

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

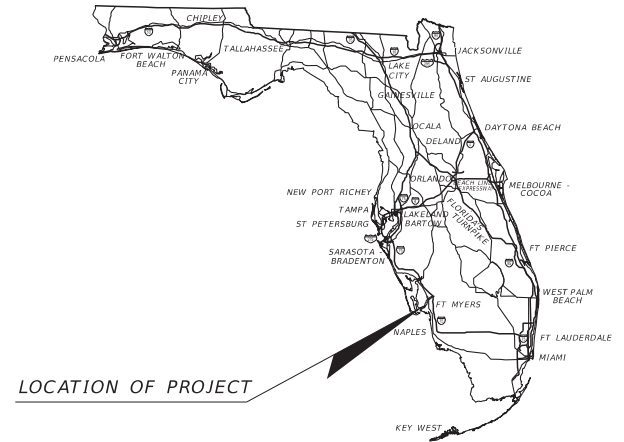
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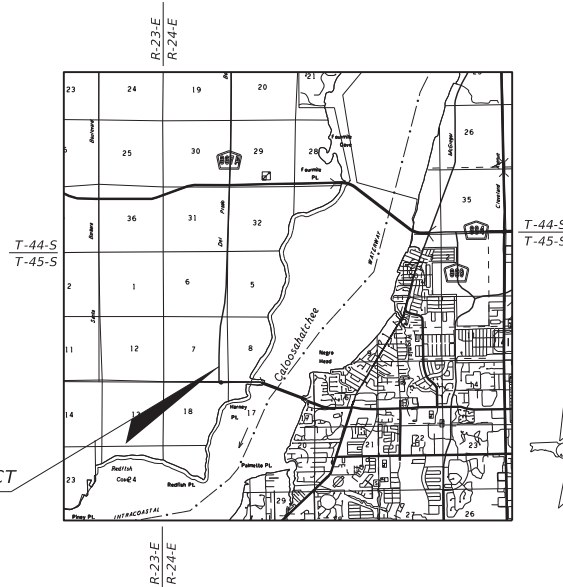
LEE COUNTY BRIDGE SCOUR
DEL PRADO BOULEVARD OVER MALAGA CANAL
BRIDGE NO. 124059

1 SOLICITATION #: B180547TJM

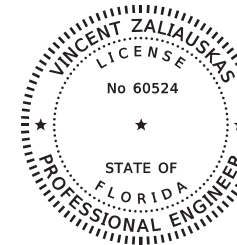
STRUCTURE PLANS



LOCATION OF PROJECT



LOCATION OF PROJECT



THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY
Vincent A Zaliauskas
Digitally signed by Vincent
A Zaliauskas
Date: 2018.10.22 09:56:32
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ON THE DATE ADJACENT TO THE SEAL

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STRUCTURE PLANS
ENGINEER OF RECORD:

VINCENT ZALIAUSKAS, P.E.
P.E. LICENSE NUMBER 60524
HIGHSPANS ENGINEERING, INC.
2121 MCGREGOR BLVD.
SUITE 200
FORT MYERS, FL 33901
CERTIFICATE OF AUTHORIZATION NO. 27559

FDOT PROJECT MANAGER:

AVELINO CANCEL, P.E.

GOVERNING DESIGN STANDARDS:

Florida Department of Transportation, FY 2017-18 Design Standards eBook (DSeB)
and applicable Design Standards Revisions (DSRs) at the following website:
<http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm>

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, Jan 2018 Standard Specifications
for Road and Bridge Construction at the following website:
<http://www.dot.state.fl.us/programmanagement/Implemented/SpecBooks>

