

| | | |
|---------------------|--------------|----------|
| FBI ROUTE | SECTION | COUNTY |
| | 1E-0000(+50) | ST CLAIR |
| CONTRACT NO. 97500 | | ILLINOIS |
| FEDERAL AID PROJECT | | |

THOUVENOT, WADE & MOERCHEN, INC.
ENGINEERS • SURVEYORS • PLANNERS

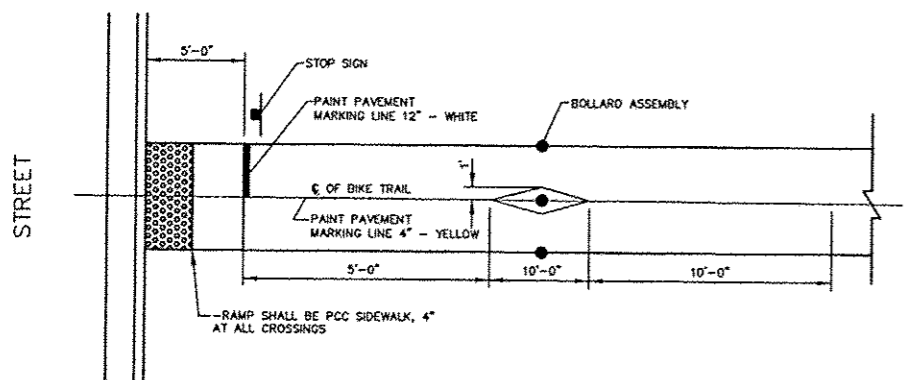


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SWANSEA, ILLINOIS 62226
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FAX (618) 656-4343
edwardsville@twm-inc.com
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ST. LOUIS, MISSOURI 63101
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stlouis@twm-inc.com

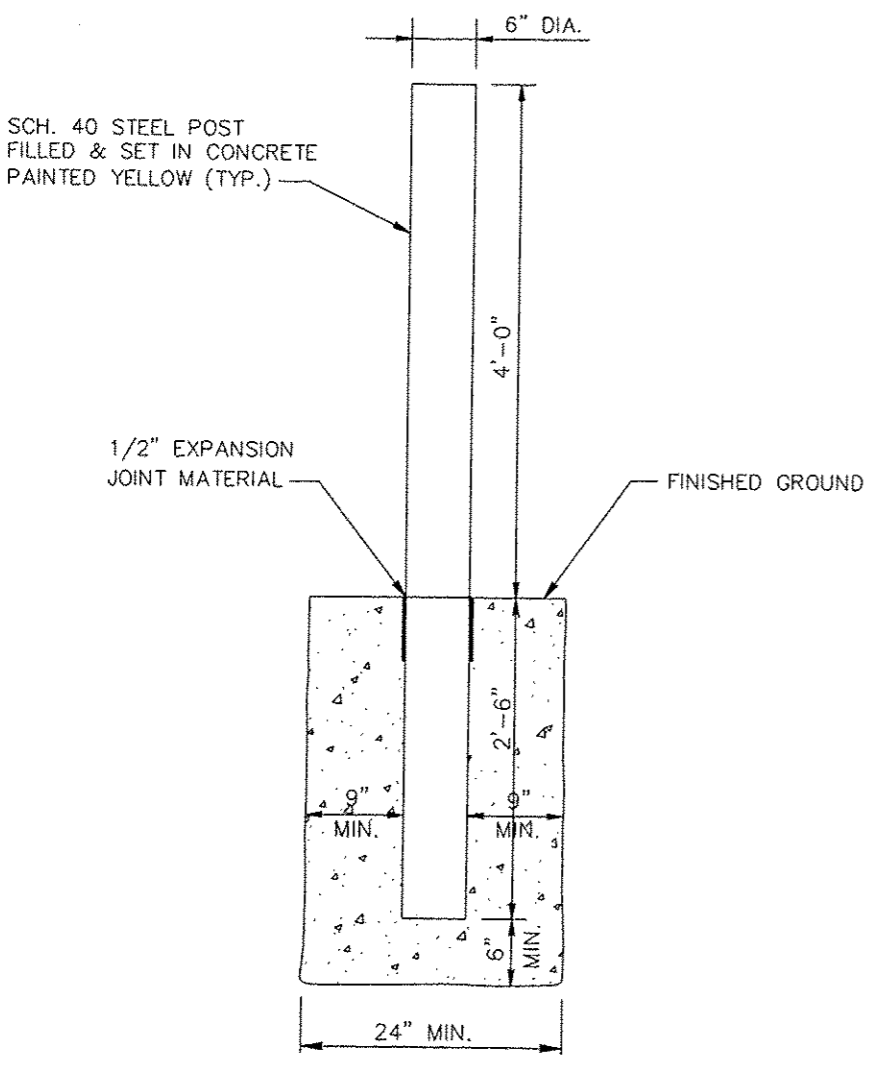
| PROFESSIONAL REGISTRATIONS | LICENSE NO. |
|-------------------------------------|-------------|
| ILLINOIS PROFESSIONAL DESIGN FIRM | 184-00120 |
| PROFESSIONAL ENGINEERING CORP. | 42-03370 |
| PROFESSIONAL STRUCTURAL ENGR. CORP. | 81-005202 |
| ILLINOIS PROF. LAND SURVEYING CORP. | 048-00020 |
| MISSOURI PROFESSIONAL ENGR. CORP. | MC 001528 |
| MISSOURI LAND SURVEYING CORP. | MC 000346 |

