

Florida Department of Environmental Protection

Northwest District Office 160 W. Government Street, Suite 308 Pensacola, Florida 32502-5740 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

> Noah Valenstein Secretary

December 8, 2017

Escambia County BOCC Joy Jones 3363 W Park Place Pensacola, FL 32505 DJJones@myescambia.com

File No. 0358869-001-EG/17, Escambia County

Dear Ms. Jones:

On November 14, 2017, we received your notice of intent to use a General Permit (GP) pursuant to Rule 62-330.451, Florida Administrative Code (F.A.C.) to upgrade an existing drainage structure within unnamed wetlands, Class III Florida Waters. The project is located within the Lake Charlene subdivision, along Lake Joanne Drive and S 61st Street in Pensacola, Florida 32506, in Section 20, Township 02 South, Range 31 West of Escambia County; Latitude 30°24′2.60″ North / Longitude 87°18′4.02″ West.

Your intent to use a general permit has been reviewed by Department staff for three types of authorization: (1) regulatory authorization, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal authorization. The authority for review and the outcomes of the reviews are listed below. Please read each section carefully.

Your project did not qualify for the federal authorization; therefore, additional authorization must be obtained prior to commencement of the proposed activity. This letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity. Please refer to the specific section dealing with that portion of the review below for advice on how to proceed.

If you change the project from what you submitted, the authorizations granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

If you have any questions regarding this matter, please contact Chuck Harrell at the letterhead address, at (850)595-0581, or at Charles.Harrell@dep.state.fl.us.

1. Regulatory Review – Approved

Based on the forms, drawings, and documents submitted with your notice, it appears that the project meets the requirements for the General Permit under Rule 62-330.451, F.A.C. Any activities performed under a general permit are subject to general conditions required in Rule 62-330.405, F.A.C. (attached) and the specific conditions of Rule 62-330.451, F.A.C. (attached). Any deviations from these conditions may subject the permittee to enforcement action and possible penalties.

Please be advised that the construction phase of the GP must be completed within five years from the date the notice to use the GP was received by the Department. If you wish to continue this GP beyond the expiration date, you must notify the Department at least 30 days before its expiration.

Authority for review – Part IV of Chapter 373, Florida Statutes (F.S.), Title 62, F.A.C., and in accordance with the operating agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C.

2. Proprietary Review – Not Required

The activity does not appear to be located on sovereign submerged lands and does not require further authorization under Chapters 253 or 258, F.S. or Chapters 18-20 or 18-21, F.A.C.

3. Federal Review – SPGP Not Approved

Your proposed activity as outlined on your application and attached drawings does not qualify for federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE** permit or authorization shall be required from the U.S. Army Corps of Engineers (Corps). You must apply separately to the Corps using the federal application form (ENG 4345). More information about Corps permitting may be found online in the Jacksonville District Regulatory Division Sourcebook. Failure to obtain Corps authorization prior to construction could subject you to federal enforcement action by that agency.

Authority for review – an agreement with the Corps entitled "Coordination Agreement Between the U.S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection, or Duly Authorized Designee, State Programmatic General Permit," Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Additional Information

Please retain this general permit. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S. and Chapter 18-14, F.A.C.

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NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S. before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only

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at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S. by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Ryan Godwin

Environmental Specialist

Submerged Lands and Environmental Resources Program

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Attachment(s):

- 1. Rule 62-330.451, F.A.C., 2 pages
- 2. General Conditions for All General Permits, Rule 62-330.405, F.A.C., 3 pages
- 3. Project Drawings, 51 pages

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

D. Allen Vinson, HDR, Inc., <u>Allen.Vinson@hdrinc.com</u>
Escambia County, <u>jtkirsche@myescambia.com</u>; <u>BDBANE@myescambia.com</u>; <u>bdschneider@myescambia.com</u>; <u>TRDAY@myescambia.com</u>

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Barbara Browning

December 8, 2017

Clerk

Date

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62-330.451 General Permit to Counties, Municipalities, and other Agencies to Conduct Stormwater Retrofit Activities.

- (1) A general permit is granted to counties, municipalities, state agencies and water management districts to construct, operate and maintain stormwater retrofit activities as authorized below for improving existing surface water and stormwater systems. This general permit may be used in conjunction with exempt activities.
 - (2) Types of stormwater retrofit activities authorized under this general permit are:
- (a) Construction or alteration that will add additional treatment or attenuation capacity and capability to an existing stormwater management system;
- (b) The modification, reconstruction, or relocation of an existing stormwater management system or stormwater discharge facility;
- (c) Stabilization of eroding banks, and installation of structures such as gabions to limit sidebank erosion; or
- (d) Excavation or dredging to remove sediments or other pollutants that have accumulated in existing surface waters as a result of stormwater runoff and stormwater discharges, provided the material removed is not deposited in existing wetlands or other surface waters.
 - (3) Stormwater retrofit activities shall not:
- (a) Be proposed or implemented for the purpose of providing the water quality treatment or flood control needed to serve new development or redevelopment; or
- (b) Include a dam that has more than 50 acre-feet of storage capacity if the dam is more than five feet high, nor a dam having a height of ten or more feet, regardless of storage capacity. Height is measured from the top of the dam to the natural bed of the stream or watercourse at the downward toe of the dam, or from the lowest elevation of the outside limit of the dam to the maximum elevation of the dam.
- (4) There is no limit to the acreage of stormwater retrofit activities in artificial waters. Work in wetlands and non-artificial surface waters shall be limited to no more than 0.5 acre.
 - (5) A stormwater quality retrofit activity must result in at least one of the following:
- (a) Addition of treatment capacity to an existing stormwater management system such that it reduces stormwater pollutant loadings to receiving waters;
- (b) Addition of treatment or attenuation capability to an existing developed area when either the existing stormwater management system or the developed area has substandard stormwater treatment or attenuation capabilities, compared to what would be required for a new system requiring a permit under Part IV of Chapter 373, F.S.; or
 - (c) Removal of pollutants generated by, or resulting from, previous stormwater discharges.
- (6) A water quantity retrofit project proposed to reduce existing flooding problems must be designed in such a way that the project does not:
- (a) Result in a net reduction in water quality treatment provided by the existing stormwater management system;
 - (b) Increase discharges of untreated stormwater entering receiving waters;
- (7) The project must be designed, constructed, and implemented so that it will be implemented as a complete, stand-alone project within the construction phase duration of a general permit, and such that it will not at any time during its construction or operation:
 - (a) Cause or contribute to any water quality violations;
- (b) Contribute to any existing violation if it discharges pollutants into waters where existing ambient water quality does not meet water quality standards for those pollutants. In such a case,

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the project must include measures that will cause a net improvement in the receiving waters for those pollutants in accordance with Section 373.414(1)(b)3., F.S.;

- (c) Adversely affect the value of functions provided to fish and wildlife by wetlands or other surface waters;
- (d) Adversely affect the hydroperiod of wetlands on adjacent lands or the hydroperiod of other wetlands upstream, downstream, or adjoining to the work area under subsection (4), above;
- (e) Cause or contribute to increased flooding of adjacent lands or cause new adverse water quantity impacts to receiving waters;
 - (f) Add or increase any chemical treatment;
 - (g) Be operated by pumps or other mechanical or adjustable features;
- (h) Adversely impact the maintenance of surface or ground water levels or surface water flows established pursuant to Section 373.042, F.S.
- (8) The entity conducting this general permit must conduct at least one pre-notice meeting with Agency staff having responsibility for the review of the proposed activities. The notice required in Rule 62-330.402, F.A.C., shall include materials reflecting the recommendations of the Agency discussed during that meeting, and demonstrating compliance with the above, including a certification by a registered professional that the proposed activity will meet the criteria specified above. Such certification shall include appropriate design analyses, pollutant loading analyses, modeling and other engineering calculations, drawings, specifications and other information to support, describe, verify, and document the registered professional's certification.
- (9) Nothing in this general permit will preclude a county or municipality from obtaining and implementing a Basin Management Action Plan with water quality credits for activities performed under this authorization.
- (10) Within 30 days after completion of construction, a registered professional shall submit certification that construction was completed in substantial conformance with the plans and calculations that were submitted in the notice to use this general permit.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.118(6), 373.406(5), 373.4131, 373.414(9), 373.418, 403.805(1) FS. Law Implemented 373.118(1), (6), 373.406(5), 373.413, 373.4131, 373.414(9), 373.416, 373.418 FS. History—New 10-1-13.

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62-330.405 General Conditions for All General Permits

The following general permit condiitons are binding upon the permittee and are enforceable under Chapter 373, F.S. These conditions do not apply to the general permit in Section 403.814(12), F.S.

- (1) The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- (2) This general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit.
- (3) This general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.
- (4) The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.
- (5) Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.
- (6) The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with Chapter 120, F.S., and Section 373.429, F.S.
- (7) This permit shall not be transferred to a third party except pursuant to Rule 62-330.340, F.A.C. The permittee transferring the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.
- (8) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the permit.
- (9) The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in this general permit.
- (10) A permitee's right to conduct a specific activity under this general permit is authorized for a duration of five years.
- (11) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the *State of*

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Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), available at www.dep.state.fl.us/water/wetlands/docs/erp/FLErosionSedimentManual_6_07.pdf, and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), available at www.dep.state.fl.us/water/nonpoint/docs/erosion/erosion-inspectors-manual.pdf.

- (12) Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:
- (a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter 4 inches or greater at breast height;
 - (b) The maximum width of the construction access area shall be limited to 15 feet;
 - (c) All mats shall be removed within 72 hours after the work commences; and
- (d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.
- (13) Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.
- (14) The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.
 - (15) Except where specifically authorized in a general permit, activities must not:
- (a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands;
- (b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to Section 373.042, F.S., or a Works of the District established pursuant to Section 373.086, F.S.; or
- (16) If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.
- (17) The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.

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- (18) The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:
- (a) All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- (b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.
- (c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All on-site project personnel are responsible for observing water-related activities for the presence of listed species.
- (d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1 (888) 404-3922 and ImperiledSpecies@myFWC.com.
- (e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at imperiledspecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.
- (19) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.
- (20) The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.044, 373.118(1), 373.129, 373.136, 373.406(5), 373.413, 373.414(9), 373.4145, 373.416, 373.422, 373.423, 373.429, 403.814(1) FS. History–New 10-3-95, Amended 10-1-07, Formerly 62-341.215, Amended 10-1-13.

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BOARD OF COUNTY COMMISSIONERS ESCAMBIA COUNTY, FLORIDA

PUBLIC WORKS BUREAU ENGINEERING DIVISION

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S-009	REINFORCING BAR LIST

PROJECT NO. PD 13-14.081

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE LATEST ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION I, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICAPABLE TO ANY SPECIFICATION REFERED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

PLANS PROPOSED FOR

LAKE CHARLENE DRAINAGE IMPROVEMENTS

100% PLANS OCTOBER 2017



PROJECT LOCATION

VICINITY MAP

COMMISSIONERS

DISTRICT ONE JEFF BERGOSH (VICE CHAIRMAN)

DISTRICT TWO DOUG UNDERHILL (CHAIRMA)

DISTRICT THREE LUMON MAY

DISTRICT FOUR GROVER C. ROBINSON, IV

DISTRICT FIVE STEVEN BARRY



PROJECT MANAGER:

D. Allen Vinson

SECTION / TOWNSHIP / RANGE:

S20, 21, 53 / T2S / R30,31W

2

PROJECT ENGINEER:

D. Allen Vinson

SIGNATURE:

See EOR Seal

DATE:

See EOR Seal

AY ITEM	SUMMARY OF PAY ITEMS DESCRIPTION	QUANTITY	UNITS
1	Mobilization / Demobilization	1	EA
2	Clearing and Grubbing, per County Spec 2230	4.32	ACRE
3	Earthwork	1	LS
4	Earthwork Establishing Grade, County Specs 2300	12438	SY
5	Dewatering - Bypass pumping at weir	1	LS
6	Dewatering -Trench	2500	LF
7	2" County Spec 2500 Type SP 12.5 Asphalt, over 1500sy	6613	SY
8	Type SP 12.5 Asphalt Leveling (110lbs. per SY), less than 1500sy	102	SY
9	1 1/4" County Spec 2500 Type SP 12.5 Asphalt (Driveways) in place, includes compacted subgrade	778	SY
10	Mill Existing Asphalt, 0"-1.5" Thickness, less than 1500sy	102	SY
11	Lateral pavement patch as per FDOT Index 307 (Full depth Asphalt)	138	SY
12	Saw cut Existing Asphalt	81	LF
13	12" Stabilized Subgrade, County Spec 2300, over 1000sy	10375	SY
14	6" Graded aggregate Base "Min. LBR 100 at 100% Modified Proctor", County Spec 2400, over 1000sy	6764	SY
15	Relocate Traffic Signs	4	EA
16	FDOT Type E Curb And Gutter, FDOT Index 300, less than 500lf	386	LF
17	County Type B Curb, Per County Detail, over 500lf	632	LF
18	Valley Gutter Section, 6" thick, Per County Detail	78	LF
19	4" Fiber Reinforced Concrete Driveway, over 100sy	249	SY
20	Storm Manhole, 6-12ft depth	5	EA
21	Tie to Existing Inlets, Pipe, Manhole	6	EA
22	36" RCP Pipe, 0'-6' depth	81	LF
23	60" RCP Pipe, 7'-12' depth	3973	LF
24	36" RCP Side Drain MES, FDOT Index 273, 280	2	EA
25	Class II Concrete for Endwalls	51	CY
26	Reinforcing Steel for Endwalls	4708	LB
27	Pipe Removal, 30" and larger	81	LF
28	Remove MES for 30" and larger (or equivalent) pipe	2	EA
30	Centipede Sod, Staked, over 1000sy 18" Depth Rip Rap Rubble w/ 4" Bedding Stone and	12438 45	SY
31	Geotextile Establish and Provide Sediment & Erosion Control	1	LS
32	Plan including all items for implementation Fiber Reinforced Plastic (FRP) Sheet Pile Retaining Wall	1334	SF
33	Thermoplastic 6" White Solid Stripe	50	LF
34	Thermoplastic 24" White Solid Stripe	42	LF
35	Thermoplastic 6" Double Yellow Solid Stripe	150	LF
36	RPM's (Y/Y)	8	EA
37	Maintenance of Traffic Safety Plan (develop and provide including all items for implementation)	1	LS
38	State Road - Maintenance of Traffic	1	LS
30	Territoria de la constante de		

SUMMARY OF PAY ITEMS						
PAY ITEM	DESCRIPTION	QUANTITY	UNITS			
39	Riprap for Sheet Pile and Weir	1				
40	Final Pavement Markings (US 98 Only)	1	LS			
630-2-12	Conduit, F&I, Directional Bore	204	LF			
632-7-1	Signal Cable-New or Reconstructed Intersection, F&I	1	PI			
635-2-11	Pull & Splice Box, 13"x24" Cover Size	3	EA			
649-26-5	Steel Mast Arm Assembly, Remove, Deep Foundation-Bolt On Attachment	1	EA			
649-21-17	Steel Mast Arm Assembly, F&I, Double Arm 70'-40'	1	EA			
	Traffic Signal, F&I, Alum., 3 Section, 1 Way	3	AS			
	Traffic Signal, F&I, Alum., 5 Section Straight, 1 Way	1	AS			
	Loop Assembly, F&I, Type A 1					
	00-3-501 Sign Panel, Relocate, Up To 12 SF					

IT IS THE CONTRACTOR'S RESPONSIBILITY TO SELECT AND GAIN PERMISSION TO USE SITES/PARCELS WHICH ARE LOCATED OUTSIDE THE COUNTY'S RIGHT-OF-WAY OR MAINTENANCE CLAIM AREAS FOR LAYDOWN OR TEMPORARY EARTHWORK DISPOSAL (INCLUDING SEDIMENT CONTROL). THE CONTRACTOR SHALL RETURN ALL SITES USED FOR THESE PURPOSES TO ORIGINAL CONDITION OR BETTER, ANY COSTS ASSOCIATED WITH THE ABOVE SHALL BE INCLUDED IN THE COST OF MOBILIZATION/DEMOBILIZATION.

ITEM INCLUDES ALL ITEMS TO BE REMOVED FOR THE CONSTRUCTION OF THE PROJECT INCLUDING TREES, ROADWAYS, DRIVEWAYS, CURB AND GUTTER, FLUMES AND ALL OTHER ITEMS NOT LISTED AS A REMOVAL PAY ITEM. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE AMOUNT, LOCATION, AND SIZE OF TREES TO

EARTHWORK IS A LUMP SUM PAY ITEM AND IS LIMITED TO AREAS ADJACENT TO THE TWO ENDWALL LOCATIONS. DREDGING OF A PORTION OF THE CANAL, AS SHOWN IN THE PLANS, IS INCLUDED IN THIS PAY ITEM. THIS PAY ITEM DOES NOT INCLUDE EARTHWORK ASSOCIATED WITH PIPE INSTALLATION OR ROADWAY RECONSTRUCTION.

EARTHWORK ESTABLISHING GRADE INCLUDES ALL GRADING FROM THE EDGE OF PROPOSED PAVEMENT TO THE LIMITS OF CONSTRUCTION. THIS INCLUDES RE-ESTABLISHING ALL SHOULDER AND DITCH GRADES AS SHOWN IN THE PLANS AND CROSS SECTIONS.

THIS ITEM IS INTENDED TO COVER THE CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION OF THE WEIR/ENDWALL/SHEET PILING AT THE END OF THE CANAL. THIS MAY INCLUDE BUT IS NOT LIMITED TO DEWATERING OF THE AREA, TEMPORARILY PUMPING DOWN THE WATER SURFACE ELEVATION, OR BYPASS

THIS ITEM INCLUDES ALL ITEMS AND PHASES NECESSARY TO DEWATER THE TRENCHES FOR STORMWATER

ITEM INTENDED FOR THE RESURFACING OF MILLED AREAS.

ITEM IS INTENDED FOR WORK CROSSING US 98. THE PAVEMENT DESIGN FOR THE LATERAL PAVEMENT PATCH MATCHES THE EXISTING PAVEMENT DESIGN FOR US 98. SEE PLAN DETAIL.

SAW CUT QUANTITY IS INTENDED FOR LOCATIONS WERE RECONSTRUCTION LIMITS END. SAW CUTTING FOR US 98 IS INCLUDED IN THE COST OF LATERAL PAVEMENT PATCH.

QUANTITY INCLUDES COST TO CONSTRUCT FLUME THAT FLOWS OVER HEADWALL LOCATED OFF LAKE JOANNE DR. FLUME AREA IS 14SY.

INCLUDES THE TOP AND BOTTOM OF DRAINAGE STRUCTURES. MANHOLE ACCESS LOCATIONS SHALL AVOID THE WHEEL PATH OF ROADWAYS BY LOCATING ALONG THE CENTERLINE OF THE ROADWAY OR CENTER OF

				THE TRAVEL LANE.	
				PROJECT MANAG	ER A. VINSON
133				DESIGNED BY	J. CLARK
F /				DRAWN BY	J. CLARK
				CHECKED BY	J. BURCHFIELD
HDR Engineering, Inc. 25 West Cedar Street, Suite 200 Pensacola, FL 32502-5945					
(850) 432-6800 www.hdrinc.com Certificate of Authorization No. 4213	- ISSUE	- DATE	- DESCRIPTION	PROJECT NUMB	ER PD 13-14.081

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ITEM IS FOR CONNECTION OF EXISTING PIPE TO PROPOSED DRAINAGE STRUCTURES.

ITEMS 22-26: ALL SHORING REQUIRED FOR PIPE INSTALLATION IS INCLUDED IN THE COST OF PIPE. DEWATERING IS INCLUDED IN OTHER ITEMS. THE COST OF REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL IS INCLUDED IN THE COST OF PIPE. SEE GEOTECHNICAL REPORT FOR LIMITS OF UNSUITABLE MATERIAL. AT A MINIMUM, UNSUITABLE MATERIAL IS LIKELY TO BE ENCOUNTERED AT PIPE ELEVATIONS ALONG THE SOUTHERN 1300 FEET OF THE PROJECT.

SOD ALL AREAS OF DISTURBANCE FROM R/W TO R/W. SOD THICKNESS SHOULD BE CONSIDERED WHEN PLACING ON FINAL GRADES SO THAT STORMWATER RUNOFF IS NOT IMPEDED SUCH AS AT THE EDGE OF PAVEMENT OR DRIVEWAYS. SODDING OR SEEDING OF DISTURBANCE OUTSIDE THE R/W SHALL BE INCLUDED IN THE COST OF MOBILIZATION/DEMOBILIZATION.

CONTRACTOR SHALL SUBMIT A PLAN FOR COUNTY APPROVAL. ITEM INCLUDES NPDES PERMITTING.

INCLUDES LAYOUT, PAINT, AND THERMOPLASTIC APPLICATION WITHIN COUNTY RIGHT-OF-WAY. INCLUDES TEMPORARY AND PERMANENT RPMS. ALL PAVEMENT MARKINGS ASSOCIATED WITH MOT SHALL BE INCLUDED IN THE COST OF MOT.

CONTRACTOR SHALL SUBMIT A PLAN FOR COUNTY APPROVAL. ITEM INCLUDES BUT IS NOT LIMITED TO DETOUR SIGNAGE, WORK ZONE SIGNAGE, DRUMS, PCMS'S, PAVEMENT MARKINGS, AND INSTALLATION AND REMOVAL OF COMMERCIAL MATERIAL FOR LOCAL DRIVEWAY/ROADWAY ACCESS AS REQUIRED.

CONTRACTOR SHALL SUBMIT A PLAN FOR FDOT APPROVAL. ITEM INCLUDES BUT IS NOT LIMITED TO TEMPORARY ASPHALT, EARTHWORK, BARRIER WALL, WORK ZONE & DETOUR SIGNAGE, DRUMS, PCMS'S, PAVEMENT MARKINGS AND ITEMS TO BE TEMPORARILY RELOCATED FOR MULTIPLE PHASES. PLAN MAY REQUIRE MULTIPLE SUBMITTALS TO FDOT.

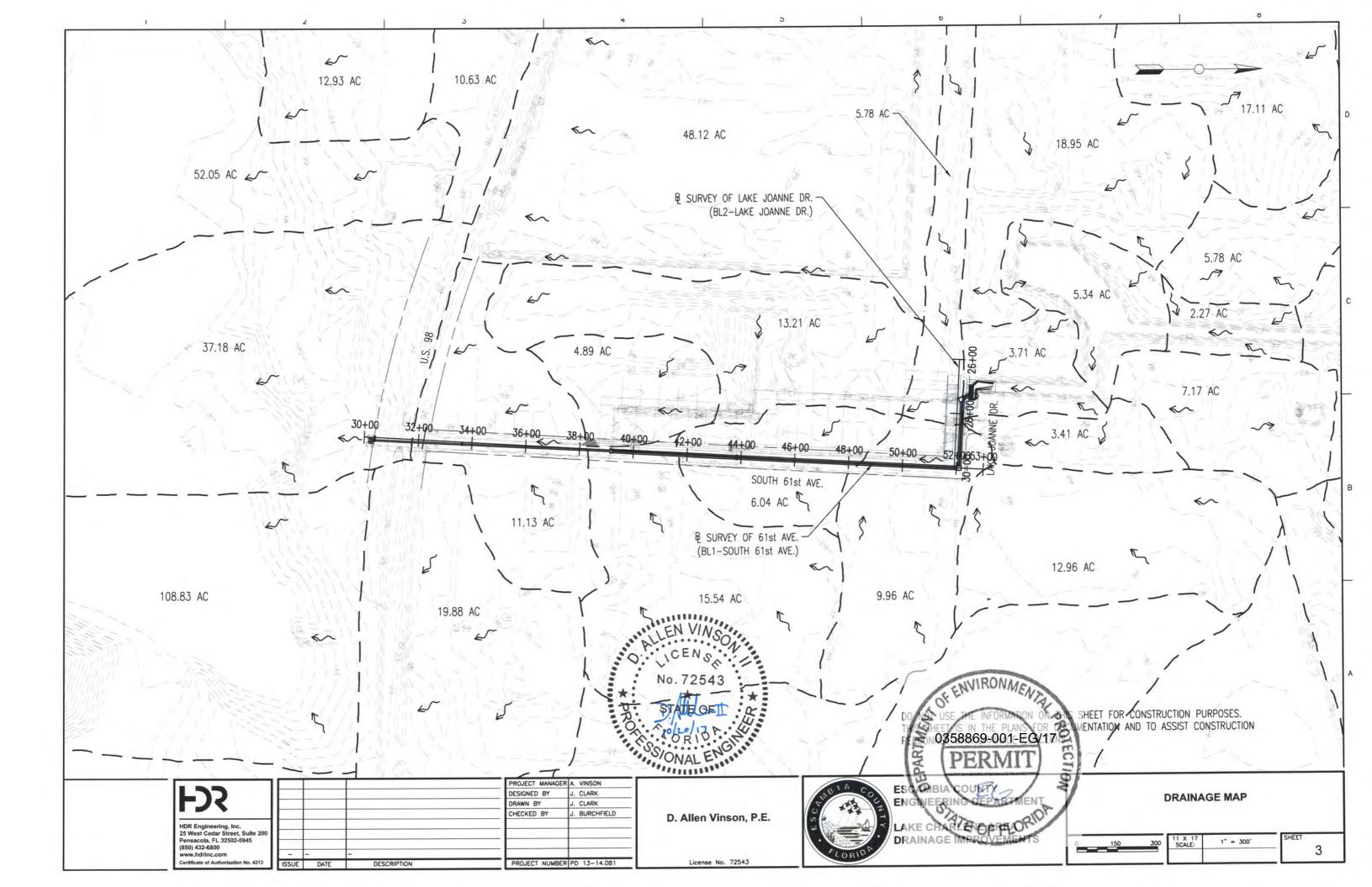
ITEM COVERS ALL RIPRAP CEMENT SAND AND RIPRAP RUBBLE QUANTITIES SHOWN ON SHEET 5007.

ITEM COVERS FINAL PLACEMENT OF PERMANENT MARKINGS, INCLUDING RPM'S IN FDOT R/W. MARKINGS TO MATCH EXISTING MARKINGS AND SHALL COVER THE LIMITS OF CONTRACTOR'S MOT PLAN.

