

Reduction of Routes

New Deal

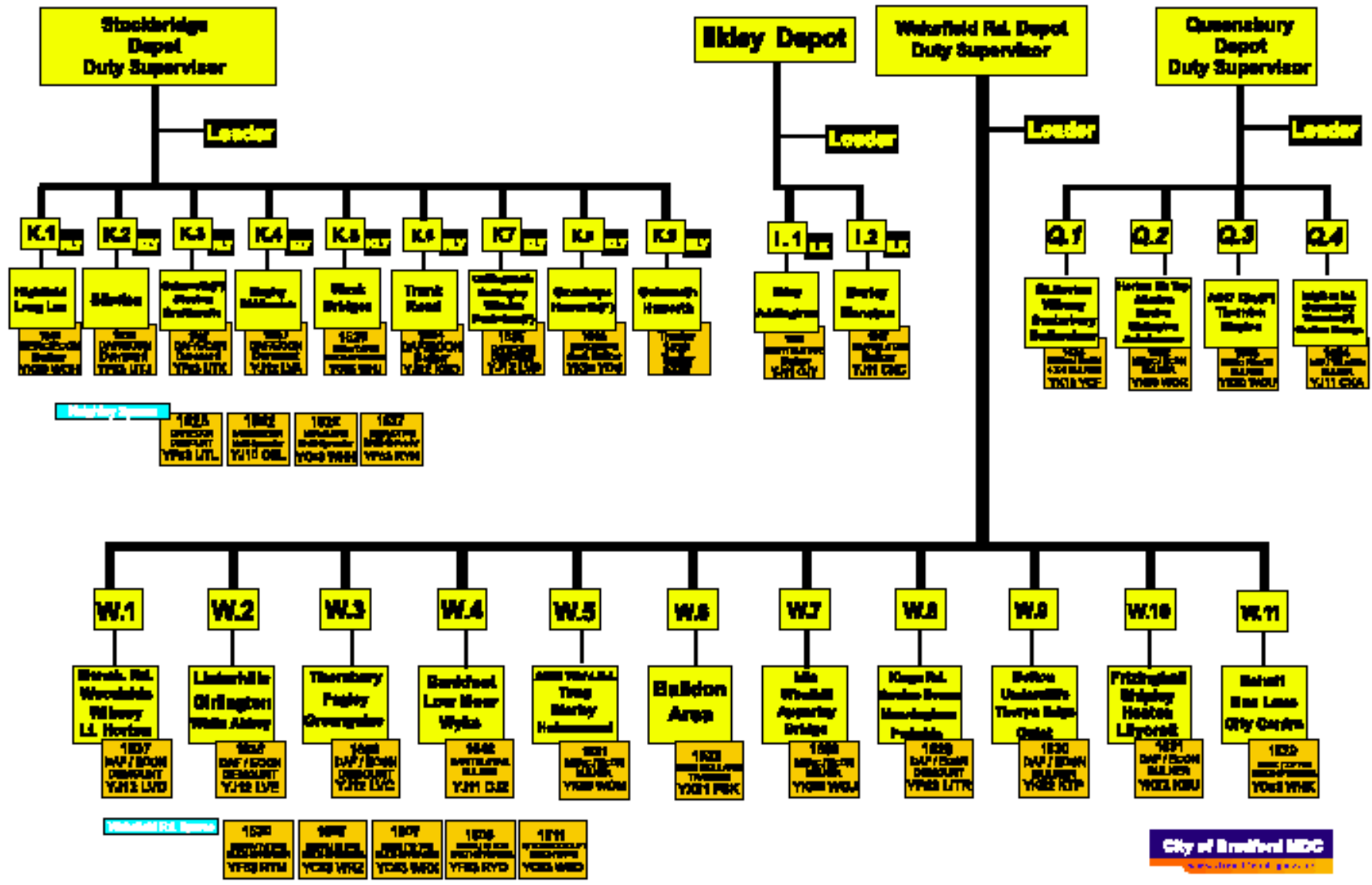
Resilience Since 2009

Severe Weather Team

