SECTION COUNTY VERMILION 34 31

• 115RS-4, 116RS-2

CONTRACT NO. 90865

FOR RESETTING LAND SURVEY MONUMENTS IN RIGID AND COMPOSITE PAVEMENTS

-CAPTURED SCREW

<u>% " (5) HOLE</u>

DRILLED AT 30°

PAVEMENT

FA-01/02

FINE AGGREGATE

OR SUB-GRADE

DETAIL OF SURVEY MARKER VAULT

TWO-COMPONENT EPOXY INSIDE OF 8" (200) DIAMETER CORE HOLE SEE LID HINGE DETAIL 8" (200) DIAMETER CORE HOLE OR SAWED HOLE AS APPROVED BY THE ENGINEER ACCESS COVER **PLAN**

(138)

<u> ⟨SEC. D-D</u> ⟨

71/4"(184)

51/2" (140

5% (141)

SEC. D-D

SEC. B-B

(10)

ALUMINUM CASTING

48 (#15 X 1.2 m)

SEC. B-B

SEC. A-A

SEC. A-A

5" (125)

PLASTIC INSULATOR FOR

CORROSION PREVENTION

P.V.C. PIPE

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 6" (150 mm) DIAMETER, OR OUTSIDE A STANDARD 5" (125 mm) DIAMETER, SCHEDULE 40 PVC PIPE. THE ACCESS COVER SHALL HAVE SPECIAL UNIFORM 1" (25 mm) THICK TOP SURFACE TO PERMIT INFORMATION TO BE EASILY MACHINE-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 - 19,000-21,000 PSI (131-145 MPo); TENSILE - 38,000-44,000 PSI (262-303 MPo); ELONGATION - 10-15% IN 2" (50 mm). SPECIFICATIONS: ALLOY 535.0: OQ-A-601Es. NO EXCEPTIONS.

LEGEND

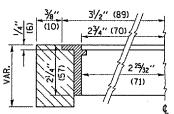
- ALUMINUM CASTING

5" (125) OR 6" (150) P.V.C. PIPE

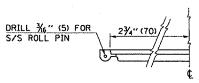
- TWO-COMPONENT EPOXY

T = THICKNESS OF PAVEMENT STRUCTURE

H = THE THICKNESS OF THE SUB-BASE GRANULAR + 1" (25)



SECTION C-C



LID HINGE DETAIL

RE-BAR-SURVEY MARKER, TYPE I. (SPECIAL) TO BE FURNISHED BY THE CONTRACTOR AND SET BY AN ILLINOIS PROFESSIONAL LAND SURVEYOR (SEE SPECIAL DETAIL SHEET FOR ALUMINUM TABLET AND RE-BAR SPECIFICATIONS).

GENERAL NOTES

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

ELEVATION

MAGNET

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

PROVIDE 1/6" (2) CLEARANCE

(200) DIA.

DRILL CUT

CORE HOLE

- 3. WORK SHALL NOT START ON THIS ITEM UNTIL THE FINAL LIFT OF SURFACE HAS BEEN COMPLETED.
- 4. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR SURVEY MARKER VAULT 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.

THE CASTING SHALL BE ANCHORED IN THE 8" (200 mm) DIAMETER CORE HOLE WITH TWO-COMPONENT EPOXY CONFORMING TO APPLICABLE

PORTIONS OF ARTICLE 1025. 01 OF THE STANDARD SPECIFICATIONS.

