

12/9/2014 3:21:59 PM I:\sfm\local\dfs\root\DFSDS\Civil 3D Projects\2014_027.001 ATKINS Saddle Road West Side Truck Escape Ramps\Roadway\Sheets\A-Gen_sht\HI SR 200 00_SYMBOLS.dgn

ABBREVIATIONS

Q	CL	centerline	L	L	length of curve
A	Δ	curve delta	lam.	lam.	lamination
	abut.	abutment	lat.	lat.	latitude
	ADT	average daily traffic	long.	long.	longitudinal
	aggr.	aggregate	LPSM	LPSM	lump sum
	AH	ahead	Lt. or LT	Lt. or LT	left
	alt.	alternate	LW	LW	low water
	appr.	approach	M	mag.	magnetic
	asph.	asphalt	maint.	maint.	maintenance
B	b.f.	both faces	matl.	matl.	material
	beg.	beginning, begin	max.	max.	maximum
	BK	back	min.	min.	minimum
	BM	bench mark	mon.	mon.	monument
	BP	balance point	mtn(s).	mtn(s).	mountain(s)
	br.	bridge	N	N	north
	brg.	bearing	NC	NC	normal crown
C	CBC	concrete box culvert	neg.	neg.	negative
	c-c	center to center	no. or #	no. or #	number
	clr.	clear	O	o.c.	on centers
	CMP	corrugated metal pipe	o.f.	o.f.	other face
	Co.	county	OD	OD	outside diameter
	col.	column	P	PC	point of curve
	conc.	concrete	PCC	PCC	point of compound curve
	constr.	construction	perf.	perf.	perforate
	constr. jt.	construction joint	PI	PI	point of intersection
	cont.	continuous	pl.	pl.	plate
	corr.	corrugated	POC	POC	point on curve
	cr.	creek	POS	POS	point on spiral
	CS	point of curve to spiral	POT	POT	point on tangent
	ctrs.	centers	proj.	proj.	project
	CTSM	contingent sum	psi	psi	pounds per square inch
	culv.	culvert	PT	PT	point of tangent
D	decr.	decrement	pvmt.	pvmt.	pavement
	DHV	design hour volume	quant., Qty	quant., Qty	quantities
	DI	drop inlet	R	R	radius
	dia. or D	diameter	R.	R.	range
	diag.	diagonal	R/W	R/W	right-of-way
	diaph.	diaphragm	rd.	rd.	road
	dist.	distance	rdwy.	rdwy.	roadway
	Dist.	district	reconst.	reconst.	reconstruction
	DLC	donation land claim	reinf.	reinf.	reinforcement
	dwg(s).	drawing(s)	reqd.	reqd.	required
E	E	east	res.	res.	reservoir
	e	superelevation rate	Res.	Res.	Reservation
	El. 94.066	elevation with number	ret. wall	ret. wall	retaining wall
	elev.	elevation	RH	RH	reference hub
	emb.	embankment	Rt. or RT	Rt. or RT	right
	engr(s).	Engineer(s)	rte.	rte.	route
	EOP	edge of pavement	S	S	south
	EQ or eq.	equation	SADT	SADT	seasonal average daily traffic
	ER	edge of road	SC	SC	point of spiral to curve
	et al	and others	sec.	sec.	section
	et ux	and wife	shldr.	shldr.	shoulder
	EW	edge of water	spa.	spa.	spacing, Spaces or Spaced
	exc.	excavation	spec.	spec.	specification
	exp. jt.	expansion joint	st.	st.	street
	ext.	exterior	ST	ST	point of spiral to tangent
F	f.f.	fill face	sta.	sta.	station
	Fed.	federal	std.	std.	standard
	FES	flared end section	stiff.	stiff.	stiffener
	fin.	finish	str.	str.	straight
	ftg.	footing	struc.	struc.	structural
G	ga.	gage (gauge)	sym.	sym.	symmetrical
	galv.	galvanized	T	T	tangent length
	gdr.	girder	T.	T.	township
H	hdwl.	headwall	tan.	tan.	tangent
	HES	homestead entry survey	TBM	TBM	temporary bench mark
	hex.	hexagon	TCE	TCE	temporary construction easement
	horiz.	horizontal	transv.	transv.	transverse
	HW	high water	TS	TS	point of tangent to spiral
	hwy.	highway	typ.	typ.	typical
I	ID	inside diameter	V	V	design speed
	incl.	inclusive, including	vert.	vert.	vertical
	incr.	increment	vph	vph	vehicles per hour
	int.	interior	VPI	VPI	vertical point of intersection
J	jt.	joint	W	W	west

DRAINAGE SYMBOLS

Ditch (Existing, Proposed)

Flow Arrow

Drainage or Small Creek

Lake, Pond or Reservoir

Large Creek

Wetland

River

Spring

Bridge (Existing, Proposed)

Box Culvert (Existing, Proposed)

Pipe Culvert (Existing, Proposed)

With End Sections (Existing, Proposed)

With Headwalls (Existing, Proposed)