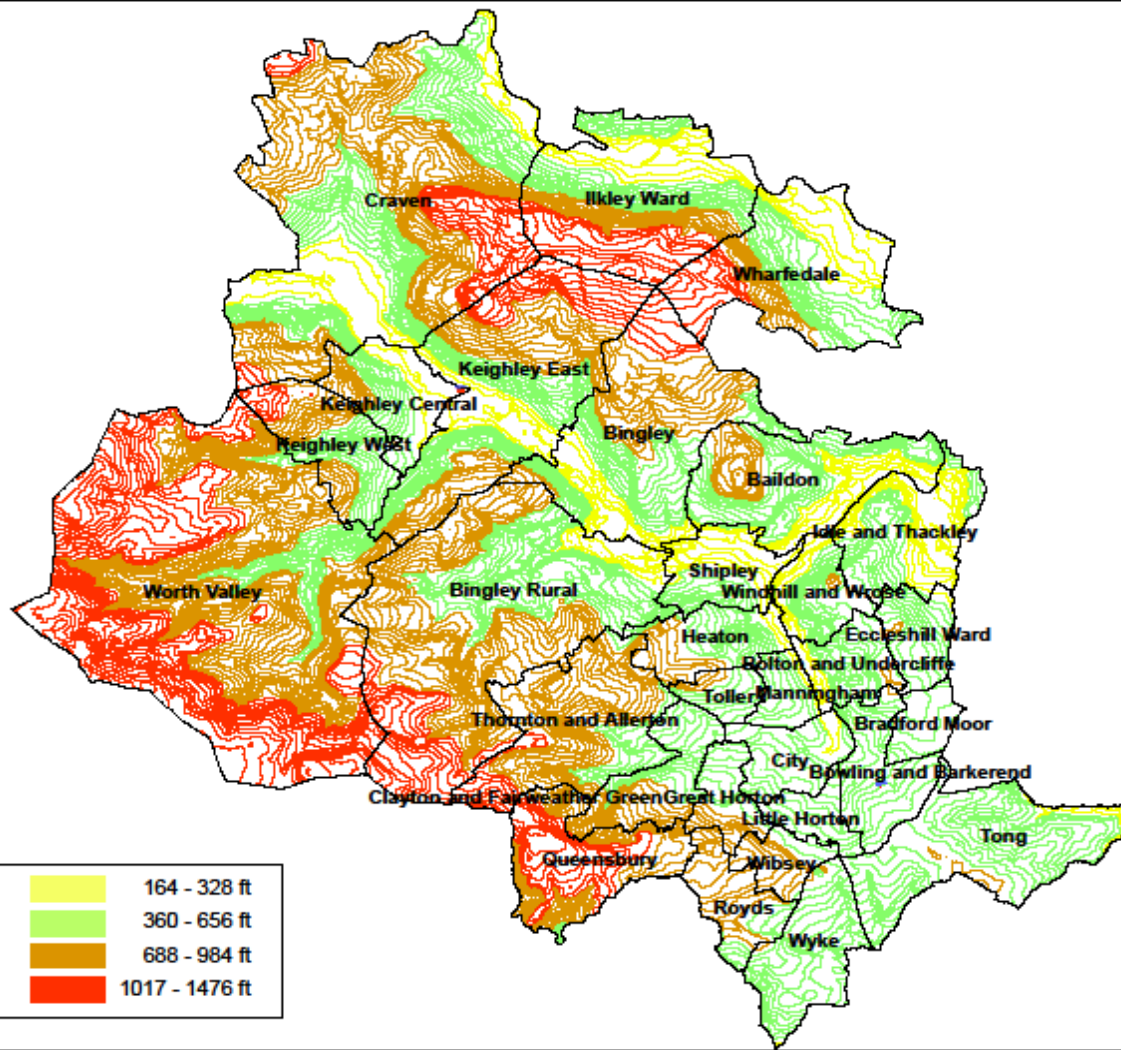
**Dave Mazurke:
Group Manager - Highway Maintenance
Bradford Metropolitan District Council.**

