

Town Council Meeting

October 23, 2023 at 6:00 PM Howey-in the-Hills Town Hall 101 N. Palm Ave., Howey-in-the-Hills, FL 34737

Join Zoom Meeting: https://us06web.zoom.us/j/82600166011?pwd=Xd0f8vcKM2ba1dkwlhaCTgVfr6Dbkb.1

Meeting ID: 826 0016 6011 | Passcode: 495749

AGENDA

Call the Town Council Meeting to order Pledge of Allegiance to the Flag Invocation by Councilor Reneé Lannamañ

ROLL CALL

Acknowledgement of Quorum

AGENDA APPROVAL/REVIEW

CONSENT AGENDA

Routine items are placed on the Consent Agenda to expedite the meeting. If Town Council/Staff wish to discuss any item, the procedure is as follows: (1) Pull the item(s) from the Consent Agenda; (2) Vote on the remaining item(s); and (3) Discuss each pulled item and vote.

- 1. The approval of the minutes and ratification and confirmation of all Town Council actions at the October 09, 2023 Town Council Meeting.
- 2. The approval of the minutes and ratification and confirmation of all Town Council actions at the September 26, 2023 Town Council Workshop.

PUBLIC HEARING

OLD BUSINESS

NEW BUSINESS

- 3. Consideration and Approval: **Final Subdivision Plans Hillside Groves**
- 4. Consideration and Approval: (First Reading) **Ordinance 2023-012 Land Development Code (LDC)**Omnibus

AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, PERTAINING TO LAND USE; AMENDING SECTIONS OF THE TOWN'S LAND DEVELOPMENT CODE AS FOLLOWS: AMENDING SECTION 5.02.06 TO SPECIFY THE MINIMUM SETBACK FROM PROPERTY LINES FOR FLAGPOLES; AMENDING SECTION 2.03.03 TO REQUIRE TWO-

CAR GARAGES FOR TOWNHOMES AND TO SPECIFY THE MINIMUM SQUARE FOOTAGE OF THE GARAGE AND THE MINIMUM LENGTH AND WIDTH OF THE RELATED DRIVEWAY; AMENDING SECTION 5.02.06 TO SPECIFY THE TIME PERIOD FOR TEMPORARY PERMITS FOR MOVABLE MODULE STORAGE UNITS; AMENDING SECTION 7.09.02 PERTAINING TO TREE PRUNING; AMENDING SECTION 7.10.00 AND ITS LIST OF APPROVED TREES AND PLANTS; AMENDING SECTION 7.10.01 TO ADD AN ITEM TO THE PROHIBITED PLANT LIST; AMENDING SECTION 7.11.01 REGARDING TREE PROTECTION; AMENDING SECTION 7.08.01 REGARDING LANDSCAPING REQUIREMENTS; ENACTING NEW SECTION 5.01.10 TO DEFINE "WORKSHOPS;" ENACTING NEW SECTION 7.04.04 TO IMPOSE CERTAIN REQUIREMENTS AT STREET INTERSECTIONS TO PRESERVE VISIBILITY FOR MOTORISTS; AMENDING SECTION 1.12.00 TO ENACT A NEW DEFINITION AND TO MODIFY CERTAIN EXISTING DEFINITIONS; AMENDING SECTION 7.12.01 REGARDING REQUIREMENTS FOR TREE REMOVAL; ENACTING NEW SUBSECTIONS 8.05.02.L AND 8.05.04.F REGARDING POTABLE AND RECLAIMED WATER SYSTEMS; ESTIMATING THE ECONOMIC IMPACT OF THE ORDINANCE ON PRIVATE BUSINESSES; PROVIDING FOR SEVERABILITY, CODIFICATION, AND AN EFFECTIVE DATE.

- Mayor MacFarlane will read the Ordinance title.
- Town Planner will explain Ordinance 2023-012.
- Mayor MacFarlane will open Public Comment and Questions for this item only.
- Mayor MacFarlane will close Public Comment.
- Motion to approve Ordinance 2023-012
- Council Discussion
- Roll Call Vote
- 5. Consideration and Approval: Lake-Sumter Metropolitan Planning Organization (MPO) / Florida Department of Transportation (FDOT) Letter in Support of Complete Streets Study
- 6. Discussion: Lake County Sherriff Office (LCSO) Dispatch Agreement
- 7. Discussion: Police Chief Leave

DEPARTMENT REPORTS

8. Town Manager

COUNCIL MEMBER REPORTS

- 9. Mayor Pro Tem Gallelli
- **10.** Councilor Lehning
- 11. Councilor Miles
- 12. Councilor Lannamañ
- 13. Mayor MacFarlane

PUBLIC COMMENTS

Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

ADJOURNMENT

To Comply with Title II of the Americans with Disabilities Act (ADA):

Qualified individuals may get assistance through the Florida Relay Service by dialing 7-1-1. Florida Relay is a service provided to residents in the State of Florida who are Deaf, Hard of Hearing, Deaf/Blind, or Speech Disabled that connects them to standard (voice) telephone users. They utilize a wide array of technologies, such as Text Telephone (TTYs) and ASCII, Voice Carry-Over (VCO), Speech to Speech (STS), Relay Conference Captioning (RCC), CapTel, Voice, Hearing Carry-Over (HCO), Video Assisted Speech to Speech (VA-STS) and Enhanced Speech to Speech.

Howey Town Hall is inviting you to a scheduled Zoom meeting.

Topic: Town Council Meeting

Time: Oct 23, 2023 06:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

https://us06web.zoom.us/j/82600166011?pwd=Xd0f8vcKM2ba1dkwlhaCTgVfr6Dbkb.1

Meeting ID: 826 0016 6011

Passcode: 495749 Dial by your location

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Passcode: 495749

Find your local number: https://us06web.zoom.us/u/kWTycqGP3

Please Note: In accordance with F.S. 286.0105: Any person who desires to appeal any decision or recommendation at this meeting will need a record of the proceedings, and that for such purposes may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based. The Town of Howey-in-the-Hills does not prepare or provide this verbatim record. Note: In accordance with the F.S. 286.26: Persons with disabilities needing assistance to participate in any of these proceedings should contact Town Hall, 101 N. Palm Avenue, Howey-in-the-Hills, FL 34737, (352) 324-2290 at least 48 business hours in advance of the meeting.



Town Council Meeting

October 09, 2023 at 6:00 PM Howey-in the-Hills Town Hall 101 N. Palm Ave., Howey-in-the-Hills, FL 34737

MINUTES

Mayor MacFarlane called the Town Council Meeting to order at 6:00 p.m. Mayor MacFarlane led the attendees in the Pledge of Allegiance to the Flag. Councilor Reneé Lannamañ delivered an invocation.

ROLL CALL

Acknowledgement of Quorum

MEMBERS PRESENT:

Councilor Reneé Lannamañ | Councilor David Miles | Councilor George Lehning | Mayor Pro Tem Marie V. Gallelli | Mayor Martha MacFarlane

STAFF PRESENT:

Sean O'Keefe, Town Manager | John Brock, Town Clerk | Rick Thomas, Police Chief | Tom Wilkes, Town Attorney | Tom Harowski, Town Planner | Morgan Cates, Public Works Director | Matt McDonald, Code Enforcement Officer | Fred DeVito, Finance Supervisor

AGENDA APPROVAL/REVIEW

Motion made by Councilor Lannamañ to approve the meeting's agenda; seconded by Mayor Pro Tem Gallelli. Motion approved unanimously by voice vote.

Voting

Yea: Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

Nay: None

CONSENT AGENDA

Routine items are placed on the Consent Agenda to expedite the meeting. If Town Council/Staff wish to discuss any item, the procedure is as follows: (1) Pull the item(s) from the Consent Agenda; (2) Vote on the remaining item(s); and (3) Discuss each pulled item and vote.

- 1. The approval of the minutes and ratification and confirmation of all Town Council actions at the September 25, 2023 Town Council Meeting.
- 2. The approval of the minutes and ratification and confirmation of all Town Council actions at the September 25, 2023 Town Council Public Hearing on Final Budget and Millage Rate.

3. The approval of the minutes and ratification and confirmation of all Town Council actions at the September 26, 2023 Town Council Workshop. (*Minutes were not ready for this meeting and were not voted on during the Consent Agenda*)

Motion made by Councilor Miles to approve only Item #1 and Item #2 (not Item #3); seconded by Councilor Lannamañ. Motion approved unanimously by voice vote.

Voting

Yea: Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

Nay: None

PUBLIC HEARING

None

OLD BUSINESS

4. Discussion: Scope of October 30th Town Hall Meeting

Councilor Lannamañ introduced this item and presented her proposed scope for the October 30th Town Hall Meeting. Councilor Lannamañ proposed four topics for discussion, which were:

- 1) What would they like to see accomplished moving into fiscal year 2024-2025?
- 2) Development to a Town or City is key in its sustainability, what is their definition of "sustainability"?
- 3) Do you think the Town should move forward with building a water plant to be maintained and ran by Howey in the Hills?
- 4) Name two (2) concerns you have regarding the well-being and sustainability of Howey in the Hills.

Councilor Miles asked if Topic Item #3 was supposed to be "Wastewater Plant" not "Water Plant". It was confirmed by Councilor Lannamañ that wastewater was the focus of Topic Item #3.

Mayor Pro Tem Gallelli asked if there would be back-and-forth between the residents and the Town Councilors. It was confirmed that there would be (so that questions could be answered) as long as it was still confined to the 5-minute speaking limit proposed for this meeting.

Councilor Lannamañ proposed that Police Chief Thomas be made the moderator for the meeting. Councilor Miles preferred that the moderator be Mayor MacFarlane or the Town Manager, Sean O'Keefe. There was a consensus that Mayor MacFarlane would be the moderator for the meeting. It was also decided that Mr. O'Keefe would be the Timekeeper for the meeting.

Residents wishing to speak will need to fill out a comment card ahead of time and submit it to the Town Clerk. These comment cards will then be sorted by the topic that the resident would like to speak on. If a resident wanted to speak about multiple topics, they could, but they were still only allowed to speak once during the meeting for a total time of five minutes.

There was a consensus to remove the "two concerns" requirement in Topic item #4 and allow residents to speak about just one concern if they choose so. Also, it was decided that a fifth Topic Item would be created that covers miscellaneous topics.

Mayor MacFarlane opened Public Comment for this item.

Tim Everline, 1012 N. Lakeshore Blvd. – Mr. Everline suggested that, instead of talking about all topics together, topics should be discussed separately in five sections.

5. Discussion: LDC/Comprehensive Plan - Status of Proposed Amendments

Tom Wilkes, Town Attorney, introduced this item. Mr. Wilkes stated that a starting point for the proposed changes that the Town Council wanted to make in reference to development within the Town should start by amending the Town's Future Land Use Element of its Comprehensive Plan. Some of the proposed changes included changing the allowable density of house units from 4 units an acre to 3 units an acre and changing how the Town determines "open space" for a neighborhood.

Mr. Wilkes explained the process to change the Town's Comprehensive Plan included have a Public Hearing during a Planning and Zoning Board meeting and then two Public Hearings during Town Council Meetings (in which the Town Council would function as the Land Planning Agency). The first Public Hearing before the Town Council would be called a Transmittal Hearing, after which the proposed amendments to the Comprehensive Plan would be sent to the State of Florida's Department of Commerce for review. The second Public Hearing before the Town Council would be the final Adoption Hearing.

Both Mr. Wilkes and Town Planner, Tom Harowski, suggested, prior to starting the formal process of amending the Comprehensive Plan, that the Town Council should hold a Workshop to discuss the ramifications of the proposed changes.

Councilor Miles stated that he believed that proposed amendments to the Town's Comprehensive Plan should be enough to satisfy the State-required Evaluation and Appraisal Review (EAR) of the Comprehensive Plan (which is due for the Town by 10/1/2024). Mr. Wilkes and Mr. Harowski disagreed with Councilor Miles in that this amendment itself would not be enough to satisfy the EAR requirements.

Councilor Lehning wants a detailed timeline and schedule which would include all necessary components through completion of amendment process to be submitted to the Town Council at the proposed Workshop meeting. It was decided that the Workshop meeting would be scheduled for Wednesday, November 1, 2023.

Mayor MacFarlane opened Public Comment for this item. Seeing no public comments, Mayor MacFarlane closed Public Comment.

NEW BUSINESS

6. Discussion: Planning Board Omnibus Recommendations Package

Councilor Miles stated that he would like to discuss just the points that he disagreed with. Councilor Miles stated that he thought the current Town code relating to flagpoles was good enough and did not need to be changed. Councilor Miles disagreed with property owners needing to have to get a permit for installing flagpoles. Mayor MacFarlane stated that the only thing she saw from the proposed standards that should stay would be the required 5-foot setback from the property line. It was decided that the Ordinance would be written with the old regulation relating to flagpoles, but with the addition of "flagpoles shall have a minimum five (5) foot setback from all property lines".

Councilor Miles stated that, in section 2.03.03 **Townhomes**, he would like to see the minimum proposed requirement for the square footage of garages extended from 400 square feet to 441 square feet.

Councilor Miles stated, in section 7.10.00 **Approved Tree and Plant List**, that he did not want to see Laurel Oaks added to the list, and that Red Maple (which was already on the list) was a good alternative for it. Councilor Lannamañ stated that she would like to see Japanese Blueberry Trees added to the list.

Councilor Miles asked why there was a proposed change to 7.08.01 **Required Landscaping**, which changed the amount of required landscaping area from 50% to 60%. Town Planner, Tom Harowski, stated that, some years back, the Town had changed its Water Conservation rules to come more in alignment with the Water Management District's recommendations and that this is one of the changes that was adopted in the Town's Water Conservation Policy. Mayor MacFarlane stated, that the Town absolutely needed to make this change, otherwise it would be detrimental to the Town's renewal of its Consumptive Use Permit (CUP).

The next section that Councilor Miles wanted to discuss was 7.12.01 **Permit Required** (to remove a tree). Councilor Miles wanted to know if the proposed changes would require the Town to get a permit from itself to remove a tree in the right-of-way. Mayor MacFarlane stated the Town would not require itself to get a permit. Councilor Miles wanted to know if there would be a cost to get a permit to remove a tree. Mayor MacFarlane stated that she did not think there was a cost for that.

Mr. Harowski stated that he would make the changes that were discussed and submit them to the Town Attorney and Town Clerk so that they could begin writing the necessary ordinance.

7. Discussion: Howey Police Department Management

Councilor Lannamañ explained that she asked for this item to be added to the meeting's agenda. Councilor Lannamañ stated that she had been concerned about the Police Chief reporting to someone who does not have a law enforcement background, as opposed to them reporting to a Mayor or Commissioner. Councilor Lannamañ stated that, to change the reporting structure for the Police Chief, it would require a charter change for the Town, so this might be a topic for the Town to look at next year.

Mayor MacFarlane stated that she had been concerned about when the Town Manager had told the Police Chief to hold off on hiring an additional officer during the last year and that she thought that act was a safety concern. Mayor MacFarlane stated that she did not want to see this happen again in the future.

Town Attorney, Tom Wilkes, summarized an email that he had sent all the Town Councilors about changing the reporting structure of the Police Chief. Mr. Wilkes stated that it was a widespread practice within the State for municipalities with a Council/Manager form of government to have the Police Chief report to the Town Manager (as in the case of the current reporting structure in the Town's current charter). Mr. Wilkes stated that it was common practice to have all departments in the Town report to the Town Manager, with the expectation that, typically, the Town Attorney reports directly to the Town Council.

Councilor Miles stated that, in all of his years of experience, he has never seen a municipality with a Council/Manager or Strong Mayor form of government in which the Police Chief did not report directly to the Town Manager or Mayor. Councilor Miles stated that, if the Town Council was not happy with the way the Town Manager was running things, rather than change the Town's charter, the Town Council should fire the Town Manager, although he was not suggesting that they should. Councilor Miles reminded the other Town Councilors that, just a week and a half prior, all the Town Councilors had given the Town Manager a satisfactory rating on his annual review. Councilor Miles stated that there were just two employees that the Town Council directly controls, the Town Manager and the Town Attorney; all other Town employees report to the Town Manager.

Mayor MacFarlane stated that she did not want any personnel being called out or reprimanded for talking to the Town Councilors individually.

Councilor Lannamañ asked how 911 calls get communicated to the Police Department. Chief Thomas stated that the Town get dispatched through the Lake County Sheriff's Office. Chief Thomas stated that this would be a problem in the future. This was because the Sheriff was planning on instituting a fee for the dispatch service and the Town Manager had removed it from the Town's budget, stating that the Town was disputing the fee. Chief Thomas stated that the dispute with the dispatch fee was between Mr. O'Keefe, Mr. Wilkes, and the Sheriff.

Mr. O'Keefe explained that the dispute with the dispatch fee stemmed from a question of double taxation. Currently, the dispatch fee is paid by everyone in Lake County out of their county property taxes. Going forward, all county residents will not be charged anything in addition to the current costs already in the county taxes. The Sheriff is proposing that all residents in municipalities would have to pay an additional fee out of their municipal property taxes for the same service that the county residents receive. Mr. O'Keefe explained that the Sheriff proposed very late in the budget process to institute this charge on municipalities and, as such, they have given municipalities six months to start paying before the service would be terminated. The Town's discounted cost for the current fiscal year would be approximately \$10,000. Mayor MacFarlane stated that she believes that the Town Council should have been better notified that the budget for the fee had been removed.

Mayor MacFarlane opened Public Comment for this item.

Joshua Husemann, 671 Avila Pl. – Mr. Husemann believed that both the Police Chief and the Town Manager should be trusted.

Glennys Barber, 307 S Lakeshore Blvd. – Ms. Barber stated that she believed that the Police Department should have their own dispatch and that she believed the Howey police were leaving the Town too much and working outside of the Town too much.

DEPARTMENT REPORTS

8. Town Hall

The department report was included in the packet for the meeting.

9. Police Department

Police Chief Thomas noted that the department report was included in the meeting's packet. Chief Thomas stated that Officer Billy Johns had recently resigned from the Police Department and the Department would soon be doing interviews for his replacement. Chief Thomas also noted that the Department would be hiring a new part-time officer. Mayor MacFarlane told Chief Thomas to let the Town Council know if they needed to do anything to assist him with the hiring process.

10. Code Enforcement

Code Enforcement Officer McDonald noted that the department report was in the meeting's packet. Councilor Lehning stated that he would like to see more information in the report. Officer McDonald stated that he would add violators' addresses to next month's report.

11. Public Works

Morgan Cates, Public Works Director, said that he had discovered that it would cost between \$100,000 and \$125,000 to bring the Talichet Wastewater Lift station up to the Town's standards.

Mr. Cates announced that he expected to finish interviewing candidates for the new Public Works Admin. Assistant position within a week after the meeting.

12. Library

Library Director, Tara Hall, announced that new extended hours for the Town's library had started. The library would now be open Monday through Friday, 10am to 6pm, and on Saturdays, 10am to 3pm.

13. Parks & Recreation Advisory Board / Special Events

None

14. Town Attorney

None

15. Finance Supervisor

Mayor MacFarlane introduced the Town's new Finance Supervisor, Fred DeVito, to the Town Council.

16. Town Manager

Town Manager, Sean O'Keefe, announced that drilling had commenced on the new well (Well #5). Mr. O'Keefe announced that the Town would be giving a Tour of the work being done on Water Treatment Plant #3 to Senator Baxley at 10am on Wednesday, 10/25/2023.

COUNCIL MEMBER REPORTS

17. Mayor Pro Tem Gallelli

Mayor Pro Tem Gallelli asked if the Town Manager had any new information about the potential sale of land to the Lake County Fire Department. Mr. O'Keefe stated there was no new information.

Mayor Pro Tem Gallelli asked for an update on the Citrus Ave. road project.

18. Councilor Lehning

Councilor Lehning stated that he would like to see an agenda item for the next meeting that included the Town Council collectively approving a letter to the Lake-Sumter MPO and Florida Department of Transportation to support a study creating a bypass around the Town.

19. Councilor Miles

Councilor Miles spoke about the Citrus Avenue paving project. Councilor Miles stated that he had spoken with representatives from the Howey Mansion, and they would like to see the project happen during the slow time for the Mansion, which would occur after April. Councilor Miles also stated he would like to see Citrus Ave. rebuilt at a width of 24 feet. Councilor Miles stated that the sidewalks that were in front of the Howey Mansion were in terrible condition, and it was said that they should be fixed when the road project happens.

Councilor Miles stated that, for every hardwood tree that was removed when redoing the intersection of Citrus Ave. and Camellia, the Town should replant two 3" caliper oak trees on the right-of-way on Citrus Ave. on the Howey Mansion side of the road. Councilor Miles also stated that any royal palm tree that was in the affected area of the Citrus Ave. and Camellia intersection, those trees should be dug up and replanted somewhere else in the town.

Councilor Miles started a conversation about the status of wastewater projects and sites. During this conversation, Councilor Miles stated that the Town Engineer would be sending people into the Town's old landfill site to do core drillings to see about the suitability of using that site as a park. Councilor Miles stated that the property owners that were discussing donating the 5-acre wetland parcel off Number Two Road wanted to have a park named after them. Councilor Miles stated that the old landfill parcel would be ideal, but that Pine Park would be the second choice. Councilor Miles stated that he would like to have an agreement with the landowners looking to donate the land brought before the Town Council by December.

Councilor Miles stated that another Town Councilor had sent an email to the Mayor and other Town Councilors and that this was a violation of Florida's Sunshine law. Councilor Miles asked the other members of the Town Council to not violate the Florida Sunshine law and, in the future, to refrain from sending emails to other Town Councilors or the Mayor.

20. Councilor Lannamañ

Councilor Lannamañ stated that she had unintentionally violated the Sunshine law by sending the email to the Mayor. Councilor Lannamañ asked for kindness and decorum in the meeting.

21. Mayor MacFarlane

Mayor MacFarlane reminded the Councilors that Senator Baxley would be touring the well drilling site on October 25, 2023, at 10am and asked for the other Town Councilors to attend the tour as well.

Mayor MacFarlane stated the Parks and Recreation Board needed to make the designing and building of Pine Park their top priority. Morgan Cates, Public Works Director, stated that, at the October Parks and Recreation Board meeting, one of the agenda topics was the creation of the RFP for the design of Pine Park. Mayor MacFarlane would like to see the construction of the entrance to the park start soon.

Mayor MacFarlane stated that she would like to see the Parks and Recreation Board discuss a tree plan. She would also like the board to come up with a plan on how to maintain newly planted trees.

Mayor MacFarlane told the Town Manager that representatives from Halff and the Town's Engineer needed to be invited to Senator Baxley's well tour.

PUBLIC COMMENTS

Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

Tim Everline, 1012 N. Lakeshore Blvd. – Mr. Everline asked if the Town Hall Office Supervisor had been hired.

Beth Flack, 607 N. Florida Ave. – Mrs. Flack read a statement that she had composed stating that she wanted a public apology from Councilor Miles in reference to Councilor Miles calling the Friends of the Library a "slush fund" for Library Director, Tara Hall, and for the way Councilor Miles spoke to Mrs. Flack during the September 11, 2023, Town Council Meeting. Mrs. Flack also wanted the Town Council to give a Public Reprimand to Councilor Miles for his behavior during the September 11, 2023, Town Council Meeting. Mrs. Flack also stated that she did not believe that the minutes for the September 11, 2023, Town Council Meeting were descriptive enough about what Councilor Miles had said during the meeting.

Azure Botts, Former Code Enforcement Officer for the Town of Howey-in-the-Hills – Mrs. Botts was upset at what the Town Council had decided in relation to flagpoles during this meeting's discussion on the LDC Omnibus and she wanted the Town Council to reconsider.

ADJOURNMENT

There being no further business to discuss, a motion was made by Councilor Lannamañ to adjourn the meeting; Mayor Pro Tem Gallelli seconded the motion. Motion was approved unanimously by voice vote.

| The Meeting adjourned at 8:36 p.m. | Attendees: 38 |
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| ATTEST: | Mayor Martha MacFarlane |
| John Brock, Town Clerk | |
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Town Council Workshop

September 26, 2023 at 1:00 PM Howey-in the-Hills Town Hall 101 N. Palm Ave., Howey-in-the-Hills, FL 34737

MINUTES

Mayor MacFarlane called the Town Council Workshop to order at 1:00 p.m

ROLL CALL

Acknowledgement of Quorum

MEMBERS PRESENT:

Councilor Reneé Lannamañ | Councilor George Lehning | Mayor Pro Tem Marie V. Gallelli | Mayor Martha MacFarlane | Councilor David Miles (via Zoom Phone Call)

STAFF PRESENT:

Sean O'Keefe, Town Manager | John Brock, Town Clerk

NEW BUSINESS

1. Discussion: Town Manager Annual Review

Mayor MacFarlane acknowledged that this was the first time that the Town Council had performed an annual review on a Town Manager. Sean O'Keefe, Town Manager, gave a brief opening statement.

Mayor Pro Tem Gallelli reviewed her comments that she had made in Mr. O'Keefe's review.

Both Councilor Lannamañ and Mayor MacFarlane stated that the Town should create a Mission Statement (as the Town currently does not have one) and a new logo.

Mayor Pro Tem Gallelli asked Mr. O'Keefe what personal goal he had that wasn't given by the Town Council. Mr. O'Keefe stated that he would like to see the Town's Personnel Policy updated.

Councilor Lehning stated that, overall, he believed Mr. O'Keefe had done a good job, but there were times that he needed to be more assertive with his direct reports.

Councilor Lannamañ stated that she had heard that the previous Finance Supervisor had said, "That's not my job," in the presence of Mr. O'Keefe and believes that Mr. O'Keefe should have taken issue with that statement at the time, with more immediate feedback.

Councilor Lannamañ asked about how often staff meetings occur. Mr. O'Keefe stated that he holds biweekly Director meetings. Councilor Lannamañ suggested that Mr. O'Keefe hold joint staff meetings with all Town employees every 6 months or once a year.

Councilor Miles stated that he believed Mr. O'Keefe has done a satisfactory job during the past year.

Mayor MacFarlane stated that she had overheard Sean speaking with Mayor Pro Tem Gallelli at a luncheon and Mr. O'Keefe had stated that looking for grants was not in his job description, but she reminded Mr. O'Keefe that looking for grants had been in his Town Administrator job description, and he should still be doing this. Mr. O'Keefe apologized and stated that he may have given a quick answer in a moment and that he was currently working this year's plan for a schedule of grant applications and that grant writing was a team effort.

Mayor MacFarlane wanted to know when the Town had signed away its rights to Lake County for CDBG grants.

Mayor MacFarlane suggested that more team building exercises and sharing of information should be done in the Town.

Mayor MacFarlane stated that, normally, the Police Chief does not report to the Town Manager, but that they report directly to the town or city council. Mayor MacFarlane stated that she believes that this is something the Town Council should look at in the future.

PUBLIC COMMENTS

Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

Tim Everline, 1012 N Lakeshore Blvd. – Mr. Everline was concerned about the Town's increase in budget from the previous year. Mr. Everline was concerned about how the Town spent \$300,000 of its ARPA money.

Mr. Everline was concerned that the Finance Supervisor had quit during the last year and that the Town Clerk had received a 19% raise.

Mr. Everline said he thought Mr. O'Keefe was too quiet during meetings.

Mr. Everline stated that he believed meeting packets came out too late and that there had been too much of a delay reviewing and amending the Town's Land Development Code and Comprehensive Plan.

Mr. Everline stated that he doesn't like the Town Planner's vision for the Town.

Jim Steele, 1003 N. Temple Ave. – Mr. Steele stated that he thinks Mr. O'Keefe is a great asset to the Town and is doing a great job.

Mr. Steele stated that, if a department director goes to the Town Council directly (over Mr. O'Keefe's head), this was a bad thing. Mr. Steele said that he hoped this doesn't happen.

Mayor MacFarlane stated that she believed that the Town Council should establish the role of the Town Manager. Mayor MacFarlane stated that, rather than have the Town Manager introduce or explain items during the Town Council Meetings, the subject matter experts, such as the Town Planner, Town Attorney, or Town Engineer, should be introducing the items. The expectation should be that the Town Manager should manage the process.

Mayor MacFarlane stated that she thought the cycle of reviews should be changed so that they are completed right before the budget cycle begins. Mid-year reviews should be completed in October and final reviews should be completed in April.



ADJOURNMENT

There being no further business to discuss, a motion was made by Councilor Lannamañ to adjourn the meeting; Mayor Pro Tem Gallelli seconded the motion. Motion was approved unanimously by voice vote.

| The Meeting adjourned at 2:00 p.m. | Attendees: 17 | |
|------------------------------------|---------------|-------------------------|
| ATTEST: | | Mayor Martha MacFarlane |
| John Brock, Town Clerk | | |
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TMHConsulting@cfl.rr.com 97 N. Saint Andrews Dr. Ormond Beach, FL 32174

PH: 386.316.8426

MEMORANDUM

TO: Howey-in-the-Hills Town Council

CC: J. Brock, Town Clerk

FROM: Thomas Harowski, AICP, Planning Consultant SUBJECT: Hillside Groves Phase 1 Final Subdivision Plan

DATE: October 3, 2023

The Town has received an application for final subdivision approval for Phase 1 of the Hillside Groves mixed use development. This project, formerly known as The Reserve, was approved in its current form following a major amendment to the original development approval. The amended project was approved by the Town Council at their regular meeting of October 24, 2022. The submittal of a request for final subdivision approval is the next logical step in the development process. The Planning Board reviewed the application at their regular meeting of September 28, 2023, and recommended approval of the final subdivision plan.

Review Process and Project Status

The Town's process for Village Mixed Use developments includes approval of planned unit development agreement that sets out the concept plan for the development and any specific parameters that will govern the project in addition to the Town's land development regulations. Once the development agreement is approved (October 24, 2022, in this case) the project can proceed to a preliminary subdivision plan for any lots to be created or a site plan for any non-residential development. In this case the preliminary subdivision plan was approved at the same time as the amended development agreement. As noted above, the next step in the process is the final subdivision plan.

The final subdivision plan is the point in the development process where detailed engineering for streets, utilities, stormwater facilities and any other subdivision improvements are completed. The review process for a final subdivision plat is to check the design for compliance with Town standards and compliance with general engineering design principles. The plan is compared with the preliminary subdivision plan to verify that the design as submitted is consistent with the preliminary subdivision plan. The layout of streets, lots, and other site arrangements of land in the project is done at the preliminary subdivision phase. So long as the final subdivision plan is consistent with the preliminary subdivision plan, the review is basically a technical evaluation.

The Reserve project includes 378 acres. Phase One encompasses 140 acres or 37% of the total project area. The overall project includes residential development in four phases using the Hillside Groves name, commercial development, and a civic use tract. The Town has previously approved a site plan for the Howey Self Storage miniwarehouse project located on SR 19 just south of the Florida Avenue intersection. The Howey Self Storage project is part of the larger Reserve development. At this time the Howey Self Storage Project has not sought a permit for construction. Hillside Groves is the residential portion of The Reserve project with this application seeking approval for the final subdivision plan for phase one. The first phase residential development includes 245 units or about one-third of the residential unit total of 728.

Final Subdivision Plan

The final subdivision plan is the last step before the project is authorized for construction. The project has reserved sewage treatment capacity with the Central Lake Community Development District, and the final subdivision plans show the sewage collection system that will support the project. The Town has adequate potable water capacity to support the project and the final subdivision plans include designs for extending water service to the site and for serving individual lots. The traffic study found the affected roadway segments have adequate capacity to operate within the designated level of service for phase one and for the project at buildout. The traffic study recommended turn lanes at the project entrance on SR-19 which will be provided in accordance with FDOT permitting, and the project will include turn lanes at the intersection with Number Two Road as required by Lake County. Additional right-of-way dedication is also required by Lake County. The stormwater plan meets current state and Town requirements per the engineering review. Due to the age of the project it is exempt from Lake County School concurrency.

The first phase of the project includes the central collector road and residential neighborhoods in the center of the project as shown on the accompanying diagram. The first phase residential component includes 129 units on 50 x 80 foot lots and 116 units on 50 x 115 foot lots. This phase also includes stormwater systems and utilities to support the residential development. Some of the utility work will be off-site to extend water and sewer systems from the current plant locations.

The project was reviewed by the Development Review Committee at several meetings with the last review conducted on August 10, 2023. Following that DRC meeting the applicant made final adjustments that were reviewed by the Town engineer and found to be in compliance with the Town code and engineering practice.

Final subdivisions are required to begin construction within 18 months of final approval by the Town, unless the project is granted a time extension. The applicant will be required to submit permits from state and local agencies including:

- Florida DEP for water and sewer system construction
- Florid DEP for wetland impacts
- FDOT for improvements within the SR 19 right-of-way
- Lake County for improvements within the Number Two Road right-of-way

- St Johns River Water Management District for stormwater systems
- An NPDES permit is also required for runoff control during construction

At the August 19, 2023 Development Review Committee meeting Mr. Miles submitted a list of eight questions about the proposed plan set. The applicants were asked to provide a response for each of these items. The response from the project engineer is included in the agenda packet. These comments were discussed as part of the Planning Board meeting including the formal response submitted by the applicant and comments from staff. The Planning Board did not direct any changes to the plan based on this discussion. There may still be some open issues so far as Mr. Miles is concerned, and he will discuss these at the Town Council meeting.

Recommendation

The final subdivision plan is consistent with the approved preliminary subdivision plan, and the Town's engineering consultant has found the plans to meet the Town's design requirements and good engineering practice. The recomemndation is to approve the final subdivision plan.

September 15, 2023

Tom Harowski Representing the Town of Howey in the Hills 97 N. Saint Andrews Dr. Ormond Beach, FL 32174

RE: Hillside Groves Subdivision: Comment Response Letter

Dear Mr. Harowski:

This letter is written to address the comments found in your September 11, 2023 email where you tabulated comments from recent public meetings. Below are the listed comment, follow by our response in **bold**.

1) Need to address improvements to Number Two Road to the west of the entrance to road A.

The turn lane on Number 2 Road is show on the civil engineering plan set by our firm.

2) The road A collector road is over 8/10 of a mile long and plans have only 16 streetlights (8 on each side of the road). Councilor Miles would like to see this doubled to 32 streetlights.

The final street light locations will be designed at a later date and be in accordance with photometric standards and other jurisdictional standards related to light levels and other factors.

3) There is no entrance sign to the development off of Number Two Road.

The location and type of an entrance sign from Number 2 Road is at the discretion of the developer and may be installed in future phases.

4) Along much of Road A there is no irrigation provided, with Bahia grass being used. Councilor Miles thinks it needs to be irrigated.

Please reference the 500 series landscape sheets that shows full irrigation of the green space on Road A.

5) The L403 tract P had a pump station buffered only with landscaping. Councilor Miles stated that he wants it to have a 6-foot-high chain link fence (black or green coated) surrounding it.

Sheet 16 of the civil engineering set shows a standard detail with a 6' chain link fence in compliance with town code.

6) Unnamed amenity on tract R, Councilor Miles would like to know what this is.

The layout for the amenity has not yet been designed. The amenity plan will be submitted to the town at a later date.

7) On the Property's northwest corner is a townhouse tract, with more than 50 units. Councilor Miles would like a second ingress/egress point that is not an emergency entrance.

This access is shown on sheet 3 of the civil plan set. The councilor likely was referring to the landscape drawing set that did not show this connection. The landscape drawing base will be updated prior to construction. Note that the townhomes are in phase two and not part of these engineering approvals. Landscape drawings will be refined with the construction of phase two. The master site plan shown on sheet 3 were recently updated to show all requested connections in the approved preliminary site plan approved by the town.

8) At the south junction of Road A the commercial area is only showing 3 lanes and it should have two north and two south bound lanes (as shown the last time this item came before the Town Council).

FDOT staffers commented that the four-lane configuration would not be allowed. The consultant team held meetings with agency staffers to settle on the design shown today. The current design allows for one lane into the site via "ROAD A". Leaving the site is a through/left turn lane and an exclusive right turn lane. This is now a three-lane roadway where the site accesses S. Palm Avenue. FDOT has approved the construction drawings as an adequate access width.

For traffic coming from S. Palm Avenue, the commercial parcel is served by a four-lane section at the four-way intersection. An exclusive right lane and exclusive left lane are used for the patrons of the commercial area for access. This allows unrestricted through movements for vehicles entering and exiting the subdivision. For vehicles traveling toward S. Palm Avenue, they have access to a three-lane configuration. This offers through movements into the subdivision, exclusive left turns into the commercial site from the subdivision, and a through/right turn lane for vehicles leaving the subdivision and/or accessing the commercial site

Thank you for the opportunity to offer these responses, Please let me know if you have any questions. I can be reached at 904.265.3030 or at evans@cwienq.com.

Sincerely,

Eric D. Evans, PE Senior Project Manager



TOWN OF HOWEY-IN-THE-HILLS, FLORIDA

GENERAL LAND DEVELOPMENT APPLICATION

101 N. Palm Avenue, Howey-in-the-Hills, Florida 34737 Phone: (352) 324-2290 • Fax: (352) 324-2126

| REQUESTED ACTION Comp Plan Amendment | Date Received: | Application ID: | Received By: | |
|--|-------------------------------------|-------------------------------|--|---------|
| □ PUD □ Rezoning □ Preliminary □ Subdivision Minor □ Final □ Subdivision (check one below) □ Preliminary Subdivision (Final Subdivision | | REO | UESTED ACTION | |
| APPLICANT INFORMATION: Name: Whilliam (Bill) Ray, AILP E-Mail: WRAYASSOC AOL, COM. Address: 2712 SE 29th ST, Ocala, FL. Phone: Phone: Fax: OWNER INFORMATION: Name: EASTON & ASSOC E-Mail: E-Mail: Ejeaston @ theeaston gro. Address: 10165 NW 19th ST. Phone: 786-437-5806 | PUD Conditional Use Land Developmen | Rezo | oning Preliminary ivision Minor Subdivision (check one be Preliminary Subdivision Preliminary Subdivision | elow) |
| Name: MILLIAM (BILL) RAY, AILP Address: 2712 SE 29th ST, Ocala, Fly Phone: S2-425-8881 Owner Magent for Owner Attorney for Owner OWNER INFORMATION: Name: EAST ON & ASS DE E-Mail: Cleaston @ theeaston gro Address: 10165 NW 19th ST Phone: 786-437-5806 | | OMATION. | | |
| Address: 2712 SE 29th ST, OCALA, FJ. 17 Phone: Sep 81 Fax: Owner Name: EAST ON & ASS DE E-Mail: Eleast on @ theeast on gro Address: 10/65. NW 19th ST Phone: 786-437-5806 | | | | |
| OWNER INFORMATION: Name: <u>EASTON</u> & Assoc E-Mail: <u>ejeaston@theeastongro</u> Address: 19165 NW 19th ST Phone: 786-437-5806 | Name: WILLIAM (| SILL) KAY, AICH | E-Mail: WRAYASSOC @ AOL, COM | |
| OWNER INFORMATION: Name: EASTON & ASS DE E-Mail: ejeaston@theeastongro Address: 10/65 NW 19th ST Phone: 786-437-5806 | Address: 2112 SE C | 7" SI, OCALA, 12.1. , 3447 | Phone: Fax: | |
| Name: <u>EASTON</u> & Assoc E-Mail: <u>ejeaston@theeastongro</u> Address: 10/65 NW 19th ST Phone: 786-437-5806 | Owner V | Agent for Owner | Attorney for Owner | |
| Name: <u>EASTON</u> & Assoc E-Mail: <u>ejeaston@theeastongro</u> Address: 10/65 NW 19th ST Phone: 786-437-5806 | | | | |
| Name: <u>EASTON</u> & ASS DE E-Mail: <u>ejeaston@theeastongro</u> Address: <u>10165</u> NW 19th 57 Phone: <u>786-437-5806</u> Fax: | OWNER INFORMA | TION: | | |
| Address: 10/65 NW 19th 5 Phone: 786-437-5806 MIAMI, FL 33/72 Fax: | Name: EASTON & F | ISS DE E | -Mail: ejeaston@theeasto | mgroup. |
| MIAMI, FL 33/70 Fax: | Address: 10/65. N | W 19th 55 | Phone: 786-437-5806 | Con |
| | MIAMI, 1 | FL 32170 F | ax: | |
| | , | 20117 | | |

| PROPERTY INFORMATION: |
|---|
| Address: |
| General Location: South of No. 2 KD- North of SR 19 |
| Current Zoning: PuD Current Land Use: VMU |
| Parcel Size: 375.2 Act/- Tax Parcel #: |
| Legal Description Attached V Yes No Survey Attached V Yes No |
| Pre-Application Meeting Date: (Attach Pre-Application Form) |
| Application Fee: \$ |
| Applicant's Signature: Much Ray ALP (Signature) (Date) WILLIAM (BILL) A. RAY ALL P |
| Owner's Signature: (Provide letter of Authorization) Edward J. Easton (Print) William (Bill) A. Ray AICP (Print) (Print) (Signature) (Date) |
| Applications must be complete to initiate the review process |

Hillside Grove

PHASE 1- COMMUNITY LANDSCAPE ARCHITECTURE

Prepared For:

EASTON & ASSOCIATES

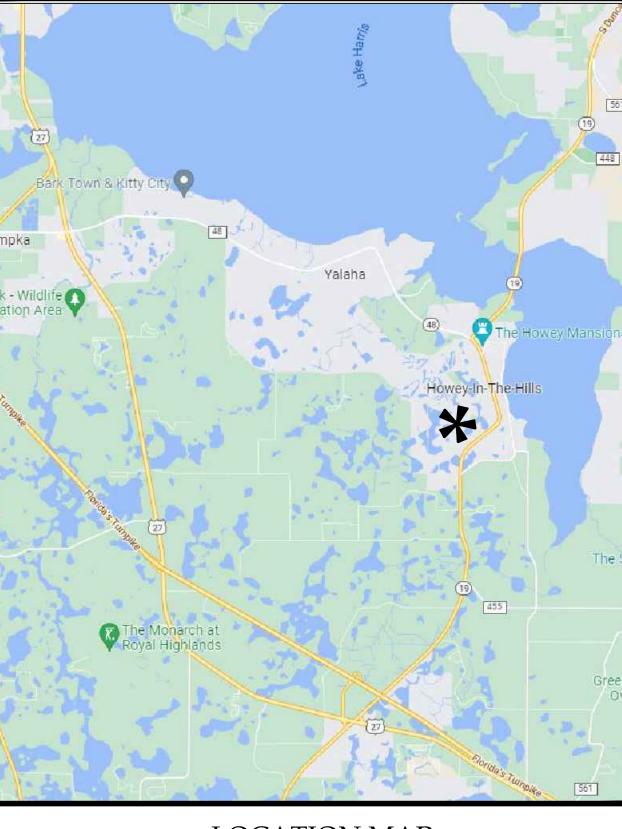
HOWEY-IN-THE-HILLS, FLORIDA

DEVELOPER / OWNER: EASTON & ASSOCIATES 10165 NW 19th ST Miami, FL 33172

PROJECT CIVIL ENGINEER: CONNELLY & WICKER, INC.

