

- SHEET DESCRIPTION**
- 1 COVER SHEET
 - 2 LEGEND
 - 3 GENERAL NOTES, SPECIFICATIONS & TYPICAL SECTION
 - 4-8 PLAN
 - 9 DETAILS
 - 10-13 CROSS SECTIONS
 - 14-18 MAINTENANCE OF TRAFFIC

HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

CONSTRUCTION PLANS

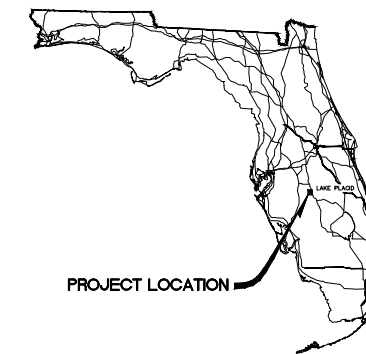
FOR

THUNDERBIRD ROAD WEST SIDEWALK EXTENSION

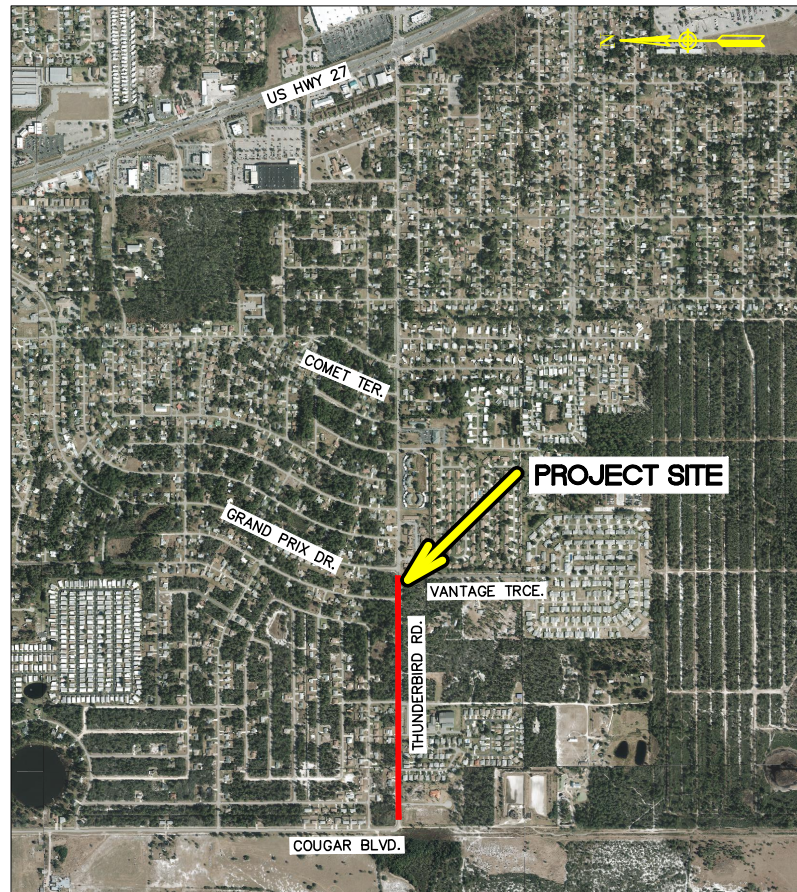
HIGHLANDS COUNTY PROJECT NO. 15010

FINANCIAL PROJECT ID# 433203-1-58-01

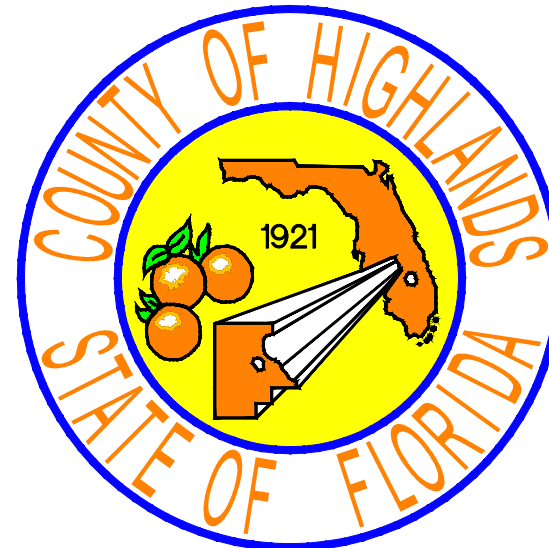
(FEDERAL FUNDS)



STATE LAW REQUIRES EXCAVATORS TO CALL 811 BEFORE DIGGING PER THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" CHAPTER 556, FLORIDA STATUTES. FAILURE TO CALL CAN RESULT IN FINES FROM \$250 TO \$5,000.



PROJECT LOCATION MAP
SCALE: 1" = 2,000'



CLINTON HOWERTON, JR., P.E.
COUNTY ENGINEER

ENGINEER OF RECORD
JAMES D. LANGFORD, JR., P.E.

RIGHT-OF-WAY WIDTH = VARIES FROM 68' TO 85' WIDTH
APPROXIMATE PROJECT LENGTH = 2,587 LF (0.489 MILE)
POSTED SPEED LIMIT = 45 MPH

THUNDERBIRD ROAD WEST SIDEWALK EXTENSION HIGHLANDS COUNTY PROJECT NO. 15010			
BASE BID			
TASK NO.	ITEM DESCRIPTION	QUANTITY	UNIT
1	MOBILIZATION	1	LS
2	BONDS & INSURANCE	1	LS
3	CONSTRUCTION SURVEY STAKING INCLUDING AS-BUILT	1	LS
4	TESTING	1	LS
5	MAINTENANCE OF TRAFFIC	1	LS
6	SEDIMENT BARRIER TEMPORARY	2,437	LF
7	CLEARING AND GRUBBING INCLUDING TREE REMOVAL	1	LS
8	REMOVAL OF EXISTING ASPHALT PAVEMENT ROADWAY	110	SY
9	MAILBOX REMOVE AND RELOCATE	7	EA
10	REGULAR EXCAVATION	600	CY
11	REGULAR EMBANKMENT	400	CY
12	STABILIZATION, TYPE B, LBR 40, 12" COMPACTED THICKNESS SIDE STREET CONSTRUCTION & 8' SHOULDER	2,178	SY
13	OPTIONAL BASE, BASE GROUP 4, 6" COMPACTED THICKNESS	270	SY
14	OPTIONAL BASE, BASE GROUP 6, 8" COMPACTED THICKNESS	110	SY
15	SUPERPAVE ASPHALTIC CONCRETE, 1 1/2" THICK, RAP 30% MAXIMUM	12	TN
16	18" x 12" REINFORCED CONCRETE PIPE (RCP)	50	LF
17	15" HIGH DENSITY POLYETHYLENE PIPE (HDPE)	150	LF
18	MITERED END SECTION	6	EA
19	SIDEWALK CONCRETE, 4" THICK, 3,000 PSI MIN	1,350	SY
20	DRIVEWAY CONCRETE, 6" THICK, INCLUDE 6"x6"W1.4xW1.4 WWM, 3,000 PSI MIN	270	SY
21	CONCRETE DRAINAGE STRUCTURE (S-1), SEE DETAILS	5	EA
22	DETECTABLE WARNING, YELLOW, EMBEDDED	80	SF
23	PERFORMANCE TURF (SOD)	6,000	SY
24	SINGLE POST SIGN, F & I, STOP (R1-1), 30" x 30" & TWO (2), D3-1	3	AS
25	SINGLE POST SIGN, F & I, W1-R 30"x30" & W13-1P (15 MPH) 18" x 18"	1	AS
26	TEMPORARY PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 12"	170	LF
27	TEMPORARY PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 24"	27	LF
28	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12"	170	LF
29	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	27	LF

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS DATED 2016, AS AMENDED BY CONTRACT DOCUMENTS.
https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/floridagreenbook/2016floridagreenbookfinal-982972170.pdf?sfvrsn=946ed802_2

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2019/2020 STANDARD PLANS AND REVISED INDEX DRAWINGS AS APPENDED HEREIN, AND JANUARY 2020 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION; AS AMENDED BY CONTRACT DOCUMENTS.

HIGHLANDS COUNTY TECHNICAL STANDARDS MANUAL, THROUGH RESOLUTION 14-15-60.
[http://cms2.revize.com/revize/highlandscounty/document_center/LDRS%20thru%20Ord%2017-18-15%20\(7-25-18\).pdf](http://cms2.revize.com/revize/highlandscounty/document_center/LDRS%20thru%20Ord%2017-18-15%20(7-25-18).pdf)

PLANS PREPARED BY HIGHLANDS COUNTY ENGINEERING DEPARTMENT

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY COMPANIES

COMCAST CABLE
3010 HERRING AVE.
SEBRING, FL 33870
TIM HINEFELT
(863) 273-8556

HIGHLANDS COUNTY TRAFFIC
505 S. COMMERCE AVE.
SEBRING, FLORIDA 33870
EDDIE CARDONA
(863) 402-6877

CITY OF SEBRING
368 S. COMMERCE AVE.
SEBRING, FLORIDA 33870
BOB BOGGUS
(863) 471-5100

CENTURY LINK
924 MEMORIAL DR.
AVON PARK, FL 33825
KEN LUTZ
(863) 452-3185

DUKE ENERGY-FLORIDA
2051 OLD SCENIC HWY.
LAKE WALES, FL 33898
MARK MANNER
(863) 678-4476

PROJECT CONTROL POINTS				
Point Number	Easting	Northing	Elevation	Description
5000	493225.3650'	1151256.3750'	161.51'	Set Iron Rod w/ cap stamped "Highlands County"
5001	492398.4320'	1151256.2110'	164.68'	Set Iron Rod w/ cap stamped "Highlands County"
5002	491351.9530'	1151278.2980'	167.34'	Set Iron Rod w/ cap stamped "Highlands County"
5003	490401.6090'	1151276.8390'	169.60'	Set Iron Rod w/ cap stamped "Highlands County"

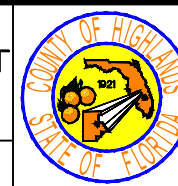
REVISIONS			STATUS
DATE	BY	DESCRIPTION	
2-19-19	BWD	REVISED PER FDOT COMMENTS	FOR BID
2-5-2020	DMN	REVISED STANDARDS AND SPECIFICATIONS DATES	

HIGHLANDS COUNTY ENGINEERING DEPARTMENT
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

DESIGNED BY: J.D. LANGFORD, P.E.
DRAWN BY: DOUG NIETUBICZ
CHECKED BY: J.D. LANGFORD, P.E.
IN CHARGE: J.D. LANGFORD, P.E.
DATE: 3/19/2020

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402

DATE:



THUNDERBIRD ROAD WEST SIDEWALK EXTENSION
COVER SHEET

SCALE: HORIZ. N/A VERT. N/A	PROJECT NO. 15010	REV. 0
SHEET 1 OF 18		

LINE LEGEND

	OVERHEAD WIRES
	BURIED ELECTRIC
	CONDUIT & CASEMENTS
	BURIED FIBER OPTIC
	BURIED TELEPHONE
	FORCE MAIN
	GAS LINE
	WATER LINE
	CABLE TELEVISION
	WIRE FENCE
	CHAIN LINK FENCE
	WOOD FENCE
	EXISTING TOP OF BANK
	EXISTING TOE OF SLOPE
	EXISTING EDGE OF SHELL ROCK
	EXISTING RIGHT OF WAY LINE
	PROPOSED RIGHT OF WAY LINE
	EXISTING GRADE AT R/W RT (PROFILE VIEW)
	EXISTING GRADE AT R/W LT (PROFILE VIEW)
	EXISTING GRADE AT CONST BL (PROFILE VIEW)
	EXISTING CONTOURS WITH ELEVATIONS
	PROPOSED CONTOURS WITH ELEVATIONS
	EXISTING GUARDRAIL
	EXISTING EASEMENT
	GOVERNMENT FRACTIONAL LINES
	LOT LINES
	PROPOSED SOD SHOULDER LINE
	PROPOSED BACK OF DITCH
	PROFILE GRADE LINE (PROFILE VIEW)
	PROPOSED CURVE RETURN
	PROPOSED CENTERLINE OR BASELINE

SYMBOL LEGEND

	BENCHMARK
	CONCRETE MONUMENT
	IRON ROD OR IRON PIPE
	NAIL AND DISK
	CLEANOUT
	ELECTRIC METER
	FLAG ELECTRIC
	FLAG FIBER OPTIC
	FLAG GAS
	FLAG SEWER
	FLAG TELEPHONE
	FLAG WATER
	FIRE HYDRANT
	GAS VALVE
	ELECTRIC BOX
	TELEPHONE BOX
	TELEVISION BOX
	TRAFFIC SIGNAL BOX
	PEDESTRIAN CROSSWALK
	LIGHT POLE
	MANHOLE DRAINAGE
	MANHOLE OTHER
	MANHOLE SEWER
	MANHOLE TELEPHONE
	MONITORING WELL
	UTILITY POLE
	WATER METER
	WATER VALVE
	WELL
	EXISTING GRADE SHOT
	PROPOSED ELEVATIONS
	BOLLARD
	MAIL BOX
	SIGN
	MITERED END SECTION
	GUY ANCHOR

ABBREVIATIONS

A.D.	ALGEBRAIC DIFFERENCE
BFS	BEGIN FULL SUPER
BL	BASELINE
BNC	BEGIN NORMAL CROWN
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
CONST.	CONSTRUCTION
EFS	END FULL SUPER
ELEV	ELEVATION
ENC	END NORMAL CROWN
EXIST.	EXISTING
HDPE	HIGH DENSITY POLYETHYLENE PIPE
LC	LONG CHORD
LT	LEFT
MES	MITERED END SECTION
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PGL	PROFILE GRADE LINE
PROP.	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCP	REINFORCED CONCRETE PIPE
RT	RIGHT
STA	STATION
TYP	TYPICAL

TREE LEGEND

	CEDAR TREE
	CITRUS TREE
	CYPRESS TREE
	MAGNOLIA TREE
	MAPLE TREE
	OAK TREE
	PALM TREE
	PINE TREE
	TREE
	TREE A
	TREE B
	TREE C
	TREE D

DRAINAGE LEGEND

	EXISTING PIPES & STRUCTURES
	PROPOSED PIPES & STRUCTURES

<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">REVISIONS</th> <th rowspan="2">STATUS</th> </tr> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td rowspan="4" style="text-align: center; vertical-align: middle;">FOR BID</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS		STATUS	DATE	DESCRIPTION			FOR BID							<p>DESIGNED BY: J.D. LANGFORD, P.E. DRAWN BY: DOUG NIETUBICZ CHECKED BY: J.D. LANGFORD, P.E. IN CHARGE: J.D. LANGFORD, P.E. DATE: 3/19/2020</p>	<p>HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870</p> <p>APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402</p>		<p>THUNDERBIRD ROAD WEST SIDEWALK EXTENSION</p> <p>LEGEND</p>	<p>SCALE: HORIZ. N/A VERT. N/A</p> <p>PROJECT NO. 15010 REV. 0</p> <p>SHEET 2 OF 18</p>
REVISIONS		STATUS																	
DATE	DESCRIPTION																		
		FOR BID																	

G:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings\Details Legend 15009 Thunderbird Rd Sidewalk.dwg, West Legend, Nietubicz, Douglas Acad 1-7 Black.ctb

GENERAL NOTES AND SPECIFICATIONS

GENERAL CONSTRUCTION NOTES

- The Contractor shall be responsible for furnishing all material and labor to construct the facility as shown and described in the construction documents.
- The Contractor shall be responsible for obtaining all required construction bonds prior to construction.
- The Contractor shall have available at the job site at all times one copy of the construction documents including plans, specifications, and special conditions and copies of any required construction permits.
- Any discrepancies on the drawings shall be immediately brought to the attention of the Highlands County Project Manager before commencing work. No field changes or deviations from design are to be made without prior approval of the Highlands County Project Manager.
- Contractor shall submit a construction schedule to the Highlands County Project Manager prior to commencement of construction.
- Contractor shall coordinate proposed driveway construction with affected property owners.
- Contractor shall repair and/or replace all disturbed irrigation. Contractor shall coordinate this activity with affected property owners.

