	Division/Section: ITSO Division /ITSO OCC Traffic Operations	Rev No. 2
	Effective Date: Xx Dec 2020	
	Document No: ITSO/OCC/SOP/NOP02.005	
<h2>Handling & Managing of Road Incidents</h2>		

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DOCUMENT CONTROL

REV	DOCUMENT TITLE & COPY NUMBER	Date	Prepared by	Reviewed by	Approved by
0	Handling & Managing of Road Incidents Copy____of ____	15 th December 2009	Benson Khoe (SOE)	Alfred Loh (SOE)	Soh Ling Tim (MOPN)
1	Handling & Managing of Road Incidents Copy____of ____	XX October 2013	Chiam Zhi Wei (DysOE) Chua Teck Leong (AOM, ITSO OCC)	Ng Soon Han, Frankie (DOM, ITSO OCC)	Yeo Se Lay (SM,Ops)
2	Handling & Managing of Road Incidents Copy____of ____	XX December 2020	Daniel Wu (AOM) Lye Keng Fatt (DM, ITSO OCC)	Ng Soon Han, Frankie (Mgr, ITSO OCC)	Yeo Se Lay (DDIT)

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AMENDMENT HISTORY RECORD

Rev No.	Effective Date of Change	Section & Sub- Section Amended	Amendments/ References	Party Requesting for Change
1	XX Oct 2013	Whole Document	Due to organization change of division name from ITSC to ITSO.	DOM, ITSO OCC
2	XX Dec 2020	Whole Document	Due to change of Staff Designations in ITSO OCC. Delete SOE, insert DM Delete DySOE, insert DyAM	Mgr, ITSO OCC

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Section 1 Description

Describes the general principles in handling and managing of road incidents by ITSO OCC.

The road incidents described here are major or minor incidents graded as level 3 that occur on a daily basis (*act in accordance with ITSO OCC procedures for accidents and incidents*).

Please refer to ITSO/OCC/SOP/AOP03.002 for handling & managing incidents graded as level 1 or 2.

Section 2 Personnel Involved

2.1.1 All OCC operations staff.

Section 3 Process

Sub-section 3.1 Handling and Managing of Minor Road Incidents

- 3.1.1 Minor incidents are incidents that do not have a great impact on traffic flow (e.g stalled vehicles, accidents that do not result in human injuries, obstructions that do not pose as potential hazards to other motorists, etc.) Such incidents do not usually involve other emergency services.
- 3.1.2 Minor incidents are incidents within the ability of LTA's local resources (AETOS LTM and CERTIS CISCO VRS) to handle and clear the incident site. Thus, it is expected for such incidents to be cleared promptly and safely (*refer to ITSO/OCC/SOP/APP05.001 for details of LTM & VRS performance indicators*).
- 3.1.3 General guiding principles for managing such an incident would be to inform the LTM and VRS DO to dispatch their resources to the incident site as soon as possible. OE shall create an IR and implement the appropriate messages on the VMS to inform other motorists in order to prevent any secondary incident from occurring.
- 3.1.4 Local resources upon reaching site shall secure the incident site, attend to the incident and render appropriate assistances.
- 3.1.5 Once the site is secured, recovery process will commence. Local resources shall assist to clear the incident site as soon as possible. (e.g. for minor accidents without injury or damage to government property, either ask vehicles to move on or move to the shoulder).
- 3.1.6 For case specific handling refer to Attachment 1 for details.

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Sub-section 3.2 Handling and Managing of Major Road Incidents

3.2.1 A major incident typically causes a great deal of impact on the traffic condition; it may involve multiple human injuries and emergency services. These major incidents usually prolong the delay to other road users, but they are able to be managed using ITSO OCC procedures without activating the CMG and can be classified as level 3. Examples of such incidents include:

- Chain collisions involving multiple human injuries.
- Major accident renders one or less lane passable to traffic such as overturned trailer.
- Fallen trees causing the closures of expressways, sunken roads that endanger road users.
- Massive chemical spillage with no known ill-effects to the general public.
- Other incidents that pose as potential hazards to other motorists.

3.2.2 Such incidents are usually not within the ability of LTA's local resources of AETOS LTM and CERTIS VRS to handle and clear the incident site. Other external agencies assistance is required to clear the site. (e.g. TP, SCDF, NParks etc.)

