Sunshine
Water Control District

REGULAR MEETING AGENDA

October 22, 2024

SUNSHINE
WATER CONTROL DISTRICT

AGENDA LETTER

Sunshine
Water Control District

October 15, 2024

ATTENDEES:
Please identify yourself each time you speak to facilitate accurate transcription of meeting minutes.

Board of Supervisors
Sunshine Water Control District

Dear Board Members:
The Board of Supervisors of the Sunshine Water Control District will hold a Regular Meeting on October 22, 2024 at 6:30 p.m., at Mullins Hall, 10170 NW 29th St, Coral Springs, Florida 33065. The agenda is as follows:

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Public Comments **[3-Minute Time Limit]** *(Comments should be made from the microphone to ensure recording. Please state your name prior to speaking.)*
5. Discussion: Site Visit Report and Resources
6. Acceptance of Unaudited Financial Statements as of August 31, 2024
7. Approval of September 12, 2024 Public Hearings and Regular Meeting Minutes
8. Supervisors' Communications
9. Staff Reports
   - A. District Counsel: *Lewis, Longman & Walker, P.A.*
   - B. District Engineer: *Craig A. Smith & Associates*
     - I. Presentation: Monthly Engineer's Report
     - II. Permit Application(s)
       - Installation of FOC Via Attachment to Riverside Drive Bridge Consisting of 50 LF of 2" PVC Pipe Over SWCD Canal "E" [Blue Stream Communications, LLC – S14/15/T48S/R41E]

- Replacement of Two (2) Fiber Optic Pull Boxes & Conduit Installation Within Existing Coral Springs Drive Bridge Over SWCD West Outfall Canal ROW; and Directionally of 3-2" HDPE Conduits Under SWCVD Canal Z Culverts [Broward County – Highway Construction & Engineering Division – S29T48S/R41E]

C. District Engineering Consultant: *John McKune*

D. District Field Supervisor: *Cory Selchan*

E. District Manager: *Wrathell, Hunt & Associates, LLC*

- NEXT MEETING: November 13, 2024 at 6:30 PM
  - QUORUM CHECK

JOE MORERA	☐ IN PERSON	☐ PHONE	☐ NO
IVAN ORTIZ	☐ IN PERSON	☐ PHONE	☐ NO
CAROL SMITH	☐ IN PERSON	☐ PHONE	☐ NO

10. Public Comments

11. Adjournment

Should you have any questions, please contact me directly at (561) 512-9027.

Sincerely,

Jamie Sanchez
District Manager

FOR BOARD MEMBERS AND STAFF TO ATTEND BY TELEPHONE
CALL-IN NUMBER: 1-888-354-0094
PARTICIPANT PASSCODE: 131 733 0895

SUNSHINE
WATER CONTROL DISTRICT

5

FLORIDA INSURANCE ALLIANCE

Sunshine Water Control District

Date of Visit:	**Tuesday, September 17th, 2024 at 10:00 AM**
District Manager:	Jamie Sanchez, sanchezj@whhassociates.com
Site Contact:	Cory Selchan, corys@csidfl.org
Address:	**10300 NW 11th Manor Coral Springs 33071**
Egis Attendees:	Charlen Wade, Loss Control Consultant

Visit Overview

The purpose of the visit on the above referenced date was to allow our team to review the Sunshine Water Control District from a risk management perspective. The visit also allowed us to support the district's loss control efforts by identifying any hazards that could lead to accidents and claims and discuss recommendations to remediate any loss producing conditions. Those recommendations are included in this letter. While we did not have the opportunity to observe all areas owned and/or maintained by the district, we feel that the areas we were able to observe are representative of the general condition of the property.

District Summary

Sunshine Water Control District provides infrastructure and services for the purposes of surface water control. These services include maintaining approximately 5,500 acres of canals, culverts, and rights-of-ways which provide drainage and flood protection to residents. The district boundaries include northern along Wiles Road, west along Sawgrass Expressway, southern on the south side of Royal Palm Blvd. and east along the Dells neighborhood from Wiles Rd. to Sample Rd. The remaining east boarder from Sample Rd. to Royal Palm Blvd. is City of Coral Springs and the City of Margate municipal boundary.

Sunshine Water Control District owns two pump stations, generators, and chain link fencing and antennae. Maintenance of the canals are done by the employees and include removal of excess aquatic vegetation and debris from waterways. Other employee responsibilities include mowing, use of tractors, spraying, and boating. For larger projects, including tree trimming and removal, vendors are used. Easement access agreements are in place with the local municipality and are used for canals that are owned and maintained by the District. When right-of-way maintenance is conducted, vendors are not allowed to park at the side of the road but instead must be away from the roadways. The manufacturer maintains the generators for the district, even outside of warranty period.

Loss Control Observations

Recommendations below have been placed into categories based on the likelihood and severity potential of each exposure and related losses. Placement may also be based on lessons learned from claims experience with similar districts and loss sources.

Strengths

Strengths highlight some of the existing risk mitigation strategies in place. Consistent application is important to the district's overall risk management program.

- The district is well maintained overall.
- Employees work in pairs to complete tasks, with 2 crews typically spraying and 1 crew cleaning. This pairing allows for employees to keep an eye on one another in the event of an emergency.
- Employee safety training is done at Coral Springs Improvement District and the Risk Management Center training platform is used.
- Coolers and ice are provided to each pair of workers to reduce chances of heat related illnesses during the hotter months.
- All employees are trained herbicide applicators and have current state certifications.
- Diesel Fuel Tanks are double walled and have electronic leak monitoring systems which alert employees to possible leaks if they occur.

Critical Recommendations

Critical recommendations are associated with exposures and hazards that represent a significant danger or risk warranting immediate attention. While follow-up for all recommendations is encouraged, items in the critical category may require documented resolution and review by FIA's Risk Services team as indicated in the recommendation description.

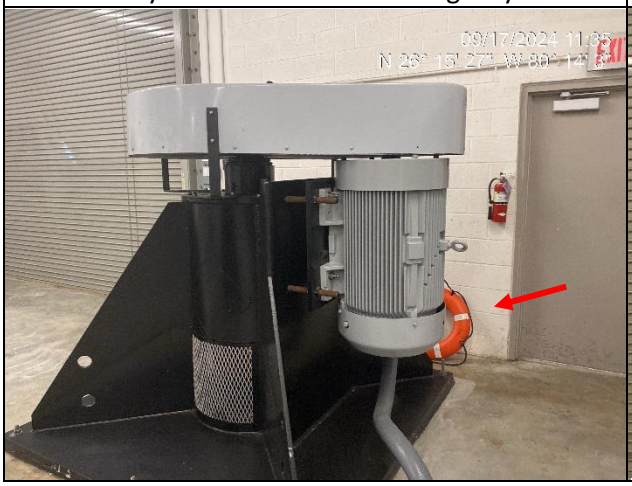
- There are no critical recommendations currently.

Important Recommendations

Important recommendations are provided to address exposures that if not corrected, have the potential to result in significant injury or property/liability losses.

- Risk Transfer
- Life Safety Ring Accessibility
- Fire Extinguisher Placement
- Broken Ladder

Risk Transfer - When your entity uses a contractor to provide goods or services, your entity can transfer the risk of it causing harm to your property, residents, and guests. Best practices to facilitate risk transfer in your favor include having vendors name the district as an additional insured as well has having contracts in place that include hold harmless language in the district's favor. Similarly, risk should also be transferred to companies with permanent operations within the district. Additional information can be found in the "Risk Transfer to Protect Your District" article that will accompany this report. This can be applicable to the vendors that provide services to the district including tree cutting. If counsel works with other CDDs, they should likely have a contract template in place that can be used for most vendors.

Life Safety Ring Accessibility – The below life ring was seen on the floor near the entrance of the pump station and the other life ring mounted on an emergency light fixture. This may limit accessibility in the event of an emergency.	Life safety rings should be mounted in areas that are unobstructed. Designated locations that provide quick and easy access should be determined and the life rings should be placed there.
	

Fire Extinguisher Placement – The fire extinguisher near the door is located on the floor near the entrance of the pump station. This may cause a lower back strain if it is improperly lifted for use.	NFPA 10 suggests that extinguishers need to be installed at least 4 inches off the ground up to a maximum of 5ft. The exception to this is for extinguishers heavier than 40 lbs, they can only be up to 3 ft 6 in off the ground and wheeled fire extinguishers don't need to be off the ground since the wheels already keep the cylinder from touching the floor. Consider either having a hook that allows for the extinguisher not to be on the floor and improve ease of access.
	

Broken Ladder – The spreader assembly, pall shelf, and top are bent and may create instability which could lead to a fall if an employee tried to use the ladder. *This recommendation was also within the 8.14.2020 site visit report.	Best practice is to remove broken ladders from accessibility. The locks are bent as well as the top and pall shelf. The ladder should be taken out of service or labelled "do not use" until it can be discarded.
	

Advisory Recommendations

Advisory recommendations are provided to address exposures that while having the potential for loss, would not normally result in a significant or severe loss. These recommendations are typically provided to share best practices.

- Motor Vehicle Record Review
- Fire Extinguisher Monthly Visual Inspection

Motor Vehicle Record Review - Monitoring the district drivers' MVRs is an important step in reducing the chance of an accident and improving the district's loss experience. Consider MVR monitoring as due diligence for assuring that your drivers meet the standards you have established for safe performance of their jobs. As a best practice, the review process should take place as part of the hiring process and annually thereafter. The scoring tool that accompanies this letter may be used to evaluate a driver's fit for the district.

Fire Extinguisher Monthly Visual Inspection - Fire extinguishers should be subjected to an annual maintenance check and monthly visual inspections to ensure functionality in the event of an emergency.	Monthly self-inspections are considered a best practice and should be done as part of the overall preventive maintenance program.
	

Risk Transfer: An Important Strategy to Protect Your District

Districts of all sizes often rely on crucial relationships with outside entities including contractors and vendors to support successful operations. Such relationships often involve the negotiation of written agreements and the subsequent need for a contract management program. While much of the focus tends to be on the financial elements of a contract, such as invoicing terms and overall service costs, it's important to ensure that other terms and conditions, specifically those that allocate risk and associated responsibilities, are not overlooked.

Start with a Risk Based Approach

Including a risk-based approach to contractor and vendor management through proper contractual risk transfer can provide the best protection for districts. This consists of a wide range of provisions that can shift liability exposures to the appropriate party in a manner consistent with their ability to control and insure the associated risks. This can include insurance requirements, as well as hold harmless and indemnification language. Failure to examine this can result in your district bearing an unfair amount of risk, including injury, damage, and defense costs associated with claims and lawsuits that may be a result of another party's actions or negligence.

Consider the Following Scenario

Needfore Improvement District hires ABC Paving to make a few repairs to its office parking lot. ABC underestimates the number of repairs needed and must come back within a couple of days with more material. As a result, large holes are left open in the parking lot. In the meantime, ABC places cones and caution tape where the repairs are still in progress but did not have enough of each to cover all areas. The district had a community education event scheduled for the next day. An attendee stepped into an open, unmarked hole shortly after stepping out of their vehicle, falling and sustaining severe injuries, subsequently filing suit against the district. The district had entered into a written agreement with ABC; however, it did not include any language addressing insurance requirements, nor the allocation of risk. The district had used ABC about a year ago for similar repairs and secured a certificate of insurance at that time but failed to ask for a more recent copy. The district incurs over $100,000 in expenses to defend and resolve the claim without any contribution from ABC due to poor risk transfer practices.

How is Risk Transfer Accomplished?

Risk transfer is most effective as a layered approach including both contracts and insurance requirements. We'll outline what to look for in reviewing each of these and how they can work together to protect your district.

Contracts, Hold Harmless, and Indemnification

Properly worded contracts and agreements not only help to clarify each party's roles and responsibilities, but they can also offer the most comprehensive protection when they include provisions that allocate each party's risk equitably and outline insurance requirements clearly. Because contracts are intended to be enforceable by law, it is important to engage legal counsel in the drafting and review process. This also helps to ensure that contracts will be interpreted and enforced in a clear and consistent way, as these and other legal documents may be read and interpreted differently by multiple parties.

Contracts that include hold harmless, indemnification and duty to defend provisions can help transferring the risk of loss, damage, or liability from one party to another. While some view the terms indemnification and hold harmless as interchangeable, there are notable differences. Indemnification is generally the act of one party agreeing to provide compensation after a loss has already occurred, whereas hold harmless involves one party agreeing not to seek reimbursement from another for liability or damages, including those to a third party. For this reason, hold harmless and indemnification language often go hand in hand. Imposing a duty to defend on the vendor, contractor, and/or their subcontractors can also provide for a legal defense and associated costs related to lawsuits.

The ways in which this type of language allocates risk among the involved parties can span a wide spectrum. On one end of the spectrum, one party may assume all responsibility for injuries and damages that occur in the performance of contractual obligations. On the other end, each party may agree that they are only responsible for the outcomes of their own negligence. Distributing the risk to each party can sometimes be a part of the negotiation. Several factors can influence how much risk each party should agree to retain, transfer, or share, which can be difficult to navigate without the help of a risk management professional.

When contracts shift the burden of risk to another party, it is important to confirm that the other party is able and willing to pay for the liability it has assumed. This is why it's imperative to include insurance requirements in all contracts and agreements.

Insurance Requirements

Vendors and contractors working with your district should be able to meet the insurance requirements outlined in your contracts. It's important that these include the appropriate types of coverages that are consistent with the vendor's operations and the associated risks presented to your district. While general liability and worker's compensation coverage may be a given, it's important not to overlook others that may need to apply. For example, a vendor providing services that require the use of vehicles throughout the district should maintain automobile liability coverage. Likewise, a vendor who stores fuel tanks on district property should maintain pollution liability coverage. Some situations may seem less common but can present significant exposures to a district. Vendors providing services to minors, such as

swim and tennis classes, is an instance where it would be imperative to confirm the vendor's policy includes coverage for incidents and allegations related to sexual abuse and molestation.

Determining the appropriate coverages and limits is another area where consulting with your insurance professional can be helpful. Factors typically considered include the type and scope of services involved, other parties that may be impacted by those services, as well as the potential for the services to contribute to losses.

Additional Insured Status (AI)

The primary advantage of obtaining additional insured status on a vendor's policy is the provision of certain rights under that policy, including access to the insurance policy without having to pay any premiums or deductibles. This can also include defense coverage for those named as AI. This is particularly important when contracts require third parties to indemnify the district. As good as this sounds, it does not come without its limitations.

Additional insureds tend to have narrower coverage than what is provided to the vendor or named insured who purchased the policy as the intent is for an AI to be indemnified for liability related to the operations in the contract or agreement that involve the named insured in some way.

When a district requests AI status from another party, that party's insurance policy is endorsed to include the district as an additional insured. Some insurance companies can provide copies of these endorsements to better understand the scope and limitation of being an additional insured, along with any other special requirements.

Certificates of Insurance (COI)

When evaluating and selecting contractors and vendors, it's important to request a current Certificate of Insurance that reflects the coverages included in the insurance requirements outlined in your contract. A COI is a form issued by an insurer or agent that lists the coverage(s), expiration date(s) and limits of the insured's coverage(s). It includes important information about each line of coverage, including policy numbers, policy limits, insurer, agent, coverage period and name of the insured. Special endorsements, including AI status mentioned previously, and others, such as a waiver of subrogation may also be noted on the COI.

Risk Transfer Tips and Strategies

- Contracts with overly ambiguous risk allocation language can render the provision ineffective.
- Roles and responsibilities noted in contracts should also outline safety responsibilities. For example, a vendor that repairs a portion of a roadway should be required to comply with traffic control procedures. A vendor that works with minors should be responsible for screening employees.
- Certain risks associated with the physical safety of your district facilities can be difficult to transfer. Having a plan in place to control hazards such as uneven sidewalks remain important.
- All contracts should indicate that nothing shall be deemed as a waiver of the immunity or limits of liability of the district beyond those that have been adopted by the Florida Legislature in section 768.28 of the state statutes. This is especially important when contracting with private entities who do not enjoy this statutory benefit.
- The provision of additional insured status should be included in the insurance requirements or similar section of a contract.

- Requiring additional insured status on a primary and non-contributory basis can provide broader coverage, stipulating that the vendor's coverage pays before the district's policy without seeking contribution other polices afforded to or maintained by the district.
- Insurance providers can seek subrogation (recovery of some or all costs from another insurance carrier) if they believe the other carrier's insured was at fault or contributed to the cause of a claim. To avoid this, your district can request that vendor insurance policies include a waiver of subrogation.
- Many vendor insurance policies include what's known as a blanket additional insured endorsement. This can allow districts to be named as AI automatically, however, only when required by contract.
- COIs only provide a snapshot of coverage at a particular point in time. Districts should have a system in place to enable periodic review of the COIs provided by the entities they work with.
- Although COI's can indicate that AI status has been provided, the underlying endorsement is the best way to get confirmation.
- While the COI can serve as evidence of additional insured status, the contract provides the necessary context and details about the specific conditions and limitations of that coverage, making them both essential components for comprehensive risk management.
- Absent proof of a vendor's workers compensation coverage, a district may experience increased worker's compensation premiums of their own.
- If the vendor the district is working with utilizes subcontractors, those subcontractors will also need to meet the same insurance requirements as the general contractor.
- Contract indemnification language should reference not only the contractor as the indemnitor but also its employees, agents, representatives, and subcontractors.
- Indemnification clauses should be written such that the vendor indemnifies the district, not the other way around. Most third parties are private entities, and there is an extremely limited amount of circumstances where a governmental entity indemnifies a private entity. Doing so may expose the district to significant liability beyond the limits of its sovereign immunity protection.
- Be especially critical of contracts that other entities ask you to sign. Such contracts can include language and responsibilities unfavorable to the district, which may also serve to diminish the district's sovereign immunity protection.
- Risk transfer should not be overlooked even when dealing with smaller vendors or those used on an incidental or emergency basis. Even seemingly minor tasks can carry significant risks, and the financial impact of a claim or lawsuit can be devastating for a district, regardless of the size or frequency of the vendor's services. Ideally, each contract is specific to each vendor's operations. However, districts may consider a standardized template agreement that includes the risk transfer provisions mentioned in this article to be used for these types of scenarios.

The risk transfer tools and strategies in this article are an important part of a district's risk management efforts and should be used whenever possible as they help to minimize the likelihood of being exposed to undue amounts of liability, including those that are the result of the action or inaction of others. While employing these strategies can seem a bit overwhelming, we've assisted several districts in implementing them into their risk management programs. For more articles, sample forms and policies, or any other resources on safety and risk management, please reach out to our team at riskservices@egisadvisors.com.

Risk Transfer Checklist

Questions to Answer	YES	NO	Best Practices
Do you have a written contract with the service provider which has been reviewed and approved by District Legal Counsel?	☐	☐	All contracts should be reviewed and approved by District Legal Counsel before signing. This helps to ensure that each contract addresses the specific risks and district needs related to each vendor and service.
Is there language in the contract that may be construed as a waiver of sovereign immunity protection as outlined in FS 768.28?	☐	☐	Contracts should include language clarifying a non-waiver of the district's sovereign immunity.
Does the contract include hold harmless and indemnification language in the district's favor?	☐	☐	Clear and distinct language outlining the vendor's obligations regarding compensation for loss, damage, or liability is critical in protecting the district.
Has the vendor or contractor provided proof of insurance (Certificate of Insurance) for all pertinent coverages and limits as outlined in the contract?	☐	☐	Obtaining proof of coverage from the vendor or contractor is important and must align with requirements imposed within the contract. FIA's Risk Services team can help in navigating these requirements.
Is your District named in the vendor or contractor Certificate of Insurance as an Additional Insured with the appropriate boxes checked on the COI?	☐	☐	Additional Insured status on vendor or contractor insurance policies can extend coverage to the district for loss arising out of the vendor's operations. AI status should be provided on a primary and non-contributory basis.
Has the vendor provided the actual underlying insurance endorsement to the District?	☐	☐	Although being an Additional Insured on the COI is critical, having a copy of the underlying endorsement is the only way to provide true confirmation.
Does the vendor insurance policies include a waiver of subrogation?	☐	☐	This helps protect the District from subrogation efforts by other carriers.
Does the District have a process in place for checking and acquiring updated Certificates of Insurance from regularly used vendors and contractors?	☐	☐	COI are only a snapshot in time therefore it is a best practice to check and verify the District has the most updated version on file, at least annually.
Have you contacted the FIA Risk Services Team to discuss Risk Transfer techniques?	☐	☐	Often a quick phone call or email to your FIA risk management team can help make sure the District has proper protections in place.

FLORIDA INSURANCE ALLIANCE

Using Motor Vehicle Record Reviews to Improve Driver Safety Programs

While there are a variety of operational focuses within the spectrum of Florida's special taxing districts, most rely on some form of vehicular operations. Driving district-owned vehicles, or even employee-owned vehicles for district business whether on a regular or occasional basis does not come without an added risk exposure.

Automobile accidents can be a significant liability for districts that rely on the use of vehicles for their operations. Fortunately, a well-managed driver safety program including training, vehicle inspection and maintenance, and driver selection criteria can be very helpful in managing this risk. The exposure has seen an uptick in recent years due in large part to distracted driving and a legal concept called negligent entrustment.

What is Negligent Entrustment?

Negligent entrustment occurs when an employer is held liable for negligence in choosing an employee to operate a dangerous instrument, typically a vehicle, regardless of whether the employer owns the vehicle. An employer, or district in this case, can be found negligent if both of the following situations occur:

1. An employee driving on district business causes injury to a third party or damages physical property, even if the employee is not the at fault party.
2. The district knew, or should have known, not to trust the vehicle to the driver or that the vehicle was unsafe.

If a driver is working within the scope of his or her job duties, including running an errand on behalf of the district, it is presumed that the employer has trusted the driver with the vehicle. Districts should be able to show that they took all possible precautions to prevent accidents. If not, the actions they did or did not take may be construed as negligent entrustment.

That is where motor vehicle records (MVRs) can help. The rest of this article will provide an overview of MVRs, how and why to obtain them, and what to look for once you have secured them.

What are MVRs?

Put simply, MVRs are historical driving records that districts can use to evaluate current and potential drivers. Specifically, MVRs provide an overview of an individual's:

- Driving history over a specific period, usually several years
- Moving violations
- Chargeable accidents
- DUI offenses
- Suspensions or revocations
- Point accumulations
- Driver's license and restrictions
- Vehicular crimes

This information is crucial for public entities, as an individual's accident and violation history are a good indicator of their driving performance and habits. Studies indicate that drivers with a poor record are more likely to be involved in future incidents.

By obtaining and reviewing MVRs for employees who drive, you are ensuring the individuals you hire are able to perform their job duties safely, helping you reduce the likelihood of vehicle accidents.

How to Obtain MVRs and What to Look For

When it comes to obtaining MVRs, districts have several options. Specifically, you can secure an MVR through:

- The state's department of motor vehicles
- A third-party service: FLHSMV List of Third Party Record Providers

MVRs can be obtained through one of the above sources. While insurance agents and carriers may request driving records, it is typically only for underwriting purposes. It is still up to the district to determine driver eligibility for their respective operations and is an integral part of the hiring process.

Before you request a current or prospective employee's MVR, you must first obtain their written consent. MVRs should be reviewed before making a hiring decision and at least annually thereafter.

For workers whose roles include driving as a key component, acceptable MVRs should be a condition of employment. The definition of an acceptable MVR can differ from district to district, but it is important to set clear standards that employees can understand. Some general guidelines to consider include the following:

- The current or prospective employee must have a valid driver's license for the state in which they reside.
- The current or prospective employee should have at least five years of driving experience.
- he current or prospective employee should not have any serious violations in the last three to five years. Examples of serious violations can vary by state but may include:
    - Speeding excessively (e.g., driving 15 mph faster than the posted speed limit).
    - Operating a vehicle under the influence of alcohol or narcotics. It should be noted that refusing to take a chemical test can also qualify as a serious violation.
    - Passing a stopped school bus.
    - Driving with a suspended, revoked, or invalid license.
    - Driving recklessly or negligently. Drivers involved in vehicular assault, homicide or manslaughter should be disqualified from employment.
    - Fleeing the scene of an accident (e.g., hit and run incidents).
- The current or prospective employee should not have:
    - Three or more moving violations within the last three years (e.g., speeding, changing lanes improperly, running a red light or failing to yield)
    - Two or more at-fault accidents within the last three years (e.g., accidents where the driver receives a citation or causes a collision due to their negligence)
    - More than one at-fault accident and one moving violation combined within the last three years

Having a consistent system for collecting, retaining, and reviewing MVRs can go a long way toward hiring qualified drivers and preventing accidents and is an important part of a district's overall fleet and driver risk management program. In future articles, we will highlight other key components of a good program including vehicle inspection and maintenance, driver training, and more. A sample table included below to help district develop their own evaluation process. When reviewing MVRs, it is essential for districts to consider the specific driving requirements of the position, type of vehicle being operated, and frequency of driving. These and other factors should be used in determining the appropriate level of scrutiny for each driving record.

Sample Evaluation Table

Violation	Points	# of Violations	Date of Violation	Comments
Serious (Within Previous 5 Years)				
DUI/DWI (Driving Under the Influence or While Intoxicated)	4			
Homicide or Assault w Vehicle	4			
Leaving the Scene of an Accident	4			
Any Vehicle Related Felony	4			
Reckless Driving	4			
Speeding	4			
Other Serious Violations	4			
Major Violations (Within Previous 3 Years)				
Speeding	2			
Improper Lane Change	2			
Failure to Yield	2			
Running Red Light	2			
Other Major Violation	2			
Minor Violations (Within Previous 3 Years)				
Speeding	1			
Failure to Stop at a Stop Sign	1			
Improper Passing	1			
Improper Backing	1			
Distracted Driving	1			
Other Minor Violations	1			

4 points or more – High Risk	2 – 3 points – Medium Risk	0 – 1 points – Low Risk

At Florida Insurance Alliance, we understand the risks and hazards found in our member districts. If you have areas of concern or would like one of our knowledgeable loss control consultants to review and assess your district's risk management program, please contact us at riskservices@egisadvisors.com.

SUNSHINE
WATER CONTROL DISTRICT

UNAUDITED FINANCIAL STATEMENTS

SUNSHINE
WATER CONTROL DISTRICT
FINANCIAL STATEMENTS
UNAUDITED
AUGUST 31, 2024

SUNSHINE
WATER CONTROL DISTRICT
BALANCE SHEET
GOVERNMENTAL FUNDS
AUGUST 31, 2024

	General Fund	Debt Service Fund Series 2021	Total Governmental Funds
ASSETS			
Centennial Bank	$ 609,220	$ -	$ 609,220
Centennial Bank - escrow	35	-	35
DS - Series 2021	-	621,104	621,104
Investments			
State Board of Administration			
31-Aug-24	5,707	-	5,707
A Bank maintenance reserve account	2,990	-	2,990
A Renewal & replacement reserve account	2,225	-	2,225
A Equipment replacement reserve account	235	-	235
Centennial Bank - MMA	262,652	-	262,652
FineMark Bank - MMA	41,244	-	41,244
Bank United - MMA	249,775	-	249,775
Bank United - ICS	14,950,569	-	14,950,569
Iberia Bank - MMA	5,562	-	5,562
Due from general fund	-	1	1
Due from other soures	3,736	-	3,736
Total assets	$16,133,950	$ 621,105	$ 16,755,055
LIABILITIES			
Liabilities:			
Accounts payable	$ 2,960	$ -	$ 2,960
Due to debt service	1	-	1
Deposits payable/trash bonds	247,000	-	247,000
Cost recovery deposits	52,878	-	52,878
Total liabilities	302,839	-	302,839
FUND BALANCES			
Assigned:			
3 months working capital	575,077	-	575,077
Disaster recovery	3,500,000	-	3,500,000
Truck replacement	180,000	-	180,000
Restricted for			
Debt service	-	621,105	621,105
Unassigned	11,576,034	-	11,576,034
Total fund balances	15,831,111	621,105	16,452,216
Total liabilities and fund balances	$16,133,950	$ 621,105	$ 16,755,055

SUNSHINE
WATER CONTROL DISTRICT
STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
GENERAL FUND
FOR THE PERIOD ENDED AUGUST 31, 2024

	Current Month	Year to Date	Adopted Budget	% of Budget
REVENUES				
Assessments	$ 5	$ 3,759,495	$ 3,727,751	101%
Interest and miscellaneous	44,214	476,618	9,000	5296%
Permit review fees	-	2,800	2,450	114%
Cost recovery	-	9,165	17,500	52%
InterlocalAgrCity-cost sharing	70,925	70,925	-	N/A
Total revenues	115,144	4,319,003	3,756,701	115%
EXPENDITURES				
Administrative				
Supervisors	150	1,550	1,938	80%
Supervisor health care benefits	2,184	6,799	25,000	27%
Supervisors reimbursement	-	100	7,500	1%
Management/accounting/recording	5,642	62,062	67,706	92%
DSF & CPF accounting	1,318	14,498	15,816	92%
Dissemination fee	83	917	1,000	92%
Arbitrage rebate calculation	-	-	750	0%
Trustee	-	3,000	5,000	60%
Audit	-	11,500	11,500	100%
Legal	-	38,580	95,000	41%
Legal - legislative representation	9,953	25,953	24,000	108%
Retirement plan consulting	-	1,537	10,000	15%
Human resource services	649	7,136	7,784	92%
Communication	-	-	7,500	0%
Dues/subscriptions	-	4,675	4,500	104%
Rent - operations facility	4,177	45,949	50,126	92%
Insurance	-	25,997	27,630	94%
Legal advertising	334	1,066	2,500	43%
Office supplies and expenses	-	385	1,500	26%
Postage	126	931	1,200	78%
Postage-ROW clearing	-	-	500	0%
Printing and binding	117	1,283	1,400	92%
Website	-	705	3,000	24%
ADA website compliance	210	210	210	100%
Contingencies	317	1,347	5,000	27%
Total administrative expenses	25,260	256,180	378,060	68%
Field operations				
Salaries and wages	49,127	396,756	469,439	85%
FICA taxes	3,763	30,703	35,912	85%
Special pay	-	1,451	2,000	73%
Bonus program	-	-	2,500	0%
401a retirement plan	4,904	44,791	46,944	95%
Health insurance	17,325	188,779	373,750	51%
Workers' compensation insurance	-	11,908	16,500	72%
Engineering	350	12,204	100,000	12%
Engineering - capital outlay westchester	-	1,282	-	N/A
Engineering - capital outlay ps1 & ps2	19,545	179,383	-	N/A
Engineering - capital outlay NW 123 ave	-	5,775	85,000	7%
Engineering - capital outlay University drive	-	-	100,000	0%
Engineering - telemetry	-	-	75,500	0%
Engineering - wofo phase 3		-	340,000	0%
Consulting engineer services	-	-	25,000	0%
Cost recovery	437	15,108	17,500	86%
Water quality testing	-	5,011	5,224	96%

SUNSHINE
WATER CONTROL DISTRICT
STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
GENERAL FUND
FOR THE PERIOD ENDED AUGUST 31, 2024

	Current Month	Year to Date	Adopted Budget	% of Budget
Telephone	-	680	1,800	38%
Electric	13,095	68,503	85,000	81%
Insurance	-	67,237	89,438	75%
Repairs and maintenance				
Canal banks	9,800	21,393	75,000	29%
Canal dredging	-	-	50,000	0%
Culvert inspection & cleaning	-	4,250	100,000	4%
Dumpster service	1,639	12,998	13,000	100%
Truck, tractor and generator	4,400	21,365	32,000	67%
Other	1,138	4,720	10,000	47%
Operating supplies				
Chemicals	15,480	73,468	90,000	82%
Fuel	1,143	10,042	20,000	50%
Fuel-pump station generator	-	-	50,000	0%
Triploid carp	-	-	19,755	0%
Uniforms	155	1,471	3,217	46%
Other	27	1,223	4,000	31%
Permit fees, licenses, schools	2,750	5,570	5,000	111%
Capital outlay- West Outfall	-	63,614	-	N/A
Capital outlay - NW 123 Ave	-	-	200,000	0%
Capital outlay - University drive	-	-	150,000	0%
Capital outlay - telemetry	-	-	340,000	0%
Capital outlay - wofc phase 3	-	-	2,500,000	0%
Field equipment	-	1,539	35,000	4%
Pump station telemetry	1,426	5,427	40,000	14%
Pump station telemetry	-	-	5,000	0%
Total field operations	146,504	1,256,651	5,613,479	22%
Other fees and charges				
Tax collector	-	37,516	38,831	97%
Property appraiser	-	37,516	38,831	97%
Property tax bills - fire & EMS assessment	-	40	100	40%
Total other fees & charges	-	75,072	77,762	97%
Total expenditures	171,764	1,587,903	6,069,301	26%
Excess/(deficiency) of revenues over/(under) expenditures	(56,620)	2,731,100	(2,312,600)	
Fund balance - beginning	15,887,731	13,100,011	11,721,524	
Fund balance - ending				
Assigned:				
3 months working capital	1,760,312	1,760,312	1,760,312	
Disaster recovery	3,500,000	3,500,000	3,500,000	
Truck replacement	180,000	180,000	180,000	
Unassigned	10,390,799	10,390,799	5,155,520	
Total fund balance - ending	$ 15,831,111	$ 15,831,111	$ 9,408,924	

SUNSHINE
WATER CONTROL DISTRICT
STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
DEBT SERVICE FUND SERIES 2021
FOR THE PERIOD ENDED AUGUST 31, 2024

	Current Month	Year To Date	Adopted Budget	% of Budget
REVENUES				
Assessment levy: on-roll	$ 1	$ 855,647	$ 848,359	101%
Interest	2,523	33,388	-	N/A
Total revenues	2,524	889,035	848,359	105%
EXPENDITURES				
Debt service				
Principal	-	490,000	490,000	100%
Interest	-	348,158	348,158	100%
Total debt service	-	838,158	838,158	100%
Other fees and charges				
Tax collector	-	8,538	8,837	97%
Property appraiser	-	8,538	8,837	97%
Total other fees and charges	-	17,076	17,674	97%
Total expenditures	-	855,234	855,832	100%
Excess/(deficiency) of revenues over/(under) expenditures	2,524	33,801	(7,473)	
Fund balances - beginning	618,581	587,304	570,220	
Fund balances - ending	$ 621,105	$ 621,105	$ 562,747	

SUNSHINE
Water Control District
Special Assessment Revenue Refunding Bonds, Series 2021
$12,010,000

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I
11/01/2022		-	181,246.25	181,246.25
05/01/2023	470,000.00	3.050%	181,246.25	651,246.25
11/01/2023	-	-	174,078.75	174,078.75
05/01/2024	490,000.00	3.050%	174,078.75	664,078.75
11/01/2024	-	-	166,606.25	166,606.25
05/01/2025	500,000.00	3.050%	166,606.25	666,606.25
11/01/2025	-	-	158,981.25	158,981.25
05/01/2026	515,000.00	3.050%	158,981.25	673,981.25
11/01/2026	-	-	151,127.50	151,127.50
05/01/2027	530,000.00	3.050%	151,127.50	681,127.50
11/01/2027	-	-	143,045.00	143,045.00
05/01/2028	550,000.00	3.050%	143,045.00	693,045.00
11/01/2028	-	-	134,657.50	134,657.50
05/01/2029	565,000.00	3.050%	134,657.50	699,657.50
11/01/2029	-	-	126,041.25	126,041.25
05/01/2030	585,000.00	3.050%	126,041.25	711,041.25
11/01/2030	-	-	117,120.00	117,120.00
05/01/2031	600,000.00	3.050%	117,120.00	717,120.00
11/01/2031	-	-	107,970.00	107,970.00
05/01/2032	615,000.00	3.050%	107,970.00	722,970.00
11/01/2032	-	-	98,591.25	98,591.25
05/01/2033	635,000.00	3.050%	98,591.25	733,591.25
11/01/2033	-	-	88,907.50	88,907.50
05/01/2034	655,000.00	3.050%	88,907.50	743,907.50
11/01/2034	-	-	78,918.75	78,918.75
05/01/2035	675,000.00	3.050%	78,918.75	753,918.75
11/01/2035	-	-	68,625.00	68,625.00
05/01/2036	690,000.00	3.050%	68,625.00	758,625.00
11/01/2036	-	-	58,102.50	58,102.50
05/01/2037	720,000.00	3.050%	58,102.50	778,102.50
11/01/2037	-	-	47,122.50	47,122.50
05/01/2038	735,000.00	3.050%	47,122.50	782,122.50
11/01/2038	-	-	35,913.75	35,913.75
05/01/2039	760,000.00	3.050%	35,913.75	795,913.75
11/01/2039	-	-	24,323.75	24,323.75
05/01/2040	785,000.00	3.050%	24,323.75	809,323.75
11/01/2040	-	-	12,352.50	12,352.50
05/01/2041	810,000.00	3.050%	12,352.50	822,352.50
Total	**$11,885,000.00**	**-**	**$3,947,462.50**	**$15,832,462.50**

SUNSHINE
WATER CONTROL DISTRICT

MINUTES

MINUTES OF MEETING
SUNSHINE WATER CONTROL DISTRICT

The Board of Supervisors of the Sunshine Water Control District held Public Hearings and a Regular Meeting on September 12, 2024 at 6:30 p.m., at Sartory Hall, 10150 NW 29th Street, Coral Springs, Florida 33065.

Present were:

Joe Morera	President
Carol Smith	Secretary

Also present:

Jamie Sanchez	District Manager
Janice Rustin	District Counsel
Orlando Rubio	District Engineer
Cory Selchan	Field Superintendent
Peter Palmer	Member of the public
Lawrence N. Kaldor	Member of the public

FIRST ORDER OF BUSINESS **Call to Order**

Mr. Morera called the meeting to order at 6:43 p.m.

SECOND ORDER OF BUSINESS **Roll Call**

Supervisors Morera and Smith were present. Supervisor Ortiz was absent.

THIRD ORDER OF BUSINESS **Pledge of Allegiance**

All present recited the Pledge of Allegiance.

FOURTH ORDER OF BUSINESS **Public Comments [3-Minute Time Limit] (Comments should be made from the microphone to ensure recording. Please state your name prior to speaking.)**

No members of the public spoke.

FIFTH ORDER OF BUSINESS **Public Hearing on Adoption of Fiscal Year 2024/2025 Budget**

A. Proof/Affidavit of Publication

The affidavit of publication was included for informational purposes.

B. **Consideration of Resolution 2024-09, Relating to the Annual Appropriations and Adopting the Budget for the Fiscal Year Beginning October 1, 2024, and Ending September 30, 2025; Authorizing Budget Amendments; and Providing an Effective Date**

Ms. Sanchez presented Resolution 2024-09. She reviewed the proposed Fiscal Year 2025 budget, highlighting increases, decreases and adjustments, compared to the Fiscal Year 2024 budget, and explained the reasons for any changes. She called attention to the following:

- On Page 2, Under "Field equipment" the Proposed budget FY 2025 amount will be changed from $315,000 to $35,000.
- Page 10: Because of the increase in the number of "Assessable units" from the prior fiscal year, the assessed amount was spread out across more lots.

Discussion ensued regarding a total adjusted expenditures amount of $6,434,19 and the total adjusted "Field operations" amount of $5,955,220.

Ms. Sanchez will send an updated file to the Board and Staff with a blind copy.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the Public Hearing was opened.

