



The Evolution of the Consulting Arborist into a Design Professional

What We Will Discuss

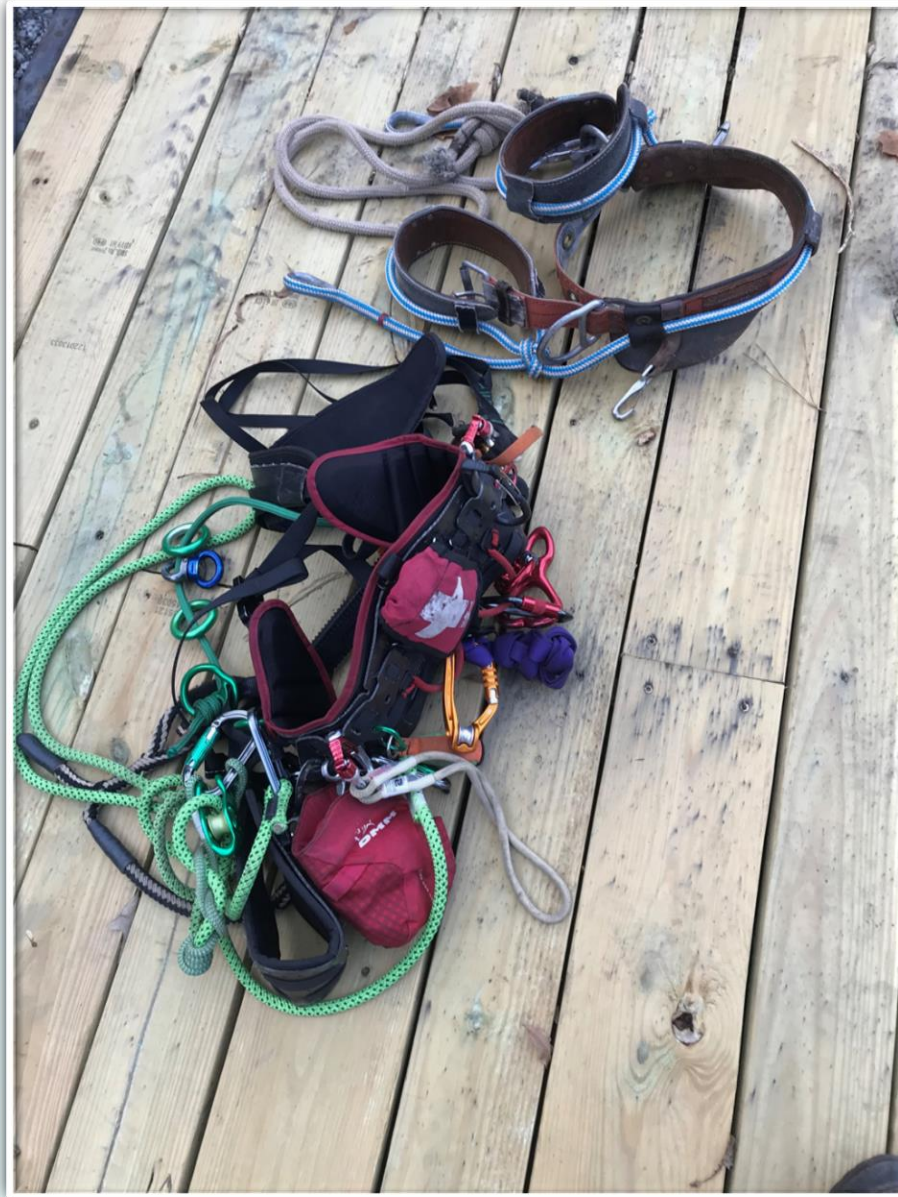
- 40 years of change in our industry
- Who are Consulting Arborists and Design Professionals
- Engaging in the Design Process
- Case Studies



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Who is a Consulting Arborist ?

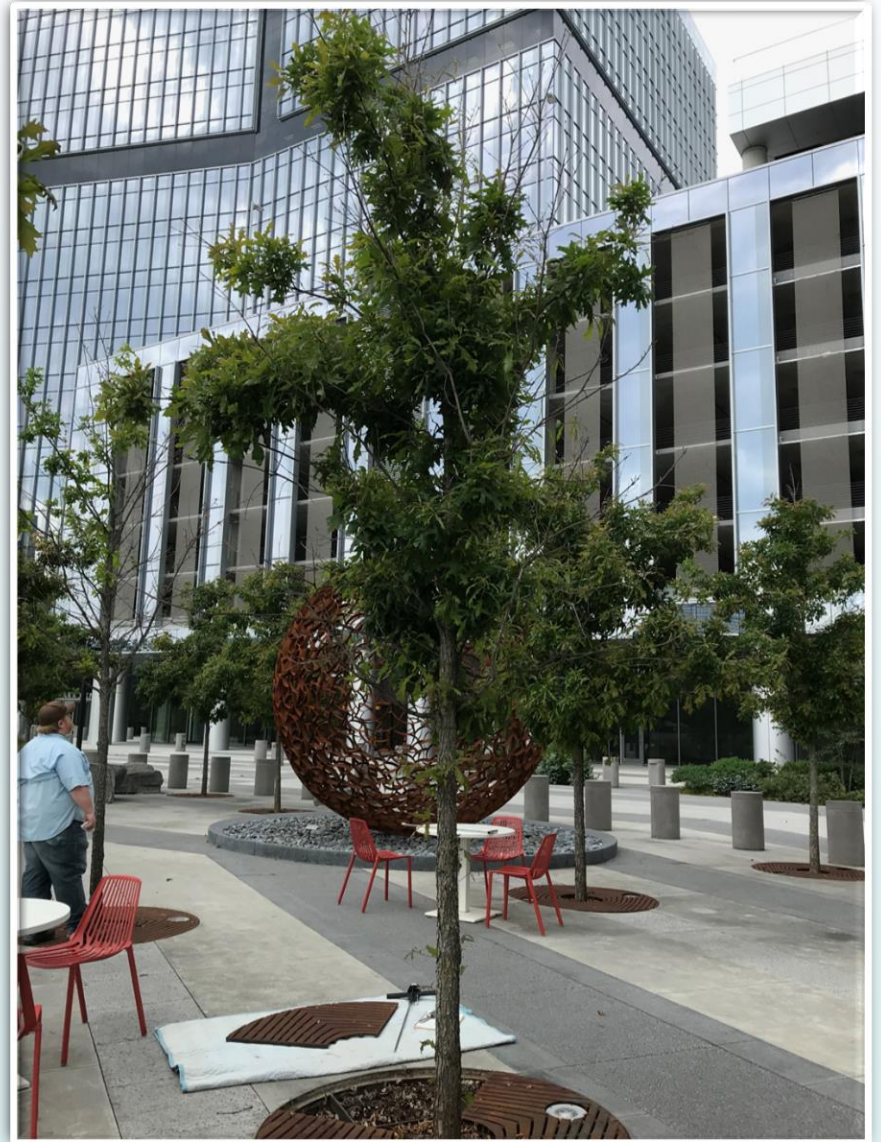
A consulting arborist is the authoritative expert on trees and brings an objective, comprehensive viewpoint to their clients – ensuring the safety, health and preservation of trees.

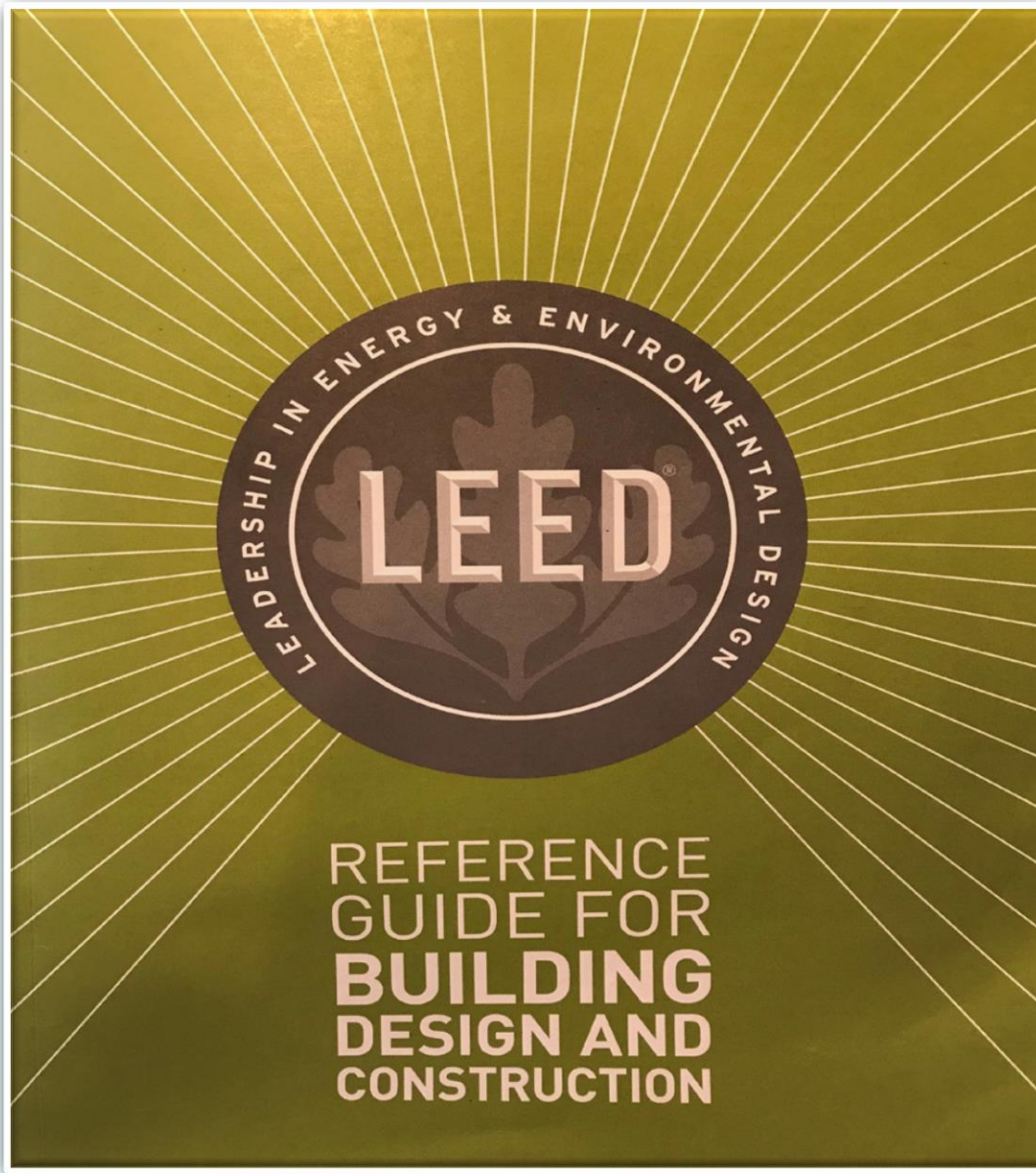
The Clients of the consulting arborist include:

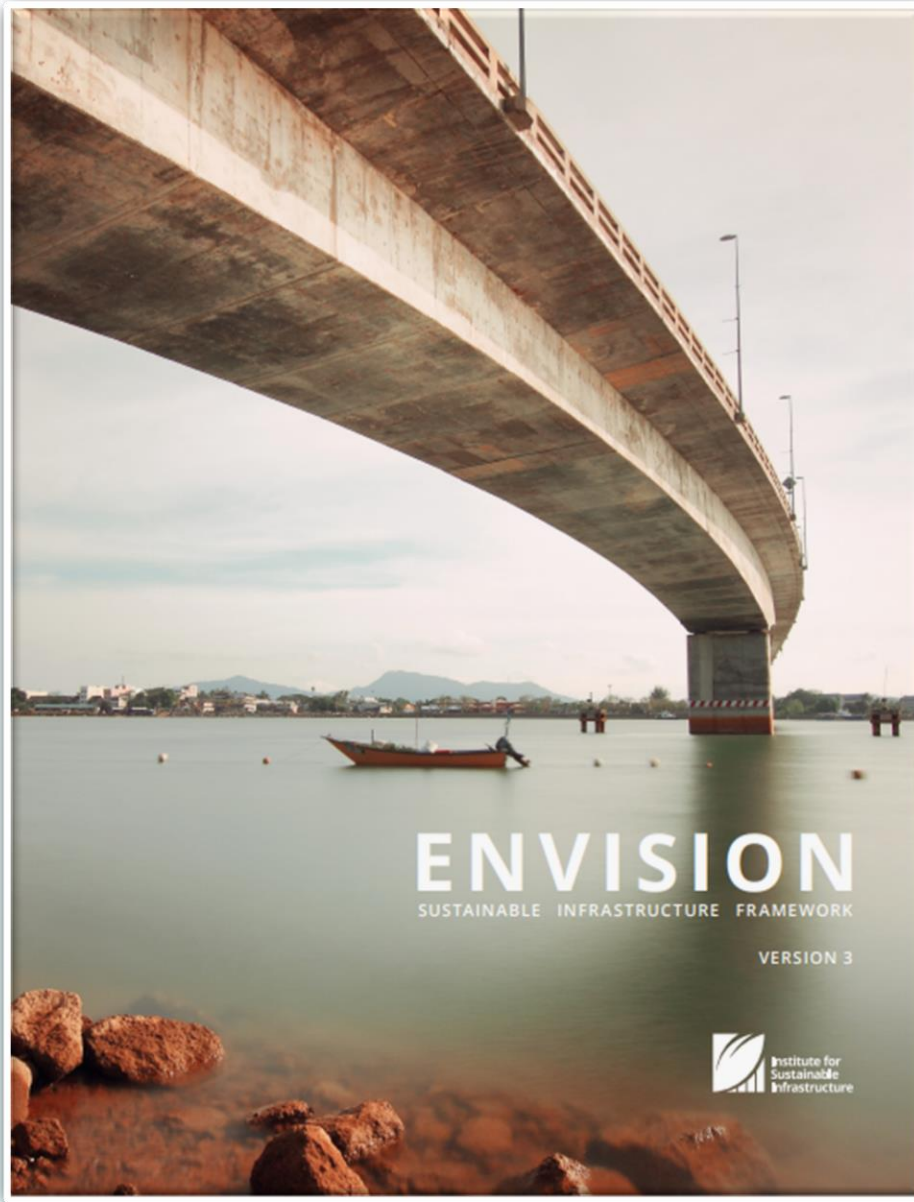
- Property Owners
- Municipalities
- Contractors
- Attorneys
- Insurance Professionals
- Landscape Architects
- Developers
- Engineers
- Other Arborists

What Services could a Consulting Arborist Provide?

