



PROJECT MANUAL  
For

# **ROCKY BRANCH PARK IMPROVEMENTS CAROLINA THREAD TRAIL BELMONT EXTENSION**

OWNER:  
**CITY OF BELMONT**  
115 North Main Street  
(P.O. Box 431)  
Belmont, North Carolina 28012

PARK AND RECREATION DEPARTMENT:  
**Zip Stowe**  
Parks and Recreation Director  
115 North Main Street  
(P.O. Box 431)  
Belmont, North Carolina 28012  
704-901-2081  
Fax 702-825-0514

September 2020

Address all communications regarding this project to the Parks and Recreation Director at the address listed above.

# CITY OF BELMONT

## ROCKY BRANCH PARK IMPROVEMENTS CAROLINA THREAD TRAIL BELMONT EXTENSION

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Forms indicated above as \* are required for Bid.

DIVISION 00  
PROJECT DESCRIPTION AND  
SCOPE OF WORK

## REQUEST FOR BIDS

### **ROCKY BRANCH PARK IMPROVEMENTS – CAROLINA THREAD TRAIL BELMONT EXTENSION**

Sealed bids are requested to be submitted before Tuesday, **October 6, 2020** at **2:00 P.M.**

Bids shall be submitted to Zip Stowe, Park and Recreation Director at City Hall located at 115 North Main Street, Belmont, North Carolina 28012.

Two copies of the Bid Form and General Contractor Qualifications Statement, as included in the Project Manual, shall be completed and submitted in a sealed envelope marked **ROCKY BRANCH PARK IMPROVEMENTS – CAROLINA THREAD TRAIL BELMONT EXTENSION**.

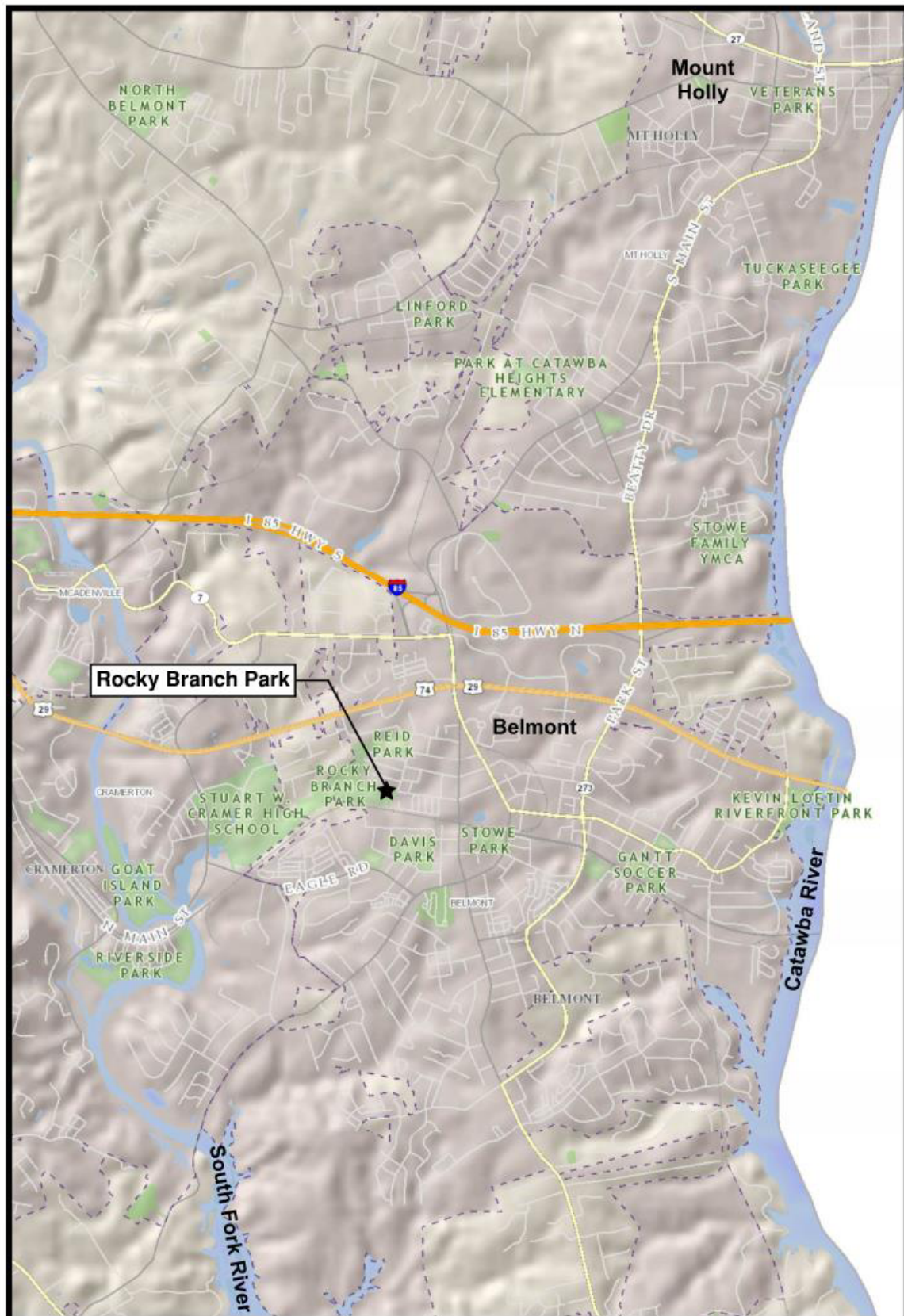
This base bid contract consists of furnishing all labor, materials and equipment for construction of approximately 3,315 linear feet of multi-use trail and other ancillary construction necessary for the completion of the work at Rocky Branch Park as specified herein and by the City's Parks and Recreation Director or designated agent. The project includes construction of a 6 to 8 foot wide crusher run capped trail constructed primarily using bench-cut rolling-contour techniques with five bridges and one culvert crossing. The contract also consists of four add alternate bids which includes furnishing all labor, materials, and equipment for construction of the trailhead entry monuments, trailhead map kiosk, trailhead donor kiosk and improvements to the trailhead gravel parking lot. These add alternate bids will be awarded based on project budget availability.

Applicable bid forms and specifications for this Request for Bids may be obtained from the City of Belmont Finance Office, Belmont City Hall, 115 North Main Street (P.O. Box 431), Belmont, NC 28012 – (704) 825-5586.

North Carolina laws and regulations apply. The right is reserved to reject any or all bids.



# LOCATION MAP



## SCOPE OF WORK

### ROCKY BRANCH PARK IMPROVEMENTS – CAROLINA THREAD TRAIL BELMONT EXTENSION

Rocky Branch Park (RBP) is located 12 miles west of Uptown Charlotte at 103 Sacco Street in Belmont, North Carolina. Surrounded by mostly working class residential neighborhoods and quiet streets, RBP is a relatively undeveloped urban greenspace within walking distance to public schools, parks, homes and Belmont's lively Main Street, a mere mile away.

Totaling approximately 41 acres, the park is comprised of wooded, rolling terrain with its namesake stream, Rocky Branch, meandering through the property from east to west. This small urban tributary of the South Fork Catawba River drains a highly developed urban landscape and features a trickling boulder-strewn stream bed.

The Carolina Thread Trail is the first of a multi-phased plan outlined in the Rocky Branch Trail Enhancement Plan. This once conceptual multi-use trail corridor is now fully designed at ground-level and known as the Carolina Thread Trail (CTT) Belmont Extension. The design document is included in Attachment A. Due to the unique nature of the multi-use trail's characteristics, specifications, scope and scale, this document details the CTT Belmont Extension as a stand-alone project defined as Phase 1.1. Phase 1.2 also contained in the attached design document is known as the CTT Cramerton Extension and is not included in this bid.

The CTT Belmont Extension designed corridor utilizes landscapes and topography that will minimize impacts to adjacent singletrack opportunities, showcase the namesake Rocky Branch Creek, traverse slopes that will allow for sustainable bench-cut style construction, and navigate the landscape at a reasonable average gradient.

The designed corridor runs from Rocky Branch Park's East Gateway trailhead off of Sacco St. to the Stuart W. Cramer High School property line to the west (Attachment A - Figure 1, Phase 1.1). The CTT Belmont Extension is 3,315 linear feet in length, and includes the construction of five (5) bridges and one (1) culvert crossing. It has opportunity for 1,335 linear feet of trail to be developed at full width of 8 feet, while the remainder should be built at a reduced width of 6 feet, with short segments as narrow as 4 feet to avoid mature tree root damage. The finished trail tread shall be compacted, smooth, root and obstacle free, wide enough to accommodate passing users, and capped with crusher run gravel.

The project includes four add alternates that will be awarded depending on project budget availability. The first add alternate includes improvements to the parking lot and park entrance off of Sacco St. These improvements include clearing brush from the west end of the parking lot, minor fine grading, and adding additional ABC stone. A plan of the parking lot improvements is included in Attachment D. The second add alternate is the construction of two rock boulder cairn trailhead entry monuments to frame the entrance of the Carolina Thread Trail. A schematic of the trailhead entry monuments are included in Attachment E. The third add alternate is the construction of a trailhead map kiosk displaying a map of the park trails and a regional map of the Carolina Thread Trail system. A schematic of the map kiosk is included in attachment F. The final add alternate is the construction of a trailhead donor kiosk recognizing the many donors that contributed to the project. A schematic of the donor kiosk is included in Attachment F.

Further details of the bid, contract, and project specifications are included in subsequent sections of this project manual.

DIVISION 01  
BID DOCUMENTS

## INSTRUCTIONS TO BIDDERS & CONTRACT CONDITIONS

### 1. DEFINITIONS

Wherever used in this Project Manual and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

- 1.1. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 1.2. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 1.3. *Bidder*—The individual or entity who submits a Bid directly to Owner.
- 1.4. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work.
- 1.5. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.
- 1.6. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.
- 1.7. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 1.8. *Owner*—The City of Belmont.
- 1.9. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 1.10. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual is contained in the table of contents.
- 1.11. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 1.12. *Substantial Completion* – Stage when a construction project is deemed sufficiently completed to the point where the owner can use it for its intended purpose.

### 2. BIDDING DOCUMENTS

Complete sets of Bidding Documents must be used in preparing Bids. Owner assumes no responsibility for misinterpretations resulting from the use of incomplete sets of Bidding Documents. Bidders are responsible for checking that their bidding documents contain every section listed in the table of contents, and that no pages are missing from any section or its attachments.

### 3. CONTRACTOR'S LICENSING

The Bidder's (Contractor's) attention is called to the requirements of Chapter 87 of the General Statutes of the State of North Carolina and Regulations of the North Carolina Licensing Boards for Contractors established

and empowered by virtue of Chapter 318 of the public laws of 1925, as amended, shall be enforced on this Contract, as applicable.

Due to the value of these contract improvements, the contractor must be licensed as a general contractor in the State of North Carolina or have the ability and qualifications to become licensed as a general contractor in the State of North Carolina prior to the pre-construction meeting. All Bidder's not able to meet this requirement will be considered unqualified to complete the Work.

#### 4. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

It is the responsibility of each Bidder, before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may in any manner affect cost, progress, performance or furnishing of the Work, (c) consider federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress, performance or furnishing of the Work; (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify the Parks and Recreation Director of all conflicts, errors or discrepancies in the Contract Documents.

A **project site meeting** will be held on Tuesday, **September 29, 2020 at 2:00 P.M.** at the park entrance located at 103 Sacco Street, Belmont, NC. During this meeting, contractors will have the opportunity to walk the approximate trail alignment and discuss the proposed improvements with the project team. All questions will be recorded and answers distributed to the bidders after the meeting.

The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with the requirements of this article, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions of performance and furnishing of the Work.

#### 5. INTERPRETATIONS AND ADDENDA

All questions about the meaning or intent of the Contract Documents are to be directed to the Parks and Recreation Director. Addenda may also be issued to modify the Bidding Documents as deemed advisable by Parks and Recreation Director.

#### 6. CONTRACT TIME

Bidder shall indicate the number of consecutive calendar days required to complete the Work in the Bid Form (Section 01 200).

#### 7. BID FORM

The Bid Form is included with this Project Manual.

Bids by corporations must be executed in the corporate name by the president or a vice-president and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown with the signature. If requested, the person signing a Bid for a corporation or partnership must produce evidence satisfactory to the Owner of the person's authority to bind the corporation or partnership.

Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

## 8. SUBMISSION OF BIDS

Sealed proposals are required and such proposals shall be on the Bid Form bound in this Project Manual.

The Bid Form and General Contractor Qualification Statement shall be completely filled out and submitted with the bid. The bidder shall also acknowledge receipt of addendum if applicable. Failure to submit all forms with the Bid shall be just cause for rejection of the Bid by the Owner.

## 9. BIDS TO REMAIN OPEN

All Bids shall remain open for ninety (90) calendar days after the day of the Bid opening, but Owner may, at its sole discretion, release any Bid prior to that date. Extensions of time when Bids shall remain open beyond the ninety-day period may be made only by mutual agreement between the Owner and the Successful Bidder.

## 10. AWARD OF CONTRACT

To the extent permitted by applicable state and federal laws and regulations, Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work with the Successful Bidder, and the right to disregard all nonconforming, nonresponsive, unbalanced or conditional Bids. Bids may be considered irregular and subject to rejection if they show serious omission, unauthorized alteration of form, unauthorized alternate bids, incomplete or unbalanced unit prices, or irregularities of any kind. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner.

The Bidder shall be notified of any errors in the Bid Documents submitted to the Owner which affect his status as low bidder or as may otherwise reduce his total bid. If the corrected total represents an unacceptable amount and the Contractor can substantiate same, totally in accordance with the General Statutes of the State of North Carolina G.S. 143-129.1, the Bidder may then withdraw his bid and the Owner may award the project to the second low bidder or re-let the project.

In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

If the Contract is to be awarded, it will be awarded to the lowest responsive and responsible Bidder whose evaluation by the Owner indicates to Owner that the award will be in the best interests of the Project.

## 11. TAXES

The Contractor shall pay all applicable sales, consumer, use and other similar taxes required by law. The Contractor is responsible for reviewing the pertinent State Statutes involving the sales tax and sales tax exemption and complying with all requirements.

## 12. SIGNING OF AGREEMENT

When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within ten days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds. Thereafter Owner shall deliver one fully signed counterpart to Contractor. Each counterpart is to be accompanied by a complete set of the Drawings, if applicable, with appropriate identification.

## 13. EXECUTION OF WRITTEN CONTRACT

The successful bidder will be required to sign a written contract identified as the Agreement.