PAY ITEMS 632-2-12 THRU 700-3-501: THESE PAYITEMS ARE DIRECTLY FROM THE MOST CURRENT VERSION OF THE FLORIDA DEPARTMENT BASIS OF ESTIMATES MANUAL

SUMMARY OF PAY ITEMS

NOT TO SCALE SCALE



TRAFFIC DATA DESIGN SPEED = 25 MPH POSTED SPEED = 25 MPH NO COUNTS AVAILABLE RECONSTRUCTION 2.0" SP-12.5 ASPHALT 6" GRADED AGGREGATE BASE (98% MODIFIED PROCTOR, LBR 100) 12" TYPE B STABILIZATION (98% MODIFIED PROCTOR, LBR 40) NOTES 1. LIMITS OF CONSTRUCTION SHALL BE AT THE R/W FOR THE LEFT SIDE AND FOR THE RIGHT SIDE IT SHALL BE 2 FT TO THE RIGHT OF SURVEY OF BASELINE. TRAFFIC DATA DESIGN SPEED = 30 MPH

POSTED SPEED = 30 MPH

NO COUNTS AVAILABLE

RECONSTRUCTION 2.0" SP-12.5 ASPHALT

6" GRADED AGGREGATE BASE (98% MODIFIED PROCTOR, LBR 100)

12" TYPE B STABILIZATION (98%

MODIFIED PROCTOR, LBR 40)

NOTES I. LIMITS OF CONSTRUCTION SHALL

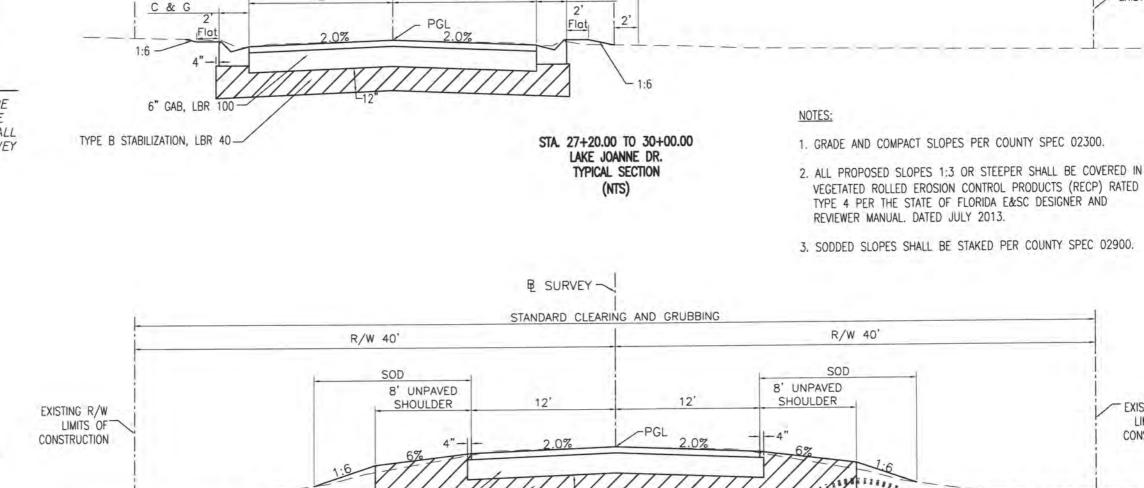
BE AT THE RIW.

EXISTING R/W LIMITS OF

CONSTRUCTION

SOD

TYPE B



18.5' € SURVEY-

SOD

TYPE B

C & G

L12"

STA. 32+00.00 TO 52+26.11

61st AVE. TYPICAL SECTION (NTS)

- LIMITS OF CONSTRUCTION

€ CONST. ~

STANDARD CLEARING AND GRUBBING (42')

6" GAB, LBR 100-

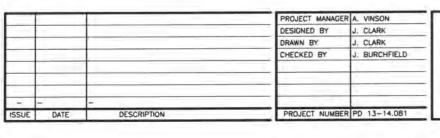
TYPE B STABILIZATION, LBR 40-

12'

R/W 40'

12'

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R/W 40'

TYPICAL SECTIONS

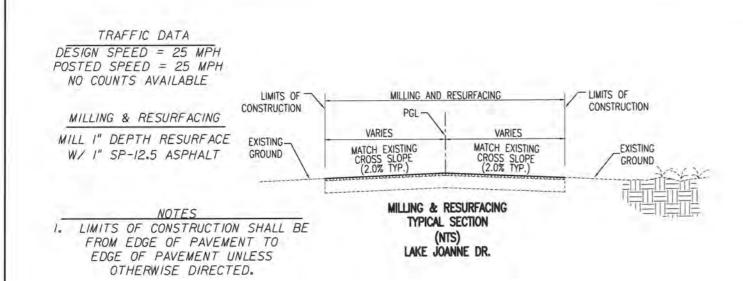
11 X 17 SCALE: NOT TO SCALE

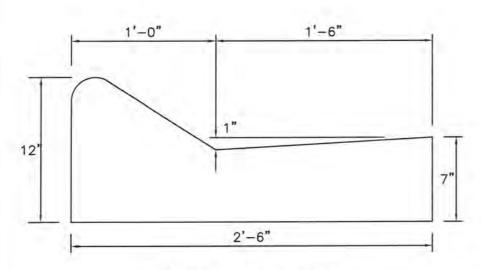
EXISTING R/W

LIMITS OF

CONSTRUCTION

-EXISTING R/W

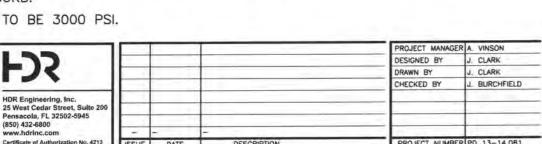




TYPE 'B' CURB & GUTTER FOR CURB MACHINE NOT TO SCALE

NOTE:

- 1. ALL CURB TO HAVE DUMMY JOINT AT 10' ON CENTER. MIN. DEPTH OF JOINT TO BE 2".
- 2. EXPANSION JOINTS ARE TO BE 60' ON CENTER. TYPICAL FOR ALL CURB.
- 3. CONCRETE TO BE 3000 PSI.



PROJECT NUMBER PD 13-14.081

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ATHBI ES ENG LAKE CHARLENDER OF ADADWAYS PER FDOT INDEX 307

BY UTILITY TRENCH CUT CONSTRUCTION SHALL BE RESTORED IN KIND.

BUT MUST HAVE PRIOR APPROVAL BY THE ENGINEER. ETHER STRAIGHT OR DIAGONAL, AND SHALL NOT BE

AND A MAXIMUM DEPTH OF SIX (6) FEET UNLESS

AT SPECIALIZES IN SOILS ENGINEERING. THE

TYPICAL SECTION

SCALE:

NOT TO SCALE 5

See Location Criteria In the Utility Accommodaton Manual Stage #2 Backfill (See Notes Below) Stage #1 Backfill (See Notes Below) = Replacement Pavement Vories PAVEMENT REMOVAL AND REPLACEMENT = Replacement Base Ditch Width (w) 1. PAVEMENT SHALL BE MECHANICALLY SAWED. 2. THE REPLACEMENT ASPHALT SHALL MATCH THE EXISTING STRUCTURAL AND FRICTION COURSES FOR TYPE AND THICKNESS IN ACCORDANCE WITH CURRENT FDOT ASPHALT MIX SPECIFICATIONS. 3. THE NEW BASE MATERIALS SHALL BE EITHER OF THE SAME TYPE AND COMPOSITION AS THE MATERIALS REMOVED OR OF EQUAL OR GREATER STRUCTURAL ADEQUACY (SEE FOOT PAVEMENT DESIGN MANUAL). COMPACTED AND STABILIZED FILL

Ditch Width (w) + 4'-0" Replacement Structural Course (3") & Friction Course (1")

- A. BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH SECTION 125 OF THE STANDARD SPECIFICATIONS.
- B, IN STAGE #1, CONSTRUCT COMPACTED FILL BENEATH THE HAUNCHES OF THE PIPE, USING MECHANICAL TAMPS SUITABLE FOR THIS PURPOSE. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING.
- C. IN STAGE #2, CONSTRUCT COMPACTED FILL ALONG THE SIDES OF THE PIPE AND UP TO THE BOTTOM OF THE BASE, WITH THE UPPER 12" RECEIVING TYPE B STABILIZATION. IN LIEU OF TYPE B STABILIZATION, THE CONTRACTOR MAY CONSTRUCT USING OPTIONAL BASE GROUP 3.
- 2. FLOWABLE FILL
- A. IF COMPACTION CAN NOT BE ACHIEVED THROUGH NORMAL MECHANICAL METHODS THEN FLOWABLE FILL MAY BE USED.
- B. FLOWABLE FILL IS TO BE PLACED IN ACCORDANCE WITH SECTION 121 OF THE SPECIFICATIONS, AS APPROVED BY THE ENGINEER
- C. DO NOT ALLOW THE UTILITY BEING INSTALLED TO FLOAT. IF A METHOD IS PROVIDED TO PREVENT FLOTATION FROM OCCURRING, STAGES #1 AND #2 CAN BE COMBINED, IF APPROVED BY THE ENGINEER.
- D. IN STAGE #1, PLACE FLOWABLE FILL MIDWAY UP ON BOTH SIDES OF THE UTILITY. ALLOW TO HARDEN BEFORE PLACING STAGE #2.
- E. IN STAGE #2, PLACE FLOWABLE FILL TO THE BOTTOM OF THE EXISTING BASE COURSE.

GENERAL NOTES

- 1. THE DETAILS PROVIDED IN THIS STANDARD INDEX APPLY TO CASES IN WHICH JACK AND BORE OR DIRECTIONAL BORING METHODS ARE NOT REQUIRED BY THE ENGINEER.
- 2. FLOWABLE FILL SHALL NOT BE PLACED DIRECTLY OVER LOOSE, OR HIGH PLASTIC, OR MUCK MATERIAL (SEE INDEX 505) WHICH WILL CAUSE SETTLEMENT DUE TO FILL WEIGHT. WHERE HIGHLY COMPRESSIBLE MATERIAL EXISTS, THE AMOUNT, SHAPE AND DEPTH OF FLOWABLE FILL MUST BE ENGINEERED TO
- 3. THESE DETAILS DO NOT APPLY TO UTILITY CUTS LONGITUDINAL TO THE CENTERLINE OF THE ROADWAY WHICH MAY REQUIRE THE ADDITIONAL USE OF GEOTEXTILES, SPECIAL BEDDING AND BACKFILL, OR OTHER SPECIAL REQUIREMENTS.
- 4. METHOD OF CONSTRUCTION MUST BE APPROVED BY THE ENGINEER.
- 5. SOME PIPE MAY REQUIRE SPECIAL GRANULAR BACKFILL UP TO 6" ABOVE TOP OF PIPE, GEOTEXTILES MAY BE REQUIRED TO ENCAPSULATE THE SPECIAL GRANULAR MATERIAL.
- 6. WHERE ASPHALT CONCRETE OVERLAYS EXIST OVER FULL SLAB CONCRETE PAVEMENT, THE REPLACEMENT PAVEMENT SHALL HAVE AN OVERLAY CONSTRUCTED OVER THE REPLACEMENT SLAB. THE OVERLAY SHALL MATCH THE EXISTING ASPHALT PAVEMENT THICKNESS. THE REPLACEMENT FRICTION COURSE SHALL MATCH THE EXISTING FRICTION COURSE, EXCEPT STRUCTURAL COURSE MAY BE USED IN LIEU OF DENSE GRADED FRICTION COURSE.

7. ALL SHOULDER PAVEMENT, CURB, CURB AND GUTTER, AND

8. THE USE OF FLOWABLE FILL TO REDUCE THE TIME

FLOWABLE FILL USE IS ALLOWED ONLY WHEN PROPER INSTALLED FOR SIGNIFICANT DEPTHS OR LENGTHS.

SUPPORTED BY AN ENGINEERING DOCUMENT PREPA

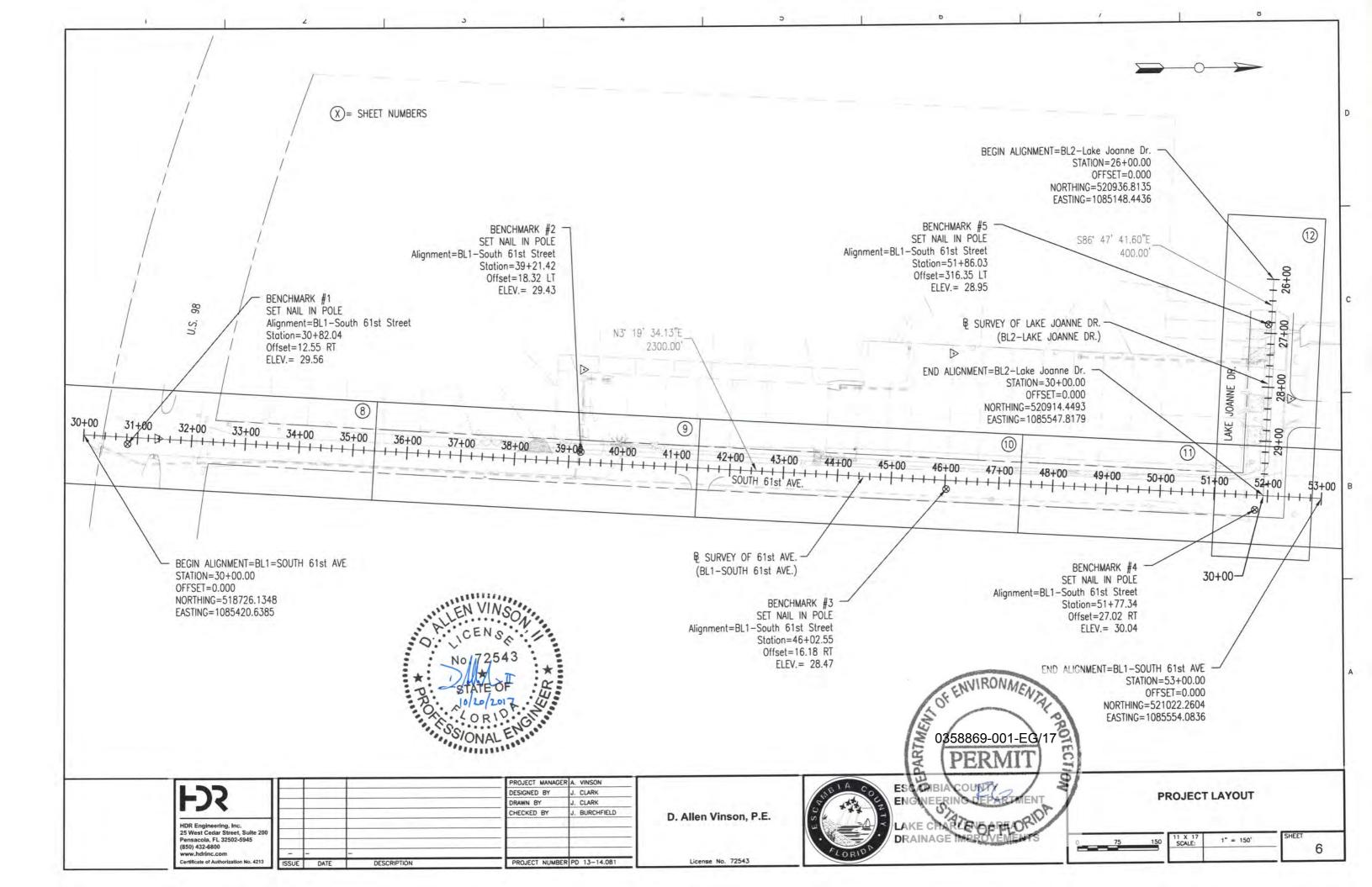
ENGINEERING DOCUMENT SHALL ADDRESS THE EVAL 9. EXCAVATABLE FLOWABLE FILL IS TO BE USED WHE

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N AND SETTLEMENT POTENTIAL.

DETAILS

License No. 72543



GENERAL NOTES:

- THE CONTRACTORS SHALL NOTIFY THE COUNTY DESIGN ENGINEER OR DESIGNEE 48 HOURS PRIOR TO CONSTRUCTION.
- 2. ALL CONDITIONS AND STIPULATIONS OF THE CONSTRUCTION PERMITS AND THE APPROVALS ISSUED BY THE ESCAMBIA COUNTY ENGINEER SHALL BE COMPLIED WITH IN EVERY DETAIL.
- 3. ANY DAMAGE TO ROADWAYS OR ADJACENT PRIVATE PROPERTIES CAUSED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE EXPENSE.
- 4. THE CONTRACTOR SHALL TAKE STEPS NECESSARY TO PREVENT EROSION AND ANY OFF SITE SEDIMENT TRANSPORT RESULTING FROM INCREASED RUNOFF DURING CONSTRUCTION BY PROVIDING SILT FENCE AND/OR STAKED HAY BALES AS REQUIRED BY FDOT EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL, 2012 EDITION. OR AS INDICATED ON THE PLANS. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ASSOCIATED DISTURBED AREAS ARE STABILIZED AS TO REDUCE SEDIMENT RUNOFF, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DESIGNEE.
- 5. ANY NECESSARY PERMITS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. ESCAMBIA COUNTY OR ITS DESIGNEE WILL ASSIST CONTRACTOR WITH REQUIRED
- 6. THE CONTRACTOR IS CAUTIONED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BIDDING AND/OR CONSTRUCTION.
- 7. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESERVE OR RELOCATE ALL BENCHMARKS (VERTICAL CONTROL) AS NEEDED DURING CONSTRUCTION. ALL PUBLIC OR PRIVATE CORNER MONUMENTATION SHALL BE PROTECTED. IF A PUBLIC OR PRIVATE CORNER MONUMENTATION IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR DESIGNEE IMMEDIATELY. ANY ESCAMBIA COUNTY HARNIGPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A HARNIGPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS ARE DISTURBED OR DESTROYED THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELACEMENT OF THE MONUMENTS AND HAVE THE MONUMENTS POSITION DETERMINED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER USING GUIDELINES AS ESTABLISHED BY NATIONAL GEODETIC SURVEY FOR BLUE BOOKING AND APPROVAL.
- EXISTING DRAINAGE FEATURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
- 9. THE CONTRACTOR SHALL MATCH EXISTING CONDITIONS AT THE BEGINNING AND END OF CONSTRUCTION AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.
- 10 EXISTING STREETS AND DRIVES SHALL BE MAINTAINED TO LOCAL TRAFFIC AND PROPERTY OWNERS
- 11. ALL ROADWAY CONSTRUCTION SHALL COMPLY WITH THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.
- 12. ALL MATERIALS, TESTING AND CONSTRUCTION METHODS SHALL CONFORM TO THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION
- 13. ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.
- 14. EXISTING STREET AND ROAD NAME SIGNS ON THE PROJECT SHALL BE KEPT VISIBLE AT ALL TIMES FOR THE FACILITATION OF ACCESS BY EMERGENCY VEHICLES. ALL OTHER EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE TAKEN DOWN AND STOCKPILED WITHIN THE R/W LIMITS BY THE CONTRACTOR AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE. ANY EXISTING SIGNS THAT ARE TO BE RELOCATED AND ARE DAMAGED BEYOND USE BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- 15. CONTRACTOR SHALL COMPLY WITH ALL F.D.E,P. AND ARMY CORP. OF ENGINEERS REQUIREMENTS.
- 16. ONLY ACCESS TO THE ROAD RW AS SHOWN IS GUARANTEED BY THE COUNTY. PRIVATE RW REQUIRED BY THE CONTRACTOR TO FACILITATE CONSTRUCTION SHALL BE ACQUIRED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION OR ASSISTANCE FROM THE COUNTY.
- 17. IN THE EVENT THAT SURVEY MONUMENTATION OR REFERENCE POINTS ARE MISSING OR HAVE BEEN DESTROYED, PLEASE CONTACT:

3363 WEST PARK PLACE PENSACOLA, FLORIDA 32505 PH (850) 595-3427 FRIC STUART, PMS NOBLES CONSULTING GROUP 600 UNIVERSITY OFFICE BLVD., SUITE 17-B PENSACOLA, FL, 32504, (850) 857-7723

- 18. VEGETATION ON RW AND EASEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION UNLESS OTHERWISE NOTED ON THE PLAN SHEETS. COST OF SAID RESTORATION SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS.
- 19. ALL TREES WITHIN LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED IN PLANS.
- 20. ALL COMPACTED FILL SHALL BE PLACED IN 4" LIFTS FOR HAND POWERED TAMPERS AND 8" LIFTS FOR HEAVY EQUIPMENT OPERATED TAMPERS.
- 21. IF ARCHAEOLOGICAL MATERIAL/PREHISTORIC ARTIFACTS SUCH AS POTTERY OR CERAMICS, STONE TOOLS OR METAL IMPLEMENTS, OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH NATIVE AMERICAN CULTURES, OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME, THE PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE APPLICANT/RECIPIENT, OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF STATE, DIVISION OF HISTORICAL RESOURCES. THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AND THE DSH/FEMA REGION IV ENVIRONMENTAL OFFICER AND FDEM STATE ENVIRONMENTAL LIAISON OFFICER FOR FURTHER GUIDANCE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT WERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES.
- 22. IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK MUST STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH F.S. 872.05.
- 23. GROUNDWATER ELEVATIONS SHOWN IN THE PLANS REFLECT GROUNDWATER ELEVATIONS DURING TIME OF GEOTECHNICAL BORINGS ONLY. GROUNDWATER ELEVATIONS CAN FLUCTUATE UP OR DOWN.

UTILITY NOTES:

- THE LOCATION SHOWN FOR EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR AGREES TO BE COMPLETELY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO **FXACTLY LOCATE AND PRESERVE ALL UTILITIES.**
- 2. UTILITY OWNERS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION SO THAT THE UTILITY OWNER CAN SPOT VERIFY AND/OR EXPOSE THEIR UTILITIES. KNOWN UTILITIES OWNERS INCLUDE:

SEWER/WATER - EMERALD COAST UTILITY AUTHORITY MR. MIKE HAMLIN P.O. BOX 15311

PENSACOLA, FL. 32514 PH: (850) 969-3310

NATURAL GAS - ENERGY SERVICES OF PENSACOLA MR. CLINT SHEVAT 1625 ATWOOD DRIVE PENSACOLA, FL. 32514 PH; (850) 791-5285

TELEPHONE - AT&T FLORIDA MR. STEVE KENNINGTON MILTON, FL, 32571 PH: (850) 623-381

TRAFFIC DEPARTMENT - ESCAMBIA COUNTY PUBLIC WORKS MRS. JOHNNY COX 3363 WEST PARK PLACE PENSACOLA, FL. 32505 PH:(850) 595-3404

ELECTRIC - GULF POWER MR. CHAD SWAILS 5120 DOGWOOD DRIVE MILTON, FL. 32570 PH: (850) 429-2446

CABLE - COX CABLE MR. TROY YOUNG 2421 EXECUTIVE PLAZA PENSACOLA, FL. 32504 PH: (850) 857-4564

SUNSHINE STATE ONE-CALL 7200 LAKE ELLENOR DRIVE, SUITE 200 ORLANDO, FL. 32809 PH: (800) 432-4770



3. AT&T FLORIDA WILL COMPLETE ALL WORK DURING THE HOURS OF 7:30 AM - 4:30 PM, MONDAY THRU FRIDAY, NO NIGHT OR WEEKEND WORK

- 4. ALL CABLE DAMAGE MUST BE REPORTED TO THE ATT FLORIDA REPAIR SERVICE DEPARTMENT AT 611 FROM A LAND LINE OR 877-737-2478 IF USING A CELL PHONE.
- CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.
- UTILITIES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. NECESSARY REPAIRS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS AND SHALL BE TO THE SATISFACTION OF UTILITY OWNERS.

SURVEYOR NOTES

- NORTH AND BEARINGS ARE GRID BASED ON THE NORTH AMERICAN DATUN 1983 AS SHOWN ON THE BASELINE OF SURVEY OF 61ST AVE, PER GPS CONTINUAL OPERATING REFERENCE STATION "PENSACOLA" PER THE STATE OF FLORIDA.
- 2. NO TITLE SEARCH WAS PERFORMED BY NOR FURNISHED TO MOTT MACDONALD FLORIDA LLC FOR THE PURPOSES OF THIS SURVEY SHOWN HEREON.
- 3. THE OPINION OF THE LOCATION AND EXTENT OF THE PROPERTY REPRESENTED & RIGHT OF WAYS BY THE SURVEY DOES NOT GUARANTEE TITLE TO NOR DETERMINE OWNERSHIP TO ANY PERSONS OR PARTY.
- ALL UNDERGROUND UTILITIES SHOWN WERE LOCATED PER 811 DESIGN TICKETS 323606849, 323606909 & 323606963 AND THEIR PAINTED/FLAGGED LOCATIONS SURVEYED BY MOTT MACDONALD FIELD CREWS. SURVEYOR DOES GUARANTEE UNDERGROUND LOCATIONS. THERE MAY BE OTHER UNDERGROUND UTILITIES NOT SHOWN HEREON. SIZES AND DEPTHS ARE UNKNOWN.
- 5. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 AS SHOWN ON THIS SURVEY PER THE PROJECTED ELEVATION FROM GPS CONTINUAL REFERENCE STATION "PENSACOLA" PER THE STATE
- RIGHT OF WAYS AND PARCELS LINES ARE CALCULATED PER FIELD SURVEY OF SUBDIVISION MAPS, RIGHT OF WAY MAPS AND APPARENT MAINTENANCE.



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D. Allen Vinson, P.E.