- 26 Routes
- 7 Dedicated Footway Routes
- Since 2011 Continuous Cut-backs
- Total spend on Gritting £1.1 million
- £140k on Footway Gritting
- 712 Mile equates to approx 60% of Network
- Meetings in July 2015 to look at cuts in Winter maintenance Budget 2016-2017
- Reduce Network of Gritting to 50%
- 626 Miles

Winter Maintenance Operation 2014 - 2015



0 1.5 3 6 9 12 15 18 Miles



- | | |
|-------------------|--------------------|
| 1 Haworth | 14 Bingley |
| 2 Oxenhope | 15 Keighley Centre |
| 3 Denholme | 16 Steeton |
| 4 Queensbury | 17 Silsden |
| 5 Clayton | 18 Silsden Moor |
| 6 Halifax Road | 19 Addingham |
| 7 Odsal | 20 Ilkley |
| 8 Bfd City Centre | 21 Burley |
| 9 Undercliffe | 22 Menston |
| 10 Greengates | 23 Ilkley Moor |
| 11 Thackley | |
| 12 Shipley | |
| 13 Lower Baildon | |

Bradford District Elevation Profile



- Population of Bradford over 500,000
- Up to 50% live at 600 feet and above
- Saving of 3 Gritters, salt, fuel ,labour
- Saving of £71k
- Risk is high
- You put your name to it
- November the proposal went to Council and consultation
- Ratified at Full Council in February 2016 for approval
- Phone red-hot with Councillors