3.2.3 General guiding principle for managing such an incident would be to inform the LTM and VRS DO to deploy their resources to the incident site as soon as possible, OE to open IR and send out the appropriate messages on the VMS to inform other motorist in order to prevent a secondary incident.

3.2.4 If OE is able to determine the nature of incident via the PTZ camera they can activate the relevant external agencies to incident site. If unable to determine, OE shall wait for local resources to reach site and give a confirmation report before activating the relevant external agencies.

3.1.4 Next, local resources upon reaching site will secure the site, give first onsite report to OCC render assistance and manage incident site until other external agencies arrive.

3.1.7 Once the site is secured, recovery process will commence when the relevant external agencies with the appropriate resource and/or authority arrives. Throughout the recovery process the LTA local resources shall update OCC as and when there are changes or as appropriate.

3.1.8 OE shall update and change Incident Plan accordingly and DM shall escalate to higher management via sms when needed and keep them updated (Refer to Attachment 3)

3.1.9 For case specific handling refer to Attachment 1 for details

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Section 4 Abbreviations

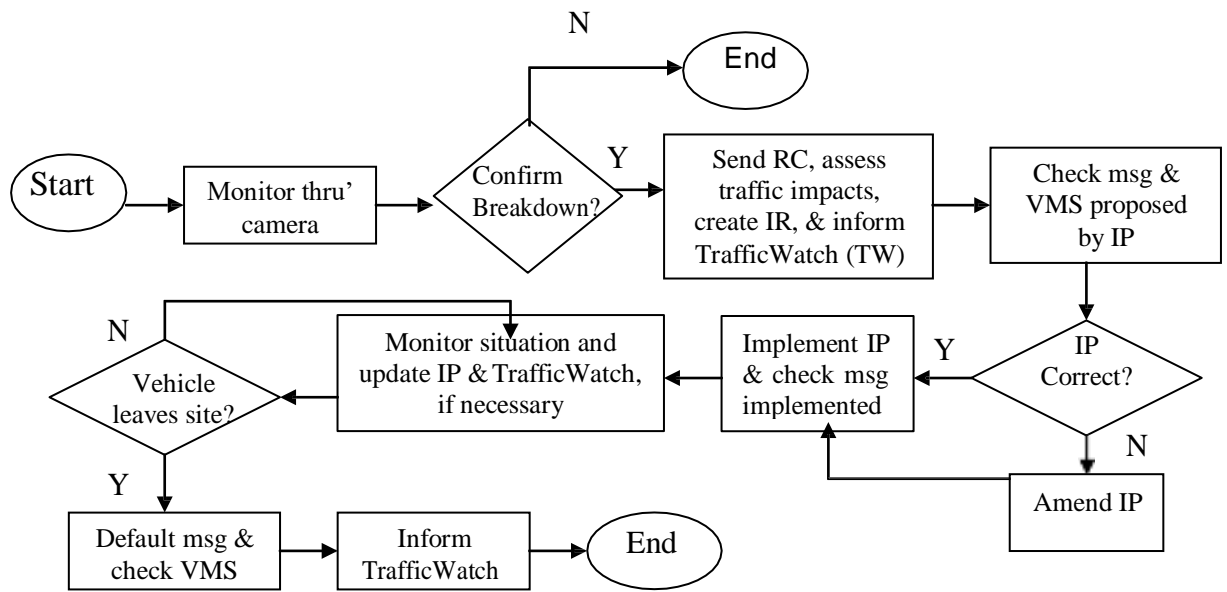
ITSO	Intelligent Transport Systems Operations
LTM DO	Land Transport Authority Traffic Marshals Deployment Officer
LTA	Land Transport Authority
OE	Operations Executive
RC	Recovery Crew
DM	Deputy Manager
TP	Traffic Police
VRS	Vehicle Recovery Service
DO	Deployment Officer