EROSION CONTROL

- The Contractor shall grade the site to the elevations indicated and shall regrade washouts where they occur after every rainfall event until sod is well established or adequate stabilization occurs.
- Contractor shall denote on plan the temporary parking and storage area which shall also be used as the equipment maintenance and cleaning area, employee parking area, and area for locating toilet facilities
- All wash water (concrete trucks, vehicle cleaning, equipment cleaning, etc.) shall be detained and properly treated and disposed.
- The Contractor shall be responsible for the control of dust and dirt rising and scattering in the air during construction and shall provide water sprinkling or other suitable methods of control. The Contractor shall comply with all governing regulations pertaining to environmental protection.
- The use of motor oils and other petroleum based or toxic liquids for dust suppression operations is prohibited.
- Sod must be installed and maintained on exposed slopes within 48 hours of completing final grading, and at any other time as necessary, to prevent erosion, sedimentation or turbid discharges.
- Stabilization practices should be initiated as soon as practical, but in no case more than 7 days where construction has temporarily ceased.
- All materials spilled, dropped, washed or tracked from vehicles onto roadways or into storm drains must be removed as soon as possible.
- On-site & off-site soil stockpile and borrow areas shall be protected from erosion and sedimentation through implementation of best management practices.
- Slopes shall be left in a roughened condition during the grading phase to reduce runoff velocities and erosion.
- Due to grade changes during the development of the project, the Contractor shall be responsible for adjusting the erosion control measures (silt fence, etc.) to prevent erosion.
- All construction shall be stabilized at the end of each working day, this includes back filling of trenches for utility construction and placement of gravel or bituminous paving for road construction.
- The contractor shall install sediment barrier as shown on plans within the perimeter of the project site.

SURVEY AND STAKEOUT

- Existing section corners and 1/4 Section corners, and other land markers or monuments located within proposed construction are to be referenced prior to construction and reset after construction. The Contractor shall have this work done by a registered Professional Land Surveyor at the Contractor's expense (Florida Registration). Any public land corner within the limits of construction is to be protected. If a corner monument is in danger of being destroyed and has not been properly referenced, the Contractor should notify the County Surveyor, without delay, by telephone (863-402-6877).
- Benchmark data is North American Vertical Datum of 1988 (NAVD 88).
- Any NGVD-29 monument within the limits of construction is to be protected. If in danger of damage, the Contractor should notify: Geodetic Information Center, Attn: Mark Maintenance Section N/CG-162, 6001 Executive Boulevard, Rockville, Maryland 20852. Telephone (301) 443-8319.
- Grades shown are the finished grades, unless otherwise indicated.
- The Contractor shall remove survey stakes and erosion control items prior to the completion of the contract.
- The Contractor shall be responsible for submitting to the Highlands County Project Manager a certified record survey signed and sealed by a Professional Land Surveyor registered in the state of Florida depicting the actual field location of all constructed improvements that are required by the jurisdictional agencies for the certification process. All survey costs will be the Contractor's responsibility.

UTILITIES

- It is the Contractor's responsibility to contact the various utility companies which may have buried or aerial utilities within or near the construction area before commencing work. The Contractor shall call 811 to provide 48 hours minimum notice to all utility companies in advance of any excavation involving their utilities so that a company representative can be present. A list of the utility companies which the Contractor MUST call before commencing work is provided in these construction plans. This list serves as a guide only and is not intended to limit the utility companies which the contractor may wish to notify.
- Existing utilities shown are located according to the information available to the Engineer at the time of the topographic survey and have not been independently verified by the Owner or the Engineer. Guarantee is not made that all existing underground utilities are shown or that the location of those shown are entirely accurate. Finding the actual location of any existing utilities is the Contractor's responsibility and shall be done before he/she commences any work in the vicinity. Furthermore, the Contractor shall be fully responsible for any and all damages due to the Contractor's failure to exactly locate and preserve any and all underground utilities. The Owner or Engineer will assume no liability for any damages sustained or cost incurred because of the operations in the vicinity of existing utilities or structures, nor for temporary bracing and shoring of same. If it is necessary to shore, brace, swing or relocate a utility, the utility company or department affected shall be contacted and their permission obtained regarding the method to use for such work. In addition, the Contractor shall be responsible to verify if "other" utilities (Not shown in the plans) exist within the area of construction. Should there be utility conflicts, the Contractor shall inform the Engineer and notify the respective utility owners to resolve utility conflicts and utility adjustments as required.
- The Contractor is to use caution when working in or around areas of overhead transmission lines or underground utilities.
- Prior to commencement of any excavation, the contractor shall comply with Florida Statute 553.851 for the protection of underground gas pipelines.
- All valves within area of construction or disturbed by construction to be adjusted to finished grade. Replace valve collars and boxes as necessary.

CLEARING AND GRUBBING

- Contractor shall clear and grub all areas unless otherwise indicated, removing trees, stumps, roots, muck, existing pavement, existing concrete and all other deleterious material.

PAVING, GRADING AND DRAINAGE

- Where new pavements meets the existing pavement, the Contractor shall saw cut the existing pavement a minimum 2" deep for a smooth and straight joint and match the existing pavement elevation with the proposed pavement unless otherwise indicated.
- All cut or fill slopes shall be 4 (horizontal): 1 (vertical) or flatter unless otherwise shown.
- Existing drainage structures within construction limits shall remain unless noted otherwise.
- Contractor is responsible for repairing any existing concrete or asphalt areas that are disturbed during construction.

PAVEMENT MARKING AND SIGNAGE

- Stop bars shall be 24" white stripes.
- Temporary pavement markings shall be provided by the end of each day's operation.
- All pavement markings and signage shall be installed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition.
- Sign substrate shall be aluminum.
- Traffic signs shall be mounted on 3" diameter post with "Z" bar brackets.
- Sign post underground support shall be 6" aluminum "Z" bar brackets (no concrete).
- All removed sign assemblies shall be brought by the contractor to the Highlands County Traffic Operations Office located at 4300 George Blvd., Sebring, FL 33875.

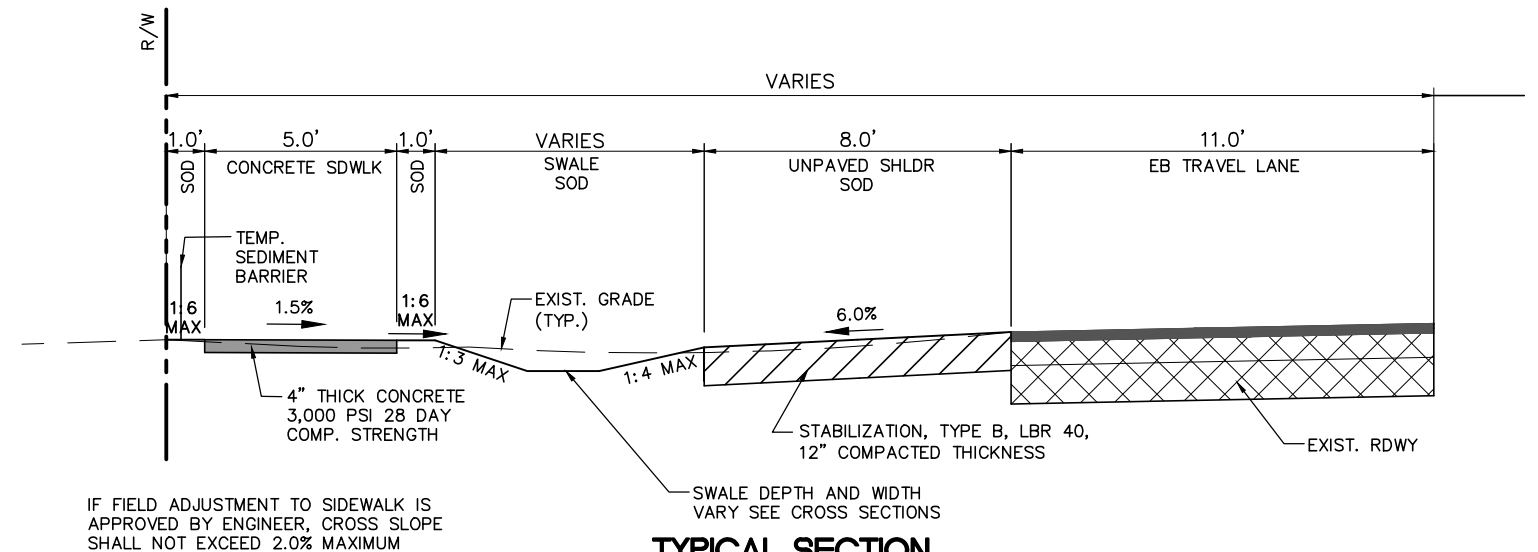
SOD

- All disturbed areas within the project limits shall be sodded with "like kind" sod. The areas on which sod is to be placed shall be thoroughly wetted prior to and after placement is complete. No addition of top soil material is required prior to placement.
- All sod materials shall be subject to inspection by the Highlands County Project Manager prior to placement. Any sod with noxious weeds and grasses including tropical soda apple, shall be rejected for use on the spot.
- All areas within the project site shall be sodded unless indicated in these construction plans.

TESTING

- Contractor shall perform, at his own expense, any and all tests required by the specifications and/or any agency having jurisdiction. A copy of the test results shall be provided to the Highlands County Project Manager.
- The Highlands County Project Manager shall inspect all construction and is authorized to call to the attention of the Contractor any failure of work or materials to conform with the plans and specifications.
- All copies of compaction, concrete and other required test results are to be sent to the Highlands County Project Manager directly from the testing agency.

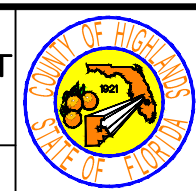
THUNDERBIRD ROAD WEST SIDEWALK EXTENSION PROJECT NO. 15010		
CONTRACTOR REQUIRED QUALITY CONTROL MATERIALS TESTING		
Sidewalk Construction: IN-SITU SOIL TESTING REQUIREMENTS (6" COMPACTED THICKNESS)		
TEST NAME	QUALITY CONTROL	ACCEPTANCE
DENSITY	ONE (1) PER LIFT, TEN (10) TOTAL	Minimum density of 95% of AASHTO T99 density.
Construction Method: Compact area directly under the sidewalk and one (1) foot beyond each side of the sidewalk to a depth		
Residential Driveways: OPTIONAL BASE GROUP 4 TESTING REQUIREMENTS (6" COMPACTED THICKNESS)		
TEST NAME	QUALITY CONTROL	ACCEPTANCE
DENSITY	ONE (1) PER LIFT PER DRIVEWAY, SIX (6) TOTAL	Minimum density of 95% of AASHTO T99 Density.
THICKNESS	ONE (1) PER LIFT PER DRIVEWAY, SIX (6) TOTAL	Compacted lift thickness = 6", tolerance = 0.5"
Optional Base Group 4 Construction Method: Construct the base in one (1) equal lift with a compacted lift thickness of six (6)		
Shoulder Construction: TYPE B STABILIZATION (LBR 40) TESTING REQUIREMENTS (12" COMPACTED THICKNESS)		
TEST NAME	QUALITY CONTROL	ACCEPTANCE
DENSITY	ONE (1) PER LIFT, TEN (10) TOTAL	Minimum density of 95% of the Modified Proctor maximum density as determined by FM 1-T 180, Method D
THICKNESS	ONE (1) PER LIFT, TEN (10) TOTAL	Compacted lift thickness = 12", tolerance = 0.5"
Stabilization Construction Method: Construct the stabilization in one (1) 12" lift with a compacted lift thickness of twelve (12)		
NOTE: Contractor shall perform at minimum one LBR per material type. County shall perform verification testing as necessary.		



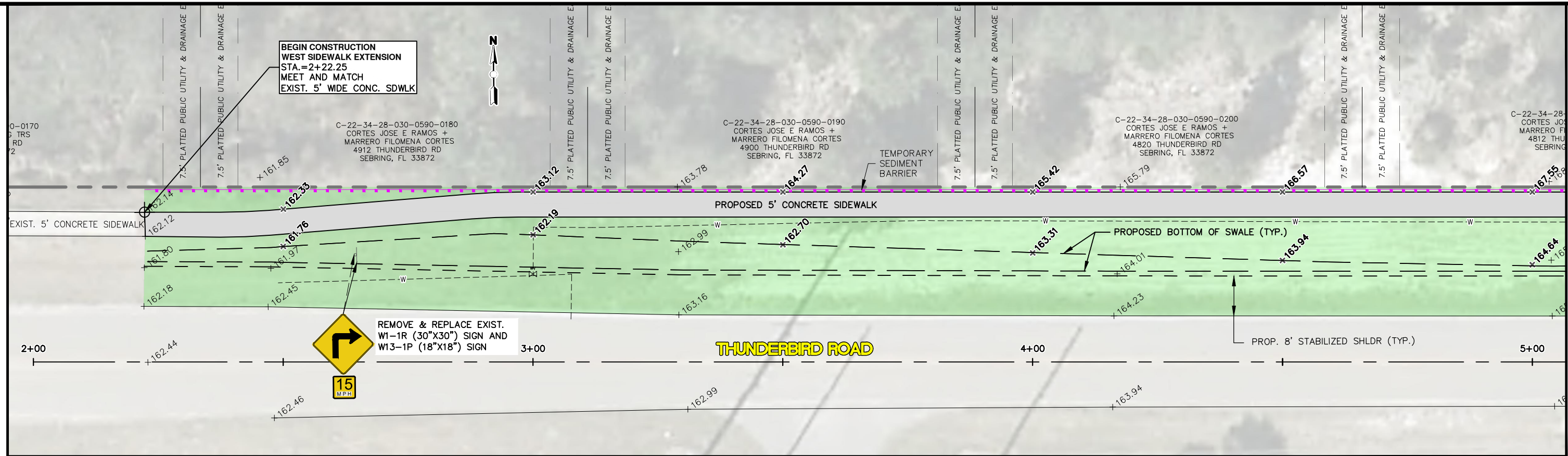
**TYPICAL SECTION
CONCRETE SIDEWALK CONSTRUCTION
FROM STA 2+22.25 TO STA 28+08.44**

REVISIONS			STATUS	DESIGNED BY: J.D. LANGFORD, P.E.	DRAWN BY: DOUG NIETUBICZ	CHECKED BY: J.D. LANGFORD, P.E.	IN CHARGE: J.D. LANGFORD, P.E.	DATE: 3/20/2020	APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402	DATE:	SCALE: HORIZ. N/A VERT. N/A	PROJECT NO. 15010	REV. 0
DATE	BY	DESCRIPTION											
2-19-19	BWD	REMOVED NOTE PER FDOT COMMENTS	FOR BID										
3-18-2020	DMN	REVISED TYPICAL SECTION AND ADDED NOTE.											

