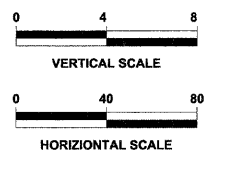
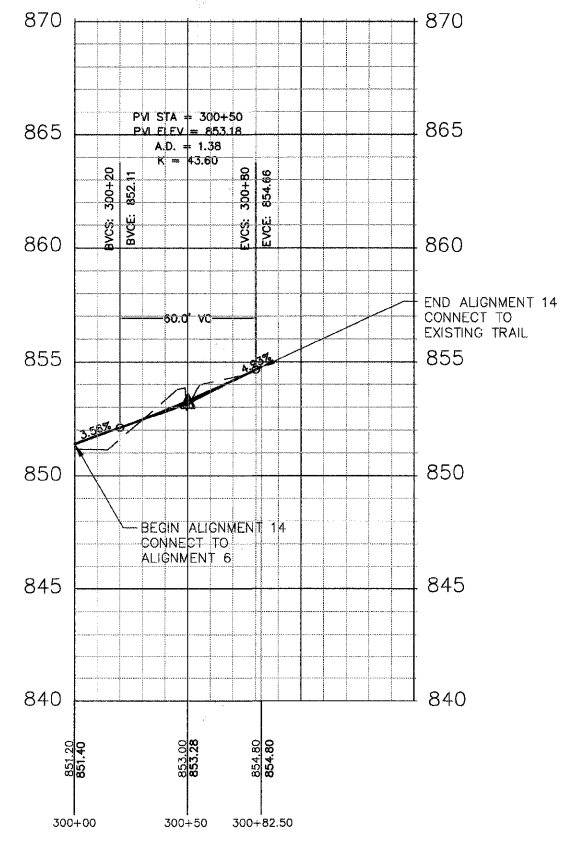
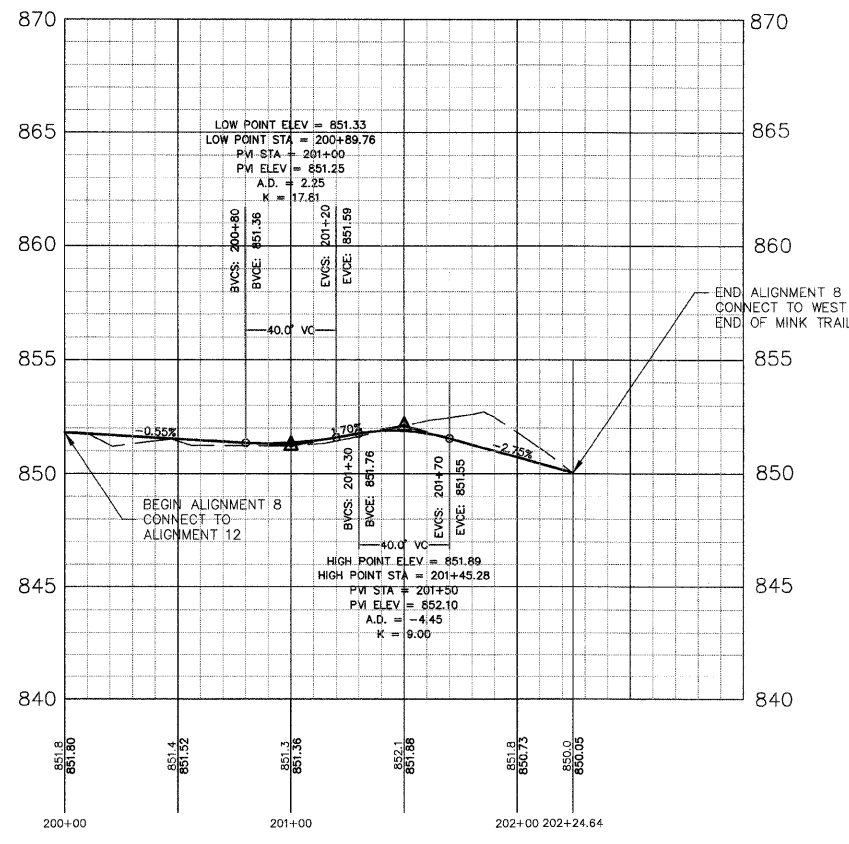


