F  FILL
F.A. FEDERAL AID
F.C. FLOOD CONTROL
FND. FOUNDATION
FDN. FOUNDATION
F.E. FENCE
FERT. FERTILIZER
F.E.T.S. OR FETS FIXED END TERMINAL SECTION
F.G. OR FG FINISHED GRADE OR FRONT OF GUTTER
F.G.S. FINISHED GRADE STAKE
F.H. FIRE HYDRANT
FHWA FEDERAL HIGHWAY ADMINISTRATION
FIN. FINISH
FL. FLUSH
F.L. OR FL FLOW LINE
F.O. OR FO FIBER OPTIC CABLE
F.P. FENCE POST
FR. OR FR FRONTAGE
FR. RD. FRONTAGE ROAD
F.S. OR FS FORESHYET
FT. FOOT OR FEET
FIG. FOOTING
FUT. FUTURE
FWY. FREEWAY
G Gram
G.D. GRADING
G.A. GAUGE
GAL. GALVONIZED
GAR. GARAGE
GED. GEODETIC
G.L. GAS LINE
G.L.O. GENERAL LAND OFFICE
G.P.S. OR GPS GLOBAL POSITIONING SYSTEM
GR. GRADE
G.R. GUARDRAIL
GRO GRID
GRN. GROUND
GRSEP. GRADE SEPARATION
G.S. GRAVEL SURFACING
G.S.P. OR GSP GALVANIZED STEEL PIPE
GTR. GUTTER
G.V. GAS VALVE
H CONCRETE CUTOFF WALL DEPTH
Ha HECTARE
HDWL. HEADWALL
H.G. HEADGAGE
H.I. OR HI HEIGHT OF INSTRUMENT
H.O. HOUSE
HOR. HORIZONTAL
H.P. HIGH POINT
H.T. HEIGHT
H.W. HIGH WATER
HWY. HIGHWAY
I INTERSTATE
I.C. INCIDENTAL CONSTRUCTION
I.D. INSIDE DIAMETER
I.E. INVERT ELEVATION
IN. INCH
INC. INCORPORATED OR INCREMENT
INCL. INCLUDED
INSTR. INSTRUMENT
INT. INTERSECTION
INTCH. INTERCHANGE
INV. INVERT
I.P. IRON PIN
IRR. IRRIGATION
I.R.T.S. OR IRS INTERSECTING ROADWAY TERMINAL SECTION
JCT. JUNCTION
J.P. JOINT USE POLE
kg KILOGRAM
km KILOMETER

