

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	MAX	MAXIMUM
AGGR	AGGREGATE	MH	MANHOLE
APPROX	APPROXIMATELY	MIN	MINIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MOM	MOMENT
AVG	AVERAGE	N	NORTH
BC	BEGIN CURVE	NIC	NOT IN CONTRACT
BDY	BOUNDARY	NTS	NOT TO SCALE
BLDG	BUILDING	OC	ON CENTER
BM	BENCH MARK	OD	OUTSIDE DIAMETER
BOP	BOTTOM OF PIPE	PC	POINT OF CURVE
BRG	BEARING	PCT, X	PERCENT
BVC	BEGIN VERTICAL CURVE	PI	POINT OF INTERSECTION
CB	CATCH BASIN	PIV	POST INDICATOR VALVE
C	COMMUNICATION	PVIC	POINT OF INTERSECTION, VERTICAL CURVE
C TO C	CENTER TO CENTER	POC	POINT OF CONNECTION
CF	CURB FACE	POVC	POINT ON VERTICAL CURVE
CJ	CONSTRUCTION JOINT	PST	POUND-FORCE PER SQUARE INCH
CL, E	CENTERLINE	PT	POINT OF TANGENCY
CLR	CLEAR	PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	PVMT	PAVEMENT
CO	CLEANOUT, CONDUIT ONLY, CONSTRUCTION JOINT	PW	POTABLE WATER
COL	COLUMN	R	RADIUS, RISE
COMC	CONCRETE	RAD	RADIAL
CONSTR	CONSTRUCTION	RCP	REINFORCED-CONCRETE PIPE
CONT	CONTINUATION	RD	ROAD
CP	CONCRETE PIPE	RODR	REDUCER
CPB	COMMUNICATIONS PULLBOX	REF	REFERENCE
CS	CARBON STEEL	REINF	REINFORCEMENT
CU FT	CUBIC FEET	REQD	REQUIRED
CULV	CULVERT	REV	REVISION
CWR	CHILLED WATER RETURN	RG	ROUGH GRADE
CWS	CHILLED WATER SUPPLY	R/W	RIGHT-OF-WAY
CY	CUBIC YARD	R/W	RIGHT-OF-WAY
DELTA	DELTA = ANGLE	S	SLOPE, SOUTH
D	DUCT	SCH, SCHED	SCHEDULE
DEG	DEGREE	SD	STORM DRAIN
DET	DETAIL	SG	SUBGRADE
DI	DUCTILE IRON	SH	SHIELD
DIA, Ø	DIAMETER	SIM	SIMILAR
DL	DRAIN LINE	SO FT, SF	SQUARE FOOT
DWG	DRAWING	SS	SANITARY SEWER
E	EAST, ELECTRICAL	STA	STATION
EA	EACH	STD	STANDARD
EC	END CURVE	STL	STEEL
EDB	ELECTRICAL DUCT BANK	SW	SIDEWALK
EJ	EXPANSION JOINT	T	TANGENT, TELEPHONE
EL, ELEV	ELEVATION (HEIGHT)	TC	TOP OF CURB
ELEC	ELECTRICAL	TEL	TELEPHONE
ELM	ELECTRICAL MANHOLE	TG	TOP OF GRATE
EPB	ELECTRICAL PULLBOX	TOC	TOP OF CONCRETE
EY	ELECTRICAL VAULT	TOP	TOP OF PIPE
EW	END VERTICAL CURVE	TOPO	TOPOGRAPHY
EW	EACH WAY	TW	TOP OF WALL
EXIST, EX	EXISTING	TYP	TYPICAL
FH	FIRE HYDRANT	UG	UNDERGROUND
FIN	FINISH	UNOT	UNLESS OTHERWISE NOTED
FIN FL	FINISH FLOOR	VC	VERTICAL CURVE
FG	FINISH GRADE	VCP	VITRIFIED CLAY PIPE
FL	FLOOR	VERT	VERTICAL
FLG	FLOW LINE	VOL	VOLUME
FOF	FACE OF FLANGE	W	WEST, WATER
FS	FINISH SURFACE	W/O	WITHOUT
FT	FOOT, FEET	WW	WASTE WATER
FTG	FOOTING	WWF	WELDED WIRE FABRIC
FW	FIRE WATER	XFMR	TRANSFORMER
GALV	GALVANIZED	YD	YARD
GA	GAGE		
GB	GRADE BREAK		
GPM	GALLONS PER MINUTE		
GR	GRADE		
GVL	GRAVEL		
HORIZ	HORIZONTAL		
HP	HIGH POINT		
ID	INSIDE DIAMETER		
IN	INCH		
INCL	INCLUDE		
INTSCT	INTERSECTION		
INV	INVERT		
JB	JUNCTION BOX		
JT	JOINT		
L	LENGTH		
LA DOTD	STATE OF LOUISIANA, DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT		
LB	POUND		

