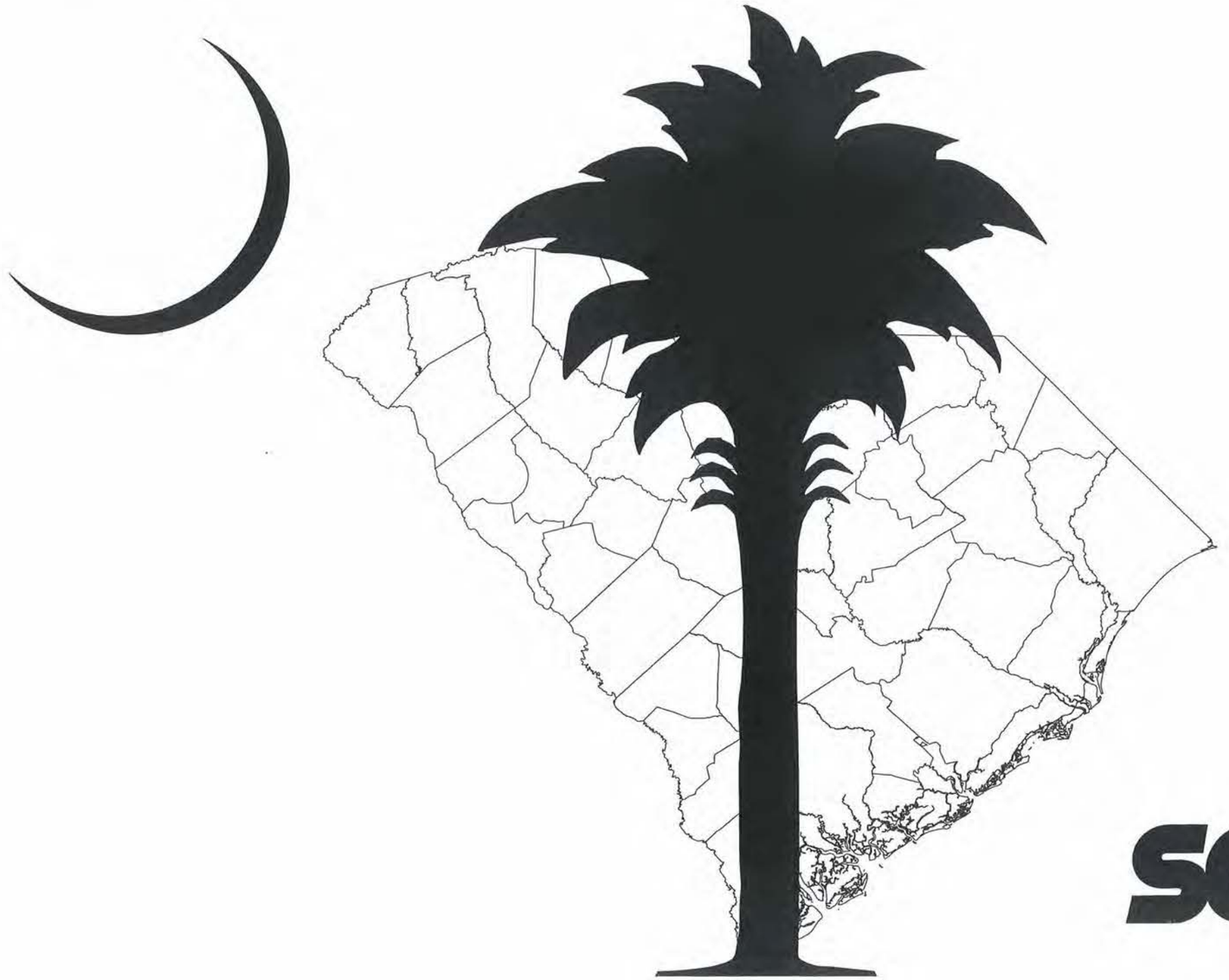

GENERAL NOTES & INSTRUCTIONS

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

SECTION
100-000

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EAGLE, II

SIGNATURE

MARCH 3, 2008

DATE

#	DATE	CHK	DESCRIPTION
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0	3/2008	DSO	GENERAL REVISIONS

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

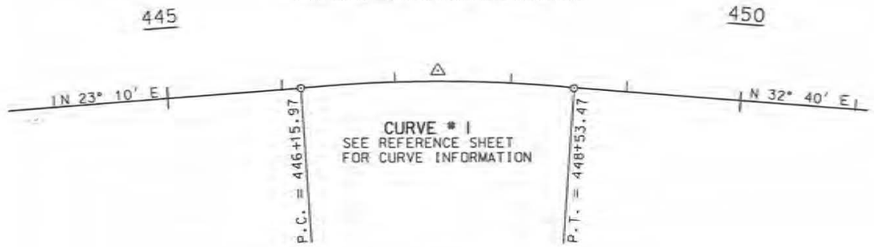
SYMBOLS & ABBREVIATIONS (ROAD)

100-105-00

EFFECTIVE LETTING DATE | MAY, 2008

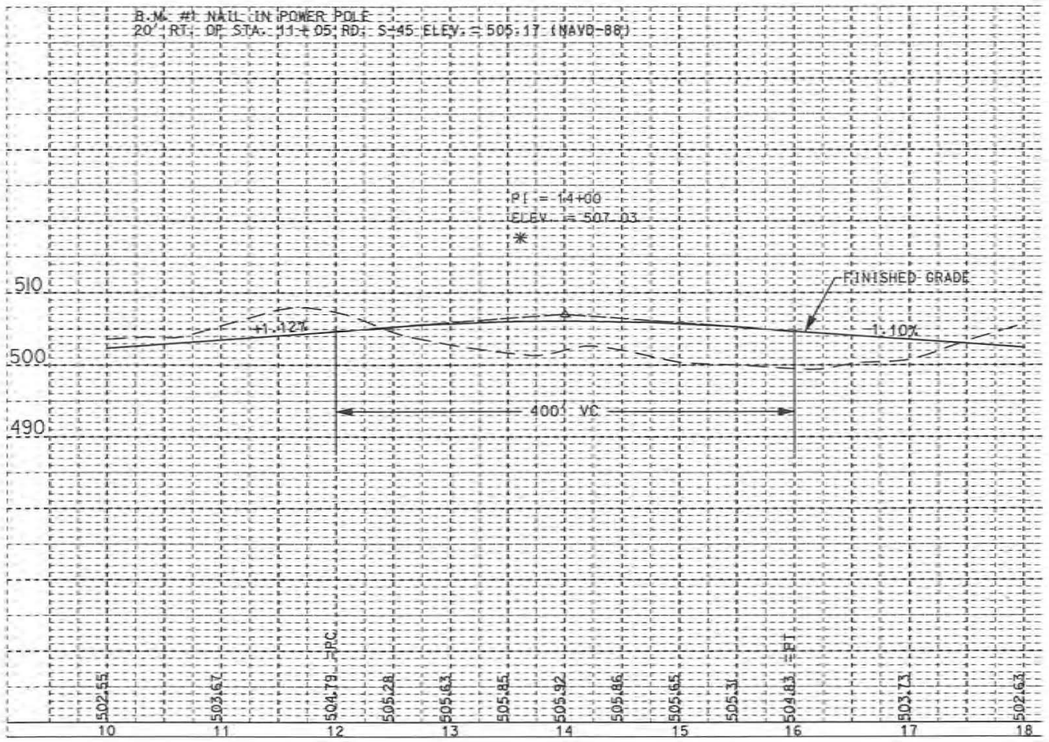
THIS DRAWING IS NOT TO SCALE

TYPICAL HORIZONTAL CURVE



ALIGNMENT CONTROL CAN BE FOUND ON REFERENCE SHEET

TYPICAL PROFILE



* NOTE:
IF THE DESIGN SPEED OF THE VERTICAL CURVE IS LESS THAN THE DESIGN SPEED OF THE PROJECT, IT SHALL BE NOTED UNDER THE P.I. ELEVATION OF THE VERTICAL CURVE.

