AGENDA REPORT
April 9, 2019

Waiver Request to Stormwater Management Criteria, Re: Sprengergarton, LLC (19WV00003) (District 3)

SUBJECT:
Waiver Request to Stormwater Management Criteria, Re: Sprengergarton LLC. Waiver # 19WV00003

FISCAL IMPACT:
None

DEPT/OFFICE:
Planning and Development

REQUESTED ACTION:
M.E.C., Inc. (Luke Miorelli, P.E.) representing Sprengerarton LLC. is requesting that the Board of County Commissioners grant a waiver to the Stormwater Management Criteria to allow the use of a trench drain in lieu of the required minimum 18 inch Reinforced Concrete Pipe (RCP).

SUMMARY EXPLANATION and BACKGROUND:
The Saint Johns River Water Management District (SJRWMD) is requiring the developer to provide stormwater treatment for the stormwater runoff from the new pavement for the turn lane. Normally, turn lanes are exempt from treatment requirements by the SJRWMD. The applicant is proposing to install shallow retention areas along the south side of Eber Road to capture the runoff and treat it. The proposal includes the installation of Type II trench drains across two private residential driveways and an additional trench drain across the proposed development driveway to connect the shallow retention areas and convey runoff to the existing swale along American Drive.

The applicants proposal would require a board waiver of the Stormwater Code Section 62-3751, Exhibit A. This code section requires culverts to be constructed of reinforced concrete pipe and be a minimum of 18 inches in diameter or equivalent elliptical pipe. However, their proposal will induce a new maintenance responsibility on the adjacent property owner.

Staff recommends denial of the above stated waiver request and is in support of alternative designs as provided in the attached Staff Report (see Exhibit B). In summary, determination of the denial is based on the following considerations:

- Undue hardship on an adjacent property owner
- Trench drains require significantly more maintenance than a typical culvert
- Trench drains pose Americans with Disabilities Act (ADA) and public safety concerns
- There are reasonable alternative designs that do not require trench drains

Board options are:

1. Not approve the waiver request
2. Approve the waiver request
3. Other Board action

ATTACHMENTS:

Description

- **Applicant Submittal - Exhibit A**
- **Revised Staff Report**

BREVARD County
BOARD OF COUNTY COMMISSIONERS

FLORIDA'S SPACE COAST

Tammy Rowe, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972
Tammy.Rowe@brevardclerk.us

April 10, 2019

MEMORANDUM

TO: Corrina Gumm, Interim Public Works Director

RE: Item J.1., Waiver Request to Stormwater Management Criteria for Sprengergarton, LLC

The Board of Commissioners, in regular session on April 9, 2019, considered the waiver request to stormwater management criteria for Sprengergarton, LLC, but took no formal action.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Tammy Rowe

Tammy Rowe, Deputy Clerk

/kp

AGENDA REPORT

Meeting Date: March 26, 2019

Category:	New Business
Title:	Approval of Trench Drain on Eber Road
Subject:	Tench Drain as allowed by 62.3755.4.5
Fiscal Impact:	Zero
Dept/Office:	Public Works/Engineering
Requested Action:	Approve use of 1* x 18" Trench drain athe driveways on south side of Eber Road Consistant with Brevard County Ordinance.
Summary Explanation and Background:	Eber Road is built on a Melbourne Tillaman ROW. Thereffore, the Brevard County ROW is on 33' wide. TPW Ventures wishes to build a new turn lane on the south side of Eber. TPW does not own all of the land along the proposed turn lane. Beacuse of issues particular to the site (Roadway all slopes to south, minimal ROW avaialbe, existing FPL and ATT easements and equipment, high water table, limited stormwater runoff outfall, etc. TPW cannot install a normal pipe crossing at a swale without ponding water in the drive aisle of Eber or creating drivae entrances that are too steep and would cause "tail dragging for" vehicle. The use of FDOT approved trench drains at the crossing would resolve all of the issues. This is consistanty with Brevard County Code. TPW does not believe this is a waiver and is entitled to a refund.
Clerk to the Board Instructions:	
Attachment Descriptions:	Plans and Section for areas in question. Copy of Code sections.
Department Reviewer:	
ACM Reviewer:	
County Manager Reviewer:	

SPRENGERGARTEN (TPW COMMERCIAL PARK PHASE 1) TURNLANE

2825 EBER BLVD.

WEST MELBOURNE, BREVARD COUNTY, FLORIDA

VICINITY MAP
N.T.S.

[illegible]

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT NECESSARY AND INCIDENTAL TO THE CONSTRUCTION. HE SHALL OBTAIN AND PAY FOR ALL PERMITS AND OFFICIAL INSPECTIONS REQUIRED BY THE UTILITY AND OTHER OFFICIAL FEES IN CONNECTION WITH THE WORK. CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE WITH THE UTILITY AS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION.

2. SITE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN THE REQUIRED PERMITS FOR DEWATERING & SHALL BE RESPONSIBLE FOR MONITORING & CONTROLLING TURBIDITY FROM DEWATERING OR STORM WATER RUNOFF DURING CONSTRUCTION.

3. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS & SHALL FIELD VERIFY LOCATIONS, CONDITIONS, & SIZES OF ALL EXISTING WATER LINES, SEWER LINES, MANHOLES, WATER METERS, GAS & ELECTRIC LINES, TELEPHONE, CABLE, FIBER OPTIC, ETC., BEFORE STARTING CONSTRUCTION.

4. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE BETWEEN CIVIL, MECHANICAL, ARCHITECTURAL, ELECTRICAL AND FIRE PROTECTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER DURING LAYOUT AND LONG BEFORE COMMENCING PLACEMENT.

5. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER REPRODUCIBLE AS-BUILT DRAWINGS WITH THE FOLLOWING INFORMATION PREPARED BY A FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S OWN EXPENSE:

STORM STRUCTURES:
LOCATION, GRATE ELEV., RIM ELEV., INVERT ELEV., DISTANCES BETWEEN CENTERS OF ALL DRAINAGE STRUCTURES.

STORM PIPE:
MATERIAL, SIZE, LENGTH, INVERTS, AND SLOPES OF ALL STORM DRAIN PIPES.

