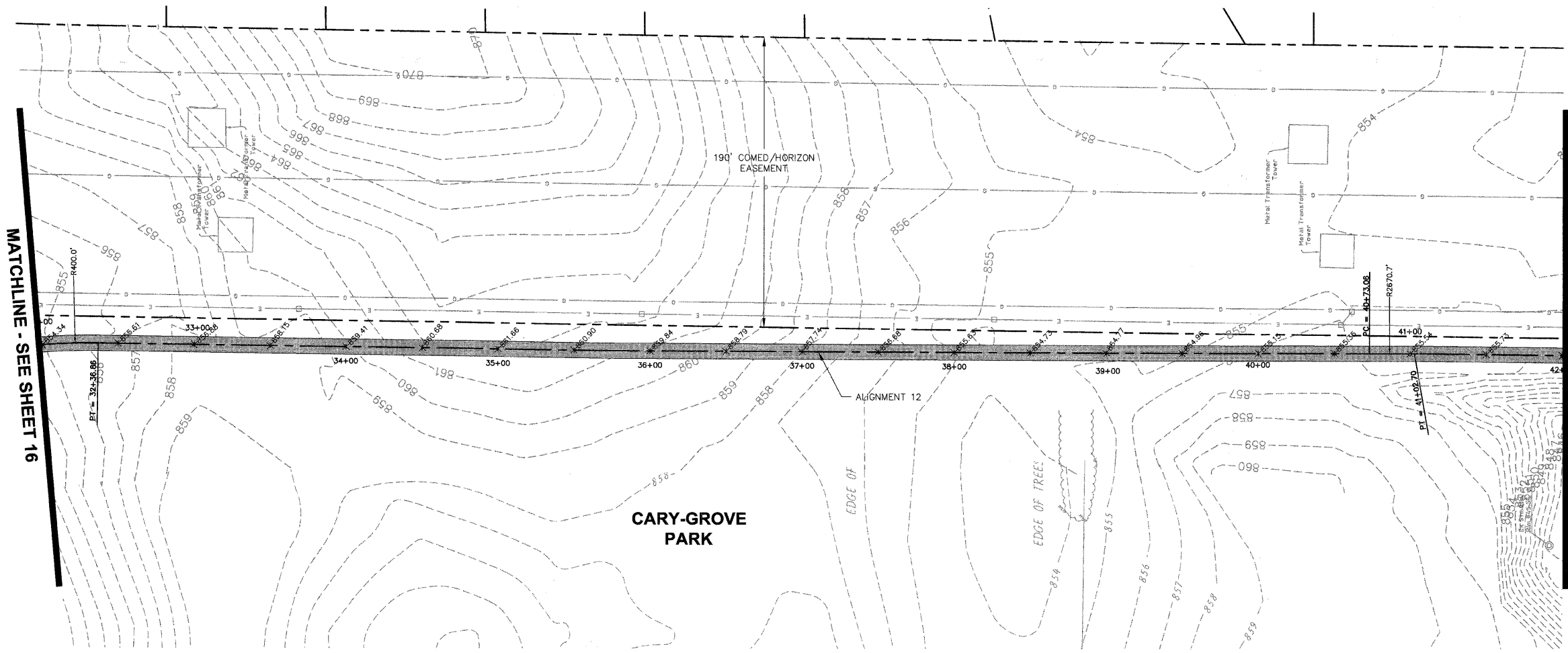
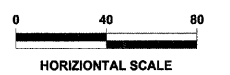
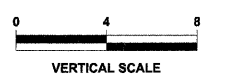
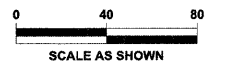
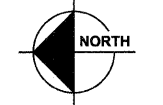


PLAN LEGEND:

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



CARY COMMUNITY TRAIL ALIGNMENT 12 - STA. 32+00 TO 42+00



DATUM CONVERSION FOR CARY COMMUNITY BIKE TRAIL TOPOGRAPHIC SURVEY

THE DATUM USED FOR THE CARY COMMUNITY BIKE TRAIL TOPOGRAPHIC SURVEY PERFORMED BY HAZGER ENGINEERING, LLC DATED FEB. 2, 2009 (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 8, 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 HAZGER 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 HAZGER ENGINEERING, LLC WAS NEVER SUPPLIED THIS INFORMATION, HOWEVER, HAZGER ENGINEERING, LLC CHECKED INTO MH 46 ELEVATION WITH ITS RTK GPS UNIT THAT IS BASED ON KARA COMPANY'S RTK CORRS REFERENCE NETWORK USING NAVD 83 (GEOID 03) AS ITS REFERENCE DATUM. HAZGER ENGINEERING, LLC FOUND MH 46 ELEVATION (861.45) TO BE 0.11' HIGHER THAN THAT MEASURED WITH THE GPS EQUIPMENT (861.34) USING NAVD 88 (GEOID 03) AS THE REFERENCE DATUM. BASED ON THE GPS MEASURED HEIGHT THE CONVERSION TO NAVD 23 ELEVATION FOR MH 46 USING NGS VERTCON CONVERSION WOULD BE 861.22 (0.07' HIGHER THAN PUBLISHED MH 46 ELEVATION). THEREFORE, DUE TO THE ACCURACY OF THE GPS RTK MEASUREMENT (PLUS OR MINUS 0.05') IT IS UNKNOWN TO HAZGER 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 HAZGER ENGINEERING, LLC GPS RTK MEASUREMENT OF MH 46 THE DATUM CONVERSION FOR "THE TOPO" IS AS FOLLOWS:
 NAVD 88 (GEOID 03) - LOWER TOPO 0.11' (WITH AN ACCURACY OF PLUS OR MINUS 0.05')
 NAVD 23 - RAISE TOPO 0.07' (WITH AN ACCURACY OF PLUS OR MINUS 0.05')

