

TORONTO TRANSIT COMMISSION REPORT NO.

MEETING DATE: December 16, 2009

SUBJECT: PASSENGER FLOW AT BLOOR-YONGE STATION

INFORMATION ITEM

RECOMMENDATION

A presentation will be made to the Commission regarding a pilot project to streamline passenger flow at Bloor-Yonge Station in the morning rush hour. The presentation will include a description on what was done to manage the passenger flow and the results of the pilot.

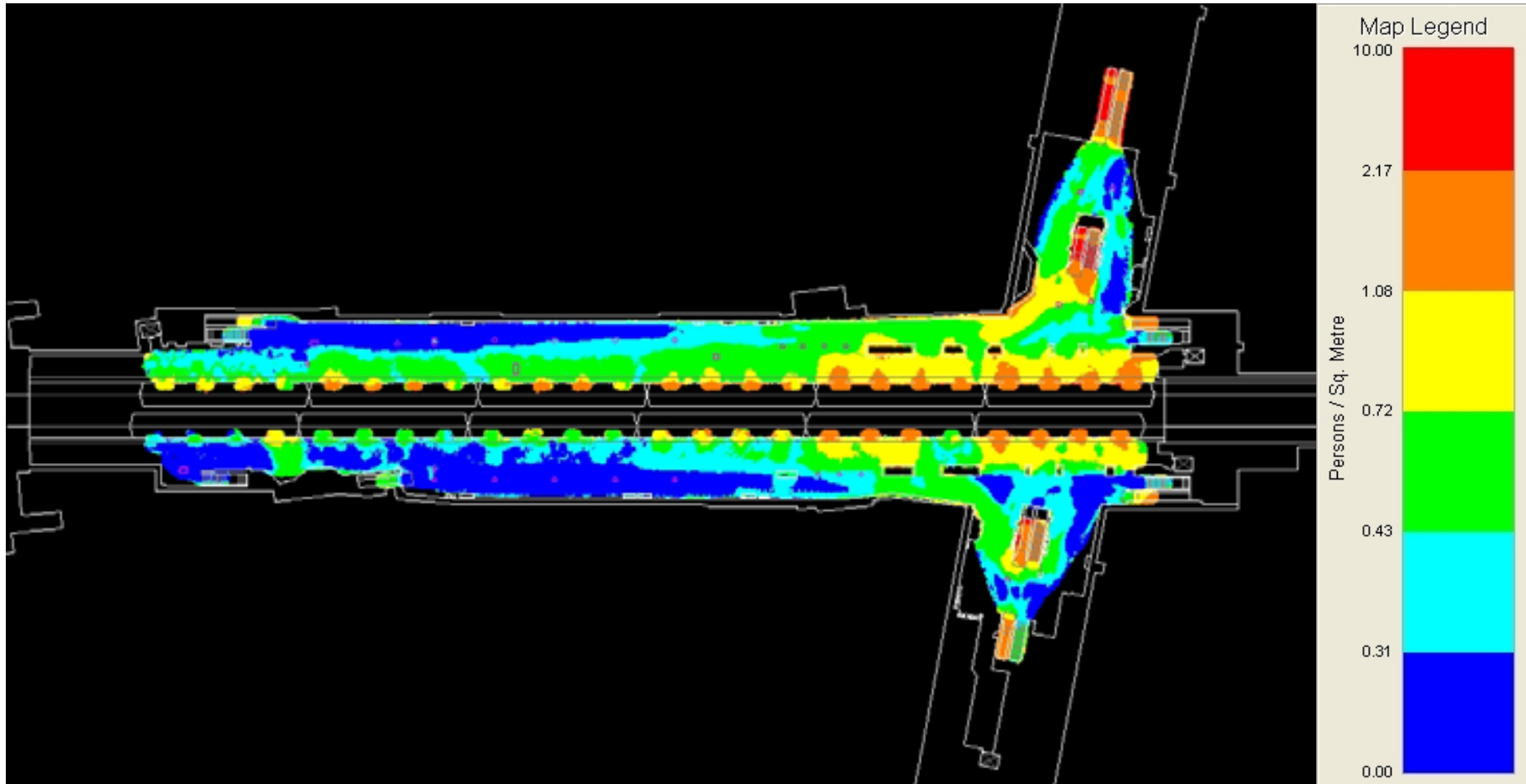
December 11, 2009
1-5-20

Passenger Flow Yonge-Bloor Station



Commission Meeting
December 16, 2009

Passenger Density (AM)