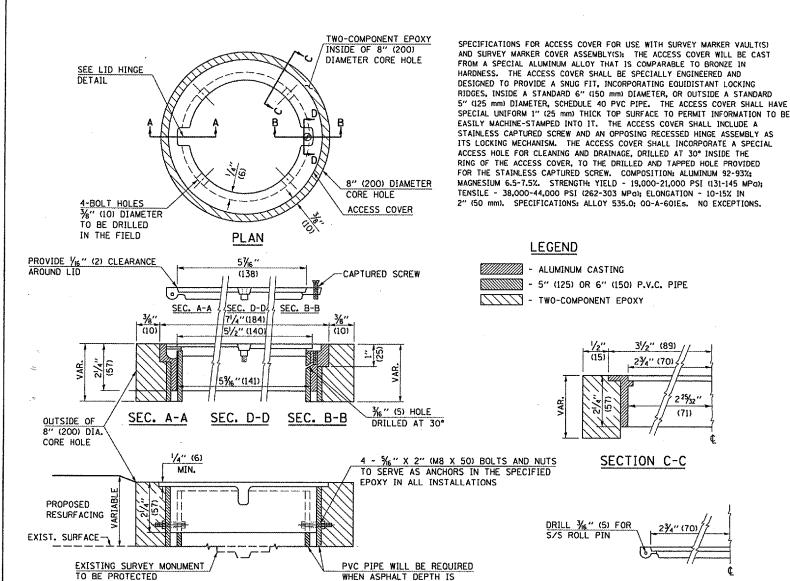
- 6. ALL SURVEY MARKER (VAULTS) SHALL BE PLACED 1/4" (6 mm) ± BELOW THE FINAL SURFACE.
- 7. THE 8" (200 mm) DIAMETER CORE HOLE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

BILL OF MATERIAL

ALUMINUM CASTING OF THE DIMENSIONS AND SPECIFICATIONS SHOWN OR OTHER SUBJECT TO ENGINEER'S APPROVAL OF SHOP DRAWINGS. 5" OR 6" (125 mm OR 150 mm) DIAMETER P.V.C. PIPE, SCHEDULE 40, ALUMINUM TABLET, STAMPED IN ACCORDANCE WITH STANDARD 667101. 3/8" X 48" (#15 X 1.2 m) RE-BAR, EPOXY AND FA-01/02 AGGREGATE.

DETAIL OF SURVEY MONUMENT COVER ASSEMBLY

TO BE INSTALLED WHEN AN EXISTING LAND SURVEY MONUMENT IS TO BE PRESERVED IN EXISTING RIGID AND COMPOSITE PAVEMENT



GENERAL NOTES

GREATER THAN 21/2" (65)

1. WORK SHALL NOT START ON THIS ITEM UNTIL THE FINAL LIFT OF SURFACE HAS BEEN COMPLETED.

ELEVATION

- 2. THE SURVEY MONUMENT COVER ASSEMBLY SHALL BE CENTERED ABOVE THE SURVEY MONUMENT TO BE PROTECTED.
- 3. MODIFICATION OF THE ALUMINUM CASTING SHALL BE DONE BY GRINDING OR SAWING WHEN HEIGHT REDUCTION IS REQUIRED.
- 4. ALL SURVEY MONUMENT COVER ASSEMBLIES SHALL BE PLACED 1/4" (6 mm) ± BELOW THE FINAL SURFACE.
- 5. ALUMINUM CASTING SHALL BE PLACED OVER A 5" (125 mm) P.V.C. PIPE OR INSIDE OF A 6" (150 mm) P.V.C. PIPE WHEN AN INCREASE IN HEIGHT IS REQUIRED.

6. THE CASTING SHALL BE ANCHORED IN THE 8" (200 mm) DIAMETER CORE HOLE WITH TWO-COMPONENT EPOXY CONFORMING TO APPLICABLE PORTIONS OF ARTICLE 1025.01 OF THE STANDARD SPECIFICATIONS.

(71)

LID HINGE DETAIL

- 7. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR SURVEY MONUMENT COVER ASSEMBLY WHICH PRICE SHALL INCLUDE ALL LABOR AND MATERIAL AS SPECIFIED INCLUDING CORING THE NEW PAVEMENT SURFACE AND EPOXY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 8. THE 8" (200 mm) 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. 4 EACH - 16" X 2" (MB X 50) BOLTS WITH NUTS, EPOXY, 5" OR 6" (125 mm OR 150 mm) DIAMETER P.V.C. PIPE, SCHEDULE 40 (WHEN REQUIRED).

		DATE	REVISIONS	
DESIGNED		2-28-91	NAME	DATE
CHECKED	J.H.M.	2-28-91	D.L.P.	10/90
CADD NO.	D~	I.04	K.A.G.	06/0

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.