7	22.1	98.1	98.5	22.1	92320-2	D-2937	100	100
543	120.2	22.0	98.5	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
541	1,300' from Phase 1 boundary	Subgrade
542	50' from Turning Lake Dr. cul de sac	Subgrade
543	50' from Turning Lake Dr. parking lot	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Walking Trail Date: 5/21/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
544	120.2	22.1	98.5	98.5	22.1	92320-2	D-2937	100	100
545	120.0	22.3	98.1	98.5	22.1	92320-2	D-2937	100	100
546	120.4	22.1	98.0	98.5	22.1	92320-2	D-2937	100	100


Test No.	LOCATION OF TESTS	Elevation
544	300' from Phase 1 boundary	Subgrade
545	600' from Phase 1 boundary	Subgrade
546	900' from Phase 1 boundary	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Stafford Report Number: 1 of 2
 Location: Greenway Trail Date: 6/24/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
548	142.5	5.0	135.7	138.1	5.4	QC-0304	D-6938	98	98
549	143.4	5.2	136.3	138.1	5.4	QC-0304	D-6938	99	98
550	143.1	4.8	136.5	138.1	5.4	QC-0304	D-6938	99	98
551	144.0	5.0	137.1	138.1	5.4	QC-0304	D-6938	99	98
552	144.3	5.1	137.3	138.1	5.4	QC-0304	D-6938	99	98
553	143.0	4.7	136.6	138.1	5.4	QC-0304	D-6938	99	98
554	144.5	5.0	137.6	138.1	5.4	QC-0304	D-6938	100	98
555	143.7	5.2	136.6	138.1	5.4	QC-0304	D-6938	99	98
556	144.1	4.7	137.6	138.1	5.4	QC-0304	D-6938	100	98
557	143.9	5.1	136.9	138.1	5.4	QC-0304	D-6938	99	98

Test No.	LOCATION OF TESTS	Elevation
548	150' from Phase 1 line	Stone SG
549	300' from Phase 1 line	Stone SG
550	450' from Phase 1 line	Stone SG
551	600' from Phase 1 line	Stone SG
552	750' from Phase 1 line	Stone SG
553	900' from Phase 1 line	Stone SG
554	1050' from Phase 1 line	Stone SG
555	1200' from Phase 1 line	Stone SG
556	1350' from Phase 1 line	Stone SG
557	1500' from Phase 1 line	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 38081

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Stafford Report Number: 2 of 2
 Location: Greenway Trail Date: 6/24/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
558	144.3	5.0	137.4	138.1	5.4	QC-0304	D-6938	100	98
559	143.7	4.8	137.1	138.1	5.4	QC-0304	D-6938	99	98
560	144.0	5.3	136.8	138.1	5.4	QC-0304	D-6938	99	98
561	143.5	5.0	136.7	138.1	5.4	QC-0304	D-6938	99	98
562	144.3	4.8	137.7	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
558	Greenway Trail at center of Lot 428	Stone SG
559	Greenway Trail 200' from Turning Lake Dr. cul de sac	Stone SG
560	Greenway Trail at pond 1 outlet	Stone SG
561	Greenway Trail between center of Lots 441 & 442	Stone SG
562	Greenway Trail 150' from Lots 441 & 442	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans


Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 38081

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Lot 445 Date: 4/13/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
472	119.5	22.9	97.2	98.5	22.1	92320-2	D-2937	99	95
473	119.9	22.7	97.7	98.5	22.1	92320-2	D-2937	99	95

Test No.	LOCATION OF TESTS	Elevation
472	Lot 445	-5
473	Lot 445	-4

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Lot 446 Date: 4/15/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
474	117.7	22.5	96.0	98.5	22.1	92320-2	D-2937	98	95
475	118.7	22.3	97.1	98.5	22.1	92320-2	D-2937	99	95
476	119.5	22.4	97.6	98.5	22.1	92320-2	D-2937	99	95

Test No.	LOCATION OF TESTS	Elevation
474	Approximate center of Lot 446	-7
475	Approximate center of Lot 446	-6
476	Approximate center of Lot 446	-5

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Subdivision Streets Date: 4/20/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
477	120.0	22.6	98.0	98.5	22.1	92320-2	D-2937	100	100
478	120.3	22.8	98.0	98.5	22.1	92320-2	D-2937	100	100
479	120.2	22.5	98.1	98.5	22.1	92320-2	D-2937	100	100
480	120.4	22.6	98.2	98.5	22.1	92320-2	D-2937	100	100
481	120.1	22.3	98.2	98.5	22.1	92320-2	D-2937	100	100
482	120.2	22.1	98.4	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
477	Turning Lake Dr., station 12+50	Subgrade
478	Fauna St., station 13+00	Subgrade
479	Indian Summer St., station 17+00	Subgrade
480	Crackling Ct., station 29+00	Subgrade
481	Cider Mill Way, station 14+50	Subgrade
482	Cider Mill Way, station 16+50	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Subdivision Streets Date: 4/23/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
483	119.9	22.3	98.0	98.5	22.1	92320-2	D-2937	100	100
484	120.2	22.0	98.5	98.5	22.1	92320-2	D-2937	100	100
485	120.0	22.2	98.2	98.5	22.1	92320-2	D-2937	100	100
486	120.2	22.4	98.2	98.5	22.1	92320-2	D-2937	100	100
487	119.9	22.2	98.1	98.5	22.1	92320-2	D-2937	100	100
488	120.4	22.5	98.3	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
483	Turning Lake Dr., station 15+00	Subgrade
484	Cider Mill Way, station 13+00	Subgrade
485	Fauna Street, station 11+50	Subgrade
486	Crackling Ct., station 27+00	Subgrade
487	Indian Summer St., station 13+00	Subgrade
488	Indian Summer St., station 15+50	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Subgrade Soil Date: 4/26/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
489	120.2	22.5	98.1	98.5	22.1	92320-2	D-2937	100	100
490	120.1	22.1	98.4	98.5	22.1	92320-2	D-2937	100	100
491	120.3	22.1	98.5	98.5	22.1	92320-2	D-2937	100	100
492	120.2	22.3	98.2	98.5	22.1	92320-2	D-2937	100	100
493	120.0	22.0	98.4	98.5	22.1	92320-2	D-2937	100	100
494	120.2	22.4	98.2	98.5	22.1	92320-2	D-2937	100	100
495	120.3	22.4	98.3	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
489	Road, station 18+50	Subgrade
490	Road, station 21+50	Subgrade
491	Road, station 24+50	Subgrade
492	Road, station 26+00	Subgrade
493	Road, station 28+50	Subgrade
494	Road, station 30+50	Subgrade
495	Center if cul de sac	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Gusty Lane & Little Patch Street Date: 4/26/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
496	119.9	21.9	98.3	98.5	22.1	92320-2	D-2937	100	100
497	120.1	22.2	98.3	98.5	22.1	92320-2	D-2937	100	100
498	120.0	22.0	98.4	98.5	22.1	92320-2	D-2937	100	100
499	120.2	22.3	98.3	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
496	Gusty Ln., station 11+00	Subgrade
497	Gusty Ln., station 14+00	Subgrade
498	Gusty Ln. cul de sac	Subgrade
499	Little Patch St., station 13+50	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Lots 444 & 445 Date: 5/4/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
500	118.7	22.4	97.0	98.5	22.1	92320-2	D-2937	99	95
501	119.3	22.2	97.6	98.5	22.1	92320-2	D-2937	99	95


Test No.	LOCATION OF TESTS	Elevation
500	Lot 444	-2
501	Lot 445	-2

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Lot 445 Date: 5/11/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
502	118.2	22.6	96.4	98.5	22.1	92320-2	D-2937	98	95

Test No.	LOCATION OF TESTS	Elevation
502	Lot 445	-1

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans


Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 1 of 2
 Location: Streets Stone Base Date: 5/14/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
503	141.0	2.4	137.7	138.1	5.4	QC-0304	D-6938	100	98
504	142.4	2.7	138.7	138.1	5.4	QC-0304	D-6938	100	98
505	142.8	2.5	139.3	138.1	5.4	QC-0304	D-6938	100	98
506	142.3	2.6	138.7	138.1	5.4	QC-0304	D-6938	100	98
507	142.3	2.5	138.8	138.1	5.4	QC-0304	D-6938	100	98
508	143.4	3.0	139.2	138.1	5.4	QC-0304	D-6938	100	98
509	142.1	2.9	138.1	138.1	5.4	QC-0304	D-6938	100	98
510	142.4	3.2	138.0	138.1	5.4	QC-0304	D-6938	100	98
511	141.6	2.9	137.6	138.1	5.4	QC-0304	D-6938	100	98
512	143.0	3.3	138.4	138.1	5.4	QC-0304	D-6938	100	98


Test No.	LOCATION OF TESTS	Elevation
503	Crackling Ct., at Lot 364	Stone SG
504	Crackling Ct., at Lot 366	Stone SG
505	Crackling Ct., at Lot 368	Stone SG
506	Gusty Ln., at Lot 322	Stone SG
507	Gusty Ln., at Lot 325	Stone SG
508	Gusty Ln., at Lot 328	Stone SG
509	Gusty Ln., center of cul de sac	Stone SG
510	Indian Summer St., station 11+50	Stone SG
511	Indian Summer St., station 13+00	Stone SG
512	Indian Summer St., station 14+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 2 of 2
 Location: Streets Stone Base Date: 5/14/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
513	142.1	2.8	138.2	138.1	5.4	QC-0304	D-6938	100	98
514	141.5	3.0	137.4	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
513	Indian Summer St., station 16+00	Stone SG
514	Indian Summer St., station 17+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 1 of 2
 Location: Streets Stone Base Date: 5/17/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
515	142.4	2.4	139.1	138.1	5.4	QC-0304	D-6938	100	98
516	141.6	2.5	138.1	138.1	5.4	QC-0304	D-6938	100	98
517	142.0	2.6	138.4	138.1	5.4	QC-0304	D-6938	100	98
518	141.2	2.5	137.8	138.1	5.4	QC-0304	D-6938	100	98
519	140.9	2.6	137.3	138.1	5.4	QC-0304	D-6938	100	98
520	142.4	2.8	138.5	138.1	5.4	QC-0304	D-6938	100	98
521	141.5	2.6	137.9	138.1	5.4	QC-0304	D-6938	100	98
522	142.0	2.4	138.7	138.1	5.4	QC-0304	D-6938	100	98
523	141.4	2.7	137.7	138.1	5.4	QC-0304	D-6938	100	98
524	142.6	2.8	138.7	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
515	Fauna St., station 11+50	Stone SG
516	Fauna St., station 13+00	Stone SG
517	Cider Mill Way, station 11+50	Stone SG
518	Cider Mill Way, station 13+00	Stone SG
519	Cider Mill Way, station 14+50	Stone SG
520	Cider Mill Way, station 16+00	Stone SG
521	Cider Mill Way, station 17+50	Stone SG
522	Little Patch St., station 11+50	Stone SG
523	Little Patch St., station 13+00	Stone SG
524	Little Patch St., station 14+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans


Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 2 of 2
 Location: Streets Stone Base Date: 5/17/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
525	141.0	2.5	137.6	138.1	5.4	QC-0304	D-6938	100	98
526	142.5	2.6	138.9	138.1	5.4	QC-0304	D-6938	100	98
527	140.8	2.8	137.0	138.1	5.4	QC-0304	D-6938	99	98
528	142.1	2.6	138.5	138.1	5.4	QC-0304	D-6938	100	98
529	141.5	2.5	138.0	138.1	5.4	QC-0304	D-6938	100	98
530	142.4	2.8	138.5	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
525	Little Patch St., station 16+00	Stone SG
526	Turning Lake Dr., station 11+50	Stone SG
527	Turning Lake Dr., station 13+00	Stone SG
528	Turning Lake Dr., station 14+50	Stone SG
529	Turning Lake Dr., station 16+00	Stone SG
530	Turning Lake Dr., station 17+50	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Heston Report Number: 1 of 1
 Location: Streets Stone Base Date: 5/17/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
531	140.9	2.7	134.2	138.1	5.4	QC-0304	D-6938	99	98
532	141.5	2.5	138.0	138.1	5.4	QC-0304	D-6938	100	98
533	142.0	2.8	138.1	138.1	5.4	QC-0304	D-6938	100	98
534	141.7	2.7	138.0	138.1	5.4	QC-0304	D-6938	100	98
535	140.8	2.5	137.4	138.1	5.4	QC-0304	D-6938	100	98
536	142.0	2.6	138.4	138.1	5.4	QC-0304	D-6938	100	98
537	141.4	2.7	137.7	138.1	5.4	QC-0304	D-6938	100	98
538	141.7	2.5	138.2	138.1	5.4	QC-0304	D-6938	100	98
539	142.0	2.6	138.4	138.1	5.4	QC-0304	D-6938	100	98
540	141.6	2.7	137.9	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
531	Turning Lake Dr., station 19+00	Stone SG
532	Turning Lake Dr., station 20+50	Stone SG
533	Turning Lake Dr., station 22+00	Stone SG
534	Turning Lake Dr., station 23+50	Stone SG
535	Turning Lake Dr., station 25+00	Stone SG
536	Turning Lake Dr., station 26+50	Stone SG
537	Turning Lake Dr., station 28+00	Stone SG
538	Turning Lake Dr., station 29+50	Stone SG
539	Turning Lake Dr. cul de sac, NE side	Stone SG
540	Turning Lake Dr. cul de sac, SW side	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans


Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 37926

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Walking Trail Date: 5/21/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
541	120.0	21.9	98.4	98.5	22.1	92320-2	D-2937	100	100
542	119.7	22.1	98.1	98.5	22.1	92320-2	D-2937	100	100
543	120.2	22.0	98.5	98.5	22.1	92320-2	D-2937	100	100

Test No.	LOCATION OF TESTS	Elevation
541	1,300' from Phase 1 boundary	Subgrade
542	50' from Turning Lake Dr. cul de sac	Subgrade
543	50' from Turning Lake Dr. parking lot	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by:  _____

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Walking Trail Date: 5/21/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
544	120.2	22.1	98.5	98.5	22.1	92320-2	D-2937	100	100
545	120.0	22.3	98.1	98.5	22.1	92320-2	D-2937	100	100
546	120.4	22.1	98.0	98.5	22.1	92320-2	D-2937	100	100


Test No.	LOCATION OF TESTS	Elevation
544	300' from Phase 1 boundary	Subgrade
545	600' from Phase 1 boundary	Subgrade
546	900' from Phase 1 boundary	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans
 Depth referenced from: Contractor
 Full Time Monitoring: Yes No
 Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Aaron Williams Report Number: 1 of 1
 Location: Lot 449 Date: 5/28/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
547	119.4	22.8	97.2	98.5	22.1	92320-2	D-2937	99	98

Test No.	LOCATION OF TESTS	Elevation
547	Lot 449	Subgrade

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: _____

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
92320-2	D-698	98.5	22.1

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Stafford Report Number: 1 of 2
 Location: Greenway Trail Date: 6/24/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
548	142.5	5.0	135.7	138.1	5.4	QC-0304	D-6938	98	98
549	143.4	5.2	136.3	138.1	5.4	QC-0304	D-6938	99	98
550	143.1	4.8	136.5	138.1	5.4	QC-0304	D-6938	99	98
551	144.0	5.0	137.1	138.1	5.4	QC-0304	D-6938	99	98
552	144.3	5.1	137.3	138.1	5.4	QC-0304	D-6938	99	98
553	143.0	4.7	136.6	138.1	5.4	QC-0304	D-6938	99	98
554	144.5	5.0	137.6	138.1	5.4	QC-0304	D-6938	100	98
555	143.7	5.2	136.6	138.1	5.4	QC-0304	D-6938	99	98
556	144.1	4.7	137.6	138.1	5.4	QC-0304	D-6938	100	98
557	143.9	5.1	136.9	138.1	5.4	QC-0304	D-6938	99	98

Test No.	LOCATION OF TESTS	Elevation
548	150' from Phase 1 line	Stone SG
549	300' from Phase 1 line	Stone SG
550	450' from Phase 1 line	Stone SG
551	600' from Phase 1 line	Stone SG
552	750' from Phase 1 line	Stone SG
553	900' from Phase 1 line	Stone SG
554	1050' from Phase 1 line	Stone SG
555	1200' from Phase 1 line	Stone SG
556	1350' from Phase 1 line	Stone SG
557	1500' from Phase 1 line	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 38081

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

Field Density Test Report

Project Name: Autumn Lakes, Phase 3 Project Number: 92322
 Technician: Chris Stafford Report Number: 2 of 2
 Location: Greenway Trail Date: 6/24/21

Test No.	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Maximum Dry Density (pcf)	Optimum Moisture (%)	Proctor Control No.	ASTM Test Method	Compaction (%)	Required Compaction
558	144.3	5.0	137.4	138.1	5.4	QC-0304	D-6938	100	98
559	143.7	4.8	137.1	138.1	5.4	QC-0304	D-6938	99	98
560	144.0	5.3	136.8	138.1	5.4	QC-0304	D-6938	99	98
561	143.5	5.0	136.7	138.1	5.4	QC-0304	D-6938	99	98
562	144.3	4.8	137.7	138.1	5.4	QC-0304	D-6938	100	98

Test No.	LOCATION OF TESTS	Elevation
558	Greenway Trail at center of Lot 428	Stone SG
559	Greenway Trail 200' from Turning Lake Dr. cul de sac	Stone SG
560	Greenway Trail at pond 1 outlet	Stone SG
561	Greenway Trail between center of Lots 441 & 442	Stone SG
562	Greenway Trail 150' from Lots 441 & 442	Stone SG

Locations of tests should be considered approximate, and only accurate to the degree capable from measuring distances relative to reference points provided by others. Compaction of areas not specifically tested should not be inferred from these results.

Locations referenced from: Plans

Depth referenced from: Contractor

Full Time Monitoring: Yes No

Nuclear Gauge S/N: 38081

Proctor Control No.	Proctor Specification	Maximum Dry Density (pcf)	Optimum Moisture (%)
QC-0304	NCDOT	138.1	5.4

Remarks

Reviewed by: 

May 21, 2021
Via Electronic Mail

*✓ CPT
Approved
As
Submitted*

RE: Autumn Lakes Subdivision-Phase 3
0 Old Bunn Road
Zebulon, NC 27597
BE # NCR162057

Engineer Certified Statement for Water Installation

I, Steven Keidel, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically, the construction of the project, Autumn Lakes Subdivision Phase 3, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that by my inspection of the constructed improvements and my review of the as-built survey data, I hereby certify that the (1) public improvements, (2) private improvements, and (3) public safety of the above referenced project as constructed are in compliance with the requirements of the improvements as prescribed in the approved Construction Drawings, approved design documents, and/or any approved modifications, except as noted in red on the 'As-Built' drawings. Furthermore, I certify that the red-noted exceptions do not adversely affect the required performance or public safety aspects of the improvements.

Name: Steven Keidel



2021.05.21

Engineer Certified Statement for Sewer Installation

I, Steven Keidel, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically, the construction of the project, Autumn Lakes Subdivision Phase 3, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that by my inspection of the constructed improvements and my review of the as-built survey data, I hereby certify that the (1) public improvements, (2) private improvements, and (3) public safety of the above referenced project as constructed are in compliance with the requirements of the improvements as prescribed in the approved Construction Drawings, approved design documents, and/or any approved modifications, except as noted in red on the 'As-Built' drawings. Furthermore, I certify that the red-noted exceptions do not adversely affect the required performance or public safety aspects of the improvements.

