OPERATIONS SHEET

Location: Punggol Field PC near Blk 201A Int. No: 15507

Prepared by: Chen Eng Heng Date: 19 / 08 / 2022 Signal ID: 2217

Checked by: Mohd Farhan

Approved by: Simon Ho

**Add Audio Tactile**

**(for all PED)**

1

# 

SG5 – GM+PED3 for PED1

SG6 – GM+PED4 for PED2

SG7 – Audio Tactile for PED1/GM+PED3

SG8 – Audio Tactile for PED2/GM+PED4

PED7 – GM+ Fault Monitoring

Punggol Field

Punggol Field

**PB 1**

**GM+ 2**

**SAVH 3**

**PB 1**

**GM+ 2**

**SAVH 3**

**PB 4**

**GM+ 5**

**SAVH 6**

**PB 4**

**GM+ 5**

**SAVH 6**

*Blk 201A*

2

3 PED1

4 PED2

(With Timer)

Wef. 1st April 2005

Pg. 1

**PHASING DIAGRAM**

Location: Punggol Field PC near Blk 201A Int. No: 15507

|  |  |  |
| --- | --- | --- |
| A | 1  PIVOT | **NOTES:-**   * If phase change switch is equal or more than TSM15, controller is to send out MSS15 flag * A AND B PHASES ARE PLACED ON PERMANENT DEMAND IN ALL MODES. * IN ISOLATED MODE, A PHASE HAS PERMANENT EXTENSION.   **PED 1 CONTROL**   * PED 1 IS INTRODUCED ON DEMAND AT THE START OF B PHASE. * SG 1 WILL CLOSE DURING A PHASE INTERGREEN ONLY IF PED 1 IS DEMANDED. * IN MASTERLINK, PED IS TERMINATED BY P-   **PED 2 CONTROL**   * INTRODUCTION OF PED 2 IS CONTROLLED BY SPECIAL TIMER. * TIMER T1 (TSM 11) STARTS AT A PHASE AMBER. * WHEN TIMER T1 (TSM 11) EXPIRES, SG 2 WILL CLOSE IF PED 2 IS DEMANDED. * AFTER SG 2 CLOSES, PED 2 WILL BE INTRODUCED. PED 2 IS ALWAYS RELEASE. * AFTER PED 2 TERMINATES, THERE IS A 3 SECONDS ALL RED (TSM1) BEFORE SG 2 GOES GREEN.   **AUDIO TACTILE**   * SG **7** AUDIO TACTILE IS CONTROLLED BY **Z-** FLAG * SG **8** AUDIO TACTILE IS CONTROLLED BY **Z+** FLAG   **POLICE CONTROL**   * PEDS 1 AND 2 ARE PLACED ON PERMANENT DEMAND. * BOTH PEDS ARE INTRODUCED AT START OF B PHASE.   **GM+ Control**   * **SG5 GM+ PED3 & SG6 GM+ PED4** WILL BE HIDDEN. * ANY GM+ FAULT => PED **7**  PB WILL BE FAULTY.   **\*SG2 CONTROL**  **\*Substitute TSM13 (20 sec) to SG2 Min GRN.** |
| 2 | |
| A1 | 1 |
| 4 PED2 (SG6 GM+ PED4)  PB4, GM+5, SAVH6 | |
| A2 | 1 |
| 2 | |
| B |  |
| 2  3 PED1 (SG5 GM+ PED3)  PB1, GM+2, SAVH3 | |

