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NOTE:
THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CITY OF BATON ROUGE AND PARISH OF EAST BATON ROUGE, LOUISIANA, LATEST EDITION, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN ON THIS PROJECT.

DATE	DESCRIPTION	BY
	REVISIONS	

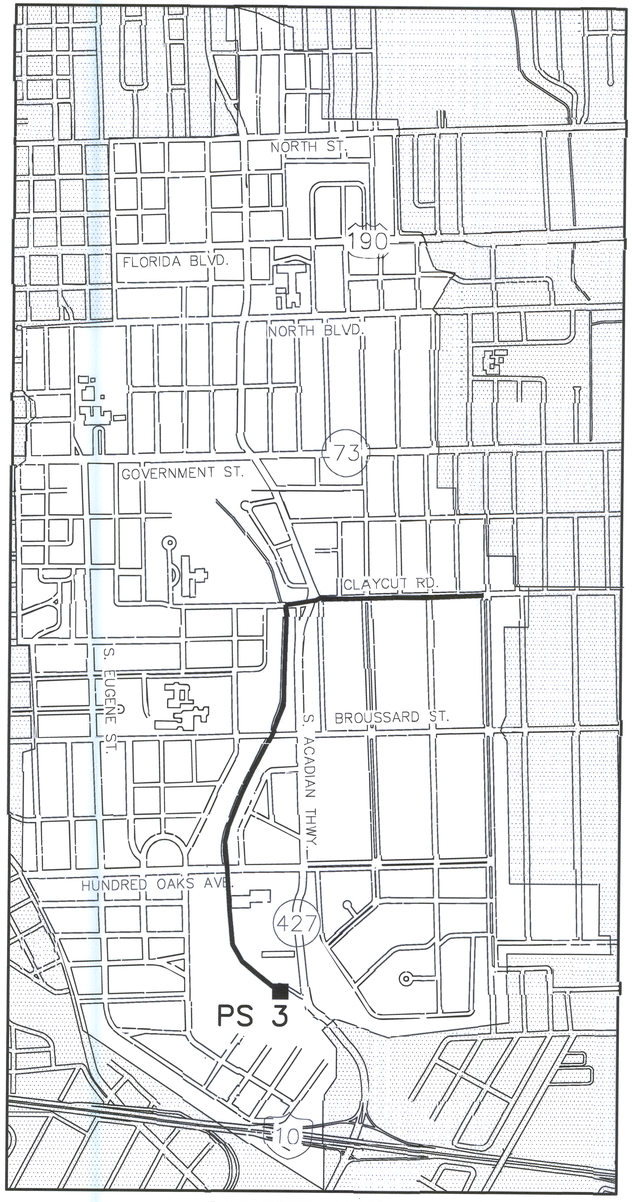
CITY OF BATON ROUGE
AND
PARISH OF EAST BATON ROUGE

EAST BATON ROUGE SEWERAGE COMMISSION
DEPARTMENT OF ENVIRONMENTAL SERVICES

PLANS OF PROPOSED

ACADIAN THRUWAY LARGE DIAMETER SEWER REHABILITATION PROJECT

CITY PARISH PROJECT NO. 20–AR–MS–0022



LAYOUT MAP

0 750' 1500' 2250'

PROJECT AREA



VICINITY MAP

STATE OF LOUISIANA
JOSEPH O. YOUNG
REG. No. 29439
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
7/16/2020

STATE OF LOUISIANA
NICOLE HENDERSON
License No. 42744
PROFESSIONAL ENGINEER
IN
ENVIRONMENTAL ENGINEERING
7/16/20

PREPARED BY AND RECOMMENDED FOR APPROVAL _____
DATE 7/16/2020 DESIGN ENGINEER

RECOMMENDED FOR APPROVAL _____
DATE 7/16/20 DES SEWER ENGINEERING

RECOMMENDED FOR APPROVAL _____
DATE 7-16-20 DES CHIEF OF OPERATIONS & MAINTENANCE

RECOMMENDED FOR APPROVAL _____
DATE 07/17/20 ENVIRONMENTAL SERVICES DIRECTOR

SET NO.

DRAWING NUMBER

SHEET NUMBER	1
PARISH	EAST BATON ROUGE PARISH
PROJECT NUMBER	20–AR–MS–0022
DESIGNED	YOUNG
CHECKED	
DETAILED	CORTEZ
CHECKED	
DATE	MAY 2020
SHEET	1

REVISION DESCRIPTION | BY | DATE | NO.

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

TITLE SHEET

JACOBS

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GENERAL NOTES:

1. THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, DEPT. OF PUBLIC WORKS ENGINEER DIVISION AS AMENDED BY THE PROJECT SPECIFICATIONS SHALL GOVERN THIS PROJECT.

2. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ALL RESIDENTS AND BUSINESSES AFFECTED BY THE WORK AND SHALL ALSO PROVIDE ACCESS TO UTILITY COMPANIES FOR MAINTENANCE AND WORK ON THEIR UTILITIES DURING THE COURSE OF WORK AT NO ADDITIONAL COST TO THE OWNER.

3. THE CONTRACTOR SHALL PROVIDE SUPPORT OF EXISTING UTILITIES EXPOSED DURING EXCAVATION TO MAINTAIN SERVICE AND INTEGRITY OF UTILITY.

4. CONTRACTOR SHALL RELOCATE OR ADJUST EXISTING SEWER CONNECTIONS, AS NECESSARY.

5. THE LOCATION OF ALL PIPES, DUCTS, UTILITIES OR UNDERGROUND STRUCTURES IS NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES, DUCTS, UTILITIES OR STRUCTURES ARE SHOWN. CONTRACTOR SHALL REFER TO SECTION 8-4.6 OF THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL PERTINENT UTILITY COMPANIES PRIOR TO ANY POTHOLING AND CONSTRUCTION FOR COORDINATION.

6. AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION THE CONTRACTOR SHALL CONTACT LA ONE CALL, 1-800-272-3020 AND VERIFY THE EXACT LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL PROVIDE WRITTEN PROOF TO THE CITY/PARISH THAT THE CONTACT WAS MADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCASIONED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.

7. ANY UTILITIES THAT WILL NEED TO BE RELOCATED SHALL BE DONE SO AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL COORDINATE WITH EACH UTILITY COMPANY TO HAVE THESE UTILITIES RELOCATED.

8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL TRAFFIC DURING CONSTRUCTION AND NOT IMPEDE TRAFFIC ON ANY PUBLIC STREETS WITHOUT WRITTEN APPROVAL FROM EITHER THE LA DOTD FOR STATE HIGHWAYS OR CITY-PARISH DPW FOR OTHER PUBLIC STREETS. CONTRACTOR SHALL INSTALL AND MAINTAIN ADEQUATE CONSTRUCTION SIGNING AND BARRICADES IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS TO ENSURE SAFETY OF THE WORKMEN AND THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

9. EXISTING DRIVEWAY CULVERTS REMOVED DURING CONSTRUCTION SHALL BE REPLACED WITH A NEW REINFORCED CONCRETE OR BITUMINOUS COATED STEEL PIPE, MATCHING THE SIZE (15" MIN.) & LENGTH OF PIPE REMOVED AND LAID ON GRADE FOR POSITIVE DRAINAGE. THIS SHALL BE PAID ON A PER LINEAR FOOT OF PIPE BASIS. THE REMOVAL OF THE EXISTING PIPE SHALL BE PAID UNDER THE CORRESPONDING NEW PIPE PAYMENT ITEM. CULVERTS TO BE REMOVED AND REPLACED SHALL BE AS INDICATED IN THE PLANS OR AS DIRECTED BY PROJECT ENGINEER.

10. THE CONTRACTOR SHALL RESTORE ALL ROADSIDE DITCHES FOR POSITIVE DRAINAGE AND IN THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.

11. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO AND THROUGH EXISTING DRAINAGE FACILITIES FROM ALL NEWLY PATCHED DEPRESSIONS.

12. WRITTEN PERMISSION FOR USE AND TO HOLD HARMLESS MUST BE OBTAINED FROM THE PROPERTY OWNERS PRIOR TO WORKING ON PRIVATE PROPERTY. COPIES OF PERMISSION MUST BE PROVIDED TO CITY/PARISH.

13. DRIVEWAYS, ROADWAYS AND WALKS OR PORTIONS THEREOF SHALL BE REPLACED IN KIND OR AS NOTED IF REMOVED DURING CONSTRUCTION.

14. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION.

15. ALL MAILBOXES OR SIGNAGE SHALL BE REPLACED IN KIND IF REMOVED DURING CONSTRUCTION (AT NO DIRECT PAY, UNLESS OTHERWISE NOTED ON PLANS).

16. THE CONTRACTOR SHALL NEATLY SAW CUT (FULL DEPTH) ALL ROADWAYS AND DRIVEWAYS FOR REMOVAL AND RESTORATION OF PAVEMENT. A NEAT EDGE OF PAVEMENT IS REQUIRED PRIOR TO PERMANENT PAVEMENT REPAIR. IF NOT CONTRACTOR SHALL PERFORM A NEW SAW CUT AT NO ADDITIONAL COST TO OWNER. DURING THE TIME BETWEEN THE FINAL BACKFILL OF PIPE INSTALLATION AND COMPLETION OF THE PERMANENT PAVEMENT REPAIR, THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN ACCORDANCE WITH THE SPECIFICATIONS. IN ADDITION, THE CONTRACTOR SHALL TEMPORARILY FURNISH, PLACE, SHAPE, COMPACT, AND MAINTAIN TRAFFIC MAINTENANCE AGGREGATE UNTIL THE PERMANENT PAVEMENT REPAIR IS COMPLETE AT NO DIRECT COST TO THE OWNER. OTHERWISE, CONTRACTOR MAY COMPLETE SURFACE RESTORATION, REMEDIAL OR FOLLOW-UP WORK IMMEDIATELY AFTER COMPLETION OF THE REPAIR AND FINAL BACKFILL.

17. CONTRACTOR SHALL HAVE A CONFORMED SET OF PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.

18. ALL WORK SHALL BE PERFORMED BY A LOUISIANA LICENSED CONTRACTOR.

19. INDICATED SCALES ARE BASED ON FULL SIZED (24" x 36") DRAWINGS. IF THE DRAWINGS ARE REDUCED OR INCREASED, SCALES MUST BE ADJUSTED ACCORDINGLY.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROJECT SITE RESULTING FROM THE CONTRACTOR'S CONSTRUCTION ACTIVITIES.

21. CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR WORKING CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. DURING PERFORMANCE OF WORK THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

22. ALL MANHOLE, CULVERT AND PIPE REPLACEMENTS SHALL MATCH EXISTING INVERTS AND GRADE. CONTRACTOR SHALL FIELD VERIFY AND RECORD ALL INVERTS PRIOR TO ORDERING MATERIALS AND REMOVING AND REPLACING PIPES, CULVERTS AND MANHOLES.

23. A COPY OF ALL RELATIVE REFERENCE MAPS FOR THIS PROJECT IS AVAILABLE AT THE DEPARTMENT OF PUBLIC WORKS FOR THE CONTRACTOR'S REVIEW.

24. PER SECTION 808 OF THE CONTRACT DOCUMENTS, CONTRACTOR SHALL PERFORM PRE-INSTALLATION CCTV INSPECTION OF PIPE TO BE CIPP LINED. ANY CONDITION THAT MAY PREVENT PROPER INSTALLATION OF THE CIPP LINER SHALL BE SUBMITTED TO THE ENGINEER AS A CRITICAL DAMAGE REPORT (CDR). BASED ON THE CDR, THE ENGINEER MAY ADD A REPAIR TO REMOVE THE CONDITION PREVENTING PROPER CIPP INSTALLATION. THE CONTRACTOR SHALL PERFORM THESE REPAIRS AT THE ESTABLISHED CONTRACT UNIT BID PRICES FOR THE RELATIVE ITEMS OF WORK.

25. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK WITH SUBCONTRACTORS SUCH THAT INCONVENIENCE TO THE PUBLIC IS MINIMIZED. ANY REPAIRS SHOWN ON A LINE SEGMENT THAT REQUIRES CCTV MUST BE COMPLETED PRIOR TO PERFORMING CCTV WORK. CIPP AND CCTV WORK SHALL BE COORDINATED WITH OTHER WORK SUCH THAT REMOVAL AND REPLACEMENT OF FENCE AND SURFACE RESTORATION IS REQUIRED ONLY ONCE ON THE SAME PROPERTY. REMOVAL AND REPLACEMENT OF FENCE AND SURFACE RESTORATION REQUIRED MORE THAN ONCE IN THE SAME LOCATION DUE TO THE CONTRACTOR'S LACK OF COORDINATION SHALL BE AT NO ADDITIONAL COST TO THE OWNER.

26. AT LEAST 72 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MR. CHRIS PADDIE (225-389-3243) WITH THE CITY/PARISH TRAFFIC ENGINEERING DIVISION (CPTED) TO IDENTIFY ALL THE TRAFFIC SIGNAL INTERCONNECTION FIBER OPTIC LINE LOCATIONS THROUGHOUT THE PROJECT AREA. CONTRACTOR SHALL PROVIDE WRITTEN PROOF TO THE PROJECT ENGINEER THAT THE CPTED WAS CONTACTED AND HAS VERIFIED THE EXACT LOCATIONS OF THE FIBER OPTIC LINE.

27. CONTRACTOR SHALL CONTACT PROJECT ENGINEER AT LEAST 30 CALENDAR DAYS PRIOR TO BEGINNING ANY CONSTRUCTION THAT WILL AFFECT SURROUNDING SCHOOL TRAFFIC OR SCHOOL RELATED ACTIVITIES FOR THOSE WITHIN THE PROJECT AREA LISTED, BUT NOT LIMITED TO, BELOW. PROJECT ENGINEER WILL APPROVE CONTRACTOR SCHEDULE OF WORK FOR EACH SCHOOL LOCATION, DIRECT CONTRACTOR TO SCHEDULE REQUIRED WORK BE DONE DURING NIGHT HOURS WHEN DEEMED NECESSARY, AND COORDINATE CONSTRUCTION NOTIFICATION WITH EACH SCHOOL AS NEEDED. SCHOOLS THAT REQUIRE NOTIFICATION ARE AS FOLLOWS: BATON ROUGE CENTER FOR VISUAL AND PERFORMING ARTS.

28. CONTRACTOR SHALL CAREFULLY POTHOLE AND EXPOSE SELECTED SUBSURFACE UTILITIES TO OBTAIN THREE-DIMENSIONAL INFORMATION. NO CONTRACT TIME WILL BE ADDED FOR ANY CONTRACTOR DOWNTIME WHILE WAITING TO COORDINATE THE POTHOLING OPERATION WITH A GIVEN UTILITY COMPANY. IF A CONFLICT IS VERIFIED THAT WOULD PREVENT THE CONTRACTOR FROM PERFORMING THE WORK ON A PARTICULAR REPAIR, HE IS TO CONTACT THE CONSTRUCTION MANAGER IMMEDIATELY AND FOLLOW THE CONFLICT LOG PROCESS. ADD THE REPAIR TO THE CONFLICT LOG. POTHOLING TO EXPOSE SUBSURFACE UTILITIES IN VERIFYING EXISTENCE OF CONFLICTS SHALL BE PAID AT THE ESTABLISHED CONTRACT UNIT BID PRICE FOR POINT REPAIR EXCAVATION, BEDDING, BACKFILL, AND COMPACTION UP TO THE DEPTH RANGE AT WHICH THE UTILITIES ARE DISCOVERED.

29. LOCATING MANHOLES AND REPAIR LOCATIONS IS INCIDENTAL TO OTHER WORK ITEMS. TYPICAL MEANS AND METHODS FOR LOCATING MANHOLES WOULD BE USE OF GPS EQUIPMENT, MARKING OFF FOOTAGES FROM CONNECTING MANHOLES, ROD PROBING, USE OF METAL DETECTING WANDS, ETC. CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER IF AFTER UTILIZING ALL OF TYPICAL MEANS & METHODS CONTRACTOR IS UNABLE TO LOCATE MANHOLE. ENGINEER MAY DIRECT CONTRACTOR TO USE SEWER MAINLINE CAMERA BEACON WITH GROUND WALKOVER TO LOCATE MANHOLE. THE CONTRACTOR SHALL PERFORM THIS BEACON LOCATE WORK AS DIRECTED BY THE ENGINEER AT THE ESTABLISHED CONTRACT UNIT BID PRICES FOR REGULAR SEWER LINE CLEANING AND TELEVISION INSPECTION OF SEWER MAINLINE.

30. THE FOLLOWING IS A LIST OF THE CONTACTS FOR UTILITIES WITHIN THE PROJECT AREA:

- AT&T: TRACY LAUVRAY, 225-367-0613
- ATMOS ENERGY: HEATHER HATTY, 985-249-3223
- B.R. WATER: RYAN SCARDINA, 225-952-7619
- COX: THOMAS FLOYD, 225-806-4745
- DEMCO: THEODORE MCCRAY, 225-261-1177
- ENTERGY GAS: RICKEY WATTS, 225-354-3204
- ENTERGY ELECTRIC: JERRY KENNEDY, 225-354-3060
- GAS UTILITY DISTRICT 1: MICKEY GORE, 225-654-4020
- UNITI FIBER: BRYAN KUSTENMACHER, 504-470-5190
- SOUTHERN LIGHT: WALTER GOODMAN, 251-445-1048
- DOTD FIBER: SAMMY WILLIAMS, 225-379-1195

31. CLEARING AND GRUBBING WILL BE PERFORMED AS NEEDED FOR ALL CONSTRUCTION ACTIVITIES AND ACCESS. ALL TREES REMOVED WILL BE CONSIDERED PART OF PAYMENT FOR CLEARING AND GRUBBING.

STATE OF LOUISIANA
JOSEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 2

PARISH: EAST BATON ROUGE PARISH
PROJECT NUMBER: 20-AR-MS-0022

DESIGNED: YOUNG
DETAILED: CORTEZ
CHECKED:
DATE: MAY 2020
SHEET: 2

NO. | DATE | REVISION DESCRIPTION | BY

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

GENERAL NOTES, LEGEND & DETAILS

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LEGEND:

XX — U.S. HIGHWAY

XX — INTERSTATE HIGHWAY

XX — STATE HIGHWAY

ELP — EXISTING LINED PIPE

PUMP STATION

(DISTANCE)–(SIZE) — EXISTING SEWER LINES

(DISTANCE)–(SIZE) — EXISTING FORCE MAINS

EXISTING SURFACE DRAINAGE

EXISTING RAILROADS

(NUMBER) — EXISTING MANHOLES

(NUMBER) — EXISTING LIFT STATIONS

EXISTING CLEANOUTS

CATCH BASIN

FIRE HYDRANT

POWER POLE

SIGN POLE ON PEDESTAL

LIGHT POLE ON PEDESTAL

OAK TREE

TREE

SHRUBS

STUMP

G — GAS PIPELINE

SL — SERVICE LATERAL

XXX / XXX'–XXX' — CIPP LINE

XXX / XXX'–XXX' — REPAIR BY REMOVING AND REPLACING SEGMENT. DISTANCE FROM UPSTREAM MANHOLE TO BEGINNING & END REPLACEMENT.

VUC — VISIBLE UTILITY CONFLICT

XXX / XXX'–XXX' — POINT REPAIR. DISTANCE FROM UPSTREAM MANHOLE TO BEGINNING & END OF REPAIR

XXX / (XXX'–XXX') — POINT REPAIR. DISTANCE FROM DOWNSTREAM MANHOLE TO BEGINNING & END OF REPAIR

TH — XXX / XX.X' — LATERAL CONNECTION SEALING AND REPAIR PRODUCT (12"–24" TOP HAT) INSTALLATION LOCATION AND DISTANCE FROM UPSTREAM MANHOLE TO CENTER OF LATERAL TO BE USED ON AN EXISTING LINED PIPE. INTERNAL CUTTING REQUIRED FOR INSTALLATION OF TOP HAT SHALL BE PERFORMED PER CONTRACT DOCUMENTS SECTION 808–19.

STATE OF LOUISIANA
JOESEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 3

PARISH: EAST BATON ROUGE PARISH
PROJECT NUMBER: 20-AR-MS-0022

DESIGNED: YOUNG
DETAILED: CORTEZ
CHECKED: __
DATE: MAY 2020
SHEET: 3

REVISION DESCRIPTION | BY | NO. | DATE

DEPARTMENT OF ENVIRONMENTAL SERVICES · EAST BATON ROUGE PARISH

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

GENERAL NOTES, LEGEND & DETAILS

THE PARISH OF EAST BATON ROUGE

JACOBS

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ACADIAN THRUWAY LARGE DIAMETER SEWER REPAIR SCHEDULE

REPAIR No.	SHEET No.	MH US	MH DS	LENGTH(FT)	PIPE SIZE(IN)	US DEPTH	DS DEPTH	REPAIR BEGIN	REPAIR END	MATERIAL TYPE	No. OF SERVICES	ADDRESS	COMMENTS
001	9	003-01784	003-01783	364	30	15.2	CNL	328	334	CON	0		P.R., UTILITY POLE IN LINE SEGMENT TO BE REMOVED
602	8	003-01781	003-01780	270	30	N/A	N/A	0	270	CON	0		REHAB MAINLINE
603	8	003-01782	003-01781	183	30	N/A	N/A	0	183	CON	0		REHAB MAINLINE
604	8	003-01783	003-01782	200	30	N/A	N/A	0	200	CON	0		REHAB MAINLINE
605	8	003-01784	003-01783	364	30	15.2	N/A	0	364	CON	0		REHAB MAINLINE
606	8	003-01785	003-01784	345	30	13.8	15.2	0	345	CON	0		REHAB MAINLINE
607	7	003-01869	003-01785	246	30	12.7	13.8	0	246	CON	0		REHAB MAINLINE
608	7	003-01870	003-01869	136	30	12.1	12.7	0	136	CON	0		REHAB MAINLINE
609	7	003-01871	003-01870	370	30	11.8	12.1	0	370	CON	0		REHAB MAINLINE
610	7	003-01872	003-01871	141	30	CNL	11.8	0	141	CON	1		REHAB MAINLINE AND SERVICE LATERAL AT 108'
611	7	003-01873	003-01872	150	30	CNL	CNL	0	150	CON	1		REHAB MAINLINE AND SERVICE LATERAL AT 114'
612	7	003-01874	003-01873	150	30	12.6	CNL	0	150	CON	2		REHAB MAINLINE AND SERVICE LATERAL AT 22' & 140'
613	7	003-01875	003-01874	118	30	12.5	12.6	0	118	CON	0		REHAB MAINLINE
614	7	003-01888	003-01875	221	30	13.0	12.5	0	221	CON	0		REHAB MAINLINE
615	7	003-01923	003-01888	359	27	11.8	13.0	0	359	CON	0		REHAB MAINLINE
616	7	003-01924	003-01923	307	27	10.7	11.8	0	307	CON	0		REHAB MAINLINE
617	6	003-01925	003-01924	378	27	12.5	10.7	0	378	CON	1		REHAB MAINLINE AND SERVICE LATERAL AT 329'
618	6	003-01926	003-01925	218	27	12.8	12.5	0	218	CON	0		REHAB MAINLINE
619	6	003-01927	003-01926	137	27	13.0	12.8	0	137	CON	0		REHAB MAINLINE
620	5	003-02016	003-02015	285	18	6.3	6.8	0	285	CON	1		REHAB MAINLINE AND SERVICE LATERAL AT 236'
621	5	003-02015	003-02010	313	18	6.8	8.3	0	313	CON	2		REHAB MAINLINE AND SERVICE LATERAL AT 160'
622	5	003-02010	003-02009	337	18	8.3	10.1	184	187	ELP	1		REHAB SERVICE LATERAL ONLY
623	5	003-02009	003-02005	293	18	10.1	11.1	0	293	CON	1		REHAB MAINLINE AND SERVICE LATERAL AT 53'
624	5	003-02005	003-02004	257	18	11.1	9.3	0	257	CON	1		REHAB MAINLINE AND SERVICE LATERAL AT 203'
625	5	003-02004	003-02001	276	18	9.3	8.8	0	276	CON	1		REHAB MAINLINE AND SERVICE LATERAL AT 42'
626	5	003-02001	003-02000	33	18	8.8	10.2	0	33	CON	0		REHAB MAINLINE
627	5	003-02000	003-01927	392	18	10.2	13.0	0	392	CON	0		REHAB MAINLINE
002	5	003-01925	003-01924	378	27	12.5	12.8	326	332	CON	1		P.R.,CUT PROTRUDING CAST IRON TAP TO BE FLUSH WITH MAINLINE

N/A - DEPTH NOT AVAILABLE

NOTE: ALL SERVICE LATERALS MUST BE DYE TESTED PER SECTION 816 AT THE CLEANOUT OR LANDOWNER'S PLUMBING PRIOR TO REINSTATEMENT TO CONFIRM THE SERVICE LINE IS ACTIVE. THE COORDINATION WITH LANDOWNERS WILL BE THE CONTRACTOR'S RESPONSIBILITY.

MANHOLE REHABILITATION

REPAIR No.	SHEET No.	MANHOLE No.	APPROXIMATE DEPTH (FT)	COMMENTS
6003	8	003-01780	16.1	MCP LINING AND MANHOLE COVER VENT SYSTEM
6004	8	003-01781	N/A	MCP LINING AND MANHOLE COVER VENT SYSTEM
6005	8	003-01782	N/A	MCP LINING AND MANHOLE COVER VENT SYSTEM
6006	8	003-01783	N/A	MCP LINING AND MANHOLE COVER VENT SYSTEM
6007	8	003-01784	15.2	MCP LINING AND MANHOLE COVER VENT SYSTEM
6008	8	003-01785	13.8	MCP LINING AND MANHOLE COVER VENT SYSTEM
6009	7	003-01869	12.7	MCP LINING AND MANHOLE COVER VENT SYSTEM
6010	7	003-01870	12.1	MCP LINING AND MANHOLE COVER VENT SYSTEM
6011	7	003-01871	11.8	MCP LINING AND MANHOLE COVER VENT SYSTEM
6012	7	003-01872	CNL	MCP LINING AND MANHOLE COVER VENT SYSTEM
6013	7	003-01873	CNL	MCP LINING AND MANHOLE COVER VENT SYSTEM
6014	7	003-01874	12.6	MCP LINING AND MANHOLE COVER VENT SYSTEM
6015	7	003-01875	12.5	MCP LINING AND MANHOLE COVER VENT SYSTEM
6016	7	003-01888	13.0	MCP LINING AND MANHOLE COVER VENT SYSTEM
6017	7	003-01923	11.8	MCP LINING AND MANHOLE COVER VENT SYSTEM
6018	6	003-01924	10.7	MCP LINING AND MANHOLE COVER VENT SYSTEM
6019	6	003-01925	12.5	MCP LINING AND MANHOLE COVER VENT SYSTEM
6020	6	003-01926	12.8	MCP LINING AND MANHOLE COVER VENT SYSTEM
6021	6	003-01927	13.0	MCP LINING AND MANHOLE COVER VENT SYSTEM

N/A - DEPTH NOT AVAILABLE

MANHOLE REHABILITATION

REPAIR No.	SHEET No.	MANHOLE No.	APPROXIMATE DEPTH (FT)	COMMENTS
6022	5	003-02016	6.3	MCP LINING
6023	5	003-02015	6.8	MCP LINING
6024	5	003-02010	8.3	MCP LINING
6025	5	003-02009	10.1	MCP LINING
6026	5	003-02005	11.1	MCP LINING
6027	5	003-02004	9.3	MCP LINING
6028	5	003-02001	8.8	MCP LINING
6029	5	003-02000	10.2	MCP LINING

***MATERIAL TYPE ABBREVIATIONS**

HDPE – HIGH DENSITY POLYETHYLENE
PVC – POLYVINYL CHLORIDE
TRU – TRUSS
VCP – VITRIFIED CLAY PIPE
NIA – NO INSPECTION AVAILABLE
CLY – CLAY PIPE
CON – CONCRETE
DIP – DUCTILE IRON PIPE
ELP – EXISTING LINED PIPE
CPP – CORRUGATED PLASTIC PIPE

⚠ NOTE:
REPAIR BEGIN & END DISTANCES TAKEN FROM DOWNSTREAM MANHOLE.

STATE OF LOUISIANA
JOESEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 4
PARISH: EAST BATON ROUGE PARISH
PROJECT NUMBER: 20-AR-MS-0022
DESIGNED: YOUNG
DETAILED: CORTEZ
CHECKED:
DATE: MAY 2020
SHEET: 4
REVISION DESCRIPTION | BY | DATE | NO.

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT
SEWER REPAIR SCHEDULE

JACOBS

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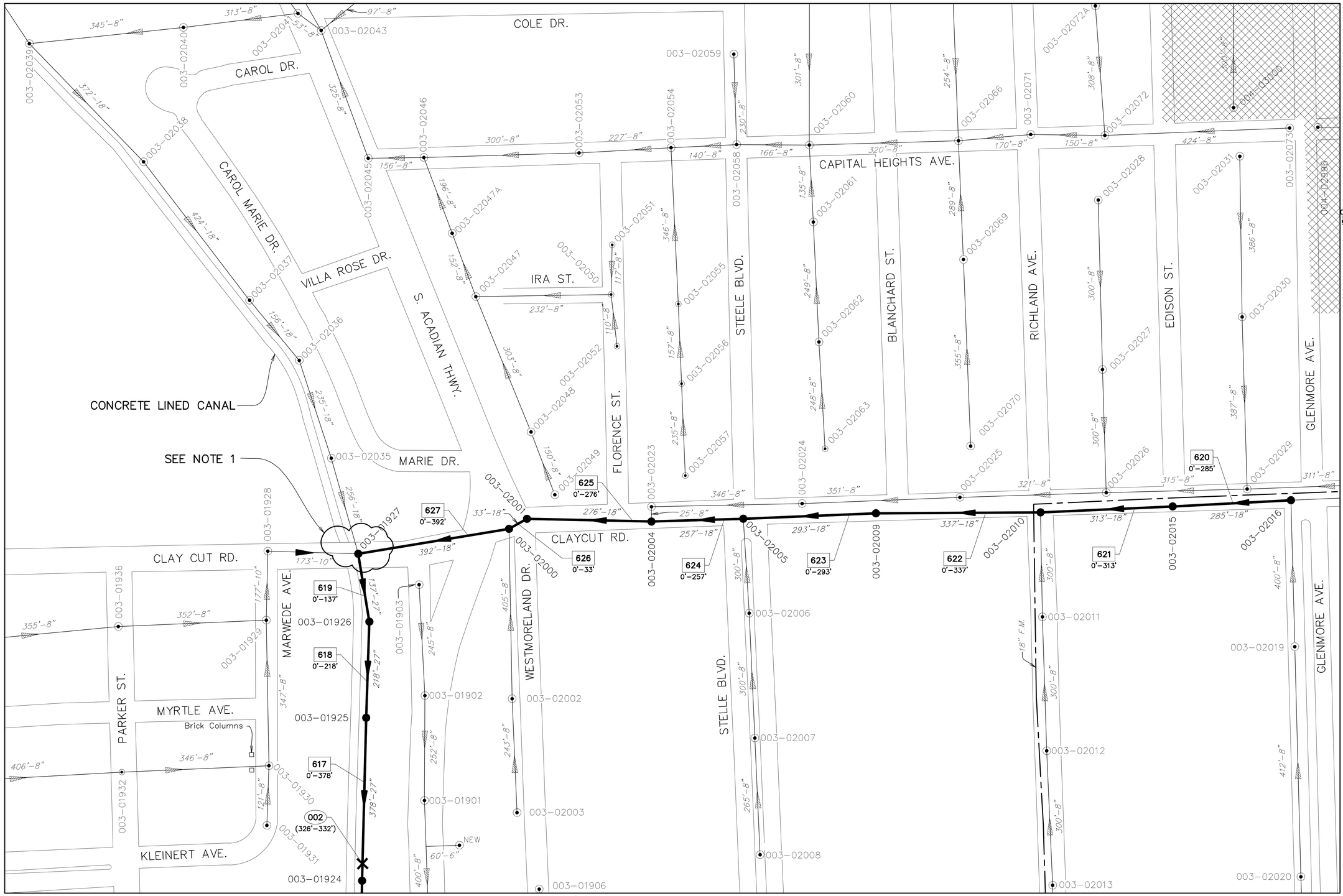
NO WORK WILL BE CONDUCTED THAT MAY POSSIBLY DAMAGE THE DECK STRUCTURE OR RAILINGS OF THE BRIDGE ON CLAYCUT RD. ANY DAMAGE THAT IS DONE TO THE BRIDGE STRUCTURE WITHIN THE RIGHT OF WAY WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE TO ORIGINAL CONDITION. PRIOR TO PROCEEDING WITH WORK IN OR NEAR THE CLAYCUT RD. BRIDGE, THE CONTRACTOR SHALL PROVIDE A SCOPE OF WORK & ACTIVITIES IN THIS AREA AND OBTAIN APPROVAL FROM ENGINEER.



SHEET No. 6

REPAIR NUMBER 002 BEGIN AND END DISTANCES TAKEN FROM UPSTREAM MANHOLE

SHEET NUMBER	5
PARISH	EAST BATON ROUGE PARISH
PROJECT NUMBER	20-AR-MS-0022
DESIGNED	YOUNG
DETAILED	CORTEZ
CHECKED	
DATE	MAY 2020
SHEET	5

AERIAL MATCH SHT. 9

REVISION DESCRIPTION | NO. | DATE | BY

JOSEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
STATE OF LOUISIANA

336–702

A	B
C	D

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

PARTIAL PLAN VIEW

JACOBS

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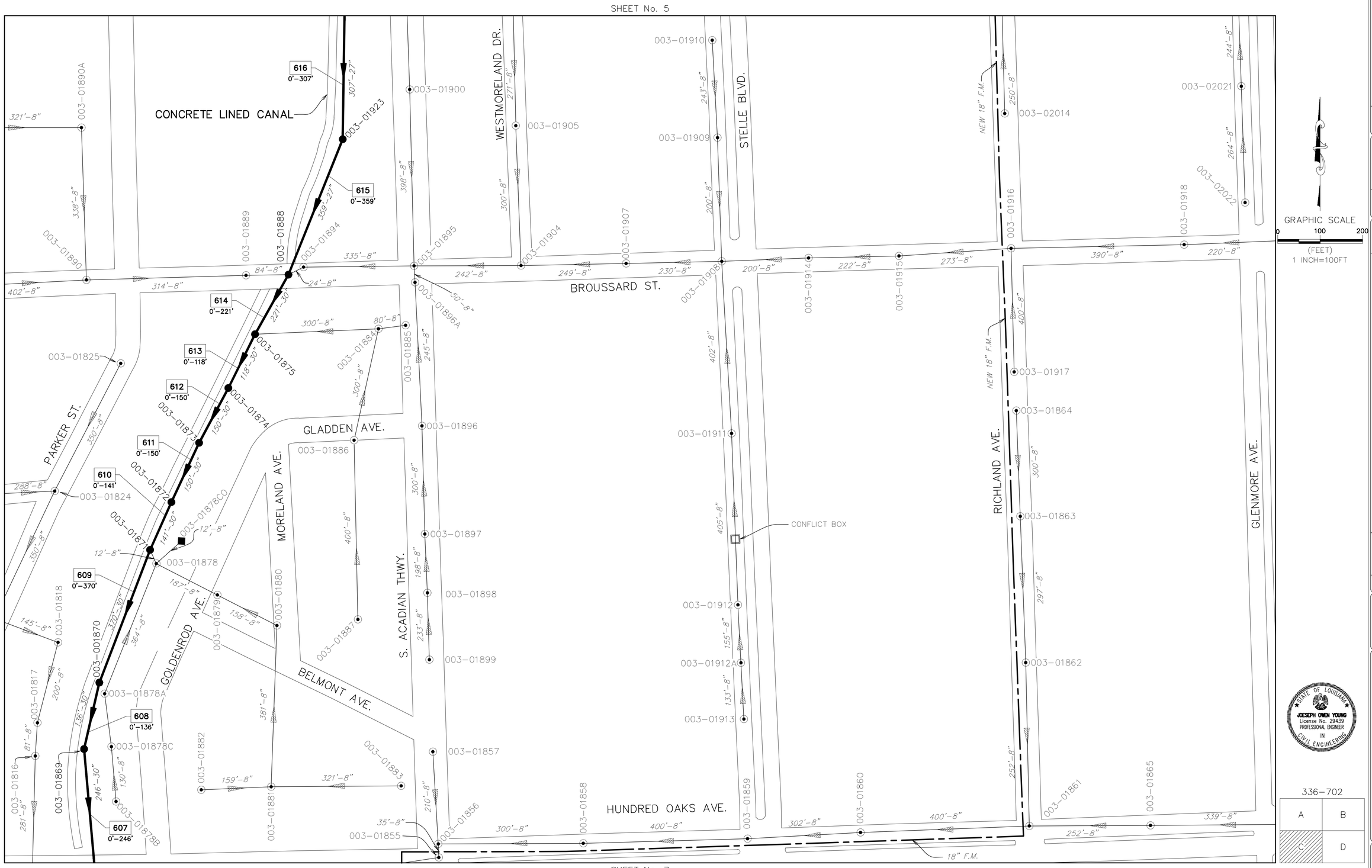

SHEET NUMBER 6

AERIAL MATCH SHT. 10

PARISH: EAST BATON ROUGE PARISH

PROJECT NUMBER: 20-AR-MS-0022

DESIGNED: YOUNG
CHECKED: ___
DETAILED: CORTEZ
CHECKED: ___
DATE: MAY 2020
SHEET: 6

NO.	DATE	REVISION DESCRIPTION	BY

STATE OF LOUISIANA
JOESEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

PARTIAL PLAN VIEW

JACOBS

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REPAIR NUMBER 001 BEGIN AND END DISTANCES TAKEN FROM UPSTREAM MANHOLE.

SHEET No. 6

HUNDRED OAKS AVE.
CATHOLIC DIOCESE
RAMSEY DR.
HILLSIDE CIR.
STEELE BLVD.
CHATFIELD AVE.
GLENMORE AVE.
CHURCHILL AVE.
S. ACADIAN THWY.
BATON ROUGE CENTER FOR VISUAL & PERFORMING ARTS
PROPOSED CONSTRUCTION– INSET A: SEE SHEET 8
RICHLAND AVE.
RICHLAND CIR.
E. RAMSEY DR.
S. RAMSEY DR.
BAWELL ST.
TYRONE DR.
DAGGETT AVE.
ORPINE AVE.
PS 3
PS 96
House with Carport
Brick Column Wall
36" F.M.
24" F.M.
4" F.M.

GRAPHIC SCALE
0 100 200
(FEET)
1 INCH=100FT

336–698

A	B
C	D

SHEET NUMBER 7
PARISH: EAST BATON ROUGE PARISH
PROJECT NUMBER: 20–AR–MS–0022
AERIAL MATCH SHT. 11
DESIGNED: YOUNG
DETAILED: CORTEZ
CHECKED:
DATE: MAY 2020
SHEET: 7

NO. | DATE | REVISION DESCRIPTION | BY

STATE OF LOUISIANA
JOSEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

PARTIAL PLAN VIEW

JACOBS

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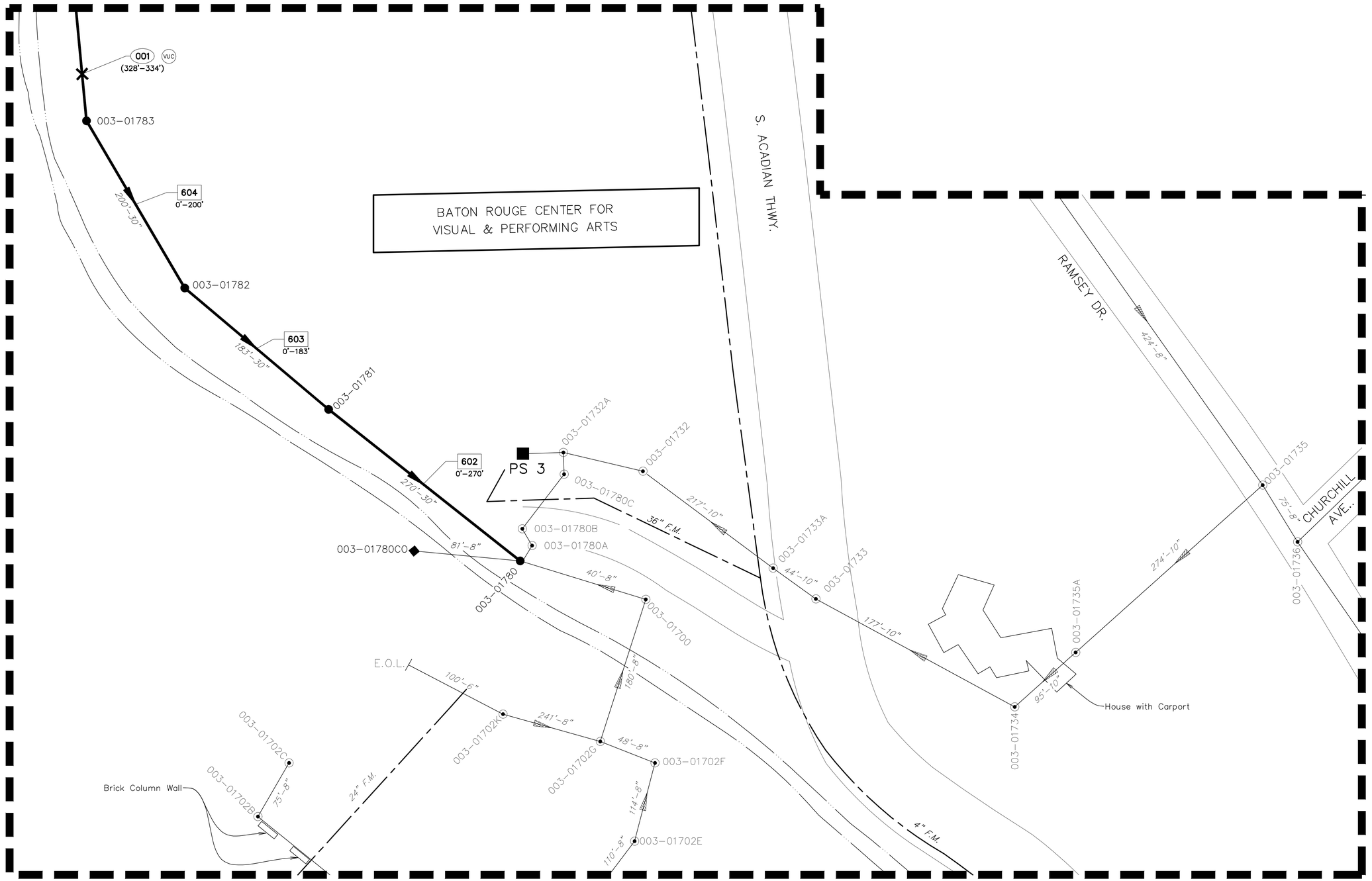

GRAPHIC SCALE
0 50 100
(FEET)
1 INCH=50 FT

PROPOSED CONSTRUCTION

INSET A: SHEET 7

STATE OF LOUISIANA
JOSEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 8

PARISH: EAST BATON ROUGE PARISH

PROJECT NUMBER: 20-AR-MS-0022

DESIGNED: YOUNG
CHECKED: ___
DETAILED: CORTEZ
CHECKED: ___
DATE: MAY 2020
SHEET: 8

NO.	DATE	REVISION DESCRIPTION	BY

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

INSET SHEET

JACOBS

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NO ATTEMPT HAS BEEN MADE BY CITY–PARISH DES TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDES, EASEMENTS, RIGHT–OF–WAY, OR OTHER BURDENS ON THE SUBJECT PROPERTIES. PROPERTY LINES, RIGHT–OF–WAY, AND SERVITUDES SHOWN ON THESE DRAWINGS ARE BASED ON REFERENCE MAP INFORMATION AND ARE PLOTTED HEREON FOR INFORMATIONAL PURPOSES ONLY. THIS DRAWING DOES NOT REPRESENT, NOR IS INTENDED TO REPRESENT, AN ON THE GROUND MINIMUM STANDARD BOUNDARY SURVEY. REFERENCE MAPS ARE LISTED ON DRAWING SHEET 12.



GRAPHIC SCALE
0 100 200
(FEET)
1 INCH=100FT

SHEET No. 10

336–702

A	B
C	D

SHEET NUMBER	9
PARISH	EAST BATON ROUGE PARISH
PROJECT NUMBER	20–AR–MS–0022
DESIGNED	YOUNG
DETAILED	CORTEZ
CHECKED	
DATE	MAY 2020
SHEET	9

PLAN VIEW MATCH SHT. 5

REVISION DESCRIPTION | BY | NO. | DATE

STATE OF LOUISIANA
JOSEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

PARTIAL PLAN VIEW

JACOBS

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NO ATTEMPT HAS BEEN MADE BY CITY–PARISH DES TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDES, EASEMENTS, RIGHT–OF–WAY, OR OTHER BURDENS ON THE SUBJECT PROPERTIES. PROPERTY LINES, RIGHT–OF–WAY, AND SERVITUDES SHOWN ON THESE DRAWINGS ARE BASED ON REFERENCE MAP INFORMATION AND ARE PLOTTED HEREON FOR INFORMATIONAL PURPOSES ONLY. THIS DRAWING DOES NOT REPRESENT, NOR IS INTENDED TO REPRESENT, AN ON THE GROUND MINIMUM STANDARD BOUNDARY SURVEY. REFERENCE MAPS ARE LISTED ON DRAWING SHEET 12.

SHEET No. 9



SHEET No. 11

SHEET No. 33

GRAPHIC SCALE
0 100 200
(FEET)
1 INCH=100FT

336–702

A	B
C	D

JOESEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
STATE OF LOUISIANA

SHEET NUMBER	10
PARISH	EAST BATON ROUGE PARISH
PROJECT NUMBER	20–AR–MS–0022
DESIGNED	YOUNG
CHECKED	
DETAILED	CORTEZ
CHECKED	
DATE	MAY 2020
SHEET	10

PLAN VIEW MATCH SHT. 6

REVISION DESCRIPTION | BY | DATE | NO.

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

PARTIAL PLAN VIEW

JACOBS

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NO ATTEMPT HAS BEEN MADE BY CITY-PARISH DES TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDES, EASEMENTS, RIGHT-OF-WAY, OR OTHER BURDENS ON THE SUBJECT PROPERTIES. PROPERTY LINES, RIGHT-OF-WAY, AND SERVITUDES SHOWN ON THESE DRAWINGS ARE BASED ON REFERENCE MAP INFORMATION AND ARE PLOTTED HEREON FOR INFORMATIONAL PURPOSES ONLY. THIS DRAWING DOES NOT REPRESENT, NOR IS INTENDED TO REPRESENT, AN ON THE GROUND MINIMUM STANDARD BOUNDARY SURVEY. REFERENCE MAPS ARE LISTED ON DRAWING SHEET 12.

SHEET No. 10



GRAPHIC SCALE
0 100 200
(FEET)
1 INCH=100FT

336-698

A	B
C	D

STATE OF LOUISIANA
JOSEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 11

PARISH: EAST BATON ROUGE PARISH
PROJECT NUMBER: 20-AR-MS-0022
PLAN VIEW MATCH SHT. 7

DESIGNED: YOUNG
DETAILED: CORTEZ
CHECKED:
DATE: MAY 2020
SHEET: 11

NO.	DATE	REVISION DESCRIPTION	BY

ACADIAN THRUWAY LARGE DIA. SEWER REHABILITATION PROJECT

PARTIAL PLAN VIEW

JACOBS

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REFERENCE DOCUMENTS

NO ATTEMPT HAS BEEN MADE BY CITY–PARISH DES TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDES, EASEMENTS, RIGHT–OF–WAY, OR OTHER BURDENS ON THE SUBJECT PROPERTIES. PROPERTY LINES, RIGHT–OF–WAY, AND SERVITUDES SHOWN WITHIN THE AERIAL DRAWINGS ARE BASED ON REFERENCE MAP INFORMATION AND ARE PLOTTED HEREIN FOR INFORMATIONAL PURPOSES ONLY. THIS DRAWINGS DO NOT REPRESENT, NOR ARE INTENDED TO REPRESENT, AN ON THE GROUND MINIMUM STANDARD BOUNDARY SURVEY. COORDINATES ARE NOT PROVIDED FOR ALL MANHOLES WITHIN THE REHABILITATION PROJECT AREA. GENERALLY, COORDINATES ARE PROVIDED FOR MANHOLES ON PIPE SEGMENTS THAT WILL HAVE EXCAVATED REPAIRS.

SHEET NO. 10

1) SURVEY MAP OF THE RESUBDIVISION OF LOTS 13 & 14, SQUARE E, STEELE PLACE, DATED SEPTEMBER 17, 1971, PREPARED BY PAUL J. MOREL.
2) MAP SHOWING SUBDIVISION OF LOT 23, BLOCK G OF STEELE PLACE SUBDIVISION INTO LOTS 23–A, 23–B, 23–C & 23–D, DATED JUNE 7, 2007, PREPARED BY RUSSEL L. MISTRIC.
3) MAP SHOWING RESUBDIVISION OF SOUTH ½ OF LOT 12, NORTH ½ OF LOT 12 & SOUTH ½ OF LOT 13, SQUARE D, STEELE PLACE INTO LOTS 12–A, 12–B & 13–A BEING A PORTION OF SQUARE D, STEELE PLACE, DATED OCTOBER 29, 1997, PREPARED BY G. WAYNE SLEDGE.
4) MAP SHOWING THE RESUBDIVISION OF THE N ½ OF LOTS 12 & 13, SQ. C STEELE PLACE SUBDIVISION, PREPARED BY WILLIAM L. BOWMAN.
5) MAP SHOWING RESUBDIVISION OF LOT 10 STEELE PLACE, DATED APRIL 5, 1965, PREPARED BY JOHN W. KELLEN, JR.
6) MAP SHOWING RESUBDIVISION OF LOTS 10 & 11, SQ. B OF STEELE PLACE SUBDIVISION INTO LOTS 10–A, 10–B, & 11–A, DATED APRIL 9, 1981, PREPARED BY JOHN A. GRAVES.
7) MAP OF MORELAND BEING LOTS 7, 28, AND 29 AND A PORTION OF LOTS 8, 9, AND 27 HUNDRED OAKS FARMS, DATED MAY 31, 1946, PREPARED BY PREPARED BY A.G. MUNDINGER.

SHEET NO. 11

1) WYE RECORD OF BEAUMONT LANE, PREPARED BY ALVIN FAIRBURN, SR.
2) RESUBDIVISION OF LOT 1 AND LOT 2 INTO LOT 1–A AND LOT 2–A BEAUMONT LANE, DATED APRIL 23, 1996, PREPARED BY R. JAMES TATUM.
3) SKETCH SHOWING PROPOSED LOCATION OF PUMP STATION No. 3, SEWER LINES, AND FORCE MAIN, DATED APRIL 1984, PREPARED BY FREDERICK E. SMITH.
4) SKETCH SHOWING PROPOSED LOCATION OF PUMP STATION NO. 3, SEWER LINES, AND FORCE MAIN OF SEWERAGE DISTRICTS NO.S 6 & 6A, EAST BATON ROUGE PARISH LA., ON THE PROPERTY OF DR. HARRIET DAGGETT. SKETCH ALSO SHOWS A 15' & 50' R/W FOR SEWERS AND AN ACCESS DRIVE ON THE SAME PROPERTY AND A 50' R/W FOR SEWERS AND AN ACCESS DRIVE ON THE PROPERTY OF JOHN M. RAMSEY. DATED APRIL 1948, PREPARED BY FREDERICK E. SMITH.

STATE OF LOUISIANA
JOESEPH OWEN YOUNG
License No. 29439
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 12

PARISH: EAST BATON ROUGE PARISH
PROJECT NUMBER: 20-AR-MS-0022

DESIGNED	DETAILED	DATE	SHEET
YOUNG	CORTEZ	MAY 2020	12

NO.	REVISION DESCRIPTION	DATE	BY

ACADIAN THRUWAY LARGE DIA.
SEWER REHABILITATION PROJECT

AERIAL REFERENCE MAPS

JACOBS

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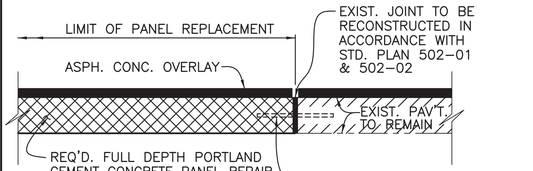
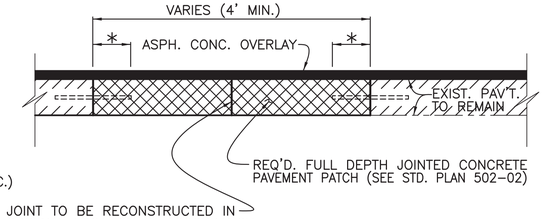
PROJECT NO.	SHEET



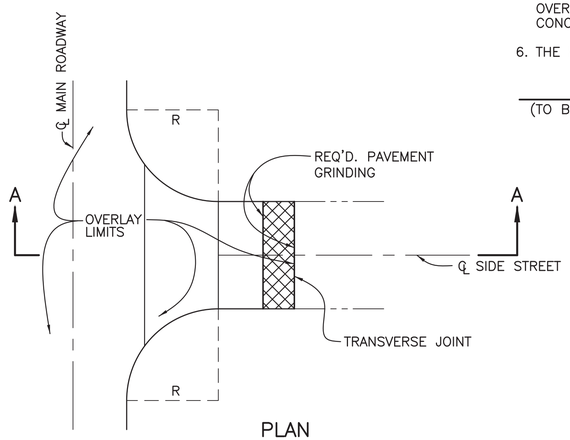
1. DURING CONCRETE REMOVAL, THE CONTRACTOR SHALL TAKE PRECAUTION TO PRESERVE THE INTEGRITY OF EXISTING LOAD TRANSFER DEVICES. (SEE LOAD TRANSFER DEVICE NOTES BELOW)
2. DETERIORATED BASE COURSE SHALL BE REMOVED AND REPLACED WITH CONCRETE. AN APPROVED BOND BREAKER SHALL BE PLACED BETWEEN THE REPAIRED BASE COURSE AND PORTLAND CEMENT CONCRETE PATCH.
3. JOINTS SHALL BE REESTABLISHED IN THE PORTLAND CEMENT CONCRETE PANEL REPLACEMENT AT THE ORIGINAL JOINT LOCATIONS. JOINTS SHALL BE SEALED. JOINTS SHALL BE SAWED AND SEALED IN THE ASPHALT CONCRETE OVERLAY. SEE DETAILS OF SAWING AND SEALING JOINTS IN ASPHALT CONCRETE OVERLAY.
4. THE PANEL REPAIR SURFACE SHALL BE A DRAG FINISH.

CONCRETE PAVEMENT PATCHING
(TO BE USED @ WHOLE PANEL REPLACEMENT LOCATIONS)



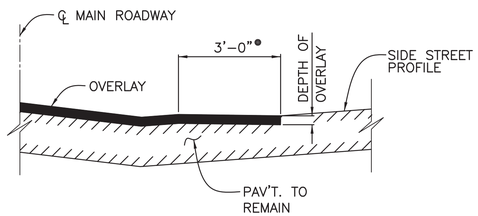
*1. AN 18" CLEARANCE BETWEEN THE SAWCUT AND THE NEAREST TRANSVERSE CRACK IS DESIRED. MINIMUM CLEARANCE SHALL BE 6".
2. DURING CONCRETE REMOVAL, THE CONTRACTOR SHALL TAKE PRECAUTION TO PRESERVE THE INTEGRITY OF EXISTING LOAD TRANSFER DEVICES. (SEE LOAD TRANSFER DEVICE NOTES BELOW).
3. DETERIORATED BASE COURSE SHALL BE REMOVED AND REPLACED WITH CONCRETE. AN APPROVED BOND BREAKER SHALL BE PLACED BETWEEN THE REPAIRED BASE COURSE AND THE PORTLAND CEMENT CONCRETE PATCH.
4. FACE OF EXISTING CONCRETE SHALL BE COATED WITH AN APPROVED EPOXY ADHESIVE (DOTD QPL 32) BEFORE PLACING CONCRETE
5. JOINTS SHALL BE REESTABLISHED IN THE PORTLAND CEMENT CONCRETE PATCH AT THE ORIGINAL JOINT LOCATION. JOINTS SHALL BE SEALED. JOINTS SHALL BE SAWED AND SEALED IN THE ASPHALT CONCRETE. OVERLAY. SEE DETAILS OF SAWING AND SEALING JOINTS IN ASPHALT CONCRETE OVERLAY BELOW.
6. THE PANEL REPAIR SURFACE SHALL BE A DRAG FINISH.

CONCRETE PAVEMENT PATCHING
(TO BE USED @ JOINT REPAIR AND PARTIAL PANEL REPLACEMENT LOCATIONS)



PLAN

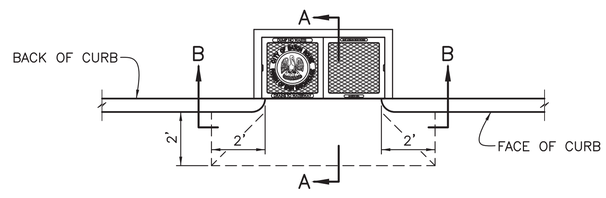
PAVEMENT GRINDING & ASPHALT CONCRETE OVERLAY @ TURNOUTS



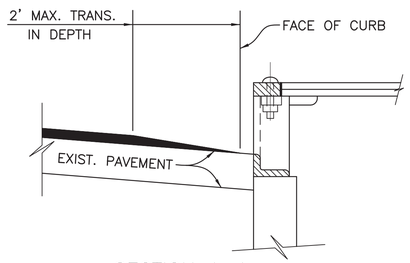
● LOCATION OF PAVEMENT GRINDING TO BE AT CURB RETURN OR NEXT TRANSVERSE JOINT AS DETERMINED BY THE ENGINEER.

SECTION A–A

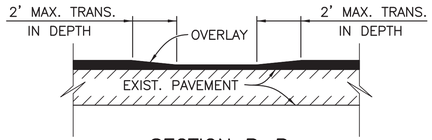
DETAILS OF TURNOUTS AND INTERSECTIONS
(FOR SIDE STREETS WITHOUT OPEN DITCHES)



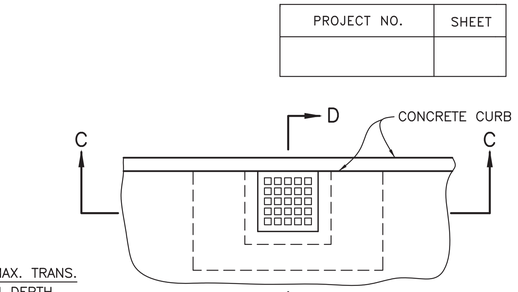
PLAN VIEW



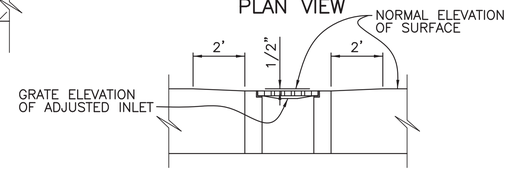
SECTION A–A



SECTION B–B

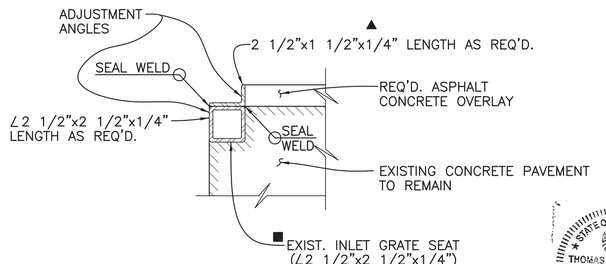


PLAN VIEW



SECTION C–C

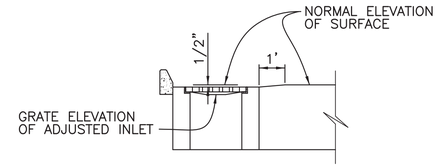
DETAIL OF SUMP IN OVERLAY AT SIDE INLET



NOTES:

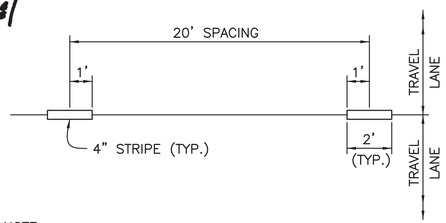
1. STRUCTURAL STEEL TO BE A–36 GALVANIZED.
2. ALL ∠s TO BE CUT TO FIT AND WELDED AT CORNERS.
3. ADJUSTMENT ANGLE DIMENSIONS BASED ON 2" ASPHALT CONCRETE OVERLAY THICKNESS.
- ■4. AT GRATE INLET LOCATIONS WHERE PANEL REPLACEMENT IS REQUIRED THE EXISTING INLET GRATE SEAT SHALL BE RESET TO ITS ORIGINAL ELEVATION AND ADJUSTED AS SHOWN FOR THE REQUIRED OVERLAY.
- ▲5. DIMENSION SHALL BE 1/2" LESS THAN ASPHALT OVERLAY THICKNESS.

GRATE INLET ADJUSTMENT DETAIL



SECTION D–D

GRATE INLET SUMP DETAIL
(SHOWING TRANSITION IN SURFACE ELEVATION)



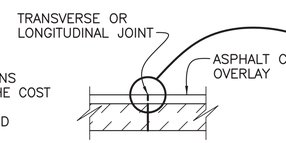
NOTE:

1. TEMPORARY PAVEMENT MARKINGS REQUIRED IN ALL OVERLAY AREAS.

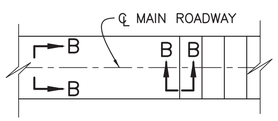
TEMPORARY PAVEMENT MARKING DETAIL

LOAD TRANSFER DEVICE NOTES

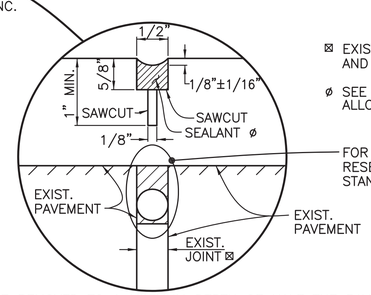
1. DOWEL BARS SHALL BE INSTALLED AT JOINT LOCATIONS WHERE EXIST. LOAD TRANSFER DEVICES HAVE FAILED. THE COST OF INSTALLATION, LABOR AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PORTLAND CEMENT CONCRETE PATCH ITEM.
2. 1 1/4"x18" PLASTIC COATED DOWEL BARS SHALL BE INSTALLED ON 12" CENTERS. THE BARS SHALL BE PLACED IN EXISTING PAVEMENT BY DRILLING 1 3/8" HOLES TO A DEPTH OF 9" AND FILLING WITH AN APPROVED EPOXY GROUT BEFORE INSERTION OF DOWEL BARS.
3. TIE BARS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLAN 502–01. LABOR AND MATERIALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE PORTLAND CEMENT CONCRETE PATCH ITEM.
4. DOWEL BARS AND TIE BARS SHALL BE INSTALLED AS OUTLINED ABOVE AT THE CONTRACTOR'S EXPENSE AT LOCATIONS WHERE THE CONTRACTOR DAMAGES EXIST. LOAD TRANSFER DEVICES OR TIE BARS.