10060 Skinner Lake Drive, Suite 500 Jackcsonville, FL 32246 Contact: Rick Welch, P.E. phone: 904.265.3030 LANDSCAPE ARCHITECT:
BONNETT DESIGN GROUP, LLC
400 South Orlando Ave. Suite 201
Maitland, FL 32751
Contact: Todd W. Bonnett, RLA, LEED AP, CNU-a
phone: 407.622.1588

IRRIGATION DESIGNER:
SPADE IRRIGATION DESIGN
307 Dubsdread Circle
Orlando, Florida 32804
Contact: Larry W. Spade, PLA, CID
phone: 407.896.3904



LOCATION MAP

Applicable Codes, Regulations, Ordinances and Standards

Town of Howey-In-the-Hills

SHEET INDEX:

| L000 | COVER SHEET | L500 | OVERALL IRRIGATION PLAN |
|------|------------------------|------|----------------------------|
| L100 | DIGITAL SIGNATURE PAGE | L501 | IRRIGATION PLAN |
| | | L502 | IRRIGATION PLAN |
| L200 | LAYOUT PLAN | L503 | IRRIGATION PLAN |
| L201 | LAYOUT PLAN | L504 | IRRIGATION PLAN |
| | | L505 | IRRIGATION PLAN |
| L301 | HARDSCAPE DESIGN PLAN | L506 | IRRIGATION PLAN |
| | | L507 | IRRIGATION PLAN |
| L400 | OVERALL LANDSCAPE PLAN | L508 | IRRIGATION PLAN |
| L401 | LANDSCAPE PLAN | L509 | IRRIGATION PLAN |
| L402 | LANDSCAPE PLAN | L510 | IRRIGATION DETAILS & NOTES |
| L403 | LANDSCAPE PLAN | | |
| L404 | LANDSCAPE PLAN | | |
| L405 | LANDSCAPE PLAN | | |
| L406 | LANDSCAPE PLAN | | |
| L407 | LANDSCAPE PLAN | | |
| | | | |

Rev City Comments 2023-06-26

Rev City Comments 2022-11-17

Rev City Comments 2022-09-29

May 27, 2022

2021.195

LANDSCAPE PLAN

LANDSCAPE PLAN

LANDSCAPE DETAILS & NOTES



BONNETT design group, llc

landscape architecture . community planning FL # LC26000341

400 South Orlando Ave. Suite 201 . Maitland, FL 32751 407.622.1588 voice . 407.358.5363 fax www.BonnettDesignGroup.com

Know what's **below**.

Call before you dig.

BONNETT design group, llc landscape architecture community planning FL LC 26000341 400 South Orlando Ave. Suite 202 Maitland, FL 32751 407.622.1588 voice THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

TODD W. BONNETT, RLA

ON THE DATE ADJACENT TO THE SEAL.

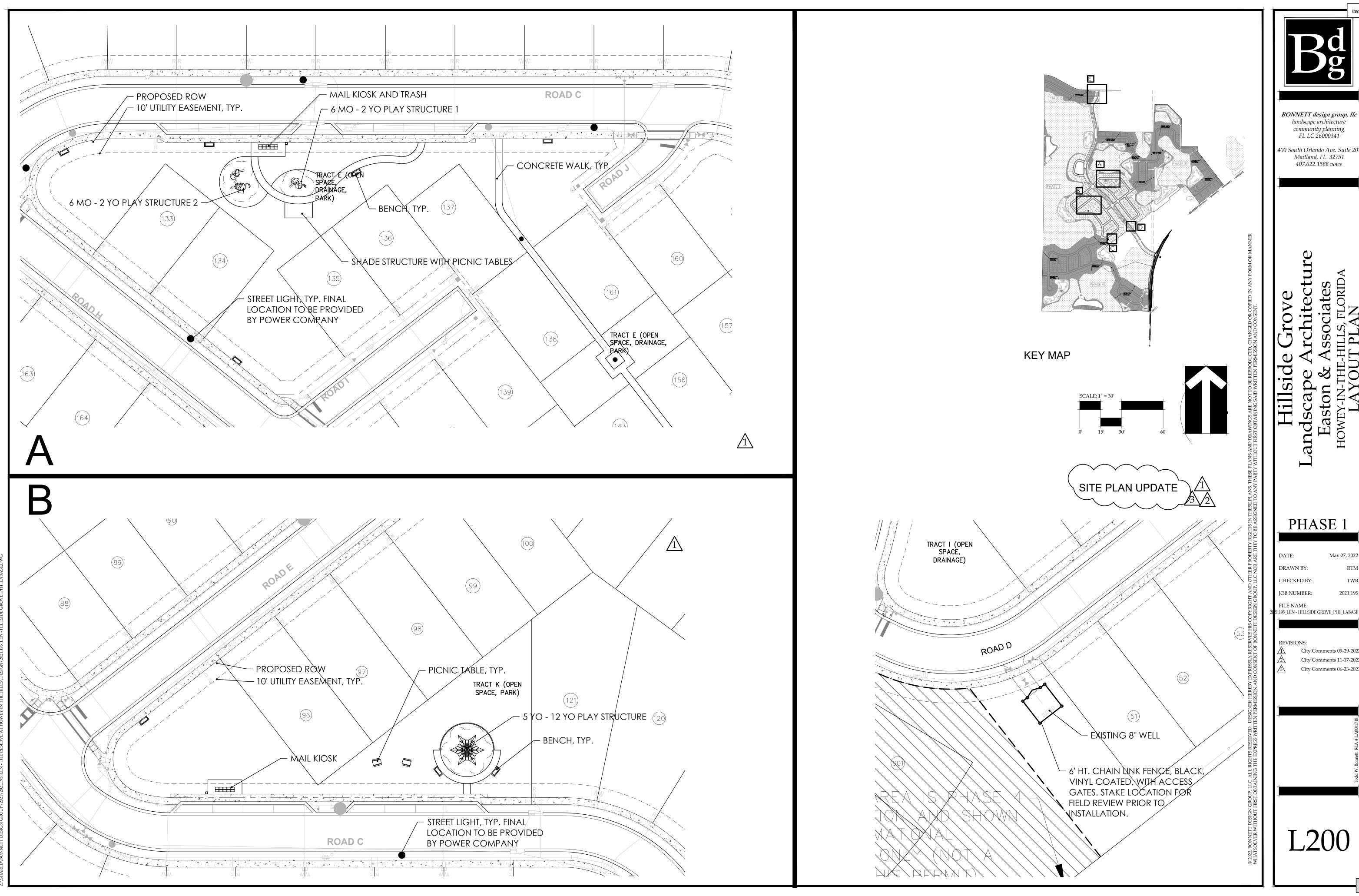
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMEN 13.

BONNETT DESIGN GROUP, LLC 400 S. ORLANDO AVE, SUITE 201 MAITLAND, FL 32751 FLORIDA REGISTRY: BONNETT DESIGN GROUP, LLC LA0001718 TODD W. BONNETT, RLA, FL LA0001718

THE ABOVE NAMED PROFESSIONAL LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G10-11.011, F.A.C.

| INDEX OF SHEETS | | | | |
|-----------------|----------------------------|--|--|--|
| SHEET | TITLE | | | |
| L001 | COVER | | | |
| L100 | DIGITAL SIGNATURE | | | |
| L200-L201 | LAYOUT PLAN | | | |
| L301 | HARDSCAPE DESIGN PLAN | | | |
| L400 | OVERALL PHASING PLAN | | | |
| L401-409 | LANDSCAPE PLANS | | | |
| L410 | LANDSCAPE DETAILS & NOTES | | | |
| L500-509 | IRRIGATION PLANS | | | |
| L510 | IRRIGATION DETAILS & NOTES | | | |

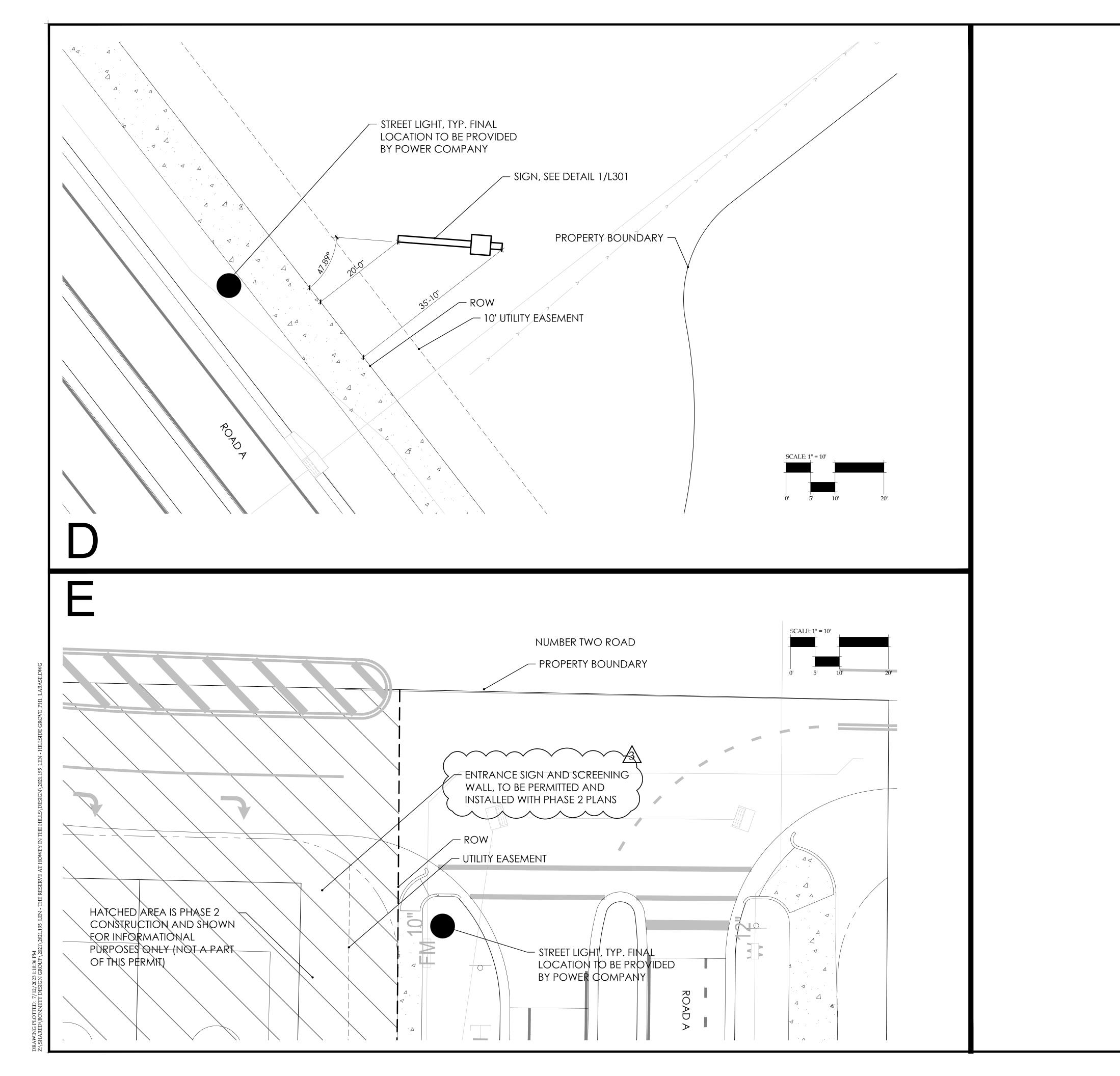
This item signed and nett, RLA Signature Printed considerable signature electronic PHASE 1 CHECKED BY: JOB NUMBER: FILE NAME: 2(21.195_LEN - HILLSIDE GROVE_PH1_LABASE City Comments 09-29-2022 City Comments 06-23-2023

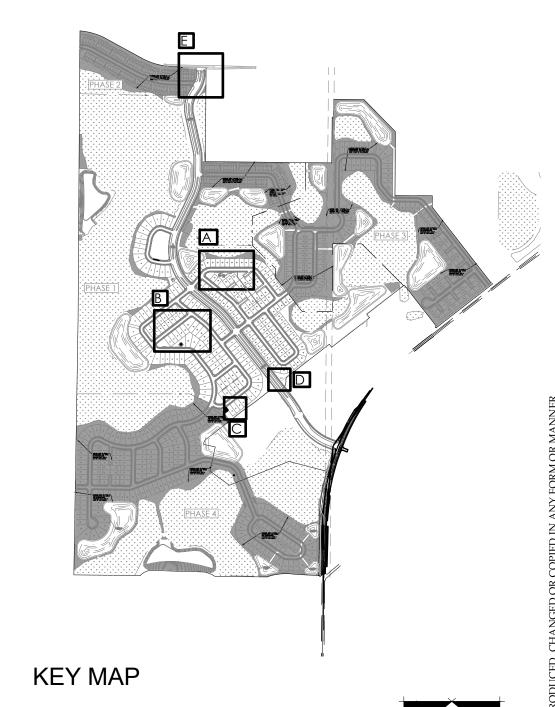


BONNETT design group, llc landscape architecture community planning FL LC 26000341

400 South Orlando Ave. Suite 201 Maitland, FL 32751

City Comments 09-29-2022 City Comments 11-17-2022 City Comments 06-23-2023





SCALE: 1" = 30'
0' 15' 30' 60'





Bdg

BONNETT design group, llc landscape architecture community planning FL LC 26000341

400 South Orlando Ave. Suite 201 Maitland, FL 32751 407.622.1588 voice

Hillside Grove

Landscape Architecture

Easton & Associates

HOWEY-IN-THE-HILLS, FLORIDA

PHASE 1

DATE: May 27, 2022

CHECKED BY:

JOB NUMBER:

DRAWN BY:

FILE NAME: 2021.195_LEN - HILLSIDE GROVE_PH1_LABASE

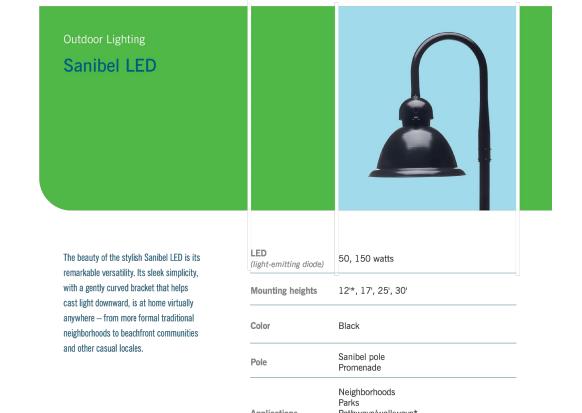
EVISIONS:

City Comments 09-29-2022 City Comments 11-17-2022 City Comments 06-23-2023

2021.195

201

NOTE: HARDSCAPE DESIGN PLANS PROVIDED TO DEMONSTRATE DESIGN INTENT ONLY AND ARE NOT VALID FOR CONSTRUCTION WITHOUT FINAL STRUCTURAL & REINFORCEMENT DESIGN.



Shopping centers

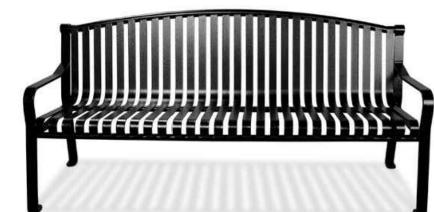
DUKE ENERGY.

duke-energy.com/OutdoorLighting or call us toll-free at 866.769.6417. *LIGHT FIXTURE SHALL MEET TOWN OF HOWEY IN THE HILL'S

STREET LIGHT SCALE: NTS

REQUIRMENTS OR TOWN/OWNER APPROVED EQUAL





PRODUCT DESCRIPTION Manufactured to withstand daily commercial use, this high quality imported steel bench features a back and seat made from 1-9/16" x 3/16" welded steel bars. The arms and legs are constructed from 2" x 1/2" steel, which will provide many years of outstanding service. Designed to wear well with seasonal exposure UV stabilized, corrosion resistant powder-coating 6' length

PRODUCT: COMMERCIAL PARK BENCH WITH CURVED BACK MODEL: CBPB-6CB-BK-BL COLOR: BLACK AS MANUFACTURED BY BYO RECREATION (www.byoplayground.com)

*OR OWNER APPROVED EQUAL



D006 • DOG WASTE STATION

PARTS LIST:

- Can (1)

• Post (1)

- Dispenser (1)
- Sign/Sign Bracket (1)
- Dispenser Keys (2)
- 600 Waste Bags
- 50 Can Liners
- Hardware Pack

PRODUCT: DOG WASTE STATION MODEL: D006

AS MANUFACTURED BY TERRABOUND SOLUTIONS (www.terraboundsolutions.com)

DOG WASTE STATION

SCALE: NTS



PRODUCT: SMALL HEXAGONAL SPACENET

AS MANUFACTURED BY KOMPAN (www.kompan.com)
*OR OWNER APPROVED EQUAL

SCALE: NTS

Item no. PCE100100-0602

*OR OWNER APPROVED EQUAL

Item no. PCE200200-0602 General Product Information

Data is subject to change without prior notice.

Color options Dimensions LxWxH

Play capacity (users)

Age group

5-12 YO PLAY STRUCTURE

MODEL: COR36331

appropriate activities sustains the playing and encourages them to return. The Voyager's three levels offer layers of play starting from ground level and up to the elevated platform

children's fine motor skills as well as their logical thinking and turn-taking skills. The slide with a slide. The ground level sand play funnels down is a fun reward for climbing up and

Black
Orange
Orange
Green
Green
Blue
Blue
Rainbow

PRODUCT: VOYAGER MODEL: PCE1001 AS MANUFACTURED BY KOMPAN (www.kompan.com)

6 MO - 2 YO PLAY STRUCTURE

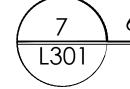


play for hours. The rich, roomy platforms offer and knees is important for later literacy and tactile and responsive play panels. These invite exploring and train fine motor and cognitive reading skills. The ground level play corner offers tables and a play panel that trains fine skills such as logical thinking. The bouncy and rocking rubber parts add responsive physical motor skills. In addition, it provides a quieter retreat area. The Tumbler, thanks to its two-

The developing youngster finds the Tumbler activities, such as a gentle sway. The tunnel sided play panels and ground level play points, challenging and supportive of their most important developmental areas, inviting them to invites all to play and trains social-emotional skills such as taking turns.

PRODUCT: TUMBLER 1/5/4/2022 MODEL: PCE2002

AS MANUFACTURED BY KOMPAN (www.kompan.com) *OR OWNER APPROVED EQUAL



6 MO - 2YO PLAY STRUCTURE 2 SCALE: NTS BONNETT design group, llc landscape architecture

community planning FL LC 26000341 400 South Orlando Ave. Suite 20

Maitland, FL 32751 407.622.1588 voice

PHASE

May 27, 2022

CHECKED BY: JOB NUMBER:

FILE NAME: 21.195_LEN - HILLSIDE GROVE_PH1_HSBASE

City Comments 09-29-202 City Comments 11-17-2022

2021.195

♠ Roll over image to zoom in. PRODUCT DESCRIPTION

> Our ribbed steel trash receptacle offers durability and style. The slatted wave design adds a subtle and simple interest point available in a variety of colors!

- 32 gallon capacity
- 3/4 #9 expanded metal inside ribbed steel with rolled edges

*OR OWNER APPROVED EQUAL Dimensions: 2.5' H x 2' W x 2' D PRODUCT: 32 GAL. RIBBED STEEL TRASH RECEPTACLE

MODEL: WC SERIES COLOR: VIP BLACK

AS MANUFACTURED BY BYO RECREATION (www.byoplayground.com)

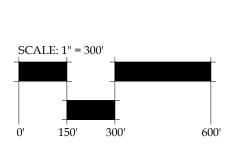


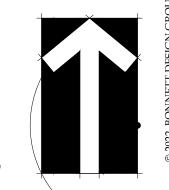
TRASH RECEPTACLE SCALE: NTS

| TREES AR LIM PE QV | QTY 2 10 14 12 | BOTANICAL NAME Acer rubrum Lagerstroemia indica `Muskogee` Pinus elliotti Quercus virginiana | COMMON NAME Red Maple Muskogee Crape Myrtle Slash Pine Live Oak | SPECIFICATION 2.5" Cal. Min. 10` ht. 2" cal., 8`-10` ht. x 30" spd. 2" cal., 8`-10` ht. x 24" spd. 2.5" Cal. Min. 10` ht. | NATIVE YES NO YES YES | WATER USE ZONE HIGH LOW LOW LOW | SPACING AS AS AS AS | REMARKS |
|--------------------------------------|--------------------------------|--|--|---|-----------------------------------|---|--|---|
| SP STREET TREES: COMMON TRACTS MG-C | 10 <u>QTY</u> 181 | Sabal palmetto <u>BOTANICAL NAME</u> Magnolia grandiflora `Brackens Brown Beauty` | Sabal Palm <u>COMMON NAME</u> Bracken`s Southern Magnolia | 12`-15` MIXED SPECIFICATION 4" Cal. | YES NATIVE YES | WATER USE ZONE MEDIUM | AS SPACING AS | REMARKS Min. 10' height |
| QV-C UA-C | 83 13 | Quercus virginiana Ulmus alata | Live Oak Winged Elm | 4" Cal. 4" Cal. | YES YES | LOW LOW | AS AS | Min. 10' height Min. 10' height |
| STREET TREES: LOTS MG-L UA-L | QTY 55 207 | BOTANICAL NAME Magnolia grandiflora `Brackens Brown Beauty` Ulmus alata | <u>COMMON NAME</u> Bracken`s Southern Magnolia Winged Elm | SPECIFICATION 4" Cal. 4" Cal. | NATIVE YES YES | WATER USE ZONE MEDIUM LOW | SPACING AS AS | REMARKS Min. 10' height Min. 10' height |
| SHRUBS Hpc Ph Pa | QTY 164 26 54 | BOTANICAL NAME Hamelia patens `Compacta` Philodendron x `Hope` Plumbago auriculata `Imperial Blue` | COMMON NAME Dwarf Firebush Hope Philodendron Plumbago | SPECIFICATION 3 gal., full 3 gal., 18"-24" 3 gal., 20"-20" | NATIVE YES NO NO | WATER USE ZONE LOW MEDIUM MEDIUM | SPACING 36" o.c. 36" o.c. 36" o.c. | REMARKS |
| Pm Src Sb | 90 64 122 | Podocarpus macrophyllus Serenoa repens `Cinerea` Spartina bakeri | Podocarpus Silver Saw Palmetto Sand Cord Grass | 7 gal., 30"x16" spd. 3 gal., 18" o.a. 3 gal., full | NO YES NO | MEDIUM LOW MEDIUM | 24" o.c. 36" o.c. 30" o.c. | < |
| Vowc Vo Zf Zp | 96 1,159 12 524 | Viburnum obovatum `Whorled Class` Viburnum odoratissimum Zamia furfuracea Zamia pumila | Dwarf Walter`s Viburnum Sweet Viburnum Cardboard Palm Coontie | 3 gal., 18" o.a. 3 gal., 18" o.a. 10 gal., 24" ht., 36" spd. 3 gal., 18" o.a. | YES NO NO YES | LOW MEDIUM LOW LOW | 36" o.c. 36" o.c. AS 24" o.c. | |
| GROUND COVERS aa agl | QTY 406 1,612 | BOTANICAL NAME Agapanthus africanus Arachis glabrata | COMMON NAME Lily of the Nile Perennial Peanut | SPECIFICATION 1 gal., full 1 gal., full. Use mulch fines | NATIVE NO NO | WATER USE ZONE MEDIUM LOW | SPACING 18" o.c. 12" o.c. | REMARKS |
| dtv dv jp Img | 1,221 59 217 356 | Dianella tasmanica `Variegata` Dietes vegeta Juniperus davurica `Parsonii` Liriope muscari `Emerald Goddess` | Varigated Flax Lily African Iris Parson`s Juniper Emerald Goddess Lilyturf | 1 gal., 12"-15" spd., full pot 1 gal., 2-3 ppp 1 gal., 12"-15" spd. 1 gal., 12"-15" spd., full pot | NO NO NO NO | LOW LOW LOW LOW | 18" o.c. 24" o.c. 18" o.c. 18" o.c. | |
| mcc | 479 | Muhlenbergia capillaris | Muhly Grass | 1 gal., 24" ht., full pot | YES | LOW | 24" o.c. | • |
| ta | 78 | Trachelospermum asiaticum | Asian Jasmine | 1 gal., full. Use mulch fines | NO | MEDIUM | 18" o.c. | DELLA DIVO |
| SOD/SEED soda sodb | QTY 34,708 sf 337,875 sf | BOTANICAL NAME Cynodon dactylon `Celebration` Paspalum notatum `Argentine` | COMMON NAME Celebration Bermuda Grass Argentine Bahia Grass | SPECIFICATION sod sod | NATIVE NO NO | WATER USE ZONE MEDIUM LOW | SPACING sod sod | REMARKS solid sod - weed free sand grown solid sod - we |



NOTE: THE LANDSCAPE PROVIDED FOLLOWS
THE WATERWISE FLORIDA LANDSCAPES AND
IS COMPLIANT WITH THE FLORIDA WATER STAR
PROGRAM PER SEC. 7.04.01 STANDARDS





Bdg

BONNETT design group, llc landscape architecture community planning FL LC 26000341

400 South Orlando Ave. Suite 201 Maitland, FL 32751 407.622.1588 voice

> rchitecture ssociates ILLS, FLORIDA

PHASE 1

DATE: May 27, 2022

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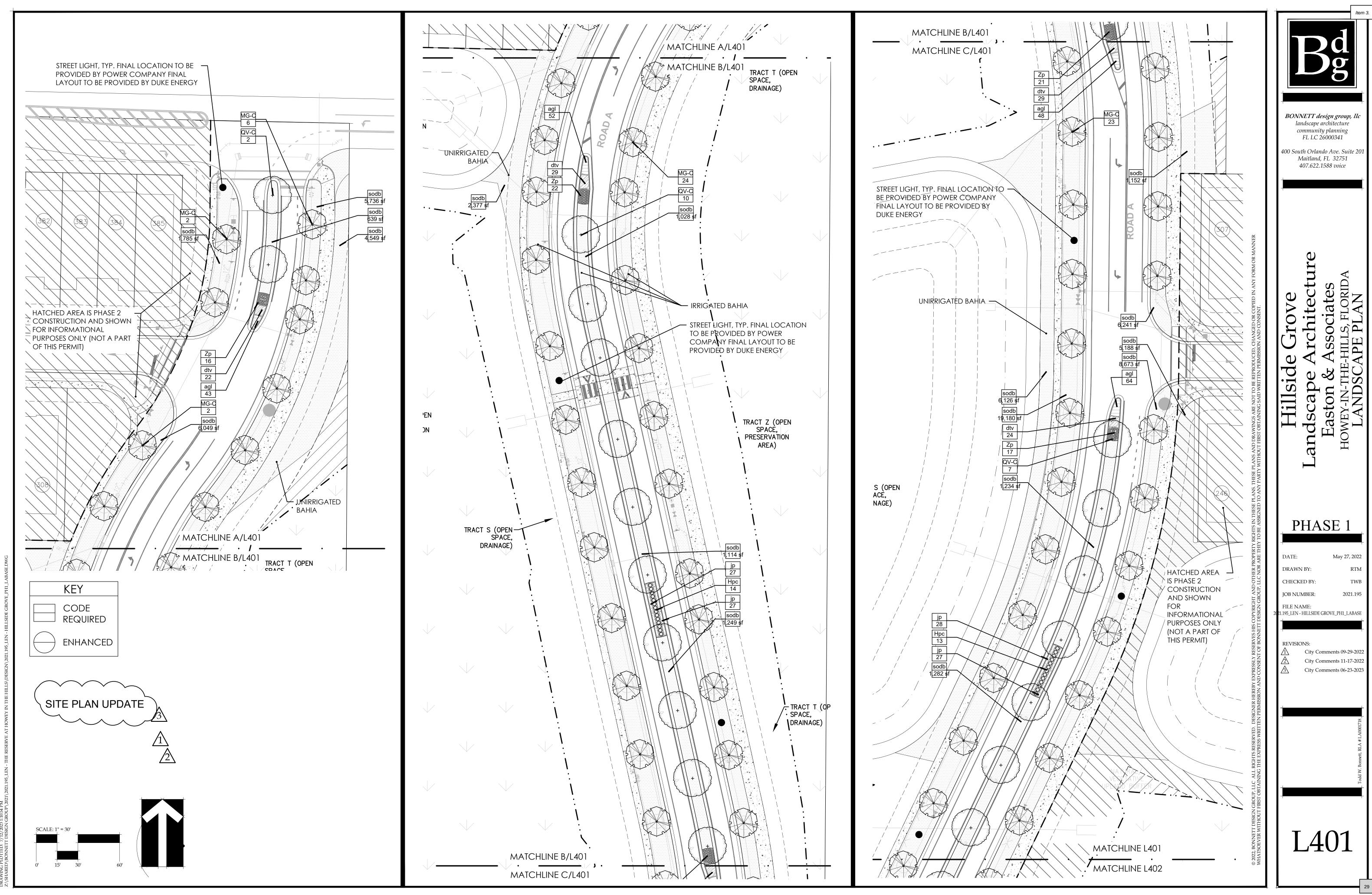
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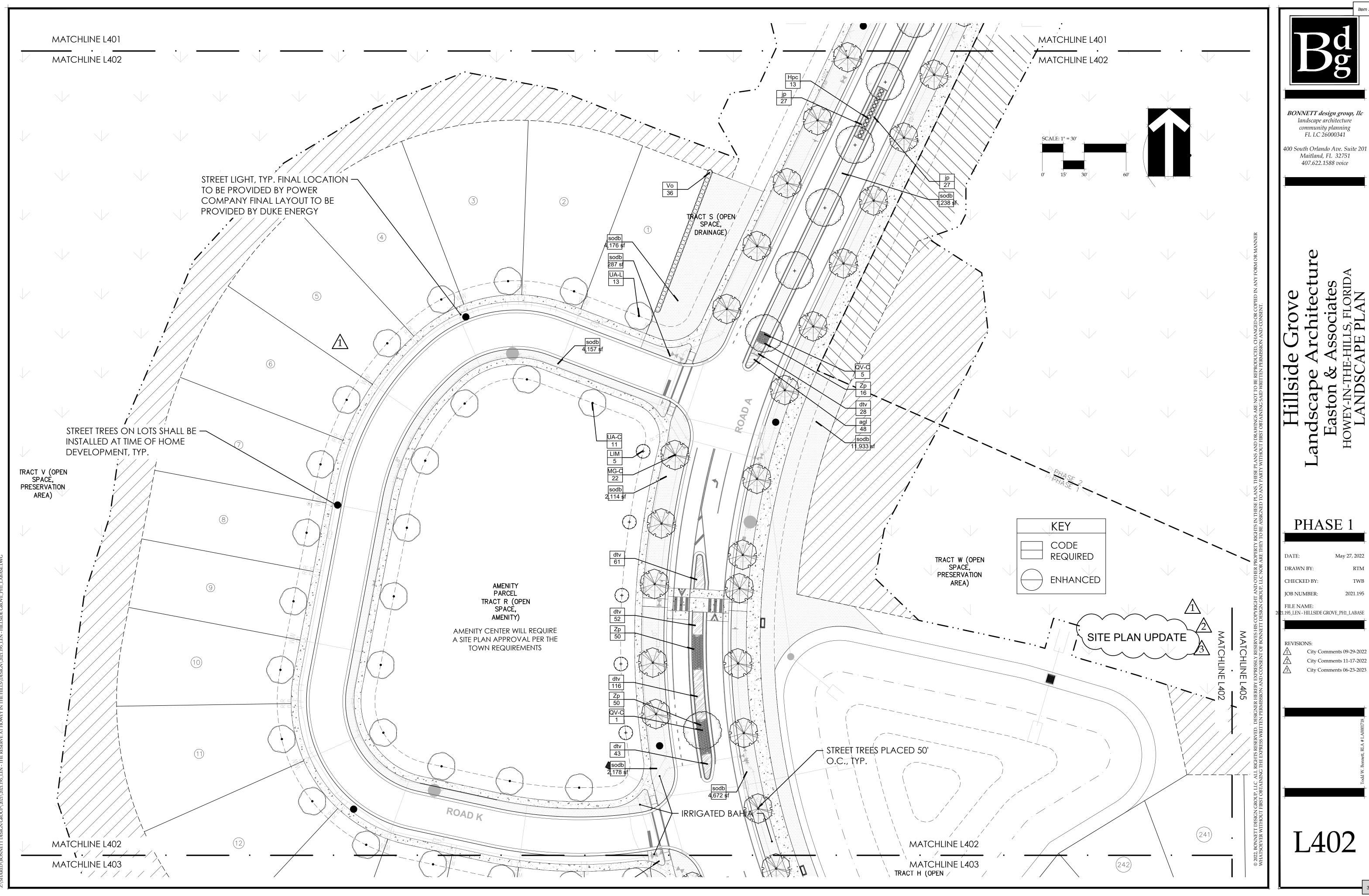
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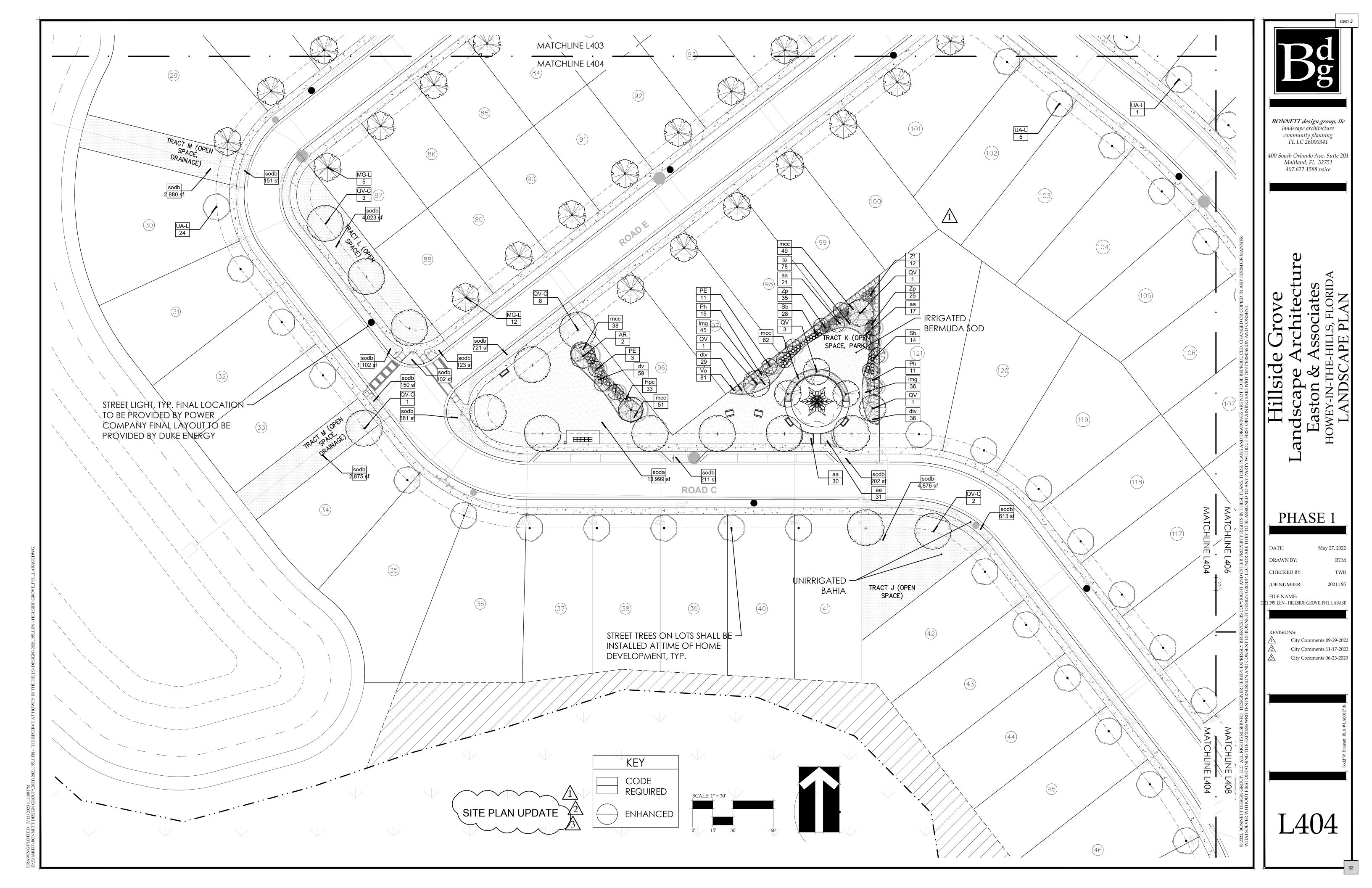
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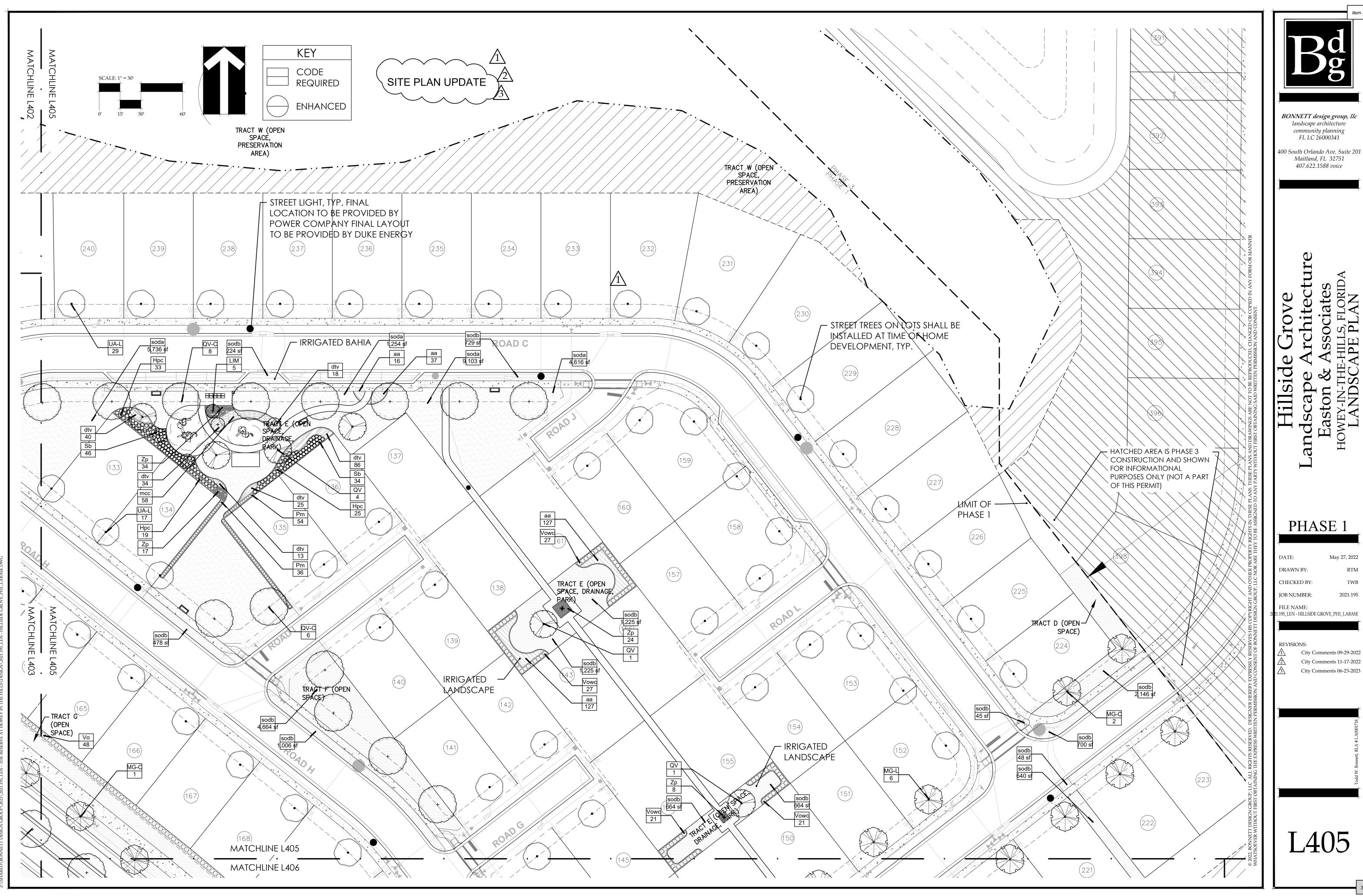
City Comments 09-29-2022 City Comments 11-17-2022 City Comments 06-23-2023