#### 14. EQUAL OPPORTUNITY – NON-DISCRIMINATION PROVISIONS

The Owner is committed to promoting equal opportunities for all and to eliminating prohibited discrimination in all forms. For purposes of this section, prohibited discrimination means discrimination in the solicitation, selection, and/or treatment of any subcontractor, vendor, supplier or commercial customer on the basis of race, ethnicity, gender, age, religion, national origin, disability or other unlawful form of discrimination. Without limiting the foregoing, prohibited discrimination also includes retaliating against any person, business or other entity for reporting any incident of prohibited discrimination. It is understood and agreed that not only is prohibited discrimination improper for legal and moral reasons, prohibited discrimination is also an anti-competitive practice that tends to increase the cost of goods and services to the Owner and others. As a condition of entering into this Agreement, the Contractor represents, warrants, and agrees that it does not and will not engage in or condone prohibited discrimination. Without limiting any rights the Owner may have at law or under any other provision of this Agreement, it is understood and agreed that a violation of this provision constitutes grounds for the Owner to terminate this Agreement.

As a condition of entering into this Agreement, the Contractor further agrees to: (a) promptly provide to the Owner all information and documentation that may be requested by the Owner from time to time regarding the solicitation and selection of subcontractors; and (b) provide to the Owner within sixty days after completion of performance under this Agreement a Final Payment Affidavit in the form attached to this Agreement. Failure to maintain or failure to provide such information constitutes grounds for the Owner to terminate or withhold payment under this Agreement.

#### 15. CONTRACTOR'S SAFETY

The Contractor shall at all times perform the work subject to this Contract in a safe and proper manner and in compliance with all applicable ordinances, statutes, rules and regulations concerning safety, including but not limited to, such applicable statutes, rules and regulations known as or issued pursuant to, the Occupational Safety and Health Act ("OSHA") (hereinafter "safety standards"). Without limiting the foregoing in any manner, safety standards concerning trenching and excavation are particularly important. The Parks and Recreation Director shall take such action as is reasonably necessary or convenient to require the Contractor to comply with the safety standards in performing all aspects of the work subject to this Contract. If the Parks and Recreation Director or his authorized Inspector(s) become aware of any violation of the safety standards or of any failure by the Contractor to comply with the safety standards, the Parks and Recreation Director and his authorized Inspector(s) may, but shall not be obligated to, report such violation to the regulatory agency. It is expressly understood and agreed that neither the Owner, its officers, employees or representatives have any obligation, duty or responsibility to inspect the work subject to this contract for compliance with this sub-paragraph nor to report violations of this sub-paragraph to the Contractor and/or any regulatory agency.

The Contractor will immediately notify the Owner of any OSHA inspection. In addition, the Contractor will send Owner a copy of any citation upon receipt of the citation (not after settlement of the case).

The Contractor will notify the Owner of any unusual hazards created by the job or found during construction.

The Contractor will provide to Owner a copy of all work permits, if requested.

#### 16. CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall maintain adequate liability insurance for the duration of the Contract. As proof of insurance coverage, Contractor shall deliver certificates of insurance to Owner.

The Contractor shall purchase and maintain with a company acceptable to the Owner and authorized to do business with the state of North Carolina, such as will protect him from:

- Claims for damages of bodily injury or property damage arising out of the ownership, operation or maintenance of a motor vehicle.

- Claims of bodily injury and property damage which arise from operations of this Contract, including products/completed operations, personal injury liability, Contractual liability assumed under the indemnity provision of this Contract, broad form property damage, explosion, collapse and underground utility damage (XC&U).
- Claims under workers' compensation laws, disability benefit laws or other similar employee benefit laws and from Claims for damages because of bodily injury, occupational sickness or disease or death of his employees.

This insurance shall be written for not less than the limits of liability specified below or required by law.

- COMMERCIAL AUTOMOBILE: bodily injury and property damage liability covering all owned, non-owned and hired automobiles for limits of not less than \$1,000,000 bodily injury each person, each accident and \$1,000,000 property damage, or \$1,000,000 combined single limit bodily injury and property damage.
- COMMERCIAL GENERAL LIABILITY: bodily injury and property damage liability as shall protect the Contractor and sub-Contractor performing Work under this Contract from Claims of bodily or property damage which arise from operations of this Contract whether such operations are performed by the Contractor, any Subcontractor or anyone directly or indirectly employed by either. The amount of such insurance shall not be less than \$2,000,000 bodily injury each occurrence/aggregate and \$2,000,000 property damage each occurrence/aggregate or \$2,000,000 bodily injury and property damage combined single limits each occurrence/aggregate. This insurance shall include coverage for products/completed operations, personal injury liability, contractual liability assumed under the indemnity provision of this Contract, broad form property damage, explosion-collapse-underground utility damage (XC&U). Stating if policy is written on a Claims made or occurrence basis.
- WORKERS' COMPENSATION INSURANCE: meeting the statutory requirements of the State of North Carolina. Employers Liability - limit per accident - \$500,000, disease per policy limit - \$500,000, disease each employee limit - \$500,000.

The Contractor shall provide the Owner with Certificates of Insurance certifying that the foregoing insurance is in force; and such insurance certificates shall include provisions that the insurance shall not be canceled, allowed to expire or be materially changed without giving the Owner thirty days advance notice by registered mail.

These policies of insurance shall name Owner as additional insured.

The Contractor is advised that if any part of the Work under the Contract is sublet, he would require the Subcontractor(s) to carry insurance as required. However, this will in no way relieve the Contractor from providing full insurance coverage on all phases of the Projects, including any that are sublet.

Contractor may purchase and maintain excess liability in order to satisfy the required limits of insurance.

Contractor may purchase and maintain excess liability insurance in the umbrella form in order to meet the limits of liability required for the insurance to be purchased and maintained. Evidence of such excess liability shall be delivered to Owner in the form of a certificate indicating the policy numbers and limits of liability of all underlying insurance. The umbrella liability insurance shall have a combined single limit of not less than \$10,000,000. Any company directing or performing blasting Work shall obtain Commercial General Liability insurance from a surety company acceptable to Owner and licensed to do business in the State of North Carolina with an AM best rating of not less than A. The Commercial General Liability insurance for blasting Work shall meet all requirements of the paragraph within this Section entitled "COMMERCIAL GENERAL LIABILITY:" except that the amount of such insurance shall not be less than \$5,000,000 each occurrence/aggregate.

All insurance policies provided by the Contractor shall contain provisions to the effect that the insurer waives all rights of subrogation against any of the insured, additional insureds, and the officers, directors, partners, employees, agents, consultants, and sub-consultants of each and any of them.



## 17. CONTRACTOR'S RESPONSIBILITIES

Regular working hours are defined as 8 hours per day, Monday through Friday, excluding Owner's holidays, between the hours of 8:00 AM and 6:00 PM. Requests to Work other than regular working hours shall be submitted to Owner not less than 48 hours prior to any proposed weekend Work or scheduled extended work weeks.

Contractor shall reimburse the Owner for additional design and/or inspection costs incurred as a result of overtime Work in excess of the regular working hours. At Owner's option, overtime costs may either be deducted from the Contractor's monthly payment request or deducted from the Contractor's retention prior to release of final payment. Overtime costs for the Owner's personnel shall be \$125 per hour.

## 18. CORRECTION OF WORK PERIOD

Within one year after the date of Substantial Completion of the Work or designated portion thereof, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so. During the one-year period for Correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor.

## 19. WARRANTY

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

END OF SECTION

SECTION 01 200

**BID FORM**

BY: \_\_\_\_\_  
(Bidder)

PROJECT IDENTIFICATION: **ROCKY BRANCH PARK IMPROVEMENTS  
CAROLINA THREAD TRAIL BELMONT EXTENSION**

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid Form and the Agreement, and in accordance with the other terms and conditions of the Contract Documents.
2. Bidder accepts all of the terms and conditions of the Bidding and Contract Documents.
3. In submitting this Bid, Bidder makes all representations required by the Instructions to Bidders and further warrants and represents that:
  - (a) Bidder has examined copies of all the Bidding Documents, the Request for Bids, the Instructions to Bidders, Contract Documents, and of the following Addenda (receipt of all which is hereby acknowledged):  

No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
  - (b) Bidder has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing the Work.
  - (c) Bidder has given Parks and Recreation Director written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by Parks and Recreation Director is acceptable to Bidder.
  - (d) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.

4. Bidder agrees to complete the Work for the prices(s) indicated in the Schedule of Prices which follows and is further described in the Contract Documents.

ITEM NO.	SECTION	DESCRIPTION	EST. QTY.	UNITS	UNIT PRICE	ITEM TOTAL
1	03 200	Mobilization	1	LS		
2	03 300	Demolition of Existing Trail Features	1	LS		
3	03 300	Multi-Use Trail Construction	3,315	LF		
4	03 300	Crusher Run Gravel (ABC Gravel)	265	TON		
5	03 300	NCDOT Class B Rip Rap Stone	2	TON		
6	03 300	24" HDPE Culvert	10	LF		
7	03 400	Bridges	5	EA		
8	03 300	Erosion and Sediment Control	1	LS		
TOTAL BASE BID (ITEMS 1-8)					\$	
(in words)					(in figures)	
9	03 500	Clearing and Grading	1	LS		
10	03 500	Crusher Run Gravel (ABC Gravel)	190	TON		
11	03 500	Wheel Stops	20	EA		
12	03 500	Split Rail Fence	50	LF		
13	03 500	Erosion and Sediment Control	1	LS		
TOTAL ADD ALTERNATE #1 BID (ITEMS 9-13)					\$	
(in words)					(in figures)	

ITEM NO.	SECTION	DESCRIPTION	EST. QTY.	UNITS	UNIT PRICE	ITEM TOTAL
14	03 600	Rock Cairn Trailhead Monument	2	EA		
TOTAL ADD ALTERNATE #2 BID (ITEM 14)					\$	
(in words)					(in figures)	
15	03 700	Trailhead Map Kiosk	1	LS		
TOTAL ADD ALTERNATE #3 BID (ITEM 15)					\$	
(in words)					(in figures)	
16	03 700	Trailhead Donor Kiosk	1	LS		
TOTAL ADD ALTERNATE #4 BID (ITEMS 16)					\$	
(in words)					(in figures)	

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided, determined as provided in the Contract Documents.

5. The Bidder agrees that the Work shall be substantially completed within \_\_\_\_\_ calendar days. Time commences to run as provided in the Notice to Proceed, and will run continuously until the project is completed and ready for final payment in accordance with the Agreement.
6. The General Contractor Qualifications Statement & Questionnaire (Section 01 300) document is attached to and made a condition of this Bid.
7. Communications concerning this Bid shall be addressed to:
 

Contact Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Phone No.: \_\_\_\_\_
8. The terms used in this Bid have the meanings assigned to them in the Instruction to Bidders.

Submitted on \_\_\_\_\_, 2019.

Bidder is:

**An Individual**

By: \_\_\_\_\_ (SEAL)  
(Individual's Name and Signature)

Doing business as: \_\_\_\_\_

Business address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone No.: \_\_\_\_\_

**A Partnership**

By: \_\_\_\_\_ (SEAL)  
(Firm Name)

\_\_\_\_\_  
(General Partner's Name and Signature)

Business address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone No.: \_\_\_\_\_

**A Corporation**

By: \_\_\_\_\_ (SEAL)  
(Corporation Name)

State of incorporation: \_\_\_\_\_

By: \_\_\_\_\_  
(Name and signature of person authorized to sign)

Title: \_\_\_\_\_

(Corporate Seal)

Attest: \_\_\_\_\_  
(Secretary)

Business address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone No.: \_\_\_\_\_

**A Joint Venture**

By: \_\_\_\_\_  
(Name and Signature)

Business address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone No.: \_\_\_\_\_

By: \_\_\_\_\_  
(Name and Signature)

Business address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone No.: \_\_\_\_\_

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above).

END OF SECTION

SECTION 01 300

**GENERAL CONTRACTOR  
QUALIFICATIONS STATEMENT & QUESTIONNAIRE**

The undersigned warrants the truth and accuracy of all statements and answers herein contained. The information requested in Items 1 through 9 of the Informational Questionnaire shall be completed in its entirety by the Bidder. The requirements set forth below are the minimum qualifications and previous project experience that must be met by the General Contractor. Previous project experience listed below shall be accurate and representative of the Work performed by the General Contractor listed below. Previous project experience performed as part of a joint venture shall be performed directly by the General Contractor listed below. **Failure** to meet these conditions will result in a **non-responsive Bid. Failure** to complete this section of the Bid in its entirety shall render Bid **non-responsive**. Include additional sheets if necessary.

Minimum qualification requirements for Bidders:

1. General Contractor shall be licensed to do work in the State of North Carolina or have the ability to obtain licensure as a General Contractor in North Carolina prior to the start of construction.
2. General Contractor shall have completed at least three projects similar in nature to the proposed one.

Priority will be given to Bidder's that meet the following qualification preferences:

1. General Contractor that is a member of the Professional Trail Builders Association.
2. General Contractor that has never failed to complete work awarded to him/her.
3. General Contractor with past client references that provide a satisfactory review of their past project performances.
4. General Contractor that has shown substantial experience in constructing trails in rolling natural terrain.
5. General Contractor that has shown they fully understand the scope of the project and the characteristics of the project site.
6. General Contractors that have skilled labor and experience in constructing load bearing bridges, trailhead kiosks, and trailhead entry monuments.

INFORMATIONAL QUESTIONNAIRE

Include additional sheets if necessary.

1. How many years has your organization been in business constructing trails? \_\_\_\_\_
2. Is your organization licensed as a General Contractor in the State of North Carolina? \_\_\_\_\_

If so, how many years has your organization been in business as a General Contractor? \_\_\_\_\_

Provide General Contractor's license number and classification.

License Number: \_\_\_\_\_

Classification: \_\_\_\_\_

If not, does your organization meet the requirements and have the ability to obtain licensure as a General Contractor in the State of North Carolina prior to the start of construction? \_\_\_\_\_

3. Is your organization a member of the Professional Trail Builders Association (PTBA)? \_\_\_\_\_

4. Describe and give the date and owner of the last project that you have completed similar in type, size, and nature as the one proposed.

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5. Have you ever failed to complete work awarded to you? If so, where and why?

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6. Name three individuals, municipalities, or corporations for which you have performed work and to which you refer; with contact name, phone number, & email address:

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7. Have you personally inspected the site of the proposed work? \_\_\_\_\_

8. Please list the names and addresses of the subcontractors to be used for the portions of the work listed below. Insert "self" if proposing to perform the Work with own forces. All proposed subcontractors must meet the qualification requirements set forth in the Project Manual.

