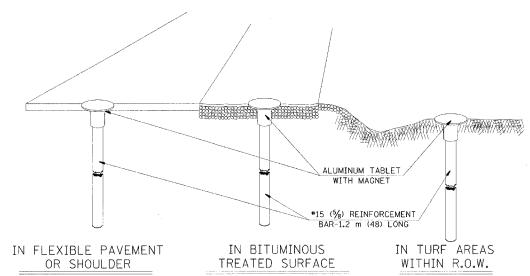
SURVEY MARKER, TYPE 1 (SPECIAL)

TO BE USED IN FLEXIBLE PAVEMENT AND SHOULDER, A-3 BITUMINOUS TREATED SURFACE OVER AGGREGATE BASE COURSE AND TURF AREAS WITHIN THE RIGHT-OF-WAY LIMITS FOR RESETTING EXISTING CENTERLINE CONTROL POINTS AND LAND SURVEY MONUMENTS



GENERAL NOTES

- 1. WORK ON THIS ITEM SHALL NOT START UNTIL THE FINAL SURFACE IS COMPLETED.
- 2. THE ALUMINUM TABLET (FORKED) SHALL REST UPON THE BOTTOM OF THE 100 mm (4") CORE HOLE. IF THE HOLE IS TOO DEEP, EPOXY GROUT MUST BE USED TO DECREASE THE DEPTH AND ALLOWED
- 3. THE ALUMINUM TABLET SHALL BE ANCHORED IN THE 100 mm (4") DIAMETER HOLE IN THE NEW PAVEMENT WITH TWO-COMPONENT EPOXY CONFORMING TO APPLICABLE PORTIONS OF ARTICLE 1025.01 (725.01) OF THE STANDARD SPECIFICATIONS.
- 4. THE 100 mm (4") CORE HOLE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
- 5. THE CONTRACT PRICE, EACH, FOR SURVEY MARKER, TYPE 2 (SPECIAL) SHALL BE PAYMENT IN FULL FOR FURNISHING THE ALUMINUM TABLET AND ALL LABOR AND MATERIAL TO SET THE MARKER IN PLACE, AS SPECIFIED, INCLUDING CORING THE NEW PAVEMENT.
- ALL SURVEY MARKERS, TYPE 2 (SPECIAL) SHALL BE PLACED SHALL BE PLACED \pm 6 mm ($\frac{1}{4}$ ") BELOW THE FINAL SURFACE.

83 (3¹/₄) PARTMENT TRANSPORTATIO MAGNET 38 DE S 0 16 (5/8) PLASTIC INSULATOR SLEEVE $(3^{1}/_{4})$

DIMENSIONS SHOWN SHALL BE EXACT, OTHERS MAY VARY, BUT SHALL

GENERAL NOTES

- 1. THE CONTRACT UNIT PRICE, EACH, FOR SURVEY MARKER, TYPE I, (SPECIAL) SHALL BE PAYMENT IN FULL FOR FURNISHING THE SURVEY MARKER.
- 2. ALL SURVEY MARKERS, TYPE 1 (SPECIAL) SHALL BE PLACED ± 6 mm (1/4") BELOW THE FINAL SURFACE.
- 3. WHEN THE TABLET AND REBAR ARE PLACED AS PART OF A SURVEY MARKER VAULT, THEY SHALL BE CONSIDERED AS INCLUDED IN THAT PAY ITEM AND THERE WILL BE NO PAYMENT FOR THE SURVEY MARKER, TYPE 1 (SPECIAL).

