

# STANDARD ABBREVIATION

## A

AASHTO ..... AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
 ABUT. .... ABUTMENT  
 AC. .... ACRE  
 AC ..... ASPHALT CEMENT  
 ACCEL. .... ACCELERATION  
 ACS ..... ASPHALTIC CONCRETE SURFACE  
 ADA ..... AMERICAN with DISABILITIES ACT  
 ADL ..... AVERAGE DAILY LOADING  
 ADT ..... AVERAGE DAILY TRAFFIC  
 AFAD ..... AUTOMATED FLAGGER ASSISTANCE DEVICE  
 AGG. .... AGGREGATE  
 AH ..... AHEAD  
 ALUM ..... ALUMINUM  
 APPR. .... APPROACH  
 APPROX. .... APPROXIMATE  
 ASPH. .... ASPHALT  
 ASTM ..... AMERICAN SOCIETY FOR TESTING AND MATERIALS  
 AVE. .... AVENUE  
 AVG. .... AVERAGE

## B

B ..... BRICK  
 BAR. .... BARRIER  
 BAL. .... BALANCE  
 BCCMP ..... BITUMINOUS COATED CORRUGATED METAL PIPE  
 BEG. .... BEGINNING  
 B.G. .... BELOW GRADE  
 BK. .... BACK  
 BIT. .... BITUMINOUS  
 BL. .... BLOCK  
 BLDG. .... BUILDING  
 BLVD. .... BOULEVARD  
 B.M. .... BENCH MARK  
 BN. .... BARN  
 BOR. .... BORROW  
 BOTT. .... BOTTOM  
 BR. .... BRIDGE  
 BTWN. .... BETWEEN  
 BUS. .... BUSINESS

## C

C ..... CABLE UTILITY  
 CATV ..... CABLE TV  
 C.A. .... CONTROLLED ACCESS  
 CALC. .... CALCULATED  
 C.B. .... CATCH BASIN  
 C.C. .... CENTER TO CENTER  
 CFS ..... CUBIC FEET PER SECOND  
 C&G ..... CURB AND GUTTER  
 CH. .... CHANNEL  
 CH. CH. .... CHANNEL CHANGE  
 CHNLK. .... CHAIN-LINK  
 C.I.P. .... CAST IRON PIPE  
 C.I.S. .... CONSTRUCTION IDENTIFICATION SIGN  
 CK. .... CREEK  
 CL. .... CLASS  
 CL ..... CENTER LINE  
 CM ..... CORRUGATED METAL  
 CMP ..... CORRUGATED METAL PIPE  
 CMPA ..... CORRUGATED METAL PIPE ARCH  
 CO. .... COUNTY or COMPANY  
 COM. .... COMMON  
 CONC. .... CONCRETE  
 CONN. .... CONNECTION

CONST. .... CONSTRUCTION  
 CONT. .... CONTINUOUS  
 CP ..... CONTROL POINT  
 CR. .... CRUSHED  
 C.R.S.I. .... CONCRETE REINFORCING STEEL INSTITUTE  
 C.S. .... CURVE TO SPIRAL  
 CT. .... CORT  
 CULV. .... CULVERT  
 C.Y. .... CUBIC YARD

## D

D ..... DEGREE OF CURVATURE ON CURVE WITHOUT SPIRALS  
 D.A. .... DRAINAGE AREA  
 DBST ..... DOUBLE BITUMINOUS SURFACE TREATMENT  
 DBYL ..... DOUBLE BROKEN YELLOW LINE  
 DECEL ..... DECELERATION  
 Ds ..... DEGREE OF CURVATURE ON A CURVE WITH SPIRALS  
 DHV ..... DESIGN HOURLY VOLUME  
 D.I. .... DROP INLET  
 DIA. .... DIAMETER  
 DIV. .... DIVERSION  
 DR. .... DRIVE  
 DRG. .... DRAINAGE  
 DSYL ..... DOUBLE SOLID YELLOW LINE  
 DSWL ..... DOUBLE SOLID WHITE LINE  
 DUC. .... DUCTILE IRON  
 DWG. .... DRAWING  
 DWL ..... DOTTED WHITE LINE  
 DYL ..... DOTTED YELLOW LINE

## E

E ..... EAST or EAST COORDINATE  
 E ..... EXTERNAL DISTANCE ON CURVE WITH NO SPIRALS  
 EBL ..... EASTBOUND LANE  
 ECM ..... EXISTING CONCRETE MONUMENT  
 ECP ..... EXISTING CORNER POST  
 E.I.P. .... EXISTING IRON PIN  
 EL. or ELEV. .... ELEVATION  
 ELONG. .... ELONGATED  
 EBM. .... EMBANKMENT  
 ENGR. .... ENGINEER  
 ENT. .... ENTRANCE  
 E.P. .... EDGE OF PAVEMENT  
 EQ. .... EQUATION  
 Es ..... EXTERNAL DISTANCE ON A CURVE WITH SPIRALS  
 E.S. .... EDGE OF SHOULDER  
 ESMT. .... EASEMENT  
 E.W. .... END WALL  
 EX. .... EXISTING  
 EXC. .... EXCAVATION  
 EXCL ..... EXCLUDING  
 EXT. .... EXTENSION

## F

F ..... FRAME  
 F.A. .... FEDERAL AID  
 FAP ..... FEDERAL AID PRIMARY  
 FAS ..... FEDERAL AID SECONDARY  
 FED. .... FEDERAL  
 F.G. .... FINISHED GRADE  
 F.H.W.A. .... FEDERAL HIGHWAY ADMINISTRATION  
 FIN. .... FINISHED  
 FL.EL. .... FLOOR ELEVATION  
 F.L. .... FLOW LINE  
 FLG. .... FLANGE  
 FMS ..... FORCE MAIN SEWER  
 FOC ..... FIBER OPTIC CABLE

F.P. .... FIRE PLUG  
 FR.RD. .... FRONTAGE ROAD  
 FT. .... FOOT OR FEET  
 F/F ..... FOOT PER FOOT  
 FUT. .... FUTURE

## G

G ..... GAS (PUMP or UTILITY)  
 GA. .... GAUGE  
 GAL. .... GALLON  
 GALV. .... GALVANIZED  
 GAR. .... GARAGE  
 G.M. .... GAS METER  
 GNSS ..... GLOBAL NAVIGATION SATELLITE SYSTEM  
 GPH ..... GALLONS PER HOUR  
 GPM ..... GALLONS PER MINUTE  
 GPS ..... GLOBAL POSITIONING SYSTEM  
 GR. .... GRADE or GRADED or GRAVEL  
 G.R. .... GUARD RAIL  
 GRAN. .... GRANULAR  
 GREEN BOOK ..... A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS  
 GT. .... GRATE  
 G.V. .... GAS VALVE  
 GW ..... GUY WIRE

## H

H.C.M. .... HIGHWAY CAPACITY MANUAL  
 HD. .... HEAD  
 HDPE ..... HIGH DENSITY POLYETHYLENE  
 HO ..... HORIZONTAL OVAL  
 HOCPC ..... HORIZONTAL OVAL CONCRETE PIPE CULVERT  
 HORIZ. .... HORIZONTAL  
 HSE. .... HOUSE  
 HT. .... HEIGHT  
 H.W. .... HIGH WATER  
 HWY ..... HIGHWAY  
 H.S. .... HIGH STRENGTH

## I

I ..... INTERSTATE  
 I.D. .... INSIDE DIAMETER  
 IN. .... INLET  
 INCL. .... INCLUDE  
 INV. .... INVERT  
 I.P. .... IRON PIN  
 ITS ..... INTELLIGENT TRANSPORTATION SYSTEM

## J

JCT. .... JUNCTION  
 JT. .... JOINT

## L

L ..... LENGTH OF CIRCULAR CURVE WITH NO SPIRALS  
 LN ..... LANE  
 Lc ..... LENGTH OF CIRCULAR CURVE BETWEEN SPIRALS  
 LB. .... POUND  
 LB/FT ..... POUND PER FOOT  
 L.C. .... LONG CHORD, DISTANCE BETWEEN P.C. AND P.T.  
 L.F. .... LINEAR FEET  
 LGTH. .... LENGTH  
 LIN. .... LINEAR  
 LOC. .... LOCATION  
 L.P. .... LIGHT POLE  
 Ls ..... LENGTH OF SPIRAL  
 L.S. .... LUMP SUM  
 L.T. .... LONG TANGENT OF SPIRAL  
 LT. .... LEFT

REV. 7-1-72: CHANGED DEPARTMENT NAME.

REV. 1-1-76: CHANGED DWG. NO. FROM A-A-1 (SHEET 2) TO RD-A-1.

REV. 11-9-76: REORGANIZED SHEET AND ADDED THE FOLLOWING: AASHTO BIT., H.S., P.C.O., PKWY., P.S.F., PVC, S.R. OR ST. RT., ST. P., T.P., UG, AND WD. P.

REV. 9-18-79: ADDED PAVEMENT MARKING ABBREVIATIONS AS FOLLOWS: DSYL, DWL, HWL, HYL, SDWL, SDYL, SSWL, AND SSYL.

REV. 2-22-88: CHANGED PAVEMENT MARKING ABBREVIATIONS SDWL AND SDYL TO SBWL SBYL. ADDED DBYL AND DYL.

REV 3-20-91: REDREW SHEET AND ADDED THE FOLLOWING: ADL, ASP., BAR., BOR., CATV, CFS, DECEL, E.P., E.S., EX., F/F, FL. EL., FLG, H.C.M., JCT., LB/FT, MPH, MUTCD, N.A.D., N.G.S., O.H.W., PB, REF., TDOT, TGRN, VAR., V.P.C., V.P.I., V.P.O.C., V.P.T., AND WGT.

REV. 6-20-91: ADDED THE FOLLOWING: ECM, ECP, GW, AND W.M.

REV. 10-26-92: ADDED THE FOLLOWING: MOD.

REV. 10-26-93: ADDED THE FOLLOWING: FOC.

REV. 9-5-94: ADDED THE FOLLOWING: ALUM, GPH, GPM, AND TD.

REV. 7-29-98: ADDED THE FOLLOWING: CMPA, HO, HOCPC, RCPA, VO, AND VOCP.

REV. 12-18-99: ADDED THE FOLLOWING: RDSYL AND RSSWL.

REV. 02-20-20: DEVIDED ABBREVIATIONS IN TWO SHEETS. FIRST STANDARD DRAWING NO. RD-A-1, A THROUGH L AND DRAWING NO. RD-A-2, M THROUGH Z IS A NEW DRAWING. ADDED SEVERAL NEW ABBREVIATIONS AND REDREW SHEET.

APPROVED BY FHWA  
 (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE  
 DEPARTMENT OF  
 TRANSPORTATION

STANDARD  
 ABBREVIATIONS  
 A THROUGH L

# STANDARD ABBREVIATION

## M

MATL. .... MATERIAL  
 MASH ..... MANUAL for ASSESSING SAFETY HARDWARE  
 MAX. .... MAXIMUM  
 MB. .... MAILBOX  
 MCPL ..... MUNICIPAL  
 MED. .... MEDIAN  
 M.G. .... THOUSAND GALLONS  
 M.H. .... MANHOLE  
 MI. .... MILE  
 MIN. .... MINIMUM  
 MIN. AGG. .... MINERAL AGGREGATE  
 MM ..... MILE MARKER  
 MOBH ..... MOBILE HOME  
 MOD. .... MODIFY or MODIFIED  
 MON. .... MONUMENT  
 MPH ..... MILE PER HOUR  
 MUTCD ..... MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

## N

N ..... NORTH or NORTH COORDINATE  
 N.A.D. .... NORTH AMERICAN DATUM  
 N.A.V.D. .... NORTH AMERICAN VERTICAL DATUM  
 NBL ..... NORTHBOUND LANE  
 NCHRP ..... NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM  
 NEPA ..... NATIONAL ENVIRONMENTAL POLICY ACT  
 N.G.S. .... NATIONAL GEODETIC SURVEY  
 N.I.C. .... NOT IN CONTRACT  
 NO. .... NUMBER  
 NW ..... NORMAL WATER

## O

O.D. .... OUTSIDE DIAMETER  
 O.H. .... OVERHEAD  
 O.H.W. .... ORDINARY HIGH WATER  
 O.P. .... OVERPASS  
 OUT. .... OUTLET

## P

P ..... POWER UTILITY  
 PB ..... PEDESTRIAN PUSHBUTTON  
 P.C. .... POINT OF CURVATURE  
 P.C.F. .... POUNDS PER CUBIC FOOT  
 P.C.O. .... PILE CUT OFF  
 PED. .... PEDESTRIAN or PEDESTAL  
 P.I. .... POINT OF INTERSECTION  
 PKWY. .... PARKWAY  
 PL. .... PLACE  
 P.O.C. .... POINT OF CURVE  
 P.O.S.T. .... POINT ON SUBTANGENT  
 P.O.T. .... POINT ON TANGENT  
 P.P. .... POWER POLE  
 PP ..... POLYPROPYLENE PIPE  
 PRES. .... PRESENT  
 PROJ. .... PROJECT  
 PROP. .... PROPOSED  
 PROWAG ..... PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES  
 P.S.F. .... POUND PER SQUARE FOOT  
 P.S.I. .... POUND PER SQUARE INCH  
 P.S.Y. .... POUND PER SQUARE YARD  
 P.T. .... POINT OF TANGENCY  
 PVC ..... POLYVINYL CHLORIDE  
 PVMT ..... PAVEMENT  
 PVT. .... PRIVATE  
 PWR. .... POWER

## Q

Q ..... DESIGN DISCHARGE (CUBIC FEET PER SECOND)  
 QPL ..... QUALIFIED PRODUCTS LIST  
 QUAN. .... QUANTITY

## R

R ..... RADIUS OF CIRCULAR CURVE WITH NO SPIRALS  
 Rc ..... RADIUS OF CIRCULAR CURVE WITH SPIRALS  
 RCP ..... REINFORCED CONCRETE PIPE  
 RCPA ..... REINFORCED CONCRETE PIPE ARCH  
 RDSYL ..... REMOVABLE DOUBLE SOLID YELLOW LINE  
 RD. .... ROAD  
 RDY. .... ROADWAY  
 REF. .... REFUSAL  
 REINF. .... REINFORCED  
 RELOC. .... RELOCATION  
 REM. .... REMAINDER  
 REQD. .... REQUIRED  
 RES. .... RESIDENCE  
 REV. .... REVISED  
 R.L. .... REFUSAL LINE  
 R.O.W. .... RIGHT-OF-WAY  
 R.R. .... RAILROAD  
 RSSWL ..... REMOVABLE SINGLE SOLID WHITE LINE  
 RT. .... RIGHT  
 RTE. .... ROUTE  
 RY. .... RAILWAY

## S

S ..... SOUTH  
 SA ..... SANITARY SEWER  
 SBL ..... SOUTHBOUND LANE  
 SBST ..... SINGLE BITUMINOUS SURFACE TREATMENT  
 S.C. .... SPIRAL TO CURVE  
 SCH. .... SCHOOL  
 S.D. .... SIDE DRAIN  
 S.E. .... SUPERELEVATION  
 SEC. .... SECTION  
 S.F. .... SQUARE FOOT  
 SHLD. .... SHOULDER  
 SHR. .... SHRINKAGE  
 SHT. .... SHEET  
 SL. .... SLOPE  
 S.L. .... STATE LINE  
 S.M. .... SEWER METER  
 S.P. .... SUPPORT POLE  
 SPA. .... SPACE  
 SPEC. .... SPECIAL  
 SPECS. .... SPECIFICATIONS  
 SPR.D. .... SPRING DRAIN  
 SQ. .... SQUARE  
 S.R. .... SOLID ROCK  
 S.R. or ST. RT. .... STATE ROUTE  
 SRTRO ..... STEEL REINFORCED THERMOPLASTIC RIBBED PIPE  
 ST. .... STREET or STATE  
 S.T. .... SPIRAL TO TANGENT or SHORT TANGENT OF SPIRAL  
 STA. .... STATION  
 STAB. .... STABILIZED  
 STD. .... STANDARD  
 STL. .... STEEL  
 STM. .... STORM  
 STN. .... STONE  
 ST.P. .... STRAIN POLE  
 STR. .... STRENGTH or STRAIGHT  
 STRUC. .... STRUCTURE  
 SURV. .... SURVEY

S.V. .... SEWER VALVE  
 SWL ..... SWELL  
 S.W. .... SIDEWALK  
 S.Y. .... SQUARE YARD  
 SBWL ..... SINGLE BROKEN WHITE LINE  
 SBYL ..... SINGLE BROKEN YELLOW LINE  
 SSWL ..... SINGLE SOLID WHITE LINE  
 SSYL ..... SINGLE SOLID YELLOW LINE

## T

T ..... TANGENT LENGTH OF CURVE  
 T or TEL. .... TELEPHONE UTILITY  
 Tc ..... TANGENT LENGTH FROM S.C. OR C.S. TO INTERSECTION OF TANGENTS  
 TD ..... TRENCH DEPTH  
 TDOT ..... TENNESSEE DEPARTMENT OF TRANSPORTATION  
 TEMP. .... TEMPORARY  
 TGRN ..... TENNESSEE GEODETIC REFERENCE NETWORK  
 THK. .... THICKNESS  
 TNPK. .... TURNPIKE  
 T.P. .... TURNING POINT  
 TR. .... TRACK  
 TRAV ..... TRAVERSE POINT  
 Ts ..... SUBTANGENT LENGTH ON CURVE WITH SPIRAL  
 TTC ..... TEMPORARY TRAFFIC CONTROL  
 TTI ..... TEXAS (A&M) TRANSPORTATION INSTITUTE  
 T.V.A. .... TENNESSEE VALLEY AUTHORITY  
 TYP. .... TYPICAL

## U

UG ..... UNDERGROUND  
 U.L. .... URBAN LIMITS  
 UNCL.EX. .... UNCLASSIFIED EXCAVATION  
 U.P. .... UNDERPASS  
 U.S. .... UNITED STATES  
 U.S.C.E. .... UNITED STATES CORPS OF ENGINEERS

## V

V ..... DESIGN SPEED  
 VAR. .... VARIABLE  
 V.C. .... VERTICAL CURVE  
 V.C.P. .... VITRIFIED CLAY PIPE  
 VERT. .... VERTICAL  
 VO ..... VERTICAL OVAL  
 VOCPC ..... VERTICAL OVAL CONCRETE PIPE CULVERT  
 V.P.C. .... VERTICAL POINT OF CURVATURE  
 V.P.I. .... VERTICAL POINT OF INTERSECTION  
 V.P.O.C. .... VERTICAL POINT ON CURVE  
 V.P.T. .... VERTICAL POINT OF TANGENCY

## W

W ..... WEST  
 W/ ..... WITH  
 WBL ..... WESTBOUND LANE  
 WD.P. .... WOOD POLE  
 WGT. .... WEIGHT  
 W.L. .... WATER LEVEL  
 W.M. .... WATER METER  
 W.V. .... WATER VALVE  
 W.W. .... WING WALL

## X, Y & Z

Xc ..... SPIRAL COORDINATE  
 X-ING ..... CROSSING  
 X-RD. .... CROSS-ROAD  
 X-SEC. .... CROSS-SECTION  
 Yc ..... SPIRAL COORDINATE

