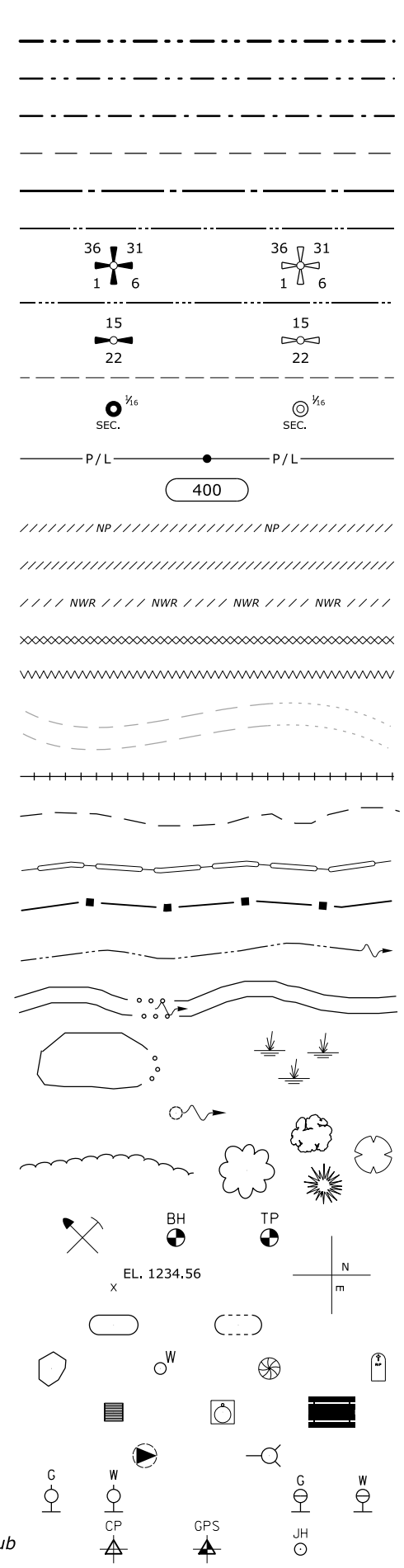


$\Delta$	total central angle	M.L.	main line
$\Delta c$	curve central angle	M.P.	mile post
$\emptyset$	diameter	m2	square meter
$\theta s$	spiral central angle	m3	cubic meter
abut.	abutment	matl.	material
ADT	average daily traffic	max.	maximum
AH	ahead	min.	minimum
appr.	approach	mon.	monument
BK	back	N	north
BM	bench mark	NC	normal crown
BP	balance point	o. c.	on center
br.	bridge	o. to o.	out to out
brg.	bearing	OD	outside diameter
cc or c. to c.	center to center	OG	original ground
$\ell$	centerline	PC	point of curve
clr.	clear	PCC	point of compound curve
CMP	corrugated metal pipe	PCS	point of curve to spiral
col.	column	PI	point of intersection
conc.	concrete	pl.	plate
conn.	connection	POC	point on curve
constr. jt.	construction joint	POS	point on spiral
cont.	continuous	POT	point on tangent
CS	point of curve to spiral	PS	point of tangent to spiral
ctrs.	centers	PSC	point of spiral to curve
culv.	culvert	PST	point of spiral to tangent
D	diameter	PT	point of tangent
DHV	design hourly volume	pvmt.	pavement
dia.	diameter	R	radius
diag.	diagonal	R.	range
diaph.	diaphragm	R/W	right-of-way
dist.	distance	rdwy.	roadway
drwg(s).	drawing(s)	rein.	reinforcement
E	east	reqd.	required
e	superelevation rate	rt. or RT	right
El. 94.061 m	elevation with number	rte.	route
elev.	elevation	S	south
emb.	embankment	SADT	seasonal average daily traffic
EP	edge of pavement	SC	point of spiral to curve
EQ or eq.	equation	sec.	section
ER	edge of road	shldr.	shoulder
EW	edge of water	slry	slurry unit
exc.	excavation	spa.	spacing, spaces or spaced
exp. jt.	expansion joint	SRS	point of spiral to reverse spiral
fin.	finish	SS	point of spiral to spiral (no curve)
flg.	flange	ST	point of spiral to tangent
ftg.	footing	Sta.	station
ga.	gage (gauge)	std.	standard
galv.	galvanized	stgr.	stringer
hdwl.	headwall	stiff.	stiffener
hex.	hexagon	struct.	structural
HW	high water	STS	point of spiral to tangent spiral
ID	inside diameter	sym.	symmetrical
jt.	joint	T	tangent distance
K.P.	kilometer post	T.	township
L	length of curve	TBM	temporary bench mark
lam.	lamination	thd.	thread
lat.	latitude	thd.	thread
long.	longitudinal	TS	point of tangent to spiral
LPSM	lump sum	Ts	tangent distance (spiraled curve)
Ls	length of spiral	typ.	typical
lt. or LT	left	V	design speed
LW	low water	vph	vehicles per hour
		VPI	vertical point of intersection
		W	west