- Contract Preparation and Supervision
- Diagnosis of Tree and Landscape Problems
- Expert Witness and Litigation
- Forensic Investigations
- Tree Risk Assessments and Surveys
- Insect Disease Identification and Management
- Municipal Ordinance Development
- Plant Healthcare Programs
- Training and Education
- Tree, Landscape, and Nursery Appraisals
- Tree Management for Arboreta, Golf Courses, and Nurseries
- Tree Plant Inventories
- Tree Planting Programs
- Tree Protection for Construction Projects







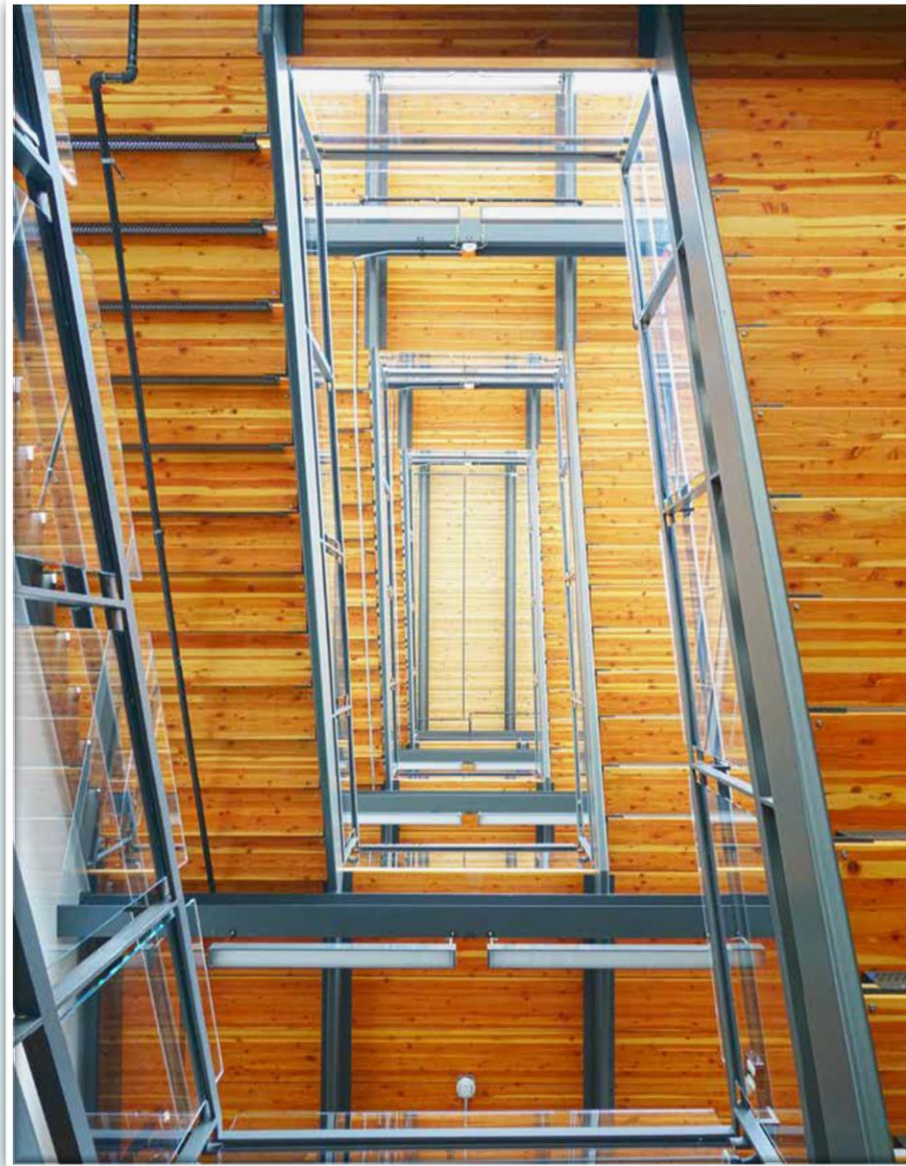
SITES v2

Rating System

For Sustainable Land Design and Development



Sustainable
SITES
Initiative™



LIVING BUILDING CHALLENGESM 4.0

A Visionary Path to a
Regenerative Future



INTERNATIONAL
LIVING FUTURE
INSTITUTE™

JUNE 2019



**Climate Positive
Design Challenge.**

<https://climatepositivedesign.com/challenge/>

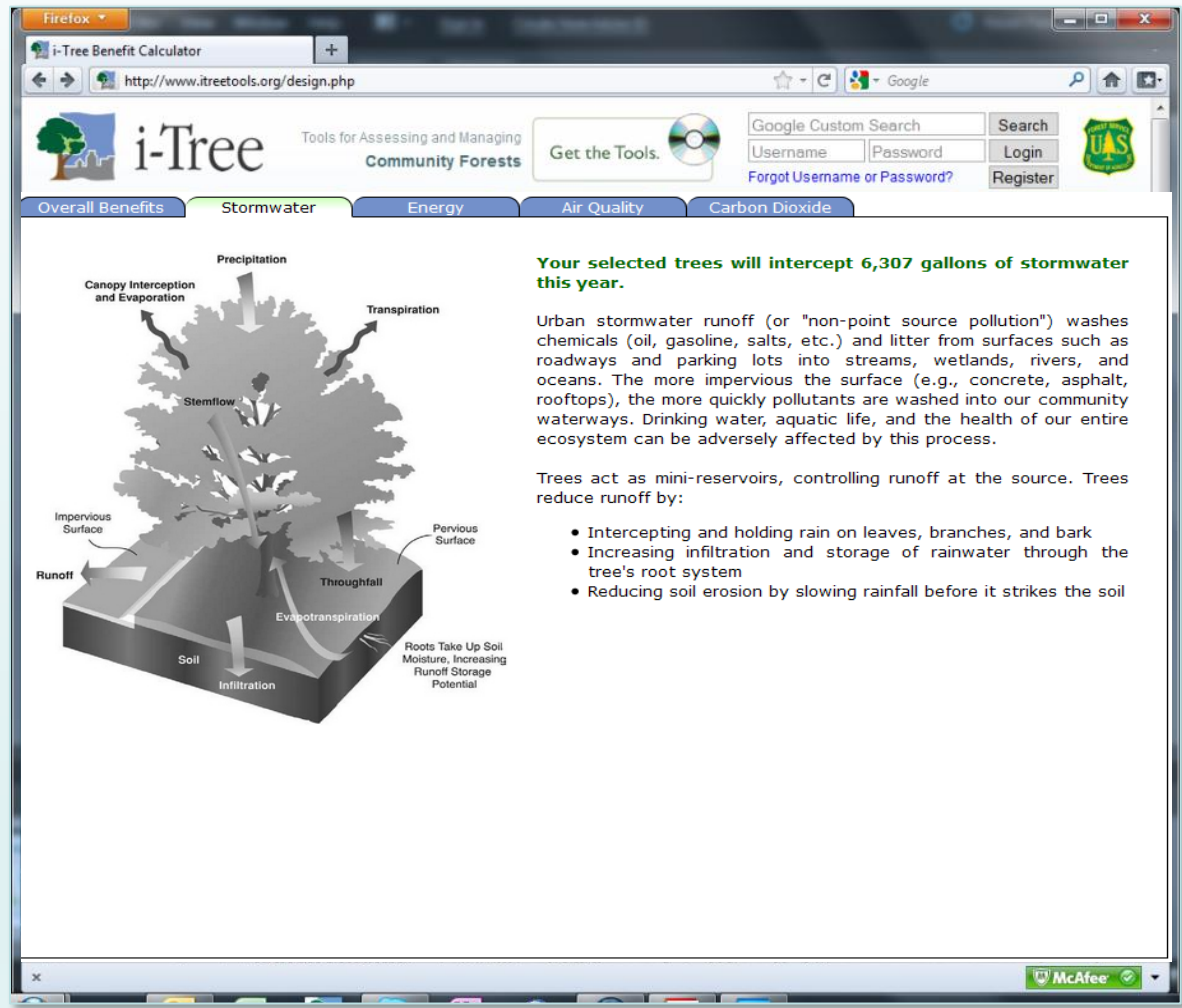
i-Tree Design

design.itreetools.org

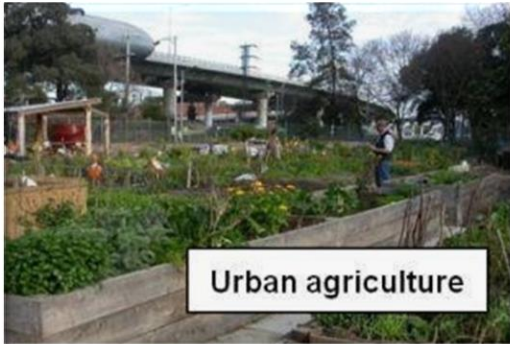
Web application
(any web browser)

Homeowner /
Parcel level tool.

Easy to use.



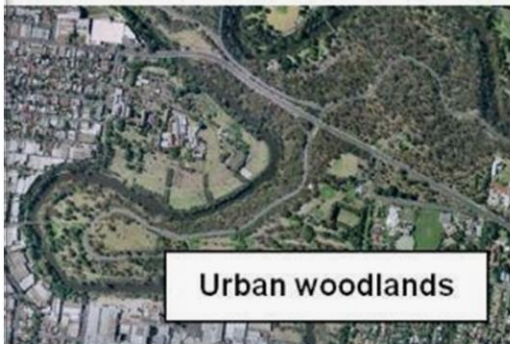
Urban green infrastructure



Urban agriculture



Green walls



Urban woodlands



Suburban street trees



City street trees



Green roofs



Sensitive urban design



Parks, gardens & golf courses

The Atlanta BeltLine will require SITES certification for future parks



Currently, Atlanta BeltLine sustainability guidelines [require compliance](#) with the [SITES Rating System](#), ensuring that the Atlanta BeltLine corridor will be built using best practices in green design and construction.

Austin will require all future Parks and Recreation projects to achieve SITES certification



By [Hannah Su](#) • July 27, 2022 • [News](#), [Professional Practice](#), [Southwest](#), [Sustainability](#)



Image credit: mandritoiu, Adobe Stock.

[Rebecca Price](#) Aug 05, 2022

Rhode Island Amends its Green Buildings Act

The legislation expands the requirement that public projects meet a [LEED](#), [LEED for Neighborhood Development](#) and/or [SITES](#) certification to include public buildings, public structures and public real property of cities and local governments. The original law applied to state projects, state agencies and “political subdivisions thereof.”

STORMWATER

THE JOURNAL FOR SURFACE WATER QUALITY PROFESSIONALS

Urban Forest

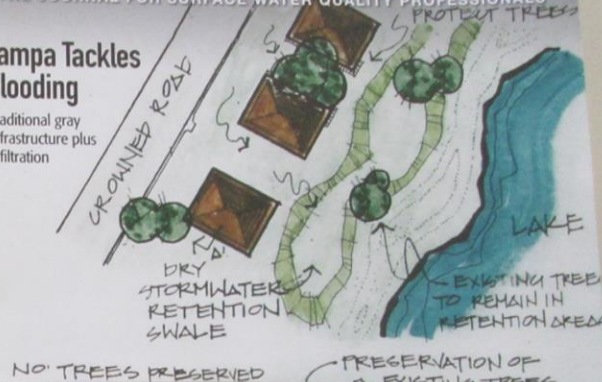
How trees affect stormwater runoff

STORMWATER

THE JOURNAL FOR SURFACE WATER QUALITY PROFESSIONALS

Tampa Tackles Flooding

Traditional gray infrastructure plus infiltration



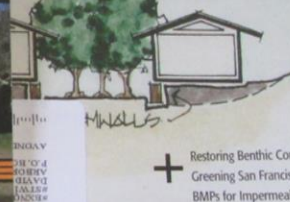
DAM STABILIZATION CAPPING LANDFILLS PROTECTING INLETS

Erosion Control

OFFICIAL JOURNAL OF THE INTERNATIONAL EROSION CONTROL ASSOCIATION

EROSIONCONTROL.COM JULY/AUGUST 2014

Compost The Sustainable Solution



+ Restoring Benthic Communities
Greening San Francisco
BMPs for Impermeable Soils

Picture Courtesy of D. Dechant

The Future ...

Who will take care of our urban forests?

- Civil Engineer? Urban Planners? Watershed? Landscape Architects? Director of the Arborist Division?
- Trees as Green Infrastructure
- Climate Change will drive species selection
- Future ordinance writers making it mandatory for a consulting arborist to be part of the design team
- Sadly, arborists are not recognized as professionals
- No Credential available that specifically addresses Arboriculture with Site Design in mind

ANSI A300 (Part 5)-2019
Revision of ANSI A300 (Part 5)-2012

ANSI A300 (Part 5)-2019 Management of Trees and Shrubs During Site Planning, Site Development, and Construction
Revision of ANSI A300 (Part 5)-2012

American National Standard

*Tree, Shrub, and Other Woody Plant
Management Standard Practices
(Management of Trees and Shrubs
During Site Planning, Site Development,
and Construction)*



54.2 Design phase

54.2.1 An inventory of trees and other resources should be specified and conducted, if this was not completed in the planning phase. Information from the inventory should be used to develop a tree protection plan.

54.2.2 Inventory specifications should include:

- Area to be inventoried;
- Resources to be inventoried (e.g., trees, shrubs, soil)
- Minimum size tree to include (e.g. trunk diameter or height) ;
- Data to be collected (see 52.4.3);
- If a tree risk assessment will be completed, the methodology shall be specified;
- Time frame for data collection;
- Type of report to be provided (e.g. oral, written, map, plan);
- Due date of report; and,
- To whom the report should be submitted.

54.2.3 Tree inventory data should include:

- Identification/tag number;
- Location (map reference or coordinates);
- Species;
- Size (e.g. trunk diameter, crown spread);
- Condition (i.e. health, structure, form);
- Status as defined by applicable regulations (e.g. heritage, historic); and,
- Additional factors as specified.

54.2.4 Tree protection report should include:

- Objectives;
- Tree inventory data;
- Suitability for preservation;
- Estimation of the construction impacts to tree;
- Recommended action for each tree (retained, transplanted or removed);
- Required mitigation for trees to be removed (if appropriate);

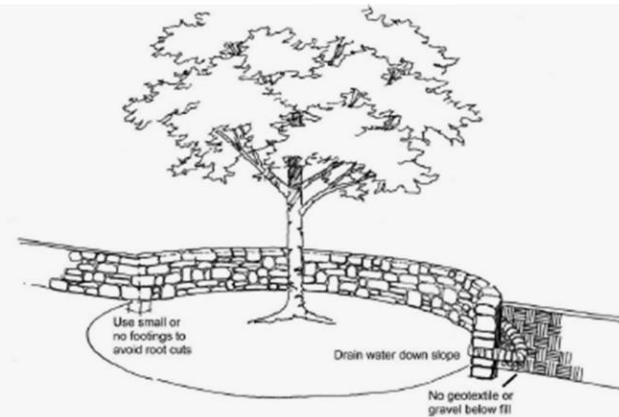


Figure 54.2 Adapted with permission from Best Management Practices, Managing Trees During Construction. 2008. Fite, Kelby and Smiley, E. Thomas. Copyright 2008, International Society of Arboriculture, Champaign, IL.

ANSI A300 (Part 5)-2019 *Management of Trees and Shrubs During Site Planning, Site Development, and Construction*

- Recommendations for care of retained trees (e.g. pruning to provide clearance for construction, pruning to improve structure, root pruning, work procedures);
- Procedures for protecting trees, other plants and soil areas (e.g. tree protection zone [TPZ] locations);
- Irrigation recommendations for retained trees during all phases;
- Identification of the appropriate times to implement tree protection procedures;
- Consequences for non-compliance; and,
- Additional items as specified.

54.2.5 The tree protection plan should be developed from the tree-protection report.

54.2.6 When a tree protection plan sheet is required or desired, it should be developed from the tree protection report.

54.2.7 When appropriate, design changes or alternative building methods should be recommended to avoid root loss and/or soil compaction. (e.g. pervious/permeable surface materials that do not rely on excessive excavation to install a sub base treatment).

Elements of Project Evolution

- Concept
- Request for Proposal (RFP)
- Schematic Design (30%)
- Design & Development (60%-90%)
- Construction Documents (100%)



Atlanta BeltLine

REQUEST FOR QUALIFICATIONS

PROFESSIONAL DESIGN AND CONSULTING SERVICES

FOR

ATLANTA BELTLINE WESTSIDE TRAIL EXTENSION

STATEMENTS OF QUALIFICATIONS DUE: Monday, September 9, 2019, 3:00 PM, EST

Envelope(s) shall be sealed and marked with

Project Title and Firm Identified

3. PROJECT TEAM

Include an organizational chart and task matrix detailing the division of responsibilities. Provide a professional resume for the key personnel, including key personnel of any joint venture member, or major sub-consultants proposed to be assigned to the Project. Describe their unique qualifications and relevant experience on similar or related projects. Describe key personnel's proposed roles and responsibilities on this Project. Resumes should be included in the Attachments/Supporting Materials section of the response. Submittals must identify a proposed Project Manager who will be responsible for the day- to-day management of Project tasks and would be the primary point of contact with your firm. Describe the Project Manager's experience with similar projects and with managing and leading interdisciplinary teams. List other projects to which the proposed Project Manager is currently assigned.