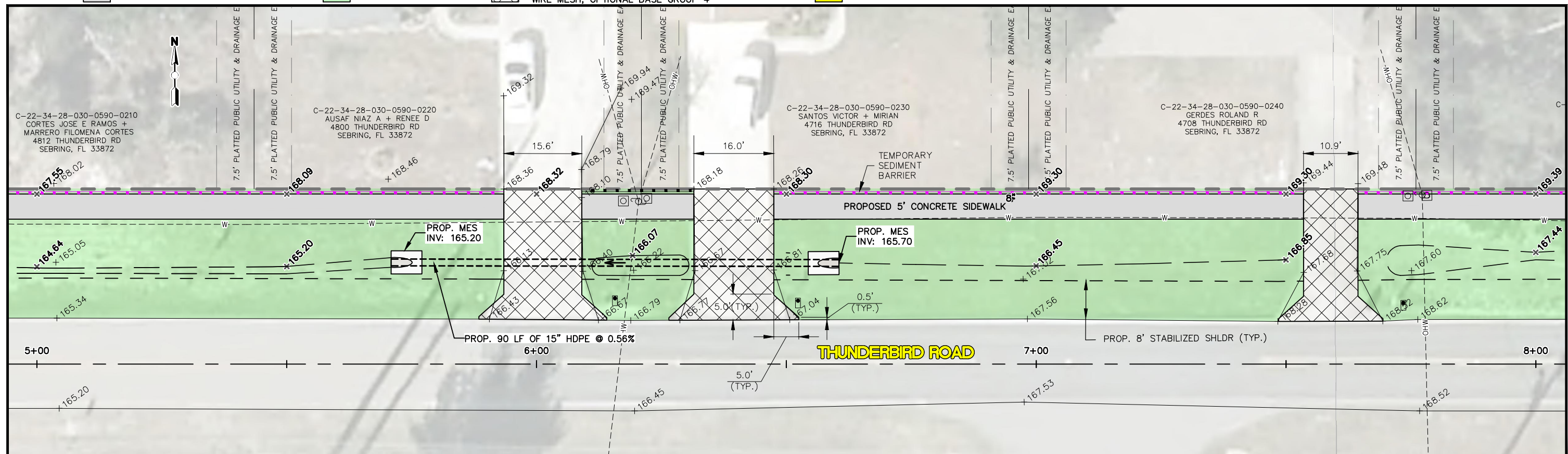
**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870



**THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION**
GENERAL NOTES & QUANTITIES



- PROP. 5' WIDE CONCRETE SIDEWALK (3,000 PSI MIN., 28 DAY)
- PROP. SOD
- PROP. CONCRETE DRIVEWAY (6" THICK 3,000 PSI MIN., INCLUDE 6"x6" W1.4/W1.4, WELDED WIRE MESH, OPTIONAL BASE GROUP 4)
- PROP. DETECTABLE WARNING, YELLOW, EMBEDDED
- TEMPORARY SEDIMENT BARRIER



REVISIONS		STATUS
DATE	BY	DESCRIPTION
2-5-2020	DMN	REVISE SWALES & DRAINAGE STRUCTURES

FOR BID

HIGHLANDS COUNTY
 ENGINEERING DEPARTMENT
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870



THUNDERBIRD ROAD WEST
 SIDEWALK EXTENSION
 PLAN SHEETS

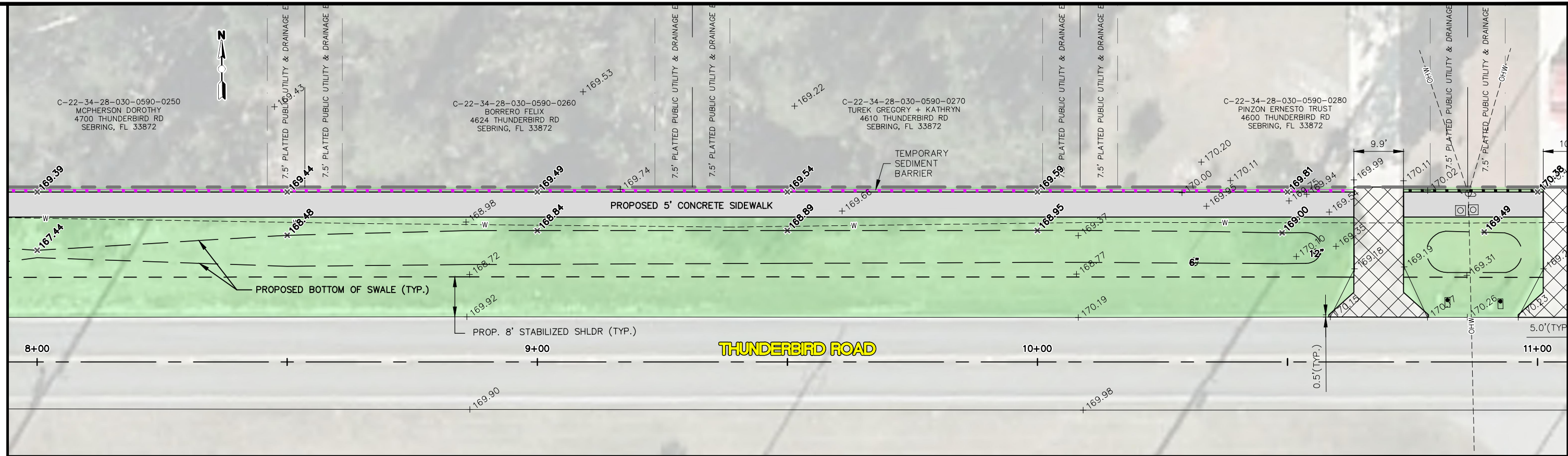
SCALE: HORIZ. 1"=20' VERT. N/A	
PROJECT NO. 15010	REV. 0
SHEET 4 OF 18	

G:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings_Plan & Profile Sheets 15009 Thunderbird Rd Sidewalk.dwg, Plan & Profile Sheet - (1), Nietubicz, Douglas Acad 1-7 Black.ctb

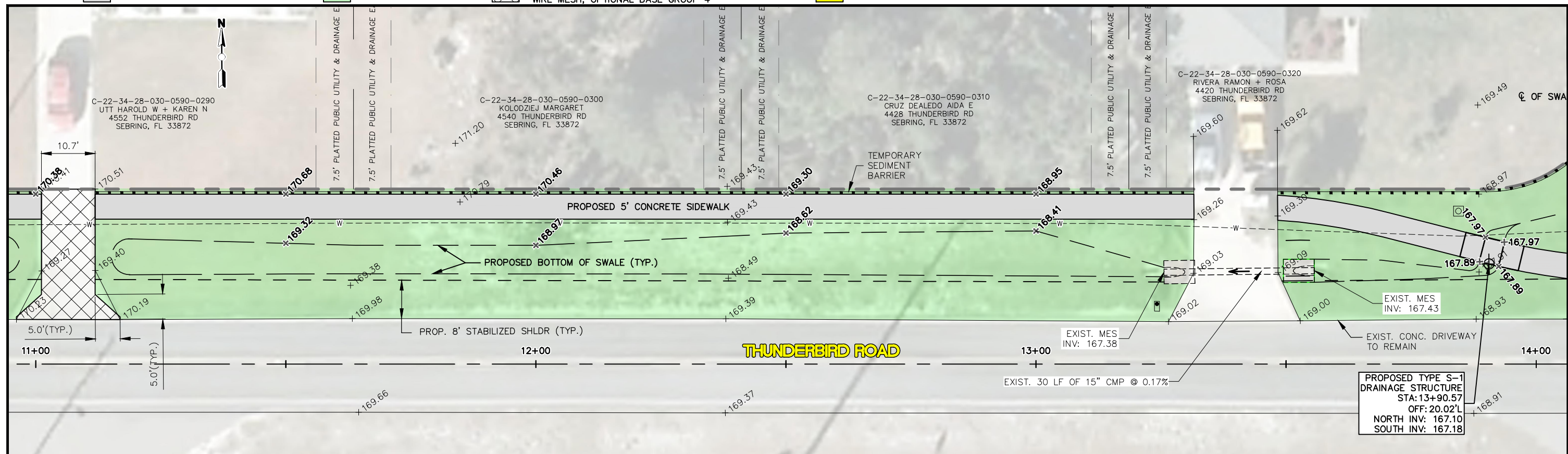
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- PROP. 5' WIDE CONCRETE SIDEWALK (3,000 PSI MIN., 28 DAY)
- PROP. SOD
- PROP. CONCRETE DRIVEWAY (6" THICK 3,000 PSI MIN., INCLUDE 6"x6" W1.4/W1.4, WELDED WIRE MESH, OPTIONAL BASE GROUP 4)
- PROP. DETECTABLE WARNING, YELLOW, EMBEDDED
- TEMPORARY SEDIMENT BARRIER

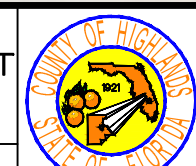


REVISIONS			STATUS
DATE	BY	DESCRIPTION	
2-5-2020	DMN	REVISE SWALES & DRAINAGE STRUCTURES	FOR BID
2-24-2020	DMN	ADD NOTE TO TYPE S-1 DRAINAGE STRUCTURE	

DESIGNED BY: J.D. LANGFORD, P.E.
 DRAWN BY: DOUG NIETUBICZ
 CHECKED BY: J.D. LANGFORD, P.E.
 IN CHARGE: J.D. LANGFORD, P.E.
 DATE: 3/19/2020

HIGHLANDS COUNTY
ENGINEERING DEPARTMENT
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870

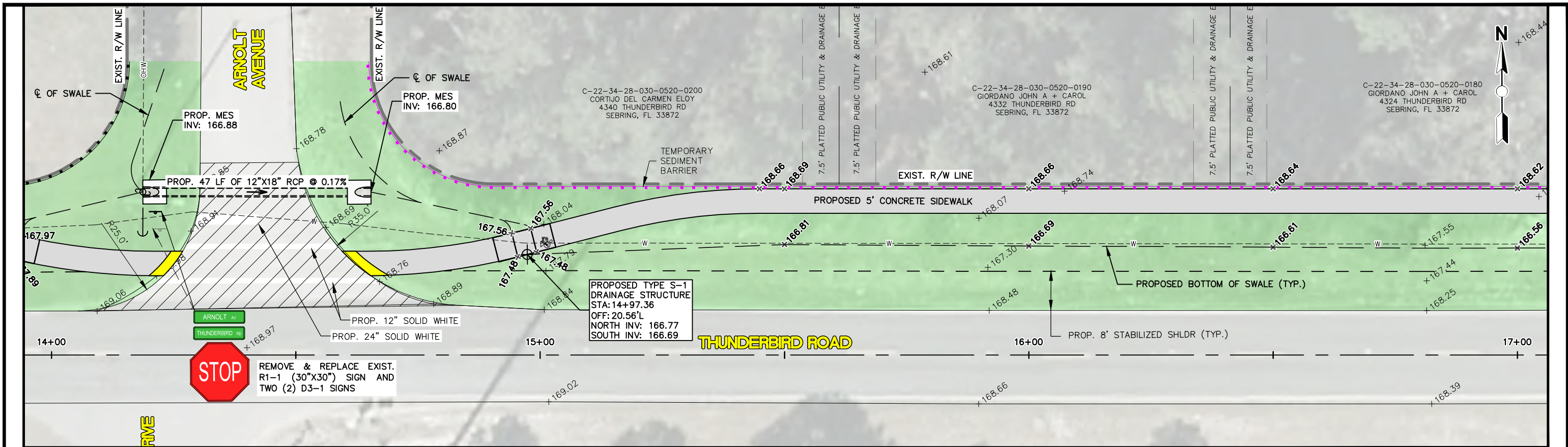
APPROVED BY: JAMES D. LANGFORD, JR., P.E.
 FLORIDA REGISTRATION NO.: 78402



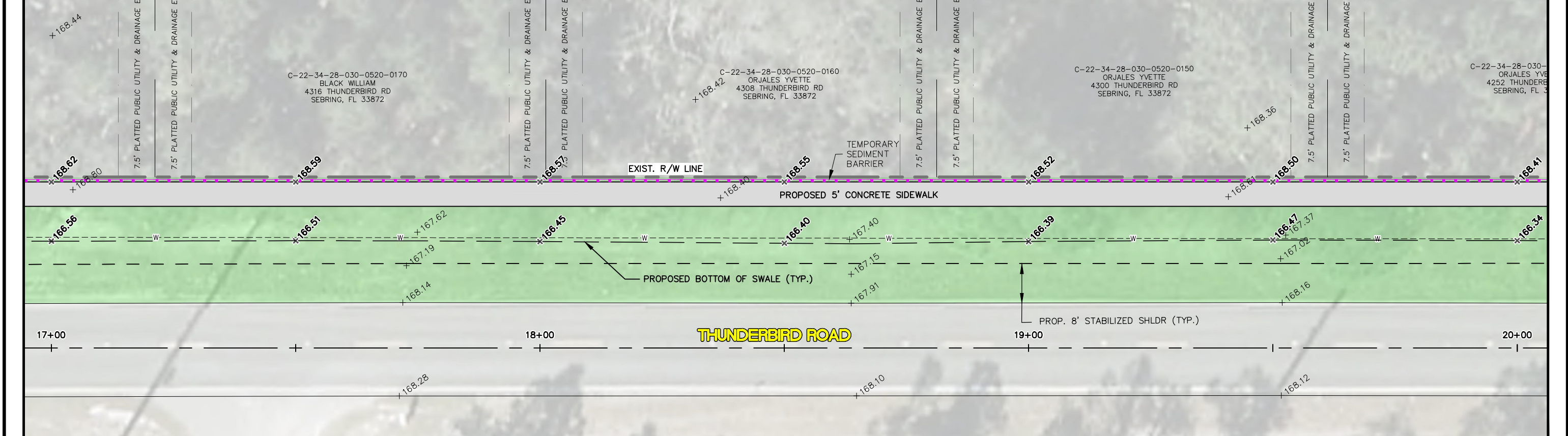
THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION
 PLAN SHEETS

SCALE: HORIZ. 1"=20' VERT. N/A	
PROJECT NO. 15010	REV. 0
SHEET 5 OF 18	

G:\PROJECTS\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings\Plan & Profile Sheets 15009 Thunderbird Rd Sidewalk.dwg, Plan & Profile Sheet - (2), Nietubicz, Douglas Acad 1-7 Black.ctb



PROP. 5' WIDE CONCRETE SIDEWALK (3,000 PSI MIN., 28 DAY)	PROP. SOD	PROP. CONCRETE DRIVEWAY (6" THICK 3,000 PSI MIN., INCLUDE 6"x6" W1.4/W1.4, WELDED WIRE MESH, OPTIONAL BASE GROUP 4	PROP. DETECTABLE WARNING, YELLOW, EMBEDDED	FULL DEPTH RECONSTRUCTION, STABILIZATION, TYPE B, LBR 40, 12" COMPACTED THICKNESS OPTIONAL BASE GROUP 6, 8" COMPACTED THICKNESS SUPERPAVE ASPHALTIC CONCRETE, 1 1/2" COMPACTED THICKNESS	TEMPORARY SEDIMENT BARRIER
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REVISIONS		STATUS
DATE	BY	DESCRIPTION
2-5-2020	DMN	REVISE SWALES & DRAINAGE STRUCTURES
2-24-2020	DMN	ADD NOTE TO TYPE S-1 DRAINAGE STRUCTURE

FOR BID

DESIGNED BY: J.D. LANGFORD, P.E.
 DRAWN BY: DOUG NIETUBICZ
 CHECKED BY: J.D. LANGFORD, P.E.
 IN CHARGE: J.D. LANGFORD, P.E.
 DATE: 3/19/2020

**HIGHLANDS COUNTY
 ENGINEERING DEPARTMENT**
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
 FLORIDA REGISTRATION NO.: 78402