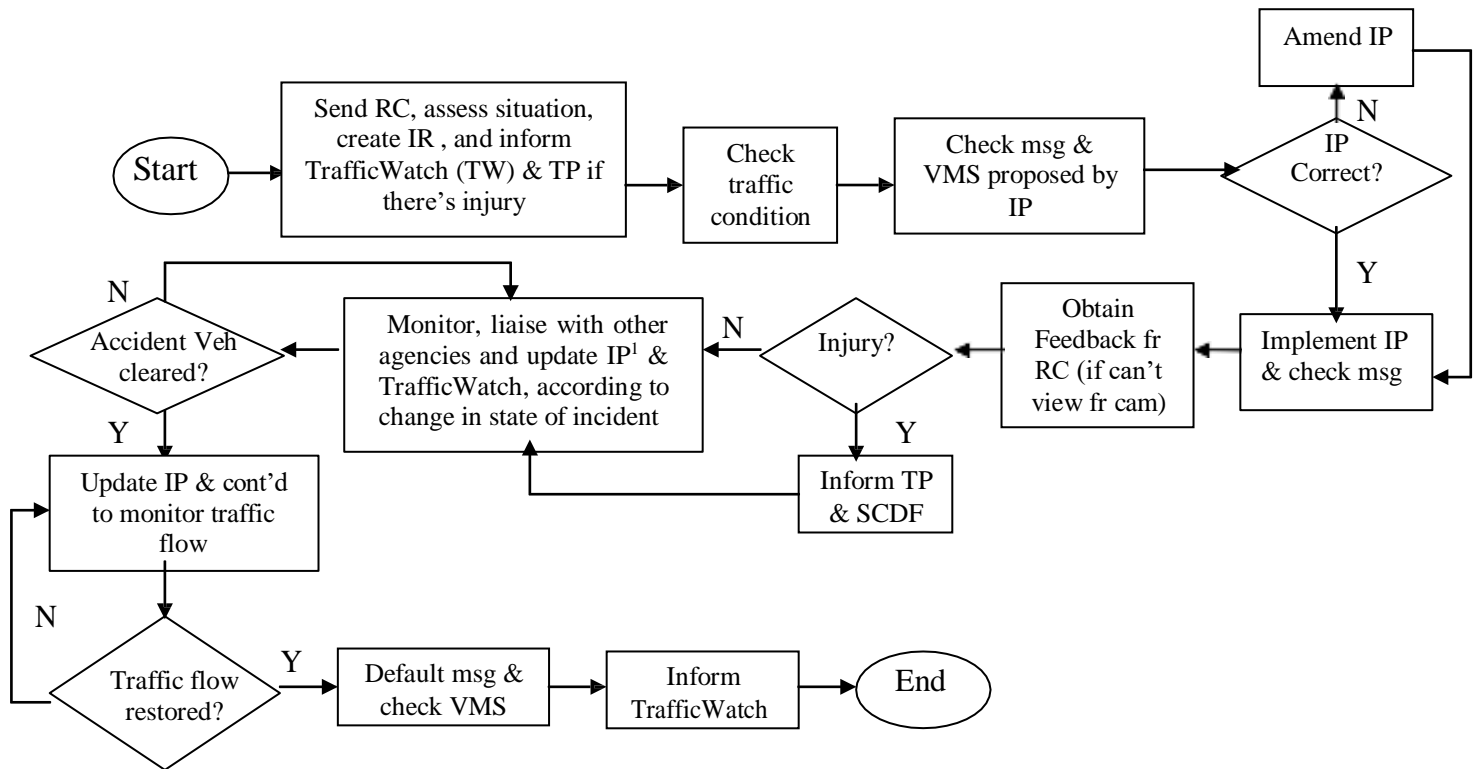
Section 5 References & Attachments

1. Intelligent Transport Systems Operations (Operations), Integrated Standard Operating Procedure