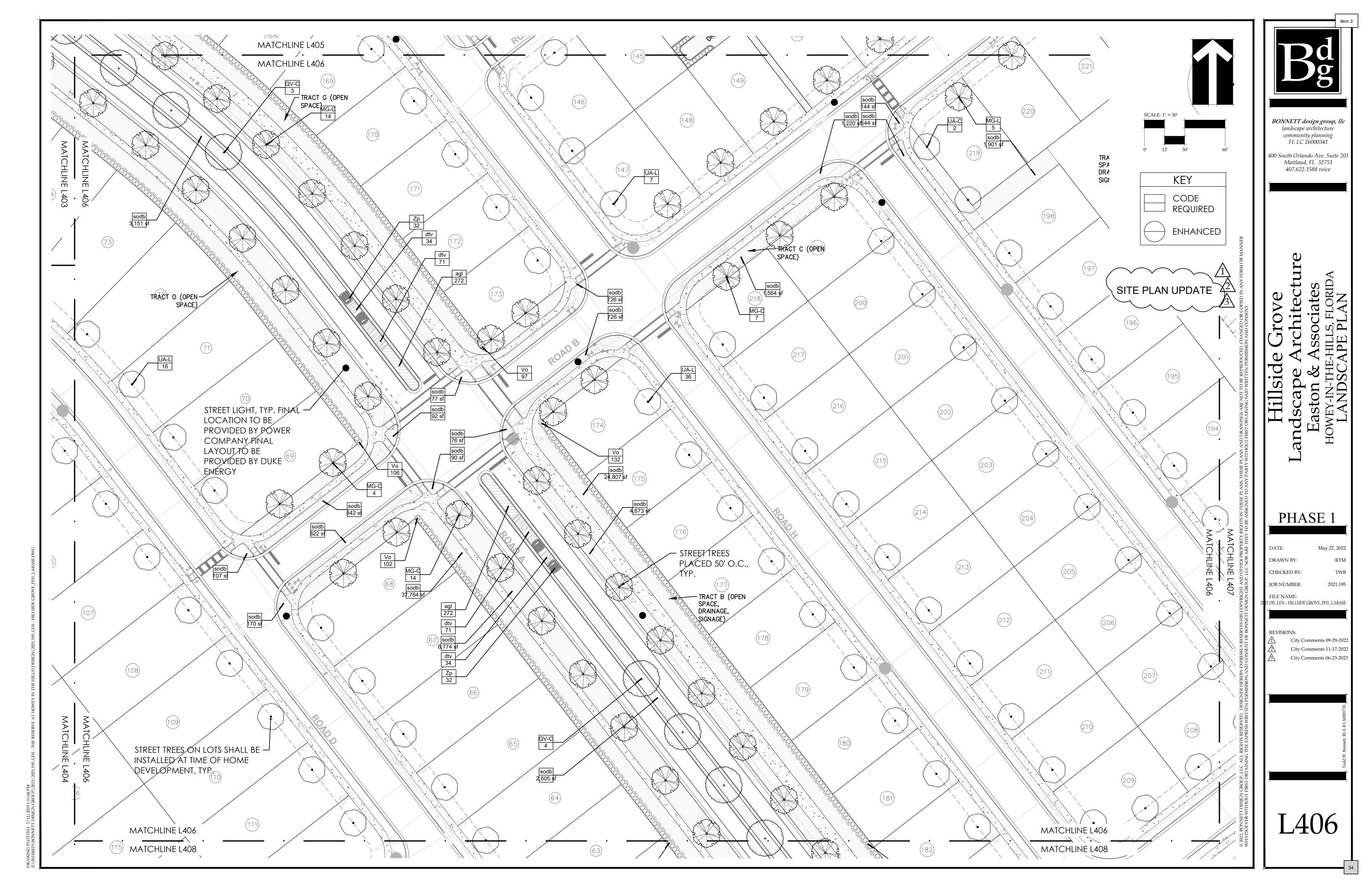
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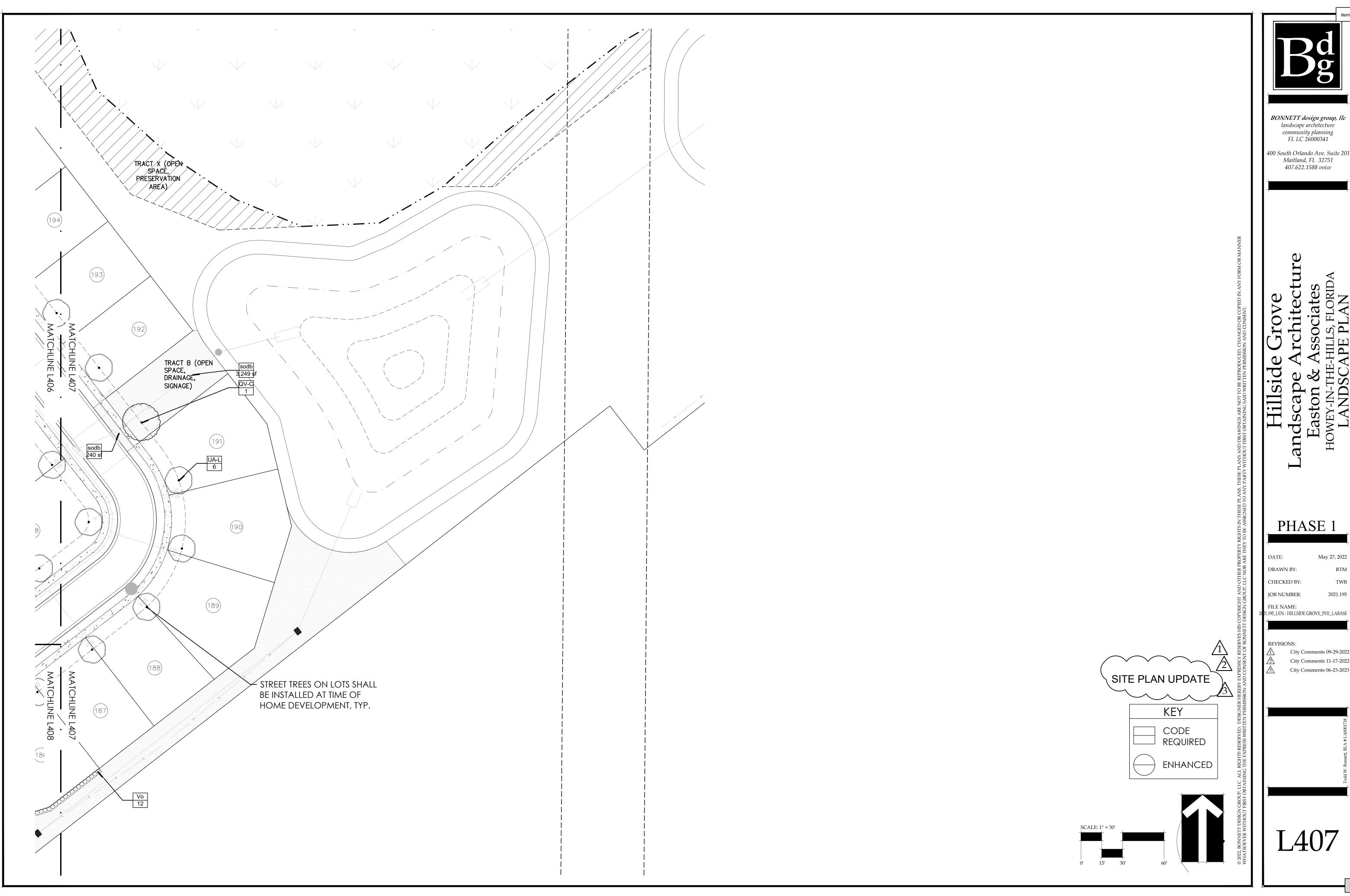




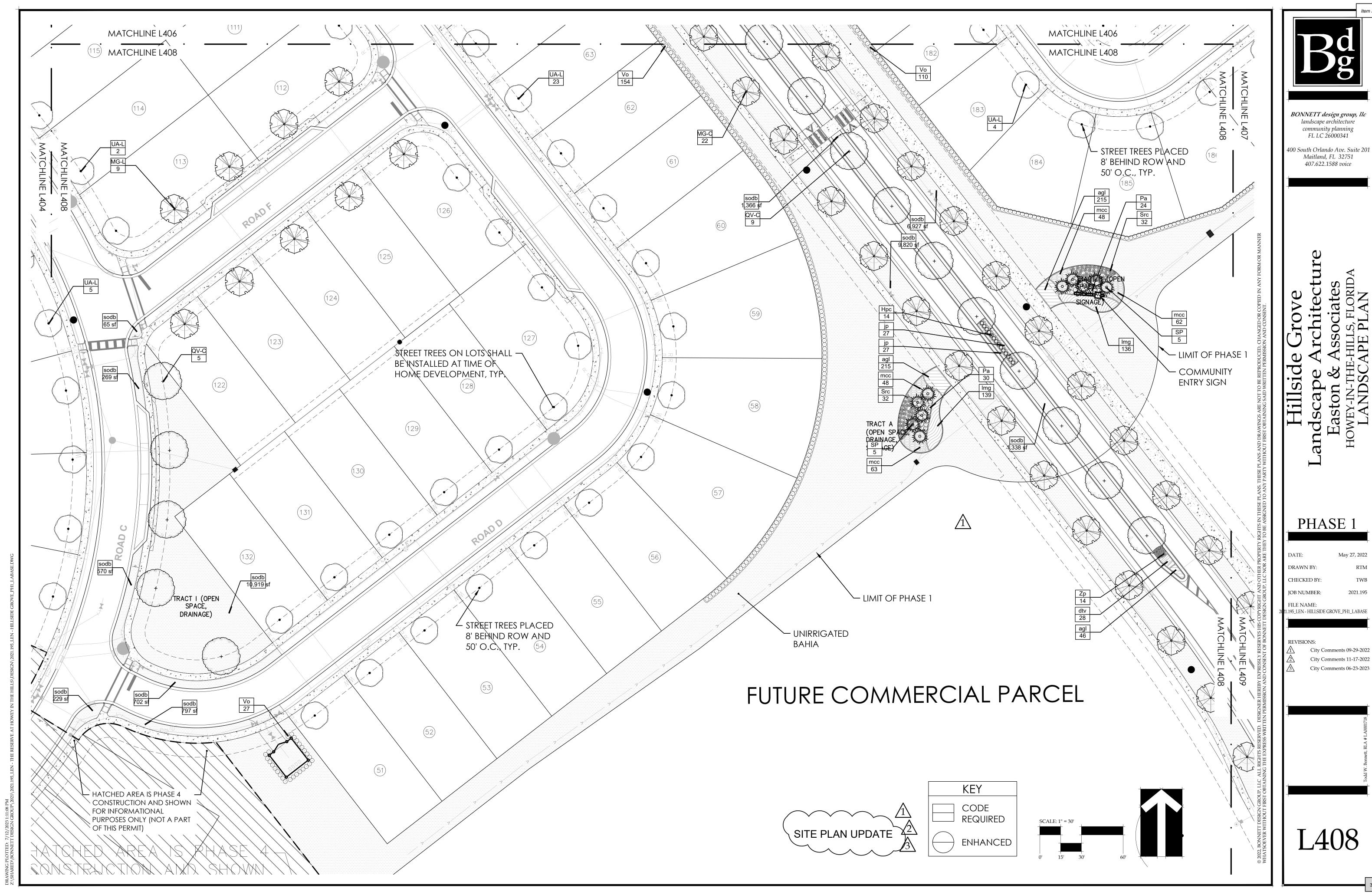


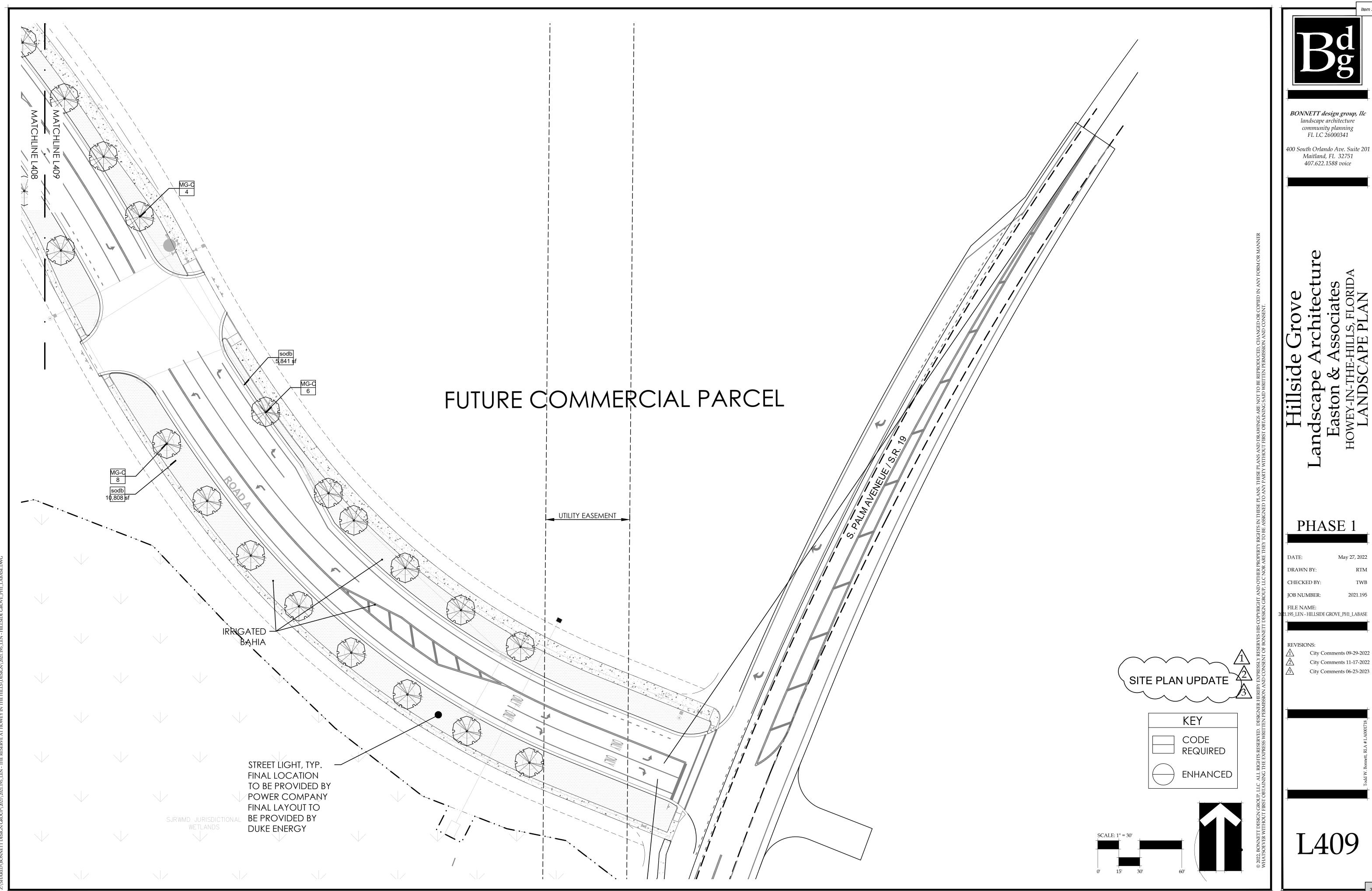






City Comments 06-23-2023





The Landscape Contractor shall warranty all trees for a period of one (1) year and shrubs and ground covers for a period of six (6) months from the time of final acceptance by Owner and Landscape Architect.

The Landscape Contractor shall be wholly responsible for the stability and plumb condition of all trees and shall be legally liable for any damage caused by the instability of any plant material. Staking of trees and palms, if required, shall be done utilizing a method agreed upon by the Landscape Architect.

The Landscape Contractor shall research plans and contact appropriate agencies to determine the location of any utilities and obstructions prior to commencing work. Any utilities or unanticipated obstructions shall be reported to Landscape Architect or Owner immediately.

All plant material and sodded areas shall have an automatic underground irrigation system providing 100% coverage.

Positive drainage shall be maintained away from all structures on the site.

PLANT SPECIFICATIONS

All nursery stock plant material shall be Florida #1 or better in accordance with Grades and Standards for Nursery Plants Parts I & II, latest edition as published by the Florida Department of Agriculture and Consumer Services- Division of Plant Industry

All plant material shall be planted, fertilized and mulched as per the plant details and planting specifications noted on the plans

All container grown material shall be healthy, vigorous, well rooted plants, and established in the container in which they are delivered to the site. The plants shall have tops which are good quality and in a healthy growing condition. Established container grown plant material shall be grown in that container sufficiently long enough for the new fibrous roots to have developed enabling the root mass to retain it's shape when removed the container. Plants which have become root bound in the container are unacceptable.

All plant material that is not container grown shall be freshly dug, sound, healthy, vigorous, well branched, and free of disease and insect eggs and larvae, and shall have adequate root systems. Where any requirements are omitted from the plant list, the plants furnished shall be normal for the variety. Plants may be pruned prior to delivery only upon the approval of the Landscape Architect.

FERTILIZER

Two fertilizers shall be used on all types of plantings, except palms. Granular fertilizer shall be uniform in composition, dry and free flowing. This fertilizer shall be delivered to the site in the original unopened bags bearing the manufacturer's statement of analysis. Granular fertilizer shall be a controlled release variety meeting the following requirements: sixteen percent (16%) nitrogen, four percent (4%) phosphorus, eight percent (8%) potassium, plus iron. tablet fertilizer ("Agriform" or approved equal) in 21 gram size shall meet the following requirements: twenty percent (20%) nitrogen, ten percent (10%) phosphorus, five percent (5%) potassium.

Application Rates:

| Plant size | 16-4-8 | "Agriform" tablet (21 gram |
|-----------------|-----------------------|----------------------------|
| 1 gallon | 1/4 lb. | 1 tablet |
| 3 gallon | 1/3 lb. | 2 tablets |
| 7-15 gallon | 1/2 lb. | 4 tablets |
| 1" - 6" caliper | 2 lbs. per 1" caliper | 2 tablets per 1" caliper |
| 6" + caliper | 3 lbs. per 1" caliper | 2 tablets per 1" caliper |
| | | |

Sodded areas shall receive an application of the granular fertilizer (16-4-8) at a rate of 1/2 lb. of Nitrogen per 1,000 square feet of sod area.

"Palm Special" fertilizer shall be applied to all palms at installation at a rate of 1 1/2 lbs. per 100 square feet of canopy area. Palm fertilizer shall be a controlled release variety containing chelated micro nutrients and a ratio of N-P-K-Mg of 2:1:3:1.

SOIL

Planting soil for use in preparing the backfill material for planting pits shall be added a rate of fifty percent (50%) planting soil to fifty percent (50%) existing soil. This soil mix shall be used in all plant pits except Sabal Palms which shall be backfilled with clean sand. Planting soil shall be a fertile, friable natural topsoil of loamy character. It shall contain forty (40) to fifty (50) percent decomposed organic matter and be free of heavy clay, stones larger than 1" in diameter, noxious weeds and plants, sod, partially disintegrated debris, insects or any other undesirable material, plants or seeds that would be toxic or harmful to plant growth.

MULCH

All plant beds and tree watering basins shall be top dressed with three inches (3") of pine bark mini-nuggets mulch.

SOD

Refer to Landscape Plan for limits of sod.

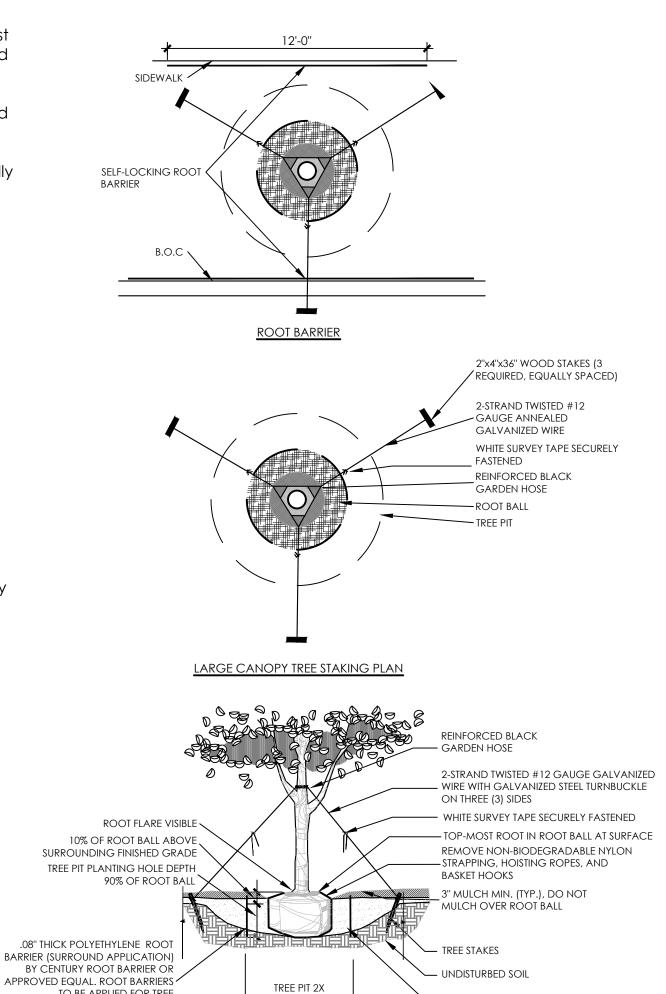
All areas disturbed by construction (including material staging, equipment storage, temporary facilities, site access, construction staff parking, etc.) beyond the minimum limits of sod as shown on the Landscape Plan shall be sodded as needed.

All lawn areas to receive sod shall be disked four (4) to six (6) inches and graded to establish a level finished grade ensuring positive drainage from all structures. All debris shall be removed from the site.

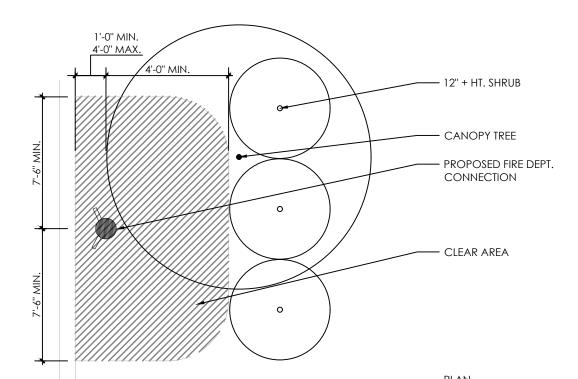
Sod shall be free of weeds and pests. It shall be laid evenly with tight fitting joints and rolled. The sod shall contain moist soil which does not fall apart or tear when lifted.

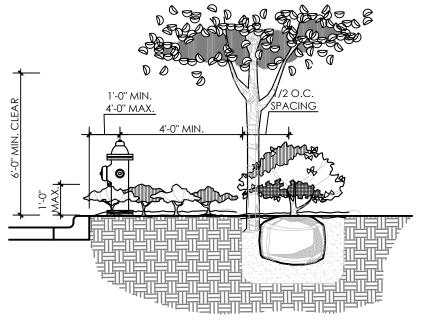
See plant list for specific sod species and locations.

See 'Fertilizer' for requirements of all sodded areas.









TREES AND SHRUBS TALLER THAN 12" SHALL NOT BE PLANTED ANY CLOSER THAN 4'-0" FROM THE BACK OR 7'-6" FROM EACH SIDE OF A FIRE HYDRANT OR FIRE DEPT. CONNECTION

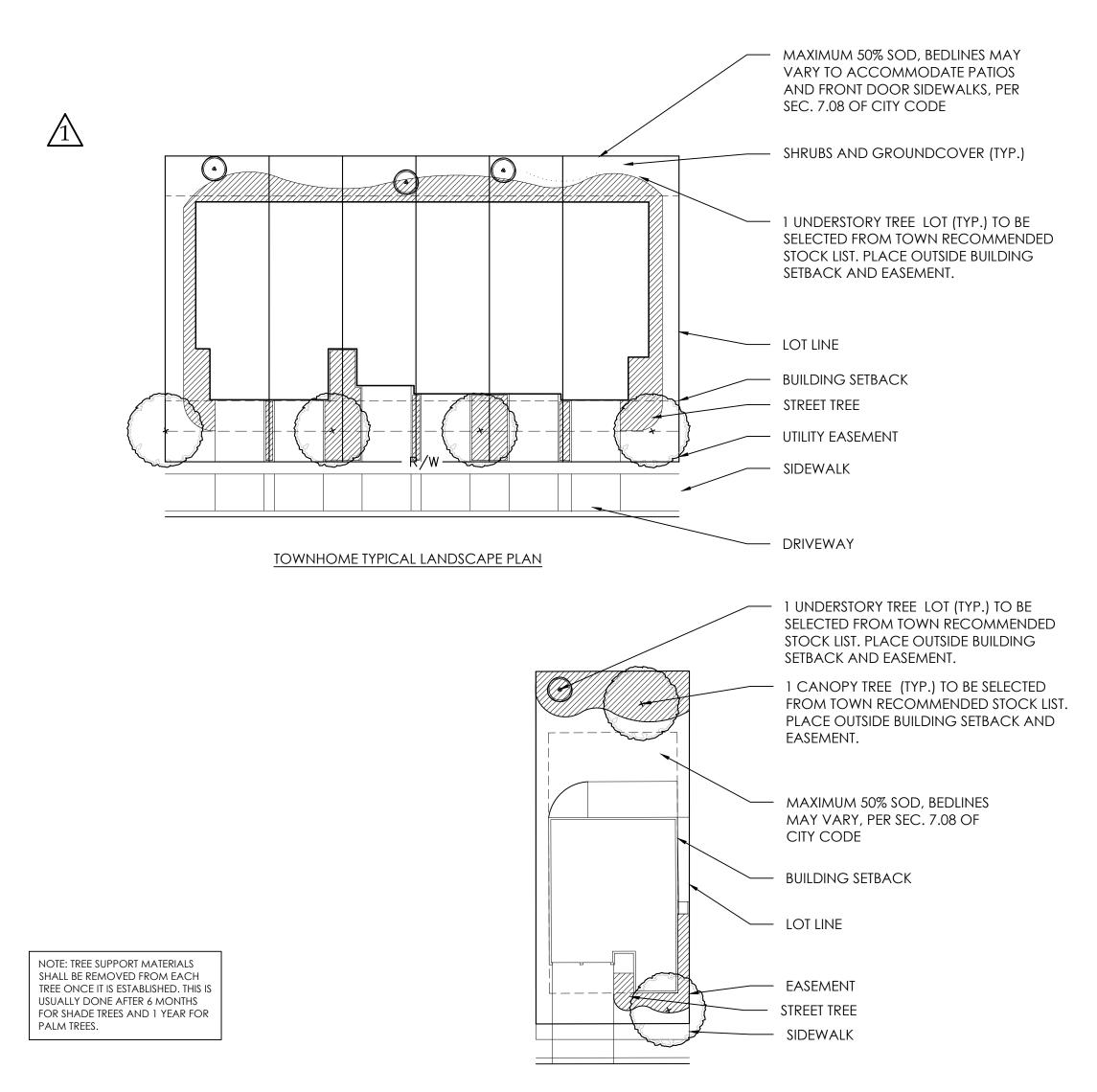
NO TREES OR SHRUBS SHALL BE PLANTED IN FRONT OF A FIRE HYDRANT OR FIRE DEPT. CONNECTION.

TURF AND GROUNDCOVER SHORTER THAN 12" IS PERMITTED WITHIN THE CLEARANCE AREA

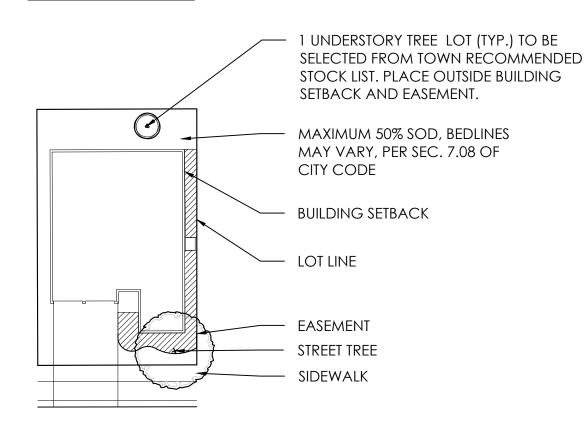
<u>SECTION</u>

TYPICAL PLANTING AT FIRE HYDRANT

N.T.S.







TYPICAL LOT WITH TREES, 50'X80'

Bdg

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400 South Orlando Ave. Suite 20: Maitland, FL 32751 407.622.1588 voice

Hillside Grove Indscape Architecture Easton & Associates

PHASE

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JOB NUMBER:

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FILE NAME: 21.195_LEN - HILLSIDE GROVE_PH1_LABASE

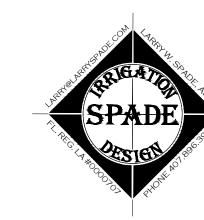
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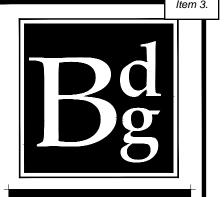
REVISIONS:

City Comments 09-29-2022

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400 South Orlando Ave. Suite 201 Maitland, FL 32751 407.622.1588 voice

PHASE 1

May 27, 2022

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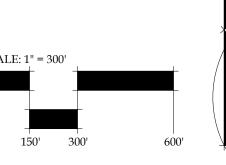
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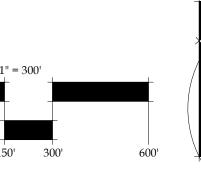
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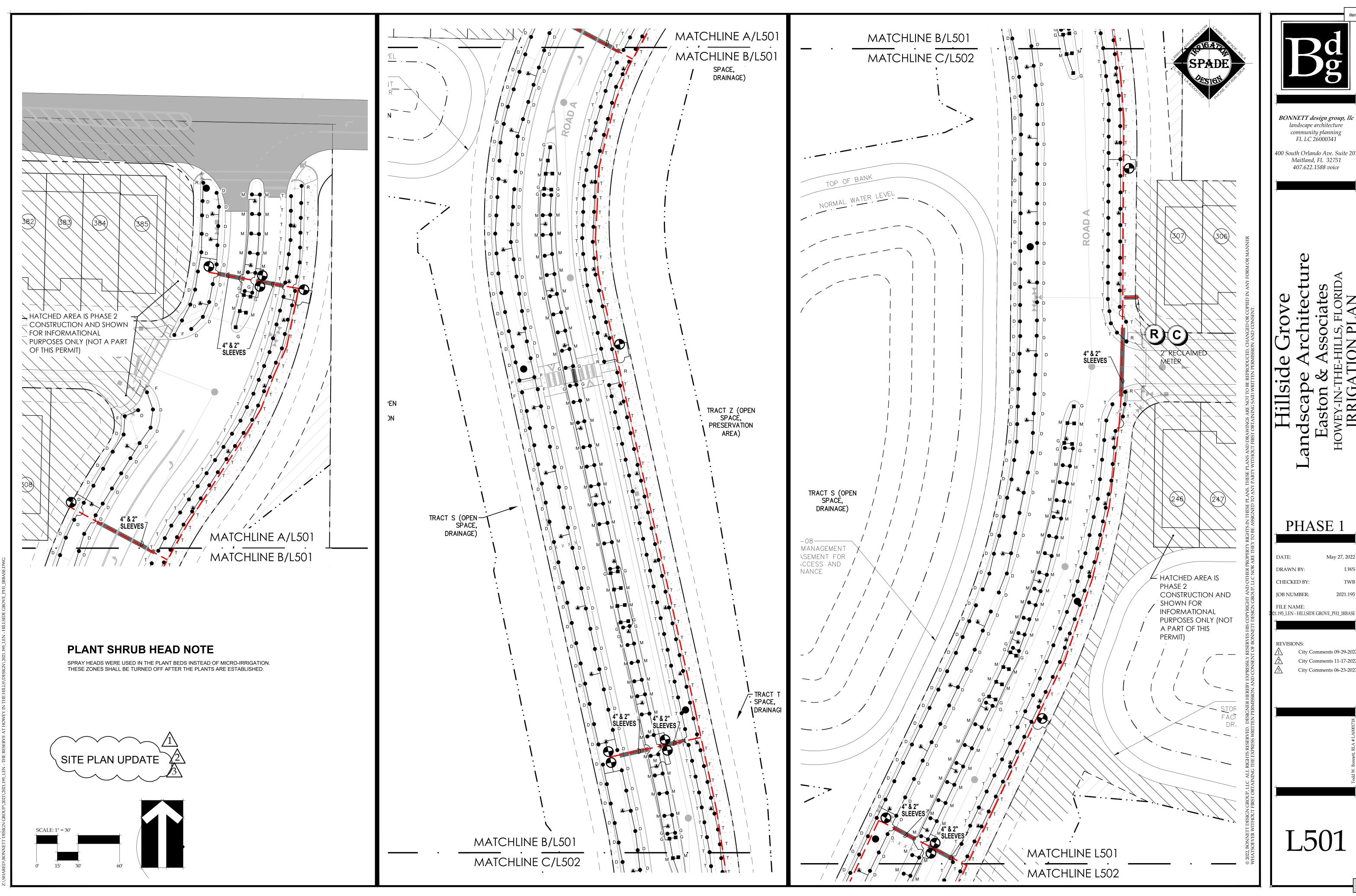
City Comments 11-17-2022 City Comments 06-23-2023

SITE PLAN UPDATE

NOTE: PER 7.06.03 IRRIGATION DESIGN AND INSTALLATION AFFIDAVITS, THIS IRRIGATION SYSTEM WILL COMPLY WITH THE STANDARDS
OF HOWEY-IN-THE-HILLS WATER
CONSERVATION PLAN, IRRIGATION
STANDARDS.