SECTION B–B



PLAN VIEW



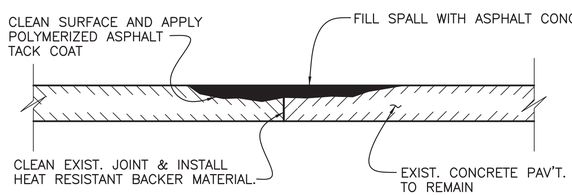
⊠ EXISTING JOINT TO BE CLEANED AND SEALED.

ø SEE SPECIAL PROVISIONS FOR ALLOWED TYPE OF SEALANT.

FOR DETAIL OF CLEANING AND RESEALING EXISTING JOINTS, SEE STANDARD PLAN 502–02.

1. INCOMPRESSIBLES SHALL BE REMOVED TO A MINIMUM DEPTH OF HALF THE PAVEMENT THICKNESS FOR JOINTS WIDTHS OF 1" AND LESS AND TO FULL PAVEMENT DEPTH WHERE JOINT WIDTHS ARE OVER 1".

DETAILS OF SAWING AND SEALING JOINTS IN ASPHALT CONCRETE OVERLAY



1. SURFACE PREPARATION, APPLICATION OF TACK COAT AND ASPHALT CONCRETE REQUIRED TO FILL SPALLED AREA SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ASPHALT CONCRETE PAVEMENT ITEM.

SPALL REPAIR DETAIL

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
501–01	AUGUST 6, 2008	1 OF 1

ASPHALT CONCRETE OVERLAY OF P.C. CONCRETE PAVEMENT

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

DESIGNED	DRAWN	CHECKED	APPROVED
R.K. BANKS	G. VANNICE	R.E. ELLIS.	T. STEPHENS

ENGINEERING ADOBE14 STDJAY FORM C.V1

501–01

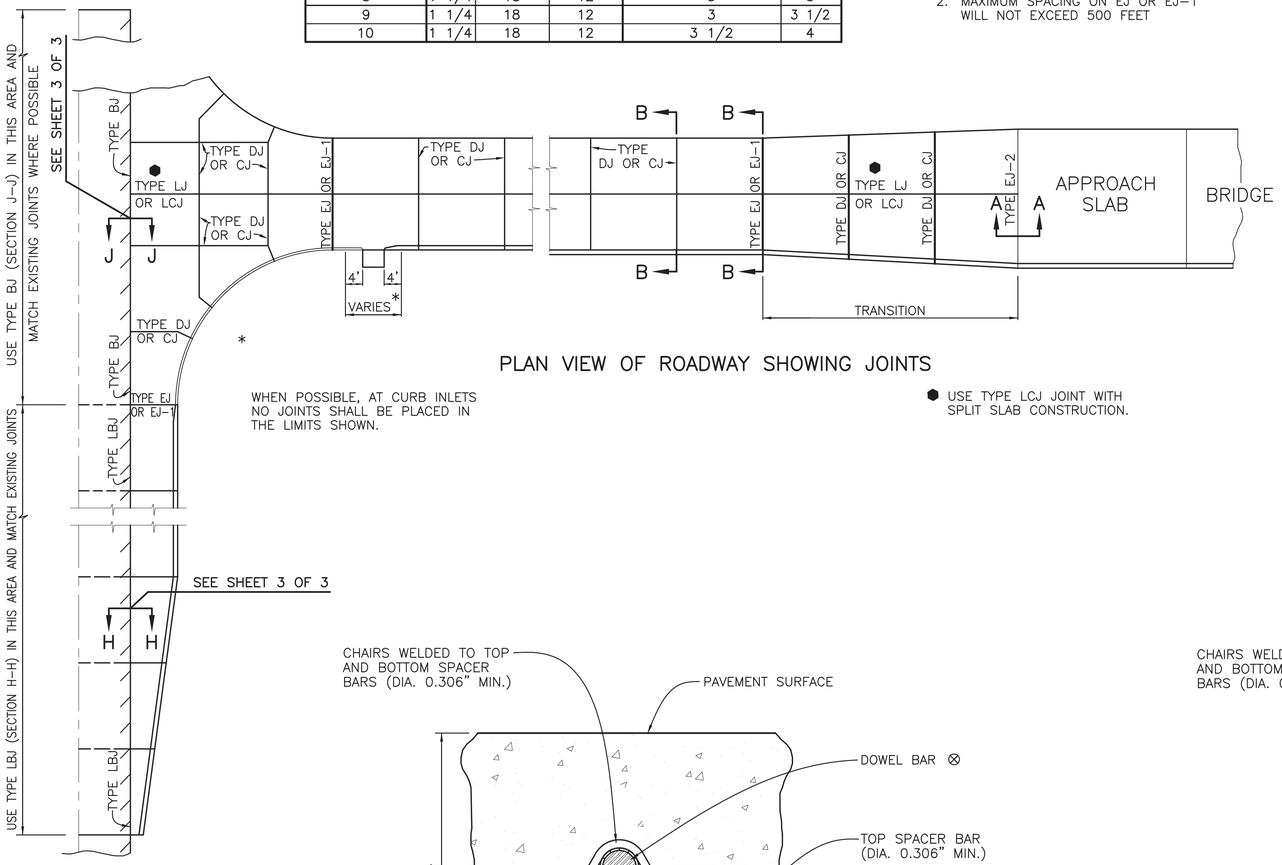
PROJECT NO.	SHEET

TABLE 1
(ALL DIMENSIONS ARE IN INCHES)

PAVEMENT THICKNESS "T"	DOWEL BARS ⊗			MINIMUM DEPTH OF JOINT	
	SIZE	LENGTH	SPACING	■ C.J. & D.J.	◪ L.J.
6	1	18	12	2	2
8	1 1/4	18	12	3	3
9	1 1/4	18	12	3	3 1/2
10	1 1/4	18	12	3 1/2	4

NOTES:

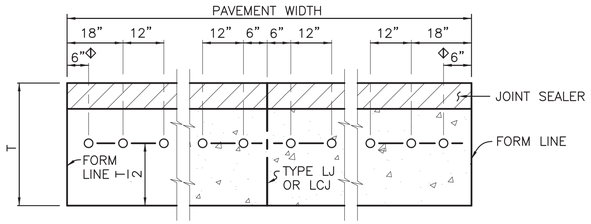
1. ALL JOINTS 10' MIN. SPACING 20' MAX. SPACING
2. MAXIMUM SPACING ON EJ OR EJ–1 WILL NOT EXCEED 500 FEET



PLAN VIEW OF ROADWAY SHOWING JOINTS

WHEN POSSIBLE, AT CURB INLETS NO JOINTS SHALL BE PLACED IN THE LIMITS SHOWN.

⬢ USE TYPE LCJ JOINT WITH SPLIT SLAB CONSTRUCTION.



SECTION B–B

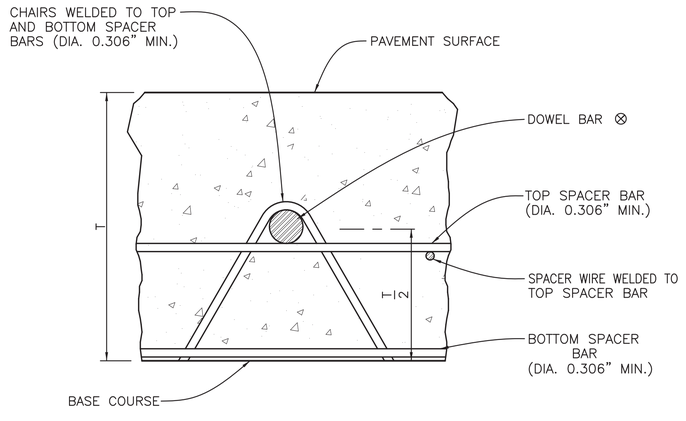
DOWEL BAR SPACING FOR TYPE DJ,CJ AND EJ JOINTS

◈ 9"–WHEN MECHANICAL PLACEMENT OF DOWEL BARS IS USED.

GENERAL NOTES

1. OUTSIDE PAVEMENT EDGES SHALL BE ROUNDED 1/4".
2. ON TYPE EJ JOINTS, EXPANSION TUBES AND STOPS SHALL BE PLACED ON ALTERNATE ENDS OF EACH DOWEL BARS. BARS SHALL BE SPOT WELDED ON ALTERNATE ENDS TO DOWEL BASKETS.
3. TYPE LJ JOINTS SHALL BE SAWED 1/8" WIDE AS SHOWN IN DETAIL "D" ON SHEET 2 TO THE DEPTH SHOWN IN TABLE 1. THEY SHALL BE CLEANED AND SEALED WITH A JOINT SEALER CONFORMING TO SUBSECTION 1007–2.
4. TYPE DJ AND CJ JOINTS SHALL BE TO THE DEPTH SHOWN IN TABLE 1. IF SAWED, THEY SHALL HAVE AN INITIAL CUT USING A 1/8" BLADE, OTHERWISE, JOINTS SHALL CONFORM TO DETAILS "B" AND "C" ON SHEET 2. THEY SHALL ALSO BE SAND BLASTED AND CLEANED PRIOR TO SEALING USING A JOINT SEALER CONFORMING TO SUBSECTION 1007–2.
5. TYPE DJ JOINTS MAY ALSO BE A COMBINATION JOINT FORMER/ SEALER AS SHOWN IN DETAIL "A" ON SHEET 2 CONFORMING TO SUBSECTION 1007–4.
6. TYPE EJ JOINTS SHALL BE FORMED FULL DEPTH, USING A WOOD FILLER, EXCEPT FOR THE TOP 1/2" WHICH SHALL BE A JOINT SEALER CONFORMING TO SUBSECTION 1007–2. THE WOOD FILLER SHALL CONFORM TO SUBSECTION 1007–1(b).
7. IN LIEU OF DOWEL BASKET, APPROVED VIBRATORY PLACEMENT OF DOWEL BARS AND TIE BARS WILL BE PERMITTED. DOWEL BASKETS SHALL BE SIMILAR TO ONES SHOWN, OR APPROVED EQUALS.
8. INSTALL GEOTEXTILE FABRIC UNDER CJ, DJ AND EJ TYPE JOINTS WHEN CONCRETE IS PLACED ON UNSTABILIZED OR UN–TREATED BASE COURSE WHEN DOWEL BARS ARE VIBRATED IN PLACE, THE GEOTEXTILE FABRIC SHALL BE ANCHORED TO BASE COURSE WITH PINS.
9. TRANSVERSE EXPANSION JOINTS SHALL NOT BE USED FOR CONSTRUCTION JOINTS.
10. TIE BARS SHALL NOT BE PLACED WITHIN 18" OF CONTRACTION (DUMMY) OR EXPANSION JOINTS.
11. TRANSVERSE EXPANSION JOINTS (TYPE EJ OR EJ–1) SHALL BE PLACED AT MAXIMUM 500–FOOT INTERVALS IN ADDITION TO BEING PLACED AT JUNCTIONS WITH OTHER CONCRETE PAVEMENTS.

SECTION C–C
⊗ SEE TABLE 1



SECTION D–D
⊗ SEE TABLE 1



DATE	DESCRIPTION REVISIONS	BY

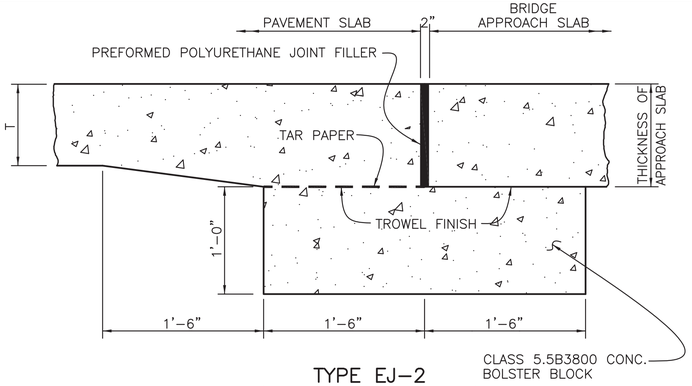
STANDARD PLAN NO.	DATED	SHEET NO.
502–01	January 18, 2008	1 OF 3

CONCRETE PAVEMENT

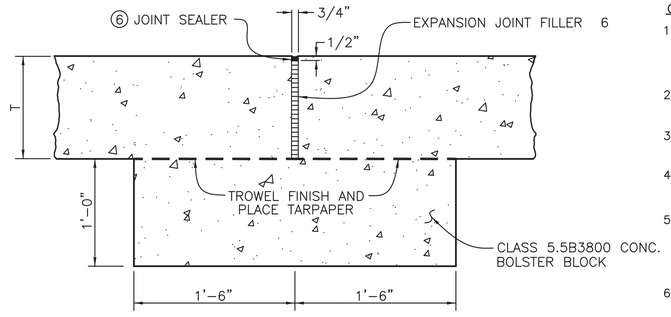
DETAILS

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

DESIGNED	DRAWN	CHECKED	APPROVED
R.E.E./N.A.R.	G. VANNICE	N.A.R./R.E.E.	T. STEPHENS



TYPE EJ–2
(TRANSVERSE EXPANSION JOINT)
SECTION A–A

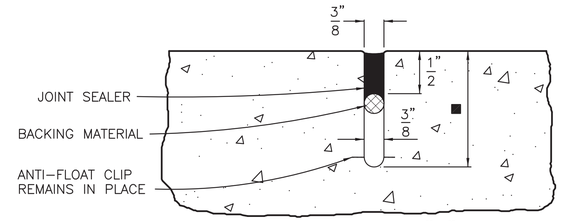


TYPE EJ–1
(TRANSVERSE EXPANSION JOINT)

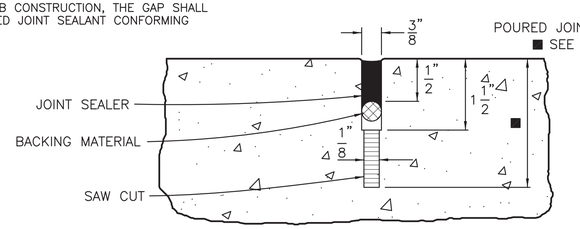
COMBINATION JOINT FORMER / SEALER NOTES:

1. AFTER PAVEMENT HAS BEEN FINISHED AND WHILE CONCRETE IS STILL PLASTIC, GROOVES SHALL BE CUT INTO PAVEMENT AT PROPER LOCATION AND DEPTH. INSTALL SEALINSERT FLUSH WITH FINISHED SURFACE.
2. IMMEDIATELY CONSOLIDATE CONCRETE ON BOTH SIDES OF SEALINSERT WITH AN APPROVED MECHANICAL VIBRATOR.
3. AFTER FINAL FINISH BUT BEFORE CONCRETE HAS TAKEN ITS INITIAL SET, JOINT EDGES SHALL BE ROUNDED TO RADIUS SHOWN.
4. TOP CAP SHALL REMAIN IN PLACE UNTIL FINAL CLEAN–UP HAS BEEN COMPLETED.
5. SEALINSERTS SHALL BE CUT AND INSTALLED TO BE CONTINUOUS ACROSS THE FULL WIDTH OF SLAB, UNLESS FIELD SPLICING IS APPROVED BY THE ENGINEER. FIELD SPLICES SHALL BE SEALED WITH A POURED OR EXTRUDED JOINT SEALANT CONFORMING TO SUBSECTION 1007–2.
6. AT THE INTERSECTION OF TYPE LJ AND DJ JOINTS USING A COMBINATION JOINT FORMER / SEALER OR SPLIT SLAB CONSTRUCTION, THE GAP SHALL BE FILLED WITH A POURED OR EXTRUDED JOINT SEALANT CONFORMING TO SUBSECTION 1007–2.

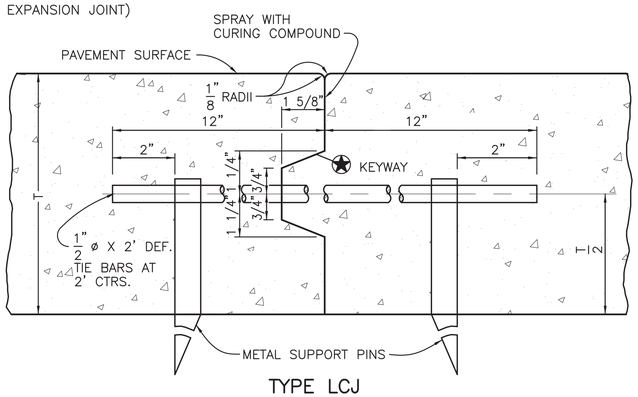
PROJECT NO.	SHEET



DETAIL "B"
POURED JOINT (FORMED) TYPE DJ OR CJ
■ SEE TABLE 1 ON SHEET 1



DETAIL "C"
POURED JOINT (SAWED) TYPE DJ OR CJ
■ SEE TABLE 1 ON SHEET 1

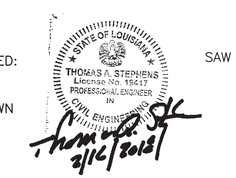


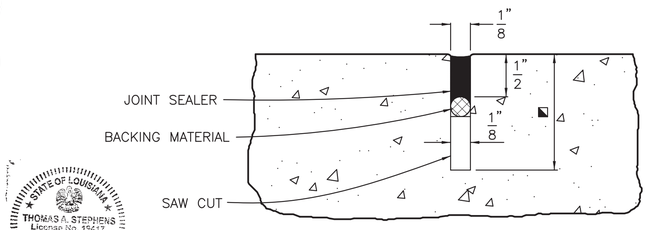
TYPE LCJ
(LONGITUDINAL CONSTRUCTION JOINT)
(SPLIT SLAB CONSTRUCTION)

★ IN LIEU OF KEYWAY, ONE OF THE FOLLOWING OPTIONS WILL BE ALLOWED:

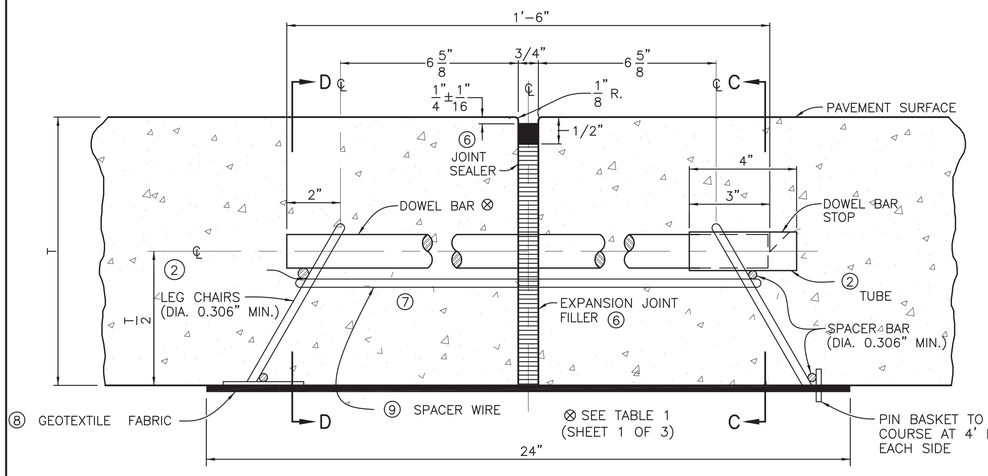
a.) INSTALL TIE BARS OF THE SIZE SHOWN ABOVE AT 1/2 SPACING.

b.) INSTALL TIE BARS 1/4" LARGER THAN THE TIE BAR DIAMETER SHOWN ABOVE AT SAME SPACING.





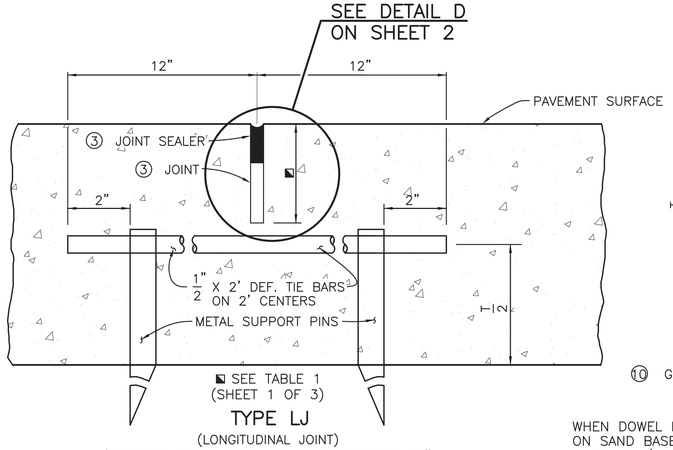
DETAIL "D"
POURED JOINT (SAWED)
TYPE LJ
■ SEE TABLE 1 ON SHEET 1.



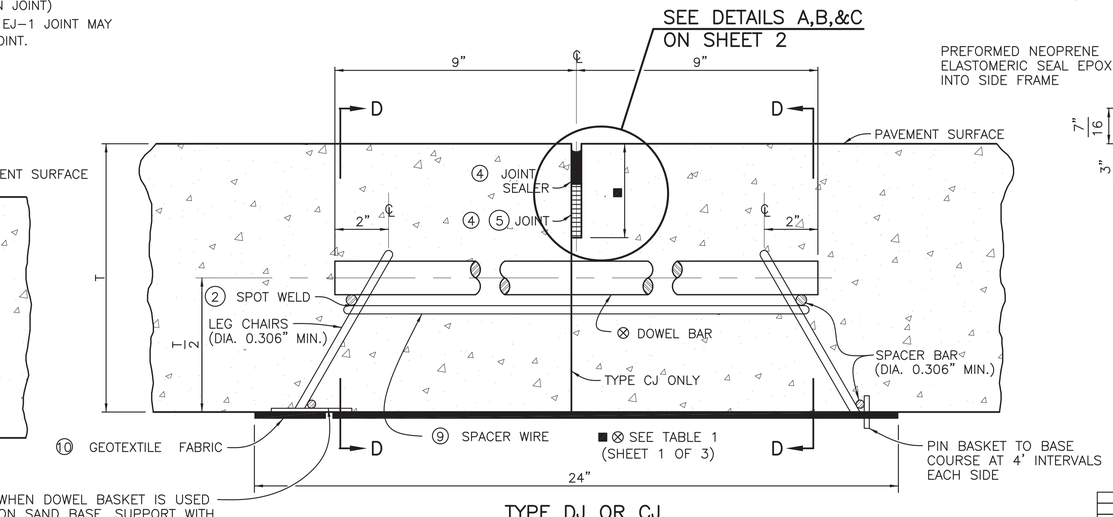
TYPE EJ
(TRANSVERSE EXPANSION JOINT)
AT CONTRACTOR'S OPTION, TYPE EJ–1 JOINT MAY BE USED IN LIEU OF TYPE EJ JOINT.

SEALINSERT DETAIL "A"

DETAIL "A"
COMBINATION JOINT FORMER / SEALER
■ SEE TABLE 1 ON SHEET 1



TYPE LJ
(LONGITUDINAL JOINT)
(REQUIRED WHEN PAVEMENT WIDTH EXCEEDS 15')



WHEN DOWEL BASKET IS USED ON SAND BASE, SUPPORT WITH 9 SQ. IN. (MIN.) SQUARE OR ROUND PLATE

TYPE DJ OR CJ
(TRANSVERSE DUMMY JOINT OR CONSTRUCTION JOINT)

DATE	DESCRIPTION REVISIONS	BY

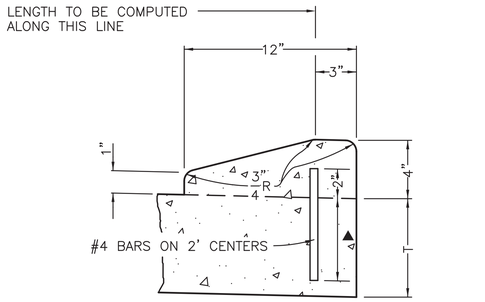
STANDARD PLAN NO.	DATED	SHEET NO.
502–01	January 18, 2008	2 OF 3

CONCRETE PAVEMENT DETAILS

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

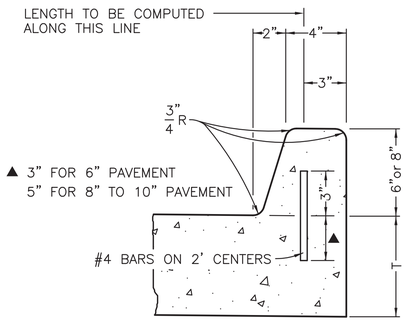
DESIGNED	DRAWN	CHECKED	APPROVED
R.E.E./N.A.R.	G. VANNICE	N.A.R./R.E.E.	T. STEPHENS

PROJECT NO.	SHEET



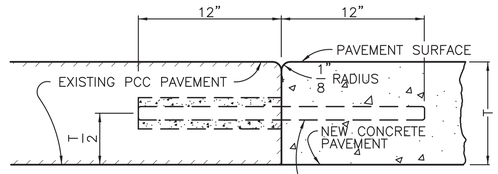
(MOUNTABLE TYPE) ▲ 4" FOR 6" PAVEMENT
6" FOR 8" TO 10" PAVEMENT

INTEGRAL CONCRETE CURB



(BARRIER TYPE)

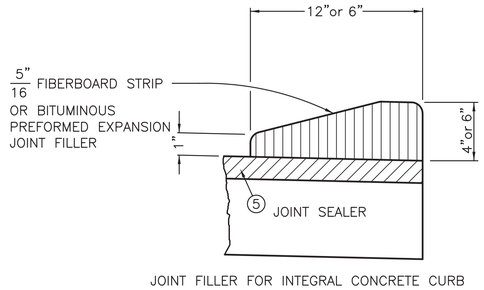
INTEGRAL CONCRETE CURB



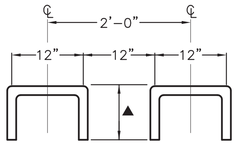
TYPE LBJ
(LONGITUDINAL BUTT JOINT)

SECTION H–H

1/2"x 2' DEF. TIE BARS ON 2' CENTERS SHALL BE INSTALLED IN THE EXISTING PAVEMENT BY DRILLING 5/8" DIA. HOLES TO A DEPTH OF 12". HOLES SHALL BE FILLED IN ACCORDANCE WITH SUBSECTION 502–5(c).



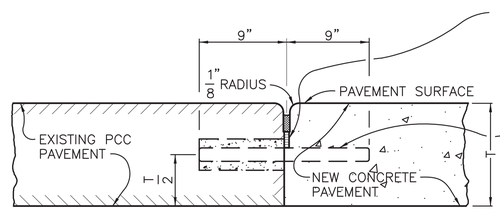
JOINT FILLER FOR INTEGRAL CONCRETE CURB



BAR DETAIL

SHOWING DIMENSIONS AND SPACING OF #4 DEF. REIN. STEEL BARS FOR CONC. CURB

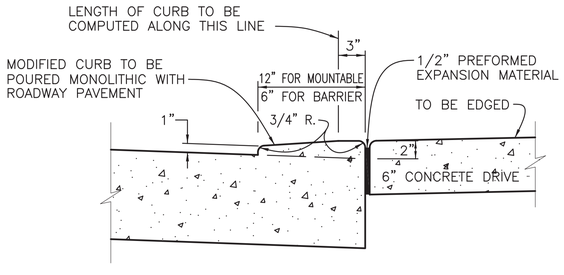
▲ 6" FOR 6" PAVEMENT
8" FOR 8" TO 10" PAVEMENT



DOWEL BARS OF THE SIZE, LENGTH AND SPACING SPECIFIED IN TABLE 1 (SHEET 1 OF 3) SHALL BE PLACED IN EXISTING PAVEMENT BY DRILLING HOLES 1/8" LARGER THAN THE BAR DIAMETER TO A DEPTH OF 1/2 THE BAR LENGTH AND FILLING HOLES IN ACCORDANCE WITH SUBSECTION 502–5(g).

TYPE BJ
(TRANSVERSE BUTT JOINT)

SECTION J–J
⊗ SEE TABLE 1 ON SHEET 1



CONSTRUCTION JOINT AT CONCRETE DRIVES



STANDARD PLAN NO. 502–01	DATED January 18, 2008	SHEET NO. 3 OF 3

CONCRETE PAVEMENT

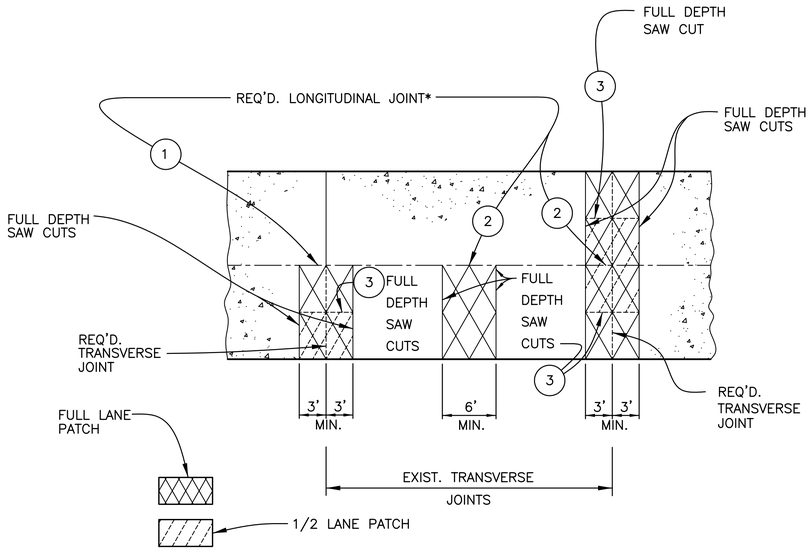
DETAILS

DATE	DESCRIPTION REVISIONS	BY

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

DESIGNED	DRAWN	CHECKED	APPROVED
R.E.E./N.A.R.	G. VANNICE	N.A.R./R.E.E.	T. STEPHENS

PROJECT NO.	SHEET



LONGITUDINAL JOINTS

∗ Dowel Bars and Longitudinal Tie Bars shall conform to STD. PLAN CPS 502–01

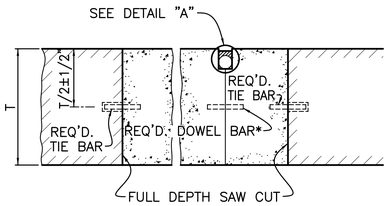
△ New Joint to be Formed or Sawed

① (a) Tie bars shall be placed along the Longitudinal Joint with respect to the existing Transverse Joint in the Adjacent Slab.

② (a) 24" Tie bars shall be placed in the Longitudinal Joint.

③ Tie bar (.) to be used along Longitudinal Cut of 1/2 Lane Patch.

DETAILS FOR FULL DEPTH PATCHING OF JOINTED CONCRETE PAVEMENT



TRANSVERSE JOINTS

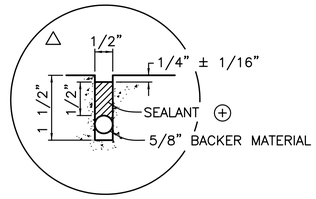
TRANSVERSE JOINTS

Deformed Tie Bars for Transverse Joints shall be 1" in diameter and 24" in length.

Deformed Tie Bars for Transverse Joints shall be installed in existing pavement by drilling holes 1/8" larger than the diameter of the Bar to a depth of 12" and filling the holes with an approved Epoxy Resin (DOTD QPL) insertion of the Bars. Spacing shall be at 12".

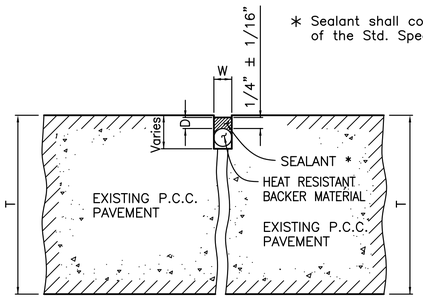
Face of existing Concrete shall be coated with an approved Epoxy Adhesive (DOTD QPL) before placing Concrete.

⊕ Sealant shall conform to Subs. 1007–2 of the Std. Specs.



DETAIL "A" TRANSVERSE JOINT

∗ Sealant shall conform to Subs. 1007–2 of the Std. Specs.



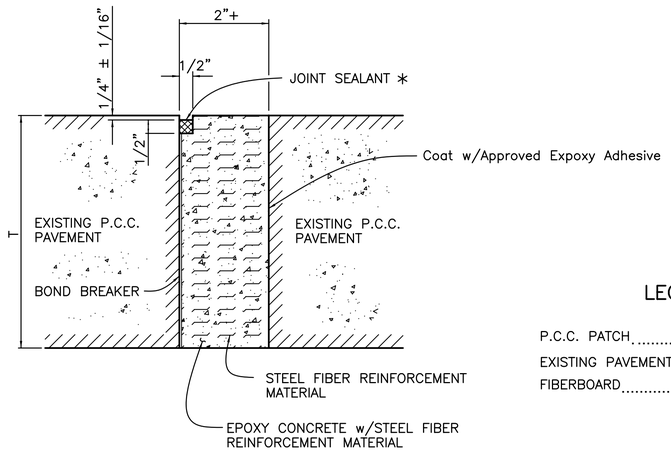
TRANSVERSE JOINT WIDTH (W)	LONGITUDINAL JOINTS WIDTH (W)	D	BACKER MATERIAL (INCH)	MINIMUM DEPTH TO REMOVE INCOMPRESSIBLES
1/2" – 1"	3/8" – 1"	1/2"	W + 25 %	T/2
>1" – 3"	>1" – 2"	W/2	W + 25 %	T

NOTES:

Backer Material shall consist of Heat Resistant, Closed – Cell Cross – Linked Polyethylene or Polyolefin Foam.

DETAIL FOR CLEANING AND RESEALING EXISTING TRANSVERSE & LONGITUDINAL JOINTS

∗ Sealant shall conform to Subs. 1007–2 of the Std. Specs.



LEGEND

P.C.C. PATCH.....

EXISTING PAVEMENT TO REMAIN.....

FIBERBOARD.....

NOTES:

Face of existing concrete (opposite face with Bond Breaker) shall be coated with an approved Epoxy Adhesive (LDOTD QPL) before placement of Epoxy Concrete w/ Steel Fiber Reinforcement Material.

SPECIAL DETAIL CLEANING AND FILLING EXISTING LONGITUDINAL PAVEMENT JOINTS (Existing Opening 2" and wider)

STATE OF LOUISIANA
BRYAN K. HARMON
REG. No. 22595
REGISTERED PROFESSIONAL ENGINEER IN ENGINEERING

February 8, 2008

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 502–02	DATED DECEMBER 12, 2007	SHEET NO. 1 OF 1

CONCRETE PAVEMENT REPAIR

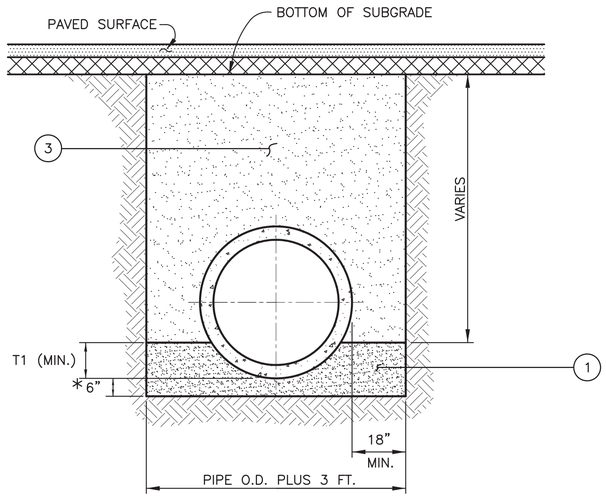
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
R.K. BANKS	G.VANNICE	R.K. BANKS	B. HARMON

PROJECT NO.	SHEET

RIGID PIPE

(REINFORCED CONCRETE)

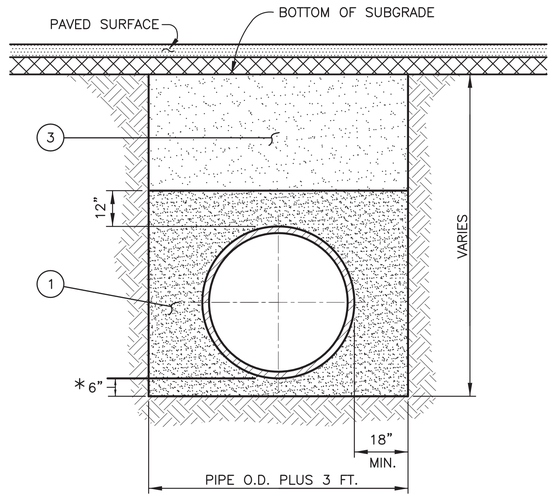


PIPE UNDER OR WITHIN 5 FEET OF STREETS AND PAVED SURFACES.

SCALE: 1/2"=1'-0"

FLEXIBLE PIPE

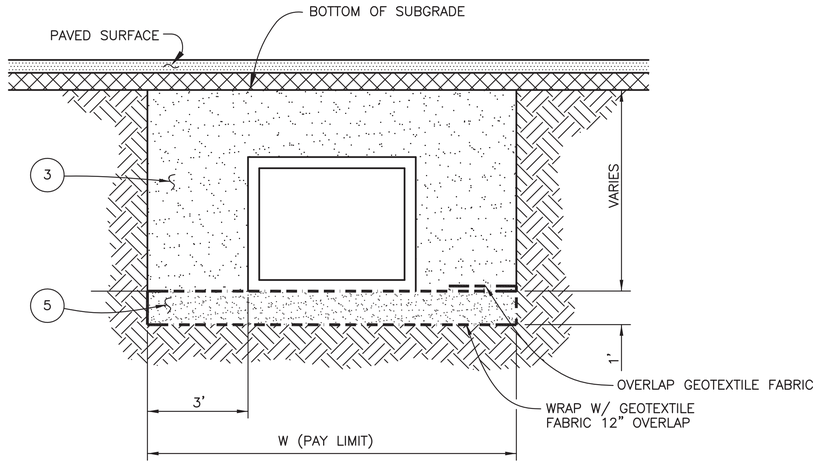
(CORRUGATED METAL, POLYVINYL CHLORIDE, AND POLYETHYLENE)



PIPE UNDER OR WITHIN 5 FEET OF STREETS AND PAVED SURFACES.

SCALE: 1/2"=1'-0"

TYPICAL BEDDING DETAIL FOR REINFORCED CONCRETE BOX CULVERT

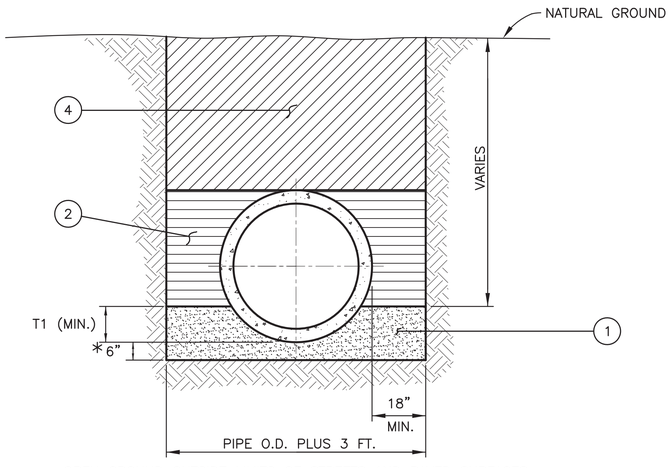


SCALE: 1/2"=1'-0"

GENERAL NOTES

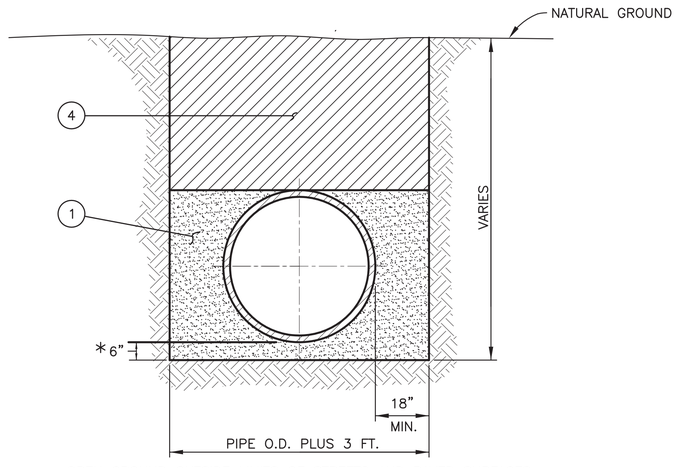
ALL MATERIALS AND WORK SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF BATON ROUGE AND PARISH OF EAST BATON ROUGE-"STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".

* BEDDING UNDER PIPE SHALL BE 6" UNLESS OTHERWISE SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.



OPEN GROUND OUTSIDE LIMITS OF STREETS AND PAVED SURFACES

SCALE: 1/2"=1'-0"



OPEN GROUND OUTSIDE LIMITS OF STREETS AND PAVED SURFACES

SCALE: 1/2"=1'-0"

LEGEND

1. BEDDING MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY. (NO DIRECT PAY).
2. BACKFILL MATERIAL (QUALITY EXCAVATED OR SELECT MATERIAL OR SAND). COMPACTED TO A DENSITY AT LEAST EQUAL TO SURROUNDING UNDISTURBED SOIL. (NO DIRECT PAY).
3. BACKFILL MATERIAL (BACKFILL SAND), COMPACTED TO 95% STANDARD PROCTOR DENSITY. (NO DIRECT PAY).
4. BACKFILL MATERIAL (QUALITY EXCAVATED OR SELECT MATERIAL). COMPACTED TO A DENSITY AT LEAST EQUAL TO THE SURROUNDING UNDISTURBED SOIL. (NO DIRECT PAY).
5. 67 LIMESTONE W/ GEOTEXTILE FABRIC.

PIPE BEDDING SCHEDULE

(RIGID PIPE)

PIPE SIZE	T1 (MIN.)
12"-30"	6"
36"-60"	12"
66"-96"	18"

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2012

DATE	DESCRIPTION REVISIONS	BY

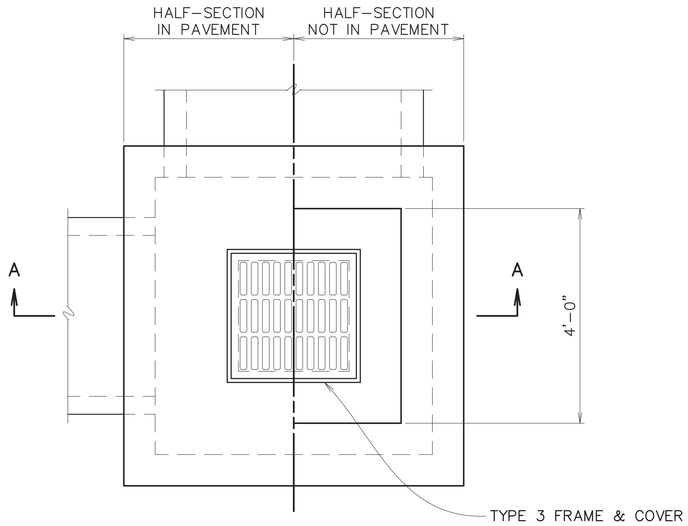
STANDARD PLAN NO.	DATED	SHEET NO.
701-01	February 8, 2008	1 OF 1

STANDARD BEDDING AND BACKFILL DETAILS FOR STORM DRAINAGE CONDUIT

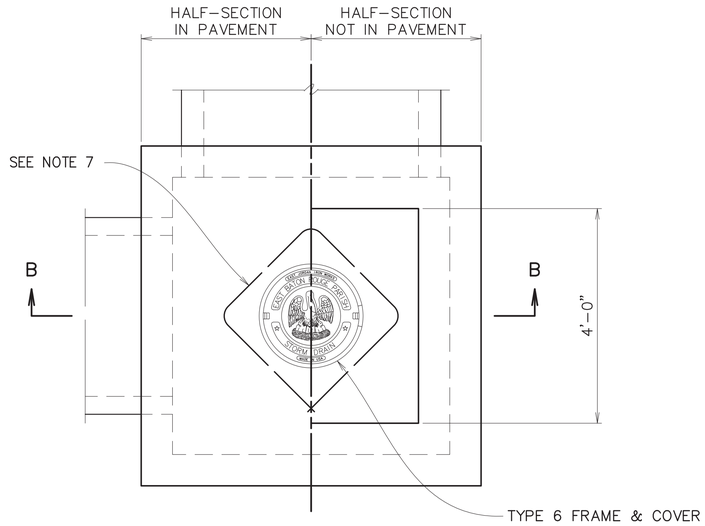
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
R. ELLIS	G. VANNICE	R. ELLIS	T. STEPHENS

PROJECT NO.	SHEET



TOP VIEW
TYPE 3
SCALE: 3/4"=1'–0"



TOP VIEW
TYPE 6
SCALE: 3/4"=1'–0"

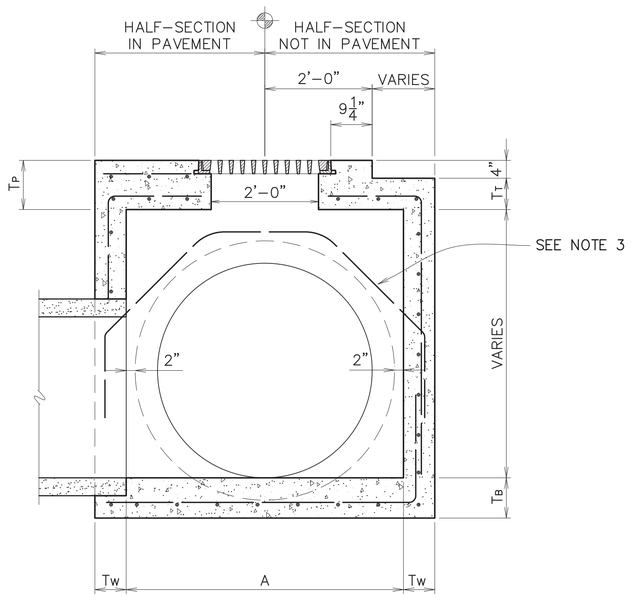
PIPE SIZE		DIMENSION
ROUND PIPE	ARCH PIPE (ROUND EQUIV.)	A *
15"	–	2'–10"
18"	15"	2'–10"
24"	18"	2'–10"
30"	24"	3'–5"
36"	30"	4'–0"
42"	36"	4'–8"
48"	–	5'–2"
54"	42"	5'–9"
60"	48"	6'–4"
–	54"	6'–8"
72"	60"	7'–6"
84"	72"	8'–10"

* INCREASE AS REQUIRED TO PROVIDE MINIMUM TOP WIDTH OF 4' SQUARE.

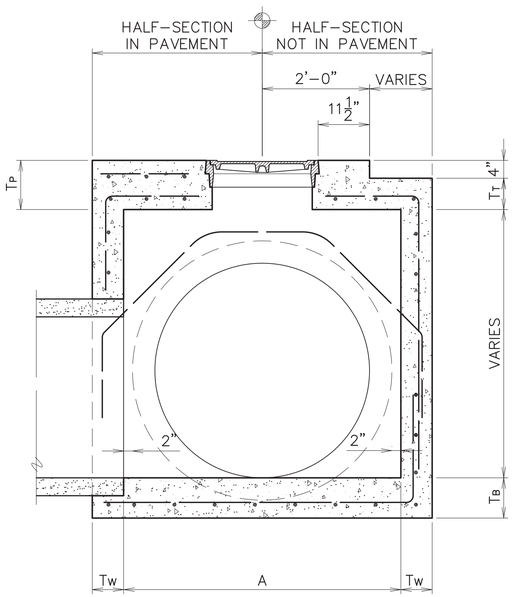
NOTE:

1. SEE STANDARD PLAN 702–99 FOR FRAME AND COVER DETAILS. TYPE 3 OR TYPE 6 FRAME AND COVER REQUIRED.
2. PRECAST CONCRETE STRUCTURES CONFORMING TO STANDARD PLAN 702–97 MAY BE FURNISHED.
3. DIAGONAL REINFORCEMENT REQUIRED FOR PIPE LARGER THAN 36". BARS SHALL LAP TO A FULL LENGTH VERTICAL BAR W/18d LAP LENGTH.
4. DIMENSION A MAY BE VARIED FOR SKEWED PIPE.
5. SEE STANDARD PLAN 702–96 FOR THICKNESS, REINFORCING STEEL, AND OTHER STRUCTURAL DETAILS.
6. SEE STANDARD PLAN 702–98 FOR FOR CURB TRANSITION DETAILS.
7. DIAGONAL REINFORCEMENT REQUIRED. USE SAME REBAR SIZE AS TOP REINFORCING. PLACE AS BOTTOM STEEL IF LOCATED IN PAVEMENT.

⊕ PLAN STATION CALL–OUT



SECTION A–A
TYPE 3
SCALE: 3/4"=1'–0"



SECTION B–B
TYPE 6
SCALE: 3/4"=1'–0"



DATE	DESCRIPTION REVISION	BY

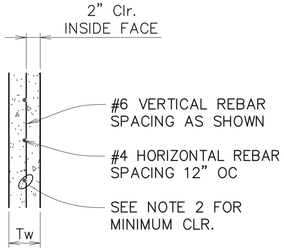
STANDARD PLAN No.	DATED	SHT. No.
702–20	DEC. 6, 2010	1 OF 1

CAST IRON GRATE INLET AND JUNCTION BOX

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

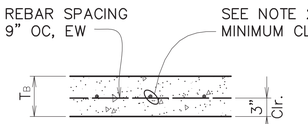
DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

PROJECT NO.	SHEET



STANDARD WALL DETAIL

SCALE: N.T.S.



BOTTOM SLAB DETAIL

SCALE: N.T.S.

WALL DIMENSIONS

WALL HEIGHT (FT)	"Tw" WALL THICKNESS (IN)	VERT. REBAR SPACING (IN)
0'–4'	6.0"	12"
4'–8'	6.0"	9"
8'–10'	7.0"	9"
10'–12'	7.0"	6"
12'–16'	8.0"	6"
16'–20'	9.0"	6"

BOTTOM SLAB DIMENSIONS

"TB" SLAB THICKNESS (IN)	"A" OR "B" MAXIMUM WIDTH OF OPENING INSIDE STRUCTURE (FT)	MAXIMUM DEPTH STRUCTURE (FT)	REBAR REQ'D
6.0"	4'	8'	#4
7.0"	6'	12'	#5
8.0"	8'	16'	#5
9.0"	10'	20'	#6

BOTTOM SLAB THICKNESS TO MEET MINIMUM CRITERIA SHOWN FOR OPENING WIDTH AND STRUCTURE DEPTH.

PAVEMENT SLAB DIMENSIONS

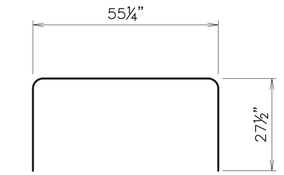
"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"TP" SLAB THICKNESS (IN)	REBAR REQ'D *	INTERMEDIATE SUPPORT BEAM REQ'D (Y OR N)
≤10'	≤ 4'	7.0"	#5	N
≤10'	4'–6'	8.0"	#5	N
≤10'	6'–8'	10.0"	#6	N
6'–8'	6'–8'	7.0"	#5	Y
8'–10'	8'–10'	8.0"	#5	Y

* 9" OC, EW, TB

REBAR MINIMUM LAP AND DEVELOPMENT LENGTHS

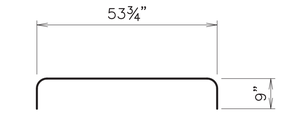
REBAR SIZE	LAP LENGTH (IN)	DEVELOPMENT LENGTH (IN)
#4	16"	12"
#5	20"	16"
#6	24"	19"

SHOP DRAWING DETAILING REQ'D TO PROVIDE MINIMUM LENGTHS OR ELSE USE STANDARD HOOKS



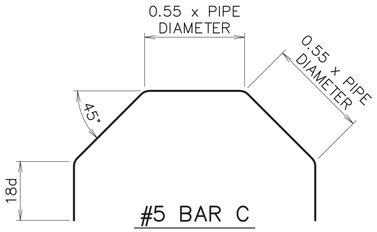
#5 BAR A

SCALE: N.T.S.
2 REQ'D PER FRAME



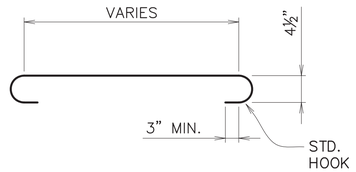
#5 BAR B

SCALE: N.T.S.
1 REQ'D PER FRAME



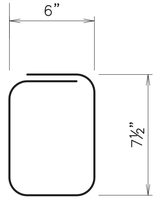
#5 BAR C

SCALE: N.T.S.
1 REQ'D PER PIPE ENTRANCE ≥ 36"ø



#5 BAR D

SCALE: N.T.S.
2 REQ'D PER EACH INTERMEDIATE BEAM



#3 BAR J

SCALE: N.T.S.
REQ'D STIRRUPS @ 4" OC

ABBREVIATIONS:

OC – ON CENTER
EW – EACH WAY
TB – TOP & BOTTOM

NOTE:

1. ALL REINFORCING STEEL TO BE DEFORMED GRADE 60 MINIMUM REBAR. STEEL BAR SIZE & SPACING MAY BE ADJUSTED AS LONG AS AREA OF STEEL IS MAINTAINED PER FOOT.
2. MINIMUM CONCRETE COVER FOR REBAR STEEL IS TO BE 3" FOR CONCRETE FACES CAST AGAINST EARTH, 2.5" FOR FACES PERMANENTLY EXPOSED TO EARTH AND 2" FOR ALL OTHERS.
3. CONCRETE COMPRESSIVE STRENGTH FOR CAST–IN–PLACE STRUCTURES TO BE 4000 PSI AT 28 DAYS MINIMUM.
4. SEE SHEET 702–99 FOR FRAME AND COVER DETAILS.
5. SLABS MAY BE PRECAST AND DOWELED INTO WALL SECTIONS. (SEE STD. PLAN 702–97)

A=LENGTH INSIDE OPENING MEASURED PARALLEL TO CURB
B=WIDTH INSIDE OPENING MEASURED PERPENDICULAR TO CURB

TOP SLAB DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"TT" SLAB THICKNESS (IN)	* REBAR REQ'D
≤ 4'	≤ 4'	6.0"	#4
4'–6'	4'–6'	6.0"	#5
6'–8'	6'–8'	6.0"	#6
8'–20'	8'–10'	7.0"	#6

* 9" OC, EW, SET 2" CLR. FROM SLAB BOTTOM

MIDDLE SLAB UNDER PAVEMENT DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"TMP" SLAB THICKNESS (IN)	* REBAR REQ'D
≤20'	≤ 4'	7.0"	#4
≤20'	4'–6'	7.0"	#5
≤20'	6'–8'	8.5"	#6
≤20'	8'–10'	10.0"	#6

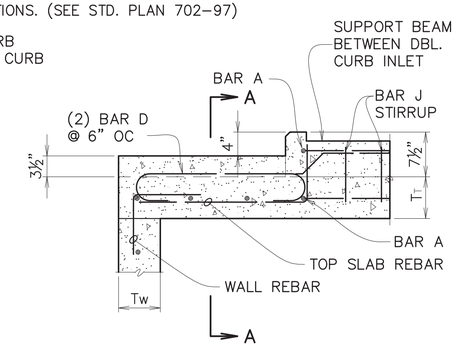
* 9" OC, EW, SET 2" CLR. FROM SLAB BOTTOM

MIDDLE SLAB OUTSIDE PAVEMENT DIMENSIONS

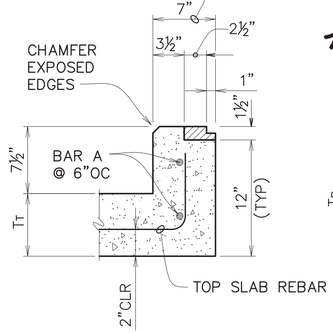
"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"TM" SLAB THICKNESS (IN)	* REBAR REQ'D
≤20'	≤ 4'	7.0"	#4
≤20'	4'–6'	7.0"	#5
≤20'	6'–8'	7.0"	#6
≤20'	8'–10'	8.0"	#6

* 9" OC, EW, SET 2" CLR. FROM SLAB BOTTOM

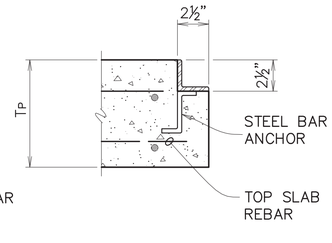
LEDGE WIDTH MAY BE EXTENDED TO MAXIMUM WIDTH OF 1'–2" FOR SMALLER PIPE STRUCTURES TO SIMPLIFY CONSTRUCTION FRAMING OF TOP SLAB.



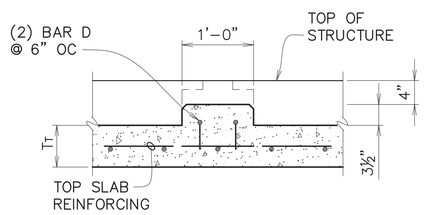
TOP SLAB
INTERMEDIATE SUPPORT BEAM
FOR DOUBLE CURB INLET
SCALE: N.T.S.



TYPE 1 FRAME SUPPORT DETAIL
SCALE: N.T.S.

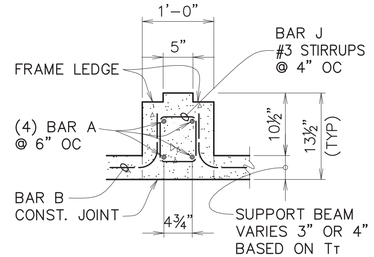


TYPE 2 FRAME IN PAVEMENT
SUPPORT DETAIL
SCALE: N.T.S.

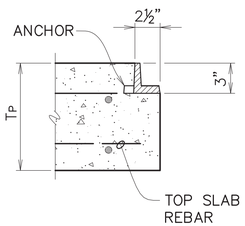


SECTION A–A

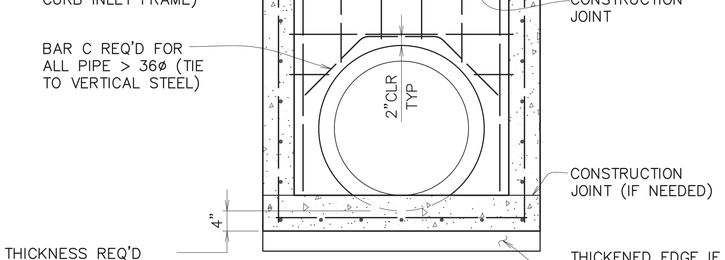
TOP SLAB
INTERMEDIATE SUPPORT BEAM
FOR DOUBLE CURB INLET
SCALE: N.T.S.



TYPICAL SUPPORT BEAM
BETWEEN DOUBLE CURB INLETS
SCALE: N.T.S.



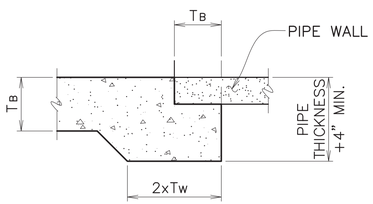
TYPE 3 FRAME IN PAVEMENT
SUPPORT DETAIL
SCALE: N.T.S.



TYPICAL PIPE AND
FRAME REINFORCEMENT

SCALE: N.T.S.

4" MIN. THICKNESS REQ'D IN BOTTOM SLAB BELOW PIPE OUTSIDE WALL. IF "TB" DOES NOT MEET MIN. THICKNESS REQ'D FOR PIPE O.D., PROVIDE THICKENED EDGE WITH MIN. WIDTH OF 2xTw. REINFORCE AS REQ'D. FOR BASE SLAB.



THICKENED EDGE
FOR PIPE SUPPORT
SCALE: N.T.S.

DATE	DESCRIPTION REVISION	BY

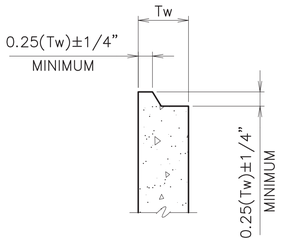
STANDARD PLAN No.	DATED	SHT. No.
702–96	DEC. 6, 2010	1 OF 1

CAST–IN–PLACE DRAINAGE STRUCTURES (STRUCTURAL DETAILS)

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

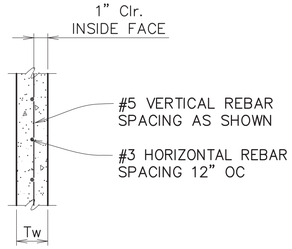
DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

PROJECT NO.	SHEET



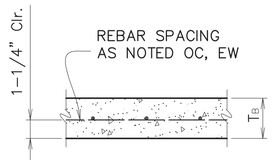
JOINT DETAIL

SCALE: N.T.S.



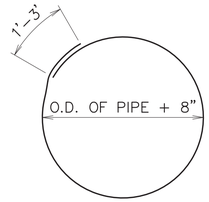
STANDARD
PRECAST WALL DETAIL

SCALE: N.T.S.



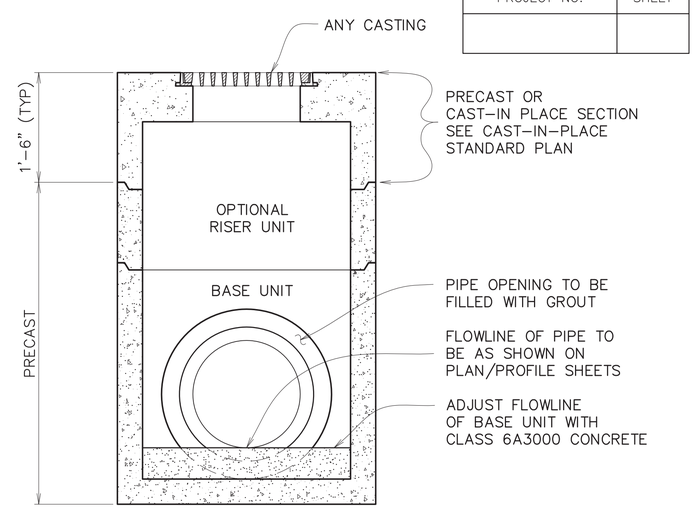
BOTTOM SLAB DETAIL

SCALE: N.T.S.