Signature: _____
Signature Date: _____
Expiration Date: _____

STATEMENT OF RESPONSIBILITY
I hereby confirm that the document herein to be authorized by my seal is restricted to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be utilized for any other part of the architectural, engineering or survey project.



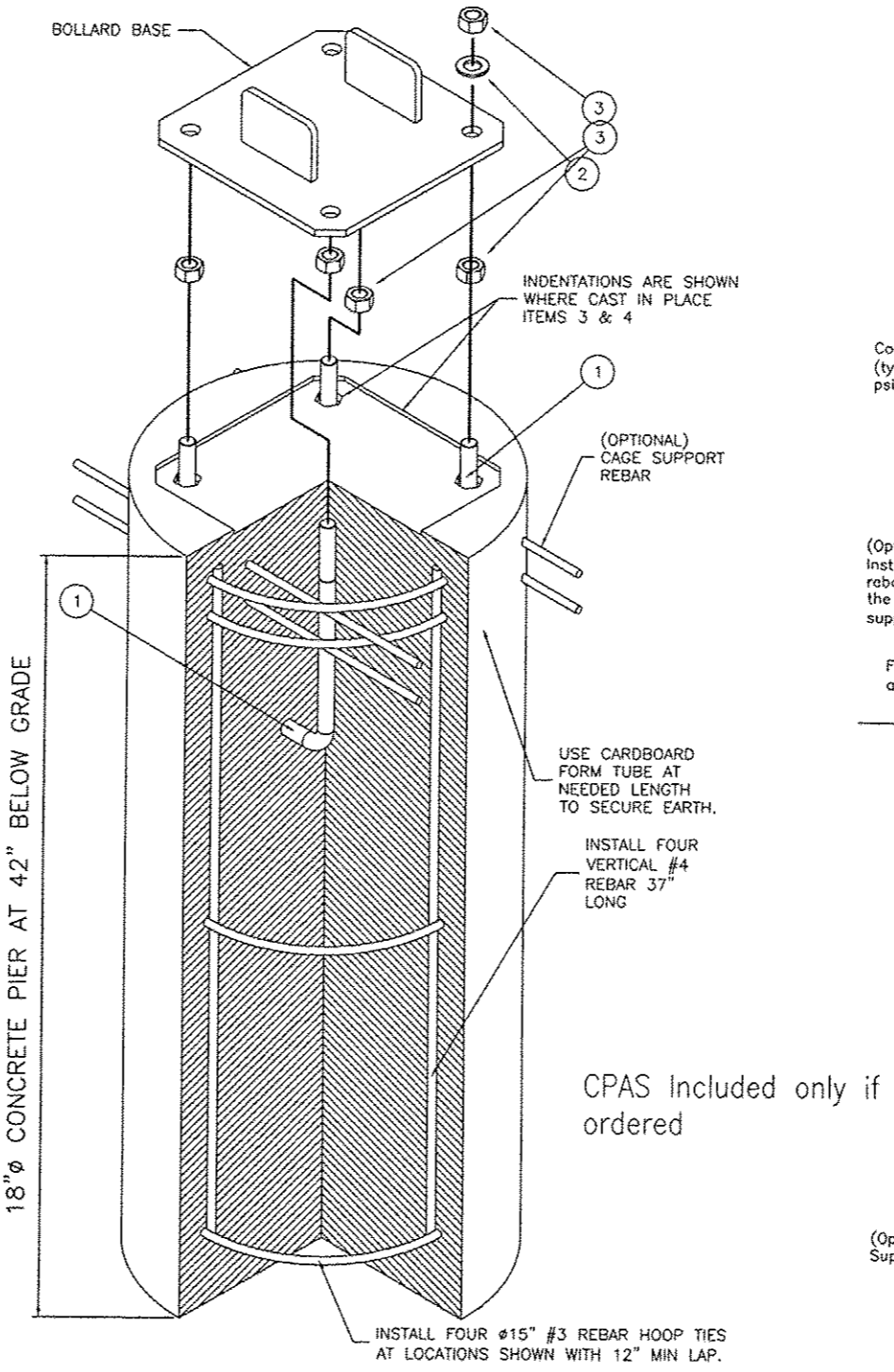
INTERSECTION DETAIL



STATIONARY PIPE BOLLARD DETAIL

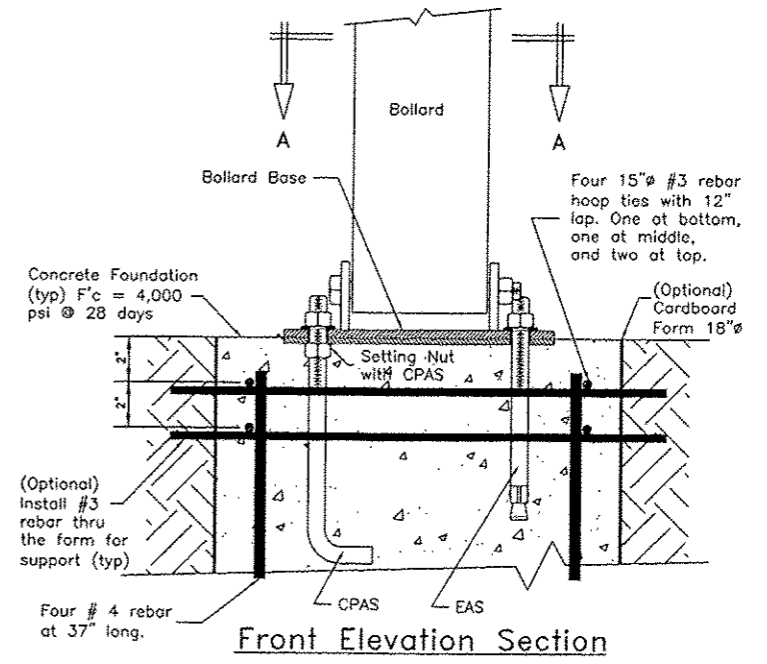
| BILL OF MATERIAL | | |
|------------------|--|------|
| ITEM PART # | DESCRIPTION | QTY. |
| * 9001 | CPAS KIT - INCLUDES THE FOLLOWING PART NUMBERS * | * |
| 1 0002 | Ø3/4" x 12" TYPE L ANCHOR BOLT-H.D.G. | 4 |
| 2 0007 | Ø3/4" TYPE A FLAT NARROW WASHER GALVANIZED STEEL | 4 |
| 3 0006 | Ø3/4" HEX NUT GALVANIZED STEEL | 8 |