**DETECTOR FUNCTION**

Pg. 2

Location: Punggol Field PC near Blk 201A Int. No: 15507

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Detector No** | | **CALL PHASE** | **LOCKING** | **NON LOCKING** | **SET VIG ON PHASE** | **EXTEND PHASE** | **SPECIAL** | | | **DETECTOR ALARMS** | | | **PLAN REFERENCE** |
| **FAULT SIMULATION** | | |
| **CALL & EXTEND** | **CALL ONLY** | **DISABLE** |
| 1 |  |  |  |  |  | |  | |  |  |  |  | |
| 2 |  |  |  |  |  | |  | |  |  |  |  | |
| 3 |  |  |  |  |  | |  | |  |  |  |  | |
| 4 |  |  |  |  |  | |  | |  |  |  |  | |
| 5 |  |  |  |  |  | |  | |  |  |  |  | |
| 6 |  |  |  |  |  | |  | |  |  |  |  | |
| 7 |  |  |  |  |  | |  | |  |  |  |  | |
| 8 |  |  |  |  |  | |  | |  |  |  |  | |
| 9 |  |  |  |  |  | |  | |  |  |  |  | |
| 10 |  |  |  |  |  | |  | |  |  |  |  | |
| 11 |  |  |  |  |  | |  | |  |  |  |  | |
| 12 | A |  |  |  |  | | *VS for PB, GM+ & SAVH* | |  |  | **✓** |  | |
| 13 | A |  |  |  |  | | *VS for GM+* | |  |  | **✓** |  | |
| 14 | A |  |  |  |  | | *VS for SAVH* | |  |  | **✓** |  | |
| 15 |  |  |  |  |  | | PHASE CHANGE SWITCH |  |  |  | **✓** |  | |
| 16 |  |  |  |  |  | | POLICE CONTROL SWITCH |  |  |  | **✓** |  | |
| PB1 | B | ✓ |  |  |  | | PUSH BUTTON PED1 | |  | **✓** |  |  | |
| PB2 | B | ✓ |  |  |  | | GM+ PED3 for PED1 | |  | **✓** |  |  | |
| PB3 | B | ✓ |  |  |  | | SAVH PED3 for PED1 | |  | **✓** |  |  | |
| PB4 | A, B | ✓ |  |  |  | | PUSH BUTTON PED2 | |  | **✓** |  |  | |
| PB5 | A, B | ✓ |  |  |  | | GM+ PED4 for PED2 | |  | **✓** |  |  | |
| PB6 | A, B | ✓ |  |  |  | | SAVH PED4 for PED2 | |  | **✓** |  |  | |
| PB7 | A | ✓ |  |  |  | | *GM+ Fault Monitoring (PED7)* | |  |  |  |  | |
| PB8 |  |  |  |  |  | |  | |  |  |  |  | |

Tick if detector failure causes an alarm on det. 16

# **INTERGREEN, PEDESTRIAN TIMES AND SPECIAL FUNCTIONS**

Pg. 3

Location: Punggol Field PC near Blk 201A Int. No: 15507

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PHASE** | **CLEARANCE MOVEMENT** | **CLEARANCE DISTANCE** | **INTERGREEN** | | |  | **PED NO.** | **PHASE** | **WALK** | | **CLEARANCE TIME** | |
| **AMBER** | **RED** | **TOTAL** |  | **DISTANCE (m)** | **GREEN TIME** | **1** | **2** |
| A |  |  | 3 | 3 | 6 |  | 1 | B | 7.2 | 6 | 8 |  |
| B |  |  | 3 |  | 3 |  | 2 | A, B | 7.3 | 6 | 8 |  |
| C |  |  |  |  |  |  | 3 (GM+) | B | 7.2 | 6 | 11 |  |
| D |  |  |  |  |  |  | 4 (GM+) | A, B | 7.3 | 6 | 11 |  |
| E |  |  |  |  |  |  | 5 |  |  |  |  |  |
| F |  |  |  |  |  |  | 6 |  |  |  |  |  |
| G |  |  |  |  |  |  | 7 |  |  |  |  |  |
|  |  |  |  |  |  |  | Pedestrian Walking Speed:  **1.0** m/s *(Near to School)*GM+ Walking Speed: ***0.8*** m/s *(GM+ Minimum +3 Sec)* | | | | | |