Name: Steven Keidel

✓
AS
APPROVED
AS
Submitted



2021.05.21

PARTIAL WAIVER AND RELEASE OF LIEN BY SUBCONTRACTOR OR SUPPLIER


✓
APPROVED
AS
SUBMITTED
7/1/21

The undersigned **Wynn Site Development Inc.** (hereinafter referred to as "Subcontractor"), as a subcontractor, materialman, supplier or other person who furnished services, labor, materials and/or equipment in the construction, renovation or improvement of the real property located at **0 Old Bunn Road - Zebulon NC 27597-Autumn Lakes Subdivision Phase 3** -(the "Premises"), to **LGI Homes - NC, LLC.** (hereinafter referred to as "General Contractor"), acknowledges and confirms as follows:

In consideration of the payment of \$0 and other valuable consideration received and acknowledged, this document is immediately effective as a partial waiver, release and relinquishment by subcontractor of: (1) any and all claims for payment which the subcontractor has or may have, now or in the future, against any party, including but not limited to the General Contractor and **Autumn Lakes Subdivision Phase 3.** (hereinafter referred to as "Owner"), arising from services, labor, materials and/or equipment provided on the Premises; and (2) any and all liens or rights to claim a lien on the Premises which Subcontractor has or may have in any way arising out of the or related to services, labor, materials and/or equipment provided on the Premises up and through the date of **07/01/21**, excepting those rights and liens that the Subcontractor might have in any retainage amounts.

The undersigned certifies that all of its material and equipment suppliers, subcontractors and employees have been paid and the undersigned agrees to fully indemnify and hold completely harmless the Owner and General Contractor in the event of any claims hereafter asserted by or on behalf of Subcontractor's material and equipment suppliers, subcontractors, or its or their employees.

This the 1st day of July 2021.


Wynn Site Development
165 Sommerville Park Road
Raleigh, NC 27603

THIS FORM MUST BE WITNESSED BY A NOTARY PUBLIC THAT IT IS SIGNED BY A CORPORATE OFFICER, OWNER, OR AUTHORIZED SIGNER PER EXHIBIT "I".

State of North Carolina
County of WAKE

Derek Shankweiler, Catherine Holland Smith a Notary Public for said county and state, do hereby certify that Derek Shankweiler and Catherine Holland Smith personally appeared before me this day and acknowledged the foregoing instrument. Witness my hand and official seal this the 1 day of July, 2021.


(Notary Public)

(Official Seal)
Catherine Holland Smith
NOTARY PUBLIC
My Commission Expires May 22 2025
Watauga County, NC
My Commission Expires May 22 2025

*Check
7/11/21
Approved
AS
Submitted*

	Job
--	-----

Run Type For Active Southeast Division North Carolina Autumn Lakes Allocations and all child jobs
Low Month Year
High Month Year
Date Report Ran 06/29/2021

Activity Code	Description	Vendor Name	Typical Work	PO Number	Invoice Number	Amount	Check Number	Check Date
14300	Entrance	Duke Energy Progress			N36311923	\$12,821.81	00027507	4/17/2020
14300	Entrance	Duke Energy Progress			N36312030	\$20,068.92	00027507	4/17/2020
15100	Other Fees	Duke Energy Progress			Check	\$150.00	00022120	8/15/2019
15100	Other Fees	Duke Energy Progress			CRL0000208	\$21,183.86	00032430	4/9/2021

LGI Homes
 Cost_History

Paid Dollars	Variance Request	Adjustment	Transaction Control Data					Accounting Amount	Payment Request	Source	Flagged as paid	Job
			Batch	Reference	Year	Month	Date					
\$12,821.81			001530	0154	2020	04	4/15/2020	\$12,821.81	26152	LandDev/New		Active Southeast
\$20,068.92			001530	0155	2020	04	4/15/2020	\$20,068.92	26156	LandDev/New		Active Southeast
\$150.00			001211	0005	2019	08	8/9/2019	\$150.00	10161	LandDev/New		Active Southeast
\$21,183.86			002002	0148	2021	04	4/5/2021	\$21,183.86	54474	LandDev/New		Active Southeast

AS-BUILTS FOR AUTUMN LAKES SUBDIVISION PHASE III (TRC 2019-03)

CONTACT INFORMATION

REFERENCES

SURVEY
TOPOGRAPHY SURVEY OF GAY FAMILY PARTNERSHIP II
PREPARED BY BOHLER ENGINEERING NC, PLLC
PLATTS ASSOCIATED JOB NO. 1903021
DATED: 10/09/19

TOPOGRAPHIC SURVEY
PREPARED BY BOHLER ENGINEERING NC, PLLC
BOHLER ENGINEERING JOB NO. 1903021
DATED: 09/17

GEOTECHNICAL INVESTIGATION REPORT
SUMMARY OF GEOTECHNICAL EVALUATION FOR BUNN ROAD SITE
PREPARED BY S.M. SMITH ENGINEERING, LABORATORY & TESTING, INC.
S.M. SMITH PROJECT NO. 121048
DATED: 10/10/14

SUMMARY OF GEOTECHNICAL EVALUATION 1027 OLD BUNN ROAD PROPERTY
PREPARED BY S.M. SMITH ENGINEERING, LABORATORY & TESTING, INC.
S.M. SMITH PROJECT NO. 121048
DATED: 10/10/14

ENVIRONMENTAL SITE ASSESSMENT
PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR BUNN ROAD SITE
PREPARED BY S.M. SMITH ENGINEERING, LABORATORY & TESTING, INC.
S.M. SMITH PROJECT NO. 121048
DATED: 09/30/14

PHASE I ENVIRONMENTAL SITE ASSESSMENT OLD BUNN ROAD SITE
PREPARED BY S.M. SMITH ENGINEERING, LABORATORY & TESTING, INC.
S.M. SMITH PROJECT NO. 428230-2
DATED: 11/22/14

TRAFFIC ASSESSMENT
TRAFFIC IMPACT STUDY FOR AUTUMN LAKES
PREPARED BY BARRY W. TAP & ASSOCIATES, INC.
DATE: 11/22/14

GOVERNING AGENCIES

TOWN OF ZEBULON PLANNING DEPARTMENT
200 S. WILSON ST.
ZEBULON, NC 27597
CONTACT: TERRY GAFFNER, PLANNING DIVISION
PHONE: 919.753.1900
FAX: 919.753.1900

CITY OF RALEIGH PUBLIC UTILITY DEPARTMENT
ONE COURAGE LANE
RALEIGH, NC 27601
919.966.6474

WAKE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT
108 W. WELLS STREET
RALEIGH, NC 27601
919.709.4800

NC DEPARTMENT OF TRANSPORTATION DIVISION 5
ONE S. WILSON STREET
RALEIGH, NC 27601
919.709.4800

OWNERS

GAY FAMILY LIMITED PARTNERSHIP II
108 W. WELLS STREET
RALEIGH, NC 27601

BUNN EGGAR ROGER III HEIRS
108 W. WELLS STREET
RALEIGH, NC 27601

DEVELOPER

LGI HOMES, INC.
1001 W. WELLS STREET
RALEIGH, NC 27601
CONTACT: ROBERT WOODRUFF
www.lgihomes.com

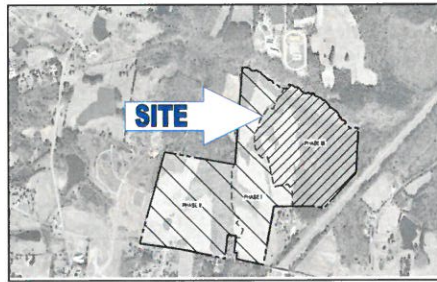
UTILITY SERVICE CONTACTS

SERVICE	UTILITY / GOVERNING AGENCY
TOWN OF ZEBULON PUBLIC WORKS	400 S. WILSON STREET ZEBULON, NC 27597 ELECTRIC: JAMES ANDERSON, SENIOR ELECTRICAL INSPECTOR (919) 753-1900 WATER: COREY BUCK, PUBLIC WORKS DIVISION UTILITY: LORI STANLEY, PUBLIC WORKS DIVISION (919) 753-1900
WATER AND SEWER	1001 W. WELLS STREET RALEIGH, NC 27601 WATER: ROBERT WOODRUFF, DIRECTOR PHONE: 919.966.6474
SEWER AND FROUGH CONTROL	SEWERWATER MANAGEMENT DIVISION 1001 W. WELLS STREET RALEIGH, NC 27601 PHONE: 919.966.6474
ELECTRIC	DUKE ENERGY 111 W. WELLS STREET RALEIGH, NC 27601 PHONE: 919.966.6474
TELEPHONE/CABLE	TIME WARNER CABLE 200 ATLANTIC AVENUE # 1901 RALEIGH, NC 27601 PHONE: 919.966.6474

LOCATION OF SITE

0 OLD BUNN ROAD
ZEBULON, NC 27597

PIN # 2706615785; 2706729236; 2706514158
WAKE COUNTY, NORTH CAROLINA



LOCATION MAP
COPYRIGHT BY MAPS & TECH SERVICES CORPORATION



INFRASTRUCTURE TABLE

INFRASTRUCTURE	PUBLIC		TOTAL
	WATER	SEWER	
10" RCP	1875 LF	1564 LF	
16" RCP	207 LF	48 LF	
24" RCP	1,326 LF	87 LF	
30" RCP	1,204 LF	87 LF	
36" RCP	288 LF	134 LF	
42" RCP	171 LF	145 LF	
48" RCP	149 LF	51 LF	
TOTAL	7813 LF	2060 LF	
LIGHTING			
STREET LIGHTS	37	2	

PUBLIC IMPROVEMENT QUANTITIES

PHASE NUMBER(S)	3
TOTAL NUMBER OF LOTS	466
LOT NUMBER(S) BY PHASE	PHASE 1: 131
LOT NUMBER(S) BY PHASE	PHASE 2: 166
LOT NUMBER(S) BY PHASE	PHASE 3: 169
PHASE III PUBLIC UTILITIES	
PUBLIC SEWER (S.F.)	6,416
PUBLIC WATER (S.F.)	3,848
PHASE III PUBLIC STREETS	
BISECTIONAL COLLECTOR (S.F.)	218
LOCAL STREET (S.F.)	6,348
PUBLIC SIDEWALK (S.F.)	7,027

ROADWAY DATA TABLE

STREET NAME	CLASSIFICATION	DESIGN POSTED SPEED	PUBLIC OR PRIVATE	LENGTH OR NEW ROAD
CRACKS RD COURT	COLLECTOR	30/25	PUBLIC	379'
TEMPORAL LANE DRIVE	LOCAL STREET	30/25	PUBLIC	2,506'
LITTLE PATCH STREET	LOCAL STREET	30/25	PUBLIC	841'
GOER MILL WAY	LOCAL STREET	30/25	PUBLIC	820'
PAJAN STREET	LOCAL STREET	30/25	PUBLIC	499'
IRVING SUMNER STREET	LOCAL STREET	30/25	PUBLIC	817'
QUEST LANE	LOCAL STREET	30/25	PUBLIC	652'
TOTAL				5,734'



4130 PARKLAKE AVE., SUITE 130

RALEIGH, NC 27612

Phone: (919) 578-9000

Fax: (919) 703-2665

NC@BohlerEng.com

CONTACT: CHARLIE YOWELL - CYOWELL@BOHLERENG.COM



REVISIONS

REV.	DATE	COMMENT	BY



KNOW WHAT'S BELOW
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It's Not. It's Free. It's 811.org

ASBUILT
RECORD DRAWING

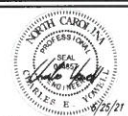
PROJECT NO. NCR130P-1
DRAWN BY: S.M.
CHECKED BY: C.Y.
DATE: 6-2-21
SCALE: N/A
SHEET: 001

PROJECT
**AUTUMN LAKES
PHASE III**
FOR



LOCATION OF SITE
0 OLD BUNN RD
ZEBULON, NC 27597
WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING NC, PLLC
4130 PARKLAKE AVENUE, SUITE 130
RALEIGH, NC 27612
Phone: (919) 578-9000
Fax: (919) 703-2665
NC@BohlerEng.com



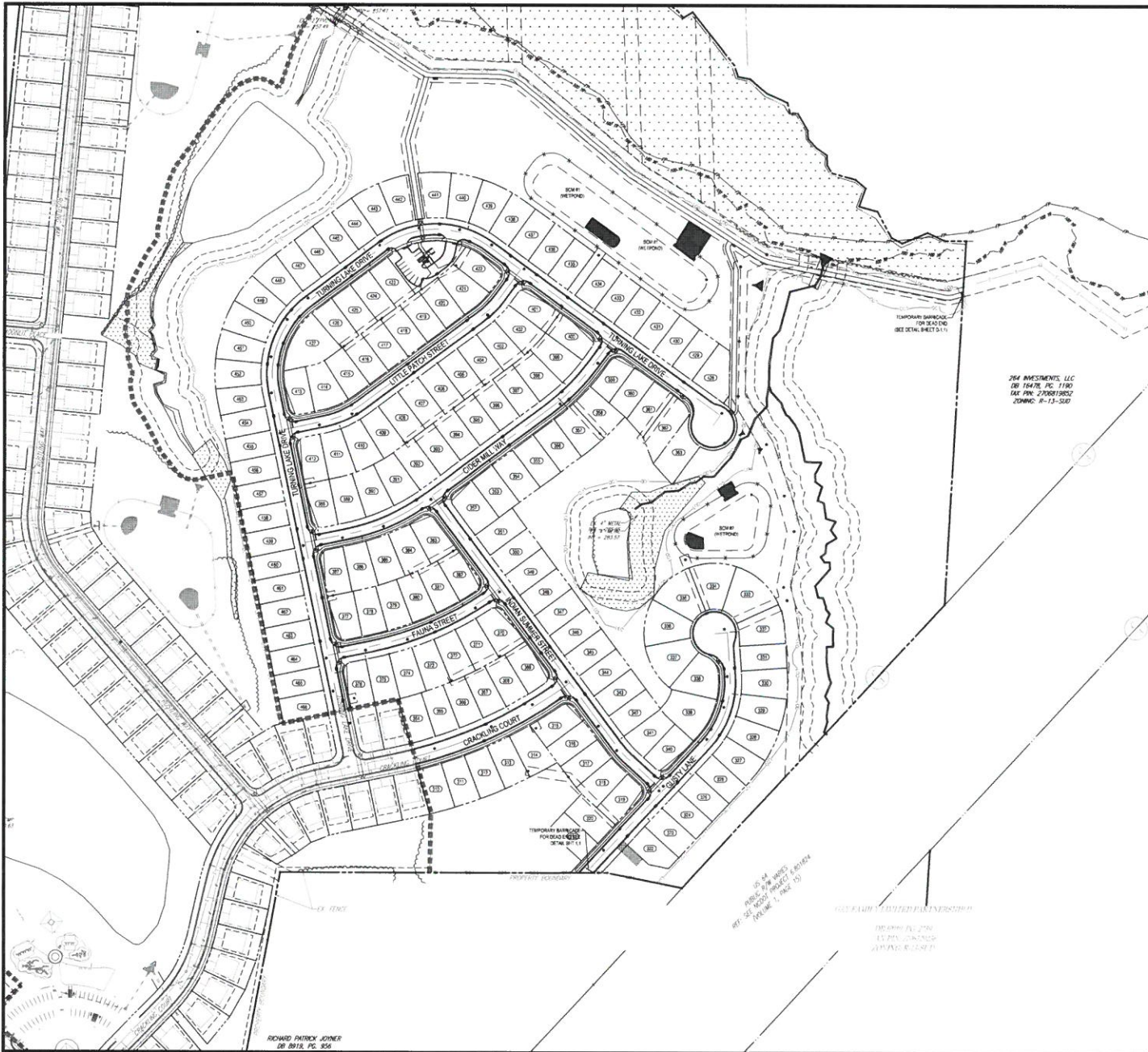
SHEET TITLE

COVER SHEET

SHEET NUMBER

C-0.0

IF THE REVISIONS OF THIS CONTRACT ARE TO BE MADE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY CHANGES TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY CHANGES TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY CHANGES TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY CHANGES TO THE CONTRACT.



GRAPHIC LEGEND		
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	PROPERTY/LEASE LINE	---
---	BUILDING ON	---
---	PARKING SETBACK	---
---	CURB & GUTTER	---
---	FLASH CURB	---
---	PAVEMENT	---
---	STRENGTH AT SEW	---
---	STOP SIGN	---
---	ADA ACCESSIBLE PARKING SIGN	---
---	PAINTED STOP BAR	---
---	TREE	---
---	PHASE LINE	---

SUBDIVISION NOTES

1. REFER TO GENERAL NOTES ON SHEET C-1.
2. SETBACKS ARE SHOWN IN ACCORDANCE WITH THE APPROVED TOWN OF ZEBULON STANDARDS. REFER TO TOWN OF ZEBULON LAND DEVELOPMENT ORDINANCE FOR PORCHES, DECKS, GARAGES, ETC.
3. ALL CURB AND GUTTER SHALL BE CONSTRUCTED ACCORDING TO STANDARD DETAILS OF THE TOWN OF ZEBULON STREET AND STORM DRAINAGE STANDARDS & SPECIFICATIONS MANUAL.
4. CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-452-4343) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
5. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
6. CONTRACTOR IS RESPONSIBLE FOR REMOVING OR RELOCATING ALL UTILITIES IN CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO DISTURBANCE.

264 INVESTMENTS, LLC
 2821 LAYNE, P.O. BOX 1180
 RAY, PA. 210811802
 ZONING: R-13-300

BOHLER ENGINEERING, P.L.L.C.
 4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27612
 Phone: (919) 575-9000
 Fax: (919) 733-2665
 NC@BohlerEng.com

REVISIONS			
REV.	DATE	COMMENT	BY

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ASBUILT RECORD DRAWING
 PROJECT No. AUTUMN LAKES PHASE III
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: 6-20-21
 SCALE: 1" = 200'
 CAD ID: [ID]

LEI
 LOCATION OF SITE:
 6 OLD BURN RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING, P.L.L.C.
 4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27612
 Phone: (919) 575-9000
 Fax: (919) 733-2665
 NC@BohlerEng.com

Professional Engineer Seal for **Richard Patrick Joiner**, State of North Carolina, License No. 10000, dated 8/25/21.

