JOINT PUBLIC NOTICE

February 10, 2020

United States Army
Corps of Engineers
New Orleans District
Attn: Regulatory Branch
7400 Leake Avenue
New Orleans, Louisiana 70118-3651

State of Louisiana
Department of Environmental Quality
Attn: Water Quality Certifications
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

Project Manager:
Amy Oestringer
(504) 862-2272
Amy.L.Oestringer@usace.army.mil
Application #: MVN-2013-01506-WQQ

Project Manager:
Elizabeth Hill
(225) 219-3225
WQC Application Number
WQC # 200205-03

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [X] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [X] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344).

The application has also been mailed to the Louisiana Department of Environmental Quality, for a Water Quality Certification (WQC) in accordance with statutory authority contained in Louisiana Revised Statute 30:2074 A(3), and provisions of Section 401 of the Clean Water Act (P.L. 95-17).

DRAINAGE IMPROVEMENTS IN POINTE COUPEE PARISH

NAME OF APPLICANT: Pointe Coupee Parish, c/o Patin Engineers and Surveyors, Inc., Attn: Cletus Langlois, 1111 Hospital Road, Suite D, New Roads, Louisiana 70760.

LOCATION OF WORK: located in Johnson Bayou Canal, near Batchelor, Louisiana, in Pointe Coupee Parish, as shown on the enclosed drawings.

Latitude: 30.727947° Longitude: -91.735933° Hydrologic Unit Code 08080101 (Atchafalaya River Basin)

CHARACTER OF WORK: The applicant has requested a permit to excavate approximately 130,000 cubic yards of accumulated sediments from the existing Johnson Canal pumping station influent canal to improve area drainage flow and capacity. All excavated spoil materials will be pumped to the Atchafalaya River and discharged at the surface. Approximately 13 acres of Waters of the US will be temporarily impacted by the project implementation. No wetland impacts are proposed, therefore no compensatory mitigation will be required.

The comment period for the Department of the Army Permit will close **20 days** from the date of this public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit must be mailed so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be mailed to the Corps

of Engineers at the address above, ATTENTION**: REGULATORY BRANCH**. Individuals or parties may request an extension of time in which to comment on the proposed work by writing or e-mailing the Corps of Engineers Project Manager listed above. Any request must be specific and substantively supportive of the requested extension, and received by this office prior to the end of the initial comment period. The Section Chief will review the request and the requestor will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous to the initial comment period and, inclusive of the initial comment period, will not exceed a total of 30 calendar days. Letters concerning the Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Copies of this public notice are being sent to the State Archeologist and State Historic Preservation Officer regarding potential impacts to cultural resources.

Our initial finding is that the proposed work would neither affect any species listed as endangered by the U.S. Departments of Interior or Commerce, nor affect any habitat designated as critical to the survival and recovery of any endangered species. Based on the South Louisiana Standard Local Operating Procedure for Endangered Species (SLOPES), as signed on October 22, 2014, between the U.S. Army Corps of Engineers, New Orleans and the U.S. Fish and Wildlife Service, it has been determined that the project would have no effect to any listed species.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal may result in the destruction, alteration, and/or disturbance of **N/A** acres of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency and certification that the proposed activity will not violate applicable water quality standards will be required from the Louisiana Department of Environmental Quality, Office of Environmental Services, before a permit is issued.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

You are invited to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

Darrell S. Barbara
Chief, Western Evaluation Section
Regulatory Branch

Enclosure

PLANS OF

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING

LOCATED IN

SECTIONS 9, 10, & 11, TOWNSHIP 4 SOUTH, RANGE 7 EAST

SOUTHEASTERN LAND DISTRICT, WEST OF THE MISSISSIPPI RIVER

POINTE COUPEE PARISH, STATE OF LOUISIANA

SEPTEMBER 2014

FUNDING BY LOUISIANA OFFICE OF COMMUNITY DEVELOPMENT/DISASTER RECOVERY UNIT

OWNER:

POINTE COUPEE PARISH POLICE JURY		POINTE COUPEE PARISH COUNCIL	
KYLE OLINDE, PRESIDENT		MAJOR THIBAUT, PRESIDENT	
MEMBERS (START OF PROJECT)	DISTRICT	MEMBERS (AS OF JAN. 2019)	DISTRICT
ALLEN MONK	1	JIMMIE GASPARD	A
JOHN POURCIAU	2	SIDNEY LACOSTE, II	B
RUSSELL YOUNG	3	EDWARD BAZILE	C
GLENN RAY CLINE	4	CHARLES WATKINS	D
KYLE OLINDE	5	EDWIN SOULIER	E
MELANIE L. BUECHE	6	DUSTIN BOUDREAUX	F
ALBERT DUKES	7	PAUL BERGERON	G
CORNELL DUKES	8	KURT JARREAU	H
JANET VOSBURG	9		
KURT JARREAU	10		
JUSTIN COX	11		
CLIFFORD NELSON	12		
JOHN GREZAFFI (PARISH ADMINISTRATOR)			
BLAINE BORDELON (DIRECTOR OF PUBLIC WORKS)			
JAMES DAVID (DIREC. OF PUB. WORKS)			

REVISION 2: 1/27/2020

RESIZED CONSTRUCTION PLANS TO 8.5" X 11" AS REQUIRED BY USCOE; ADDED INFORMATION FOR CLARITY AS REQUIRED AND REQUEST BY USCOE; CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (SHEET 8 AND 9 OF 11 WERE NOT INCLUDED BECAUSE DETAILS SHOWN ON THOSE PAGES WERE NOT REQUIRED FOR THIS PROJECT; SHEET 11 OF 11 WAS DELETED BECAUSE IN RESIZING THE CONSTRUCTION PLANS – DETAILS SHOWN ON SHEET 11 OF 11 THAT WERE PART OF THIS PROJECT ARE NOW SHOWN ON SHEET 10 OF 11)

REVISION 1: 4/1/2019

ADDED PIPELINE LOCATION

POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

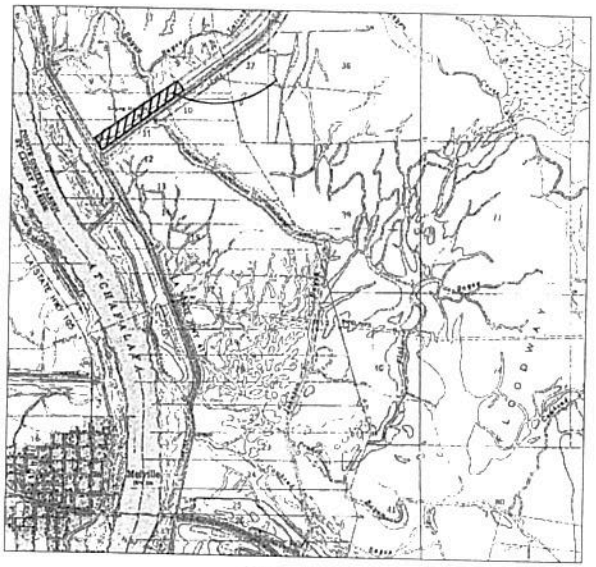
SHEET NO:	DESCRIPTION
1	TITLE SHEET
2	OVERALL SITE MAP
3	OVERALL PROJECT SITE AND TOPOGRAPHY
4	CROSS SECTIONS: STA: 0+58.22 TO 8+57.81
5	CROSS SECTIONS: STA: 9+23.48 TO 15+02.96
6	CROSS SECTIONS: STA: 17+02.96 TO 30+21.18
7	STORM WATER POLLUTION PREVENTION PLAN S.W.P.P.P. & SPOIL DISTRIBUTION
8	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (1 OF 11)
9	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (2 OF 11)
10	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (3 OF 11)
11	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (4 OF 11)
12	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (5 OF 11)
13	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (7 OF 11)
14	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (8 OF 11)
15	CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (10 OF 11)
16	CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (1 OF 4)
17	CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (2 OF 4)
18	CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (3 OF 4)
19	CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (4 OF 4)
20	EC-01: TEMPORARY EROSION CONTROL DETAILS (1 OF 2)
21	EC-01: TEMPORARY EROSION CONTROL DETAILS (2 OF 2)
22	FLOATING TURBIDITY BARRIER DETAIL
23	RIGHT-OF-WAY SERVITUDE/SURVEY DRAWING
24	PROPOSED SPOIL DISPOSAL (DISCHARGE)
25	PROPOSED SPOIL DISPOSAL (DISCHARGE) (CROSS SECTION)

PLANS PREPARED BY PATIN ENGINEERS & SURVEYORS, INC.

Thomas R. Olinde — 1/16/19

THOMAS R. OLINDE, P.E. — DATE

PATIN ENGINEERS AND SURVEYORS, INC.



VICINITY MAP

SCALE: 1"=2000'

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 1997 STANDARD SPECIFICATIONS FOR PUBLIC CONSTRUCTION OF THE EAST BATON ROUGE CITY-PARISH DEPARTMENT OF PUBLIC WORKS AND THE POINTE COUPEE PARISH UNIFIED DEVELOPMENT CODE, IN CASE OF CONFLICTS IN SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES AND STRUCTURES AND SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS. (CONTACT LOUISIANA-ONE-CALL: 1-800-272-3020 FOR UTILITY LOCATIONS)
3. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND THE DIRECTOR OF PUBLIC WORKS OF THE APPROPRIATE FEDERAL, STATE, OR PARISH DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING, TO REQUEST FIELD INSPECTIONS DURING ALL PHASES OF CONSTRUCTION CONTACT THE ENGINEER AND THE APPROPRIATE PUBLIC WORKS DEPARTMENT.
4. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A NOTICE OF INTENT (N.O.I.) TO THE LADEQ PRIOR TO CONSTRUCTION. A LPDES PERMIT WILL BE REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY CONTROLLING STORMWATER RUNOFF DURING CONSTRUCTION IN ACCORDANCE WITH LPDES AND PARISH OF POINTE COUPEE REQUIREMENTS.
5. A DOTD PERMIT WILL BE REQUIRED SHOULD ANY ACTIVITY FALL WITHIN A STATE RIGHT-OF-WAY. COORDINATE WITH PROJECT ENGINEER.
6. FINAL AS-BUILT SURVEY WILL BE REQUIRED AS DOCUMENTATION OF WORK PERFORMED UNDER THIS CONTRACT AND WILL SERVE TO VERIFY CONFORMITY TO CONSTRUCTION PLANS. NO ADDITIONAL COMPENSATION FOR OVER CUTTING CANAL OR STOCKPILING SPOIL WILL BE MADE. PAYMENT FOR FINAL AS-BUILT SURVEY WILL INCLUDED IN LUMP SUM PRICE.
7. PERFORMANCE OF ALL SUBSURFACE WORK WITHIN THE PROJECT AREA IS RESTRICTED WHEN THE STAGE OF THE MISSISSIPPI RIVER IS ABOVE +11.0 FEET ON THE CARROLLTON GAGE, AT NEW ORLEANS, LOUISIANA. WORK SHOULD BE SCHEDULED FOR PERFORMANCE DURING LOW-WATER PERIODS. POINTE COUPEE PARISH POLICE JURY HAS REQUESTED A WAIVER OF THAT +11.0 FEET RESTRICTION UP TO +15.0 FEET ON THE CARROLLTON GAGE (WAIVER PENDING REVIEW AND APPROVAL).

SITE BENCHMARK:

TBM: TEMPORARY BENCHMARK WILL BE PLACED AS NEEDED.

REFERENCE BENCHMARK:

DESIGNATED "PC-7"
THE MONUMENT IS A 9/16 INCH STAINLESS STEEL ROD FOUND IN GOOD CONDITION AND ENCASED BY A 6 INCH PVC PIPE WITH AN ALUMINUM ACCESS COVER STAMPED "PC-7 FROM WHICH THE LID IS MISSING. THE STATION IS 3.8 FEET EAST OF A BARBED WIRE FENCE, 22.8 FEET WEST OF THE CENTERLINE OF LA HWY 417, 88.3 FEET WEST OF A POWER POLE, AND 1.1 FEET EAST OF AN ORANGE CARSONITE WITNESS POST LOCATED IN POINTE COUPEE PARISH, LA, 1.0 MILES EAST OF MELVILLE, LA, 8.8 MILES WEST-SOUTHWEST OF MORGANZA, LA, AND 9.8 MILES NORTHWEST OF FORDOCHE, LA. TO REACH THE STATION FORM THE INTERSECTION OF LA HWY 10 AND LA HWY 417 TRAVEL NORTH ON LA HWY 417 FOR APPROXIMATELY 270 FEET AND THE STATION WILL BE ON THE LEFT.

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

PESI
PATIN ENGINEERS & SURVEYORS INCORPORATED
1111 HOSPITAL ROAD, SUITE D
NEW ROADS, LA 70760
OFFICE: (225) 387-2167

TITLE SHEET

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

THOMAS R. OLINDE REG. NO. 30980 PROFESSIONAL ENGINEER STATE OF LOUISIANA

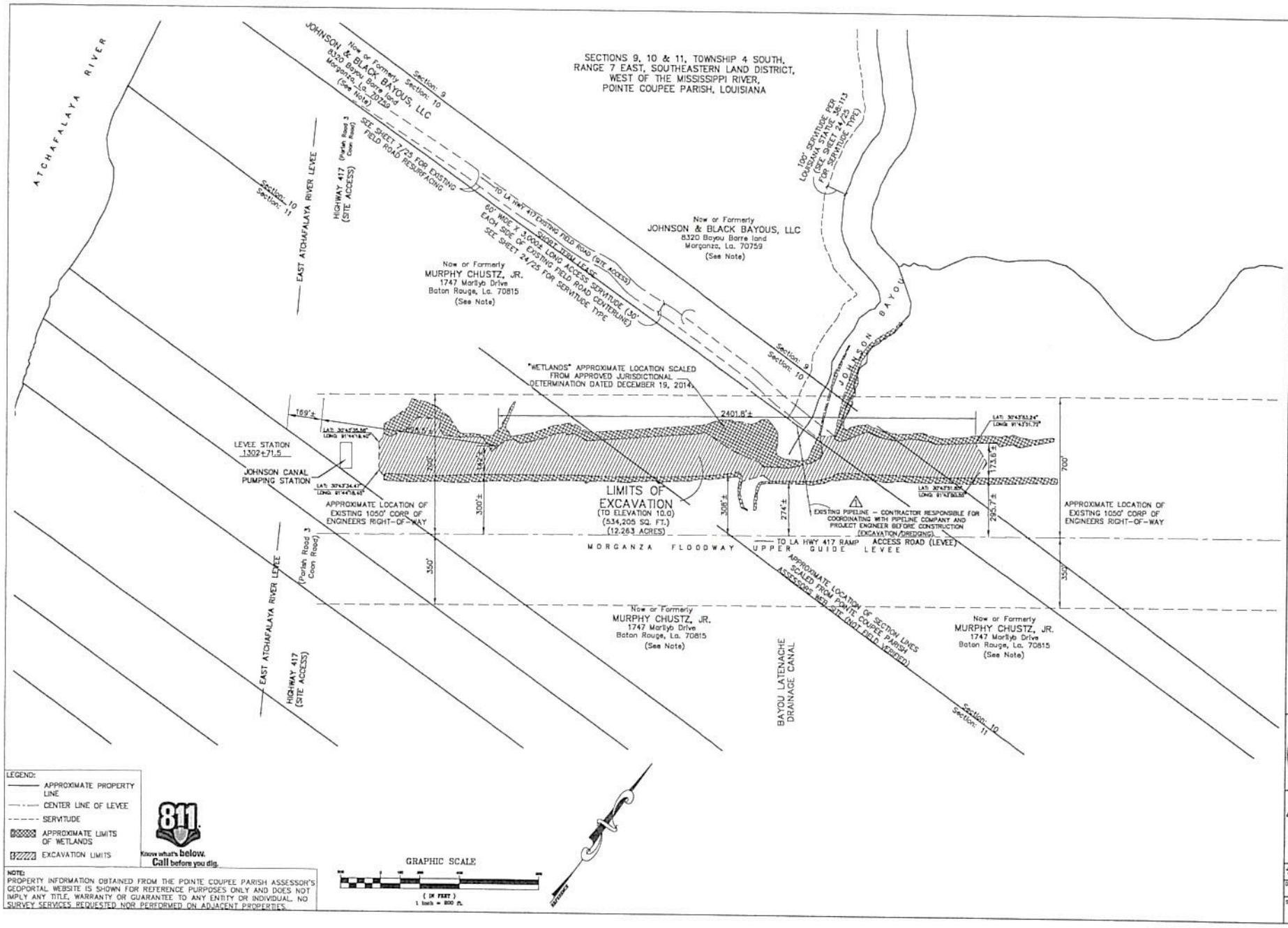
PROJECT STATUS: CONSTRUCTION READY

REVISIONS:

JOB NO. 13-183

DATE January, 2019

SHEET 1/25



LEGEND:
- APPROXIMATE PROPERTY LINE
- CENTER LINE OF LEVEE
- SERVITUDE
- APPROXIMATE LIMITS OF WETLANDS
- EXCAVATION LIMITS

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NOTE:
PROPERTY INFORMATION OBTAINED FROM THE POINTE COUPEE PARISH ASSESSOR'S GEOPORTAL WEBSITE IS SHOWN FOR REFERENCE PURPOSES ONLY AND DOES NOT IMPLY ANY TITLE, WARRANTY OR GUARANTEE TO ANY ENTITY OR INDIVIDUAL. NO SURVEY SERVICES REQUESTED NOR PERFORMED ON ADJACENT PROPERTIES.

GRAPHIC SCALE
(IN FEET)
1 inch = 800 ft.

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1111 HOSPITAL ROAD, SUITE B
NEW ROADS, LA 70760
OFFICE: (225) 307-2167

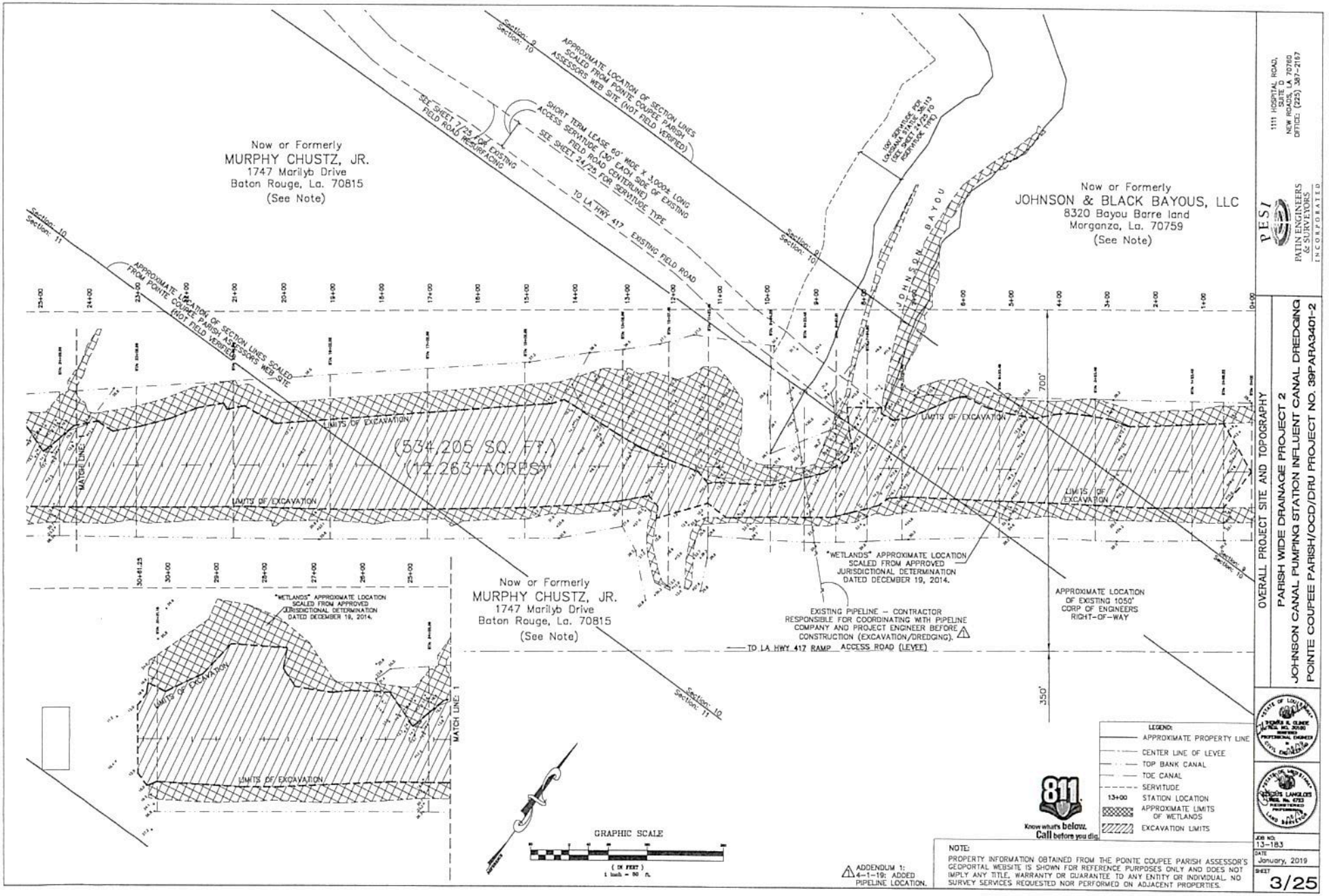
OVERALL SITE MAP

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PAPA3401-2

STATE OF LOUISIANA
THOMAS R. CLINE
REG. NO. 30550
PROFESSIONAL ENGINEER
CIVIL ENGINEER

ADDENDUM 1: 4-1-19: ADDED PIPELINE LOCATION

JOB NO. 13-183
DATE January, 2019
SHEET 2/25



ADDENDUM 1:
4-1-19: ADDED PIPELINE LOCATION.

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PROPERTY INFORMATION OBTAINED FROM THE POINTE COUPEE PARISH ASSESSOR'S GEOPORTAL WEBSITE IS SHOWN FOR REFERENCE PURPOSES ONLY AND DOES NOT IMPLY ANY TITLE, WARRANTY OR GUARANTEE TO ANY ENTITY OR INDIVIDUAL. NO SURVEY SERVICES REQUESTED NOR PERFORMED ON ADJACENT PROPERTIES.

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NEW ROADS, LA 70760
OFFICE: (225) 387-2167

OVERALL PROJECT SITE AND TOPOGRAPHY

PARISH WIDE DRAINAGE PROJECT 2

JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING

POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

JOB NO. 13-183
DATE January, 2019
SHEET 3/25

STATE OF LOUISIANA
CLETUS LANDRY
REG. No. 4733
REGISTERED PROFESSIONAL
LAND SURVEYOR

PROPOSED SPOIL DISPOSAL (DISCHARGE)

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION
INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU
PROJECT NO. 39PARA3401-2

LOCATED IN
SECTIONS 19, 10 & 11, TOWNSHIP 4 SOUTH, RANGE 7 EAST,
SOUTHEASTERN LAND DISTRICT, WEST OF THE MISSISSIPPI RIVER,
POINTE COUPEE PARISH, STATE OF LOUISIANA

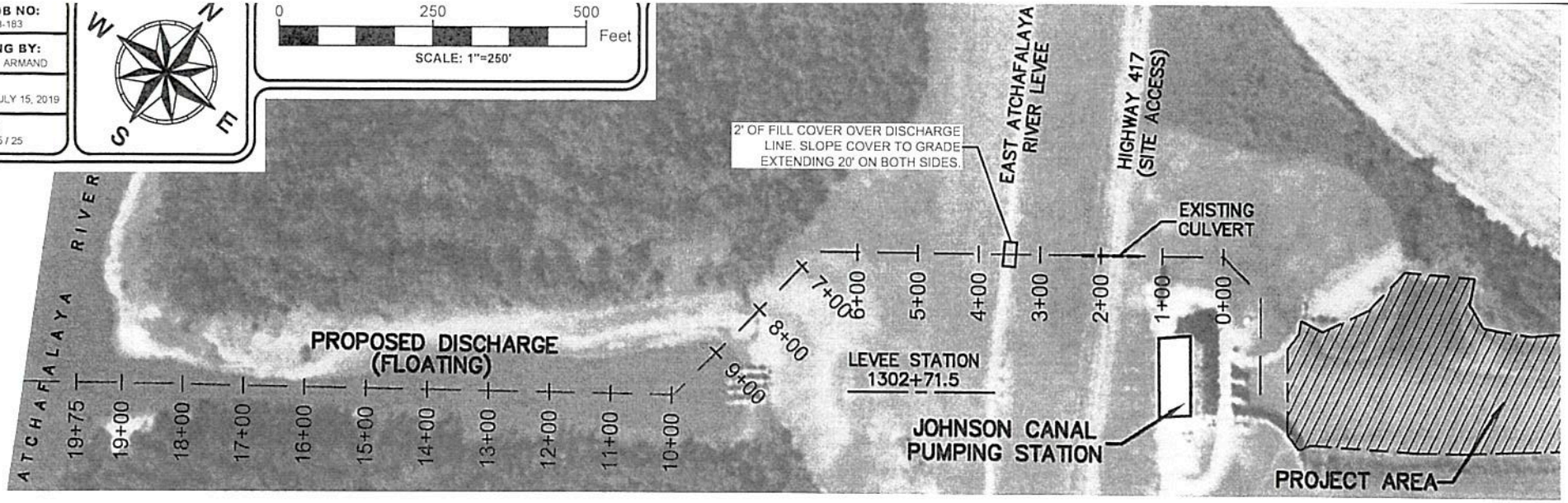
PESI JOB NO:	13-183
DRAWING BY:	P. ARMAND
DATE:	JULY 15, 2019
SHEET:	24 / 25

1111 HOSPITAL ROAD, SUITE D
NEW ROADS, LA 70760
OFFICE: (225) 387-2167

PESI JOB NO:	13-183
DRAWING BY:	P. ARMAND
DATE:	JULY 15, 2019
SHEET:	25 / 25

0 250 500 Feet

SCALE: 1"=250'