LEGEND

EXISTING	NEW	DESCRIPTION
		CENTERLINE, E
		BUILDING OR STRUCTURE
		FENCE LINE
		ROAD
		ASPHALT CONCRETE PAVING
		MULTIPLE BITUMINOUS SURFACE
		CONCRETE
		RIP-RAP
		DIRECTION OF SHEET FLOW
		FLOWLINE
		CLEANOUT
		DRAIN LINE
		POTABLE WATER
		ELECTRICAL
		ELECTRICAL DUCT BANK
		STORM DRAIN
		SANITARY SEWER
		TELEPHONE
		WATER
		FIRE WATER
		CHILLED WATER SUPPLY
		CHILLED WATER RETURN
		COMMUNICATIONS
		COMMUNICATIONS OR ELECTRICAL PULLBOX
		ELECTRICAL VAULT OR MANHOLE
		FIRE HYDRANT
		GATE VALVE
		MANHOLE
		STORM DRAIN CATCH BASIN
		CULVERT
		CULVERTS w/ FLARED END OUTLET
		POWER POLE
		GUARD POST
		PLUG OR CAP
		INDEX CONTOUR LINE
		INTERMEDIATE CONTOUR LINE
		CUT/FILL SLOPE
		FINISH GRADE ELEVATION
		FINISH SURFACE ELEVATION
		FLOW LINE ELEVATION
		TOP OF CURB
		TOP OF WALL
		INVERT ELEVATION
		ROUGH GRADE ELEVATION
		SECTION CUT
		DETAIL INDICATION
		DETAIL TITLE
		PROFILE
		REVISION CLOUD
		REVISION TRIANGLE & NUMBER ON FACE OF DRAWING