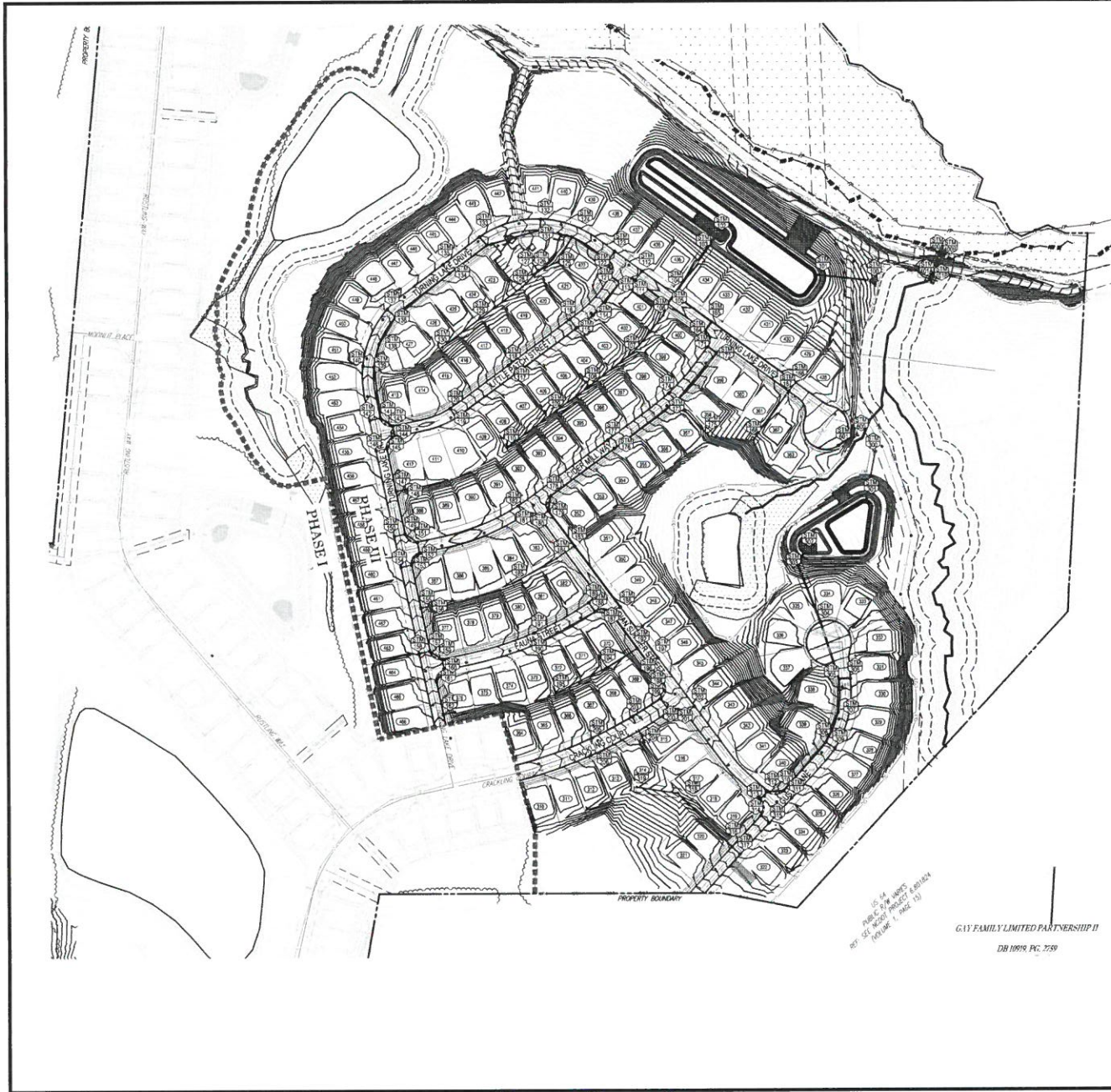
SHEET TITLE:
OVERALL SITE PLAN
 SHEET NUMBER:
C-3.0



RICHARD PATRICK JOINER
 100 8818, P.O. BOX 456

DATE: 05/24/21
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: 6/20/21
 SCALE: 1" = 200'

DATE: 05/24/21
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: 6/20/21
 SCALE: 1" = 200'



GRADING LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	PROPERTY LINE	---
---	CONTOUR & ELEVATION	---
---	UNDERGROUND GAS SERVICE	(S)
---	UNDERGROUND WATER MAIN	(W)
---	UNDERGROUND FIRE LINE	(F)
---	UNDERGROUND FIBER OPTIC	(O)
---	UNDERGROUND WIRE	(E)
---	UNDERGROUND ELECTRIC SERVICE	(E)
---	UNDERGROUND TELEPHONE	(T)
---	STORM	(S)
---	SEWER	(S)
---	SANITARY SEWER	(SS)
---	MANHOLE	(M)
---	LIMITS OF DISTURBANCE	---
---	DRAINAGE FLOW ARROW	---
---	UTILITY POLARITY	---
---	CLEAN-OUT	---
---	SEWER MANHOLE	---
---	STORM MANHOLE	---
---	STORM CURB SET	---
---	STORMWELL	---
---	WATER VALVE	---
---	WATER METER	---
---	STORM LABEL	---

GRADING NOTES

1. REFER TO GENERAL NOTES ON SHEET G-1.
2. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES.
3. ALL FILL SHALL BE COMPACTED IN ACCORDANCE WITH RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER AND/OR TOWN OF ZEPHURUS ON SPECIFICATIONS.
4. ALL STORM DRAINAGE PIPE SHALL BE CLASS II RFP UNLESS OTHERWISE NOTED.
5. THE PROJECT MEETS ALL REQUIREMENTS RELATIVE TO BEST MANAGEMENT PRACTICES AND ENGINEERED STORMWATER CONTROL STRUCTURES AS OUTLINED IN THE NC DEC BMP MANUAL AND WAKE COUNTY STORMWATER DESIGN MANUAL.
6. ALL SENSITIVE AREAS SHALL BE LOCATED TO MAINTAIN OPEN SPACE. OPEN SPACE INCLUDES A BLANKET DRAINAGE & ACCESS BASEMENT FOR THE STORMWATER SYSTEM & ASSOCIATED BMP. OPERATIONS AND MAINTENANCE MANUALS AND MAINTENANCE AGREEMENT SHALL BE IN PLACE FOR EACH BMP.
7. A VEGETATION STRATEGY PLAN MAY BE REQUIRED FOR THIS PROJECT.
8. ALL WETLAND, STRIPES, AND BUI FOR IMPACTS SHALL BE PERMITTED THROUGH THE USACE AND NC DEC, AS REQUIRED.
9. REFER TO STORM DRAINAGE SUMMARY SHEET CA-01 FOR DRAINAGE SYSTEM INFORMATION.
10. ALL V-4-INLET CURB INLET 10M ELEVATION ARE MEASURED AT THE CUTTER FLOW LINE.

BOHLER ENGINEERING INC. PLLC
 REGISTERED PROFESSIONAL ENGINEER
 LICENSE NO. 19876
 4130 PARKLAKE AVENUE, SUITE 110
 RALEIGH, NC 27612
 Phone: (919) 753-9900
 Fax: (919) 753-2965
 NC@BohlerEng.com
 PROJECT: AUTUMN LAKES PHASE III
 DATE: 09/25/21
 SCALE: 1" = 40'
 SHEET NO: C-4.0

REVISIONS

REV.	DATE	COMMENT	BY

811
 KNOW WHAT'S BELOW
 ALWAYS CALL 811
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 24 Hr. 811: 811, 24 Hr. 24 Hr. 811

ASBUILT RECORD DRAWING

PROJECT NO.: MCR 142003-1
 DRAWN BY: JLR
 CHECKED BY: CBT
 DATE: 09/25/21
 SCALE: 1" = 40'
 CALLED: CBT

PROJECT: AUTUMN LAKES PHASE III FOR

1GI
 LOCATION OF SITE:
 8 OLD BUNN RD
 ZEPHURUS, NC 27587
 WAKE COUNTY, NORTH CAROLINA

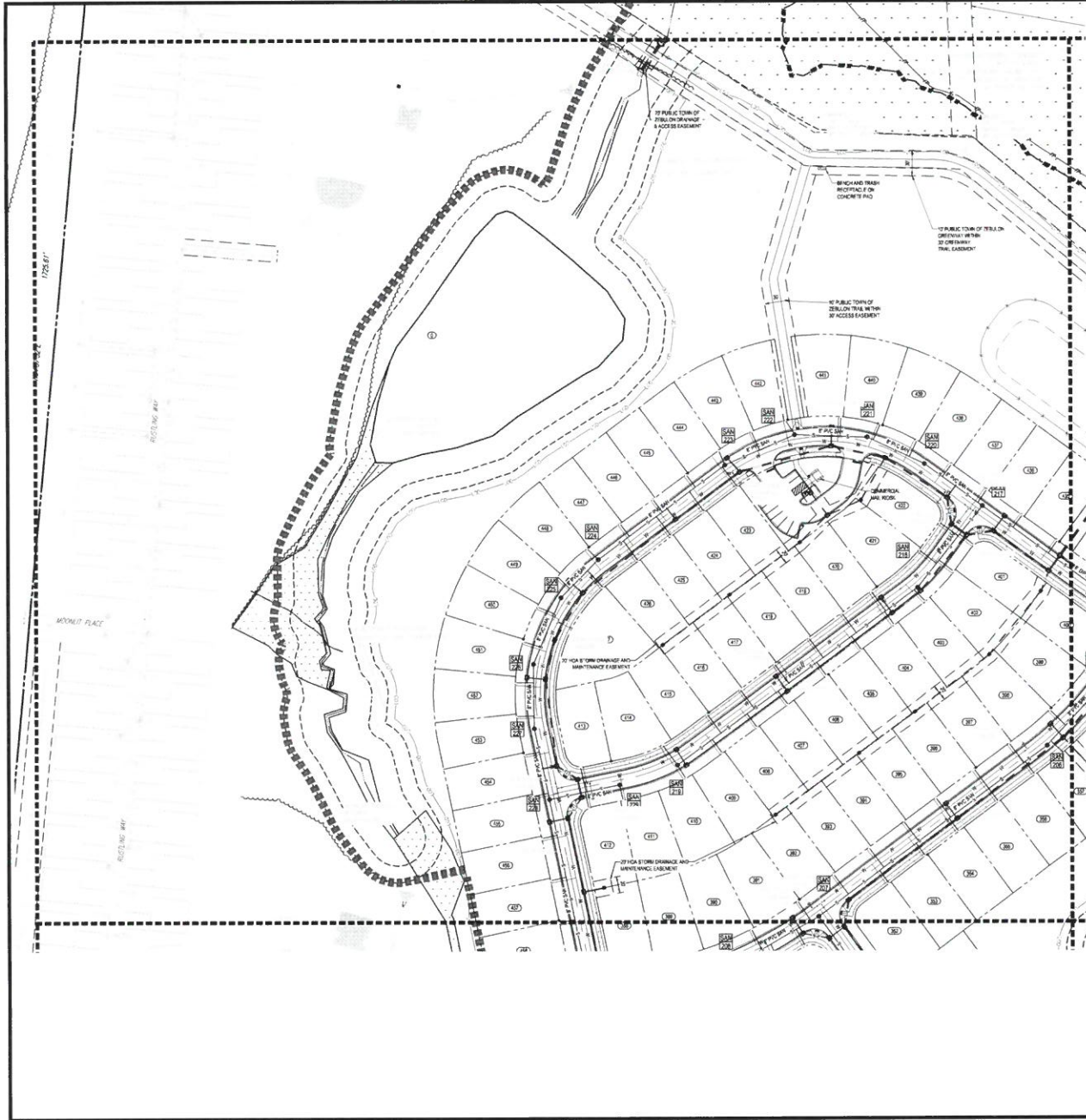
BOHLER ENGINEERING INC. PLLC
 4130 PARKLAKE AVENUE, SUITE 110
 RALEIGH, NC 27612
 Phone: (919) 753-9900
 Fax: (919) 753-2965
 NC@BohlerEng.com

STATE OF NORTH CAROLINA
 PROFESSIONAL ENGINEER
 SEAL
 19876
 C. BOHLER
 09/25/21

OVERALL GRADING PLAN
 SHEET NUMBER: C-4.0

15. 56
 PUBLIC WORKS DEPT
 801 50' NORTH PROJECT 683104
 1631 N. GAY ST. PHASE 1/2
 GAY FAMILY LIMITED PARTNERSHIP II
 DB 10019 PG. 7/59





UTILITY LEGEND		
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	PROPERTY LINE	---
---	CONTOUR & ELEVATION	---
---	UNDERGROUND WATER MAIN	---
---	UNDERGROUND FIRE LINE	---
---	UNDERGROUND GAS LINE	---
---	UNDERGROUND TELEPHONE	---
---	UNDERGROUND ELECTRIC SERVICE	---
---	UNDERGROUND TELEPHONE	---
---	STORM SEWER	---
---	SANITARY SEWER	---
---	SANITARY MANHOLE	---
---	LIMITS OF DISTURBANCE	---
---	DISCHARGE FLOW ARROW	---
---	UTILITY POLE/POST	---
---	CLEAN-OUT	---
---	STORM MANHOLE	---
---	STORM CLEAN-OUT	---
---	STORM VALVE	---
---	WATER VALVE	---
---	WATER METER	---
---	SANITARY LABEL	---
---	STREET LIGHT	---

CITY OF RALEIGH STANDARD UTILITY NOTES:

1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUS HANDBOOK, CURRENT EDITION).
2. UTILITY SEPARATION REQUIREMENTS:
 - A. DISTANCE OF 10' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SERVICE. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, PERIODIC SANITARY SEWER PIPE SHALL BE SPECIFIED TO BE APPROVED SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 2' FROM A PRIVATE WELL OR 3' FROM A PUBLIC WELL.
 - B. WHEN METALS WATER & SANITARY SEWER, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 12". IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IN THE WATER MAIN IS A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 1' ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DEPARTMENT. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - C. WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN OR MATERIALS OR STEEL ENCASUREMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - D. 2" MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & 6" STORM SEWER FACILITIES. UNLESS TOP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
 - E. MAINTAIN 1" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS. MAINTAIN 6" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY TOP MATERIALS & A CONCRETE GRADE MANHOLE 4" MIN. CLEARANCE PER CORPUS DETAIL 11A1 & 11A2.
 - F. ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDMENT PLAN & NOT PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24-HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
5. 3" MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4" MINIMUM COVER IS REQUIRED ON ALL UTILITY MAINS.
6. IF IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT, THIS INCLUDES HANDING OVER TAP AT MAIN & RECORD OF SERVICE FROM ROW OR EASEMENT PER CORPUS HANDBOOK PROCEDURE.
7. INSTALL 3/4" COPPER WATER SERVICES WITH METEER LOCATED AT ROW OR WITHIN A 2' XZ WATERLINE EASEMENT IMMEDIATELY ADJACENT TO METEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE WATER SERVICES FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
8. INSTALL 4" PVC SEWER SERVICES @ 1/8" MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACES EVERY 25 FEET MINIMUM.
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI. BACKFLOWER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING GRADE LOWER THAN 1' ABOVE THE NEXT UPSTREAM MANHOLE.
10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM MEADOWS, USACE & OR FEM FOR ANY PERMANENT BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
11. MUDOUT / RAINFALL ENFORCEMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK INCLUDING MAIN EXTENSIONS & SERVICE TAP/WITHIN EASEMENT OR MAINTENANCE ROW PRIOR TO CONSTRUCTION.
12. GREAT INTERSECTION / ON WATER REPAIR FOR SINKING CALCULATIONS & INSTALLATIONS SPECIFICATIONS SHALL BE APPROVED BY THE CORPUS LOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TAMI BEAULY AT (919) 969-2324 OR TIMOTHY BEAULY (BEAULY@RALA.NC.GOV) FOR MORE INFORMATION.
13. CROSS CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD AND ARE ALL LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER UTILITIES IN NORTH CAROLINA. THESE DEVICES MEET THE MINIMUM REQUIREMENTS. THE DEVICES SHALL BE APPROVED BY THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) OR BE ON THE LIST OF APPROVED DEVICES BY THE SOUTHERN CALIFORNIA PIPELINE ASSOCIATION (SCPCA) OR BE ON THE LIST OF APPROVED DEVICES BY THE NATIONAL SANITARY ENGINEERING ASSOCIATION (NSPE). THE DEVICES SHALL BE INSTALLED AND TESTED (SHOULDN'T BEAL) AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PROGRAMS ARE SEWER & WATER STRONGEST. CONTACT JOANNE HARTLEY AT (919) 969-2324 OR JOANNE.HARTLEY@RALA.NC.GOV FOR MORE INFORMATION.

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 NC@BohlerEng.com

REVISIONS			
REV.	DATE	COMMENT	BY



ASBUILT RECORD DRAWING

PROJECT NO.: _____

DRAWN BY: _____

CHECKED BY: _____

DATE: 6-20-21

SCALE: 1" = 80'

CAD: JDF

PROJECT: AUTUMN LAKES PHASE III

FOR **BOHLER ENGINEERING, INC.**

LOCATION OF SITE: 8 OLD BURN RD, ZEBULON, NC 27587, WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING, INC., PLLC

4130 PARKLAKE AVENUE, SUITE 150
 RALEIGH, NC 27612
 PHONE: (919) 793-9000
 FAX: (919) 793-2905
 NC@BohlerEng.com



SHEET TITLE: **UTILITY PLAN - AREA A**

SHEET NUMBER: **C-5.0**

ATTENTION CONTRACTORS:

1. This drawing is the property of Bohler Engineering, Inc. and shall not be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Bohler Engineering, Inc.

2. This drawing is to be used only for the project and site identified on the drawing. It is not to be used for any other project or site without the prior written permission of Bohler Engineering, Inc.

3. The user of this drawing shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities.

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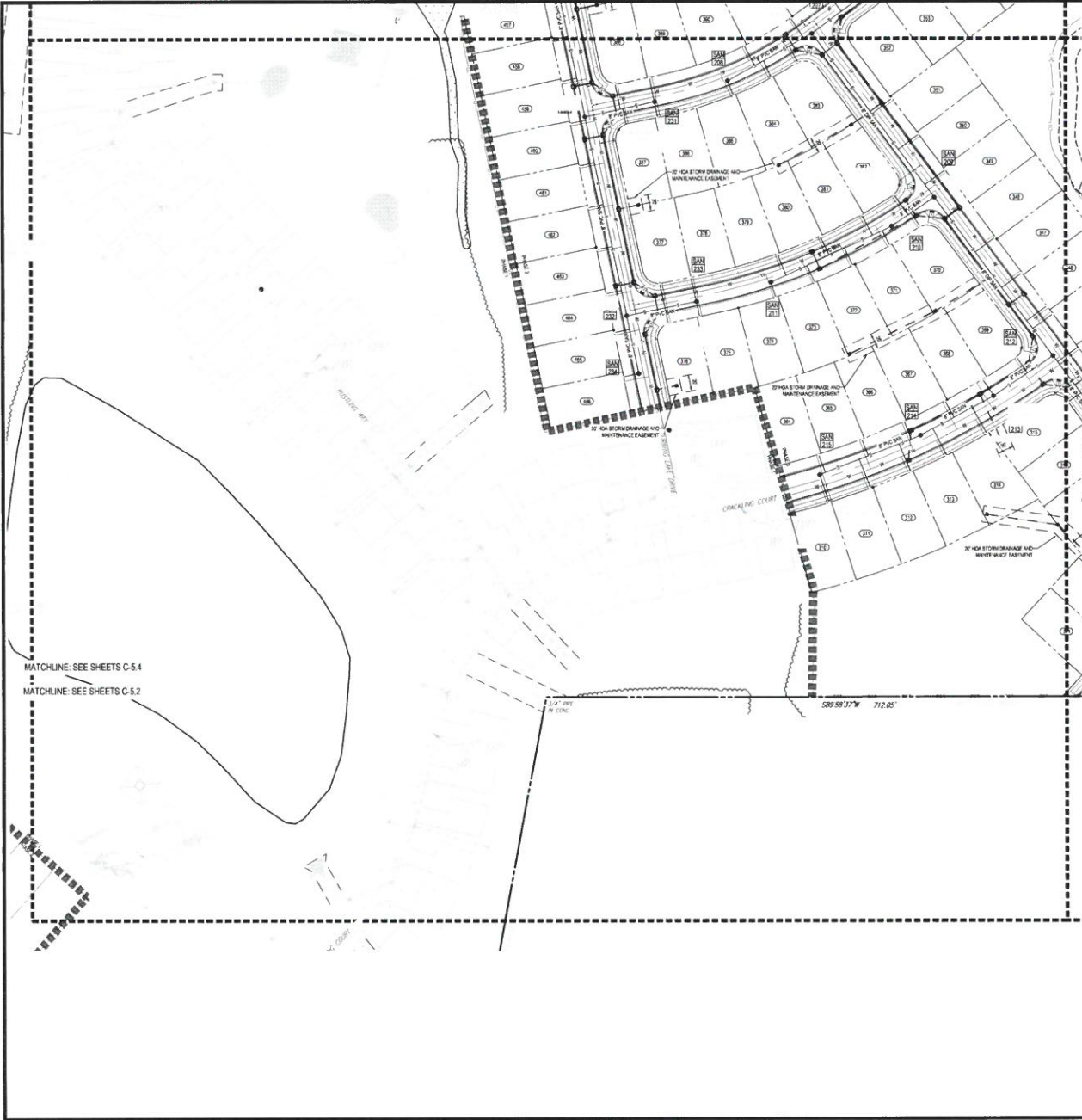
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8. The user of this drawing shall be responsible for obtaining all necessary information from the appropriate authorities.