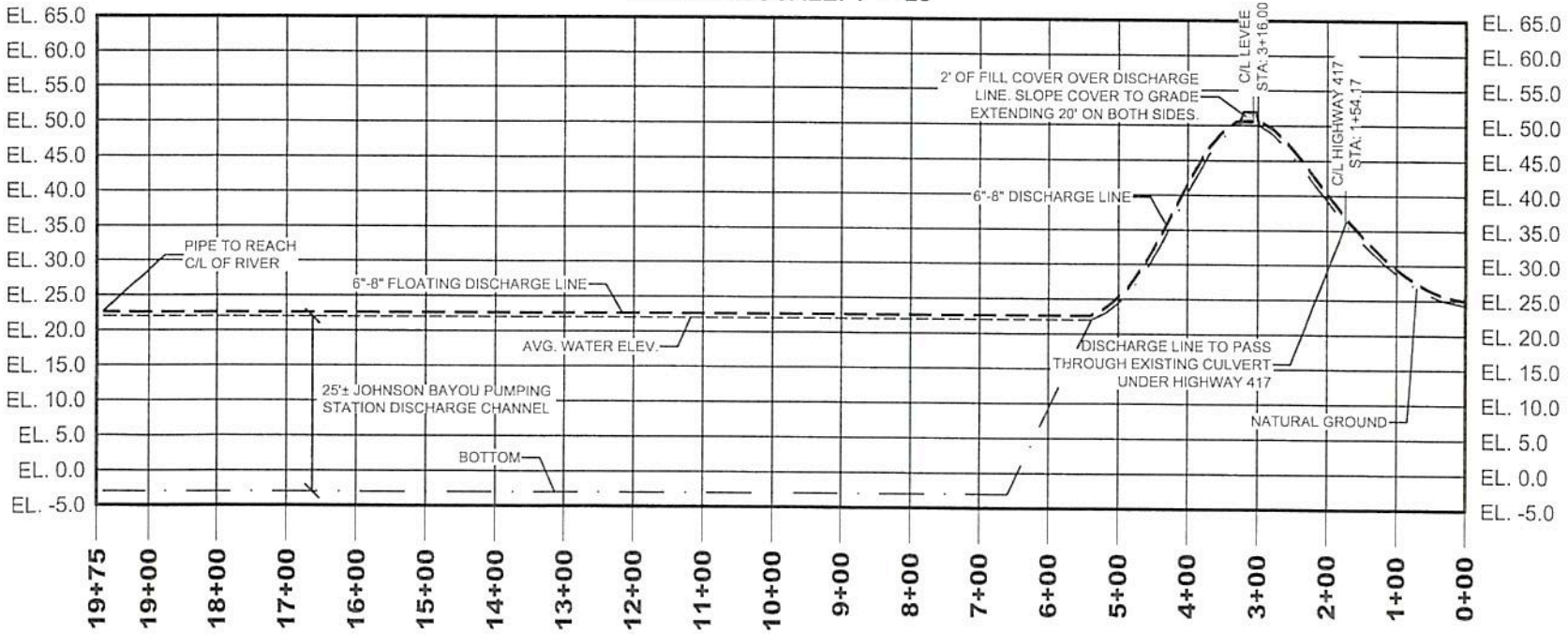


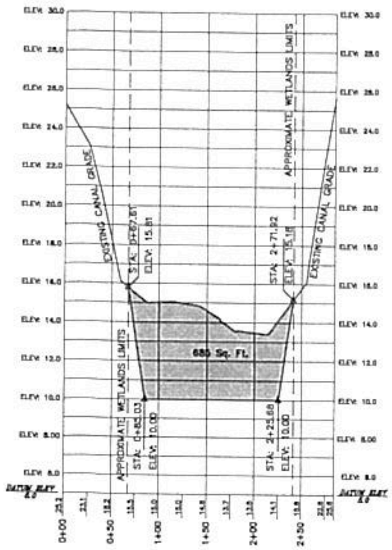
PLAN & PROFILE:

STA 0+00 - STA 19+75

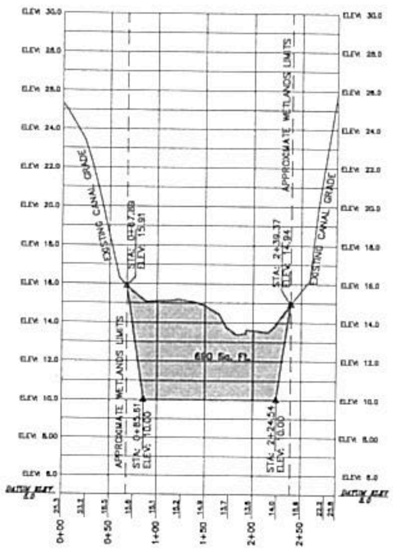
HORIZONTAL SCALE: 1" = 250'

VERTICAL SCALE: 1" = 25'





CROSS SECTION
STA 0+58.22
JOHNSON CANAL PUMPING STATION
(SCALE: 1"=60')



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STA 1+23.48
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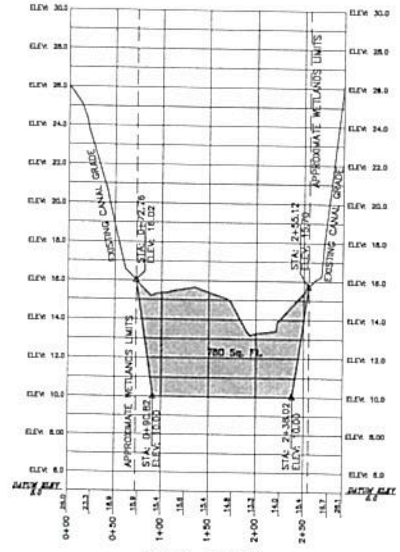
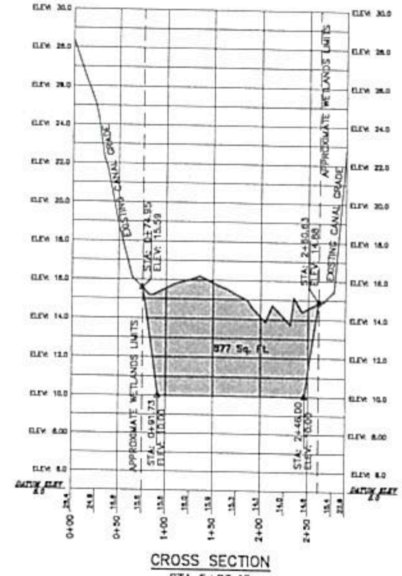
(SCALE: 1"=60')



CROSS SECTION
STA 3+23.48
JOHNSON CANAL PUMPING STATION
(SCALE: 1"=60')



CROSS SECTION
STA 5+23.48
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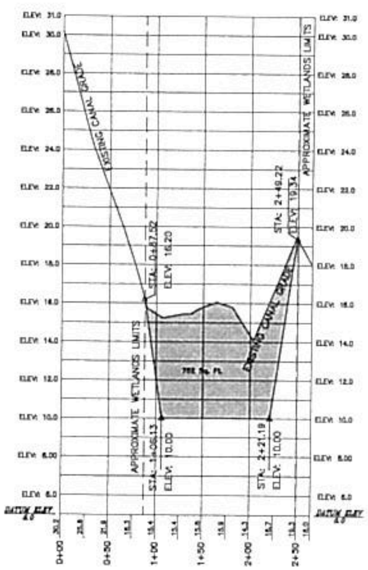
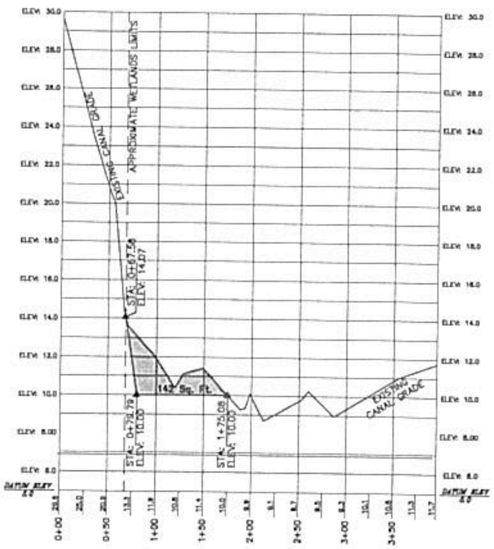
(SCALE: 1"=60')



CROSS SECTION
STA 7+23.48
JOHNSON CANAL
PUMPING STATION
(SCALE: 1"=60')



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STA 7+94.80
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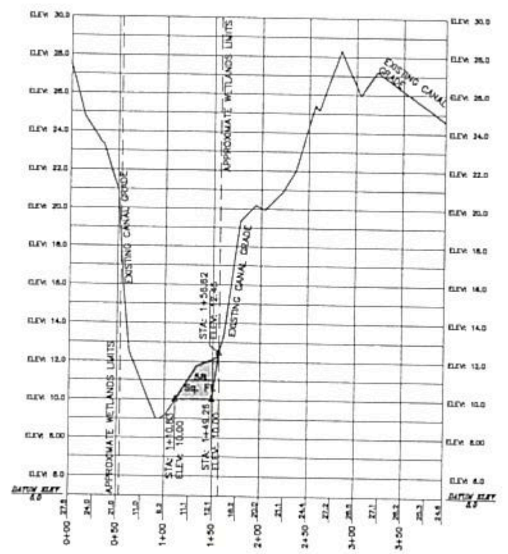
(SCALE: 1"=60')



CROSS SECTION
STA 8+57.81
JOHNSON CANAL PUMPING STATION
(SCALE: 1"=60')

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NEW ROADS, LA 70760
OFFICE: (225) 387-2167

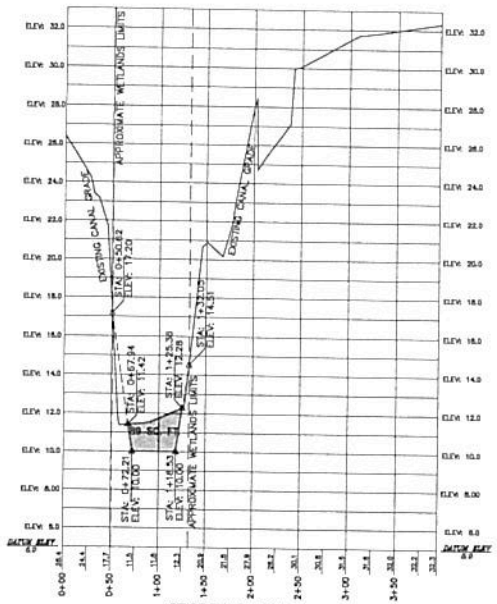
PESI
PATIN ENGINEERS & SURVEYORS
INCORPORATED

CROSS SECTIONS: STA: 0+58.22 TO 5+57.81

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO: 13-183
DATE: January, 2019
SHEET



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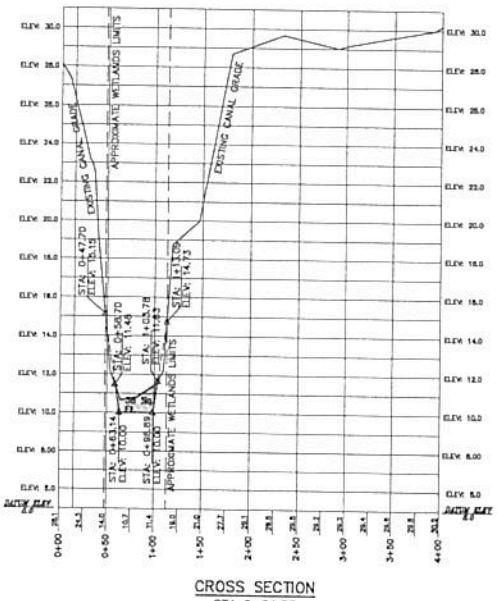

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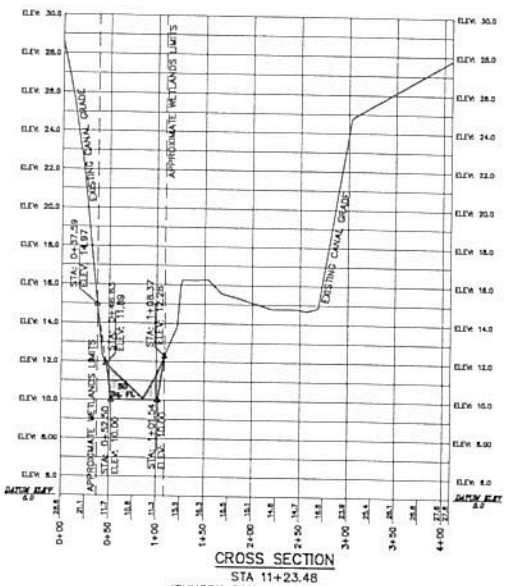

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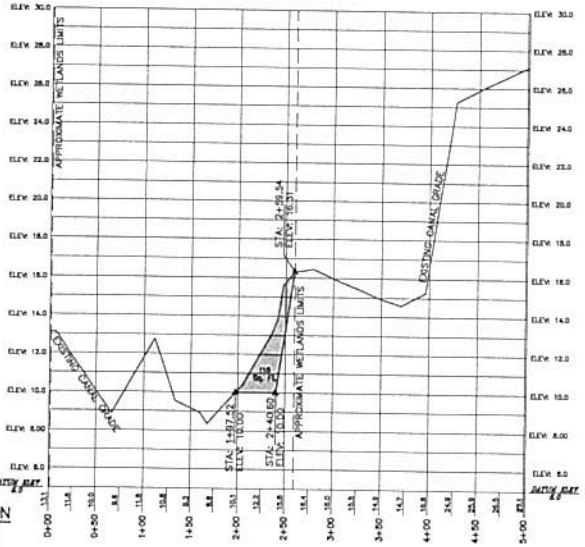

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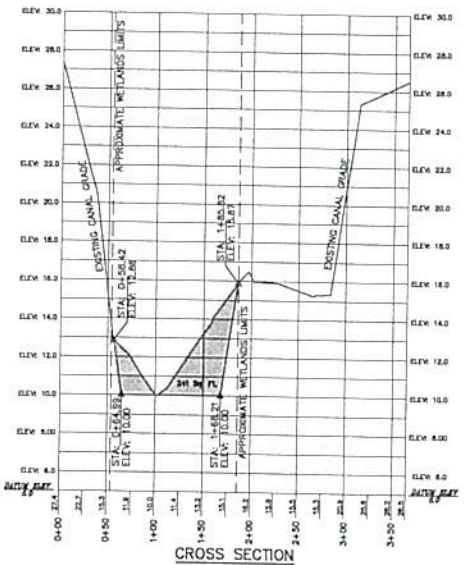
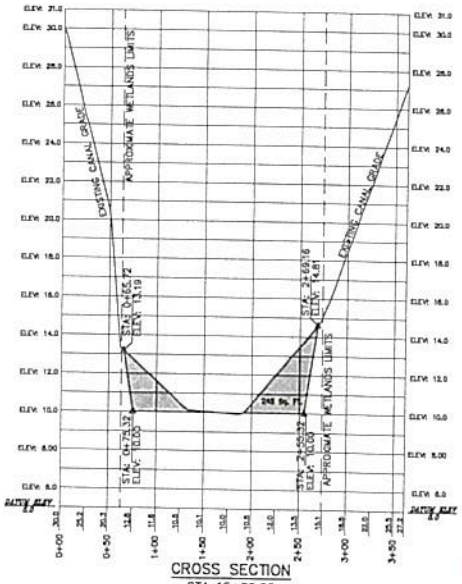
PUMPING STATION
(SCALE: 1"=60')



CROSS SECTION
STA 13+02.96
JOHNSON CANAL PUMPING STATION
(SCALE: 1"=60')



CROSS SECTION
STA 15+02.95
JOHNSON CANAL PUMPING STATION
(SCALE: 1"=60')

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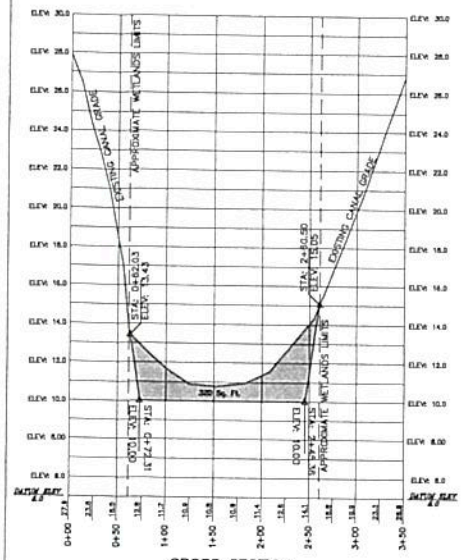
OFFICE: (225) 387-2167

CROSS SECTIONS: STA: 9+23.48 TO 15+02.96
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

STATE OF LOUISIANA
THOMAS R. CLARK
No. 30180
PROFESSIONAL ENGINEER
CIVIL

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 5/25



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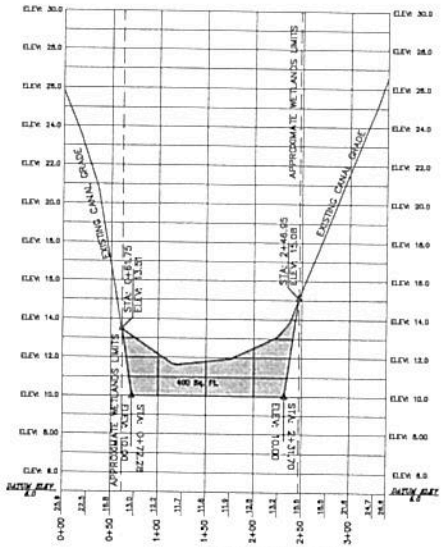

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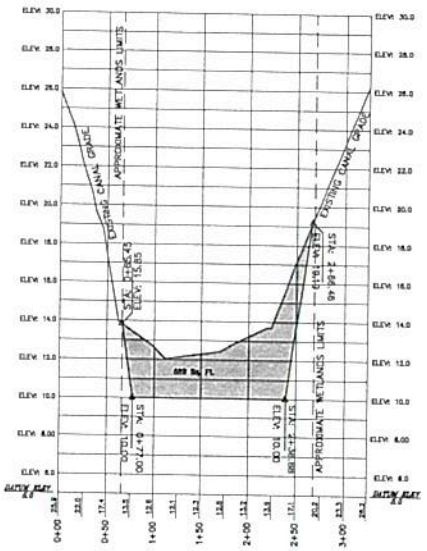

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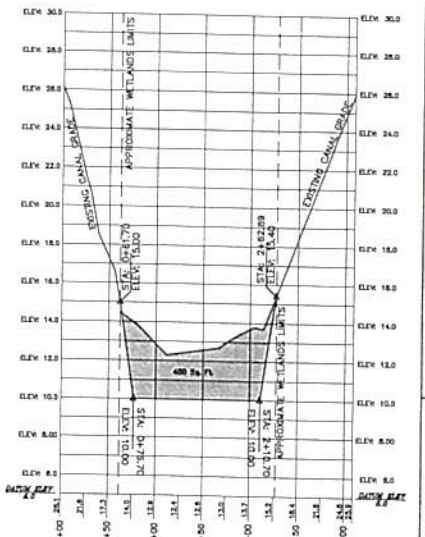

CROSS SECTION
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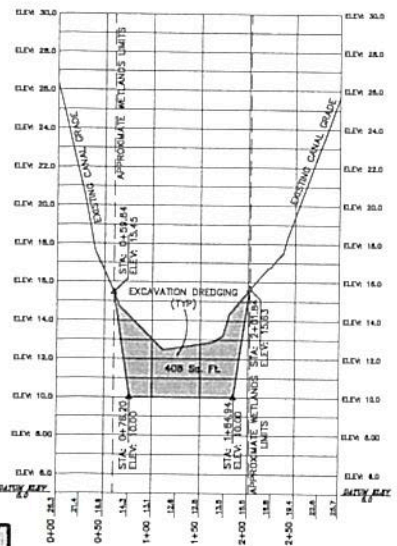

CROSS SECTION
STA 24+59.96
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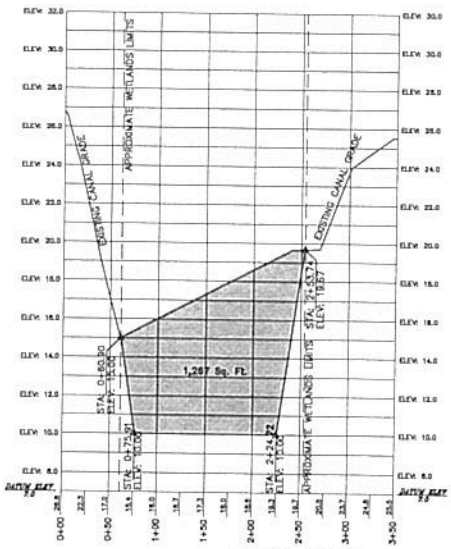
(SCALE: 1"=60')



CROSS SECTION
STA 30+21.18
JOHNSON CANAL PUMPING STATION
(SCALE: 1"=60')

811
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EXCAVATION DREDGING TABLE (BIN 2030400)					
STA	LENGTH	SEC AREA	AVG. SEC. AREA	VOLUME (FT3)	VOLUME (YD3)
0+00.0		0			
	58.22		343	19,969	740
0+58.22		685			
	65.26		688	44,899	1,663
1+23.48		690			
	200.00		735	147,000	5,444
3+23.48		780			
	200.00		829	165,800	6,141
5+23.48		877			
	200.00		820	164,000	6,074
7+23.48		762			
	71.32		452	32,237	1,194
7+94.80		142			
	63.01		100	6,301	233
8+57.81		58			
	65.67		74	4,860	180
9+23.48		89			
	70.77		84	4,529	168
9+94.25		36			
	129.23		44	5,688	211
11+23.48		50			
	83.94		83	6,967	258
12+07.42		115			
	95.54		178	17,006	630
13+02.96		241			
	200.00		243	48,600	1,800
15+02.96		245			
	200.00		283	56,600	2,096
17+02.96		320			
	200.00		360	72,000	2,667
19+02.96		400			
	200.00		485	97,000	3,593
21+02.96		569			
	200.00		510	102,000	3,778
23+02.96		450			
	157.00		429	67,353	2,495
24+59.96		408			
	561.22		838	470,022	17,408
30+21.18		1,267			
	40.07		634	25,404	941
30+61.25		0			
TOTAL					57,824

EXCAVATION/DREDGING:
FINAL CROSS SECTION OF INFLUENT CANAL SHALL CONFORM TO CROSS SECTIONS SHOWN ON SHEETS 4, 5 & 6. FINAL CROSS SECTIONS WILL BE PERFORMED BY PESI. EXCAVATION /DREDGED MATERIAL SHALL BE DISPOSED OFFSITE. OFFSITE DISPOSAL SITE SHALL BE APPROVED BY THE ENGINEER OF RECORD OR HIS REPRESENTATIVE. OFFSITE STOCKPILE OF EXCAVATED/DREDGED MATERIAL SHALL BE DEPOSITED TO DRAIN FREELY WITHOUT INTERRUPTION OF EXISTING DRAINAGE PATTERNS. EROSION CONTROL FOR THE DEPOSIT SITE SHALL CONFORM TO EAST BATON ROUGE CITY PARISH STANDARDS PLAN 903-01: STORM POLLUTION PREVENTION PLAN, BEST MANAGEMENT PRACTICES (SHEETS 8-16 OF THESE PLANS).

NO ADDITIONAL COMPENSATION FOR OVER CUTTING INFLUENT CANAL, STOCKPILING MATERIAL, INTERIM REPAIRS TO THE ACCESS ROAD OR FINAL GRADING OF SPOIL SITE WILL BE MADE.

NO ADDITIONAL COMPENSATION WILL BE MADE FOR CORRECTIVE ACTION TO MAINTAIN EXISTING DRAINAGE INFRASTRUCTURE EITHER BY REPAIR/REPLACEMENT OF EXISTING DRAINAGE STRUCTURES OR REMOVAL OF SEDIMENT FROM EXISTING DRAINAGE CHANNELS.

ANY DAMAGE TO THE EXISTING MORGANZA FLOODWAY UPPER GUIDE LEVEE WILL BE REPAIRED BY THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE MADE FOR THESE REPAIRS.

CONTRACTOR WILL PRODUCE AN EROSION CONTROL PLAN FOR ENGINEER'S APPROVAL PRIOR TO COMMENCEMENT OF SPOIL DEPOSITION.

TURBIDITY CURTAINS SHALL REMAIN IN PLACE AFTER COMPLETION OF WORK.

USACE APPROVED (J.D.) OFFSITE SPOIL DEPOSIT SITES ARE DELINEATED ON SHEET 25/25

ESTIMATED EXCAVATION/DREDGING QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE CORRECT QUANTITIES REQUIRED TO COMPLETE THE PROJECT. NO ADJUSTMENT ON CONTRACT PRICE WILL BE MADE.

THE CONTRACTOR IS RESPONSIBLE FOR ALL NEGOTIATIONS WITH THE LANDOWNER OF THE DISPOSAL SITE. A COPY OF THE AGREEMENT BETWEEN THE CONTRACTOR AND THE LAND OWNER MUST BE PROVIDED PRIOR TO ISSUANCE OF THE NOTICE TO PROCEED. NO SEPARATE PAY WILL BE MADE TO THE LAND OWNER NOR THE CONTRACTOR FOR USE OF THE DISPOSAL SITE PROPERTY.

