



**AGENDA**  
**BREVARD CITY COUNCIL - REGULAR MEETING**  
**Monday, November 20, 2023 - 5:30 PM**  
**City Council Chambers**

**A. Welcome and Call to Order**

**B. Invocation**

Pastor Andrew White, Calvary Baptist Church

**C. Pledge of Allegiance**

**D. Certification of Quorum**

**E. Approval of Agenda**

**F. Approval of Minutes**

**G. Public Comments**

**H. Certificates / Awards / Recognition**

1. Proclamation 2023-21 Brevard High School Girls Volleyball Team State Championship
2. Proclamation 2023-22 Brevard High School Boys' Cross Country Team State Champions

**I. Special Presentation(s)**

1. Water Shortage Response Plan Briefing

**J. Public Hearing(s)**

1. Proposed Text Amendment to City of Brevard Unified Development Ordinance Chapters 2, 3, 10 & 19 - Extraction Uses
2. Proposed Text Amendment to City of Brevard Unified Development Ordinance, Chapters 2, 4, 5, 17 and 19 - Building Line Revisions

**K. Consent and Information**

1. Tax Settlement Report - October, 2023

2. Resolution Designating Police Chief Tom Jordan as City's Official to Make Recommendations to NC ABC Commission
3. City Manager Employment Agreement Amendments
4. City Council Housing Committee Minutes - October 10, 2023
5. City Council Downtown Master Plan Committee Minutes - October 11, 2023

**L. Unfinished Business**

1. Proposed Text Amendment to the City of Brevard Code of Ordinances, Chapter 34  
- Floodplain Development Revision

**M. New Business**

1. Times Arcade Alley - Authorize City Manager to Award Contract

**N. Remarks / Future Agenda Considerations**

**O. Closed Session(s)**

**P. Adjourn**

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Agenda Posted, Website, Sunshine List (November 16, 2023)  
D. Hodsdon, City Clerk

*To review Agenda materials, go to the City's website [www.cityofbrevard.com](http://www.cityofbrevard.com). Select "Your Government" tab followed by "Agenda Packets" tab. Agenda packet materials are posted on Thursday afternoon prior to Council's Monday meeting.*



**Proclamation No. 2023-21**  
**In Recognition of Brevard High School Girls Volleyball Team**  
**Winning 2023 State Championship**

**WHEREAS**, on November 4, 2023, Brevard High School Girls Volleyball Team captured the 2023 North Carolina High School Athletic Association (NCHSAA) 2A Volleyball State Championship; and

**WHEREAS**, under the guidance of Head Coach Cori Bryson and Assistant Coaches Nell McMurtry, Caleb Hill and Rachel Tritt, the Brevard Lady Devils Volleyball Team earned it first NCHSAA state title in school history, completing the season with an overall record of 32-2; and

**WHEREAS**, Coach Cori Bryson was named the 2023 Coach of the Year; and

**WHEREAS**, Meleah Foster was named 2023 Player of the Year; and

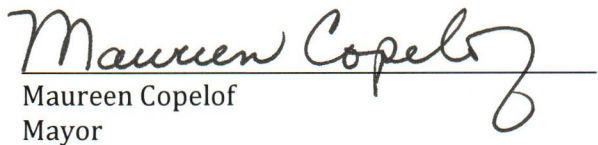
**WHEREAS**, Clair Wilson was named 2023 Defensive Player of the Year; and

**WHEREAS**, through hard work, dedication, teamwork, and commitment, the Lady Blue Devils brought honor upon themselves, Brevard High School, and Transylvania County.

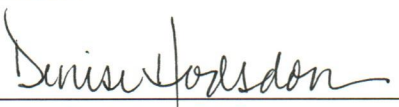
**NOW, THEREFORE**, be it proclaimed that the Brevard City Council expresses its congratulations and appreciation to the athletes, coaches, staff and parents of the Brevard High School Girls Volleyball Team. Let it be remembered that each and every one of these individuals are a valuable asset to the City of Brevard and Transylvania County and will shape our future as they continue on the path towards adulthood.

Further, I, Mayor Maureen Copelof and Brevard City Council, do hereby proclaim Tuesday, **November 21, 2023**, as "**LADY BLUE DEVILS VOLLEYBALL TEAM DAY**" in the City of Brevard, North Carolina, and call upon all citizens to join us in recognizing the Brevard High School Girls Volleyball Team and coaching staff for their achievements.

Proclaimed this the 20th day of November 2023.

  
Maureen Copelof  
Mayor

ATTEST:

  
Denise Hodsdon, CMC  
City Clerk





**Proclamation No. 2023-22**  
**In Recognition of Brevard High Boys Cross Country Team**  
**Winning 2023 State Championship**

**WHEREAS**, on November 4, 2023, Brevard High School Boys Cross Country Team captured the 2023 North Carolina High School Athletic Association (NCHSAA) 2A Cross Country State Championship; and

**WHEREAS**, under the guidance of Coach Ben Morgan and Coach Jackie Witherspoon, the Brevard Blue Devils Cross Country Team had a perfect championship season, winning Conference, Regionals and the State Championship, the second State Championship in school history; and

**WHEREAS**, this year the Boys Cross Country Team won the historical Freedom Invitational and the prestigious Wendy's Invitational; and

**WHEREAS**, Leo Murray, Avan Hinkle and Keaton Campbell gained All-State Honors; and

**WHEREAS**, through hard work, dedication, teamwork, and commitment, the Boys Cross Country Team brought honor upon themselves, Brevard High School, and Transylvania County.

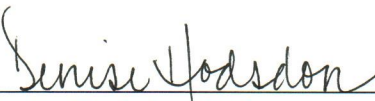
**NOW, THEREFORE**, be it proclaimed that the Brevard City Council expresses its congratulations and appreciation to the athletes, coaches, staff and parents of the Brevard High School Boys Cross Country Team. Let it be remembered that each and every one of these individuals are a valuable asset to the City of Brevard and Transylvania County and will shape our future as they continue on the path towards adulthood.

Further, I, Mayor Maureen Copelof and Brevard City Council, do hereby proclaim Wednesday, **November 22, 2023**, as "**BLUE DEVILS BOYS CROSS COUNTRY TEAM DAY**" in the City of Brevard, North Carolina, and call upon all citizens to join us in recognizing the Brevard High School Boys Cross Country Team and coaching staff for their achievements.

Proclaimed this the 20th day of November 2023.

  
Maureen Copelof  
Mayor

ATTEST:

  
Denise Hodsdon, CMC  
City Clerk





## STAFF REPORT

City Council, Monday, November 20, 2023

**Title:** Water Shortage Response Plan Briefing

**Speaker:** Wilson Hooper, City Manager  
Dennis Richardson, Water Treatment Plant ORC

**Prepared by:** Dennis Richardson, Water Treatment Plant ORC, Wilson Hooper, City Manager

**Approved by:** Wilson Hooper, City Manager

### Background

Transylvania County is one of 31 (as of Nov. 9) North Carolina counties deemed to be in a "Severe Drought" by the North Carolina Drought Management Advisory Council (NC DMAC). The NC DMAC is made up of environmental experts from various state, federal, and private sector agencies who monitor conditions and make recommendations based on conservation best practices.

Brevard's Water Shortage Response Plan is not triggered by an NC DMAC designation. The City of Brevard's water intake along Cathey's Creek is closer to the source than many other towns', so Brevard is often the last to feel the effects of drought. But Cathey's Creek is vulnerable to the environmental conditions analyzed by the drought monitoring group, so a NC DMAC designation causes Brevard to take notice and begin monitoring its water levels.

### Discussion

Codified into ordinance in 2010, Brevard's "Water Shortage Response Plan" seeks to preserve water availability for "human consumption, sanitation, health and fire protection." It outlines a tiered response to drought conditions based on severity. It authorizes the City Manager to enact its provisions whenever the trigger conditions are met. It lists notification requirements. And it gives the city the legal authorization it needs to enforce its regulations.

| Stage   | Trigger                 | Conservation measures                                                                                           | Conservation goals           | Enforcement methods |
|---------|-------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------|---------------------|
| Stage 1 | WTP can pump <1,700 GPM | Voluntary measures. City seeks to induce voluntary conservation by conducting education across media platforms. | 10% below normal consumption | None                |

|         |                         |                                                                                                                                                                                                                   |                              |                                                                                                                                                                                                                                                       |
|---------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stage 2 | WTP can pump <1,500 GPM | Mandatory restrictions. Irrigation activities shall be minimized and only conducted one hour after sunrise/one hour before sunset. Residential car washing prohibited. Washing of impervious surfaces prohibited. | 20% below normal consumption | <p>Surcharge of 1.5x normal rate for consumption over 2000 gals/mo.</p> <p>Notice of violation for first offense; 24-hour disconnection for second offense; \$250 fine and 48-hour shut off period for third and subsequent offenses</p>              |
| Stage 3 | WTP can pump <1,300 GPM | Mandatory restrictions. All non-essential uses prohibited. Firefighting is the only allowable outdoor water use.                                                                                                  | 30% below normal consumption | <p>Surcharge of 2x normal rate for consumption over 2000 gals/mo.</p> <p>24-hour disconnection for first offense; \$500 fine and 48-hour disconnection for second offense; \$500 fine and 72-hour disconnection for third and subsequent offenses</p> |

City staff are on hand to provide a more detailed briefing and answer questions about the Water Shortage Response Plan.

### **Action**

The Water Shortage Response Plan briefing is for information and discussion only.

**Attachments:**

1. Chapter 70 Article 4 Water Shortage Response Plan



## CITY CODE OF ORDINANCES

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# PART II: CODE OF ORDINANCES

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## CHAPTER 70. UTILITIES

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*Cross reference(s)—Buildings and building regulations, [CHAPTER 18](#); poles, wires and conduits, § [62-91](#) et seq.*

*State law reference(s)—Municipal authority to operate public utilities, G.S. 160A-312.*

## ARTICLE IV. WATER SHORTAGE RESPONSE PLAN

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### Contents:

- 70-127. Declaration.
- 70-128. Authorization.
- 70-129. Notification.
- 70-130. Classification of water uses.
- 70-131. Levels of response.
- 70-132. "Triggers" and responses.
- 70-133. Public comment.
- 70-134. Variance protocols.
- 70-135. Effectiveness.
- 70-136. Revision.
- 70-137. Enforcement and penalties.
- 70-138, 70-139. Reserved.

Editor's Notes

### 70-127. Declaration.

Whenever the water supply of the City of Brevard's public water system is low or declining due to conditions which may adversely affect the continued availability of water for human consumption, sanitation, health and fire protection, it will become necessary to declare a water shortage and implement conservation requirements under the standards set forth below. The procedures herein are written to reduce potable water demand whenever drinking water supplies are in danger of being inadequate to meet customer needs.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### 70-128. Authorization.





The City of Brevard City Manager is authorized to enact water shortage response provisions whenever the trigger conditions outlined in Section 70-132 are met. In his or her absence the ORC (operator in responsible charge) of the water treatment plant will assume this role.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-129. Notification.**

The following notification methods will be used to inform water system customers and employees of a water shortage declaration: employee e-mail announcements and notification from supervisors when reporting for work, notices posted at city hall, notices on water bills, notice posted on city website, notice published in the Transylvania Times, public service announcements on local radio WSQL and via Comporium CATV.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-130. Classification of water uses.**

#### **A. Class I: Essential uses of potable water.**

1. *Domestic:* Water to sustain human and domestic pet life, maintain hygiene and sanitation standards.
2. *Patient care:* Patient care and rehabilitation, including swimming pools used for patient care and rehabilitation as prescribed by medical personnel.
3. *Public safety:* Firefighting and approved flushing of hydrants and sewer mains to ensure public health and safety.

#### **B. Class II: Socially or economically essential uses of potable water.**

1. *Domestic:* Minimal use for kitchen, bathroom and laundry; minimal watering of vegetable gardens needed to sustain them between the hours of one hour before sunset and one hour after sunrise.
2. *Patient care:* Patient care and rehabilitation, including swimming pools used for patient care and rehabilitation as prescribed by medical personnel.
3. *Public use:* Filling and operation of public swimming pools.
4. *Commercial:* Commercial vehicle washers, laundromats, restaurants, hotels/motels, minimal water usage by commercial nurseries required to sustain stock, minimum amounts required to sustain essential cooling operations.
5. *Agricultural:* Minimal amounts required to sustain crops, livestock and associated activities.
6. *Industrial:* Minimal use necessary to operate production facilities and sustain jobs, minimal amounts required to sustain essential cooling operations.
7. *Institutional:* Efficient use of water by schools, churches, and government facilities.

#### **C. Class III: Non-essential uses of potable water.**

1. *All:* Ornamental uses (fountains, reflecting pools, artificial waterfalls, etc.) residential and commercial lawn irrigation, non-commercial washing of motor vehicles, wash down of impervious surfaces, filling and operation of recreational swimming pools.
2. *Public use:* Gardens, lawns, parks, city/county playing fields and recreation areas.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-131. Levels of response.**



Three levels of response are included in this plan. These levels are: stage 1 water shortage advisory, voluntary restrictions/reductions. Stage 2 water shortage alert, mandatory restrictions/reductions. Stage 3 water shortage emergency, escalated mandatory restrictions/reductions and water rationing. A detailed description of each response level and corresponding water reduction measures are as follows.

**A. *Stage 1 water shortage advisory:***

1. Water supply conditions indicate a potential for a shortage. Voluntary restrictions. Water users are encouraged to voluntarily reduce their water use and improve water use efficiency; however, there are no penalties for noncompliance. All water users are requested to adhere to class I and class II uses of potable water.
2. All water users who use in excess of 2,000 gallons during the billing period will be asked to reduce their normal water use by ten percent. Customer education programs (i.e., articles in local publications, city's website, city newsletter, public service announcements on local radio and cable system will encourage water conservation.

**B. *Stage 2 water shortage alert:***

1. Water supply conditions are significantly lower than normal and conditions are expected to persist. Mandatory restrictions. Water users must abide by required water use restrictions and reductions. Penalties apply for noncompliance. All customers are required to reduce their water use by an additional ten percent in comparison to their previous month's water bill. Only water usage as described in class I and class II uses is allowed.
2. Additionally, in stage 2 a water use surcharge of one and one-half times the normal water rate applies to any user (who exceeds 2,000 gallons usage for the billing period) who did not achieve the required ten percent reduction in usage.

**C. *Stage 3 water shortage emergency:***

1. Water supply conditions are substantially diminished and pose an imminent threat to human health. Water users must continue actions from all previous stages and further reduce water use by ten percent compared to their previous month's bill. All non-essential uses of drinking water are prohibited. All customers must only use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use.
2. Water rationing, if deemed necessary by the city manager, will be to provide drinking water to protect public health. All customers are only permitted to use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use and pickup locations for distributing potable water will be announced by the city.
3. Additionally, in stage 3 a water use surcharge of two times the normal water rate applies to any user (who exceeds 2,000 gallons usage for the billing period) who did not achieve the required additional ten percent reduction.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

## **70-132. "Triggers" and responses.**

The following "triggers" for the city are listed below in relationship to the city's "run of the river" water supply system.

- A. *Triggers.*** If the city's water source, Cathey's Creek, experiences stream flow reductions as described below, then specific responses will take effect.



1. *Stage 1.* If the flow of water entering the raw water intake becomes inadequate for normal pump operation greater than 1,700 gallons per minute during seven consecutive days; or if damage, failure or contamination of the city's treatment and/or distribution systems occurs thus restricting or otherwise limiting the city's ability to maintain normal operation of its water system as determined by the city's manager or authorized representative; or for other reasons as may be determined by the city manager, then the city manager may declare a water shortage advisory.
2. *Stage 2.* If the flow of raw water entering the raw water intake becomes inadequate for normal pump operation greater than 1,500 gallons per minute during seven consecutive days; or if damage, failure or contamination of the city's treatment and/or distribution systems occurs thus restricting or otherwise limiting the city's ability to maintain normal operation of its water system as determined by the city's manager or authorized representative; or for other reasons as may be determined by the city manager, then the city manager may declare a water shortage alert.
3. *Stage 3.* If the flow of raw water entering the raw water intake becomes inadequate for normal pump operation greater than 1,300 gallons per minute during seven consecutive days; or if damage, failure or contamination of the city's treatment and/or distribution systems occurs thus restricting or otherwise limiting the city's ability to maintain adequate operation of its water system as determined by the city's manager or authorized representative; or for other reasons as may be determined by the city manager, then the city manager may declare a water shortage emergency.

**B. Responses.**

1. In stage 1, water shortage advisory, all water users will be asked to reduce their normal water use by ten percent. Conservation and efficiency measures will be encouraged by outreach programs such as articles in the Transylvania Times, PSAs on local radio and cable TV and the city's website. Irrigating landscapes should be at the minimum required and should only be done between the hours of one hour before sunset and one hour after sunrise. Identify and repair all water leaks. Consider installing water-saving devices on showers. Avoid watering or washing impervious surfaces such as driveways and sidewalks. Minimize vehicle washing.
2. In stage 2, water shortage emergency, all water users are expected to reduce their water use by an additional ten percent in comparison to their previous month's water bill if that bill shows usage of more than 2,000 gallons. In addition to continuing the steps which were encouraged during the water shortage advisory, the following restrictions apply: Irrigation activities must be done at the minimum required to sustain plant life and must be done only between the hours of one hour before sunset and one hour after sunrise. Washing of vehicles is prohibited except at commercial car washes. Watering or washing impervious surfaces such as driveways and sidewalks is prohibited. All use of city fire hydrants will be limited to that required for public health and safety and done only by personnel authorized by the city manager or his representative. All customers are only permitted to use water at the minimum required for public health protection as outlined in class I and class II water uses. Additionally, in stage 2, a water use surcharge of one and one-half times the normal water rate will apply for all users who use more than 2,000 gallons during the billing period.
3. In stage 3, water shortage emergency, all water users must continue actions from all previous stages and further reduce water by ten percent compared to their previous month's water bill if that bill shows usage of more than 2,000 gallons. All non-essential uses of drinking water as outlined in class III are prohibited. Water rationing, if deemed necessary by the city manager, will be to provide drinking water to protect public health. All customers are only permitted to use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use. Additionally, in stage 3, a



water use surcharge of two times the normal water rate will apply for all users who use more than 2,000 gallons during the billing period. "Essential uses of potable water" is defined as: water to sustain human and domestic pet life, maintain hygiene and sanitation standards; patient care and rehabilitation as prescribed by medical personnel; firefighting and approved flushing of hydrants and sewer mains to ensure public health and safety and comply with monitoring requirements.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-133. Public comment.**

Water users will have the opportunity to comment on the provisions of the water shortage response plan. Notices disclosing the locations where the draft plan may be viewed by the public will be published in the Transylvania Times and on the City of Brevard website ([www.cityofbrevard.com](http://www.cityofbrevard.com)). A public hearing will be scheduled with notice given as to the time and place of the hearing. All subsequent revisions to the plan will be published at least 30 days prior to an adoption vote by the City of Brevard Council.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-134. Variance protocols.**

Applications for water use variance requests are available at Brevard City Hall. All applications must be submitted to the Brevard City Manager or his or her designee. A decision to approve or deny individual variance requests will be determined within two weeks of submittal after careful consideration of the following criteria: impact on water demand, expected duration of the shortage, alternative source options and social and economic importance.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-135. Effectiveness.**

The effectiveness of the City of Brevard Water Shortage Response Plan will be determined by comparing the stated water conservation goals with observed water use reduction data. Other factors include, but are not limited to, the frequency of plan activation, desired reductions attained and evaluation of demand reductions compared to the previous year's seasonal data.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-136. Revision.**

The water response plan will be reviewed and revised as needed to adapt to new circumstances affecting water supply and demand, following implementation of restrictions, and at a minimum of every five years, as required by G.S. 143-355(1). Further, a water response planning work group designated by the city manager, will review procedures following any change in restriction status. The city manager is responsible for initiating all subsequent revisions.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

### **70-137. Enforcement and penalties.**



The provisions of the water shortage response plan will be enforced by the City of Brevard Police Department. Violators may be reported to the city by calling the police department at 883-2212. Citations are assessed according to the following schedule depending on the number of prior violations and the current level of water shortage:

- A. *Stage 1:* None.
- B. *Stage 2:*
  - 1. *First:* Notice of violation (NOV).
  - 2. *Second:* Disconnection of water service (24-hour shut-off period).
  - 3. *Third:* Up to \$250.00 fine and disconnection of water service (48-hour shut-off period).
  - 4. Drought surcharge rates apply.
- C. *Stage 3:*
  - 1. *First:* Disconnection of water service (24-hour shut-off period).
  - 2. *Second:* Up to \$500.00 fine and disconnection of water service (48-hour shut-off period).
  - 3. *Third:* Up to \$500.00 fine and disconnection of water service (72-hour shut-off period).
  - 4. Drought surcharge rates apply.

(Ord. No. 19-10, § 2(Exh. A), 10-4-10)

**70-138, 70-139. Reserved.**

### Editor's Notes

Ord. No. 19-10, §§ 1, 2(Exh. A), adopted Oct. 4, 2010, repealed the former Art. IV, §§ 70-127—70-138, and enacted a new Art. IV as set out herein. The former Art. IV pertained to emergency water conservation plan and derived from Ord. No. 5-03, § 1, 4-21-2003. See also the [Code Comparative Table](#).

## STAFF REPORT

City Council, Monday, November 20, 2023

**Title:** Proposed Text Amendment to City of Brevard Unified Development Ordinance Chapters 2, 3, 10 & 19 - Extraction Uses

**Speaker:** Aaron Bland, Asst Planning Director

**Prepared by:** Aaron Bland, Asst Planning Director

**Approved by:**

### Background

In fielding inquiries during day-to-day administration of the Unified Development Ordinance (UDO) Planning Staff realized that there is no land use in the use matrix of Section 2.2 for mines, quarries, or other such uses. These types of land use are collectively referred to as "Extractive Industries" and include businesses that excavate and remove rock, stone, ore, soil, gravel, sand, minerals, and similar materials from the surface and/or subsurface. These are intensive uses that are capable of generating large amounts of truck traffic, noise, and dust. Much of the activity of these uses occurs outdoors and the result can be an unaesthetic sight of pits, machinery, and piles of materials. Because of these potentially severe detrimental impacts Staff has initiated this text amendment to specifically add these uses to the UDO.

### Discussion

This amendment adds extractive uses to the UDO in several places: the use matrix in Chapter 2; the uses standards in Chapter 3; the parking standards in Chapter 10; and establishes the use definitions in Chapter 19. The details of these additions are outlined below and the full proposed amendments are included as Attachment 1.

#### Chapter 2 - Use Matrix

Staff is proposing to add "Extractive Industries" as a category under the "Manufacturing/Wholesale/Storage" header. There would be two sub-uses: "Extractive uses which involve blasting" and a more general "All other extractive industries, except as listed below," following the standard set by the recent use matrix overhaul adopted earlier this year. Staff is proposing that the general use be permitted by right in the General Industrial zoning district and that the blasting version be allowed only with a special use permit in General Industrial.

#### Chapter 3 - Use Standards

The use standards for the general use include hours of operation set at 7:00 AM to 7:00 PM. This matches other limited hours of operation found in the UDO and City Code. The blasting use includes these hours of overall operation and also additional limits on the blasting, which is proposed to not be allowed between 5:00 PM and 9:00 AM and not at any time on Sundays. Additionally, extraction uses involving blasting also must comply with any and all public safety provisions prescribed by the Brevard Police Chief, Brevard Fire

Chief, and/or Transylvania County Emergency Management Director.

#### Chapter 10 - Parking Standards

Staff is proposing that this use be one of the uses that does not have specific parking ratios listed in the off-street minimum and maximum vehicle parking ratios table. Rather, Staff recommends this be one of the uses that is referred to Section 10.3.D, which is for land uses which have "widely varying parking demand characteristics making it impossible to specify a single off-street parking standard."

Staff is presenting this amendment using the new tiered model of parking standards currently being considered, but not yet adopted, by City Council. Staff is asking the Board make their recommendation under the assumption that the parking chapter amendments are adopted and the UDO moves to the tiered model prior to this amendment being considered by Council. Should the new chapter fail to be adopted, then the parking standards for this use would go by the still-current table of minimum parking ratios requirement for the "Manufacturing/Warehousing/Light Assembly" use, which is 0.25 parking spaces per 1,000 square feet of non-office space.

#### Chapter 19 - Definitions

Two definitions will be established, one for "Extractive uses" in general and another for "Extractive uses involving blasting." These can be found in Attachment 1.

### **Policy Analysis**

Ensuring the use matrix is robust and does not have missing land uses is a general best practice for zoning ordinances. Additionally, the Building Brevard Comprehensive Land Use Plan action item LUH-19 speaks to maintaining clear and understandable planning documents, stating that the City should "Strive to make planning documents and UDO more approachable and user friendly to empower citizens to understand and advocate for their neighborhoods."

### **Fiscal Impact**

None.

### **Recommendation**

The Planning Board discussed this amendment at their October 24th meeting and unanimously recommended approval with some minor changes. In accordance with North Carolina General Statutes, the Planning Board also submits the attached Statement of Consistency (Attachment 2).

### **Action**

No action is requested at this time; this is for public hearing purposes only.

### **Attachments:**

1. Draft Amendment
2. Consistency Statement





## Section 2.2.C – Use Matrix

| CATEGORY                           | SECTION | USE                                                                       | ZONING DISTRICTS |     |     |     |     |    |     |
|------------------------------------|---------|---------------------------------------------------------------------------|------------------|-----|-----|-----|-----|----|-----|
|                                    |         |                                                                           | GR               | RMX | NMX | DMX | CMX | IC | GI  |
| Manufacturing/Wholesale/Storage    |         |                                                                           |                  |     |     |     |     |    |     |
| Light Industrial and Manufacturing | 3.11.A  | All light industrial and manufacturing activities, except as listed below | —                | —   | —   | —   | SUP | —  | P   |
|                                    |         | Brewery, Distillery, Winery, Cidery - High Impact                         | —                | —   | —   | —   | P   | —  | P   |
|                                    |         | Brewery, Distillery, Winery, Cidery - Low Impact                          | —                | —   | SUP | PS  | PS  | —  | PS  |
|                                    |         | Laboratory                                                                | —                | —   | —   | —   | P   | P  | P   |
|                                    |         | Laundry, Dry Cleaning Plant                                               | —                | —   | —   | —   | SUP | P  | P   |
|                                    |         | Manufacturing Research and Development                                    | —                | —   | —   | —   | P   | P  | P   |
|                                    |         | Media Production                                                          | —                | —   | P   | P   | P   | P  | P   |
| Heavy Manufacturing                | 3.11.B  | All heavy manufacturing activities, except as listed below                | —                | —   | —   | —   | —   | —  | SUP |
|                                    |         | Metal Products Fabrication, Machine or Welding Shop                       | —                | —   | SUP | SUP | P   | —  | P   |
| Storage and Disposal               | 3.11.C  | All storage and disposal uses, except as listed below                     | —                | —   | —   | —   | SUP | —  | P   |
|                                    |         | Chemical Storage Facility                                                 | —                | —   | —   | —   | —   | —  | P   |
|                                    |         | Solid Waste Disposal Facilities                                           | —                | —   | —   | —   | —   | —  | PS  |
|                                    |         | Junkyard / Salvage Yard                                                   | —                | —   | —   | —   | —   | —  | SUP |
| Wholesaling and Distribution       | 3.11.D  | All wholesaling and distribution activities, except as listed below       | —                | —   | —   | —   | P   | —  | P   |
|                                    |         | Equipment Rental                                                          | —                | —   | —   | —   | P   | —  | P   |
|                                    |         | Indoor Vehicle/Heavy Equipment Sales                                      | —                | —   | PS  | PS  | PS  | —  | PS  |
|                                    |         | Outdoor Vehicle/Heavy Equipment Sales                                     | —                | —   | —   | —   | PS  | —  | PS  |
| Extractive Industries              | 3.11.E  | All extractive industries, except as listed below                         | —                | —   | —   | —   | —   | —  | P   |
|                                    |         | Extractive industries involving blasting                                  | —                | —   | —   | —   | —   | —  | SUP |

## Section 3.11.E (new)

### E. Extractive Industries Use Category

#### 1. Extractive industries:

a. Definition: Enterprises that excavate and remove rock, stone, ore, soil, gravel, sand, minerals, and similar natural materials from the surface and/or subsurface. This definition shall include, but is not limited to, quarries, sand and gravel pits, mines, and soil removal operations. This definition shall not include any such uses that involve blasting or other use of explosives.

#### b. Additional Standards:

i. Hours of Operation: Operating hours are limited to the hours of 7:00 AM to 7:00 PM.

#### 2. Extractive industries involving blasting:

a. Definition: Enterprises that utilize the use of blasting or other explosives in order to excavate and remove rock, stone, ore, soil, gravel, sand, minerals, and similar natural materials from the surface and/or subsurface. This definition shall include, but is not limited to, any quarries, sand and gravel pits, mines, and soil removal operations that involve blasting at any point in the extraction process.

#### b. Additional Standards:

i. Hours of Operation: Operating hours are limited to the hours of 7:00 AM to 7:00 PM.

ii. Hours of Blasting: No blasting shall occur between 5:00 PM and 9:00 AM, nor at any time on Sundays or federal holidays.

iii. Compliance with Emergency Services: All special and general provisions in the interest of public safety relating to the process of blasting prescribed by the Brevard Police Chief, Brevard Fire Chief, and/or Transylvania County Emergency Management Director shall be strictly complied with.

## Section 10.3.B

| TABLE 10.3B: OFF-STREET MINIMUM AND MAXIMUM VEHICLE PARKING RATIOS |                                                   |                                                                                                                |         |                                                                                                               |                                                                                                                |         |                                                                                                                |
|--------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------------------------------------|
| Category                                                           | Land Use                                          | Tier 1                                                                                                         |         | Tier 2                                                                                                        |                                                                                                                | Tier 3  |                                                                                                                |
|                                                                    |                                                   | Minimum                                                                                                        | Maximum | Minimum                                                                                                       | Maximum                                                                                                        | Minimum | Maximum                                                                                                        |
| Manufacturing / Wholesale / Storage                                |                                                   |                                                                                                                |         |                                                                                                               |                                                                                                                |         |                                                                                                                |
| Light Industrial and Manufacturing                                 | All light industrial and manufacturing activities | 1 / 750 SF of office, retail or administrative area + 1 / 4,000 SF of industrial space                         |         | 1/ 750 SF of office, retail or administrative area + 1 / 4,000 SF of industrial space                         | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of industrial space                         |         | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of industrial space                         |
| Heavy Manufacturing                                                | All heavy manufacturing activities                | 1 / 750 SF of office, retail or administrative area + 1 / 4,000 SF of industrial space                         |         | 1/ 750 SF of office, retail or administrative area + 1 / 4,000 SF of industrial space                         | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of industrial space                         |         | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of industrial space                         |
| Storage and Disposal                                               | All storage and disposal uses                     | 1 / 750 SF of office, retail or administrative area + 1 / 4,000 SF of storage/ disposal space                  |         | 1/ 750 SF of office, retail or administrative area + 1 / 4,000 SF of storage/ disposal space                  | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of storage/ disposal space                  |         | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of storage/ disposal space                  |
| Wholesaling and Distribution                                       | All wholesaling and distribution activities       | 1 / 750 SF of office, retail or administrative area + 1 / 4,000 SF of wholesale, distribution, or retail space |         | 1/ 750 SF of office, retail or administrative area + 1 / 4,000 SF of wholesale, distribution, or retail space | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of wholesale, distribution, or retail space |         | 1 / 300 SF of office, retail or administrative area + 1 / 2,000 SF of wholesale, distribution, or retail space |
| <a href="#">Extractive Industries</a>                              | <a href="#">All extractive industries</a>         | <a href="#">Varies, See Section 10.3.D</a>                                                                     |         | <a href="#">Varies, See Section 10.3.D</a>                                                                    | <a href="#">Varies, See Section 10.3.D</a>                                                                     |         | <a href="#">Varies, See Section 10.3.D</a>                                                                     |
| Note: All square footage in gross square feet.                     |                                                   |                                                                                                                |         |                                                                                                               |                                                                                                                |         |                                                                                                                |

### Section 19.3 – Definitions

**Extractive industries:** Enterprises that excavate and remove rock, stone, ore, soil, gravel, sand, minerals, and similar natural materials from the surface and/or subsurface. This definition shall include, but is not limited to, quarries, sand and gravel pits, mines, and soil removal operations. This definition shall not include any such uses that involve blasting or other use of explosives.

**Extractive industries involving blasting:** Enterprises that utilize the use of blasting or other explosives in order to excavate and remove rock, stone, ore, soil, gravel, sand, minerals, and similar natural materials from the surface and/or subsurface. This definition shall include, but is not limited to, any quarries, sand and gravel pits, mines, and soil removal operations that involve blasting at any point in the extraction process.

**COMMENT OF CONSISTENCY WITH COMPREHENSIVE PLAN  
AND ANY OTHER OFFICIALLY ADOPTED APPLICABLE PLANS  
TXT-23-013**

*NCGS 160D-605 requires that the Planning Board shall advise and comment on whether the proposed amendment is consistent with any comprehensive plan prior to consideration by the Governing Board. The Planning Board shall provide a written recommendation to the Governing Board that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the Comprehensive Plan shall not preclude consideration or approval of the proposed amendment by the Governing Board.*

The Brevard Planning Board forwards this recommendation to City Council with a finding that the proposed zoning map amendment is **consistent** with the following elements of the City's adopted plans and policies:

Building Brevard Comprehensive Land Use Plan:

**LUH- 19: Enhance communication of land use planning efforts, policy development, approvals and processes.** Create online public information portal to provide updates on proposed and in-progress development projects. Strive to make planning documents and UDO more approachable and user friendly to empower citizens to understand and advocate for their neighborhoods.

## STAFF REPORT

City Council, Monday, November 20, 2023

**Title:** Proposed Text Amendment to City of Brevard Unified Development Ordinance, Chapters 2, 4, 5, 17 and 19 - Building Line Revisions

**Speaker:** Emily Brewer, AICP, Senior Planner

**Prepared by:** Emily Brewer, Senior Planner

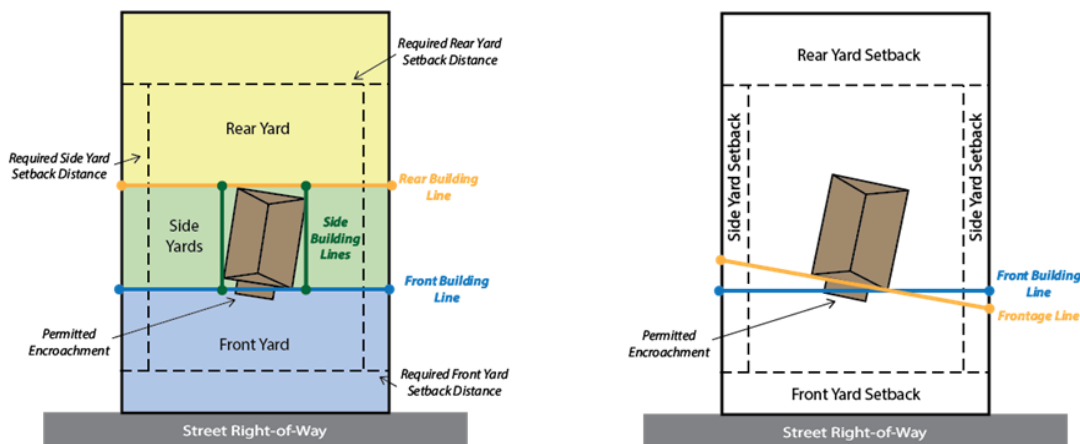
**Approved by:** Paul Ray, Planning Director, Wilson Hooper, City Manager

### Background & Discussion

Building lines and yards are used as the measurement for multiple different standards in the Unified Development Ordinance, including fence height and accessory structure placement. This is a Staff-initiated text amendment that clarifies the definitions for these and other related items. The proposed text amendment is included as Attachment 1. The major elements of the text amendment are below:

- **Building line:** A line measured parallel to the right-of-way line or property line touching that part of the building closest to the right-of-way line or property line. The building line shall not be measured from any encroachments permitted in Section 5.17 or any unenclosed structure (e.g., decks or patios).
- **Yard:** A space that lies between the principal building(s) and the nearest lot line or right-of-way line. The front yard and rear yard are defined by the respective building line, with the side yard(s) consisting of the remainder of the property not occupied by principal building(s).
- **Frontage Line:** A line measured across the façade of the portion of the building closest to the street. The frontage line shall not be measured from any encroachments permitted in Section 5.17 or any unenclosed structure (e.g., decks or patios). This line can be synonymous with the front building line when a building is oriented towards the street.





Staff also used this as an opportunity to improve the quality of the graphics and add additional graphics to illustrate key concepts.

## Policy Analysis

According to North Carolina General Statute §160D, land use and development regulations should be objective standards that zoning administrators can apply in implementation, administration and enforcement actions (NCGS §160D-102). This text amendment continues to clarify the City's zoning regulations and improve the usability of planning documents.

Beyond implementing objective standards, the proposed text amendment is consistent with the following elements of *Building Brevard 2030* Comprehensive Land Use Plan:

- **GOAL 2:** *Encourage a development pattern that respects Brevard's sense of place and prioritizes livable communities.*
- **LUH-19:** *Enhance communication of land use planning efforts, policy development, approvals, and processes.*

## Action

For public hearing only – no action is requested at this time. At the next regular meeting, Staff requests that City Council take one of the following actions:

1. Adoption of the amendment as written;
2. Adoption of the amendment as revised by City Council;
3. Rejection of the amendment;
4. Send the application back to the Planning Board for further study and consideration; or
5. Call for additional public hearings on petitions brought before them.

In accordance with North Carolina General Statutes, the Planning Board also submits a statement analyzing the consistency and reasonableness of this proposal with regards to existing policies or plans of the City of Brevard. The Statement of Consistency and Reasonableness is included as Attachment 2.

**Attachments:**

1. Proposed Text Amendment
2. Consistency Statement



## UNIFIED DEVELOPMENT ORDINANCE

# CHAPTER 2. DISTRICT PROVISIONS

### 2.3. Density and dimensional requirements.

TABLE 2.3A: DENSITY AND DIMENSIONAL REQUIREMENTS

| District                            | Minimum Lot Size/Project Area | Maximum Project Area By Right | Maximum Dwelling Unit (DU) Density | Maximum Ground Floor Area Each Principal Structure |
|-------------------------------------|-------------------------------|-------------------------------|------------------------------------|----------------------------------------------------|
| GR4                                 | None                          | 20 acres                      | 4 du/ac                            | 10,000 sq. ft.                                     |
| GR8                                 | None                          | 20 acres                      | 8 du/ac                            | 8,000 sq. ft.                                      |
| RMX—Single-family home and duplex   | None                          | 10 acres                      | 15 du/ac                           | 8,000 sq. ft.                                      |
| RMX—Multi-family and nonresidential | None                          | 10 acres                      | 15 du/ac                           | 25,000 sq. ft.                                     |
| NMX                                 | None                          | 10 acres                      | 25 du/ac                           | 30,000 sq. ft.                                     |
| DMX                                 | None                          | 10 acres                      | None                               | 25,000 sq. ft.                                     |
| CMX                                 | None                          | 10 acres                      | 40 du/ac                           | 50,000 sq. ft.                                     |
| IC                                  | None                          | None                          | 15 du/ac                           | 100,000 sq. ft.                                    |
| GI                                  | None                          | None                          | DU Not Permitted                   | 100,000 sq. ft.                                    |

Note: Projects or developments that do not meet one or more of the above standards may apply for conditional zoning in accordance with Section 2.1.C.

#### A. Development intensity.

- The following development types are considered group developments that may be permitted by the administrator in accordance with the review procedures in [CHAPTER 16](#):
  - Groupings of two or more principal structures or principal uses built on a single lot, tract or parcel of land (or grouping thereof) not subdivided into the customary streets and lots and designed for occupancy by separate families, businesses or other enterprises normally permitted within the underlying district (examples include, but are not limited to, summer camps, school campuses and hospitals, shopping centers, industrial parks, and apartment complexes);
  - Minor subdivisions, as defined in [CHAPTER 19](#), resulting in the establishment of condominium buildings, lots or spaces, townhomes, and other projects for which zero lot line development is proposed; or
  - Individual structures designed to accommodate a variety of distinct uses may be considered as a group development at the discretion of the administrator.



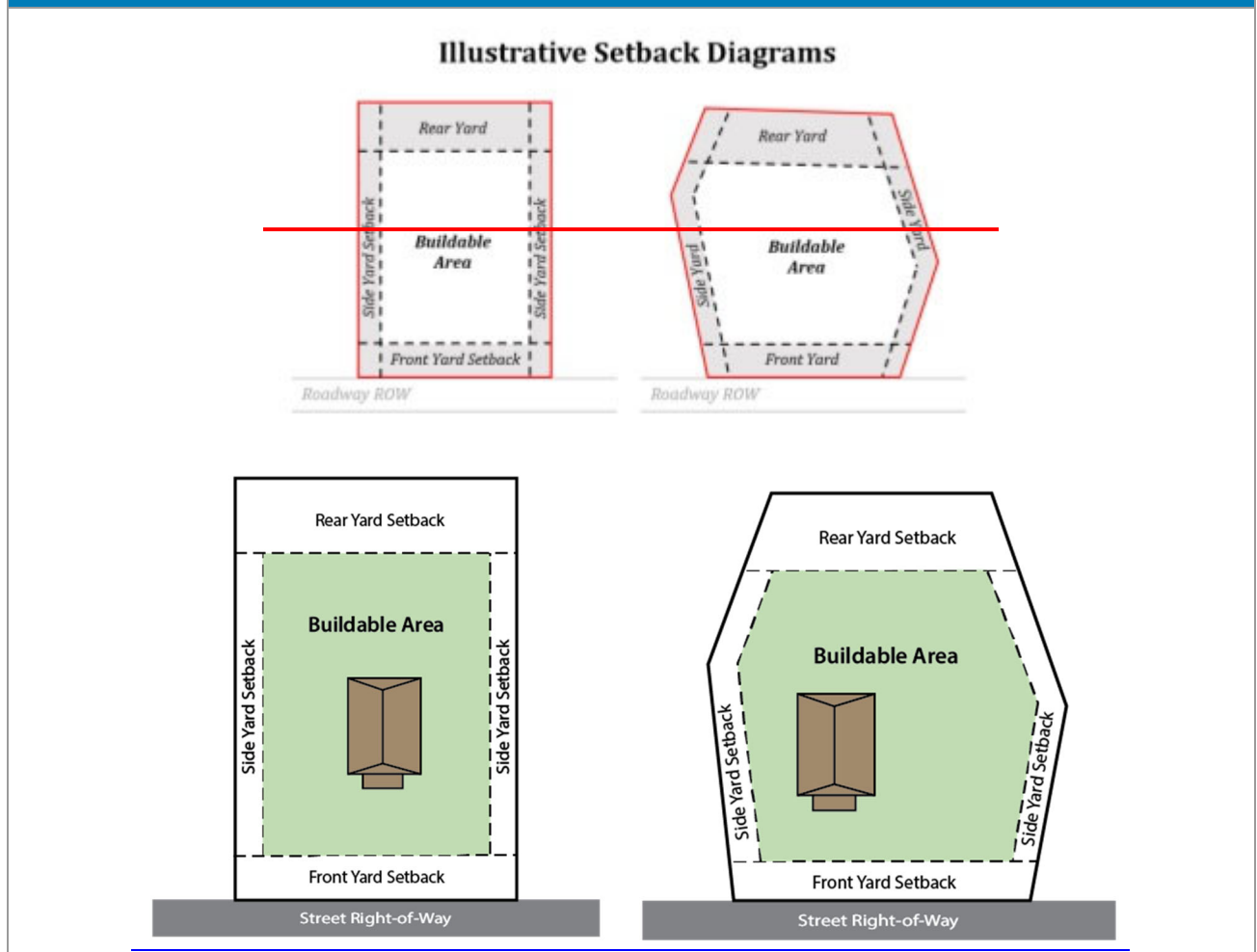
~~2. [Reserved.]~~

**B. General standards for all setbacks and yards.**

1. A building, structure, lot, or sign shall not be developed, used or occupied unless it meets the minimum setback requirements set forth herein for the use or the zoning district in which it is located, except permitted encroachments in Section 5.17.
  - a. Landscaping requirements set forth in CHAPTER 8 of this ordinance may supersede setbacks listed herein.
2. *Types of setbacks:*
  - a. Front yard setbacks shall apply to the portion of the lot adjacent to the right-of-way. All lots are required to have a front yard.
  - b. Rear yard setbacks shall apply to the portion of the lot on the opposite side of the lot from the front yard setback. All lots are required to have a rear yard.
  - c. Side yard setbacks shall be the required setback from any property line other than front or rear property lines.

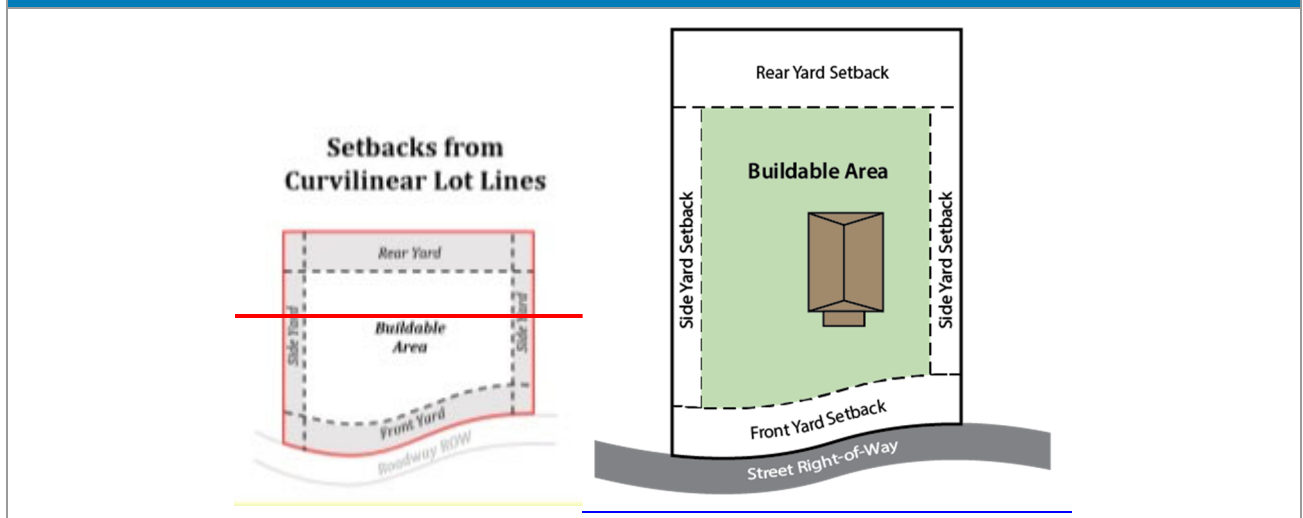


**FIGURE 2.3A: ILLUSTRATIVE SETBACK DIAGRAMS**

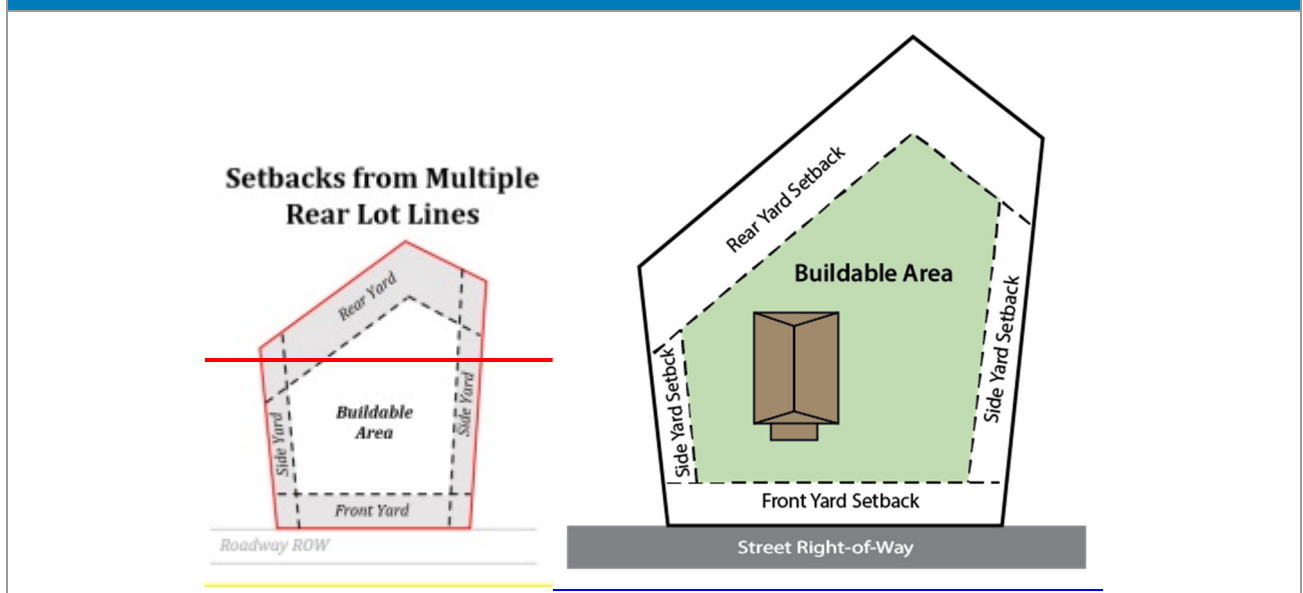


3. *Measurement of setbacks [and building lines](#):*

- a. Required yard setbacks [and building lines](#) are measured parallel to the applicable lot line or public right-of-way line.
  - i. Front yard setbacks [and building lines](#) shall be measured from the property line or the edge of the right-of-way, whichever is further from the centerline of the roadway.
  - ii. Side yard and rear yard setbacks [and building lines](#) shall be measured from the property line(s).
- b. When lot lines are curvilinear, setbacks [and building lines](#) shall be measured parallel to the curvilinear lot line.

**FIGURE 2.3B: SETBACKS FROM CURVILINEAR LOT LINES**

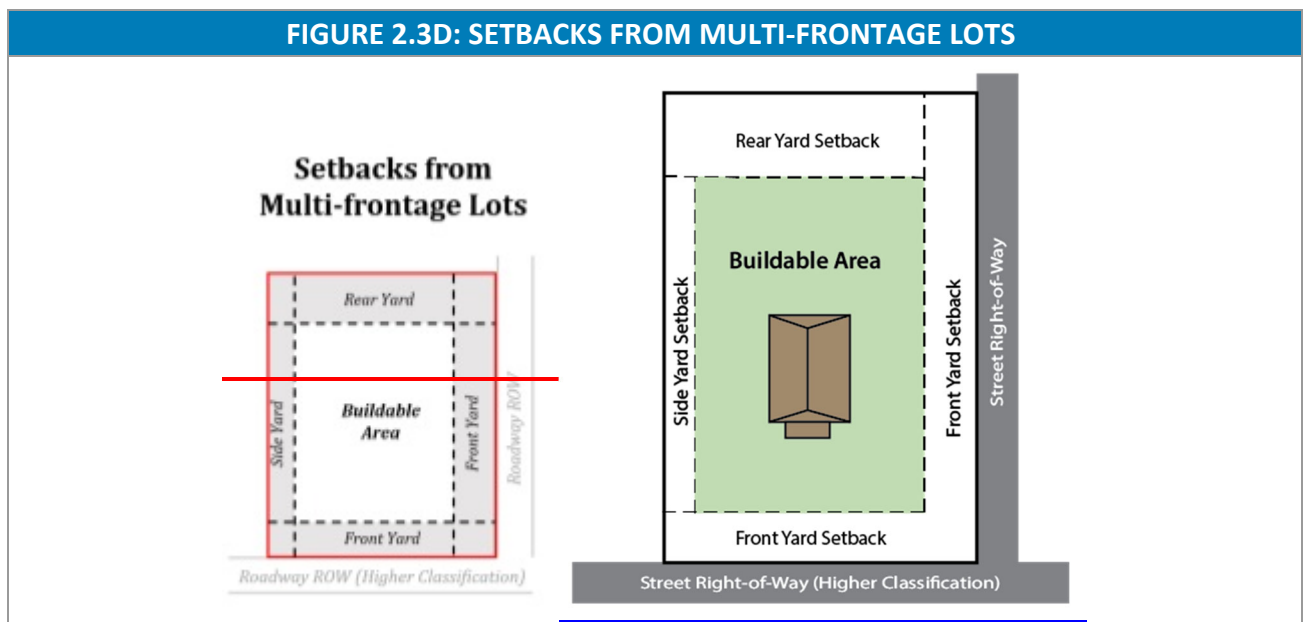
- c. When there are multiple rear lot lines, the rear [yard](#) setback [and building line](#) must be measured from each of the rear lot lines.

**FIGURE 2.3C: SETBACKS FROM MULTIPLE REAR LOT LINES**

4. *Administrative decisions for setbacks:*
- The administrator may impose additional setbacks based upon specific guidance from the City of Brevard Comprehensive Plan, the City of Brevard Downtown Master Plan and other district or small area/master plans, the City of Brevard Comprehensive Pedestrian Plan, the City of Brevard Street Schedule, or other plans or policies of the city.
  - For private streets, a right-of-way in accordance with [CHAPTER 13](#) shall be assumed by the administrator.



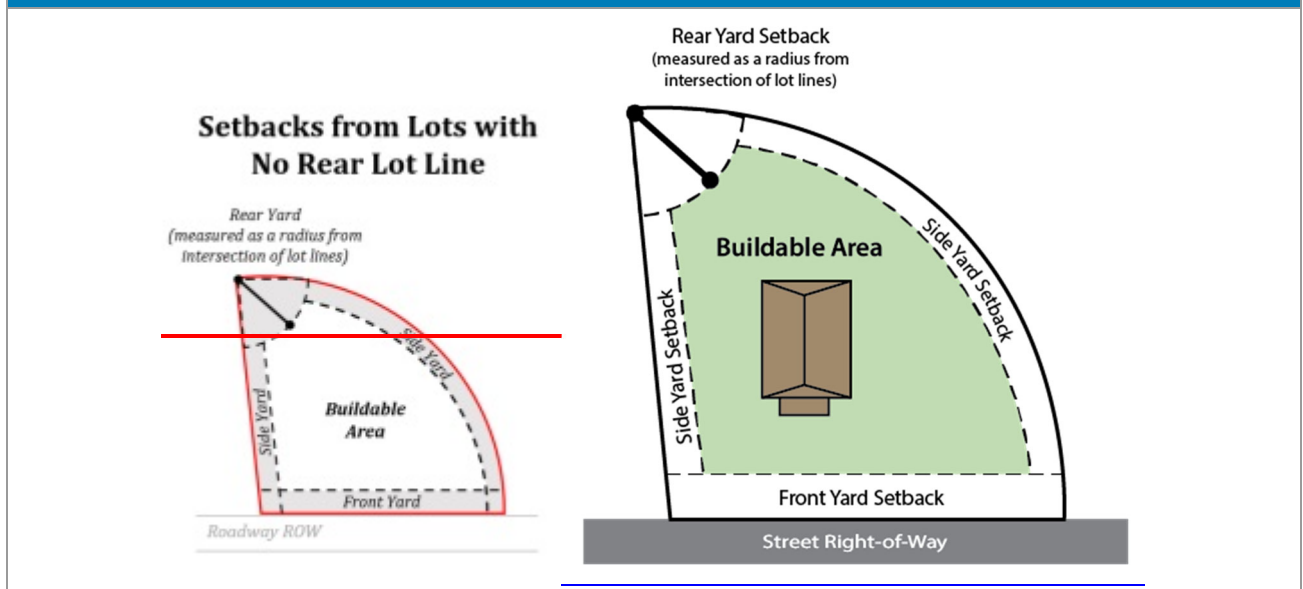
- ii. When determining the edge of the right-of-way, the administrator shall account for existing or proposed additional automobile, bicycle, or pedestrian travel lanes, turn lanes, roundabouts, on-street parking, and other improvements that deviate from a standard street cross-section.
  - b. The administrator may approve deviations from required setbacks by up to 20 percent of the required area in accordance with [CHAPTER 16](#) in order to:
    - i. protect existing or proposed rights-of-way and other infrastructure improvements
    - ii. ensure environmental protection of sensitive and/or conservation areas, including steep slope areas
    - iii. account for surface water protection and/or satisfy flood damage prevention requirements
  - c. For non-conforming lots without street frontage, the administrator shall designate a front yard for the purposes of setback measurement.
5. *Corner lots and multi-frontage lots setbacks:*
  - a. Any structure on any lot that fronts on more than one street shall comply with the minimum front yard setback requirement for each street upon which the lot fronts.
  - b. Alleys, rear lanes, and commercial service lanes are not classified as streets for the purpose of determining corner or multi-frontage lot setbacks.
  - c. The rear yard shall be determined as the portion of the lot on the opposite side of the lot from the front yard on the street with the higher classification.



6. *Triangle lots and other lots without a rear lot line:*
  - a. On properties where there is no rear lot line, the rear [yard](#) setback shall be measured as a radial distance from the intersection of side lot lines at the rear of the lot.



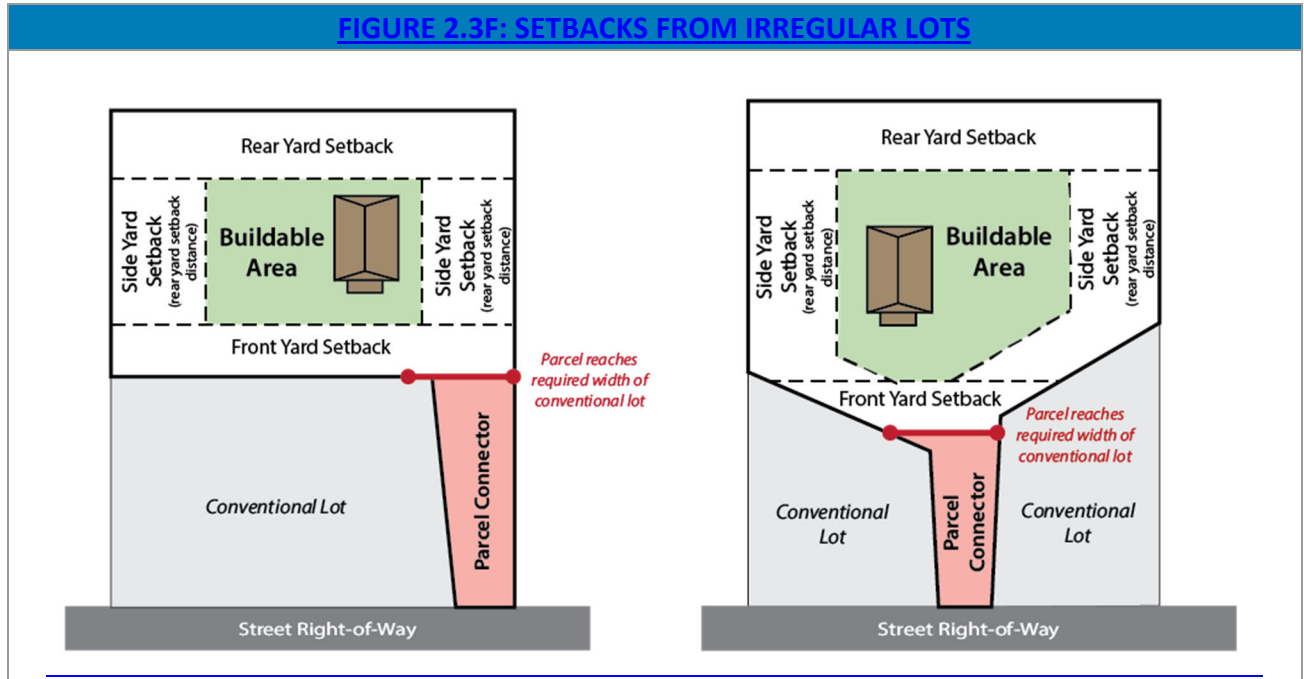
FIGURE 2.3E: SETBACKS FROM LOTS WITH NO REAR LOT LINE



7. *Irregular lot setbacks:*

- a. The location of required front, side and rear yards on irregularly shaped lots shall be determined by the administrator. This determination shall be based on the spirit and intent of this ordinance to continue the appropriate spacing and location of buildings and structures on individual lots.
- b. For irregular lots, the Zoning Administrator will determine the termination of the “parcel connector” based on the definition and will measure front-yard setbacks from that point.
- ~~b.c. Lots that do not have an obvious visual relationship with the fronting street, such as “irregular lots,” shall be evaluated on the basis of having one setback from neighboring properties. The setback amount~~ All other setback distances (rear and side yards) shall be equal to the minimum rear yard setback for the district, unless:
  - i. A newly-created irregular lot would convert an existing conforming secondary or accessory dwelling unit to a principal single-family structure. In this case, the setbacks for the principal structure may equal that of an accessory structure of that size in the zoning district.
- ~~c.a. For irregular lots, the Zoning Administrator will determine the termination of the “parcel connector” based on the definition and will measure front-yard setbacks from that point.~~



**FIGURE 2.3F: SETBACKS FROM IRREGULAR LOTS**

8. *Zero-lot line development setbacks:*

- a. Zero-lot line development (i.e., townhomes, condominiums and similar structures) and other structures using partiwalls are permitted subject to other requirements as set forth in this ordinance.

9. *Infill lot setbacks:*

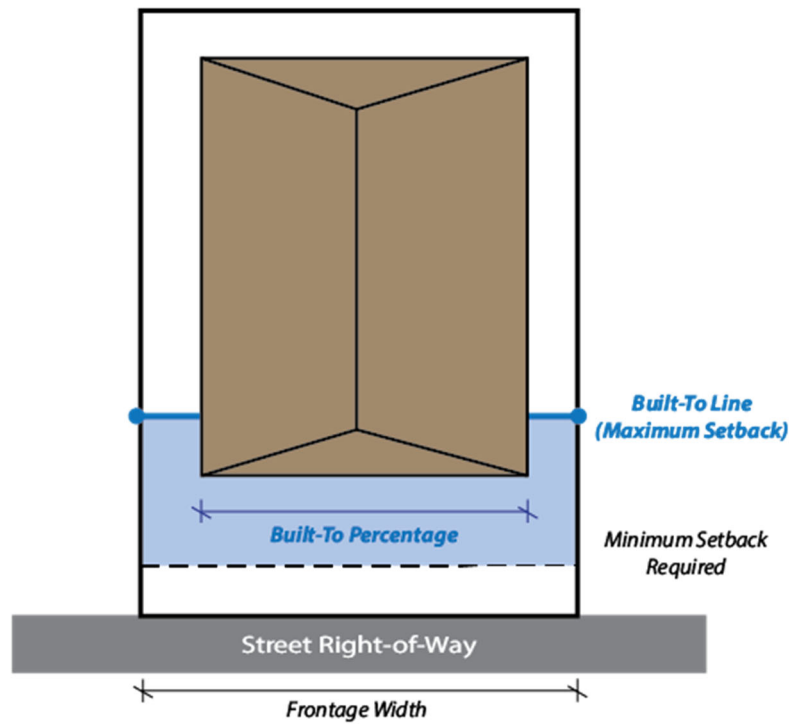
- a. The administrator may grant exceptions to the setback requirements of this ordinance for infill developments where the average setback on already-built-upon lots located wholly or in part within the same block and zoning district, and fronting on the same street as such lot, is less than the minimum required setback. In such cases, the front and side [yard](#) setbacks on such lot may be less than the required setback but not less than the average of the existing setbacks on the developed lots.
- b. In established neighborhoods, the administrator may determine that the functional rear yard is not opposite the front yard based on the peculiar shape of the parcel or the development pattern. In these cases, the administrator may determine that another line shall be considered the rear lot line for setback purposes.

10. *Lots within the Downtown Development Overlay District:*

- a. New buildings in the Downtown Development Overlay District shall be subject to a front build-to line, or maximum setback, of 12 feet, as measured from the edge of the right-of-way, with a build-to percentage of 80 percent. The build-to percentage may be reduced to 50 percent if the new building includes a public courtyard or plaza space.



**FIGURE 2.3G: BUILD-TO LINE AND BUILD-TO PERCENTAGE**



**C. Setbacks for zoning districts.**

1. The minimum setback distance for principal structures varies by zoning district and shall be measured in accordance with this section.

**TABLE 2.3B: SETBACKS FOR PRINCIPAL STRUCTURES**

| District  | Front Yard Setback                      | Rear Yard Setback                           | Side Yard Setback                           |
|-----------|-----------------------------------------|---------------------------------------------|---------------------------------------------|
| GR (4, 8) | 15 feet                                 | 25 feet                                     | 6 feet                                      |
| RMX       | 10 feet                                 | 25 feet                                     | 6 feet                                      |
| NMX       | Edge of right-of-way                    | 10 feet                                     | 0 feet / 10 feet from residential district  |
| DMX       | Edge of right-of-way                    | 0 feet                                      | 0 feet                                      |
| CMX       | 10 feet                                 | 10 feet / 25 feet from residential district | 0 feet / 10 feet from residential district  |
| IC        | 40 feet                                 | 40 feet                                     | 40 feet                                     |
| GI        | 15 feet                                 | 10 feet / 25 feet from residential district | 10 feet / 25 feet from residential district |
| CZD       | To be determined by approving authority |                                             |                                             |

**D. Setbacks for accessory structures.**



1. Setbacks for accessory structures vary based on the size of the structure and the zoning district.

| TABLE 2.3C: SETBACKS FOR ACCESSORY STRUCTURES |                                           |                                           |                                           |                                           |
|-----------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| District                                      | Side Yard Setback                         |                                           | Rear Yard Setback                         |                                           |
|                                               | < 120 sq. ft.                             | ≥ 120 sq. ft.                             | < 120 sq. ft.                             | ≥ 120 sq. ft.                             |
| GR (4, 8)                                     | 3 feet                                    | 6 feet                                    | 3 feet                                    | 10 feet                                   |
| RMX                                           | 0 feet                                    | 3 feet                                    | 0 feet                                    | 3 feet                                    |
| NMX                                           | 0 feet                                    | 3 feet                                    | 0 feet                                    | 3 feet                                    |
| DMX                                           | 0 feet                                    | 0 feet                                    | 0 feet                                    | 0 feet                                    |
| CMX                                           | 0 feet                                    | 0 feet                                    | 0 feet                                    | 0 feet                                    |
| IC                                            | 40 feet along all external boundaries     |                                           |                                           |                                           |
| GI                                            | 10 feet/25 feet from residential district | 10 feet/25 feet from residential district | 10 feet/25 feet from residential district | 10 feet/25 feet from residential district |
| CZD                                           | To be determined by approving authority   |                                           |                                           |                                           |

2. Accessory structures to residential uses [located](#) within 6 feet of the principal structure are considered to be attached for the purpose of setbacks, and shall comply with the setback [requirements](#) of the principal structure.

**E. Other structure and lot dimensional requirements.**

| TABLE 2.3D: OTHER STRUCTURE AND LOT DIMENSIONAL REQUIREMENTS |                                         |                                        |                                              |                                                    |                 |
|--------------------------------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------------------|----------------------------------------------------|-----------------|
| District                                                     | Height By Right (1)                     | Min. Lot Width of Conventional Lot (2) | Min. Lot Width of Irregularly Shaped Lot (3) | Max. Parcel Connector Length of Irregular Lots (4) | Out-Parcels (5) |
| GR (4, 8)                                                    | 35 feet                                 | 30 feet                                | 20 feet                                      | 300 feet                                           | -               |
| RMX                                                          | 35 feet                                 | 30 feet                                | 20 feet                                      | 300 feet                                           | -               |
| NMX                                                          | 35 feet                                 | 20 feet                                | -                                            | -                                                  | -               |
| DMX                                                          | 50 feet                                 | 0 feet                                 | -                                            | -                                                  | P               |
| CMX                                                          | 50 feet                                 | 0 feet                                 | -                                            | -                                                  | P               |
| IC                                                           | 50 feet                                 | 60 feet                                | 20 feet                                      | 300 feet                                           | P               |
| GI                                                           | 50 feet                                 | 60 feet                                | 20 feet                                      | 300 feet                                           | P               |
| CD                                                           | To be determined by approving authority |                                        |                                              |                                                    |                 |

1. Additional height may be permitted by the board of adjustment (hereinafter BOA) as a special use permit. See the requirements for large structures as set forth in Section 5.14. See computation of building height as set forth in Section 5.18.
2. Minimum lot width for conventional lots shall be fulfilled at the right-of-way line.
- 3&4. Irregularly shaped lots are permitted to have the reduced minimum lot width at the right-of-way line if the lot width reaches the minimum lot width for a conventional lot within the maximum allowable parcel connector length. Additional standards are levied on these parcels (see Section 4.3.G).