# 

# **SPECIAL FACILITIES**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SIGNAL GROUP** | **HOUR** | **MINUTE** | **SECOND** | **FUNCTION** | **REMARKS** |
| SG 7 | 21 | 00 | 00 | Audio Tactile “OFF” | Control by Z-(program only) |
| 07 | 00 | 00 | Audio Tactile “ON” |
| SG 8 | 21 | 00 | 00 | Audio Tactile “OFF” | Control by Z+ |
| 07 | 00 | 00 | Audio Tactile “ON” |

# **PRE-EMPTION**

|  |  |  |  |
| --- | --- | --- | --- |
| **SIGNAL GROUP** | **PHASE** | **FUNCTION** | **REMARKS** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# **CONTROLLER TIMESETTING**

Pg. 4

Location: Punggol Field PC near Blk 201A Int. No: 15507

# **SPECIAL MOVEMENT (S. M.) TIME**

# (‘B’ ENTER)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **S. M.** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| **INTERVAL** |
| **MINIMUM GREEN** | 1 |  |  |  |  |  |  |  |  |
| **AMBER** | 2 |  |  |  |  |  |  |  |  |
| **RED** | 3 |  |  |  |  |  |  |  |  |
| **GAP** | 4 |  |  |  |  |  |  |  |  |
| **HEADWAY** | 5 |  |  |  |  |  |  |  |  |
| **WASTE** | 6 |  |  |  |  |  |  |  |  |
| **MAXIMUM** | 7 |  |  |  |  |  |  |  |  |
| **SIGNAL GROUP** | |  |  |  |  |  |  |  |  |
| **DETECTORS** | |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PRESENCE (RANGE 0 –5)**(‘D’ ENTER) | | | | | | |  | **ALTERNATE TIME SETTING (RANGE 0-200)**(‘B’ ENTER) | | | | |
|  |  | |  |  |  | |  |  |  |  |  |  |
| **DET. NO** | **PRESENCE TIME** | |  | **DET. NO** | **PRESENCE TIME** | |  | **ALT. NO** | **TIME** |  | **ALT. NO** | **TIME** |
| 1 |  | Sec |  | 13 |  | Sec |  | 1 | 3 Sec(SG 2 All Red) |  | 17GM+ PED3 | 11 Sec |
| 2 |  | Sec |  | 14 |  | Sec |  | 2 | 3 Sec(PED 2 All Red) |  | 18GM+ PED4 | 11 Sec |
| 3 |  | Sec |  | 15 |  | Sec |  | 3 | 3 Sec(PED 1 All Red) |  | 19 |  |
| 4 |  | Sec |  | 16 |  | Sec |  | 4 |  |  | 20 | \*5 Sec |
| 5 |  | Sec |  | 17 |  | Sec |  | 5 |  |  | 21 |  |
| 6 |  | Sec |  | 18 |  | Sec |  | 6 |  |  | 22 |  |
| 7 |  | Sec |  | 19 |  | Sec |  | 7 |  |  | 23 |  |
| 8 |  | Sec |  | 20 |  | Sec |  | 8 |  |  | 24 |  |
| 9 |  | Sec |  | 21 |  | Sec |  | 9 |  |  | 25 |  |
| 10 |  | Sec |  | 22 |  | Sec |  | 10 |  |  | 26 |  |
| 11 |  | Sec |  | 23 |  | Sec |  | 11 | 30 Sec(Timer 1) |  | 27 |  |
| 12 |  | Sec |  | 24 |  | Sec |  | 12 |  |  | 28 |  |
|  |  | |  |  |  | |  | 13 | 20 Sec(SG2 Min GRN) |  | 29 |  |
|  |  | |  |  |  | |  | 14 |  |  | 30 |  |
|  |  | |  |  |  | |  | 15 | 50 Sec |  | 31 |  |
|  |  | |  |  |  | |  | 16 |  |  | 32 |  |