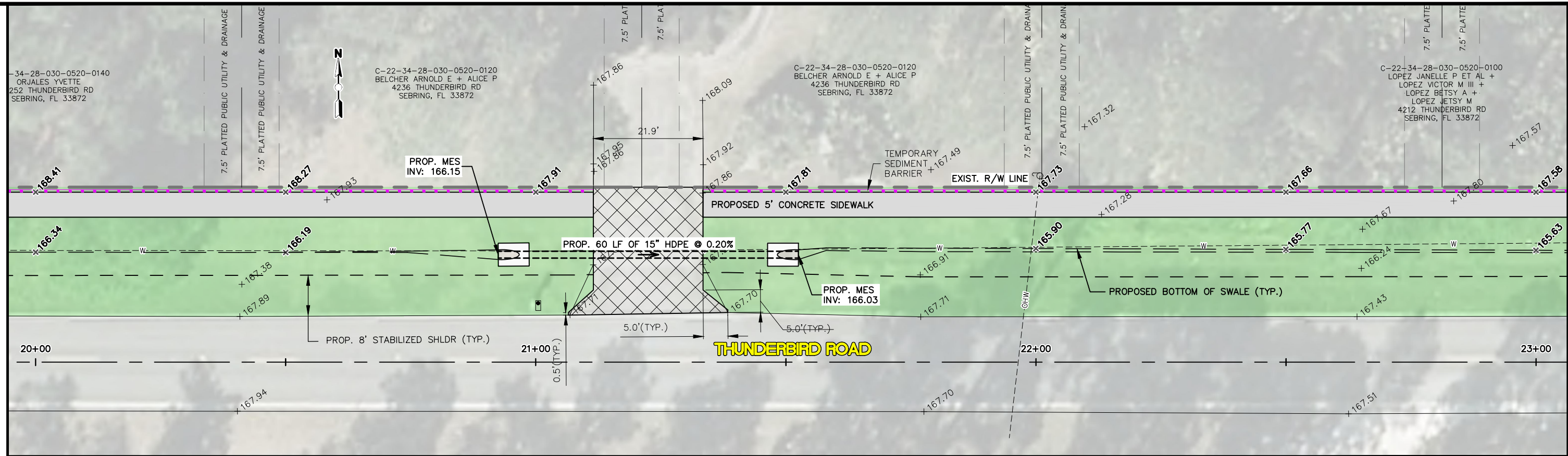


**THUNDERBIRD ROAD WEST
 SIDEWALK EXTENSION**

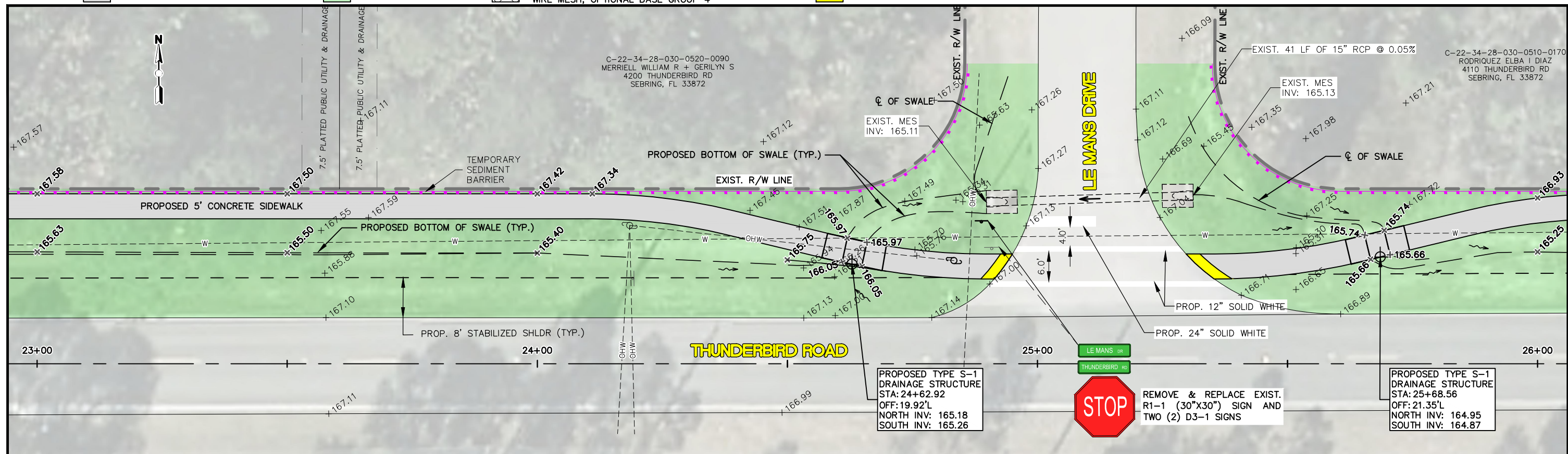
PLAN SHEETS

SCALE: HORIZ. 1"=20' VERT. N/A	PROJECT NO. 15010	REV. 0
SHEET 6 OF 18		

G:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings\Plan & Profile Sheets 15009 Thunderbird Rd Sidewalk.dwg, Plan & Profile Sheet - (3), Nietubicz, Douglas Acad 1-7 Black.ctb



- PROP. 5' WIDE CONCRETE SIDEWALK (3,000 PSI MIN., 28 DAY)
- PROP. SOD
- PROP. CONCRETE DRIVEWAY (6" THICK 3,000 PSI MIN., INCLUDE 6"x6" W1.4/W1.4, WELDED WIRE MESH, OPTIONAL BASE GROUP 4)
- PROP. DETECTABLE WARNING, YELLOW, EMBEDDED
- TEMPORARY SEDIMENT BARRIER



REVISIONS		
DATE	BY	DESCRIPTION
2-5-2020	DMN	REVISE SWALES & DRAINAGE STRUCTURES
2-24-2020	DMN	ADD NOTE TO TYPE S-1 DRAINAGE STRUCTURE

STATUS
FOR BID

HIGHLANDS COUNTY
ENGINEERING DEPARTMENT
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870



THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION
 PLAN SHEETS

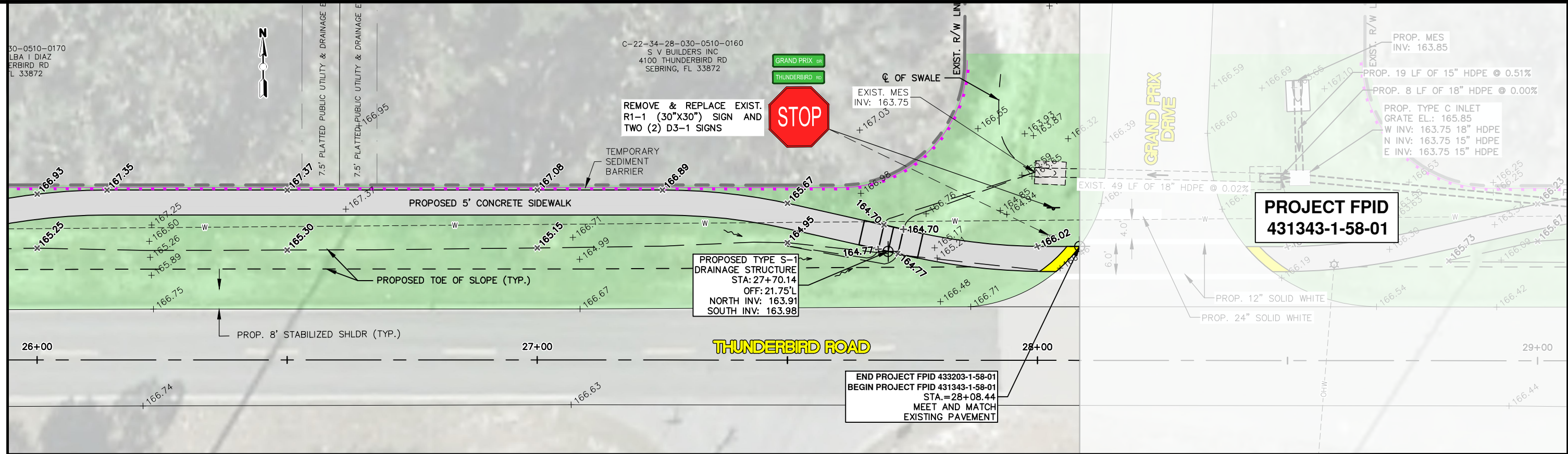
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PROJECT NO. 15010
REV. 0
SHEET 7 OF 18

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DESIGNED BY: J.D. LANGFORD, P.E.
 DRAWN BY: DOUG NIETUBICZ
 CHECKED BY: J.D. LANGFORD, P.E.
 IN CHARGE: J.D. LANGFORD, P.E.
 DATE: 3/19/2020

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402

DATE:



- PROP. 5' WIDE CONCRETE SIDEWALK (3,000 PSI MIN., 28 DAY)
- PROP. SOD
- PROP. CONCRETE DRIVEWAY (6" THICK 3,000 PSI MIN., INCLUDE 6"x6" W1.4/W1.4, WELDED WIRE MESH, OPTIONAL BASE GROUP 4)
- PROP. DETECTABLE WARNING, YELLOW, EMBEDDED
- TEMPORARY SEDIMENT BARRIER

REVISIONS			FOR BID
DATE	BY	DESCRIPTION	
2-5-2020	DMN	REVISE SWALES & DRAINAGE STRUCTURES	
2-24-2020	DMN	ADD NOTE TO TYPE S-1 DRAINAGE STRUCTURE	

DESIGNED BY:
J.D. LANGFORD, P.E.

DRAWN BY:
DOUG NIETUBICZ

CHECKED BY:
J.D. LANGFORD, P.E.

IN CHARGE:
J.D. LANGFORD, P.E.

DATE:
3/19/2020

**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402

DATE: _____



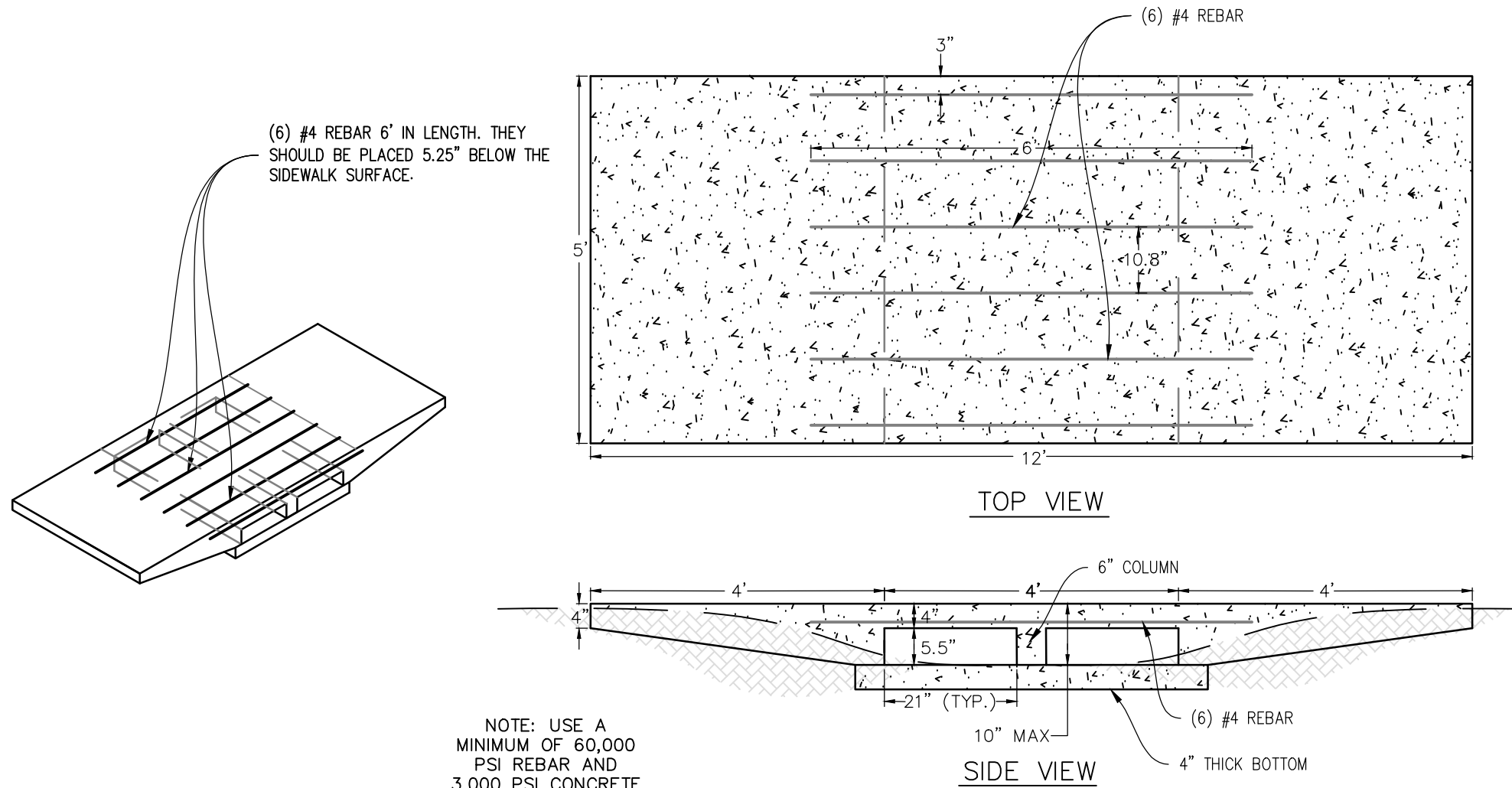
**THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION**
PLAN SHEETS

SCALE: HORIZ. 1"=20' VERT. N/A	
PROJECT NO. 15010	REV. 0
SHEET 8 OF 18	

G:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings\Plan & Profile Sheets 15009 Thunderbird Rd Sidewalk.dwg, Plan & Profile Sheet - (5), Nietubicz, Douglas Acad 1-7 Black.ctb

DRAINAGE STRUCTURE S-1

NOT TO SCALE



REVISIONS		
DATE	BY	DESCRIPTION

FOR BID

DESIGNED BY:
J.D. LANGFORD, P.E.
DRAWN BY:
DOUG NIETUBICZ
CHECKED BY:
J.D. LANGFORD, P.E.
IN CHARGE:
J.D. LANGFORD, P.E.
DATE:
3/19/2020