5. In Zoning Districts where out-parcels are permitted, the minimum lot width at the right-of-way for irregular lots may be fulfilled by an exclusive access easement for ingress, egress, and utilities. This easement must be at least the width of the minimum lot width for irregular lots in the Zoning District.
  - a. "P" denotes out-parcels are permitted.
  - b. "-" denotes out-parcels are not permitted within the given district.
6. No structure or land use shall encroach upon any public or private easement or public or private right-of-way or easement unless otherwise provided for by this ordinance.



## CHAPTER 4. GENERAL LOT AND STRUCTURE PROVISIONS

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### 4.8. Accessory structures.

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- A. *Principal buildings required.* The construction of an accessory structure or building is not permitted unless a principal building is located on the lot, except as set forth below or as otherwise provided in this ordinance. Accessory structures shall be incidental and subordinate to the principal structure(s). Accessory and principal buildings may be constructed concurrently.
1. Accessory structures utilized for agricultural purposes in association with bona-fide agricultural operations may be permitted in the absence of a principal structure.
  2. Garden sheds may be permitted in the absence of a principal structure subject to the following requirements:
    - a. Garden sheds shall be no larger than 120 square feet in size;
    - b. Garden sheds shall be single-story;
    - c. Garden shed shall not be connected to water, sewer, or electricity; and
    - d. Garden sheds shall be utilized only for the storage of lawn equipment, garden utensils, and other implements necessary for the maintenance of gardens and grounds.
- B. Accessory structures shall meet the density and dimensional requirements set forth in Section 2.3 of this ordinance.
- C. Accessory structures shall not exceed two stories in height.
- D. *Accessory structures on lots with single-family dwellings and duplexes.*
1. Maximum number permitted. No more than two accessory structures shall be permitted per lot. Beehives and chicken coops shall not count toward the maximum number of accessory structures on a lot.
  2. Accessory structures shall be located only in the side or rear yards, except for gazebos, private garages, and carports. Such structures shall comply with the front yard setbacks [for primary structures](#) in Section 2.3-B. The administrator shall make a determination as to the side or rear yard for accessory structures proposed to be located on lots fronting more than one street.
  - ~~3. Accessory buildings shall not cover more than 30 percent of the required side or rear yard except as otherwise provided in this ordinance.~~
  - ~~4.3.~~ Accessory structures with a footprint of more than 500 square feet shall be buffered from the adjacent residential development with a Type A buffer yard. Accessory structures located more than 24 feet from a property line shall be exempt from this buffering requirement.
  - ~~5.4.~~ Under no circumstances shall the use of a shipping container be permitted for the purpose of providing permanent storage as an accessory use.
- E. *Accessory structures on lots with non-residential uses, multi-family uses, and group developments.*



1. Maximum number permitted. No more than two accessory structures shall be permitted per lot, except in General Industrial (GI). In all other zoning districts, additional structures shall be considered as principal structures in a group development.
2. Accessory structures shall be located only in side or rear yards except for bona-fide agricultural enterprises.
3. Accessory structures shall comply with the applicable landscaping requirements of [CHAPTER 8](#) of this ordinance.
4. Accessory structures shall be clad in materials similar in appearance to the principal structure in accordance with [CHAPTER 5](#), except when such material is non-conforming with this ordinance.

**F. Exempt structures.**

1. Structures including but not limited to mailboxes, newspaper boxes, birdhouses, flagpoles, pump covers, garden boxes and planters, doghouses, and any other similar small or ornamental structures shall not be considered principal or accessory structures and shall not require a permit.

## 4.9. Fences and walls.

- A. All fences and walls shall be constructed so that the best face faces outward from the parcel upon which it is constructed and towards adjacent properties. The "best face" shall generally mean the side opposite to framing members.
- B. Fences and walls shall not be placed within public utility easements or public right-of-way without first securing an encroachment agreement from the City of Brevard, the North Carolina Department of Transportation, or other appropriate entity.
- C. Fence or wall height shall be measured from the side of the fence or wall that is exterior to the property as the vertical distance between the lowest adjacent ground level, natural or filled, and the top of the fence material. Fence heights are restricted as follows:
  1. In industrial districts, and public safety and other critical facilities. Fences or walls shall be no greater than six feet in height ~~before the front building line~~ in the front yard(s) and no greater than eight feet in height in the side ~~or~~ and rear yards.
  2. All other districts and uses. Fences or walls shall be no greater than four feet in height in the front yard(s) and no more than eight feet in height in the side and rear yards. ~~than eight feet in height behind the front building line or four feet in height before the front building line.~~
  3. No closed fence or wall shall be greater than two-and-a-half feet in height when placed within the sight triangle of any intersection as specified in [Section 4.5](#) of this ordinance. Open fences are exempt from this provision.
- D. Fence and wall materials shall conform to the following requirements:
  1. *Residential districts:*
    - a. All fences and walls must be of brick, stone, stucco, wrought iron, wood, or other materials similar in appearance and durability, except that chain link or woven wire may be used in the side and rear yards ~~behind the front building line.~~
    - b. All other wire fences, including barbed wire or concertina wire, are prohibited.



- c. Nothing in this chapter shall prevent the administrator from approving architecturally variant uses of material to allow creative fence design, such as the contemporary look of heavy-gauged welded wire panels framed in timber.
- d. The use of plastic plumbing pipe is a prohibited fence material.

2. *Commercial districts:*

- a. All fences and walls must be of brick, stone, stucco, wrought iron, wood, or other materials similar in appearance and durability.
- b. Chain link wire fences may be used as secure enclosures internal to the property or site subject to the following requirements:
  - i. Chain link fences shall not be visible from a public right-of-way,
  - ii. Chain link fences shall not serve as a perimeter fence or property line fence unless buffered by a type A buffer yard on all sides, and then only in the side or rear yard behind the front building line.
- c. All other wire fences, including barbed wire or concertina wire, are prohibited.
- d. All walls and fences shall be materially similar to other walls and fences in the same block or general vicinity.

3. *Industrial districts, public safety facilities, and other critical facilities:*

- a. All fences and walls must be of brick, stone, stucco, wrought iron, wood, or other materials similar in appearance and durability, and shall be materially similar to other walls and fences on the same block or general vicinity.
- b. Vinyl coated, chain link fencing may be approved by the administrator as perimeter fencing with additional filtering through openings using opaque or semi opaque slats or screening or by installing a type A landscaping buffer between incompatible uses, between different zoning districts or where visible from a public street.

4. *Barbed wire:* Barbed wire may be permitted within bona-fide agricultural operations within any zoning district.

E. Retaining walls shall also conform to the following requirements:

- 1. Retaining walls should minimize the impacts of cut and fill on a site.
- 2. The height of any retaining wall should not exceed five feet unless required to be higher for engineering reasons.
  - a. An increase in retaining wall height may be allowed if the proposed design minimizes the cut and fill impacts and enhances the existing landscape.
- 3. In areas where cuts are steeper, a stepped or terraced wall should be used. Large, unbroken retaining walls in a uniform plane should be avoided.



## CHAPTER 5. BUILDING TYPES AND ARCHITECTURAL STANDARDS

### 5.4. General building design requirements.

Unless otherwise noted, the following standards apply to all buildings:

- A. *Architectural style:* The building design standards of this chapter intentionally do not mandate a particular style and permit a wide variety of architectural expressions. However, when a design exhibits a known architectural style (e.g., Colonial, Victorian, Classical Revival) the details shall be consistent with that style unless the local architectural vernacular of Brevard provides an alternate precedent for a detail.
- B. *Frontage:* All buildings in the Downtown Development Overlay District, regardless of building type, shall be oriented towards the street so that the frontage line is the same as the front building line. ~~All buildings shall share a frontage line with a street or square. (Exception: Building that are interior to a site that has buildings that otherwise meet the frontage requirement.)~~
- C. *Termination of vistas:* Important street vistas, such as along city gateways and primary pedestrian streets, should terminate in a focal point such as a building or other architectural or natural feature.
- D. *Compatibility:* Adjacent buildings should relate in similarity of scale, height, architectural style, and/or configuration.
- E. *Proportions:* Windows, doors, columns, eaves, parapets, and other building components shall be proportional to the overall scale of the building. Windows shall be vertically proportioned wherever possible.

FIGURE 5.4A: EXAMPLE OF PROPORTIONAL FACADE ELEMENTS



- F. *Wall materials:* When two or more materials are used on a façade, the heavier material (e.g., brick) should be placed below the lighter material (e.g., siding) to give a sense of support and grounding.
- G. *Underground wiring:* To reduce the visual impact of overhead wiring, utility services shall be located underground.
- H. *Type of construction:* Manufactured, mobile, and metal units are prohibited, except as may be allowed in CHAPTER 3 for a temporary office or classrooms, site management, or storage uses during construction projects.
- I. *Roof pitch:* Roofs with pitches less than 3:12 and flat roofs will require a parapet wall. A pitched roof shall be profiled by eaves a minimum of six inches from the building face or with a gutter.





**FIGURE 5.4B: EXAMPLE OF PITCHED ROOFS WITH EAVES**



- J. *Public art:* Public art, such as statues, fountains, and other works of art are encouraged and may be placed in any required front setback area as well as in other appropriate areas.
- K. *Façade treatment:*
1. Architectural elements such as windows, doors, bulkheads, masonry piers, transoms, cornice lines, window hoods, awnings, canopies, and other similar details, shall be used on all facades facing public rights-of-way.

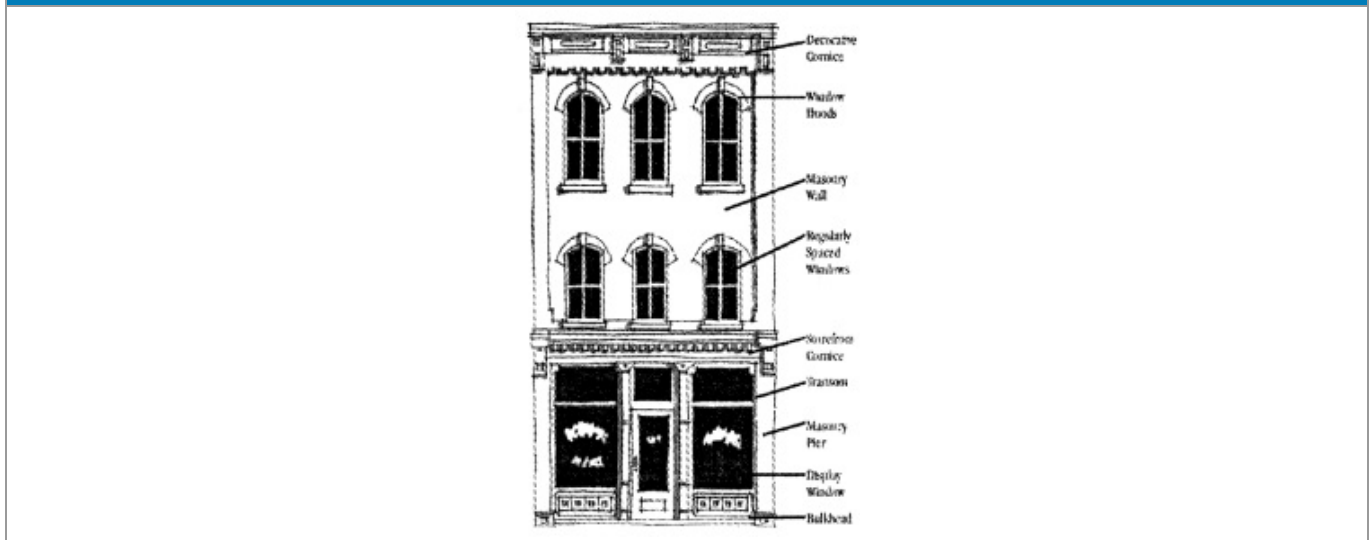
**FIGURE 5.4C: EXAMPLE OF STOREFRONT WITH WINDOWS AND DOORS ALONG STREET FRONTAGE**



2. Building wall offsets, including projections, recesses, and changes in floor level shall be used in order to:
  - a. Add architectural interest and variety; relieve the visual effect of a single, long wall;
  - b. Subdivide the wall into human size proportions. Similarly, roofline offsets shall be provided to lend architectural interest and variety to the massing of a building and to relieve the effect of a single, long roof.
3. The ground level of buildings shall offer pedestrian interest along sidewalks and paths. This may be accomplished by means of windows, entrances, and architectural details. Incidental signage on buildings (in accordance with [CHAPTER 12](#)), awnings, and ornamentation is encouraged.



**FIGURE 5.4D: EXAMPLE OF MULTISTORY BUILDING WITH PEDESTRIAN-ORIENTED GROUND LEVEL**

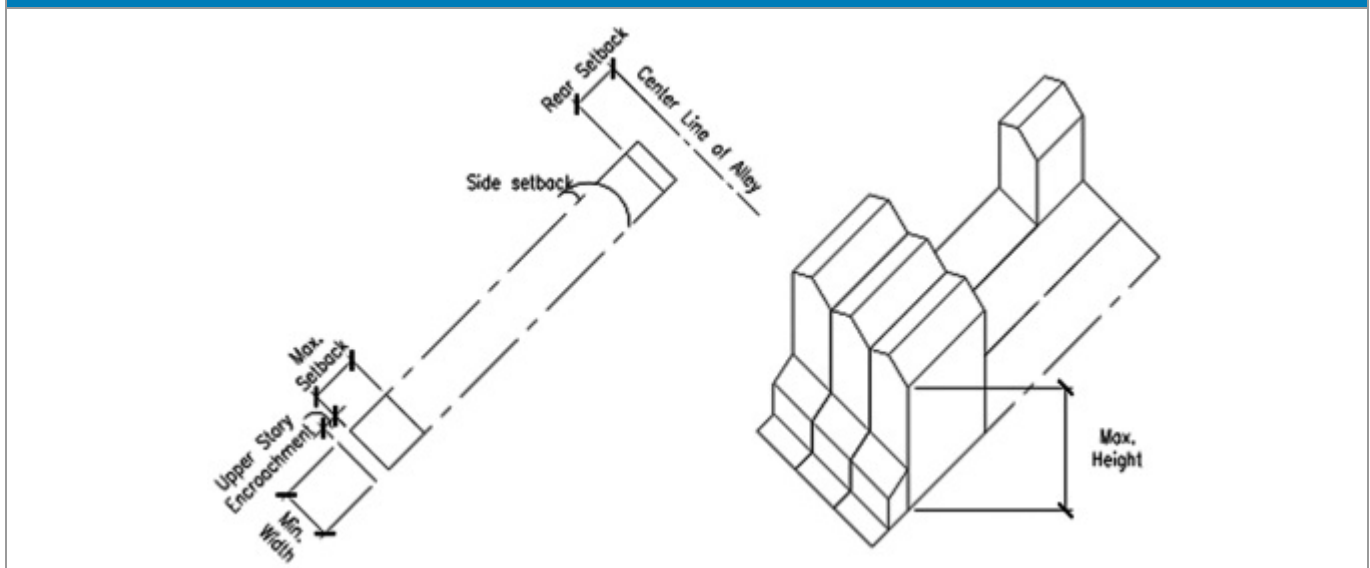


## 5.11. Building type: Townhouse.

The following restrictions only apply to regulation of townhouse buildings not subject to the N.C. Residential Code for One- and Two-Family Dwellings.

- A. *Description:* The townhome is a building with more than two residential units that are located side-by-side. When an entrance is provided at-grade, the townhome may be used as a live-work unit. The uses permitted within the building are determined by the regulations in place for the district in which it is located.

**FIGURE 5.11A : ILLUSTRATION OF ATTACHED HOUSE**



- ~~B. *Yards:* The townhome typically has one yard (rear) though variations include a small front setback often used for landscaping.~~

**G.B. General requirements:**

1. The bulk and scale of townhome infill development shall be similar to and consistent with the surrounding neighborhood as evaluated by the bulk of buildings adjacent, abutting and surrounding the proposed development. All buildings should be designed to adhere to the existing architectural pattern of the surrounding neighborhood.
2. Useable porches and stoops should form a predominate motif of the building design and be located on the front and/or side of the building. Useable front porches are at least eight feet deep and extend more than 30 percent of the facade.
3. Garage doors are not permitted on the front elevation of any townhome.
4. All building elevation visible from the street shall provide doors, porches, balconies, and/or windows. A minimum of 60 percent of front elevations, and a minimum of 30 percent of side and rear building elevations shall meet this standard. "Percent of elevation" is measured as the horizontal plane (lineal feet) containing doors, porches, balconies, terraces, and/or windows. This standard applies to each full and partial building story.
5. To provide privacy, all front entrances shall be raised from the finished grade (at the building line) a minimum of 1½ feet.
6. All townhome buildings shall provide detailed design along all elevations. Detailed design shall be provided by using as many of the following architectural features on all elevations as appropriate for the proposed building type and style (may vary features on rear/side/front elevations):
  - a. Dormers.
  - b. Gables.
  - c. Recessed entries.
  - d. Covered porch entries.
  - e. Cupolas or towers.
  - f. Pillars or posts.
  - g. Eaves (minimum ten-inch projections which may include gutter).
  - h. Off-sets in building face or roof (minimum 16 inches).
  - i. Window trim (minimum four inches wide).
  - j. Bay windows.
  - k. Balconies.
  - l. Decorative patterns on exterior finish (e.g. scales/shingles, wainscoting, ornamentation, and similar features).
  - m. Decorative cornices and roof lines (for flat roofs).



**FIGURE 5.11B: EXAMPLES OF TOWNHOUSE BUILDINGS**

| Multi-Family Townhomes with Alley                                                 | Multi-Family Townhomes with Alley                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  |  |
| Multi-Family Townhomes with Driveways                                             | Live-Work Units                                                                    |
|  |  |

**D.C. Materials:**

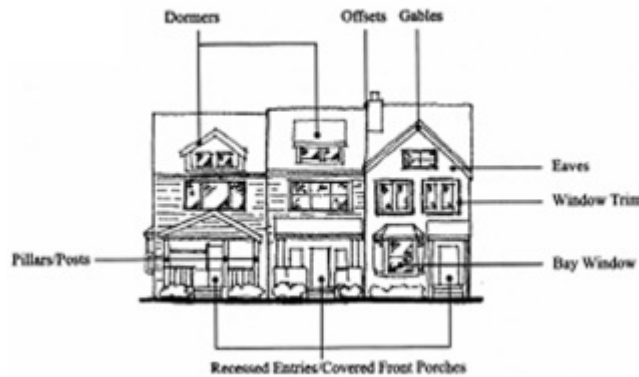
1. Residential building walls shall be one or more of the following: wood clapboard, cementitious fiber board, wood shingle, wood drop siding, primed board, wood board and batten, brick, stone, stucco, or vinyl.
2. Residential roofs shall be clad in wood shingles, standing seam metal, terne, slate, and/or asphalt shingles.

**E.D. Other requirements:**

1. Main roofs on residential buildings shall be symmetrical gables or hips with a pitch between 6:12 and 12:12. Monopitch (shed) roofs are allowed only if they are attached to the wall of the main building. No monopitch roof shall be pitched less than 4:12.
2. Two wall materials may be combined horizontally on one facade. The heavier material should be vertically placed below the other material.
3. The undercroft of buildings shall be enclosed.
4. All buildings should be designed to adhere to the existing architectural pattern of the surrounding neighborhood.
5. Overhanging eaves may expose rafters.
6. Flush eaves shall be finished by profiled molding or gutters.
7. All rooftop equipment shall be screened from view.



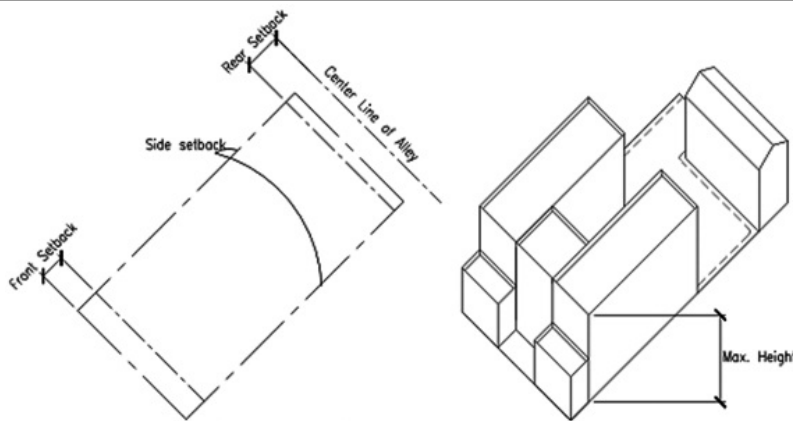
FIGURE 5.11C : ILLUSTRATION OF TOWNHOUSE BUILDING FACADE



## 5.12. Building type: Apartment.

- A. *Description:* A multiple unit building with units vertically arranged (generally) and with parking located below or behind the building. Units may be used for rent or for sale in condominium ownership or may be designed as continuing care facilities. The ground floor may be available for commercial uses. The use permitted within the building is determined by the district in which it is located.
- B. ~~*Yards:* An apartment building typically has one yard (rear) though variations include a small front setback often used for landscaping.~~

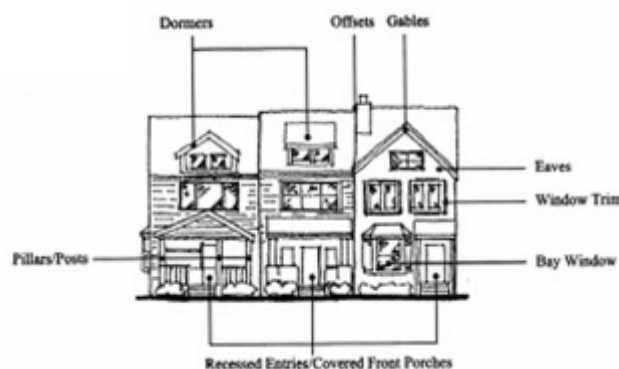
FIGURE 5.12A : ILLUSTRATION OF APARTMENT BUILDING



- C. *General requirements:*
1. The bulk and scale of apartment infill development shall be similar to and consistent with the surrounding neighborhood as evaluated by the bulk of buildings adjacent, abutting and surrounding the proposed development. All buildings should be designed to adhere to the existing architectural pattern of the surrounding neighborhood.
  2. Useable porches and stoops should form a predominate motif of the building design and be located on the front and/or side of the building. Useable front porches are at least eight feet deep and extend more than 30 percent of the facade.



3. Garage doors are not permitted on the front elevation of any apartment building.
4. All building elevations visible from the street shall provide doors, porches, balconies, and/or windows. A minimum of 60 percent of front elevations, and a minimum of 30 percent of side and rear building elevations shall meet this standard. "Percent of elevation" is measured as the horizontal plane (linear feet) containing doors, porches, balconies, terraces, and/or windows. This standard applies to each full and partial building story.
5. To provide privacy, all front entrances shall be raised from the finished grade (at the building line) a minimum of 1½ feet.
6. Apartment buildings shall provide detailed design along all elevations. Detailed design shall be provided by using as many of the following architectural features on all elevations as appropriate for the proposed building type and style. Features may vary between rear, side and front elevations.
  - a. Dormers.
  - b. Gables.
  - c. Recessed entries.
  - d. Covered porch entries.
  - e. Cupolas or towers.
  - f. Pillars or posts.
  - g. Eaves (minimum ten-inch projection which may include gutter).
  - h. Off-sets in building face or roof (minimum 16 inches).
  - i. Window trim (minimum four inches wide).
  - j. Bay windows.
  - k. Balconies.
  - l. Decorative patterns on exterior finish (e.g. scales/shingles, wainscoting, ornamentation, and similar features).
  - m. Decorative cornices and roof lines (for flat roofs).

**FIGURE 5.12B : ILLUSTRATION OF APARTMENT BUILDING FACADE****D. Materials:**

1. Apartment building walls shall be wood clapboard, cementitious fiber board, wood shingle, wood drop siding, primed board, wood board and batten, brick, stone, stucco, or vinyl.



2. Apartment building roofs shall be clad in wood shingles, standing seam metal, terne, slate, or asphalt shingles.

**E. Other requirements:**

1. Main roofs on apartment buildings shall be symmetrical gables or hips with a pitch between 6:12 and 12:12. Monopitch (shed) roofs are allowed only if they are attached to the wall of the main building. No monopitch roof shall be pitched less than 4:12.
2. Two wall materials may be combined horizontally on one facade. The heavier material should be vertically placed below the other material.
3. The undercroft of buildings shall be enclosed.
4. All buildings should be designed to adhere to the existing architectural pattern of the surrounding neighborhood.
5. Overhanging eaves may expose rafters.
6. Flush eaves shall be finished by profiled molding or gutters.
7. All rooftop equipment shall be screened from view.

**FIGURE 5.12C: EXAMPLES OF APARTMENT BUILDINGS**

| Multi-Family Development                                                            | Multi-Family Development                                                             |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|   |   |
| Eight-Plex                                                                          | Multi-Family Development                                                             |
|  |  |

## 5.13. Building type: Mixed-use.

- A. Description:** A multi-story small scale structure which can accommodate a variety of uses. A group of mixed-use buildings can be combined to form a mixed-use neighborhood center. Individual mixed-use buildings can be used to provide some commercial services, such as a neighborhood store, in close proximity to homes.



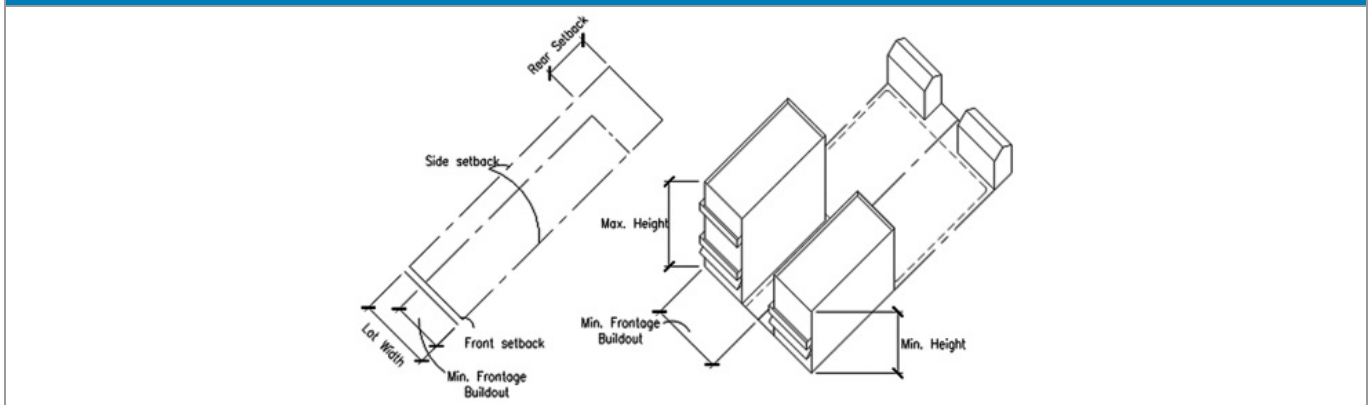


The uses permitted within the building are determined by the regulations for the zoning district in which it is located.

| FIGURE 5.13A: EXAMPLES OF MIXED-USE BUILDINGS                                        |                                                                                    |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Office Over Retail / Restaurant                                                      | Office Over Retail / Office                                                        |
|     |  |
| Residential / Office Over Retail                                                     | Office Over Office / Retail                                                        |
|     |  |
| Residential Over Residential / Office / Retail                                       |                                                                                    |
|  |                                                                                    |

- B. Yards Public Space: A mixed-use building ~~typically has one yard (rear), although variations may~~ include a small front plaza or courtyard to provide public space for outdoor seating as well as a building with complete lot coverage where parking is handled in a manner other than on-site surface parking.



**FIGURE 5.13B: ILLUSTRATION OF MIXED-USE BUILDING****C. General requirements:**

1. Mixed-use buildings shall have a minimum of two stories.
2. Street walls: The first floors of all mixed-use buildings shall be designed to encourage and complement pedestrian-style interest and activity by incorporating the following elements:
  - a. The first floor of all buildings fronting directly on a street shall include transparent windows and doors arranged so that the uses inside are visible from and/or accessible to the street on at least 40 percent of the length of the first floor building elevation.
  - b. Expanses of blank walls may not exceed 20 feet in length. (A "blank wall", in this context, is a facade that does not contain transparent windows or doors).
  - c. Window dimensions:
    - i. Maximum sill height (1st floor): 42 inches (as measured from the finished floor elevation).
    - ii. Minimum area: 16 square feet.
    - iii. Minimum width: 3 feet.
    - iv. Minimum height: 4 feet.
3. Ventilation grates and emergency exit doors located at the first floor level in the building facade, which are oriented to any public street, shall be decorative.
4. Building entrances: A primary entrance facade shall be oriented toward the street, designed for the pedestrians, and distinguishable from the rest of the building. Such entrances shall provide a sense of entry and add variety to the streetscape. Additional entrances may be oriented toward side or rear parking lots. Service entrances for shipping and receiving shall be oriented away from the public street.
5. A building canopy, awing, or similar weather protection may be provided and should project a minimum of three—five feet from the facade.

**D. Materials:**

1. Mixed-use building walls shall be brick, stone, cementitious fiber board, stucco, or wood clapboard. Regular or decorative concrete block and EIFS-type stucco may be used on building walls not visible from a public street or as an accent material only. All accessory buildings shall be clad in materials similar in appearance to the principal structure.
2. Pitched roofs shall be clad in wood shingles, standing seam metal, corrugated metal, slate, or asphalt shingles.



## 5.14. Building type: Commercial building.

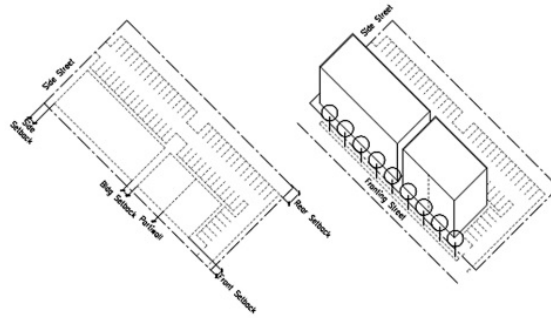
- A. *Description:* A single or multi-story medium to large structure which generally accommodates automobile-oriented commercial uses typically found along major thoroughfares. A group of commercial buildings can be combined to form a community center. This building type provides convenient automobile access from the fronting thoroughfare, while maintaining the negative impacts of parking lots on an active pedestrian realm. The uses permitted within the building are determined by the regulations for the zoning district in which it is located.

| FIGURE 5.14A: EXAMPLES OF COMMERCIAL BUILDINGS                                      |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Retail                                                                              | Grocery Store                                                                        |
|    |    |
| Retail along Thoroughfare                                                           | Pharmacy with Drive-Thru                                                             |
|   |   |
| Fast-food Restaurant                                                                | Gas Station                                                                          |
|  |  |

- B. ~~Yards~~Public Space: The commercial building ~~typically has one yard (rear) though variations may~~ include a small front plaza or courtyard to provide public space for outdoor seating as well as a building with complete lot coverage where parking is handled in a manner other than on-site surface parking.



FIGURE 5.14B: ILLUSTRATION OF COMMERCIAL BUILDING

**C. General requirements:**

1. **Street walls:** The first floors of all commercial buildings shall be designed to encourage and complement pedestrian-style interest and activity by incorporating the following elements:
  - a. The first floor of all buildings fronting directly on a street shall include transparent windows and doors arranged so that the uses inside are visible from and/or accessible to the street on at least 40 percent of the length of the first floor building elevation.
  - b. Expanses of blank walls may not exceed 20 feet in length. (A "blank wall", in this context, is a facade that does not contain transparent windows or doors.)
  - c. Window dimensions:
    - i. Maximum sill height (1st floor): 42 inches measured from the finished floor elevation
    - ii. Minimum area: 16 square feet.
    - iii. Minimum width: 3 feet.
    - iv. Minimum height: 4 feet.
  - d. Ventilation grates and emergency exit doors located at the first floor level in the building facade, which are oriented to any public street, shall be decorative.

**D. Materials:**

1. Commercial building walls shall be brick, stone, cementitious fiber board, stucco or wood clapboard. Regular or decorative concrete block and EIFS-type stucco may be used on building walls not visible from a public street or as an accent material only. All accessory buildings shall be clad in materials similar in appearance to the principal structure.
2. Pitched roofs shall be clad in wood shingles, standing seam metal, corrugated metal, slate, or asphalt shingles.

## 5.17. Encroachments.

Certain [structural and](#) architectural features are permitted to encroach across parcel lines, into setback areas, and into rights-of-way. The following standards shall be established for encroachments:

- A. Awnings:** Awnings on structures within commercial and mixed-use zoning districts may encroach upon the front setback area and rights-of-way provided that the following conditions are met:



1. Awnings shall be supported by means of a frame attached directly to the structure receiving beneficial use of the awning. In no case shall awnings be supported by a frame attached to a sidewalk or other public right-of-way.
  2. Storefront awnings projecting the width of the sidewalk pedestrian zone must be attached to the building at 14 feet above the grade of the sidewalk. Awnings may only project two-thirds the width of the sidewalk pedestrian zone if attached lower than 14 feet above the grade of the sidewalk.
  3. Awnings shall not project into the furniture/landscape zone of any sidewalk, nor over a street or adjacent on-street parking, and, in no event, shall they project further than seven feet from the face of the building.
  4. The lowest point of any awning shall be at least nine feet above the grade of the sidewalk.
  5. All awnings in other zoning districts shall be considered a part of the structure for purposes of measuring and complying with area and setback regulations.
- B. *Handicapped ramps:*** The administrator may approve the installation of handicapped landings, ramps, and similar structures as additions to existing structures, even though such additions do not meet the minimum setback requirements of this ordinance, provided such additions meet the following criteria:
1. They are intended for the sole purpose of providing handicapped access to an existing structure.
  2. They fully conform to North Carolina Building Code and are designed to minimize setback deviations to the maximum extent possible.
  3. Prior to the issuance of any permit the administrator shall inspect the site of the proposed addition and may impose such conditions as are necessary to minimize any conflicts that may arise from the construction thereof, including the encroachment of such additions upon setback lines.
  4. No such addition shall encroach into a public or private right-of-way or easement, regulatory floodway, or surface water protection area.
- C. *Roof overhangs and gutters:***
1. Roof overhangs and gutters may encroach into front, rear, or side yard setbacks by up to two feet.
- D. *Uncovered porches, stoops, and stairs:***
1. Uncovered porches, stoops, and stairs, intended primarily for means of ingress and egress, nominally in line with the first floor above grade or any floor below that, may encroach into front, or rear yard setbacks up to one-third of the required setback dimension up to a height of four feet above the elevation of the floor being served. The area of each porch not including landings between runs of stairs, shall be no greater than fifty square feet.
- E. *Balconies and bay windows:***
1. Covered or uncovered balconies and bay windows may encroach into front or rear setbacks up to three feet into the required setback dimension. Balconies or bay windows may not exceed ten feet in width. Cumulative total of balconies and bay windows projecting into the setback shall not exceed 33 percent of the total width of each elevation.
- F. *Chimneys:***
1. Chimneys may encroach into front, rear, or side setbacks by up to two feet. Width of the chimney encroachment shall not exceed that necessary for the fireplace, flue, and the typical building walls enclosing the fireplace or flue.
- G.** No such eve, bay window, balcony, stairs, stoop, porch, chimney shall encroach into a public or private right-of-way or easement, regulatory floodplain, or surface water protection area.



## CHAPTER 17. DEVELOPMENT PLAN REQUIREMENTS

### 17.7. Final plat requirements. [EXCERPT]

The final plat shall be prepared by a registered land surveyor, licensed to practice in the State of North Carolina and must be drawn to a scale no less than one inch = 100 feet, and shall meet the requirements of the Transylvania County Register of Deeds Office. The final plat shall constitute all portions of the preliminary plat site, which the subdivider proposes to record, and develop at the time. The size and number of completed applications shall be set by the administrator.

No final plat shall be approved unless and until the subdivider has installed in the platted area all improvements required by this ordinance or has posted performance guarantees in accordance with [CHAPTER 11](#). The final plat shall contain the following:

- A. The exact boundary of the tract of land being subdivided showing clearly the disposition of all portions of the tract.
- B. Scale denoted both graphically and numerically with north arrow and declination. A vicinity map showing the location of the subdivision with respect to adjacent streets and properties.
- C. As built drawings and plans of all water, sewer, and storm drainage system facilities, illustrating their layouts and connections to existing systems. Such plans shall show all easements and rights-of-way, to demonstrate that the facilities are properly placed and the locations of all fire hydrants, blow-off valves, manholes, pumps, force mains, and gate valves are indicated. This information shall not be placed on the final plat but must be submitted at the time of request for final plat approval or release of any surety for required improvements, whichever comes later.
- D. Sufficient data to determine readily and reproduce accurately on the ground the location, bearing, and length of every street, alley line, lot line, building ~~line~~ and easement line. All dimensions shall be measured to the nearest one-hundredth of a foot and all angles to the nearest second.
- E. The lines and names of all streets, alley lines, lot lines, lot and block numbers, easements, reservations, protected areas or required open space (steep slope areas, surface water protection areas, floodways and non-encroachment areas, etc.), the special flood hazard area, on-site demolition landfills and areas dedicated to public purpose with notes stating their purposes. The final plat shall contain the following statement:

"Areas delineated upon this plat or plan as a protection area or special flood hazard areas is subject to limitations upon development as set forth [CHAPTER 6](#) of the City of Brevard [UNIFIED DEVELOPMENT ORDINANCE](#), and any development, disturbance, or encroachment is prohibited except in accordance therewith."

- F. The accurate locations and descriptions of all monuments, markers, and control points.
- G. Underground and aerial utility easements shall be shown.
- H. The name of the city in which the subdivision is located, the name of the subdivision, the name of the owner, the name, registration number, and seal of the registered surveyor under whose supervision the plat was prepared, and the date of the plat.
- I. Submittal of payment in lieu of dedicated open space (if applicable).



## CHAPTER 19. DEFINITIONS

### 19.3. Definitions.

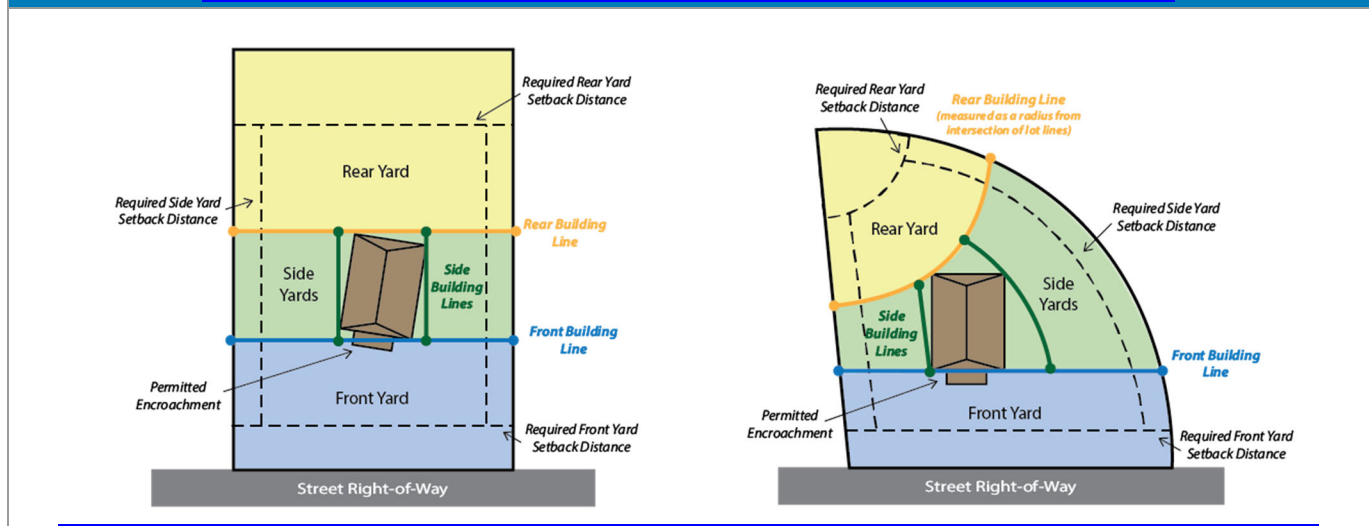
The following words, terms and phrases, when used in this UDO, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

**Building:** Any "structure" used or intended for supporting or sheltering any use or occupancy. See Structure.

**Buildable area:** ~~That~~ The portion of any lot which may be used or built upon in accordance with the regulations governing the zoning district within which the lot is located when the front, side, and rear yard setbacks and open space requirements for the district have been subtracted from the total area. ~~The required front, side and rear yards shall be measured inward toward the center of said lot from all points along the respective property lines or street right-of-way as appropriate. Buildable area shall be computed by measuring the allotted distances, perpendicular from each property line.~~

**Building line:** A line measured parallel to the right-of-way line or property line touching that part of the building closest to the right-of-way line or property line. The building line shall not be measured from any encroachments permitted in Section 5.17 or any unenclosed structure (e.g., decks or patios). ~~That line determined by meeting respective front, side, and rear yard requirements. The required side and rear yards for individual lots shall be measured inward toward the center of the lot from all points along the respective property lines. The required front yard shall be measured inward toward the center of the lot from all points on the street right-of-way line.~~

**FIGURE 19.3A: ILLUSTRATIVE DIAGRAMS OF BUILDING LINES AND YARDS**



**Build-to line:** A build-to line is a set building line on a lot, measured parallel from the front and/or corner side lot line, where the structure must be located. The building façade must be located at or in front of the build-to line. Façade articulation, such as window or wall recesses and projections are not counted as the building façade line, which begins at the applicable façade wall. The build-to line may also be referred to as a maximum setback.





**Build-to percentage:** The build-to percentage specifies the percentage of the building façade that must be located at the build-to line or within a build-to zone. Façade articulation, such as window or wall recesses and projections, do not count against the required build-to percentage.

**Build-to zone:** The area between the build-to line and the minimum setback line.

**Encroachment:** Any structural or architectural element that breaks the plane of a vertical or horizontal regulatory limit, such as extending into setback requirements or above a height limit.

For the purposes of flood management, this term shall mean ~~Means~~ the advance or infringement of uses, fill, excavation, buildings, permanent structures or development into a floodplain (including floodway) or surface water protection area (including floodway), which may impede or alter the storage capacity or flow capacity of a floodplain.

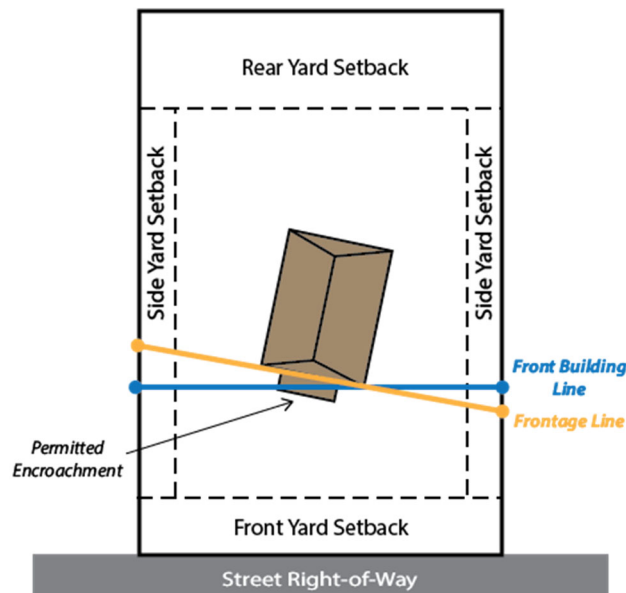
**Fence:** An enclosure or barrier of wood, masonry, stone, wire, metal, or other manufactured material or combination of materials intended to be used as a boundary, means of protection, privacy screening, area of confinement, or retaining wall.

**Fence, closed:** A fence in which the openings through which clear vision is possible from one side to the other on a horizontal plane comprise 30 percent or less of the total side area of the fence.

**Fence, open:** A fence in which the openings through which clear vision is possible from one side to the other on a horizontal plane comprise 70 percent or more of the total side area of the fence.

**Frontage:** The side of a lot abutting a street. Frontage is not determined by design features (including entrances) of any building(s) located on the lot.

**Frontage line:** A line measured across the façade of the portion of the building closest to the street. The frontage line shall not be measured from any encroachments permitted in Section 5.17 or any unenclosed structure (e.g., decks or patios). This line can be synonymous with the front building line when a building is oriented towards the street.

**FIGURE 19.3B: ILLUSTRATIVE DIAGRAMS OF FRONTAGE LINE AND BUILDING LINE**

**Lot, conventional:** Conventional Lot shall refer to any lot where the minimum lot width for conventional lots (See Section 2.3) is met at the right-of-way line.

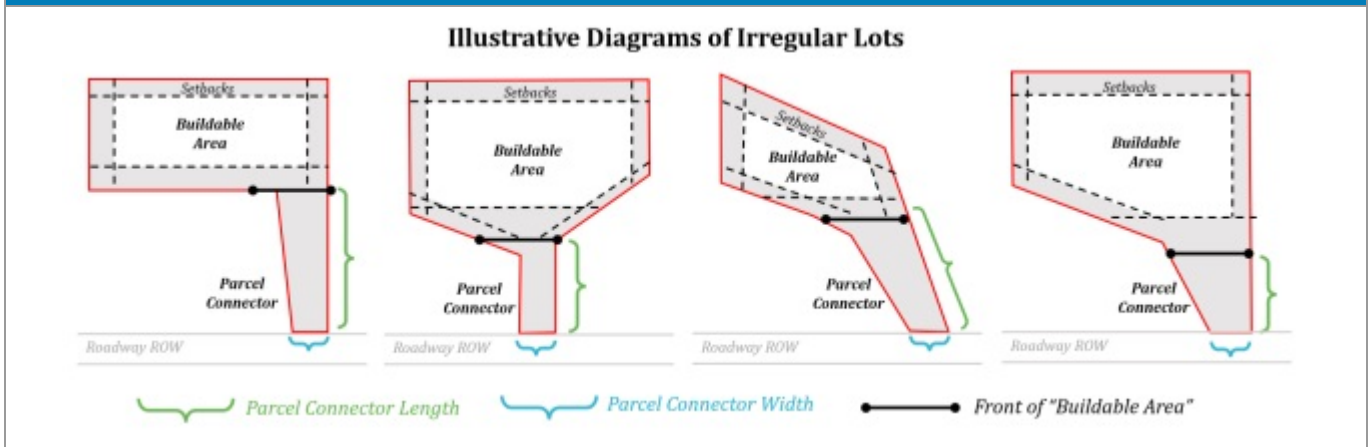
**Lot, irregular:** Irregular Lot shall refer to any lot where the functional access to a road is provided along a long narrow “parcel connector” and the “buildable area” is typically situated, at least in part, behind adjoining lots which front on a public street.

- A. **“Buildable Area”:** The largest portion of an irregular lot where development is intended.
- B. **“Parcel Connector”:** The long narrow strip of property that provides functional access for ingress, egress, and utilities.
  - 1. The width of the “parcel connector” is measured along the right-of-way line, and must be at least minimum lot width for irregular lots and does not exceed that for conventional lots (see Section 2.3).
  - 2. The length of the “parcel connector” is measured from the right-of-way until the property width reaches the minimum lot width for conventional lots and shall not exceed the maximum parcel connector length for irregular lots (see Section 2.3).





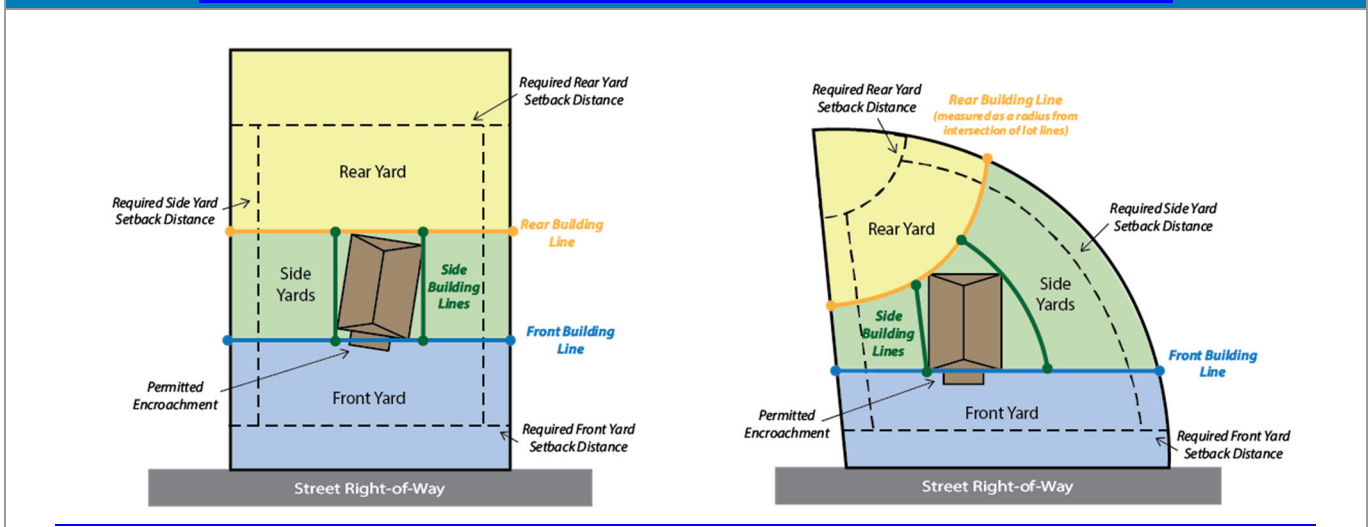
**FIGURE 19.3A3C: ILLUSTRATIVE DIAGRAMS OF IRREGULAR LOTS**



**Setback:** The minimum distance a structure may be located from a ~~curb line~~, lot line, or right-of-way line along frontages and side and rear lot lines.

**Yard:** A space that lies between the principal building(s) and the nearest lot line or right-of-way line. The front yard and rear yard are defined by the respective building line, with the side yard(s) consisting of the remainder of the property not occupied by principal building(s). ~~on the same lot with a principal building, open, unoccupied, and unobstructed by buildings or structures from ground to sky except where encroachments and accessory buildings and structures are expressly permitted.~~

**FIGURE 19.3D: ILLUSTRATIVE DIAGRAMS OF BUILDING LINES AND YARDS**



**Yard, front:** A yard situated between the front building line and the front lot line or right-of-way line extending the full width of the lot. See Yard.

**Yard, rear:** A yard situated between the rear building line and the rear lot line extending the full width of the lot. In the case of multi-frontage lots or other type of lot, the front yard shall supersede the rear yard. See Yard.



**Yard, side:** A yard situated between a ~~side-building line~~ and side lot line(s) and extending from the required front yard, as determined by the front building line, to the required rear yard, as determined by the rear building line. See Yard. ~~In determining the situation of accessory structures, the side yard shall be assumed to extend through the rear yard to the rear lot line.~~

**COMMENT OF CONSISTENCY WITH COMPREHENSIVE PLAN  
AND ANY OTHER OFFICIALLY ADOPTED APPLICABLE PLANS**

*NCGS 160D-605 requires that the Planning Board shall advise and comment on whether the proposed amendment is consistent with any comprehensive plan prior to consideration by the Governing Board. The Planning Board shall provide a written recommendation to the Governing Board that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the Comprehensive Plan shall not preclude consideration or approval of the proposed amendment by the Governing Board.*

The Brevard Planning Board forwards this recommendation to City Council with a finding that the proposed zoning map amendment is **consistent** with the following elements of the City's adopted plans and policies:

Building Brevard Comprehensive Land Use Plan:

**GOAL 2:** Encourage a development pattern that respects Brevard's sense of place and prioritizes livable communities.

**LUH-19:** Enhance communication of land use planning efforts, policy development, approvals, and processes.



# CITY of BREVARD

The mission of the City of Brevard is to promote a high quality of life, support economic prosperity, and cultivate community while honoring its heritage and culture.

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## **TAX SETTLEMENT REPORT FOR MONTH ENDED OCTOBER 31, 2023**

**Tina Tanner, Tax Collector**

CITY OF BREVARD TAX SETTLEMENT REPORT  
MONTH ENDING OCTOBER 31, 2023

UPDATED: 11.14.2023

| YEAR         | JULY        | AUGUST          | SEPTEMBER     | OCTOBER       | NOVEMBER | DECEMBER | TOTAL           |
|--------------|-------------|-----------------|---------------|---------------|----------|----------|-----------------|
| 2023         |             | \$ 3,999,226.23 | \$ 423,200.72 | \$ 153,930.97 |          |          |                 |
| 2022-2011    | \$ 8,264.83 | \$ 22,421.57    | \$ 1,772.62   | \$ 2,221.69   |          |          |                 |
| 2010 - Prior | \$ -        | \$ -            | \$ -          | \$ -          | \$ -     | \$ -     |                 |
| TOTAL:       | \$ 8,264.83 | \$ 4,021,647.80 | \$ 424,973.34 | \$ 156,152.66 | \$ -     | \$ -     |                 |
|              |             |                 |               |               |          |          |                 |
|              | JANUARY     | FEBRUARY        | MARCH         | APRIL         | MAY      | JUNE     | TOTAL           |
| 2023         |             |                 |               |               |          |          | \$ 4,576,357.92 |
| 2022-2011    |             |                 |               |               |          |          | \$ 34,680.71    |
| 2010 - Prior | \$ -        | \$ -            | \$ -          | \$ -          | \$ -     | \$ -     | \$ -            |
| TOTAL:       | \$ -        | \$ -            | \$ -          | \$ -          | \$ -     | \$ -     | \$ 4,611,038.63 |

HEART OF BREVARD TAX SETTLEMENT REPORT  
MONTH ENDING, OCTOBER 31, 2023

UPDATED: 11.14.2023

| YEAR         | JULY    | AUGUST       | SEPTEMBER   | OCTOBER     | NOVEMBER | DECEMBER | TOTAL        |
|--------------|---------|--------------|-------------|-------------|----------|----------|--------------|
| 2023         |         | \$ 84,666.91 | \$ 4,920.46 | \$ 2,272.69 |          |          |              |
| 2022-2011    |         | \$ 4,227.80  | \$          | \$ 535.70   |          |          |              |
| 2010 - Prior | \$ -    | \$ -         | \$ -        | \$ -        | \$ -     | \$ -     |              |
| TOTAL:       | \$ -    | \$ 88,894.71 | \$ 4,920.46 | \$ 2,808.39 | \$ -     | \$ -     |              |
|              |         |              |             |             |          |          |              |
|              | JANUARY | FEBRUARY     | MARCH       | APRIL       | MAY      | JUNE     | TOTAL        |
| 2023         |         |              |             |             |          |          | \$ 91,860.06 |
| 2022-2011    |         |              |             |             |          |          | \$ 4,763.50  |
| 2010 - Prior | \$ -    | \$ -         | \$ -        | \$ -        | \$ -     | \$ -     | \$ -         |
| TOTAL:       | \$ -    | \$ -         | \$ -        | \$ -        | \$ -     | \$ -     | \$ 96,623.56 |

## **STAFF REPORT**

**City Council, Monday, November 20, 2023**

**Title:** Resolution Designating Police Chief Tom Jordan as City's Official to Make Recommendations to NC ABC Commission

**Speaker:** Denise Hodsdon, City Clerk

**Prepared by:** Denise Hodsdon

**Approved by:** Wilson Hooper, City Manager

### **Background**

Businesses applying for an ABC Permit from the NC ABC Commission are required to submit a Local Government Opinion Form with their application packet. The purpose of the Local Government Opinion Form is for the City to make recommendation to the ABC Commission whether an applicant is a suitable person and the location is a suitable place. The form is completed and signed by a designated official of the local government. Historically, the Police Chief has been the designated official for the City of Brevard.

### **Discussion**

The ABC Commission's record of the City of Brevard designated official is out of date and needs to be updated to specify that Police Chief Tom Jordan is the City's designated official.

### **Action**

Staff requests that Council approve the attached NC ABC Commission Designated Official Resolution

### **Attachments:**

1. ABC Designated Official Resolution

**NORTH CAROLINA  
ALCOHOLIC BEVERAGE CONTROL COMMISSION  
(919) 779-0700**

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**DESIGNATED OFFICIAL RESOLUTION**

RESOLUTION OF THE CITY OF BREVARD, COUNTY OF  
TRANSYLVANIA, REGARDING THE DESIGNATION OF AN OFFICIAL  
TO MAKE RECOMMENDATIONS TO THE NORTH CAROLINA ALCOHOLIC  
BEVERAGE CONTROL COMMISSION ON ABC PERMIT APPLICATIONS.

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WHEREAS G.S.18B-904(f) authorizes a governing body to designate an official, by name or by position, to make recommendations concerning the suitability of persons or locations for ABC permits; and

WHEREAS the City of BREVARD, County of  
TRANSYLVANIA, wishes to notify the NC ABC Commission of its designation as required by G.S.18B-904(f);

BE IT THEREFORE RESOLVED that C. THOMAS JORDAN, CHIEF OF POLICE,  
(Name of Official) (Title or Position)

is hereby designated to notify the North Carolina Alcoholic Beverage Control Commission of the recommendations of the City of BREVARD, County of  
TRANSYLVANIA, regarding the suitability of persons and locations for ABC permits within its jurisdiction.

BE IT FURTHER RESOLVED THAT notices to the City of BREVARD, County of  
TRANSYLVANIA, should be mailed or delivered to the official designated above at the following address:

|                  |                                           |
|------------------|-------------------------------------------|
| Mailing address: | <u>BREVARD POLICE DEPARTMENT</u>          |
| Office location: | <u>ATTN: CHIEF OF POLICE</u>              |
|                  | <u>95 W. MAIN STREET</u>                  |
| City:            | <u>BREVARD</u> , NC                       |
| Zip Code:        | <u>28712</u> Phone #: <u>828-883-2212</u> |

This the 20th day of NOVEMBER, 2023.

\_\_\_\_\_  
(Mayor/Chairman)

Sworn to and subscribed before me this the 20th day of NOVEMBER, 2023.

\_\_\_\_\_  
(Clerk)



## **STAFF REPORT**

**City Council, Monday, November 20, 2023**

**Title:** City Manager Employment Agreement Amendments

**Speaker:** Mack McKellar, City Attorney

**Prepared by:** Kelley Craig, Human Resources Director

**Approved by:** Kelley Craig, Human Resources Director

### **Background**

The City Council is responsible for selecting/hiring a city manager, and setting the terms of his/her employment. Being the only employee hired by the elected board, the City Manager is the only full-time city employee whose employment is governed by a contract rather than by the city's Personnel Policy.

The original employment contract with the City Manager was signed in August 2022, effective September 2022. It called for the City Manager's performance to be evaluated once a year in the fall.

### **Discussion**

The performance evaluation referenced above was conducted September-November under the facilitation of the City Attorney. The evaluation system that was used was recommended by the Finance, Human Resources, and Citizen Appointment Committee last summer. Elected officials scored the Manager's performance in ten different categories, and also provided open-ended feedback. The results were reviewed with the City Manager in closed session on November 6, 2023.

At the conclusion of the evaluation, the City Manager asked the Council to consider two updates to his contract:

1. Section 3.B - Amend the term of severance agreement from six (6) months to twelve (12) months, and state explicitly that the health insurance to which he is entitled under this clause include his covered family members. A 12-month term is considered appropriate according to ICMA's model employment agreement.
2. Section 4.A - Increase his base compensation 5% to \$147,000. A 5% increase matches the cost of living adjustment given to all employees at the start of the fiscal year.

### **Action**

Approve the amended City Manager Employment Agreement

### **Attachments:**

1. Amended City Manager Employment Agreement



THIS AGREEMENT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2023, by and between the City of Brevard, North Carolina, a municipal corporation, hereinafter called "Employer or Governing Body" as party of the first part, and WILSON HOOPER, \_\_\_\_\_, hereinafter called "Manager", as party of the second part, both of whom understand as follows:

WITNESSETH

WHEREAS, Employer desires to secure the services of said WILSON HOOPER, as City Manager of the City of Brevard, North Carolina, as provided for in the City Charter; and

WHEREAS, it is the desire of the Governing Board, hereinafter called "Governing Body" to provide certain benefits, to establish certain conditions of employment and to set working conditions of said Manager; and

WHEREAS, it is the desire of the Governing Body to (1) retain the services of WILSON HOOPER, and to provide inducement for him to remain in such employment, (2) to make possible full work productivity and independence by assuring Manager's morale and peace of mind with respect to future security, and (3) to provide a just means for terminating Manager's services at such time that Employer may desire to terminate his employ; and

WHEREAS, Manager desires to begin employment as City Manager of the City of Brevard;

NOW, THEREFORE, In consideration of the mutual covenants herein contained, the parties agree as follows:

Section 1. Powers and Duties of the Local Government Manager

- A. Employer hereby agrees to retain WILSON HOOPER as Manager of the City of Brevard to perform the functions and duties specified in the City Code, City Charter, North Carolina General Statutes and herein, and as otherwise reasonably assigned to him from time to time by the Governing Body.
- B. Neither the Governing Body, nor any of its members shall direct or request the appointment of any person to, or removal from, office by the Manager or any of his subordinates, or in any manner take part in the appointment or removal of officers and employees in the service of the City, except where expressly provided for by City Charter or state law. However, this will not preclude a Board member from communicating with an employee with respect to getting information that will be, or has been, brought before the Board. Neither does it preclude an employee from discussing with a Board member a grievance with the Manager that has not been handled to his/her satisfaction or in a professional, courteous, and respectful manner.
- C. The Manager shall be the Chief Administrative Officer of the City of Brevard, NC. He may head one or more departments and shall be responsible to the Governing Body for the proper administration of all affairs of the City of Brevard. To that end, he shall have the power and be required to:

1. Appoint and, when necessary in his judgment for the good of the City, suspend or remove any employee of the City, except as otherwise provided herein or by the City Charter or State Law.
2. Prepare the budget annually, including all funds of the City of Brevard, without exception, and submit it to the Governing Body together with a message describing the important features, and be responsible for its administration after adoption.
3. Oversee the submission of an annual report to the Governing Body on the finances and administrative activities of the City of Brevard as of the end of each fiscal year.
4. Direct and supervise the administration of all departments, offices, and agencies of the City of Brevard, subject to the general direction of the Governing Body.
5. Keep the Governing Body advised of the financial condition and future needs of the City, and make such recommendations, as he shall deem advisable.
6. Recommend to the Governing Body, adoption of a pay and compensation philosophy and policy, which shall guide his administration of the compensation system.
7. Recommend to the Governing Body, adoption of such measures, as he may deem necessary to expedient for the health, safety or welfare of the City, or the improvement of the administrative services.
8. Attend all meetings of the Governing Body, unless excused therefrom, and take part in the discussion of all matters coming before the Governing Body.
9. Supervise the purchase of all materials, supplies and equipment for which funds are provided in the budget; advise the Governing Body on the advantages or disadvantages of contract and bid proposals; and issue rules governing purchasing procedures within the administrative organization.
10. See that all laws and ordinances are duly enforced.
11. Investigate the affairs of the City or any department or division thereof. Investigate all complaints in relation to matters concerning the administration of the government of the City, and in regard to service maintained by the public utilities in the City, and see that all franchises, permits, and privileges granted by the City are faithfully observed.
12. Perform other such duties as may be required by the Governing Body, not inconsistent with the City Charter, law or ordinances, or this Agreement.

## Section 2. Term

- A. The Manager serves at the pleasure of the Governing Body and nothing herein shall be taken to prevent, limit or otherwise interfere with the right of the Governing Body to

terminate the services of the Manager at any time subject only to the provisions of Section 3 of this Agreement.

- B. The term of this Employment Agreement shall begin at 12:01 a.m. on November 20, 2023, and shall continue until terminated with or without cause by the Governing Body as herein provided.
- C. In the event Manager voluntarily resigns before expiration of the term of this Agreement, then Manager shall give the Governing Body at least ninety (90) days' advance notice unless the parties agree otherwise.
- D. Manager agrees to remain in the exclusive employ of the City of Brevard during the terms of this Agreement. The term "employed", however, shall not be construed to include occasional teaching, writing, speaking or consulting performed on Manager's time off, even if outside compensation is provided for such services. Said activities are expressly allowed, provided that in no case is any activity allowed which would present a conflict of interest with the City of Brevard. In the event overnight travel is required for such non-Employer-related business, the Governing Body shall be notified in advance. *De minimis* use of City equipment for such purposes is hereby authorized.
- E. Manager shall reside within the corporate limits of Transylvania County during the term of this Employment Agreement. Manager agrees to begin residence primarily in Transylvania County from his current domicile within one hundred eighty (180) days from the date of the commencement of his employment the week of September 19, 2022. Council may modify this requirement at the request of the Manager which request shall not reasonably be declined. Manager shall be eligible to receive reimbursement for any moving expenses incurred in connection with his relocation of up to \$8,000.00 upon presentation of receipts supporting such reimbursement to the Director of Finance for the City of Brevard.

### Section 3.

- A. Termination for Cause. Throughout the term of this Employment Agreement, the Manager shall be subject to discharge for cause (as herein defined). For purposes of this Agreement, the Governing Body shall have "cause" to terminate this Agreement upon a determination by the Board, in good faith, that Manager (A) has breached in any material respect any of the terms or conditions of this Agreement or any City Policy, including those related to his duties under this agreement; (B) engages in conduct involving gross negligence, willful misconduct or insubordination; (C) engages in conduct that by common judgment reflects significantly unfavorably upon the Manager's ability to continue to serve and to perform the essential functions of his office; (D) is convicted of a felony or misdemeanor involving moral turpitude; or (E) receives a sanction or censure from the International City Manager Association for violation of its code of ethics. Manager's refusal to comply with a directive from Council that violate the ICMA Code of Ethics shall in no event serve as a cause for termination.

The Board also shall not arbitrarily or capriciously call for the termination of the Manager for cause, and the Manager shall have the right to receive written grounds for his discharge, a fair hearing before the Board, and at least ten (10) days' written notice of said

charges and hearing. At such hearing before the Board, the Manager shall have the right to be present and to be heard, or represented by counsel, and to present through witnesses any testimony relevant to the grounds of discharge identified by the City Council for his termination. A transcript of the record of the proceedings before the City Council shall be made available without charge to the Manager. If the Manager chooses to be accompanied by legal counsel at the hearing before the City Council, the Manager will assume the cost of his legal expenses.

- B. Termination without Cause and Severance Pay. In the event the majority of the Governing Body takes action to terminate the employment of the Manager without cause under this Agreement, and during such time as the Manager is willing and able to perform his duties under this Employment Agreement, then the Employer agrees to pay the Manager up front, a lump sum cash payment for all accrued vacation, holiday, or other leave owed to Manager through the termination date; thereafter, Manager will receive salary compensation (including the City of Brevard's share of Manager's contribution to the Local Government Retirement System) and continued health insurance coverage for himself and his dependents for a period of up to twelve (12) months as severance pay. No other benefits such as an automobile or cellular allowance, or accrual of leave time will be provided during this period of up to twelve (12) months. It is expressly agreed between the parties, however, that Manager will receive salary compensation (including the City of Brevard's share of Manager's contribution to the Local Government Retirement System), and continued health insurance coverage only until Manager secures other comparable employment. Such severance pay shall terminate upon the date of Manager's commencement of comparable employment elsewhere, or at the end of a period of twelve (12) months from the termination of the Manager's employment without cause whichever event sooner occurs.
- C. In the event the Governing Body at any time reduces the salary, compensation, or other benefits of the Manager in a greater amount than an applicable across-the-board reduction for all employees of the City, or in the event the Governing Body refuses to comply with any other provision benefiting the Manager herein, then and in that event, Manager may at his option, be deemed to be terminated without cause as provided herein.
- D. Should the Manager be permanently disabled or otherwise unable to perform his duties because of sickness, accident, injury, mental incapacity or health for a period of four (4) successive weeks beyond any accrued leave, the Governing Body shall have the right to terminate this Agreement subject to the severance provisions of Section 3B and 3C above.
- E. The terms of this Agreement shall remain in full force and effect and hold over until employment is terminated under the terms herein, or a new Agreement has been negotiated and entered into by Manager and Governing Body.
- F. Contemporaneously with the delivery of the severance pay herein above described, Employee agrees to execute and deliver to Employer a release, releasing Employer of any and all claims that Manager may have against Employer.

