Plan Reading – Exercise Answers

EXERCISE #1

- 1. 21,100 21,000 = 100 feet
- 2. 21,030 21,000 = 30 feet
- 3. 21,100 21,030 = 70 feet
- 4. 21,100 + 50 = 21, 150 = Sta. 211+50
- 5. 21,200 50 = 21,150 = Sta. 211+50
- 6. 21,250 21,150 = 100 feet

EXERCISE #2

- 1. 1,500 1,410 = 90 feet
- 2. 8,520 8,010 = 510 feet
- 3. 5,124.8 4,876.2 = 248.6 feet

EXERCISE #3

If you are walking along the C of a project, reading the station numbers on the stakes, and these numbers are increasing as you go, there is a good chance you are walking toward the **EAST** or **NORTH**.

EXERCISE #4

- 1. Sta. 14+00, 40 ft. left of
- 2. 2. Sta. 15+25 on
- 3. East; North
- 4. 1,588.6 1,500.0 = 88.6 feet
- 5. back of
- 6. 1,600 1,350 = 250 feet

EXERCISE #5

- 1. BRO-7076 (18)
- 2. 7+00.00
- 3. 29+00.00
- 4. (a.) 2,200.00 feet (b.) 0.417 miles
- 5. Crushed rock
- 6. 2", 25'
- 7. 2,012.8 feet
- 8. 1-Grading, 4-Culverts, 6-Bridges, 7-Guardrail, 10-General
- 9. Sta. 16+25.00
- 10. Sec. 35 & Sec. 36

EXERCISE #6

- 1. a.) Spike in power pole
 - b.) BM #3
 - c.) 1458.27'
 - d.) 81' Left
- 2. a.) Twin Span Girder & Floorbeam
 - b.) 120' 0"
 - c.) 20' 0''
 - d.) Remove
- 3. 8.7'
- 4. D.A. = 4 acres
- 5. Earth dike, elevation 1460.0'

EXERCISE #7

- 1. 47BD
- 2. 4,000 PSI
- 3. ASTM A615, Grade 60
- 4. 1,260 Tons
- 5. 2,780 Lbs.
- 6. 16+25.00
- 7. 185' 2''
- 8. 28' 0''
- 9. 3 Spans
- 10. 1' 2''
- 11. Turkey Creek
- 12. 303.8 Square Miles
- 13. 100 Years
- 14. 42 Piles
- 15. 20 & 45 Tons/Pile

EXERCISE #9

- 1. Title Sheet
- 2. Summary of Quantities Sheet
- 3. Plan View
- 4. Profile View
- 5. 150 feet
- 6. Plan/Profile Sheet
- 7. Sheet 2-N2, General Information
- 8. South or West
- 9. 36 square miles
- 10. Sheet R1, ROW Data

EXERCISE #8

- 1. Refer to Parcel (Tract) #1
 - a. Stewart Revocable Trust, JL & JM
 - b. Part of SE ¼ Sec. 35, T8N, R1E
 - c. 1.94 acres
 - d. 0.00 acres
 - e. 0.30 acres
- 2. 3.78 acres
- 3. Permanent Easements 0.00 acres, Temporary Easements – 0.64 acres
- 4. a. Construction staging area
 - b. Stewart Revocable Trust, JL & JM
 - c. 0.23 acres