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PROJECT NOTES

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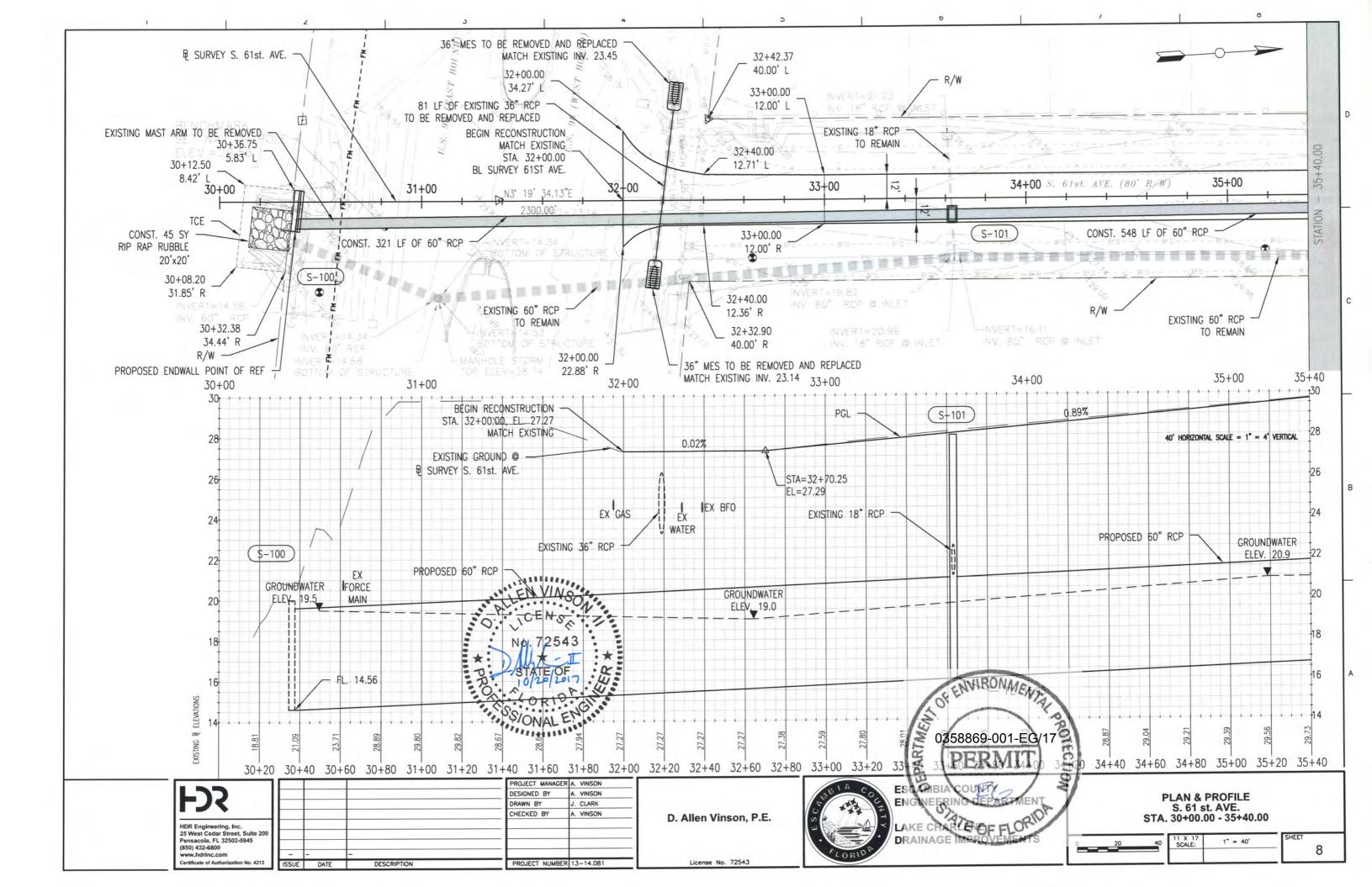
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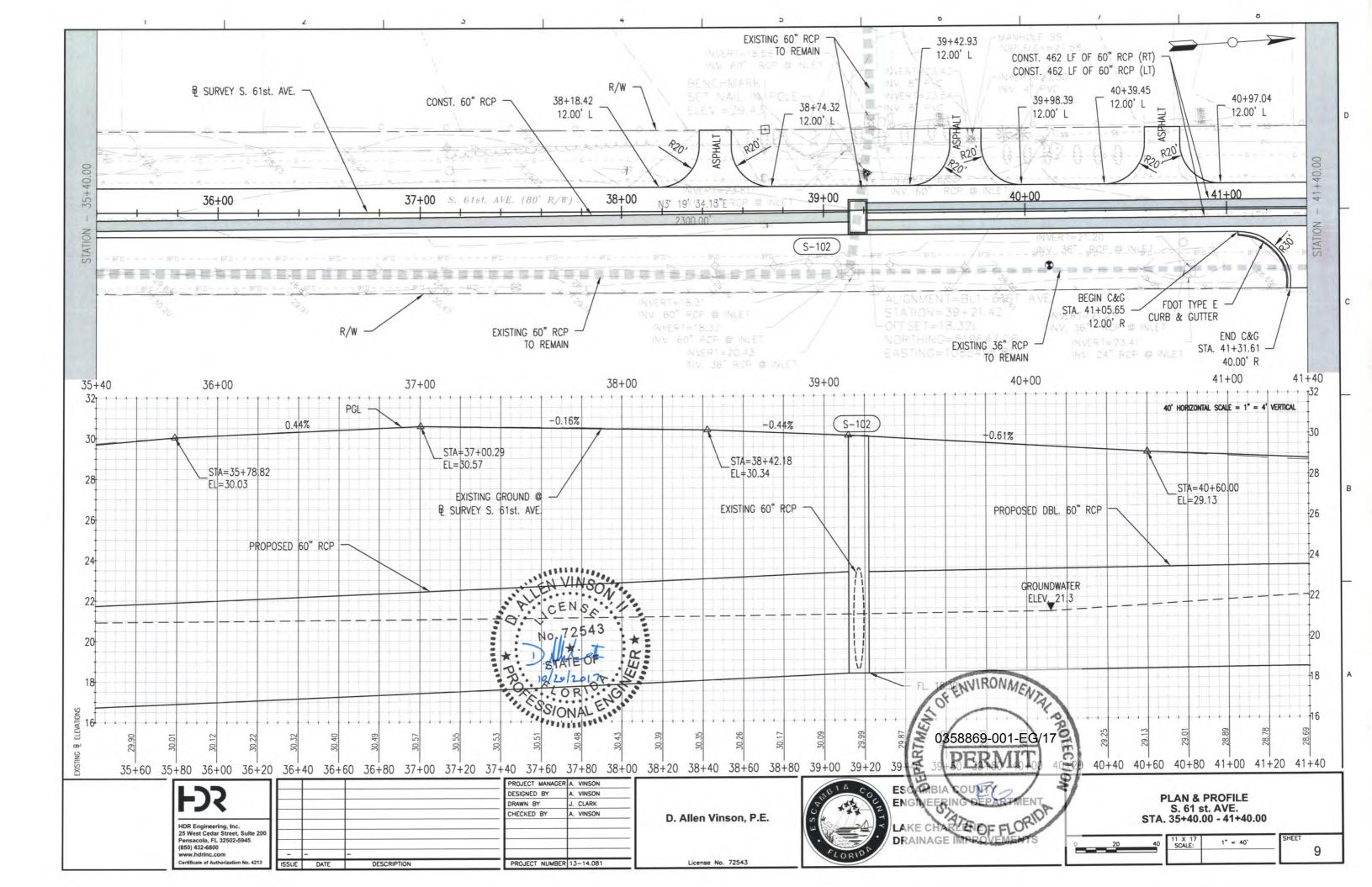
25 West Cedar Street, Suite 20 Pensacola, FL 32502-5945 www.hdrinc.com

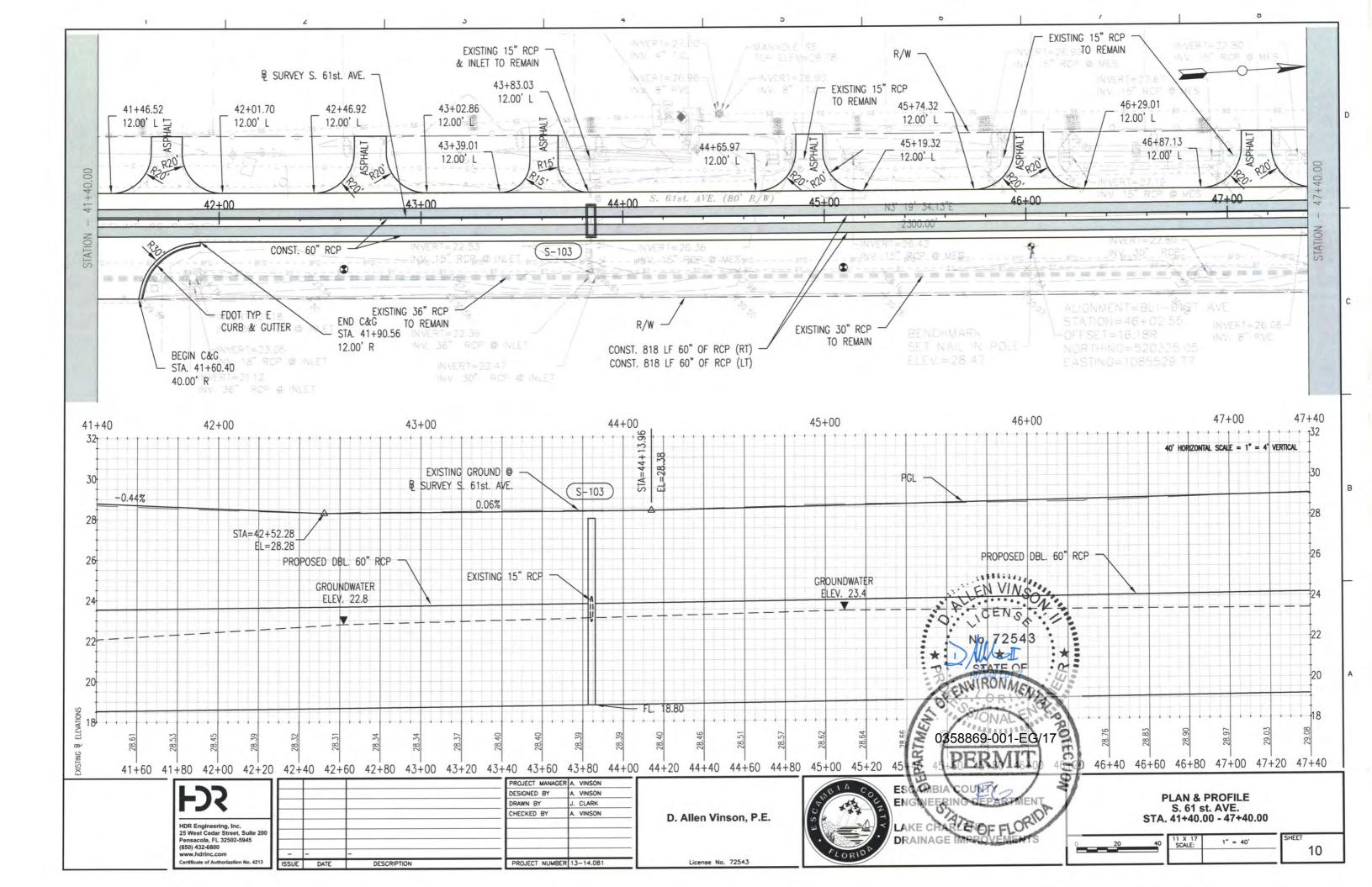
ESIGNED BY CLARK CLARK RAWN BY HECKED BY BURCHFIELD DESCRIPTION PROJECT NUMBER PD 13-14.08 ISSUE DATE

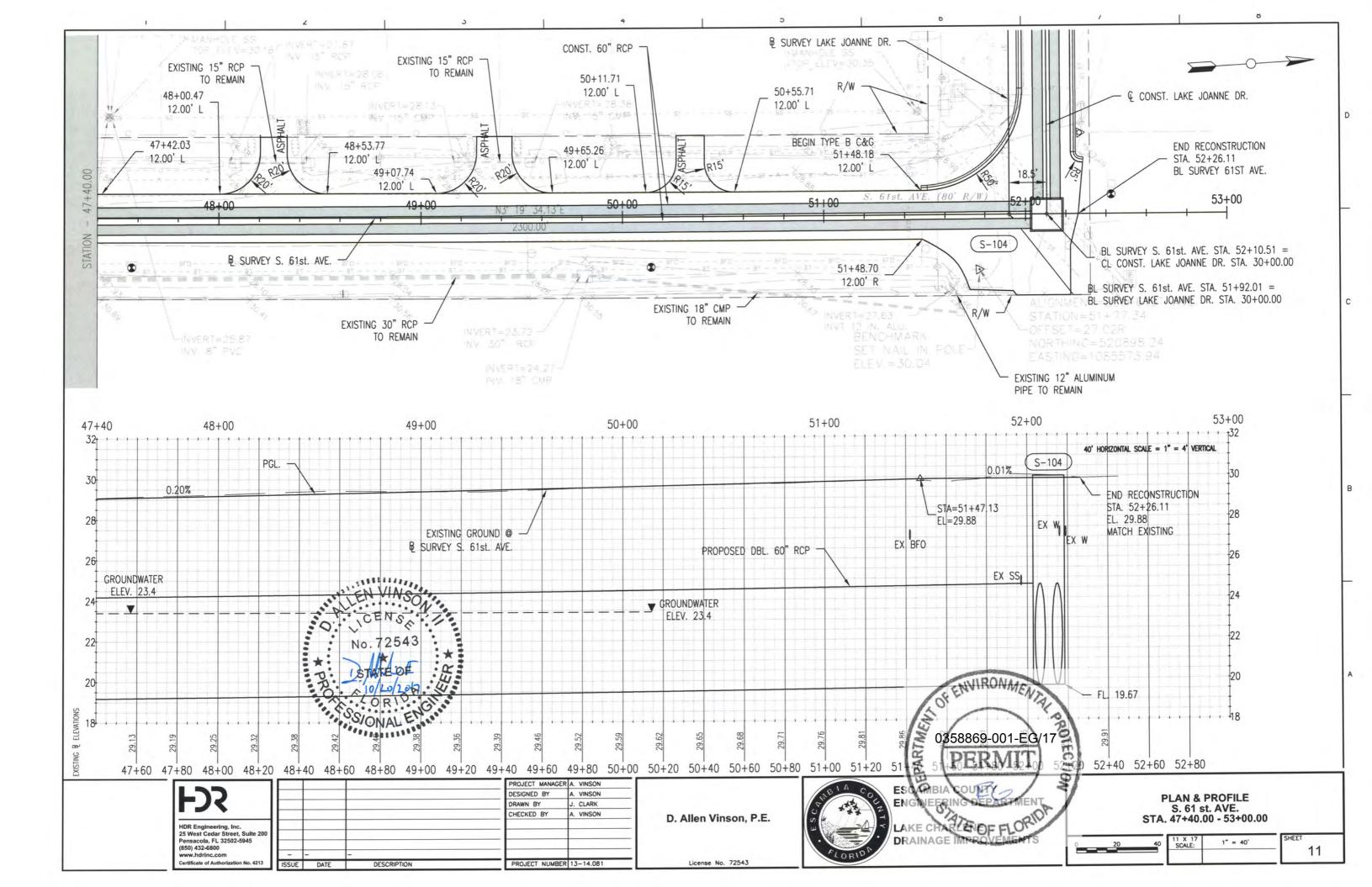
PROJECT MANAGER A. VINSON

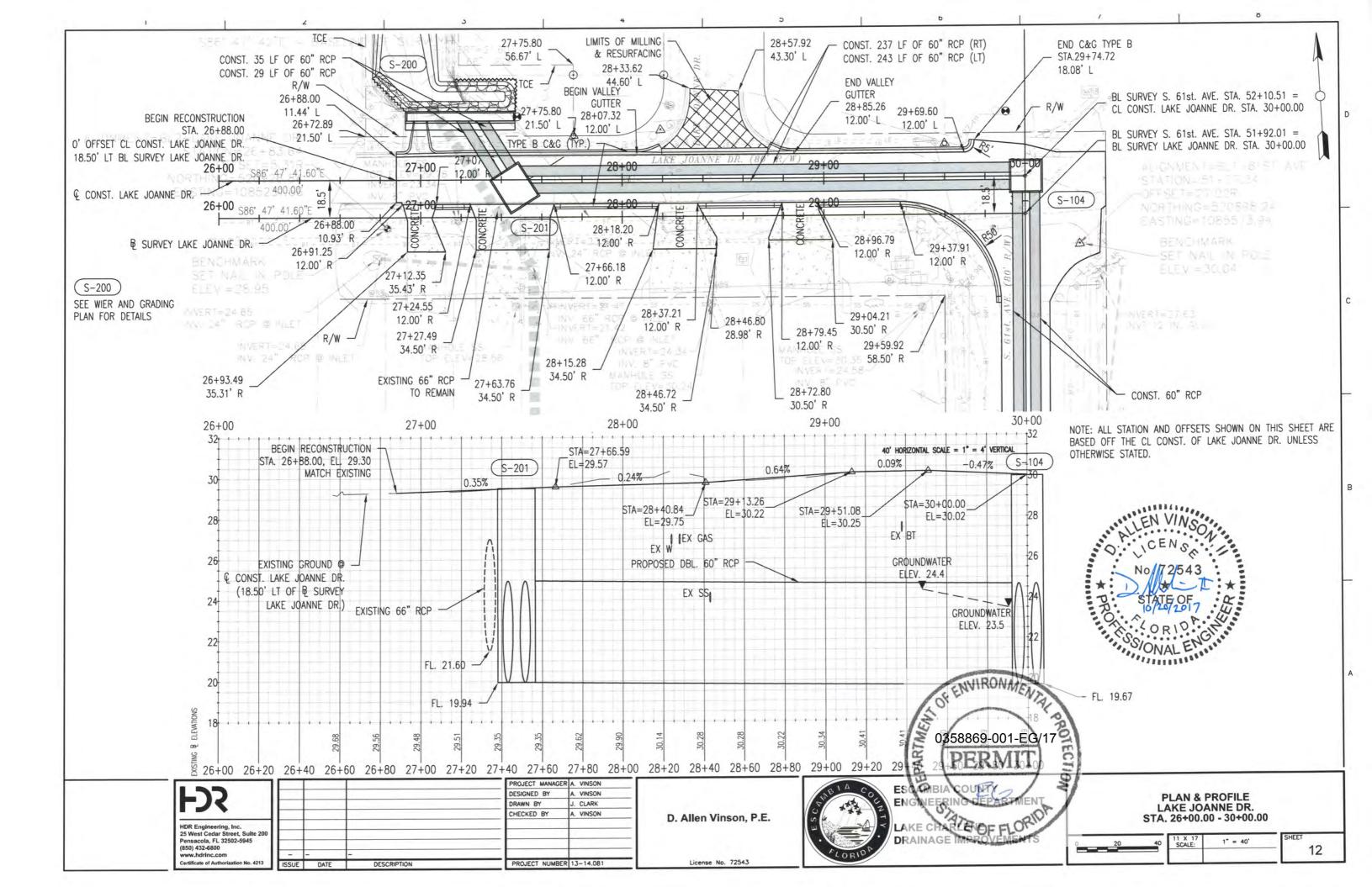
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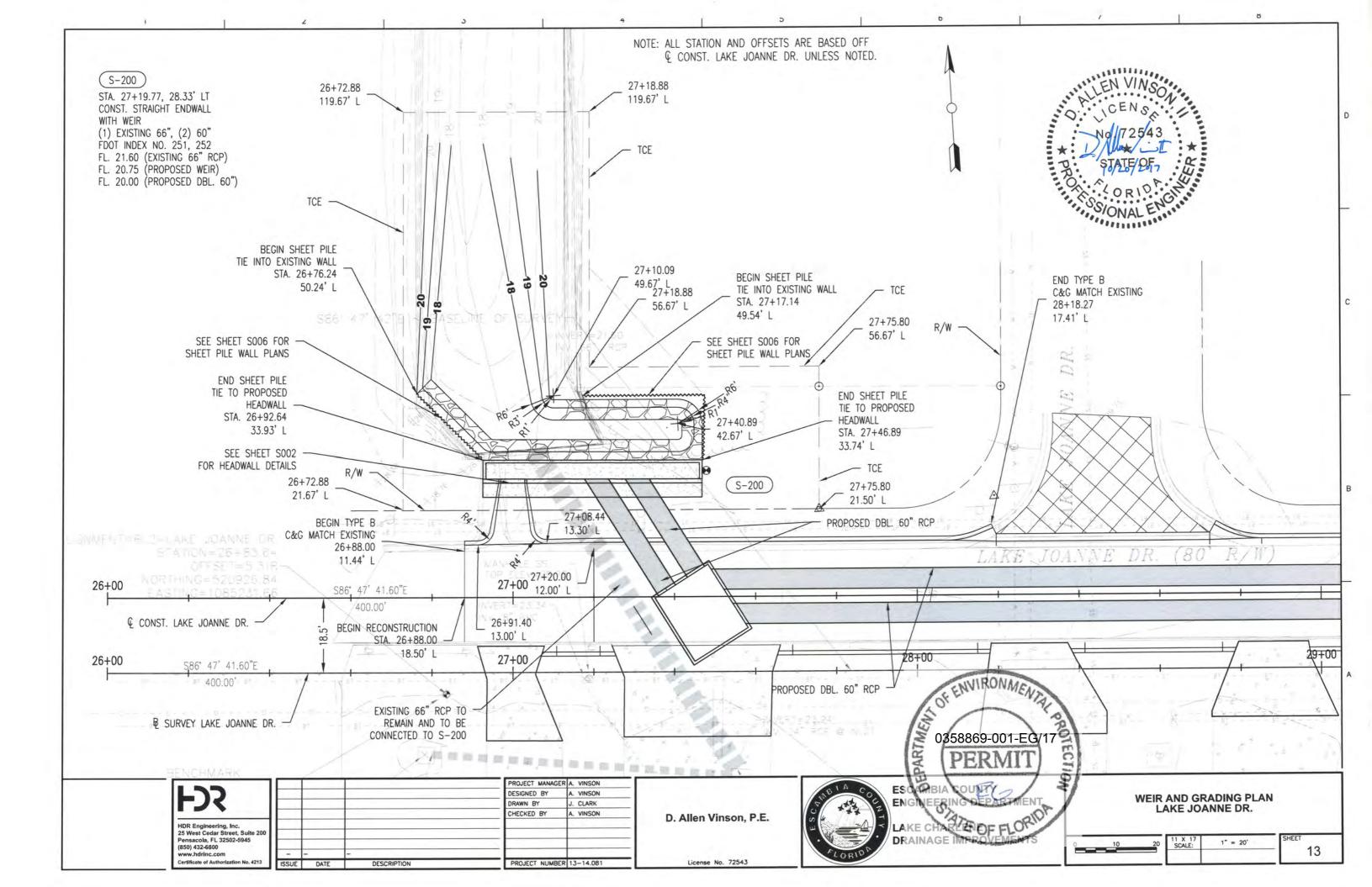