BONNETT design group, llc landscape architecture

100 South Orlando Ave. Suite 201 Maitland, FL 32751 407.622.1588 voice

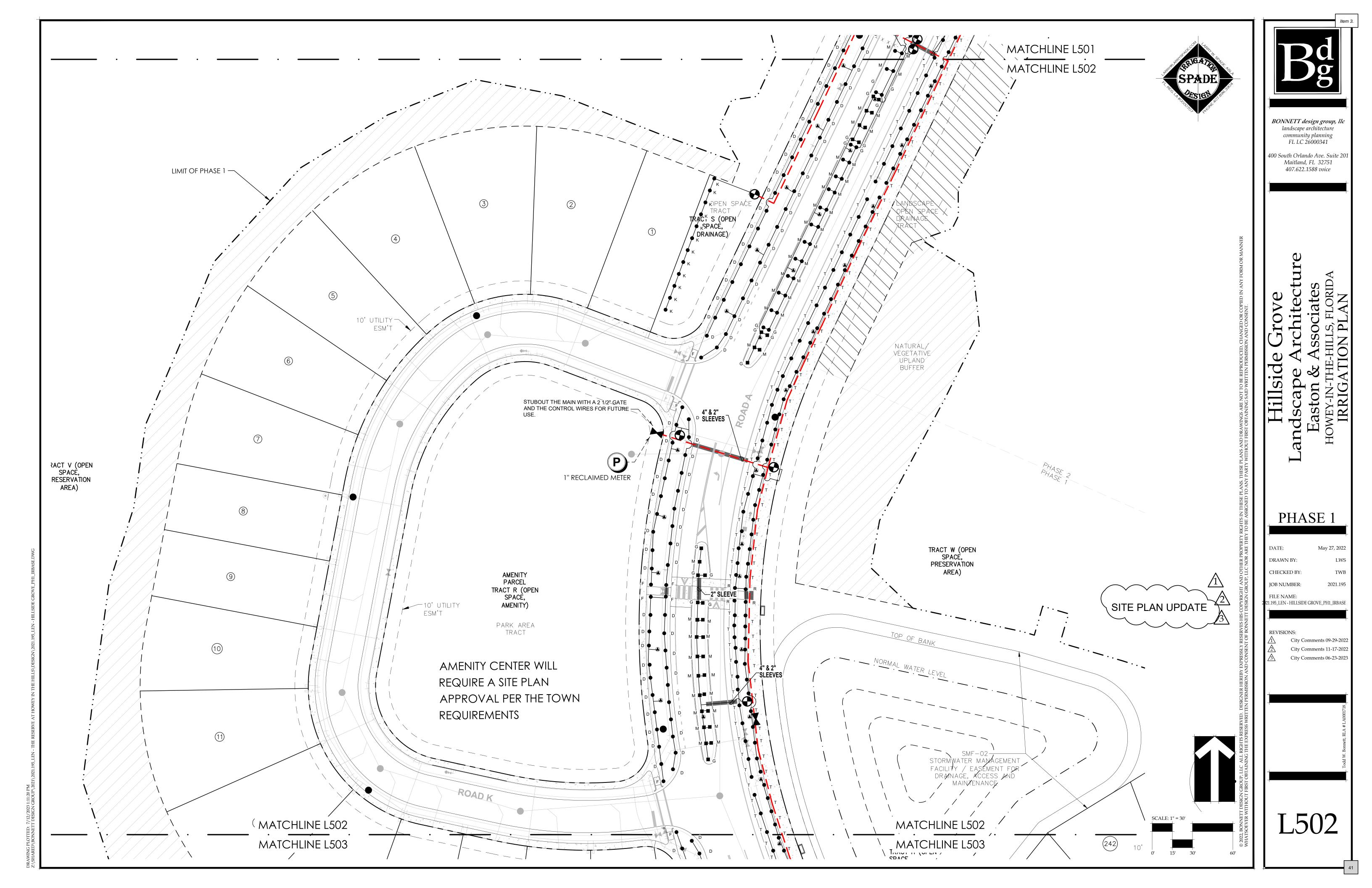
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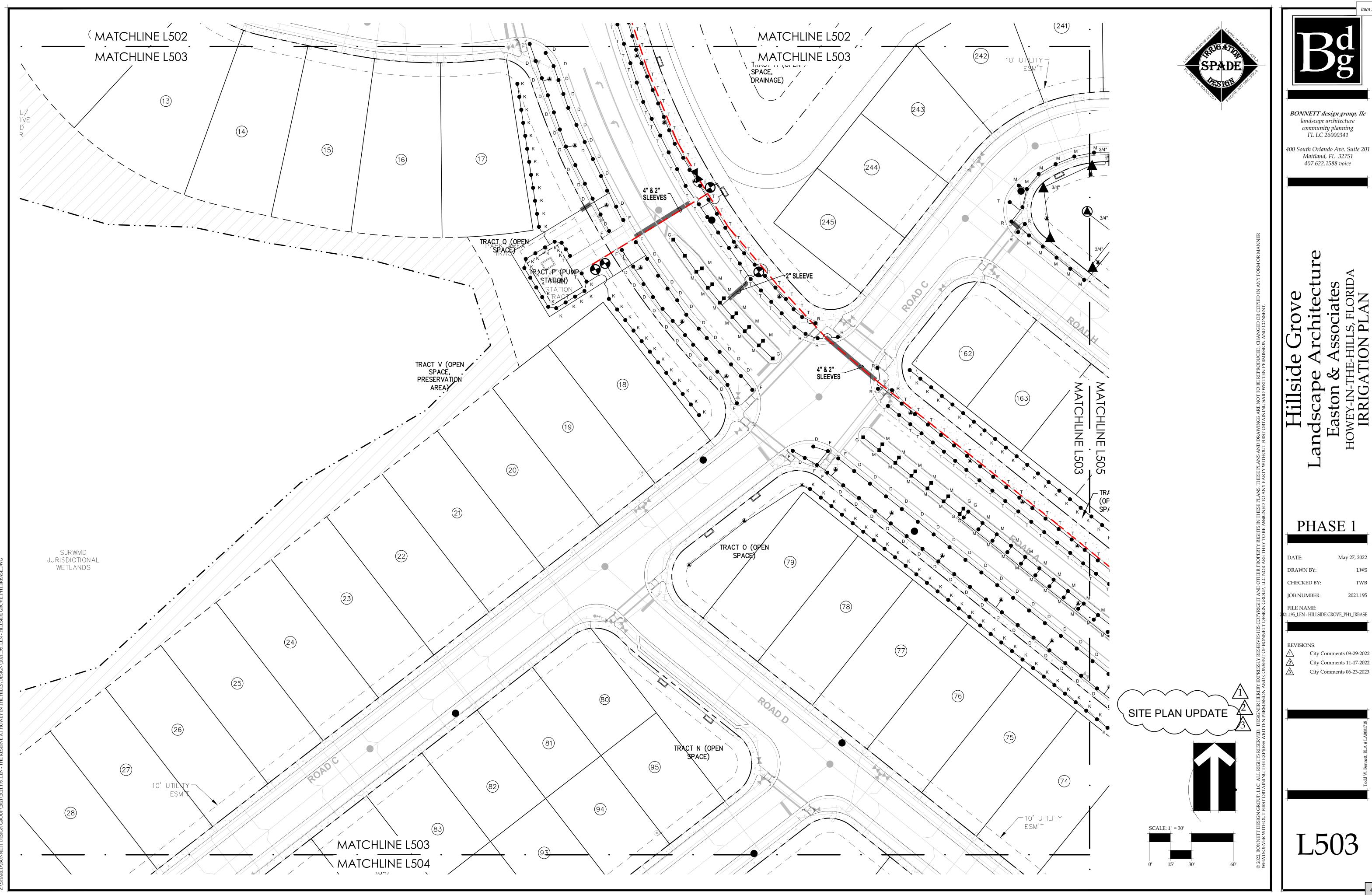
May 27, 2022

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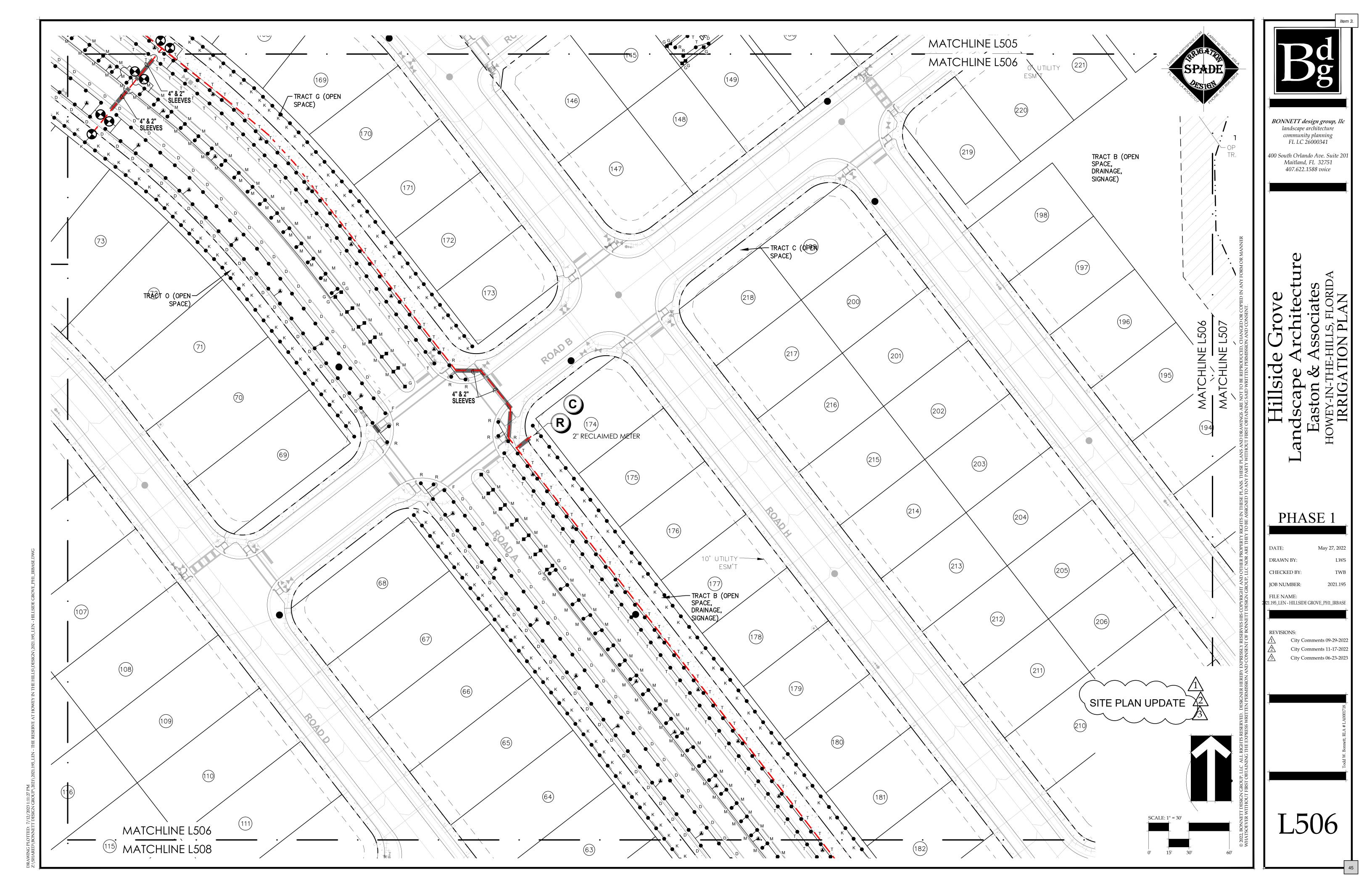


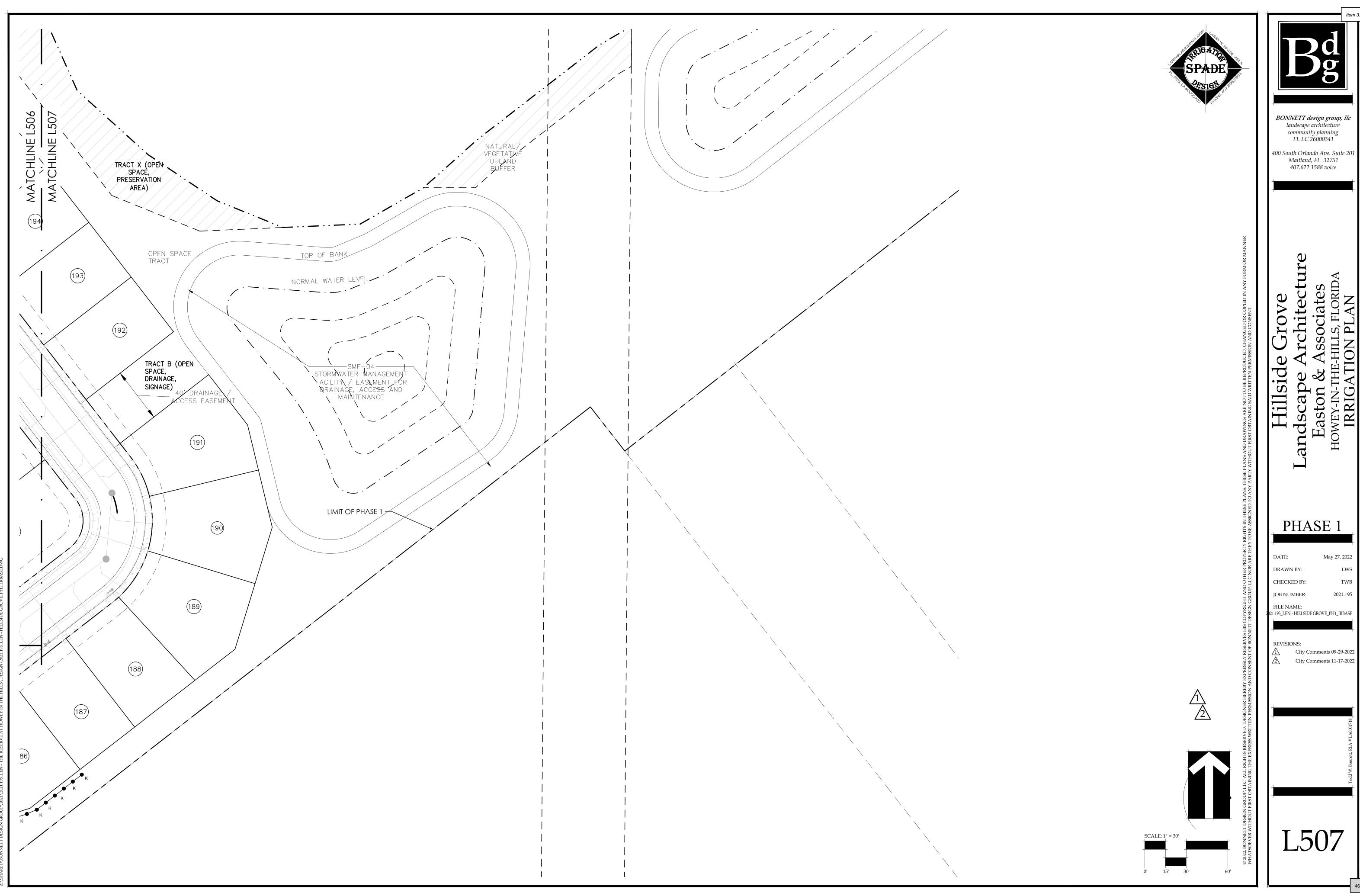


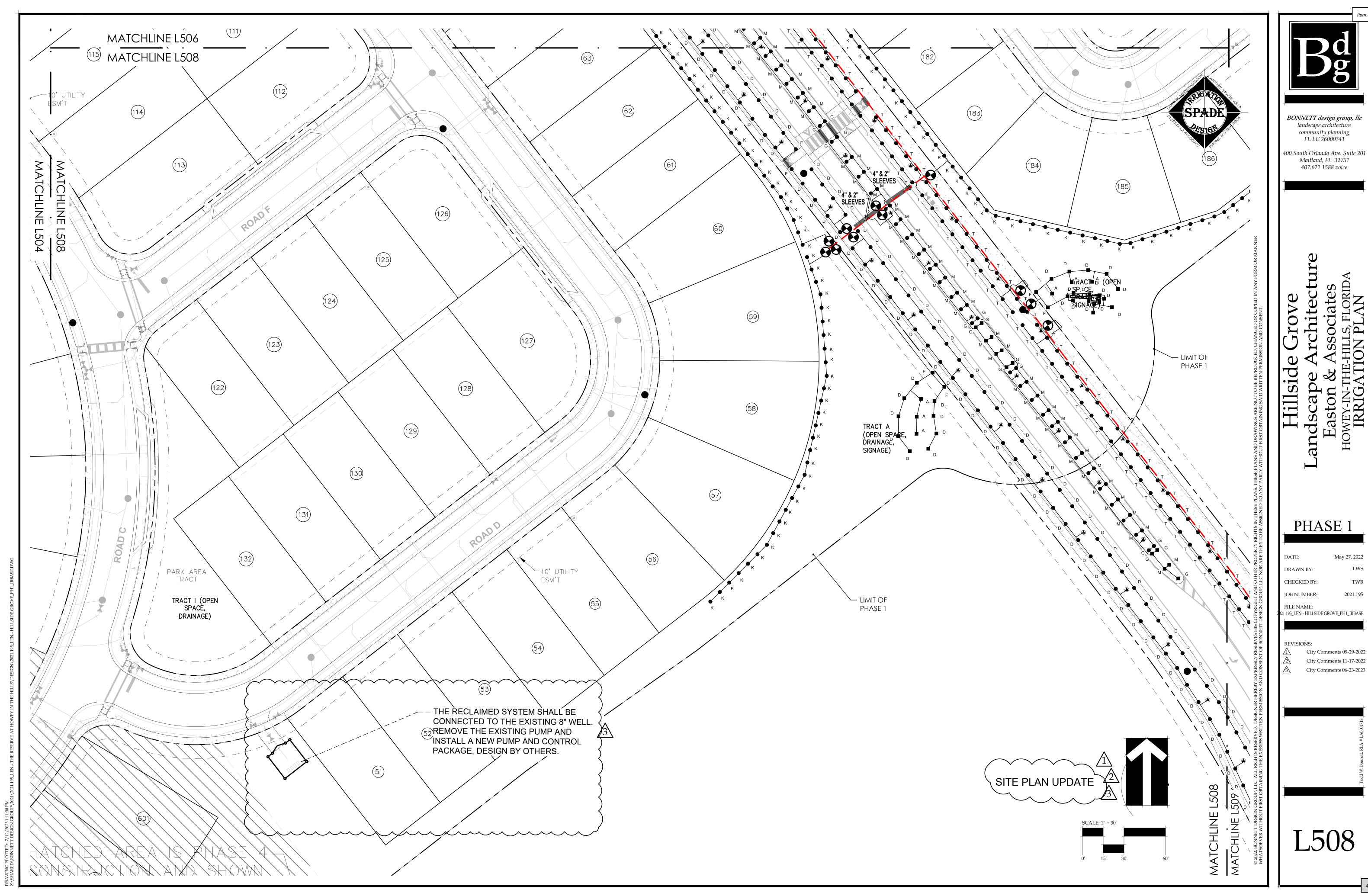


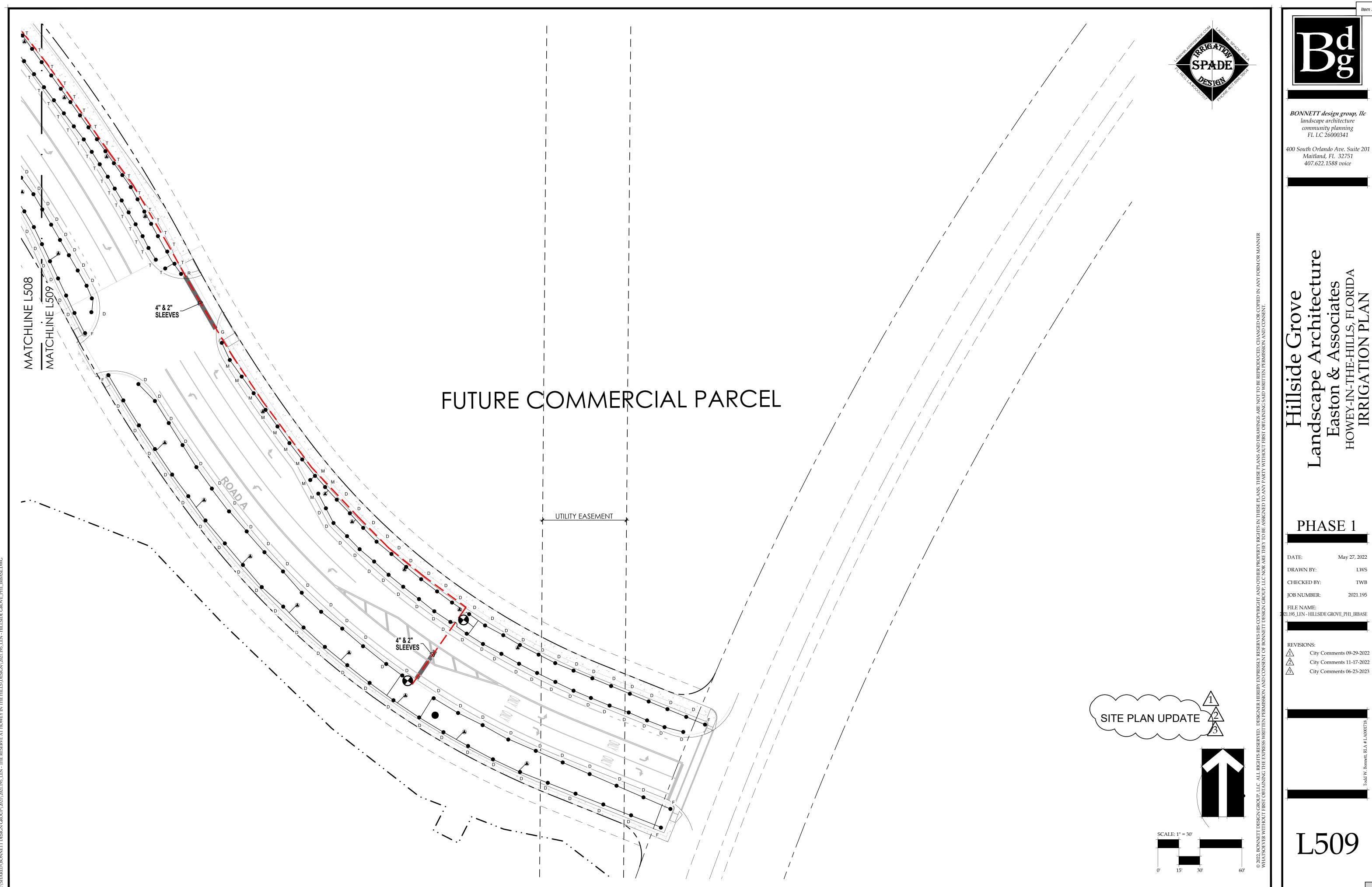
City Comments 11-17-2022

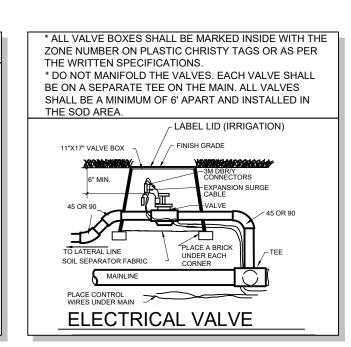


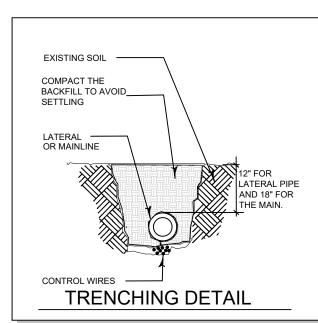


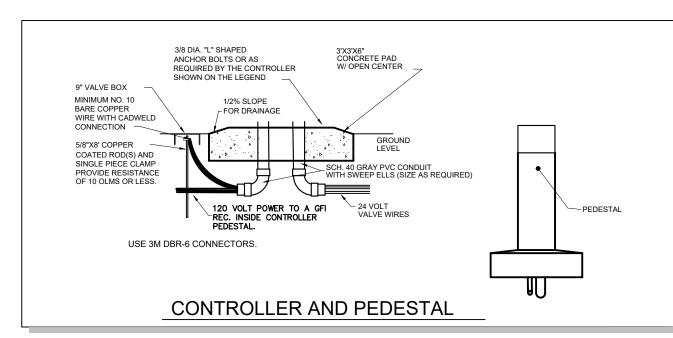


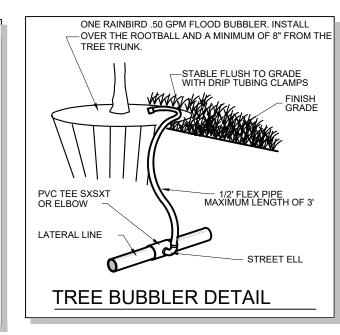


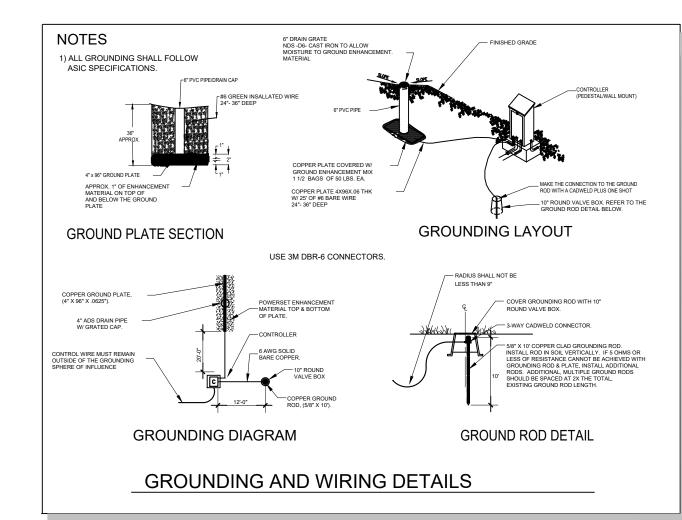


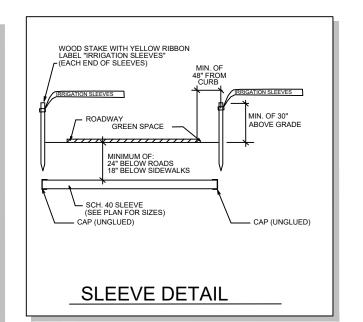














GENERAL NOTES

1) REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREES AND SHRUBS. HAND DIG AROUND ANY EXISTING TREES. DO NOT CUT ANY ROOTS OVER 2" IN DIAMETER. 2) ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER. ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.

3) ALL POP-UP ROTORS AND SPRAYS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. DO NOT USE POLYETHYLENE PIPE. USE WELDON 737 WITH A PURPLE PRIMER OR RED HOT CHRISTY'S BLUE GLUE ON ALL CONNECTIONS.

4) ADJUST ALL NOZZLES TO REDUCE WATER WASTE ON HARD SURFACES, WINDOWS AND BLDG. WALLS. THROTTLE ALL VALVES ON SHRUB LINES AS REQUIRED TO PREVENT FOGGING. USE ADJUSTABLE NOZZLES WHERE REQUIRED TO AVOID ANY WATER ON BUILDING WINDOWS.

6) ALL CONTROL WIRE CONNECTIONS SHALL BE MADE IN VALVE BOXES USING 3M DBR-Y WIRE

CONNECTORS AND SEALANT WITH WIRE NUTS.

7) THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATION.
THE CONTRACTOR SHALL NEATLY MARK IN RED INK ON A WHITE BOND PAPER COPY OF THE IRRIGATION PLAN ANY
INSTALLATION THAT DEVIATES FROM THE PLAN. THE AS-BUILT DRAWING SHALL ALSO LOCATE ALL MAINLINE AND VALVES
BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES. MEASUREMENTS SHALL BE MARKED ON THE PLAN EVEN
WHEN THE EQUIPMENT IS INSTALLED IN THE EXACT LOCATION AS THE PLAN. PROVIDE THE OWNER A PDF OF THE AS-BUILT

8) ALL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES. THE VALVE BOXES SHALL BE PURPLE WHEN USING RECLAIMED WATER.

9) ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A LANDSCAPE AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY AND INSIDE THE LANDSCAPE AREAS OR INSIDE A SCH. 40 SLEEVE.

10) ALL HEADS SHALL BE INSTALLED A MINIMUM OF 24" FROM ANY WALL AND A MINIMUM OF 6" FROM ANY SIDEWALK, PATIO OR ROAD. (MINIMUM OF 2'-0" WHERE THERE ARE NO BUMPER STOPS) THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE OWNER'S REPRESENTATIVE IN THE FIELD. INSTALL THE 12" POP-UP HIGHER WHERE BLOCKED BY TALL SHRUBS.

11) THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DAMAGE ANY EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIRS AND COST OF ANY DAMAGE CAUSED BY THEIR WORK.

12) ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP OR AS OUTLINED IN THE WRITTEN SPECIFICATIONS.

13) ELECTRICAL SERVICE TO LOCATION OF THE CONTROLLER, WELL OR PUMP SHALL BE PROVIDED TO A JUNCTION BOX OR DISCONNECT AT THE EQUIPMENT LOCATION BY THE ELECTRICAL CONTRACTOR OR BY OWNER WHEN IT IS NOT PART OF THE BID PACKAGE. CONFIRM THE LOCATION OF THE CONTROLLER WITH THE OWNER OR

GENERAL CONTRACTOR BEFORE ANY INSTALLATION.

14) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCALE THE PLAN AND CHECK NOZZLE TYPES TO DETERMINE THE CORRECT SPACING OF THE HEADS. THE CONTRACTOR SHALL NOT SPACE THE HEADS FURTHER APART OR USE LESS HEADS THAN SHOWN ON THE PLAN. ANY CHANGES TO THE HEAD SPACING OR LAYOUT. WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER. SHALL

HOLD THE IRRIGATION CONTRACTOR RESPONSIBLE FOR WARRANTY OF THE PLANTS AND OR SOD IN THESE AREAS.
15) 48 HOURS BEFORE DIGGING, CALL 1-800-432-4770 (SUNSHINE STATE ONE CALL CENTER)

15) 48 HOURS BEFORE DIGGING, CALL 1-800-432-4770 (SUNSHINE STATE ONE CALL CENTER)
16) INSTALL THREE EXTRA CONTROL WIRES TO EACH TERMINATION OF THE MAIN. ALL CONTROL WIRES SHALL BE INSTALLED INSIDE OF SCH. 40 GRAY PVC CONDUIT WHERE THEY CANNOT BE UNDER THE MAIN.

RE

RECLAIMED WATER REQUIREMENTS

- 1) ALL PIPE SHALL BE THE PURPLE RECLAIMED WATER TYPE
- 2) ALL SPRINKLER HEADS SHALL HAVE PURPLE INDICATORS.
- 3) ALL MANUAL AND ELECTRIC VALVES SHALL HAVE TAGS TO INDICATE RECLAIMED WATER.
- 4) ALL VALVE BOXES SHALL BE PURPLE WITH PURPLE LIDS TO INDICATE THE PRESENCE OF RECLAIMED WATER.
 5) ALL EQUIPMENT SHALL BE INSTALLED AS PER ALL LOCAL, COUNTY, STATE, AND FEDERAL CODES. PROVIDE AND
- INSTALL ALL REQUIRED RECLAIMED WATER SIGNS. COORDINATE PLACEMENT AND TYPE WITH THE RECLAIMED WATER PROVIDER.

 6) ALL CROSSINGS OF IRRIGATION PIPING AND POTABLE WATER LINES SHALL HAVE THE VERTICAL CLEARANCE VISUALLY
- 6) ALL CROSSINGS OF IRRIGATION PIPING AND POTABLE WATER LINES SHALL HAVE THE VERTICAL CLEARANCE VISUALL VERIFIED AND THIS VERIFICATION MUST BE SHOWN ON THE AS-BUILT DRAWINGS BY DOCUMENTING THE VERTICAL MEASUREMENT SEPARATING THE PIPES.
- THE VERTICAL SEPARATION BETWEEN THE POTABLE AND RECLAIMED WATER LINES SHALL BE A MINIMUM OF 18". THIS SEPARATION SHALL BE VERIFIED AND DOCUMENTED IN A SET OF AS-BUILT DRAWINGS AS PER SPECIFICATIONS. THE HORIZONTAL SEPARATION SHALL BE 5' CENTER TO CENTER AND 3' OUTSIDE TO OUTSIDE IF VERTICAL MINIMUM OF 18" IS NOT MET. REFER TO THE SPECIFIC CODE IF THESE SEPARATIONS CAN NOT BE MET.

NOZZLE CHART

| LETT | ER • PRODUCT • (| G.P.M. @ 40 I | PSI • RADIUS | RADIUS/ANG | GLE • | ZONE LABELS |
|------|---------------------|---------------|--------------|--------------|-------|----------------------|
| Α | RAINBIRD R-VAN 18 | 1.80 | 13'-18' | FULL | 360 * | |
| В | RAINBIRD R-VAN 18 | .60 | 13'-18' | ONE THIRD | 120 ° | |
| D | RAINBIRD R-VAN 18 | .98 | 13'-18' | HALF | 180 ° | |
| F | RAINBIRD R-VAN 18 | .50 | 13'-18' | QUARTER | 90 * | |
| G | RAINBIRD 1800-15EST | .23 | 4' X 15' | END STRIP | | |
| Н | RAINBIRD XPCN | .23 | 4.5' | HALF PATTERN | | Z ^{ONE} GPM |
| K | RAINBIRD R-VAN 14 | 1.22 | 8'-14' | FULL | 360 * | (H) |
| М | RAINBIRD 1800-15SST | .46 | 4' X 30' | SIDE STRIP | | PLANT |
| R | RAINBIRD R-VAN 14 | .31 | 8'-14' | QUARTER | 90 * | SOD |
| Т | RAINBIRD R-VAN 14 | .61 | 8'-14' | HALF | 180 * | M PLANTS TREES |
| V | RAINBIRD R-VAN 24 | .77 | 17'-24' | QUARTER | 90 ° | HIGH |
| W | RAINBIRD R-VAN 24 | 1.54 | 17'-24' | HALF | 180 ° | WATER USE MEDIUM |
| Х | RAINBIRD R-VAN 24 | 2.31 | 17'-24' | THREE QUAR. | 270 ° | LOW |
| Υ | RAINBIRD R-VAN 24 | 3.13 | 17'-24' | FULL | 360 ° | |
| Z | RAINBIRD R-VAN 18 | 1.42 | 13'-18' | THREE QTR. | 270 * | 1 |

THE NOZZLES LISTED SHOW THE TYPE OF RAINBIRD ROTORY NOZZLE THAT SHOULD BE USED. THE CONTRACTOR SHOULD INSTALL THE NOZZLES IN EACH HEAD AS SHOWN BY THE LETTER BESIDE THE HEAD ON THE PLAN. THE GPM, DISTANCE AND ANGLE ON THE NOZZLE CHART ARE APPROXIMATE. THE CONTRACTOR SHALL ADJUST ALL NOZZLES TO PROVIDE THE 100% COVERAGE, BUT LIMIT OVERTHROW ON TO BUILDINGS, WALLS, PAVEMENT, ETC. THE HEADS SHALL BE SPACED AS PER THE PLAN. SCALE THE PLAN FOR DISTANCE. DO NOT ASSUME THAT ALL HEADS ARE SPACED AS PER CONVENTIONAL SPRAY HEADS. THE PRECIPITATION RATE FOR THESE NOZZLES IS LESS THAN A CONVENTIONAL SPRAY NOZZLE. FOLLOW THE ZONE CHART FOR AN APPROXIMATE RUN TIME FOR EACH ZONE, BUT SET THE RUN TIME ON THE CONTROLLER BASED ON THE SPECIFIC SITE CONDITIONS.



| ł | LEGEND | | REFER TO THE RECLAIMED WATER NOTES |
|---------|--------|------------------|--|
| $-\Box$ | SYMBOL | QUANTITY | USE RAINBIRD ROTORY NOZZLES SPECIFICATION |
| | • | 2306 | RAINBIRD 1800-PRS-P45 SPRAY SERIES 6" POP-UP |
| | | 308 | RAINBIRD 1800 PRS-P45 SPRAY SERIES 12" POP-UP |
| | | 275 | RAINBIRD .5 GPM FLOOD BUBBLER |
| | | 52 | RAINBIRD 5000 SERIES ROTOR HEAD - FULL CIRCLE 6 GPM |
| | | 02 | RAINBIRD 5000 SERIES ROTOR HEAD - PART CIRCLE 3 GPM |
| | | 2 1/2" 6016' | CLASS 200 PURPLE PVC MAINLINE-2 1/2" |
| | | 1 1/2" | CLASS 200 PURPLE PVC MAINLINE-1 1/2" |
| • | | REFER TO PLAN | CLASS 200 PVC PURPLE LATERAL LINE- SIZE AS SHOWN UNTIL A SMALLER SIZE IS SHOWN. MINIMUM SIZE OF 3/4" (EXCEPT RISERS AND FLEX PIPE) |
| | | REFER TO PLAN | SCH. 40 SLEEVE (MINIMUM OF 24" DEPTH AND 2 SIZES LARGER THAN THE PIPE SIZE OR AS LABELED ON THE PLAN) |
| | • | 72 | RAINBIRD PESBR-PRS-D2 ELECTRIC VALVE. INSTALL THE VALVE IN A PURPLE ARMOR 11" X 17" VALVE BOX AND COVER. 0-25 GPM=1" 26-50 GPM=1 1/2" 51 AND HIGHER GPM=2" |
| | © | 4 | CONTROLLER-RAINBIRD ESP-LXD-PED PEDESTAL MOUNT.WHERE SHOWN ON THE PLAN. INSTALL WITH A RAINBIRD RAIN SENSOR. GROUND AS PER ASIC SPECIFICATIONS AND DETAILS. SLEEVE TO AS REQUIRED. |
| | R | 4 | POINT OF CONNECTION TO A RECLIMED WATER METER. REFER TO THE UTILITY PLAN FOR THE EXACT LOCATION AND DETAILS. |
| | P | 1 | POINT OF CONNECTION TO A 2" METER. REFER TO THE UTILITY PLAN FOR THE EXACT LOCATION AND DETAILS. |
| | | | |

PLANT SHRUB HEAD NOTE

SPRAY HEADS WERE USED IN THE PLANT BEDS INSTEAD OF MICRO-IRRIGATION.
THESE ZONES SHALL BE TURNED OFF AFTER THE PLANTS ARE ESTABLISHED.

Bdg

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andscape Architecture
Easton & Associates

PHASE

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PUD#

PARCEL #: 26-20-25-0100-000-00002, 35-20-25-0003-000-00501, 35-20-25-0002-000-00500, 26-20-25-0100-0004, 26-20-25-0100-000-0005, 26-20-25-0100-0004, 26-20-25-0100-000-0003 &

EGAL DESCRIPTION:

The Southwest 1/4 of the Northwest 1/4 of the Northeast 1/4 of Section 35, Township 20 South, Range 25 East, Lake County, Florida;

he Southwest 1/4 of the Northwest 1/4 of the Northwest 1/4 of the Northeast 1/4 of Section 35, Township 20 South, Range 25 East, Lake County, Florida;

triangular tract of land described a

Beginning at the Northeast corner of the Southwest 1/4 of the Northwest 1/4 of the Northeast 1/4, in Section 35, Township 20 South, Range 25 East, Lake County, Florida; run thence West approximately 330 feet to the Southeast corner of the Southwest 1/4 of the Northwest 1/4 of the Northwest 1/4 of the Northwest 1/4 of the Northwest 1/4 of the Northeast 1/4; thence run North approximately 330 feet to the Northeast corner of the Two and One—Half Acre Tract last described; thence Southeast to the Poin of Beginning;

The Southwest 1/4 of the Northeast 1/4, Less that part lying within Taylor Memorial Cemetery hereinafter particularly described:

The Northwest 1/4 of the Southeast 1/4, lying North and West of State Road 19, now paved. Less and Except such portion of Taylor Memorial Cemetery included therein, which cemetery is more particularly described as follows:

Beginning at the East 1/2 mile corner of Section 35, Township 20 South, Range 25 East, Lake County, Florida; run West 1490 feet to an iron pipe on the North right—of—way line of said State Road now paved; thence Southwesterly along said right—of—way line 446.5 feet to a cement marker and the Point of Beginning of Cemetery property; run thence Southwesterly with the North right—of—way line of said road 509.4 feet; thence North 36°27' West, 573.8 feet; thence North 51°33' East, 500 feet; thence South 38°27 East, 500 feet to the Point of Beginning;

The Southeast 1/4 of the Northeast 1/4, lying North and West of State Road 19, now paved, Less and Except such part thereof as is contained in the plat of Pa Gardens as recorded in the Public Records of Lake County, Florida on February 26, 1951, in Plat Book 12, Page 11;

The West 1/2, Less and Except the North 3/4 of the Northeast 1/4 of the Northwest 1/4, in Section 35, Township 20 South, Range 25 East, Lake County, Florida;

That part of the South 1/4 of the Southwest 1/4 of the Southwest 1/4, lying South of County Clay Road, in Section 26, Township 20 South, Range 25 East, Lake County, Florida. Subject to the rights—of—way for all existing state, county and town road, streets and highways;

AND

AND

A tract of land located in the Northeast 1/4 of the Northeast 1/4 of Section 35, Township 20 South, Range 25 East, Lake County, Florida, and generally described

All of Block D—14, according to the plat of Palm Gardens, filed February 26, 1951, and recorded in Plat Book 12, Page 11, of the Public Records of Lake County, Florida.

All of the above Lake County property being more particularly described as follows:

That part of the Northwest 1/4 of the Northeast 1/4 of Section 35, Township 20 South, Range 25 East, in the town of Howey in the Hills, Florida, bounded and described as follows:

Begin at the Northwest corner of the Southwest 1/4 of the Northwest 1/4 of the Northwest 1/4 of the Northwest 35; thence run East along the North line thereof to the Northeast corner of the said Southwest 1/4 of the Northwest 1/4 of the Northwest 1/4 of the Northeast 1/4; thence run Southeasterly along a straight line to the Northeast corner of the Southwest 1/4 of the Northwest 1/4 of the Northeast 1/4 of said Section 35; thence run South along East line thereof, to the Southeast corner of the said Southwest 1/4 of the Northwest 1/4 of the Northeast 1/4; thence run West along the South line thereof to the Southwest corner of the said Northwest 1/4 of the Northeast 1/4; thence run North along the West line of the said Northwest 1/4 of the Northeast 1/4 to the Point of Beginning; Less all rights—of—way for streets in Howey in the Hills, Florida.

All of Block D-14 in Palm Gardens, a subdivision in the town of Howey in the Hills, Florida, according to the plat thereof recorded in Plat Book 12, Page 11 of the Public Records of Lake County, Florida.

The South 3/4 of the West 1/2; the Northwest 1/4 of the Northwest 1/4, Less the right—of—way of a County Clay Road; and the South 1/4 of the Northeast 1/4 of the Northwest 1/4 of Section 35, Township 20 South, Range 25 East, Lake County, Florida, in the town of Howey in the Hills, Florida.

That part of the Southwest 1/4 of the Northeast 1/4 and that part of the Northwest 1/4 of the Southeast 1/4 lying North and West of the Westerly line of the right—of—way of State Road No. 19, in Section 35, Township 20 South, Range 25 East, Lake County, Florida, in the town of Howey in the Hills, Florida; Less and Except therefrom that part thereof lying within Taylor Memorial Cemetery, according to the plat thereof recorded in Plat Book 12, Page 5, of the Public Records of Lake County, Florida, and also Less all rights—of—way for streets in Howey in the Hills, Florida.

That part of the East 1/2 of the Northeast 1/4 of Section 35, Township 20 South, Range 25 East, in the town of Howey in the Hills, Florida, bounded and described as follows:

Begin at the Northwest corner of Lot 1, in Block D-14, in Palm Gardens, according to the plat thereof recorded in Book 12, Page 11, of the Public Records of Lake County, Florida; thence run West to the West line of the Northeast 1/4 of the said Section 35; thence run South along the West line of the East 1/2 of the Northeast 1/4 of the said Section 35 to a point on the Northwesterly line of the right-of-way of State Road No. 19; thence run Northeasterly along the Northwesterly line of the said right-of-way line of Block D-14, of the said Palm Gardens subdivision; thence run Northwesterly along the Westerly line of the said Block D-14, to the Point of Beginning; Less all rights-of-way for streets in Howey in the Hills, Florida,

That part of the South 1/4 of the Southwest 1/4 of the Southwest 1/4 of Section 26, Township 20 South, Range 25 East, Lake County, Florida, lying South of the Southerly line of the right—of—way of the County Road.

