

ENGINEERING STANDARD PRACTICE

ESP

207.1

SUBJECT:

EFFECTIVE

3 MAR 89

ABBREVIATIONS FOR SURVEYING AND MAPPING

SUPERCEDES

10 MAY 67

The following abbreviations are used on District drawings, maps and records. In some cases, abbreviation forms appear in parentheses to indicate that the form not parenthesized is preferred. The American Standards Association list of abbreviations has been used as a guide.

Abbreviations should be used only in circumstances where it is reasonably certain that the user of the information will be able to interpret accurately the meaning.

- A -

∠	Angle
@	At
A, Ac.	Acre
A	Arc, Area; Asbestos cement
Aband.	Abandoned
a/c	On account of
A.C., Asb. Cem.	Asbestos cement
A.C., Asph. Conc.	Asphaltic concrete; armour coat
Add.	Addition
Adj.	Adjusted
Agre. (Agree.) (ag.)	Agreement
Ahd.	Ahead
Ala. Co.	Alameda County
Approx.	Approximate
A.P.S.	A. P. Smith (gate valve)
(Aq.)	Aqueduct (Spell out.)
A.T. & S.F. Ry.	Atchinson, Topeka & Santa Fe Railway
A.V.	Air Valve
AVE.	Avenue
Az.	Azimuth
Az. Mk.	Azimuth Mark

- B -

B	Asphaltic or Coal Tar (Pipe lining or coating)
BARTD (BART)	Bay Area Rapid Transit District
B.C.	Beginning of curve
Bdy.	Boundary
Beg.	Beginning
Bet.	Between
Bfly. V.	Butterfly Valve
B.G.	Bevel gear
B.H.	Bumped head
B.I.F.	Builders Iron Foundry (gate valve)
Bit.	Bituminous
Bk.	Back; Book; Bank
B.L.	Building line
B/L	Base Line
BLVD.	Boulevard
B.M.	Bench mark
B.O.	Blowoff
B.O.P.	Bottom of pipe (elev.)

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Bot.	Bottom
B.P.	By-pass
Br.	Branch
br.	Brass
Brk.	Break
B.S.	Back sight; Butt strap
B. & S.	Bell and Spigot
B.S.B.L.	Building set back line
Btwn.	Between
B.V.C.	Beginning of vertical curve

- C -

C	Cut; Cast iron
C., ctd.	Coated
C., cov.	Cover
C., cont.	Contract (Work Order)
C., chd.	Chord
Calc.	Calculated
C.B.	Catch basin
C.C.	Cement coated; Center to center
C.C. Co.	Contra Costa County
Cem.	Cement
C/F	Curb face
Chap.	Chapman (gate valve)
Ch.	Chain
Chkd.	Checked
Ch. X	Chiseled Cross
C.I.	Cast Iron
C.I.P.P.	Cast Iron Perforated Pipe
CIR.	Circle
⌀	Center line
C.L.	Cement lined (see Mortar Lined)
C/L	Curb line (spell out)
C.M.P.	Corrugated metal pipe
Cof.	Coffin (gate valve)
Conc.	Concrete
Cond.	Conduit; condition
Conn.	Connect
Cont.	Continue
Contd.	Continued
Conv.	Converse
Cop.	Copper
Cor.	Corner
Corr.	Corrected, corrugated
C.P.S.	Cathodic protection station
Cr.	Crane (gate valve); creek
C/R	Curb return
C.R.B.	Crusher run base
CRES.	Cresent
Csg.	Casing
CT.	Court

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C.T.	Copper tack
Ctrl.	Control
Ctr.	Center
Culv.	Culvert
C.V. (Ch. V.)	Check valve
C.W.S.	California Water Service

- D -

D	Delta; Mapping tie point
Deg.	Deed
Des.	Degree
Desc.	Design
Dest.	Description
D/E	Destroyed
df	Difference of elevation
Defl.	Deflection per foot
D.H.	Deflection
D.I.	Double hub
D.I.E.	Drain inlet; Drop inlet
Dist.	District Improvement Extension
Dr.	Distance; (District); (Distribution)
DR.	Drain
D.S.	Drive
D&W	Double spigot
Dwg. (Drwg., Dr.)	Dipped and Wrapped
	Drawing

- E -

EA	Extension Agreement
E, Ext.	Extension Order (Work Order); East
Ease.	Easement
E.B.W. Co.	East Bay Water Co.
EBMJD	East Bay Municipal Utility District
E.C.	End of curve
Ecc.	Eccentric
EG	Edge of gutter
e.g.	For example
E.H., E. Hvy.	Extra heavy
El., Elev.	Elevation
El	Elbow
Enc.	Encased
Encl.	Enclosed
Engr.	Engineer
E/o	East of
E/P	Edge of paving
Eq.	Equation
E/R	Edge of road
E.R.	End of return
Est.	Estimate
Estab.	Established