4. TEAM EXPERIENCE

Submit minimum of five examples of projects that are reflective of the subject of this Project, including references. For each example, identify the type of project, size, budget, Respondent's role, client name and contact information, and indicate what role (if any) the proposed Project Manager or other team members had on the related project. When submitting projects for which an individual firm worked in an auxiliary capacity or in a joint venture or partnership, please include the name of the lead firm. Please remember that any extensive descriptions of vaguely related projects are discouraged and could negatively impact the overall outcome of the evaluation.

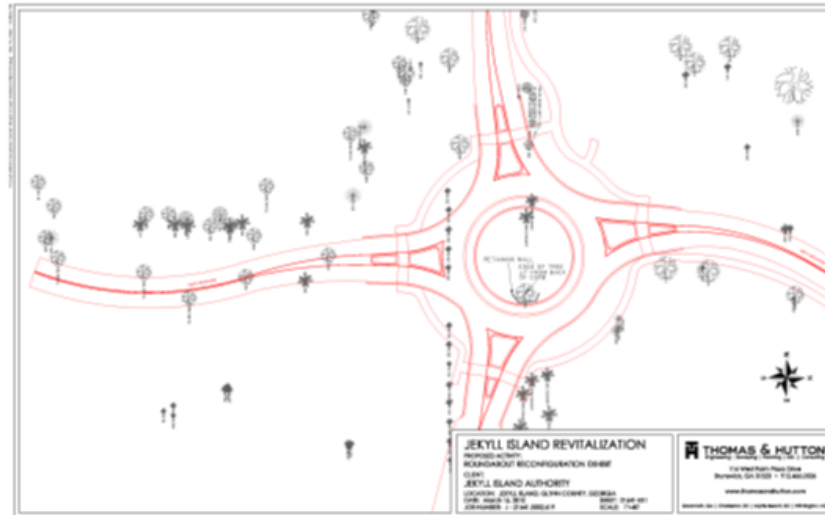
Courtesy of Atlanta Beltline, Inc.



Project Experience

Jekyll Island Beach Village Renovation, Jekyll Island, Georgia

On this project Mr. Dechant provided consulting services related to plan review, interfaced with the Design and the Ownership Teams to implement design changes as needed to protect valuable Live Oak tree resources within the limits of disturbance. Produced and implemented a comprehensive tree conservation program with an innovative fine system to discourage needless tree damage. He also supervised the demolition of existing structures adjacent to all protected trees. 34 Live Oak trees ranging in size from 11" in diameter to 31" in diameter were relocated under the oversight of the project arborist. There was a 100% survival rate of the relocated trees. This \$30.2 million project was completed in the spring of 2012. Cliff Gawron, with the Jekyll Island Authority and Director of Landscape and Planning, 381 Riverview Drive Jekyll Island, GA 31527, 912-635-4099, cgawron@jekyllisland.com was my primary project contact. The unique nature of this project was recognized by the Georgia Urban Forestry Council and received its 2013 Excellence in Urban Arboriculture Award and received the Urban Ag Council's 2013 Green Star Award.



Original plan showing 40" Live Oak tree at bottom of Roundabout, high likelihood of dying within 3 years in this scenario

SECTION 6 - EVALUATION CRITERIA

Each submittal shall be evaluated on the following criteria weighting and maximum points as follows:

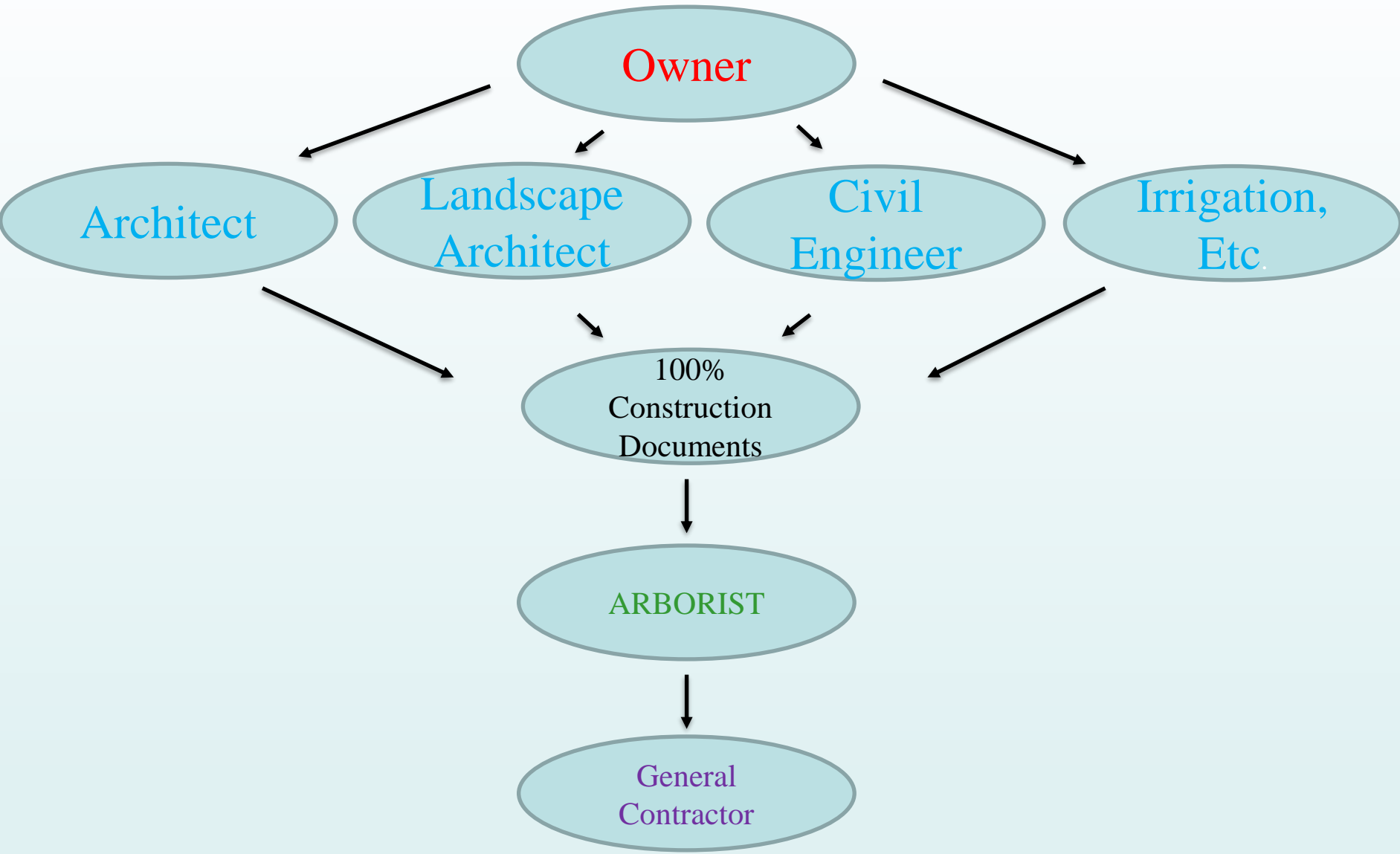
Evaluations of the responsive submitted SOQs

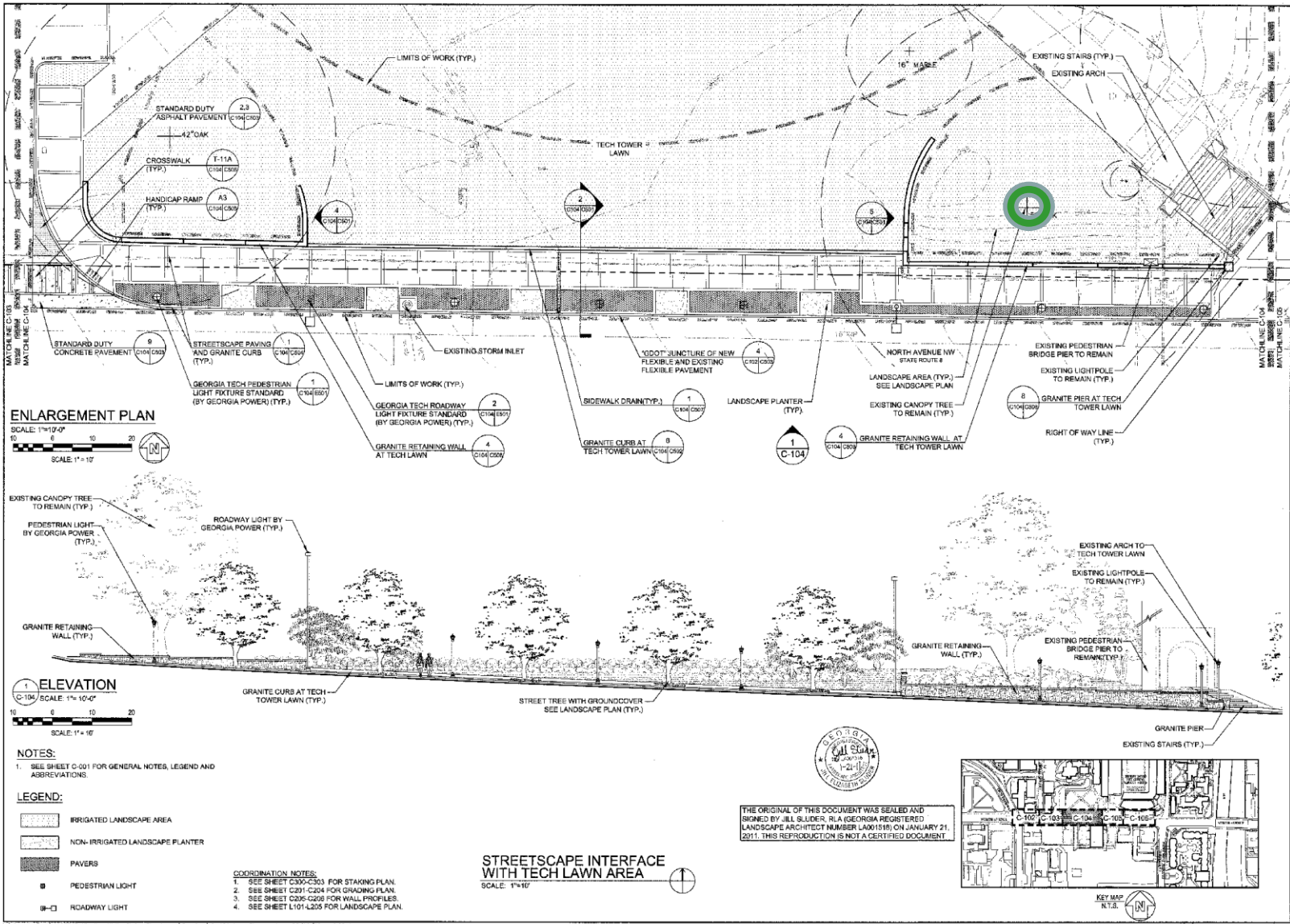
Firm Description	10 Points
Project Team	20 Points
Team Experience	<u>20 Points</u>
	50 Points

Evaluation of Short-Listed Firms Only

Project Understanding/Proposal	35 Points
Interview/Presentation	<u>15 Points</u>
	50 Points

An evaluation committee convened by ABI will evaluate the submittals. At the discretion of ABI, follow-up interviews may be conducted before a final selection is made. The interview will focus on the proposal presentation, interpersonal skills, ability to organize data, and design vision.





CONTRACTOR: POND & COMPANY, INC.
PROJECT: GEORGIA INSTITUTE OF TECHNOLOGY
DATE: 02/16/11
LAYOUT: 11/10/11
REVISED: 02/16/11
BY: J.S.
CHECKED: J.S.
APPROVED: J.S.

POND
ARCHITECTS & ENGINEERS PLANNERS
3800 North Ave.
Atlanta, GA 30307
Phone 404.525.1000
Fax 404.525.7744
www.pondco.com

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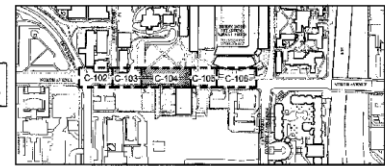
**GEORGIA INSTITUTE OF TECHNOLOGY
NORTH AVENUE STREETSCAPE
BETWEEN TECHWOOD DR. & TECH PKWY
ENLARGEMENT/ ELEVATIONS/ SECTIONS**
LAW: 02/16/11, 02/16/11, 02/16/11, 02/16/11, 02/16/11, 02/16/11, 02/16/11, 02/16/11

DRAWN BY: JF
REVIEWER: JES
JOB NO: 1100248

C-104



THE ORIGINAL OF THIS DOCUMENT WAS SEALED AND SIGNED BY JILL SLUBER, RLA GEORGIA REGISTERED LANDSCAPE ARCHITECT NUMBER LA001518, ON JANUARY 21, 2011. THIS REPRODUCTION IS NOT A CERTIFIED DOCUMENT.