GENERAL NOTES

- THE ORIGINAL TOPOGRAPHY WITHIN THE PROPERTY LINES, WAS GENERATED BY COMPUTER METHODS FROM A STAKING SURVEY BY JOHN E. CHANCE & ASSOCIATES, INC., 200 DULLES DRIVE, LAFAYETTE, LOUISIANA, DATED MARCH 8, 1993. TOPOGRAPHY AND PLANIMETRIC FEATURES OUTSIDE THE PROPERTY BOUNDARY ARE BASED ON USS-SATSUMA, LA. QUADRANGLE, DATED 1980. ROUGH GRADING ACTIVITIES BASED ON THE AFORESAID TOPOGRAPHY FOR THE BEAM TUBE ARMS, CORNER STATION AND END STATIONS WAS ACCOMPLISHED BY STRANCO CONSTRUCTION IN ACCORDANCE WITH PLANS PREPARED BY PARSONS AND FORMS THE PRIMARY TOPOGRAPHY SHOWN ON THE FACILITY DRAWINGS.
- GEOTECHNICAL INFORMATION AND SOIL BORING SUMMARIES ARE FROM AN INVESTIGATION BY WOODWARD-CLYDE CONSULTANTS, 2822 O'NEAL LANE, BATON ROUGE, LOUISIANA, DATED FEBRUARY, 1995. A COPY OF THIS REPORT IS ON FILE WITH THE CONSTRUCTION MANAGER.
- DRAINAGE CONSIDERATIONS INCORPORATED WITHIN THE DRAWINGS ARE FROM A HYDROLOGIC AND HYDRAULIC REPORT BY GULF ENGINEERS & CONSULTANTS, INC., 3357 INTERLINE AVENUE, BATON ROUGE, LOUISIANA, DATED DECEMBER, 1994. A COPY OF THIS REPORT IS ON FILE WITH THE CONSTRUCTION MANAGER.
- DIMENSIONS, ELEVATIONS AND LOCATION OF EXISTING UTILITIES, STRUCTURES, OR GRADING ARE TO BE VERIFIED PRIOR TO START OF CONSTRUCTION BY CONTRACTOR. ANY DISCREPANCY WITH THE DRAWINGS SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE CONSTRUCTION MANAGER. ANY ADDITIONAL WORK PERFORMED BY THE CONTRACTOR DUE TO HIS FAILURE TO VERIFY AND SO ADVISE, SHALL BE COMPLETELY AT HIS OWN COST AND AT NO COST TO THE INSTITUTE.
- NOTES RELATING TO A SPECIFIC DRAWING WILL BE FOUND ON THE DRAWING FOR WHICH THEY ARE APPLICABLE.
- ALL UNDERGROUND PIPES AND CULVERTS SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION FROM HEAVY MOVING EQUIPMENT.
- THE CONTRACTOR SHALL BE REQUIRED TO APPLY A DUST INHIBITOR ON ALL ROADS, AT THE DIRECTION OF THE CONSTRUCTION MANAGER.
- WASTE AREAS WILL BE DESIGNATED IN THE FIELD BY THE CONSTRUCTION MANAGER.
- STRAIGHT GRADE BETWEEN SPOT ELEVATIONS, UNLESS OTHERWISE SHOWN ON PLANS.
- FINISHED SURFACES SHALL BE SLOPED UNIFORMLY FROM HIGH POINTS, RIDGE LINES, AND AROUND FOUNDATIONS TO FLOW LINES AND AREA DRAINS UNLESS INDICATED OTHERWISE.
- STORM DRAIN, SANITARY SEWER, AND UTILITY LINES SHALL BE SLOPED AT A UNIFORM GRADE BETWEEN INVERT ELEVATIONS.
- SEEDING SHALL NOT BE DONE ON THE FLAT BOTTOM OF DITCHES OR ON CURRENTLY GRASSED AREAS THAT ARE UNDISTURBED BY GRADING OPERATIONS. ALL OTHER AREAS SHALL BE SEEDED.
- THE STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT, OFFICE OF HIGHWAYS, STANDARD PLANS ARE A PART OF THESE DOCUMENTS TO THE EXTENT REFERENCED.
- THE STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ARE A PART OF THESE DOCUMENTS TO THE EXTENT REFERENCED.

SPECIFICATION FOR LIMESTONE SURFACING (LIGO TEMPORARY ACCESS ROAD)

LIMESTONE USED FOR SURFACING OF THE LIGO TEMPORARY ACCESS ROAD SHALL MEET THE FOLLOWING (PER LA. DOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 1992, SECTION 1003 AGGREGATES FOR SURFACE COURSE, ARTICLE 1003.03(a) "STONE"):

*THIS MATERIAL SHALL CONSIST OF 100 PERCENT STONE AND SHALL CONFORM TO THE FOLLOWING GRADATIONS:

U.S. SIEVE	PERCENT PASSING
1-1/2"	100
NO. 4	50-100
NO. 40	36-65
NO. 200	10-32
	3-15

THE FRACTION OF STONE PASSING THE NO. 40 SIEVE SHALL BE NON-PLASTIC.*

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E
D
C
B
A

DRAWING NO. 5 DESCRIPTION NO. DATE BY CHKD ENGR PROJ DESCRIPTION	REVISIONS NO. DATE BY CHKD ENGR PROJ DESCRIPTION	ISSUED FOR CONSTRUCTION DRAWN WRB 11-15-96 CHECKED WL 11-15-96 ENGINEER JB 11/15/96 PROJ 11/15/96	 100 WEST WALNUT STREET PASADENA, CALIFORNIA	 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY BEAM TUBE ENCLOSURE - LIVINGSTON, LA		
		TITLE CIVIL GENERAL NOTES, LEGEND & ABBREVIATIONS			SHEET NUMBER NONE PP150969 8094	PROJECT NUMBER L A - C - 502	