9. The user of this drawing shall be responsible for obtaining all necessary information from the appropriate authorities.

10. The user of this drawing shall be responsible for obtaining all necessary information from the appropriate authorities.





MATCHLINE: SEE SHEETS C-5.4
 MATCHLINE: SEE SHEETS C-5.2

UTILITY LEGEND		
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	PROPERTY LINE	---
---	CONTOUR & ELEVATION	---
---	UNDERGROUND WATER LINE	---
---	UNDERGROUND FIRE LINE	---
---	UNDERGROUND FIBER OPTIC	---
---	OVERHEAD WIRE	---
---	UNDERGROUND ELECTRIC SERVICE	---
---	TELEPHONE	---
---	STEAM	---
---	SEWER	---
---	SAINTARY SEWER	---
---	MANHOLE	---
---	LIMITS OF DISTURBANCE	---
---	DRAINAGE FLOW ARROW	---
---	UTILITY POLYBAG	---
---	CLEAN OUT	---
---	SAINTARY MANHOLE	---
---	SEWER	---
---	STORM	---
---	STORM INLET	---
---	WATER VALVE	---
---	WATER METER	---
---	SAINTARY LABEL	---

CITY OF RALEIGH STANDARD UTILITY NOTES:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (HEREINAFTER REFERRED TO AS "CITY STANDARDS").
- UTILITY SEPARATION REQUIREMENTS:
 - A DISTANCE OF 18" SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE (SUCH AS AN IMPROVED WELL) UNLESS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, PROPOSED SANITARY SEWER PIPE SHALL BE SPECIFIED AS BELL-ENDED WITH A GASKETED JOINT. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 15" FROM A PRIVATE WELL OR 30" FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER BORN SERVICE, THE VERTICAL SEPARATION BETWEEN UTILITIES SHALL BE 12" IF THE SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS. THE VARIATION ALLOWED IS THE WATER MAIN IS SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 12" ABOVE THE TOP OF THE SEWER. THIS MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - WHEN IT IS POSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATER MAIN OR TELEPHONE OR FIBER OPTIC, THE SANITARY SEWER SHALL BE INSTALLED IN A TRENCH 18" ON EACH SIDE OF CROSSING MUST BE SPECIFIED AS INSTALLED TO MAINTAIN SPECIFICATIONS.
 - IF MINIMUM HORIZONTAL SEPARATION IS REQUIRED BY TRENCH IN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS OTHERWISE SPECIFIED FOR SANITARY SEWER.
 - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATER MAIN & STORM DRAIN CROSSINGS. MAINTAIN 12" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATION CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE GRADE MINIMUM 18" MIN. CLEARANCE PER CORPUS DETAIL 311 & 341.
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN AND PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- IF MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS, 4" MINIMUM COVER IS REQUIRED ON ALL UTILITY MAINS.
- IF THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONMENT AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUS HANDBOOK PROCEDURE.
- INSTALL 2" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2' X 2' WATERLINE CASING IN IMMEDIATELY ADJACENT HOUSING. THE APPLICABLE RESPONSIBILITY TO PROVIDE THE WATER SERVICES FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW PRESSURE.
- INSTALL 2" PVC SEWER SERVICES @ 1.5% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEPTING 3/4" P.S.I. BACKWATER USE SEE REQUIREMENTS FOR SANITARY SEWER SERVICES HAVING 8" DIA. DRAINS LOWER THAN 18" ABOVE THE NEXT UPSTREAM MANHOLE.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM WINDS, SPACE, SOIL ETC. FOR ANY NEARBY BUTTER, WETLANDS AND FLOODPLAIN IMPACTS RESPECTIVELY PRIOR TO CONSTRUCTION.
- ACCORD TO ROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK INCLUDING MANHOLES OR SERVICE TRENCHES IN STATE OR ROAD ROW PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR, OIL WATER SEPARATOR (OWS) CALCULATIONS & INSTALLATIONS SPECIFICATIONS SHALL BE APPROVED BY THE CORPUS POC PROGRAM COORDINATION PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT THE BUREAU AT (919) 996-3234 OR TIMOTHY BEATLEY@RALEIGH.GOV FOR MORE INFORMATION.
- CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE DEVICES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING ASSETS STANDARDS OR BE IN THE POSSESSION OF SUCH PERMITS AS APPROVED. ALL DEVICES SHALL BE INSTALLED AND TESTED BOTH VISUALLY AND PERIODIC TESTING THEREAFTER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM WHETHER IN MAJOR STREETWORK CONTACT JOANNE HARTLEY AT (919) 996-3603 OR JOANNE.HARTLEY@RALEIGH.GOV FOR MORE INFORMATION.

ATTENTION CONTRACTORS:
 The Contractor shall be responsible for the accuracy of the information provided in this plan. The Contractor shall verify the location and depth of all existing utilities prior to construction. The Contractor shall be responsible for the accuracy of the information provided in this plan. The Contractor shall verify the location and depth of all existing utilities prior to construction. The Contractor shall be responsible for the accuracy of the information provided in this plan. The Contractor shall verify the location and depth of all existing utilities prior to construction.



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REVISIONS

REV.	DATE	COMMENT	BY



ASBUILT RECORD DRAWING

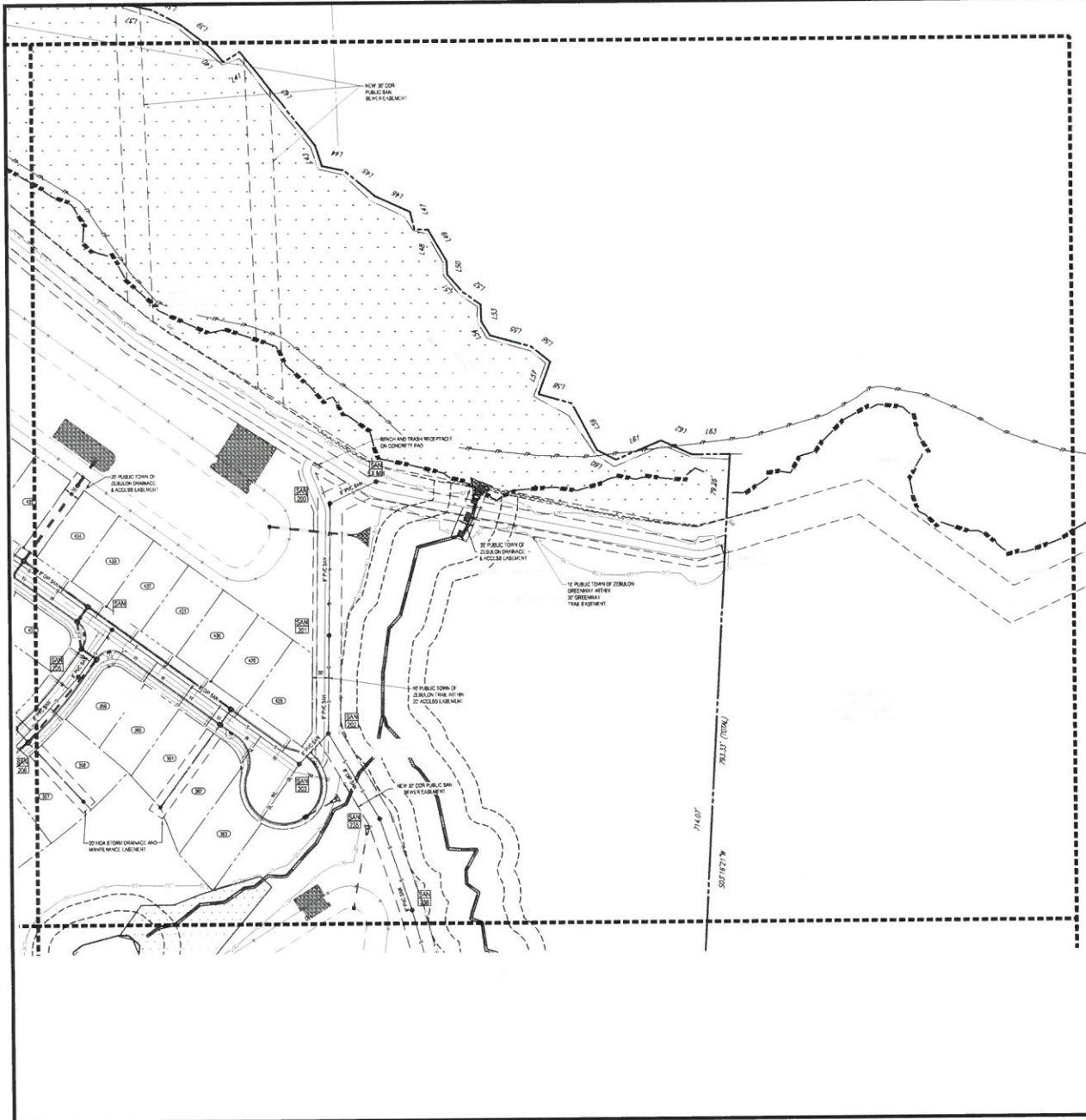
PROJECT NO.	SCALE

PROJECT: AUTUMN LAKES PHASE III FOR HOMER
 LOCATION OF SITE: 1100 BUNN RD ZEBULON, NC 27587 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING NC, PLLC
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 Fax: (919) 753-2915
 NC@BohlerEng.com



PROJECT TITLE: UTILITY PLAN - AREA B
SHEET NUMBER: C-5.1



UTILITY LEGEND		
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	PROPERTY LINE	
	CONTOUR & ELEVATION	
	UNDEVELOPED WATER LINE	
	UNDEVELOPED FIRE LINE	
	UNDEVELOPED FIBER OPTIC	
	UNDEVELOPED WASTE	
	UNDEVELOPED ELECTRIC SERVICE	
	UNDEVELOPED TELEPHONE	
	UNDEVELOPED SEWER	
	SANITARY SEWER MANHOLE	
	UNITS OF DISTURBANCE	
	DRAINAGE FLOW ARROW	
	UTILITY POLYGRAPH	
	CLEANOUT	
	SANITARY MANHOLE	
	STORM MANHOLE	
	STORM CURB	
	STORM INLET	
	WATER VALVE	
	WATER METER	
	SANITARY LABEL	

CITY OF RALEIGH STANDARD UTILITY NOTES:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAIL SPECIFICATIONS, PREVIOUS EDITIONS, CURRENT EDITIONS.
- UTILITY SEPARATION REQUIREMENTS:
 - A DISTANCE OF 10' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPROVED RESERVOIR OR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED THROUGH SANITARY SEWER PIPES SHALL BE SPECIFIED & INSTALLED TO MAINTAIN SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 2' FROM A PRIVATE WELL OR FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER & SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS. THE MINIMUM ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 1' ABOVE THE TOP OF THE SEWER MAIN. BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, OR MAXIMUM 30" STEEL CLOSURE MANHOLE EXTENDED TO EACH END OF CROSSING MUST BE SPECIFIED & INSTALLED TO MAINTAIN SPECIFICATIONS.
 - IF AN MINIMUM VERTICAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES UNLESS OTHERWISE SPECIFIED FOR SANITARY SEWER.
 - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & STORM SEWER CROSSINGS. MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & STORM SEWER CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY MATERIALS & CONCRETE GRADE HAVING 4" MIN. CLEARANCE (PER CORPUS DETAIL S-W-4 & S-4).
 - ALL UTILITY UNDERGROUNDING UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN & PERMITS BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- IF 30" MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS, 4" MINIMUM COVER IS REQUIRED ON ALL RELIEF MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED PRIOR TO THE START OF A SITE UNDER DEVELOPMENT DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MANHOLE & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUS DRAINAGE PROVISIONS.
- INSTALL 2" COPPER WATER SERVICES WITH METER LOCATED AT ROW OR WITHIN A 2' X 2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE LINE FOR EACH INDIVIDUAL RESIDENTIAL SINGLE-FAMILY DWELLING.
- INSTALL 4" PVC SEWER SERVICES @ 1% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI. BACKFLOW VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES EXCEEDING 100 PSI. BACKFLOW VALVES SHALL BE INSTALLED ABOVE THE TOP OF THE SEWER MAIN.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM MOVED, USACE & FEMA FOR ANY NEARBY BUFFERS, WETLANDS & FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- ACROSS-ROAD ROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK INCLUDING MAIN EXTENSIONS & SERVICE TAPS WITHIN STATE OR ROAD ROW PRIOR TO CONSTRUCTION.
- CROSS-SECTION (OR WATER SEPARATION) DESIGN CALCULATIONS & INSTALLATIONS SPECIFICATIONS SHALL BE APPROVED BY THE CITY OF RALEIGH PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIME BEARS AT (919) 996-2334 OR TIME@RALEIGH.NC.GOV FOR MORE INFORMATION.
- CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE PUBLIC GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE DEVICES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED BOTH PRE AND POST-CONSTRUCTION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM. THE DEVICE IS MOST STRONGEST CONTACT AGAINST WATER BY AT (919) 996-5027 OR AGAINST WATER BY AT (919) 996-2334 FOR MORE INFORMATION.

ATTENTION CONTRACTORS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING UTILITIES AND SERVICES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND SERVICES FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL EXISTING UTILITIES AND SERVICES TO ORIGINAL CONDITION OR BETTER AFTER CONSTRUCTION IS COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING UTILITIES AND SERVICES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND SERVICES FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL EXISTING UTILITIES AND SERVICES TO ORIGINAL CONDITION OR BETTER AFTER CONSTRUCTION IS COMPLETE.

BOHLER ENGINEERING INC., PLLC

REGISTERED PROFESSIONAL ENGINEERS - CIVIL
 REGISTERED PROFESSIONAL ENGINEERS - ELECTRICAL
 REGISTERED PROFESSIONAL ENGINEERS - MECHANICAL
 REGISTERED PROFESSIONAL ENGINEERS - SURVEYING
 REGISTERED PROFESSIONAL ENGINEERS - WATER RESOURCES
 REGISTERED PROFESSIONAL ENGINEERS - WIND ENERGY
 REGISTERED PROFESSIONAL ENGINEERS - WOODWORKING
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 RALEIGH, NC 27612
 PHONE: (919) 278-0000
 FAX: (919) 278-0000
 NC@BohlerEng.com

REVISIONS

REV#	DATE	COMMENT	BY

KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

It's Not 911. It's 811.

ASBUILT RECORD DRAWING

PROJECT: AUTUMN LAKES PHASE III

FOR

IGI HOMES

LOCATION OF SITE
 0 OLD BURN RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING INC., PLLC

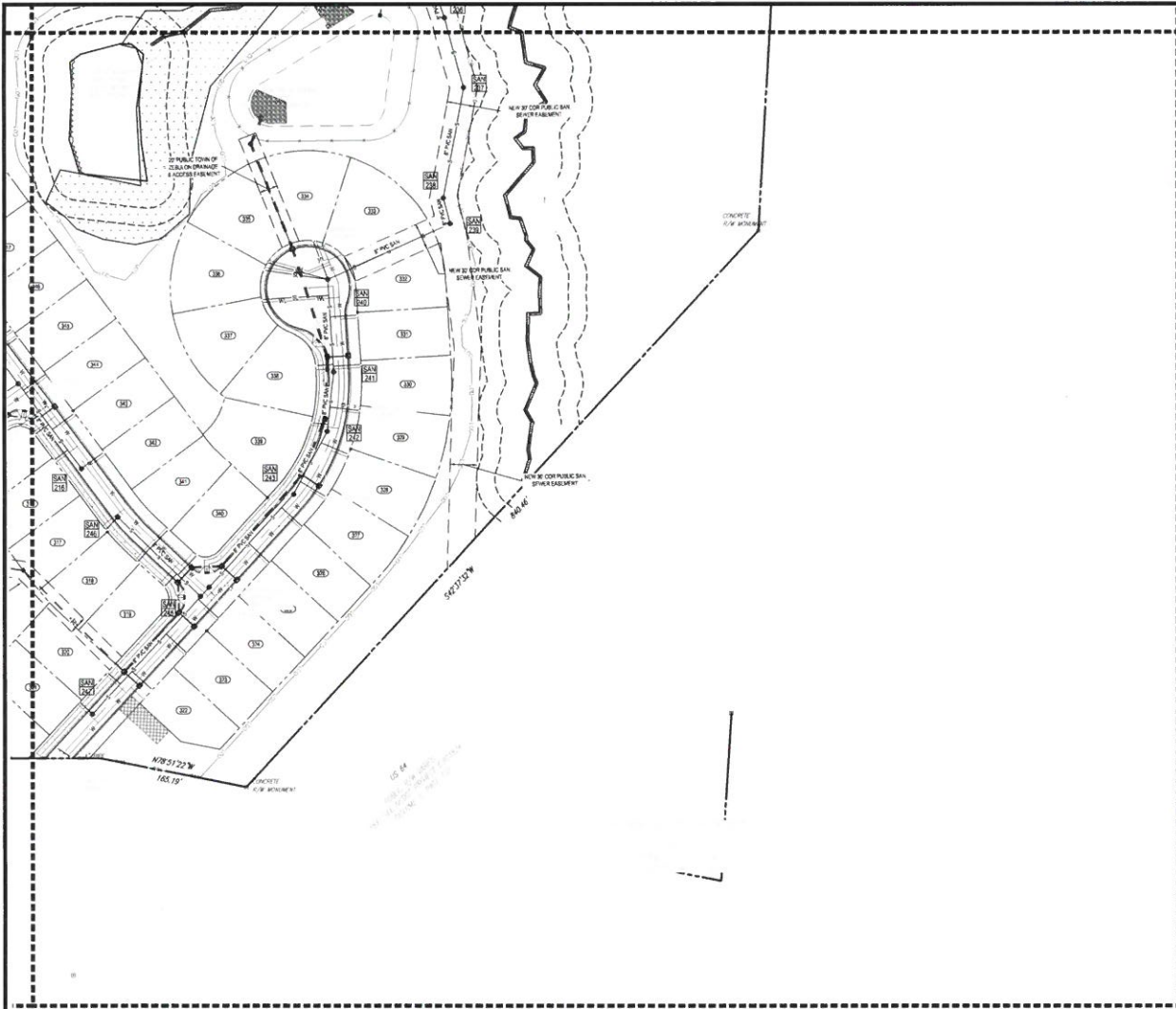
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 Fax: (919) 278-0000
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UTILITY PLAN - AREA C