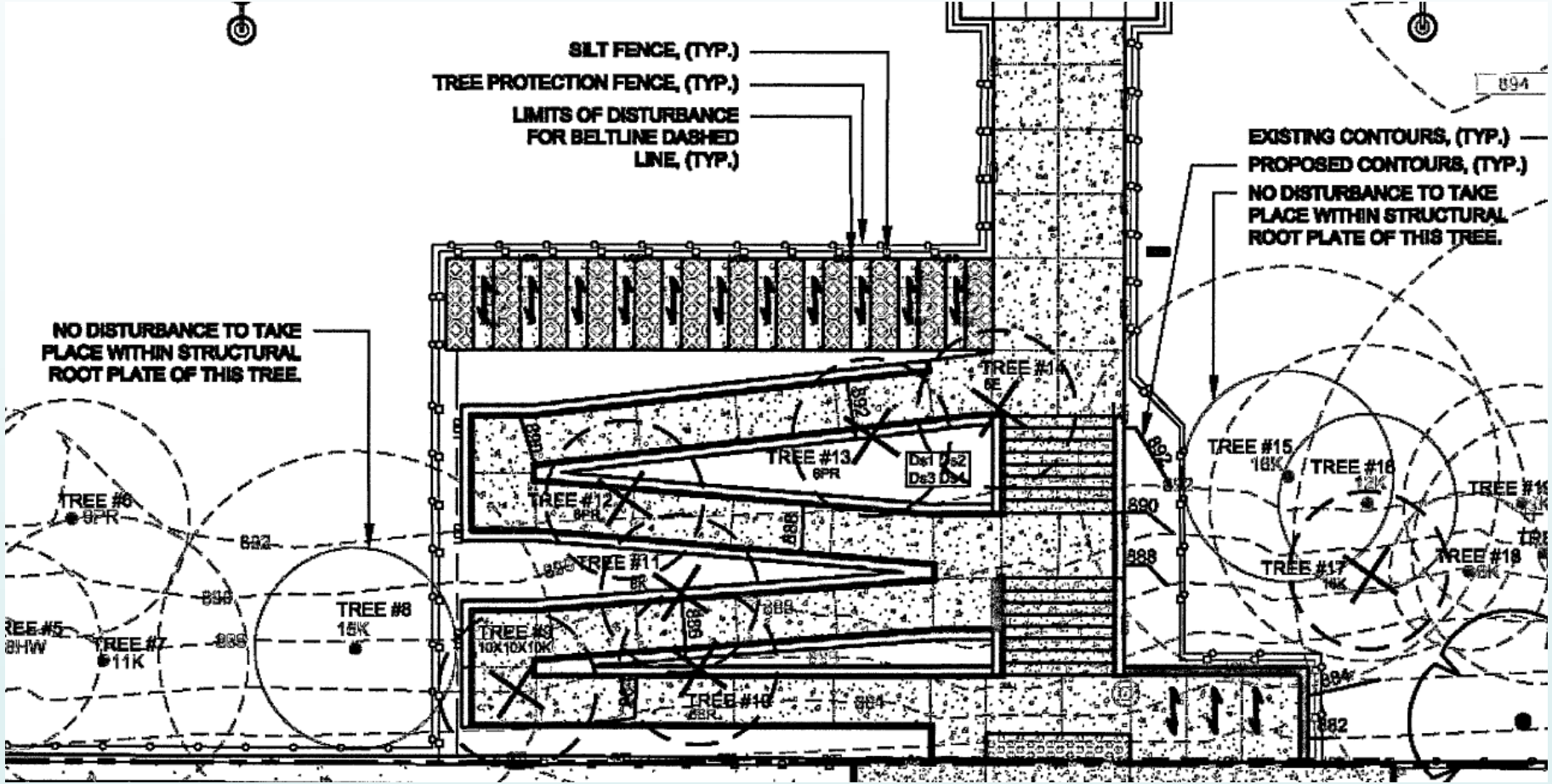


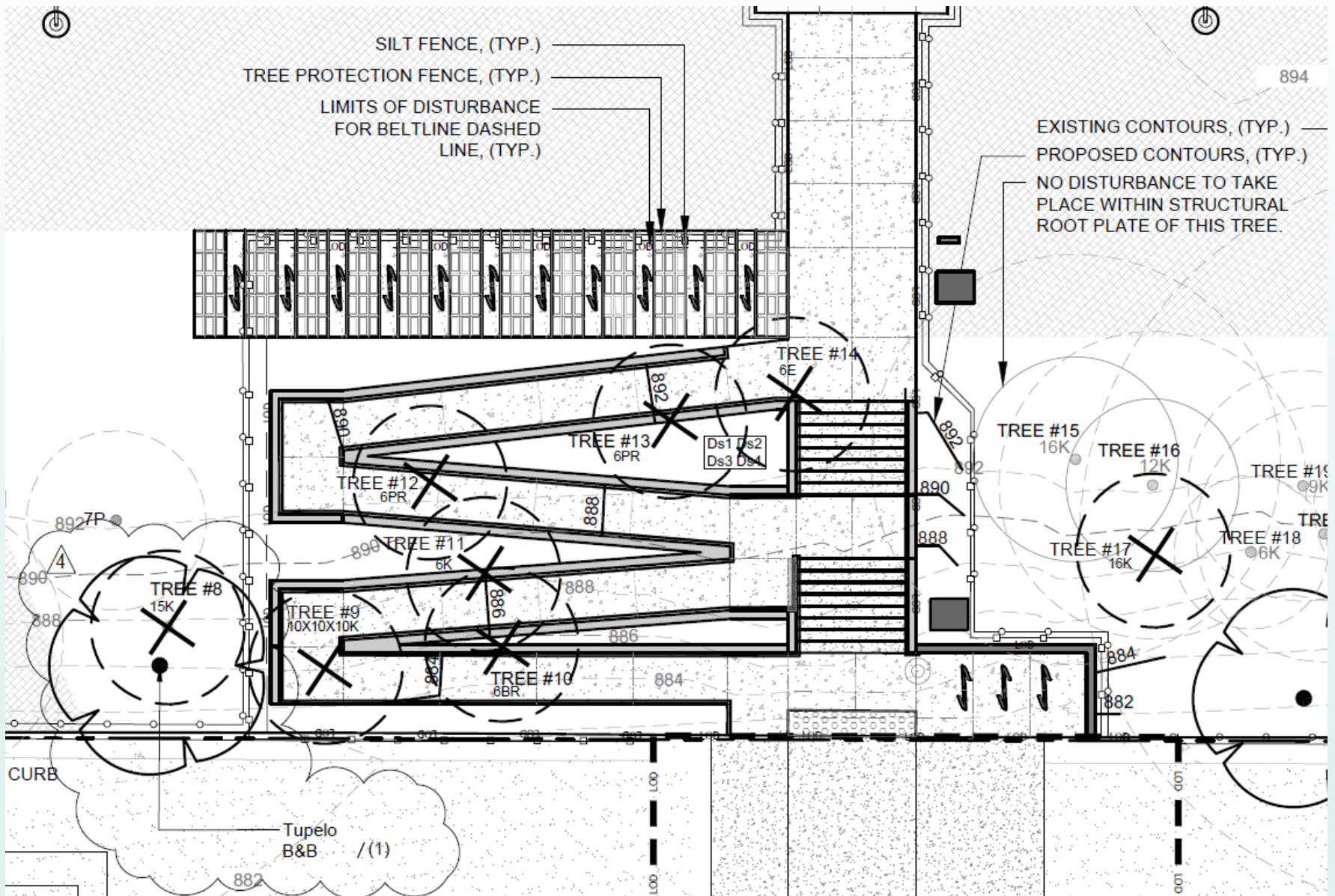


Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant





Plan Courtesy of ASD SKY

*We Need a Non-Traditional
Approach
to
Site Design!*

SITES v2 Rating System

For Sustainable Land Design and Development



Sustainable
SITES
Initiative™

SITES GUIDING PRINCIPLES

These principles informed the development of specific and measurable criteria for site sustainability, and can also be applied to the land design and development process.

Do no harm.

Make no changes to the site that will degrade the surrounding environment. Promote sustainable design projects on sites where previous disturbance or development presents an opportunity to regenerate ecosystem services through sustainable design.

Apply the precautionary principle.

Be cautious in making decisions that could threaten human and environmental health. Some actions can cause irreversible damage. Examine a full range of alternatives (including no action), and be open to contributions from all potentially affected parties.

Design with nature and culture.

Create and implement designs that are responsive to economic, environmental, and cultural conditions and to the local, regional, and global context.

Use a decision-making hierarchy of preservation, conservation, and regeneration.

Maximize the benefit of ecosystem services by preserving existing environmental features, conserving resources in a sustainable manner, and regenerating lost or damaged ecosystem services.

Provide regenerative systems as intergenerational equity.

Provide future generations with a sustainable environment supported by regenerative systems and endowed with regenerative resources.

Support a living process.

Continuously re-evaluate assumptions and values, and adapt to demographic and environmental change.

Use a systems thinking approach.

Understand and value the relationships in an ecosystem. Use an approach that reflects and sustains ecosystem services and re-establishes the integral and essential relationship between natural processes and human activity.

Use a collaborative and ethical approach.

Encourage direct and open communication among colleagues, clients, manufacturers, and users to link long-term sustainability with ethical responsibility.

Maintain integrity in leadership and research.

Implement transparent and participatory leadership; develop research with technical rigor; and communicate new findings in a clear, consistent, and timely manner.

Foster environmental stewardship.

In all aspects of land development and management, foster an ethic of environmental stewardship—an understanding that responsible management of healthy ecosystems improves the quality of life for present and future generations.

The prerequisites are as follows:

Context P1.1: Limit development on farmland

Context P1.2: Protect floodplain functions

Context P1.3: Conserve aquatic ecosystems

Context P1.4: Conserve habitats for threatened and endangered species

Pre-Design P2.1: Use an integrative design process

Pre-Design P2.2: Conduct a pre-design site assessment

Pre-Design P2.3: Designate and communicate Vegetation and Soil Protection Zones

Water P3.1: Manage precipitation on site

Water P3.2: Reduce water use for landscape irrigation

Soil+Veg P4.1: Create and communicate a soil management plan

Soil+Veg P4.2: Control and manage invasive plants

Soil+Veg P4.3: Use appropriate plants

Materials P5.1: Eliminate the use of wood from threatened tree species

Construction P7.1: Communicate and verify sustainable construction practices

Construction P7.2: Control and retain construction pollutants

Construction P7.3: Restore soils disturbed during construction

O+M P8.1: Plan for sustainable site maintenance

O+M P8.2: Provide for storage and collection of recyclables

Prerequisite 2.1: Use an integrative design process

Required

P2.1



INTENT

Optimize site performance by identifying and executing synergistic opportunities across different disciplines throughout all phases of design and construction.

REQUIREMENTS

Projects must complete all of the following steps for prerequisite achievement:

1. Form an integrated design team

- The integrated design team should include, at minimum, the following roles:
 - Owner and/or client
 - Professionals knowledgeable in design, construction, and maintenance
 - Professionals knowledgeable in sustainable practices
 - Professionals with expertise in vegetation, water, soils, landscape ecology, materials, and human health and well-being, selected to meet the unique constraints and opportunities of the project and its site

2. Develop a collaborative communication process

- Develop an agreed upon communication method for team members. The method should be collaborative and allow the viewpoints and perspectives of all members to be fully considered in the decision-making process.
- Designate a team facilitator to be responsible for overseeing and ensuring a collaborative communication process.

3. Identify project sustainability principles and performance goals (see O+M P8.1: Plan for sustainable site maintenance)

- Identify the principles and performance goals of the project (both short- and long-term). Include an associated timeline and specific performance measures for each goal to determine when it has been achieved.
- Designate specific team members to track project goals throughout the development process.

4. Incorporate the sustainability principles and performance goals into a program plan

- Develop a program plan that at minimum includes the following information:
 - The unique characteristics, opportunities, and constraints of the site
 - General project parameters, such as the scope, budget, implementation schedule, purpose, and design intent of the project
 - A diagram or description of the intended function, arrangement, and relationship of desired features and their approximate dimensions
- Describe how the sustainability principles and performance goals will be incorporated into the design.

5. Identify stakeholders and site user groups

- Identify project stakeholders.
- Identify the full range of potential site users. List the primary and secondary user groups.

1. Form an integrated design team

- The integrated design team should include, at minimum, the following roles:
 - Owner and/or client
 - Professionals knowledgeable in design, construction, and maintenance
 - Professionals knowledgeable in sustainable practices
 - Professionals with expertise in vegetation, water, soils, landscape ecology, materials, and human health and well-being, selected to meet the unique constraints and opportunities of the project and its site

Owner, Architect, Civile Engineer, Landscape Architect, Operations, Maintenance, Irrigation, Arborist, etc.



100%
Construction
Documents



General Contractor,
ARBORIST

Who is a Design Professional?

A [design professional](#) can be one of several different types of specialists:

- A licensed Architect
- A licensed Landscape Architect
- A registered Professional Engineer
- A licensed Land Surveyor

The common theme with any professional trade is a strict adherence to the highest level of moral and ethical standards during the performance of a given task

If we maintain that design is not just a job, but a profession, like being an architect or a doctor or lawyer, then we must also accept the responsibilities and obligations that come with it.

Being a design professional is not merely a badge of acceptance. The title implies adherence to a code of professional behavior; it implies that we have obligations towards society and that there are lines that we are professionally bound not to cross.

How Do You Get a Seat at the Table?

It is critical that you gain the respect and trust of other design professionals:

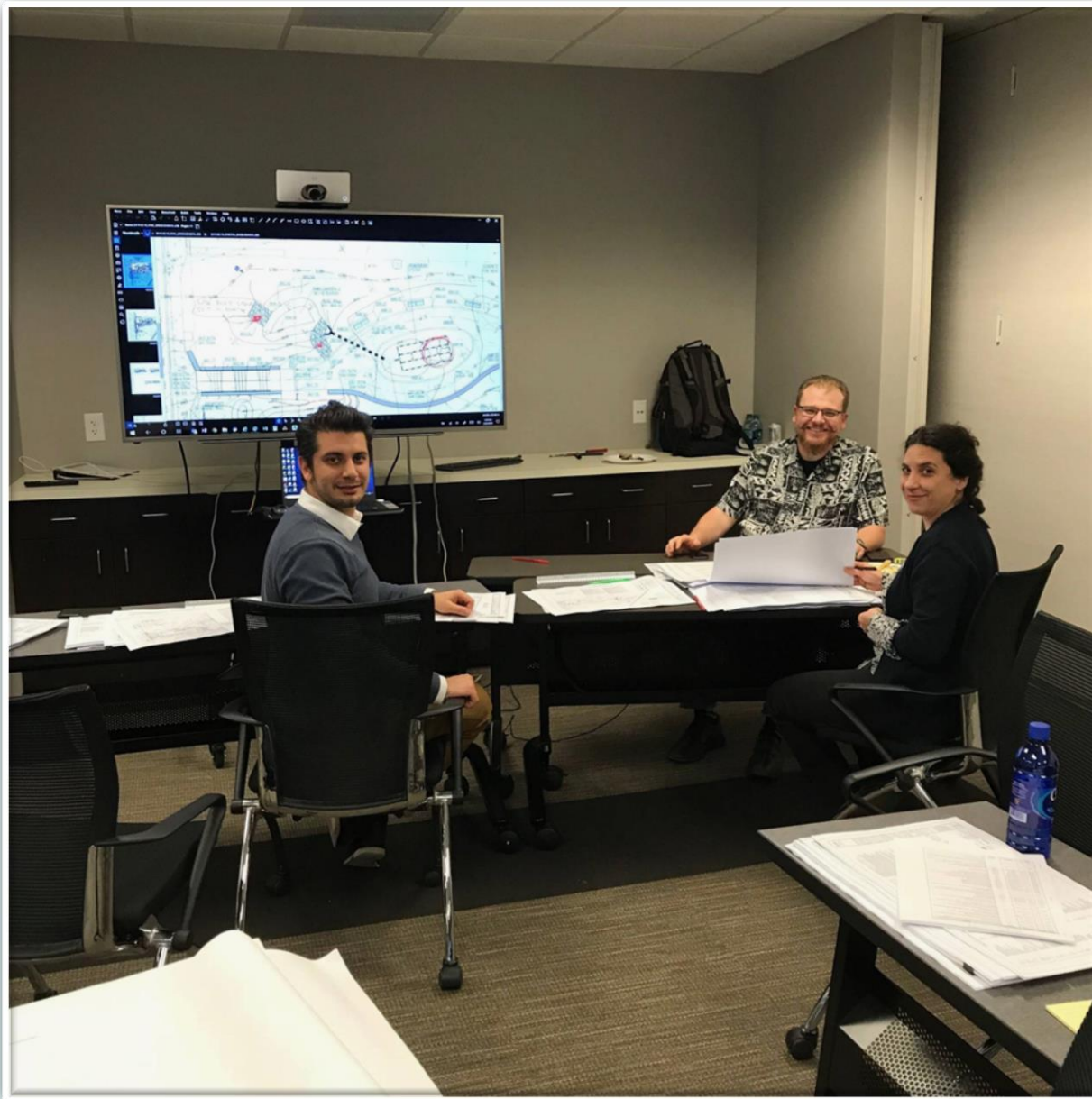
- **Credentials**
 - ISA Certified Arborist
 - ISA Board Certified Master Arborist
 - ISA Municipal Arborist Specialist
 - Tree Risk Assessment Qualification (TRAQ)
 - SITES AP
 - ENV SP
- **Education**
- **Experience**
- **Excellent Communication Skills**
 - You must understand how to communicate effectively in the language of other trades:
 - Architect
 - Civil Engineer
 - Landscape Architect



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant

American Standard for Nursery Stock

published by



cdn.ymaws.com/americanhort.site-ym.com/resource/collection/38ED7535-9C88-45E5-AF44-01C26838AD0C/ANSI_Nursery_Stock_Standards_AmericanHort_2014.pdf

•→29-100¶

- Availability of the trees in the Metro Atlanta area Questionable¶
- Water Hickory¶
- Bluff Oak¶
- Southern Shagbark Hickory¶
- No Green Ash should be planted, Emerald Ash Borer is killing them¶
- Sand Post Oak¶
- Carolina Buckthorn¶
- Persian Ironwood¶
- Post Oak¶
- American Bladdernut¶
- Horse Sugar¶