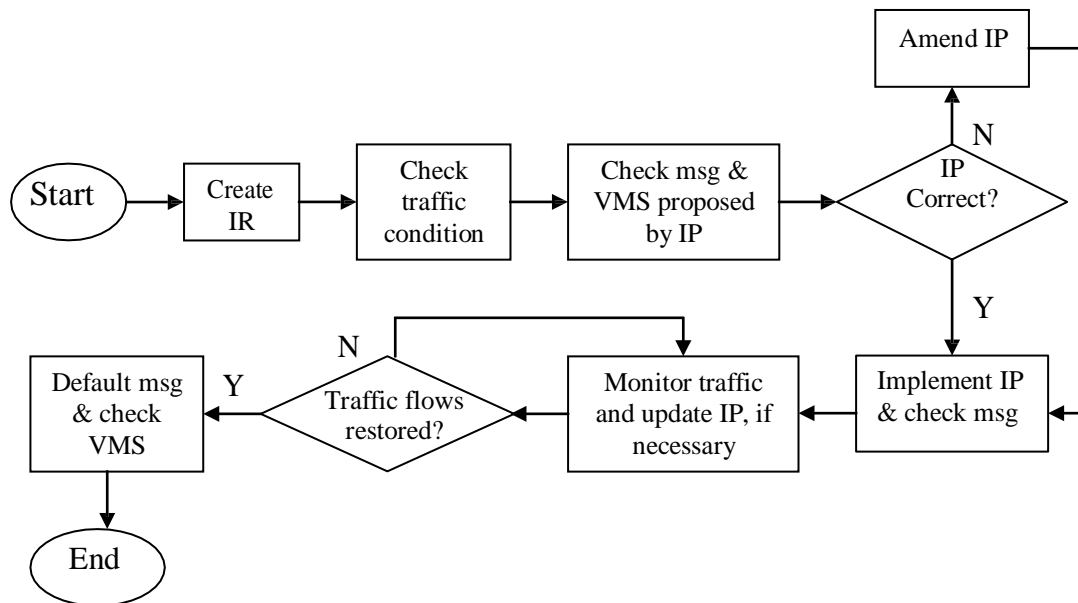
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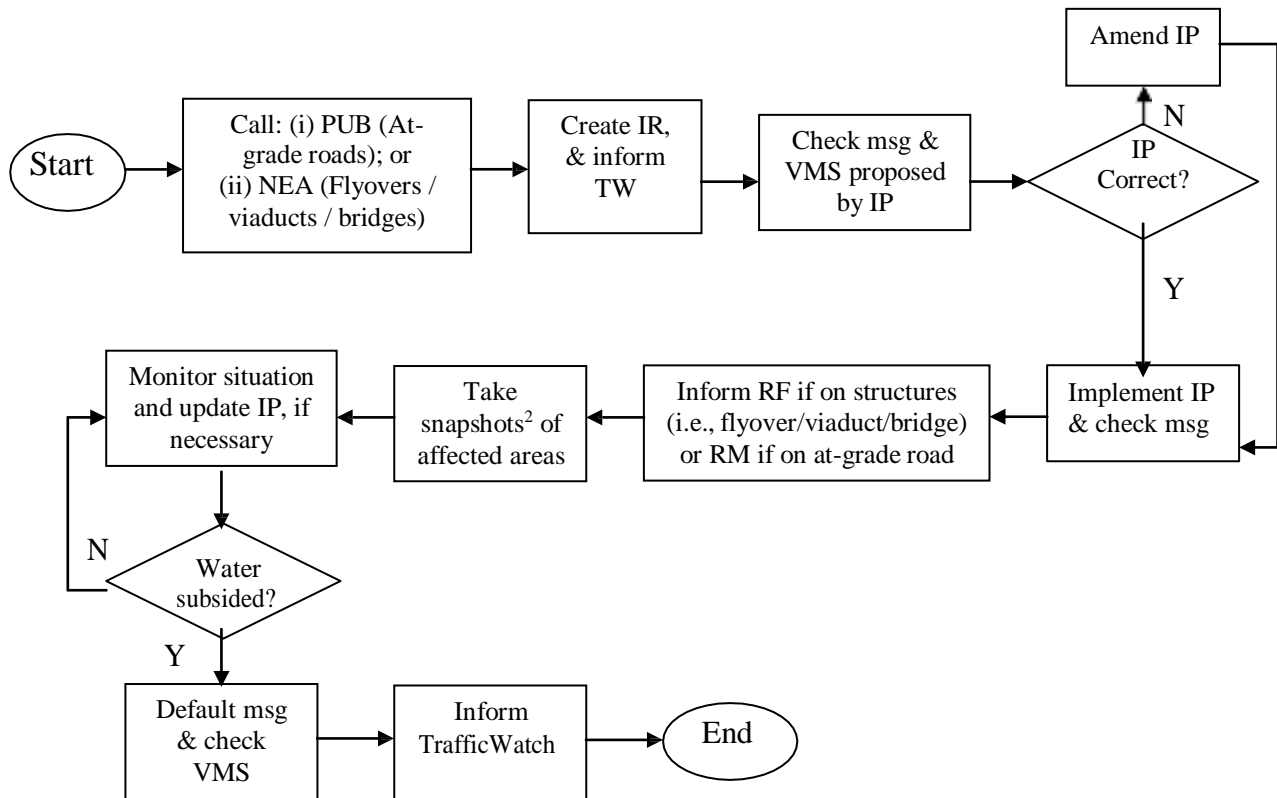
ATTACHMENT 1 WORK FLOWS FOR INCIDENT MANAGEMENT