LEGEND

PI = POINT OF INTERSECTION
Δ = DELTA ANGLE
T = TANGENT LENGTH
L = LENGTH OF CURVE
R = RADIUS OF CURVE
E = EXTERNAL DISTANCE
D.S. = DESIGN SPEED IN MILES PER HOUR
e_{MAX} = MAXIMUM SUPERELEVATION TABLE
e = SUPERELEVATION RATE IN FOOT PER FOOT WIDTH
POC = POINT OF CURVE
POT = POINT OF TANGENT
POST = POINT ON SUB-TANGENT
PC = POINT OF CURVATURE (BEGINNING OF CURVE)
PT = POINT OF TANGENT (END OF CURVE)
ELEV. = ELEVATION
VC = LENGTH OF VERTICAL CURVE
PCC = POINT OF COMPOUND CURVE
PRC = POINT OF REVERSE CURVE
D = DEGREE OF CURVATURE
PC-LG% = LONGITUDINAL GRADIENT AT POINT OF CURVATURE
PT-LG% = LONGITUDINAL GRADIENT AT POINT OF TANGENT
BM = BENCHMARK

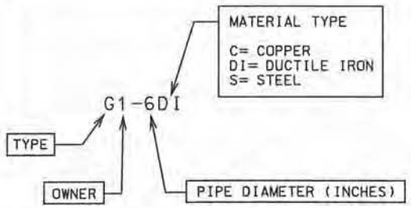
NOTE:
THESE SYMBOLS AND ABBREVIATIONS WERE UPDATED ON 01/05. ANY DRAWINGS CREATED PRIOR TO THIS UPDATE MAY REFLECT PREVIOUS SYMBOLOGY PRACTICES.

STANDARD SYMBOLS

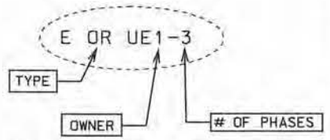
CONCRETE MARKER
R/W MONUMENT
PROPERTY CORNER
PROPERTY PIN
SIGN
NEW SIGN
ELECTRIC PEDESTAL
UNDERGROUND TANK
WELL
AIR CONDITIONER
COLUMN
RADIO/TV/CELLULAR TOWER
SATELLITE DISH
GRAVE
SPRING
GEODETIC MARKER
FLOOD/GROUND LIGHT
TELEPHONE BOX
WATER SPIGOT
SPRINKLER
FLAG POLE
MARSH/SWAMP
PAMPAS GRASS
BENCHMARK — B.M. 124
SPOT ELEVATION — 37.612
FILL CAP FOR UNDERGROUND TANK
WITNESS POST
PARKING METER
ELECTRIC OUTLET/RESIDENTIAL
VACUUM/COMMERCIAL
SEDIMENT DAM
SEDIMENT FILTER
TREE/SHRUB (NOT SURVEYED)
TREE/SHRUB (SURVEYED)
WOODED AREA OUTLINE
TREE LINE
R/R CROSSING ARM
R/R MILE POST
R/R SIGNAL
R/R SIGNAL BOX

STATE LINE — NORTH CAROLINA / SOUTH CAROLINA
COUNTY LINE — RICHLAND COUNTY / LEXINGTON COUNTY
CITY LIMITS — COLUMBIA CITY LIMITS
PRESENT RIGHT-OF-WAY /PROPERTY LINE — R / PRESENT 50' R/W
PRESENT RIGHT-OF-WAY /EXISTING CONTROL OF ACCESS — PRESENT 33' R/W / ROADWAY SIDE
NEW RIGHT-OF-WAY — NEW 50' R/W
NEW RIGHT-OF-WAY /NEW CONTROL OF ACCESS — NEW 45' R/W / ROADWAY SIDE
CONSTRUCTION LIMITS — 22'C 24'F 21'C CZL
EXISTING FENCE
NEW FENCE
EXISTING PAVED ROAD
EXISTING DIRT ROAD
EXISTING PAVED ROAD WITH CURB & GUTTER
NEW PAINTED MEDIAN
NEW CONCRETE SIDEWALK/ MEDIAN/DITCH GUTTER
BUILDING — FRAME DWLG.
RIVERS, CREEKS, STREAMS
EXISTING BOX CULVERT
NEW BOX CULVERT
BRIDGE
NPDES — NPDES NPDES NPDES
DRAINAGE DITCHES
NEW DRAINAGE STRUCTURES
EXISTING DRAINAGE STRUCTURES/PIPE
NEW PIPE
EXISTING PIPE
NORTH ARROW
FACE OF CURB — FOC FOC
RAILROAD TRACK
EXISTING GUARDRAIL W/ TYPE B END TREATMENT
NEW GUARDRAIL
TYPE T END TREATMENT

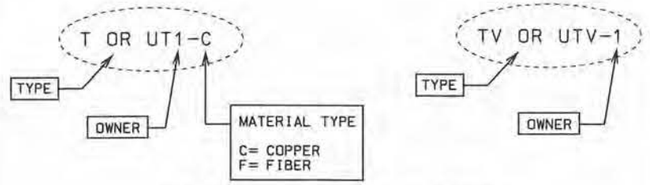
UTILITY LINE LABEL KEY



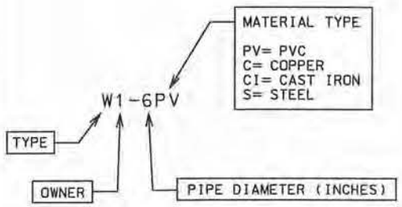
GAS



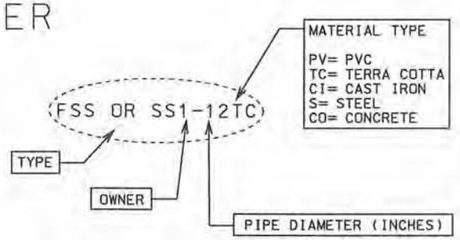
ELECTRICAL



COMMUNICATIONS



WATER



SEWER

THIS DRAWING IS NOT TO SCALE

UTILITY SYMBOLS AND LINES

NOTE:
THESE SYMBOLS WERE UPDATED ON 01/05. ANY DRAWINGS CREATED PRIOR TO THIS UPDATE MAY REFLECT PREVIOUS SYMBOLOGY PRACTICES.

