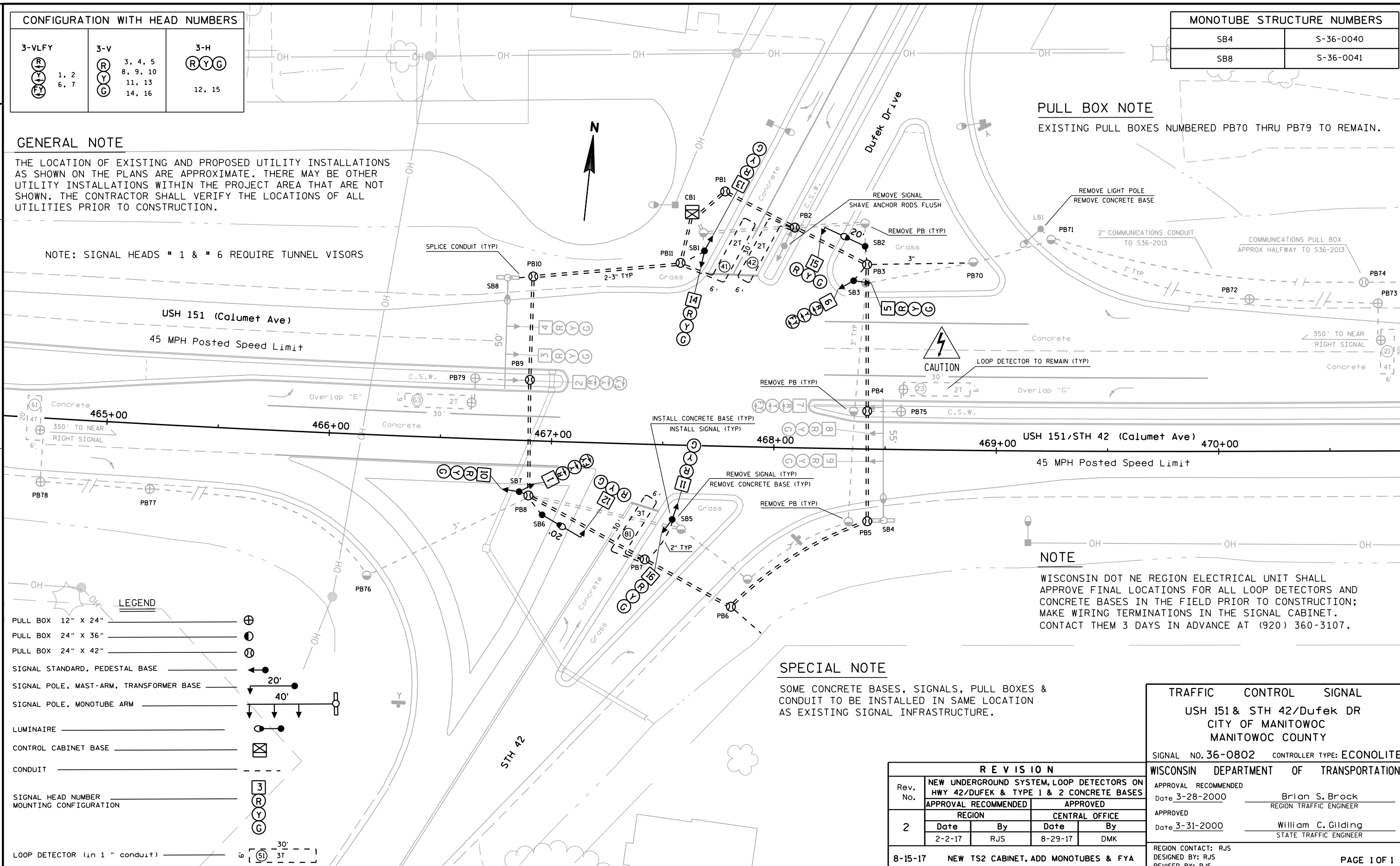


| MONOTUBE STRUCTURE NUMBERS |           |
|----------------------------|-----------|
| SB4                        | S-36-0040 |
| SB8                        | S-36-0041 |

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

NOTE: SIGNAL HEADS # 1 & # 6 REQUIRE TUNNEL VISORS



| R E V I S I O N |                                                                                    |     |                |     |
|-----------------|------------------------------------------------------------------------------------|-----|----------------|-----|
| Rev.<br>No.     | NEW UNDERGROUND SYSTEM, LOOP DETECTORS ON HWY 42/DUFEK & TYPE 1 & 2 CONCRETE BASES |     |                |     |
|                 | APPROVAL RECOMMENDED                                                               |     | APPROVED       |     |
| 2               | REGION                                                                             |     | CENTRAL OFFICE |     |
|                 | Date                                                                               | By  | Date           | By  |
|                 | 2-2-17                                                                             | RJS | 8-29-17        | DMK |