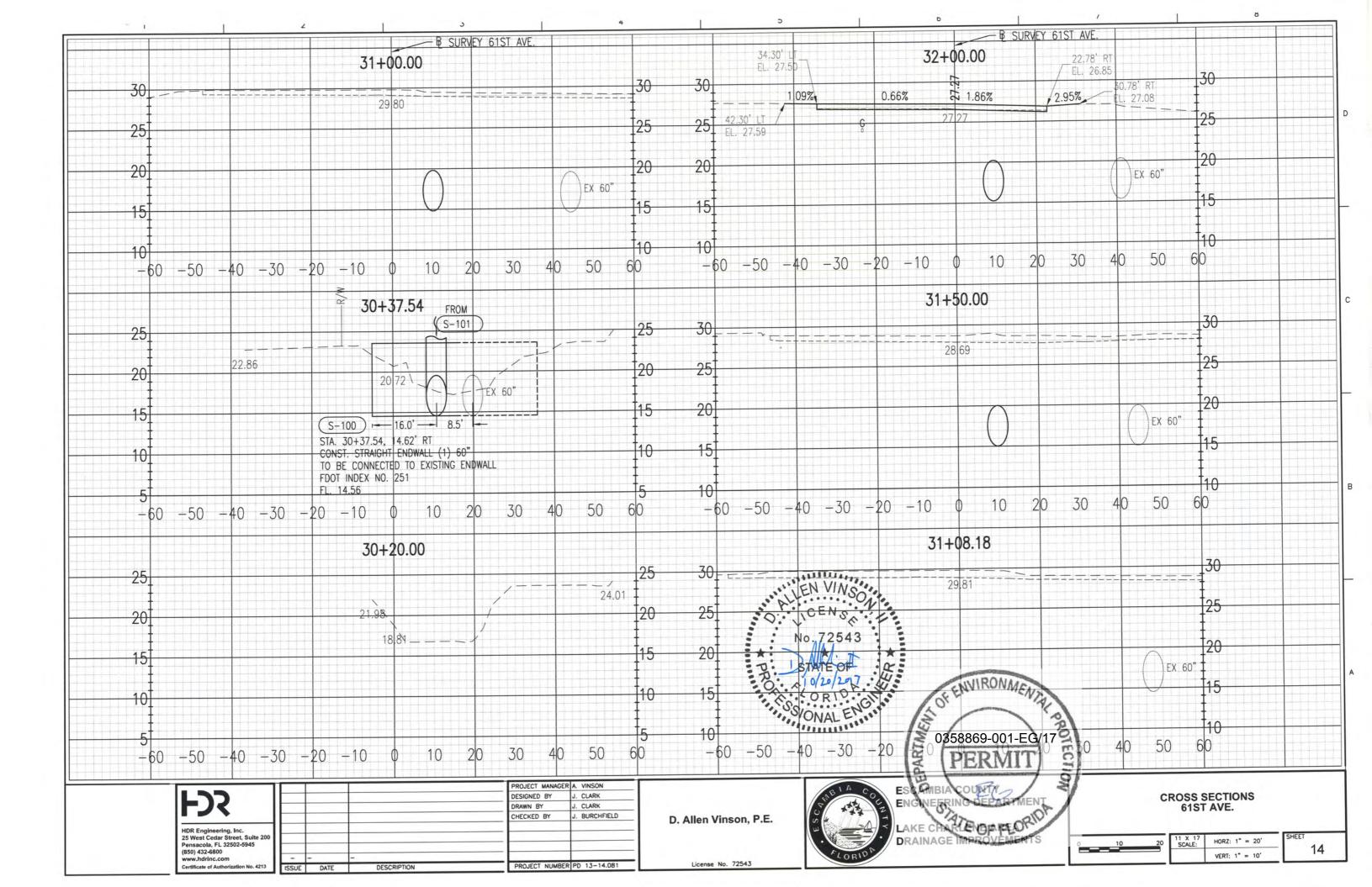


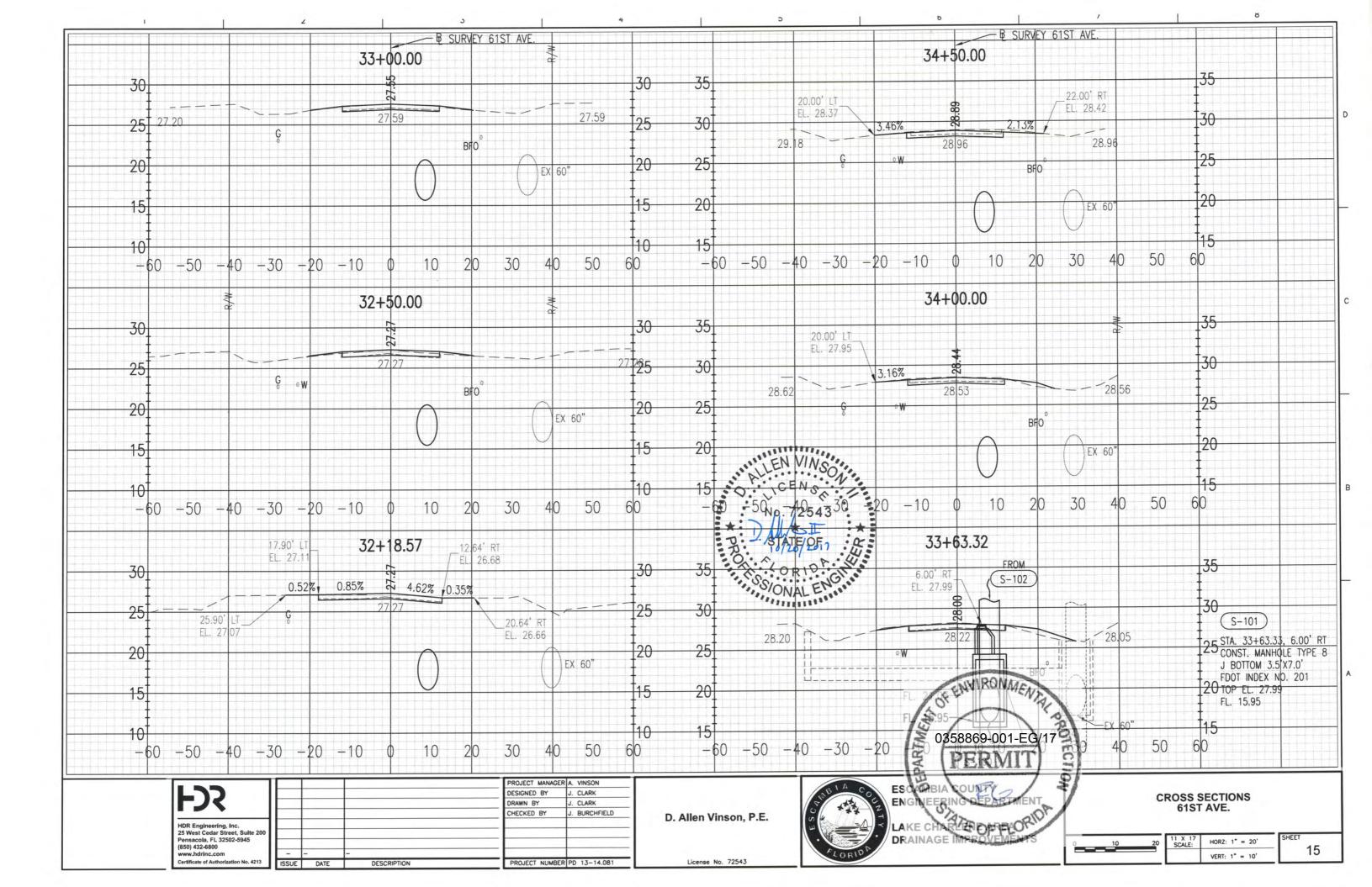


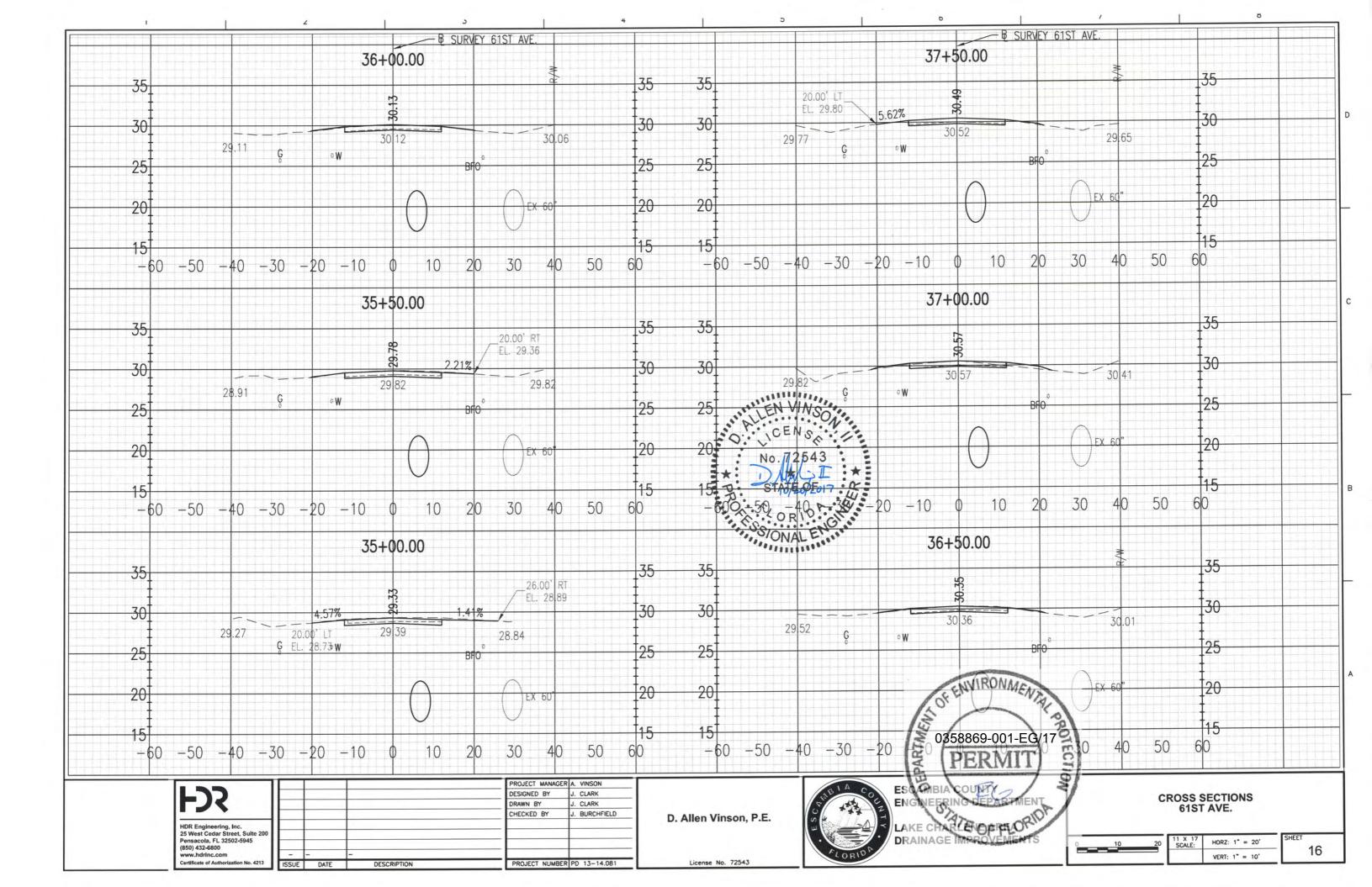


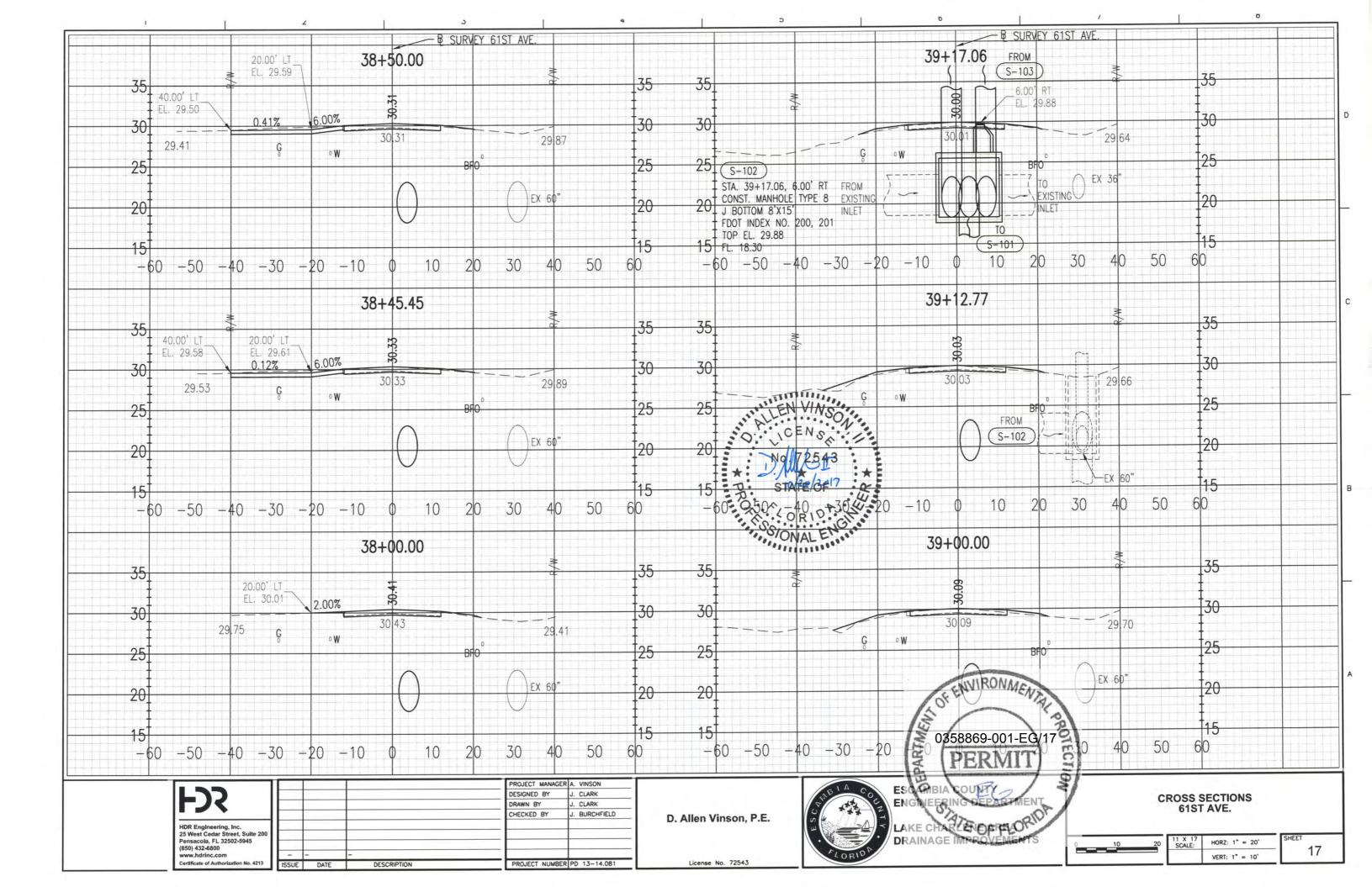


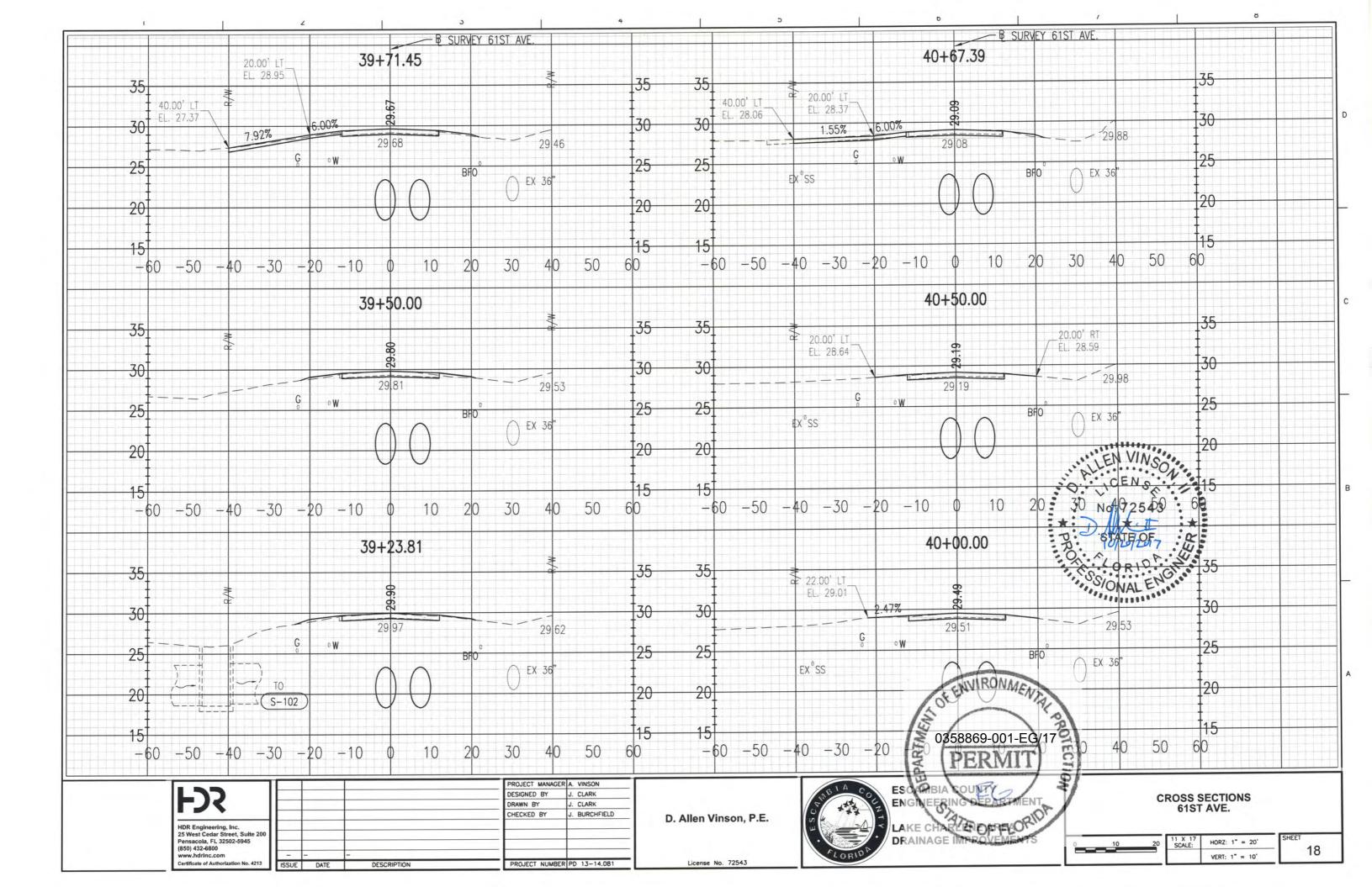


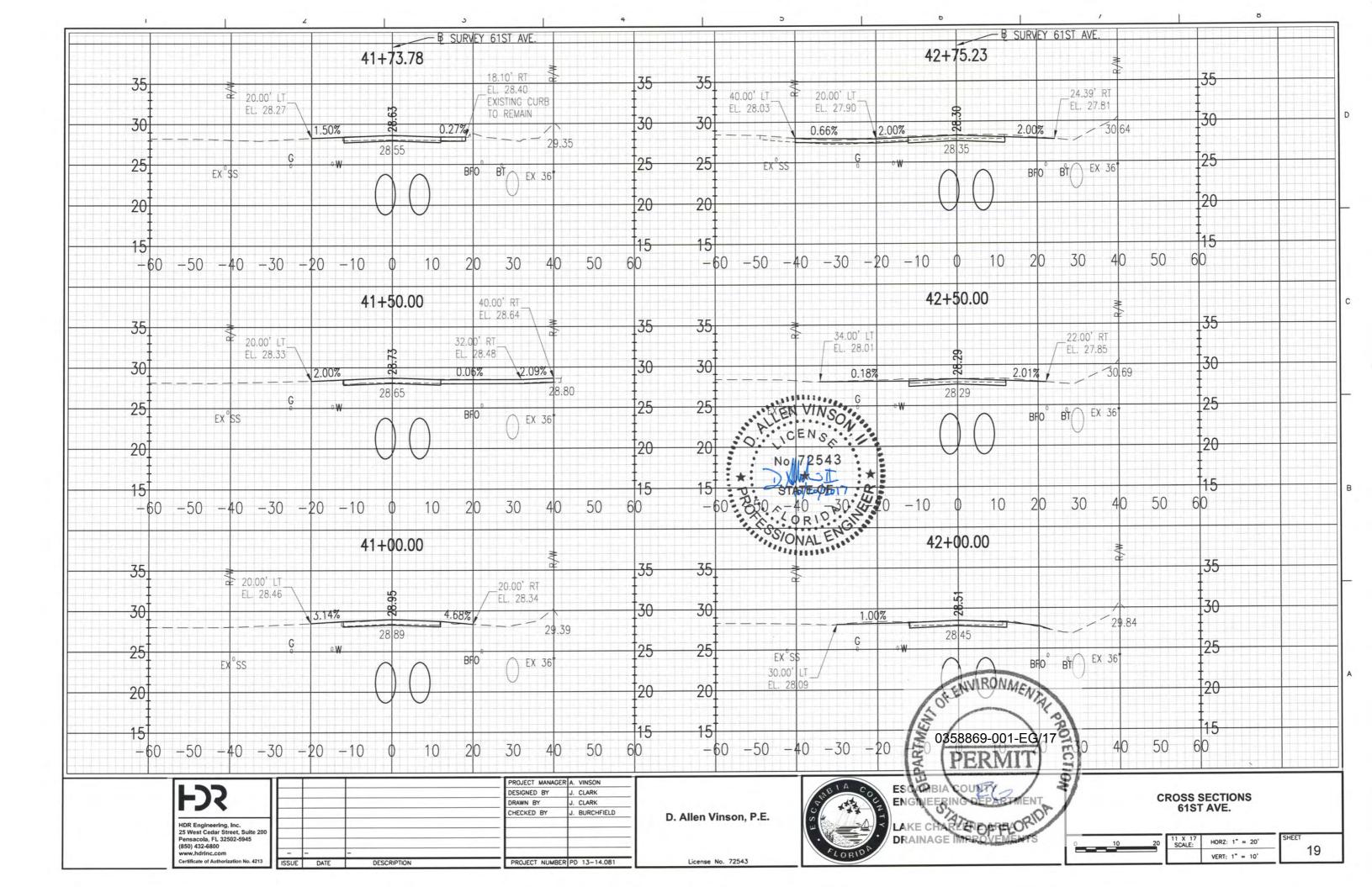


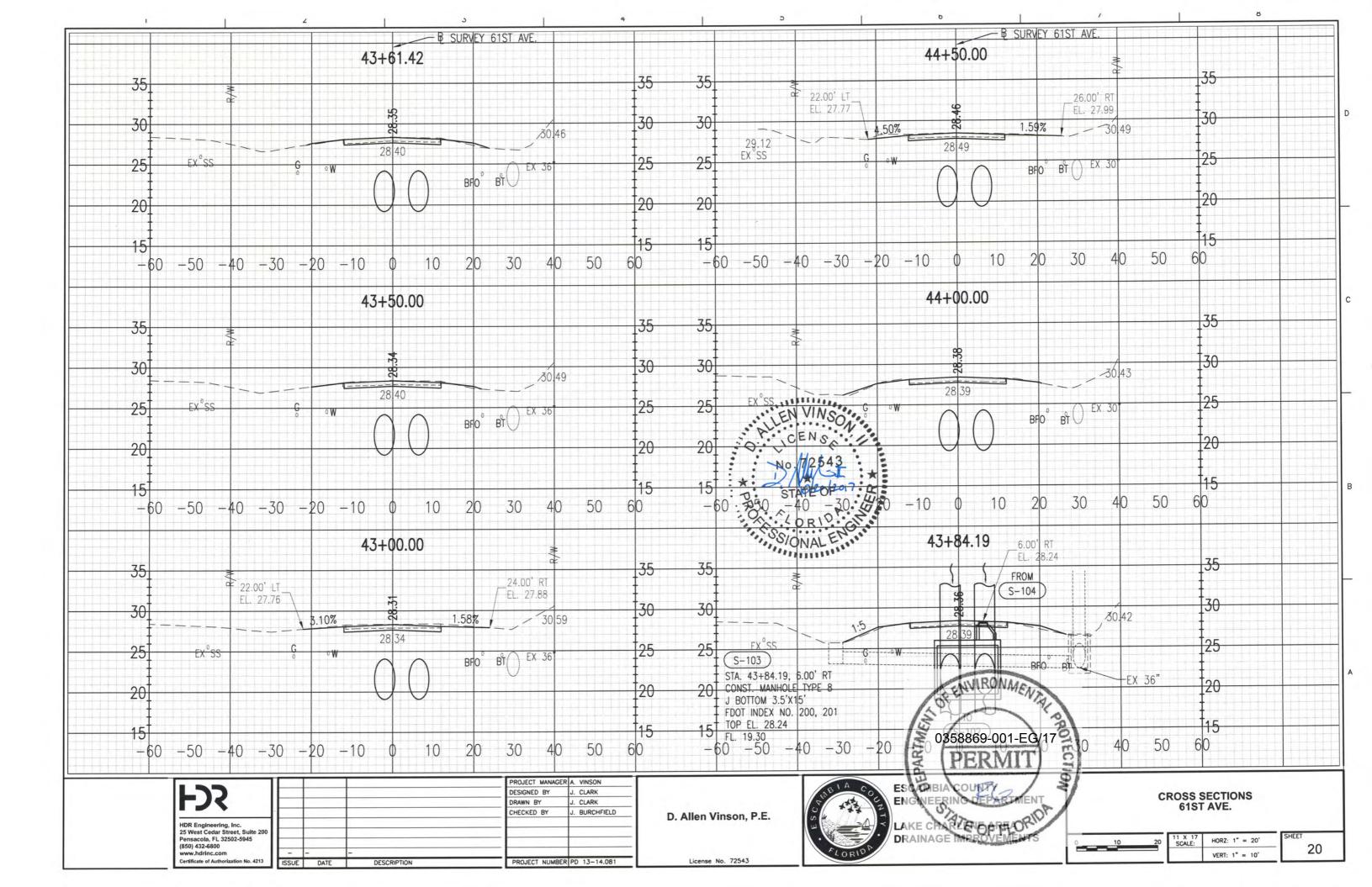


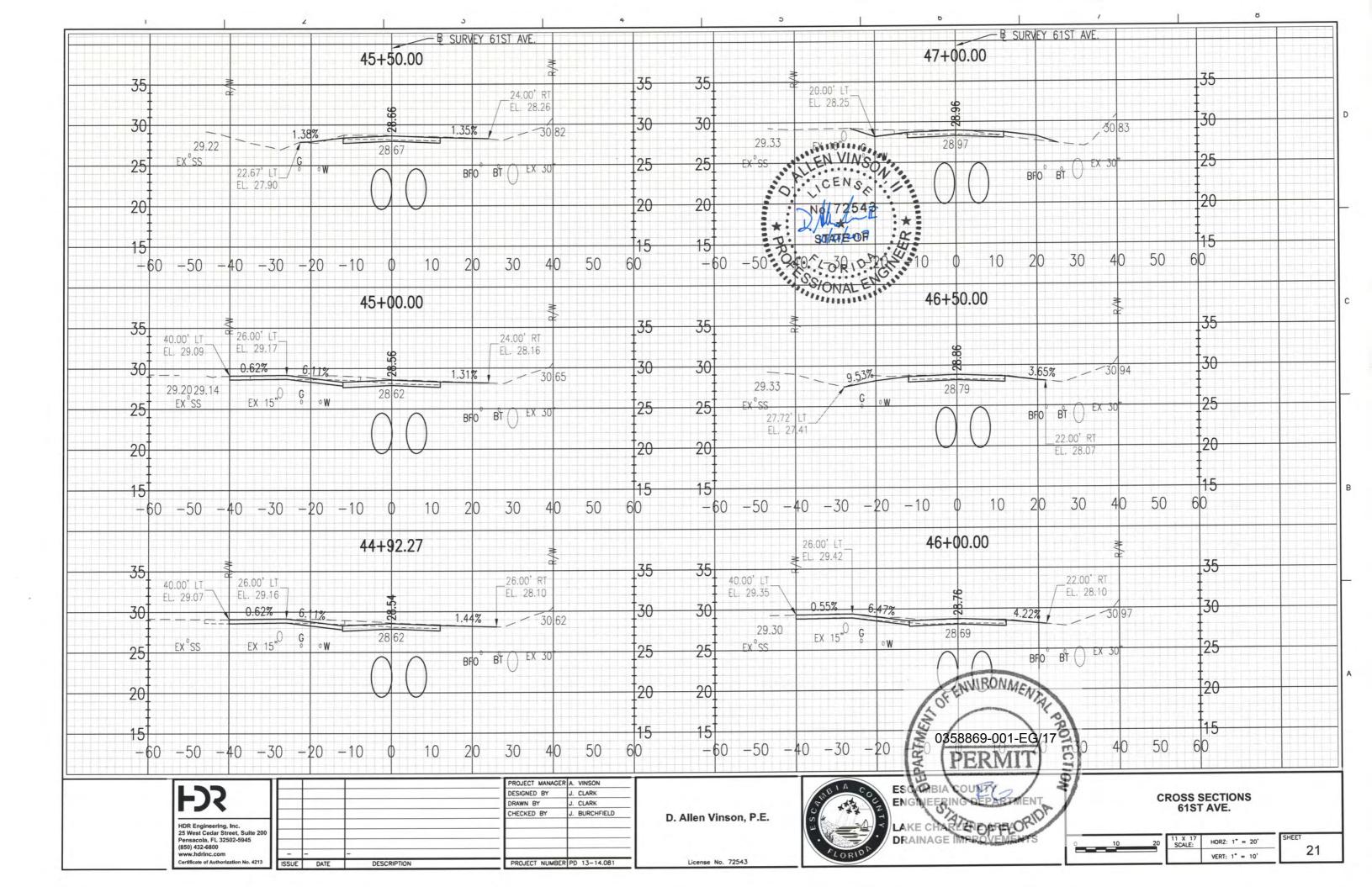


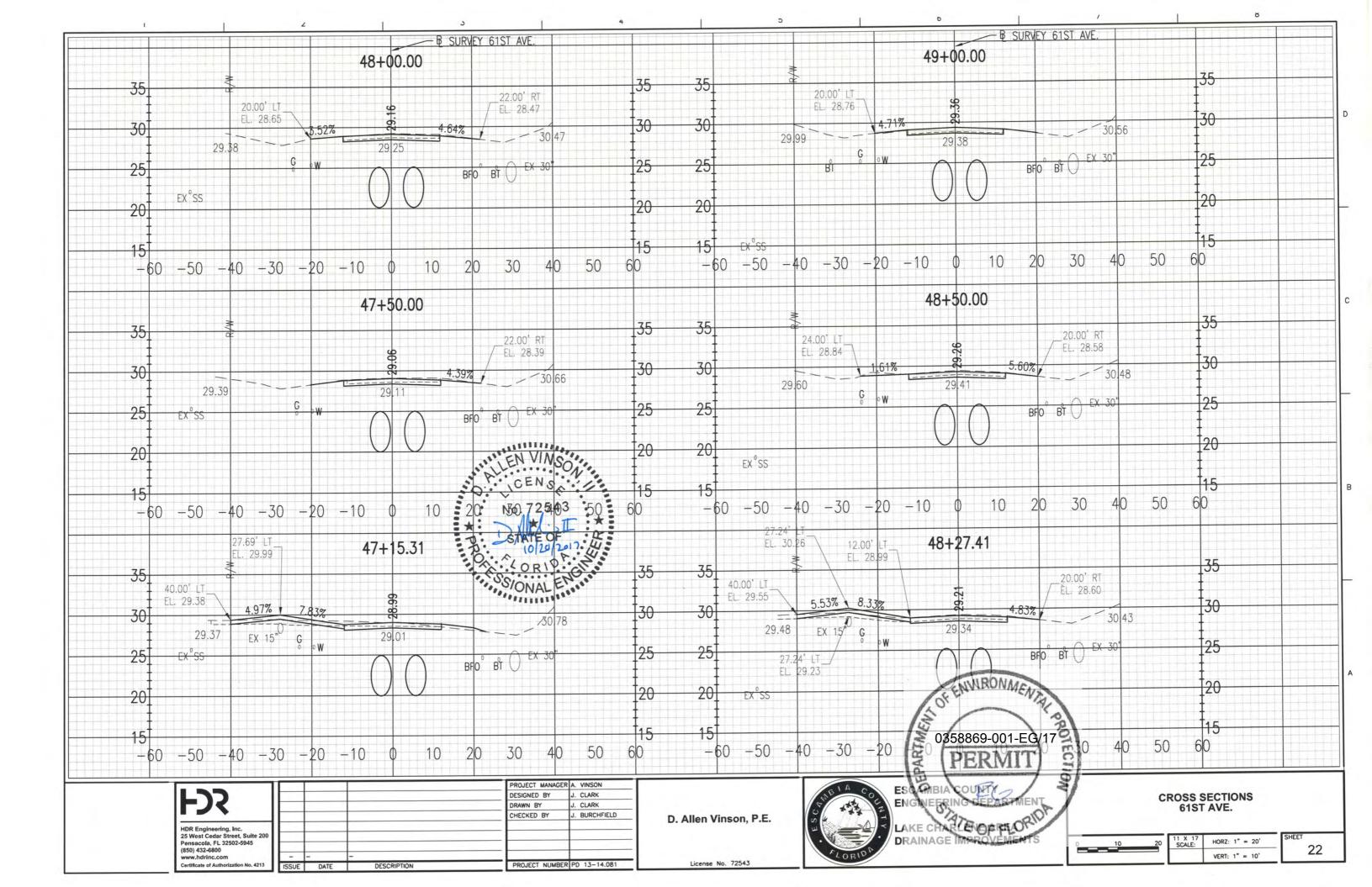