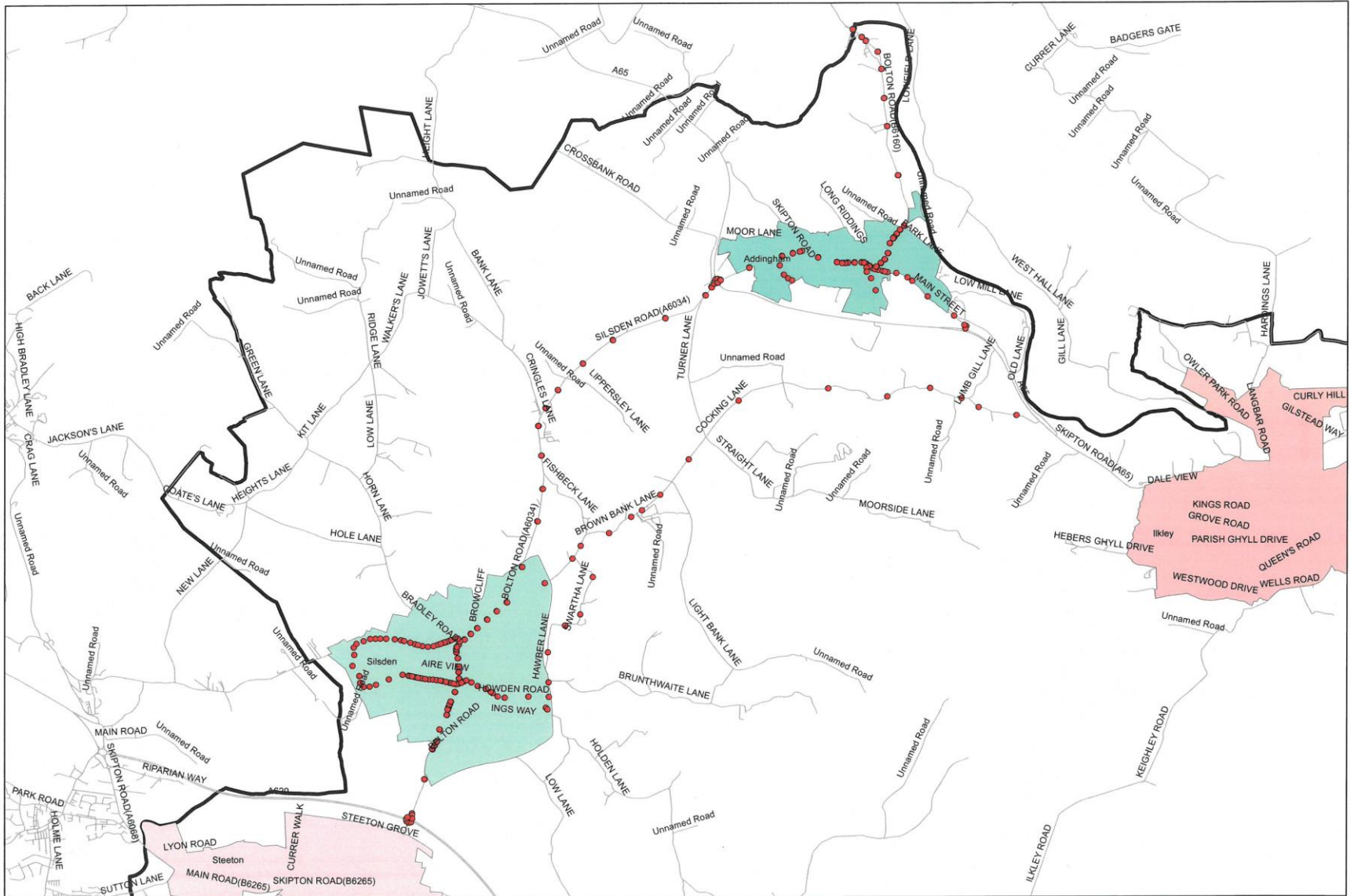
History of Gritting

YEAR	NO. OF GRITTING RUNS	TOTAL OF SALT USED
2009- 2010	106	21,000 TONNES
2010-2011	85	13,300 TONNES
2011-2012	73	12,500 TONNES
2012-2013	117	22,000 TONNES
2013-2014	45	6,300 TONNES
2014-2015	68	14,800 TONNES
2015-2016	36	7,700 TONNES

- Ploughing Routes = 532
- 5 year period this worked
- Appendix H- Risk Management approach
Removed some rural roads and flat roads
- Overlaid Bus routes
- Added Schools
- Steep hills
- Software used was RouteSmart



Silsden Route



New Deal

- Working with community Groups
- Several parish Councils will buy grit bin and we fill for £100
- Rural roads
- Homes for the Elderly
- Health centres
- Schools
- Grit Bin meets New Deal ?????





Resilience Since 2009

- Salt Stocks – 26,000 tonnes
- New fleet investment
- Trackers
- Calibration
- Bradford Winter Service Plan
- Social media
- Maps
- Severe Weather Resilience contracts with Local Contractors
- West Yorkshire Collaboration
- West Yorkshire Winter Service Plan
- Improved Weather Information
- APSE Meetings Sharing Information, Innovations

- Quarmby Report 2010
- Appendix 'H' 2012
- Adverse Weather plans
- DFT- Transport Resilience Review- Extreme Weather Events
- Liquid Sprays
- Econ Multi -Spreaders
- Safecote
- Prewet Systems
- Slush Blades
- Domes
- Multi – Hog Snow Blower
- Drivers Hours

- Road temperature Sensors
- Thermal mapping
- Bosch cameras on the Bradford Network
- Linked into UTC Wireless Comms Network
- Does not record for Data Protection Legislation.