# **\*Note:** During start-up of controller, there will be a 5 seconds All Red (TSM20)

# **CONTROLLER TIMESETTING**

Pg. 5

Location: Punggol Field PC near Blk 201A Int. No: 15507

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **PHASE** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** |  |
|  | **INTERVAL** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **Range** |
| **RED/YELLOW** | 1 |  |  |  |  |  |  |  |  | 0 – 5 |
| **LATE START** | 2 |  |  |  |  |  |  |  |  | 0 – 20 |
| **MINIMUM GREEN** | 3 | 20 | 6 |  |  |  |  |  |  | 5 – 20 |
| **INCREMENT** | 4 |  |  |  |  |  |  |  |  | 0 – 5 |
| **MAX. V. I. G.** | 5 |  |  |  |  |  |  |  |  | 0 – 40 |
| **MAX. EXT. GREEN** | 6 | 30 | 0 |  |  |  |  |  |  | 0 – 150 |
| **EARLY CUT-OFF** | 7 |  |  |  |  |  |  |  |  | 0 – 20 |
| **AMBER** | 8 | 3 | 3 |  |  |  |  |  |  | 3 – 7 |
| **ALL RED** | 9 | 3 |  |  |  |  |  |  |  | 0 – 15 |
| **SPECIAL ALL RED** | 10 |  |  |  |  |  |  |  |  | 0 – 15 |
| **GAP 1** | 11 |  |  |  |  |  |  |  |  | 0 –10 |
| **GAP 2** | 12 |  |  |  |  |  |  |  |  | 0 –10 |
| **GAP 3** | 13 |  |  |  |  |  |  |  |  | 0 –10 |
| **GAP 4** | 14 |  |  |  |  |  |  |  |  | 0 –10 |
| **HEADWAY 1** | 15 |  |  |  |  |  |  |  |  | 0 – 5 |
| **HEADWAY 2** | 16 |  |  |  |  |  |  |  |  | 0 – 5 |
| **HEADWAY 3** | 17 |  |  |  |  |  |  |  |  | 0 – 5 |
| **HEADWAY 4** | 18 |  |  |  |  |  |  |  |  | 0 – 5 |
| **WASTE 1** | 19 |  |  |  |  |  |  |  |  | 0 – 50 |
| **WASTE 2** | 20 |  |  |  |  |  |  |  |  | 0 – 50 |
| **WASTE 3** | 21 |  |  |  |  |  |  |  |  | 0 – 50 |
| **WASTE 4** | 22 |  |  |  |  |  |  |  |  | 0 – 50 |
| **MAXIMUM 1** | 23 |  |  |  |  |  |  |  |  | 0 – 150 |
| **MAXIMUM 2** | 24 |  |  |  |  |  |  |  |  | 0 – 150 |
| **MAXIMUM 3** | 25 |  |  |  |  |  |  |  |  | 0 – 150 |
| **MAXIMUM 4** | 26 |  |  |  |  |  |  |  |  | 0 – 150 |

# Maximum V. A. Cycle Time:

✓

# In Flexilink Operation, If Z- flag = C (255), A phase = TSM 11

✓

# In Isolated Operation, A phase = Max. Ext. Green

Pg. 6

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Pedestrian NO.** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |  |
|  | **Interval** | 17 | 18 | 19*GM+* | 20*GM+* | 21 | 22 | 23 | **24** | **Range** |
| **Delay** | 1 |  |  |  |  |  |  |  |  | 0 - 20 |
| **Walk** | 2 | 6 | 6 | 6 | 6 |  |  |  |  | 0 - 40 |
| **Clearance 1** | 3 | 8 | 8 | 11 | 11 |  |  |  |  | 0 - 40 |
| **Clearance 2** | 4 |  |  |  |  |  |  |  |  | 0 - 10 |
| **PAC** | | 7 | 7 | 7 | 7 |  |  | 7 |  |  |