GRADING:
PAVING ELEV. AT THE POINTS SHOWN ON THE PLANS, BOTTOM AND PERIMETER LOCATIONS AND ELEVATIONS OF ALL RETENTION AREAS AND SWALES.

SANITARY SEWER MANHOLE:
LOCATION, RIM ELEV., INVERT ELEV., DISTANCE BETWEEN MANHOLES, SANITARY SEWER PIPE: MATERIAL, SIZE, LENGTH, INVERTS, & SLOPES OF ALL SANITARY SEWER PIPES.

WATER LINES:
LOCATION OF MAIN FROM PROPERTY LINE OR EASEMENT LINES @ 200' INTERVALS, WATER MAIN MATERIALS & DISTANCE FROM STRUCTURES, DISTANCE FROM HYDRANT TO HYDRANT VALVE, PERTINENT EASEMENT INFORMATION, AT LEAST 2 TIES TO ALL VALVES, SERVICE LINES, FITTINGS & FIRE HYDRANTS FROM PERMANENT POINTS.

6. CONTRACTOR SHALL CONTACT PROJECT ENGINEER TO INSPECT ALL RETENTION AREAS PRIOR TO SODDING.

[illegible] ALL WORK PERFORMED IN THE BREVARD COUNTY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE 2016 FDOT STANDARD PLANS & THE 2016 SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

[illegible]

1. CONTRACTOR SHALL VERIFY ASBUILT CONDITIONS & ELEVATIONS AGAINST APPROVED SITE PLAN. ANY DISCREPANCIES SHALL BE CORRECTED IN THE FIELD & ON THE ASBUILTS PRIOR TO REQUESTING CERTIFICATION FROM THE ENGINEER OF RECORD.

NOTE:

CONTRACTOR & SUBCONTRACTORS MUST CALL FOR UTILITY LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION.

CONTRACTOR & SUBCONTRACTORS SHALL FIELD VERIFY LOCATION, SIZE, TYPE, ETC. OF ALL EXISTING [illegible] UTILITIES (ABOVE AND BELOW GROUND) AND ALL OTHER EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

CONTACT:
SUNSHINE 811 UTILITY LOCATES 811 OR 1-800-432-4770
BREVARD COUNTY PUBLIC WORKS (INFO) 617-7202

LEGEND

[illegible]

ENGINEERS CERTIFICATION

MARCH 6, 2019

[illegible]

- C-0 COVER SHEET & NOTES
- C-1 EROSION & SEDIMENTATION PLAN
- C-2 EXISTING SITE & DEMO PLAN
- C-3 SITE PLAN
- C-4a DRAINAGE, GRADING & UTILITIES PLAN
- C-4b ROOF DRAINAGE
- C-0 COVER SHEET & NOTES TURNLANE
- C-5a TURNLANE PLAN
- C-5b TURNLANE SECTIONS
- C-5c FDOT INDEXES & BRE. CO. EXHIBITS
- C-5d TURNLANE ADDITIONAL DETAILS
- C-5e TURNLANE ADDITIONAL DETAILS 2
- C-6 SECTIONS & DETAILS
- C-7 DETAILS
- C-8 DETAILS
- C-9 DETAILS
- C-10 SURVEY PG1
- C-11 SURVEY PG2
- C-12 SURVEY PG3
- C-13 SURVEY PG4
- C-14 SURVEY PG5
- C-15 WETLAND SURVEY
- L-1 EXISTING VEGETATION PLAN
- L-2 LANDSCAPE PLAN
- L-3 LANDSCAPE PLAN
- L-4 ENLARGED LANDSCAPE PLAN
- L-5 LANDSCAPE DETAILS
- L-6 LANDSCAPE SPECIFICATIONS
- PH-1 PHOTOMETRIC LIGHTING PLAN

MEC
CONTRACTORS • ENGINEERS
Mid Florida Engineering Consultants, dba
7607 Coral Drive, West Melbourne, FL 32904

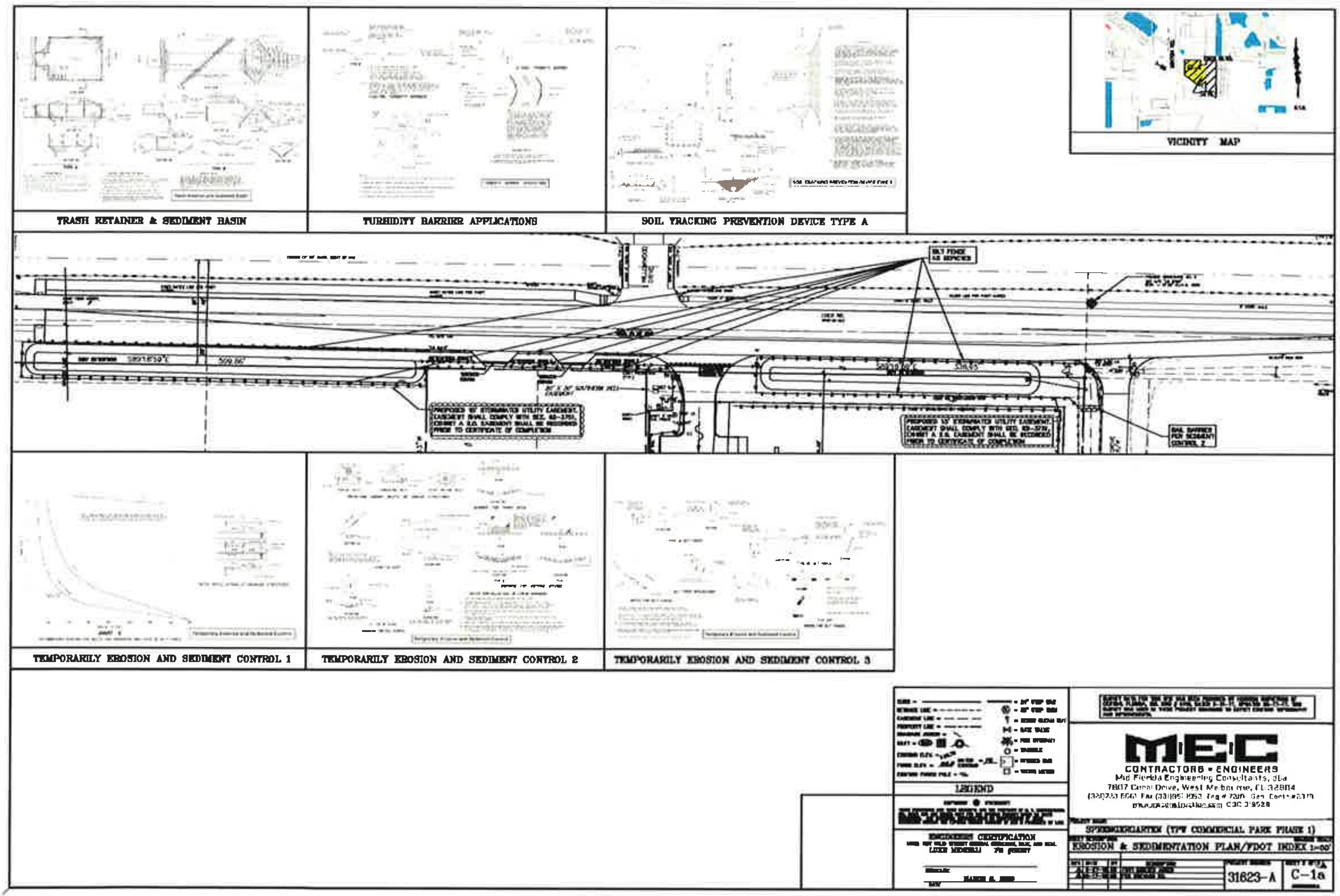
SPRENGERGARTEN (TPW COMMERCIAL PARK PHASE 1)