GAS

- GM – GAS METER
- GV – GAS VALVE
- GMH – GAS MANHOLE
- GVT – GAS VENT
- GR – GR– GAS PRESSURE REGULATOR
- G1-6DI — GAS LINE UNDERGROUND (RECORDED)
- G1-6DI – – – GAS LINE UNDERGROUND (DESIGNATED)

WATER

- WM – WATER METER
- WV – WATER VALVE
- WMW – WATER MONITORING WELL
- FH – FIRE HYDRANT
- WMH – WATER MANHOLE
- WAR – WAR– WATER AIR RELEASE VALVE
- W1-6PV — WATER LINE (RECORDED)
- W1-6PV – – – WATER LINE (DESIGNATED)

ELECTRICAL

- PP – POWER POLE
- MP – METER POLE
- ETB – ELECTRIC TRANSFORMER BOX
- LP – LIGHT POLE
- PMH – POWER MANHOLE
- PHH – POWER CABLE HAND HOLD
- GW – GUY WIRE
- GP – GUY POLE
- PLT – POWER LINE TOWER
- TSP – TRAFFIC SIGNAL POLE
- TSJ – TRAFFIC SIGNAL JUNCTION BOX
- E1-3 — ABOVE GROUND ELECTRIC LINE
- UE1-3 — UNDERGROUND ELECTRIC (RECORDED)
- UE1-3 – – – UNDERGROUND ELECTRIC (DESIGNATED)
- E1-2,T1-C — ELECTRIC – TELEPHONE (ABOVE)
- E1-3,TV1 — ELECTRIC – TELEVISION (ABOVE)
- E2-2,T1-F,TV2 — ELECTRIC – TELEPHONE – TELEVISION (ABOVE)

SEWERS

- SVC – SEWER CLEAN OUT
- SMH – SANITARY SEWER MANHOLE
- SAR – SEWER AIR RELEASE VALVE
- SS1-12TC — GRAVITY SANITARY SEWER (RECORDED)
- SS1-12TC – – – GRAVITY SANITARY SEWER (DESIGNATED)
- FSS1-18CI — FORCED SANITARY SEWER (RECORDED)
- FSS1-12CI – – – FORCED SANITARY SEWER (DESIGNATED)

COMMUNICATIONS

- TB – TELEPHONE BOOTH
- TV – CABLE TV PEDESTAL
- TP – TELEPHONE POLE
- TPP – TELEPHONE PEDESTAL
- TM – TELEPHONE MANHOLE
- FHH – FIBER OPTIC HAND HOLD
- CT – CELL PHONE TOWER
- THH – TELEPHONE HAND HOLD
- TVHH – CABLE TV HAND HOLD
- T1-C — TELEPHONE LINE ABOVE
- T1-C,TV1 — TELEPHONE CABLE TV ABOVE
- UT1-F — TELEPHONE UNDERGROUND (RECORDED)
- UT1-C – – – TELEPHONE UNDERGROUND (DESIGNATED)
- TV-1 — CABLE TV ABOVE
- UTV-2 — CABLE TV UNDERGROUND (RECORDED)
- UTV-2 – – – CABLE TV UNDERGROUND (DESIGNATED)
- DB-1 — DUCT BANK RUN (RECORDED)
- DB-1 – – – DUCT BANK RUN (DESIGNATED)

MISCELLANEOUS

- OP – OTHER USE POLE
- EOI – EOI – END OF INFORMATION
- TH – TEST HOLE
- ?UTIL1 — UNKNOWN UTILITY LINE
- SUE — LIMITS OF SUE SWEEP

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

A POLICY FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHTS-OF-WAY

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
NO. 8858
EDWIN SYLVESTER EAGLE, II

SIGNATURE

MARCH 3, 2008
DATE

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0	3/2008	DSO	GENERAL REVISIONS

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DESIGN STANDARDS OFFICE
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COLUMBIA, SC 29201

STANDARD DRAWING

SYMBOLS & ABBREVIATIONS (UTILITY)

100-110-00

EFFECTIVE LETTING DATE: MAY 2008

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

PRECONSTRUCTION SURVEY MANUAL

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EAGLE, II

SIGNATURE

MARCH 3, 2008

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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

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COLUMBIA, SC 29201

STANDARD DRAWING

SYMBOLS & ABBREVIATIONS (SURVEY)