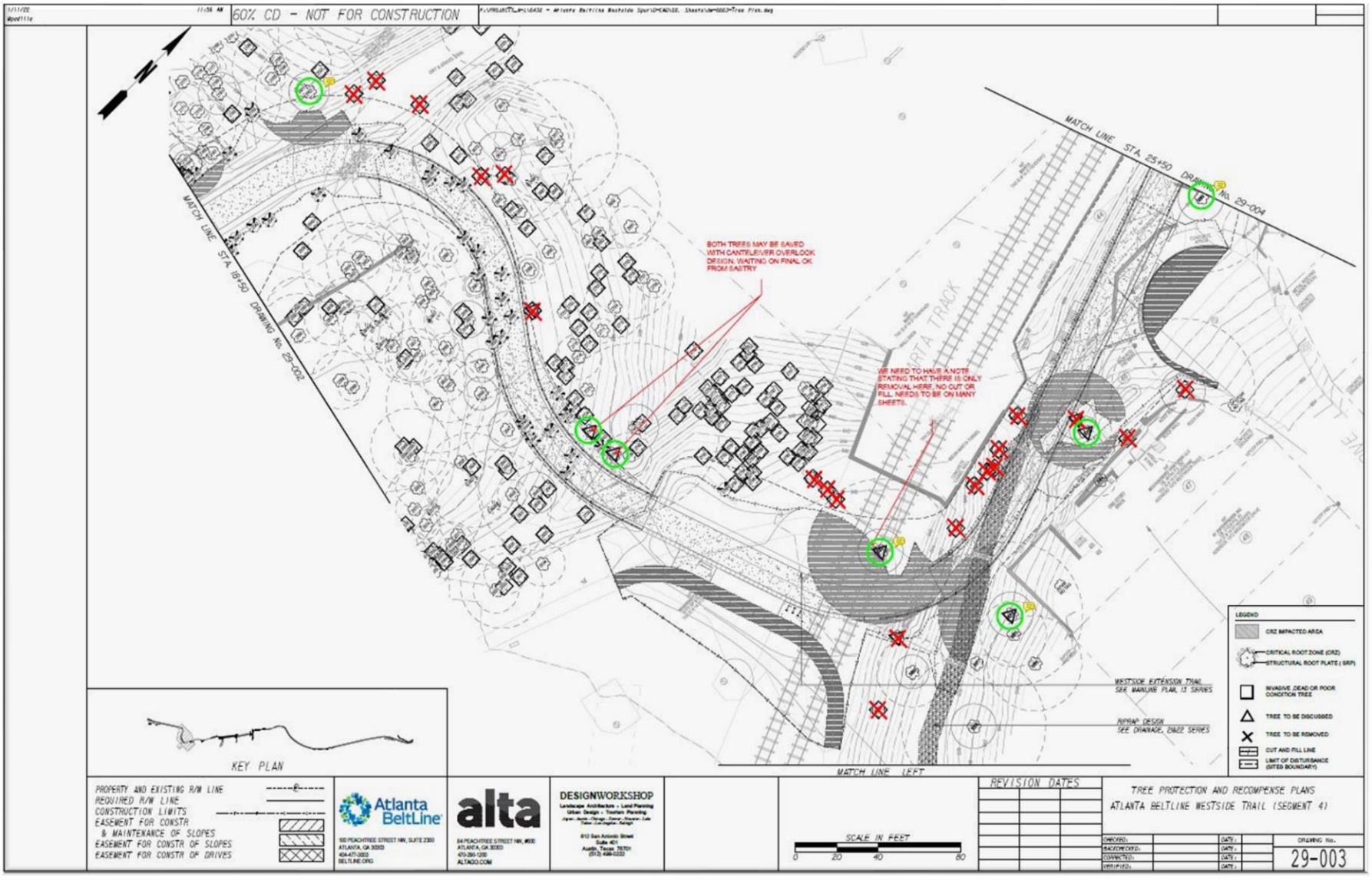
This note needs to be added to this page:¶

Since all trees shown are specified as container grown trees, all trees are to be inspected by an ISA certified arborist BEFORE the containers are to be removed from the shipping vehicle. NO EXCEPTIONS. ¶

All container grown trees shall meet the American Standard for Nursery Stock ANSI Z60.1-2004. As per Section 1.7 on page 20 of the document, all trees shall be free of excessive circling roots. Trees found with excessive irreparable girdling root conditions will be rejected before being off-loaded. NO EXCEPTIONS. ¶



Picture Courtesy of D. Dechant



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

Atlanta BeltLine
 80 PEACHTREE STREET NW, SUITE 230
 ATLANTA, GA 30303
 404.471.0000
 BELTLINE.ORG

alta
 84 PEACHTREE STREET NW, 800
 ATLANTA, GA 30303
 404.360.0200
 ALTA00.COM

DESIGNWORKSHOP
 Landscape Architecture • Land Planning
 Urban Design • Transit Planning
 812 San Antonio Street
 Suite 401
 Austin, Texas 78701
 (512) 444-0222



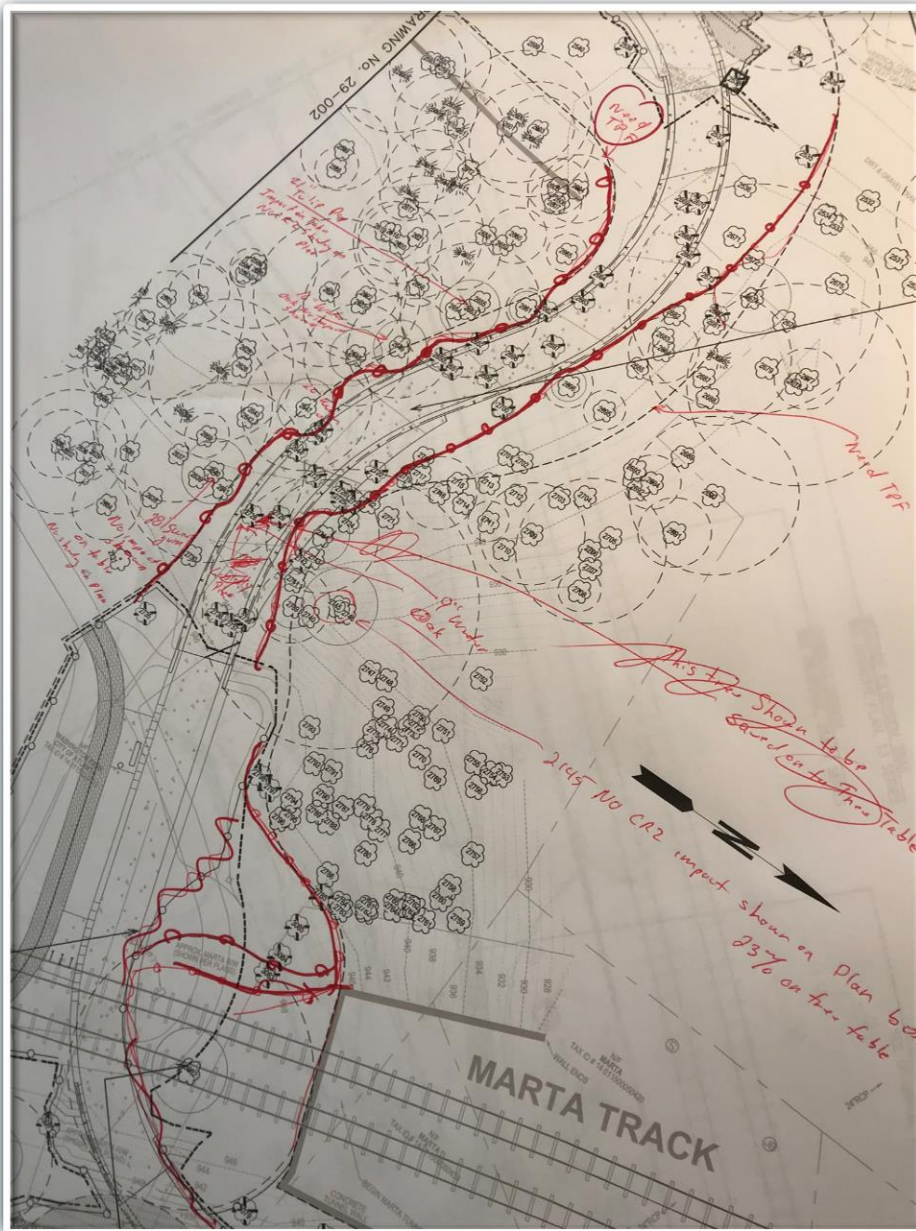
REVISION DATES	

TREE PROTECTION AND RECOMPENSE PLANS ATLANTA BELTLINE WESTSIDE TRAIL (SEGMENT 4)			
DESIGNED	DATE:	DRAWN	DATE:
REWORKED	DATE:	CHECKED	DATE:
APPROVED	DATE:		

DRAWING No. **29-003**



Plan Courtesy of alta



Picture Courtesy of D. Dechant



NOTE: FENCE SHOULD BE INSTALLED ALONG THE CUT AND FILL LINE WHEN IT IS SHOWN CLOSE TO IT.



KEY PLAN

- LEGEND
- CRZ IMPACTED AREA
 - CRITICAL ROOT ZONE (CRZ)
 - STRUCTURAL ROOT PLATE (SRP)
 - INVASIVE DEAD OR POOR CONDITION TREE
 - TREE TO BE REMOVED
 - CUT AND FILL LINE
 - LIMIT OF DISTURBANCE (LIMIT BOUNDARY)
 - TREE PROTECTION FENCE

ONLY ORIGINAL MARKED IN THIS PART: NO CUT OR FILL AROUND TREE 3062

WESTSIDE EXTENSION TRAIL SEE MAINLINE PLAN, 13 SERIES

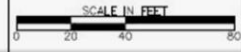
SEPARATION SEE DRAINAGE, 21&22 SERIES

MATCH LINE DRAWING No. 13-017

REVISION DATES

NO.	DATE	DESCRIPTION

TREE PROTECTION AND RECOMPENSE PLANS
ATLANTA BELTLINE WESTSIDE TRAIL (SEGMENT 4)



CHECKED:	DATE:	DRAWING No.:
DESIGNED:	DATE:	29-003
REVISED:	DATE:	

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

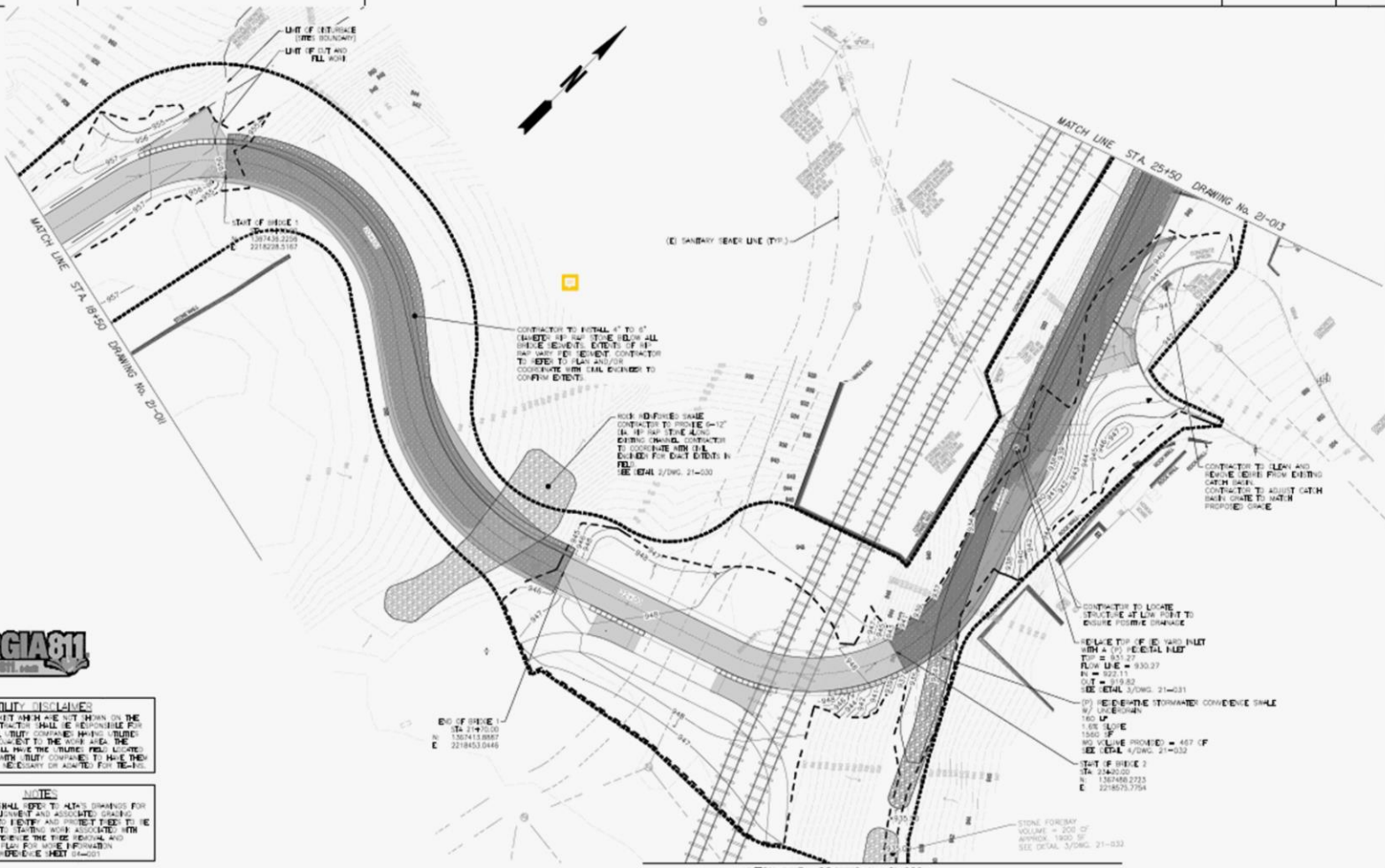
100 PEACHTREE STREET NW, SUITE 2000
ATLANTA, GA 30309
404-477-2830
BELTLINE.ORG

84 PEACHTREE STREET NW, 8EED
ATLANTA, GA 30309
404-360-0330
ALTA@G.COM

Landscape Architecture + Land Planning
Urban Design + Town Planning
Interior Design + Design + Interior Design + Land
Tobacco: Los Angeles, Raleigh

612 East Andrews Street
Suite 401
Austin, Texas 78701
(512) 468-9222

Arboguard
Tree Specialists






LIABILITY DISCLAIMER

AUTUMN MAY EXIST WITH A CUT THROUGH ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING ALL UTILITY LOCATIONS BEFORE ANY WORK BEGINS ON ANY SITE TO THE WORK AREA. THE CONTRACTOR SHALL PROTECT THE UTILITIES FROM DAMAGE AND COORDINATE WITH UTILITY COMPANIES TO HAVE THEM RELOCATED WHEN NECESSARY OR ADAPTED FOR THE PROJECT.

NOTES

1. CONTRACTOR SHALL VERIFY TO ALTA ENGINEERS FOR FINAL ADJUSTMENT AND ASSOCIATED GRADING.
2. CONTRACTOR TO IDENTIFY AND PROTECT TIES TO THE EXISTING PUBLIC UTILITY SYSTEMS ASSOCIATED WITH THE DRAINAGE. REFER TO THE EXISTING RECORD AND FIELD VERIFY TIE DATA FOR MORE INFORMATION.
3. FOR MEDIAN IMPROVEMENT DRAWING 21-001.