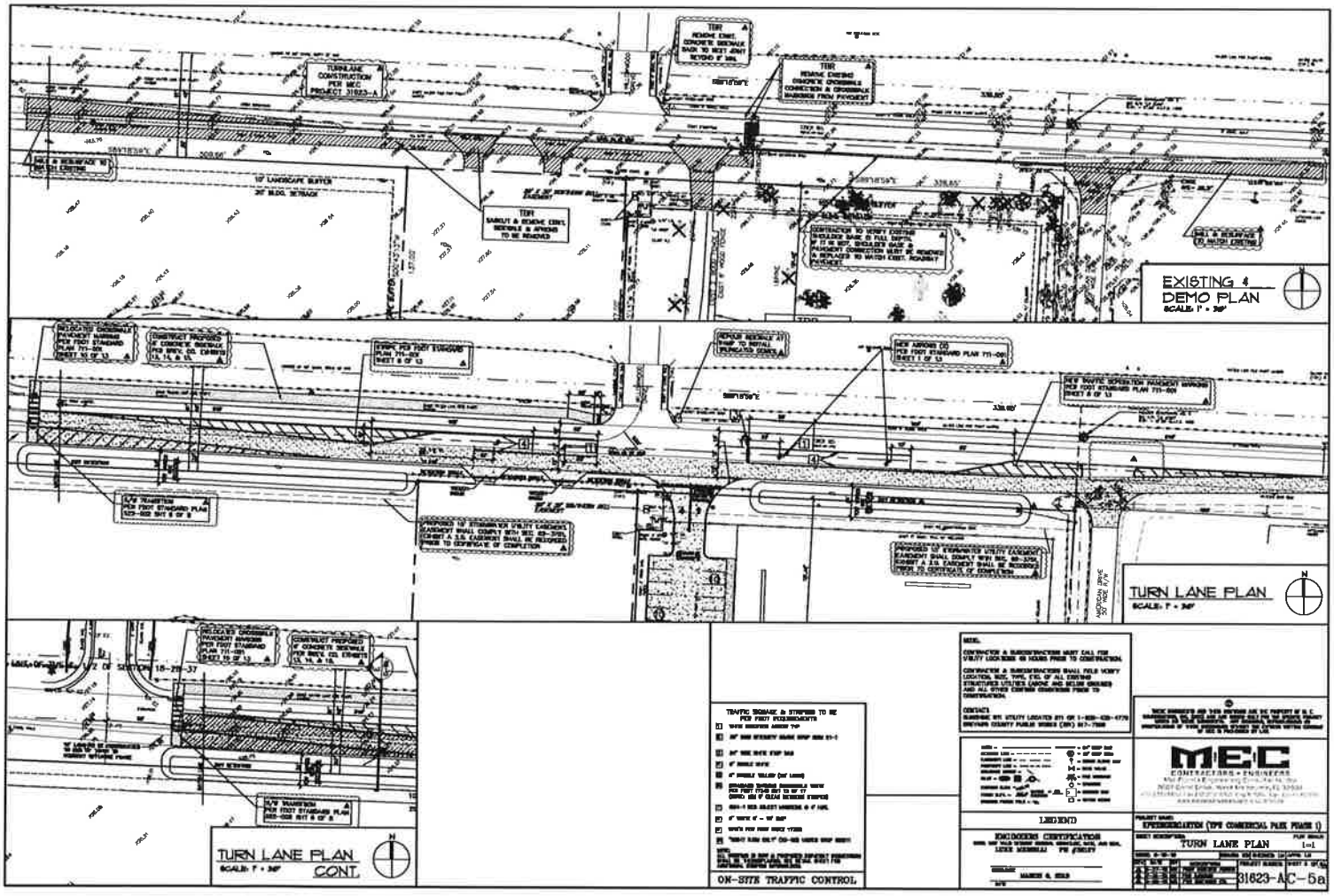
COVER SHEET & NOTES

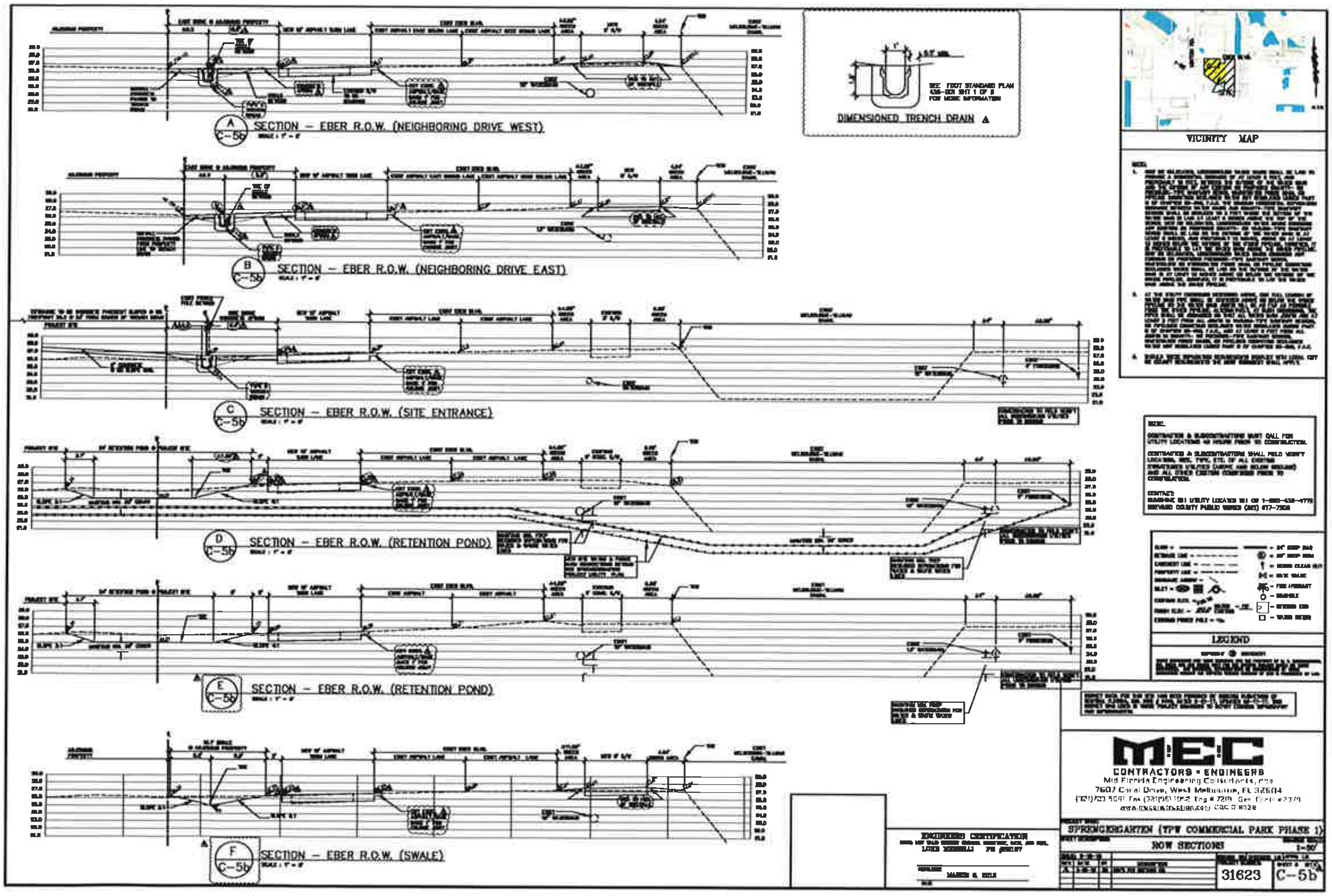
N.T.S.

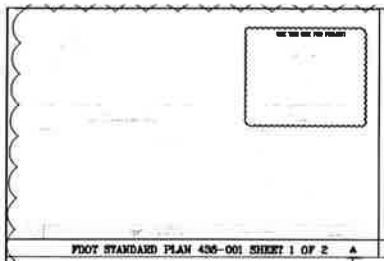
31623-A

C-0


TRASH RETAINER & SEDIMENT BASIN
TURBIDITY BARRIER APPLICATIONS
SOIL TRACKING PREVENTION DEVICE TYPE A
VICINITY MAP
SILT FENCE AS DEPICTED
509.66'
TEMPORARILY EROSION AND SEDIMENT CONTROL 1
TEMPORARILY EROSION AND SEDIMENT CONTROL 2
TEMPORARILY EROSION AND SEDIMENT CONTROL 3
LEGEND
ENGINEERS CERTIFICATION
MEC
CONTRACTORS • ENGINEERS
EROSION & SEDIMENTATION PLAN/FDOT INDEX
31623-A
C-1a

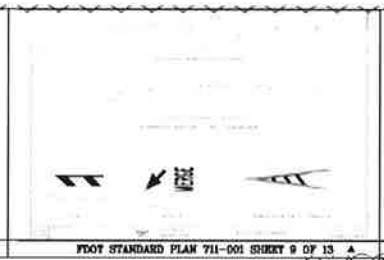

EXISTING & DEMO PLAN
SCALE: 1" = 30'
TURN LANE PLAN
SCALE: 1" = 30'
TURN LANE PLAN CONT.
SCALE: 1" = 30'
LEGEND
