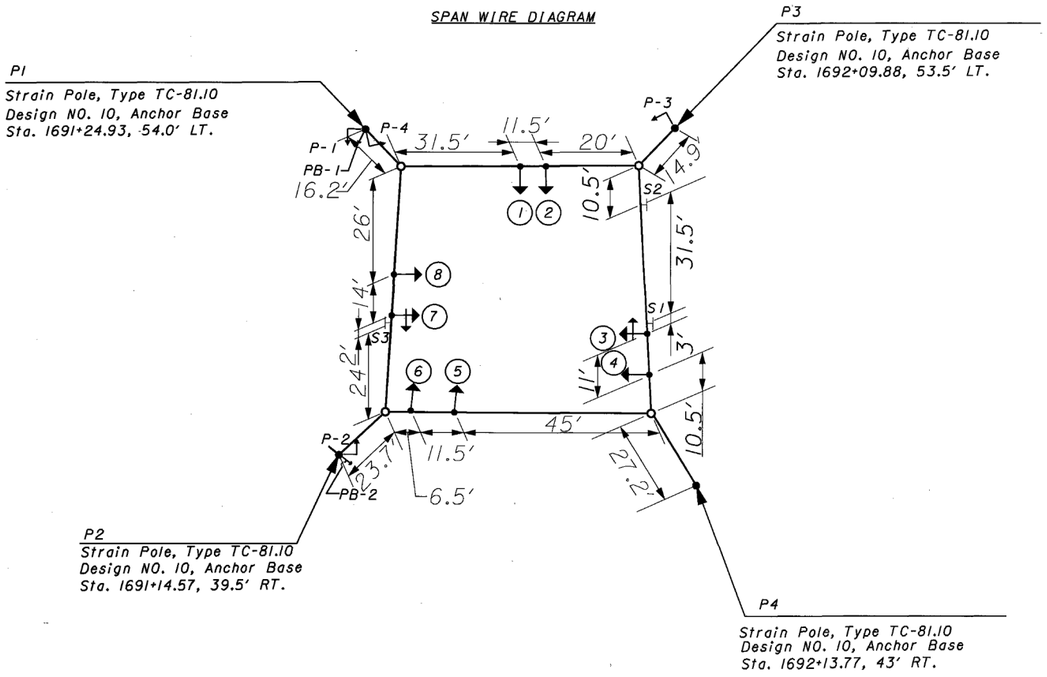
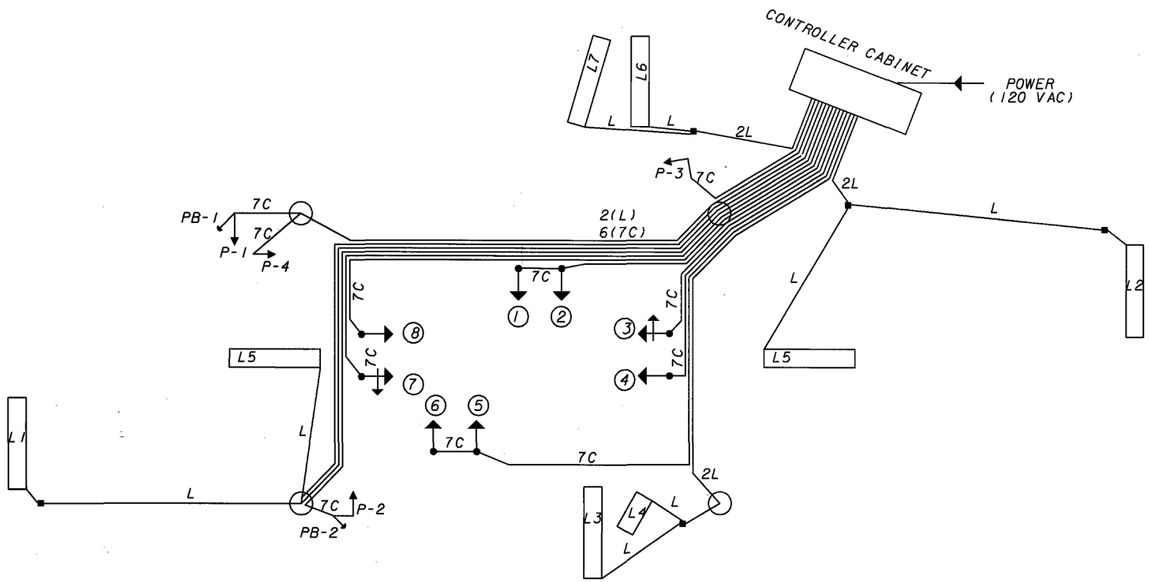
## SPAN WIRE DIAGRAM