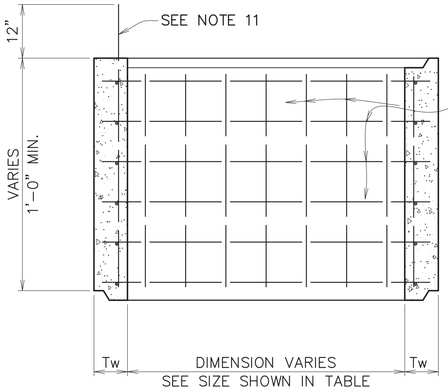
#4 HOOP

SCALE: N.T.S.



TYPICAL COMPOSITE STRUCTURE

SCALE: N.T.S.



OPTIONAL RISER UNIT

SCALE: N.T.S.

A=LENGTH INSIDE OPENING MEASURED PARALLEL TO CURB
B=WIDTH INSIDE OPENING MEASURED PERPENDICULAR TO CURB

PRECAST TOP SLAB DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T_T" SLAB THICKNESS (IN)	* REBAR REQ'D	* REBAR SPACING
≤ 4'	≤ 4'	4.0"	#4	12"
4'-6'	4'-6'	4.0"	#5	12"
6'-8'	6'-8'	5.0"	#5	8"
8'-20'	8'-10'	5.5"	#5	6"

* AS SHOWN OC, EW, SET 1-1/4" CLR. FROM SLAB BOTTOM

PRECAST MIDDLE SLAB
UNDER PAVEMENT DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T_{MP}" SLAB THICKNESS (IN)	* REBAR REQ'D	* REBAR SPACING
≤ 20'	≤ 4'	5.0"	#4	12"
≤ 20'	4'-6'	6.0"	#5	12"
≤ 20'	6'-8'	7.0"	#5	8"
≤ 20'	8'-10'	8.5"	#5	6"

* AS SHOWN OC, EW, SET 1-1/4" CLR. FROM SLAB BOTTOM

PRECAST MIDDLE SLAB
OUTSIDE PAVEMENT DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T_M" SLAB THICKNESS (IN)	* REBAR REQ'D	* REBAR SPACING
≤20'	≤ 4'	5.0"	#4	12"
≤20'	4'-6'	5.0"	#5	12"
≤20'	6'-8'	6.0"	#5	8"
≤20'	8'-10'	6.5"	#5	6"

* AS SHOWN OC, EW, SET 1-1/4" CLR. FROM SLAB BOTTOM

PRECAST BOTTOM SLAB DIMENSIONS

"T_B" SLAB THICKNESS (IN)	"A" OR "B" MAXIMUM WIDTH OF OPENING INSIDE STRUCTURE (FT)	MAXIMUM DEPTH STRUCTURE (FT)	REBAR REQ'D	REBAR SPACING
4.0"	4'	4'	#4	12"
5.0"	6'	8'	#5	12"
6.0"	8'	12'	#5	12"
7.0"	8'	16'	#5	12"
7.5"	10'	20'	#5	6"

BOTTOM SLAB THICKNESS TO MEET MINIMUM CRITERIA SHOWN FOR OPENING WIDTH AND STRUCTURE DEPTH.

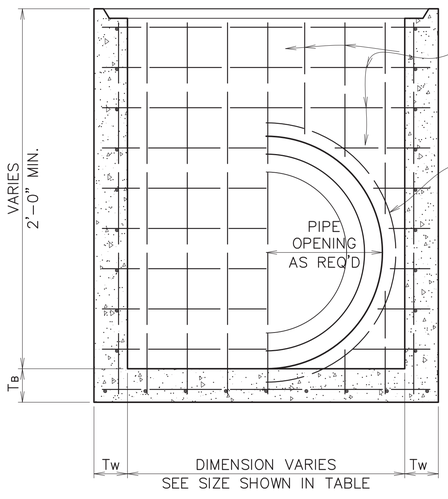
PRECAST PAVEMENT SLAB DIMENSIONS

INTERMEDIATE SUPPORT BEAM REQ'D (Y OR N)	"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T_P" SLAB THICKNESS (IN)	REBAR REQ'D *	REBAR SPACING
N	≤10'	≤ 4'	6.0"	#5	12"
N	≤10'	4'-6'	7.0"	#5	12"
N	≤10'	6'-8'	9.0"	#5	8"
Y	6'-10'	6'-10'	6.0"	#5	12"

* AS SHOWN OC, EW, TB

PRECAST WALL DIMENSIONS

WALL HEIGHT (FT)	"Tw" WALL THICKNESS (IN)	VERT. REBAR SPACING (IN)
0'-4'	4.0"	12"
4'-8'	5.0"	12"
8'-10'	6.0"	9"
10'-12'	6.0"	6"
12'-16'	7.0"	4.5"
16'-20'	7.5"	4.5"



BASE UNIT

SCALE: N.T.S.

NOTE:

1. THESE PRECAST UNITS ARE INTENDED TO BE USED AS THE LOWER PORTION OF A COMPOSITE STRUCTURE. STRUCTURAL AND FINISHING DETAILS ARE SHOWN ON OTHER STANDARD PLANS FOR STRUCTURE TYPES.
2. ALL REINFORCING STEEL TO BE DEFORMED GRADE 60 MINIMUM REBAR. STEEL BAR SIZE & SPACING MAY BE ADJUSTED AS LONG AS AREA OF STEEL IS MAINTAINED PER FOOT IN ACCORDANCE WITH ASTM C913-08.
3. MINIMUM CONCRETE COVER FOR REBAR STEEL IS TO BE 1" FOR PRECAST CONCRETE WALLS AND 1-1/4" FOR OTHER PRECAST MEMBERS.
4. CONCRETE COMPRESSIVE STRENGTH FOR PRECAST STRUCTURES TO BE 5000 PSI AT 28 DAYS MINIMUM. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI BEFORE SHIPPING UNITS.
5. SEE SHEET 702-99 FOR FRAME AND COVER DETAILS.
6. SEE SHEET 702-96 FOR CAST-IN-PLACE STRUCTURAL DETAILS.
7. PIPE OPENING TO BE FORMED ONLY WHEN REQUIRED.
8. PIPE OPENING TO BE O.D. OF PIPE + 4"± 1/2".
9. ALL PIPE ENDS TO BE SET FLUSH WITH INTERIOR WALLS FACE. PIPE ANNULAR SPACE IS TO BE GROUTED WITH NON-SHRINK GROUT AFTER INSTALLATION. GROUT AS REQUIRED TO CREATE INVERTS.
10. JOINTS BETWEEN PRECAST UNITS TO BE SEALED WITH FLEXIBLE PLASTIC GASKET MATERIAL AND WRAPPED WITH A 12" WIDTH OF GEOTEXTILE FABRIC.
11. JOINTS BETWEEN CAST-IN-PLACE SECTIONS AND OR PRECAST UNITS TO BE TONGUE AND GROOVE AND SEALED WITH TYPE II GRADE A EPOXY OR FLAT JOINT WITH A MINIMUM OF 12" OF No. 4 BARS AT 18" CTRS. (MAX.)
12. PRECAST CONCRETE INLETS CONFORMING TO STANDARD PLANS MAY BE FURNISHED. LEDGE WIDTH MAY BE REDUCED BY 1" AROUND INLET FRAMES TO 2-1/2". SUPPORT BEAM BETWEEN DOUBLE RETICULINE GRATE INLETS MAY BE REDUCED BY 2" DEPTH TO FORM 10"x10" BEAM.
13. PRECAST UNITS SHALL CONFORM TO SECTION 1017 OF THE STANDARD SPECIFICATIONS.
14. ALL PRECAST UNITS TO BE EQUIPPED WITH AT LEAST 2 COMMERCIALLY MANUFACTURED EMBEDDED INSERTS RATED FOR THE STRUCTURE'S LIFT LOAD IN COMPLIANCE WITH APPLICABLE ANSI AND OSHA STANDARDS (MINIMUM SAFETY FACTOR OF 4). EMBEDDED INSERTS TO CONSTRUCTED OF GALVANIZED STEEL OR CORROSION RESISTANT MATERIALS AND INSTALLED BY PRECAST MANUFACTURER IN ACCORDANCE WITH SUPPLIERS INSTRUCTIONS. NO LIFT INSERTS SHALL REMAIN EXPOSED ON VISIBLE SURFACES AFTER THE STRUCTURE IS INSTALLED. NO LIFTING WITH CHAINS WRAPPED AROUND STRUCTURE IS PERMITTED.
15. PRECASTERS ARE REQUIRED TO BE NPCA CERTIFIED.
16. INSTALLATION OF PRECAST STRUCTURES ARE TO BE PER MANUFACTURER'S INSTRUCTIONS. ANY MODIFICATIONS TO STRUCTURES IN FIELD SHALL REQUIRE PRECASTER'S WRITTEN APPROVAL.
17. MINIMUM THICKNESS OF STRUCTURAL ELEMENTS INSTALLED IN OR UNDER PAVEMENT SHALL BE 6".



1	02/10/2012 NOTE #15 REVISION.	G.C.
DATE	DESCRIPTION REVISION	BY

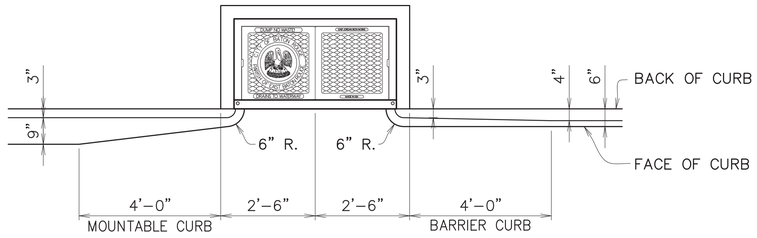
STANDARD PLAN No.	DATED	SHT. No.
702-97	DEC. 6, 2010	1 OF 1

PRECAST DRAINAGE STRUCTURE (STRUCTURAL DETAILS)

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

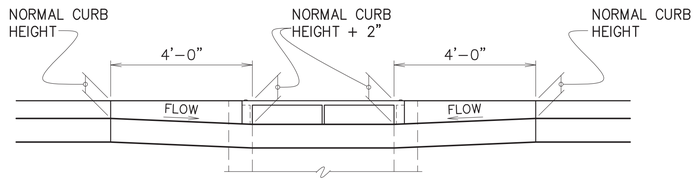
DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

PROJECT NO.	SHEET

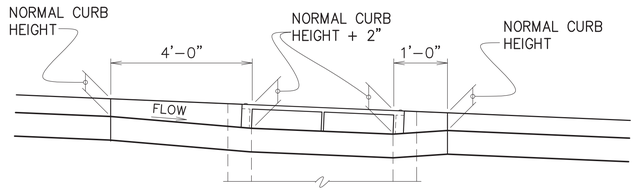


PLAN

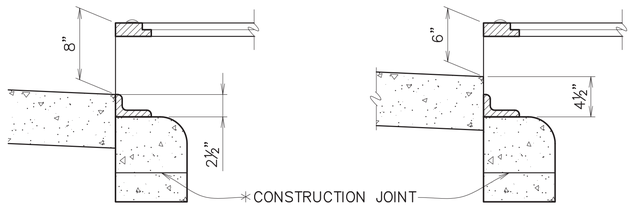
TRANSITION IN CURB WIDTH
SCALE: 1/2"=1'–0"



TRANSITION IN CURB HEIGHT
CURB INLET @ LOW POINT

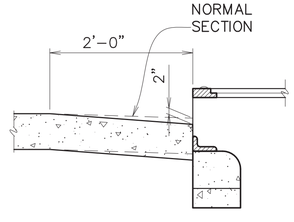


TRANSITION IN CURB HEIGHT
CURB INLET ON GRADE



INLET CONFIGURATION

SCALE: 1–1/2"=1'–0"



SECTION

SHOWING PAVEMENT SUMP
SCALE: 1"=1'–0"

* NOTE:
THE BASIN SHALL NOT BE CONSTRUCTED ABOVE BOTTOM OF PAVEMENT ELEVATION UNTIL THE PAVING ADJACENT TO THE BASIN IS IN PLACE.

DATE	DESCRIPTION REVISION	BY

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2013

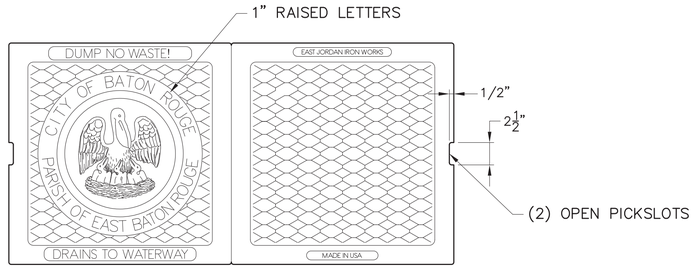
STANDARD PLAN No.	DATED	SHT. No.
702–98	DEC. 6, 2010	1 OF 1

DRAINAGE STRUCTURES CURB TRANSITION DETAILS

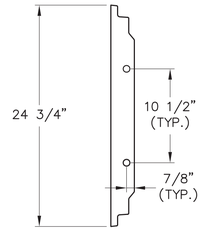
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

PROJECT NO.	SHEET

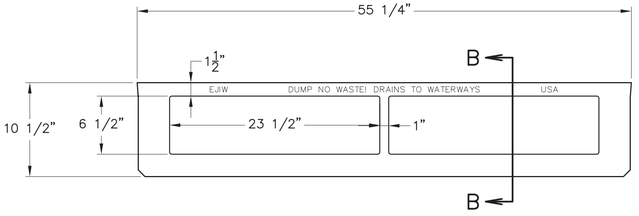


PLAN OF DUCTILE IRON COVER
SCALE: 1 1/2"=1'-0"

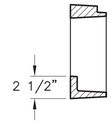


SIDE VIEW

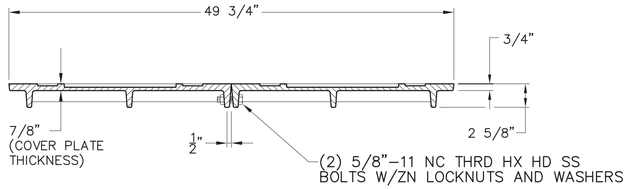
EJIW PRODUCT #44302030
USF 5188 (ITEM 8070063)
OR APPROVED EQUAL



FRONT VIEW

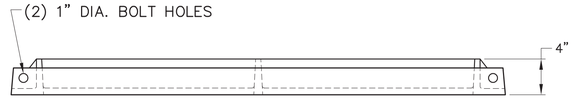


SECTION B-B

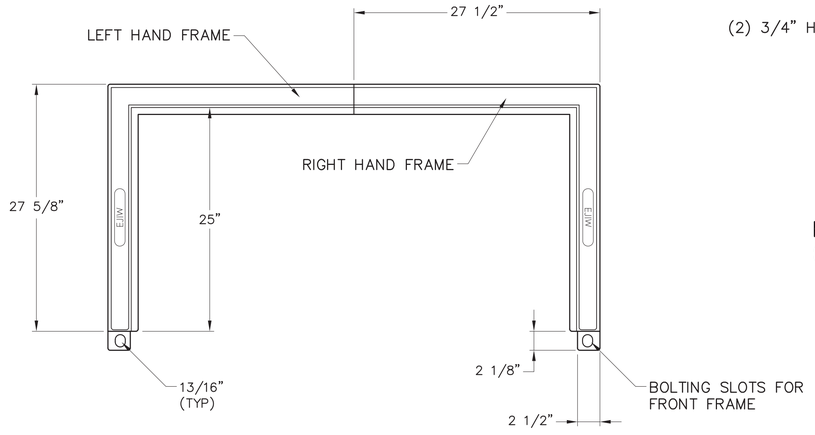


FRONT VIEW

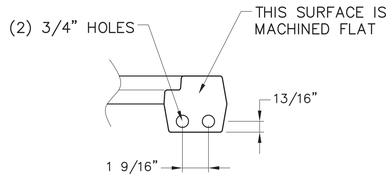
EJIW PRODUCT #44300209
USF 5188 (ITEM 8015665 & 8015666)
OR APPROVED EQUAL



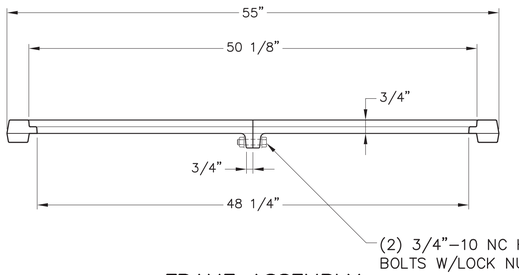
TOP VIEW



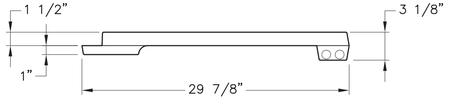
EJIW PRODUCT #44300016
USF 5188 (ITEM 8060020)
OR APPROVED EQUAL

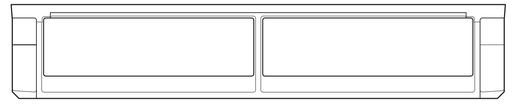


BOLT FLANGE DETAIL
(TYP, BOTH HALVES)



FRAME ASSEMBLY
SCALE: 1 1/2"=1'-0"





BACK VIEW
SCALE: 1 1/2"=1'-0"

* NOTES: WEIGHT OF DUCTILE IRON COVER = 314 LBS.
WEIGHT OF DUCTILE IRON FRAME = 128 LBS.
WEIGHT OF GREY IRON GRATE = 140 LBS.
* (WEIGHTS SHOWN ARE FOR EJIW PRODUCTS.
WEIGHTS OF APPROVED EQUAL PRODUCTS MAY VARY.)

GENERAL NOTE:

ALL CAST IRON FRAME, GRATES, AND COVERS SHALL BE TRAFFIC BEARING AND BE OF DOMESTIC ORIGIN OR COMPLY WITH SECTION 6-11. FRAME, GRATES, AND COVERS SHALL MEET OR EXCEED ALL REQUIREMENTS OF THE AASHTO DESIGNATION: M306 STANDARD SPECIFICATION FOR DRAINAGE, SEWER, UTILITY, AND RELATED CASTINGS.



DATE	DESCRIPTION OF REVISION	BY
3/28/12	UPDATE USF PRODUCT NUMBER.	G. L. P.
12/06/10	ADD NOTES FOR PRODUCT WEIGHTS.	G. L. P.
3/17/10	ADD USF PRODUCT NUMBER.	G. L. P.

STANDARD PLAN No.	DATED	SHT. No.
702-99	AUGUST 11, 2008	1 OF 3

FRAMES, GRATES AND COVERS FOR INLETS AND MANHOLES (TYPE 1)

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

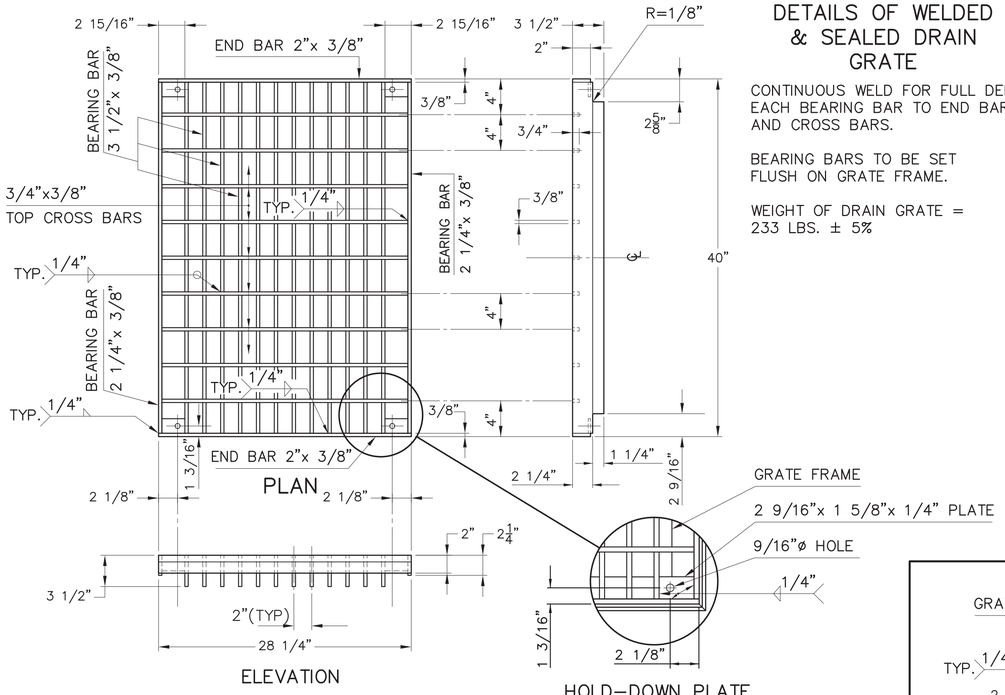
PROJECT NO.	SHEET

DETAILS OF WELDED & SEALED DRAIN GRATE

CONTINUOUS WELD FOR FULL DEPTH EACH BEARING BAR TO END BARS AND CROSS BARS.

BEARING BARS TO BE SET FLUSH ON GRATE FRAME.

WEIGHT OF DRAIN GRATE = 233 LBS. ± 5%



FABRICATED BAR
SCALE: 1 1/2"=1'-0"

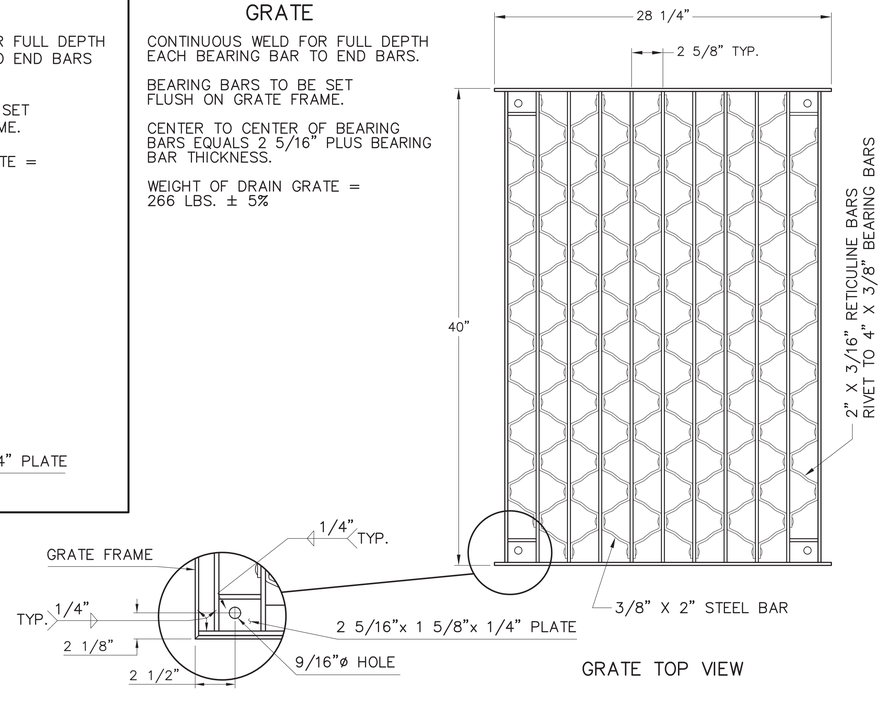
DETAILS OF RIVETED RETICULINE DRAIN GRATE

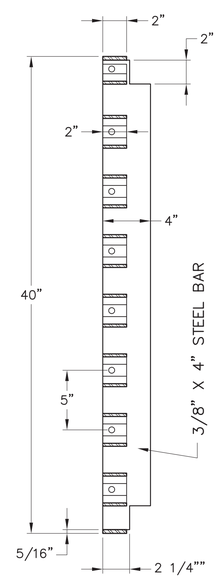
CONTINUOUS WELD FOR FULL DEPTH EACH BEARING BAR TO END BARS.

BEARING BARS TO BE SET FLUSH ON GRATE FRAME.

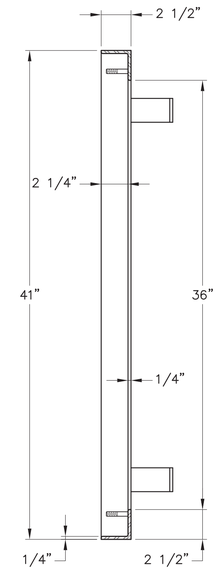
CENTER TO CENTER OF BEARING BARS EQUALS 2 5/16" PLUS BEARING BAR THICKNESS.

WEIGHT OF DRAIN GRATE = 266 LBS. ± 5%

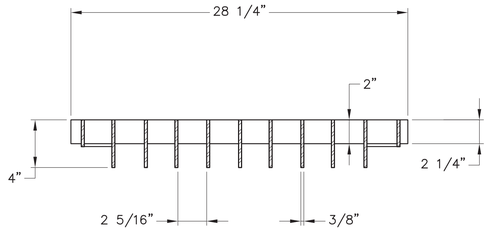




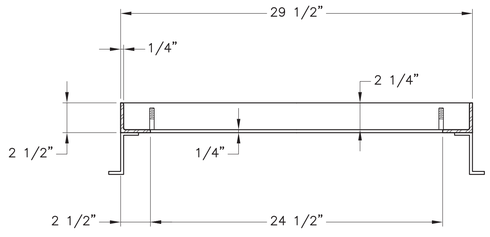
GRATE SECTION



FRAME SECTION

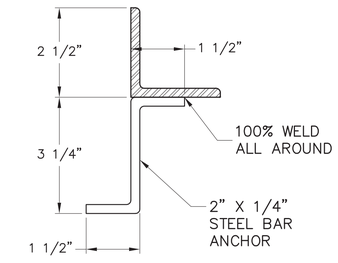


GRATE SECTION

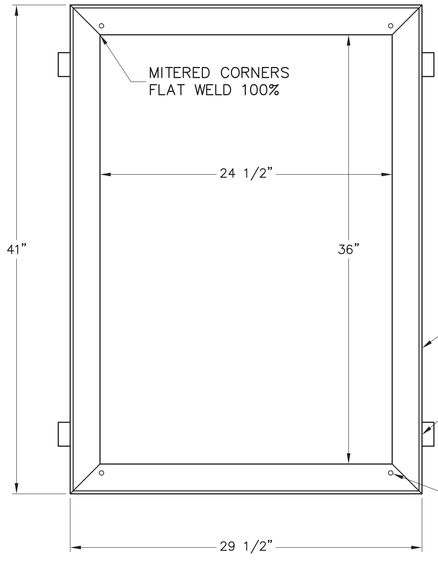


FRAME SECTION

RETICULINE GRATE AND FRAME
SCALE: 2"=1'-0"



ANCHOR DETAIL



FRAME TOP VIEW

NOTE:
FRAME AND GRATE:
ASTM A36 STEEL, WELDED CONSTRUCTION. HOT DIP GALVANIZED AFTER FABRICATION.
(GALVANIZE PER ASTM A123)

EJIW PRODUCT #44863061
USF 6672-6673
OR APPROVED EQUAL

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/12/2012

STANDARD PLAN No.	DATED	SHT. No.
702-99	AUGUST 11, 2008	2 OF 3

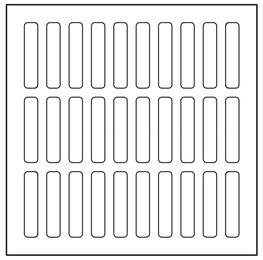
FRAMES, GRATES AND COVERS FOR INLETS AND MANHOLES (TYPE 2)

DATE	DESCRIPTION	BY
3/28/12	ADD USF PRODUCT NUMBER.	G. L. P.
	REVISION	

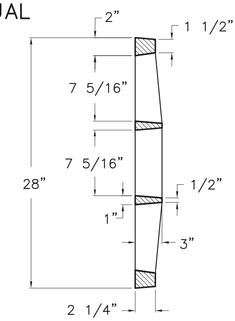
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

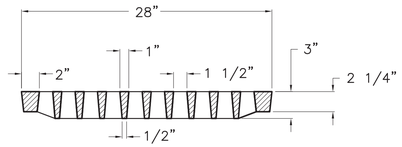
EJIW PRODUCT #45775030, USF 6278 OR APPROVED EQUAL



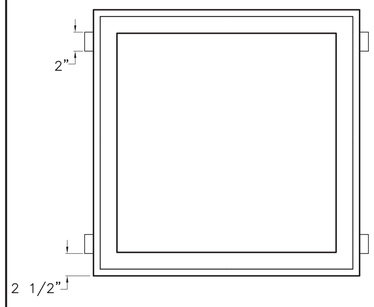
GRATE TOP VIEW



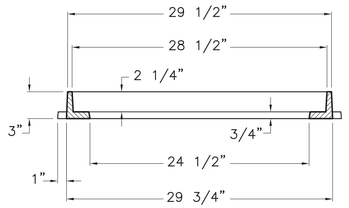
GRATE SECTION



GRATE SECTION



FRAME TOP VIEW

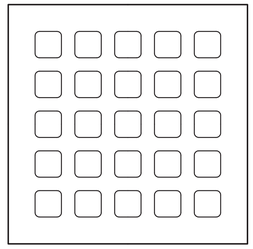


FRAME SECTION

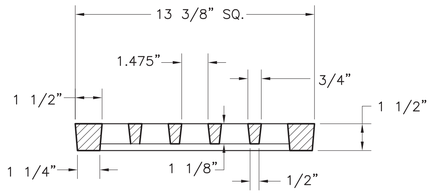
"TYPE 3"
SCALE: 1-1/2"=1'-0"

EJIW PRODUCT #45775010
USF 4650
OR APPROVED EQUAL

EJIW PRODUCT #45913130, USF 6279 OR APPROVED EQUAL



GRATE TOP VIEW

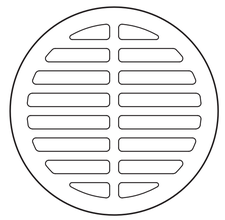


GRATE SECTION

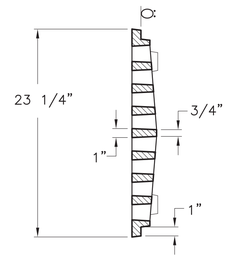
"TYPE 4"
SCALE: 3"=1'-0"

DETAILS OF CAST IRON GRATE
WEIGHT OF CASTING = 38 LBS.

EJIW PRODUCT #43501030, USF 5685 OR APPROVED EQUAL

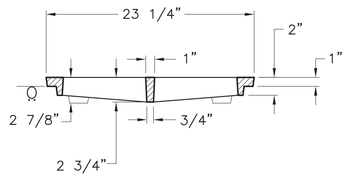


GRATE TOP VIEW



GRATE SECTION

Ö MACHINED SURFACE

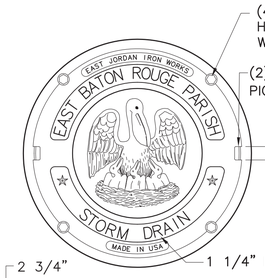


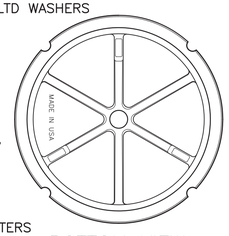
GRATE SECTION

"TYPE 5"
SCALE: 1-1/2"=1'-0"

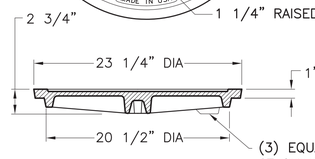
EJIW PRODUCT #41886007 USF 1346 BZ BLT OR APPROVED EQUAL

PROJECT NO.	SHEET

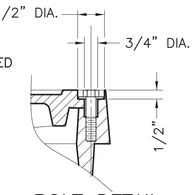




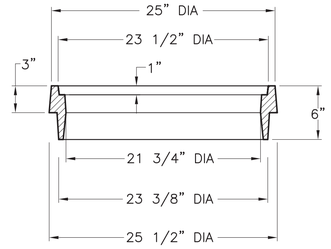
BOTTOM VIEW OF COVER



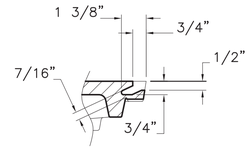
COVER SECTION



BOLT DETAIL



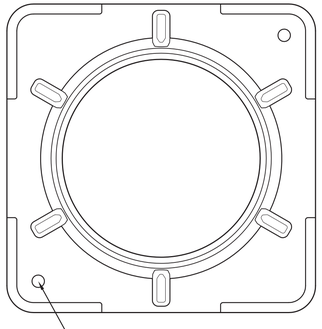
RING SECTION

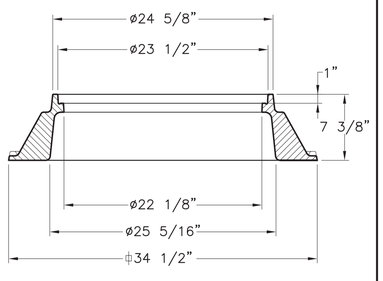


PICKHOLE DETAIL

"TYPE 6"
SCALE: 1-1/2"=1'-0"

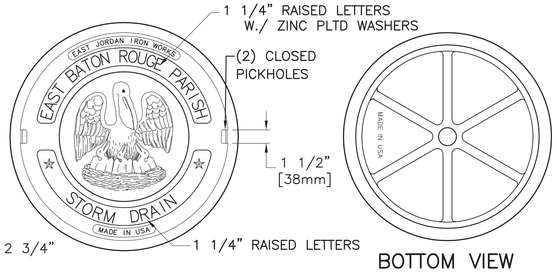
EJIW PRODUCT #41301211, USF 678 BZ OR APPROVED EQUAL



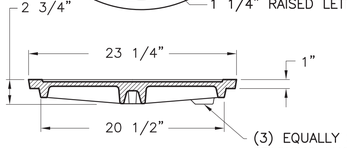


NOTE:
FRAME TO BE USED WITH TYPE 7 COVER.

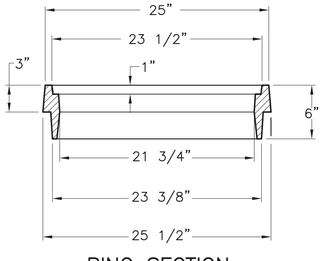
"TYPE 9"
SCALE: 1-1/2"=1'-0"



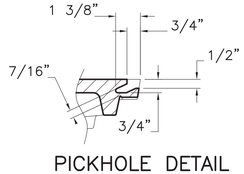
BOTTOM VIEW OF COVER



COVER SECTION



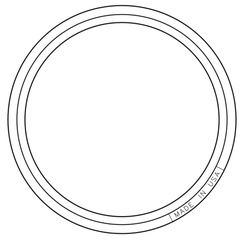
RING SECTION



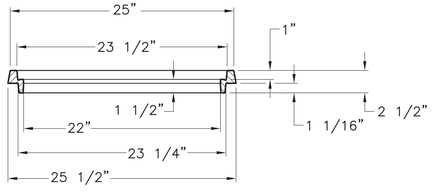
PICKHOLE DETAIL

EJIW PRODUCT #41886010
USF 1346 BZ
OR APPROVED EQUAL

"TYPE 7"
SCALE: 1-1/2"=1'-0"



EJIW PRODUCT #41901110
USF 2337
OR APPROVED EQUAL



RING SECTION

"TYPE 8"
DETAILS OF MANHOLE
ADJUSTMENT RING
SCALE: 1 1/2"=1'-0"



DATE	DESCRIPTION	BY
3/28/12	ADD USF PRODUCT NUMBER.	G. L. P.

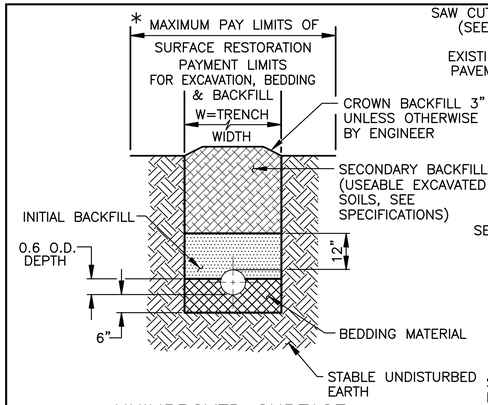
REVISION

STANDARD PLAN No.	DATED	SHT. No.
702-99	AUGUST 11, 2008	3 OF 3

FRAMES, GRATES AND COVERS FOR INLETS AND MANHOLES

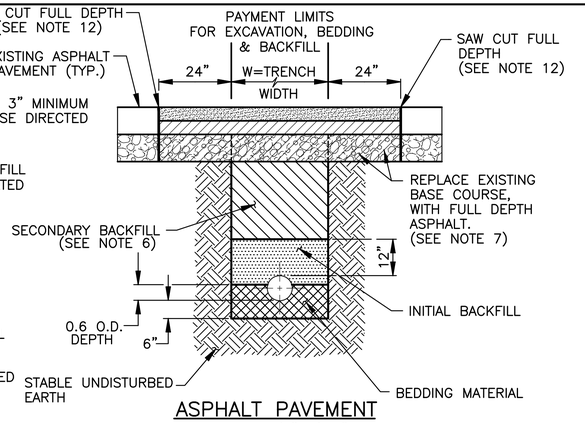
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS



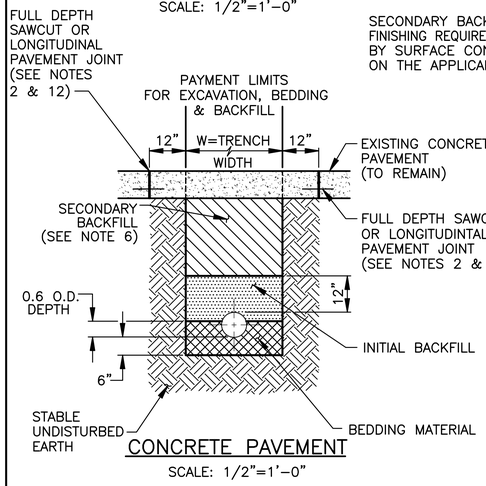
UNIMPROVED SURFACE

SCALE: 1/2"=1'-0"



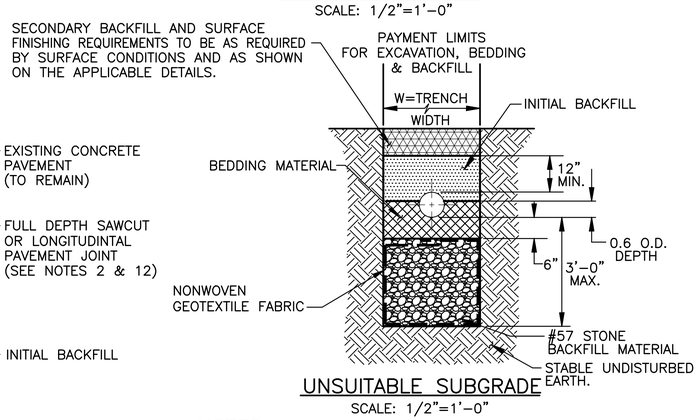
ASPHALT PAVEMENT

SCALE: 1/2"=1'-0"



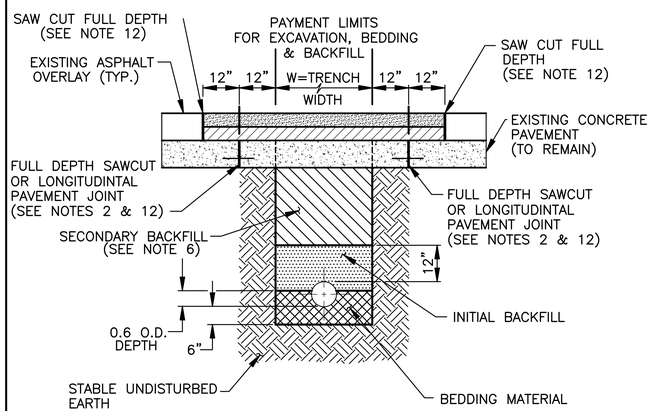
CONCRETE PAVEMENT

SCALE: 1/2"=1'-0"



UNSUITABLE SUBGRADE

SCALE: 1/2"=1'-0"



CONCRETE PAVEMENT W/ASPHALT OVERLAY

SCALE: 1/2"=1'-0"

NOTES:

1. TRENCH WIDTH (W) SHALL BE AS SHOWN IN THE TABLE BELOW. PIPE SHALL BE CENTERED IN TRENCH.

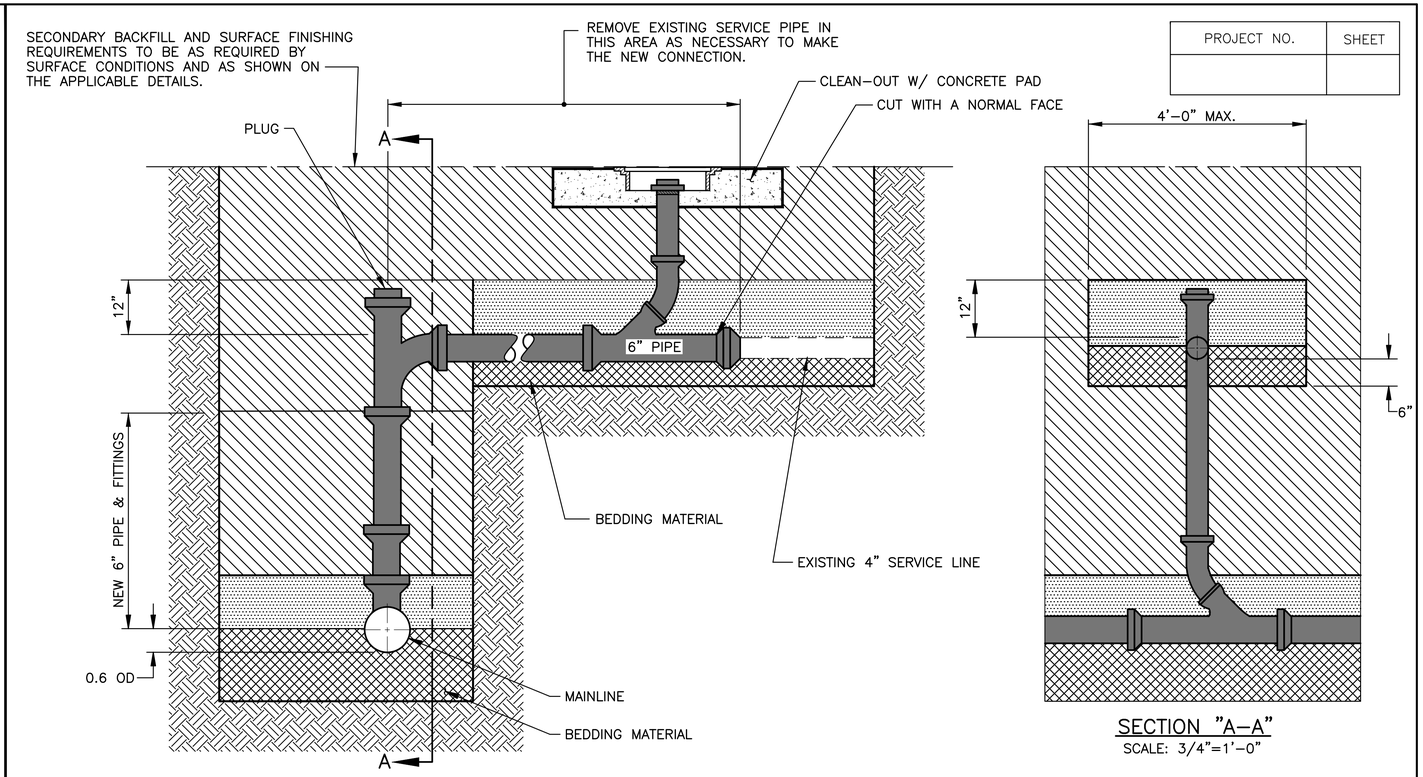
NOMINAL PIPE SIZE	"W"
UP TO 36"	36" + O.D.
OVER 36"	48" + O.D.

2. CONTRACTOR TO REMOVE AND REPLACE CONCRETE PAVEMENT SLABS AS SHOWN. IF CONCRETE PAVEMENT JOINT (OR EDGE OF ROAD/BACK OF CURB) IS WITHIN 2', REMOVE PAVEMENT TO JOINT LINE. PAVEMENT TO CONFORM TO STANDARD CPS 502-01(STANDARD PAVEMENT DETAILS). REUSE EXISTING DOWELS IF NOT DAMAGED DURING PAVEMENT REMOVAL. REPLACE ALL DAMAGED DOWEL WITH ½" x 2'-0" DEFORMED BARS ON 2'-0" CENTERS WITH EPOXY.
3. WATER SHALL NOT BE PERMITTED IN TRENCH DURING CONSTRUCTION. DEWATER AS NECESSARY.
4. USE OF THE UNSUITABLE SUBGRADE PIPE BEDDING DETAIL IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
5. GEOTEXTILE FABRIC SHALL BE OVERLAPPED 8" MINIMUM.
6. IF LIMITS OF THE PIPE TRENCH FALL UNDER EXISTING ASPHALTIC OR PCC ROADWAYS AND/OR EXISTING PARKING LOTS, THE SECONDARY BACKFILL SHALL BE #610 STONE OR AS SPECIFIED IN SECTION 801 OF THE SPECIFICATIONS.

   IF LIMITS OF THE PIPE TRENCH FALL OUTSIDE OF, BUT WITHIN 10 FT. OF THE EDGE OF AN EXISTING ROADWAY, OR UNDER THE LIMITS OF A FUTURE ROADWAY TO BE CONSTRUCTED SUBSEQUENT TO SANITARY SEWER INSTALLATION; THE SECONDARY BACKFILL SHALL BE THE SAND-AGGREGATE MIXTURE. REFER TO SECTION 801 OF THE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS.

   IN AREAS OUTSIDE THOSE DESCRIBED ABOVE, SECONDARY BACKFILL MATERIAL SHALL CONSIST OF USABLE EXCAVATED SOILS.
7. ASPHALTIC CONCRETE PAVEMENT SHALL BE REPLACED WITH FULL DEPTH ASPHALT CONSISTING OF A MINIMUM 7" THICKNESS OF MIX TYPE B BASE COURSE AND 2" THICKNESS OF WEARING COURSE FOR CITY/PARISH STREETS IN ACCORDANCE WITH THE SPECIFICATIONS. MINIMUM 4" MIX TYPE B (PG64-22) FOR PARKING LOTS AND DRIVEWAYS.
8. ASPHALT OR CONCRETE PAVEMENT OR UNIMPROVED GRANULAR SURFACE REMOVED IN EXCESS OF LIMITS SHOWN SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
9. BEDDING AND BACKFILL NEEDED IN EXCESS OF LIMITS SHOWN SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
10. MAXIMUM PAYMENT LENGTHS FOR REMOVAL AND RESTORATION OF SURFACES SHALL BE THE SAME AS FOR THE EXCAVATION, BEDDING AND BACKFILL.
11. *PAY LIMITS OF SURFACE RESTORATION ON UNIMPROVED SURFACES SHALL BE LIMITED TO THE WIDTH OF THE SEWER SERVITUDE OR AS SPECIFIED ON THE DRAWINGS AND MUST BE APPROVED BY THE ENGINEER.
12. FINAL EDGES ALONG PAVEMENT REMOVAL LIMITS SHALL BE STRAIGHT, CLEAN, SOLID, VERTICAL FACES FREE FROM LOOSE MATERIAL PRIOR TO PAVEMENT RESTORATION. SAWCUTTING AT LIMITS SHOWN SHALL BE PAID ONLY ONCE PER TRENCH PATCH. ANY ADDITIONAL SAWCUTS FOR THE CONVENIENCE OF THE CONTRACTOR SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
13. IMPROVED GRANULAR SURFACE LIMITS SIMILAR TO CONCRETE PAVEMENT LIMITS.

TYPICAL TRENCH EXCAVATION & FINAL PAVEMENT REPLACEMENT DETAILS

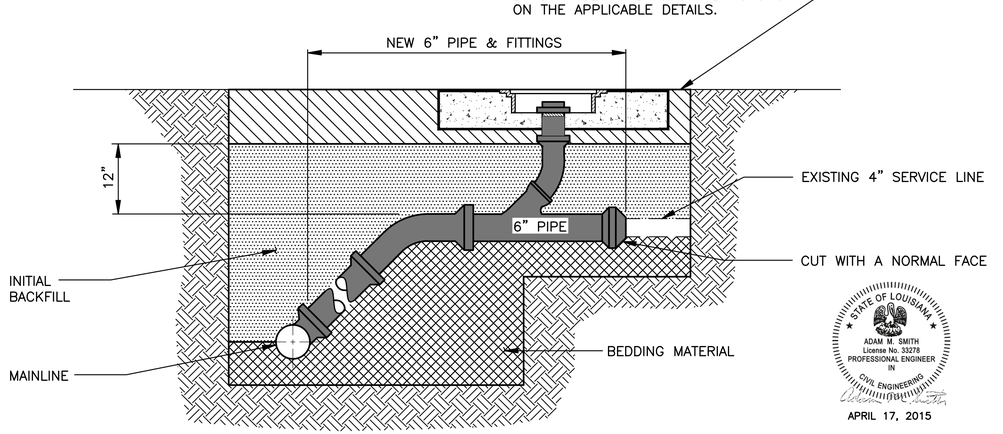


SEWER SERVICE LATERAL CONNECTION STACK

SCALE: 3/4"=1'-0"

SECTION "A-A"

SCALE: 3/4"=1'-0"



SEWER SERVICE LATERAL CONNECTION

SCALE: 3/4"=1'-0"

BACKFILL FOR SERVICE LINE RECONNECTION

STATE OF LOUISIANA
ADAM M. SMITH
License No. 33278
PROFESSIONAL ENGINEER IN
CIVIL ENGINEERING
APRIL 17, 2015

PROJECT NO.	SHEET

STANDARD PLAN NO. 801-01	DATED APRIL 17, 2015	SHEET NO. 1 OF 1

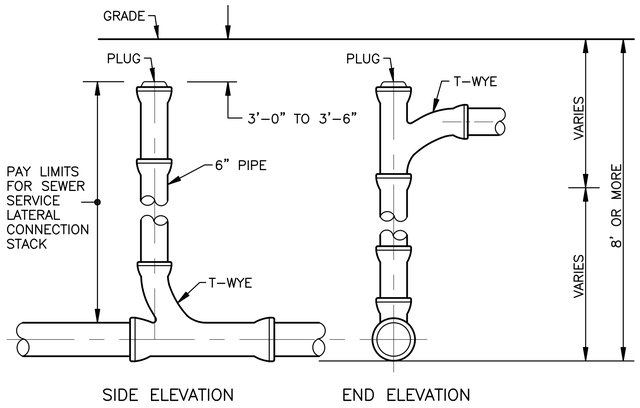
BEDDING AND BACKFILL DETAILS FOR SANITARY SEWER PIPE, FORCE MAINS AND SERVICE LINES

DATE	DESCRIPTION REVISIONS	BY
4/15	DELETED GEOTEXTILE FABRIC EXCEPT FOR USE WITH #57 STONE AND REVISED GENERAL NOTES.	A.M.S.
4/13	REVISED STACK DETAILS AND REVISED GENERAL NOTES.	A.S.
10/12	ADDED GEOTEXTILE FABRIC ON SEC. BACKFILL	A.S.

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

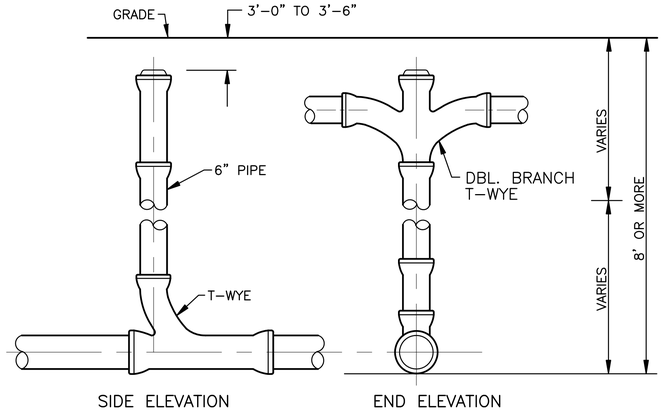
DESIGNED	DRAWN	CHECKED	APPROVED
A. SCHULZE	G. VANNICE	R. WRIGHT	B. HARMON

801-01



SEWER SERVICE LATERAL SINGLE CONNECTION STACK

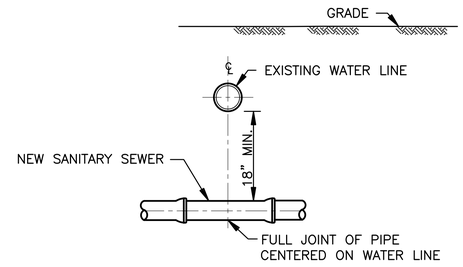
SCALE: 3/4"=1'–0"



SEWER SERVICE LATERAL DOUBLE CONNECTION STACK

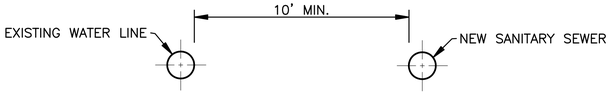
SCALE: 3/4"=1'–0"

PROJECT NO.	SHEET



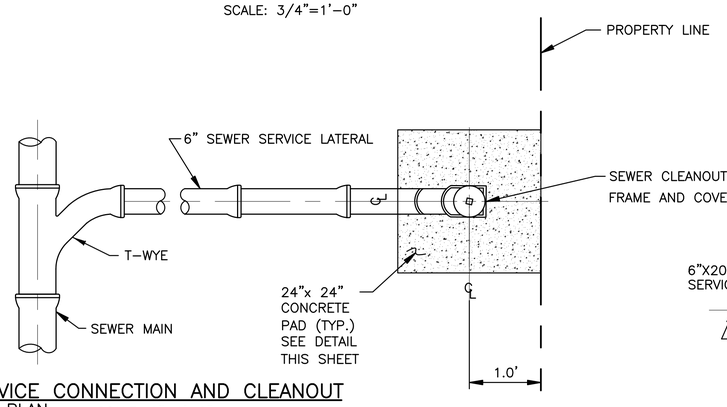
NEW SANITARY SEWER CROSSING EXISTING WATER LINE

SCALE: 3/4"=1'–0"



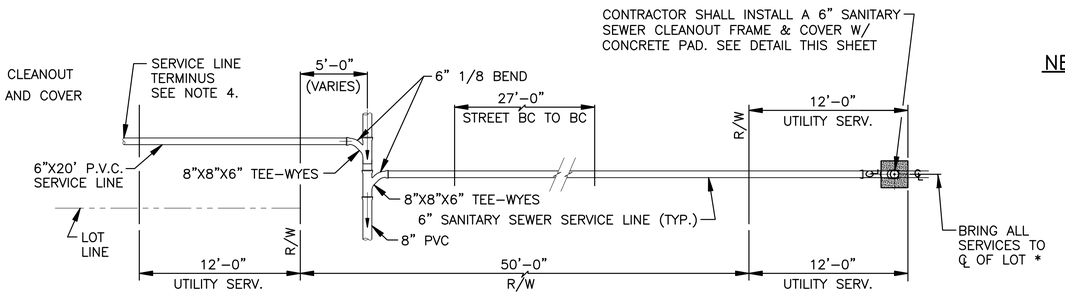
NEW SANITARY SEWER PARALLEL EXISTING WATER LINE

SCALE: 1/2"=1'–0"



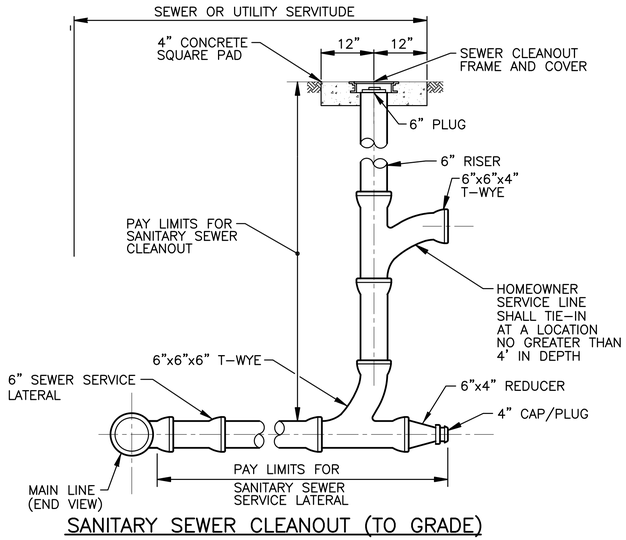
SERVICE CONNECTION AND CLEANOUT PLAN

SCALE: 1"=1'–0"



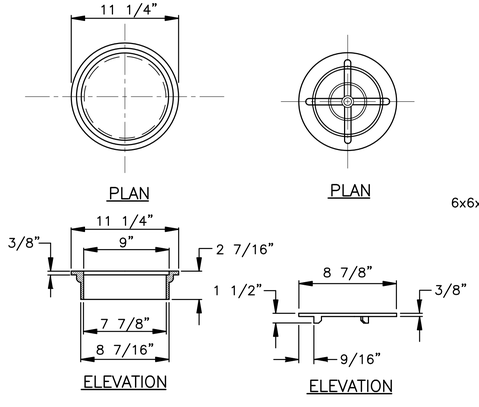
TYPICAL LOT SERVICE DETAIL

SCALE: 3/16"=1'–0"



SANITARY SEWER CLEANOUT (TO GRADE)

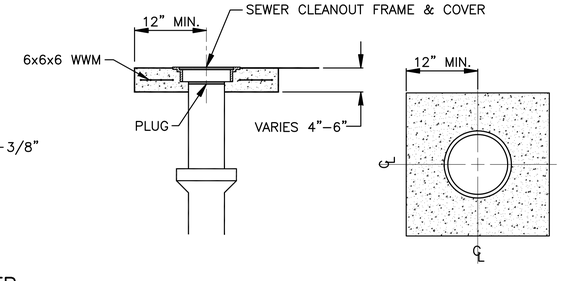
SCALE: 3/4"=1'–0"



SEWER CLEANOUT FRAME AND COVER

EJIW V–8503 OR APPROVED EQUAL

SCALE: 1 1/2"=1'–0"



24"X24" CONCRETE PAD

(PRECAST CONCRETE PAD ACCEPTABLE)

SCALE: 1"=1'–0"

NOTES:

1. DEPARTMENT OF HEALTH AND HOSPITALS MUST APPROVE INSTALLATION METHOD IF VERTICAL AND HORIZONTAL SEPARATIONS BETWEEN SEWER AND WATER LINES CANNOT BE MET.
2. SEPARATION REQUIREMENTS SHOWN HERE DO NOT APPLY TO SERVICE CONNECTIONS – REFER TO PLUMBING CODE FOR APPLICABLE REQUIREMENTS.
3. SEWER CLEANOUT FRAME AND COVER SHALL MEET THE LATEST EDITION OF AASHTO M306.
4. IN NEW SUBDIVISIONS OR IN NEW SEWER SERVICE AREAS WHERE NEW SERVICE LATERAL CONNECTIONS ARE REQUIRED, THE SEWER SERVICE LATERAL TERMINATION SHALL BE STUBBED ABOVE GROUND AT THE BACK EDGE OF ALL SERVITUDES. PRIOR TO FINAL PLUMBING INSPECTION AND ACCEPTANCE, THE PLUMBING CONTRACTOR FOR EACH LOT SHALL INSTALL THE CLEANOUT AS SHOWN.
5. DOUBLE WYES ARE ONLY ALLOWED ON LOTS 50' WIDE OR LESS AND SHALL ONLY BE ON THOSE SERVICES CROSSING THE STREET. SERVICES NOT CROSSING THE STREET AND ON LOTS GREATER THAN 50' WIDE SHALL HAVE SINGLE WYES TO THE CENTER OF THE LOTS AS SHOWN.

STATE OF LOUISIANA
BRYAN K. HARMON
REG. No. 22595
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

AUGUST 1, 2011

DATE	DESCRIPTION REVISIONS	BY
4–13	REVISED FRAME AND COVER DIMENSION DETAILS	A.S.

STANDARD PLAN NO. 802–01	DATED AUGUST 1, 2011	SHEET NO. 1 OF 2

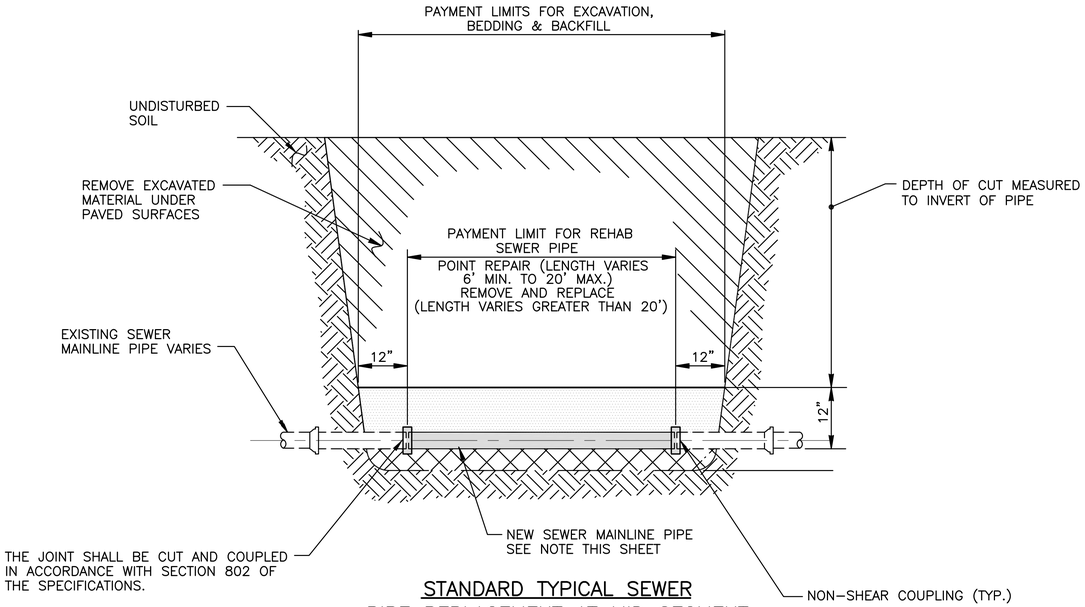
SANITARY SEWER PIPE AND CLEANOUT DETAILS

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

DESIGNED	DRAWN	CHECKED	APPROVED
A. SCHULZE	G. VANNICE	R. WRIGHT	B. HARMON

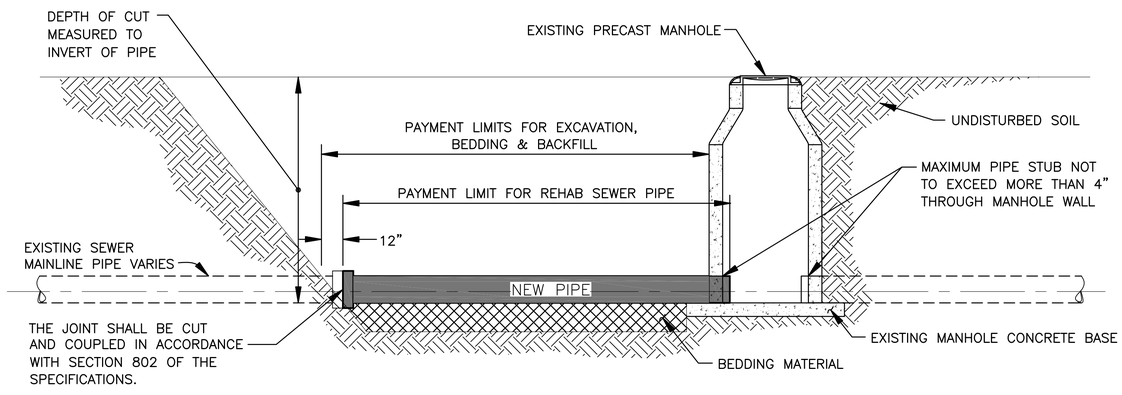
802–01

PROJECT NO.	SHEET



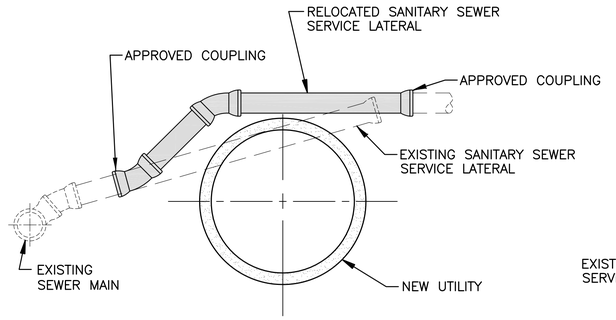
STANDARD TYPICAL SEWER PIPE REPLACEMENT AT MID SEGMENT

N.T.S.