ON-SITE TRAFFIC CONTROL
M·E·C
CONTRACTORS • ENGINEERS
TURN LANE PLAN
31623-AC-5a


DIMENSIONED TRENCH DRAIN
VICINITY MAP
SECTION – EBER R.O.W. (NEIGHBORING DRIVE WEST)
SECTION – EBER R.O.W. (NEIGHBORING DRIVE EAST)
SECTION – EBER R.O.W. (SITE ENTRANCE)
SECTION – EBER R.O.W. (RETENTION POND)
SECTION – EBER R.O.W. (RETENTION POND)
SECTION – EBER R.O.W. (SWALE)
LEGEND
CONTRACTORS • ENGINEERS
Mid Florida Engineering Consultants, dba
7607 Coral Drive, West Melbourne, FL 32904
SPRENGERGARTEN (TPW COMMERCIAL PARK PHASE 1)
ROW SECTIONS
31623
C-5b



FDOT STANDARD PLAN 436-001 SHEET 1 OF 2 ▲

FDOT STANDARD PLAN 711-001 SHEET 1 OF 13 ▲



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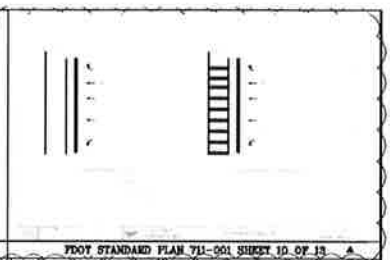


