## **SNUG Document Suite**

Draft for discussion



#### **SNUG Document Suite (draft)**

#### DESIGN

- SNUG Design Guide TBC (proposed to use ATOC as template)
- Stops & Gos Rewrite TBC

#### INSTALLATION

- P43 Traffic Signal Specification Updated
   Including Site Acceptance Test forms (SAT) Updated
- CIS/SFT checking and testing templates, design proforma – Complete

#### MAINTENANCE

- Electrical specification *TBC*
- Asset condition rating *TBC*



#### **Site Acceptance Test – Updated Forms in P43**

- SAT for New Sites: Updated Form (4 pages)
  - Generally minor tweaks, sections simplified/merged
  - Critical snags required for switch on
  - Commissioning (switch on) vs SAT
- SAT for Upgrades: New short form (2 pages)
  - Only fill in sections where things have changed
  - Section to confirm whether a flash test is required (only if wiring has changed)
  - Consideration as to whether it's safe to do a flash test in live traffic scenario
  - Online option available for Contractor to do, mobile phone friendly (MS forms, questions trigger prompts)

$\vdash$								
Н								
Faults that need to be addressed before site can be switched on:								
Н								
H								
Approved for switch on? YES / NO If yes, has the site been commissioned? YES / NO								
Traffic Signal Representative:								
Si	ign: Date:							
Signal Contractor:								
Si	: Date:							
HAND OVER TO RCA OPERATIONS WHEN SIGNED ABOVE								

OPERATION TESTING	MUST BE COMPLETED IF ANY SIGNAL GROUP WIRING HAS CHANGED, BEFORE SWITCH ON		
Testing required?	Circle NO or YES		
Test	When to test	Complete?	
Flash test each Signal Group	Preferred test.  Must be safe to do so, e.g. roads are quiet/night or site is under traffic management control		
Watch Signal Group operation	If not safe to do a flash test.  Each signal group must be observed/checked.  Diamond signal groups (e.g. those in a D1/D2 phase or G1/G2 phase) must have each of those phases locked on via SCATS or detector board.  For example: Lock on all peds and the TH+RT detectors for the approach and check the correct signal groups run in each diamond phase, i.e. it should be SG1+3 together, SG2+4 together, etc.		

### **Questions / Comments?**

# SIGNALS NZ USER GROUP

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# CIS and Personality SNUG Process Update



#### **CIS and Personality process**

Primary objective: To reduce the potential for unsafe operation, by setting the level of expectation for checking and testing in NZ.

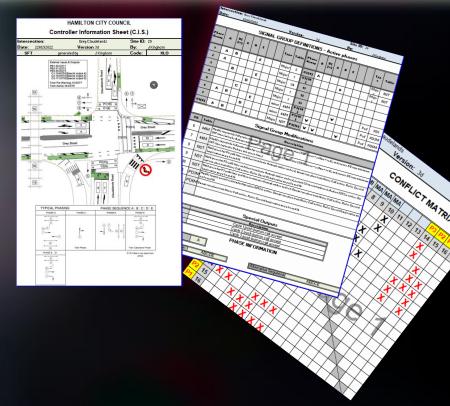
Secondary objective: To provide proformas to assist with development and testing of CIS and personality.

Where we're at: Documents are complete and are/will be available on SNUG website for use (thank you to all who gave feedback)



#### **Background**

- All signals require a Controller Information Sheet (CIS) and personality (SFT).
  - CIS is a technical document
  - SFT ("software") is a coded file that runs in the controller
- It's common for CIS and SFT to be completed by the same person, but usually not the designer
- Therefore it's proposed that a 1-page "Traffic Signal Design Summary" is given to the CIS developer by designer,
   OR capture relevant operational info on the plan





#### **Checking & Testing**

- Checking of CIS (by independent practitioner)
  - Check sheet completed and kept on file as evidence
- Checking of SFT (by independent practitioner)
  - Done using "WinTraff" simulation tool, and test sheet provided for file
  - File names update with each modification e.g. CIS=V2b, SFT = V2bc