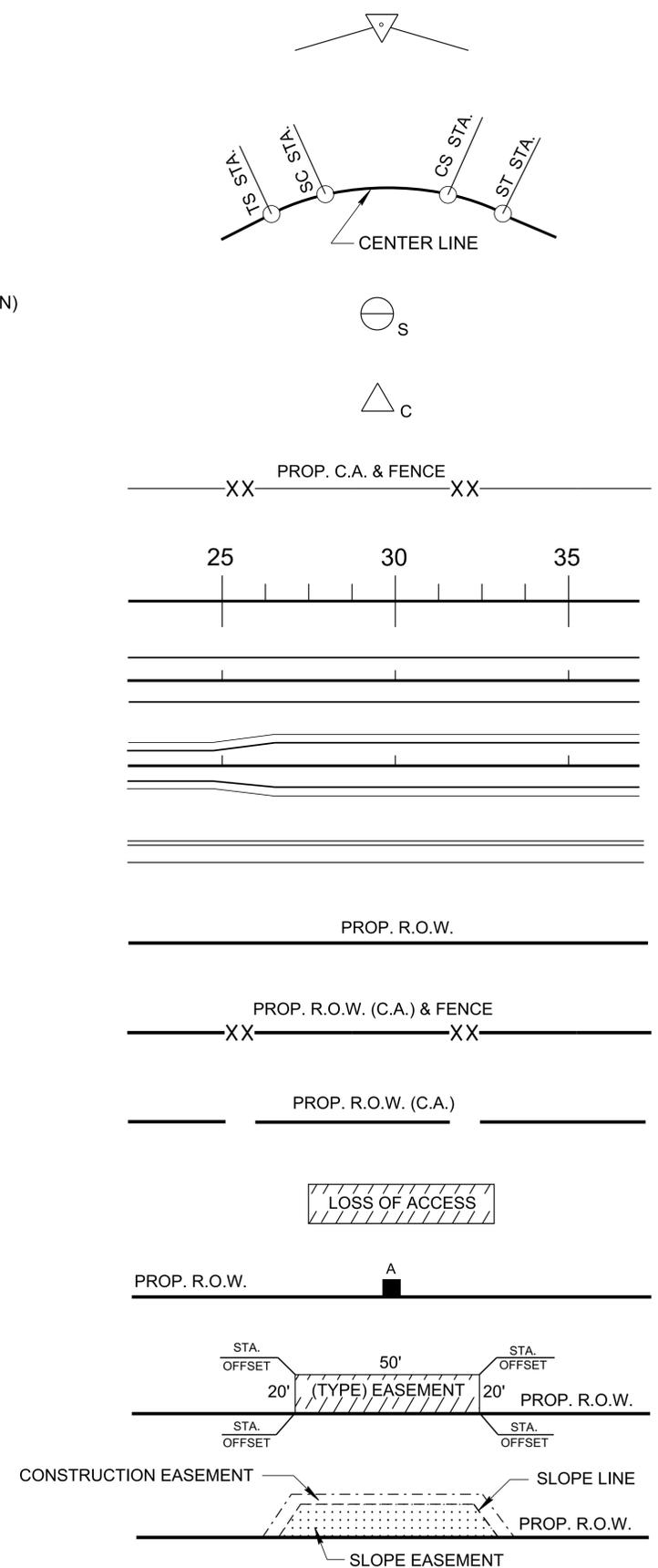
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# STANDARD LEGEND

## EXISTING

## PROPOSED

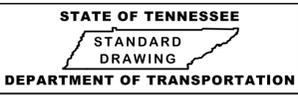
	SURVEY CONTROL POINT
	HORIZONTAL CONTROL POINT
	HORIZONTAL CONTROL POINTS ARIAL
	PROPERTY CORNER LOCATED (EXISTING IRON PIN)
	CONTROL OF ACCESS WITH FENCE
	PRIVATE FENCE (LABEL TYPE)
	BASE LINE OR CENTERLINE
	ROADS (SHOW WIDTH AND NAME OR ROUTE)
	ROADS (SHOW WIDTH SHOULDER)
	CURB AND GUTTER
	PROPERTY LINE
	PROPERTY LINE WITH FENCE
	SAME PROPERTY OWNER
	EASEMENTS (UTILITY, DRAINAGE, ETC.)
	R.O.W. MARKER (SHOW TYPE A, B, OR C)
	STATE BOUNDARY LINE
	COUNTY BOUNDARY LINE
	CITY, VILLAGE OR BOROUGH BOUNDARY LINE (SHOW DOTS ON CITY SIDE)



PI=POINT OF INTERSECT OF TANGENT
POINTS OF ON HORIZONTAL ALIGNMENT PC = POINT OF CURVE    SC = SPIRAL TO CURVE PT = POINT OF TANGENT    CS = CURVE TO SPIRAL TS = TANGENT TO SPIRAL    ST = SPIRAL TO TANGENT
SPIRAL ANGLE
DELTA ANGLE OF CIRCULAR CURVE (EXCLUDING SPIRAL ANGLE)
CONTROL OF ACCESS WITH FENCE
BASE LINE OR CENTERLINE
ROADWAY WITH CENTERLINE AND EDGE OF PAVEMENT
ROADWAY WITH CENTERLINE AND EDGE OF PAVEMENT AND SHOULDER LINE
CURB AND GUTTER
RIGHT-OF-WAY
RIGHT-OF-WAY, CONTROL OF ACCESS AND FENCE
RIGHT-OF-WAY, CONTROL OF ACCESS WITHOUT FENCE
LOSS OF ACCESS
PROPOSED R.O.W. & R.O.W. MARKER (SHOW TYPE A, B, OR C)
DRAINAGE EASEMENT AND/OR UTILITY EASEMENT (DESIGNATE) PERMANENT
TEMPORARY CONSTRUCTION & SLOPE EASEMENT

- REV. 7-1-72: CHANGED DEPARTMENT NAME.
- REV. 1-1-76: CHANGED DRAWING NUMBER FROM A-A-1 (SHEET 1) TO RD-L-1. ADDED SYMBOLS DITCH LINING.
- REV. 3-15-76: CHANGED THE WORD "RECTANGULAR" TO "TRAPEZOIDAL" REGARDING DITCH LINING.
- REV. 1-19-91: REDREW SHEET AND ADDED SYMBOLS FOR EXISTING AND PROPOSED OVERHEAD POWER AND CABLE TV LINES. ADDED RIP-RAP TO DITCH LINING TREATMENT.
- REV. 10-26-93: CHANGED SYMBOLS FOR EXISTING AND PROPOSED OVERHEAD UTILITY POLES AND ADDED SYMBOL FOR UNDERGROUND FIBER OPTIC CABLE.
- REV. 10-26-94: REDREW SHEET AND ADDED SYMBOL FOR SEPTIC TANK. MOVED WETLAND BOUNDARY SYMBOL FROM OLD DRAWING NO. RD-L-2. MOVED SYMBOLS REFLECTING ALL UTILITY INSTALLATIONS TO NEW DRAWING NO. RD-L-2.
- REV. 02-20-20: SPLIT SHEET IN TO TWO SHEETS MOVED 1/2 CONTENTS TO NEW DRAWING RD-L-1A. REDREW SHEET.

APPROVED BY FHWA  
 (ALL OTHERS APPROVED BY TDOT)



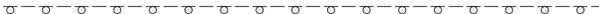
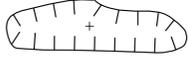
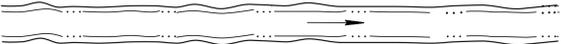
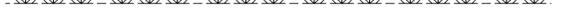
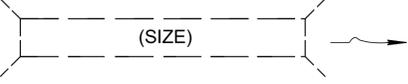
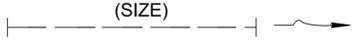
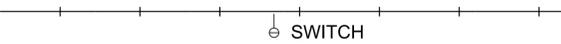
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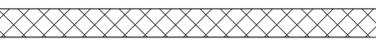
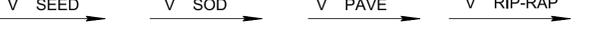
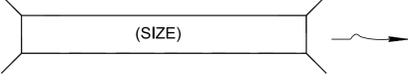
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# STANDARD LEGEND

## EXISTING

## PROPOSED

	SINGLE GUARDRAIL
	MEDIAN DIVIDER GUARDRAIL
	SINKHOLE (SHOW ELEVATION, LOCATION OF LOW POINT AND IF OPEN OR CLOSED)
	SEPTIC TANK (SHOW SIZE - DIRECTION OF ARROW INDICATES LOCATION OF OVERFLOW FIELD)
	SPRING
	LARGE STREAM WITH DIRECTIONAL ARROW
	SMALL STREAM WITH DIRECTIONAL ARROW
	INTERMITTENT STREAM
	SWAMP, MARSH OR WETLAND
	WETLAND BOUNDARY
	BRIDGE, BOX OR SLAB BRIDGES AND CULVERTS (DESCRIBE)
	CROSS DRAIN OR SIDE DRAIN CULVERTS (SHOW SIZE, LENGTH, MATERIAL, INLET AND OUTLET ELEVATIONS, AND TYPE OF ENDWALLS)
	CATCH BASIN (SHOW TYPE, IF KNOWN)
	MANHOLE
	RAILROAD
	WALL (RETAINING, BRICK, STONE)
	TREE
	TREE LINE
	ROCK, EMBANKMENTS, REVETMENTS

	SINGLE GUARDRAIL
	MEDIAN DIVIDER GUARDRAIL
	TOE OF FILL SLOPE
	TOP OF CUT SLOPE
	CONCRETE
	REINFORCED CONCRETE PAVEMENT
	CHANNEL CHANGE OR LARGE SPECIAL DITCH (DESCRIBE)
	"V" OR ROUND DITCH & LINING TREATMENT
	TRAPEZOIDAL DITCH & LINING TREATMENT (INDICATES CHANGE, V TO TRAPEZOIDAL DITCH)
	BRIDGE BOX OR SLAB BRIDGES AND CULVERTS (DESCRIBE)
	CROSS DRAIN OR SIDE DRAIN CULVERTS (SHOW SIZE, LENGTH, MATERIAL, INLET AND OUTLET ELEVATIONS, AND TYPE OF ENDWALLS)
	CATCH BASIN (SHOW TYPE)
	MANHOLE
	RAILROAD
	WALL (RETAINING, BRICK, STONE)
	TREE

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# STANDARD LEGEND

REV. 10-26-94: NEW DRAWING REFLECTING ALL UTILITY RELATED SYMBOLS MOVED FROM DRAWING NO. RD-L-1.  
 REV. 2-28-01: CHANGED SYMBOLS FOR OVERHEAD UTILITY LINES AND ADDED SYMBOLS FOR SEWER METERS & VALVES.  
 REV. 9-5-01: CORRECTED DESCRIPTIONS FOR PROPOSED OVERHEAD UTILITY LINES.  
 REV. 02-20-20: REDREW SHEET.

## EXISTING

	GAS LINE (SHOW SIZE)	
	GAS VALVE IN LINE	
	MANHOLE (TYPE P, T, SA, OR ST) IN LINE	
	SANITARY SEWER (SHOW SIZE)	
	STORM SEWER (SHOW SIZE)	
	UNDERGROUND FIBER OPTIC CABLE	
	UNDERGROUND POWER LINE	
	UNDERGROUND POWER AND TELEPHONE LINE	
	UNDERGROUND TELEPHONE LINE	
	WATER LINE (SHOW SIZE)	
	WATER VALVE IN LINE	
	FIRE HYDRANT	
	GAS VALVE	
	LIGHT POLE	
	LIGHT POLE WITH POWER	LET SLASH INDICATE DIRECTION OF OVER HEAD LINE
	TELEPHONE POLE	
	POWER POLE	
	POWER AND TELEPHONE POLE	
	POWER, TELEPHONE AND CABLE TV POLE	
	TRANSMISSION TOWER (SHOW NUMBER, OWNER AND SIZE AT BASE)	
	SEWER METER	
	SEWER VALVE	
	WATER METER	
	WATER VALVE	
	OVERHEAD POWER LINE	UTILITY SHEETS ONLY
	OVERHEAD TELEPHONE LINE	
	OVERHEAD POWER AND TELEPHONE LINE	
	OVERHEAD POWER AND CABLE TV	

## PROPOSED

	GAS LINE (SHOW SIZE)	1/2" OR MORE LENGTH OF DASH
	GAS VALVE IN LINE	
	MANHOLE (TYPE P, T, SA, OR ST) IN LINE	
	SANITARY SEWER (SHOW SIZE)	
	STORM SEWER (SHOW SIZE)	
	UNDERGROUND FIBER OPTIC CABLE	
	UNDERGROUND POWER LINE	
	UNDERGROUND POWER AND TELEPHONE LINE	
	UNDERGROUND TELEPHONE LINE	
	WATER LINE (SHOW SIZE)	
	WATER VALVE IN LINE	
	FIRE HYDRANT	
	GAS VALVE	
	LIGHT POLE	LET SLASH INDICATE DIRECTION OF OVER HEAD LINE
	LIGHT POLE WITH POWER	
	TELEPHONE POLE	
	POWER POLE	
	POWER AND TELEPHONE POLE	
	POWER, TELEPHONE AND CABLE TV POLE	
	TRANSMISSION TOWER (SHOW NUMBER, OWNER AND SIZE AT BASE)	
	SEWER METER	
	SEWER VALVE	
	WATER METER	
	WATER VALVE	
	OVERHEAD POWER LINE	UTILITY SHEETS ONLY
	OVERHEAD TELEPHONE LINE	
	OVERHEAD POWER AND TELEPHONE LINE	
	OVERHEAD POWER AND CABLE TV LINE	

NOT TO SCALE

STATE OF TENNESSEE  
 STANDARD DRAWING  
 DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND FOR UTILITY INSTALLATIONS

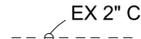
10-26-1994 RD-L-2

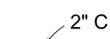
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# STANDARD LEGEND

## EXISTING

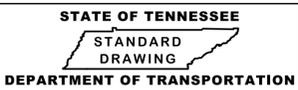
## PROPOSED

	LOOP DETECTOR WITH LEAD-IN
	RADAR/VIDEO DETECTION AREA
	RADAR DETECTOR
	VIDEO DETECTION CAMERA
	VIDEO DETECTION CAMERA 360
	EMERGENCY VEHICLE DETECTOR
	POLE MOUNTED CONTROLLER
	PAD MOUNTED CONTROLLER
	PEDESTRIAN SIGNAL HEAD WITH NUMBER
	RECTANGULAR RAPID FLASHING BEACON
	SIGNAL HEAD WITH NUMBER
	SIGNAL HEAD WITH NUMBER AND BACKPLATE
	PULL BOX
	FIBER OPTIC PULL BOX
	2" CONDUIT
	STRAIN POLE FOR SIGNAL SUPPORT
	WOOD POLE FOR SIGNAL SUPPORT

	LOOP DETECTOR WITH LEAD-IN
	RADAR/VIDEO DETECTION AREA
	RADAR DETECTOR
	VIDEO DETECTION CAMERA
	VIDEO DETECTION CAMERA 360
	EMERGENCY VEHICLE DETECTOR
	POLE MOUNTED CONTROLLER
	PAD MOUNTED CONTROLLER
	PEDESTRIAN SIGNAL HEAD WITH NUMBER
	RECTANGULAR RAPID FLASHING BEACON
	SIGNAL HEAD WITH NUMBER WITHOUT BACKPLATE
	SIGNAL HEAD WITH NUMBER AND BACKPLATE
	PULL BOX
	FIBER OPTIC PULL BOX
	2" CONDUIT
	STRAIN POLE FOR SIGNAL SUPPORT
	WOOD POLE FOR SIGNAL SUPPORT

- REV. 9-18-79: ADDED SIGNAL HEAD WITH NUMBER AND BACKPLATE, PEDESTRIAN PUSHBUTTON WITH NUMBER AND PAVEMENT ARROW TO EXISTING AND PROPOSED LEGEND.
- REV. 1-11-82: ADDED EROSION CONTROL LEGEND.
- REV. 8-21-89: ADDED WETLAND BOUNDARY.
- REV. 1-19-91: REDREW SHEET AND ADDED SYMBOL FOR BOTH BELOW AND ABOVE GROUND SEDIMENT TRAPS.
- REV. 10-26-94: CHANGED DRAWING NO. FROM RD-L-2 TO RD-L-3. ADDED LIGHTING SYMBOLS. MOVED WETLAND BOUNDARY SYMBOL TO DRAWING NO. RD-L-1. MOVED EROSION CONTROL SYMBOLS TO DRAWING NO. RD-L-4.
- REV. 2-28-01: DELETED SYMBOL FOR EXISTING JACKED AND BORED CONDUIT WITH PULL BOXES.
- REV. 4-15-04: CHANGED LEGEND FOR LOOP DETECTOR WITH LEAD-IN. ADDED SYMBOLS FOR VIDEO DETECTION AREA, VIDEO DETECTION CAMERA, EMERGENCY VEHICLE DETECTOR, AND FIBER OPTIC PULL BOX. MOVED SYMBOLS BEGINNING WITH SYMBOL FOR GUYING DEVICE ANGLE ANCHOR TO NEW DRAWING NO. RD-L-4.
- REV. 3-16-17: ADDED SYMBOL FOR EXISTING RADAR/VIDEO DETECTION AREA. ADDED "RADAR" BEFORE "VIDEO DETECTION AREA". ADDED "WITHOUT BACKPLATE" AFTER "SIGNAL HEAD WITH NUMBER".
- REV. 02-20-20: REDREW SHEET.
- REV. 03-01-23: ADDED RADAR DETECTOR, VIDEO DETECTION CAMERA 360 AND RECTANGULAR RAPID FLASHING BEACON TO EXISTING AND PROPOSED LEGEND.

□ APPROVED BY FHWA  
(ALL OTHERS APPROVED BY TDOT)



## STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING

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# STANDARD LEGEND

## EXISTING

## PROPOSED



GUYING DEVICE ANGLE ANCHOR



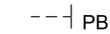
GUYING DEVICE ANGLE ANCHOR



GUYING DEVICE VERTICAL ANCHOR



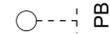
GUYING DEVICE VERTICAL ANCHOR



PEDESTRIAN PUSHBUTTON



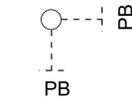
PEDESTRIAN PUSHBUTTON



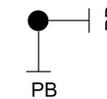
PEDESTRIAN POLE OR PUSHBUTTON POLE  
FOR SINGLE PUSHBUTTON



PEDESTRIAN POLE OR PUSHBUTTON POLE  
FOR SINGLE PUSHBUTTON



PEDESTRIAN POLE OR PUSHBUTTON POLE  
FOR DUAL PUSHBUTTON



PEDESTRIAN POLE OR PUSHBUTTON POLE  
FOR DUAL PUSHBUTTON



HIGH MAST POLE WITH LUMINAIRES ON FULL RING



HIGH MAST POLE WITH LUMINAIRES ON FULL RING



HIGH MAST POLE WITH LUMINAIRES ON HALF RING



HIGH MAST POLE WITH LUMINAIRES ON HALF RING



SINGLE OFFSET TYPE LUMINAIRE AND POLE



SINGLE OFFSET TYPE LUMINAIRE AND POLE



DUAL OFFSET TYPE LUMINAIRE AND POLE



DUAL OFFSET TYPE LUMINAIRE AND POLE



WALL MOUNTED UNDERPASS LIGHT



LIGHTING CONTROL CENTER



LIGHTING CONTROL CENTER



RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL



RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL



RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL  
WITH AUTOMATIC GATE



RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL  
WITH AUTOMATIC GATE



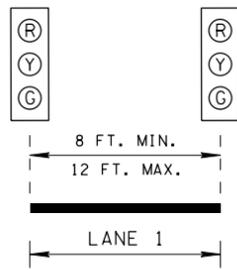
JACKED OR BORED CONDUIT WITH PULL BOXES

REV. 04-15-04: MOVED SYMBOLS BEGINNING WITH SYMBOL FOR GUYING DEVICE ANGLE ANCHOR FROM DRAWING NO. RD-L-3. ADDED SYMBOLS FOR PEDESTRIAN POLE FOR SINGLE AND DUAL PUSHBUTTON, DUAL ARM OFFSET TYPE LUMINAIRE AND POLE AND WALL MOUNTED UNDERPASS LIGHT.

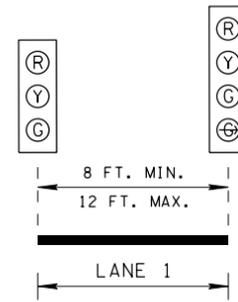
REV. 03-16-17: ADDED "OR PUSHBUTTON POLE" AFTER "PEDESTRIAN POLE" ON FOUR INSTANCES.