Commence at the East 1/4 corner of Section 35, Township 20 South, Range 25 East, Lake County, Florida; thence run North 89'21'35" West along the South line of the Northeast 1/4 of said Section 35, 1487.79 feet to a point on the Northwesterly right—of—way line, 459.23 feet to the point of curvature of a curve concave Southeasterly; thence run Southwesterly along the arc of said curve and said Northwesterly right—of—way line having a central angle of 14'35'56", a radius of 2341.83 feet, an arc length of 596.69 feet, a chord bearing of South 44'49'31" West and a chord distance of 595.08 feet to the Point of Beginning; thence continue along said Northwesterly right—of—way line being a curve concave Southeasterly, thence run Southwesterly along said curve having a central angle of 22'58'29", a radius of 2341.83 feet, an arc length of 939.04 feet, a chord bearing of South 26'02'16" West and a chord distance of 932.76 feet; thence run North 75'26'58" West, 402.66 feet; thence run Southwesterly along said curve having a central angle of 22'58'29", a radius of 2341.83 feet, an arc length of 939.04 feet, a chord bearing of South 26'02'16" West, 250.16 feet; thence run North 12'38'17" East, 13.01 feet to the point of curvature of a curve concave Easterly, thence run Northbeasterly along the arc of said curve having a central angle of 39'28'41", a radius of 75.00 feet, an arc length of 51.68 feet; thence run North 54'47'17" East, 150.16 feet; thence run North 52'06'58" East, 205.75 feet to the point of tangency; thence run North 52'06'58" East, 476.63 feet; thence run North 54'47'17" East, 150.16 feet; thence run North 52'06'58" East, 205.75 feet to the point of curvature of a curve concave Southerly; thence run Easterly along the arc of said curve having a central angle of 62'53'19", a radius of 99.99 feet, an arc length of 219.47 feet, a chord bearing of North 52'06'58" East and a chord distance of 178.00 feet to the point of reverse curvature of a curve concave Southeasterly; thence run Northeasterly along the arc of sa

ALSO LESS the following described parcel:

Commence at the East 1/4 corner of Section 35, Township 20 South, Range 25 East, Lake County, Florida; thence run North 89'21'35" West along the South line of the Northeast 1/4 of said Section 35, 1487.79 feet to a point on the Northwesterly right—of—way line of State Road No. 19; thence run South 52'07'27" West along said Northwesterly right—of—way line, 66.25 feet to the Point of Beginning; thence continue South 52'07'27" West along said Northwesterly right—of—way line, 392.98 feet to the point of curvature of a curve concave Southeasterly; thence run Southwesterly along the arc of said curve having a central angle of 02'12'24", a radius of 2341.83 feet, an arc length of 90.19 feet, a chord bearing of South 51'01'15" West and a chord distance of 90.19 feet to the most Easterly corner of Taylor Memorial Cemetery; thence run North 38'00'31" West, along the Northeasterly line of said Taylor Memorial Cemetery, 547.00 feet; thence run North 52'06'58" East, 484.34 feet to the point of curvature of a curve concave Southerly; thence run Southeasterly along the arc of said curve having a central angle of 90'00'00", a radius of 10.00 feet, an arc length of 15.71 feet, a chord bearing of South 82'53'02" East and a chord distance of 14.14 feet to the point of tangency; thence run Southwesterly; thence run Southwesterly along the arc of said curve having a central angle of 90'00'00", a radius of 10.00 feet, an arc length of 15.71 feet, a chord bearing of South 07'07'12" West and a chord distance of 14.14 feet to the Point of Beginning.

AND, ALSO LESS the following described parcel:

Commence at the East 1/4 corner of Section 35, Township 20 South, Range 25 East, Lake County, Florida; thence run North 89°21'35" West along the South line of the Northeast 1/4 of said Section 35, 1487.79 feet to a point on the Northwesterly right—of—way line of State Road No. 19 thence run North 52'07'27" East along said Northwesterly right—of—way line, 673.75 feet to the Point of Beginning; thence run North 37°53'02" West, 1008.88 feet; thence run North 00°35'47" East, 116.78 feet to a point on the North line of the Southwest 1/4 of the Northwest 1/4 of said Section 35; thence run South 89°24'13" East along said North line, 270.08 feet to a point on the West line of the Northeast 1/4 of the Northeast 1/4 of said Section 35; thence run North 00°35'88" East along said Wost line, 256.12 feet to a point on the South line of the residence of Don White; thence run South 89°24'13" East along said South line, 418.17 feet; thence run South 00°35'47" West, 709.10 feet; thence run South 37'52'33" East, 317.47 feet to a point on said Northwesterly right—of—way line of State Road No. 19; thence run South 52°07'27" West along said Northwesterly right—of—way line, 329.54 feet to the Point of Beginning.

ALSO, LESS AND EXCEPT the following described parcel:

That parcel described as the Taylor Memorial Cemetery in that Quitclaim Deed recorded in Official Records Book 1147, Page 1398, of the Public Records of Lake County, Florida.

Parcel 2 (Easement Estate):

Together with those appurtenant easements as set forth and granted by Eagles Landing at Ocoee, Inc., a Florida corporation, to Howey in the Hills, a Florida limited partnership, in that Development Agreement and Grant of Easements, recorded November 10, 2005 in Official Records Book 3003, Page 1377, of the Public Records of Lake County Florida

26-20-25-0400-D14-00000 HOWEY-IN-THE-HILLS LAKE COUNTY, FL

> PREPARED FOR EASTON & ASSOCIATES 10165 SW 19TH ST

PROJECT LOCATION



| | / | 'NDEX OF SHEETS |
|--------|-----------|--|
| | SHEET | Π/LE |
| | C100 | COVER |
| | C101 | GENERAL NOTES |
| \sim | C15Q | EXISTING CONDITIONS PLAN |
| | C160 | CLEARING, SEDIMENT & EROSION . CONTROL PLAN |
| | C400 | MASTER SHEPLAN |
| | C500-C504 | MASS GRADING PLAN |
| | C505 | STRUCTURE TABLES |
| | C510 | CONTROL STRUCTURE DETAILS |
| | C900 | TOWN OF HOWEY-IN-THE-HILLS DETAILS |
| | <u> </u> | SWPPP |

Connelly & Wicker Inc. Planning Engineering Landscape Architecture

10060 SKINNER LAKE DR., SUITE 500 JACKSONVILLE, FLORIDA 32246 (904) 265-3030 FAX: (904) 265-3031 1560 NORTH ORANGE AVE., SUITE 210 WINTER PARK, FLORIDA 32789 (407) 261-3100 FAX: (407) 261-3099

FLORIDA REGISTRY: 3650 L.A. NUMBER: LC26000311 www.cwieng.com

<u>DEVELOPER</u> LENNAR – ORLANDO 6750 FORUM DRIVE, SUITE 310 ORLANDO, FL 32821

CIVIL ENGINEER

CONNELLY & WICKER INC

1560 NORTH ORANGE AVENUE, SUITE 210

WINTER PARK, FL 32789

(904) 265–3030

CONTACT: JUSTIN WILLIAMS, P.E.

PLANNER William (Bill) A. Ra

William (Bill) A. Ray, AICP
Ray and Associates
Planning and Environmental Services
2712 SE 29th Street,
Ocala, FL 34471
Office & Cell; 352-425-8881

OWNER EASTON & ASSOCIATES

10165 NW 19TH ST

MIAMI, FL 33172

Project No.:
21-04-0008

Designed: Drawn:
RRB RAH

Checked: O.C.:
RRB RCW

Date:
APRIL 2021

Scale: DATUM:

Sheet C100

GENERAL NOTES: 1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST STANDARDS OF THE \sim TOWN OF HOWEY-IN-THE-HILLS, FDOT AND FDEP.

2. PAVEMENT STRIPING TO BE IN ACCORDANCE WITH THE FLORIDA D.O.T. ROADWAY & TRAFFIC STANDARDS, INDEX 17346, AND AS REQUIRED BY THE TOWN OF HOWEY-IN-THE-HILLS

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF SIZE AND LOCATION OF ALL EXISTING UTILITIES AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. SHOULD THE CONTRACTOR OBSERVE ANY DEVIATIONS FROM WHAT IS SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SAID DEVIATIONS PRIOR TO COMMENCEMENT OF WORK. ANY WORK THAT MUST BE REDONE DUE TO FAILURE OF CONTRACTOR TO NOTIFY THE ENGINEER OF DEVIATIONS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS SOLE EXPENSE.

- 4. WHERE MUCK OR OTHER ORGANIC MATERIAL IS FOUND, IT SHALL BE REPLACED WITH GOOD QUALITY BACKFILL MATERIAL OBTAINED FROM THE GRADING OPERATIONS OR OTHER SOURCE APPROVED BY THE GEOTECHNICAL ENGINEER. THE ORGANIC MATERIAL SHALL BE THEN USED AS TOP DRESSING WHEN MIXED WITH CLEAN BACKFILL SOIL AS APPROVED BY THE GEOTECHNICAL ENGINEER OR PLACED AS APPROVED BY OWNER.
- 5. ALL FINISHED GRADES AND ELEVATIONS ARE AS DENOTED BY THE APPLICABLE LEGEND.
- 6. AS PART OF THE CLEARING AND GRUBBING OPERATION, THE CONTRACTOR IS TO REMOVE ALL FENCING AND/OR EXISTING FACILITIES FROM THE SITE AS DIRECTED BY ARCHITECT.
- 7. MAINTAIN MINIMUM 3' COVER OVER PROPOSED LINES, UNLESS OTHERWISE NOTED. $\mathbb A$ 8. THE CONTRACTOR SHALL NOTIFY THE TOWN OF HOWEY—IN—THE—HILLS AND TH $\widehat{\mathbb E}$ UTILITY OWNER CONSTRUCTION DEPARTMENTS 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION.
- 9. THE LIMITS OF THE SWALES SHALL BE SODDED AS INDICATED ON THE PLANS.
- 10. THE CONSTRUCTION OF ALL UTILITIES CONNECTING TO UTILITY SYSTEMS SHALL CONFORM TO STANDARDS AND CONSTRUCTION SPECIFICATIONS OF THE UTILITY OWNER.

11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY IN ACCORDANCE OF FLORIDA ADMINISTRATIVE CODE 62-621.300 (2), 62-620, AND FLORIDA STATUTES CHAPTER 403.

- 12. ALL EXCESS FILL MATERIAL SHALL BE HAULED OFFSITE
- 13. ALL DESIGNATED ENTRANCES AND EXITS FOR CONSTRUCTION SITE SHALL BE STABILIZED USING FILTER FABRIC AND GRAVEL OR OTHER PRE—APPROVED METHODS TO PREVENT OFF-SITE TRACKING OF SEDIMENTS. **EROSION CONTROL NOTES:**
- 1. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING SURFACE WATERS. SUCH MEASURES SHALL BE APPROVED BY THE PROJECT ENGINEER AND MAY INCLUDE. BUT NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES, SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, OR SILT
- 2. SODDING (OR OTHER STABILIZATION) OF STORMWATER DETENTION AREAS SHOULD BE ACCOMPLISHED WITH IN SEVEN (7) DAYS FOLLOWING COMPLETION OF GRADING TO MINIMIZE EROSION POTENTIAL.
- 3. AT A MINIMUM, THE RETENTION/DETENTION STORAGE AREA MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATES. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE STORAGE AREA PRIOR TO FINAL GRADING AND STABILIZATION.
- 4. IF DURING CONSTRUCTION, THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORILY, ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY /1\ WITH THE TOWN OF HOWEY-IN-THE-HILLS EROSION PROTECTION STANDARDS. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL EROSION CONTROL COSTS INCLUDING ANY COSTS ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.
- 5. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED EROSION CONTROL PLAN TO THE TOWN OF HOWEY-IN-THE-HILLS FOR REVIEW AND APPROVAL A MINIMUM OF 2 WORKING DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. AT A MINIMUM, THE EROSION CONTROL PLAN SHALL PROPOSE SILT SCREEN OR SYNTHETIC HAY BALES AND TURBIDITY BARRIERS, IN ACCORDANCE WITH THE CONSTRUCTION PLANS.
- 6. ALL PERMANENT EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL GRADING. ALL TEMPORARY EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE COMPLETED AND ESTABLISHED.
- 7. CONTRACTOR SHALL INSPECT THE EROSION/SEDIMENT CONTROL EFFORTS TO DETERMINE THE EFFECTIVENESS. INSPECTIONS SHALL BE CONDUCTED DAILY AND WITHIN 24 HOURS AFTER EACH 0.50 INCH OR GREATER RAINFALL EVENT. ANY NECESSARY REMEDIES SHALL BE PERFORMED IMMEDIATELY.
- 8. SEDIMENTATION CONTROLS/BMP'S SHALL PREVENT STORMWATER RUNOFF WITH TURBIDITY GREATER THAN 29 NTUs FROM LEAVING THE CONSTRUCTION SITE.

MAINTAINENCE OF TRAFFIC:

1. FDOT INDEX 102-602 & 102-603 TO BE USED.

UTILITY NOTES:

- 1. ALL PIPE, MATERIALS, AND WASTEWATER CONSTRUCTION SHALL COMPLY WITH /1\ CHAPTER 9 OF THE TOWN OF HOWEY-IN-THE-HILLS ENGINEERING STANDARDS MANUAL (ESM).
- 2. PER SECTION 9.03.05 OF THE ESM THE CONTRACTOR SHALL PROVIDE A DVD RECORDING OF VIDEO INSPECTION OF THE PRIVATE GRAVITY SANITARY SEWER SYSTEM TO THE CITY FOR WASTEWATER DIVISION REVIEW PRIOR TO ACCEPTANCE.
- 3. SEWER PIPE SHALL COMPLY WITH ASTM D3034 FOR GRAVITY SEWER.
- 4. SEWER JOINTS SHALL COMPLY WITH SECTION 9.03.01.B ASTM D3212 PUSH-ON ELASTOMERIC COMPRESSION GASKET TYPE.

PAVING AND DRAINAGE NOTES:

- 1. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES.
- 2. ALL CONCRETE DRAINAGE STRUCTURES TO BE CONSTRUCTED PER D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED.
- 3. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.
- 4. FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.
- 5. CONTRACTOR SHALL PLACE BLUE REFLECTIVE MARKERS ON PAVEMENT IN FRONT OF FIRE HYDRANTS.
- 6. TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE AT MINIMUM 4 INCHES ABOVE FINISH GRADE.

AS-BUILT NOTE:

1. THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD ↑ DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE TOWN OF HOWEY-IN-THE-HILLS REQUIREMENTS AND THE FOLLOWING REQUIREMENTS.

- A. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
- B. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, POTABLE WATER AND WASTEWATER PIPING, AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.
- C. DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIMED WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH FDEP CRITERIA AT UTILITY CROSSINGS.
- D. DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.
- E. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
- F. LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED BY STATE PLANE COORDINATES.
- G. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND THE INVERTS, AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE
- H. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. AS-BUILT POND CONTOURS SHALL BE PROVIDED AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AND ELEVATIONS SPECIFIED ON THE PLANS. CONTRACTOR SHAL BE RESPONSIBLE FOR RE-GRADING POND SLOPES THAT ARE STEEPER THAN SHOWN ON THE DESIGN PLANS.
- I. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILT DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".
- J. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER. FORCEMAIN AND RECLAIMED WATER). THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
- K. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSINGS. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
- CERTIFIED AS-BULT DRAWINGS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO BACTERIOLOGICAL TESTING. FAILURE TO PROVIDE ACCURATE DRAWINGS MAY RESULT IN EXPIRED TEST RESULTS AND REQUIRE ADDITIONAL TESTING AT THE CONTRACTOR'S EXPENSE.
- 3. COORDINATE DATA SHALL BE PROVIDED IN STATE PLANE COORDINATES.
- 4. AS-BUILTS SHALL REFERENCE THE REQUIREMENTS OF CHAPTER 5 OF THE CITY'S ENGINEERING STANDARDS MANUAL.

ENGINEER'S CERTIFICATION NOTE:

"I, RYAN BLAIDA, P.E. HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE ALL EXISTING UTILITIES HAVE BEEN FIELD LOCATED AND THE LOCATION AND ELEVATION DEPICTED ON THESE PLANS IS BASED ON ACTUAL SURVEY, GROUND PENETRATING RADAR, SOFT DIG EXCAVATIONS, AND OTHER INDUSTRY METHODS. I FURTHER CERTIFY THAT ALL MEASURES HAVE BEEN TAKEN WITH REGARD TO UTILITY PROVIDERS' NOTIFICATION TO MARK UTILITIES IN ACCORDANCE WITH CHAPTER 556 F.S., SUNSHINE STATE ONE CALL."

"I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT KNOWN AS: MASS $\uparrow \setminus$ GRADING RALEIGH STREET MEETS ALL OF THE REQUIREMENTS AND HAS BEEN DESIGNED SUBSTANTIALLY IN ACCORDANCE WITH THE TOWN OF HOWEY-IN-THE-HILLS STORMWATER MANAGEMENT CRITERIA."

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Item 3.

PLANS ROVES HILLS NG H. G. DE SS GRADII R HILLSIDE WEY IN T S R O

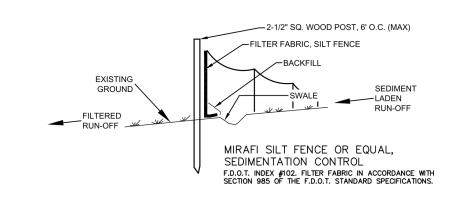
USTIN FL P.

21-04-0008 Designed: RAH RRB Checked: 0.C.: RCW RRB APRIL 2021

DATUM:

Sheet C101

Scale:



1. TEMPORARY EROSION CONTROL STRUCTURE TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY ENGINEER OR AREAS ON—SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURE MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY CONTRACTOR.

2. CONSTRUCT STORMWATER SYSTEMS BEFORE ANY BUILDING OR ROAD CONSTRUCTION IS STARTED. a.)PROTECT SYSTEM FROM SILTING AND DEBRIS BY METHODS PROVIDED IN DETAILS. b.)PROTECT SWALE BOTTOM FROM SEALING BY EXCAVATING ALL SILT DEPOSITS DURING CONSTRUCTION. THIS SHALL BE DONE BEFORE SOD & SEEDING & MULCHING IS FINISHED

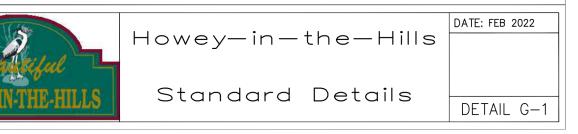
THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF-SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.

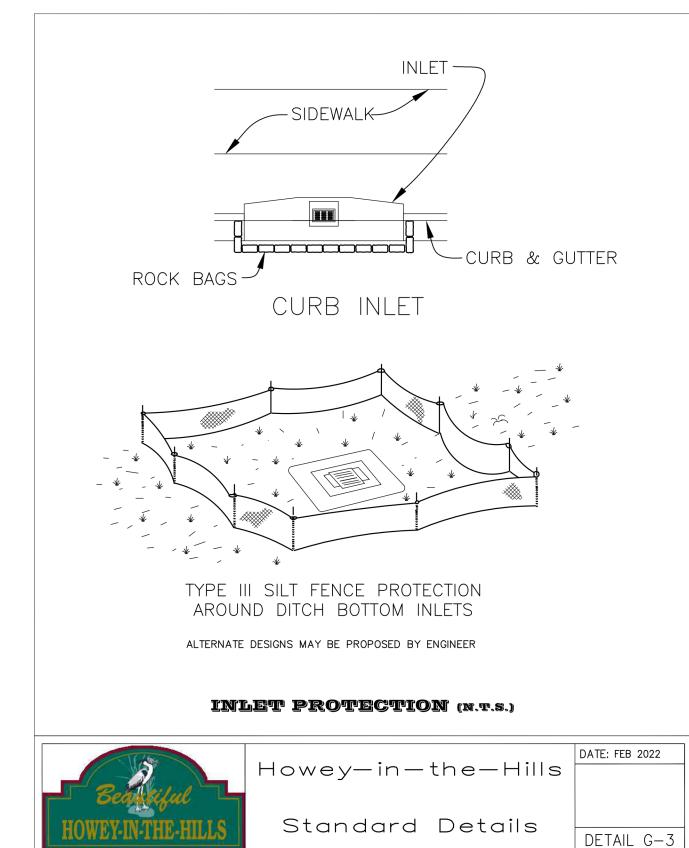
TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.

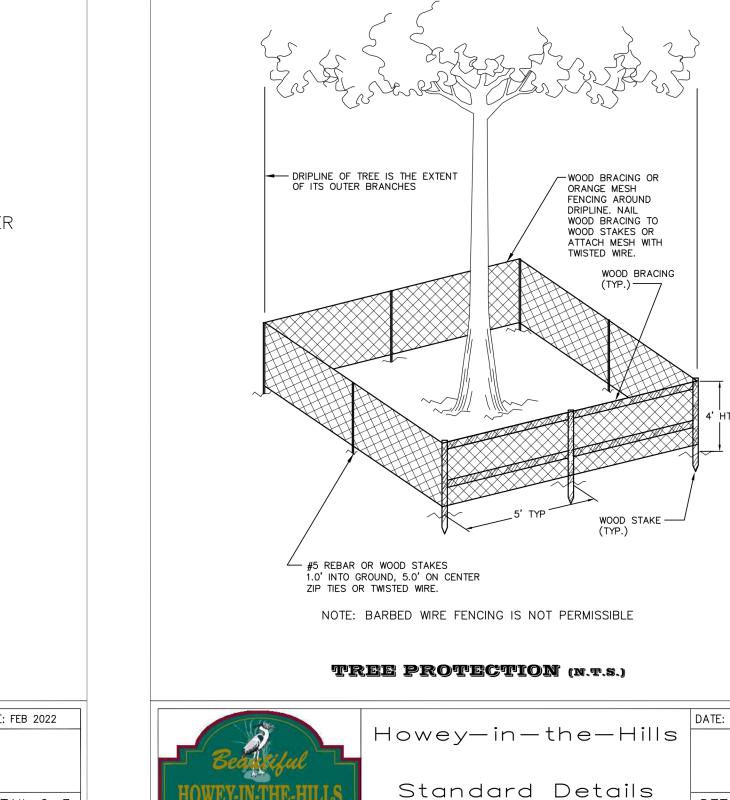
EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.

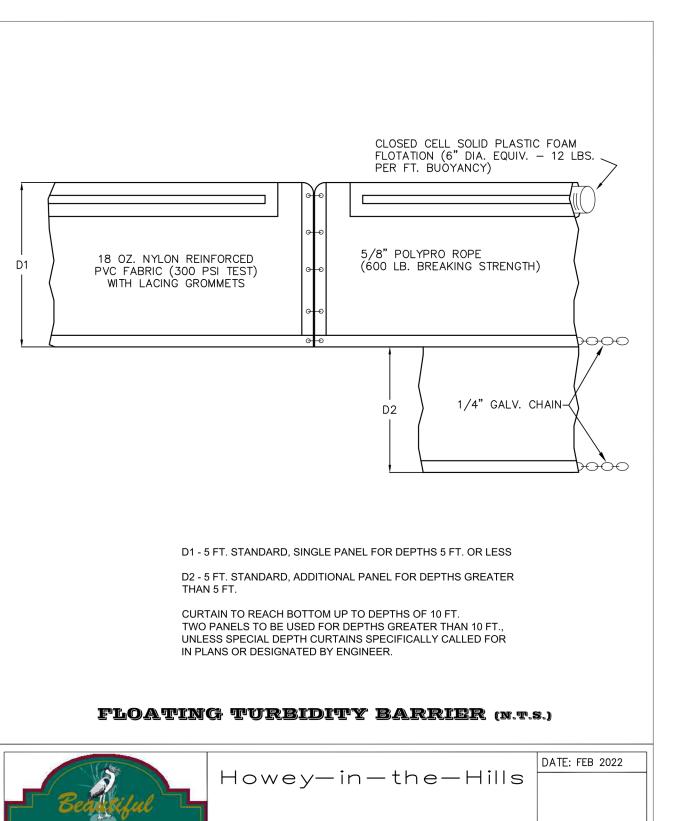
SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

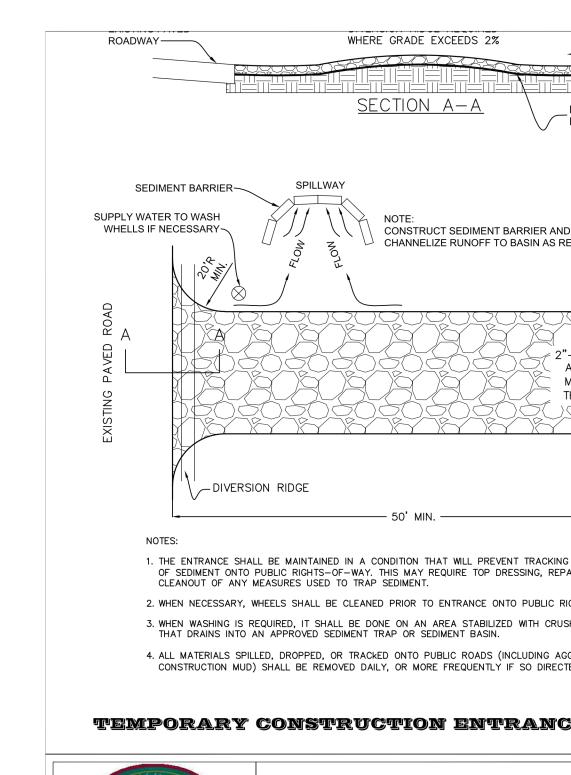
erosion & sediment control (N.T.S.)

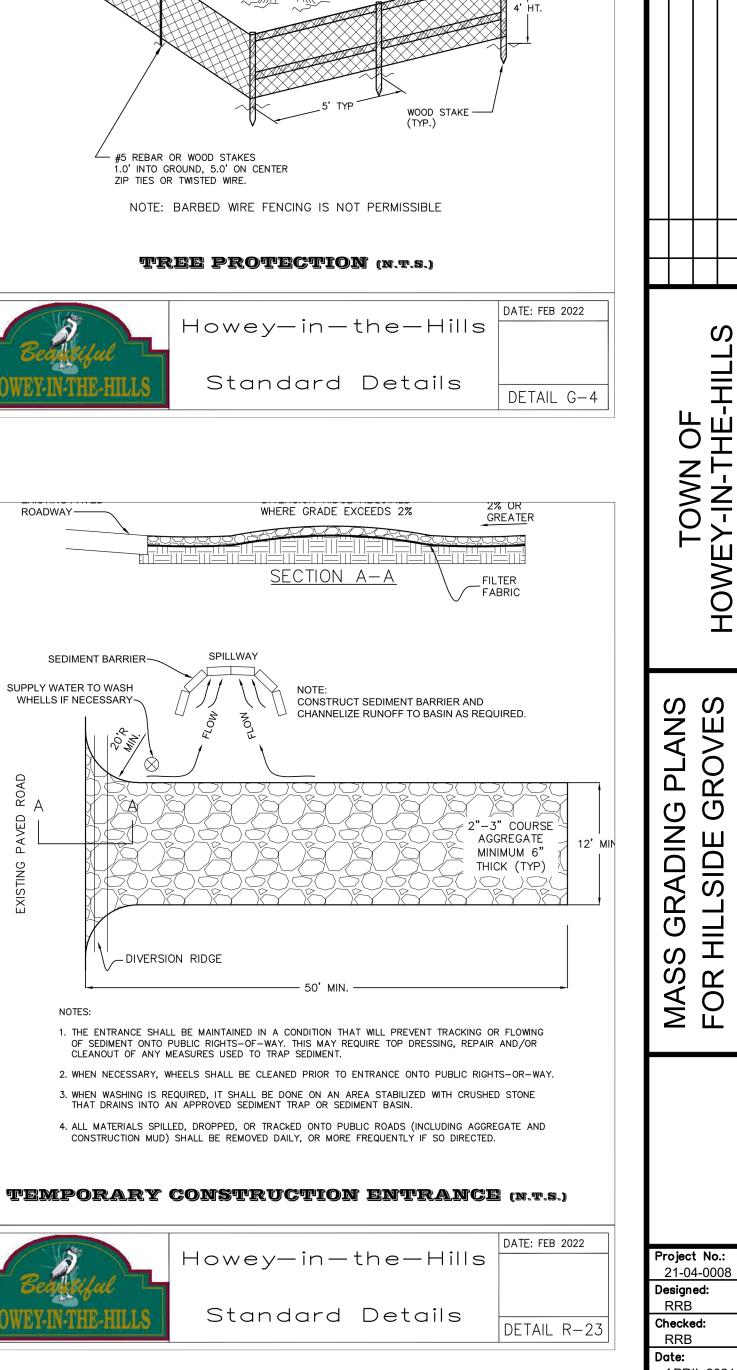












RAH O.C.: RCW **APRIL 2021** DATUM:

Scale:

Item 3.

Wicker

Connelly

Standard Details DETAIL G-2 SITE DESCRIPTION

PROJECT NAME AND LOCATION:

OWNER NAME AND ADDRESS:

RESIDENTIAL SUBDIVISION

6750 FORUM DRIVE, SUITE 310

SOIL DISTURBING ACTIVITIES WILL INCLUDE:

SEE SOIL BORING REPORT FOR SOILS DATA

CLEARING AND GRUBBING; EARTHWORK, PAVEMENT AND GRADING;

STORM SEWER, AND PREPARATION FOR FINAL PLANTING

PRE-CONSTRUCTION = .3

DURING CONSTRUCTION = .8

POST-CONSTRUCTION = .8

HILLSIDE GROVES

LAKE COUNTY, FL

HOWEY-IN-THE-HILLS

LENNAR - ORLANDO

ORLANDO, FL 32821

DESCRIPTION:

AND SEEDING.

RUNOFF COEFFICIENT:

TOTAL AREA OF SITE = 375.2 AC

TOTAL AREA TO BE DISTURBED = 239.3 AC

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY (DESRIPTION:) _____ WET & DRY DETENTION AREAS

FOR THE PROJECT. AREAS WHICH ARE NOT TO BE CONSTRUCTED ON, BUT WILL BE REGARDED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE. THE SITE DISCHARGES TO A DRAINAGE SYSTEM AS SHOWN ON THE PLANS. WHERE PRACTICAL, TEMPORARY SEDIMENT BASINS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN.

TIMING OF CONTROLS/MEASURES

REFER TO " CONTRACTORS RESPONSIBILITY" FOR THE TIMING OF CONTROL/MEASURES.

> CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

D.E.P. DREDGE/FILL PERMIT # _____ C.O.E. DREDGE/FILL PERMIT # ______ S.J.R.W.M.D. M.S.S.W. PERMIT# ______

POLITION PREVENTION PLAN CERTIFICATION

CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

DATED: _

SIGNED:

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

GENERAL

SEQUENCE OF MAJOR ACTIVITIES:

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES

AND HAY BALES AND STABILIZED CONSTRUCTION ENTRANCE

WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY

CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY

WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE

IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE

INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE

CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN

AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE

ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND

TURBIDITY CONTROLS AS SHOWN ON THE FROSION AND TURBIDITY CONTROL

CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPERLY

TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE.

THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN

ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL

MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST

MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS

1. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW

B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM

DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE

A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.

CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE

BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE

THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES

C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.

SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE

REFER TO LOCAL JURISDICTION DETAIL FOR CONSTRUCTING THE HAY

2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW

B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM

3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED

4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-

FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE

GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE

APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE

ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.

DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE

A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.

CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE

SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS

FOLLOWING LIMITATIONS:

AGAINST WASHOUT

FOLLOWING LIMITATIONS:

BALE BARRIER.

STABILIZATION PRACTICES

REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED

TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT

PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE

AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

- 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
- 2. INSTALL SILT FENCES AND HAY BALES AS REQUIRED
- CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT
- 4. CONSTRUCT SEDIMENTATION 5. CONTINUE CLEARING AND
- GRUBBING 6. STOCK PILE TOP SOIL IF REQUIRED
- ON SITE AS REQUIRED 8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE

7. PERFORM PRELIMINARY GRADING

- 9. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTER.
- 10. APPLY BASE TO PROJECT 11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING 12. COMPLETE FINAL PAVING

AS REQUIRED

13. REMOVE ACCUMULATED SEDIMENT FROM BASINS 14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION

SWALES/DIKES AND RESEED/SOD

FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH. 10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S)

CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL

STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF

6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODEABLE

EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES.

THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN

ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT

DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM

AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND

RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED

WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY

COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT

9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT

RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS

8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS

EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF

SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR

7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE

THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

LATER COMPETE WITH THE PERMANENT GRASSING.

THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER

RECONCENTRATE AFTER RELEASE. LEVEL SPREADER SHALL BE CONSTRUCTED

LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO

5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE

IN ACCORDANCE TO LOCAL JURISDICTION DETAIL.

OF SEDIMENTS.

- SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
- 11. TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
- 12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- 13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE
- 14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED

STRUCTURAL PRACTICES

- 1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.
- 2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN A DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA. THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION
- A. BLOCK & GRAVEL SEDIMENT FILTER THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.
- B. GRAVEL SEDIMENT TRAP THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED
- C. DROP INLET SEDIMENT TRAP THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS.
- 3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
- 4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE.

THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

| Concrete | | ₩ood | |
|------------|--------------------------|---------------------|---|
| Asphalt | Petroleum Based Products | ⊠ Masonry Blocks | ĺ |
| ☑ Tar | □ Cleaning Solvents | □ Roofing Materials | |
| Detergents | □ Paints | ⊠ Metal Studs | |
|] | | | İ |
| | | | 1 |

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED

WILL BE FOLLOWED.

ONSITE DURING THE CONSTRUCTION PROJECT. * AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO

- * ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY
- MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- * PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- * SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- DISPOSING OF THE CONTAINER. * MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL

WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE

* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

- THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.
- PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY
- * IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

CONTAIN IMPORTANT PRODUCT INFORMATION.

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS. CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IE APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

- * ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
- * ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF
- * BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

- * SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
- * THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMEN AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.
- * DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
- * TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- * A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH

THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF

TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS

- * THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE
- * PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

OF NON-COMPLIANCE.

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING

* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION). ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE PROPER

SEDIMENT TRAPS PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

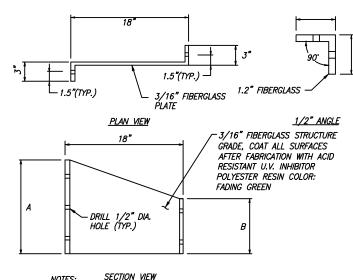
| RESPONSIBLE FOR/DUTIES | GENERAL CONTRACTOR | SUB-CONTRACTOR | SUB-CONTRACTOR | SUB-CONTRACTOR | SUB-CONTRACTOR |
|---|--------------------|----------------|----------------|----------------|----------------|
| BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS | | | | | |
| SIGNATURE | | | | | |

OUU

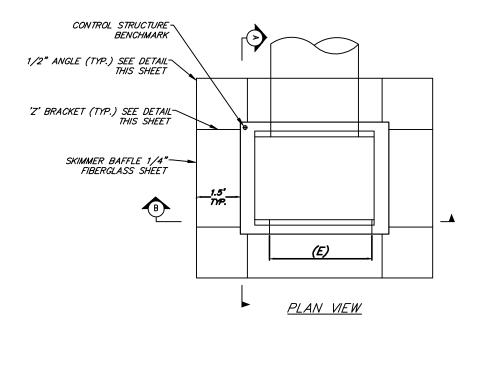
3

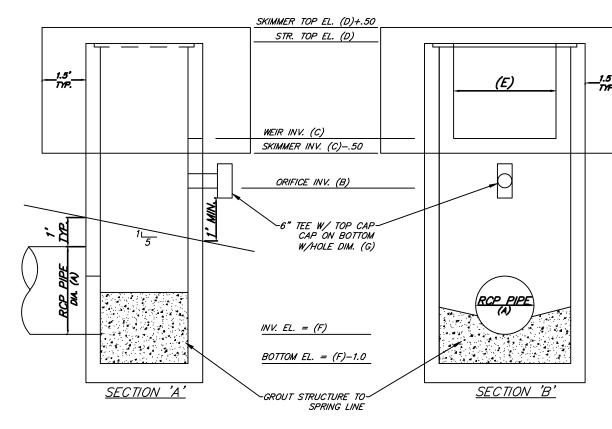
21-04-0008 Designed: RAH RRB 0.C.: Checked: RCW RRB APRIL 2021 DATUM: Scale:

BROADCRESTED WEIR NOTES: 1. ALL CONCRETE USED IN BROADCRESTED WEIR TO BE FIBER REINFORCED.