LENGTH OF CURVE, LITER OR ANGLE IRON
POUND
LENGTH OF CIRCULAR CURVE
LONG CHORD
LOOP DETECTOR
LENGTH OR LENGTHEN
LINE
LANE
LENGTH OF SPIRAL
LAND SURVEYOR
LEFT
METER
SQUARE METER
CUBIC METER
MILLIMETER
SQUARE MILLIMETER
MATERIAL
MAXIMUM
MONTANA DEPARTMENT OF TRANSPORTATION
MEASURED
MEDIAN
MARSHOLE
MINIMUM, MINERAL OR MINUTE
MISCELLANEOUS
MARKER
MAINLINE
MUNICIPAL
MID ORDIYATE
MOVEMENT
MID-POINT OF CURVE
MANUAL ON UNIFORM TRAFFIC
CONTROL DEVICES
MILE YARD
NORTH
NORTHBOUND
NORMAL CROWN
NORTHEAST
NATIONAL GAS
NATIONAL GEOETIC SURVEY
NAIL
NORTHERLY
NUMBER
NORTHWEST
NORMAL WATER ELEVATION
P. OR PG. PAGE
PAVEMENT
FULL BOX
POINT OF CURVE (BEGINNING)
POINT OF CURVE (END)
PORTLAND CEMENT CONCRETE
PRELIMINARY ENGINEERING
OR PROFESSIONAL ENGINEER
P.E. OR PE
<table>
<thead>
<tr>
<th>PEN.</th>
<th>PENETRATION</th>
<th>SLOT.DR.</th>
<th>SLOTTED DRAIN</th>
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<td>PENG.</td>
<td>PERFORATED</td>
<td>S.I.P.STK.</td>
<td>SLOPE STAKE</td>
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<td>P.I. OR PI</td>
<td>POINT OF INTERSECTION</td>
<td>S.I.Y.</td>
<td>SOUTHERLY</td>
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<td>PL.</td>
<td>PLACE, PLATE OR PLANT</td>
<td>S.P.</td>
<td>STANDARD PIPE OR STRAIGHT PIPE</td>
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<td>P.L.</td>
<td>PROPERTY LINE</td>
<td>S.P.C.</td>
<td>SPECIAL PROVIDION</td>
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<td>PLAS.</td>
<td>PLASTIC</td>
<td>S.P.H.P.</td>
<td>STEEL PIPE, HIGH PRESSURE</td>
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<td>P.M.</td>
<td>PRINCIPAL MERIDIAN OR PUNCH MARK</td>
<td>S.PK.</td>
<td>SPIKE</td>
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<td>P.M.B.</td>
<td>PLANT MIX BASE</td>
<td>SQ.</td>
<td>SQUARE</td>
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<tr>
<td>P.M.P.</td>
<td>PERFORATED METAL PIPE</td>
<td>S.S. OR SS</td>
<td>EMULSIFIED ASPHALT</td>
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<td>P.M.S. OR PMS</td>
<td>PLANT MIX SURFACING</td>
<td>S.S.P.P.</td>
<td>STRUCTURAL STEEL PLATE PIPE</td>
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<td>PERMIT</td>
<td>S.S.P.P.A.</td>
<td>STRUCTURAL STEEL PLATE PIPE ARCH</td>
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<td>P.O.C. OR PCC</td>
<td>POINT ON CURVE</td>
<td>OR S.S.P.P.A.</td>
<td>STRUCTURAL STEEL PLATE PIPE ARCH</td>
</tr>
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<td>P.O.C. OR POL</td>
<td>POINT ON LINE</td>
<td>OR S.S.P.P.A.</td>
<td>CULVERT</td>
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<td>P.O.S. OR POS</td>
<td>POINT ON SPIRAL</td>
<td>OR S.S.P.P.A.C.</td>
<td>CULVERT</td>
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<td>P.O.T. OR PSC</td>
<td>POINT ON SEMI-TANGENT</td>
<td>OR S.S.P.P.A.C.</td>
<td>CULVERT</td>
</tr>
<tr>
<td>P.T. OR PTP</td>
<td>POINT ON CURVE</td>
<td>OR S.S.P.P.A.C.</td>
<td>CULVERT</td>
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<td>P.T.V. OR PVC</td>
<td>POINT ON CURVE</td>
<td>OR S.S.P.P.A.C.</td>
<td>CULVERT</td>
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<tr>
<td>PTP</td>
<td>POWER POLE</td>
<td>STA.</td>
<td>STATION</td>
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<td>PTP</td>
<td>GAGES</td>
<td>STAD.</td>
<td>STANDARD</td>
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<td>PREST.</td>
<td>PRESTRESSED</td>
<td>STD. SPEC.</td>
<td>STANDARD SPECIFICATIONS</td>
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<td>PRIM.</td>
<td>PRIMARY</td>
<td>STK.</td>
<td>STAKED OR STAKE</td>
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<td>PROC.</td>
<td>PROCESSING</td>
<td>STE.</td>
<td>STEEL</td>
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<td>PROJ.</td>
<td>PROJECT OR PROJECTED</td>
<td>STN.</td>
<td>STORM DRAIN</td>
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<td>PROT.</td>
<td>PROTECT, PROTECTOR OR PROTECTION</td>
<td>STPD.</td>
<td>STAMPED</td>
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<td>P.T. OR PT</td>
<td>POINT OF TANGENT</td>
<td>STR.</td>
<td>STRUCTURE OR STRAIGHT</td>
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<td>PT.</td>
<td>POINT</td>
<td>SUBD.</td>
<td>SUBDIVISION</td>
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<tr>
<td>P.T.W. OR PW</td>
<td>PRESENT TRAVELED WAY</td>
<td>SURF.</td>
<td>SURFACE OR SURFACING</td>
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<tr>
<td>PVC. OR PVC</td>
<td>POLYVINYL CHLORIDE</td>
<td>SURV.</td>
<td>SURVEY</td>
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<td>PVT.</td>
<td>PRIVATE</td>
<td>SY.</td>
<td>SQUARE YARD</td>
</tr>
<tr>
<td>P.W. OR PW</td>
<td>POWER LINES</td>
<td>SY.</td>
<td>SQUARE YARD</td>
</tr>
<tr>
<td>Q</td>
<td>PEAK DISCHARGE (WATER)</td>
<td>†</td>
<td>METRIC TON</td>
</tr>
<tr>
<td>QTY.</td>
<td>QUANTITY</td>
<td>†</td>
<td>TOWNSHIP, TOWN LENGTH, PERCENT TRUCKS, OR THICKNESS</td>
</tr>
<tr>
<td>R</td>
<td>RANGE, RADIUS OR RISE</td>
<td>T</td>
<td>TANGENT</td>
</tr>
<tr>
<td>R.A.C.E.T.</td>
<td>ROAD APPROACH CURVET END TREATMENT</td>
<td>T.B.C. OR TBC</td>
<td>TOP BACK OF CURB</td>
</tr>
<tr>
<td>OR RACE</td>
<td></td>
<td>T.B.M</td>
<td>TEMPORARY BENCH MARK</td>
</tr>
<tr>
<td>R.A.P. OR RAP</td>
<td>RECLAIMED ASPHALT PAVEMENT</td>
<td>TBR., TIMBER</td>
<td></td>
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<td>R.</td>
<td>SPIRAL CURVE RADII</td>
<td>TEL. OR TEL.</td>
<td>TELEPHONE</td>
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<td>R.C. OR RC</td>
<td>RAPID CURING</td>
<td>TEL.</td>
<td>TELEPHONE</td>
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<td>R.C.B. OR RCB</td>
<td>REINFORCED CONCRETE BOX</td>
<td>TEL.</td>
<td>TELEPHONE</td>
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<tr>
<td>R.C.P. OR RCP</td>
<td>REINFORCED CONCRETE PIPE</td>
<td>TEL.</td>
<td>TELEPHONE POL</td>
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</tbody>
</table>
V
V.A.B.M.
V.C. OR VC
V.C. CORR.
V.C.M.
V.C.P.
V.E.
V.E.N.T.
V.E.T.
V.P.
V.P.C. OR VPC
V.P.I. OR VPI
V.P.T. OR VPT
W
W/ W
W.B. OR WB
W.C.
W.L.
W.L.Y.
W/O
W.P.
W.S.
W.T.
W.T.
W.V.
W.W.
YD
YD

XING.
XSEC.

DETAILED DRAWING
REFERENCE DWG. NO.
STANDARD SPEC. 101-08
SECTION 101

ABBREVIATIONS

MDT MONTANA DEPARTMENT OF TRANSPORTATION