Clearing/Trail Construction: \_\_\_\_\_

Bridge Construction: \_\_\_\_\_

Parking Lot Improvements: \_\_\_\_\_

Trailhead Entry Monument: \_\_\_\_\_

Trailhead Map and Donor Kiosks: \_\_\_\_\_

Other: \_\_\_\_\_

9. State the true and exact, correct, and complete name under which you do business. Bidder is:

**SOLE PROPRIETORSHIP**

Individual's Signature: \_\_\_\_\_

Individual's Name: \_\_\_\_\_



**PARTNERSHIP**

Partnership Name: \_\_\_\_\_

General Partner's Signature: \_\_\_\_\_

General Partner's Name: \_\_\_\_\_

**CORPORATION**

Corporation Name: \_\_\_\_\_

State of Incorporation: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Name of Person Authorized to Sign: \_\_\_\_\_

END OF SECTION

DIVISION 02  
CONTRACT DOCUMENTS

NOTICE OF AWARD

Dated: \_\_\_\_\_

TO: \_\_\_\_\_  
(Bidder)

CONTRACT FOR: **ROCKY BRANCH PARK IMPROVEMENTS – CAROLINA THREAD TRAIL  
BELMONT EXTENSION**

You are notified that your Bid dated \_\_\_\_\_ for the above Contract has been considered. You are the apparent successful Bidder and have been awarded a contract for the construction of the **Rocky Branch Park Improvements – Carolina Thread Trail Belmont Extension**.

The Contract Price of your contract is \_\_\_\_\_ Dollars  
and \_\_\_\_\_ Cents (\$\_\_\_\_\_).

Enclosed are three copies of the Contract Documents for your execution and subsequent return to this office for further processing.

You must comply with the following conditions within ten (10) days of the date of this Notice of Award, which is by  
\_\_\_\_\_, 2020:

1. Execute three copies of the Agreement. Do not date the Agreements; this will be accomplished upon execution of the contracts by the Owner.
2. Include three copies of the Certificate of Insurance. The Certificate must name the Owner as additional insureds.

The Owner will return to you one fully signed counterpart of the Contract Documents attached.

If you have any questions, or if we can be of any further assistance, please do not hesitate to contact this office.

Sincerely,

City of Belmont, North Carolina

\_\_\_\_\_  
Adrian T. Miller, City Manager  
(Authorized Representative of Owner)

## SECTION 02 200

### AGREEMENT

THIS AGREEMENT is dated as of the \_\_\_\_\_ day of \_\_\_\_\_ in the year 2020 by and between the City of Belmont, North Carolina, a municipal corporation organized and existing under the laws of the State of North Carolina and herein called the Owner, and \_\_\_\_\_ herein called the Contractor.

Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

#### 1. WORK

Contractor shall complete all Work as specified or indicated in the Contract Documents. The work is described in the Contract Documents and generally includes all work required for construction of the **ROCKY BRANCH PARK IMPROVEMENTS – CAROLINA THREAD TRAIL BELMONT EXTENSION**.

#### 2. CONTRACT TIME

The Contractor shall be substantially completed with the work as specified in the Bid within \_\_\_\_\_ calendar days after the date when the Contract Time commences to run as provided in the Notice to Proceed.

#### 3. CONTRACT PRICE

Owner shall pay Contractor for performance of the Work in accordance with the Contract Documents in current funds at the unit prices presented in the Bid Form (Section 01 200) of these Contract Documents in the amount of \$\_\_\_\_\_.

Estimated quantities are not guaranteed, and verifications of actual quantities and classification are to be made by the Contractor.

#### 4. PAYMENT PROCEDURES

Progress Payments: Owner will make monthly progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment during performance of the Work. All such payments will be measured by the schedule of values established in the Bid and will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold.

- 4.1 Partial payment of the cost of Work completed, until 50 percent of the Work is completed, as evidenced by payments in the amount of at least 50 percent of the Contract Price, shall be made at the rate of 95 percent of the estimates. After 50 percent of the Work is completed, payment of the cost of Work completed shall be made at the rate of 100 percent of the estimates with no further funds being retained.
- 4.2 Final Payment. Upon final completion, and acceptance of the Work, Owner shall pay the remainder of the Contract Price as recommended by Parks and Recreation Director.
- 4.3 On the completion of the work, the Owner shall pay such amount, less payments previously made, in legal tender of the United States, and payments of such final amount shall release the Owner from all claims for work done or materials furnished under this contract.
- 4.4 The Owner will require full release of all claims, including without limitation, for materials or labor furnished for this work, and prior to the payment of the final estimate, the Contractor shall furnish the City with a written statement sworn before a Notary Public to the effect that all payments have been made for labor

and materials used in this construction, and that all claims, suits, and proceedings of every name and description against the Owner, its officers and agents, have been settled.

## 5. POST CONSTRUCTION

Once construction is substantially complete, the Contractor shall remain obligated to the quality of the construction materials used and workmanship of their Work according to the following requirements:

- 5.1 Within one year after the date of Substantial Completion of the Work or designated portion thereof, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so. During the one-year period for Correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor.
- 5.2 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

## 6. CONTRACTOR'S REPRESENTATIONS

In order to induce Owner to enter into this Agreement Contractor makes the following representations:

- 6.1 Contractor has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or finishing of the Work.
- 6.2 Contractor has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 6.3 Contractor has given Parks and Recreation Director written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by Parks and Recreation Director is acceptable to Contractor.

## 7. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between Owner and Contractor are attached to this Agreement, made a part hereof and consist of the following:

- 7.1 This Agreement (pages 1 to 4 of Section 02 200, inclusive).
- 7.2 Notice of Award and Notice to Proceed.
- 7.3 Project Manual bearing the general title "Rocky Branch Park Improvements – Carolina Thread Trail Belmont Extension", dated August 2020 and consisting of Project Description and Scope of Work, Bid Documents, Contract Documents, Contract Provisions and Specifications, and attachments all as listed in table of contents thereof.
- 7.4 Addenda numbers \_\_\_\_\_ to \_\_\_\_\_, inclusive.
- 7.5 Contractor's Bid (pages 1 to 4 of Section 01 200, inclusive).

- 7.6 General Contractor Qualification Statement & Questionnaire (pages 1 and 3 of Section 01 300, inclusive).
- 7.7 All applicable provisions of State and Federal law and any Modification, including all Change Orders, duly delivered after execution of Agreement.

There are no Contract Documents other than those listed above in this article. The Contract Documents may only be amended, modified or supplemented as provided in Project Manual.

## 8. MISCELLANEOUS

- 8.1 Terms used in this Agreement are defined in the Instructions to Bidders and shall have the meanings indicated.
- 8.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 Owner and Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 8.4 Contractor shall pay promptly and before final payment, any and all claims or liens incurred in and about this work, and execute a final receipt form.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement and caused their respective corporate seals to be affixed hereto. All portions of the Contract Documents have been signed or identified by Owner and Contractor.

(AFFIX CORPORATE SEAL HERE)

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State, Zip

BY: \_\_\_\_\_  
President/Vice President

ATTEST: \_\_\_\_\_  
Secretary/Treasurer

Federal Taxpayer ID Number \_\_\_\_\_

**CITY OF BELMONT**  
OWNER

BY: \_\_\_\_\_  
City Manager

WITNESS: \_\_\_\_\_  
City Clerk

END OF SECTION

SECTION 02 300

**CERTIFICATE OF INSURANCE**

(Attach Certificate of Insurance here)

END OF SECTION



SECTION 02 400

**NOTICE TO PROCEED**

Dated \_\_\_\_\_, 20\_\_

CONTRACT FOR: **ROCKY BRANCH PARK IMPROVEMENTS  
CAROLINA THREAD TRAIL IMPROVEMENTS**

CONTRACTOR:

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

You are hereby notified to commence work on the subject contract on or before \_\_\_\_\_ and are to substantially complete the work within \_\_\_\_\_ calendar days. The Substantial Completion date is \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(OWNER)

By \_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Printed Name & Title of above signer)

DIVISION 03  
CONTRACT PROVISIONS AND  
SPECIFICATIONS

## SECTION 03 100

### CONTRACT CONSIDERATIONS

#### 1.1 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on an Application for Payment form as included in Section 03 110. Contractor's electronic media driven form will be considered.
- B. Content and Format: Utilize schedule of bid items for listing items in Applications for Payment.
- C. Payment Period: Monthly.
- D. Owner may require Contractor to furnish waivers of lien signed by all persons furnishing labor or materials included in any estimate submitted by or on behalf of Contractor.
- E. Include three copies of sales tax statement as included in Section 03 120 with copies of receipts.

#### 1.2 MEASUREMENT AND PAYMENT - UNIT PRICES

- A. Authority: Measurement methods are delineated in Section 03 140.
- B. Take measurements and compute quantities. Owner will verify measurements and quantities.
- C. Quantities: Actual quantities provided within defined limits shall determine payment.
- D. The total Bid price shall cover all Work required by the Contract Documents. All costs for the providing of all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work, and other overhead and profit shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Bid shall be considered a subsidiary obligation of Contractor, and all costs in connection therewith shall be included in the prices bid.

END OF SECTION

## SECTION 03 110

**APPLICATION FOR PAYMENT**

PROJECT: **ROCKY BRANCH PARK IMPROVEMENTS  
CAROLINA THREAD TRAIL BELMONT EXTENSION**

CONTRACTOR:

Sheet No. \_\_\_\_\_

Estimate No. \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_\_\_

OWNER: **CITY OF BELMONT**

P.O. Box 431 (115 North Main Street)

Belmont, NC 28012

704-825-5586

CONTACT:

**Belmont Parks and Recreation Director**

**RECAP**

	<u>Contract Amount</u> Total	<u>Completed to Date</u> Total
Original Contract	\$ _____	\$ _____
Extra Orders	\$ _____	\$ _____
Deduction Orders	\$ _____	\$ _____
<b>Totals</b>	\$ _____	\$ _____
<hr/>		
Less Retainer 10% (after 50% complete 0% on remaining est.)		\$ _____
Net Completed to Date		\$ _____
<b>Total Earned to Date</b>		\$ _____
<b>Less Amount Previously Paid</b>		\$ _____
<b>DUE THIS ESTIMATE</b>		\$ _____

**CONTRACTOR'S CERTIFICATE**

I hereby certify that the above materials and services have been furnished and performed in accordance with the conditions of the contract for the above work, and that payment has not been received and there is due and unpaid on said contract

\_\_\_\_\_

\_\_\_\_\_ Dollars \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SIGNED: \_\_\_\_\_

Date

**OWNER'S APPROVAL**

\_\_\_\_\_ (Authorized Signature) \_\_\_\_\_ Date

**ENGINEER'S RECOMMENDATION**

\_\_\_\_\_ (Authorized Signature) \_\_\_\_\_ Date

*Rocky Branch Park Improvements  
Carolina Thread Trail Belmont Extension*

03 110-1  
Application for Payment

**CITY OF BELMONT**  
9/1/20

## UNIT PRICE QUANTITIES AND AMOUNTS

CONTRACTOR:

PROJECT: **ROCKY BRANCH PARK IMPROVEMENTS  
CAROLINA THREAD TRAIL BELMONT EXTENSION**

ESTIMATE  
NUMBER:

DATE:

ITEM NO.	ITEM DESCRIPTION	UNIT	CONTRACT QUANTITY	PREVIOUS INSTALLED QUANTITY	INSTALLED QUANTITY THIS PERIOD	TOTAL INSTALLED QUANTITY	UNIT PRICE	TOTAL CURRENT AMOUNT
1	Mobilization	LS	1				\$	\$
2	Demolition of Existing Trail Features	LS	1				\$	\$
3	Multi-Use Trail Construction	LF					\$	\$
4	Crusher Run Gravel for Trail	TON					\$	\$
5	NCDOT Class B Rip Rap Stone	TON					\$	\$
6	24" HDPE Culvert	LF					\$	\$
7	Bridges	EA					\$	\$
8	Erosion and Sediment Control for Trail	LS	1				\$	\$
9	Clearing and Grading	LS	1				\$	\$
10	Crusher Run Gravel for Parking Lot	TON					\$	\$
11	Wheel Stops	EA					\$	\$
12	Split Rail Fence	LF					\$	\$
13	Erosion and Sediment Control for Parking Lot	LS	1				\$	\$
14	Rock Cairn Trailhead Monument	EA					\$	\$

ITEM NO.	ITEM DESCRIPTION	UNIT	CONTRACT QUANTITY	PREVIOUS INSTALLED QUANTITY	INSTALLED QUANTITY THIS PERIOD	TOTAL INSTALLED QUANTITY	UNIT PRICE	TOTAL CURRENT AMOUNT
15	Trailhead Map Kiosk	LS	1				\$	\$
16	Trailhead Donor Kiosk	LS	1				\$	\$
							\$	\$
							\$	\$
							\$	\$
							\$	\$
							\$	\$
TOTAL								\$

## SECTION 03 120

## SALES TAX STATEMENT

Project \_\_\_\_\_

Period Covered \_\_\_\_\_

Invoice No.	Invoice Date	Vendor's Name	Amount Before Taxes	NC Tax	County Tax	Total Inv. Amount	County Paid
<b>Subtotal (Page 1)</b> _____			\$	\$	\$	\$	
Plus total cost of material withdrawn from our warehouse stock							
<b>Grand Total</b>			\$	\$	\$	\$	

I certify that the above listed vendors were paid sales tax upon purchases of building materials during the period covered by the construction estimate, and the property upon which such taxes were paid with or will be used in the performance of this contract. No tax on purchases of tangible personal property purchased by such contractors for use in performing the contract which does not annex to, affix to, or in some manner become a part of the building or structure being erected, altered or repaired is included in the above list.

Signed: \_\_\_\_\_

\_\_\_\_\_  
(Title)\_\_\_\_\_  
Contractor (or Sub-Contractor) Name

SECTION 03 130

**FINAL RECEIPT**

CITY OF BELMONT, NORTH CAROLINA

**ROCKY BRANCH PARK IMPROVEMENTS - CAROLINA THREAD TRAIL BELMONT EXTENSION**

\_\_\_\_\_ agrees to accept the sum of \_\_\_\_\_ as full and final payment of the cost of all improvements provided for in the foregoing contract whose total sum of \_\_\_\_\_ Dollars, \$\_\_\_\_\_, in cash, being the full amount accruing to the undersigned by virtue of said Contract, said cash covering and including full payment for all extra work and material furnished by the undersigned in the construction of said improvements, and all incidentals thereto. The undersigned hereby releases the said City of Belmont and its agents and representatives from all claims whatsoever growing out of the said Contract.

The undersigned further certifies that all construction has been completed in substantial compliance with the Contract Documents and that all persons doing work upon or furnishing materials or supplies for said improvements under the foregoing Contract have been paid or will be paid in full in accordance with the requirements of the Contract Documents and the requirements of the General Laws of the State of North Carolina.