No affected property owners or members of the public spoke.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the Public Hearing was closed.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, Resolution 2024-09, Relating to the Annual Appropriations and Adopting the Budget for the Fiscal Year Beginning October 1, 2024, and Ending September

30, 2025, as amended; Authorizing Budget Amendments; and Providing an Effective Date, was adopted.

SIXTH ORDER OF BUSINESS **Public Hearing to Hear Comments and Objections on the Imposition of Maintenance and Operation Special Assessments to Fund the Budget for Fiscal Year 2024/2025, Pursuant to Florida Law**

A. Proof/Affidavit of Publication

The affidavit of publication was included for informational purposes.

B. Consideration of Resolution 2024-10, Making a Determination of Benefit and Imposing Special Assessments for Fiscal Year 2024/2025; Providing for the Collection and Enforcement of Special Assessments; Certifying an Assessment Roll; Providing for Amendments to the Assessment Roll; Providing a Severability Clause; and Providing an Effective Date

Ms. Sanchez presented Resolution 2024-10 and read the title.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the Public Hearing was opened.

No affected property owners or members of the public spoke.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the Public Hearing was closed.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, Resolution 2024-10, Making a Determination of Benefit and Imposing Special Assessments for Fiscal Year 2024/2025; Providing for the Collection and Enforcement of Special Assessments; Certifying an Assessment Roll; Providing for Amendments to the Assessment Roll; Providing a Severability Clause; and Providing an Effective Date, was adopted.

SEVENTH ORDER OF BUSINESS **Consideration of Revised Goals and Objectives Reporting [HB7013 - Special Districts Performance Measures and Standards Reporting]**

Ms. Sanchez presented the revised Goals and Objectives and Performance Measures/Standards & Annual Reporting Form. She recalled that this item was deferred at the previous meeting and Staff was directed to increase the least number of meetings per fiscal year from two to six. The remainder of the information is unchanged.

Mr. Morera explained the reasoning behind the Board's decision to hold six meetings instead of two.

In response to Mr. Lawrence Kaldor's question, Ms. Sanchez explained that Florida Statutes require Special Districts to hold a proposed budget meeting and a budget adoption meeting, which is why the original reporting Form had a minimum of two meetings.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the Revised Goals and Objectives and the Performance Measures/Standards & Annual Reporting Form, were approved.

EIGHTH ORDER OF BUSINESS **Consideration of Resolution 2024-11, Directing the District Manager to Appoint Signors on the Local Bank Account; and Providing an Effective Date**

Ms. Sanchez presented Resolution 2024-11. This item was added because the Controller realized that the Resolution was not on file. The current signors on the account are as follows:

Joe Morera	District President
Craig Wrathell	Treasurer
Jeff Pinder	Secretary

Mr. Morera stated, even though, as Board President, he is a designated signor on the account, his duties have not included signing any financial documents whatsoever. Management's Staff is responsible for that role.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, Resolution 2024-11, Directing the District Manager to Appoint Signors on the Local Bank Account; and Providing an Effective Date, was adopted.

NINTH ORDER OF BUSINESS **Acceptance of Unaudited Financial Statements as of July 31, 2024**

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the Unaudited Financial Statements as of July 31, 2024, were accepted.

TENTH ORDER OF BUSINESS **Approval of August 14, 2024 Regular Meeting Minutes**

The following changes were made:

Line 119: Delete "Staff did not report on them because they are not specific to Special Districts."

Line 164: Remove "displaced birds"

Line 166: Change "and upgraded motor" to "an upgraded motor"

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the August 14, 2024 Regular Meeting Minutes, as amended, were approved.

ELEVENTH ORDER OF BUSINESS **Supervisors' Communications**

Ms. Smith stated that the canals seem to be operating properly despite the recent increased rainfall.

Mr. Morera concurred that the past month has been rainy. He stated that Oktoberfest is an upcoming event at City Hall.

Mr. Morera announced that this is his next to last meeting with the District.

TWELFTH ORDER OF BUSINESS **Staff Reports**

A. District Counsel: Lewis, Longman & Walker, P.A.

Ms. Rustin reported that a resident recently complained about an alligator in one of the canals. Staff referred this to the Nuisance Alligator Removal Program; authorization is needed

to access the District right-of-way (ROW). Ms. Rustin drafted and presented an Alligator Removal Permit Form, which will be for 90 days or until the alligator is caught. She recommended approval.

Discussion ensued regarding the increase in the alligator population, the permit removal form, the definition of a nuisance and the investigation by a Florida Fish and Wildlife (FFW) representative.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the Alligator Removal Permit Form and authorizing the District Manager to execute the Alligator Removal Permit Form, were approved.

B. District Engineer: Craig A. Smith & Associates

I. Presentation: Monthly Engineer's Report

Mr. Rubio presented the Monthly Engineer's Report and provided updates about the Pump Station 3 replacement and the West Outfall Canal (WOFC) Phase 3 Project.

II. Permit Application(s)

- **Comcast Directional Bore Installation 70-LF of 1-2" HDPE conduit at 6 SWCD Canal locations (420 LF total), SWCD Canals MMA, KK (2), LL, 19-1, 19-2, Located within Westchester**

Mr. Rubio presented the permit application and recommended approval.

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the CAS Project No. 15-1826, Right-of-Way Permit Application, submitted by Comcast for the installation of 70-LF of 1-2" HDPE conduit at 6 SWCD Canal locations (420 LF total), SWCD Canals MMA, KK (2), LL, 19-1, 19-2, Located within Westchester, subject to the Special Conditions set forth in the September 4, 2024 recommendation letter, was approved.

C. District Engineering Consultant: John McKune

There was no report.

D. District Field Supervisor: Cory Selchan

Mr. Selchan reported the following:

- It is the peak of Hurricane Season.
- Over 11" of rain fell in the past month. Water levels were up and the pump stations were activated.
- The ground is saturated with water and weed growth is elevated.
- Everything is operating smoothly and the water levels are back to normal. The canals look good for this time of year.

Mr. Selchan stated that the District is in good shape.

E. District Manager: Wrathell, Hunt & Associates, LLC

I. Consideration of Obstruction Removal Agreement [12188 NW 32 Ct.]

Ms. Sanchez stated that the resident asked Staff to take the obstruction removal request off the agenda. The resident withdrew the request for now.

II. NEXT MEETING: October 9, 2024 at 6:30 PM

- **QUORUM CHECK**

Ms. Sanchez reviewed the updated Fiscal Year 2024/2025 Meeting Schedule, with the re-scheduled December meeting.

The next meeting will be held on October 9, 2024.

THIRTEENTH ORDER OF BUSINESS Public Comments

Mr. Kaldor asked about teleconference options if he cannot attend a meeting. Ms. Sanchez stated the Board will soon have five members and, in order to establish a quorum, there must be at least three Board Members present in person. Supervisors can call in.

Asked when the December meeting will be held, Mr. Morera stated December 4, 2024.

Discussion ensued regarding cancellations when there is not a quorum.

FOURTEENTH ORDER OF BUSINESS Adjournment

On MOTION by Ms. Smith and seconded by Mr. Morera, with all in favor, the meeting adjourned at 7:35 p.m.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE

_____	_____
Secretary/Assistant Secretary	President/Vice President

SUNSHINE
WATER CONTROL DISTRICT

STAFF REPORTS BI

CRAIG A. SMITH & ASSOCIATES
A SMART-INFRASTRUCTURE COMPANY

October 2, 2024

Board of Supervisors
Sunshine Water Control District (**via e-mail)**
2300 Glades Road, Suite 410W
Boca Raton, Florida 33073

RE: SUNSHINE WATER CONTROL DISTRICT – JUNE MONTHLY ENGINEER'S REPORT (MER)
September 12, 2024 – October 2, 2024
CAS PROJECT NO. 15-1826

Dear Board of Supervisors:

Craig A. Smith & Associates, Inc. (CAS) is pleased to provide you with the MER summarizing activity performed by our team on behalf of SWCD during the referenced period including future work. Anything of significance or modifications occurring after this writing will be brought up at the October 9, 2024 BOS meeting.

Pump Station 3 Replacement

Responses to permit review from are still being worked on. CAS will be seeking price proposals from CAS recommended contractors for the proposed work in the interim. One contractor has already shown interest.

WOFC Phase 3

Responses to permit review from are still being worked on. Contract documents with project bid schedule have been prepared.

Right-of-way Permitting

- Recommended is the approval of Blue Stream Communications, LLC permit application for the installation of 50 LF of 2" PVC pipe to be attached to the Riverside Drive Bridge over SWCD Canal "E" per the attached plans.

- Recommended is the approval of ROW permit application submitted by the Broward County – Highway Construction &Engineering Division for the Replacement of two (2) fiber optic pull boxes & conduit installation within the existing Coral Springs Drive Bridge over the SWCD West Outfall Canal ROW and the directional bore of 3-2" HDPE conduits under SWCVD Canal Z culverts.

As always, we continue to look forward to working with the SWCD staff on current and future important projects. Should there be any questions, I can be reached at the letterhead numbers shown or by electronic mail at orubio@craigasmith.com.

Sincerely,
CRAIG A. SMITH & ASSOCIATES

Orlando A. Rubio, PE
VP - Stormwater Engineering

Enclosure: Blue Stream Communications, LLC ROW Permit Recommendation

cc via e-mail: **SWCD -** Cory Selchan, District Superintendent
WHA - Jamie Sanchez, Daphne Gillyard, Gianna Denofrio, Caryn Kupiec ;
CAS - Stephen C. Smith, PE, File

\\cas-file\projects\districts\sunshine_water_control\monthly engineers reports\2024mer\2024-10\swcd-monthlyrpt-2024-10-02.docx

SUNSHINE
WATER CONTROL DISTRICT

STAFF REPORTS BII

CRAIG A. SMITH & ASSOCIATES
A SMART- INFRASTRUCTURE COMPANY

October 1, 2024

Board of Supervisors
Sunshine Water Control District
2300 Glades Road, Suite 410W
Boca Raton, Florida 33073

RE: SWCD RIGHT-OF-WAY (ROW) PERMIT APPLICATION
Installation of FOC via attachment to Riverside Drive Bridge consisting of 50 LF of 2" PVC pipe over SWCD Canal "E"
Permittee: Blue Stream Communications, LLC – S14/15/T48S/R41E
CAS PROJECT NO. 15-1826

Dear Board of Supervisors:

We have reviewed a ROW permit application submitted by Blue Stream Communications, LLC for the installation of 50 LF of 2" PVC pipe attached to the Riverside Drive Bridge over SWCD Canal "E". The applicant has met SWCD applicable subaqueous criteria and we recommend that the SWCD Board of Supervisors issue a Right-of-Way Permit to the applicant, subject to the following Special Conditions to be made part of the Permit:

1. All work must be in compliance with the latest SWCD Permit Criteria Manual.
2. Permittee will ensure that all necessary Sediment & Erosion Control devices will be utilized at the SWCD right-of-way during construction.
3. Trash bond ($2,500) shall be submitted prior to permit issuance and the Contractor shall repair and replace any SWCD facilities damaged during construction at no cost to the District.
4. A copy of Record As-builts and Engineer Certification shall be provided to SWCD upon completion of all work.
5. All applicable permits and approvals for Work shall be obtained.
6. All disturbed areas are to be restored.
7. SWCD shall be notified at least 48 hours prior to construction.

Sincerely,
CRAIG A. SMITH & ASSOCIATES

Orlando A. Rubio, PE
VP - Stormwater Engineering

Enclosures: Plans

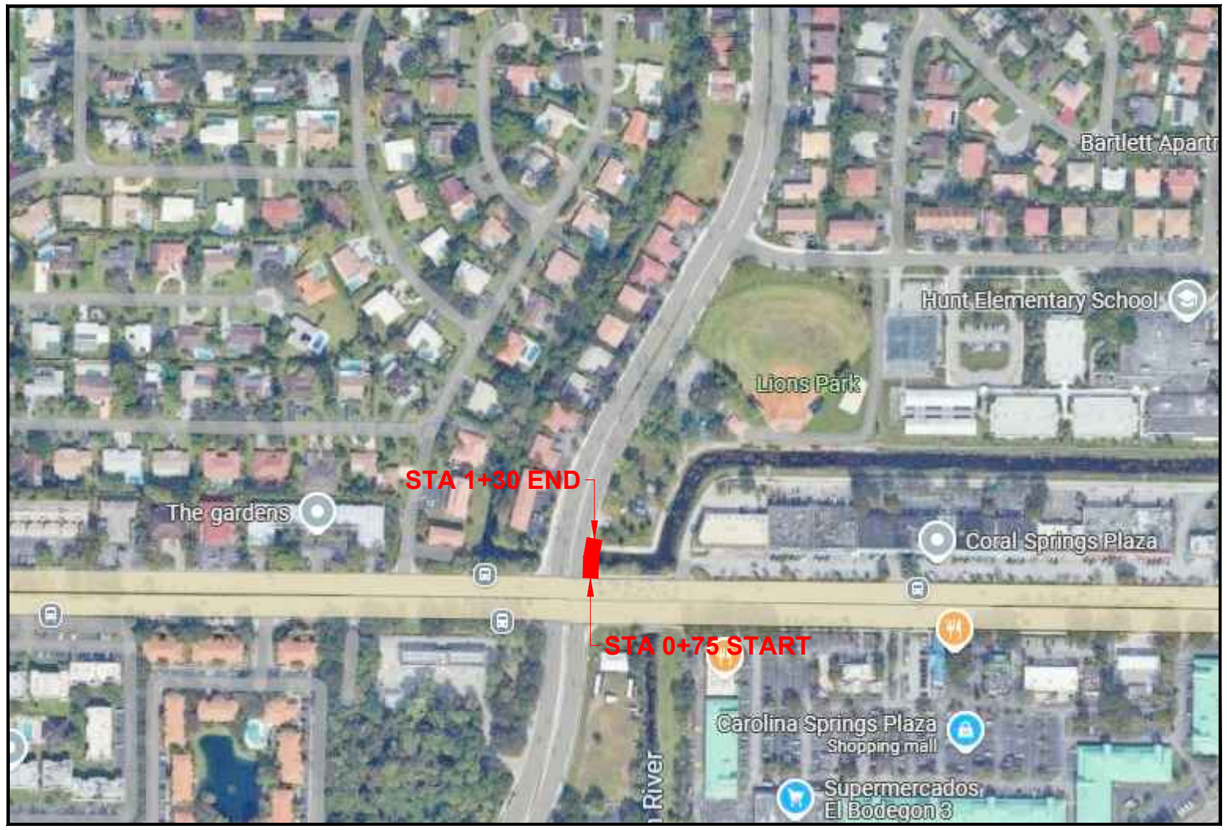
cc via e-mail: SWCD – Cory Selchan, WHA - Jamie Sanchez, Gianna Denofrio, CAS – Stephen C. Smith, PE

\\cas-file\Projects\Districts\Sunshine_Water_Control\19-2064-1CP-SWCD Non recovery\01-RIGHT-OF-WAY\2024\15-1826-BlueS-3602_RSDrive\04-Correspondence\02-Letters\15-1826-BlueSream3602RSDrive.docx

PROJECT: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP
ADDRESS: 3602 RIVERSIDE DR, CORAL SPRINGS, FL 33065 -
SUNSHINE WATER CONTROL DISTRICT PERMIT

LINETYPES

- UG FIBER - EXISTING
- UG FIBER - PROPOSED
- AERIAL FIBER - EXISTING
- AERIAL FIBER - PROPOSED
- STRAND - EXISTING
- STRAND - PROPOSED
- CONDUIT - EXISTING
- CONDUIT - PROPOSED
- INNERDUCT - EXISTING
- INNERDUCT - PROPOSED
- ASBUILT CONDUIT
- G — GAS
- TRF — TRAFFIC
- W — WATER
- T — TELEPHONE
- E — ELECTRIC
- E — STREET LIGHT
- FOC — FOC
- FM — FORCE MAIN
- SEW — SANITARY SEWER (SEW)
- SD — STORM DRAIN
- RW — RECLAIMED WATER
- X — X — FENCE
- TV — CABLE TV
- STM — STEAM
- OIL — OIL
- UNK — UNKNOWN UTILITY
- R/W — RIGHT OF WAY
- EDGE OF PAVEMENT
- EASEMENT



SITE LOCATION
SCALE: NTS

SPACE RESERVED FOR PROFESSIONAL SEALS

SUMMARY DATA	
JOB DESCRIPTION	FTG
BRIDGE ATTACHMENT	50'
TRENCH	5
HANDHOLE	1

PERMITTING

JURISDICTION:

* S.W.C.D

DATE SUBMITTED

09/09/24

TWP : 48S	RNG : 41E	SEC : 14/15
PLAT BOOK : 63	PAGE : 01	

Know what's below. Call before you dig.

BlueStream fiber

CONTACTS

BLUE STREAM
DREW ANDREWS
DESIGN ENGINEER
PHONE: (772) 486-2106
AANDRES@BLUESTREAMFIBER.COM

CYPRESS COMMUNICATIONS
MIKE WOOD
CONTRACTOR
PHONE: 772-267-3990
MWOOD@CYPRESSCOMMUNICATIONS.NET

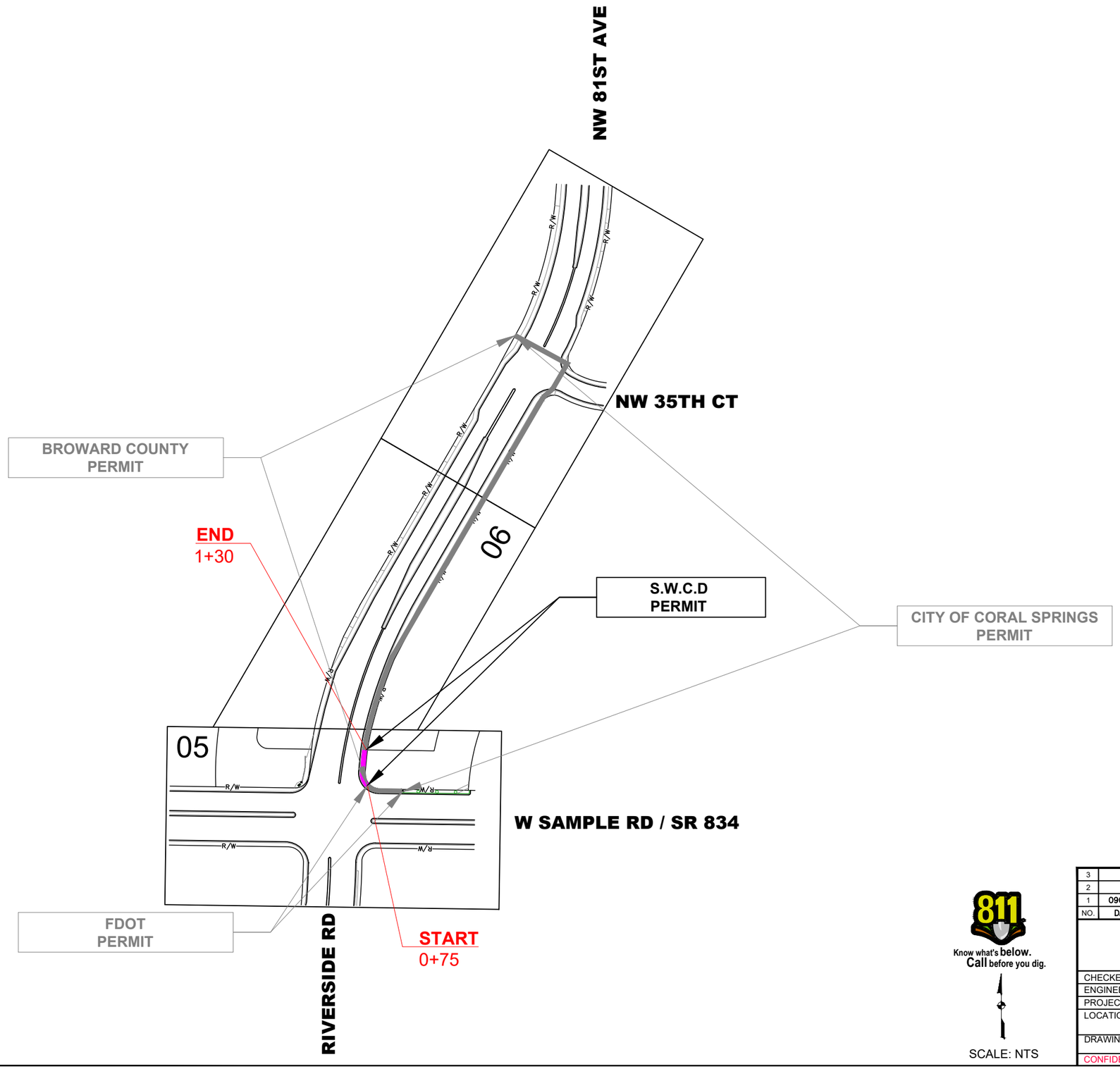
KMV FIBERTELECOM INC
SANDRA KARINA VARGAS
10604 NW 48TH ST
CORAL SPRINGS FL 33076
PHONE: 954-937-5239
KARINAV@KMVFIBERTELECOM.COM

SITE INDEX

NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS–BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg



811 Know what's below. Call before you dig.

SCALE: NTS

NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS–BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

BlueStream fiber

CHECKED BY: GIULIANO LEON

ENGINEERING FIRM: KMV FIBERTELECOM INC

PROJECT NUMBER: KMV-BS-24-191

LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065

DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

CONSTRUCTION NOTES

TYPICAL UNDERGROUND CONSTRUCTION:

- RESTORE ALL SURFACES TO EQUAL OR BETTER CONDITION.
- CONTRACTOR TO VERIFY ALL MEASUREMENTS AND DISTANCES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY LOCATION AND CONDITION OF EXISTING CONDUIT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
- MAINTAIN MINIMUM 24" VERTICAL AND HORIZONTAL SEPARATION BETWEEN PROPOSED BY BLUE STREAM DUCTS & EXISTING UTILITIES.
- MAINTAIN A MIN BENDING RADIUS OF 5' ON ALL DUCT CONFIGURATION.
- ANY CHANGES ON PROPOSED RUNNING LINE HAVE TO GET APPROVAL FROM BLUE STREAM CONSTRUCTION MANAGER.

FOR CONSTRUCTION:

- EXTREME CAUTION TO BE TAKEN TO CONTAIN SLURRY AROUND WORK AREAS NEAR WETLANDS TO AVOID ANY WATER QUALITY ISSUES!
- LOCATIONS, ELEVATIONS LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER SITE FEATURES SHOWN ON THE DRAWINGS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. PLEASE CONTACT SUNSHINE STATE ONE-CALL AT 1-800-432-4770
- **CAUTION**: EXISTING UNDERGROUND UTILITIES IN AREA. NO ELEVATION RECORDS FOR EXISTING UTILITIES AVAILABLE. CONTRACTOR SHOULD CONTACT SUNSHINE 811, LOCATE ALL UTILITIES AND VERIFY ALL DEPTHS PRIOR TO CONSTRUCTION

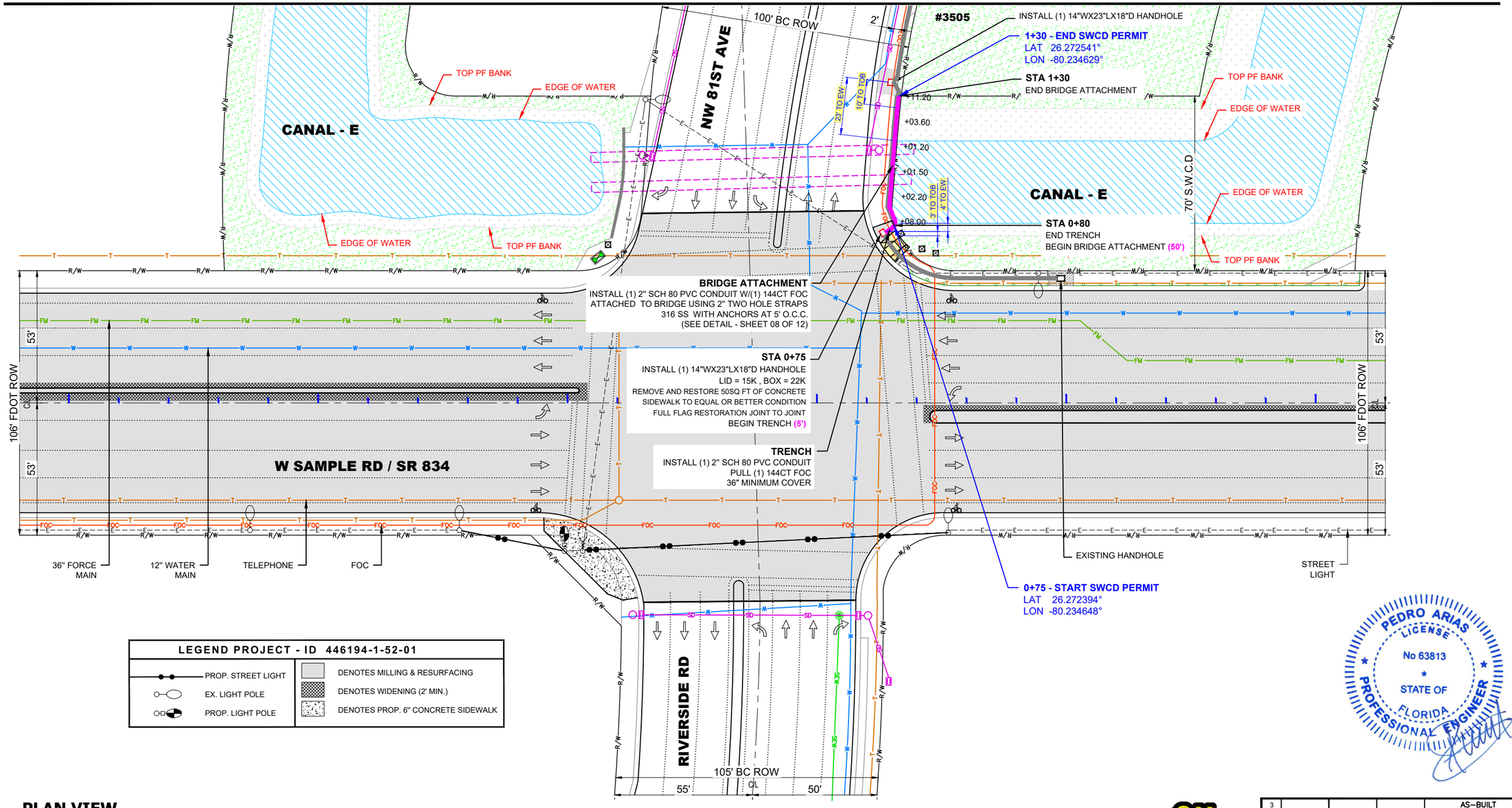
DESIGN TICKET
#249405522

NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS-BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

MATCH TO SHEET 05 - STA 1+70



LEGEND PROJECT - ID 446194-1-52-01	
PROP. STREET LIGHT	DENOTES MILLING & RESURFACING
EX. LIGHT POLE	DENOTES WIDENING (2' MIN.)
PROP. LIGHT POLE	DENOTES PROP. 6" CONCRETE SIDEWALK

PEDRO ARIAS LICENSE No 63813 STATE OF FLORIDA PROFESSIONAL ENGINEER

PLAN VIEW

SCALE: 1"=40'

1. ATTACHMENT ONTO BRIDGE STRUCTURE SHALL HAVE ALL THE METALLIC PORTIONS OF THE ATTACHMENT HARDWARE (HANGERS, BOLTS, STRAPS, CONDUIT, ANCHORS, ETC) FABRICATED FROM 316 STAINLESS STEEL OR THE EQUAL MATERIAL.
2. MOUNTING HARDWARE SHOULD BE STAINLESS STEEL IN ACCORDANCE WITH UAM.

811 Know what's below. Call before you dig.

0 10' 20' 30' 40'

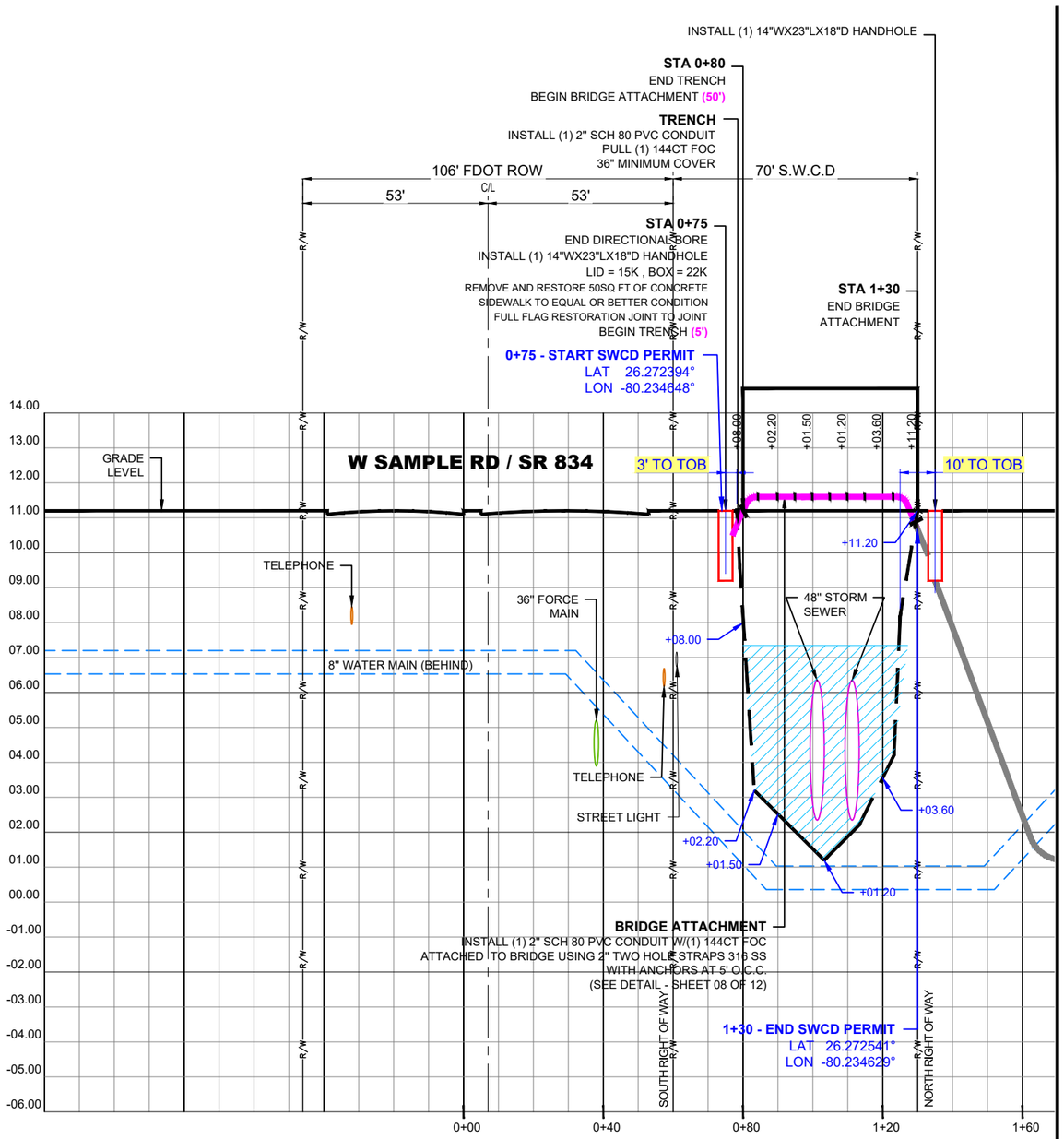
SCALE: 1"=40'

NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS-BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

CONFIDENTIAL/PROPRIETARY SHEET: 04 OF 12



PROFILE - NW 81ST AVE (LOOKING WEST)

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'

RECORD ON UTILITY PLANS
CONSTRUCTION CONTRACTOR
SHALL CALL LOCATES AND SOFT DIG TO DETERMINE
UTILITY ELEVATION BEFORE CONSTRUCTION.

PEDRO ARIAS
LICENSE
No 63813
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

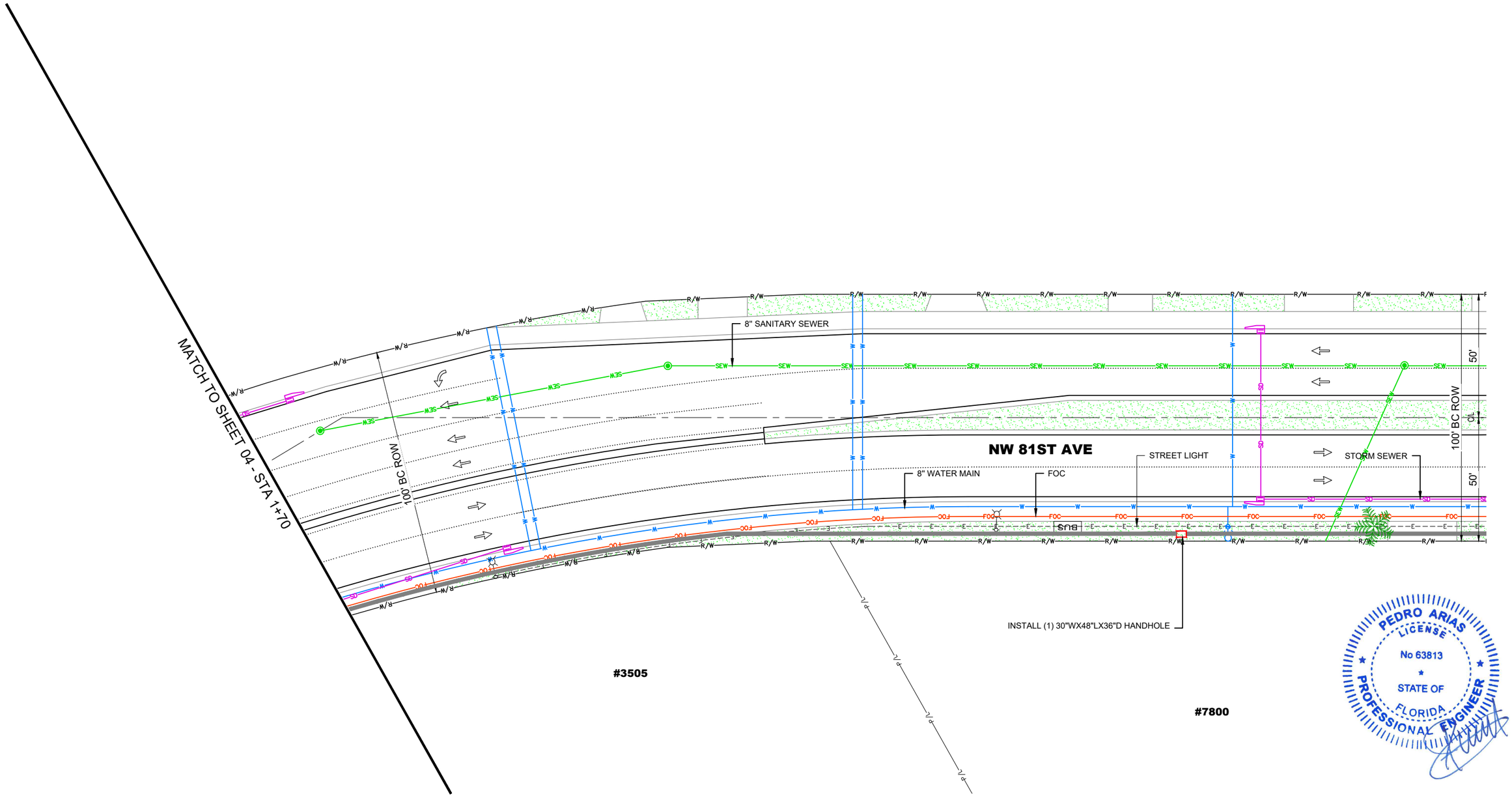
811
Know what's below.
Call before you dig.

NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS–BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

CONFIDENTIAL/PROPRIETARY



PLAN VIEW

SCALE: 1"=40'

Know what's below. Call before you dig.

0 10' 20' 30' 40'

SCALE: 1"=40'

PEDRO ARIAS LICENSE No 63813 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS–BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

BlueStream fiber

CHECKED BY: GIULIANO LEON

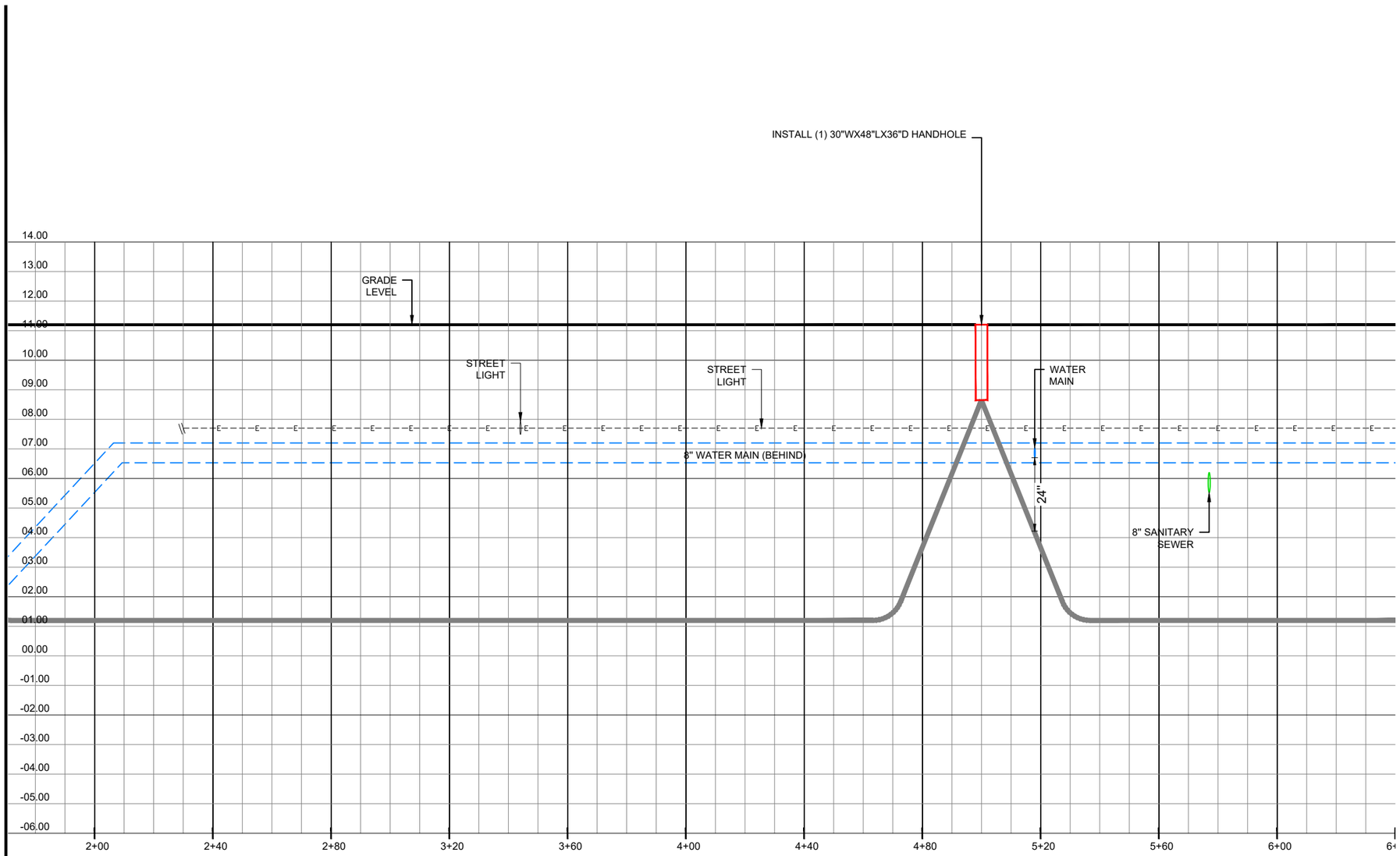
ENGINEERING FIRM: KMV FIBERTELECOM INC

PROJECT NUMBER: KMV-BS-24-191

LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065

DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

CONFIDENTIAL/PROPRIETARY



PROFILE - NW 81ST AVE (LOOKING WEST)

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'

RECORD ON UTILITY PLANS
CONSTRUCTION CONTRACTOR
SHALL CALL LOCATES AND SOFT DIG TO DETERMINE
UTILITY ELEVATION BEFORE CONSTRUCTION.