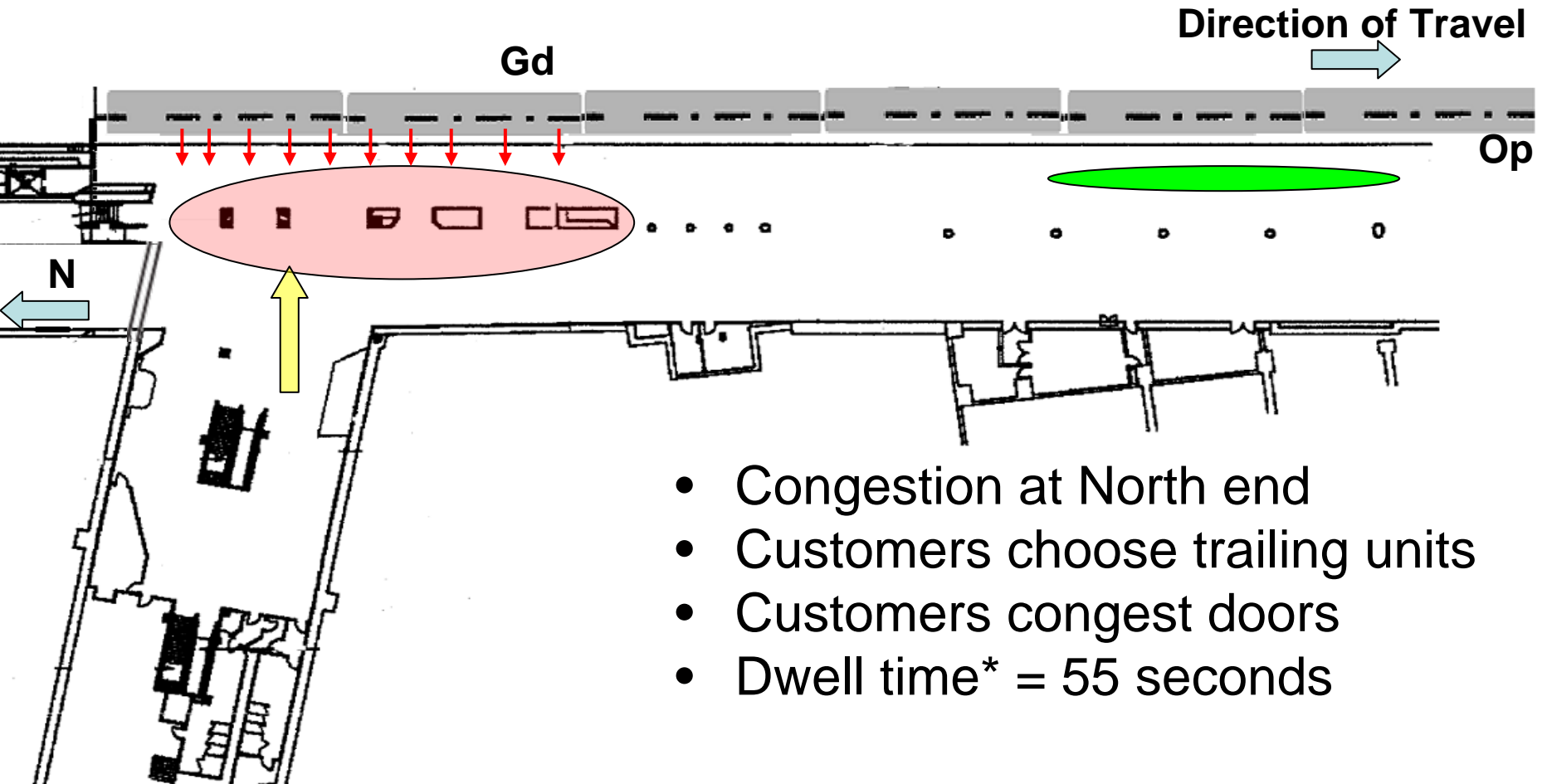
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Bloor South Bound AM Peak Challenge

Unimpeded run from Rosedale to Bloor,
increase current throughput of trains/hour
and minimize the dwell time

*Diagram not to scale

Pre-Pilot Situation Southbound Platform



- Congestion at North end
- Customers choose trailing units
- Customers congest doors
- Dwell time* = 55 seconds