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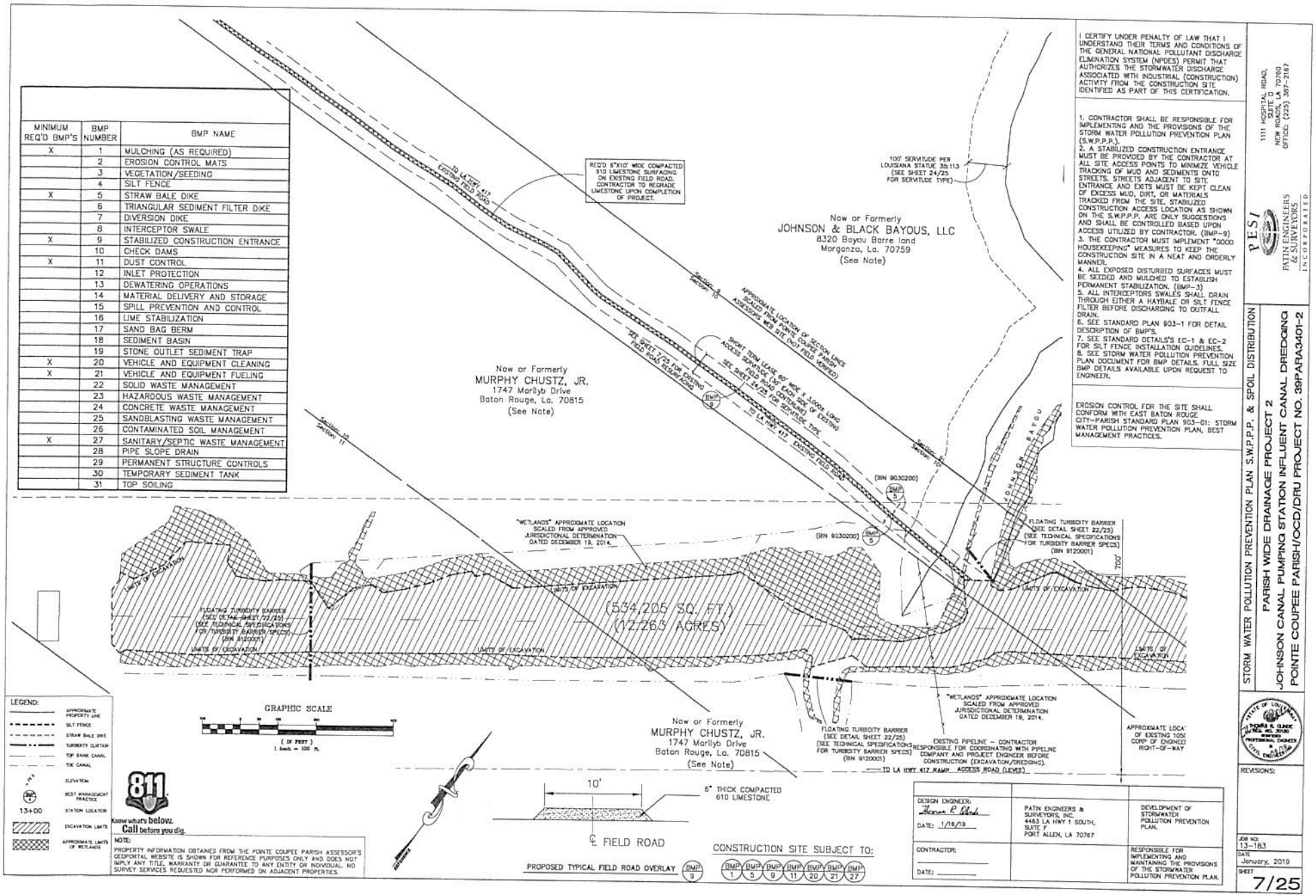
CROSS SECTIONS: STA: 17+02.96 TO 24+59.96
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO: 13-183
DATE: January, 2019
SHEET: 6/25



MINIMUM REQ'D BMP'S	BMP NUMBER	BMP NAME
X	1	MULCHING (AS REQUIRED)
	2	EROSION CONTROL MATS
	3	VEGETATION/SEEDING
	4	SILT FENCE
X	5	STRAW BALE DIKE
	6	TRIANGULAR SEDIMENT FILTER DIKE
	7	DIVERSION DIKE
	8	INTERCEPTOR SWALE
X	9	STABILIZED CONSTRUCTION ENTRANCE
	10	CHECK DAMS
X	11	DUST CONTROL
	12	INLET PROTECTION
	13	DEWATERING OPERATIONS
	14	MATERIAL DELIVERY AND STORAGE
	15	SPILL PREVENTION AND CONTROL
	16	LIME STABILIZATION
	17	SAND BAG BERM
	18	SEDIMENT BASIN
	19	STONE OUTLET SEDIMENT TRAP
X	20	VEHICLE AND EQUIPMENT CLEANING
X	21	VEHICLE AND EQUIPMENT FUELING
	22	SOLID WASTE MANAGEMENT
	23	HAZARDOUS WASTE MANAGEMENT
	24	CONCRETE WASTE MANAGEMENT
	25	SANDBLASTING WASTE MANAGEMENT
	26	CONTAMINATED SOIL MANAGEMENT
X	27	SANITARY/SEPTIC WASTE MANAGEMENT
	28	PIPE SLOPE DRAIN
	29	PERMANENT STRUCTURE CONTROLS
	30	TEMPORARY SEDIMENT TANK
	31	TOP SOILING

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THEIR TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL (CONSTRUCTION) ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND THE PROVISIONS OF THE STORM WATER POLLUTION PREVENTION PLAN (S.W.P.P.P.).
2. A STABILIZED CONSTRUCTION ENTRANCE MUST BE PROVIDED BY THE CONTRACTOR AT ALL SITE ACCESS POINTS TO MINIMIZE VEHICLE TRACKING OF MUD AND SEDIMENTS ONTO STREETS. STREETS ADJACENT TO SITE ENTRANCE AND EXITS MUST BE KEPT CLEAN OF EXCESS MUD, DIRT, OR MATERIALS TRACKED FROM THE SITE. STABILIZED CONSTRUCTION ACCESS LOCATION AS SHOWN ON THE S.W.P.P.P. ARE ONLY SUGGESTIONS AND SHALL BE CONTROLLED BASED UPON ACCESS UTILIZED BY CONTRACTOR. (BMP-9)
3. THE CONTRACTOR MUST IMPLEMENT "GOOD HOUSEKEEPING" MEASURES TO KEEP THE CONSTRUCTION SITE IN A NEAT AND ORDERLY MANNER.
4. ALL EXPOSED DISTURBED SURFACES MUST BE SEEDED AND MULCHED TO ESTABLISH PERMANENT STABILIZATION. (BMP-3)
5. ALL INTERCEPTORS SWALES SHALL DRAIN THROUGH EITHER A HAYBALE OR SILT FENCE FILTER BEFORE DISCHARGING TO OUTFALL DRAIN.
6. SEE STANDARD PLAN 903-1 FOR DETAIL DESCRIPTION OF BMP'S.
7. SEE STANDARD DETAILS'S EC-1 & EC-2 FOR SILT FENCE INSTALLATION GUIDELINES.
8. SEE STORM WATER POLLUTION PREVENTION PLAN DOCUMENT FOR BMP DETAILS. FULL SIZE BMP DETAILS AVAILABLE UPON REQUEST TO ENGINEER.

EROSION CONTROL FOR THE SITE SHALL CONFORM WITH EAST BATON ROUGE CITY-PARISH STANDARD PLAN 903-01: STORM WATER POLLUTION PREVENTION PLAN, BEST MANAGEMENT PRACTICES.

LEGEND:
- APPROXIMATE PROPERTY LINE
- SILT FENCE
- STRAW BALE DIKE
- TURBIDITY CURTAIN
- TOP BANK CANAL
- TOE CANAL
- ELEVATION
- BMP 9 — BEST MANAGEMENT PRACTICE
- 13+00 — STATION LOCATION
- EXCAVATION LIMITS
- APPROXIMATE LIMITS OF WETLANDS

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NOTE:
PROPERTY INFORMATION OBTAINED FROM THE POINTE COUPEE PARISH ASSESSOR'S GEOPORTAL WEBSITE IS SHOWN FOR REFERENCE PURPOSES ONLY AND DOES NOT IMPLY ANY TITLE, WARRANTY OR GUARANTEE TO ANY ENTITY OR INDIVIDUAL. NO SURVEY SERVICES REQUESTED NOR PERFORMED ON ADJACENT PROPERTIES.

DESIGN ENGINEER: Warren P. Patin DATE: 1/18/19	PATIN ENGINEERS & SURVEYORS, INC. 4463 LA HWY 1 SOUTH, SUITE F PORT ALLEN, LA 70767	DEVELOPMENT OF STORMWATER POLLUTION PREVENTION PLAN.
CONTRACTOR: DATE:		RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING THE PROVISIONS OF THE STORMWATER POLLUTION PREVENTION PLAN.

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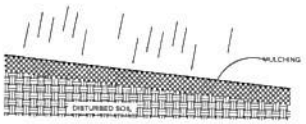
STORM WATER POLLUTION PREVENTION PLAN S.W.P.P.P. & SPOIL DISTRIBUTION

PARISH WIDE DRAINAGE PROJECT 2

JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO: 13-183
DATE: January, 2019
SHEET: 7/25



DESCRIPTION: MULCHING IS THE APPLICATION OF A LAYER OF CHOPPED STRAW, HAY OR OTHER MATERIAL WHICH IS SPREAD UNIFORMLY OVER BARREN AREAS TO REDUCE THE EFFECTS OF EROSION FROM RAINFALL. TYPES OF MULCH INCLUDE ORGANIC MATERIALS, STRAW, WOOD CHIPS, BARK OR OTHER FIBERS. MULCH ALSO COMES IN PREPACKAGED FORMS, USING STRAW, HAY OR OTHER MATERIAL WITH ORGANIC AND INORGANIC BINDING SYSTEMS.

PRIMARY USE: MULCH IS USED TO TEMPORARILY AND/OR PERMANENTLY STABILIZE CLEAR OR FRESHLY SEEDED AREAS. IT PROTECTS THE SOIL FROM EROSION AND MOISTURE LOSS BY LESSENING THE EFFECTS OF WIND, WATER, AND SUNLIGHT. IT ALSO DECREASES THE VELOCITY OF SHEET FLOW, THEREBY REDUCING THE VOLUME OF SEDIMENT-LADEN WATER FLOW LEAVING THE MULCHED AREA.

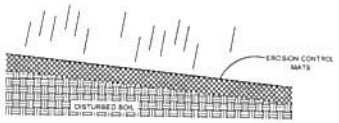
APPLICATION: MULCH MAY BE USED ON ANY CONSTRUCTION-RELATED DISTURBED AREA FOR SURFACE PROTECTION INCLUDING: 1.) FRESHLY SEEDED OR PLANTED AREAS. 2.) AREAS AT RISK DUE TO THE TIME PERIOD BEING UNSUITABLE FOR GROWING VEGETATION. 3.) AREAS THAT ARE NOT CONDUCTIVE TO SEEDING OR PLANTING.

DESIGN CRITERIA: MULCH MAY BE USED BY ITSELF OR IN COMBINATION WITH NETTING OR OTHER ANCHORS TO PROMOTE SOIL STABILIZATION. SEVERAL MANUFACTURES PROVIDE AN ORGANIC MULCH WITH AN ATTACHED NETTING TO SIMPLIFY INSTALLATION. INSTALLATION SHOULD ADHERE TO MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS. CHOICE OF MULCH DEPENDS LARGELY DEPENDS ON SLOPE, CLIMATE, AND SOIL TYPE IN ADDITION TO AVAILABILITY OF DIFFERENT MATERIALS. STRAW AND HAY ARE THE RECOMMENDED CHOICES DUE TO THEIR AVAILABILITY AND BIODEGRADABILITY.
MULCH SHOULD BE APPLIED IN AN EVEN AND UNIFORM MANNER WHERE CONCENTRATED WATER FLOW IS NEGLIGIBLE. APPLICATION OF STRAW OR HAY MULCH SHOULD BE APPROXIMATELY 2 TONS DRY PER ACRE SPREAD UNIFORMLY ACROSS THE DISTURBED AREA. OTHER MATERIAL SHOULD NE APPLIED SUCH THAT 25% OF THE SOIL IS VISIBLE THROUGH THE MULCH. FOR AREAS USING STRAW MULCH AND THE SLOPE GREATER THAN 3-5%, ANCHORING OF THE MULCH WITH A KRIMPER TOOL IS REQUIRED.

LIMITATIONS: MULCHES ARE SUBJECT TO REMOVAL BY WIND OR WATER UNDER SEVERE CLIMATIC CONDITIONS. MULCHES LOWER THE SOIL TEMPERATURE WHICH MAY RESULT IN LONGER SEED GERMINATION PERIODS.

MAINTENANCE REQUIREMENTS: MULCHED AREAS MUST BE INSPECTED ON A WEEKLY BASIS, AND AFTER SIGNIFICANT (>0.5INCH) RAINFALL, FOR THIN OR BARE SPOTS CAUSED BY NATURAL DECOMPOSITION OR WEATHER RELATED EVENTS. MULCH IN HIGH TRAFFIC AREAS SHOULD BE REPLACED ON A REGULAR BASIS TO MAINTAIN UNIFORM PROTECTION.

BMP 1 **MULCHING**
(NOT TO SCALE)



DESCRIPTION: AN EROSION CONTROL MAT (ECM) IS A GEOMEMBRANE OR BIODEGRADABLE FABRIC PLACED OVER DISTURBED AREAS TO LIMIT THE EFFECTS OF EROSION DUE TO RAINFALL IMPACT AND RUNOFF ACROSS BARREN SOIL. EROSION CONTROL MATS ARE MANUFACTURED BY A WIDE VARIETY OF VENDORS ADDRESSING A WIDE VARIETY OF CONDITIONS SUCH AS VEGETATION ESTABLISHMENT, PROTECTION FROM HEAVY RAINFALL, AND HIGH VELOCITY FLOW. TYPES OF MATTING INCLUDE ORGANIC (JUTE, STRAW) AND SYNTHETIC (PLASTIC, AND GLASS FIBER) MATERIALS.

PRIMARY USE: MATS CAN BE PROVIDED BOTH TEMPORARY AND/OR PERMANENT STABILIZATION FOR DISTURBED SOIL OR BARREN AREAS. IT IS USED FOR DIFFICULT TO STABILIZE AREAS SUCH AS STEEP SLOPES, TEMPORARY OR PERMANENT DRAINAGE SWALES, EMBANKMENTS OR HIGH TRAFFIC (PEDESTRIAN) AREAS. SOME MATS ARE REUSABLE, REDUCING THE INITIAL COST OF THE INSTALLATION.

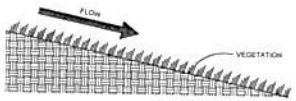
APPLICATIONS: MATS CAN BE USED ON ANY CONSTRUCTION-RELATED DISTURBED AREA, BUT ARE PARTICULARLY EFFECTIVE FOR EROSION CONTROL OF FINE GRAINED SOILS, AND ON SHORT, STEEP SLOPES (SUCH AS STREAM BANKS) WHERE EROSION IS HIGH AND GROWTH OF VEGETATION IS SLOW.

DESIGN CRITERIA: A MAT MAY BE USED BY ITSELF OR IN COMBINATION WITH NETTING OR OTHER ANCHORS TO PROMOTE SOIL STABILIZATION. CHOICE OF MATTING DEPENDS LARGELY ON SLOPE, CLIMATE, SOIL TYPE, AND DURABILITY. MATS ARE USUALLY INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDED GUIDELINES. AFTER APPROPRIATE INSTALLATION, THE MATTING SHOULD BE CHECKED FOR: UNIFORM CONTACT WITH THE SOIL; SECURITY OF THE LAP JOINTS; AND FLUSHNESS OF THE STAPLES WITH THE GROUND.
MANUFACTURERS INFORMATION WILL VERIFY ACCEPTABLE APPLICATIONS FOR A PARTICULAR PRODUCT.

LIMITATIONS: ALTHOUGH MATTING IS HIGHLY EFFECTIVE IN CONTROLLING EROSION, IT MAY BE LESS COST-EFFECTIVE THAN OTHER BMPS FOR EROSION CONTROL AND IT MAY REQUIRE A CONTRACTOR WITH CONSIDERABLE MAT INSTALLATION EXPERIENCE FOR INSTALLATION.

MAINTENANCE REQUIREMENTS: MATTED AREAS MUST BE INSPECTED ON A WEEKLY BASIS, AND AFTER SIGNIFICANT (>0.5 INCH) RAINFALL, FOR BARE SPOTS CAUSED BY WEATHER RELATED EVENTS. MISSING OR LOOSENED MATTING MUST BE REPLACED OR RE-ANCHORED.

BMP 2 **EROSION CONTROL MATS**
(NOT TO SCALE)



DESCRIPTION: VEGETATION, AS A BEST MANAGEMENT PRACTICE, IS THE SHOWING OF ANNUAL GRASSES, SMALL GRAINS OR LEGUMES TO PROVIDE INTERIM AND PERMANENT VEGETATIVE STABILIZATION FOR DISTURBED AREAS. UNLESS OTHERWISE SPECIFIED, BERMUDA GRASS IS TO BE USED FOR PERMANENT SEEDING. TEMPORARY STABILIZATION MAY BE ACHIEVED DURING WINTER BY SEEDING WITH RYE GRASS.

PRIMARY USE: VEGETATION IS USED AS A TEMPORARY OR PERMANENT STABILIZATION TECHNIQUE FOR AREAS DISTURBED BY CONSTRUCTION BUT NOT PROTECTED BY PAVEMENT, BUILDING OR OTHER STRUCTURES. AS A TEMPORARY CONTROL, VEGETATION IS USED TO STABILIZE STOCKPILES AND BARREN AREAS WHICH ARE INACTIVE FOR LONG PERIODS OF TIME. AS A PERMANENT CONTROL, GRASSES AND OTHER VEGETATION PROVIDE GOOD PROTECTION FOR THE SOIL ALONG WITH SOME FILTERING FOR OVERLAND RUNOFF. SUBJECTED TO ACCEPTABLE RUNOFF VELOCITIES , VEGETATION CAN PROVIDE A GOOD METHOD OF PERMANENT STORM WATER MANAGEMENT AS WELL AS A VISUAL AMENITY TO THE SITE. OTHER BMPS MAY BE REQUIRED TO ASSIST IN THE ESTABLISHMENT OF VEGETATION. THESE OTHER TECHNIQUES INCLUDE EROSION CONTROL MATTING, SWALES AND DIKES TO DIRECT FLOW AROUND NEWLY SEEDED AREAS AND PROPER GRADING TO LIMIT RUNOFF VELOCITIES DURING CONSTRUCTION.

APPLICATIONS: VEGETATIVE TECHNIQUES CAN AND SHOULD APPLY TO EVERY CONSTRUCTION PROJECT WITH FEW EXCEPTIONS. VEGETATION EFFECTIVELY REDUCES EROSION IN SWALES, STOCK PILES, BERMS MILD TO MEDIUM SLOPES AND ALONG ROADWAYS. VEGETATIVE STRIPS CAN PROVIDE SOME PROTECTION WHEN USED AS A PERIMETER CONTROL FOR UTILITY AND SITE DEVELOPMENT CONSTRUCTION. IN MANY CASES, THE INITIAL COST OF TEMPORARY SEEDING MAY BE HIGH COMPARED TO TARPS OR COVERS FOR STOCKPILES OR OTHER BARREN AREAS SUBJECT TO EROSION YET INACTIVE. THIS INITIAL COST SHOULD BE WEIGHED WITH THE AMOUNT OF TIME THE AREA IS TO REMAIN INACTIVE, SINCE MAINTENANCE COST FOR VEGETATED AREAS IS MUCH LESS THEN MOST STRUCTURAL CONTROLS.

DESIGN CRITERIA: SURFACE PREPARATION; INTERIM OR FINAL GRADING MUST BE COMPLETED PRIOR TO SEEDING, MINIMIZING ALL STEEP SLOPES. INSTALL ALL NECESSARY EROSION STRUCTURES SUCH AS DIKES, SWALES, DIVERSIONS, ETC., PRIOR TO SEEDING. GROOVE OR FURROW SLOPES STEEPER THAN 3:1 ON THE CONTOUR LINE BEFORE SEEDING. PROVIDE 4-6 INCHES OF TOPSOIL OVER UNSUITABLE SOILS. SEED-BED SHOULD BE WELL PULVERIZED, LOOSE AND UNIFORM. PLANT SELECTION, FERTILIZATION AND SEEDING; USE ONLY HIGH QUALITY, USDA CERTIFIED SEED. FOR PERMANENT VEGETATIVE COVER DURING THE PERIOD FROM MARCH TO AUGUST (INCLUSIVE) USE HULLED BERMUDA GRASS APPLIED AT 10-12 POUNDS PER ACRE. FOR PERMANENT VEGETATIVE COVER DURING THE PERIOD FROM SEPTEMBER TO FEBRUARY (INCLUSIVE) USE UNHULLED BERMUDA GRASS APPLIED AT 15-20 POUNDS PER ACRE. FOR TEMPORARY STABILIZATION ON DISTURBED AREAS OR STOCKPILES, USE RYE GRASS SEED APPLIED AT 40-50 POUNDS PER ACRE. FERTILIZER SHALL BE APPLIED ACCORDING TO THE MANUFACTURE'S RECOMMENDATION WITH PROPER SPREADER EQUIPMENT. TYPICAL APPLICATION RATE FOR 10-10-10 GRADE FERTILIZER IS 700-1000 POUNDS PER ACRE. DO NOT OVER APPLY FERTILIZER. IF HYDRO-SEEDING IS USED, DO NOT MIX SEED FERTILIZER MORE THAN 30 MINUTES BEFORE APPLICATION. EVENLY APPLY SEED USING CYCLONE SEEDER, SEED DRILL, CULTIPACKER OR HYDROSEEDER. PROVIDE ADEQUATE WATER TO AID IN ESTABLISHMENT OF VEGETATION. USE APPROPRIATE MULCHING TECHNIQUES WHERE NECESSARY.

LIMITATIONS: VEGETATION IS NOT APPROPRIATE FOR AREAS SUBJECTED TO HEAVY PEDESTRIAN OR VEHICULAR TRAFFIC. AS A TEMPORARY TECHNIQUE, VEGETATION MAY BE COSTLY WHEN COMPARED TO OTHER TECHNIQUES. VEGETATION IS NOT APPROPRIATE FOR ROCK, GRAVEL, OR COARSE GRAINED SOILS UNLESS 4-6 INCHES OF TOPSOIL IS APPLIED.

MAINTENANCE REQUIREMENTS: PROTECT NEWLY SEEDED AREAS FROM EXCESSIVE RUNOFF AND TRAFFIC UNTIL VEGETATION IS ESTABLISHED (MULCHING MAY BE NECESSARY). A WATERING AND FERTILIZING SCHEDULE WILL BE REQUIRED AS PART OF THE SWPPP TO ASSIST IN THE ESTABLISHMENT OF THE VEGETATION.

BMP 3 **VEGETATION**
(NOT TO SCALE)

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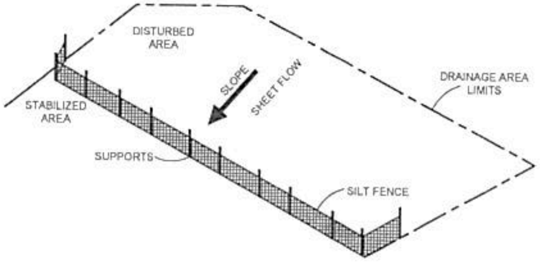
CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (1 OF 11)
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39FARA3401-2

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 8/25



DESCRIPTION: A SILT FENCE CONSISTS OF GEOTEXTILE FABRIC SUPPORTED BY POULTRY NETTING OR OTHER BACKING STRETCHED BETWEEN EITHER WOODEN OR METAL POSTS WITH THE LOWER EDGE OF THE FABRIC SECURELY EMBEDDED IN THE SOIL. THE FENCE IS TYPICALLY LOCATED DOWNSTREAM OF DISTURBED AREAS TO INTERCEPT RUNOFF IN THE FORM OF SHEET FLOW. SILT FENCE PROVIDES BOTH FILTRATION AND TIME FOR SEDIMENTATION TO REDUCE SEDIMENT AND IT REDUCES THE VELOCITY OF THE RUNOFF. PROPERLY DESIGNED SILT FENCE IS ECONOMICAL SINCE IT CAN BE RE-LOCATED DURING CONSTRUCTION AND RE-USED ON THE PROJECTS.

PRIMARY USE: SILT FENCE IS NORMALLY USED AS PERIMETER CONTROL LOCATED DOWNSTREAM OF DISTURBED AREAS. IT IS ONLY FEASIBLE FOR NON-CONCENTRATED, SHEET FLOW CONDITIONS.

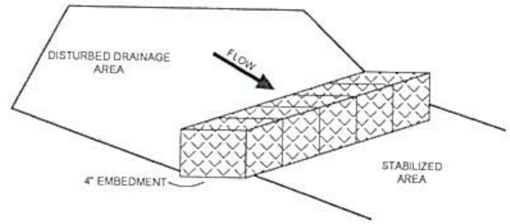
APPLICATIONS: SILT FENCE IS AN ECONOMICAL MEANS TO TREAT OVERLAND, NON-CONCENTRATED FLOWS FOR ALL TYPES OF PROJECTS. SILT FENCES ARE USED AS PERIMETER CONTROL DEVICES FOR BOTH SITE DEVELOPMENTS AND LINEAR (ROADWAY) TYPE PROJECTS. THEY ARE MOST EFFECTIVE WITH COARSE TO SILTY SOIL TYPES. DUE TO THE POTENTIAL OF CLOGGING, SILT FENCE SHOULD NOT BE USED WITH CLAY SOIL TYPES. IN ORDER TO REDUCE THE LENGTH OF SILT FENCE, IT SHOULD NE PLACED ADJACENT TO THE DOWN SLOPE SIDE OF THE CONSTRUCTION ACTIVITIES.

DESIGN CRITERIA: FENCES ARE TO BE CONSTRUCTED ALONG A LINE OF CONSTANT ELEVATION (ALONG A CONTOUR LINE) WHERE POSSIBLE. MAXIMUM SLOPE ADJACENT TO THE FENCE IS 1:1. MAXIMUM DISTANCE OF FLOW TO THE SILT FENCE SHALL BE 200 FEET OR LESS. MAXIMUM CONCENTRATED FLOW TO SILT FENCE SHALL BE 1 CFS PER 20 FEET OF FENCE. IF 50% OR LESS OF SOIL, BY WEIGHT, PASSES THE U.S. STANDARD SIEVE NO. 200, SELECT THE EQUIVALENT OPENING SIZE (E.O.S.) TO RETAIN 85% OF THE SOIL. MAXIMUM EQUIVALENT OPENING SIZE SHALL BE 70 (#70 SIEVE). MINIMUM EQUIVALENT OPENING SIZE SHALL BE 100 (#100 SIEVE). IF 85% OR MORE OF SOIL, BE WEIGHT, PASSES THE U.S. STANDARD SIEVE NO. 200, SILT FENCES SHALL NOT BE USED DUE TO POTENTIAL CLOGGING. SUFFICIENT ROOM FOR THE OPERATION OF SEDIMENT REMOVAL EQUIPMENT SHALL BE PROVIDED BETWEEN THE SILT FENCE AND OTHER OBSTRUCTIONS IN ORDER TO PROPERLY MAINTAIN THE FENCE. THE ENDS OF THE FENCE SHALL BE TURNED UPSTREAM TO PREVENT BYPASS OF STORMWATER.

LIMITATIONS: MINOR PONDING WILL LIKELY OCCUR AT THE UPSTREAM AIDE OF THE SILT FENCE RESULTING IN MINOR LOCALIZED FLOODING. FENCES WHICH ARE CONSTRUCTED IN SWALES OR LOW AREAS SUBJECT TO CONCENTRATED FLOW MAY BE OVERTOPPED RESULTING IN FAILURE OF THE FILTER FENCE. SILT FENCES SUBJECT TO AREAS OF CONCENTRATED FLOW (WATERWAYS WITH FLOWS > 1 CFS) ARE NOT ACCEPTABLE. SILT FENCE CAN INTERFERE WITH CONSTRUCTION OPERATIONS, THEREFORE PLANNING OF ACCESS ROUTES ONTO THE SITE IS CRITICAL. SILT FENCE CAN FAIL STRUCTURALLY UNDER HEAVY STORM FLOWS, CREATING MAINTENANCE PROBLEMS AND REDUCING THE EFFECTIVENESS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS: INSPECTIONS SHOULD BE MADE ON A WEEKLY BASIS, ESPECIALLY AFTER LARGE STORM EVENTS. IF THE FABRIC BECOMES CLOGGED, IT SHOULD BE CLEANED OR IF NECESSARY REPLACED. SEDIMENT SHOULD BE REMOVED WHEN IT REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE.