| ITEM NUMBER | QUANTITY | UNIT | ITEM DESCRIPTON |
|---|---|---|---|
| | | | |
| 625 | 537 | FT | CONDUIT, 2", 725.04 |
| 625 | 537 | FT | TRENCH, 24" DEEP |
| 625 | 6 | EACH | PULL BOX, 725.08, 18" |
| 625 | 1 | EACH | PULL BOX, 725.08, 24" |
| 625 | 5 | EACH | GROUND ROD |
| 625 | 1 | EACH | POWER SERVICE |
| | | | |
| 630 | 3 | EACH | SIGN HANGER ASSEMBLY, SPAN WIRE |
| 630 | 22.5 | SQ FT | SIGN, FLAT SHEET |
| | | | |
| 632 | 6 | EACH | VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, 3 SECTION, 12" LENS, 1-WAY, AS PER PLAN |
| 632 | 2 | EACH | VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, 5 SECTION, 12" LENS, 1-WAY, AS PER PLAN |
| 632 | 4 | EACH | PEDESTRIAN SIGNAL HEAD WITH LED LAMP UNITS, TYPE A2, AS PER PLAN |
| 632 | 8 | EACH | COVERING OF VEHICULAR SIGNAL HEAD |
| 632 | 4 | EACH | COVERING OF PEDESTRIAN SIGNAL HEAD |
| 632 | 2 | EACH | PEDESTRIAN PUSHBUTTON |
| 632 | 8 | EACH | DETECTOR LOOP |
| 632 | 6 | EACH | LOOP DETECTOR UNIT, 2 CHANNEL |
| 632 | 345 | FT | MESSENGER WIRE, 7 STRAND, 3/8" DIAMETER WITH ACCESSORIES |
| 632 | 1482 | FT | SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG |
| 632 | 4 | EACH | STRAIN POLE FOUNDATION |
| 632 | 1508 | FT | LOOP DETECTOR LEAD-IN CABLE |
| 632 | 80 | FT | POWER CABLE, 2 CONDUCTOR, NO. 6 AWG |
| 632 | 4 | EACH | STRAIN POLE, TYPE TC-81.10, DESIGN 10 |
| 632 | 1 | EACH | REMOVAL OF TRAFFIC SIGNAL INSTALLATION AND DISPOSAL |
| | | | |
| 633 | 1 | EACH | CONTROLLER UNIT, TYPE 170E, WITH CABINET, TYPE 332 |
| 633 | 1 | EACH | CABINET RISER |
| 633 | 1 | EACH | CABINET FOUNDATION, AS PER PLAN |
| 633 | 1 | EACH | CONTROLLER WORK PAD, AS PER PLAN |




CALCULATED SRD
CHECKED JAA

# PROPOSED SIGNAL DETAILS
# USR 50 AND WALTON CREEK ROAD

HAM-50-31.95

135
189

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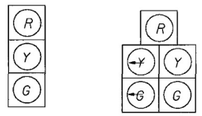
## PROPOSED SIGNAL HEAD ASSEMBLY



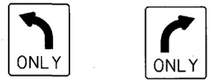

NOTE: ALL SIGNAL HEADS SHALL BE 12"

## PEDESTRIAN SIGNAL HEADS




Type A2 P1,P2, P3,P4 — R10-4 Mount Above PB1,PB2 — R9-3a-18 CW-1, CW-2 CW-3, CW-4

