

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|-----------|--------------|-----------|
| 808 | (28X)TS-3 | CHAMPAIGN | 14 | 10 |

DETECTOR LOOP DATA

| Loop | Size | Turns | Mode | Delay / Ext. | Loop Output | Veh. Phase |
|------|----------|-------|----------|--------------|-------------|------------|
| A1-2 | 6' x 6' | 4 | PRESENCE | 2 / | VD 7 | 7 |
| A3 | 6' x 6' | 4 | PRESENCE | | PD 7 | 7 |
| A4 | 6' x 6' | 4 | PRESENCE | | SD 3 | 4 |
| A5 | 6' x 6' | 4 | PRESENCE | | SD 4 | 4 |
| A6-7 | 6' x 6' | 5 | PRESENCE | / 5 | VD 4 | 4 |
| B1-2 | 6' x 6' | 4 | PRESENCE | 2 / | VD 3 | 3 |
| B3 | 6' x 6' | 4 | PRESENCE | | PD 3 | 3 |
| B4 | 6' x 6' | 4 | PRESENCE | | SD 7 | 8 |
| B5 | 6' x 6' | 4 | PRESENCE | | SD 8 | 8 |
| B6-7 | 6' x 6' | 5 | PRESENCE | / 5 | VD 8 | 8 |
| C1-2 | 6' x 6' | 5 | PRESENCE | 2 / | VD 5 | 5 |
| C3 | 6' x 6' | 5 | PRESENCE | | PD 5 | 5 |
| C4 | 6' x 6' | 5 | PRESENCE | | SD 1 | 2 |
| C5 | 6' x 6' | 5 | PRESENCE | | SD 2 | 2 |
| C6 | 6' x 6' | 5 | PRESENCE | 10 / | VD 2 | 2 |
| C7-8 | 6' x 6' | 5 | PRESENCE | / 5 | VD 2 | 2 |
| D1-2 | 6' x 6' | 3 | PRESENCE | 2 / | VD 1 | 1 |
| D3 | 6' x 6' | 3 | PRESENCE | | PD 1 | 1 |
| D4 | 6' x 6' | 3 | PRESENCE | | SD 5 | 6 |
| D5 | 6' x 6' | 3 | PRESENCE | | SD 6 | 6 |
| D6 | 6' x 10' | 3 | PRESENCE | 10 / | VD 6 | 6 |
| D7-8 | 6' x 6' | 5 | PRESENCE | / 5 | VD 6 | 6 |

GENERAL NOTES

1. THE FOLLOWING SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE: (A2, A3), (B2, B3), (C2, C3), (C4, C5), (D3, D4) - EACH MAST ARM MOUNTED SIGNAL HEAD SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE MAST POLE HANDHOLE TO THE SIGNAL HEAD.
2. THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND TRAFFIC CONTROLLER WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. POST MOUNTED SIGNALS SHALL BE INSTALLED SO THAT NO PART OF THE SIGNAL HEAD IS WITHIN 2 FT. OF THE FACE OF CURB.
4. ALL MAST ARM POLES SHALL BE A MINIMUM OF 6 FT. FROM THE CENTER OF THE POLE TO THE FACE OF CURB (ON THE MAST ARM SIDE) OR AS SHOWN ON THE PLANS.
5. ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
6. THE BASE FOR A TRAFFIC SIGNAL POST SHALL BE SITUATED SUCH THAT THE HANDHOLE IS LOCATED ON A SIDE AWAY FROM A TRAVELED LANE.
7. PEDESTRIAN PUSHBUTTON SIGNAL SIGNS SHALL BE MOUNTED ABOVE THE APPROPRIATE PEDESTRIAN PUSHBUTTON.
8. THE ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE BACKPANEL OF THE CONTROLLER CABINET.

LOOPS SHALL BE WIRED TO COMMON AMPLIFIERS AS LISTED ABOVE.

THE FOLLOWING LOOP SHALL SERVE AS PRESENCE DETECTORS AND TRAFFIC COUNT LOOPS: A3, A4, A5, B3, B4, B5, C3, C4, C5, D3, D4, D5, D6

22 AMPLIFIERS TOTAL REQUIRED

RAILROAD PRE-EMPTION SEQUENCE

UPON ACTUATION OF THE RAILROAD PRE-EMPTION, THE PHASES IN SERVICE SHALL TERMINATE TO ALL WAY RED, THE ASSOCIATED PEDESTRIAN PHASES SHALL BE ABBREVIATED TO THE YELLOW CHANGE INTERVAL AND TIMED CONCURRENTLY. PEDESTRIAN INDICATIONS SHALL STAY IN SOLID DON'T WALK DURING THE PRE-EMPTION. UPON COMPLETION OF THE PRE-EMPTION, THE CONTROLLER SHALL RESUME NORMAL OPERATIONS.

Suggested Timings

| PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Min. Grn. | 7 | 15 | 7 | 15 | 7 | 15 | 7 | 15 |
| add sec./act. | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Max Init Grn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green | 15 | 55 | 15 | 45 | 15 | 55 | 15 | 45 |
| Passage | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 |
| T.B.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| T.T.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Min. Gap | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Amber Clear | 3.0 | 3.5 | 3.0 | 3.5 | 3.0 | 3.5 | 3.0 | 3.5 |
| Red Clear | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Walk | | 4 | | 4 | | 4 | | 4 |
| Ped Clear | | 22 | | 26 | | 22 | | 28 |

Timing Plan 1/1/1 Mon-Fri 9:00-1600
 Mon-Fri 18:00-19:00
 Sat 7:00-19:00
 Timing Plan 2/1/1 Mon-Fri 7:00-9:00
 Timing Plan 3/1/1 Mon-Fri 16:00-18:00
 Coordination Mode=Permissive-Yield
 Correction=Shortway

| | | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|
| Timing Plan 1/1/1 | 13 | 31 | 13 | 28 | 13 | 31 | 13 | 28 |
| -Phase Mode | 0 | 1 | 0 | 3 | 0 | 1 | 0 | 3 |
| Timing Plan 2/1/1 | 13 | 31 | 13 | 28 | 13 | 31 | 13 | 28 |
| -Phase Mode | 0 | 1 | 0 | 3 | 0 | 1 | 0 | 3 |
| Timing Plan 3/1/1 | 13 | 41 | 13 | 28 | 15 | 39 | 16 | 25 |
| -Phase Mode | 0 | 1 | 0 | 3 | 0 | 1 | 0 | 3 |

Cycle=85s, offset=28s

Cycle=85s, offset=28s

Cycle=95s, offset=62s

All vehicle detectors shall be set for non-locking operation

All active detector channels shall have 30 min. set into max-call field of detector diagnostics.