- Run on a physical controller
- All conflicts are checked and proven
- Bench test form completed and provided for file

#### Installation

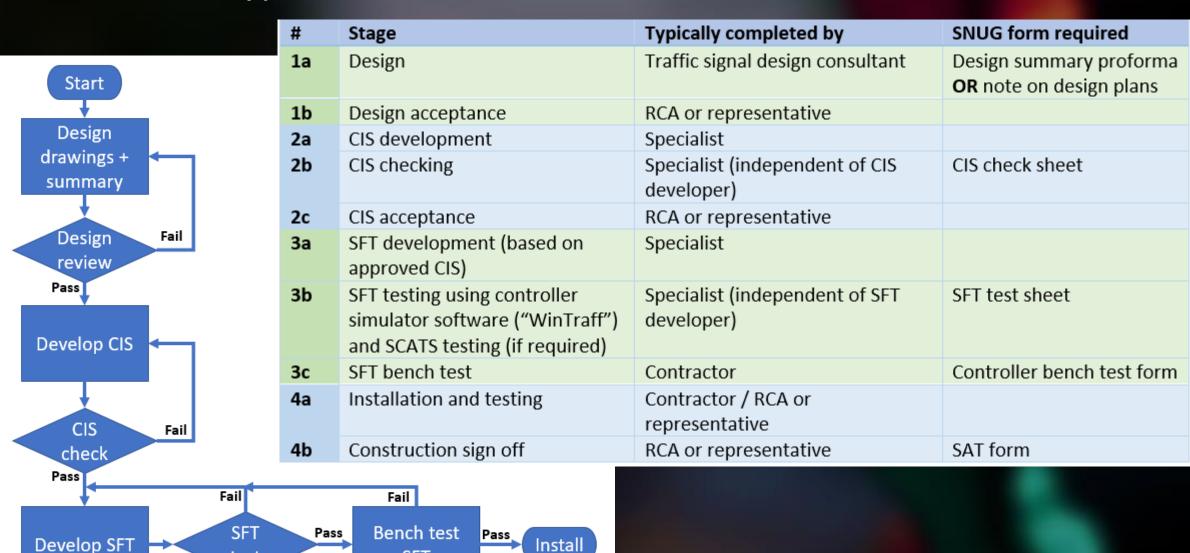
- Flash test
- Site acceptance Test (SAT) completed full/short?





#### **CIS and Personality process**

test



SFT

#### **Proformas**

#### Design Summary

This is a simple form, main objective is capture:

- "special stuff" like filtering, staging, logic
- Pedestrian functionality and protection
- Cycle crossings (if provided)

- Templates also provided for
  - CIS check sheet
  - SFT check sheet
  - Bench test

General:									
	Date:		Site Location:						
	al designer company:		Speed Envi	ronment:					
	Sp	ecify any right turn filtering:							
Any non-ir	Any non-inductance vehicle detection (e.g. radar):								
Sp	Specify any advanced or queue loop logic:								
	Any staging or interim treatments?:								
	-	ard or safety considerations cut-off, event phasing, etc):							
Pedestrian Crossings:									
Crossing	Specify	y the left turn and right turn protection, e.g.:		Note a	ny special logic				
	- La	ate start delay for left turn an	d right turn traffic	(reintroduction, walk-for-green,					
	- Re	ed arrow left turn during walk	and full right turn	dynamic	clearance, delay,				
	- Re	<ul> <li>Red arrow left turn timer Walk/clearance, full RT</li> </ul>			above ground detection)				

P1

P2 P3 P4

Cycle Crossings:

Designer Notes:

General comments on operation not covered above:

Number of cycle crossings: Types of cycle detection:

e.g. reintroduction)

Type of cycle signals (2/3 aspect): Cycle crossings run with adjacent

pedestrian crossing or independently? Note any special logic for cyclists

### **Questions / Comments?**