The undersigned further certifies that all taxes, imposed by Chapter 212, North Carolina Statutes (Sales and Use Tax Act), as amended, have been paid and discharged.

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
DATE



## SECTION 03 140

### MEASUREMENT AND PAYMENT

#### 1.1 SECTION INCLUDES

- A. This section covers methods of measurement and payment of items of work under this contract.
- B. The total Bid Price for each section of the contract shall cover all work required by the Contract Documents. All costs in connection with the proper and successful completion of the work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the work, shall be included in the unit and lump sum prices bid. All work not specifically set forth as a pay item in the Bid Form, including but not limited to testing and inspections, shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the prices bid.

#### 1.2 ESTIMATED QUANTITIES

- A. All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used for the purpose of comparing the bids submitted for the work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities.
- B. The basis of payment for work and materials will be the actual amount of work done and materials furnished.
- C. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore. Owner reserves the right to reduce the scope of the Work as necessary to conform to the project budget.

#### 1.3 MOBILIZATION & DEMOBILIZATION

- A. Mobilization consists of preparatory work and operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for establishment of facilities necessary for work on the project. Also included is the removal and disbandment of those personnel, equipment, supplies and incidentals established for work on the project; and for costs incurred prior to beginning work on the items on the Project site.
- B. All work covered by mobilization will be paid for at the contract lump sum price. Fifty percent of the lump sum will be paid with the first payment request application. The remainder will be paid with the last application.

#### 1.4 DEMOLITION

- A. The work covered by this section consists of all removal and disposal of existing trail features indicated on the existing trail map in Attachment B. Features shall be demolished, hauled offsite, and disposed of in a proper landfill in accordance with local, state, and federal regulations.
- B. The work covered under this section shall be paid for at the contract lump sum price and will be full compensation for all elements of work needed to complete this work as specified. The lump sum price will be paid once demolition is complete.

- C. Any additional trail features not indicated on the existing trail map in Attachment B will be negotiated during construction with the Owner or Owner's designated representative. Payment will be made based on the negotiated lump sum price at the completion of the demolition.

#### 1.5 MULTI-USE TRAIL CONSTRUCTION

- A. The work covered by this section consists of all equipment, material, and labor to clear, excavate, and compact the multi-use trail as specified in Section 03 300.
- B. The work covered under this section shall be paid on a unit price basis per linear foot of multi-use trail that is satisfactorily completed as determined by the Owner or Owner's designated agent.

#### 1.6 CRUSHER RUN GRAVEL (ABC GRAVEL)

- A. The work covered by this section consists of all equipment, material, and labor to install and compact the crusher run gravel as specified in Sections 03 300 and 03 500.
- B. The Contractor shall take into consideration that the Owner's designated agent has an agreement with Vulcan Materials Company's Southern NC Area Quarries for a raw material price of crusher run gravel of \$15 per ton. This price does not include hauling or installation of the stone. The contractor shall take this agreement into consideration in their bid price and provide the lowest cost option for crusher run gravel between Vulcan or a quarry of their choice.
- C. The work covered under this section shall be paid on a unit price basis per ton for the actual number of tons of aggregate which has been incorporated into the satisfactorily completed work as determined by the Owner or Owner's designated agent.

#### 1.7 NCDOT CLASS B RIPRAP

- A. The work covered by this section consists of all equipment, material, and labor to install the riprap for armoring as specified in Section 03 300.
- B. The work covered under this section shall be paid on a unit price basis per ton for the actual number of tons of riprap which has been incorporated into the satisfactorily completed work as determined by the Owner or Owner's designated agent.

#### 1.8 HDPE CULVERT

- A. The work covered by this section consists of all equipment, material, and labor to install the HDPE culvert as specified in Section 03 300. The work shall include excavation, backfill, and proper compaction for installation of the HDPE culvert.
- B. The work covered under this section shall be paid on a unit price basis per linear foot of HDPE culvert pipe satisfactorily installed as determined by the Owner or Owner's designated agent.

#### 1.9 BRIDGES

- A. The work covered by this section consists of all equipment, material, and labor to design, permit, and construct the load bearing bridge as specified in Section 03 400 and designed by the contractor.
- B. The work covered under this section shall be paid on a unit price basis per each bridge satisfactorily installed as determined by the Owner or Owner's designated agent.

#### 1.10 CLEARING AND GRADING

- A. The work covered by this section consists of all equipment, material, and labor to clear and grade for the parking lot improvements as specified in Section 03 500. This work shall include clearing, brush removal, tree trimming, and proper disposal of debris. It shall also include grading of the parking lot area and proper compaction of the parking lot subgrade.
- B. The work covered under this section shall be paid for at the contract lump sum price and will be full compensation for all elements of work needed to complete this work as specified. The lump sum price will be paid once this work is substantially complete as determined by the Owner or Owner's designated agent.

#### 1.11 WHEEL STOPS

- A. The work covered by this section consists of all equipment, material, and labor to install wheel stops in the parking lot as specified in Section 03 500.
- B. The work covered under this section shall be paid on a unit price basis per each wheel stop satisfactorily installed as determined by the Owner or Owner's designated agent.

#### 1.12 SPLIT RAIL FENCE

- A. The work covered by this section consists of all equipment, material, and labor to install the split rail fence as specified in Section 03 500. This item includes post hole excavation and concrete post footer.
- B. The work covered under this section shall be paid on a unit price basis per linear foot of split rail fence satisfactorily installed as determined by the Owner or Owner's designated agent.

#### 1.13 ROCK CAIRN TRAILHEAD MONUMENT

- A. The work covered by this section consists of all equipment, material, and labor to construct the rock cairn trailhead monument as specified in Section 03 600. This item includes the mounting post and logo sign.
- B. The work covered under this section shall be paid on a unit price basis per each rock cairn satisfactorily installed as determined by the Owner or Owner's designated agent.

#### 1.14 TRAILHEAD MAP KIOSK

- A. The work covered by this section consists of all equipment, material, and labor to construct the trailhead map kiosk as specified in Section 03 700.
- B. The work covered under this section shall be paid for at the contract lump sum price once the trailhead map kiosk is satisfactorily installed as determined by the Owner or Owner's designated agent.

#### 1.15 TRAILHEAD DONOR KIOSK

- A. The work covered by this section consists of all equipment, material, and labor to construct the trailhead donor kiosk as specified in Section 03 700.
- B. The work covered under this section shall be paid for at the contract lump sum price once the trailhead donor kiosk is satisfactorily installed as determined by the Owner or Owner's designated agent.

#### 1.16 EROSION AND SEDIMENT CONTROL

- A. This item consists of the work described in Sections 03 300 and 03 500 of the specifications.
- B. The work covered under this section shall be paid for at the contract lump sum price and will be full compensation for all elements of work needed to complete this work as specified. The lump sum price will be paid for with the last application

END OF SECTION

## SECTION 03 200

### CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

#### 1.1 MOBILIZATION

- A. Perform preparatory work and operations for the assembling and setting up necessary for work on the project, such as shops, plants, storage areas, sanitary facilities, moving in of personnel and equipment, incidentals to the project, and any other facilities, as required by the Specifications and special requirements of the Contract Documents, as well as by Laws and Regulations in effect at the Site.
- B. Perform demobilization to remove the items and equipment specific to the Project.

#### 1.2 TEMPORARY UTILITIES

- A. Arrange for and pay for all temporary utilities required for the work and for temporary facilities on the Site.
- B. Water: Contractor may obtain water needed for his operations and his subcontractor's operations and construction of the work from the City of Belmont without charge.

#### 1.3 BARRIERS

- A. Provide, erect, and maintain barricades, suitable and sufficient warning lights, and take all necessary precautions for the protection of the public.
- B. Provide barriers to prevent unauthorized entry to construction areas, and to protect existing facilities and adjacent properties from damage from construction operations.

#### 1.4 ENVIRONMENTAL CONTROLS

- A. Provide and maintain methods, equipment, and temporary construction as necessary to provide controls over environmental conditions along the route of construction and related areas under Contractor's control as required to comply with Laws and Regulations governing noise, dust, water, pollution, and erosion control, and the requirements of these Contract Documents. In the event of conflict between the requirements of these Contract Documents and Laws and Regulations, the more restrictive shall apply.
- B. Control dust and dirt on a daily basis within the limits of the Project and haul roads leading to or away from the Project that are used by Contractor, Subcontractors, and Suppliers. If not complied with in a satisfactory manner, all Work, except clean-up operations will be stopped immediately until complied with to the satisfaction of Owner or Owner's designated representative. Methods of control shall include, but are not limited to:
  - 1. Sweep streets and haul roads using an automatic self-contained mechanical sweeper with integral water spray and vacuum equipment.
  - 2. Remove excessive dirt on streets by means of hand shoveling or appropriate mechanical equipment, and sweep area as in method above.
  - 3. Clean sidewalks and driveways using shovels and hand brooms or approved mechanical equipment.

1.5 PROTECTION OF INSTALLED WORK

- A. Protect installed work and provide special protection where specified in individual Specifications Sections.
- B. Provide temporary and removable protection for installed materials. Control activity in immediate work area to prevent damage.

1.6 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from Site daily and dispose off-site.

END OF SECTION

## SECTION 03 300

### **MULTI-USE TRAIL**

#### 1.1 GENERAL TRAIL CONSTRUCTION SPECIFICATIONS AND TRAIL STANDARDS

- A. All trail construction shall be in accordance with the specifications and standards listed in this section.
- B. Trail construction shall adhere to the IMBA standards specified in their book, Trail Solutions, where noted in this section.
- C. Overall trail characteristic shall resemble a USFS Trail Class 5.
- D. The owner reserves the right to utilize donated materials as a substitute for contractor purchased materials on the specified multi-use trail construction. A deduction in the unit price shall be applied for any materials donated.

#### 1.2 DEMOLITION

- A. Features indicated on the existing trail map in Attachment B shall be demolished, hauled offsite, and disposed of in a proper landfill in accordance with local, state, and federal regulations.
- B. Manmade trail features that are deemed in conflict with the construction of the multi-use trail and approved by the owner or owner's designated representative shall be removed and disposed of offsite.
- C. No existing trail features shall be removed without prior approval from the owner or owner's designated representative regardless of its designation in Attachment B.

#### 1.3 TREE CUTTING

- A. Avoid removal of trees with a diameter at breast height (dbh) greater than 6" when possible to do so.
- B. Stumps on the trail tread shall be completely removed, including the root ball, and placed at least 30 feet from the edge of the trail corridor.
- C. Trees removed from the trail corridor and outside of the trail tread shall be cut flush with the ground.
- D. Tree roots within the trail corridor shall be cleanly cut using a root cutting saw. Realignment of the trail shall be considered to avoid cutting more than 1/3 of the root length. In some specific cases, tree fertilization shall be considered to increase the likelihood of the tree's survival.

#### 1.4 BRUSH REMOVAL

- A. The width of the trail corridor shall be approximately 2 feet outside the finished trail surface on each side. The trail corridor shall be at least 8 feet high.
- B. The trail corridor shall be cleared of all limbs, brush, vines, and vegetation. All branches shall be cut just outside of the branch collar to promote sealing of the wound.
- C. A 5' fall zone outside the finished trail surface shall be cleared of all hazards, stobs, and protrusions.

- D. Vegetation cut from the trail corridor shall be moved at least 30 feet from the edge of the trail corridor and not interfere with any existing trails. The brush shall be placed so that the cut end is facing away from the trail.
- E. Brush shall not be placed in piles unless directed by the owner or owner's designated representative. It shall be spread out in a way that appears natural.

#### 1.5 TRAIL ALIGNMENT

- A. The trail shall be constructed within 10 feet of corridor centerline flagline. The owner will provide GIS coordinates of corridor centerline.
- B. Any variances in trail alignment are required to be approved by the owner or owner's designated representative.

#### 1.6 TRAIL TREAD

- A. The trail tread shall be 6 to 8 feet wide as designated in Figure 2 of the Rocky Branch Park - Carolina Thread Trail Extension design document located in Attachment A.
- B. Reduced tread width to a minimum of 4 feet is allowed in localized areas for protection of mature tree root balls.
- C. Trails shall be constructed with a full bench cut on the back slope that smoothly transitions to the hillside. The backslope shall be 1:1 or angle of repose.
- D. Mechanized equipment shall not have a footprint that exceeds the width of the tread. The contractor shall use a mini-excavator or trail specific dozer such as a Sutter or Sweco to perform the full bench cut excavation of the trail. Trail excavation using a skid steer is not allowed.
- E. Excavated material shall be evenly distributed downhill of the trail tread to avoid forming a berm on the outer edge of the tread.
- F. All clean clay-based fill dirt needed for trail construction shall be harvested onsite or supplied by the owner.
- G. Maximum average grade target is 7%. Maximum short pitch grade shall be 10% for 30 feet or less.
- H. Tread shall be out-sloped 3-5% to encourage water to roll downhill. The maximum traverse grade shall not exceed 5%.
- I. Grade reversals and grade dips shall be constructed to remove water from the trail tread. All needed grade reversals and/or grade dips will be done according to IMBA standards specified in their book, Trail Solutions. Grade reversals shall occur approximately every 75'-100'.
- J. All needed climbing turns shall be designed and constructed according to IMBA standards specified in their book, Trail Solutions.
- K. All needed rolling crown switchbacks shall be designed and constructed according to IMBA standards as specified in their book, Trail Solutions.
- L. Rolling crown switchbacks shall have a near level turning platform that is slightly crowned. The upper leg should be in-sloped at 5 % and shall create a drain extending well beyond the platform. The lower leg should be out-sloped at 5% for proper drainage. Grade reversals shall be located immediately before and after the switchback.



- M. Small vegetative and/or root matter in the tread shall be removed. Large feeder roots shall be covered with soil to raise the tread above the roots.
- N. The trail tread shall be capped with 2" of compacted crusher run gravel (aggregate base course gravel). Aggregate base course gravel shall meet the requirements of NCDOT specification section 520.
- O. Compaction shall be completed using vibratory compaction or roller compaction of the tread and cap. The trail shall be smooth and free of protrusions, obstacles, or roots.

#### 1.7 CULVERT CROSSINGS

- A. Culverts shall be installed at locations indicated in Figure 1 of the Rocky Branch Park – Carolina Thread Trail Extension design document provided in Attachment A.
- B. All culverts shall be corrugated, dual wall, smooth interior high-density polyethylene (HDPE) pipe.
- C. All culverts shall have a minimum of 12" of cover above the pipe to the trail tread surface.
- D. NCDOT Class B riprap shall be installed at the inlet and outlet of the culvert as needed to armor the culvert mouth.
- E. Culverts shall be installed as indicated in Figure 4 of the Rocky Branch Park – Carolina Thread Trail Extension design document provided in Attachment A.