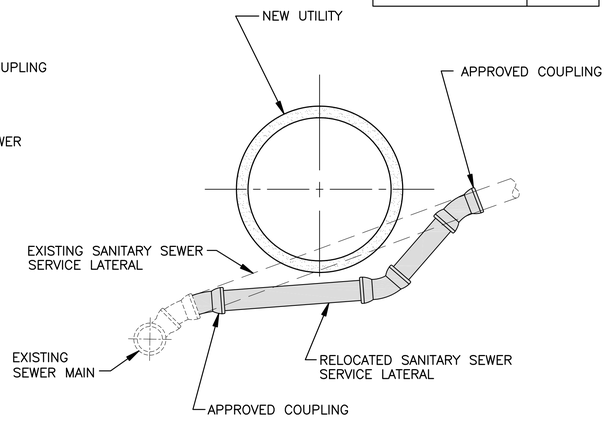


STANDARD TYPICAL SEWER PIPE REPLACEMENT AT MANHOLE

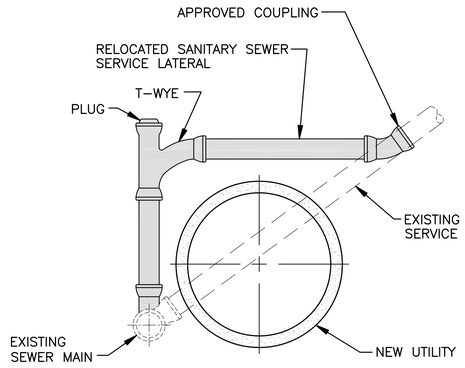
N.T.S.



CASE "A"



CASE "C"



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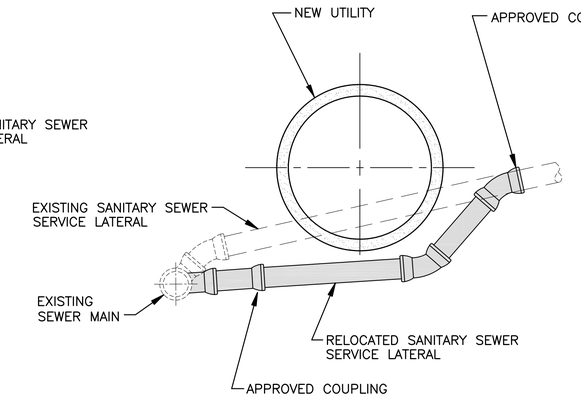


CASE "D"

LEGEND

= RELOCATED SANITARY SEWER SERVICE LATERAL

= EXISTING SANITARY SEWER SERVICE LATERAL

ADJUSTED SANITARY SEWER SERVICE LATERAL CONNECTION DETAILS

N.T.S.

NOTES:

1. THE RELOCATED SANITARY SEWER SERVICE LATERAL SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE (PVC) PIPE EXCEPT WHERE THE SANITARY SEWER SERVICE LATERAL IS BELOW THE UTILITY OR HAS LESS THAN 3 FEET OF COVER TO FINISH GRADE. IN THESE CASES THE PIPE MATERIAL SHALL BE DUCTILE IRON.
2. THE RELOCATED SANITARY SEWER SERVICE LATERAL SHALL BE CONNECTED TO THE PIPE WITH APPROVED NON-SHEAR COUPLINGS.
3. USE OF CASE "D" TYPE REROUTING DEPENDS ON THE LEVEL OF FLOW (PRESENT AND FUTURE) WITHIN MAINLINE SEWER – SUBJECT TO CASE APPROVAL BY ENGINEER.
4. MINIMUM SLOPE ON ANY REROUTED SEGMENT OF SANITARY SEWER SERVICE LATERAL TO BE 1.00%.
5. NEW SEWER PIPE LENGTH & TYPE TO BE DEFINED BY ENGINEER.
6. BEDDING, SECONDARY BACKFILL, INITIAL BACKFILL, AND SURFACE RESTORATION SHALL BE IN ACCORDANCE WITH SECTION 801 OF THE SPECIFICATION AND STANDARD PLAN 801-01.

DATE	DESCRIPTION	BY
	REVISIONS	
4/13	REVISED PIPE REPLACEMENT DETAIL & PIPE REPLACEMENT AT MANHOLE DETAIL ADDED GENERAL NOTES 5 & 6.	A.S.

STATE OF LOUISIANA
BRYAN K. HARMON
REG. No. 22595
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

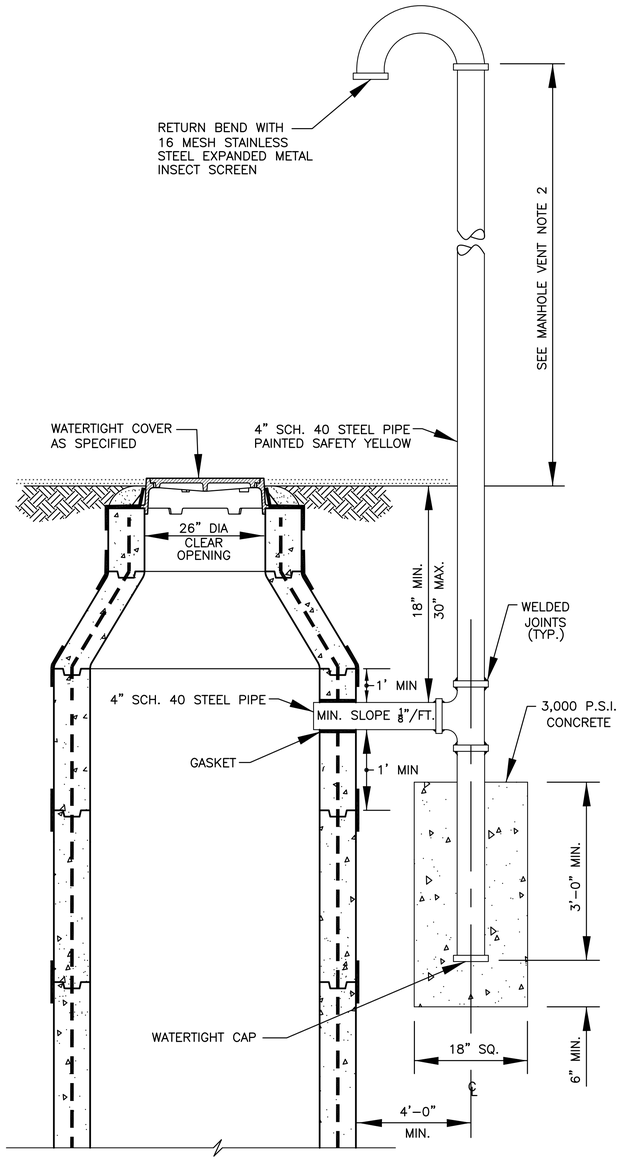
AUGUST 1, 2011

STANDARD PLAN NO.	DATED	SHEET NO.
802-01	AUGUST 1, 2011	2 OF 2

SANITARY SEWER PIPE AND CLEANOUT DETAILS

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

DESIGNED	DRAWN	CHECKED	APPROVED
A. SCHULZE	G. VANNICE	R. WRIGHT	B. HARMON

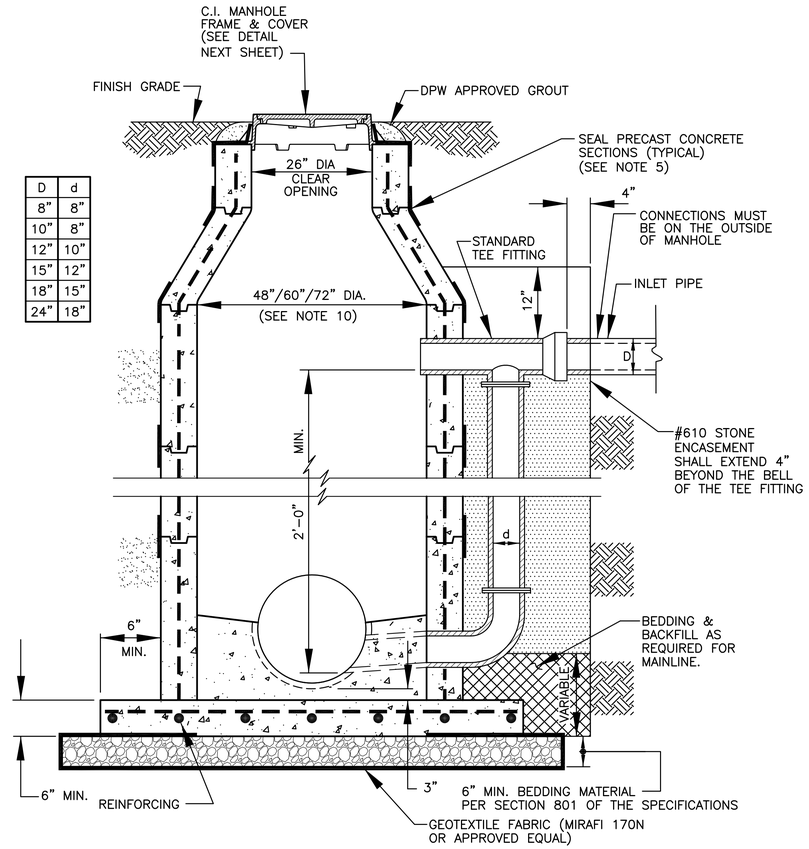


MANHOLE VENT

NOT TO SCALE

MANHOLE VENT NOTES:

1. PIPE TO BE PAINTED IN ACCORDANCE W/SECTION 822.
2. TOP OF VENT TO BE MIN. OF 1' ABOVE BASE FLOOD ELEVATION OR HIGHER AS SHOWN ON PLANS.
3. MANHOLE VENT TO BE UTILIZED ONLY WHEN STIPULATED ON PLANS.



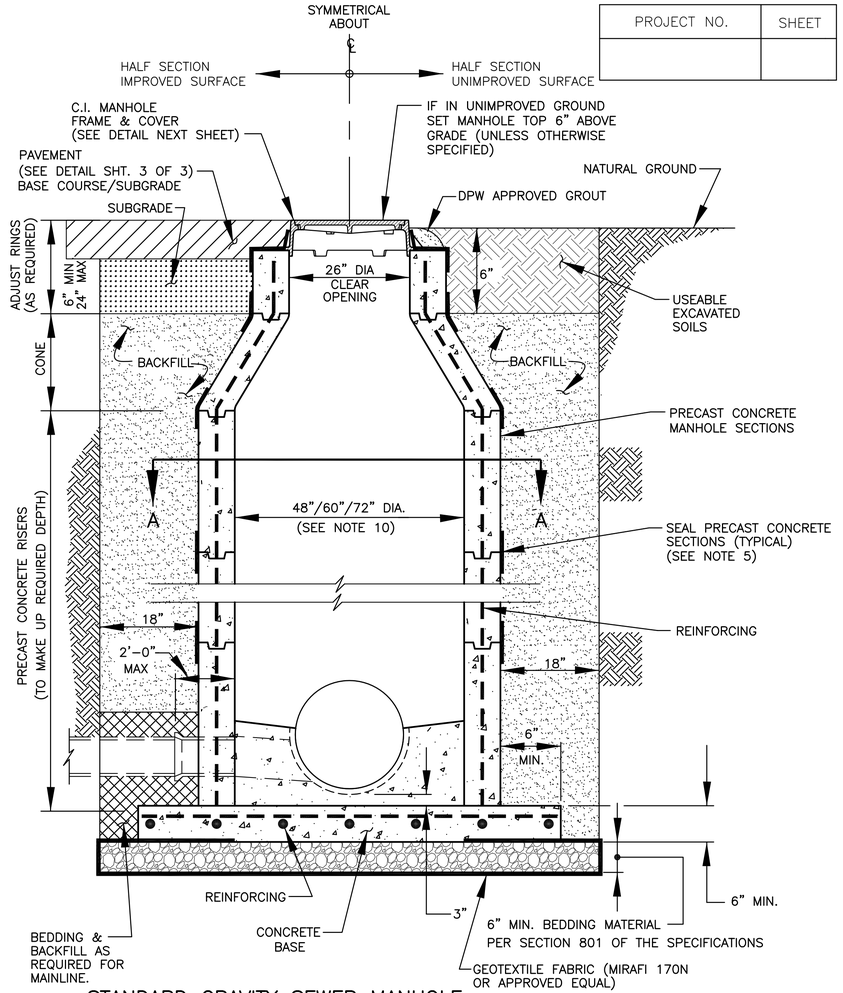
D	d
8"	8"
10"	8"
12"	10"
15"	12"
18"	15"
24"	18"

STANDARD GRAVITY SEWER DROP MANHOLE

N.T.S.

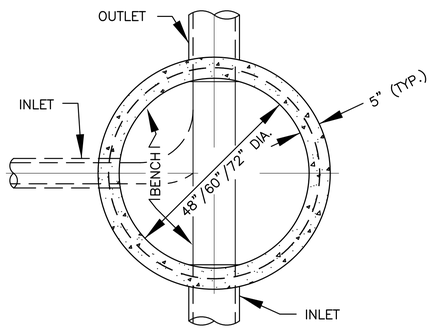
GENERAL NOTES:

1. ALL STUBS FROM MANHOLES AND ENDS OF PIPE TO WHICH CONNECTIONS ARE TO BE MADE UNDER THIS CONTRACT SHALL BE PROVIDED WITH TEMPORARY WATER TIGHT PLUGS OR CAPS. ALL STUBS FOR CONNECTIONS TO OTHER CONTRACTS SHALL BE PROVIDED WITH WATER TIGHT PLUGS PLACED FROM INSIDE OF MANHOLE. SEWERS WHICH ARE TO BE CONNECTED TO MANHOLES WHICH WILL BE BUILT UNDER OTHER CONTRACTS SHALL BE PROVIDED WITH WATER TIGHT PLUGS AND CAPS. STUBS SHALL BE A MAXIMUM OF 2FT. IN LENGTH. SUCH PLUGS LOCATED AT JUNCTIONS OF TWO CONTRACTS SHALL REMAIN IN PLACE AND SHALL BE REMOVED BY OTHERS.
2. THE BENCH SHALL SLOPE TOWARD THE INVERT CHANNEL AT THE RATE OF (1.5"/FT.), BUT MINIMUM OF 3" DIFFERENCE SHALL BE MAINTAINED FROM THE TOP OF CHANNEL TO THE WALL.
3. ALL CAST IRON FRAME AND COVERS SHALL BE TRAFFIC BEARING. FRAME AND COVERS SHALL MEET OR EXCEED ALL REQUIREMENTS OF THE LATEST AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS DESIGNATION: M306 STANDARD SPECIFICATION FOR DRAINAGE, SEWER, UTIITY, AND RELATED CASTINGS. THEY SHALL HAVE AN ENVIRONMENTALLY SAFE, WATER-BASE ASPHALTIC COATING WHICH IS NONTOXIC, NONFLAMMABLE, COLORLESS, AND DRIES TO A HARD BLACK FINISH.
4. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO HALF THE DIAMETER OF THE LARGEST DIAMETER SEWER PIPE IN THE MANHOLE.
5. MANHOLE SECTIONS SHALL BE JOINED TOGETHER WITH FLEXIBLE WATERTIGHT RUBBER GASKETS AND EXTERNALLY SEALED AT THE JOINTS IN ACCORDANCE WITH THE SPECIFICATIONS.
6. ALL MANHOLES ARE TO BE CONSTRUCTED OF PRECAST CONCRETE (BASE, RISERS AND CONE). NO BRICK MANHOLES WILL BE ACCEPTED UNLESS APPROVED IN WRITING.
7. BEDDING AND BACKFILL SHALL BE ACCORDANCE WITH THE SPECIFICATIONS. SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS AND PLACEMENT AND COMPACTION OF PIPE BEDDING MATERIALS.
8. PIPE PENETRATIONS SHALL CONFORM TO THE SPECIFICATIONS.
9. REINFORCING FOR PRE-CAST MANHOLES AS PER ASTM C-478.
10. FOR SEWERS 16" DIA. OR LESS CONSTRUCT 48" DIA. MANHOLE, FOR SEWERS LARGER THAN 16" UP TO 24" DIA. CONSTRUCT 60" DIA. MANHOLE, AND FOR SEWERS LARGER THAN 24" DIA. CONSTRUCT 72" DIA. MANHOLE. MANHOLE DIA. SIZING, HOWEVER IS CONTINGENT UPON THE LIMITATIONS OF THE MANUFACTURER DUE TO PIPE SIZE AND ORIENTATION AT THE MANHOLE. THE DESIGN ENGINEER MUST VERIFY THAT THE PROPER MANHOLE DIA. IS PROVIDED.
11. MANHOLE SHALL NOT INCLUDE STEPS.



STANDARD GRAVITY SEWER MANHOLE

N.T.S.



SECTIONAL A-A

N.T.S.

4-13	REVISED GENERAL NOTES, ADDED DIMENSIONS	A.S.
DATE	DESCRIPTION REVISIONS	BY

STATE OF LOUISIANA
BRYAN K. HARMON
REG. No. 22595
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

AUGUST 1, 2011

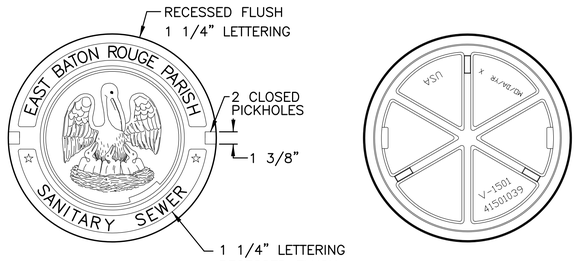
PROJECT NO.	SHEET

STANDARD PLAN NO.	DATED	SHEET NO.
803-01	AUGUST 1, 2011	1 OF 3

SANITARY SEWER MANHOLES

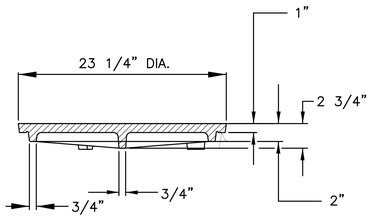
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
A. SCHULZE	G. VANNICE	R. WRIGHT	B. HARMON



COVER FRONT

COVER BACK



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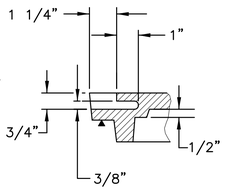
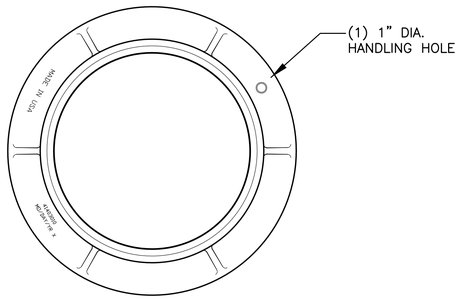


(2) TYPE TWO NON–PENETRATING PICKHOLES

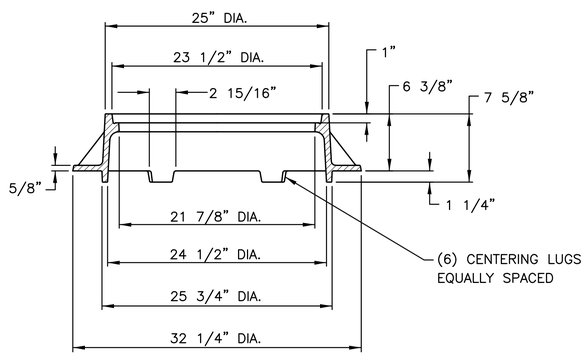
PICKHOLE DETAIL

STANDARD HEAVY DUTY MANHOLE COVER

EJIW MODEL V–1501 OR APPROVED EQUAL

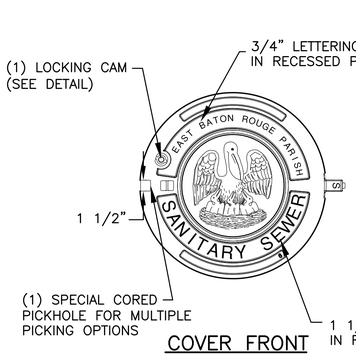


TOP



STANDARD MANHOLE FRAME WITH LUGS

EJIW MODEL V–1403 OR APPROVED EQUAL



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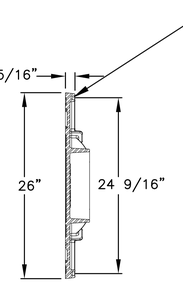
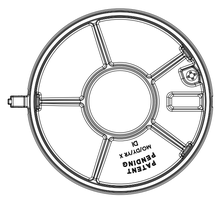


COVER SIDE VIEW



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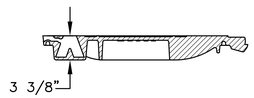

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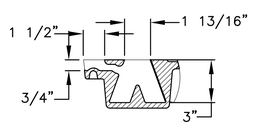
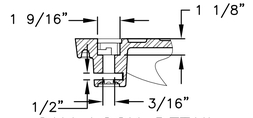
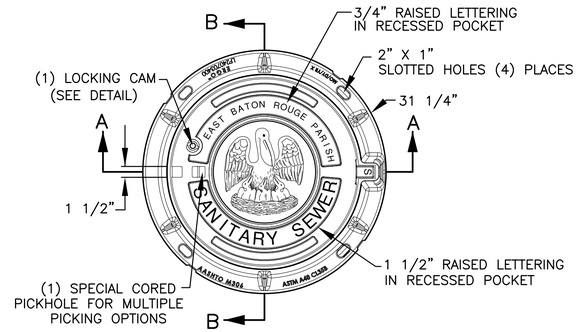


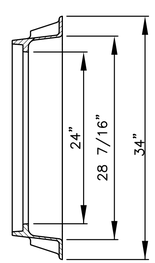
PICKHOLE DETAIL



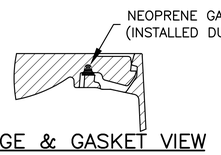
CAM LOCK DETAIL



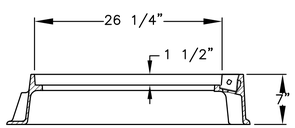
PLAN VIEW



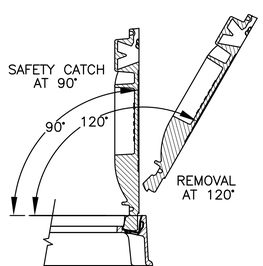
FRAME SECTION B–B



HINGE & GASKET VIEW



FRAME SECTION A–A

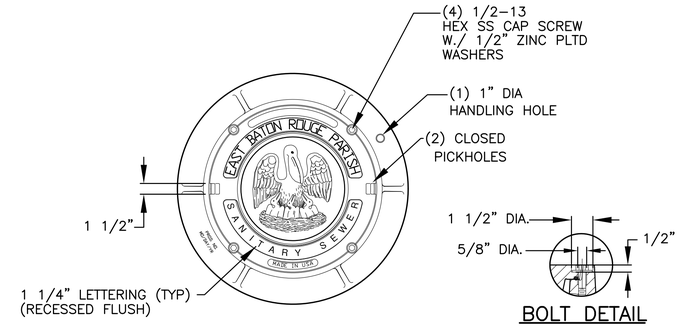


HINGE POSITONS

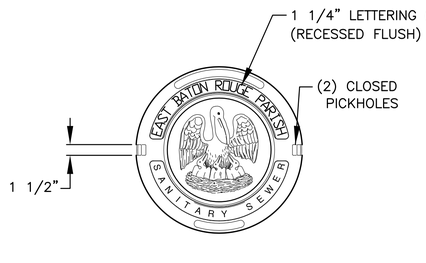
HINGED MANHOLE ASSEMBLY

EJIW MODEL 24" ERGO OR APPROVED EQUAL

PROJECT NO.	SHEET



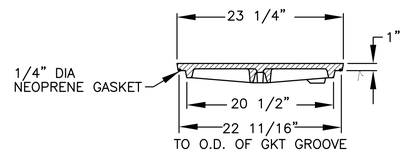
BOLT DETAIL



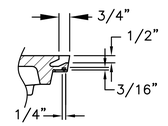
COVER FRONT



COVER BACK



COVER SECTION



GASKET GROOVE
& PICKHOLE DETAIL

BOLT DOWN WATERTIGHT MANHOLE ASSEMBLY

EJIW MODEL V–I501GS OR APPROVED EQUAL (COVER)
EJIW MODEL V–1403 OR APPROVED EQUAL (FRAME)

GENERAL NOTE:

1. TYPE OF FRAME AND COVER TO BE USED SHALL BE AS SHOWN ON PLANS OR AS DIRECTED BY PROJECT ENGINEER.

STATE OF LOUISIANA
BRYAN K. HARMON
REG. No. 22595
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

AUGUST 1, 2011

STANDARD PLAN NO.	DATED	SHEET NO.
803–01	AUGUST 1, 2011	2 OF 3

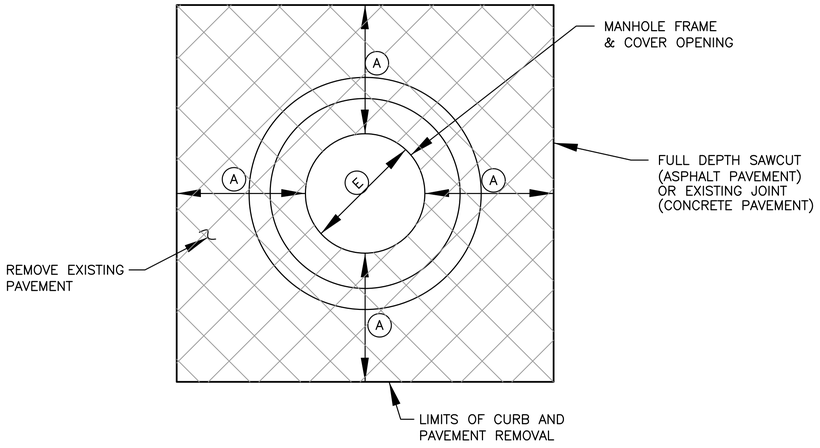
SANITARY SEWER MANHOLES

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

DESIGNED	DRAWN	CHECKED	APPROVED
A. SCHULZE	G. VANNICE	R. WRIGHT	B. HARMON

DATE	DESCRIPTION REVISIONS	BY

PROJECT NO.	SHEET

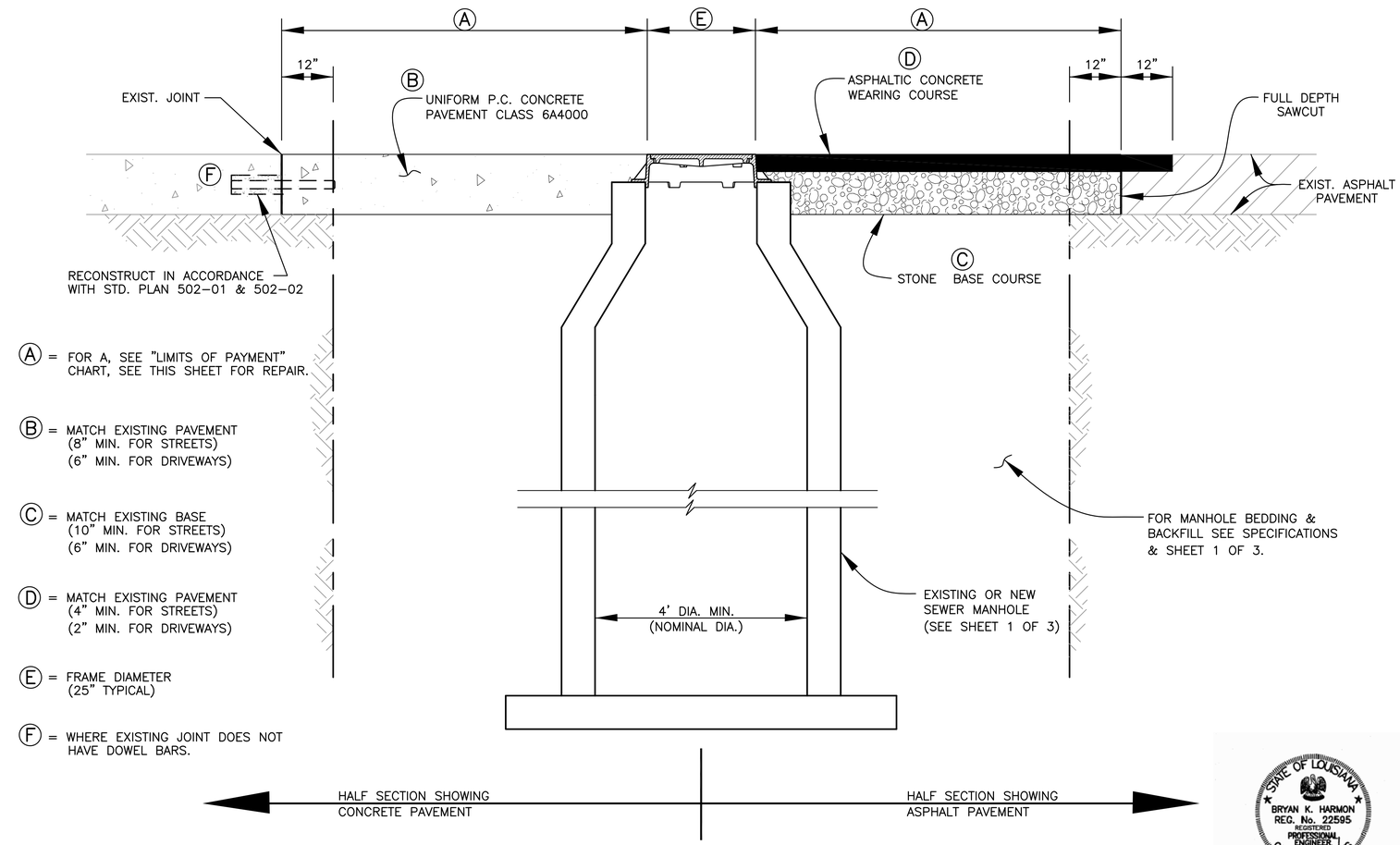


PAVEMENT REMOVAL (MANHOLE REPAIR)

NOT TO SCALE

LIMITS OF PAVEMENT	
MANHOLE REPAIR	A (FT.)
RESET MANHOLE FRAME	2
REPLACE MANHOLE FRAME AND COVER	2
REPLACE MANHOLE CONE	5
REPLACE MANHOLE	7

(2) CONTRACTOR TO REMOVE AND REPLACE CONCRETE PAVEMENT SLABS AS SHOWN. IF CONCRETE PAVEMENT JOINT (OR EDGE OF ROAD/BACK OF CURB) IS WITHIN 2', REMOVE PAVEMENT TO JOINT LINE. PAVEMENT TO CONFORM TO STANDARD CPS 502-01(STANDARD PAVEMENT DETAILS). REUSE EXISTING DOWELS IF NOT DAMAGE DDURING PAVEMENT REMOVAL. REPLACE ALL DAMAGED DOWEL WITH 1/2"x 2'-0" DEFORMED BARS ON 2'-0" CENTERS W/ EPOXY.



Ⓐ = FOR A, SEE "LIMITS OF PAYMENT" CHART, SEE THIS SHEET FOR REPAIR.

Ⓑ = MATCH EXISTING PAVEMENT
(8" MIN. FOR STREETS)
(6" MIN. FOR DRIVEWAYS)

Ⓒ = MATCH EXISTING BASE
(10" MIN. FOR STREETS)
(6" MIN. FOR DRIVEWAYS)

Ⓓ = MATCH EXISTING PAVEMENT
(4" MIN. FOR STREETS)
(2" MIN. FOR DRIVEWAYS)

Ⓔ = FRAME DIAMETER
(25" TYPICAL)

Ⓕ = WHERE EXISTING JOINT DOES NOT HAVE DOWEL BARS.

PAVEMENT REMOVAL (MANHOLE REPAIR)

NOT TO SCALE

STATE OF LOUISIANA
BRYAN K. HARMON
REG. No. 22595
REGISTERED
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING

AUGUST 1, 2011

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 803-01	DATED AUGUST 1, 2011	SHEET NO. 3 OF 3

SANITARY SEWER MANHOLES

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

DESIGNED	DRAWN	CHECKED	APPROVED
A. SCHULZE	G. VANNICE	R. WRIGHT	B. HARMON

PROJECT NO.	SHEET

GATES				
WIDTH OF GATE SINGLE OR ONE LEAF OR DOUBLE GATE	GATE FRAME		GATE POST	
	O.D.(IN.)	LBS/FT.	O.D.(IN.)	LBS/FT.
13' MAXIMUM	1.90	2.71	4.00	9.10
13' TO 18'	1.90	2.71	6.625	18.97
OVER 18'	1.90	2.71	8.625	24.70

The Contractor may substitute the following fencing materials in lieu of those materials specified:

Chain link fence posts, rails, braces and gate frame materials may be round pipe manufactured from steel conforming to ASTM A–569, cold rolled, electric welded and externally triple coated with a minimum of 0.9 ounce per square foot of high grade slab zinc conforming to ASTM B–6; a minimum of 15.0 micrograms of chromate conversion coating per square inch, and an electrostatically applied thermoplastic clear polyurethane acrylic coating having a minimum dry film thickness of not less than 0.3 mil. The interior surface shall also be protected by an application of zinc rich based organic coating (having a minimum zinc powder loading of not less than 87.0 percent by weight) to be applied after fabrication.

Posts, rails, braces and gate frame materials shall conform to the following schedule:

USE	PIPE SIZE	MINIMUM WEIGHT
End, Corner, Slope and Pull Posts:	3.50 Inches	5.71 lbs. per L.F.
Line Posts	3.00 Inches	4.64 lbs. per L.F.
Gate Posts:	3.50 Inches	5.71 lbs. per L.F.
Top Rails and Braces:	1.625 Inches	1.84 lbs. per L.F.
Frame and Stiffner for gates:	2.00 Inches	2.28 lbs. per L.F.

GENERAL NOTES:

The fence installation and details shown are typical and may vary in accordance with different manufacturers, provided that they meet the Standard Specifications.

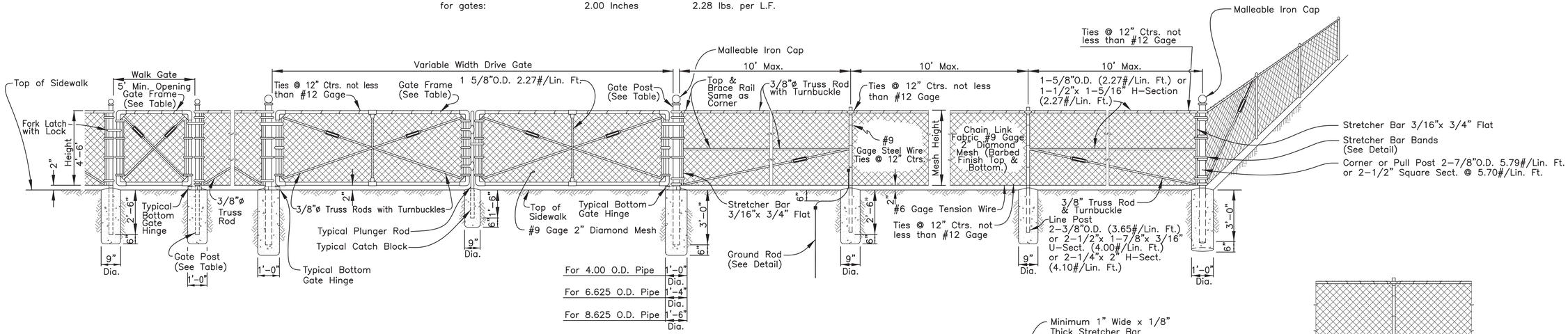
Any Galvanized Fence Item Which has its Surface Abraded Shall Be Painted With Rust–Oleum "Galvinoleum," or an Approved Equal.

Electrical grounding devices are to be installed in accordance with Subsection 902–3 of the Standard Specifications.

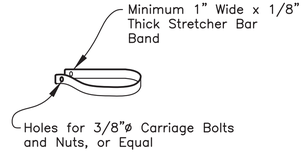
All bolts to be upset to discourage vandalism.

NOTE:

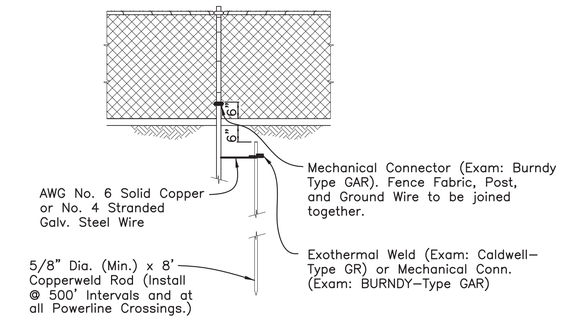
Lateral Fence to be same Construction As Frontage Fence.



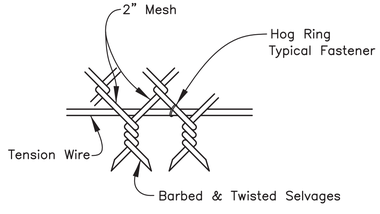
CHAIN LINK FENCE
N.T.S.



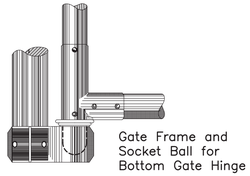
TYPICAL STRETCHER BAR BAND



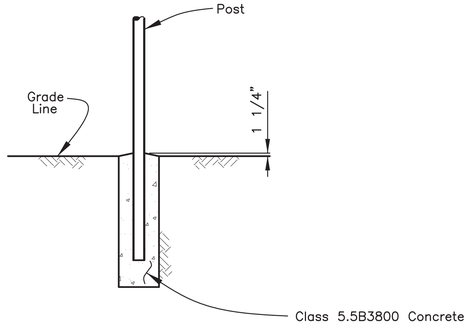
DETAIL OF GROUND WIRES FOR FENCE



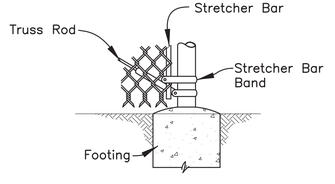
FABRIC & TENSION WIRE DETAIL
Tension Wire Req'd. on Bottom Only



TYPICAL BOTTOM GATE HINGE



DETAIL OF POST FOOTING



TERMINAL POST DETAIL

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2013

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 902–02	DATED February 6, 2008	SHEET NO. 1 OF 1

CHAIN LINK FENCE & GATES

4' – 5' – 6' HEIGHT

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

DESIGNED	DRAWN	CHECKED	APPROVED
R. ELLIS	G. VANNICE	R. ELLIS	T. STEPHENS

PROJECT NO.	SHEET

GATES				
WIDTH OF GATE SINGLE OR ONE LEAF OR DOUBLE GATE	GATE FRAME		GATE POST	
	O.D.(IN.)	LBS/FT.	O.D.(IN.)	LBS/FT.
13' MAXIMUM	1.90	2.71	4.00	9.10
13' TO 18'	1.90	2.71	6.625	18.97
OVER 18'	1.90	2.71	8.625	24.70

The Contractor may substitute the following fencing materials in lieu of those materials specified:

Chain link fence posts, rails, braces and gate frame materials may be round pipe manufactured from steel conforming to ASTM A–569, cold rolled, electric welded and externally triple coated with a minimum of 0.9 ounce per square foot of high grade slab zinc conforming to ASTM B–6; a minimum of 15.0 micrograms of chromate conversion coating per square inch, and an electrostatically applied thermoplastic clear polyurethane acrylic coating having a minimum dry film thickness of not less than 0.3 mil. The interior surface shall also be protected by an application of zinc rich based organic coating (having a minimum zinc powder loading of not less than 87.0 percent by weight) to be applied after fabrication.

Posts, rails, braces and gate frame materials shall conform to the following schedule:

USE	PIPE SIZE	MINIMUM WEIGHT
End, Corner, Slope and Pull Posts:	3.50 Inches	5.71 lbs. per L.F.
Line Posts	3.00 Inches	4.64 lbs. per L.F.
Gate Posts:	3.50 Inches	5.71 lbs. per L.F.
Top Rails and Braces:	1.625 Inches	1.84 lbs. per L.F.
Frame and Stiffner for gates:	2.00 Inches	2.28 lbs. per L.F.

GENERAL NOTES:

The fence installation and details shown are typical and may vary in accordance with different manufacturers, provided that they meet the Standard Specifications.

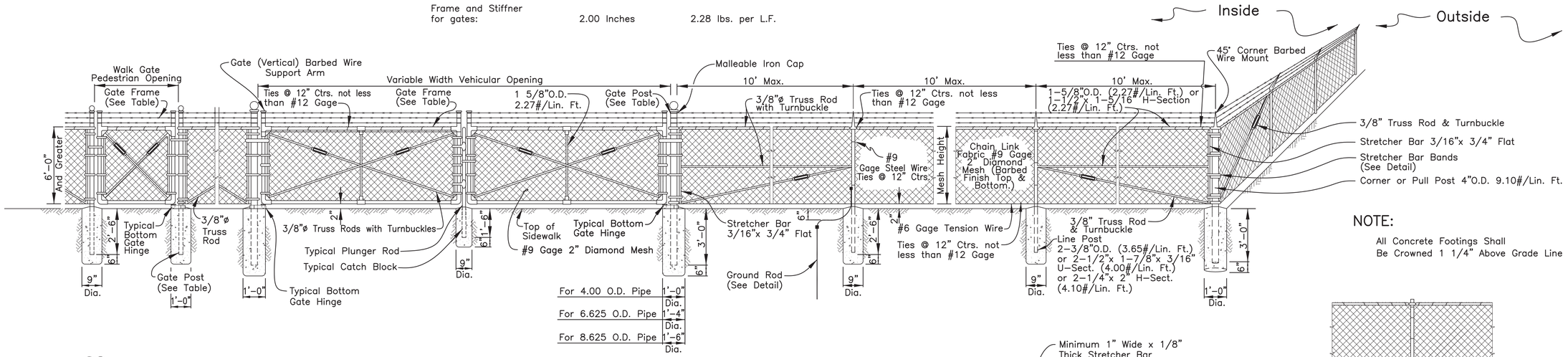
Typical installation may vary as shown on the plans or as directed by the Engineer. Location of gates are to be shown on plans.

Any Galvanized Fence Item Which has its Surface Abraded or Damaged Shall Be Painted With Rust–Oleum "Galvinoleum," one of the Methods Specified in Section 161, or an Approved Equal.

Electrical grounding devices are to be installed in accordance with Subsection 810.037 of the Standard Specifications.

All bolts to be upset to discourage vandalism.

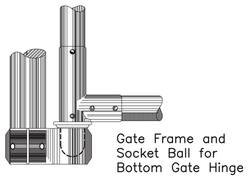
Fencing and gates shall be paid for under the appropriate individual pay items.



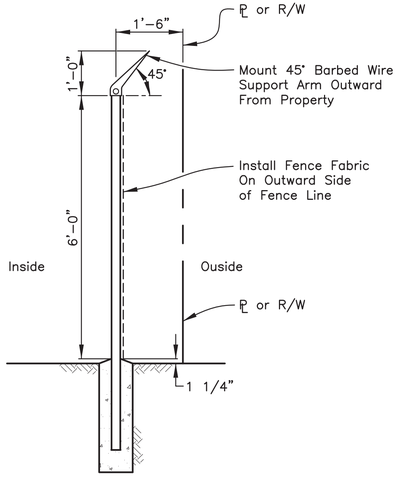
CHAIN LINK SECURITY FENCE (6' HIGH AND GREATER)
N.T.S.

NOTE:

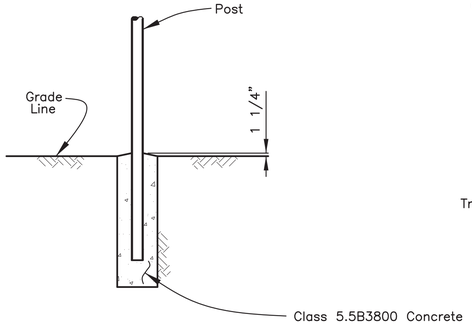
All Concrete Footings Shall Be Crowned 1 1/4" Above Grade Line



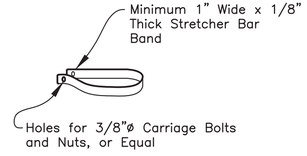
TYPICAL BOTTOM GATE HINGE



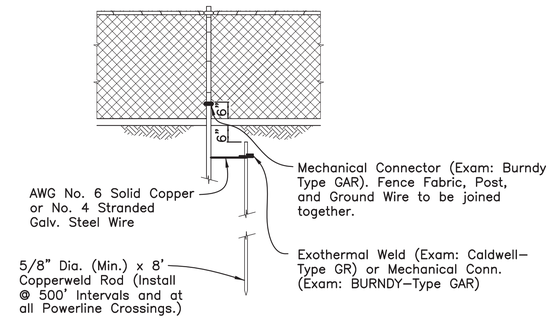
TYPICAL END ELEVATION



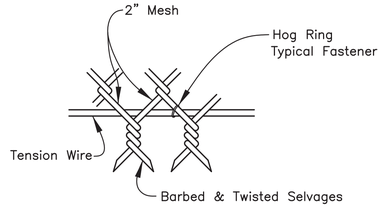
DETAIL OF POST FOOTING



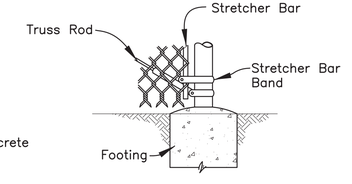
TYPICAL STRETCHER BAR BAND



DETAIL OF GROUND WIRES FOR FENCE



FABRIC & TENSION WIRE DETAIL
Tension Wire Req'd. on Bottom Only



TERMINAL POST DETAIL



DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 902–03	DATED February 7, 2008	SHEET NO. 1 OF 1

CHAIN LINK SECURITY FENCE

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

DESIGNED	DRAWN	CHECKED	APPROVED
R. ELLIS	G. VANNICE	R. ELLIS	T. STEPHENS

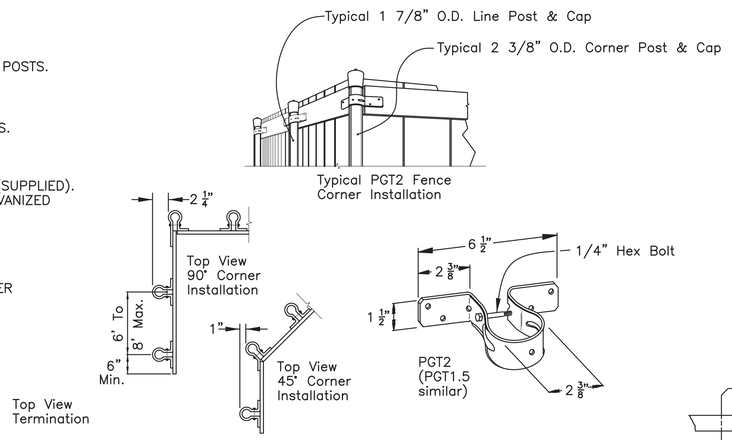
PROJECT NO.	SHEET

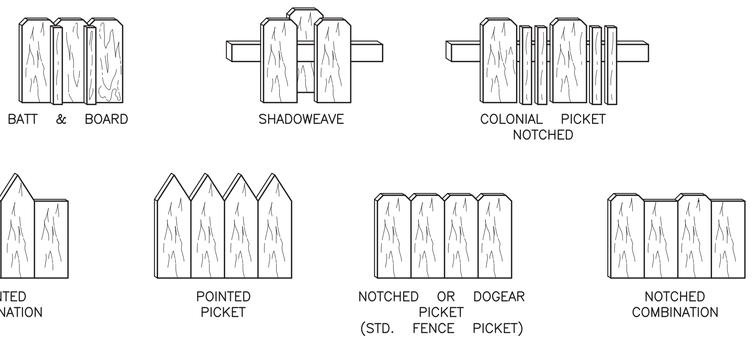
PGT ⊙ *PIPE GRIP TIES OR APPROVED EQUAL.*

THE PGT1.5 SHALL BE FOR 1 7/8" OUTSIDE DIAMETER LINE POSTS, AND THE PGT2 SHALL BE FOR 2 3/8" OUTSIDE DIAMETER CORNER POSTS.

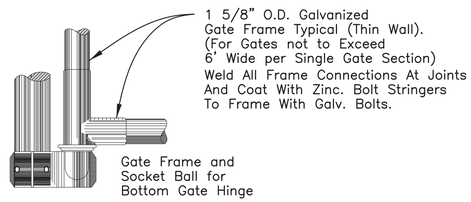
MATERIAL: 12 gauge
FINISH: GALVANIZED
INSTALLATION: USE ALL SPECIFIED FASTENERS. SEE GENERAL NOTES.

- INSTALL ON VERTICAL PIPES TO ALLOW FOR CORRECT RAIL ALIGNMENT.
- USE 3 PIPE GRIP TIES PER PIPE; LINE UP TO STRINGLINE.
- FASTEN PIPE GRIP TIES TO PIPE WITH 1/4" HEX HEAD BOLT (SUPPLIED).
- PIPE GRIP TIE ATTACHES TO HORIZONTAL RAIL WITH FOUR GALVANIZED SCREWS AS SPECIFIED.
- NAIL OR SCREW FENCE BOARDS TO RAILS USING GALVANIZED FASTENERS AS SPECIFIED.
- 5/16" GALVANIZED CARRAGE BOLTS WITH FLAT WASHERS AND NUTS MAY BE USED IN LIEU OF PIPE GRIP TIES (3 PER POST REQUIRED FOR LINE POST; 6 PER POST REQUIRED FOR CORNER POST; FLAT WASHERS ALL SIDES).

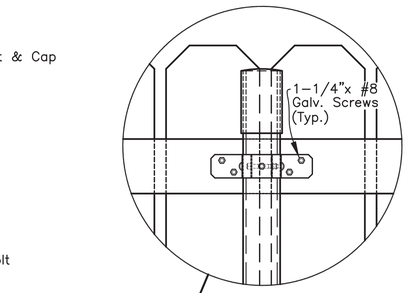




TYPICAL FENCE PICKET DETAILS
(See Specifications)

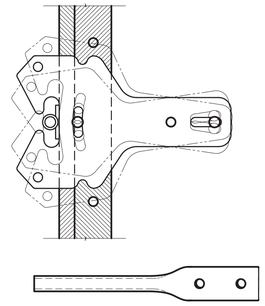


TYPICAL BOTTOM GATE HINGE

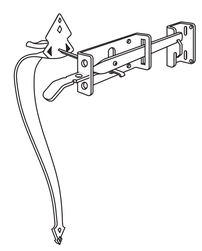


REAR ELEVATION | FRONT ELEVATION | SECTION

FENCE DETAIL
3/4"=1'-0"



CATCH LATCH DETAIL



CATCH LATCH DETAIL

GENERAL NOTES:

1. Typical Installation may very as shown on the Plans or as Directed by the Engineer. Location of Gates to be shown on Plans.
2. Face Boards Towards Street, or Toward Building if on Edge of Canal, Unless Otherwise Directed By The Engineer.
3. Screw Pipe Grip Ties to Treated 2"x4" Horizontal Rails with Galvanized Fasteners (1-1/4"x #8 Galvanized Round Slotted Head Wood Screws). (4/Board Minimum per Grip Tie)
4. Use 2" Galvanized Ring Shank Nails to Secure Fence Board to Horizontal Rails (6 per Board).
5. Line and Gate Posts shall be Galvanized Round Pipe per the following Schedule unless noted otherwise.
   1 7/8" O.D. = 2.71 lbs./L.F.; 1.900" O.D. Alt.*
   2 3/8" O.D. = 3.65 lbs./L.F.; 2.375" O.D. Alt.*

* Alternate Coating requirements for Round Sections- Sections may be externally coated with no less than 0.8 oz./ft. of high grade or special high grade plus zinc conforming to A.S.T.M. B6, followed by a chromate conversion coating of 30+10 micro-grams/in² and an electrostatically applied thermoplastic acrylic coating having a minimum dry film thickness of 0.3 mil. The Internal surface shall be coated with a zinc rich coating of no less than 81% ZINC powder by weight, 0.3 mil. or greater in thickness.

PGT⊙ PIPE GRIP TIES = U.S. PATENT NO. 5,297,890

DATE	DESCRIPTION REVISIONS	BY

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3/14/2018

STANDARD PLAN NO.	DATED	SHEET NO.
902-04	February 8, 2008	1 OF 1

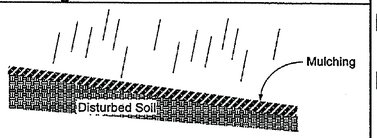
RESIDENTIAL WOODEN FENCE DETAILS (6FT. HIGH OR LESS)

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. JONES	G. VANNICE	N. RABALAIS	T. STEPHENS

PROJECT NO.	SHEET

Mulching



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.

APPLICATIONS
Mulch may be used on any construction-related disturbed area for surface protection including:
- Freshly seeded or planted areas,
- Areas at risk due to the time period being unsuitable for growing vegetation,
- Areas that are not conducive 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 manufacturers 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 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.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ● Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
1

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Mulching

- Application of straw or hay mulch should be approximately 2 tons dry per acre spread uniformly across the disturbed area. Other material should be applied such that 25% of the soil is visible through the mulch.
- For areas using straw mulch and the slope is greater than 3-5%, anchoring of the mulch with a Krimper Tool is required.

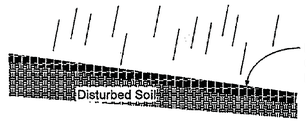
LIMITATIONS
Mulches are subject to removal by wind or water under severe climatic conditions. Mulches lower the soil temperature which may result in longer seed germination periods.

MAINTENANCE REQUIREMENTS
Mulched areas must be inspected on a weekly basis, and after significant (>0.5 inch) 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

Department of Public Works

Erosion Control Mats



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 provide 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

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ◒ Maintenance
- ◒ Training
- ◒ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
2

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Erosion Control Mats

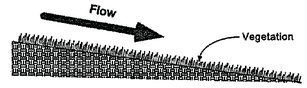
contractor with considerable mat installation experience for installation.

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

Department of Public Works

Vegetation



DESCRIPTION
Vegetation, as a Best Management Practice, is the sowing 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 than most structural controls.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ● Sediment
- ◒ Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
3

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Vegetation

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 manufacturer'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 and 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 to 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

Department of Public Works

DATE	DESCRIPTION REVISIONS	BY

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/16/2012

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	1 OF 11

STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES

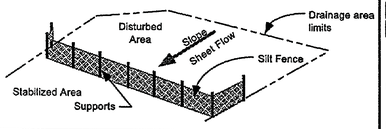
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

903–01

PROJECT NO.	SHEET

Silt Fence



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 other 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 be 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 silt fence should 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).

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ● Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

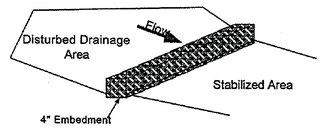
Implementation Requirements
- ◒ Capital Costs
- ● Maintenance
- ○ Training
- ◒ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
4

City of Baton Rouge Parish of East Baton Rouge
Department of Public Works

Straw Bale Dike



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.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

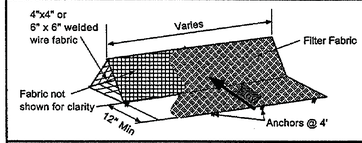
Implementation Requirements
- ◒ Capital Costs
- ● Maintenance
- ○ Training
- ◒ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
5

City of Baton Rouge Parish of East Baton Rouge
Department of Public Works

Triangular Sediment Filter Dike



DESCRIPTION
A Triangular Sediment Filter Dike is a self contained silt fence consisting of filter fabric wrapped around welded wire fabric shaped into a triangular cross section. While similar in use to a silt fence, the dike is reusable, sturdier, transportable and can be used on paved areas or in situations where it is impractical to install embedded posts for support.

PRIMARY USE
Triangular filter dikes are used in place of silt fence, treating sediment flow at the perimeter of construction areas and at the perimeter of the site. Also, the dikes can serve as stream protection devices by preventing sediment from entering the streams or as check dams in small swales.

Triangular sediment filter dikes are especially useful for construction areas surrounded by pavement, such as roadways, taxiways, ramps, etc., where silt fence or hay bale installation is Since they can be anchored without penetration, pavement damage can be minimized.

APPLICATIONS
Triangular dikes are used to provide perimeter control by detaining sediment on a disturbed site with drainage that would otherwise flow onto adjacent areas. Triangular dikes also serve as sediment trapping devices when used in areas of sheet flow across disturbed areas or are placed along stream banks to prevent sediment-laden sheet flow from entering the stream. The dikes can be subjected to more concentrated flows and a higher flowrate than silt fence.

DESIGN CRITERIA
- Dikes are to be installed along a line of constant elevation (along a contour line).
- Maximum slope perpendicular to the dike is 1:1.
- Maximum drainage flow to the dike shall be 11 CFS per 100 linear feet of dike.
- Maximum distance of flow to dike should be 200 feet or less.
- Maximum concentrated flow to dike shall be 1 CFS.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ● Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ◒ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
6

City of Baton Rouge Parish of East Baton Rouge
Department of Public Works

Silt Fence

- Minimum equivalent opening size shall be 100 (#100 sieve).
- If 85% or more of soil, by 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 side 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

Department of Public Works

Straw Bale Dike

- 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 due 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
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Department of Public Works

Triangular Sediment Filter Dike

- 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, by weight, passes the U.S. Standard sieve No. 200, triangular sediment dike shall not be used due to clogging.
- Sufficient room for the operation of sediment removal equipment shall be provided between the dike and other obstructions in order to properly remove sediment.
- The ends of the dike shall be turned upgrade to prevent bypass of stormwater.

LIMITATIONS
Ponding will likely occur directly adjacent to the dike which may possibly cause flooding.

Triangular sediment filter dikes are not effective for conditions which include substantial concentrated flows or when they are not constructed along a contour line due to the potential for flow concentration and overtopping.

MAINTENANCE REQUIREMENTS
Inspections should be made on a weekly basis, especially after large (> 0.5 inches) storm events. If the fabric becomes clogged, it should be cleaned or if necessary, replaced.

Sediment should be removed when it reaches approximately 6 inches in depth. In addition, inspections should be made on a regular basis to check the structural integrity of the dike. If structural deficiencies are found, the dike should be immediately repaired or replaced.

As with silt fence, integrity of the filter fabric is important to the effectiveness of the dike. Overlap between dike sections must be checked on a regular basis and repaired if deficient.

BMP
6

Department of Public Works

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2013

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	2 OF 11

STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES

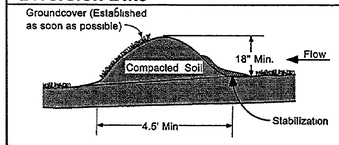
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

903–01

PROJECT NO.	SHEET

Diversion Dike



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 a 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.

Significant savings in structural controls can be realized by using diversion dikes to direct sheet flow to a central area such as a sediment basin or other sediment reduction structure if the runoff crosses disturbed areas.

DESIGN CRITERIA
- The maximum contributing drainage area should be 10 acres or
- 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.

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ● Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ◒ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes >5%

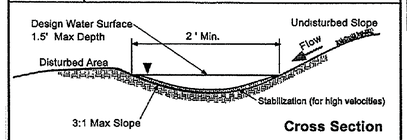
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
7

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Interceptor Swale



Cross Section

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 into a controlled outlet or to direct 'clean' runoff around 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.

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ● Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ● Floatable Materials
- ◒ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes >5%

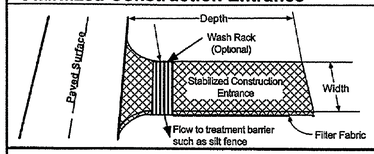
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
8

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Stabilized Construction Entrance



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 wash 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 a 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.

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ◒ Maintenance
- ○ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
9

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Diversion Dike

- 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

Department of Public Works

Interceptor Swale

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 be 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

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

Department of Public Works

Stabilized Construction Entrance

- 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

Department of Public Works

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/12/2018

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	3 OF 11

STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES

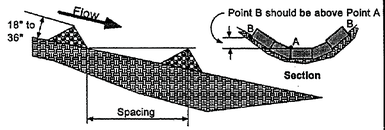
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION REVISIONS	BY

903–01

Check Dams



DESCRIPTION
Check dams are small barriers consisting of straw bales, rock, or earth berms placed across a drainage swale or ditch. They reduce the velocity of small concentrated flows, provide a limited barrier for sediment and help disperse concentrated flows, reducing potential erosion.

PRIMARY USE
Check dams are used for long drainage swales or ditches in which permanent vegetation may not be established and erosive velocities are present. They are typically used in conjunction with other techniques such as inlet protection, rip rap or other sediment reduction techniques. Check dams provide limited treatment. They are more useful in reducing flow to acceptable levels for other techniques.

APPLICATIONS
Check dams are typically used early in construction in swales for long linear projects such as roadways. They can also be used in short swales with a steep slope to reduce unacceptable velocities.