# **CO-ORDINATION DATA**

Pg. 5

Location: Punggol Field PC near Blk 201A Int. No: 15507

# **SPECIAL FUNCTIONS**

|  |  |
| --- | --- |
| **SIGNAL** | **FUNCTION** |
| Y- FLEXI | Continuous |
| Y- MASTER | Auto call Push Button PED1, 2 |
| Y+ FLEXI |
| Z- FLEXI | SET SG7 AUDIO TACTILE “ON” (for PED1 / GM+PED3) |
| Z- MASTER |
| Z+ FLEXI | SET SG8 AUDIO TACTILE “ON” (for PED2 / GM+PED4) |
| Z+ MASTER |
| R- FLEXI |  |
| R+ FLEXI |  |
| Q- FLEXI |  |
| Q+ FLEXI |  |
| Z1 MASTER |  |
| Z MASTER |  |
| Z MASTER |  |
| Z MASTER |  |

# **LOOK AHEADS AND RELEASES**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Phase Sequence 1** | | |  | **Phase Sequence 2** | | |
| **PHASE** | **LOOK AHEAD** | **RELEASE** |  | **PHASE** | **LOOK AHEAD** | **RELEASE** |
| A | NO |  |  | A |  |  |
| B | NO | Auto |  | B |  |  |
| C |  |  |  | C |  |  |
| D |  |  |  | D |  |  |
| E |  |  |  | E |  |  |
| F |  |  |  | F |  |  |
| G |  |  |  | G |  |  |

# The following phases can be inhibited in Flexilink by omitting the call pulses in the plan data

|  |  |
| --- | --- |
| **NO** | **PHASE SEQUENCE** |
| 1 (No ) | A B |
| 2 ( ) |  |

# **GLIDE INTERSECTION DATA**

Pg. 7

Location: Punggol Field PC near Blk 201A Int. No: 15507

# **Note:** The data shown on this page should be entered when the intersection is first placed on line. This data is not necessarily used for Master Link operation.