#### 1.8 EROSION AND SEDIMENT CONTROL

- A. Contractor shall implement the use of SWPP and ECD's where necessary.
- B. Contractor shall maintain less than 3,000 sq ft of broken, un-compacted soil at any time.
- C. Contractor shall re-naturalize disturbances, spoils, and borrow pits with native organics.
- D. Trail constructed within 100 feet of streams shall be completed and stabilized by the end of each work day. Collect and remove waste materials, debris, and rubbish from Site daily and dispose off-site.
- E. Contractor shall re-seed or apply seed mat where necessary.
- F. Existing trail to be abandoned shall be re-naturalized. The contractor shall re-naturalize the existing trail by stacking vegetative debris in regular intervals to use as check dams to slow water runoff and push water off of the trail.

END OF SECTION

## SECTION 03 400

### BRIDGES

#### 1.1 GENERAL SPECIFICATIONS AND SUBMITTAL REQUIREMENTS

- A. Example bridge plans have been provided in Attachment C for illustration purposes only.
- B. The contractor shall submit bridge plans in accordance with the specifications of this section to the Owner or Owner's designated agent for review and approval. The bridge plans shall be signed and sealed by a licensed professional structural engineer in the State of North Carolina.
- C. The contractor is responsible for obtaining all necessary permits required for work in and around the streams. All stream crossings shall be constructed in accordance with local, state, and federal regulations.

#### 1.2 LOAD BEARING

- A. Bridges shall be designed and rated to USFS "heavy duty" standard and have a 5-ton (10,000 lbs.) rating.
- B. Bridges shall be designed and constructed to support shared use traffic including bikers, hikers, small emergency rescue vehicles, and small trail construction and maintenance equipment. Emergency rescue vehicles include all terrain UTV's and ATV's. Trail equipment includes a Sutter Trail Dozer.

#### 1.3 SPAN LENGTH

- A. Bridge spans shall be determined based on field conditions and exact alignment of the trail at the stream crossing. Estimated bridge spans include four bridges at approximately 20 feet in length and one bridge at approximately 30 feet in length.
- B. Bridges shall span from top of bank to top of bank of the stream at a minimum. The deck of the bridge shall be flush with the connecting trail grade or a ramp shall be required. All ramps shall have a slope less than 12:1.
- C. Single span and multiple span bridges are acceptable options as long as they meet all local, state, and federal guidelines for stream crossings.
- D. Angled bridge approaches are allowed, but the design must be approved by the Owner or Owner's designated agent.

#### 1.4 WIDTH

- A. The width of the bridge decking shall not be less than the connecting trail width.
- B. The bridge width from the inside of the vertical post to the inside of the opposite vertical post shall be a minimum of 6 feet, but no more than 8 feet.

#### 1.5 MATERIAL

- A. All bridge framing and decking shall be pressure treated southern yellow pine.
- B. All timber materials shall be rough sawn finish.

- C. Deck boards shall be minimum 2" x 8" rough sawn pressure treated southern yellow pine.
- D. Deck boards with anti-slip properties are highly preferred. Any anti-slip surface treatment or agent that will be applied to the bridge surface shall be reviewed and approved by the Owner or Owner's designated agent.

#### 1.6 RAILINGS

- A. Safety posts and top rails shall be round 6" diameter pressure treated southern yellow pine.
- B. Intermediate rails shall be round 4" diameter.
- C. Alternative railing options are allowed, but must be reviewed and approved by the Owner or Owner's designated agent.

#### 1.7 FASTENERS

- A. All fasteners used shall be corrosion resistant and rated for outdoor use.
- B. Acceptable fasteners include SPAX anodized lag screws, TimberLOK deck screws, or approved equal.

#### 1.8 FOUNDATION

- A. The bridge spans shall be supported by reinforced concrete piers. The concrete piers shall be designed and constructed to support the load bearing requirements listed in this specification.

END OF SECTION

## SECTION 03 500

### PARKING LOT IMPROVEMENTS

#### 1.1 GENERAL SPECIFICATIONS

- A. All parking lot improvements shall be in accordance with the specifications and standards listed in this section.
- B. Parking lot improvements shall be constructed as shown on the Parking Lot Improvements plan provided as Attachment D. Specifications for the Trailhead entry monuments, map kiosk, and donor kiosk are provided in specification sections 03 600 and 03 700.
- C. The owner reserves the right to utilize donated materials as a substitute for contractor purchased materials on the specified parking lot improvements. A deduction in the unit price shall be applied for any materials donated.

#### 1.2 CLEARING & TREE TRIMMING

- A. Avoid removal of trees with a diameter at breast height (dbh) greater than 6" when possible to do so.
- B. Stumps shall be completely removed, including the root ball, and placed at least 30 feet from the edge of the parking lot or trail corridor.
- C. Any tree roots encountered during grading shall be cleanly cut using a tree root cutting saw. Avoid cutting more than 1/3 of the root length. In some specific cases, tree fertilization shall be considered to increase the likelihood of the tree's survival.
- D. The parking lot area shall be cleared of all limbs, brush, vines, and vegetation. All branches shall be cut just outside of the branch collar to promote sealing of the wound.
- E. The parking lot area shall be cleared of all limbs, brush, vines, and vegetation to a height of 10 feet.

#### 1.3 GRADING

- A. All brush and topsoil shall be cleared from the new parking lot area. This material shall be disposed of onsite. It shall be spread out of sight more than 30 feet from the parking lot area or trail corridor and more than 30 feet from a stream or ditch.
- B. Minor grading shall be completed to provide a smooth subgrade free of protrusions, obstacles, or roots. Parking lot grades shall be a minimum of 2% and no more than 7% in any direction.
- C. Proof roll subgrade with heavy pneumatic rubber tired compaction equipment. Subgrade shall be compacted to 95% maximum dry density in accordance with ASTM D-1557.
- D. Where proper subgrade compaction cannot be achieved, undercut and soil stabilization geotextile may be required per NCDOT specification section 505.

#### 1.4 GRAVEL PARKING LOT

- A. Crusher run gravel shall be installed in the parking lot and trailhead entrance to the limits shown on the Parking Lot Improvements plan.

- B. The crusher run gravel shall consist of 6 inches of aggregate base course gravel. Aggregate base course gravel shall meet the requirements of NCDOT specification section 520.
- C. Crusher run gravel shall be compacted to 95% maximum dry density in accordance with ASTM D-1557.

#### 1.5 WHEEL STOPS

- A. Wheel stops shall be located as shown on the Parking Lot Improvements plan in designated parking spot locations.
- B. The length of all wheel stops shall be between 6 and 8 feet long.
- C. Wheel stops shall be pressured treated railroad ties or 8"x8" pressure treated southern yellow pine. All wheel stop materials shall be the same. Do not mix material types.
- D. All wheel stops shall be anchored to the ground using two 18 inch long #4 rebars. Holes shall be drilled through the wheel stops 8 inches from each end. The rebar shall be driven through the drilled holes into the ground until the end of the rebar is flush with the top of the wheel stop.

#### 1.6 FENCE

- A. Fencing shall be installed as shown on the Parking Lot Improvements plan.
- B. All fence shall be 2-rail split rail fence to match the existing fence.
- C. The fence shall be constructed using pressure treated southern yellow pine or western red cedar.
- D. The maximum spacing between fence posts shall be 8 feet. Shorter spans may be utilized based on the fence layout.
- E. All fence posts shall be installed 24" to 36" below the ground surface and secured with 3,000 psi concrete.

#### 1.7 EROSION AND SEDIMENT CONTROL

- A. Contractor shall implement the use of SWPP and ECD's where necessary.
- B. Contractor shall re-naturalize disturbances, spoils, and borrow pits with native organics.
- C. Contractor shall re-seed or apply seed mat where necessary.

END OF SECTION

## SECTION 03 600

### TRAILHEAD MONUMENT

#### 1.1 GENERAL SPECIFICATIONS AND SUBMITTAL REQUIREMENTS

- A. The trailhead monuments shall be in accordance with the specifications and standards listed in this section.
- B. Two trailhead monuments shall be constructed at the entry to the multi-use trail as shown on the Parking Lot Improvements plan provided as Attachment D.
- C. The contractor shall submit trailhead monument plans in accordance with the specifications of this section to the Owner or Owner's designated representative for review and approval. Details such as securing the rock boulders and mounting the trail logo signs shall be provided on the trailhead monument plans.
- D. A schematic plan of the trailhead monument has been provided in Attachment E for illustration purposes only.
- E. The owner reserves the right to utilize donated materials as a substitute for contractor purchased materials for construction of the trailhead monuments. A cost deduction shall be applied for any materials donated. The value of the cost deduction shall be negotiated between the Contractor and Owner or Owner's designated agent during construction.

#### 1.2 ROCK CAIRN

- A. The rock cairns shall consist of flat rock boulders of varying sizes.
- B. The bottom flat rock boulder shall be of substantial size and large enough to provide a seating ledge.
- C. The flat rock boulders shall be stacked on top of one another to a height of approximately 10 feet. The rock boulders shall decrease in size as they are stacked up.
- D. The contractor shall determine a sustainable and safe way to secure the rock boulders to each other and keep them from falling over. The method of securing the rock boulders shall be reviewed and approved by the Owner or Owner's designated representative.

#### 1.3 LOGO SIGN

- A. A weather resistant mounting post shall be installed at the top of the rock cairn above the top rock boulder. A three dimensional logo sign shall be mounted to the mounting post.
- B. The contractor shall coordinate with Bret Baronak of the Carolina Thread Trail to obtain the standard Carolina Thread Trail three dimensional logo sign.
- C. The Rocky Branch Park logo sign shall be made of aluminum or other durable metal. The sign shall have some thickness with varied texture on the face of the logo. Before the sign is ordered, the contractor shall submit the details of the sign to the Owner or Owner's designated representative for review and approval.

END OF SECTION

## SECTION 03 700

### MAP AND DONOR KIOSKS

#### 1.1 GENERAL SPECIFICATIONS AND SUBMITTAL REQUIREMENTS

- A. The map and donor kiosks shall be in accordance with the specifications and standards listed in this section.
- B. The map and donor kiosks shall be constructed at the entry to the multi-use trail as shown on the Parking Lot Improvements plan provided in Attachment D.
- C. The contractor shall submit plans for the map and donor kiosks in accordance with the specifications of this section to the Owner or Owner's designated representative for review and approval. Details such as kiosk layout and material types shall be provided on the kiosk plans.
- D. Schematic plans of the map and donor kiosks have been provided in Attachment F for illustration purposes only.
- E. The owner reserves the right to utilize donated materials as a substitute for contractor purchased materials for construction of the trailhead monument. A cost deduction shall be applied for any materials donated. The value of the cost deduction shall be negotiated between the Contractor and Owner or Owner's designated agent during construction.

#### 1.2 KIOSK FRAMING

- A. All lumber for kiosk shall be eastern red cedar or pressure treated rough sawn southern yellow pine.
- B. The wood kiosk shall be stained. The stain color shall be selected by the Owner or Owner's designated representative during construction.
- C. All posts shall be installed at a depth below the ground equal to one-third (1/3) of the total post height.
- D. All posts shall be secured with 3,000 psi concrete post footing.

#### 1.3 MAP KIOSK

- A. All signs shall be made of aluminum or other durable metal.
- B. Images for all maps, logos, and park rules shall be obtained from the Owner or Owner's designated representative.

#### 1.4 DONOR KIOSK

- A. The donor wall design and material shall be finalized with the Owner or Owner's designated representative during construction.
- B. Images for all donor logos and names shall be obtained from the Owner or Owner's designated representative.

END OF SECTION

ATTACHMENT A  
ROCKY BRANCH PARK -  
CAROLINA THREAD TRAIL EXTENSION





**Prepared By:**

Craig Brickser, MSP  
Community Trail Design

**Contact :**

**P :** 850.264.7355  
**E :** [craig@communitytraildesign.com](mailto:craig@communitytraildesign.com)  
**W :** [communitytraildesign.com](http://communitytraildesign.com)

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# ROCKY BRANCH PARK - CAROLINA THREAD TRAIL EXTENSION

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Photo Credit: Town of Cramerton,  
The Stuart W. Cramer Trail, part of the Carolina Thread Trail

# PROJECT OVERVIEW

The first of a three-phase plan outlined in the Rocky Branch Trail Enhancement Plan calls for funding and park improvements to begin with the development of a connective multi-use trail corridor and beginner-level bike-optimized singletrack. Formally adopted by both the Belmont Parks and Recreation Master Plan and Carolina Thread Trail Master Plan, this once conceptual multi-use trail corridor is now fully designed at ground-level and known as the Carolina Thread Trail (CTT) Belmont Extension. Due to the unique nature of the multi-use trail's characteristics, specifications, scope and scale, this document details the CTT Belmont Extension as a stand-alone project defined as Phase 1.1 and 1.2. This project is separate from any singletrack bike-optimized trail development and will only describe the scope, costs, and details associated with developing Phase 1.1 and 1.2. multi-use trail. Previously described Phase 1 Green Zone singletrack shall be amended as Phase 2 trail development in conjunction with Blue Zone bike-optimized trail and detailed in a separate document.