DESIGN CRITERIA
- Check dams should be placed at a distance and height to allow small pools to form between each one. Typically, dam height should be between 18" and 36". Dams should be spaced such that the top of the downstream dam should be at the same elevation as the toe of the upstream dam.
- See design criteria for straw bales, sand bag berms, etc. for specific criteria. Maximum allowable flow shall be based on the specific technique utilized and the velocity of flow.
- Major flows (greater than 2 year design storm) must pass the check dam without causing excessive upstream flooding.
- Check dams should be used in conjunction with other sediment reduction techniques prior to releasing flow offsite.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ● Maintenance
- ○ Training
- ◒ Suitability for Slopes >5%

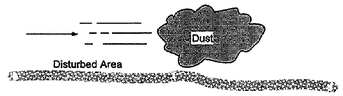
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
10

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Dust Control BMP



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.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ◒ Nutrients Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ◒ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- Suitability for Slopes >5%

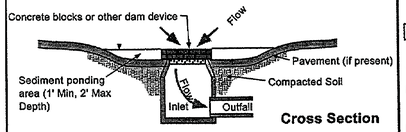
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
11

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Inlet Protection



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 construction traffic may occur over the inlet. This form of protection may be used with both curb and drop inlets

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients Toxic Materials
- ◒ Oil & Grease
- ◒ Floatable Materials
- ◒ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
12

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Check Dams

LIMITATIONS
Minor ponding will occur upstream of the check dams.

For heavy flows or high velocity flows, extensive maintenance or replacement of the dams will be required.

Check dams are not a total treatment technique.

MAINTENANCE REQUIREMENTS
Maintenance of the dams should adhere to the maintenance requirements of the management practice used for the dam.

BMP
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Department of Public Works

Dust Control BMP

MAINTENANCE REQUIREMENTS
Most dust control measures require frequent, often daily, attention.

ADDITIONAL INFORMATION
Dust control BMP's generally stabilize expose
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 dust control applications. 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 BMPs 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
- Mulching

BMP
11

Department of Public Works

Inlet Protection

- 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 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 60%.

For systems using stone filters, when the stone filter becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced. Since cleaning of gravel at a construction site may be difficult, an alternative approach would be to use the clogged stone as fill material and put new stone around the inlet.

BMP
12

Department of Public Works

PROJECT NO.	SHEET

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/12/2008

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	4 OF 11

STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES

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

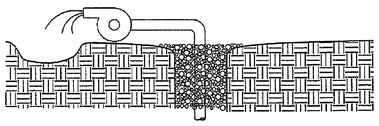
DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION REVISIONS	BY

903–01

PROJECT NO.	SHEET

Dewatering Operations



DESCRIPTION
Prevent or reduce the discharge of pollutants to storm water from dewatering operations by using sediment controls and by testing the water for contamination.

APPLICATIONS
There are two general classes or pollutants that may result from dewatering operations: sediment, and toxics and petroleum products. A high sediment content in dewatering discharges is common because of the nature of the operation. On the other hand, toxics and petroleum products are not commonly found in dewatering discharges unless, the site or surrounding area has been used for light or heavy industrial activities, or the area has a history of groundwater contamination.

DESIGN CRITERIA
- Use sediment controls to remove sediment from water generated from dewatering.
- Use filtration to remove sediment from a sediment trap or basin. Filtration can be achieved with:
  - Sump pit and a standpipe in the center with holes and wapped in filter fabric. The standpipe is surrounded by stones which filters the water as it collects in the pit before being pumped out;
  - Floating suction hose allowing cleaner surface water to be pumped out; or
  - Standpipe in the sediment basin with slits and wrapped in filter fabric to remove sediments.
- Toxics and Petroleum Products:
  - In areas suspected of having groundwater contamination, protect yourself early in the excavation process by sampling and having the water tested at a certified laboratory. Check with the Louisiana Department of Environmental Quality and the PROGRAM MANAGER for their requirements, including additional water quality tests and disposal options.

Applications
- Perimeter Control
- Slope Protection
- **Sediment Trapping**
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ○ Nutrients
- ○ Toxic Materials
- ◒ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ○ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

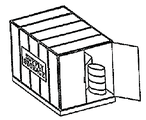
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
13

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Material Delivery And Storage



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, and 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.
- 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

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- **Housekeeping Practices**

Targeted Constituents
- ○ Sediment
- ○ Nutrients
- ○ Toxic Materials
- ◒ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ○ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

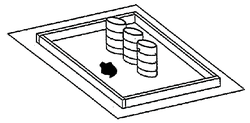
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
14

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Spill Prevention And Control



DESCRIPTION
Prevent or reduce the discharge of pollutants to storm water from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

This best management practice covers only spill prevention and control. However, Material Delivery and Storage and Material 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, 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 down or bury dry materials spills. Sweep up or excavate the material and dispose of properly. See the waste management BMPs

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- **Housekeeping Practices**

Targeted Constituents
- ○ Sediment
- ○ Nutrients
- ○ Toxic Materials
- ◒ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements
- ○ Capital Costs
- ○ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
15

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Dewatering Operations

- Contaminated water can be expensive to treat and/or dispose of properly. However, addressing the problem before construction is much less expensive than after the structures are in place.

LIMITATIONS
The presence of contaminated water may indicate contaminated soil as well. If contaminated water is discovered or suspected, the CONTRACTOR shall stop dewatering and immediately notify the PROGRAM MANAGER.

MAINTENANCE REQUIREMENTS
Maintain sediment controls and filters in good working order.

Inspect excavated areas daily for signs contaminated water as evidenced by discoloration, oily sheet, or odors.

BMP
13

Department of Public Works

Material Delivery And Storage

- Storage of reactive, ignitible, or flammable liquids must comply with the local fire codes and BTR Airport Rescue and Fire Fighting (ARFF) regulations. Contact ARFF, Captain Milton Thomas (504-355-2068), 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 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
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Department of Public Works

Spill Prevention And Control

Reporting
- Immediately report spills to the BTR Airport Rescue & Fire Fighting Unit (504-355-2068). Federal regulations require that any oil spill into a water body or onto an adjoining shoreline be reported to the National Response center (NRC) at 800-424-8802 (24 hour).

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 runoff 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 adsorbent materials on small spills rather than hosing down or burying the spill. Remove the adsorbent 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 ven if you think all the acid has drained out. If you drop a battery, treat it as if is cracked. Put in 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

Department of Public Works

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 15417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2012

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	5 OF 11

STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES

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

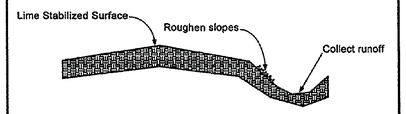
DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION REVISIONS	BY

903–01

PROJECT NO.	SHEET

Lime Stabilization BMP



Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ○ Nutrients / Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ○ Capital Costs
- ○ Maintenance
- ○ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP 16

City of Baton Rouge Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
Lime stabilization is used extensively in some areas to stabilize pavement subbases for roadways, parking lots and other paved surfaces. Hydrated lime is applied to the soil and mixed through disking and other techniques, then allowed to cure. This practice will reduce the potential for runoff to carry lime offsite, where it may impact aquatic life through changing the pH balance of streams, ponds and other water bodies.

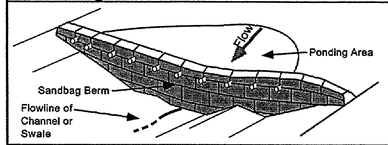
PRIMARY USE
This BMP consists of a series of techniques that should be implemented when lime is required for soil stabilization.

APPLICATIONS
Each of the techniques listed can be used under a variety of conditions. The engineer should determine the applicability of the technique based on site conditions such as available open space, quantity of area to be stabilized, proximity of nearby water courses and other BMPs employed at the site. The use of diversion dikes and interceptor swales (see appropriate

in conjunction with these techniques to reduce the impact of the lime.

DESIGN CRITERIA
- The contractor shall limit lime operations to that which can be thoroughly mixed and compacted by the end of each work day.
- No traffic other than water trucks and mixing equipment shall be allowed to pass over the spread lime until after completion of mixing.
- Areas adjacent and downstream of stabilized areas shall be roughened to intercept lime from runoff and reduce runoff velocity.
- Geotextile fabrics such as those used for silt fence should not be used to address lime since the grain size of lime is significantly smaller than the equivalent opening size of the fabric.
- For areas which phasing of lime operations is impractical, use of a curing seal such as Liquid Asphalt, Grade MC-250 or MC-800 applied at a rate of 0.15 gallons per square yard of surface can be used to protect the base.

Sand Bag Berm



Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ○ Nutrients / Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ○ Maintenance
- ○ Training
- ● Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP 17

City of Baton Rouge Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
Sandbag berms consist of stacked sandbags installed across a watercourse to direct flow around construction or to allow sedimentation to occur for flows downstream of disturbed areas. There are overflow pipes located in the top of the berm to allow controlled outflow of water after sedimentation has occurred.

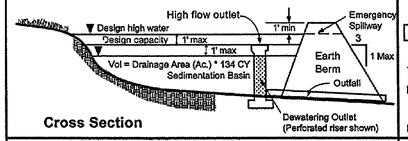
PRIMARY USE
A sandbag berm is a temporary sediment control method that addresses the problem of construction in creeks, channels and other watercourses which carry a constant flow and is subjected to high, concentrated flows. A sandbag berm can also be used to create a small sedimentation pond prior to the completion of a permanent detention basin.

Sandbag berms can be used as check dams in temporary swales or borrow ditches.

Sandbag berms are not recommended for typical perimeter controls where sheet flow is prevalent.

APPLICATIONS
During utility or any type of construction in channels or stream beds, sandbag berms can be used as check dams across channels, serve as a barrier for utility trenches or even provide a temporary channel crossing for construction equipment without seriously affecting stream conditions. Sandbag berms can also be installed parallel to a roadway, providing a corridor of sediment control similar to that provided by a silt fence or hay bales with the exception that a sand bag dike is capable of controlling much higher flows and is much more durable. For site construction sandbag berms can be used to divert or direct flow or create a temporary sediment basin with the added dimension of being able to be moved to accommodate changes in construction much more easily than compacted earth berms.

Sediment Basin



Cross Section

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ● Sediment
- ◒ Nutrients / Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP 18

City of Baton Rouge Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
A sediment basin is a pond area with a controlled outlet in which sediment-laden runoff is directed to allow settling of suspended sediment from the runoff. It provides treatment for the runoff as well as detention and controlled release of runoff, minimizing flood impacts downstream.

PRIMARY USE
Sediment basins should be used for all sites with adequate open space to site the basin and the ability to direct a majority of the site drainage into the basin. For sites with disturbed areas of 10 acres and larger that are part of a common drainage area, sediment basins are required as either temporary or permanent controls unless specific site conditions limit their use.

APPLICATIONS
Sediment basins serve as treatment devices which can be used on a variety of project types. It is normally used in site development projects in which large areas of land are available for the basin, a stream or drainage way crosses the site, or a specific water feature is planned for the site. Sediment basins are highly effective at reducing sediment and other pollutants for design storm conditions. It also reduces maintenance requirements due to the central location of the sediment and minimal structural requirements of the basin.

DESIGN CRITERIA
- Maximum drainage area contributing to the basin should be 10 acres or less. Larger sediment basins will require specific measures to address the potential for overtopping of the basin and possible failure of the berm.
- Minimum capacity of the basin shall be 3600 cubic feet per disturbed acre of contributing drainage area.
- Deposited sediment shall be removed when the storage capacity of the basin has been depleted by 20%.
- Minimum width of the embankment at the top shall be 8 feet.
- Minimum embankment slope shall be 3:1.
- Maximum embankment height shall be 6 feet as measured from

Lime Stabilization BMP

- Use of sediment basins with a significant (>36 hour) drawdown time is encouraged for large stabilized areas (see Sediment Basin BMP).

LIMITATIONS
These techniques are part of an overall plan to reduce pollutants from an active construction site. In the case of pollution due to lime, prevention of contamination is the only effective method to address this pollutant. Proper application and mixing along with avoiding applications when there is a significant probability of rain will reduce lime runoff.

MAINTENANCE REQUIREMENTS
None.

BMP 16

Department of Public Works

Sand Bag Berm

DESIGN CRITERIA
- Berms are to be constructed along a line of constant elevation (a contour line) for use as perimeter control devices.
- Maximum flow through rate shall be 0.1 CFS per square foot of berm surface.
- Minimum height shall be 18 inches.
- Minimum width of the berm shall be 18 inches at the top and 54 inches measured at the bottom.
- Maximum side slopes shall be 2:1.
- Maximum design freeboard shall be 0.3 feet
- Sandbags shall be consist of jute, polypropylene, polyethylene or polyamide woven fabric. Jute shall be composed of a uniform weave of undyed and unbleached single jute jarn weighing an average of 1.2 pounds per linear ard of cloth with approximately 78 warp ends per width of cloth. Polypropylene, polyethylene or polyamide woven fabric shall have a minimum unit weight of 4 ounces per square yard, a mullen burst strength of 300 psi minimum and ultraviolet stability exceeding 70 percent, and shall be filled with coarse sand or pea gravel.
- 4" diameter Schedule 40 or greater PVC pipe segments approximately 24 inches in length shall be used immediately below the top layer of sandbags to allow for flow through the berm.
- For severe velocities or high flows, woven wire mesh can be used to maintain the integrity of the berm.
- Sufficient room for the operation of sediment removal equipment shall be provided between the berm and other obstructions in order to properly remove sediment.
- The ends of the berm shall be turned upgrade or shall tie into natural grades to prevent bypass of stormwater.
- In channel applications, the center of the berm must be lower than the outside ends to prevent bypass around the berm.

LIMITATIONS
Sandbag berms are a costly, labor intensive technique which is suitable only for areas subjected to high concentrated flows. The permeability of the berms makes it unsuitable for low flow, perimeter conditions.

Ponding will occur directly upstream from the berm creating the possibility of a flooding concern which should be considered prior to its placement.

For sandbag berms located in high flow areas such as creeks, the potential for berm damage during high flows increases the requirement for maintenance.

MAINTENANCE REQUIREMENTS
Inspections should be made on a daily basis and after each significant (>0.5 inches) rain event. The sandbags shall be reshaped or replaced as need during the inspection. Silt should be removed when it reaches a depth of six (6) inches. In addition, weekly inspections should be made on the PVC pipe segments to assure clear flow.

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Department of Public Works

Sediment Basin

the toe of slope on the downstream side.
- The basin outlet shall be designed to accommodate a 10 year design storm without causing damage to the containment structure.
- Minimum outlet capacity shall be 0.2 CFS per acre of contributing drainage area.
- The sediment basin shall have a minimum design dewatering time of 36 hours.
- The basin must be laid out such that the effective flow length of the basin should be at least twice the effective flow width.
- The outlet of the outfall pipe shall be stabilized with rip rap or other form of stabilization with design flows and velocities based on 25 year design storm peak flows. For velocities in excess of 5 feet per second, velocity dissipation measures should be used to reduce outfall velocities.

LIMITATIONS
Sediment basins can be rather large depending on site conditions, requiring the use of expensive development area and comprehensive planning for construction phasing prior to implementation.

Storm events which exceed the design storm event can cause damage to the spillway structure of the basin and may impact downstream concerns.

MAINTENANCE REQUIREMENTS
Sediment shall be removed and the basin shall be regraded to its original dimensions at such point that the capacity of the impoundment has been reduced to 20% of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas which are protected from erosion.

The basin outlet structure and emergency spillway (if present) should be checked frequently and after each major rain event to check for damage and to insure that obstructions are not diminishing the effectiveness of the structures.

BMP 18

Department of Public Works

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/12/2018

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	6 OF 11

STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES

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

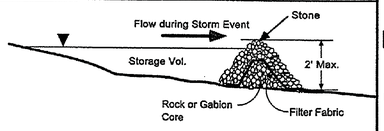
DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION REVISIONS	BY

903–01

PROJECT NO.	SHEET

Stone Outlet Sediment Trap



DESCRIPTION
A stone outlet sediment trap is a small ponding area formed by placing a stone embankment or gabion core with an integral stone filter outlet across a drainage swale for the purpose of detaining sediment-laden runoff generated by construction activities. The sediment trap detains runoff long enough to allow most of the suspended sediment to settle while still allowing for diffused flow of runoff.

PRIMARY USE
A sediment trap is used in situations where flows are concentrated in a drainage swale or channel. The sediment trap reduces velocities and allows for settling of sediment while allowing the area behind the trap to de-water. This is normally used for long term (18 months or less) applications in which a sediment basin is not feasible due to site or construction method restrictions. The use of a gabion core as opposed to a
dewatering the area as necessary.

APPLICATIONS
Temporary stone outlet sediment traps are installed at locations where concentrated flows require a protected outlet to contain sediment or spread flow prior to discharge.

DESIGN CRITERIA
- Maximum drainage area contributing to the trap shall be 3 acres. For larger drainage areas, a sediment basin should be used.
- The minimum length of the crest, in feet, of the stone outlet shall be equal to 6 times the size (acres) of the contributing drainage area.
- Deposited sediment shall be removed when the depth of sediment is equal to one-third of the height of the outlet structure as measured from the original toe of slope to the crest of the outlet, or has reached a depth of one foot, whichever is less.
- Minimum width of the embankment at the top shall be 3 feet.
- Minimum embankment slope shall be 3:1.

Applications
- Perimeter Control
- Slope Protection
- **Sediment Trapping**
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ● Sediment
- ○ Nutrients
- ○ Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes >5%

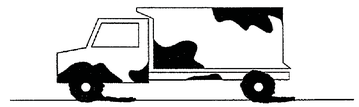
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
19

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Vehicle And Equipment Cleaning



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, 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.
for wash water collection and subsequent infiltration into the ground.
- 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 a jacent 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.

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- **Housekeeping Practices**

Targeted Constituents
- ◒ Sediment
- ○ Nutrients
- ○ Toxic Materials
- ◒ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ○ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
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City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Vehicle And Equipment Fueling



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, and 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 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.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Use adsorbent materials on small spills rather than hosing down or burying the spill. Remove the adsorbent 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.

Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- **Housekeeping Practices**

Targeted Constituents
- ○ Sediment
- ○ Nutrients
- ○ Toxic Materials
- ◒ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ○ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
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City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Stone Outlet Sediment Trap

- Maximum embankment height shall be 2 feet as measured from the toe of slope to the crest of the stone outlet. The height of the compacted earth embankment shall be one foot higher than the crest of the outlet.
- The maximum allowable flow-through rate shall be 0.1 CFS per square foot of the frontal area of the outlet structure.
- The effective life of the stone outlet sediment trap is approximately 18 months.

LIMITATIONS
Limited applications due to cost of construction, availability of materials, and the amount of land required.

Can cause minor flooding upstream of dam, impacting construction operations.

This technique serves as a temporary measure during construction. It should not be used for more than 18 months due to reduced efficiency.

MAINTENANCE REQUIREMENTS
Sediment shall be removed and the area directly behind the berm shall be regraded to its original dimensions at such point when the capacity of the impoundment has been reduced to one-half of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas which are protected from erosion.

The stone outlet structure should be inspected frequently and after each major rain event to check for clogging of the void spaces between stones. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced.

BMP
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Department of Public Works

Vehicle And Equipment Cleaning

LIMITATIONS
Even phosphate-free, biodegradable soaps have been shown degrades.
Sending vehicles/equipment off-site should be done in conjunction with Entrance).

MAINTENANCE REQUIREMENTS
Minimal.

BMP
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Department of Public Works

Vehicle And Equipment Fueling

- 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

Department of Public Works

DATE	DESCRIPTION REVISIONS	BY

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/12/2018

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	7 OF 11

STORM WATER POLLUTION PREVENTION PLAN
BEST MANAGEMENT PRACTICES

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

PROJECT NO.	SHEET

Solid Waste Management

DESCRIPTION
Large volumes of solid waste are often generated at construction sites including: packaging, pallets, wood waste, concrete waste, soil, electrical wiring, cuttings, and a variety of other materials. The solid waste management practice lists techniques to minimize the potential of storm water 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 is 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, nails, rust residue)
  - Gypsum board cuttings and waste
  - Sheathing cuttings and waste
  - Miscellaneous cutting and waste
  - Food waste
  - 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.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ● Nutrients
- Toxic Materials
- ○ Oil & Grease
- ● Floatable Materials
- ● Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
22

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Hazardous Waste Management

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
  - 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.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ● Nutrients
- Toxic Materials
- ● Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
23

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Concrete Waste Management

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 a 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 manager 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.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ○ Nutrients
- Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
24

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Solid Waste Management

- 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 recyclable 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 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

Department of Public Works

Hazardous Waste Management

- 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 and

BMP
23

Department of Public Works

Concrete Waste Management

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

Department of Public Works

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2013

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	8 OF 11

STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION REVISIONS	BY

903–01

PROJECT NO.	SHEET

Sandblasting Waste Management

DESCRIPTION

The objective of the this management program is to minimize the potential of storm water quality degradation from sandblasting activities at construction sites. The key issues in this program are prudent handling and storage of sandblast media, dust suppression, and proper collection and disposal of spent media. it is not the intent of this program to outline all of the worker safety issues pertinent to this practice. Safety issues should be addressed by construction safety programs as well as local, state, and federal regulations.

INSTALLATION/APPLICATION CRITERIA

Since the media consists of fine abrasive granules, it can be easily transported by air and running water. Sandblasting activities typically create a significant dust problem which must be contained and collected to prevent off-site migration of fines.

Operational Procedures
- Use only inert, non-degradable sandblast media.
- Use appropriate equipment for the job, do not over-blast.
- Wherever possible, blast in a downward direction.
- Install a wind sock or other wind direction instrument.
- Cease blasting activities in high winds or if wind direction could transport grit to drainage facilities.
- Install dust shielding around sandblasting areas.
- Collect and dispose of all spent sandblast grit, use dust containment fabrics and dust collection hoppers and barrels.
- Non-hazardous sandblast grit may be disposed in permitted construction debris landfills or permitted sanitary landfills.
- If sandblast media cannot be fully contained, construct sediment traps downstream from blasting area where appropriate.
- Use fencing where appropriate in areas where blast media - cannot be fully contained.
- If necessary, install misting equipment to remove sandblast grit from the air - prevent runoff from misting operations from entering drainage systems.
- Use vacuum grit collection systems where possible.
- Keep records of sandblasting materials, procedures, and weather conditions on a daily basis.
- Take all reasonable precautions to ensure that sandblasting grit is contained and kept away from drainage structures.

Educational Issues
- Educate all on-site employees of potential dangers to humans and the environment from sandblast grit.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ● Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ● Maintenance
- ● Training
- ○ Suitability for Slopes >5%

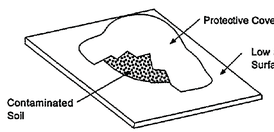
Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP
25

City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Contaminated Soil Management



DESCRIPTION
Prevent or reduce the discharge of pollutants to storm water from contaminated soil and highly acidic or alkaline soils by conducting pre-construction surveys, inspecting excavations regularly, and remediating contaminated soil promptly.

APPLICATIONS
Contaminated soils may occur on your site for several reasons including:
Past site uses and activities;
Detected or undetected spills and leaks; and

DESIGN CRITERIA
- Conduct thorough site planning including pre-construction geologic surveys.
- Look for contaminated soil as differences in soil properties.
- Seal bedrock fractures with grout or bentonite to reduce seepage from excavation.
- Prevent leaks and spills to the maximum extent practicable. Contaminated soil can be expensive to treat and/or dispose of properly. However, addressing the problem before building construction is much less expensive than after the buildings are in place.
- Test suspected soils at a certified laboratory.
- If the soil is contaminated, work with the local regulatory agencies to develop options for treatment and/or disposal.

LIMITATIONS
If necessary, use a private spill cleanup company.

MAINTENANCE REQUIREMENTS
Contaminated soils that cannot be treated on-site must be disposed of off-site by a licensed hazardous waste hauler.
The presence of contaminated soil may indicate contaminated water as well.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ◒ Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ◒ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ○ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

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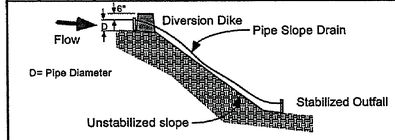
City of Baton Rouge
Parish of
East Baton Rouge

Department of Public Works

Pipe Slope Drain



DESCRIPTION
A pipe slope drain is a temporary pipe line typically utilizing flexible pipe that conveys runoff down unstabilized slopes. The drain is anchored on the upstream end with some form of headwall to limit erosion and secure the pipe.

PRIMARY USE
A pipe slope drain is used on sites with a long, unstabilized, steep slope area which is subject to erosion from overland flow. It is normally used in combination with interceptor swales or diversion dikes to direct the flow into the pipe area. The pipe slope drain can provide service for a relatively large area. It does not treat the runoff, therefore if the runoff contains sediment, treatment through a controlled outlet will be required before the flow is released offsite.

APPLICATIONS
Sites with large berms or grade changes such as roadway embankments are candidates for a pipe slope drain. Since provisions must be made to direct the flow into the pipe drain, some grading is normally required upstream of the pipe slope drain. Installed properly, slope erosion can be greatly reduced (but not entirely eliminated) through the use of the drain.

Pipe slope drains also require a stabilized outlet. This is critical since the velocities at the outfall are normally high. Velocity dissipators as well as stone or concrete rip rap are typically required to reduce the velocity and spread the flow, reducing erosion. Flow from a pipe slope drain should be routed to a sediment reduction practice through interceptor swales, diversion dikes or other suitable methods.

DESIGN CRITERIA
- The entrance to the pipe slope drain may be a standard corrugated metal pre-fabricated flared end section with an integral toe plate extending a minimum of 6 inches from the bottom of the end section. The grade of the entrance shall be 3 percent maximum.
- The berm at the entrance shall have a minimum height of the pipe diameter + 6" and a minimum width of 3 times the pipe diameter.
- All sections of the pipe slope drain shall be connected using watertight collars or gasketed watertight fittings.
- All sediment-laden runoff conveyed by the pipe slope drain shall be directed to a sediment trapping facility.
- Temporary pipe slope drains are to be sized to accommodate runoff flows equivalent to a 10 year storm as calculated using the Rational Method and

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ● Maintenance
- ○ Training
- ● Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

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City of Baton Rouge
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Department of Public Works

Sandblasting Waste Management

- Instruct all on-site employees of the potential hazardous nature of sandblast grit and the possible symptoms of over-exposure to sandblast grit.
- Instruct operators of sandblasting equipment on safety procedures and personal protection equipment.
- Instruct operators on proper procedures regarding storage, handling and containment of sandblast grit.
- Instruct operators to recognize unfavorable weather conditions regarding sandblasting activities.
- Instruct operators and supervisors on current local, state and federal regulations regarding fugitive dust and hazardous waste from sandblast grit.
- Have weekly meetings with operators to discuss and reinforce proper operational procedures.
- Establish a continuing education program to indoctrinate new employees.

Materials Handling Recommendations
- Sandblast media should always be stored under cover away from drainage structures.
- Ensure that stored media or grit is not subject to transport by wind.
- Ensure that all sandblasting equipment as well as storage containers comply with current local, state and federal regulations.
- Refer to Hazardous Waste BMP for hazardous components.
- Capture and treat runoff which comes into contact with sandblasting material or waste.

Quality Assurance
- Foremen and/or construction supervisor should monitor all sandblasting activities and safety procedures.
- Educate and if necessary, discipline workers who violate procedures.
- Take all reasonable precautions to ensure that sandblast grit is not transported off-site or into drainage facilities.

Requirements
- Education and awareness program for all employees regarding control of sandblasting and potential dangers to humans and the environment.
- Operator and supervisor education program for those directly involved in sandblasting activities
- Instructions on material handling, proper equipment operation, personal protective equipment, fugitive dust control, record keeping and reporting.
- Proper sandblast equipment for the job.
- Site-specific fugitive dust control and containment equipment.
- Site-specific fugitive dust control procedures.
- Compliance by supervisors and workers.

Costs
- Minimal cost for training and monitoring.
- Potential for significant cost for containment procedures on large jobs.
- Potential for significant costs associated with cleanup, correction and remediation if contamination occurs.

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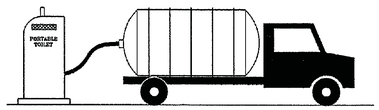
Department of Public Works

Sanitary/Septic Waste Management



DESCRIPTION
Prevent or reduce the discharge of pollutants to storm water from sanitary/septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

APPLICATIONS
This BMP is

DESIGN CRITERIA
- Sanitary or septic wastes should be treated or disposed of in accordance with State and local requirements.
- Locate sanitary facilities in a convenient location.
- Untreated raw sewage should never be discharged or buried.
- Temporary septic systems should treat wastes to appropriate levels before discharging.
- If using an on-site disposal system (OSDS), such as a septic system, contact the
- If discharging to the sanitary sewer, contact the local sewage treatment plant for their requirements.
- Sanitary/septic facilities should be maintained in good working order by a licensed service.
- Arrange for regular waste collection by a licensed hauler before facilities overflow.

LIMITATIONS
There are no major limitations to this best management practice.

MAINTENANCE REQUIREMENTS
Inspect facilities regularly. Arrange for regular waste collection.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents
- ○ Sediment
- ● Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ○ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

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City of Baton Rouge
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Department of Public Works

Pipe Slope Drain

Manning's equation, but in no case shall pipes be sized smaller than is shown in the following table:

Minimum Pipe Size	Maximum Contributing Drainage Area
12"	0.5 Acres
18"	1.5 Acres
21"	2.5 Acres
24"	3.5 Acres
30"	5.0 Acres

- Maximum drainage area for individual pipe slope drains shall be 5 acres. For areas larger than 5 acres, additional drains shall be added.
- Both the entrance and outfall of the pipe slope drain should be properly stabilized. Grass can normally be used at the entrance, but armor type stabilization such as stone or concrete rip rap is normally required to address the high velocities of the outfall.
- An effectiveness rating is based on the ratio of storm water routed away from the slope and into the pipe drain versus the total area of the drainage basin. A minimum value of 0.40 and a maximum value of 0.85 is used for the rating.

LIMITATIONS
- Drains must be located away from construction areas since the drain can easily be damaged by construction traffic.
- Securing the pipe to the slope can be difficult and require significant maintenance during the life of the system.
- In situations where pipe slope drains convey sediment-laden runoff, pipes can become clogged during large rain events causing water to overtop the diversion dike thereby creating a serious erosion condition.
- Grading is normally required upstream of the pipe slope drain in order to direct flow into the system. This can cause additional cost and maintenance.
- A pipe slope drain reduces erosion but does not prevent it or reduce the amount of sediment in runoff. Additional measures should be used in conjunction with the pipe slope drain to treat the flow.

MAINTENANCE REQUIREMENTS
Inspection must be made of the pipe after each significant (>0.5 inch) rain event to locate and repair any damage to joints or clogging of the pipe. In cases where the diversion dike has deteriorated from around the entrance of the pipe, it may be necessary to reinforce the dike with sandbags or to install a concrete collar to prevent failure. Signs of erosion around the pipe drain should be addressed in a timely manner by stabilizing the area with erosion control mats, crushed stone, concrete or other acceptable method.

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DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	9 OF 11

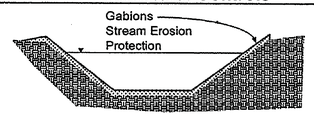
STORM WATER POLLUTION PREVENTION PLAN
BEST MANAGEMENT PRACTICES

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

903–01

Permanent Structural Controls



Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ● Sediment
- ○ Nutrients / Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP 29

City of Baton Rouge Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
Permanent erosion techniques consist of a wide variety of erosion prevention methods including gabions, retaining walls, and rip rap. These are not included as individual BMPs since they go beyond construction phase measures and due to the fact that their use is widespread in the region and the variety of design factors influencing design.

PRIMARY USE
Permanent erosion control is required at the completion of the construction phase of the project. This includes permanent structural methods as well as non-structural methods such as vegetation.

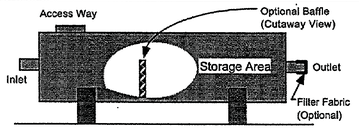
APPLICATIONS
Due to high installation cost and long term maintenance, permanent structural methods should be used only when necessary to address severe erosive conditions. In certain instances however, retaining walls are an effective method to reduce site slopes, reducing runoff velocity. Gabions and concrete rip-rap are effective in reducing stream bank erosion under severe concentrated flow conditions and at pipe outfalls.

DESIGN CRITERIA
Most structural controls such as gabions and rip-rap are designed based on the velocity of flow and the size of the stone used. Project plans will address this as part of standard details. Specifications for rip rap will be provided in design specifications for stone size based on the design velocity of flow across the structure. Manufacturers' information addresses stone size along with basket dimensions for gabions.

Design of retaining walls is based on a variety of structural conditions including soil compressive strength, wall height and water table influence. Tables of dimensions for retaining walls based on site conditions are available from a variety of sources including the Concrete Reinforcing Steel Institute (CRSI).

A critical aspect with regards to the design of many permanent controls is adequate anchoring of the structure to prevent undermining of the

Temporary Sediment Tank



Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients / Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ● Capital Costs
- ● Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP 30

City of Baton Rouge Parish of East Baton Rouge

Department of Public Works

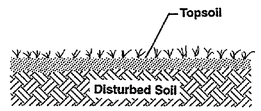
DESCRIPTION
A temporary sediment tank (TST) is a large truck mounted tank used to hold sediment laden water to provide for sedimentation and filtration. For smaller applications, 55 gallon drums or other water tight container can be used for storage. Water is pumped into the tank where it is detained. If desired an outlet with a geofabric filter can be provided to release the flow after a period of detention.

PRIMARY USE
A TST is typically used at construction sites in urban areas where conventional methods of sediment removal (e. g., sediment traps, sediment basins) are not practical.

APPLICATIONS
Applications for a TST include utility construction in confined areas (such as a business district or large developed area) or localized construction in which other BMPs are not required such as small, depressed construction (tank farms). This includes pumpage from excavation in heavily developed areas, such as a central business district, with flows due to groundwater or runoff entering the trench or excavated area.

DESIGN CRITERIA
- A TST can be used as either a sedimentation or filtration device. If an oil sheen is present in the runoff, additional treatment will be required before release of runoff.
- For use as a small scale sedimentation basin, de-watering discharge is directed into the TST to a level below the tank midpoint and held for a minimum of 2 hours to allow settlement of a majority of the suspended particles. The tank should be designed for a controlled release when the contents of the tank reach a level higher than the midpoint. When sediment occupies 1/3 the capacity of the TST, it should be removed from the tank.
- As a filtration device, a TST is used for collecting de-watering discharge and flowing it through a filtered opening at the outlet of

Topsoiling



Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ◒ Sediment
- ○ Nutrients / Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements
- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ◒ Suitability for Slopes >5%

Legend
- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

BMP 31

City of Baton Rouge Parish of East Baton Rouge

Department of Public Works

STANDARD FOR TOPSOILING[1]

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 vegetations, 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

Permanent Structural Controls

foundation and washout of sediment at the edges of the structure. Where applicable, proper anchoring in the form of embedment or 'toe in' of the structure is required.

LIMITATIONS
The initial cost is an important consideration in selection of permanent structural controls.

Stream bank erosion protection such as rip rap provides limited protection unless used extensively due to the potential for erosion at the edges of the rip rap.

MAINTENANCE REQUIREMENTS
Most stone or concrete structures require little maintenance, but may be subject to vandalism. As mentioned above, erosion around the structure may undermine the integrity of the structure. When maintenance is required, it is typically very extensive and costly.

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Department of Public Works

Temporary Sediment Tank

the tank to reduce suspended sediment volume. The filter opening in the TST should have an EOS (see silt fence BMP) of 70 or smaller.

LIMITATIONS
This is a specialized technique for the situations listed. It is not cost effective for normal sediment removal conditions.

The use of a temporary sediment tank is limited by the capacity of the tank, the time required for settlement of suspended material, and disposal of the water and the sediment.

MAINTENANCE REQUIREMENTS
The temporary sediment tank should be inspected periodically during and after use. A tank should be cleaned out when it becomes 1/3 full of sediment.

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Department of Public Works

Topsoiling

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 a 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.

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PROJECT NO.	SHEET

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 15417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2013

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	10 OF 11

STORM WATER POLLUTION PREVENTION PLAN
BEST MANAGEMENT PRACTICES

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION REVISIONS	BY

903–01

PROJECT NO.	SHEET

Topsoiling

Bonding - After 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 advantages 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

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Department of Public Works

Topsoiling

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.

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STATE OF LOUISIANA
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License No. 15417
PROFESSIONAL ENGINEER
IN
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2/14/2013

STANDARD PLAN NO.	DATED	SHEET NO.
903–01	FEBRUARY 25, 2008	11 OF 11

STORM WATER POLLUTION
PREVENTION PLAN
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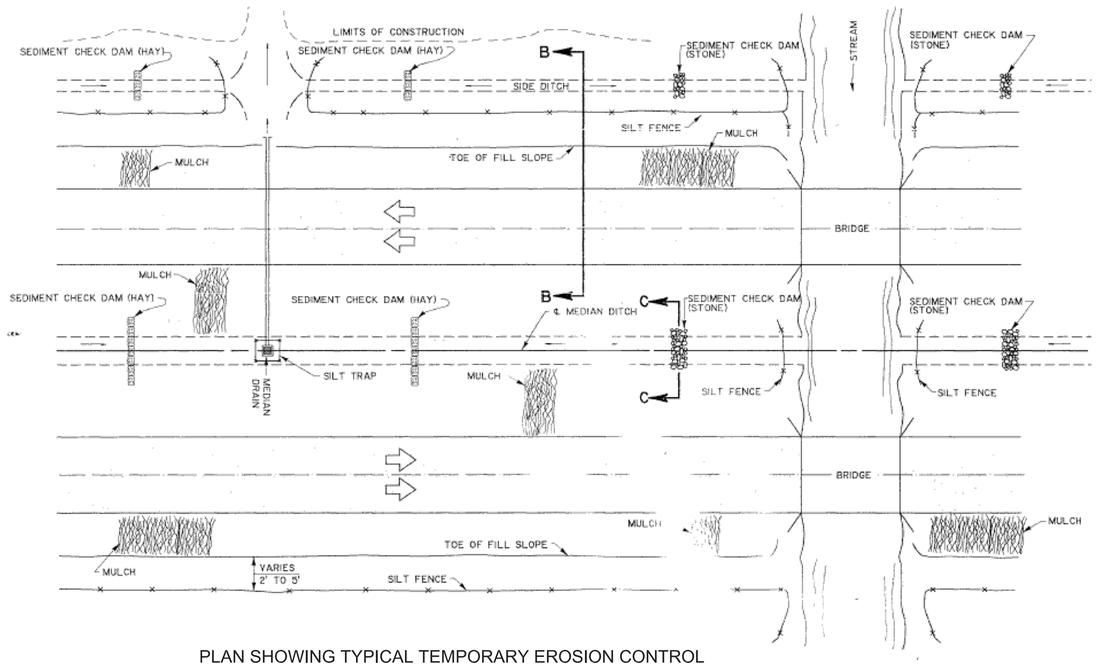
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

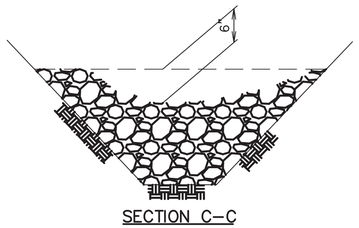
DATE	DESCRIPTION REVISIONS	BY



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 the Standard Specifications for mulches. 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.

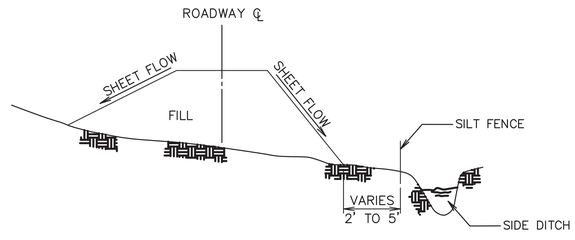


SECTION C–C

TEMPORARY SEDIMENT CHECK DAM (STONE)

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 stormwater flows, thereby reducing erosion of the 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:

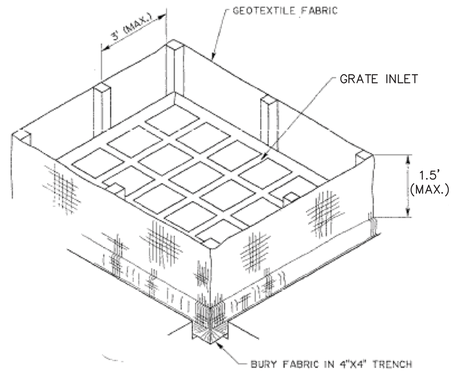
1. Use in small open channels which drain 10 acres or less;
2. Do not use in a live stream;
3. Use in a temporary ditch or swale which, because of their short length of service, cannot receive a non–erodible lining;
4. Use in permanent ditches or swales which will not receive a permanent lining for an 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 Section 705, 2lb class.



SECTION B–B

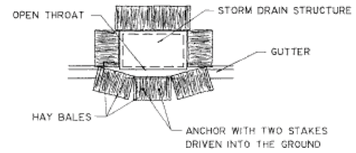
TEMPORARY SILT FENCE APPLICATION

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

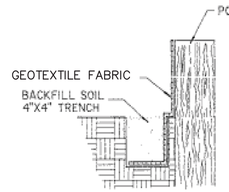


ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC

(BACKFILL SOIL NOT SHOWN)



PLAN SHOWING HAY BALES

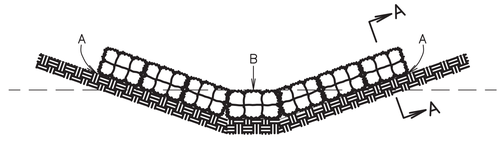


SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC

NOTES:
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. 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;
2. The height 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;
3. The trap should be inspected regularly after each storm. The sediment should be removed and make sure each stake is firmly in the ground.
4. The geotextile fabric shall conform to Type F or G as per Standard Specifications.

TEMPORARY INLET SILT TRAP



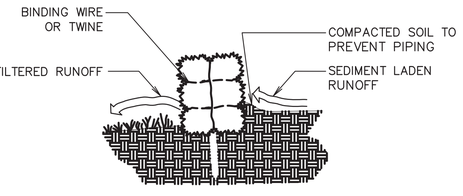
POINTS A SHOULD BE HIGHER THAN POINT B.

ELEVATION

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. 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.



SECTION A–A

LADOTD Standard Plan EC-01 has been adopted with modifications for use by the City/Parish as Standard Plan 903-02.

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/16/2012

PROJECT NO.	SHEET

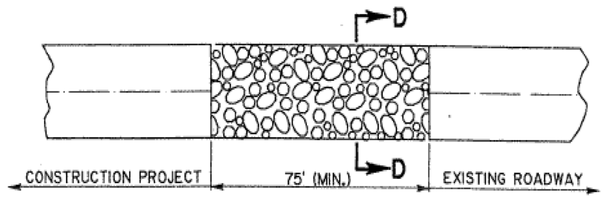
DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
903–02	November 28, 2009	1 OF 2

TEMPORARY EROSION CONTROL INSTALLATION DETAILS

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. L. P.	G. VANNICE	G. L. P.	T. STEPHENS



PLAN



SECTION D–D

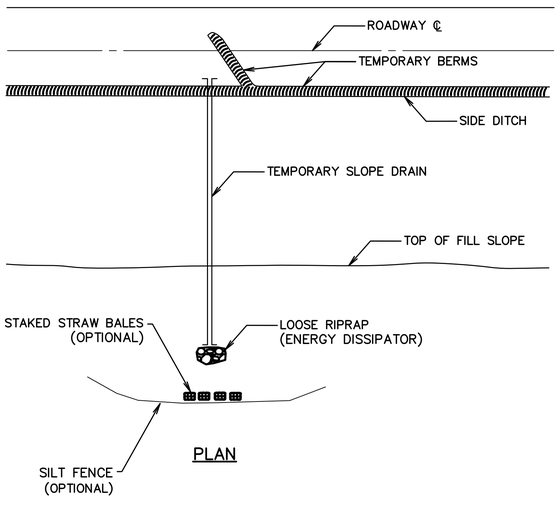
TEMPORARY STONE CONSTRUCTION ENTRANCE

PAY AS SPECIAL ITEM, TEMPORARY STONE CONSTRUCTION ENTRANCE

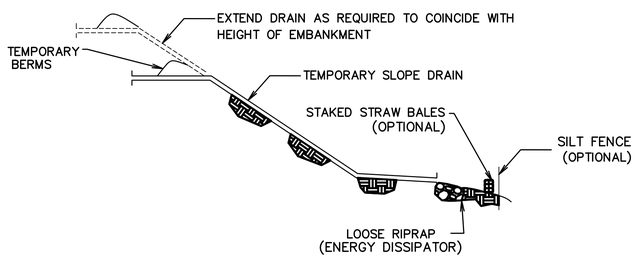
NOTES:
TEMPORARY STONE CONSTRUCTION ENTRANCE AND/OR WASH RACK

A stone stabilized pad located at points of vehicular ingress and egress on the construction site to reduce the amount of mud transported onto public roads. If the action of the vehicle traveling over the gravel pad is not sufficient to remove the majority of the mud, then the tires must be washed before the vehicle enters a public road. A few basic design guidelines for the use of a Stone Construction Entrance and/or Wash Racks are:

1. The stone layer must be a least 6 inches thick;
2. The length of the pad must be at least 75 feet and it must extend the Width of the vehicular ingress and egress;
3. A geotextile fabric underliner is required. The geotextile fabric shall be Type D or per the Standard Specifications;
4. 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.
6. For stone specifications, see Section 705, 2lb class.



PLAN



ELEVATION

TEMPORARY SLOPE DRAIN

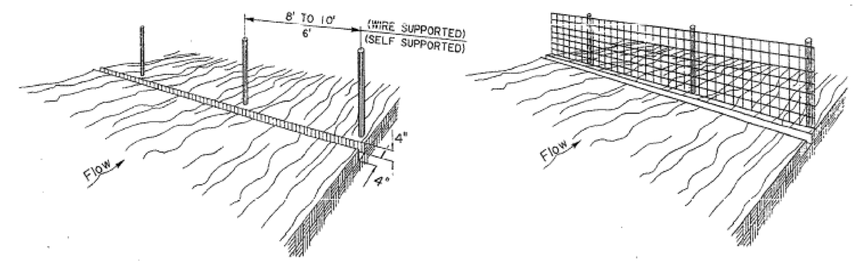
NOTES:
A temporary slope drain is a device used to carry water from the construction work area to a lower elevation. Slope drains may be plastic sheets, metal or plastic pipe, stone gutters, fiber mats, or concrete or asphalt ditches. A few basic design guidelines for the use of a Temporary Slope Drain are:

1. The spacing of the slope drains varies with the road grade.
   For Grades: 0.0% – 2.0% use 500' spacing
   2.1% – 5.0% use 200' spacing
   Greater than 5.0% use 100' spacing
2. Slope drain material: Smooth pipe – 8"minimum
   Corrugated pipe –12"minimum
   Plastic sheeting –4'wide minimum
   Plastic sheeting –3 mils thick minimum
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 silt fence or hay bales.
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 slit traps cleaned if necessary.

PROJECT NO.	SHEET

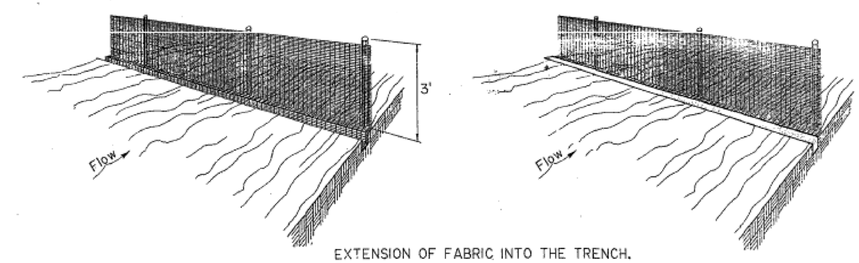
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.

2. STAPLE WIRE FENCING TO THE POSTS.

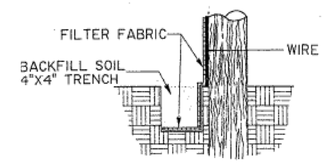


3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.

4. BACKFILL AND COMPACT EXCAVATED SOIL.



EXTENSION OF FABRIC INTO THE TRENCH.



CONSTRUCTION OF TEMPORARY SILT FENCING

(WIRE SUPPORTED SILT FENCE IS SHOWN. SELF SUPPORTED SILT FENCE WILL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.)

NOTES:
Silt fencing is a temporary sediment barrier consisting of a filter fabric support by post and stretched across an area to intercept and detain small amounts of sediment. Silt fencing shall be in accordance with Section 903 of the Standard Specifications. 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 where 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.

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
8/14/2012

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 903–02	DATED November 28, 2009	SHEET NO. 2 OF 2

TEMPORARY EROSION CONTROL INSTALLATION DETAILS

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

DESIGNED	DRAWN	CHECKED	APPROVED
G. L. P.	G. VANNICE	G. L. P.	T. STEPHENS

PROJECT NO.	SHEET

GENERAL PROVISIONS

- All Temporary Traffic Control (TTC) Devices used shall be in accordance with the City Parish Standard Specifications for Public Works Construction, the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), and the requirements of the National Cooperative Highway Research Program (NCHRP) 350 for Test Level 3. The MUTCD is available at http://mutcd.fhwa.dot.gov/
- The Contractor shall provide one or more authorized Traffic Control Supervisor (TCS) in accordance with the Standard Specifications.
- Materials used for Temporary Traffic Controls shall be in accordance with the City-Parish Standard Specifications for Public Works Construction and when applicable the City-Parish Qualified Products List (C-P QPL).
- No temporary traffic controls shall be erected without the approval of the City-Parish Traffic Engineer and until work is about to begin, unless they are covered.
- No lane closures, lane shifts, diversions, or detours shall occur without the authorization of the City-Parish Traffic Engineer.
- Responsibility is hereby placed upon the contractor for the installation, maintenance, and operation of all temporary traffic control devices called for in these plans or required by the Project Engineer for the protection of the traveling public as well as all Department and construction personnel. 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.
- The contractor shall also be responsible for the maintenance of all permanent signs and pavement markings left in place as essential to the safe movement and guidance of traffic within the project limits.
- The City-Parish Traffic Engineer shall serve as a technical advisor to the Project Engineer for all Traffic Control matters.
- 'Road Work XX Miles" sign shall be required on all projects and located at beginning of the project unless otherwise noted. The sign shall be a minimum 36"X60" unless otherwise noted.
- Warning signs used for lane closures or lane shifts in which the roadway shall be returned to full public use within 14 hours or less may be placed on NCHRP350 approved portable sign frames.
- The City-Parish will approve any detour route marking required to guide travelers around the construction area, but the contractor will be responsible for the required signage.

SPEED LIMITS

- Speed limits shall be lowered by 10 mph for any construction, maintenance, or utility operation that requires one or more of the following: (A) the condition of the original highway is degraded due to milled surfaces or uneven pavements; (B) work is in progress in the immediate vicinity of the travel way requiring lone closures, lone width reductions, or low speed diversions; (C) workers present on the shoulder within 2' of the edge of traveled way without barrier protection.
- The reduced speed zone shall only apply to those portions of the project limits affected. The Project Engineer may allow SPEED LIMIT WHEN FLASHING signs to supplement reduced speed zones.
- At the end of the reduced speed zone, a speed limit sign displaying the original speed limit before construction shall be installed.
- If conditions warrant, the City-Parish Traffic Engineer may authorize the reduction of the speed limit by more than 10 mph.

PAVEMENT MARKINGS (see C-P QPL)

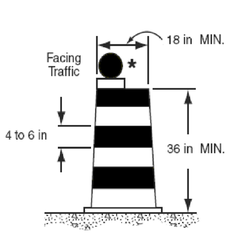
- All pavement markings within the limits of the project that are in conflict with the project signing or the required traffic movements shall be removed from the pavement by blast cleaning or grinding (Existing striping shall not be painted over with black paint or covered with tape).
- If special pavement markings are needed, they shall be reflectorized, removable, and accompanied by the proper signage.
- Temporary Raised Pavement Markers (RPMs) may be added to supplement temporary striping in areas of transition, in tapers, in detours, and in other areas of need as directed by the Project Engineer.
- Materials and placement of temporary pavement markings shall conform to Section 905 of the Standard Specifications. If no pay item exists, temporary markings will be considered incidental to traffic control.

SIGNS

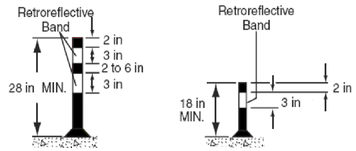
- All signs used for temporary traffic controls shall follow the Department's Standard Plans and the MUTCD. Signs shown in the Standard Plan illustrations are typical and may vary with each specific condition.
- More appropriate signing for a specific condition may be required or substituted with the approval of the Project Engineer and reviewed by the City Parish Traffic Engineer.
- When projects are separated by less than one mile, they shall be signed as one project.
- At no time shall signs warning against a particular operation be left in place once the operation has been completed or where the obstacle has been removed.
- Signs over 10 sq ft shall be mounted on two post and signs over 20 sq ft shall be mounted on at least three post.
- Signs shall have a minimum of two bolts per post.
- Permanent signs no longer applicable or in conflict shall be removed or covered with a strong, lightweight, opaque material.
- Warning signs used for temporary traffic controls shall meet the following guidelines unless otherwise noted in the plans: (A) size shall be 48' x 48', (B) see the Departments Standard Specifications and the C-P QPL for sheeting information, (C) a minimum of a 2 lb U-Channel post may be used driven to a minimum depth of 3', (D) sign height shall be a minimum of 5' above the roadway surface unless there is a concern for pedestrians or bicycle traffic in which it shall be a minimum of 7', (E) lateral distance of signs shall be a minimum of 6' from the edge of shoulder or edge of pavement if no shoulder exist and 2' from the back of curb in urban areas.
- Vinyl Roll Up signs will be allowed for short term (less than 12 hours) daytime work provided that they meet all size, color, retroreflectivity requirements, and NCHRP 350.
- Mesh rollup signs shall not be allowed on any project.
- All signs shall be removed or covered when no longer applicable.
- Contractor shall use caution not to damage existing signs which remain in place. Any signs damaged by work operations shall be replaced at the Contractor's expense.

CHANNELIZING DEVICES

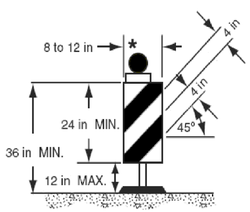
- The following devices may be used: Tubular Markers, Vertical Panels, Cones, Drums, and Super Cones. Drums (at standard spacing) and Super Cones (at 1/2 standard spacing) are the only devices allowed to be used in taper areas on the interstate system during daylight hours. Only drums can be used in tapers during night operations.
- Retroreflective material pattern used on super cones shall match that used on drums and conform to Section 1020-1.2(C) of the Standard Specifications.
- 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.
- 28" traffic cones are not allowed on: 1) Interstates, and 2) Highways with speeds greater than 40 mph.
- During night time operations: 1) 28" and 36" cones are not allowed, 2) drums are the only device allowed in the taper.



DRUM

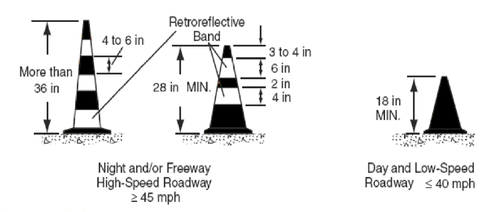


TUBULAR MARKERS

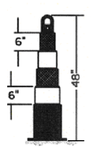


VERTICAL PANEL

* Warning lights (optional)



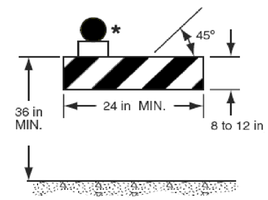
CONES



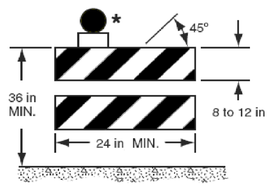
SUPER CONE

BARRICADES

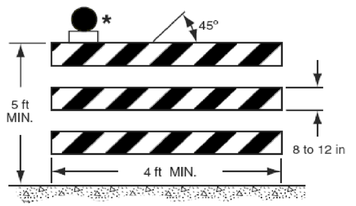
- Barricades shall be designed and applied in accordance with these standard plans and the current MUTCD guidance. Generally three types of barricades are used as below. Specific project applications shall be reviewed and approved by the City Parish Traffic Engineer and shall not deployed without such approval.
- Steady burn lights shall be used when barricades are used in a series for channelization.
- Type I barricades shall be used on low speed roads or urban streets.
- Type II barricades shall be used on high speed roads.
- Type III barricades shall be used to close a road section to traffic and shall extend completely across a roadway and its shoulders or from curb to curb
- When signs and lights are to be mounted to a barricade, they must meet NCHRP 350 requirements.



TYPE I BARRICADE **



TYPE II BARRICADE **



TYPE III BARRICADE **

* Warning lights (optional)

** Rail stripe widths shall be 6 in, except that 4 in wide stripes may be used if rail lengths are less than 36 in. The sides of barricades facing traffic shall have retroreflective rail faces.

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
PROFESSIONAL ENGINEER
IN
VERTICAL ENGINEERING

SEPTEMBER 28, 2007

STANDARD PLAN NO.	DATED	SHEET NO.
905–01	September 28, 2007	1 OF 3

TEMPORARY TRAFFIC CONTROL

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

DESIGNED	DRAWN	CHECKED	APPROVED
MUTCD	G. CHENG	B. HARMON	I. PARTENHEIMER

DATE	DESCRIPTION	BY
	REVISIONS	
8/6/10	STANDARD PLAN NO. REVISION.	G. C.

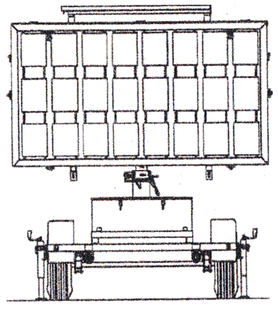
PROJECT NO.	SHEET

LIGHTING

- All temporary lighting shall be LED.
- Lighting shall supplement barricades that close one or more lanes or that extends across the roadway. A minimum of two 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 NCHRP 350.
- High intensity flashing lights shall be used to mark the first advance warning sign.
- Low intensity flashing lights shall be used to mark all other hazards off the travel way.
- Steady burning lights shall be used on all traffic control devices used for channelizations.
- Flashing units will be mounted as high as possible and battery compartments shall be mounted 6" from the ground.

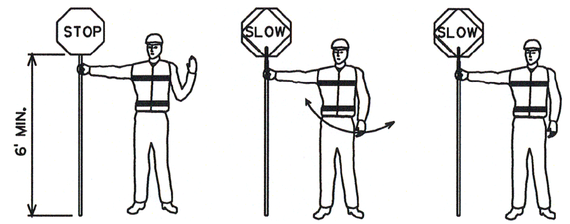
PORTABLE CHANGEABLE MESSAGE SIGNS

- When working within the traveled way, including shoulders and auxiliary lanes. Changeable Message Signs (CMS) shall be used on all Interstate Highways and on all other roadways (where space is available) with an ADT greater than 20,000 and should be delineated with retroreflective TTC devices.
- When used in advance of a lane closure or a lane shift, the CMS should be placed on the right hand side of the road a minimum distance of 2 miles in advance of the taper for Interstates and to be determined by the City-Parish Traffic Engineer on other roadways.
- CMS messages shall be approved by the City-Parish Traffic Engineer.
- When Portable Changeable Message signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers; or if the previous two options are not feasible, they should be delineated with retroreflective TTC devices.



FLAGGERS

- All flaggers must be qualified. The contractor shall be responsible for training or assuring that all flaggers are qualified to perform flagging duties. A certificate indicating completion of a flagger training course shall be available to the engineer if requested. A Qualified Flagger is one that has attended courses such as those offered by the American Traffic Safety Services Association (ATSSA) or other courses approved by the City-Parish.
- When utilized, a flagger shall use a minimum 18 inch sign on a minimum 6' stop/slow paddle and wear ANSI Class 2 vest during day time operations and ANSI Class 3 ensemble during night operations. In all flagging operations, the flagger must be visible from flagger advance warning sign.
- 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 feet is desirable. In urban areas, the advances distance may be decreased.

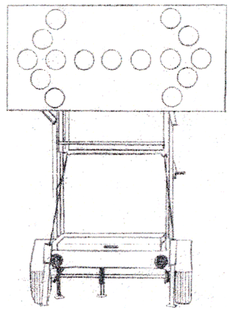


To STOP Traffic | Traffic Proceed | To Alert and Slow Traffic

USE OF HAND SIGN

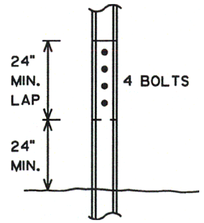
FLASHING ARROW PANELS

- Flashing Arrow Panels shall be used for lane closures on all facilities with 2 or more lanes in a single direction and a speed limit greater than 35 mph,
- When used, flashing arrow panels should be located on the shoulder at the beginning of the taper.
- Where the shoulder width is limited, the flashing arrow panel should be placed within the closed lane as close to the beginning of the taper as practical.
- All Flashing Arrow Panels shall be 4' x 8' Type C with LED lighting.
- When Flashing Arrow Panels signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers: or if the previous two options are not feasible, they should be delineated with retroreflective TTC devices.



ALLOWABLE LAP SPLICE FOR U-CHANNEL POST

- U-Channel posts may be spliced where long lengths are required. The upper section shall overlap the lower section by at least 24 inches. The bottom edge of the upper section of the splice shall be a minimum of 24 inches above the ground. The spliced sections shall be secured with at least four 5/16" inch diameter hexhead bolts spaced equally along the splice.



Front View

HIGHWAY-RAIL GRADE CROSSING

1. When a highway-rail grade crossing exists within or upstream of the merging taper and it is anticipated that backups resulting from the lane closure might extend through the highway-rail grade crossing, the TTC zone should be extended so that the merging taper precedes the highway-rail grade crossing.
2. When a highway-rail grade crossing exists within the activity area, provisions should be made to provide road users operating on the left side of the normal centerline with comparable warning devices as supplied for road users operating on the right side of the normal centerline.
3. When a highway-rail grade crossing exists within the activity area, early coordination with the railroad company should occur before work starts.
4. When a highway-rail grade crossing exists within the activity area, a flagger may be used at the highway-rail grade crossing to minimize the probability that vehicles are stopped within 15 ft of the highway-rail grade crossing, measured from both sides of the outside rails.
5. A truck-mounted attenuator may be used on the work vehicle and/or the shadow vehicle.

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

SEPTEMBER 28, 2007

DATE	DESCRIPTION REVISIONS	BY
8/6/10	STANDARD PLAN NO. REVISION.	G. C.