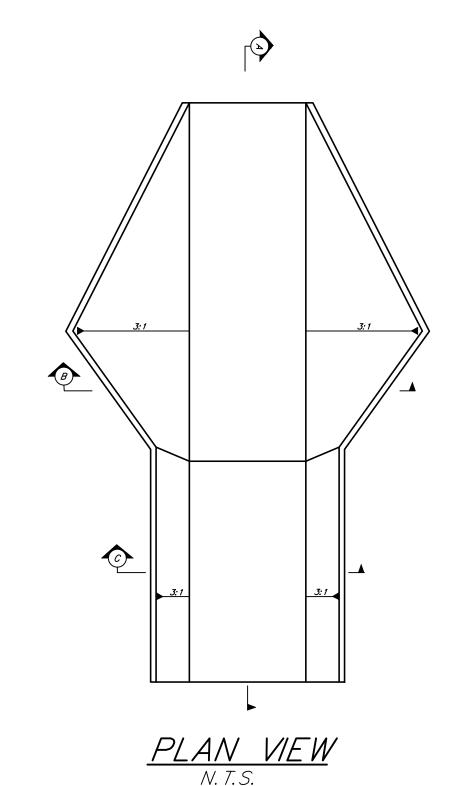


- NOTES: SECTION VIEW
- 1. MOUNT BRACKETS TO SKIMMERS W/ 1/4" STAINLESS STEEL BOLTS. 2. MOUNT BRACKETS TO STRUCTURES W/ 3/8" x 3-1/2" STAINLESS STEEL WEDGE ANCHORS.
- 3. A PERMANENT BENCH MARK IS TO BE SET IN A PERMANENT MANNER ON TOP OF THE OUTFALL CONTROL STRUCTURE.
- 4. SKIMMER TO BE MOUNTED TO DBI IN ACCORDANCE WITH MANUFACTURES SPECIFICATIONS USING 'Z' BRACKETS.
- 5. THE CONTROL STRUCTURES ARE TO BE LOCATED IN THE POND PER THE CONTROL STRUCTURE DETAIL.
- 6. ALL BOX STRUCTURES ARE TO INCLUDE GRATES AND CHAINS. MOUNTING 'Z' BRACKET DETAIL *N.T.S.*

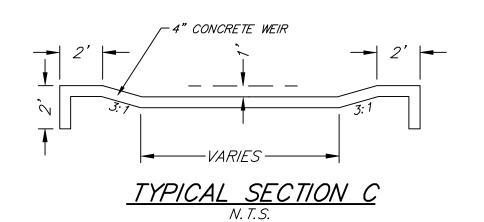




<u>TYPICAL CONTROL STRUCTURE DETAIL</u> N.T.S.



| 2' | ▼ |
|-------------------|---------------------|
| WEIR INV. EL. 'B' | WEIR WIDTH DIM. 'C' |



TYPICAL SECTION B

BROADCRESTED WEIR STRUCTURE DETAIL
N.T.S.

| RP01 | DORECTED | MEID | | | | | | |
|--------|-------------------|----------|--|--|--|--|--|--|
| | BROADCRESTED WEIR | | | | | | | |
| 5// | RUCTURE D | DIM. | | | | | | |
| POND | EL. (B) | DIM. (C) | | | | | | |
| W1 — 1 | <i>85.50</i> | 25' | | | | | | |
| W1-2 | 86.50 | 25' | | | | | | |
| W1-3 | 86.50 | 25' | | | | | | |
| W1-4 | 84.50 | 25' | | | | | | |
| W2-1 | 85.00 | 25' | | | | | | |
| W2-2 | <i>85.50</i> | 25' | | | | | | |
| W4-1 | 83.50 | 25' | | | | | | |

| DRY POND ELEVATIONS | | | | | | | | | |
|---------------------|-----------|-------------|--------------|--|--|--|--|--|--|
| POND | ELEV. (A) | ELEV. (B) | ELEV. (C) | | | | | | |
| D1-1 | 83.0 | 84.0 | 86.5 | | | | | | |
| D1-2 | 83.0 | 87.5 | 88.0 | | | | | | |
| D1-3 | 83.0 | 86.0 | 87.0 | | | | | | |
| D1-4 | 83.0 | 84.0 | <i>85.0</i> | | | | | | |
| D2-1 | 83.00 | 84.50 | <i>85.50</i> | | | | | | |
| D2-2 | 83.0 | <i>85.0</i> | 86.10 | | | | | | |
| D4-1 | 83.0 | 84.00 | 85.00 | | | | | | |

POND

B1-1

B2-1

B4-1

D1-1

D1-2

D1-3

D1-4

D2-1

D2-2

D4-1

W3-1

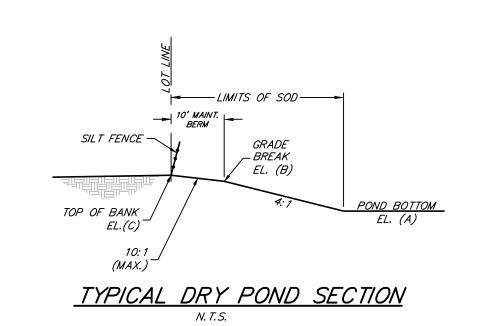
W3-2 W3-3

W3-4

W4-1

W4-2

| CONTROL STRUCTURE ELEVATIONS | | | | | | | | | | |
|------------------------------|----------|-----------|---------------|-----------|-----------|-----------|-------------|-----------|----------|---------------------|
| POND | I.D. NO. | STR. TYPE | PIPE DIA. (A) | ELEV. (B) | ELEV. (C) | ELEV. (D) | DIM. (E) | ELEV. (F) | DIM. (G) | ORIFICE QUANTITY |
| W4-2 | DS4-2 | DS | 24" | 81.00 | 82.50 | 86.40 | <i>36"</i> | 77.00 | 3.00" | 1 |
| W3-4 | DS3-4 | DS | 24" | 81.00 | 84.50 | 85.50 | <i>36"</i> | 77.00 | 3.00" | 1 |
| W4-1 | DS4-1 | DS | 24" | 81.00 | 84.00 | 85.00 | <i>36"</i> | 77.00 | 3.00" | 1 |
| W3-3 | DS3-3 | DS | 24" | 81.00 | 84.00 | 85.00 | <i>36"</i> | 77.00 | 3.00" | 1 |
| W3-2 | DS3-2 | DS | 24" | 81.00 | 84.00 | 85.00 | <i>36</i> " | 77.00 | 3.00" | 1 |
| W3-1 | DS3-1 | DS | 24" | 81.00 | 84.00 | 85.00 | <i>36"</i> | 77.00 | 3.00" | 1 |
| B4-1 | H4-1-W | DS | <i>36</i> " | 81.00 | | | | | | |
| B4-1 | H4-1-E | DS | <i>36"</i> | 81.00 | | | | | | |
| <i>B2</i> –1 | DS-B2-1 | DS | 48" | 81.00 | | | | | | |
| B1-1 | H1-1 | DS | 48" | 81.00 | | | | | | |
| WET G3 | E-WETG | DS | 24" | 81.00 | | | | | | |
| WET J | E-WETJ | DS | 24" | 81.00 | | | | | | |
| WET F | E-WETF | DS | 24" | 81.00 | | | | | | |
| D2-1 | DS2-1 | DS | 24" | 81.00 | | | | | | |
| D1-3 | DS1-3 | DS | 24" | 81.00 | | | | | | |
| D1-2 | DS1-2 | DS | 24" | 81.00 | | | | | | |



PEAK STAGE SUMMARY

84.5

83.9

84.1

83.5

85.0

84.7

BANK

85.5

85.5

85.00

86.5

88.0

87.0

87.0

85.5

86.1

85.0

85.0

85.0

85.0

85.5

85.0

86.4

81.0

81.0

81.0

83.0

83.0

83.0

83.0

83.0

83.00

83.00

81.00

81.00

81.00

81.00

81.00

81.00

| 101 LME | -LIMITS OF SOD | 4 |
|------------------|---------------------------|---------------------|
| SILT FENCE - | | |
| | GRADE BREAK EL. (D) | _ N.C.L. EL. (C) |
| TOP OF BANK | 5.7 | |
| 10:1_/ (MAX.) | 20.105.00.115 | -VARIES — |
| | GRADE BRAKE _/ EL. (B) | POND BOTTOM EL. (A) |

| TYPICAL | WET POND SECTION | |
|---------|------------------|--|
| | N. T. S. | |

| _ | | | | | | $14/\Gamma T = 4 \times 1/$ |
|---|-------------|-----------|-------------|--------------|-------------------|-----------------------------|
| | 25YR/24HR | 10YR/24HR | 100YR/24HR | 25YR/96HR | 0.04/5 | WET AND |
| | 83.6 | 83.6 | 83.6 | 83.6 | POND | · · · · |
| | 83.6 | 83.6 | 83.6 | 83.6 | B1-1 | 71.0 |
| | | | | | B2-1 | 71.0 |
| | 82.2 | 81.9 | 82.7 | 83.0 | B4-1 | 69.0 |
| | <i>85.3</i> | 84.8 | 85.6 | 85.6 | W3-1 | |
| | 86.6 | 86.0 | 87.4 | 87.9 | W3-2 | _ |
| | 84.5 | 84.1 | <i>85.2</i> | 85.6 | $\frac{W3}{W3-3}$ | |
| | <i>85.2</i> | 85.6 | 85.44 | <i>85.52</i> | $\frac{1}{W3-4}$ | |
| | 84.7 | 84.5 | 84.9 | 85.0 | W4-1 | |
| | 85.6 | 85.6 | 85.8 | 85.9 | W4-2 | |
| | 83.9 | 83.9 | 84.1 | 84.1 | | |
| | 83.99 | 83.3 | 84.4 | 84.5 | | |
| | 82.7 | 82.4 | 83.4 | 83.7 | | |
| | 83.4 | 82.9 | 84.2 | 84.2 | | |
| | 84.0 | 83.4 | 84.9 | 85.0 | | |
| | | | | | | |

85.1

85.1

| | WET AND BORROW POND ELEVATIONS | | | | | | | |
|------|--------------------------------|-----------|-----------|-------------|-------------|--|--|--|
| POND | ELEV. (A) | ELEV. (B) | ELEV. (C) | ELEV. (D) | ELEV. (E) | | | |
| B1-1 | 71.0 | 79.0 | 81.0 | 84.5 | <i>85.5</i> | | | |
| B2-1 | 71.0 | 79.0 | 81.0 | 84.5 | 85.5 | | | |
| B4-1 | 69.0 | 79.0 | 81.0 | 84.0 | 85.0 | | | |
| W3-1 | 69.0 | 79.00 | 81.00 | 84 | 85.0 | | | |
| W3-2 | 69.0 | 79.0 | 81.00 | 84.00 | 85.00 | | | |
| W3-3 | 69.00 | 79.00 | 81.00 | 84.00 | 85.00 | | | |
| W3-4 | 69.00 | 79.0 | 81.0 | 84.00 | <i>85.5</i> | | | |
| W4-1 | 71.00 | 79.00 | 81.00 | 84.50 | 85.00 | | | |
| W4-2 | 71.5 | 79.00 | 81.00 | <i>85.4</i> | 86.4 | | | |

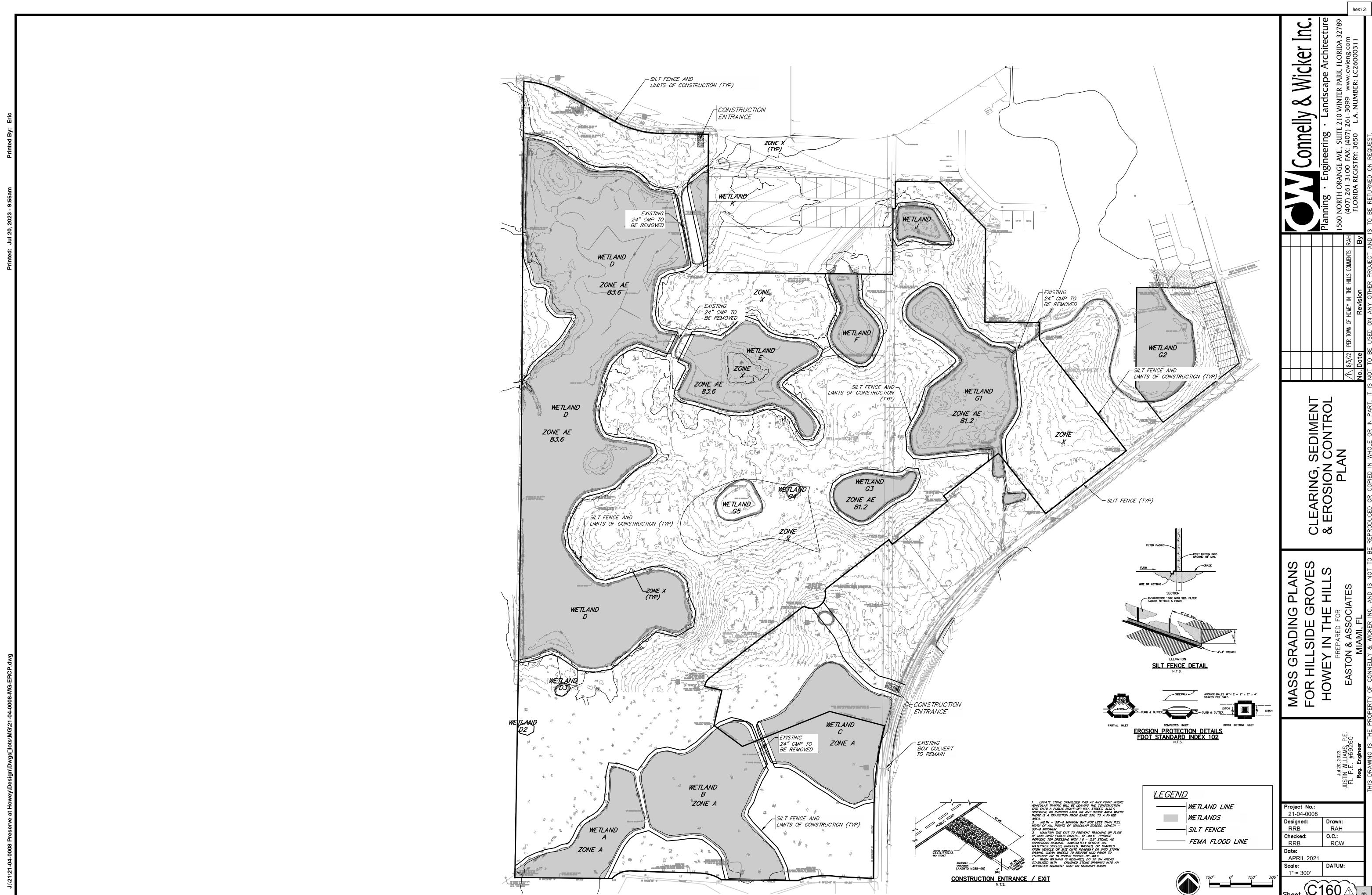
| CONTROL STRUCTUF DETAILS | | | | | |
|---|---|---------------|---|--|--|
| MASS GRADING PLANS FOR HILLSIDE GROVES | HOWEY IN THE HILLS PREPARED FOR EASTON & ASSOCIATES | MIAMI, FL | THIS DRAWING IS THE PROPERTY OF CONNELLY & WICKER INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PAR | | |
| | Jul 20, 2023 JUSTIN WILLIAMS, P.E. FI PF #69260 | Reg. Engineer | THIS DRAWING IS THE PR | | |
| roject No.: 21-04-0008 | | | | | |
| esigned: RRB | Drawn: RAH | | | | |
| hecked: | 0.C.: | | | | |
| RRB ate: | RCW | | | | |
| APRII 2021 | | | | | |

Sheet C510

y & Wicker Inc.

Landscape Architecture

Connelly



| F | 3.39 |
|----|--------------|
| G1 | 13.22 |
| G2 | 6.31 |
| G3 | 3.16 |
| G4 | 0.18 |
| G5 | 1.66 |
| J | 1. <i>76</i> |
| K | 1.03 |
| D2 | 0.19 |
| D3 | 0.17 |
| | |
| | |

WETLAND

ACRE

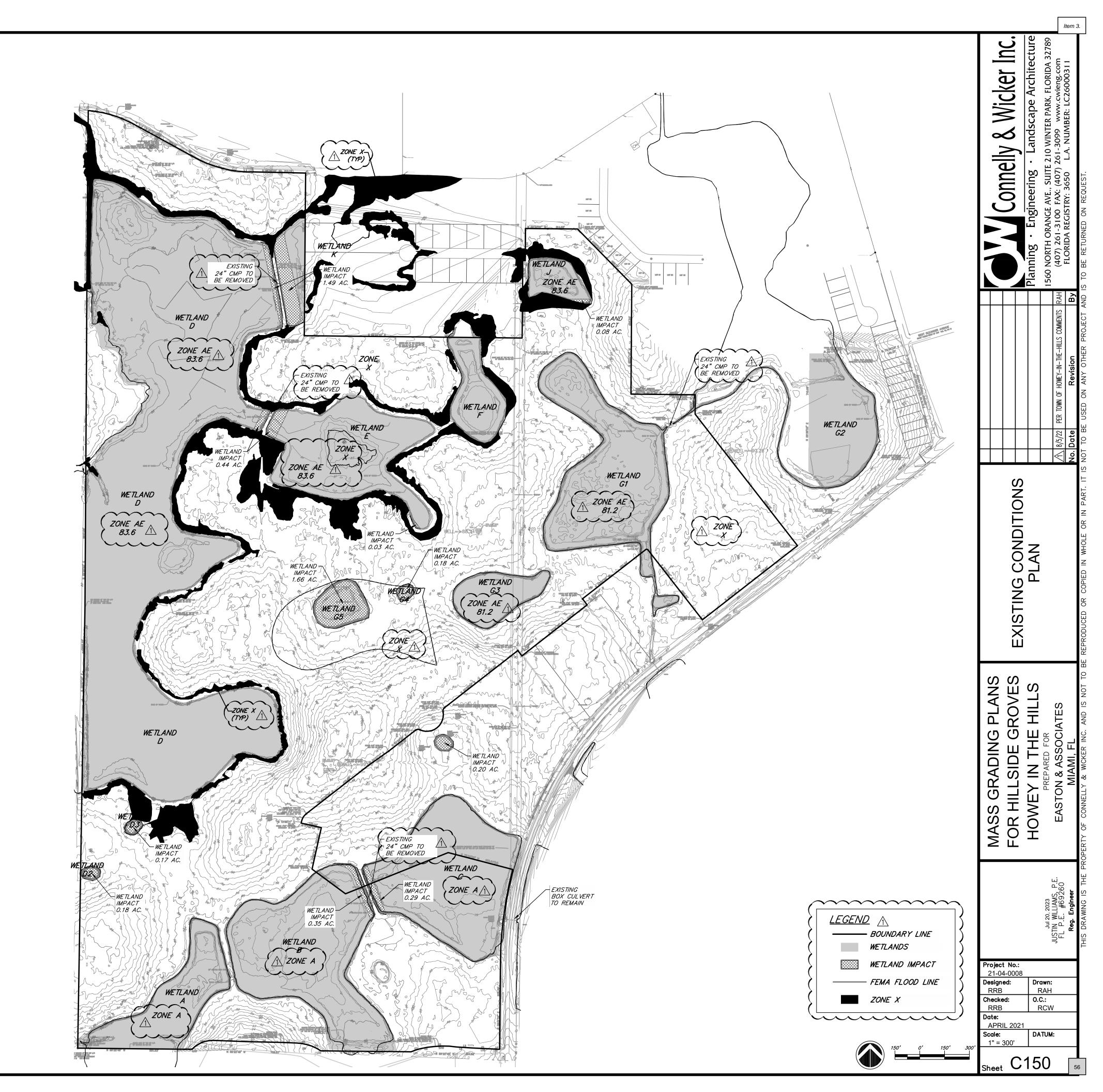
6.59

14.31

7.94

62.25

10.19

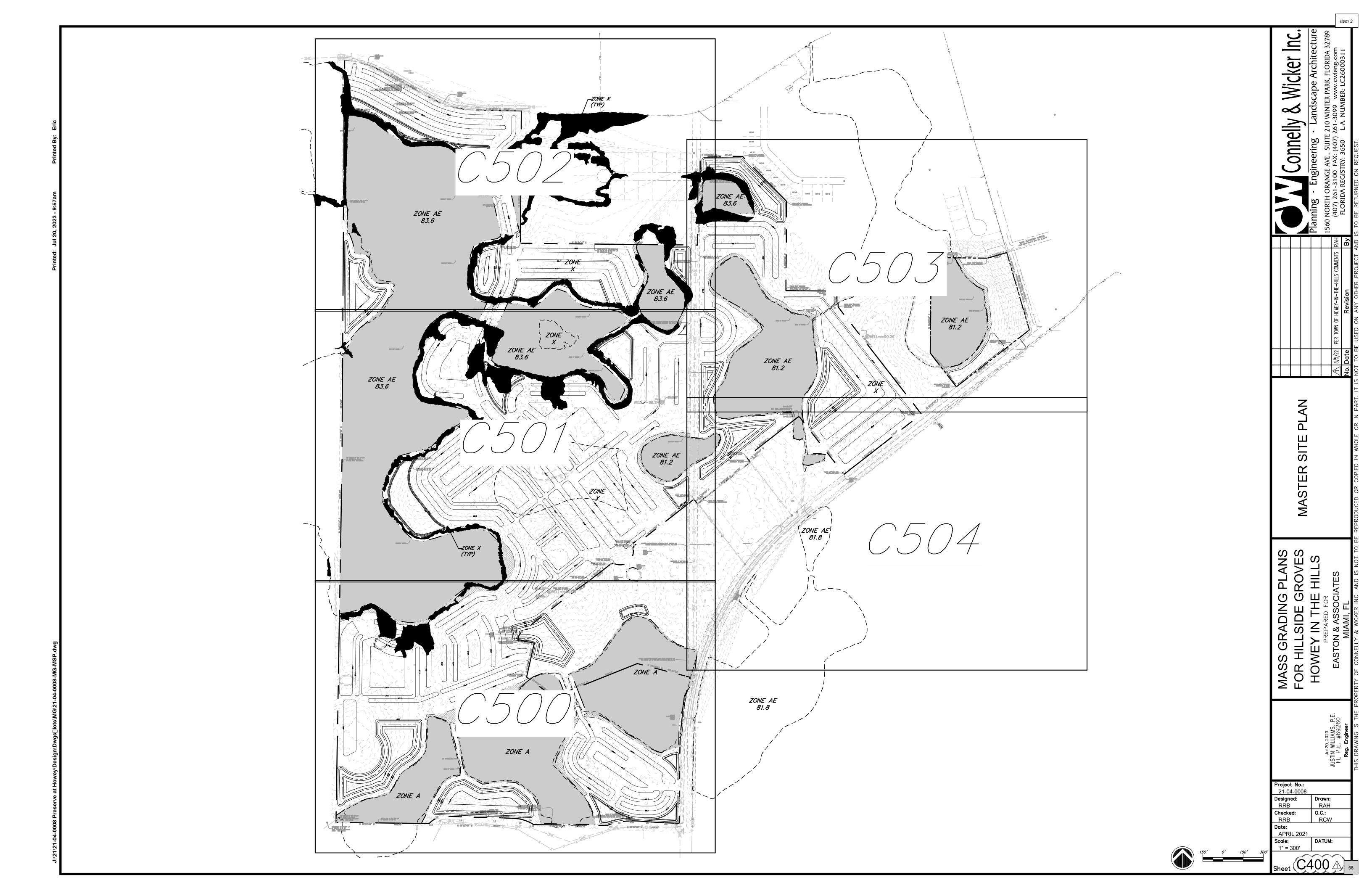


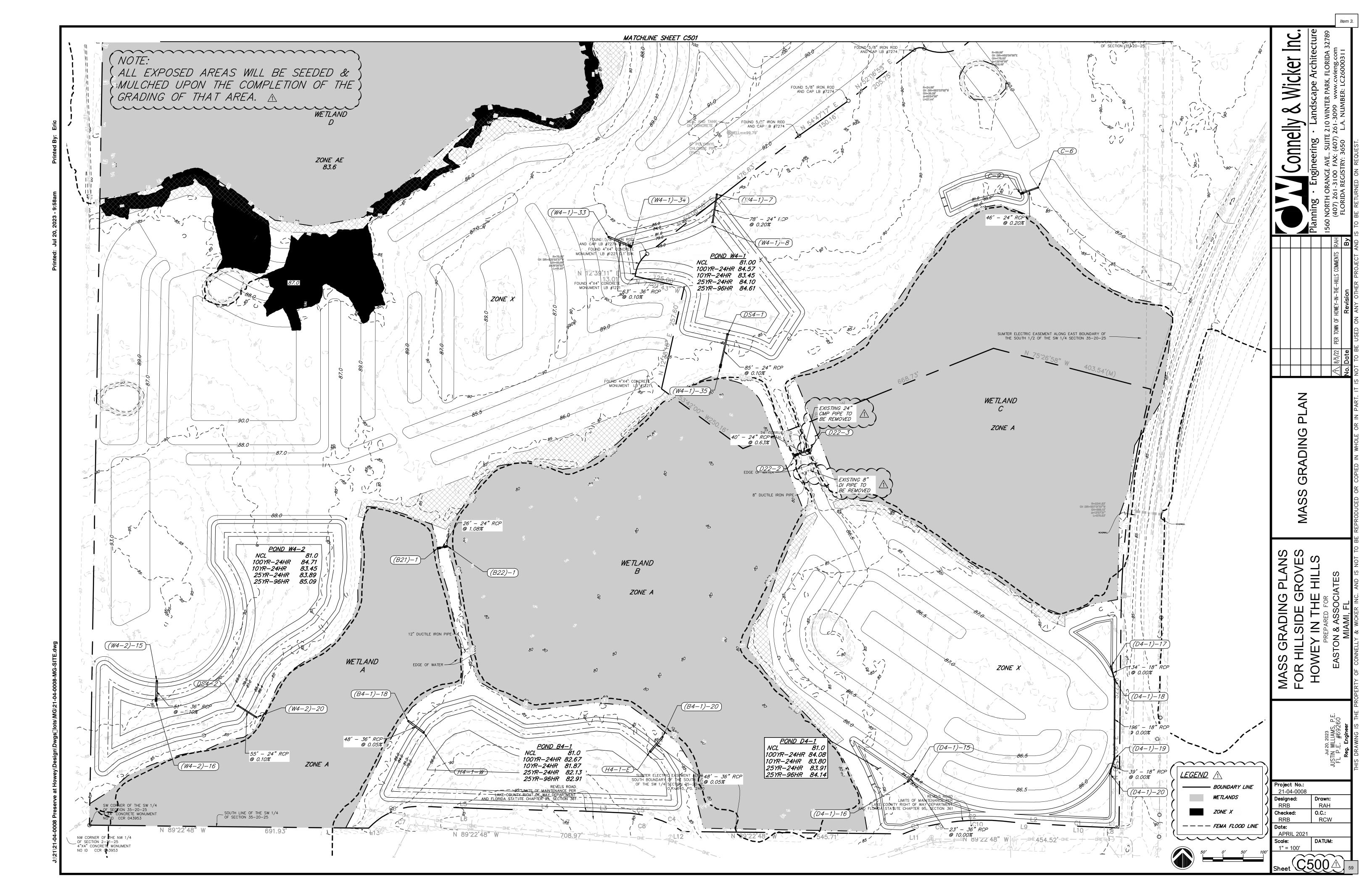
Connelly

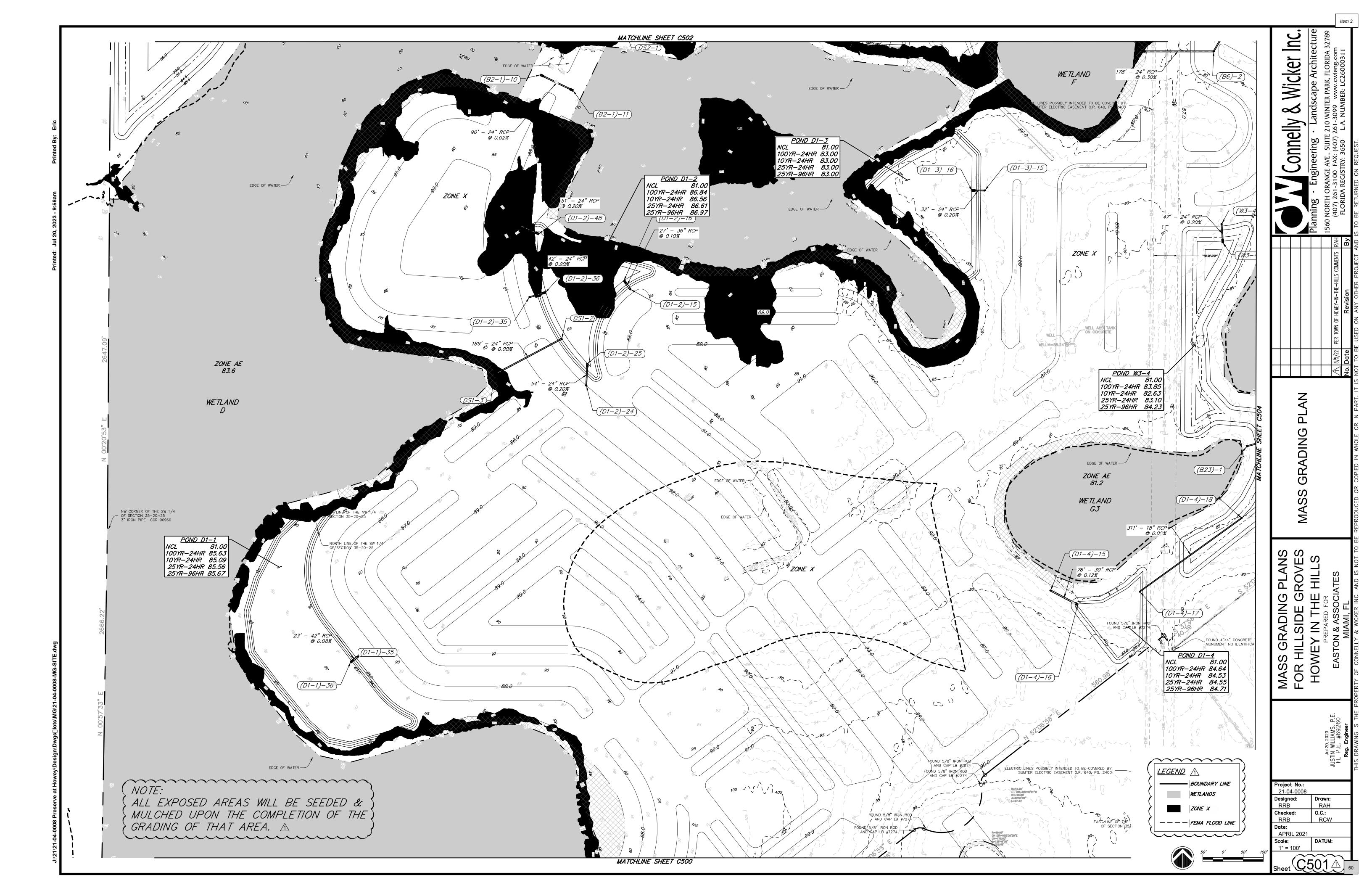
LOODPLAIN FILL MPENSATION MAP

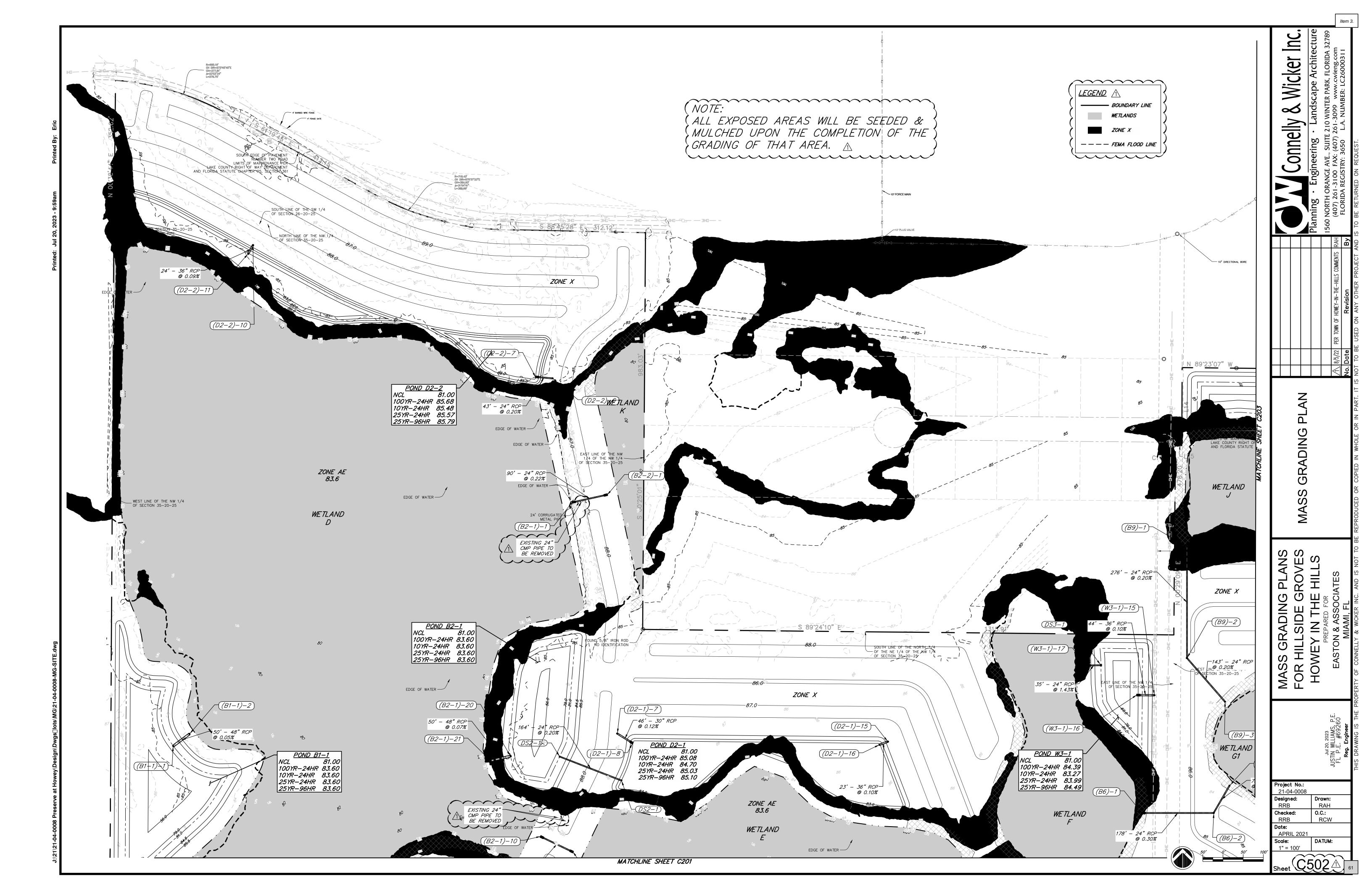
21-04-0008 Designed: RAH RRB O.C.: Checked: RRB RCW APRIL 2021 DATUM:

Scale: 1" = 300' Sheet EX.

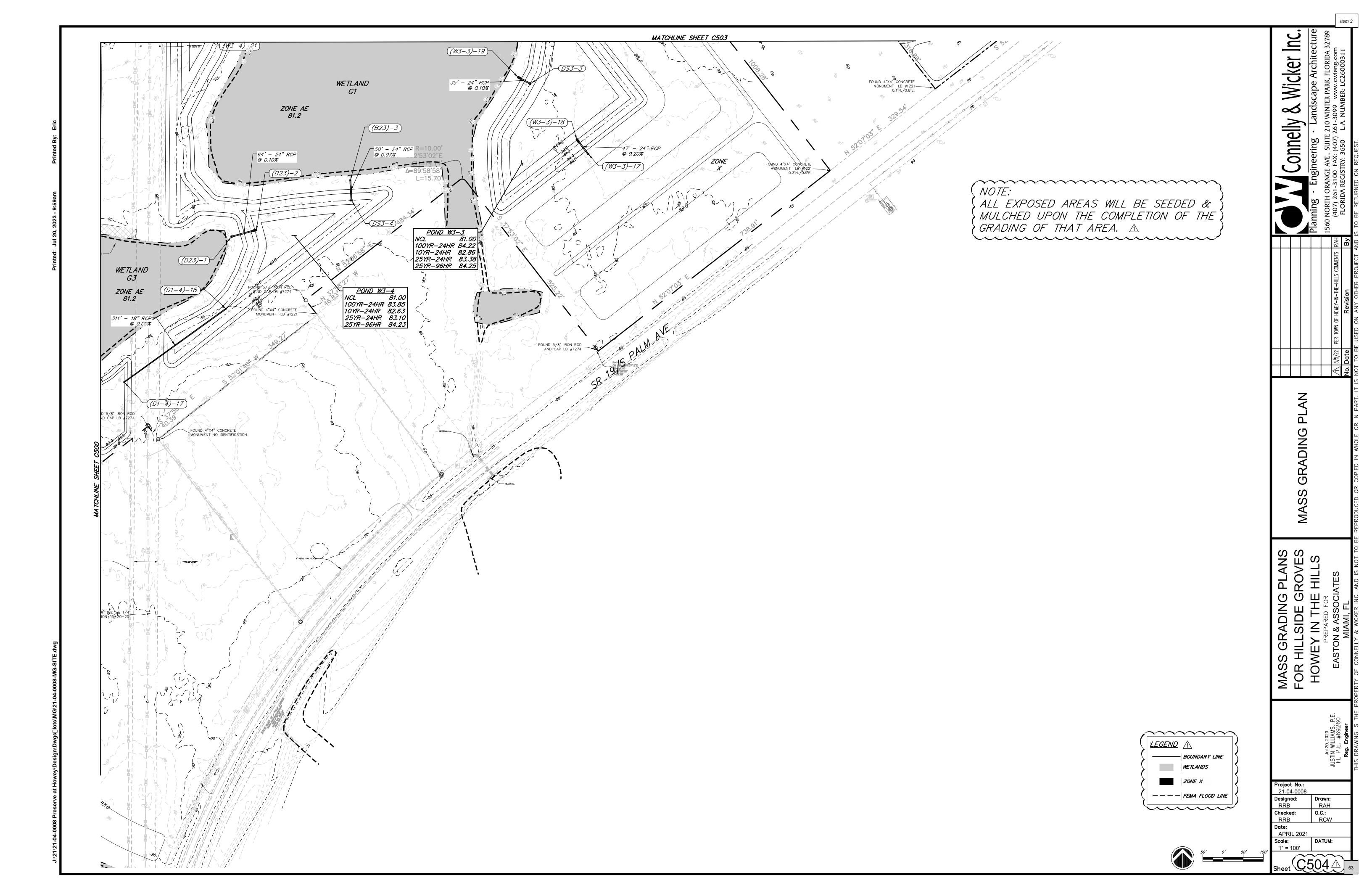












| Drainage Structure Table | | | | | | |
|--------------------------|-----------|--|------------------------------------|--|--|--|
| Name | Туре | Details | Location | | | |
| (B1-1)-1 | 'H' DBI | RIM = 81.00 INV OUT = 74.00 (NE) | N: 1590487.4478 E: 403555.7193 | | | |
| (B1-1)-2 | 'C' DBI | RIM = 83.72 INV IN = 73.97 (SW) | N: 1590517.3890 E: 403595.7635 | | | |
| (B2-1)-20 | 'H' DBI | RIM = 81.00 INV OUT = 74.00 (W) | N: 1590462.3094 E: 404391.1381 | | | |
| (B2-1)-21 | 'C' DBI | RIM = 79.22 INV IN = 73.96 (E) | N: 1590450.9195 E: 404342.4526 | | | |
| (B4-1)-18 | 'C' DBI | RIM = 84.69 INV IN = 73.98 (SE) | N: 1586729.7237 E: 404137.7254 | | | |
| (B4-1)-20 | 'C' DBI | RIM = 85.00 INV IN = 73.98 (SW) | N: 1586690.3546 E: 404768.0442 | | | |
| (B6)-2 | 'P' MH | RIM = 86.50 INV IN = 78.97 (W) INV OUT = 78.97 (NE) | N: 1590321.5469 E: 406133.5094 | | | |
| (B6)-3 | 'C' DBI | RIM = 82.99 INV IN = 78.77 (SW) | N: 1590389.3743 E: 406172.8217 | | | |
| (B9)–1 | 'C' DBI | RIM = 84.00 INV OUT = 79.22 (S) | N: 1590981.5085 E: 406067.3943 | | | |
| (B9)-2 | 'P' MH | RIM = 85.00 INV IN = 78.67 (N) INV OUT = 78.67 (SE) | N: 1590705.4672 E: 406067.3943 | | | |
| (B9)-3 | 'C' DBI | RIM = 83.38 INV IN = 78.38 (NW) | N: 1590597.3202 E: 406161.5856 | | | |
| (B10)-2 | 'P' MH | RIM = 84.08 INV IN = 79.30 (SW) INV OUT = 79.30 (SE) | N: 1590337.9471 E: 407033.6499 | | | |
| (B23)–1 | 'C' DBI | RIM = 82.99 INV OUT = 77.00 (E) | N: 1589343.3217 E: 406216.2088 | | | |
| (823)–3 | 'C' DBI | RIM = 82.98 INV IN = 73.96 (S) | N: 1589483.2381 E: 406510.5162 | | | |
| (D1-1)-35 | 'P' MH | RIM = 86.65 INV IN = 81.94 (NE) INV OUT = 81.94 (SW) | N: 1588822.2260 E: 404013.0364 | | | |
| (D1–2)–15 | 'P' MH | RIM = 87.19 INV IN = 82.03 (SE) INV OUT = 82.03 (NW) | N: 1589732.0243 E: 404687.9059 | | | |
| (D1-2)-24 | 'P4' Cl | RIM = 90.09 INV IN = 85.30 (SE) INV OUT = 84.84 (N) | N: 1589493.6625 E: 404578.7770 | | | |
| (D1-2)-35 | 'P3' CI-R | RIM = 90.77 INV IN = 85.64 (W) INV OUT = 85.64 (E) | N: 1589712.6383 E: 404438.3608 | | | |
| (D1-3)-15 | 'P' MH | RIM = 87.00 INV OUT = 83.06 (W) | N: 1589976. 7082 E: 405566.0790 | | | |
| (D1-4)-15 | 'P' MH | RIM = 88.30 INV IN = 80.12 (SW) INV OUT = 80.12 (SE) | N: 1588985.7717 E: 405729.4132 | | | |

| Drainage Structure Table | | | | | |
|--------------------------|-----------|---|-------------------------------------|--|--|
| Name | Туре | Details | Location | | |
| [D1-4)-17 | 'C' DBI | R/M = 83.00 $INV IN = 79.50 (NE)$ | N: 1588983.0146 E: 405950.1727 | | |
| (D1-4)-18 | 'C' DBI | RIM = 83.00 INV OUT = 79.50 (SW) | N: 1589165.1794 E: 406202.7459 | | |
| (D2-1)-7 | 'P3' CI-R | RIM = 88.25 INV IN = 82.37 (N) INV IN = 83.37 (W) INV OUT = 81.87 (SE) | N: 1590518. 3552 E: 404655. 7864 | | |
| (D2-1)-15 | 'P' MH | RIM = 86.00 INV OUT = 77.02 (W) | N: 1590498.5179 E: 405326.3260 | | |
| (D2-1)-16 | 'C' DBI | RIM = 83.00 INV IN = 77.00 (E) | N: 1590490.4766 E: 405305.3121 | | |
| (D2-2)-6 | 'P3' CI-L | RIM = 88.68 $INV IN = 82.14 (N)$ $INV IN = 83.79 (E)$ $INV OUT = 81.64 (W)$ | N: 1591398.2676 E: 404495.1543 | | |
| D2-2)-10 | 'P' MH | RIM = 86.50 INV OUT = 77.02 (SW) | N: 1591728.4355 E: 403752.9500 | | |
| (D2-2)-11 | 'C' DBI | R/M = 83.00 $INV IN = 77.00 (NE)$ | N: 1591706.9440 E: 403741.1979 | | |
| (D4-1)-15 | 'P' MH | R/M = 85.00 /NV OUT = 79.00 (SW) | N: 1586597.9018 E: 405388.5952 | | |
| (D4-1)-16 | 'C' DBI | R/M = 83.00 INV IN = 76.70 (NE) | N: 1586578.9438 E: 405375.5723 | | |
| D4-1)-17 | 'C' DBI | RIM = 83.00 INV IN = 79.50 (S) | N: 1586864.7710 E: 405878.6754 | | |
| [D4-1)-18 | 'P' MH | RIM = 86.50 INV IN = 79.50 (S) INV OUT = 79.50 (N) | N: 1586831.8669 E: 405888.2502 | | |
| D4-1)-19 | 'P' MH | RIM = 85.00 INV IN = 79.50 (S) INV OUT = 79.50 (N) | N: 1586636.2773 E: 405887.4845 | | |
| D4-1)-20 | 'C' DBI | RIM = 85.54 INV OUT = 79.50 (N) | N: 1586599.4136 E: 405876.2749 | | |
| W3-1)-15 | 'P' MH | RIM = 85.50 INV OUT = 77.04 (W) | N: 1590613.2596 E: 405986.4912 | | |
| W3-2)-15 | 'P' MH | RIM = 86.00 INV OUT = 77.09 (NE) | N: 1590955.8999 E: 406579.4621 | | |
| W3-2)-17 | 'C' DBI | RIM = 77.80 INV IN = 73.97 (NE) | N: 1591040.2441 E: 406451.1525 | | |
| W3-3)-15 | 'P' MH | RIM = 87.00 INV OUT = 78.08 (SW) | N: 1589882.1068 E: 407103.2258 | | |
| W3-3)-17 | 'P' MH | RIM = 87.00 INV OUT = 78.09 (NW) | N: 1589547.6729 E: 407100.2470 | | |
| V3-4)-20 | 'P' MH | RIM = 86.50 INV OUT = 77.09 (S) | N: 1589893. 7446 E: 406153.0898 | | |