REV. 07-16-18: REMOVED THE WORD ARM FROM SINGLE AND DUAL TYPE LUMINAIRE AND POLE. REDREW SHEET.

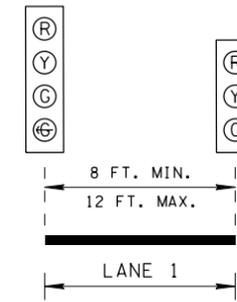
REV. 02-20-20: REDREW SHEET.



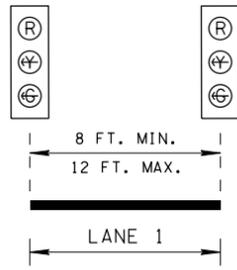
PROTECTED OR SPLIT PHASING (VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS FOR BOTH LEFT-TURN AND RIGHT-TURN MOVEMENTS)



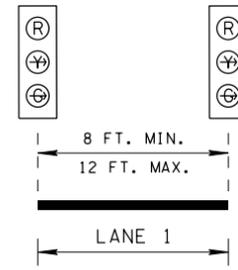
PROTECTED OR SPLIT PHASING (VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS FOR THE LEFT-TURN MOVEMENT ONLY)



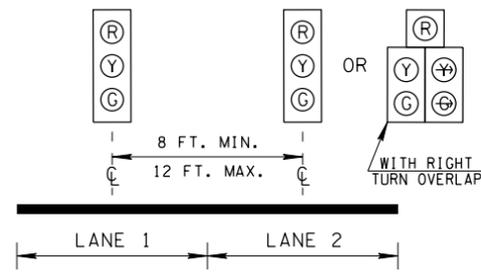
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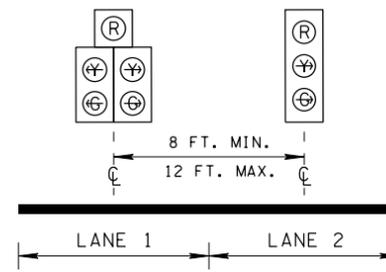
PROTECTED OR SPLIT PHASING (NO VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS)



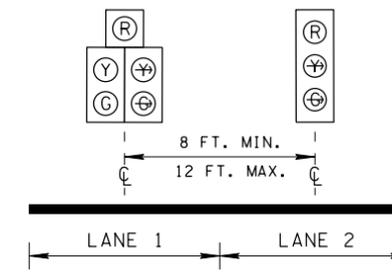
PROTECTED OR SPLIT PHASING (NO VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS)



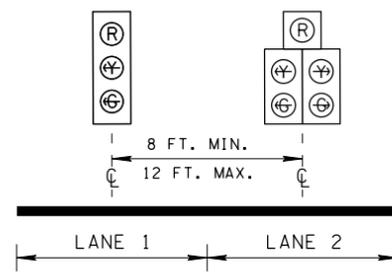
PROTECTED OR SPLIT PHASING (WITH/WITHOUT VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS)



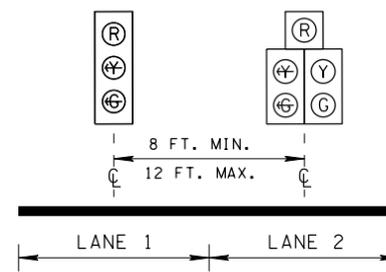
PROTECTED OR SPLIT PHASING (NO VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS)



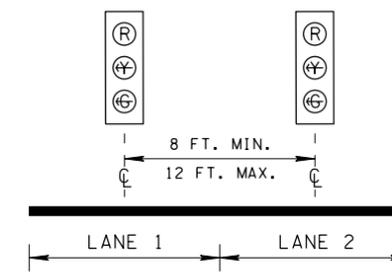
PROTECTED OR SPLIT PHASING (VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS FOR THE LEFT-TURN MOVEMENT ONLY)



PROTECTED OR SPLIT PHASING (NO VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS)



PROTECTED OR SPLIT PHASING (VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS FOR THE RIGHT-TURN MOVEMENT ONLY)



PROTECTED OR SPLIT PHASING (NO VEHICULAR OR PEDESTRIAN MOVEMENT CONFLICTS)

NOTE 1: LAYOUTS SHOWN ARE APPROACHES WITH NO THROUGH MOVEMENTS SUCH AS A T-INTERSECTION OR WHERE THE OPPOSITE APPROACH IS A ONE-WAY ROADWAY IN THE OPPOSITE DIRECTION.

NOTE 2: WHERE THERE IS AN OPPOSITE APPROACH (ONE-WAY ROADWAY IN THE OPPOSITE DIRECTION), THESE LAYOUTS SHOWN INCLUDE LEAD-LAG OR SPLIT PHASING FOR PROTECTED PHASING ONLY. USE ENGINEERING JUDGEMENT FOR PERMISSIVE PHASING.

NOTE 3: WHERE THERE IS AN OPPOSITE TRAVEL LANE APPROACH IN THE SAME ALIGNMENT AS THE APPROACH LANE, THE SIGNAL HEAD IS OFFSET TWO FEET (MIN.) CLOSER TO THE RIGHT TURN LANE IN ORDER TO INCREASE THE APPROACH'S SIGNAL HEAD VISIBILITY.

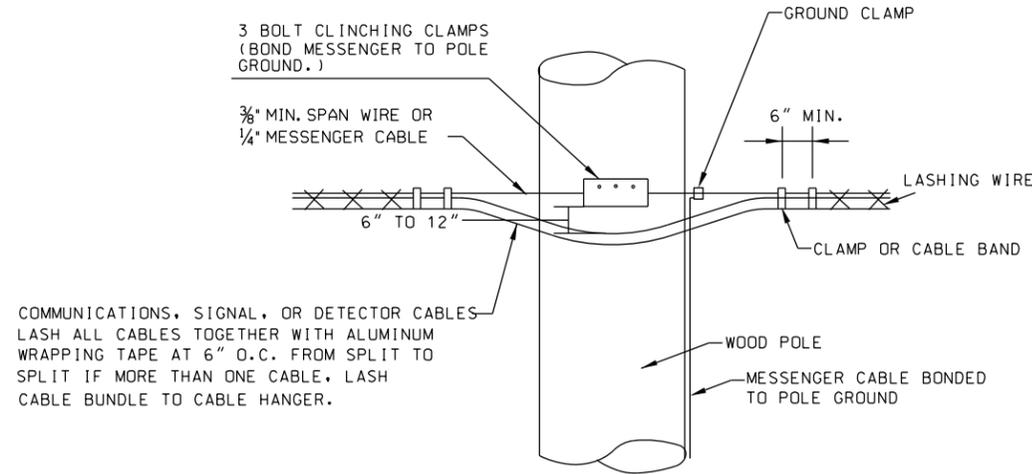
NOTE 4: SEE THE CURRENT EDITION OF THE MUTCD FOR ADDITIONAL INFORMATION REGARDING SIGNAL HEAD PLACEMENTS.

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DEPARTMENT OF TRANSPORTATION

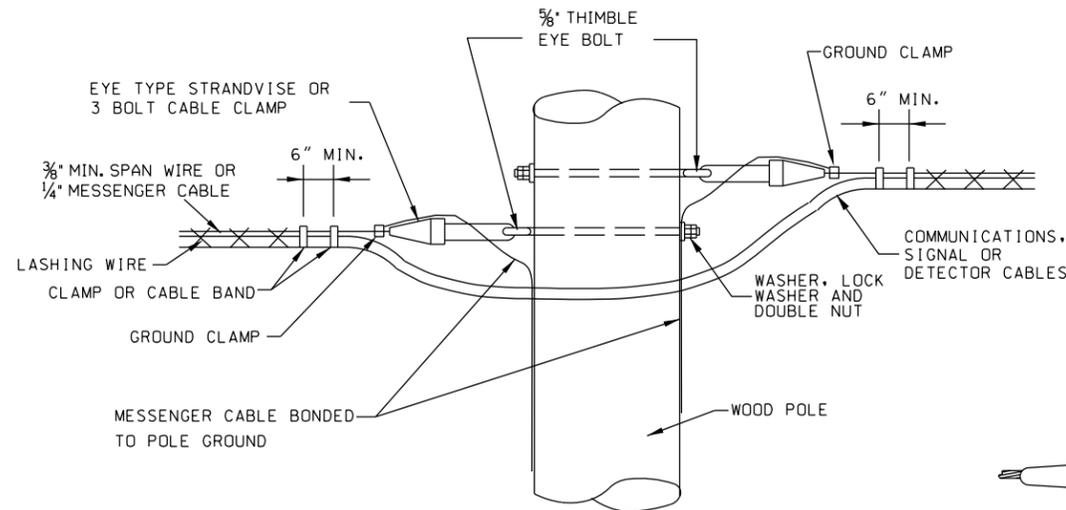
TYPICAL SIGNAL HEAD PLACEMENT

APPROACHES WITH NO THROUGH MOVEMENTS

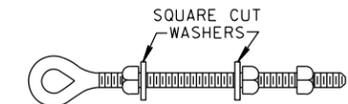
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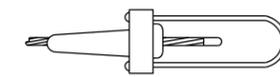
TYPICAL CABLE CONTINUATION—SAME MESSENGER CABLE



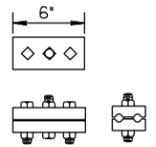
ALTERNATE CABLE CONTINUATION—SEPARATE MESSENGER CABLE



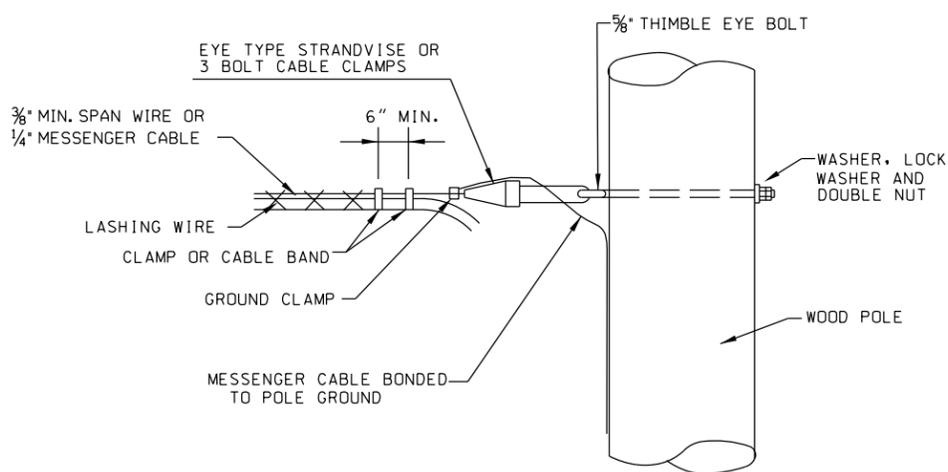
THIMBLE EYE BOLT  
EYE BOLT SHALL EXCEED TENSILE STRENGTH OF SPAN WIRE



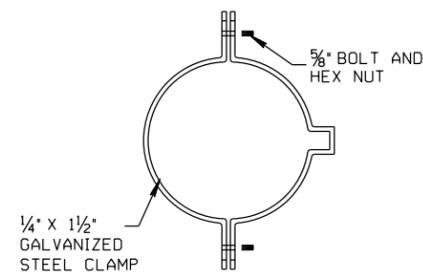
CABLE DEAD END OR STRAND VISE



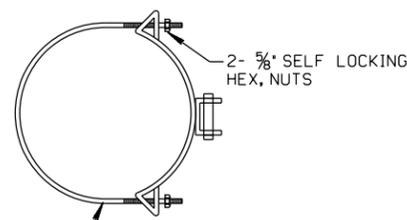
THREE BOLT CLAMP



TYPICAL POLE ATTACHMENT DETAIL FOR MESSENGER DEAD END

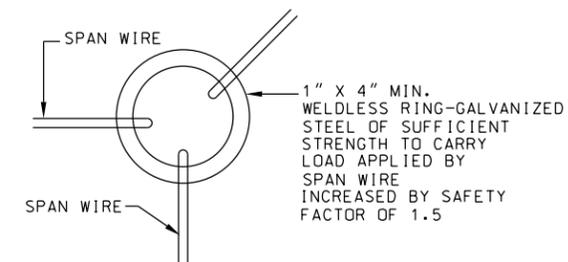


SPLIT CLAMP

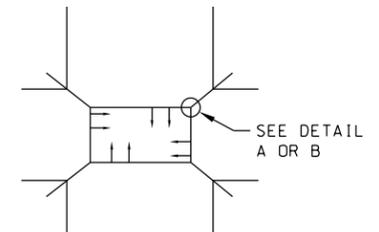


U-BOLT CLAMP

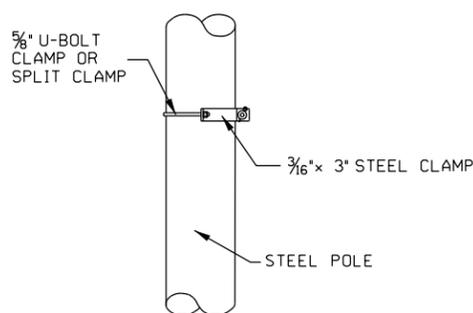
- GENERAL NOTES**
- Ⓐ MINIMUM  $\frac{3}{8}$ " SPAN WIRE SHALL BE USED TO SUPPORT TRAFFIC SIGNALS, SIGNS, AND SIGNAL CABLES.  $\frac{1}{4}$ " MESSENGER CABLE SHALL BE USED ONLY TO SUPPORT COMMUNICATIONS, SIGNAL, OR DETECTOR CABLES.
  - Ⓑ IF IT IS NECESSARY TO RUN POWER SERVICE CABLE FROM ONE SIGNAL (STRAIN OR WOOD) POLE TO ANOTHER, THE POWER SERVICE CABLE SHALL BE LASHED TO ITS OWN MESSENGER CABLE 2 FEET ABOVE THE SIGNAL CABLE.
  - Ⓒ DEAD END ATTACHMENTS TO BE UTILIZED ON ALL TRANSFERS FROM UTILITY POLES TO THE SIGNAL POLES.
  - Ⓓ ALL MESSENGER CABLE WITH FIBER OPTIC CABLE SHALL BE DOUBLE LASHED.



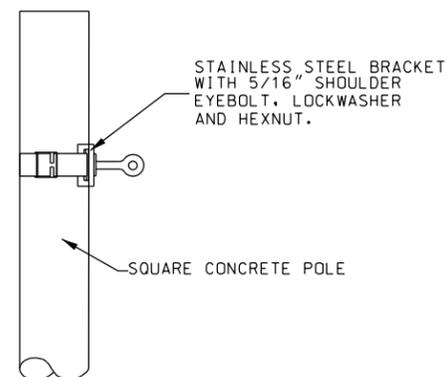
DETAIL A TENSION RING (TYP.)



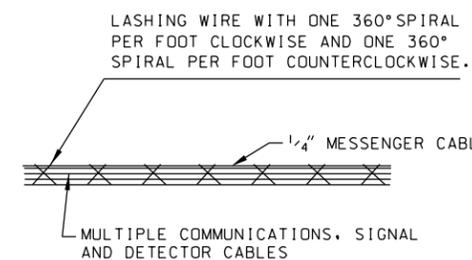
SUSPENDED BOX



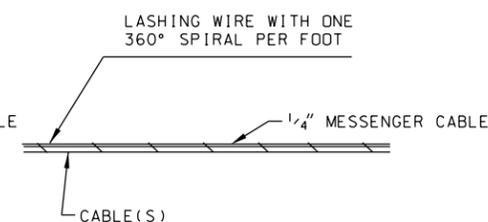
TYPICAL POLE ATTACHMENT FOR STEEL POLE



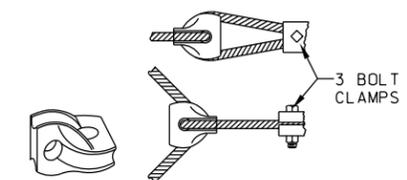
TYPICAL POLE ATTACHMENT FOR SQUARE CONCRETE POLE



DOUBLE LASHING DETAIL



TYPICAL LASHING DETAIL



DETAIL B STRAND CONNECTOR (ALT.)

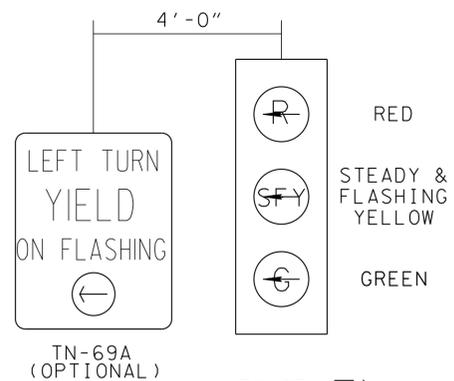
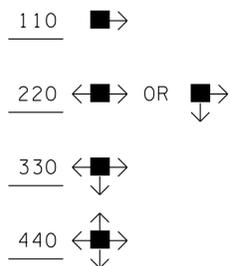
□ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

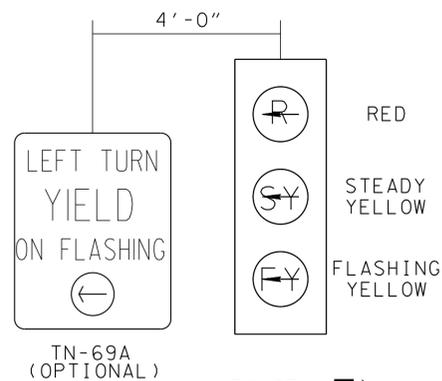
SPAN WIRE AND MESSENGER CABLE DETAILS



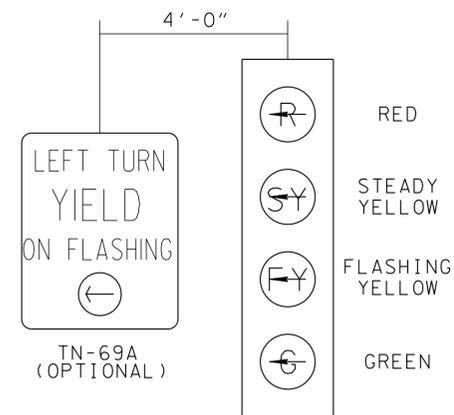
**FLASHING BEACON HEADS**



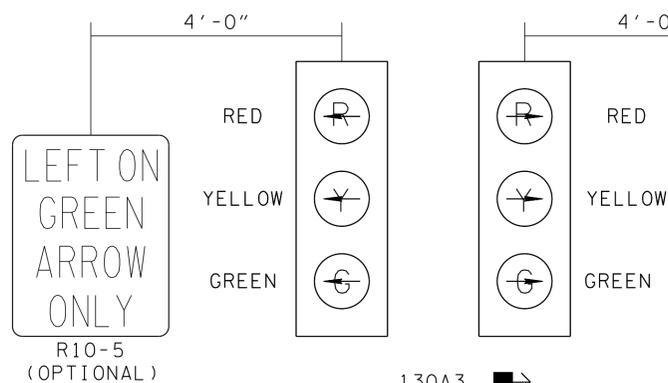
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(SEE NOTE 1)