NOTE: CONCRETE, FORM AND REBAR PROVIDED BY OTHERS

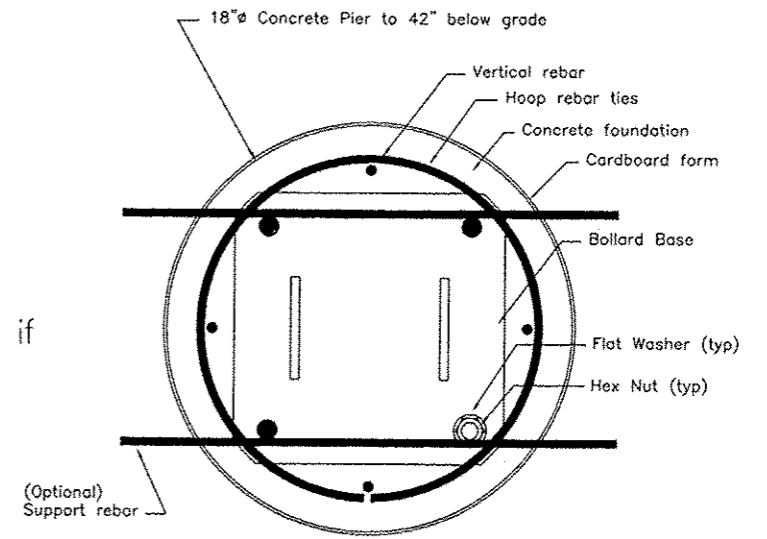


CONCRETE PIER ANCHOR SYSTEM (CPAS)

REMOVABLE BOLLARD BASE DETAIL



Front Elevation Section



Plan Section "A-A"

TITLE: SECTION 10-00032-00-BT
BOLLARD DETAILS

PROJECT: RICHLAND CREEK BIKE TRAIL
PHASE 2B
VILLAGE OF SWANSEA
ST CLAIR COUNTY, ILLINOIS

| REV. | DATE | DESCRIPTION |
|------|------|-------------|
| ▲ | | |
| ▲ | | |
| ▲ | | |

| | |
|---|--|
| DRAWN BY: JUV | SHEET |
| DESIGNED BY: JUV | 28 |
| CHECKED BY: MJK | OF 46 SHEETS |
| APPROVED BY: JUV | PROJECT DESCRIPTION |
| PROJECT NUMBER: M19100072A | |
| <input type="checkbox"/> ISSUED FOR REVIEW | <input checked="" type="checkbox"/> ISSUED FOR BIDDING |
| <input type="checkbox"/> ISSUED FOR CONSTR. | <input type="checkbox"/> RECORD DRAWING |