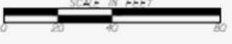
LIMIT OF DISTURBANCE (SITE BOUNDARY) 
 LIMIT OF CUT/FILL WORK 
 PROPERTY LINE 


 100 PEACHTREE STREET NW, SUITE 200
 ATLANTA, GA 30309
 404-477-3030
 BELTLINE.ORG


 34 PEACHTREE STREET NW, SUITE 800
 ATLANTA, GA 30309
 404-386-1000
 ALTA.GOV.COM


 675 POWERS DE LOAN AVE. NE, SUITE 800
 ATLANTA, GA 30309
 404-525-9007
 SHERWOODENGINEERS.COM

MATCH LINE DRAWING No. 21-026

SCALE IN FEET 

REVISION DATES	

DRAINAGE PLAN ENLARGEMENT 3
 ATLANTA BELTLINE WESTSIDE TRAIL (SEGMENT 4)

DATE	DESCRIPTION	BY	CHECKED

DRAWING NO. 21-012



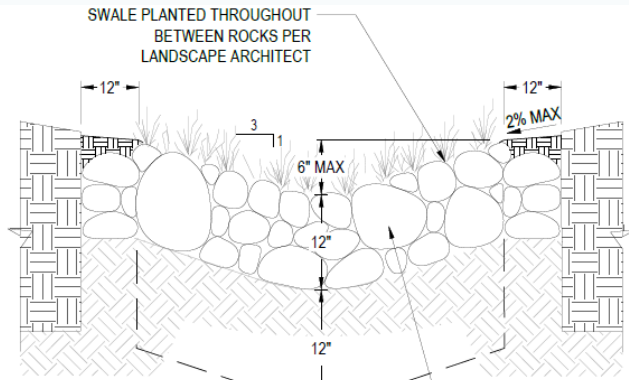
Plan Courtesy of alta



- o → Accuracy is critical when dealing with the City of Atlanta Parks Department plan reviewers, it is strongly recommended that someone on this team go thru this table with the plan and **accurately one tree at a time mark the poor, dead and invasive trees with the box symbol on the plan and correct if needed any deficiencies on the tree table, no exceptions to this will be acceptable anywhere on the 29 plan series.**

¶ General note: every sheet in this series has significant inconsistency regarding the symbol for poor, dead and invasive trees. Some trees have the symbol while most trees that should have the symbol do not. **It is critically important that this symbol be shown on all trees in the 29 Series that require this symbol, whether they are being removed or not.**

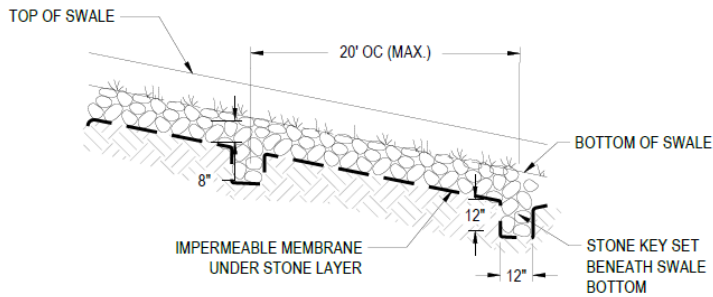
- → 001, ¶
 - o → remove "X" from tree # 301 ¶
 - o → NOTE: Tree # 1906 & 1907 will be removed and relocated on-site, to read " will be relocated on-site, remove "X" from both trees use a unique designation for relocated trees. I never identified on the planting plan where these trees are to be located to ¶
- → 002, ¶
 - o → No tree impact shown to CRZ's within the bioswale/riprap area ¶
 - o → # 2004 shown in a bioswale, should it be removed? ¶
 - o → Multiple trees require the DDH symbol ¶
- → 003, ¶
 - o → # 2640 has trees being removed immediately adjacent to it, need a note stating "Tree removal shall not damage adjacent trees to be saved" ¶
 - o → # 2745 shown to have a 23% impact in the table, but no shaded CRZ or impact shown on the plan ¶
 - o → # 3078 shows riprap thru a large portion of the CRZ with a 5% impact shown in the table and no root zone impact shown on the plan. Please refer to the details pages in the 21 series set to see how this riprap area is going to be constructed and revise the tree impact accordingly ¶
 - o → No tree protection fence shown adjacent to Bridge 1, there will be tree removal and riprap installation under the bridge that will impact the CRZ's of adjacent protected trees. SRP's are to be protected on both sides of the bridge, see attached .jpg of marked-up site plan ¶
 - o → Multiple trees require the DDH symbol ¶
- → 004, ¶
 - o → @ # 3031, TPF encroaches into riprap feature (?) ¶
 - o → No TPF @ # 3057, should at least follow the LOD ¶



STONE KEY AT 20' OC STARTING AT BOTTOM OF SWALE (BEYOND)

SECTION

HAND PLACE 2"-8" NON-EROSIVE STONES IN LAYERS. TIGHTLY BACKFILL VOIDS FOR EACH LAYER WITH NATIVE SOIL AND HAND COMPACT. STONE SIZES VARY TO MINIMIZE VOIDS AND SHALL BE PLACED TO MAXIMIZE CONTACT WITH EACH OTHER



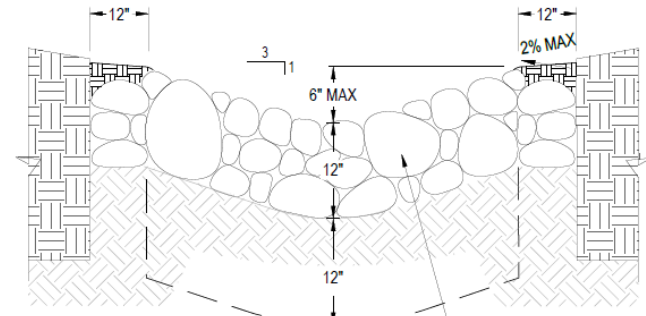
PROFILE

NOTE: "ROCK REINFORCED" SWALE TO BE CONSTRUCTED GENERALLY FOR SWALES WITH LONGITUDINAL SLOPE OVER 5%, UNLESS OTHERWISE SHOWN ON PLANS.

2

ROCK REINFORCED SWALE

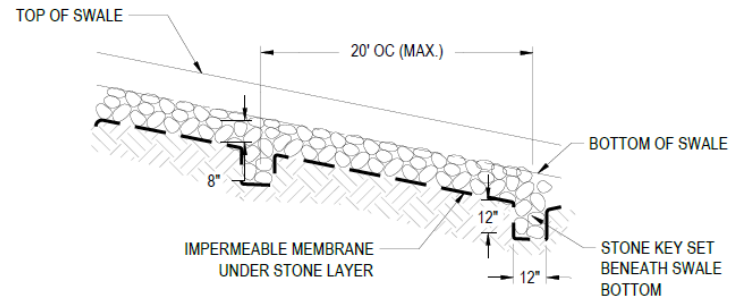
SCALE: NTS



STONE KEY AT 20' OC STARTING AT BOTTOM OF SWALE (BEYOND)

SECTION

HAND PLACE 2"-8" NON-EROSIVE STONES IN LAYERS. TIGHTLY BACKFILL VOIDS FOR EACH LAYER WITH NATIVE SOIL AND HAND COMPACT. STONE SIZES VARY TO MINIMIZE VOIDS AND SHALL BE PLACED TO MAXIMIZE CONTACT WITH EACH OTHER



PROFILE

3

RIPRAP LOW FLOW CHANNEL

SCALE: NTS



UTILITY DISCLAIMER
 UTILITY LOCATIONS SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE UTILITIES AND COORDINATE WITH THE UTILITY COMPANIES TO HAVE THEM RELOCATED WHEN NECESSARY OR AVOIDED FOR THEM.

- NOTES**
1. CONTRACTOR SHALL REFER TO ALTA'S DRAWINGS FOR FINAL TIE-IN ALIGNMENT AND ASSOCIATED GRADING.
 2. CONTRACTOR TO VERIFY AND VERIFY TIES TO BE SHOWN PRIOR TO ANY WORK ASSOCIATED WITH DRAINAGE. VERIFY THE TIE INFORMATION AND CONTACT ALTA FOR MORE INFORMATION.
 3. FOR LEGEND, REFER TO SHEET 04-002, TYPICAL.

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

Atlanta BeltLine
 120 PEACOCK STREET NW, SUITE 200
 ATLANTA, GA 30303
 404-471-3833
 BELTLINE.ORG

alta
 24 PEACOCK STREET NW, SUITE 400
 ATLANTA, GA 30303
 404-266-5288
 ALTA.GEO.COM

SHERWOOD DESIGN ENGINEERS
 475 FORTUNE DRIVE, SUITE 500
 ATLANTA, GA 30308
 770-420-8900
 SHERWOODENGINEERS.COM

MATCH LINE DRAWING No. 21-026

SCALE: 1" = 40'

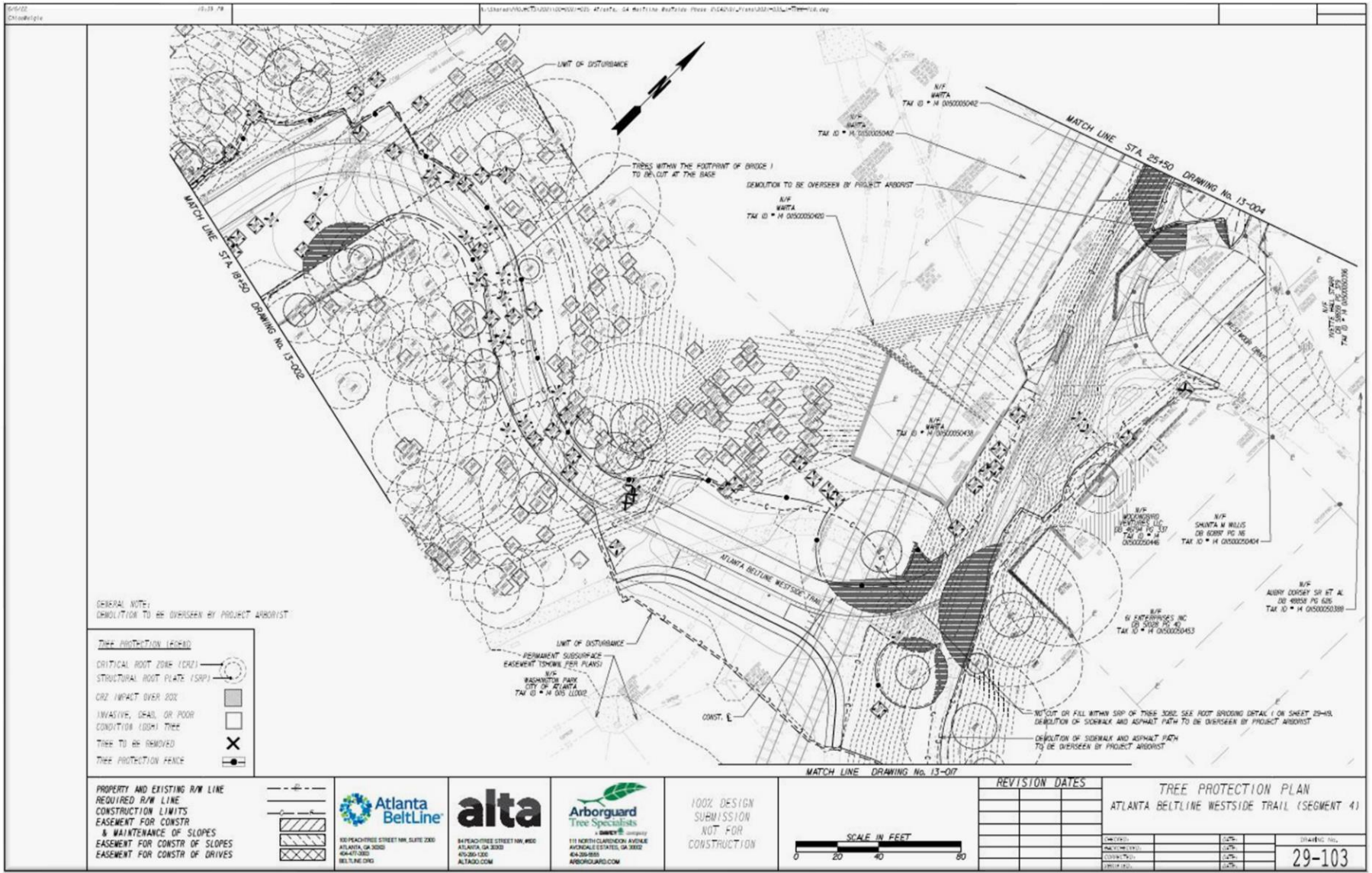
REVISION DATES	

DRAINAGE PLAN ENLARGEMENT 3
 ATLANTA BELTLINE WESTSIDE TRAIL (SEGMENT 4)

NO.	DATE	DESCRIPTION	BY	DATE	REVISION NO.

21-012





GENERAL NOTE:
DEMOLITION TO BE OVERSEEN BY PROJECT ARBORIST

- TREE PROTECTION FENCE**
- CRITICAL ROOT ZONE (CRZ)
 - STRUCTURAL ROOT PLATE (SRP)
 - CRZ IMPACT OVER 20%
 - INVASIVE, DEAD, OR POOR CONDITION (100%) TREE
 - TREE TO BE REMOVED
 - TREE PROTECTION FENCE

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

80 PEACOCK STREET NW, SUITE 2000
ATLANTA, GA 30309
404.477.0300
BELTLINE.ORG

84 PEACOCK STREET NW, 4000
ATLANTA, GA 30309
404.506.1200
ALTA.GO.COM

111 NORTH GAVINSON AVENUE
AVERAUXE ESTATES, GA 30002
678.266.8888
ARBORGUARD.COM

100% DESIGN SUBMISSION NOT FOR CONSTRUCTION



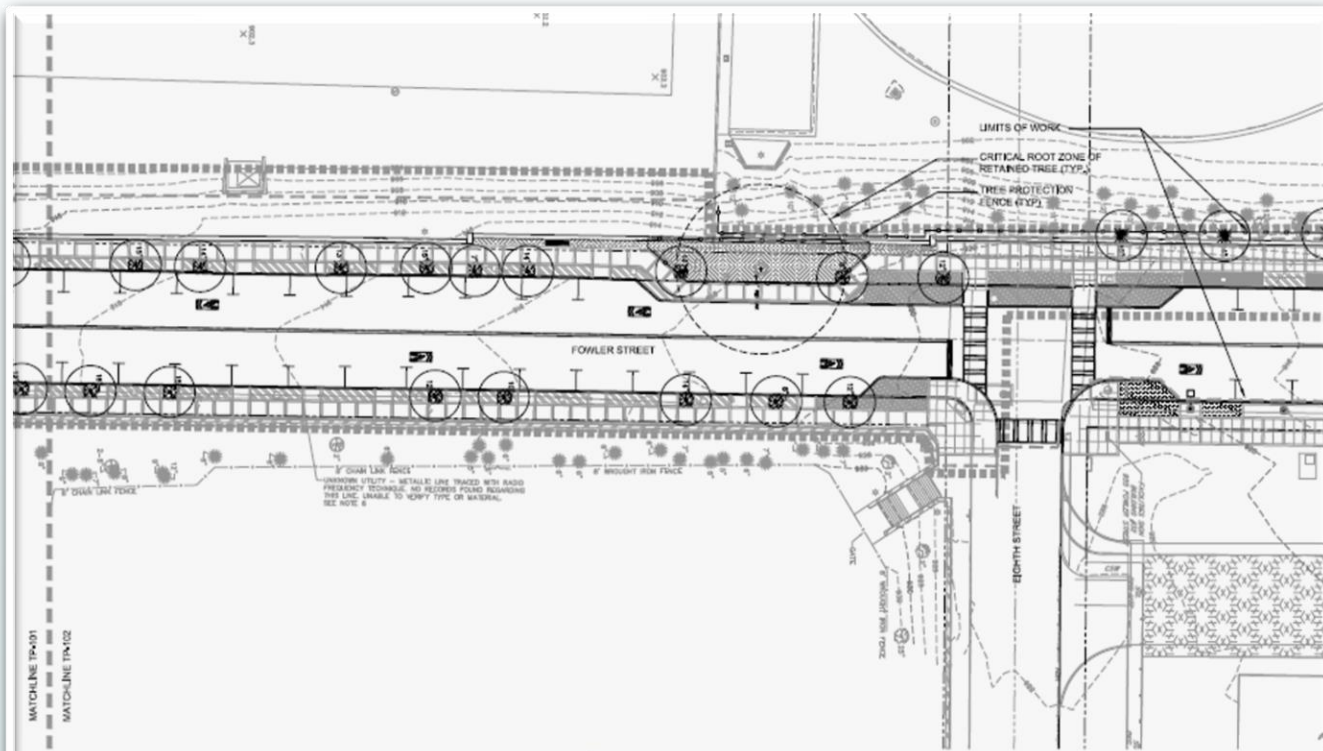
REVISION DATES

NO.	DATE	DESCRIPTION
1	05/20/2024	PRELIMINARY
2	06/10/2024	REVISED
3	06/10/2024	REVISED
4	06/10/2024	REVISED

TREE PROTECTION PLAN
ATLANTA BELTLINE WESTSIDE TRAIL (SEGMENT 4)