	NAME	DATE	REVISIONS	
DESIGNED	AWH	8/17/91	NAME	DATE
CHECKED	PEK	8/17/91	G.A.M.	11-95
CADD NO.	D-1	.05	D.L.P.	10-96

SPECIFICATIONS FOR ALUMINUM TABLET

SURVEY CAP FOR REBAR. 83 mm (31/4") CONVEX SURVEY CAP FOR 15 mm (5%") REBAR WITH ILLINOIS DEPARTMENT OF TRANSPORTATION LOGO. THIS LOGO SHALL PROVIDE LETTERS RECESSED INTO THE SURFACE A MINIMUM OF OF TRANSPORTIATION LOGO. HIS LOGO SHALL PROVIDE LETTERS RECESSED INTO THE SURFACE A MINIMUM OF O.8 mm (1/2") FOR EASY AND LONG-TERM LEGIBILITY. THE ALUMINUM CAP FOR REBAR SHALL BE PRODUCED BY THE PROCESS OF ORBITAL FORGING TO PRODUCE A HIGH-STRENGTH AND DURABLE MARKER CAP WHICH WILL NOT CHIP OR BREAK AND PROVIDE A SMOOTH FINISH FOR STAMPING OF DATA IN THE FIELD. THE ALUMINUM CAP FOR REBAR SHALL BE TAPERED FOR A PERFECT COMPRESSION FIT. A SPECIAL PLASTIC INSULATOR SHALL BE INSTALLED TO PREVENT DISSIMLAR METAL CONTACT AND CORPOSION. THE PLASTIC INSULATOR SHALL FORM READILY TO THE OUTER SHAPE OF THE REBAR AND TO THE INNER SHAPE OF THE ALUMINUM CAP SOCKET. THE PLASTIC INSULATOR SHALL BE LOW DENSITY POLYETHYLENE, A MINIMUM 38 mm (1/2") LONG AND CONFORM TO FEDERAL SPECIFICATION L-P 390.

COMPOSITION: ALUMINUM 98.3-98.7%; OTHER 1.3-1.7%; STRENGTH: YIELD 193 MPa (28 KSI), ULTIMATE 221 MPa (32 KSI). ELONGATION 15% (IN 50 mm (2")]. SPECIFICATIONS: ALUMINUM ALLOY 6101-0; ASTM B317-83 (EXCEPT TEMPER) AS FORGED. NO EXCEPTIONS.

SPECIFICATION FOR REBAR

REBAR FOR ALUMINUM TABLET. REINFORCEMENT BAR SHALL BE #15 (5/8") X 1.2 m (48") (DEFORMED).

INSPECTION OF REINFORCEMENT BAR *15 $(\frac{5}{8})$ SHALL BE DONE BY DISTRICT PERSONNEL OF THE ILLINOIS DEPARTMENT OF HIGHWAYS, DIVISION OF HIGHWAYS.

All dimensions are in millimeters (inches) unless otherwise shown.

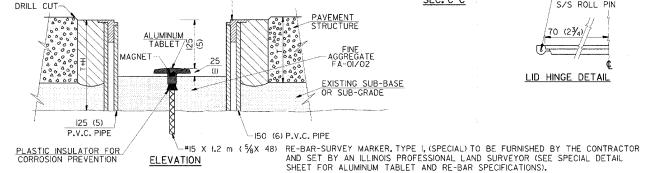
DETAIL OF SURVEY MARKER VAULT

FOR RESET LAND SURVEY MONUMENTS IN RIGID AND COMPOSITE PAVEMENTS

COUNTY TOTAL SHEET NO. SECTION 642 99-00124-02-PV COLES 229 117 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TWO-COMPONENT FROXY INSIDE OF 200 (8)
DIAMETER CORE HOLE SEE LID HINGE DETAIL R CORE HOLE