FDOT STANDARD PLAN 711-001 SHEET 10 OF 13 ▲

FDOT STANDARD PLAN 430-022 SHEET 1 OF 7 ▲

FDOT STANDARD PLAN 425-062 SHEET 1 OF 7 ▲

FDOT STANDARD PLAN 425-062 SHEET 3 OF 7 ▲

BREVARD CO. LAND DEV. EXHIBIT 3 ▲

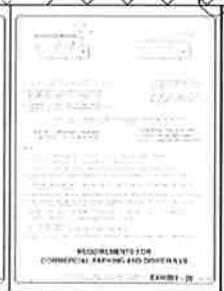
BREVARD CO. LAND DEV. EXHIBIT 4 ▲

BREVARD CO. LAND DEV. EXHIBIT 13 ▲

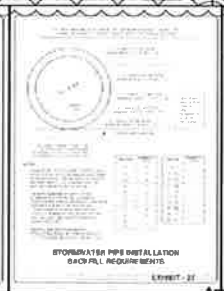
BREVARD CO. LAND DEV. EXHIBIT 14 ▲

BREVARD CO. LAND DEV. EXHIBIT 15 ▲

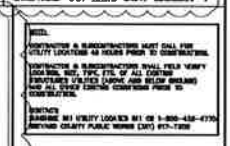
BREVARD CO. LAND DEV. EXHIBIT 18 ▲



BREVARD CO. LAND DEV. EXHIBIT 20 ▲



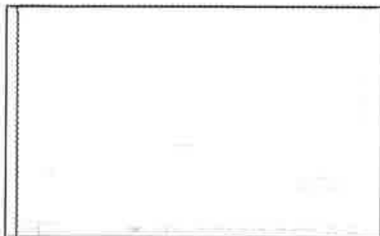
BREVARD CO. LAND DEV. EXHIBIT 27 ▲



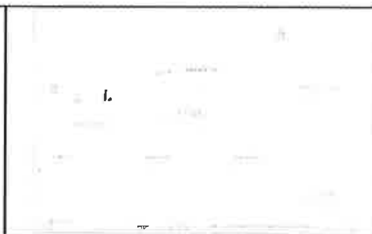
ENGINEERS CERTIFICATION

MEC
CONTRACTORS • ENGINEERS

31623 C-5c



FDOT STANDARD PLAN 102-601 SHEET 1 OF 1



FDOT STANDARD PLAN 102-602 SHEET 1 OF 1

FDOT STANDARD PLAN 102-603 SHEET 1 OF 3

FDOT STANDARD PLAN 102-611 SHEET 1 OF 1

BREVARD COUNTY PUBLIC WORKS ENGINEERING STANDARD DEVELOPMENT NOTES

BREVARD COUNTY PUBLIC WORKS ENGINEERING STANDARD DEVELOPMENT NOTES

LEGEND

ENGINEERS CERTIFICATION

MARCUS A. [illegible]