100-115-00

EFFECTIVE LETTING DATE: MAY 2008

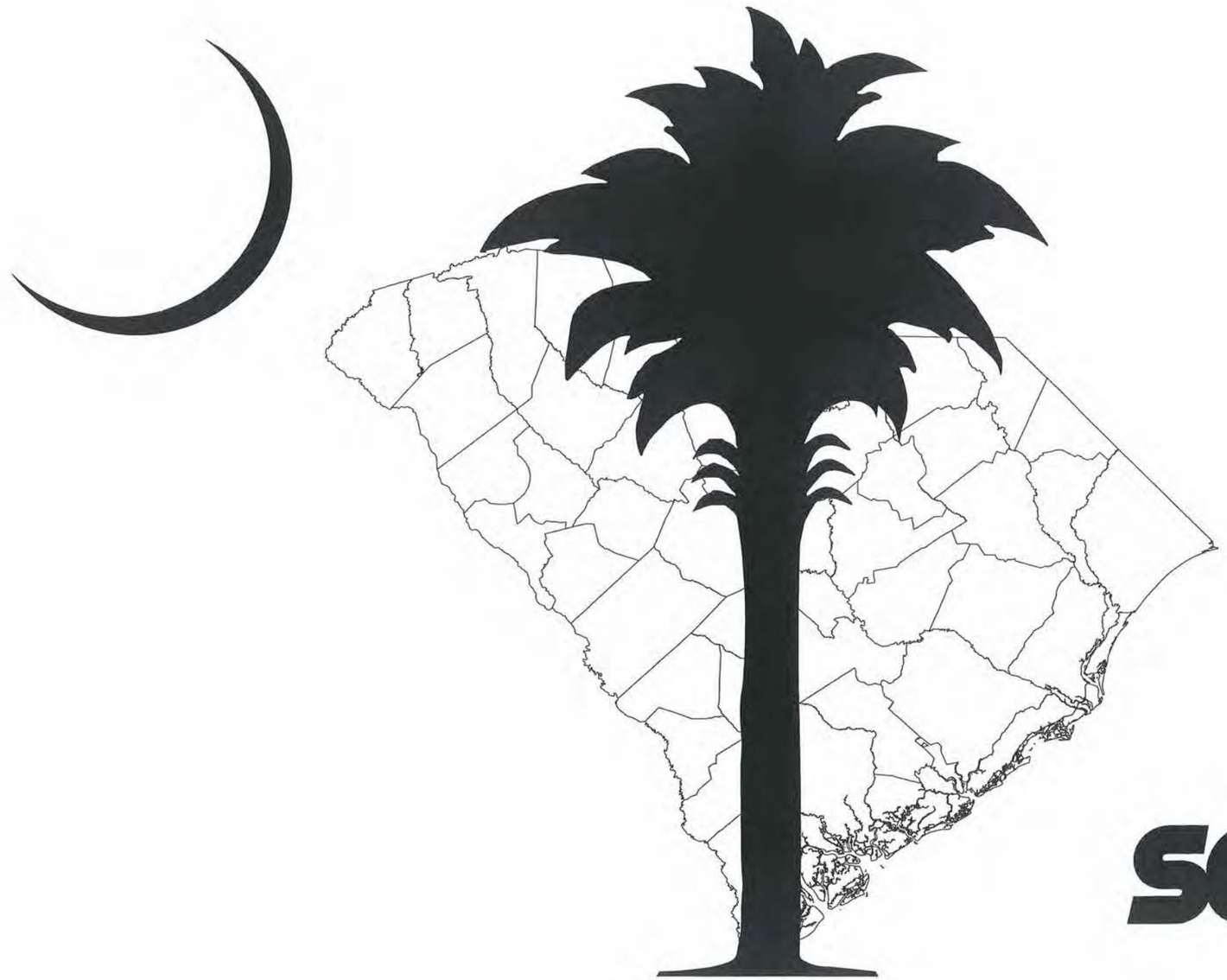
SURVEY CODES LEGEND

CODE	FEATURE DESCRIPTION	SHOT	CHARACTERISTIC
?UTIL	UNKNOWN UTILITY	LINE	UTILITY
AC	AIR CONDITIONER UNIT	SINGLE	UTILITY
AGT	ABOVE GROUND TANK	LINE	UTILITY
B	BUILDING	LINE	BUILDINGS
BDL	BERM DITCH LEFT	LINE	OTHER
BDR	BERM DITCH RIGHT	LINE	OTHER
BL	MISC. BREAKLINE	LINE	BREAKLINE
BM	BENCH MARK	SINGLE	ALIGNMENT & CONTROL
BRC	BRIDGE- CONCRETE	LINE	DRAINAGE
BRW	BRIDGE-WOOD	LINE	DRAINAGE
BS	BOTTOM OF SLOPE	LINE	BREAKLINE
BSW	BACK EDGE OF SIDEWALK	LINE	BREAKLINE
C	COLUMN	SINGLE	COLUMNS
CAP	FILL CAP FOR UNDERGROUND TANK	SINGLE	UTILITY
CBN	CATCH BASIN	SINGLE	DRAINAGE
CEM	CEMETERY	LINE	OTHER
CFL	FACE OF CURB LEFT	LINE	ROADS & DRIVES
CFR	FACE OF CURB RIGHT	LINE	ROADS & DRIVES
CL	CL PROFILE (WILL HAVE X-SECTION)	SINGLE	PROFILE & X-SECTION
CLP	CL PROFILE (NO X-SECTION)	SINGLE	PROFILE & X-SECTION
CMT	CONCRETE MONUMENT	SINGLE	PROPERTY & LEGAL
CNP	CANOPY	LINE	OTHER
CP	CONTROL POINT	SINGLE	ALIGNMENT & CONTROL
CPD	CONCRETE PAD	LINE	OTHER
CRL	CREEK BANK LEFT	LINE	OTHER
CRR	CREEK BANK RIGHT	LINE	OTHER
CRW	CROWN OF PAVED ROAD OR STREET	LINE	BREAKLINE
CT	CELL PHONE TOWER	SINGLE	UTILITY
CVL	CULVERT	LINE	DRAINAGE
D	EDGE OF DIRT DRIVEWAY	LINE	ROADS & DRIVES
DAM	DAM	LINE	OTHER
DC	EDGE OF CONCRETE DRIVEWAY	LINE	ROADS & DRIVES
DEF	DEFAULT FEATURE CODE	SINGLE	OTHER
DF	UNDERGROUND DRAIN FIELDS	LINE	UTILITY
DI	DROP INLET	SINGLE	DRAINAGE
DP	EDGE OF PAVED (ASPHALT) DRIVEWAY	LINE	ROADS & DRIVES
DTL	DITCH LEFT	LINE	OTHER
DTR	DITCH RIGHT	LINE	OTHER
E	ABOVE GOUND ELECTRIC	LINE	UTILITY
EOI	END OF INFORMATION	SINGLE	OTHER
EP	ADDITIONAL EDGE OF PAVEMENT	LINE	ROADS & DRIVES
EP1	EDGE OF PAVEMENT LINE 1	LINE	ROADS & DRIVES
EP2	EDGE OF PAVEMENT LINE 2	LINE	ROADS & DRIVES
EP3	EDGE OF PAVEMENT LINE 3	LINE	ROADS & DRIVES
EP4	EDGE OF PAVEMENT LINE 4	LINE	ROADS & DRIVES
EPL	EDGE OF PAVEMENT LEFT	LINE	ROADS & DRIVES
EPP	ELECTRICAL PEDESTAL	SINGLE	UTILITY
EPR	EDGE OF PAVEMENT RIGHT	LINE	ROADS & DRIVES
ERL	EDGE OF DIRT ROAD LEFT	LINE	ROADS & DRIVES
ERR	EDGE OF DIRT ROAD RIGHT	LINE	ROADS & DRIVES
ET	ELECTRIC - TELEPHONE	LINE	UTILITY
ETB	ELECTRIC TRANSFORMER / BOX / MARKER	SINGLE	UTILITY
ETTV	ELECTRIC - TELEPHONE / TELEVISION	LINE	UTILITY
ETV	ELECTRIC - TELEVISION	LINE	UTILITY
F	FLOWER BED	LINE	VEGETATION
FDB	FIBER DIRECT BURIED (DESIGNATED)	LINE	UTILITY
FDB	FIBER DIRECT BURIED (RECORDED)	LINE	UTILITY
FDR	FIBER DUCT RUN (DESIGNATED)	LINE	UTILITY
FDR	FIBER DUCT RUN (RECORDED)	LINE	UTILITY
FH	FIRE HYDRANT	SINGLE	UTILITY
FHH	FIBER OPTIC HAND HOLD	SINGLE	UTILITY
FL	FENCE-LEFT	LINE	FENCES
FLAG	FLAG POLE	SINGLE	OTHER
FLT	FLOOD/GROUND LIGHT	SINGLE	OTHER
FOL	FIBER OPTIC LINE	LINE	UTILITY
FR	FENCE-RIGHT	LINE	FENCES
FSS	FORCED SANITARY SEWER (RECORDED)	LINE	UTILITY
G	UNDERGROUND GAS (RECORDED)	LINE	UTILITY
GEO	GEODETIC SURVEY MARKER	SINGLE	OTHER
GL	GAS LINE	LINE	UTILITY
GLT	GAS LINE TEST VALVE	SINGLE	UTILITY
GM	GAS METER	SINGLE	UTILITY
GMH	GAS MANHOLE	SINGLE	UTILITY
GP	GUY POLE	SINGLE	UTILITY
GPI	GAS PUMP ISLAND	LINE	UTILITY
GR	GUARDRAIL	LINE	OTHER
GR	GAS PRESSURE REGULATOR	SINGLE	UTILITY