#### Section 4. Salary and Deferred Compensation

- A. Employer agrees to pay Manager at the annual base salary of **ONE HUNDRED FORTY SEVEN THOUSAND DOLLARS (\$147,000)**, payable bi-weekly (annual base salary does not include vehicle and cellular phone allowance).
- B. In addition to Manager's annual base salary, Manager shall receive a contribution of 5% of its base salary as deferred compensation to the Prudential NC 401k Plan in the same manner in which the City of Brevard makes contributions each year for the benefit of its Law Enforcement Officers.
- C. The Governing Body shall review and evaluate the performance of the Manager beginning in October and ending in November of each year commencing in 2024. Employer may increase base salary and/or benefits of the Manager at time of said review, in such amounts and to such extent as the Governing Body may determine that it is desirable to do so, in light of performance by the Manager and within budget restraints. With the agreement of both Manager and Council, these review dates may be modified but shall be at least annually. The Manager will not participate in any cost of living adjustments provided to other employees of the City of Brevard from time to time.

#### Section 5. Retirement Benefits

- A. The Manager shall be covered and governed by the same retirement system as all other non-public safety employees, specifically NCLGERS. Calculations for retirement contributions shall include all compensation normally reportable to the IRS, including deferred compensation.
- B. In addition to the Employer's payment to the local government retirement system referenced above, Employer agrees to execute and keep in force all necessary agreements provided by any Section 457 deferred compensation plan for Manager's participation, or continued participation, in such supplemental retirement plan.

#### Section 6. Insurance Coverage

- A. The Manager shall be covered by the same health, life, and dental plans as all other employees.
- B. The Employer agrees to pay the cost to provide the Manager with one membership for himself and his family to a health club of the Manager's choice.

#### Section 7. Bonding

- A. The Employer shall bear the full cost of any fidelity or other bonds required of the Manager under any law or ordinance.

#### Section 8. Automobile and Mobile Phone Allowance

- A. The Employer shall provide a vehicle and cellular phone allowance of \$600.00 per month to the Manager. For the future purpose of allocating the reimbursement, parties agree

that \$500 is provided for automobile expenses and \$100 for cellular phone and service expenses. Said vehicle allowance shall be intended to reimburse the Manager for local travel only, generally defined as travel within Transylvania, Henderson, or Buncombe County. Manager shall be reimbursed for his actual gas costs for all travel outside of Transylvania, Buncombe, or Henderson County. The Manager shall make available his gas receipts to the City Council upon their request. The cellular phone portion of the allowance shall reimburse the Manager for being required to purchase and maintain cellular telephone service, available at all times for the conduct of city business. It is understood that such telephone phone and cellular service shall be the responsibility of the Manager to maintain during his tenure as city manager.

#### Section 9. Other Benefits

- A. All provisions of the City Charter, rules and regulations of Employer relating to fringe benefits and working conditions as they now exist or hereafter may be amended, shall also apply to the Manager as they would to all other employees of Employer, in addition to said benefits enumerated specifically for the benefit of the Manager herein. Except that all benefits which vary according to tenure shall be calculated and granted in accordance with the City of Brevard's provisions using Manager's original employment date.
- B. Upon written verification from his current employer, the City will accept Manager's unused sick leave in accordance with City policy.

#### Section 10. No Reduction of Benefits

- A. The Employer shall not at any time during this agreement reduce the salary, compensation, or other financial benefits of the Manager, except to the degree such a reduction is across-the-board for all employees of the Employer.

#### Section 11. Hours of Work

- A. It is recognized that the Manager must devote a great deal of time outside normal office hours to the business of Employer, and to that end Manager will be allowed to take compensatory time off as he shall deem appropriate during said normal office hours, to the extent that it does not reasonably interfere with the orderly management of the City.

#### Section 12. Professional Development

- A. Employer agrees to budget for and to pay the professional dues, subscriptions, travel, and subsistence expenses of the Manager for professional participation and travel, meetings and occasions adequate to continue his professional development. Said participation on City time to include, but not to be limited to, the International City/County Management Association, North Carolina League of Municipalities, North Carolina City/County Manager's Association, American Public Power Association, ElectriCities of North Carolina, and such other national, regional, state and local government groups and committees thereof which the Manager serves as a member, or which said participation is beneficial to Employer, as well as associated short courses, institutes and seminars. Specifically, the City strongly encourages Manager to attend and participate in any courses he may deem necessary related to North Carolina Municipal Government as



presented by the North Carolina School of Government at the expense of the City.

- B. Additionally, Employer encourages the Manager to attain positions of leadership in national, state, regional and local associations and organizations relevant to his profession. As expressly approved by the City Council, Employer agrees to budget and pay for the travel and subsistence expenses necessary for Manager to discharge his official duties for such associations and organizations.

#### Section 13. Membership in Civic and Community Organizations

- A. The Governing Body recognizes the desirability of representation in and before local, civic, and other organizations, and the Manager is authorized to become a member of such clubs and organizations as are expressly approved by the City Council. Employer shall pay expenses for such memberships as may be expressly approved by the City Council. The Manager shall seek approval of the joining of the organization from the Governing Body before seeking membership reimbursement or payment.

#### Section 14. Performance Evaluation

- A. The Governing Body shall review and evaluate the performance of the Manager beginning in October and ending in November of each year following the first year of employment. It is anticipated that the City Council will undertake the evaluation of the Manager in October of each year and strive to complete the evaluation in November of each year, or as soon thereafter as is reasonably practicable. Employer may increase the annual base salary and/or benefits of the Manager at time of said review, in such amounts and to such extent as the Governing Body may determine that it is desirable to do so, in light of performance by the Manager and within budget restraints. The months of this review may be modified with the mutual consent of both Manager and Council.

#### Section 15. Suspension

- A. The Governing Body may suspend the Manager with full pay and benefits at any time during the term of this Agreement, if a majority of the Governing Board votes to suspend the Manager after the Manager is given written notice setting forth the reasons for his suspension ten (10) calendar days prior to a hearing before the Governing Body where he is allowed to answer such charges.

#### Section 16. Indemnification

- A. Employer shall defend, save harmless and indemnify Manager against any tort, professional liability claim or demand or other legal action, whether groundless or otherwise, arising out of an alleged act or omission occurring in the performance of his actual duties as Manager. Employer will compromise and settle any such claim or suit and the amount of any settlement or judgment rendered thereon. Said indemnification shall extend beyond termination of employment and the otherwise expiration of this Agreement, to provide full and complete protection to the Manager by the City of Brevard as described herein, for any acts undertaken or committed in his capacity as Manager, regardless of whether the notice of filing of a lawsuit for such tort, claim, demand or other legal action occurs during or following employment with Employer. In connection with

those claims or suits involving the Manager in his/her professional capacity, the Employer must defend the Manager and/or must retain and pay for an attorney to represent the Manager (including all fees and costs) in connection with any such suit, claim, complaint, mediation, arbitration, or similar actions.

#### Section 17. Conflict of Interest Prohibition

- A. It is further understood and agreed that because of the duties of the Manager within and on behalf of the City of Brevard and its citizenry, the Manager shall not, during the term of this Agreement, individually, as a partner, joint venture, officer or shareholder, invest or participate in any business venture conducting business in the corporate limits of the City of Brevard except for stock ownership in any company whose capital stock is publicly held and regularly traded, without prior approval of the Governing Body. For and during the term of this Agreement, the Manager further agrees, except for a personal residence or residential property acquired or held for future use as his personal residence, not to invest in any other real estate or property improvements within the corporate limits of the City of Brevard, without the prior consent of the Governing Body.

#### Section 18. Notices

- A. Notices pursuant to this Agreement shall be given by deposit in the custody of the United States Postal Service, postage prepaid, addressed as follows or delivered in person in the same manner as is applicable to civil judicial practice:

Employer: City of Brevard  
P.O. Box 219  
Brevard, NC 28513

Manager: Wilson Hooper

\_\_\_\_\_  
\_\_\_\_\_

#### Section 19. Review of Agreement

- A. This Agreement shall be reviewed annually in advance of adoption of the annual operating budget.

#### Section 20. General Provisions

- A. The text herein shall constitute the entire Agreement between the parties.
- B. This Agreement shall be binding upon and inure to the benefit of the heirs at law and executors of the Manager.
- C. This Agreement shall become effective upon adoption and approval by the Governing Body of the City of Brevard.

- D. If any provisions, or any portion thereof, contained in this Agreement is held unconstitutional, invalid or unenforceable, the remainder of this Agreement, or portion thereof, shall not be affected and shall remain in full force and effect.

IN WITNESS THEREOF, the City of Brevard has caused this Agreement to be signed and executed in its behalf by its Mayor and duly attested by its City Clerk, and the Manager has signed and executed this Agreement, both in duplicate, the day and year first written above.

By: \_\_\_\_\_  
Maureen Copelof, Mayor

By: \_\_\_\_\_  
Wilson Hooper, Manager

By: \_\_\_\_\_  
Denise Hodsdon, City Clerk

# **MINUTES**

## **CITY COUNCIL HOUSING COMMITTEE**

**Tuesday, October 10, 2023 – 3:30 PM**

City Hall Council Chambers

**Members Present:** Gary Daniel, City Council Member  
Maurice Jones, City Council Member

**Staff Present:** Wilson Hooper, City Manager  
Dean Luebbe, Assistant City Manager/Finance Director  
Alex Shepherd, Assistant to the City Manager  
Becky McCann, Communications Coordinator

**Guest Present:** Angie Hunter, Transylvania Habitat for Humanity; Kristin Dunn, Housing Assistance Corporation; Nora Jane Montgomery

### **A. Welcome and Call to Order**

Gary Daniel welcomed everyone and called the meeting to order at 3:34 PM.

### **B. Certification of Quorum**

Quorum was certified by Assistant to the City Manager Alex Shepherd.

### **C. Approval of Agenda**

Motion by Mr. Jones, seconded by Mr. Daniel to approve the agenda as presented.  
The motion carried unanimously.

### **D. Approval of Minutes**

Motion by Mr. Jones, seconded by Mr. Daniel to approve the minutes of the September 12, 2023 meeting as presented. The motion carried unanimously.

### **E. James St. Property Disposition**

Mr. Hooper communicated to the committee that we need housing experts to help the city solve our affordable housing needs. Today, we have two experts who will share their different models for helping the city with the James St. property location.

#### **1. Habitat for Humanity:**

Ms. Hunter mentioned that Habitat for Humanity has been present in our community since 1984 and has consistently followed the same single-family housing model, where homes are sold to the homeowner, who then makes

decisions about the property. However, in light of the rapidly appreciating housing market, they are reevaluating their approach. They have already begun working on a quadraplex in Rosenwald and are purchasing older homes for rehabilitation. For the James St. property, they are proposing a "Starter Home" concept, which is a departure from Transylvania Habitat for Humanity's traditional model but is being implemented in other locations, such as Flagstaff, AZ. The Starter Home Project involves a \$1,000 down payment, a \$833 monthly payment. This monthly payment is placed in a savings account dedicated to the homeowner. The homeowner is allowed to reside in the home for 3 to 8 years, with a deed restriction that allows Habitat for Humanity to repurchase the home when the homeowner moves out. Once the homeowner does move out, Transylvania Habitat compensates them with the principal amount they invested in the starter home, which amounts to \$10,000 for each year they lived there. This approach offers various benefits, such as maintaining affordable housing units, safeguarding homes from speculative markets, serving more families, and ensuring long-term affordability to stabilize communities.

Mr. Jones asked the question would Habitat be the protector of the home and landlord.

Ms. Hunter clarified that Habitat would not be the landlord, as the person living in the home would be the homeowner. However, deed restrictions would be in place to ensure that the property can be sold back to Habitat for Humanity.

Mr. Hooper inquired about the \$10,000 annual payment and whether it replaces equity in the home.

Ms. Hunter confirmed that the savings could be used as a down payment on another home.

Mr. Daniel expressed concern about where the individuals could use the savings as a down payment. He highlighted the importance of building a sense of community and noted that the 3 to 8-year time constraint for residency could hinder this. He stated that he didn't see how this concept would effectively address Brevard's affordable housing problem.

In response, Ms. Hunter acknowledged that one house wouldn't solve the larger problem. She emphasized that Transylvania Habitat for Humanity is still actively constructing affordable housing for low-income families, addressing the demand for such homes. However, the Starter Home concept provides an additional option for individuals who may not want to live in a smaller home for the rest of their lives. It accommodates those on an upward career trajectory who anticipate increased income in the future. This model offers them a safe place to reside while they save money and plan for their next home.

Mr. Daniel inquired about the source of the equity payment and sought clarification on whether the person is renting or owning the home.

Ms. Hunter clarified that the individual would be the homeowner, establishing homeownership. Habitat for Humanity would retain the savings for them and place a restriction on the deed to ensure the property could be sold back to Habitat.

Mr. Jones expressed his support for the Habitat concept, recognizing that it serves as a steppingstone for families to regain their footing and save money for their next home.

Mr. Daniel asked the question does Habitat offer housing counselors.

Ms. Hunter confirmed that they provide financial counseling for potential homeowners.

## **2. Housing Assistance Corporation:**

Ms. Dunn provided information about the Housing Assistance Corporation (HAC), which was established in 1988. She explained that HAC initially focused on making necessary home repairs but expanded into developing multi-family units in the mid-1990s. HAC also began utilizing the USDA Self-Help Home program in their region and is about to complete their 209th house. She clarified that USDA requires four staff members, each working a forty-hour workweek, to be on-site. They work with four homeowners each, who dedicate ten hours a week for ten months to build their homes and their neighbors' homes. This homeowner participation reduces the overall construction cost, allowing them to build equity in their homes. Currently, they are seeking two more Self-Help homes and have the staff availability, eligible potential homeowners, and necessary funds to commence construction within thirty days. HAC introduced a program where they can qualify future low-income homeowners for a USDA mortgage and build the house for them over the next ten months. They can also include deed restrictions on these homes, ensuring that if the owner decides to sell, they would need to pay back the sweat equity.

Mr. Daniel asked how the process works regarding the list of eligible potential homeowners and who qualifies. Ms. Dunn explained that they would contact potential homeowners in the order they appear on the list and ask if they would like to build in Brevard until someone agrees. The potential homeowners can come from inside or outside of Transylvania.

Mr. Daniel inquired whether HAC would be willing to build smaller houses, as they typically build three- or four-bedroom houses.

Ms. Dunn explained that they typically do not build homes smaller than three bedrooms in size, as families often require space to accommodate growth, especially if they plan to have children.

Mr. Daniel stated that the committee will not make a decision today on which organization to allow to build on the land.

Mr. Hooper asked Ms. Dunn a question about the possibility that the house could become a market-rate home in the future.

Ms. Dunn explained that it depends on the controlled measures and deed restrictions. When government loans are involved, there can be complications, and they cannot guarantee long-term affordability.

Mr. Hooper mentioned that the concern was whether the property might convert to a market-rate unit, which would make it illegal to sell it for less than its appraised value. According to North Carolina State Law, public land can only be sold for less than its market value if affordable housing is provided in return. He suggested seeking a legal opinion.

Ms. Hunter asked Ms. Dunn if the Housing Assistance Corporation would be interested in purchasing the land if necessary.

Ms. Dunn confirmed that they do have funds set aside for land purchases.

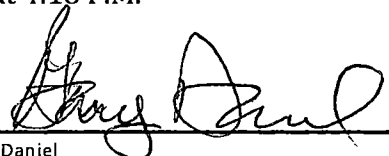
**F. Set Date for Next Meeting**

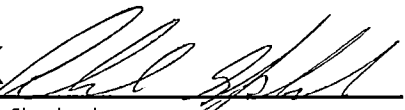
The next meeting was scheduled for Tuesday, November 14, 2023 at 3:30 pm.

**G. Adjourn**

There being no further business, the meeting adjourned at 4:18 P.M.

Minutes Approved: November 14, 2023

X   
\_\_\_\_\_  
Gary Daniel  
City Council Member

X   
\_\_\_\_\_  
Alex Shepherd  
Assistant to the City Manager

# **MINUTES**

## **COUNCIL DOWNTOWN MASTER PLAN COMMITTEE**

**Wednesday, October 11, 2023 – 4:00 PM**

City Hall Council Chambers

**Members Present:** Gary Daniel, Chair, Council Member  
Geraldine Dinkins, Vice Chair, Council Member  
Nicole Bentley, Exec Dir. Heart of Brevard  
Billy Parrish, Heart of Brevard Representative  
Lee McMinn, Citizen Member

**Staff Present:** Wilson Hooper, City Manager  
Alex Shepherd, Assistant to the City Manager  
Becky McCann, Communications Coordinator (Arrived at 4:14 pm)

**Guests:** Monica Driscoll, Citizen; Harvest Leasure, Fluid Form Design; Jim Koffman, First Victory; Madeline Magin, Citizen

**Media:** Jon Rich, The Transylvania Times

### **A. Welcome & Call to Order**

Committee Chair Gary Daniel welcomed everyone and called the meeting to order at 4:00 PM.

### **B. Certification of Quorum**

Quorum was certified by Assistant to the City Manager Alex Shepherd.

### **C. Approval of Agenda**

Motion by Mr. McMinn, seconded by Ms. Bentley to approve the agenda as presented. The motion carried unanimously.

### **D. Approval of Minutes of September 21, 2023 Meeting**

Motion by Mr. Dinkins, seconded by Mr. McMinn to approve the minutes of the September 21, 2023 meeting as presented. The motion carried unanimously.

### **E. Clemson Plaza Fountain Concepts**

Ms. Bentley informed the committee that the original plans for Clemson Plaza included both a water feature and public art. The committee has expressed a desire to revisit the water feature with hopes of securing funding from the Transylvania County Tourism



Development Authority through their Destination Infrastructure Committee. Additionally, they aim to make Clemson Plaza more user-friendly by incorporating noise-cancelling features through the waterfall. Jim Koffman from First Victory and Harvest Leisure from Fluid Form Design have joined us to present drawings and ideas for the Clemson Plaza Fountain.

Mr. Koffman informed the committee that the original water feature was never completed due to budget constraints. Installing the fountain two years ago would have cost \$59,000, excluding the general contractor fee, plumbing and electrical costs. The original design called for five staggered columns of varying lengths, made from basalt imported from Washington State, which required costly shipping and crane installation. The new concept involves using local craftsman Mr. Leasure from Fluid Form Design to create concrete columns designed in a style that doesn't resemble typical concrete. The water feature will also incorporate Brevard's identity as the land of waterfalls. The smallest column, approximately five feet in height, should discourage children from climbing on them. During the initial construction of Clemson Plaza, the water line and electrical connections were installed, but the concrete slab was not, due to uncertainty about future usage and installation costs. The hollow concrete columns will allow for plumbing to enable water to flow from the top, cascade down the front, and recirculate into a basin. The water supply will feature an automatic switch to maintain the water level and allow for winter shutdowns.

Mr. Leasure discussed various design options and concepts, including acid-stained concrete that would reflect water and color movement. The vision is for the top side of the pillar to have a rough texture, ensuring that water cascades toward the front rather than the back, so it's visible. The concrete used can be the standard gray color unless the committee prefers pigmented concrete. Various accents, such as a chiseled stone look, an aggregate stone look, or artistic etching, are possible.

Mr. Daniel expressed a preference for using local materials, like granite, instead of importing stone from Washington State.

Mr. Parrish recommended an abstract or natural design that evokes the feelings of the mountains.

Mr. McMinn said that he would recommend the water feature look like something that is natural to the area.

Mr. Parrish asked how many seasons the water feature would operate.

Mr. Koffman informed the committee that, in his opinion, the water feature could operate year-round since the basin is deep enough in the ground to prevent freezing. He also mentioned that chemicals can be added to the water to prevent freezing at normal temperatures. The water feature will be designed to be drained if the city decides to winterize it or perform maintenance.

Ms. Dinkins expressed the need to give Clemson Plaza a purpose, as it currently lacks one. Its main function is providing seating for people without a designated place to sit. However, few people choose to sit there due to its proximity to a busy road, which makes them feel exposed. She believes that the water feature would not only add an artistic touch but also provide a purpose, making the plaza more appealing, peaceful, and comfortable.

Mr. Koffman clarified that the water feature would be more like a gravel pit and not a splash pad. Nevertheless, they could adjust the design to create a pool-like area that would generate additional noise, helping to drown out traffic sounds.

Mr. Hooper raised a concern that if people are allowed to play in the water, then would the water need to be chlorinated like a pool or splash pad.

Mr. Koffman confirmed that it would require chlorination, resulting in more upkeep and maintenance.

Mr. Daniel pointed out that the water feature is not meant to be a splash pad or play area. He also mentioned that it's essential to consider how much input the Transylvania County Tourism Development Authority should have, especially if they're financing the project.

Mr. Hooper noted that they would need to present a final proposal to the authority, including the design, costs, and timeline. The next step would involve obtaining quotes for this concept and presenting them to the Downtown Master Plan Committee for their recommendation to City Council.

The committee reached a consensus, expressing a preference for the design with five pillars, and requested Mr. Koffman to provide designs and quotes based on this concept.

## **F. Additional Comments**

Ms. Magin mentioned during the previous month's meeting, the Transylvania County Tourism Development Authority presented the idea of hiring a consulting firm to assess wayfinding signage and bike infrastructure. The committee had a positive response to this concept and would like to know if any progress has been made.

Mr. Shepherd explained that he has taken the lead on this project. He had discussions with Paul Ray, the Planning Director, and Aaron Bland, the Assistant Planning Director, who provided information about what had been done in the past. Additionally, he reached out to Dee Dee Perkins to develop a scope of work, which would be shared with potential consultants for them to provide quotes.

Mr. Hooper mentioned that around ten years ago, the committee developed guidelines for determining who is eligible to be on the wayfinding signs. He suggested revisiting these guidelines, and this topic would be brought back to the committee in the future.

Mr. Daniel highlighted that there are several businesses and individuals eligible for inclusion on these signs, and he would like to have more information on this topic.

Mr. Parrish said that the Friends of the Ecusta Trail have designed a logo, which may pose a challenge if the committee is trying to implement a wayfinding sign program.

Ms. Magin agreed that the Friends of the Ecusta Trail is undergoing a rebranding of their logo and suggested coordinating wayfinding signage with them.

Mr. Hooper clarified that the signs don't necessarily have to look the same as the Ecusta Trail signs. They could transition to the Estatoe Trail once the Ecusta Trail is completed, and both signs would complement each other rather than conflicting.

Mr. Parrish respectfully disagreed, emphasizing that it should be one unified signage system rather than several different signs.

Mr. Hooper provided an update on the Times Arcade Alley Project, mentioning that it's out for bid, and five interested parties currently hold bid packets. The city will receive bids on Thursday, November 2nd.

Mr. Daniel drew attention to Mr. Platt's suggestion regarding downtown trees. This was briefly discussed at the last meeting, considering moving and replacing the trees with larger caliper trees. He believes it's a good idea, and the committee should consider the budget available for it.

Mr. Hooper reminded everyone that they are holding this year's Downtown Master Plan allocation in the budget for the Times Arcade Alley Project. They hope not to use those funds unless necessary.

Ms. Bentley recommended considering noninvasive trees suitable for urban and downtown environments that address the constraints of narrow bulb-outs. The American Linden was suggested as an option for quick growth and shade, especially when compared to sugar bay magnolias, which may not grow as tall.

#### **G. Set Date for Next Meeting**

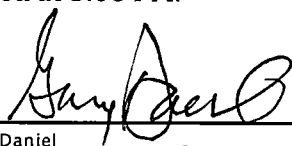
The next meeting of the Council Downtown Master Plan Committee was scheduled for Wednesday, November 8, 2023 at 4:00 PM.

#### **H. Adjourn**

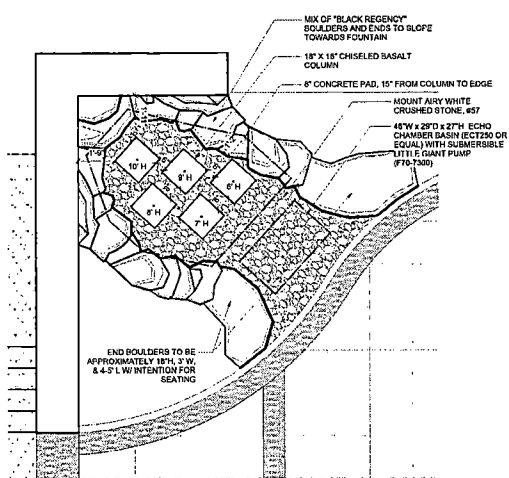
There being no further business, the meeting was adjourned at 5:06 PM.

Minutes Approved - November 8, 2023

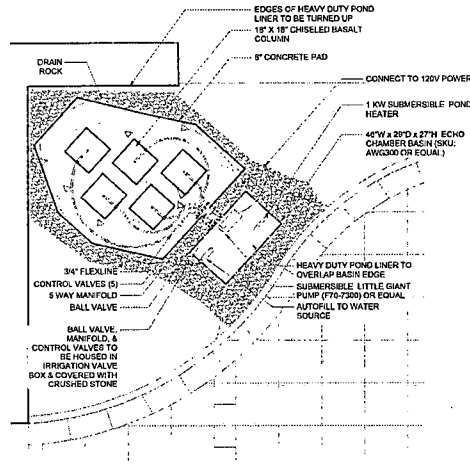
Minutes – Downtown Master Plan Committee Meeting – October 11, 2023  
Page 4 of 4

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Gary Daniel  
Chair, Council Member

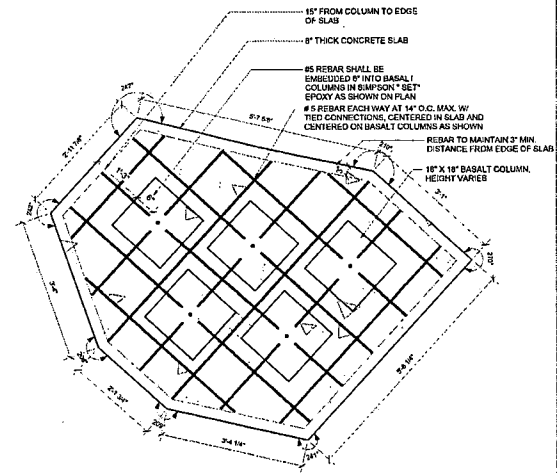
X   
\_\_\_\_\_  
Alex Shepherd  
Assistant to the City Manager



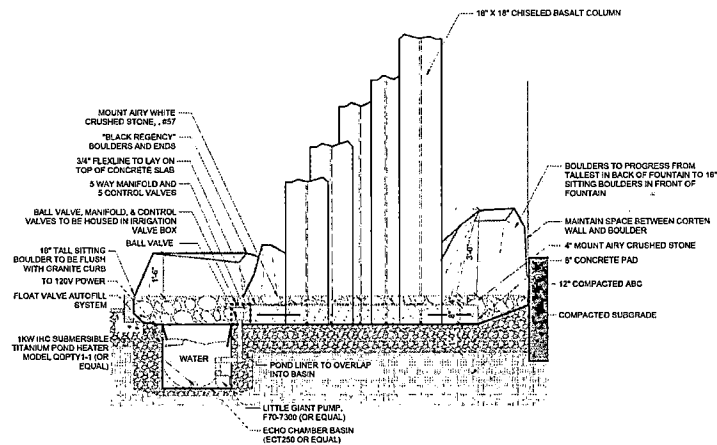
1 FOUNTAIN LAYOUT  
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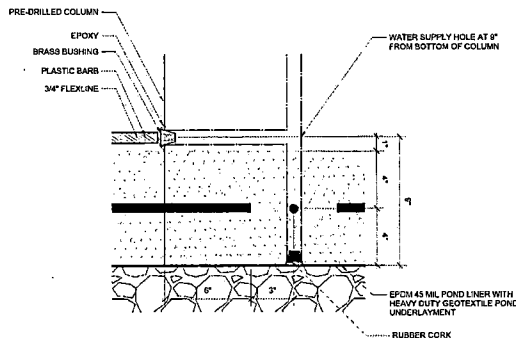
2 FOUNTAIN COMPONENTS PLAN  
Scale: 3/8" = 1'-0"



3 FOUNTAIN CONCRETE BASE PLAN  
Scale: 3/4" = 1'-0"



4 FOUNTAIN SECTION  
Scale: 1/2" = 1'-0"



5 FOUNTAIN WATER CONNECTION DETAIL  
Scale: 3" = 1'-0"

#### NOTES:

- FOUNTAIN COLUMNS**  
CHISELED BASALT FOUNTAINS (5) (OR EQUAL APPROVED BY LANDSCAPE ARCHITECT)
- 18"X18"  
1PC - 10' TALL  
1PC - 9' TALL  
1PC - 8' TALL  
1PC - 7' TALL  
1PC - 6' TALL  
MANUFACTURER: COVERALL STONE
- ELM2**  
LITTLE GIANT F70-7300 (OR EQUAL)  
ITEM # 689729  
WEB: <http://www.lg-outdoor.com/products/energy-efficient-water-color-pump-f70-7300-115v>
- BASIN**  
ECHO CHAMBER BASIN (ECT250 OR EQUAL)  
WEB: <http://www.thepondoutlet.com/echo-chamber-basins-by-atlantic-water-gardens>  
SKU: AWG250  
48"W x 29"D x 27"H  
100 GALLONS
- POND HEATER**  
10W HC SUBMERSIBLE TITANIUM POND HEATER (OR EQUAL)  
ITEM # CDPHY-1  
WEB: <http://www.thewaterconnection.com/images/CAT420PDIACULTURE.pdf>  
10W WITH THERMOSTAT CONTROLLER  
120 V
- LINER**  
(1) POND LINER TO BE EPDM 45 MIL (OR GREATER).  
(2) HEAVY DUTY GEOTEXTILE POND UNDERLAYMENT TO BE LOCATED UNDER LINER.
- STONE**  
BLACK REGENCY BOULDERS\* AND ENDS (OR EQUAL)  
WEB: [http://blunkd.com/stones.com/pepview\\_products.php?sp=121](http://blunkd.com/stones.com/pepview_products.php?sp=121)  
110 lbs per cubic yard  
\*BOULDERS TO COMPRISE MORE THAN 75 PERCENT OF STONELAND
- CRUSHED STONE**  
MOUNT AIRY WHITE CRUSHED STONE  
PRODUCT #67  
SIZE: 1-3/8"  
COLOR: WHITE

## CLEMSON PLAZA

SW CORNER OF INTERSECTION @  
S. CALDWELL ST. AND W. MAIN ST.  
BREVARD, NC 28712



The City of  
**Brevard**  
North Carolina

THE CITY OF BREVARD  
95 W. Main St., Brevard, NC 28712  
Ph: 828-685-5600



**Areté**  
ENGINEERS  
ARETE ENGINEERS, PLLC  
7668 Valley Blvd. Blowing  
Rock, NC 28605  
Ph: 828.434.0587

Project #:  
Drawn By: CAG  
Checked By:  
Scale: Varies

Issue Date

Drawing Title:

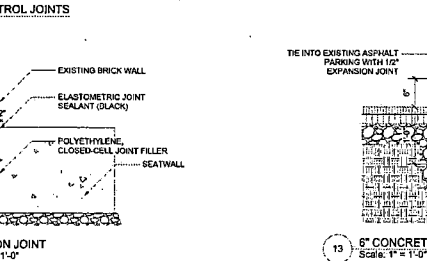
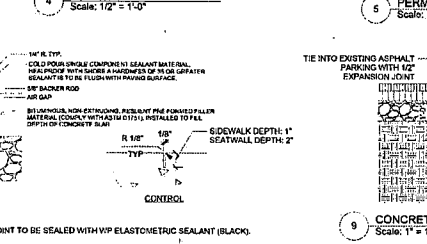
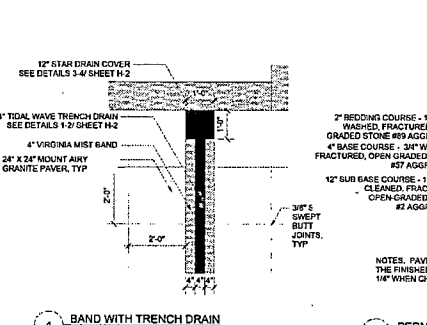
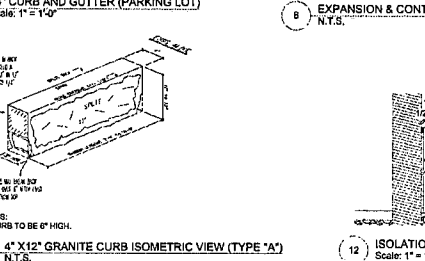
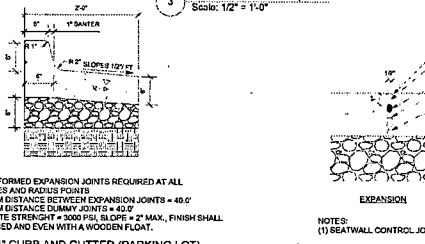
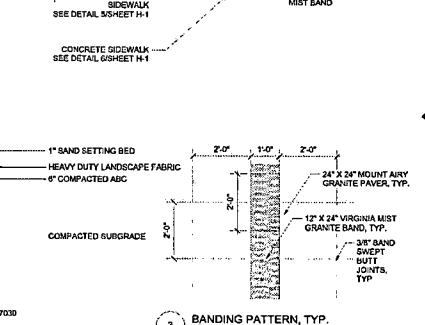
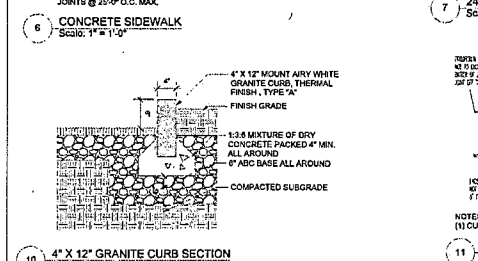
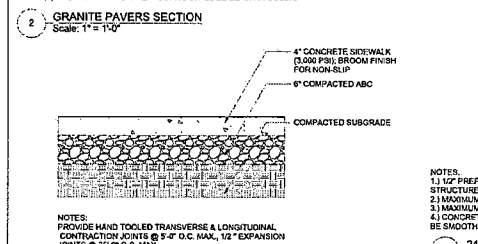
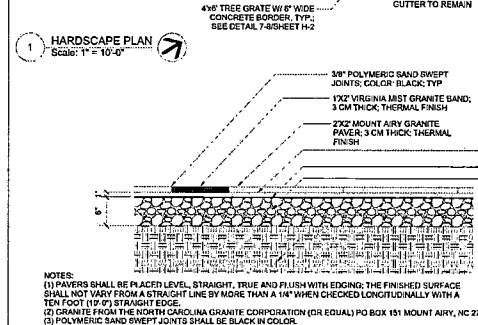
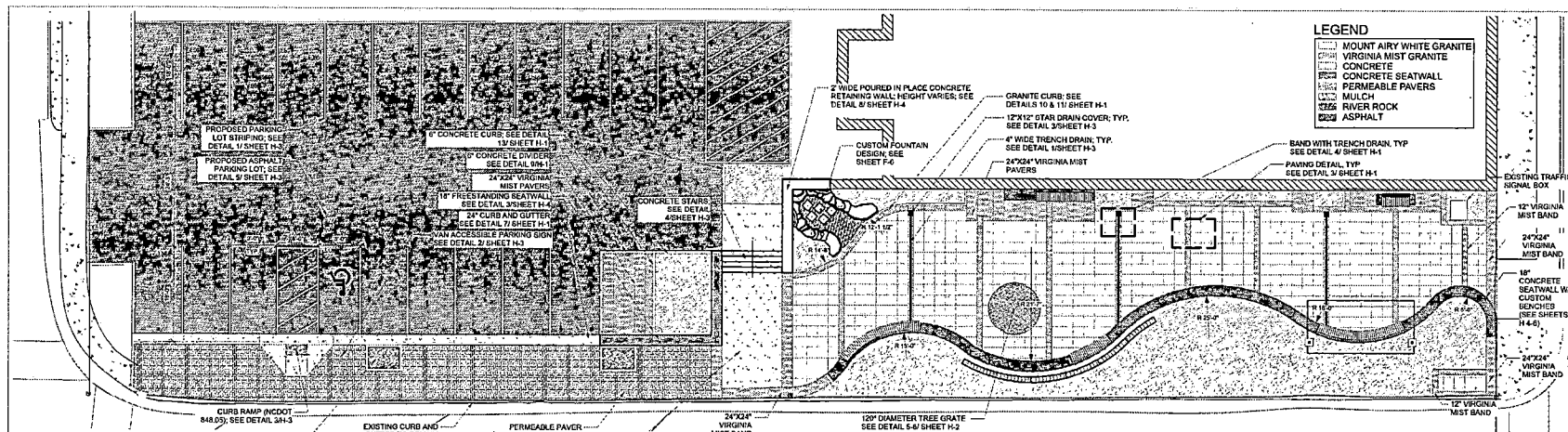
### SITE FURNISHINGS

BRIAN P. MULLIN, P.E.  
STRUCTURAL ENGINEER  
ARETE ENGINEERS, PLLC  
NC LICENSE 045097



Drawing No.:

F-6



# CLEMSON PLAZA

SW CORNER OF INTERSECTION @  
S. CALDWELL ST. AND W. MAIN ST.  
BREVARD, NC 28712



THE CITY OF BREVARD  
95 W. Main St. Brevard, NC 28712  
Ph: 828-685-5600

## DESTINATION BY DESIGN

DESTINATION BY DESIGN STUDIOS, PLLC

136 FURMAN RD., #6  
BOONE, NC 28607  
Ph: 828.586.1866

Project #: CAG  
Drawn By: CAG  
Checked By: Varies  
Scale: Varies

Issue \_\_\_\_\_ Date \_\_\_\_\_

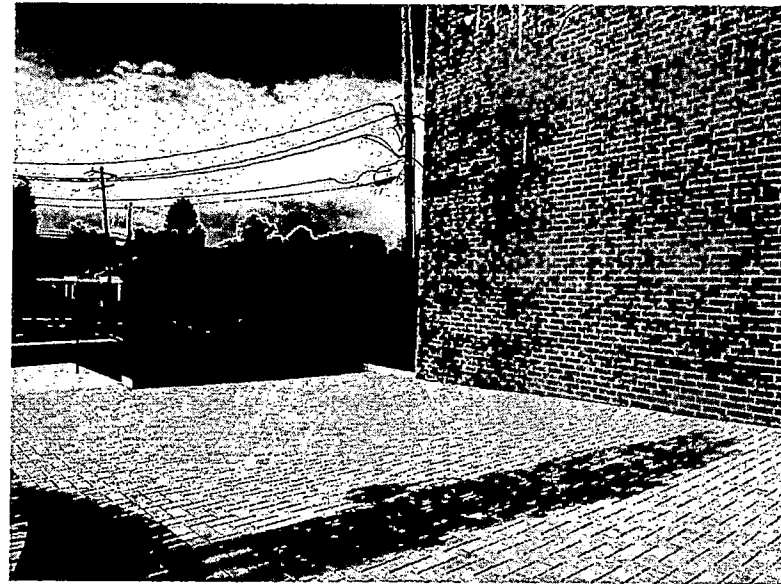
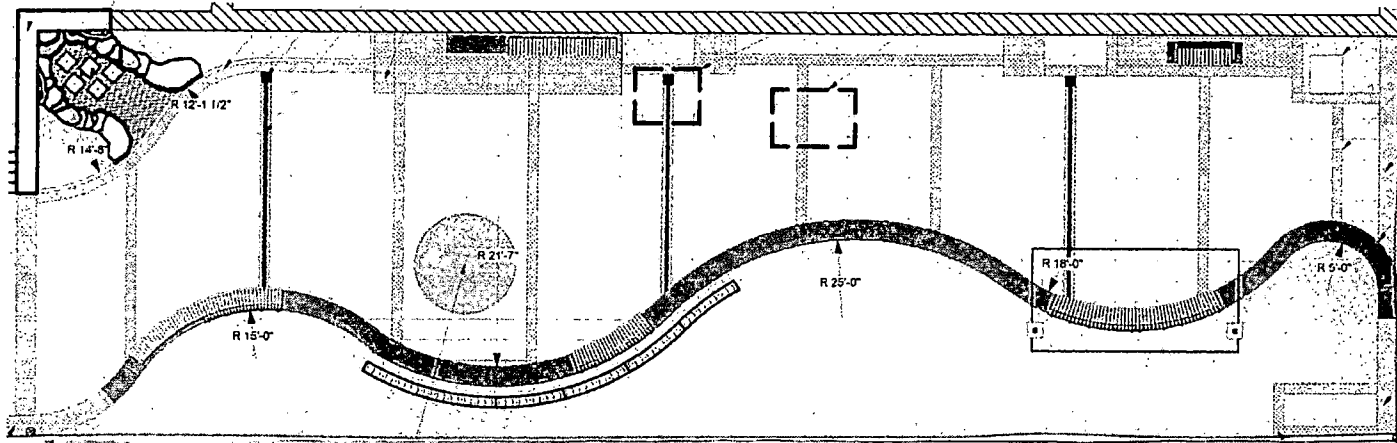
## HARDSCAPE PLAN & DETAILS

Seal:  
CHARLES A. GODTHORP, P.L.A.  
LANDSCAPE ARCHITECT  
QUALIFICATION DESIGN  
SINCE 1997  
NC LICENSE 2097



Drawing No:

H-1



## **STAFF REPORT**

**City Council, Monday, November 20, 2023**

**Title:** Proposed Text Amendment to the City of Brevard Code of Ordinances, Chapter 34 - Floodplain Development Revision

**Speaker:** Emily Brewer, AICP, Senior Planner  
Paul Ray, CZO, Planning Director

**Prepared by:** Emily Brewer, Senior Planner

**Approved by:** Wilson Hooper, City Manager, Paul Ray, Planning Director

### **Background**

Staff is proposing amendments to Chapter 34 – Flood Damage Prevention – of the City’s Code of Ordinances. The purpose of the Flood Damage Prevention chapter is to promote public health, safety and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by enforcing the provisions designed to accomplish these goals. The Planning Director, or his designee, is the Floodplain Manager for the City responsible for enforcing these provisions and maintaining the City’s participation in the National Flood Insurance Program (NFIP). Staff coordinates with the North Carolina Department of Public Services Emergency Management (NCEM) on floodplain regulations and our participating in NFIP.

The City of Brevard has higher standards that exceed the minimum requirements of NFIP. The Community Rating System (CRS) is a voluntary program that incentivizes communities to have higher standards in exchange for a reducing of insurance premiums for residents. The City of Brevard is classified as a Level 8 Community where citizens who need flood insurance are eligible to purchase it for a 10% discount on their premium

The goals of this staff-initiated text amendment are to:

- Better align our ordinance with the model provided by NCEM and reflect best practices in floodplain management;
- Improve the usability of the floodplain management regulations;
- Consolidate all floodplain enforcement and variance procedures to the Code of Ordinances (instead of the Unified Development Ordinance); and
- Ensure we retain our CRS rating and achieve additional points where possible.

City Council held a public hearing on the proposed amendments on November 6, 2023.

### **Discussion**

A summary of the changes and Staff’s rationale is as follows:

- ***Alignment with NCEM Model Ordinance:*** NCEM retains a model ordinance that meets the NFIP requirements within North Carolina General Statutes. This model ordinance is periodically updated to reflect the changing standards. The majority of the changes presented are to align our ordinance with the updated requirements. These include, among others:
  1. Adding new and amending existing definitions
  2. Updating the form reference numbers
  3. Clarifying regulations for HVAC replacements
  4. Adding specific regulations for elevating gas/liquid storage tanks
  
- ***Improved Usability:*** In reviewing the chapter, Staff identified a few opportunities to improve the usability of this very technical chapter. These include:
  1. Adding separate definitions for the various types of letters of map change (LOMC)
  2. Providing detailed requirements for notices of violations
  3. Consolidating enforcement and variance procedures
  4. Removing standards for types of special flood hazard areas that are not within our jurisdiction (i.e., Zone AO)
  
- ***Comprehensive Enforcement, Appeal and Variance Procedures:*** Currently, the ordinance refers to the enforcement measures and variance procedures within the Unified Development Ordinance. However, these procedures are distinct from what is required for zoning regulations. These are now incorporated into this chapter with specific provisions that relate to the preventative measures and the specific risks related to flood damage. In preparing these amendments, Staff reviewed the ordinances of other CRS communities, including Asheville (which is also Level 8), to understand what types of variance procedures are used.
  1. *Enforcement:* All of the penalties and corrective procedures are outlined in a single section.
  2. *Appeal:* The appeal process is more clearly outlined, stating that the owner has the right to provide additional information and evidence to the floodplain administrator. The administrator then provides a written determination, which can subsequently be appealed to the Board of Adjustment by the applicant. This ensures that the administrator is fully informed and can provide written testimony related to the evidence and the rationale in the decision.
  3. *Variance:* Granting variances to the floodplain development regulations can only be done in very specific circumstances, which were not included in the UDO. The new section walks through the minimum requirements for



granting a variance and the documentation required for consideration by the Board of Adjustment.

- **CRS Rating Points:** Staff examined the options available to secure additional points in CRS scoring and identified a few opportunities. Staff does not anticipate that these changes will elevate the City to a higher rating at this time, it improves our score for future review and reflects higher standards that can reduce/prevent future flood damage. These changes are:
  1. Increasing the time period used to calculate “significant damage” and “significant improvement” so the value for the damage or improvement is measured over a five-year period instead of a one-year period
  2. Including non-conversion agreements be recorded when necessary to ensure the unfinished lower floors (basements, garages, etc.) are not improved or converted to habitable space

Staff consulted with NCEM to verify the compliance with NFIP and CRS. The comments received are reflected in the proposed changes.

### **Policy Analysis**

A basic civic function is protecting the public health, safety, and welfare of its constituents. Under NCGS §160D-923, a local government is authorized to enact and enforce floodplain regulations and flood damage prevention regulations in pursuit of that goal. The proposed amendments align with NCGS and the City’s *Building Brevard 2030* Comprehensive Land Use Plan, which includes the following actions:

- **LUH-19:** *Enhance communication of land use planning efforts, policy development, approvals, and processes*
- **LUH-25:** *Limit the scale and footprint of new development in Conservation / Low Density areas on the Future Land Use Map.*
- **PNRC-5:** *Require conservation design in areas with sensitive natural resources.*

### **Action**

Staff requests that City Council take one of the following actions:

1. Adoption of the amendment as written;
2. Adoption of the amendment as revised by City Council;
3. Rejection of the amendment;
4. Send the application back to the Staff for further study and consideration; or
5. Call for additional public hearings on petitions brought before them.

**Attachments:**

1. Proposed Text Amendment
2. Draft Enacting Ordinance



## CHAPTER 34. FLOOD DAMAGE PREVENTION

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### ARTICLE I. IN GENERAL

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#### 34-1. Statutory authorization.

The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; [Article 6 of Chapter 153A](#); [Article 8 of Chapter 160A](#); and Articles 7, [9](#), and [11](#), ~~and 13~~ of Chapter 160D, ~~and Article 8 of Chapter 160A~~ of the North Carolina General Statutes, delegated to local governmental units the ~~responsibility~~ [authority](#) to adopt regulations designed to promote the public health, safety, and general welfare.

[Therefore, the Governing Body of the City of Brevard, North Carolina, does ordain as follows:](#)

#### 34-2. Findings of fact.

- A. The flood prone areas within the jurisdiction of the City of Brevard are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- B. These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities and by the occupancy in flood prone areas of uses vulnerable to floods or other hazards.

#### 34-3. Statement of purpose.

It is the purpose of this chapter to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

- A. Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
- D. Control filling, grading, dredging, and all other development that may increase erosion or flood damage; and
- E. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.

#### 34-4. Objectives.

The objectives of this chapter are to:

- A. Protect human life, safety, and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;



- D. Minimize prolonged business losses and interruptions;
- E. Minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
- F. Minimize damage to private and public property due to flooding;
- G. Make flood insurance available to the community through the National Flood Insurance Program;
- ~~E.~~H. Maintain the natural and beneficial functions of floodplains;
- ~~F.~~I. Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and
- ~~G.~~J. Ensure that potential buyers are aware that property is in a special flood hazard area.

### 34-5. Definitions.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

**Accessory structure (appurtenant structure)** means a structure located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

**Addition (to an existing building)** means an extension or increase in the floor area or height of a building or structure.

**Alteration of a watercourse** means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

**Appeal** means a request for a review of the [floodplain](#) administrator's interpretation of any provision of this chapter.

**Area of shallow flooding** means a designated Zone AO [or AH](#) on the most recently adopted flood insurance rate map (FIRM) with base flood depths determined to be from one to three feet. These areas are located where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

**Area of special flood hazard.** See "Special flood hazard area (SFHA)."

**Basement** means any area of the building having its floor subgrade (below ground level) on all sides.

**Base flood** means the flood having a one percent chance of being equaled or exceeded in any given year.

**Base flood elevation (BFE)** means a determination of the water surface elevations of the base flood as published in the flood insurance study. When the BFE has not been provided in a "special flood hazard area," it may be obtained from engineering studies available from a federal, state, or other source using FEMA approved engineering methodologies. This elevation, when combined with the "freeboard," establishes the "regulatory flood protection elevation."

**Building.** See "Structure."

**Chemical storage facility** means a building, portion of a building, or exterior area adjacent to a building used for the storage of any chemical or chemically reactive products.



**Conditional letter of map revision (CLOMR):** A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective flood insurance rate map or flood insurance study; upon submission and approval of certified as-built documentation, a letter of map revision may be issued by FEMA to revise the effective FIRM.

**Critical facility** means a structure used to house a function that is especially vulnerable or essential to the community. Uses include but are not limited to: child and adult daycare facilities, nursing homes, schools, hospitals, fire, police and medic facilities and other uses as determined by the administrator.

**Development** means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

**Development activity** means any activity defined as development which will necessitate a floodplain development permit. This includes buildings, structures, and non-structural items, including (but not limited to) fill, bulkheads, piers, pools, docks, landings, ramps, and erosion control/stabilization measures.

**Digital Flood Insurance Rate Map (DFIRM)** means the digital official map of a community, issued by the Federal Emergency Management Agency (FEMA), on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

**Disposal** means, as defined in N.C.G.S. 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

**Elevated building** means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

**Encroachment** means the advance or infringement of uses, fill, excavation, buildings, structures or development into a ~~floodplain~~ special flood hazard area, which may impede or alter the flow capacity of a floodplain.

**Existing building and existing structure** means any building and/or structure for which the "start of construction" commenced before the initial effective date of the floodplain management regulations adopted by a community, October 2, 2009.

**Existing manufactured home park or manufactured home subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the initial effective date of the floodplain management regulations adopted by the community, October 2, 2009.

**Flood or flooding** means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters; and/or
- B. The unusual and rapid accumulation of runoff of surface waters from any source.

**Flood boundary and floodway map (FBFM)** means an official map of a community, issued by the Federal Emergency Management Agency, on which the special flood hazard areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the flood insurance rate map (FIRM).



**Flood hazard boundary map (FHBM)** means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the special flood hazard areas have been defined as Zone A.

**Flood insurance** means the insurance coverage provided under the National Flood Insurance Program.

**Flood insurance rate map (FIRM)** means the most recently adopted [official](#) map, issued by the Federal Emergency Management Agency, on which both the special flood hazard areas and the risk premium zones applicable to the community are delineated. [See also "DFIRM."](#)

**Flood insurance study (FIS)** means an examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the Federal Emergency Management Agency. The flood insurance study report includes flood insurance rate maps (FIRMs) and flood boundary and floodway maps (FBFMs), if published.

**Flood prone area.** See "Floodplain."

**Floodplain** means any land area susceptible to being inundated by water from any source.

**Floodplain administrator** means the individual appointed to administer and enforce the floodplain management regulations.

**Floodplain development permit** means any type of permit that is required in conformance with the provisions of this chapter, prior to the commencement of any development activity.

**Floodplain management** means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

**Floodplain management regulations** means this chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power. This term describes federal, state or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

**Floodproofing** means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents. [A structure, its utilities and sanitary facilities, or other physical object shall only be considered "floodproofed" with a Floodproofing Certificate from a qualified design professional in accordance with FEMA regulations.](#)

**Flood-resistant material** means any building product (material, component or system) capable of withstanding direct and prolonged contact (minimum 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. [Any material that is water-soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to \*Technical Bulletin 2, Flood Damage-Resistant Materials Requirements\*, available from the FEMA. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.](#)



**Floodway** means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

**Floodway encroachment analysis** means an engineering analysis of the impact a proposed encroachment into a floodway or non-encroachment area is expected to have on the floodway boundaries and flood levels during the occurrence of the base flood discharge, ~~base flood elevations, and floodway surcharge elevations~~. The evaluation shall be prepared by a qualified North Carolina licensed engineer using standard engineering methods and hydraulic models meeting the minimum requirements of the National Flood Insurance Program.

**Flood zone** means a geographical area shown on a flood hazard boundary map or flood insurance rate map that reflects the severity or type of flooding in the area.

**Freeboard** means the height added to the base flood elevation (BFE) to account for the many unknown factors that could contribute to flood heights greater than that the height calculated for a selected size flood and floodway conditions, such as ~~wave action~~, blockage of bridge or culvert openings, precipitation exceeding the base flood, and the hydrological effect of urbanization of the watershed. The base flood elevation plus the freeboard establishes the "regulatory flood protection elevation."

**Functionally dependent facility** means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, limited to a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

**Hazardous waste management facility** means, as defined in N.C.G.S. 130A, Article 9, a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.

**Highest adjacent grade (HAG)** means the highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

**Historic structure** means any structure that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a local inventory of historic landmarks in communities with a "Certified Local Government (CLG) Program;" or
- D. Certified as contributing to the historical significance of a historic district designated by a community with a "Certified Local Government (CLG) Program."

Certified Local Government (CLG) Programs are approved by the U.S. Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966 as amended in 1980.

~~**Income capitalization** means a valuation method appraisers and real estate investors use to estimate the value of income-producing real estate. It is based upon the premise of anticipation i.e., the expectation of future benefits. This method of valuation relates value to two things: (1) the "market rent" that a property can be expected to earn; and (2) the "reversion" (resale) when a property is sold.~~





**Letter of map amendment (LOMA)** means an official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA is based on technical data showing that a property had been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the base flood elevation. A LOMA amends the current effective flood insurance rate map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

**Letter of map change (LOMC)** means an official determination issued by FEMA that amends or revises an effective flood insurance rate map or flood insurance study. Letters of map change include:

- [A. Letter of map amendment \(LOMA\)](#)
- [B. Letter of map revision \(LOMR\)](#)
- [C. Letter of map revision based on fill \(LOMR-F\)](#)
- [A.D. Conditional letter of map revision \(CLOMR\)](#)

~~**B. Letter of map amendment (LOMA):** An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective flood insurance rate map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.~~

**Letter of map revision (LOMR):** ~~A~~ [means a](#) revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

**Letter of map revision based on fill (LOMR-F):** ~~A~~ [means a](#) determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

**Light Duty Truck** means any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less as defined in 40 CFR 86.082-2 and is:

- [A. Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or](#)
- [B. Designed primarily for transportation of persons and has a capacity of more than 12 persons; or](#)
- [C. Available with special features enabling off-street or off-highway operation and use.](#)

**Lowest adjacent grade (LAG)** means the elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

**Lowest floor** means [the](#) lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter.

**Manufactured home** means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

**Manufactured home park or subdivision** means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**Map repository** means the location of the official flood hazard data to be applied for floodplain management. It is a central location in which flood data is stored and managed; in North Carolina, FEMA has recognized that the





application of digital flood hazard data products have the same authority as hard copy products. Therefore, the NCEM's Floodplain Mapping Program websites house current and historical flood hazard data. For effective flood hazard data the NC FRIS website (<http://FRIS.NC.GOV/FRIS>) is the map repository, and for historical flood hazard data the FloodNC website (<http://FLOODNC.GOV/NCFLOOD>) is the map repository.

**Market value** means the building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (actual cash value); or adjusted tax assessed values. ~~The income capitalization approach of appraisal shall not be utilized to determine market value.~~

**New construction** means structures for which the "start of construction" commenced on or after the effective date of the initial floodplain management regulations and includes any subsequent improvements to such structures.

**North American Vertical Datum of 1988 (NAVD 88)** means the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. It held fixed the height of the primary tidal bench mark, referenced to the new International Great Lakes Datum of 1985 local mean sea level height value, at Father Point/Rimouski, Quebec, Canada. Additional tidal bench mark elevations were not used due to the demonstrated variations in sea surface topography, i.e., the fact that mean sea level is not the same equipotential surface at all tidal bench marks.

**Non-conversion agreement** means a document stating that the owner will not convert or alter what has been constructed and approved. Violation of the agreement is considered a violation of the ordinance and, therefore, subject to the same enforcement procedures and penalties. The agreement must be filed with the recorded deed for the property. The agreement must show the clerk's or recorder's stamps and/or notations that the filing has been completed.

**Non-encroachment area (NEA)** means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot as designated in the flood insurance study report.

**No adverse impact floodplain management** means providing appropriate regulatory oversight that the action of one property owner or community does not adversely affect the flood risks for other properties or communities as measured by increased flood stages, increased flood velocity, increased flows, or the increased potential for erosion and sedimentation, or any other impact deemed important by the City of Brevard, unless the impact is mitigated as provided for in a community or watershed based plan.

**No rise requirement** means that, prior to undertaking any development or other activity within the special flood hazard area, non-encroachment area, or floodway, the person desiring to do so shall demonstrate through an engineering study that such activity will cause no increase in the base flood elevation of the base flood. "No rise" shall also mean an increase in the base flood elevation due to development in the special flood hazard area where such rise and any change in the geographic extent of the special flood hazard area or floodway is strictly confined within property or properties upon which the project creating the rise is located or the property of a consenting owner, where such property is protected from future development by means of a conservation easement or other, similar restriction that is acceptable to the administrator. The "no rise requirement" as a standard for development efforts shall not be varied as per section 34-26~~5~~ of this chapter.

**Post-FIRM** means construction or other development for which the "start of construction" occurred on or after the effective date of the initial flood insurance rate map, September 29, 1978.



**Pre-FIRM** means construction or other development for which the "start of construction" occurred before the effective date of the initial flood insurance rate map, [September 29, 1978](#).

**Principally above ground** means that at least 51 percent of the actual cash value of the structure is above ground.

**Public safety and/or nuisance** means anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

**Recreational vehicle (RV)** means a vehicle, which is:

- A. Built on a single chassis;
- B. Four hundred square feet or less when measured at the largest horizontal projection;
- C. Designed to be self-propelled or permanently towable by a light duty truck; ~~and~~
- D. Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use; and
- ~~D.E. Is fully licensed and ready for highway use.-~~

**Reference level** means the bottom of the lowest horizontal structural member of the lowest floor and any ductwork, excluding the foundation system, for structures within all special flood hazard areas.

**Regulatory flood protection elevation** means the "base flood elevation" plus the "freeboard." In "special flood hazard areas" where base flood elevations (BFEs) have been determined, this elevation shall be the BFE plus two feet of freeboard. In "special flood hazard areas" where no BFE has been established, this elevation shall be at least three feet above the highest adjacent grade.

**Remedy a violation** means to bring the structure or other development into compliance with state and community floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the chapter or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

**Riverine** means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

**Salvage yard** means any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

**Solid waste disposal facility** means any facility involved in the disposal of solid waste, as defined in N.C.G.S. 130A-290(a)(35).

**Solid waste disposal site** means, as defined in N.C.G.S. 130A-290(a)(36), any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.

**Special flood hazard area (SFHA)** means the land in the floodplain subject to a one percent or greater chance of being flooded in any given year, as determined in section [34-7](#) of this chapter.



**Start of construction** includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

**Structure** means any walled and/or roofed building or other physical object, whether temporary or permanent, that is designed for human habitation or to uphold, house, contain, or bear other objects or materials. Examples of structures include but are not limited to permanently affixed signs, swimming pools, houses, telecommunication towers, manufactured homes, or a gas, liquid, or liquefied gas storage tank that is principally above ground.

**Substantial damage** means damage of any origin sustained by a structure during any ~~one~~five-year period whereby the cost of restoring the structure to the before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See [also](#) definition of “substantial improvement.” Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

**Substantial improvement** means any combination of repairs, reconstruction, rehabilitation, addition, or other modification or improvement of a structure taking place during any ~~one~~five-year period for which the cost equals or exceeds 50 percent of the market value of the structure as of the date the improvement was permitted (or, in the absence of any permit, before the date of start of construction of the improvement). ~~In the absence of any information pertaining to market value, the administrator shall utilize the assessed value of the structure.~~ This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either of the following:

- A. Any correction of existing violations of state, city, or county health, sanitary, or safety code specifications which have been identified by the administrator or other authorized official of the State of North Carolina or Transylvania County, and which are the minimum necessary to assure safe living conditions; or
- B. Any alteration of a historic structure provided ~~that it meets the following criteria: such alteration is necessary to maintain, retain or restore historically significant characteristics;~~ the alteration will not preclude the structure's continued designation as a historic structure; ~~and the alteration does not result in the expansion of a non-conforming condition.~~ and the alteration is approved by a variance issued pursuant to Section 34-26.

**Technical bulletin and technical fact sheet** means a FEMA publication that provides guidance concerning the building performance standards of the NFIP, which are contained in Title 44 of the U.S. Code of Federal Regulations at Section 60.3. The bulletins and fact sheets are intended for use primarily by State and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations; rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.



It should be noted that Technical Bulletins and Technical Fact Sheets provide guidance on the minimum requirements of the NFIP regulations. State or community requirements that exceed those of the NFIP take precedence. Design professionals should contact the community officials to determine whether more restrictive State or local regulations apply to the building or site in question. All applicable standards of the State or local building code must also be met for any building in a flood hazard area.

**Temperature controlled** means having the temperature regulated by a heating and/or cooling system, built-in or appliance.

**Variance** means a grant of relief from the requirements of this chapter.

**Violation** means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in [ARTICLE II](#) and [ARTICLE III](#) is presumed to be in violation until such time as that documentation is provided.

**Water surface elevation (WSE)** means the height, in relation to NAVD 88, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

**Watercourse** means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

### 34-6. Lands to which this chapter applies.

This chapter shall apply to all special flood hazard areas within the jurisdiction, including extraterritorial jurisdictions (ETJs) if applicable, of the City of Brevard ~~and within the jurisdiction of any other community whose governing body agrees, by resolution, to such applicability.~~ For purposes of complying with [the City's floodplain development regulations](#) ~~state or federal law~~, property that is exempt from the exercise of municipal extraterritorial planning and development regulation jurisdiction [such as bona fide farms](#), shall be subject to [Transylvania County's](#) floodplain regulation provisions.

### 34-7. Basis for establishing the special flood hazard areas.

The special flood hazard areas are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its flood insurance study (FIS) [dated October 2, 2009 for Transylvania County and associated DFIRM panels, including any digital data developed as part of the FIS, which are adopted by reference and declared a part of this chapter, and all revisions thereto.](#) ~~and its accompanying flood insurance rate maps (FIRM), most recently adopted for Transylvania County, which are adopted by reference and declared to be a part of this chapter. It should be noted that the initial flood insurance rate maps for the City of Brevard were adopted by Brevard City Council on September 29, 1978. The initial flood insurance rate maps for Transylvania County, of which the City of Brevard is the County Seat, were adopted by the Transylvania County Board of Commissioners on January 2, 1980.~~

### 34-8. Establishment of floodplain development permit.

A floodplain development permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities within special flood hazard areas determined in accordance with the provisions of Section [34-7](#) of this chapter.



### 34-9. Compliance.

No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this chapter and other applicable regulations.

### 34-10. Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

### 34-11. Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

### 34-12. Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the special flood hazard areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the City of Brevard or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

### ~~34-13. Penalties for violation.~~

~~A. Penalties and remedies for violations of the provisions of this chapter or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or floodplain development permits are contained in CHAPTER 18 of the City of Brevard Unified Development Ordinance. Further, nothing therein contained shall prevent the City of Brevard from taking any other such lawful action as is necessary to prevent or remedy any violation.~~

### 34-~~14~~13—34-20. Reserved.

## ARTICLE II. ADMINISTRATION

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### 34-21. Designation of floodplain administrator.

The City of Brevard Planning Director, or his/her designee, shall serve as the floodplain administrator, hereinafter referred to as the "administrator", and is hereby appointed to administer and implement the provisions of this chapter. In instances where the administrator receives assistance from others to complete tasks to administer and implement this chapter, the administrator shall be responsible for the coordination and community's overall compliance with the National Flood Insurance Program and the provisions of this chapter.



### 34-22. Floodplain development application, permit and certification requirements.

- A. *Application requirements.* Application for a floodplain development permit shall be made to the administrator prior to any development activities located within special flood hazard areas. The following items shall be presented to the administrator to apply for a floodplain development permit:
1. A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
    - a. The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
    - b. The boundary of the special flood hazard area as delineated on the FIRM or other flood map as determined in Section 34-7, or a statement that the entire lot is within the special flood hazard area;
    - c. Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Section 34-7;
    - d. The boundary of the floodway(s) or non-encroachment area(s) as determined in Section 34-7;
    - e. The base flood elevation (BFE) where provided as set forth in Section 34-7, Section 34-23, or Section 34-34;
    - f. The old and new location of any watercourse that will be altered or relocated as a result of proposed development;
    - g. The certification of the plot plan by a registered land surveyor or professional engineer if required by the administrator or this chapter;
    - h. Other information as may be required by the administrator.
  2. Proposed elevation, and method thereof, of all development within a special flood hazard area including but not limited to:
    - a. Elevation in relation to NAVD 88 of the proposed reference level (including basement) of all structures;
    - b. Elevation in relation to NAVD 88 to which any non-residential structure in Zones A, AE, and A99 ~~AE, A or AO~~ will be floodproofed; and
    - c. Elevation in relation to NAVD 88 to which any proposed utility systems will be elevated or floodproofed.
  3. If floodproofing, a floodproofing certificate (FEMA Form 206-FY-22-153, or any successors ~~086-0-34 (07/12)~~) with supporting data, an operational plan, and an inspection and maintenance plan that includes, but ~~are~~ is not limited to, installation, exercise, and maintenance of floodproofing measures.
  4. A foundation plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this chapter are met. These details include but are not limited to:
    - a. The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls);
    - b. Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with subsection 34-32.C. when solid foundation perimeter walls are used in Zones A, AE, and A99 ~~A, AO, AE, and A1—30~~.
  5. Usage details of any enclosed areas below the lowest floor.





6. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
7. Certification that all other local, state and federal permits required prior to floodplain development permit issuance have been received.
8. Documentation for placement of recreational vehicles and/or temporary structures, when applicable, to ensure that the provisions of subsections 34-32.G and 34-32.H of this chapter are met.
9. A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

**B. Permit requirements.** The floodplain development permit shall include, but not be limited to:

1. A complete description of the development to be permitted under the floodplain development permit (e.g., house, garage, pool, septic, bulkhead, cabana, pier, bridge, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials, etc.).
2. The special flood hazard area determination for the proposed development in accordance with available data specified in Section 34-7.
3. The regulatory flood protection elevation required for the reference level and all attendant utilities.
4. The regulatory flood protection elevation required for the protection of all public utilities.
5. All certification submittal requirements with timelines.
6. A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, unless the requirements of Section 34-36 are met~~as applicable~~.
7. The flood openings requirements, ~~if in Zones A, AO, AE or A1—30.~~
8. A statement by the property owner that no uses below BFE other than parking and storage shall be employed.
9. Other information as may be required by the administrator.