Pg. 8

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | SLOT **111 (RC15)** | | = 2, 1, 4 | | | | | Slot \_\_\_=x, y, z: x=No of Phases; y=No of Split Plans; z=No of PEDs. | | | | | | | | | | | | | | | | | | |
|  | | INT = 15507 | | |  | | | | | | | | | | | | | | | | | | | | | | | |
|  | | VC = 5 | | |  | | Date: | | | | | | | | | | Date: | | | | | | | | | |  | |
|  | | CS = | | |  | | PP1 = 19, 19 ^A | | | | | | | | | | PP1 = | | | | | | | | | |  | |
|  | | COM = Port 15 / 7 | | |  | | PP2 = 19, 19 ^A | | | | | | | | | | PP2 = | | | | | | | | | |  | |
|  | | PK = | | |  | | PP3 = 19, 19 ^A | | | | | | | | | | PP3 = | | | | | | | | | |  | |
|  | | S# = 37 | | |  | | PP4 = -19, -19 ^A | | | | | | | | | | PP4 = | | | | | | | | | |  | |
|  | | LM = **MF** | | |  | | | | | | | | | | | | | | | | | | | | | | | |
|  | | RMN = | | |  | | | | | | | | | | | | | | | | | | | | | | | |
|  | | DCL = *80* | | |  | | **Variation Parameter (VP)** | | | | | | | | | | | | | | | | | | | | | |
|  | | VOLS = **1 – 14** | | |  | | VP1 = | | | | | VP8 = | | | | VP15 = | | | | VP22 = | | | | VP29 = | | |  | |
|  | | VP# = | | |  | | VP2 = | | | | | VP9 = | | | | VP16 = | | | | VP23 = | | | | VP30 = | | |  | |
|  | | AT = 6 | | |  | | VP3 = | | | | | VP10 = | | | | VP17 = | | | | VP24 = | | | | VP31 = | | |  | |
|  | | BT = 3 | | |  | | VP4 = | | | | | VP11 = | | | | VP18 = | | | | VP25 = | | | | VP32 = | | |  | |
|  | | CT = | | |  | | VP5 = | | | | | VP12 = | | | | VP19 = | | | | VP26 = | | | | VP33 = | | |  | |
|  | | DT = | | |  | | VP6 = | | | | | VP13 = | | | | VP20 = | | | | VP27 = | | | | VP34 = | | |  | |
|  | | ET = | | |  | | VP7 = | | | | | VP14 = | | | | VP21 = | | | | VP28 = | | | | VP35 = | | |  | |
|  | | FT = | | |  | | | | | | | | | | | | | | | | | | | | | | | |
|  | | GT = | | |  | | |  | |  |  | | | | | | |  |  | | |  | | | | | | |
|  | | W1 = 0 | | |  | | |  | |  | W4 = 6 | | | | | | |  |  | | |  | | | | | | |
|  | | W1T = 11 | | | P- | | |  | |  | W4T = 6 | | | | | | | P- | P+ | | |  | | | | | | |
|  | | W2 = 6 | | |  | | |  | |  | W5 = | | | | | | |  |  | | |  | | | | | | |
|  | | W2T = 6 | | | P- | | | P+ | |  | W5T = | | | | | | | P- | P+ | | |  | | | | | | |
|  | | W3 = 0 | | |  | | |  | |  | W6 = | | | | | | |  |  | | |  | | | | | | |
|  | | W3T = 14 | | | P- | | | P+ | |  | W6T = | | | | | | | P- | P+ | | |  | | | | | | |
| **SPLIT PLANS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | **1** | | | **2** | | | | | **3** | | **4** |  |  | | | | | | **5** | | **6** | | **7** | **8** | | |
|  | **SF** | |  | | |  | | | | |  | |  |  | **SF** | | | | | |  | |  | |  |  | | |
|  | **FEATURES** | |  | **FEATURES** | | | | | |
| A | 0 FG NG PD B | | 0 B | | |  | | | | |  | |  |  |  | | | | | |  | |  | |  |  | | |
| B | A | | 17# A | | |  | | | | |  | |  |  |  | | | | | |  | |  | |  |  | | |
| C |  | |  | | |  | | | | |  | |  |  |  | | | | | |  | |  | |  |  | | |
| D |  | |  | | |  | | | | |  | |  |  |  | | | | | |  | |  | |  |  | | |
| E |  | |  | | |  | | | | |  | |  |  |  | | | | | |  | |  | |  |  | | |
| F |  | |  | | |  | | | | |  | |  |  |  | | | | | |  | |  | |  |  | | |
| G |  | |  | | |  | | | | |  | |  |  |  | | | | | |  | |  | |  |  | | |

# **PLAN DATA**

Location: Punggol Field PC near Blk 201A Int. No: 15507

# **PLAN**

# (‘E’ ENTER)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| 0 | **CL** | 120 | 100 |  | 120 | 90 | 100 | 100 |  |  |  |
| 1 | **A** | 37 | 41 |  | 37 | 31 | 41 | 41 |  |  |  |
| 2 | **B** | 17 | 21 |  | 17 | 11 | 21 | 21 |  |  |  |
| 3 | **C** |  |  |  |  |  |  |  |  |  |  |
| 4 | **D** |  |  |  |  |  |  |  |  |  |  |
| 5 | **E** |  |  |  |  |  |  |  |  |  |  |
| 6 | **F** |  |  |  |  |  |  |  |  |  |  |
| 7 | **G** |  |  |  |  |  |  |  |  |  |  |
| 8 | **R-** |  |  |  |  |  |  |  |  |  |  |
| 9 | **R+** |  |  |  |  |  |  |  |  |  |  |
| 10 | **Y-** | C | C |  | C | C | C | C |  |  |  |
| 11 | **Y+** |  |  |  |  |  |  |  |  |  |  |
| 12 | **Z-** | C | C |  | C | N | N | C |  |  |  |
| 13 | **Z+** | C | C |  | C | N | N | C |  |  |  |
| 14 | **Q-** |  |  |  |  |  |  |  |  |  |  |
| 15 | **Q+** |  |  |  |  |  |  |  |  |  |  |
| 16 | **XSF (9-16)\*** |  |  |  |  |  |  |  |  |  |  |
| 17 | **XSF (1-8)\*** |  |  |  |  |  |  |  |  |  |  |

