NOTE: IF PROJECT IS WITHIN ANOTHER JURISDICTION THAT JURISDICTION MAY BE USED IN PLACE OF ELBERT COUNTY

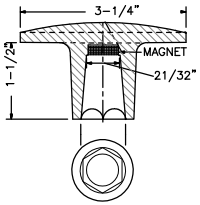
REFERENCE MONUMENT CAP

R O W MONUMENT CAP

CONTROL MONUMENT CAP

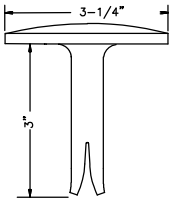
ALIQUOT CORNER MONUMENT CAP

NOTE: (A BLANK CAP MAY BE SUBSTITUTED IF THE APPROPRIATE ABOVE CAP IS NOT AVAILABLE. IF A BLANK CAP IS USED, ALL INFORMATION NORMALLY INCLUDED ON THE APPROPRIATE STANDARD CAP, SHALL BE STAMPED ON THE BLANK CAP ALONG WITH SPECIFIC PROJECT INFORMATION SUCH AS PROJECT NO., DATE, POINT NO., ETC..)



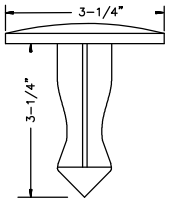
BRASS AND ALUMINUM CAPS

BRASS CAP USED WITH STAINLESS STEEL ROD. ALUMINUM CAP USED WITH ALUMINUM ROD. (THREADED CAP IS ALSO AVAILABLE)



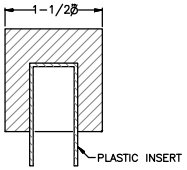
ALUMINUM CAP

FOR PLACING IN EXISTING CONCRETE OR ROCK

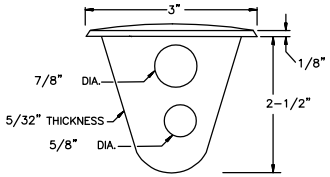


BRASS CAP

FOR PLACING IN EXISTING CONCRETE OR ROCK



TEMPORARY ALUMINUM CAP



BRASS CAP

FOR PLACING IN NEW CONCRETE.

MONUMENT APPLICATION

CAP TYPE	MONUMENT TYPE							
	1	1A	2	2A	3	3A	4	5
REFERENCE	X	X					X	
ROW	X	X						X
CONTROL		X	X	X			X	
ALIQUOT CORNER					X	X		
WITNESS POST (WHEN REQUIRED)	X	X	X	X	X			X

DIMENSIONS ARE INCHES (") UNLESS OTHERWISE NOTED.

TYPE 1 AND TYPE 1A ALUMINUM AND STAINLESS STEEL DRIVEN MONUMENTS

MONUMENTS ARE INSTALLED BY ATTACHING THE PROPER SIZE TIP TO ONE END OF A SECTION OF ROD AND A 3" LONG x 3/4" DIA. STAINLESS STEEL DRIVER TO THE OTHER END. DRIVER IS THEN PLACED OVER THE STAINLESS STEEL DRIVER FOR THE HAMMER TO CONTACT. WHEN ADDITIONAL SECTIONS OF ROD ARE NEEDED, THEY ARE TO BE ATTACHED USING A SET OF SELF-LOCKING WASHERS. RODS ARE STOCKED IN TWO-FOOT AND THREE-FOOT SECTIONS. ONE FOOT SECTIONS MAY BE OBTAINED BY CUTTING A TWO-FOOT SECTION IN HALF. THE ROD SECTION IS DRIVEN BY USING THE PROPER HAMMER WITH A SOFT FACE OR BY USING A POWER ADAPTER WITH A GASOLINE-POWERED DRIVER.

TYPE 1 MONUMENTS TYPICALLY USE A THREE-FOOT SECTION OF ROD. WHEN SUBSURFACE ROCK OR CONCRETE IS ENCOUNTERED LESS THAN THREE-FEET BELOW THE GROUND SURFACE, THE ROD SHALL BE EMBEDDED IN THE ROCK OR CONCRETE AT LEAST 6" WITH A GROUT MATERIAL. THE ROD MAY BE SHORTENED TO ACCOMMODATE THE CONDITIONS.