1 REVISIONS:
SHEET B-01 AND B1-01

KEY SHEET REVISIONS	
DATE	DESCRIPTION
10/17/18	ADDED SOLICITATION #

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
	18	B-01

GENERAL NOTES

1. GOVERNING STANDARDS AND CONSTRUCTION SPECIFICATIONS
A. FLORIDA DEPARTMENT OF TRANSPORTATION, 2017-18 DESIGN STANDARDS AND REVISED INDEX DRAWINGS AS APPENDED HEREIN, AND JANUARY 2018 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS.
B. EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES SHALL BE USED IN STRICT COMPLIANCE WITH THE GUIDELINES AND SPECIFICATIONS DESCRIBED IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, 1988), INCORPORATED BY REFERENCE IN RULE 40E-4.091, F.A.C., TO PREVENT VIOLATIONS OF STATE WATER QUALITY.
2. VERTICAL DATUM
ELEVATIONS ARE NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD 29), UNLESS NOTED OTHERWISE.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION AND OWNERSHIP OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA OF THE PROJECT PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY INFORMATION AND DATA IN THE PLANS BEFORE BEGINNING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A PRE- AND POST-CONSTRUCTION SURVEY UNDER THE DIRECTION OF A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER (PSM). THE SURVEY IS TO INCLUDE PROFILE AND CROSS SECTIONS TO INSURE A MINIMUM WATER DEPTH OF 5 FEET IS MAINTAINED.
6. ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY THE CONTRACTOR OR ANY SUB-CONTRACTOR SHALL BE RESTORED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
7. DURING CONSTRUCTION SEQUENCE ALL BARGES USED SHALL NOT EXCEED A DRAFT DEPTH OF 3 FEET TO MEET THE UNITED STATES COAST GUARD MINIMUM CLEARANCE REQUIREMENT.
8. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING NAVIGABLE WATERWAYS. THE CONTRACTOR SHALL MOVE EQUIPMENT IN A TIMELY MANNER TO ALLOW BOATS AND OTHER VESSELS TO REASONABLY NAVIGATE THROUGH THE CANAL. ANY SHORT TERM IMPACTS TO NAVIGATION SHALL BE COORDINATED WITH THE UNITED STATES COAST GUARD (USCG), MR. EDDIE LAWRENCE. EMAIL ADDRESS: eddie.h.lawrence@uscg.mil, TELEPHONE NUMBER (305) 415-6946. IN ADVANCE OF ANY CONSTRUCTION ACTIVITY RESTRICTING HORIZONTAL AND/OR VERTICAL CLEARANCES THE CONTRACTOR SHALL SUBMIT TO THE COUNTY A CONSTRUCTION PLAN APPROVED BY THE USCG.
9. ENDANGERED SPECIES MAY BE PRESENT OR MIGRATE THROUGH THE PROJECT AREA. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS REGARDING ENDANGERED, THREATENED, AND STATE LISTED SPECIES OF SPECIAL CONCERN.
10. THE PROJECT LIES WITHIN DESIGNATED CRITICAL HABITAT FOR THE FEDERALLY ENDANGERED WEST INDIAN MANATEE AND SMALLTOOTH SAWFISH. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL AND STATE REQUIREMENTS AND SPECIAL PROVISIONS INCLUDING THE "STANDARD MANATEE CONDITIONS FOR IN-WATER WORK" AND THE NATIONAL MARINE FISHERIES SERVICE'S "SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS".
11. ACCORDING TO NOAA STATION 8725781 THE FOLLOWING DATA VALUES WERE OBTAINED: MHHW=2.19 FT, MHW=1.87 FT, MLW=0.41 FT, MLLW=0.00 FT USING NAVD88 (NORTH AMERICAN VERTICAL DATUM OF 1988).
12. CONTRACTOR SHALL MAINTAIN CURRENT WATER QUALITY CONDITIONS AND PROVIDE TURBIDITY BARRIERS DURING CONSTRUCTION TO AVOID TURBID RUNOFF.
13. CONTRACTOR SHALL PLACE EXCAVATED CANAL BED MATERIAL AROUND THE PIERS AND ABUTMENTS. NEW MATERIAL IS TO BE WASHED STONE TO MINIMIZE ROCK DUST INTRODUCED INTO THE WATER.
14. ONLY CLEAN FILL MATERIAL SHALL BE USED FOR THIS PROJECT. THE FILL MATERIAL SHALL BE FREE FROM ITEMS SUCH AS TRASH, DEBRIS, AUTOMOTIVE PARTS, ASPHALT, CONSTRUCTION MATERIALS, CONCRETE BLOCK WITH EXPOSED REINFORCEMENT BARS, AND SOILS CONTAMINATED WITH ANY TOXIC SUBSTANCE.
15. IF TURBIDITY EXCEEDS 0 NTU'S ABOVE BACKGROUND OUTSIDE OF THE WORK AREA, DREDGING AND FILLING SHALL CEASE UNTIL TURBIDITY FALLS TO 0 NTU'S OUTSIDE THE MIXING ZONE. THE APPLICANT WILL CONTACT LEE COUNTY IMMEDIATELY IF A WATER QUALITY VIOLATION IS DETECTED THAT REQUIRES THE WORK TO CEASE. WATER QUALITY MONITORING REPORTS SHALL BE SUBMITTED TO THE COUNTY STAFF ON A WEEKLY BASIS DURING CONSTRUCTION ACTIVITY.
16. CONTRACTOR SHALL ACQUIRE AND MAINTAIN ALL FEDERAL, STATE, AND LOCAL PERMITS REQUIRED FOR CONSTRUCTION.
17. ANY MATERIAL TO BE STOCKPILED FOR PERIODS GREATER THAN 24 HOURS SHALL BE PROTECTED BY APPROPRIATE EROSION CONTROL DEVICES.
18. NO STAGING OR OTHER STAGING ACTIVITIES FOR THIS PROJECT WILL BE ALLOWED WITHIN OR ADJACENT TO THE WATERWAY OR OTHER ENVIRONMENTALLY SENSITIVE AREAS.
19. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL PLANS IF NECESSARY.
20. NO WORK SHALL BE PERFORMED FROM BRIDGE DECK.
21. ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET AND INCHES EITHER HORIZONTALLY OR VERTICALLY, UNLESS OTHERWISE NOTED.