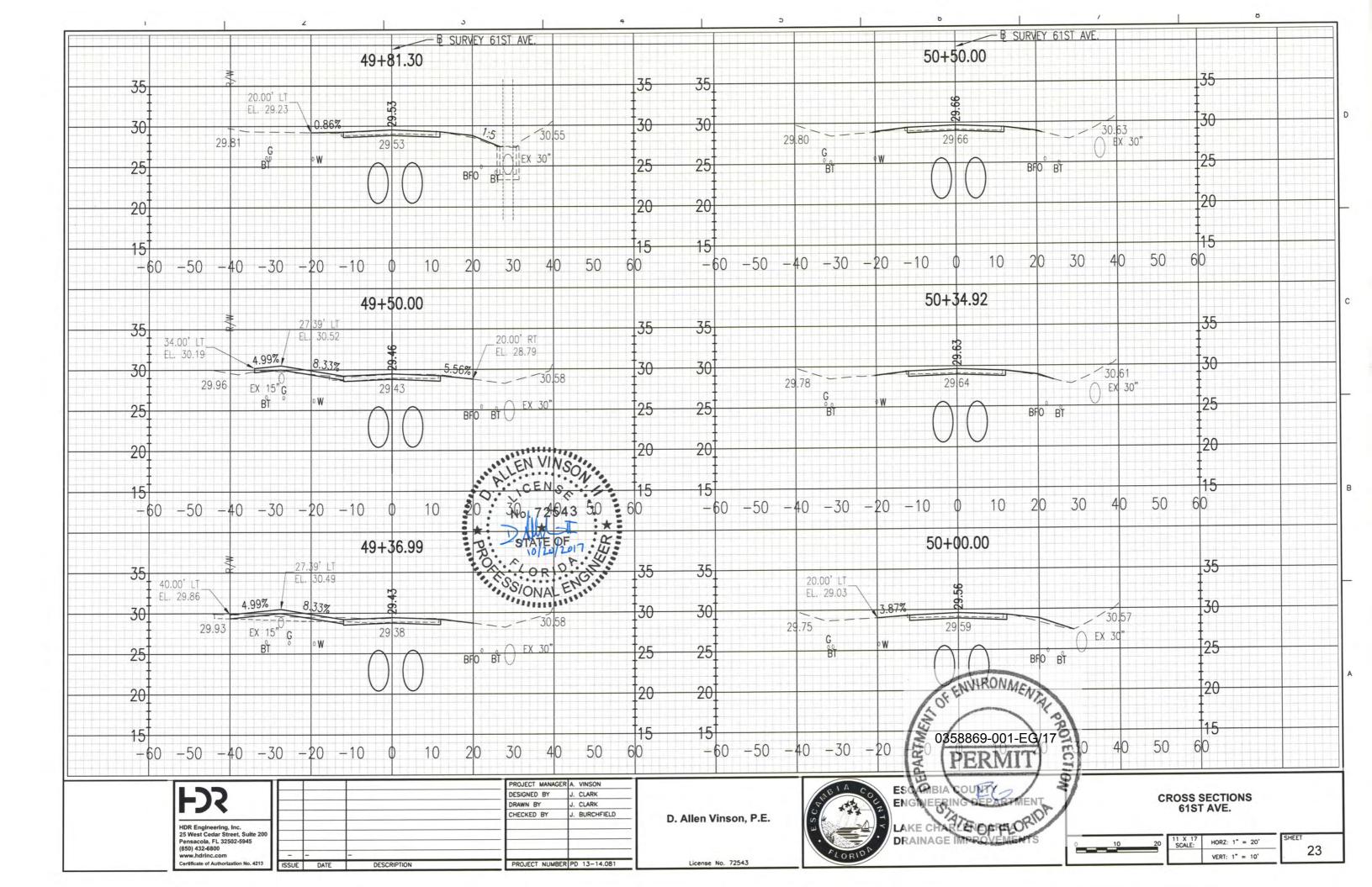


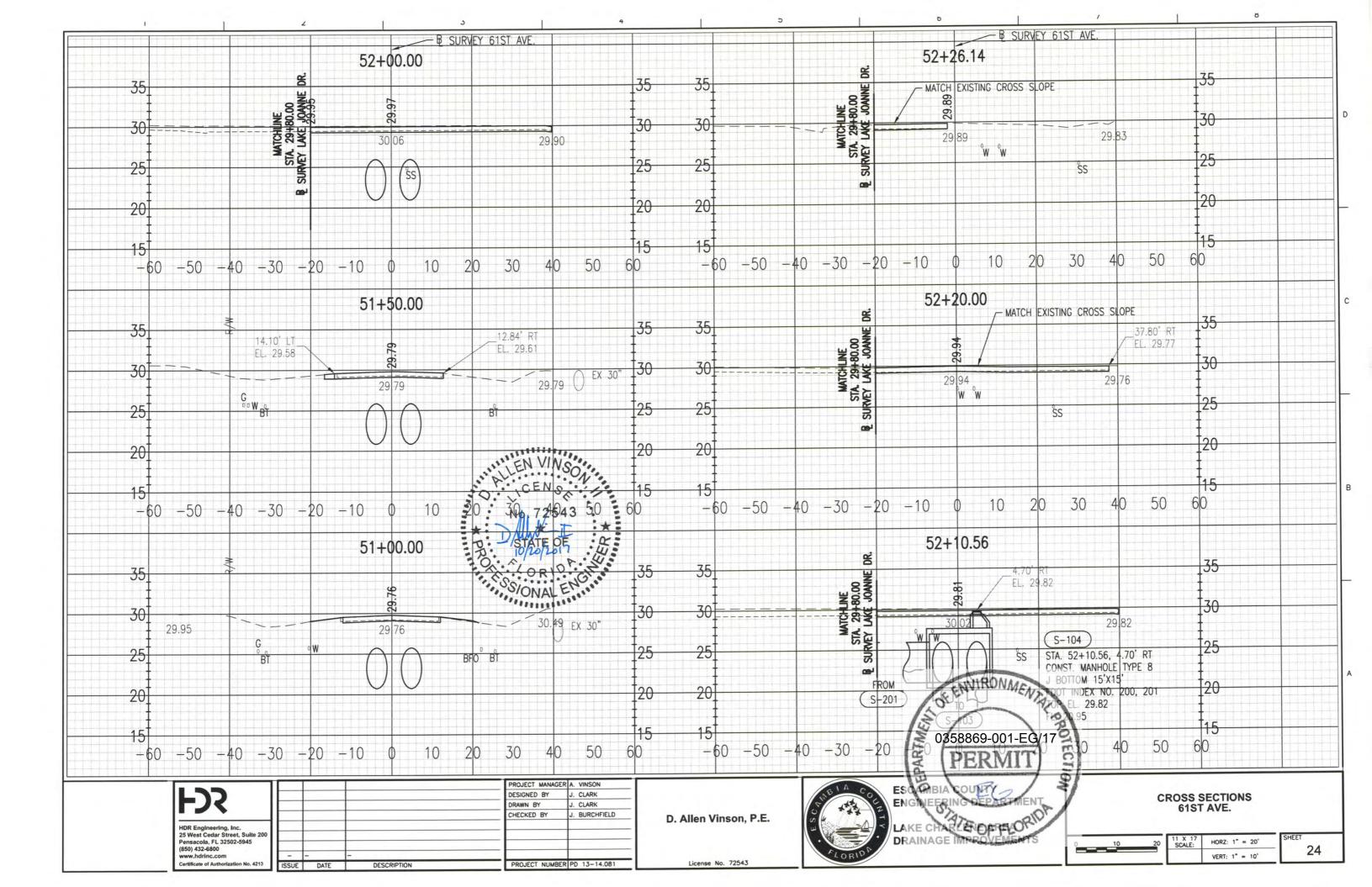


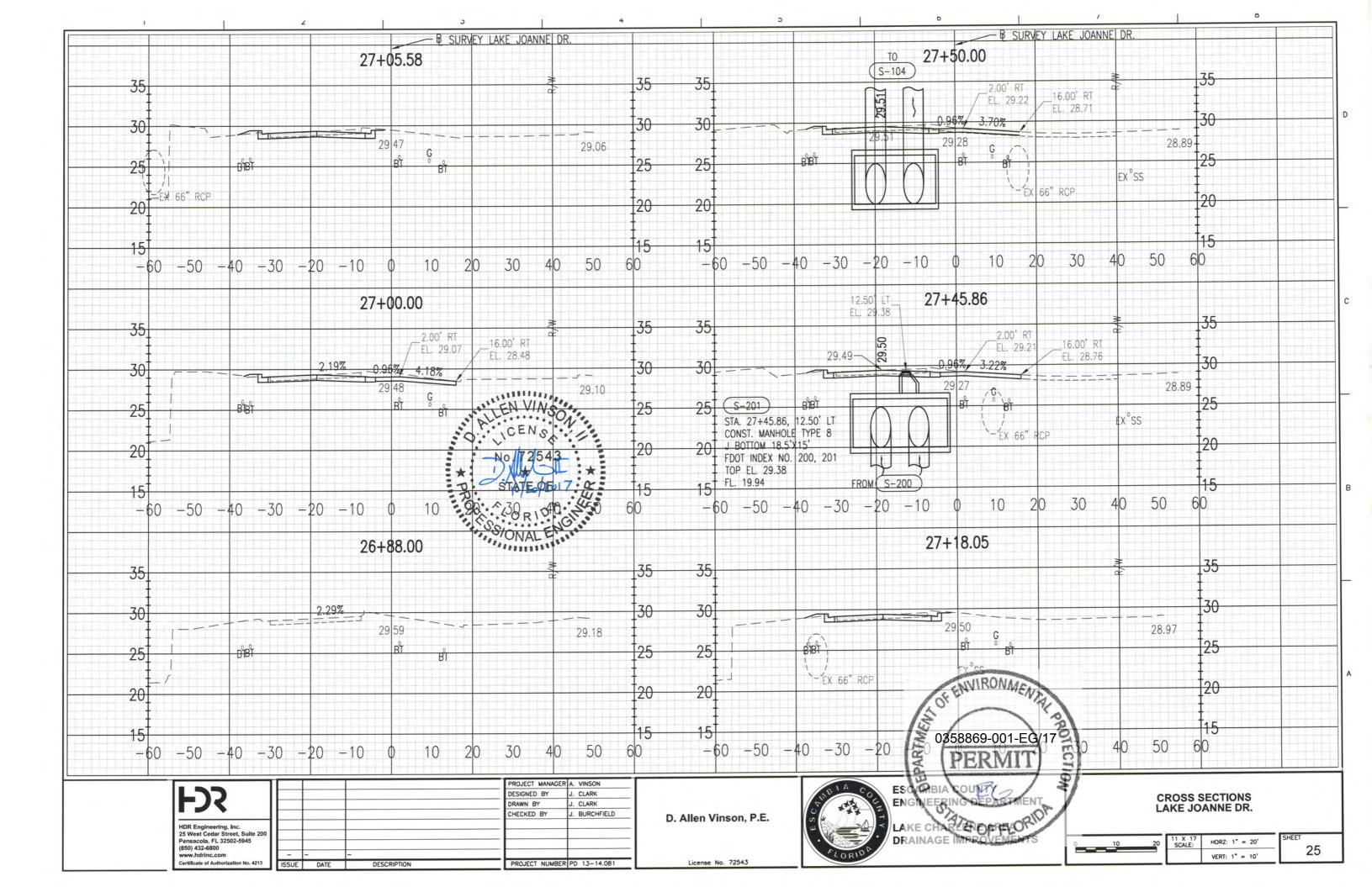


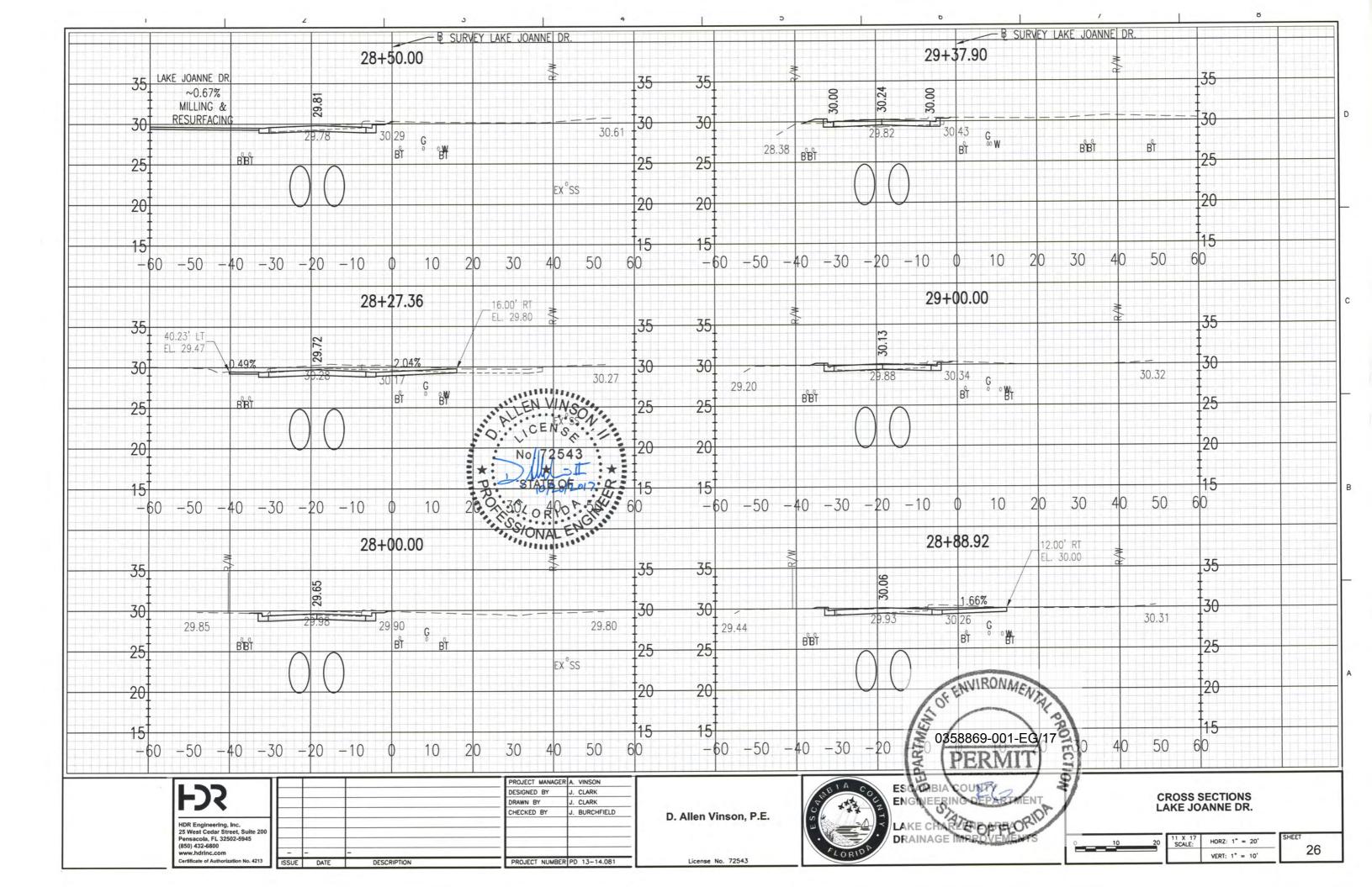


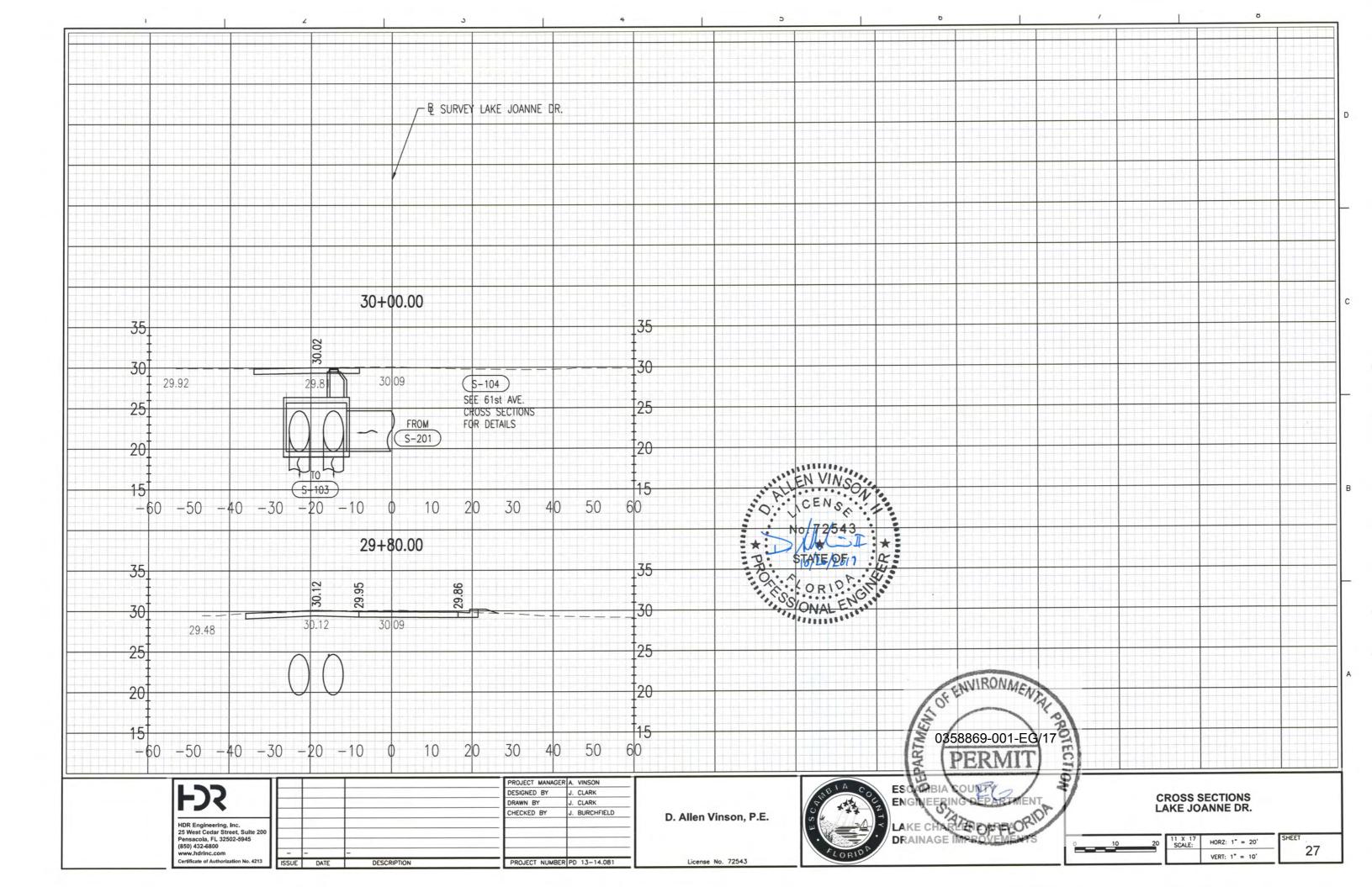


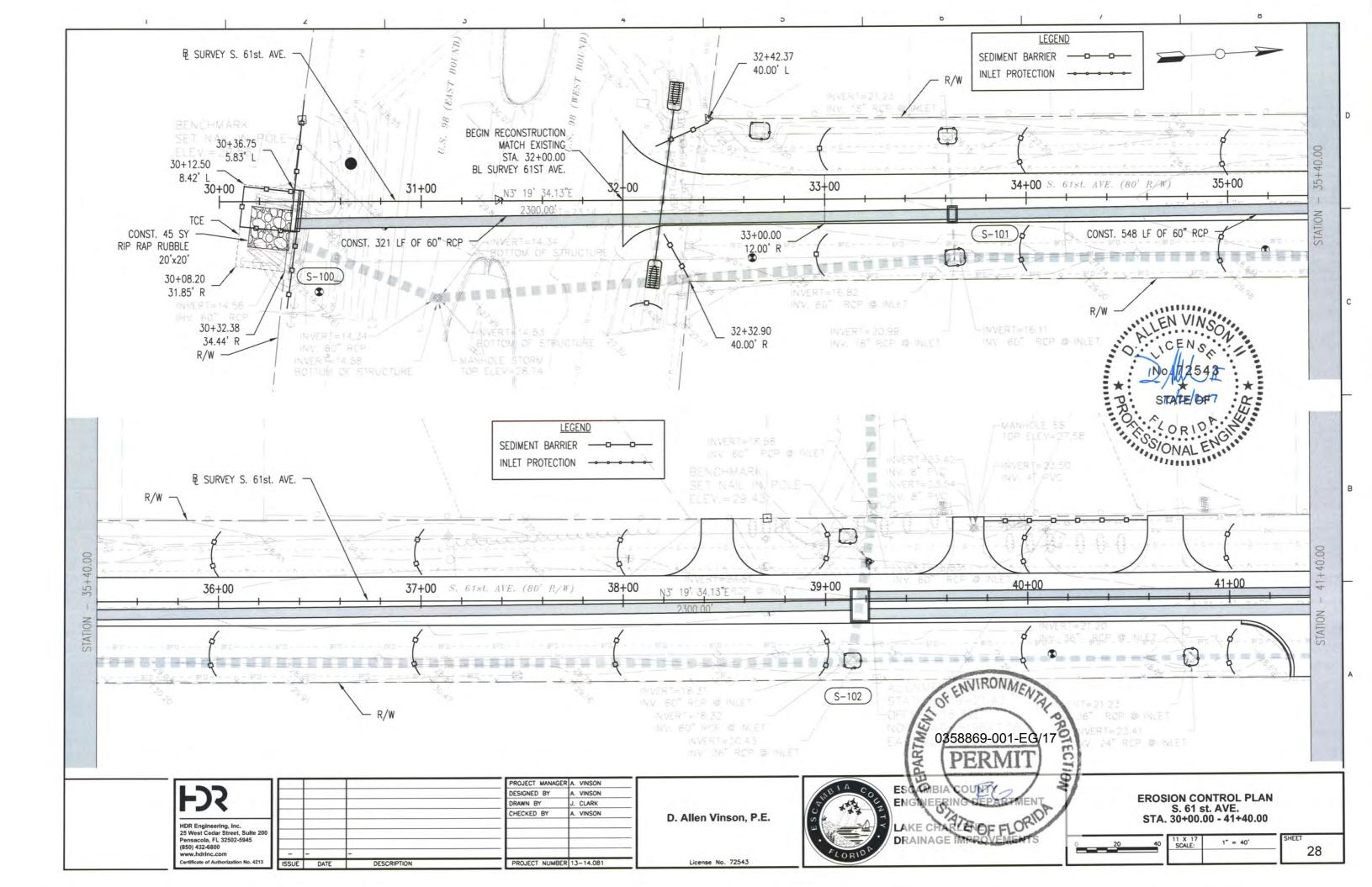


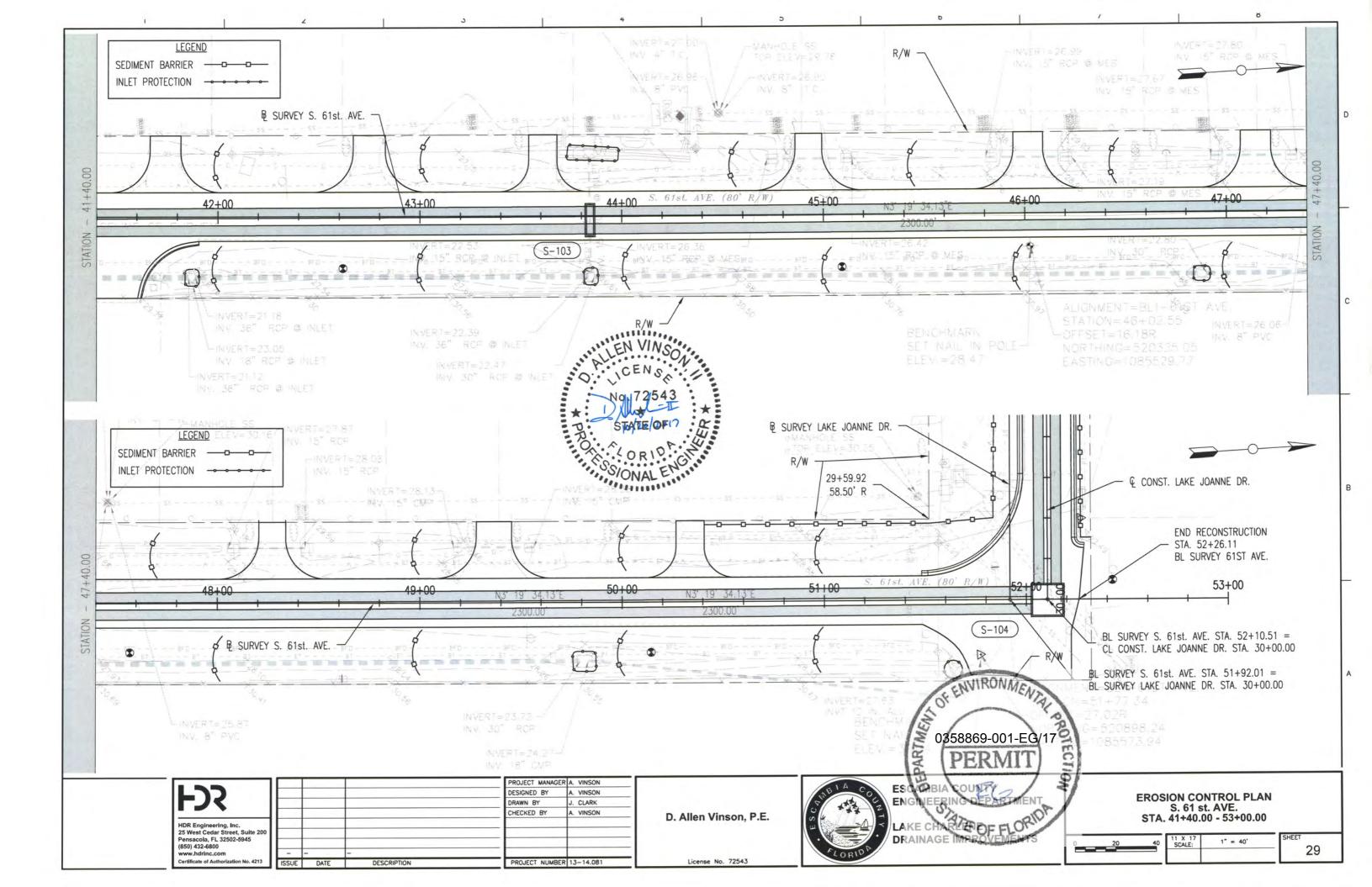


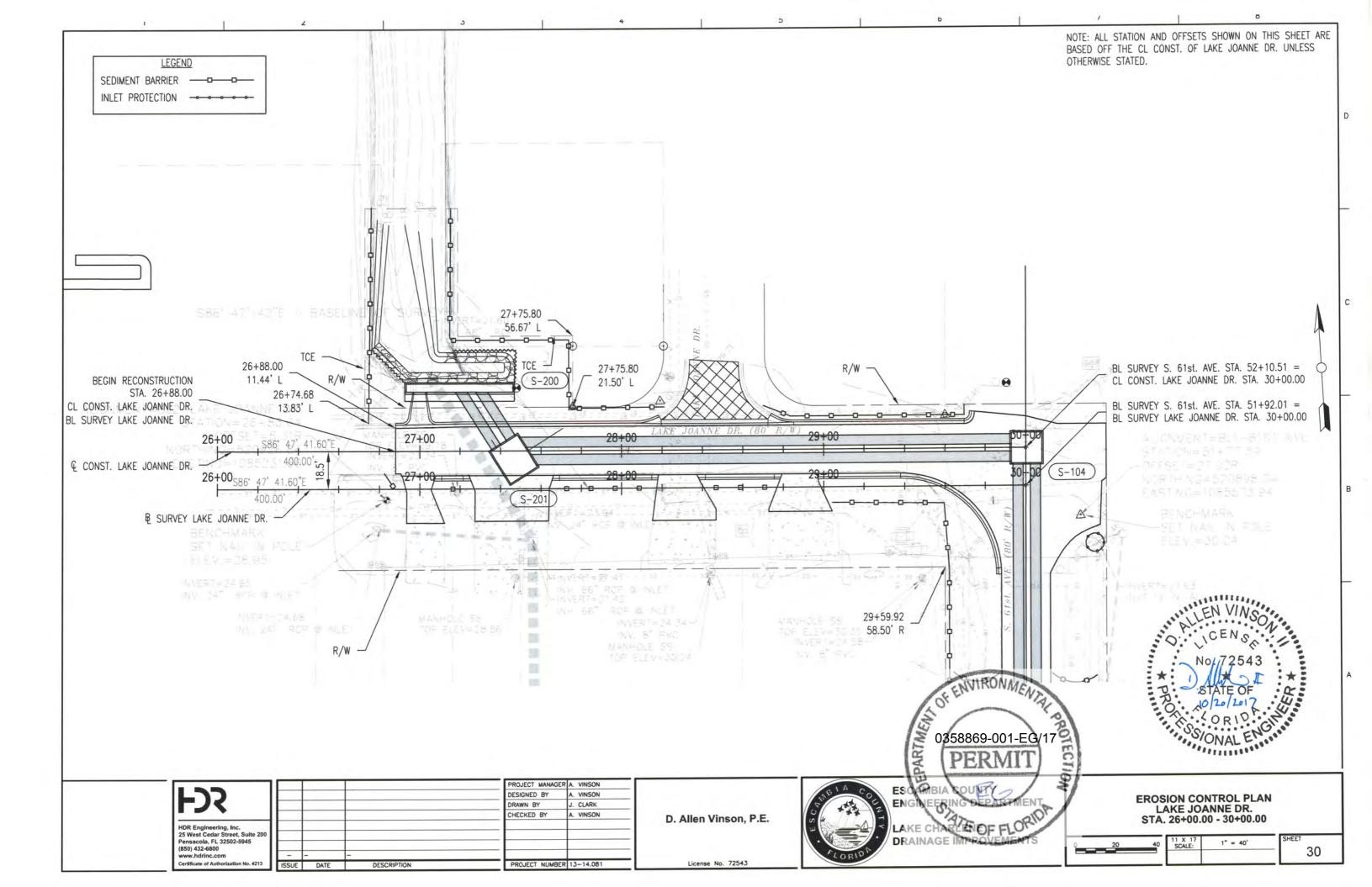












TEMPORARY TRAFFIC CONTROL NOTES:

- 1. THE CONTRACTOR SHALL PROVIDE AN APPROVED TRAFFIC CONTROL PLAN THAT ADHERES TO THE REQUIREMENTS OF THE FY 2017-18 FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS INDEX SERIES 600.
- 2. THE TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE CURRENT FDOT "DESIGN STANDARDS" INDEX SERIES 600, SPECIFICALLY INDEX 600, 602, 603, 604, 605, 612, 613 AND 615 AND THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL
- 3. THE CONTRACTOR SHALL INSTALL ADVANCE CONSTRUCTION SIGNING PRIOR TO COMMENCEMENT OF ALL CONSTRUCTION OPERATIONS AND MAINTAIN SIGNING THROUGHOUT THE DURATION OF CONSTRUCTION.
- 4. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
- 5. LANE CLOSURES WILL NOT BE PERMITTED DURING SPECIAL EVENTS, AND NO WORK WILL BE PERMITTED DURING HOLIDAYS AS CALLED FOR IN THE SPECIFICATIONS.
- SPECIAL EVENT: BLUE ANGEL AIR SHOW AT NAVAL AIR STATION HELD DURING NOVEMBER OF EACH YEAR.
- 6. ALL LANES ON 61st AVE., LAKE JOANNE DR. & US 98 MUST BE REOPENED TO NORMAL TRAFFIC WITHIN 12 HOURS DURING AN EVACUATION NOTICE OF A HURRICANE OR ANY OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT AS DIRECTED BY THE PROJECT ENGINEER/ADMINISTRATOR.
- 7. EXISTING STREET AND ROAD NAME SIGNS ON THE PROJECT ARE TO BE TEMPORARILY RELOCATED DURING CONSTRUCTION AND KEPT VISIBLE AT ALL TIMES FOR THE FACILITATION OF ACCESS BY EMERGENCY VEHICLE TRAFFIC.
- 8. WORK ZONE SPEED LIMITS SHALL BE POSTED 20 MPH ON COUNTY ROADWAYS AND 35 MPH ON US 98.
- 9. THE CONTRACTOR SHALL NOT EXCAVATE ANY AREA LARGER THAN HE CAN BACKFILL OR RECONSTRUCT BY THE END OF THE SAME WORK PERIOD. NO DROPOFF REQUIRING THE USE OF A BARRIER WALL WILL BE ALLOWED TO REMAIN IN AN INACTIVE WORK ZONE. THE CONTRACTOR SHALL RESTORE DROPOFFS TO AN ACCEPTABLE GRADE USING AN APPROVED METHOD FROM INDEX 600.
- 10. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) ARE TO BE PLACED AND RUNNING AT LEAST 7 DAYS PRIOR TO LANE AND/OR INTERSECTION CLOSURE.
- 11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO LOCAL PROPERTIES DURING ROAD CLOSURE.

CONSTRUCTION SEQUENCE:

- 1. CLOSE S. 61ST AVE.
- 2. RELOCATE TRAFFIC SIGNAL ON US 98.
- 3. INSTALL PIPE ACROSS US 98 W/MOT.
- 4. INSTALL PIPE ON 61ST AVE.
- 5. RECONSTRUCT 61ST AVE.
- 6. INSTALL PIPE ON LAKE JOANNE DR.
- RECONSTRUCT LAKE JOANNE DR.
- 8. OPEN S. 61ST AVE. TO TRAFFIC.
- 9. CONSTRUCT WEIR AND HEADWALL AT LAKE JOANNE CANAL.



PARTMENY ESO ARIBI LAKE CHARLENDERLORID D. Allen Vinson, P.E.

ECTION

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TEMPORARY TRAFFIC CONTROL PLAN

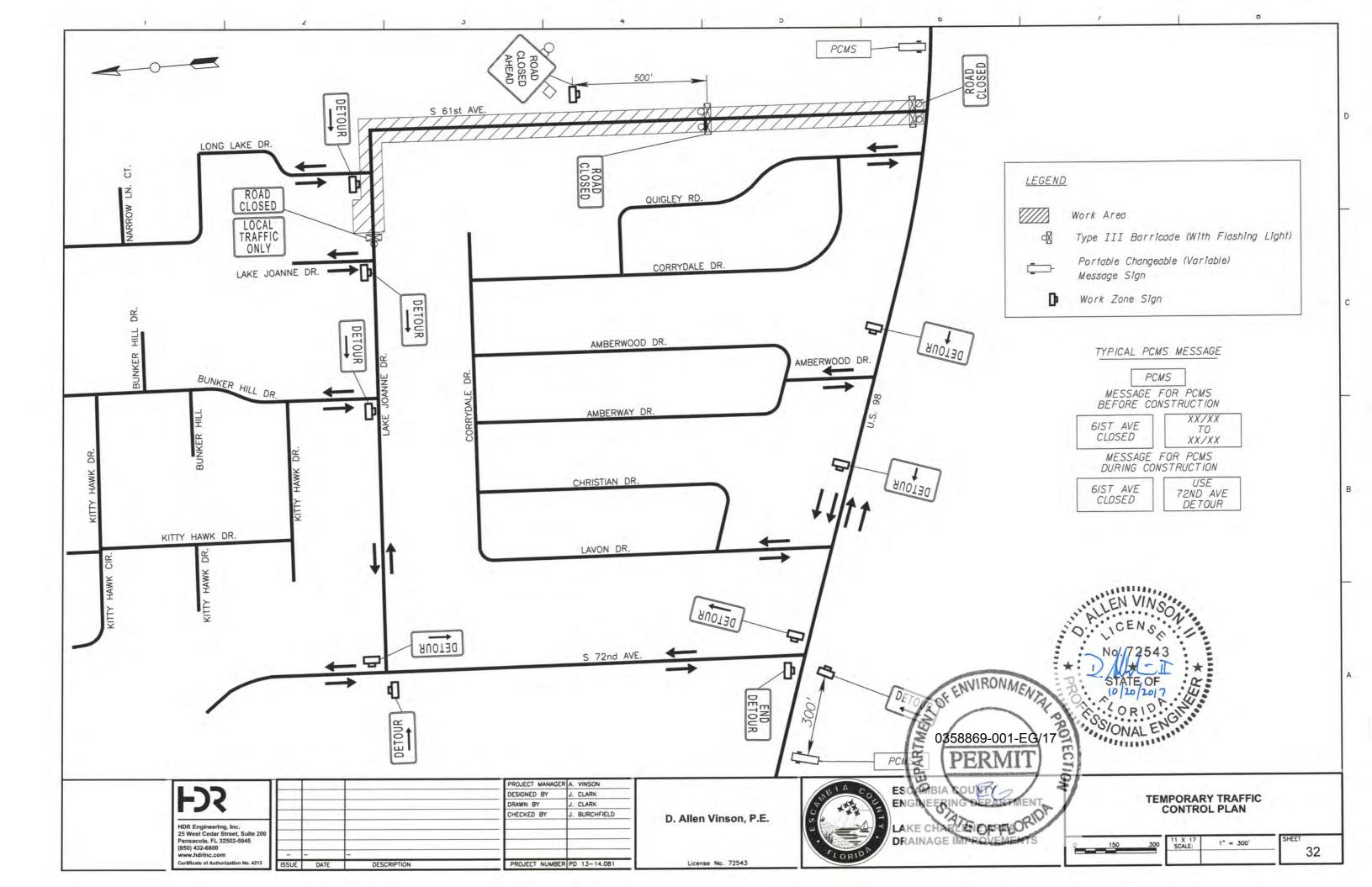
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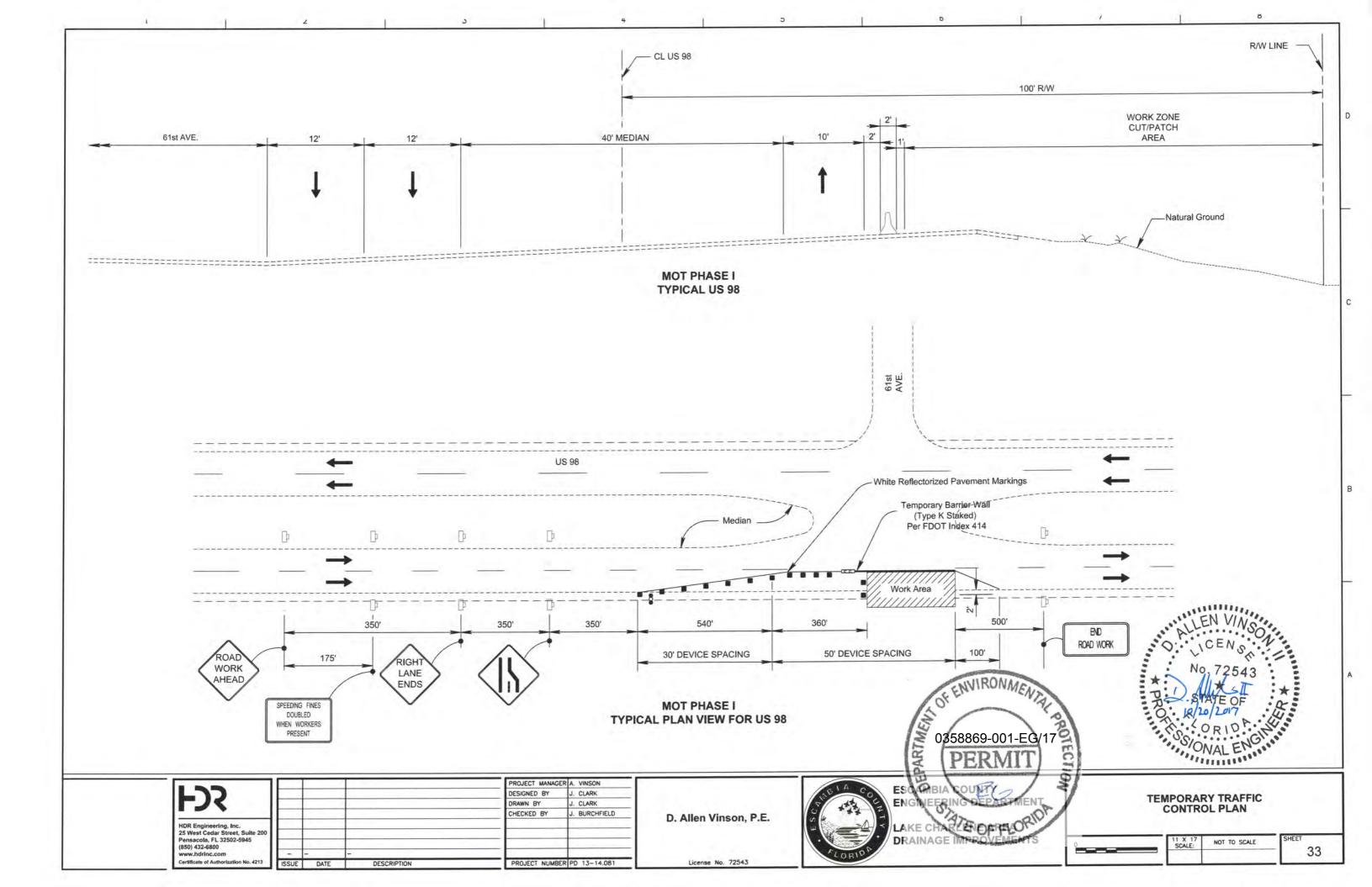
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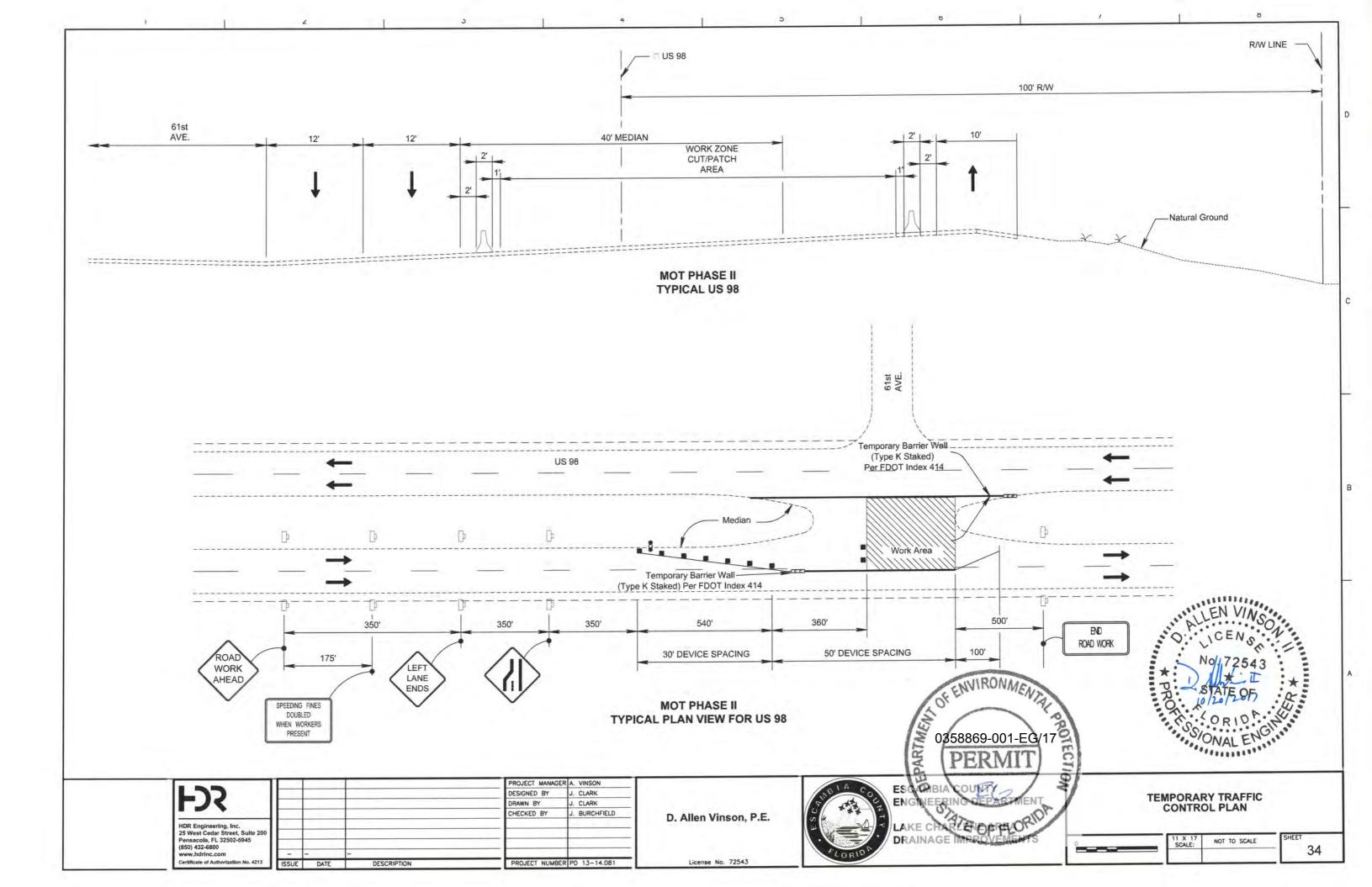
HDR Engineering, Inc. 25 West Cedar Street, Suite 200 Pensacola, FL 32502-5945 (850) 432-6800 www.hdrinc.com ertificate of Authorization No. 4213

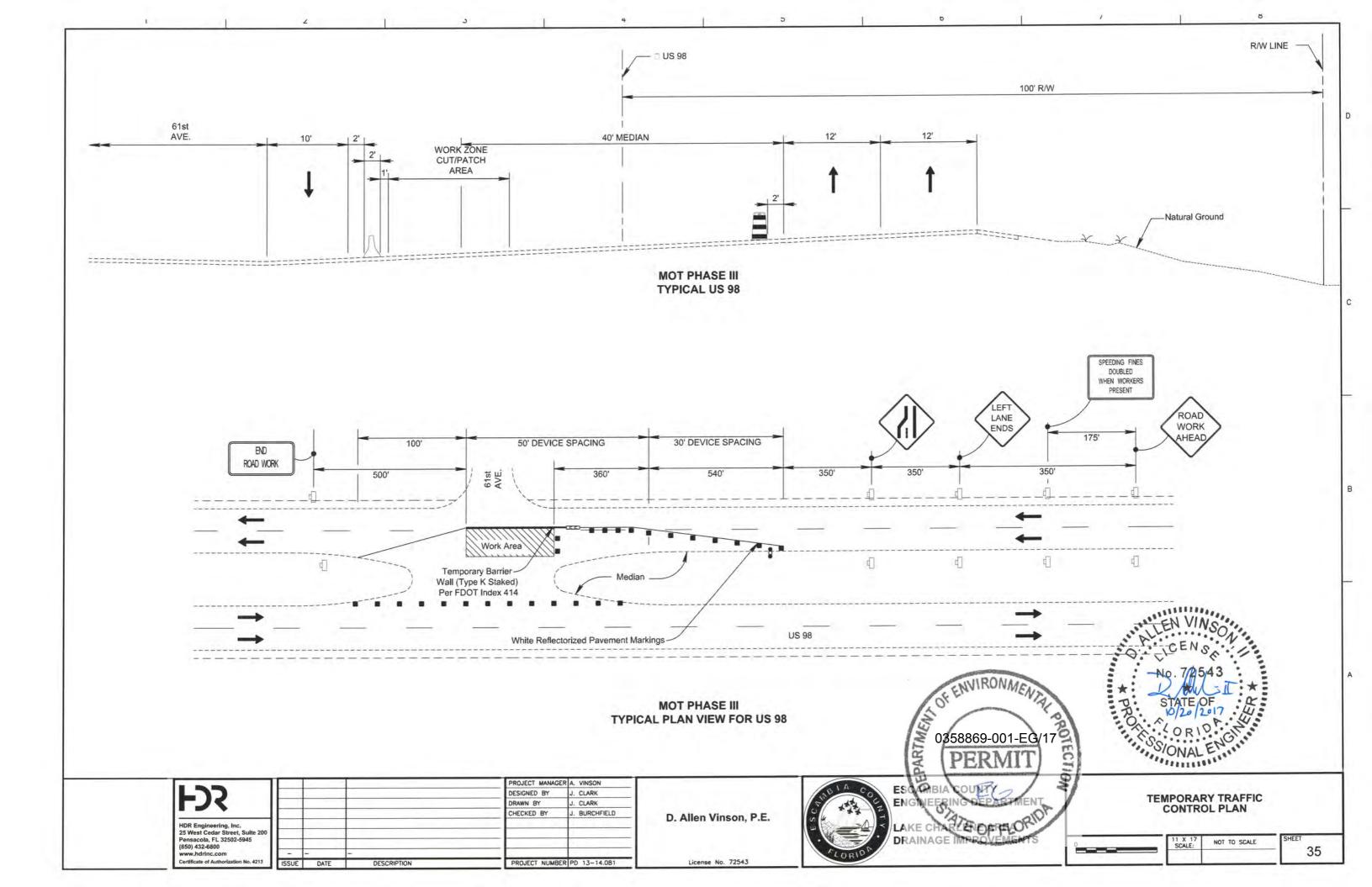
ISSUE	DATE	DESCRIPTION	PROJECT NUMBER	R PD 13-14.081
-	-	-		5.00
			CHECKED BY	J. BURCHFIELD
			DRAWN BY	J. CLARK
			DESIGNED BY	J. CLARK
			PROJECT MANAGE	R A. VINSON

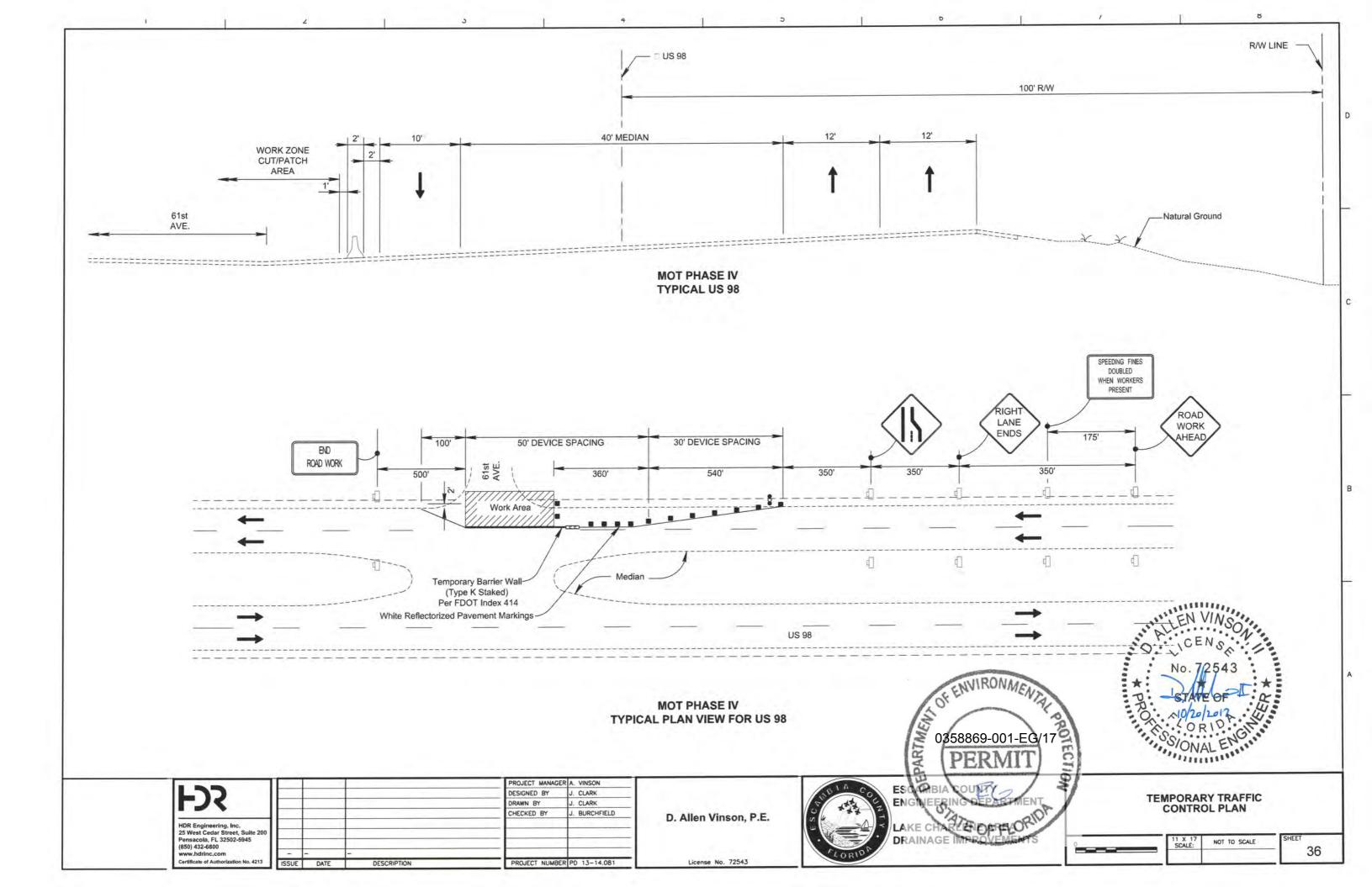
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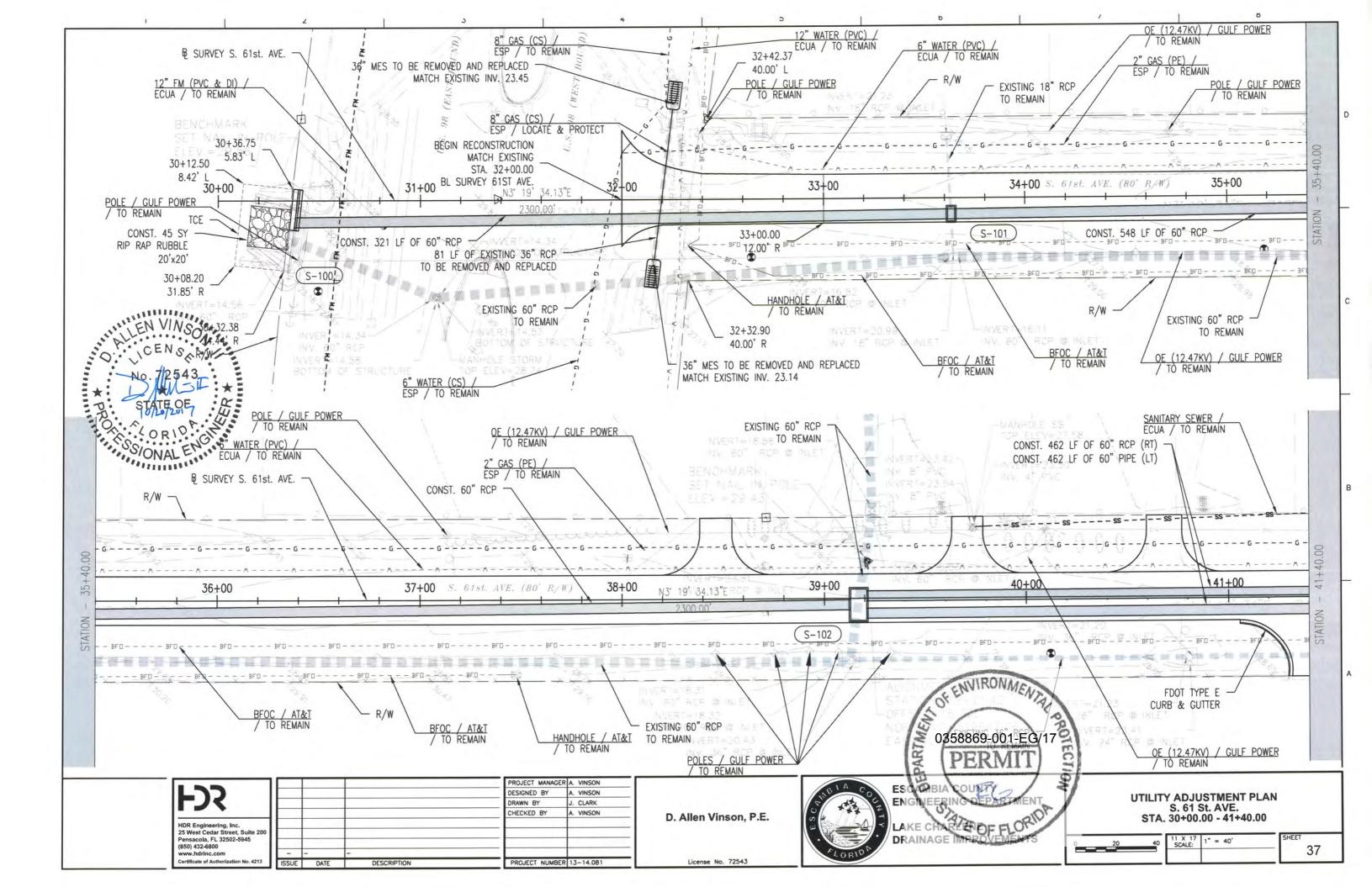