STANDARD PLAN NO.	DATED	SHEET NO.
905–01	September 28, 2007	2 OF 3

TEMPORARY TRAFFIC CONTROL

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

DESIGNED	DRAWN	CHECKED	APPROVED
MUTCD	G. CHENG	B. HARMON	I. PARTENHEIMER

PROJECT NO.	SHEET

Suggested Advance Warning Sign Spacing

Road Type	Distance Between Signs*		
	A	B	C
Urban (30 mph or less)	100	100	100
Urban (35 mph or more)	350	350	350
Rural	500	500	500

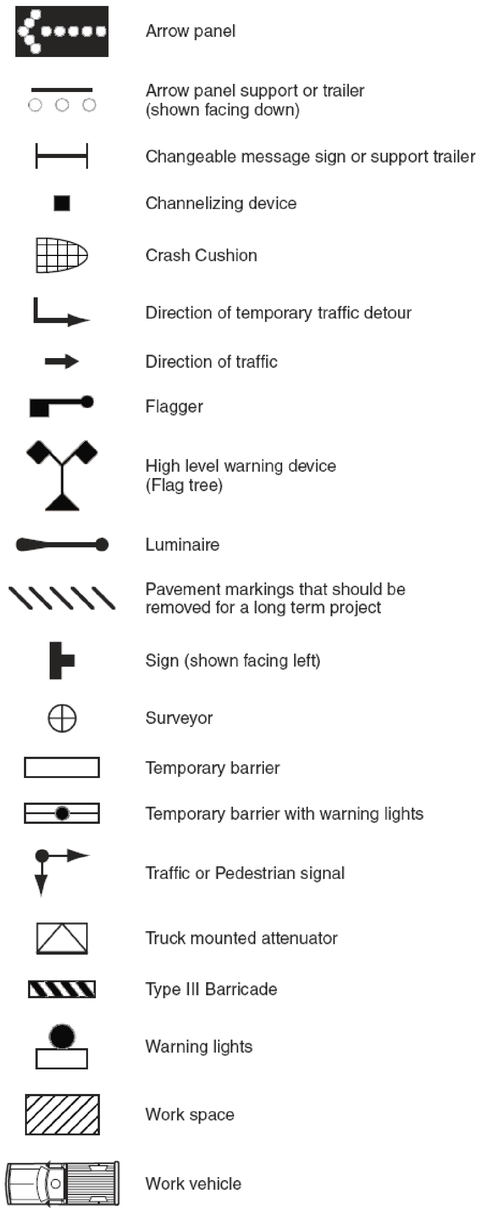
* Distances are shown in feet. The column headings A, B, and C are the dimensions shown in Typical Application Figures. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The third sign is the first one in a three-sign series encountered by a driver approaching a TTC zone.)

Formulas for Determining Taper Lengths

Speed Limit (S)	Taper Length (L) Feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where:
L = taper length in feet
W = width of offset in feet
S = posted speed limit in mph.

Meaning of Symbols on Typical Application Diagrams



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Information contained herewith was taken directly from the MUTCD 2003 version.

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

SEPTEMBER 28, 2007

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8/6/10	STANDARD PLAN NO. REVISION.	G. C.

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905–01	September 28, 2007	3 OF 3

TEMPORARY TRAFFIC CONTROL

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

DESIGNED	DRAWN	CHECKED	APPROVED
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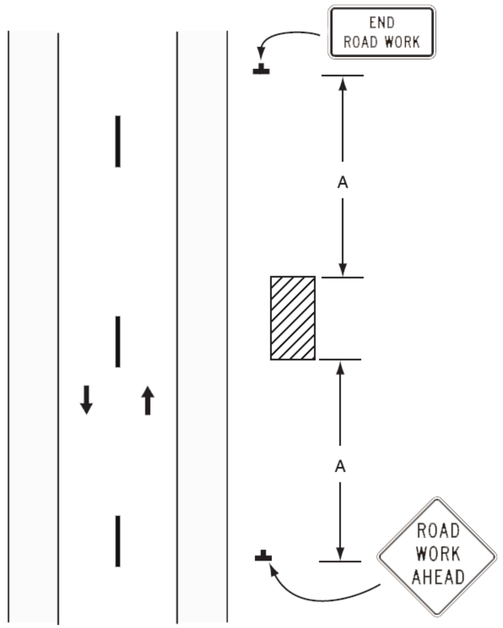

Figure TA-1
Work Beyond the Shoulder

Notes:

1. If the work space is in the median of a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.
2. The ROAD WORK AHEAD sign may be replaced with other appropriate signs such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.
3. For short-term, short-duration or mobile operation, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
4. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
5. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

This sheet shall be used with Standard Plan No. 905-01.

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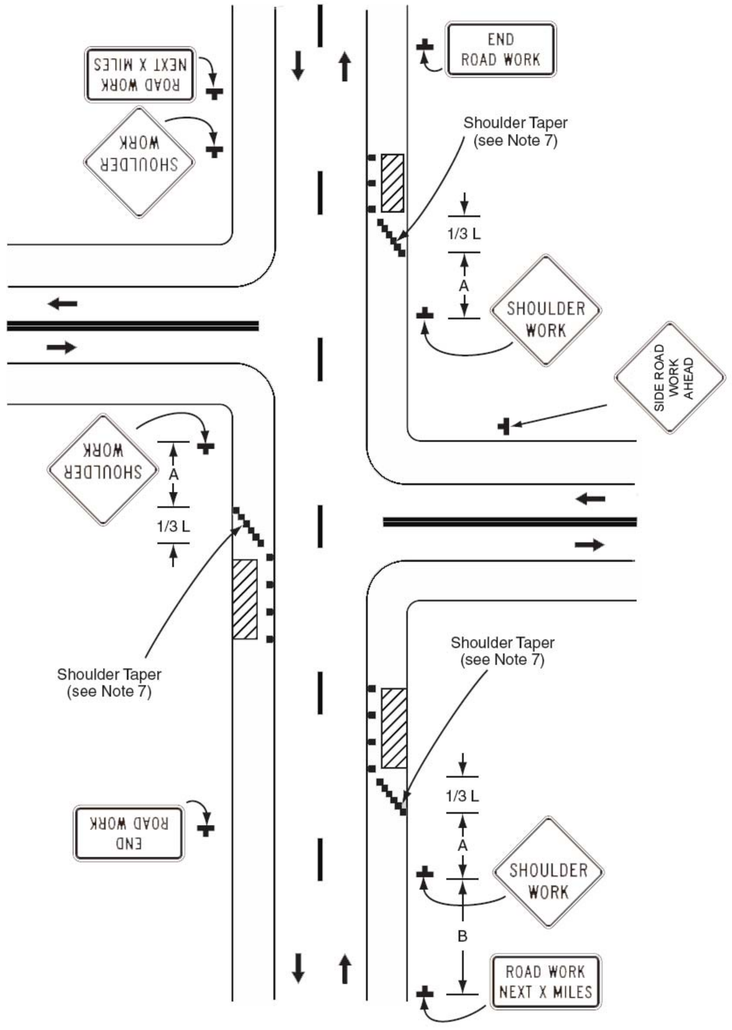

Figure TA-3
Work on Shoulders

Notes:

1. A SHOULDER WORK sign should be placed on the left side of the roadway for a divided or one-way street only if the left shoulder is affected.
2. The Workers symbol signs may be used instead of SHOULDER WORK signs.
3. The SHOULDER WORK AHEAD sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
4. For short-duration operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.
7. When paved shoulders having a width of 8 ft or more are closed, at least one advance warning sign shall be used. In addition, channelizing devices shall be used to close the shoulder in advance to delineate the beginning of the work space and direct vehicular traffic to remain within the traveled way.

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INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

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TEMPORARY TRAFFIC CONTROL
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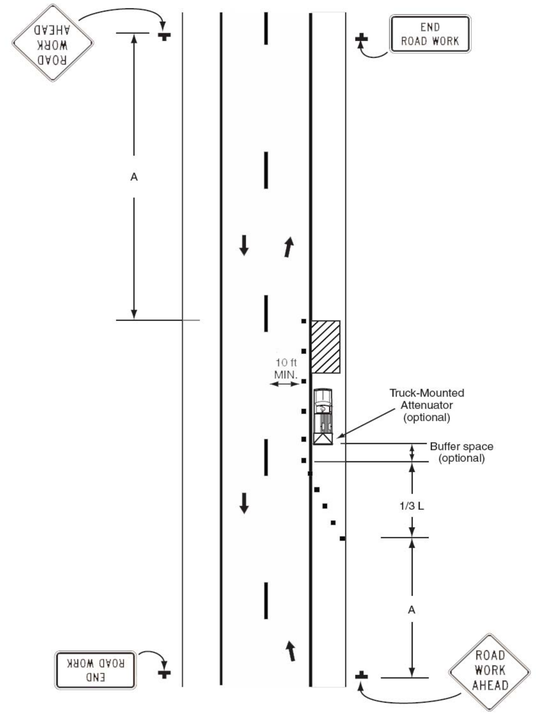

Figure TA-6
Shoulder Work with Minor Encroachment

Notes:

1. All lanes should be a minimum of 10 ft in width as measured to the near face of the channelizing devices.
2. The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.
3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 ft may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely spaced channelizing devices, provided that the minimum lane width of 10 ft is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
11. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

This sheet shall be used with Standard Plan No. 905-01.

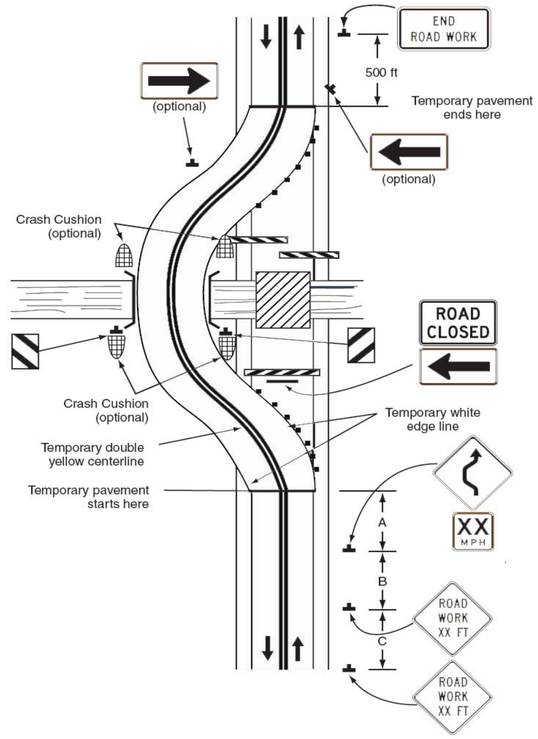

Figure TA-7
Road Closed with Diversion

Notes:

1. Signs and object markers are shown for one direction of travel only.
2. Devices similar to those depicted shall be placed for the opposite direction of travel.
3. Pavement markings no longer applicable shall be removed or obliterated as soon as practicable.
4. Temporary barriers and end treatments shall be crashworthy.
5. If the tangent distance along the temporary diversion is more than 600 ft, a Reverse Curve sign, left first, should be used instead of the Double Reverse Curve sign, and a second Reverse Curve sign, right first, should be placed in advance of the second reverse curve back to the original alignment.
6. When the tangent section of the diversion is more than 600 ft, and the diversion has sharp curves with recommended speeds of 30 mph or less, Reverse Turn signs should be used.
7. Where the temporary pavement and old pavement are different colors, the temporary pavement should start on the tangent of the existing pavement and end on the tangent of the existing pavement.
8. Flashing warning lights and/or flags may be used to call attention to the warning signs.
9. On sharp curves, large arrow signs may be used in addition to other advance warning signs.
10. Delineators or channelizing devices may be used along the diversion.

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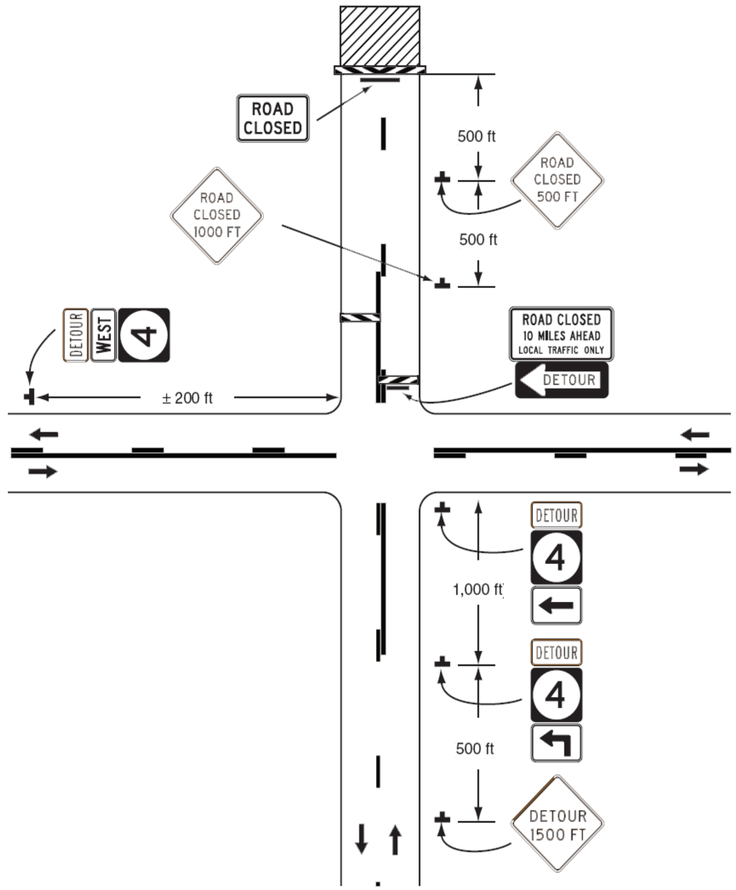

Figure TA-8
Roads Closed with Off-Site Detour

Notes:

1. Regulatory traffic control devices should be modified as needed for the duration of the detour.
2. If the road is opened for some distance beyond the intersection and/or there are significant origin/destination points beyond the intersection, the ROAD CLOSED and DETOUR signs on Type III Barricades may be located at the edge of the traveled way.
3. A Route Sign Directional assembly may be placed on the far left corner of the intersection to augment or replace the one shown on the near right corner.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. Cardinal direction plaques may be used with route signs.

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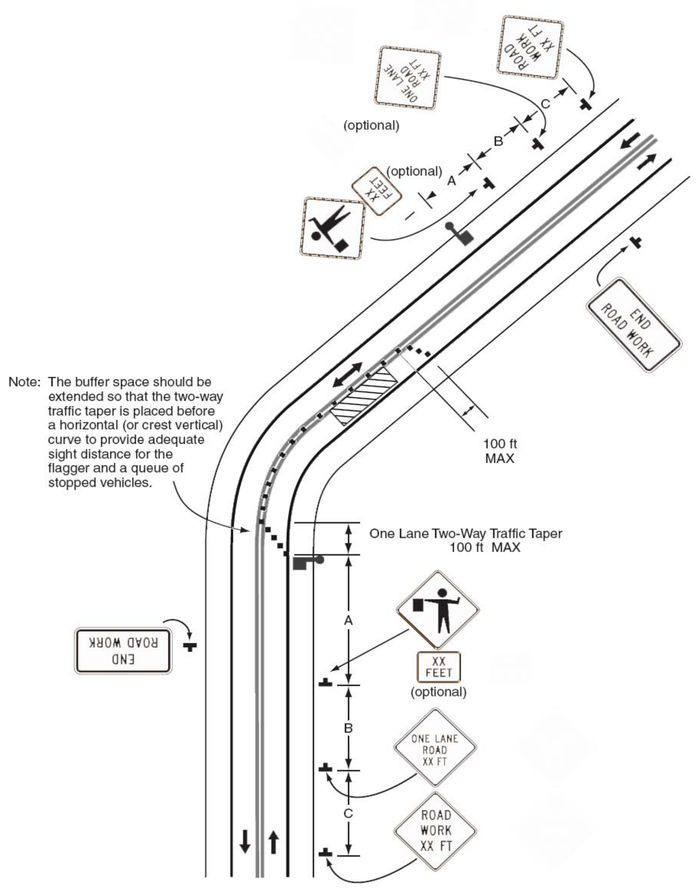

Figure TA-10
Lane Closure on Two-Lane Road Using Flaggers

Notes:

1. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used.
2. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
3. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

a. A BE PREPARED TO STOP sign may be added to the sign series.

4. The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.
5. At night, flagger stations shall be illuminated, except in emergencies.
6. When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.

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INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

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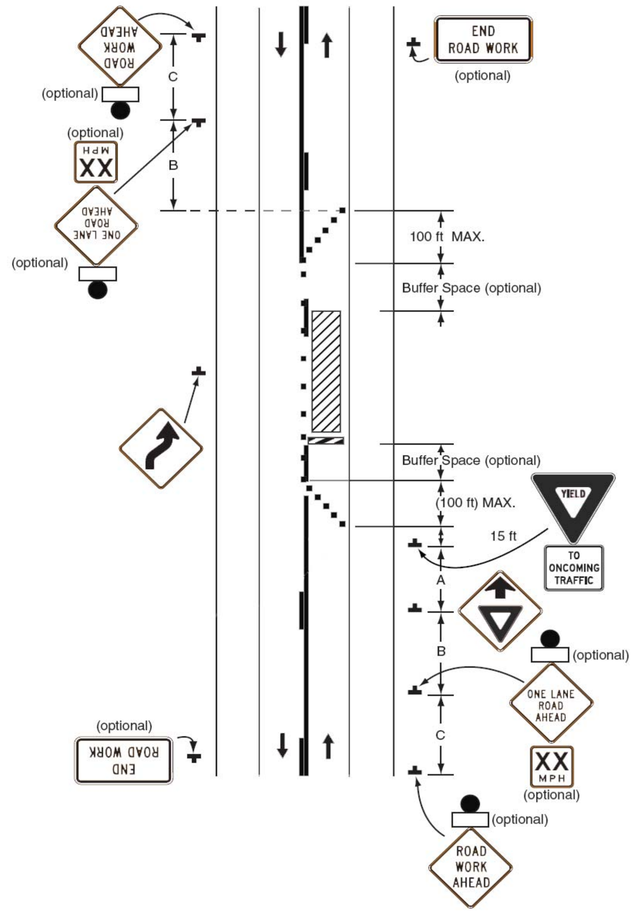

Figure TA-11
Lane Closure on Two-Lane Road with Low Traffic Volumes

Notes:

1. This TTC zone application may be used as an alternate to the TTC application shown in Figure TA-10 (using flaggers) when the following conditions exist:
   a. Vehicular traffic volume is such that sufficient gaps exist for vehicular traffic that must yield.
   b. Road users from both directions are able to see approaching vehicular traffic through and beyond the work site and have sufficient visibility of approaching vehicles.
2. The Type B flashing warning lights shall be placed on the ROAD WORK AHEAD and the ONE LANE ROAD AHEAD signs whenever a night lane closure is necessary.

This sheet shall be used with Standard Plan No. 905-01.

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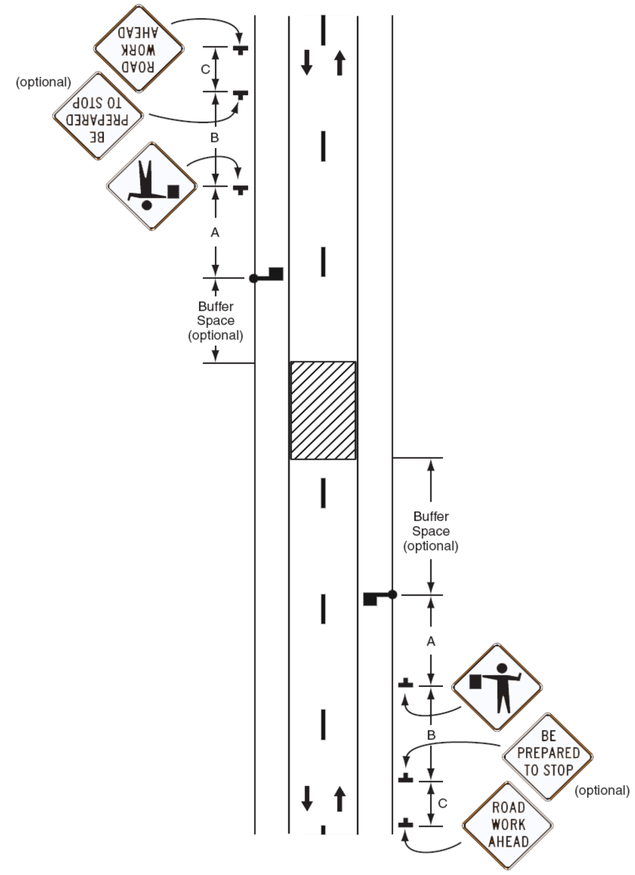

Figure TA-13
Temporary Road Closure

Notes:

1. Conditions represented are a planned closure not exceeding 20 minutes during the daytime.
2. A flagger or uniformed law enforcement officer shall be used for this application.
3. A BE PREPARED TO STOP sign may be added to the sign series.
4. When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.

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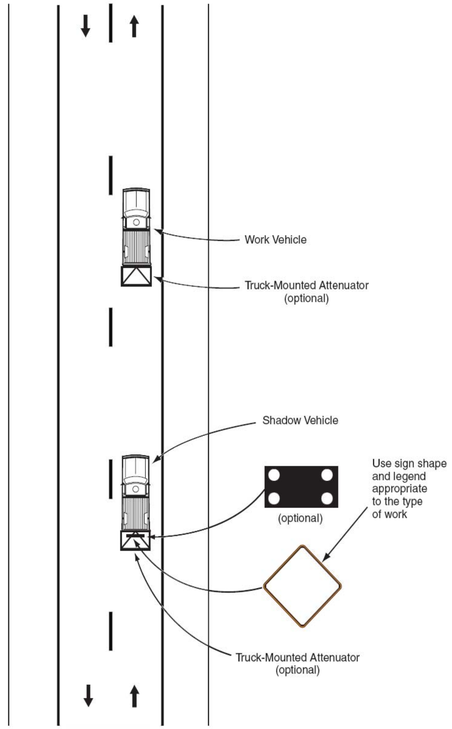

Figure TA-17
Mobile Operations on Two-Lane Road

Notes:

1. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
2. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
3. If an arrow panel is used, it shall be used in the caution mode.
4. Where practical and when needed, the work and shadow vehicles should pull over periodically to allow vehicular traffic to pass.
5. Whenever adequate stopping sight distance exists to the rear, the shadow vehicle should maintain the minimum distance from the work vehicle and proceed at the same speed. The shadow vehicle should slow down in advance of vertical or horizontal curves that restrict sight distance.
6. The shadow vehicles should also be equipped with two high-intensity flashing lights mounted on the rear, adjacent to the sign.
7. The distance between the work and shadow vehicles may vary according to terrain, paint drying time, and other factors.
8. Additional shadow vehicles to warn and reduce the speed of oncoming or opposing vehicular traffic may be used. Law enforcement vehicles may be used for this purpose.
9. A truck-mounted attenuator may be used on the shadow vehicle or on the work vehicle.
10. If the work and shadow vehicles cannot pull over to allow vehicular traffic to pass frequently, a DO NOT PASS sign may be placed on the rear of the vehicle blocking the lane.
11. Shadow vehicles are used to warn motor vehicle traffic of the operation ahead.
12. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

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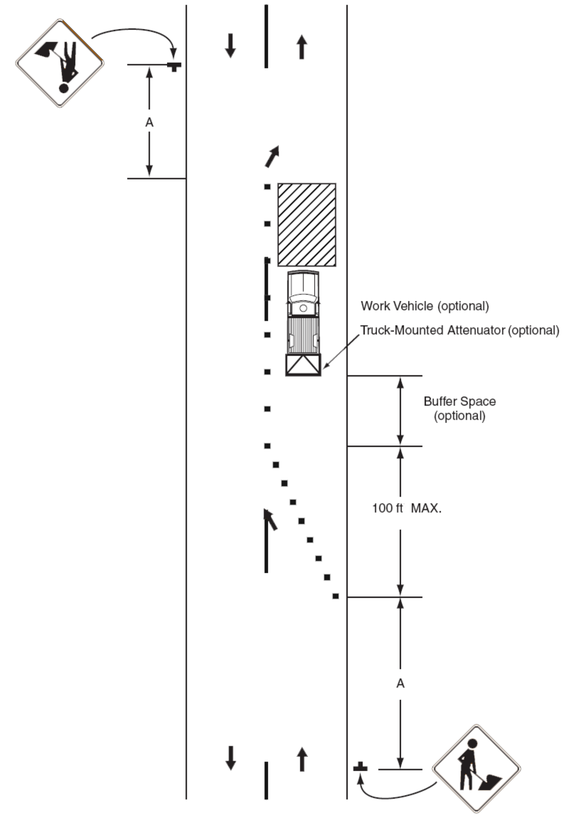

Figure TA-18
Lane Closure on Minor Street

Notes:

1. This TTC shall be used only for low-speed facilities having low traffic volumes.
2. Where the work space is short, where road users can see the roadway beyond, and where volume is low, vehicular traffic may be self-regulating.
3. Where vehicular traffic cannot effectively self-regulate, one or two flaggers shall be used as illustrated in Figure TA-10.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. A truck-mounted attenuator may be used on the work vehicle and the shadow vehicle.

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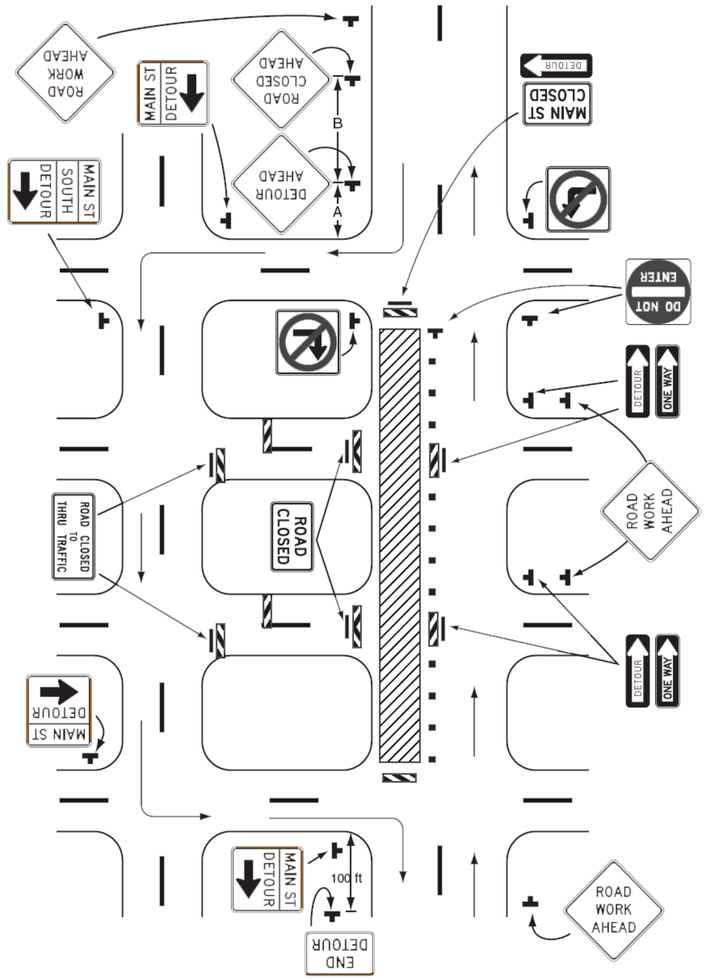

Figure TA-19
Detour for One Travel Direction

Notes:

1. This plan should be used for streets without posted route numbers.
2. On multi-lane streets, Detour signs with an Advance Turn Arrow should be used in advance of a turn.
3. The STREET CLOSED legend may be used in place of ROAD CLOSED.
4. Additional DO NOT ENTER signs may be used at intersections with intervening streets.
5. Warning lights may be used on Type III Barricades.
6. Detour signs may be located on the far side of intersections.
7. A Street Name sign may be mounted with the Detour sign. The Street Name sign may be either white on green or black on orange.
8. When used, the Street Name sign shall be placed above the Detour sign.

This sheet shall be used with Standard Plan No. 905-01.

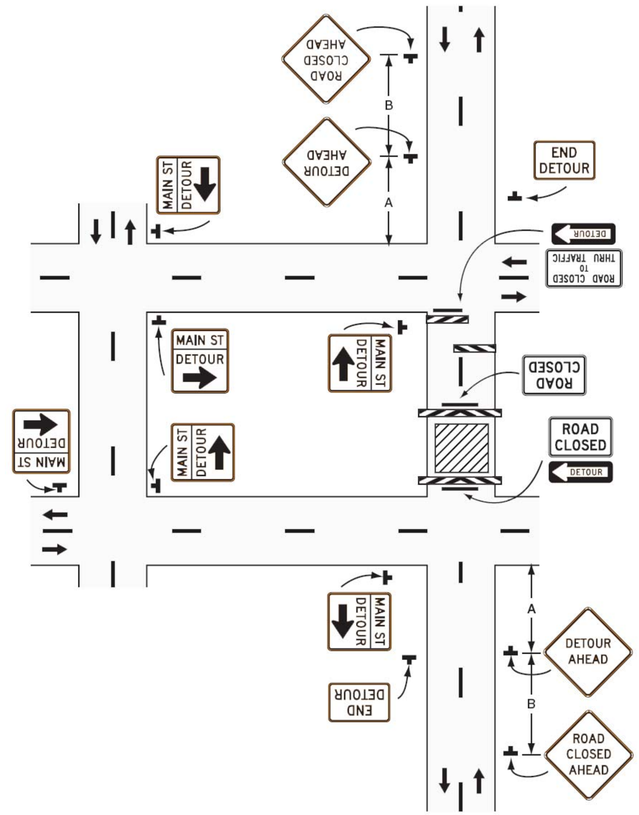

Figure TA-20
Detour for Closed Street

Notes:

1. This plan should be used for streets without posted route numbers.
2. On multi-lane streets, Detour signs with an Advance Turn Arrow should be used in advance of a turn.
3. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
4. Flashing warning lights may be used on Type III Barricades.
5. Detour signs may be located on the far side of intersections. A Detour sign with an advance arrow may be used in advance of a turn.
6. A Street Name sign may be mounted with the Detour sign. The Street Name sign may be either white on green or black on orange.
7. When used, the Street Name sign shall be placed above the Detour sign.

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REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

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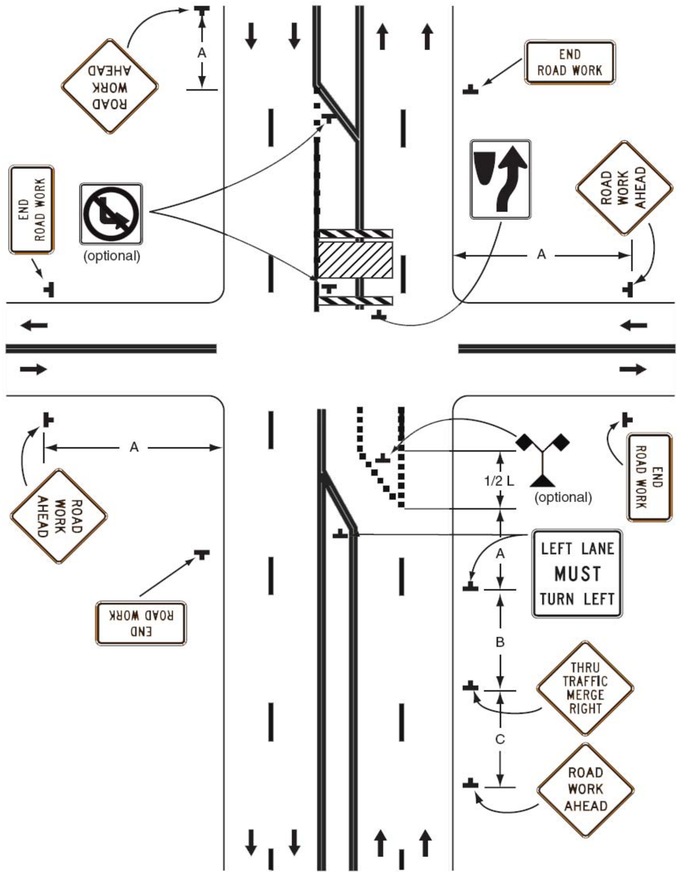

Figure TA-25
Multiple Lane Closures at Intersection

Notes:

1. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TA-14.
2. If the left through lane is closed on the near-side approach, the LEFT LANE MUST TURN LEFT sign should be placed in the median to discourage through vehicular traffic from entering the left-turn bay.
3. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. If the left-turning movement that normally uses the closed turn bay is small and/or the gaps in opposing vehicular traffic are frequent, left turns may be permitted on that approach.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

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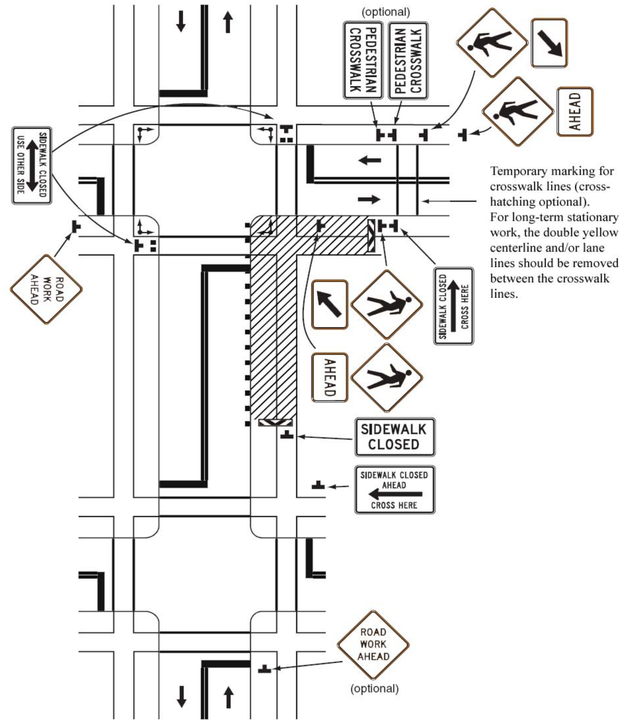

Temporary marking for crosswalk lines (cross-hatching optional). For long-term stationary work, the double yellow centerline and/or lane lines should be removed between the crosswalk lines.

Figure TA-29
Crosswalk Closures and Pedestrian Detours

Notes:

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.
2. Curb parking shall be prohibited for at least 50 ft in advance of the midblock crosswalk.
3. Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.
4. Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.
5. Street lighting may be considered.
6. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS signs, may be used to control vehicular traffic.
7. For nighttime closures, Type A Flashing warning lights may be used on barricades supporting signs and closing sidewalks.
8. Type C Steady-Burn warning lights may be used on channelizing devices separating the work space from vehicular traffic.
9. In order to maintain the systematic use of the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs in a jurisdiction, the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC zones.

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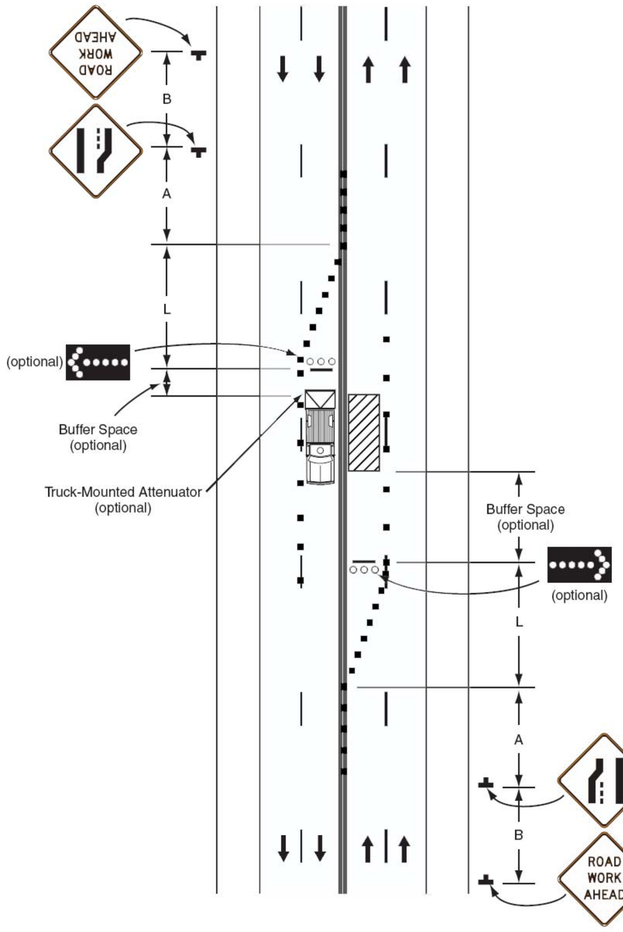


Figure TA-30
Interior Lane Closure on Multi-lane Street

Notes:

1. This information applies to low-speed, low-volume urban streets. Where speed or volume is higher, additional signing such as LEFT LANE CLOSED XX FT should be used between the signs shown.
2. The closure of the adjacent interior lane in the opposing direction may not be necessary, depending upon the activity being performed and the work space needed for the operation.
3. Shadow vehicles with a truck-mounted attenuator may be used.

This sheet shall be used with Standard Plan No. 905-01.

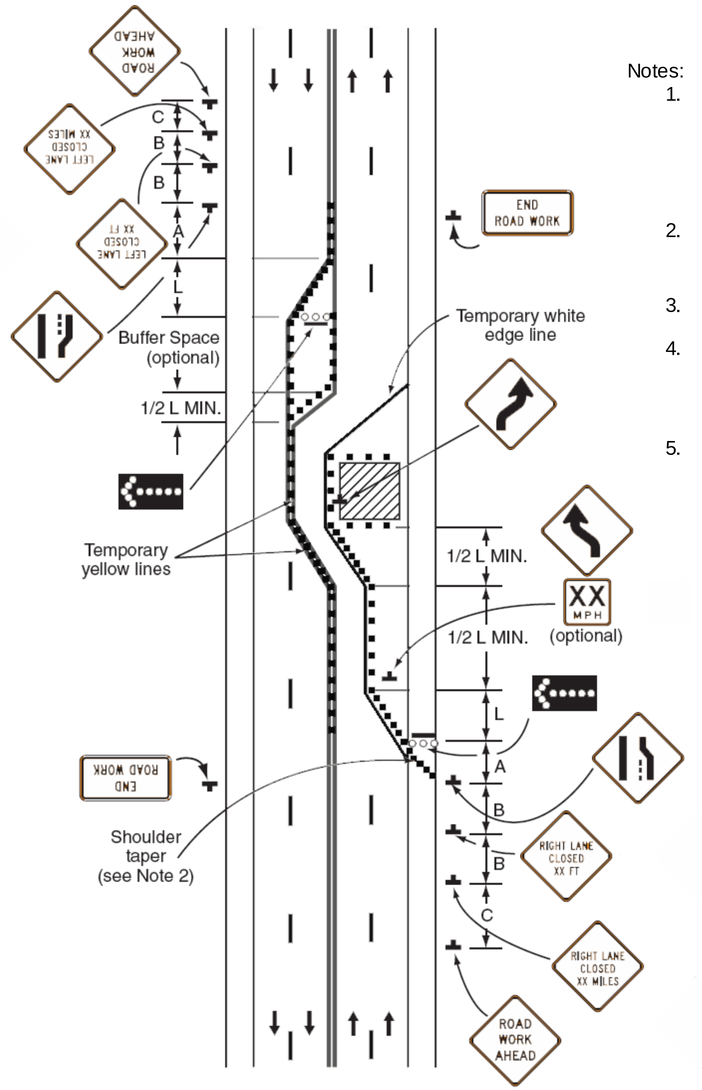


Figure TA-32
Half Road Closure on Multi-lane, High-Speed Highway

Notes:

1. Pavement markings no longer applicable shall be removed or obliterated as soon as practical. Except for intermediate-term and short-term situations, temporary markings shall be provided to clearly delineate the temporary travel path. For short-term and intermediate-term situations where it is not feasible to remove and restore pavement markings, channelization shall be made dominant by using a very close device spacing.
2. When paved shoulders having a width of 8 ft or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.
3. Where channelizing devices are used instead of pavement markings, the maximum spacing should be 0.5 S feet where S is the speed in mph.
4. If the tangent distance along the temporary diversion is more than 600 ft, a Reverse Curve sign, left first, should be used instead of the Double Reverse Curve sign, and a second Reverse Curve sign, right first, should be placed in advance of the second reverse curve back to the original alignment.
5. Warning lights may be used to supplement channelizing devices at night.

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
PROFESSIONAL ENGINEER IN TRAFFIC ENGINEERING

SEPTEMBER 28, 2007

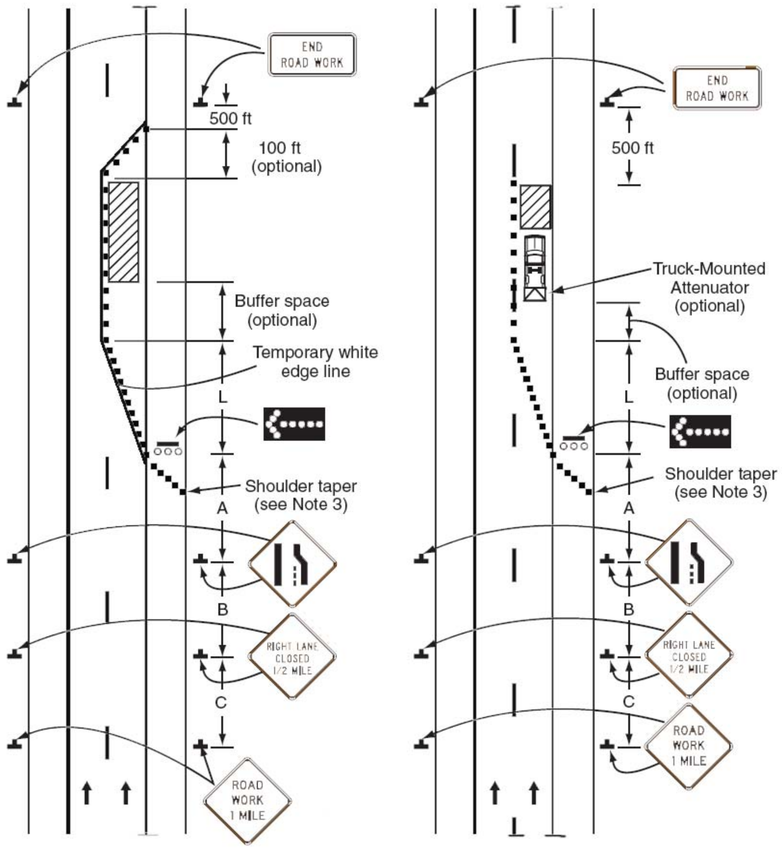
DATE	DESCRIPTION REVISIONS	BY
8/6/10	STANDARD PLAN NO. & NOTES REVISION.	G. C.

STANDARD PLAN NO.	DATED	SHEET NO.
905–09	September 28, 2007	1 OF 1

TEMPORARY TRAFFIC CONTROL
TYPICAL APPLICATIONS

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

DESIGNED	DRAWN	CHECKED	APPROVED
MUTCD	G. CHENG	B. HARMON	I. PARTENHEIMER



LONG-TERM AND INTERMEDIATE

SHORT-TERM

Figure TA-33
Lane Closure on Divided Highway

Notes:

1. This information also shall be used when work is being performed in the lane adjacent to the median on a divided highway. In this case, the LEFT LANE CLOSED signs and the corresponding Lane Ends signs shall be substituted.
2. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.
3. When paved shoulders having a width of 8 ft or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.
4. A truck-mounted attenuator may be used on the work vehicle and/or shadow vehicle.
5. Where conditions permit, restricting all vehicles, equipment, workers, and their activities to one side of the roadway might be advantageous.

This sheet shall be used with Standard Plan No. 905-01.

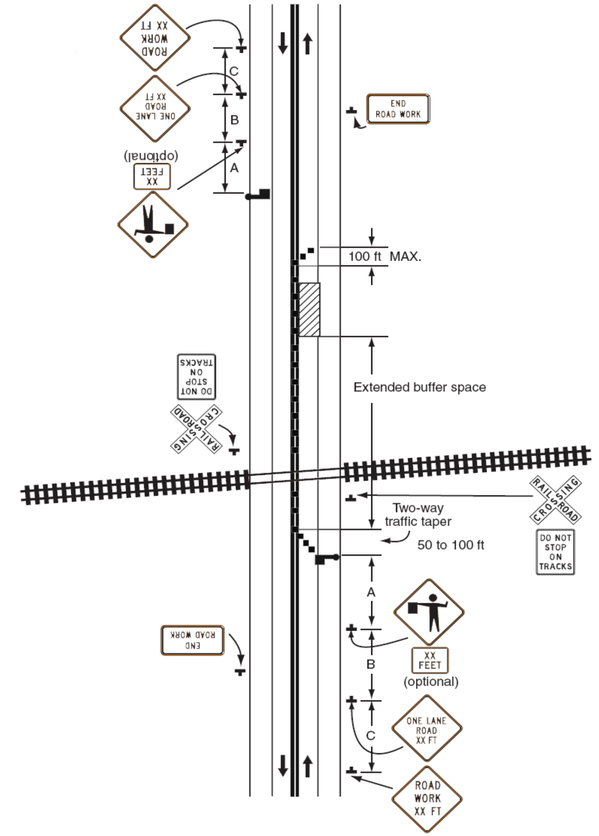


Figure TA-46
Work in Vicinity of Highway-Rail Grade Crossing

Notes:

1. When highway-rail grade crossings exist either within or in the vicinity of roadway work activities, extra care should be taken to minimize the probability of conditions being created, either by lane restrictions, flagging or other operations, where vehicles might be stopped within the highway-rail grade crossing, considered as being 15 ft on either side of the closest and farthest rail.
2. If the queuing of vehicles across active rail tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing (as described in Note 1), even if automatic warning devices are in place.
3. Early coordination with the railroad company should occur before work starts.
4. In the example depicted, the buffer space of the activity area should be extended upstream of the highway-rail grade crossing (as shown) so that a queue created by the flagging operation will not extend across the highway-rail grade crossing.
5. The DO NOT STOP ON TRACKS sign should be used on all approaches to a highway-rail grade crossing within the limits of a TTC zone.
6. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
7. A BE PREPARED TO STOP sign may be added to the sign series.
8. When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.
9. At night, flagger stations shall be illuminated, except in emergencies.

PROJECT NO.	SHEET

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

SEPTEMBER 28, 2007

STANDARD PLAN NO.	DATED	SHEET NO.
905–10	September 28, 2007	1 OF 1

TEMPORARY TRAFFIC CONTROL
TYPICAL APPLICATIONS

DATE	DESCRIPTION	BY
8/6/10	STANDARD PLAN NO. & NOTES REVISION.	G. C.

REVISIONS

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

DESIGNED	DRAWN	CHECKED	APPROVED
MUTCD	G. CHENG	B. HARMON	I. PARTENHEIMER

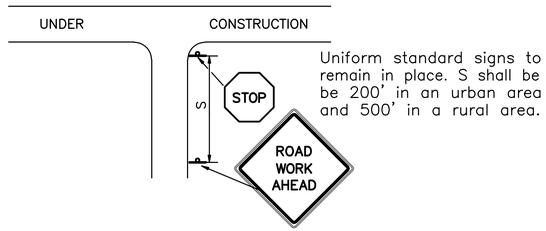
PROJECT NO.	SHEET
	229

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



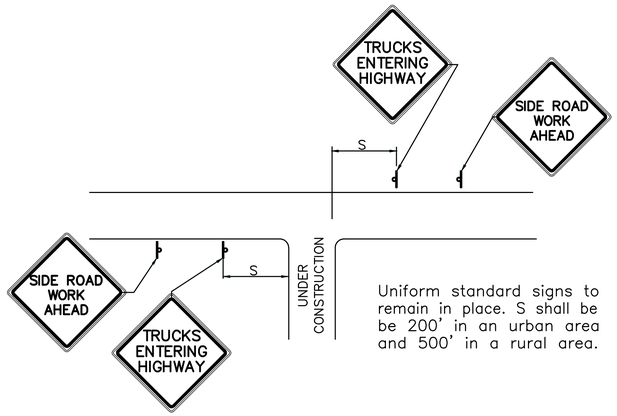
36" x 36"
Legend 5" Series C

SIDE ROAD WORK AHEAD SIGN



Uniform standard signs to remain in place. S shall be be 200' in an urban area and 500' in a rural area.

SIGNING FOR SIDE ROAD APPROACH TO CONSTRUCTION PROJECT



Uniform standard signs to remain in place. S shall be be 200' in an urban area and 500' in a rural area.

SIDE ROAD WORK

This sheet shall be used with Standard Plan No. 905-01 and 905-02.

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN PRACTICAL ENGINEERING

SEPTEMBER 28, 2007

STANDARD PLAN NO.	DATED	SHEET NO.
905-30	September 28, 2007	1 OF 1

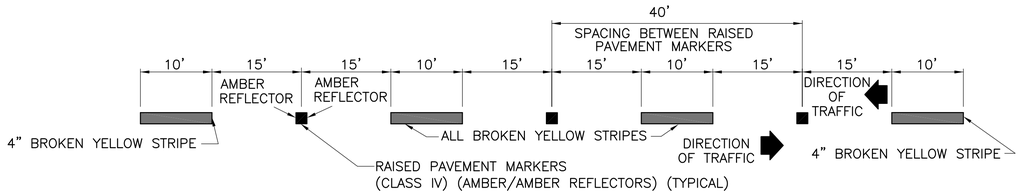
TEMPORARY TRAFFIC CONTROL
LOCAL APPLICATIONS

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

DESIGNED	DRAWN	CHECKED	APPROVED
MUTCD	G. CHENG	B. HARMON	I. PARTENHEIMER

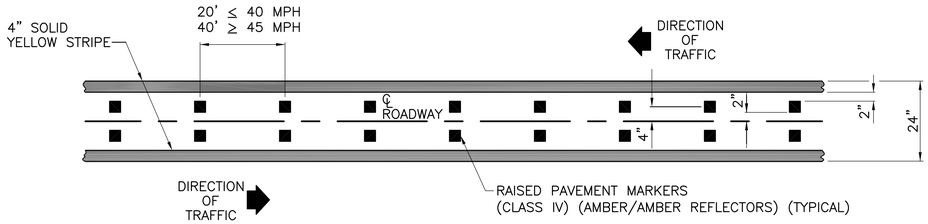
DATE	DESCRIPTION	BY
	REVISIONS	

PROJECT NO.	SHEET
	224



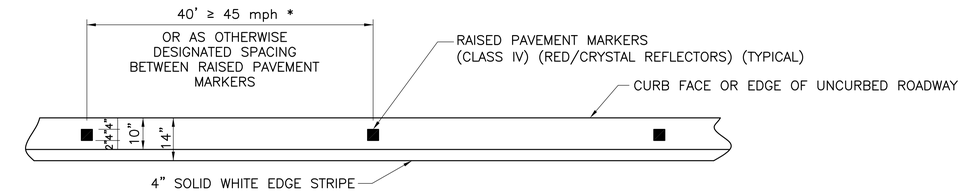
TWO–LANE, TWO–WAY, PASSING CENTERLINE STANDARD

TO BE USED ALONG ℄ OF TWO–LANE ROADWAY WITH TWO–WAY TRAFFIC



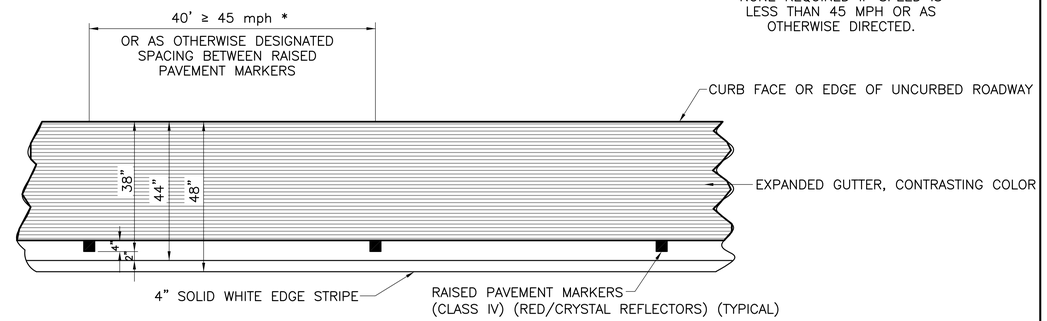
MULTILANE, TWO–WAY, NO PASSING, CENTERLINE STANDARD

TO BE USED ALONG ℄ OF MULTI–LANE UNDIVIDED HIGHWAY



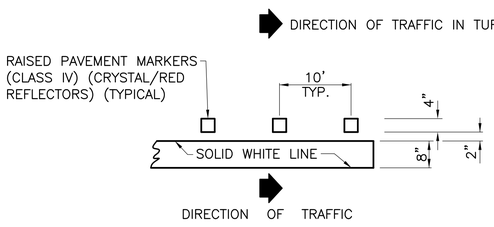
CURB EDGELINE STANDARD

TYPICAL ROADWAY EDGE PAVEMENT MARKERS

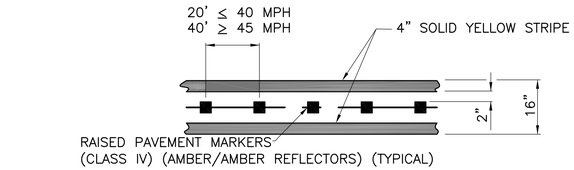


CURB EDGELINE STANDARD WITH EXPANDED GUTTER

TYPICAL ROADWAY EDGE PAVEMENT MARKERS

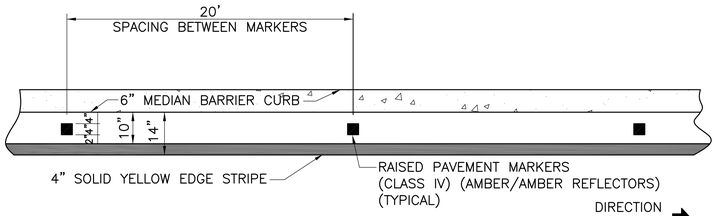


DETAIL OF RAISED PAVEMENT MARKER PLACEMENT



TWO–LANE, TWO–WAY, NO PASSING CENTERLINE STANDARD

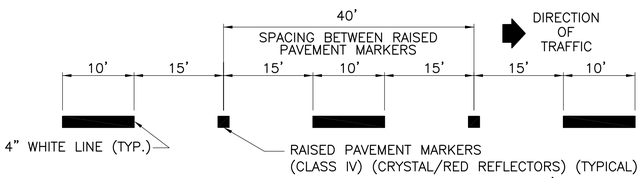
TO BE USED ALONG ℄ OF TWO LANE, TWO–WAY
ROADWAY WHERE NO PASSING IS ALLOWED



MEDIAN EDGELINE STANDARD

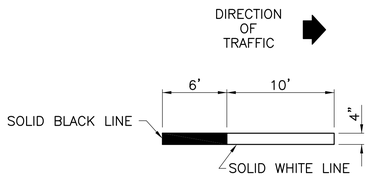


JUNE 13, 2008



LANELINE STANDARD

TO BE USED ALONG LANE LINES FOR ONE–WAY TRAFFIC
IN RURAL AREAS, AND ON URBAN SECTIONS OF MULTI–LANE ROADWAYS.



LANE LINE STRIPE DETAIL – LEADING SHADOW

TO BE USED ON PORTLAND CEMENT
CONCRETE STREETS WITH POSTED SPEED
45 MPH OR GREATER AND ON ALL
BRIDGES AND APPROACH SLABS
REGARDLESS OF POSTED SPEED LIMIT.

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 905–50	DATED JUNE 13, 2008	SHEET NO. 1 OF 7

ROADWAY MARKING
AND
TYPICAL DETAILS

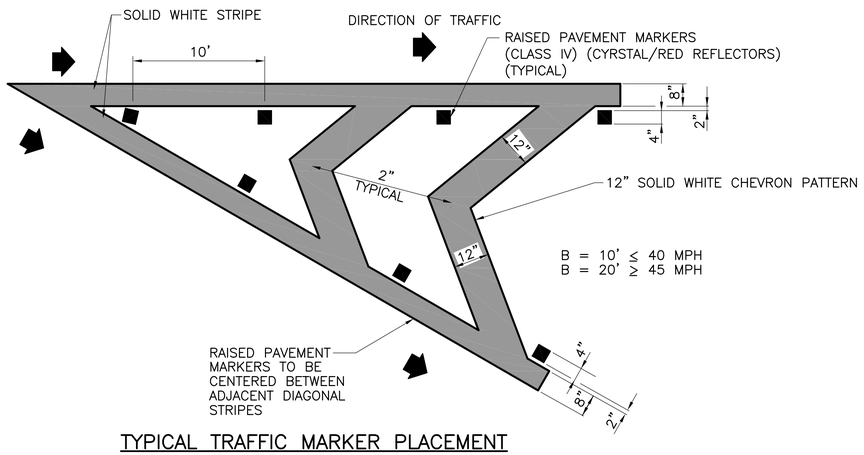
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	I. PARTENHEIMER

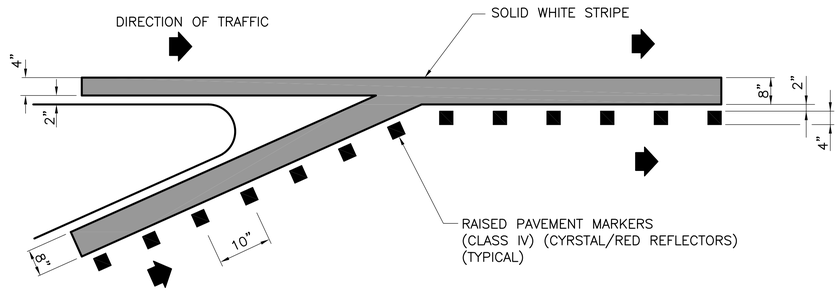
905–50

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

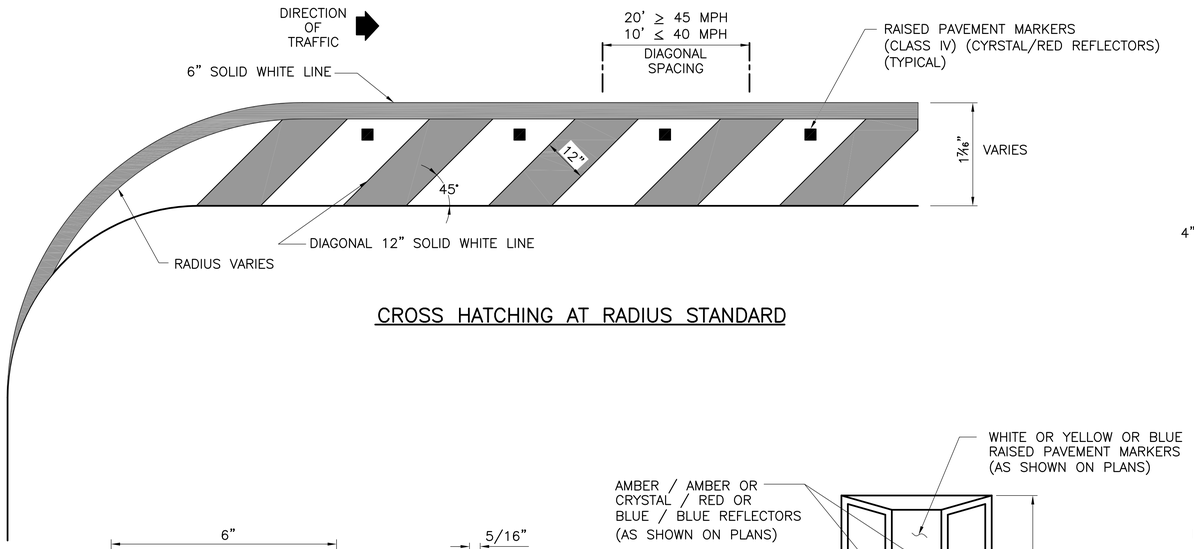
PROJECT NO.	SHEET
	225



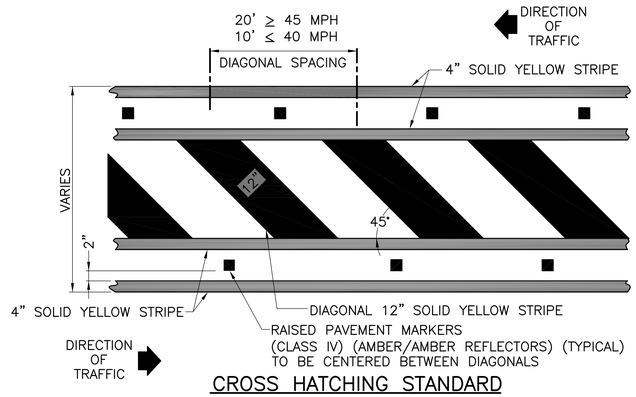
TYPICAL TRAFFIC MARKER PLACEMENT
AT OFF–RAMP GORES



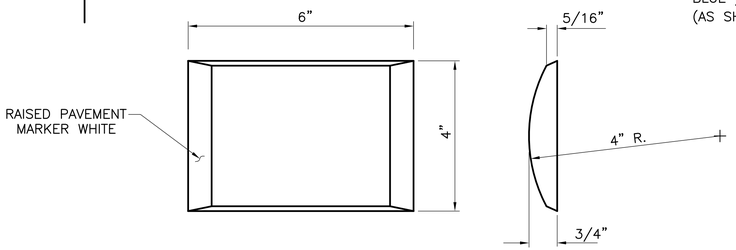
TYPICAL TRAFFIC MARKER PLACEMENT
AT ON–RAMP GORES



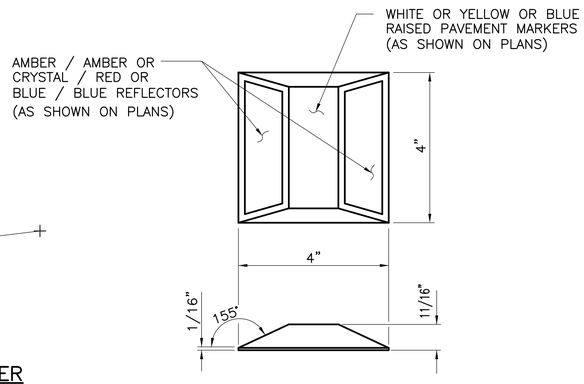
CROSS HATCHING AT RADIUS STANDARD



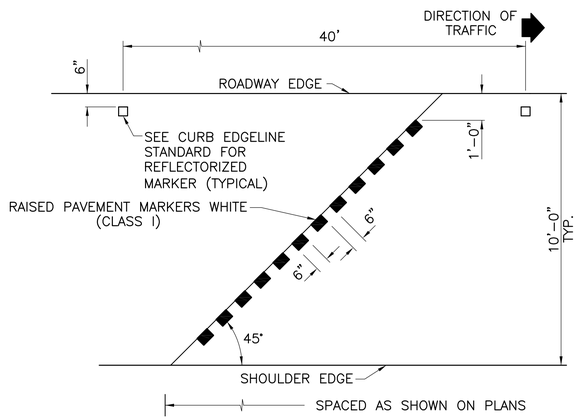
CROSS HATCHING STANDARD



4" X 6" NON–REFLECTORIZED RAISED PAVEMENT MARKER
TYPICAL (CLASS I)



4" X 4" REFLECTORIZED RAISED PAVEMENT
MARKER TYPICAL (CLASS IV)



TYPICAL RAISED MARKER
PLACEMENT ALONG BRIDGE SHOULDER

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
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JUNE 13, 2008

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ROADWAY MARKING AND TYPICAL DETAILS

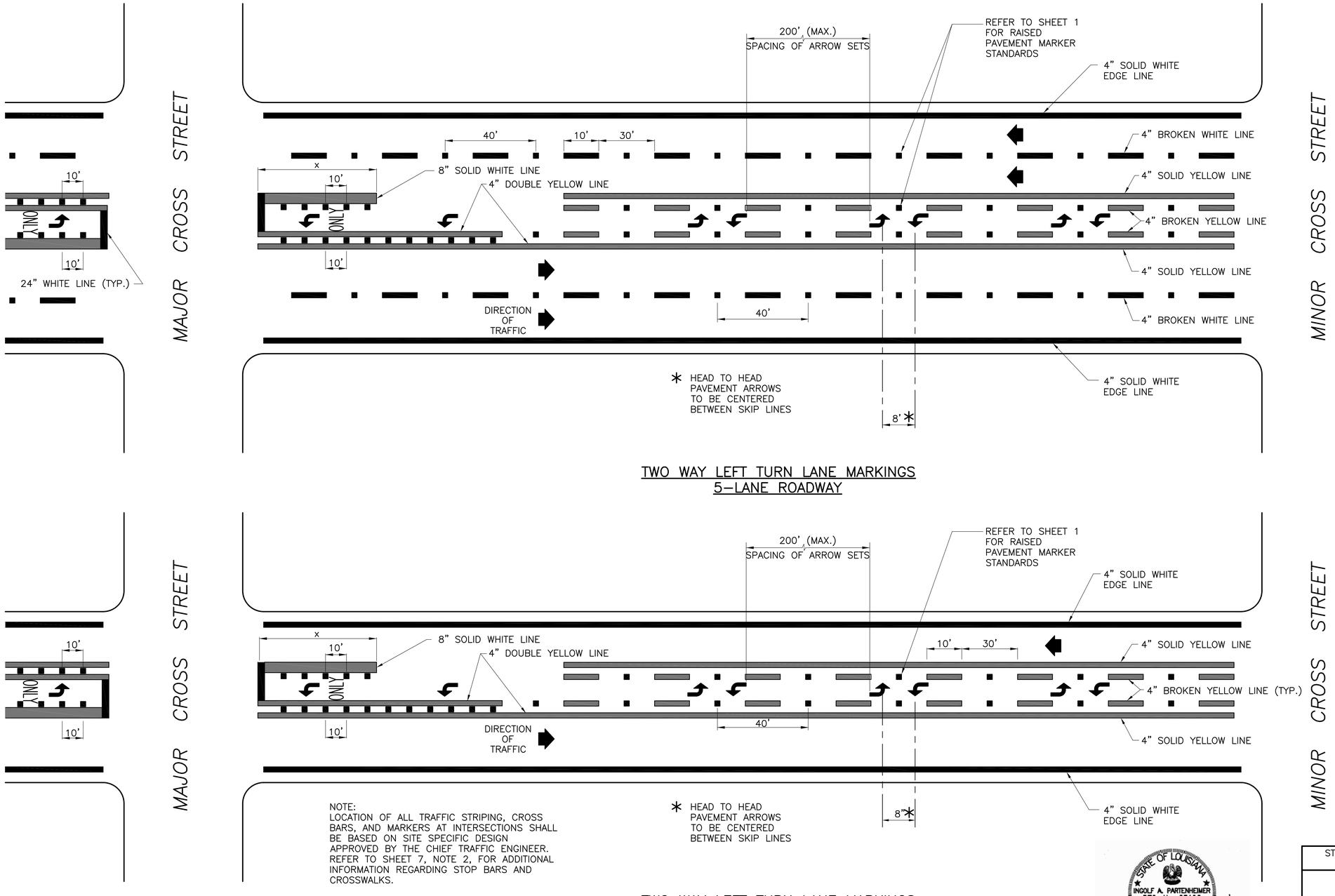
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	I. PARTENHEIMER

DATE	DESCRIPTION	BY
	REVISIONS	

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET
	226



TWO WAY LEFT TURN LANE MARKINGS
5–LANE ROADWAY

NOTE:
LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, AND MARKERS AT INTERSECTIONS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO SHEET 7, NOTE 2, FOR ADDITIONAL INFORMATION REGARDING STOP BARS AND CROSSWALKS.