**PLAN LEGEND:**

- XXXXXX PROPOSED SPOT ELEVATIONS
- PROPOSED BIKE TRAIL
- PROPOSED AGGREGATE SHOULDER
- PROPERTY LINE

**CARY COMMUNITY TRAIL ALIGNMENT 8 - STA. 200+00 TO STA. 202+24.64**

**CARY COMMUNITY TRAIL ALIGNMENT 14 - STA. 300+00 TO STA. 300+82.50**



**DATUM CONVERSION FOR CARY COMMUNITY BIKE TRAIL TOPOGRAPHIC SURVEY**

THE DATUM USED FOR THE CARY COMMUNITY BIKE TRAIL TOPOGRAPHIC SURVEY PERFORMED BY HAEDER ENGINEERING, LLC DATED FEB. 2, 2008 ("THE TOPO") WAS BASED ON MH 46 ON PAGE 25 OF 36 ON THE MANHARD CONSULTING LTD. RECORD DRAWINGS FOR FOXFORD HILLS SUBDIVISION - PHASE 1 DATED MARCH 6, 2007. THIS DATUM WAS REQUESTED TO BE USED IN ORDER FOR "THE TOPO" TO STAY CONSISTENT WITH PROJECTS DONE IN THE AREA (FOXFORD HILLS). THE PUBLISHED RECORD ELEVATION FOR MH 46 WAS 861.45 FEET. THIS ELEVATION WAS USED TO ESTABLISH THE ELEVATIONS REPORTED BY "THE TOPO." IT IS UNKNOWN TO HAEDER ENGINEERING, LLC AS TO THE SOURCE BENCHMARK OR PUBLISHED DATUM THAT WAS ORIGINALLY USED FOR THE RECORD DRAWINGS OF FOXFORD HILLS SUBDIVISION PROJECT DUE TO THE FACT HAEDER ENGINEERING, LLC WAS NEVER SUPPLIED THIS INFORMATION. HOWEVER, HAEDER ENGINEERING, LLC DID CHECK INTO MH 46 ELEVATION WITH ITS RTK GPS UNIT THAT IS BASED ON NAD83 COMPANYS RTK GPS REFERENCE NETWORK USING NAVD 86 (GEOID 03) AS ITS REFERENCE DATUM. HAEDER ENGINEERING, LLC FOUND MH 46 ELEVATION (861.45) TO BE 0.11' HIGHER THAN THAT MEASURED WITH THE GPS EQUIPMENT (861.34) USING NAVD 86 (GEOID 03) AS THE REFERENCE DATUM. BASED ON THE GPS MEASURED HEIGHT CONVERSION TO NVD 28 ELEVATION FOR MH 46 USING NGS VERTCON CONVERSION WOULD BE 861.52 (0.07' HIGHER THAN PUBLISHED MH 46 ELEVATION). THEREFORE DUE TO VERTICAL ACCURACY OF THE GPS RTK MEASUREMENT (PLUS OR MINUS 0.07') IT IS UNKNOWN TO HAEDER ENGINEERING, LLC AS TO THE TRUE PUBLISHED DATUM USED FOR "THE TOPO" WITH OUT BEING SUPPLIED THE SOURCE BENCHMARK OR CONTROL INFORMATION THE FOXFORD HILLS SUBDIVISION WAS BUILT ON.

BASED ON HAEDER ENGINEERING, LLC GPS RTK MEASUREMENT OF MH 46 THE DATUM CONVERSION FOR "THE TOPO" IS AS FOLLOWS:

NAVD 86 (GEOID 03)-LOWER TOPO 0.11' (WITH AN ACCURACY OF PLUS OR MINUS 0.05')  
 NVD 28-RAISE TOPO 0.07' (WITH AN ACCURACY OF PLUS OR MINUS 0.05')

**BENCHMARKS**

**SOURCE BENCHMARK:**  
 DESCRIPTION: MANHOLE #46 FROM THE ASSULT RECORD DRAWINGS BY MANHARD CONSULTING LTD DATED 3-6-07 FOR THE FOXFORD HILLS SUBDIVISION-PHASE 1 IN THE VILLAGE OF CARY, ILLINOIS.  
 LOCATION: 120' NORTHEAST OF THE OAKMAN DRIVE AND PARKSTONE DRIVE INTERSECTION ON OAKMAN DRIVE.  
 ELEVATION: 861.45

**SITE BENCHMARKS**  
 NE CP #1  
 DESCRIPTION: IRON PIPE.  
 LOCATION: 100' EAST OF THE INTERSECTION OF 1ST AND THREE OAKS ROAD, 584' NORTH OF THE NORTH SIDE OF THREE OAKS ROAD, 31' NORTHEAST OF STORM MANHOLE, AND 25' NORTHWEST OF POWER POLE.  
 ELEVATION: 854.94

HE CP #2  
 DESCRIPTION: "PK" NAIL IN EDGE OF PAVEMENT.  
 LOCATION: 592' WEST OF THE INTERSECTION OF RANSON BRIDGE ROAD AND MINK TRAIL, 40' SOUTHWEST OF TREE 27 SOUTHEAST OF IRON ROD, AND 10' SOUTH OF CONCRETE WALK.  
 ELEVATION: 860.97

HE CP #3  
 DESCRIPTION: RAIL ROAD SPIKE.  
 LOCATION: NORTHWEST CORNER OF INTERSECTION OF CRYSTAL LAKE ROAD AND RANSON BRIDGE ROAD, 22' SOUTHWEST OF FENCE CORNER, 16' SOUTHWEST OF POWER POLE, AND 11' NORTHWEST OF PAVEMENT.  
 ELEVATION: 823.23



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|          |            |         |  |
|----------|------------|---------|--|
| DESIGNED | JWH        | REVISED |  |
| DRAWN    | LES        | REVISED |  |
| CHECKED  | JMM        | REVISED |  |
| DATE     | 10/02/2009 | REVISED |  |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CARY PARK DISTRICT**  
**CARY COMMUNITY TRAIL**

**TRAIL ALIGNMENT**  
**PLAN & PROFILE**  
**STA. 200+00 TO STA. 202+24.64**  
**STA. 300+00 TO STA. 300+82.50**

| SECTION               | COUNTY   | TOTAL SHEETS       | SHEET NO. |
|-----------------------|----------|--------------------|-----------|
| 06-P4001-00-BR        | MCHENRY  | 64                 | 19        |
| FED. ROAD DIST. NO. 1 | ILLINOIS | CONTRACT NO. 63333 |           |