811 Know what's below. Call before you dig.

PEDRO ARIAS LICENSE No 63813 STATE OF FLORIDA PROFESSIONAL ENGINEER

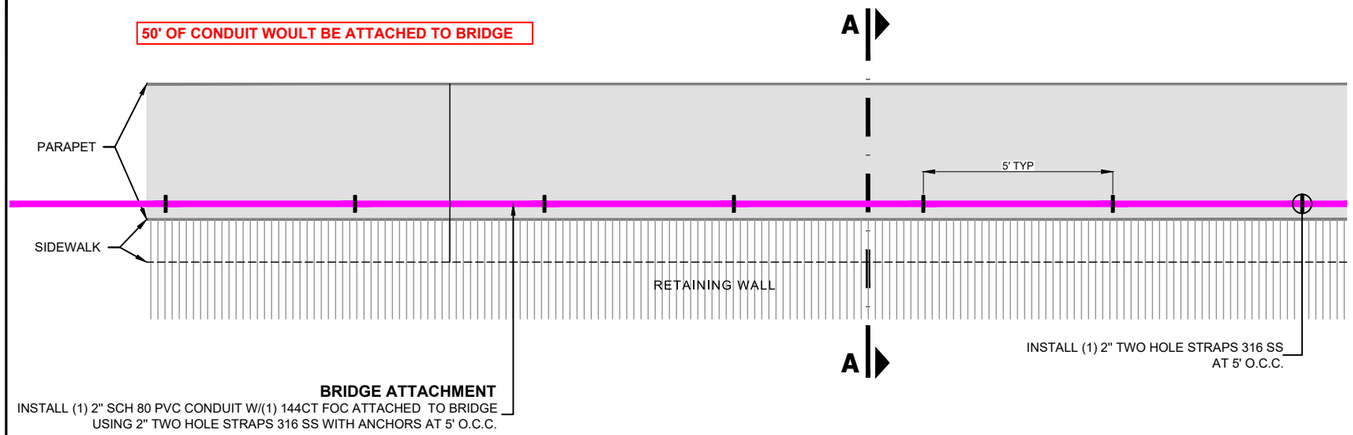
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS–BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

CONFIDENTIAL/PROPRIETARY SHEET: 05A OF 12

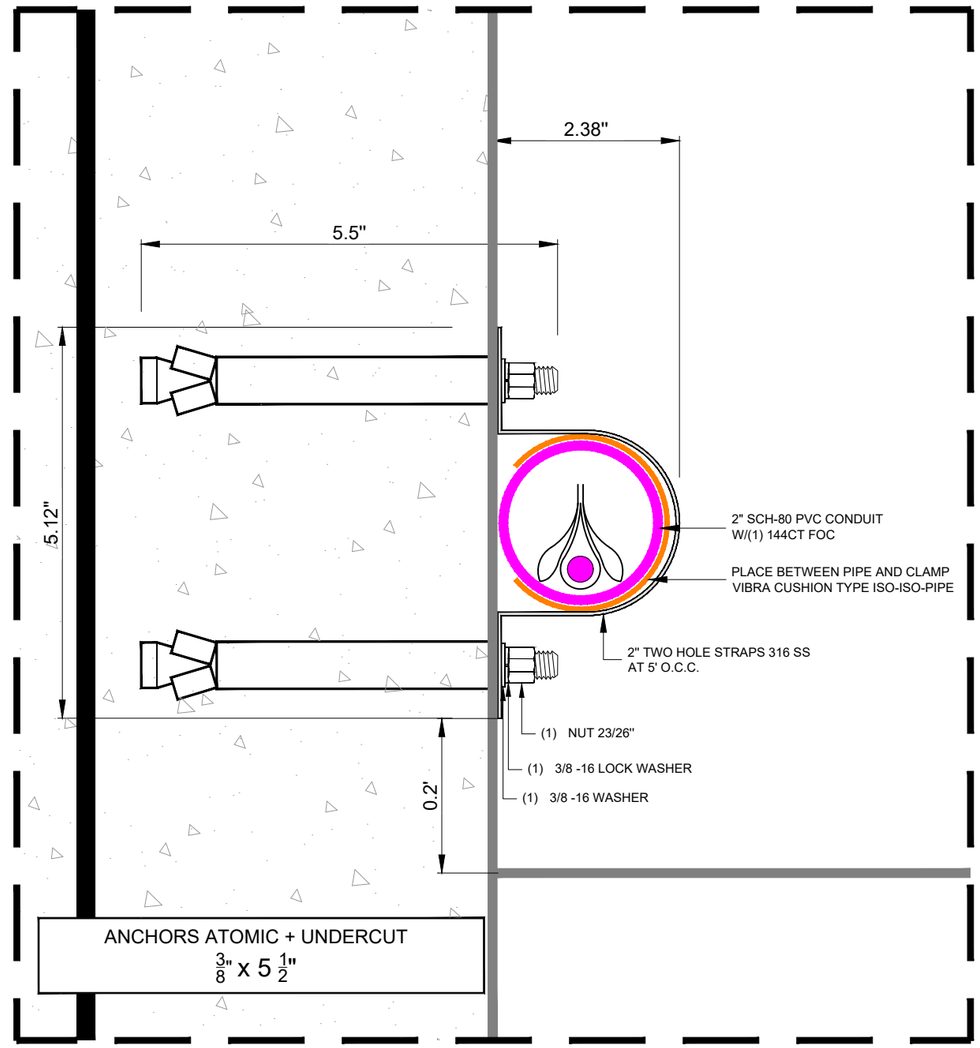
50' OF CONDUIT WOULT BE ATTACHED TO BRIDGE



BRIDGE ELEVATION - LOOKING WEST

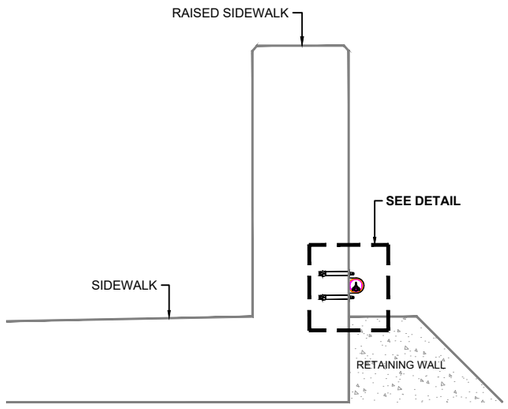
SCALE 1"=4'

1. ATTACHMENT ONTO BRIDGE STRUCTURE SHALL HAVE ALL THE METALLIC PORTIONS OF THE ATTACHMENT HARDWARE (HANGERS, BOLTS, STRAPS, CONDUIT, ANCHORS, ETC) FABRICATED FROM 316 STAINLESS STEEL OR THE EQUAL MATERIAL.
2. MOUNTING HARDWARE SHOULD BE STAINLESS STEEL IN ACCORDANCE WITH UAM.



DETAIL

SCALE 6"=1'



CROSS SECTION A-A

SCALE 1"=2'

BRIDGE ATTACHMENT
INSTALL (1) 2" SCH 80 PVC CONDUIT W/(1) 144CT FOC ATTACHED TO BRIDGE
USING 2" TWO HOLE STRAPS 316 SS WITH ANCHORS AT 5' O.C.C.
(SEE DETAIL - SHEET 08 OF 12)

PICTURE

General Notes:
1. All work done in Broward County Right of Way shall be in accordance with Broward County minimum standards.
2. Any damage to Broward County or adjacent property resulting from the permitted work shall be repaired/replaced within seven calendar days of the occurrence to the satisfaction of the County.
3. Maintain minimum 2" of horizontal and 12" vertical separation from existing utilities.
4. The Contractor shall coordinate with Broward County HBMD to have a representative present during the attachment of the utility to the bridge.

NO.	DATE	ENG DESIGN	DRAFTING	COMMENT
3				AS-BUILT
2				REVISION # 1
1	090924	KMV	AC	ORIGINAL

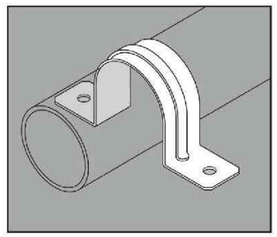
BlueStream fiber

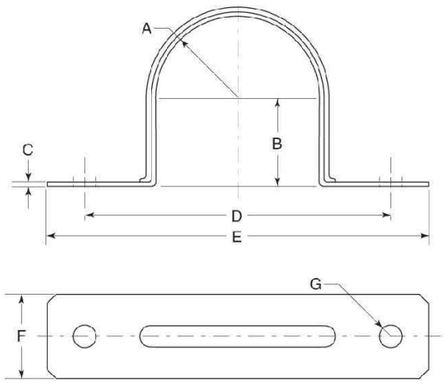
CHECKED BY:	GIULIANO LEON
ENGINEERING FIRM:	KMV FIBERTELECOM INC
PROJECT NUMBER:	KMV-BS-24-191
LOCATION:	3602 RIVERSIDE DR CORAL SPRINGS, FL 33065
DRAWING NAME:	KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

STAINLESS STEEL
TWO HOLE STRAPS

APPLICATION

- *Used to mount conduit systems flat against walls and other surfaces to provide extra support*
- *Manufactured in stainless steel to help prevent corrosion*
- *Can be installed using ordinary hand tools and require little maintenance or repair*
- *Provided in a bright, polished finish that does not require touch up or painting*





PRODUCT DETAILS

Material:
316 SS

Standards:
ASTM A240

Country of Origin:
100% Made in USA

UL File Number:
DWMU.E506522
(Standard 2239)

Canada UL File Number:
DWMU7.E506522
(Standard 2239)

Part Number	Conduit Size	Weight/ 100 (lbs.)	Dimension (in.) A	B	C	D	E	F	G
3038-2	⅜ in.	2	0.35	0.32	.024 - .030	1.56	2.00	0.50	0.19
3050-2	½ in.	2	0.42	0.39	.024 - .030	1.78	2.25	0.56	0.19
3075-2	¾ in.	3	0.52	0.50	.024 - .030	2.18	2.62	0.62	0.19
3100-2	1 in.	4	0.65	0.62	.033 - .038	2.53	3.20	0.75	0.25
3125-2	1-¼ in.	6	0.83	0.80	.033 - .038	3.16	4.00	0.87	0.25
3150-2	1-½ in.	9	0.95	0.92	.043 - .050	3.37	4.20	0.93	0.25
3200-2	2 in.	11	1.18	1.15	.043 - .050	4.25	5.12	1.00	0.38
3250-2	2-½ in.	16	1.43	1.40	.053 - .060	4.95	5.87	1.00	0.38
3300-2	3 in.	20	1.75	1.70	.053 - .060	5.50	6.50	1.00	0.38
3350-2	3-½ in.	26	2.00	1.95	.068 - .075	6.18	7.12	1.00	0.44
3400-2	4 in.	29	2.25	2.20	.068 - .075	6.81	7.75	1.00	0.44

1. ATTACHMENT ONTO BRIDGE STRUCTURE SHALL HAVE ALL THE METALLIC PORTIONS OF THE ATTACHMENT HARDWARE (HANGERS, BOLTS, STRAPS, CONDUIT, ANCHORS, ETC) FABRICATED FROM 316 STAINLESS STEEL OR THE EQUAL MATERIAL.
2. MOUNTING HARDWARE SHOULD BE STAINLESS STEEL IN ACCORDANCE WITH UAM.

FFW - Flat Fender Washer

Size Range: 3/8"-16 and 1/2"-13 rods
Material: Steel
Function: To provide a greater bearing surface than standard washer.
Finish: Plain or Electro-Galvanized. Contact customer service for alternative finishes and materials.
Order By: Figure number and size

Part Number	For Rod Size	Inside Diameter in. (mm)	Outside Diameter in. (mm)	Approx. Wt./100 lbs. (kg)
FFW-3/8	⅜"-16	½" (12.7)	1⅛" (28.6)	3.0 (1.3)
FFW-1/2	½"-13	9/16" (14.3)	2" (50.8)	2.8 (1.3)

NO.	D-TE	ENG DESIGN	DR-FTING	COMMENT
3				-S-BUILT
2				REVISION # 1
1	090924	KMV	-C	ORIGIN-L

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

GENERAL INFORMATION

ATOMIC+ UNDERCUT®

Heavy Duty Undercut Anchor

PRODUCT DESCRIPTION

The Atomic+ Undercut anchor is designed for applications in cracked and uncracked concrete. The anchors are is available in standard ASTM A 36 steel, high strength ASTM A 193 Grade B7 steel and Type 316 stainless steel in Class 1 and Class 2 strength designations.

The Type 316 stainless steel version can be considered for exterior use and industrial applications where a high level of corrosion resistance is required.

The Atomic+ Undercut anchor is installed into a pre-drilled hole which has been enlarged at the bottom in the shape of a reversed cone using the undercut drill bit supplied by DEWALT. The result is an anchor which transfers load mainly through bearing, and unlike a typical expansion anchor is not dependent upon friction between the expansion sleeve and the concrete. Due to the use of a thick walled expansion sleeve, the load is distributed to a large area which can provide ductile behavior of the anchor even at relatively shallow embedments.

GENERAL APPLICATIONS AND USES

- Structural connections, beam and column anchorage
- Safety related attachments
- Tension zone applications
- Heavy duty loading
- Pipe supports, strut & base mounts
- Suspended equipment
- Seismic and wind loading

FEATURE AND BENEFITS

+ Consistent performance in high and low strength concrete
+ Anchors available for standard pre-set installations and for through bolt applications
+ Length ID code and identifying marking stamped on head of each anchor
+ Load transfers to concrete through bearing, not friction, behaves like a cast-in-place bolt
+ Bearing load transfer allows for closer spacing and edge distances
+ Can be designed for predictable ductile steel performance
+ Undercut created in seconds with durable undercutting tool

APPROVALS AND LISTINGS

- International Code Council, Evaluation Service (ICC-ES), ESR-3067 Code compliant with the 2015 IBC, 2015 IRC, 2012 IBC, 2012 IRC, 2009 IBC, 2009 IRC, 2006 IBC, and 2006 IRC
- Tested in accordance with ACI 355.2/ASTM E488 and ICC-ES AC193 for use in structural concrete under the design provisions of ACI 318-14 Chapter 17 or ACI 318-11/08 Appendix D
- Evaluated and qualified by an accredited independent testing laboratory for recognition in cracked and uncracked concrete including seismic and wind loading (Category 1 anchors)

GUIDE SPECIFICATIONS

CSI Divisions: 03 16 00 – Concrete Anchors and 05 05 19 - Post-Installed Concrete Anchors. Undercut anchors shall be Atomic+ Undercut as supplied by DEWALT, Towson, MD. Anchors shall be installed in accordance with published instructions and the Authority Having Jurisdiction.

SECTION CONTENTS

ATOMIC+ UNDERCUT ASSEMBLY

THREAD VERSION

- UNC threaded stud

ANCHOR MATERIALS

- Zinc Plated Carbon Steel
- Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

- 3/8" through 3/4" diameter

SUITABLE BASE MATERIALS

- Normal-weight concrete
- Sand-lightweight concrete

CODE LISTED
ICC-ES ESR-3067
CONCRETE

DDA
DEWALT DESIGN ASSIST

MECHANICAL ANCHORS

ATOMIC+ UNDERCUT®
Heavy Duty Undercut Anchor

MECHANICAL ANCHORS

ATOMIC+ UNDERCUT®
Heavy Duty Undercut Anchor

MATERIAL SPECIFICATIONS

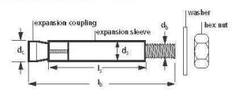
Anchor Component	Anchor Designation			
	Carbon Steel	High Strength Carbon Steel	Stainless Steel (Type 316)	High Strength Stainless Steel (Type 316)
Threaded Rod	ASTM A 36	ASTM A 193, Grade B7	ASTM A193, Grade B8M, Class 1	ASTM A193, Grade B8M, Class 2
Expansion Coupling (Cone)	ASTM A 108 12L14		ASTM A 274 S	
Expansion/Spacer Sleeve	ASTM A 513 Type 5		ASTM A 274 S	
Hex Nut	ASTM A 563, Grade C		ASTM A 194, Grade 8M	
Washer	ASTM F 844; Meets dimensional requirements of ANSI B18.22.1, Type A plain		Type 316 SS; Meets dimensional requirements of ANSI B18.22.1, Type A plain	
Plating	Zinc plating in accordance with ASTM B 633, SC1 (Fe/Zn 5) or equivalent; Minimum plating requirement for Mild Service Condition		Not applicable	

ANCHOR SPECIFICATIONS

Dimensional Characteristics Table for Atomic+ Undercut

Anchor Designation	Anchor Type	Anchor Rod ASTM Designation	Rod Diameter, d_b (inch)	Anchor Length, l_b (inches)	Sleeve Length, l_s (inches)	Sleeve Diameter, d_s (inch)	Expansion Coupling Diameter d_c (inch)	Max. Fixture Thickness, t (inches)
03100SD	Standard	A 36	3/8	5-1/2	2-3/4	5/8	5/8	1-3/4
03102SD	Through bolt (TB)	A 36	3/8	5-1/2	4-1/2	5/8	5/8	1-3/4
03600SD	Standard	A 193, Grade B8M, Class 1	3/8	5-1/2	2-3/4	5/8	5/8	1-3/4
03602SD	Through bolt (TB)	A 193, Grade B8M, Class 1	3/8	5-1/2	4-1/2	5/8	5/8	1-3/4
03603SD	Standard	A193, Grade B8M, Class 2	3/8	6-3/4	4	5/8	5/8	1-3/4
03605SD	Through Bolt (TB)	A193, Grade B8M, Class 2	3/8	6-3/4	5-3/4	5/8	5/8	1-3/4
03104SD	Standard	A 193, Grade B7	3/8	6-3/4	4	5/8	5/8	1-3/4
03106SD	Through bolt (TB)	A 193, Grade B7	3/8	6-3/4	5-3/4	5/8	5/8	1-3/4
03108SD	Standard	A 36	1/2	7	4	3/4	3/4	1-3/4
03110SD	Through bolt (TB)	A 36	1/2	7	5-3/4	3/4	3/4	1-3/4
03606SD	Standard	A 193, Grade B8M, Class 1	1/2	7	4	3/4	3/4	1-3/4
03610SD	Through bolt (TB)	A 193, Grade B8M, Class 1	1/2	7	5-3/4	3/4	3/4	1-3/4
03609SD	Standard	A193, Grade B8M, Class 2	1/2	8	5	3/4	3/4	1-3/4
03613SD	Through Bolt (TB)	A193, Grade B8M, Class 2	1/2	8	6-3/4	3/4	3/4	1-3/4
03112SD	Standard	A 193, Grade B7	1/2	8	5	3/4	3/4	1-3/4
03114SD	Through bolt (TB)	A 193, Grade B7	1/2	8	6-3/4	3/4	3/4	1-3/4
03116SD	Standard	A 193, Grade B7	1/2	9-3/4	6-3/4	3/4	3/4	1-3/4
03118SD	Through bolt (TB)	A 193, Grade B7	1/2	9-3/4	8-1/2	3/4	3/4	1-3/4
03120SD	Standard	A 36	5/8	7-3/4	4-1/2	1	1	1-3/4
03122SD	Through bolt (TB)	A 36	5/8	7-3/4	6-1/4	1	1	1-3/4
03620SD	Standard	A 193, Grade B8M, Class 1	5/8	7-3/4	4-1/2	1	1	1-3/4
03622SD	Through bolt (TB)	A 193, Grade B8M, Class 1	5/8	7-3/4	6-1/4	1	1	1-3/4
03635SD	Standard	A193, Grade B8M, Class 2	5/8	10-3/4	7-1/2	1	1	1-3/4
03639SD	Through Bolt (TB)	A193, Grade B8M, Class 2	5/8	10-3/4	9-1/4	1	1	1-3/4
03124SD	Standard	A 193, Grade B7	5/8	10-3/4	7-1/2	1	1	1-3/4
03126SD	Through bolt (TB)	A 193, Grade B7	5/8	10-3/4	9-1/4	1	1	1-3/4
03128SD	Standard	A 193, Grade B7	5/8	12-1/4	9	1	1	1-3/4
03130SD	Through bolt (TB)	A 193, Grade B7	5/8	12-1/4	10-3/4	1	1	1-3/4
03132SD	Standard	A 36	3/4	8-5/8	5	1-1/8	1-1/8	1-3/4
03134SD	Through bolt (TB)	A 36	3/4	8-5/8	6-3/4	1-1/8	1-1/8	1-3/4
03632SD	Standard	A 193, Grade B8M, Class 1	3/4	8-5/8	5	1-1/8	1-1/8	1-3/4
03634SD	Through bolt (TB)	A 193, Grade B8M, Class 1	3/4	8-5/8	6-3/4	1-1/8	1-1/8	1-3/4
03648SD	Standard	A193, Grade B8M, Class 2	3/4	13-5/8	10	1-1/8	1-1/8	1-3/4
03649SD	Through Bolt (TB)	A193, Grade B8M, Class 2	3/4	13-5/8	11-3/4	1-1/8	1-1/8	1-3/4
03136SD	Standard	A 193, Grade B7	3/4	13-5/8	10	1-1/8	1-1/8	1-3/4
03138SD	Through bolt (TB)	A 193, Grade B7	3/4	13-5/8	11-3/4	1-1/8	1-1/8	1-3/4

Atomic+ Undercut Anchor Detail



Head Marking

Legend
Letter Code = Length Identification Mark
'+' Symbol = Strength Design Compliant Anchor (see ordering information)

Length Identification

Mark	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
From	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	6-1/2"	7"	7-1/2"	8"	8-1/2"	9"	9-1/2"	10"	11"	12"
Up to but not including	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	6-1/2"	7"	7-1/2"	8"	8-1/2"	9"	9-1/2"	10"	11"	12"	13"

Length identification mark indicates overall length of anchor.

TECHNICAL GUIDE – MECHANICAL ANCHORS ©2018 DEWALT – REV1.0

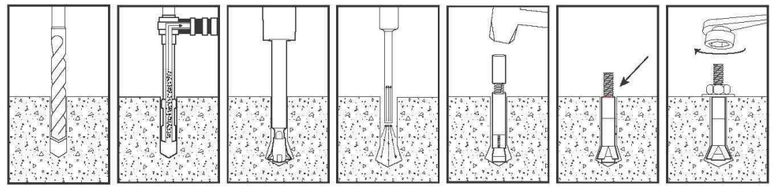
NO.	D-TE	ENG DESIGN	DR-FTING	COMMENT
3				-S-BUILT
2				REVISION # 1
1	090924	KMV	-C	ORIGIN-L

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg
CONFIDENTIAL/PROPRIETARY SHEET: 08 OF 12

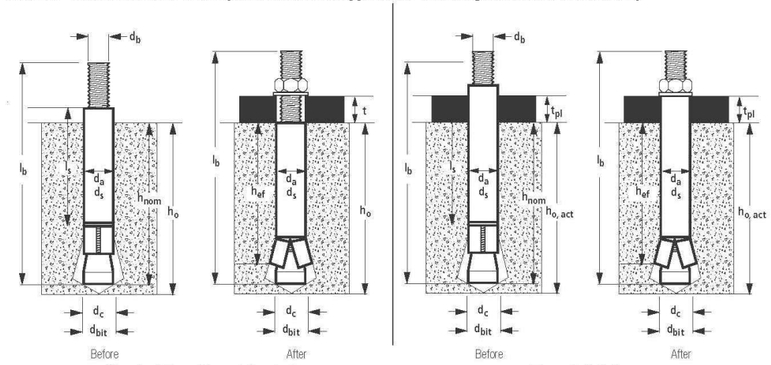
INSTALLATION INSTRUCTIONS

Installation Instructions for Atomic+ Undercut Anchors



1. Using the proper drill bit size, drill a hole into the base material to the required depth. The tolerances of the drill bit used should meet the requirements of ANSI Standard B212.15.
2. Remove dust and debris from the hole during drilling (e.g. dust extractor, hollow bit) or following drilling (e.g. suction, forced air) to extract loose particles created by drilling.
3. Insert the undercut bit and start the rotohammer. Undercutting is complete when the stopper sleeve is fully compressed (gap closed)
4. Remove dust and debris from the hole following drilling (e.g. suction, forced air)
5. Insert anchor into hole. Place setting sleeve over anchor and drive the expansion sleeve over the expansion coupling.
6. Verify that the setting mark is visible on the theaded rod above the sleeve.
7. Apply proper torque; Do not exceed maximum torque.

Atomic+ Undercut Anchor Detail (before and after application of setting sleeve and attachment)



Axial Stiffness Values, β, for Atomic+ Undercut Anchors in Normal-Weight Concrete[1]

Concrete State	Notation	Units	Nominal Anchor Size / Rod Diameter (inch)			
			3/8	1/2	5/8	3/4
Uncracked concrete	β_{min}	10^3 lbf/in	131			
	β_{av}	10^3 lbf/in	930			
	β_{max}	10^3 lbf/in	1,444			
Cracked concrete	β_{min}	10^3 lbf/in	91			
	β_{av}	10^3 lbf/in	394			
	β_{max}	10^3 lbf/in	1,724			

1. Valid for anchors with high strength threaded rod (A 193 Grade B7). For anchors with low strength threaded rod (A 36) values must be multiplied by 0.7.

INSTALLATION SPECIFICATIONS

Installation Specifications for Atomic+ Undercut Anchors

Anchor Property/Setting Information	Notation	Units	Nominal Anchor Diameter									
			3/8 inch		1/2 inch			5/8 inch			3/4 inch	
Outside anchor diameter	d_a	in. (mm)	0.625 (15.9)		0.750 (19.1)			1.000 (25.4)			1.125 (28.6)	
Minimum diameter of hole clearance in fixture[2]	d_h	in. (mm)	7/16 (11.1)		9/16 (14.3)			11/16 (17.5)			13/16 (20.6)	
Anchor rod designation, carbon steel	ASTM	-	A36	A193 Gr. B7	A36	A193 Grade B7		A36	A193 Grade B7		A36	A193 Gr. B7
Anchor rod designation, stainless steel	ASTM	-	A193 Gr. B8M Class 1	A193 Gr. B8M Class 2	A193 Gr. B8M Class 1	A193 Gr. B8M Class 2	-	A193 Gr. B8M Class 1	A193 Gr. B8M Class 2	-	A193 Gr. B8M Class 1	A193 Gr. B8M Class 2
Minimum nominal embedment depth	h_{nom}	in. (mm)	3-1/8 (79)	4-3/8 (111)	4-1/4 (108)	5-1/4 (133)	7 (178)	5 (127)	8 (203)	9-1/2 (241)	5-7/8 (149)	10-7/8 (276)
Effective embedment	h_{ef}	in. (mm)	2-3/4 (68)	4 (102)	4 (102)	5 (127)	6-3/4 (171)	4-1/2 (114)	7-1/2 (190)	9 (229)	5 (127)	10 (254)
Minimum hole depth[1]	h_o	in. (mm)	3-1/8 (79)	4-3/8 (111)	4-1/4 (108)	5-1/4 (133)	7 (178)	5 (127)	8 (204)	9-1/2 (241)	5-7/8 (149)	10-7/8 (276)
Minimum concrete member thickness	For h_{min1}	in. (mm)	5-1/2 (140)	8 (204)	8 (204)	10 (254)	13-1/2 (343)	9 (229)	15 (381)	18 (457)	10 (254)	20 (508)
	$c_{ac,1} \geq$	in. (mm)	4-1/8 (105)	6 (152)	6 (152)	7-1/2 (190)	10-1/8 (257)	6-3/4 (171)	11-1/4 (256)	13-1/2 (343)	7-1/2 (190)	15 (381)
	For h_{min2}	in. (mm)	4-3/8 (111)	6 (152)	6 (152)	7-1/2 (190)	10-1/8 (257)	6-3/4 (171)	11-1/4 (256)	13-1/2 (343)	7-1/2 (190)	15 (381)
	$c_{ac,2} \geq$	in. (mm)	5-1/2 (140)	10-1/4 (260)	9-1/4 (235)	13 (330)	20-1/4 (514)	9-1/2 (241)	21 (533)	27 (686)	10-1/2 (267)	30 (762)
Minimum edge distance	c_{min}	in. (mm)	2-1/4 (57)	3-1/4 (82)	3-1/4 (82)	4 (102)	5-3/8 (86)	3-5/8 (92)	6 (152)	7-1/4 (184)	4 (102)	8 (204)
Minimum spacing distance	s_{min}	in. (mm)	2-3/4 (70)	4 (102)	4 (102)	5 (127)	6-3/4 (171)	4-1/2 (114)	7-1/2 (190)	9 (229)	5 (127)	10 (254)
Maximum thickness of fixture	t	in. (mm)	1-3/4 (44)		1-3/4 (44)			1-3/4 (44)			1-3/4 (44)	
Maximum torque	T_{inst}	ft.-lbf.	26		44			60			133	
Torque wrench / socket size	-	in.	11/16		7/8			1-1/16			1-1/4	
Nut Height	-	in.	23/64		31/64			39/64			47/64	
Stop Drill Bit												
Nominal stop drill bit diameter	d_{bit}	in.	5/8 ANSI		3/4 ANSI			1 ANSI			1-1/8 ANSI	
Stop drill bit for anchor installation	-	-	3220SD	3221SD	3222SD	3223SD	3224SD	3225SD	3226SD	3227SD	3228SD	3229SD
Drilled hole depth of stop bit[1]	-	-	3-1/8	4-3/8	4-1/4	5-1/4	7	5	8	9-1/2	5-7/8	10-7/8
Stop drill bit shank type	-	-	SDS		SDS			SDS-Max			SDS-Max	
Undercut Drill Bit												
Nominal undercut drill bit diameter	d_{uc}	in.	5/8		3/4			1			1-1/8	
Undercut drill bit designation	-	-	3200SD		3201SD			3202SD			3203SD	
Maximum depth of hole for undercut drill bit	-	in. (mm)	9 (229)		10-1/4 (260)			12-1/4 (311)			13-1/2 (343)	
Undercut drill bit shank type	-	-	SDS		SDS			SDS-Max			SDS-Max	
Required impact drill energy	-	ft.-lbf.	1.6		2.5			3.2			4.0	
Setting Sleeve												
Recommended setting sleeve	-	-	3210SD		3211SD			3212SD			3213SD	

For SI: 1 inch = 25.4 mm, 1 ft-lbf = 1.356 N-m.

1. For through bolt applications, the actual hole depth is given by the minimum hole depth plus the maximum thickness of fixture less the thickness of the actual part(s) being fastened to the base material ($h_{o,act} = h_o + t - t_{pl}$).
2. For through bolt applications the minimum diameter of hole clearance in fixture is 1/16-inch larger than the nominal outside anchor diameter.

NO.	D-TE	ENG DESIGN	DR-FTING	COMMENT
3				-S-BUILT
2				REVISION # 1
1	090924	KMV	-C	ORIGIN-L

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg
CONFIDENTIAL/PROPRIETARY
SHEET: 09 OF 12

PERFORMANCE DATA

Tension and Shear Design Information For Atomic+ Undercut Anchor in Concrete (For use with load combinations taken from ACI 318-14 Section 5.3 or ACI 318-11 Section 9.2)[1]

Anchor Property / Setting Information		Notation	Units	Nominal Anchor Diameter									
				3/8 inch		1/2 inch			5/8 inch			3/4 inch	
Anchor category		1,2 or 3	-	1									
Outside anchor diameter		d_a [d_o][9]	in. (mm)	0.625 (15.9)		0.750 (19.1)			1.000 (25.4)			1.125 (28.6)	
Effective embedment		h_{ef}	in. (mm)	2-3/4 (68)	4 (102)	4 (102)	5 (127)	6-3/4 (171)	4-1/2 (114)	7-1/2 (190)	9 (229)	5 (127)	10 (254)
STEEL STRENGTH IN TENSION AND SHEAR[1]													
Tensile stress area of anchor rod steel		A_{se}	in.^{2} (mm^2)	0.0775 (50)		0.1419 (91)			0.2260 (146)			0.3345 (216)	
ASTM A36 (f_y > 36 ksi) ASTM A193 Grade B7 (f_y ≥ 105 ksi)	Minimum specified yield strength of anchor rod[10]	f_y	ksi (N/mm^2)	36 (248)	105 (723)	36 (248)	105 (723)	105 (723)	36 (248)	105 (723)	105 (723)	36 (248)	105 (723)
	Minimum specified ultimate tensile strength of anchor rod[10]	f_{uta}	ksi (N/mm^2)	58 (400)	125 (860)	58 (400)	125 (860)	125 (860)	58 (400)	125 (860)	125 (860)	58 (400)	125 (860)
	Steel strength in tension, static[10]	N_{sa}	lb (kN)	4,495 (20.1)	9,685 (43.2)	8,230 (36.7)	17,735 (79.1)	17,735 (79.1)	13,100 (58.5)	28,250 (126.1)	28,250 (126.1)	19,400 (86.3)	41,810 (186.0)
	Steel strength in shear, static[9,10]	V_{sa}	lb (kN)	2,245 (10.0)	4,885 (21.7)	4,110 (18.4)	8,855 (39.5)	8,855 (39.5)	6,560 (29.3)	14,110 (63.0)	14,110 (63.0)	9,685 (43.2)	20,875 (93.2)
	Steel strength in shear, seismic[9,10]	V_{eq}	lb (kN)	2,245 (10.0)	4,885 (21.7)	4,110 (18.4)	8,855 (39.5)	8,855 (39.5)	6,560 (29.3)	14,110 (63.0)	14,110 (63.0)	9,685 (43.2)	20,875 (93.2)
ASTM A193 Grade B8M, Class 1 (f_y >= 30 ksi) ASTM A193 Grade B8M, Class 2 (f_y >= 95 ksi)	Minimum specified yield strength of anchor rod (Type 316 stainless steel anchor)	$f_{y,ss}$	ksi (N/mm^2)	30 (205)	95 (655)	30 (205)	95 (655)	-	30 (205)	95 (655)	-	30 (205)	95 (655)
	Minimum specified ultimate tensile strength of anchor rod (Type 316 stainless steel anchor)	$f_{uta,ss}$	ksi (N/mm^2)	75 (515)	105 (760)	75 (515)	105 (760)	-	75 (515)	105 (760)	-	75 (515)	105 (760)
	Steel strength in tension, static (Type 316 stainless steel anchor)[11]	$N_{sa,ss}$	lb (kN)	4,415 (19.6)	8,525 (37.9)	8,085 (36.0)	15,610 (69.4)	-	12,880 (57.3)	24,860 (110.6)	-	19,065 (84.8)	36,795 (163.7)
	Steel strength in shear, static (Type 316 stainless steel anchor)[11]	$V_{sa,ss}$	lb (kN)	2,210 (9.8)	4,265 (19.0)	4,045 (18.0)	7,805 (34.7)	-	6,440 (28.6)	12,430 (55.3)	-	9,535 (42.4)	18,400 (81.8)
Reduction factor for steel strength in tension[2]		ϕ	-	0.75									
Reduction factor for steel strength in shear[2]		ϕ	-	0.65									
CONCRETE BREAKOUT STRENGTH IN TENSION AND SHEAR[2]													
Effectiveness factor for uncracked concrete		k_{uncr}	-	30		30			30			30	
Effectiveness factor for cracked concrete		k_{cr}	-	24		24			24			24	
Modification factor for cracked and uncracked concrete[4]		$\Psi_{c,N}$	-	1.0 (See note 4)		1.0 (See note 4)			1.0 (See note 4)			1.0 (See note 4)	
Reduction factor for concrete breakout strength in tension[2]		ϕ	-	0.65 (Condition B)									
Reduction factor for concrete breakout strength in shear[2]		ϕ	-	0.70 (Condition B)									
PULLOUT STRENGTH IN TENSION[7]													
Characteristic pullout strength, uncracked concrete (2,500 psi)[5]		$N_{p,uncr}$	lb (kN)	See note 6		See note 6			See note 6			See note 6	
Characteristic pullout strength, cracked concrete (2,500 psi)[5]		$N_{p,cr}$	lb (kN)	See note 6	9,000 (40.2)	See note 6	11,500 (51.3)		See note 6	15,000 (67.0)		See note 6	22,000 (98.2)
Characteristic pullout strength, seismic (2,500 psi)[5,10]		N_{eq}	lb (kN)	See note 6	9,000 (40.2)	See note 6	11,500 (51.3)		See note 6	15,000 (67.0)		See note 6	22,000 (98.2)
Reduction factor for pullout strength[2]		ϕ	-	0.65 (Condition B)									
PRYOUT STRENGTH IN SHEAR[7]													
Coefficient for pryout strength		k_{cp}	-	2.0		2.0			2.0			2.0	
Reduction factor for pryout strength[2]		ϕ	-	0.70 (Condition B)									

For SI: 1 inch = 25.4 mm, 1 ksi = 6.895 MPa (N/mm^2), 1 lbf = 0.0044 kN, 1 in^2 = 645 mm^2.

1. The data in this table is intended to be used with the design provisions of ACI 318-14 Chapter 17 or ACI 318-11 Appendix D, as applicable; for anchors resisting seismic load combinations the additional requirements of ACI 318-14 17.2.3 or ACI 318-11 D.3.3, as applicable, shall apply.
2. All values of ϕ were determined from the load combinations of IBC Section 1605.2, ACI 318-14 Section 5.3 or ACI 318-11 Section 9.2, as applicable. If the load combinations of ACI 318-11 Appendix C are used, then the appropriate value of ϕ must be determined in accordance with ACI 318-11 D.4.4. For reinforcement that meets ACI 318-14 Chapter 17 or ACI 318-11 Appendix D, as applicable, requirements for Condition A, see ACI 318-14 17.3.3(c) or ACI 318-11 D.4.3(c), as applicable, for the appropriate ϕ factor when the load combinations of IBC Section 1605.2, ACI 318-14 Section 5.3 or ACI 318-11 Section 9.2, as applicable, are used.
3. Anchors are considered a ductile steel element as defined by ACI 318-14 2.3 or ACI 318-11 D.1, as applicable.
4. For all design cases $\Psi_{c,N}$ =1.0. The appropriate effectiveness factor for cracked concrete (k_{cr}) or uncracked concrete (k_{uncr}) must be used.
5. For all design cases $\Psi_{c,P}$ =1.0. For concrete compressive strength greater than 2,500 psi N_{pn} = ($N_{p,uncr}$ or $N_{p,cr}$)*(specified concrete compressive strength/2,500)$^{0.5}$.
6. Pullout strength does not control design of indicated anchors. Do not calculate pullout strength for indicated anchor size and embedment.
7. Anchors are permitted to be used in lightweight concrete provided the modification factor λ_a equal to 0.8λ is applied to all values of $\sqrt{f'_c}$ affecting N_n and V_n. λ shall be determined in accordance with the corresponding version of ACI 318.
8. The notation in brackets is for the 2006 IBC.
9. Shear strength values are based on standard (pre-set) installation, and must be used for both standard (pre-set) and through-bolt installations.
10. These values are only applicable to carbon steel anchors; values are not established for stainless steel anchors.
11. Calculated using $f_{uta,ss}$ = 57 ksi (1.9f_y) in accordance with ACI 318-14 Chapter 17 or ACI 318-11 Appendix D.