TRAFFIC CONTROL SIGNAL

USH 151 & STH 42/Dufek DR  
CITY OF MANITOWOC  
MANITOWOC COUNTY

SIGNAL NO. 36-802 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

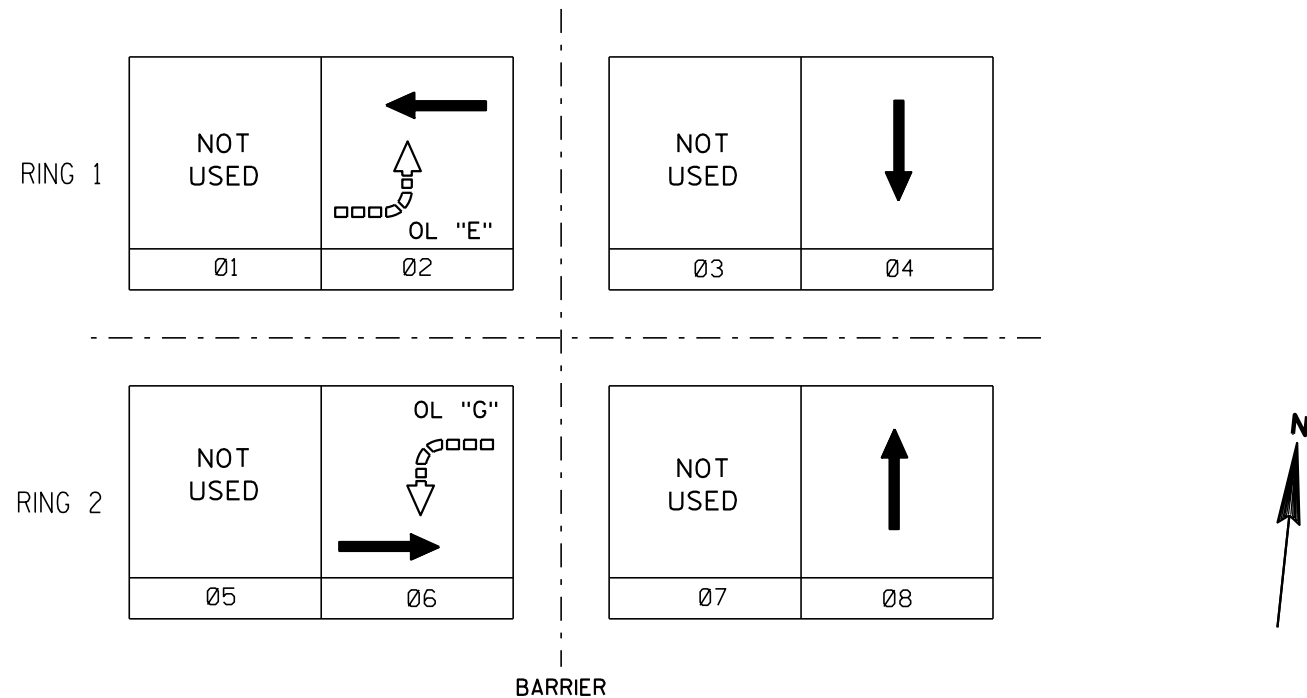
APPROVAL RECOMMENDED

Date 3-28-2000 Brian S. Brock  
REGIONAL TRAFFIC ENGINEER

APPROVED

Date 3-31-2000 William C. Gilding  
STATE TRAFFIC ENGINEER

|     | HEAD NUMBERS | FLASH |
|-----|--------------|-------|
| Ø1  | 6, 7         | R     |
| Ø2  | 3, 4, 5      | R     |
| Ø3  |              |       |
| Ø4  | 11, 12, 13   | R     |
| Ø5  | 1, 2         | R     |
| Ø6  | 8, 9, 10     | R     |
| Ø7  |              |       |
| Ø8  | 14, 15, 16   | R     |
| Ø2P |              |       |
| Ø4P |              |       |
| Ø6P |              |       |
| Ø8P |              |       |
| OLE | 6, 7         | -     |
| OLF |              |       |
| OLG | 1, 2         | -     |
| OLH |              |       |



| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL | PHASE ACTIVE |
|--------------|---------------|------------------|--------------|--------------|
| 1            |               |                  |              |              |
| 2            |               |                  | MIN          | x            |
| 3            |               |                  |              |              |
| 4            |               | 8                |              | x            |
| 5            |               |                  |              |              |
| 6            |               |                  | MIN          | x            |
| 7            |               |                  |              |              |
| 8            |               | 4                |              | x            |

| TYPE OF INTERCONNECT/COMMUNICATION |   |
|------------------------------------|---|
| CELL MODEM                         | x |
| CLOSED LOOP                        |   |
| TWISTED PAIR*                      |   |
| FIBER OPTIC*                       |   |
| FIBER OPTIC (ETHERNET)             |   |
| RADIO                              |   |

| TYPE OF COORDINATION               |         |
|------------------------------------|---------|
| NONE                               |         |
| TBC                                | x       |
| TRAFFIC RESPONSIVE                 |         |
| ADAPTIVE                           |         |
| *LOCATION OF MASTER CONTROLLER NO: | S-000   |
| SIGNAL SYSTEM #:                   | SS-0000 |

| TYPE OF LIGHTING                 |   |
|----------------------------------|---|
| BY OTHER AGENCY                  |   |
| IN TRAFFIC SIGNAL CABINET        | x |
| IN SEPARATE DOT LIGHTING CABINET |   |

| TYPE OF PRE-EMPT  |   |
|-------------------|---|
| NONE              | x |
| RAILROAD          |   |
| EMERGENCY VEHICLE |   |
| GTT               |   |
| TOMAR             |   |
| HARDWIRE          |   |
| 3M                |   |
| LIFT BRIDGE       |   |
| QUEUE DETECTOR    |   |

DETECTOR LOGIC

| RACK # 1                |   |     |     |   |     |    |     |
|-------------------------|---|-----|-----|---|-----|----|-----|
| DETECTOR CHANNEL        | 3 | 1   | 7   | 5 | 11  | 9  | 15  |
| PLAN LOOP DETECTOR *(S) |   | 21  | 41  |   | 61  |    | 81  |
| ASSIGNED PHASE          |   | 2   | 4   |   | 6   |    | 8   |
| OPERATION MODE          |   | Veh | Veh |   | Veh |    | Veh |
| SWITCH TO PHASE         |   |     |     |   |     |    |     |
| EXTEND                  |   |     |     |   |     |    |     |
| DELAY                   |   |     | Yes |   |     |    |     |
| DETECTOR CHANNEL        | 4 | 2   | 8   | 6 | 12  | 10 | 16  |
| PLAN LOOP DETECTOR *(S) |   | 23  | 42  |   | 63  |    |     |
| ASSIGNED PHASE          |   | 2   | 4   |   | 6   |    |     |
| OPERATION MODE          |   | Veh | Veh |   | Veh |    |     |
| SWITCH TO PHASE         |   |     |     |   |     |    |     |
| EXTEND                  |   |     |     |   |     |    |     |
| DELAY                   |   |     |     |   |     |    |     |

| RACK # 2                |    |    |    |    |    |    |    |
|-------------------------|----|----|----|----|----|----|----|
| DETECTOR CHANNEL        | 19 | 17 | 23 | 21 | 27 | 25 | 31 |
| PLAN LOOP DETECTOR *(S) |    |    |    |    |    |    |    |
| ASSIGNED PHASE          |    |    |    |    |    |    |    |
| OPERATION MODE          |    |    |    |    |    |    |    |
| SWITCH TO PHASE         |    |    |    |    |    |    |    |
| EXTEND                  |    |    |    |    |    |    |    |
| DELAY                   |    |    |    |    |    |    |    |
| DETECTOR CHANNEL        | 20 | 18 | 24 | 22 | 28 | 26 | 32 |
| PLAN LOOP DETECTOR *(S) |    |    |    |    |    |    |    |
| ASSIGNED PHASE          |    |    |    |    |    |    |    |
| OPERATION MODE          |    |    |    |    |    |    |    |
| SWITCH TO PHASE         |    |    |    |    |    |    |    |
| EXTEND                  |    |    |    |    |    |    |    |
| DELAY                   |    |    |    |    |    |    |    |

GENERAL NOTES:

1. PROVIDE FOR HAND CONTROL.

Revision 2

|                                                                    |                       |
|--------------------------------------------------------------------|-----------------------|
| USH 151 & STH 42/Dufek DR<br>CITY OF MANITOWOC<br>MANITOWOC COUNTY |                       |
| SIGNAL NO. 36-0802                                                 |                       |
| CABINET: TS2                                                       | CONTROLLER: ECONOLITE |
| DATE: 8-29-2017                                                    | PAGE NO. 2 OF 2       |