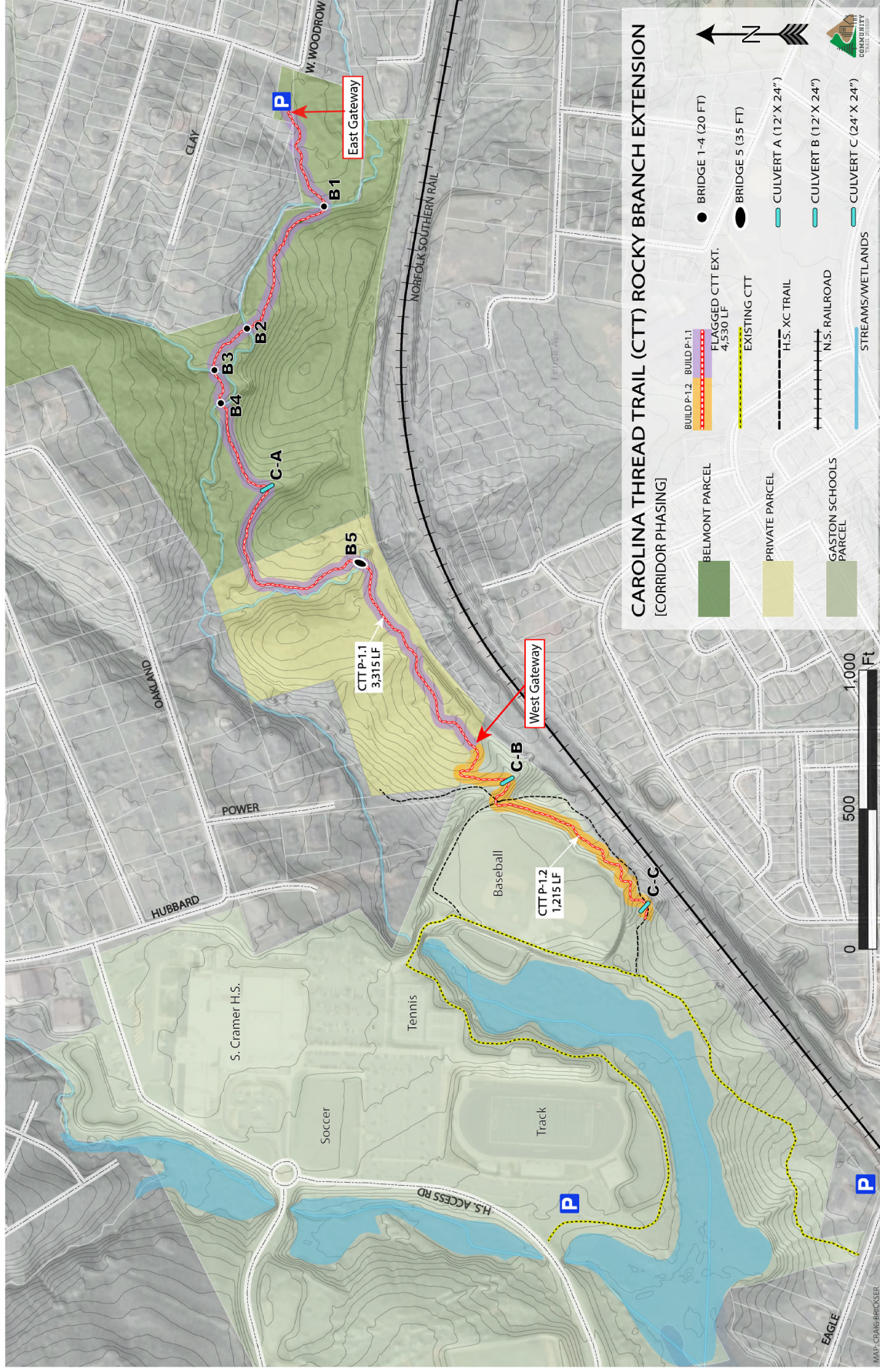
## BACKGROUND

The CTT Belmont Extension was originally proposed as a conceptual alignment based on surveys of the landscape during the development of the Rocky Branch Park Trail Enhancement Plan. Striving to achieve the goals of community connectivity, inclusive recreation space, and a navigational backbone for the enhancement of adjacent bike-optimized singletrack, the designed corridor utilizes landscapes and topography that will minimize impacts to adjacent singletrack opportunities, showcase the namesake Rocky Branch Creek, traverse slopes that will allow for sustainable bench-cut style construction, and navigate the landscape at a reasonable average gradient.

## SETTING & CONTEXT

The designed corridor is dependent on utilizing several parcels of land in order to complete a connection from Rocky Branch Park's East Gateway trailhead on W. Woodrow Avenue to the existing Carolina Thread Trail on Stuart W. Cramer High School property to the west (Figure 1). While passing through these parcels, the corridor utilizes the landscape's contours when possible yet will require (5) bridges and (3) culvert crossings to complete the alignment. As the trail corridor exits the private parcel towards the west, it enters Gaston County Schools property at a boundary known as the West Gateway which signifies the western entrance/exit of Rocky Branch Bike Park. Finally, the CTT Belmont Extension will traverse a short but complex landscape across Gaston County Schools property ultimately tying into an existing multi-use path behind the high school's athletic fields.

# Figure 1 - Construction Phasing





## PHASING

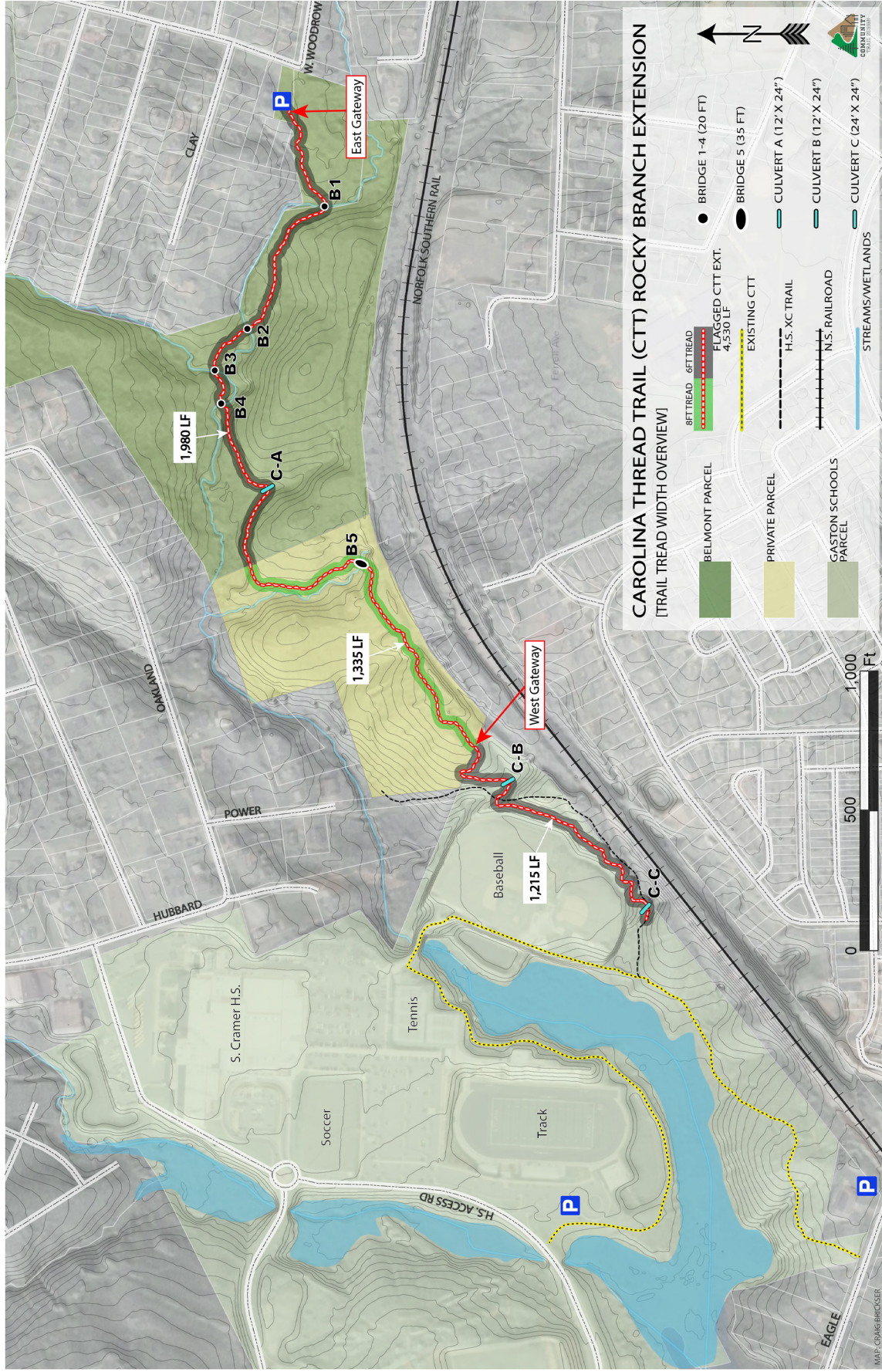
Due to ongoing discussions related to the trail maintenance MOU with the Tarheel Trailblazers and required approvals from Gaston County School's Operations Committee, trail development on the Gaston County Schools property may be delayed. Phase 1 may need to be developed in multiple phases itself, with the first phase of multi-use trail development terminating at the property line of the private parcel, previously described as the West Gateway (Figure 1). This segment of Phase 1, defined as Phase 1.1, is 3,315 linear feet in length, and includes the construction of (5) bridges and (1) culvert crossing. Phase 1.1 has opportunity for 1,335 linear feet of trail to be developed at full width of 8 feet, while the remainder should be built at a reduced specification of 6 feet, with short segments as narrow as 4 feet to avoid mature tree root damage (see Figure 1 and Figure 2).

When approved, the remaining 1,215 linear feet of Phase 1.2 can be developed at a maximum width of 6 feet tread specification requiring (2) culvert crossings and (3) switchback turns.

## CORRIDOR CONSTRUCTION

At the request of the Carolina Thread Trail stewards, opportunities to build the trail at a maximum 8 feet tread specification have been identified. Effort should be made to build the remainder of the corridor at a 6 feet tread specification (Figure 2) with a minimum of 4 feet for short segments to reduce tree root damage. The finished trail tread should be compacted, smooth, root and obstacle free, and wide enough to accommodate passing users. The trail corridor should be constructed primarily using bench-cut rolling-contour technique, with frequent grade reversals approximately every 75-100 feet. The use of check dams, rollers, or abrupt grade dips is highly discouraged. Total length of the CTT Belmont Extension is 4,530 linear feet end-to-end (see Figure 1 and Figure 2).

# Figure 2 - Tread Specs



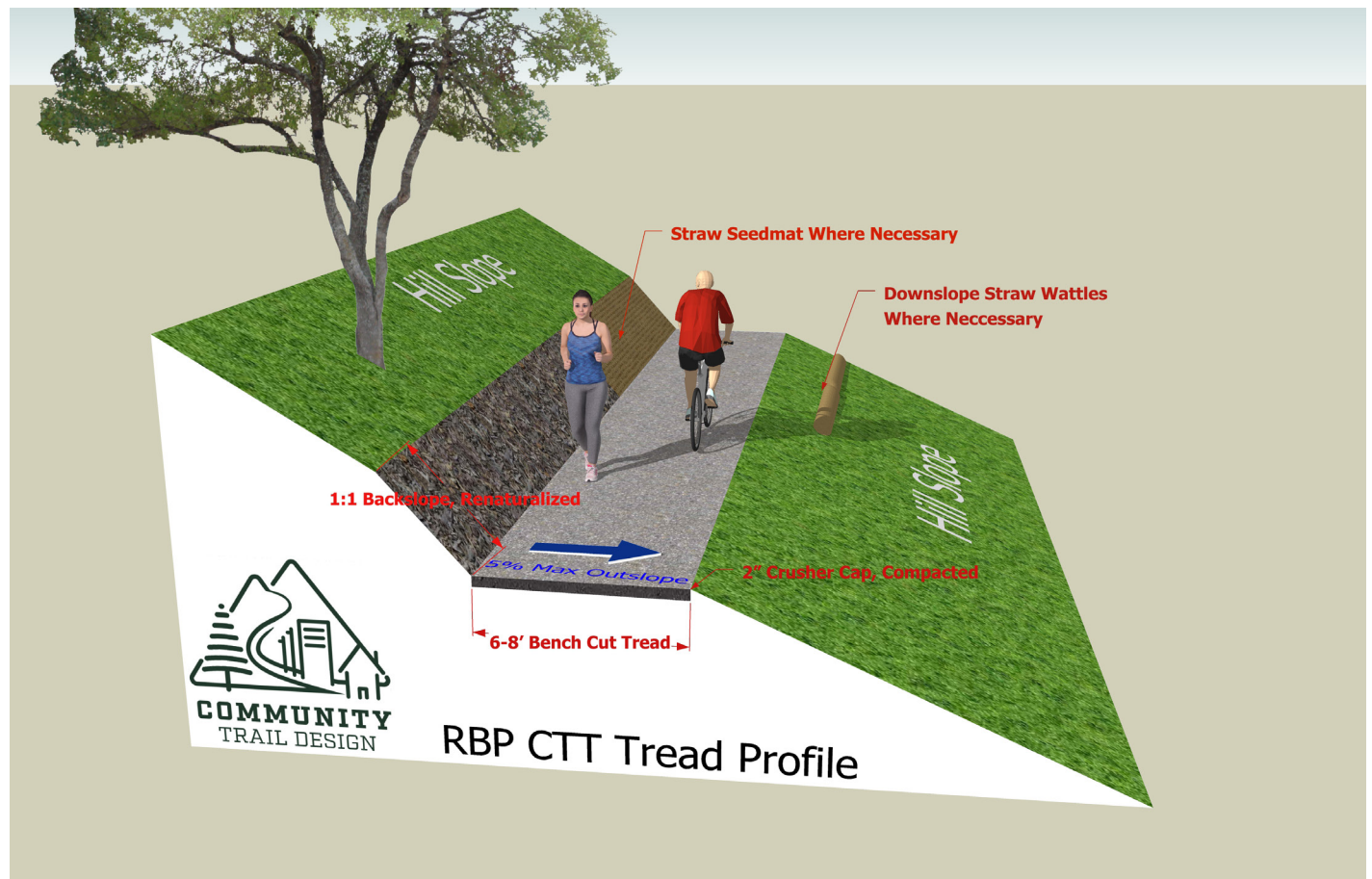
# CORRIDOR CONSTRUCTION REQUIREMENTS

The follow construction requirements are recommended for trail construction.