With Drop Inlet (Existing, Proposed)

Underdrain (Existing, Proposed)

Riprap Apron (Proposed)

EROSION & SEDIMENT CONTROL SYMBOLS

Bonded Fiber Matrix Mulching

Check Dam

Diversion Berm

Erosion Control Mat

Riprap

Sediment Log

Silt Fence

Stabilized Construction Entrance

Temporary Inlet Protection

Wattle

FENCE & CATTLEGUARD SYMBOLS

Fence (Existing, Proposed)

Fence w/ Gate (Existing, Proposed)

Cattleguard (Existing, Proposed)

GEOLOGIC SYMBOLS

Boring Location (Existing, Proposed)

Material Source

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(8)	A2	A9

INDEX TO SHEETS	
SHEET	DESCRIPTION
T1-T3	617 STANDARDS: GUARDRAILS
T4-T6	617 SPECIALS: GUARDRAILS, IMPACT ATTENUATORS
T7-T9	618 SPECIALS: CONCRETE BARRIER
U1	HWY 190 (MAMALAHOA HWY) INTERSECTION LIGHTING PLAN
U2-U3	636 SPECIALS: SOLAR POWERED STREET LIGHTING DETAILS
V1-V7	DANIEL K. INOUE HWY SIGNING & STRIPING PLAN
V8-V19	633 SPECIALS: PERMANENT TRAFFIC CONTROL
V20-V23	634 SPECIALS: PERMANENT PAVEMENT MARKINGS
W1-W2	DANIEL K. INOUE HWY TEMPORARY TRAFFIC CONTROL PLAN
W3	HWY 190 (MAMALAHOA HWY) TEMPORARY TRAFFIC CONTROL PLAN
W4-W6	635 STANDARDS: TEMPORARY TRAFFIC CONTROL
W7-W8	635 SPECIALS: TEMPORARY TRAFFIC CONTROL

WENDY G. McLAIN

LICENSED PROFESSIONAL ENGINEER

No. 11328-C

HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4/30/2016

SIGNATURE

EXPIRATION DATE OF THE LICENSE

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

U.S. CUSTOMARY

CONVENTIONAL PLAN
SYMBOLS AND ABBREVIATIONS

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LANDSCAPING & VEGETATION SYMBOLS

Tree

Treeline

MAPPING SYMBOLS

Building (Existing, Proposed)

Coordinate Grid Tick

North Arrow

Railroad

Single Track

Double Track

Spot Elevation

Trail

Survey Control Point

RIGHT-OF-WAY SYMBOLS

Boundaries

National

State

County

City

Township or Range Line

Section

1/4 Section

1/16 Section

Bureau of Indian Affairs

Bureau of Land Management

National Forest

National Park

National Wildlife Refuge

Easements

Permanent (Existing)

Permanent (Proposed)

Temporary (Proposed)

Monument (As described)

Parcel Number

Property Line

Right-of-Way Line (Existing)

Right-of-Way Line (Proposed)

Section Corner (Found, Projected)

1/4 Section Corner (Found, Projected)

1/16 Section Corner (Found)

GUARDRAIL, BARRIER & WALL SYMBOLS

Guardrail (Existing, Proposed)

Guardwall (Existing, Proposed)

Median & Side Barrier (Existing, Proposed)

Retaining Wall (Existing, Proposed)

ROADWAY SYMBOLS

Clearing/Construction Limits

Slope Stake Limits

Top of Cut

Transition

Toe of Fill

Edge of Roadway

Existing

Proposed

Roadway Centerline (With Station ticks)

Roadway Obliteration

SIGN SYMBOLS

Signs

Commercial (Existing, Proposed)

Delineator (Existing, Proposed)

Portable (Proposed)

Post Mounted (Existing, Proposed)

UTILITY SYMBOLS

Irrigation Ditch

Underground (Existing, Proposed)

Surface (Existing, Proposed)

Support Pole (Existing, Proposed)

Support Pole Anchor (Existing, Proposed)

Street Light (Existing, Proposed)

Telephone Booth (Existing, Proposed)

Telephone Pedestal (Existing, Proposed)

Underground Utility (Existing, Proposed)

CATV

Fiber Optic

Gas

Oil

Power

Sanitary Sewer

Telephone

Water

Overhead Utility Line (Existing, Proposed)

CATV

Fiber Optic

Power

Telephone

MISCELLANEOUS SYMBOLS

See Note 4

PROJECT SPECIFIC SYMBOLS

Storm Drain (Existing, Proposed)

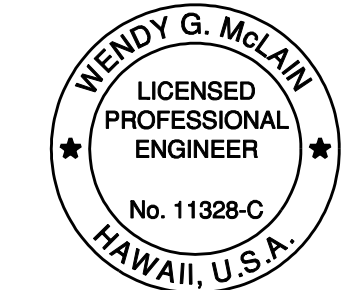
PROJECT SPECIFIC ABBREVIATIONS

SD storm drain

MH manhole

Ex. existing

WWF welded wire fabric



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

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SYMBOLS AND ABBREVIATIONS

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