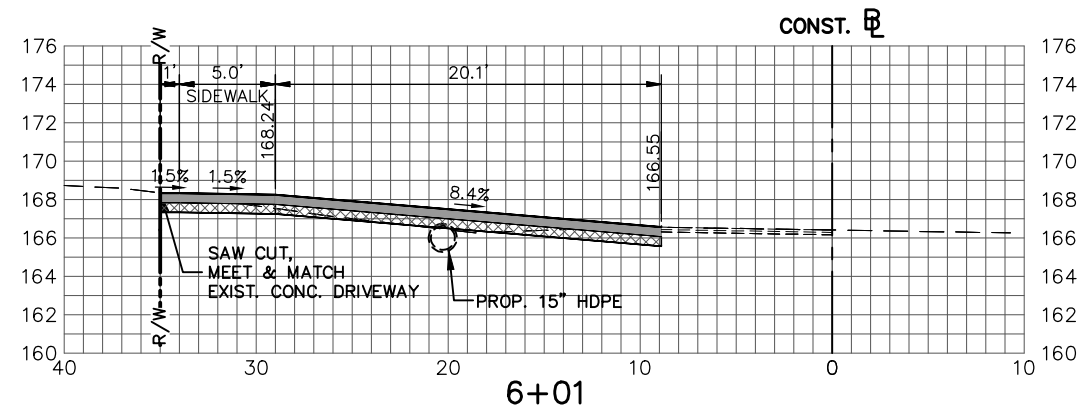
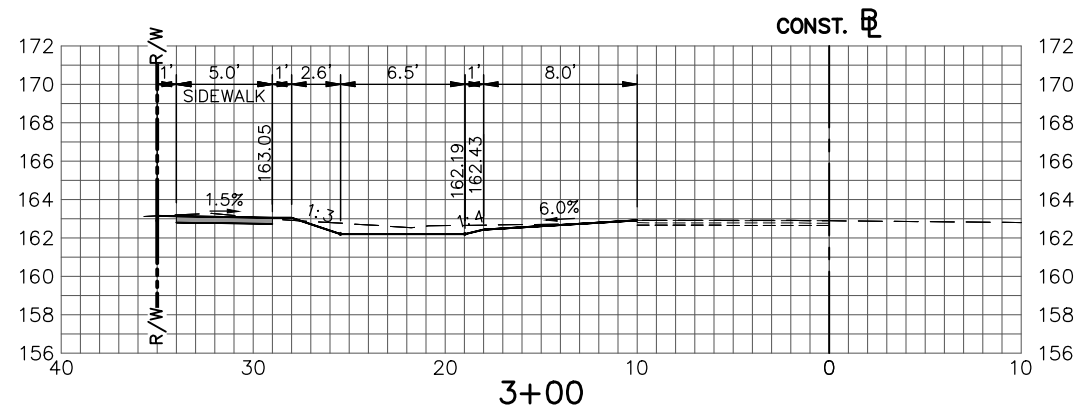
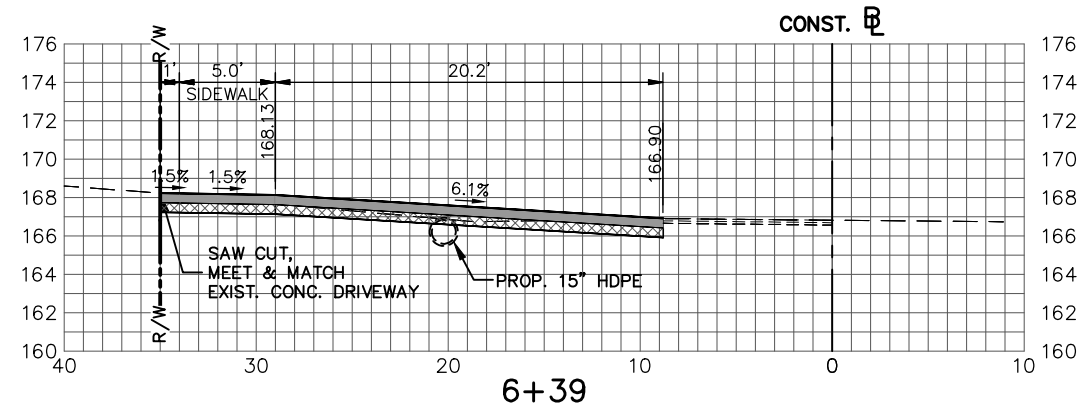
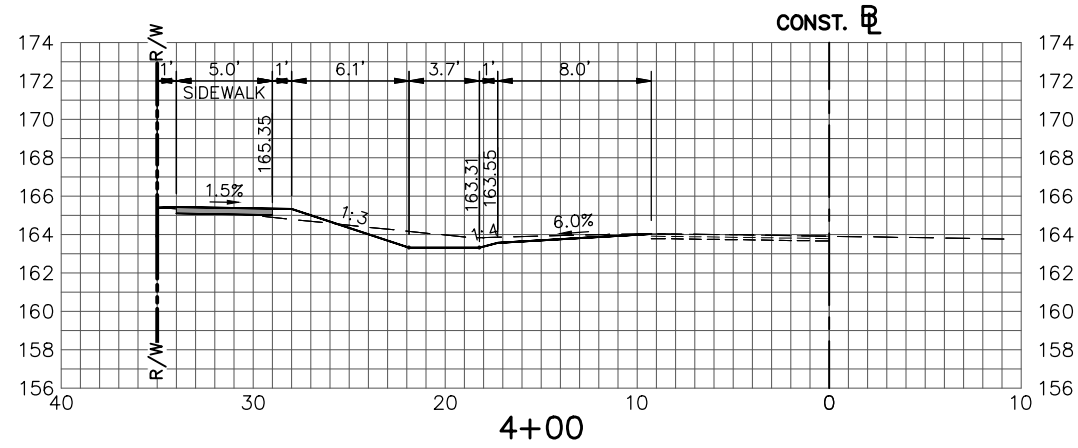
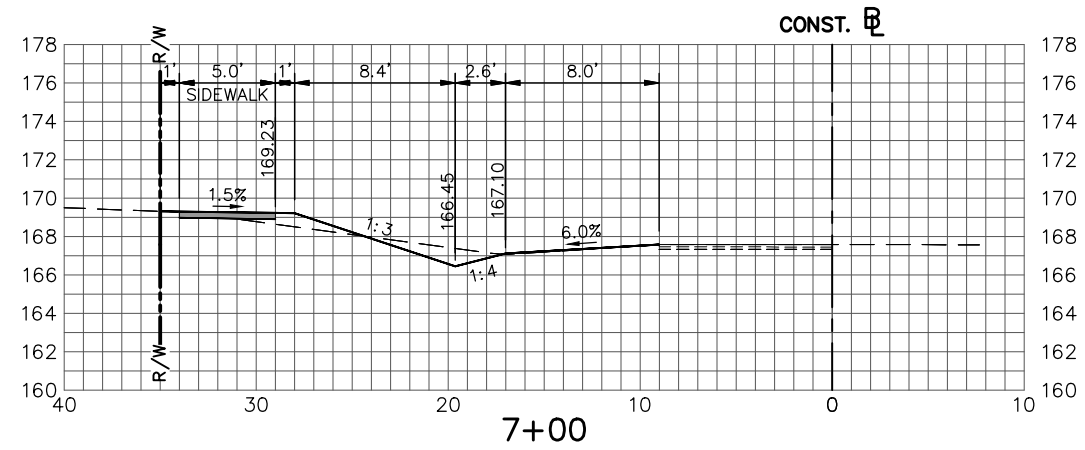
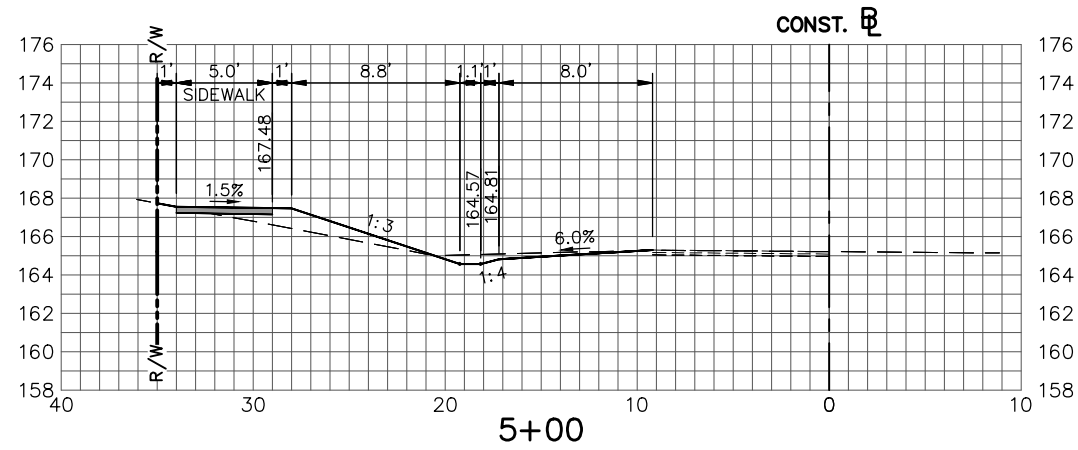
**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402



THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION
DETAILS

SCALE: HORIZ. 1"=5' VERT. N/A	
PROJECT NO. 15010	REV. 0
SHEET 9 OF 18	



REVISIONS		
DATE	BY	DESCRIPTION

STATUS

FOR BID

DESIGNED BY:
J.D. LANGFORD, P.E.

DRAWN BY:
DOUG NIETUBICZ

CHECKED BY:
J.D. LANGFORD, P.E.

IN CHARGE:
J.D. LANGFORD, P.E.

DATE:
3/19/2020

**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402

DATE:



**THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION**

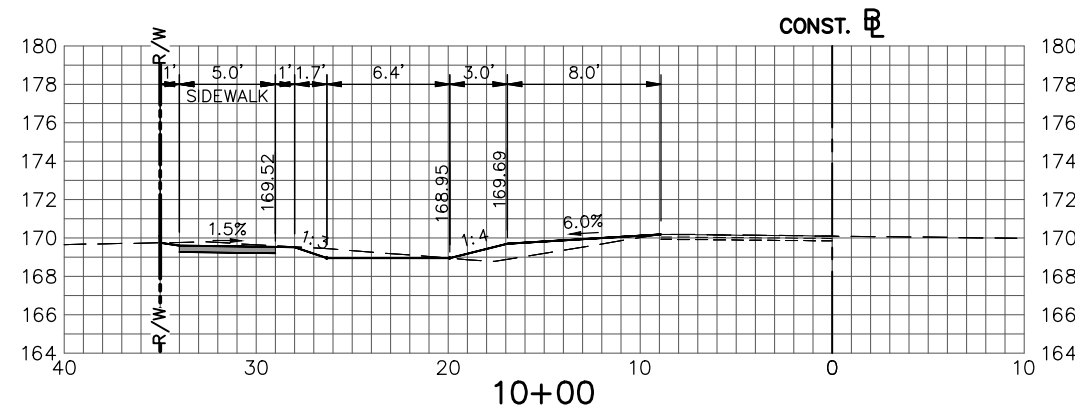
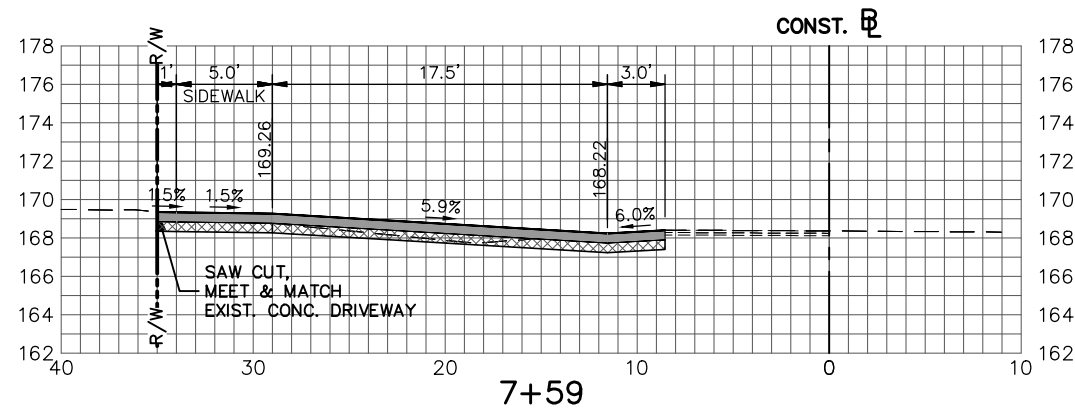
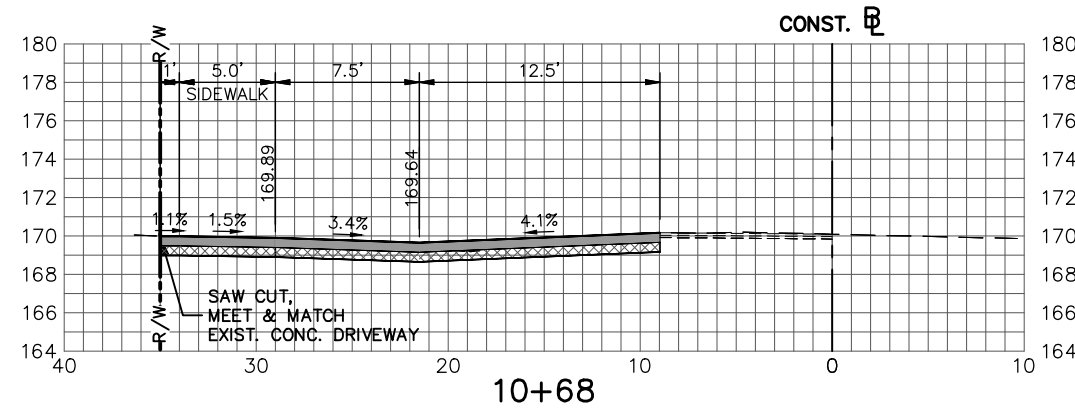
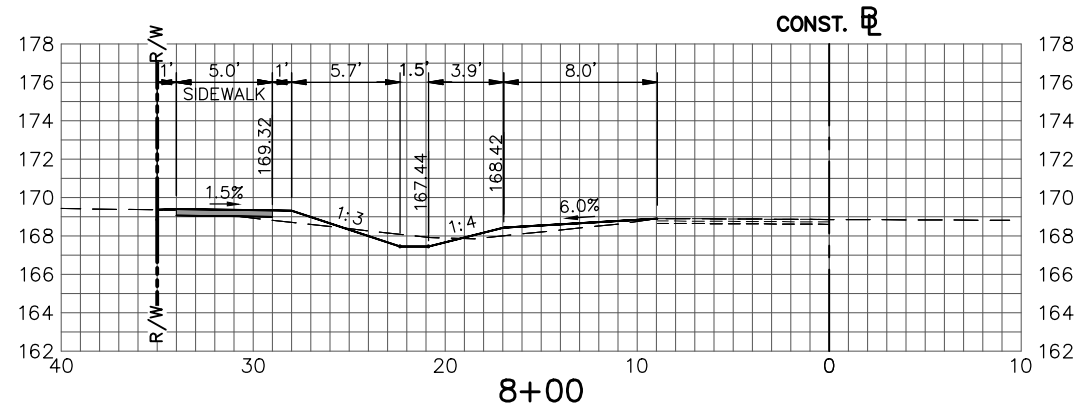
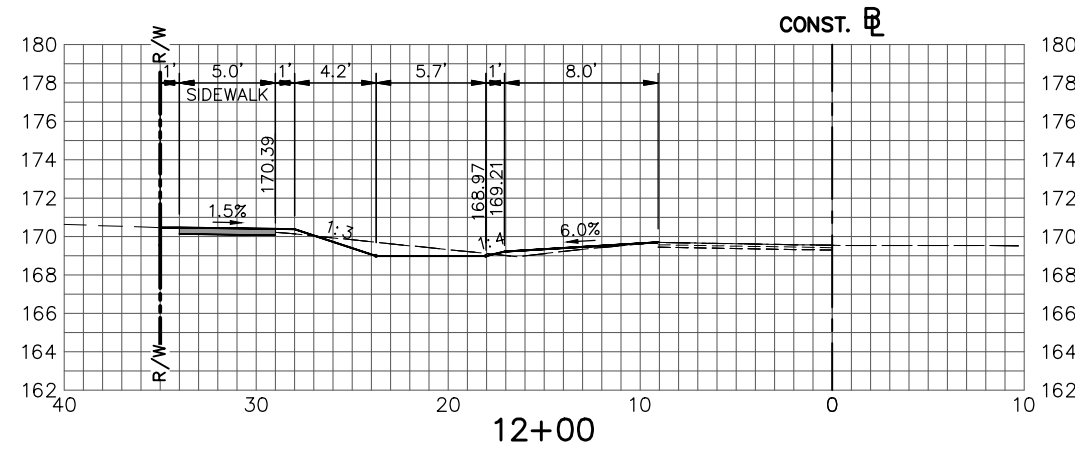
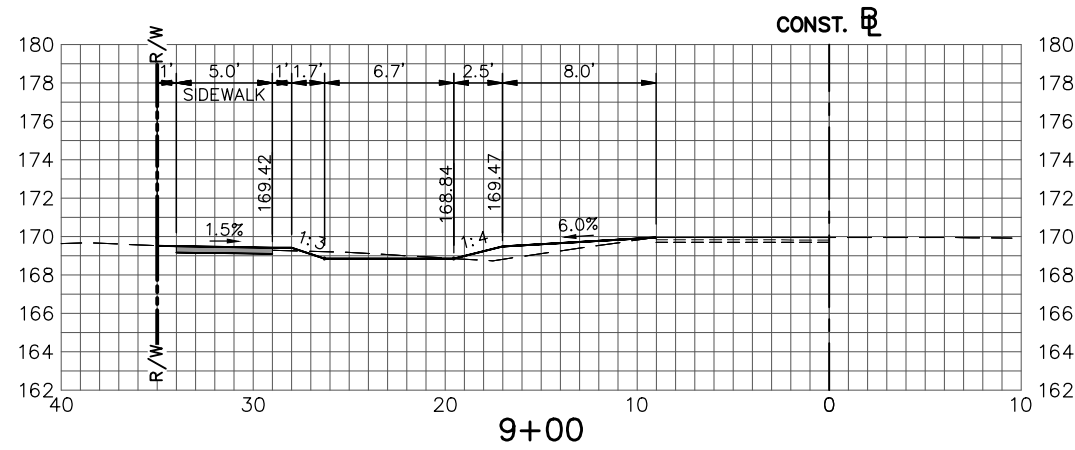
CROSS SECTIONS

SCALE:
HORIZ. 1"=10'
VERT. 1"=10'

PROJECT NO.
15010

REV.
0

SHEET 10 OF 18



REVISIONS		
DATE	BY	DESCRIPTION

STATUS

FOR BID

DESIGNED BY:
J.D. LANGFORD, P.E.