M.L.	main line	National Boundary	-----
M.P.	mile post	State Boundary	-----
m2	square meter	County Boundary	-----
m3	cubic meter	City Boundary	-----
matl.	material	Township or Range Line	-----
max.	maximum	Section Line	-----
min.	minimum	Section Corner (Found, Projected)	
mon.	monument	1/4 Section Line	-----
N	north	1/4 Section Corner (Found, Projected)	
NC	normal crown	1/16 Section Line	-----
o. c.	on center	1/16 Section Corner (Found, Projected)	
o. to o.	out to out	Property Line w/Found Property Corner	
OD	outside diameter	Parcel Number	
OG	original ground	National Park Boundary	//// NP ////
PC	point of curve	National Forest Boundary	//// NWR ////
PCC	point of compound curve	National Wildlife Refuge Boundary	//// NWR ////
PCS	point of curve to spiral	BLM Lands Boundary	xxxx
PI	point of intersection	Indian Reservation Boundary	~~~~~
pl.	plate	Existing Roadway (Road, Paved, Gravel)	-----
POC	point on curve	Railroad	+++++
POS	point on spiral	Trail	-----
POT	point on tangent	Fiber Roll or Wattle	-----
PS	point of tangent to spiral	Silt Fence	-----
PSC	point of spiral to curve	Intermittent Drainage or Small Creek	-----
PST	point of spiral to tangent	Large Creek or River	-----
PT	point of tangent	Lake, Pond or Reservoir; Marshland	-----
pvmt.	pavement	Spring or Seep	-----
R	radius	Treeline; Individual Trees	-----
R.	range	Material Source; Bore Hole; Test Pit	-----
R/W	right-of-way	Spot Elevation; Coordinate Grid Tick	-----
rdwy.	roadway	Above Ground Tank; Underground Tank	-----
rein.	reinforcement	Boulder; Well; Satellite Dish; Grave	-----
reqd.	required	Cooking Grate; Garbage Can; Picnic Table	-----
rt. or RT	right	Flagpole; Fire Hydrant	-----
rte.	route	Gas & Water Meter; Gas & Water Valve	-----
S	south	Control Point (Terrestrial and GPS); Jump Hub	-----
SADT	seasonal average daily traffic		
SC	point of spiral to curve		
sec.	section		
shldr.	shoulder		
slry	slurry unit		
spa.	spacing, spaces or spaced		
SRS	point of spiral to reverse spiral		
SS	point of spiral to spiral (no curve)		
ST	point of spiral to tangent		
Sta.	station		
std.	standard		
stgr.	stringer		
stiff.	stiffener		
struct.	structural		
STS	point of spiral to tangent spiral		
sym.	symmetrical		
T	tangent distance		
T.	township		
TBM	temporary bench mark		
thd.	thread		
thd.	thread		
TS	point of tangent to spiral		
Ts	tangent distance (spiraled curve)		
typ.	typical		
V	design speed		
vph	vehicles per hour		
VPI	vertical point of intersection		
W	west		

National Boundary	-----
State Boundary	-----
County Boundary	-----
City Boundary	-----
Township or Range Line	-----
Section Line	-----
Section Corner (Found, Projected)	
1/4 Section Line	-----
1/4 Section Corner (Found, Projected)	
1/16 Section Line	-----
1/16 Section Corner (Found, Projected)	
Property Line w/Found Property Corner	
Parcel Number	
National Park Boundary	//// NP ////
National Forest Boundary	//// NWR ////
National Wildlife Refuge Boundary	//// NWR ////
BLM Lands Boundary	xxxx
Indian Reservation Boundary	~~~~~
Existing Roadway (Road, Paved, Gravel)	-----
Railroad	+++++
Trail	-----
Fiber Roll or Wattle	-----
Silt Fence	-----
Intermittent Drainage or Small Creek	-----
Large Creek or River	-----
Lake, Pond or Reservoir; Marshland	-----
Spring or Seep	-----
Treeline; Individual Trees	-----
Material Source; Bore Hole; Test Pit	-----
Spot Elevation; Coordinate Grid Tick	-----
Above Ground Tank; Underground Tank	-----
Boulder; Well; Satellite Dish; Grave	-----
Cooking Grate; Garbage Can; Picnic Table	-----
Flagpole; Fire Hydrant	-----
Gas & Water Meter; Gas & Water Valve	-----
Control Point (Terrestrial and GPS); Jump Hub	-----



North Arrow									
Slope Stake Limits	<table border="0"> <tr> <td>EXISTING</td> <td>PROPOSED</td> </tr> <tr> <td>Top of Cut</td> <td>-----</td> </tr> <tr> <td>Toe of Fill</td> <td>-----</td> </tr> <tr> <td>Transition</td> <td>-----</td> </tr> </table>	EXISTING	PROPOSED	Top of Cut	-----	Toe of Fill	-----	Transition	-----
EXISTING	PROPOSED								
Top of Cut	-----								
Toe of Fill	-----								
Transition	-----								
Fence									
Gate with Fence									
Cattleguard									
Guardrail									
Concrete Barrier									
Retaining Wall									
Signs (single, double post; portable)									
Delineators									
Pipe Culvert (arrow shows flow)									
Pipe Culvert with End Section									
Pipe Culvert with Headwall									
Pipe Culvert with Drop Inlet									
Box Culvert									
Underdrain									
Overhead/Above Ground Utilities									
Underground Utilities									
<p>FM = force main, FO = fiber optic, G = gas, IRR = irrigation, O = oil, P = power, SA = sanitary sewer, SD = storm drain, SS = storm sewer, STEAM = steam, T = telephone, TV = CATV, W = water</p>									
Poles (Power, Telephone, Joint Use, Light, Support w/Anchor)									
Miscellaneous Utility Features									
<p>EM = electric meter, T = telephone pedestal, TV = CATV pedestal, UP = transformer or junction box, WF = water fountain</p>									
Building									
Right-of-Way Line with Monument									
Permanent Easement									
Construction Easement									
Riprap									

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
WESTERN FEDERAL LANDS HIGHWAY DIVISION

METRIC DETAIL

**PLAN SYMBOLS  
AND ABBREVIATIONS**

DETAIL APPROVED FOR USE 11/2001	DETAIL
REVISED: 9/2005 1/2007 10/2009 10/2014	WM101-1

NO SCALE

**NOTE:**

- Other symbols used in the plans will be shown in a legend on the appropriate plan sheet.
- Dimensions in this plan set are in millimeters unless otherwise noted.