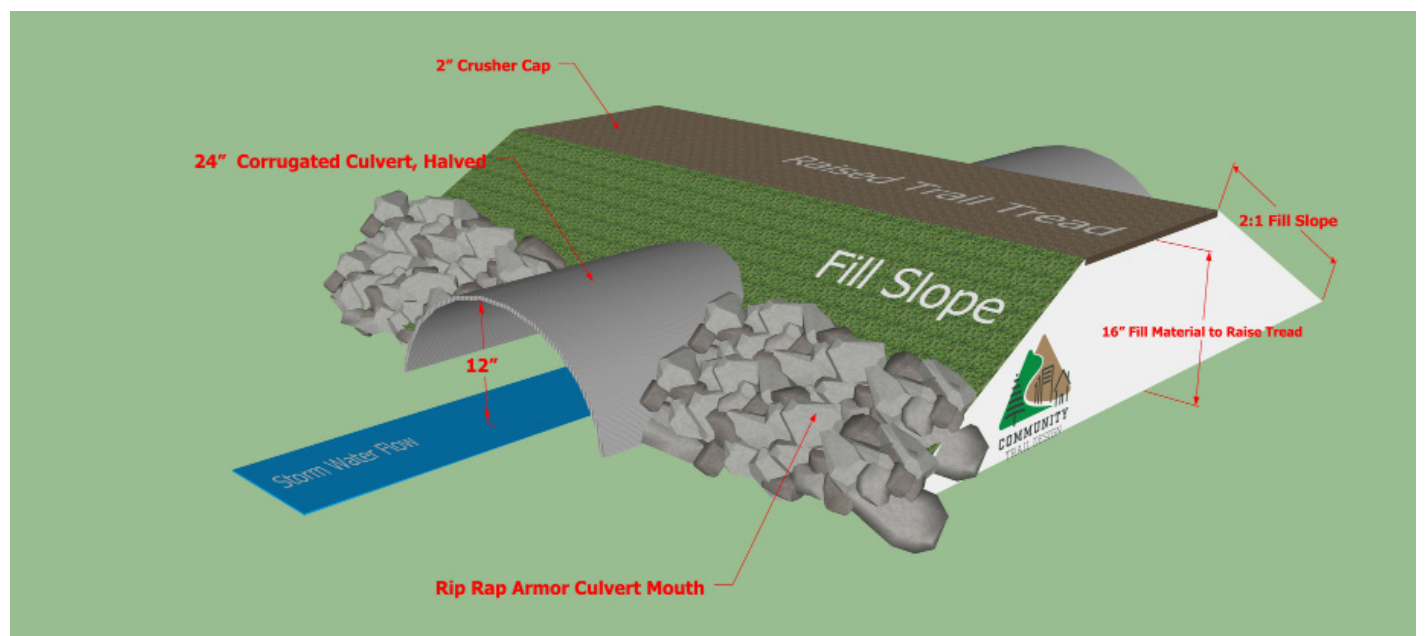
- Overall trail characteristic resembling a USFS Trail Class 5
- Average grade target is 7%
- Maximum short pitch grade 10% (30' or less)
- Grade reversals approximately every 75'-100'
- Maximum transverse grade 5% (inslope/outslope)
- Bridge structures able to support machinery and ATVs/UTVs
- Vibratory compaction or roller compaction of tread and cap
- Renaturalized disturbances, spoils, and borrow pits with native organics
- Backslope 1:1 or angle of repose
- 2" crusher gravel cap
- 6" maximum Diameter Breast Height (DBH) tree removal
- Protection of mature tree root balls with reduced tread width where necessary
- 10' corridor centerline allowance, left or right of flagline.
- 8' minium trail corridor ceiling
- Pruning and limbing of all branches flush with bark collar
- 5' fall zone clear of all hazards, stobs, protrusions
- Implementation of SWPP and ECD's where necessary
- Maintain less than 3,000 sq ft of broken, uncompacted soil at any time
- Contractor responsible for re-seeding or applying seed mat if neccessary
- Finished surface should be smooth and free of protrusions, obstacles, or roots



## FIGURE 3 - CTT BELMONT EXTENSION TRAIL PROFILE



## FIGURE 4 - CULVERT CROSSING







**ATTACHMENT B**  
**EXISTING FEATURES TO BE REMOVED**

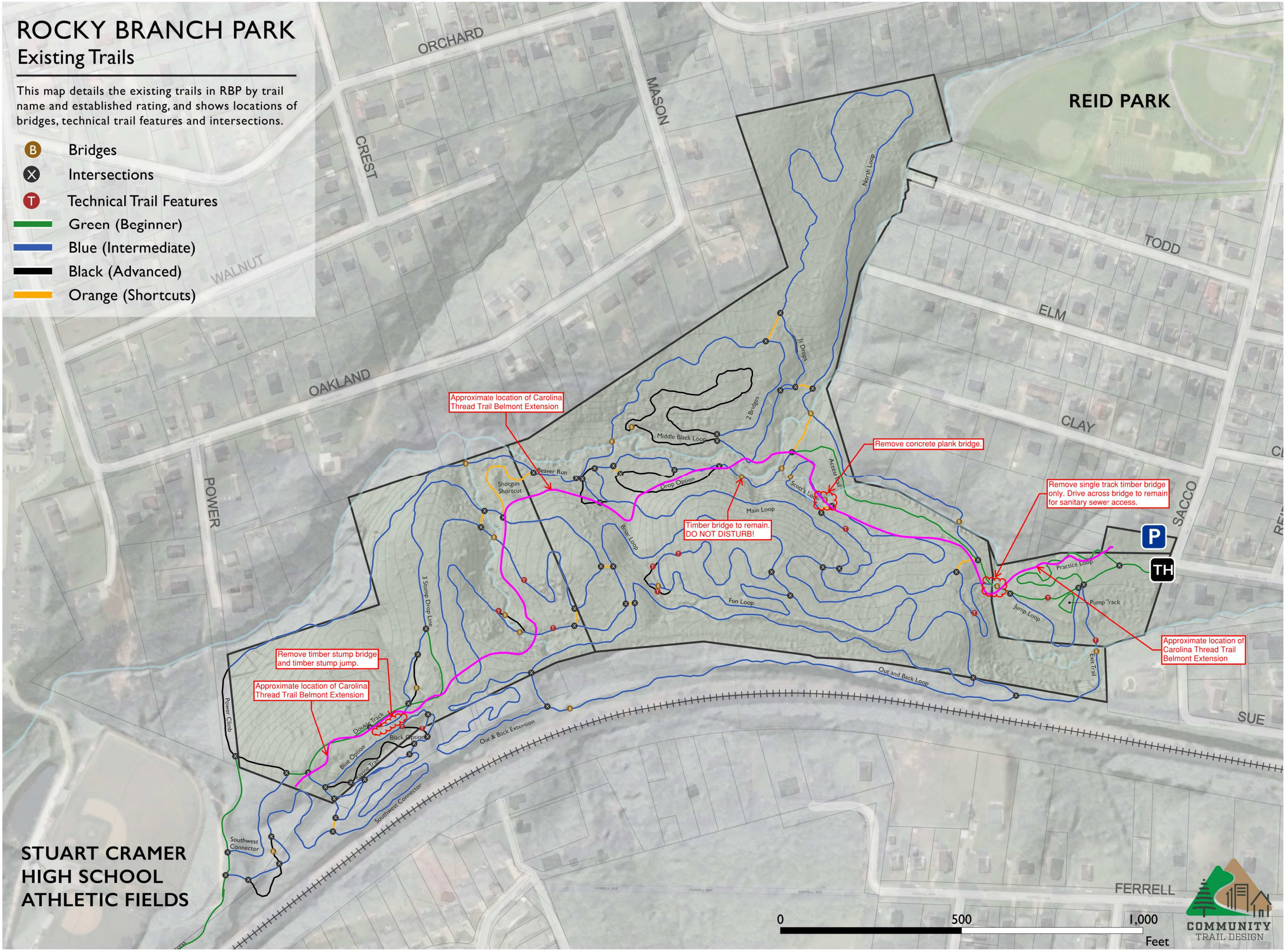


# ROCKY BRANCH PARK

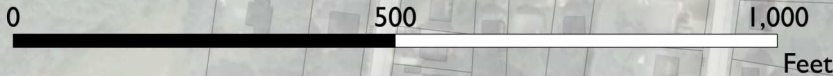
## Existing Trails

This map details the existing trails in RBP by trail name and established rating, and shows locations of bridges, technical trail features and intersections.

- B Bridges
- X Intersections
- T Technical Trail Features
- Green (Beginner)
- Blue (Intermediate)
- Black (Advanced)
- Orange (Shortcuts)