**C. Certification requirements.**

1. Elevation certificates.
  - a. An elevation certificate (FEMA Form 206-FY-22-152, or any successors ~~086-0-33 (7/12)~~) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the administrator a certification of the elevation of the reference level, in relation to NAVD 88. The administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.
  - b. An elevation certificate (FEMA Form 206-FY-22-152, or any successors ~~086-0-33 (7/12)~~) is required after the reference level is established. Within seven calendar days of establishment of the reference level elevation, it shall be the duty of the permit holder to submit to the administrator a certification of the elevation of the reference level, in relation to NAVD 88. Any work done within the seven-day calendar period and prior to submission of the certification shall be at the permit holder's risk. The administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed.



Failure to submit the certification or failure to make required corrections shall be cause to issue a stop work order for the project.

- c. A final finished construction elevation ~~as-built elevation certificate~~ (FEMA Form 206-FY-22-152, or any successors 086-0-33 (7/12)) is required after construction is completed and prior to certificate of compliance/occupancy issuance. It shall be the duty of the permit holder to submit to the administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to certificate of compliance/occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a certificate of compliance/occupancy. The Finished Construction Elevation Certificate certifier shall provide at least 2 photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least 2 additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least 3" x 3". Digital photographs are acceptable.

2. Certification of no adverse impact.

- ~~d.a. When deemed appropriate by the administrator and as~~ As per section 34-33 of this chapter, development endeavors within the City of Brevard's Special Flood Hazard Areas shall be required to certify, utilizing a professional engineer licensed in the State of North Carolina, that the development endeavors of one property owner or community do not adversely affect flood risks for other properties or communities as measured by increased flood stages, increased flood velocity, increased flows, the increased potential for erosion and sedimentation, or any other impact deemed important or as specified by the City of Brevard, unless the impact is mitigated as provided for in a community or watershed based plan. This certification shall employ industry standards for hydraulic and hydrological analysis to determine no adverse impact and all data shall be provided in hard-copy and digitally for review and corroboration by the city's engineer or any governmental review agency acceptable to the City of Brevard. See Section 34-33 of this chapter.

3. Floodproofing certificate.

- a. If nonresidential floodproofing is used to meet the regulatory flood protection elevation requirements, a floodproofing certificate (FEMA Form FF-206-FY-22-153, or any successors 086-0-34 (7/12)), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 88. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a certificate of compliance/occupancy.





e.b. A final Finished Construction Floodproofing Certificate (FEMA Form 206-FY-22-153, or any successors), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the issuance of a certificate of compliance/occupancy. It shall be the duty of the permit holder to submit to the administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 88. Floodproofing certificate shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to certificate of occupancy. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to deny a certificate of compliance/occupancy.

2.4. If a manufactured home is placed within Zones A, AE, or A99 ~~A, AO, AE, or A1—30~~ and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of subsection 34-32.C.2.

3.5. If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.

4.6. Certification exemptions. The following structures, if located within Zones A, AE, or A99 ~~A, AO, AE or A1—30~~, are exempt from the elevation/floodproofing certification requirements specified in items C.1 and C.2 of this subsection:

- a. Recreational vehicles meeting requirements of subsection 34-32.F.1;
- b. Temporary structures meeting requirements of subsection 34-32.G; and
- c. Accessory structures less than 150 square feet or cost less than \$5,000 and meeting requirements of subsection 34-32.H.

D. Determinations for existing buildings and structures. For applications for permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the administrator, in coordination with the Building Official or based on other quantitative data, shall:

1. Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
2. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
3. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
- 5.4. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the NC Building Code and this chapter is required.



### 34-23. Duties and responsibilities of the administrator.

The administrator shall perform, but not be limited to, the following duties:

- A. Review all floodplain development applications and issue permits for all proposed development within special flood hazard areas to assure that the requirements of this chapter have been satisfied.
- B. Review all proposed development within special flood hazard areas to assure that all necessary local, state and federal permits have been received, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- C. Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- D. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.
- E. Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of section 34-36 are met.
- F. Obtain actual elevation (in relation to NAVD 88) of the reference level (including [Basement](#)) and all attendant utilities of all new and substantially improved structures, in accordance with subsection 34-22.C.
- G. Obtain actual elevation (in relation to NAVD 88) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of subsection 34-22.C.
- H. Obtain actual elevation (in relation to NAVD 88) of all public utilities in accordance with the provisions of subsection 34-22.C.
- I. When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of subsection 34-22.C and subsection 34-32.B.
- J. Where interpretation is needed as to the exact location of boundaries of the special flood hazard areas, floodways, or non-encroachment areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- K. When base flood elevation (BFE) data has not been provided in accordance with section 34-7, obtain, review, and reasonably utilize any base flood elevation (BFE) data, along with floodway data or non-encroachment area data available from a federal, state, or other source, including data developed pursuant to subsection 34-34.B.2., in order to administer the provisions of this chapter.
- L. When base flood elevation (BFE) data is provided but no floodway or non-encroachment area data has been provided in accordance with section 34-7, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a federal, state, or other source in order to administer the provisions of this chapter.
- M. When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a special flood hazard area is above the base flood elevation, advise the property owner of the option to apply for a letter of map amendment (LOMA) from FEMA, and maintain a copy of all letter of map amendment (LOMA) issued by FEMA in the floodplain development permit file.
- N. Permanently maintain all records that pertain to the administration of this chapter and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.



- O. Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.
- P. Issue stop-work orders as required, [in accordance with Section 34-25](#). ~~Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this chapter, the administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Penalties for the violation of a stop-work order are provided in CHAPTER 18 of the City of Brevard UNIFIED DEVELOPMENT ORDINANCE. Further, nothing therein contained shall prevent the City of Brevard from taking any other such lawful action as is necessary to prevent or remedy any violation.~~
- Q. Revoke floodplain development permits as required, [in accordance with Section 34-25](#). ~~The administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of state or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable state or local law may also be revoked.~~
- R. Make periodic inspections throughout the special flood hazard areas within the jurisdiction of the community. The administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- S. Follow through with corrective procedures of section ~~34-24~~[25](#).
- T. Review, provide input, and make recommendations for variance requests.
- U. Maintain a current map repository to include, but not limited to, the [historical and effective](#) FIS report, [the historical and effective](#) FIRM and other official flood maps and studies adopted in accordance with section 34-7 of this chapter, including any revisions thereto including letters of map change, issued by FEMA. Notify state and FEMA of mapping needs.
- V. Coordinate revisions to FIS reports and FIRMs, including letters of map revision based on fill (LOMR-F) and letters of map revision (LOMR).
- W. All costs associated with the administration of this chapter, including but not limited to the review of engineering analysis for the benefit of the city and the costs associated with map revisions, shall be borne by the applicant, developer or property owner, as appropriate.

### **34-24. Violations and notices.**

- A. *General violations:* It shall constitute a violation of this ordinance for any person to fail to comply with the provisions of this chapter or with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions. Nothing herein contained shall prevent the City of Brevard from taking such other lawful action as is necessary to prevent or remedy any violation.



- B. Continued violations. Each day such violation continues shall be considered a separate offense. Separate notices of violations are not required for each subsequent day, provided it is addressed in the initial notice of violation.
- C. Repeat violations. If an owner and/or occupant repeats the same violation within five-year period from the date of the initial violation, it shall be considered a continuation of the initial violation and shall be subject to additional penalties and remedies.
- D. Notice of violation. If it is determined that a person has violated this ordinance, the administrator shall immediately give the property owner and/or occupant written notice, by certified or registered mail to the owner's last known address or by personal service, stating:
1. That the building or priority is in violation of this chapter;
  2. The nature of the violation and the citation of the section(s) of this chapter violated;
  3. The measures needed to comply;
  4. The time within such measures must be completed;
  5. Warn that failure to correct the violation within the time period shall subject the violator and/or property owner to civil and/or other enforcement action; and
  6. Mechanisms available to appeal the decision of the administrator.
- E. Failure to take corrective action: If the violator and/or property owner should fail to take prompt corrective action to remedy the violation, then the administrator shall proceed in accordance with Section 34-25.

### **34-2425. Enforcement and corrective procedures.**

- ~~A. Violations to be corrected.~~ When the administrator finds violations of applicable state and local laws, it shall be his or her duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.
- A. Civil penalty. Any person who is found to be in violation shall be subject to a civil penalty in the amount of:
1. \$50.00 for the first violation;
  2. \$100.00 for the second violation;
  3. \$200.00 for the third violation; and
  4. \$500.00 for the fourth and each succeeding violation.
- B. Civil penalty assessment. No civil penalty shall be assessed until the person alleged to be in violation has been notified in accordance with Section 34-24. If after receiving a notice of violation under Section 34-24, the property owner or other violator fails to take corrective action, a civil penalty shall be imposed under this section in the form of a citation. A civil penalty may be assessed from the initial date of the violation. The citation shall be served in the same manner as of a notice of violation. The citation shall state the nature of the violation, shall state the civil penalty to be imposed upon the violator, and shall direct the violator to pay the civil penalty within 15 days of the date of the citation.
- C. Stop-work order: Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this chapter, the administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Penalties for the violation of a stop-work order are provided in CHAPTER 18 of the City of Brevard UNIFIED DEVELOPMENT ORDINANCE. Further, nothing therein contained shall prevent the City of Brevard from taking any other such lawful action as is necessary to prevent or remedy any violation.



- D. Revocation.** The administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of state or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable state or local law may also be revoked.
- E. Permit reinstatement.** A new permit application and approved plan including all permit fees must be submitted prior to reinstatement of the revoked permit. For permit reinstatement the site must be deemed to be in compliance with the requirements of this chapter and all penalties have been paid in full or penalty appeal has been filed within the given time frame.
- ~~B.F.~~ Actions in event of failure to take corrective action.** If the ~~owner of a building or property~~ violator and/or property owner shall fail to take prompt corrective action, the administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:
1. That the building or property is in violation of the floodplain management regulations;
  2. That a hearing will be held before the administrator at a designated place and time, not later than ten days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
  3. That following the hearing, the administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as applicable.
- ~~C.G.~~ Order to take corrective action.** If, upon a hearing held pursuant to the notice prescribed above, the administrator shall find that the building or development is in violation of the flood damage prevention ordinance, they shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than 60 calendar days, nor more than 180 calendar days. Where the administrator finds that there is imminent danger to life or other property, they may order that corrective action be taken in such lesser period as may be feasible. An appeal may be taken from the order as set forth herein.
- H. Appeal.** Any aggrieved party may file an appeal for or from the issuance of a variance, or from a penalty assessment, notice of violation, permit disapproval, order, requirement, determination or interpretation rendered under the provisions of this chapter. The appeals process shall be as follows:
1. To the administrator. With the exception of appealing for the issuance of a variance, all appeals must initially be heard by the administrator. The appeal must be submitted in writing within 30 days of receipt of an adverse action and shall specify the specific grounds for relief and what relief is requested. The floodplain administrator shall schedule a hearing no later than 30 days from receipt of the written notice of appeal. The owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter, and the administrator shall issue to the petitioner a written determination. Further appeal may be taken to the board of adjustment as set forth below. In the absence of an appeal, the order of the administrator shall be final.
  2. To the Brevard Board of Adjustment. Further appeal may be taken to ~~Any owner who has received an order to take corrective action may appeal the order to~~ the Board of Adjustment by giving notice of appeal in writing to the administrator and the clerk within ten days following issuance of the final order. ~~In the absence of an appeal, the order of the administrator shall be final.~~ The Board of Adjustment shall hear an appeal within a reasonable time and ~~as provided in Section 16.8 of the City of Brevard UNIFIED DEVELOPMENT ORDINANCE,~~ in accordance with and pursuant to the written requirements of the board and Chapter 16 of the Unified Development Ordinance.



3. To superior court: Every decision of the board shall be subject to review by the superior court by proceedings in the nature of certiorari. Petition for review by the superior court shall be filed with the clerk of superior court within 30 days after the decision of the Board of Adjustment is filed or after a written copy thereof is delivered to every person who has filed a written request for such copy with the Board at the time of its hearing of the case, whichever is later.

~~D.~~

~~E.I.~~ Failure to comply with order. If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the Board of Adjustment following an appeal, the owner shall be subject to remedies and penalties as provided ~~for in CHAPTER 18 of the City of Brevard UNIFIED DEVELOPMENT ORDINANCE~~ herein.

### **34-~~25~~26. Variance procedures.**

A. The Board of Adjustment as for the City of Brevard shall hear and decide requests for variances from the requirements of this chapter. ~~Variances shall follow the same procedures and be subject to the same requirements as those established in UDO section 16.8.E.~~

B. Petition for a variance. Variances may be issued for:

1. The repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;
2. Functionally dependent facilities if determined to meet the definition as stated in Section 34-5 of this chapter, provided provisions (2), (3), and (5) of 34-25.I below have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or
3. Any other type of development provided it meets the requirements of this Section.

C. Requirements for the granting of variances. The Board of Adjustment may only grant a variance if the applicant satisfies all of the following requirements:

1. The variance is the minimum necessary, considering the flood hazard, to afford relief.
2. No development permit has been approved.
3. The applicant has demonstrated a showing of good and sufficient cause.
4. Failure to grant the variance would result in exceptional hardship.
5. The granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
6. The granting of the variance will not make the structure in violation of other federal, state, or local laws, regulations, or ordinances unless such local regulations or ordinances are lawfully varied as part of this decision.
7. If the variance request is within any designated floodway or non-encroachment area, the granting of the variance would not result in any increase in flood levels during the base flood discharge.

D. Prerequisites to considering a request for a variance. Prior to considering a request for a variance, the Board of Adjustment shall be provided with the following:





1. The administrator shall provide a written report specifying whether all technical evaluations, all relevant factors, and all standards specified in other sections of this chapter has been met.
2. The applicant shall submit a written report with the variance application addressing each of the following factors:
  - i. The danger that materials may be swept onto other lands to the injury of others;
  - ii. The danger to life and property due to flooding or erosion damage;
  - iii. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - iv. The importance of the services provided by the proposed facility to the community;
  - v. The necessity to the facility of a waterfront location as defined under Section 34-5 of this chapter as a functionally dependent facility, where applicable;
  - vi. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
  - vii. The compatibility of the proposed use with existing and anticipated development;
  - viii. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area, such as the City's continued eligibility to remain or its participation in the Community Rating System (CRS) which reduces insurance rates for the citizens of Brevard;
  - ix. The safety of access to the property in times of flood for ordinary and emergency vehicles;
  - x. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
  - xi. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- E. Conditions. Upon consideration of the factors listed above and the purposes of this chapter, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this chapter.
- F. Notice. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the BFE and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE may result in increased premium rates for flood insurance. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.
- G. Records. The administrator shall maintain the records of all appeal actions and report any variances to the FEMA and the State of North Carolina Department of Public Safety upon request.
- H. ~~unless such local regulations or ordinances are lawfully varied as part of this decision~~Special facilities. A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.
  1. The use serves a critical need in the community.
  2. No feasible location exists for the use outside the Special Flood Hazard Area.
  3. The reference level of any structure is elevated or floodproofed to at least the Regulatory Flood Protection Elevation.



4. The use complies with all other applicable federal, state and local laws.

5. The City of Brevard has notified the Secretary of the North Carolina Department of Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.

A.I. Appeal. Any person aggrieved by the decision of the Board of Adjustment may appeal such decision to superior court, as provided in Chapter 7A of the North Carolina General Statutes.

**34-~~26~~27—34-30. Reserved.**

## **ARTICLE III. PROVISIONS FOR FLOOD HAZARD REDUCTION**

### **34-31. General standards.**

In all special flood hazard areas the following provisions are required:

- A. All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure.
- B. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage, in accordance with the FEMA Technical Bulletin 2, Flood Damage-Resistant Materials Requirements.
- C. All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.
- D. All new e~~E~~lectrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be ~~designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding to the regulatory flood protection elevation.~~ located at or above the regulatory flood protection elevation and/or specially designed to prevent water from entering or accumulating within the components and installed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation. Utility systems, equipment, and service facilities include, These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters, and electric outlets/switches.
  - a. Replacements as part of a substantial improvement must also meet the above provisions.
  - a.b. Replacements that are for maintenance and not part of a substantial improvement, may be installed at the original location provided the addition and/or improvements comply with the standards for new construction consistent with the code and requirements for the original structure.
- ~~D.E.~~ All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- ~~E.F.~~ New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
- ~~F.G.~~ On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- ~~G.H.~~ Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this chapter, shall meet the requirements of "new construction" as contained in this chapter.





- H.I.** Nothing in this chapter shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this chapter and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this chapter.
- H.J.** New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified Section 34-26. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a special flood hazard area only if the structure or tank is either elevated or floodproofed to at least the regulatory flood protection elevation and certified in accordance with the provisions of subsection 34-22.C.
- H.K.** All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.
- K.L.** All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- L.M.** All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- M.N.** All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- O.** Newly created parcels of land shall have adequate developable area outside of the special flood hazard area, except parcels created and restricted for the purpose of recreation, agriculture, conservation or open space protection.
- N.P.** Fill and other encroachments shall not be permitted within the ~~SFHA~~ special flood hazard area of any parcel created after the date of enactment of this chapter, except upon successful demonstration of no rise and no adverse impact.
- O.Q.** When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.
- P.R.** When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest base flood elevation shall apply.

### 34-32. Specific standards.

In all special flood hazard areas where base flood elevation (BFE) data has been provided, as set forth in section 34-7, or section 34-34, the following provisions, in addition to the provisions of section 34-31, are required:

- A. Residential construction.** New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in section 34-5 of this chapter.
- B. Nonresidential construction.** New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in section 34-5 of this chapter. Structures located in Zones A, AE, AH, AO, or A99A, AE, AO, and A1—30 Zones may be floodproofed to the regulatory flood protection



elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the regulatory flood protection elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. For AO Zones, the floodproofing elevation shall be in accordance with subsection 34-37.B. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the administrator as set forth in subsection 34-22.C, along with the operational, maintenance and inspections plans.

**C. *Manufactured homes.***

1. New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation, as defined in section 34-5 of this chapter.
2. Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to N.C.G.S. 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis 36 inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above 36 inches in height, an engineering certification is required.
3. All enclosures or skirting below the lowest floor shall meet the requirements of subsection 34-32.D.
4. An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the administrator and the local emergency management coordinator.

**D. *Elevated buildings.*** Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:

1. Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;

2. Shall not be temperature-controlled or conditions;

- ~~2.3.~~ Shall be constructed entirely of flood resistant materials at least to the regulatory flood protection elevation;

- ~~3.4.~~ Shall include, ~~in Zones A, AO, AE, and A1—30,~~ flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:

- a. A minimum of two flood openings on different sides of each enclosed area subject to flooding;
- b. The total net area of all flood openings must be at least one square inch for each square foot of enclosed area subject to flooding;
- c. If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;



- d. The bottom of all required flood openings shall be no higher than one foot above the higher of the interior or exterior adjacent grade;
- e. Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
- f. Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.

5. Non-conversion agreement. As applicable, property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit declaring that the area below the lowest floor shall not be improved, finished or otherwise converted to habitable space; the City of Brevard will have the right to inspect the enclosed area. This agreement shall be recorded with the Transylvania County Register of Deeds and shall transfer with the property in perpetuity.

4.6. Release of restrictive covenant. If a property which is bound by a non-conversion agreement is modified to remove enclosed areas below BFE, then the owner may request release of restrictive covenant after staff inspection and submittal of confirming documentation.

**E. Additions/improvements.**

1. Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
  - a. Not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and must not be any more non-conforming than the existing structure.
  - b. A substantial improvement, with modifications/rehabilitations/improvements to the existing structure or the common wall is structurally modified more than installing a doorway, both the existing structure and the addition ~~and/or improvements~~ must comply with the standards for new construction.
2. Additions to pre-FIRM and post-FIRM structures that are a substantial improvement with no modifications/rehabilitations/improvements to the existing structure other than a standard door in the common wall shall require only the addition to comply with the standards for new construction.
3. Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
  - a. Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction.
  - b. A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
4. Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a ~~one~~five-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started must comply with the standards for new construction. For each building or structure, the ~~one~~five-year period begins on the date of the first improvement or repair of that building or structure subsequent to the effective date of this chapter. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The requirement does not, however, include either:



- a. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assume safe living conditions.
- b. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

**F. *Recreational vehicles.*** Recreational vehicles shall either:

1. Be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions); or
2. Meet all the requirements for new construction.

**G. *Temporary non-residential structures.*** Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the administrator for review and written approval:

1. A specified time period for which the temporary use will be permitted. Time specified may not exceed three months, renewable up to one year;
2. The name, address, and phone number of the individual responsible for the removal of the temporary structure;
3. The time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
4. A copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and
5. Designation, accompanied by documentation, of a location outside the special flood hazard area, to which the temporary structure will be moved.

**H. *Accessory structures.*** When accessory structures (sheds, detached garages, etc.) are to be placed within a special flood hazard area, the following criteria shall be met:

1. Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
2. Accessory structures shall not be temperature-controlled;
3. Accessory structures shall be designed to have low flood damage potential;
4. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
5. Accessory structures shall be firmly anchored in accordance with the provisions of subsection 34-31.A;
6. All service facilities such as electrical shall be installed in accordance with the provisions of subsection 34-31.D; and
7. Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below regulatory flood protection elevation in conformance with the provisions of subsection 34-32.D.3.
8. An accessory structure with a footprint less than 150 square feet, or that is a minimal investment (~~\$3,000~~1,500.00) or less that satisfies the criteria outlined above does not require an elevation or floodproofing certificate. Elevation or floodproofing certifications are required for all other accessory structures in accordance with subsection 34-22.C.



I. Tanks. When gas and liquid storage tanks are to be placed within a special flood hazard area, the following criteria shall be met:

1. Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty;
2. Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the regulatory flood protection elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area;
3. Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of 34-23.B of this section shall be permitted in flood hazard areas provided the tanks are designed, constructed, installed, and anchored to resist all flood-related and other loads, including the effects of buoyancy, during conditions of the design flood and without release of contents in the floodwaters or infiltration by floodwaters into the tanks. Tanks shall be designed, constructed, installed, and anchored to resist the potential buoyant and other flood forces acting on an empty tank during design flood conditions.
4. Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:
  - a. At or above the regulatory flood protection elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
  - b. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

H.J. Public utilities. For development of such utilities as necessary for the collection, treatment, and distribution of public water and wastewater within the special flood hazard area (Zone AE) the following criteria shall apply:

1. The "no rise" requirement of this chapter shall be considered satisfied if the development demonstrates an increase in the base flood elevation of 0.05 feet or less.
2. This does not exempt such development from complying with the "no rise" requirement as it relates to development within the floodway or non-encroachment area which requires demonstration that development would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the administrator prior to issuance of floodplain development permit.
3. Such development must certify a determination of no adverse impact as defined below.

K. Other development.

1. Fences in regulated floodways and non-encroachment areas that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of section 34-36.
2. Retaining walls, sidewalks and driveways in regulated floodways and non-encroachment areas. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Section 34-36.
3. Roads and watercourse crossings in regulated floodways and non-encroachment areas. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Section 34-36 of this ordinance.



4. Commercial storage facilities are not considered “limited storage” as noted in this chapter, and shall be protected to the regulatory flood protection elevation as required for commercial structures.

### **34-33. No adverse impact determination.**

- A. After examination of the National Flood Insurance Program standards for floodplain development, the City Council of the City of Brevard has made the judgment that due to its geographic location, topography and the extensive riverine floodplain systems within its jurisdiction that the minimum standards of the National Flood Insurance Program are not wholly sufficient to protect its citizens and their properties from the effects of flooding, especially in situations where flooding possibly could be exacerbated by development that would otherwise be allowable under the minimum standards of the National Flood Insurance Program, and that additional protections must be employed to protect the lives and property within the jurisdiction of the City of Brevard.
- B. No structure or land shall be located, extended, converted, altered, or developed in any way within the special flood hazard area, nor shall any floodplain development permit be issued except as otherwise provided in this chapter, until the administrator makes a determination that the project would not increase danger to life or property and would have no adverse impact based upon the affirmative findings that:
1. The granting of the floodplain development permit will not create a danger that fill, construction materials or other debris or construction spoils may be swept onto properties upstream from, downstream from, or adjacent to the project area, or increase erosion and sedimentation; and
  2. The granting of the floodplain development permit will result in no rise in the base flood elevation as defined by this chapter; and
  3. The granting of the floodplain development permit will not result in increased flood peaks, increased flood stages, or increased flood velocities during the base flood discharge; and
  4. The granting of the floodplain development permit will not increase or alter the width or extent of the floodway or special flood hazard area except within the property or properties upon which the floodplain development is located or the property of a consenting owner, where such property is protected from future development by means of a conservation easement or other, similar restriction that is acceptable to the administrator; and
  5. The granting of the floodplain development permit will not increase the susceptibility of any property to flooding during the base flood except the property or properties upon which the floodplain development is located or the property of a consenting owner, where such property is protected from future development by means of a conservation easement or other, similar restriction that is acceptable to the administrator; and
  6. The granting of the floodplain development permit will not increase the susceptibility of existing or proposed structure to flooding during the base flood; and
  7. The granting of the floodplain development permit will not detrimentally impact the functionality or level of service of any street, bridge or culvert, or public utility during the base flood; and
  8. The granting of the floodplain development permit will not reduce the effective base flood storage volume of the floodplain; [and]
  9. The granting of the floodplain development permit will not increase the susceptibility of any critical facility to flooding, nor detrimentally impact access thereto during the base flood; and





10. The granting of the floodplain development permit will not otherwise increase the probability of flooding or property damage and thereby create a danger to life and property, or otherwise create conditions that are injurious to the public health, safety, and welfare, or detrimental to the value of adjoining property and associated uses; and
  11. The use, structure, or other activity that is the subject of the floodplain development permit will comply with all other requirements and specifications of Brevard City Code.
- C. The burden of proof shall lie with the applicant, who shall be required to present evidence to substantiate any affirmative finding. The administrator shall maintain records containing specific evidence to substantiate any affirmative finding.
- D. Property owners and any tenant or lessee thereof, who may be adversely impacted by the proposed floodplain development, shall be provided an opportunity to comment, in writing, upon such development or to provide information or evidence pertaining to a potential adverse impact. The administrator shall provide notification of the proposed floodplain development by means of first class mail to the owners of all properties lying within or adjacent to the special flood hazard area whose properties lie within the geographic scope of the hydraulic and hydrologic evaluation that is required by subsection 34-33.E.5, below, or subsection 34-22.C.2. The applicant shall be required to respond, in writing, to any claim of adverse impact by an affected property owner or tenant or lessee thereof.
- E. In order to evaluate development proposals in the context of the required findings, the following, minimum information is required for presentation to the administrator:
1. A narrative, written in non-technical language, which explains how no adverse impact is being accomplished with respect to the proposed project.
  2. No rise certification documentation by a professional engineer is required to show that proposed encroachment into the special flood hazard area will cause no rise in the water surface elevation of the 100-year base flood as defined in this chapter.
  3. No adverse impact certification documentation by a professional engineer is required to show that the proposed encroachment into the special flood hazard area will create no adverse impact upon any other property owner.
  4. Other information as may be required by the administrator in order to evaluate the proposed floodplain development permit in the context of the required findings that are set forth in subsection 34-33.2, above.
  5. All data and conclusions shall be demonstrated using the most current hydraulic and hydrological models employed by the Federal Emergency Management Agency (hereafter, FEMA) or North Carolina Emergency Management's Office of Geospatial and Technology Management (hereafter, NCEM GTMO) for the purposes of flood risk assessment and mapping. If there is no model available for the basin or watercourse affected by proposed development, a full hydraulic and hydrological model shall be developed by a professional engineer and approved by the administrator and/or FEMA/NCEM GTMO as appropriate.
  6. Hydraulic and hydrologic conditions shall be evaluated within the project area, as well as upstream and downstream of the project area along the channel to the point where water surface profiles consistently meet the existing conditions as defined in the effective model. The administrator shall have the authority to determine the reach and scope of any hydraulic and hydrologic evaluation.
  7. The developer or property owner of any development project that causes an increase in the base flood elevation or a change in the geographic extent of the special flood hazard area or floodway shall be responsible for revisions to the flood insurance rate maps, which shall be approved by FEMA, in



accordance with 44 CFR 70. The developer or property owner shall be responsible for preparing and recording appropriate legal documents in which all property owners affected by the increased flood elevations or change to the geographic extent of the special flood hazard area or floodway have consented to the impacts upon their property, including development restrictions approved by the administrator. Prior to approval of any project, the developer shall [provide a](#) conditional letter of map revision (CLOMR) first to the City of Brevard for review and approval and then to North Carolina Emergency Management for review. A letter of map revision (LOMR) must be obtained and new flood insurance rate maps produced and presented to the administrator within six months of completion of the proposed encroachment. The applicant shall enter into a written agreement with the city and provide financial security that is sufficient to cover all costs associated with completion of the LOMR and FIRMs. Such agreement and security shall be provided in accordance with the improvement guarantee requirements and procedures which are set forth in [CHAPTER 16](#) of the City of Brevard [UNIFIED DEVELOPMENT ORDINANCE](#).

- F. The administrator, for the further protection of the neighboring properties and the public welfare, may impose appropriate conditions and safeguards upon any floodplain development permit which it may grant pursuant to the provisions of this subsection. Any floodplain development permit granted may be revoked by the administrator should any conditions and safeguards imposed be violated.
- G. Exemptions. The following projects are potentially exempt, as determined by the administrator, from the specific requirements of subsection 34-33.B, above:
1. Agricultural structures such as barns, feed-waste storage structures, greenhouses, and similar structures that are not insurable through the National Flood Insurance Program, provided that such structures comply with subsection [34-32.H](#) of this chapter.
  2. Non-substantial improvements as defined in this chapter.
  3. Minor projects clearly having negligible impact, such as street resurfacing and rehabilitation, certain utility infrastructure and appurtenances (e.g. hydrants, poles, manholes, underground pipes), and minor water quality features.
  4. Development pursuant to approved site-specific development plans and floodplain development permits which are still in force on the effective date of this chapter are not required to meet no rise criteria unless such was previously a requirement of the approving authority.
  5. Fill sufficient to permit the establishment of no more than one single-family dwelling unit on parcels the boundaries of which were on record in the Transylvania County Register of Deeds prior to the enactment of this chapter. The approving authority shall have the right to impose such conditions and make such allowances as are necessary to limit the volume of fill placed for this purpose, including but not limited to modifications to required setbacks, which are set forth in [CHAPTER 2](#) of the City of Brevard [UNIFIED DEVELOPMENT ORDINANCE](#), by as much as 20 percent in order to minimize necessary fill.
  6. Stream bank, stream channel, wetland restoration, soil stabilization, or other surface water protection and restoration projects of the North Carolina Cooperative Extension Service, Transylvania County Soil and Water Conservation Service, USDA Natural Resources Conservation Service, Transylvania County, the City of Brevard, the North Carolina Forest Service, or a cooperating organization or entity. This exemption does not include the impoundment, levying, straightening or channelization of any watercourse.
- H. The administrator shall have the right to require any proposed development project or other activity to which these exemptions may apply to provide adequate engineering to assure the goals of section 34-33 are met, up to and including if necessary demonstration of no adverse impact as in outlined in subsection 34-33.B.





### 34-34. Standards for floodplains without established base flood elevations.

Within the special flood hazard areas designated as approximate Zone A and established in section 34-7, where no base flood elevation (BFE) data has been provided by FEMA, the following provisions, in addition to the provisions of section 34-31, shall apply:

- A. No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of ~~50~~ 30 feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. The BFE used in determining the regulatory flood protection elevation shall be determined based on the following criteria:
  - 1. When base flood elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this chapter and shall be elevated or floodproofed in accordance with standards in sections 34-31 and 34-32, and shall comply with all other applicable requirements of this chapter.
  - 2. When floodway or non-encroachment area data is available from a federal, state, or other source, all new construction and substantial improvements within floodway areas shall also comply with the requirements of sections 34-32 and 34-36, and shall comply with all other applicable requirements of this chapter.
  - 3. All subdivision, manufactured home park and other development proposals shall provide base flood elevation (BFE) data if development is greater than five acres or has more than 50 lots/manufactured home sites. Such base flood elevation (BFE) data shall be adopted by reference in accordance with section 34-7 and utilized in implementing this chapter, and shall comply with all other applicable requirements of this chapter.
  - 4. When base flood elevation (BFE) data is not available from a federal, state, or other source as outlined above, the reference level shall be elevated or floodproofed (nonresidential) to or above the regulatory flood protection elevation, as defined in section 34-5. All other applicable provisions of section 34-32 shall also apply.

### 34-35. Standards for riverine floodplains with BFE, but without established floodways or non-encroachment areas.

Along rivers and streams where BFE data is provided by FEMA or is available from another source but neither floodway nor non-encroachment areas are identified for a special flood hazard area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

- A. Standards of sections 34-31 and 34-32; and
- B. Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community; and
- C. All other applicable requirements of this chapter.



### 34-36. Floodways and non-encroachment areas.

Areas designated as floodways or non-encroachment areas are located within the special flood hazard areas established in section 34-7. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in sections 34-31 and 34-32, shall apply to all development within such areas:

- A. No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:
1. It is demonstrated that the proposed encroachment would not result in any increase ("no rise" as defined in this chapter) in the flood levels during the occurrence of the base flood [discharge](#), based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the administrator prior to issuance of floodplain development permit; ~~and~~
  2. A no adverse impact certification can be attained pursuant to section 34-33 of this chapter; and
  3. The developer or property owner of any development project that causes an increase in the base flood elevation or a change in the geographic extent of the special flood hazard area or floodway shall be responsible for revisions to the flood insurance rate maps, which shall be approved by FEMA, in accordance with 44 CFR 70. The developer or property owner shall be responsible for preparing and recording appropriate legal documents in which all property owners affected by the increased flood elevations or change to the geographic extent of the special flood hazard area or floodway have consented to the impacts upon their property, including development restrictions approved by the administrator. Prior to approval of any project, the developer shall [provide a](#) conditional letter of map revision (CLOMR) first to the City of Brevard for review and approval and then to North Carolina Emergency Management for review. A letter of map revision (LOMR) must be obtained and new flood insurance rate maps produced and presented to the administrator within six months of completion of the proposed encroachment. The applicant shall enter into a written agreement with the city and provide financial security that is sufficient to cover all costs associated with completion of the LOMR and FIRMs. Such agreement and security shall be provided in accordance with the improvement guarantee requirements and procedures which are set forth in [CHAPTER 16](#) of the City of Brevard [UNIFIED DEVELOPMENT ORDINANCE](#).
- B. Floodway development activities shall be limited to critical transportation or pedestrian infrastructure for which there is no other feasible location, utility installations or other public improvements for which there is no other feasible location, channel crossings necessary for property access for which there is no other feasible location, and stream bank, stream channel, or wetland restoration, soil stabilization, or other surface water protection and restoration projects of the North Carolina Cooperative Extension Service, Transylvania County Soil and Water Conservation Service, USDA Natural Resources Conservation Service, Transylvania County, the City of Brevard, the North Carolina Forest Service, or a cooperating organization or entity approved by the administrator. No fill or other development activity shall be permitted within the floodway.
- C. If subsection 34-36.A is satisfied, all development shall comply with all other applicable [flood hazard reduction](#) provisions of this chapter.
- D. No manufactured homes shall be permitted [in floodways or non-encroachment areas](#), except replacement manufactured homes in an existing manufactured home park or subdivision, provided the following provisions are met:
1. The anchoring and the elevation standards of subsection 34-32.C; and



2. The no encroachment standard of subsection 34-36.A.

### **~~34-37. Standards for areas of shallow flooding (Zone AO).~~**

~~Located within the special flood hazard areas established in section 34-7, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to section 34-31, all new construction and substantial improvements of all structures shall have the reference level elevated to:~~

- ~~A. At least as high as the depth number specified on the flood insurance rate map (FIRM), in feet, plus a freeboard of three feet, above the highest adjacent grade; or~~
- ~~B. At least two feet above the highest adjacent grade plus a freeboard of three feet if no depth number is specified. All new construction and substantial improvements of all non-residential structures may, in lieu of elevation, floodproof to the same depths as listed above so that any space below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as per subsection 34-22.C and subsection 34-32.B.~~

### **34-38—34-40. Reserved.**

## **ARTICLE IV. LEGAL STATUS PROVISIONS**

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### **34-41. Effect on rights and liabilities under the existing flood prevention ordinance.**

This ordinance in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted September 17, 1978 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any enforcement action, or any suit or proceeding instituted or pending, or otherwise cure any existing violations. All provisions of the flood damage prevention ordinance of the City of Brevard enacted on September 17, 1978, as amended, which are not reenacted herein are repealed. The date of the initial Flood Damage Prevention Ordinance for Transylvania County is January 2, 1980.

### **34-42. Effect upon outstanding floodplain development permits.**

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a floodplain development permit has been granted by the administrator or his or her authorized agents before the time passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

### **34-43. Severability.**

If any section, clause, sentence, or phrase of the ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this ordinance.



### 34-44. Effective date.

This ordinance shall become effective ~~October 2, 2009~~ [\[will reflect new effective date\]](#).

### 34-45. Adoption certification.

I hereby certify that this is a true and correct copy of the flood damage prevention ordinance as adopted by the Brevard City Council, State of North Carolina, on this the ~~21st day of September, 2009~~ [\[will reflect the new adoptive date\]](#).

**ORDINANCE NO. 2023-**

**AN ORDINANCE AMENDING CHAPTER 34 FLOOD DAMAGE PREVENTION  
OF THE CITY OF BREVARD CODE OF ORDINANCE**

**WHEREAS**, the City of Brevard wishes to update Chapter 34 Flood Damage Prevention of the Code of Ordinances.

**WHEREAS**, a public hearing was conducted on November 6, 2023, by Brevard City Council, and after hearing all persons wishing to comment, and upon review and consideration of the proposed amendments, it is the desire of the City Council of the City of Brevard that the City Code of Ordinance be amended as outlined below.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BREVARD, NORTH CAROLINA THAT:**

**SECTION 01.** The City of Brevard Code of Ordinance is hereby amended as depicted in Exhibit A, which is attached hereto and incorporated herein by reference.

**SECTION 02.** The City Clerk of the City of Brevard is hereby authorized and directed to revise and amend the official records and the Code of Ordinance to reflect the change as set forth in the aforementioned Exhibit A.

**SECTION 03.** The City Manager of the City of Brevard is hereby authorized and directed to prepare a policy document to accompany these code changes to inform requests for connection without annexation.

**SECTION 04.** If any section, subsection, paragraph, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed severable and such holding shall not affect the validity of the remaining portions hereof.

**SECTION 05.** This Ordinance shall be in full force and in effect from and after the date of its adoption and approval.

Adopted and approved on the 20<sup>th</sup> day of November 2023.

\_\_\_\_\_  
Maureen Copelof  
Mayor

ATTEST:

\_\_\_\_\_  
Denise Hodsdon  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Charles W. McKeller, Attorney at Law  
City Attorney

**EXHIBIT A**

**CHAPTER 34. FLOOD DAMAGE PREVENTION**

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**ARTICLE I. IN GENERAL**

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**34-1. Statutory authorization.**

The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Article 6 of Chapter 153A; Article 8 of Chapter 160A; and Articles 7, 9, and 11 of Chapter 160D of the North Carolina General Statutes, delegated to local governmental units the authority to adopt regulations designed to promote the public health, safety, and general welfare.

Therefore, the Governing Body of the City of Brevard, North Carolina, does ordain as follows:

**34-2. Findings of fact.**

- A.** The flood prone areas within the jurisdiction of the City of Brevard are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- B.** These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities and by the occupancy in flood prone areas of uses vulnerable to floods or other hazards.

**34-3. Statement of purpose.**

It is the purpose of this chapter to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

- A.** Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;
- B.** Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
- C.** Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
- D.** Control filling, grading, dredging, and all other development that may increase erosion or flood damage; and
- E.** Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.

**34-4. Objectives.**

The objectives of this chapter are to:

- A.** Protect human life, safety, and health;
- B.** Minimize expenditure of public money for costly flood control projects;
- C.** Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D.** Minimize prolonged business losses and interruptions;
- E.** Minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
- F.** Minimize damage to private and public property due to flooding;
- G.** Make flood insurance available to the community through the National Flood Insurance Program;
- H.** Maintain the natural and beneficial functions of floodplains;
- I.** Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and

49 J. Ensure that potential buyers are aware that property is in a special flood hazard area.

50 **34-5. Definitions.**

51 Unless specifically defined below, words or phrases used in this chapter shall be interpreted  
52 so as to give them the meaning they have in common usage and to give this chapter its most  
53 reasonable application.

54 **Accessory structure (appurtenant structure)** means a structure located on the same  
55 parcel of property as the principal structure and the use of which is incidental to the use of  
56 the principal structure. Garages, carports and storage sheds are common urban accessory  
57 structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and  
58 may or may not be located on the same parcel as the farm dwelling or shop building.

59 **Addition (to an existing building)** means an extension or increase in the floor area or  
60 height of a building or structure.

61 **Alteration of a watercourse** means a dam, impoundment, channel relocation, change in  
62 channel alignment, channelization, or change in cross-sectional area of the channel or the  
63 channel capacity, or any other form of modification which may alter, impede, retard or  
64 change the direction and/or velocity of the riverine flow of water during conditions of the  
65 base flood.

66 **Appeal** means a request for a review of the floodplain administrator's interpretation of any  
67 provision of this chapter.

68 **Area of shallow flooding** means a designated Zone AO or AH on the most recently adopted  
69 flood insurance rate map (FIRM) with base flood depths determined to be from one to three  
70 feet. These areas are located where a clearly defined channel does not exist, where the path  
71 of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

72 **Area of special flood hazard.** See "Special flood hazard area (SFHA)."

73 **Basement** means any area of the building having its floor subgrade (below ground level) on  
74 all sides.

75 **Base flood** means the flood having a one percent chance of being equaled or exceeded in any  
76 given year.

77 **Base flood elevation (BFE)** means a determination of the water surface elevations of the  
78 base flood as published in the flood insurance study. When the BFE has not been provided in  
79 a "special flood hazard area," it may be obtained from engineering studies available from a  
80 federal, state, or other source using FEMA approved engineering methodologies. This  
81 elevation, when combined with the "freeboard," establishes the "regulatory flood protection  
82 elevation."

83 **Building.** See "Structure."

84 **Chemical storage facility** means a building, portion of a building, or exterior area adjacent  
85 to a building used for the storage of any chemical or chemically reactive products.

86 **Conditional letter of map revision (CLOMR):** A formal review and comment as to whether  
87 a proposed flood protection project or other project complies with the minimum NFIP  
88 requirements for such projects with respect to delineation of special flood hazard areas. A  
89 CLOMR does not revise the effective flood insurance rate map or flood insurance study; upon  
90 submission and approval of certified as-built documentation, a letter of map revision may be  
91 issued by FEMA to revise the effective FIRM.

92 **Critical facility** means a structure used to house a function that is especially vulnerable or  
93 essential to the community. Uses include but are not limited to: child and adult daycare  
94 facilities, nursing homes, schools, hospitals, fire, police and medic facilities and other uses as  
95 determined by the administrator.

96 **Development** means any man-made change to improved or unimproved real estate,  
97 including, but not limited to, buildings or other structures, mining, dredging, filling, grading,  
98 paving, excavation or drilling operations, or storage of equipment or materials.



**Development activity** means any activity defined as development which will necessitate a floodplain development permit. This includes buildings, structures, and non-structural items, including (but not limited to) fill, bulkheads, piers, pools, docks, landings, ramps, and erosion control/stabilization measures.

**Digital Flood Insurance Rate Map (DFIRM)** means the digital official map of a community, issued by the Federal Emergency Management Agency (FEMA), on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

**Disposal** means, as defined in N.C.G.S. 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

**Elevated building** means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

**Encroachment** means the advance or infringement of uses, fill, excavation, buildings, structures or development into a special flood hazard area, which may impede or alter the flow capacity of a floodplain.

**Existing building and existing structure** means any building and/or structure for which the "start of construction" commenced before the initial effective date of the floodplain management regulations adopted by a community, October 2, 2009.

**Existing manufactured home park or manufactured home subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the initial effective date of the floodplain management regulations adopted by the community, October 2, 2009.

**Flood or flooding** means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters; and/or
- B. The unusual and rapid accumulation of runoff of surface waters from any source.

**Flood boundary and floodway map (FBFM)** means an official map of a community, issued by the Federal Emergency Management Agency, on which the special flood hazard areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the flood insurance rate map (FIRM).

**Flood hazard boundary map (FHBM)** means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the special flood hazard areas have been defined as Zone A.

**Flood insurance** means the insurance coverage provided under the National Flood Insurance Program.

**Flood insurance rate map (FIRM)** means the most recently adopted official map, issued by the Federal Emergency Management Agency, on which both the special flood hazard areas and the risk premium zones applicable to the community are delineated. See also "DFIRM."

**Flood insurance study (FIS)** means an examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the Federal Emergency Management Agency. The flood insurance study report includes flood insurance rate maps (FIRMs) and flood boundary and floodway maps (FBFMs), if published.

**Flood prone area.** See "Floodplain."

**Floodplain** means any land area susceptible to being inundated by water from any source.

**Floodplain administrator** means the individual appointed to administer and enforce the floodplain management regulations.

**Floodplain development permit** means any type of permit that is required in conformance with the provisions of this chapter, prior to the commencement of any development activity.



**Floodplain management** means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

**Floodplain management regulations** means this chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power. This term describes federal, state or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

**Floodproofing** means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents. A structure, its utilities and sanitary facilities, or other physical object shall only be considered "floodproofed" with a Floodproofing Certificate from a qualified design professional in accordance with FEMA regulations.

**Flood-resistant material** means any building product (material, component or system) capable of withstanding direct and prolonged contact (minimum 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. Any material that is water-soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to *Technical Bulletin 2, Flood Damage-Resistant Materials Requirements*, available from the FEMA. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.

**Floodway** means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

**Floodway encroachment analysis** means an engineering analysis of the impact a proposed encroachment into a floodway or non-encroachment area is expected to have on the floodway boundaries and flood levels during the occurrence of the base flood discharge. The evaluation shall be prepared by a qualified North Carolina licensed engineer using standard engineering methods and hydraulic models meeting the minimum requirements of the National Flood Insurance Program.

**Flood zone** means a geographical area shown on a flood hazard boundary map or flood insurance rate map that reflects the severity or type of flooding in the area.

**Freeboard** means the height added to the base flood elevation (BFE) to account for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as, blockage of bridge or culvert openings, precipitation exceeding the base flood, and the hydrological effect of urbanization of the watershed. The base flood elevation plus the freeboard establishes the "regulatory flood protection elevation."

**Functionally dependent facility** means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, limited to a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

**Hazardous waste management facility** means, as defined in N.C.G.S. 130A, Article 9, a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.

**Highest adjacent grade (HAG)** means the highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

**Historic structure** means any structure that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a local inventory of historic landmarks in communities with a "Certified Local Government (CLG) Program;" or
- D. Certified as contributing to the historical significance of a historic district designated by a community with a "Certified Local Government (CLG) Program."

Certified Local Government (CLG) Programs are approved by the U.S. Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966 as amended in 1980.

**Letter of map amendment (LOMA)** means an official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA is based on technical data showing that a property had been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the base flood elevation. A LOMA amends the current effective flood insurance rate map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

**Letter of map change (LOMC)** means an official determination issued by FEMA that amends or revises an effective flood insurance rate map or flood insurance study. Letters of map change include:

- A. Letter of map amendment (LOMA)
- B. Letter of map revision (LOMR)
- C. Letter of map revision based on fill (LOMR-F)
- D. Conditional letter of map revision (CLOMR)

**Letter of map revision (LOMR)** means a revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

**Letter of map revision based on fill (LOMR-F)** means a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

**Light Duty Truck** means any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less as defined in 40 CFR 86.082-2 and is:

- A. Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or
- B. Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- C. Available with special features enabling off-street or off-highway operation and use.

**Lowest adjacent grade (LAG)** means the elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

**Lowest floor** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter.

**Manufactured home** means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

**Manufactured home park or subdivision** means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**Map repository** means the location of the official flood hazard data to be applied for floodplain management. It is a central location in which flood data is stored and managed; in North Carolina, FEMA has recognized that the application of digital flood hazard data products have the same authority as hard copy products. Therefore, the NCEM's Floodplain Mapping Program websites house current and historical flood hazard data. For effective flood hazard data the NC FRIS website (<http://FRIS.NC.GOV/FRIS>) is the map repository, and for historical flood hazard data the FloodNC website (<http://FLOODNC.GOV/NCFLOOD>) is the map repository.

**Market value** means the building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (actual cash value); or adjusted tax assessed values.

**New construction** means structures for which the "start of construction" commenced on or after the effective date of the initial floodplain management regulations and includes any subsequent improvements to such structures.

**North American Vertical Datum of 1988 (NAVD 88)** means the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. It held fixed the height of the primary tidal bench mark, referenced to the new International Great Lakes Datum of 1985 local mean sea level height value, at Father Point/Rimouski, Quebec, Canada. Additional tidal bench mark elevations were not used due to the demonstrated variations in sea surface topography, i.e., the fact that mean sea level is not the same equipotential surface at all tidal bench marks.

**Non-conversion agreement** means a document stating that the owner will not convert or alter what has been constructed and approved. Violation of the agreement is considered a violation of the ordinance and, therefore, subject to the same enforcement procedures and penalties. The agreement must be filed with the recorded deed for the property. The agreement must show the clerk's or recorder's stamps and/or notations that the filing has been completed.

**Non-encroachment area (NEA)** means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot as designated in the flood insurance study report.

**No adverse impact floodplain management** means providing appropriate regulatory oversight that the action of one property owner or community does not adversely affect the flood risks for other properties or communities as measured by increased flood stages, increased flood velocity, increased flows, or the increased potential for erosion and sedimentation, or any other impact deemed important by the City of Brevard, unless the impact is mitigated as provided for in a community or watershed based plan.

**No rise requirement** means that, prior to undertaking any development or other activity within the special flood hazard area, non-encroachment area, or floodway, the person desiring to do so shall demonstrate through an engineering study that such activity will cause no increase in the base flood elevation of the base flood. "No rise" shall also mean an increase in the base flood elevation due to development in the special flood hazard area where such rise and any change in the geographic extent of the special flood hazard area or floodway is strictly confined within property or properties upon which the project creating the rise is located or the property of a consenting owner, where such property is protected from future development by means of a conservation easement or other, similar restriction that is acceptable to the administrator. The "no rise requirement" as a standard for development efforts shall not be varied as per section 34-26 of this chapter.

**Post-FIRM** means construction or other development for which the "start of construction" occurred on or after the effective date of the initial flood insurance rate map, September 29, 1978.

**Pre-FIRM** means construction or other development for which the "start of construction" occurred before the effective date of the initial flood insurance rate map, September 29, 1978.

**Principally above ground** means that at least 51 percent of the actual cash value of the structure is above ground.

**Public safety and/or nuisance** means anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

**Recreational vehicle (RV)** means a vehicle, which is:

- A. Built on a single chassis;
- B. Four hundred square feet or less when measured at the largest horizontal projection;
- C. Designed to be self-propelled or permanently towable by a light duty truck;
- D. Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use; and
- E. Is fully licensed and ready for highway use.

**Reference level** means the bottom of the lowest horizontal structural member of the lowest floor and any ductwork, excluding the foundation system, for structures within all special flood hazard areas.

**Regulatory flood protection elevation** means the "base flood elevation" plus the "freeboard." In "special flood hazard areas" where base flood elevations (BFEs) have been determined, this elevation shall be the BFE plus two feet of freeboard. In "special flood hazard areas" where no BFE has been established, this elevation shall be at least three feet above the highest adjacent grade.

**Remedy a violation** means to bring the structure or other development into compliance with state and community floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the chapter or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

**Riverine** means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

**Salvage yard** means any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

**Solid waste disposal facility** means any facility involved in the disposal of solid waste, as defined in N.C.G.S. 130A-290(a)(35).

**Solid waste disposal site** means, as defined in N.C.G.S. 130A-290(a)(36), any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.

**Special flood hazard area (SFHA)** means the land in the floodplain subject to a one percent or greater chance of being flooded in any given year, as determined in section 34-7 of this chapter.

**Start of construction** includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or



not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

**Structure** means any walled and/or roofed building or other physical object, whether temporary or permanent, that is designed for human habitation or to uphold, house, contain, or bear other objects or materials. Examples of structures include but are not limited to permanently affixed signs, swimming pools, houses, telecommunication towers, manufactured homes, or a gas, liquid, or liquefied gas storage tank that is principally above ground.

**Substantial damage** means damage of any origin sustained by a structure during any five-year period whereby the cost of restoring the structure to the before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See also definition of "substantial improvement." Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

**Substantial improvement** means any combination of repairs, reconstruction, rehabilitation, addition, or other modification or improvement of a structure taking place during any five-year period for which the cost equals or exceeds 50 percent of the market value of the structure as of the date the improvement was permitted (or, in the absence of any permit, before the date of start of construction of the improvement).. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either of the following:

- A. Any correction of existing violations of state, city, or county health, sanitary, or safety code specifications which have been identified by the administrator or other authorized official of the State of North Carolina or Transylvania County, and which are the minimum necessary to assure safe living conditions; or
- B. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure and the alteration is approved by a variance issued pursuant to Section 34-26.

**Technical bulletin and technical fact sheet** means a FEMA publication that provides guidance concerning the building performance standards of the NFIP, which are contained in Title 44 of the U.S. Code of Federal Regulations at Section 60.3. The bulletins and fact sheets are intended for use primarily by State and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations; rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.

It should be noted that Technical Bulletins and Technical Fact Sheets provide guidance on the minimum requirements of the NFIP regulations. State or community requirements that exceed those of the NFIP take precedence. Design professionals should contact the community officials to determine whether more restrictive State or local regulations apply to the building or site in question. All applicable standards of the State or local building code must also be met for any building in a flood hazard area.

**Temperature controlled** means having the temperature regulated by a heating and/or cooling system, built-in or appliance.

**Variance** means a grant of relief from the requirements of this chapter.

**Violation** means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in [ARTICLE II](#) and [ARTICLE III](#) is presumed to be in violation until such time as that documentation is provided.

**Water surface elevation (WSE)** means the height, in relation to NAVD 88, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

**Watercourse** means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

**34-6. Lands to which this chapter applies.**

This chapter shall apply to all special flood hazard areas within the jurisdiction, including extraterritorial jurisdictions (ETJs) if applicable, of the City of Brevard. For purposes of complying with the City’s floodplain development regulations, property that is exempt from the exercise of municipal extraterritorial planning and development regulation jurisdiction such as bona fide farms, shall be subject to Transylvania County’s floodplain regulation provisions.

**34-7. Basis for establishing the special flood hazard areas.**

The special flood hazard areas are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its flood insurance study (FIS) dated October 2, 2009 for Transylvania County and associated DFIRM panels, including any digital data developed as part of the FIS, which are adopted by reference and declared a part of this chapter, and all revisions thereto.

**34-8. Establishment of floodplain development permit.**

A floodplain development permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities within special flood hazard areas determined in accordance with the provisions of Section 34-7 of this chapter.

**34-9. Compliance.**

No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this chapter and other applicable regulations.

**34-10. Abrogation and greater restrictions.**

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

**34-11. Interpretation.**

In the interpretation and application of this chapter, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

**34-12. Warning and disclaimer of liability.**

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the special flood hazard areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the City of Brevard or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

**34-13—34-20. Reserved.**

**ARTICLE II. ADMINISTRATION**

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**34-21. Designation of floodplain administrator.**

The City of Brevard Planning Director, or his/her designee, shall serve as the floodplain administrator, hereinafter referred to as the "administrator", and is hereby appointed to administer and implement the provisions of this chapter. In instances where the administrator receives assistance from others to complete tasks to administer and implement this chapter, the administrator shall be responsible for the coordination and community's overall compliance with the National Flood Insurance Program and the provisions of this chapter.

**34-22. Floodplain development application, permit and certification requirements.**

**A. Application requirements.** Application for a floodplain development permit shall be made to the administrator prior to any development activities located within special flood hazard areas. The following items shall be presented to the administrator to apply for a floodplain development permit:

1. A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
  - a. The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
  - b. The boundary of the special flood hazard area as delineated on the FIRM or other flood map as determined in Section 34-7, or a statement that the entire lot is within the special flood hazard area;
  - c. Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Section 34-7;
  - d. The boundary of the floodway(s) or non-encroachment area(s) as determined in Section 34-7;
  - e. The base flood elevation (BFE) where provided as set forth in Section 34-7, Section 34-23, or Section 34-34;
  - f. The old and new location of any watercourse that will be altered or relocated as a result of proposed development;
  - g. The certification of the plot plan by a registered land surveyor or professional engineer if required by the administrator or this chapter;
  - h. Other information as may be required by the administrator.
2. Proposed elevation, and method thereof, of all development within a special flood hazard area including but not limited to:
  - a. Elevation in relation to NAVD 88 of the proposed reference level (including basement) of all structures;
  - b. Elevation in relation to NAVD 88 to which any non-residential structure in Zones A, AE, and A99 will be floodproofed; and
  - c. Elevation in relation to NAVD 88 to which any proposed utility systems will be elevated or floodproofed.
3. If floodproofing, a floodproofing certificate (FEMA Form 206-FY-22-153, or any successors) with supporting data, an operational plan, and an inspection and maintenance plan that include, but are not limited to, installation, exercise, and maintenance of floodproofing measures.
4. A foundation plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this chapter are met. These details include but are not limited to:
  - a. The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls);
  - b. Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with subsection 34-32.C. when solid foundation perimeter walls are used in Zones A, AE, and A99.

5. Usage details of any enclosed areas below the lowest floor.
  6. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
  7. Certification that all other local, state and federal permits required prior to floodplain development permit issuance have been received.
  8. Documentation for placement of recreational vehicles and/or temporary structures, when applicable, to ensure that the provisions of subsections 34-32.G and 34-32.H of this chapter are met.
  9. A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.
- B. Permit requirements.** The floodplain development permit shall include, but not be limited to:
1. A complete description of the development to be permitted under the floodplain development permit (e.g., house, garage, pool, septic, bulkhead, cabana, pier, bridge, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials, etc.).
  2. The special flood hazard area determination for the proposed development in accordance with available data specified in Section 34-7.
  3. The regulatory flood protection elevation required for the reference level and all attendant utilities.
  4. The regulatory flood protection elevation required for the protection of all public utilities.
  5. All certification submittal requirements with timelines.
  6. A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, unless the requirements of Section 34-36 are met.
  7. The flood openings requirements.
  8. A statement by the property owner that no uses below BFE other than parking and storage shall be employed.
  9. Other information as may be required by the administrator.
- C. Certification requirements.**
1. Elevation certificates.
    - a. An elevation certificate (FEMA Form 206-FY-22-152, or any successors ) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the administrator a certification of the elevation of the reference level, in relation to NAVD 88. The administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.
    - b. An elevation certificate (FEMA Form 206-FY-22-152, or any successors) is required after the reference level is established. Within seven calendar days of establishment of the reference level elevation, it shall be the duty of the permit holder to submit to the administrator a certification of the elevation of the reference level, in relation to NAVD 88. Any work done within the seven-day calendar period and prior to submission of the certification shall be at the permit holder's risk. The administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to submit the certification or failure to make required corrections shall be cause to issue a stop work order for the project.



- c. A final finished construction elevation (FEMA Form 206-FY-22-152, or any successors ) is required after construction is completed and prior to certificate of compliance/occupancy issuance. It shall be the duty of the permit holder to submit to the administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to certificate of compliance/occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a certificate of compliance/occupancy. The Finished Construction Elevation Certificate certifier shall provide at least 2 photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least 2 additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least 3" × 3". Digital photographs are acceptable.

2. Certification of no adverse impact.

- a. As per section 34-33 of this chapter, development endeavors within the City of Brevard's Special Flood Hazard Areas shall be required to certify, utilizing a professional engineer licensed in the State of North Carolina, that the development endeavors of one property owner or community do not adversely affect flood risks for other properties or communities as measured by increased flood stages, increased flood velocity, increased flows, the increased potential for erosion and sedimentation, or any other impact deemed important or as specified by the City of Brevard, unless the impact is mitigated as provided for in a community or watershed based plan. This certification shall employ industry standards for hydraulic and hydrological analysis to determine no adverse impact and all data shall be provided in hard-copy and digitally for review and corroboration by the city's engineer or any governmental review agency acceptable to the City of Brevard. See Section 34-33 of this chapter.

3. Floodproofing certificate.

- a. If nonresidential floodproofing is used to meet the regulatory flood protection elevation requirements, a floodproofing certificate (FEMA Form FF-206-FY-22-153, or any successors), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 88. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a certificate of compliance/occupancy.
- b. A final Finished Construction Floodproofing Certificate (FEMA Form 206-FY-22-153, or any successors), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the issuance of a certificate of compliance/occupancy. It shall be the duty of the permit holder to submit to the administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 88. Floodproofing certificate shall be prepared by or under the direct

supervision of a professional engineer or architect and certified by same. The administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to certificate of occupancy. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to deny a certificate of compliance/occupancy.

4. If a manufactured home is placed within Zones A, AE, or A99 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of subsection 34-32.C.2.
  5. If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.
  6. Certification exemptions. The following structures, if located within Zones A, AE, or A99, are exempt from the elevation/floodproofing certification requirements specified in items C.1 and C.2 of this subsection:
    - a. Recreational vehicles meeting requirements of subsection 34-32.F.1;
    - b. Temporary structures meeting requirements of subsection 34-32.G; and
    - c. Accessory structures less than 150 square feet or cost less than \$5,000 and meeting requirements of subsection 34-32.H.
- D. Determinations for existing buildings and structures.** For applications for permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the administrator, in coordination with the Building Official or based on other quantitative data, shall:
1. Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
  2. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
  3. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
  4. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the NC Building Code and this chapter is required.

### **34-23. Duties and responsibilities of the administrator.**

The administrator shall perform, but not be limited to, the following duties:

- A.** Review all floodplain development applications and issue permits for all proposed development within special flood hazard areas to assure that the requirements of this chapter have been satisfied.
- B.** Review all proposed development within special flood hazard areas to assure that all necessary local, state and federal permits have been received, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- C.** Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and

- submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- D.** Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.
- E.** Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of section 34-36 are met.
- F.** Obtain actual elevation (in relation to NAVD 88) of the reference level (including [Basement](#)) and all attendant utilities of all new and substantially improved structures, in accordance with subsection 34-22.C.
- G.** Obtain actual elevation (in relation to NAVD 88) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of subsection 34-22.C.
- H.** Obtain actual elevation (in relation to NAVD 88) of all public utilities in accordance with the provisions of subsection 34-22.C.
- I.** When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of subsection 34-22.C and subsection 34-32.B.
- J.** Where interpretation is needed as to the exact location of boundaries of the special flood hazard areas, floodways, or non-encroachment areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- K.** When base flood elevation (BFE) data has not been provided in accordance with section 34-7, obtain, review, and reasonably utilize any base flood elevation (BFE) data, along with floodway data or non-encroachment area data available from a federal, state, or other source, including data developed pursuant to subsection 34-34.B.2., in order to administer the provisions of this chapter.
- L.** When base flood elevation (BFE) data is provided but no floodway or non-encroachment area data has been provided in accordance with section 34-7, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a federal, state, or other source in order to administer the provisions of this chapter.
- M.** When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a special flood hazard area is above the base flood elevation, advise the property owner of the option to apply for a letter of map amendment (LOMA) from FEMA, and maintain a copy of all letter of map amendment (LOMA) issued by FEMA in the floodplain development permit file.
- N.** Permanently maintain all records that pertain to the administration of this chapter and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.
- O.** Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.
- P.** Issue stop-work orders as required, in accordance with Section 34-25.
- Q.** Revoke floodplain development permits as required, in accordance with Section 34-25.
- R.** Make periodic inspections throughout the special flood hazard areas within the jurisdiction of the community. The administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- S.** Follow through with corrective procedures of section 34-25.
- T.** Review, provide input, and make recommendations for variance requests.

- U. Maintain a current map repository to include, but not limited to, the historical and effective FIS report, the historical and effective FIRM and other official flood maps and studies adopted in accordance with section 34-7 of this chapter, including any revisions thereto including letters of map change, issued by FEMA. Notify state and FEMA of mapping needs.
- V. Coordinate revisions to FIS reports and FIRMs, including letters of map revision based on fill (LOMR-F) and letters of map revision (LOMR).
- W. All costs associated with the administration of this chapter, including but not limited to the review of engineering analysis for the benefit of the city and the costs associated with map revisions, shall be borne by the applicant, developer or property owner, as appropriate.

#### 34-24. Violations and notices.

- A. *General violations:* It shall constitute a violation of this ordinance for any person to fail to comply with the provisions of this chapter or with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions. Nothing herein contained shall prevent the City of Brevard from taking such other lawful action as is necessary to prevent or remedy any violation.
- B. *Continued violations.* Each day such violation continues shall be considered a separate offense. Separate notices of violations are not required for each subsequent day, provided it is addressed in the initial notice of violation.
- C. *Repeat violations.* If an owner and/or occupant repeats the same violation within five-year period from the date of the initial violation, it shall be considered a continuation of the initial violation and shall be subject to additional penalties and remedies.
- D. *Notice of violation.* If it is determined that a person has violated this ordinance, the administrator shall immediately *give the property owner and/or occupant written notice, by certified or registered mail to the owner's last known address or by personal service, stating:*
  - 1. *That the building or priority is in violation of this chapter;*
  - 2. *The nature of the violation and the citation of the section(s) of this chapter violated;*
  - 3. *The measures needed to comply;*
  - 4. *The time within such measures must be completed;*
  - 5. *Warn that failure to correct the violation within the time period shall subject the violator and/or property owner to civil and/or other enforcement action; and*
  - 6. *Mechanisms available to appeal the decision of the administrator.*
- E. *Failure to take corrective action: If the violator and/or property owner should fail to take prompt corrective action to remedy the violation, then the administrator shall proceed in accordance with Section 34-25.*

#### 34-25. Enforcement and corrective procedures.

- A. *Civil penalty.* Any person who is found to be in violation shall be subject to a civil penalty in the amount of:
  - 1. \$50.00 for the first violation;
  - 2. \$100.00 for the second violation;
  - 3. \$200.00 for the third violation; and
  - 4. \$500.00 for the fourth and each succeeding violation.
- B. *Civil penalty assessment.* No civil penalty shall be assessed until the person alleged to be in violation has been notified in accordance with Section 34-24. If after receiving a notice of violation under Section 34-24, the property owner or other violator fails to take corrective action, a civil penalty shall be imposed under this section in the form of a citation. A civil penalty may be assessed from the initial date of the violation. The citation shall be served in the same manner as of a notice of violation. The citation shall state the nature of the violation, shall state the civil penalty to be imposed upon the violator, and shall direct the violator to pay the civil penalty within 15 days of the date of the citation.
- C. *Stop-work order:* Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this chapter, the administrator may



order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed.. Further, nothing therein contained shall prevent the City of Brevard from taking any other such lawful action as is necessary to prevent or remedy any violation.

**D. Revocation:** The administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of state or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable state or local law may also be revoked.

**E. Permit reinstatement.** A new permit application and approved plan including all permit fees must be submitted prior to reinstatement of the revoked permit. For permit reinstatement the site must be deemed to be in compliance with the requirements of this chapter and all penalties have been paid in full or penalty appeal has been filed within the given time frame.

**F. Actions in event of failure to take corrective action.** If the violator and/or property owner shall fail to take prompt corrective action, the administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:

1. That the building or property is in violation of the floodplain management regulations;
2. That a hearing will be held before the administrator at a designated place and time, not later than ten days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
3. That following the hearing, the administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as applicable.