TWO WAY LEFT TURN LANE MARKINGS
3–LANE ROADWAY

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
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PROFESSIONAL
ENGINEER
IN
ELECTRICAL ENGINEERING

JUNE 13, 2008

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 905–50	DATED JUNE 13, 2008	SHEET NO. 3 OF 7

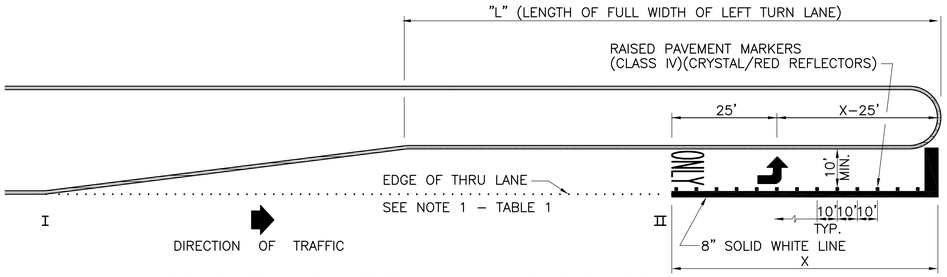
ROADWAY MARKING
AND
TYPICAL DETAILS

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

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	I. PARTENHEIMER

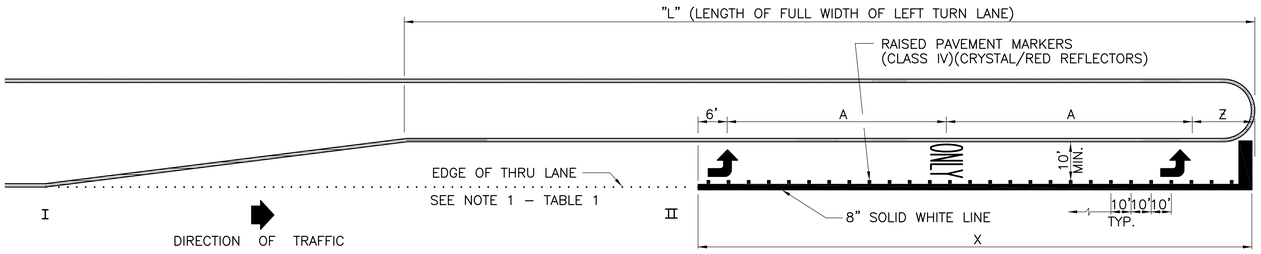
ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET
	227



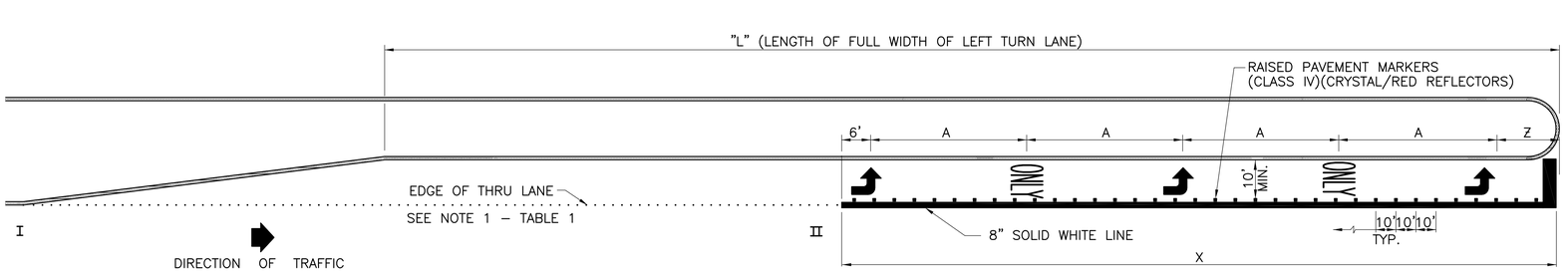
STANDARD LEFT TURN LANE, DIVIDED ROADWAY

L = 150' OR LESS



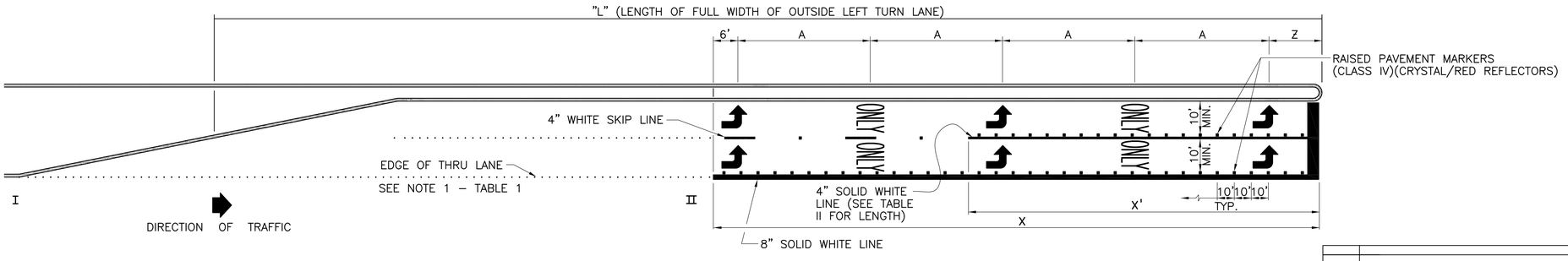
STANDARD LEFT TURN LANE, DIVIDED ROADWAY

L = 151' TO 300'



STANDARD LEFT TURN LANE, DIVIDED ROADWAY

L = 301' OR MORE



STANDARD DUAL LEFT TURN LANES, DIVIDED ROADWAY

TABLE I

DIMENSIONS OF LEFT TURN LANES

L FEET	X FEET	Z FEET	A FEET	NUMBER OF LEGENDS	
				ARROWS	"ONLY"
≤150	1/2 L	–	–	1	1
151–300	125/150 (L–150)+75	10–25	(X–Z–6)/2	2	1
301 & UP	2/3 L	10–25	(X–Z–6)/4	3	2

NOTE:

A 4" WHITE DOTTED LINE IS TO BE PLACED ALONG THE EDGE OF THE THRU LANE FROM I TO II.

TABLE II

ADDITIONAL DIMENSIONS FOR DUAL LEFT TURN LANES

X FEET	X' FEET
≤150	1/2 X
151–300	125/150 (X–150)+75
301 & UP	2/3 X

NOTES: ALL OTHER DIMENSIONS ARE TO BE DETERMINED FROM TABLE I.

PAVEMENT LEGENDS AND SYMBOLS ARE TO BE PLACED AT THE SAME LOCATION IN EACH LANE (SEE TABLE I FOR NUMBER & LOCATION). REFER TO MUTCD FOR SIZE AND DIMENSIONS OF SYMBOLS AND LEGENDS.

GENERAL NOTES:

1. REFER TO SHEET 1 FOR TYPICAL STRIPING CONFIGURATION FOR ROADWAYS.
2. REFER TO SHEET 6 FOR TYPICAL STRIPING OF INTERSECTIONS.
3. REFER TO SHEET 7 FOR LAYOUT AND STRIPING OF HANDICAP RAMPS AND CROSSING.
4. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY CHIEF TRAFFIC ENGINEER. REFER TO SHEET 7, NOTE 2, FOR ADDITIONAL INFORMATION REGARDING STOP BARS AND CROSSWALKS.

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

JUNE 13, 2008

STANDARD PLAN NO.	DATED	SHEET NO.
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ROADWAY MARKING AND TYPICAL DETAILS (DIVIDED ROADWAY)

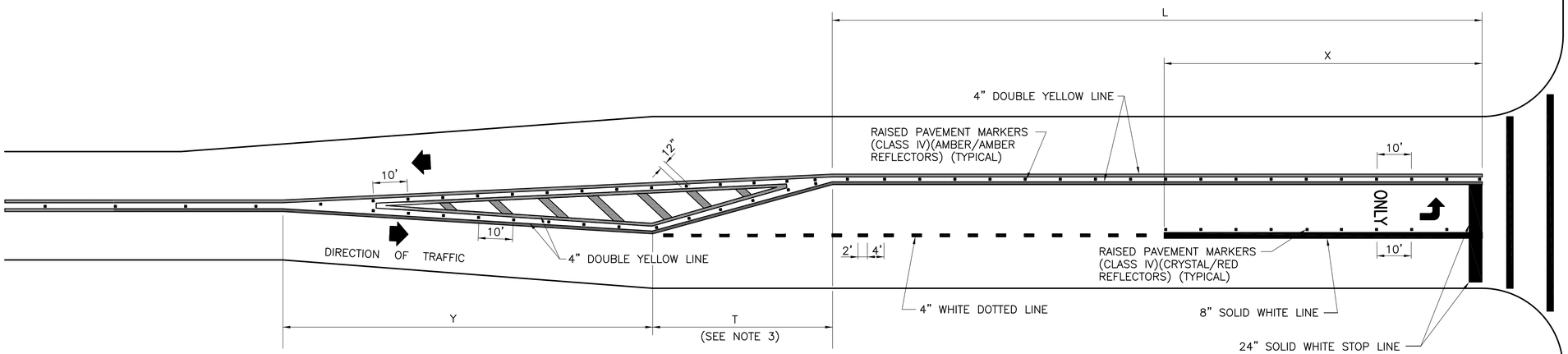
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	I. PARTENHEIMER

DATE	DESCRIPTION	BY
	REVISIONS	
11/18/09	TABLE 1 NOTES REVISION.	G.L.P.

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET
	228



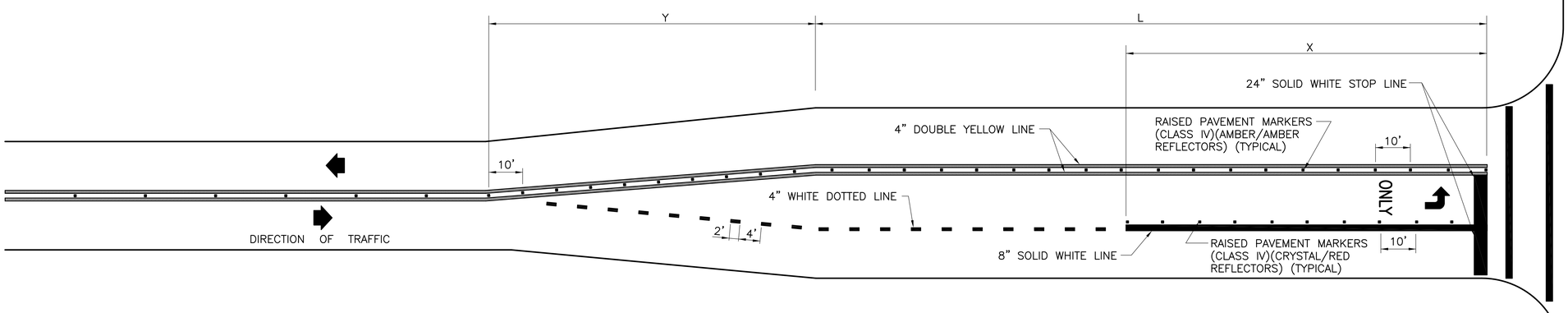
TWO LANE UNDIVIDED LEFT TURN LANES AT CONTROLLED INTERSECTION – CASE 1

1. Y=WS FOR SPEEDS ≥ 45 MPH
   WHERE W IS WIDTH OF OFFSET AND S IS SPEED IN MPH.
2. $Y = \frac{WS^2}{60} \leq 40$ MPH

1. LEFT TURN LANE TREATMENT FOR SPEEDS ≥ 40 MPH.
2. FOR TURN LANE SYMBOL, NUMBERS & SPACING SEE TABLE I, SHEET 4

NOTE:

PAVEMENT LEGENDS AND SYMBOLS ARE TO BE PLACED AT THE SAME LOCATION IN EACH LANE (SEE SHEET 4–TABLE I FOR NUMBER & LOCATION). REFER TO MUTCD FOR SIZE AND DIMENSIONS OF SYMBOLS AND LEGENDS.



TWO LANE UNDIVIDED LEFT TURN LANES AT CONTROLLED INTERSECTION – CASE 2

1. LEFT TURN LANE TREATMENT FOR SPEEDS ≤ 35 MPH.
2. FOR TURN LANE SYMBOL, NUMBERS & SPACING SEE TABLE I, SHEET 4

1. REFER TO SHEET 1 FOR TYPICAL STRIPING CONFIGURATION ON ROADWAYS AND INTERSECTIONS.
2. REFER TO SHEET 6 FOR TYPICAL STRIPING OF INTERSECTIONS.
3. REFER TO SHEET 7 FOR LAYOUT AND STRIPING OF HANDICAP RAMPS AND CROSSING.
4. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY CHIEF TRAFFIC ENGINEER. REFER TO SHEET 7, NOTE 2, FOR ADDITIONAL INFORMATION REGARDING STOP BARS AND CROSSWALKS.

STATE OF LOUISIANA
INCOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

JUNE 13, 2008

DATE	DESCRIPTION	BY
11/18/09	CASE 1 TAPER AND NOTES REVISION.	G.L.P.
	REVISIONS	

STANDARD PLAN NO.	DATED	SHEET NO.
905–50	JUNE 13, 2008	5 OF 7

ROADWAY MARKING AND TYPICAL DETAILS (UNDIVIDED ROADWAY)

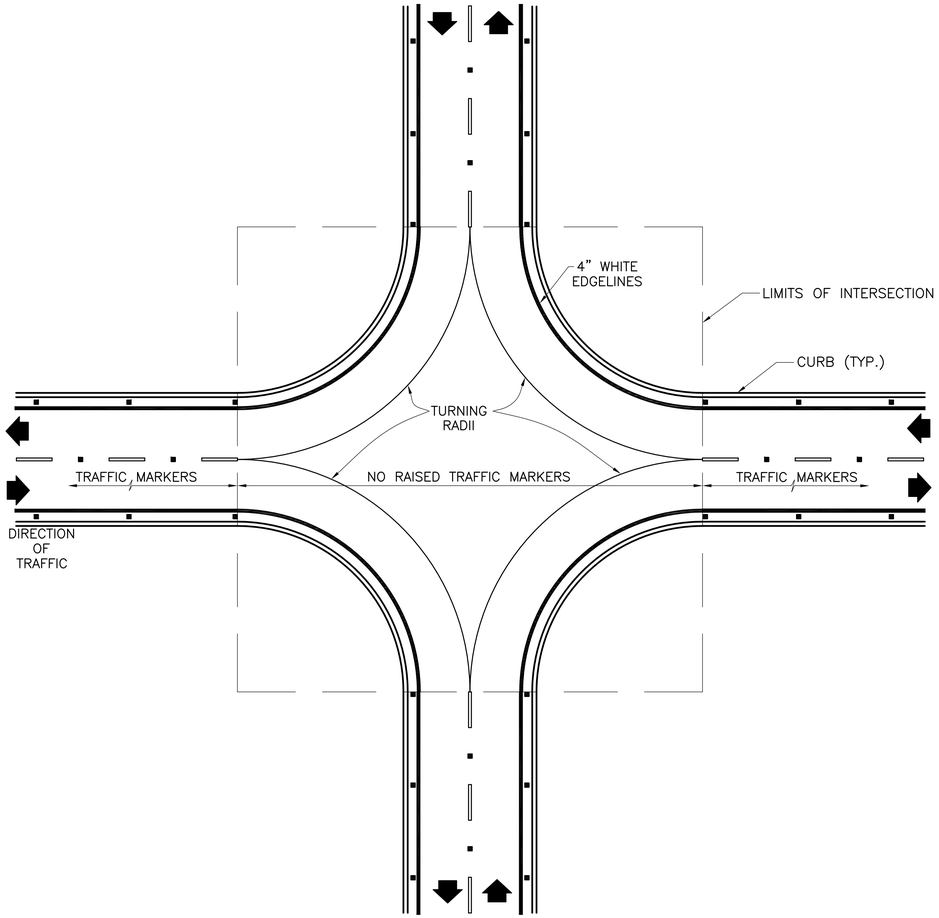
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	I. PARTENHEIMER

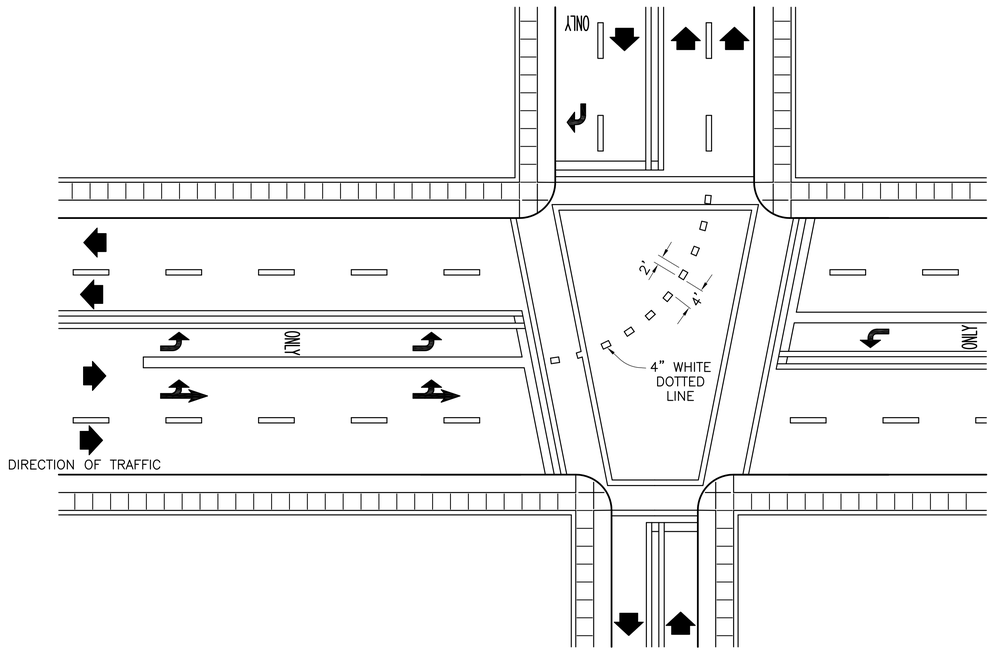
905–50

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET
	229



DETAIL OF TYPICAL INTERSECTION
SHOWING TRAFFIC MARKER PLACEMENT
FOR TWO–LANE ROADWAY



DETAIL OF TYPICAL INTERSECTION
SHOWING LANE STRIPING FOR
DOUBLE LEFT–TURN CONDITION.

NOTE:

AT CHANNELIZED INTERSECTION TRAFFIC MARKERS TO BE PLACED AS DIRECTED BY THE PROJECT ENGINEER.

ALL STRIPING TO BE THERMOPLASTIC MATERIAL, UNLESS OTHERWISE DIRECTED.

RAISED MARKERS SHALL BE CLASS IV, UNLESS OTHERWISE DIRECTED.

ALL PATTERNS SHOWN ARE TYPICAL AND SUBJECT TO CHANGE DEPENDING ON ROADWAY WIDTH.

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

JUNE 13, 2008

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
905–50	JUNE 13, 2008	6 OF 7

ROADWAY MARKING AND TYPICAL DETAILS

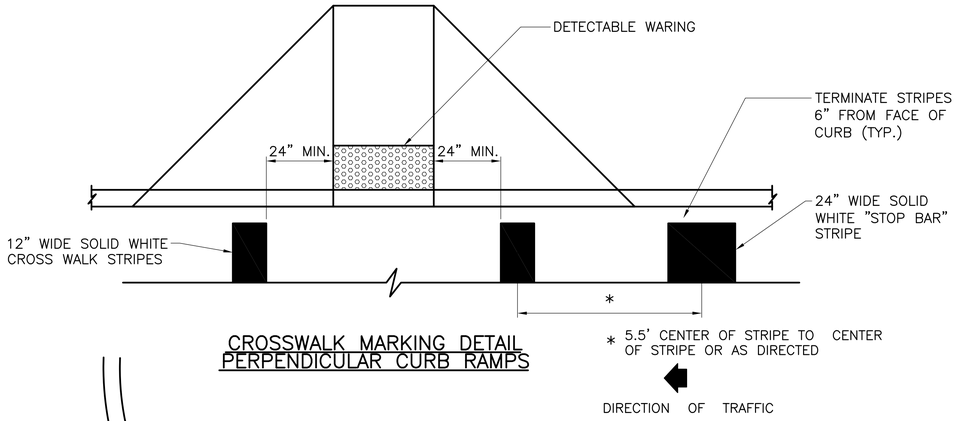
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	I. PARTENHEIMER

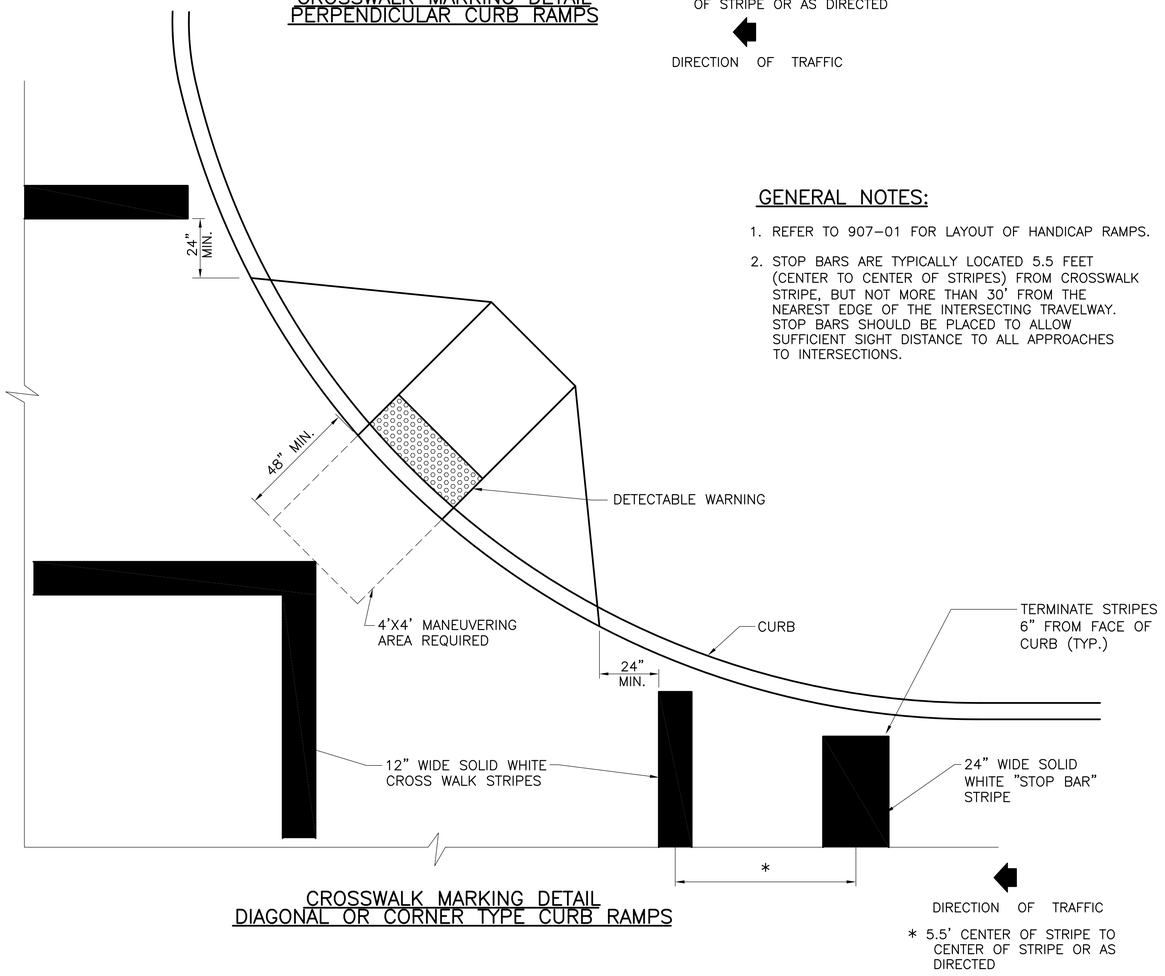
905–50

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET
	230



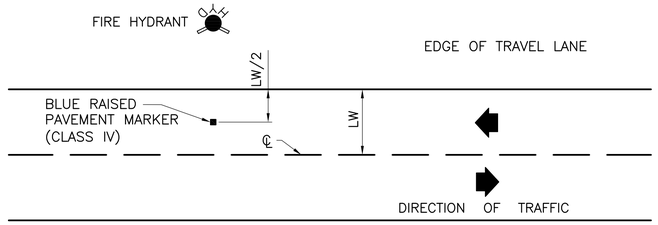
CROSSWALK MARKING DETAIL
PERPENDICULAR CURB RAMPS



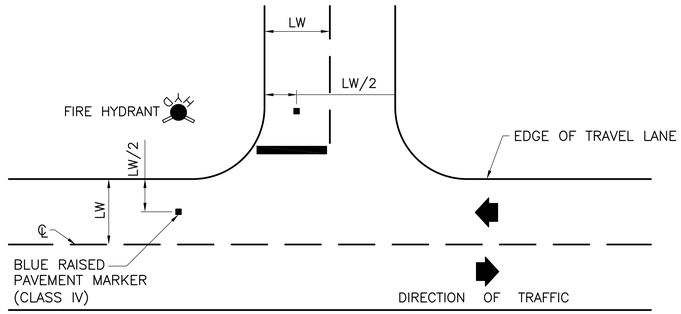
CROSSWALK MARKING DETAIL
DIAGONAL OR CORNER TYPE CURB RAMPS

GENERAL NOTES:

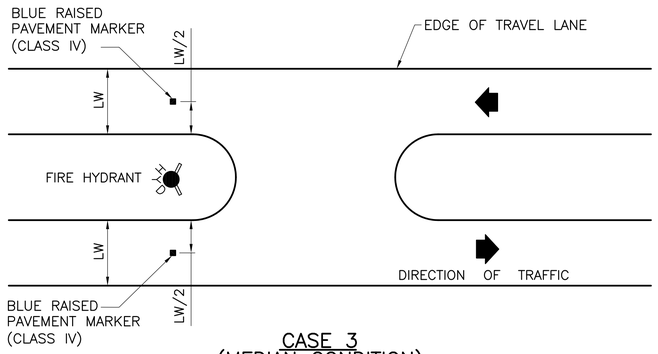
1. REFER TO 907-01 FOR LAYOUT OF HANDICAP RAMPS.
2. STOP BARS ARE TYPICALLY LOCATED 5.5 FEET (CENTER TO CENTER OF STRIPES) FROM CROSSWALK STRIPE, BUT NOT MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING TRAVELWAY. STOP BARS SHOULD BE PLACED TO ALLOW SUFFICIENT SIGHT DISTANCE TO ALL APPROACHES TO INTERSECTIONS.



CASE 1
(THRUWAY CONDITION)



CASE 2
(CORNER CONDITION)



CASE 3
(MEDIAN CONDITION)

REFLECTIVE MARKER FOR FIRE DEPARTMENT

STATE OF LOUISIANA
INGOLF A. PARTENHEIMER
REG. No. 28190
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

JUNE 13, 2008

STANDARD PLAN NO. 905-50	DATED JUNE 13, 2008	SHEET NO. 7 OF 7

INTERSECTION MARKINGS
AND
TYPICAL DETAILS

DATE	DESCRIPTION REVISIONS	BY

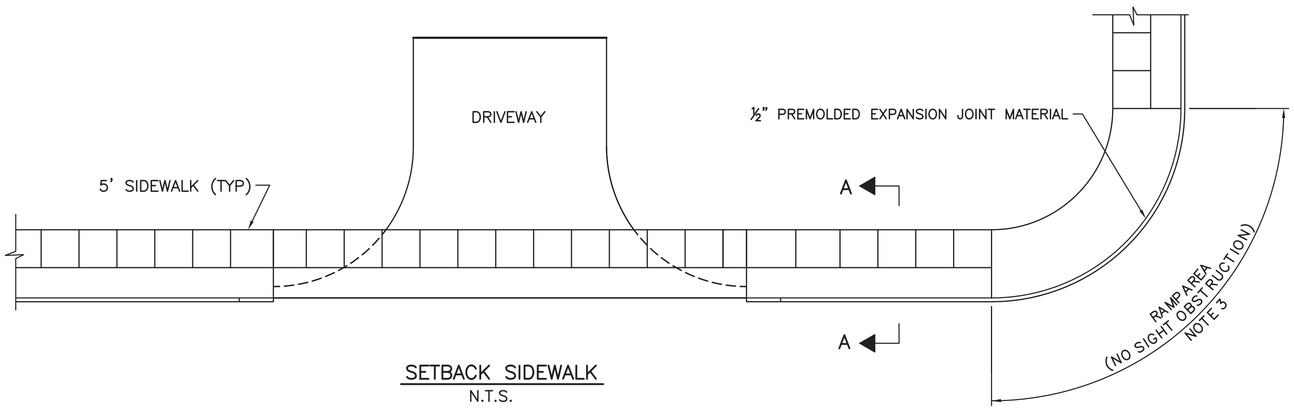
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	I. PARTENHEIMER

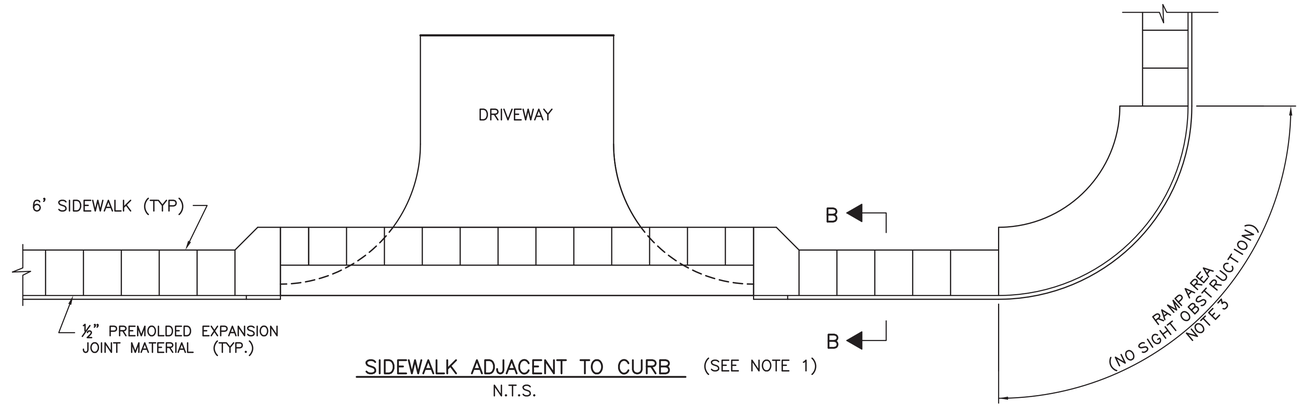
905-50

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET

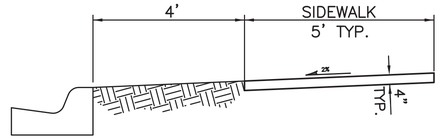


SETBACK SIDEWALK
N.T.S.

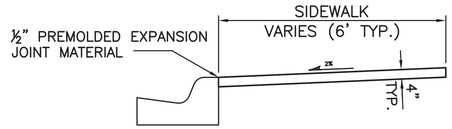


SIDEWALK ADJACENT TO CURB (SEE NOTE 1)
N.T.S.

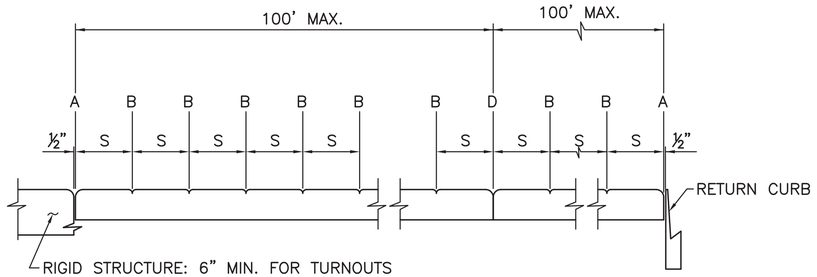
DRIVEWAYS



SIDEWALK TYPICAL SECTION A–A
N.T.S.



SIDEWALK TYPICAL SECTION B–B



OPEN JOINTS
LONGITUDINAL SECTION
SIDEWALK JOINTS

JOINT LEGEND

A – ½" EXPANSION JOINTS (PREFORMED JOINT FILLER) AT JUNCTIONS WITH CURBS, DRIVES, OTHER WALKS, AND AS DIRECTED BY THE PROJECT ENGINEER.

B – ½" DUMMY JOINTS, TOOLED

D – ½" EXPANSION JOINT MATERIAL OR CONSTRUCTION JOINT (REDWOOD) NOT TO EXCEED 100–FOOT INTERVALS AND AS DIRECTED BY THE PROJECT ENGINEER.

S – TYPICAL JOINT SPACING EQUALS WIDTH OF SIDEWALK.

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/12/2013

NOTES:

1. REFER TO 907–03–COMMERCIAL DRIVEWAYS.
2. REFER TO 907–04–RESIDENTIAL DRIVEWAYS.
3. THE TYPICAL HANDICAP RAMP INSTALLATION WILL BE DUAL FLARED RAMPS (LAYOUT 1 – SHEET 2).
4. REFER TO SHT. 907–02, CURB AND GUTTER DETAILS.

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 907–01	DATED AUGUST 8, 2008	SHEET NO. 1 OF 6

SIDEWALK AND HANDICAP RAMPS (TYPICAL INSTALLATIONS)

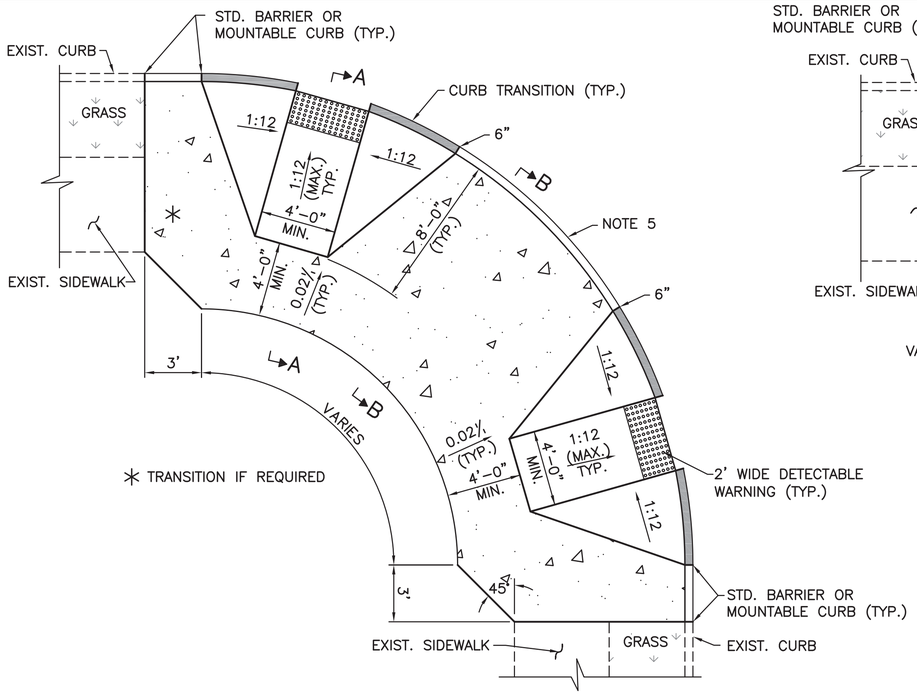
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

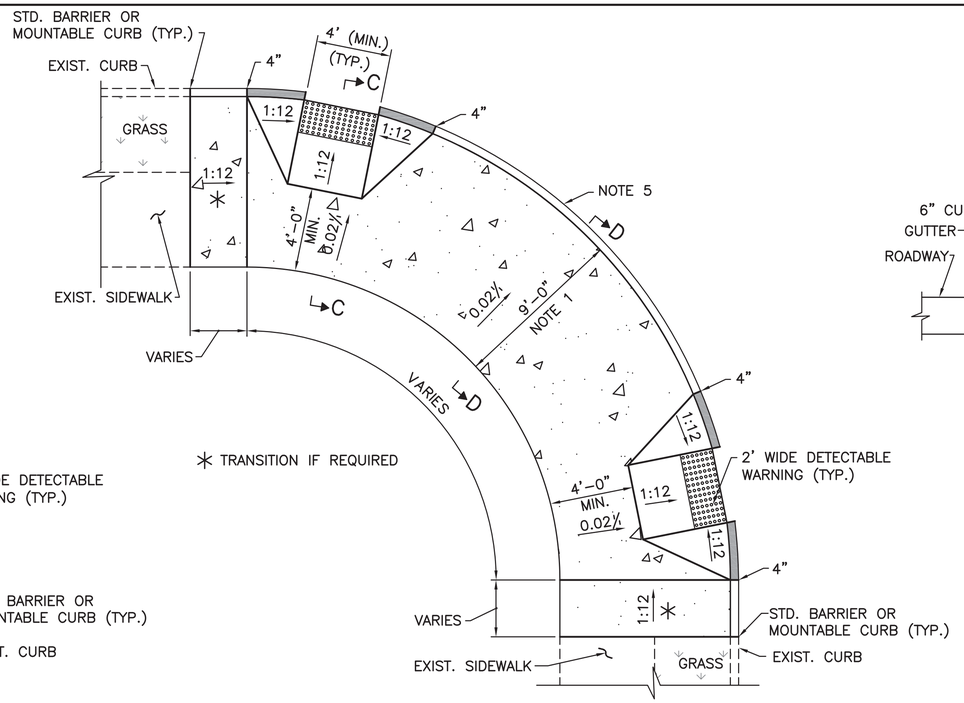
907–01

ENGINEERING AUTODESK LAND DESKTOP STDJAY FORM G.V.

907–01_1of2.dwg

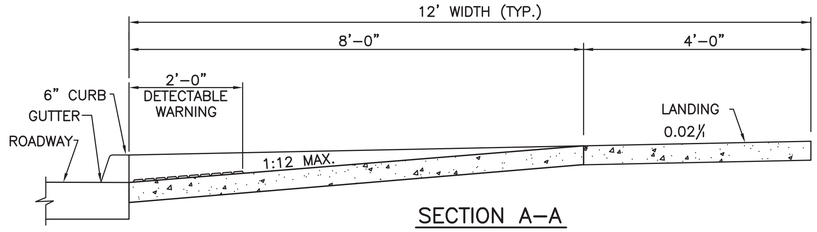


LAYOUT 1
DUAL CORNER RAMP (FLARED)
STANDARD CONDITION
(REFER TO NOTES)

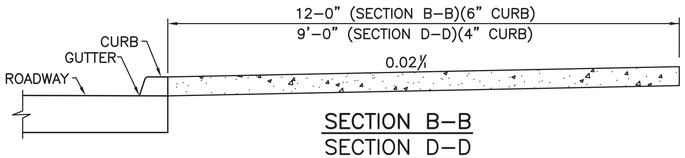


LAYOUT 2
DUAL CORNER RAMP (FLARED)
CONSTRAINED CONDITION
(REFER TO NOTES)

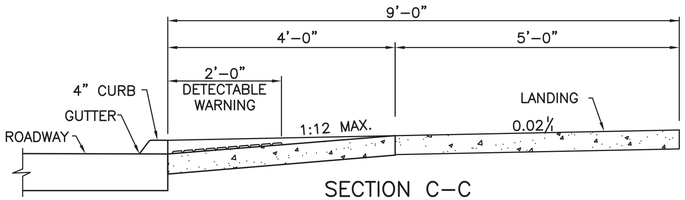
PROJECT NO.	SHEET



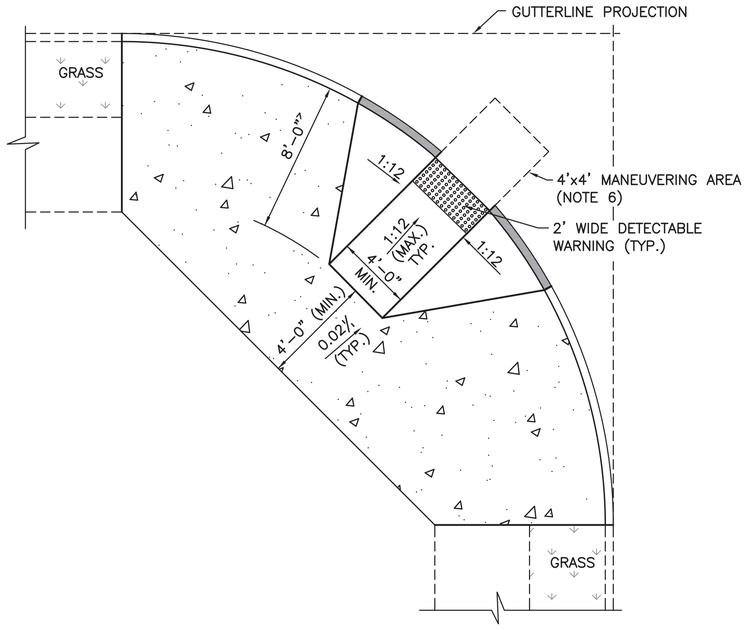
SECTION A–A
N.T.S.



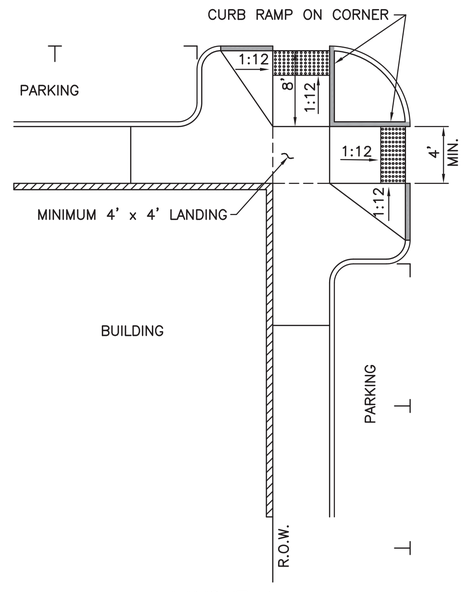
SECTION B–B
SECTION D–D
N.T.S.



SECTION C–C
N.T.S.



LAYOUT 3
SINGLE CORNER RAMP (FLARED)
(REFER TO NOTES)



LAYOUT 4
CORNER CURB EXTENSIONS (BULB–OUTS)

AREAS OF CURB MODIFICATION

NOTES:

1. THE STANDARD CORNER HANDICAP RAMP WILL BE TYPE ① (SHEET 4) AS DEPICTED IN LAYOUTS 1 AND 2. OTHER SOLUTIONS MAY BE REQUIRED DEPENDING ON EXISTING CONDITIONS OR GEOMETRIC CONSTRAINTS – REFER TO SHTS. 4 AND 5. EACH LOCATION SHOULD BE EVALUATED BY QUALIFIED PERSONNEL TO DEVELOP AN APPROPRIATE SOLUTION IN ACCORDANCE WITH CURRENT STANDARDS. RAMP SELECTION AND DESIGN REQUIRES COORDINATION WITH TRAFFIC AND CROSSWALK STRIPING. ALTERNATE RAMP CONFIGURATIONS MUST BE APPROVED BY THE CHIEF TRAFFIC ENGINEER.
2. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905–50 SHEET 7.
3. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
4. AREA WITHIN THE SIGHT TRIANGLE SHOULD HAVE NO SITE OBSTRUCTIONS SUCH AS BENCHES TREES, ETC..
5. MINIMUM LENGTH OF FULL HEIGHT CURB BETWEEN RAMPS SHALL BE 2 FEET LONG.
6. THE SINGLE CORNER RAMP CAN ONLY BE USED WHEN LAYOUT 1 OR LAYOUT 2 CAN NOT BE ACCOMMODATED AND IF ADEQUATE SPACE IS AVAILABLE TO DEVELOP THE REQUIRED MANEUVERING AREA BOUND BY THE CURB FACE AND THE GUTTERLINE PROJECTIONS.
7. REFER TO SHT. 907–02, CURB AND GUTTER DETAILS.

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/14/2018

STANDARD PLAN NO.	DATED	SHEET NO.
907–01	AUGUST 8, 2008	2 OF 6

SIDEWALK AND HANDICAP RAMPS – STREETS (TYPICAL LAYOUTS)

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

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T.STEPHENS

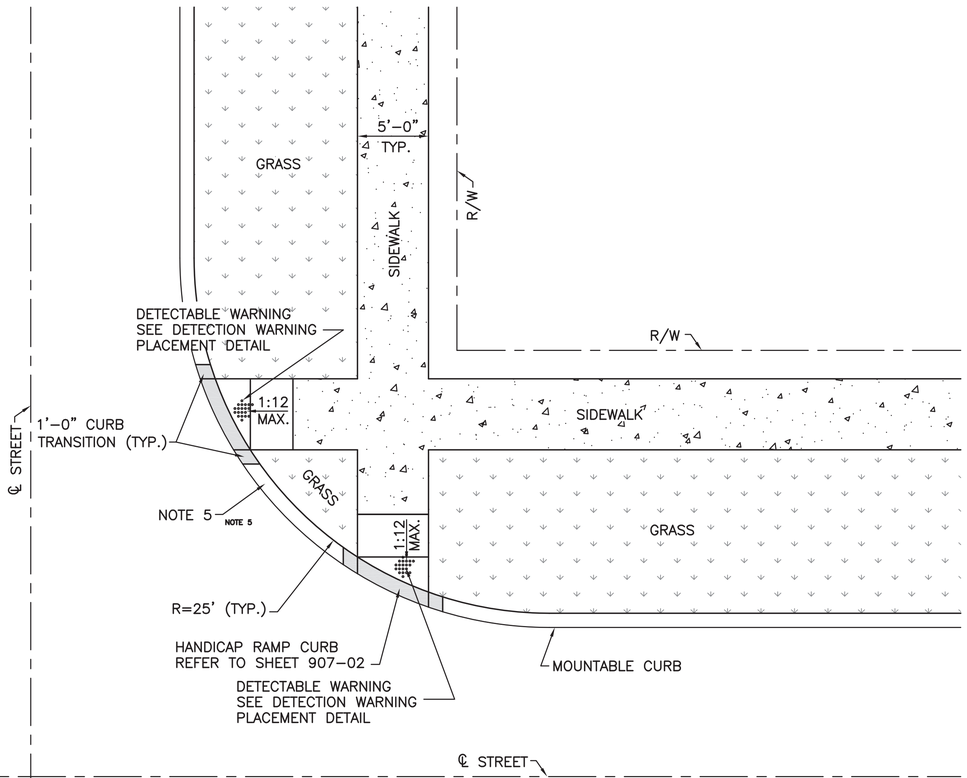
DATE	DESCRIPTION REVISIONS	BY

HANDICAP RAMPS – PLAN VIEWS
N.T.S.

907–01

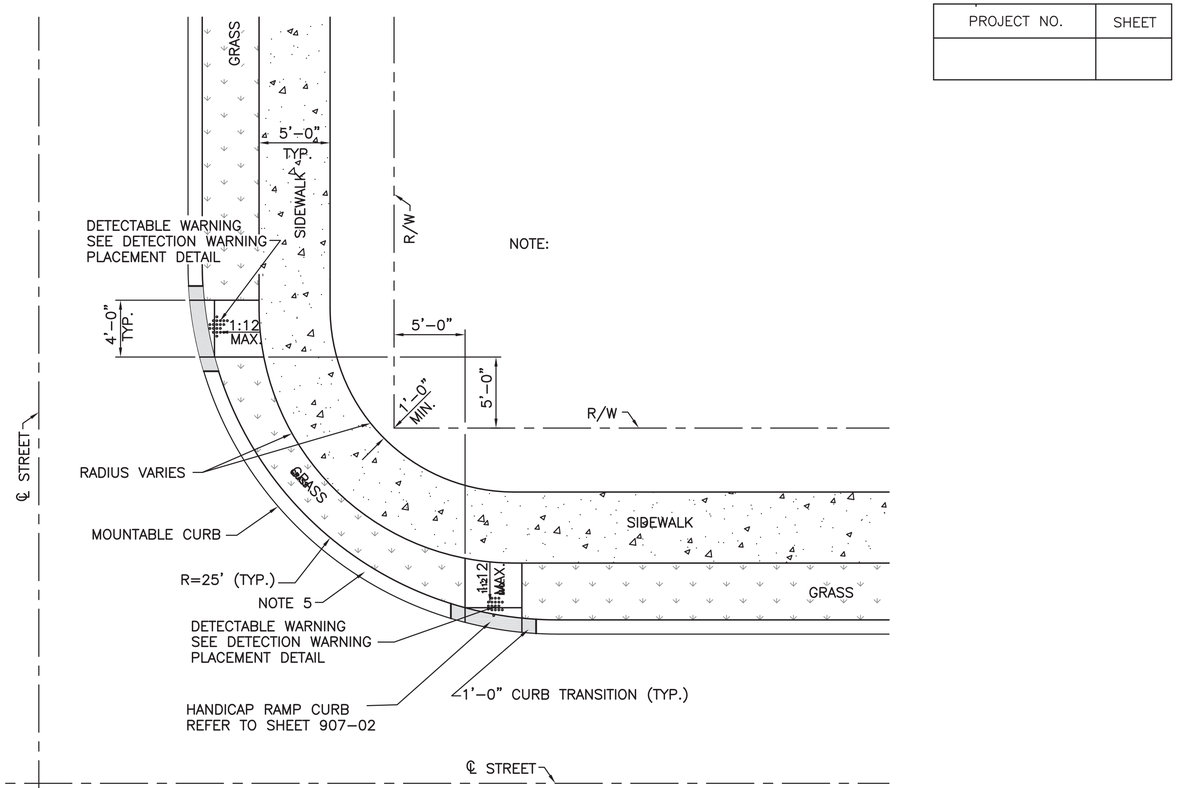
ENGINEERING AUTODESK LAND DESKTOP STDJAY FORM G.V.
907–01_2of2.dwg

PROJECT NO.	SHEET



DUAL CORNER RAMP – LAYOUT 1

(DESIRABLE CORNER RAMP IN RESIDENTIAL SUBDIVISION)
(N.T.S.)



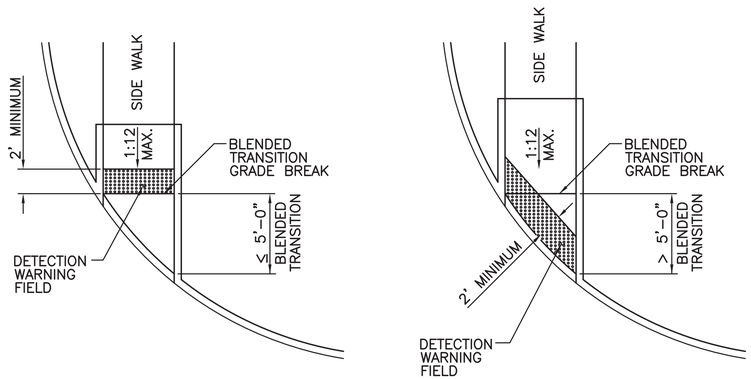
DUAL CORNER RAMP – LAYOUT 2

(FOR USE IN RESIDENTIAL SUBDIVISION WITH GEOMETRIC CONSTRAINTS)
(N.T.S.)

NOTE:

NOTES:

1. THE STANDARD CORNER HANDICAP RAMP WILL BE TYPE 12 (SHEET 5) AS DEPICTED IN LAYOUTS 1 AND 2. OTHER SOLUTIONS MAY BE REQUIRED DEPENDING ON EXISTING CONDITIONS OR GEOMETRIC CONSTRAINTS – REFER TO SHTS. 4 AND 5. EACH LOCATION SHOULD BE EVALUATED BY QUALIFIED PERSONNEL TO DEVELOP AN APPROPRIATE SOLUTION IN ACCORDANCE WITH CURRENT STANDARDS. RAMP SELECTION AND DESIGN REQUIRES COORDINATION WITH TRAFFIC AND CROSSWALK STRIPING. ALTERNATE RAMP CONFIGURATIONS MUST BE APPROVED BY THE CHIEF TRAFFIC ENGINEER.
2. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905–50 SHEET 7.
3. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 4" MOUNTABLE CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD BARRIER CURB BE USED.
4. AREA WITHIN THE SIGHT TRIANGLE SHOULD HAVE NO SIGHT OBSTRUCTIONS SUCH AS BENCHES, TREES, ETC..
5. MINIMUM LENGTH OF FULL HEIGHT CURB BETWEEN RAMPS SHALL BE 2 FEET LONG.
6. THE SINGLE CORNER RAMP CAN ONLY BE USED WHEN LAYOUT 1 OR LAYOUT 2 CAN NOT BE ACCOMMODATED AND IF ADEQUATE SPACE IS AVAILABLE TO DEVELOP THE REQUIRED MANEUVERING AREA BOUND BY THE CURB FACE AND THE GUTTERLINE PROJECTIONS.
7. REFER TO SHT. 907–02, CURB AND GUTTER DETAILS.
8. DETECTION WARNING PLACEMENT IS NOT CONSTRAINED IN BLENDED TRANSITION AREA.
9. SLOPES ON BLENDED TRANSITION SHALL NOT BE STEEPER THAN 2% (1 ON 50) IN ANY DIRECTION.



(N.T.S.)

DETECTION WARNING PLACEMENT DETAIL

THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
STATE OF LOUISIANA
3/12/2013

AREAS OF CURB MODIFICATION

4/25/11	ADD DETECTION WARNING PLACEMENT DETAIL	G.CHENG
DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
907–01	AUGUST 8, 2008	3 OF 6

SIDEWALK AND HANDICAP RAMPS–SUBDIVISIONS (TYPICAL LAYOUTS)

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

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907–01

ENGINEERING AUTODESK LAND DESKTOP STDJAY FORM G.V.

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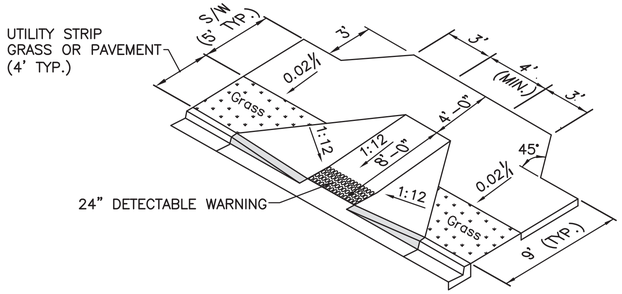
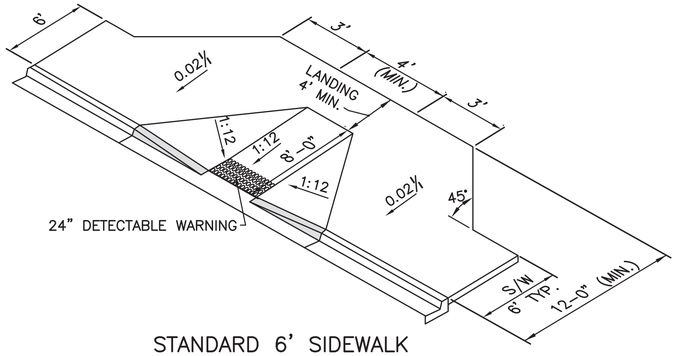
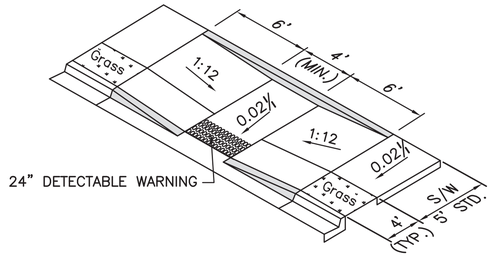
PROJECT NO.	SHEET



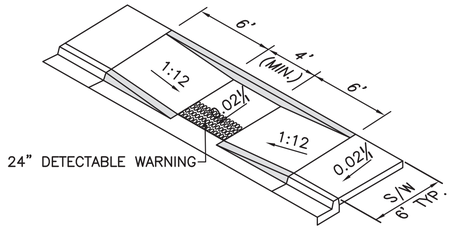
STANDARD 5' SIDEWALK
WITH FLARED SLOPES
TYPE (1)
NTS



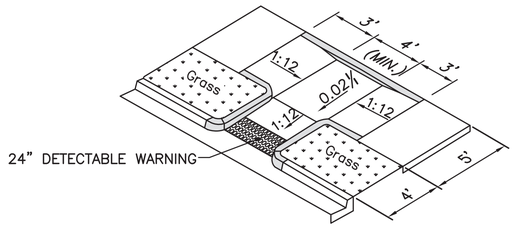
STANDARD 6' SIDEWALK
WITH FLARED RAMP
TYPE (2)
NTS



STANDARD 5' SIDEWALK
WITH PAVED RAMP
TYPE (3)
NTS



STANDARD 6' SIDEWALK
WITH PAVED RAMP
TYPE (4)
NTS



STANDARD 5' SIDEWALK
WITH CURBED RAMP
TYPE (5)
(REFER TO NOTES, TYP.)
NTS

AREAS OF CURB MODIFICATION

NOTES:

1. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905-50 SHEET 7.
2. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
3. RAMP CONFIGURATIONS MUST BE APPROVED BY THE CHIEF TRAFFIC ENGINEER.

