



Plot Date: 2010-08-06 File Location: P:\Stillwater\A-F\Stillwater City of Duluth CCTV-AVL #3502\Drawings\Technology Drawings - 8-09-10.dwg

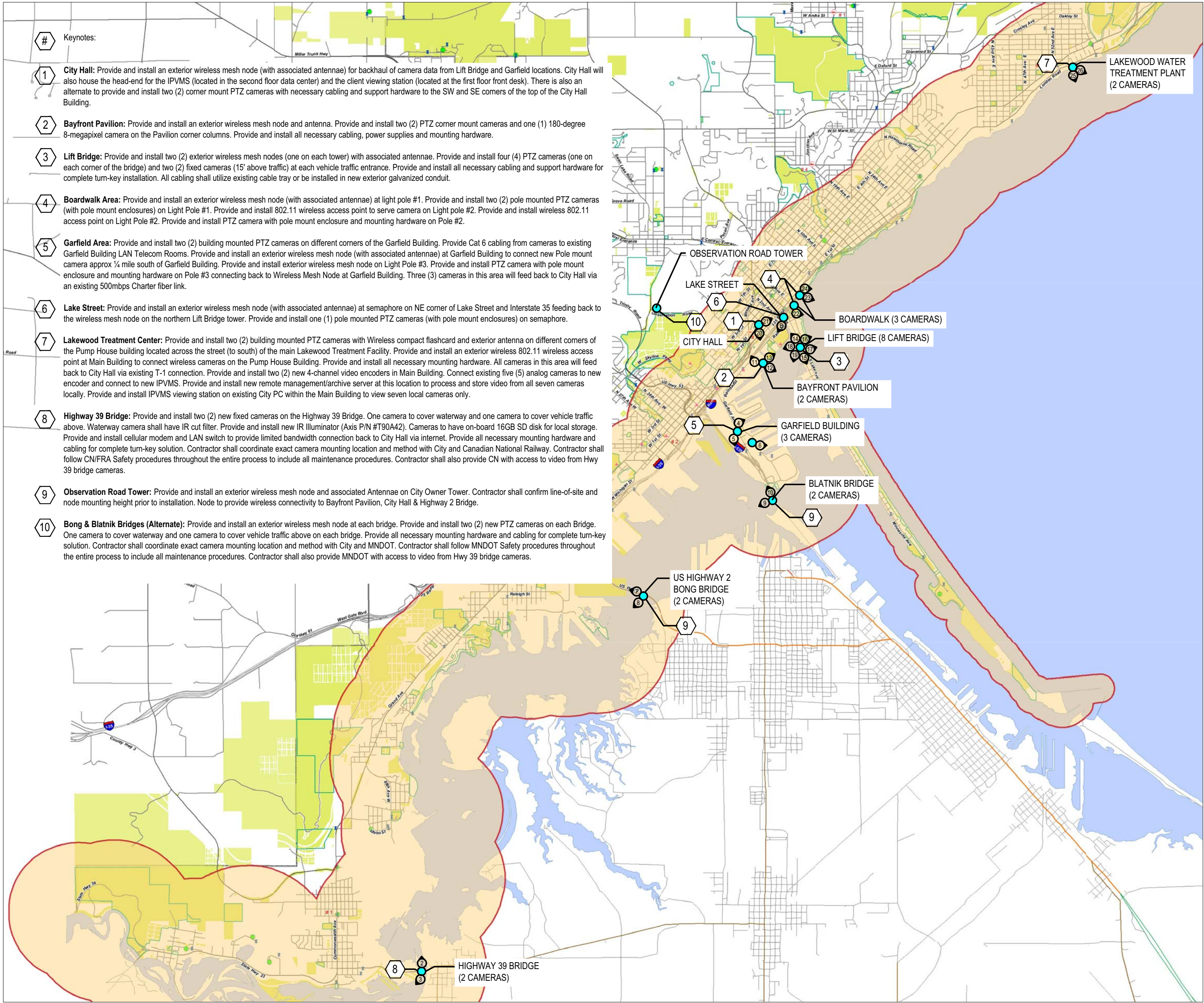
City of Duluth

Port Security Additions


Duluth, MN

Index of Drawings	Premise Security Legend	General Legend	General Notes
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Drawn By:	J.C.	 <div>elert & associates 140 Third Street South Stillwater, MN 55082 651.430.2772 fax: 651.430.2661</div> 	Project Title	City of Duluth	Date:	08/09/10
Designed By:	T.C.		Project No.	3502		
Checked By:	T.C.		Drawing Title	Port Security Project	Sheet	T100