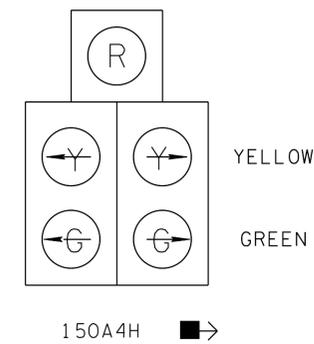
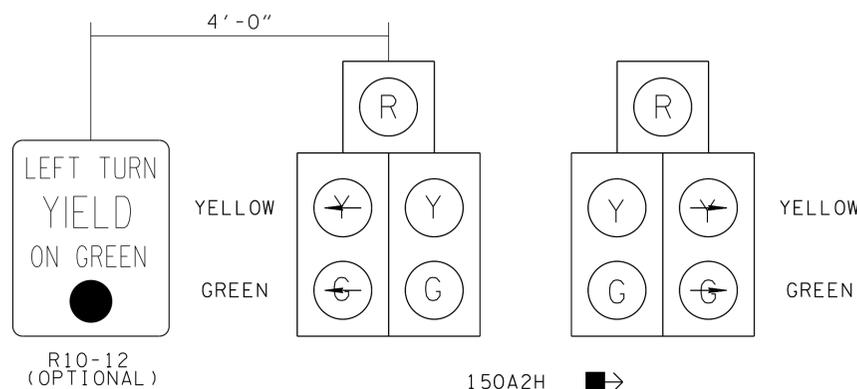
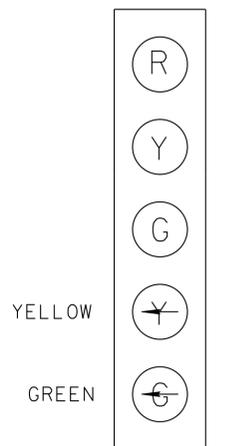
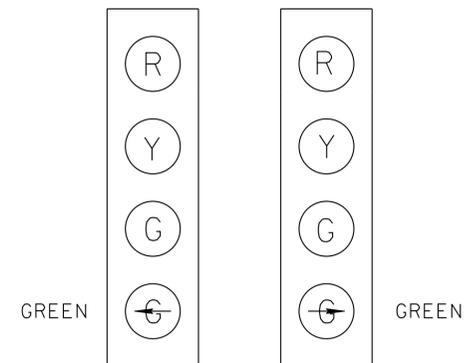
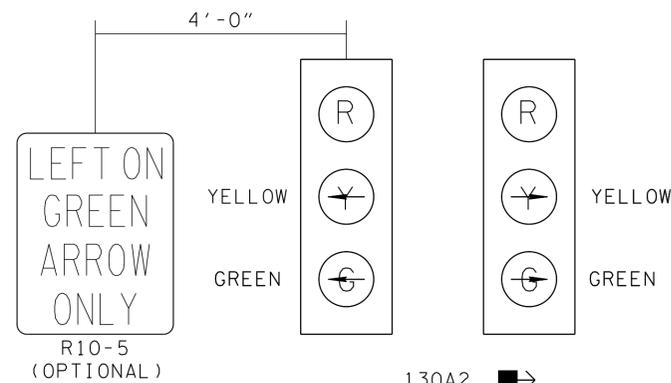
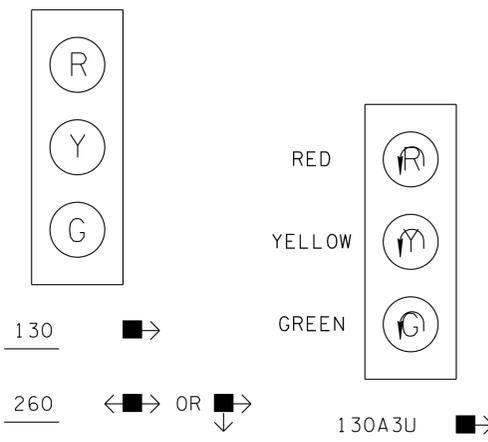
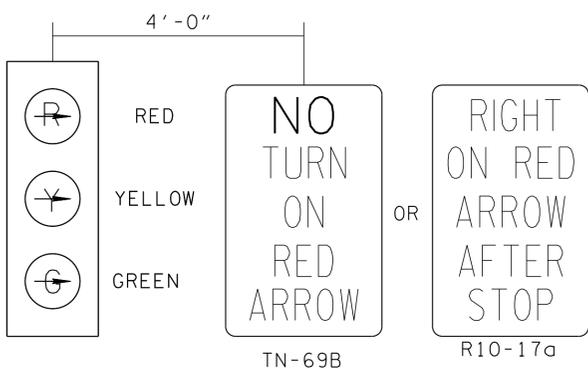
130A3FY ■→



140A4F ■→



130A3 ■→



- REV. 4-12-85: ADDED 4(12)0 ASSEMBLY.
- REV. 5-30-89: CENTERED RED INDICATION ON 150A2H
- REV. 3-12-90: REDREW SHEET. REORGANIZED AND DELETED VARIOUS SIGNAL HEADS. ADDED DETAIL FOR PED. SIGNS.
- REV. 9-30-93: REDREW SHEET. CHANGED PED. PUSHBUTTON SIGNS.
- REV. 12-13-03: REVISED PED. SIGNAL HEAD. ADDED TYPE 130A3 SIGNAL HEAD.
- REV. 7-29-04: CHANGED PEDESTRIAN CROSSWALK SIGNALS AND PEDESTRIAN PUSH BUTTON SIGN DETAIL 130A3. DELETED DETAIL 123A2V.
- REV. 11-1-11: DELETED 130A2 SIGNAL HEAD. ADDED R10-3E SIGN AND NOTES. ADDED 150 A4H SIGNAL HEAD.
- REV. 1-15-14: ADDED GENERAL NOTES
- REV. 6-27-16: REVISED AND MOVED ALL PEDESTRIAN PUSHBUTTON AND PEDESTRIAN SIGN DETAILS TO T-SG-6. ADDED THREE AND FOUR SECTION FLASHING YELLOW ARROW, 130A3U, AND LEFT AND RIGHT 130A2 SIGNAL HEAD DETAILS. ADDED SIGN DETAILS TO 130A2, 130A3, AND 150A2H SIGNAL HEADS. REORGANIZED SHEET AND MADE MINOR REVISIONS TO DETAILS. REVISED SHEET TITLE.
- REV. 7-11-17: ADDED R10-12(MOD.) SIGNS AND SIGNAL HEAD WITH STEADY AND FLASHING YELLOW TO 130A3F AND 140A4F. ADDED NOTE 1.
- REV. 10-21-19: CHANGED SIGNAL HEAD WITH STEADY AND FLASHING YELLOW FROM 130A3F TO 130A3FY.

NOTE 1: THIS TRAFFIC SIGNAL HEAD CAN ONLY BE USED THROUGH INTERIM APPROVAL 17 (1A-17) OPTIONAL USE OF THREE-SECTION FLASHING YELLOW ARROW SIGNAL FACE. CONTACT TDOT'S STATE TRAFFIC ENGINEER TO REQUEST PERMISSION AND OBTAIN APPROVAL TO UTILIZE THIS TRAFFIC SIGNAL HEAD.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

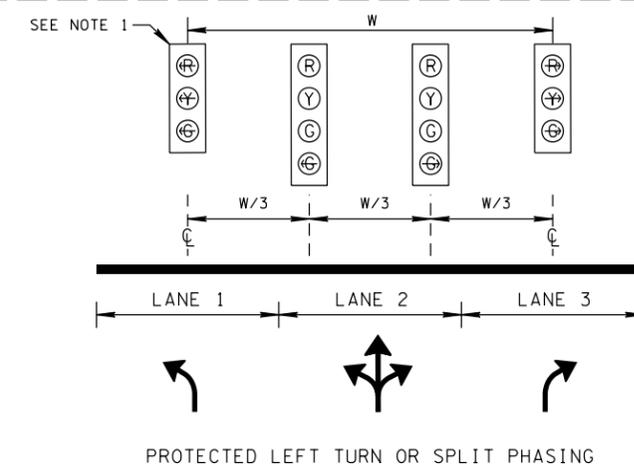
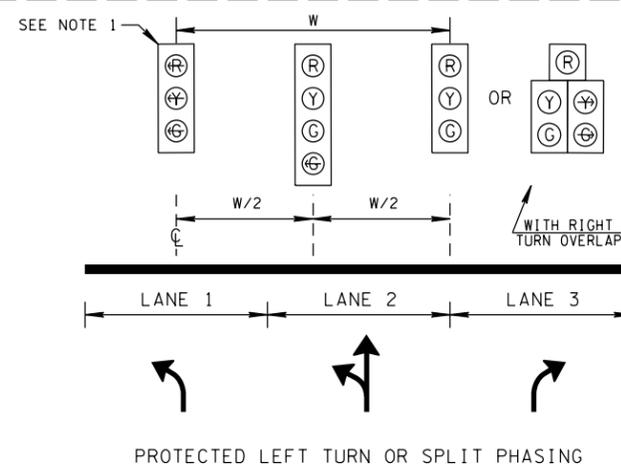
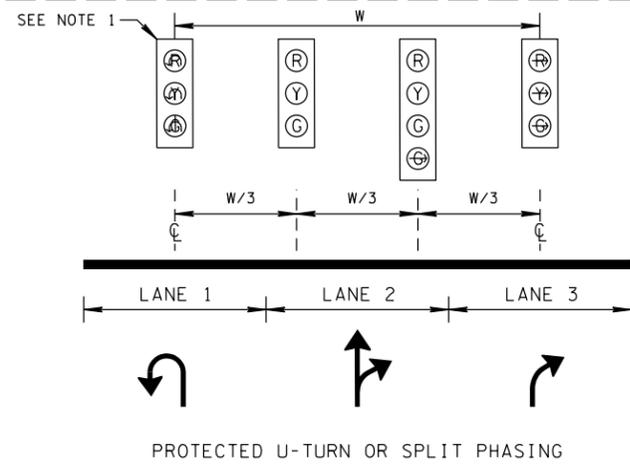
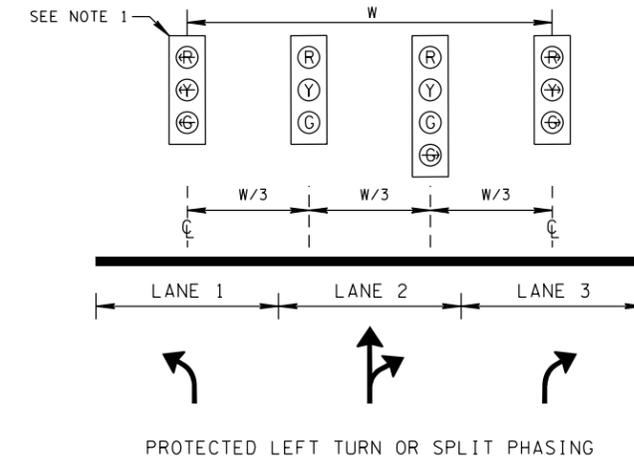
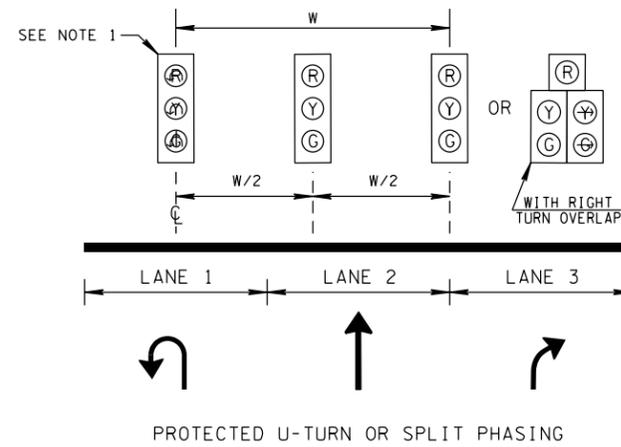
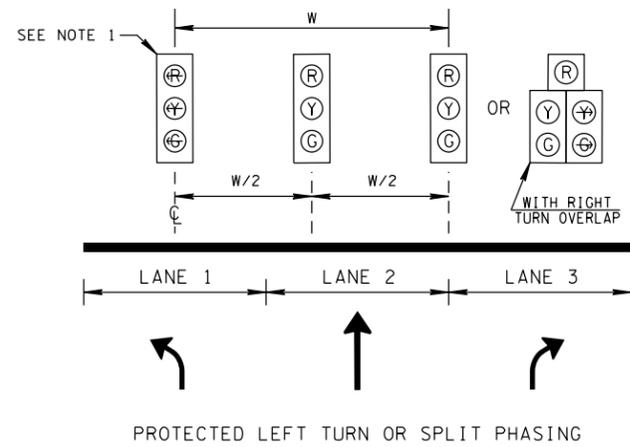
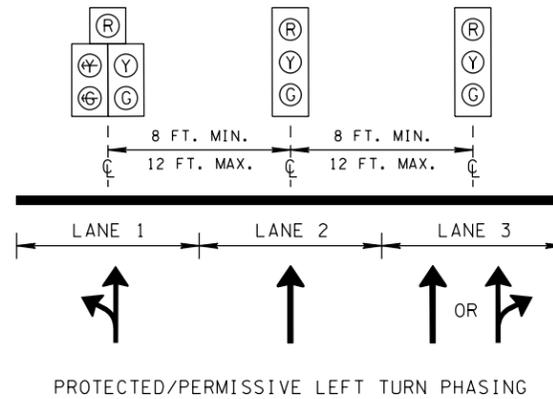
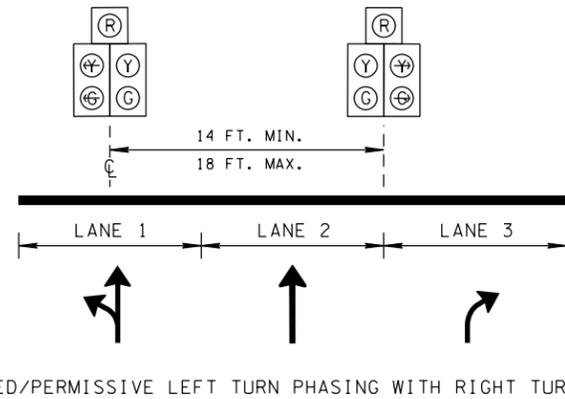
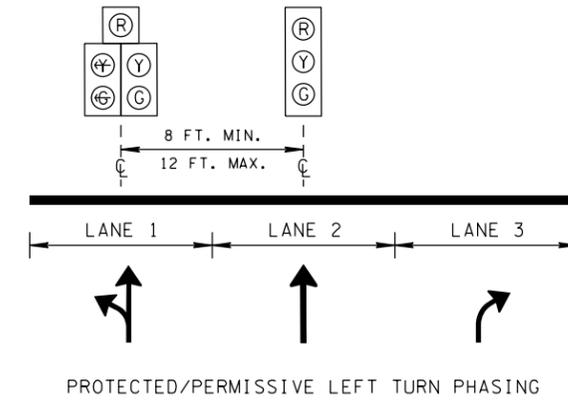
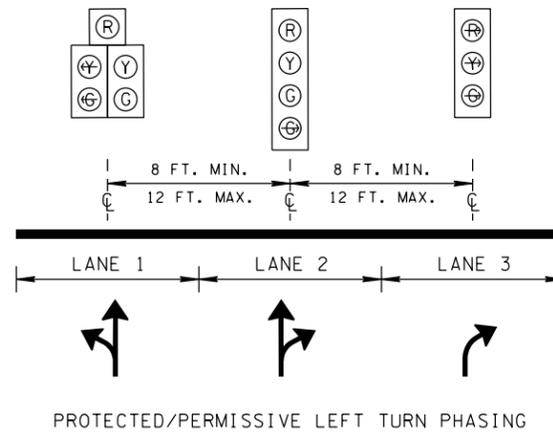
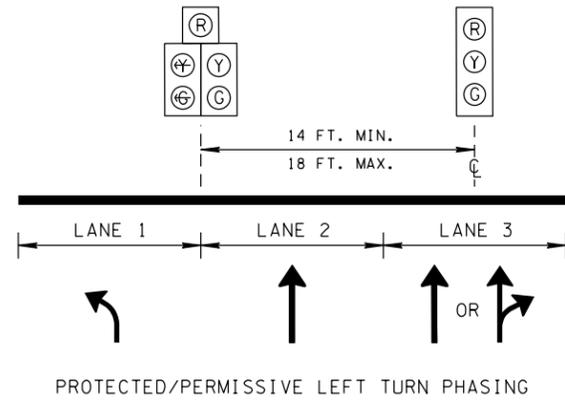
STATE OF TENNESSEE  
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SIGNAL HEAD ASSEMBLIES

BEFORE 4-12-85 T-SG-7

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REV. 7-13-17: ADDED FOURTH SIGNAL HEAD TO "PROTECTED LEFT TURN OR SPLIT PHASING" AND "PROTECTED U-TURN OR SPLIT PHASING" DETAILS.



NOTE 1: WHERE THERE IS AN OPPOSITE LEFT TURN LANE APPROACH IN THE SAME ALIGNMENT AS THE LEFT TURN LANE, THE LEFT TURN SIGNAL HEAD IS OFFSET TWO FEET (MIN.) CLOSER TO THE THROUGH LANE IN ORDER TO INCREASE THE APPROACH'S SIGNAL HEAD VISIBILITY.

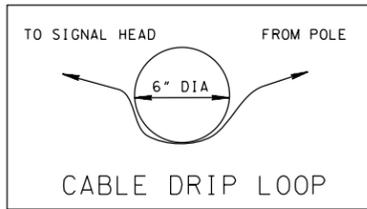
NOTE 2: SEE THE CURRENT EDITION OF THE MUTCD FOR ADDITIONAL INFORMATION REGARDING SIGNAL HEAD PLACEMENTS.