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Ests	Estates
Etc.	Et cetera
Et vir	And husband
Et al	And others
Et ux	And wife
E.T.S.	Electrolysis Test Station
E.V.C.	End of Vertical Curve
Exist.	Existing
Ext.	External; extended; Extension

- F -

F.	Fill; Fence (spell out)
F.A.	Fire alarm
F.B.	Field book
Fd.	Found
Fig.	Figure
Fl.	Flow
F/L	Flow line; Fence line
Flg.	Flange
Flgd.	Flanged
F.P.	Filter plant
F.S.	Flashing Signal; Foresight; Fire Service
Ft.	Feet; foot
F & S	Flange and Spigot
Fwd.	Forward

- G -

G.	Gas
G.A.	Guy anchor
Galv.	Galvanize
G.B.	Grade break
G.I.P.	Galvanized Iron Pipe
G.L.	Ground line
Gl.	Gland
G.M.A.	General Manager's Authorization
G.O.	General Order (Work Order)
G.P.	Granite Post; Guyed pole
Gr. (Grd.)	Grade; ground
G.V.	Gate valve
(G.V.)	Gas valve (spell out)
G.W.P.	Great Western Power

- H -

H., Hyd., (Hydt.), (FHy.)	Hydrant
H.D.	Hydraulic Design; Horizontal distance
H.E.	Hub end
H. & F.	Hub and flanged
H.I.	Height of instrument
Horiz. (Hor.)	Horizontal

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H.P.	High pressure
H. & S.	Hub and spigot
Ht.	Height
H. & T.	Hub and tack
H.W.	Head Wall; High Water
HWY. (Hy.)	Highway

- I -

I. & O.	Inlet and outlet
I.D.	Inside diameter
i.e.	That is
I.J., (Ins. Jt.)	Insulating Joint
Imp.	Improvement
In.	Inch
Inst.	Instrument
Int.	Intersection; Interval
Inv.	Invert
I.P. (I.P. Mon.)	Iron pipe monument

- J -

J.B.	Junction box
J.P.	Joint pole
Jt.	Joint

- K -

K	Kill (Work Order)
Ken.	Kennedy (gate valve)

- L -

L.	Length; Length of arc; Lined
Lat.	Latitude
L.C.	Long chord
Ld.	Lead
L.H.	Lamp hole
Lks.	Links
L. & T.	Lead & tack
Long.	Longitude
LN.	Lane
Loc.	Locate; location
L.P.	Low pressure
L.S.	Local System; Licensed Surveyor
L.S.M.	Land Surveyor's Map
Lt.	Left
L.W.	Low water

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- M -

M	Map; Middle ordinate; Meter; Mortar (coating or lining)
Mac.	Macadam
Max.	Maximum
M.B.	Map book
M.C.	Middle of curve
M.D.B.&M.	Mt. Diablo Baseline & Meridian
Meas.	Measured
M & H	M & H (gate valve)
M.H.	Manhole
Min.	Minimum; Minute
Misc.	Miscellaneous
M.O.A.	Machine over-all
Mon.	Monument
M.P.	Marker post; Mid point
M.S.L.	Mean Sea Level
MT.	Mount
Mtn.	Mountain

- N -

N	North; Non-Metallic Pipe
N.E.	Northeast
No.	Number
Nom.	Nominal
N/o	North of
Nord.	Nordstrom (plug valve)
N. & S.	Nail and shiner
N.W.	Northwest

- O -

O.D.	Outside diameter
O.F.	Overflow
O.L.	Open left
O.M.	Oil Macadam; Out meter; Orifice meter
Opp.	Opposite
O.R.	Open right; Official record
Obs.	Observe
Orig.	Original
O.G.	Original Ground

- P -

P	Prestressed concrete cylinder Pipe
Pave.	Pavement
P. & C.	Pratt & Cady (gate valve)
P.C.C.	Point of compound curve
Pcl.	Parcel
Pg.	Page

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P.G.&E.	Pacific Gas & Electric Co.
P.H.	Powerhouse
P.I.	Point of interesection
P.I.V.C.	Point of intersection vertical curve
P/L	Property line
P.	Plate
Pl.	Plain
PL	Place
P.L.E.	Pipeline Engineering
Pl.M.	Plant mix
P.M.	Pilot meter, Parcel map
P.M.P.	Perforated metal pipe
P.O.B.	Point of Beginning
P.O.C.	Point on curve, Point of commencement
P.O.S.T.	Point on semi-tangent
P.O.T.	Point on tangent
P.P.	Pumping plant; Power pole
P.R.	Pressure regulator
P.R.C.	Point of reverse curve
Proj.	Project; Projected
Prod.	Produced
Prop.	Property; Proposed
P.S., Pac. Sts.	Pacific States (gate valve)
P.T.	Pumping tee; Point of tangency
Pt.	Point
P.T.&T.	Pacific Telephone & Telegraph Co.
P.U.E.	Public Utility Easement
P.W. Co.	Peoples Water Co.
P.Z.	Pressure Zone
P.Z.C.	Pressure Zone Change