SHEET NUMBER: **C-5.2**





UTILITY LEGEND		
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	PROPERTY LINE	
	CONTOUR & ELEVATION	
	UNDERDRAIN	
	NO-TELL LINE	
	UNDERDRAIN	
	FIRE LINE	
	UNDERDRAIN	
	FIBER OPTIC	
	UNDERDRAIN	
	ELECTRIC SERVICE	
	TELEPHONE	
	STORM SEWER	
	SANITARY SEWER	
	MANHOLE	
	LIMITS OF DISTURBANCE	
	DRAINAGE FLOW ARROW	
	UTILITY POLE/SUPPORT	
	CLEANOUT	
	SANITARY MANHOLE	
	STORM MANHOLE	
	STORM LINE	
	STORM INLET	
	WATER VALVE	
	WATER METER	
	SANITARY LABEL	

CITY OF RALEIGH STANDARD UTILITY NOTES:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAIL & SPECIFICATIONS (REFERENCE: CONCORD HANDBOOK, CURRENT EDITION).
- UTILITY SEPARATION REQUIREMENTS:**
 - A DISTANCE OF 10' SHALL BE MAINTAINED BETWEEN SANITARY SEWERS & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE (SUCH AS AN UNDERGROUND SOURCE OF DRINKING WATER). IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFICALLY INSTALLED TO MEET THE REQUIREMENTS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER AND OTHER MARKS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MARK IS A SEPARATE TRICH WITH THE ELEVATION OF THE WATER MARK AT LEAST 10' ABOVE THE TOP OF THE SEWER. IT MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATER MAIN, OR WATER MAIN OR STEEL ENCLOSURE EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFICALLY INSTALLED TO MEET THESE REQUIREMENTS.
 - 10' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWERS & STORM SEWER FACILITIES. UNLESS OTHERWISE SPECIFIED FOR SANITARY SEWERS.
 - WHEN IN 10' MIN. VERTICAL SEPARATION AT ALL SANITARY SEWERS & STORM SEWER CROSSINGS. MAINTAIN 10' MIN. VERTICAL SEPARATION AT ALL SANITARY SEWERS & STORM SEWER CROSSINGS. WHEN ADEQUATE SEPARATION CANNOT BE ACHIEVED, USE OF MATERIALS & CONCRETE GRADE HAVING 10' MIN. CLEARANCE PER CORPUS DETAILS W&S 4.19.
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 10' MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AUTHORIZED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 1/2" MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. A 7" MINIMUM COVER IS REQUIRED ON ALL SEWER MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN PREVIEW COMMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CONCORD HANDBOOK PROCEDURE.
- INSTALL 2" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'x2' WATERLINE LABELING MANHOLE. (ADJACENT NOTE TO THE APPLICANTS RESPONSIBILITY TO PROVIDE 2" PIPING, THE WATER SERVICES (THE EACH CONNECTION TO PROVIDED, ADEQUATE FLOW & PRESSURE).
- INSTALL 1" PVC SEWER SERVICES BY 18" MINIMUM GRADE WITH 12" CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75' LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEPTING 3/4" P.S.I. BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING 18" OR 24" DRAINS LOWER THAN 1.0' ABOVE THE NEAR UPSTREAM MANHOLE.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCEM, USACE, & USFWS FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- ICDOT 1600 ROAD ENFORCEMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MANY EXTENSIVE) & SERVICE TAPING STATE OR FEDERAL ROW PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATIONS SPECIFICATIONS SHALL BE APPROVED BY THE CORPUS FOR PROGRAM COORDINATION PRIOR TO BRANCHING OF A BUILDING PERMIT. CONTACT TIME BEASLEY AT (919) 963-2346 OR TIMOTHY BEASLEY@RALPHING.GOV FOR MORE INFORMATION.
- CROSS-CONNECTION CONTROL PROTECTION OFFICER ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPROVAL OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES MEET THE MINIMUM REQUIREMENTS. THE SERVICE SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF NORTH CAROLINA'S (UNCC) LIST OF APPROVED TESTERS. THE SERVICE SHALL BE INSTALLED AND TESTED BOTH LINE AND PERIODIC TESTING THEREAFTER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM (WHICHEVER IS MORE STRINGENT). CONTACT ASHLEY HARTY AT (919) 966-5423 OR ASHLEY.HARTY@RALPHING.GOV FOR MORE INFORMATION.

BOHLER ENGINEERING NC, PLLC

1130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27812
 Phone: (919) 515-5000
 Fax: (919) 753-2955
 NC@BohlerEng.com

REVISIONS

REV.	DATE	COMMENT	BY



ASBUILT RECORD DRAWING

PROJECT NO: NC184257
 DRAWN BY: SUB
 CHECKED BY: CLK
 DATE: 6-21-17
 SCALE: 1" = 40'
 CADD: JED

AUTUMN LAKES PHASE III

FOR

LOCATION OF SITE
 1 OLD BLINN RD
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING NC, PLLC

1130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27812
 Phone: (919) 515-5000
 Fax: (919) 753-2955
 NC@BohlerEng.com



SHEET TITLE
UTILITY PLAN - AREA D

SHEET NUMBER
C-5.3

ATTENTION CONTRACTORS

The undersigned professional engineer certifies that the information furnished on this drawing was prepared by him or under his direct supervision and that he is a duly licensed professional engineer in the State of North Carolina. He certifies that he is not providing engineering services for this project in violation of the provisions of the North Carolina Engineering Law. He certifies that he is not providing engineering services for this project in violation of the provisions of the North Carolina Engineering Law. He certifies that he is not providing engineering services for this project in violation of the provisions of the North Carolina Engineering Law.



SEWER POINT TABLE

Table with columns for stationing (e.g., 63465 762524.81) and coordinates (e.g., 2207255.55, 278.74 CO).

WATER POINT TABLE

Table with columns for stationing (e.g., 63266 762522.50) and coordinates (e.g., 2207253.81, 278.79 WM).

BOHLER ENGINEERING INC. PLLC logo and contact information including address and phone number.

REVISIONS table with columns for REV, DATE, COMMENT, and BY.

KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG logo and text.

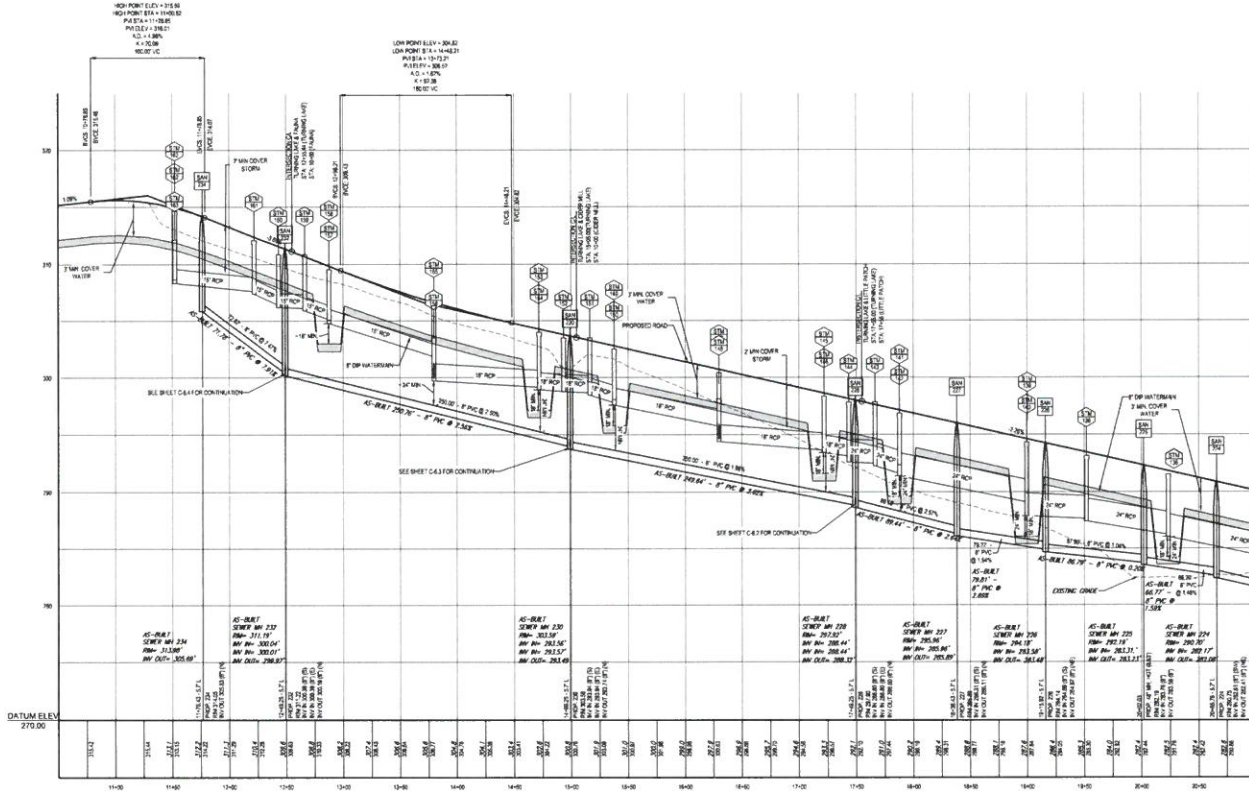
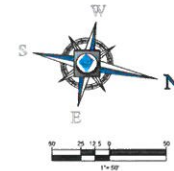
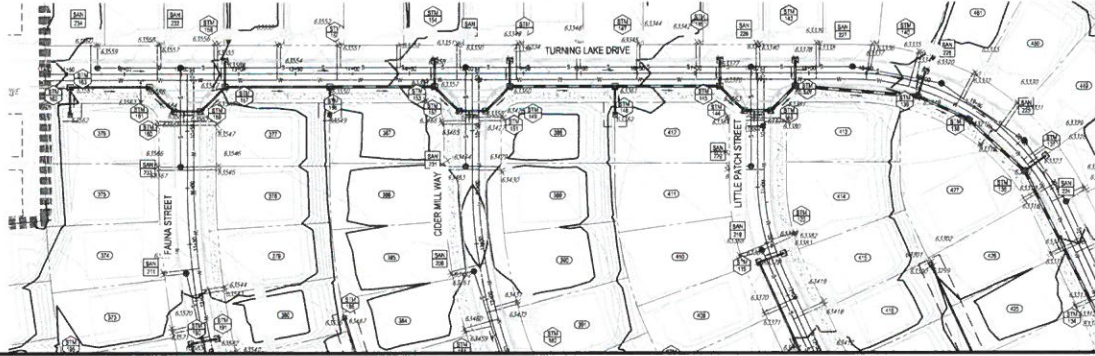
ASBUILT RECORD DRAWING logo and text.

AUTUMN LAKES PHASE III FOR logo and site location information in Wake County, North Carolina.

BOHLER ENGINEERING INC. PLLC logo and address information.

SEAL BY PROFESSIONAL ENGINEER logo and signature information.

SANITARY PIPE AND STRUCTURE TABLE C-5.6 logo and sheet number.



NOTES:

1. ALL PIPE FITTINGS & BEEDS SHALL CONFORM TO TOWN OF ZEBLON AND CITY OF RALEIGH STANDARDS. WHEN PIPES OR STRUCTURES ARE INSTALLED ABOVE PUBLIC USE, ENGINEERED FILL OR OTHER TOWN APPROVED MATERIAL SHALL BE USED IN TRENCH AS REQUIRED BY TOWN OF ZEBLON OR CITY OF RALEIGH.
2. WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT THE WATER LINES PER TOWN OF ZEBLON STANDARDS. LIGHT PIPE COLLECTION AND RISES, AS REQUIRED, TO AVOID CONFLICT WITH SERVICE LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBLON SEPARATION REQUIREMENTS.
3. WATER LINE APPURTENANCES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE APPURTENANCES TO AVOID CONFLICT WITH CURB AND GUTTER AND OTHER UTILITIES.

TURNING LAKE DRIVE PROFILE

LOCAL RESIDENTIAL
35 MPH DESIGN
SPEED LIMIT 25 MPH - DESIGN SPEED 30 MPH
SCALE: 1" = 10' HORIZONTAL
1" = 5' VERTICAL



BOHLER
ENGINEERING, INC., PLLC

10000 W. BIRCHWOOD DRIVE, SUITE 100
RALEIGH, NC 27615
PHONE: (919) 253-0900
FAX: (919) 253-2665
WWW.BOHLENERG.COM
BOHLER ENGINEERING, INC. IS AN EQUAL OPPORTUNITY EMPLOYER.
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REVISIONS

REV	DATE	COMMENT	BY



**KNOW WHAT'S BELOW
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**ASBUILT
RECORD DRAWING**

PROJECT NO.: NC142204
SUB: 6-0
CHECKED BY: JLB
DATE: 6-25-21
SCALE: 1" = 50'
CADD: JLB

PROJECT: **AUTUMN LAKES
PHASE III**
FOR



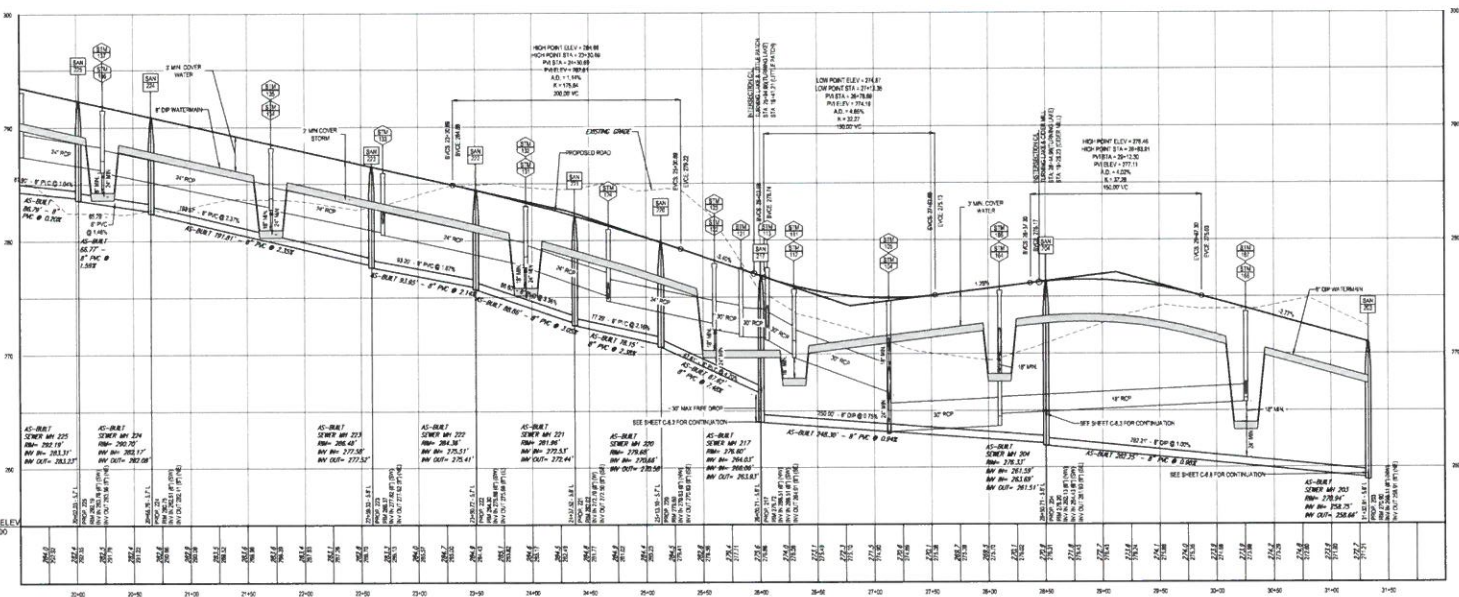
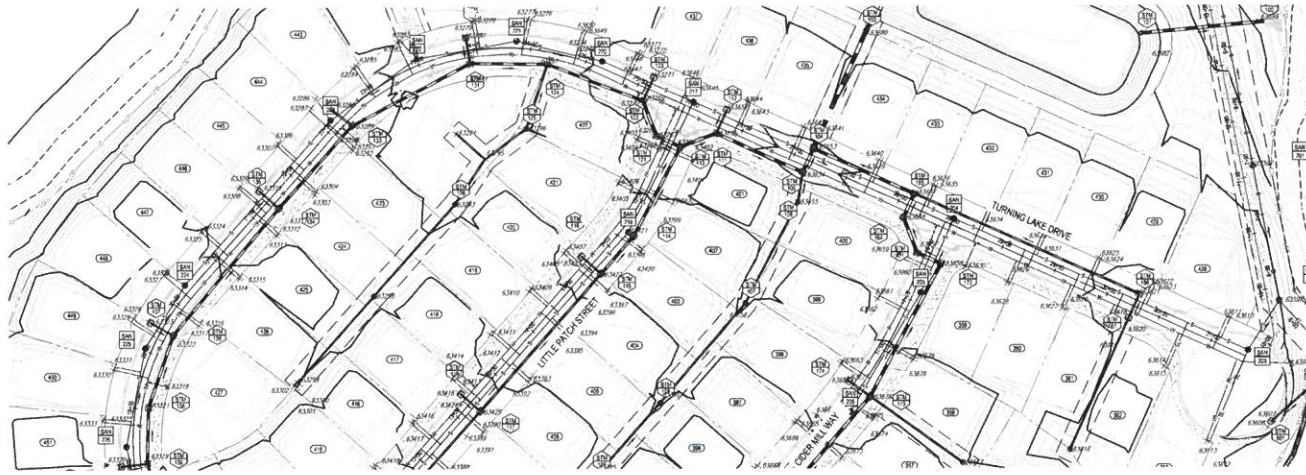
LOCATION OF SITE:
0 OLD BLINN RD
ZEBLON, NC 27597
WAKE COUNTY, NORTH CAROLINA

BOHLER
ENGINEERING, INC., PLLC
4150 PARKLAKES AVENUE, SUITE 150
RALEIGH, NC 27612
Phone: (919) 253-0900
Fax: (919) 253-2665
NC@BohlerEng.com



SHEET TITLE:
**TURNING LAKE DRIVE PLAN
AND PROFILE**

SHEET NUMBER:
C-6.0



- NOTES:**
- ALL PIPE, TRENCHES & BEDDING SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. WHEN PIPES OR STRUCTURES ARE NOT CALLED ABOVE OR IN LOCAL ENGINEERED PLAN OR OTHER TOWN APPROVED MATERIAL, SHALL BE DESIGN TRENCH AS REQUIRED BY TOWN OF ZEBULON OR CITY OF RALEIGH.
 - WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE WATER LINES PER TOWN OF ZEBULON STANDARDS. USING PIPE SELECTIONS AND BLENDERS, AS REQUIRED, TO AVOID CONFLICT WITH SERVICE LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON SEPARATION REQUIREMENTS.
 - WATER LINE APPURTENANCES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE APPURTENANCES TO AVOID CONFLICT WITH CURBS AND GUTTERS AND OTHER UTILITIES.