MECHANICAL ANCHORS
ATOMIC+ UNDERCUT®
Heavy Duty Undercut Anchor

Tension and Shear Design Strength for Stainless Steel Atomic+ Undercut Anchor in Uncracked Concrete

Nominal Anchor Size (in.)	Nominal Embed. h_{nom} (in.)	Anchor Rod Designation (ASTM)	Minimum Concrete Compressive Strength, f'c (psi)									
			2,500		3,000		4,000		6,000		8,000	
			ϕN_n Tension (lbs.)	ϕV_n Shear (lbs.)	ϕN_n Tension (lbs.)	ϕV_n Shear (lbs.)	ϕN_n Tension (lbs.)	ϕV_n Shear (lbs.)	ϕN_n Tension (lbs.)	ϕV_n Shear (lbs.)	ϕN_n Tension (lbs.)	ϕV_n Shear (lbs.)
3/8	3-1/8	A 193, Gr. B8M Class 1	3,310	1,435	3,310	1,435	3,310	1,435	3,310	1,435	3,310	1,435
	4-3/8	A 193, Gr. B8M Class 2	6,395	2,770	6,395	2,770	6,395	2,770	6,395	2,770	6,395	2,770
1/2	4-1/4	A 193, Gr. B8M Class 1	6,065	2,625	6,065	2,625	6,065	2,625	6,065	2,625	6,065	2,625
	5-1/4	A 193, Gr. B8M Class 2	10,900	5,075	11,705	5,075	11,705	5,075	11,705	5,075	11,705	5,075
5/8	5	A 193, Gr. B8M Class 1	9,305	4,185	9,660	4,185	9,660	4,185	9,660	4,185	9,660	4,185
	8	A 193, Gr. B8M Class 2	18,645	8,080	18,645	8,080	18,645	8,080	18,645	8,080	18,645	8,080
3/4	5-7/8	A 193, Gr. B8M Class 1	10,900	6,195	11,940	6,195	13,790	6,195	14,300	6,195	14,300	6,195
	10-7/8	A 193, Gr. B8M Class 2	27,595	11,955	27,595	11,955	27,595	11,955	27,595	11,955	27,595	11,955

□ - Anchor Pullout/Prycut Strength Controls ▒ - Concrete Breakout Strength Controls ■ - Steel Strength Controls

Converted Allowable Loads for Stainless Steel Atomic+ Undercut in Uncracked Concrete[1,2]

Nominal Anchor Diameter (in.)	Nominal Embed. h_{nom} (in.)	Anchor Rod Designation (ASTM)	Minimum Concrete Compressive Strength									
			f 'c = 2,500 psi		f 'c = 3,000 psi		f 'c = 4,000 psi		f 'c = 6,000 psi		f 'c = 8,000 psi	
			$T_{allowable,ASD}$ Tension (lbs.)	$V_{allowable,ASD}$ Shear (lbs.)	$T_{allowable,ASD}$ Tension (lbs.)	$V_{allowable,ASD}$ Shear (lbs.)	$T_{allowable,ASD}$ Tension (lbs.)	$V_{allowable,ASD}$ Shear (lbs.)	$T_{allowable,ASD}$ Tension (lbs.)	$V_{allowable,ASD}$ Shear (lbs.)	$T_{allowable,ASD}$ Tension (lbs.)	$V_{allowable,ASD}$ Shear (lbs.)
3/8	3-1/8	A 193, Gr. B8M Class 1	2,365	1,025	2,365	1,025	2,365	1,025	2,365	1,025	2,365	1,025
	4-3/8	A 193, Gr. B8M Class 2	4,570	1,980	4,570	1,980	4,570	1,980	4,570	1,980	4,570	1,980
1/2	4-1/4	A 193, Gr. B8M Class 1	4,330	1,875	4,330	1,875	4,330	1,875	4,330	1,875	4,330	1,875
	5-1/4	A 193, Gr. B8M Class 2	7,785	3,625	8,360	3,625	8,360	3,625	8,360	3,625	8,360	3,625
5/8	5	A 193, Gr. B8M Class 1	6,645	2,990	6,900	2,990	6,900	2,990	6,900	2,990	6,900	2,990
	8	A 193, Gr. B8M Class 2	13,320	5,770	13,320	5,770	13,320	5,770	13,320	5,770	13,320	5,770
3/4	5-7/8	A 193, Gr. B8M Class 1	7,785	4,425	8,530	4,425	9,850	4,425	10,215	4,425	10,215	4,425
	10-7/8	A 193, Gr. B8M Class 2	19,710	8,540	19,710	8,540	19,710	8,540	19,710	8,540	19,710	8,540

1. Allowable load values are calculated using a conversion factor, α, from Factored Design Strengths and conditions shown on the previous page.
2. Tabulated allowable load values assume 50% dead load and 50% live load, with controlling load combination 1.2D + 1.6L. Calculated weighted average for the conversion factor α: 1.2(0.5) + 1.6(0.5) = 1.4.

Atomic+ Undercut Anchor Type 316 Stainless Steel

Cat. No.	Anchor Rod ASTM Designation	Nominal Anchor Diameter	Anchor Outside Diameter	Overall Length	Required Undercut Bit (Cat. No.)	Required Slop Bit (Cat. No.)	Anchor Type	Std. Box
03600SD	ASTM A193, Grade B8M, Class 1	3/8"	5/8"	5-1/2"	03200SD	03220SD	Standard	20
03602SD	ASTM A193, Grade B8M, Class 1	3/8"	5/8"	5-1/2"		*	Through Bolt	20
03603SD	ASTM A193, Grade B8M, Class 2	3/8"	5/8"	6-3/4"		03221SD	Standard	20
03605SD	ASTM A193, Grade B8M, Class 2	3/8"	5/8"	6-3/4"		*	Through Bolt	20
03608SD	ASTM A193, Grade B8M, Class 1	1/2"	3/4"	7"	03201SD	03222SD	Standard	15
03610SD	ASTM A193, Grade B8M, Class 1	1/2"	3/4"	7"		*	Through Bolt	15
03609SD	ASTM A193, Grade B8M, Class 2	1/2"	3/4"	8"		03223SD	Standard	15
03613SD	ASTM A193, Grade B8M, Class 2	1/2"	3/4"	8"		*	Through Bolt	15
03620SD	ASTM A193, Grade B8M, Class 1	5/8"	1"	7-3/4"	03202SD	03225SD	Standard	10
03622SD	ASTM A193, Grade B8M, Class 1	5/8"	1"	7-3/4"		*	Through Bolt	10
03635SD	ASTM A193, Grade B8M, Class 2	5/8"	1"	10-3/4"		03226SD	Standard	10
03639SD	ASTM A193, Grade B8M, Class 2	5/8"	1"	10-3/4"		*	Through Bolt	10
03632SD	ASTM A193, Grade B8M, Class 1	3/4"	1-1/8"	8-5/8"	03203SD	03228SD	Standard	8
03634SD	ASTM A193, Grade B8M, Class 1	3/4"	1-1/8"	8-5/8"		*	Through Bolt	8
03648SD	ASTM A193, Grade B8M, Class 2	3/4"	1-1/8"	13-5/8"		03229SD	Standard	8
03649SD	ASTM A193, Grade B8M, Class 2	3/4"	1-1/8"	13-5/8"		*	Through Bolt	8

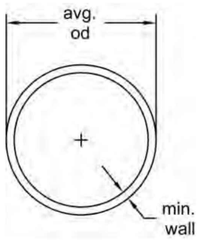
For availability of all anchor lengths please contact DEWALT.
*Contact DEWALT for appropriate drilling method and hardware

NO.	D-TE	ENG DESIGN	DR-FTING	COMMENT
3				-S-BUILT
2				REVISION # 1
1	090924	KMV	-C	ORIGIN-L

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg
CONFIDENTIAL/PROPRIETARY
SHEET: 10 OF 12

PVC SCHEDULE 80 PIPE



Size (inch)	P/L	Plain End Part No.	USD	Lift Qty. (20ft Lgths) (ft)	Average O.D. (inch)	Min. Wall (inch)	Wt/Ft (lbs/ft)
1/2	H18	* H0800050PG2000	2.41	5700	0.840	0.147	0.202
3/4	H18	* H0800075PG2000	3.19	5260	1.050	0.154	0.273
1	H18	* H0800100PG2000	4.81	4280	1.315	0.179	0.402
1 1/4	H18	* H0800125PG2000	6.65	2360	1.660	0.191	0.554
1 1/2	H18	* H0800150PG2000	7.52	2060	1.900	0.200	0.673
2	H18	* H0800200PG2000	10.40	1660	2.375	0.218	0.932
2 1/2	H18	* H0800250PG2000	17.47	1080	2.875	0.276	1.419
3	H18	* H0800300PG2000	21.43	840	3.500	0.300	1.903
4	H18	* H0800400PG2000	30.83	520	4.500	0.337	2.782
6	H18	* H0800600PG2000	59.47	340	6.625	0.432	5.313
8	H18	* H0800800PG2000	89.47	220	8.625	0.500	8.058
10	H18	* H0801000PG2000	132.70	80	10.750	0.593	11.956
12	H18	* H0801200PG2000	181.57	60	12.750	0.687	16.437

GRIPLOC COUPLING

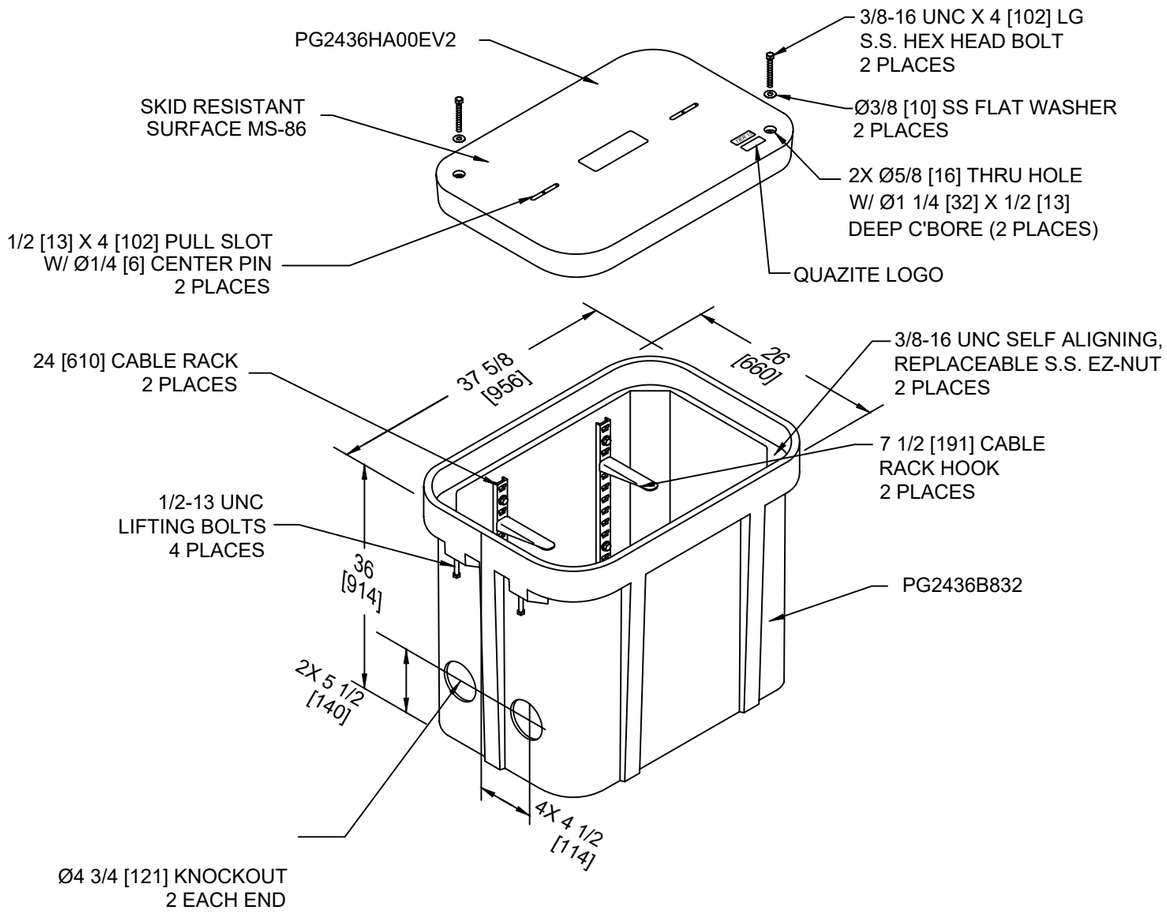
Part Number	Size	Std Pk	Mstr Ctn	Prod Code	MSRP
GL429-005	1/2	1	40	131	14.25
GL429-007	3/4	1	36	131	18.64
GL429-010	1	1	20	131	19.19
GL429-012	1-1/4	1	15	131	22.81
GL429-015	1-1/2	1	15	131	22.81
GL429-020	2	1	10	131	23.68

NO.	D-TE	ENG DESIGN	DR-FTING	COMMENT
3				-S-BUILT
2				REVISION # 1
1	090924	KMV	-C	ORIGIN-L

BlueStream fiber

CHECKED BY: GIULIANO LEON
ENGINEERING FIRM: KMV FIBERTELECOM INC
PROJECT NUMBER: KMV-BS-24-191
LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065
DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

TYPICAL



TYPICAL DETAIL - # 1

24X36X30 BOX ASSEMBLY

W/(2) 24" CR, (2) 7 1/2" CR, HOOKS

& (4) Ø4 3/4 KNOCKOUT

PG2436Z978EV2

QUAZITE - 25479684

NO.	D-TE	ENG DESIGN	DR-FTING	COMMENT
3				-S-BUILT
2				REVISION # 1
1	090924	KMV	-C	ORIGIN-L

BlueStream fiber

CHECKED BY: GIULIANO LEON

ENGINEERING FIRM: KMV FIBERTELECOM INC

PROJECT NUMBER: KMV-BS-24-191

LOCATION: 3602 RIVERSIDE DR
CORAL SPRINGS, FL 33065

DRAWING NAME: KMV-BS-24-191 - HABITAT NORTH AND SOUTH - OSP.dwg

CRAIG A. SMITH & ASSOCIATES
A SMART- INFRASTRUCTURE COMPANY

October 2, 2024

Board of Supervisors
Sunshine Water Control District
2300 Glades Road, Suite 410W
Boca Raton, Florida 33073

RE: SWCD RIGHT-OF-WAY (ROW) PERMIT APPLICATION
1. Replacement of two (2) fiber optic pull boxes & conduit installation within existing Coral Springs Drive Bridge over SWCD West Outfall Canal ROW;
2. Directionally of 3-2" HDPE conduits under SWCVD Canal Z culverts.
Permittee: Broward County – Highway Construction & Engineering Division – S29T48S/R41E
CAS PROJECT NO. 15-1826

Dear Board of Supervisors:

We have reviewed a ROW permit application submitted by the Broward County – Highway Construction & Engineering Division for the following:

1. Replacement of two (2) fiber optic pull boxes & conduit installation within existing Coral Springs Drive Bridge over SWCD West Outfall Canal ROW;

2. Directionally of 3-2" HDPE conduits under SWCVD Canal Z culverts.

The applicant has met SWCD applicable criteria and we recommend that the SWCD Board of Supervisors issue a Right-of-Way Permit to the applicant, subject to the following Special Conditions to be made part of the Permit:

1. All work must be in compliance with the latest SWCD Permit Criteria Manual.
2. Permittee will ensure that all necessary Sediment & Erosion Control devices will be utilized at the SWCD right-of-way during construction.
3. Trash bond ($2,500) shall be submitted prior to permit issuance and the Contractor shall repair and replace any SWCD facilities damaged during construction at no cost to the District.
4. A copy of Record As-builts and Engineer Certification shall be provided to SWCD upon completion of all work.
5. All applicable permits and approvals for Work shall be obtained.
6. All disturbed areas are to be restored.
7. SWCD shall be notified at least 48 hours prior to construction.

Sincerely,
CRAIG A. SMITH & ASSOCIATES

Orlando A. Rubio, PE
VP - Stormwater Engineering

Enclosures: Plans
cc via e-mail: SWCD – Cory Selchan, WHA - Jamie Sanchez, Gianna Denofrio, CAS – Stephen C. Smith, PE
\\cas-file\Projects\Districts\Sunshine_Water_Control\19-2064-1CP-SWCD Non recovery\01-RIGHT-OF-WAY\2024\15-1826-PineIslandFOC\04-Correspondence\02-Letters\15-1826-PineIslandFOC.docx

BCTED NO. 230803061

CONTRACT PLANS COMPONENTS

INTELLIGENT TRANSPORTATION SYSTEM PLANS

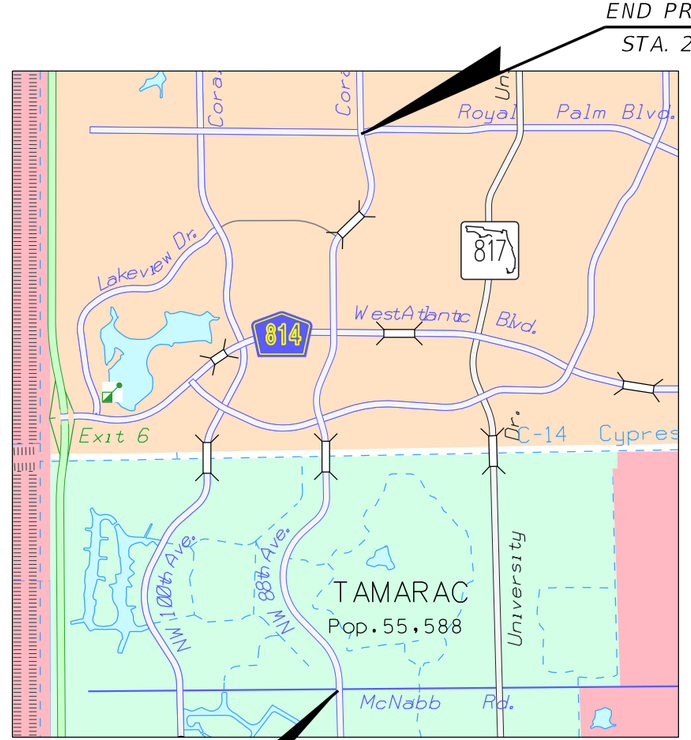
PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION & ENGINEERING DIVISION

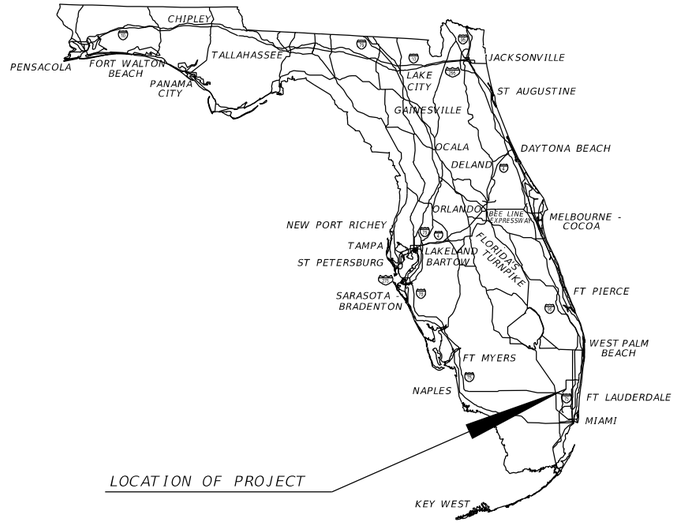
CONTRACT PLANS

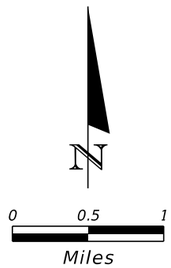
BROWARD COUNTY PROJECT NO. FIBER012/FIBER015

PINE ISLAND ROAD/ CORAL SPRINGS DRIVE

FIBER OPTIC NETWORK IMPROVEMENTS
FROM McNAB RD TO ROYAL PALM BLVD







BROWARD COUNTY FLORIDA

SHOP DRAWINGS TO BE SUBMITTED TO:

RICARDO J. GONZALEZ
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

INTELLIGENT TRANSPORTATION PLANS ENGINEER OF RECORD:

RICARDO J. GONZALEZ, P.E.
P.E. LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF ITS PLANS

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2023-24 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, JANUARY 2024 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks
All MOT and construction work performed in Broward County Right of Way shall be in accordance with the governing standards and specifications: Exhibit 25A, Broward County Administrative Code

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ITS PROJECT LIMITS	20,080	3.803
NET LENGTH OF PROJECT	20,080	3.803
EXCEPTIONS	0	0.00
GROSS LENGTH OF PROJECT	20,080	3.803

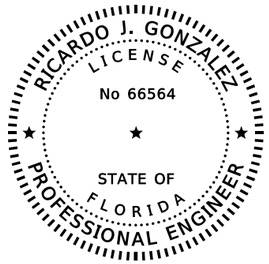
BROWARD COUNTY PROJECT MANAGER: CHRIS MASULLO

FISCAL YEAR	SHEET NO.
24	01

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:32:12 AM Austin.Willard
C:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austin.willard@metriceng.com\dms27854\KEYSIT01.dgn

BCTED NO. 230803061

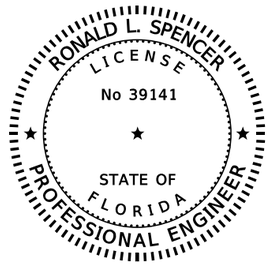


THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224
RICARDO J GONZALEZ, P.E. NO. 66564



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BMA CONSULTING ENGINEERING, INC.
16928 SW 35TH STREET
MIRAMAR, FLORIDA 33027
RONALD L. SPENCER P.E. NO. 39141

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

INTELLIGENT TRANSPORTATION SYSTEM PLANS

SHEET NO.	SHEET DESCRIPTION
01	KEY SHEET
02	SIGNATURE SHEET
03	TABULATION OF QUANTITIES
04	GENERAL NOTES
05	LEGEND
06	PROJECT LAYOUT
07 - 20	PLAN SHEETS
21	DIRECTIONAL BORE AND TRENCHING DETAIL
22 - 23	PULL BOX AND CONDUIT DETAILS
24 - 25	SIGNAL CABINET DETAILS
26	CROSS SECTION

INTELLIGENT TRANSPORTATION SYSTEM PLANS & TRAFFIC CONTROL PLANS

SHEET NO.	SHEET DESCRIPTION
27	LOGICAL DIAGRAM
28 - 33	SPLICING DIAGRAM
34	EROSION CONTROL PLAN
35	EROSION CONTROL DETAILS
36	TRAFFIC CONTROL (TC) NOTES
37	TRAFFIC CONTROL (TC) TYPICAL
38	TC WORK WITHIN TRAVEL WAY OR OUTSIDE LANE

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

SIGNATURE SHEET

SHEET NO. 02

6/7/2024 11:32:28 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austin.willard@metriceng.com\dms27854\SIGNIT01.dgn

BCTED NO. 230803061

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																						TOTAL		REF. SHEET
			7		8		9		10		11		12		13		14		15		16		17				
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
101-1	MOBILIZATION	LS																									
102-1	MAINTENANCE OF TRAFFIC	LS																									
110-1-1	CLEARING & GRUBBING	LS																									
110-4-10	REMOVAL OF EXISTING CONCRETE	SY			3						5		30		9.2				5						52.2		
339-1	MISCELLANEOUS ASPHALT PAVEMENT	TN			3																		2.83		5.83		
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY									5		30		9.2				5						49.2		
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF			52		29						32		43				35				25		216		
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE, 1-2" HDPE CONDUIT	LF													92										92		
	CONDUIT, F&I, DIRECTIONAL BORE, 3-2" HDPE CONDUIT	LF	1499		1508		1473		1466		1539		1474		1308		1527		1481		1500		1540		16315		
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	LF																					5		5		
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	LF			134		146				167		149		163								135		894		
633-1-123	FIBER OPTIC ARMORED CABLE, F&I, UNDERGROUND, 49-96 FIBERS	LF	1649		1708		1723		1566		1789		2020		1789		1577		2377		1550		1790		19538		
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	94		4		4				4		4		4				96				4		214		
633-2-32	FIBER OPTIC CONNECTION, INSTALL, TERMINATION	EA			4		4				4		4		4								4		24		
633-3-11	FIBER OPTIC CONNECTION HARDWARE F&I, SPLICE ENCLOSURE	EA			1		1				1		1		1								1		6		
633-3-12	FIBER OPTIC CONNECTION HARDWARE F&I, SPLICE TRAY	EA	7		1		1				1		1		1				7				1		20		
633-3-16	FIBER OPTIC CONNECTION HARDWARE F&I, PATCH PANEL-FIELD TERMINATED	EA			1		1				1		1		1								1		6		
633-3-51	FIBER OPTIC CONNECTION HARDWARE,ADJUST/MODIFY SPLICE ENCLOSURE	EA	1																						1		
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA											3												3		
635-2-12	PULL & SPLICE BOX, F&I, 24" x 36" COVER SIZE	EA	1				2		2		1		3		2		1		3		1		2		18		
635-2-15	SPLICE BOX, F&I, 30" X 48" COVER SIDE, 36" DEEP	EA			1		1				1		1		1								1		6		
635-2-60	REMOVAL OF EXISTING PULL BOX	EA					1				1		4		1										7		
676-1-600	TRAFFIC SIGNAL CONTROLLER CABINET, REMOVE	EA									1														1		

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																				TOTAL		GRAND TOTAL		REF. SHEET
			18		19		20																				
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
101-1	MOBILIZATION	LS																							1		
102-1	MAINTENANCE OF TRAFFIC	LS																							1		
110-1-1	CLEARING & GRUBBING	LS																							1		
110-4-10	REMOVAL OF EXISTING CONCRETE	SY	3.4				3.4																6.8		59		
339-1	MISCELLANEOUS ASPHALT PAVEMENT	TN																							5.83		
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	3.4				3.4																6.8		56		
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF	32																				32		248		
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE, 1-2" HDPE CONDUIT	LF																							92		
	CONDUIT, F&I, DIRECTIONAL BORE, 3-2" HDPE CONDUIT	LF	1402		1482		692																3576		19891		
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	LF																							5		
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	LF	102				77																179		1073		
633-1-123	FIBER OPTIC ARMORED CABLE, F&I, UNDERGROUND, 49-96 FIBERS	LF	1777		1532		842																4151		23689		
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	4				4																8		222		
633-2-32	FIBER OPTIC CONNECTION, INSTALL, TERMINATION	EA	4				4																8		32		
633-3-11	FIBER OPTIC CONNECTION HARDWARE F&I, SPLICE ENCLOSURE	EA	1				1																2		8		
633-3-12	FIBER OPTIC CONNECTION HARDWARE F&I, SPLICE TRAY	EA	1				1																2		22		
633-3-16	FIBER OPTIC CONNECTION HARDWARE F&I, PATCH PANEL-FIELD TERMINATED	EA	1				1																2		8		
633-3-51	FIBER OPTIC CONNECTION HARDWARE,ADJUST/MODIFY SPLICE ENCLOSURE	EA																							1		
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA																							3		
635-2-12	PULL & SPLICE BOX, F&I, 24" x 36" COVER SIZE	EA	2		1		1																4		22		
635-2-15	SPLICE BOX, F&I, 30" X 48" COVER SIDE, 36" DEEP	EA	1				1																2		8		
635-2-60	REMOVAL OF EXISTING PULL BOX	EA	2				1																3		10		
676-1-600	TRAFFIC SIGNAL CONTROLLER CABINET, REMOVE	EA																							1		

REVISIONS

DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

TABULATION OF QUANTITIES

SHEET NO. 03

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:32:45 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austin.willard@metricengg.com\dms27854\TABQUT01.dgn

BCTED NO. 230803061

GENERAL:

1. UNLESS OTHERWISE NOTED IN THE TECHNICAL SPECIFICATIONS: INSTALLATION, ACCEPTANCE, AND PAYMENT FOR ALL ITEMS REQUIRED IN THESE PLANS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING, REFERENCED IN THE KEY SHEET: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (STANDARD SPECIFICATIONS), FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (STANDARD INDEXES), BROWARD COUNTY MINIMUM STANDARDS, BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS AND SPECIFICATIONS, AND ANY OR ALL BROWARD COUNTY TRAFFIC ENGINEERING REQUIREMENTS THAT MEET OR EXCEED THOSE FOUND IN THE ABOVE REFERENCED DOCUMENTS.
2. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST FLAG JOINTS.
3. THE CONTRACTOR SHALL BE ADVISED THAT OTHER PROJECTS MAY BE UNDER CONSTRUCTION CONCURRENTLY WITH THIS PROJECT AND THAT COORDINATION EFFORTS MAY BE NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE CONSTRUCTION SCHEDULE AND FOR THE AMOUNT OF COORDINATION REQUIRED. THE CONTRACTOR SHALL COORDINATE ANY AND ALL CONSTRUCTION ACTIVITIES AND TRAFFIC CONTROL PHASES WITH ANY OTHER CONTRACTOR WITHIN OR ADJACENT TO PROJECT LIMITS.
4. NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM THEIR RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENCES ALONG THE PROPOSED CONSTRUCTION AREA.
5. OFFSETS TO PULL BOXES ARE TO THE CENTER OF THIS ITEM. THE LOCATION OF ALL PROPOSED EQUIPMENT TO BE INSTALLED SHALL BE CONSIDERED TO BE APPROXIMATE. FIELD ADJUSTMENT OF ALL PROPOSED EQUIPMENT MAY BECOME NECESSARY TO ACCOMMODATE EXISTING FIELD CONDITIONS. VARIATIONS FROM THE PROPOSED LOCATION MUST BE PRE-APPROVED BY THE ENGINEER OF RECORD IN WRITING.
6. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT. IN THE EVENT ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OR THE PROGRESSION OF ANY WORK SPECIFIED IN THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD PRIOR TO ANY FURTHER WORK ACTIVITY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY DISTURBED WORK AREA TO THE SAME, OR BETTER, CONDITION THAN AT THE START OF CONSTRUCTION. THE RESTORATION MATERIALS WILL BE OF LIKE KIND TO THE MATERIALS EXISTING AT THE START OF CONSTRUCTION. THE AREA SHALL BE RESTORED PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. SUCH PROPERTY RESTORATION SHALL INCLUDE, BUT IS NOT LIMITED TO, LANDSCAPING, DRIVEWAYS, MAILBOXES, WALKWAYS, WALLS, PAVERS, CURBS, GUTTERS, SIDEWALKS, WALLS, SODDING, FENCES, FOOTINGS, PAVEMENT, LIGHTING, REMOVAL ITEMS, PAVEMENT MARKINGS, UNDERGROUND UTILITIES, IRRIGATION SYSTEMS, DRAINAGE FACILITIES, AND TRAFFIC AND STREET SIGNS. IF THERE ARE ANY QUESTIONS OR DISCREPANCIES, THE PRE-CONSTRUCTION VIDEO WILL BE USED TO DETERMINE THE CONDITIONS AT THE START OF CONSTRUCTION. HOWEVER, AN EXISTING CONDITION DOES NOT ALLEVIATE THE RESPONSIBILITY OF THE CONTRACTOR TO REMEDY THE CONDITION IF THE WORK IS DETERMINED TO BE A PART OF THIS PROJECT.

INSPECTIONS:

1. ALL FINAL INSPECTIONS ARE TO BE SCHEDULED IN ACCORDANCE WITH CONTRACT DOCUMENTS.
2. CONTRACTOR SHALL HAVE THE APPROVED SHOP DRAWINGS AVAILABLE ON THE PROJECT SITE.
3. ALL WORK WHICH WILL NOT BE READILY VISIBLE UPON COMPLETION SHALL NOT BE CONCEALED UNTIL AN APPROVED INSPECTION. IN THE EVENT THAT ITEMS ARE CONCEALED, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO EXPOSE THE QUESTIONED ITEM(S) FOR THE INSPECTORS APPROVAL, AT NO ADDITIONAL COST TO THE COUNTY. THIS INCLUDES, BUT IS NOT LIMITED TO:
   - BURIED OR IMBEDDED CONDUIT
   - GROUND WIRE, RODS, AND ARRAY
   - COMMUNICATIONS WIRING AND HOMERUNS
   - SPLICES BEFORE ENCAPSULATING
4. ALL SPLICE TRAYS, PULL BOXES AND SPLICE BOXES MUST BE PHOTOGRAPHED PRIOR TO BEING CLOSED UP. THESE PHOTOS WILL BECOME PART OF THE PROJECT DOCUMENTATION AND NEED TO BE TURNED INTO THE COUNTY PROJECT MANAGER PRIOR TO FINAL INSPECTION. ALL PHOTOGRAPHS SHALL BE PROPERLY EXPOSED AND CLEARLY SHOW THE CONDITION OF THE SPLICES AND BOXES. THE MINIMUM RESOLUTION FOR ALL IMAGES SHALL BE 12 MEGAPIXELS.
5. IN AN INSPECTION, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR USE BY THE INSPECTOR AND MAINTENANCE STAFF.

AS-BUILTS:

1. THE CONTRACTOR SHALL PROVIDE SIX (6) SETS OF MARKED UP (AS-BUILT) CONSTRUCTION PLANS AND ONE CAD FILE OF SUCH TO THE ENGINEER AND MAINTAINING AGENCY AS DEFINED IN FDOT STANDARDS AND BRIDGE SPECIFICATIONS SECTION 611, SEVEN (7) DAYS PRIOR TO ITS CONDITIONAL ACCEPTANCE INSPECTION BY THE MAINTAINING AGENCY. THE CONTRACTOR SHALL BE REQUIRED TO BECOME FAMILIAR WITH BCTED'S INSPECTION PROCEDURE.

SUBMITTALS:

1. ALL SUBMITTALS SHOULD BE SUBMITTED TO THE CEI PROJECT MANAGER FOR DISTRIBUTION AND PROJECT RECORDS. THE CONTRACTOR SHALL ALLOW FOR 30 DAY TURN AROUND ON SUBMITTALS. EOR AND COUNTY APPROVAL IS REQUIRED FOR ALL COUNTY PROJECTS.
2. PRIOR TO ANY EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL EQUIPMENT SPECIFICATIONS, OR DESIGN DATA FOR ALL MATERIAL PROPOSED FOR THIS PROJECT.

CONDUITS AND PULLBOXES:

1. ALL HDPE CONDUIT CONNECTIONS SHALL BE JOINED WITH A MECHANICAL COUPLE OR APPROVED EQUAL.
2. ALL UNDERGROUND CONDUITS INSTALLED SHALL BE SEALED AT BOTH ENDS TO PREVENT THE ENTRY OF DUST, DIRT, AND MOISTURE. USE MECHANICAL DUST PLUGS THAT PROVIDE A WATER TIGHT BARRIER BETWEEN THE CONDUIT AND THE FIBER OPTIC CABLE. MECHANICAL DUCT PLUGS SHALL BE INSTALLED IN ALL SPARE CONDUITS AND ELECTRICAL CONDUITS.
3. ALL CONDUITS SHALL BE TESTED FOR CONTINUITY. SPARE CONDUITS SHALL BE FURNISHED WITH PULL CABLE (MULE TAPE) FOR FUTURE USE.
4. IN AREAS WHERE CONDUIT INSTALLATIONS IMPACT EXISTING SIDEWALK REPLACE COMPLETE SECTIONS OF SIDEWALK. PATCHING OF SIDEWALK WILL NOT BE ACCEPTED.
5. ALL CONDUITS SHALL BE 2 IN. DIAMETER UNLESS OTHERWISE NOTED IN THE PLANS.
6. ALL EXISTING CONDUITS ARE TO BE CLEANED OF DEBRIS AND PROOFED PRIOR TO THE INSTALLATION OF ANY FIBER CABLE.
7. DO NOT LEAVE TRENCH OPENED OVERNIGHT OR WHEN WORKERS ARE NOT PRESENT. INSTALL CONDUITS IN A CONTINUOUS OPERATION WHERE TRENCH IS OPENED, CONDUIT IS PLACED, AND TRENCH IS FILLED IN AS THE TRENCHING OPERATION MOVES ALONG.
8. MAINTAIN 1000' MAXIMUM SPACING BETWEEN FIBER PULL BOXES AND/OR FIBER SPLICE BOXES. ALL PULL BOXES SHALL BE RATED TIER-22.

UTILITIES:

1. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS IS BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. UTILITIES SHALL REMAIN UNLESS OTHERWISE NOTED.
2. IT IS THE INTENT OF THESE PLANS THAT THE PROPOSED EQUIPMENT TO BE INSTALLED IS TO BE PLACED IN SUCH A MANNER SO AS TO TOTALLY AVOID ANY CONFLICTS WITH EXISTING UTILITIES ALONG THE ROUTE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY INFORMATION TO PLAN THEIR WORK WITHIN THE DESIGN OR SPECIFIED PARAMETERS, AND THE SPECIFIED TIMEFRAME. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL ABOVEGROUND AND UNDERGROUND CONFLICTS IN ADVANCE OF THE PLACEMENT OF ANY CONDUIT OR OTHER FACILITIES.
3. THE CONTRACTOR SHALL USE HAND EXCAVATION METHODS WHEN EXCAVATING NEAR EXISTING UTILITIES, OR WHERE HAND-DIGGING IS SPECIFIED ON THE PLANS. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK. EXTREME CAUTION SHALL BE USED BY THE CONTRACTOR WHEN EXCAVATING, INSTALLING, BACKFILLING AND COMPACTING AROUND EXISTING UTILITIES.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE LOCATION AND PROTECTION, REPAIR AND/OR REPLACEMENT OF ALL UTILITIES, INCLUDING SPRINKLER AND SUPPLY LINES, THAT MAY BE AFFECTED BY THE CONSTRUCTION OF THIS PROJECT.
5. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS THROUGH SUNSHINE ONE CALL OF FLORIDA INC. (1-800-432-4770) AND UTILITY OWNERS LISTED BELOW TWO (2) BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE. A CONTRACTOR'S REPRESENTATIVE SHALL BE PRESENT WHEN THE UTILITY COMPANY LOCATES THEIR FACILITIES. THE LOCATION OF EXISTING UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR AND THE UTILITY REPRESENTATIVE WHEN NECESSARY DURING CONSTRUCTION.