# \* A digit hexadecimal number which signifies which XSF bits are used; e.g. AO signifies bits 14 & 16 are set.

# **NOTE:** C = Continuous (255) N = Not Used (254)

# **PLAN SCHEDULE**

# (‘F’ ENTER)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CODE** | **HOUR** | **MINUTE** | **PLAN** |  | **CODE** | **HOUR** | **MINUTE** | **PLAN** |
| 8 | 0 | 0 | 5 |  | 7 | 12 | 0 | 4 |
| **8** | **7** | **0** | **1** |  | 7 | 15 | 0 | 2 |
| 8 | 9 | 0 | 7 |  | **7** | **21** | **0** | **6** |
| 8 | 12 | 0 | 2 |  | 7 | 23 | 0 | 5 |
| 8 | 17 | 0 | 4 |  | 1 | 0 | 0 | 5 |
| **8** | **21** | **0** | **6** |  | **1** | **7** | **0** | **7** |
| 8 | 23 | 0 | 5 |  | 1 | 9 | 0 | 7 |
| 7 | 0 | 0 | 5 |  | 1 | 14 | 0 | 2 |
| **7** | **7** | **0** | **1** |  | **1** | **21** | **0** | **6** |
| 7 | 9 | 0 | 7 |  | 1 | 23 | 0 | 5 |

Pg. 9

**Pedestrian and Vehicle Signal Groups Interlock Table**

Location: Punggol Field PC near Blk 201A Int. No: 15507

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Phase A** | **Phase B** | **Phase C** | **Phase D** | **Phase E** | **Phase F** | **Phase G** |
| **SG 1** | GAR | RED |  |  |  |  |  |
| **SG 2** | SGAR | SGAR |  |  |  |  |  |
| **SG 3** | DON’T | WALK |  |  |  |  |  |
| **SG 4** | PWALK | PWALK |  |  |  |  |  |
| **SG 5**  **GM+** | DON’T | WALK |  |  |  |  |  |
| **SG 6**  **GM+** | PWALK | PWALK |  |  |  |  |  |
| **SG 7** | AUDIO TACTILE | |  |  |  |  |  |
| **SG 8** | AUDIO TACTILE | |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SG 9** |  |  |  |  |  |  |  |
| **SG 10** |  |  |  |  |  |  |  |
| **SG 11** |  |  |  |  |  |  |  |
| **SG 12** |  |  |  |  |  |  |  |
| **SG 13** |  |  |  |  |  |  |  |
| **SG 14** |  |  |  |  |  |  |  |
| **SG 15** |  |  |  |  |  |  |  |
| **SG 16** |  |  |  |  |  |  |  |

Legend:

GAR Green, Amber, Red

GEAR Green, Amber, Red (With ECO)

RED Red

SGRN Special Green

SOFF Special Off

WALK PED Walk, Clearance 1 and Clearance 2

SWALK Special PED Walk, Clearance 1 and Clearance 2

DON’T PED Red

Pg. 10

Appendix A

**Signal Groups Conflict Matrix**

Location: Punggol Field PC near Blk 201A Int. No: 15507

(‘C16’ ENTER)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SG | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** |
| **1** |  |  | X |  | X |  |  |  |  |  |  |  |  |  |  |  |
| **2** |  |  |  | X |  | X |  |  |  |  |  |  |  |  |  |  |
| **3** | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **4** |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **5** | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **6** |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **7** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **8** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **9** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **10** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **12** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **13** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **14** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **15** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **16** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Pg. 11