CODE	FEATURE DESCRIPTION	SHOT	CHARACTERISTIC
GRV	GRAVE OR CEMETERY	LINE	OTHER
GV	GAS VALVE	SINGLE	UTILITY
GVT	GAS VENT	SINGLE	UTILITY
GW	GUY WIRE	SINGLE	UTILITY
H	HEDGE ROW	LINE	VEGETATION
HW	HEADWALL	LINE	DRAINAGE
ICL	INTERSECTING ROAD CENTERLINE	LINE	ALIGNMENT & CONTROL
IP	IRON PIN	SINGLE	PROPERTY & LEGAL
JB	JUNCTION BOX	SINGLE	DRAINAGE
LC	CLOTHES LINE	LINE	OTHER
LP	LIGHT POLE	SINGLE	UTILITY
MAR	MARSH LINE	LINE	OTHER
MCL	MISC. CURB LEFT OF C/L.	LINE	ROADS & DRIVES
MCR	MISC. CURB RIGHT OF C/L.	LINE	ROADS & DRIVES
MDC	MEDIAN-CONCRETE	LINE	ROADS & DRIVES
MHD	MAN HOLE-DRAINAGE	SINGLE	DRAINAGE
MHS	MAN HOLE-SANITARY SEWER	SINGLE	UTILITY
MHU	MAN HOLE-UTILITY	SINGLE	UTILITY
MP	SERVICE / METER POLE	SINGLE	UTILITY
MSL	MISCELLANEOUS LINE	LINE	SPECIAL NOTES
MSL1	MISCELLANEOUS LINE 1	LINE	OTHER
MSL2	MISCELLANEOUS LINE 2	LINE	OTHER
MSL3	MISCELLANEOUS LINE 3	LINE	OTHER
MSL4	MISCELLANEOUS LINE 4	LINE	OTHER
MSP	MISCELLANEOUS POINT	SINGLE	SPECIAL NOTES
ODL	OUTFALL DITCH LINE	LINE	ALIGNMENT & CONTROL
OF	OUTFALL DRAIN FLOW LINE PROFILE	SINGLE	PROFILE & X-SECTION
OP	OTHER USE POLE	SINGLE	OTHER
OT	ORCHARD TREE (APPLE, PECAN, ETC.)	SINGLE	VEGETATION
OTL	ORCHARD TREE LINE LEFT	LINE	VEGETATION
OTR	ORCHARD TREE LINE RIGHT	LINE	VEGETATION
P	PIPE	LINE	DRAINAGE
PC	POINT OF CURVE	SINGLE	ALIGNMENT & CONTROL
PCC	POINT OF COMPOUND CURVE	SINGLE	ALIGNMENT & CONTROL
PHH	POWER CABLE HAND HOLD	SINGLE	UTILITY
PI	POINT OF INTERSECTION	SINGLE	ALIGNMENT & CONTROL
PK	PARKING METER	SINGLE	OTHER
PL	PROPERTY LINE (SHOT ON LINE)	LINE	PROPERTY & LEGAL
PLC	PROPERTY LINE CORNER COMPUTED / GROUND EVIDENCE	SINGLE	PROPERTY & LEGAL
PLT	PLANTER	LINE	OTHER
PLT	POWER LINE TOWER	SINGLE	UTILITY
PMH	POWER MANHOLE	SINGLE	UTILITY
POC	POINT OF CURVE	SINGLE	ALIGNMENT & CONTROL
POST	POINT ON SUB TANGENT	SINGLE	ALIGNMENT & CONTROL
POT	POINT ON TANGENT	SINGLE	ALIGNMENT & CONTROL
PP	POWER POLE	SINGLE	UTILITY
PRC	POINT OF REVERSE CURVE	SINGLE	ALIGNMENT & CONTROL
PT	POINT OF TANGENCY	SINGLE	ALIGNMENT & CONTROL
RP	RADIUS POINT OF CURVE	SINGLE	ALIGNMENT & CONTROL
RR	RAILROAD TRACK	LINE	RAILROADS
RRB	RAILROAD SIGNAL BOX	SINGLE	RAILROADS
RRM	RAILROAD MILE POST	SINGLE	RAILROADS
RRS	RAILROAD SIGNAL	SINGLE	RAILROADS
RRT	RAILROAD TRESTLE	LINE	RAILROADS
RRX	RAILROAD CROSSING ARM	SINGLE	RAILROADS
RSB	RAILROAD SIGNAL BOX	SINGLE	RAILROADS
RWE	RIGHT OF WAY LINE EXISTING	LINE	PROPERTY & LEGAL
RWM	RIGHT OF WAY MONUMENT	SINGLE	PROPERTY & LEGAL
S	SHRUB	SINGLE	VEGETATION
SAR	SEWER AIR RELEASE VALVE	SINGLE	UTILITY
SAT	SATELLITE DISH	SINGLE	UTILITY
SL	LINE ROW OF SHRUBS	LINE	VEGETATION
SMH	SANITARY SEWER MANHOLE	SINGLE	UTILITY
SN	SIGN	LINE	OTHER
SP	SIGN POST	SINGLE	OTHER
SPG	WATER SPIGOT	SINGLE	OTHER
SPK	SPRINKLER	SINGLE	OTHER
SPL	SERVICE / METER POLE	SINGLE	UTILITY
SPR	SPRING	SINGLE	OTHER
SS	SANITARY SEWER	LINE	UTILITY
SSC	SANITARY SEWER CLEANOUT	SINGLE	UTILITY
ST	SEPTIC TANK	LINE	UTILITY
STP	STEPS	LINE	BUILDINGS
SUE	LIMITS OF SUE SWEEP	LINE	OTHER
SVC	SEWER CLEANOUT	SINGLE	UTILITY
SW	SIDEWALK TO THE ROAD	LINE	SIDEWALKS
SWL	SIDEWALK LEFT OF CL	LINE	SIDEWALKS

CODE	FEATURE DESCRIPTION	SHOT	CHARACTERISTIC
SWP	SWAMP LINE	LINE	OTHER
SWR	SIDEWALK RIGHT OF CL	LINE	SIDEWALKS
T	TREE	SINGLE	VEGETATION
T	TELEPHONE LINE	LINE	UTILITY
TB	TELEPHONE BOOTH	SINGLE	UTILITY
TBX	TELEPHONE BOX	SINGLE	UTILITY
TC	TOP OF CURB	LINE	BREAKLINE
TCW	TOWER (RADIO/TV) RESIDENTIAL	SINGLE	UTILITY
TG	TELEGRAPH POLE	SINGLE	UTILITY
TH	TEST HOLE	SINGLE	OTHER
THH	TELEPHONE HAND HOLD	SINGLE	UTILITY
TL	TREE LINE OR WOODS LINE LEFT	LINE	VEGETATION
TM	TELEPHONE MANHOLE	SINGLE	UTILITY
TP	TELEPHONE POLE	SINGLE	UTILITY
TPP	TELEPHONE PEDESTAL	SINGLE	UTILITY
TR	TREE LINE OR WOODS LINE RIGHT	LINE	VEGETATION
TS	TOP OF SLOPE / SHOULDER BREAK	LINE	BREAKLINE
TSJ	TRAFFIC SIGNAL JUNCTION BOX	SINGLE	OTHER
TSP	TRAFFIC SIGNAL POLE	SINGLE	OTHER
TTV	TELEPHONE CABLE TV	LINE	UTILITY
TV	CABLE TV	LINE	UTILITY
TVHH	CABLE TV HAND HOLD	SINGLE	UTILITY
TVP	CABLE TV PEDESTAL	SINGLE	UTILITY
TW	PERIMETER OF COMMERCIAL TOWER / POWER LINES	LINE	UTILITY
UE	UNDERGROUND ELECTRIC	LINE	UTILITY
UGC	UNDERGROUND CABLE	LINE	UTILITY
UGT	UNDERGROUND TANK	SINGLE	UTILITY
UT	UNDERGROUND TELEPHONE	LINE	UTILITY
UTV	UNDERGROUND CABLE TV	LINE	UTILITY
VGL	VALLEY GUTTER-LEFT	LINE	ROADS & DRIVES
VGR	VALLEY GUTTER-RIGHT	LINE	ROADS & DRIVES
VOID	IGNORE THIS POINT	SINGLE	SPECIAL NOTES
W	WALL	LINE	WALLS
W	WATER LINE	LINE	UTILITY
WAR	WATER AIR RELEASE VALVE	SINGLE	UTILITY
WE	EDGE OF WATER	LINE	OTHER
WE	EDGE OF WATER, PONDS, ETC.	LINE	OTHER
WEL	WELL	SINGLE	OTHER
WELL	WELL HOUSE	SINGLE	OTHER
WH	HIGH WATER LINE OR MARK	SINGLE	OTHER
WL	WATER LINE	LINE	UTILITY
WM	WATER METER	SINGLE	UTILITY
WMH	WATER MANHOLE	SINGLE	UTILITY
WMW	WATER MONITORING WELL	SINGLE	OTHER
WTS	UTILITY WITNESS MARKER / POST	SINGLE	UTILITY
WV	WATER VALVE	SINGLE	UTILITY
WW	WINGWALL	LINE	DRAINAGE
X	CROSS SECTION / SPOT SHOT	SINGLE	PROFILE & X-SECTION
XL	END OF X-SECTION LEFT	SINGLE	PROFILE & X-SECTION
XP	EDGE OF PAVEMENT ON X-SECT.	SINGLE	ROADS & DRIVES
XR	END OF X-SECTION RIGHT	SINGLE	PROFILE & X-SECTION