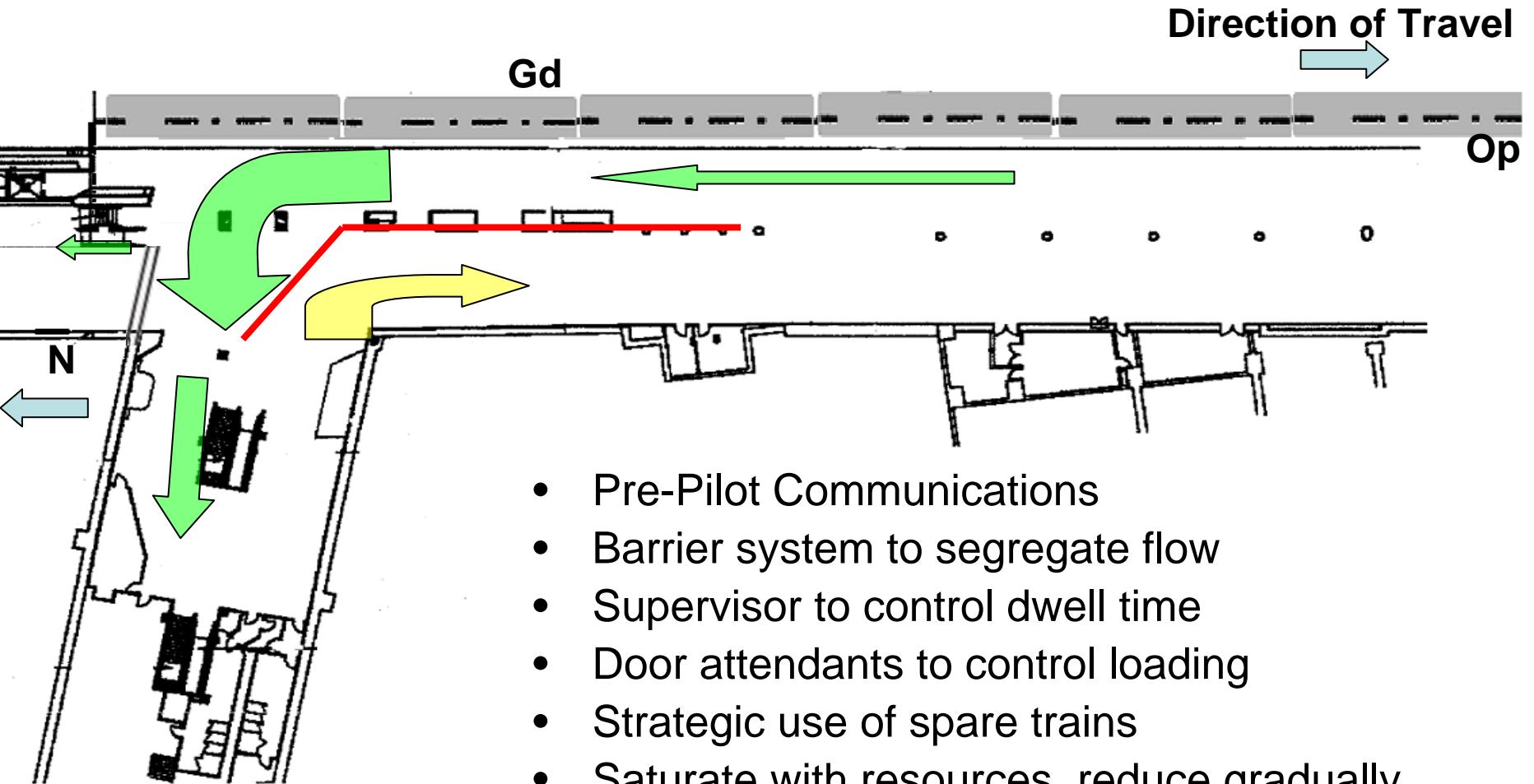
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*time spent with doors open

*Diagram not to scale

Plan Overview

Key Concepts



- Pre-Pilot Communications
- Barrier system to segregate flow
- Supervisor to control dwell time
- Door attendants to control loading
- Strategic use of spare trains
- Saturate with resources, reduce gradually

Pilot Communications

**Travelling south
on Yonge ...**



**Please move down
to the south end of
the platform.**

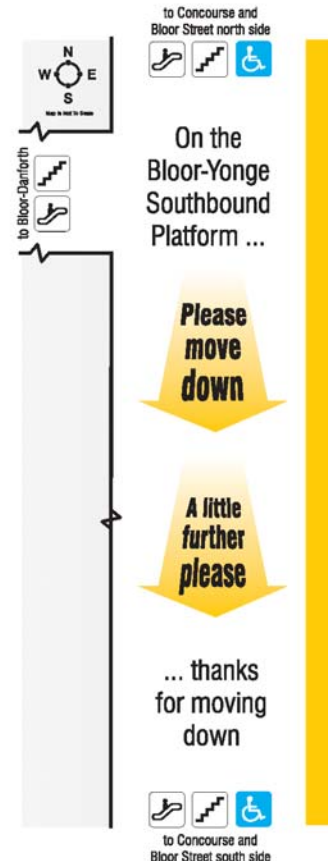
You will:

- Board quicker
- Have more seating
- Leave sooner

We will:

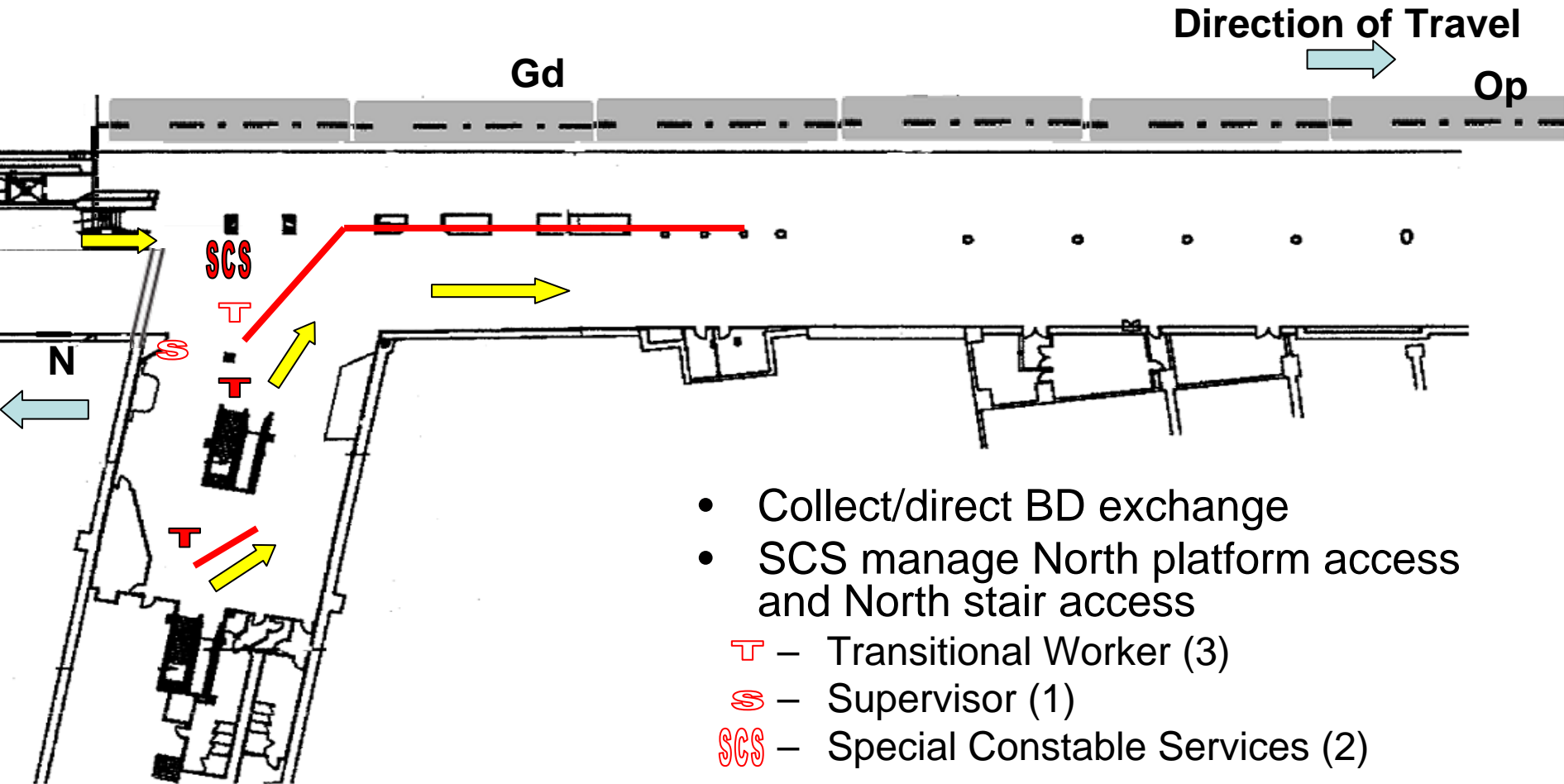
- Reduce crowding
- Improve service
- Get you there faster