**G. Order to take corrective action.** If, upon a hearing held pursuant to the notice prescribed above, the administrator shall find that the building or development is in violation of the flood damage prevention ordinance, they shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than 60 calendar days, nor more than 180 calendar days. Where the administrator finds that there is imminent danger to life or other property, they may order that corrective action be taken in such lesser period as may be feasible. An appeal may be taken from the order as set forth herein.

**H. Appeal.** Any aggrieved party may file an appeal for or from the issuance of a variance, or from a penalty assessment, notice of violation, permit disapproval, order, requirement, determination or interpretation rendered under the provisions of this chapter. The appeals process shall be as follows:

1. *To the administrator.* With the exception of appealing for the issuance of a variance, all appeals must initially be heard by the administrator. The appeal must be submitted in writing within 30 days of receipt of an adverse action and shall specify the specific grounds for relief and what relief is requested. The floodplain administrator shall schedule a hearing no later than 30 days from receipt of the written notice of appeal. The owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter, and the administrator shall issue to the petitioner a written determination. Further appeal may be taken to the board of adjustment as set forth below. In the absence of an appeal, the order of the administrator shall be final.
2. *To the Brevard Board of Adjustment.* Further appeal may be taken to the Board of Adjustment by giving notice of appeal in writing to the administrator and the clerk within ten days following issuance of the final order. The Board of Adjustment shall hear an appeal within a reasonable time and in accordance with and pursuant to the

written requirements of the board and Chapter 16 of the Unified Development Ordinance.

3. *To superior court:* Every decision of the board shall be subject to review by the superior court by proceedings in the nature of certiorari. Petition for review by the superior court shall be filed with the clerk of superior court within 30 days after the decision of the Board of Adjustment is filed or after a written copy thereof is delivered to every person who has filed a written request for such copy with the Board at the time of its hearing of the case, whichever is later.

I. *Failure to comply with order.* If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the Board of Adjustment following an appeal, the owner shall be subject to remedies and penalties as provided [herein](#).

### **34-26. Variance procedures.**

A. The Board of Adjustment as for the City of Brevard shall hear and decide requests for variances from the requirements of this chapter.

B. *Petition for a variance.* Variances may be issued for:

1. The repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;

2. Functionally dependent facilities if determined to meet the definition as stated in Section 34-5 of this chapter, provided provisions (2), (3), and (5) of 34-25.I below have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or

3. Any other type of development provided it meets the requirements of this Section.

C. *Requirements for the granting of variances.* The Board of Adjustment may only grant a variance if the applicant satisfies all of the following requirements:

1. The variance is the minimum necessary, considering the flood hazard, to afford relief.

2. No development permit has been approved.

3. The applicant has demonstrated a showing of good and sufficient cause.

4. Failure to grant the variance would result in exceptional hardship.

5. The granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

6. The granting of the variance will not make the structure in violation of other federal, state, or local laws, regulations, or ordinances unless such local regulations or ordinances are lawfully varied as part of this decision.

7. If the variance request is within any designated floodway or non-encroachment area, the granting of the variance would not result in any increase in flood levels during the base flood discharge.

D. *Prerequisites to considering a request for a variance.* Prior to considering a request for a variance, the Board of Adjustment shall be provided with the following:

1. The administrator shall provide a written report specifying whether all technical evaluations, all relevant factors, and all standards specified in other sections of this chapter has been met.

2. The applicant shall submit a written report with the variance application addressing each of the following factors:

i. The danger that materials may be swept onto other lands to the injury of others;

- ii. The danger to life and property due to flooding or erosion damage;
  - iii. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - iv. The importance of the services provided by the proposed facility to the community;
  - v. The necessity to the facility of a waterfront location as defined under Section 34-5 of this chapter as a functionally dependent facility, where applicable;
  - vi. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
  - vii. The compatibility of the proposed use with existing and anticipated development;
  - viii. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area, such as the City's continued eligibility to remain or its participation in the Community Rating System (CRS) which reduces insurance rates for the citizens of Brevard;
  - ix. The safety of access to the property in times of flood for ordinary and emergency vehicles;
  - x. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
  - xi. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- E. Conditions.** Upon consideration of the factors listed above and the purposes of this chapter, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this chapter.
- F. Notice.** Any applicant to whom a variance is granted shall be given written notice specifying the difference between the BFE and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE may result in increased premium rates for flood insurance. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.
- G. Records.** The administrator shall maintain the records of all appeal actions and report any variances to the FEMA and the State of North Carolina Department of Public Safety upon request.
- H. Special facilities.** A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.
- 1. The use serves a critical need in the community.
  - 2. No feasible location exists for the use outside the Special Flood Hazard Area.
  - 3. The reference level of any structure is elevated or floodproofed to at least the Regulatory Flood Protection Elevation.
  - 4. The use complies with all other applicable federal, state and local laws.
  - 5. The City of Brevard has notified the Secretary of the North Carolina Department of Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.
- I. Appeal.** Any person aggrieved by the decision of the Board of Adjustment may appeal such decision to superior court, as provided in Chapter 7A of the North Carolina General Statutes.

**34-27—34-30. Reserved.**

**ARTICLE III. PROVISIONS FOR FLOOD HAZARD REDUCTION**

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**34-31. General standards.**

In all special flood hazard areas the following provisions are required:

- A.** All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure.
- B.** All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage, in accordance with the FEMA Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements*.
- C.** All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.
- D.** All new electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be located at or above the regulatory flood protection elevation and/or specially designed to prevent water from entering or accumulating within the components and installed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation. Utility systems, equipment, and service facilities include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters, and electric outlets/switches.
  - a. Replacements as part of a substantial improvement must also meet the above provisions.
  - b. Replacements that are for maintenance and not part of a substantial improvement, may be installed at the original location provided the addition and/or improvements comply with the standards for new construction consistent with the code and requirements for the original structure.
- E.** All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- F.** New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
- G.** On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- H.** Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this chapter, shall meet the requirements of "new construction" as contained in this chapter.
- I.** Nothing in this chapter shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this chapter and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this chapter.
- J.** New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified Section 34-26. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a special flood hazard area only if the structure or tank is either elevated or floodproofed to at least the regulatory flood protection elevation and certified in accordance with the provisions of subsection 34-22.C.
- K.** All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.
- L.** All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.



- M.** All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- N.** All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- O.** Newly created parcels of land shall have adequate developable area outside of the special flood hazard area, except parcels created and restricted for the purpose of recreation, agriculture, conservation or open space protection.
- P.** Fill and other encroachments shall not be permitted within the special flood hazard area of any parcel created after the date of enactment of this chapter, except upon successful demonstration of no rise and no adverse impact.
- Q.** When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.
- R.** When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest base flood elevation shall apply.

### **34-32. Specific standards.**

In all special flood hazard areas where base flood elevation (BFE) data has been provided, as set forth in section 34-7, or section 34-34, the following provisions, in addition to the provisions of section 34-31, are required:

- A. Residential construction.** New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in section 34-5 of this chapter.
- B. Nonresidential construction.** New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in section 34-5 of this chapter. Structures located in Zones A, AE, AH, AO, or A99 may be floodproofed to the regulatory flood protection elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the regulatory flood protection elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. For AO Zones, the floodproofing elevation shall be in accordance with subsection 34-37.B. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the administrator as set forth in subsection 34-22.C, along with the operational, maintenance and inspections plans.
- C. Manufactured homes.**
  - 1. New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation, as defined in section 34-5 of this chapter.
  - 2. Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to N.C.G.S. 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis 36 inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above 36 inches in height, an engineering certification is required.
  - 3. All enclosures or skirting below the lowest floor shall meet the requirements of subsection 34-32.D.

- 1075 4. An evacuation plan must be developed for evacuation of all residents of all new,  
1076 substantially improved or substantially damaged manufactured home parks or  
1077 subdivisions located within flood prone areas. This plan shall be filed with and  
1078 approved by the administrator and the local emergency management coordinator.
- 1079 **D. *Elevated buildings.*** Fully enclosed area, of new construction and substantially improved  
1080 structures, which is below the lowest floor:
- 1081 1. Shall not be designed or used for human habitation, but shall only be used for  
1082 parking of vehicles, building access, or limited storage of maintenance equipment  
1083 used in connection with the premises. Access to the enclosed area shall be the  
1084 minimum necessary to allow for parking of vehicles (garage door) or limited storage  
1085 of maintenance equipment (standard exterior door), or entry to the living area  
1086 (stairway or elevator). The interior portion of such enclosed area shall not be  
1087 finished or partitioned into separate rooms, except to enclose storage areas;
- 1088 2. Shall not be temperature-controlled or conditions;
- 1089 3. Shall be constructed entirely of flood resistant materials at least to the regulatory  
1090 flood protection elevation;
- 1091 4. Shall include flood openings to automatically equalize hydrostatic flood forces on  
1092 walls by allowing for the entry and exit of floodwaters. To meet this requirement,  
1093 the openings must either be certified by a professional engineer or architect or meet  
1094 or exceed the following minimum design criteria:
- 1095 a. A minimum of two flood openings on different sides of each enclosed area  
1096 subject to flooding;
- 1097 b. The total net area of all flood openings must be at least one square inch for each  
1098 square foot of enclosed area subject to flooding;
- 1099 c. If a building has more than one enclosed area, each enclosed area must have  
1100 flood openings to allow floodwaters to automatically enter and exit;
- 1101 d. The bottom of all required flood openings shall be no higher than one foot above  
1102 the higher of the interior or exterior adjacent grade;
- 1103 e. Flood openings may be equipped with screens, louvers, or other coverings or  
1104 devices, provided they permit the automatic flow of floodwaters in both  
1105 directions; and
- 1106 f. Enclosures made of flexible skirting are not considered enclosures for  
1107 regulatory purposes, and, therefore, do not require flood openings. Masonry or  
1108 wood underpinning, regardless of structural status, is considered an enclosure  
1109 and requires flood openings as outlined above.
- 1110 5. *Non-conversion agreement.* As applicable, property owners shall be required to  
1111 execute and record a non-conversion agreement prior to issuance of a building  
1112 permit declaring that the area below the lowest floor shall not be improved, finished  
1113 or otherwise converted to habitable space; the City of Brevard will have the right to  
1114 inspect the enclosed area. This agreement shall be recorded with the Transylvania  
1115 County Register of Deeds and shall transfer with the property in perpetuity.
- 1116 6. *Release of restrictive covenant.* If a property which is bound by a non-conversion  
1117 agreement is modified to remove enclosed areas below BFE, then the owner may  
1118 request release of restrictive covenant after staff inspection and submittal of  
1119 confirming documentation.
- 1120 **E. *Additions/improvements.***
- 1121 1. Additions and/or improvements to pre-FIRM structures when the addition and/or  
1122 improvements in combination with any interior modifications to the existing  
1123 structure are:
- 1124 a. Not a substantial improvement, the addition and/or improvements must be  
1125 designed to minimize flood damages and must not be any more non-conforming  
1126 than the existing structure.
- 1127 b. A substantial improvement, with modifications/rehabilitations/improvements  
1128 to the existing structure or the common wall is structurally modified more than  
1129 installing a doorway, both the existing structure and the addition must comply  
1130 with the standards for new construction.

2. Additions to pre-FIRM and post-FIRM structures that are a substantial improvement with no modifications/rehabilitations/improvements to the existing structure other than a standard door in the common wall shall require only the addition to comply with the standards for new construction.
3. Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
  - a. Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction.
  - b. A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
4. Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a five-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started must comply with the standards for new construction. For each building or structure, the five-year period begins on the date of the first improvement or repair of that building or structure subsequent to the effective date of this chapter. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The requirement does not, however, include either:
  - a. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assume safe living conditions.
  - b. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

**F. *Recreational vehicles.*** Recreational vehicles shall either:

1. Be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions); or
2. Meet all the requirements for new construction.

**G. *Temporary non-residential structures.*** Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the administrator for review and written approval:

1. A specified time period for which the temporary use will be permitted. Time specified may not exceed three months, renewable up to one year;
2. The name, address, and phone number of the individual responsible for the removal of the temporary structure;
3. The time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
4. A copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and
5. Designation, accompanied by documentation, of a location outside the special flood hazard area, to which the temporary structure will be moved.

**H. *Accessory structures.*** When accessory structures (sheds, detached garages, etc.) are to be placed within a special flood hazard area, the following criteria shall be met:

1. Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
2. Accessory structures shall not be temperature-controlled;
3. Accessory structures shall be designed to have low flood damage potential;
4. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

5. Accessory structures shall be firmly anchored in accordance with the provisions of subsection 34-31.A;
  6. All service facilities such as electrical shall be installed in accordance with the provisions of subsection 34-31.D; and
  7. Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below regulatory flood protection elevation in conformance with the provisions of subsection 34-32.D.3.
  8. An accessory structure with a footprint less than 150 square feet, or that is a minimal investment (\$3,000.00) or less that satisfies the criteria outlined above does not require an elevation or floodproofing certificate. Elevation or floodproofing certifications are required for all other accessory structures in accordance with subsection 34-22.C.
- I. *Tanks.* When gas and liquid storage tanks are to be placed within a special flood hazard area, the following criteria shall be met:
1. Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty;
  2. Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the regulatory flood protection elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area;
  3. Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of 34-23.B of this section shall be permitted in flood hazard areas provided the tanks are designed, constructed, installed, and anchored to resist all flood-related and other loads, including the effects of buoyancy, during conditions of the design flood and without release of contents in the floodwaters or infiltration by floodwaters into the tanks. Tanks shall be designed, constructed, installed, and anchored to resist the potential buoyant and other flood forces acting on an empty tank during design flood conditions.
  4. Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:
    - a. At or above the regulatory flood protection elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
    - b. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.
- J. *Public utilities.* For development of such utilities as necessary for the collection, treatment, and distribution of public water and wastewater within the special flood hazard area (Zone AE) the following criteria shall apply:
1. The "no rise" requirement of this chapter shall be considered satisfied if the development demonstrates an increase in the base flood elevation of 0.05 feet or less.
  2. This does not exempt such development from complying with the "no rise" requirement as it relates to development within the floodway or non-encroachment area which requires demonstration that development would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the administrator prior to issuance of floodplain development permit.
  3. Such development must certify a determination of no adverse impact as defined below.
- K. *Other development.*

1. Fences in regulated floodways and non-encroachment areas that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of section 34-36.
2. Retaining walls, sidewalks and driveways in regulated floodways and non-encroachment areas. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Section 34-36.
3. Roads and watercourse crossings in regulated floodways and non-encroachment areas. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Section 34-36 of this ordinance.
4. Commercial storage facilities are not considered “limited storage” as noted in this chapter, and shall be protected to the regulatory flood protection elevation as required for commercial structures.

**34-33. No adverse impact determination.**

- A.** After examination of the National Flood Insurance Program standards for floodplain development, the City Council of the City of Brevard has made the judgment that due to its geographic location, topography and the extensive riverine floodplain systems within its jurisdiction that the minimum standards of the National Flood Insurance Program are not wholly sufficient to protect its citizens and their properties from the effects of flooding, especially in situations where flooding possibly could be exacerbated by development that would otherwise be allowable under the minimum standards of the National Flood Insurance Program, and that additional protections must be employed to protect the lives and property within the jurisdiction of the City of Brevard.
- B.** No structure or land shall be located, extended, converted, altered, or developed in any way within the special flood hazard area, nor shall any floodplain development permit be issued except as otherwise provided in this chapter, until the administrator makes a determination that the project would not increase danger to life or property and would have no adverse impact based upon the affirmative findings that:
1. The granting of the floodplain development permit will not create a danger that fill, construction materials or other debris or construction spoils may be swept onto properties upstream from, downstream from, or adjacent to the project area, or increase erosion and sedimentation; and
  2. The granting of the floodplain development permit will result in no rise in the base flood elevation as defined by this chapter; and
  3. The granting of the floodplain development permit will not result in increased flood peaks, increased flood stages, or increased flood velocities during the base flood discharge; and
  4. The granting of the floodplain development permit will not increase or alter the width or extent of the floodway or special flood hazard area except within the property or properties upon which the floodplain development is located or the property of a consenting owner, where such property is protected from future development by means of a conservation easement or other, similar restriction that is acceptable to the administrator; and
  5. The granting of the floodplain development permit will not increase the susceptibility of any property to flooding during the base flood except the property or properties upon which the floodplain development is located or the property of a consenting owner, where such property is protected from future development by means of a conservation easement or other, similar restriction that is acceptable to the administrator; and
  6. The granting of the floodplain development permit will not increase the susceptibility of existing or proposed structure to flooding during the base flood; and
  7. The granting of the floodplain development permit will not detrimentally impact the functionality or level of service of any street, bridge or culvert, or public utility during the base flood; and



8. The granting of the floodplain development permit will not reduce the effective base flood storage volume of the floodplain; [and]
  9. The granting of the floodplain development permit will not increase the susceptibility of any critical facility to flooding, nor detrimentally impact access thereto during the base flood; and
  10. The granting of the floodplain development permit will not otherwise increase the probability of flooding or property damage and thereby create a danger to life and property, or otherwise create conditions that are injurious to the public health, safety, and welfare, or detrimental to the value of adjoining property and associated uses; and
  11. The use, structure, or other activity that is the subject of the floodplain development permit will comply with all other requirements and specifications of Brevard City Code.
- C. The burden of proof shall lie with the applicant, who shall be required to present evidence to substantiate any affirmative finding. The administrator shall maintain records containing specific evidence to substantiate any affirmative finding.
- D. Property owners and any tenant or lessee thereof, who may be adversely impacted by the proposed floodplain development, shall be provided an opportunity to comment, in writing, upon such development or to provide information or evidence pertaining to a potential adverse impact. The administrator shall provide notification of the proposed floodplain development by means of first class mail to the owners of all properties lying within or adjacent to the special flood hazard area whose properties lie within the geographic scope of the hydraulic and hydrologic evaluation that is required by subsection 34-33.E.5, below, or subsection 34-22.C.2. The applicant shall be required to respond, in writing, to any claim of adverse impact by an affected property owner or tenant or lessee thereof.
- E. In order to evaluate development proposals in the context of the required findings, the following, minimum information is required for presentation to the administrator:
1. A narrative, written in non-technical language, which explains how no adverse impact is being accomplished with respect to the proposed project.
  2. No rise certification documentation by a professional engineer is required to show that proposed encroachment into the special flood hazard area will cause no rise in the water surface elevation of the 100-year base flood as defined in this chapter.
  3. No adverse impact certification documentation by a professional engineer is required to show that the proposed encroachment into the special flood hazard area will create no adverse impact upon any other property owner.
  4. Other information as may be required by the administrator in order to evaluate the proposed floodplain development permit in the context of the required findings that are set forth in subsection 34-33.2, above.
  5. All data and conclusions shall be demonstrated using the most current hydraulic and hydrological models employed by the Federal Emergency Management Agency (hereafter, FEMA) or North Carolina Emergency Management's Office of Geospatial and Technology Management (hereafter, NCEM GTMO) for the purposes of flood risk assessment and mapping. If there is no model available for the basin or watercourse affected by proposed development, a full hydraulic and hydrological model shall be developed by a professional engineer and approved by the administrator and/or FEMA/NCEM GTMO as appropriate.
  6. Hydraulic and hydrologic conditions shall be evaluated within the project area, as well as upstream and downstream of the project area along the channel to the point where water surface profiles consistently meet the existing conditions as defined in the effective model. The administrator shall have the authority to determine the reach and scope of any hydraulic and hydrologic evaluation.
  7. The developer or property owner of any development project that causes an increase in the base flood elevation or a change in the geographic extent of the special flood hazard area or floodway shall be responsible for revisions to the flood insurance rate maps, which shall be approved by FEMA, in accordance with 44 CFR 70. The developer or property owner shall be responsible for preparing and

recording appropriate legal documents in which all property owners affected by the increased flood elevations or change to the geographic extent of the special flood hazard area or floodway have consented to the impacts upon their property, including development restrictions approved by the administrator. Prior to approval of any project, the developer shall provide a conditional letter of map revision (CLOMR) first to the City of Brevard for review and approval and then to North Carolina Emergency Management for review. A letter of map revision (LOMR) must be obtained and new flood insurance rate maps produced and presented to the administrator within six months of completion of the proposed encroachment. The applicant shall enter into a written agreement with the city and provide financial security that is sufficient to cover all costs associated with completion of the LOMR and FIRMs. Such agreement and security shall be provided in accordance with the improvement guarantee requirements and procedures which are set forth in [CHAPTER 16](#) of the City of Brevard [UNIFIED DEVELOPMENT ORDINANCE](#).

**F.** The administrator, for the further protection of the neighboring properties and the public welfare, may impose appropriate conditions and safeguards upon any floodplain development permit which it may grant pursuant to the provisions of this subsection. Any floodplain development permit granted may be revoked by the administrator should any conditions and safeguards imposed be violated.

**G.** Exemptions. The following projects are potentially exempt, as determined by the administrator, from the specific requirements of subsection 34-33.B, above:

1. Agricultural structures such as barns, feed-waste storage structures, greenhouses, and similar structures that are not insurable through the National Flood Insurance Program, provided that such structures comply with subsection [34-32.H](#) of this chapter.
2. Non-substantial improvements as defined in this chapter.
3. Minor projects clearly having negligible impact, such as street resurfacing and rehabilitation, certain utility infrastructure and appurtenances (e.g. hydrants, poles, manholes, underground pipes), and minor water quality features.
4. Development pursuant to approved site-specific development plans and floodplain development permits which are still in force on the effective date of this chapter are not required to meet no rise criteria unless such was previously a requirement of the approving authority.
5. Fill sufficient to permit the establishment of no more than one single-family dwelling unit on parcels the boundaries of which were on record in the Transylvania County Register of Deeds prior to the enactment of this chapter. The approving authority shall have the right to impose such conditions and make such allowances as are necessary to limit the volume of fill placed for this purpose, including but not limited to modifications to required setbacks, which are set forth in [CHAPTER 2](#) of the City of Brevard [UNIFIED DEVELOPMENT ORDINANCE](#), by as much as 20 percent in order to minimize necessary fill.
6. Stream bank, stream channel, wetland restoration, soil stabilization, or other surface water protection and restoration projects of the North Carolina Cooperative Extension Service, Transylvania County Soil and Water Conservation Service, USDA Natural Resources Conservation Service, Transylvania County, the City of Brevard, the North Carolina Forest Service, or a cooperating organization or entity. This exemption does not include the impoundment, levying, straightening or channelization of any watercourse.

**H.** The administrator shall have the right to require any proposed development project or other activity to which these exemptions may apply to provide adequate engineering to assure the goals of section 34-33 are met, up to and including if necessary demonstration of no adverse impact as in outlined in subsection 34-33.B.

#### **34-34. Standards for floodplains without established base flood elevations.**

Within the special flood hazard areas designated as approximate Zone A and established in section [34-7](#), where no base flood elevation (BFE) data has been provided by FEMA, the following provisions, in addition to the provisions of section [34-31](#), shall apply:



- A. No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of 30 feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. The BFE used in determining the regulatory flood protection elevation shall be determined based on the following criteria:
1. When base flood elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this chapter and shall be elevated or floodproofed in accordance with standards in sections 34-31 and 34-32, and shall comply with all other applicable requirements of this chapter.
  2. When floodway or non-encroachment area data is available from a federal, state, or other source, all new construction and substantial improvements within floodway areas shall also comply with the requirements of sections 34-32 and 34-36, and shall comply with all other applicable requirements of this chapter.
  3. All subdivision, manufactured home park and other development proposals shall provide base flood elevation (BFE) data if development is greater than five acres or has more than 50 lots/manufactured home sites. Such base flood elevation (BFE) data shall be adopted by reference in accordance with section 34-7 and utilized in implementing this chapter, and shall comply with all other applicable requirements of this chapter.
  4. When base flood elevation (BFE) data is not available from a federal, state, or other source as outlined above, the reference level shall be elevated or floodproofed (nonresidential) to or above the regulatory flood protection elevation, as defined in section 34-5. All other applicable provisions of section 34-32 shall also apply.

**34-35. Standards for riverine floodplains with BFE, but without established floodways or non-encroachment areas.**

Along rivers and streams where BFE data is provided by FEMA or is available from another source but neither floodway nor non-encroachment areas are identified for a special flood hazard area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

- A. Standards of sections 34-31 and 34-32; and
- B. Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community; and
- C. All other applicable requirements of this chapter.

**34-36. Floodways and non-encroachment areas.**

Areas designated as floodways or non-encroachment areas are located within the special flood hazard areas established in section 34-7. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in sections 34-31 and 34-32, shall apply to all development within such areas:

- A. No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:
1. It is demonstrated that the proposed encroachment would not result in any increase ("no rise" as defined in this chapter) in the flood levels during the occurrence of the base flood discharge, based on hydrologic and hydraulic analyses performed in

accordance with standard engineering practice and presented to the administrator prior to issuance of floodplain development permit;

2. A no adverse impact certification can be attained pursuant to section 34-33 of this chapter; and

3. The developer or property owner of any development project that causes an increase in the base flood elevation or a change in the geographic extent of the special flood hazard area or floodway shall be responsible for revisions to the flood insurance rate maps, which shall be approved by FEMA, in accordance with 44 CFR 70. The developer or property owner shall be responsible for preparing and recording appropriate legal documents in which all property owners affected by the increased flood elevations or change to the geographic extent of the special flood hazard area or floodway have consented to the impacts upon their property, including development restrictions approved by the administrator. Prior to approval of any project, the developer shall provide a conditional letter of map revision (CLOMR) first to the City of Brevard for review and approval and then to North Carolina Emergency Management for review. A letter of map revision (LOMR) must be obtained and new flood insurance rate maps produced and presented to the administrator within six months of completion of the proposed encroachment. The applicant shall enter into a written agreement with the city and provide financial security that is sufficient to cover all costs associated with completion of the LOMR and FIRMs. Such agreement and security shall be provided in accordance with the improvement guarantee requirements and procedures which are set forth in CHAPTER 16 of the City of Brevard UNIFIED DEVELOPMENT ORDINANCE.

B. Floodway development activities shall be limited to critical transportation or pedestrian infrastructure for which there is no other feasible location, utility installations or other public improvements for which there is no other feasible location, channel crossings necessary for property access for which there is no other feasible location, and stream bank, stream channel, or wetland restoration, soil stabilization, or other surface water protection and restoration projects of the North Carolina Cooperative Extension Service, Transylvania County Soil and Water Conservation Service, USDA Natural Resources Conservation Service, Transylvania County, the City of Brevard, the North Carolina Forest Service, or a cooperating organization or entity approved by the administrator. No fill or other development activity shall be permitted within the floodway.

C. If subsection 34-36.A is satisfied, all development shall comply with all other applicable flood hazard reduction provisions of this chapter.

D. No manufactured homes shall be permitted in floodways or non-encroachment areas, except replacement manufactured homes in an existing manufactured home park or subdivision, provided the following provisions are met:

1. The anchoring and the elevation standards of subsection 34-32.C; and

2. The no encroachment standard of subsection 34-36.A.

**34-38—34-40. Reserved.**

#### **ARTICLE IV. LEGAL STATUS PROVISIONS**

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##### **34-41. Effect on rights and liabilities under the existing flood prevention ordinance.**

This ordinance in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted September 17, 1978 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any enforcement action, or any suit or proceeding instituted or pending, or otherwise cure any existing violations. All provisions of the flood damage prevention ordinance of the City of Brevard enacted on September 17, 1978, as amended, which are not reenacted herein are repealed. The date of the initial Flood Damage Prevention Ordinance for Transylvania County is January 2, 1980.

##### **34-42. Effect upon outstanding floodplain development permits.**

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a floodplain development permit has been granted by the administrator or his or her authorized agents before the time passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

**34-43. Severability.**

If any section, clause, sentence, or phrase of the ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this ordinance.

**34-44. Effective date.**

This ordinance shall become effective November 20, 2023.

**34-45. Adoption certification.**

I hereby certify that this is a true and correct copy of the flood damage prevention ordinance as adopted by the Brevard City Council, State of North Carolina, on this the 20<sup>th</sup> day of November, 2023.

## **STAFF REPORT**

**City Council, Monday, November 20, 2023**

**Title:** Times Arcade Alley - Authorize City Manager to Award Contract

**Speaker:** Paul Ray, Planning Director

**Prepared by:** Paul Ray, Planning Director

**Approved by:** Wilson Hooper, City Manager

### **Background**

The Times Arcade Alley stormwater improvement and streetscape enhancement project will renovate stormwater infrastructure beneath the alley, build decorative bumpouts adjacent to the alley on Main and Jordan streets, and create a small pocket park at the Main St. entrance to the alley. This project was envisioned as part of the Downtown Master Plan.

The project was originally coupled with the Main St. Streetscape Improvements project, but was separated last year when bids for the combined project came in too high and alley businesses complained that construction during the spring/summer season would disrupt their business.

### **Discussion**

At our request the City's engineering firm, Arbor Engineering, drew up amended plans for a standalone project. The new plan had one notable change from the original plan that has been shared with Council prior. In the new plan the surface of the alley will be finished in concrete rather than asphalt. This change would enable the construction to be performed in phases and permit part of the alley to remain open at all times during construction. It's also a more durable surface. The solicitation also asked bidders to quote the cost of a few optional extras, discussed more below.

The solicitation was posted in September 2023. A bid opening was held on November 2, 2023. One bid was received. Since state law requires three bids, the bid was not opened and the solicitation was reposted. A second bid opening was held on November 13. Here, two bids were received. State law permits bids to be opened if less than three are received after the readvertisement period.

The "apparent low bidder" -so named because the bid must be reviewed to make sure it comports with the requirements in the solicitation- was by Tennoca Construction out of Candler, NC. Their base bid of \$1,011,670 was reviewed by Arbor Engineering and deemed to be responsive.

In addition to the base price, the bid includes costs for a number of voluntary extras:

- Alt 1A - Brick Column & Sign @ Times Arcade Alley entrance - \$22,000

- Alt 1B - Brick Column, Sign & Archway @ Main St./Times Arcade - \$30,000
- Alt 1C - Archway @ Jordan St./Times Arcade - \$9,200
- Alt 2 - Repaving Platt-owned Times Arcade parking lot - \$39,000 (to be reimbursed by Platt Architecture)
- Alt E1 - Food Truck receptacle pedestals - \$2,400
- Alt E2 - Holiday Lights receptacle pedestals - \$18,000

Staff may also wish to forego any extras and leave \$70,333 available as a contingency.

### **Fiscal Impact**

The project has three primary funding sources:

- A \$700,000 grant from NC DEQ for stormwater infrastructure improvements. This grant was awarded in 2022 and originally split between two project. The state confirmed in June 2023 that the entirety of the grant can be spent on Times Arcade Alley.
- A \$250,000 GoldenLEAF "Flood Mitigation Grant." This grant was awarded in August 2023
- The City of Brevard's "penny for downtown". More specifically, the \$132,000 General Fund appropriation to the Downtown Master Plan. This cost of any voluntary extras may not exceed this amount.

### **Action**

Select which extra features to include (if any), and approve a resolution awarding the contract to Tennoca Construction in the amount of \$1,xxx,xxx (depending on which extras are included) and authorizing the City Manager to execute the agreement.

### **Attachments:**

1. TIMES ARCADE - AWARD RECOMMENDATION
2. Draft Resolution re Times Arcade Alley contract
3. Times Arcade - Construction Plans



**Date:** November 16, 2023

**To:** City of Brevard  
Paul Ray  
Planning Director  
95 W. Main Street  
Brevard, NC 28712

**Regarding:** Times Arcade Streetscape  
Brevard, NC  
Arbor Job No. 21501

Mr. Ray,

Arbor Land Design has reviewed the Times Arcade Streetscape bids received on November 13, 2023, for completeness and the stated award criteria. It is the recommendation of Arbor Land Design to award the contract for Main Street Streetscape to Tennoca Construction Co. Their bid was the lowest responsible bid received in the amount of \$1,011,670.00, and they meet all award criteria stated in the project manual.

Attached to this recommendation is a bid tabulation sheet that provides information on all bids received.

If you should have any questions, please let me know.

Sincerely,

Jason Smit  
ARBOR LAND DESIGN

## BID TABULATION SHEET

Date: November 13, 2023, 2:00 pm  
 Location: Brevard City Hall at 95 W. Main St. Brevard, NC 28712  
 Project: Main Street Streetscape  
 Project #: 21501

CERTIFIED TRUE & CORRECT BY:

Engineer Representative: *Jason Smit*  
 City Representative: *Denise Hodsdon*, City Clerk

|                                                                                                                                    |                                                                                             |                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Contractor: <u><i>Tenoca Construction Co</i></u><br>Addendum Acknowledgement: <u><i>n/a</i></u><br>Bid Security: <u><i>✓</i></u>   | Base Bid: <u><i>\$1,011,670.00</i></u><br><br>Add Alternate #1: <u><i>A: \$22,000</i></u>   | Alt# 1B: <i>\$39,000.00</i><br>1C: <i>\$9,200.00</i><br>2: <i>\$39,000.00</i><br>E1: <i>\$2,400.00</i><br>E2: <i>\$18,000.00</i>  |
| Contractor: <u><i>Sossamon Construction Co</i></u><br>Addendum Acknowledgement: <u><i>n/a</i></u><br>Bid Security: <u><i>✓</i></u> | Base Bid: <u><i>\$2,107,380.00</i></u><br><br>Add Alternate #1: <u><i>A \$65,765.00</i></u> | Alt 1B: <i>\$98,573.00</i><br>1C: <i>\$21,209.00</i><br>2: <i>\$40,906.00</i><br>E1: <i>\$38,920.00</i><br>E2: <i>\$22,240.00</i> |
| Contractor: _____<br>Addendum Acknowledgement: _____<br>Bid Security: _____                                                        | Base Bid: _____<br><br>Add Alternate #1: _____                                              |                                                                                                                                   |
| Contractor: _____<br>Addendum Acknowledgement: _____<br>Bid Security: _____                                                        | Base Bid: _____<br><br>Add Alternate #1: _____                                              |                                                                                                                                   |



**RESOLUTION NO. 2023-XX**

**RESOLUTION AWARDING CONTRACT TO TENNOCA CONSTRUCTION FOR TIMES  
ARCADE ALLEY STORMWATER AND STREETScape PROJECT**

**WHEREAS**, the City of Brevard Downtown Master Plan calls for stormwater improvements and streetscape improvements in and around Times Arcade Alley;

**WHEREAS**, the City has secured several outside funding sources to fund the project;

**WHEREAS**, the City's consulting engineering firm, Arbor Land Design, conducted a competitive bidding process for the Times Arcade Alley Stormwater and Streetscape Project and Tennoca Construction submitted the lowest responsive bid;

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF BREVARD,  
NORTH CAROLINA THAT:**

A contract for \$1,xxx,xxx for Times Arcade Alley Stormwater and Streetscape Project is hereby awarded to Tennoca Construction, which the City Manager (or his designee) is hereby authorized to execute.

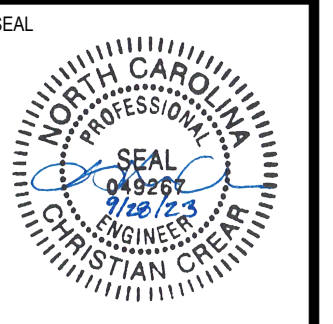
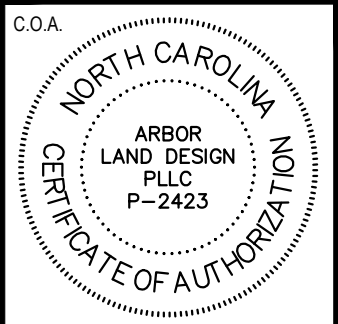
Approved and adopted this \_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
Maureen Copelof  
Mayor

ATTEST:

\_\_\_\_\_  
Denise Hodsdon, CMC  
City Clerk

TRANSYLVANIA COUNTY, NC  
ARPA PROJECT NUMBER: SRP-SW-ARP-0009  
ARPA PROJECT NAME: TIMES ARCADE ALLEY STORMWATER IMPROVEMENTS

[illegible][illegible]

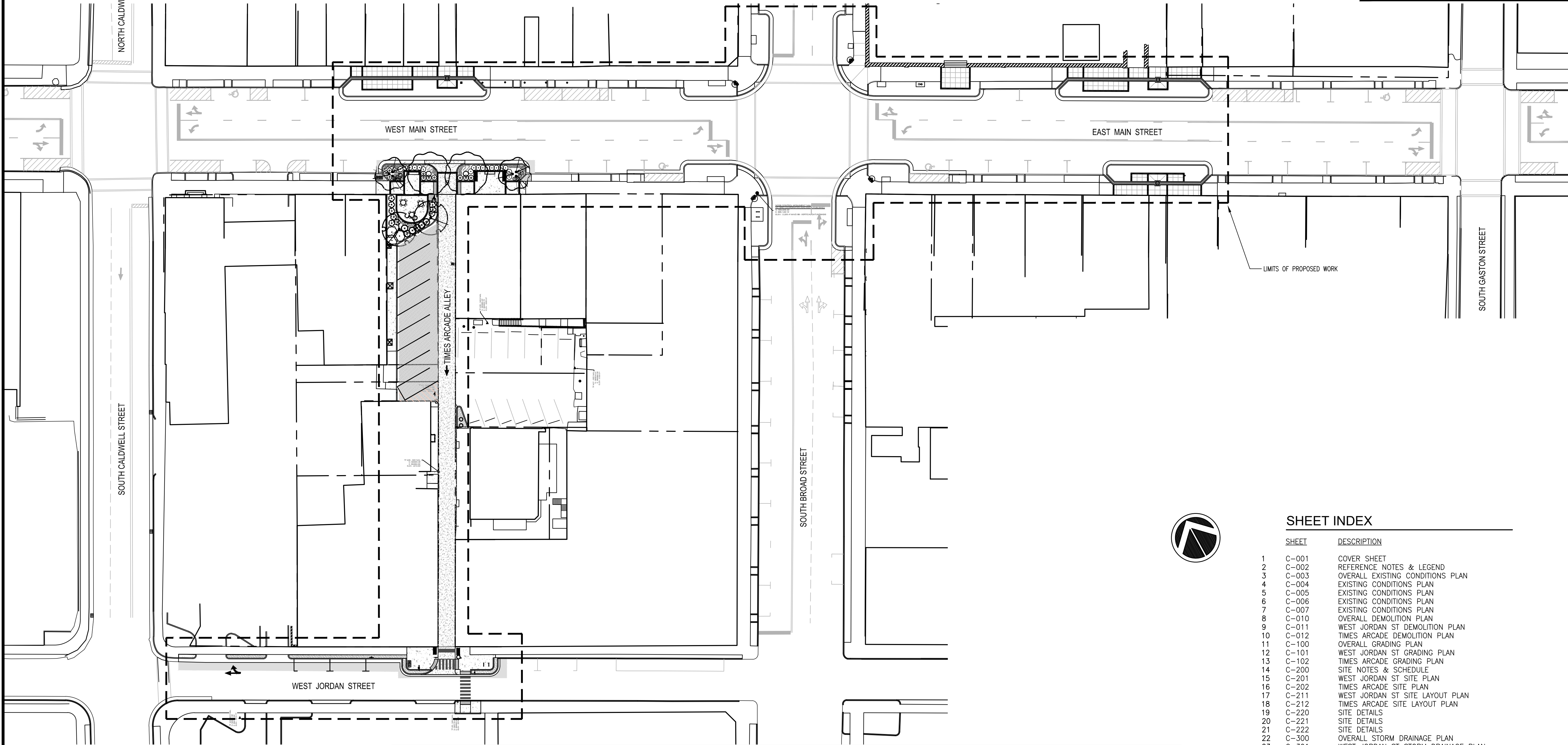
## BREVARD NORTH CAROLINA

|               |     |                   |         |
|---------------|-----|-------------------|---------|
| DRAWN:        | JRS | DATE:             | 9/28/23 |
| DESIGN:       | JRS | HORIZONTAL SCALE: | 1"=100' |
| APPROVED:     | CAC | VERTICAL SCALE:   | -       |
| GRAPHIC SCALE |     |                   |         |

JOB NO. 21501

|                                                                                              |                                                                                                |
|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| DRAWING NO.<br><div style="font-size: 2em; font-weight: bold; margin-top: 10px;">C-001</div> | SHEET NO.<br><div style="font-size: 1.5em; font-weight: bold; margin-top: 10px;">1 OF 41</div> |
|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|

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| <u>SHEET</u> | <u>DESCRIPTION</u> |
|--------------|--------------------|
|--------------|--------------------|

|    |        |                                        |
|----|--------|----------------------------------------|
| 1  | C-001  | COVER SHEET                            |
| 2  | C-002  | REFERENCE NOTES & LEGEND               |
| 3  | C-003  | OVERALL EXISTING CONDITIONS PLAN       |
| 4  | C-004  | EXISTING CONDITIONS PLAN               |
| 5  | C-005  | EXISTING CONDITIONS PLAN               |
| 6  | C-006  | EXISTING CONDITIONS PLAN               |
| 7  | C-007  | EXISTING CONDITIONS PLAN               |
| 8  | C-010  | OVERALL DEMOLITION PLAN                |
| 9  | C-011  | WEST JORDAN ST DEMOLITION PLAN         |
| 10 | C-012  | TIMES ARCADE DEMOLITION PLAN           |
| 11 | C-100  | OVERALL GRADING PLAN                   |
| 12 | C-101  | WEST JORDAN ST GRADING PLAN            |
| 13 | C-102  | TIMES ARCADE GRADING PLAN              |
| 14 | C-200  | SITE NOTES & SCHEDULE                  |
| 15 | C-201  | WEST JORDAN ST SITE PLAN               |
| 16 | C-202  | TIMES ARCADE SITE PLAN                 |
| 17 | C-211  | WEST JORDAN ST SITE LAYOUT PLAN        |
| 18 | C-212  | TIMES ARCADE SITE LAYOUT PLAN          |
| 19 | C-220  | SITE DETAILS                           |
| 20 | C-221  | SITE DETAILS                           |
| 21 | C-222  | SITE DETAILS                           |
| 22 | C-300  | OVERALL STORM DRAINAGE PLAN            |
| 23 | C-301  | WEST JORDAN ST STORM DRAINAGE PLAN     |
| 24 | C-302  | TIMES ARCADE STORM DRAINAGE PLAN       |
| 25 | C-310  | STORM DRAINAGE DETAILS                 |
| 26 | C-311  | EROSION CONTROL DETAILS                |
| 27 | C-400  | OVERALL UTILITIES PLAN                 |
| 28 | C-401  | WEST JORDAN ST UTILITIES PLAN          |
| 29 | C-402  | TIMES ARCADE UTILITIES PLAN            |
| 30 | C-410  | UTILITY DETAILS                        |
| 31 | C-501  | WEST JORDAN ST STRIPING & SIGNAGE PLAN |
| 32 | C-502  | TIMES ARCADE STRIPING & SIGNAGE PLAN   |
| 33 | L-100  | OVERALL LANDSCAPE PLAN                 |
| 34 | L-101  | TIMES ARCADE LANDSCAPE PLAN            |
| 35 | L-120  | LANDSCAPE NOTES & DETAILS              |
| 36 | E-001  | ELECTRICAL LEGEND AND SCHEDULES        |
| 37 | E-002  | ELECTRICAL LEGEND AND SCHEDULES        |
| 38 | ED-101 | OVERALL DEMOLITION PLAN                |
| 39 | E-101  | ELECTRICAL LIGHTING AND POWER PLAN     |
| 40 | E-102  | ELECTRICAL LIGHTING AND POWER PLAN     |
| 41 | E-103  | ELECTRICAL LIGHTING AND POWER PLAN     |

**OWNER CONTACT:**  
Paul C. Ray  
Planning Director  
City of Brevard Planning Department  
95 W. Main Street  
Brevard, NC 28712  
828-885-5630

**CIVIL ENGINEERING /  
LANDSCAPE ARCHITECTURE**  
Arbor Land Design  
49 Greenland Drive  
Greenville, SC 29615  
864-235-3589

**ELECTRICAL ENGINEERING**  
Burdette Engineering  
200 Regent Park Court  
Greenville, SC 29607  
864-297-8717

UTILITIES:  
GAS: Dominion Energy  
Brad Sharp  
828-674-4256

POWER: Duke Energy  
Bob Mabry  
828-698-2055

SANITARY SEWER: City of Brevard  
Wesley Shook  
828-533-3842

TELECOMMUNICATIONS: Comporium  
Jimmy Aldridge  
828-883-6451

WATER: City of Brevard  
Wesley Shook  
828-533-3842



CONTRACTOR SHALL BE RESPONSIBLE  
FOR PERFORMANCE OF ALL DISCIPLINES  
NEEDED TO COMPLETE THIS PROJECT.



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REFERENCE NOTES SCHEDULE

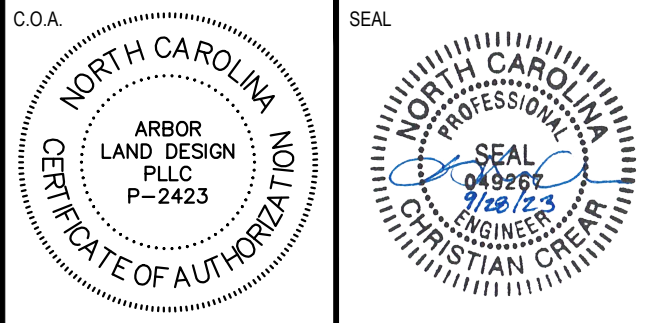
| SYMBOL   | DEMOLITION<br>DESCRIPTION                                                                                                                                                                                                                                                                                                                 | QTY      | DETAIL   |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
| 02-40-01 | Existing concrete pavement to be sawcut & removed                                                                                                                                                                                                                                                                                         | 1,424 sf |          |
| 02-40-02 | Existing asphalt pavement to be sawcut & removed                                                                                                                                                                                                                                                                                          | 8,392 sf |          |
| 02-40-03 | Existing concrete curb & gutter to be sawcut & removed                                                                                                                                                                                                                                                                                    | 282 lf   |          |
| 02-40-04 | Existing fence to be removed                                                                                                                                                                                                                                                                                                              | 26 lf    |          |
| 02-40-08 | Existing concrete curb to be sawcut & removed                                                                                                                                                                                                                                                                                             | 52 lf    |          |
| 02-40-11 | Existing brick pavers to be removed & stored for reuse                                                                                                                                                                                                                                                                                    | 316 sf   |          |
| 02-40-12 | Existing stone pavement to be removed                                                                                                                                                                                                                                                                                                     | 110 sf   |          |
| 02-40-16 | Existing sanitary sewer to be removed                                                                                                                                                                                                                                                                                                     | 91 lf    |          |
| SYMBOL   | SIGNAGE<br>DESCRIPTION                                                                                                                                                                                                                                                                                                                    | QTY      | DETAIL   |
| 10-14-01 | Traffic sign; see plan for type. Mounted on 3" square smooth black steel post, Item #OPOS3S1014BKP0 from CPC Signs (www.cpcsigns.com) or approved equal. With 3" x 3" Ball Cap Finial, black finish, Item #FN-1033 from Signature Streetscapes (www.signaturestreetscapes.com) or approved equal. Mount w/ NCDOT approved breakaway base. | 6        |          |
| 10-14-03 | New wayfinding sign                                                                                                                                                                                                                                                                                                                       | 2        | 2/C-222  |
| SYMBOL   | SITE FURNISHINGS<br>DESCRIPTION                                                                                                                                                                                                                                                                                                           | QTY      | DETAIL   |
| 12-93-01 | Existing metal bench to be relocated                                                                                                                                                                                                                                                                                                      | 2        |          |
| 12-93-02 | Existing metal table & chairs relocated from North Alley                                                                                                                                                                                                                                                                                  | 3        |          |
| 12-93-03 | Planter; relocate existing from Main St                                                                                                                                                                                                                                                                                                   | 3        |          |
| 12-93-04 | New metal bench; 6' Black Roll Formed Diamond Bench by Leisure Craft, Inc.; or approved equal. Include cutout for donor plaque; Plaque to be provided by City of Brevard.                                                                                                                                                                 | 2        |          |
| 12-93-05 | Bike rack; U shaped surface mount rack to match existing                                                                                                                                                                                                                                                                                  | 2        |          |
| 12-93-06 | New metal bench; 4' Black Roll Formed Diamond Bench by Leisure Craft, Inc.; or approved equal.                                                                                                                                                                                                                                            | 2        |          |
| 12-93-10 | Existing trash/recycling receptacle pair to be reused                                                                                                                                                                                                                                                                                     | 1        |          |
| 12-93-13 | Trash/Recycling receptacle pair; by Leisure Craft model #PTRD32D or approved equal; Black trash / Blue recycle; personalized with City of Brevard logo; to match existing                                                                                                                                                                 | 1        |          |
| SYMBOL   | ASPHALT PAVING<br>DESCRIPTION                                                                                                                                                                                                                                                                                                             | QTY      | DETAIL   |
| 32-12-01 | Heavy duty asphalt paving; match grade of adjacent gutter and existing asphalt pavement                                                                                                                                                                                                                                                   | 764 sf   | 7/C-220  |
| 32-12-02 | Standard duty asphalt paving                                                                                                                                                                                                                                                                                                              | 2,251 sf | 4/C-222  |
| SYMBOL   | CONCRETE PAVING<br>DESCRIPTION                                                                                                                                                                                                                                                                                                            | QTY      | DETAIL   |
| 32-13-02 | Concrete walk                                                                                                                                                                                                                                                                                                                             | 1,986 sf | 1/C-220  |
| 32-13-03 | Heavy duty concrete paving                                                                                                                                                                                                                                                                                                                | 3,123 sf | 5/C-220  |
| SYMBOL   | UNIT PAVING<br>DESCRIPTION                                                                                                                                                                                                                                                                                                                | QTY      | DETAIL   |
| 32-14-04 | Brick pavers to match existing on Main Street; herringbone pattern. Existing pavers removed during demolition to first be used in areas where new paver abut existing pavers.                                                                                                                                                             | 356 sf   | 9/C-220  |
| 32-14-05 | Mortared brick paver band; Pathway 4x8 Full Range clay brick paver by Pine Hall Brick; or approved equal; provide sample before ordering                                                                                                                                                                                                  | 233 lf   | 10/C-220 |
| SYMBOL   | CURBS AND GUTTERS<br>DESCRIPTION                                                                                                                                                                                                                                                                                                          | QTY      | DETAIL   |
| 32-16-01 | 2'-6" Concrete curb & gutter                                                                                                                                                                                                                                                                                                              | 199 lf   | 4/C-220  |
| 32-16-02 | 6" concrete curb                                                                                                                                                                                                                                                                                                                          | 88 lf    | 6/C-220  |
| 32-16-03 | 6"x12" concrete band                                                                                                                                                                                                                                                                                                                      | 11 lf    | 9/C-220  |
| 32-16-05 | 1'-6" Concrete curb & gutter                                                                                                                                                                                                                                                                                                              | 164 lf   | 3/C-220  |
| SYMBOL   | PAVING SPECIALTIES<br>DESCRIPTION                                                                                                                                                                                                                                                                                                         | QTY      | DETAIL   |
| 32-17-02 | Detectable Warning Plates by ADA Solutions or approved equal. Cast-In-Place (Wet Set) Replaceable Panel; red color to match existing @ Main/Broad intersection; install per manufacturer's instructions; www.adatile.com                                                                                                                  | 79 sf    |          |
| 32-17-03 | Painted pavement marking; 4" solid white line                                                                                                                                                                                                                                                                                             | 238 lf   |          |
| 32-17-07 | Painted pavement marking; 12" wide white crosswalk striping @ 24" O.C.                                                                                                                                                                                                                                                                    | 74 lf    |          |
| 32-17-11 | Painted hatching; 8" wide white diagonal stripe @ 36" o.c.                                                                                                                                                                                                                                                                                | 141 sf   |          |
| 32-17-12 | Painted pavement marking; 24" wide white stop bar                                                                                                                                                                                                                                                                                         | 10 lf    |          |
| SYMBOL   | IRRIGATION<br>DESCRIPTION                                                                                                                                                                                                                                                                                                                 | QTY      | DETAIL   |
| 32-84-01 | 6" Schedule 40 PVC sleeve, white; locations to be coordinated with electrical conduit routing & combined in the same trench where crossing streets.                                                                                                                                                                                       | 27 lf    | 11/C-220 |
| SYMBOL   | 33 UTILITIES<br>DESCRIPTION                                                                                                                                                                                                                                                                                                               | QTY      | DETAIL   |
| 33-01-07 | Utilities Trench. Contractor to provide open and closure of trench for new Duke & Comporium lines. Coordinate with Duke Energy and Comporium Energy for detailed routing.                                                                                                                                                                 | 417 lf   |          |

LEGEND

|  |                                        |
|--|----------------------------------------|
|  | DMH/IB - DROP MANHOLE/JUNCTION BOX     |
|  | EXCI - EXISTING CURB INLET             |
|  | CI - CURB INLET                        |
|  | GI - GRATE INLET                       |
|  | TD - TRENCH DRAIN                      |
|  | EXISTING STORM DRAIN LINE              |
|  | PROPOSED STORM DRAIN LINE              |
|  | PROPOSED ROOF DRAIN LINE               |
|  | PROPOSED TRENCH DRAIN PIPE             |
|  | DRAINAGE AREA LINES                    |
|  | TEMPORARY INLET PROTECTION             |
|  | EXISTING CONTOUR                       |
|  | PROPOSED CONTOUR                       |
|  | PROPOSED SPOT ELEVATION                |
|  | EX. WATER LINE                         |
|  | EX. WATER METER                        |
|  | PROPOSED WATER SERVICE                 |
|  | WATER VALVE                            |
|  | EX. SANITARY SEWER MANHOLE             |
|  | EX. SANITARY SEWER LINE                |
|  | PROPOSED SANITARY SEWER MANHOLE        |
|  | PROPOSED SANITARY SEWER LINE           |
|  | PROPOSED 6" SANITARY SEWER SERVICE     |
|  | FLOW ARROW                             |
|  | EXISTING UNDERGROUND FIBER OPTIC CABLE |
|  | EXISTING GAS LINE                      |
|  | EXISTING OVERHEAD UTILITY              |
|  | EXISTING UNDERGROUND ELECTRIC          |
|  | UTILITIES TRENCH                       |
|  | LIMITS OF CONSTRUCTION                 |
|  | HEAVY-DUTY CONCRETE PAVING             |
|  | STANDARD-DUTY ASPHALT PAVING           |
|  | HEAVY-DUTY ASPHALT PAVING              |

LIST OF ALTERNATES

| #  | ITEM                                                                                                                                                               | DRAWING #               |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1A | BRICK COLUMN & ATTACHED WAYFINDING SIGN @ TIMES ARCADE & W. MAIN ST.; DEDUCT 1 POST MOUNTED WAYFINDING SIGN INCLUDED IN BASE BID AT THIS LOCATION.                 | C-202<br>C-222          |
| 1B | BRICK COLUMN, ATTACHED WAYFINDING SIGN, & METAL ARCHWAY @ TIMES ARCADE & W. MAIN ST.; DEDUCT 1 POST MOUNTED WAYFINDING SIGN INCLUDED IN BASE BID AT THIS LOCATION. | C-202<br>C-222<br>C-223 |
| 1C | METAL ARCHWAY @ TIMES ARCADE & W. JORDAN ST                                                                                                                        | C-201<br>C-223          |
| 2  | REPAVE & RESTRIPE EXISTING PARKING LOT                                                                                                                             | C-202                   |
| E1 | FOOD TRUCK RECEPTACLE PEDESTALS ON MAIN ST.                                                                                                                        | E-002                   |
| E2 | RECEPTACLE PEDESTALS FOR HOLIDAY LIGHTS                                                                                                                            | E-002                   |



REVISIONS

| NO. | DATE    | DESCRIPTION                      | BY  |
|-----|---------|----------------------------------|-----|
| 1   | 8/25/23 | ISSUED FOR CITY & FUNDING REVIEW | CAC |
| 2   | 9/28/23 | ISSUED FOR BID                   | CAC |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |

LEGEND

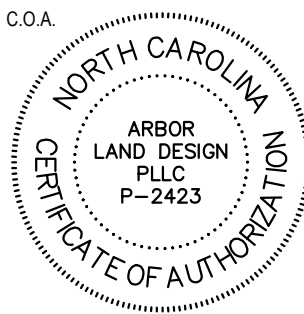
TIMES ARCADE  
STREETSCAPE

BREVARD NORTH CAROLINA

REFERENCE  
NOTES & LEGEND

|                   |     |                   |         |
|-------------------|-----|-------------------|---------|
| DRAWN:            | JRS | DATE:             | 9/28/23 |
| DESIGN:           | JRS | HORIZONTAL SCALE: |         |
| APPROVED:         | CAC | VERTICAL SCALE:   | -       |
| GRAPHIC SCALE     |     |                   |         |
| JOB NO. 21501     |     |                   |         |
| DRAWING NO. C-002 |     | SHEET NO. 2 OF 41 |         |





## LEGEND

## STREETSCAPE

BREVARD

NORTH CAROLINA

# OVERALL EXISTING CONDITIONS PLAN

JOB NO. 21501

DRAWING NO.

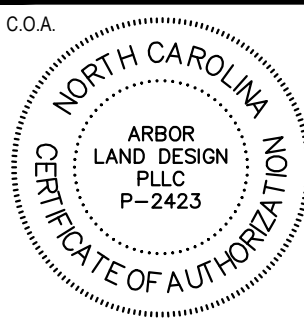
21501

C-003

SHEET NO.

3 OF 41



[illegible]

### LEGEND

**TIMES ARCADE**  
STREETSCAPE

BREVARD NORTH CAROLINA

# EXISTING CONDITIONS PLAN

|           |     |                   |        |
|-----------|-----|-------------------|--------|
| DRAWN:    | JRS | DATE:             | 9/28/2 |
| DESIGN:   | JRS | HORIZONTAL SCALE: | 1"=10' |
| APPROVED: | CAC | VERTICAL SCALE:   |        |



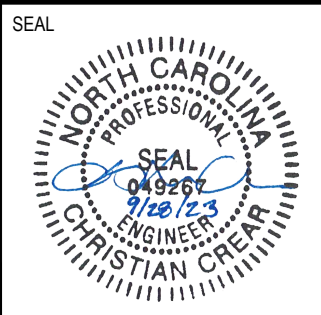
JOB NO. 21501

DRAWING NO.

C-004

Page 161 of 198





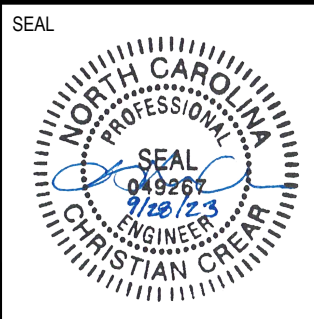
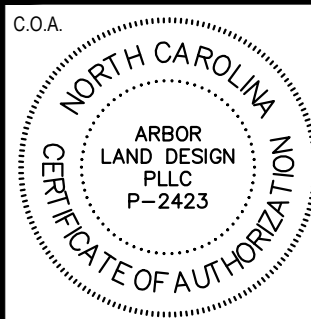
| NO. | DATE    | DESCRIPTION                      | BY  |
|-----|---------|----------------------------------|-----|
| 1   | 8/25/23 | ISSUED FOR CITY & FUNDING REVIEW | CAC |
| 2   | 9/28/23 | ISSUED FOR BID                   | CAC |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |

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|             |           |
|-------------|-----------|
| DRAWING NO. | SHEET NO. |
| C-005       | 5 OF 41   |







### LEGEND

**TIMES ARCADE**  
STREETSCAPE

## STREETSCAPE

BREVARD

NORTH CAROLINA

## EXISTING CONDITIONS PLAN

GRAPHIC SCALE  
0 20 40 60 feet  
1" = 20'

JOB NC

21501

DRAWING NO.

C-006

SHEET NO.

6 OF 41



[illegible]

## STREETSCAPE

|                             |                             |
|-----------------------------|-----------------------------|
| DRAWING NO.<br><b>C-007</b> | SHEET NO.<br><b>7 OF 41</b> |
|-----------------------------|-----------------------------|



**Know what's below.  
Call before you dig.**

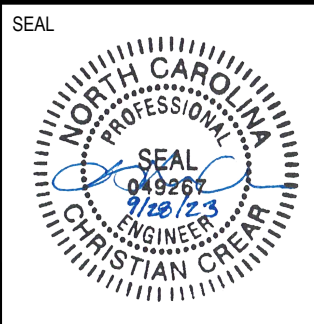
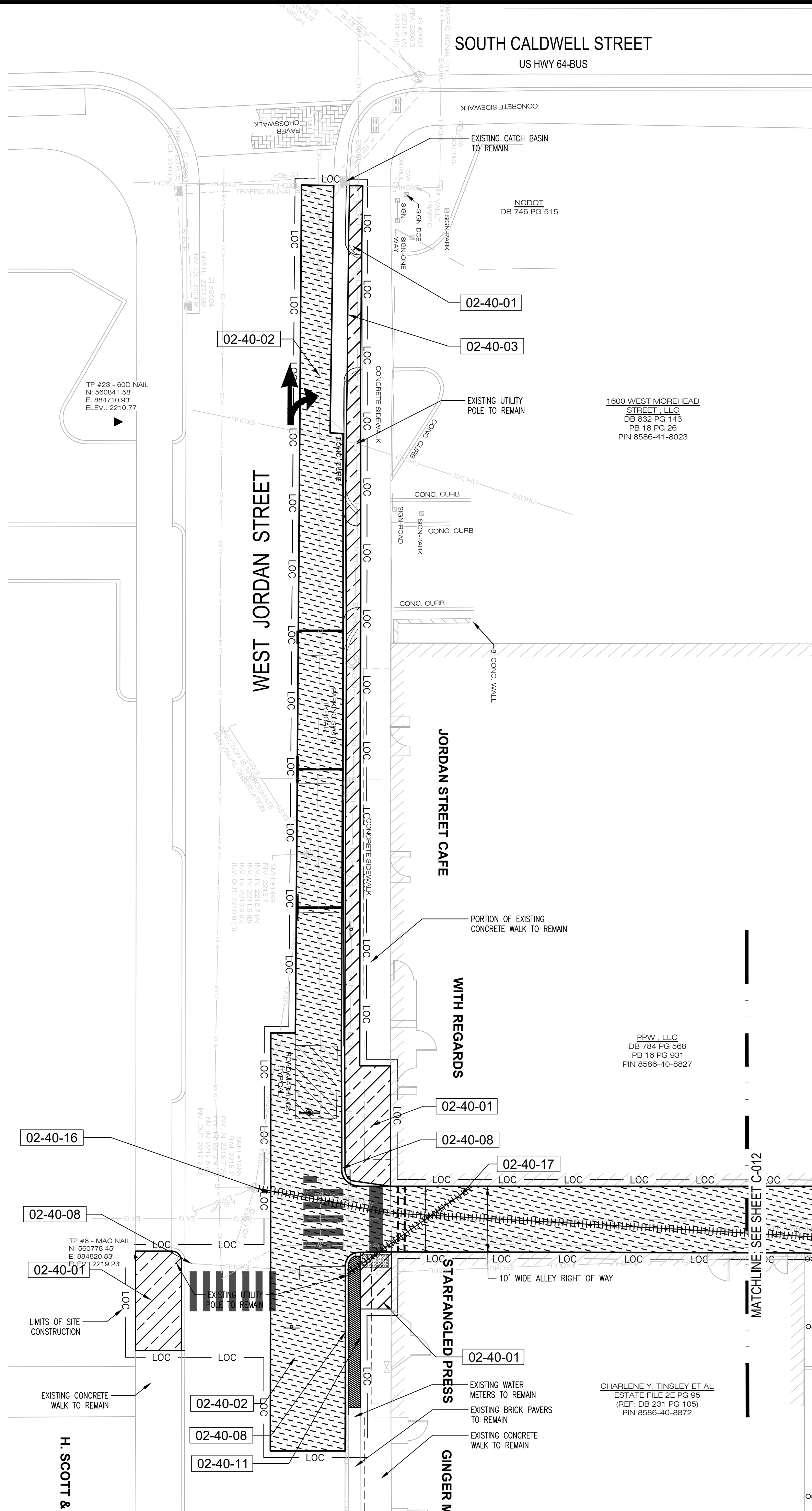






DEMOLITION NOTES:

1. ALL EXISTING UTILITY LINES AND APPURTENANCES TO REMAIN UNLESS OTHERWISE NOTED.
2. CONTRACTOR RESPONSIBLE FOR PROTECTING ALL BUILDING AWNINGS IN AREA OF WORK.

[illegible]

## STREETSCAPE

NORTH CAROLINA

GRAPHIC SCALE

0 10 20 30 feet

1" = 10'

21501

SHEET NO.