- Q -

1/4 Sec.	Quarter Section
1/4 Cor.	Quarter Corner

- R -

R	Radius; Radial; Range; Reinforced concrete pipe
R.C.B.	Reinforced concrete box
R.C.C.P.	Reinforced concrete cement pipe
R.C.E.	Registered Civil Engineer
R.C.P.	Reinforced concrete pipe
RD.	Road
R.E.	Registered Engineer
Rec.	Record; Recommend; Received
Recon.	Reconnaissance
Red.	Reducer
Reg.	Regulator
Ref.	Reference
Rens.	Rensselaer (gate valve)
Rep1.	Replacement

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Ret.	Return
Res.	Reservoir; Resolution
Rev.	Reverse, Revise
R.F.S.	Remove from service
Rich	Rich (gate valve)
R.M.	Reference mark
Ro.	Rancho
R.P.	Reference point
R.P.E.	Registered Professional Engineer
R.R.	Railroad; Rod reading
R.S.	Riveted steel; Record of survey
Rt.	Right
Rte.	Route
R/W	Right of way
Ry	Railway

- 5 -

S	South; Sewer; Steel (welded, riveted, sheet and screw pipe)
San.	Sanitary
Sc.	Screw
Sched.	Schedule
S.D.	Special District; Slope distance; Storm drain
S.E.	Spigot end; southeast
SFBARTD	San Francisco Bay Area Rapid Transit District
Sec., (Sect.)	Section
Sec. Cor.	Section corner
S.Fe.R.R.	Santa Fe Railroad
S.I.	Sheet iron
Sim.	Similar
S.L.H.	Sanitary lamphole
S.M.H.	Sanitary manhole
S.N.R.R.	Sacramento Northern Railroad
S/o	South of
Sob.	Sobrante
S.O.O.T.	Set on old tap
S.P.	San Pablo
Spec.	Specification; Specify
Spk.	Spike
S.P.R.R.	Southern Pacific Railroad
S.S.	Sheet steel; Stainless steel
St.	Storm
ST.	Street
S.T.	Semi-tangent
Sta.	Station
Std.	Standard
Stk.	Stake
Stl.	Steel
Sq.	Square
Subdiv. (Sub'n.)	Subdivision
Supv.	Supervisor

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Sur.	Survey
S.W.	Southwest
S/W	Sidewalk
Symm.	Symmetrical

- T -

T.	Tap; Temperature; pretensioned concrete cylinder pipe; Township
Tan.	Tangent
Tap.	Tapping
T.B.A.	To be abandoned
T.B.I.	To be installed
T.B.M.	Temporary Bench Mark
T/C	Top of curb
T.C.	Terra Cotta
Temp.	Temporary
TERR.	Terrace
T/G	Top of gutter
T.H.	Test hole
Tk.	Tack; Tank
T.L. (T/L)	Transit Line
T.O.	Turn out
Topo.	Topography
T.P.	Telephone Telegraph pole; Turning point
TWP	Township
TR.	Trail
Tr.	Tract
Trans.	Transite (trade name)
Trk.	Track
Typ.	Typical

- U -

U	Unlined pipe
U.S.C.&.G.S.	U.S. Coast and Geodetic Survey
U.S.C.E.	United States Corps of Engineers
U.S.G.S.	U.S. Geological Survey
U.W. Co.	Union Water Co.
U.S.L.	Upper San Leandro

- V -

V.A.	Vertical Angle
V.C.	Vertical curve; Vitriified clay
V.C.D.	Vitriified clay duct
V.C.P.	Vitriified clay pipe
Vert.	Vertical
viz.	Namely
V.M. (Vent.)	Venturi meter
Vol.	Volume

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- W -

W	West; Wrought Iron Pipe; Water
W.C.	Witness Corner
Wh. V.	Wheel valve
W.I.	Wrought iron
WK.	Walk
W/L	Water line
W/o	West of; without
W.P.	Witness post
W.M.	Water meter
W.P.R.R.	Western Pacific Railroad
W.S.	Welded steel; water surface
W.W.	Wall to wall

- X -

X	X-order (old plant removal work order)
"X"-inc	Crossing
X-Sec.	Cross-section

- Z -

Z.	Zone (see pressure zone)
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C. T. Way
 C. T. WAY
 Chief Engineer

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