FIBER OPTIC CABLE:

1. FIBER OPTIC TRUNK CABLE SHALL BE ARMORED.
2. FIBER OPTIC DROP CABLE SHALL NOT BE ARMORED. IF THE DISTANCE FROM THE FIBER OPTIC TRUNK CABLE IS GREATER THAN 20 FEET, A LOCATE WIRE MUST BE INSTALLED WITHIN THE SAME CONDUIT WITH THE FIBER CABLE. DO NOT BRING LOCATE WIRE INTO CABINET.
3. MARK THE JACKET WITH THE MANUFACTURER'S NAME, FIBER TYPE, FIBER COUNT, DATE OF MANUFACTURE, THE WORDS "BCTED FIBER OPTIC CABLE" AND THE SEQUENTIAL CABLE LENGTHS MARKED IN FEET.
4. USE BCTED APPROVED LABELS AND BCTED CABLE ID SCHEME TO LABEL ALL FIBER CABLES AT PULL BOXES, SPLICE ENCLOSURES AND CABINETS. COST OF LABELS ARE INCLUDED IN THE PAY ITEMS 633-1-113, 633-1-121 AND 633-1-123.
5. NO MECHANICAL SPLICING IS ALLOWED, ALL SPLICINGS MUST BE FUSION. USE PRE-TERMINATED CONNECTOR ASSEMBLIES (PIG-TAILS) AT PATCH PANELS.

INTERCONNECT NOTES:

1. THE CONTRACTOR SHALL BE AWARE THAT SYSTEM COMMUNICATIONS INTERCONNECT MAY EXTEND THROUGHOUT THE PROJECT. CABLE RUNS AND/OR CONDUIT, AND ANY OTHER SIGNAL OR OTHER SYSTEMS EQUIPMENT DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
2. ANY MATERIAL FURNISHED FOR THE PURPOSES OF: NEW INSTALLATION, REPLACEMENT OR REPAIR OF THE EXISTING COMMUNICATIONS INFRASTRUCTURE SHALL MEET THE STANDARDS AND SPECIFICATIONS OF BROWARD COUNTY TRAFFIC ENGINEERING DIVISION (BCTED). ANY SUPPLIED CONTROLLER CABINET, CONTROLLER, TELEMETRY UNIT, COMMUNICATIONS CABLE, PULL BOX, CONDUIT, SHALL COMPLY WITH THE LATEST REQUIREMENTS AS STATED BY BCTED AND SHALL PROVIDE FOR FULL FUNCTIONALITY WITH THE EXISTING BCTED'S ATMS.now OPERATIONS.

CITY OF TAMARAC NOTES:

1. MAINTAIN AT LEAST 24' FROM EXISTING CITY OF TAMARAC'S UTILITIES.
2. PROVIDE A COPY OF AS-BUITLS AND BORE LOGS TO THE CITY OF TAMARAC.

UTILITY COMPANY:	CONTACT PERSON:	PHONE NUMBER:
ADVANCE CABLE COMMUNICATIONS	SEAN HAYDEN	(772) 607-2203
AT&T DISTRIBUTION	LAZARO SIXTO	(772) 332-7382
BREEZELINE	JAVARES SIXTO	(305) 861-8069 X5208
BROWARD COUNTY TRAFFIC ENGINEERING	REBECCA MARTINEZ	(954) 847-2619
BROWARD COUNTY COMMUNICATIONS	ROBERT BLOUNT	(954) 847-2745
BROWARD COUNTY WATER & WASTEWATER	HALINA PLUTA	(954) 831-0793
CITY OF CORAL SPRINGS	NAIJA ZERROUKI	(954) 345-2188
CITY OF TAMARAC	JUSTIN ANTONOFF	(954) 597-3914
COMCAST CABLE	RICARDO DAVIDSON	(786) 586-8505
CORAL SPRING IMPROVEMENT DISTRICT	CURT DWIGGINS	(954) 344-1065
CROWN CASTLE NG	DANNY HASKETT	(786) 610-7073
FLORIDA POWER & LIGHT-BROWARD	AKRUM JOMAA	(954) 321-2067
FLORIDA POWER & LIGHT-FIBER	WAYNE KRAMER	(561) 313-6891
HOTWIRE COMMUNICATION	WALTER SANCHO-DAVILA	(954) 699-0900
LUMEN / CENTURI LINK	LESLIE DINGMAN	(887) 366-8344 X2
MCI	FIELD CONTACT	(800) 624-9675 X2
TECO PEOPLES GAS SOUTH FLORIDA	JOAN DOMNING	(813) 275-3783

ABBREVIATIONS

AFOC:	ARMORED FIBER OPTIC CABLE
BCTED:	BROWARD COUNTY TRAFFIC ENGINEERING DIVISION
BCTED CIC:	BROWARD COUNTY TRAFFIC ENGINEERING DIVISION COPPER INTERCONNECT CABLE
BOSW:	BACK OF SIDEWALK
B.P.B.:	BCTED CIC PULL BOX
C.S.I.D.:	CORAL SPRING IMPROVEMENT DISTRICT
COCS:	CITY OF CORAL SPRINGS
E.P.B.:	ELECTRICAL PULL BOX
FO:	FIBER OPTIC
FOC:	FIBER OPTIC CABLE (NOT ARMORED)
FOPB:	FIBER OPTIC PULL BOX
FOSB:	FIBER OPTIC SPLICE BOX
S.F.W.M.D:	SOUTH FLORIDA WATER MANAGEMENT DISTRICT
SGU:	SHEATH GROUNDING UNIT
SM:	SINGLE MODE
S.P.B.:	SIGNAL PULL BOX
S.W.C.D.:	SUNSHINE WATER CONTROL DISTRICT
SWPPP:	STORM WATER POLLUTION PREVENTION PLAN
V.P.B.:	VIDEO PULL BOX
WGU:	WIRE GROUNDING UNIT
(CR XX)	SIDEWALK CURB RAMP PER FDOT INDEX 304

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

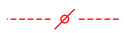
CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

GENERAL NOTES

SHEET NO. 04

BCTED NO. 230803061

LEGEND:

	EXISTING	PROPOSED
GROUND MOUNT CABINET OR JUNCTION BOX		
FIBER OPTIC PULL BOX		
FIBER OPTIC SPLICE BOX		
SIGNAL STRAIN POLE		
EXISTING CONDUIT TO BE REUSED		
DIRECTIONAL BORE CONDUIT		
UNDERGROUND CONDUIT/OPEN TRENCH (EXISTING TO REMIAN)		
BURIED ELECTRIC		
BURIED FIBER OPTIC		
JACK AND BORE CONDUIT		
NON PORTABLE WATER		
OVERHEAD ELECTRIC		
GRAVITY MAIN		
GAS LINE		
WATER MAIN		
UTILITY EASEMENT		
EXISTING WETLAND		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:33:01 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austin.willard@metriceng.com\dms27854\GWNTITF01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

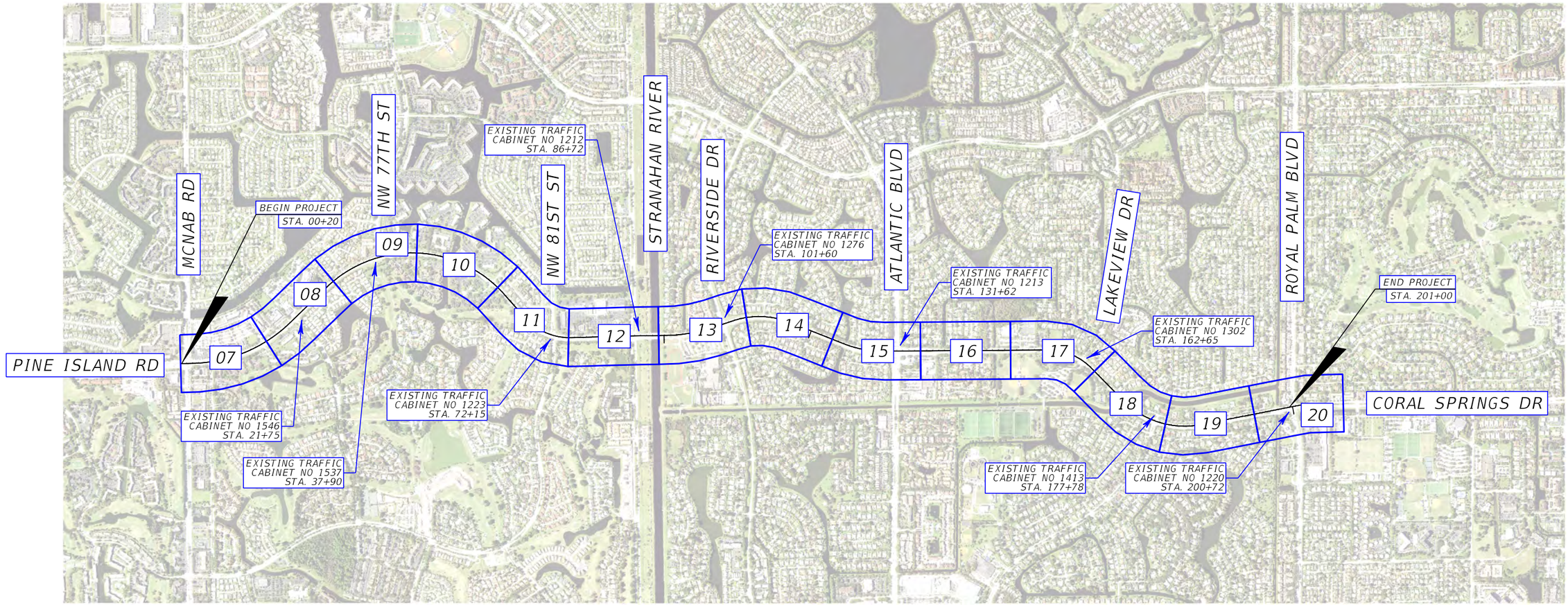
PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

LEGEND

SHEET NO. 05

BCTED NO. 230803061



REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PROJECT LAYOUT

SHEET NO. 06

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:33:20 AM AustinWillard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\ricardo.gonzalez@metriceng.com\dms27854\PLAYIT01.dgn

BCTED NO. 230803061

R/W LINE

R/W LINE

W MCNAB ROAD

ATT&T:
BT-COPPER
BTA-COPPER

ATT&T: BT DUCT BANK 21-4" PVC
BT-2-FIBERS

FPL OE - 23 Kv

EX. 24" WM

LUMEN: METRO LATERAL, UNDERGROUND
LUMEN (CENTURY LINK / LEVEL 3)
(3) 1.5" HDPE CONDUITS

BEGIN PROJECT
STA. 00+20

ATT&T: MH
MR-7, MR-7.5
6'X12'X7'

ATT&T: BT DUCT BANK 9-4" PVC
BT-COPPER

FPL OE - 23 Kv

8" POLYVINYL CHLORIDE
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

FORCE MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

R/W LINE

ATT&T: BT-COPPER

STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

N1°35'23"W

N90°0'0"E

N PINE ISLAND ROAD

ATT&T: BT DUCT BANK 12-4" PVC

N PINE ISLAND ROAD

SAN

ATT&T: OT-2-FIBERS
BT-COPPER
BTA-COPPER

UTILIZE EXISTING
SPLICE BOX
96SM AFOC SLACK

633-1-123	100 LF
633-2-31	94 EA
633-3-12	7 EA
633-3-51	1 EA

FPL OE - 23 Kv

R/W LINE

FPL OE - 23 Kv

UTILITY EASEMENT

CROWN CASTLE (4) 1.5" CONDUIT (1)

EX. 8" FM

ATT&T: OT-FIBER

CROWN CASTLE (4) 1.5" CONDUIT (1)

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 403 LF
633-1-123	403 LF

EX. 16" WM

EX. 24" FM

ATT&T: BT DUCT BANK 1-4" PVC

FPL BE - 23 Kv

UTILITY EASEMENT

FPL BE - 23 Kv

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

W MCNAB ROAD

R/W LINE

NW 70TH STREET

R/W LINE

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 1096 LF
633-1-123	1096 LF

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:33:47 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\ricardo.gonzalez@metriceng.com\dms27854\PLANIT01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 07

BCTED NO. 230803061

ATT&T: BT DUCT BANK 9-4" PVC
BT-2-COPPER
BT-FIBER

15" REINFORCED CONCRETE
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

ATT&T: BT DUCT BANK 9-4" PVC
BT-COPPER

24"
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

16" DUCTILE IRON
FORCE MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

ATT&T: MH
PI-12
6'X12'X7'

CROWN CASTLE
(4) 1.5" CONDUIT (1)

R/W LINE

FPL BE - 23 Kv

FPL OE - 23 Kv

GRAVITY MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

15"
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

FPL BE - 23 Kv

ATT&T: BT DUCT BANK 9-4" PVC
BT-2-COPPER

R/W LINE
UTILITY EASEMENT

FPL OE - 23 Kv

EX. 8" WM

N44°5'23"W

N PINE ISLAND ROAD

ATT&T: BT-FIBER

ATT&T: OT-FIBER

UTILITY EASEMENT

FPL OE - 23 Kv

15" CORRUGATED METAL
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

CROWN CASTLE (4) 1.5" CONDUIT (1)

ATT&T: OT-FIBER

R/W LINE

EX. 16" WM

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 711 LF
633-1-123	711 LF

FOC SPLICE BOX
96SM AFOC SLACK &
W/ CONCRETE PAD

50 LF	633-1-121
2 x 100 LF	633-1-123
4 EA	633-2-31
1 EA	633-3-11
1 EA	633-3-12
1 EA	635-2-15

EX. 10" FM

UTILITY EASEMENT

R/W LINE

NW 75TH STREET

REMOVE AND REPLACE
CONCRETE SIDEWALK FLAG
FOR CONDUIT INSTALLATION

110-4-10	3 SY
522-2	3 SY

SEE INSET A

EXISTING TRAFFIC
CABINET NO. 1546
STA. 21+75

633-2-32	4 EA
633-3-16	1 EA

ATT&T: OT-FIBER

EX. 8" WM

UTILITY EASEMENT

R/W LINE

FPL BE - 23 Kv

INSET A
SCALE 1:10

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 797 LF
633-1-123	797 LF

OPEN TRENCH
INTERSECT EXISTING 2" SPARE CONDUIT
& EXTEND IT TO PROPOSED F.O.S.B.
1-2" HDPE CONDUIT
12SM FOC (ORANGE CONDUIT)

630-2-11	1 RUN @ 52 LF
633-1-121	84 LF

N PINE ISLAND ROAD

R/W LINE

FPL BE - 23 Kv

EX. 12" WM

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:33:55 AM Austin.Willard
C:\pwworkingdir\metric-pw.hentley.com_metric-pw-01\ricardo.gonzalez@metriceng.com\dms27854\PLAN1T01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 08

BCTED NO. 230803061

N

N PINE ISLAND ROAD

NW 76TH STREET

NW 77TH STREET

NW 78TH STREET

HOLLY CT

R/W LINE

UTILITY EASEMENT

FPL BE - 23 Kv

FPL OE - 23 Kv

EX. 8" WM

AT&T: BT DUCT BANK 9-4" PVC
BT-2-COPPER

16" DUCTILE IRON
FORCE MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

8" VITRIFIED CLAY
GRAVITY MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

6" CAST IRON
SANITARY WASTEWATER
CITY OF TAMARAC

EX. 8" FM
GRAVITY MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

AT&T:
BT-COPPER

EX. 12" WM

EX. 6" WM

SEE INSET A

GRAVITY MAIN
8" VITRIFIED CLAY
SANITARY WASTEWATER
CITY OF TAMARAC

FOC SPLICE BOX
96SM AFOC SLACK &
W/ CONCRETE PAD

633-1-121	50 LF
633-1-123	2 x 100 LF
633-2-31	4 EA
633-3-11	1 EA
633-3-12	1 EA
635-2-15	1 EA

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 595 LF
633-1-123	595 LF

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 209 LF
633-1-123	209 LF

CROWN CASTLE (4) 1.5" CONDUIT (1)

STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

UTILIZE EXISTING 2"
SPARE CONDUIT
12SM FOC

17 LF 633-1-121

EXISTING TRAFFIC
CABINET NO. 1537
STA. 37+90

4 EA 633-2-32
1 EA 633-3-16

INSET A
SCALE 1:10

16"
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

AT&T: BT 4-4" PVC
OT-2-FIBER
BT-2-FIBER
BT-3-COPPER
UTILITY EASEMENT

STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC
UTILITY EASEMENT

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 669 LF
633-1-123	669 LF

OPEN TRENCH
1-2" HDPE CONDUIT
12SM FOC (ORANGE CONDUIT)

630-2-11	1 RUN @ 29 LF
633-1-121	29 LF

REPLACE P.B. W/F.O.P.B.
12SM FOC SLACK &
W/CONCRETE PAD

633-1-121	50 LF
635-2-12	1 EA
635-2-60	1 EA

AT&T:
BT-COPPER

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:02 AM Austin.Willard
c:\pwworkingdir\metric-pw_bentley.com_metric-pw-01\austin.willard@metricengg.com\dms27854\PLANIT01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 09

BCTED NO. 230803061

8" POLYVINYL CHLORIDE
GRAVITY MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

16" FORCE MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

EX. 8" WM

FPL BE - 23 Kv

CROWN CASTLE (4) 1.5" CONDUIT (1)

UTILITY EASEMENT

R/W LINE

STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

FORCE MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

EXISTING WETLANDS

FPL OE - 23 Kv

AT&T: BT 1-4" PVC
BT-FIBER
BT-COPPER

AT&T:
OT-FIBER
BT-3-COPPER

18"
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

FPL BE - 23 Kv

GRAVITY MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

AT&T:
BT-COPPER

UTILITY EASEMENT

R/W LINE

15" CORRUGATED METAL
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

EX. 8" WM

NW 79TH STREET

N90°0'0"E

5 46 47 48 49 50 51 52 53 54 55 56 57 58 59 6

N PINE ISLAND ROAD

EX. 12" WM

R/W LINE

UTILITY EASEMENT

DIRECTIONAL BORE
3-2" HDPE CONDUIT
965M AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 1078 LF
633-1-123	1078 LF

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 306 LF
633-1-123	306 LF

CROWN CASTLE (4) 1.5" CONDUIT (1)

AT&T:
BT-COPPER

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

50 LF	633-1-123
1 EA	635-2-12

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 82 LF	630-2-12
82 LF	633-1-123

R/W LINE

AZALEA CT

R/W LINE

UTILITY EASEMENT

AT&T:
BT-FIBER
BT-2-COPPER

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:08 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austin.willard@metriceng.com\dms27854\PLAN[T01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 10

BCTED NO. 230803061

INSET A
SCALE 1:10

INSET B
SCALE 1:10

FORCE MAIN
SANITARY
WASTEWATER
CITY OF TAMARAC

AT&T:
BT-COPPER

SAWCUT CONCRETE APRON

UTILIZE EXISTING 2" SPARE CONDUIT 12SM FOC
633-1-121 52 LF

REPLACE P.B. W/F.O.S.B. 96SM AFOC SLACK W/CONCRETE PAD

633-1-121	50 LF
633-1-123	2 x 100 LF
633-2-31	4 EA
633-3-11	1 EA
633-3-12	1 EA
635-2-15	1 EA
635-2-60	1 EA

UTILIZE EXISTING 2" SPARE CONDUIT 12SM FOC
633-1-121 15 LF

AT&T:
OT-2-FIBER
BT-2-COPPER
BTA-COPPER

NW 81ST STREET

UTILITY EASEMENT

R/W LINE

FPL BE - 23 Kv

EX. 12" WM

EX. 24" FM

AT&T:
BT-COPPER

FPL OE - 23 Kv

FPL OE - 23 Kv

FPL BE - 23 Kv

GRAVITY MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

UTILITY EASEMENT

R/W LINE

REMOVE EXISTING JUNCTION BOX CABINET
676-1-600 1 EA

18" CORRUGATED METAL
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

EXISTING TRAFFIC CABINET NO. 1223
STA. 72+15

4 EA	633-2-32
1 EA	633-3-16

UTILITY EASEMENT
633-1-121 50 LF

SANITARY WASTEWATER
CITY OF TAMARAC
12" DUCTILE IRON
FORCE MAIN

R/W LINE

UTILITY EASEMENT

EX. 16" FM

FPL BE - 23 Kv

AT&T:
BT-COPPER

FPL BE - 23 Kv

15" REINFORCED CONCRETE

18" REINFORCED CONCRETE
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

N PINE ISLAND ROAD

N48°16'17"E

N90°00'E

0 61 62 63 64 65 66 67 68 69 71 72 73 74

FPL OE - 23 Kv

FPL BE - 23 Kv

EX. 10" SAN

UTILITY EASEMENT

R/W LINE

AT&T:
OT-2-FIBER
BT-2-COPPER

SEE INSET A

AT&T:
OT-2-FIBER
BT-2-COPPER

EX. 12" FM

EX. 10" WM

NW 81ST STREET

UTILITY EASEMENT

R/W LINE

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 883 LF 630-2-12
883 LF 633-1-123

CROWN CASTLE (4) 1.5" CONDUIT (1)

AT&T:
BT-FIBER
BT-2-COPPER

EX. 8" SAN
GRAVITY MAIN
SANITARY WASTEWATER
CITY OF TAMARAC

F.O.P.B.
96SM AFOC SLACK &
REPLACE CONCRETE FLAG

5 SY	110-4-10
5 SY	522-2
50 LF	633-1-123
1 EA	635-2-12

EXISTING WETLANDS

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 330 LF 630-2-12
330 LF 633-1-123

UTILITY EASEMENT

R/W LINE

NW 79TH STREET

EXISTING WETLANDS

SEE INSET B

EX. 12" WM

UTILITY EASEMENT

R/W LINE

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 326 LF 630-2-12
326 LF 633-1-123

AT&T:
BT-COPPER

UTILITY EASEMENT

R/W LINE

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:15 AM austin.Willard
c:\pwworkingdir\metric_pw_bentley.com_metric_pw-01\austin.willard@metricengg.com\dms27854\PLAN1T01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 11

INSET A
SCALE 1:10

INSET B
SCALE 1:10

INSET C
SCALE 1:10

SAWCUT CONCRETE APRON

EXISTING TRAFFIC CABINET NO. 1212
STA. 86+72

633-2-32	4 EA
633-3-16	1 EA

REPLACE P.B. W/F.O.P.B. 96SM AFOC SLACK & W/CONCRETE PAD

50 LF	633-1-123
1 EA	635-2-12
1 EA	635-2-60

UTILIZE EXISTING F.O.P.B. 12SM FOC SLACK

633-1-121	50 LF

UTILIZE EXISTING 2" SPARE CONDUIT 12SM FOC

633-1-121	17 LF

REPLACE E.P.B.

635-2-11	3 EA
635-2-60	3 EA

REMOVE AND REPLACE CONCRETE APRON

110-4-10	20 SY
522-2	20 SY

SOUTHGATE BLVD

BCTED NO. 230803061

R/W LINE

FPL OE - 23 Kv

S.F.W.M.D. R/W LINE

HOTWIRE COMM. 1-2" HDPE FOC

REMOVE BCTED CIC
UTILIZE EXISTING 2"
3-2" MAXCELL INNERDUCT
CONDUIT (NOTE 1 & 2)
96SM AFOC

196 LF	633-1-123

EXISTING WETLANDS

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 179 LF	630-2-12
179 LF	633-1-123

EXISTING BARRIER WALL

EX. 10" WM

UTILITY EASEMENT

R/W LINE

HOTWIRE COMM. 1-2" HDPE FOC

STORMWATER DRAINAGE COLLECTOR
18" REINFORCED CONCRETE
CITY OF TAMARAC

AT&T:
BT-COPPER

STORMWATER DRAINAGE COLLECTOR
12" REINFORCED CONCRETE
CITY OF TAMARAC

UTILITY EASEMENT

R/W LINE

SEE INSET A

SEE INSET C

SEE INSET B

N PINE ISLAND ROAD

CORAL SPRINGS DRIVE

N1°35'51"W

NO°58'18"W

5 76 77 78 79 80 81 82 83 84 85 86 87 88 89 9

18" REINFORCED CONCRETE
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

15" REINFORCED CONCRETE
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

24"
STORMWATER DRAINAGE COLLECTOR
CITY OF TAMARAC

15" CORRUGATED METAL

UTILITY EASEMENT

R/W LINE

STA. 113+54

EX. 12" WM

R/W LINE

UTILITY EASEMENT

AT&T:
0T-2-FIBER

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 535 LF	630-2-12
535 LF	633-1-123

F.O.P.B.
96SM AFOC SLACK &
REPLACE CONCRETE FLAG

5 SY	110-4-10
5 SY	522-2
50 LF	633-1-123
1 EA	635-2-12

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 652 LF	630-2-12
652 LF	633-1-123

FPL BE - 23 Kv

FPL OE - 23 Kv

CROWN CASTLE (4) 1.5" CONDUIT (1)

OPEN TRENCH
1-2" HDPE CONDUIT
12SM FOC (ORANGE CONDUIT)

630-2-11	1 RUN @ 32 LF
633-1-121	32 LF

F.O.P.B.
96SM AFOC SLACK &
REPLACE CONCRETE FLAG

110-4-10	5 SY
522-2	5 SY
633-1-121	50 LF
633-1-123	2 x 100 LF
633-2-31	4 EA
633-3-11	1 EA
633-3-12	1 EA
635-2-15	1 EA

FPL BE - 23 Kv

EX. 8" WM

AT&T:
BT-FIBER

SOUTHGATE BLVD

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 108 LF
633-1-123	108 LF

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

HOTWIRE COMM. OVERHEAD FOC

FPL: OVERHEAD FACILITY

R/W LINE

S.F.W.M.D. R/W LINE

FPL BE - 23 Kv

NOTES:
1. CLEAN EXISTING CONDUIT OF WATER, DIRT OR SAND, AND ANY OBSTRUCTION THAT CAN PREVENT THE PROPER INSTALLATION OF THE MAXCELL INNERDUCT AND THE 96SM FOC.
2. COST OF CABLE REMOVAL, CONDUIT CLEANING, AND 3-2" MAXCELL INNERDUCT CONDUIT INSTALLATION TO BE INCLUDED IN THE 633-1-123 PAY ITEM COST.

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:22 AM AustinWillard
C:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austinwillard@metriceng.com\dms27854\PLANIT01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 12

BCTED NO. 230803061

S.F.W.M.D. R/W LINE

UTILITY EASEMENT

REMOVE BCTED CIC
UTILIZE EXISTING 2" 3-2" MAXCELL INNERDUCT CONDUIT (NOTE 1 & 2) 96SM AFOC

633-1-123	45 LF

EXISTING WETLANDS

INTERSECT EXISTING 2" CONDUIT AND EXTEND TO PROPOSED F.O.P.B. DIRECTIONAL BORE
REMOVE BCTED CIC 3-2" MAXCELL INNERDUCT CONDUIT (NOTE 1, 2 & 3) 96SM AFOC

630-2-12	1 RUN @ 92 LF
633-1-123	136 LF

SEE INSET A

F.O.P.B. 96SM AFOC SLACK & W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

NOTES:
1. CLEAN EXISTING CONDUIT OF WATER, DIRT OR SAND, AND ANY OBSTRUCTION THAT CAN PREVENT THE PROPER INSTALLATION OF THE MAXCELL INNERDUCT AND THE 96SM FOC.
2. COST OF CABLE REMOVAL, CONDUIT CLEANING, AND 3-2" MAXCELL INNERDUCT CONDUIT INSTALLATION TO BE INCLUDED IN THE 633-1-123 PAY ITEM COST.
3. UNABLE TO FIND THE PRECISE LOCATION OF THE EXISTING CONDUIT DURING DESIGN.

BT-COPPER

RIVERSIDE DR

AT&T:
BT-FIBER
BT-COPPER

UTILITY EASEMENT

REMOVE AND REPLACE CONCRETE APRON

110-4-10	9.2 SY
522-2	9.2 SY

R/W LINE

FOC SPLICE BOX 96SM AFOC SLACK & W/ CONCRETE PAD

633-1-121	50 LF
633-1-123	2 x 100 LF
633-2-31	4 EA
633-3-11	1 EA
633-3-12	1 EA
635-2-15	1 EA

EXISTING WETLANDS

EXISTING 48" CMP STORM DRAINAGE APROX. INVERT ELEV.: -0.5' (NOTE 1)

CSID: WATER MAIN
10" PVC WM

CSID: SEWER GRAVITY MAIN

UTILITY EASEMENT

R/W LINE

DIRECTIONAL BORE 3-2" HDPE CONDUIT 96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 979 LF
633-1-123	979 LF

SEE INSET B

DIRECTIONAL BORE 3-2" HDPE CONDUIT 96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 329 LF
633-1-123	329 LF

AT&T:
BT-COPPER

CORAL SPRINGS DRIVE

0 91 92 93 94 95 96 97 98 99 100 101 102 103 104

N1°17'2"W N90°0'0"E N18°28'1"W

POT STA. 94+75

BEGIN SCHOOL ZONE STA. 91+53.82

S.F.W.M.D. R/W LINE

INSET A
SCALE 1:10

REPLACE P.B. W/F.O.P.B. 96SM AFOC SLACK & W/CONCRETE PAD

50 LF	633-1-123
1 EA	635-2-12
1 EA	635-2-60

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

FPL BE - 23 Kv

EXISTING TRAFFIC CABINET NO. 1276 STA. 101+60

4 EA	633-2-32
1 EA	633-3-16

EXISTING BARRIER WALL

CROWN CASTLE (4) 1.5" CONDUIT (1)

UTILIZE EXISTING 2" SPARE CONDUIT 12SM FOC

20 LF	633-1-121

UTILIZE EXISTING F.O.P.B. 96SM AFOC SLACK

50 LF	633-1-121

INSET B
SCALE 1:10

FPL BE - 23 Kv

OPEN TRENCH 2" HDPE CONDUIT 12SM FOC (ORANGE CONDUIT)

630-2-11	1 RUN @ 43 LF
633-1-121	43 LF

END SCHOOL ZONE STA. 103+86.34

AT&T:
BT-FIBER
BT-COPPER

AT&T:
BT-2-FIBER

CSID: SEWER PRESSURIZED MAIN
8" FM

UTILITY EASEMENT

R/W LINE

R/W LINE

NOTES:
1. INSTALL PROPOSED CONDUITS AT LEAST 10' BELOW THE CULVERT BOTTOM INVERT.

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 13

6/7/2024 11:34:29 AM AustinWillard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austinwillard@metriceng.com\dms27854\PLAN\T01.dgn

BCTED NO. 230803061

DIRECTIONAL BORE
3-2" HDPE CONDUIT
965M AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 715 LF
633-1-123	715 LF

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 812 LF
633-1-123	812 LF

NW 3RD STREET

NW 4TH DRIVE

CSID: WATER MAIN

CSID: SEWER GRAVITY MAIN

UTILITY EASEMENT

R/W LINE

AT&T:
BT-COPPER

R/W LINE

UTILITY EASEMENT

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

UTILITY EASEMENT

R/W LINE

R/W LINE

UTILITY EASEMENT

105 106 107 108 109 110 111 112 113 114 115 116 117 118 119

N90°0'0"E

N21°31'59"E

CORAL SPRINGS DRIVE

CSID: 8" D.L. FM

FPL BE - 23 Kv

R/W LINE

UTILITY EASEMENT

AT&T: BT
1-4" PVC
BT-FIBER

POT STA +22.51

R/W LINE

UTILITY EASEMENT

R/W LINE

UTILITY EASEMENT

CSID: SEWER PRESSURIZED MAIN

CROWN CASTLE (4) 1.5" CONDUIT (1)

AT&T:
BT-2-FIBER

NW 4TH DRIVE

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:36 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austin.willard@metricengcom\dms27854\PLANIT01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 14

BCTED NO. 230803061

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 18 LF
633-1-123	18 LF

F.O.P.B.
96SM AFOC SLACK & W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

R/W LINE
UTILITY EASEMENT
AT&T:
BT-COPPER

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 494 LF
633-1-123	494 LF

EXISTING WETLANDS
EXISTING 48" CMP STORM DRAINAGE
APROX. INVERT ELEV.: -0.5'
(NOTE 1)
NW 6TH STREET
CORAL SPRINGS DRIVE
EXISTING WETLANDS
CSID: WATER MAIN
CSID: SEWER GRAVITY MAIN
AT&T:
1-4" PVC
BT-FIBER
FPL BE - 23 Kv
CROWN CASTLE (4) 1.5" CONDUIT (1)
R/W LINE
UTILITY EASEMENT
NW 6TH STREET
R/W LINE
UTILITY EASEMENT
AT&T:
1-4" PVC
BT-FIBER
EXISTING TRAFFIC CABINET NO. 1213
STA. 131+62
CSID: SEWER PRESSURIZED MAIN
CSID: WATER MAIN
10" PVC
R/W LINE
UTILITY EASEMENT

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 659 LF	630-2-12
659 LF	633-1-123

F.O.P.B.
96SM AFOC SLACK & W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

AT&T:
BT-COPPER
CSID: WATER MAIN
CSID: SEWER GRAVITY MAIN
R/W LINE
UTILITY EASEMENT
W ATLANTIC BLVD
AT&T: MH
ABW-7
6'X12'X7'
SEE INSET A
POT STA. 3+12
R/W LINE
UTILITY EASEMENT
W ATLANTIC BLVD
FPL BE - 23 Kv

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 310 LF	630-2-12
310 LF	633-1-123

OPEN TRENCHING
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
(NOTE 1)

630-2-11	3 RUNS @ 35 LF
633-1-123	2 x 35 LF

F.O.P.B.
96SM AFOC SLACK & REPLACE CONCRETE FLAG

110-4-10	5 SY
522-2	5 SY
633-1-123	50 LF
635-2-12	1 EA

UTILITY EASEMENT
R/W LINE
CSID: SEWER GRAVITY MAIN
12" FM
CSID: 16" FM
AT&T: BT
3-4" PVC
UTILIZE EXISTING 1-2" SPARE CONDUIT
96SM AFOC

633-1-123	2 x 163 LF

UTILIZE EXISTING F.O.S.B
96SM AFOC SLACK

633-1-123	2 x 100 LF
633-2-31	96 EA
633-3-12	7 EA

AT&T: BT
DUCT BANK
9-4" PVC
FPL BE - 23 Kv
FPL BE - 23 Kv
R/W LINE
UTILITY EASEMENT
CORAL SPRINGS DRIVE

INSET A
SCALE 1:10

NOTES:

1. INSTALL PROPOSED CONDUITS AT LEAST 10' BELOW THE CULVERT BOTTOM INVERT.

UTILIZE EXISTING F.O.P.B.
96SM AFOC SLACK
2 x 50 LF 633-1-123

0 20 100
Feet

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 15

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:43 AM AustinWillard
C:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austinwillard@metriceng.com\dms27854\PLANIT01.dgn

BCTED NO. 230803061

N

NW 9TH MANOR

R/W LINE

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

CSID: SEWER GRAVITY MAIN

CSID: WATER MAIN
24" WM

EXISTING 36" CMP STORM PIPE
APROX. INVERT ELEV.: 1.0'
(NOTE 1)

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 734 LF
633-1-123	734 LF

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

630-2-12	3 RUNS @ 766 LF
633-1-123	766 LF

EXISTING WETLANDS

EXISTING 36" CMP STORM PIPE
APROX. INVERT ELEV.: 1.0'
(NOTE 1)

EXISTING WETLANDS

R/W LINE

AT&T: BT
1-4" PVC

R/W LINE

135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 15

N0°25'14"W

N0°25'11"W

CORAL SPRINGS DRIVE

CORAL SPRINGS DRIVE

POT STA. +84.30

16" D.I.P. FM

R/W LINE

UTILITY EASEMENT

FPL BE - 23 Kv

UTILITY EASEMENT

CSID: 16" D.I.P. FM

R/W LINE

UTILITY EASEMENT

EXISTING WETLANDS

CROWN CASTLE (4) 1.5" CONDUIT (1)

NOTES:

1. INSTALL PROPOSED CONDUITS AT LEAST 10' BELOW THE CULVERT BOTTOM INVERT.

0 20 100
Feet

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 16

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:50 AM AustinWillard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austinwillard@metriceng.com\dms27854\PLAN1T01.dgn

BCTED NO. 230803061

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
630-2-12 3 RUNS @ 290 LF
633-1-123 290 LF

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD
633-1-123 50 LF
635-2-12 1 EA

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
630-2-12 3 RUNS @ 1021 LF
633-1-123 1021 LF

UTILITY EASEMENT
R/W LINE
AT&T: BT
1-2.5" PVC
FPL: DIRECTIONAL DRILL
(3) 2" HDPE
CSID: WATER MAIN
12" WM
AT&T: BT DUCT BANK
6-4" PVC
CROWN CASTLE (4) 1.5" CONDUIT (1)
FPL BE - 23 Kv
UTILITY EASEMENT
R/W LINE
LAKEVIEW DRIVE
FPL BE - 23 Kv
SEE INSET A
R/W LINE
UTILITY EASEMENT
CSID: SEWER PRESSURIZED MAIN
CSID: SEWER GRAVITY MAIN
AT&T: BT-FIBER
EXISTING TRAFFIC CABINET NO. 1302
STA. 162+65
4 EA 633-2-32
1 EA 633-3-16
F.O.P.B.
12SM FOC SLACK
633-1-121 50 LF
635-2-12 1 EA
OPEN TRENCH
1-2" HDPE CONDUIT
12SM FOC (ORANGE CONDUIT)
630-2-11 1 RUN @ 20 LF
633-1-121 20 LF
DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 229 LF 630-2-12
229 LF 633-1-123
CORAL SPRINGS DRIVE
CORAL SPRINGS DRIVE
R/W LINE
UTILITY EASEMENT
R/W LINE
UTILITY EASEMENT
CROWN CASTLE (4) 1.5" CONDUIT (1)
AT&T: BT
1-2" PVC
AT&T: BT DUCT BANK
6-4" PVC

INSET A
SCALE 1:10

ENTER CABINET THROUGH WALL.
SEE DETAIL ON SHEET 24.
2" RGS CONDUIT
12SM FOC
1 RUN @ 5 LF 630-2-14
10 LF 633-1-121

OPEN TRENCHING
2" HDPE CONDUIT
12SM FOC (ORANGE CONDUIT)
1 RUN @ 5 LF 630-2-11
5 LF 633-1-121

REPLACE MISCELLANEOUS
ASPHALT PAVEMENT 6"
339-1 2.83 TN

FOC SPLICE BOX
96SM AFOC SLACK &
W/ CONCRETE PAD
633-1-121 50 LF
633-1-123 2 x 100 LF
633-2-31 4 EA
633-3-11 1 EA
633-3-12 1 EA
635-2-15 1 EA

N90°0'0"E

0 20 100
Feet

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:34:56 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austin.willard@metriceng.com\dms27854\PLANIT01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 17

BCTED NO. 230803061

INSET A
SCALE 1:10

REPLACE P.B. W/F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA
635-2-60	1 EA

EXISTING BARRIER WALL

S.W.C.D. R/W LINE

REMOVE BCTED CIC
UTILIZE EXISTING 2" CONDUIT
3-2" MAXCELL INNERDUCT
CONDUIT (NOTE 1 & 2)
96SM AFOC

75 LF 633-1-123

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

UTILITY EASEMENT

R/W LINE

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 679 LF 630-2-12
679 LF 633-1-123

EXISTING WETLANDS

SEE INSET A

SEE INSET B

INTERSECT EXISTING 2"
SPARE CONDUIT AND EXTEND
IT TO PROPOSED F.O.S.B.
OPEN TRENCH
2" HDPE CONDUIT
12SM FOC (ORANGE CONDUIT)

1 RUN @ 32 LF 630-2-11
32 LF 633-1-121

INSET C
SCALE 1:10

EXISTING TRAFFIC
CABINET NO. 1413
STA. 177+78

633-2-32	4 EA
633-3-16	1 EA

UTILIZE EXISTING 2"
SPARE CONDUIT
12SM FOC

633-1-121 20 LF

AT&T:
BT-COPPER

R/W LINE

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 231 LF 630-2-12
231 LF 633-1-123

S.W.C.D. R/W LINE

EXISTING WETLANDS

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)

3 RUNS @ 492 LF 630-2-12
492 LF 633-1-123

REMOVE AND REPLACE
CONCRETE SIDEWALK FLAG

3.4 SY 110-4-10
3.4 SY 522-2

FPL BE - 23 Kv

SEE INSET C

CSID: 12" WM

CORAL SPRINGS DRIVE

N45°26'30"E

N90°0'0"E

CORAL SPRINGS DRIVE

R/W LINE

UTILITY EASEMENT

CROWN CASTLE (4) 1.5" CONDUIT (1)

INSET B
SCALE 1:10

EXISTING BARRIER WALL

REPLACE P.B. W/F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD

633-1-123	50 LF
635-2-12	1 EA
635-2-60	1 EA

S.W.C.D. R/W LINE

AT&T: BT DUCT BANK
6-4" PVC

FPL BE - 23 Kv

R/W LINE

UTILITY EASEMENT

S.W.C.D. R/W LINE

UTILITY EASEMENT

R/W LINE

FOC SPLICE BOX
96SM AFOC SLACK &
W/ CONCRETE PAD

633-1-121	50 LF
633-1-123	2 x 100 LF
633-2-31	4 EA
633-3-11	1 EA
633-3-12	1 EA
635-2-15	1 EA

UTILITY EASEMENT

R/W LINE

RABLEWOOD DRIVE

WEST OUTFALL CANAL (SWCD)

NOTES:
1. CLEAN EXISTING CONDUIT OF WATER, DIRT OR SAND, AND ANY OBSTRUCTION THAT CAN PREVENT THE PROPER INSTALLATION OF THE MAXCELL INNERDUCT AND THE 96SM FOC.
2. COST OF CABLE REMOVAL, CONDUIT CLEANING, AND 3-2" MAXCELL INNERDUCT CONDUIT INSTALLATION TO BE INCLUDED IN THE 633-1-123 PAY ITEM COST.