TURNING LAKE DRIVE PROFILE - CONTINUED

LOCAL RESIDENTIAL
 30 MPH DESIGN SPEED IN MPH
 SCALE: 1" = 10' HORIZONTAL
 1" = 1' VERTICAL

BOHLER
 ENGINEERING INC., PLLC

LICENSED PROFESSIONAL ENGINEER
 LICENSE NO. 35080
 REGISTERED PROFESSIONAL LAND SURVEYOR
 LICENSE NO. 10000
 REGISTERED PROFESSIONAL GEODETIC SURVEYOR
 LICENSE NO. 10000
 REGISTERED PROFESSIONAL CIVIL ENGINEER
 LICENSE NO. 10000

OFFICE: 4130 PARK LAKE AVENUE, SUITE 150, RALEIGH, NC 27612
 PHONE: (919) 775-9000
 FAX: (919) 775-2995
 WWW: WWW.BOHLERINC.COM
 BOHLER@BOHLERINC.COM

REVISIONS			
REV.	DATE	COMMENT	BY

811

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 ALWAYS CALL 811
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It's Not 24 Hours. It's The Day.

ASBUILT RECORD DRAWING

PROJECT NO.: INC100000000
 DRAWN BY: JEB
 CHECKED BY: JEB
 DATE: 6-20-21
 SCALE: 1" = 30'
 SHEET NO.: 290

AUTUMN LAKES PHASE III

FOR

HOME

LOCATION OF SITE:
 0 OLD BURN RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER
 ENGINEERING INC., PLLC

4130 PARK LAKE AVENUE, SUITE 150
 RALEIGH, NC 27612
 PHONE: (919) 775-9000
 FAX: (919) 775-2995
 WWW: WWW.BOHLERINC.COM
 BOHLER@BOHLERINC.COM

STATE OF NORTH CAROLINA

SEAL

CHARLES E. HERRICK

REGISTERED PROFESSIONAL CIVIL ENGINEER

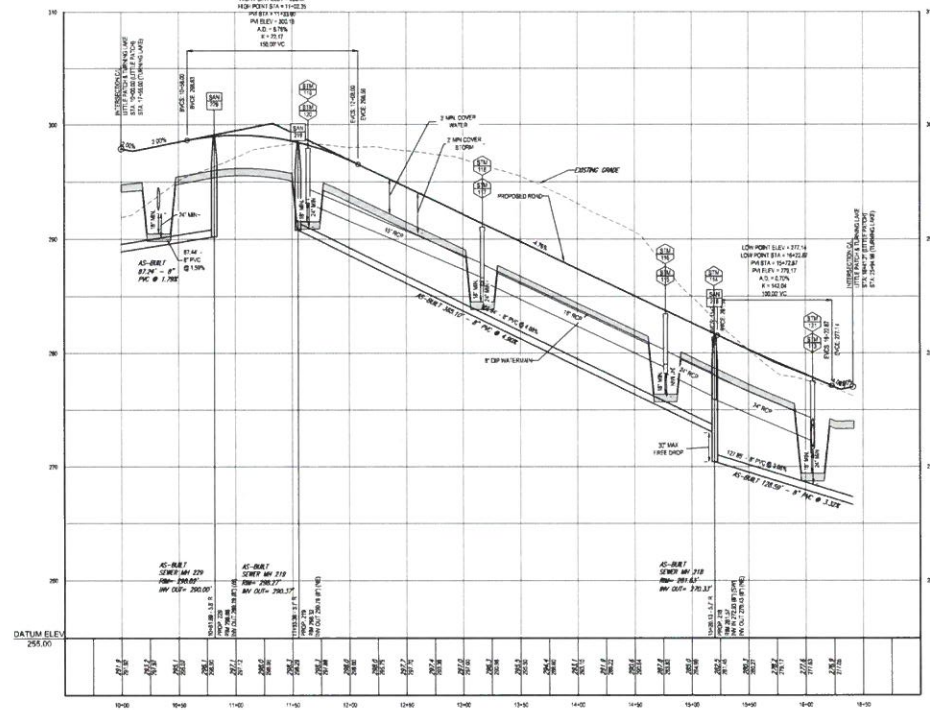
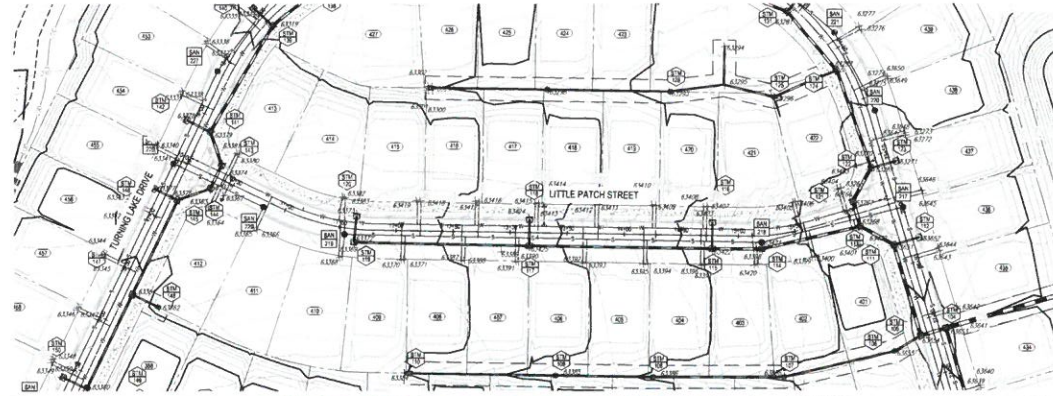
NO. 25121

SHEET TITLE

TURNING LAKE DRIVE PLAN AND PROFILE

SHEET NUMBER

C-6.1



LITTLE PATCH STREET PROFILE
 LOCAL REVISIONS:
 REVISION NO. DATE
 SPEED LIMIT 25 MPH - 28 MPH SPEED 25 MPH
 SCALE: 1" = 8' VERTICAL

- NOTES:**
1. ALL PIPE TRENCHES & BEDDING SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. WHEN PIPES OR STRUCTURES ARE INSTALLED ABOVE FINISHED GRADE, ENGINEERED FILL OR OTHER TOWN APPROVED MATERIAL SHALL BE USED IN TRENCH AS REQUIRED BY TOWN OF ZEBULON OR CITY OF RALEIGH.
 2. WAIVER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE WAIVER LINES PER TOWN OF ZEBULON STANDARDS, USING PROPER COLLECTION AND RECORDS, TO AVOID CONFLICT WITH SERVICE LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON SEPARATION REQUIREMENTS.
 3. WATER LINE APPURTENANCES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FULLY LOCATE APPURTENANCES TO AVOID CONFLICT WITH CURBS AND GUTTER AND OTHER UTILITIES.

BOHLER ENGINEERING NC, PLLC
 4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27813
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 Fax: (919) 753-2955
 NC@BohlerEng.com

REVISIONS

REV#	DATE	COMMENT	BY

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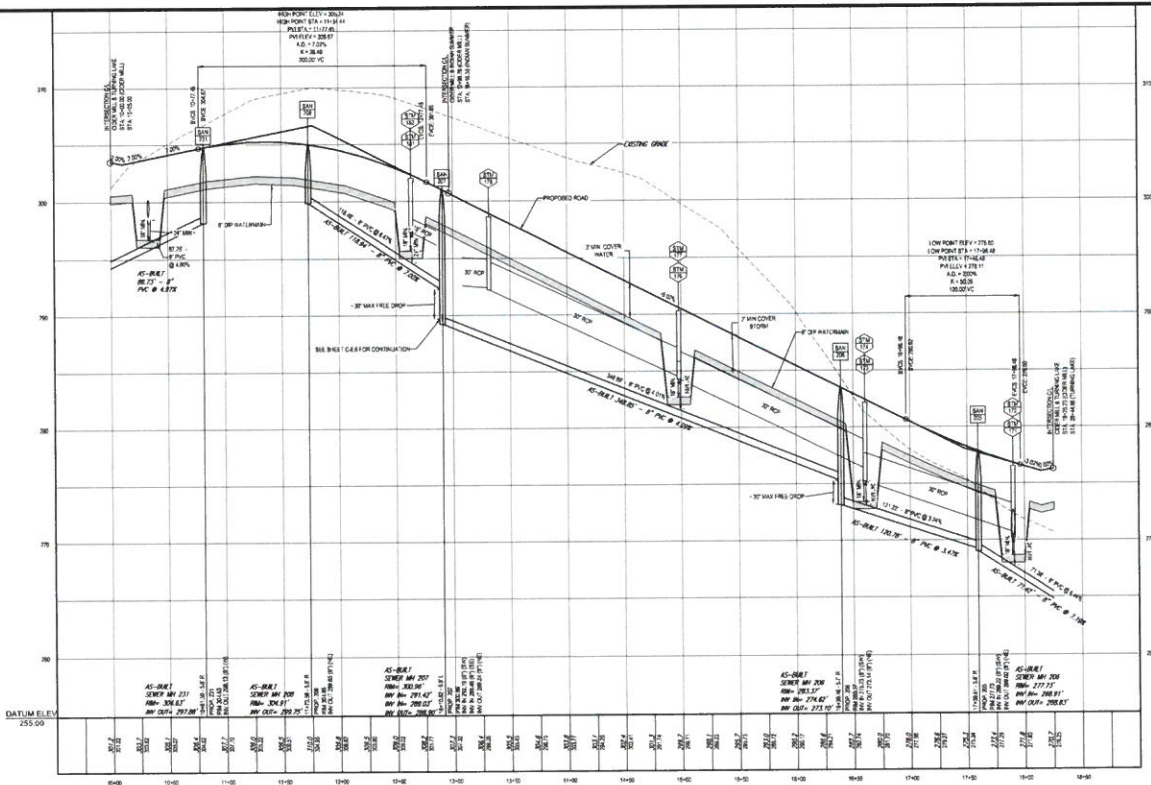
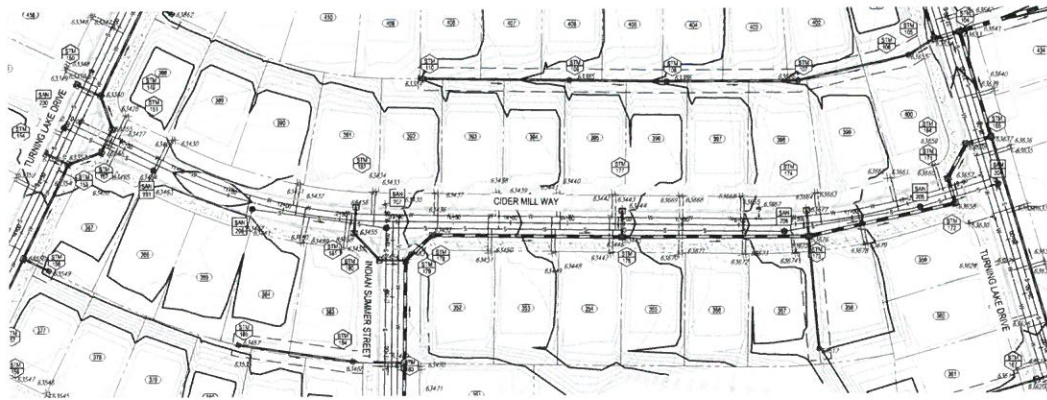
ASBUILT RECORD DRAWING

PROJECT: **AUTUMN LAKES PHASE III**
 FOR: **HOHLER**
 LOCATION OF SITE:
 0 OLD BLINN RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING NC, PLLC
 4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27813
 Phone: (919) 578-9000
 Fax: (919) 753-2955
 NC@BohlerEng.com

NEW CAROLINA
 PROFESSIONAL SEAL
 9/25/21

SHEET TITLE:
LITTLE PATCH PLAN AND PROFILE
 SHEET NUMBER:
C-6.2



NOTES:

1. ALL PIPE TRENCHES & BEDDING SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. SUCH PIPES OR STRUCTURES ARE NOT Laid ABOVE IN SITU SOIL. ENGINEERED FILL OR OTHER TOWN APPROVED MATERIALS SHALL BE USED IN TRENCH AS REQUIRED BY TOWN OF ZEBULON OR CITY OF RALEIGH.
2. WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE WATER LINES PER TOWN OF ZEBULON STANDARDS. LONG PIPE DEFLECTIONS AND BENDS, AS REQUIRED, TO AVOID CONTACT WITH SERVICE LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON SEPARATION REQUIREMENTS.
3. WATER AND ADJUSTMENTS ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ADJUSTMENTS TO AVOID CONTACT WITH CURB AND GUTTER AND OTHER UTILITIES.

CIDER MILL WAY PROFILE

LOCAL SURVEYOR:
 30 DAY OF P.L.C.A.
 SHEET NO. 214 - DESIGNATED BY LAW
 SCALE: 1" = 40' (VERTICAL)
 1" = 80' (HORIZONTAL)

BOHLER ENGINEERING INC. PLLC
 ENGINEERING INC. PLLC
 4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27612
 PHONE: (919) 576-5000
 FAX: (919) 576-2995
 NC@BohlerEng.com



REVISIONS

REV.	DATE	COMMENT	BY

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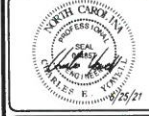
ASBUILT RECORD DRAWING

PROJECT NO.:
 DRAWN BY:
 CHECKED BY:
 DATE:
 SCALE:
 SHEET NO.:

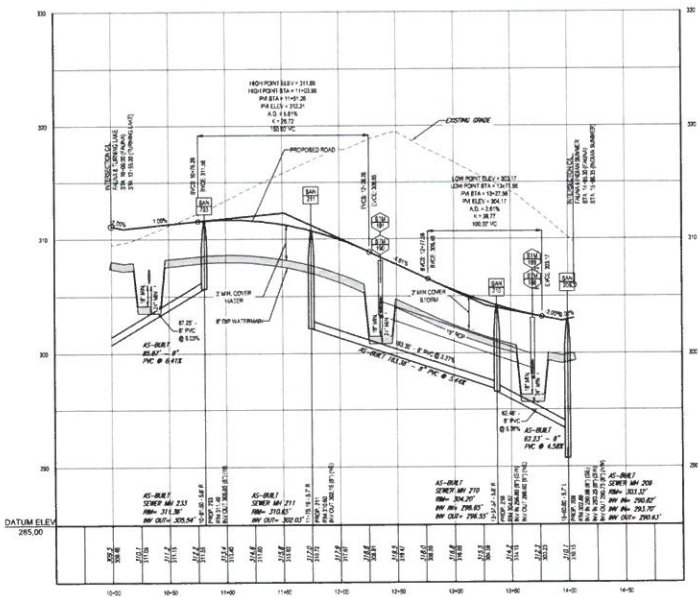
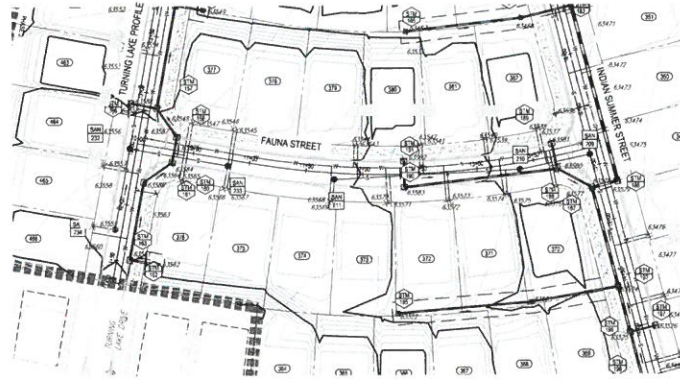
AUTUMN LAKES PHASE III
 FOR

 LOCATION OF SITE
 0 OLD BURN RD
 ZEBULON, NC 27587
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING INC. PLLC
 4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27612
 Phone: (919) 576-5000
 Fax: (919) 576-2995
 NC@BohlerEng.com



SHEET TITLE:
CIDER MILL PLAN AND PROFILE
 SHEET NUMBER:
C-6.3



FAUNA STREET PROFILE
 LOCAL ELEVATIONS
 30.00 IN PER FOOT
 10.00 HORIZONTAL PER 1.00 VERTICAL
 SCALE = 1" = 10' HORIZONTAL
 1" = 10' VERTICAL

- NOTES:**
- ALL PIPE TRENCHES & BLDG. SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. WHEN PIPES OR STRUCTURES ARE NOT MAILED AND/OR TRAFFIC SIGN, ENGINEERED FILL OR OTHER TOWN APPROVED MATERIAL SHALL BE USED IN TRENCH AS REQUIRED BY TOWN OF ZEBULON OR CITY OF RALEIGH.
 - WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE WATER LINES THE TOWN OF ZEBULON STANDARDS. USING PIPE DEFLECTIONS AND BENDS, AS REQUIRED, TO AVOID CONFLICT WITH SERVICE LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON SEPARATION REQUIREMENTS.
 - WATER LINE APPURTENANCES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE APPURTENANCES TO AVOID CONFLICT WITH CURBS AND GUTTER AND OTHER UTILITIES.

BOHLER ENGINEERING INC. PLLC
 ENGINEERING INC. PLLC
 4130 PARKLAKE AVENUE, SUITE 150
 RALEIGH, NC 27612
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 FAX: (919) 575-2965
 NC@BohlerEng.com

REVISIONS			
REV.	DATE	COMMENT	BY

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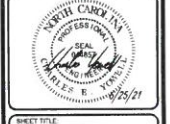
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PROJECT NO.: WCR16001
 DRAWN BY: CJA
 CHECKED BY: JES
 DATE: 6-25-21
 SCALE: 1" = 10'
 SHEET: 6-4

ATUMN LAKES PHASE III
 FOR

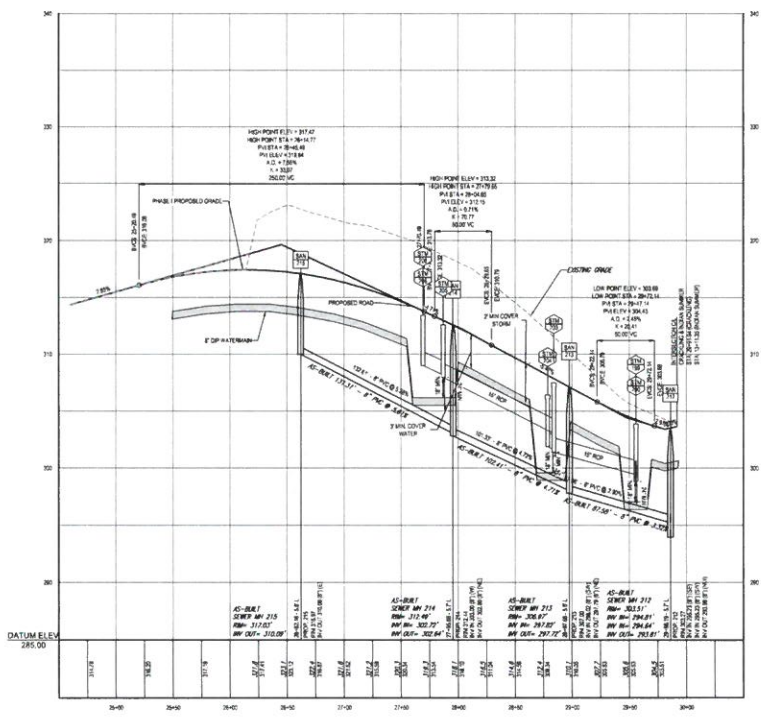
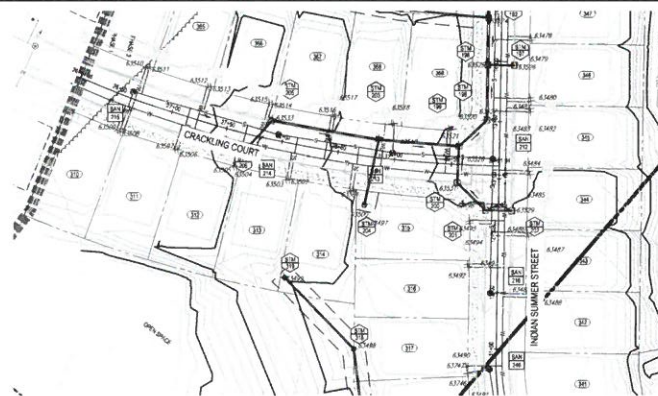
 LOCATION OF SITE
 0 OLD BUNN RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING INC. PLLC
 4130 PARKLAKE AVENUE, SUITE 150
 RALEIGH, NC 27612
 PHONE: (919) 575-5000
 FAX: (919) 575-2965
 NC@BohlerEng.com



SHEET TITLE:
FAUNA PLAN AND PROFILE

SHEET NUMBER:
C-6.4



NOTES:

1. ALL PIPE TRENCHES & STIFFENS SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. WATER PIPES OR STRUCTURE SHALL BE INSTALLED IN UNDISTURBED SOIL. FOUNDATIONS SHALL BE AS REQUIRED BY TOWN OF ZEBULON OR CITY OF RALEIGH.
2. WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE WATER LINES PER TOWN OF ZEBULON STANDARDS, USING PIPE DETECTION AND REMEDIATION AS REQUIRED TO AVOID CONFLICT WITH EXISTING LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON SEPARATION REQUIREMENTS.
3. WATER LINE ADJUSTMENTS ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ADJUSTMENTS TO AVOID CONFLICT WITH CURBS AND GUTTERS AND OTHER UTILITIES.