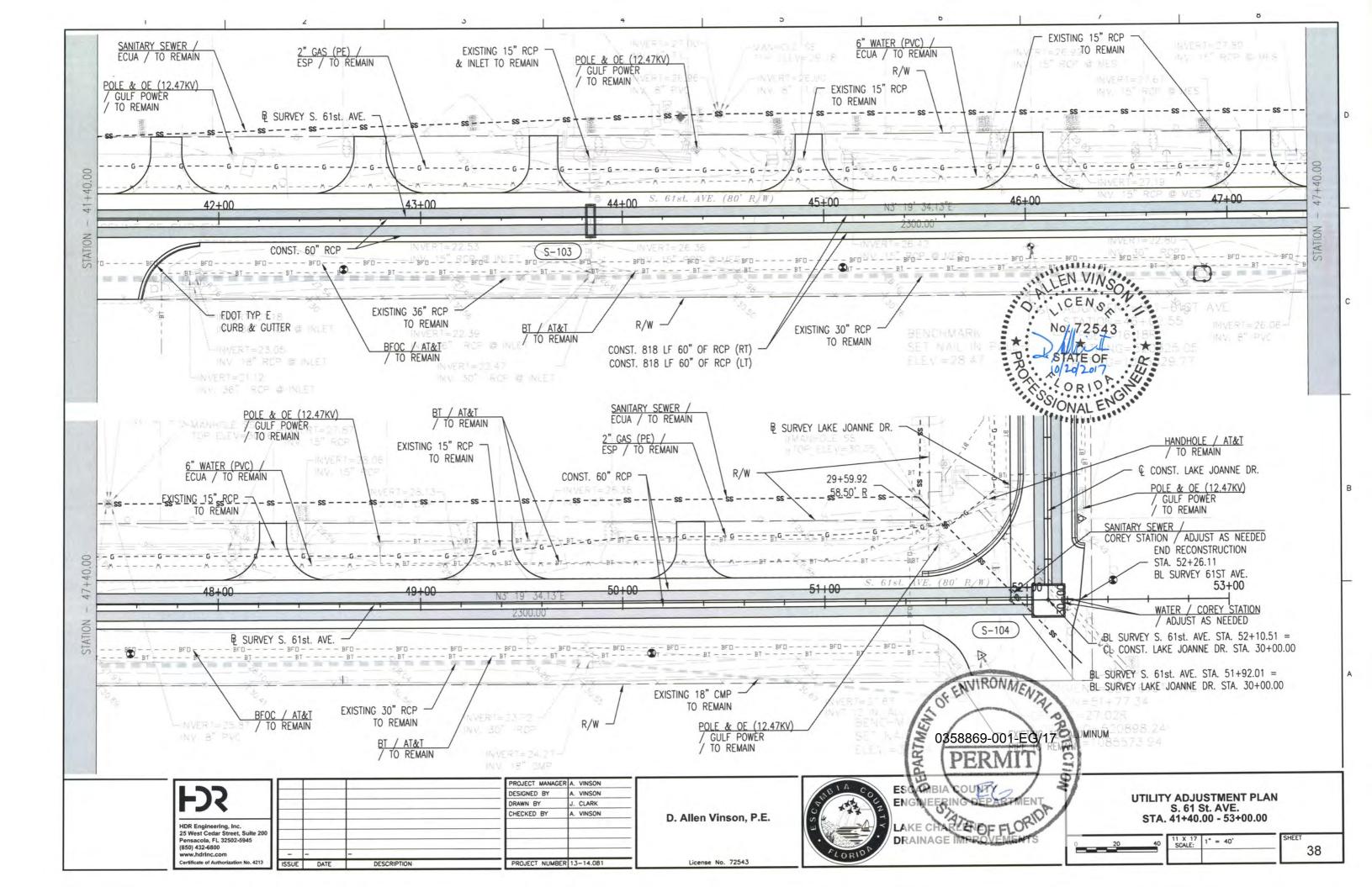


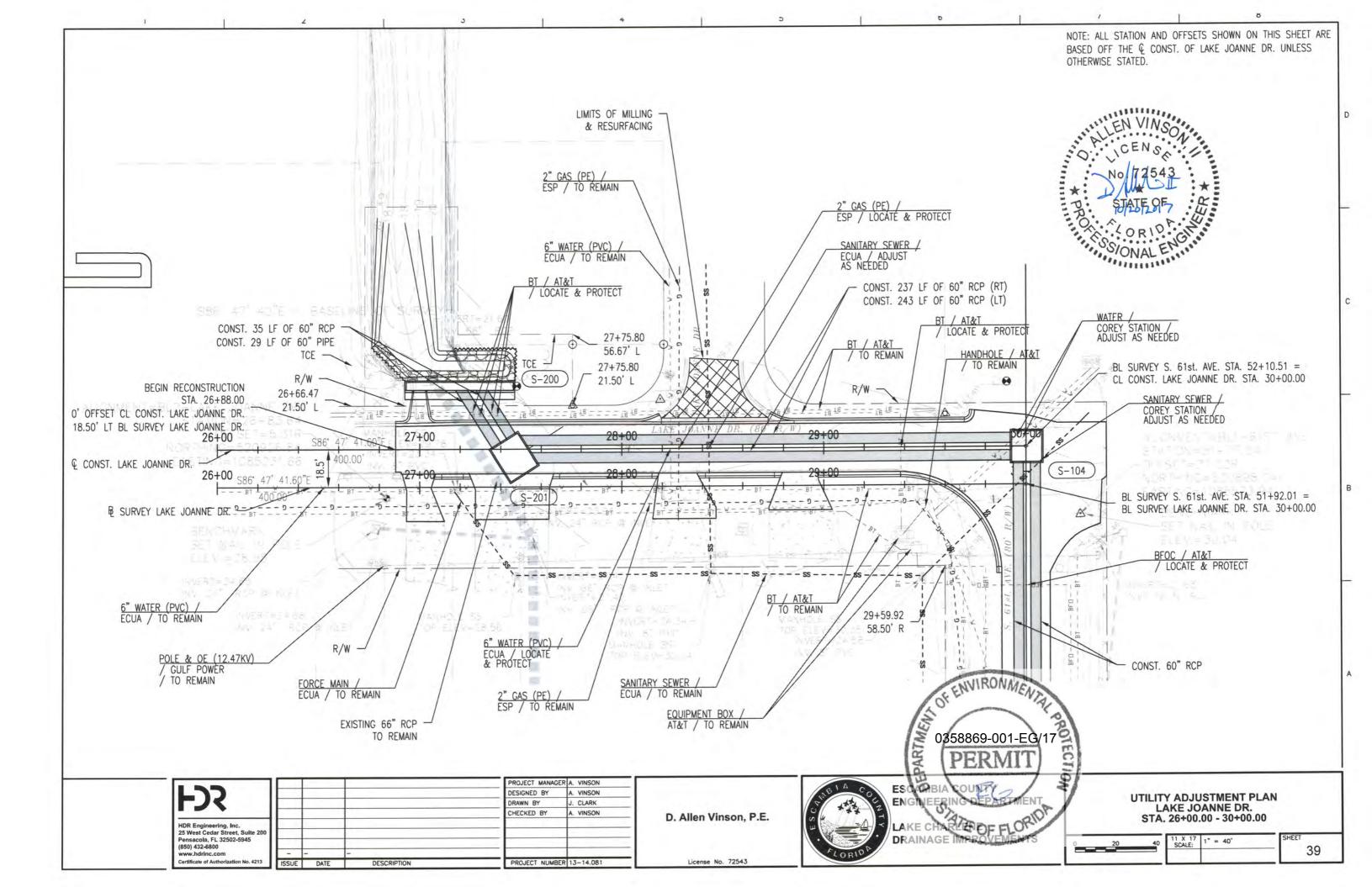


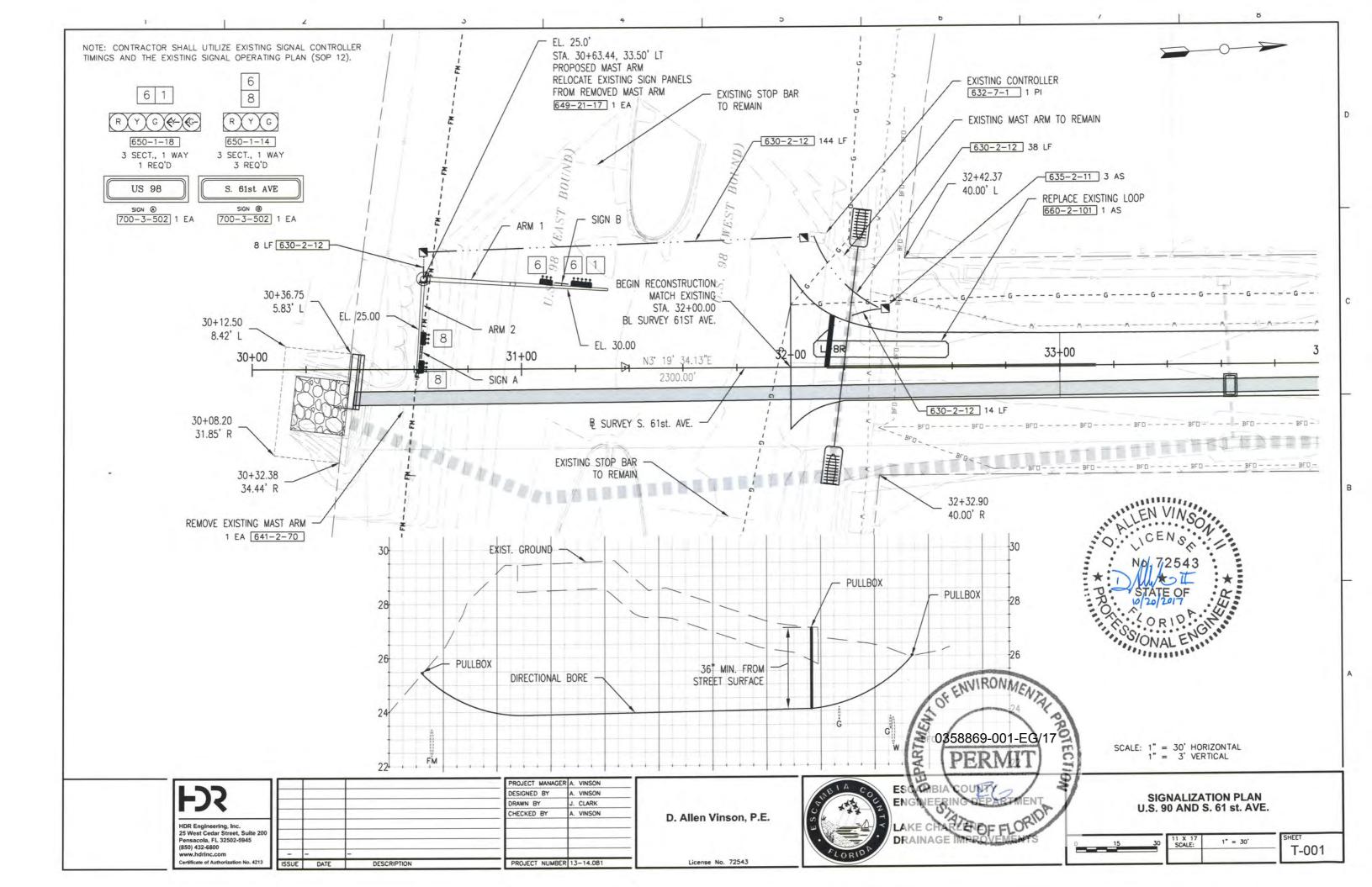


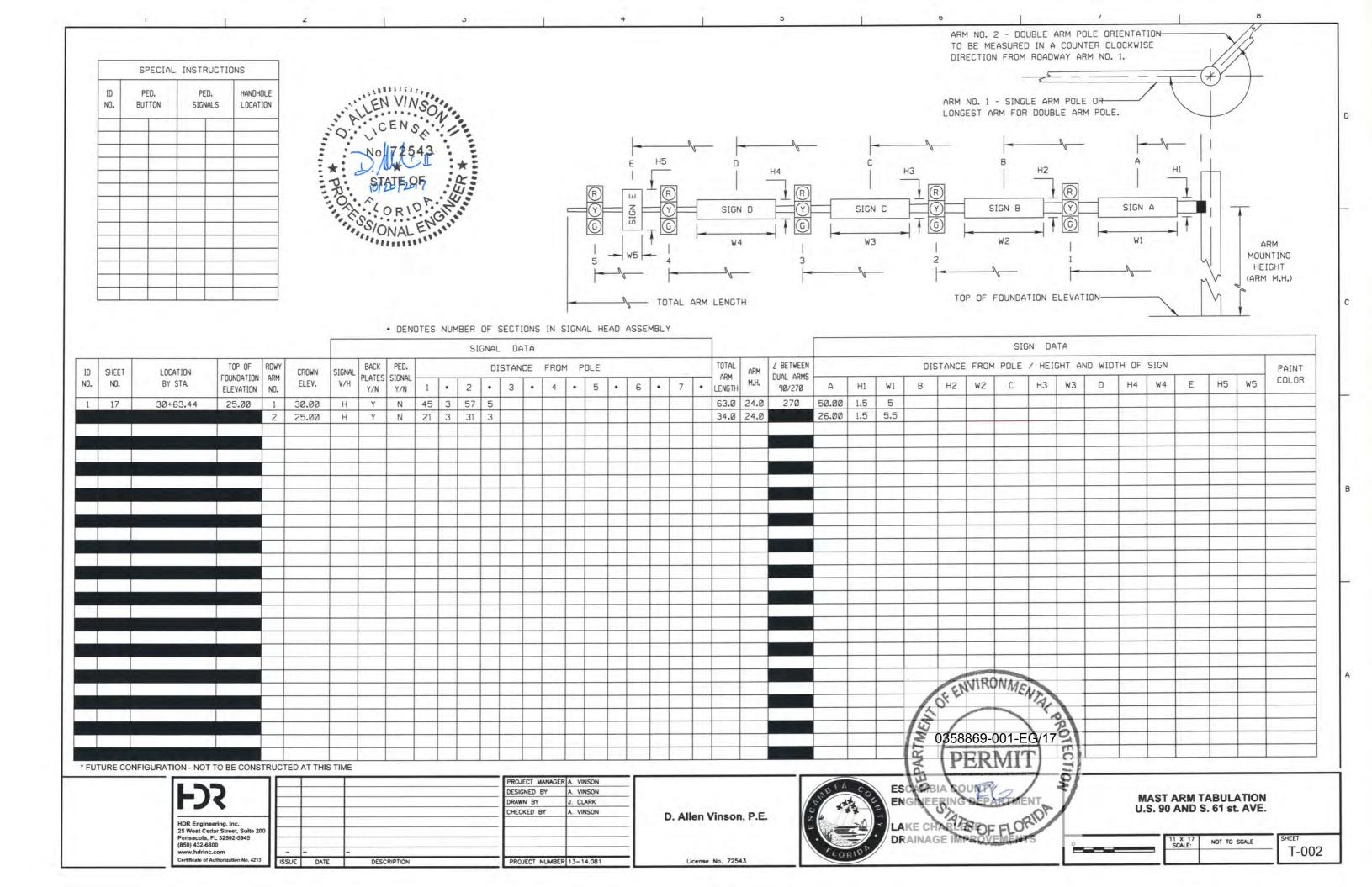












STRUCTURE NUMBER	FIRST ARM CONNECTION (in) FIRST ARM CAMBER ANGLE = 2 DEGREES									SECOND ARM CONNECTION (in) SECOND ARM CAMBER ANGLE = 2 DEGREES												
	# BOLTS	HT	FJ	FK	FL	FN	FO	FP	FR	FS	FT	# BOLTS	HT	SJ	SK	SL	SN	so	SP	SR	SS	ST
1	6	30	36	3	0.75	0 25	25.8	1.25	2	12.5	0.313	6	30	36	3	0 75	0 25	25,8	1 25	2	12,5	0 313
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								SPECIAL	MAST AR	MASSEN	BLIES DA	TA TABLE	(CONT.)											
STRUCTURE NUMBER	POLE BASE CONNECTION (in)				SHAFT AND REINFORCING						LUMINAIRE AND LUMINAIRE CONNECTION													
	# BOLTS	BA	BB	BC	BF	DAIR	DB(N)	RA	R8	RC	RD(in)	RE	RF(in)	LA(ft)	LB(ft)	LC(in)	LD(in)	£E.	LF(ft)	LG(in)	LH(in)	LJ(in)	LK(in)	LL(de
1	6	40	2.5	2	40	19	5	11	19	12	8	0	0	0	0	0	0	0	0	0	0		. 1	
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NOTES: 1 WORK WITH INDEX 17745

2 DESIGN WIND SPEED = 150 MPH

3 MOUNTING ARM HEIGHT, REFER TO MAST ARM TABULATIONS SHEET FOR ACTUAL ARM MOUNTING HEIGHT FOR EACH ARM

FOUNDATION NOTES:

1. DESIGN BASED ON BORING B-11 SHOWN IN ADDENDUM DATED 01/26/2017, SIGNED AND SEALED BY TERRY NEIMAN LMJ & ASSOCIATES, INC

2 ASSUMPTIONS AND VALUES USED IN DESIGN:

MOTT
MACDONALD
228 Viest Garden Siver 4

HDR Engineering, Inc. 25 West Cedar Streel, Suite 20 0 Pensacola, FL 32502-5945 (850) 432-6800 www.hdrinc.com Certificate of Authorization No. 4213

			PROJECT MANAGER	B HENDRICKS
			DESIGNED BY	YSS
			DRAWN BY	KWD
			CHECKED BY	BFH
Α	10/20/17	ISSUED FOR PERMIT		
ISSUE	DATE	DESCRIPTION	PROJECT NUMBER	13-14.081

Bart F. Hendricks



0358869-001-EG/17
PERMIT

ESCAMERA COUNTY
ENGINEERING DEPARTMENT

LAKE CHARLENE A GEOFLOW
Warrington Basin Study

MAST ARM TABLE OF VARIABLES

SCALE AS SHOWN

T003

GENERAL NOTES

- GOVERNING STANDARDS AND CONSTRUCTION SPECIFICATIONS:

 1 FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS (LATEST EDITION)
- FDOT STRUCTURES MANUAL DATED JANUARY 2017
 AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, [7TH], EDITION AND ALL SUBSEQUENT INTERIMS.

- . ALL CONCRETE SHALL CONFORM WITH SECTION 346
- 2. UNIT WEIGHT OF CONCRETE (INCLUDING REINFORMS) = 150 LB/FT³

 3. CONCRETE SHALL BE CLASS II, CAST IN PLACE AND HAVE A MIN. 28-DAY COMPRESSIVE STRENGTH OF 3,400 PSI

 4. PROVIDE ¾" CHAMFERS ON ALL EXPOSED EDGES EXCEPT AS OTHERWISE NOTED.
- ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 6 MINIMUM CONCRETE COVER SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN IN PLANS:

WALL: 2" FOOTING: 2", EXCEPT CAST AGAINST EARTH: 3"

- 1. ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE
- 2 ENDWALL DIMENSIONS, LOCATIONS AND POSITIONS ARE FOR ROUND AND ELLIPTICAL CONCRETE PIPE, ROUND CONCRETE

FOR LOCATIONS OF EXISTING UTILITIES, SEE CIVIL DRAWINGS AND UTILITY PLANS
 THE UTILITIES SHOWN IN THESE PLANS ARE AT APPROXIMATE LOCATIONS

SITE CONDITIONS

- I. REVIEW ALL CONTRACT DOCUMENTS, DIMENSIONS AND SITE CONDITIONS AND COORDINATE WITH FIELD DIMENSIONS, REPORT ANY DISCREPANCIES IN WRITING TO THE ENGINEER OF RECORD. DO NOT CHANGE SIZE OR DIMENSIONS OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE ENGINEER OF RECORD.
- 2 ALL PORTIONS OF TREES AND MISCELLANEOUS DEBRIS WITHIN THE CHANNEL WITHIN THE R/W LIMITS SHALL BE REMOVED AND DISPOSED PROPERLY
 3. FRONT SLOPE AND DITCH TRANSITIONS SHALL BE IN ACCORDANCE WITH INDEX NO. 280
- 4. ON OUTFALL DITCHES WITH SIDE SLOPES FLATTER THAN 1:1½ PROVIDE 20' TRANSITIONS FROM THE ENDWALL TO THE FLATTER SIDE SLOPES, RIGHT OF WAY PERMITTING
 5. DEWATERING WILL BE NEEDED TO INSTALL THE FOUNDATIONS. REFER TO GEOTECHNICAL REPORT FROM LARRY M
- JACOBS, FILE # 16-251, DATED JANUARY 13, 2017 FOR HEADWALL FOUNDATION AND SHEET PILE RECOMMENDATIONS.

 6. IF DEWATERING IS NOT PAID FOR IN A PAY ITEM, DEWATERING COST SHALL BE INCIDENTAL TO THE COST OF THE ITEM TO BE INSTALLED.

0358869-001-EG/17 ESCAMBA CO

STRUCTURAL GENERAL NOTES

ORID ENGIN

THE TOHER HENDING

SHEET S001

MOTT MACDONALD FLORIDA LLC M 100 100 200 MOTT
MACDONALD STORES 20 -0000 53

HX HDR Engineering, Inc. 25 West Cedar Street, Suite 20 0 Pensacola, FL 32502-5945

Certificate of Authorization No. 4213

(850) 432-6800

ROJECT MANAGER B. HENDRICKS DESIGNED BY YSS RAWN BY KWD CHECKED BY ISSUED FOR PERMIT 10/20/17 ISSUE DATE DESCRIPTION PROJECT NUMBER 13-14.081