**Thank you for
your co-operation.**



*Diagram not to scale

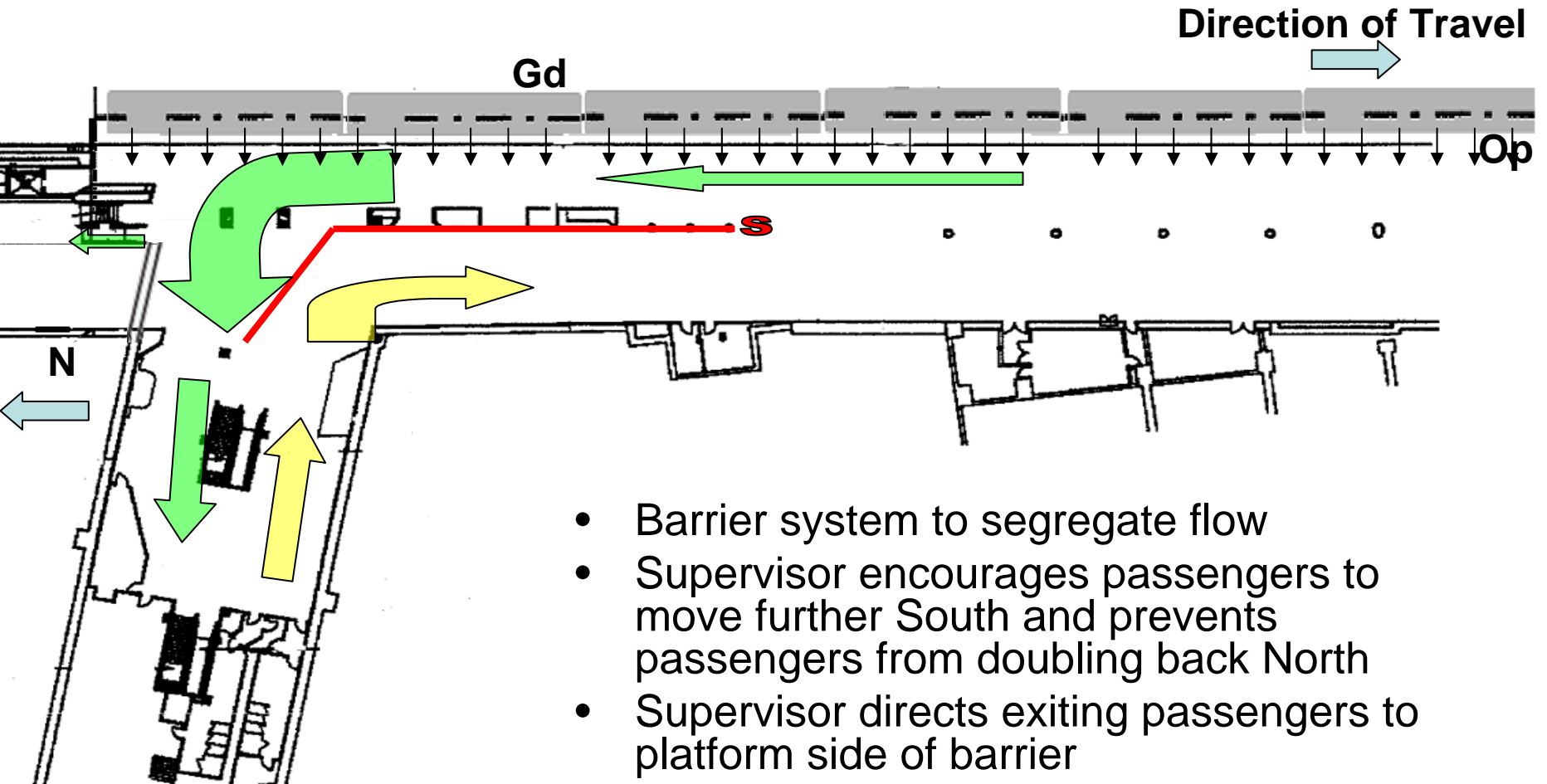
Key Activities Stairwell Management



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*Diagram not to scale

Key Activities Platform Management



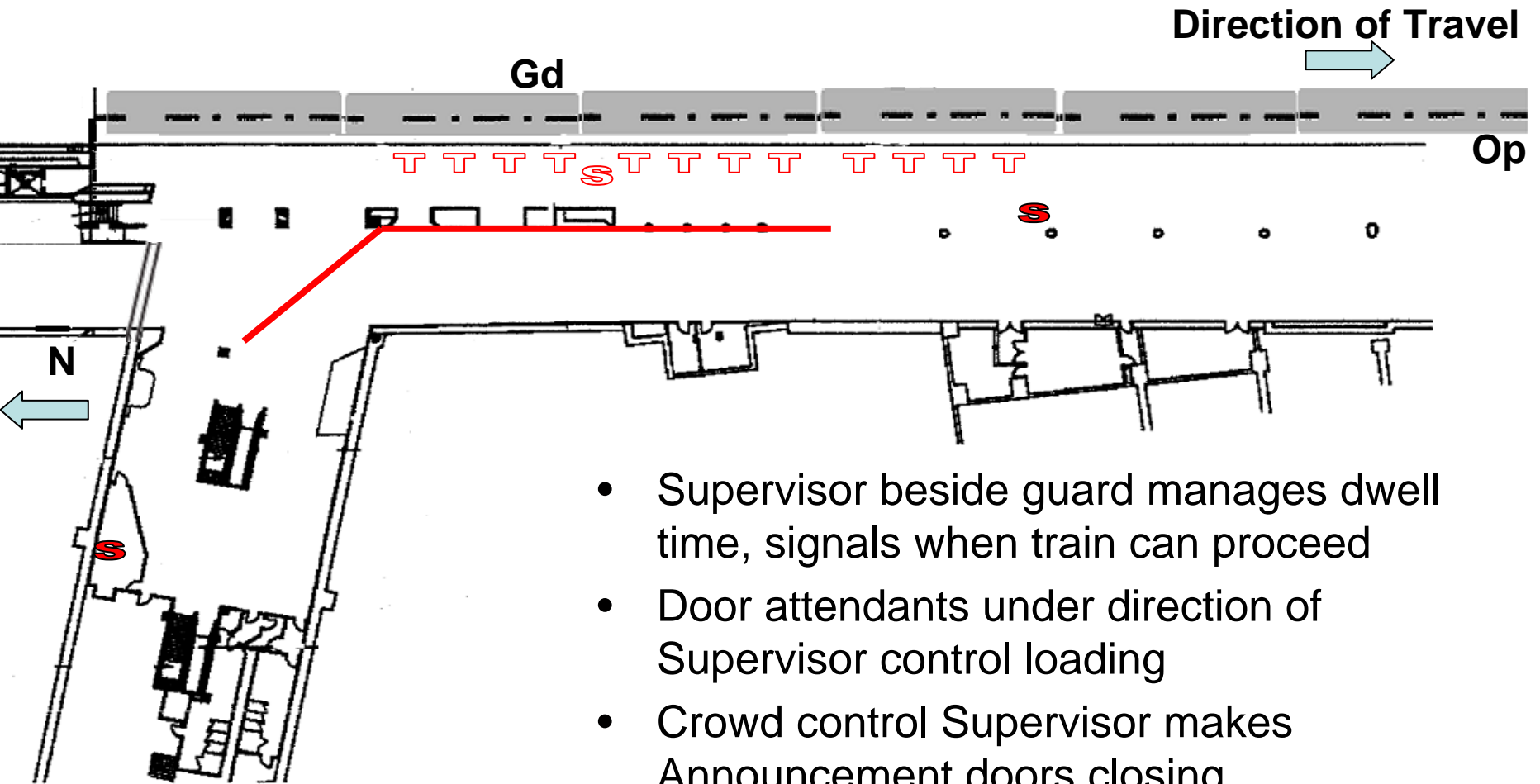
- Barrier system to segregate flow
- Supervisor encourages passengers to move further South and prevents passengers from doubling back North
- Supervisor directs exiting passengers to platform side of barrier