DESIGN NOTES

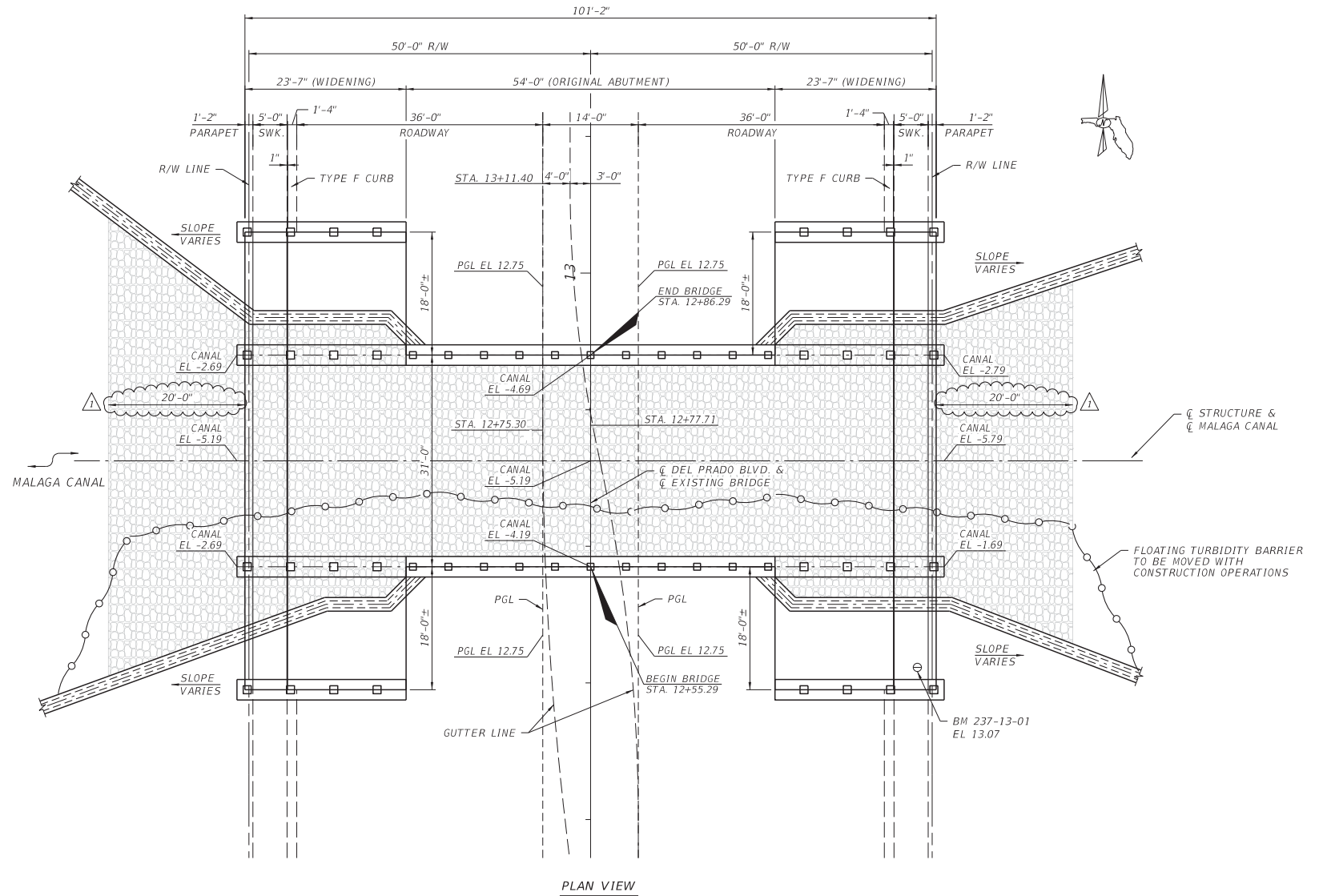
1. BRIDGE NAME AND NUMBER: DEL PRADO BOULEVARD OVER MALAGA CANAL, NO. 124059.
2. DESIGN METHODOLOGY: EVALUATING SCOUR, HYDRAULIC ENGINEERING CIRCULAR NO. 18 (HEC-18)
3. CHANNEL CROSS SECTIONS WERE VALIDATED WITH FIELD MEASUREMENTS (HEC-20).
4. ORIGINAL BRIDGE DESIGN LOADING: HS20-44
5. ASSUMED CONDITIONS:
FLOW RATE: 10 CFS
VELOCITY: 0.3 FPS
EXISTING GRAIN SIZE D50 (SAND): 2.5 MM
EXISTING GRAIN SIZE D90 (SAND): 4.75 MM
PROPOSED GRAIN SIZE D50 (RUBBLE RIPRAP (DITCH LINING)): 150 MM
PROPOSED GRAIN SIZE D90 (RUBBLE RIPRAP (DITCH LINING)): 200 MM
BED CONDITION (PLAIN BED): 1.1
6. CALCULATED SCOUR RESULTS:
EXISTING POTENTIAL SCOUR: 4.63 FT
PROPOSED POTENTIAL SCOUR: 0.67 FT
7. MATERIALS:
RUBBLE RIPRAP (DITCH LINING) PER SPECIFICATIONS SECTION 530

SUMMARY OF RIPRAP					
LOCATION	SIDE	LENGTH	WIDTH	RIPRAP - RUBBLE (DITCH LINING)	
				0530	3 4
				TN	
MALAGA CANAL UNDER DEL PRADO BLVD.	L/R	141.2	38.5	P	F
				580.1	

BRIDGE NO. 124059

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 CERTIFICATE OF AUTHORIZATION NO. 27559	DRAWN BY: SDS 06/18 CHECKED BY: ESE 06/18 DESIGNED BY: MBR 06/18 CHECKED BY: VAZ 06/18	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE: GENERAL NOTES		REF. DWS. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:		SHEET NO.
									LEE		LEE COUNTY BRIDGE SCOUR DEL PRADO BOULEVARD OVER MALAGA CANAL		B-02

ADDENDUM 1-REVISED PLANS



BRIDGE NO. 124059

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 CERTIFICATE OF AUTHORIZATION NO. 27559	DRAWN BY: SDS 06/18 CHECKED BY: ESC 06/18 DESIGNED BY: MBR 06/18 CHECKED BY: VAZ 06/18	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE: PLAN VIEW	REF. DWS. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
10/17/18	SDS	△ ADDED DIMENSION							LEE		LEE COUNTY BRIDGE SCOUR DEL PRADO BOULEVARD OVER MALAGA CANAL	B1-01

