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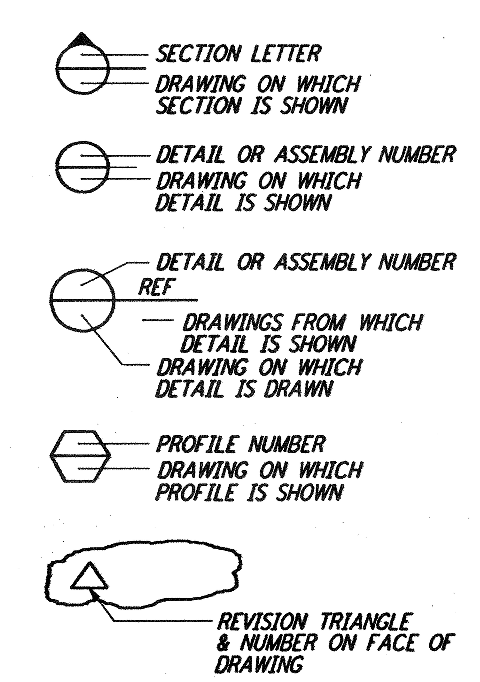
ABBREVIATIONS

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

LEGEND

EXISTING	NEW	DESCRIPTION
		CENTERLINE, ℄
		BUILDING OR STRUCTURE
		FENCE LINE
		ROAD
		ASPHALT CONCRETE PAVING
		MULTIPLE BITUMINOUS SURFACE
		CONCRETE
		RIP-RAP
		DIRECTION OF SHEET FLOW
		FLOWLINE
CO	CO	CLEANOUT
-----DL-----	——DL——	DRAIN LINE
-----PW-----	---PW---	POTABLE WATER
-----E-----	-----E-----	ELECTRICAL
-----EDB-----	---EDB---	ELECTRICAL DUCT BANK
-----SD-----	——SD——	STORM DRAIN
-----SS-----	---SS---	SANITARY SEWER
-----T-----	-----T-----	TELEPHONE
-----W-----	---W---	WATER
	---FW---	FIRE WATER
	---CWS---	CHILLED WATER SUPPLY
	----CWR----	CHILLED WATER RETURN
	-----C-----	COMMUNICATIONS
	CPB/EPB	COMMUNICATIONS OR ELECTRICAL PULLBOX
	EV/EMH	ELECTRICAL VAULT OR MANHOLE
		FIRE HYDRANT
		GATE VALVE
		MANHOLE
		STORM DRAIN CATCH BASIN
		CULVERT
		CULVERTS w/ FLARED END OUTLET
PP	PP	POWER POLE
GP	GP	GUARD POST
		PLUG OR CAP
---(50)---	—— 50 ——	INDEX CONTOUR LINE
		INTERMEDIATE CONTOUR LINE
TOP / TOE	TOP / TOE	CUT/FILL SLOPE
(51.00) FG	51.00 FG	FINISH GRADE ELEVATION
(52.50) FS	52.50 FS	FINISH SURFACE ELEVATION
(53.65) FL	53.65 FL	FLOW LINE ELEVATION
(51.50) TC	51.50 TC	TOP OF CURB
(57.00) TW	57.00 TW	TOP OF WALL
(51.00) INV	51.00 INV	INVERT ELEVATION
(51.00) RG	51.00 RG	ROUGH GRADE ELEVATION



GENERAL NOTES

1. 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 'USGS'SATSUMA, LA. QUADRANGLE, DATED 1980. ROUGH GRADING ACTIVITIES BASED ON THE AFOREMENTIONED TOPOGRAPHY FOR THE BEAM TUBE ARMS, CORNER STATION AND END STATIONS PADS WAS ACCOMPLISHED BY STRANCO CONSTRUCTION IN ACCORDANCE WITH PLANS PREPARED BY PARSONS AND FORMS THE PRIMARY TOPOGRAPHY SHOWN ON THE FACILITY DRAWINGS.
2. 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.
3. DRAINAGE CONSIDERATIONS INCORPORATED WITHIN THE DRAWINGS ARE FROM A HYDROLOGIC AND HYDRAULIC REPORT BY GULF ENGINEERS & CONSULTANTS, INC., 9357 INTERLINE AVENUE, BATON ROUGE, LOUISIANA, DATED DECEMBER, 1994. A COPY OF THIS REPORT IS ON FILE WITH THE CONSTRUCTION MANAGER.
4. 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.
5. NOTES RELATING TO A SPECIFIC DRAWING WILL BE FOUND ON THE DRAWING FOR WHICH THEY ARE APPLICABLE.
6. ALL UNDERGROUND PIPES AND CULVERTS SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION FROM HEAVY MOVING EQUIPMENT.
7. THE CONTRACTOR SHALL BE REQUIRED TO APPLY A DUST INHIBITOR ON ALL ROADS, AT THE DIRECTION OF THE CONSTRUCTION MANAGER.
8. WASTE AREAS WILL BE DESIGNATED IN THE FIELD BY THE CONSTRUCTION MANAGER.
9. STRAIGHT GRADE BETWEEN SPOT ELEVATIONS, UNLESS OTHERWISE SHOWN ON PLANS.
10. FINISHED SURFACES SHALL BE SLOPED UNIFORMLY FROM HIGH POINTS, RIDGE LINES, AND AROUND FOUNDATIONS TO FLOW LINES AND AREA DRAINS UNLESS INDICATED OTHERWISE.
11. STORM DRAIN, SANITARY SEWER, AND UTILITY LINES SHALL BE SLOPED AT A UNIFORM GRADE BETWEEN INVERT ELEVATIONS.
12. 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.
13. THE STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT, OFFICE OF HIGHWAYS, STANDARD PLANS ARE A PART OF THESE DOCUMENTS TO THE EXTENT REFERENCED.
14. 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- / "	100
/ "	50-100
NO. 4	36-65
NO. 40	10-32
NO. 200	3-15

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

LIGO-D961259-01-O

REFERENCES	
DRAWING NO.	DESCRIPTION

NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
1	1-15-99	MEI	--	--	MDW	ISSUED FOR AB BUILT

0 ISSUED FOR CONSTRUCTION		
DRAWN	WRB	11-15-96
CHECKED		
ENGINEER		
PROJ		

AS-BUILT DRAWINGS

PARSONS
100 WEST WALNUT STREET
PASADENA, CALIFORNIA

LIGO
CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LASER INTERFEROMETER
GRAVITATIONAL-WAVE OBSERVATORY
BEAM TUBE ENCLOSURE - LIVINGSTON, LA

TITLE: CIVIL GENERAL NOTES, LEGEND & ABBREVIATIONS

SCALE	CONTRACT NUMBER	PROJECT NUMBER	SHEET NUMBER	REVISIONS
NONE	PP150969	8094	LA-C-502	1