0 20 100
Feet

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 18

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:35:04 AM AustinWillard
C:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austinwillard@metriceng.com\dms27854\PLANIT01.dgn

BCTED NO. 230803061

DIRECTIONAL BORE
3-2" HDPE CONDUIT (NOTE1)
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 561 LF | 630-2-12
561 LF | 633-1-123

F.O.P.B.
96SM AFOC SLACK &
W/CONCRETE PAD
50 LF | 633-1-123
1 EA | 635-2-12

DIRECTIONAL BORE
3-2" HDPE CONDUIT (NOTE 1)
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 921 LF | 630-2-12
921 LF | 633-1-123

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

CITY OF CORAL SPRINGS
12" DI WM

AT&T:
BT-COPPER

CSID: WATER MAIN
8" WM

R/W LINE

CORAL SPRINGS DRIVE

30 181 182 183 184 185 186 187 188 189 190 191 192 193 194

N11°1'41"W

R/W LINE

UTILITY EASEMENT

CROWN CASTLE (4) 1.5" CONDUIT (1)

AT&T: BT DUCT BANK
6-4" PVC

FPL BE - 23 Kv

UTILITY EASEMENT

R/W LINE

NW 103RD TERRACE

UTILITY EASEMENT

R/W LINE

NOTES:
1. MAINTAIN 5 FEET SEPARATION BETWEEN WATER MAIN AND PROPOSED FIBER OPTIC CONDUIT.

0 20 100
Feet

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

SHEET NO. 19

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:35:11 AM AustinWillard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austinwillard@metriceng.com\dms27854\PLAN1T01.dgn

BCTED NO. 230803061

F.O.P.B.
96SM AFOC SLACK & W/CONCRETE PAD
50 LF 633-1-123
1 EA 635-2-12

DIRECTIONAL BORE
3-2" HDPE CONDUIT
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 115 LF 630-2-12
115 LF 633-1-123

EXISTING CULVERTS (SEE SHEET 26)

EXISTING WETLANDS

AT&T: BT DUCT BANK
9-4" PVC
BT-COPPER

FPL BE - 23 Kv

DIRECTIONAL BORE
3-2" HDPE CONDUIT (NOTE 1)
96SM AFOC (ORANGE CONDUIT)
3 RUNS @ 577 LF 630-2-12
577 LF 633-1-123

AT&T: BT-COPPER

R/W LINE

CSID: WATER MAIN
8" WM

CORAL SPRINGS DRIVE

AT&T: BT DUCT BANK
6-4" PVC

R/W LINE

UTILITY EASEMENT

CROWN CASTLE (4) 1.5" CONDUIT (1)

EXISTING WETLANDS

S.W.C.D. R/W LINE

SWCD CANAL

S.W.C.D. R/W LINE

CROWN CASTLE (4) 1.5" CONDUIT (1)

EXISTING WETLANDS

SEE INSET A

S.W.C.D. R/W LINE

CSID: WATER MAIN

R/W LINE

CITY OF CORAL SPRINGS
12" DI WM BEND

ROYAL PALM BLVD

FPL OE - 23 Kv

AT&T: BT DUCT BANK
22-4" PVC
BT-2-COPPER

END PROJECT
STA. 201+00

R/W LINE

POT STA. 4+49.99

N11°1'35"W

N90°0'0"E

CORAL SPRINGS DRIVE

R/W LINE

UTILITY EASEMENT

FPL OE - 23 Kv

AT&T: BT DUCT BANK
20-4" PVC
BT-COPPER

UTILITY EASEMENT

R/W LINE

FPL: DIRECTIONAL DRILL
(3) 2" HDPE

ROYAL PALM BLVD

INSET A
SCALE 1:10

EXISTING TRAFFIC CABINET NO. 1220
STA. 200+72
4 EA 633-2-32
1 EA 633-3-16

REMOVE AND REPLACE CONCRETE SIDEWALK FLAG
110-4-10 3.4 SY
522-2 3.4 SY

REPLACE P.B. W/ F.O.S.B
96SM AFOC SLACK

633-1-121	50 LF
633-1-123	100 LF
633-2-31	4 EA
633-3-11	1 EA
633-3-12	1 EA
635-2-15	1 EA
635-2-60	1 EA

UTILIZE EXISTING 2" SPARE CONDUIT
12SM FOC
633-1-121 27 LF

AT&T: BT FIBER
BT-2-COPPER

NOTES:
1. MAINTAIN 5 FEET SEPARATION BETWEEN WATER MAIN AND PROPOSED FIBER OPTIC CONDUIT.

0 20 100
Feet

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

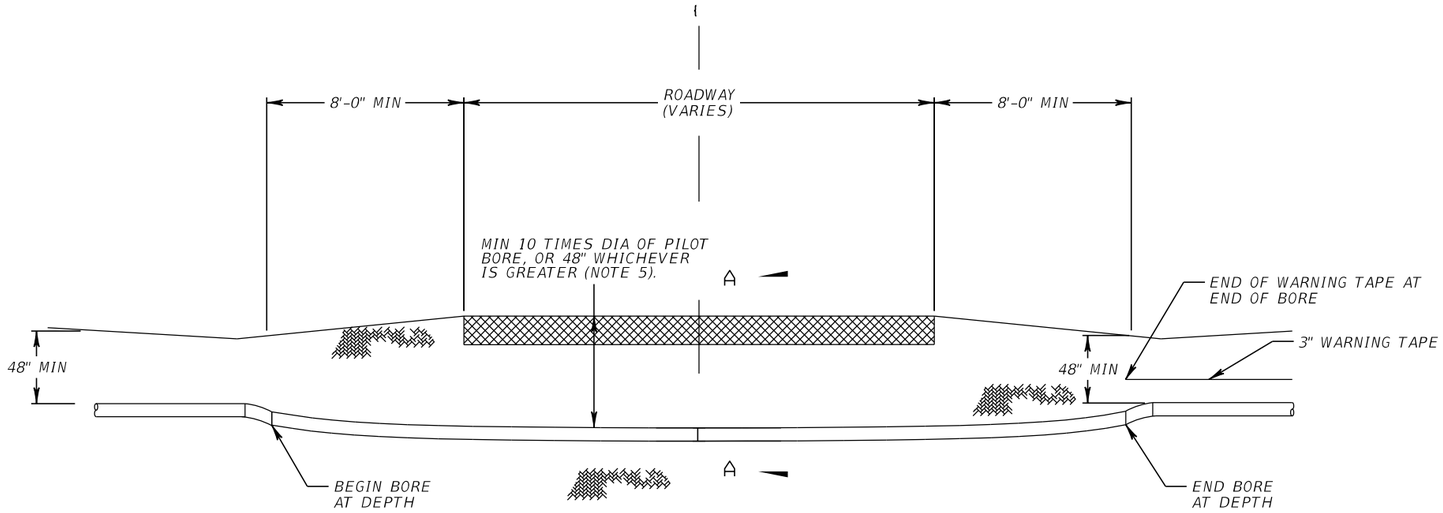
CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PLAN SHEET

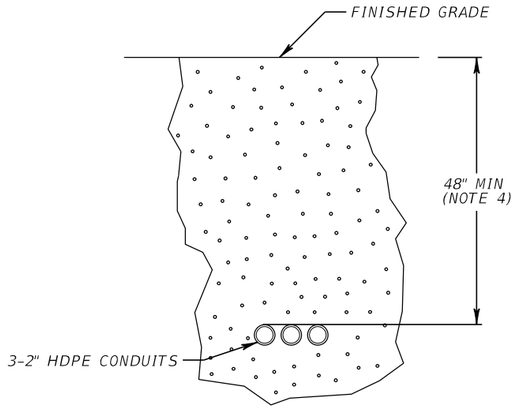
SHEET NO. 20

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

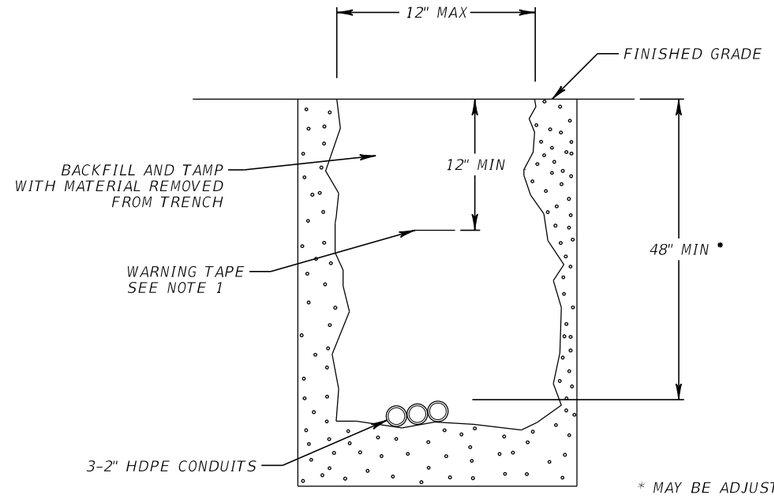
6/7/2024 11:35:18 AM AustinWillard
C:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\austinwillard@metriceng.com\dms27854\PLANIT01.dgn



TYPICAL DIRECTIONAL BORE
NTS



SECTION A-A
NTS



* MAY BE ADJUSTED DUE TO FIELD CONDITIONS UPON APPROVAL OF THE ENGINEER OF RECORD

TYPICAL TRENCHING
NTS

NOTES:

1. WARNING TAPE WITH THE MESSAGE "WARNING, BCTED BURIED FIBER OPTIC CABLE BELOW".
2. UTILITIES IN THE PATH OF THE BORE SHALL BE LOCATED AND THE DEPTH OF THE BORE CROSSING SHALL BE DELINEATED TO CROSS UNDER OR OVER UTILITY WITH 6" MINIMUM SEPARATION.
3. HORIZONTAL DEPTH SHALL BE IN ACCORDANCE WITH FDOT UTILITY ACCOMMODATION MANUAL SECTION 9.3 AND 12.3.
4. FOR BORES WITH REAMER SIZE GREATER THAN 6", THE DEPTH FOR ROADWAY CROSSINGS SHALL BE GREATER THAN 10 TIMES THE BORE REAMER SIZE. THIS WILL AFFECT THE REQUIRED SETBACK DISTANCES IN ORDER TO MEET PROPER DRILL ENTRY AND EXIT ANGLE CRITERIA (NOT TO EXCEED A 1:4 OR 25% SLOPE).

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

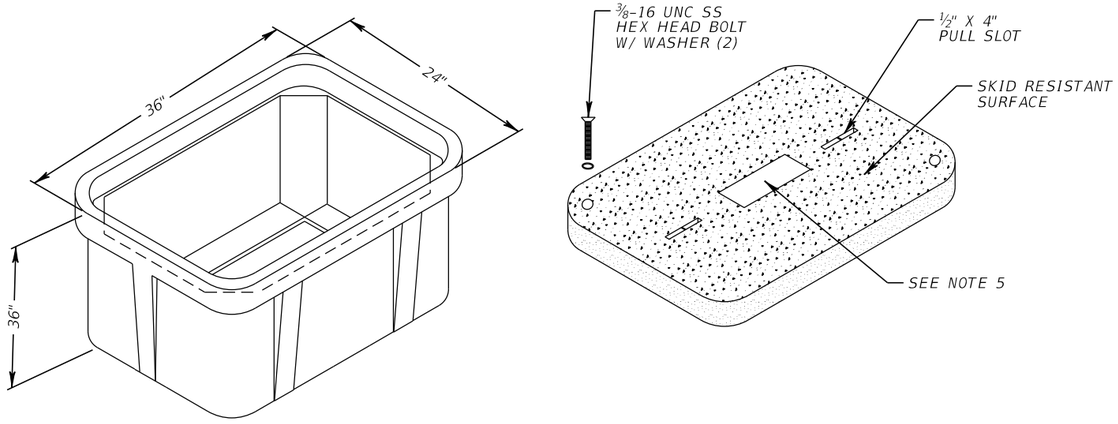
DIRECTIONAL BORE AND TRENCHING DETAIL

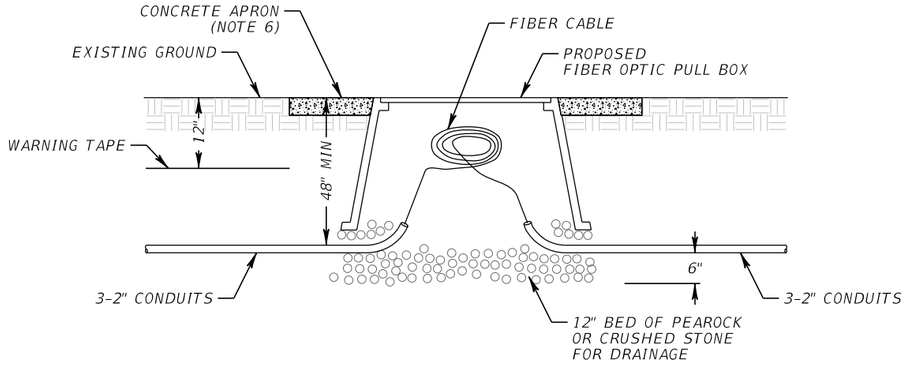
SHEET NO. 21

FIBER OPTIC PULL BOX AND CONDUIT DETAILS
NTS

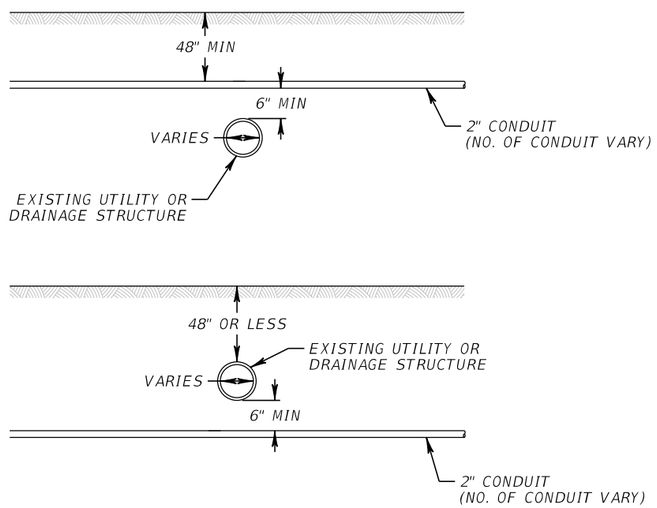
BCTED NO. 230803061

FIBER OPTIC PULL BOX
NTS





CONDUIT DETAIL
NTS



FIBER OPTIC PULL BOX NOTES:

1. FIBER OPTIC PULL BOX SHALL NOT BE INSTALLED IN ROADWAYS, DRIVEWAYS, PEDESTRIAN RAMPS, OR FLARES. PULL BOXES SHALL BE 'HEAVY-DUTY', NON-METALLIC, OF POLYMER MATERIAL, WITH AN OPEN BOTTOM AND RATED FOR A STATIC DESIGN LOAD OF AT LEAST 22,500 LBS. OVER A 10" SQUARE AREA. THE COVER (LID) SHALL BE HEAVY DUTY WITH A MINIMUM ANSI TIER 22 RATING, OF POLYMER MATERIAL.
2. FIBER OPTIC PULL BOX LENGTH (LONG SIDE) SHALL BE PARALLEL TO THE CONDUIT RUN. WHEN THE CONDUIT RUN IS PERPENDICULAR AT THE JUNCTION POINT, THE PULL BOX SHALL BE PARALLEL TO THE ROADWAY.
3. CONDUIT SHALL BE ALIGNED TO TOP EDGE OF PULL BOX TO FACILITATE CABLE PULLING.
4. SPARE FIBER OPTIC CABLE IS TO BE WOUND NEATLY AND CAREFULLY, AS NOT TO EXCEED THE MINIMUM BENDING RADIUS OF THE FIBER OPTIC CABLE.
5. ALL FIBER PULL AND SPLICE BOX COVERS SHALL BE LABELED AS "TRAFFIC FIBER OPTICS".
6. ALL PULL BOXES SHALL BE PROVIDED WITH CONCRETE APRONS WHEN NOT LOCATED WITHIN SIDEWALK. APRON SHALL BE FLUSHED WITH FINISHED GRADE STRUCTURAL CLASS 1 CONCRETE WITH A MINIMUM STRENGTH AT 28 DAYS OF FC = 3.0 KSI. APRONS SHALL BE A MINIMUM OF 12" WIDE ON ALL SIDES AROUND AND 6" DEEP. THE COST OF THE APRON IS TO BE INCLUDED IN THE COST FOR FURNISH AND INSTALL PULL BOX.
7. PULL BOXES SHALL BE PLACED 10' FROM CURB RADIUS AND DRIVEWAY ENTRANCES, RIGHT-OF-WAY PERMITTING.
8. WHEN PULL BOXES ARE INSTALLED IN EXISTING SIDEWALKS, THE ENTIRE FLAG OF SIDEWALK WILL BE REPLACED.

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

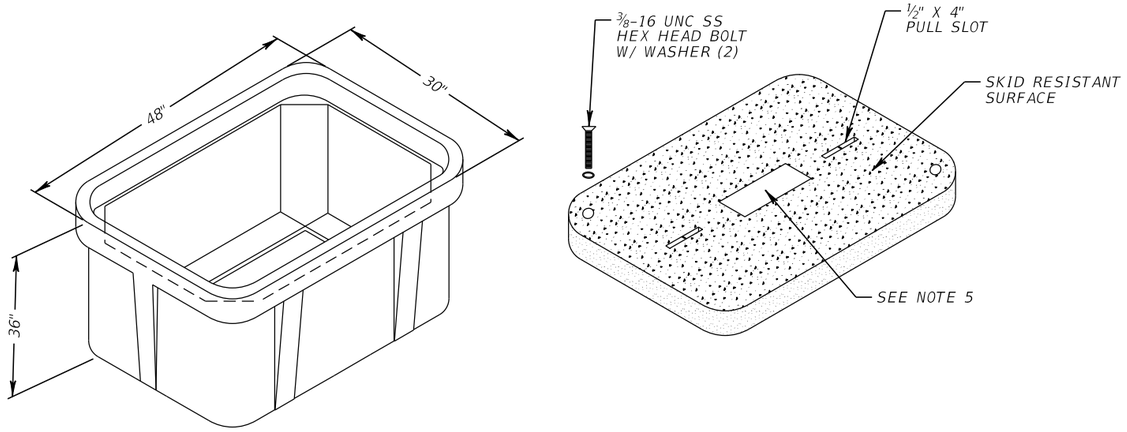
PULL BOX AND CONDUIT DETAILS

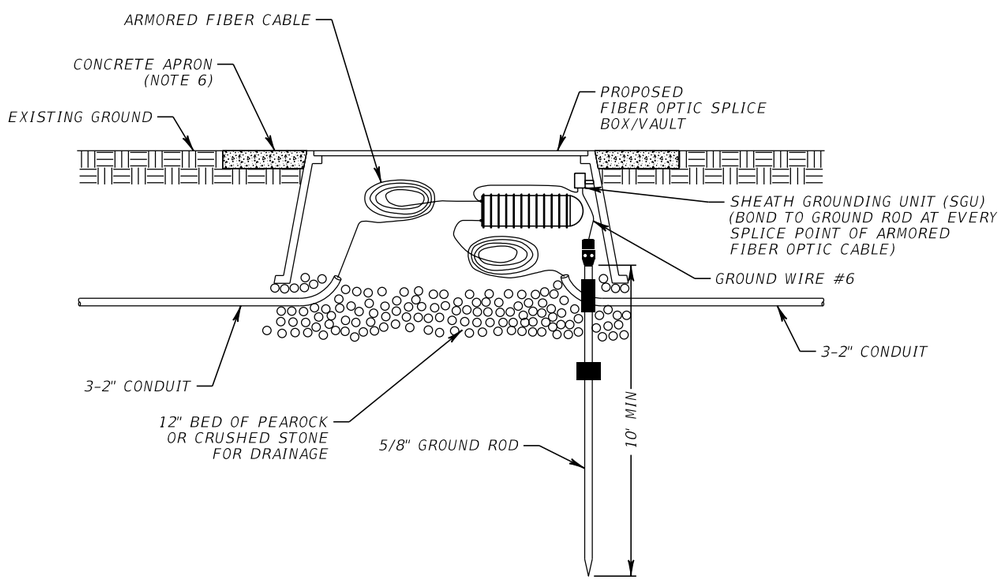
SHEET NO. 22

FIBER OPTIC SPLICE BOX AND CONDUIT DETAILS
NTS

BCTED NO. 230803061

FIBER OPTIC SPLICE BOX
NTS





SPLICE BOX NOTES:

1. FIBER OPTIC PULL BOX SHALL NOT BE INSTALLED IN ROADWAYS, DRIVEWAYS, PEDESTRIAN RAMPS, OR FLARES. PULL BOXES SHALL BE 'HEAVY-DUTY', NON-METALLIC, OF POLYMER MATERIAL, WITH AN OPEN BOTTOM AND RATED FOR A STATIC DESIGN LOAD OF AT LEAST 22,500 LBS. OVER A 10" SQUARE AREA. THE COVER (LID) SHALL BE HEAVY DUTY WITH A MINIMUM ANSI TIER 22 RATING, OF POLYMER MATERIAL.
2. FIBER OPTIC PULL BOX LENGTH (LONG SIDE) SHALL BE PARALLEL TO THE CONDUIT RUN. WHEN THE CONDUIT RUN IS PERPENDICULAR AT THE JUNCTION POINT, THE PULL BOX SHALL BE PARALLEL TO THE ROADWAY.
3. CONDUIT SHALL BE ALIGNED TO TOP EDGE OF PULL BOX TO FACILITATE CABLE PULLING.
4. SPARE FIBER OPTIC CABLE IS TO BE WOUND NEATLY AND CAREFULLY, AS NOT TO EXCEED THE MINIMUM BENDING RADIUS OF THE FIBER OPTIC CABLE.
5. ALL FIBER PULL AND SPLICE BOX COVERS SHALL BE LABELED AS "TRAFFIC FIBER OPTICS".
6. ALL PULL BOXES SHALL BE PROVIDED WITH CONCRETE APRONS WHEN NOT LOCATED WITHIN SIDEWALK. APRON SHALL BE FLUSHED WITH FINISHED GRADE STRUCTURAL CLASS 1 CONCRETE WITH A MINIMUM STRENGTH AT 28 DAYS OF FC = 3.0 KSI. APRONS SHALL BE A MINIMUM OF 12" WIDE ON ALL SIDES AROUND AND 6" DEEP. THE COST OF THE APRON IS TO BE INCLUDED IN THE COST FOR FURNISH AND INSTALL PULL BOX.
7. PULL BOXES SHALL BE PLACED 10' FROM CURB RADIUS AND DRIVEWAY ENTRANCES, RIGHT-OF-WAY PERMITTING.
8. WHEN PULL BOXES ARE INSTALLED IN EXISTING SIDEWALKS, THE ENTIRE FLAG OF SIDEWALK WILL BE REPLACED.

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

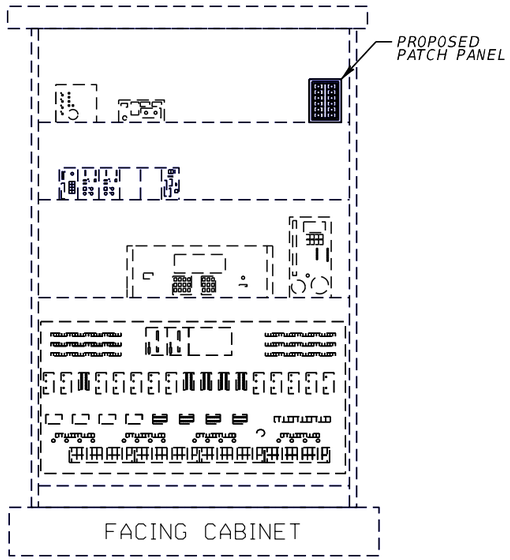
CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

PULL BOX AND CONDUIT DETAILS

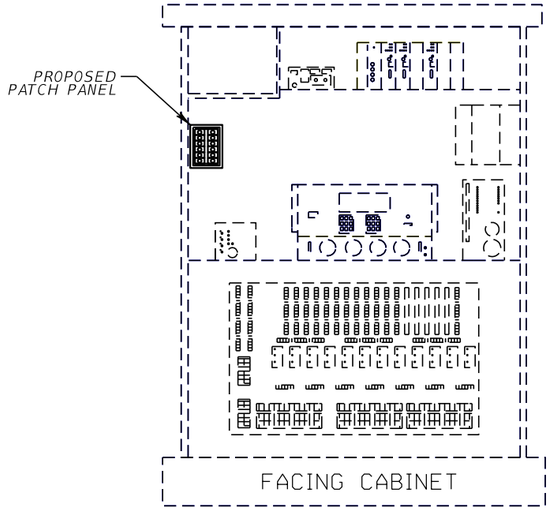
SHEET NO. 23

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PINE ISLAND RD @ NW 75TH ST
CABINET NO. 1546
STA. 21+75

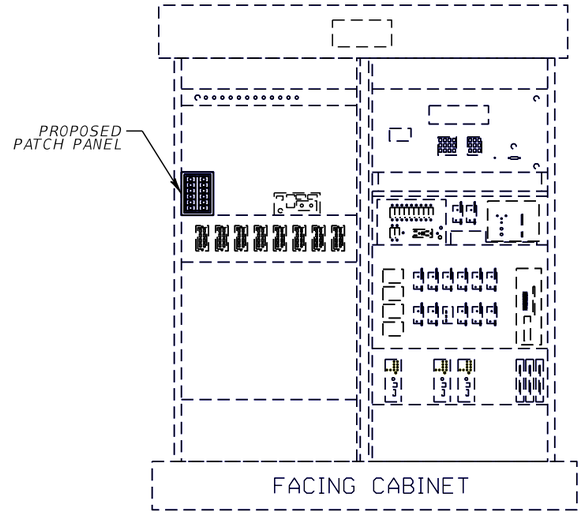


PINE ISLAND RD @ NW 77TH ST
CABINET NO. 1537
STA. 37+90

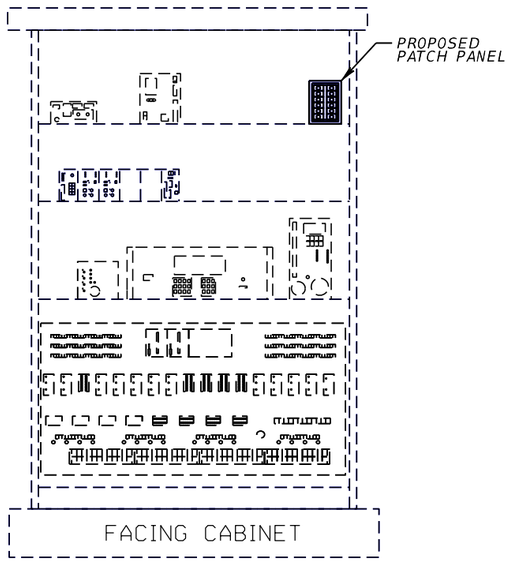


PINE ISLAND RD @ NW 81ST ST
CABINET NO. 1223
STA. 72+15

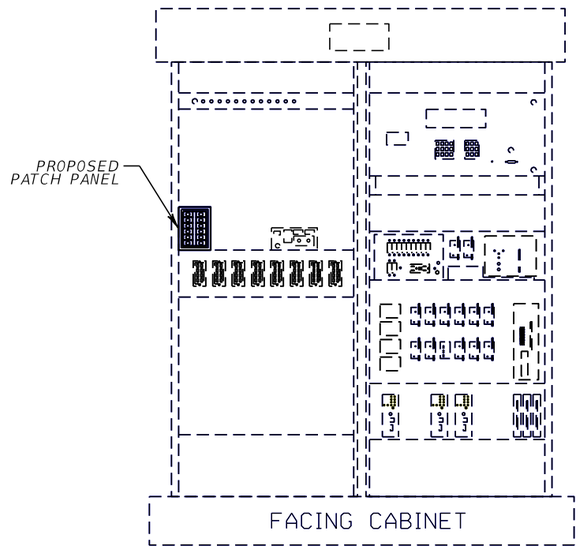
BCTED NO. 230803061



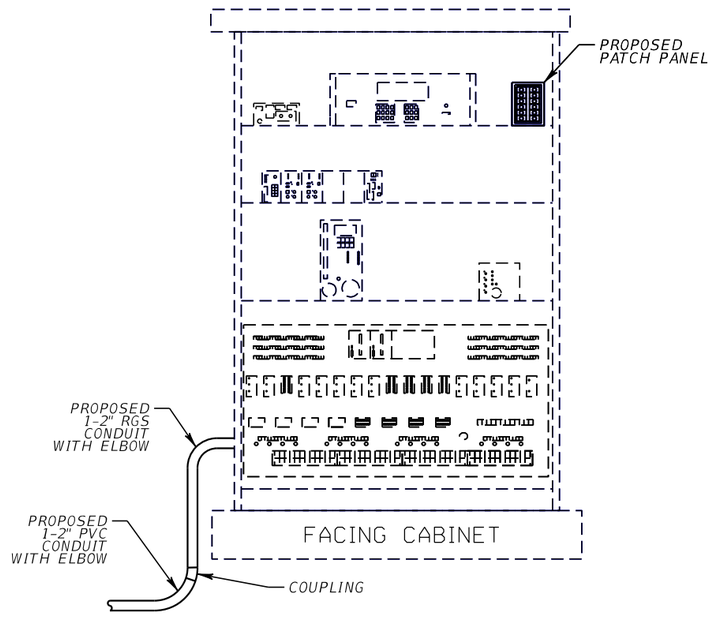
PINE ISLAND RD @ SOUTHGATE BLVD
CABINET NO. 1212
STA. 86+72



CORAL SPRING DR @ NW RIVERSIDE DR
CABINET NO. 1276
STA. 101+60



CORAL SPRING DR @ LAKEVIEW DR
CABINET NO. 1302
STA. 162+65



REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

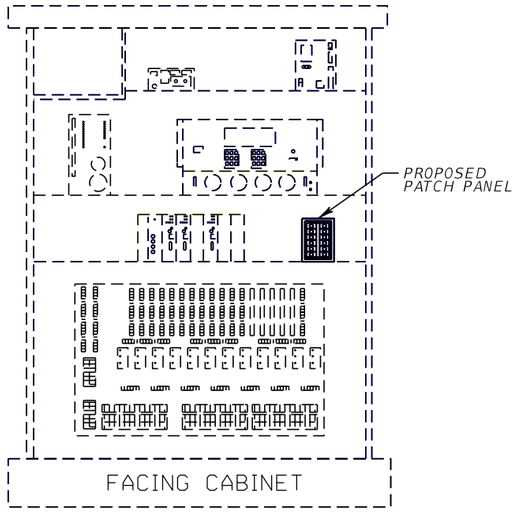
SIGNAL CABINET DETAIL

SHEET NO. 24

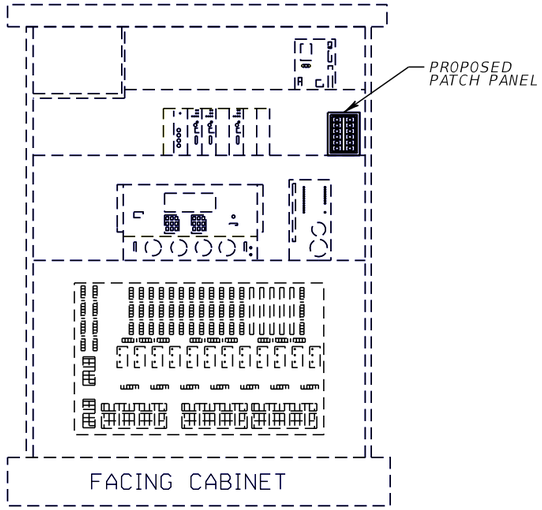
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6/7/2024 11:36:10 AM Austin.Willard
c:\pwworkingdir\metric-pw.bentley.com_metric-pw-01\ricardo.gonzalez@metriceng.com\dms27854\SPDTIT03.dgn

CORAL SPRING DR @ RABLEWOOD DR
CABINET NO. 1413
STA. 177+78



CORAL SPRINGS DR @ ROYAL PALM BLVD
CABINET NO. 1220
STA. 200+72



BCTED NO. 230803061

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

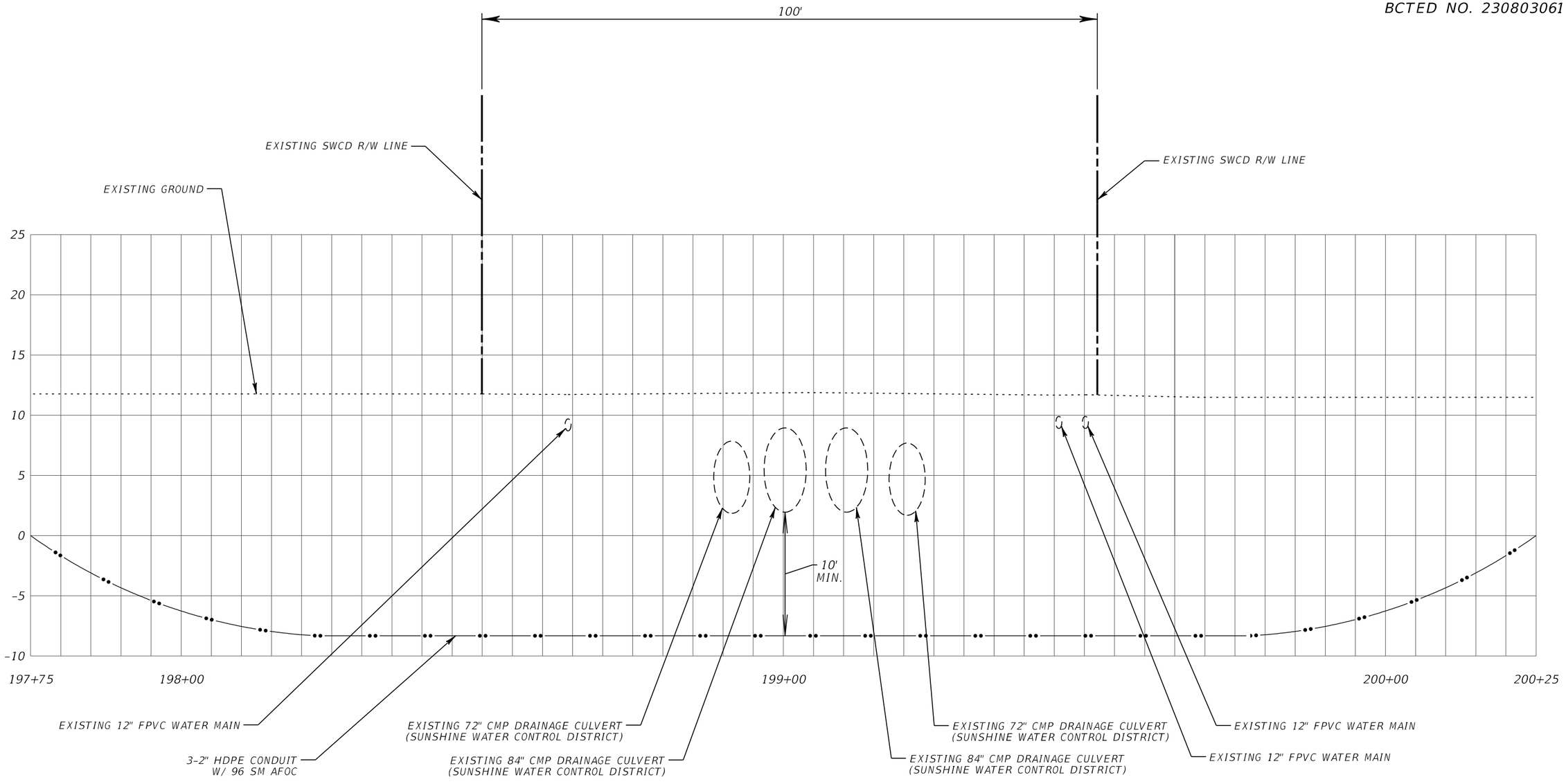
PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

SIGNAL CABINET DETAIL

SHEET NO. 25

BCTED NO. 230803061



BROWARD COUNTY
PINE ISLAND AND CANAL CROSSING
(SUNSHINE WATER CONTROL DISTRICT)
WEST FACING

(SEE SHEET 20)

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RICARDO J. GONZALEZ, P.E.
LICENSE NUMBER 66564
METRIC ENGINEERING, INC.
11760 MARCO BEACH DRIVE, SUITE 1
JACKSONVILLE, FLORIDA 32224

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

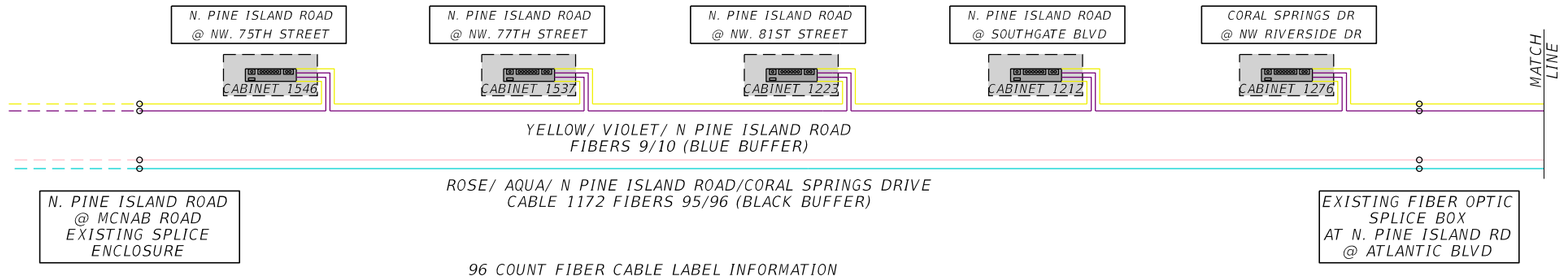
CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