A. Vehicle Breakdown

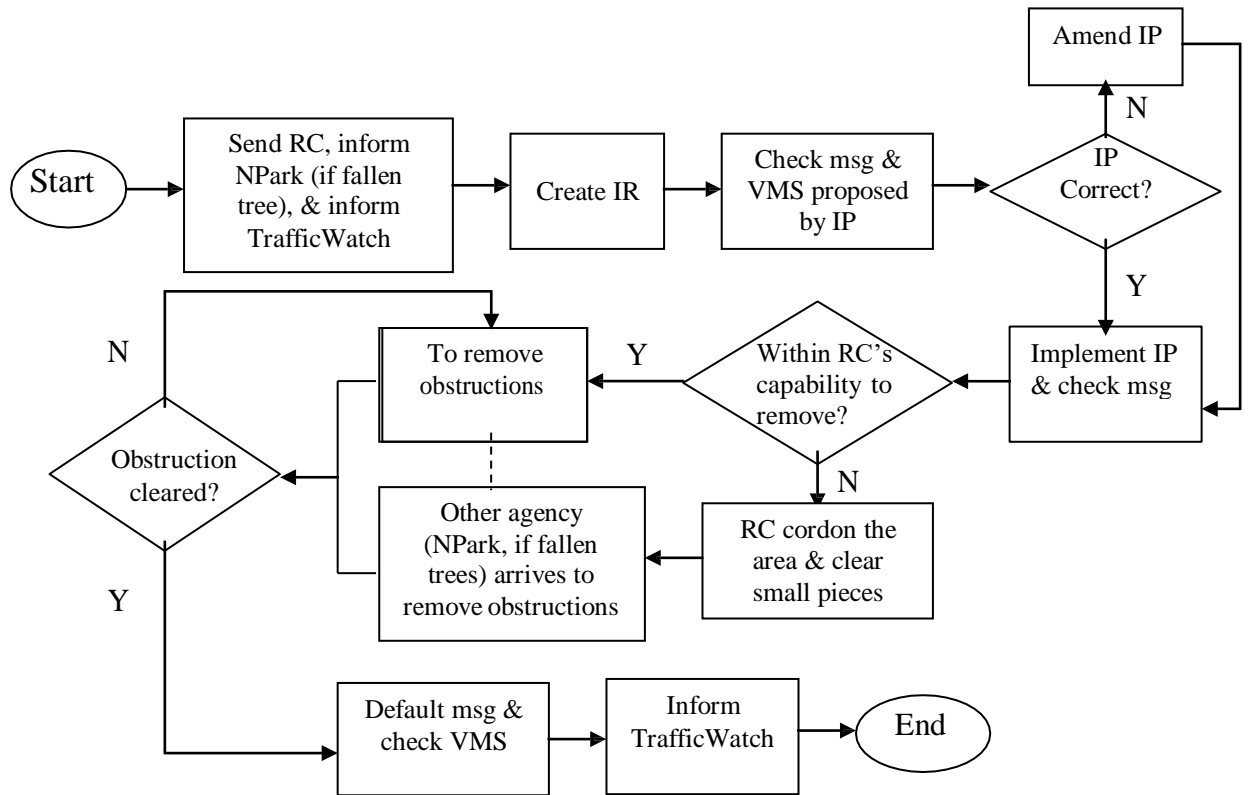
B. Accident

¹According to the change in the state of the incident, e.g., when congestion worsen, advise motorists to avoid or exit the expressway early, identify an alternate route (if available & viewable by J-Eyes), display messages to advise motorists to use this alternate route.