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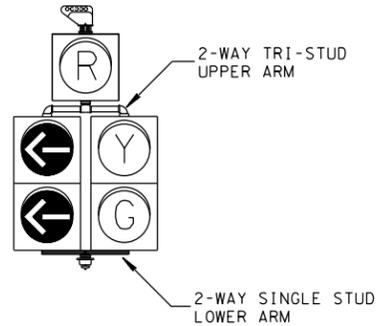
TYPICAL SIGNAL HEAD PLACEMENT  
THREE-LANE APPROACHES

6-27-16 T-SG-7F

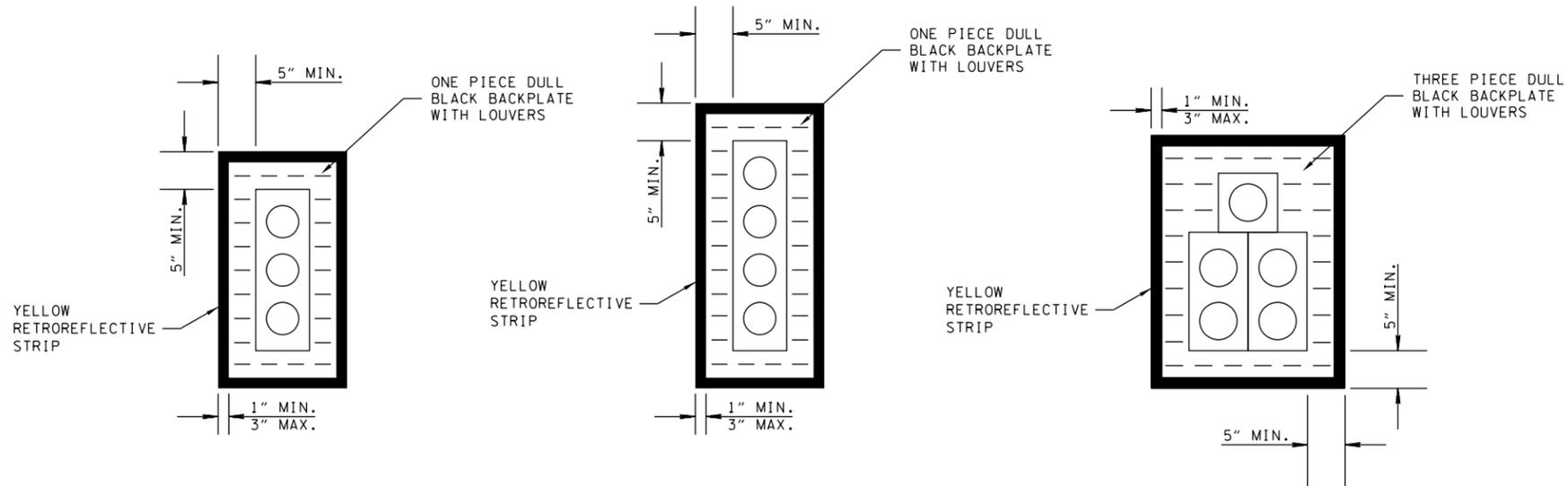




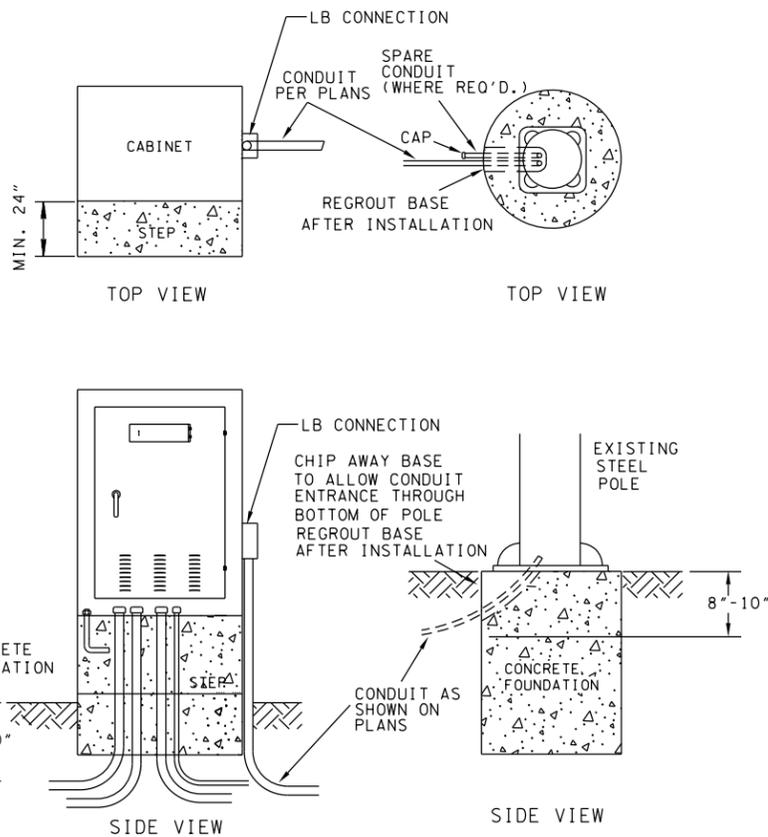
TO PREVENT WATER FROM ENTERING SIGNAL HEAD LOOP CABLE BETWEEN POLE AND SIGNAL HEAD



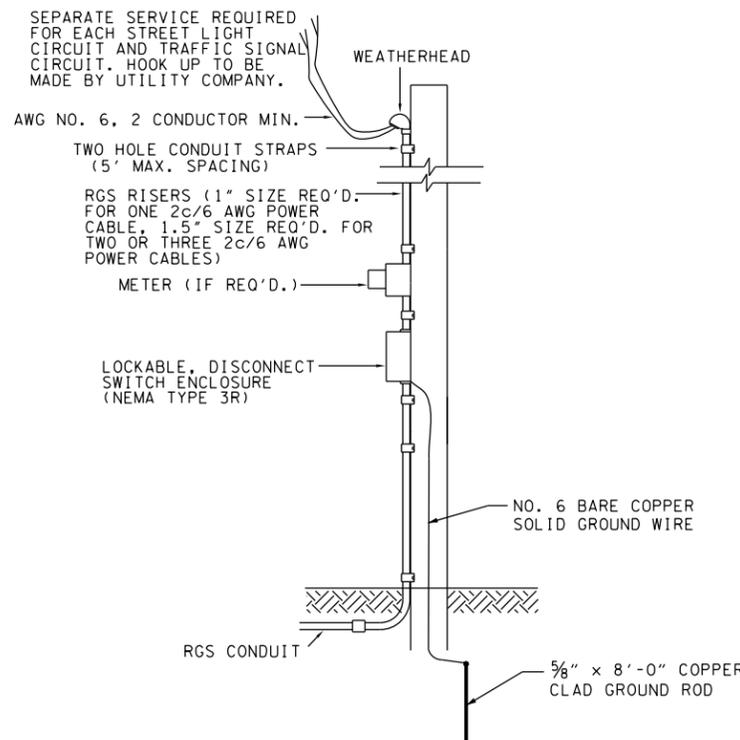
5-SECTION SIGNAL HEAD



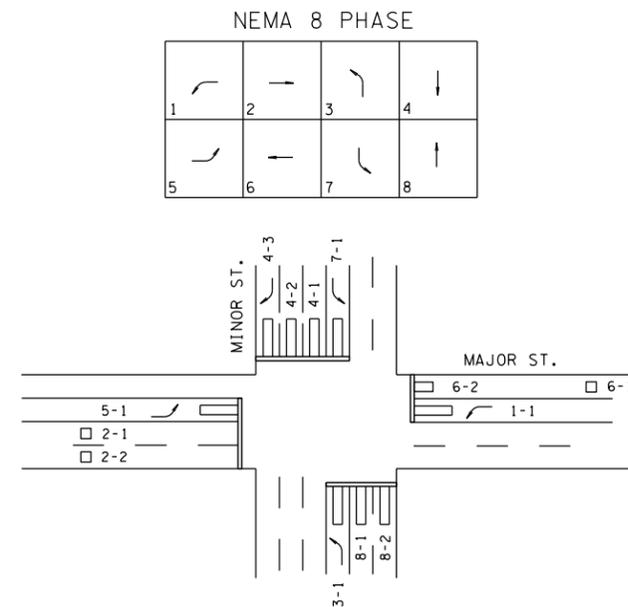
TRAFFIC SIGNAL BACKPLATE DETAIL



CONDUIT ENTRANCE DETAIL (EXISTING CABINET OR POLE)



POWER SERVICE DETAIL



TYPICAL LOOP NUMBERING-8 PHASE

NOTE: WIRING SHALL BE LABELED TO CORRESPOND WITH THE APPROPRIATE LOOP(S).

1. LABEL LOOP LEAD-INS IN PULL BOX OR POLE BASE.
2. LABEL SHIELDED DETECTOR CABLE IN CONTROLLER.
3. LABEL DETECTOR UNITS AND HARNESSSES IN CONTROLLER.

- REV. 12-4-13: CHANGED ANCHOR BOLTS TO THREADED.
- REV. 5-1-14: MODIFIED PEDESTAL POLE HEIGHT.
- REV. 6-27-16: REVISED AND MOVED ALL PEDESTAL POLE DETAILS TO T-SG-6. MADE MINOR TEXT EDITS ON SHEET. REDREW TRAFFIC SIGNAL BACKPLATE DETAIL TO INCLUDE LOUVERS AND RETROREFLECTIVE STRIPS.
- REV. 7-12-17: ADDED NEMA 8 PHASE DIAGRAM AND TYPICAL LOOP NUMBERING-8 PHASE NOTE FROM T-SG-12.

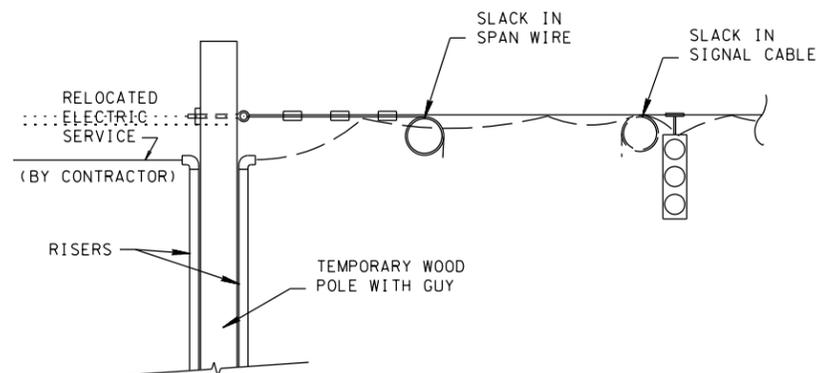
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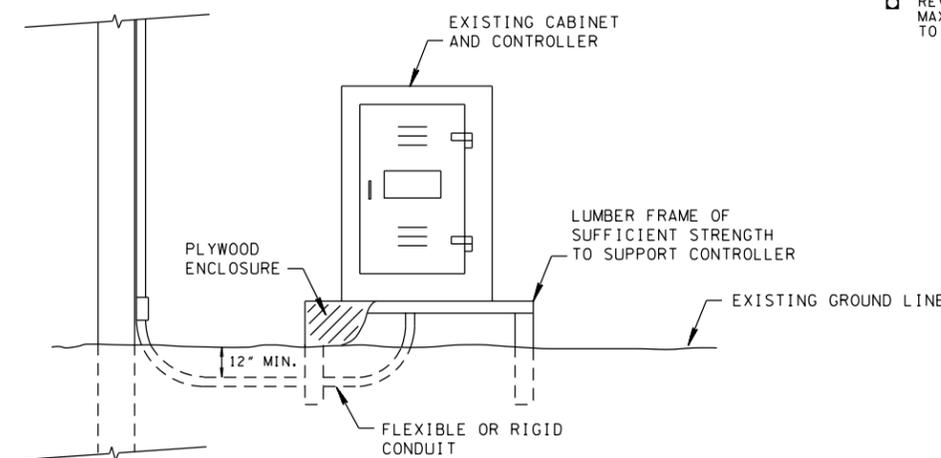
MISCELLANEOUS SIGNAL DETAILS

BEFORE 12-4-13 T-SG-9A

- REV. 7-29-04: REDREW SHEET.
- REV. 7-8-14: CORRECTED NOTE 63.
- REV. 6-27-16: LABELED EXISTING GROUND LINE FOR BASE-MOUNT CONTROLLER.
- REV. 7-12-17: ADDED 14 DAY MAXIMUM SIGNAL FLASHING LIMIT TO NOTE 66.



TYPICAL DETAIL FOR TEMPORARY SUPPORTS, SPANS AND CABLES  
(REFERENCE STANDARD DRAWING T-SG-1)



DETAIL FOR TEMPORARY RELOCATION OF EXISTING BASE-MOUNT CONTROLLER

NOTES FOR TEMPORARY SIGNALS

- (T1) WHEN CONSTRUCTION OPERATIONS AND PHASING REQUIRE THE REMOVAL OR RELOCATION OF EXISTING SIGNAL EQUIPMENT (I.E., SIGNAL SUPPORTS, BASE-MOUNTED CONTROLLERS), THE CONTRACTOR MAY USE THE FOLLOWING METHODS TO MAINTAIN SIGNALIZATION.
- (1) THE CONTRACTOR MAY RELOCATE EXISTING EQUIPMENT.
  - (2) THE CONTRACTOR MAY USE PROPOSED EQUIPMENT. EQUIPMENT SUCH AS SIGNAL SUPPORTS, BASE-MOUNTED CONTROLLERS, PULL BOXES, AND CONDUIT SHALL BE INSTALLED IN THE PROPOSED FINAL LOCATION AND AT FINAL GRADES AND SHALL NOT BE RELOCATED. IF PROPOSED SPAN WIRE AND/OR SIGNAL CABLES ARE USED WITH TEMPORARY SUPPORTS, SUFFICIENT SLACK SHALL BE LEFT TO ATTACH TO FINAL SUPPORTS AND FOR FINAL SIGNAL HEAD ALIGNMENT OR FOR REPOSITIONING EQUIPMENT DURING CONSTRUCTION PHASING. IF CONDITIONS MAKE IT IMPRACTICAL TO LEAVE SLACK IN SPAN WIRE, THE PROPOSED SPAN WIRE MAY BE OVERRUN, AS APPROVED BY THE ENGINEER. (IN PROJECTS WHERE FINAL SUPPORTS ARE MAST ARM POLES AND TEMPORARY WOOD POLES ARE PROVIDED IN THE PLANS, TEMPORARY SPAN WIRE WILL ALSO BE PROVIDED IN THE PLANS.)
  - (3) THE CONTRACTOR MAY SUPPLY AND USE TEMPORARY EQUIPMENT, AS PROVIDED FOR IN THE PLANS OR AT HIS OWN DISCRETION. THIS MATERIAL AND EQUIPMENT, WHILE NOT REQUIRED TO BE NEW, SHALL BE IN GOOD CONDITION AND READY FOR USE. IF THE CONTRACTOR ELECTS TO USE A TRAFFIC SIGNAL CONTROLLER THAT IS NOT NEW, CERTIFICATION SHALL BE SUBMITTED THAT THE EQUIPMENT HAS BEEN TESTED TO THE ORIGINAL MANUFACTURER'S SPECIFICATIONS AND IS IN GOOD WORKING CONDITION, AND THAT ALL APPLICABLE NEMA ENVIRONMENTAL STANDARDS ARE MET. WHEN THE CONTRACTOR SUPPLIES AND USES TEMPORARY EQUIPMENT, HE ASSUMES ALL MAINTENANCE RESPONSIBILITIES ASSOCIATED WITH THAT EQUIPMENT, AND RETAINS POSSESSION OF THE EQUIPMENT AT THE END OF ITS USE.
- (T2) TYPICAL PAY ITEMS THAT MAY BE INCLUDED IN THE PLANS FOR USE IN TEMPORARY SIGNALS INCLUDE WOOD POLES, GUYING DEVICES, SPAN WIRE, AND CONDUIT RISERS, AND THESE ITEMS WILL BE SO NOTED. THERE WILL BE NO DIRECT PAYMENT FOR OTHER COSTS RELATED TO RELOCATING OR REPOSITIONING SIGNAL EQUIPMENT OR FOR TEMPORARY EQUIPMENT PROVIDED AT THE CONTRACTOR'S DISCRETION.

GENERAL NOTES FOR MAINTAINING EXISTING AND PROPOSED SIGNALS DURING HIGHWAY CONSTRUCTION

- (G1) EXISTING TRAFFIC SIGNALS SHALL REMAIN OPERATIONAL UNTIL THE PROPOSED SIGNALS ARE PLACED IN OPERATION.
- (G2) WHEN IT IS NECESSARY TO PUT AN EXISTING TRAFFIC SIGNAL OUT OF OPERATION FOR SHORT PERIODS OF TIME, THE CONTRACTOR SHALL PROVIDE AT HIS EXPENSE A LICENSED OFFICER TO CONTROL TRAFFIC. THE SIGNAL SHALL BE PLACED BACK IN OPERATION BY THE END OF THE WORKING DAY.
- (G3) THE LOCAL AGENCY IS RESPONSIBLE FOR ROUTINE MAINTENANCE OF EXISTING SIGNAL EQUIPMENT DURING CONSTRUCTION. ANY EXISTING EQUIPMENT THAT IS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- (G4) THE CONTRACTOR SHALL NOTIFY THE LOCAL AGENCY A MINIMUM OF TWENTY-FOUR (24) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS THAT WILL RENDER EXISTING DETECTION LOOPS USELESS. THE LOCAL AGENCY WILL ARRANGE TO DISCONNECT THE LOOPS AND MAKE APPROPRIATE ADJUSTMENTS TO SIGNAL TIMING PRIOR TO THESE OPERATIONS.
- (G5) ALL PROPOSED SIGNAL HEADS SHALL BE BAGGED AND COMPLETELY COVERED UNTIL THEY ARE PUT INTO USE.
- (G6) PROPOSED SIGNALS INSTALLED AT PREVIOUSLY UNSIGNALIZED INTERSECTIONS SHALL BE FLASHED A MINIMUM OF SEVEN (7) DAYS UP TO A MAXIMUM OF FOURTEEN (14) DAYS, BEFORE PUT INTO FINAL OPERATION.
- (G7) THE EXISTING SIGNAL PHASING SHALL BE CONTINUED DURING THE CONSTRUCTION PERIOD. PROPOSED PHASING, IF DIFFERENT, MAY BE IMPLEMENTED WHEN PROPOSED SUPPORTS, SIGNAL HEADS, CONTROLLER, AND ROADWAY GEOMETRY ARE IN PLACE SUCH THAT PROPOSED PHASING IS PRACTICAL.
- (G8) SIGNAL HEADS SHALL BE REPOSITIONED FOR CHANGES IN CONSTRUCTION PHASING TO CONFORM TO REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THIS MAY REQUIRE ADDITIONAL NEAR SIDE SIGNAL HEADS IF STOPLINE TO SIGNAL HEAD DISTANCE EXCEEDS 180' (120' IF 8 INCH LENSES ARE USED) OR IS LESS THAN 40'.

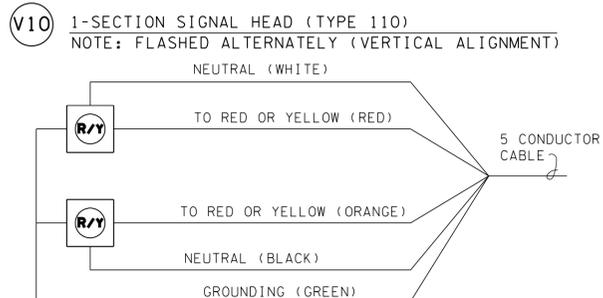
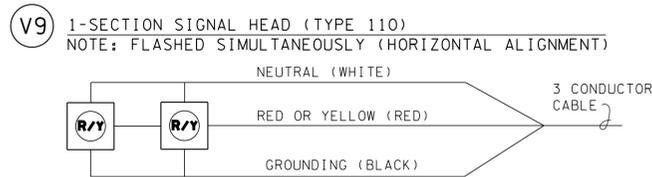
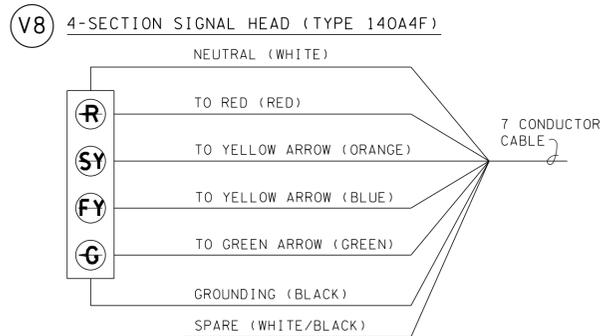
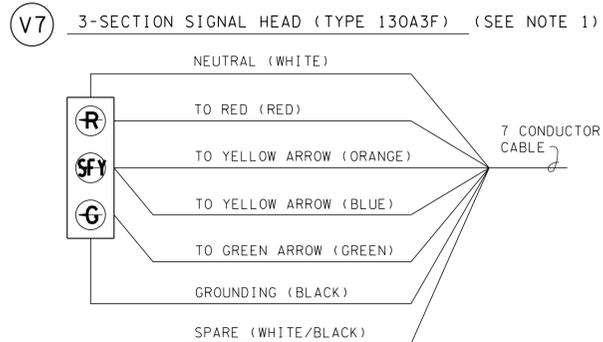
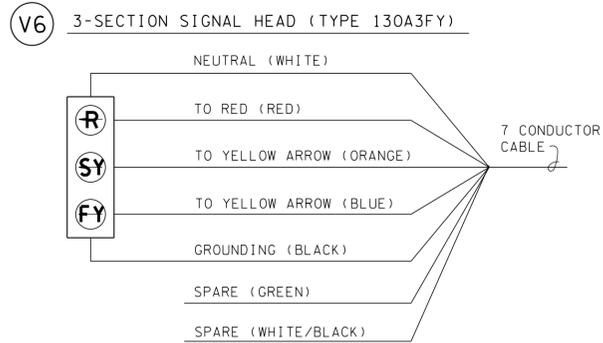
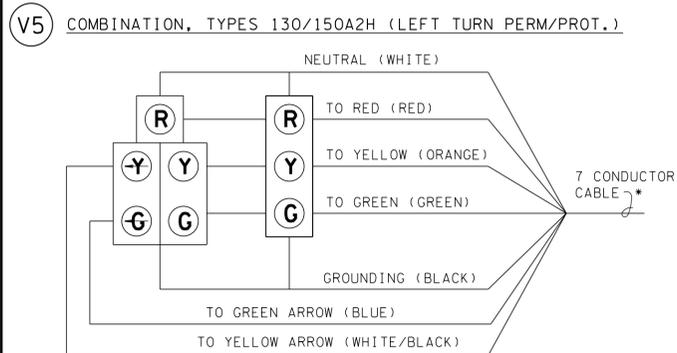
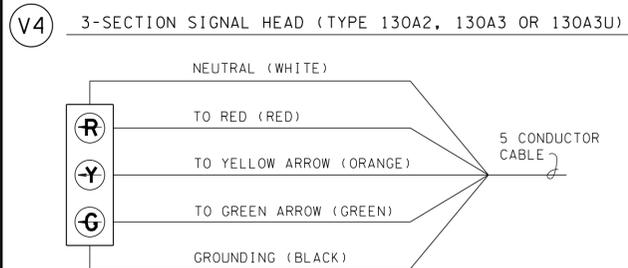
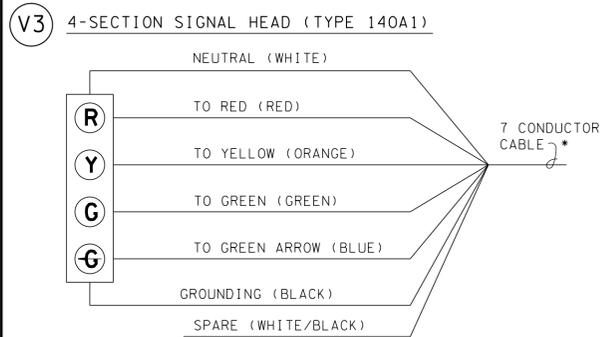
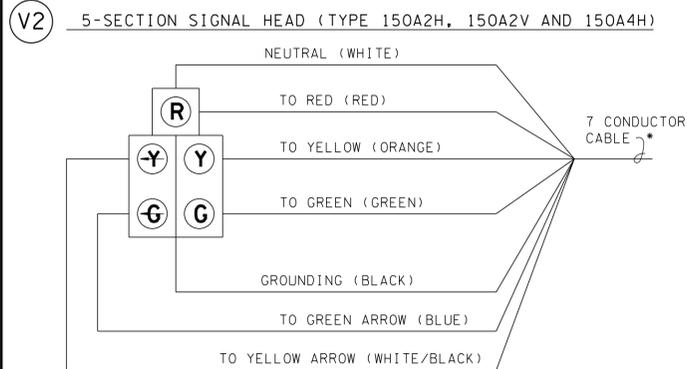
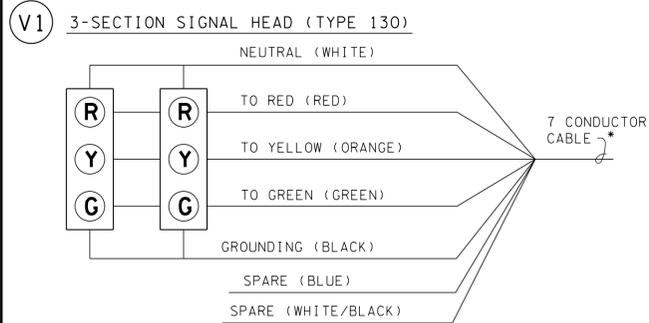
□ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