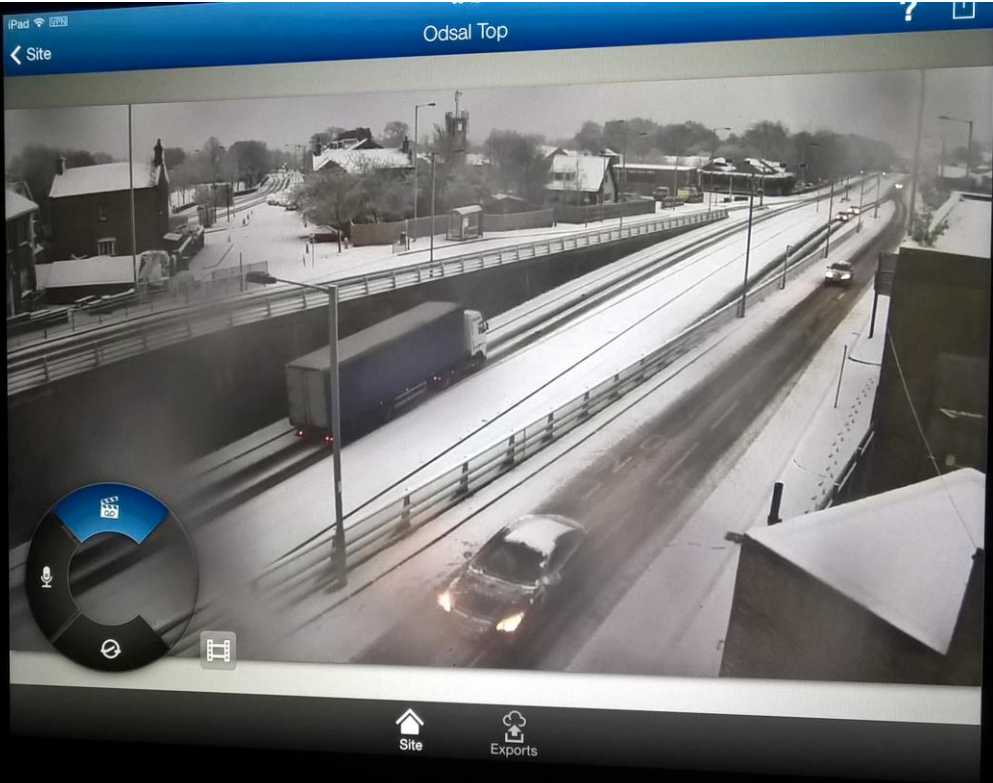
- Baldon
- Carr Lane/Wrose Road
- GI Horton/Cross Ln
- Queensbury
- Odsall Top
- Dudley Hill Roundabout
- Thornton Rd/Halifax Rd
- Bankfield Roundabout
- Thornbury
- Sandy Lane



- Output 1
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Control panel with a directional pad, buttons for 'Scene', 'Set', 'AUX on', and 'AUX off', and a numeric keypad (1-6).

Time	Device	Events
03/02/2016 08:31:21	Thornton Rd/Halifax Rd	Connecting to 93.91.35.63 (IP bullet 4000 HD) failed due to invalid access data
03/02/2016 08:30:03	Thornton Rd/Halifax Rd	Connecting to 93.91.35.63 (IP bullet 4000 HD) failed due to invalid access data
03/02/2016 07:17:55	Thornton Rd/Halifax Rd	Connecting to 93.91.35.63 (IP bullet 4000 HD) failed due to invalid access data
03/02/2016 07:17:25	192.168.246.22	Connecting to 192.168.246.22 (Unknown) failed
03/02/2016 07:17:24	Thornbury	10.136.84.133 is connected
03/02/2016 07:17:23	Thornton Rd/Halifax Rd	Connecting to 93.91.35.63 (IP bullet 4000 HD) failed due to invalid access data
03/02/2016 07:17:22	Queensbury	10.140.73.9 is connected
03/02/2016 07:17:22	172.23.3.133	172.23.3.133 is connected
03/02/2016 07:17:22	10.140.144.45	10.140.144.45 is connected
03/02/2016 07:17:21	10.140.70.76	10.140.70.76 is connected