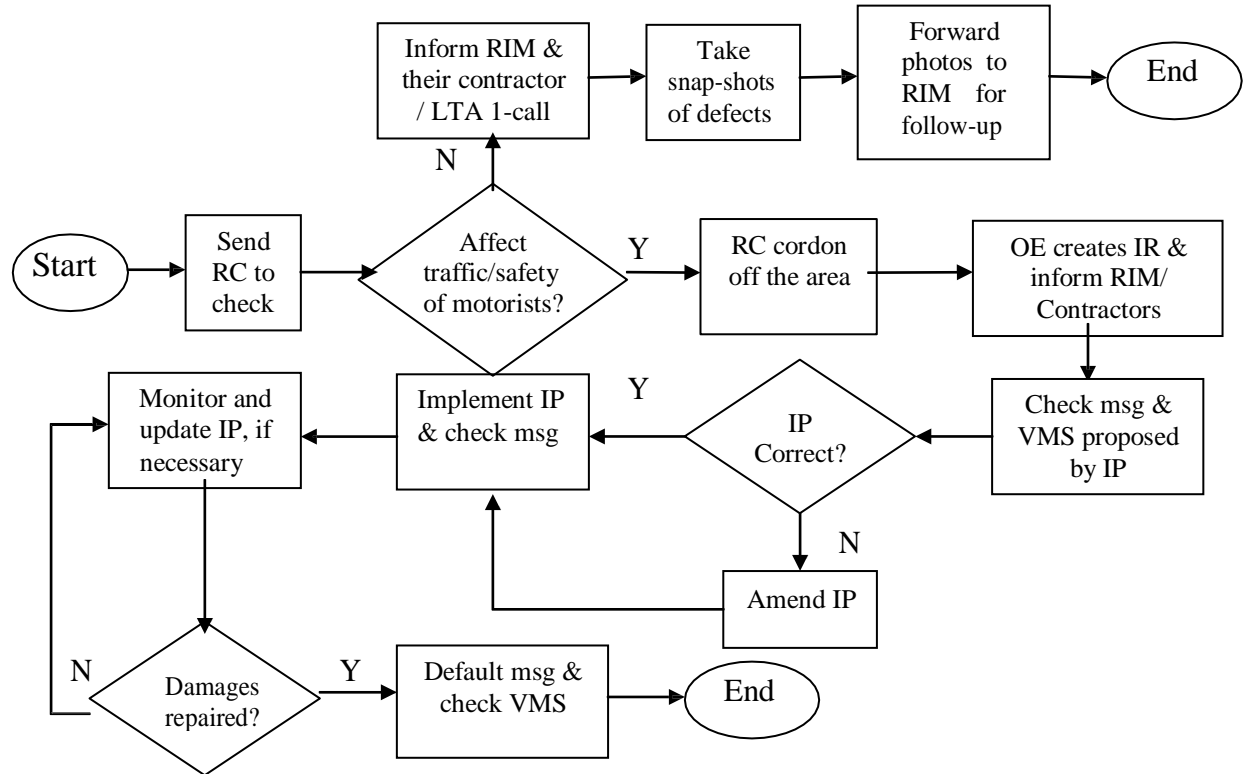
C. Heavy Traffic (On Expressways)

D. Water Ponding/Floods (Open Expressway)

² Send the pictures to the relevant department(s) after the incident.

E. Fallen Objects/Obstacles (e.g., fallen tree/branches, goods, etc.)

F. Damages to Road Infrastructures (e.g. potholes/ground settlement/street lighting) / Street lighting lamp out



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ATTACHMENT 2 VRS TOWING DESIGNATED CAR PARK

ABANDONED VEHICLE		NON-ABANDONED VEHICLE	
PIE			
1	BLK 155 SIMEI RD	1	URA C/P AT CSA (AIRPORT BOULEVARD)
2	BLK 294 TAMPINES ST 22	2	BLK 155 SIMEI RD
3	BLK 101 TAMPINES ST 11	3	BLK 294 TAMPINES ST 22
4	BLK 214 TOA PAYOH LOR 8	4	BLK 101 TAMPINES ST 11
5	ADAM RD FOOD CENTRE	5	BLK 701 - 705 BEDOK RESERVOIR RD
6	BT TIMAH MARKET opp UPP BT TIMAH RD	6	BLK 71 CIRCUIT RD
7	BLK 937 JURONG WEST ST. 91	7	BLK 12 - 16 EUNOS CRESCENT
		8	TOA PAYOH SPORT COMPLEX
		9	BLK 214 TOA PAYOH LOR 8
		10	THOMSON / WHITLEY HEAVY VEH C/P
		11	ADAM RD FOOD CENTRE
		12	BT TIMAH MARKET opp UPP BT TIMAH RD
		13	JLN SEH CHUAN C/P
		14	BLK 1 - 4 TOH YI DRIVE
		15	BLK 213 - 215 JURONG EAST ST 21
		16	BLK 937 JURONG WEST ST. 91
CTE			
1	BLK 123 MC NAIR RD	1	BLK 123 MC NAIR RD
2	BLK 33 JLN BAHAGIA	2	BLK 33 JLN BAHAGIA
3	BLK 214 TOA PAYOH LOR 8	3	BLK 214 TOA PAYOH LOR 8
4	BLK 401 - 406 ANG MO KIO AVE 10	4	BLK 401 - 406 ANG MO KIO AVE 10
5	BLK 104 - 107 JLN BT MERAH	5	BLK 104 - 107 JLN BT MERAH
		6	BLK 1 - 5 SELETAR HILL
		7	BLK 102 POTONG PASIR AVE 1
		8	NEWTON FOOD CENTRE - CLEMENCEAU AVE NORTH
AYE			
1	BLK 30 DOVER RD	1	BLK 30 DOVER RD
2	BLK 401 - 406 CLEMENTI AVE 1	2	BLK 401 - 406 CLEMENTI AVE 1
3	BLK 415 - 416 PANDAN GARDEN	3	BLK 415 - 416 PANDAN GARDEN
4	BLK 104 - 107 JLN BT MERAH	4	BLK 10 YUNG KUANG RD
		5	BLK 311 - 320 CLEMENTI AVE 4
		6	BLK 104 - 107 JLN BT MERAH
		7	JURONG STADIUM C/P
		8	FIRST LOK YANG RD URA C/P