CROSS SECTION

SHEET NO. 26

BCTED NO. 230803061

BCTED CABLE 1171 96 SM FIBERS
INSTALLED UNDER BCP NO. FIBER005
YELLOW /VIOLET BLUE BUFFER
ROSE/AQUA BLACK BUFFER
PINE ISLAND RD

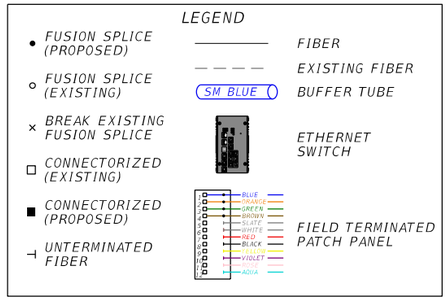


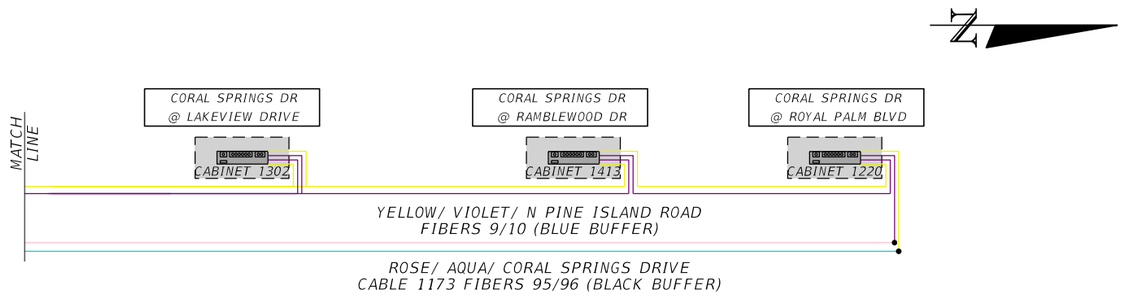
96 COUNT FIBER CABLE LABEL INFORMATION

PINE ISLAND ROAD/CORAL SPRINGS DRIVE	
CABLE TYPE	BCTED
CABLE NUMBER	1172
FIBER COUNT	96
ORIGINATION	ROYAL PALM BLVD.
END POINT	W. MCNAB ROAD

12 COUNT FIBER CABLE LABEL INFORMATION

PINE ISLAND ROAD/CORAL SPRINGS DRIVE	
CABLE TYPE	BCTED
CABLE NUMBER	DROP CABLE
FIBER COUNT	12
ORIGINATION	
END POINT	CABINET XXXX





96 COUNT FIBER CABLE LABEL INFORMATION

CORAL SPRINGS DRIVE	
CABLE TYPE	BCTED
CABLE NUMBER	1173
FIBER COUNT	96
ORIGINATION	ROYAL PALM BLVD
END POINT	W. MCNAB ROAD

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

3/21/2024 2:17:46 PM edyad
F:\1104-BMA\307 PineIslandFO\Fiber012-015\TS\NWLYIT01.DGN

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

LOGICAL DIAGRAM

SHEET NO. 27

BCTED NO. 230803061

LEGEND

- FUSION SPLICE (PROPOSED)
- FUSION SPLICE (EXISTING)
- BREAK EXISTING FUSION SPLICE
- CONNECTORIZED (EXISTING)
- CONNECTORIZED (PROPOSED)
- UNTERMINATED FIBER
- FIBER
- EXISTING FIBER
- SM BLUE — BUFFER TUBE
- ETHERNET SWITCH
- FIELD TERMINATED PATCH PANEL

N

BROWARD COUNTY 96SM FIBER OPTIC CABLE 1171 INSTALLED UNDER BROWARD COUNTY PROJECT NO: FIBER005

EXISTING SPLICE ENCLOSURE

EXISTING SPLICE VAULT

PROPOSED 96SM AFOC N PINE ISLAND ROAD CABLE 1172

PROPOSED SPLICE ENCLOSURE

SM BLUE
SM ORANGE
SM GREEN
SM BROWN
SM SLATE
SM WHITE
SM RED
SM BLACK

BLUE ORANGE GREEN BROWN SLATE WHITE RED BLACK YELLOW VIOLET AQUA

MATCHLINE (SEE SHEET 2 OF 6)

PROPOSED SPLICE BOX

PROPOSED FIELD TERMINATED FIBER PATCH PANEL (SC)

ETHERNET SWITCH (INSTALLED BY OTHERS)

PROPOSED 12SM FOC DROP

SM JUMPERS (BY OTHERS)

N PINE ISLAND ROAD @ NW 75TH STREET

EXISTING SIGNAL CABINET NO. 1546 STA. 21+75

W MCNAB ROAD

SM BLACK SM RED SM WHITE SM SLATE SM BROWN SM GREEN SM ORANGE SM BLUE

BCTED 1180 FIBER OPTIC CABLE

12SM FOC DROP

FIELD TERMINATED FIBER PATCH PANEL (SC)

ETHERNET SWITCH

N PINE ISLAND ROAD @ W. MCNAB ROAD

EXISTING SIGNAL CABINET NO. 1211 STA. 00+20

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

3/21/2024 2:03:27 PM edyal
F:\TS\104-BMA\307 Pine Island FO\Fiber012-015\TS\SPDT1T02.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

SPLICING DIAGRAMS (1 OF 6)

SHEET NO. 28

BCTED NO. 230803061

LEGEND

- FUSION SPLICE (PROPOSED)
- FUSION SPLICE (EXISTING)
- BREAK EXISTING FUSION SPLICE
- CONNECTORIZED (EXISTING)
- CONNECTORIZED (PROPOSED)
- UNTERMINATED FIBER
- FIBER
- EXISTING FIBER
- SM BLUE — BUFFER TUBE
- ETHERNET SWITCH
- FIELD TERMINATED PATCH PANEL

N

PROPOSED SPLICE ENCLOSURE

PROPOSED SPLICE BOX

PROPOSED 96SM AFOC N PINE ISLAND ROAD CABLE 1172

SM BLUE
SM ORANGE
SM GREEN
SM BROWN
SM SLATE
SM WHITE
SM RED
SM BLACK

MATCHLINE (SEE SHEET 1 OF 6)

MATCHLINE (SEE SHEET 3 OF 6)

BLUE ORANGE GREEN BROWN SLATE WHITE RED BLACK YELLOW VIOLET ROSE AQUA

RX TX TX RX

PROPOSED FIELD TERMINATED FIBER PATCH PANEL (SC)

ETHERNET SWITCH (INSTALLED BY OTHERS)

PROPOSED 12SM FOC DROP

SM JUMPERS (BY OTHERS)

N PINE ISLAND ROAD @ NW 77TH STREET

EXISTING SIGNAL CABINET NO. 1537
STA. 37+90

N PINE ISLAND ROAD @ NW 81ST STREET

EXISTING SIGNAL CABINET NO. 1223
STA. 72+15

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

SPLICING DIAGRAMS (2 OF 6)

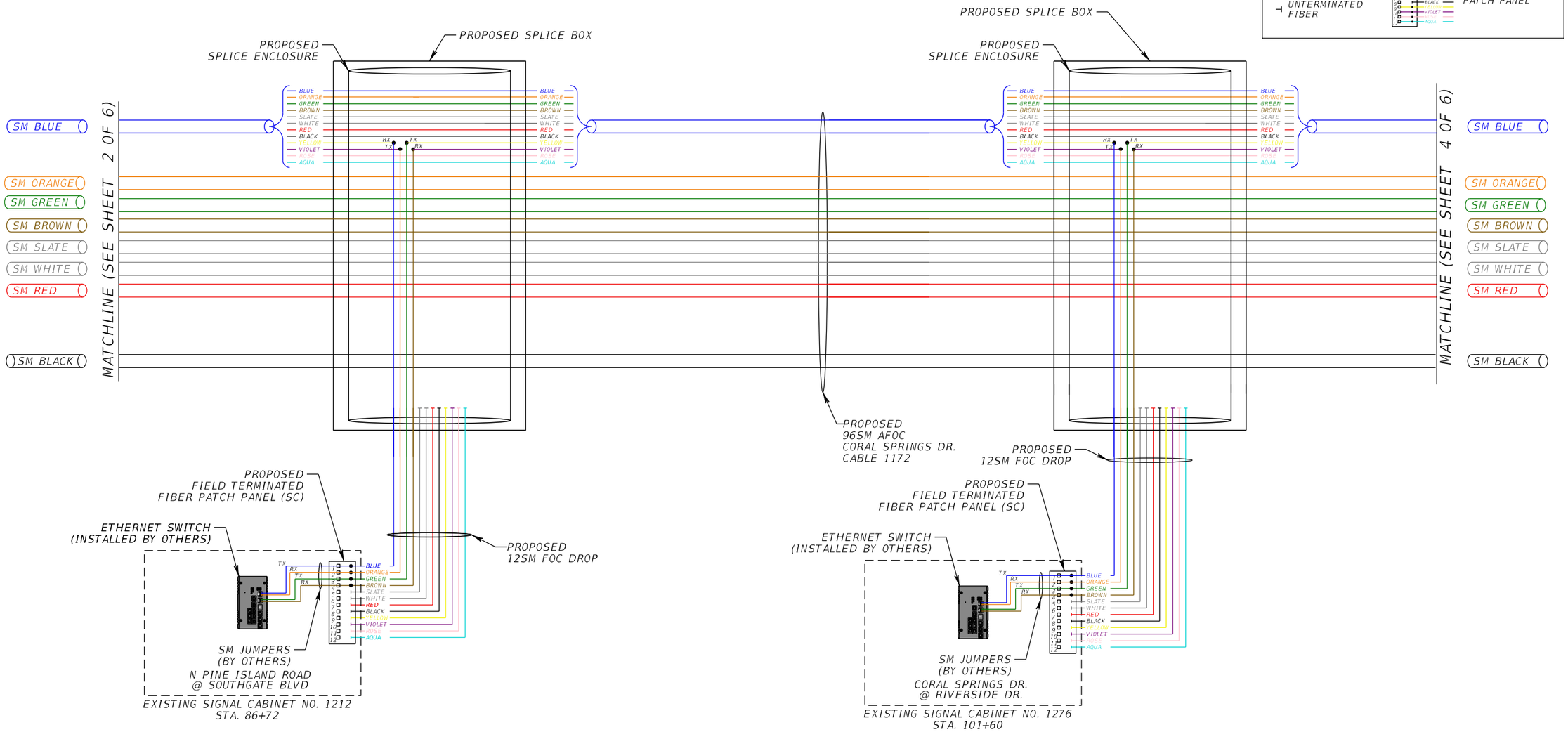
SHEET NO. 29

1/25/2024 11:17:56 PM edy.ad
F:\TN\104-BMA\307 PineIslandFO\Fiber012-015\TS\SPDTIT02.dgn

BCTED NO. 230803061

LEGEND

- FUSION SPLICE (PROPOSED)
- FUSION SPLICE (EXISTING)
- BREAK EXISTING FUSION SPLICE
- CONNECTORIZED (EXISTING)
- CONNECTORIZED (PROPOSED)
- UNTERMINATED FIBER
- FIBER
- EXISTING FIBER
- SM BLUE — BUFFER TUBE
- ETHERNET SWITCH
- FIELD TERMINATED PATCH PANEL



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS		ENGINEER OF RECORD	PUBLIC WORKS DEPARTMENT HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION			SPLICING DIAGRAMS (3 OF 6)	SHEET NO.
DATE	DESCRIPTION	RONALD L. SPENCER, P.E. LICENSE NUMBER: 39141 BMA CONSULTING ENGINEERING, INC. 16928 SW 35th STREET MIRAMAR, FL 33027	CITY	ROADWAY	COUNTY PROJECT NO.		30
			CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015		

1/25/2024 11:31:25 PM ed.rat
F:\N104-BMA\307 Pine Island\FO\Fiber\012-015\VTS\SPDTIT02.dgn

BCTED NO. 230803061

LEGEND

- FUSION SPLICE (PROPOSED)
- FUSION SPLICE (EXISTING)
- BREAK EXISTING FUSION SPLICE
- CONNECTORIZED (EXISTING)
- CONNECTORIZED (PROPOSED)
- UNTERMINATED FIBER
- FIBER
- EXISTING FIBER
- SM BLUE — BUFFER TUBE
- ETHERNET SWITCH
- FIELD TERMINATED PATCH PANEL

N

EXISTING SPLICE VAULT

PROPOSED SPLICE ENCLOSURE

PROPOSED 96SM AFOC CORAL SPRINGS DR. CABLE 1172

PROPOSED 96SM AFOC CORAL SPRINGS DR. CABLE 1173

MATCHLINE (SEE SHEET 3 OF 6)

SM BLUE
SM ORANGE
SM GREEN
SM BROWN
SM SLATE
SM WHITE
SM RED
SM BLACK

MATCHLINE (SEE SHEET 5 OF 6)

SM BLUE
SM ORANGE
SM GREEN
SM BROWN
SM SLATE
SM WHITE
SM RED
SM BLACK

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE
RED
BLACK
YELLOW
VIOLET
ROSE
AQUA

ATLANTIC BLVD.

EXISTING 12SM FOC DROP INSTALLED BY BROWARD COUNTY PROJECT NO. FIBER003

BROWARD COUNTY 96SM FIBER OPTIC CABLE EXISTING SIGNAL CABINET NO. 1181 INSTALLED BY BROWARD COUNTY PROJECT NO. FIBER003

TX
RX
TX
RX

ATLANTIC BLVD. @ PINE ISLAND RD.

EXISTING SIGNAL CABINET NO. 1201
STA. 131+63

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

3/21/2024 2:04:35 PM edyad
F:\N104-BMA\307 Pine\Island\0\Fiber012-015\TS\SPDT1T02.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS / TAMARAC	PINE ISLAND RD / CORAL SPRINGS DR	FIBER012/015

SPLICING DIAGRAMS (4 OF 6)

SHEET NO. 31

BCTED NO. 230803061

LEGEND

- FUSION SPLICE (PROPOSED)
- FUSION SPLICE (EXISTING)
- BREAK EXISTING FUSION SPLICE
- CONNECTORIZED (EXISTING)
- CONNECTORIZED (PROPOSED)
- UNTERMINATED FIBER
- FIBER
- EXISTING FIBER
- SM BLUE — BUFFER TUBE
- ETHERNET SWITCH
- FIELD TERMINATED PATCH PANEL

N

SM BLUE
SM ORANGE
SM GREEN
SM BROWN
SM SLATE
SM WHITE
SM RED
SM BLACK

MATCHLINE (SEE SHEET 4 OF 6)

MATCHLINE (SEE SHEET 6 OF 6)

PROPOSED SPLICE ENCLOSURE

PROPOSED SPLICE BOX

PROPOSED 96SM AFOC CORAL SPRINGS DR. CABLE 1173

PROPOSED FIELD TERMINATED FIBER PATCH PANEL (SC)

ETHERNET SWITCH (INSTALLED BY OTHERS)

PROPOSED 12SM FOC DROP

SM JUMPERS (BY OTHERS)

CORAL SPRINGS DR. @ LAKEVIEW DR.

EXISTING SIGNAL CABINET NO. 1302
STA. 162+65

CORAL SPRINGS DR. @ RABLEWOOD DR.

EXISTING SIGNAL CABINET NO. 1413
STA. 177+78

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

3/19/2024 12:32:49 AM EdZevallos
G:\1104-BMA\307 PineIslandFO\Fiber012-015\TFS\SPDTIT02.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

SPLICING DIAGRAMS
(5 OF 6)

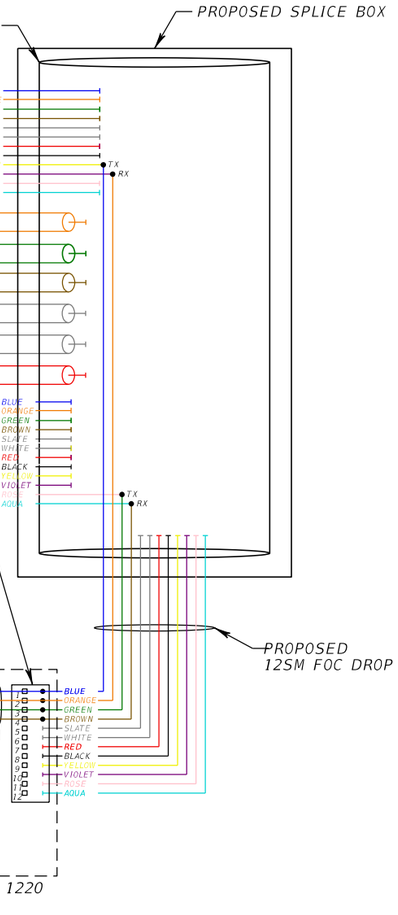
SHEET NO. 32

BCTED NO. 230803061

LEGEND

- FUSION SPLICE (PROPOSED)
- FUSION SPLICE (EXISTING)
- BREAK EXISTING FUSION SPLICE
- CONNECTORIZED (EXISTING)
- CONNECTORIZED (PROPOSED)
- UNTERMINATED FIBER

FIBER
EXISTING FIBER
SM BLUE — BUFFER TUBE
ETHERNET SWITCH
FIELD TERMINATED PATCH PANEL



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

3/19/2024 12:43:25 AM EdZevallos
G:\104-BMA\307 PineIslandFO\Fiber\012-015\TS\SPDTIT02.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

SPLICING DIAGRAMS (6 OF 6)

SHEET NO. 33

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

THE FOLLOWING NARRATIVE OF THE STORM WATER POLLUTION PREVENTION PLAN CONTAINS REFERENCES TO THE FDOT SPECIFICATIONS, THE DESIGN STANDARDS AND OTHER SHEETS OF THE CONSTRUCTION PLANS. THE FIRST SHEET OF THE CONSTRUCTION PLANS (KEY SHEET) CONTAINS AN INDEX TO THE OTHER SHEETS. THE COMPLETE STORM WATER POLLUTION PREVENTION PLAN INCLUDES SEVERAL ITEMS: THIS NARRATIVE DESCRIPTION, THE DOCUMENTS REFERENCED IN THIS NARRATIVE, THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN REQUIRED BY SPECIFICATION SECTION 104, AND REPORTS OF INSPECTION MADE DURING CONSTRUCTION.

1. SITE DESCRIPTION:

1.A. NATURE OF CONSTRUCTION ACTIVITY:

CONSTRUCTION ACTIVITIES OF THIS PROJECT CONSISTS OF INSTALLATION, CONSTRUCTION AND INTEGRATION OF INTELLIGENT TRANSPORTATION SYSTEM (ITS) ALONG N. PINE ISLAND ROAD / CORAL SPRINGS DRIVE VIA FIBER OPTIC CABLE. THE PROJECT INCLUDES INSTALLATION OF PULL BOXES AND FIBER OPTIC CABLE ALONG THE PROJECT LIMITS. CONSTRUCTION CONSISTS OF INSTALLATION OF UNDERGROUND FIBER OPTIC CONDUITS. THE LIMITS ARE BETWEEN W. MCNAB ROAD AND ROYAL PALM BOULEVARD ON N. PINE ISLAND ROAD / CORAL SPRINGS DRIVE .

A DISTANCE OF APPROXIMATELY 3.69 OF ROADWAY MILES WITH THE CONSTRUCTION AREAS LIMITED TO THE SHOULDER BETWEEN THE EDGE OF PAVEMENT AND THE RIGHT-OF-WAY. NOTE: THIS PROJECT DOES NOT INVOLVE CREATING ANY ADDITIONAL IMPERVIOUS AREAS TO EXISTING ROADWAY PAVEMENT.

1.B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

FDOT SPECIFICATIONS SECTION 104 FOR EROSION CONTROL PLAN AND ALL INSTALLATIONS AS PER PROJECT APPROVED CONSTRUCTION SCHEDULES WILL BE FOLLOWED. THE SEQUENCE OF ALL MAJOR ACTIVITIES WILL BE FOLLOWED AS DESCRIBED ON THE PROJECT SCHEDULE.

* ALL EROSION CONTROL DEVICES FOR EACH PHASE OF WORK ARE TO BE INSTALLED PRIOR TO BEGINNING OF CONSTRUCTION, UNLESS CONSTRUCTION ACTIVITY IS TO BE COMPLETED IN THE SAME DAY AND THERE ARE NO ERODIBLE SURFACES REMAINING IN THE AREA WHERE WORK WAS PERFORMED.
* INSTALL SEDIMENT BARRIER PER EROSION CONTROL DETAILS.
* TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT FROM SEASONAL CLIMATE CHANGES OR WEATHER EVENTS.

1.C. AREA ESTIMATES:

TOTAL SITE AREA: 3.63 ACRES
TOTAL SITE AREA TO BE DISTURBED: 0.75 ACRES
TOTAL AREA TO BE DISTURBED EQUALS LESS THAN 5 ACRES.

1.D. RUNOFF DATA:

CONSTRUCTION ACTIVITIES ARE NOT EXPECTED TO INCREASE RUNOFF COEFFICIENTS. FURTHERMORE, NO IMPERVIOUS AREAS ARE BEING ADDED TO THE ROADWAY SYSTEM. THE GRASS AREAS ADJACENT TO THE SHOULDERS HAS AN ESTIMATED RUNOFF COEFFICIENT C=0.38.

1.E. SITE MAP:

SINCE CONSTRUCTION ACTIVITIES ARE LIMITED TO INSTALLATIONS OF UNDERGROUND CONDUIT VIA TRENCHING OR BORINGS BETWEEN THE EDGE OF THE ROADWAY PAVEMENT AND THE RIGHT-OF-WAY LINE, DRAINAGE MAPS WERE NOT PREPARED. THE CONSTRUCTION PLANS; HOWEVER, PROVIDE INFORMATION RELATED TO EXISTING BODIES OF WATER, SUCH AS LATERAL CANAL AND RETENTION PONDS.

APPROXIMATE SLOPES: THE CONSTRUCTION ACTIVITIES DO NOT INCLUDE THE CONSTRUCTION OF ANY EMBANKMENTS. THE EXISTING SIDE SLOPES ARE TO REMAIN.
LOCATION OF CONTROLS: AREAS OF CONSTRUCTION THAT ARE WITHIN SIX (6) FEET OF STANDING WATER SHALL HAVE TEMPORARY EROSION CONTROL.
AREAS TO BE STABILIZED: STABILIZATION PRACTICES WILL OCCUR THROUGHOUT THE LIMITS OF THE PROJECT. STABILIZATION SHALL OCCUR WHERE THERE IS DISTURBED EARTH.

1.F. RECEIVING WATERS:

SEE PLANS FOR LOCATION OF CANALS AND BODIES OF WATER.

STORM WATER POLLUTION PREVENTION PLAN CONTINUED:

2. CONTROLS:

ALL ITEMS DISCUSSED IN THE FOLLOWING SECTIONS ARE DESCRIBED IN DETAIL IN THE SPECIFICATION 104 AND THE FDOT EROSION & SEDIMENT CONTROL MANUAL.

2.A. EROSION AND SEDIMENT CONTROL:

THE CONTRACTOR SHALL SUBMIT TO THE COUNTY FOR APPROVAL THE PROPOSED STABILIZATION AND STRUCTURAL PRACTICES BASED ON THE CONTRACTOR'S CONSTRUCTION PHASING PLAN.

THE SOIL EROSION AND SEDIMENT CONTROL SHALL BE MAINTAINED BY THE CONTRACTOR TO MINIMIZE THE AMOUNT OF DISTURBED SOIL, PREVENT OFF- SITE RUNOFF FROM FLOWING AGAINST THE DISTURBED AREAS, SLOW THE RUNOFF ACROSS THE SITE AND REMOVE SEDIMENT FROM ON SITE RUNOFF BEFORE IT LEAVES THE SITE.

THE ENGINEER WILL DETERMINE IF ADDITIONAL CONTROLS AND DEPLOYMENT SCHEDULES ARE NECESSARY FOR THE IMPLEMENTATION OF ALL EROSION CONTROL DEVICES. APPLICABLE CONTROL DEVICES AND IMPLEMENTATION PROCEDURES ARE PROVIDED IN THE PLANS.

CONSTRUCTION ACTIVITIES: THE MAJOR CONTROLS OUTLINED IN THIS SWPPP ARE SEDIMENT AND EROSION CONTROL THROUGH THE PHASING OF CONSTRUCTION OPERATIONS; THEREBY, LIMITING THE AMOUNT OF ERODIBLE EARTH EXPOSED AT ANY GIVEN TIME. REMOVAL OF EXCESS DIRT ON THE PAVED AREAS AND AROUND THE CONSTRUCTION AREAS, AND THE PROTECTION OF THE EXISTING OUTFALLS. MAJOR EROSION PROBLEMS ARE NOT ANTICIPATED DUE TO THE NATURE OF THIS PROPOSED WORK.

PRIOR TO COMMENCEMENT, THE CONTRACTOR SHALL PROVIDE TO THE COUNTY A DETAILED CONSTRUCTION SCHEDULE TO INDICATE THE DATES OF MAJOR PHASES AND TO DETERMINE THE SEQUENCING OF TEMPORARY AND PERMANENT SOIL STABILIZATION ACTIVITIES ON ALL PORTIONS OF THE SITE.

PRIOR TO BEGINNING ANY PHASE OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL ITEMS IN ACCORDANCE WITH THE PLANS.

STOCKPILED AREAS, APPROVED BY THE ENGINEER, (WHICH WILL REQUIRE AN ENDANGERED SPECIES CLEARANCE) WILL HAVE STAKED SEDIMENT BARRIER AROUND THE PERIMETER TO PREVENT OFF- SITE FLOW OF POLLUTED STORM WATER RUNOFF.

STOCKPILED MATERIALS WILL NOT BE STORED ON -SITE FOR MORE THAN 24-HOURS PRIOR TO INSTALLATION, NOR BE LOCATED ADJACENT TO WATER BODIES, INLETS OR WETLANDS. SHOULD A SITUATION ARISE THAT REQUIRES THE MATERIAL TO BE STOCKPILED FOR MORE THAN 24-HOURS, PLASTIC SHEETING, FILTER FABRIC OR SEDIM ENT BARRIER WILL BE PROVIDED TO REDUCE THE POTENTIAL FOR SEDIMENT TRANSPORT.

EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND MAY BE REMOVED WHEN PERMANENT STABILIZATION IS ESTABLISHED.

2.B. STABILIZATION PRACTICES:

STABILIZATION PRACTICES TO BE IMPLEMENTED INCLUDING BUT NOT LIMITED TO PERMANENT SODDING, SEEDING OR SEED AND MULCH. THIS SHALL BE DONE IN ACCORDANCE WITH SPECIFICATIONS SECTION 570 PERFORMANCE TURF. STABILIZATION METHOD SHALL BE IMPLEMENTED AS SOON AS POSSIBLE FOLLOWING CONSTRUCTION ACTIVITIES, BUT IN NO CASE SHALL THE TIME BE GREATER THAN SEVEN DAYS AFTER THE CONSTRUCTION HAS CEASED. THE CONTRACTOR SHALL DOCUMENT THIS IN THE SWPPP EROSION CONTROL INSPECTION REPORTS.

2.C. STRUCTURAL PRACTICES:

STAKED SEDIMENT BARRIERS WILL BE IN ACCORDANCE WITH THE FDOT EROSION AND SEDIMENT CONTROL MANUAL (LATEST EDITION). SEE PLANS FOR EROSION CONTROL AND SEDIMENT BARRIER DETAILS AND LOCATIONS WHERE POSSIBLE IMPACTS MAY OCCUR.

2.D. STORM WATER MANAGEMENT:

THE EXISTING STORM WATER MANAGEMENT SYSTEM ALONG THE PROJECT LIMITS PRIMARILY CONSISTS OF AN OPEN DRAINAGE SYSTEM WITH SOME CROSS DRAINAGE AND CATCH BASINS THAT CONVEY STORM WATER INTO DITCH SWALES THAT ULTIMATELY DISCHARGE IN PONDS OR CANALS. NO ADDITIONAL IMPERVIOUS AREAS ARE PROPOSED; THEREFORE, NO CHANGES TO EXISTING STORM WATER MANAGEMENT SYSTEM ARE REQUIRED.

STORM WATER POLLUTION PREVENTION PLAN CONTINUED:

2.E. OTHER CONTROLS:

WASTE DISPOSAL: THE CONTRACTOR SHALL DOCUMENT ANY LITTER REMOVAL IN THE SWPPP EROSION CONTROL INSPECTION REPORTS.

OFF SITE VEHICLE TRACKING AND DUST CONTROL: THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS FOR MINIMIZING OFF- SITE VEHICLE TRACKING OF SEDIMENTS. ALL CONSTRUCTION ENTRANCES TO THE CORRIDOR SHALL BE FROM EXISTING ENTRANCES (RAMPS, MAINLINE). THE CONTRACTOR WILL PROVIDE POLLUTION CONTROL BY IMPLEMENTING DUST CONTROL DURING DUST GENERATING ACTIVITIES, SUCH AS DRILLING POLE FOUNDATIONS. A TRUCK SHALL REMOVE ANY EXCESS SOIL MATERIAL THAT IS TO BE DISCHARGED WITH A TARPAULIN COVERING THE MATERIAL. THE CONTRACTOR SHALL DOCUMENT THIS IN THE SWPPP EROSION CONTROL INSPECTION REPORTS.

STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL: A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR WILL COLLECT ANY SANITARY WASTE FROM THE PORTABLE UNITS AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION. THE CONTRACTOR SHALL DOCUMENT THIS IN THE SWPPP EROSION CONTROL INSPECTION REPORTS.

FERTILIZERS AND PESTICIDES (IF APPLICABLE): FERTILIZERS SHALL BE APPLIED ACCORDING TO APPLICABLE SUBSECTIONS OF SPECIFICATION 570 OF THE FDOT SPECIFICATIONS. FERTILIZERS AND PESTICIDES SHALL NOT BE USED WITHIN 50 FT OF ANY SURFACE WATER BODY. ALL FERTILIZERS AND PESTICIDES SHALL BE STORED, HANDLED AND APPLIED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS AND APPLICATION RATES. THE DISPOSAL OF ANY FERTILIZER AND PESTICIDES SHALL BE THE CONTRACTOR'S RESPONSIBILITY IN ACCORDANCE WITH EPA'S STANDARD PRACTICE BY MANUFACTURER. THE CONTRACTOR SHALL DOCUMENT THIS IN THE SWPPP EROSION CONTROL INSPECTION REPORTS.

TOXIC SUBSTANCES: THE CONTRACTOR IS RESPONSIBLE TO REPORT ANY CHEMICAL SPILLS TO THE COUNTY. IF CONTAMINATED SOILS OR GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL CONTACT THE ENVIRONMENTAL RESPONSE LINE AT(954) 519-1499.

STATE AND LOCAL PLANS: THE CONTRACTOR SHALL FOLLOW THE CONDITIONS AND SPECIFICATIONS OUTLINED IN THE WATER MANAGEMENT DISTRICT AND THE ENVIRONMENTAL PROTECTION AGENCY PERMITS AND CRITERION.

MAINTENANCE:

MAINTENANCE AND REPAIR REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE COST OF THE REQUIRED PAY ITEMS.

IN CASE OF EMERGENCY, THE CONTRACTOR SHALL PROVIDE 24 HOUR CONTACT FOR EROSION CONTROL REPAIR.

STRUCTURAL PRACTICES: BUILT- UP SEDIMENT WILL BE REMOVED AND PROPERLY DISPOSED OF FROM THE SEDIMENT BARRIERS AND STAKED TURBIDITY BARRIERS WHEN IT HAS REACHED ONE- THIRD THE HEIGHT OF THE FENCE. SEDIMENT BARRIERS SHALL BE OBSERVED FOR OPENINGS IN THE MESH, BROKEN STAKES AND TO ENSURE THAT THEY ARE FUNCTIONING AS INTENDED. TEMPORARY AND PERMANENT SEEDING AND SODDING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH, AND PROPER MAINTENANCE. THE CONTRACTOR SHALL DOCUMENT THIS IN THE SWPPP EROSION CONTROL INSPECTION REPORTS.

3. INSPECTIONS:

THE CONTRACTOR SHALL PERFORM COMPREHENSIVE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL FEATURES AT LEAST ONCE EVERY SEVEN DAYS AND AFTER EACH RAINFALL OF 0.5 INCHES OR MORE. EXCEPT FOR THE DAILY INSPECTIONS OF SEDIMENT BARRIER REQUIRED UNDER THE FDOT SPECIFICATION 104-6.4.8.3, THE CONTRACTOR SHALL GIVE THE COUNTY A MINIMUM OF 24-HOUR ADVANCE NOTICE TO PROVIDE COUNTY PERSONNEL WITH THE OPPORTUNITY TO ACCOMPANY THE CONTRACTOR ON THE COMPREHENSIVE INSPECTIONS. THE CONTRACTOR SHALL SUBMIT INSPECTION REPORTS TO THE COUNTY CONSTRUCTION WEEKLY. WHERE SITES HAVE BEEN FINALLY STABILIZED, INSPECTION SHALL BE CONDUCTED AT LEAST ONCE EVERY 30 DAYS AT DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.

IF INSPECTIONS INDICATE THAT THE INSTALLED STABILIZATION AND STRUCTURAL PRACTICES ARE NOT SUFFICIENT TO MINIMIZE EROSION, RETAIN SEDIMENT AND PREVENT DISCHARGING POLLUTANTS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES, AS APPROVED BY THE ENGINEER.

4. NON-STORMWATER DISCHARGE:

NO NON-STORMWATER DISCHARGES ARE ANTICIPATED FOR THIS PROJECT.

1/25/2024 11:25:49 PM edyad
F:\N104-BMA\307 PineIslandFO-Fiber012-015\Roadway\SWPPRD01.DGN

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

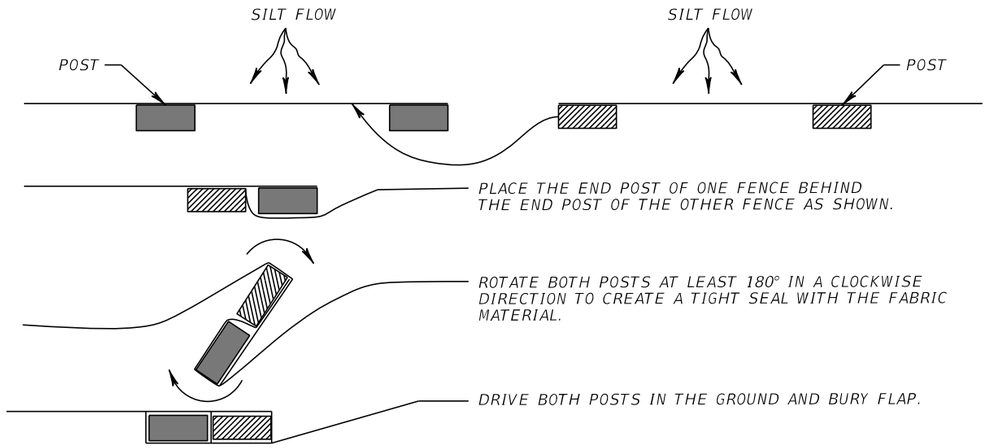
CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

EROSION CONTROL PLAN

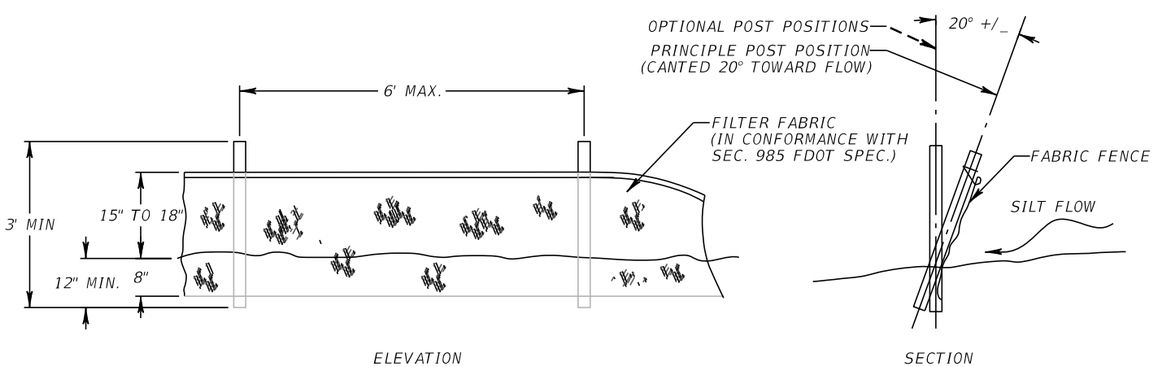
SHEET NO. 34

NOTES:

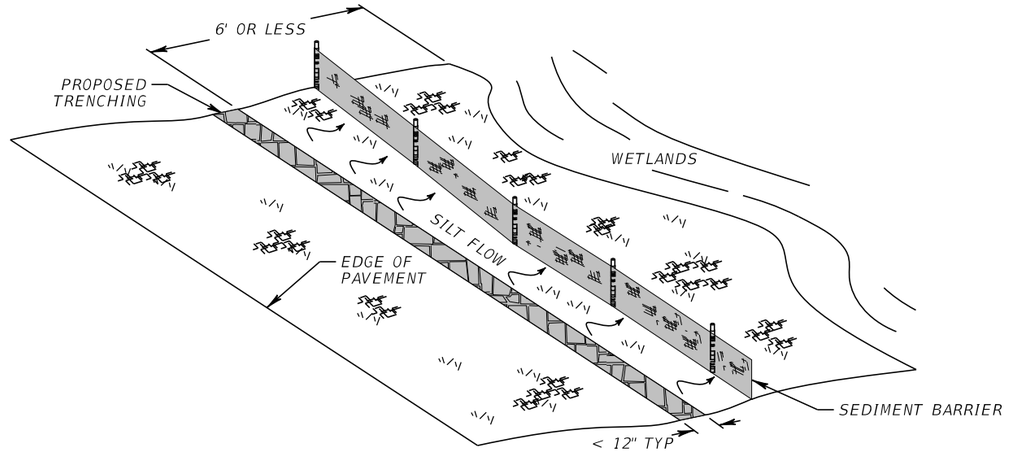
1. THE CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY TO LIMIT TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE VOLUME AND AMOUNT THAT ARE EXISTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THIS CONDITION WILL BE SATISFIED FOR THE TOTAL ANTICIPATED CONSTRUCTION PERIOD. PROVISION MUST BE MADE TO PRESERVE THE INTEGRITY AND CAPACITY OF CHECK WEIRS, SEDIMENT BASINS, SLOPE DRAINS, GRADING PATTERNS, ETC., REQUIRED TO MEET THIS PROVISION THROUGHOUT THE LIFE OF THE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE SYNTHETIC HAY BALES, SILT BARRIERS, TEMPORARY GRASSING, ETC., AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION. COSTS TO BE INCIDENTAL TO PAY ITEMS.
2. NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
3. THE SURFACE AREA OF OPEN, RAW, ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE CONTROLLED SO THAT THIS OPERATION WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
4. INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT LADEN STORMWATER RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
5. ALL FEATURES OF THE PROJECT SHALL BE CONSTRUCTED TO PREVENT EROSION AND SEDIMENT RUNOFF/MIGRATION AND SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT.
6. MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO CONTROL EROSION AND SEDIMENT RUNOFF FROM THE SITE DURING CONSTRUCTION. SUCH METHODS SHALL BE IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
7. TEMPORARY SEDIMENT BARRIER IS TO BE IN PLACE PRIOR TO BEGINNING OPERATIONS WHERE SEDIMENTS MIGHT OTHERWISE BE TRANSPORTED INTO BODIES OF WATER.
8. TYPE III SEDIMENT BARRIER TO BE USED AT MOST LOCATIONS.
9. DO NOT CONSTRUCT SEDIMENT BARRIERS ACROSS PERMANENT FLOWING WATERCOURSES. SEDIMENT BARRIERS ARE TO BE AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.
10. WHERE USED AS SLOPE PROTECTION, SEDIMENT BARRIER IS TO BE CONSTRUCTED ON 0% LONGITUDINAL GRADE TO AVOID CHANNELIZING RUNOFF ALONG THE LENGTH OF THE FENCE.