CRACKLING COURT PROFILE

RESIDENTIAL COLLECTOR
 12" S&P 8" P 5" W
 SPEED 247 CUM. 10000 BREED 24 MPH
 SCALE: V = 1" = 10' HORIZONTAL
 1" = 1' VERTICAL

BOHLER ENGINEERING INC., PLLC
 CITY OF ZEBULON, NORTH CAROLINA
 4130 PARKLAKE AVENUE, SUITE 110
 RALEIGH, NC 27612
 PHONE: (919) 793-2900
 FAX: (919) 793-2905
 NC@BohlerEng.com

REVISIONS

REV	DATE	COMMENT	BY

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ASBUILT RECORD DRAWING

PROJECT NO.: NC12026
 DRAWN BY: SLS
 CHECKED BY: CDT
 DATE: 6/23/21
 SCALE: 1" = 50'
 GRID: 285.00

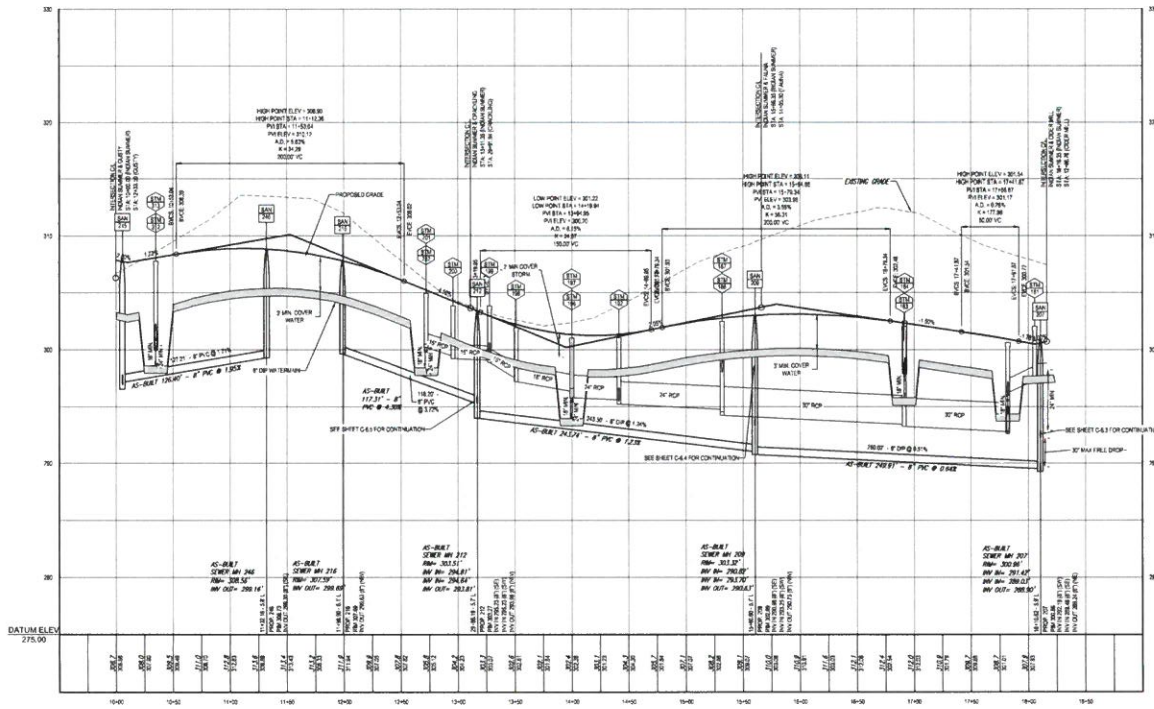
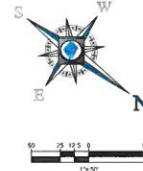
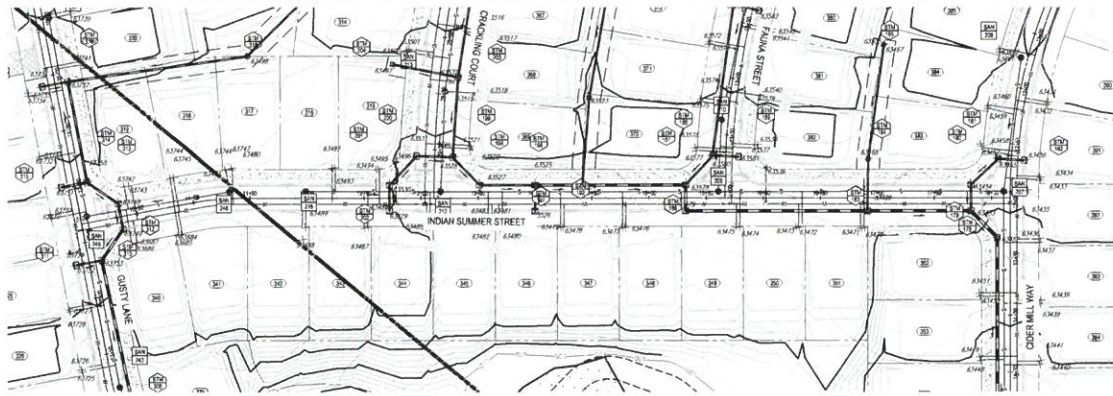
AUTUMN LAKES PHASE III
 FOR

 L&K ARCHITECTS
 610 DUNN RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING INC., PLLC
 4130 PARKLAKE AVENUE, SUITE 110
 RALEIGH, NC 27612
 Phone: (919) 793-2900
 Fax: (919) 793-2905
 NC@BohlerEng.com

PROFESSIONAL SEAL
 NORTH CAROLINA
 ENGINEER
 BOHLER ENGINEERING INC., PLLC
 DATE: 6/25/21

CRACKLING COURT PLAN AND PROFILE
 SHEET NUMBER:
C-6.5



NOTES:

1. ALL PIPER TRENCHES & BEDDING SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. WHERE PIPES OR FITTINGS ARE NOT LISTED ABOVE, INSTALL 15' MIN. UNBLENDED BELT OR OTHER TOWN APPROVED MATERIAL SHALL BE USED IN TRENCH AS REQUIRED BY TOWN OF ZEBULON OR CITY OF RALEIGH.
2. WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE WATER LINES PER TOWN OF ZEBULON STANDARDS, USING PIPE DEFLECTORS AND BRIDGE, AS REQUIRED, TO AVOID CONFLICT WITH SERVICE LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON SEPARATION REQUIREMENTS.
3. WATER LINE APPURTENANCES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCAL REQUIREMENTS TO AVOID CONFLICT WITH CURB AND OTHER UTILITIES.

INDIAN SUMMER STREET PROFILE

LOCAL NORTHERN
 10 1/8" x 14 1/8" x 1/4"
 SHEET 1441 28 MPH - DESIGN SPEED: 30 MPH
 SCALE: 1" = 10' HORIZONTAL
 1" = 4' VERTICAL

BOHLER ENGINEERING NC, PLLC
 4130 PARKLAK AVENUE, SUITE 150
 RALEIGH, NC 27612
 Phone: (919) 293-2900
 Fax: (919) 793-2965
 NC@BohlerEng.com

REVISIONS			
REV.	DATE	COMMENT	BY

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ASBUILT RECORD DRAWING
 PROJECT NO.: NCE13026
 DRAWN BY: SLS
 CHECKED BY: CDT
 DATE: 8/25/21
 SCALE: 1" = 50'
 CADD: PMS

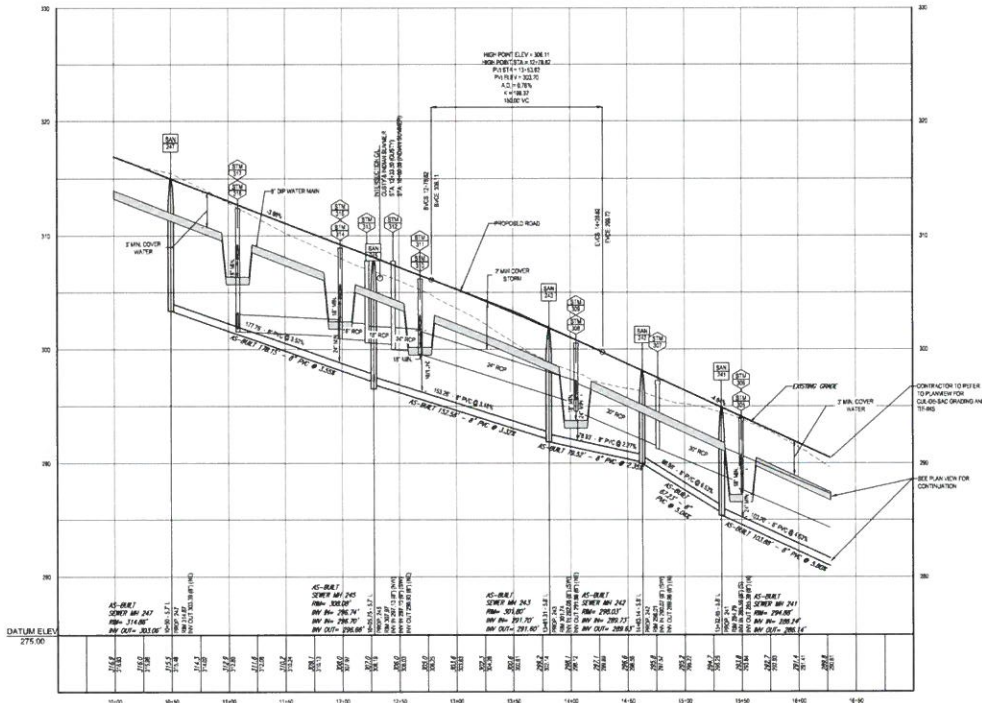
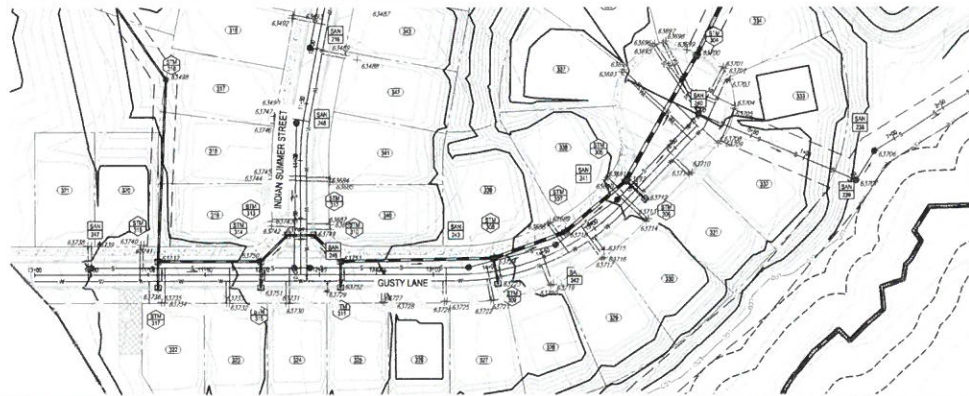
AUTUMN LAKES PHASE III
 FOX

 L&C ACTION 118 SITE:
 6 OLD BUNN RD
 ZEBULON, NC 27587
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING NC, PLLC
 4130 PARKLAK AVENUE, SUITE 150
 RALEIGH, NC 27612
 Phone: (919) 293-2900
 Fax: (919) 793-2965
 NC@BohlerEng.com

Professional Engineer Seal for **John A. Bohler**, License No. 10017, State of North Carolina, dated 8/25/21.

SHEET TITLE:
INDIAN SUMMER STREET PLAN AND PROFILE
 SHEET NUMBER:
C-6.6



- NOTES:**
1. ALL PIPE TRENCHES & BEDDING SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. WHEN PIPES OR STRUCTURES ARE INSTALLED ABOVE EXISTING, ENGINEERED FILL OR OTHER TOWN APPROVED MATERIAL SHALL BE USED IN TRENCH AS REQUIRED BY TOWN OF ZEBULON OR CITY OF RALEIGH.
 2. WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE WATER LINES PER TOWN OF ZEBULON STANDARDS, USING PIPE DEFLECTIONS AND BEDDING, AS REQUIRED, TO AVOID CONFLICT WITH SEWER, LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON ESTIMATION REQUIREMENTS.
 3. WATER LINE APPURTENANCES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE APPURTENANCES TO AVOID CONFLICT WITH CURB AND GUTTER AND OTHER UTILITIES.

GUSTY LANE PROFILE
 LOOK HORIZONTAL
 1/8" = 1'-0"
 1/8" = 1'-0" VERTICAL

BOHLER ENGINEERING INC, PLLC
 4130 PARKLANE AVENUE, SUITE 110
 RALEIGH, NC 27612
 Phone: (919) 753-2900
 Fax: (919) 753-2985
 NC@BohlerEng.com

REVISIONS

REV	DATE	COMMENT	BY

811
 KNOW WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG
 PLS. See 49 Pa.C. 2601

ASBUILT RECORD DRAWING

PROJECT NO.: NC182204
 DRAWN BY: SAE
 CHECKED BY: DEY
 DATE: 6/25/21
 SCALE: 1" = 30'
 CADD: PMS

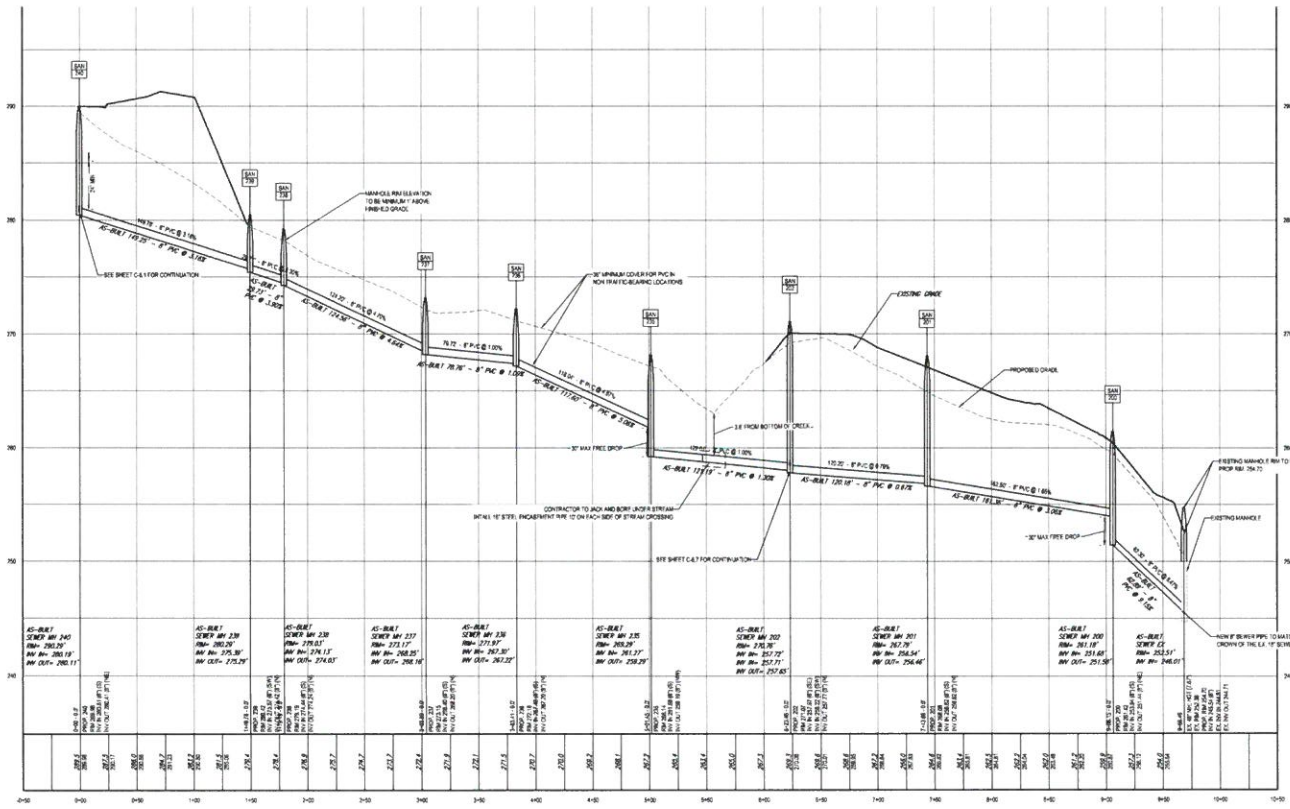
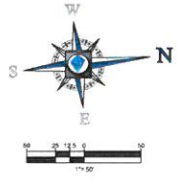
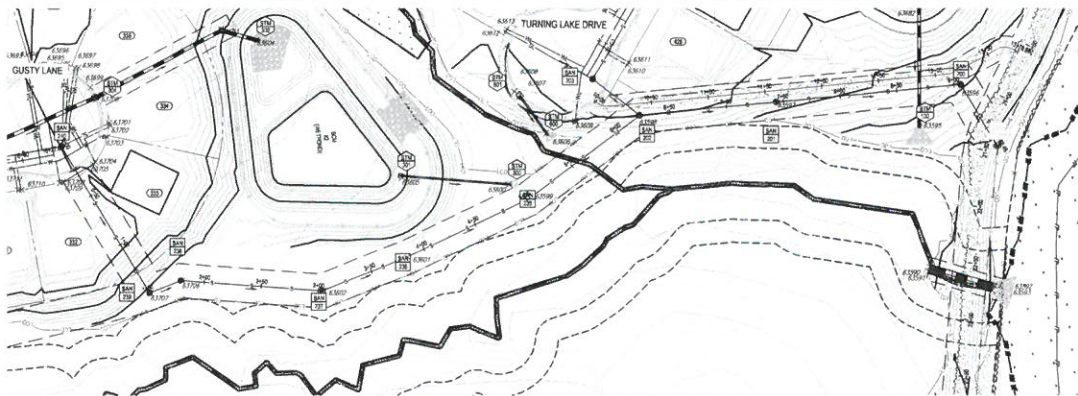
AUTUMN LAKES PHASE III
 FOR

LOCATION OF SITE:
 0 OLD BLINN RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING INC, PLLC
 4130 PARKLANE AVENUE, SUITE 110
 RALEIGH, NC 27612
 Phone: (919) 753-2900
 Fax: (919) 753-2985
 NC@BohlerEng.com

SHEET TITLE:
GUSTY LANE PLAN AND PROFILE

SHEET NUMBER:
C-6.7



- NOTES:**
- ALL PIPE, FITTINGS & BELLS SHALL CONFORM TO TOWN OF ZEBULON AND CITY OF RALEIGH STANDARDS. WHEN PIPES OR FITTINGS ARE NOT CALLED OUT IN THIS SPEC, LOCKING END SHALL BE USED UNLESS OTHERWISE SPECIFIED. ALL PIPES SHALL BE 15' MINIMUM LENGTH UNLESS OTHERWISE SPECIFIED.
 - WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT THE WATER LINES PER TOWN OF ZEBULON STANDARDS. USING PIPE DEFLECTIONS AND RECORDS AS REQUIRED TO AVOID CONFLICT WITH SERVICE LATERALS AND OTHER UTILITIES, AND MEET TOWN OF ZEBULON SEPARATION REQUIREMENTS.
 - WATER LINE APPURTENANCES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE APPURTENANCES TO AVOID CONFLICT WITH CURB AND GUTTER AND OTHER UTILITIES.