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*Diagram not to scale

Key Activities

Door Dwell Management



- Supervisor beside guard manages dwell time, signals when train can proceed
- Door attendants under direction of Supervisor control loading
- Crowd control Supervisor makes Announcement doors closing

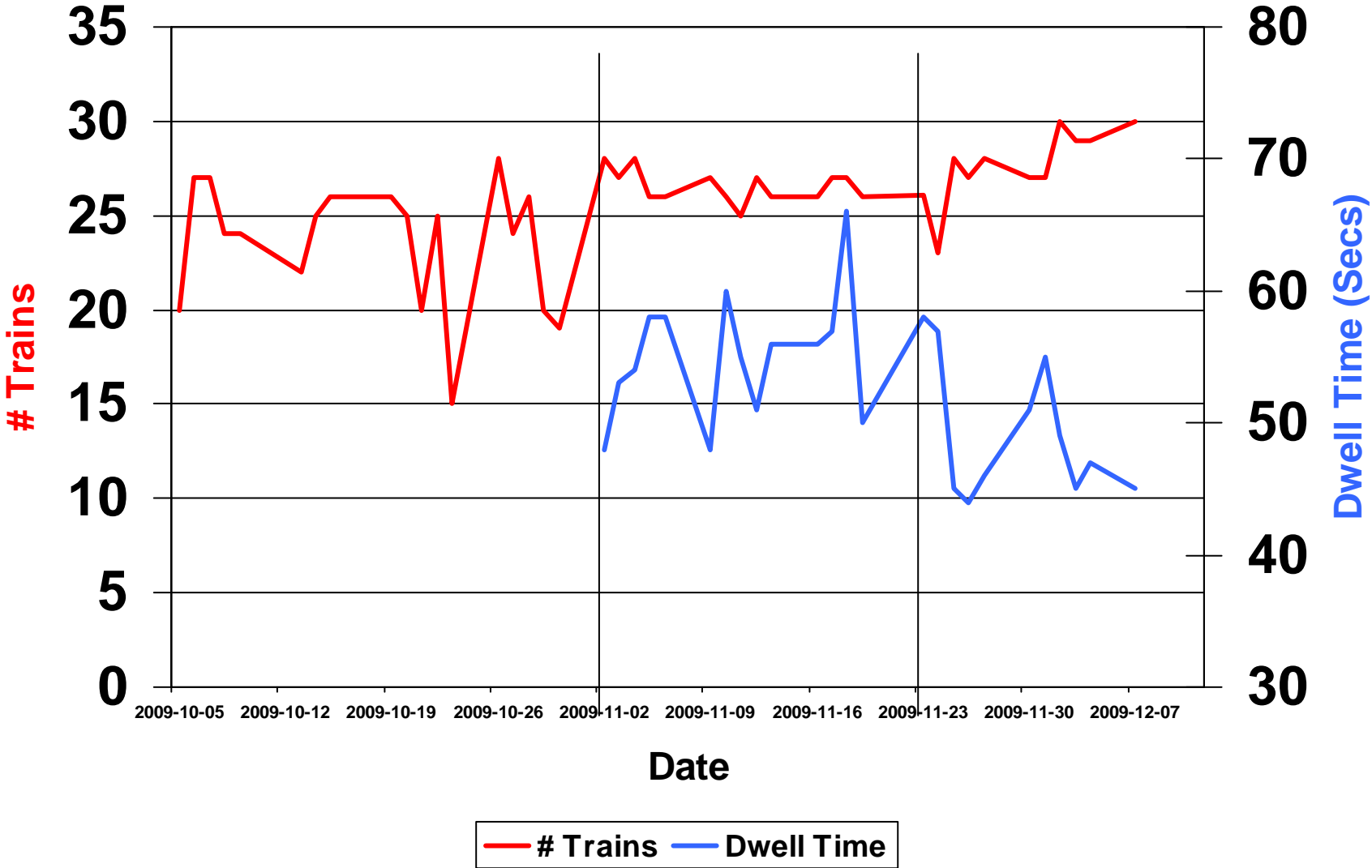
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Resource Requirement

Activity	Resource
Stairwell management	1 S + 3 TWP + 2 SCS
Door management	1 S + 12 TWP
Train dwell management	1 S
Overall management	1 S