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DEPARTMENT OF TRANSPORTATION

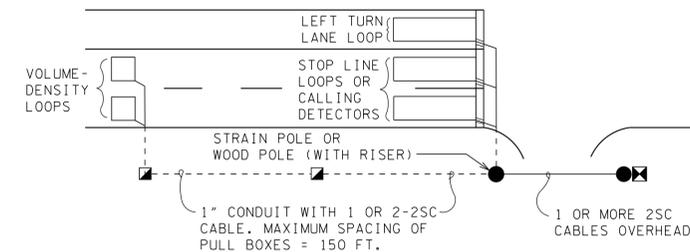
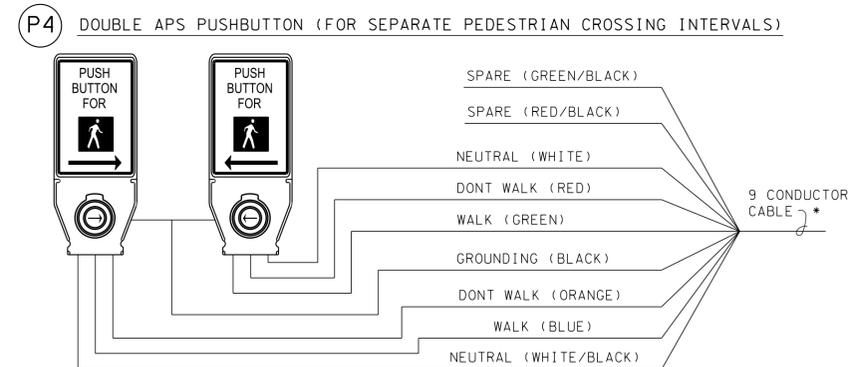
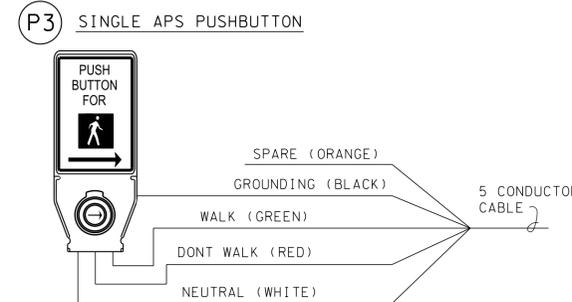
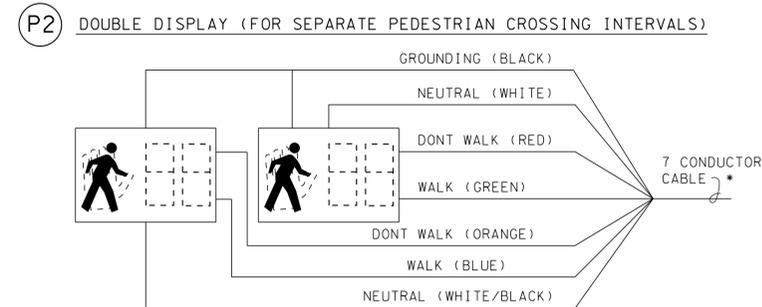
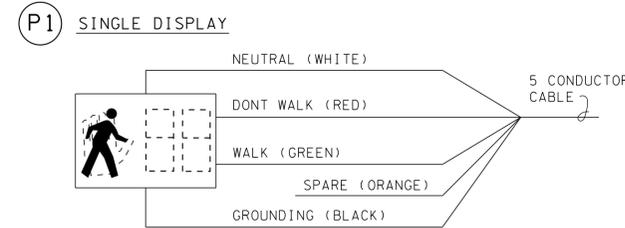
MAINTENANCE OF  
EXISTING SIGNALS  
DURING HIGHWAY  
CONSTRUCTION

10-26-91 T-SG-11

**VEHICLE SIGNAL HEAD WIRING**



**PEDESTRIAN SIGNAL HEAD & PUSHBUTTON WIRING**

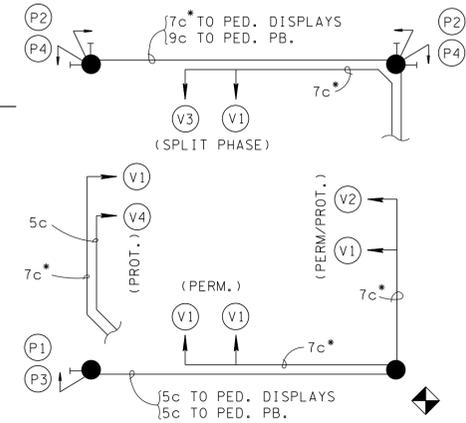


**TYPICAL LOOP WIRING**

NOTE: ANY OR ALL OF THE LOOPS DEPICTED MAY BE PROPOSED.

**LEGEND**

- ☒ CONTROLLER
- ☑ PULL BOX
- POLE FOR SIGNAL SUPPORT



- ☐ REV. 6-13-95: CHANGED 8 CONDUCTOR TO 9 CONDUCTOR CABLE.
- REV. 12-16-03: CHANGE 3-SECTION AND 5-SECTION HEADS TO 7 CONDUCTOR CABLE.
- REV. 7-29-04: MODIFIED DETAILS (V1), (V2), (V5), (P1), AND (P2). MODIFIED TYPICAL LOOP NUMBER-4 PHASE AND TYPICAL LOOP NUMBERING-8 PHASE DETAILS.
- REV. 11-1-11: REVISED TYPICAL WIRING SCHEMATIC. ADDED 150 A4H TO (V2). DELETED THE WORDS LEFT TURN FROM (V4).
- REV. 6-27-16: ADDED WIRING DETAILS FOR FLASHING BEACON AND THREE AND FOUR SECTION FLASHING YELLOW ARROW SIGNAL HEADS. ADDED 130A3U TO (V4) WIRING DETAIL. CHANGED ALL PEDESTRIAN SIGNAL HEADS TO COUNTDOWN. CHANGED MAXIMUM PULL BOX SPACING TO 150'. DELETED TYPICAL LOOP NUMBER-4 PHASE DETAIL.
- ☐ REV. 7-12-17: MOVED NEMA 8 PHASE DIAGRAM AND TYPICAL LOOP NUMBERING-8 PHASE NOTE TO T-SG-9A. V7, V8, V9 RENAMED V8, V9, V10 RESPECTIVELY. ADDED NEW V7. ADDED NOTE 1.
- ☐ REV. 12-20-19: CHANGED ALL PEDESTRIAN PUSHBUTTONS TO APS PUSHBUTTON DESIGN WITH UPDATED WIRING DETAILS. CHANGED "\*" NOTE TO "9c OR 12c MAY BE USED". CHANGED "Y" LENSES ON (V6) SIGNAL HEAD TO "SY" & "FY" AND CHANGED "130A3F" ON TITLE DESCRIPTION TO "130A3FY". CHANGED "Y" LENSES ON (V7) SIGNAL HEAD TO "SFY". CHANGED "Y" LENS ON (V8) SIGNAL HEAD TO "SY" & "FY". ADDED GROUNDING WIRE TO ALL WIRING DETAILS.

NOTE 1: THIS TRAFFIC SIGNAL HEAD CAN ONLY BE USED THROUGH INTERIM APPROVAL 17 (1A-17) OPTIONAL USE OF THREE-SECTION FLASHING YELLOW ARROW SIGNAL FACE. CONTACT TDOT'S STATE TRAFFIC ENGINEER TO REQUEST PERMISSION AND OBTAIN APPROVAL TO UTILIZE THIS TRAFFIC SIGNAL HEAD.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

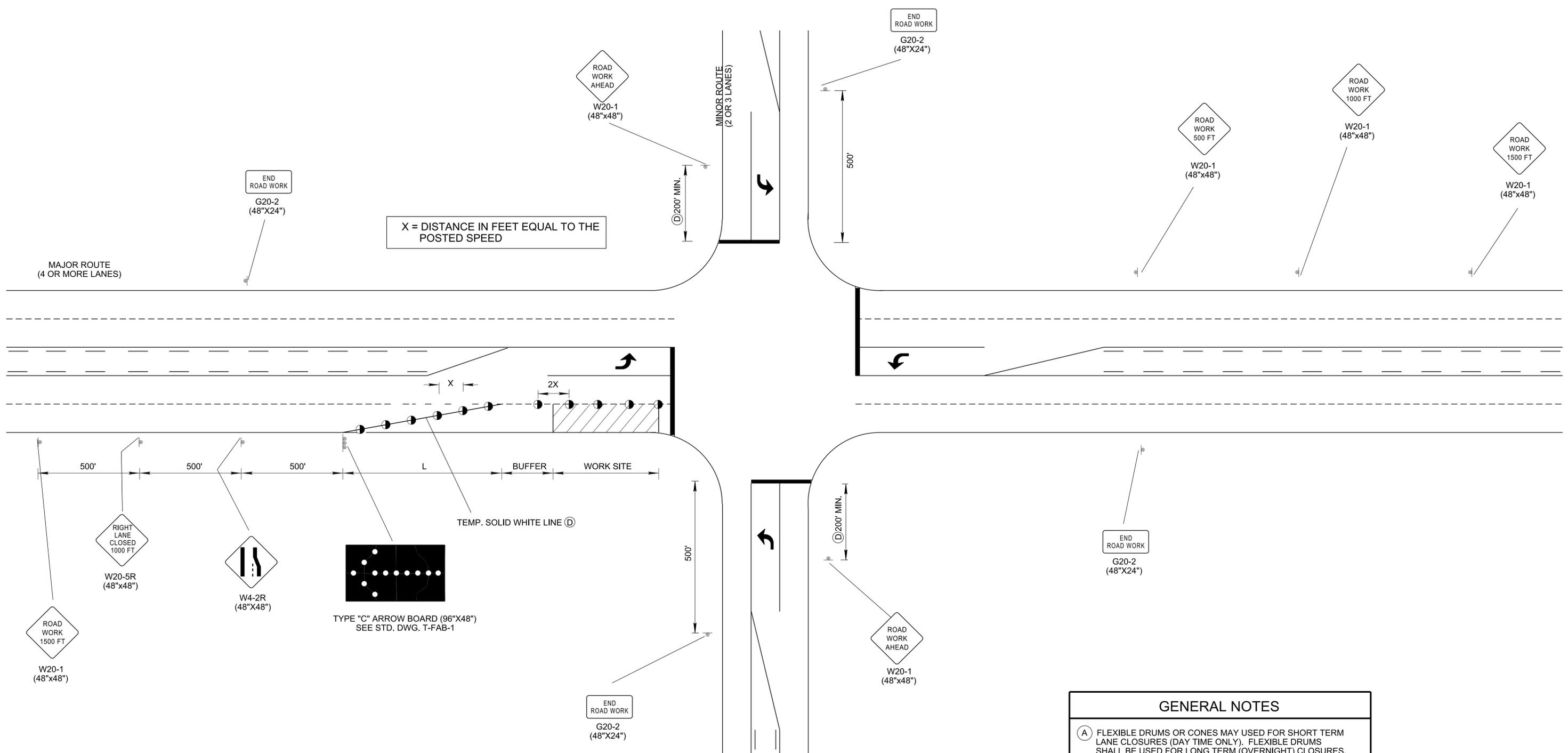
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TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS

2-14-92 T-SG-12

# RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS

- REV. 9-1-05: REMOVED TYPE "C" WARNING LIGHTS FROM FLEXIBLE DRUMS IN TAPER. REMOVED TYPE "C" WARNING LIGHT NOTE FROM GENERAL NOTES.
- REV. 12-18-99: MODIFIED HEADING DESCRIPTION AND ELIMINATED OLD GENERAL NOTE(A)
- REV. 4-2-12: CHANGED SIGN G20-2A TO G20-2.
- REV. 03-05-17: ADDED GENERAL NOTE (D)
- REV. 4-15-99: ADDED GENERAL NOTE(E)
- REV. 4-15-04: CHANGED W4-2 SIGN. CHANGED GENERAL NOTES(B) AND (C) TO COMPLY WITH 2003 MUTCD.



X = DISTANCE IN FEET EQUAL TO THE POSTED SPEED

TYPE "C" ARROW BOARD (96"x48")  
SEE STD. DWG. T-FAB-1

CHANNELIZATION DEVICE LEGEND	
	FLEXIBLE DRUMS
	SIGN SUPPORT
	WORK SITE
	FLASHING YELLOW ARROW BOARD (SEE STD. DWG. NO. T-FAB-1, FOR DETAILS AND SPECIFICATIONS)

COMPUTATION FOR DISTANCE L	
$L = W \times S$	(FOR POSTED SPEEDS OF 45 MPH OR GREATER)
$L = \frac{W \times S^2}{60}$	(FOR POSTED SPEEDS OF 40 MPH OR LESS)
L = TAPER LENGTH IN FEET W = WIDTH OF OFFSET IN FEET S = POSTED SPEED	

GENERAL NOTES	
(A)	FLEXIBLE DRUMS OR CONES MAY USED FOR SHORT TERM LANE CLOSURES (DAY TIME ONLY). FLEXIBLE DRUMS SHALL BE USED FOR LONG TERM (OVERNIGHT) CLOSURES.
(B)	SEE TABLE 6C-2 OF PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR RECOMMENDED LENGTHS OF BUFFER SPACE WHICH ARE BASED ON STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED.
(C)	SEE TABLE 6C-1 OF PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR GUIDELINES FOR ADVANCE WARNING SIGN SPACING TO BE USED TO DETERMINE DISTANCE FOR "ROAD WORK AHEAD" SIGN TO BE PLACED PRIOR TO INTERSECTION.
(D)	SEE TDOT ROADWAY DESIGN GUIDELINES SECTION 4-716.11 FOR LINE WIDTH AND SECTION 4-716.30 FOR MATERIAL TYPE.

□ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

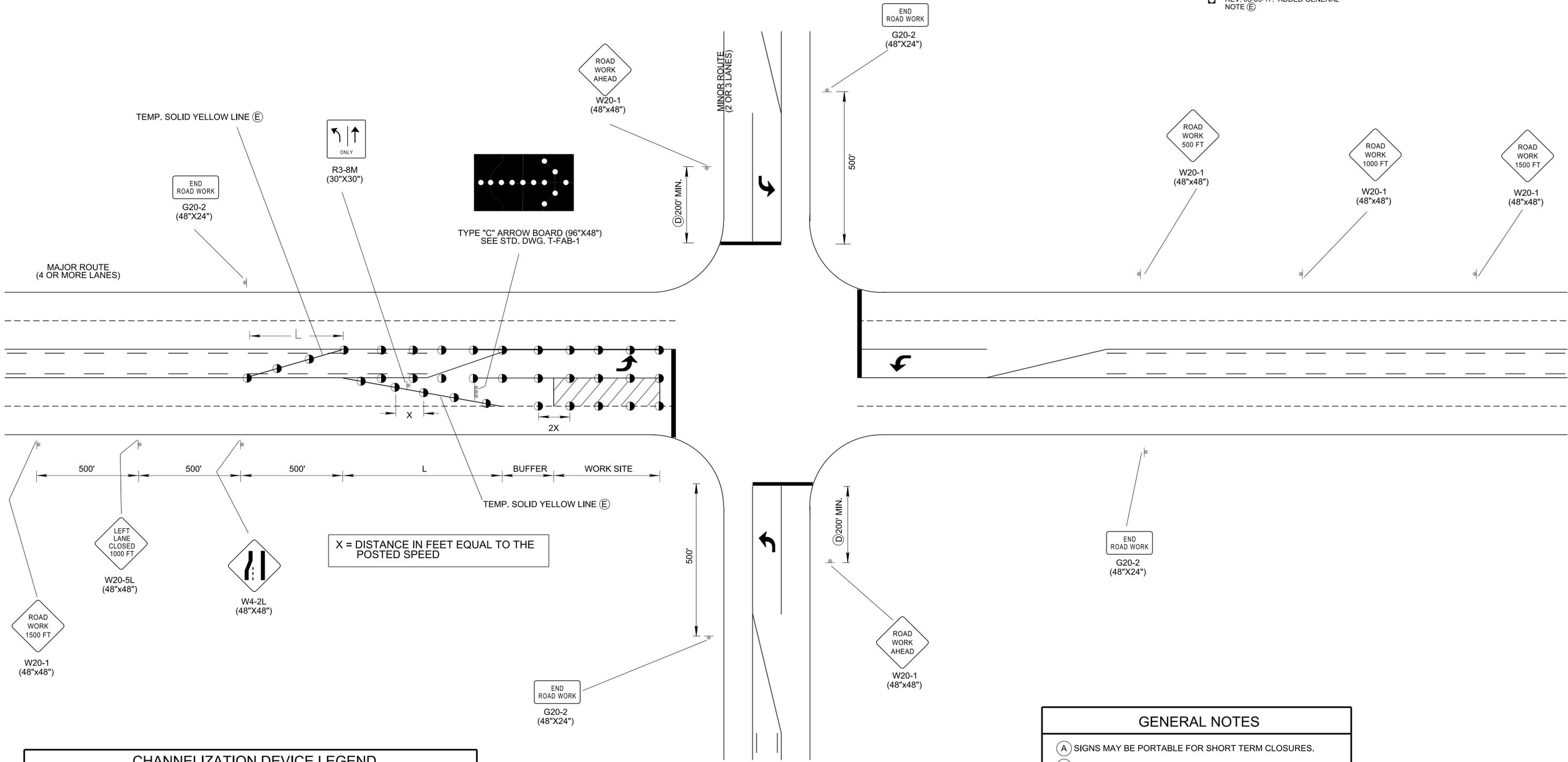
**STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION**

**RIGHT LANE  
CLOSURES  
AT NEAR SIDE  
OF INTERSECTIONS**

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# LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS (FOR 40 MILES PER HOUR AND GREATER)

- REV. 9-1-05: REMOVED TYPE "C" WARNING LIGHTS FROM FLEXIBLE DRUMS IN TAPER. REMOVED TYPE "C" WARNING LIGHT NOTE FROM GENERAL NOTES.
- REV. 4-2-12: CHANGED G20-2A TO G20-2, ADDED CHANNELIZATION TO PROTECT LEFT TURN LANE.
- REV. 03-05-17: ADDED GENERAL NOTE (E)
- REV. 4-15-99: ADDED GENERAL NOTE (E)
- REV. 4-15-04: CHANGED W4-2 SIGN, CHANGED GENERAL NOTES (B) AND (C) TO COMPLY WITH 2003 MUTCD.