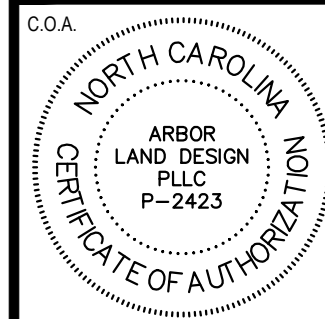
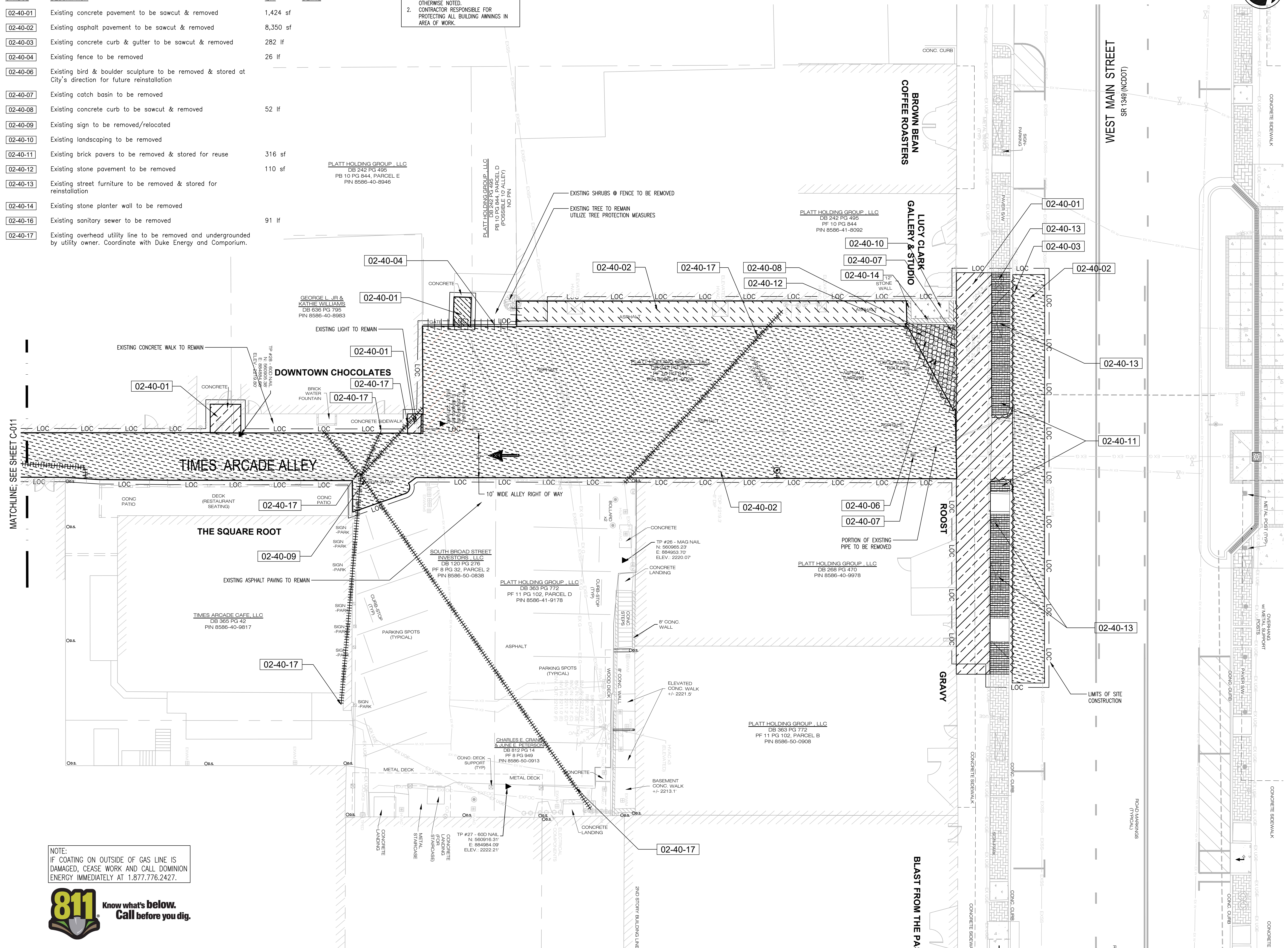
C-011

9 OF 41



| <u>SYMBOL</u> | <u>DESCRIPTION</u>                                                                                     | <u>QTY</u> | <u>DETAIL</u> |
|---------------|--------------------------------------------------------------------------------------------------------|------------|---------------|
| 02-40-01      | Existing concrete pavement to be sawcut & removed                                                      | 1,424 sf   |               |
| 02-40-02      | Existing asphalt pavement to be sawcut & removed                                                       | 8,350 sf   |               |
| 02-40-03      | Existing concrete curb & gutter to be sawcut & removed                                                 | 282 lf     |               |
| 02-40-04      | Existing fence to be removed                                                                           | 26 lf      |               |
| 02-40-06      | Existing bird & boulder sculpture to be removed & stored at City's direction for future reinstallation |            |               |
| 02-40-07      | Existing catch basin to be removed                                                                     |            |               |
| 02-40-08      | Existing concrete curb to be sawcut & removed                                                          | 52 lf      |               |
| 02-40-09      | Existing sign to be removed/relocated                                                                  |            |               |
| 02-40-10      | Existing landscaping to be removed                                                                     |            |               |
| 02-40-11      | Existing brick pavers to be removed & stored for reuse                                                 | 316 sf     |               |
| 02-40-12      | Existing stone pavement to be removed                                                                  | 110 sf     |               |
| 02-40-13      | Existing street furniture to be removed & stored for reinstallation                                    |            |               |
| 02-40-14      | Existing stone planter wall to be removed                                                              |            |               |
| 02-40-16      | Existing sanitary sewer to be removed                                                                  | 91 lf      |               |
| 02-40-17      | Existing overhead utility line to be removed and undergrounded                                         |            |               |

|                                                                                   |
|-----------------------------------------------------------------------------------|
| DEMOLITION NOTES:                                                                 |
| 1. ALL EXISTING UTILITY LINES AND APPURTENANCES TO REMAIN UNLESS OTHERWISE NOTED. |
| 2. CONTRACTOR RESPONSIBLE FOR PROTECTING ALL BUILDING AWNINGS IN AREA OF WORK.    |



## REVISIONS

[illegible]

### LEGEND

**TIMES ARCADE**  
STREETSCAPE

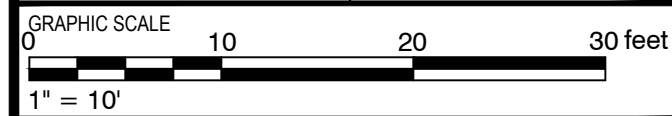
## STREETSCAPE

BREVARD

NORTH CAROLINA

# TIMES ARCADE DEMOLITION PLAN

|           |     |                   |         |
|-----------|-----|-------------------|---------|
| DRAWN:    | JRS | DATE:             | 9/28/23 |
| DESIGN:   | JRS | HORIZONTAL SCALE: | 1"=10'  |
| APPROVED: | CAC | VERTICAL SCALE:   |         |



JOB NC

21501

DRAWING NO.

C-012

SHEET NO.

10 OF 41







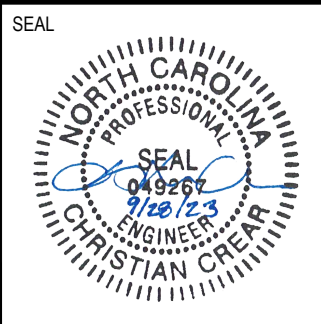
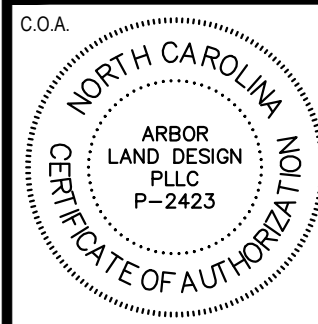
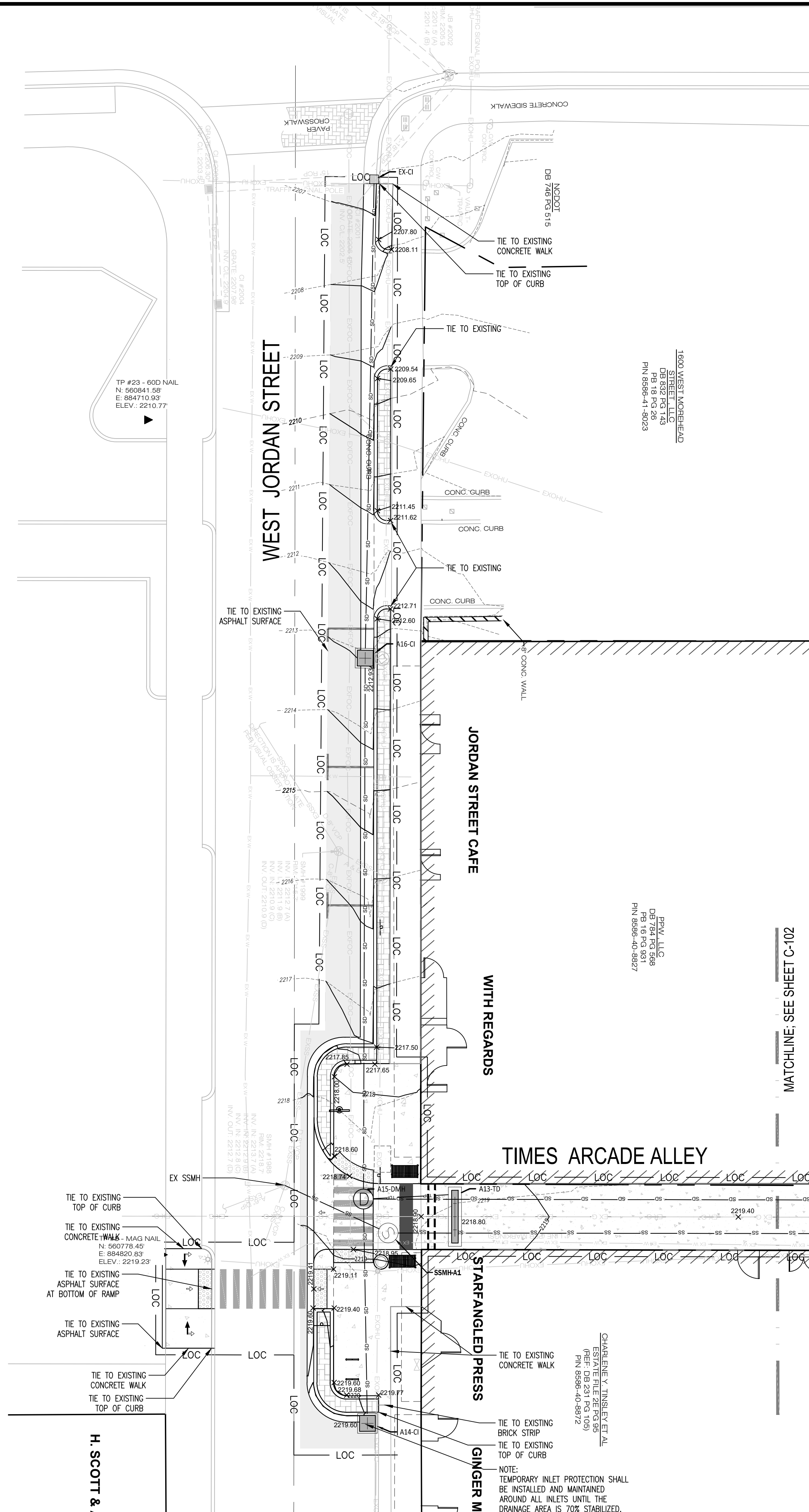
1. The Contractor shall install temporary inlet protection around all existing and proposed storm drain inlets during construction. Inlet protection shall remain in place until site is 70% stabilized.
2. Slopes greater than 3:1 shall be stabilized as necessary with synthetic or vegetative mats, in addition to grassing/hydro seeding to ensure their integrity. Temporary slope drains shall be installed as necessary along construction where said slopes exceed (8) vertical feet. Temporary berms may be needed until slope is brought to grade.
3. Silt buildup shall be removed once it has reached a depth of 1'-0" or  $\frac{1}{2}$  of the height of the control device, whichever is less.
4. Once the site has become 70% stabilized, the Contractor shall remove all temporary erosion control BMPs.
5. Temporary concrete washout facilities shall be constructed with a depression or berm and located fifty feet from storm drain inlets, open drainage facilities and watercourses.
6. All or any fill dirt or waste dirt must be to or from a permitted site.
7. Temporary sanitary facilities, (Port-a-John), shall be located on a flat surface away from drainage facilities, water courses and traffic circulation.
8. All or any fill dirt or waste dirt must be to or from a permitted site.
9. Contractor shall be responsible for removal of any excess earthwork or demolition material.
10. Stockpile locations for usable materials shall be approved by the City. The material shall be surrounded by silt fence at all times. All stockpiles shall be placed away from storm water inlet structures, adjacent property and public roads.
11. The Contractor shall be responsible for making sure all storm drain manhole lids are flush with proposed grade.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING PROPOSED CONCRETE TO EXISTING GRADE AT FACE OF BUILDING AND EXISTING SURFACES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING FINAL GRADE CONFORMS TO EXISTING STRUCTURES (e.g., MHs, MAST ARMS, ETC.) UNLESS OTHERWISE NOTED.



**Know what's below.  
Call before you dig.**

THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES.



## REVISIONS

[illegible]

### LEGEND

|                                                                                       |                                        |
|---------------------------------------------------------------------------------------|----------------------------------------|
|    | MH/JB - MANHOLE/JUNCTION BOX           |
|    | DMH/JB - DROP MANHOLE/JUNCTION BOX     |
|    | EXCI - EXISTING CURB INLET             |
|   | CI - EXISTING INLET                    |
|  | GI - GRATE INLET                       |
|  | TO - TRENCH DRAIN                      |
|  | EXISTING STORM DRAIN LINE              |
|  | PROPOSED STORM DRAIN LINE              |
|  | PROPOSED ROOF DRAIN LINE               |
|  | PROPOSED TRENCH DRAIN PIPE             |
|  | DRAINAGE AREA LINES                    |
|  | TEMPORARY INLET PROTECTION             |
|  | EXISTING CONTOUR                       |
|  | PROPOSED CONTOUR                       |
|  | PROPOSED SPOT ELEVATION                |
|  | EX. WATER LINE                         |
|  | EX. WATER METER                        |
|  | EX MN - EXISTING MANHOLE               |
|  | EX. SANITARY WATER SERVICE             |
|  | WATER VALVE                            |
|  | EX. SANITARY SEWER MANHOLE             |
|  | EX. SANITARY SEWER LINE                |
|  | PROPOSED SANITARY SEWER MANHOLE        |
|  | PROPOSED SANITARY SEWER LINE           |
|  | PROPOSED 6" SANITARY SEWER SERVICE     |
|  | FLOW ARROW                             |
|  | EXISTING UNDERGROUND FIBER OPTIC CABLE |
|  | EXISTING GAS LINE                      |
|  | EXISTING OVERHEAD UTILITY              |
|  | EXISTING UNDERGROUND ELECTRIC          |
|  | UTILITIES TRENCH                       |
|  | LIMITS OF CONSTRUCTION                 |
|  | HEAVY-DUTY CONCRETE PAVING             |
|  | STANDARD-DUTY ASPHALT PAVING           |
|  | HEAVY-DUTY ASPHALT PAVING              |

**TIMES ARCADE**  
STREETSCAPE

## STREETSCAPE

BREVARD

NORTH CAROLINA

## GRADING PLAN

|           |         |                   |        |
|-----------|---------|-------------------|--------|
| DRAWN:    | JRS     | DATE:             | 9/2/92 |
| DESIGN:   | JRS/SJL | HORIZONTAL SCALE: | 1"=10' |
| APPROVED: | CAC     | VERTICAL SCALE:   |        |

GRAPHIC SCALE

0 10 20 30 feet

1" = 10'

JOB NO. 21501

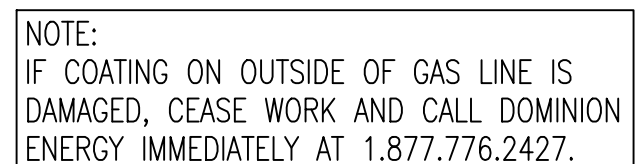
DRAWING NO.

C-101

SHEET NO.

Page 169 of 198

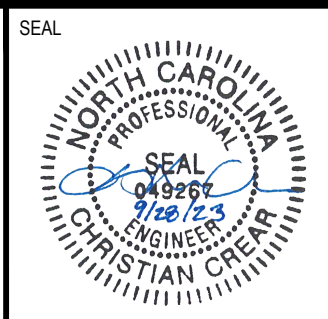
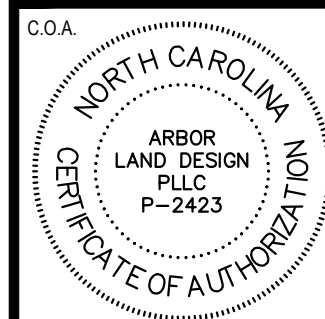
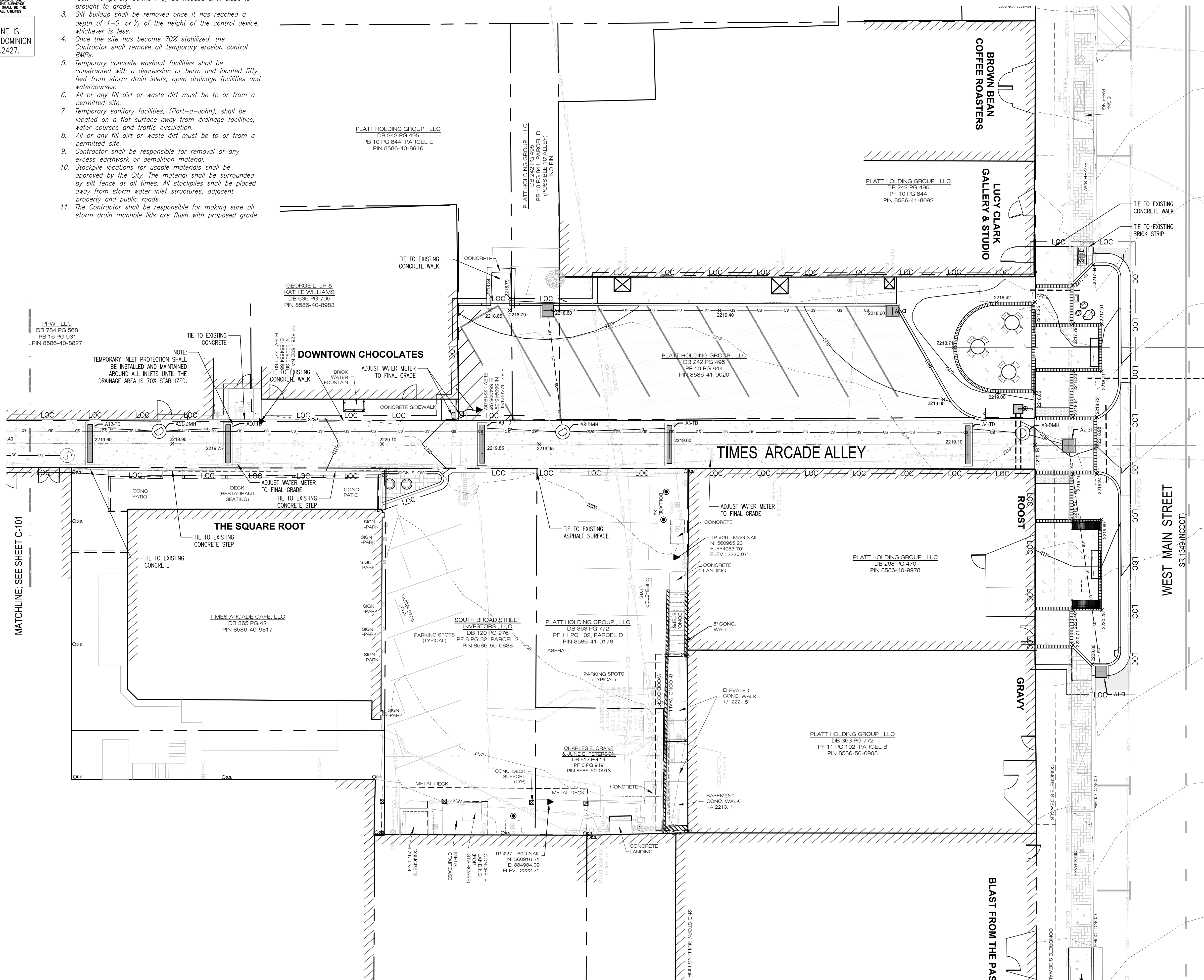




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11. The Contractor shall be responsible for making sure all storm drain manhole lids are flush with proposed grade.

GRADING NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING PROPOSED CONCRETE TO EXISTING GRADE AT FACE OF BUILDING AND EXISTING SURFACES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING FINAL GRADE CONFORMS TO EXISTING STRUCTURES (e.g., MHs, MAST ARMS, ETC.) UNLESS OTHERWISE NOTED.



## REVISIONS

[illegible]

### LEGEND

MH/JB - MANHOLE/JUNCTION BOX  
 DMH/JB - DRAIN MANHOLE/JUNCTION BOX  
 EXC - EXISTING CURB INLET  
 CI - CURB INLET  
 GI - GRATE INLET  
 TD - TRENCH DRAIN  
 EX SD - EXISTING STORM DRAIN LINE  
 SD - PROPOSED STORM DRAIN LINE  
 RD - PROPOSED ROOFED ROOF DRAIN LINE  
 TDP - PROPOSED TRENCH DRAIN PIPE  
 DRAINAGE AREA LINES  
 TEMPORARY INLET PROTECTION  
 EXISTING CONTOUR  
 PROPOSED CONTOUR  
 +1089.0 - PROPOSED SPOT ELEVATION  
 EX W - EX. WATER LINE  
 EXWM - EX. WATER METER  
 W - PROPOSED WATER SERVICE  
 WATER VALVE  
 EX SSMH - EX. SANITARY SEWER MANHOLE  
 EX SS - EX. SANITARY SEWER LINE  
 SS - PROPOSED SANITARY SEWER MANHOLE  
 SS - PROPOSED SANITARY SEWER LINE  
 SS - PROPOSED 6" SANITARY SEWER SERVICE  
 FLOW ARROW  
 EXFRC - EXISTING UNDERGROUND FIBER OPTIC CABLE  
 EX G - EXISTING GAS LINE  
 EXOHU - EXISTING OVERHEAD UTILITY  
 EXUGEL - EXISTING UNDERGROUND ELECTRIC  
 UTIL - UTILITIES TRENCH  
 LIMITS OF CONSTRUCTION  
 HEAVY-DUTY CONCRETE PAVING  
 STANDARD-DUTY ASPHALT PAVING  
 HEAVY-DUTY ASPHALT PAVING

**TIMES ARCADE**  
STREETSCAPE

BREVARD NORTH CAROLINA

## GRADING PLAN

|                 |  |                          |  |
|-----------------|--|--------------------------|--|
| DRAWN: JRS      |  | DATE: 9/2/92             |  |
| DESIGN: JRS/SJL |  | HORIZONTAL SCALE: 1"=10' |  |
| APPROVED: CAC   |  | VERTICAL SCALE:          |  |
|                 |  |                          |  |

JOB NO. 21501

|                             |                              |
|-----------------------------|------------------------------|
| DRAWING NO.<br><b>C-102</b> | SHEET NO.<br><b>13 OF 41</b> |
|-----------------------------|------------------------------|



| NO. | DATE    | DESCRIPTION                      | BY  |
|-----|---------|----------------------------------|-----|
| 1   | 8/25/23 | ISSUED FOR CITY & FUNDING REVIEW | CAC |
| 2   | 9/28/23 | ISSUED FOR BID                   | CAC |

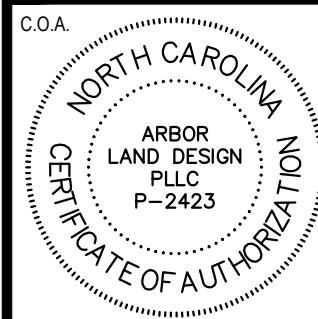
MH/JB -- MANHOLE/JUNCTION BOX  
 DMH/JB -- DROP MANHOLE/JUNCTION BOX  
 EXCI -- EXISTING CURB INLET  
 C -- CATCH BASIN  
 TG -- TRENCH GRATE  
 EX SD -- EXISTING STORM DRAIN LINE  
 SD -- STORM DRAIN DRAIN LINE  
 DRAINAGE AREA LINES  
 TEMPORARY INLET PROTECTION  
 EXISTING CONTOUR  
 PROPOSED CONTOUR  
 +100.0  
 +110.0  
 +1089.0  
 EX WATER LINE  
 EX WATER METER  
 EX MW -- PROPOSED WATER SERVICE  
 WATER VALVE  
 EX EX SS MH -- EX. SANITARY SEWER MANHOLE  
 EX. SANITARY SEWER LINE  
 SS -- PROPOSED SANITARY SEWER MANHOLE  
 SS -- PROPOSED SANITARY SEWER LINE  
 SS -- PROPOSED 6" SANITARY SEWER SERVICE  
 FLOW ARROW  
 EXFOC -- EXISTING UNDERGROUND FIBER OPTIC CABLE  
 EXG -- EXISTING GAS LINE  
 EXOHU -- EXISTING OVERHEAD UTILITY  
 EXUG -- EXISTING UNDERGROUND ELECTRIC

## BREVARD NORTH CAROLINA

C 200 SHEET NO.

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[illegible]

|                                                                                       |                                        |
|---------------------------------------------------------------------------------------|----------------------------------------|
|    | MH/JB - MANHOLE/JUNCTION BOX           |
|    | DM/JB - DROP MANHOLE/JUNCTION BOX      |
|   | EXCI - EXISTING CURB INLET             |
|  | CI - CURB INLET                        |
|  | CATCH BASIN                            |
|  | TRENCH GRATE                           |
|  | EXISTING STORM DRAIN LINE              |
|  | PROPOSED STORM DRAIN LINE              |
|  | DRAINAGE AREA LINES                    |
|  | TEMPORARY INLET PROTECTION             |
|  | EXISTING CONTOUR                       |
|  | PROPOSED CONTOUR                       |
|  | PROPOSED SPOT ELEVATION                |
|  | EX. WATER LINE                         |
|  | EX. WATER METER                        |
|  | EX. WATER METER                        |
|  | PROPOSED WATER SERVICE                 |
|  | WATER VALVE                            |
|  | EX. SANITARY SEWER MANHOLE             |
|  | EX. SANITARY SEWER LINE                |
|  | PROPOSED SANITARY SEWER MANHOLE        |
|  | PROPOSED SANITARY SEWER LINE           |
|  | PROPOSED 6" SANITARY SEWER SERVICE     |
|  | FLOW ARROW                             |
|  | EXISTING UNDERGROUND FIBER OPTIC CABLE |
|  | EXISTING GAS LINE                      |
|  | EXISTING OVERHEAD UTILITY              |
|  | EXISTING UNDERGROUND ELECTRIC          |

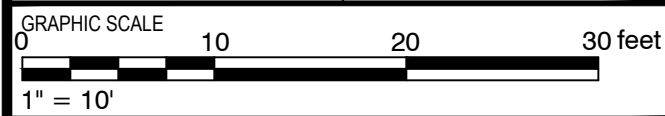
## STREETSCAPE

BREVARD

NORTH CAROLINA

## WEST JORDAN ST. SITE PLAN

|           |         |                   |         |
|-----------|---------|-------------------|---------|
| DRAWN:    | JRS     | DATE:             | 9/28/23 |
| DESIGN:   | JRS/SJL | HORIZONTAL SCALE: | 1"=10'  |
| APPROVED: | CAC     | VERTICAL SCALE:   |         |



JOB NC

21501

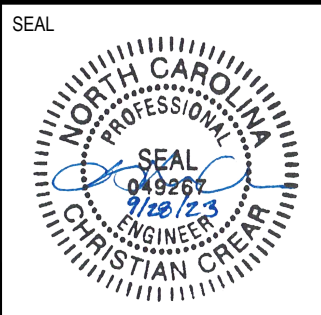
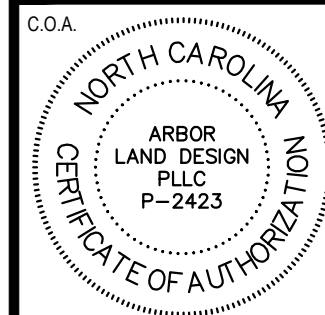
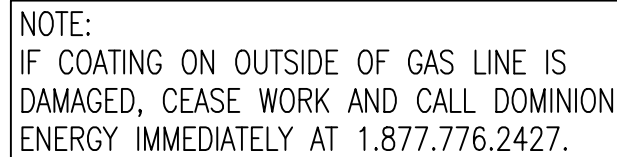
DRAWING NO.

C-201

SHEET NO.

15 OF 41



[illegible]

MH/JB - MANHOLE/JUNCTION BOX  
 DW/JB - DROP MANHOLE/JUNCTION BOX  
 EXCI - EXISTING CURB INLET  
 CI - CURB INLET  
 CB - CATCH BASIN  
 TO - TRENCH  
 TO EXISTING STORM DRAIN LINE  
 PROPOSED STORM DRAIN LINE  
 DRAINAGE AREA LINES  
 TEMPORARY INLET PROTECTION  
 EXISTING TOWER  
 PROPOSED CONTOUR  
 +1100.0  
 PROPOSED SPOT ELEVATION  
 EX. WATER LINE  
 EX. WATER METER  
 EXW/M - EXISTING WATER SERVICE  
 WATER VALVE  
 EX. SS/MH - EX. SANITARY SEWER MANHOLE  
 EX. SS - EX. SANITARY SEWER LINE  
 PROPOSED SANITARY SEWER MANHOLE  
 PROPOSED SANITARY SEWER LINE  
 SS - PROPOSED 6" SANITARY SEWER SERVICE  
 FLOW ARROW  
 EX-TRFC - EXISTING UNDERGROUND FIBER OPTIC CABLE  
 EX-G - EXISTING GAS LINE  
 EX-OW - EXISTING OVERHEAD UTILITY  
 EX-E - EXISTING UNDERGROUND ELECTRIC

# TIMES ARCADE ALLEY SITE PLAN

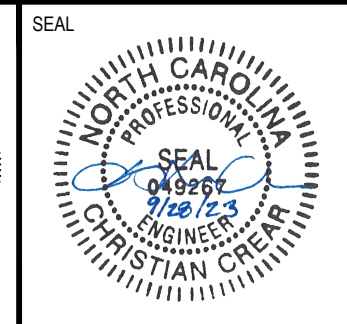
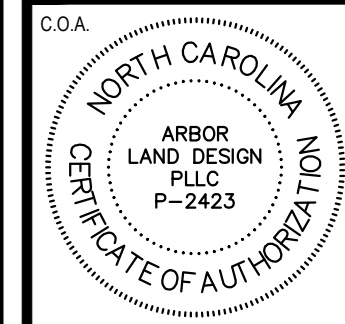
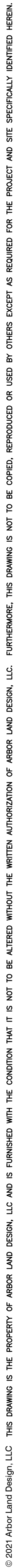
DRAWING NO. 00000 SHEET NO. 00000

C-202

SHEET NO.

16 OF 41



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| Date | Description | Debit | Credit | Balance |
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## BREVARD NORTH CAROLINA

|           |         |                   |         |
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| DRAWN:    | JRS     | DATE:             | 9/28/23 |
| DESIGN:   | JRS/SJL | HORIZONTAL SCALE: | 1"=10'  |
| APPROVED: | JM3     | VERTICAL SCALE:   |         |

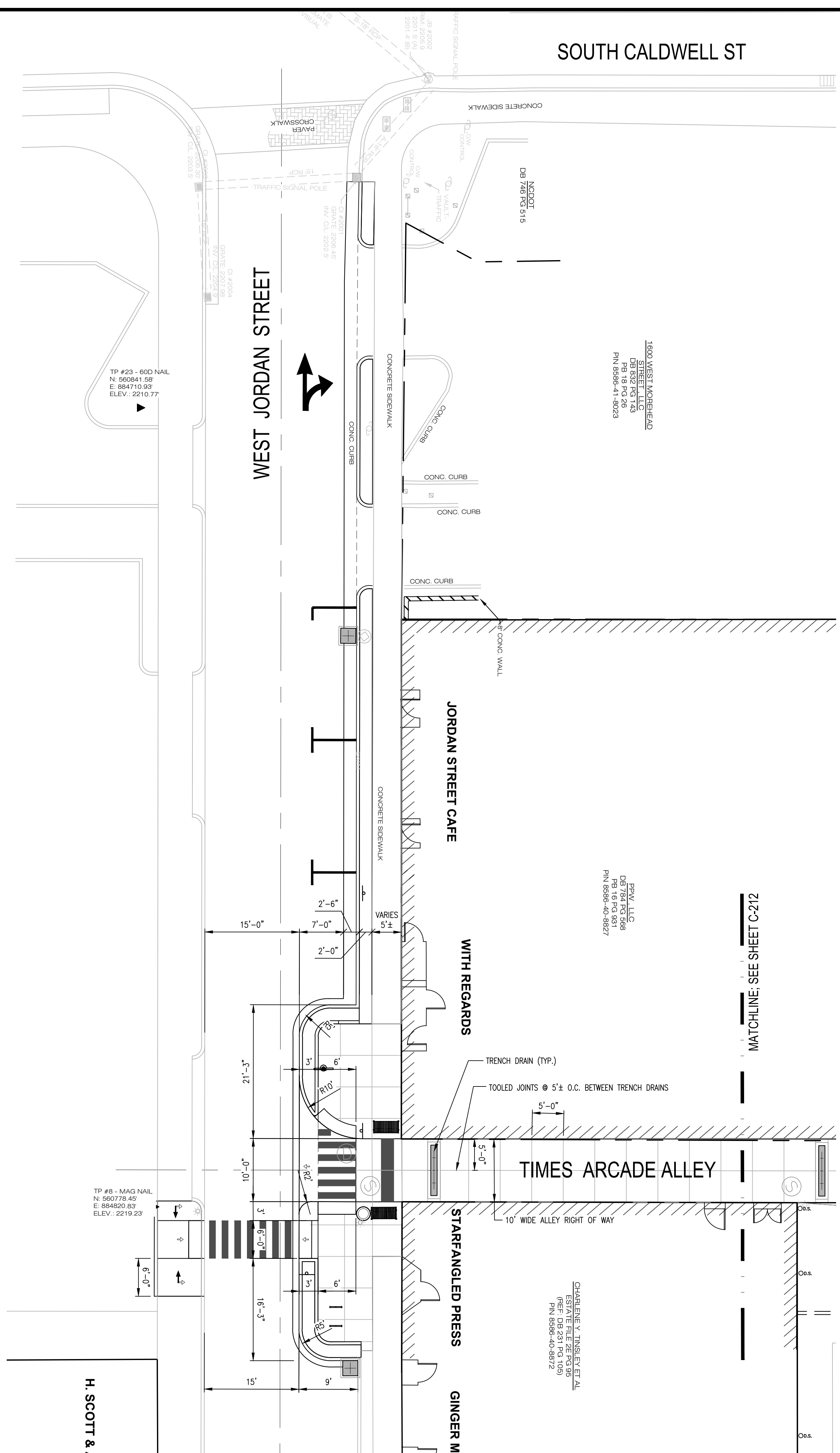
GRAPHIC SCALE

0 10 20 30 feet

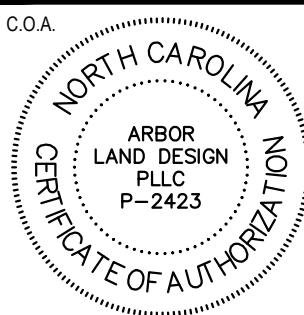
1" = 10'

JOB NO. 21501

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|-------------|-----------|
| DRAWING NO. | SHEET NO. |
| C-211       | 17 OF 41  |







## LEGEND

**TIMES ARCADE**  
STREETSCAPE

BREVARD

NORTH CAROLINA

## SITE LAYOUT PLAN

GRAPHIC SCALE

0 10 20 30 feet

1" = 10'

21501

DRAWING NO.

C-212

SHEET NO.

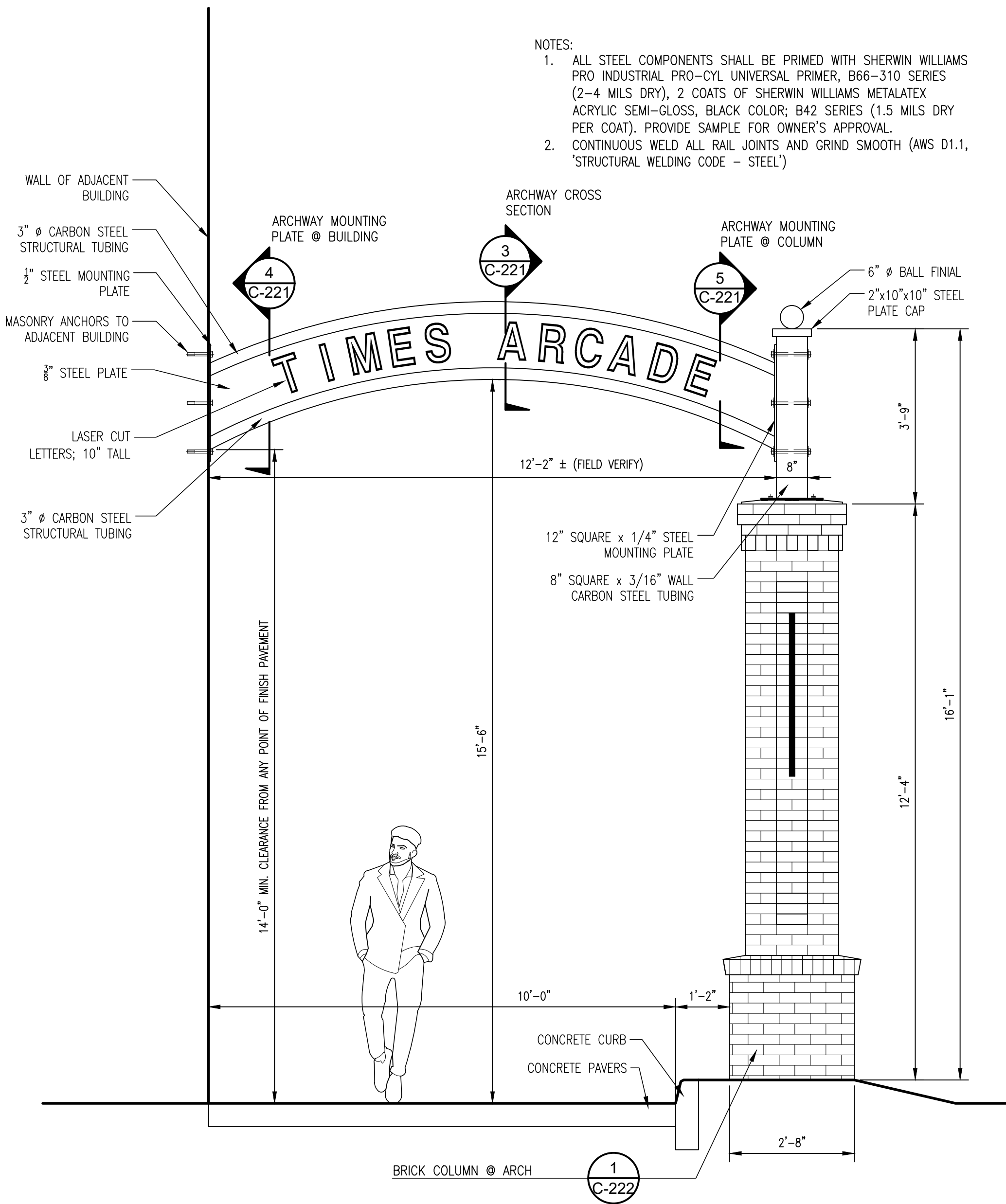
18 OF 41







© 2021 Arbor Land Design, LLC. THIS DRAWING IS THE PROPERTY OF ARBOR LAND DESIGN, LLC AND IS FURNISHED WITH THE CONDITION THAT IT IS NOT TO BE ALTERED WITHOUT THE WRITTEN AUTHORIZATION OF ARBOR LAND DESIGN, LLC. FURTHERMORE, THIS DRAWING IS NOT TO BE COPIED, REPRODUCED OR USED BY OTHERS EXCEPT AS REQUIRED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN.



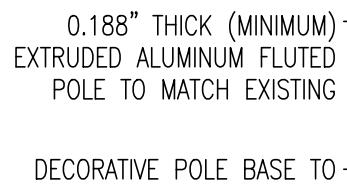



$$3/4'' = 1'-0''$$
$$3/4'' = 1'-0''$$


NOTE:  
BRICK COLUMN & SIGN TO BE INCLUDED IN ALTERNATE #1A;  
(1) FREESTANDING WAYFINDING SIGN FROM BASE BID TO BE  
DEDUCTED AS PART OF ALTERNATE #1A; STEEL ARCH SIGN SHOWN  
ON THIS DETAIL TO BE INCLUDED AS PART OF ALTERNATE #1B.

NOTES:

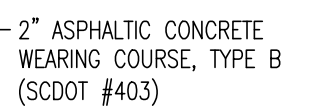
1. ALL DIMENSIONS SHOWN ARE MINIMUMS. FABRICATOR IS RESPONSIBLE FOR VERIFYING STRUCTURAL ADEQUACY AND MODIFYING DESIGN AS NECESSARY. FABRICATOR SHALL PROVIDE SEALED SHOP DRAWINGS INDICATING ACTUAL DESIGN.



NOTE:  
(2) FREESTANDING WAYFINDING SIGNS TO BE INCLUDED IN BASE  
BID; (1) WAYFINDING SIGN TO BE REMOVED IN PLACE OF BRICK  
COLUMN & SIGN UNDER ALTERNATE #1A.

2 WAYFIN  
1" = 1'-0"

P-CO-21501C-03


$$1'' = 1' - 0''$$
$$1'' = 1' - 0''$$


- 2" BINDER COURSE, TYPE B  
(BID ALTERNATE) (SCDOT #402)

- 4" AGGREGATE BASE COURSE  
(SCDOT #305)

- COMPACTED SUBGRADE -98%  
MAX. DRY DENSITY (ASTM  
D-698) SCDOT 208

$$1\ 1/2'' = 1'-0''$$
$$1\ 1/2'' = 1'-0''$$

P-CO-21501-08

C.O.A.

NORTH CAROLINA

ARBOR  
LAND DESIGN  
PLLC  
P-2423

CERTIFICATE OF AUTHORIZATION

SEAL

NORTH CAROLINA

PROFESSIONAL

SEAL  
049867  
9/28/23

ENGINEER

CHRISTIAN CREAR

[illegible]

## LEGEND

## STREETSCAPE

NORTH CAROLINA

## SITE DETAILS

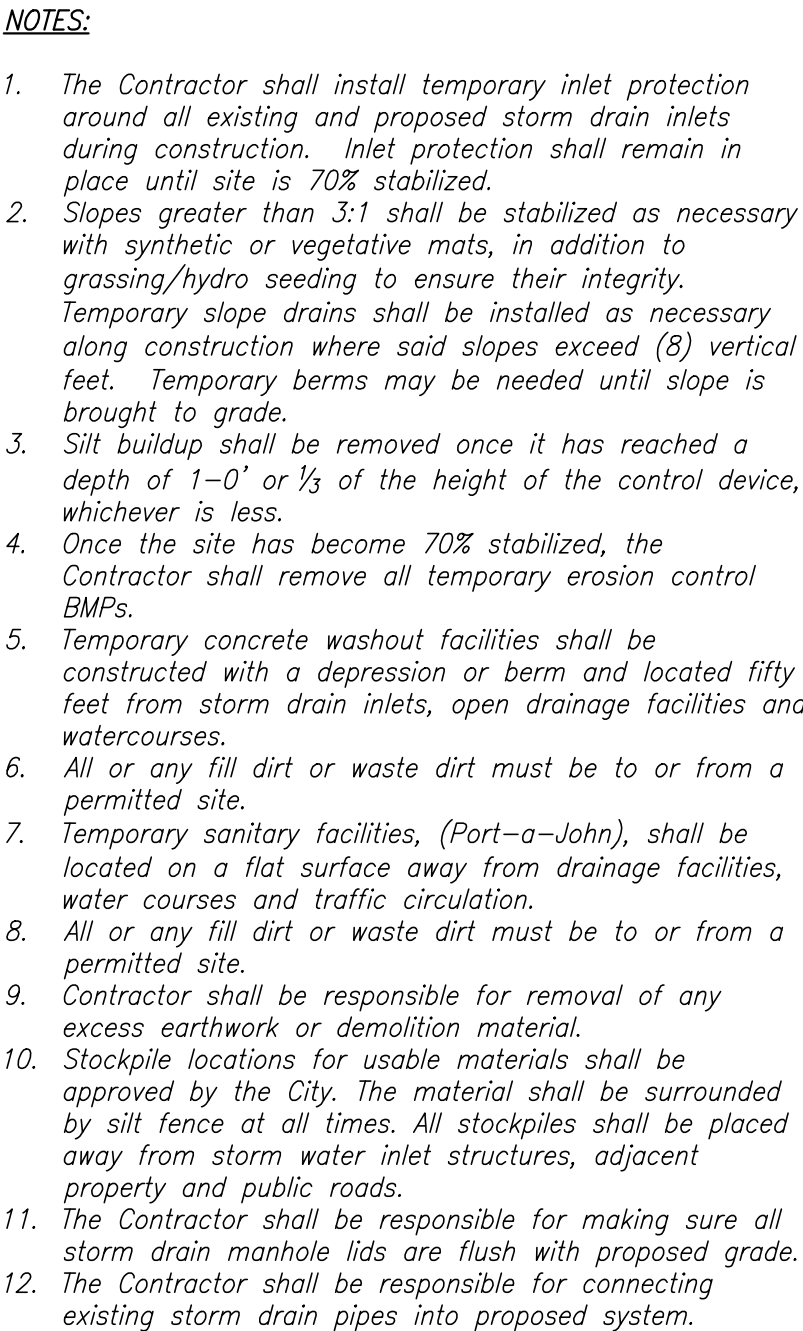
|               |         |                   |         |
|---------------|---------|-------------------|---------|
| DRAWN:        | JRS     | DATE:             | 9/28/21 |
| DESIGN:       | JRS/SJL | HORIZONTAL SCALE: |         |
| APPROVED:     | CAC     | VERTICAL SCALE:   |         |
| GRAPHIC SCALE |         |                   |         |

21501

SHEET NO.

21 OF 41





| STRUCTURE CODE | INLET ELEV. | INVERT ELEV. | STRUCTURE TYPE | RUNOFF AREA (acres) | RUNOFF COEFFICIENT | INLET FLOW (cfs) | FROM | TO  | INVERT TOP | INVERT BOTTOM | PIPE FLOW (cfs) | PIPE SLOPE (%) | HP PIPE (inches) | PIPE LENGTH (ft) | CAPACITY (cfs) | VELOCITY CFS/F | 25 YR FLOW (cfs) | 100 YR FLOW (cfs) | COMMENTS                                 |
|----------------|-------------|--------------|----------------|---------------------|--------------------|------------------|------|-----|------------|---------------|-----------------|----------------|------------------|------------------|----------------|----------------|------------------|-------------------|------------------------------------------|
| A1             | 2220.3*     | 2218.1       | CI             | 0.11                | 0.98               | 0.72             | A1   | A2  | 2218.1     | 2216.4        | 0.72            | 3.5%           | 15               | 48               | 12.19          | 9.93           | 0.84             | 1.05              | CURB INLET - SEE DETAIL                  |
| A2             | 2220.9*     | 2216.4       | GI             | 0.02                | 0.98               | -                | A2   | A3  | 2218.4     | 2216.1        | 0.84            | 3.0%           | 15               | 10               | 11.22          | 9.14           | 0.98             | 1.23              | GRATE INLET - SEE DETAIL                 |
| A3             | 2219.1*     | 2214.7       | DMH/JB         | -                   | -                  | -                | A3   | A8  | 2214.7     | 2213.7        | 0.95            | 1.0%           | 15               | 98               | 6.61           | 5.38           | 1.12             | 1.40              | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A4             | 2219.1*     | 2216.7       | TD             | 0.02                | 0.98               | 0.12             | A4   | A3  | 2216.7     | 2216.6        | 0.12            | 0.8%           | 12               | 12               | 3.26           | 4.15           | 0.14             | 0.17              | TRENCH DRAIN - SEE DETAIL                |
| A5             | 2219.6*     | 2217.2       | TD             | 0.39                | 0.98               | 2.49             | A5   | A8  | 2217.2     | 2216.9        | 2.49            | 1.4%           | 12               | 22               | 4.17           | 5.31           | 2.93             | 3.85              | TRENCH DRAIN - SEE DETAIL                |
| A6             | 2218.6*     | 2215.1       | CI             | 0.03                | 1.98               | 0.37             | A6   | A7  | 2215.1     | 2214.1        | 0.37            | 1.4%           | 15               | 72               | 7.63           | 6.22           | 0.44             | 0.55              | CURB INLET - SEE DETAIL                  |
| A7             | 2218.6*     | 2214.1       | CI             | 0.04                | 0.98               | 0.23             | A7   | A8  | 2214.1     | 2213.7        | 0.60            | 1.5%           | 15               | 26               | 8.03           | 6.55           | 0.71             | 0.89              | CURB INLET - SEE DETAIL                  |
| A8             | 2219.9*     | 2213.7       | DMH/JB         | -                   | -                  | -                | A8   | A11 | 2213.7     | 2212.8        | 4.05            | 1.1%           | 18               | 85               | 10.84          | 6.13           | 4.76             | 5.94              | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A9             | 2219.85*    | 2217.4       | TD             | 0.13                | 0.98               | 0.86             | A9   | A8  | 2217.4     | 2216.9        | 0.86            | 2.9%           | 12               | 17               | 6.12           | 7.80           | 1.01             | 1.27              | TRENCH DRAIN - SEE DETAIL                |
| A10            | 2219.75*    | 2217.3       | TD             | 0.02                | 1.98               | 0.31             | A10  | A11 | 2217.3     | 2217.0        | 0.31            | 2.1%           | 12               | 14               | 5.23           | 6.66           | 0.37             | 0.46              | TRENCH DRAIN - SEE DETAIL                |
| A11            | 2219.85*    | 2212.8       | DMH/JB         | -                   | -                  | -                | A11  | A15 | 2212.8     | 2211.9        | 6.21            | 1.0%           | 18               | 90               | 10.53          | 5.96           | 7.31             | 9.12              | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A12            | 2219.6*     | 2217.2       | TD             | 0.29                | 0.98               | 1.85             | A12  | A11 | 2217.2     | 2217.0        | 1.85            | 1.4%           | 12               | 14               | 4.27           | 5.44           | 2.18             | 2.72              | TRENCH DRAIN - SEE DETAIL                |
| A13            | 2218.8*     | 2216.4       | TD             | 0.01                | 1.98               | 0.19             | A13  | A15 | 2216.4     | 2216.2        | 0.19            | 1.4%           | 12               | 14               | 4.27           | 5.44           | 0.22             | 0.27              | TRENCH DRAIN - SEE DETAIL                |
| A14            | 2219.6*     | 2216.1       | CI             | 0.17                | 0.98               | 1.08             | A14  | A15 | 2216.1     | 2215.3        | 1.08            | 2.4%           | 18               | 34               | 16.15          | 9.14           | 1.28             | 1.59              | CURB INLET - SEE DETAIL                  |
| A15            | 2218.8*     | 2211.9       | DMH/JB         | -                   | -                  | -                | A15  | A16 | 2211.9     | 2209.0        | 7.48            | 3.5%           | 18               | 82               | 19.80          | 11.21          | 8.81             | 10.98             | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A16            | 2213.07**   | 2209.0       | CI             | 0.05                | 0.98               | 0.31             | A16  | EX  | 2209.0     | 2202.5        | 7.79            | 8.9%           | 18               | 73               | 31.42          | 17.79          | 9.17             | 11.44             | CURB INLET - SEE DETAIL                  |
| EX             | 2206.48**   | 2202.5       | EXCI           | -                   | -                  | -                | -    | -   | -          | -             | -               | -              | -                | -                | -              | -              | -                | -                 | EXISTING CURB INLET                      |

\* MATCH PROPOSED GRADE \*\* MATCH EXISTING GRADE

CI - CURB INLET

GI - GRATE INLET

TD - TRENCH DRAIN

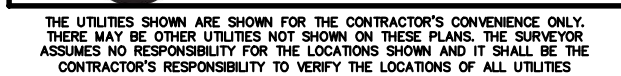
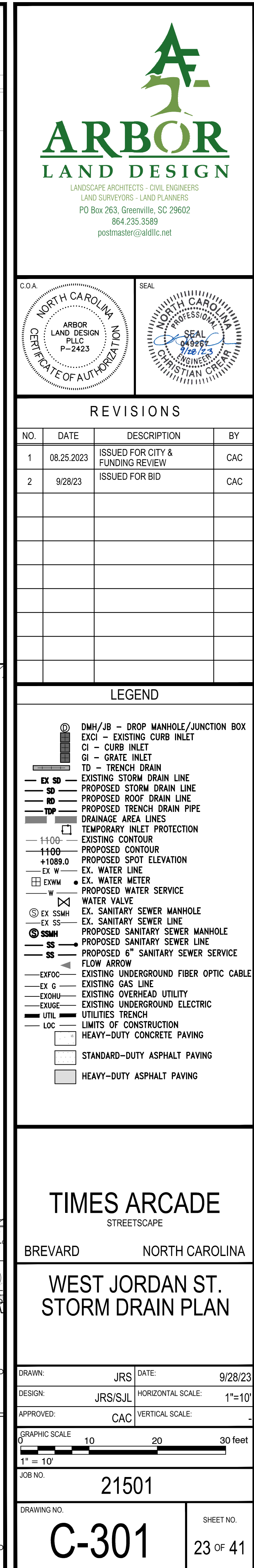
DMH/JB - DROP MANHOLE / JUNCTION BOX

EXCI - EXISTING CURB INLET

Page 179 of 198



1. The Contractor shall install temporary inlet protection around all existing and proposed storm drain inlets during construction. Inlet protection shall remain in place until site is 70% stabilized.
2. Slopes greater than 3:1 shall be stabilized as necessary with synthetic or vegetative mats, in addition to grassing/hydro seeding to ensure their integrity. Temporary slope drains shall be installed as necessary along construction where said slopes exceed (8) vertical feet. Temporary berms may be needed until slope is brought to grade.
3. Silt buildup shall be removed once it has reached a depth of 1'-0" or 1/3 of the height of the control device, whichever is less.
4. Once the site has become 70% stabilized, the Contractor shall remove all temporary erosion control BMPs.
5. Temporary concrete washout facilities shall be constructed with a depression or berm and located fifty feet from storm drain inlets, open drainage facilities and watercourses.
6. All rain or waste dirt must be to or from a permitted site.
7. Temporary sanitary facilities, (Port-a-John), shall be located on a flat surface away from drainage facilities, water courses and traffic circulation.
8. All or any fill dirt or waste dirt must be to or from a permitted site.
9. Contractor shall be responsible for removal of any excess earthwork or demolition material.
10. Stockpile locations for usable materials shall be approved by the City. The material shall be surrounded by silt fence at all times. All stockpiles shall be placed away from storm water inlet structures, adjacent property and public roads.
11. The Contractor shall be responsible for making sure all storm drain manhole lids are flush with proposed grade.
12. The Contractor shall be responsible for connecting existing storm drain pipes into proposed system.

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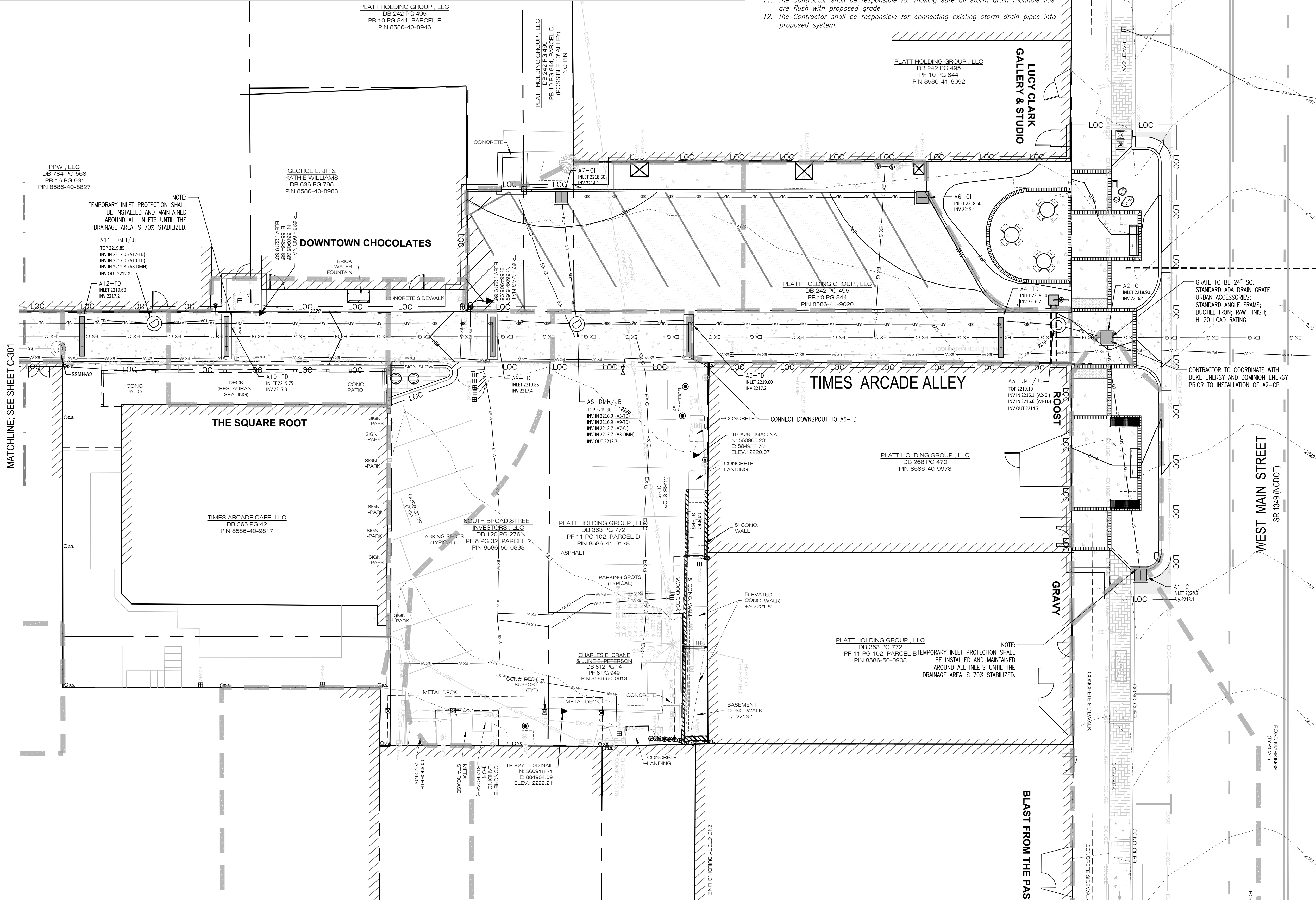
## STORM DRAIN SCHEDULE

| STRUCTURE CODE | INLET ELEV. | INVERT ELEV. | STRUCTURE TYPE | RUNOFF AREA (acres) | RUNOFF COEFFICIENT | INLET FLOW (cfs) | FROM | TO  | INVERT TOP | INVERT BOTTOM | PIPE FLOW (cfs) | PIPE SLOPE (%) | PIPE SIZE (inches) | PIPE LENGTH (ft) | CAPACITY (cfs) | VELOCITY CODE F/S | 25 YR FLOW (cfs) | 100 YR FLOW (cfs) | COMMENTS                                 |
|----------------|-------------|--------------|----------------|---------------------|--------------------|------------------|------|-----|------------|---------------|-----------------|----------------|--------------------|------------------|----------------|-------------------|------------------|-------------------|------------------------------------------|
| A1             | 2220.3*     | 2218.1       | CI             | 0.11                | 0.98               | 0.72             | A1   | A2  | 2218.1     | 2216.4        | 0.72            | 3.5%           | 15                 | 48               | 12.19          | 9.93              | 0.84             | 1.05              | CURB INLET - SEE DETAIL                  |
| A2             | 2218.9*     | 2216.4       | GI             | 0.02                | 0.98               | 0.12             | A2   | A3  | 2216.4     | 2213.1        | 0.84            | 3.0%           | 15                 | 10               | 11.22          | 9.14              | 0.98             | 1.23              | GRATE INLET - SEE DETAIL                 |
| A3             | 2219.1*     | 2214.7       | DMH/JB         | -                   | -                  | -                | A3   | A8  | 2214.7     | 2213.7        | 0.95            | 1.0%           | 15                 | 96               | 6.61           | 5.39              | 1.12             | 1.40              | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A4             | 2219.1*     | 2216.7       | TD             | 0.02                | 0.98               | 0.12             | A4   | A3  | 2216.7     | 2216.6        | 0.12            | 0.8%           | 12                 | 12               | 3.26           | 4.15              | 0.14             | 0.17              | TRENCH DRAIN - SEE DETAIL                |
| A5             | 2219.6*     | 2217.2       | TD             | 0.39                | 0.98               | 2.49             | A5   | A8  | 2217.2     | 2216.9        | 2.49            | 1.4%           | 12                 | 22               | 4.17           | 5.31              | 2.93             | 3.65              | TRENCH DRAIN - SEE DETAIL                |
| A6             | 2218.6*     | 2215.1       | CI             | 0.03                | 1.98               | 0.37             | A6   | A7  | 2215.1     | 2214.1        | 0.37            | 1.4%           | 15                 | 72               | 7.63           | 6.22              | 0.44             | 0.55              | CURB INLET - SEE DETAIL                  |
| A7             | 2218.6*     | 2214.1       | CI             | 0.04                | 0.98               | 0.23             | A7   | A8  | 2214.1     | 2213.7        | 0.60            | 1.5%           | 15                 | 26               | 8.03           | 6.55              | 0.71             | 0.89              | CURB INLET - SEE DETAIL                  |
| A8             | 2219.9*     | 2213.7       | DMH/JB         | -                   | -                  | -                | A8   | A11 | 2213.7     | 2212.8        | 4.05            | 1.1%           | 18                 | 85               | 10.84          | 6.13              | 4.76             | 5.94              | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A9             | 2219.85*    | 2217.4       | TD             | 0.13                | 0.98               | 0.86             | A9   | A8  | 2217.4     | 2216.9        | 0.86            | 2.9%           | 12                 | 17               | 6.12           | 7.80              | 1.01             | 1.27              | TRENCH DRAIN - SEE DETAIL                |
| A10            | 2219.75*    | 2217.3       | TD             | 0.02                | 1.98               | 0.31             | A10  | A11 | 2217.3     | 2217.0        | 0.31            | 2.1%           | 12                 | 14               | 5.23           | 6.66              | 0.37             | 0.46              | TRENCH DRAIN - SEE DETAIL                |
| A11            | 2219.85*    | 2212.8       | DMH/JB         | -                   | -                  | -                | A11  | A15 | 2212.8     | 2211.9        | 6.21            | 1.0%           | 18                 | 90               | 10.53          | 5.96              | 7.31             | 9.12              | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A12            | 2219.6*     | 2217.2       | TD             | 0.29                | 0.98               | 1.85             | A12  | A11 | 2217.2     | 2217.0        | 1.85            | 1.4%           | 12                 | 14               | 4.27           | 5.44              | 2.18             | 2.72              | TRENCH DRAIN - SEE DETAIL                |
| A13            | 2218.8*     | 2216.4       | TD             | 0.01                | 1.98               | 0.19             | A13  | A15 | 2216.4     | 2216.2        | 0.19            | 1.4%           | 12                 | 14               | 4.27           | 5.44              | 0.22             | 0.27              | TRENCH DRAIN - SEE DETAIL                |
| A14            | 2219.6*     | 2216.1       | CI             | 0.17                | 0.98               | 1.08             | A14  | A15 | 2216.1     | 2215.3        | 1.08            | 2.4%           | 18                 | 34               | 16.15          | 9.14              | 1.28             | 1.59              | CURB INLET - SEE DETAIL                  |
| A15            | 2218.8*     | 2211.9       | DMH/JB         | -                   | -                  | -                | A15  | A16 | 2211.9     | 2209.0        | 7.48            | 3.5%           | 18                 | 82               | 19.80          | 11.21             | 8.81             | 10.98             | DROP MANHOLE / JUNCTION BOX - SEE DETAIL |
| A16            | 2213.07**   | 2209.0       | CI             | 0.05                | 0.98               | 0.31             | A16  | EX  | 2209.0     | 2202.5        | 7.79            | 8.9%           | 18                 | 73               | 31.42          | 17.79             | 9.17             | 11.44             | CURB INLET - SEE DETAIL                  |
| EX             | 2206.48**   | 2202.5       | EXCI           | -                   | -                  | -                | -    | -   | -          | -             | -               | -              | -                  | -                | -              | -                 | -                | -                 | EXISTING CURB INLET                      |

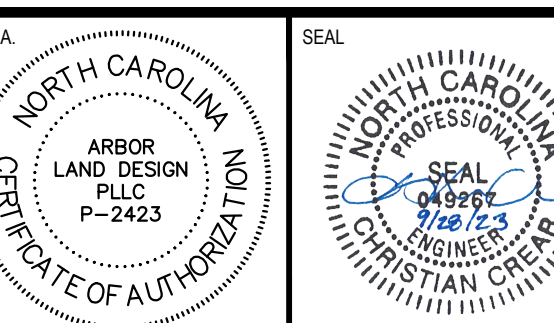
\* MATCH PROPOSED GRADE \*\* MATCH EXISTING GRADE  
CI - CURB INLET GI - GRATE INLET TD - TRENCH DRAIN DMH/JB - DROP MANHOLE / JUNCTION BOX EXCI - EXISTING CURB INLET

## NOTES:

- The Contractor shall install temporary inlet protection around all existing and proposed storm drain inlets during construction. Inlet protection shall remain in place until site is 70% stabilized.
- Slopes greater than 3:1 shall be stabilized as necessary with synthetic or vegetative mats, in addition to grassing/hydro seeding to ensure their integrity. Temporary slope drains shall be installed as necessary along construction where said slopes exceed (8) vertical feet. Temporary berms may be needed until slope is brought to grade.
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- The Contractor shall be responsible for making sure all storm drain manhole lids are flush with proposed grade.
- The Contractor shall be responsible for connecting existing storm drain pipes into proposed system.



NOTE:  
IF COATING ON OUTSIDE OF GAS LINE IS  
DAMAGED, CEASE WORK AND CALL DOMINION  
ENERGY IMMEDIATELY AT 1.877.776.2427.