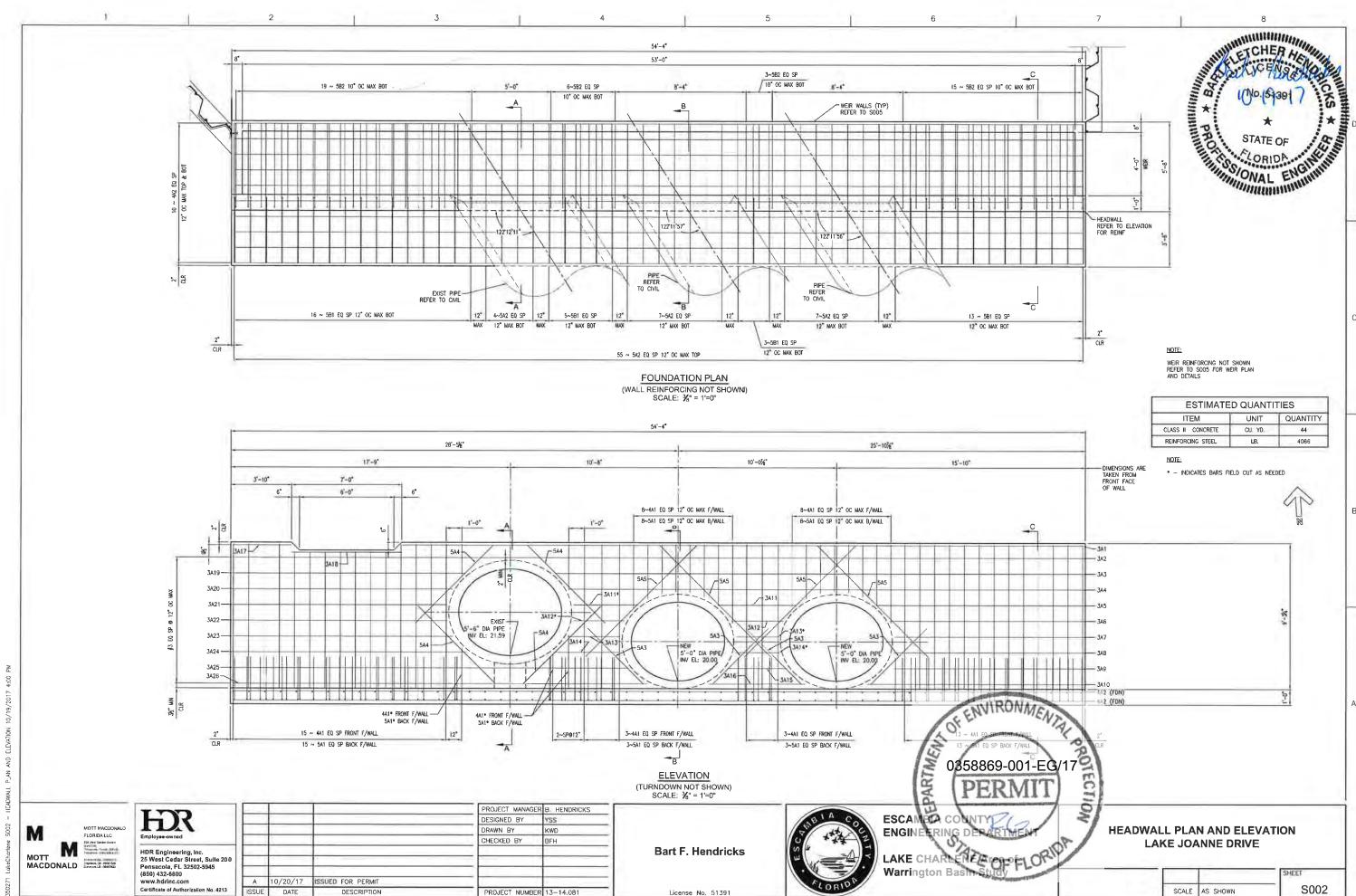
Bart F. Hendricks

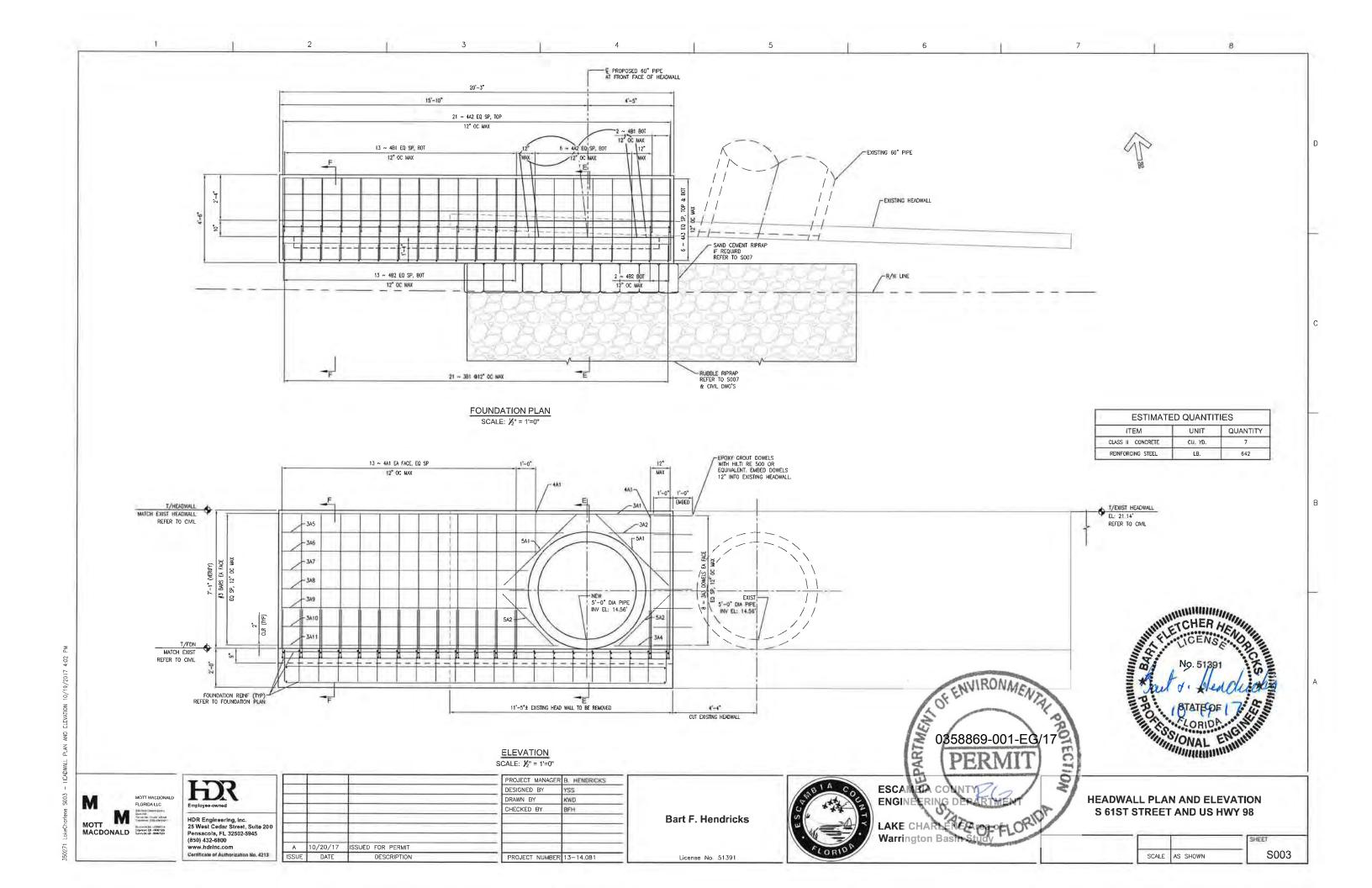
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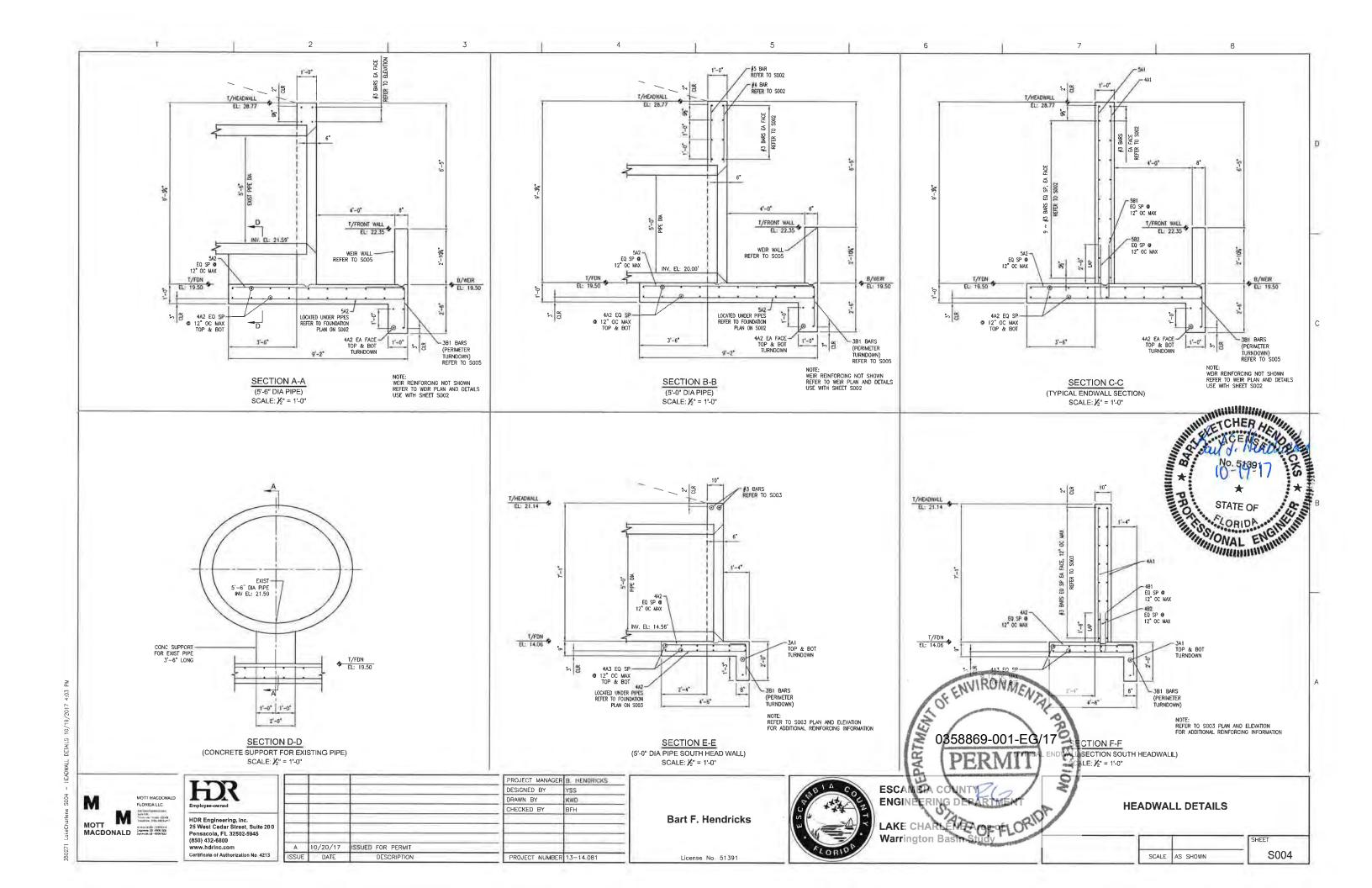
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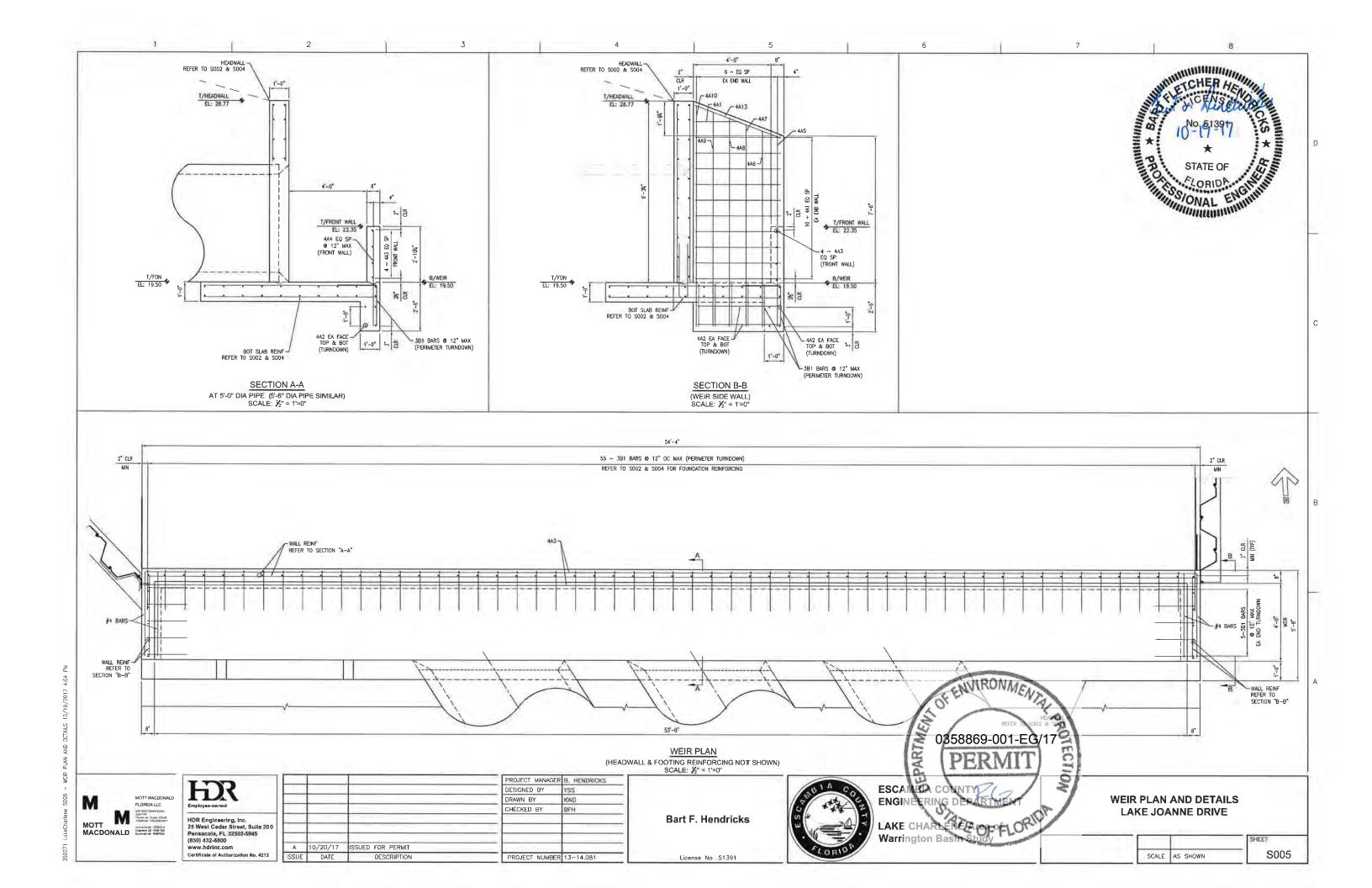
LAKE CHARLEMEA OF OLOR Warrington Bas

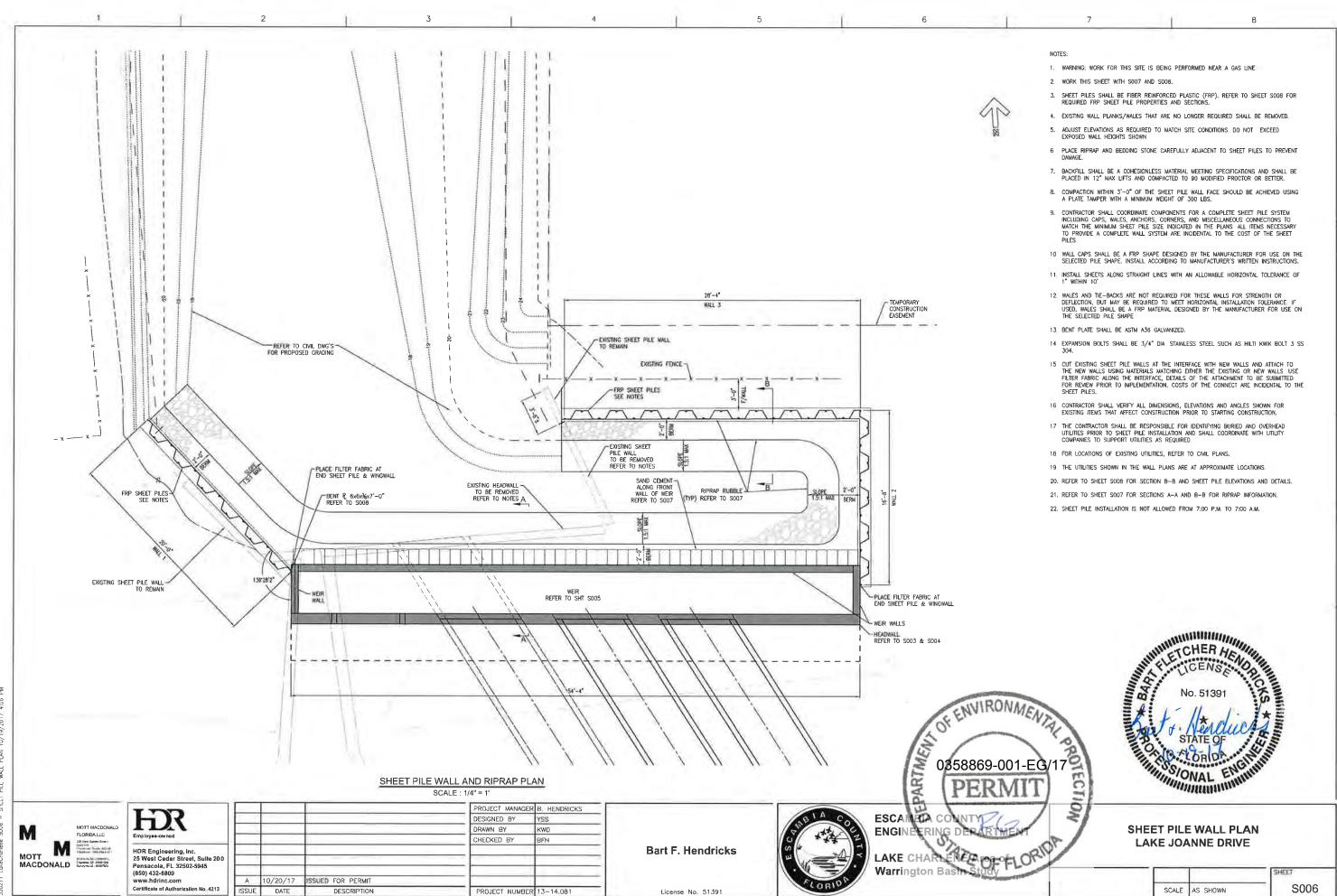
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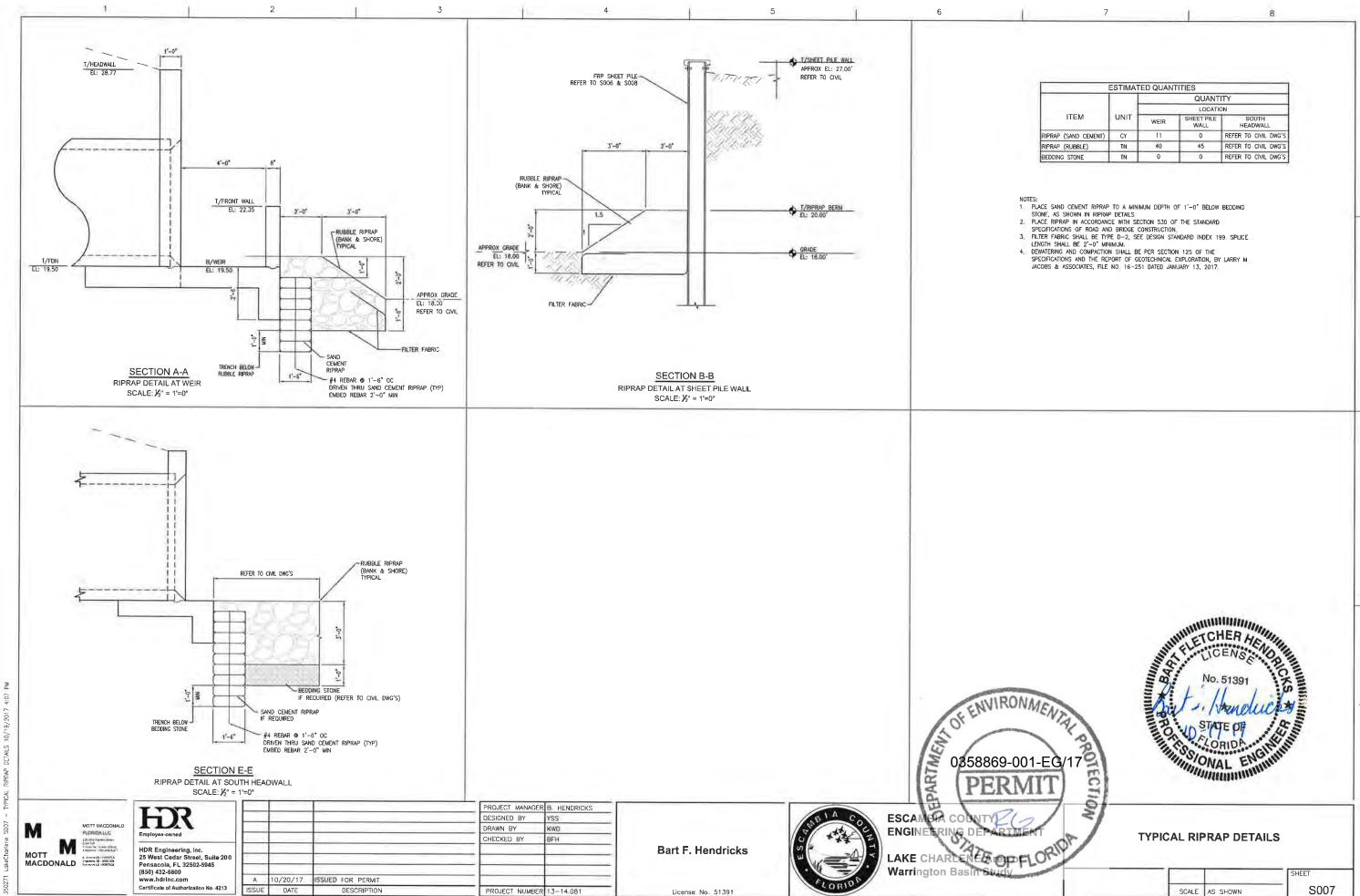


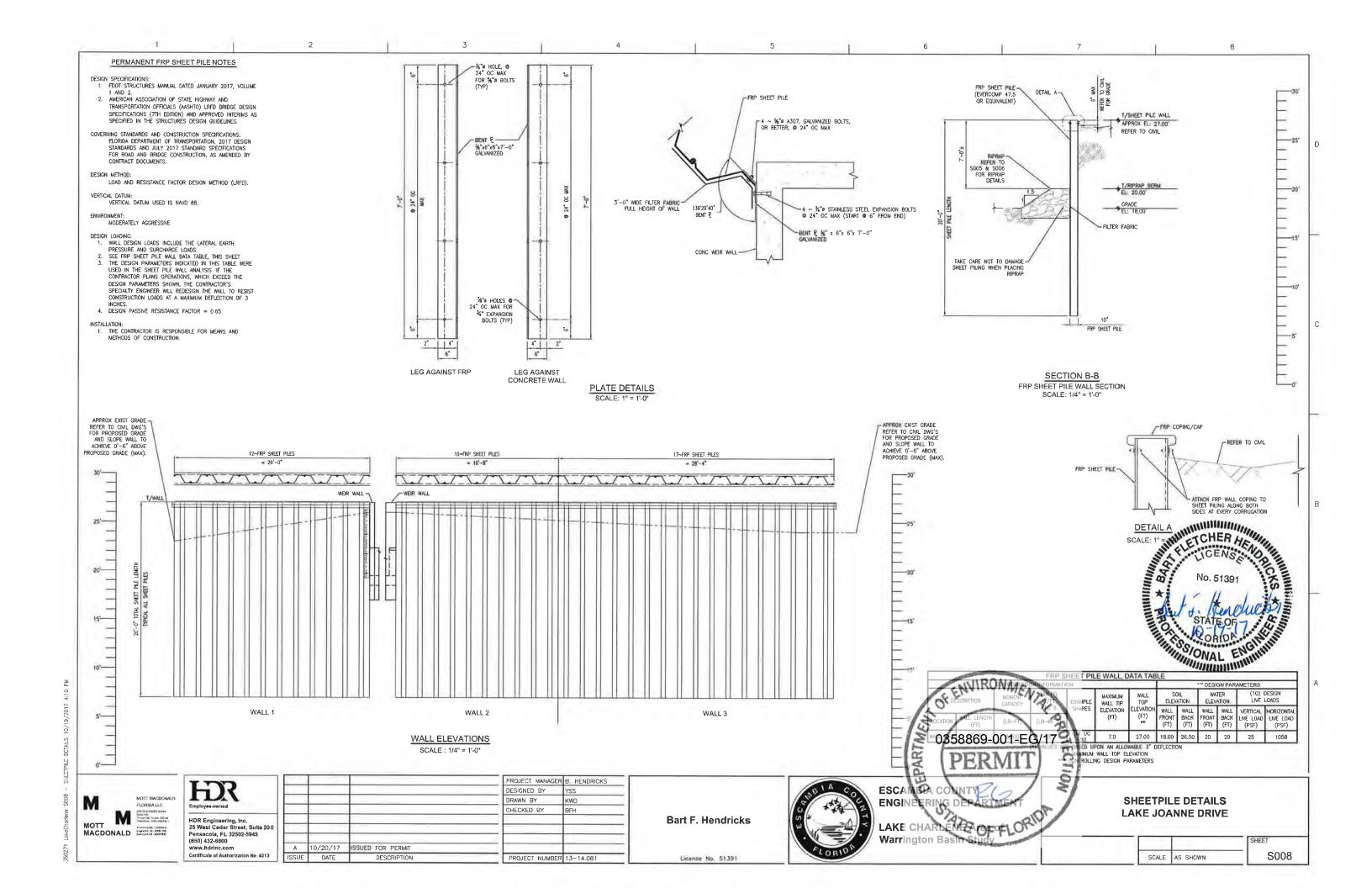












REINFORCING BAR LIST HEADWALL (LAKE JOANNE DRIVE) TOTAL NO. TOTAL DESIGNATION SIZE REQUIRED LENGTH 43'-4" 43'-4" A2 3 2 54'-0" 54'-0" А3 2 33'-6 5/8" 33'-6 5/8" A4 2 32'-8 3/4" 32'-8 3/4" A5 13'-1 1/2" 13'-1 1/2" 2 A6 2 12'-3 3/8" 12'-3 3/8" 3 11'-11 1/2" A7 11'-11 1/2" 3 2 A8 3 2 12'-0 3/8" 12'-0 3/8" A9 3 2 12'-6 1/8" 12'-6 1/8" 3 A10 2 13'-8 3/8" 13'-8 3/8" 3 A11 4'-11 7/B" 4'-11 7/8" A12 3'-3 5/8" 3'-3 5/8" A13 3 4 3'-3 3/4" 3'-3 3/4" 3 A14 4 4'-3 1/8" 4'-3 1/8" 3 A15 3'-9 1/4" 3'-9 1/4" A16 2 6'-1 5/8" 6'-1 5/8" 3 A17 3'-8" 3'-8" A18 7'-0" 7'-0" A19 14'-8 7/8" 14'-8 7/8" 3 A20 13'-10 7/8" 13'-10 7/8" 2 A21 3 2 13'-6 5/8" 13'-6 5/8" A22 13'-6 3/4" 3 2 13'-6 3/4" A23 13'-11 1/4" 3 2 13'-11 1/4" A24 3 14'-9 5/8" 14'-9 5/8" 2 A25 3 2 25'-1 1/4" 25'-1 1/4" 3 A26 26'-3 3/8" 26'-3 3/8" 3 B1 65 2'-10" 0'-10" 2'-0" A1 53 9'-1 1/4" 9'-1 1/4" 4 A2 24 54'-0" 54'-0" АЗ 4 4 54'-0" 54'-0" 4 A4 55 4'-8 1/4" 4'-8 1/4" 4 A5 2 9'-5 3/8" 9'-5 3/8" A6 2 4 9'-8 7/8" 9'-8 7/8" A7 2 10'-0 3/4" 10'-0 3/4" 4 AB 10'-4 5/8" 10'-4 5/8" 10'-8 1/2" 10'-8 1/2" A10 11'-0 3/8" 11'-0 3/8" 2 A11 24 4'-4" 4'-4" A12 2'-1 3/8" 2 2'-1 3/8" A13 4'-8 1/2" 4'-8 1/2" 2 A1 9'-1 1/4" 5 53 9'-1 1/4" 5 A2 73 8'-10" 8'-10" 5 A3 5'-0" 5'-0" 5 A4 7'-0" 7'-0" A5 10'-0" 10'-0"

	Н		FORCING BAR 98 AND SOUT	LIST H 61st AVENU <mark>E</mark>)	
SIZE	DESIGNATION	TOTAL NO. REQUIRED	TOTAL LENGTH	А	В	С
3	A1	4	19'-11"	19'-11"		
3	A2	2	3'-2"	3'-2"		
3	A3	16	2'-0"	2'-0"		
3	A4	2	2'-10 3/8"	2'-10 3/8"		
3	A5	2	14'-5 5/8"	14'-5 5/8"		
3	A6	2	13'-1 3/4"	13'-1 3/4"		
3	A7	2	12'-7 1/4"	12'-7 1/4"		
3	A8	2	12'-5 1/4"	12'-5 1/4"		
3	A9	2	12'-6 7/8"	12'-6 7/8"		
3	A10	2	13'-0 5/8"	13'-0 5/8"		
3	A11	2	14'-2 3/8"	14'-2 3/8"		
3	B1	21	2'-5"	2'-5"	10"	1'-7"
4	A1	32	6'-11"	6'-11"		
4	A2	27	4'-2"	4'-2"		
4	A3	12	19'-11"	19'-11"		
4	B1	15	4'-10"		2'-0"	2'-10"
4	B2	15	3'-10"		1'-10"	2'-0"
5	A1	4	5'-3"	5'-3"		
5	A2	4	3'-9"	3'-9"		

"A" BARS "B" BARS NOTE: ALL BAR DIMENSIONS ARE OUT TO OUT BENDING DIAGRAM NOT TO SCALE

0358869-001-EG/17

ESCA ENGINEERING DET ARTMENT Warrington Basin Si

REINFORCING BAR LIST

SCALE AS SHOWN

S009

MOTT
MACDONALD

B1

B2

37

43

7'-2"

8'-4"

HDR Engineering, Inc. 25 West Cedar Street, Suite 200 Pensacola, FL 32502-5945 (850) 432-6800 www.hdrlnc.com

			PROJECT MANAGER	B. HENDRICKS
			DESIGNED BY	YSS
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A	10/20/17	ISSUED FOR PERMIT		
SSUE	DATE	DESCRIPTION	PROJECT NUMBER	13-14-081

3'-0"

3'-0"

4'-2"

5'-4"

Bart F. Hendricks

License No. 51391