DRAWN BY:
DOUG NIETUBICZ

CHECKED BY:
J.D. LANGFORD, P.E.

IN CHARGE:
J.D. LANGFORD, P.E.

DATE:
3/19/2020

**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402

DATE:



**THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION**

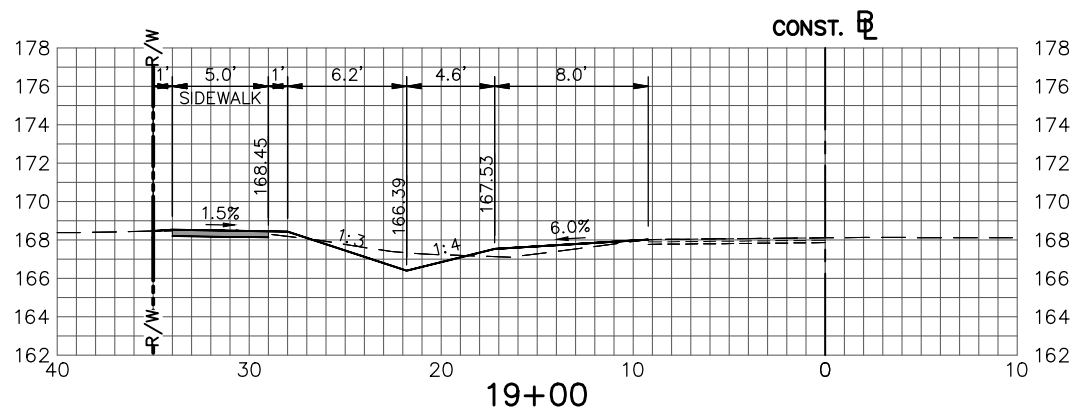
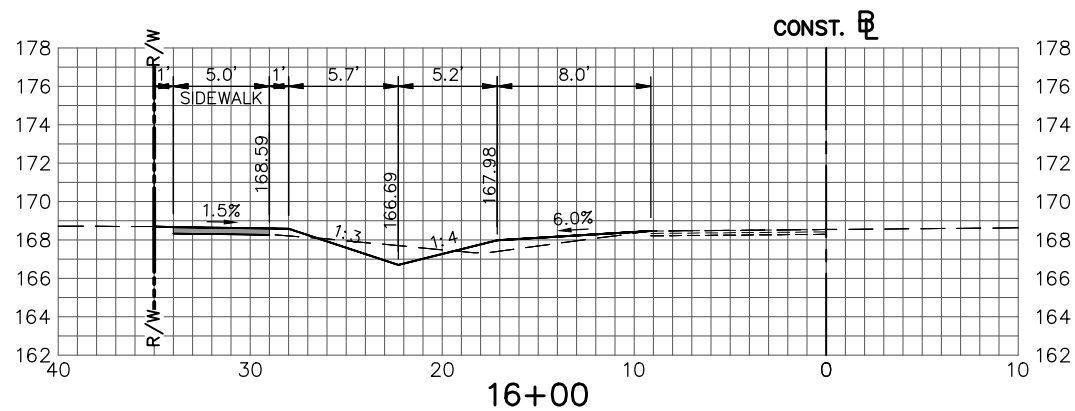
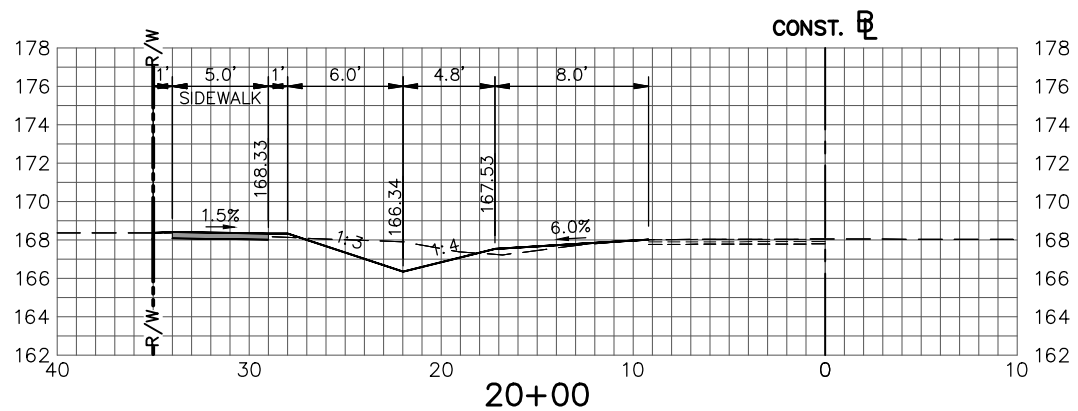
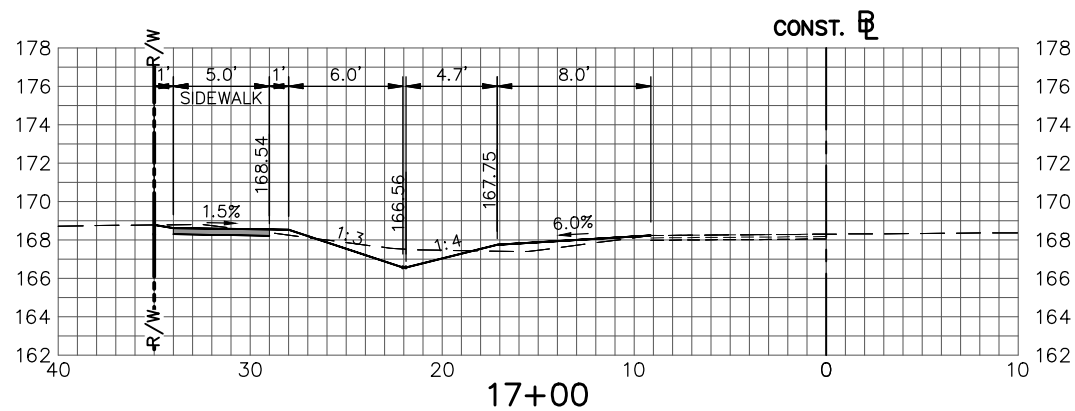
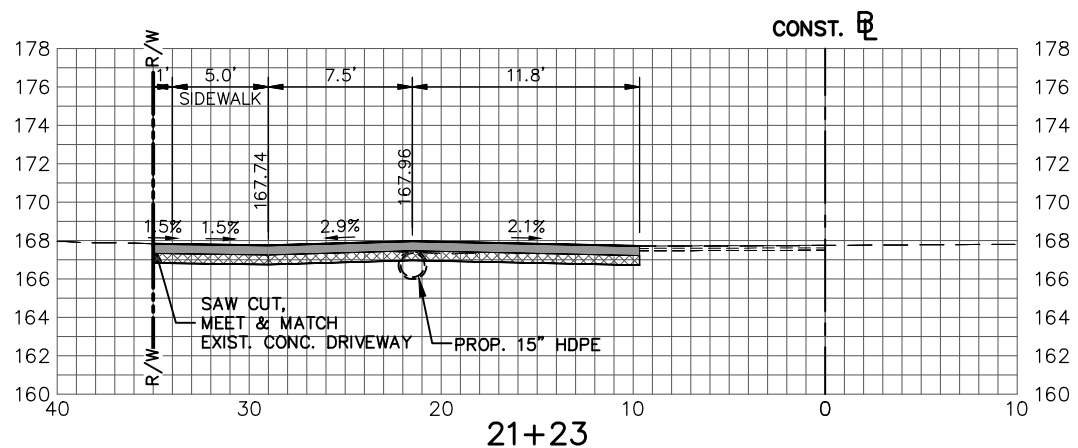
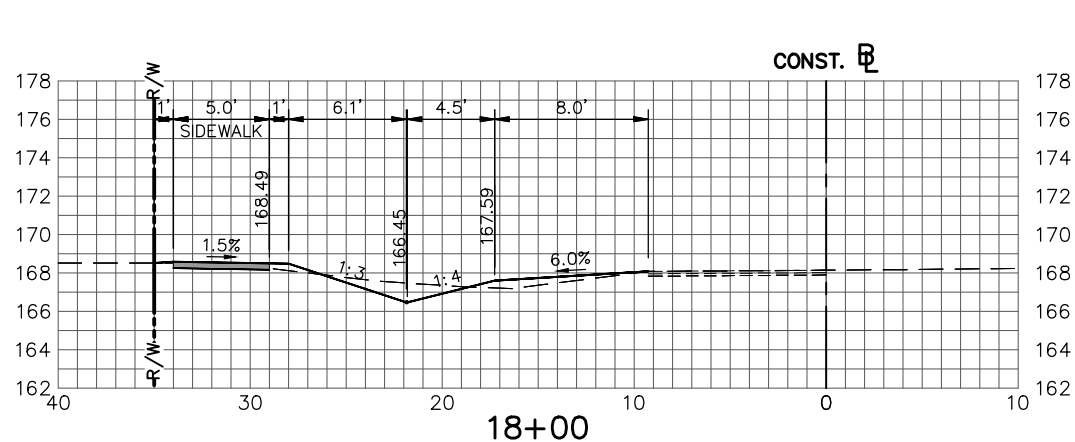
CROSS SECTIONS

SCALE:
HORIZ. 1"=10'
VERT. 1"=10'

PROJECT NO.
15010

REV.
0

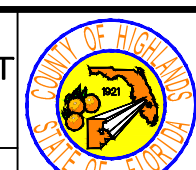
SHEET 11 OF 18



REVISIONS		
DATE	BY	DESCRIPTION

STATUS
FOR BID

HIGHLANDS COUNTY
ENGINEERING DEPARTMENT
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870



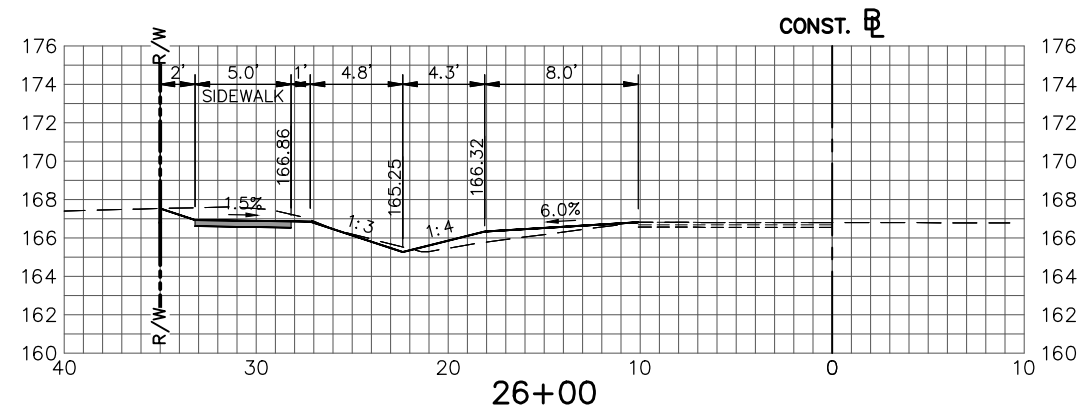
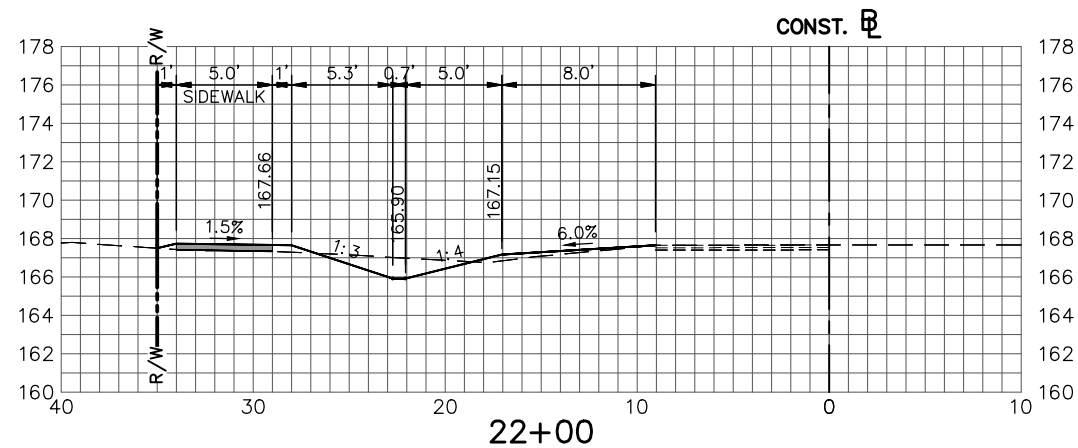
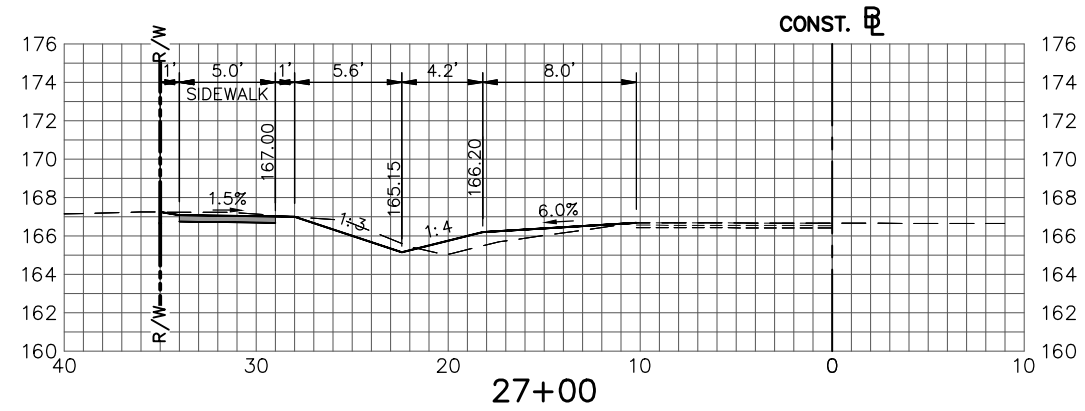
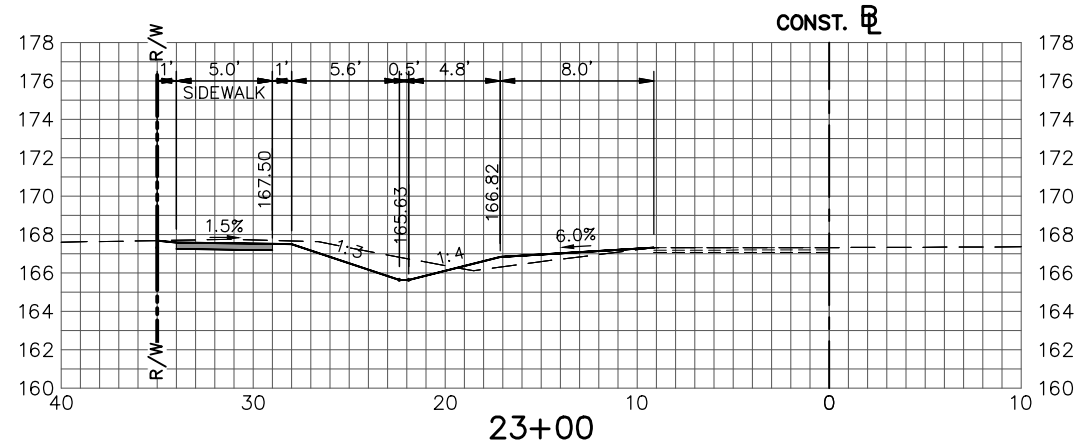
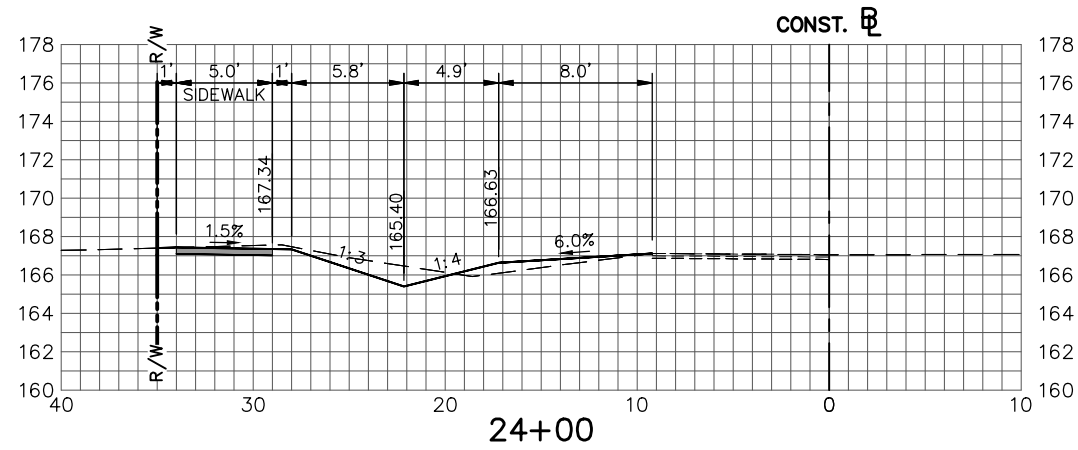
THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION
 CROSS SECTIONS