| Drainage Structure Table | | | | |
|--------------------------|---------|---|-----------------------------------|--|
| Name | Туре | Details | Location | |
| (W4-1)-7 'P' MH | | RIM = 87.36 INV IN = 84.61 (NE) INV OUT = 69.16 (S) | N: 1588034.4423 E: 404902.5102 | |
| (W4-1)-33 | 'P' MH | RIM = 87.50 INV IN = -1.55 (W) INV OUT = 77.06 (SE) | N: 1587928.8718 E: 404634.1131 | |
| (W4-2)-15 | 'P' MH | RIM = 86.50 INV OUT = 76.95 (S) | N: 1586828.8646 E: 403514.8492 | |
| (W4-2)-20 | 'C' DBI | RIM = 85.00 INV IN = 76.95 (NW) | N: 1586739.1286 E: 403761.1542 | |
| C-6 | P'MH | $R/M = 87.57$ $INV\ IN = 78.88\ (SE)$ $INV\ IN = 82.67\ (NW)$ $INV\ OUT = 81.09\ (W)$ | N: 1588051.3909 E: 405698.3045 | |
| DS1-2 | 'E' DBI | RIM = 2.08 $INV OUT = -1.00 (SW)$ | N: 1589609.2057 E: 404517.6567 | |
| DS2-1 | 'C' DBI | RIM = 85.08 INV IN = 82.00 (W) | N: 1590402.0570 E: 404666.0101 | |
| DS2-1A | 'C' DBI | RIM = 85.41 INV OUT = 82.33 (E) | N: 1590461.2716 E: 404513.0702 | |
| DS3-1 | 'C' DBI | RIM = 85.00 INV OUT = 77.00 (W) | N: 1590687.5198 E: 405854.1681 | |
| DS3-2 | 'C' DBI | RIM = 85.00 INV OUT = 74.00 (SW) | N: 1591064.4909 E: 406491.9979 | |
| DS3-4 | 'C' DBI | RIM = 85.50 INV OUT = 74.00 (N) | N: 1589433.3103 E: 406513.2079 | |
| DS4-1 | 'C' DBI | RIM = 85.00 INV OUT = 77.00 (S) | N: 1587687.8424 E: 404929.0941 | |
| DS4-2 | 'E' DBI | RIM = 86.40 INV OUT = 77.00 (SE) | N: 1586768.3379 E: 403715.1426 | |
| H4-1-E | 'E' DBI | RIM = 81.00 INV OUT = 74.00 (NE) | N: 1586654.0025 E: 404737.3604 | |
| H4-1-W | 'E' DBI | RIM = 81.00 $INV OUT = 74.00 (NW)$ | N: 1586701.2472 E: 404175.7825 | |

| Name | Туре | Details | Location |
|-----------|------|----------------------|-----------------------------------|
| (B2-1)-1 | MES | INV IN = 81.25 (E) | N: 1591090.8903 E: 404543.5809 |
| (B2-1)-10 | MES | INV IN = 80.94 (SE) | N: 1590263.4475 E: 404465.2081 |
| (B2-1)-11 | MES | INV OUT = 80.96 (NW) | N: 1590224.4837 E: 404546.3365 |
| (B2-2)-1 | MES | INV OUT = 81.45 (W) | N: 1591110.3098 E: 404631.4608 |
| (B6)–1 | MES | INV OUT = 79.50 (E) | N: 1590321.5469 E: 405955.4683 |
| (B10)–1 | MES | INV OUT = 79.48 (NE) | N: 1590240.1036 E: 406907.8904 |
| (B10)-3 | MES | INV IN = 79.21 (NW) | N: 1590301.7939 E: 407073.8888 |
| (B21)-1 | MES | INV OUT = 80.90 (E) | N: 1587157.1827 E: 404209.6026 |
| (B22)-1 | MES | INV IN = 80.62 (W) | N: 1587162.8809 E: 404234.9060 |
| (B23)-2 | MES | INV IN = 76.94 (W) | N: 1589360.4420 E: 406277.8764 |
| (D1-1)-36 | MES | INV IN = 81.92 (NE) | N: 1588808.1004 E: 403994.8851 |
| (D1-2)-16 | MES | INV IN = 82.00 (SE) | N: 1589754.0969 E: 404672.3560 |
| (D1-2)-48 | MES | INV IN = 84.09 (NW) | N: 1589869.0135 E: 404461.1340 |
| (D1-3)-16 | MES | INV IN = 83.00 (E) | N: 1589976.9796 E: 405534.0802 |
| (D1-4)-16 | MES | INV IN = 80.03 (NW) | N: 1588950.5011 E: 405796.7379 |
| (D2-1)-8 | MES | INV IN = 81.81 (NW) | N: 1590494.1449 E: 404694.4561 |
| (D2-2)-7 | MES | INV IN = 81.56 (E) | N: 1591402.0188 E: 404452.8202 |
| (W3-1)-16 | MES | INV IN = 77.00 (E) | N: 1590613.5903 E: 405942.4926 |
| (W3-1)-17 | MES | INV IN = 76.50 (E) | N: 1590686.9868 E: 405819.1722 |
| (W3-2)-16 | MES | INV IN = 77.00 (SW) | N: 1590993.8058 |

| Name | Туре | Details | Location |
|-----------|------|---------------------|------------------------------------|
| (W3-3)-16 | MES | INV IN = 78.00 (NE) | N: 1589856. 3162 E: 407070.0770 |
| (W3-3)-18 | MES | INV IN = 78.00 (SE) | N: 1589584.7306 E: 407071.3378 |
| (W3-3)-19 | MES | INV IN = 76.97 (SE) | N: 1589739.1179 E: 406925.3072 |
| (W3-4)-21 | MES | INV IN = 77.00 (N) | N: 1589847.3574 E: 406156.3374 |
| (W4-1)-8 | MES | INV IN = 69.00 (N) | N: 1587957.1695 E: 404890.8511 |
| (W4-1)-34 | MES | INV IN = 77.00 (NW) | N: 1587904.4818 E: 404691.8339 |
| (W4-1)-35 | MES | INV IN = 76.92 (N) | N: 1587604.9019 E: 404910.4966 |
| (W4-2)-16 | MES | INV IN = 77.00 (N) | N: 1586777.9057 E: 403512.8034 |
| D22-2 | MES | INV OUT = 80.71 (E) | N: 1587387.8934 E: 405096.2266 |
| D22-3 | MES | INV IN = 80.46 (W) | N: 1587402.3245 E: 405133.5096 |
| DS1-3 | MES | INV IN = -1.00 (NE) | N: 1589520.7784 E: 404351.1418 |

Engineering · Landscape Architecture
ANGE AVE., SUITE 210 WINTER PARK, FLORIDA 32789
3100 FAX: (407) 261-3099 www.cwieng.com
REGISTRY: 3650 L.A. NUMBER: LC26000311 **TABLES** RUCTURE ST MASS GRADING PLANS
FOR HILLSIDE GROVES
HOWEY IN THE HILLS
PREPARED FOR
EASTON & ASSOCIATES
MIAMI, FL

PRENTY OF CONNELLY & WICKER INC. AND IS NOT TO B JUSTIN WILLIAMS, P.E. FL P.E. #69260 Reg. Engineer THIS DRAWING IS THE Project No.:
21-04-0008

Designed:
RRB

Checked:
RRB

Date:
APRIL 2021

Scale:
N/A Drawn: RAH 0.C.: RCW DATUM:

Item 3.

Sheet C505

Technical Memorandum

Date: July 14, 2023

To: Don Griffey, PE – Griffey Engineering, Inc.

From: Eric Evans, PE -- Connelly and Wicker, Inc.

RE: Hillside Groves Subdivision – Construction Drawings

Below is a response to your comments dated January 10, 2023

1. Additional comments may be added to these with the reviews of subsequent submittals.

Response: Noted

2. This work will require various permits from SJRWMD, Duke Energy, Lake County, FDOT, FDEP, FWC, COE. Provide copies of the applicable permits & approvals before commencing work on the site.

Response: We are currently working to obtain these approvals.

3. Based on the discussion and direction of the Town Council at their meeting on 11/28/2022, Road A needs to be modified per the attached exhibit. Raised crosswalks are to be designed using the Lake County standard, also attached.

Response: The edits to Road A are now shown.

4. Modify the roadway cross section for the 100' right-of-way to reflect the current plan view.

Response: This cross section is now updated to match the new section.

5. Add a note that all curb ramps are to be constructed with the subdivision.

Response: This note is now added.

6. Provide copies of the driveway permit application documents for the connection to No. 2 Rd. Copy the town on the review and response correspondence with Lake County.

Response: We are currently working to obtain this approval.

7. The offsite utility plan along SR 19 needs to call out the location and means for tying in the existing 4" water main. The 4" main needs to be connected into the new 12" main on the west end at the cemetery and on the east end near Florida Ave. The portion of the existing 4" main between these two points needs to be removed, not abandoned in place.

Response: These comments have been addressed on the offsite utility plans.

8. For the 12'' water main extension along SR 19 west of Road A, remove the 12x6 reducer. Terminate the line with 12'' piping & fittings.

Response: These waterline fittings have been revised per your comment.

9. On the lift station site plan, align the access drive on the center of the wet well.

Response: The driveway has been shifted.

10. Provide hydraulic calculations for the irrigation system.

Response: Irrigation demand calculations are now provided with this submittal.

11. Provide site improvement details for the irrigation supply well that show driveway access and equipment & controls. This area should be fenced for security.

Response: Fencing and placeholder equipment areas are shown. The final design of the system will be addressed by a specialty contractor in a design-build effort.

Please review and approve the material provided and should you have any questions or comments with regard to this application please do not hesitate to call or email. I can be reached at 904.265.3030 or at eevans@cwieng.com.

HILLSIDE GROVES SUBDIVISION

IRRIGATION DEMAND CALCULATION

DESIGN REPORT

FOR

Easton & Associates 10165 NW 19th St. Miami, FL 33172 Phone: (305) 593-2222

PREPARED BY:



Connelly & Wicker, Inc.

10060 Skinner Lake Drive, Suite 500 Jacksonville, Florida 32246

Florida Registry: 3650 L.A. Number: LC26000311 Phone: (904) 265-3030 Fax: (904) 265-3031

DATE: 7/10/2023 CWI Project No.: 21-04-0008

Index Sheet

Connelly & Wicker, Inc.

Table of Contents Pages Cover Sheet 2 Index Sheet 2 3 **Project Summary** 3 4 **Demand Summary Table** 4 - 5 5 WaterCad Network Preview 6 6 WaterCad Simulation Results 7 - 8 Junction Report Pipe Report 9 - 10 Reservoir Report 11

Prepared under the direction of

Eric D Evans

HILLSIDE GROVES SUBDIVISION

Digitally signed by Eric D Evans
DN: cn=Eric D Evans, c=US,
o=CONNELLY AND WICKER
INC., email=eevans@cwieng.com
Date: 2023.07.14 08:29:59 -04'00'

Eric D. Evans, P.E. PE # 93585

No. 93585

PROJECT SUMMARY

THE PROJECT

The proposed development is located within the Town of Howey in the Hills, Florida. The project is located west of South Palm Avenue and north of Revels Road. The development will contain 728 single family lots.

IRRIGATION WATER SUPPLY

In the future the site will be supplied by reclaimed water for irrigation demands in a future connection on Number 2 Road. However, at this time this system is not available, but onsite irrigation wells are available to supply irrigation water in the interim. The analysis provided here is for the first phase and geographically convenient lots in future phases that could also be served by the existing onsite well adjacent to lot 51. Future Phase 2 is addressed in this analysis which includes Lots 308-385).

Future development can also be supplied by a well located within a future phase adjacent to lot 42. The future lots served will include phase 2 lots 246-307 and phase 3 lots 308-385.

The results of this analysis require the well pump to provide 2,600 GPM at 129 feet of head pressure.

WATER MAIN DESIGN

The analysis provided shows a steady state analysis of a minimum 40 PSI with 5 GPM to each lot. Additionally, each open space and the amenity is conservatively designed for 10 GPM of demand.

DESIGN ANALYSIS

The modeling for this system was accomplished using Bentley OpenFlows WaterCAD CONNECT Edition Update 3.

Connelly & Wicker, Inc.

HILLSIDE GROVES SUBDIVISION

Designed By: EE

Date: 7/10/2023 Project No: 23-04-0041

Demand Summary Table

| Calculate | Average Daily Flow | | | |
|-----------|--------------------|-------|--------|--------|
| Junction. | Description | DU | Demand | Total |
| No. J- | | Units | / Unit | Demand |
| 1 | Single Family Lot | 0 | 5 | 0 |
| 2 | Single Family Lot | 0 | 5 | 0 |
| 3 | Single Family Lot | 0 | 5 | 0 |
| 4 | Single Family Lot | 4 | 5 | 20 |
| 5 | Single Family Lot | 45 | 5 | 225 |
| 6 | Single Family Lot | 16 | 5 | 80 |
| 7 | Landscape Service | 1 | 10 | 10 |
| 8 | Single Family Lot | 18 | 5 | 90 |
| 9 | Single Family Lot | 20 | 5 | 100 |
| 10 | Single Family Lot | 0 | 5 | 0 |
| 11.1 | Single Family Lot | 4 | 5 | 20 |
| 11.2 | Landscape Service | 1 | 10 | 10 |
| 12 | Single Family Lot | 0 | 5 | 0 |
| 13 | Single Family Lot | 46 | 5 | 230 |
| 14 | Single Family Lot | 3 | 5 | 15 |
| 15 | Single Family Lot | 5 | 5 | 25 |
| 16 | Single Family Lot | 6 | 5 | 30 |
| 17 | Single Family Lot | 0 | 5 | 0 |
| 18 | Single Family Lot | 6 | 5 | 30 |
| 19 | Single Family Lot | 19 | 5 | 95 |
| 20 | Single Family Lot | 4 | 5 | 20 |
| 21 | Single Family Lot | 0 | 5 | 0 |
| 22 | Single Family Lot | 6 | 5 | 30 |
| 23 | Single Family Lot | 0 | 5 | 0 |
| 24 | Single Family Lot | 4 | 5 | 20 |
| 25 | Single Family Lot | 0 | 5 | 0 |
| 26 | Single Family Lot | 0 | 5 | 0 |
| 27 | Single Family Lot | 17 | 5 | 85 |
| 28 | Amenity Center | 1 | 10 | 10 |
| 29 | Single Family Lot | 0 | 5 | 0 |
| 30 | Landscape Service | 1 | 10 | 10 |
| 31 | Single Family Lot | 0 | 5 | 0 |
| 32 | Single Family Lot | 12 | 5 | 60 |
| 33 | Single Family Lot | 7 | 5 | 35 |
| 34 | Single Family Lot | 4 | 5 | 20 |
| 35 | Single Family Lot | 5 | 5 | 25 |
| 36 | Single Family Lot | 19 | 5 | 95 |
| 37 | Single Family Lot | 0 | 5 | 0 |
| 38 | Single Family Lot | 13 | 5 | 65 |
| 39 | Single Family Lot | 5 | 5 | 25 |
| 40 | Single Family Lot | 6 | 5 | 30 |

4

Connelly & Wicker, Inc.

HILLSIDE GROVES SUBDIVISION

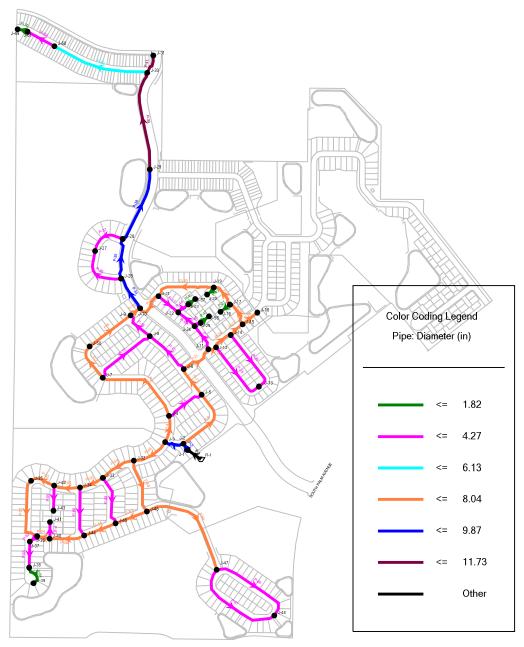
Designed By: EE

Date: 7/10/2023 Project No: 23-04-0041

Demand Summary Table

| Calculate / | Average Daily Flow | | | |
|-------------|--------------------|-------|-------------|-----------|
| Junction. | Description | DU | Flow / Unit | Avg Daily |
| No. J- | · | Units | GPD | GPD |
| | | | | |
| 41 | | 6 | 5 | 30 |
| 42 | | 3 | 5 | 15 |
| 43 | | 8 | 5 | 40 |
| 44 | | 21 | 5 | 105 |
| 45 | | 18 | 5 | 90 |
| 46 | | 13 | 5 | 65 |
| 47 | | 3 | 5 | 15 |
| 48 | | 50 | 5 | 250 |
| 49 | | 5 | 5 | 25 |
| 50 | | 6 | 5 | 30 |
| 51 | | 6 | 5 | 30 |
| 52 | | 6 | 5 | 30 |
| 53 | | 54 | 5 | 270 |
| 54 | | 19 | 5 | 95 |
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| | | E10 | | 0000 |
| | Total | 516 | | 2600 |

Scenario: Base



| | | | | | • | | | |
|--------------|----------|----------|---------------|----------|----------|--------------------|-----------------|----------|
| Label | Diameter | Material | Hazen- | Flow | Velocity | Headloss | Headloss | Headloss |
| | (in) | | Williams C | (gpm) | (ft/s) | (Friction) (ft) | (Minor) (ft) | (ft) |
| D 4 | 000.00 | D) (C | | 2.600.00 | 0.00 | | ` , | 0.00 |
| P-1 | 999.00 | PVC | 130.0 | 2,600.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| P-2 | 9.87 | PVC | 130.0 | 2,600.00 | 10.90 | 2.71 | 3.45 | 6.17 |
| P-3 | 9.87 | PVC | 130.0 | 1,673.91 | 7.02 | 3.01 | 2.30 | 5.31 |
| P-4 | 8.04 | PVC | 130.0 | 708.91 | 4.48 | 2.30 | 0.70 | 3.00 |
| P-5 | 4.24 | PVC | 130.0 | 89.66 | 2.04 | 1.70 | 0.26 | 1.96 |
| P-6 | 8.04 | PVC | 130.0 | 599.25 | 3.79 | 5.40 | 0.52 | 5.92 |
| P-7 | 8.04 | PVC | 130.0 | 506.53 | 3.20 | 1.76 | 0.17 | 1.93 |
| P-8 | 8.04 | PVC | 130.0 | 476.53 | 3.01 | 2.09 | 0.10 | 2.20 |
| P-9 | 8.04 | PVC | 130.0 | 926.09 | 5.85 | 9.49 | 0.78 | 10.27 |
| P-11 | 8.04 | PVC | 130.0 | 790.75 | 5.00 | 3.34 | 0.59 | 3.94 |
| P-12 | 4.24 | PVC | 130.0 | 99.90 | 2.27 | 2.45 | 0.15 | 2.60 |
| P-13 | 4.24 | PVC | 130.0 | -82.72 | 1.88 | 2.35 | 0.23 | 2.58 |
| P-14 | 4.24 | PVC | 130.0 | -92.63 | 2.10 | 1.35 | 0.20 | 1.55 |
| P-15 | 8.04 | PVC | 130.0 | 469.16 | 2.96 | 0.47 | 0.28 | 0.75 |
| P-16 | 8.04 | PVC | 130.0 | -25.84 | 0.16 | 0.01 | 0.00 | 0.01 |
| P-17 | 4.24 | PVC | 130.0 | 11.36 | 0.26 | 0.02 | 0.00 | 0.03 |
| P-19 | 4.24 | PVC | 130.0 | -48.64 | 1.11 | 0.29 | 0.03 | 0.31 |
| P-20 | 4.24 | PVC | 130.0 | -98.64 | 2.24 | 1.38 | 0.16 | 1.54 |
| P-21 | 8.04 | PVC | 130.0 | -610.84 | 3.86 | 2.20 | 0.87 | 3.07 |
| P-23 | 8.04 | PVC | 130.0 | 482.20 | 3.05 | 0.36 | 0.14 | 0.50 |
| P-24 | 8.04 | PVC | 130.0 | 362.62 | 2.29 | 0.50 | 0.16 | 0.66 |
| P-25 | 4.24 | PVC | 130.0 | 119.58 | 2.72 | 4.67 | 0.24 | 4.91 |
| P-26 | 4.24 | PVC | 130.0 | -110.42 | 2.51 | 4.04 | 0.20 | 4.25 |
| P-27 | 8.04 | PVC | 130.0 | 237.20 | 1.50 | 0.19 | 0.05 | 0.24 |
| P-28 | 8.04 | PVC | 130.0 | 30.00 | 0.19 | 0.00 | 0.00 | 0.01 |
| P-30 | 8.04 | PVC | 130.0 | 182.20 | 1.15 | 0.18 | 0.08 | 0.25 |
| P-31 | 1.81 | HDPE | 130.0 | 30.00 | 3.74 | 4.14 | 0.36 | 4.50 |
| P-32 | 8.04 | PVC | 130.0 | 152.20 | 0.96 | 0.13 | 0.02 | 0.15 |
| P-33 | 8.04 | PVC | 130.0 | 37.20 | 0.24 | 0.02 | 0.00 | 0.02 |
| P-34 | 9.87 | PVC | 130.0 | 495.00 | 2.08 | 0.58 | 0.13 | 0.71 |
| P-35 | 9.87 | PVC | 130.0 | 441.18 | 1.85 | 0.54 | 0.10 | 0.64 |
| P-36 | 4.24 | PVC | 130.0 | 53.82 | 1.22 | 0.82 | 0.05 | 0.88 |
| P-37 | 4.24 | PVC | 130.0 | -31.18 | 0.71 | 0.22 | 0.02 | 0.24 |
| P-38 | 9.87 | PVC | 130.0 | 400.00 | 1.68 | 0.83 | 0.07 | 0.91 |
| P-39 | 11.73 | PVC | 130.0 | 400.00 | 1.19 | 0.47 | 0.06 | 0.52 |
| P-41 | 11.73 | PVC | 130.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| P-42 | 6.13 | PVC | 130.0 | 390.00 | 4.24 | 10.37 | 0.55 | 10.92 |
| P-43 | 1.81 | HDPE | 130.0 | 20.00 | 2.49 | 1.70 | 0.16 | 1.86 |
| P-44 | 4.24 | PVC | 130.0 | 30.00 | 0.68 | 0.07 | 0.01 | 0.09 |
| P-45 | 1.81 | HDPE | 130.0 | 30.00 | 3.74 | 3.05 | 0.08 | 3.13 |
| P-46 | 4.24 | PVC | 130.0 | 30.00 | 0.68 | 0.04 | 0.01 | 0.06 |
| P-47 | 1.81 | HDPE | 130.0 | 30.00 | 3.74 | 3.59 | 0.01 | 3.67 |
| P-48 | 8.04 | PVC | 130.0 | 965.00 | 6.10 | 5.74 | 1.19 | 6.93 |
| P-49 | 8.04 | PVC | 130.0 | 433.76 | 2.74 | 1.24 | 0.18 | 1.42 |
| P-50 | 8.04 | PVC | 130.0 | 328.66 | 2.08 | 0.51 | 0.10 | 0.61 |
| P-50 P-51 | 8.04 | PVC | 130.0 | 251.14 | 1.59 | 0.33 | 0.10 | 0.39 |
| P-51 P-52 | 8.04 | PVC | 130.0 | 196.14 | 1.39 | 0.33 | 0.04 | 0.39 |
| P-52 P-53 | 8.04 | | 130.0 | 171.14 | | | | 0.23 |
| دد-۲ | 8.04 | FVC | 130.0 | 1/1.14 | 1.08 | 0.40 | 0.04 | 0.43 |

Bentley Systems, Inc. Haestad Methods Solution Center 76 Watertown Road, Suite 2D Thomaston, CT 06787 USA +1-203-755-1666

| | | | | | • | | | |
|-------|------------------|----------|--------------------|---------------|--------------------|------------------------|---------------------|------------------|
| Label | Diameter (in) | Material | Hazen- Williams | Flow (gpm) | Velocity (ft/s) | Headloss (Friction) | Headloss (Minor) | Headloss (ft) |
| | (11) | | C | (95111) | (143) | (ft) | (ft) | (10) |
| P-54 | 8.04 | PVC | 130.0 | -13.86 | 0.09 | 0.00 | 0.00 | 0.00 |
| P-55 | 8.04 | PVC | 130.0 | -73.86 | 0.47 | 0.05 | 0.01 | 0.05 |
| P-56 | 8.04 | PVC | 130.0 | -121.34 | 0.77 | 0.11 | 0.02 | 0.12 |
| P-57 | 8.04 | PVC | 130.0 | -141.24 | 0.89 | 0.14 | 0.02 | 0.16 |
| P-58 | 8.04 | PVC | 130.0 | -471.24 | 2.98 | 2.16 | 0.60 | 2.76 |
| P-59 | 8.04 | PVC | 130.0 | 265.00 | 1.67 | 1.50 | 0.16 | 1.66 |
| P-60 | 4.24 | PVC | 130.0 | 128.76 | 2.93 | 6.99 | 0.38 | 7.37 |
| P-61 | 4.24 | PVC | 130.0 | -121.24 | 2.75 | 6.94 | 0.43 | 7.37 |
| P-62 | 4.24 | PVC | 130.0 | 90.00 | 2.05 | 0.38 | 0.11 | 0.49 |
| P-63 | 4.24 | PVC | 130.0 | 90.00 | 2.05 | 1.10 | 0.10 | 1.20 |
| P-64 | 1.81 | HDPE | 130.0 | 25.00 | 3.12 | 5.21 | 0.24 | 5.45 |
| P-65 | 4.24 | PVC | 130.0 | 40.00 | 0.91 | 0.24 | 0.03 | 0.26 |
| P-66 | 4.24 | PVC | 130.0 | 57.52 | 1.31 | 0.91 | 0.10 | 1.01 |
| P-67 | 4.24 | PVC | 130.0 | -30.00 | 0.68 | 0.09 | 0.01 | 0.11 |
| P-68 | 4.24 | PVC | 130.0 | 70.10 | 1.59 | 1.33 | 0.16 | 1.50 |
| P-69 | 4.24 | PVC | 130.0 | 120.00 | 2.73 | 2.19 | 0.12 | 2.31 |
| P-70 | 1.81 | HDPE | 130.0 | 25.00 | 3.12 | 2.52 | 0.16 | 2.68 |

| Label | Diameter (in) | Material | Hazen- Williams C | Flow (gpm) | Velocity (ft/s) | Headloss (Friction) (ft) | Headloss (Minor) (ft) | Headloss (ft) |
|-------|------------------|----------|-------------------------|---------------|--------------------|--------------------------------|-----------------------------|------------------|
| P-1 | 999.00 | PVC | 130.0 | 2,600.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| P-2 | 9.87 | PVC | 130.0 | 2,600.00 | 10.90 | 2.71 | 3.45 | 6.17 |
| P-3 | 9.87 | PVC | 130.0 | 1,673.91 | 7.02 | 3.01 | 2.30 | 5.31 |
| P-4 | 8.04 | PVC | 130.0 | 708.91 | 4.48 | 2.30 | 0.70 | 3.00 |
| P-5 | 4.24 | PVC | 130.0 | 89.66 | 2.04 | 1.70 | 0.26 | 1.96 |
| P-6 | 8.04 | PVC | 130.0 | 599.25 | 3.79 | 5.40 | 0.52 | 5.92 |
| P-7 | 8.04 | PVC | 130.0 | 506.53 | 3.20 | 1.76 | 0.17 | 1.93 |
| P-8 | 8.04 | PVC | 130.0 | 476.53 | 3.01 | 2.09 | 0.10 | 2.20 |
| P-9 | 8.04 | PVC | 130.0 | 926.09 | 5.85 | 9.49 | 0.78 | 10.27 |
| P-11 | 8.04 | PVC | 130.0 | 790.75 | 5.00 | 3.34 | 0.59 | 3.94 |
| P-12 | 4.24 | PVC | 130.0 | 99.90 | 2.27 | 2.45 | 0.15 | 2.60 |
| P-13 | 4.24 | PVC | 130.0 | -82.72 | 1.88 | 2.35 | 0.23 | 2.58 |
| P-14 | 4.24 | PVC | 130.0 | -92.63 | 2.10 | 1.35 | 0.20 | 1.55 |
| P-15 | 8.04 | PVC | 130.0 | 469.16 | 2.96 | 0.47 | 0.28 | 0.75 |
| P-16 | 8.04 | PVC | 130.0 | -25.84 | 0.16 | 0.01 | 0.00 | 0.01 |
| P-17 | 4.24 | PVC | 130.0 | 11.36 | 0.26 | 0.02 | 0.00 | 0.03 |
| P-19 | 4.24 | PVC | 130.0 | -48.64 | 1.11 | 0.29 | 0.03 | 0.31 |
| P-20 | 4.24 | PVC | 130.0 | -98.64 | 2.24 | 1.38 | 0.16 | 1.54 |
| P-21 | 8.04 | PVC | 130.0 | -610.84 | 3.86 | 2.20 | 0.87 | 3.07 |
| P-23 | 8.04 | PVC | 130.0 | 482.20 | 3.05 | 0.36 | 0.14 | 0.50 |
| P-24 | 8.04 | PVC | 130.0 | 362.62 | 2.29 | 0.50 | 0.16 | 0.66 |
| P-25 | 4.24 | PVC | 130.0 | 119.58 | 2.72 | 4.67 | 0.24 | 4.91 |
| P-26 | 4.24 | PVC | 130.0 | -110.42 | 2.51 | 4.04 | 0.20 | 4.25 |
| P-27 | 8.04 | PVC | 130.0 | 237.20 | 1.50 | 0.19 | 0.05 | 0.24 |
| P-28 | 8.04 | PVC | 130.0 | 30.00 | 0.19 | 0.00 | 0.00 | 0.01 |
| P-30 | 8.04 | PVC | 130.0 | 182.20 | 1.15 | 0.18 | 0.08 | 0.25 |
| P-31 | 1.81 | HDPE | 130.0 | 30.00 | 3.74 | 4.14 | 0.36 | 4.50 |
| P-32 | 8.04 | PVC | 130.0 | 152.20 | 0.96 | 0.13 | 0.02 | 0.15 |
| P-33 | 8.04 | PVC | 130.0 | 37.20 | 0.24 | 0.02 | 0.00 | 0.02 |
| P-34 | 9.87 | PVC | 130.0 | 495.00 | 2.08 | 0.58 | 0.13 | 0.71 |
| P-35 | 9.87 | PVC | 130.0 | 441.18 | 1.85 | 0.54 | 0.10 | 0.64 |
| P-36 | 4.24 | PVC | 130.0 | 53.82 | 1.22 | 0.82 | 0.05 | 0.88 |
| P-37 | 4.24 | PVC | 130.0 | -31.18 | 0.71 | 0.22 | 0.02 | 0.24 |
| P-38 | 9.87 | PVC | 130.0 | 400.00 | 1.68 | 0.83 | 0.07 | 0.91 |
| P-39 | 11.73 | PVC | 130.0 | 400.00 | 1.19 | 0.47 | 0.06 | 0.52 |
| P-41 | 11.73 | PVC | 130.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| P-42 | 6.13 | _ | 130.0 | 390.00 | 4.24 | 10.37 | 0.55 | 10.92 |
| P-43 | 1.81 | HDPE | 130.0 | 20.00 | 2.49 | 1.70 | 0.16 | 1.86 |
| P-44 | 4.24 | PVC | 130.0 | 30.00 | 0.68 | 0.07 | 0.01 | 0.09 |
| P-45 | 1.81 | HDPE | 130.0 | 30.00 | 3.74 | 3.05 | 0.08 | 3.13 |
| P-46 | 4.24 | PVC | 130.0 | 30.00 | 0.68 | 0.04 | 0.01 | 0.06 |
| P-47 | 1.81 | HDPE | 130.0 | 30.00 | 3.74 | 3.59 | 0.08 | 3.67 |
| P-48 | 8.04 | PVC | 130.0 | 965.00 | 6.10 | 5.74 | 1.19 | 6.93 |
| P-49 | 8.04 | PVC | 130.0 | 433.76 | 2.74 | 1.24 | 0.18 | 1.42 |
| P-50 | 8.04 | PVC | 130.0 | 328.66 | 2.08 | 0.51 | 0.10 | 0.61 |
| P-51 | 8.04 | PVC | 130.0 | 251.14 | 1.59 | 0.33 | 0.16 | 0.39 |
| P-52 | 8.04 | PVC | 130.0 | 196.14 | 1.24 | 0.20 | 0.04 | 0.23 |
| P-53 | 8.04 | | 130.0 | 171.14 | | | | 0.23 |
| 11-22 | 0.04 | ' ' C | 130.0 | 1/1.14 | 1.00 | טד.ט | 0.04 | ן כד.ט |

Bentley Systems, Inc. Haestad Methods Solution Center 76 Watertown Road, Suite 2D Thomaston, CT 06787 USA +1-203-755-1666

21-04-0008 Reclaim Model.wtg 7/13/2023

WaterCAD [10.03.05.05] Page 1 of 2

| Label | Diameter (in) | Material | Hazen- Williams C | Flow (gpm) | Velocity (ft/s) | Headloss (Friction) (ft) | Headloss (Minor) (ft) | Headloss (ft) |
|-------|------------------|----------|-------------------------|---------------|--------------------|--------------------------------|-----------------------------|------------------|
| P-54 | 8.04 | PVC | 130.0 | -13.86 | 0.09 | 0.00 | 0.00 | 0.00 |
| P-55 | 8.04 | PVC | 130.0 | -73.86 | 0.47 | 0.05 | 0.01 | 0.05 |
| P-56 | 8.04 | PVC | 130.0 | -121.34 | 0.77 | 0.11 | 0.02 | 0.12 |
| P-57 | 8.04 | PVC | 130.0 | -141.24 | 0.89 | 0.14 | 0.02 | 0.16 |
| P-58 | 8.04 | PVC | 130.0 | -471.24 | 2.98 | 2.16 | 0.60 | 2.76 |
| P-59 | 8.04 | PVC | 130.0 | 265.00 | 1.67 | 1.50 | 0.16 | 1.66 |
| P-60 | 4.24 | PVC | 130.0 | 128.76 | 2.93 | 6.99 | 0.38 | 7.37 |
| P-61 | 4.24 | PVC | 130.0 | -121.24 | 2.75 | 6.94 | 0.43 | 7.37 |
| P-62 | 4.24 | PVC | 130.0 | 90.00 | 2.05 | 0.38 | 0.11 | 0.49 |
| P-63 | 4.24 | PVC | 130.0 | 90.00 | 2.05 | 1.10 | 0.10 | 1.20 |
| P-64 | 1.81 | HDPE | 130.0 | 25.00 | 3.12 | 5.21 | 0.24 | 5.45 |
| P-65 | 4.24 | PVC | 130.0 | 40.00 | 0.91 | 0.24 | 0.03 | 0.26 |
| P-66 | 4.24 | PVC | 130.0 | 57.52 | 1.31 | 0.91 | 0.10 | 1.01 |
| P-67 | 4.24 | PVC | 130.0 | -30.00 | 0.68 | 0.09 | 0.01 | 0.11 |
| P-68 | 4.24 | PVC | 130.0 | 70.10 | 1.59 | 1.33 | 0.16 | 1.50 |
| P-69 | 4.24 | PVC | 130.0 | 120.00 | 2.73 | 2.19 | 0.12 | 2.31 |
| P-70 | 1.81 | HDPE | 130.0 | 25.00 | 3.12 | 2.52 | 0.16 | 2.68 |

FlexTable: Reservoir Table

| Label | Elevation (ft) | Flow (Out net) (gpm) |
|-------|-------------------|-------------------------|
| R-1 | 224.00 | 2,600.00 |

Ground Elevation at well is ~95.6 Well pump to increase head to 224.0 by providing an additional ~129 feet of head pressure.

Technical Memorandum

Date: August 16, 2023

To: Don Griffey, PE – Griffey Engineering, Inc.

From: Eric Evans, PE -- Connelly and Wicker, Inc.

RE: Hillside Groves Subdivision – Construction Drawings

Below is a response to your comments dated January 10, 2023

1. Additional comments may be added to these with the reviews of subsequent submittals.

Response: Noted

2. This work will require various permits from SJRWMD, Duke Energy, Lake County, FDOT, FDEP, FWC, COE. Provide copies of the applicable permits & approvals before commencing work on the site.

Response: We are currently working to obtain these approvals.

3. Modify the roadway cross section dimensions for the 100' right-of-way to reflect the current plan view.

Response: The section is now modified to match the intended section.

4. Provide hydraulic calculations for the irrigation system.

Response: This was submitted and approved via email in early August.

5. The irrigation supply site improvements will need to be reviewed and approved by the Town prior to construction.

Response: Noted.

6. On the master site plan add a note and a call-out that Road B is intended to connect to SR 19 and that the design and permitting of the connection will be included with Phase 3 improvements.

Response: This is now shown on sheet 3 as requested.

7. On the south end of Road A, at the intersection of SR 19, the left outbound lane accommodates through and left movements. This lane doesn't need any markings, the arrows in the right turn lane are sufficient.

Response: This striping has been removed per your comment (Also requested by FDOT). See

sheet 4A.

8. At the northbound right turn lane at the commercial driveway, the curb lane striping needs to be between the through lane and the turn lane.

Response: This edit is now shown. See sheet 4A.

9. For the speed table at 52+50, label the advance warning signs.

Response: The signs are now labeled. See sheet 4H.

10. Utility valves are not to be located in curbs, gutters, or curb ramps. In case of a conflict during construction, the valve shall be relocated and not the curb or curb ramp. Add a conspicuous note to the utility plans stating that requirement. Also, the graphical depiction on the utility plans shows several locations where valves are conflicting with curb ramps. Adjust the plans to eliminate the conflict.

Response: Several valves and other infrastructure we shifted slightly to avoid obvious conflicts. A note regarding valve vs. ramp/curb conflict has been added to the 10 and 11 series sheets.

11. In the notes for the Typical Pavement Sections, change Note 1 to state that all disturbed areas within the r/w shall be sodded. The Typical Roadway Cross Sections should also reflect that change. Sodding of the full right-of-way in front of lots can be deferred until building construction, similar to sidewalk construction. However, the standard strips of sod at the back of curb is required on all roads as part of construction.

Response: See the revised sod comments in each of the roadway sections on sheet 13A. Note

"3" has been added to the narrower roadway sections.

12. Add a construction detail for the Multi-Use Path.

Response: See sheet 13A where the multi-use path detail has been added to the 100' and 90'

typical section per the Lake County specification.

Please review and approve the material provided and should you have any questions or comments with regard to this application please do not hesitate to call or email. I can be reached at 904.265.3030 or at evans@cwienq.com.

Technical Memorandum

Date: August 16, 2023

To: Thomas Harowski, AICP TMH Consulting

From: Eric Evans, PE -- Connelly and Wicker, Inc.

RE: Hillside Groves Subdivision – Construction Drawings

Below is a response to your comments dated August 7, 2023

Comment 1:

There are two areas where the proposed plan is inconsistent with the amendments presented to Town Council in 2022. The plan presented at the last amendment included 12 specific items which were approved by the Town Council. The plan shows a connection from the southeast residential neighborhood to Revels Road which is missing in the proposed final subdivision plan and a secondary connection from the townhouse neighborhood in the northwest corner of the projec to Number 2 Road, perhaps as an emergency access which is also missing. These changes were not approved by Town Council and the final subdivision plan needs to be consistent with the Town Council action. If the applicant wishes to change these plans they can submit an amendment request at a future time.