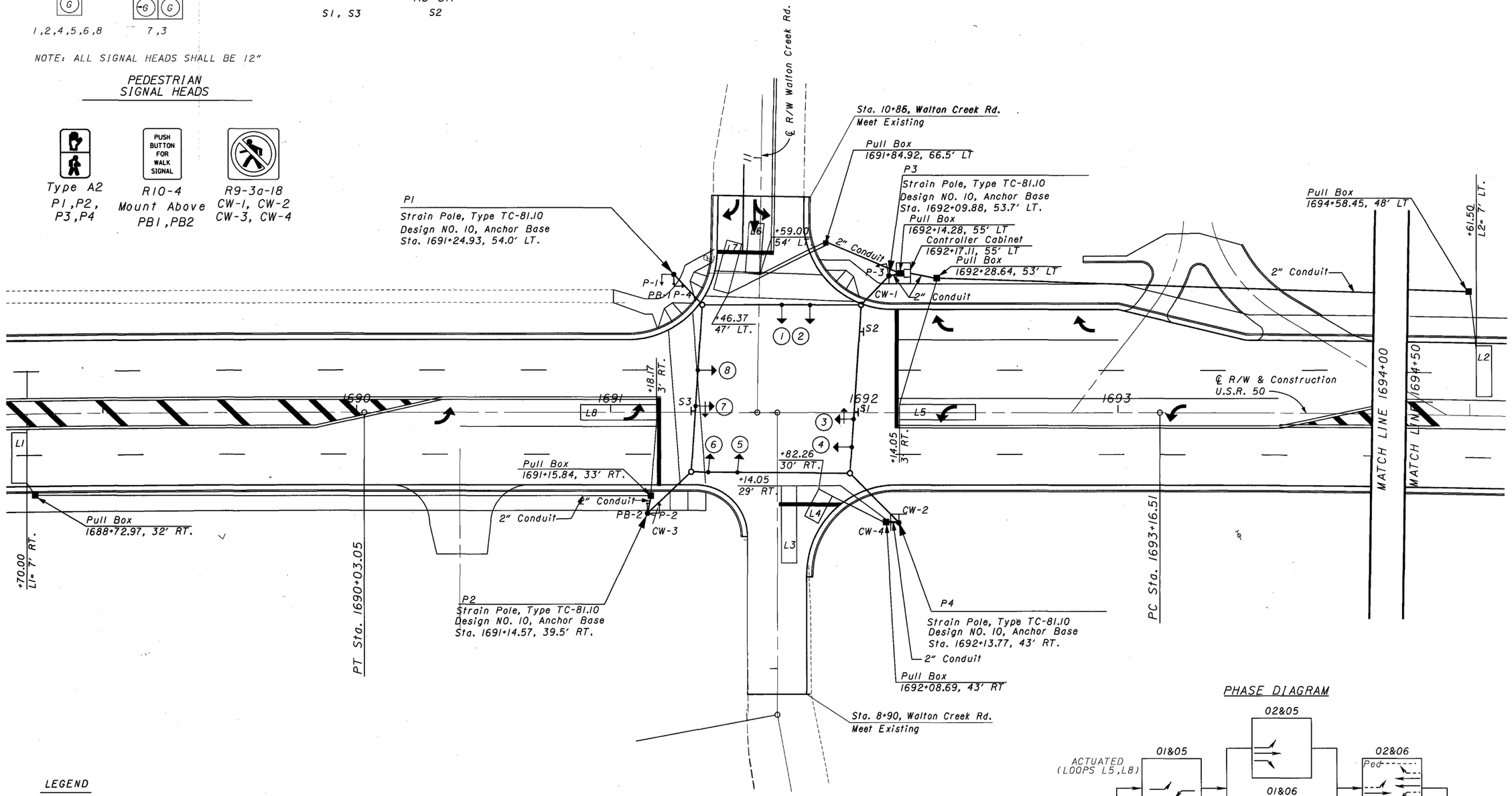
## SIGNING



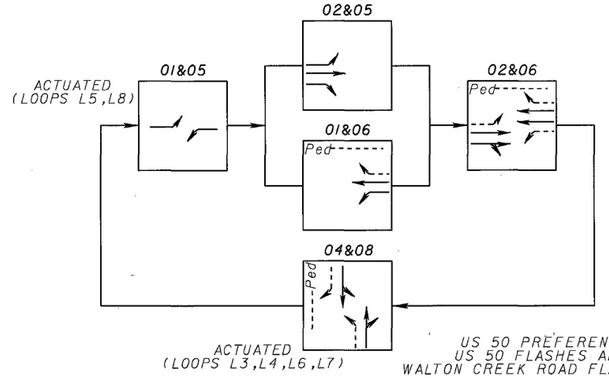

R3-5L S1, S3 — R3-5R S2

Note:

The Power Source For The Existing Signal Operations is Obtained Through an Existing Utility Pole at The Northeast Quadrant of The Intersection. Power Source For The Proposed Signal Operations is Intended to be Maintained From The Same Pole. The Utility Pole is to be Relocated by Cinergy, The Contractor Shall Coordinated With Cinergy to Obtain Power Source For The Signal Operations.




## PHASE DIAGRAM




## LEGEND

- CONTROLLER WITH FOUNDATION
- 3- SECTION SIGNAL HEAD
- 5- SECTION SIGNAL HEAD
- SIGNAL SUPPORT POLE
- PULL BOX
- LOOP DETECTOR
- PROPOSED SIGN
- EXISTING SIGN
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSH BUTON

HORIZONTAL SCALE IN FEET: 0, 20, 40

CALCULATED SRD
CHECKED JAA

# TRAFFIC SIGNAL PLAN
# U.S.R. 50 AND WALTON CREEK

HAM-50-31.95

133
189

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11/17/2004
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## DETECTOR ASSIGNMENTS

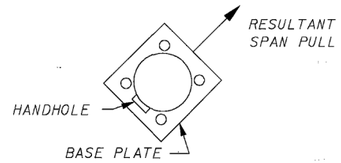
| DET # | LOCATION | LOOP SIZE* | PHASE | AMP # | TURNS | MODE | DELAY TIME (SECS) |