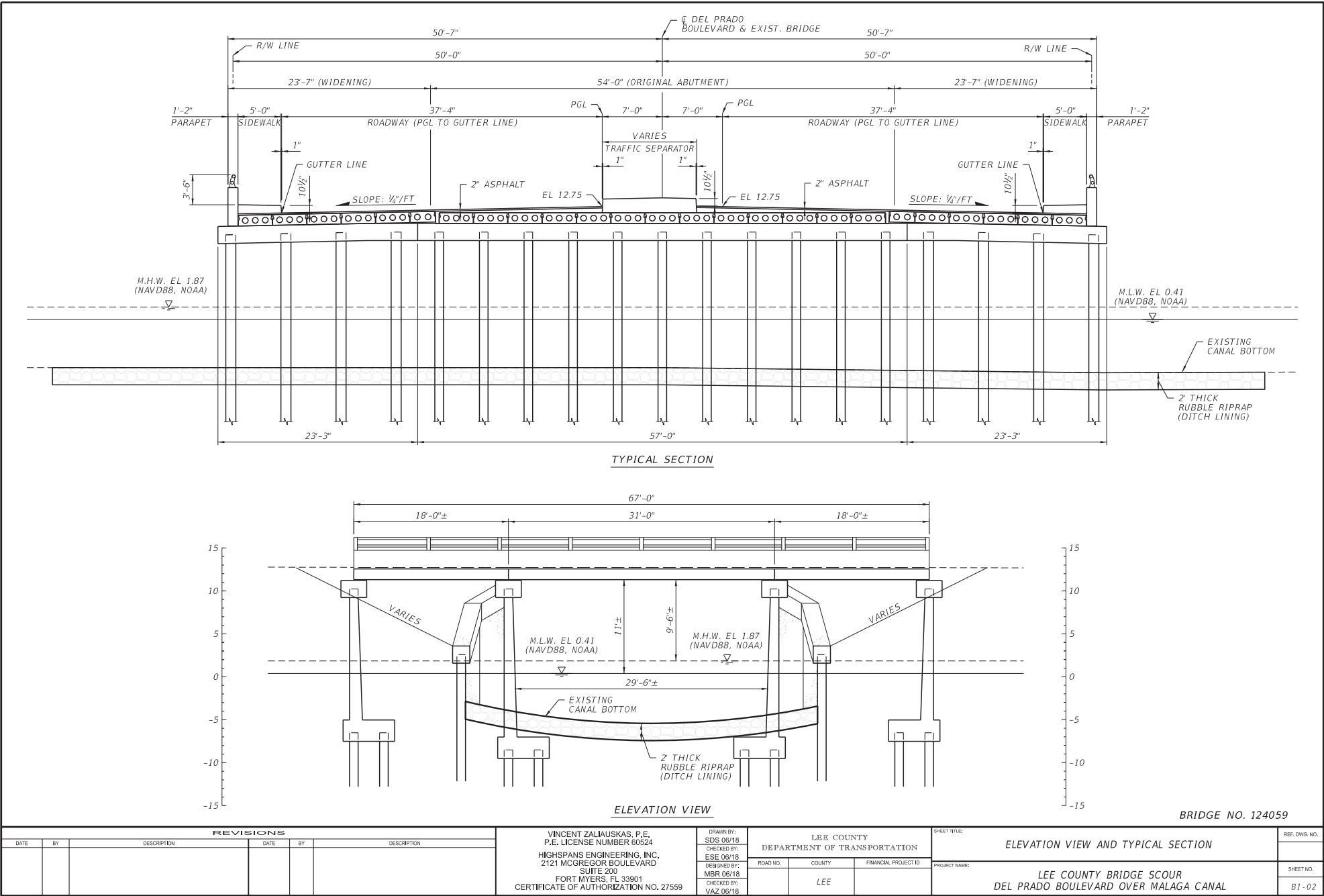
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ADDENDUM 1-REVISED PLANS



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