SPECIFICATIONS FOR ACCESS COVER FOR USE WITH SURVEY MARKER VAULT(S)
AND SURVEY MARKER COVER ASSEMBLY(S): THE ACCESS COVER WILL BE CAST
FROM A SPECIAL ALUMINUM ALLOY THAT IS COMPARABLE TO BRONZE IN
HARDNESS. THE ACCESS COVER SHALL BE SPECIALLY ENGINEERED AND
DESIGNED TO PROVIDE A SNUG FIT, INCORPORATING EQUIDISTANT LOCKING
RIDGES, INSIDE A STANDARD 150 mm (6") DIAMETER, OR OUTSIDE A STANDARD
125 mm (5") DIAMETER, SCHEDULE 40 PVC PIPE. THE ACCESS COVER SHALL HAVE
SPECIAL UNIFORM 25 mm (1") THICK TOP SURFACE TO PERMIT INFORMATION TO BE
EASILY MACHINED-STAMPED INTO IT. THE ACCESS COVER SHALL INCLUDE A
STAINLESS CAPTURED SCREW AND AN OPPOSING RECESSED HINGE ASSEMBLY AS
ITS LOCKING MECHANISM. THE ACCESS COVER SHALL INCORPORATE A SPECIAL
ACCESS HOLE FOR CLEANING AND DRAINAGE, DRILLED AT 30° INSIDE THE
RING OF THE ACCESS COVER, TO THE DRILLED AND TAPPED HOLE PROVIDED
FOR THE STAINLESS CAPTURED SCREW. COMPOSITION: ALUMINUM 92-93%;
MAGNESIUM 6.5-7.5%. STRENGTH: YIELD - 131-145 Mpg (19,000-21,000 PSI);
TENSILE - 262-303 Mpg (38,000-44,000 PSI); ELONGATION - 10-15% IN
50 mm (2"). SPECIFICATIONS: ALLOY 535.0; GO-A-601ES. NO EXCEPTIONS. (3) 200 (8) DIAMETER **PLAN** CORE HOLE OR SAWED HOLE AS APPROVED BY ACCESS COVER **LEGEND** PROVIDE 2 (1/16) CLEARANCE - ALUMINUM CASTING AROUND LID THE ENGINEER 125 (5) OR 150 (6) P.V.C. PIPE -CAPTURED SCREW (57/6) TWO-COMPONENT EPOXY THICKNESS OF PAVEMENT STRUCTURE SEC. D-D SEC. A-A SEC. B-B H = THE THICKNESS OF THE (3/8) 89 (31/2)// 140 (51/2) SUB-BASE GRANULAR + 25 (1)



5 (3/4) HOLE DRILLED AT 30°

GENERAL

L ALUMINUM CASTING SHALL BE EITHER PLACED OVER A 125 mm (5")
P.V.C. PIPE OR INSIDE OF A 150 mm (6") P.V.C. PIPE.

141 (5%)

SEC. D-D

SEC. B-B

2. BACKFILL WITH FINE AGGREGATE-FA-01/02.

OUTSIDE OF 200 (8) DIA. CORE HOLE

- 3. WORK SHALL NOT START ON THIS ITEM UNTIL THE FINAL LIFT OF CLASS I HAS BEEN COMPLETED.
- All dimensions are in millimeters (inches) unless otherwise shown.

- NOTES
- 5. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR <u>SURVEY MARKER VAULT</u> WHICH PRICE SHALL INCLUDE ALL LABOR AND MATERIAL AS SPECIFIED INCLUDING CORING, EPOXY AND FA-01/02 AGGREGATE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

(225/32)

SEC. C-C

- 6. THE CASTING SHALL BE ANCHORED IN THE 200 mm (8") DIAMETER CORE HOLE WITH TWO-COMPONENT EPOXY CONFORMING TO APPLICABLE PORTIONS OF ARTICLE 1025.01(725.01) OF THE STANDARD SPECIFICATIONS.
- 7. ALL SURVEY MARKER (VAULTS) SHALL BE PLACED 6 mm ($\frac{1}{4}$ ") \pm BELOW THE FINAL SURFACE.
- 8. THE 200 mm (8") DIAMETER CORE HOLE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

BILL OF MATERIAL ALUMINUM CASTING OF THE DIMENSIONS AND SPECIFICATIONS SHOWN OR OTHER SUBJECT TO ENGINEER'S APPROVAL OF SHOP DRAWINGS, 125 mm OR 150 mm (5" OR 6") Ø P.V.C. PIPE, SCHEDULE 40, ALUMINUM TABLET, STAMPED IN ACCORDANCE WITH STANDARD 2135. #15 X I.2 m (5/8 "X 48") RE-BAR, EPOXY AND FA-01/02 AGGREGATE.

REVISIONS		ILLINOIS DEPARTMENT OF	TRANSPORTATION
NAME	DATE	TELINOIS DEPARTMENT OF	TRANSFORTATION
		SURVEY MARKER FAI-57, FAS SEC NO. 15-23K, 99	AS 642 9-00124-02-P
		COLES COUNTY	, ILLINOIS
	 	SCALE: NOT TO SCALE	DRAWN BY DJP

CHECKED BY SKM

DRILL 5 (3/6) FOR