**X = DISTANCE IN FEET EQUAL TO THE POSTED SPEED**

CHANNELIZATION DEVICE LEGEND	
	FLEXIBLE DRUMS
	SIGN SUPPORT
	WORK SITE
	FLASHING YELLOW ARROW BOARD (SEE STD. DWG. NO. T-FAB-1, FOR DETAILS AND SPECIFICATIONS)

COMPUTATION FOR DISTANCE L	
$L = W \times S$	(FOR POSTED SPEEDS OF 45 MPH OR GREATER)
$L = \frac{W \times S^2}{60}$	(FOR POSTED SPEEDS OF 40 MPH OR LESS)
L = TAPER LENGTH IN FEET W = WIDTH OF OFFSET IN FEET S = POSTED SPEED	

GENERAL NOTES	
(A)	SIGNS MAY BE PORTABLE FOR SHORT TERM CLOSURES.
(B)	FLEXIBLE DRUMS OR CONES MAY USED FOR SHORT TERM LANE CLOSURES (DAY TIME ONLY). FLEXIBLE DRUMS SHALL BE USED FOR LONG TERM (OVERNIGHT) CLOSURES.
(C)	SEE TABLE 6C-2 OF PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR RECOMMENDED LENGTHS OF BUFFER SPACE WHICH ARE BASED ON STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED.
(D)	SEE TABLE 6C-1 OF PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR GUIDELINES FOR ADVANCE WARNING SIGN SPACING TO BE USED TO DETERMINE DISTANCE FOR "ROAD WORK AHEAD" SIGN TO BE PLACED PRIOR TO INTERSECTION.
(E)	SEE TDOT ROADWAY DESIGN GUIDELINES SECTION 4-716.11 FOR LINE WIDTH AND SECTION 4-716.30 FOR MATERIAL TYPE.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

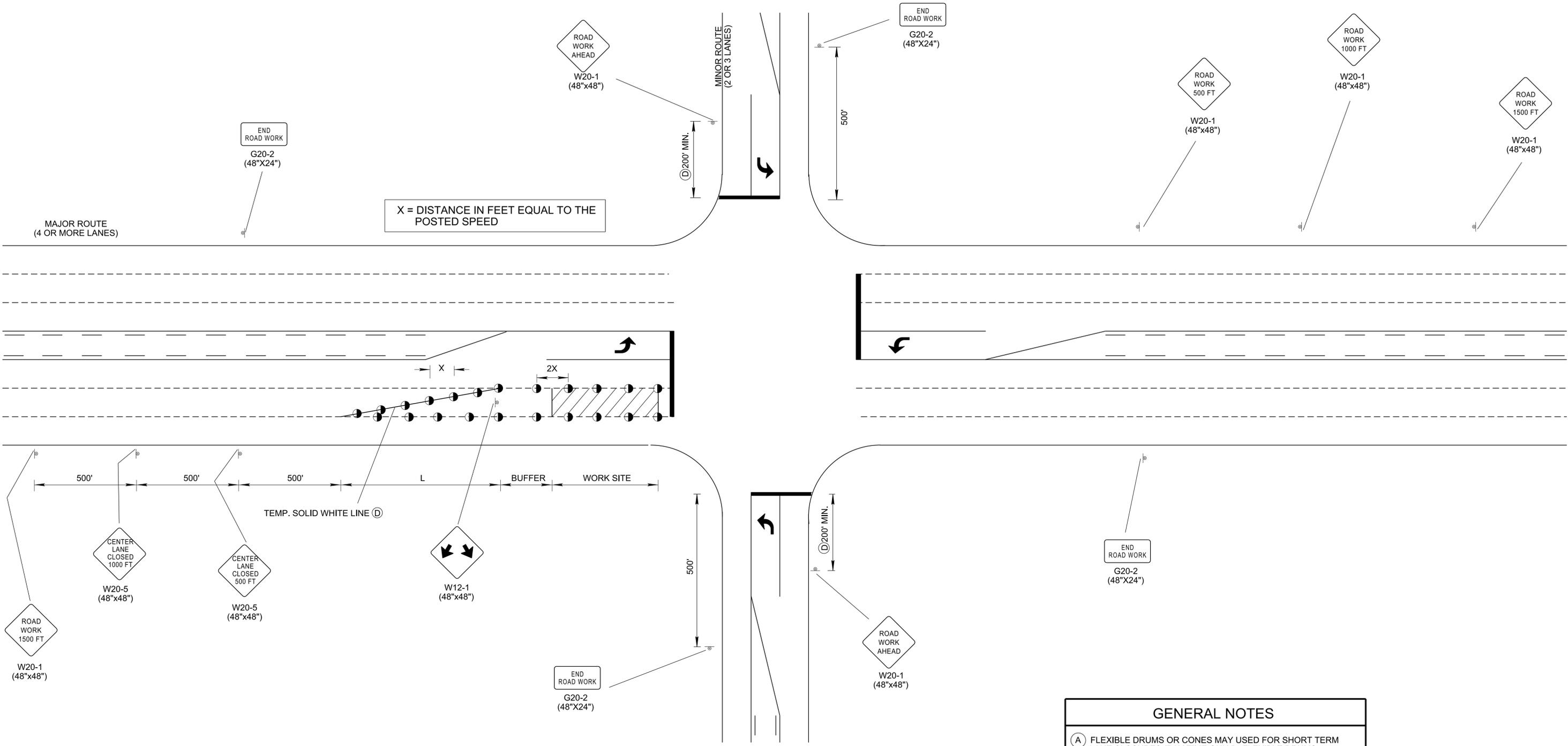
**STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION**

**LEFT LANE  
CLOSURES  
AT NEAR SIDE  
OF INTERSECTIONS**

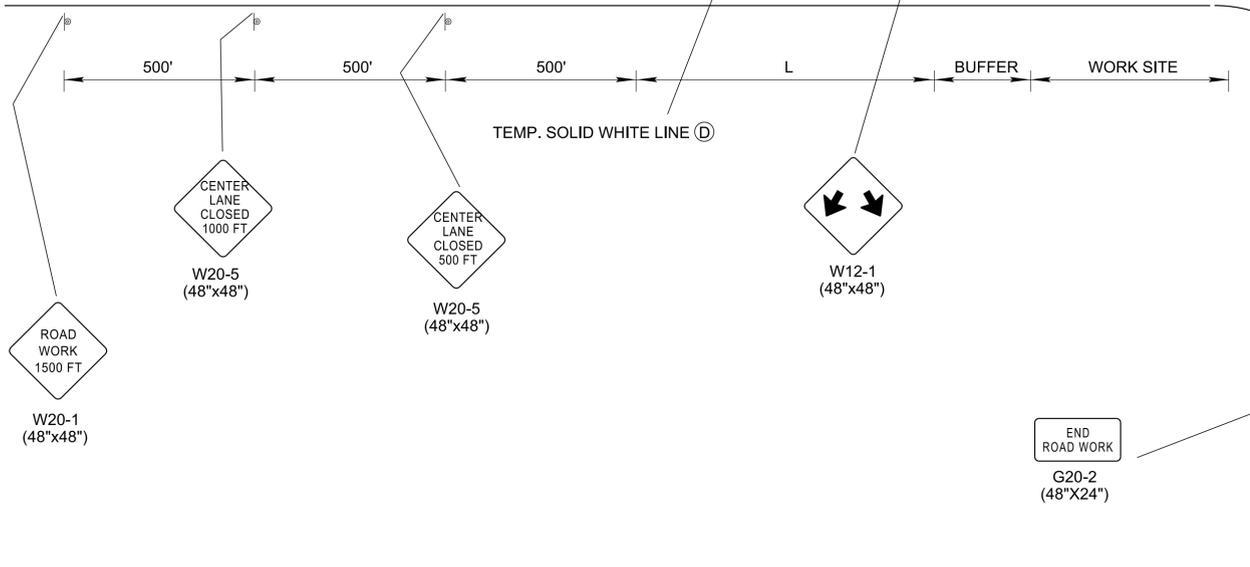
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# CENTER LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS

- REV. 9-1-05: REMOVED TYPE "C" WARNING LIGHTS FROM FLEXIBLE DRUMS IN TAPER. REMOVED TYPE "C" WARNING LIGHT NOTE FROM GENERAL NOTES.
- REV. 4-2-12: MOVED SIGN W21-1. CHANGED SIGN G20-2A TO G20-2.
- REV. 03-05-17: ADDED GENERAL NOTE (D)
- REV. 4-15-99: ADDED GENERAL NOTE (E)
- REV. 12-18-99: MODIFIED HEADING DESCRIPTION AND ELIMINATED OLD GENERAL NOTE (A)
- REV. 4-15-04: CHANGED W4-2 SIGN. CHANGED GENERAL NOTES (B) AND (C) TO COMPLY WITH 2003 MUTCD.



X = DISTANCE IN FEET EQUAL TO THE POSTED SPEED



CHANNELIZATION DEVICE LEGEND	
	FLEXIBLE DRUMS
	SIGN SUPPORT
	WORK SITE

COMPUTATION FOR DISTANCE L	
$L = W \times S$	(FOR POSTED SPEEDS OF 45 MPH OR GREATER)
$L = \frac{W \times S^2}{60}$	(FOR POSTED SPEEDS OF 40 MPH OR LESS)
L = TAPER LENGTH IN FEET W = WIDTH OF OFFSET IN FEET S = POSTED SPEED	

- | GENERAL NOTES |  |
|---------------|--|
| (A)           | FLEXIBLE DRUMS OR CONES MAY USED FOR SHORT TERM LANE CLOSURES (DAY TIME ONLY). FLEXIBLE DRUMS SHALL BE USED FOR LONG TERM (OVERNIGHT) CLOSURES.  |
| (B)           | SEE TABLE 6C-2 OF PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR RECOMMENDED LENGTHS OF BUFFER SPACE WHICH ARE BASED ON STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED.                                      |
| (C)           | SEE TABLE 6C-1 OF PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR GUIDELINES FOR ADVANCE WARNING SIGN SPACING TO BE USED TO DETERMINE DISTANCE FOR "ROAD WORK AHEAD" SIGN TO BE PLACED PRIOR TO INTERSECTION. |
| (D)           | SEE TDOT ROADWAY DESIGN GUIDELINES SECTION 4-716.11 FOR LINE WIDTH AND SECTION 4-716.30 FOR MATERIAL TYPE.   |

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION  
**CENTER LANE  
CLOSURES  
AT NEAR SIDE  
OF INTERSECTIONS**

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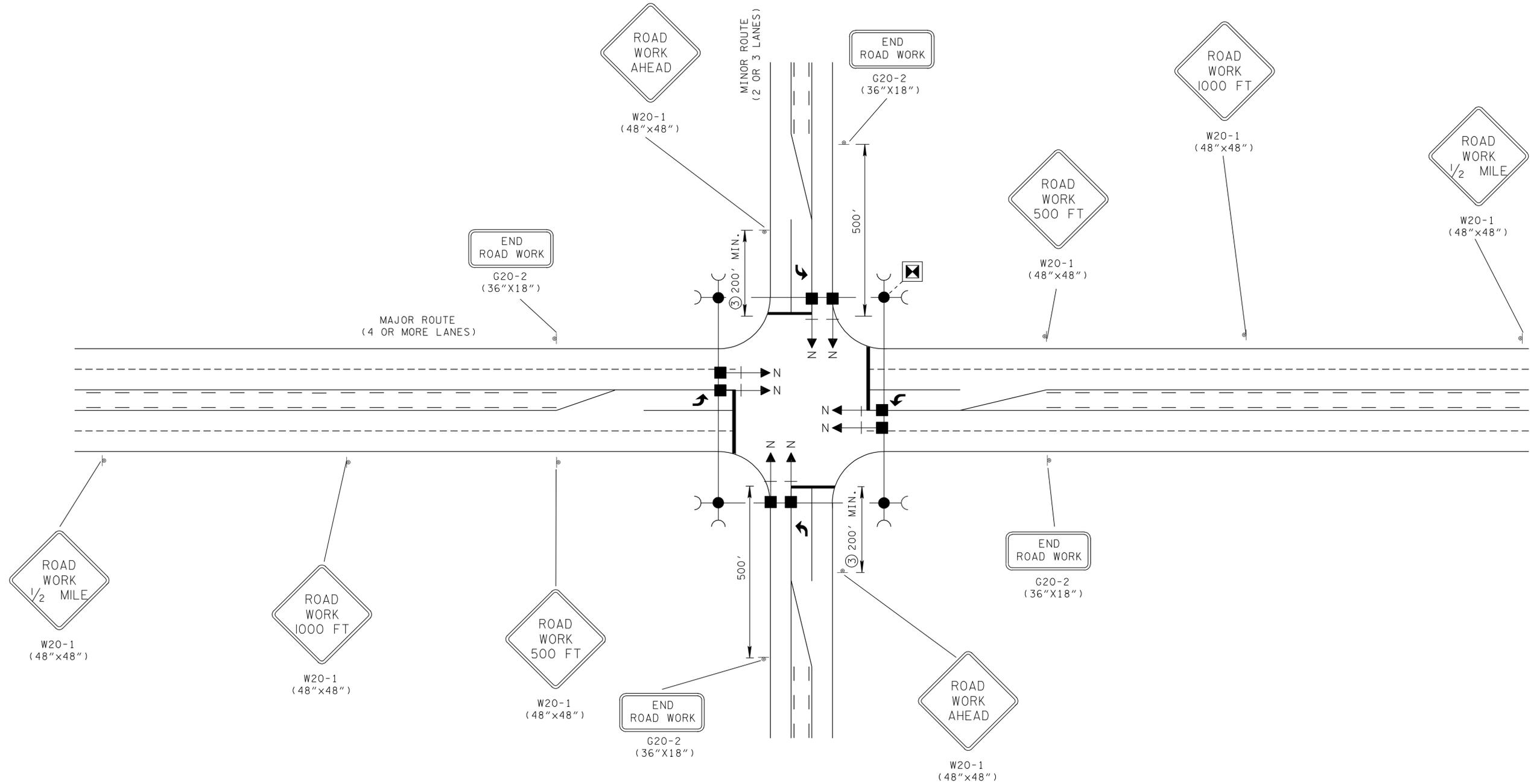
# TRAFFIC CONTROL FOR SIGNAL ONLY PROJECTS WITH A 4 OR 5 LANE MAJOR ROUTE AND A 2 OR 3 LANE MINOR ROUTE

REV. 10-26-98: CHANGED CONSTRUCTION SIGN QUANTITIES.

REV. 12-18-99: IN NOTES FOR ABOVE LAYOUT BLOCK DELETED OLD NOTE NO. ②.

REV. 7-29-03: CHANGED SIZE OF END ROAD WORK CONSTRUCTION SIGN FROM 48"X24" TO 36"X18".

REV. 4-2-12: CHANGED SIGN G20-2A TO G20-2.



**NOTES FOR ABOVE LAYOUT**

① ONE LEFT LANE CLOSED 1000 FT. SIGN (W20-5L), ONE RIGHT LANE CLOSED 1000 FT. SIGN (W20-5R), ONE "LEFT LANE MERGE" SYMBOL SIGN (W4-2L), ONE "RIGHT LANE MERGE" SYMBOL SIGN (W4-2R), AND TWO "FLAGGER AHEAD" SYMBOL SIGNS (W20-7a) SHALL BE PROVIDED. THE SIZES OF THESE SIGNS SHALL BE 48"X48". SEE STANDARD DRAWING NOS. T-WZ-40 AND T-WZ-41 FOR MORE DETAILS.

② SEE TABLE VI-3 IN PART VI OF THE MUTCD (CURRENT EDITION).