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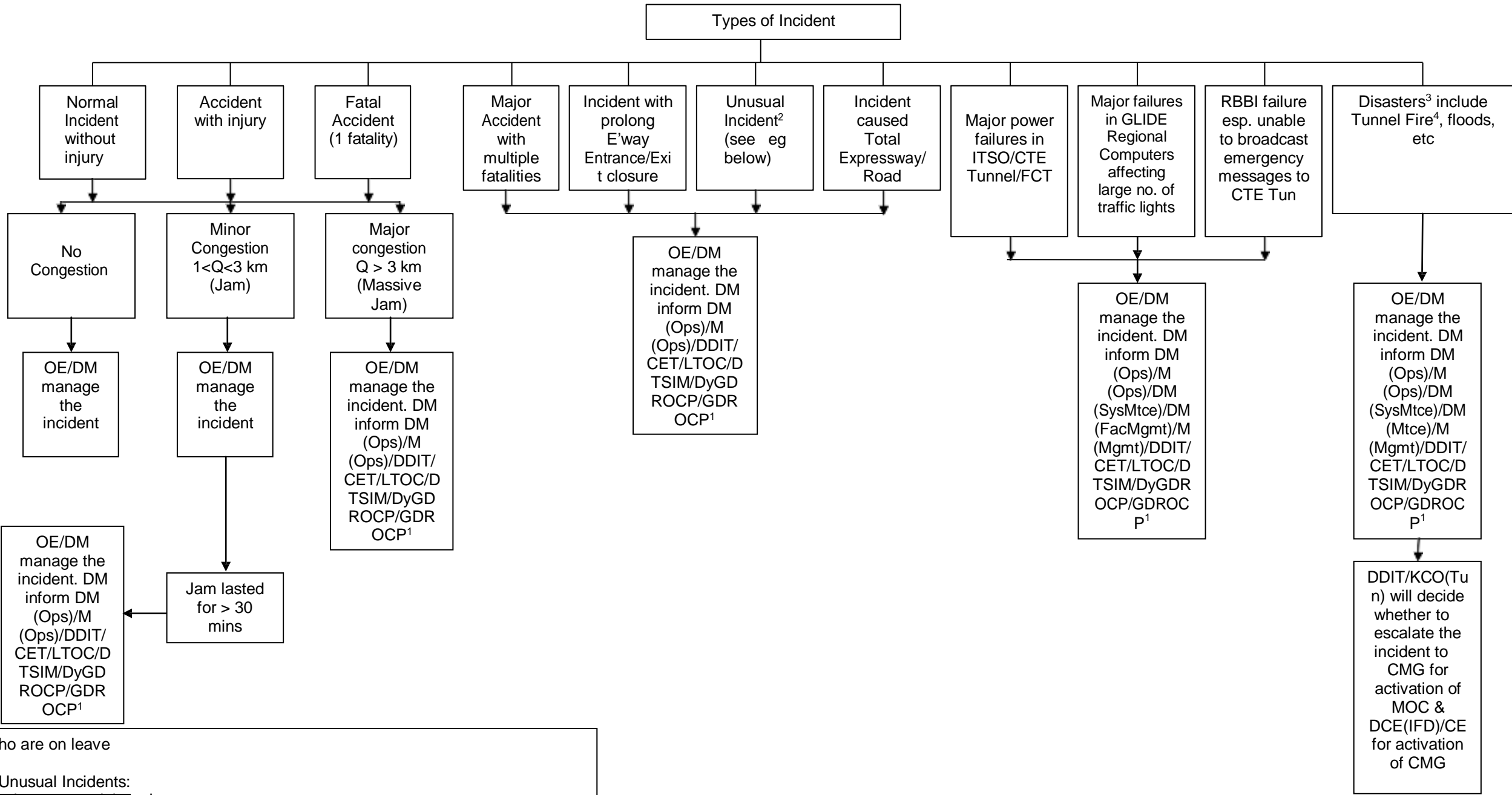
ECP	
1 BLK 51 MARINE PARADE	1 BLK 51 MARINE PARADE
2 EAST COAST PARK C/P B1	2 EAST COAST PARK C/P B1
3 EAST COAST PARK C/P E1	3 EAST COAST PARK C/P E1
4 EAST COAST PARK C/P F1	4 EAST COAST PARK C/P F1
5 EAST COAST PARK C/P F3	5 EAST COAST PARK C/P F3
6 EAST COAST PARK C/P H	6 EAST COAST PARK C/P H
7 BLK 104 - 107 JLN BT MERAH	7 URA C/P AT CSA (AIRPORT BOULEVARD)
8 PRINCE EDWARD LINK URA C/P	8 BLK 104 - 107 JLN BT MERAH
9 BUGIS MRT URA C/P (BLANCO COURT)	9 PRINCE EDWARD LINK URA C/P
	10 BUGIS MRT URA C/P (BLANCO COURT)
SLE	
1 BLK 336 WOODLANDS AVE 1	1 BLK 162 WOODLANDS CENTRAL RD
2 BLK 162 WOODLANDS CENTRAL RD	2 BLK 336 WOODLANDS AVE 1
	3 BLK 816 YISHUN ST 81 (SPORT COMPLEX)
	4 BLK 1 - 5 SELETAR HILL
TPE	
1 BLK 432 TAMPINES ST 42	1 BLK 432 TAMPINES ST 42
	2 BLK104 PASIR RIS DRIVE 1
	3 BLK 532 - 534 PASIR RIS TOWN C/P
	4 BLK 1 - 5 SELETAR HILL
BKE	
1 BT TIMAH MARKET opp UPP BT TIMAH RD	1 BT TIMAH MARKET opp UPP BT TIMAH RD
2 BLK 162 WOODLANDS CENTRAL RD	2 JLN SEH CHUAN opp St
3 MARSILING H/V C/P off ADMIRALTY RD	3 BLK 162 WOODLANDS CENTRAL RD
	4 MARSILING H/V C/P off ADMIRALTY RD
KJE	
1 BLK 417 CHOA CHU KANG AVE 4	1 BLK 356 CHOA CHU KANG LOOP
	2 BLK 417 CHOA CHU KANG AVE 4

