water symbols

EXISTING	PROPOSED	description	block name
		FIRE HYDRANT	blocks \ fh / new fh
		water meter	wm / newwm
		gate valve	wv / newwv
		butterfly valve	bfv / newbfv
		air relief valve	arv / newarv
		tee	tee / newtee
		cross	x / newx
		22 1/2 bend	22h / new22h
		45° bend	45 / new45
		90° bend	90 / new90
		reducer	red / newred
		plug	plug
		sleeve	sleeve
		thrustblock	tblk

sanitary / storm sewer symbols

EXISTING	PROPOSED	description	block name
		san s manhole	mh / new mh
		clean out	CO / NEWCO
		wye branch	wye / newwye
		san sewer crossing	XING
		storm manhole	STMH / NEWSTMH
		catch basin	cb / NEWcb
		culvert	culv / newculv
		'r' type inlet	R / NEWR
		CULVERT W/ FES & HEADWALL	fes
		double no. 16 inlet	no16 / new no16

N

Scale: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

linetype lEGEND

EXISTING ITEMS

- W — WATER w/ valve
- WATER service
- SAN — SANITARY sewer w/ mh
- ST — STORM SEWER
- E — ELECTRIC
- OE — OVERHEAD POWER
- G — NATURAL GAS
- UT — BURIED TELEPHONE
- T — overhead TELEPHONE
- FO — fiber optic
- TV — BURIED cable TV
- x — FENCE
- EASEMENT
- PROPERTY or row LINE
- INTERMEDIATE CONTOUR
- 5120 — INDEX CONTOUR
- SWALE, DITCH OR SMALL STREAM INV.
- SLOPE LINES

PROPOSED ITEMS

- 8" DIP — WATER w/ valve
- WATER service
- 8" pvc — SANITARY sewer w/ manhole
- 8" pe — STORM sewer
- INTERMEDIATE CONTOUR
- 5120 — INDEX CONTOUR EVERY 5TH CONTOUR, REGARDLESS OF INTERVAL
- 4 : 1 — DESIGN SLOPE
- SLOPE LINES

SUBSURFACE / SURFACE FEATURES

description	block name
BEDDING	bed
RIPRAP	RIPRAP
GRADE	GRADE
x 413.9 SPOT ELEVATION	spot
ASPHALT	ASPHALT
GRAVEL PATH	GRAVEL
CONCRETE	CONCr
DECIDUOUS TREE	dtree dtree1
CONIFEROUS TREE	CTREE
bushes	bush
BUS bus pad	bus
MAILBOX	mbox
sign1	sign1
sign2	sign2
embankment	bank
wetlands	wet
grass	grass

survey symbols

description	block name
benchmark	bm
survey control pt	cp
property pin (found)	pin
test hole	th
section corner	secorn
quarter corner	qcorn

gas, telephone, power & traffic symbols

telephone riser	riser
T telephone vault	tvault
transformer box	transf
signal controller	sigcon
street light	stlt
light post	lp
utility pole guy wire	guy
power pole	pp
traffic flow arrow	flow
mast arm	mast

ABBREVIATIONS

ACP	ASBESTOS CEMENT PIPE
arv	air relief valve
assbly	assembly
bfv	butterfly valve
cb	catch basin
cip	cast iron pipe
℄	centerline
cmp	corrugated metal pipe
co	cleanout
CONC	CONCRETE
cplg	coupling
cv	check valve
dia	diameter
dip	ductile iron pipe
DWG	DRAWING
Eop	edge of pavement
EW	EACH WAY
EL	ELEVATION
EQUIP	EQUIPMENT
EXIST	EXISTING
ff	flowline
fh	fire hydrant
FLG	FLANGE
FES	FLARED END SECTION
GALV	GALVANIZED
GSP	GALVANIZED STEEL PIPE
GAL	GALLON
GV	GATE VALVE
hercp	horizontal elliptical rcp
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
INV	INVERT
INV EL	INVERT ELEVATION
lp	light pole
MATL	MATERIAL
MAX	MAXIMUM
mb	mailbox
mh	manhole
MISC	MISCELLANEOUS
MFR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MJ	MECHANICAL JOINT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPP	OPPOSITE
OPNG	OPENING
PE	polyethylene
prop	proposed
PRV	PRESSURE REDUCING VALVE
PT	POINT OF TANGENT
PC	POINT OF CURVE
pp	power pole
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RAD	RADIUS
REINF	REINFORCING
RED	REDUCER
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
REQD	REQUIRED
ROW	RIGHT OF WAY
$	survey line
STA	STATION
SQ	SQUARE
STD	STANDARD
SYM	SYMMETRICAL
SPEC	SPECIFICATIONS
TAN	TANGENT
tblk	thrustblock
th	testhole
typ	typical
VERT	VERTICAL
VCP	VITRIFIED CLAY PIPE
wm	water meter
ws	water service

plan SYMBOLS

DRAWING(S) CUT ON — 2 / 5 6 — DETAIL NUMBER / DRAWING SHOWN ON

DRAWING(S) CUT ON — B / 5 6 — SECTION LETTER / DRAWING SHOWN ON

Match Line
use "this sheet", "sta" or "sheet no."

NOTES:

1. the type, size, location and number of all known underground utilities are approximate as shown on the drawings. it shall be the responsibility of the contractor to verify the existence and location of all underground utilities along the route of work and to coordinate construction schedules with these utility owners. the contractor shall note all utilities may not appear on these plans and that the potential conflict with utilities shall be considered in the preparation of cost estimates and bids. the contractor shall be responsible for protecting utilities during construction and shall hold the City and the engineer harmless for damages arising from failure to adequately protect utilities. Also, it shall be the responsibility of the contractor to schedule utility adjustments to eliminate conflict with progress of the work.

misc symbols

handicap	hcap
bike lane	bike

CITY OF BOULDER, COLORADO

DESIGNED:	
DRAWN:	
CHECKED:	
DATE:	July 2, 1998
PROJECT NO.:	
SURVEYED BY:	
CHECKED:	DATE:
PROJECT ENGINEER:	

PREPARED BY: CITY OF BOULDER UTILITIES DIVISION

DATE	REVISIONS	BY

DRAWING NO. 1.01
DRAFTING STANDARDS

file : h:\std\sht1.dwg
SHEET: 1 / 2