BMP 4 **SILT FENCE**
(NOT TO SCALE)



DESCRIPTION: A STRAW BALE DIKE IS A TEMPORARY BARRIER CONSTRUCTED OF STRAW BALES ANCHORED WITH WOOD POSTS, THAT IS USED TO INTERCEPT SEDIMENT-LADEN RUNOFF GENERATED BY SMALL DISTURBED AREAS. THE STRAW BALES CAN SERVE AS BOTH A FILTRATION DEVICE AND A DAM/DIKE DEVICE TO TREAT AND REDIRECT FLOW. BALES CAN CONSIST OF HAY OR STRAW IN WHICH STRAW IS DEFINED AS BEST QUALITY STRAW FROM WHEAT, OATS, OR BARLEY, FREE OF WEED AND GRASS SEED AND HAY IS DEFINED AS STRAW WHICH INCLUDES WEED AND GRASS SEED.

PRIMARY USE: A STRAW BALE DIKE IS USED TO TRAP SEDIMENT-LADEN STORM RUNOFF FROM SMALL DRAINAGE AREAS WITH RELATIVELY LEVEL GRADES, ALLOWING FOR REDUCTION OF VELOCITY THEREBY CAUSING SEDIMENT TO SETTLE OUT.

APPLICATIONS: STRAW BALE DIKES ARE USED TO TREAT FLOW AFTER IT LEAVES A DISTURBED AREA ON A RELATIVELY SMALL (<1 ACRE) SITE. DUE TO THE LIMITED LIFE OF THE STRAW BALE, IT IS COST EFFECTIVE FOR SMALL PROJECTS OF A SHORT DURATION. THE LIMITED WEIGHT AND STRENGTH OF THE STRAW BALE MAKES IT SUITABLE FOR SMALL, FLAT (<2 PERCENT SLOPE) CONTRIBUTING DRAINAGE AREAS. DUE TO THE PROBLEMS WITH STRAW DEGRADATION AND THE LACK OF UNIFORM QUALITY IN STRAW BALES, THEIR USE IS DISCOURAGED EXCEPT FOR SMALL RESIDENTIAL APPLICATIONS. STRAW BALES CAN ALSO BE USED AS CHECK DAMS (SEE CHECK DAM BMP S-7) FOR SMALL WATERCOURSES SUCH AS INTERCEPTOR SWALES AND BORROW DITCHES. DUE TO THE PROBLEMS IN SECURELY ANCHORING THE BALES, ONLY SMALL WATERCOURSES CAN EFFECTIVELY USE STRAW BALE CHECK DAMS.

DESIGN CRITERIA: STRAW BALE DIKES ARE TO BE CONSTRUCTED ALONG A LINE OF CONSTANT ELEVATION (ALONG A CONTOUR LINE). STRAW BALE DIKES ARE SUITABLE ONLY FOR TREATING SHEET FLOWS ACROSS GRADES OF 2% OR FLATTER. MAXIMUM CONTRIBUTING DRAINAGE AREA SHALL BE 0.25 ACRE PER 100 LINEAR FEET OF DIKE. MAXIMUM DISTANCE OF FLOW TO DIKE SHOULD BE 100 FEET OR LESS. DIMENSIONS FOR INDIVIDUAL BALES SHALL BE 30 INCHES MINIMUM LENGTH, 18 INCHES MINIMUM HEIGHT, 24 INCHES MINIMUM WIDTH AND SHALL WEIGH NO LESS THAN 50 POUNDS WHEN DRY. EACH STRAW BALE SHALL BE PLACED INTO AN EXCAVATED TRENCH HAVING A DEPTH OF 4 INCHES AND A WIDTH JUST WIDE ENOUGH TO ACCOMMODATE THE BALES THEMSELVES. STRAW BALES SHALL BE INSTALLED IN SUCH A WAY THAT THERE IS NO SPACE BETWEEN BALES.
INDIVIDUAL BALES SHALL BE HELD IN PLACE BY AT LEAST TWO WOOD STAKES DRIVEN A MINIMUM DISTANCE OF 6 INCHES BELOW THE 4" EXCAVATED TRENCH TO UNDISTURBED GROUND, WITH THE FIRST STAKE DRIVEN AT AN ANGLE TOWARD THE PREVIOUSLY INSTALLED BALE. THE ENDS OF THE DIKE SHALL BE TURNED UPGRADE TO PREVENT BYPASS OF STORMWATER. PLACE BALES ON SIDES SUCH THAT BINDINGS ARE NOT BURIED.

LIMITATIONS: DUE TO A SHORT EFFECTIVE LIFE CAUSED BY BIOLOGICAL DECOMPOSITION, STRAW BALES MUST BE REPLACED AFTER A PERIOD OF NO MORE THAN 3 MONTHS. DURING THE WET AND WARM SEASONS, HOWEVER, THEY MUST BE REPLACED MORE FREQUENTLY AS IS DETERMINED BY PERIODIC INSPECTIONS FOR STRUCTURAL INTEGRITY. STRAW BALE DIKES ARE NOT RECOMMENDED FOR USE WITH CONCENTRATED FLOWS OF ANY KIND EXCEPT FOR SMALL CHECK FLOWS IN WHICH THEY CAN SERVE AS A CHECK DAM. THE EFFECTIVENESS OF STRAW BALES IN REDUCING SEDIMENT IS VERY LIMITED. IMPROPERLY MAINTAINED, STRAW BALES CAN HAVE A NEGATIVE IMPACT ON THE WATER QUALITY OF THE RUNOFF.

MAINTENANCE REQUIREMENTS: STRAW BALES SHALL BE REPLACED IF THERE ARE SIGNS OF DEGRADATION SUCH AS STRAW LOCATED DOWNSTREAM FROM THE BALES, STRUCTURAL DEFICIENCIES DUES TO ROTTING STRAW IN THE BALE OR OTHER SIGNS OF DETERIORATION. SEDIMENT SHOULD BE REMOVED FROM BEHIND THE BALES WHEN IT REACHES A DEPTH OF APPROXIMATELY 6 INCHES.

BMP 5 **STRAW BALE DIKE**
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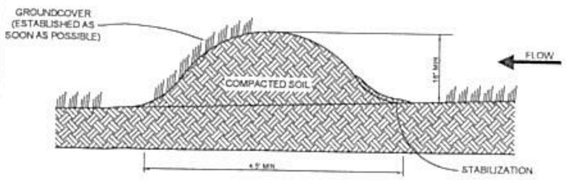


DESCRIPTION: A DIVERSION DIKE IS A COMPACTED SOIL MOUND WHICH REDIRECTS RUNOFF TO A DESIRED LOCATION. THE DIKE IS TYPICALLY STABILIZED WITH NATURAL GRASS FOR LOW VELOCITIES OR WITH STONE OR EROSION CONTROL MATS FOR HIGHER VELOCITIES.

PRIMARY USE: THE DIVERSION DIKE IS NORMALLY USED TO INTERCEPT OFFSITE FLOW UPSTREAM OF THE CONSTRUCTION AREA AND DIRECT THE FLOW AROUND THE DISTURBED SOILS. IT CAN ALSO BE USED DOWNSTREAM OF THE CONSTRUCTION AREA TO DIRECT FLOW INTO A SEDIMENT REDUCTION DEVICE SUCH AS A SEDIMENT BASIN OR PROTECTED INLET. THE DIVERSION DIKE SERVES THE SAME PURPOSE AND, BASED ON THE TOPOGRAPHY OF THE SITE, CAN BE USED IN COMBINATION WITH AN INTERCEPTOR SWALE.

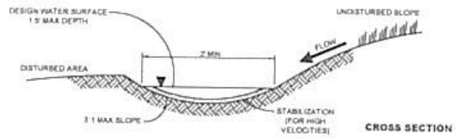
APPLICATIONS: BY INTERCEPTING RUNOFF BEFORE IT HAS THE CHANCE TO CAUSE EROSION, DIVERSION DIKES ARE VERY EFFECTIVE IN REDUCING EROSION AT THE REASONABLE COST. THEY ARE APPLICABLE TO A LARGE VARIETY OF PROJECTS INCLUDING SITE DEVELOPMENTS AND LINEAR PROJECTS SUCH AS ROADWAYS AND PIPELINE CONSTRUCTION. DIVERSION DIKES ARE NORMALLY USED AS PERIMETER CONTROLS FOR CONSTRUCTION SITES WITH LARGE AMOUNTS OF OFFSITE FLOW FROM NEIGHBORING PROPERTIES. USED IN COMBINATION WITH SWALES, THE DIVERSION DIKE CAN BE QUICKLY INSTALLED WITH A MINIMUM OF EQUIPMENT AND COST, USING THE SWALE EXCAVATION AS THE DIKE. NO SEDIMENT REMOVAL TECHNIQUE IS REQUIRED IF THE DIKE IS PROPERLY STABILIZED AND THE RUNOFF IS INTERCEPTED PRIOR TO CROSSING DISTURBED AREAS.

DESIGN CRITERIA: THE MAXIMUM CONTRIBUTING DRAINAGE AREA SHOULD BE 10 ACRES OR LESS. MAXIMUM DEPTH OF FLOW AT THE DIKE SHALL BE 1 FOOT FOR 2 YEAR DESIGN STORM. THE MAXIMUM WIDTH OF THE FLOW AT THE DIKE SHALL BE 20 FEET. SIDE SLOPES OF THE DIVERSION DIKE SHALL BE 3:1 OR FLATTER. MINIMUM WIDTH OF THE EMBANKMENT AT THE TOP SHALL BE 2 FEET. MINIMUM EMBANKMENT HEIGHT SHALL BE 18 INCHES AS MEASURED FROM THE TOE OF SLOPE ON THE UPGRADE SIDE OF THE BERM. FOR VELOCITIES LESS THAN 6 FEET PER SECOND, THE MINIMUM STABILIZATION FOR THE DIKE AND ADJACENT FLOW AREAS IS GRASS, EROSION CONTROL MATS OR MULCH. FOR VELOCITIES GREATER THAN 6 FEET PER SECOND, STONE STABILIZATION OR HIGH VELOCITY EROSION CONTROL MATS SHOULD BE USED VELOCITIES GREATER THAN 8 FEET PER SECOND MUST BE APPROVED BY THE LOCAL JURISDICTION. THE DIKES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS WHICH ARE PROTECTED BY THE DIKE ARE PERMANENTLY STABILIZED UNLESS OTHER CONTROLS ARE PUT INTO PLACE TO PROTECT THE DISTURBED AREA. FLOW LINE AT DIKE SHALL HAVE A POSITIVE GRADE TO DRAIN TO A CONTROLLED OUTLET.

LIMITATIONS: COMPACTED EARTH DIKES REQUIRE STABILIZATION IMMEDIATELY UPON PLACEMENT SO AS NOT TO CONTRIBUTE TO THE PROBLEM THEY ARE ADDRESSING. THE DIVERSION DIKES CAN BE A HINDERANCE TO CONSTRUCTION EQUIPMENT MOVING ON THE SITE, THEREFORE THEIR LOCATIONS MUST BE CAREFULLY PLANNED PRIOR TO INSTALLATION.

MAINTENANCE REQUIREMENTS: DIKES MUST BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH SIGNIFICANT (>0.5 INCH) RAINFALL TO DETERMINE IF SILT IS BUILDING UP BEHIND THE DIKE, OR IF EROSION IS OCCURRING ON THE FACE OF THE DIKE. SILT SHALL BE REMOVED IN A TIMELY MANNER. IF EROSION IS OCCURRING ON THE FACE OF THE DIKE, THE SLOPES OF THE FACE SHALL EITHER BE STABILIZED THROUGH MULCH OR SEEDING OR THE SLOPES OF THE FACE SHALL BE REDUCED.

BMP 7 **DIVERSION DIKE** (NOT TO SCALE)



DESCRIPTION: AN INTERCEPTOR SWALE IS A SMALL V-SHAPED OR PARABOLIC CHANNEL WHICH COLLECTS RUNOFF AND DIRECTS IT TO A DESIRED LOCATION. IT CAN EITHER HAVE A NATURAL GRASS LINING OR DEPENDING ON SLOPE AND DESIGN VELOCITY, A PROTECTIVE LINING OF EROSION MATTING, STONE OR CONCRETE.

PRIMARY USE: THE INTERCEPTOR SWALE CAN EITHER BE USED TO DIRECT SEDIMENT LADEN FLOW FROM DISTURBED AREAS. SINCE THE SWALE IS EASY TO INSTALL DURING EARLY GRADING OPERATIONS, IT CAN SERVE AS THE FIRST LINE OF DEFENSE IN REDUCING RUNOFF ACROSS DISTURBED AREAS. AS A METHOD OF REDUCING RUNOFF ACROSS THE DISTURBED CONSTRUCTION AREA, IT REDUCES THE REQUIREMENTS OF STRUCTURAL MEASURES TO CAPTURE SEDIMENT FROM RUNOFF SINCE THE FLOW IS REDUCED. BY INTERCEPTING SEDIMENT LADEN FLOW DOWNSTREAM OF THE DISTURBED AREA, RUNOFF CAN BE DIRECTED INTO A SEDIMENT BASIN OR OTHER BMP FOR SEDIMENTATION AS OPPOSED TO LONG RUNS OF SILT FENCE, STRAW BALES OR OTHER FILTRATION METHOD. BASED ON SITE TOPOGRAPHY, SWALES CAN BE EFFECTIVELY USED IN COMBINATION WITH DIVERSION DIKES.

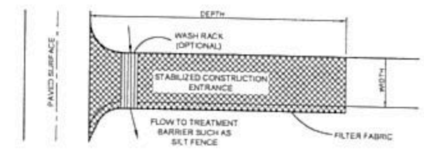
APPLICATIONS: COMMON APPLICATIONS FOR INTERCEPTOR SWALES INCLUDE ROADWAY PROJECTS, SITE DEVELOPMENT PROJECTS WITH SUBSTANTIAL OFFSITE FLOW IMPACTING THE SITE AND SITES WITH A LARGE AREA(S) OF DISTURBANCE. IT CAN BE USED IN CONJUNCTION WITH DIVERSION DIKES TO INTERCEPT FLOWS. TEMPORARY SWALES CAN BE USED THROUGHOUT THE PROJECT TO DIRECT FLOWS AWAY FROM STAGING, STORAGE AND FUELING AREAS ALONG WITH SPECIFIC AREAS OF CONSTRUCTION. NOTE THAT RUNOFF WHICH CROSSES DISTURBED AREAS OR IS DIRECTED INTO UNSTABILIZED SWALES MUST BE ROUTED INTO A TREATMENT BMP SUCH AS A SEDIMENT BASIN. GRASS LINED SWALES ARE AN EFFECTIVE PERMANENT STABILIZATION TECHNIQUE. THE GRASS EFFECTIVELY FILTERS BOTH SEDIMENT AND OTHER POLLUTANTS WHILE REDUCING VELOCITY.

DESIGN CRITERIA: MAXIMUM DEPTH OF FLOW IN THE SWALE SHALL BE 1.5 FEET BASED ON A 2 YEAR DESIGN STORM PEAK FLOW. POSITIVE OVERFLOW MUST NE PROVIDED TO ACCOMMODATE LARGER STORMS. SIDE SLOPES OF THE SWALE SHALL BE 3:1 OR FLATTER. MINIMUM DESIGN CHANNEL FREEBOARD SHALL BE 6 INCHES. THE MINIMUM REQUIRED CHANNEL STABILIZATION FOR GRADES LESS THAN 2 PERCENT AND VELOCITIES LESS THAN 6 FEET PER SECOND MAY BE GRASS, EROSION CONTROL MATS OR MULCHING. FOR GRADES IN EXCESS OF 2 PERCENT, OR VELOCITIES EXCEEDING 6 FEET PER SECOND, STABILIZATION IN THE FORM OF HIGH VELOCITY EROSION MATS, A THREE INCH LAYER OF CRUSHED STONE OR RIP RAP IS REQUIRED. VELOCITIES GREATER THAN 8 FEET PER SECOND WILL REQUIRE APPROVAL BY THE PROGRAM MANAGER. CHECK DAMS CAN BE USED TO REDUCE VELOCITIES IN STEEP SWALES. SEE CHECK DAM BMP FACT SHEET FOR DESIGN CRITERIA. INTERCEPTOR SWALES MUST BE DESIGNED FOR FLOW CAPACITY BASED ON MANNING'S EQUATION TO ENSURE A PROPER CHANNEL SECTION. ALTERNATE CHANNEL SECTIONS MAY BE USED WHEN PROPERLY DESIGNED AND ACCEPTED. CONSIDERATION MUST BE GIVEN TO THE POSSIBLE IMPACT THAT ANY SWALE MAY HAVE ON UPSTREAM OR DOWNSTREAM CONDITIONS. SWALES MUST MAINTAIN POSITIVE GRADE TO AN ACCEPTABLE OUTLET.

LIMITATIONS: INTERCEPTOR SWALES MUST BE STABILIZED QUICKLY UPON EXCAVATION SO AS NOT TO CONTRIBUTE TO THE EROSION PROBLEM THEY ARE ADDRESSING. SWALES MAY BE UNSUITABLE TO THE SITE CONDITIONS (TOO FLAT OR STEEP). LIMITED FLOW CAPACITY FOR TEMPORARY SWALES. FOR PERMANENT SWALES, THE 1.5 FEET MAXIMUM DEPTH CAN BE INCREASED AS LONG AS SITE ACCESS IS NOT IMPEDED.

MAINTENANCE REQUIREMENTS: INSPECTION MUST BE MADE WEEKLY AND AFTER EACH SIGNIFICANT (0.5" OR GREATER) RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE TO THE CHANNEL OR TO CLEAR DEBRIS OR OTHER OBSTRUCTIONS SO AS NOT TO DIMINISH FLOW CAPACITY. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHALL BE REPAIRED AS SOON AS PRACTICAL.

BMP 8 **INTERCEPTOR SWALE** (NOT TO SCALE)



DESCRIPTION: A STABILIZED CONSTRUCTION ENTRANCE CONSISTS OF A PAD CONSISTING OF GRAVEL, CRUSHED STONE, RECYCLED CONCRETE OR OTHER ROCK LIKE MATERIAL ON TOP OF GEOTEXTILE FILTER CLOTH TO FACILITATE THE WASH DOWN AND REMOVAL OF SEDIMENT AND OTHER DEBRIS FROM CONSTRUCTION EQUIPMENT PRIOR TO EXITING THE CONSTRUCTION SITE. FOR ADDED EFFECTIVENESS, A WASH RACK AREA CAN BE INCORPORATED INTO THE DESIGN TO FURTHER REDUCE SEDIMENT TRACKING. FOR LONG TERM PROJECTS, CATTLE GUARDS OR OTHER TYPE OF PERMANENT RACK SYSTEM CAN BE USED IN CONJUNCTION WITH A WAS RACK. THIS DIRECTLY ADDRESSES THE PROBLEM OF SILT AND MUD DEPOSITION IN ROADWAYS USED FOR CONSTRUCTION SITE ACCESS.

PRIMARY USE: STABILIZED CONSTRUCTION ENTRANCES ARE USED PRIMARILY FOR SITES IN WHICH SIGNIFICANT TRUCK TRAFFIC OCCURS ON A DAILY BASIS. IT REDUCES THE NEED TO REMOVE SEDIMENT FROM STREETS. IF USED PROPERLY, IT ALSO DIRECTS THE MAJORITY OF TRAFFIC TO A SINGLE LOCATION, REDUCING THE NUMBER AND QUANTITY OF DISTURBED AREAS ON THE SITE AND PROVIDING PROTECTION FOR OTHER STRUCTURAL CONTROLS THROUGH TRAFFIC CONTROL.

APPLICATIONS: STABILIZED CONSTRUCTION ENTRANCES ARE REQUIRED PART OF THE EROSION CONTROL PLAN FOR ALL SITE DEVELOPMENTS LARGER THAN 5 ACRES AND A RECOMMENDED PRACTICE FOR ALL CONSTRUCTION SITES. IT IS NOT SUITABLE FOR LONG, LINEAR PROJECTS. IF POSSIBLE, SMALL ENTRANCES SHOULD BE INCORPORATED INTO SMALL LOT CONSTRUCTION DUE TO THE LARGE PERCENTAGE OF DISTURBED AREA ON THE SITE AND THE HIGH POTENTIAL FOR OFFSITE TRACKING OF SILT AND MUD.

DESIGN CRITERIA: STABILIZED CONSTRUCTION ENTRANCES ARE TO BE CONSTRUCTED SUCH THAT DRAINAGE ACROSS THE ENTRANCE IS DIRECTED TO A CONTROLLED, STABILIZED OUTLET ON SITE WITH PROVISIONS FOR STORAGE. THE ENTRANCE MUST BE PROPERLY GRADED SO THAT STORM WATER IS NOT ALLOWED TO LEAVE THE SITE AND ENTER ROADWAYS. MINIMUM WIDTH OF ENTRANCE SHALL BE 15 FEET, BUT IN NO CASE SHALL THE WIDTH BE LESS THAN THAT OF THE ENTRY WAY TO BE USED. MINIMUM DEPTH OF ENTRANCE SHALL BE 8 INCHES FOR THE ENTIRE LENGTH OF THE CONTROL. MINIMUM DIMENSIONS FOR THE ENTRANCE SHALL BE AS FOLLOWS:

TRACT AREA	AVG. LOT DEPTH	MIN. WIDTH OF ENTRANCE	MIN. DEPTH OF ENTRANCE
< 1 ACRE	100 FEET	15 FEET	20 FEET
< 5 ACRES	200 FEET	20 FEET	30 FEET
< 10 ACRES	> 200 FEET	20 FEET	40 FEET
> 10 ACRES	> 200 FEET	25 FEET	50 FEET

LIMITATIONS: SELECTION OF THE CONSTRUCTION ENTRANCE LOCATION IS CRITICAL IN THAT TO BE EFFECTIVE, IT MUST BE USED EXCLUSIVELY. STABILIZED ENTRANCES ARE RATHER EXPENSIVE CONSIDERING THAT IT MUST BE INSTALLED IN COMBINATION WITH ONE OR MORE OTHER SEDIMENT CONTROL TECHNIQUES, BUT IT MAY BE COST EFFECTIVE COMPARED TO LABOR INTENSIVE STREET CLEANING.

MAINTENANCE REQUIREMENTS: INSPECTIONS SHOULD BE MADE ON A REGULAR BASIS AND AFTER LARGE STORM EVENTS IN ORDER TO ASCERTAIN WHETHER OR NOT SEDIMENT AND POLLUTION ARE BEING EFFECTIVELY DETAINED ON SITE. WHEN SEDIMENT HAS SUBSTANTIALLY CLOGGED THE VOID AREA BETWEEN THE ROCKS, THE AGGREGATE MAT MUST BE WASHED DOWN OR REPLACED. PERIODIC RE-GRADING AND TOP DRESSING WITH ADDITIONAL STONE MUST BE DONE TO KEEP THE EFFICIENCY OF THE ENTRANCE FROM DIMINISHING.

BMP 9 **STABILIZED CONSTRUCTION ENTRANCE** (NOT TO SCALE)

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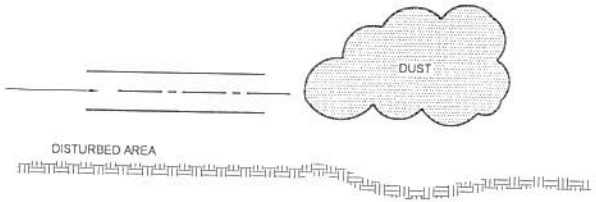


DESCRIPTION: DUST CONTROL MEASURES ARE USED TO STABILIZE SOIL FROM WIND EROSION, AND REDUCE DUST GENERATED BY CONSTRUCTION ACTIVITIES. DUST WHICH SETTLES ON SURFACES BOTH ON-SITE AND OFF-SITE MAY BE WASHED BY STORM WATER INTO WATERWAYS.

APPLICATIONS: CLEARING AND GRADING ACTIVITIES. CONSTRUCTION VEHICLES TRAFFIC ON UNPAVED ROADS.
DRILLING AND BLASTING ACTIVITIES. SEDIMENT TRACKING ONTO PAVED ROADS. SOIL AND DEBRIS STORAGE PILES. BATCH DROP FROM FRONT END LOADERS. AREAS WITH UNSTABILIZED SOIL.

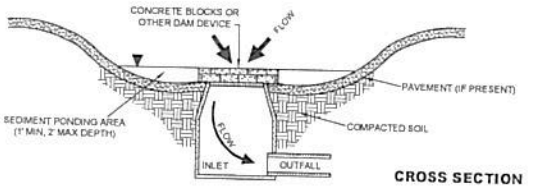
DESIGN CRITERIA: SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE THE AREA WHERE, AND TIME PERIOD WHEN SOILS ARE EXPOSED. QUICKLY STABILIZE EXPOSED SOILS USING VEGETATION, MULCHING, SPRAY-ON ADHESIVES, CALCIUM CHLORIDE, SPRINKLING, AND STONE/GRAVEL LAYERING. IDENTIFY AND STABILIZE KEY ACCESS POINTS PRIOR TO COMMENCEMENT OF CONSTRUCTION. MINIMIZING THE IMPACT OF DUST BY ANTICIPATING THE DIRECTION OF PREVAILING WINDS. DIRECT MOST CONSTRUCTION TRAFFIC TO STABILIZE ROADWAYS WITHIN THE PROJECT SITE.

LIMITATIONS: WATERING PREVENTS DUST ONLY FOR A SHORT PERIOD AND SHOULD BE APPLIED DAILY (OR MORE OFTEN) TO BE EFFECTIVE. OVERWATERING MAY CAUSE A CONTAMINATED EROSION. OILS SHOULD NOT BE USED FOR DUST CONTROL BECAUSE IT MAY MIGRATE INTO DRAINAGEWAY AND/OR SEEP INTO THE SOIL. CERTAIN CHEMICALLY-TREATED SUBGRADES MAY MAKE SOIL WATER REPELLENT, INCREASING RUNOFF.

MAINTENANCE REQUIREMENTS: MOST DUST CONTROL MEASURES REQUIRE FREQUENT, OFTEN DAILY, ATTENTION.