LEGEND	
	PAD MOUNTED CONTROLLER
	WOOD POLE FOR SIGNAL SUPPORT
	GUYING DEVICE ANGLE ANCHOR
	SIGNAL HEAD WITH NUMBER AND BACKPLATE

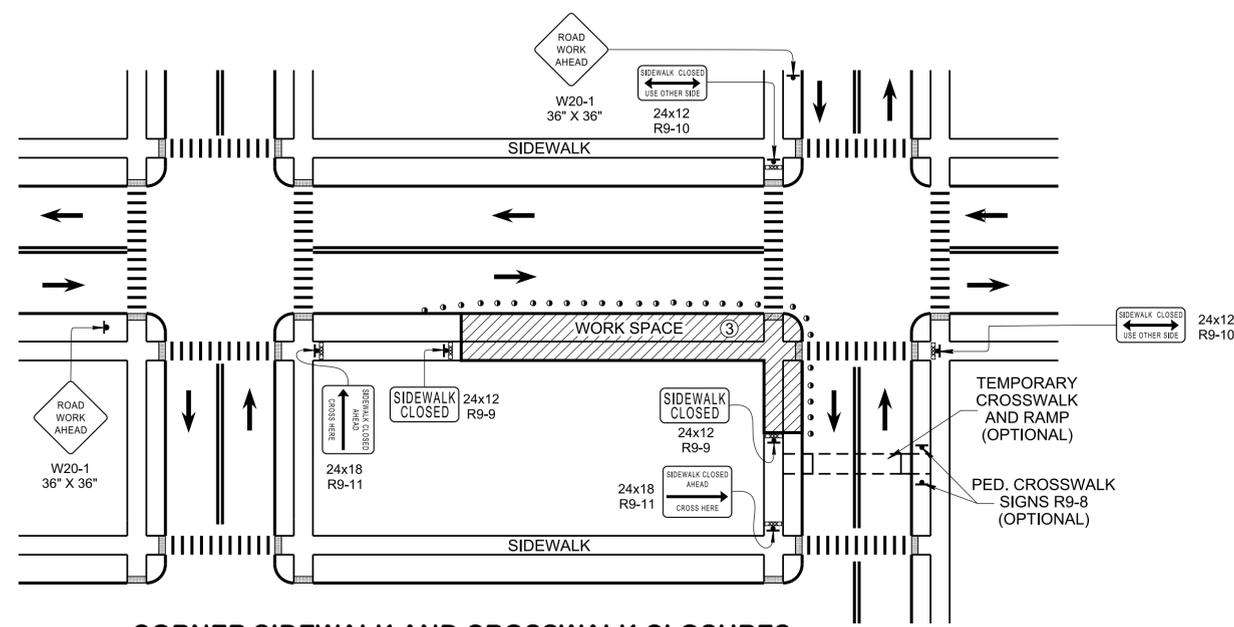
CONSTRUCTION SIGN QUANTITIES (ITEM NO. 712-06)	
"T" INTERSECTIONS	- 125.5 S.F.
4 - LEGGED INTERSECTIONS	- 146 S.F.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

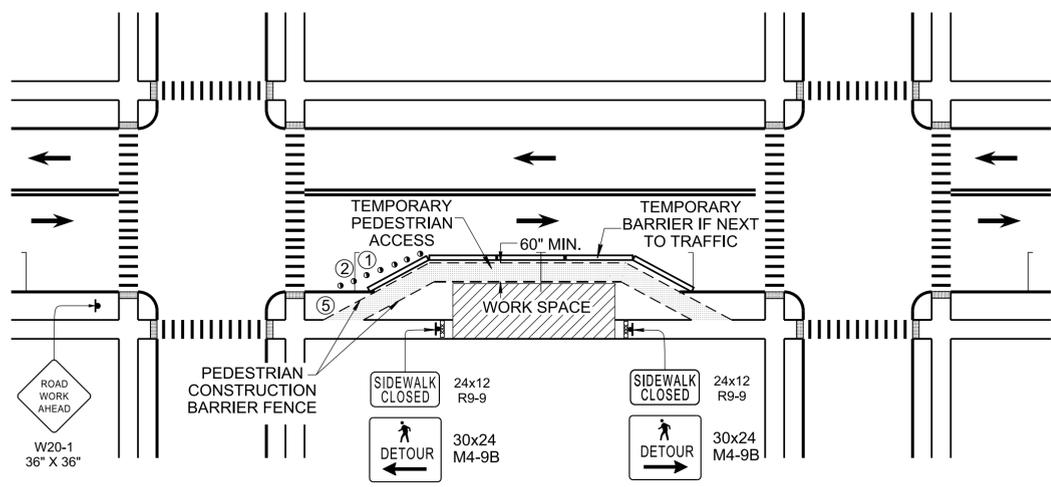
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR 5 LANE MAJOR ROUTES

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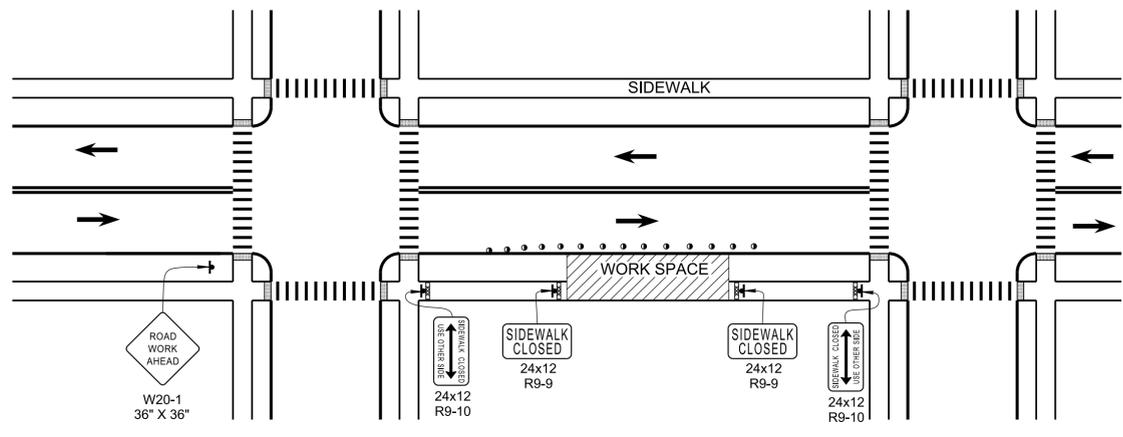
**CORNER SIDEWALK AND CROSSWALK CLOSURES WITH OPTIONAL TEMPORARY CROSSWALK**



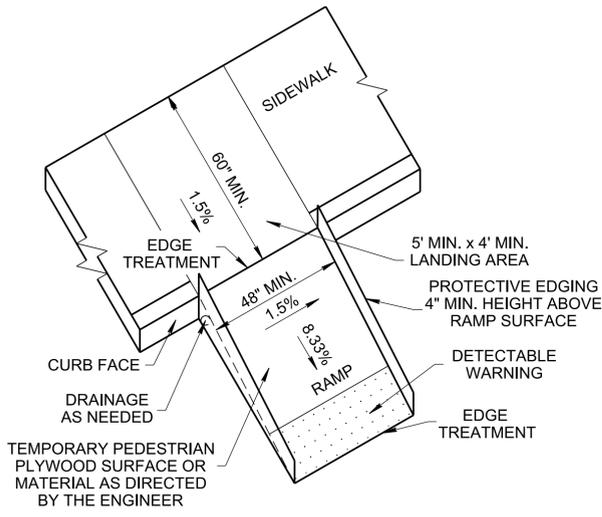
**MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE WITH SIDEWALK DIVERSION**

CHANNELIZATION DEVICE LEGEND			
	FLEXIBLE DRUMS (ITEM NO. 712-04.01, PER EACH)		SIGN SUPPORT
	TEMPORARY BARRICADES (TYPE II), (ITEM NO. 712-07.02, PER L.F.) WITH SIGNS (CONSTRUCTION) ATTACHED (ITEM NO. 712-06, PER. S.F.)		DIRECTION OF TRAFFIC
	TEMPORARY BARRICADES (TYPE III), (ITEM NO. 712-07.03, PER L.F.) WITH SIGNS (CONSTRUCTION) ATTACHED (ITEM NO. 712-06, PER. S.F.)		WORK SPACE
	PEDESTRIAN CONSTRUCTION BARRIER FENCE		PORTABLE BARRIER RAIL
	PEDESTRIAN DIVERSION		

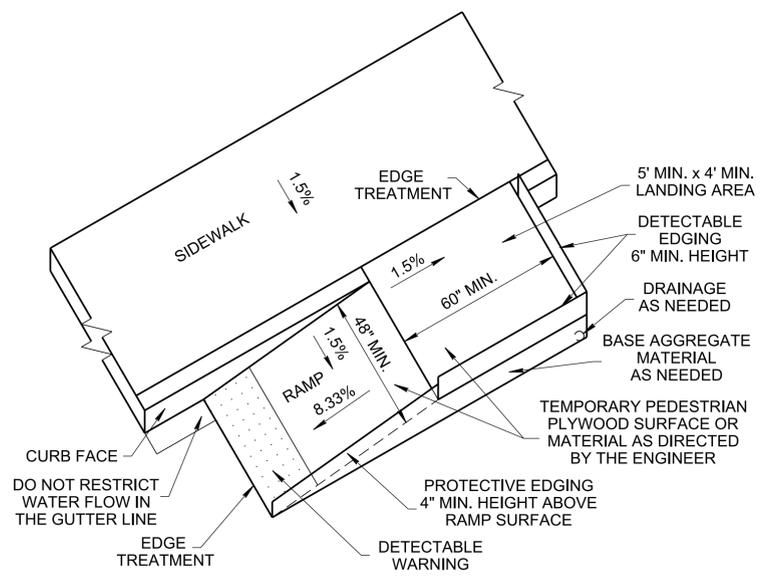
FOOTNOTES	
①	IF PARKING STALLS ARE USED FOR DIVERSION, CHANNELIZING DEVICES MAY BE SUBSTITUTED FOR PORTABLE BARRIER RAILS IF PORTABLE BARRIER RAILS ARE DEEMED UNNECESSARY BY ENGINEERING JUDGEMENT. SEE T-WZ-PBR/ T-WZ-PCB SERIES FOR PORTABLE BARRIER RAIL.
②	IF DIVERSION REQUIRES A LANE CLOSURE SEE T-WZ-SERIES FOR FURTHER INFORMATION.
③	LIMIT WORK TO ONE CORNER AT A TIME TO MINIMIZE DISRUPTION TO PEDESTRIAN TRAFFIC.
④	PEDESTRIAN TRAFFIC SIGNAL DISPLAYS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED.
⑤	IN AREAS WHERE THE ROUTE CROSSES GRASSY TERRAIN OR ELEVATION CHANGES, PLYWOOD MAY BE USED WITH A HIGHLIGHTED BEVEL AT THE JOINT.



**SIDEWALK CLOSURE, MID-BLOCK**



**TEMPORARY PEDESTRIAN ACCESS ROUTES PERPENDICULAR CURB RAMP OPTION**



**TEMPORARY PEDESTRIAN ACCESS ROUTES PARALLEL CURB RAMP OPTION**

**GENERAL NOTES FOR SIDEWALK DIVERSION**

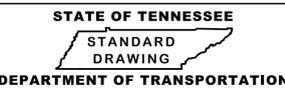
- (A) SIDEWALK DIVERSION MAY BE USED ON ROADS WITH ON STREET PARKING LANES ADJACENT TO THE SIDEWALK CLOSURE.
- (B) THE PEDESTRIAN WALKWAY SHALL BE AT LEAST 5' WIDE.
- (C) TEMPORARY FACILITIES SHALL BE COMPLIANT WITH THE CURRENT VERSION OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).
- (D) DIVERSIONS MUST BE CLEARLY IDENTIFIED, PROTECTED FROM TRAFFIC AND FREE FROM HAZARDS.
- (E) PEDESTRIAN CONSTRUCTION BARRIER FENCE SHALL BE CONTINUOUS THROUGHOUT THE LENGTH OF THE DIVERSION WITH A DETECTABLE EDGING WITH A BOTTOM NO HIGHER THAN 2" ABOVE THE SURFACE AND A TOP NO LOWER THAN 32" ABOVE THE SURFACE. THE PEDESTRIAN CHANNELIZATION DEVICE SHALL BE ORANGE. HIGH VISIBILITY FENCE, PEDESTRIAN, RAIL, AND CHAIN LINK FENCE ARE ACCEPTABLE. COST OF FENCE TO BE PAID UNDER ITEM NUMBER:  
  
707-11.01 PEDESTRIAN CONSTRUCTION BARRIER FENCE PER L.F.
- (F) CROSSING THE DIVERSION PATH BY CONSTRUCTION VEHICLES SHOULD BE AVOIDED, WHEN NECESSARY, IT SHALL BE CONTROLLED BY FLAGGER.
- (G) TRAFFIC CONTROL DEVICES FOR VEHICULAR TRAFFIC MAY BE REQUIRED FOR CLOSING THE LANE AS DIRECTED BY THE ENGINEER.
- (H) A SMOOTH, HARD, CONTINUOUS AND RIDEABLE SURFACE SHALL BE PROVIDED THROUGHOUT THE LENGTH OF THE DIVERSION.
- (I) THE COST OF MAINTAINING PEDESTRIAN DIVERSION, INCLUDING CURB RAMPS IF NEEDED, SHALL NOT BE PAID DIRECTLY BUT PAID FOR IN THE COST OF OTHER ITEMS.

**GENERAL NOTES FOR SIDEWALK CLOSURE**

- (A) TRAFFIC CONTROL DEVICES FOR VEHICULAR TRAFFIC MAY BE REQUIRED TO CONTROL VEHICLES THROUGH WORK ZONE AS DIRECTED BY THE ENGINEER.
- (B) SIGNS R9-9, R9-10 AND R9-11 TO BE ATTACHED TO TYPE I OR TYPE II BARRICADE. ALL OTHER SIGNS SHOWN ON THIS PLAN MAY BE PLACED ON PORTABLE SUPPORTS.
- (C) MINIMIZE PEDESTRIAN OUT-OF-DIRECTION TRAVEL. IT IS NOT ACCEPTABLE TO REQUIRE PEDESTRIANS TO RETRACE THEIR PATH TO FIND A SAFE CROSSING.
- (D) DETOUR SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY.
- (E) BARRICADES SHALL BE PLACED ACROSS THE FULL WIDTH OF THE CLOSED SIDEWALK.
- (F) WORK SHALL BE EXPEDITED TO MINIMIZE IMPACTS TO BUSINESS CAUSED BY THE SIDEWALK CLOSURE.

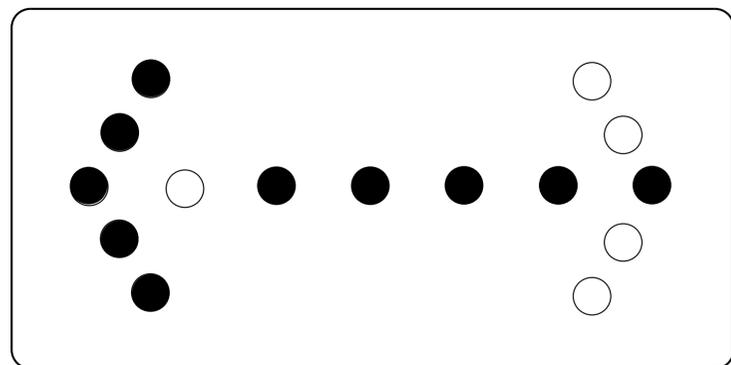
REV. 6-30-14: ADDED ITEM NUMBER FOR PEDESTRIAN CONSTRUCTION BARRIER FENCE.  
 REV. 10-10-16: UPDATED GENERAL NOTE (E) FOR SIDEWALK DIVERSION.  
 REV. 10-29-2021: SIDEWALK DIVERSION, SIDEWALK CLOSURE MIDBLOCK AND CORNER DRAWINGS WERE REDRAWN. PLYWOOD CURB RAMP DETAIL WAS REMOVED. TEMPORARY PEDESTRIAN ACCESS ROUTES PERPENDICULAR AND PARALLEL CURB RAMP OPTIONS WERE ADDED. CHANNELIZATION DEVICE LEGEND WAS REVISED. FOOTNOTES (1) WAS REVISED. GENERAL NOTES FOR SIDEWALK DIVERSION (C) AND SIDEWALK CLOSURE (A) WERE REVISED.

APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

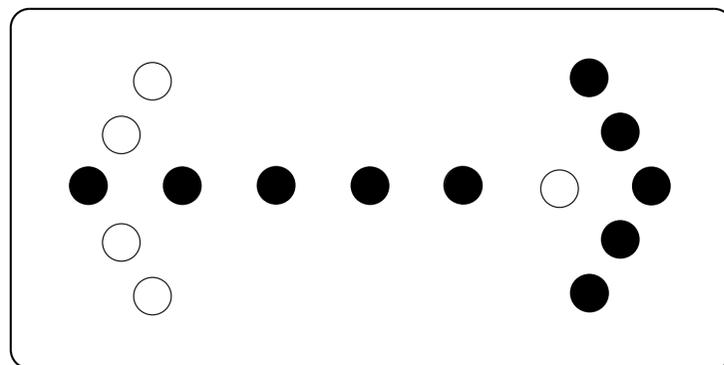


**SIDEWALK TRAFFIC CONTROL**

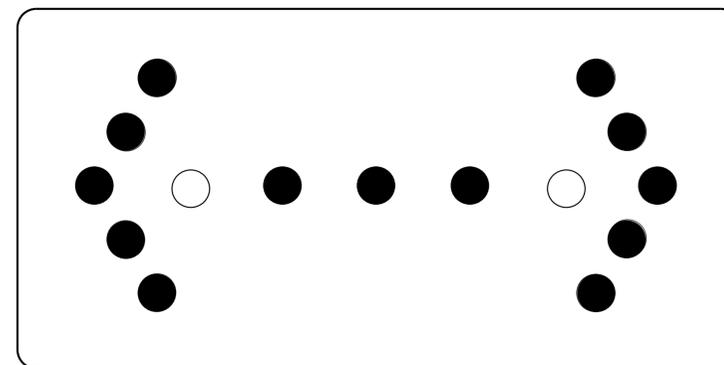
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LEFT ARROW

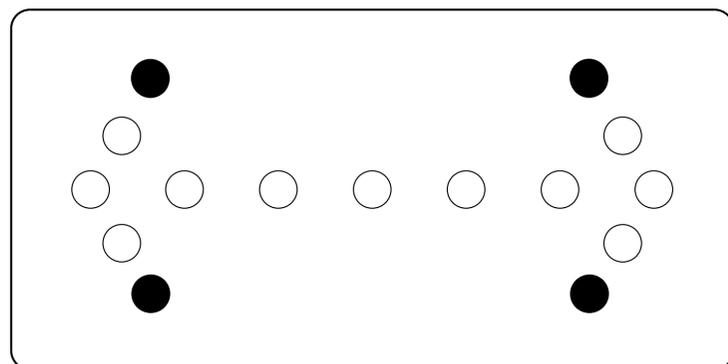


RIGHT ARROW



DOUBLE ARROW

ARROW CONFIGURATIONS



WARNING CONFIGURATION

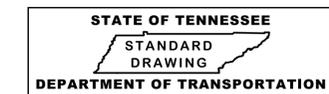
7'-0" MINIMUM  
VERTICAL CLEARANCE  
(TYPICAL FOR ALL ARROW BOARDS)

PAVEMENT

DESCRIPTION	
(A)	THE FLASHING YELLOW ARROW BOARD SHALL BE USED TO SIGNAL, CONTROL, AND DIRECT VEHICULAR TRAFFIC BOTH DAY AND NIGHT FOR EXTENDED PERIODS OF TIME.
(B)	THE 48" x 96" SIGN PANEL SHALL CONTAIN 15 HOODED LAMPS. THE SIGN PANEL SHALL BE CAPABLE OF DISPLAYING THE FOLLOWING ACTUATED ARROW CONFIGURATIONS: RIGHT ARROW; 10 LAMPS FLASHING IN UNISON. LEFT ARROW; 10 LAMPS FLASHING IN UNISON. DOUBLE ARROW; 5 LAMPS IN EACH ARROW HEAD AND 3 LAMPS IN A COMMON SHAFT ALL FLASHING IN UNISON. SEQUENTIAL ARROW CONFIGURATIONS AND CHEVRON ARROW CONFIGURATIONS ARE NOT ALLOWABLE DISPLAYS.
(C)	ARROW CONFIGURATIONS ARE USED FOR LANE CLOSURE SITUATIONS ONLY. THE WARNING CONFIGURATION SHALL BE FOUR CORNER LAMPS FLASHING IN UNISON. A HORIZONTAL BAR CONFIGURATION IS NOT AN ALLOWABLE DISPLAY.

SPECIFICATIONS	
<b>SIGN PANEL</b>	
(1)	THE SIGN PANEL SIZE SHALL BE 48" HIGH x 96" LONG.
(2)	THE YELLOW LAMPS SHALL BE FIVE INCH.
(3)	EACH LAMP SHALL CONTAIN A HOOD.
(4)	THE FINISH SHALL BE NON-REFLECTIVE BLACK.
<b>CONTROL SYSTEM</b>	
(1)	THE CONTROL SYSTEM SHALL CONTAIN THREE FLASHERS, THREE VOLTAGE DROPPING RESISTORS, AND THREE MODE (BRIGHT, DIM & AUTO) SELECTOR SWITCHES. THE PHOTO-CONTROLLED TRANSFER RELAY SHALL AUTOMATICALLY DIM ALL OPERATING LAMPS A MINIMUM OF 50% FROM THEIR RATED LAMP VOLTAGE WHEN AMBIENT LIGHT LEVEL DROPS BELOW 5 FOOT CANDLES AND AUTOMATICALLY INCREASE LAMP AND BRIGHTNESS AGAIN WHEN AMBIENT LIGHT LEVEL INCREASES TO 5 FOOT CANDLES.
(2)	FLASH RATE 25 TO 40 FLASHES PER MINUTE.
(3)	"ON" TIME - 50% OF CYCLE.
<b>POWER SUPPLY</b>	
(1)	THE POWER SUPPLY SHALL BE SUFFICIENT TO ADEQUATELY MEET THE POWER REQUIREMENTS OF THE SYSTEM AT ALL TIMES DURING OPERATION.
(2)	DIESEL/GENERATOR POWERED UNITS SHALL INCLUDE A DRIP PAN OR SIMILAR UTENSIL GASOLINE POWERED UNITS ARE NOT ALLOWED.

(Replaced Std Dwg T-FAB-1)



FLASHING  
YELLOW  
ARROW BOARD