Bloor Pilot Performance

8-9 am Trains & Dwell Time



Daily Report

07-Dec-09						
Train	Run#	Actual Arrival	Actual Departure	Dwell Time (secs)	Actual Headway (secs)	Schedule Headway (secs)
1	140	07:59:30	08:00:25	55	139	141
2	133	08:01:47	08:02:21	34	116	141
3	143	08:03:37	08:04:06	29	105	141
4	136	08:05:30	08:06:07	37	121	141
5	145	08:07:16	08:07:55	39	108	141
6	134	08:09:11	08:09:42	31	107	141
7	196	08:10:55	08:11:58	63	136	141
8	147	08:13:18	08:13:52	34	114	141
9	135	08:15:17	08:16:02	45	130	141
10	101	08:17:40	08:18:27	47	145	141
11	137	08:19:38	08:20:09	31	102	141
12	103	08:22:02	08:23:25	83	196	141
13	199	08:25:17	08:26:47	90	202	141
14	144	08:28:05	08:29:09	64	142	141
15	105	08:30:23	08:31:02	39	113	141
16	198	08:32:26	08:33:18	52	136	141
17	141	08:34:36	08:35:27	51	129	141

Daily Report cont...

Train	Run#	Actual Arrival	Actual Departure	Dwell Time (secs)	Actual Headway (secs)	Schedule Headway (secs)
18	106	08:36:40	08:37:17	37	110	141
19	107	08:38:32	08:39:07	35	110	141
20	197	08:40:21	08:41:15	54	128	141
21	108	08:42:25	08:43:08	43	113	141
22	110	08:44:21	08:45:05	44	117	141
23	109	08:46:28	08:47:09	41	124	141
24	111	08:48:27	08:49:14	47	125	141
25	113	08:50:34	08:51:33	59	139	141
26	112	08:53:06	08:53:44	38	131	141
27	115	08:54:58	08:55:31	33	107	141
28	114	08:56:45	08:57:17	32	106	141
29	116	08:58:31	08:59:07	36	110	141
30	118	09:00:19	09:00:51	32	104	141
			Average	45	126	141