ADDITIONAL INFORMATION: DUST CONTROL BMP'S GENERALLY STABILIZE EXPOSED DUST PARTICLES. FOR HEAVILY TRAVELED AND DISTURBED AREAS, WET SUPPRESSION (WATERING), CHEMICAL DUST SUPPRESSION, GRAVEL OR ASPHALT SURFACING, TEMPORARY GRAVEL CONSTRUCTION ENTRANCES, EQUIPMENT WASH-OUT AREAS, AND HAUL TRUCK COVERS CAN BE EMPLOYED AS A DUST CONTROL APPLICATION. PERMANENT OR TEMPORARY VEGETATION AND MULCHING AND FENCES CAN BE EMPLOYED FOR AREAS OF OCCASIONAL OR NO CONSTRUCTION TRAFFIC. PREVENTIVE MEASURES WOULD INCLUDE MINIMIZING SURFACE AREAS TO BE DISTURBED. MANY OF THE REASONABLY AVAILABLE CONTROL MEASURES FOR CONTROLLING DUST FROM CONSTRUCTION SITES CAN ALSO BE IMPLEMENTED AS BMP'S FOR STORM WATER POLLUTION PREVENTION. THOSE BMPS INCLUDE: PAVE, VEGETATE, OR CHEMICALLY STABILIZE ACCESS POINTS WHERE UNPAVED TRAFFIC SURFACES ADJOIN PAVED ROADS. PROVIDE COVERS FOR HAUL TRUCK TRANSPORTING MATERIALS THAT CONTRIBUTE TO DUST. PROVIDE SUPPRESSION OR CHEMICAL STABILIZATION OF EXPOSED SOILS.PROVIDE FOR RAPID CLEAN-UP OF SEDIMENTS DEPOSITED ON PAVED ROADS. FURNISH STABILIZED CONSTRUCTION ROAD ENTRANCES AND VEHICLE WASH DOWN AREAS. STABILIZE UNPAVED HAUL ROADS, PARKING AND STAGING AREAS. REDUCE SPEED AND TRIPS ON UNPAVED ROADS. IMPLEMENT DUST CONTROL MEASURES FOR MATERIAL STOCKPILES. PREVENT DRAINAGE OF SEDIMENT LADEN STORM WATER ONTO PAVED SURFACES. STABILIZE ABANDONED CONSTRUCTION SITES USING VEGETATION OR CHEMICAL STABILIZATION METHODS. LIMIT THE AMOUNT OF AREAS DISTURBED BY CLEARING AND EARTH MOVING OPERATIONS BY SCHEDULING. THESE ACTIVITIES IN PHASES. FOR THE CHEMICAL STABILIZATION, THERE ARE MANY PRODUCTS AVAILABLE AS DUST PALLIATIVES FOR CHEMICALLY STABILIZING GRAVEL ROADWAYS AND STOCKPILES. IN ADDITION, THERE ARE MANY OTHER BMPS IDENTIFIED IN THIS: SEEDING AND PLANTINGS, STABILIZED CONSTRUCTION ENTRANCES, CONSTRUCTION ROAD STABILIZATION, AND MULCHING.

BMP 11 **DUST CONTROL**
(NOT TO SCALE)



CROSS SECTION

DESCRIPTION: INLET PROTECTION CONSISTS OF A VARIETY OF METHODS OF INTERCEPTING SEDIMENT AT LOW POINT INLETS THROUGH THE USE OF STONE, FILTER FABRIC AND OTHER MATERIALS. THIS IS NORMALLY LOCATED AT THE INLET, PROVIDING EITHER DETENTION OR FILTRATION TO REDUCE SEDIMENT AND FLOATABLE MATERIALS IN STORM WATER.

PRIMARY USE: INLET PROTECTION IS NORMALLY USED AS A SECONDARY DEFENSE IN SITE EROSION CONTROL. IT IS NORMALLY USED IN NEW DEVELOPMENTS THAT INCLUDE NEW INLETS OR ROADS WITH NEW CURB INLETS OR DURING MAJOR REPAIRS TO EXISTING ROADWAYS. INLET PROTECTION HAS LIMITED USE IN DEVELOPED AREAS DUE TO THE POTENTIAL FOR FLOODING, TRAFFIC SAFETY AND PEDESTRIAN SAFETY AND MAINTENANCE PROBLEMS. INLET PROTECTION CAN REDUCE SEDIMENT IN STORM SEWER SYSTEM BY SERVING AS A BACK UP SYSTEM TO ONSITE CONTROLS OR BY REDUCING SEDIMENT LOADS FROM CONTROLS WITH LIMITED EFFECTIVENESS SUCH AS STRAW BALE DIKES.

APPLICATIONS: DIFFERENT VARIATIONS ARE USED FOR DIFFERENT CONDITIONS AS FOLLOWS. FILTER BARRIER PROTECTION (SIMILAR TO A SILT FENCE BARRIER AROUND THE INLET) IS APPROPRIATE WHEN THE DRAINAGE AREA IS LESS THAN ONE ACRE AND THE BASIN SLOPE IS LESS THAN FIVE (5) PERCENT. THIS TYPE OF PROTECTION IS NOT APPLICABLE IN PAVED AREAS. BLOCK AND GRAVEL (CRUSHED STONE, RECYCLED CONCRETE IS ALSO APPROPRIATE) PROTECTION IS USED WHEN FLOWS EXCEED 0.5 C.F.S. AND IT IS NECESSARY TO ALLOW FOR OVERTOPPING TO PREVENT FLOODING. WIRE MESH AND GRAVEL PROTECTION (CRUSHED STONE, RECYCLED CONCRETE IS ALSO APPROPRIATE) IS USED WHEN FLOWS EXCEED 0.5 C.F.S. AND MAY BE USED WITH BOTH CURD AND DROP INLETS. EXCAVATED IMPOUNDMENT PROTECTION AROUND A DROP INLET MAY BE USED FOR PROTECTION AGAINST SEDIMENT ENTERING A STORM DRAIN SYSTEM. WITH THIS METHOD, IT IS NECESSARY TO INSTALL WEEP HOLES TO ALLOW THE IMPOUNDMENT TO DRAIN COMPLETELY. THE IMPOUNDMENT SHALL BE SIZED SUCH THAT THE VOLUME OF EXCAVATION SHALL BE EQUAL TO 1800 TO 3600 CUBIC FEET PER ACRE OF CONTRIBUTING DRAINAGE AREA ENTERING THE INLET FOR FULL EFFECTIVENESS. SMALLER VOLUMES CAN BE USED FOR REDUCED EFFECTIVENESS.

DESIGN CRITERIA: FILTER FABRIC PROTECTION SHALL BE DESIGNED AND MAINTAINED IN A MANNER SIMILAR TO SILT FENCE. MAXIMUM DEPTH OF FLOW SHALL BE EIGHT (8) INCHES OR LESS DEPENDING ON VEHICULAR AND PEDESTRIAN TRAFFIC. POSITIVE DRAINAGE IS CRITICAL IN THE DESIGN OF INLET PROTECTION. IF OVERFLOW IS NOT PROVIDED FOR AT THE INLET, FLOWS WHICH EXCEED THE CAPACITY OF THE INLET PROTECTION SYSTEM SHALL BE ROUTED THROUGH ESTABLISHED SWALES, STREETS OR OTHER WATERCOURSES TO MINIMIZE DAMAGE DUE TO PONDING AND TO PROVIDE FOR PUBLIC SAFETY.

LIMITATIONS: PONDING WILL OCCUR AT THE INLET WITH POSSIBLE FLOODING AS A RESULT. INLET PROTECTION IS ONLY VIABLE AT LOW POINT INLETS. INLETS WHICH ARE ON A SLOPE CANNOT BE EFFECTIVELY PROTECTED BECAUSE STORMWATER WILL BYPASS THE INLET AND CONTINUE DOWNSTREAM, CAUSING AN OVERLOAD CONDITION AT THE INLETS BEYOND.

MAINTENANCE REQUIREMENTS: INSPECTIONS SHOULD BE MADE ON A WEEKLY BASIS, ESPECIALLY AFTER LARGE(>0.5 INCHES) STORM EVENTS. WHEN SILT FENCE IS USED AND THE FABRIC BECOMES CLOGGED, IT SHOULD BE CLEANED OR IF NECESSARY, REPLACED. ALSO, SEDIMENT SHOULD BE REMOVED WHEN IT REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE. IF A SUMP IS USED, SEDIMENT SHOULD BE REMOVED WHEN THE VOLUME OF THE BASIN IS REDUCED BY 50%

BMP 12 **INLET PROTECTION**
(NOT TO SCALE)

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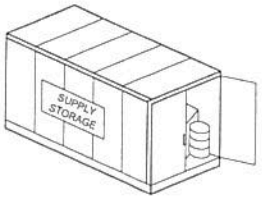
CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (4 OF 11)
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

STATE OF LOUISIANA
THOMAS A. QUICK
REG. NO. 30130
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEER

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 11/25



DESCRIPTION: PREVENT OR REDUCE THE DISCHARGE OR POLLUTANTS TO STORM WATER FROM MATERIAL DELIVERY AND STORAGE BY MINIMIZING THE STORAGE OF HAZARDOUS MATERIALS ON-SITE, STORING MATERIALS IN A DESIGNATED AREA, INSTALLING SECONDARY CONTAINMENT, CONDUCTING REGULAR INSPECTION, TRAINING EMPLOYEES AND SUBCONTRACTORS. THIS BEST MANAGEMENT PRACTICE COVERS ONLY MATERIAL DELIVERY AND STORAGE. FOR INFORMATION ON WASTES, SEE THE WASTE MANAGEMENT BMPS.

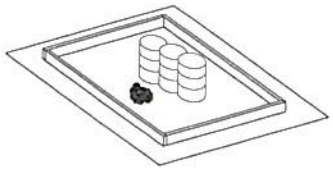
APPLICATIONS: THE FOLLOWING MATERIALS ARE COMMONLY STORED ON CONSTRUCTION SITES: PESTICIDES AND HERBICIDES, FERTILIZERS, AND DETERGENTS. PETROLEUM PRODUCTS SUCH AS FUEL, OIL, AND GREASE.
OTHER HAZARDOUS CHEMICALS SUCH AS ACIDS, LIME, GLUES, PAINTS, SOLVENTS, AND CURING COMPOUNDS. STORAGE OF THESE MATERIALS ON-SITE CAN POSE THE FOLLOWING RISKS: STORM WATER CONTAMINATION. INJURY TO WORKERS OR VISITORS. GROUNDWATER CONTAMINATION. SOIL CONTAMINATION.

DESIGN CRITERIA: DESIGNATE AN AREA OF THE CONSTRUCTION SITE FOR MATERIAL DELIVERY AND STORAGE.
PLACE NEAR THE CONSTRUCTION ENTRANCE, AWAY FROM WATERWAYS. AVOID TRANSPORT NEAR DRAINAGE PATHS OR WATERWAYS. SURROUND WITH EARTH BERMS. STORAGE OF REACTIVE, IGNITIBLE, OR FLAMMABLE LIQUIDS MUST COMPLY WITH THE LOCAL FIRE CODES AND LOCAL OFFICE OF EMERGENCY MANAGEMENT REGULATIONS. CONTACT LOCAL FIRE CHIEF/OFFICIAL TO. REVIEW SITE MATERIALS, QUANTITIES, AND PROPOSED STORAGE AREA TO DETERMINE SPECIFIC REQUIREMENTS. SEE THE FLAMMABLE AND COMBUSTIBLE LIQUID CODE NFPA30. KEEP AN ACCURATE, UP-TO-DATE INVENTORY IN YOUR SWPPP OF THE MATERIALS DELIVERED AND STORED ON-SITE. KEEP YOUR INVENTORY DOWN. STORE ONLY THE AMOUNT YOU NEED, FOR ONLY AS LONG AS YOU NEED IT. STORE AS FEW HAZARDOUS MATERIALS ON-SITE AS POSSIBLE. HANDLE HAZARDOUS MATERIALS AS INFREQUENTLY AS POSSIBLE. DESIGNATE A SECURE MATERIAL STORAGE AREA AWAY FROM DRAINAGE COURSES AND NEAR THE SITE ENTRANCE. WHENEVER POSSIBLE, STORE MATERIALS IN A COVERED AREA WITH SECONDARY CONTAINMENT SUCH AS AN EARTHEN DIKE, HORSE TROUGH, OR EVEN KID'S WADING POOL FOR NON-REACTIVE MATERIALS SUCH AS DETERGENTS, OIL GREASE AND PAINTS. SMALL AMOUNTS OF MATERIAL MAY BE SECONDARILY CONTAINED IN "BUSBOY" TRAYS OR CONCRETE MIXING TRAYS. DO NOT STORE CHEMICALS, DRUMS OR BAGGED MATERIALS DIRECTLY ON THE GROUND. PLACE THESE ITEMS IN SECONDARY CONTAINMENT. IF DRUMS MUST BE KEPT UNCOVERED, STORE THEM AT A SLIGHT ANGLE TO REDUCE PONDING OR RAINWATER ON THE LIDS AND TO REDUCE CORROSION. TRY TO KEEP CHEMICALS IN THEIR ORIGINAL CONTAINERS, AND KEEP THEM WELL LABELED. TRAIN YOUR EMPLOYEES AND SUBCONTRACTORS. EMPLOYEES TRAINED IN EMERGENCY SPILL CLEANUP PROCEDURES SHOULD BE PRESENT WHEN DANGEROUS MATERIALS OR LIQUID CHEMICALS ARE UNLOADED.

LIMITATIONS: STORAGE SHEDS OFTEN MUST MEET BUILDING AND FIRE CODE REQUIREMENTS.

MAINTENANCE REQUIREMENTS: KEEP THE DESIGNATED STORAGE AREA CLEAN AND WELL ORGANIZED. CONDUCT ROUTINE WEEKLY INSPECTIONS AND CHECK FOR EXTERNAL CORROSION OF MATERIAL CONTAINERS. KEEP AN AMPLE SUPPLY OF SPILL CLEANUP MATERIALS NEAR THE STORAGE AREA.

BMP 14 **MATERIAL DELIVERY & STORAGE**
(NOT TO SCALE)



DESCRIPTION: PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM LEAKS AND SPILLS BY REDUCING THE CHANCE FOR SPILLS, PROPERLY DISPOSING OF SPILL MATERIALS, AND TRAINING EMPLOYEES. THIS BEST MANAGEMENT PRACTICE COVERS ONLY SPILL PREVENTION AND CONTROL. HOWEVER, MATERIAL DELIVERY AND STORAGE USE, ALSO CONTAIN USEFUL INFORMATION, PARTICULARLY ON SPILL PREVENTION. FOR INFORMATION ON WASTES, SEE THE WASTE MANAGEMENT BMPS.

APPLICATIONS: THE FOLLOWING STEPS WILL HELP REDUCE THE STORM WATER IMPACTS OF LEAKS AND SPILLS:

GENERAL MEASURES: HAZARDOUS MATERIALS AND WASTES SHOULD BE STORED IN COVERED CONTAINERS AND PROTECTED FROM VANDALISM. PLACE A STOCKPILE OF SPILL CLEANUP MATERIALS WHERE IT WILL BE READILY ACCESSIBLE. TRAIN EMPLOYEES IN SPILL PREVENTION AND CLEANUP.

CLEANUP: CLEAN UP LEAKS AND SPILLS IMMEDIATELY. ON PAVED SURFACES, CLEAN UP SPILLS WITH AS LITTLE WATER AS POSSIBLE. USE A RAG FOR SMALL SPILLS, LARGE MOP FOR GENERAL CLEANUP, AND ABSORBENT MATERIAL FOR LARGER SPILLS. IF THE SPILLED MATERIAL IS HAZARDOUS, THEN THE USED CLEANUP MATERIALS ARE ALSO HAZARDOUS AND MUST BE SENT TO EITHER A CERTIFIED LAUNDRY (RAGS) OR DISPOSED OF AS HAZARDOUS WASTE. NEVER POUR DOWN OR BURY DRY MATERIALS SPILLS. SWEEP UP OR EXCAVATE THE MATERIAL AND DISPOSE OF PROPERLY. SEE THE WASTE MANAGEMENT BMPS.

REPORTING: IMMEDIATELY REPORT SPILLS TO THE LOCAL OFFICE OF EMERGENCY MANAGEMENT. FEDERAL REGULATIONS REQUIRE THAT ANY OIL SPILL INTO A BODY OF WATER OR ONTO AN ADJOINING SHORELINE BE REPORTED TO THE NATIONAL RESPONSE CENTER (NRC) AT 800-424-8802 (24HOUR).

VEHICLE AND EQUIPMENT MAINTENANCE: IF MAINTENANCE MUST OCCUR ON-SITE, USE A DESIGNATED AREA, LOCATED AWAY FROM DRAINAGE COURSES, PREVENT THE RUNON OF STORM WATER AND THE RUN OFF OF SPILLS. REGULARLY INSPECT ON-SITE VEHICLES AND EQUIPMENT FOR LEAKS, AND REPAIR IMMEDIATELY. CHECK INCOMING VEHICLES AND EQUIPMENT (INCLUDING DELIVERY TRUCKS, AND EMPLOYEE AND SUBCONTRACTOR VEHICLES) FOR LEAKING OIL AND FLUIDS. DO NOT ALLOW LEAKING VEHICLES OR EQUIPMENT ON-SITE. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN OR DEEP CLOTH, TO CATCH SPILLS OR LEAKS WHEN REMOVING OR CHANGING FLUIDS. PLACE DRIP PANS OR ABSORBENT MATERIALS UNDER EQUIPMENT WHEN NOT IN USE. USE ABSORBENT MATERIALS ON SMALL SPILLS RATHER THAN HOSING DOWN OR BURYING THE SPILL. REMOVE THE ABSORBENT MATERIALS PROMPTLY AND DISPOSE OF PROPERLY. PROMPTLY TRANSFER USED FLUIDS TO THE PROPER WASTE OR RECYCLING DRUMS. DON'T LEAVE FULL DRIP PANS OR OTHER OPEN CONTAINERS LYING AROUND. OIL FILTERS DISPOSED OF IN TRASH CANS OR DUMPSTERS CAN LEAK OIL AND CONTAMINATE STORM WATER. PLACE THE OIL FILTER IN A FUNNEL OVER A WATER OIL RECYCLING DRUM TO DRAIN EXCESS OIL BEFORE DISPOSAL. OIL FILTERS CAN ALSO BE RECYCLED. ASK YOUR OIL SUPPLIER OR RECYCLER ABOUT RECYCLING OIL FILTERS. STORE CRACKED BATTERIES IN A NON-LEAKING SECONDARY CONTAINER. DO THIS WITH ALL CRACKED BATTERIES EVEN IF YOU THINK ALL THE ACID HAS DRAINED OUT. IF YOU DROP A BATTER, TREAT IT AS IF IT IS CRACKED. PUT INTO THE CONTAINMENT AREA UNTIL YOU ARE SURE IT IS NOT LEAKING.

VEHICLE AND EQUIPMENT FUELING: IF FUELING MUST OCCUR ON-SITE, USE DESIGNATED AREAS, LOCATED AWAY FROM DRAINAGE COURSES, TO PREVENT THE RUNON OF STORM WATER AND THE RUNOFF OF SPILLS.
DISCOURAGE "TOPPING-OFF" OF FUEL TANKS. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN, WHEN FUELING TO CATCH SPILLS/LEAKS.

LIMITATIONS: IF NECESSARY, USE A PRIVATE SPILL CLEANUP COMPANY.

MAINTENANCE REQUIREMENTS: KEEP AMPLE SUPPLIES OR SPILL CONTROL AND CLEANUP MATERIALS ON-SITE, NEAR STORAGE, UNLOADING, AND MAINTENANCE AREAS. UPDATE YOUR SPILL CLEANUP MATERIALS AS CHANGES OCCUR IN THE TYPES OF CHEMICALS ON-SITE.

BMP 15 **SPILL PREVENTION & CONTROL**
(NOT TO SCALE)

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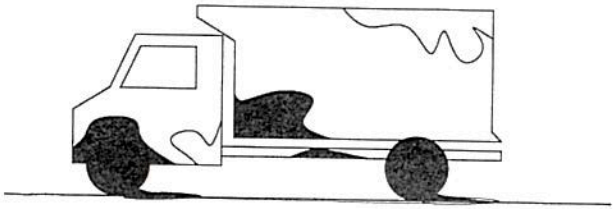
CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (5 OF 11)
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 12/25



DESCRIPTION: PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM VEHICLE AND EQUIPMENT CLEANING BY USING OFF-SITE FACILITIES, WASHING IN DESIGNATED AREAS ONLY, PREVENTS DISCHARGES TO THE STORM DRAIN BY INFILTRATING OR RECYCLING THE WASH WATER AND TRAINING EMPLOYEES AND SUBCONTRACTORS.

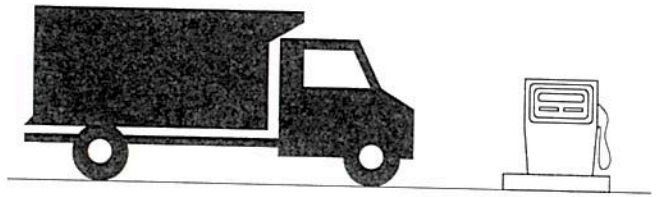
APPLICATIONS: WASHING VEHICLES AND EQUIPMENT OUTDOORS OR IN AREAS WHERE WASH WATER.

DESIGN CRITERIA: USE OFF-SITE COMMERCIAL WASHING BUSINESSES AS MUCH AS POSSIBLE. FOR OPERATIONS INVOLVING A LARGE NUMBER OF VEHICLES OR PIECES OF EQUIPMENT, CONSIDER CONDUCTING THIS WORK AT AN OFF-SITE COMMERCIAL BUSINESS EQUIPPED TO HANDLE AND DISPOSE OF THE WASH WATERS PROPERLY.PERFORMING THIS WORK OFF-SITE CAN ALSO BE ECONOMICAL BY ELIMINATING THE NEED FOR A SEPARATE WASHING OPERATION AT YOUR SITE. IF WASHING MUST OCCUR ON-SITE, USE DESIGNATED, BERMED WASH AREAS TO PREVENT WASH WATER CONTACT WITH STORM WATER, CREEKS, RIVERS AND OTHER WATER BODIES. USE AS LITTLE WATER AS POSSIBLE TO AVOID HAVING TO INSTALL EROSION AND SEDIMENT CONTROLS FOR THE WASH AREA. USE PHOSPHATE-FREE, BIODEGRADABLE SOAPS. EDUCATE EMPLOYEES AND SUBCONTRACTORS ON POLLUTION PREVENTION MEASURES. DO NOT PERMIT STEAM CLEANING ON-SITE. STEAM CLEANING CAN GENERATE SIGNIFICANT POLLUTANT CONCENTRATIONS LEADING TO POTENTIAL STORM WATER AND GROUNDWATER CONTAMINATION. IN CONSTRUCTION AREAS WHERE TRUCK TIRES COLLECT MUD, PROVIDE A CLEANING AREAS FOR REMOVING SOIL BEFORE TRUCK LEAVES SITE. TRUCK TIRES CLEANING AREA SHOULD NOT BE DIRECTLY ADJACENT TO DRAINAGE CONVEYANCES. A VEGETATED BUFFER AREA SHOULD BE LOCATED DOWNSTREAM OF THE TIRE WASH. FOR HEAVY USE OF TIRE WASH AREA, SILT FENCING, OR SEDIMENT TRAPPING MAY BE NECESSARY.

LIMITATIONS: SENDING VEHICLES/EQUIPMENT OFF-SITE SHOULD BE DONE IN CONJUNCTION WITH (STABILIZED CONSTRUCTION ENTRANCE).

MAINTENANCE REQUIREMENTS: MINIMAL.

BMP 20 **VEHICLE & EQUIPMENT CLEANING**
(NOT TO SCALE)



DESCRIPTION: PREVENT FUEL SPILLS AND LEAKS, AND REDUCE THEIR IMPACTS TO STORM WATER BY USING OFF-SITE FACILITIES, FUELING IN DESIGNATED AREAS ONLY, ENCLOSING OR COVERING STORED FUEL, IMPLEMENTING SPILL CONTROLS, TRAINING EMPLOYEES AND SUBCONTRACTORS.

APPLICATIONS: FUELING VEHICLES AND EQUIPMENT OUTDOORS OR IN AREAS WHERE WASH WATER FLOWS ONTO THE GROUND CAN POLLUTE STORM WATER.

DESIGN CRITERIA: USE OF OFF-SITE FUELING STATIONS AS MUCH AS POSSIBLE. IF YOU FUEL A LARGE NUMBER OF VEHICLES OR PIECES OF EQUIPMENT, CONSIDER USING AN OFF-SITE FUELING STATION EQUIPPED TO HANDLE FUEL AND SPILLS PROPERLY. PERFORMING THIS WORK OFF-SITE CAN ALSO BE ECONOMICAL BY ELIMINATING THE NEED FOR A SEPARATE FUELING AREA AT YOUR SITE. IF FUELING MUST OCCUR ON-SITE, USE DESIGNATED AREAS, LOCATED AWAY FROM DRAINAGE COURSE TO PREVENT THE RUN-ON OF STORM WATER AND THE RUNOFF OF SPILLS. DISCOURAGE "TOPPING-OFF" OF FUEL TANKS. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN,WHEN FUELING TO CATCH SPILLS/LEAKS. PLACE A STOCKPILE OF SPILL CLEANUP MATERIALS WHERE IT WILL BE READILY ACCESSIBLE. USE ABSORBENT MATERIALS ON SMALL SPILLS RATHER THAN HOSING DOWN OR BURYING THE SPILL. REMOVE THE ABSORBENT MATERIALS PROMPTLY AND DISPOSE OF PROPERLY. CARRY OUT ALL FEDERAL AND STATE REQUIREMENTS REGARDING STATIONARY ABOVE GROUND STORAGE TANKS. DO NOT USE MOBILE FUELING OF MOBILE CONSTRUCTION EQUIPMENT AROUND THE SITE; RATHER,TRANSPORT THE EQUIPMENT TO DESIGNATED FUELING AREAS. WITH THE EXCEPTION OF TRACKED EQUIPMENT SUCH AS BULLDOZERS AND PERHAPS SMALL FORKLIFTS, MOST VEHICLES SHOULD BE ABLE TO TRAVEL TO A DESIGNATED AREA WITH LITTLE LOST TIME. TRAIN EMPLOYEES AND SUBCONTRACTORS IN PROPER FUELING AND CLEANUP PROCEDURES.

LIMITATIONS: SENDING VEHICLES/EQUIPMENT OFF-SITE SHOULD BE DONE IN CONJUNCTION WITH STABILIZED CONSTRUCTION ENTRANCE BMP.

MAINTENANCE REQUIREMENTS: KEEP AMPLE SUPPLIES OF SPILL CLEANUP MATERIALS ON-SITE.
INSPECT FUELING AREAS AND STORAGE TANKS ON A REGULAR SCHEDULE.

BMP 21 **VEHICLE & EQUIPMENT FUELING**
(NOT TO SCALE)

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CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (7 OF 11)
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 13/25

DESCRIPTION: LARGE VOLUMES OF SOLID WASTE ARE OFTEN GENERATED AT CONSTRUCTION SITE INCLUDING: PACKAGING, PALLETS, WOOD WASTE, CONCRETE WASTE, SOIL, ELECTRICAL WIRING, CUTTINGS, AND A VARIETY OF OTHER MATERIALS. THE SOLID WASTE MANAGEMENT CONTAMINATION FROM SOLID WASTE THROUGH APPROPRIATE STORAGE AND DISPOSAL PRACTICES.

PRIMARY USE: THESE PRACTICES SHOULD BE A PART OF ALL CONSTRUCTION PRACTICES. BY LIMITING THE TRASH AND DEBRIS ON SITE, STORM WATER QUALITY IS IMPROVED ALONG WITH REDUCED CLEAN UP REQUIREMENTS AT THE COMPLETION OF THE PROJECT.