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/12/2012

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 907-01	DATED AUGUST 8, 2008	SHEET NO. 4 OF 6

SIDEWALK AND HANDICAP RAMPS (RAMP TYPES)

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

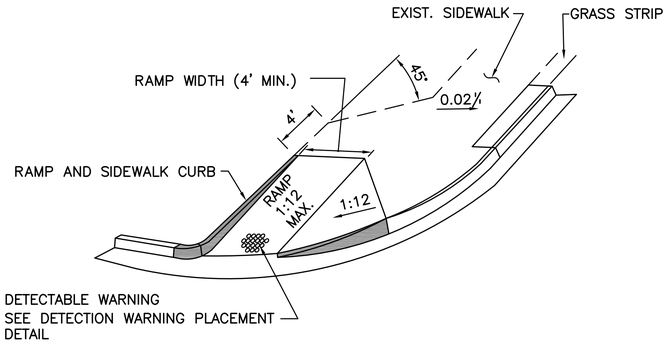
DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907-01

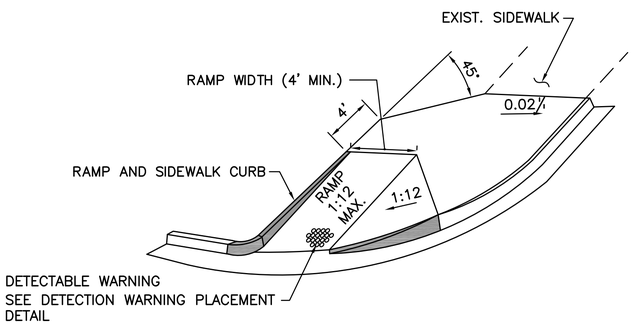
ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

907-01_3of5.dwg

PROJECT NO.	SHEET



TYPE (6)
NTS
REFER TO NOTES (TYP.)



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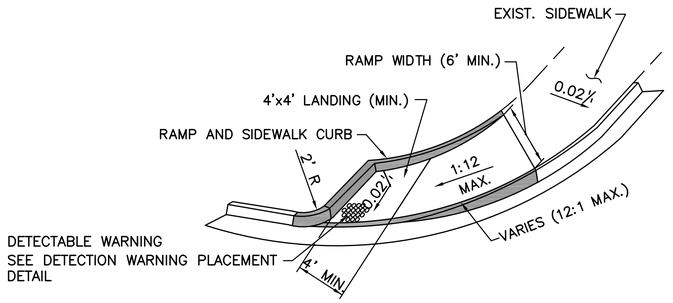

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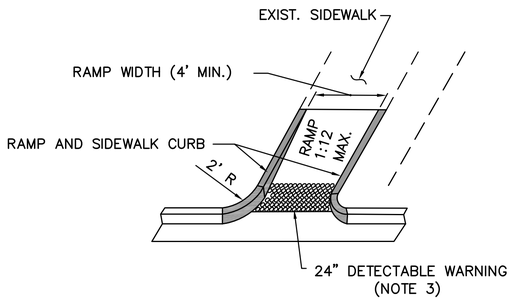

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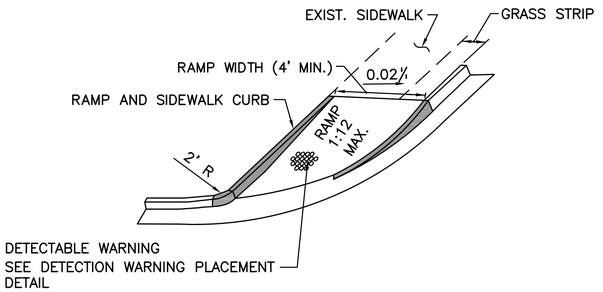

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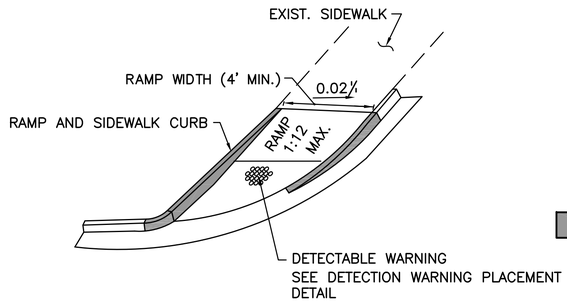

TYPE (11)
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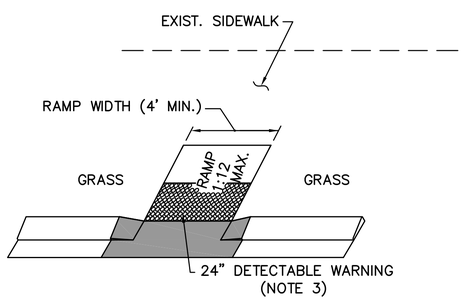
AREAS OF CURB MODIFICATION



NOTE: REFER TO 907-02 FOR HANDICAP RAMP CURB AND GUTTER

TYPE (12)
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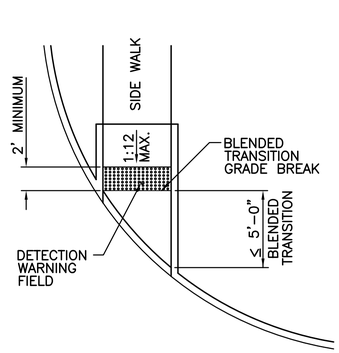
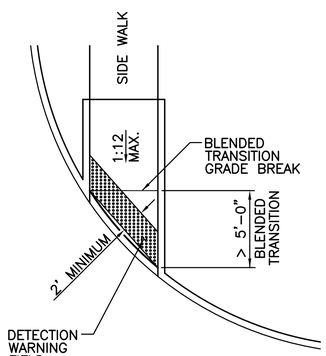


LAYOUT A



LAYOUT A

DETECTION WARNING PLACEMENT DETAIL
NTS

NOTE:

1. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905-50 SHEET 7.
2. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
3. THE MINIMUM LENGTH OF ANY SIDE OF THE DETECTABLE WARNING MATERIAL SHALL BE TWO FEET.
4. DETECTION WARNING PLACEMENT IS NOT CONSTRAINED IN BLENDED TRANSITION AREA.
5. SLOPES ON BLENDED TRANSITION SHALL NOT BE STEEPER THAN 2% (1 ON 50) IN ANY DIRECTION.

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 15417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/12/2015

DATE	DESCRIPTION	BY
4/25/11	ADD DETECTION WARNING PLACEMENT DETAIL	G.CHENG
	REVISIONS	

STANDARD PLAN NO.	DATED	SHEET NO.
907-01	AUGUST 8, 2008	5 OF 6

SIDEWALK AND HANDICAP RAMPS (RAMP TYPES)

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

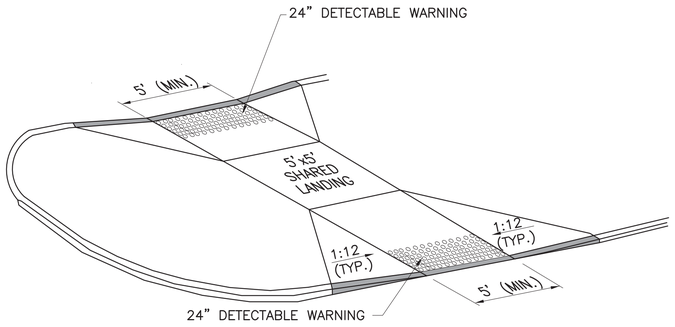
DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907-01

ENGINEERING AUTODESK LAND DESKTOP STDJAY FORM G.V.

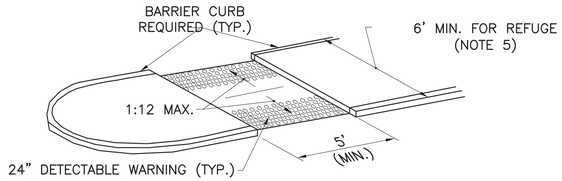
907-01_4of5.dwg

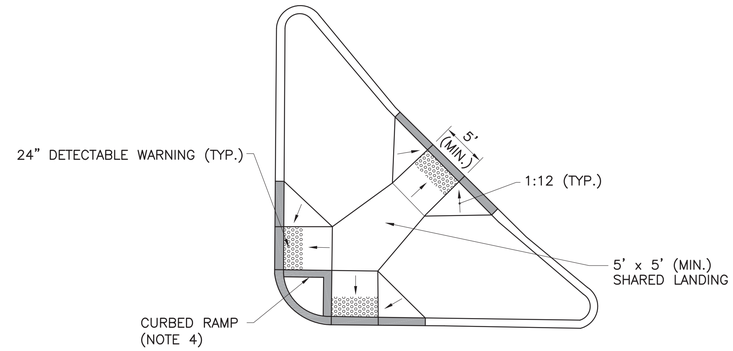
PROJECT NO.	SHEET



CURB RAMPS AT MEDIAN ISLANDS

(REFER TO NOTES, TYP.)
N.T.S.





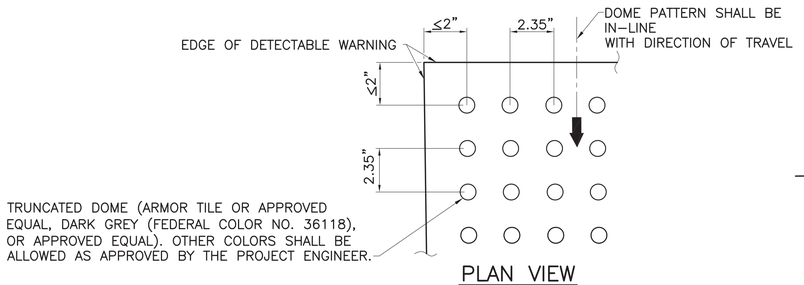
COMBINATION ISLAND RAMPS

N.T.S.

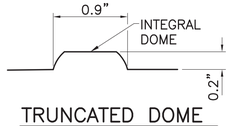
AREAS OF CURB MODIFICATION

NOTES:

1. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905–50 SHEET 7.
2. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
3. NO SIGHT OBSTRUCTIONS SUCH AS BENCHES TREES, ETC. SHALL BE PLACED TO LIMIT THE REQUIRED SIGHT DISTANCE.
4. WHEN GEOMETRIC LIMITATIONS PREVENT CONSTRUCTION OF THE FLARED RAMP WITH AT LEAST 2 FEET OF FULL DEPTH CURB BETWEEN FLARES, USE CURBED RAMPS.
5. IF A PEDESTRIAN REFUGE IS REQUIRED OR DESIRABLE, A MINIMUM 6' LENGTH IS REQUIRED, AS WELL AS STANDARD BARRIER CURB.



PLAN VIEW
N.T.S.



TRUNCATED DOME
N.T.S.

NOTE: ALL SIDEWALK CURB RAMPS ON PUBLIC STREETS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF THE CURB.

CURB RAMP DETECTABLE WARNING



DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 907–01	DATED AUGUST 8, 2008	SHEET NO. 6 OF 6

SIDEWALK AND HANDICAP RAMPS (TYPICAL MEDIAN RAMPS)

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

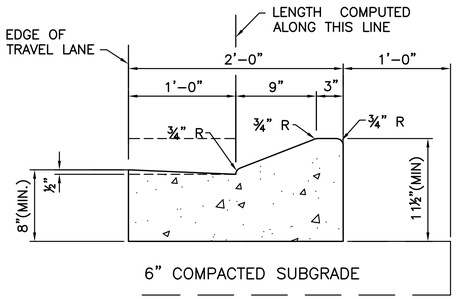
DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907–01

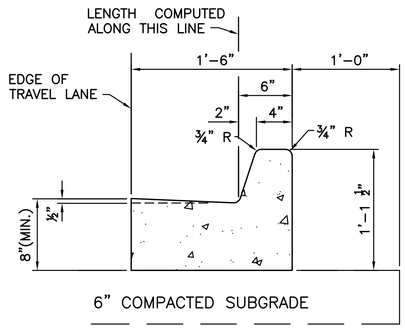
ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

907–01_5of5.dwg

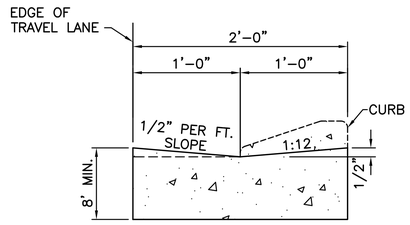
PROJECT NO.	SHEET



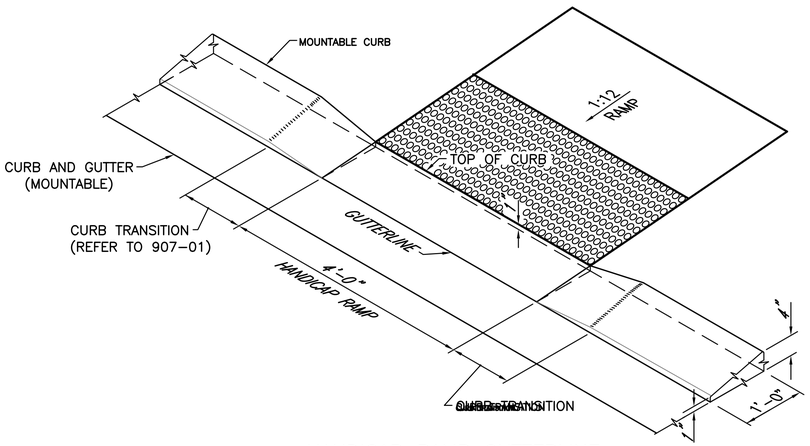
CURB AND GUTTER
DRAINAGE TO CURB
MOUNTABLE TYPE



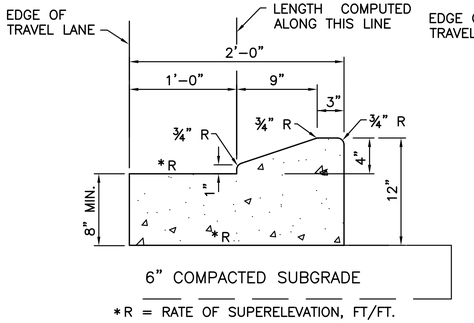
CURB AND GUTTER
DRAINAGE TO CURB
BARRIER TYPE



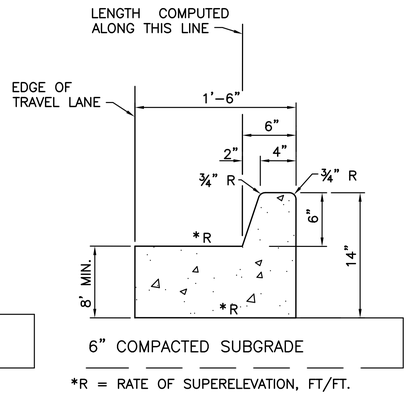
CURB AND GUTTER
HANDICAP RAMP
MOUNTABLE TYPE



HANDICAP RAMP GUTTERLINE
MOUNTABLE TYPE

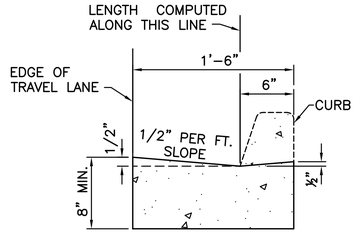


CURB AND GUTTER
DRAINAGE FROM CURB
MOUNTABLE TYPE

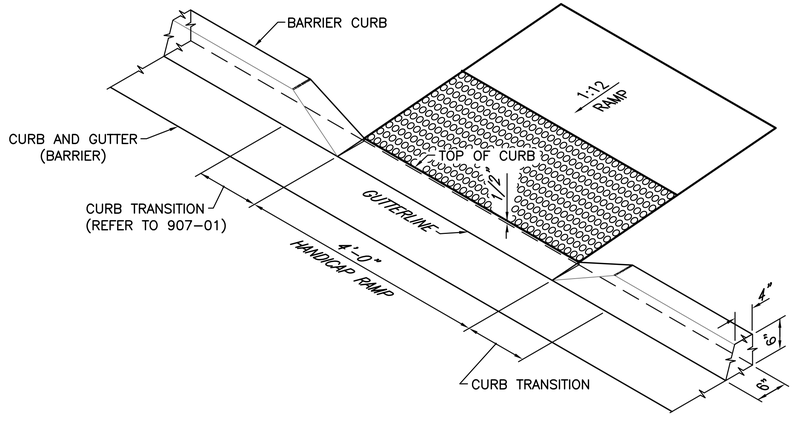


CURB AND GUTTER
DRAINAGE FROM CURB
BARRIER TYPE

SUPERELEVATED CURB SECTIONS



CURB AND GUTTER
HANDICAP RAMP
BARRIER TYPE



HANDICAP RAMP GUTTERLINE
BARRIER TYPE

CURB AND GUTTER DETAILS
N.T.S.

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/10/2016

DATE	DESCRIPTION	BY
2/10/16	Revised Section Thickness, added Sub-grade	TAS
	REVISIONS	

STANDARD PLAN NO.	DATED	SHEET NO.
907–02	AUGUST 8, 2008	1 OF 1

MONOLITHIC CURB AND GUTTER DETAILS

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

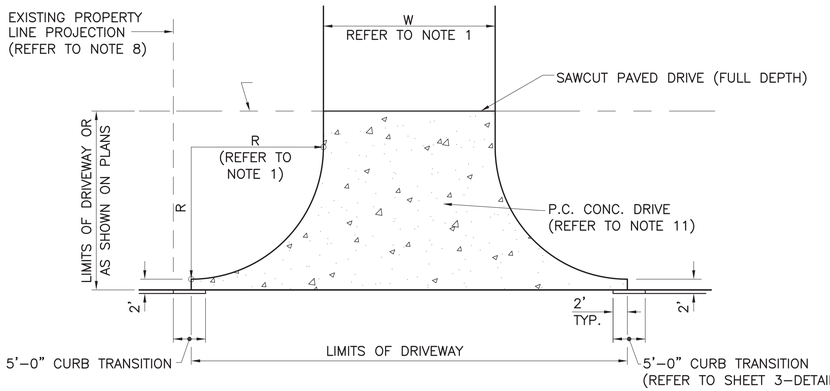
DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907–02

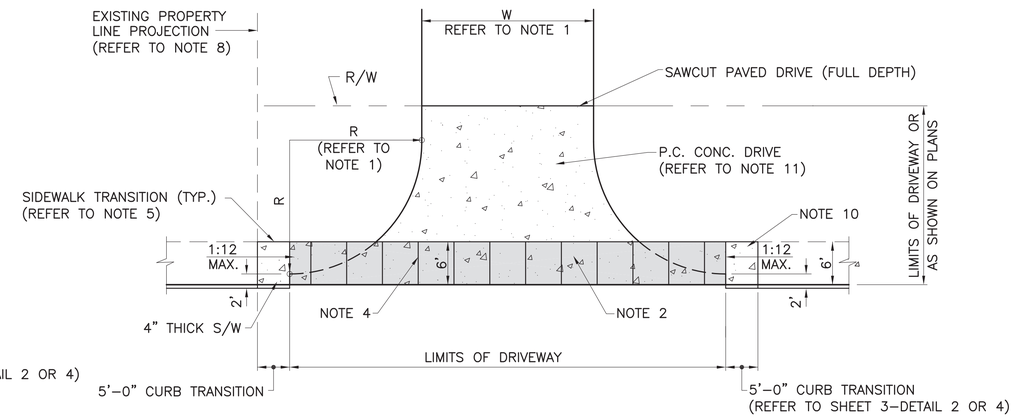
ENGINEERING AUTODESK LAND DESKTOP STDJAY FORM G.V.

907–02_1of1.dwg

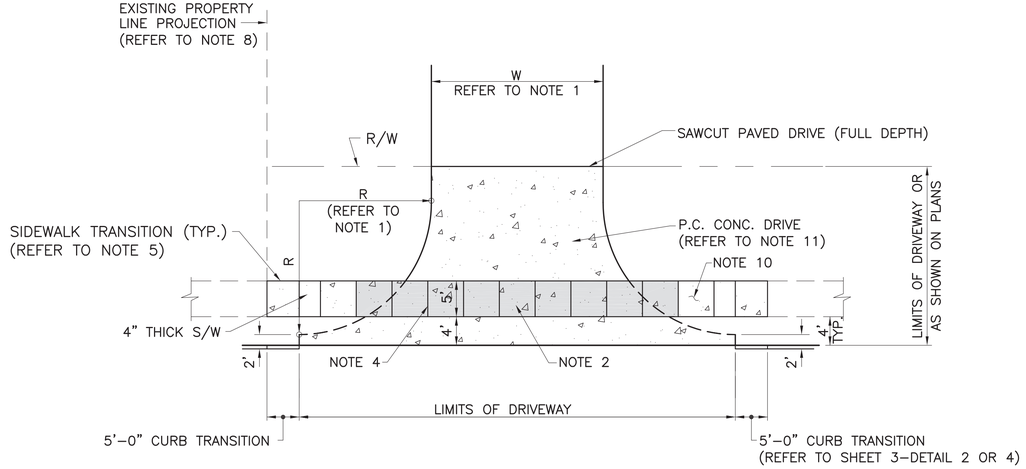
PROJECT NO.	SHEET



COMMERCIAL DRIVE – TYPE 1
SINGLE NON–CURBED
NO SIDEWALK
N.T.S.



COMMERCIAL DRIVE – TYPE 2
SINGLE NON–CURBED
WITH SIDEWALK ADJACENT TO CURB
N.T.S.



COMMERCIAL DRIVE – TYPE 3
SINGLE NON–CURBED
WITH OFFSET SIDEWALK
N.T.S.

NOTES:

1. DRIVEWAY GEOMETRY SHOWN SHALL APPLY FOR BOTH NEW STREET CONSTRUCTION AND MODIFICATIONS TO EXISTING STREETS. R AND W – REFER TO CONSTRUCTION PLAN FOR SPECIFIC DIMENSIONS WHEN PROVIDED, OTHERWISE REFER TO 907–DG.
2. SIDEWALK THICKNESS SHALL MATCH DRIVEWAY THICKNESS AS SHOWN OR AS DIRECTED THE PROJECT ENGINEER.
3. CONSTRUCTION OR KEYWAY JOINT REQ'D WHEN DRIVE DIMENSIONS EXCEED 16' IN EITHER DIRECTION. LOCATION OF JOINTS SHALL BE COORDINATED WITH THE PROJECT ENGINEER.
4. WITHIN THE DRIVEWAY LIMITS, SIDEWALK AREA SHALL HAVE SCORED JOINTS PER STANDARD PLANS AND SPECIFICATIONS. SIDEWALK EXPANSION AND CONSTRUCTION JOINT LOCATIONS SHALL BE PER 907–01.
5. REFER TO STD. PLAN 907–01 FOR SIDEWALK RAMPS. SIDEWALK TRANSITION SHALL NOT EXCEED 1:12 SLOPE.
6. MAXIMUM CHANGE IN GRADES IS 12% FOR A CREST AND 11% AT SAGS WITHOUT VERTICAL CURVES. MAXIMUM GRADE CHANGES SHOULD BE AT LEAST 10' APART. MAXIMUM GRADE TYPICALLY SHALL NOT EXCEED 20%.
7. REFER TO STD. PLAN 502–01 FOR CURB DETAILS AND STD. PLAN 907–02 FOR COMBINATION CURB AND GUTTER DETAILS.
8. DRIVEWAY SHALL NOT EXTEND BEYOND THE ADJACENT PROPERTY LINE PROJECTION.
9. STREET TYPES ARE AS DEFINED BY THE TRAFFIC ENGINEER.
10. NEW SIDEWALKS SHALL BE TRANSITIONED TO MATCH THE EXISTING SIDEWALK AS DIRECTED BY THE PROJECT ENGINEER.
11. DRIVEWAY THICKNESS SHALL BE AS SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. MINIMUM COMMERCIAL DRIVEWAY THICKNESS IS 6 INCHES.
12. REFER TO SHEET 3 FOR TYPICAL PROFILES AND DETAILS.

LEGEND
SIDEWALK AREA WITHIN DRIVEWAY (PAID AS DRIVEWAY)
REFER TO NOTES 2 AND 4

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/12/2015

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
907–03	APRIL 16, 2009	1 OF 3

COMMERCIAL DRIVES
GEOMETRIC DETAILS

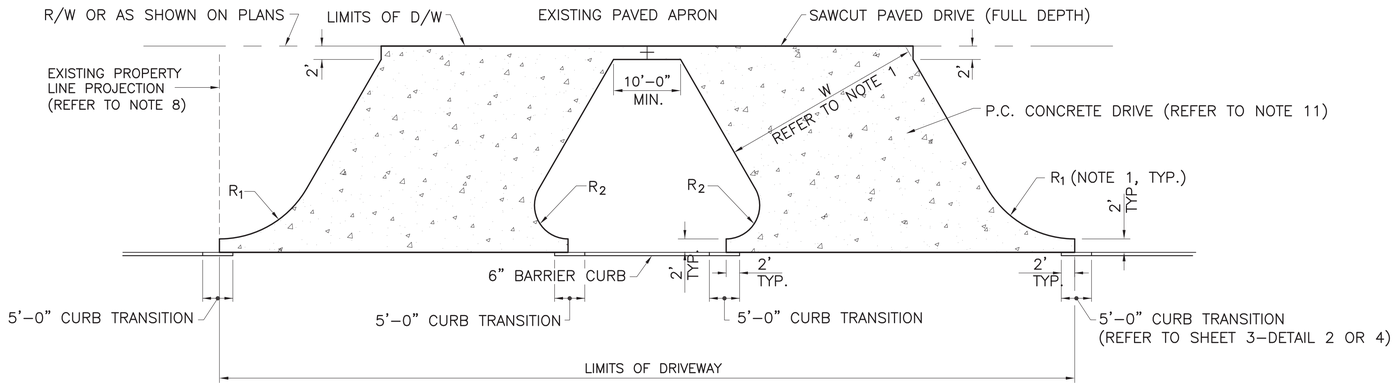
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907–03

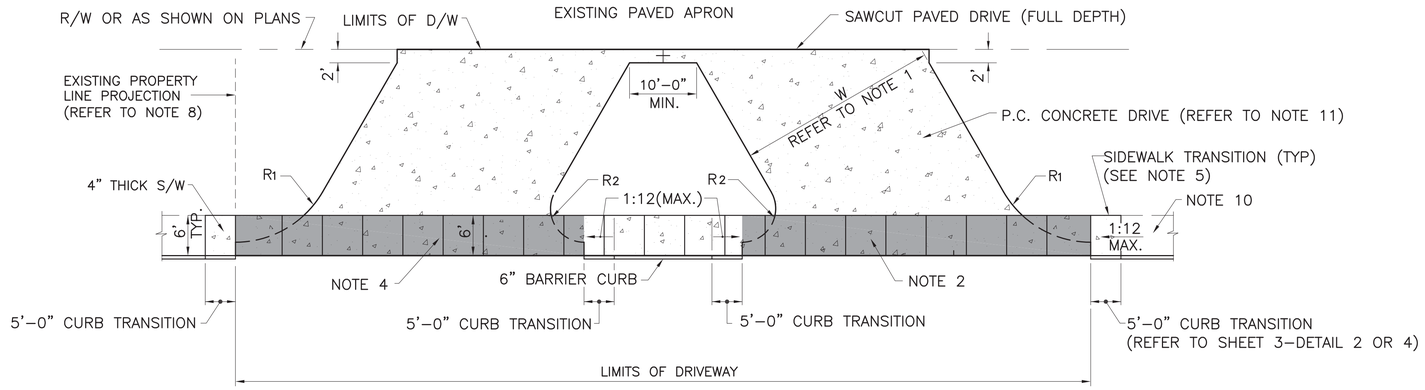
ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM C.V.

PROJECT NO.	SHEET



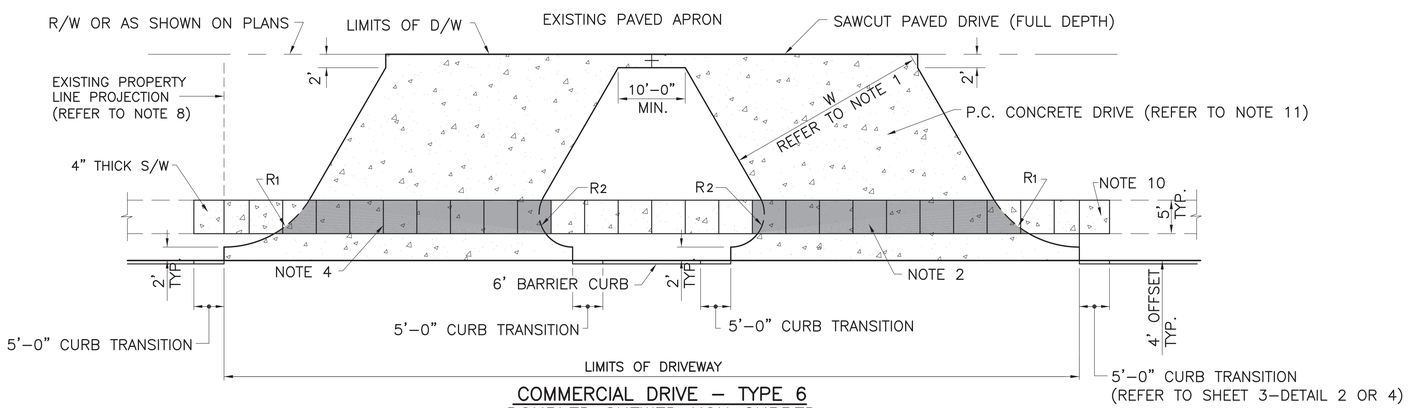
COMMERCIAL DRIVE – TYPE 4
DOUBLED SKEWED NON CURBED
NO SIDEWALK

N.T.S.



COMMERCIAL DRIVE – TYPE 5
DOUBLED SKEWED NON CURBED
SIDEWALK ADJACENT TO CURB

N.T.S.



COMMERCIAL DRIVE – TYPE 6
DOUBLED SKEWED NON CURBED
WITH OFFSET SIDEWALK

N.T.S.

NOTES:

1. DRIVEWAY GEOMETRY SHOWN SHALL APPLY FOR BOTH NEW STREET CONSTRUCTION AND MODIFICATIONS TO EXISTING STREETS. R_1, R_2 AND W – REFER TO CONSTRUCTION PLAN FOR SPECIFIC DIMENSIONS WHEN PROVIDED, OTHERWISE REFER TO 907–DG.
2. SIDEWALK THICKNESS SHALL MATCH DRIVEWAY THICKNESS AS SHOWN OR AS DIRECTED THE PROJECT ENGINEER.
3. CONSTRUCTION OR KEYWAY JOINT REQ'D WHEN DRIVE DIMENSIONS EXCEED 16' IN EITHER DIRECTION. LOCATION OF JOINTS SHALL BE COORDINATED WITH THE PROJECT ENGINEER.
4. WITHIN THE DRIVEWAY LIMITS, SIDEWALK AREA SHALL HAVE SCORED JOINTS PER STANDARD PLANS AND SPECIFICATIONS. SIDEWALK EXPANSION AND CONSTRUCTION JOINT LOCATIONS SHALL BE PER 907–01.
5. REFER TO STD. PLAN 907–01 FOR SIDEWALK RAMPS. SIDEWALK TRANSITION SHALL NOT EXCEED 1:12 SLOPE.
6. MAXIMUM CHANGE IN GRADES IS 12% FOR A CREST AND 11% AT SAGS WITHOUT VERTICAL CURVES. MAXIMUM GRADE CHANGES SHOULD BE AT LEAST 10' APART. MAXIMUM GRADE TYPICALLY SHALL NOT EXCEED 20%.
7. REFER TO STD. PLAN 502–01 FOR CURB DETAILS AND STD. PLAN 907–02 FOR COMBINATION CURB AND GUTTER DETAILS.
8. DRIVEWAY SHALL NOT EXTEND BEYOND THE ADJACENT PROPERTY LINE PROJECTION.
9. STREET TYPES ARE AS DEFINED BY THE TRAFFIC ENGINEER.
10. NEW SIDEWALKS SHALL BE TRANSITIONED TO MATCH THE EXISTING SIDEWALK AS DIRECTED BY THE PROJECT ENGINEER.
11. DRIVEWAY THICKNESS SHALL BE AS SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. MINIMUM COMMERCIAL DRIVEWAY THICKNESS IS 6 INCHES.
12. REFER TO SHEET 3 FOR CONSTRUCTION DETAILS.



LEGEND

SIDEWALK AREA WITHIN DRIVEWAY (PAID AS DRIVEWAY) (REFER TO NOTES 2 AND 4)

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 907–03	DATED APRIL 16, 2009	SHEET NO. 2 OF 3

COMMERCIAL DRIVES
GEOMETRIC DETAILS DOUBLED SKEWED LAYOUT

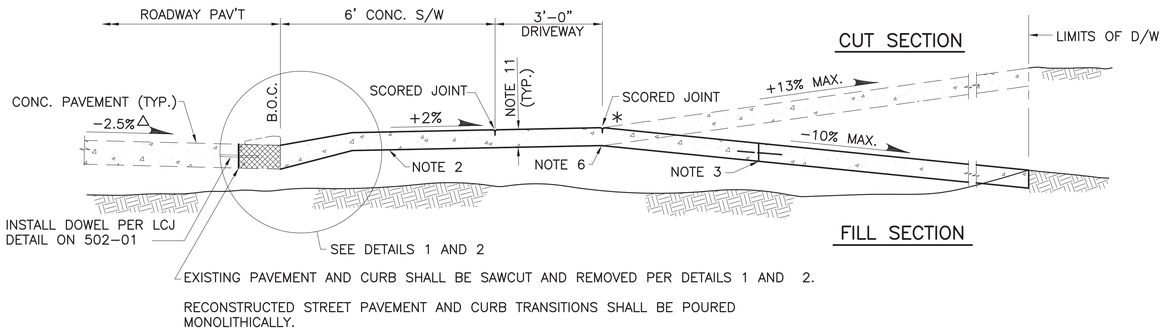
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907–03

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM C.V.

907–03_2of3.dwg



△ SLOPES SHOWN ARE FOR NORMAL CROWN ROADWAY SECTION

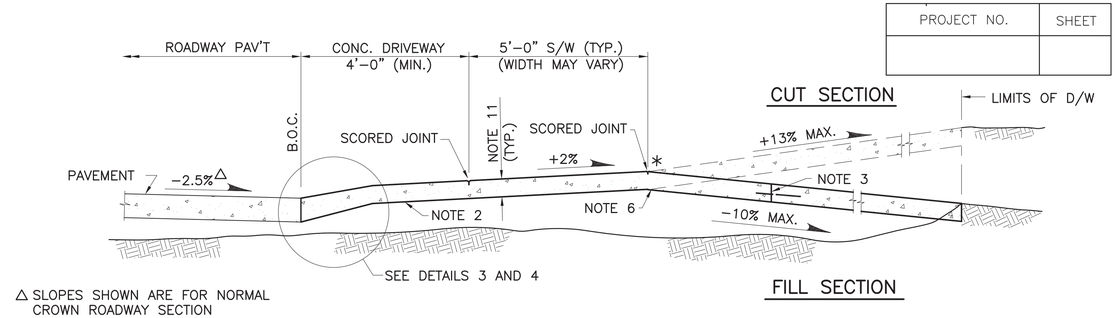
□ 2'-0" DRIVEWAY TRANSITION, NOT SUBJECT TO SAG CRITERIA

* A +0.33' VERTICAL CLEARANCE IS REQUIRED FROM THE GUTTERLINE TO THE LOCATION SHOWN.

⊙ PROFILE SIMILAR FOR 5' SIDEWALK WITH 4' OFFSET.

TYPICAL DRIVEWAY PROFILE 1
CONSTRUCTION ON EXISTING STREET
(SHOWN WITH 6 FOOT SIDEWALK ADJACENT TO CURB)⊙

REFER TO SHEET 1 FOR NOTES
N.T.S.



△ SLOPES SHOWN ARE FOR NORMAL CROWN ROADWAY SECTION

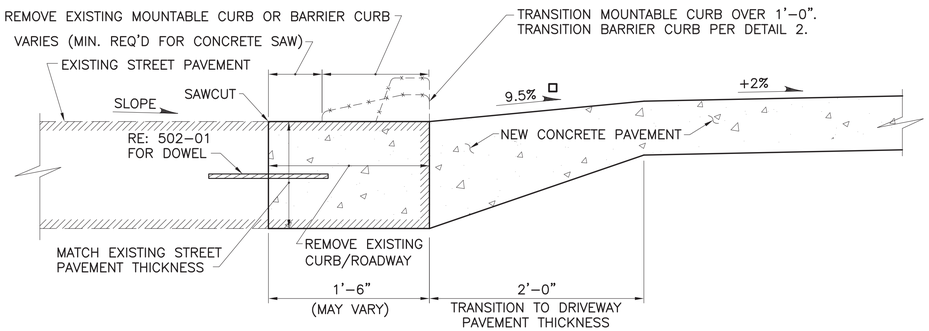
□ 2'-0" DRIVEWAY TRANSITION, NOT SUBJECT TO SAG CRITERIA

* A +0.33' VERTICAL CLEARANCE IS REQUIRED FROM THE GUTTERLINE TO THE LOCATION SHOWN.

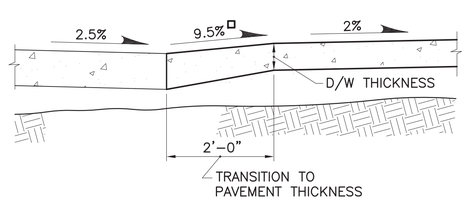
⊙ PROFILE SIMILAR FOR 6' SIDEWALK ADJACENT TO CURB.

TYPICAL DRIVEWAY PROFILE 2
NEW STREET CONSTRUCTION
(SHOWN WITH 5 FOOT SIDEWALK OFFSET FROM CURB)⊙

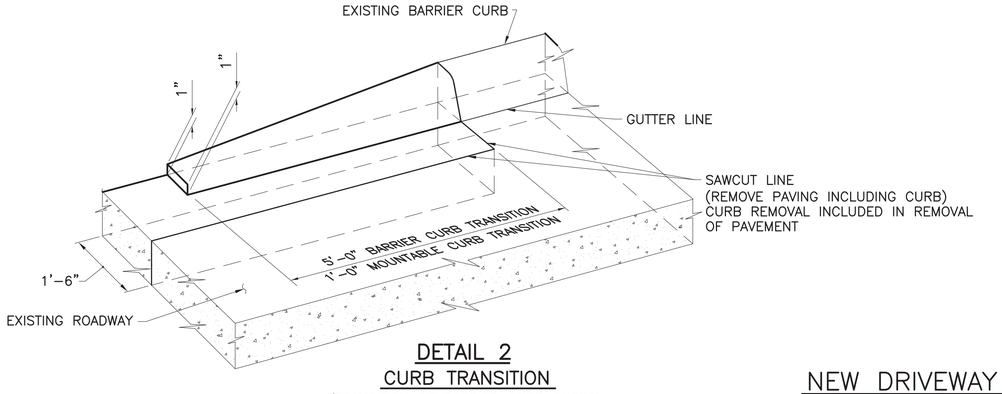
REFER TO SHEET 1 FOR NOTES
N.T.S.



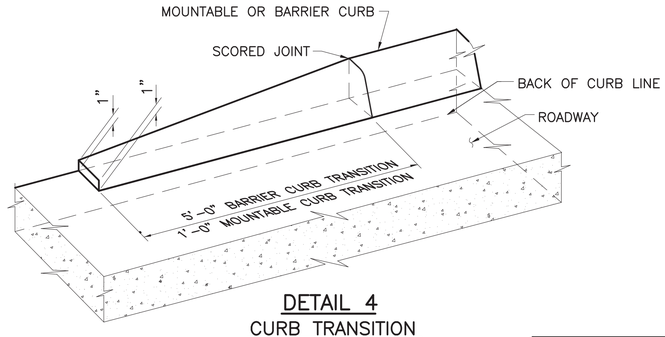
DETAIL 1
DRIVEWAY CONNECTION
N.T.S.



DETAIL 3
DRIVEWAY CONNECTION
N.T.S.



DETAIL 2
CURB TRANSITION
(TRANSITION OF BARRIER CURB SHOWN.
TRANSITION MOUNTABLE CURB OVER 1'-0".)
N. T. S.



DETAIL 4
CURB TRANSITION
(TRANSITION OF BARRIER CURB SHOWN.
TRANSITION MOUNTABLE CURB OVER 1'-0".)
N. T. S.

NEW DRIVEWAY PROFILES ON NEW OR EXISTING STREETS
N.T.S.

DATE	DESCRIPTION REVISIONS	BY

PROJECT NO.	SHEET

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 15417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/12/2013

STANDARD PLAN NO.	DATED	SHEET NO.
907-03	APRIL 16, 2009	3 OF 3

COMMERCIAL DRIVES
TYPICAL PROFILES AND DETAILS

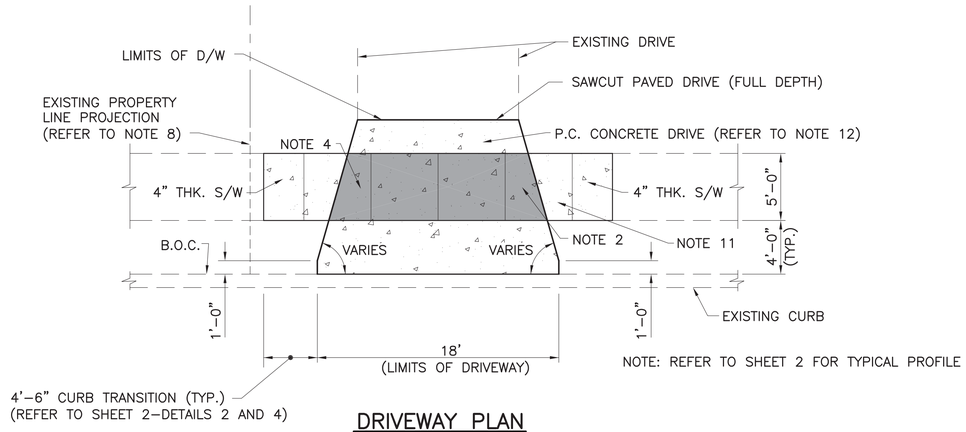
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907-03

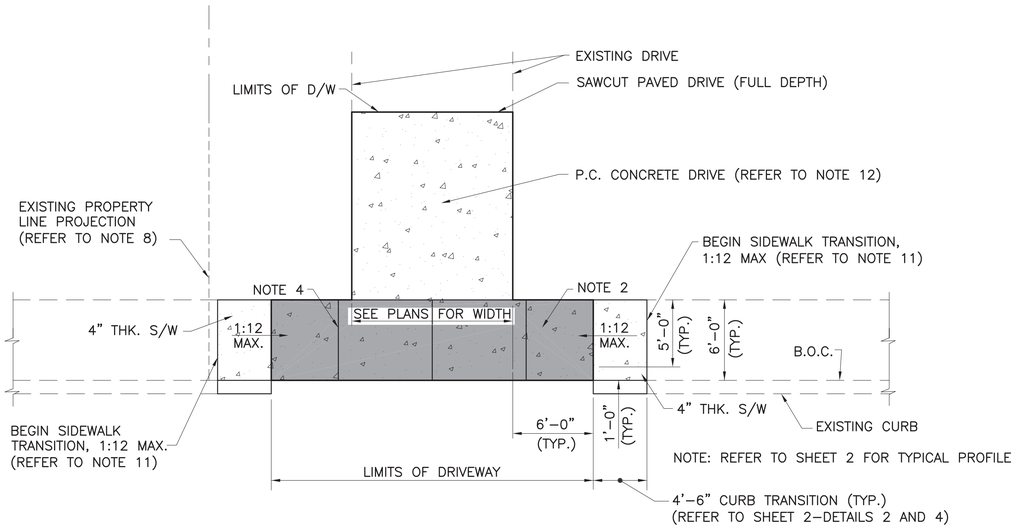
ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET



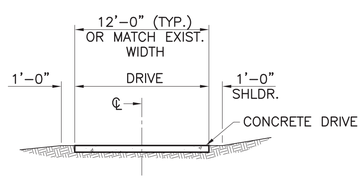
NOTE: REFER TO SHEET 2 FOR TYPICAL PROFILE

DRIVEWAY PLAN
LOCAL STREETS (REFER TO NOTE 10)
N.T.S.



NOTE: REFER TO SHEET 2 FOR TYPICAL PROFILE

DRIVEWAY PLAN
COLLECTOR AND ARTERIAL STREETS (REFER TO NOTE 10)
N.T.S.



SECTION VIEW
N.T.S.

NOTES:

1. DRIVEWAY GEOMETRY SHOWN SHALL APPLY FOR BOTH NEW STREET CONSTRUCTION AND MODIFICATIONS TO EXISTING STREETS.
2. SIDEWALK THICKNESS SHALL MATCH DRIVEWAY THICKNESS WITHIN LIMITS OF DRIVEWAY OR AS DIRECTED BY THE PROJECT ENGINEER.
3. CONSTRUCTION OR KEYWAY JOINT REQ'D WHEN DRIVE DIMENSIONS EXCEED 16' IN EITHER DIRECTION. LOCATION OF JOINTS SHALL BE COORDINATED WITH THE PROJECT ENGINEER.
4. WITHIN THE DRIVEWAY LIMITS, SIDEWALK AREA SHALL HAVE SCORED JOINTS PER STANDARD PLANS AND SPECIFICATIONS. EXPANSION AND CONSTRUCTION JOINT LOCATIONS SHALL BE PER 907-01.
5. REFER TO STD. PLAN 907-01 FOR SIDEWALK RAMPS. SIDEWALK TRANSITION SHALL NOT EXCEED 1:12 SLOPE.
6. MAXIMUM CHANGE IN GRADES IS 12% FOR A CREST AND 11% AT SAGS WITHOUT VERTICAL CURVES. MAXIMUM GRADE CHANGES SHOULD BE AT LEAST 10' APART. MAXIMUM GRADE TYPICALLY SHALL NOT EXCEED 20%.
7. REFER TO STD. PLAN 502-01 FOR CURB DETAILS AND REFER TO STD. PLAN 907-02 FOR COMBINATION CURB AND GUTTER DETAILS.
8. DRIVEWAY SHALL NOT EXTEND BEYOND THE ADJACENT PROPERTY LINE PROJECTION.
9. THE WIDTH OF THE DRIVEWAY AT THE THROAT SHALL BE A MINIMUM OF 12'.
10. STREET TYPES ARE AS DEFINED BY THE TRAFFIC ENGINEER.
11. NEW SIDEWALKS SHALL BE TRANSITIONED TO MATCH EXISTING SIDEWALKS AS DIRECTED BY THE PROJECT ENGINEER.
12. DRIVEWAY THICKNESS SHALL BE AS SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. MINIMUM RESIDENTIAL DRIVE THICKNESS IS 6".

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
2/16/2015

LEGEND

SIDEWALK AREA WITHIN DRIVEWAY (PAID FOR AS DRIVEWAY) REFER TO NOTES 2 AND 4.

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO. 907-04	DATED APRIL 16, 2009	SHEET NO. 1 OF 2

RESIDENTIAL DRIVES
GEOMETRIC DETAILS

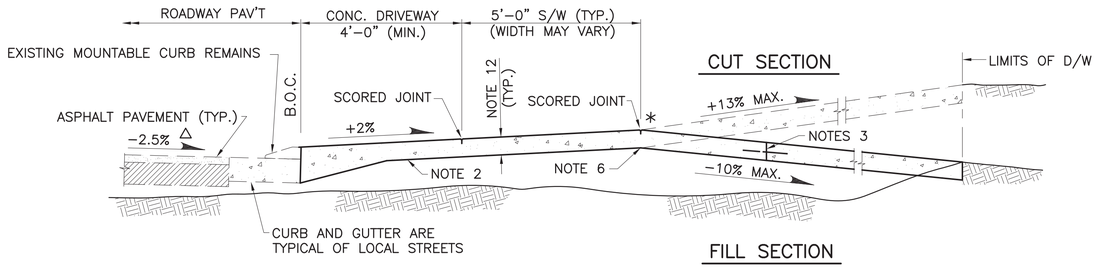
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

907-04

ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM C.V.

907-04_1of2.dwg.

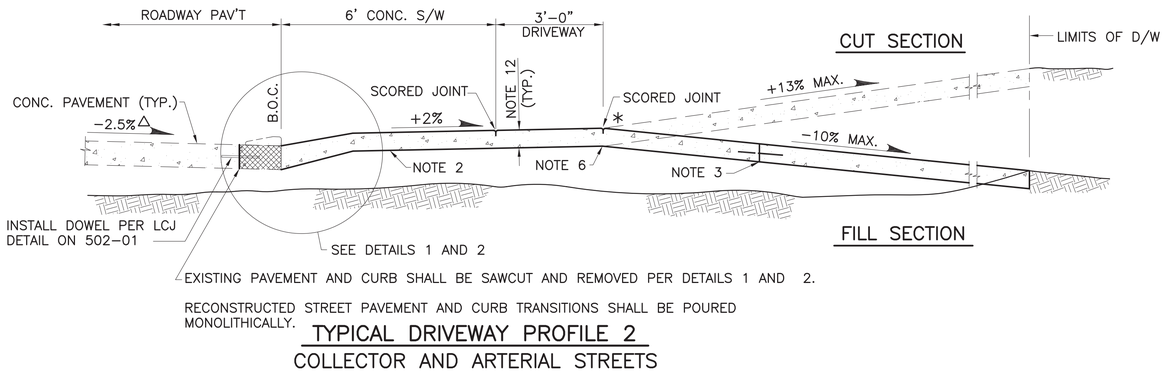


TYPICAL DRIVEWAY PROFILE 1
LOCAL RESIDENTIAL STREET W/MOUNTABLE CURB
REFER TO SHEET 1 FOR NOTES
N.T.S.

△ SLOPES SHOWN ARE FOR NORMAL CROWN ROADWAY SECTION

□ 2'–0" DRIVEWAY TRANSITION, NOT SUBJECT TO SAG CRITERIA

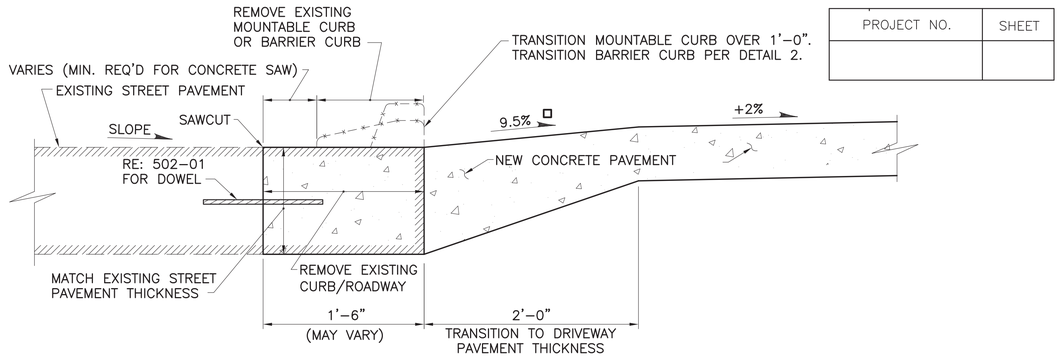
∗ A +0.33' VERTICAL CLEARANCE IS REQUIRED FROM THE GUTTERLINE TO THE LOCATION SHOWN.



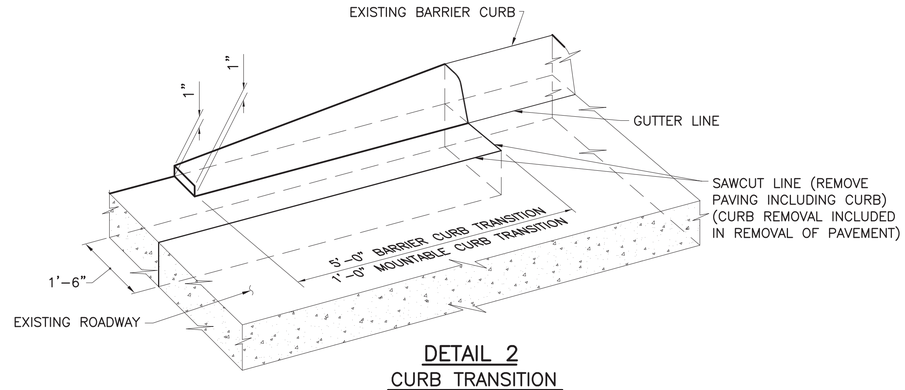
EXISTING PAVEMENT AND CURB SHALL BE SAWCUT AND REMOVED PER DETAILS 1 AND 2.

RECONSTRUCTED STREET PAVEMENT AND CURB TRANSITIONS SHALL BE POURED MONOLITHICALLY.

TYPICAL DRIVEWAY PROFILE 2
COLLECTOR AND ARTERIAL STREETS
REFER TO SHEET 1 FOR NOTES
N.T.S.

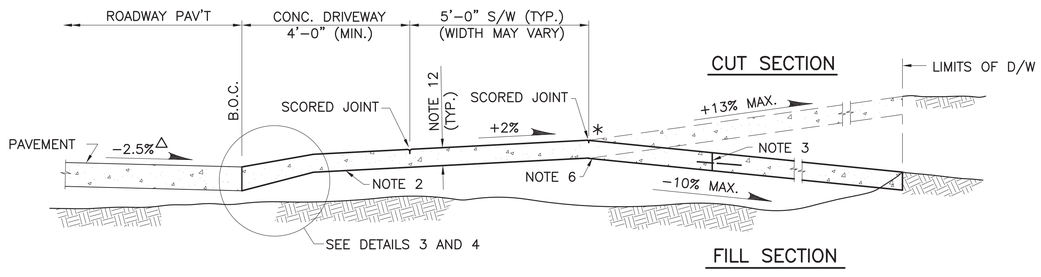


DETAIL 1
DRIVEWAY CONNECTION
N.T.S.



DETAIL 2
CURB TRANSITION
(TRANSITION OF BARRIER CURB SHOWN.
TRANSITION MOUNTABLE CURB OVER 1'–0".)
N. T. S.

NEW DRIVEWAY ON EXISTING STREET



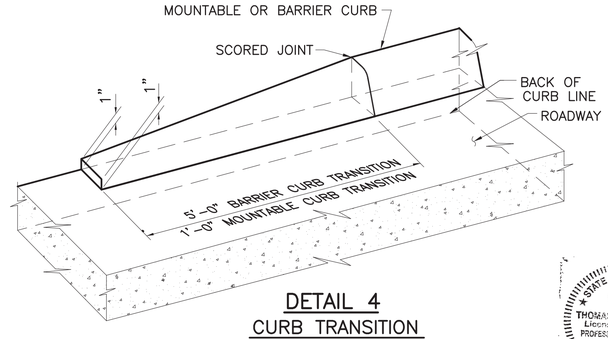
△ SLOPES SHOWN ARE FOR NORMAL CROWN ROADWAY SECTION

□ 2'–0" DRIVEWAY TRANSITION, NOT SUBJECT TO SAG CRITERIA

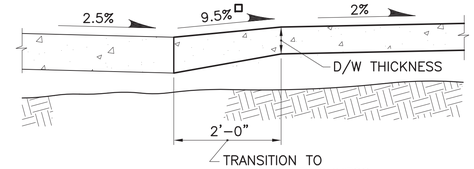
∗ A +0.33' VERTICAL CLEARANCE IS REQUIRED FROM THE GUTTERLINE TO THE LOCATION SHOWN.

◉ FOR NEW LOCAL STREET WITH MOUNTABLE CURB, CONSTRUCT IN ACCORDANCE WITH TYPICAL DRIVEWAY PROFILE 1.

TYPICAL DRIVEWAY PROFILE 3
COLLECTOR AND ARTERIAL STREETS ◉
REFER TO SHEET 1 FOR NOTES
N.T.S.



DETAIL 4
CURB TRANSITION
(TRANSITION OF BARRIER CURB SHOWN.
TRANSITION MOUNTABLE CURB OVER 1'–0".)
N. T. S.



DETAIL 3
DRIVEWAY CONNECTION
N.T.S.

NEW DRIVEWAY ON NEW STREET
N.T.S.

PROJECT NO.	SHEET

STANDARD PLAN NO.	DATED	SHEET NO.
907–04	APRIL 16, 2009	2 OF 2

RESIDENTIAL DRIVES

TYPICAL PROFILES AND DETAILS

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

DESIGNED	DRAWN	CHECKED	APPROVED
GLP	GLP	GLP	T. STEPHENS

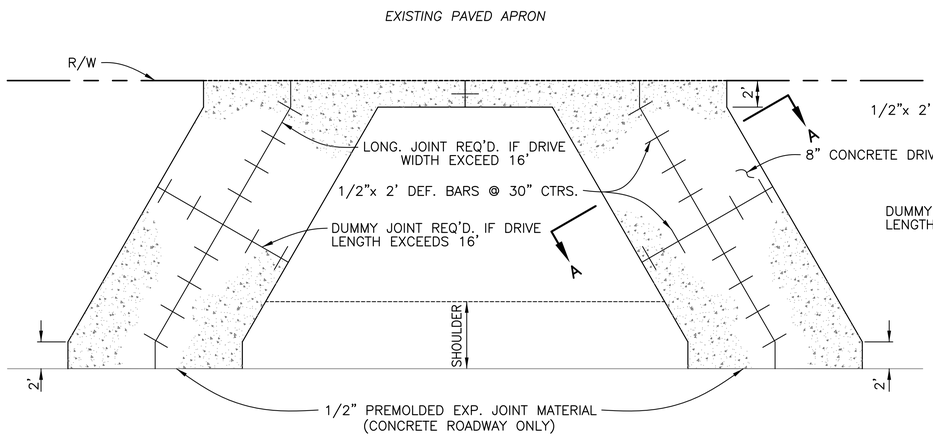
DATE	DESCRIPTION REVISIONS	BY

STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/16/2012

907–04

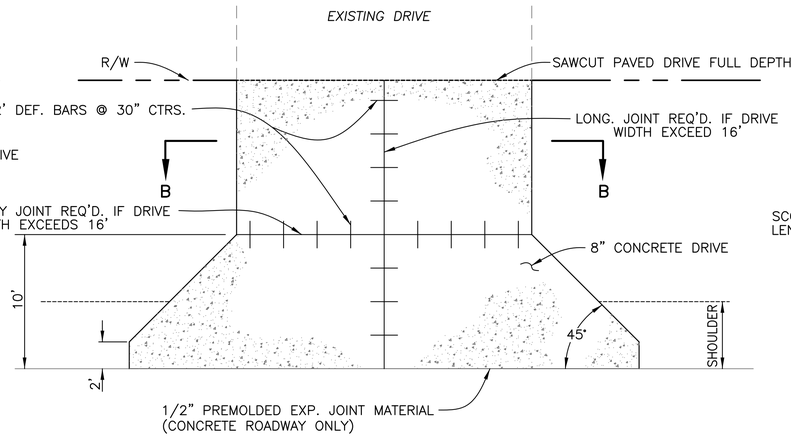
ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM G.V.

PROJECT NO.	SHEET
	235



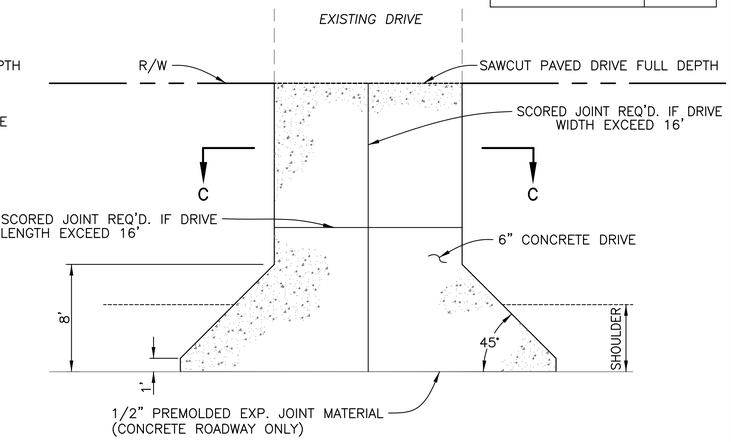
PLAN

SCALE: 3/16"=1'



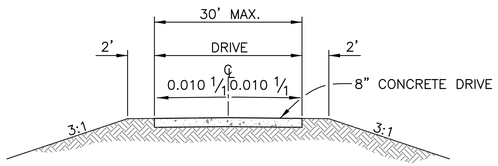
PLAN

SCALE: 3/16"=1'



PLAN

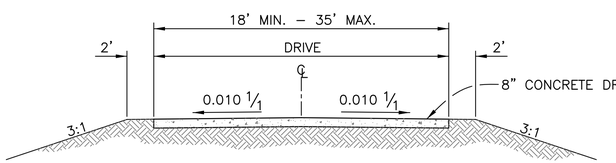
SCALE: 3/16"=1'



SECTION A–A

DOUBLE SKEWED COMMERCIAL DRIVE

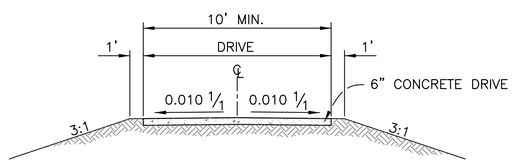
SCALE: 3/16"=1'



SECTION B–B

SINGLE COMMERCIAL DRIVE

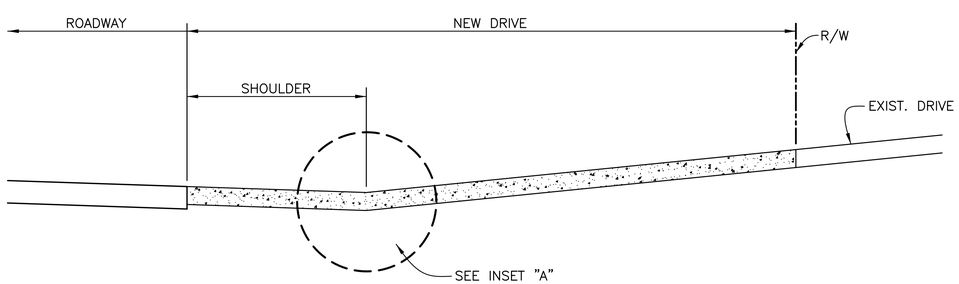
SCALE: 3/16"=1'



SECTION C–C

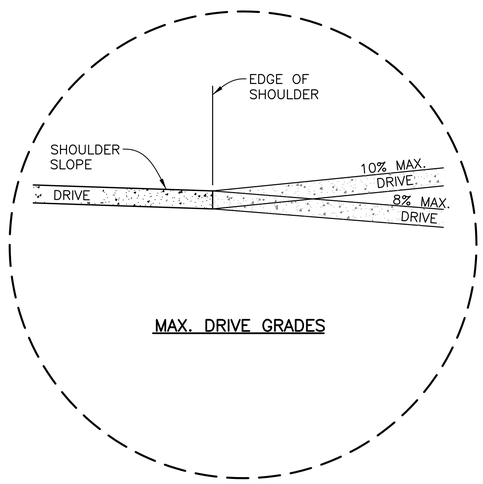
RESIDENTIAL DRIVE

SCALE: 3/16"=1'



DRIVE PROFILE

SCALE: 1/2"=1'



MAX. DRIVE GRADES

INSET "A"

SCALE: 1/2"=1'

DATE	DESCRIPTION REVISIONS	BY

STANDARD PLAN NO.	DATED	SHEET NO.
907–05	August 26, 2002	1 OF 1

DRIVES FOR NON–CURBED ROADWAYS

ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
R.E. ELLIS	G. VANNICE	R.E. ELLIS	M.J. BROUSSARD

CPS 907–05

ENGINEERING ACADR14 STDLAY FORM G.V.