## REVISIONS

| NO. | DATE       | DESCRIPTION                      | BY  |
|-----|------------|----------------------------------|-----|
| 1   | 08.25.2023 | ISSUED FOR CITY & FUNDING REVIEW | CAC |
| 2   | 9/28/23    | ISSUED FOR BID                   | CAC |

## LEGEND

- DMH/JB - DROP MANHOLE/JUNCTION BOX
- EXCI - EXISTING CURB INLET
- CI - CURB INLET
- TD - TRENCH DRAIN
- EX SD - EXISTING STORM DRAIN LINE
- SD - PROPOSED STORM DRAIN LINE
- ROD - PROPOSED ROOF DRAIN LINE
- TD - PROPOSED TRENCH DRAIN PIPE
- DA - DRAINAGE AREA LINES
- TEMP - TEMPORARY INLET PROTECTION
- 1'-0" - EXISTING CONTOUR
- 1'-0" +1089.0 - PROPOSED CONTOUR
- EX W - EX. WATER LINE
- EX M - EX. WATER METER
- W - PROPOSED WATER SERVICE
- WV - WATER VALVE
- EX SSMH - EX. SANITARY SEWER MANHOLE
- SS - PROPOSED SANITARY SEWER LINE
- SSMH - PROPOSED SANITARY SEWER MANHOLE
- SS - PROPOSED 6" SANITARY SEWER SERVICE
- FLOW ARROW - FLOW ARROW
- EXFOC - EXISTING UNDERGROUND FIBER OPTIC CABLE
- EX G - EXISTING GAS LINE
- EXHU - EXISTING OVERHEAD UTILITY
- EXUE - EXISTING UNDERGROUND ELECTRIC
- UTIL - UTILITIES TRENCH
- LOC - LIMITS OF CONSTRUCTION
- HEAVY-DUTY CONCRETE PAVING
- STANDARD-DUTY ASPHALT PAVING
- HEAVY-DUTY ASPHALT PAVING

## TIMES ARCADE

STREETSCAPE

BREVARD

NORTH CAROLINA

TIMES ARCADE ALLEY  
STORM DRAIN PLAN

|               |         |                   |         |
|---------------|---------|-------------------|---------|
| DRAWN:        | JRS     | DATE:             | 9/28/23 |
| DESIGN:       | JRS/SJL | HORIZONTAL SCALE: | 1"=10'  |
| APPROVED:     | CAC     | VERTICAL SCALE:   | -       |
| GRAPHIC SCALE | 10      | 20                | 30 feet |
| 1" = 10'      |         |                   |         |

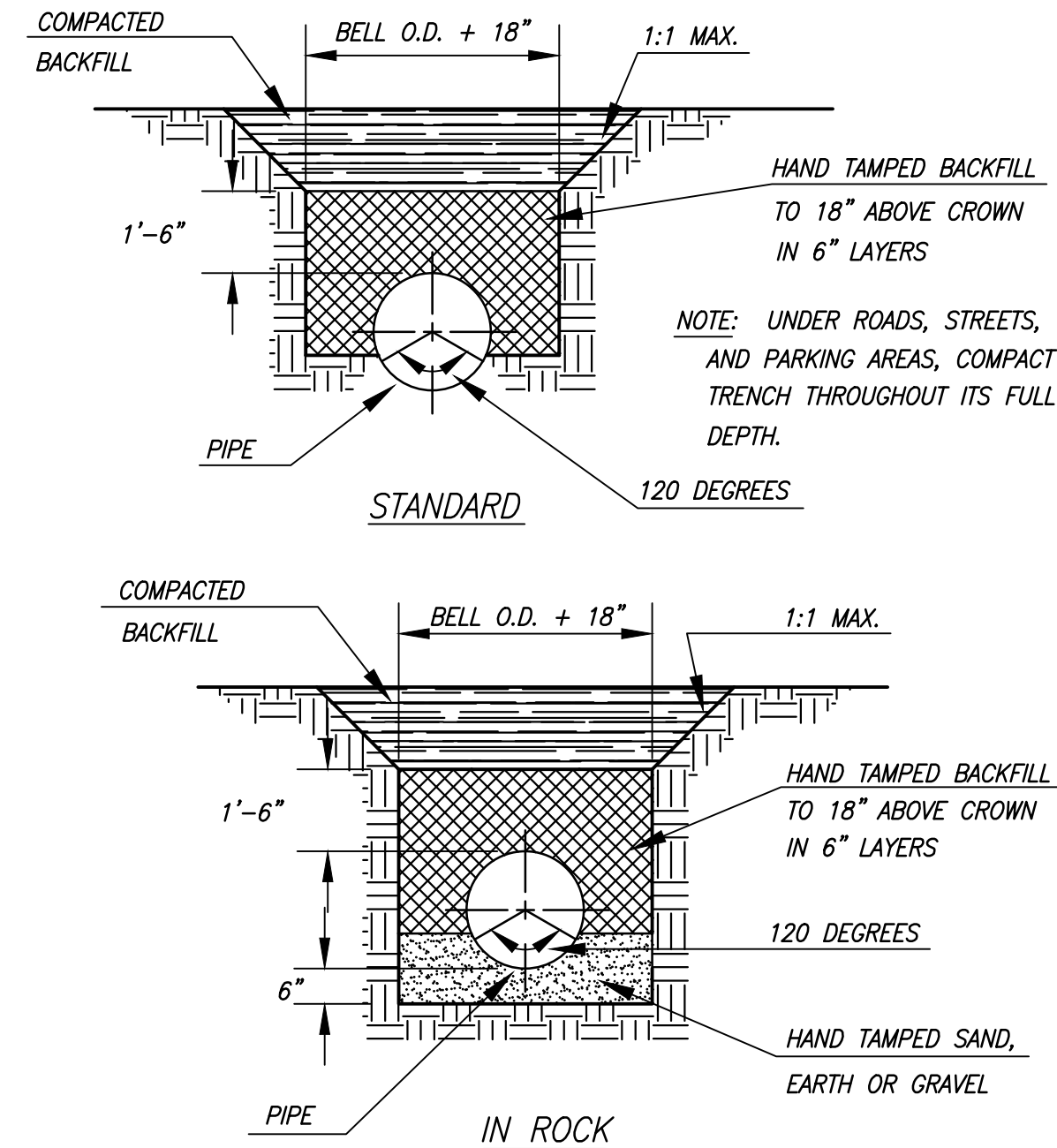
JOB NO. 21501

DRAWING NO. C-302

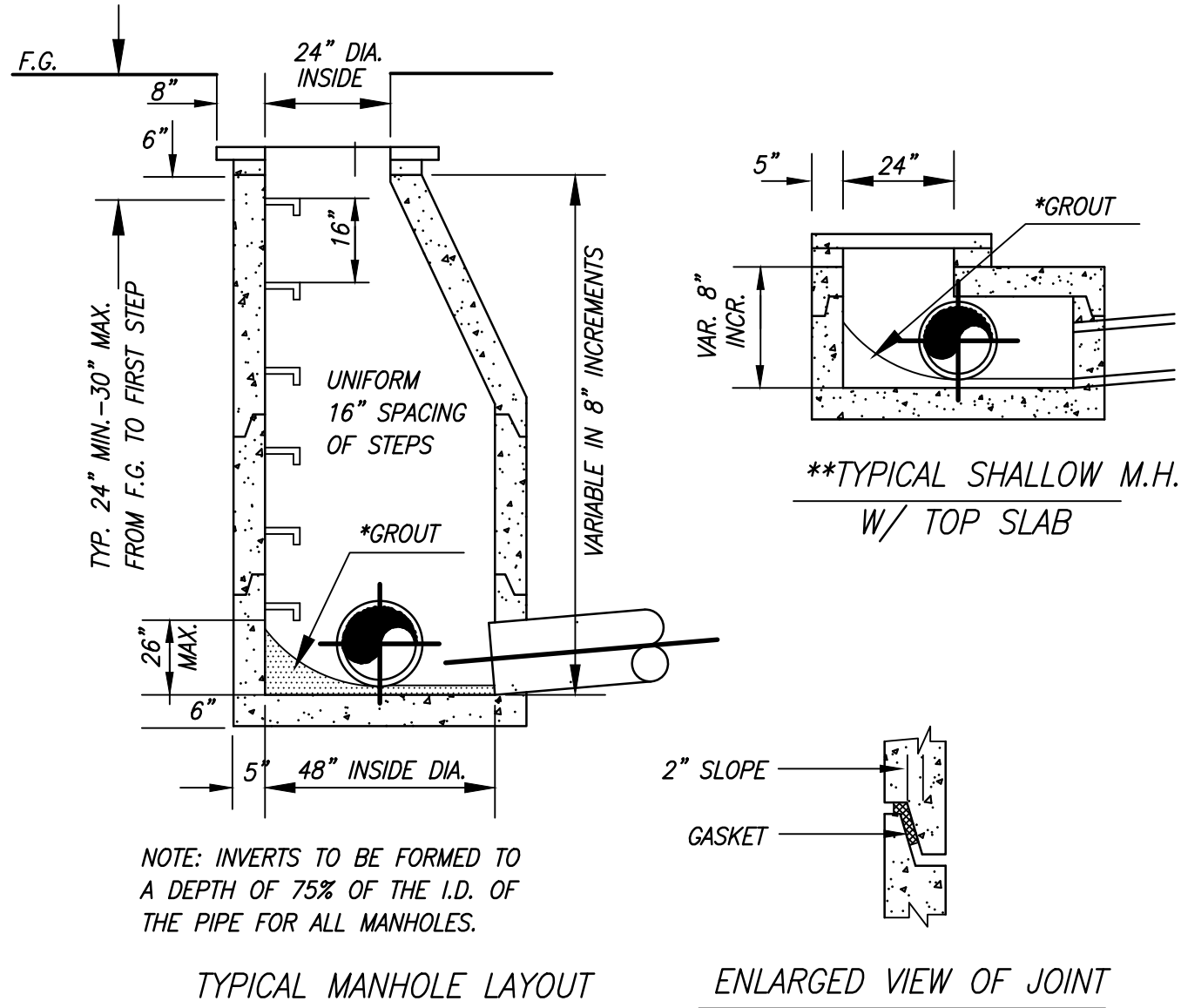
SHEET NO. 24 OF 41



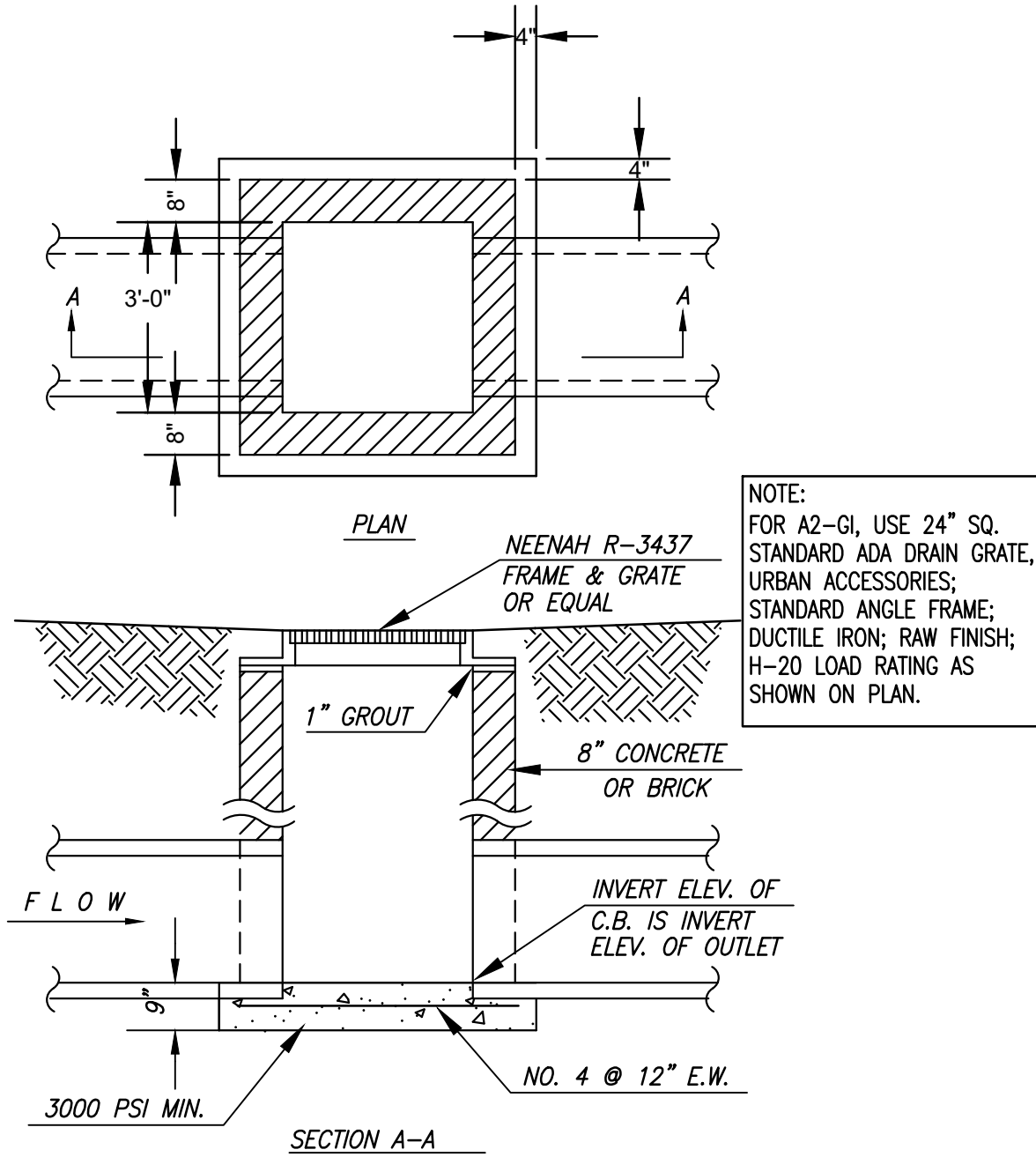
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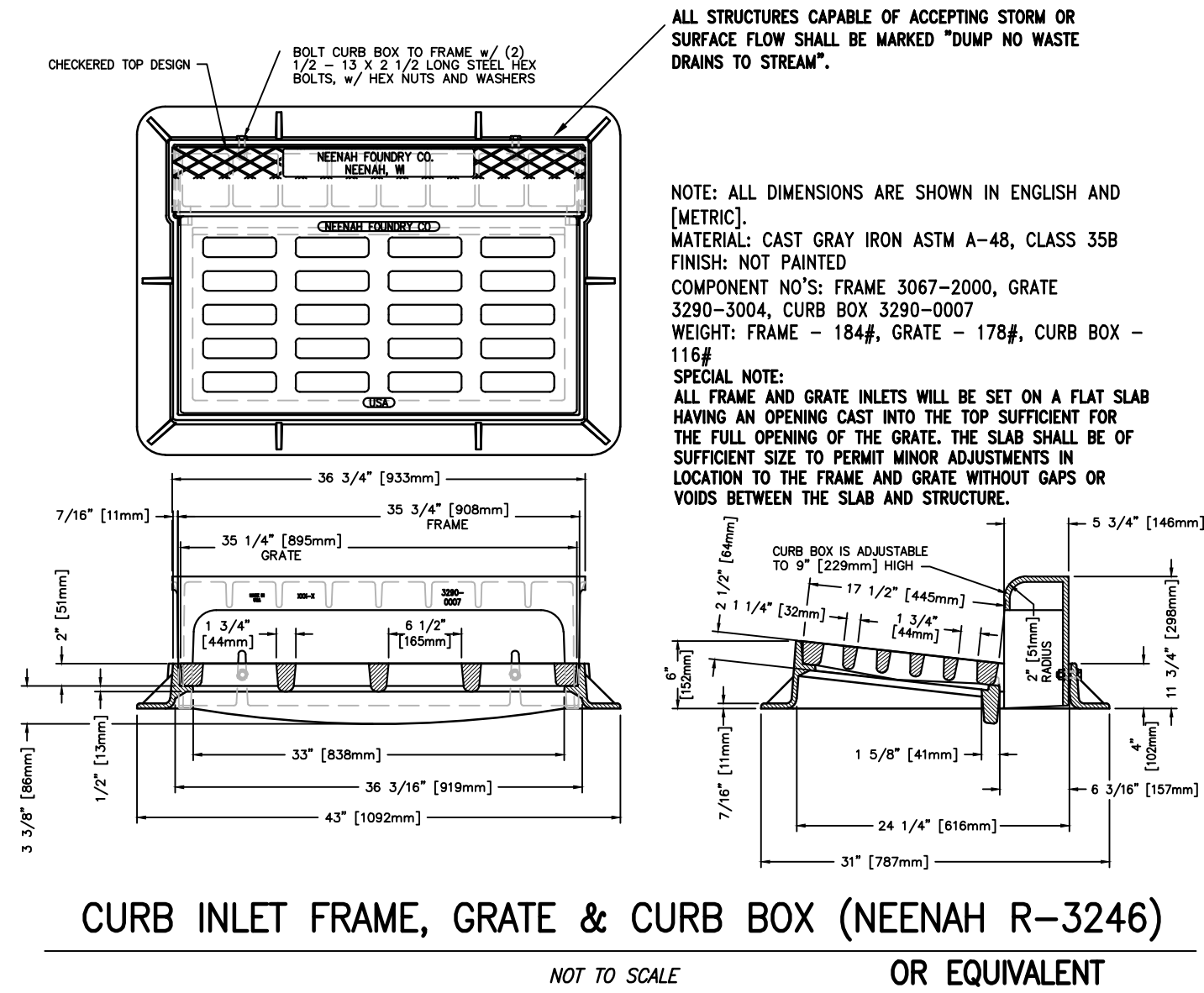
STORM SEWER PIPE BEDDING DETAIL  
NOT TO SCALE



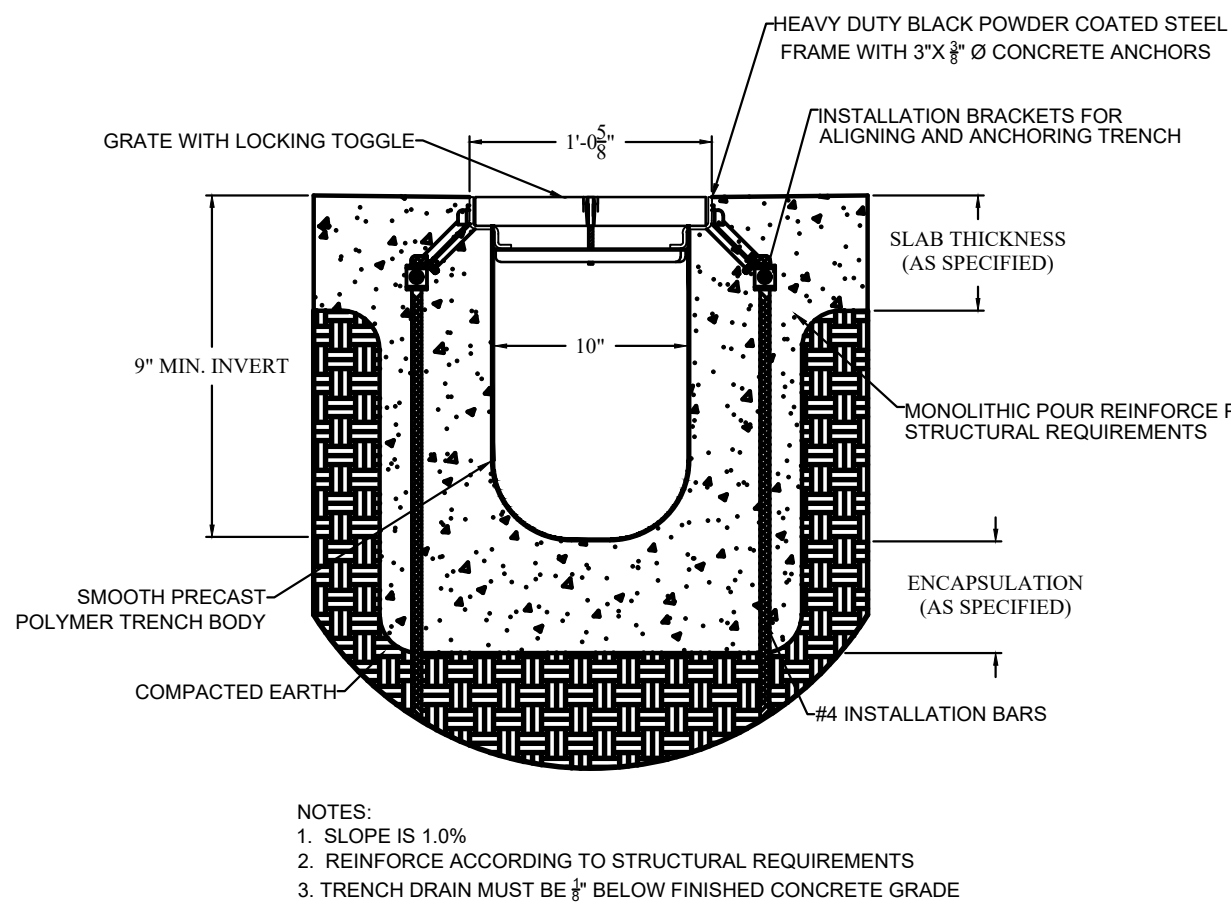
STORM DRAIN MANHOLE DETAIL  
NOT TO SCALE



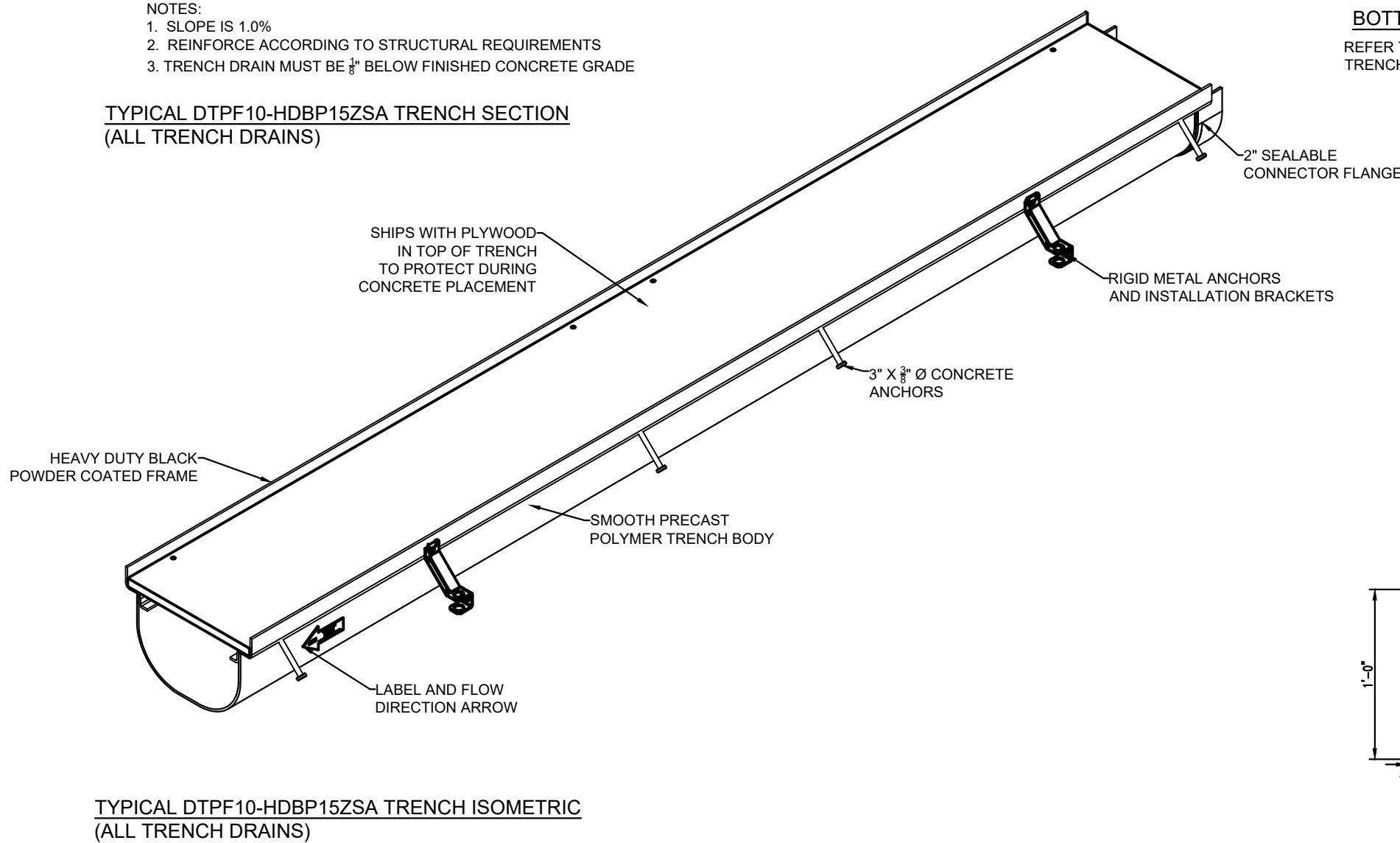
FRAME AND TYPE 'A' GRATE (NEENAH R-3437)  
NOT TO SCALE OR EQUIVALENT



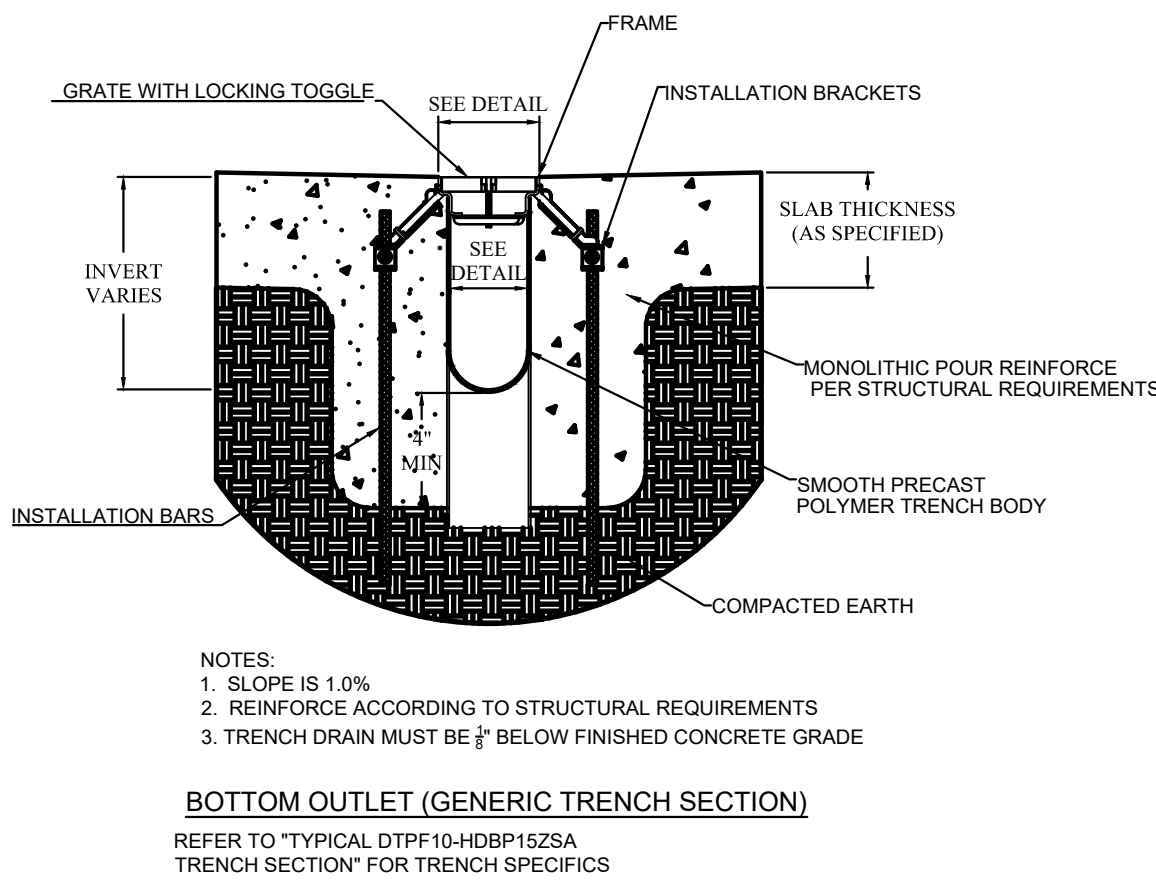
CURB INLET FRAME, GRATE & CURB BOX (NEENAH R-3246)  
NOT TO SCALE OR EQUIVALENT



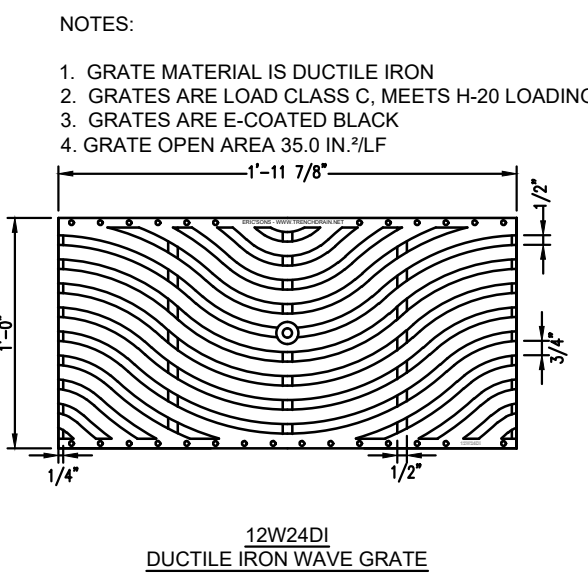
TYPICAL DTPF10-HDBP15ZSA TRENCH SECTION  
(ALL TRENCH DRAINS)



TYPICAL DTPF10-HDBP15ZSA TRENCH ISOMETRIC  
(ALL TRENCH DRAINS)

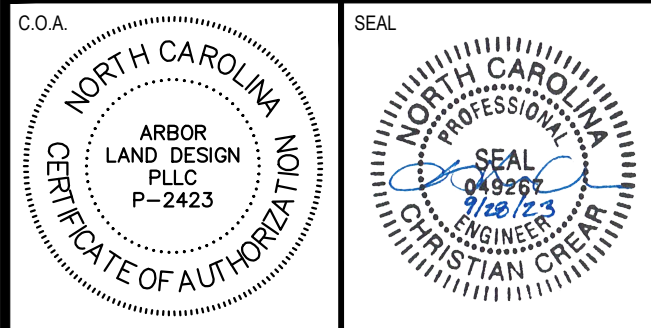


BOTTOM OUTLET (GENERIC TRENCH SECTION)  
REFER TO "TYPICAL DTPF10-HDBP15ZSA TRENCH SECTION" FOR TRENCH SPECIFICS



12W24DI  
DUCTILE IRON WAVE GRATE

TRENCH DRAIN W/BOTTOM OUTLET & ADA GRATE  
NOT TO SCALE (DURA TRENCH OR APPROVED EQUAL)



REVISIONS

| NO. | DATE       | DESCRIPTION                     | BY  |
|-----|------------|---------------------------------|-----|
| 1   | 08.25.2023 | ISSUE FOR CITY & FUNDING REVIEW | CAC |
| 2   | 9/28/23    | ISSUED FOR BID                  | CAC |
|     |            |                                 |     |
|     |            |                                 |     |
|     |            |                                 |     |
|     |            |                                 |     |
|     |            |                                 |     |
|     |            |                                 |     |
|     |            |                                 |     |
|     |            |                                 |     |

LEGEND

**TIMES ARCADE**  
STREETSCAPE

BREVARD NORTH CAROLINA

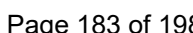
**STORM DRAINAGE**  
DETAILS

|                |         |                   |         |
|----------------|---------|-------------------|---------|
| DRAWN:         | JRS     | DATE:             | 9/28/23 |
| DESIGN:        | JRS/SJL | HORIZONTAL SCALE: |         |
| APPROVED:      | CAC     | VERTICAL SCALE:   |         |
| GRAPHIC SCALE: |         |                   |         |

JOB NO. 21501

DRAWING NO. C-310 SHEET NO. 25 OF 41





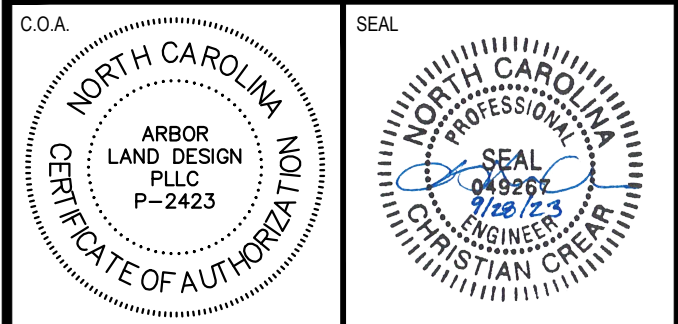
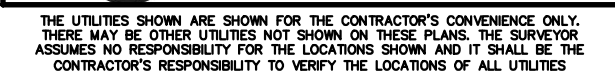
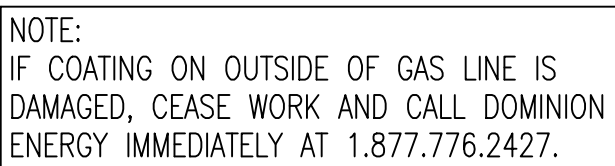






| SYMBOL   | DESCRIPTION                                                                                                                                                               | QTY    | DETAIL |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|
| 33-01-07 | Utilities Trench. Contractor to provide open and closure of trench for new Duke & Comporium lines. Coordinate with Duke Energy and Comporium Energy for detailed routing. | 417 lf |        |

1. All sanitary sewer construction shall be in accordance with the latest edition of the local sewer authority standards. The contractor shall coordinate the installation, inspections, and fees with the Local Sewer Authority.
2. Contractors shall be responsible for protecting property pins and shall pay the surveyor to replace any pins removed or disturbed.
3. All sanitary sewer pipes are to be 8" diameter PVC unless noted otherwise.
4. Contractor to adjust manhole tops to match finished grade except where noted otherwise.
5. The Contractor shall verify the slope and invert elevations shown on the plan and profile for each run of pipe between manhole prior to installation of new pipe.
6. The Contractor shall be responsible for coordinating inspection times prior to start of construction.
7. The Contractor is to notify the local sewer authority at least 72 hours prior to beginning construction.
8. The Contractor shall provide an "as-built" survey of all manhole locations, top elevations, and invert elevation for each run of pipe to the engineer prior to payment.
9. Minimum service separation is 4' center-to-center.
10. All sanitary sewer services to be 6" with a minimum slope of 1.0%.
11. All sanitary sewer service lines less than 24" cover shall be DIP.
12. Cleanouts are required on all sanitary sewer services at 75' intervals (max.).
13. All sanitary sewer services shall connect to the sanitary sewer main at an angle of 45° (see detail).
14. If the installation of cable, electric, and natural gas are not installed within the limits of disturbance, show on this plan. The plans shall be modified to show the new limits.
15. The Contractor shall be responsible for all demolition and removal of waste.
16. All storm drain inlet protection shall be maintained by the utility contractor during the utility installation.

[illegible]

 DMH/JB - DROP MANHOLE/JUNCTION BOX  
 EXCI - EXISTING CURB INLET  
 CI - CURB INLET  
 GI - GRATE INLET  
 TD - TRENCH DRAIN  
 EX SD - EXISTING STORM DRAIN LINE  
 SD - PROPOSED STORM DRAIN LINE  
 RO - PROPOSED ROOF DRAIN LINE  
 TDP - PROPOSED TRENCH DRAIN PIPE DRAINAGE AREA LINES  
 TEMPORARY INLET PROTECTION  
 EXISTING CONTOUR  
 PROPOSED CONTOUR  
 PROPOSED SPOT ELEVATION  
 EX. WATER LINE  
 EX. WATER METER  
 EXWHN - EXISTING WATER MAIN  
 PROPOSED WATER SERVICE WATER VALVE  
 EX. SANITARY SEWER MANHOLE  
 EX. SANITARY SEWER LINE  
 PROPOSED SANITARY SEWER MANHOLE  
 PROPOSED SANITARY SEWER LINE  
 PROPOSED 6" SANITARY SEWER SERVICE  
 FLOW ARROW  
 EXISTING UNDERGROUND FIBER OPTIC CABLE  
 EXISTING GAS LINE  
 EXISTING OVERHEAD UTILITY  
 EXISTING UNDERGROUND ELECTRIC  
 UTILITIES TRENCH  
 LIMITS OF CONSTRUCTION  
 HEAVY-DUTY CONCRETE PAVING  
 STANDARD-DUTY ASPHALT PAVING  
 HEAVY-DUTY ASPHALT PAVING

## BREVARD NORTH CAROLINA

|        |     |       |         |
|--------|-----|-------|---------|
| DRAWN: | JRS | DATE: | 9/28/23 |
|--------|-----|-------|---------|

|         |         |                   |        |
|---------|---------|-------------------|--------|
| DESIGN: | JRS/SJL | HORIZONTAL SCALE: | 1"=10' |
|---------|---------|-------------------|--------|

|           |     |                 |   |
|-----------|-----|-----------------|---|
| APPROVED: | CAC | VERTICAL SCALE: | - |
|-----------|-----|-----------------|---|

GRAPHIC SCALE

0 10 20 30 feet

A horizontal scale bar with alternating black and white segments. The segments are labeled 0, 10, 20, and 30 feet. The bar is divided into three equal parts, each representing 10 feet. The first part is divided into two 5-foot segments, the second into two 5-foot segments, and the third into two 5-foot segments. The total length is 30 feet. $1^{\text{II}} = 10^{\text{I}}$ 

21501

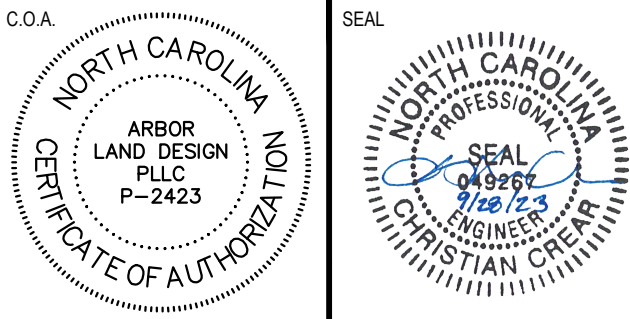
|             |           |
|-------------|-----------|
| DRAWING NO. | SHEET NO. |
|-------------|-----------|

C 401



33 UTILITIES SCHEDULE

| SYMBOL   | DESCRIPTION                                                                                                                                                               | QTY    | DETAIL |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|
| 33-01-07 | Utilities Trench, Contractor to provide open and closure of trench for new Duke & Comporium lines. Coordinate with Duke Energy and Comporium Energy for detailed routing. | 417 lf |        |



REVISIONS

| NO. | DATE       | DESCRIPTION                      | BY  |
|-----|------------|----------------------------------|-----|
| 1   | 08.25.2023 | ISSUED FOR CITY & FUNDING REVIEW | CAC |
| 2   | 9/28/23    | ISSUED FOR BID                   | CAC |

LEGEND

|  |                                        |
|--|----------------------------------------|
|  | DMH/JB - DROP MANHOLE/JUNCTION BOX     |
|  | EXCI - EXISTING CURB INLET             |
|  | CI - CURB INLET                        |
|  | GI - GRATE INLET                       |
|  | TD - TRENCH DRAIN                      |
|  | EXISTING STORM DRAIN LINE              |
|  | PROPOSED STORM DRAIN LINE              |
|  | PROPOSED ROOF DRAIN LINE               |
|  | PROPOSED TRENCH DRAIN PIPE             |
|  | DRAINAGE AREA LINES                    |
|  | TEMPORARY INLET PROTECTION             |
|  | EXISTING CONTOUR                       |
|  | PROPOSED CONTOUR                       |
|  | PROPOSED SPOT ELEVATION                |
|  | EX. WATER LINE                         |
|  | EX. WATER METER                        |
|  | PROPOSED WATER SERVICE                 |
|  | WATER VALVE                            |
|  | EX. SANITARY SEWER MANHOLE             |
|  | EX. SANITARY SEWER LINE                |
|  | PROPOSED SANITARY SEWER MANHOLE        |
|  | PROPOSED SANITARY SEWER LINE           |
|  | PROPOSED SANITARY SEWER SERVICE        |
|  | FLOW ARROW                             |
|  | EXISTING UNDERGROUND FIBER OPTIC CABLE |
|  | EXISTING GAS LINE                      |
|  | EXISTING OVERHEAD UTILITY              |
|  | EXISTING UNDERGROUND ELECTRIC          |
|  | UTILITIES TRENCH                       |
|  | LIMITS OF CONSTRUCTION                 |
|  | HEAVY-DUTY CEMENT PAVING               |
|  | STANDARD-DUTY ASPHALT PAVING           |
|  | HEAVY-DUTY ASPHALT PAVING              |

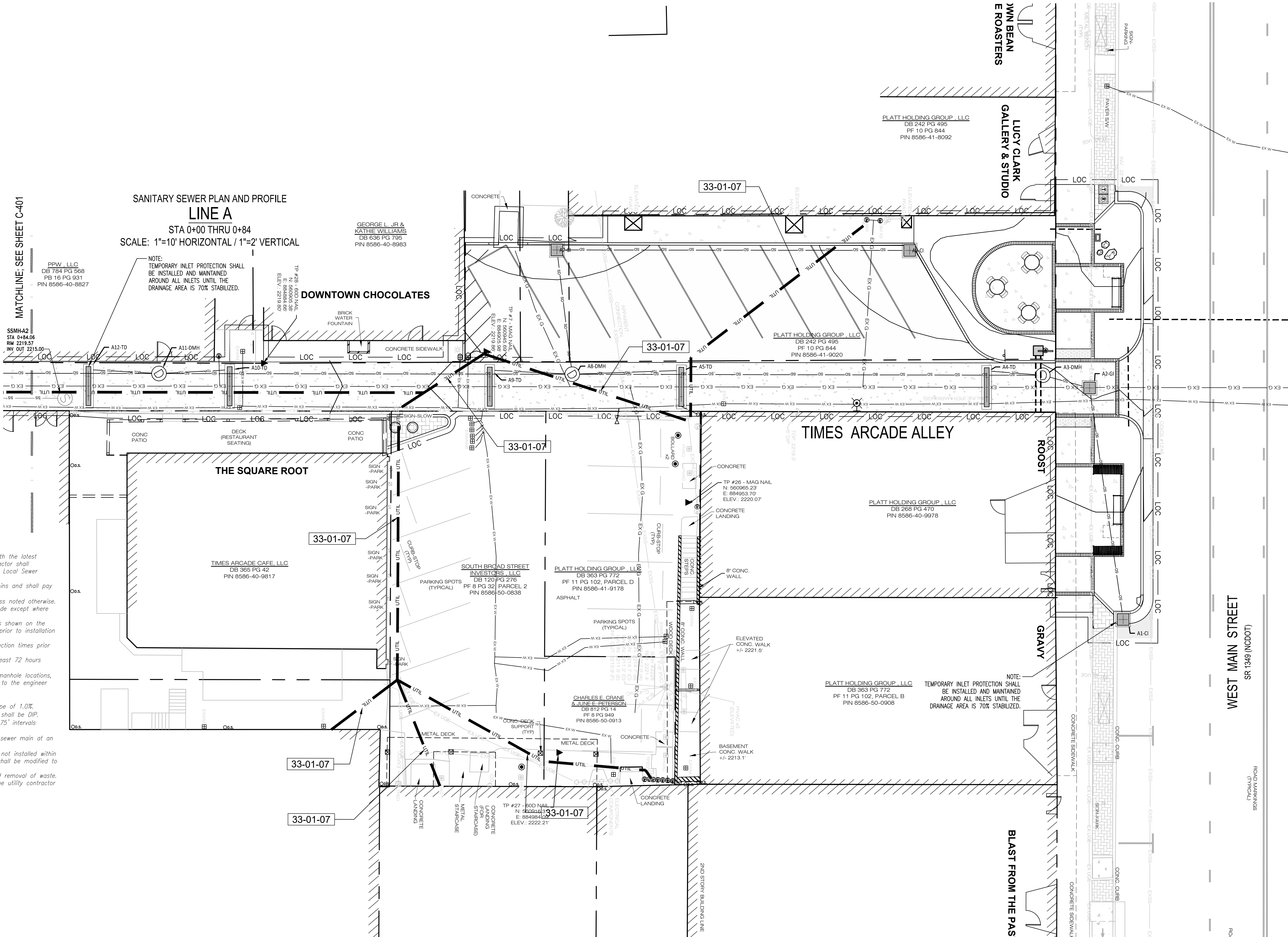
UTILITY NOTES:

- All sanitary sewer construction shall be in accordance with the latest edition of the local sewer authority standards. The contractor shall coordinate the installation, inspections, and fees with the Local Sewer Sub-District.
- Contractors shall be responsible for protecting property pins and shall pay the surveyor to replace any pins removed or disturbed.
- All sanitary sewer pipes are to be 8" diameter PVC unless noted otherwise.
- Contractor to adjust manhole tops to match finished grade except where noted otherwise.
- The Contractor shall verify the slope and invert elevations shown on the plan and profile for each run of pipe between manhole prior to installation of new pipe.
- The Contractor shall be responsible for coordinating inspection times prior to starting construction.
- The Contractor is to notify the local sewer authority at least 72 hours prior to beginning construction.
- The Contractor shall provide an "as-built" survey of all manhole locations, top elevations, and invert elevation for each run of pipe to the engineer prior to payment.
- Minimum service separation is 4' center-to-center.
- All sanitary sewer services to be 6" with a minimum slope of 1.0%.
- All sanitary sewer service lines with less than 24" cover shall be DIP.
- Cleanouts are required on all sanitary sewer services at 75' intervals (max.).
- All sanitary sewer services shall connect to the sanitary sewer main at an angle of 45° (see detail).
- If the installation of cable, electric, and natural gas are not installed within the limits of disturbance, show on this plan. The plans shall be modified to show the new limits.
- The Contractor shall be responsible for all demolition and removal of waste.
- All storm drain inlet protection shall be maintained by the utility contractor during the utility installation.

NOTE:  
IF COATING ON OUTSIDE OF GAS LINE IS  
DAMAGED, CEASE WORK AND CALL DOMINION  
ENERGY IMMEDIATELY AT 1.877.776.2427.



THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES.



TIMES ARCADE  
STREETSCAPE

BREVARD NORTH CAROLINA

TIMES ARCADE ALLEY  
UTILITIES PLAN

|               |                 |                   |         |
|---------------|-----------------|-------------------|---------|
| DRAWN:        | JRS             | DATE:             | 9/28/23 |
| DESIGN:       | JRS/SJL         | HORIZONTAL SCALE: | 1"=10'  |
| APPROVED:     | CAC             | VERTICAL SCALE:   | -       |
| GRAPHIC SCALE | 0 10 20 30 feet |                   |         |
| 1" = 10'      |                 |                   |         |

|             |       |           |
|-------------|-------|-----------|
| JOB NO.     | 21501 |           |
| DRAWING NO. | C-402 | SHEET NO. |
|             |       | 29 OF 41  |

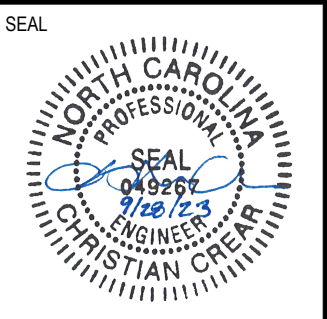
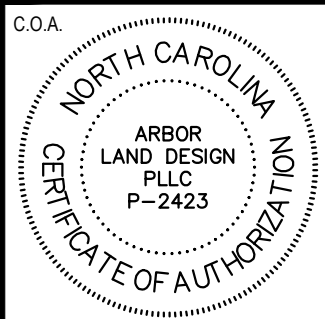
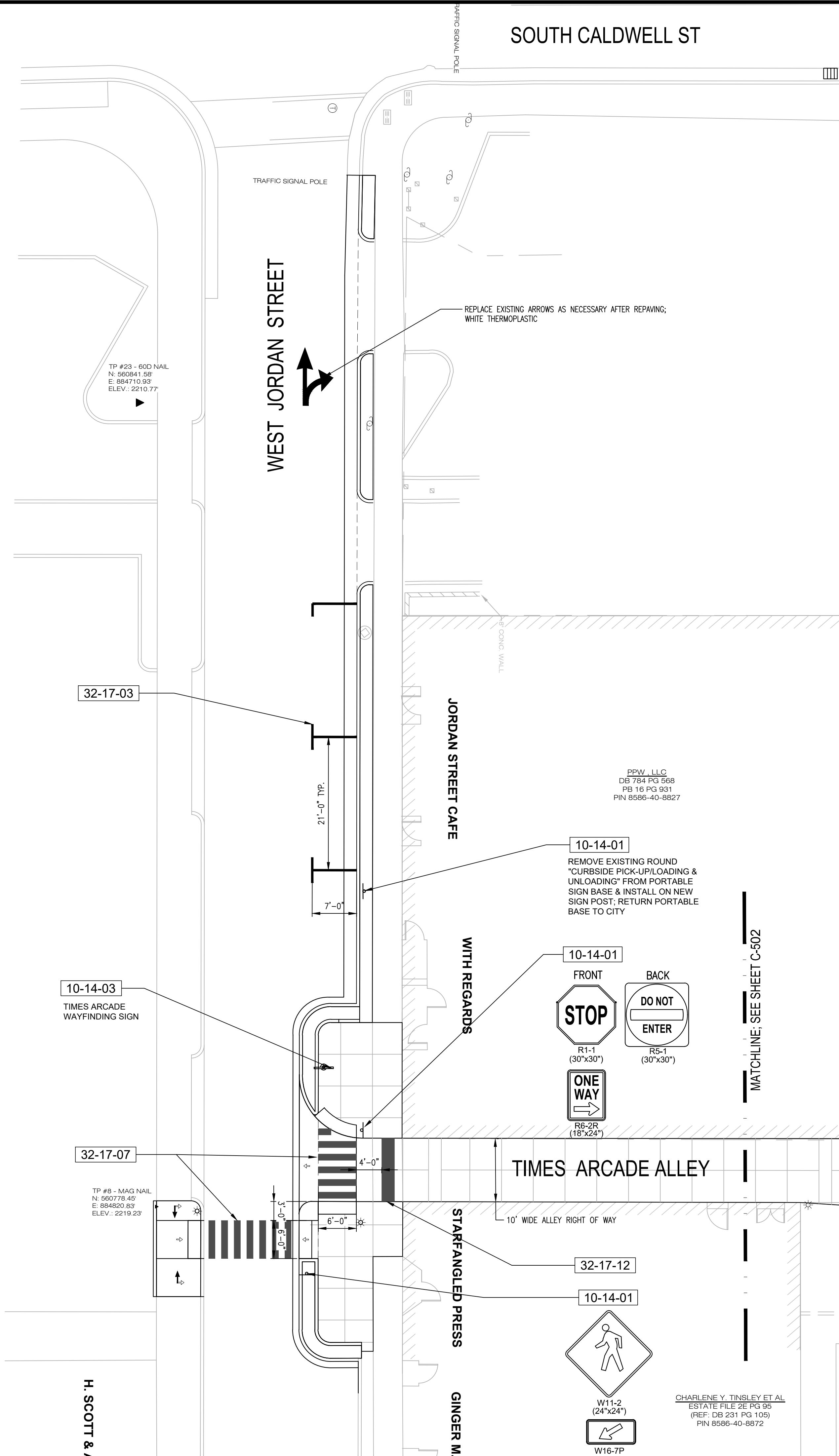






## REFERENCE NOTES SCHEDULE

| <u>SYMBOL</u>   | <u>SIGNAGE DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                                                                                                             | <u>QTY</u> | <u>DETAIL</u> |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|
| <b>10-14-01</b> | Traffic sign; see plan for type. Mounted on 3" square smooth black steel post, item #OP0S3S1014BKPO from CPC Signs ( <a href="http://www.cpcsigns.com">www.cpcsigns.com</a> ) or approved equal. With 3" x 3" Ball Cap Finial, black finish, item #FW-1033 from Signature Streetscapes ( <a href="http://www.signaturestreetscapes.com">www.signaturestreetscapes.com</a> ) or approved equal. Mount w/ NCDOT approved breakaway base. | 6          |               |
| <u>SYMBOL</u>   | <u>PAVING SPECIALTIES DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                                                                                                  | <u>QTY</u> | <u>DETAIL</u> |
| <b>32-17-02</b> | Detectable Warning Plates by ADA Solutions or approved equal. Cast-in-Place (Wet Set) Replaceable Panel; red color to match existing @ Main/Broad intersection; install per manufacturer's instructions; <a href="http://www.dotdile.com">www.dotdile.com</a>                                                                                                                                                                          | 79 sf      |               |
| <b>32-17-03</b> | Painted pavement marking; 4" solid white line                                                                                                                                                                                                                                                                                                                                                                                          | 238 lf     |               |
| <b>32-17-07</b> | Painted pavement marking; 12" wide white crosswalk striping @ 24" O.C.                                                                                                                                                                                                                                                                                                                                                                 | 74 lf      |               |
| <b>32-17-11</b> | Painted hatching; 8" wide white diagonal stripe @ 36" o.c.                                                                                                                                                                                                                                                                                                                                                                             | 141 sf     |               |
| <b>32-17-12</b> | Painted pavement marking; 24" wide white stop bar                                                                                                                                                                                                                                                                                                                                                                                      | 10 lf      |               |



## REVISIONS

[illegible]

## LEGEND

**TIMES ARCADE**  
STREETSCAPE

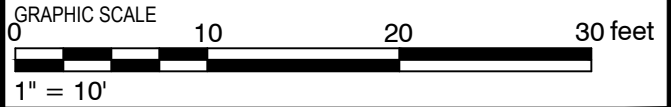
## STREETSCAPE

BREVARD

NORTH CAROLINA

# WEST JORDAN ST. TRAFFIC STRIPING & SIGNAGE PLAN

|           |     |                   |         |
|-----------|-----|-------------------|---------|
| DRAWN:    | JRS | DATE:             | 9/28/23 |
| DESIGN:   | JRS | HORIZONTAL SCALE: | 1"=10'  |
| APPROVED: | CAC | VERTICAL SCALE:   | -       |



**JOB NC**

21501

DRAWING NO.

C-501

SHEET NO

31 OF 41

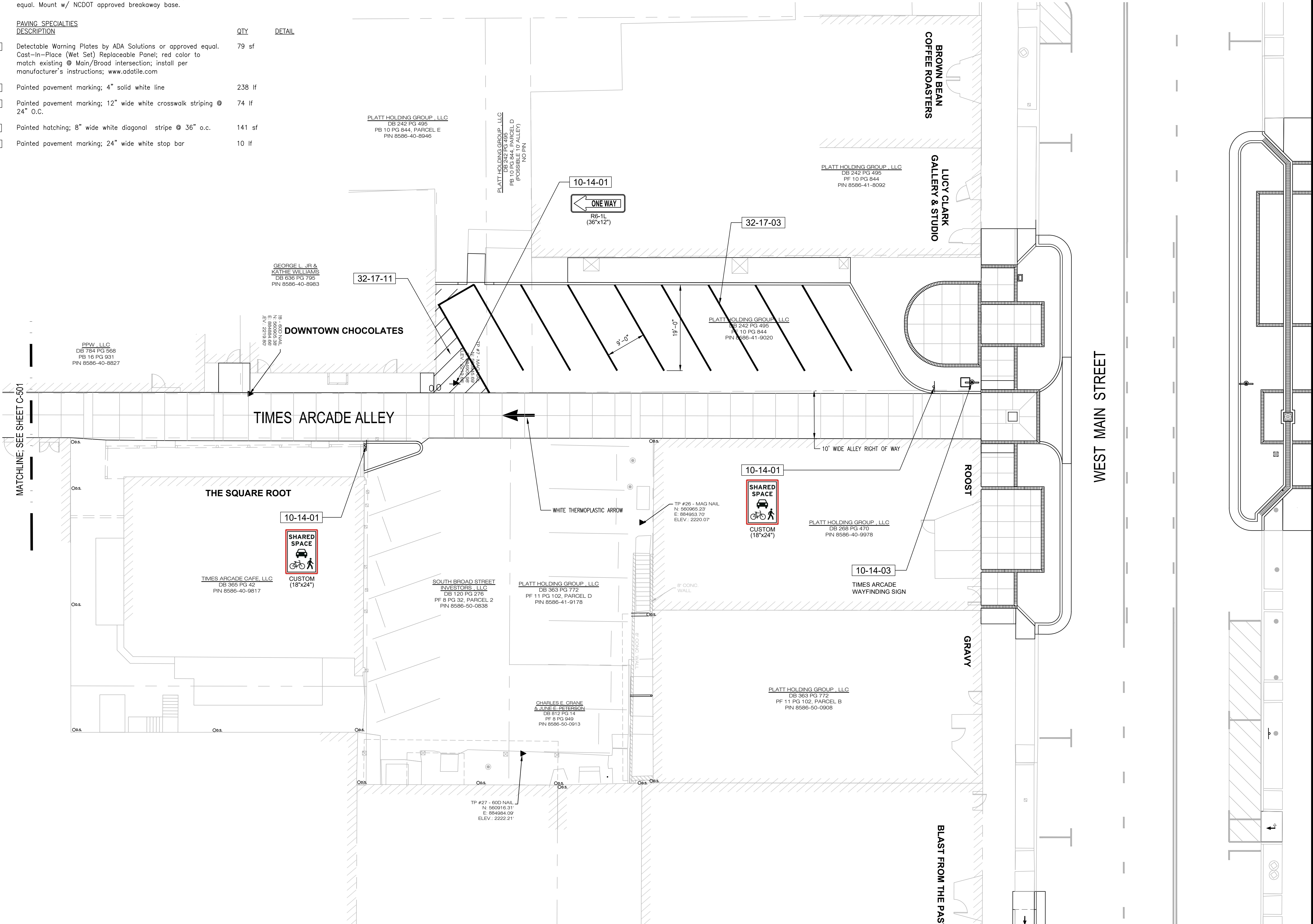


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REFERENCE NOTES SCHEDULE

| SYMBOL   | SIGNAGE DESCRIPTION                                                                                                                                                                                                                                                                                                                       | QTY | DETAIL |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------|
| 10-14-01 | Traffic sign; see plan for type. Mounted on 3" square smooth black steel post, Item #OPOS3S1014BKPO from CPC Signs (www.cpcsigns.com) or approved equal. With 3" x 3" Ball Cap Finial, black finish, Item #FN-1033 from Signature Streetscapes (www.signaturestreetscapes.com) or approved equal. Mount w/ NCDOT approved breakaway base. | 6   |        |

| SYMBOL   | PAVING SPECIALTIES DESCRIPTION                                                                                                                                                                                           | QTY    | DETAIL |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|
| 32-17-02 | Detectable Warning Plates by ADA Solutions or approved equal. Cast-In-Place (Wet Set) Replaceable Panel; red color to match existing @ Main/Broad intersection; install per manufacturer's instructions; www.adatile.com | 79 sf  |        |
| 32-17-03 | Painted pavement marking; 4" solid white line                                                                                                                                                                            | 238 lf |        |
| 32-17-07 | Painted pavement marking; 12" wide white crosswalk striping @ 24" O.C.                                                                                                                                                   | 74 lf  |        |
| 32-17-11 | Painted hatching; 8" wide white diagonal stripe @ 36" o.c.                                                                                                                                                               | 141 sf |        |
| 32-17-12 | Painted pavement marking; 24" wide white stop bar                                                                                                                                                                        | 10 lf  |        |



**ARBOR**  
LAND DESIGN

LANDSCAPE ARCHITECTS - CIVIL ENGINEERS  
LAND SURVEYORS - LAND PLANNERS  
PO Box 263, Greenville, SC 29602  
864.235.3589  
postmaster@aldllc.net

C.O.A.  
  
ARBOR LAND DESIGN  
PLLC  
P-2423

SEAL  
  
NORTH CAROLINA  
PROFESSIONAL  
ENGINEER  
CHRISTIAN CREEK

| REVISIONS |         |                                  |     |
|-----------|---------|----------------------------------|-----|
| NO.       | DATE    | DESCRIPTION                      | BY  |
| 1         | 8/25/23 | ISSUED FOR CITY & FUNDING REVIEW | CAC |
| 2         | 9/28/23 | ISSUED FOR BID                   | CAC |
|           |         |                                  |     |
|           |         |                                  |     |
|           |         |                                  |     |
|           |         |                                  |     |
|           |         |                                  |     |
|           |         |                                  |     |
|           |         |                                  |     |
|           |         |                                  |     |

LEGEND

**TIMES ARCADE**  
STREETSCAPE

BREVARD NORTH CAROLINA

**TIMES ARCADE**  
TRAFFIC STRIPING  
& SIGNAGE PLAN

DRAWN: JRS DATE: 9/28/23

DESIGN: JRS HORIZONTAL SCALE: 1"=10'

APPROVED: CAC VERTICAL SCALE: -

GRAPHIC SCALE 0 10 20 30 feet

1" = 10'

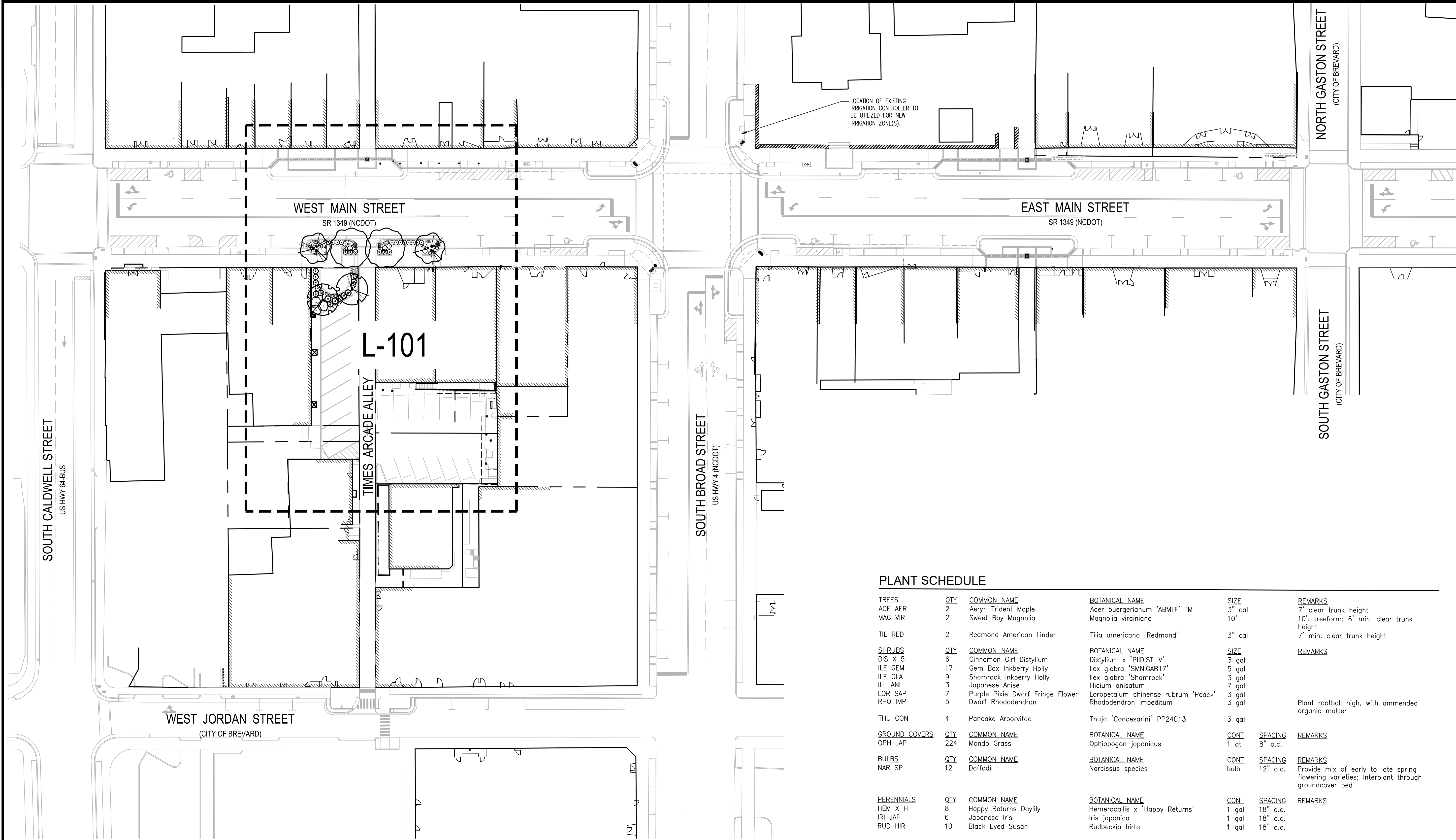
JOB NO. 21501

DRAWING NO. C-502

SHEET NO. 32 OF 41

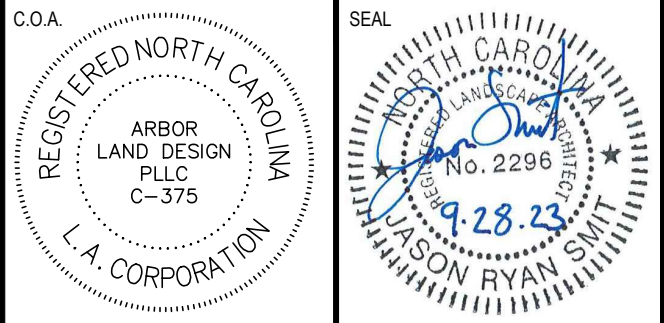


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PLANT SCHEDULE

|               |     |                                  |                                     |        |                                                   |                                                                                             |
|---------------|-----|----------------------------------|-------------------------------------|--------|---------------------------------------------------|---------------------------------------------------------------------------------------------|
| TREES         | QTY | COMMON NAME                      | BOTANICAL NAME                      | SIZE   | REMARKS                                           |                                                                                             |
| ACE AER       | 2   | Aeryn Trident Maple              | Acer buergerianum 'ABMTF' TM        | 3" cal | 7' clear trunk height                             |                                                                                             |
| MAG VIR       | 2   | Sweet Bay Magnolia               | Magnolia virginiana                 | 10'    | 10'; treeform; 6' min. clear trunk height         |                                                                                             |
| TIL RED       | 2   | Redmond American Linden          | Tilia americana 'Redmond'           | 3" cal | 7' min. clear trunk height                        |                                                                                             |
| SHRUBS        | QTY | COMMON NAME                      | BOTANICAL NAME                      | SIZE   | REMARKS                                           |                                                                                             |
| DIS X 5       | 6   | Cinnamon Girl Distylium          | Distylium x "PIIDIST-V"             | 3 gal  |                                                   |                                                                                             |
| ILE GEM       | 17  | Gem Box Inkberry Holly           | Ilex glabra "SMNIGAB17"             | 5 gal  |                                                   |                                                                                             |
| ILE GLA       | 9   | Shamrock Inkberry Holly          | Ilex glabra "Shamrock"              | 3 gal  |                                                   |                                                                                             |
| ILL ANI       | 3   | Japanese Anise                   | Illicium anisatum                   | 7 gal  |                                                   |                                                                                             |
| LOR SAP       | 7   | Purple Pixie Dwarf Fringe Flower | Loropetalum chinense rubrum "Peack" | 3 gal  |                                                   |                                                                                             |
| RHO IMP       | 5   | Dwarf Rhododendron               | Rhododendron impeditum              | 3 gal  | Plant rootball high, with ammended organic matter |                                                                                             |
| THU CON       | 4   | Pancake Arborvitae               | Thuja "Concesarini" PP24013         | 3 gal  |                                                   |                                                                                             |
| GROUND COVERS | QTY | COMMON NAME                      | BOTANICAL NAME                      | CONT   | SPACING                                           | REMARKS                                                                                     |
| OPH JAP       | 224 | Mondo Grass                      | Ophiopogon japonicus                | 1 qt   | 8" o.c.                                           |                                                                                             |
| BULBS         | QTY | COMMON NAME                      | BOTANICAL NAME                      | CONT   | SPACING                                           | REMARKS                                                                                     |
| NAR SP        | 12  | Daffodil                         | Narcissus species                   | bulb   | 12" o.c.                                          | Provide mix of early to late spring flowering varieties; Interplant through groundcover bed |
| PERENNIALS    | QTY | COMMON NAME                      | BOTANICAL NAME                      | CONT   | SPACING                                           | REMARKS                                                                                     |
| HEM X H       | 8   | Happy Returns Daylily            | Hemerocallis x "Happy Returns"      | 1 gal  | 18" o.c.                                          |                                                                                             |
| IRI JAP       | 6   | Japanese Iris                    | Iris japonica                       | 1 gal  | 18" o.c.                                          |                                                                                             |
| RUD HIR       | 10  | Black Eyed Susan                 | Rudbeckia hirta                     | 1 gal  | 18" o.c.                                          |                                                                                             |



REVISIONS

| NO. | DATE    | DESCRIPTION                      | BY  |
|-----|---------|----------------------------------|-----|
| 1   | 8/25/23 | ISSUED FOR CITY & FUNDING REVIEW | JRS |
| 2   | 9/28/23 | ISSUED FOR BID                   | JRS |
|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |
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|     |         |                                  |     |
|     |         |                                  |     |
|     |         |                                  |     |

LEGEND

TIMES ARCADE

STREETSCAPE

BREVARD NORTH CAROLINA

OVERALL LANDSCAPE PLAN & SCHEDULE

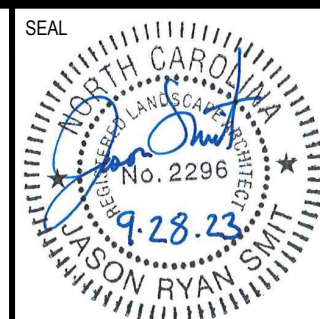
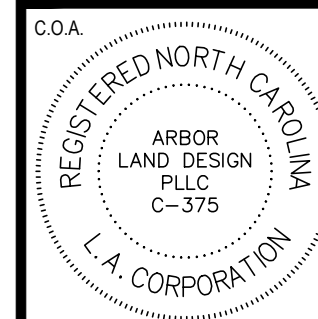
|               |                 |                   |         |
|---------------|-----------------|-------------------|---------|
| DRAWN:        | JRS             | DATE:             | 9/28/23 |
| DESIGN:       | JRS             | HORIZONTAL SCALE: | 1"=30'  |
| APPROVED:     | JRS             | VERTICAL SCALE:   | -       |
| GRAPHIC SCALE | 0 30 60 90 feet |                   |         |
| 1" = 30'      |                 |                   |         |

JOB NO. 21501

DRAWING NO. L-100 SHEET NO. 33 OF 41



NOTE:  
CONTRACTOR TO CONFIRM LOCATION OF ALL  
UNDERGROUND UTILITIES PRIOR TO LANDSCAPE  
INSTALLATION



## REVISIONS

[illegible]

### LEGEND

**TIMES ARCADE**  
STREETSCAPE

STREETSCAPE

BREVARD

NORTH CAROLINA

# TIMES ARCADE LANDSCAPE PLAN

|           |     |                   |        |
|-----------|-----|-------------------|--------|
| DRAWN:    | JRS | DATE:             | 9/28/2 |
| DESIGN:   | JRS | HORIZONTAL SCALE: | 1"=1   |
| APPROVED: | JRS | VERTICAL SCALE:   |        |

GRAPHIC SCALE  
0 10 20 30 feet  
1" = 10'

JOB NO. 21501

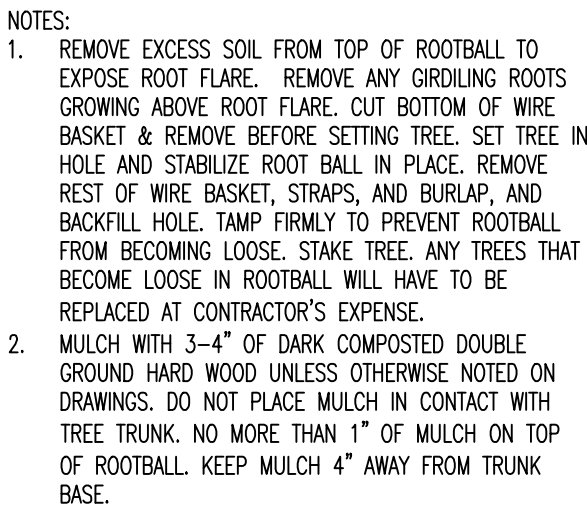
DRAWING NO.