APPLICATIONS: THE SOLID WASTE MANAGEMENT PRACTICE FOR CONSTRUCTION SITES BASED ON PROPER STORAGE AND DISPOSAL PRACTICES BY CONSTRUCTION WORKERS AND SUPERVISORS. KEY ELEMENTS OF THE PROGRAM ARE EDUCATION AND MODIFICATION OF IMPROPER DISPOSAL HABITS. COOPERATION AND VIGILANCE IS REQUIRED ON THE PART OF SUPERVISORS AND WORKERS TO ENSURE THAT THE RECOMMENDATIONS AND PROCEDURES ARE FOLLOWED. FOLLOWING ARE LISTS DESCRIBING THE TARGETED MATERIALS AND RECOMMENDED PROCEDURES.

TARGETED SOLID WASTE MATERIALS: PAPER AND CARDBOARD CONTAINERS, PLASTIC PACKAGING, STYROFOAM PACKING AND FORMS, INSULATION MATERIALS (NON-HAZARDOUS), WOOD PALLETS, WOOD CUTTINGS, PIPE AND ELECTRICAL CUTTINGS, CONCRETE, BRICK, AND MORTAR WASTE, SHINGLE CUTTINGS AND WASTE, ROOFING TAR, STEEL (CUTTINGS, NAIL, RUST RESIDUE), GYPSUM BOARD CUTTINGS AND WASTE, SHEATHING CUTTINGS AND WASTE, MISCELLANEOUS CUTTING AND WASTE, FOOD WASTE, AND DEMOLITION WASTE.

STORAGE PROCEDURES: WHEREVER POSSIBLE, MINIMIZE PRODUCTION OF SOLID WASTE MATERIALS. DESIGNATE A FOREMAN OR SUPERVISOR TO OVERSEE AND ENFORCE PROPER SOLID WASTE PROCEDURES. INSTRUCT CONSTRUCTION WORKERS IN PROPER SOLID WASTE PROCEDURES. SEGREGATE POTENTIALLY HAZARDOUS WASTE FROM NON-HAZARDOUS CONSTRUCTION SITE DEBRIS. KEEP SOLID WASTE MATERIALS UNDER COVER IN EITHER A CLOSED DUMPSTER OR OTHER ENCLOSED TRASH CONTAINER THAT LIMITS CONTACT WITH RAIN AND RUNOFF. STORE WASTE MATERIALS AWAY FROM DRAINAGE DITCHES, SWALES AND CATCH BASINS. DO NOT ALLOW TRASH CONTAINERS TO OVERFLOW. DO NOT ALLOW WASTE MATERIALS TO ACCUMULATE ON THE GROUND. PROHIBIT LITTERING BY WORKERS AND VISITORS. POLICE SITE DAILY FOR LITTER AND DEBRIS. ENFORCE SOLID WASTE HANDLING AND STORAGE PROCEDURES.

DISPOSAL PROCEDURES: IF FEASIBLE, SEGREGATE RECYCLED WASTES FROM NON-RECYCLABLE WASTE MATERIALS AND DISPOSE OF PROPERLY. GENERAL CONSTRUCTION DEBRIS MAY BE HAULED TO A LICENSED CONSTRUCTION DEBRIS LANDFILL (TYPICALLY LESS EXPENSIVE THAN A SANITARY LANDFILL). USE WASTE FACILITIES APPROVED BY LOCAL JURISDICTION. RUNOFF WHICH COMES INTO CONTACT WITH UNPROTECTED WASTE SHALL BE DIRECTED INTO STRUCTURAL TREATMENT SUCH AS A SILT FENCE TO REMOVE DEBRIS.

EDUCATION: EDUCATE ALL WORKERS ON SOLID WASTE STORAGE AND DISPOSAL PROCEDURES. INSTRUCT WORKERS IN IDENTIFICATION OF SOLID WASTE AND HAZARDOUS WASTE. HAVE REGULAR MEETINGS TO DISCUSS AND REINFORCE DISPOSAL PROCEDURES (INCORPORATE IN REGULAR SAFETY SEMINARS). CLEARLY MARK ON ALL SOLID WASTE CONTAINERS WHICH MATERIALS ARE ACCEPTABLE.

QUALITY CONTROL: FOREMAN AND/OR CONSTRUCTION SUPERVISOR SHALL MONITOR ON-SITE SOLID WASTE STORAGE AND DISPOSAL PROCEDURES. DISCIPLINE WORKERS WHO REPEATEDLY VIOLATE PROCEDURES.

REQUIREMENTS: JOB SITE WASTE HANDLING AND DISPOSAL EDUCATION AND AWARENESS PROGRAM. COMMITMENT BY MANAGEMENT TO IMPLEMENT AND ENFORCE SOLID WASTE MANAGEMENT PROGRAM. COMPLIANCE BY WORKERS. SUFFICIENT AND APPROPRIATE WASTE STORAGE CONTAINERS. TIMELY REMOVAL OF STORED SOLID WASTE MATERIALS. POSSIBLE MODEST COST IMPACT FOR ADDITIONAL WASTE STORAGE CONTAINERS. SMALL COST IMPACT FOR TRAINING AND MONITORING. MINIMAL OVERALL COST IMPACT.

LIMITATIONS: ONLY ADDRESSES NON-HAZARDOUS SOLID WASTE ONE PART OF A COMPREHENSIVE CONSTRUCTION SITE MANAGEMENT PROGRAM.

BMP 22 **SOLID WASTE MANAGEMENT**
(NOT TO SCALE)

DESCRIPTION: THE HAZARDOUS WASTE MANAGEMENT BMP ADDRESSES THE PROBLEM OF STORM WATER POLLUTED WITH HAZARDOUS WASTE THROUGH SPILLS OR OTHER FORMS OF CONTACT. THE OBJECTIVE OF THE MANAGEMENT PROGRAM IS TO MINIMIZE THE POTENTIAL OF STORMWATER CONTAMINATION FROM COMMON CONSTRUCTION SITE HAZARDOUS WASTES THROUGH APPROPRIATE RECOGNITION, HANDLING, STORAGE AND DISPOSAL PRACTICES. IT IS NOT THE INTENT OF THIS MANAGEMENT PROGRAM TO SUPERSEDE OR REPLACE NORMAL SITE ASSESSMENT AND REMEDIATION PROCEDURES. SIGNIFICANT SPILLS AND/OR CONTAMINATION WARRANT IMMEDIATE RESPONSE BY TRAINED PROFESSIONALS. SUSPECTED JOB-SITE CONTAMINATION SHOULD BE IMMEDIATELY REPORTED TO REGULATORY AUTHORITIES AND PROTECTIVE ACTIONS TAKEN. THE GENERAL PERMIT REQUIRES REPORTING OF SIGNIFICANT SPILLS TO THE NATIONAL RESPONSE CENTER (NRC) AT (800) 424-8802.

PRIMARY USE: THESE MANAGEMENT PRACTICES ALONG WITH APPLICABLE OSHA AND EPA GUIDELINES SHOULD BE INCORPORATED AT ALL CONSTRUCTION SITES WHICH USE OR GENERATE HAZARDOUS WASTES. MANY WASTES SUCH AS FUEL, OIL, GREASE, FERTILIZER AND PESTICIDE ARE PRESENT AT MOST CONSTRUCTION SITES.

INSTALLATION, APPLICATION AND DISPOSAL CRITERIA: THE HAZARDOUS WASTE MANAGEMENT TECHNIQUES PRESENTED HERE ARE BASED ON PROPER RECOGNITION, HANDLING, AND DISPOSAL PRACTICES BY CONSTRUCTION WORKERS AND SUPERVISORS. KEY ELEMENTS OF THE MANAGEMENT PROGRAM ARE EDUCATION, PROPER DISPOSAL PRACTICES, AS WELL AS PROVISIONS FOR SAFE STORAGE AND DISPOSAL. FOLLOWING ARE LISTS DESCRIBING THE TARGETED MATERIALS AND RECOMMENDED PROCEDURES.

TARGETED HAZARDOUS WASTE MATERIALS: PAINTS, SOLVENTS, STAINS, WOOD PRESERVATIVES, CUTTING OILS, GREASES, ROOFING TAR, PESTICIDES, FUELS & LUBE OILS, AND LEAD BASED PAINTS (DEMOLITION)

STORAGE PROCEDURES: WHEREVER POSSIBLE, MINIMIZE USE OF HAZARDOUS MATERIALS. MINIMIZE GENERATION OF HAZARDOUS WASTES ON THE JOB-SITE. SEGREGATE POTENTIALLY HAZARDOUS WASTE FROM NON-HAZARDOUS CONSTRUCTION SITE DEBRIS. DESIGNATE A FOREMAN OR SUPERVISOR TO OVERSEE HAZARDOUS MATERIALS HANDLING PROCEDURES. KEEP LIQUID OR SEMI-LIQUID HAZARDOUS WASTE IN APPROPRIATE CONTAINERS (CLOSED DRUMS OR SIMILAR) AND UNDER COVER. STORE WASTE MATERIALS AWAY FROM DRAINAGE DITCHES, SWALES, AND CATCH BASINS. USE CONTAINMENT BERMS IN FUELING AND MAINTENANCE AREAS AND WHERE THE POTENTIAL FOR SPILLS IS HIGH. ENSURE THAT ADEQUATE HAZARDOUS WASTE STORAGE VOLUME IS AVAILABLE. ENSURE THAT HAZARDOUS WASTE COLLECTION CONTAINERS ARE CONVENIENTLY LOCATED. DO NOT ALLOW POTENTIALLY HAZARDOUS WASTE MATERIALS TO ACCUMULATE ON THE GROUND. ENFORCE HAZARDOUS WASTE HANDLING AND DISPOSAL PROCEDURES. CLEARLY MARK ON ALL HAZARDOUS WASTE CONTAINERS WHICH MATERIALS ARE ACCEPTABLE FOR THE CONTAINER.

DISPOSAL PROCEDURES: REGULARLY SCHEDULE HAZARDOUS WASTE REMOVAL TO MINIMIZE ON-SITE STORAGE. USE ONLY REPUTABLE, LICENSED HAZARDOUS WASTE HAULERS.

EDUCATION: INSTRUCT WORKERS IN IDENTIFICATION OF HAZARDOUS WASTE. EDUCATE WORKERS OF POTENTIAL DANGERS TO HUMANS AND THE ENVIRONMENT FROM HAZARDOUS WASTES. INSTRUCT WORKERS ON SAFETY PROCEDURES FOR COMMON CONSTRUCTION SITE HAZARDOUS WASTES. EDUCATE ALL WORKERS ON HAZARDOUS WASTE STORAGE AND DISPOSAL PROCEDURES. HAVE REGULAR MEETINGS TO DISCUSS AND REINFORCE IDENTIFICATION, HANDLING AND DISPOSAL PROCEDURES (INCORPORATE IN REGULAR SAFETY SEMINARS). ESTABLISH A CONTINUING EDUCATION PROGRAM TO INDOCTRINATE NEW EMPLOYEES.

QUALITY ASSURANCE: FOREMAN AND/OR CONSTRUCTION SUPERVISOR SHALL MONITOR ON-SITE HAZARDOUS WASTE STORAGE AND DISPOSAL PROCEDURES. EDUCATE AND IF NECESSARY, DISCIPLINE WORKERS WHO VIOLATE PROCEDURES. ENSURE THAT THE HAZARDOUS WASTE DISPOSAL CONTRACTOR IS REPUTABLE AND LICENSED.

REQUIREMENTS: JOB-SITE HAZARDOUS WASTE HANDLING AND DISPOSAL EDUCATION AND AWARENESS PROGRAM. COMMITMENT BY MANAGEMENT TO IMPLEMENT HAZARDOUS WASTE MANAGEMENT PRACTICES. COMPLIANCE BY WORKERS. SUFFICIENT AND APPROPRIATE HAZARDOUS WASTE STORAGE CONTAINERS. TIMELY REMOVAL OF STORED HAZARDOUS WASTE MATERIALS.

COSTS: POSSIBLE MODEST COST IMPACT FOR ADDITIONAL HAZARDOUS STORAGE CONTAINERS. SMALL COST IMPACT FOR TRAINING AND MONITORING. POTENTIAL COST IMPACT FOR HAZARDOUS WASTE COLLECTION AND DISPOSAL BY LICENSED HAULER ACTUAL COST DEPENDS ON TYPE OF MATERIAL.

BMP 23 **HAZARDOUS WASTE MANAGEMENT**
(NOT TO SCALE)

DESCRIPTION: CONCRETE WASTE AT CONSTRUCTION SITES COMES IN TWO FORMS: 1) EXCESS FRESH CONCRETE MIX INCLUDING TRUCK AND EQUIPMENT WASHING, AND 2) CONCRETE DUST AND CONCRETE DEBRIS RESULTING FROM DEMOLITION. BOTH FORMS HAVE THE POTENTIAL TO IMPACT WATER QUALITY THROUGH STORM WATER RUNOFF CONTACT WITH THE WASTE.

PRIMARY USE: CONCRETE WASTE IS PRESENT AT MOST CONSTRUCTION SITES. THIS BMP SHOULD BE UTILIZED AT SITES IN WHICH CONCRETE WASTE IS PRESENT.

APPLICATIONS: A NUMBER OF WATER QUALITY PARAMETERS CAN BE AFFECTED BY INTRODUCTION OF CONCRETE. ESPECIALLY FRESH CONCRETE. CONCRETE AFFECTS THE PH OF RUNOFF, CAUSING SIGNIFICANT CHEMICAL CHANGES IN WATER BODIES AND HARMING AQUATIC LIFE. SUSPENDED SOLIDS IN THE FORM OF BOTH CEMENT AND AGGREGATE DUST ARE ALSO GENERATED FROM BOTH FRESH AND DEMOLISHED CONCRETE WASTE.

CURRENT UNACCEPTABLE WASTE CONCRETE DISPOSAL PRACTICES: DUMPING IN VACANT AREAS ON THE JOB-SITE. ILLICIT DUMPING OFF-JOBSITE. DUMPING INTO DITCHES OR DRAINAGE FACILITIES.

RECOMMENDED DISPOSAL PRACTICES: AVOID UNACCEPTABLE DISPOSAL PRACTICES LISTED ABOVE. DEVELOP PRE-DETERMINED, SAFE CONCRETE DISPOSAL AREAS. PROVIDE A WASHOUT AREA WITH THE MINIMUM OF 6 CUBIC FEET OF CONTAINMENT AREA VOLUME FOR EVERY 10 CUBIC YARDS OF CONCRETE POURED. NEVER DUMP WASTE CONCRETE ILLICITLY OR WITHOUT PROPERTY OWNERS KNOWLEDGE AND CONSENT. TREAT RUNOFF FROM STORAGE AREAS THROUGH THE USE OF STRUCTURAL CONTROLS AS REQUIRED.

EDUCATION: DRIVERS AND EQUIPMENT OPERATORS SHOULD BE INSTRUCTED ON PROPER DISPOSAL AND EQUIPMENT WASHING PRACTICES (SEE ABOVE). SUPERVISORS MUST BE MADE AWARE OF THE POTENTIAL ENVIRONMENTAL CONSEQUENCES OF IMPROPERLY HANDLED CONCRETE WASTE.

ENFORCEMENT: THE CONSTRUCTION SITE MANGER OR FOREMAN MUST ENSURE THAT EMPLOYEES AND PRE-MIX COMPANIES FOLLOW PROPER PROCEDURES FOR CONCRETE DISPOSAL AND EQUIPMENT WASHING. EMPLOYEES VIOLATING DISPOSAL OR EQUIPMENT CLEANING DIRECTIVES MUST BE RE-EDUCATED OR DISCIPLINED IF NECESSARY.

DEMOLITION PRACTICES: MONITOR WEATHER AND WIND DIRECTION TO ENSURE CONCRETE DUST IS NOT ENTERING DRAINAGE STRUCTURES AND SURFACE WATERS. WHERE APPROPRIATE, CONSTRUCT SEDIMENT TRAPS OR OTHER TYPES OF SEDIMENT DETENTION DEVICES DOWNSTREAM OF DEMOLITION ACTIVITIES.

REQUIREMENTS: USE A PRE-DETERMINED DISPOSAL SITE(S) APPROVED BY LADEQ FOR WASTE CONCRETE (SEE BMP 22 SOLID WASTE MANAGEMENT). INFORM PROGRAM MANAGER OF SELECTED DISPOSAL SITE(S). PROHIBIT DUMPING WASTE CONCRETE ANYWHERE BUT PRE-DETERMINED AREAS. ASSIGN PRE-DETERMINED TRUCK AND EQUIPMENT WASHING AREAS. EDUCATE DRIVERS AND OPERATORS ON PROPER DISPOSAL AND EQUIPMENT CLEANING PROCEDURES.

COSTS: MINIMAL COST IMPACT FOR TRAINING AND MONITORING. CONCRETE DISPOSAL COST DEPENDS ON AVAILABILITY AND DISTANCE TO SUITABLE DISPOSAL AREAS. ADDITIONAL COSTS INVOLVED IN EQUIPMENT WASHING COULD BE SIGNIFICANT.

LIMITATIONS: THIS CONCRETE WASTE MANAGEMENT PROGRAM IS ONE PART OF A COMPREHENSIVE CONSTRUCTION SITE WASTE MANAGEMENT PROGRAM.

BMP 24 **CONCRETE WASTE MANAGEMENT**
(NOT TO SCALE)

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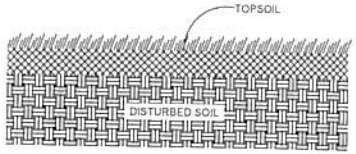
CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (8 OF 11)

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

STATE OF LOUISIANA
THOMAS R. CLINCE
REG. NO. 30180
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

REVISIONS:

JOB NO: 13-183
DATE: January, 2019
SHEET



STANDARD FOR TOPSOILING:

TOPSOILING: DEFINITIONS: TOPSOILING IS THE STRIPPING, STORING, AND SPREADING OF FERTILE TOPSOIL OVER DISTURBED AREAS. **PURPOSE:** TOPSOILING WILL PROVIDE A MORE SUITABLE SOIL MEDIUM IF THE EXISTING OR CONSTRUCTED SURFACE IS UNFAVORABLE FOR PLANT GROWTH. TOPSOILING WILL GREATLY INCREASE THE SUCCESS OF ESTABLISHING GOOD VEGETATION, HELP REDUCE SOIL EROSION, AND ENHANCE THE BEAUTY OF THE DEVELOPMENT.

CONDITIONS WHERE PRACTICES APPLIES: TOPSOILING IS USED WHERE: THE TEXTURE AND QUALITY OF THE EXPOSED SUBSOIL OR PARENT MATERIAL ARE NOT SUITABLE FOR PRODUCING ADEQUATE VEGETATIVE GROWTH. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS WITH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS. THE SOIL IS EXTREMELY ACIDIC OR CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

DESIGN CRITERIA: TOPSOIL MATERIALS: THE SITE SHOULD BE EXPLORED TO DETERMINE IF THERE IS SUFFICIENT SURFACE SOIL OF GOOD QUALITY TO JUSTIFY STRIPPING. IF ADDITIONAL OFF-SITE TOPSOIL IS NEEDED, IT SHOULD MEET THE FOLLOWING STANDARDS AS WELL: TOPSOIL SHOULD BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM). TOPSOIL SHOULD BE FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCES THAT MAY BE HARMFUL TO PLANT GROWTH. ORGANIC MATTER CONTENT SHOULD NOT BE LESS THAN 0.75 PERCENT BY WEIGHT; PH RANGE SHOULD BE FROM 5.0- 7.5. **STRIPPING AND STOCKPILING:** STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL. TOPSOIL SHOULD BE STOCKPILED SO THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND OFF-SITE SEDIMENT DAMAGE DOES NOT OCCUR. STOCKPILE SIDESLOPES SHOULD NOT EXCEED 2:1. A PERIMETER DIKE WITH AN OUTLET OR STRAW BALE BARRIERS SHOULD SURROUND THE STOCKPILES. TEMPORARY SEEDING SHOULD BE COMPLETED WITHIN 15 DAYS OF STOCKPILE FORMATION. **SITE PREPARATION:** WHEN TOPSOILING MAINTAIN NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSION DIKES, SEDIMENT BASINS, WATERWAYS, ETC. GRADING - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED,SHOULD BE MAINTAINED. LIMING - WHERE THE PH OF THE SUBSOIL IS .0 OR LESS OR THE SOIL IS COMPOSED OF HEAVY CLAYS, AGRICULTURAL LIME BE SPREAD IN ACCORDANCE WITH THE SOIL TEST ON THE VEGETATIVE ESTABLISHMENT PRACTICE BEING USED. BONDING - AFTER LIMING AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUBGRADE SHOULD BE LOOSENED BY DISKING AND SCARIFYING TO A DEPTH OF AT LEAST TWO INCHES TO INSURE BONDING OF THE TOPSOIL AND SUBSOIL. **APPLYING TOPSOIL:** TOPSOIL SHOULD BE HANDLED WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE. A UNIFORM APPLICATION OF 4 TO 6 INCHES UNSETTLED SHOULD BE MADE. NO SOD OR SEED SHOULD BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS UNTIL SUFFICIENT TIME HAS ELAPSED TO PERMIT DISSIPATION OF TOXIC MATERIALS.

GENERAL NOTES: THERE ARE ADVATAGES AND DISADVANTAGES IN TOPSOILING: STRIPPING, STOCKPILING, REAPPLYING OR IMPORTING TOPSOIL MAY NOT ALWAYS BE COST-EFFECTIVE. TOPSOILING CAN DELAY SEEDING OR SODDING OPERATIONS AND INCREASE THE EXPOSURE TIME OF DENUDED AREAS. ALSO, MOST TOPSOILS CONTAIN WEED SEEDS, AND WEEDS MAY COMPETE WITH DESIRABLE SPECIES. ON THE OTHER HAND, THE ADVANTAGES OF TOPSOIL INCLUDE ITS HIGH ORGANIC MATTER CONTENT, FRIABLE NATURE WATER-HOLDING CAPACITY, AND NUTRIENT CONTENT, WHICH MAKES IT AN EXCELLENT MEDIUM FOR GROWTH AND GREATLY REDUCES CHANCES OF FAILURE. FURTHER, PREPARING A SEEDBED IN SUBSOIL MAY BE CONSIDERED INSTEAD OF TOPSOILING, AS SOME SUBSOILS MAY PROVIDE A GOOD GROWTH MEDIUM WHICH IS GENERALLY FREE OF WEED SEEDS. IF TOPSOILING IS TO BE DONE, IT SHOULD BE DETERMINED IF AN ADEQUATE VOLUME OF TOPSOIL EXISTS ON THE SITE. THE STOCKPILE SHOULD BE LOCATED FOR PROPER NON-EROSIVE DRAINAGE AND SUCH THAT IT DOES NOT INTERFERE WITH WORK ON THE SITE. SUFFICIENT TIME SHOULD BE ALLOWED FOR SPREADING AND BONDING TOPSOIL PRIOR TO SEEDING, SODDING OR PLANTING; TOPSOIL AND SUBSOIL SHOULD BE PROPERLY BONDED. TOPSOIL SHOULD NOT BE APPLIED TO A SUBSOIL WITH CONTRASTING TEXTURE (AS A CLAY) UNLESS THE SURFACE OF THE SUBSOIL IS SCARIFIED TO PROVIDE A GOOD BOND WITH THE TOPSOIL.

BMP 31 **TOPSOILING** (NOT TO SCALE)

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CPS 903-01: STORM WATER POLLUTION PREVENTION PLAN (10 OF 11)

PARISH WIDE DRAINAGE PROJECT 2

JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING

POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

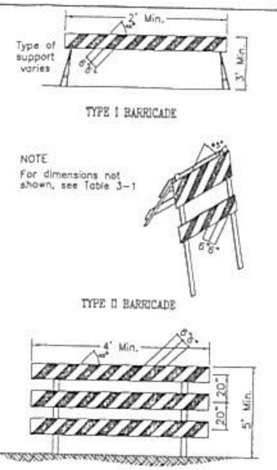
DOUG R. PATIN LA REG. NO. 30180 PROFESSIONAL ENGINEER CIVIL ENGINEERING

REVISIONS:

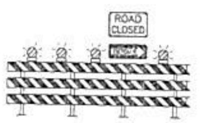
JOB NO. 13-183

DATE January, 2019

SHEET 15/25



STANDARD BARRICADES
Figure 3-1



BARRICADE CLOSING A ROAD
Figure 3-2

Barricade Design

Barricades with stripes which begin at the upper right side and slope to the lower left side are designated as "right" (R) barricades. Barricades with stripes which begin at the upper left side and slope to the lower right side are designated as "left" (L) barricades.

Markings for barricade rails shall be alternate orange and white stripes sloping downward in the direction traffic is to pass.

Where a barricade extends entirely across a roadway, stripes shall slope downward in the direction toward which traffic must turn in detouring. Where both right and left turns are provided, chevron striping shall slope downward in both directions from the center of the barricade.

Barricade rails shall be supported in a manner that will allow them to be seen by motorists and provide a support not easily blown over by wind or traffic. For Type I Barricades, the support may include other unstriped horizontal panels necessary to provide stability. The name of the agency, contractor, or supplier shall not be shown on the face parts of any barricade. Identification markings may be shown only on the back side of barricade rails.

Orange and white markings shall be encapsulated lens reflective sheeting which will display the same approximate size, shape and color for day and night, and shall conform to subsectioin 1020-1.2(C) of the Standard Specifications for Public Works Construction. The predominate color for other barricade components shall be white, except that unpainted galvanized metal or aluminum components may may be used.

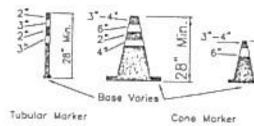
Barricades shall be constructed of lightweight materials and have no rigid stay bracing for "A" frame designs.

TABLE 3-1 BARRICADE REQUIREMENTS

	I	II	III
Width of Rail*	8" to 12"	8" to 12"	8" to 12"
Length of Rail	2' min.	2' min.	4' min.
Width of Stripes**	6"	6"	6"
Height	3' min.	3' min.	5' min.
No. of Reflectorized Rails facing one direction of traffic	1	2	3

* For wood barricade, nominal lumber dimension will be satisfactory.

** For rails less than 3' long, 4" wide stripes shall be used.



CONES
Figure 3-3

Cone Design and Tubular Marker Design

Cones and tubular markers shall have a broadened base and withstand impact without damage to themselves or to vehicles. Orange shall be the predominant color on cones. They shall be kept clean. For nighttime use they shall be reflectorized or equipped with lighting devices. Reflectorized material shall display the same approximate color day and night and shall conform to subsection 1020-1-2(C) of the Standard Specifications for Public Works Construction. Reflectorization of tubular markers shall be a minimum of 3" bands placed a minimum of 2" from the top with a maximum of 3" from the top.

Cones or tubular markers shall be set on the roadway surface or rigidy attached for continued use. Precautions shall be taken to assure they will not be blown over or displaced.