Winter 15/16 Wet



Severe Weather Teams

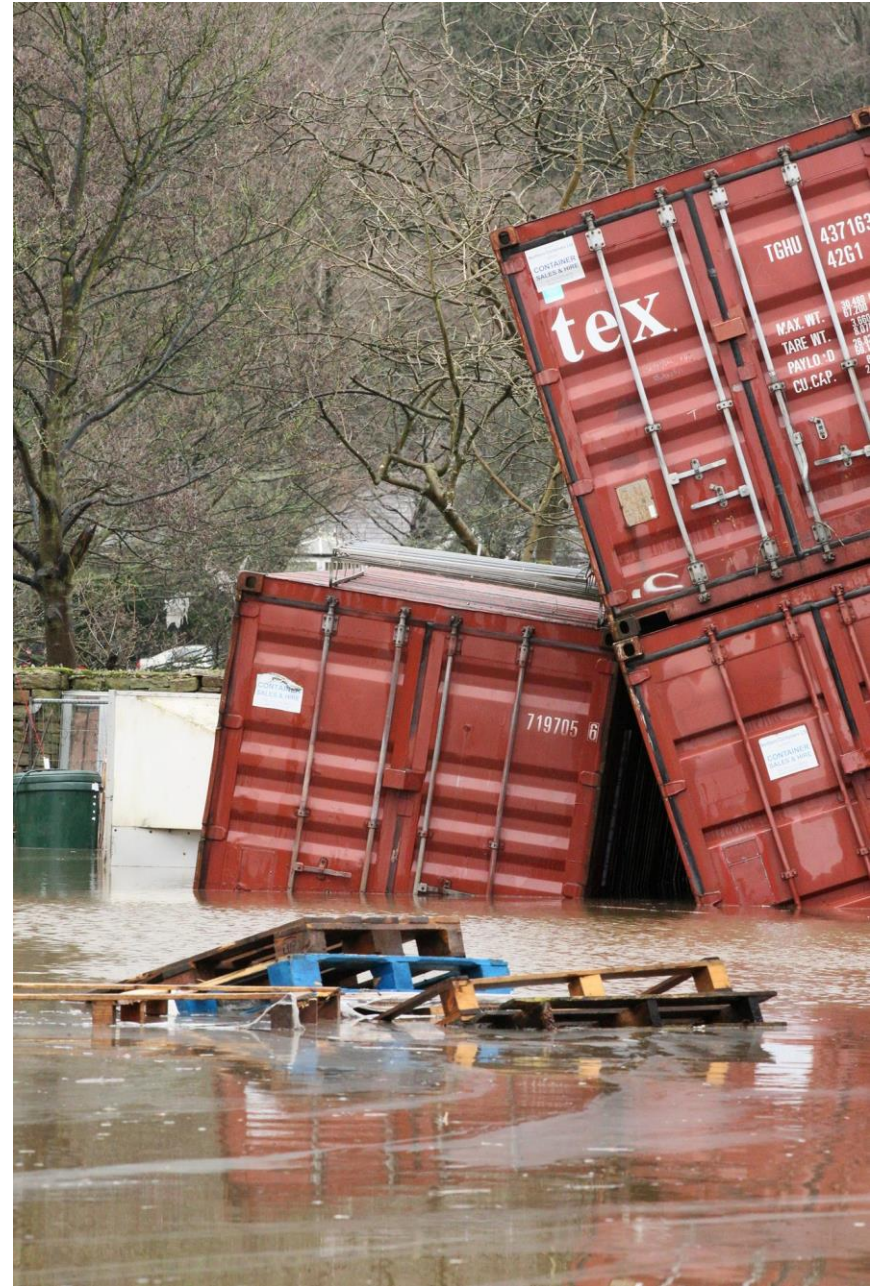
- Snow Wardens
- Snow Teams
- Boxing day Floods
- Only 24 hour operations teams available was the Winter Maintenance Teams
- 26 drivers
- Filling sandbags
- Rain and rain



- No sand as all Building Suppliers closed.
- We did have plenty of Salt!!!
- Emergency Planning had formed Silver Command at Bradford
- Received 1,000 sandbags from Nottingham
- Calls from Calderdale- Response Nil
- British Army called in from York
- 60 Men and 3,000 sandbags empty!!









Florist Street - Stockbridge