Response:

We have revised the site plan to show the two future connects as noted in your comment.

Please review and approve the material provided and should you have any questions or comments with regard to this application please do not hesitate to call or email. I can be reached at 904.265.3030 or at eevans@cwieng.com.

Technical Memorandum

Date: July 14, 2023

To: Thomas Harowski, AICP TMH Consulting

From: Eric Evans, PE -- Connelly and Wicker, Inc.

RE: Hillside Groves Subdivision – Construction Drawings

Below is a response to your comments dated January 11, 2023

1. The response identified a note on Sheet 201 of the landscape plans stating that designs for the screening wall and entrance feature for the Number 2 Road access will be submitted with the Phase 2 plans. I could not locate the note.

Response: The note is shown and marked with a rev-cloud.

2. The response noted that the requested bike trail extension along Number 2 Road would be included in the Phase 2 design plans. This is acceptable, but the applicant should coordinate the bike path with Lake County as part of the overall road improvements if the plan is to include the bike path in the Number 2 Road right-of-way.

Response: A future bike path will be included in phase 2 design.

3. The addition of a note to the plans regarding the need to keep the required trees in place is fine, but this note really needs to be part of the HOA documents so future residents are aware of the requirement when they purchase the homes.

Response: Noted

Please review and approve the material provided and should you have any questions or comments with regard to this application please do not hesitate to call or email. I can be reached at 904.265.3030 or at eevans@cwieng.com.



TMHConsulting@cfl.rr.com 97 N. Saint Andrews Dr. Ormond Beach, FL 32174

PH: 386.316.8426

MEMORANDUM

TO: Howey-in-the-Hills Planning Board

CC: J. Brock, Town Clerk

FROM: Thomas Harowski, AICP, Planning Consultant SUBJECT: Hillside Groves Phase 1, Final Subdivision Plan

DATE: September 19, 2023

The Town has received an application for final subdivision approval for Phase 1 of the Hillside Groves mixed use development. This project, formerly known as The Reserve was approved in its current form following a major amendment to the original development approval. The amended project was approved by the Town Council at their regular meeting of October 24, 2022. Submittal of a request for final subdivision approval is the next logical step in the development process.

Review Process and Project Status

The Town's process for Village Mixed Use developments includes approval of planned unit development agreement that sets out the concept plan for the development and any specific parameters that will govern the project in addition to the Town's land development regulations. Once the development agreement is approved (October 24, 2022, in this case) the project can proceed to a preliminary subdivision plan for any lots to be created or a site plan for any non-residential development. In this case the preliminary subdivision plan was approved at the same time as the amended development agreement. As noted above, the next step in the process is the final subdivision plan.

The final subdivision plan is the point in the development process where detailed engineering for streets, utilities, stormwater facilities and any other subdivision improvements are completed. The review process for a final subdivision plat is to check the design for compliance with Town standards and compliance with general engineering design principles. The plan is compared with the preliminary subdivision plan to verify that the design as submitted is consistent with the preliminary subdivision plan. The layout of streets, lots, and other site arrangement of land in the project is done at the preliminary subdivision phase. So long as the final subdivision plan is consistent with the preliminary subdivision plan, the review is basically a technical evaluation.

The Reserve project includes 378 acres. Phase One encompasses 140 acres or 37% of the total project area. The overall project includes residential development in

four phases using the Hillside Groves name, commercial development, and a civic use tract. The Town has previously approved a site plan for the Howey Self Storage miniwarehouse project located on SR 19 just south of the Florida Avenue intersection. The Howey Self Storage project is part of the larger Reserve development. At this time the Howey Self Storage Project has not sought a permit for construction. Hillside Groves is the residential portion of The Reserve project with this application seeking approval for the final subdivision plan for phase one. The first phase residential development includes 245 units or about one-third of the residential unit total of 728.

Final Subdivision Plan

The final subdivision plan is the last step before the project is authorized for construction. The project has reserved sewage treatment capacity with the Central Florida Community Development District, and the final subdivision plans show the sewage collection system that will support the project. The Town has adequate potable water capacity to support the project. The traffic study found the affected roadway segments have adequate capacity to operate within the designated level of service for phase one and for the project at buildout. The traffic study recommended turn lanes at the project entrance, and the project will include turn lanes at the intersection with Number Two Road as required by Lake County. Additional right-of-way dedication is also required by Lake County. The stormwater plan meets current state and Town requirements per the engineering review. Due to the age of the project it is exempt from Lake County School concurrency.

The first phase of the project includes the central collector road and residential neighborhoods in the center of the project as shown on the accompanying diagram. The first phase residential component includes 129 units on 50 x 80 foot lots and 116 units on 50 x 115 foot lots. This phase also includes stormwater systems and utilities to support the reseidential development. Some of the utility work will be off-site to extend water and sewer systems from the current plant locations.

The project was reviewed by the Development Review Committee at several meetings with the last review conducted on August 10, 2023. Following that DRC meeting the applicant made final adjustments that were reviewed by the Town engineer and found to be in compliance with the Town code and engineering practice.

Final subdivision are required to begin construction within 18 months of final approval by the Town, unless the project is granted a time extensions. The applicant will be required to submit permits from state and local agencies including:

- Florida DEP for water and sewer system construction
- Florid DEP for wetland impacts
- FDOT for improvements within the SR 19 right-of-way
- Lake County for improvements within the Number Two Road right-of-way
- St Johns River Water Management District for stormwater systems
- An NPDES permit is also required for runoff control during construction

At the August 19, 2023 Development Review Committee meeting Mr. Miles submitted a list of eight questions about the proposed plan set. The applicants were asked to provide a response for each of these items. The response from the project engineer is attached. In addition to the engineer's response there are a couple of related points from the Town comprehensive plan and code.

Item 1. Number Two Road Improvements:

Ultimately the Twon will be guided by the requirements of Lake County as the entity responsible for Number Two Road. The plan shows turn lanes as noted by the project engineer, and the Town is requiring dedication of additional right-of-way along the full length of the project in support of Lake County's efforts to acquire a standard right-of-way for Number Two Road. This is a standard requirement by the Town for any project fronting on Number Two Road. The applicant will be required to obtain a right-of-way development permit from Lake County to ensure the county requirements are being met.

Item 2 Street Lighting

Town code requires street lights but defers the actual design of the system to Duke Energy. The applicant will be required to submit a final design plan prepared by Duke Energy which may include additional lights and/or relocation of some fixture locations shown on the plan. While the Town does not have a distance standard in the code, spacing of street lights at intersections, on major curves and spaced at 300 foot intervals is a typical standard. Applying this standard to a mile of street yields a total of 18 fixtures.

Item 7 Second Access to Townhouse Tract

One of the required revisions to the final plan set is to include a road access from the townhouse tract to Number Two Road. The form this access takes will be in large part guided by Lake County. If the County is willing to allow another road connection, even if it is restricted to right-in/right-out, then the access can be a road access. If Lake County is unwilling to approve a road connection, an emergrncy access may need to be considered.

Item 8 Connection at SR 19.

The intersection design has been directed by FDOT in their application of the intersection design standards. As the project engineer's response notes, once drivers enter the project from SR 19, they are quickly presented with trn lane options to the two commercial tracts leaving the through lane open to minimize any potential back-up.

Recommendation

The final subdivision plan is consistent with the approved preliminary subdivision plan, and the Town's engineering consultant has found the plans to meet the Town's design requirements and good engineering practice. The recomemndation is to approve the final subdivision plan.

Item 4.

Draft only 10-20-2023

| 2 | AN ORDINANCE OF THE | TOWN OF HOWEY-IN-THE-HILLS, |
|----|---------------------------------------|---|
| 3 | | TO LAND USE; AMENDING SECTIONS |
| 4 | , | EVELOPMENT CODE AS FOLLOWS: |
| 5 | | 2.06 TO SPECIFY THE MINIMUM |
| 6 | | RTY LINES FOR FLAGPOLES; |
| 7 | | 3.03 TO REQUIRE TWO-CAR GARAGES |
| 8 | | TO SPECIFY THE MINIMUM SQUARE |
| 9 | | GE AND THE MINIMUM LENGTH AND |
| 10 | WIDTH OF THE RELATE | D DRIVEWAY; AMENDING SECTION |
| 11 | 5.02.06 TO SPECIFY THE | TIME PERIOD FOR TEMPORARY |
| 12 | PERMITS FOR MOVABLE | E MODULE STORAGE UNITS; |
| 13 | | 9.02 PERTAINING TO TREE PRUNING; |
| 14 | | 0.00 AND ITS LIST OF APPROVED TREES |
| 15 | AND PLANTS; AMENDING | G SECTION 7.10.01 TO ADD AN ITEM TO |
| 16 | THE PROHIBITED PLAN | Γ LIST; AMENDING SECTION 7.11.01 |
| 17 | REGARDING TREE PROT | TECTION; AMENDING SECTION 7.08.01 |
| 18 | REGARDING LANDSCAP | ING REQUIREMENTS; ENACTING NEW |
| 19 | SECTION 5.01.10 TO DEFI | NE "WORKSHOPS;" ENACTING NEW |
| 20 | SECTION 7.04.04 TO IMPO | OSE CERTAIN REQUIREMENTS AT |
| 21 | STREET INTERSECTION | S TO PRESERVE VISIBILITY FOR |
| 22 | 2 MOTORISTS; AMENDING | S SECTION 1.12.00 TO ENACT A NEW |
| 23 | | DIFY CERTAIN EXISTING |
| 24 | DEFINITIONS; AMENDIN | G SECTION 7.12.01 REGARDING |
| 25 | REQUIREMENTS FOR TR | REE REMOVAL; ENACTING NEW |
| 26 | SUBSECTIONS 8.05.02.L A | ND 8.05.04.F REGARDING POTABLE |
| 27 | | R SYSTEMS; ESTIMATING THE |
| 28 | | THE ORDINANCE ON PRIVATE |
| 29 | · · · · · · · · · · · · · · · · · · · | G FOR SEVERABILITY, CODIFICATION, |
| 30 | AND AN EFFECTIVE DAT | E. |
| 31 | 1 | |
| 32 | | N COUNCIL OF THE TOWN OF HOWEY-IN- |
| 33 | THE-HILLS, FLORIDA: | |
| 34 | | |
| 35 | Section 1. Amendment to section | n 5.01.11, Flagpoles. Section 5.01.11 of the Land |
| 36 | Development Code is amended to rea | d: |
| 37 | 7 | |
| 38 | 5.01.11 Flagpoles | |
| 39 | Flagpoles shall conform to the maxim | num height limits established for the zoning |
| 40 | Ci | Individual flags displayed on the pole shall not exceed |
| 41 | • | ht of the flagpole. Flagpoles shall not be located within |
| 42 | , , , | vithin required yards. Flagpoles shall have a minimum |
| 43 | <u> </u> | |

ORDINANCE 2023-012

- 45 **Section 2. Amendment to section 2.03.03, Townhomes.** Section 2.03.03 of the Land
- 46 Development Code is amended to read:

47 **2.03.03** Townhomes

- 48 A. In order to support increased densities in the Town Center Overlay, townhome
- 49 construction is permitted in areas designated as Town Center Residential (TC-R), Town Center
- 50 Flex (TC-F) or Town Center Commercial (TC-C). All townhomes shall meet the density limits
- allowed by the underlying land use classification and shall meet the dimensional requirements
- 52 as follows:

53 B. Dimensional Criteria

- 1. Maximum building height is 2 ½ stories and 30 feet.
- a. Building-mounted appurtenances such as belfries, chimneys, cupolas, and antennas used for domestic purposes, or other appurtenances usually placed above roof level and not used for human occupancy, may exceed the maximum building height by 10 feet.
- 59 2. Maximum impervious surface is 40%
- 60 3. Maximum of 4 dwelling units per acre
- 4. Minimum lot size for townhomes is 5,000 square feet.
- 5. Minimum lot width is 50 feet for exterior townhome lots, and 35 feet for interior townhome lots
- 6. Minimum lot depth is 120 feet
- 7. Minimum front yard setback is 25 feet (15 feet if the lot includes a recessed or detached garage at least 25 feet from the front lot line)
- 8. Minimum street side yard setback is 25 feet
- 68 9. Minimum side yard (interior) setback is 15 feet (no side setback for interior townhome units)
- 70 Minimum rear yard setback is 25 feet for principal dwelling, detached garage, 71 or accessory dwelling. Rear yard setback for sheds, workshops, pools, play 72 structures, and other similar accessory structures is 10 feet.
- 73 11. Setbacks do not pertain to boathouses, docks, or fences.
- 74 12. Minimum square footage of townhomes is 1,200 square feet (air-conditioned, not including garage).

| \boldsymbol{D} | raft | only |
|------------------|------|------|
| 10 | 20 | 2022 |

| | | 10-20-2023 |
|----|-----|--|
| 76 | 13. | Townhomes shall have a two-car garage (a minimum of 441 square feet) and a |
| 77 | | driveway that measures a minimum of 16 feet wide and 20 feet long from the |
| 78 | | right-of-way to the garage. |
| | | |
| 70 | | |

- 80 Section 3. Amendment to section 5.02.06, Movable Module Storage Units. Section
- 5.02.06 of the Land Development Code is amended to read:
- 82 **5.02.06** Moveable module storage units.
- 83 Movable module storage units (called "storage pods") are permitted temporary structures,
- provided that such structures are located in compliance with the following standards:
- A. A temporary use permit shall be obtained. <u>Permits may be extended for just cause</u>.
- B. The duration of the temporary use permit shall be limited to fourteen (14) 30 days per lot per year.
- The storage pod may be placed on a paved or unpaved surface. When the temporary use permit authorizes location of the storage pod on an unpaved surface, the permit shall be conditioned upon the requirement that grass, sod, or landscaping shall be restored after removal of the storage pod.
- D. The storage pod may be placed in a front or rear yard. Placement in a side yard is prohibited.
- 94 E. The storage pod shall not be placed within an easement, stormwater area, or required buffer.
- 96 F. The storage pod shall be placed at least ten (10) feet from any property line.
- 97 G. The storage pod shall not obstruct pedestrian access.
- 98 H. The storage pod shall not be located within the clear visibility area at street intersections as set forth in Section 7.01.08 7.04.04.
- 100 I. The storage pod shall not exceed a maximum size of sixteen (16) feet in length and eight (8) feet in width.

- 103 Section 4. Amendment to section 7.09.02, Maintenance of Plant Materials. Section
- 104 7.09.02 of the Land Development Code is amended to read:
- 105 **7.09.02 Maintenance of plant materials**
- 106 A. Property owners and/or their agents shall be jointly and severally responsible
- for the maintenance of all landscaping in good appearance, free of refuse and debris. This
- includes newly installed landscapes as well as those older established landscapes.

Draft only 10-20-2023

- 1. Replacement of substandard plant materials. All unhealthy and dead plant materials shall be replaced within 30 days in conformance with the approved site or landscape plan. Failure to replace the plant material within 30 days shall constitute a violation and be regulated through code enforcement.
- 113 2. Proper Pruning. Proper pruning practices as stated in the National Arborist 114 Association's (NAA) Pruning Standards for Shade Trees ANSI Standard 300 Part 1 (Pruning) or equal are required by this LDC. The practice of "topping" or "hat-racking" 115 116 is considered unacceptable by the NAA standards. In compliance with these standards, 117 every effort shall be made to cut back to a lateral at least one-third to one-half the 118 diameter of the parent limb or leader that is being removed. Cuts not made to a suitable 119 lateral, sometimes called topping cuts, shall not be permitted. Street tree canopy over 120 sidewalks shall be maintained with a ten-foot height clearance.

121

- 122 Section 5. Amendment to section 7.10.00, Approved Tree and Plant List. Section
- 7.10.00 of the Land Development Code is amended to read:
- 124 **7.10.00** Approved tree and plant list

125 Table 7.10.00 Approved Tree and Plant List

| Canopy Trees | Understory Trees | Aquatic Plants | Shrubs | Ground Cover | Turf |
|------------------------|-----------------------|------------------------------|--------------------------|--------------------|------------------|
| Bald Cypress | American Holly | Arrowhead | American Beauty Berry | Aloe | Bahia |
| Sweet Bay* Magnolia | Chickasaw Plum | Arrowroot | Cherry Laurel | Chinese Juniper | Bermuda |
| Live Oak * | Crape Myrtle | Bald Cypress | Fetterbrush | Coontie | St. Augustine |
| Longleaf Pine | Dahoon Holly | Blue Flag Iris | Firebush | Day Lily | Zoysia |
| Red Maple | Date Palm | Buttonbush | Florida Anise | Dwarf Yaupon Holly | |
| Shumard Oak | Drake Elm | Cinnamon Fern | Gallberry | English Ivy | |
| Slash Pine | East Palatka Holly | Duck Potato | Indian Hawthorne | Florida Lantana | |
| Southern Magnolia * | Flowering Dogwood | Fragrant White Water Lily | Ligustrum | Lirope | |
| Sweet Bay | Ligustrum | Golden Canna | Ligustrum | Mondo Grass | |

Draft only 10-20-2023

| | T | | | 10-20-2023 |
|-------------------------|--|--|---|---|
| Loquat | Maidencane | Native Azaleas | Society Garlic | |
| Sabal/Cabbage Palm | Pickerel Weed | Pampas Grass | Wandering Jew | |
| Savannah Holly | Pond Cypress | Pink Muhly Grass | Perennial Peanut | |
| Washington Palm | Sawtooth fern | Pittosporum | Beach Sunflower | |
| Wax Myrtle | Soft Rush | Podocarpus | Dwarf Asiatic Jasmine | |
| Weeping Bottlebrush | Swamp Hibiscus | Sandanka Viburnum | | |
| Winged Elm | | Saw Palmetto | | |
| Yaupon Holly | | Silverthorn | | |
| Natchez Crepe Myrtle | | Simpson Stopper | | |
| Purpleleaf Plum | | St. Johns Wort | | |
| Medjool Date Palm | | Star Anise | | |
| Bamboo Palm | | Sweet Viburnum | | |
| Japanese Blueberry | | | | |
| | Palm Savannah Holly Washington Palm Wax Myrtle Weeping Bottlebrush Winged Elm Yaupon Holly Natchez Crepe Myrtle Purpleleaf Plum Medjool Date Palm Bamboo Palm Japanese | Sabal/Cabbage Palm Pickerel Weed Savannah Holly Pond Cypress Washington Palm Sawtooth fern Wax Myrtle Soft Rush Weeping Bottlebrush Winged Elm Yaupon Holly Natchez Crepe Myrtle Purpleleaf Plum Medjool Date Palm Bamboo Palm Japanese | Sabal/Cabbage Palm Pickerel Weed Pampas Grass Savannah Holly Pond Cypress Pink Muhly Grass Washington Palm Sawtooth fern Pittosporum Wax Myrtle Soft Rush Podocarpus Weeping Bottlebrush Hibiscus Viburnum Winged Elm Saw Palmetto Yaupon Holly Silverthorn Natchez Crepe Simpson Stopper Myrtle Purpleleaf Plum St. Johns Wort Pum Star Anise Bamboo Palm Sweet Viburnum Japanese | Sabal/Cabbage Palm Pickerel Weed Pampas Grass Wandering Jew Savannah Holly Pond Cypress Pink Muhly Grass Washington Palm Sawtooth fern Pittosporum Beach Sunflower Wax Myrtle Soft Rush Podocarpus Dwarf Asiatic Jasmine Weeping Swamp Sandanka Viburnum Winged Elm Saw Palmetto Yaupon Holly Silverthorn Natchez Crepe Myrtle Purpleleaf Plum Medjool Date Palm Samboo Palm Sweet Viburnum Japanese |

*Live Oaks, <u>Laurel Oaks</u> and Southern Magnolias are the <u>two three</u> approved Street Tree species in the Town of Howey in the Hills. <u>Drake Elm and Sweet Bay Magnolia may be used where planting space is at a premium.</u> Other trees may also be requested as street trees and will be considered on a case-by-case basis depending on the site conditions. <u>Palms in clusters may be used as canopy trees</u>, but not in excess of 10 percent of the total required canopy trees for the site. <u>Palms may be used to replace shade trees in clusters of three trees for residential parcels and five trees for commercial parcels. <u>Palms may not be used as substitutes for street trees.</u> <u>Palms may be applied as accent trees in addition to shade trees; as part of a thematic project design; and as an alternative to understory trees when integrated into planting beds.</u></u>

Plants that do not appear on the above table may also be used if they are recommended by one of the following agencies:

| 138 | 1. | The St. Johns River Water Management District, | |
|------------|-------------------------|---|------------------------|
| 139 140 | 2. Exter | The University of Florida, IFAS (Institute of Food and Ansion, or | Agricultural Sciences) |
| 141 142 | 3. Mana | The Florida Department of Environmental Protection, Buagement. | reau of Aquatic Plant |
| 143 | | | |
| 144 145 | Section 6. the Land Dev | Amendment to section 7.10.01, Prohibited Plant List. velopment Code is amended to read: | Section 7.10.01 of |
| 146 | 7.10.01 | Prohibited Plant List | |
| 147 | The following | ng trees and plants are prohibited: | |
| 148 | A. | Acacia | |
| 149 | B. | Albizia Julibrissin (mimosa or silk tree) | |
| 150 | C. | Australian Pine | |
| 151 | D. | Brazilian Pepper Tree | |
| 152 | E. | Camphor | |
| 153 | F. | Castor Bean | |
| 154 | G. | Chinaberry | |
| 155 | H. | Chinese Tallow | |
| 156 | I. | Ear Tree | |
| 157 | J. | Eucalyptus | |
| 158 | K. | Hydrilla | |
| 159 | L. | Monkey Puzzle | |
| 160 | M. | Punk Tree | |
| 161 | N. | Rice Paper Plant | |
| 162 | O. | Silk Oak | |
| 163 | P. | Taro | |
| 164 | Q. | Water Hyacinth | |

| 165 | R. | Ailanthus (tree of heaven) |
|-----|-----|----------------------------|
| 105 | 11. | Ananthus (tiee of heaven |

- 166 Also prohibited are those plant species prohibited by the Florida Department of Environmental
- 167 Protection, the Florida Department of Agriculture and the plants listed as invasive by the
- 168 Florida Exotic Pest Council. Trees on the Prohibited Plant List are exempt from the tree
- 169 protection requirements of this chapter.

- 171 Section 7. **Amendment to section 7.11.01, Tree Protection.** Section 7.11.01 of the
- Land Development Code is amended to read: 172

173 7.11.01

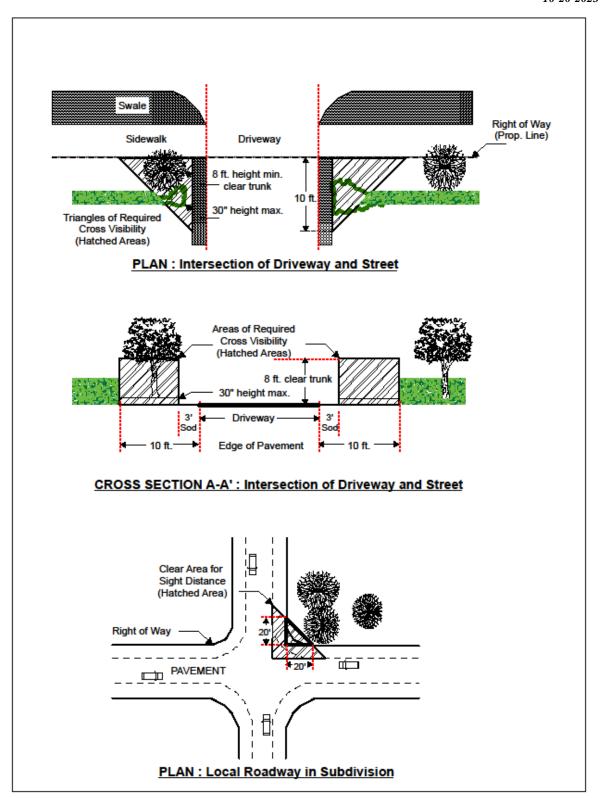
Tree protection

- 174 No application for a building permit, land clearing permit, site development
- 175 permit, subdivision development permit, or grading and filling permit may be issued by the
- 176 Building Official until the site inspector has visited the site and determined that the tree
- 177 protection measures are in place in accordance with this chapter and the approved site or
- 178 subdivision plans. Tree protection shall meet the standards of ANSI Standard A300 Part 5.
- 179 В. During construction, to ensure the health and survival of protected trees that are
- 180 not to be removed, the developer shall avoid the following types of tree injuries during all
- 181 development activities:
- 182 1. Mechanical injuries to roots, trunk, and branches. To protect against
- 183 mechanical injuries to roots, trunk, and branches:
- 184 All existing trees that are to remain shall have barriers constructed
- 185 around the tree at the drip line or around the combined drip line of any clumps of trees.
- Barriers are to be inspected by the Town prior to the start of any construction. 186
- 187 The minimum size of such wood barrier fencing shall be two inches (2")
- 188 by four inches (4") and the top of the barrier shall be a minimum of four feet (4') high.
- 189 Another acceptable means of barricading trees is the use of orange plastic construction
- 190 fence, four feet (4') high, and supported every eight feet (8') by a No. 5 rebar, driven
- 191 into the ground. Fencing shall be securely attached to rebar by the use of nylon zip ties
- 192 or twisted wire. Barricades must be taut and perpendicular to the ground. No
- 193 construction activity, cuts, fill, debris disposal or vehicular traffic is to take place within
- 194 this area. Additionally, the storage or placement of material, machinery, or other
- 195 construction equipment or substances is prohibited within the drip line area.

196

- Any waiver or request to construct barriers within the drip line shall be
- 197 reviewed by the Town. The request must be accompanied by a report from a qualified
- 198 arborist. Where drip lines of existing trees overlap, the orange mesh fencing or the
- 199 wood barriers shall be erected around the outer perimeter of the combined drip lines.

| 201 202 | Section 8. the Land De | Amendment to section 7.08.01, Required landscaping. velopment Code is amended to read: | Section 7.08.01 of |
|--------------------------|----------------------------------|---|-----------------------|
| 203 | 7.08.01 | Required Landscaping | |
| 204 205 206 207 | Florida Friengrouped togo | 60% of the landscaped area for each single-family lot shall be addy plants. Florida Friendly plants require a minimum of irrether on the lot in order to reduce the irrigation requirement forced 40% if the turf area over 40% is unirrigated. | rigation and shall be |
| 208 | | | |
| 209 210 | Section 9. Developmen | Amendment to section 5.01.10, Workshops. Section 5.01 at Code is enacted to read: | .10 of the Land |
| 211 | 5.01.10 | Workshops | |
| 212 213 214 215 | pottery, woo | is an accessory structure used for actively pursuing a craft or adcraft, etc. A workshop shall be served by electricity and shar storage sheds (5.01.09) and to the standards for all accessory | ll conform to the |
| 216 217 | ` | Town Clerk is to renumber current section 5.01.10, Docks, I 5.01.11, Flagpoles.) | Piers and Wharfs, |
| 218 | | | |
| 219 220 | Section 10. 7.04.04 is en | Amendment to section 7.04.04, Visibility triangle at intracted to read: | tersections. Section |
| 221 | 7.04.04 | Visibility Triangle at Intersections | |
| 222 223 | • | visibility at intersections of streets and at intersections of driving its shall be provided as shown in the following diagram. | veways with streets, |



| 228 229 | is amended to read, and is amended to add the definition of "street tree," as follows: |
|---|--|
| 230 231 232 | Canopy Tree means a tree, usually with one main trunk, which develops an elevated crown and provides at maturity, a minimum shade crown of thirty 30 feet (30') in diameter or greater. See also street tree. |
| 233 234 | Street Tree means any tree meeting the requirements for a canopy tree and planted to meet the requirements for a street tree as required by the code. See also canopy tree. |
| 235 236 237 238 | <i>Primary Façade</i> is the exterior wall of a building that faces a street. Buildings on corner lots have two primary facades. Buildings on lots abutting more than one street, including corner lots, through lots, and any lot abutting three or four streets, have two, three or four primary facades based on the number of streets fronted by the lot. |
| 239 | |
| 240 241 | Section 12. Amendment to section 7.12.01, Permit required. Section 7.12.01 of the Land Development Code is amended to read: |
| 242 | 7.12.01 Permit required |
| 243 244 245 246 247 248 249 250 251 | A. Any person who proposes to cut down, move, remove, or destroy any tree, including those on single family lots, shall first obtain a tree removal permit from the Town unless otherwise exempt under F.S. 163.045. Prior to removal of any tree exempt from permitting under F.S. 163.045 the property owner shall provide to the Town a copy of the arborist report required by Section 163.045(2). Requests for tree removal permits shall be made to the Public Works Director Code Enforcement Officer. Trees that are located on vacant, undeveloped land shall not be removed except as permitted through the development of the site. Trees that are on the Town's prohibited tree list may be removed without a permit. Any application for a tree removal permit shall include the following: |
| 252 | a. Property owner's name and daytime telephone number. |
| 253 | b. Street address and directions to the site. |
| 254 | c. Type and size of tree proposed to be removed. |
| 255 | d. Purpose for the tree removal. |
| 256 | e. Most recently available boundary survey. |
| 257 | f. General location of the tree on the site. |
| 258 | g. How many trees remain on the lot or parcel. |
| 259 260 | B. When determining whether to permit the tree removal, the following issues will be evaluated: |

| 261262 | 1. | Whether the tree has a potentially hazardous branching structure such as a hollow trunk, low fork in the trunk, or other. |
|---|---|---|
| 263 | 2. | Whether the tree is injured or diseased beyond repair. |
| 264 265 | 3. | Whether there are no viable alternatives to locating structures or driveways on the site. |
| 266 267 | 4. | Whether the tree is impacting the foundation of a house or other building or structure. |
| 268 | 5. | Whether the tree poses a threat to traffic visibility. |
| 269 | 6. | Whether the tree is negatively impacting a more desirable tree. |
| 270 | 7. | Any other issue deemed important by the Town. |
| 271 272 273 274 275 276 277 | 8. | Trees that are deemed hazardous or otherwise unsafe shall be allowed to be removed without mitigation. In circumstances where the condition supporting the removal of a tree is not obvious or easily documented by the Town inspector, a letter from a certified arborist may be required to permit removal. In emergency situations, a hazardous tree may be removed as long as proper documentation in the form of photographs and/or a written opinion from Town staff, accompanies the permit application. |
| 278 279 | _ | rees removed in violation of this chapter shall be deemed to be violations of pject to all penalty provisions afforded the Town. |
| 280 | | |
| 281 282 | | nendment to section 8.05.02, Potable water system. Section 8.05.02 of the ant Code is amended to enact new subsection L, as follows: |
| 283 | 8.05.02 Po | otable water system |
| 284 | * * * | • |
| 285 286 287 288 289 290 | clear of any fence allow for access be The meter box ma | esponsibility of all potable water customers to maintain a three-foot area es, structures or landscaping other than sod or mulch around meter boxes to by Town employees for reading, maintenance, and disconnection of service. ay not be buried or obstructed from view. The Town shall not be my damage to plants, fences or other impediments that are removed in the work. |
| 292 | Section 14. A | mendment to section 8.05.04, Reclaimed water systems. Section 8.05.04 |
| 292 | | elopment Code is amended to enact new subsection F, as follows: |
| 294 | 8.05.04 Re | eclaimed water system |

| 293 | ጥ ጥ ጥ |
|---|---|
| 296 297 298 299 300 301 | F. It is the responsibility of all reclaimed water customers to maintain a three-foot area clear of any fences, structures or landscaping other than sod or mulch around meter boxes to allow for access by Town employees for reading, maintenance, and disconnection of service. The meter box may not be buried or obstructed from view. The Town shall not be responsible for any damage to plants, fences or other impediments that are removed in the course of Town work. |
| 302 | |
| 303 304 | Section 15. Business Impact Estimate. In compliance with Subsection 166.041(4) of Florida Statutes the Town provides the following business impact estimate: |
| 305 306 307 308 309 310 311 312 313 | a) Summary of Ordinance 2023-012. Ordinance 2023-012 is a collection of amendments to the Town's Land Development Code (LDC). The amendments were recommended by the Planning and Zoning Board. The amendments largely clarify existing LDC provisions. Some amendments add needed regulations or specify permitted and prohibited actions and land uses by developers and landowners. The amendments address setbacks, townhome garage and driveway requirements, permits for temporary storage units, tree removal and protection, approved and prohibited types of trees and other plants, landscaping requirements and restrictions, "workshop" structures, and visibility standards for motorists. All amendments are intended ultimately to address public safety and welfare. |
| 314 315 | b) No economic impact . The following amendments in Ordinance 2023-012 will have no material economic impact on private, for-profit businesses: |
| 316 | 1. Flagpole setbacks in LDC section 5.01.11; |
| 317 | 2. Extended permit periods for temporary storage units under section 5.02.06; |
| 318 | 3. Clarification of pruning requirements in section 7.09.02; |
| 319 | 4. Adjustments to the list of approved trees and plants in section 7.10.00; |
| 320 | 5. Adjustments to the list of prohibited plants in section 7.10.01; |
| 321 | 6. Clarification of tree-protection standards in section 7.11.01; |
| 322 323 | 7. Clarification of the portions of single-family lots required to be drought-tolerant and unirrigated; |
| 324 | 8. Addition of "workshops" to the types of permitted accessory structures; |
| 325 326 | Requirement for "visibility triangles" at street intersections and at the intersection of driveways and streets; |
| 327 | 10. Clarification of and an addition to defined terms under section 1.12.00: |

| 328 329 | 11. Clarification of when trees may be removed without the need to first obtain a removal permit under section 7.12.01; |
|---|---|
| 330 331 332 | 12. Adding requirements for property owners to keep spaces around potable-water and reclaimed-water meters clear of obstacles and landscaping under sections 8.05.02 and 8.05.04 |
| 333 334 335 336 | c) Economic impact . The Town estimates that the requirement in LDC section 2.03.03 for a two-car garage and a driveway of minimum length and width at each new townhome will increase the cost of constructing the townhome, as of October 2023, by an amount equal to approximately \$ |
| 337 | |
| 338 339 340 341 342 | Section 16. Severability. If any provision or portion of this ordinance is declared by a court of competent jurisdiction to be void, unconstitutional, or unenforceable, the remaining provisions and portions of this ordinance shall remain in full effect. To that end, this ordinance is declared to be severable. |
| 343 344 345 346 | Section 17. Codification The amendments in Sections 1 through 14 of this ordinance shall be codified and published in the Town's Land Development Code. No other provisions shall be codified, either in the Town's Code of Ordinances or in the Land Development Code. |
| 347 | Section 18. Effective Date. This ordinance shall take effect upon its enactment. |
| 348 349 350 351 352 353 354 355 356 357 358 360 361 362 363 364 365 366 367 | [Signatures on the following page] |

Item 4.

Draft only 10-20-2023

| 368 | ORDAINED AND ENACTED this | day of, 2023, by the Town Council |
|------------|---|---|
| 369 | of the Town of Howey-in-the-Hills, Flor | |
| 370 | · | |
| 371 | | |
| 372 | | TOWN OF HOWEY-IN-THE-HILLS, |
| 373 | | FLORIDA |
| 374 | | By: its Town Council |
| 375 | | |
| 376 | | |
| 377 | | By: |
| 378 | | Hon. Martha MacFarlane, Mayor |
| 379 | | |
| 380 | | |
| 381 | | |
| 382 | ATTEST: | APPROVED AS TO FORM AND LEGALITY |
| 383 | | (for the use and reliance by the Town only) |
| 384 | | |
| 385 386 | | |
| 387 | John M Brock, Town Clerk | Thomas J Wilkes, Town Attorney |
| 388 | | |
| 389 | | |
| 390 | | |
| 391 | | |
| 392 | F' (D 1' | 2022 |
| 393 | First Reading: | , 2023 |
| 394 | Second Reading and Enactment: | , 2023 |
| 395 396 | A dyanticina | |
| 390 | Advertising: | |
| 398 | | |
| <i>370</i> | | |



10/23/2023

To: Mike Woods, Lake-Sumter Metropolitan Planning Organization (MPO)

Date: October 23, 2023

Subject: Request for Funding - Area Study for the Town of Howey-in-the-Hills

Dear Mr. Woods,

I am writing on behalf of the Town of Howey-in-the-Hills to formally request implementation of Complete Streets elements in the currently proposed resurfacing projects (#452642-1) as well as budget allocation for a comprehensive area study to explore the feasibility and need for alternative traffic routing in our municipality.

In reference to the Lake-Sumter MPO's Long Range Transportation Plan (LRTP) 2045, it is evident that there are significant roadway needs projects to the northeast, northwest, and south leading to and from Howey-in-the-Hills. These routes are highlighted as critical infrastructure components. With the current and projected growth patterns in and around Lake County, it is both inevitable and imperative that we address the pressing challenges posed by the increasing traffic volume, especially from heavy trucks.

Our primary concerns are as follows:

- 1. Pedestrian Safety: The escalating vehicular traffic effectively divides our town in half, making crossing Highway 19 increasingly unsafe, if not perilous. This is of particular concern for our youth and elderly populations, who are at a higher risk in such traffic conditions.
- 2. Cut-through Traffic: Currently, Howey-in-the-Hills is experiencing an influx of cut-through traffic, especially from the Tavares area. This traffic aims to access the turnpike and south Lake County, further exacerbating the congestion and safety challenges within our Town.

Given the aforementioned reasons, we believe that a detailed area study is essential in identifying potential solutions and ensuring the safety and well-being of our residents. We respectfully request that the Lake-

Town of Howey-in-the-Hills

Item 5.

Sumter MPO allocate the necessary funds to conduct this study, providing the foundation for informed decisions and future infrastructure improvements.

| We genuinely appreciate your attention to this matter and look forward to your positive response. Please feel free to contact us for any additional information or clarifications. |
|--|
| Thank you for your time and consideration. |
| Sincerely, |
| |
| |
| Sean O'Keefe |
| Town Manager |
| |
| |
| |
| CC: C. Jack Adkins, District Five Director of Transportation Development (FDOT) |
| |
| |

July 1, 2024 through June 30, 2029

Florida Department of Transportation - District Five

450740-1 - SR 25(US27) FROM N OF SR 50 TO CR 561A/SOUTHERN BREEZE DR

Type of Work: PAVEMENT ONLY RESURFACE (FLEX)

| Phase | Funding Source | 2025 | 2026 | 2027 | 2028 | 2029 |
|----------------------------|----------------|------|--------------|------|------|------|
| Construction | State | | \$10,576,291 | | | |
| Total for Project 450740-1 | | | \$10,576,291 | | | |

452642-1 - CR19 FROM LAKEVIEW AVE TO CR48

Type of Work: PAVEMENT ONLY RESURFACE (FLEX)

| Phase | Funding Source | 2025 | 2026 | 2027 | 2028 | 2029 |
|----------------------------|----------------|-----------|------|-------------|------|------|
| Preliminary Engineering | State | \$439,950 | | ' | | |
| Construction | State | | | \$1,614,735 | | |
| Total for Project 452642-1 | | \$439,950 | | \$1,614,735 | | |

452646-1 - SR 44 FROM US 441 / SR 44 / SR 500 TO S OF SR 44 (ORANGE AVE)

Type of Work: PAVEMENT ONLY RESURFACE (FLEX)

| Phase | Funding Source | 2025 | 2026 | 2027 | 2028 | 2029 |
|----------------------------|----------------|-----------|------|-------------|------|------|
| Preliminary Engineering | State | \$615,300 | | | | |
| Construction | State | | | \$3,504,907 | | |
| Total for Project 452646-1 | | \$615,300 | | \$3,504,907 | | |

453086-1 - SR 44 FROM SR 44 IN LAKE COUNTY TO VOLUSIA COUNTY LINE

Type of Work: INTERSECTION IMPROVEMENT

| Phase | Funding Source | 2025 | 2026 | 2027 | 2028 | 2029 |
|----------------------------|----------------|-----------|------|-------------|------|------|
| Preliminary Engineering | Federal | \$234,000 | | | | |
| | State | \$11,700 | | | | |
| Construction | Federal | | | \$1,280,913 | | |
| | State | | | \$62,192 | | |
| Total for Project 453086-1 | | \$245,700 | | \$1,343,105 | | |

453449-1 - CR 44 FROM US 441 TO SR 19 LEFT TURN LANES

Type of Work: ADD LEFT TURN LANE(S)

| Phase | Funding Source | 2025 | 2026 | 2027 | 2028 | 2029 |
|----------------------------|----------------|-----------|------|-------------|------|------|
| Preliminary Engineering | Federal | \$652,000 | | | | |
| Construction | Federal | | | \$2,646,750 | | |
| Total for Project 453449-1 | | \$652,000 | | \$2,646,750 | | |