THIS DRAWING IS NOT TO SCALE



SCDOT

GEOMETRY

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COLUMBIA, SC 29201

STANDARD DRAWING

SECTION
150-000

REFERENCES

NATIONAL DOCUMENTS

AASHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS"

SCDOT DOCUMENTS

SCDOT HIGHWAY DESIGN MANUAL

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EAGLE, II

SIGNATURE

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0	3/2009	DSO	GENERAL REVISIONS

SCDOT
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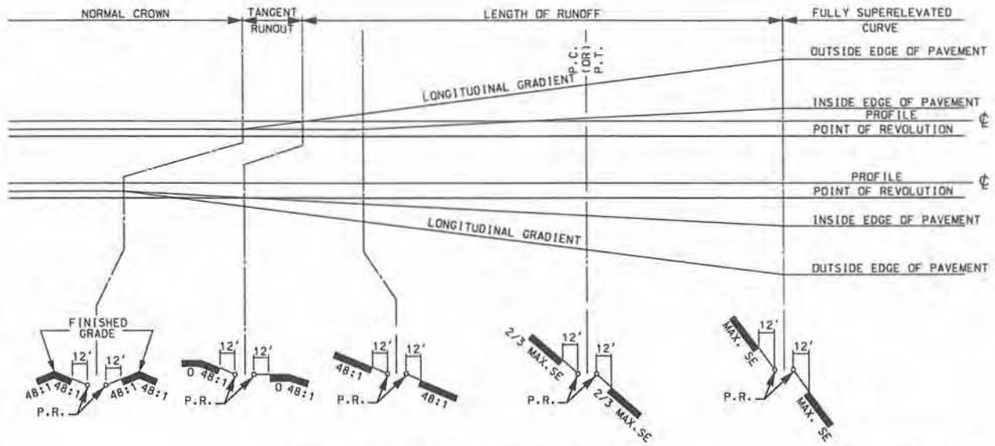
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

SUPERELEVATION (GEOMETRY)

150-205-00

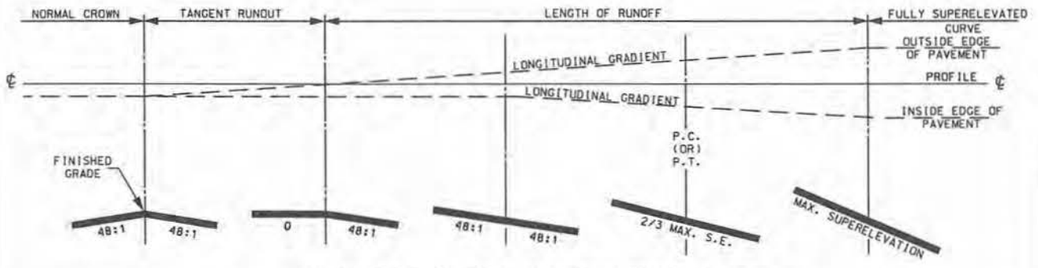
EFFECTIVE LETTING DATE | MAY, 2009



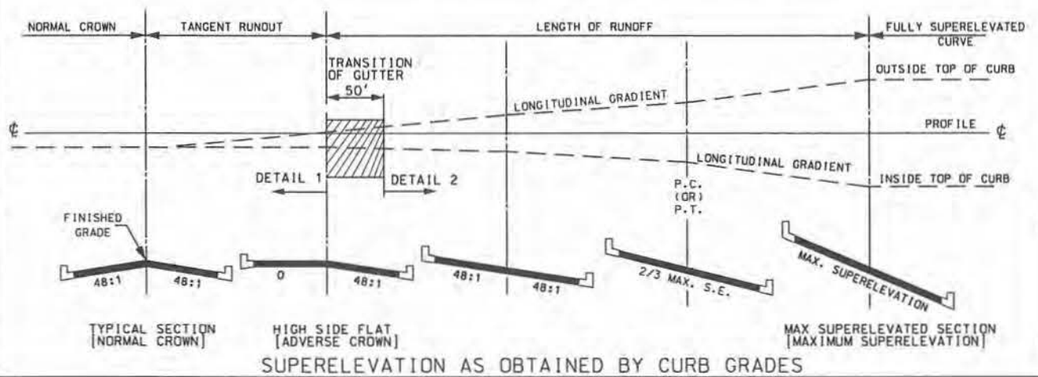
DUAL LANE SUPERELEVATION REVOLVED ABOUT MEDIAN EDGE OF FUTURE LANE

P.R. = POINT OF REVOLUTION

FOR SUPERELEVATION, P.R. POINTS TO BE EQUAL ELEVATION.



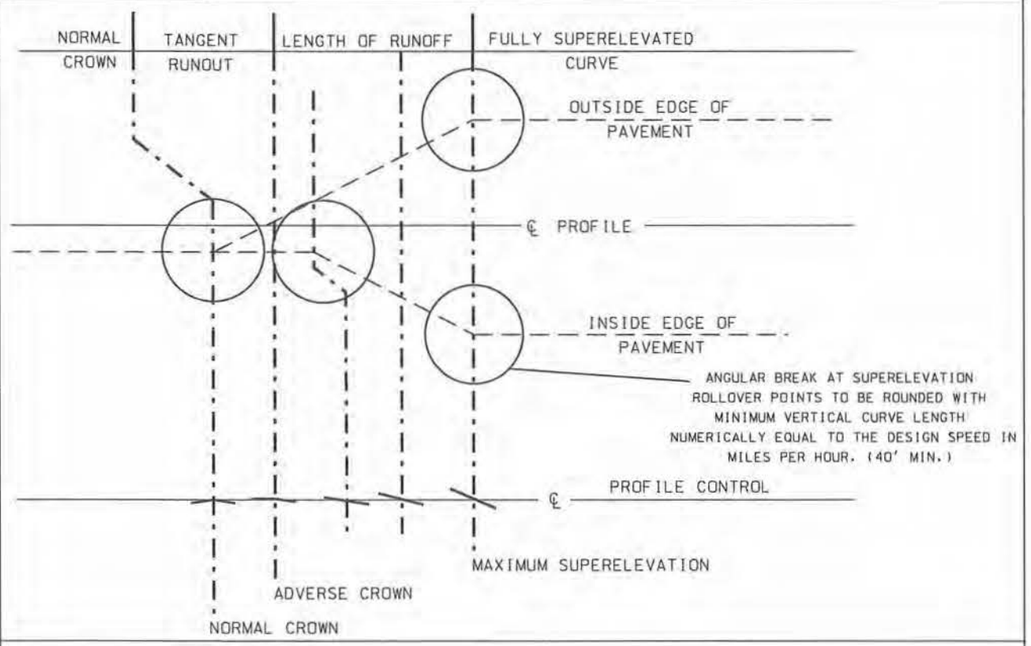
PAVEMENT REVOLVED ABOUT CENTERLINE

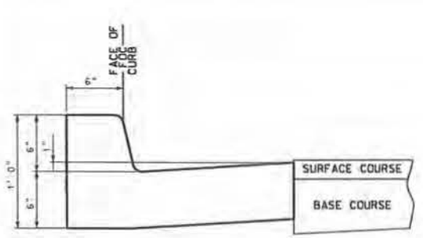


SUPERELEVATION AS OBTAINED BY CURB GRADES

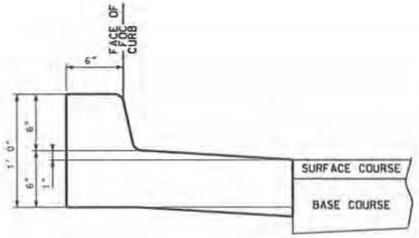
NOTES:

1. SEE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DESIGN MANUAL FOR DESIGN SPEED, SUPERELEVATION RATES, AND ACCEPTABLE LONGITUDINAL GRADIENTS.
2. TANGENT RUNOUT PLUS LENGTH OF RUNOFF = SUPEREVLEVATION TRANSITION LENGTH.
3. SUPERELEVATION TRANSITION LENGTH SHALL BE DIVIDED TO PROVIDE ⅔ OF THE TRANSITION ON THE TANGENT AND ⅓ OF THE TRANSITION ON THE CURVE.
4. SPECIAL CARE MUST BE USED TO PROPERLY DRAIN SAG VERTICAL CURVES IN DITCH, VALLEY GUTTER, AND CURB & GUTTER SECTIONS.
5. WHEN CURB & GUTTER IS USED, IT SHALL REMAIN AS STANDARD CURB AND GUTTER UNTIL THE HIGH SIDE OF THE ROADWAY BECOMES FLAT (ADVERSE CROWN). THE STANDARD CURB AND GUTTER WILL THEN BE TRANSITIONED (IN 50') TO DIRECT WATER AWAY FROM THE CURB (SEE DETAIL 2). DETAIL 2 WILL BE MAINTAINED UNTIL A LIKE POINT IS REACHED DURING THE TRANSITION BACK TO NORMAL CROWN.
6. WHEN CURB & GUTTER SECTIONS ARE USED, PLACE CATCH BASINS AT LOW POINTS WITHIN THE SUPERELEVATION TRANSITION TO PREVENT DRAINAGE FROM CROSSING ROAD AT THESE LOCATIONS. USE OF TRENCH DRAINS IS ALLOWABLE.





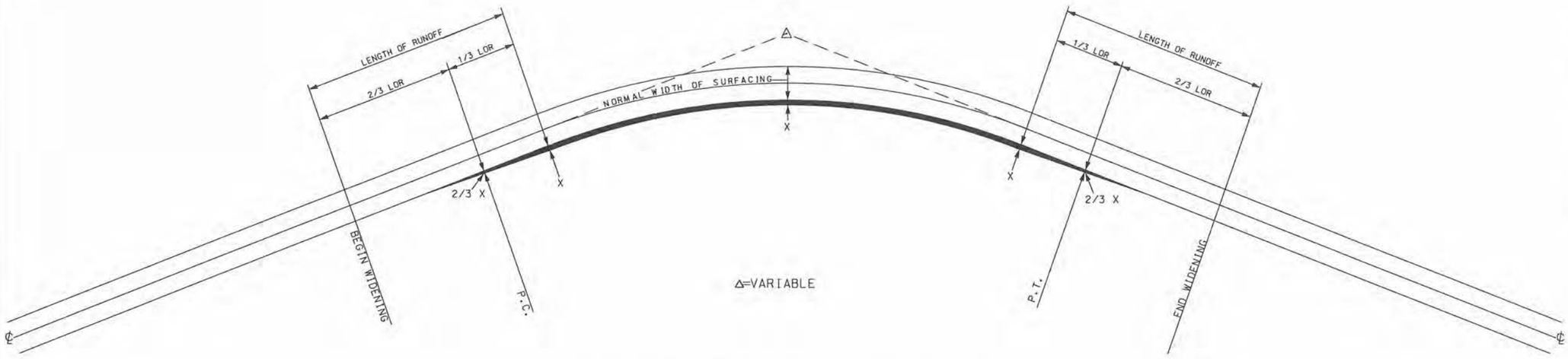
DETAIL 1
SCALE 3/4"=1'
SEE ALSO 720-105-01 (VERTICAL FACE SHOWN)



DETAIL 2
SCALE 3/4"=1'
50' AFTER ADVERSE CROWN (VERTICAL FACE SHOWN)

NOTES:

1. WIDENING SHOULD BE APPLIED TO THE INSIDE EDGE OF PAVEMENT ONLY.
2. THE TRANSITION DISTANCE FOR TRAVELED WAY WIDENING SHOULD EQUAL THE SUPERELEVATION TRANSITION LENGTH, AND SHOULD BE APPLIED WITH THE SUPERELEVATION TRANSITION.
3. WHEN THE DISTANCE BETWEEN THE P.C. AND THE P.T. IS 100' OR LESS, THE OFFSET SHALL BE IN THE CENTER OF THE CURVE AN TRANSITIONED TO NORMAL PAVEMENT WIDTH WITHIN THE SUPERELEVATION TRANSITION.
4. THE VALUE OF "X" WILL VARY ACCORDING TO THE DESIGN SPEED, RADIUS OF THE CURVE, AND TRAVELED WAY WIDTH. REFER TO TABLE FOR ACTUAL VALUE.



VALUE OF X FOR GIVEN RADIUS AND DESIGN SPEED

RADIUS OF CURVE (FEET)	TRAVELED WAY WIDTH = 24 FEET — DESIGN SPEED (MILES PER HOUR)							TRAVELED WAY WIDTH = 22 FEET — DESIGN SPEED (MILES PER HOUR)							TRAVELED WAY WIDTH = 20 FEET — DESIGN SPEED (MILES PER HOUR)						
	30	35	40	45	50	55	60	30	35	40	45	50	55	60	30	35	40	45	50	55	60
7000																				2.0	2.0
6500																				2.0	2.1
6000																			2.0	2.1	2.1
5500																		2.0	2.0	2.1	2.2
5000																	2.0	2.0	2.1	2.2	2.2
4500																	2.0	2.1	2.2	2.2	2.3
4000															2.0	2.1	2.2	2.3	2.4	2.4	2.5
3500															2.1	2.2	2.3	2.4	2.5	2.5	2.6
3000															2.2	2.3	2.4	2.5	2.6	2.7	2.8
2500													2.0	2.1	2.5	2.6	2.7	2.8	2.9	3.0	3.1
2000											2.0	2.1	2.3	2.4	2.7	2.8	2.9	3.0	3.1	3.3	3.4
1800									2.0	2.2	2.3	2.4	2.5	2.6	2.9	3.0	3.2	3.3	3.4	3.5	3.6
1600								2.1	2.2	2.3	2.4	2.6	2.7	2.8	3.1	3.2	3.3	3.4	3.6	3.7	3.8
1400						2.0	2.1	2.3	2.5	2.6	2.7	2.9	3.0	3.1	3.3	3.5	3.6	3.7	3.9	4.0	4.1
1200				2.0	2.2	2.3	2.4	2.6	2.7	2.9	3.0	3.2	3.3	3.4	3.6	3.7	3.9	4.0	4.2	4.3	4.4
1000	2.0	2.2	2.3	2.5	2.6	2.8	3.0	3.0	3.2	3.3	3.5	3.6	3.8	4.0	4.0	4.2	4.3	4.5	4.6	4.8	5.0
900	2.3	2.5	2.7	2.8	3.0	3.2		3.3	3.5	3.7	3.8	4.0	4.2		4.3	4.5	4.7	4.8	5.0	5.2	
800	2.7	2.9	3.0	3.2	3.4	3.6		3.7	3.9	4.0	4.2	4.4	4.6		4.7	4.9	5.0	5.2	5.4	5.6	
700	3.1	3.3	3.5	3.7	3.9			4.1	4.3	4.5	4.7	4.9			5.1	5.3	5.5	5.7	5.9		
600	3.8	4.0	4.2	4.4	4.6			4.8	5.0	5.2	5.4	5.6			5.8	6.0	6.2	6.4	6.6		
500	4.6	4.8	5.0	5.2				5.6	5.8	6.0	6.2				6.6	6.8	7.0	7.2			
450	5.1	5.3	5.5					6.1	6.3	6.5					7.1	7.3	7.5				
400	5.8	6.0	6.3					6.8	7.0	7.3					7.8	8.0	8.3				
350	6.7	7.0	7.2					7.7	8.0	8.2					8.7	9.0	9.2				
300	7.8	8.1						8.8	9.1						9.8	10.1					
250	9.4							10.4							11.4						
200	11.8							12.8							13.8						