TYPE 1A MONUMENTS SHALL BE DRIVEN TO REFUSAL BY THREADING ADDITIONAL SECTIONS ONTO THE FIRST SECTION. ADDED SECTIONS REQUIRE A SET OF LOCK WASHERS. REFUSAL IS DEFINED AS ONE INCH OF MOVEMENT WITH FOUR HEAVY BLOWS OF A 12 LB. HAMMER. A DRIVEN CAP IS NECESSARY (VS. A THREADED CAP) WHEN A CUT ROD IS USED. A SOFT FACED HAMMER IS REQUIRED TO SEAT THE DRIVEN CAP ONTO THE ROD.

TYPE 2 AND TYPE 2A ALUMINUM FINNED ROD MONUMENTS

A TYPE 2 MONUMENT IS USED FOR HORIZONTAL CONTROL MONUMENTS WHERE LOOSE MATERIAL IS ENCOUNTERED. THE LARGER SIZE TIP IS TO BE USED ON ONE END OF THE THREE-FOOT ROD AND THE FINS ON THE OPPOSITE END OF THE THREE - FOOT ROD ARE TO BE BENT OVER TO ACCOMMODATE THE CAP. IF MORE VERTICAL STABILITY IS REQUIRED FOR USE AS A VERTICAL CONTROL MONUMENT, THE ADDED SECTIONS WHICH ARE NOT FINNED, SHOULD BE DRIVEN FIRST. THE NUMBER OF SECTIONS TO BE ADDED WILL VARY WITH NEEDS AND TYPE OF SOIL.

THE TYPE 1A MONUMENT NOTE ABOVE ALSO APPLIES TO THE TYPE 2A MONUMENT.

TYPE 3 AND TYPE 3A ALUMINUM PIPE MONUMENTS

THIS MONUMENT IS USED TO MONUMENT AN ALIQUOT CORNER. THE INSTALLATION OF THIS MONUMENT AND RECORD FILING SHALL BE DONE IN ACCORDANCE WITH THE COLORADO REVISED STATUTES, TITLE 38, ARTICLES 50 AND 51. ALSO REFER TO THE CDOT SURVEY MANUAL. THE LAND SURVEYOR'S LICENSE NUMBER AND THE YEAR SHALL BE STAMPED ON THE CAP.

TYPE 4 BRASS CAP MONUMENT

THIS MONUMENT IS PLACED IN CONCRETE, SUCH AS BRIDGE SUPER STRUCTURE CONCRETE. IT IS PLACED ABOVE A FOOTING SUPPORT OVER THE ABUTMENT OR OVER A PIER. AN ALTERNATIVE PLACEMENT IS VERTICALLY IN THE ABUTMENT WALL OR PIER IF ONLY AN ELEVATION REFERENCE IS DESIRED AND IT IS POSSIBLE TO LEAVE ACCESS FOR AN ELEVATION ROD.

TYPE 5 BRASS CAP MONUMENT

THIS MONUMENT IS PLACED IN LOCATIONS WHERE A TYPE 1 OR TYPE 1A MONUMENT CANNOT BE PLACED. A COMMON APPLICATION IS IN A LARGE BOULDER WHERE A PROPERTY CORNER HAS BEEN PLACED. THIS MONUMENT COULD ALSO BE PLACED IN A SIDEWALK.

WITNESS POSTS

THE WITNESS POST, WHEN REQUIRED, WILL BE SUPPLIED BY THE DIVISION AND INSTALLATION SHALL BE INCLUDED IN THE WORK. IT SHALL BE DRIVEN WITHIN 10 FEET OF THE MONUMENT, WHEN POSSIBLE. A DELINEATOR POST WITH A 6" x 10" METAL SIGN PANEL MAY BE USED IN LIEU OF THE PLASTIC POST. THIS POST SHALL CONFORM TO STANDARD S-612-1.

SELF-LOCKING WASHERS

A SET OF TWO WASHERS SHALL BE USED AT ROD JOINTS AND THREADED CAP JOINTS, BUT NOT AT TIP JOINTS.

TEMPORARY MONUMENTS

A TEMPORARY ALUMINUM CAP IS USED ON A NO. 5 REBAR.

STANDARDS & SPECIFICATIONS

REVISED:

DATE:

DRAWING NO. 500-30

SURVEY MONUMENTS
SHEET 1 OF 2