NO.	DATE	DESCRIPTION
1	05/20/2024	PRELIMINARY
2	06/10/2024	REVISED
3	06/10/2024	REVISED
4	06/10/2024	REVISED

29-103



TREE PROTECTION PLAN

SCALE: 1"=20'

LEGEND

- EXISTING TREE TO REMAIN INDICATED WITH CRITICAL ROOT ZONE
- EXISTING TREE TO BE REMOVED

TREE PROTECTION FENCE

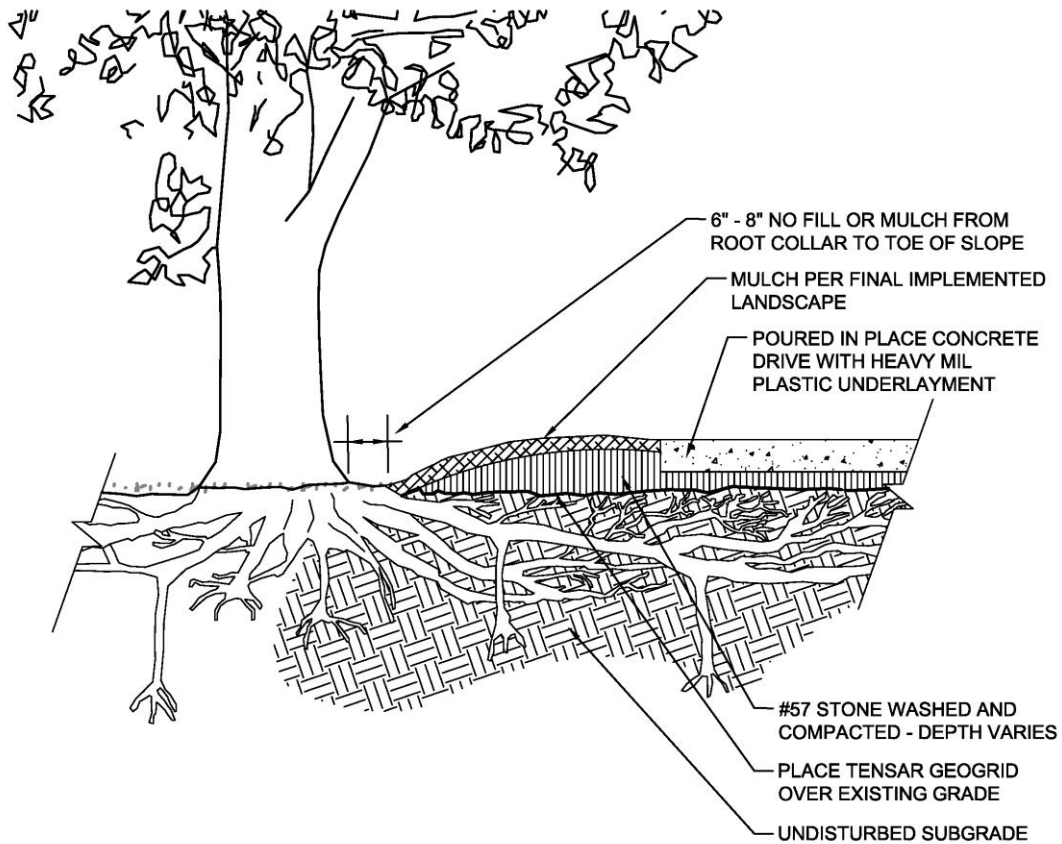
ROOT PROTECTION ZONE NOTES:

1. NO MORE THAN 10% MAY BE ALTERED WITH CUT OR FILL
2. NO TRENCHING
3. NO PARKING OF EQUIPMENT OR CONSTRUCTION ACTIVITY
4. NO STORAGE OF MATERIALS OR SOIL STOCKPILING

FENCE OF THE ROOT PROTECTION ZONE SHALL BE 64" FOOT HIGH ORANGE POLYETHYLENE FABRIC ATTACHED TO WOODEN STAKES PRIOR TO ALL CONSTRUCTION ACTIVITY, INCLUDING MOVING EQUIPMENT AND TRAILERS ONTO THE SITE.

SEE TREE PROTECTION DETAIL, 8 ON SHEET I-201

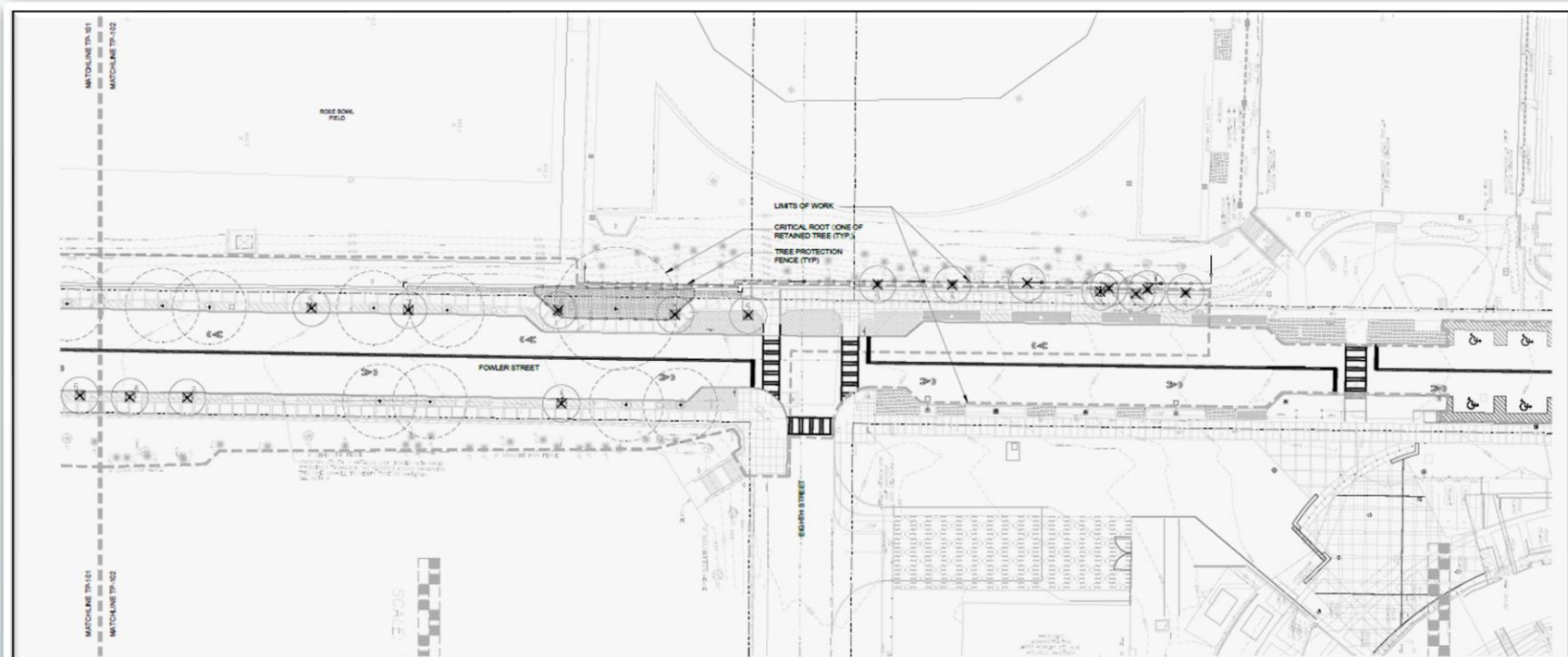
SPECIES	QTY	DBH	TOTAL ESTD	Number of Replacement Trees	Replacement DBH
(See 9/11)					
Willow					
Oak	1	7	7	2	4
	6	8	32	8	30
	4	9	36	8	30
	4	10	40	8	30
	2	11	22	4	30
Virginia Pine	1	7	7	2	4
	1	8	8	2	4
	3	10	30	6	30
TOTAL:	20	70	142	40	120
(See 12/17)					
Loblolly					
Cypress	3	12	36	15	40
Siberian					



NOTES:

- 1) NO COMPACTION OF EXISTING GRADE SHALL OCCUR WITHIN THE CRZ OF TREES BEING PRESERVED.
- 2) SOIL CUTS AND/OR ROOT DISTURBANCE SHALL ONLY OCCUR UNDER THE DIRECT SUPERVISION OF THE PROJECT ARBORIST.
- 3) IF EXISTING GRADE IS GREATER THAN 5% SLOPE, LOW RETAINING WALL MAY BE NECESSARY TO REQUIRED TO HOLD MATERIAL IN PLACE.

 **ROOT BRIDGING DETAIL**
NOT TO SCALE



TREE PROTECTION PLAN
SCALE: 1" = 20'



LEGEND

- EXISTING TREE TO REMAIN INDICATED WITH CRITICAL ROOT ZONE
- EXISTING TREE TO BE REMOVED

- ROOT PROTECTION ZONE NOTES:**
1. NO MORE THAN 10% MAY BE ALTERED WITH CUT OR FILL
 2. NO TRENCHING
 3. NO PARKING OF EQUIPMENT OR CONSTRUCTION ACTIVITY
 4. NO STORAGE OF MATERIALS OR SOIL STOCKPILING

SPECIES	QTY	DBH	TOTAL DBH	Number of Retained Trees	Replacement DBH
SITE TOTAL					
Willow Oak	1	7	7	2	6
	2	8	16	4	12
	2	5	10	4	14



Georgia Institute of Technology

CONSTRUCTION DOCUMENT PROFESSIONAL SEAL
 STATE OF GEORGIA
 PROFESSIONAL ENGINEER
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 1000 Peachtree Street, N.E.
 Atlanta, GA 30309
 404.525.1100
 www.pondco.com

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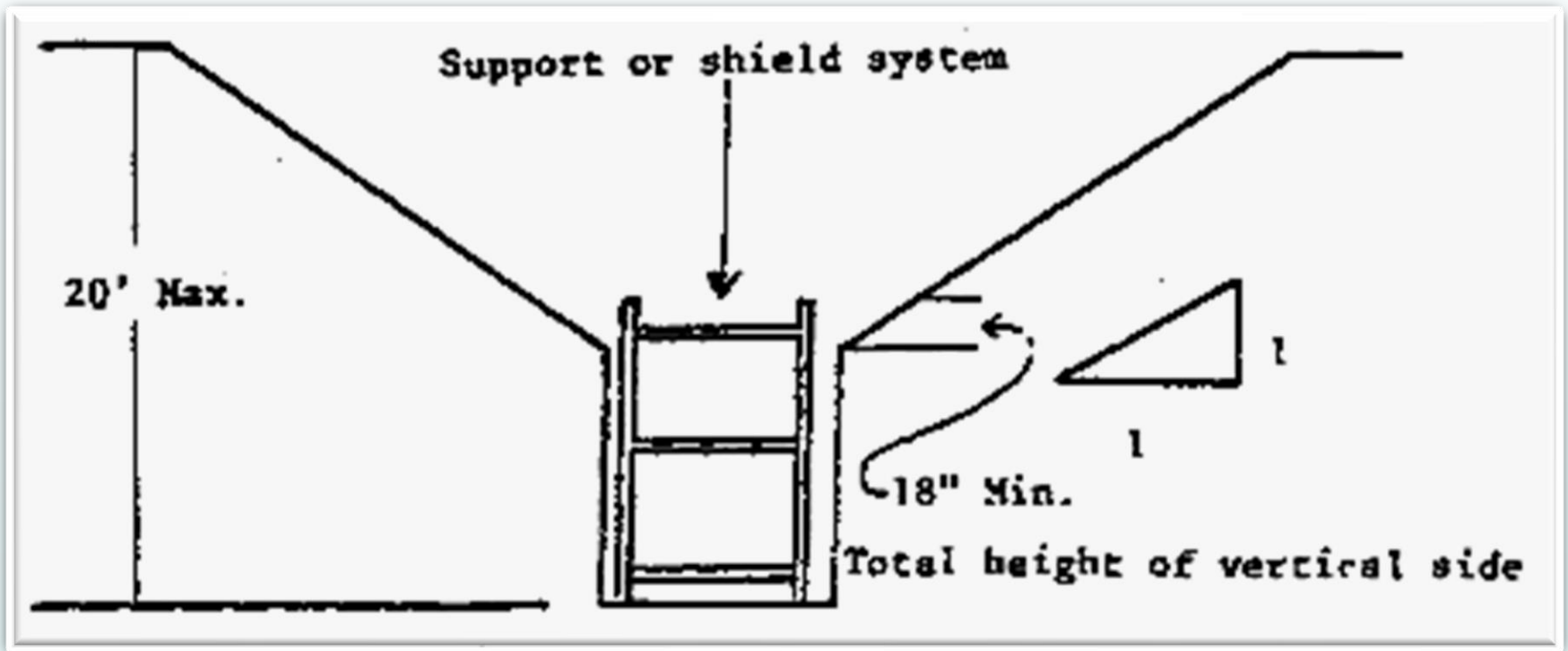
NOLOGY
SCAPE
STREET
IT PLAN
 10/10/2010