JOINING TWO SEDIMENT BARRIERS



TYPE III SEDIMENT BARRIER



TYPICAL I

(TRENCHING WITHIN 6' OF WETLAND)

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

EROSION CONTROL DETAILS

SHEET NO. 35

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

1/24/2024 3:47:39 PM edjad
F:\1\104-BMA\307 PineIslandFO\Fiber012-015\Roadway\SWPPRD01.DGN

TRAFFIC CONTROL: NOTES

1. THE TRAFFIC CONTROL PLANS FOR THE PROJECT SHALL COMPLY WITH THE LATEST EDITION OF THE FDOT STANDARD PLANS, MUTCD, BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, AND STANDARD SPECIFICATIONS, AS REQUIRED BY BROWARD COUNTY.

2. IF REQUESTED BY BROWARD COUNTY, THE CONTRACTOR SHALL INSTALL THE PROJECT INFORMATION SIGN (30 SF MINIMUM) AT EACH END OF THE PROJECT. SEE STANDARD INDEX 102-600 FOR DETAILS. THE INFORMATION SIGN PHONE NUMBER SHALL BE PROVIDED AT PRE CONSTRUCTION MEETING. COST TO FURNISH, INSTALL, AND REMOVE SIGN SHALL BE INCLUDED IN THE PAY ITEM 102-1, MAINTENANCE OF TRAFFIC. SUBMIT SHOP DRAWING TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

3. IF THE CONTRACTOR IS REQUIRED BY BROWARD COUNTY TO DEVELOP AND IMPLEMENT MODIFICATIONS TO THE TRAFFIC SIGNAL OPERATIONS, OR IF THE CONTRACTOR DETERMINES A NEED TO MODIFY THE TRAFFIC SIGNAL OPERATIONS, THESE CHANGES MUST BE REPORTED TO THE BCTED'S CENTRAL COMPUTER SITE AT 954-847-2770 PRIOR TO THEIR IMPLEMENTATION AND SHALL BE INCLUDED IN THE COST OF MAINTENANCE OF TRAFFIC.

4. DURING THE TIME THE CONTRACTOR IS RESTORING ALL MALFUNCTIONING TRAFFIC SIGNAL EQUIPMENT, THE CONTRACTOR SHALL PROVIDE, AT THEIR EXPENSE, TEMPORARY TRAFFIC CONTROL DEVICES, FLAGGER PERSONNEL, AND LAW ENFORCEMENT PERSONNEL AS NECESSARY TO MAINTAIN A SAFE AND EFFICIENT TRAFFIC FLOW.

5. EXISTING COMMUNICATIONS OR COMMAND WIRE CONNECTIONS SHALL BE MAINTAINED AT ALL SIGNALIZED LOCATIONS DURING CONSTRUCTION. THIS SHALL INCLUDE INTERCONNECT, RAILROAD FLASHING BEACONS, RAILROAD PREEMPTION, FIRE PREEMPTION AND SCHOOL ZONE FLASHERS. THE CONTRACTOR SHALL PROVIDE TEMPORARY LINES AND CONNECTIONS IF NECESSARY.

6. THE CONTRACTOR SHALL MAINTAIN ON-LINE COMMUNICATIONS OF EXISTING OR TEMPORARY SIGNALIZATION VIA INTERCONNECT COMMUNICATION CABLE, FIBER EQUIPMENT, OR CELLULAR EQUIPMENT DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE TEMPORARY LINES AND CONNECTIONS AS NECESSARY. A TIME-BASED-COORDINATION (TBC) SYSTEM IS TO BE UTILIZED ONLY IF PROVISION OF THE TEMPORARY LINES IS NOT FEASIBLE. THE DEVELOPMENT AND IMPLEMENTATION OF THE TBC PROGRAM IS TO BE PERFORMED BY THE CONTRACTOR WITH OVERSIGHT BY A TRAFFIC ENGINEER REGISTERED IN THE STATE OF FLORIDA. COST OF MAINTAINING COMMUNICATION WITH THE CENTRAL SITE, INCLUDING TEMPORARY LINES AND CONNECTIONS, SHALL BE PAID FOR UNDER THE MAINTENANCE OF TRAFFIC PAY ITEM NUMBER. ALL REPORTED MALFUNCTIONS OF THE COMMUNICATIONS SYSTEM SHALL BE RESPONDED TO BY THE CONTRACTOR WITHIN TWO HOURS AND SHALL BE REPAIRED WITHIN 24 HOURS.

7. THE EXISTING REGULATORY SPEED OF 45 MPH AS POSTED ON N. PINE ISLAND ROAD AND 40 MPH AS POSTED ON CORAL SPRINGS DR. SHALL BE MAINTAINED IN THE WORK ZONE. IF A SPEED REDUCTION IS NEEDED, IT MUST BE REVIEWED AND APPROVED BY BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, AND REDUCED SPEED AND REGULATORY SPEED SIGNS SHALL BE INSTALLED ON SEPARATE POSTS IN ACCORDANCE WITH THE STANDARD INDEXES.

8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A SAFE AND ADEQUATE WALKING SURFACE APPLICABLE TO THE AMERICANS WITH DISABILITIES ACT (ADA) FOR PEDESTRIANS DURING CONSTRUCTION. SAFE WALK ROUTES FOR ALL PEDESTRIANS AND TRANSIT BUS USERS WITHIN THE VICINITY OF THE CONSTRUCTION ZONE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. THIS INCLUDES SAFE WALK ROUTES/ACCESS TO AND FROM EXISTING BUS STOPS AND TRANSIT VEHICLES.

9. WHERE CONSTRUCTION ACTIVITIES INVOLVE CONSECUTIVE BUS STOPS, ACCESS TO AND FROM BUS STOPS SHALL BE MAINTAINED. IF ACCESS TO AND FROM ALL BUS STOPS CANNOT BE MAINTAINED, THEN A BUS STOP MAY BE TEMPORARILY RELOCATED OR REMOVED. HOWEVER, NO TWO (2) CONSECUTIVE BUS STOPS MAY BE AFFECTED IN THIS MANNER. IF A BUS STOP REQUIRES TEMPORARY REMOVAL OR RELOCATION, THEN THE BROWARD COUNTY MASS TRANSIT DIVISION (BCT) SHALL BE NOTIFIED AT 954-357-8369 AT LEAST THIRTY (30) DAYS IN ADVANCE TO ALLOW SUFFICIENT TIME TO PLAN DETOURS (IN CASE OF A ROAD CLOSURE) AND/OR TO COMMUNICATE WITH AFFECTED PASSENGERS.

10. THIRTY (30) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE BCT TRANSIT AT 954-357-8369 TO ARRANGE A PRE-CONSTRUCTION TRANSIT ROUTE/PEDESTRIAN ACCESS SAFETY MEETING. THIS MEETING IS TO DETERMINE ALL BUS ROUTES AFFECTED AND TO MAKE ANY NECESSARY ARRANGEMENTS FOR REROUTING AND TEMPORARY SIGNING AND REMOVAL OF BUS STOP FURNITURE, I.E. BENCHES, SHELTERS, ETC.

11. LANE CLOSURES SHALL OCCUR ONLY DURING NON- PEAK HOURS. NON- PEAK HOURS ARE: FROM 9:00 A.M. TO 3:30 P.M. AND FROM 8:00 P.M. TO 6:00 A.M., MONDAY THROUGH FRIDAY. ONE TRAVEL LANE CLOSURE SHALL BE ALLOWABLE IN EITHER DIRECTION DURING ACTIVE WORK PERIODS BETWEEN 9:00 AM AND 3:30 PM MONDAY THROUGH FRIDAY. ALL LANE CLOSURES REQUESTED DURING THESE TIMES SHALL BE SUBMITTED AT LEAST TWO WEEKS AHEAD OF THE DATE OF CLOSURE, AND SHALL BE APPROVED BY THE COUNTY IN ACCORDANCE WITH FDOT LANE CLOSURE REQUIREMENTS.

12. TRAFFIC CONTROL PLANS FOR SETTING UP JACKING PITS ARE DESIGNED FOR NON- PEAK HOURS ONLY. KEEP ALL EXISTING LANES OPEN DURING PEAK HOURS IN THESE PHASES.

13. LANE CLOSURES ON SATURDAY AND SUNDAY BETWEEN 8:00 AM AND 5:00 PM WILL BE ALLOWED, BUT ONLY WITH ADVANCED APPROVAL BY THE COUNTY, AND NOT DURING SPECIAL EVENTS. THE REQUEST FOR A LANE CLOSURE MUST BE MADE AT LEAST THREE (3) WEEKS IN ADVANCE OF THE SPECIFIED DATE FOR THE CLOSURE. THE REQUEST SHALL BE MADE THROUGH THE DESIGN CRITERIA PROFESSIONAL IN ACCORDANCE WITH FDOT LANE CLOSURE REQUIREMENTS.

14. IF TWO OR MORE LANES MUST BE CLOSED AT A TIME, THE CONTRACTOR SHALL REQUEST APPROVAL FROM THE COUNTY AT LEAST THREE (3) WEEKS IN ADVANCE AND MAKE ARRANGEMENTS FOR THE WORK TO OCCUR BETWEEN THE HOURS OF 9:00 PM AND 5:00 AM MONDAY THROUGH SUNDAY WITH THE PROPER USE OF LAW ENFORCEMENT OFFICER(S). COSTS FOR THE LAW ENFORCEMENT OFFICERS SHALL BE INCLUDED IN THE TOTAL CONTRACT PRICE UNDER MAINTENANCE OF TRAFFIC.

15. THE CONTRACTOR SHALL REPORT ALL LANE CLOSURES, INCLUDING ROADWAY RAMP CLOSURES, TO THE LOCAL EMERGENCY AGENCIES, THE MEDIA AND THE COUNTY AT LEAST ONE WEEK PRIOR TO THE SCHEDULED CLOSURES. ALSO, CONTRACTOR SHALL DEVELOP THE PROJECT TO BE ABLE TO PROVIDE FOR ALL LANES OF TRAFFIC TO BE OPEN IN THE EVENT OF AN EMERGENCY OR IF THE LANE CLOSURE CAUSES A DRIVER DELAY GREATER THAN 20 MINUTES. AT THE DISCRETION OF THE ENGINEER, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN ANY CLOSED LANES UNTIL SUCH TIME AS TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.

16. SIDEWALKS, GUTTERS, DRAINS, FIRE HYDRANT AND PRIVATE DRIVEWAYS SHALL BE KEPT IN GOOD CONDITION FOR THEIR INTENDED USES. FIRE HYDRANTS ON OR ADJACENT TO THE WORK SHALL BE KEPT ACCESSIBLE TO FIRE APPARATUS AT ALL TIMES, AND NO MATERIAL OR OBSTRUCTION SHALL BE PLACED WITHIN TEN (10) FEET OF ANY SUCH HYDRANT.

17. IN ACTIVE WORK ZONES GREATER THAN TWO FEET FROM THE PAVED SHOULDER, PLACE TYPE II BARRICADES OR DRUM ALONG THE EDGE OF THE WORK ZONE AT 25' SPACING C-C.

18. WHEN EXCAVATION OCCURS LESS THAN TWO FEET FROM THE PAVED SHOULDER OF ANY ROAD, THE DROPOFF IS TO BE PROTECTED BY TEMPORARY CONCRETE BARRIER WALL. ENDS OF BARRIER WALLS ARE TO BE LOCATED OUTSIDE OF CLEAR ZONE (14') OR PROTECTED BY CRASH CUSHION.

19. THE CONTRACTOR SHALL OBTAIN REQUIRED BCTED LANE CLOSURE APPROVAL IN ACCORDANCE WITH THE CITIES OF TAMARAC AND CORAL SPRINGS MOT PERMITS.

20. CONTRACTOR SHALL GUARANTEE, TO THE HOMEOWNER, AND BUSINESS OWNER, ACCESS AT ALL TIMES DURING CONSTRUCTION PHASE.

21. FDOT STANDARD PLAN INDEXES:
MULTILANE ROADWAY, WORK BEYOND THE SHOULDER: USE INDEX 102-601
MULTILANE, WORK ON SHOULDER: USE INDEX 102-602
SIDEWALK CLOSURE: USE INDEX 102-660
USE DETAILS ENCLOSED IN THESE DRAWINGS.

COMMUNICATION NOTES:

1. THE AGENCY RESPONSIBLE FOR MAINTENANCE OF THE TRAFFIC SIGNALS AND RELATED EQUIPMENT IS BROWARD COUNTY TRAFFIC ENGINEERING DIVISION (BCTED). ALL SYSTEM COMMUNICATIONS EQUIPMENT, CABLING AND RELATED MATERIAL SHALL COMPLY WITH BROWARD COUNTY'S LATEST EDITION OF THE MINIMUM STANDARDS AS EXPRESSED IN THE "STANDARDS AND SPECIFICATIONS - COMMUNICATION INFRASTRUCTURE" DOCUMENT. PLEASE REFER TO (BCTED's) COMMUNICATIONS POLICIES AND PROCEDURES FOR ADDITIONAL INFORMATION. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION WILL NOT ACCEPT ANY PROJECTS THAT DO NOT MEET THESE STANDARDS AND SPECIFICATIONS. IF FIBER OPTIC PULL BOXES ALREADY EXIST AT AN INTERSECTION, NO ADDITIONAL FIBER OPTIC PULL BOXES WILL NEED TO BE INSTALLED UNLESS SPECIFIED IN THE PLANS. FOR A COPY OF THESE STANDARDS REFER TO THE BROWARD COUNTY WEB SITE AT www.broward.org/traffic UNDER PUBLICATIONS.

2. IF THERE ARE COPPER INTERCONNECT CABLE/S WITHIN THE PROJECT LIMITS OR WITHIN 1500 FEET OF YOUR PROJECT LIMITS, CONTACT COMMUNICATIONS MANAGER AT tecommunications@broward.org OR 954-847-2745

3. IF THERE ARE FIBER OPTIC CABLE/S WITHIN THE PROJECT LIMITS OR WITHIN 1500 FEET OF YOUR PROJECT LIMITS CONTACT THE COMMUNICATIONS MANAGER AT tecommunications@broward.org OR 954-847-2745

4. IF THERE ARE CELLULAR COMMUNICATIONS WITHIN THE PROJECT LIMITS, CONTACT THE COMMUNICATIONS MANAGER AT tecommunications@broward.org OR 954-847-2745

5. ALL BCTED COMMUNICATIONS CABLES/CONDUIT SHALL BE LOCATED A MINIMUM OF 48 HOURS IN ADVANCE.

PROCEDURE FOR NOTIFICATION OF COMMUNICATION DISRUPTION:

1. COPPER INTERCONNECT CABLE NOTIFICATION CONTACT PERSON

   WHEN COMMUNICATIONS TO AN INTERSECTION MUST BE DISRUPTED BY A CONTRACTOR TO PERFORM WORK, THE CONTRACTOR SHALL PROVIDE TWO DAY ADVANCE NOTICE IN WRITING TO THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION. THIS NOTIFICATION SHALL BE CONVEYED VIA ELECTRONIC MAIL (E-MAIL) TO THE TRAFFIC SIGNAL TECHNICIAN III AT tecommunications@broward.org. NOTIFICATION SHALL INCLUDE CONTACT PERSON, TELEPHONE NUMBER, PURPOSE, LOCATION, AND DURATION. THE DISRUPTION SHALL LAST FOR NO MORE THAN 3 CONSECUTIVE BUSINESS DAYS. WHERE POSSIBLE THE DISRUPTION SHALL BE DURING OFF PEAK HOURS BEGINNING AT 9:00 AM AND ENDING AT 3:00 PM.

2. FIBER OPTIC CABLE NOTIFICATION CONTACT PERSON

   WHEN COMMUNICATIONS TO AN INTERSECTION MUST BE DISRUPTED BY A CONTRACTOR TO PERFORM WORK, THE CONTRACTOR SHALL PROVIDE TWO DAY ADVANCE NOTICE IN WRITING TO THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION. THIS NOTIFICATION SHALL BE CONVEYED VIA ELECTRONIC MAIL (E-MAIL) TO THE COMMUNICATIONS MANAGER AT tecommunications@broward.org. NOTIFICATION SHALL INCLUDE CONTACT PERSON, TELEPHONE NUMBER, PURPOSE, LOCATION, AND DURATION. THE DISRUPTION SHALL LAST FOR NO MORE THAN 3 CONSECUTIVE BUSINESS DAYS. WHERE POSSIBLE, THE DISRUPTION SHALL BE DURING OFF PEAK HOURS BEGINNING AT 9:00 AM AND ENDING AT 3:00 PM.

MAINTENANCE OF TRAFFIC - SCHOOL

THE AREAS WITHIN THE PROJECT LIMITS ARE DESIGNATED AS SAFE ROUTES TO SCHOOL BY THE BROWARD COUNTY SCHOOL BOARD (AREAS TO BE PROVIDED BY BCTED) WITHIN THESE AREAS THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FOLLOWING REQUIREMENTS:

1. PROVIDE AT LEAST ONE SAFE, WALKABLE PATH THROUGHOUT THE CONSTRUCTION ZONE. IF THE EXISTING WALKING SURFACES CANNOT BE MAINTAINED, THEN A TEMPORARY PATH, A MINIMUM OF 4 FOOT WIDE, SHALL BE PROVIDED. THE SAFE WALK ROUTE SHALL ALSO BE SEPARATED FROM THE CONSTRUCTION ACTIVITY DURING THE ENTIRE LENGTH OF THE PROJECT ENCOMPASSING THE ENTIRE WALK ROUTE WITH PROPER PEDESTRIAN OPENINGS AT DESIGNATED CROSSINGS IN COMPLIANCE WITH FDOT DESIGN STANDARDS INDEX NO. 600 AS WELL AS MEETING ALL ADA REQUIREMENTS. THE CONTRACTOR SHALL ALSO INSTALL OR MODIFY ANY ADDITIONAL PAVEMENT MARKINGS, SIGNAGE OR PEDESTRIAN SIGNALS AS NEEDED IN CONJUNCTION WITH THE TEMPORARY PATH.

2. ON DAYS THAT SCHOOL IS IN SESSION, THE CONTRACTOR'S WORK SCHEDULE WITHIN THE SCHOOL ZONE MAY BE REDUCED BASED ON ACTUAL WORK ACTIVITIES IN THE SCHOOL ZONE. SEE MAINTENANCE OF TRAFFIC PLANS FOR DETAILS ON THE WORK ZONE RESTRICTIONS, IF WARRANTED. ANY CHANGES IN THE MAINTENANCE OF TRAFFIC WORK SCHEDULES WITHIN SCHOOL ZONES SHOULD BE DISCUSSED WITH THE SPECIAL PROJECTS COORDINATOR AT BROWARD COUNTY TRAFFIC ENGINEERING, (954) 847-2600.

3. ALL WORK REQUIRED AT DESIGNATED SCHOOL CROSSINGS AND PEDESTRIAN CROSSINGS SHALL BE RESTORED TO A SAFE WALKABLE PATH DURING ARRIVAL AND DISMISSAL TIMES.

4. THIRTY (30) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE SPECIAL PROJECTS COORDINATOR AT BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, (954) 847-2600, TO DISCUSS ALL NECESSARY SAFETY MEASURES.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE FOLLOWING BROWARD COUNTY SCHOOL BOARD PUPIL TRANSPORTATION DEPARTMENT PERSONNEL IF CONSTRUCTION WILL IMPACT ANY BUS ROUTES.

   - RUTH MASTERS ROUTING (754) 321-4400 EXT. # 2309
     RUTH.MASTERS@BROWARDSCHOOLS.COM
   - VINCENT HARRELL STUDENT TRANSPORTATION & FLEET SERVICE (754)_321-4472
     VINCENT.HARRELL@BROWARDSCHOOLS.COM
   - MARY TOCHTERMANN STUDENT TRANSPORTATION & FLEET SERVICE (754) 321-4400 EXT. # 2006
     MARY.TOCHTERMANN@BROWARDSCHOOLS.COM

   UPON COORDINATION WITH THE AFOREMENTIONED PERSONNEL, AND IF DEEMED NECESSARY, A PRE- CONSTRUCTION MEETING WILL BE HELD TO DETERMINE ALL BUS ROUTES AND TO MAKE ANY NECESSARY ARRANGEMENTS FOR REROUTING. THE SPECIAL PROJECTS COORDINATOR FROM THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, (954) 847-2600, WILL BE NOTIFIED AND MAY ATTEND THE PRE-CONSTRUCTION MEETING.

10/16/2023 4:18:26 PM c688a
E:\N\104-BMA\307 PineIslandFO\Fiber012-015\Roadway\TCGNRD01.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

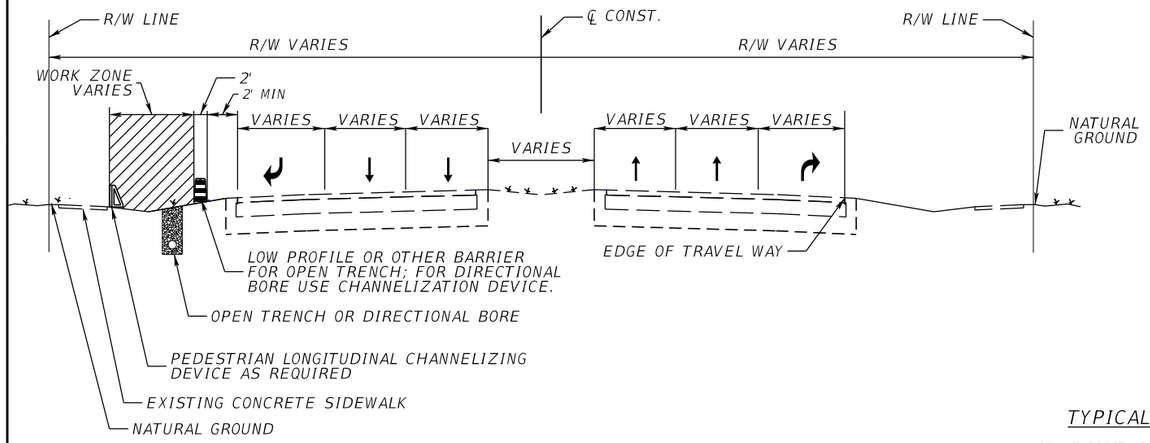
PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

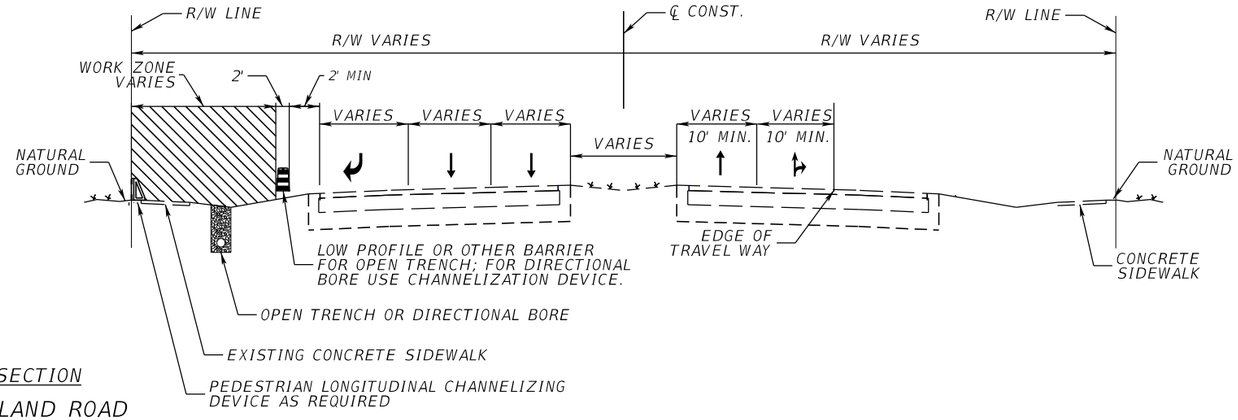
CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

TRAFFIC CONTROL (TC) NOTES

SHEET NO. 36

BCTED NO. 230803061





TYPICAL SECTION

N. PINE ISLAND ROAD / CORAL SPRINGS DR.

W. MCNAB ROAD AND ROYAL PALM BOULEVARD

CONDITION NO. 1

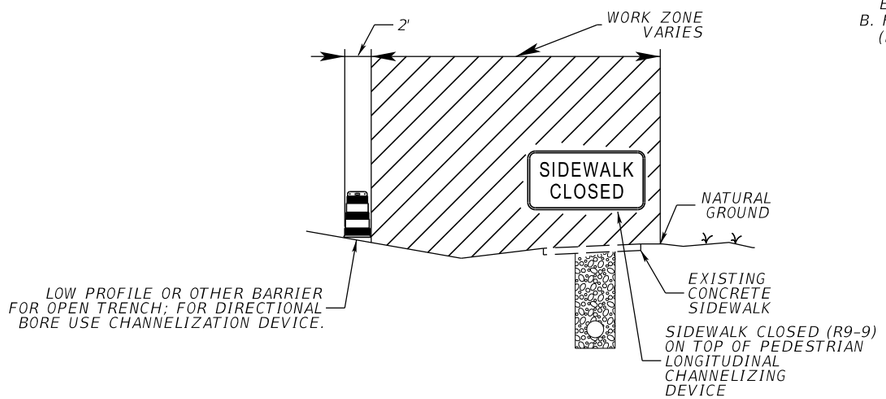
WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

1. SET UP WORK ZONE FOR CONDITION NO. 1 IN CONFORMANCE WITH TRAFFIC CONTROL FOR MULTILANE, WORK ON SHOULDER PER DESIGN STANDARD INDEX 102-602, SHEET 2 OF 2, OR USE ALTERNATE LAYOUT ENCLOSED.
2. WHEN CONSTRUCTION ACTIVITIES REQUIRE CLOSURE OF SIDEWALK, REROUTE PEDESTRIAN TRAFFIC AND INSTALL CHANNELIZING DEVICES PER DESIGN STANDARD INDEX 102-660.
3. PERFORM OPEN TRENCH EXCAVATION OR DIRECTIONAL BORE AS REQUIRED.
4. FOR DROP OFF PROTECTION:
   A. USE LOW PROFILE OR OTHER BARRIER FOR OPEN TRENCH EXCAVATION.
   B. FOR DIRECTIONAL BORE USE CHANNELIZATION DEVICE (E.G., PLASTIC DRUM).

CONDITION NO. 2

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE LANE ADJACENT TO EITHER SHOULDER AND THE AREA 2' OUTSIDE THE EDGE OF TRAVEL WAY.

1. SET UP WORK ZONE FOR CONDITION NO. 2 IN CONFORMANCE WITH TRAFFIC CONTROL FOR MULTILANE, WORK WITHIN TRAVEL WAY OR OUTSIDE SHOULDER. THE CONTRACTOR SHALL USE SHOULDER TREATMENT DETAIL WHEN NO BARRIERS ARE REQUIRED IN THE PLANS.
2. INSTALL LONGITUDINAL CHANNELIZING DEVICE PER INDEX 102-600 AND 102-660 AS REQUIRED.
3. WHEN CONSTRUCTION ACTIVITIES REQUIRE CLOSURE OF SIDEWALK, REROUTE PEDESTRIAN TRAFFIC AND INSTALL CHANNELIZING DEVICES PER DESIGN STANDARD INDEX 102-660.
4. PERFORM OPEN TRENCH EXCAVATION OR DIRECTIONAL BORE AS REQUIRED
5. FOR DROP OFF PROTECTION:
   A. USE LOW PROFILE OR OTHER BARRIER FOR OPEN TRENCH EXCAVATION.
   B. FOR DIRECTIONAL BORE USE CHANNELIZATION DEVICE (E.G., PLASTIC DRUM).



REQUIRED SIDEWALK CLOSURE DETAIL

SIDEWALK CLOSURE PER INDEX 102-660

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD

RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

TRAFFIC CONTROL (TC) TYPICAL

SHEET NO. 37

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

10/16/2023 4:20:13 PM c688a
E:\1\104-BMA\307 PinelslandFO\Fiber012-015\Roadway\TCTYR002.dgn

BCTED NO. 230803061

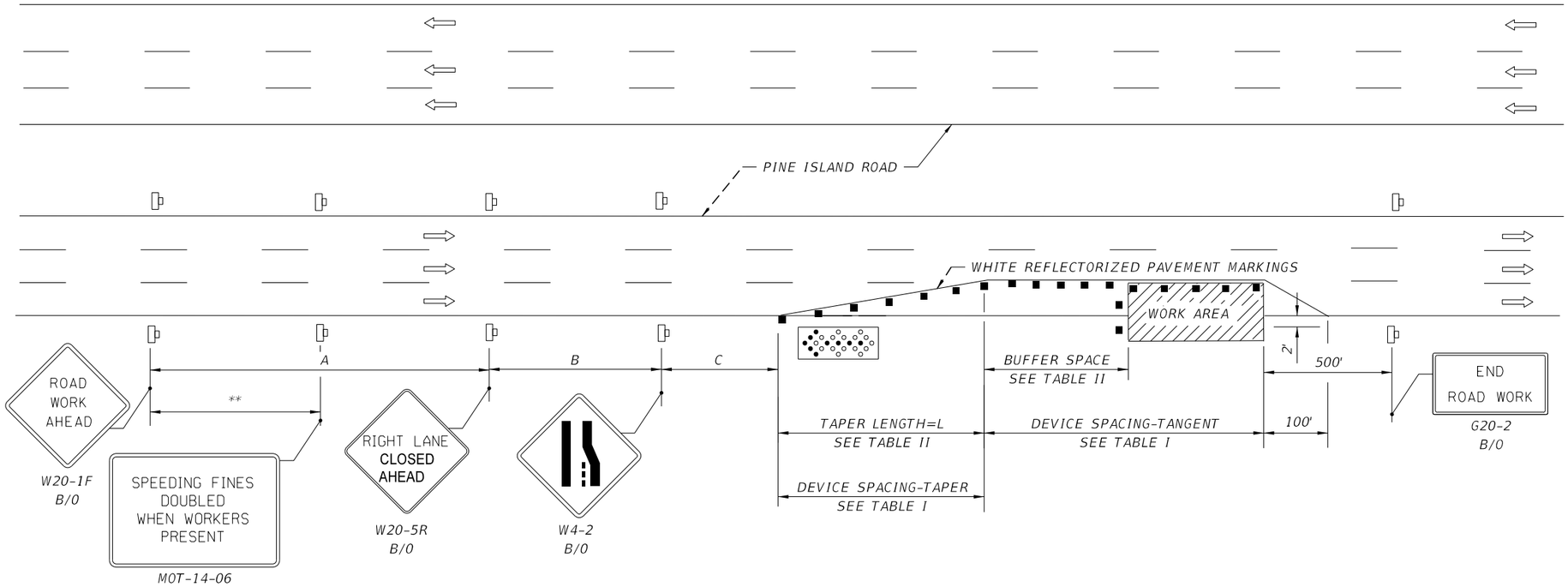


TABLE II BUFFER SPACE AND TAPER LENGTH			
SPEED (MPH)	BUFFER SPACE	TAPER LENGTH (12' LATERAL TRANSITION)	
	DIST. (FT.)	L (FT.)	NOTES (MERGE)
40	305	320	$L=\frac{WS^2}{60}$
45	360	540	L=WS

WHEN BUFFER SPACE CANNOT BE ATTAINED DUE TO GEOMETRIC CONSTRAINTS, THE GREATEST ATTAINABLE LENGTH SHALL BE USED, BUT NOT LESS THAN 200 FT.

FOR LATERAL TRANSITIONS OTHER THAN 12', USE FORMULA FOR L SHOWN IN NOTES COLUMN.
WHERE:

L = LENGTH OF TAPER IN FEET
W = WIDTH OF LATERAL TRANSITION IN FEET
S = POSTED SPEED LIMIT (MPH)

TABLE I CHANNELIZING DEVICE SPACING				
SPEED (MPH)	MAX. DISTANCE BETWEEN DEVICES (FT.)			
	CONES OR TUBULAR MARKERS		TYPE I OR TYPE II BARRICADES OR VERTICAL PANELS OR DRUMS	
	TAPER	TANGENT	TAPER	TANGENT
40 TO 45	25	50	30	50

DISTANCE BETWEEN SIGNS			
SPEED	SPACING (FT.)		
	A	B	C
40 MPH	100	100	100
45 MPH	350	350	350

* THE ROAD WORK 1 MILE SIGN MAY BE USED AS AN ALTERNATE TO THE ROAD WORK AHEAD SIGN AND THE RIGHT LANE CLOSED ½ MILE SIGN MAY BE USED AS AN ALTERNATE TO THE RIGHT LANE CLOSED AHEAD SIGN.

** 500' BEYOND THE ROAD WORK AHEAD SIGN OR MIDWAY BETWEEN SIGNS WHICHEVER IS LESS.

SYMBOLS

- WORK AREA
- CHANNELIZING DEVICE (SEE INDEX 102-600)
- WORK ZONE SIGN
- ADVANCE WARNING ARROW BOARD
- ARROW BOARD. MODE: MERGE

GENERAL NOTES

1. WORK OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE ADJACENT LANE OPEN TO TRAFFIC.
2. THE TWO CHANNELIZING DEVICES DIRECTLY IN FRONT OF THE WORK AREA MAY BE OMITTED PROVIDED VEHICLES IN THE WORK AREA HAVE HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS OPERATING.
3. ALL WORK SHALL BE COVERED FROM DROP OFF DURING INTERMITTENT WORK STOPAGE.
4. WHEN CONSTRUCTION ACTIVITIES ENCROACH ON A SIDEWALK, REFER TO INDEX 102-660.
5. FOR GENERAL TCZ REQUIREMENTS AND ADDITIONAL INFORMATION, REFER TO INDEX 102-600.

DURATION NOTES

1. TEMPORARY WHITE EDGELINE MAY BE OMITTED FOR WORK OPERATIONS LESS THAN 3 CONSECUTIVE CALENDAR DAYS.
2. FOR WORK OPERATIONS UP TO APPROXIMATELY 15 MINUTES, SIGNS, CHANNELIZING DEVICES, ARROW BOARD, AND BUFFER SPACE MAY BE OMITTED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:
   A. SPEED LIMIT IS 45 MPH OR LESS.
   B. NO SIGHT OBSTRUCTIONS TO VEHICLES APPROACHING THE WORK AREA FOR A DISTANCE EQUAL TO THE BUFFER SPACE AND THE TAPER LENGTH COMBINED.
   C. VOLUME AND COMPLEXITY OF THE ROADWAY HAS BEEN CONSIDERED.
   D. THE CLOSED LANE IS OCCUPIED BY A CLASS 5 OR LARGER, MEDIUM DUTY TRUCK(S) WITH A MINIMUM GROSS WEIGHT VEHICLE RATING (GWVR) OF 16,001 LB WITH HIGH-INTENSITY, ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS MOUNTED ABOVE THE CAB HEIGHT AND OPERATING.
3. FOR WORK OPERATIONS UP TO 60 MINUTES, ARROW BOARD AND BUFFER SPACE MAY BE OMITTED IF CONDITIONS A, B, AND C IN DURATION NOTE 2 ARE MET, AND VEHICLES IN THE WORK AREA HAVE HIGH-INTENSITY, ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS OPERATING.

USE THIS DRAWING IN CONJUNCTION WITH FDOT STANDARD PLANS INDEX 102-600. REFER TO TABLE 5, PAGE 3, FOR CLEAR ZONE WIDTHS FOR WORK ZONES. DROP OFF LESS THAN 5-INCHES USE CHANNELIZING DEVICES, INDEX 102-600. DROP OFF GREATER THAN 5-INCHES USE TEMPORARY BARRIER, INDEX 102-120.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE LANE ADJACENT TO EITHER SHOULDER AND THE AREA 2' OUTSIDE THE EDGE OF TRAVEL WAY.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

10/16/2023 4:22:09 PM c688a
E:\1\104-BMA\307 PineIslandFO\Fiber012-015\Roadway\TCDTR001.dgn

REVISIONS	
DATE	DESCRIPTION

BROWARD COUNTY FLORIDA

ENGINEER OF RECORD
RONALD L. SPENCER, P.E.
LICENSE NUMBER: 39141
BMA CONSULTING ENGINEERING, INC.
16928 SW 35th STREET
MIRAMAR, FL 33027

PUBLIC WORKS DEPARTMENT
HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

CITY	ROADWAY	COUNTY PROJECT NO.
CORAL SPRINGS TAMARAC	PINE ISLAND RD CORAL SPRINGS DR	FIBER012/015

TC WORK WITHIN TRAVEL WAY OR OUTSIDE LANE

SHEET NO. 38

SUNSHINE
WATER CONTROL DISTRICT

STAFF REPORTS E

SUNSHINE WATER CONTROL DISTRICT		
BOARD OF SUPERVISORS FISCAL YEAR 2024/2025 MEETING SCHEDULE		
LOCATION *Sartory Hall, 10150 NW 29th St., Coral Springs, Florida 33065* *[1]Mullins Hall, 10170 NW 29th St, Coral Springs, Florida 33065*		
DATE	**POTENTIAL DISCUSSION/FOCUS**	**TIME**
October 9, 2024 *rescheduled to October 22, 2024*	**Regular Meeting**	**6:30 PM**
October 22, 2024[1]	**Regular Meeting**	**6:30 PM**
November 13, 2024	**Regular Meeting**	**6:30 PM**
December 4, 2024	**Regular Meeting**	**6:30 PM**
December 11, 2024 *rescheduled to December 4, 2024*	**Regular Meeting**	**6:30 PM**
January 8, 2025	**Regular Meeting**	**6:30 PM**
February 12, 2025	**Regular Meeting**	**6:30 PM**
March 12, 2025	**Regular Meeting**	**6:30 PM**
April 9, 2025	**Regular Meeting**	**6:30 PM**
May 14, 2025	**Regular Meeting**	**6:30 PM**
June 11, 2025	**Regular Meeting**	**6:30 PM**
July 9, 2025	**Regular Meeting**	**6:30 PM**
August 13, 2025	**Regular Meeting**	**6:30 PM**
September 10, 2025	**Regular Meeting**	**6:30 PM**