MEC

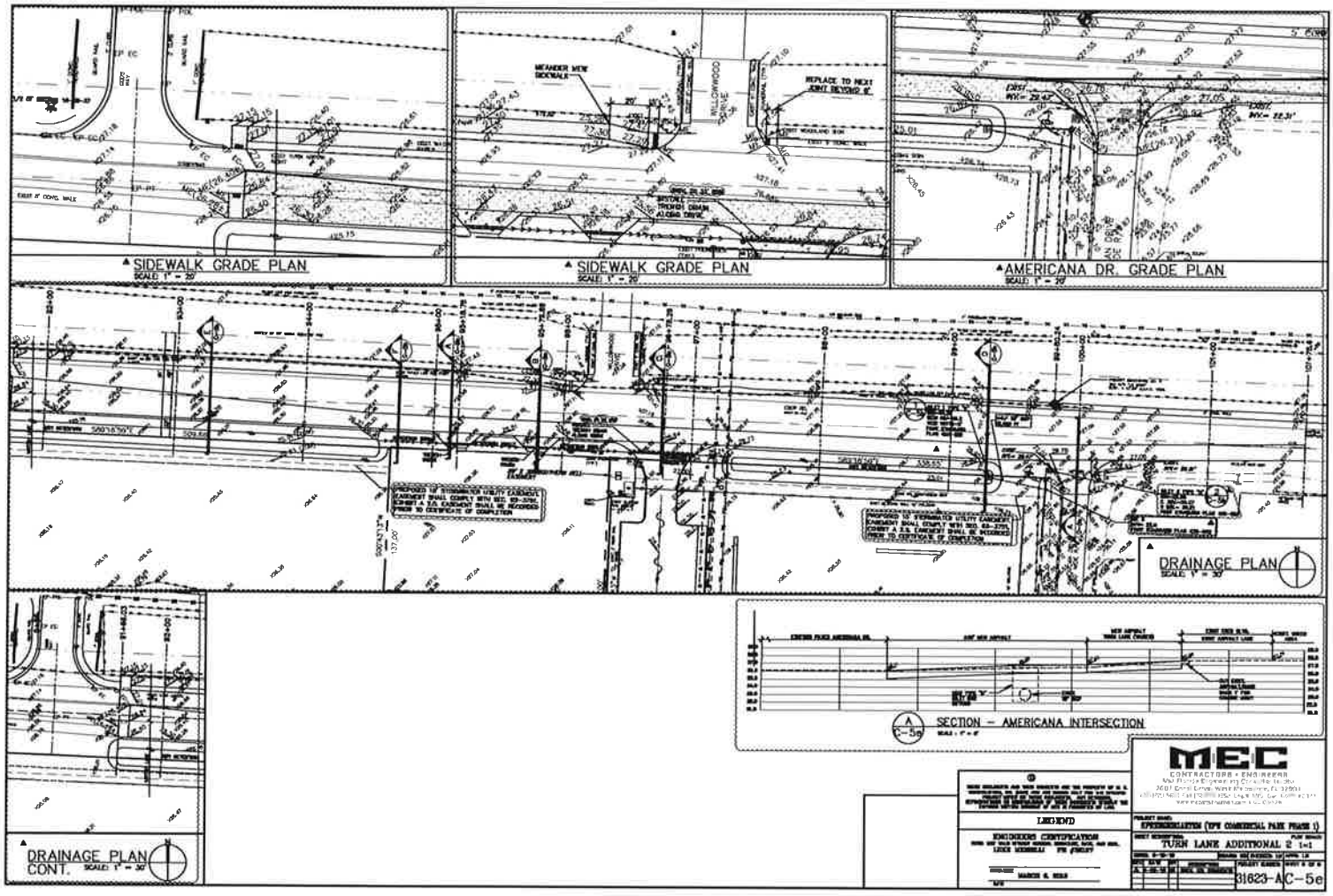
CONTRACTORS • ENGINEERS

2601 Coral Drive, West Melbourne, FL 32904

TURN LANE ADDITIONAL 1

31623-A

C-5d


SIDEWALK GRADE PLAN
SCALE: 1" = 20'
SIDEWALK GRADE PLAN
SCALE: 1" = 20'
AMERICANA DR. GRADE PLAN
SCALE: 1" = 20'
DRAINAGE PLAN
SCALE: 1" = 30'
DRAINAGE PLAN CONT.
SCALE: 1" = 30'
SECTION - AMERICANA INTERSECTION
C-5e
LEGEND
MEC
CONTRACTORS • ENGINEERS
TURN LANE ADDITIONAL 2 1=1
31623-AC-5e

4.5 Roadway (pavement) drainage design.

(a) General. Good pavement drainage design consists of the proper selection of grades, cross slopes, curb types, inlet location, etc., to remove the design storm runoff from the pavement in a cost effective manner while preserving the safety, traffic capacity and integrity of the highway and street system. These factors are generally considered to be satisfied when excessive spreads of the water are removed from the vehicular travel way and when siltation at pavement low points is not allowed to occur. The standards included herein are intended to accomplish these objectives.

(b) Roadway grade. The minimum allowable centerline grade for all streets with curb and gutter shall be 0.30 percent and 0.40 percent for curb radii grades.

(c) Cross-slope. The minimum allowable cross-slope for all streets shall be ¼-inch per foot.

(d) Drainage structures. All drainage structures, unless specifically detailed in these guidelines, shall at a minimum conform to the latest edition of the FDOT roadway and traffic design standards.

Any drainage structure not detailed in the FDOT design standards shall be designed in conformance with good engineering practices and shall require approval by the reviewer.

Where deemed necessary, the reviewer may require a drainage structure design differing from FDOT design standards.

(e) Swales.

1. The use of roadside swales is encouraged to pro mote groundwater recharge and provide stormwater treatment.

2. Roadside swales shall have maximum front slope of 5:1 seeded or 4:1 sodded and maximum back slope of 3:1 sodded. The minimum flow line grade shall be 0.10 percent when used for conveyance and 0.00 percent when used for retention.

3. Runoff may be accumulated and carried in the swales up to, but not above, the point where flooding of the shoulders or adjacent property would occur. Ditch blocks in roadside swales shall have a maximum height of 12 inches and shall not be constructed of earth.

4. Roadside swales can be used for retention if the flow line is a minimum of one-foot above the SHGWT with demonstration by approved groundwater mounding or flow net analysis that the retention volume is recovered within 24 hours.

(f) Curbs and gutters.

1. Curb and gutter sections shall have a maximum run of 400 feet between on grade inlets. Distances greater than 400 feet must be substantiated with calculations.

(g) Runoff determination. The peak rates of runoff for the pavement drainage system shall be determined by the rational method.

FDOT methodology, forms, and intensity curves shall be used. Calculation of junction losses will permit the hydraulic grade line to be raised to the gutter elevation. The minimum time of concentration will be ten minutes.

Exhibit 4-3 shall be used to determine runoff coefficients (c) for drainage areas.

(h) Stormwater spread into traveled lane. Inlets shall be spaced at all low points, intersections and along continuous grades so as to prevent the spread of water from exceeding tolerable limits. The acceptable tolerable limits for multilane arterial and collector roadways is defined as one traveled lane width. The acceptable tolerable limit for interior subdivision roadways is defined as the seven feet from the face of curb if curb and gutter is used.

(i) Inlet types. The curb inlet types and capacities to be used shall be the latest version of the state department of transportation inlets.

(j) Low point inlets. All inlets at low points (sumps) shall be designed to intercept 100 percent of the design flow without exceeding the allowable spread of water onto the traveled lanes as defined above.

(k) Inlet capacities. Inlet capacities shall be determined using FDOT criteria and tables.

4.6 Storm sewer and culvert design.

(a) Minimum pipe size. The minimum diameter pipe is 18 inches or equivalent elliptical pipe. The minimum size box culverts shall be three feet by three feet. (b) Pipe grade. All storm sewers shall be designed and constructed to produce a minimum velocity of two fps when flowing full. No storm sewer system or portion thereof will be designed to produce velocities in excess of 12 fps for reinforced concrete pipe or eight fps for metal pipe. For other pipe materials the maximum velocity shall be per the manufacturer's recommendations.

Staff Report

Permit # 18RW00621 Sprengergarten

Subject: Trench Drain Waiver Request

Existing Condition:

The property in question is located at 2825 Eber Blvd, West Melbourne, FL 32904 on the southwest corner of Eber Blvd and American Dr. Eber road in this area is an uncurbed roadway with undefined drainage. Stormwater runoff in the area currently flows from the north edge of pavement to the south side of the road, eventually making its way east to the corner of Eber Blvd and American Drive where it enters a pipe under American Drive and ultimately flows to the Melbourne Tillman Water Control District Canal. Currently there are utility boxes, power poles, and a sidewalk located on the south side of Eber Road along the property frontage.

Proposed Improvements:

The developer is proposing to develop the aforementioned parcel with an event venue and future commercial prospects. The traffic impact analysis of the current development phase warrants the addition of a westbound left turn lane into the parcel. In order to accomplish this turn lane, the roadway will be widened to the south.

The Saint Johns River Water Management District (SJRWMD) is requiring the developer to provide stormwater treatment for the stormwater runoff from the new pavement for the turn lane. Normally, turn lanes are exempt from treatment requirements by the SJRWMD. The applicant is proposing to install shallow retention areas along the south side of Eber Road to capture the runoff and treat it. The proposal includes the installation of Type II trench drains across two private residential driveways and an additional trench drain across the proposed development driveway to connect the shallow retention areas and convey runoff to the existing swale along American Drive.

The current proposal would require a board waiver of the Stormwater Code Section 62-3751, Exhibit A. This code section requires culverts to be constructed of reinforced concrete pipe and be a minimum of 18 inches in diameter or equivalent elliptical pipe.