SCALE: HORIZ. 1"=10' VERT. 1"=10'	
PROJECT NO. 15010	REV. 0
SHEET 12 OF 18	

G:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings\X-Sections 15009 Thunderbird Rd Sidewalk.dwg, WEST - (3), Nietubicz, Douglas Acad 1-7 Black.ctb

DESIGNED BY: J.D. LANGFORD, P.E.
 DRAWN BY: DOUG NIETUBICZ
 CHECKED BY: J.D. LANGFORD, P.E.
 IN CHARGE: J.D. LANGFORD, P.E.
 DATE: 3/19/2020

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402



REVISIONS		
DATE	BY	DESCRIPTION

STATUS

FOR BID

DESIGNED BY:
J.D. LANGFORD, P.E.

DRAWN BY:
DOUG NIETUBICZ

CHECKED BY:
J.D. LANGFORD, P.E.

IN CHARGE:
J.D. LANGFORD, P.E.

DATE:
3/19/2020

**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402

DATE:



**THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION**

CROSS SECTIONS

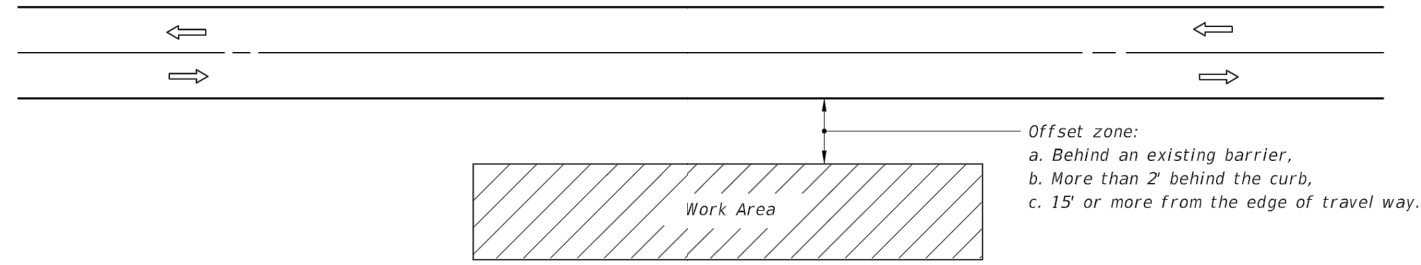
SCALE:
HORIZ. 1"=10'
VERT. 1"=10'

PROJECT NO.
15010

REV.
0

SHEET 13 OF 18

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GENERAL NOTES

1. If the work operation (excluding establishing and terminating the work area) requires that two or more work vehicles cross the offset zone in any one hour, traffic control will be in conformance with Index 102-602.
2. No special signing is required.
3. When a side road intersects the highway within the work area, additional TTC devices shall be placed in accordance with other applicable TCZ Indexes.
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.

SYMBOLS

- Work Area
- Lane Identification + Direction of Traffic

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE BEHIND AN EXISTING BARRIER, MORE THAN 2' BEHIND THE CURB, OR 15' OR MORE FROM THE EDGE OF TRAVEL WAY.

9/18/2018 10:22:06 AM

LAST REVISION 11/01/17	DESCRIPTION:	FY 2019-20 STANDARD PLANS	TWO-LANE, TWO-WAY, WORK OUTSIDE SHOULDER	INDEX 102-601	SHEET 1 of 1
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REVISIONS		
DATE	BY	DESCRIPTION

FOR BID	DESIGNED BY: N/A DRAWN BY: DOUG NIETUBICZ CHECKED BY: J.D. LANGFORD, P.E. IN CHARGE: J.D. LANGFORD, P.E. DATE: 3/19/2020
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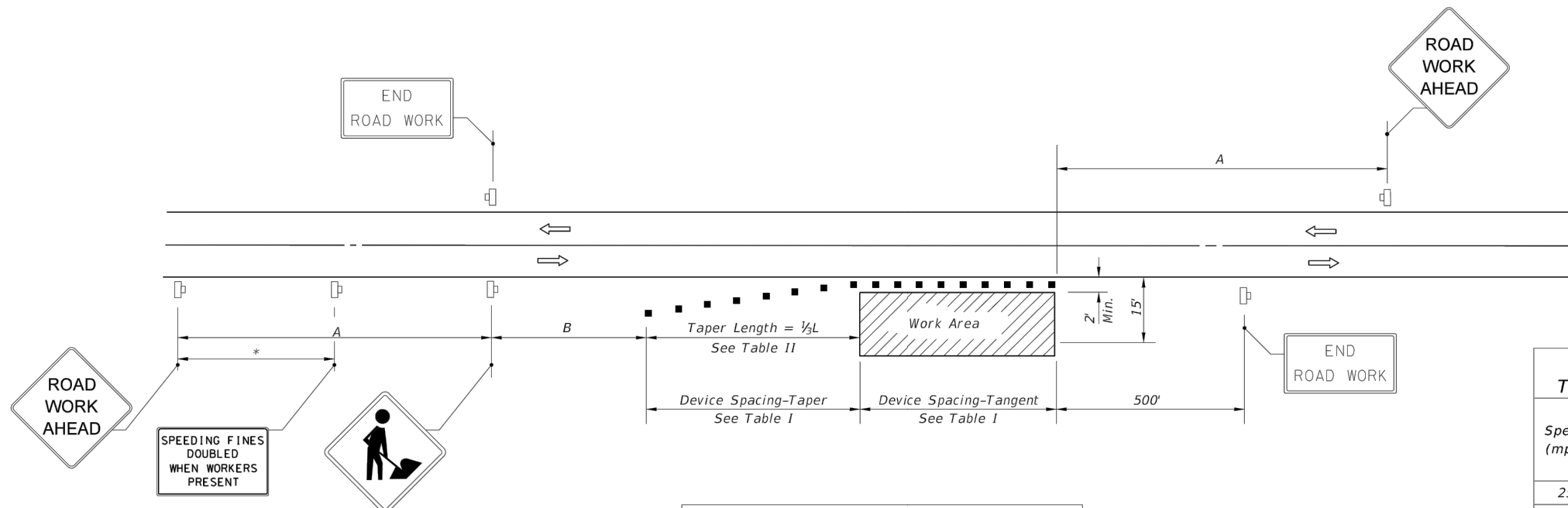
**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
505 S. COMMERCE AVENUE
SEBRING, FLORIDA 33870

APPROVED BY: JAMES D. LANGFORD, JR., P.E.
FLORIDA REGISTRATION NO.: 78402



**THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION**
FDOT MAINTENANCE OF TRAFFIC

SCALE: HORIZ. N/A VERT. N/A	PROJECT NO. 15010	REV. 0
SHEET 14 OF 18		



Speed	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph or greater	500	500

*Midway between signs.

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
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

Speed (mph)	1/3 L (ft)			Notes
	8' Shldr.	10' Shldr.	12' Shldr.	
25	28	35	42	L = WS ² / 60
30	40	50	60	
35	55	68	82	
40	72	90	107	L = WS
45	120	150	180	
50	133	167	200	
55	147	183	220	
60	160	200	240	
65	173	217	260	
70	187	233	280	

8' minimum shoulder width

1/3 L = Length of shoulder taper in feet

W = Width of total shoulder in feet (combined paved and unpaved width)

S = Posted speed limit (mph)

- SYMBOLS**
- Work Area
 - Channelizing Device (See Index 102-600)
 - Work Zone Sign
 - Lane Identification + Direction of Traffic

- GENERAL NOTES**
- When four or more work vehicles enter the through traffic lanes in a one hour period or less (excluding establishing and terminating the work area), the advanced FLAGGER sign shall be substituted for the WORKERS sign. For location of flaggers and FLAGGER signs, see Index 102-603.
 - SHOULDER WORK sign may be used as an alternate to the WORKER symbol sign only on the side where the shoulder work is being performed.
 - When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ Indexes.
 - For general TCZ requirements and additional information, refer to Index 102-600.

- DURATION NOTES**
- Signs and channelizing devices may be omitted if all of the following conditions are met:
 - Work operations are 60 minutes or less.
 - Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

CONDITIONS
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.

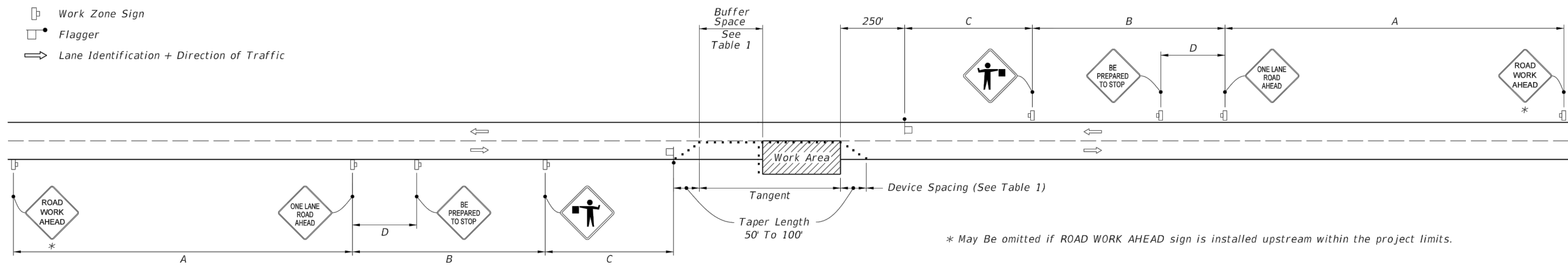
9/18/2018 10:22:44 AM

LAST REVISION 11/01/17	DESCRIPTION:	FY 2019-20 STANDARD PLANS	TWO-LANE, TWO-WAY, WORK ON SHOULDER	INDEX 102-602	SHEET 1 of 1
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SHEET 15 OF 18																																						

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Flagger
- Lane Identification + Direction of Traffic



* May Be omitted if ROAD WORK AHEAD sign is installed upstream within the project limits.

WITHOUT TEMPORARY RAISED RUMBLE STRIPS

GENERAL NOTES:

1. Special Conditions may be required in accordance with these notes and the following sheets:

A. Railroad Crossings:

- a. If an active railroad crossing is located closer to the Work Area than the queue length plus 300 feet, extend the Buffer Space as shown on Sheet 3.
- b. If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniformed traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing, even if automatic train warning devices are in place.

B. If the Work Area encroaches on the Centerline, use the Layout for Temporary Lane Shift to Shoulder on Sheet 3 only if the Existing Paved Shoulder width is sufficient to provide for an 11' lane between the Work Area and the Edge of Existing Paved Shoulder. Reduce the posted speed when appropriate.

2. Temporary Raised Rumble Strips:

A. Use when both of the following conditions are met concurrently:

- a. Existing Posted Speed is 55 mph or greater;
 - b. Work duration is greater than 60 minutes.
- B. Use a consistent Strip color throughout the work zone.
- C. Place each Rumble Strip Set transversely across the lane at locations shown.
- D. Use Option 1 or Option 2 as shown on Sheet 2. Use only one option throughout work zone.

3. Additional one-way control may be provided by the following means:

- A. Flag-carrying vehicle;
- B. Official vehicle;
- C. Pilot vehicles;
- D. Traffic signals.

When flaggers are the sole means of one-way control, the flaggers must be in sight of each other or in direct communication at all times.

4. When a side road intersects the highway within the TTC zone, place additional TTC devices in accordance with other applicable TCZ Indexes.

5. 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.

6. When Buffer Space cannot be attained due to geometric constraints, use the greatest attainable length, not less than 200 ft, for posted speeds greater than 25 mph.

7. ROAD WORK AHEAD and the BE PREPARED TO STOP signs may be omitted if all of the following conditions are met:

- A. Work operations are 60 minutes or less.
- B. Speed limit is 45 mph or less.
- C. There are no sight obstructions to vehicles approaching the work area for a distance equal to the Buffer Space shown in Table 1.
- D. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
- E. Volume and complexity of the roadway has been considered.
- F. If a railroad crossing is present, vehicles will not queue across rail tracks.
- G. AFADs are not in use.

8. See Index 102-600 for general TCZ requirements and additional information.

9. Automated Flagger Assistance Devices (AFADs) may be used in accordance with Specifications Section 102, 990 and the APL vendor drawings.