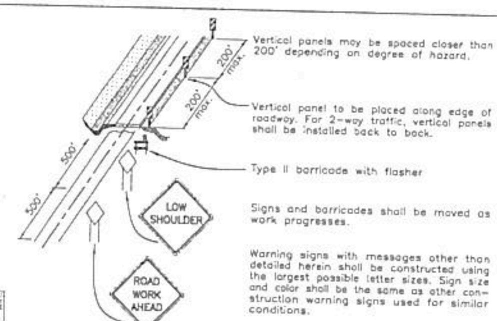
Barricade Application

Type I and II barricades shall be used where traffic is maintained through the construction area. They may be used singly or in groups to mark a specific hazard or used in series for channelizing traffic. Type I barricades shall be used on low speed roads or urban streets. Type II barricades shall be used on high speed roads. Where barricades are susceptible to overturning in the wind, sandbags shall be used for ballasting. Sandbags may be placed on lower parts of the frame or stays but shall not be placed on top of a striped rail.

When a road section is closed to traffic, Type III barricades shall be erected at the points or closure. They shall extend completely across a roadway and its shoulders or from curb to curb. To further discourage motorists from gaining access through the construction site by removing the barricade, the barricades may be anchored to the roadway. For nighttime use four high intensity flashing warning lights shall be placed on the barricade. If only one lane of the travelway is closed by a barricade, two lights shall be used. Steady burn lights shall be used when barricades are used in a series for channelization. Where provisions must be made for access of equipment and authorized vehicles, barricades shall be provided with gates or movable sections that can be closed when work is not in progress, or with indirect openings that will discourage public entry. Access through barricades shall be closed at the end of each work day.

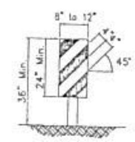
When a road or street is closed, but access must be allowed for local traffic, the barricade cannot be erected completely across a roadway. A sign with the appropriate legend concerning permissible use by local traffic shall be installed above the barricade.

Type III barricades may be used as mounting for regulatory signs, guide signs or lighting devices.



SHOULDER TRENCH SIGNS
Figure 3-4

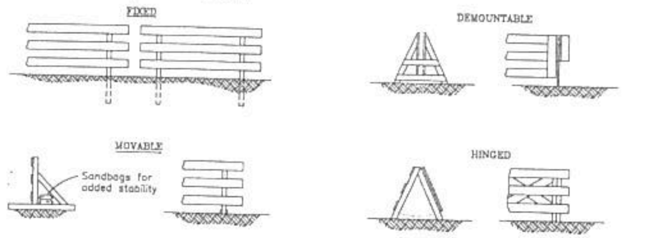
Vertical panels for trench adjacent to travelway shall be placed at 200' intervals on tangents and 100' intervals on curves. The interval shall be reduced as degree of curvature increases so that the edge of trench is clearly delineated.



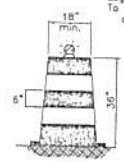
VERTICAL PANEL
Figure 3-5

Vertical Panel Design and Application

Vertical panels used as channelization or warning devices shall be orange and white striped and reflectorized in the same manner as barricades. These devices may be used for traffic separation or shoulder barricoding where space is restricted. Panels with stripes which begin at the upper right side and slope to the lower left side are designated as "right" panels (VP-1R). Panels with stripes which begin at the upper left side and slope to the lower right side are designated as "left" panels (VP-1L). For nighttime use, attach flashing warning lights on vertical panels when they are used singly and steady burn warning lights when vertical panels are used in a series for channelization. If used for 2-way traffic, back-to-back panels shall be used.



Type III Barricade Construction
Figure 3-6

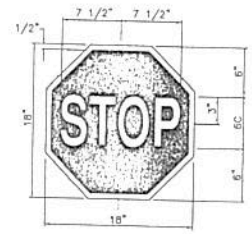


DRUM
Figure 3-7

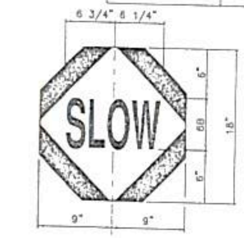
Drum Design and Application

Drums used for traffic warning or channelization shall be made of plastic and have closed tops. Marking on drums shall be horizontel circumferential orange and white reflectorized stripes displaying the same approximate size, shape and color day and night and shall conform to subsection 1020-1.2(C) of the Standard Specifications for Public Works Construction. There shall be at least 2 orange and 2 white stripes on each drum. Any nonreflectorized spaces between the orange and white stripes shall be no more than 2" wide.

Drums may be used to channelize or delineate traffic flow or to mark hazards. When drums are placed in the roadway, advance warning signs shall be used. Drum shall not be weighted to the extent that would make them hazardous to motorist. The standard ballast shall be a 25 lb. bag of sand, not to be placed on top of drum. For nighttime use, flashing warning lights shall be attached to drums singly. Steady burn warning light shall be attached to drums used in series for traffic chanellization. Small arrow signs or vertical panels mounted above drums may be used to supplement drum delineation.



Background – Red
Border – White
Legend – 6" series C
To be made of .08 aluminum or .04 tempered aluminum



Background – Orange (reflectorized)
Area outside diamond – Black or Light Blue
Legend – 6" series B
To be made of .08 aluminum or .04 tempered aluminum

PADDLE SIGNS
Figure 3-8

FLAGGING PROCEDURES
Figure 3-9

The following methods of signaling with paddles should be used.

To Stop Traffic

TO STOP TRAFFIC. The flagger shall face traffic and extend the STOP sign paddle in a stationary position with the arm extended horizontally away from the body. The free arm is raised with the palm toward approaching traffic.

Traffic Proceed

When it is Safe for TRAFFIC TO PROCEED, the flagger shall face traffic with the SLOW sign paddle held in a stationary position with the arm extended horizontally away from the body. The flagger motions traffic ahead with the free hand.

To Alert & Slow Traffic

When it is Desired to ALERT OR SLOW TRAFFIC, the flagger shall face traffic with the SLOW sign paddle held in a stationary position with the arm extended horizontally away froom the body.

Flagger stations shall be in a highly visible location far enough in advance of the work site so that approaching traffic will have sufficient distance to reduce speed before entering the project. 200'-300' is desireable. In urban areas, the advanced distance should be decreased.

The flagger shall stand either on the shoulder adjacent to the traffic being controlled or in the barricaded lane. At a "spot" obstruction a position shall be taken on the shoulder opposite the barricade section. Under no circumstances shall a flagger stand in the lane being used by moving traffic. The flagger shall be highly visible to approaching traffic. The flagger shall stand alone, never permitting other workers to congregate around the flagger station.

STANDARD PLAN NO.	DATED	SHEET NO
CPS 905-01	January 6, 2000	1 OF 4

CONSTRUCTION SIGNS AND BARRICADES

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
REE/NAR	GV/RLB	REE/NAR	MJ BROUSSARD

DATE	DESCRIPTION REVISIONS	BY

CPS 905-01

C-13

PROJECT NO. | SHEET

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PATIN ENGINEERS & SURVEYORS
INCORPORATED

CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (1 OF 4)

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO.
13-183

DATE
January, 2019

SHEET
16/25

ADVANCE ROAD CONSTRUCTION SIGN

The Advance Road Construction sign shall be located in advance of the initial activity or detour a driver may encounter. It shall have the legend ROAD CONSTRUCTION (XXX) FT or ROAD CONSTRUCTION (XX) MILE. The legend ROAD CONSTRUCTION AHEAD shall be used on approaches of roads that intersect with the road under construction. May be used in conjunction with other construction signs.

W20-1
48" x 48"

SIDE ROAD CONSTRUCTION AHEAD SIGN

The Side Road Construction Ahead sign shall be used in advance of an intersection where the construction project on the side road approach terminates at the crossing.

36" x 36"
Legend 6" Series C

DO NOT PASS AND PASS WITH CARE SIGNS

The Do Not Pass sign shall be used where a road normally used for one-way traffic is temporarily being used for 2-way traffic. It shall be installed on both sides of the road at intervals of 1000 – 1500 feet.

The Pass With Care sign shall be used at the end of a no-passing zone where a Do Not Pass sign has been erected at the beginning of the zone. It shall be of the same size and erected in the same manner as the Do Not Pass Sign.

R4-1
24" x 30"
Background – White
Legend & Border – Black
Legend – 6" Series D

R4-2
24" x 30"
Background – White
Legend & Border – Black
Legend – 6" Series D

ADVANCE DETOUR SIGN

The Advance Detour sign shall be used in advance of a point at which traffic is diverted over a temporary road or another route. It shall have the legend DETOUR (XXX) FT or DETOUR (XX) MILE.

W20-2
48" x 48"

SOFT OR LOW SHOULDER SIGN

The Soft Shoulder and/or Low Shoulder sign shall be used when the shoulder of the road under construction becomes hazardous to traffic.

W8-4
30" x 30"
Legend 5" Series C

W8-9
30" x 30"
Legend 5" Series C

LOCAL TRAFFIC ONLY SIGN

The Local Traffic Only sign shall be used where through traffic must detour to avoid a closing of the road, but where the road is open to traffic up to the point of closure. It shall carry the legend ROAD CLOSED (XX) MILES AHEAD LOCAL TRAFFIC ONLY or ROAD CLOSED TO THRU TRAFFIC. It shall be erected on a barricade in the center of the road if the pavement width permits, otherwise it shall be erected at the right of the road. It shall be accompanied by a detour arrow sign indicating the proper route for through traffic. The words ROAD CLOSED may be substituted by BRIDGE OUT where applicable. Where the sign faces through traffic it shall be preceded by an advance road closed sign and an advance detour sign.

R11-3
60" X 30"

R11-4
60" X 30"

Background – White
Legend & Border – Black
Legend – Line 1 – 6" Series C
Line 2 – 5" Series C
Line 3 – 4" Series C

ONE WAY SIGN

The One Way sign shall be used to indicate roads on which traffic is allowed to travel in one direction only. The sign shall be either a black horizontal rectangle with the words ONE WAY centered in the arrow, or a vertical rectangle with black lettering and arrow on a white background. Both designs may use either left or right arrows.

R6-1 L
R6-1 R
36" X 12"
Background – Black
Legend – White
Arrow – White
Legend – 4" Series D

R6-2 L
R6-2 R
18" X 24"
Background – White
Legend & Border – Black
Legend – 3" Series D

ADVANCE ROAD CLOSED SIGN

The Advance Road Closed sign shall be used in advance of a point at which a roadway is closed to all traffic or to all but local traffic. It shall have the legend ROAD CLOSED (XXX) FT or ROAD CLOSED (XX) MILE.

W20-3
48" x 48"

ROAD MACHINERY AHEAD AND FRESH OIL SIGNS

The Road Machinery Ahead sign shall be used where heavy road equipment is operating in or adjacent to the roadway.

The Fresh Oil or Fresh Tar sign shall be used to warn motorists that resurfacing of the road has rendered it temporarily hazardous and splashing on vehicles may occur.

W21-3
36" x 36"
Legend 5" Series D

W21-2
30" x 30"
Legend 6" Series D

ROAD CLOSED SIGN

The Road Closed sign shall be used where the road is closed to all traffic except contractor's equipment and officially authorized vehicles. It shall be erected at the center of the road on or above a Type III barricade. Bridge out may be substituted where applicable.

R11-2
48" x 30"

Background – White
Legend & Border – Black
Legend – 6 Series D

DETOUR SIGNS

The Detour Arrow sign (M4-10) shall be used at a point where a detour route has been established due to the closure of part of a road to through traffic. It shall be mounted just below the Road Closed sign or the Local Traffic Only sign normally on top of a Type III barricade.

The Detour Marker (M4-8) mounted on a route marker assembly is to be used to mark a temporary detour route that branches from a regular numbered route or bypasses a section of a route that is closed by construction, and rejoins the regular route beyond that section. The route marker assembly shall include an arrow indicating the direction of the detour.

The Detour sign (M4-9) is to be used for unnumbered routes, or in emergency situations; for periods of short duration, or where it is not necessary to show route markers to guide traffic along to its desired route. A Street Name sign may be placed above or incorporated in the Detour sign to indicate the name of the roadway for which the detour was established.

M4-9 L
M4-9 R
30" X 24"

M4-8
12" X 24"

M4-10 L
M4-10 R
48" X 18"
Background – Black
Legend – Black
Arrow – Orange
Legend – 8" Series D

ADVANCE ONE LANE ROAD SIGN

The Advance One Lane Road sign shall be used only in advance of a point where traffic in both directions must use a single lane. It shall have the legend ONE LANE ROAD (XX) FT. If the one-lane stretch is not visible throughout from either end, or if traffic is of such volume that simultaneous arrivals at both ends occur frequently, provision shall be made to permit traffic to move alternately under control of flagging or signal.

W20-4
48" x 48"

ROAD WORK AHEAD SIGN

The Road Work Ahead sign shall be used in advance of maintance or minor construction operations in the road.

W21-4
36" x 36"
Legend 5" Series D

TWO-WAY TRAFFIC SIGN

The Two-Way Traffic sign shall be used where a road normally used for one-way traffic is temporarily being used for two-way traffic or where it is necessary to remind drivers that they are traveling on a two-way road. The sign shall be placed at itervals of one-half mile and at major access points.

W6-3
48" x 48"

ADVISORY SPEED SIGN

An Advisory Speed sign shall be used to indicate a maximum safe speed determined by the Traffic Engineer through a hazardous area. Advisory speeds greater than the posted speed limit shall not be used.

W13-1
18" x 18"
Legend-Line 1 – 8" Series E
Line 2 – 3" Series E

ADVANCE LANE CLOSED SIGN

The Advance Lane Closed sign shall be used in advance of a point where one lane of a multilane road is closed. It shall have the legend RIGHT (LEFT) LANE CLOSED (XXX) FT. May be used in conjunction with other signs.

W20-5
48" x 48"

SHOULDER WORK AND SURVEY CREW SIGNS

The Shoulder Work sign shall be used in advance of maintance or minor construction operations on the shoulder, where the travelway remains unobstructed.

The Survey Crew sign shall be used in advance of a point where a survey party is working in or adjacent to the road.

W21-5
30" x 30"
Legend 5" Series C

W21-6
30" x 30"
Legend 5" Series D

SPEED LIMIT AND SPEED ZONE AHEAD SIGNS

Regulatory maximum speed limit signs shall be placed at intervals throughout the section of the project where work is being done. Speed limit shall be as indicated on plans, but not exceeding 45 mph. The speed limit shall be reduced to 20 mph through and for 275' on either side of each point where construction activites require such a reduction. In rural areas 750' should be used. When the work area moves out of the immediate section, the regulatory signs shall be covered or removed.

The Speed Zone Ahead sign shall be erected in advance of each speed zone within a construction area.

Where construction occurs within areas having posted legal speed limits less than those specified above, the posted legal speed shall apply.

Existing speed limit signs of greater than 45 mph shall be removed or covered for the duration of the project.

R2-1
24" x 30"
Background – White
Legend & Border – Black
Legend – Line 1 – 4" Series E
Line 2 – 4" Series E
Line 3 – 10" Series C

R2-5c
24" x 30"
Background – White
Legend & Border – Black
Legend – Line 1,2 & 3
6" Series C

ADVANCE FLAGGER SIGN

The Advance Flagger sign shall be used in advance of where a flagger has been stationed to control traffic through a construction area. It shall have the flagger symbol. When needed, distance message may be displayed on a supplemental plate below the symbol sign. The Word Message sign W20-7 with distances may be used in lieu of the flagger symbol sign. The sign shall be removed, covered or turned to face away from the road when flagger is not at the station.

W20-7
36" x 36"
Supplemental Plate
24" x 18"

W20-7a
36" x 36"
Supplemental Plate
24" x 18"

END CONSTRUCTION AND LENGTH OF CONSTRUCTION SIGNS

The End Construction sign shall be erected 500 feet beyond the end of a construction project. The legend END ROADWORK may be used.

The Length of Construction sign shall be erected at the limits of construction projects more than 2 miles in length, when through traffic is maintained. It shall have the legend ROAD CONSTRUCTION NEXT (XX) MILES. The Project length shall be to the nearest one tenth of a mile. It should be mounted on top of a Type III barricade.

G20-2
60" x 24"

G20-1
60" x 36"

Legend 6" Series C

NOTE:
All signs shall have orange backgrounds with with black legends and borders, except where otherwise specified. In urban areas, the word STREET may be substituted for the word ROAD on all signs.

PROJECT NO.	SHEET

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CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (2 OF 4)
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

STANDARD PLAN NO.	DATED	SHEET NO.
CPS 905-01	January 6,2000	2 OF 4

CONSTRUCTION SIGNS AND BARRICADES

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
REE/NAR	GV/PLB	REE/NAR	WJ BROUSSARD

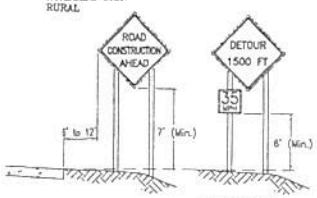
DATE	DESCRIPTION REVISIONS	BY

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 17/25

CPS 905-01
C-14

ROADSIDE SIGN
RURAL



With Advisory Speed Plate

ROADSIDE SIGN
URBAN

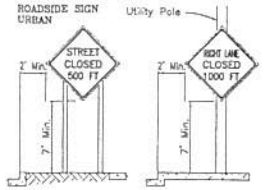
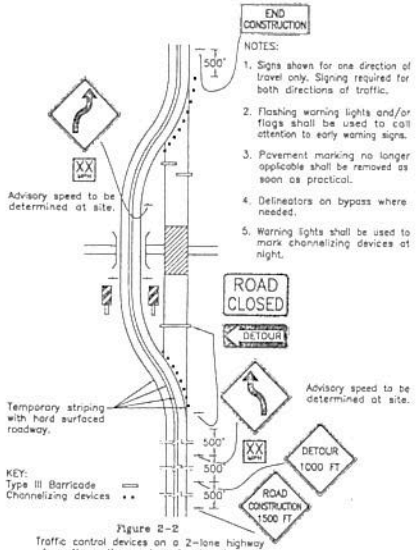


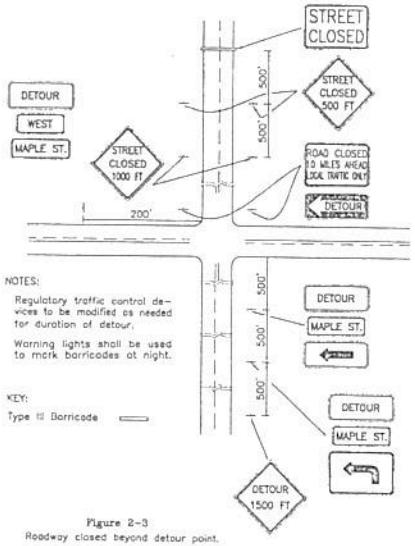
Figure 2-1
Heights and lateral location of signs.



NOTES:

1. Signs shown for one direction of travel only. Signing required for both directions of traffic.
2. Flashing warning lights and/or flags shall be used to call attention to early warning signs.
3. Pavement marking no longer applicable shall be removed as soon as practical.
4. Delineators on bypass where needed.
5. Warning lights shall be used to mark channelizing devices at night.

Figure 2-2
Traffic control devices on a 2-lane highway where the entire roadway is closed and a bypass detour is provided.



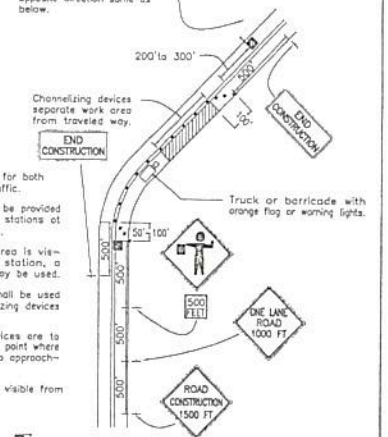
NOTES:

Regulatory traffic control devices to be modified as needed for duration of detour.

Warning lights shall be used to mark barricades at night.

KEY:
Type III Barricade

Figure 2-3
Roadway closed beyond detour point.

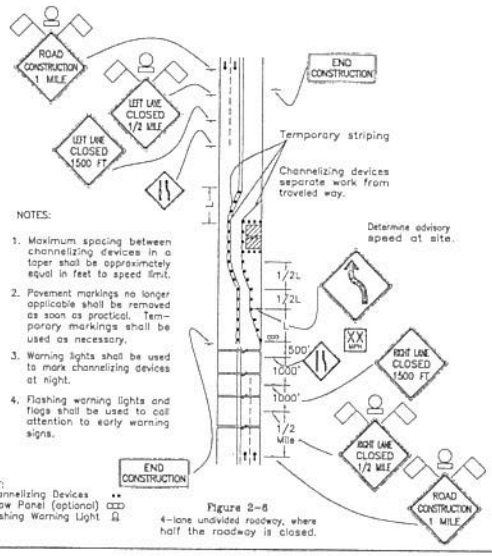


NOTES:

1. Signing required for both directions of traffic.
2. Flood light shall be provided to mark flagger stations at night as needed.
3. If entire work area is visible from one station, a single flagger may be used.
4. Warning lights shall be used to mark channelizing devices at night.
5. Channelizing devices are to be extended to a point where they are visible to approaching traffic.
6. Flagger must be visible from flagger sign.

KEY:
Flagger
Channelizing devices

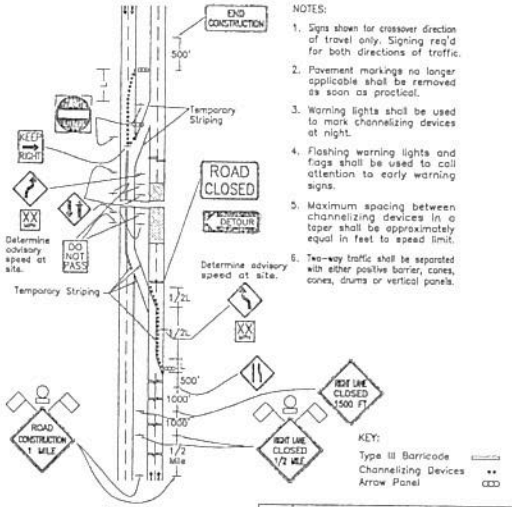
Figure 2-4
Traffic control devices on a 2-lane highway where one lane is closed and flagging is provided.



NOTES:

1. Maximum spacing between channelizing devices in a taper shall be approximately equal in feet to speed limit.
2. Pavement markings no longer applicable shall be removed as soon as practical. Temporary markings shall be used as necessary.
3. Warning lights shall be used to mark channelizing devices at night.
4. Flashing warning lights and flags shall be used to call attention to early warning signs.

Figure 2-6
4-lane undivided roadway, where half the roadway is closed.



NOTES:

1. Signs shown for crossover direction of travel only. Signing req'd for both directions of traffic.
2. Pavement markings no longer applicable shall be removed as soon as practical.
3. Warning lights shall be used to mark channelizing devices at night.
4. Flashing warning lights and flags shall be used to call attention to early warning signs.
5. Maximum spacing between channelizing devices in a taper shall be approximately equal in feet to speed limit.
6. Two-way traffic shall be separated with either positive barrier, cones, cones, drums or vertical panels.

Figure 2-7
4-lane divided where one roadway is closed.

PROJECT NO.	SHEET

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CONSTRUCTION SIGNS AND BARRICADES

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
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DATE	DESCRIPTION	BY
1/10/2002	REVISED	

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C-15

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CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (3 OF 4)
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 18/25

PROJECT NO.	SHEET

NOTE:

1. Maximum spacing between channelizing devices in a taper shall be approximately equal in feet to speed limit.

KEY:

Channelizing Devices ••

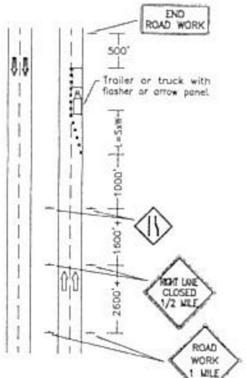

Figure 2-8

Daytime maintenance operations of short duration on a 4-lane roadway where half of roadway is closed.

NOTES:

1. Maximum spacing between channelizing devices in a taper shall be approximately equal in feet to speed limit.
2. Flashing warning lights and flags shall be used to call attention to early warning signs.

KEY:
Channelizing Devices ••
Arrow Panel (optional)
Flashing Warning Light

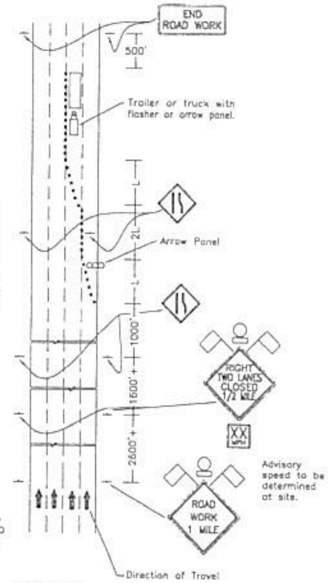

Figure 2-9

Closing multiple lanes of a multilane highway.

NOTES:

GENERAL

1. Signs and pavement markings shall be in accordance with the current edition of the Manual on Uniform Traffic Control Devices.

2. The contractor shall be responsible for the erection and maintenance of permanent signs that are left in place as essential to the safe movement and guidance of traffic within the limits of the project.

3. The City Parish will erect any detour route marking required to guide travelers around the construction area, but the contractor will be responsible for such signage required at barricade sites.

4. All reflective devices such as signs, drums, barricades, vertical panels, delineators of any type, etc. shall be cleaned or washed periodically to maintain their effectiveness, as required by conditions or Project Engineer.

5. Where a construction project involves a number of road segments, remote from each other, only those segments where actual work is in progress shall be signed. Upon completion of any segment, construction signing shall be removed and replaced with permanent signing.

6. When two projects are adjoining or are separated by less than one mile, and construction is in progress on both, they shall be considered as one project for signing purposes, and all advance signing at the juncture shall be eliminated, except for any signing that the Project Engineer might require due to site conditions.

7. Signs shown in all illustrations are typical and may vary with each specific condition. Other signs more appropriate for the specific condition may be substituted in any of the aforementioned illustrations upon approval by the project engineer.

8. Taper length (L) Fromula:

$L=S*W$ for speeds of 45 mph or more

$L=WS^2 / 60$ for speeds less than 45 mph

Where:

L=Mininum length of taper
S=Posted speed limit prior to work or 85th percentile speed
W=Width of offset

9. Spacing of channelizing devices such as cones, panels, drums, and Type I or II barricades shall not exceed a distance in feet equal to the speed limit when used for taper channelization and a distance in feet of twice the speed limit when used for tangent channelization.

PAVEMENT MARKINGS

Pavement Markings at either end of or within the limits of the project that are in conflict with project signing or the required traffic movements shall be removed from the pavement by abrasion. If, in the opinion of the project engineer, special pavement markings are needed for traffic control, as in channelization or width transitions, they shall be reflectorized, removable, temporary lane marking tape and shall be accompanied by proper signs.