SHEET NO.

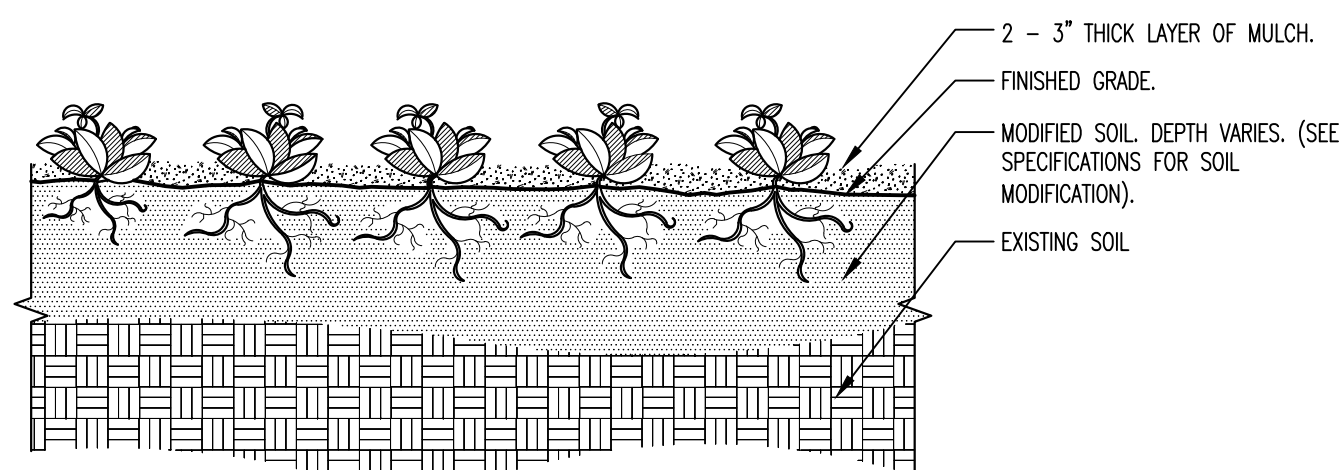
# L-101

34 OF 41

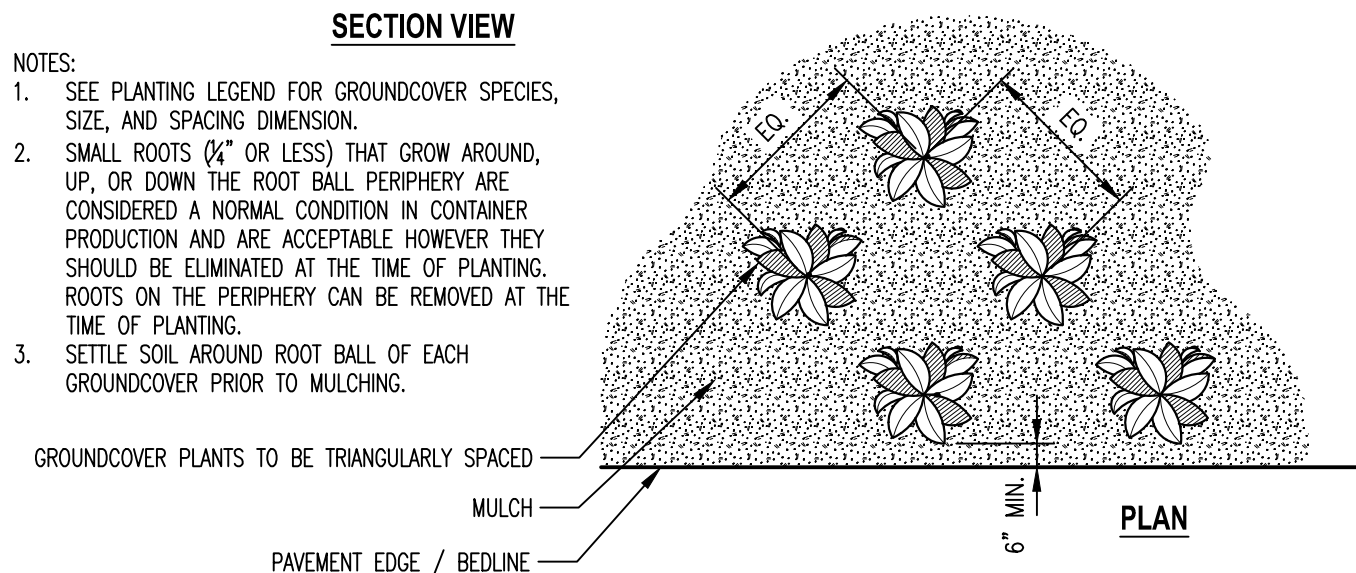




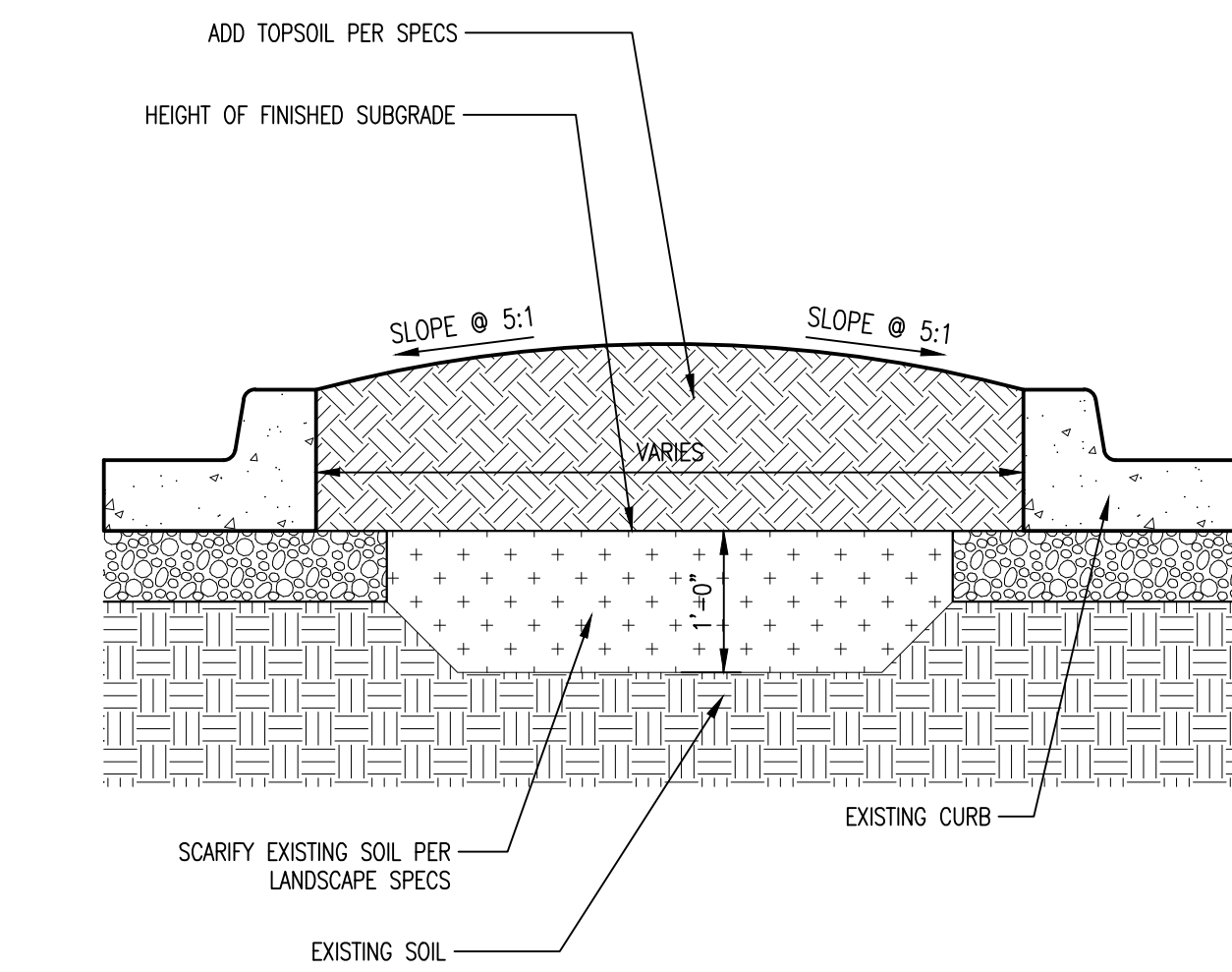
## 329343-01



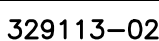
## 329333.13-10



## 329333.13-10

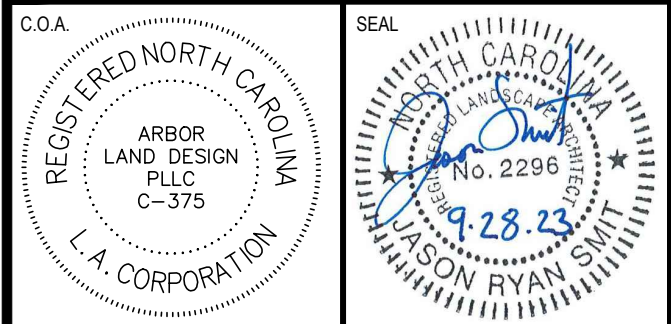


## 329113-01



- LANDSCAPE CONTRACTOR AND IRRIGATION CONTRACTOR SHALL PROVIDE THREE REFERENCES ON PROJECTS FIVE YEARS OLD OR OLDER. THE JOB SIZE SHOULD BE A MINIMUM OF \$100,000 (LANDSCAPE) AND \$50,000 (IRRIGATION).
2. ALL PLANT MATERIAL SHALL BE APPROVED BY LANDSCAPE ARCHITECT BEFORE PLANTING.
3. LANDSCAPE CONTRACTOR SHALL FLAG OUT ALL TREE PLANTINGS AND SHRUB AREAS (TYPICAL LAYOUT WILL SUFFICE), AND NOTIFY LANDSCAPE ARCHITECT FOR APPROVAL BEFORE PLANTING. ALLOW FOR 2 DAYS NOTICE.
4. PLANTING SHALL BE PER DETAILS AND ARBOR LANDSCAPE SPECIFICATIONS. AT COMPLETION OF THE JOB, THE LANDSCAPE ARCHITECT WILL CHECK THE PLANTING PROCEDURE FOR ONE PLANT IN EACH BED. IF PLANTED IMPROPERLY ALL PLANTS IN BED WILL HAVE TO BE REPLANTED. THE SAME PROCESS WILL APPLY TO ALL TREES. SO PLEASE SUPERVISE ALL PLANTINGS CAREFULLY.
5. LANDSCAPE CONTRACTOR SHALL DEEP PLOW AND RAKE-OUT ALL HARD PAN AREAS TO A DEPTH OF 12" AND SOIL AMENDMENTS ADDED BEFORE DIGGING INDIVIDUAL HOLES. 4" TOPSOIL TO BE PROVIDED BY LANDSCAPE CONTRACTOR IN ALL SOD AND SEEDED AREAS. BREAK OUT AS A SEPARATE PRICE.
6. LANDSCAPE CONTRACTOR SHALL PROVIDE 1 YEAR MAINTENANCE (SEE SPECIFICATIONS) FOR ALL NEW PLANTINGS, SOD, AND SEEDED AREAS. ALL TREES WILL REQUIRE HAND WATERING IN ADDITION TO THE IRRIGATION SYSTEM.
7. AN AS-BUILT IRRIGATION PLAN SHALL BE PROVIDED FOR OWNER.
8. MULCH - ALL PLANT BEDS TO BE MULCHED WITH 4" OF DOUBLE GROUND HARDWOOD MULCH.
9. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY LICENSES AND INSURANCE TO COMPLETE THE WORK.
10. FINAL CLEANUP OF SITE AS A RESULT OF LANDSCAPE OPERATIONS AND ALL FINE GRADING SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
11. ALL PLANT MATERIAL AND WORKMANSHIP TO BE GUARANTEED FOR ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER. PLANT REPLACEMENT TO OCCUR ONLY ONCE.
12. PAYMENT DUE UPON SATISFACTORY COMPLETION OF THE WORK.
13. IN ORDER TO KEEP ALL BIDS STANDARD, ESTIMATED UNIT PRICES MUST BE GIVEN ON PLANT TYPE AND SIZE LISTED IN PLANT LISTS. THESE ESTIMATED UNIT PRICES SHOULD BE WITHIN NURSERY INDUSTRY PRICING RANGE.
14. THESE PLANT LISTS GIVE THE PLANT AND SIZE THE MOST DESIRED FOR THIS PROJECT. ALTERNATE PLANTS AND/OR SIZES WILL BE NEGOTIATED AFTER THE SUCCESSFUL BID IS TAKEN.
15. ALL PLANT MATERIAL WILL BE INSPECTED. PLANTS NOT CONFORMING PRECISELY TO PLANT LIST WILL NOT BE ACCEPTED AND SHALL BE REPLACED.
16. THE OWNER HAS THE OPTION TO DELETE ANY PART OF THE CONTRACT PRIOR TO THE SIGNING OF THE CONTRACT. PLEASE LIST ALL ITEMS INDIVIDUALLY.
17. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ARBOR ENGINEERING, INC. LANDSCAPE SPECIFICATIONS (02930). THE LANDSCAPE CONTRACTOR SHALL ADHERE TO THESE SPECS THROUGH OUT THE DURATION OF THE JOB. SPECIFICATIONS ARE AVAILABLE AT ARBOR LAND DESIGN, LLC. 49 GREENLAND DR, GREENVILLE SOUTH CAROLINA, 29615, TELEPHONE (864) 235-3589.
18. SOD AREAS TO BE FESCUE. SEEDED AREAS TO BE FESCUE AT 10 LBS/1000 SF.

1. WATER SYSTEM STANDARDS AND SPECIFICATIONS.
2. IRRIGATION PLAN– THE IRRIGATION CONTRACTOR WILL BE RESPONSIBLE FOR DESIGNING THE SYSTEM TO MEET THE PERFORMANCE SPECIFICATIONS DESCRIBED BELOW. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS CONNECTED WITH THE INSTALLATION OF THE IRRIGATION SYSTEM. LAWN AREAS SHALL BE WATERED SEPARATELY FROM SHRUB AREAS UNLESS APPROVED BY OWNER. ROADWAY, WALKS AND BUILDINGS SHALL NOT BE SPRAYED BY SYSTEM. AN AS-BUILT DRAWING SHALL BE PROVIDED AT THE END OF THE PROJECT. THE SYSTEM SHALL PROVIDE A MINIMUM OF 1" WATER PER WEEK OVER THE LANDSCAPE. NEW SYSTEM COMPONENTS SHALL MATCH THOSE USED ON EXISTING SYSTEM.
3. SETTING OF METER– THE IRRIGATION SYSTEM SHALL UTILIZE METER IN PLACE FOR EXISTING IRRIGATION SYSTEM.
4. SETTING OF BACK FLOW PREVENTER– THE IRRIGATION SYSTEM SHALL UTILIZE BACK FLOW PREVENTER IN PLACE FOR EXISTING IRRIGATION SYSTEM
5. EXISTING PRESSURE– THE RESIDUAL PRESSURE SHALL BE DETERMINED BY THE IRRIGATION CONTRACTOR. THE IRRIGATION CONTRACTOR WILL BE RESPONSIBLE FOR THE IRRIGATION SYSTEM; AND PRIOR TO STARTING ANY WORK, HE SHALL CHECK THE PRESSURE TO ENSURE THAT A MINIMUM OF 55 PSI IS AVAILABLE AFTER THE BACK FLOW PREVENTER.
6. PIPING– ALL PIPE SHALL BE PR 200 SOLVENT WELD PVC PIPE EXCEPT FOR SCHEDULE 40 PIPE USED FOR RISERS AND THE MAIN SUPPLY LINE. THE PIPE SHALL BE BURIED A MINIMUM OF 12". THE IRRIGATION CONTRACTOR SHALL COORDINATE THE PLACEMENT OF PIPING WITH THE LANDSCAPING, PARTICULARLY CONCERNING TREES AND LARGE SHRUBBERY. THE CONTRACTOR SHALL NOT CUT ANY TREE ROOTS OVER 1" DIAMETER AND SHALL TAKE EXTRA CARE AROUND EXISTING TREES. ALL GATE VALVES ARE TO BE OF BRONZE CONSTRUCTION. SETTLEMENT OF TRENCHES SHALL BE CORRECTED BY THE IRRIGATION CONTRACTOR.
7. INSTALLATION OF HEADS– HEADS SHALL BE PROPERLY ALIGNED IN RELATIONSHIP TO THE BUILDING AND WALKS. THE RADIUS OF THE HEADS SHALL BE ADJUSTED AS NECESSARY. ALL HEADS OF THE SAME TYPE SHALL BE OF THE SAME MANUFACTURER.
8. AUTOMATIC DRAIN VALVES– AUTOMATIC DRAIN VALVES SHALL BE INSTALLED AT ALL LOW POINTS.
9. FLEX RISERS– HEADS THAT ARE 3" OR LESS ABOVE GRADE WILL BE INSTALLED WITH KING BROTHERS FLEX RISER OR TORO FUNNY PIPE.
10. CONTROLLER AND WIRE– THE IRRIGATION SYSTEM SHALL UTILIZE CONTROLLER IN PLACE FOR EXISTING IRRIGATION SYSTEM.
11. AUTOMATIC VALVES– VALVES SHALL BE ELECTRIC 24 V.A.C. REMOTE CONTROL VALVES, BY HUNTER, MODEL #PCZ-101-25. THE CONTRACTOR SHALL PLACE ALL VALVES IN "AMTEK" 10"x16" BOXES 10-170-001 (COVER 10-173-134) OR IN ROUND 10" AMTEK BOXES. ALL ELECTRICAL CONNECTIONS SHALL BE COATED WITH 3M SCOTCHKOTE ELECTRICAL COATING OR EQUAL. BOXES ARE TO BE SET ON 3" GRAVEL FOR DRAINAGE.
12. SETTING A WATER SCHEDULE– THE CONTRACTOR SHALL TAPE A WATERING SCHEDULE AND A SCHEMATIC SITE PLAN SHOWING THE LOCATION OF EACH ZONE OF THE CONTROLLER. UNLESS APPROVED OTHERWISE BY THE LANDSCAPE ARCHITECT, THE SCHEDULE SHALL PROVIDE ONE (1) INCH OF WATER PER WEEK UNTIL PLANTING BECOMES ESTABLISHED.
13. PERIODIC VISITS– DURING THE FIRST WATERING SEASON, THE CONTRACTOR SHALL PERIODICALLY VISIT THE SITE TO INSURE THE SYSTEM IS OPERATING PROPERLY. DURING SUCH VISITS, TO ACCOMMODATE UNFORESEEN SHADY, MOIST, OR DRY AREAS, THE IRRIGATION CONTRACTOR WILL ADJUST NOZZLES AS NECESSARY AS DIRECTED BY THE LANDSCAPE ARCHITECT AT NO COST TO THE OWNER.
14. SLEEVES– THE GENERAL CONTRACTOR WILL INSTALL AND MARK SCHEDULE 40 PVC SLEEVES IN THE FIELD.
15. LOCATION OF UTILITIES– THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES WITHIN THE CONSTRUCTION AREA AS NECESSARY.
16. RAIN SENSOR – A RAIN SENSOR IS ALREADY PROVIDED ON THE EXISTING IRRIGATION SYSTEM TO SHUT OFF THE IRRIGATION SYSTEM AFTER MORE THAN 3" OF RAIN HAS FALLEN

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## STREETSCAPE

NORTH CAROLINA

|               |     |                   |         |
|---------------|-----|-------------------|---------|
| DRAWN:        | JRS | DATE:             | 9/28/23 |
| DESIGN:       | JRS | HORIZONTAL SCALE: |         |
| APPROVED:     | JRS | VERTICAL SCALE:   |         |
| GRAPHIC SCALE |     |                   |         |

SHEET NO. 35 OF 41



| SYMBOL | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | <b>CIRCUITS AND CONDUIT</b><br>HOME RUN TO LIGHTING/SERVICE PANEL. HASH MARKS, WHEN SHOWN, INDICATE NUMBERS OF CONDUCTORS. 1/16" INDICATES HOT WIRE, 1/4" INDICATES NEUTRAL CONDUCTOR. 1/2" INDICATES GROUND CONDUCTOR. HOME RUN NOTE INDICATES PANEL NAME AND CIRCUIT NAME OR FEEDER TAG. CONDUCTORS SHALL BE #12 AWG IN 3/4" CONDUIT UNLESS NOTED OTHERWISE. ANY HOME RUN OR CONDUIT WITHOUT HASH MARKS IS TO CONTAIN 3 CONDUCTORS: 1 HOT, 1 NEUTRAL, AND 1 EQUIPMENT GROUND. EACH HOT CIRCUIT SHALL BE PAIRED WITH A SEPARATE NEUTRAL CONDUCTOR. SHARING OF NEUTRAL CONDUCTORS BETWEEN CIRCUITS IS NOT ALLOWED. |
|        | EXPOSED CONDUIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|        | CONDUIT RUN IN SLAB OR UNDERGROUND.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        | CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALLS, UNLESS NOTED OTHERWISE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|        | CONDUIT TURNING UP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|        | CONDUIT TURNING DOWN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|        | <b>EQUIPMENT</b><br>LIGHTING OR SERVICE METER/PANEL COMBO, SURFACE MOUNTED, NEMA 3R RATED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|        | DRY TYPE TRANSFORMER.<br><br>CONNECTION TO A SPECIFIC PIECE OF EQUIPMENT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PROVIDER / INSTALLER OF THE EQUIPMENT.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|        | <b>WIRING DEVICES</b><br>NOTE: ALL WIRING DEVICES TO BE GRAY, WITH GRAY NYLON COVERPLATE (FLUSH MOUNTED) UNLESS NOTED OTHERWISE ON THE DRAWING OR SPECIFICATIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|        | PHOTOELECTRIC CELL, SPEC GRADE, TORK MODEL 2101 OR EQUAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|        | JUNCTION BOX STEM INDICATES WALL MOUNTED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|        | 20A, 125V, 2P, 3W, NEMA 5-20R, DUPLEX RECEPTACLE. HUBBELL 5362-I OR EQUAL. STANDARD POWER. "WP" DENOTES WEATHER RESISTANT TYPE RECEPTACLE WITH CAST IN-USE COVER. "GFCI" DENOTES GFCI TYPE.                                                                                                                                                                                                                                                                                                                                                                                                                        |
|        | QUADRUPLEX - TWO DUPLEX OUTLETS MOUNTED IN A TWO GANG BOX WITH TWO GANG COVER PLATE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|        | SAME AS "P" ABOVE EXCEPT SURFACE MOUNTED IN CAST BOX, WITH CAST, IN-USE COVER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        | SAME AS "P" ABOVE EXCEPT SURFACE MOUNTED IN CAST BOX, WITH CAST IN-USE COVER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|        | SPECIAL RECEPTACLE. SEE PLANS FOR TYPE, MOUNTED IN CAST WEATHER-PROOF BOX, WITH CAST IN-USE COVER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|        | WR/GFCI DUPLEX RECEPTACLE IN CAST BOX, WITH LOCKABLE CAST IN-USE COVER, MOUNTED TO STRUT FOR POWER TO HOLIDAY LIGHTS. SEE DETAIL 2/E-002.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|        | <b>ADD-ALTERNATE E2:</b> SHORT POWER PEDESTAL WITH LOCKABLE IN-USE COVER, TO CONTAIN (1) 20A, WR/GFCI DUPLEX RECEPTACLE. SEE DETAIL 6/E-002.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|        | POWER PEDESTAL WITH LOCKABLE IN-USE COVER, TO CONTAIN (2) 20A, WR/GFCI DUPLEX RECEPTACLES. SEE DETAIL 1/E-002.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        | <b>ADD-ALTERNATE E1:</b> POWER PEDESTAL WITH LOCKABLE IN-USE COVER, TO CONTAIN (1) SPECIAL RECEPTACLE. SEE PLANS FOR TYPE, SEE DETAIL 5/E-002.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        | <b>BOXES AND POKE-THRU'S</b><br>HANDHOLE, FLUSH WITH PAVEMENT. SEE PLANS FOR SIZES AND QUANTITIES. SEE DETAIL 3/E-002.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|        | <b>LIGHTING FIXTURES AND DEVICES:</b><br>WALL MOUNTED FIXTURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|        | NEW POLE MOUNTED AREA FIXTURE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        | EXISTING WALL MOUNTED LAMP HOLDER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|        | EXISTING POLE MOUNTED UTILITY "COBRA HEAD" FIXTURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|        | NEW CATENARY CYLINDER FIXTURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| ABBREVIATIONS: |                                 |      |                            |
|----------------|---------------------------------|------|----------------------------|
| AFG            | ABOVE FINISHED GRADE            | PH   | PHASE                      |
| BKR            | BREAKER                         | PNL  | PANEL                      |
| CU             | COPPER                          | PVC  | POLYVINYL CHLORIDE CONDUIT |
| CKT            | CIRCUIT                         | RECP | RECEPTACLE (R.)            |
| D              | DEDICATED OUTLET                | REQD | REQUIRED                   |
| DWG            | DRAWING                         | RGS  | RIGID GALVANIZED STEEL     |
| EC             | ELECTRICAL CONTRACTOR           | SPD  | SURGE PROTECTIVE DEVICE    |
| EMT            | ELECTRICAL METALLIC TUBING      | SW   | SWITCH                     |
| FWE            | FURNISHED WITH EQUIPMENT        | TYP  | TYPICAL                    |
| GFI            | GROUND FAULT INTERRUPTER DEVICE | UNO  | UNLESS NOTED OTHERWISE     |
| LTG            | LIGHTING (L.)                   | UGND | UNDERGROUND                |
| MLO            | MAIN LUGS ONLY                  | W/   | WITH                       |
| MCB            | MAIN CIRCUIT BREAKER            | WP   | WEATHER PROOF              |
| MFR            | MANUFACTURER                    | XFMR | TRANSFORMER                |
| NTS            | NOT TO SCALE                    |      |                            |

# ELECTRICAL GENERAL NOTES:

1. INSPECT SITE PRIOR TO SUBMITTING BID. DRAWINGS ARE INTENDED TO COVER THE REQUIRED ELECTRICAL SYSTEMS. DRAWINGS MAY NOT SHOW COMPLETE OR ACCURATE DETAILS OF THE BUILDING OR SYSTEM IN EVERY RESPECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY ADDITIONAL INFORMATION AS REQUIRED.
2. CONFORM TO THE NATIONAL ELECTRICAL CODE (2020), IBC (2018), NCECC (2018), APPLICABLE NEMA, ANSI AND IEEE PUBLICATIONS, U.L. AND ADA STANDARDS AND OSHA REQUIREMENTS. COMPLY WITH LOCAL, COUNTY, STATE AND NATIONAL CODES HAVING JURISDICTION.
3. FURNISH AND INSTALL ALL MATERIALS IN A NEAT AND WORKMANLIKE FASHION. ALL MATERIALS SHALL BE NEW, WITH FIRST QUALITY U/L LABEL.
4. VERIFY ALL DIMENSIONS AND CLEARANCES PRIOR TO INSTALLATION OF EQUIPMENT AND RACEWAYS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK WITH THAT OF ALL OTHER TRADES AS REQUIRED.
5. CONDUIT SHALL BE EMT FOR BRANCH CIRCUIT WIRING AS ALLOWED BY NEC, EXCEPT THAT SET SCREW OR CRIMP FITTINGS ARE NOT ALLOWED. WHERE EXPOSED TO PHYSICAL DAMAGE CONDUITS SHALL BE RIGID GALVANIZED STEEL. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUCTORS SHALL BE TYPE THHN/THWN, 600V COPPER BUILDING WIRE. MINIMUM SIZE SHALL BE #12 AWG COPPER UNLESS NOTED. UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 WITH TRANSITION TO RIGID GALVANIZED STEEL FOR EXPOSED CONDUITS.
6. PROVIDE GROUNDING FOR ALL EQUIPMENT IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE. GROUND SERVICE DRIVEN GROUND ROD.
7. ALL ENCLOSURES SHALL BE OF THE NEMA TYPE WHICH IS SUITABLE FOR THE APPLICATION.
8. SEAL ALL CONDUIT PENETRATIONS TO MATCH RATING OF WALL BEING PENETRATED.
9. ALL WORK SHALL HAVE PROPER LABELING AND NAMEPLATES. ALL CIRCUITS SHALL BE LABELED AT PANELS AND BOXES AS INDICATED. ALL PANELS AND DISCONNECTS ARE TO BE PERMANENTLY MARKED WITH NAME OR EQUIPMENT SERVED. ALL PANELS ARE TO BE PROVIDED WITH TYPEWRITTEN PANEL SCHEDULES.
10. COORDINATE WITH ELECTRICAL UTILITY AS REQUIRED FOR SERVICE ENTRY. INSTALL METER AND CONDUITS PER UTILITY REQUIREMENTS AND PAY ALL REQUIRED FEES OR CHARGES FOR SERVICES SHOWN.
11. THOROUGHLY CLEAN ALL EQUIPMENT AND SYSTEMS BEFORE PLACING IN OPERATION. RESTORE FINISHED SURFACES IF DAMAGED AND DELIVER THE ENTIRE INSTALLATION IN AN APPROVED CONDITION. INSTRUCT THE OWNERS' PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF THE SYSTEMS. FURNISH TO THE OWNER THREE SETS OF OPERATION AND MAINTENANCE MANUALS FOR EACH SYSTEM.
12. GUARANTEE THE WORK INSTALLED FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE. DEFECTS WHICH APPEAR AS A RESULT OF NORMAL USAGE SHALL BE REMEDIED BY THE CONTRACTOR TO THE COMPLETE SATISFACTION OF THE OWNER WITHOUT COST TO THE OWNER.
13. CONTRACTOR SHALL KEEP CURRENT A SET OF PLANS FOR THE DURATION OF CONSTRUCTION WITH ALL CHANGES TO WORK NEATLY AND ACCURATELY MARKED IN RED AND SHALL TURN OVER TO OWNER AT COMPLETION OF PROJECT.
14. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED TO MEET SEISMIC REQUIREMENTS OF 2018 IBC.
15. ALL PANELBOARDS SHALL BE FURNISHED WITH COPPER BUS BARS AND A COPPER GROUNDING BUS BAR.

**NOTES:**

- POLE SHALL BE PROVIDED WITH MINIMUM OF FOUR ANCHOR BOLTS WITH DOUBLE NUTS, DOUBLE FLAT WASHERS, AND ONE LOCK WASHER SIZED TO MATCH EACH ANCHOR BOLT. ALL NUTS, WASHERS, AND BOLTS SHALL BE HOT DIPPED GALVANIZED.
- ANCHOR BOLT GAGE, DIMENSION "A", SHALL BE AS REQUIRED BY POLE MANUFACTURER. EXACT LOCATION OF ANCHOR BOLTS SHALL BE DETERMINED BY CONTRACTOR AFTER POLES ARE PURCHASED AND BEFORE CONCRETE BASE IS CONSTRUCTED.
- BOLT PROJECTION, DIMENSION "B", SHALL BE AS RECOMMENDED BY POLE MANUFACTURER AND SHALL NOT BE LESS THAN 3".
- ANCHOR BOLT EMBEDMENT, DIMENSION "C", SHALL BE AS RECOMMENDED BY POLE MANUFACTURER AND SHALL NOT BE LESS THAN 12". ANCHOR BOLT DIAMETER SHALL NOT BE LESS THAN 3/4".
- CONCRETE BASE SHALL BE OF MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. REINFORCING BARS SHALL BE DEFORMED STEEL, GRADE 60.
- GROUT SHALL BE PRE-BAG MIX NON-SHRINK, NON-METALLIC, 5000 PSI MINIMUM, ONE TO TWO INCHES THICK.
- SOIL AROUND FOUNDATION BASE SHALL BE NON-ORGANIC GRANULAR SOIL COMPACTED TO 95% STANDARD PROCTOR (ASTM D-698). TOP 4 TO 6 INCHES MAY BE TOP SOIL OR PAVEMENT.
- FOUNDATION EMBEDMENT DEPTH, DIMENSION "D", SHALL BE 15 PERCENT OF POLE HEIGHT ABOVE GRADE, MINIMUM OF 4'-0".
- #8 BARE COPPER GROUND CONDUCTOR, BOND TO ROD, POLE GROUND LUG AND LIGHTING CIRCUIT EQUIPMENT GROUND.

**1 BURIED CONCRETE BASE FOR METAL POLE**  
NOT TO SCALE

| GENERAL LIGHTING NOTES:                                                                                                                                                                                                                                                          |                                                                                                                                                                                                  |                                                                               |                 |                             |                 |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------|-----------------------------|-----------------|-------------------|
| 1. MANUFACTURERS & NUMBERS ARE LISTED TO ESTABLISH QUALITY ONLY AND NOT TO LIMIT COMPETITION. PRIOR TO BIDDING, SUBSTITUTIONS ARE ALLOWED SUBJECT TO SUBMITTAL DATA, PHOTOMETRICS & ENGINEERS APPROVAL AS REQUIRED BY SPECIFICATIONS. "SUBJECT TO APPROVAL" BIDS ARE PROHIBITED. |                                                                                                                                                                                                  |                                                                               |                 |                             |                 |                   |
| 2. ALL FIXTURES TO BE U.L., E.T.L. OR C.S.A. LABELED. ALL EXTERIOR FIXTURES SHALL HAVE WET LABEL OR DAMP LABEL AS REQUIRED BY LOCATION. CONTRACTOR SHALL VERIFY BEFORE SUBMITTING FIXTURE.                                                                                       |                                                                                                                                                                                                  |                                                                               |                 |                             |                 |                   |
| 3. ALL FIXTURES TO BE PAINTED AFTER FABRICATION.                                                                                                                                                                                                                                 |                                                                                                                                                                                                  |                                                                               |                 |                             |                 |                   |
| 4. PROVIDE ALL MOUNTING ACCESSORIES, BAR HANGARS & HARDWARE REQUIRED. COORDINATE MOUNTING REQUIREMENTS WITH ARCHITECT'S REFLECTED CEILING PLAN.                                                                                                                                  |                                                                                                                                                                                                  |                                                                               |                 |                             |                 |                   |
| 5. POLES FOR AREA FIXTURES ARE TO MATCH FIXTURE FINISH EXACTLY. CONTRACTOR TO COORDINATE PRE-DRILLING OF POLES AS REQUIRED TO ACCEPT ARM MOUNTING. PROVIDE HAND HOLES AT POLE BASES.                                                                                             |                                                                                                                                                                                                  |                                                                               |                 |                             |                 |                   |
| LIGHTING FIXTURE SCHEDULE                                                                                                                                                                                                                                                        |                                                                                                                                                                                                  |                                                                               |                 |                             |                 |                   |
| FIXTURE TYPE                                                                                                                                                                                                                                                                     | FIXTURE DESCRIPTION                                                                                                                                                                              | ACCEPTABLE MANUFACTURERS                                                      | MOUNTING HEIGHT | LAMPS                       | FIXTURE WATTAGE | VOLTAGE           |
| P5                                                                                                                                                                                                                                                                               | POLE-MOUNTED LED AREA LIGHT, CAST ALUMINUM HOUSING WITH BELL-SHAPED ALUMINUM SHADE, BLACK FINISH, DIFFUSE LENS, TYPE 5 OPTICS, 0-10V DIMMING DRIVER, WET LOCATION LISTED.                        | STERNBERG # 1A-GL1970-B-BFR-24L-40K-T5-MDL014-SV2-BKT-OICPM                   |                 | NOMINAL 11,000 LM LED 4000K | 88              | UNIVERSAL VOLTAGE |
|                                                                                                                                                                                                                                                                                  | 20' TALL, 5" DIA. STRAIGHT, ALUMINUM POLE, WITH 8" DIA. BASE TO 48" HIGH, BLACK FINISH, WITH INTEGRAL HANDHOLE AND BOLT COVER.                                                                   | STERNBERG # 29-20-P5-250-RCC-BKT<br><br>SEE DETAIL 1/E-001 FOR CONCRETE BASE. | 20              |                             |                 |                   |
| SL                                                                                                                                                                                                                                                                               | LED CATENARY CYLINDER LIGHTS, ALUMINUM BODY, BLACK FINISH, FROSTED ACRYLIC TUBE LENS, WEATHER PROOF CORD, LINE VOLTAGE DIMMABLE.                                                                 | HK # ZX16-CAT-GU10-SO-ACRY-120V-BK                                            | 12'             | 350 LM LED LAMP 2700K       | 5 VA PER LAMP   | 120V              |
| W2                                                                                                                                                                                                                                                                               | WALL MOUNTED LED AREA LIGHT, CAST ALUMINUM HOUSING WITH BELL-SHAPED ALUMINUM SHADE, BLACK FINISH, DIFFUSE LENS, TYPE 2 OPTICS WITH BACKLIGHT CONTROL, 0-10V DIMMING DRIVER, WET LOCATION LISTED. | STERNBERG # 1W-GL1960-B-BFR-12L-40K-T2-MDL006-SV1-BLOC-BKT-OICWM              | 14'-0" AFF      | NOMINAL 2,600 LM LED 4000K  | 20              | UNIVERSAL VOLTAGE |
| W4                                                                                                                                                                                                                                                                               | WALL MOUNTED LED AREA LIGHT, CAST ALUMINUM HOUSING WITH BELL-SHAPED ALUMINUM SHADE, BLACK FINISH, DIFFUSE LENS, TYPE 4 OPTICS WITH BACKLIGHT CONTROL, 0-10V DIMMING DRIVER, WET LOCATION LISTED. | STERNBERG # 1W-GL1960-B-BFR-12L-40K-T3-MDL006-SV1-BLOC-BKT-OICWM              | 14'-0" AFF      | NOMINAL 2,600 LM LED 4000K  | 20              | UNIVERSAL VOLTAGE |

ED-101  
E-101

TIMES ARCADE ALLEY

WEST JORDAN ST.

WEST MAIN ST.

E-102

SOUTH BROAD ST.

NORTH BROAD ST.

E-103

EAST MAIN ST.

PROJECT NORTH

② ELECTRICAL OVERALL PLAN  
1" = 40'-0"

[illegible]





**ADD ALTERNATE E2:** PROVIDE THIS POWER PEDESTAL IN LIEU OF STRUT AND WEATHER-PROOF BOX INSTALLATION FOR ALL HOLIDAY LIGHT RECEPTACLES SHOWN ON PLANS.



| PANEL B (EXISTING)        |       |                |                               | CABINET SURFACE MOUNTED |             | TYPE EATON SERIES 'B', NEMA 3R |              |                                |          |        |  |
|---------------------------|-------|----------------|-------------------------------|-------------------------|-------------|--------------------------------|--------------|--------------------------------|----------|--------|--|
| VOLTAGE 120Y/240V, 2ø, 3W |       |                |                               | FEEDER BOTTOM           |             | MAINS 125A MLO                 |              |                                |          |        |  |
| DEVICE                    |       | BRANCH CIRCUIT |                               | PHASE LOAD              |             |                                |              | BRANCH CIRCUIT                 |          | DEVICE |  |
| AMPS<br>TRIP              | POLES | NOTES          | (VOLT-AMPS)                   |                         |             |                                |              |                                |          |        |  |
|                           |       |                | øA                            |                         |             |                                | øB           |                                |          |        |  |
|                           |       |                | DESIGNATION                   |                         | No.         |                                | DESIGNATION  |                                | No.      |        |  |
|                           |       |                | 20 1 2 RECEPTACLE BELOW PANEL |                         | 1 4160 1000 |                                | 20 2 2 SPARE |                                | 2 4160 4 |        |  |
|                           |       |                | FOOD TRUCK RECEPTACLE         |                         | 1 1 50      |                                |              |                                |          |        |  |
| INTEGRATED EQUIPMENT      |       |                |                               |                         |             |                                |              |                                |          |        |  |
| RATING: EXISTING          |       |                |                               | KVA TOTAL               |             | 5.2 4.2                        |              | PANELBOARD KVA LOAD TOTAL: 9.3 |          |        |  |

**PANEL SCHEDULE NOTES:**

1. NEW BREAKER IN EXISTING SPACE.
2. EXISTING BREAKER, NEW LOAD.
3. ADD-ALTERNATE E1

C.O.A.

SEAL

NORTH CAROLINA  
PROFESSIONAL  
9/28/23  
SEAL  
DONALD J. BURDETTE

## REVISIONS

[illegible]

### LEGEND

TIMES ARCADE  
ALLEY

BREVARD NORTH CAROLINA

## ELECTRICAL LEGEND AND SCHEDULES

|        |         |       |                  |
|--------|---------|-------|------------------|
| DRAWN: | IJK/TMP | DATE: | OCTOBER 28, 2022 |
|--------|---------|-------|------------------|

|         |     |                   |          |
|---------|-----|-------------------|----------|
| DESIGN: | PEK | HORIZONTAL SCALE: | AS NOTED |
|---------|-----|-------------------|----------|

|           |     |                 |   |
|-----------|-----|-----------------|---|
| APPROVED: | DJB | VERTICAL SCALE: | - |
|-----------|-----|-----------------|---|

GRAPHIC SCALE

JOB NO. 21501

|             |  |
|-------------|--|
| DRAWING NO. |  |
|-------------|--|

E-002

SHEET NO.



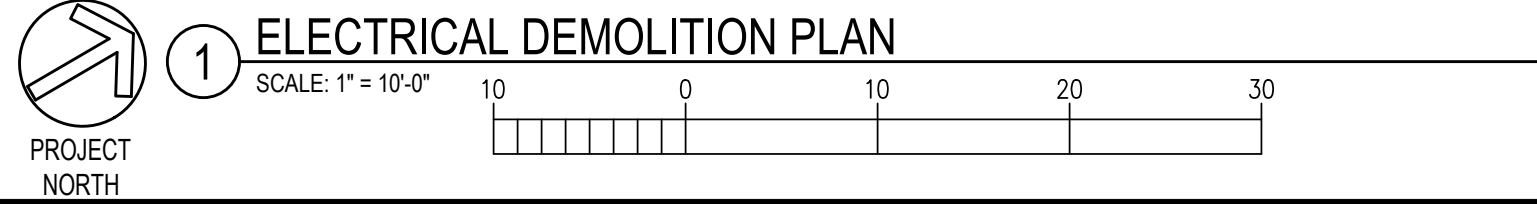
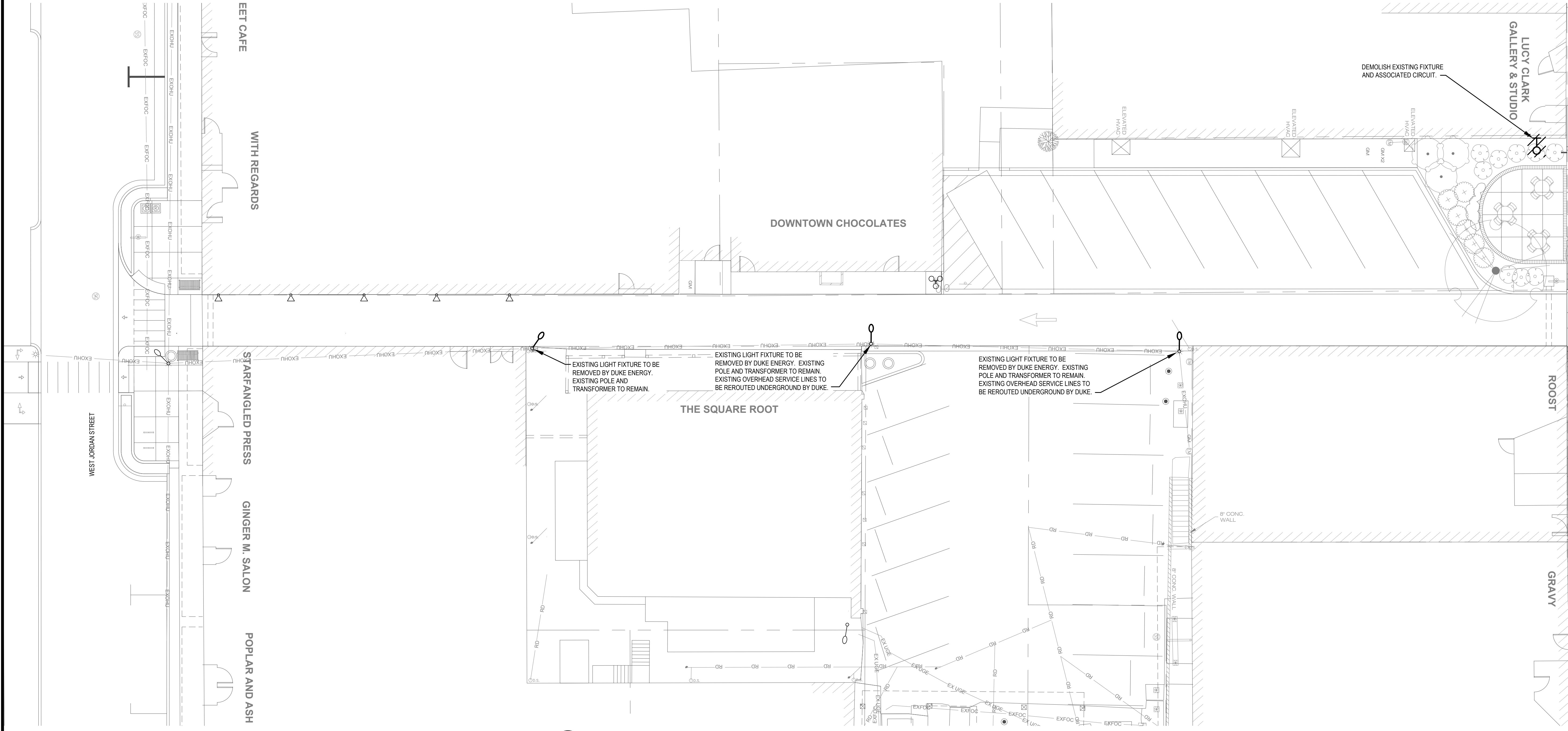
## LEGEND

TIMES ARCADE  
ALLEY

## ELECTRICAL DEMOLITION PLAN

|               |         |                            |
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| DRAWN:        | LJK/TMP | DATE: NOVEMBER 12, 202     |
| DESIGN:       | PEK     | HORIZONTAL SCALE: AS NOTED |
| APPROVED:     | DJB     | VERTICAL SCALE:            |
| GRAPHIC SCALE |         |                            |

ED-101





| NO. | DATE       | DESCRIPTION                          | BY  |
|-----|------------|--------------------------------------|-----|
| 1   | 08.25.2023 | Released for City and Funding Review | DJB |
| 2   | 09.28.2023 | ISSUE FOR BID                        | DJB |

**B** **BURDETTE**  
ENGINEERING, INC.  
200 Regent Park Court  
Greenville, SC 29607  
(864) 297-8717  
(864) 297-8719 (FAX)  
EMAIL: [Bei@BurdetteEngr.com](mailto:Bei@BurdetteEngr.com)  
BEI JOB NO. 22002B

## BREVARD NORTH CAROLINA

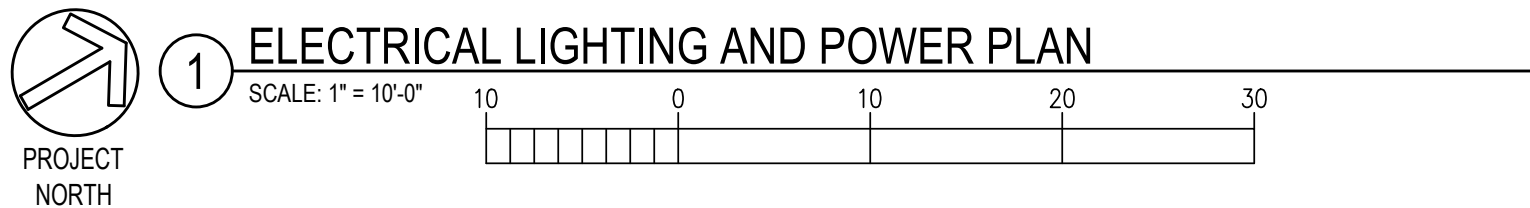
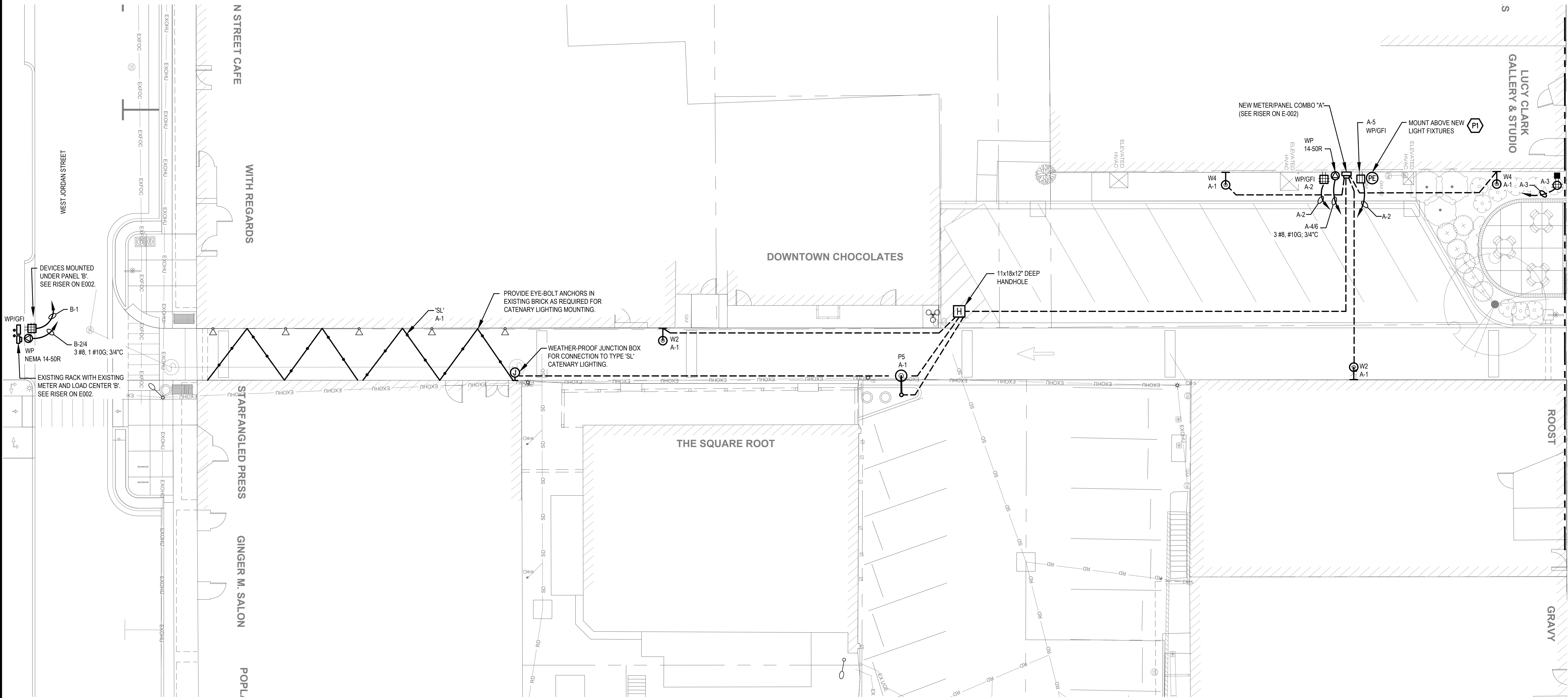
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| DRAWN:        | LJK/TMP | DATE:             | OCTOBER 28, 202 |
| DESIGN:       | PEK     | HORIZONTAL SCALE: | AS NOTE         |
| APPROVED:     | DJB     | VERTICAL SCALE:   |                 |
| GRAPHIC SCALE |         |                   |                 |

|             |  |
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| DRAWING NO. |  |
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SHEET NO.

1. COORDINATE ALL UNDERGROUND ELECTRICAL WORK WITH ALL OTHER TRADES AND EXISTING UTILITIES.
2. ALL EXPOSED CONDUIT SHALL BE RGS, AND SHALL BE PAINTED TO MATCH WALL.

P1. CIRCUIT A1 SHALL BE ROUTED THROUGH PE CELL FOR CONTROL OF ALL NEW LIGHTING





P:\V\CA\22002B\SCOPE ADDITION - BREVARD TIMES ARCADE ALLEY STREETSCAPE BREVARD NC\22002B\E101 102 103.dwg, 9/27/2023 3:06:28 PM, AutoCAD PDF (General Documentation).pc3

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GENERAL SHEET NOTES

1. COORDINATE ALL UNDERGROUND ELECTRICAL WORK WITH ALL OTHER TRADES AND EXISTING UTILITIES. COORDINATE ROUTING OF UNDERGROUND CONDUITS TO BE ADJACENT TO NEW IRRIGATION SLEEVES. SEE LANDSCAPE PLANS.

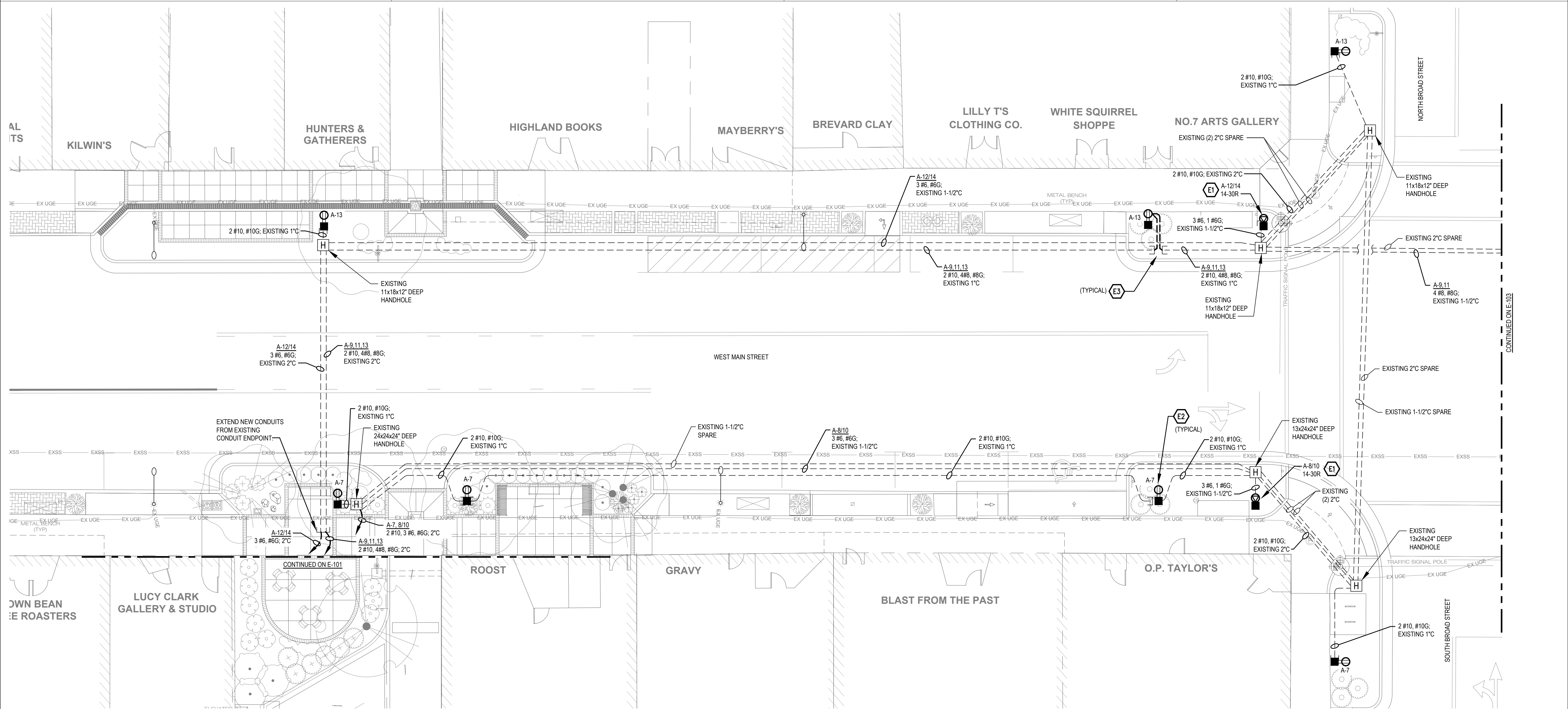
2. COORDINATE EXACT LOCATIONS OF ALL ELECTRICAL DEVICES AND BOXES WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

PLAN KEYNOTES

E1. **ADD ALTERNATE E1:** PROVIDE POWER PEDESTAL AND ASSOCIATED CIRCUITS FOR POWER CONNECTION TO FOOD TRUCK.

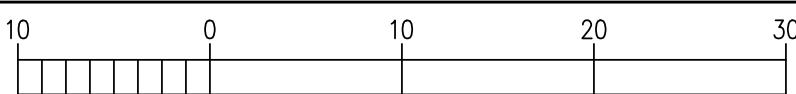
E2. **ADD ALTERNATE E2:** PROVIDE LEGRAND POWER PEDESTAL IN LIEU OF STRUT AND WEATHER-PROOF BOX INSTALLATION FOR ALL HOLIDAY LIGHT RECEPTACLES SHOWN ON PLANS. SEE 6/E-002 (TYPICAL ALL HOLIDAY LIGHT PEDESTALS).

E3. EXTEND EXISTING CONDUIT AS REQUIRED TO NEW PEDESTAL LOCATIONS. (TYPICAL ALL PEDESTALS).



1 ELECTRICAL LIGHTING AND POWER PLAN

SCALE: 1" = 10'-0"

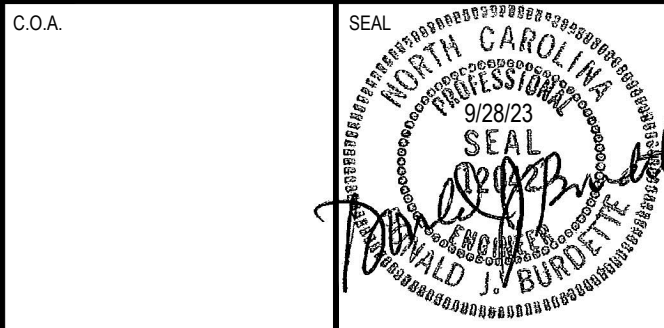


GENERAL SHEET NOTES

1. COORDINATE ALL UNDERGROUND ELECTRICAL WORK WITH ALL OTHER TRADES AND EXISTING UTILITIES. COORDINATE ROUTING OF UNDERGROUND CONDUITS TO BE ADJACENT TO NEW IRRIGATION SLEEVES. SEE LANDSCAPE PLANS.
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PLAN KEYNOTES

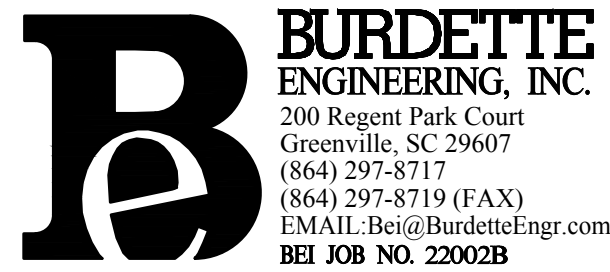
- E1. **ADD ALTERNATE E1:** PROVIDE POWER PEDESTAL AND ASSOCIATED CIRCUITS FOR POWER CONNECTION TO FOOD TRUCK.
- E2. **ADD ALTERNATE E2:** PROVIDE LEGRAND POWER PEDESTAL IN LIEU OF STRUT AND WEATHER-PROOF BOX INSTALLATION FOR ALL HOLIDAY LIGHT RECEPTACLES SHOWN ON PLANS. SEE 6/E-002 (TYPICAL ALL HOLIDAY LIGHT PEDESTALS).
- E3. EXTEND EXISTING CONDUIT AS REQUIRED TO NEW PEDESTAL LOCATIONS. (TYPICAL ALL PEDESTALS).



REVISIONS

| NO. | DATE       | DESCRIPTION                          | BY  |
|-----|------------|--------------------------------------|-----|
| 1   | 08.25.2023 | Released for City and Funding Review | DJB |
| 2   | 09.28.2023 | ISSUE FOR BID                        | DJB |

LEGEND



TIMES ARCADE ALLEY

BREVARD NORTH CAROLINA

ELECTRICAL LIGHTING AND POWER PLAN

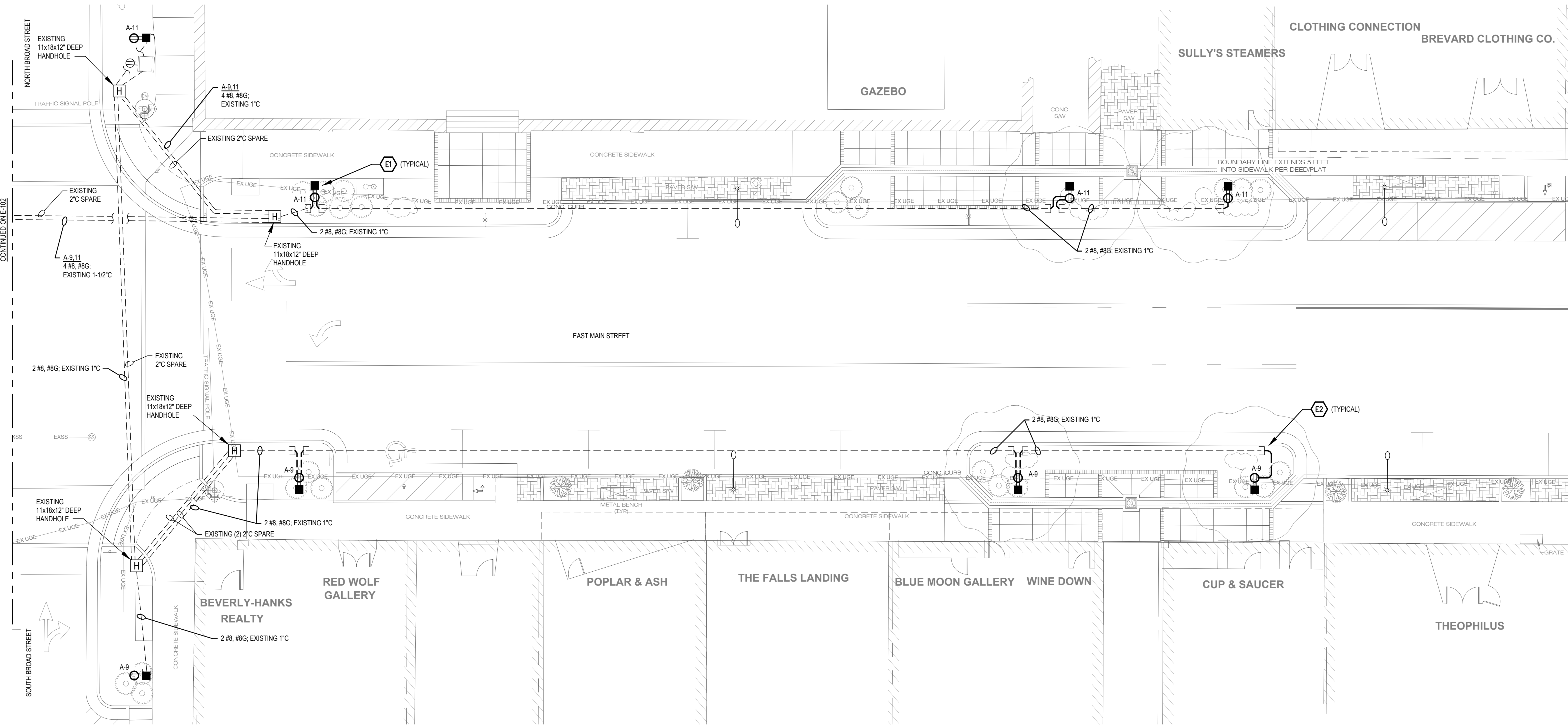
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| DRAWN: LIJ/TMP | DATE: OCTOBER 28, 2022     |
| DESIGN: PEK    | HORIZONTAL SCALE: AS NOTED |
| APPROVED: DJB  | VERTICAL SCALE:            |
| GRAPHIC SCALE  |                            |

|                   |                    |
|-------------------|--------------------|
| JOB NO. 21501     | SHEET NO. 40 OF 41 |
| DRAWING NO. E-102 |                    |



P:\V\CA\22002B\SCOPE ADDITION - BREVARD TIMES ARCADE ALLEY STREETSCAPE BREVARD NC\22002BE101 102 103.dwg, 9/27/2023 3:06:29 PM, AutoCAD PDF (General Documentation).pc3

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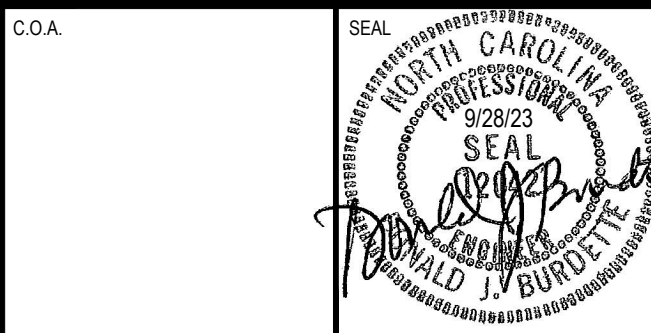
**1 ELECTRICAL LIGHTING AND POWER PLAN**  
SCALE: 1" = 10'-0"  
PROJECT NORTH

GENERAL SHEET NOTES

- COORDINATE ALL UNDERGROUND ELECTRICAL WORK WITH ALL OTHER TRADES AND EXISTING UTILITIES. COORDINATE ROUTING OF UNDERGROUND CONDUITS TO BE ADJACENT TO NEW IRRIGATION SLEEVES. SEE LANDSCAPE PLANS.
- COORDINATE EXACT LOCATIONS OF ALL ELECTRICAL DEVICES AND BOXES WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

PLAN KEYNOTES

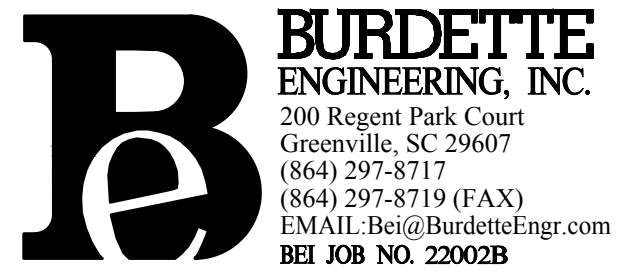
- E1. **ADD ALTERNATE E2** PROVIDE LEGRAND POWER PEDESTAL IN LIEU OF STRUT AND WEATHER-PROOF BOX INSTALLATION FOR ALL HOLIDAY LIGHT RECEPTACLES SHOWN ON PLANS. SEE 6/E-002 (TYPICAL ALL HOLIDAY LIGHT PEDESTALS).
- E2. EXTEND EXISTING CONDUIT AS REQUIRED TO NEW PEDESTAL LOCATIONS. (TYPICAL ALL PEDESTALS).



REVISIONS

| NO. | DATE       | DESCRIPTION                          | BY  |
|-----|------------|--------------------------------------|-----|
| 1   | 08.25.2023 | Released for City and Funding Review | DJB |
| 2   | 09.28.2023 | ISSUE FOR BID                        | DJB |

LEGEND



TIMES ARCADE ALLEY

BREVARD NORTH CAROLINA

ELECTRICAL LIGHTING AND POWER PLAN

|                |                            |
|----------------|----------------------------|
| DRAWN: LIJ/TMP | DATE: OCTOBER 28, 2022     |
| DESIGN: PEK    | HORIZONTAL SCALE: AS NOTED |
| APPROVED: DJB  | VERTICAL SCALE:            |
| GRAPHIC SCALE  |                            |

|                   |                    |
|-------------------|--------------------|
| JOB NO. 21501     | SHEET NO. 41 OF 41 |
| DRAWING NO. E-103 |                    |