TABLE 1

Posted Speed	DEVICE SPACING				Distance Between Signs				Buffer Space
	Maximum Spacing of Cones or Tubular Markers		Maximum Spacing of Type I or Type II Barricades/Panels/Drums		A	B	C	D	
	On a Taper	On a Tangent	On a Taper	On a Tangent					
25	20'	50'	20'	50'	200'	200'	200'	100'	155'
30	20'	50'	20'	50'	200'	200'	200'	100'	200'
35	20'	50'	20'	50'	200'	200'	200'	100'	250'
40	20'	50'	20'	50'	200'	200'	200'	100'	305'
45	20'	50'	20'	50'	350'	350'	350'	175'	360'
50	20'	50'	20'	100'	500'	500'	500'	250'	425'
55	20'	50'	20'	100'	2640'	1500'	1000'	500'	495'
60	20'	50'	20'	100'	2640'	1500'	1000'	500'	570'
65	20'	50'	20'	100'	2640'	1500'	1000'	500'	645'
70	20'	50'	20'	100'	2640'	1500'	1000'	500'	730'

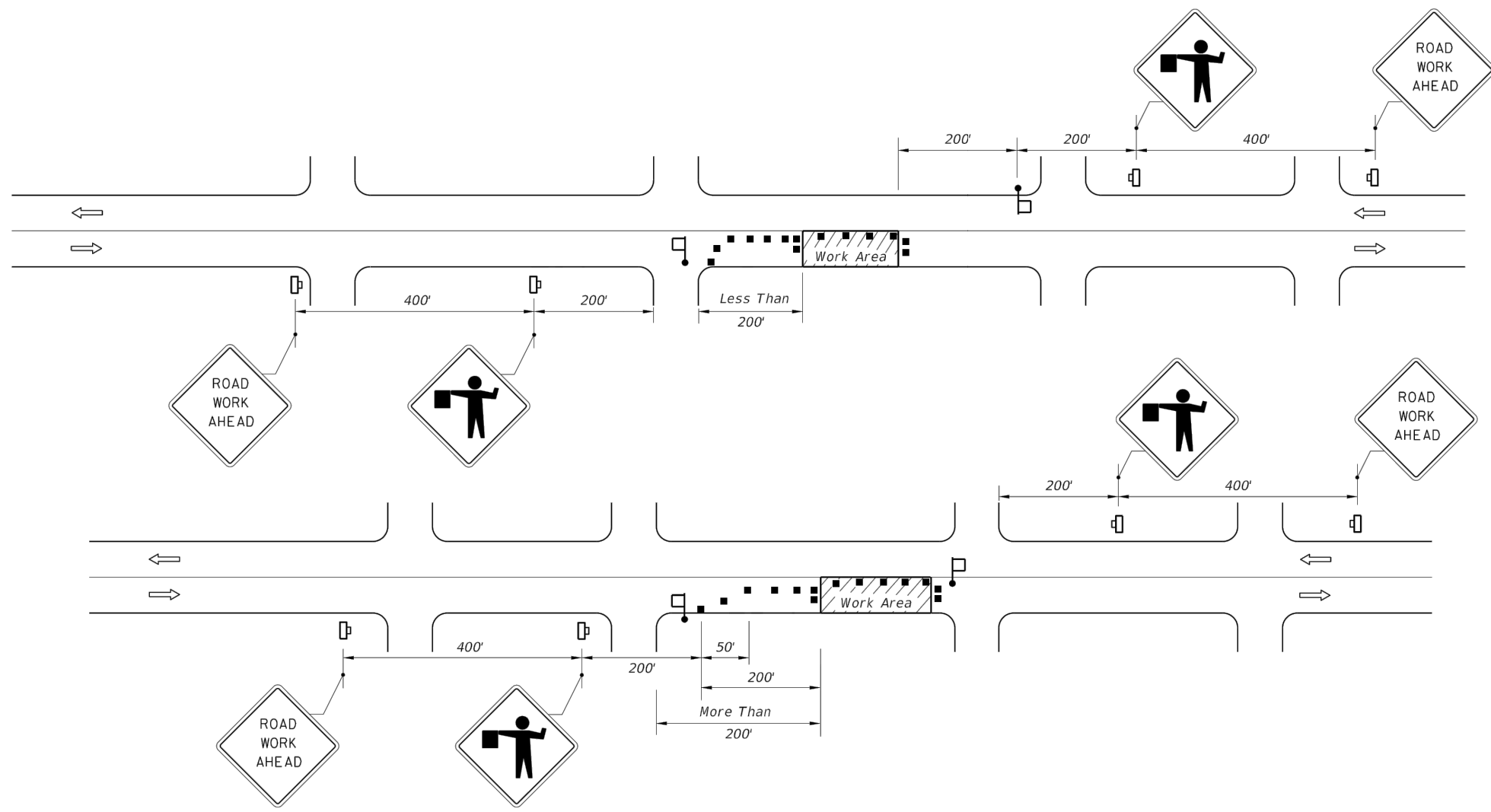
CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH THE AREA BETWEEN THE CENTERLINE AND A LINE 2' OUTSIDE THE EDGE OF TRAVEL WAY.

9/18/2018 10:24:22 AM

LAST REVISION 11/01/17	DESCRIPTION:	FY 2019-20 STANDARD PLANS	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY	INDEX 102-603	SHEET 1 of 3
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CONDITIONS
 WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS LESS THAN 200' DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

CONDITIONS
 WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS 200' OR MORE DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

- SYMBOLS**
- Work Area
 - Channelizing Device (See Index 102-600)
 - Work Zone Sign
 - Flagger
 - Lane Identification + Direction of Traffic

- GENERAL NOTES**
1. Work operations shall be confined to one travel lane, leaving the opposing travel lane open to traffic.
 2. When vehicles in a parking zone block the line of sight to TCZ signs or when TCZ signs encroach on a normal pedestrian walkway, the signs shall be post mounted and located in accordance with Index 700-101.
 3. If work area is confined to an outside auxiliary lane, the work area shall be barricaded and the FLAGGER signs replaced by ROAD WORK AHEAD signs. Flaggers are not required.
 4. Flaggers shall be in sight of each other or in direct communication at all times.
 5. The FLAGGER legend sign may be substituted for the symbol sign.
 6. The maximum spacing between devices shall be no greater than 25'.
 7. For general TCZ requirements and additional information, refer to Index 102-600.
 8. The two channelizing devices directly in front and directly at the end of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
 9. Use Temporary Raised Rumble Strips in accordance with Index 102-603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.

- DURATION NOTES**
1. ROAD WORK AHEAD sign may be omitted if all of the following conditions are met:
 - a. Work operations are 60 minutes or less.
 - b. Speed is 45 mph or less.
 - c. No sight obstructions to vehicles approaching the work area for a distance of 600 feet.
 - d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
 - e. Volume and complexity of the roadway has been considered.

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LAST REVISION 11/01/17	DESCRIPTION:		FY 2019-20 STANDARD PLANS	TWO-LANE, TWO-WAY, WORK NEAR INTERSECTION	INDEX 102-605	SHEET 1 of 1
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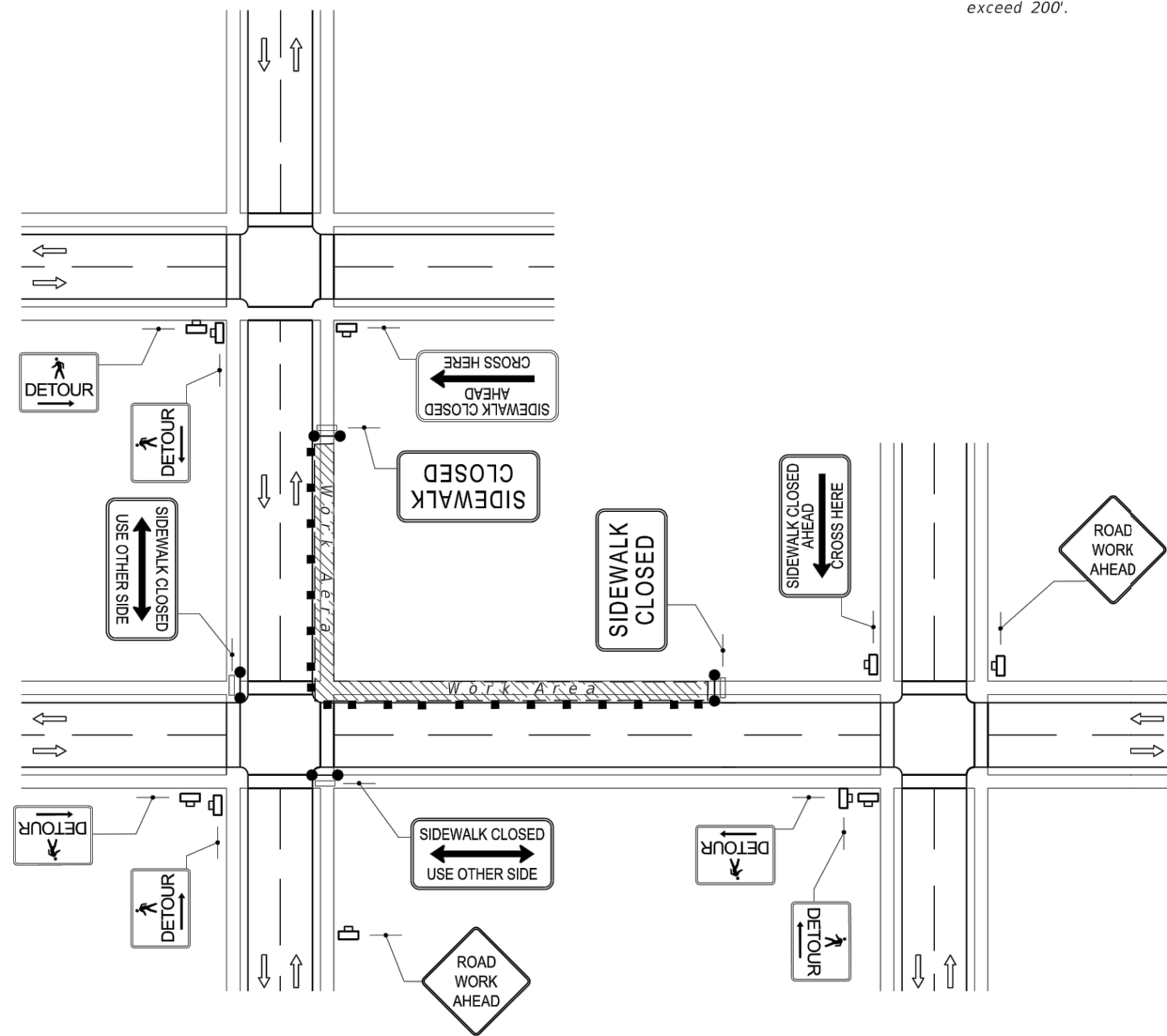
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DATE	BY		DESCRIPTION																					

SYMBOLS

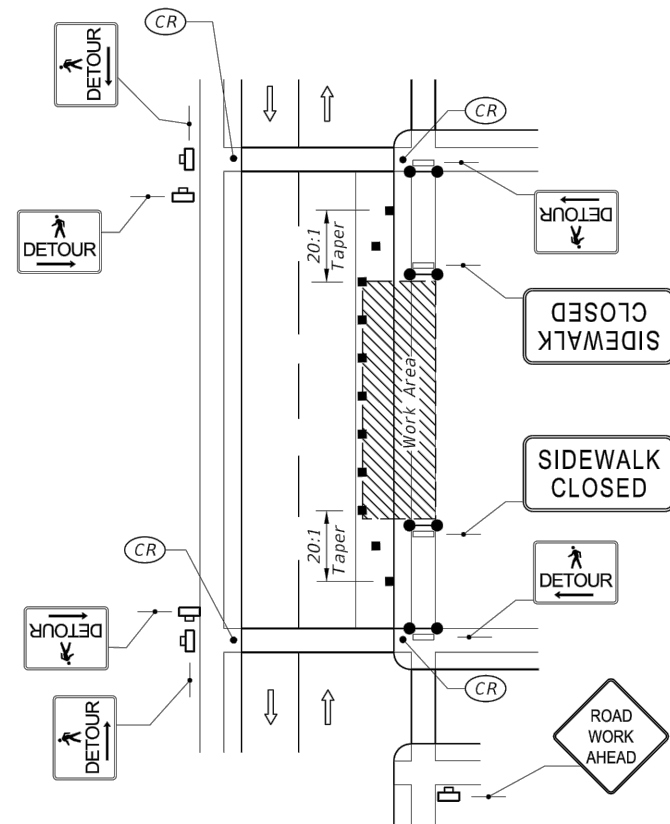
-  Work Area
-  Channelizing Device
-  Work Zone Sign
-  Required Locations For Either Temporary Or Permanent Curb Ramps.
-  Lane Identification + Direction of Traffic
-  Pedestrian Longitudinal Channelizing Device (LCD) with Mounted Work Zone Sign or separate Work Zone Sign
-  Pedestrian Longitudinal Channelizing Device (LCD)
-  Temporary Sidewalk

GENERAL NOTES:

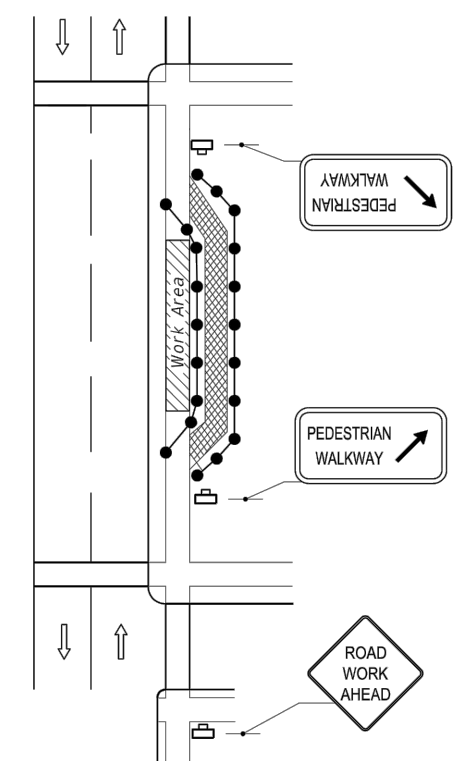
1. When encroaching work requires a sidewalk closure for 60 minutes or greater, provide an alternate pedestrian route.
2. For spacing of vehicular Channelizing Devices, see applicable vehicular temporary traffic control Indexes.
3. Cover or deactivate pedestrian traffic signal display(s) controlling closed crosswalks.
4. For post mounted signs located near or adjacent to a sidewalk, maintain a minimum 7' clearance from the bottom of the sign panel to the surface of the sidewalk.
5. Provide a 5' wide temporary walkway, except where space restrictions warrant a minimum width of 4'. Provide a 5' x 5' passing space for temporary walkways less than 5' in width at intervals not to exceed 200'.
6. Provide a cross-slope with a maximum value of 0.02 for all temporary walkways.
7. Maintain temporary walkway surfaces and ramps that are stable, firm, slip-resistant, and free of any obstructions or hazards such as holes, debris, mud, construction equipment, and stored material.
8. Remove temporary walkways immediately after reopening of the sidewalk, unless otherwise noted in the plans.
9. Meet the requirements of Index 522-002 for temporary curb ramps.
10. Place pedestrian longitudinal channelizing device(s) across the full width of the closed sidewalk. For temporary walkways, similar to the Sidewalk Diversion, place LCDs to delineate both sides of the temporary walkway.
11. For sidewalk diversions, ensure that there is sufficient R/W for placement of temporary sidewalk and pedestrian longitudinal channelizing devices.



CROSSWALK CLOSURE AND PEDESTRIAN DETOUR




SIDEWALK DETOUR



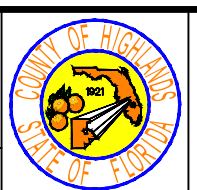
SIDEWALK DIVERSION

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LAST REVISION 11/01/17	REVISION DESCRIPTION:	 FY 2019-20 STANDARD PLANS	PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALKS	INDEX 102-660	SHEET 1 of 1
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REVISIONS			STATUS	DESIGNED BY: N/A	DRAWN BY: DOUG NIETUBICZ	CHECKED BY: J.D. LANGFORD, P.E.	IN CHARGE: J.D. LANGFORD, P.E.	DATE: 3/19/2020
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**HIGHLANDS COUNTY
ENGINEERING DEPARTMENT**
 505 S. COMMERCE AVENUE
 SEBRING, FLORIDA 33870
 APPROVED BY: JAMES D. LANGFORD, JR., P.E.
 FLORIDA REGISTRATION NO.: 78402



**THUNDERBIRD ROAD WEST
SIDEWALK EXTENSION**
 FDOT MAINTENANCE OF TRAFFIC

SCALE: HORIZ. N/A VERT. N/A	
PROJECT NO. 15010	REV. 0
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