SIGN MATERIALS

The backing material used in the fabrication and erection of construction signs shall be in accordance with subsection 1020-1.1(b) of the Standard Specifications for Public Works Construction as revised by project specifications. Signs shall be mounted on two posts, except speed limit signs, chevrons, and other similar signs, which shall be mounted on one post. A minimum of two bolts per post shall be used.

Reflectorization of signs, barricades and drums shall be by means of Type III encapsulated lens reflective sheeting in accordance with subsection 1020-1.1(e) of the Standard Specifications for Public Works Construction as revised by project specifications.

Sign materials and application shall conform to the Standard Specifications for Public Works Construction.

REMOVAL OF SIGNS

Signs warning against a particular hazard or operation shall not be left in place when the operation is not in progress or when the hazard has been removed. On part-time operations, such signs as "TRUCK CROSSING" or "MEN WORKING", shall be removed or set aside out of view of traffic when the operation is not in progress. When construction operations change, signing must change accordingly. All conflicting signs from previous operations must be removed or covered as new signs are erected.

COVERING OF SIGNS

Sign shall be covered with an opaque material, shaped to cover all of the legend on on the face of the sign and securely fastened to prevent its removal by wind, rain or other causes. The covering shall be non-reflective and of a neutral shade, or black.

LIGHTING

Lighting shall supplement barricades that close one or more lanes or that extend across the roadway. A minimum of two(2) lights will be used, but where a travel way ends immediately after a barricade, a minimum of four(4) lights shall be used. Lighting shall be by approved electrical installations. Battery operated equipment shall conform to Subsection 1018.12 of the LADOTD Standard Specifications.

1. High intensity flashing lights shall be used to mark the first advance warning sign.
2. Low intensity flashing lights shall be used to mark all other hazards off the travel way.
3. Steady burning lights shall be used on all traffic control devices used for channelization.

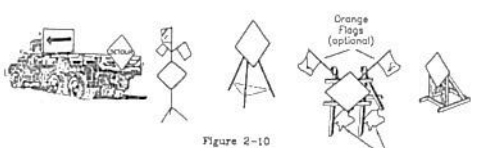

Figure 2-10

PORTABLE AND TEMPORARY MOUNTINGS

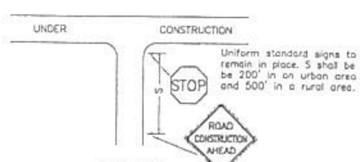

Figure 2-11

Signing for side road approach to construction project.

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CONSTRUCTION SIGNS AND BARRICADES

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
REE/NAR	GV/RLB	REE/NAR	WJ BROUSSARD

DATE	DESCRIPTION REVISIONS	BY

CPS 905-01

C-14

CPS 905-01: CONSTRUCTION SIGNS AND BARRICADES (4 OF 4)

PARISH WIDE DRAINAGE PROJECT 2

JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING

POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

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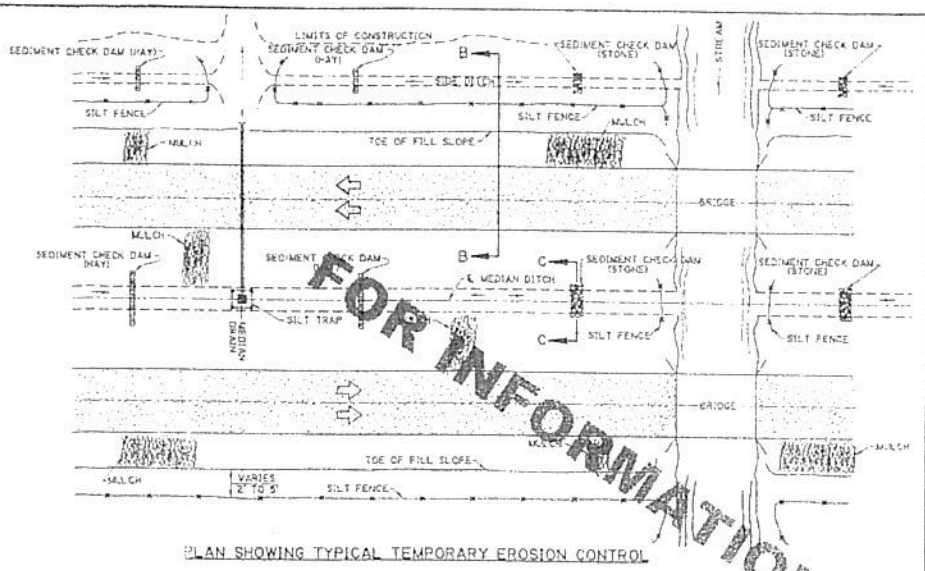
REVISIONS:

JOB NO: 13-183

DATE: January, 2019

SHEET: 19/25

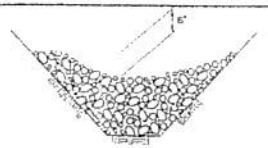


PLAN SHOWING TYPICAL TEMPORARY EROSION CONTROL

MULCHES

MULCHES ARE THE APPLICATION OF MATS OF MATERIAL PLACED ON THE SOIL SURFACE TO PREVENT EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND TO REDUCE THE VELOCITY OF OVERLAND FLOW. MULCHES CAN BE ORGANIC OR SYNTHETIC. MULCHES SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. A FEW GUIDELINES FOR THE USE OF MULCHES ARE:

1. USE ON CUT AND EMBANKMENT SLOPES WHICH HAVE NOT BEEN COMPLETED TO PLAN GRADE OR WHERE THE WEATHER OR SOIL CONDITIONS WILL NOT PERMIT COMPLETING THEM WITHIN A REASONABLE TIME.
2. USE ON CLEARED, GRUBBED, AND SCALPED AREAS WHERE SOIL EROSION IS LIKELY TO OCCUR.
3. USE WITH TEMPORARY SEEDING.



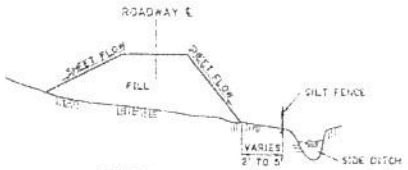
SECTION C-C

TEMPORARY SEDIMENT CHECK DAM (STONE)

PAY ITEM: TEMPORARY SEDIMENT CHECK DAM (STONE)

NOTES:
A STONE CHECK DAM IS A SMALL TEMPORARY DAM CONSTRUCTED ACROSS A SWALE OR DRAINAGE DITCH. THE PURPOSE OF THIS MEASURE IS TO REDUCE THE VELOCITY OF CONCENTRATED STORM WATER FLOWS, THEREBY REDUCING EROSION OF THE SWALE OR DITCH. THE STONE CHECK DAM WILL TRAP SMALL AMOUNTS OF SEDIMENTS GENERATED IN THE DITCH ITSELF; HOWEVER IT SHOULD NOT BE USED AS A SEDIMENT TRAPPING DEVICE. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF STONE CHECK DAMS ARE:

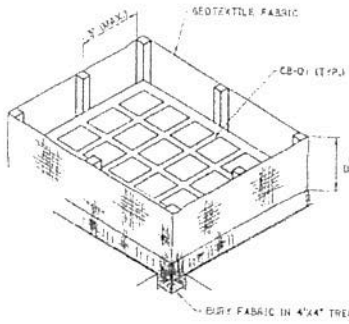
1. USE IN SMALL OPEN CHANNELS WHICH DRAIN 10 ACRES OR LESS.
2. DO NOT USE IN A LIVE STREAM.
3. USE IN A TEMPORARY DITCH OR SWALE WHICH, BECAUSE OF THEIR SHORT LENGTH OF SERVICE, CANNOT RECEIVE A NON-ERODIBLE LINING.
4. USE IN PERMANENT DITCHES OR SWALES WHICH WILL NOT RECEIVE A PERMANENT LINING FOR AN EXTENDED PERIOD OF TIME.
5. USE IN TEMPORARY OR PERMANENT DITCHES OR SWALES WHICH NEED PROTECTION DURING THE ESTABLISHMENT OF GRASS LININGS.
6. FOR STONE SPECIFICATIONS, SEE PROJECT SPECIFICATIONS FOR RIPRAP, (CLASS I OR II).



SECTION B-B

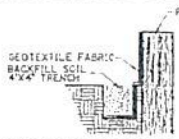
TEMPORARY SILT FENCE APPLICATION

(FOR CONSTRUCTION DETAILS AND SPECIFICATIONS SEE SHEET 2 OF 2.)

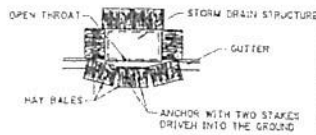


ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC

(BACKFILL SOIL NOT SHOWN)



SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC



PLAN SHOWING HAY BALES

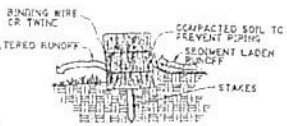
PAY ITEM: TEMPORARY HAY OR STRAW BALES

TEMPORARY INLET SILT TRAP

THE TEMPORARY DROP INLET SILT TRAP IS TO BE USED FOR SMALL DRAINAGE AREAS (LESS THAN 1 ACRE) WHERE THE STORM DRAIN IS FUNCTIONAL BEFORE THE AREA IS STABILIZED. THE TRAP CAN BE EITHER GEOTEXTILE FABRIC OR HAY BALES.

1. THE GEOTEXTILE FABRIC SHALL CONFORM TO PROJECT SPECIFICATIONS FOR GEOTEXTILE FABRIC (CLASS D).
2. WOODEN STAKES SUPPORTING THE FABRIC SHALL BE 2" X 2" OR 2" X 4" WITH A MINIMUM LENGTH OF 3 FEET. THE STAKES SHALL BE SPACED AROUND THE INLET AT A MAXIMUM SPACING OF 3 FEET.
3. THE WEIGHT OF THE FABRIC ABOVE THE INLET SHALL BE LIMITED TO 1.5' AND THE BOTTOM OF THE FABRIC SHALL BE BURIED IN A TRENCH APPROXIMATELY 4" WIDE, BY 4" DEEP. THE FABRIC SHALL BE STAPLED TO THE POST WITH ½" STAPLES.
4. THE TRAP SHOULD BE INSPECTED REGULARLY AND AFTER EACH STORM. THE SEDIMENT SHOULD BE REMOVED AND EACH STAKE SHOULD BE FIRMLY IN THE GROUND.
5. HAY BALES SHALL BE PLACED SO THAT THE BINDING WIRE OR TWINE IS NOT IN CONTACT WITH THE GROUND.

ELEVATION



SECTION A-A

TEMPORARY SEDIMENT CHECK DAM (HAY)

PAY ITEM: TEMPORARY SEDIMENT CHECK DAM (HAY)

NOTES:
A HAY BALE BARRIER IS A TEMPORARY SEDIMENT BARRIER CONSISTING OF A ROW OF ENTRENCHED AND ANCHORED BALES OF STRAW OR HAY. THE HAY BALE BARRIER IS ALSO USED AS A CHECK DAM TO REDUCE THE VELOCITY IN SMALL DITCHES OR SWALES. THE HAY BALES SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF A HAY BALE BARRIER ARE:

1. USE WHERE EROSION WOULD OCCUR IN THE FORM OF SHEET AND RILL EROSION.
2. USE IN MINOR SWALES OR DITCHES WHERE THE MAXIMUM DRAINAGE AREA IS 2 ACRES.
3. ONLY USE WHERE THE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
4. DO NOT USE IN LIVE STREAMS OR IN SWALES OR DITCHES WHERE THERE IS A POSSIBILITY OF A WASHOUT.

TEMPORARY EROSION CONTROL DETAILS

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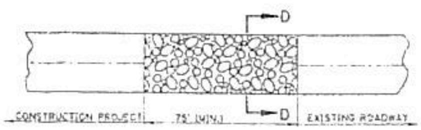
EC-01: TEMPORARY EROSION CONTROL DETAILS (1 OF 2)

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO. 13-183
DATE January, 2019
SHEET 20/25



PLAN

SECTION D-D

TEMPORARY STONE CONSTRUCTION ENTRANCE

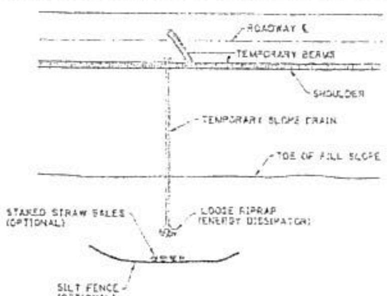
PAY ITEM [illegible] STONE CONSTRUCTION ENTRANCE

NOTES:

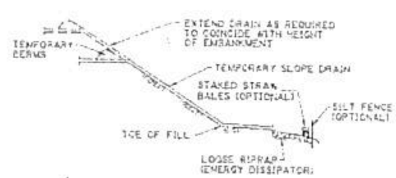
TEMPORARY STONE CONSTRUCTION ENTRANCE AND/OR WASH RACK

A STONE STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS [illegible] ON THE CONSTRUCTION SITE TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PUBLIC ROADS. IF THE ACTION [illegible] CLE TRAVELING OVER THE GRAVEL PAD IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF THE MUD, THEN THE TIRE [illegible] BE WASHED BEFORE THE VEHICLE ENTERS A PUBLIC ROAD. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF A S[illegible]NCE AND/OR WASH RACKS ARE:

1. THE STONE LAYER MUST BE AT LEAST 6 INCHES THICK.
2. THE STONE SHALL CONFORM TO PROJECT SPECIFICATIONS FOR RIPRAP (CLASS 2 LB).
3. THE LENGTH OF THE PAD MUST BE A LEAST 75 FEET AND IT MUST EXTEND THE FULL WIDTH [illegible] VEHICULAR INGRESS AND EGRESS.
4. A GEOTEXTILE FABRIC UNDERLINER IS REQUIRED. THE GEOTEXTILE FABRIC SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR GEOTEXTILE FABRIC (CLASS D).
5. IF A WASH RACK IS NECESSARY, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE.



PLAN



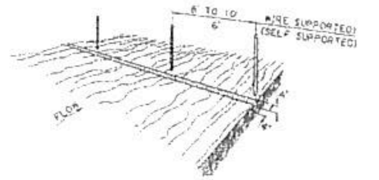
ELEVATION

TEMPORARY SLOPE DRAIN

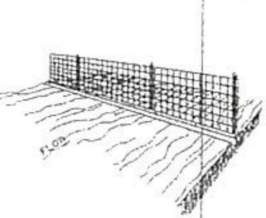
A TEMPORARY SLOPE DRAIN IS A DEVICE USED TO CARRY WATER FROM THE CONSTRUCTION WORK AREA TO A LOWER ELEVATION. SLOPE DRAINS MAY BE PLASTIC SHEET, METAL OR PLASTIC PIPE, STONE GUTTERS, FIBER MATS, OR CONCRETE OR ASPHALT DITCHES. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF A TEMPORARY SLOPE DRAIN ARE:

1. THE SPACING OF THE SLOPE DRAINS VARIES WITH THE ROAD GRADE.
   FOR GRADES: 0.0% - 2.0% USE 300' SPACING
   2.1% - 5.0% USE 200' SPACING
   GREATER THAN 5.0% USE 100' SPACING
2. SLOPE DRAIN MATERIAL: SMOOTH PIPE - 8" MINIMUM - 3 MILS THICK MIN.
   CORRUGATED PIPE - 12" MINIMUM
   PLASTIC SHEETING - 4' WIDE MINIMUM
   PLASTIC SHEETING - 3 MILS THICK MIN.
3. PLASTIC SHEETING CAN BE STAKED DOWN OR WEIGHTED WITH ROCKS OR LOGS. THE AREA UNDER THE SHEETING SHOULD BE SHAPED TO PROVIDE AN ADEQUATE CHANNEL.
4. THE OUTLET END SHOULD BE PROTECTED OR HAVE SOME MEANS OF DISSIPATING ENERGY. THE FLOW SHOULD BE DIRECTED THROUGH A SEDIMENT TRAP SUCH AS A SILT FENCE, HAY BALES, OR OTHER APPROVED SEDIMENT CONTROL DEVICES.
5. TO INSURE PROPER OPERATION, TEMPORARY SLOPE DRAINS SHOULD BE INSPECTED REGULARLY AND AFTER EACH STORM, FOR CLOGGING OR DISPLACEMENT. EROSION AT THE OUTLET SHOULD BE CHECKED AND THE SILT TRAPS CLEANED IF NECESSARY.

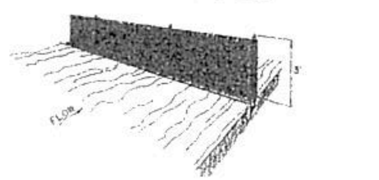
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



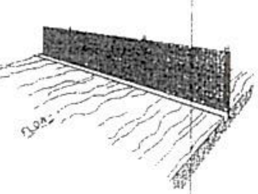
2. STAPLE WIRE FENCING TO THE POSTS.



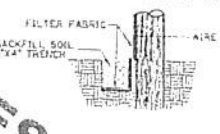
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT EXCAVATED SOIL.



EXTENSION OF FABRIC INTO THE TRENCH



CONSTRUCTION OF TEMPORARY SILT FENCING

(WIRE SUPPORTED SILT FENC[illegible]L. SELF SUPPORTED SILT FENCE WILL BE CONSTRUCTED ACCO[illegible] MANUFACTURERS SPECIFICATIONS.)

NOTES:

SILT FENCING IS A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC SUPPORTED BY POSTS AND STRETCHED ACROSS AN AREA TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT. THE SILT FENCING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. A FEW BASIC GUIDELINES FOR THE USE OF SILT FENCING ARE:

1. USE WHERE EROSION WOULD OCCUR IN THE FORM OF SHEET AND RILL EROSION
2. USE WHERE THE MAXIMUM DRAINAGE AREA BEHIND THE SILT FENCE IS ¼ ACRE PER 100 FEET OF SILT FENCE LENGTH
3. USE WHERE THE MAXIMUM SLOPE LENGTH BEHIND THE BARRIER IS 100 FEET
4. USE THERE THE MAXIMUM GRADIENT BEHIND THE BARRIER IS 2:1
5. DO NOT USE SILT FENCES IN LIVE STREAMS OR IN DITCHES OR SWALES WHERE FLOWS EXCEED ONE CUBIC FOOT PER SECOND

TEMPORARY EROSION CONTROL DETAILS

EC-01

HYDRAULICS SECTION

10-1-08 REMOVE SPECIFIC PAY ITEM NOS., GENERAL REVISIONS

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EC-01: TEMPORARY EROSION CONTROL DETAILS (2 OF 2)

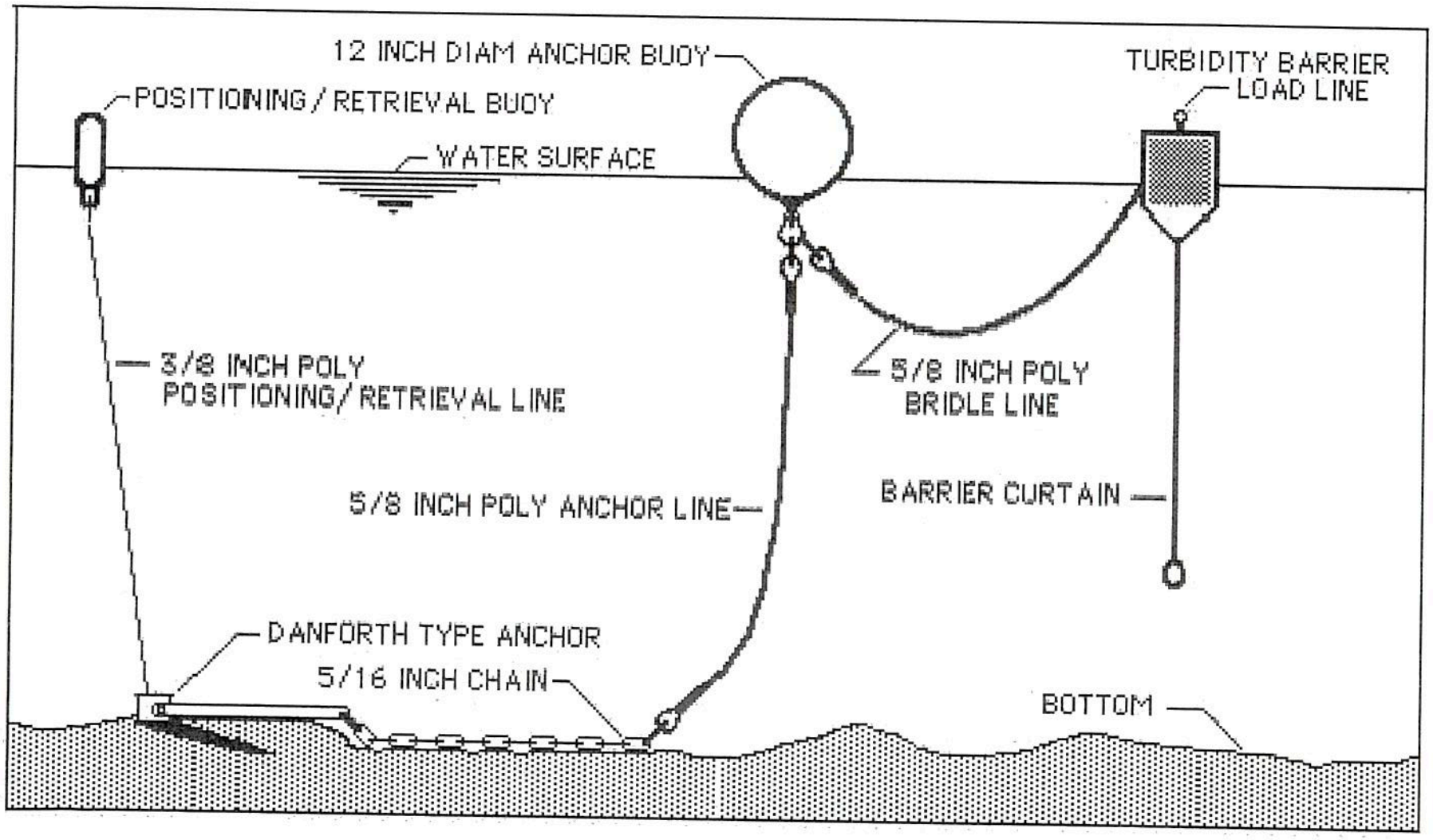
PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

JOB NO. 13-183

DATE January, 2019

SHEET 21/25



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FLOATING TURBIDITY BARRIER DETAIL

PARISH WIDE DRAINAGE PROJECT 2

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POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

REVISIONS:

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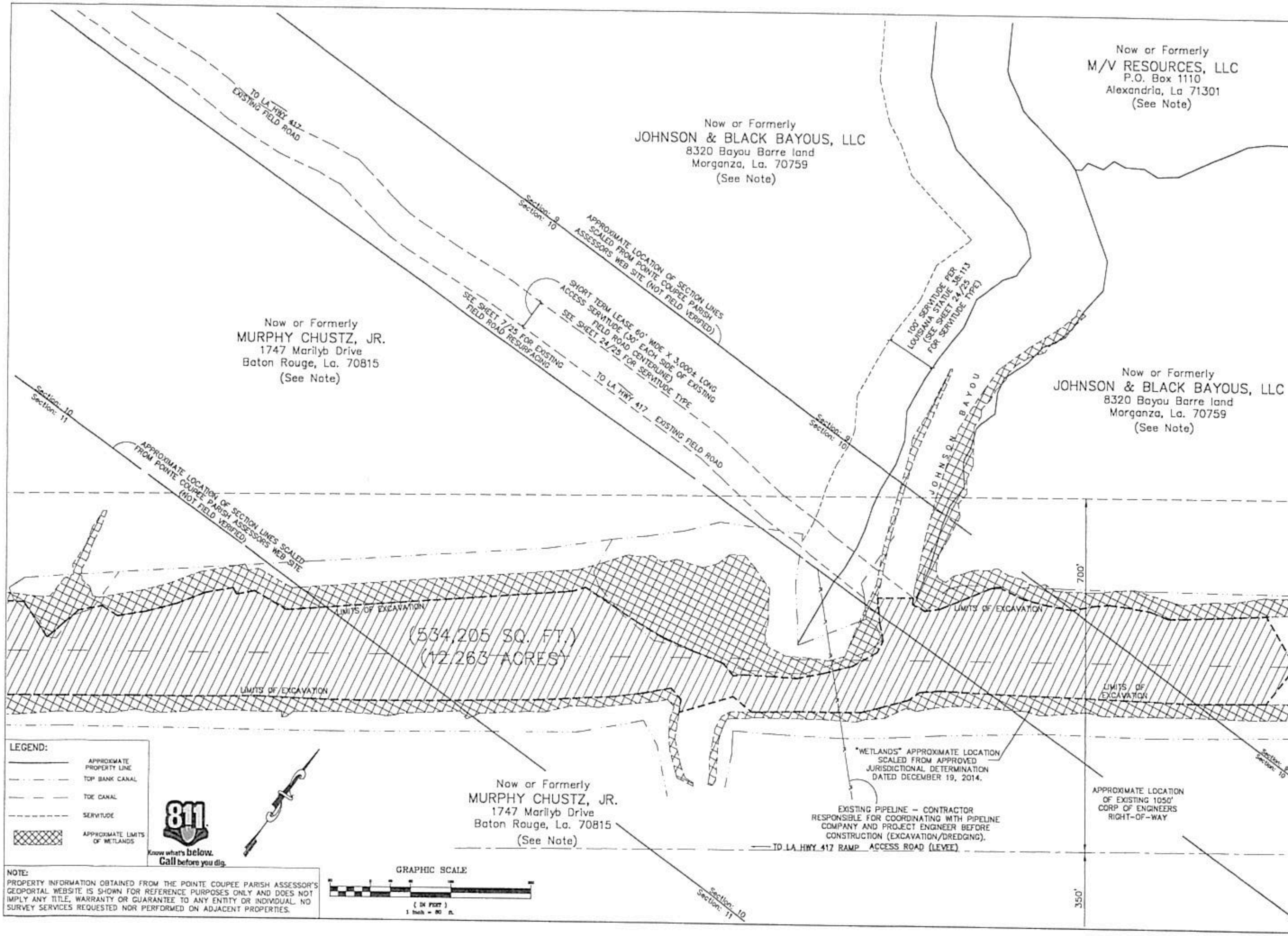
DATE January, 2019

SHEET 22/25



LEGEND:

(solid line)	APPROXIMATE PROPERTY LINE
(dash-dot line)	TOP BANK CANAL
(long dash line)	TOE CANAL
(short dash line)	SERVITUDE
(crosshatch)	APPROXIMATE LIMITS OF WETLANDS

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RIGTH-OF-WAY/SERVITUDE SURVEY DRAWING

PARISH WIDE DRAINAGE PROJECT 2
JOHNSON CANAL PUMPING STATION INFLUENT CANAL DREDGING
POINTE COUPEE PARISH/OCD/DRU PROJECT NO. 39PARA3401-2

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