NOTE: VALUES SHOWN ARE FOR WB-62 DESIGN VEHICLE AND REPRESENT WIDENING IN FEET

VALUES FOR TRAVELED WAY WIDENING ON INSIDE OF HORIZONTAL CURVES (TWO-LANE HIGHWAYS, ONE-WAY, OR TWO WAY) (X)

THIS DRAWING IS NOT TO SCALE

REFERENCES

NATIONAL DOCUMENTS

AASHTO GEOMETRIC DESIGN

SCDOT DOCUMENTS

SCDOT HIGHWAY DESIGN MANUAL

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
NO. 8858
EDWIN SYLVESTER EARGLE, II

SIGNATURE

MARCH 3, 2008
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0	3/2008	DSO	GENERAL REVISIONS

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

SUPERELEVATION (TYPICAL ROAD WIDENING METHOD)

150-210-00

EFFECTIVE LETTING DATE | MAY 2008

REFERENCES

NATIONAL DOCUMENTS

AASHTO GEOMETRIC DESIGN

SCDOT DOCUMENTS

SCDOT HIGHWAY DESIGN MANUAL

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION SUPPORT ENGINEER

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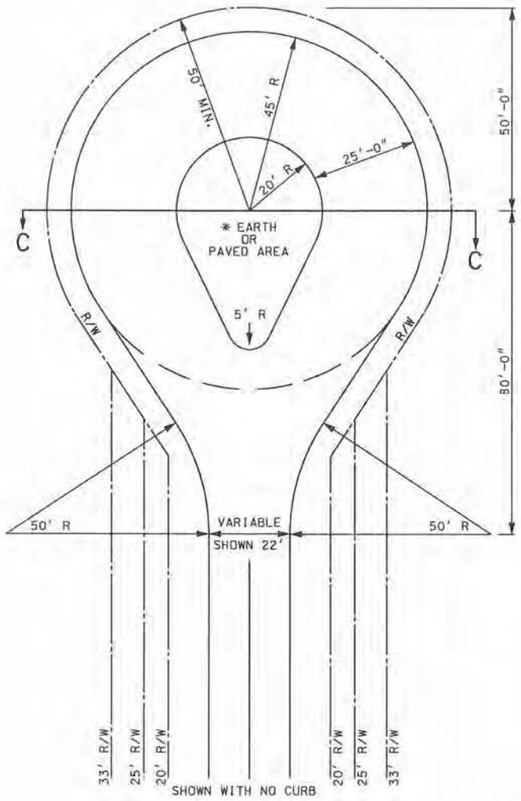
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

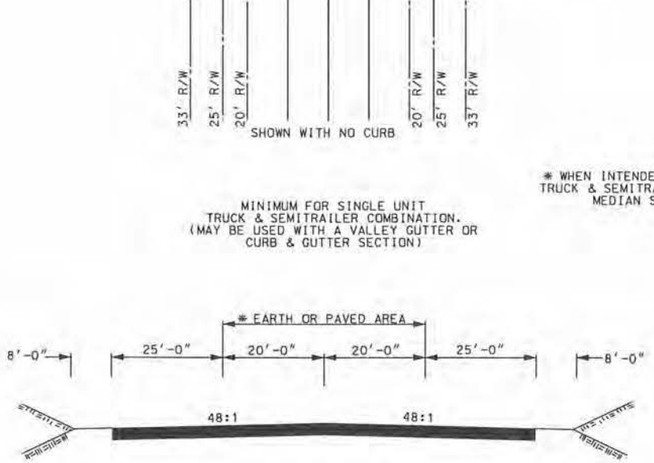
CUL-DE-SAC DETAILS

150-605-00

EFFECTIVE LETTING DATE | MAY 2008

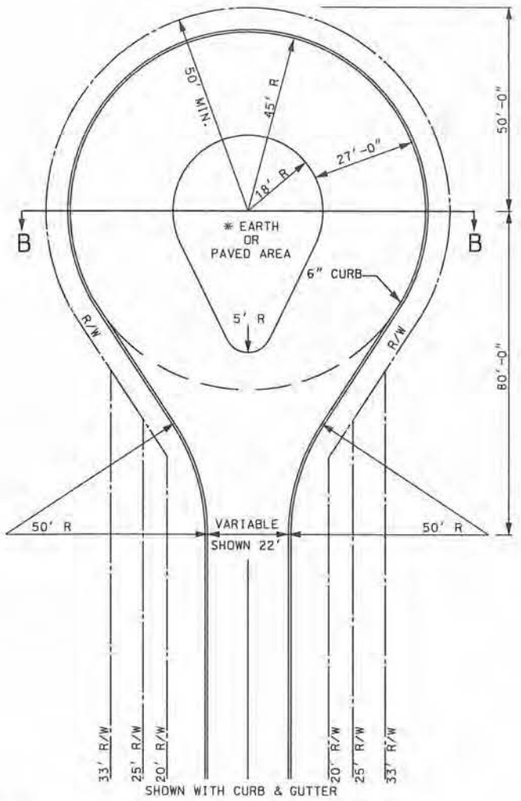


MINIMUM FOR SINGLE UNIT TRUCK & SEMITRAILER COMBINATION. (MAY BE USED WITH A VALLEY GUTTER OR CURB & GUTTER SECTION)

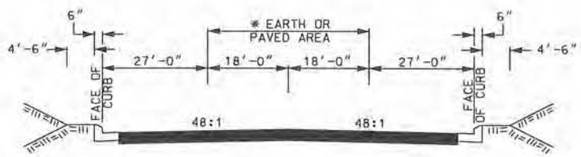


SECTION C-C

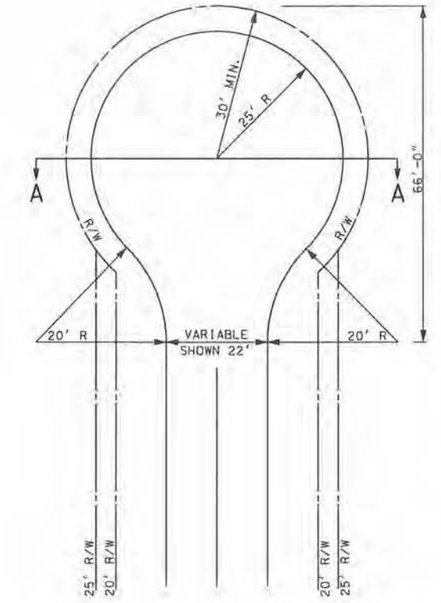
* WHEN INTENDED USE IS FOR BUSES OR TRUCK & SEMITRAILER COMBINATION, THE MEDIAN SHOULD BE PAVED.



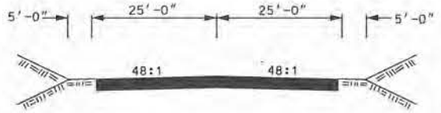
MINIMUM FOR SINGLE UNIT, BUSES, AND TRUCK & SEMITRAILER COMBINATION (MAY BE USED WITH A VALLEY GUTTER OR CURB & GUTTER SECTION)



SECTION B-B



MINIMUM FOR PASSENGER CAR TURN AROUND. (MAY BE USED WITH A VALLEY GUTTER SECTION)



SECTION A-A