SANITARY OUTFALL PROFILE
SCALE: HORIZONTAL = 1" = 30'
VERTICAL = 1" = 3'

BOHLER ENGINEERING INC., PLLC
 4130 PARKLAKE AVENUE, SUITE 110
 RALEIGH, NC 27612
 PHONE: (919) 213-2900
 FAX: (919) 213-2965
 NC@BohlerEng.com

REVISIONS

REV	DATE	COMMENT	BY

811
 KNOW WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG
 24 HOURS A DAY, 7 DAYS A WEEK
 1-800-4-A-DAWG

ASBUILT RECORD DRAWING

PROJECT NO.: NCR13292
 DRAWN BY: J. L. CRY
 CHECKED BY: J. L. CRY
 DATE: 08/24/2010
 SCALE: 1" = 30'
 SHEET NO.: 68

AUTUMN LAKES PHASE III
 FOR

 LOCATION OF SITE:
 1100 BLUM RD
 ZEBULON, NC 27597
 WAKE COUNTY, NORTH CAROLINA

BOHLER ENGINEERING INC. PLLC
 4130 PARKLAKE AVENUE, SUITE 110
 RALEIGH, NC 27612
 PHONE: (919) 213-2900
 FAX: (919) 213-2965
 NC@BohlerEng.com

BOHLER ENGINEERING INC. PLLC
 J. L. CRY
 8/25/21

SANITARY OUTFALL PLAN AND PROFILE
 SHEET NUMBER:
C-6.8

Chris Ray

From: Chris Ray
Sent: Wednesday, June 30, 2021 11:29 AM
To: Meade Bradshaw
Cc: Jason Brown; Roger Silvers; Michael Clark; Bobby Fitts
Subject: Construction Inspection Fees - Autumn Lake Phase III

Meade,

Based on the submittal data for Autumn Lakes Phase III closeout; please bill Autumn Lakes for the following:

- Roadway Inspection Fees - 5,724 LF * \$2.50 per LF = \$14,310.00
- Sidewalk Inspection Fees - 7,027 LF * \$1.00 per LF = \$7,027.00
- Stormwater Inspection Fees - 6,233. LF * \$1.00 per LF = \$6,233.00
- Stormwater Mapping Fees - 6,233. LF * \$1.50 per LF = \$9,349.50 (new this year)
- Greenway Inspection Fees - 1,575 LF * 1.50 per LF = \$2,362.50 (new rate this year)

Total Cost

\$ 39,282.00

Let me know if you have any questions. Please send me a copy of the bill for my files and check when paid in full.

Regards,

Chris D. Ray
Zebulon Public Works Director
450 East Horton Street
Zebulon, NC 27597
Ph# 919-269-5285
Fax# 919-269-2617
Email – cray@townofzebulon.org
www.townofzebulon.org

ZEBULON
NORTH CAROLINA

Pursuant to North Carolina General Statutes Chapter 132, Public Records, this electronic mail message and any attachments hereto, as well as any electronic mail message(s) that may be sent in response to it may be considered public record and as such are subject to request and review by anyone at any time.



Town of Zebulon
 1003 N. ARENDELL AVENUE
 ZEBULON, NC 27597
 (919)823-1806

INVOICE #
22-00002

YOU CAN PAY ONLINE BY CREDIT/DEBIT/ACH:
 WWW.EDMUNDSGOVPAY.COM/ZEBULON
 YOU WILL NEED YOUR ACCOUNT ID AND PIN

ACCOUNT ID: BOHL PIN: 165234
 INVOICE DATE: 07/01/21
 DUE DATE: 07/02/21

Bohler Engineering NC, PLLC
 4130 Parklake Avenue STE 130
 Raleigh, NC 27612

QUANTITY/UNIT	SERVICE ID	DESCRIPTION	UNIT PRICE	AMOUNT
Autumn Lakes Phase 3				
7027.0000/LF	SIDEWALK	Sidewalk Construction Inspecti Sidewalk	1.000000	7,027.00
5724.0000/LF	STREETCU	Streets/Curb/Gutter Constr Ins Roadway	2.500000	14,310.00
6233.0000/LF	STORMDRA	Storm Drainage Constr. Inspect Stormwater	1.000000	6,233.00
6233.0000/LF	STORMMAP	STORMWATER MAPPING FEES Stormwater Mapping	1.500000	9,349.50
1575.0000/LF	GREENWYC	Greenway Construction Inspecti Greenway	1.500000	2,362.50
160.0000/LOT	PLAT PER	MAJ SUBDIVISION PLAT FEE/LOT Planning	5.000000	800.00
TOTAL DUE:				<u>\$ 40,082.00</u>
Prn Payment: 07/29/21 CK 33459				-40,082.00
BALANCE:				<u>\$ 0.00</u>

PAYMENT COUPON - PLEASE DETACH AND RETURN THIS PORTION ALONG WITH YOUR PAYMENT

Town of Zebulon
 1003 N. ARENDELL AVENUE
 ZEBULON, NC 27597
 (919)823-1806

INVOICE #: 22-00002
 DESCRIPTION: Autumn Lakes Phase 3
 ACCOUNT ID: BOHL PIN: 165234
 DUE DATE: 07/02/21
 TOTAL DUE: \$ 0.00

Bohler Engineering NC, PLLC
 4130 Parklake Avenue STE 130
 Raleigh, NC 27612





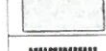


SITE DATA

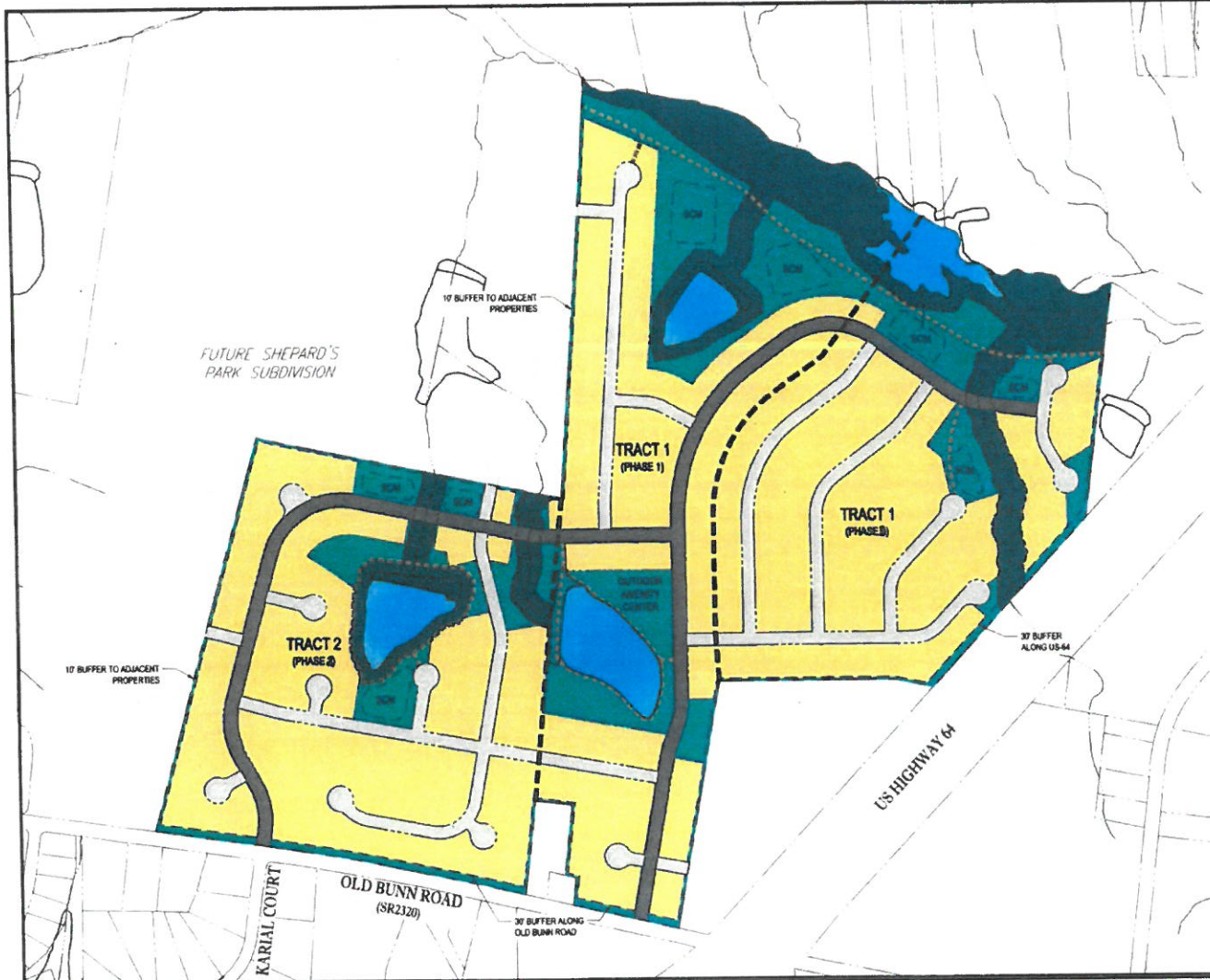
GROSS AREA	±180 ACRES
MAX. NUMBER OF PROPOSED HOMES	550 UNITS
MAX. GROSS DENSITY	4 DUA
MIN. GROSS AREA OF OPEN SPACE	20% OF GROSS AREA
MIN. BUILDABLE OPEN SPACE	20% OF GROSS OPEN SPACE
TRACT 1	
GROSS AREA	±105 AC
MAX. NUMBER OF PROPOSED HOMES	375 UNITS
MAX. GROSS DENSITY	4 DUA
MIN. GROSS AREA OF OPEN SPACE	20% OF GROSS AREA
MIN. BUILDABLE OPEN SPACE	20% OF GROSS OPEN SPACE
TRACT 2	
GROSS AREA	±55 AC
MAX. NUMBER OF PROPOSED HOMES	175 UNITS
MAX. GROSS DENSITY	4 DUA
MIN. GROSS AREA OF OPEN SPACE	20% OF GROSS AREA
MIN. BUILDABLE OPEN SPACE	20% OF GROSS OPEN SPACE

GENERAL NOTES

- BOUNDARY INFORMATION IS TAKEN FROM WAKE COUNTY GIS
- ALL AREAS ARE APPROXIMATE AND SUBJECT TO SURVEY
- ALL DESIGN, MATERIALS, AND CONSTRUCTION WILL BE IN ACCORDANCE WITH THE TOWN OF ZEBULON ORDINANCES, STANDARDS, AND SPECIFICATIONS. ALL WATER AND SANITARY SEWER DESIGN, MATERIALS, AND CONSTRUCTION WILL BE IN ACCORDANCE WITH CITY OF RALEIGH PUBLIC UTILITIES POLICIES, STANDARDS, AND SPECIFICATIONS
- GREENWAY, TRAILS, OUTDOOR AMENITIES, AND STORMWATER CONTROL MEASURES WILL BE LOCATED IN OPEN SPACE
- THIS PLAN IS ILLUSTRATIVE IN NATURE AND SUBJECT TO CHANGE. ITEMS THAT MAY AFFECT DESIGN INCLUDE: FINAL ALTA SURVEY, FINAL TRAFFIC IMPACT ANALYSIS, COMPLIANCE WITH REGULATORY ORDINANCES, STANDARDS, AND POLICIES, REFINEMENT OF UTILITY AND STORMWATER DESIGN, AND UNFORESEEN CIRCUMSTANCES. IT IS INTENDED TO ILLUSTRATE IN VERY GENERAL TERMS THE SCOPE, SCALE, AND CONNECTIVITY OF THIS DEVELOPMENT

LEGEND

	SINGLE FAMILY LOTS
	BUILDABLE OPEN SPACE
	BUFFERED OPEN SPACE
	RESIDENTIAL COLLECTOR (60' ROW)
	LOCAL STREET (50' ROW)
	GREENWAY AND TRAILS
	PHASE LINE



PROJECT NAME

AUTUMN LAKES SUBDIVISION
 OLD BUNN ROAD
 TOWN OF ZEBULON, WAKE COUNTY, NC



SHEET TITLE

ILLUSTRATIVE CONCEPT PLAN

SCALE	DATE	CAD ID	PROJECT NUMBER
1"=400'	11-2-2016		NCR162057

RESOLUTION 2022-05
ACCEPTING ROADWAY, STORM DRAINAGE AND GREENWAY
INFRASTRUCTURE FOR AUTUMN LAKES PHASE 3

WHEREAS, LGI Homes – NC, LLC, the developers of Autumn Lakes Phase 3, has requested the Town of Zebulon to assume ownership and maintenance of the roadway, greenway and storm drainage infrastructure within the public right-of-way or dedicated easements of Autumn Lakes Phase 3, consisting of 6,233 linear feet (LF) of drainage infrastructure, 2,166 LF of 10-foot asphalt greenway, and 5,724 LF of roadway:

- 378 LF at Crackling Court
- 2004 LF at Turning Lake Drive
- 641 LF at Little Patch Street
- 825 LF at Cider Mill Way
- 405 LF at Fauna Street
- 816 LF at Indian Summer Street
- 655 LF at Gusty Lane

WHEREAS, the Town of Zebulon has inspected said infrastructure; and

WHEREAS, LGI Homes-NC, LLC has completed all punch list tasks; and

WHEREAS, the Town of Zebulon has received all required documentation needed for Dedication and Warranty; and

WHEREAS, the Town of Zebulon has received a subdivision bond from IAT Insurance Company for completion of final asphalt roadway overlay, five-foot sidewalk, access ramps, stormwater pond conversion, greenway amenities, street trees and mail kiosk; and

WHEREAS, the Town of Zebulon may accept an offer of dedication of streets, greenways, sidewalks, curb and gutter, and storm drainage by resolution of the Board of Commissioners per the Town of Zebulon Uniform Development Ordinance section 6.4.1 and 6.10.4.

NOW, THEREFORE, BE IT RESOLVED that the Board of Commissioners of the Town of Zebulon accepts dedication of the aforementioned roadway, storm drainage, and greenway infrastructure as described in the attached documents effective September 13, 2021.

Adopted this 13th day of September 2021.


SEAL

Robert S. Matheny - Mayor

Lisa M. Markland, CMC - Town Clerk

STAFF REPORT
ROTARY CLUB "FLAGS FOR HEROS"
ZEBULON MUNICIPAL COMPLEX FACILITY
USE APPLICATION
SEPTEMBER 13, 2021

Topic: Rotary Club "Flags for Heros" Zebulon Municipal Complex Facility Use Application

Speaker: Chris Ray, Director of Public Works
From: Chris Ray, Director of Public Works
Prepared by: Chris Ray, Director of Public Works
Approved by:  Joseph M. Moore II, PE, Town Manager

Executive Summary:

The Board of Commissioners will consider Zebulon Rotary Club's request to install 200, 10-foot American flags on the municipal grounds over the Veterans Day holiday weekend.

Background:

On May 22, 2013, Zebulon's Board of Commissioners adopted a facility use policy detailing the requirements for non-profit groups to utilize the Zebulon Municipal Complex.

The Zebulon Rotary Club has requested the use of the municipal complex to install 200, 10-foot US flags to support our veterans and other local heroes from November 9th through November 14th. Flag bases will be installed November 9. The flags will be installed on Veterans day, Thursday, November 11th, and kept up through Sunday, November 14th. The Rotary Club also requests installation of a 10'x10' tent staffed with members from Thursday thru Sunday (11/11-11/14) from 10am to 4pm.

Approximately 138 flags will line both sides of the front circle drive, along the front fence, and outlining the Blue Star Memorial. An additional 62 flags will be spread out on the rear lawn. If the event is a success, the Rotary Club may choose the leave bases installed in ground.

Rotary Club members will work closely with Zebulon Public Works Staff on the installation to avoid damage to the irrigation system. The Rotary Club requests a waiver of the facility use fee of \$1,000. All proceeds from the event will go to support Rotary Club charitable activities throughout the year.

Based on the projected number of attendees, the Rotary event will be smaller than other events held at ZMC (e.g., Zebulon Night Out and Relay for life). There should be minimal impact to the facility grounds. The event does not require use of the buildings; therefore, there should be no impact on the buildings.

Discussion:

The discussion before the Board is whether to allow the Rotary Club to install the 200 flags on the municipal complex grounds over the Veterans Day Holiday weekend, and waive the facility use fee.

STAFF REPORT
ROTARY CLUB "FLAGS FOR HEROS"
ZEBULON MUNICIPAL COMPLEX FACILITY
USE APPLICATION
SEPTEMBER 13, 2021

Policy Guidance:

The Zebulon Rotary request to use the municipal complex facilities is consistent with the first four considerations in Exhibit D of the Facility Use Policy for the Zebulon Municipal Complex:

- Nonprofit status or public service
- Substantial presence in the community
- Proven track record over time of contributions to benefit the Town, its institutions, and its citizens
- Stimulate or encourage community participation in nonprofit activities

Fiscal Analysis:

The FY2021 facility use fee is \$1,000. The approximate cost for labor and other expenses for the event is \$440.00. The event fundraiser goal is \$10,000, less the cost of flags.

Staff Recommendation:

Staff recommends the Zebulon Board of Commissioners approve the use of the facility and waive the facility use fee. Public Works staff will be available to assist if an issue arises.

Attachments:

1. Rotary Club Site Layout

STAFF REPORT
ROTARY CLUB – FLAGS FOR HEROES
EXHIBIT LAYOUT
SEPTEMBER 13, 2021