|---|---|---|---|---|---|---|---|
| L1 | EB THRU | 6'x20' | Ø2 | 1 | 3 | PRESENCE | |
| L2 | WB THRU | 6'x20' | Ø4 | 2 | 3 | PRESENCE | |
| L3 | NB | 6'x30' | Ø4 | 4 | 3 | PRESENCE | 3 |
| L4 | NB RT | 6'x12' | Ø4 | 5 | 3 | PRESENCE | 10 |
| L5 | WB LT | 6'x30' | Ø5 | 6 | 3 | PRESENCE | |
| L6 | SB | 6'x30' | Ø8 | 6 | 3 | PRESENCE | 3 |
| L7 | SB RT | 6'x30' | Ø8 | 6 | 3 | PRESENCE | 10 |
| L8 | EB LT | 6'x30' | Ø8 | 6 | 3 | PRESENCE | 10 |
| | | | | | | | |
| | | | | | | | |

## POLE ORIENTATION DATA CHART

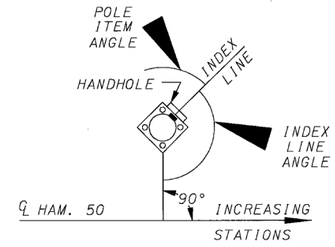
| POLE | TC-81.10 DESIGN NO. | STATION & OFFSET | FOUNDATION ELEVATION | POLE HEIGHT | INDEX LINE ANGLE | RESULTANT SPAN PULL | ORIENTATION ANGLE (DEG) FROM INDEX LINE: HAND HOLE | PED. SIGNAL | PUSH BUTTON | CAPPED 2" ELLS | POWER |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P1 | 10 | 1691+24.93 - 54.0' LT | 497.52 | 32' | 135° | 180° | 0° | 135°/225° | 225° | 0° | |
| P2 | 10 | 1691+14.57 - 39.5' RT | 498.47 | 32' | 225° | 180° | 0° | 225° | 225° | 0° | |
| P3 | 10 | 1692+09.88 - 53.5' LT | 497.61 | 32' | 225° | 180° | 0° | 220° | | | |
| P4 | 10 | 1692+13.77 - 43.0' RT | 498.44 | 32' | 135° | 180° | 0° | | | | |