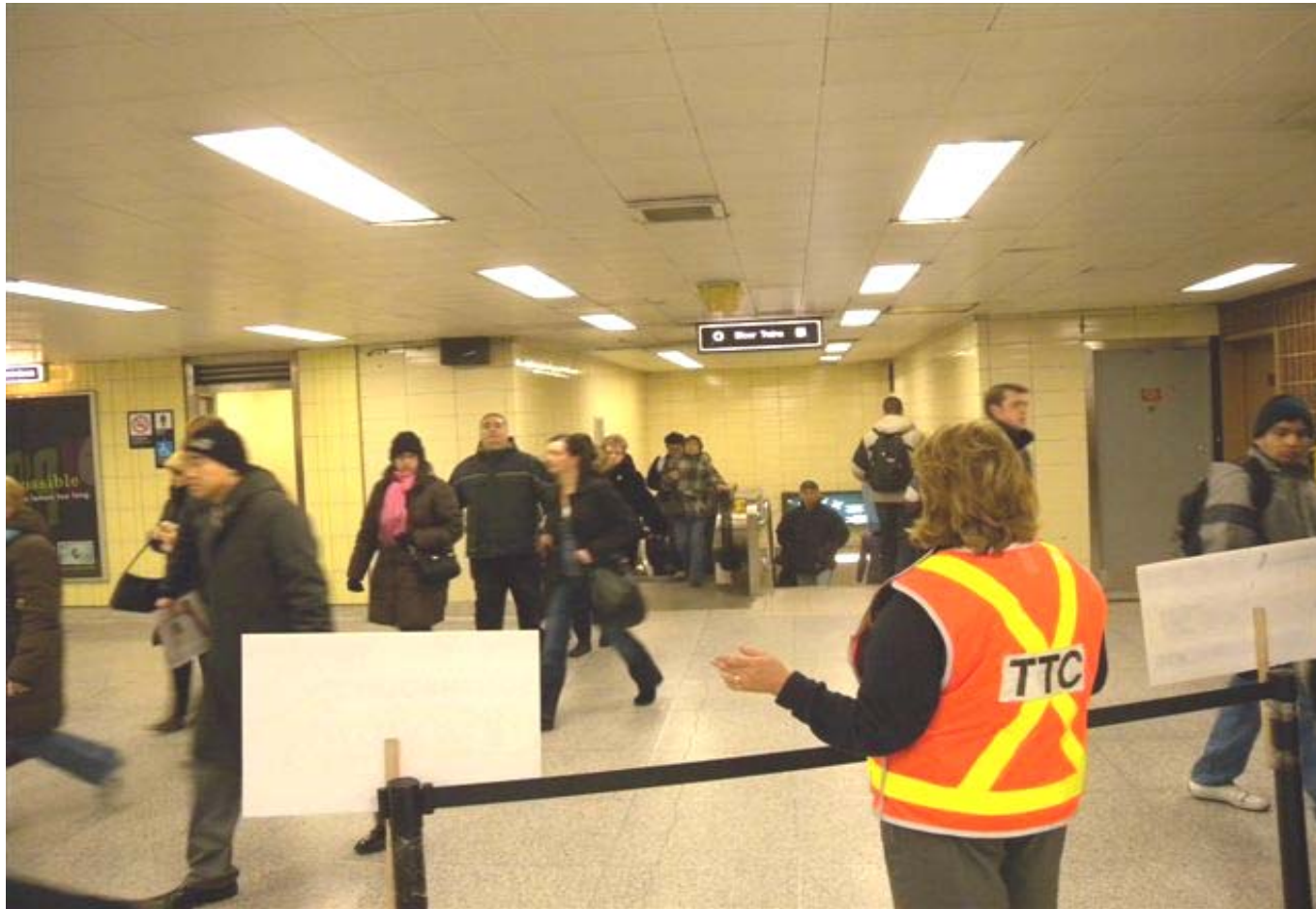
Benefits

- Increased train throughput
- Reduced dwell time
- Additional intangible benefits:
 - Fewer delays, PAAs, security incidents
 - Better “On Time” Performance
 - Train crews’ positive feedback
 - Impact on subsequent platforms

Next Steps

- **Make permanent:**
 - Investigate permanent barriers, signage, etc
- **Continue to determine:**
 - Throughput and dwell time potential
 - Sustainability in all operating conditions
 - Minimum staffing required
- **Continue working with ACAT**

Stairwell Management West Bank



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Stairwell Management East Bank



- Monitor crowding
- Alternate stairs
- Allow NB access



Stairwell Management

Special Constable Services

- Presence
- Re-direct
- Enforce



Platform Management



- Overall management
- Direct further south
- Regulate north loads
- Barrier integrity



Door Management



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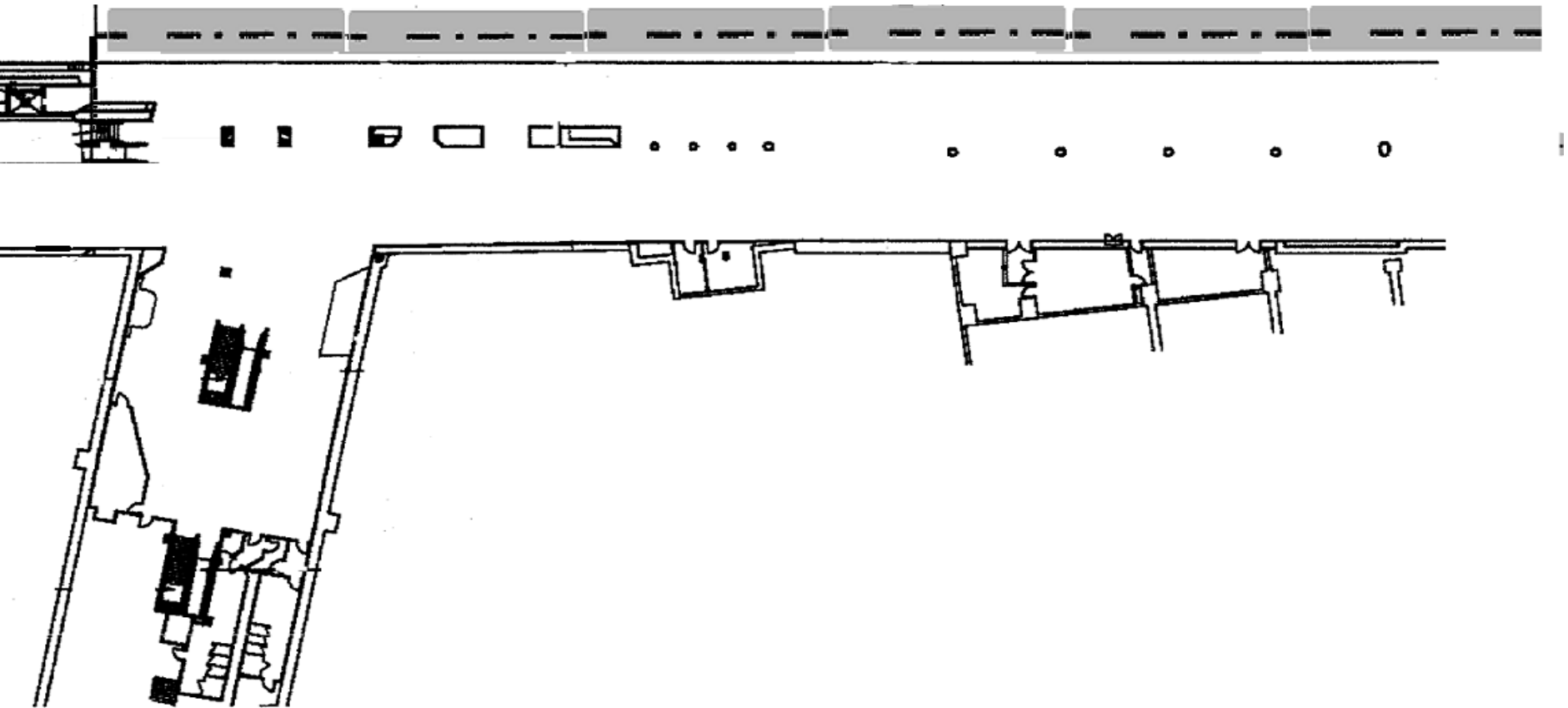
Door Dwell Management

Crowd Control room



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Platform Layout



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