Staff Recommendations:

Staff recommends denial of the above stated waiver request and support of alternative designs as provided in the next section to accommodate the development.

Trench drains elicit more concerns and require significantly more maintenance than a typical culvert. They pose ADA concerns for people and bicycles traversing the grates. Special grates are available that meet the ADA requirement, but they tend to be costly. Due to their longitudinal configuration, trench drains collect more sediment buildup that, if not cleaned on a regular basis, will begin to grow vegetation as it is exposed to sunlight and impede flow. Maintenance requires the grates to be removed and the trench drain manually cleaned. Under Code Section 86-70, Article (a), Sub-Article (4), driveway culverts are the responsibility of the property owner. As such, staff considers the above request to place undue hardship on an adjacent property owner (not the developer) to maintain a drainage trench drain in perpetuity that is not a requirement by the County or needed for his property.

The request states that the proposed design utilizes a FDOT approved trench drain. While the trench drain is an approved FDOT product, the proposed design is not consistent with County standards, nor usual FDOT conditions.

In addition, staff has reviewed the trench drain design in accordance with the FDOT Standards, Specifications and Manuals. The proposed use of the Type II trench drain across the driveways does not appear to meet the intended use per the FDOT details. The FDOT Standard Plans 436-001 notes that the Type II Trench Drain is primarily intended for use in valley gutter across driveway openings and drop curbing, and is connected to outlet pipe or drainage structure(s). The January 2019 FDOT Drainage Manual Section 3.9.3 states "Trench drains are not allowed for the final constructed condition unless approved by the District Drainage Engineer. Trench drains are only allowed for temporary drainage." As this is proposed as a permanent solution, this application would not be an accepted use with the FDOT without special approval.

Lastly, staff would like to highlight that while the County does follow many of the FDOT Standards and Specifications, many County requirements do deviate from these requirements when appropriate to ensure a maintainable and functioning system for years to come. Below are just a couple examples:

- Sidewalks: FDOT requires 4", 2500 PSI concrete. County requires 6", 3000 PSI Concrete with fiber due to service life and liability from damage.
- Pipe: FDOT allows many different types of materials including metal pipes in some applications. County requires reinforced concrete pipe due to our highly brackish environment and past experience.

Alternative Acceptable Designs:

Staff has been working diligently on this matter to provide the developer with a viable design option to accomplish their goal. Based on the provided developer survey and subsequent site visit, staff has determined that there are several possible design alternatives which would meet both County Code and the SJRWMD requirements. A design based on the below concept alternative designs would be acceptable and still accommodate the SJRWMD requirement.

One alternative design consists of piping in the right-of- way connecting to the pipe under American Drive. The pipe would be installed low enough preventing humps or steep grades within the driveways. Above the piped system, a shallow retention area would be constructed to flow into ditch bottom inlets that would serve as control structures to meet retention volume requirements. Power poles would be relocated to the ROW line to remove them from the flow line. This can be easily accommodated as the utility lines are installed vertically with no overhang. Inlet locations and pipe alignment would be adjusted as necessary to avoid utility boxes. Refer to Figure 1 and Figure 2 below for conceptual plan information.

Another viable alternative is to provide additional right-of-way along the western portion of the property frontage sufficient enough to provide the required storage volume to treat the 25-year, 96-hour storm. The current plan proposes to dedicate right-of-way to the County for only a portion of the western property frontage instead of the full length of frontage. Refer to Figure 3 below for conceptual right-of-way dedication information.

If there is not sufficient right-of-way to meet the treatment requirements per SJRWMD, the developer can also consider allowing the stormwater runoff to drain onsite and provide treatment onsite instead.

These are just a few other design options that satisfactorily meet County requirements. Also attached are site visit photos showing existing conditions within the Eber Blvd right-of-way.

Alternative Acceptable Designs:

Staff has been working diligently on this matter to provide the developer with a viable design option to accomplish their goal. Based on the provided developer survey and subsequent site visit, staff has determined that there are several possible design alternatives which would meet both County Code and the SJRWMD requirements. A design based on the below concept alternative designs would be acceptable and still accommodate the SJRWMD requirement.

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Another viable alternative is to provide additional right-of-way along the western portion of the property frontage sufficient enough to provide the required storage volume to treat the 25-year, 96-hour storm. The current plan proposes to dedicate right-of-way to the County for only a portion of the western property frontage instead of the full length of frontage. Refer to Figure 3 below for conceptual right-of-way dedication information.

If there is not sufficient right-of-way to meet the treatment requirements per SJRWMD, the developer can also consider allowing the stormwater runoff to drain onsite and provide treatment onsite instead.

These are just a few other design options that satisfactorily meet County requirements. Also attached are site visit photos showing existing conditions within the Eber Blvd right-of-way.

Alternative Acceptable Designs:

Staff has been working diligently on this matter to provide the developer with a viable design option to accomplish their goal. Based on the provided developer survey and subsequent site visit, staff has determined that there are several possible design alternatives which would meet both County Code and the SJRWMD requirements. A design based on the below concept alternative designs would be acceptable and still accommodate the SJRWMD requirement.

One alternative design consists of piping in the right-of- way connecting to the pipe under American Drive. The pipe would be installed low enough preventing humps or steep grades within the driveways. Above the piped system, a shallow retention area would be constructed to flow into ditch bottom inlets that would serve as control structures to meet retention volume requirements. Power poles would be relocated to the ROW line to remove them from the flow line. This can be easily accommodated as the utility lines are installed vertically with no overhang. Inlet locations and pipe alignment would be adjusted as necessary to avoid utility boxes. Refer to Figure 1 and Figure 2 below for conceptual plan information.

Another viable alternative is to provide additional right-of-way along the western portion of the property frontage sufficient enough to provide the required storage volume to treat the 25-year, 96-hour storm. The current plan proposes to dedicate right-of-way to the County for only a portion of the western property frontage instead of the full length of frontage. Refer to Figure 3 below for conceptual right-of-way dedication information.

If there is not sufficient right-of-way to meet the treatment requirements per SJRWMD, the developer can also consider allowing the stormwater runoff to drain onsite and provide treatment onsite instead.

These are just a few other design options that satisfactorily meet County requirements. Also attached are site visit photos showing existing conditions within the Eber Blvd right-of-way.