Picture Courtesy of D. Dechant



1926 Subpart P App B - Sloping and Benching | Occupational Safety and Health Administration (osha.gov)



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant

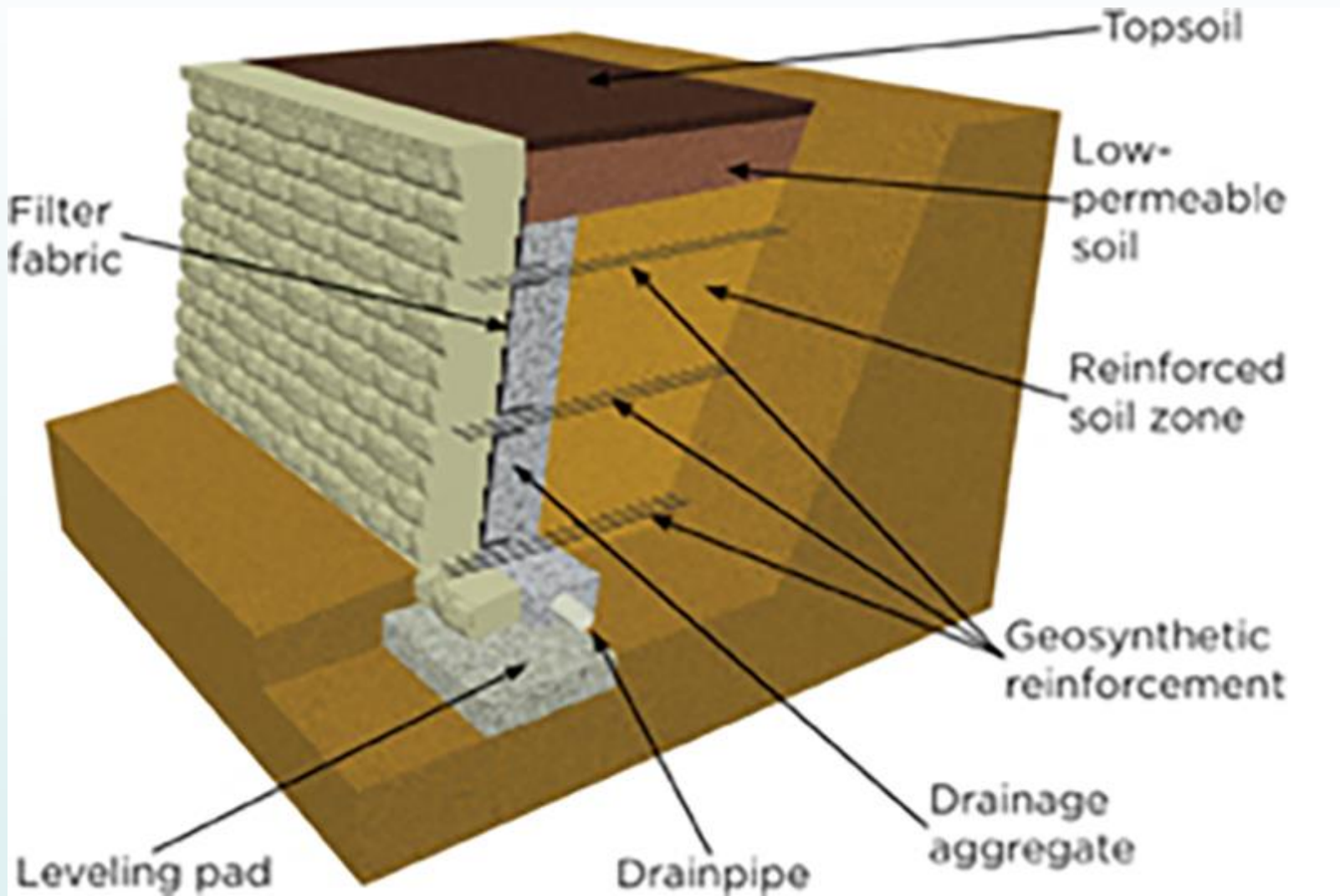
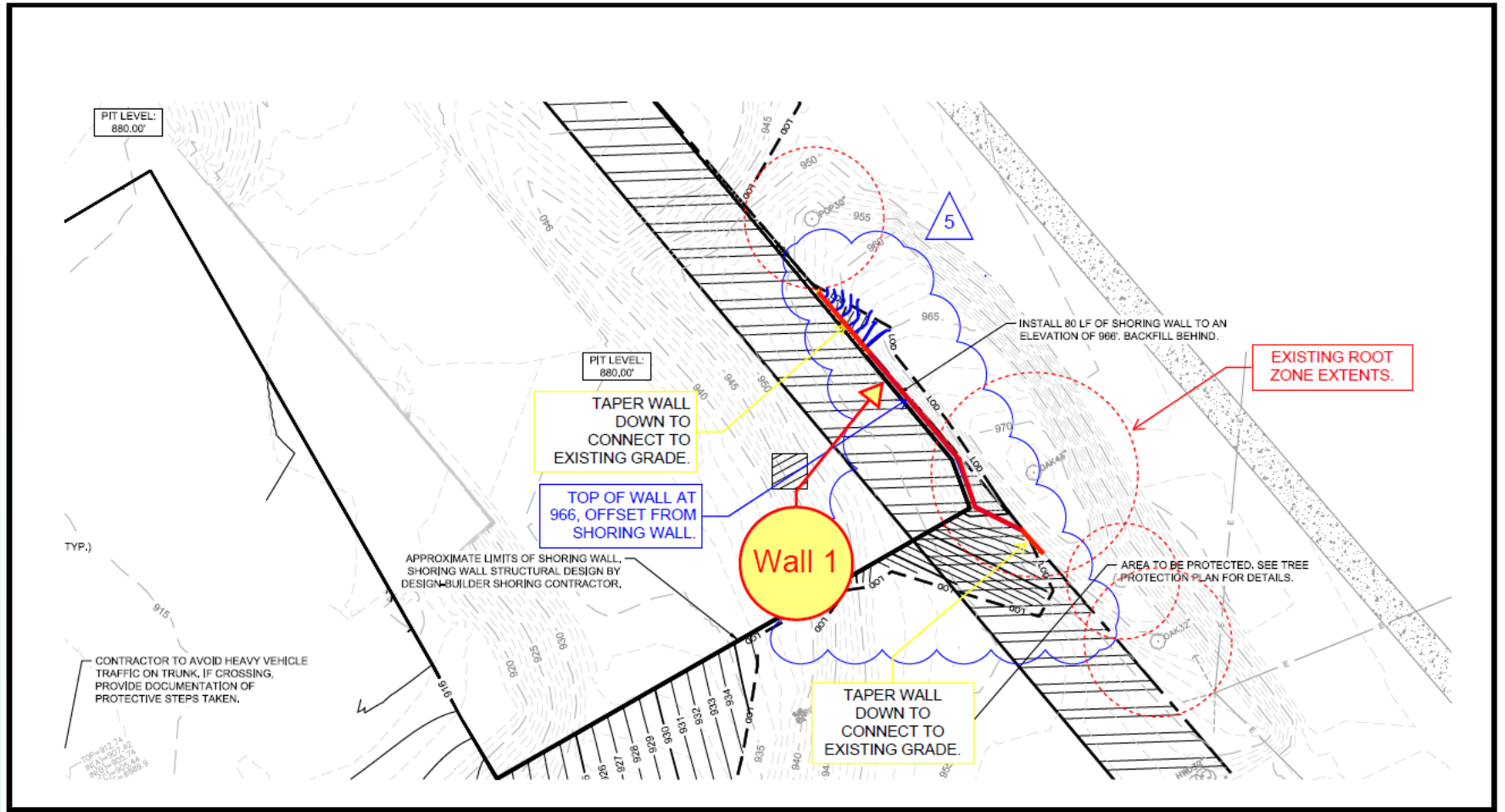


Diagram courtesy of anchor diamond



Picture Courtesy of D. Dechant



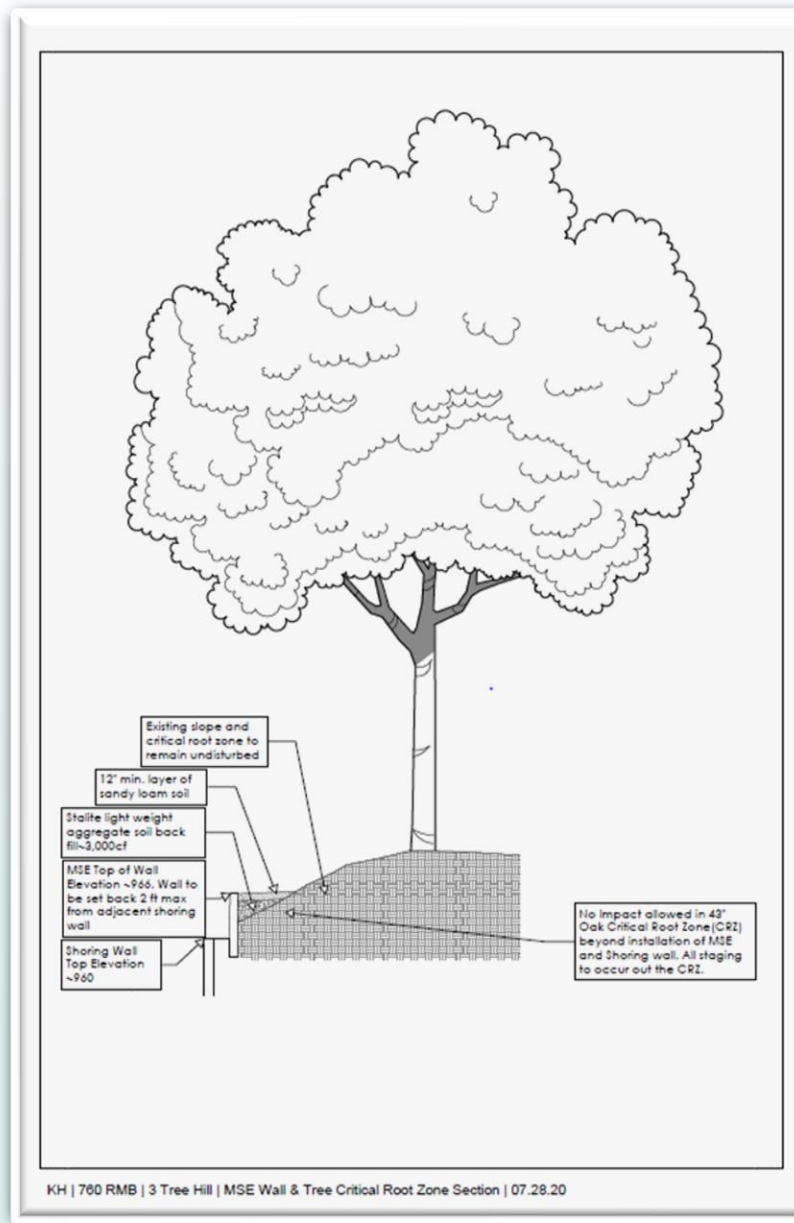
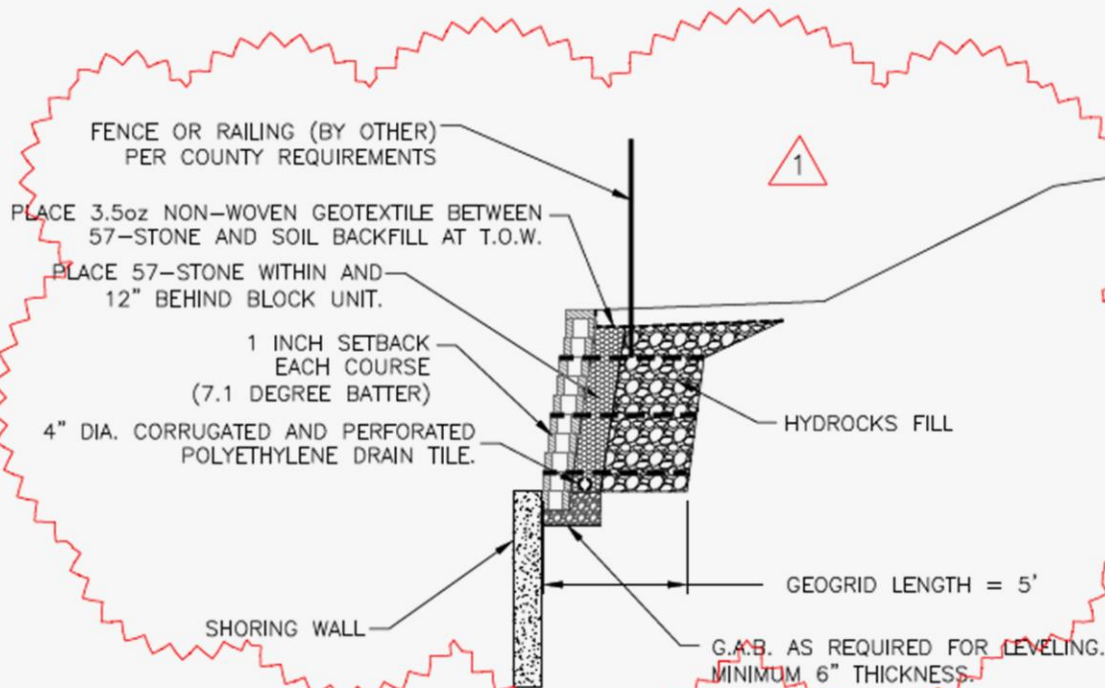


Diagram Courtesy of Kimley-Horn

WALL 1 CROSS-SECTION A-A

SCALE: 1" = 5'







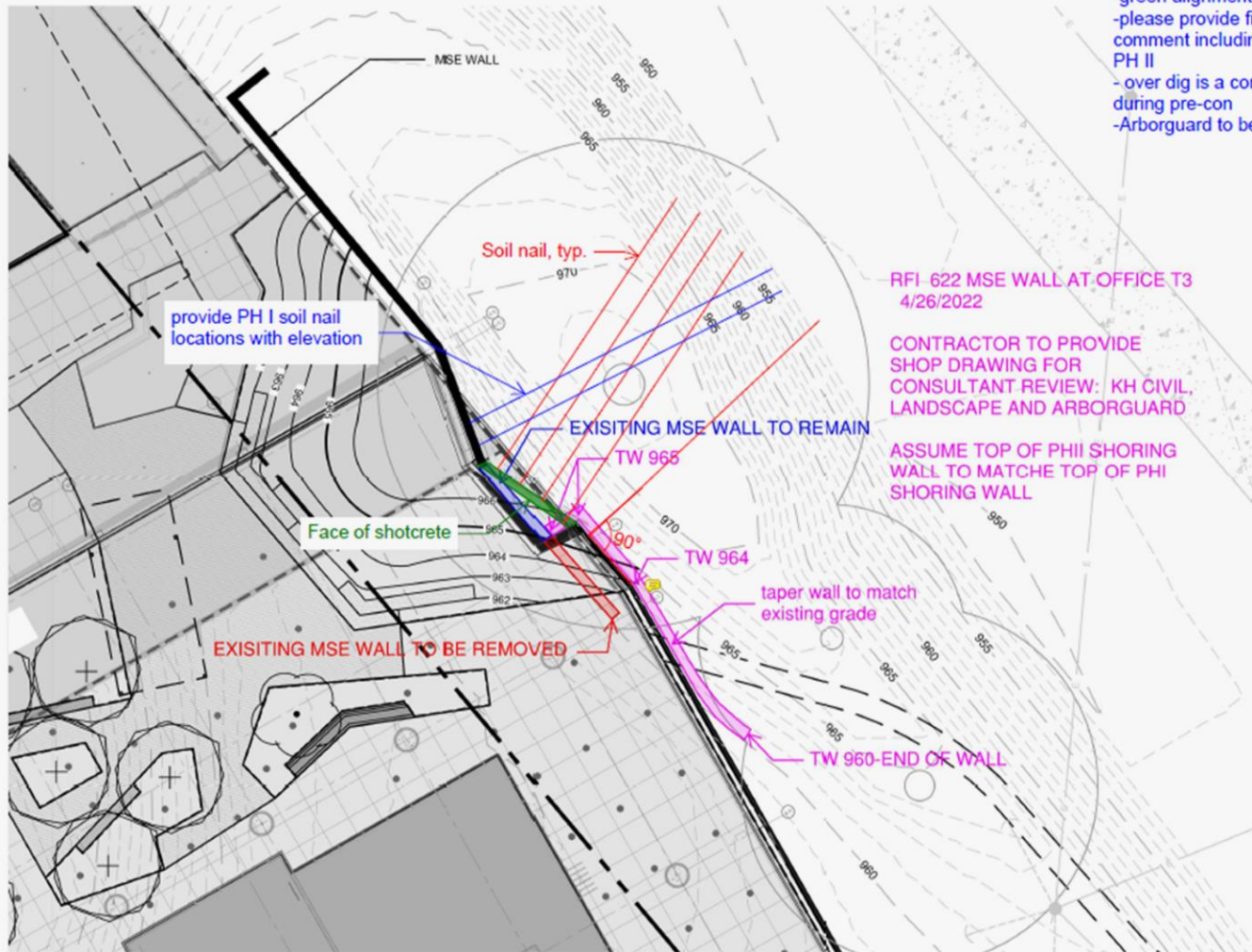
Picture Courtesy of D. Dechant



Picture Courtesy of D. Dechant

KH/ARBORGUARD COMMENTS:
5/12/2022

- green alignment is acceptable
- please provide final shop drawing for review and comment including: soil nail elevations for PH I and PH II
- over dig is a concern, limits to be determined on site during pre-con
- Arboguard to be on-site for start of construction



provide PH I soil nail locations with elevation

Soil nail, typ.

RFI 622 MSE WALL AT OFFICE T3
4/26/2022

CONTRACTOR TO PROVIDE SHOP DRAWING FOR CONSULTANT REVIEW: KH CIVIL, LANDSCAPE AND ARBORGUARD

ASSUME TOP OF PHII SHORING WALL TO MATCH TOP OF PHI SHORING WALL

Face of shotcrete

EXISTING MSE WALL TO REMAIN

taper wall to match existing grade

EXISTING MSE WALL TO BE REMOVED

TW 960-END OF WALL

David Dechant LEED AP, SITES AP, ENV SP

*ISA Board Certified Master Arborist
ISA Certified Municipal Specialist
ISA Qualified Tree Risk Assessor*

Arboguard Tree Specialists
ddechant@arboguard.com
404-354-2638