ALL WEATHERHEADS SHALL BE 2" EXCEPT FOR THE 3" SIGNAL WEATHERHEAD ON POLE 'P2'.
** ELEVATIONS SHALL BE STAKED AND APPROVED BY THE DIVISION OF TRAFFIC PRIOR TO FOUNDATION EXCAVATION.
* TO BE DETERMINED WHEN LOCATION OF THE UTILITY POLE IS ESTABLISHED.

HANDHOLE & BOLT HOLE POSITIONING




ROTATE POLE ACCORDING TO RESULTANT SPAN PULL
ROTATE POLE FOUNDATION AS SHOWN ON THE INTERSECTION LAYOUT SHEET




NOTES:
1. ALL ANGLES MEASURED CLOCKWISE
2. INDEX LINE GOES THROUGH CENTER OF HANDHOLE

## ACTUATED TRAFFIC SIGNAL CONTROLLER TIMING CHART

START UP

START IN: Y/R FLASH ___ OR ALL RED ___
TIME FOR FLASH OR ALL RED: _____
FIRST PHASES(S): # _____ & # _____
COLOR DISPLAYED: GREEN ___; YELLOW ___

DUAL ENTRY _____
REST IN RED: RING 1__; RING 2__

| OVERLAP | A | B | C | D |
|---|---|---|---|---|
| PHASES | | | | |

| INTERVAL OR FEATURE | | | CONTROLLER MOVEMENT NO. | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| INTERSECTION MOVEMENT | | | WBL | EBT | | SBT | EBL | WBT | | NBT |
| MINIMUM GREEN (INITIAL) | | (SEC.) | 7 | 20 | | | | 20 | | 7 |
| ADDED INITIAL | | *(SEC./ACTUATION) | | | | | | | | |
| PASSAGE TIME (PRESET GAP) | | (SEC.) | 5 | 4 | | | 6 | 4 | | |
| TIME BEFORE REDUCTION | | *(SEC.) | | | | | | | | |
| MINIMUM GAP | | *(SEC.) | | | | | | | | |
| TIME TO REDUCE | | *(SEC.) | | | | | | | | |
| MAXIMUM GREEN I | | (SEC.) | 20 | 40 | | | 20 | 40 | | 30 |
| MAXIMUM GREEN II | | (SEC.) | | | | | | | | |
| YELLOW CHANGE | | (SEC.) | 4 | 4 | | | 4 | 4 | | 4 |
| ALL RED CLEARANCE | | (SEC.) | 2 | 2 | | | 2 | 2 | | 2 |
| WALK | | (SEC.) | | 7 | | | | 7 | | 7 |
| PEDESTRIAN CLEARANCE | | (SEC.) | | 10 | | | | 10 | | 15 |
| RECALL | MAXIMUM | (ON/OFF) | | | | | | | | |
| | MINIMUM | (ON/OFF) | | ON | | | | ON | | |
| | PEDESTRIAN | (ON/OFF) | | | | | | | | |
| MEMORY | | (ON/OFF) | | | | | | | | |
| CALL TO NON-ACTUATED | NO. 1 | | | | | | | | | |
| | NO. 2 | | | | | | | | | |

* VOLUME DENSITY CONTROLS

CALCULATED SRD
CHECKED JAA

# PROPOSED SIGNAL DETAILS
# USR 50 AND WALTON CREEK ROAD

HAM-50-31.95

134
189

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1/18/2004
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