Figure 1: Conceptual Plan - Aerial View

LEGEND

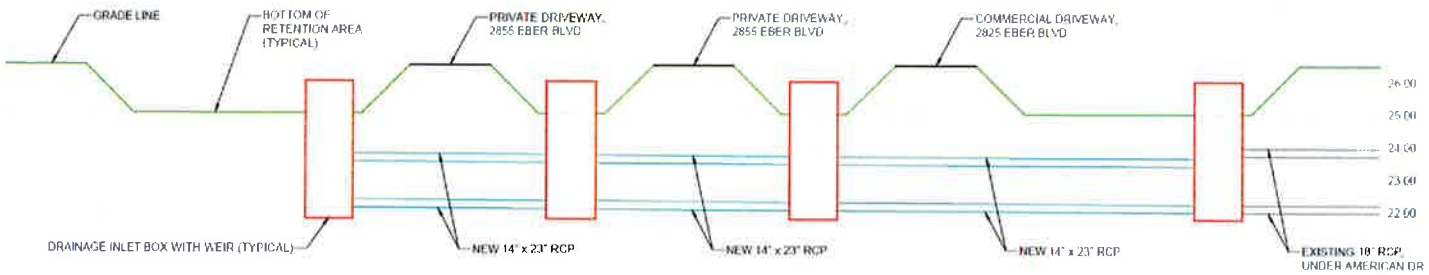
- Drainage Inlet
- New Storm Pipe
- Existing Storm Pipe
- Retention Area

N

N.T.S.

Revised 4/3/2019

Figure 2: Conceptual Plan - Profile View



CONCEPT PLAN PROFILE VIEW
N.T.S.

Revised 4/3/2019

Figure 3: Additional Right-of-Way Dedication Option

LEGEND

- Current Proposed Right-of-Way Dedication Area
- Current Proposed Drainage Easement Dedication Area
- Possible Additional Right-of-Way Dedication Area

N

N.T.S.

Revised 4/3/2019

Figure 4: Existing Conditions – 2825 Eber Blvd Property Frontage, Looking West

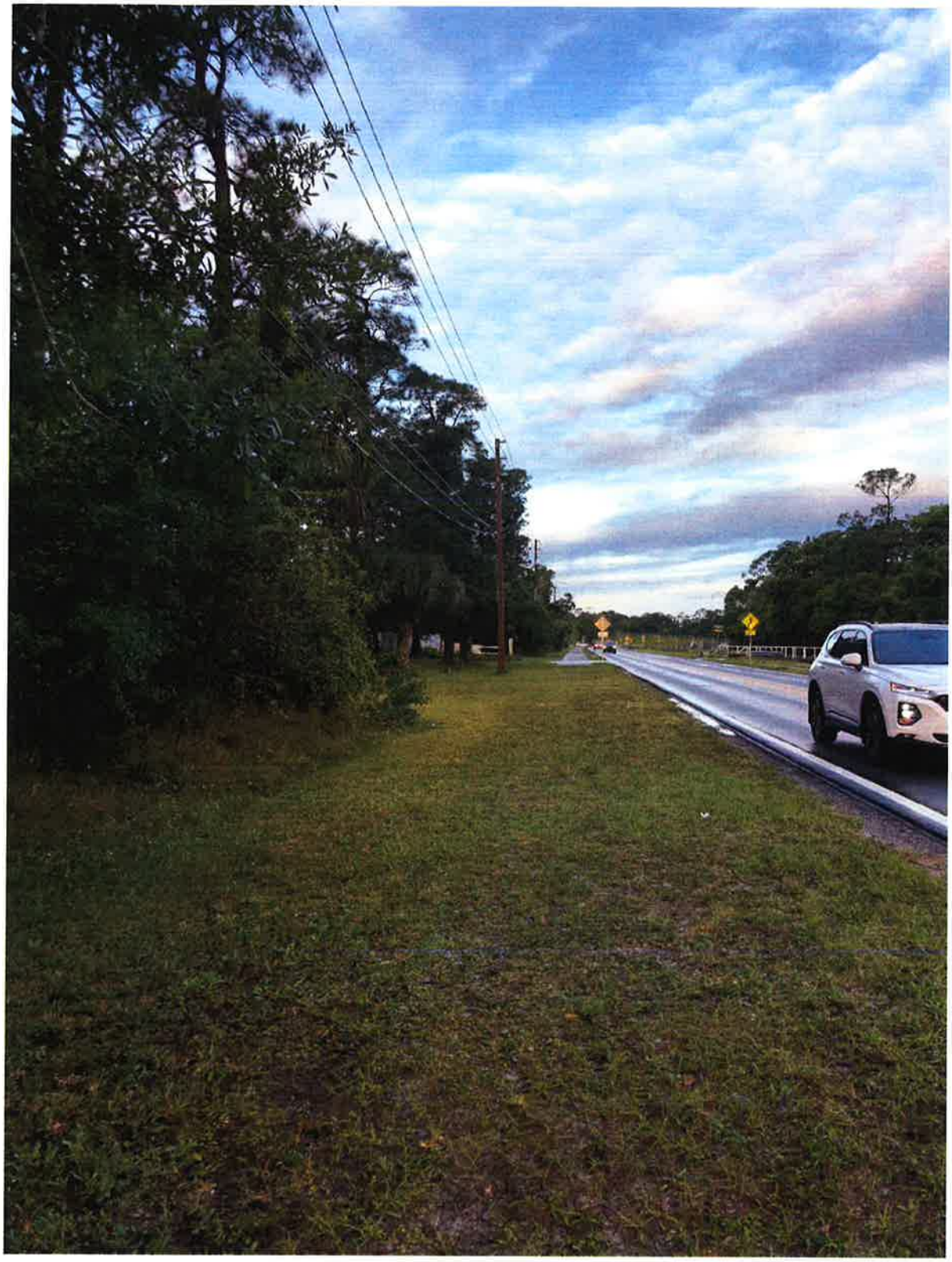


Figure 5: Existing Conditions – 2825 Eber Blvd Property Frontage, Looking West

Figure 6: Existing Conditions – At Eber Blvd and American Drive, Looking West

Figure 7: Existing Conditions – Culvert Pipe Under American Drive, Looking East