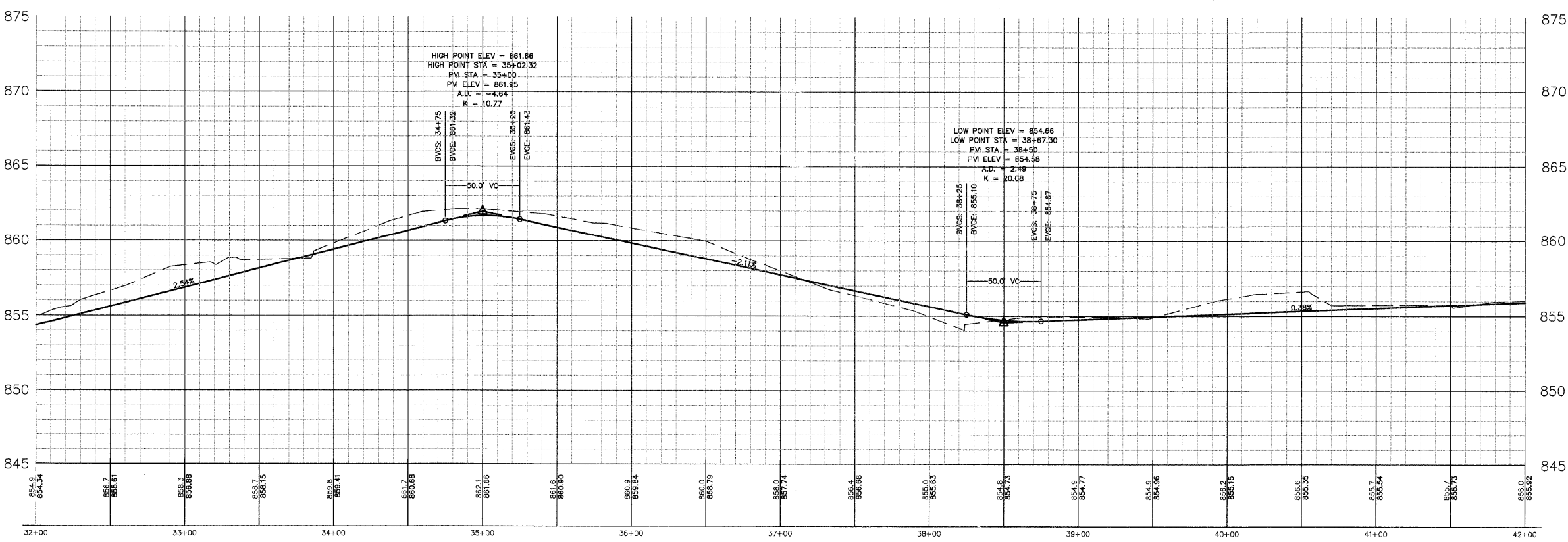
BENCHMARKS

SOURCE BENCHMARK
 DESCRIPTION: MANHOLE #46 FROM THE ASPHALT RECORD DRAWINGS BY MANHARD CONSULTING LTD DATED 3-8-07 FOR THE FOXFORD HILLS SUBDIVISION-PHASE 1 IN THE VILLAGE OF CARY.
 LOCATION: 120' NORTHEAST OF THE OAKMAN DRIVE AND PARKSONS DRIVE INTERSECTION ON OAKMAN DRIVE.
 ELEVATION: 861.45

SITE BENCHMARKS
 HE CP #100
 DESCRIPTION: IRON PIPE.
 LOCATION: 1000' EAST OF THE INTERSECTION OF 1ST AND THREE OAKS ROAD, 864' NORTH OF THE NORTH SIDE OF THREE OAKS ROAD, 31' NORTHEAST OF STORM MANHOLE, AND 26' NORTHWEST OF POWER POLE.
 ELEVATION: 854.94

HE CP #1
 DESCRIPTION: "TM" NAIL IN EDGE OF PAVEMENT.
 LOCATION: 592' WEST OF THE INTERSECTION OF RAWSON BRIDGE ROAD AND WALK TRAIL, 45' SOUTHWEST OF TREE 27 SOUTHWEST OF IRON ROD, AND 10' SOUTH OF CONCRETE WALK.
 ELEVATION: 860.97

HE CP #6
 DESCRIPTION: RAIL ROAD SPIKE.
 LOCATION: NORTHWEST CORNER OF INTERSECTION OF CRYSTAL LAKE ROAD AND RAWSON BRIDGE ROAD, 22' SOUTHWEST OF FENCE CORNER, 18' SOUTHWEST OF POWER POLE, AND 11' NORTHWEST OF PAVEMENT.
 ELEVATION: 853.23



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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. 32+00 TO STA. 42+00

| | | | |
|-----------------------|----------|--------------------|-----------|
| SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 06-P4001-00-BR | MCHENRY | 64 | 17 |
| FED. ROAD DIST. NO. 1 | ILLINOIS | CONTRACT NO. 63333 | |