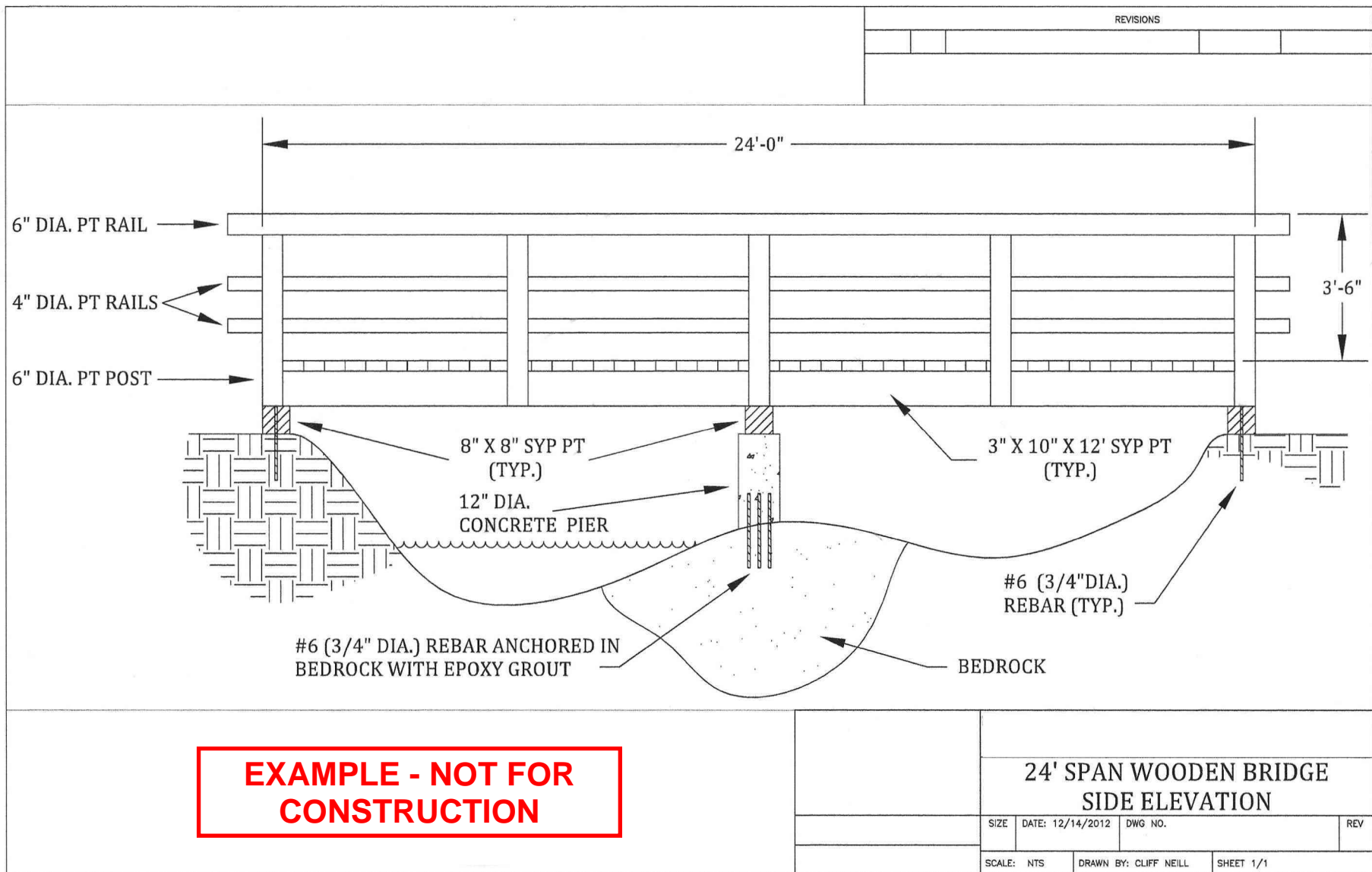


STUART CRAMER  
HIGH SCHOOL  
ATHLETIC FIELDS

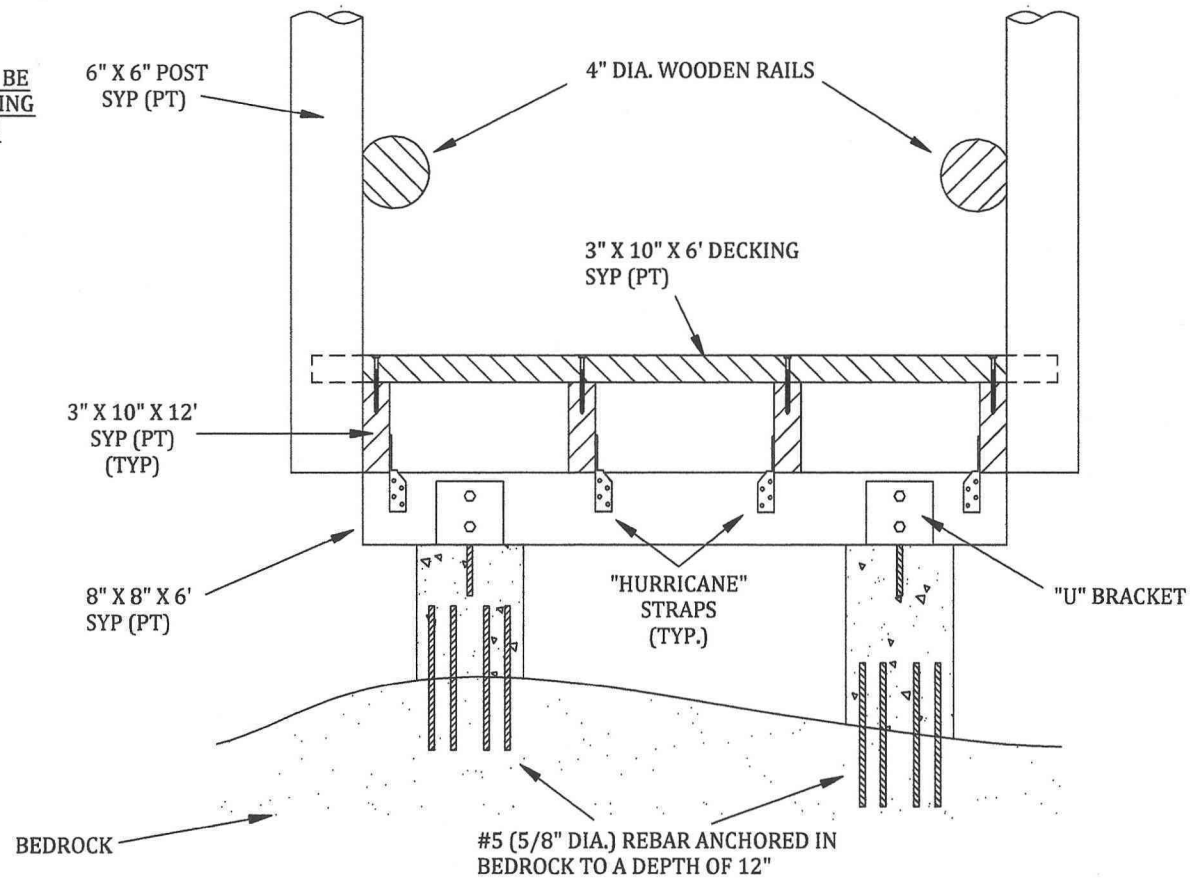




ATTACHMENT C  
EXAMPLE BRIDGE PLANS



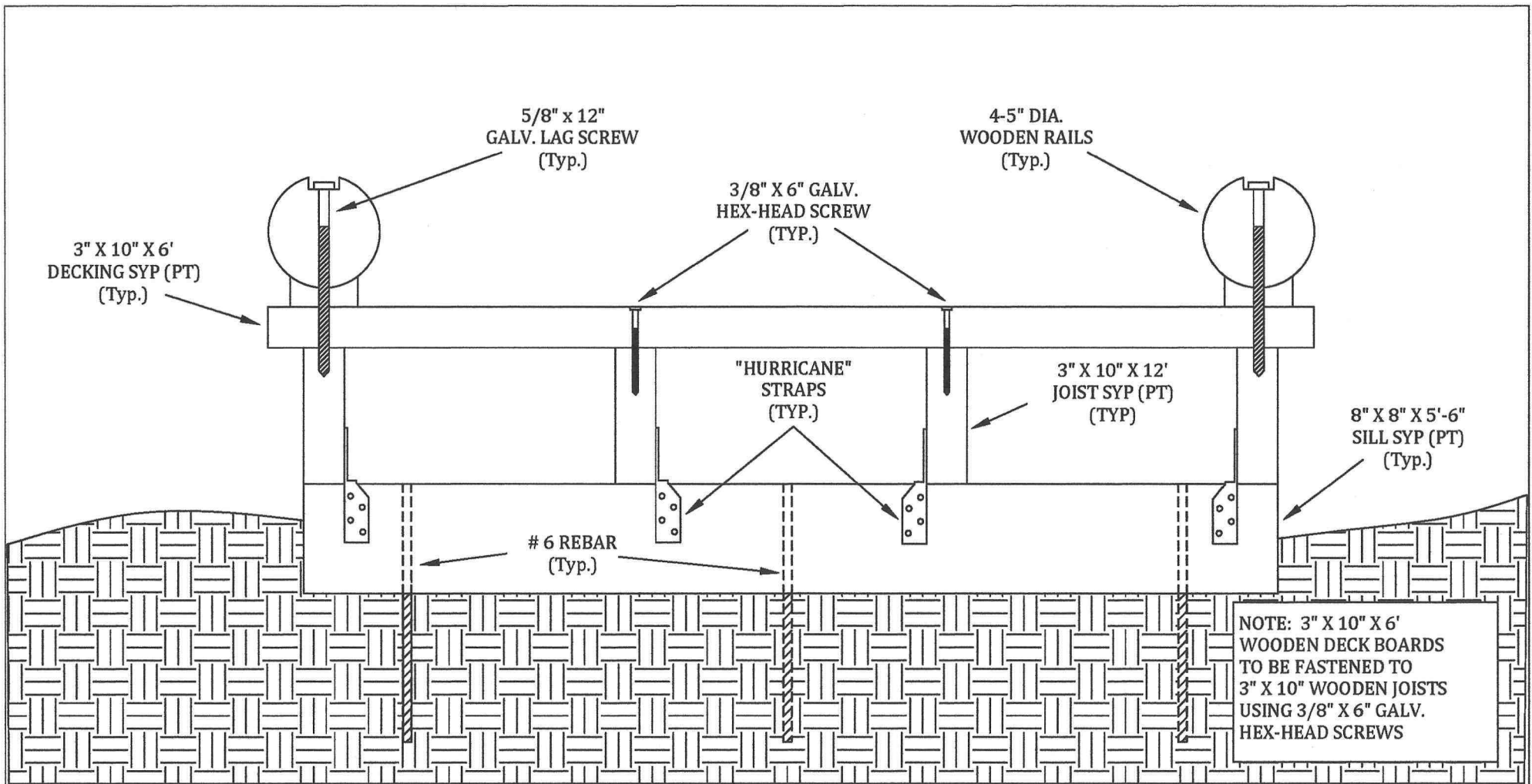
NOTE: 3" X 10" X 6' WOODEN DECK BOARDS TO BE FASTENED TO 3" X 10" WOODEN STRINGERS USING 3" X 6" X 3/8" GALVANIZED HEX-HEAD SCREWS



**EXAMPLE - NOT FOR  
CONSTRUCTION**

# 24' SPAN WOODEN BRIDGE FRONT ELEVATION

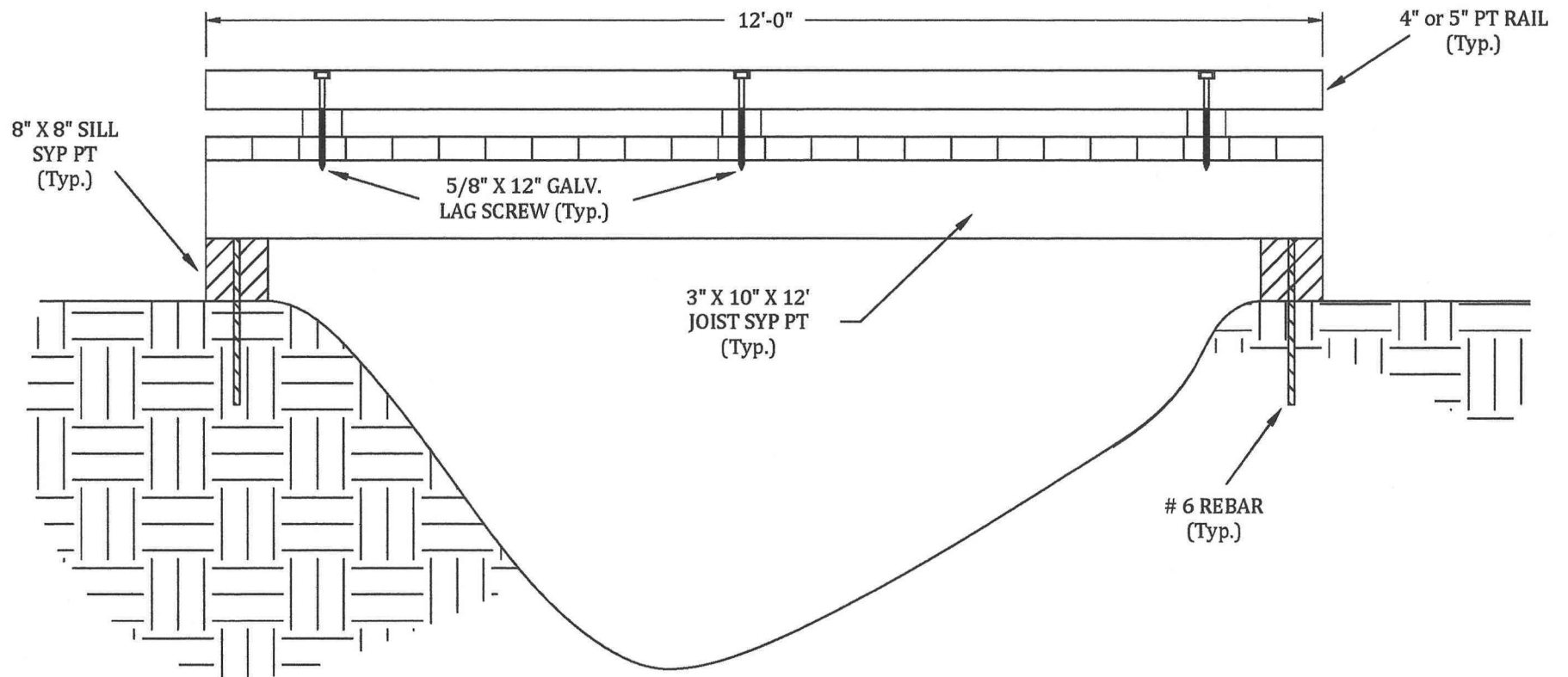
SIZE	DATE: 12/14/2012	DWG NO.	REV
SCALE: NTS	DRAWN BY: CLIFF NEILL	SHEET 1/1	



**EXAMPLE - NOT FOR  
CONSTRUCTION**

# 12' SPAN WOODEN BRIDGE FRONT ELEVATION

SIZE	DATE: 6/17/2013	DWG NO.	REV
SCALE: NTS	DRAWN BY: CLIFF NEILL	SHEET 1/1	



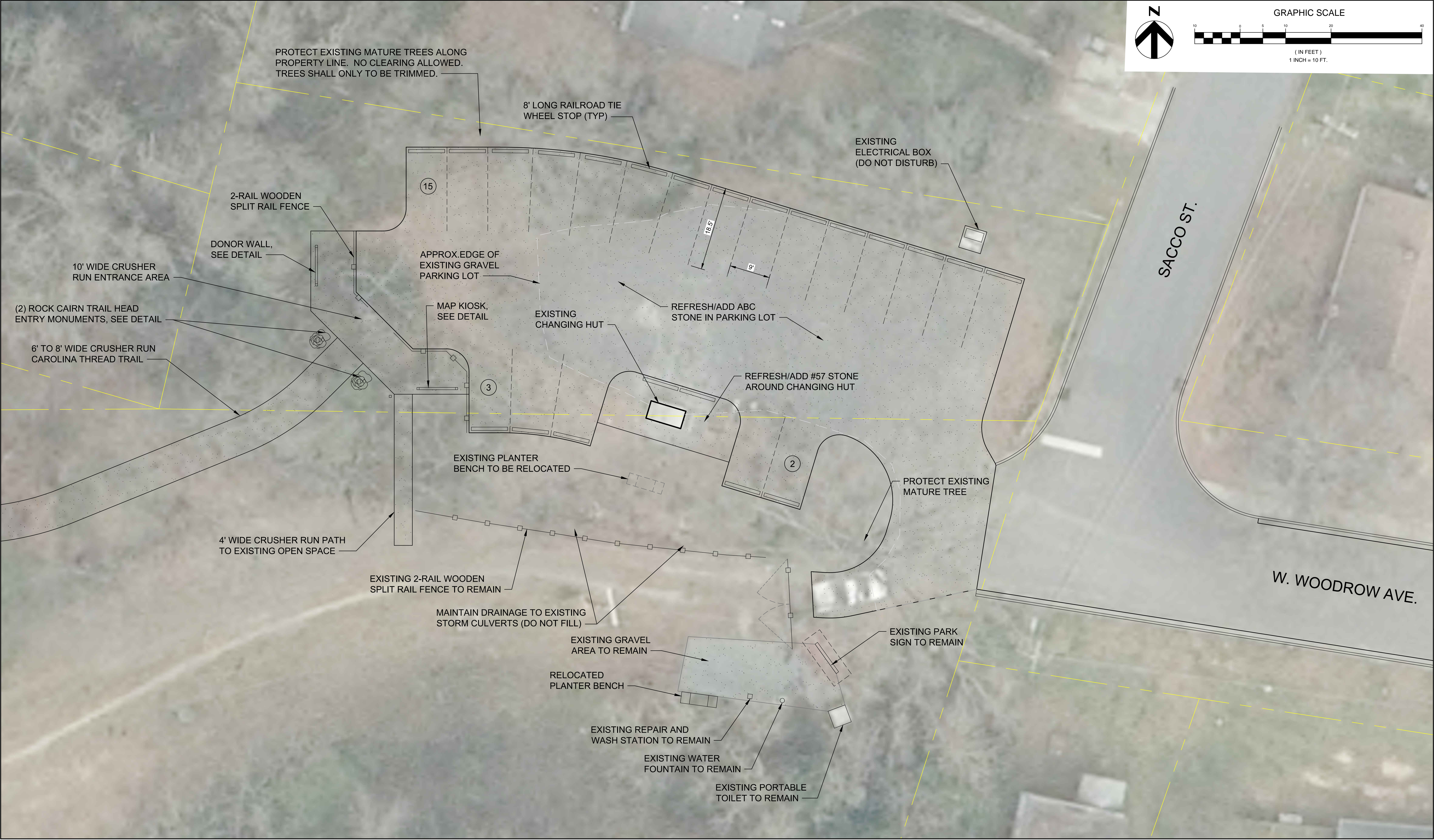
**EXAMPLE - NOT FOR  
CONSTRUCTION**

# 12' SPAN WOODEN BRIDGE SIDE ELEVATION

SIZE	DATE: 6/17/2013	DWG NO.	REV
SCALE: NTS	DRAWN BY: CLIFF NEILL	SHEET 1/1	

ATTACHMENT D  
PARKING LOT IMPROVEMENTS PLAN



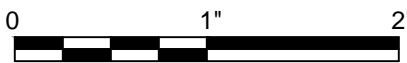


ISSUE	DATE	DESCRIPTION

PROJECT MANAGER		TARHEEL TRAILBLAZERS
PROJECT NUMBER	N/A	

ROCKY BRANCH PARK IMPROVEMENTS  
CAROLINA THREAD TRAIL BELMONT EXTENSION

ATTACHMENT D  
PARKING LOT IMPROVEMENTS PLAN



FILENAME  
SCALE 1" = 10'

SHEET  
D-1



ATTACHMENT E  
TRAILHEAD MONUMENT SCHEMATIC

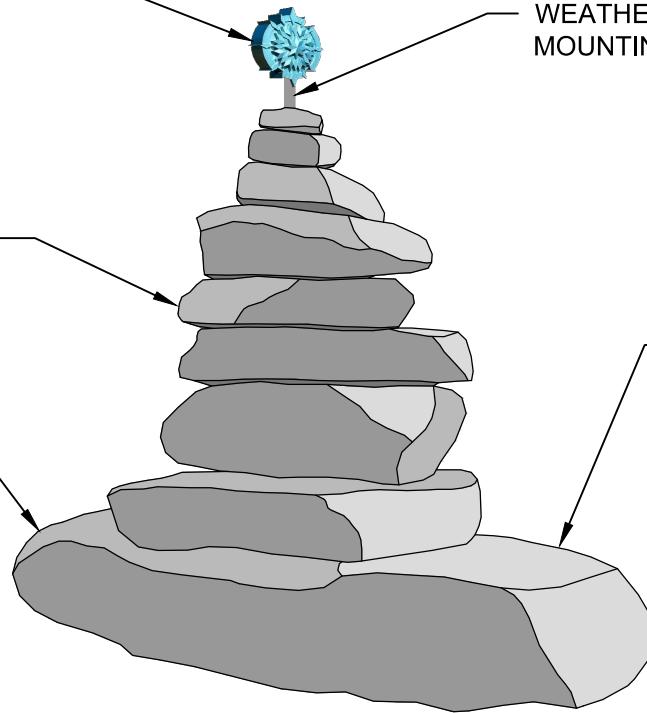
CAROLINA THREAD TRAIL LOGO AND  
ROCKY BRANCH PARK LOGO TO BE  
MOUNTED AT TOP OF ROCK CAIRNS

WEATHER RESISTANT  
MOUNTING POST

SPECIFIC ROCK CAIRN DESIGN TO  
BE COORDINATED WITH THE  
OWNER DURING CONSTRUCTION

BOTTOM ROCK BOULDER TO  
EXTEND OUT FOR SEATING

ROCK BOULDERS, SIZES VARY



ISOMETRIC VIEW

**EAST TRAILHEAD ROCK  
CAIRN MONUMENT**

ATTACHMENT F  
MAP AND DONOR KIOSK SCHEMATIC