- *Foreign vehicle are not allow to park at Jalan Seh Chuan or Adam Food Center carpark*

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ATTACHMENT 3

ESCALATION OF INFORMATION ON INCIDENTS



¹To exclude those who are on leave

²Some examples of Unusual Incidents:
(a) Abnormal massive jam on arterial roads
(b) Huge obstacles such as fallen trees (affecting > 50% of carriageway)
(c) Road cave-in
(d) Serious upheaval of road surface
(e) Flooding
(f) Serious road settlement, subsidence or undulating carriageway over a considerable length of road
(g) Unauthorised works on roads that adversely affect traffic flow / unusual events on roads
(h) Severe damage to overhead gantry/cantilever sign causing massive jam or posing safety hazard
(Also to inform DM (Fac Mgmt) & M (Mgmt) if it is an EMAS sign)

³Disaster – Please refer to the LTA CMG Minor Disaster List

⁴For Tunnel fire, SCDF takes command and control of the rescue and recovery operations

SMS Message

(a) Est. Nos. of SMS per incident: (i) Start of an incident (ii) updates when there is a change in status (iii) End of an incident.
Min. = 3nos.
(b) Format : <Time> : <New or U/D> : <Type of incident> : <Location> : <Actions taken> : <Impact of incident>
E.g. 0650hrs : New – Accident CTE(AYE) aft PIE(Changi) on Ln 1. TP & TW informed. Congestion 4km up to AMK Ave 1