CAMERA LEGEND

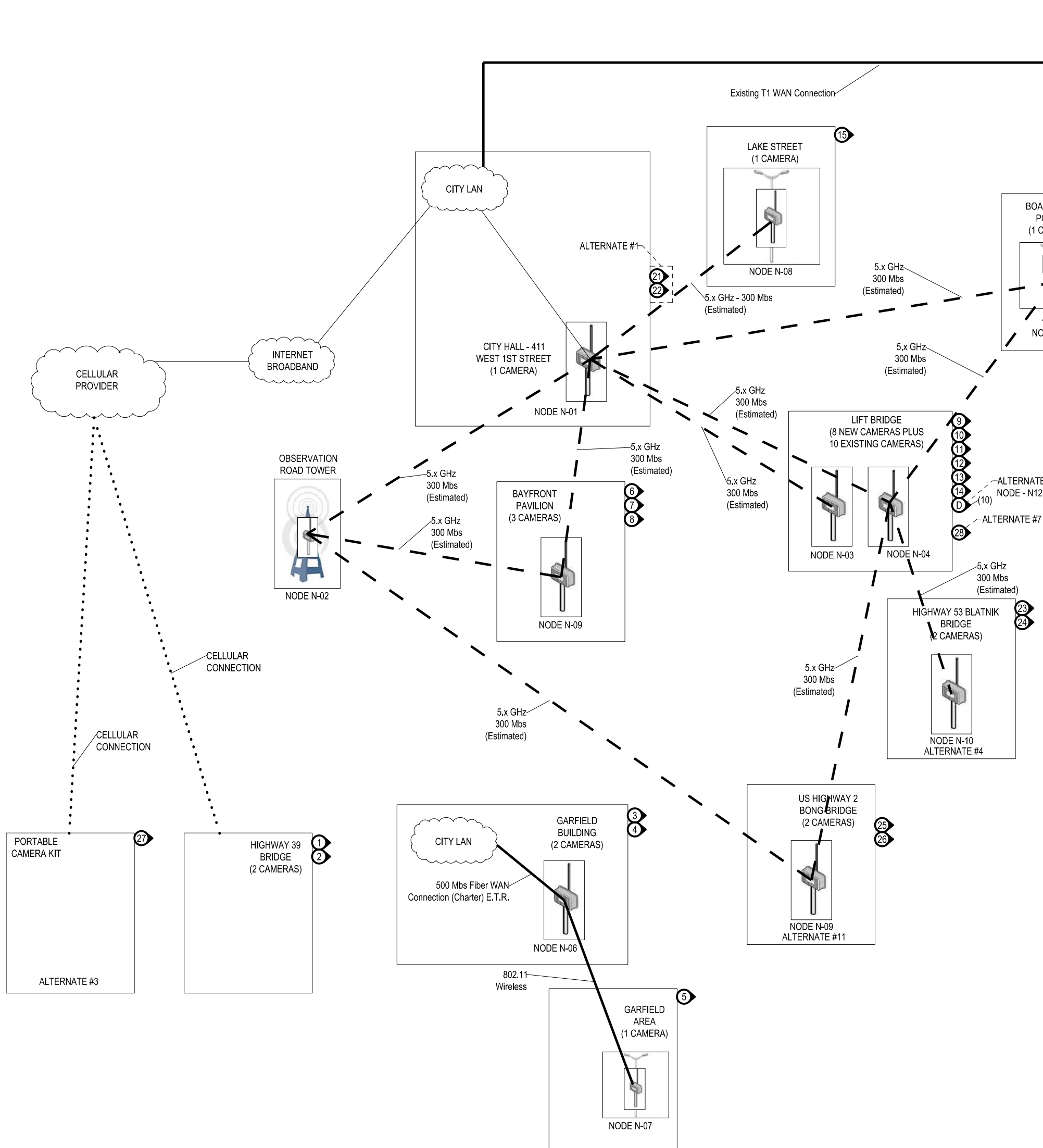
 NEW CAMERA - REFER TO T301 SPREADSHEET AND SPECIFICATIONS FOR CAMERA TYPE

1

CAMERA/NODE LOCATIONS

SCALE: NONE

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Checked By:	T.C.				Sheet	T300



- # NEW CAMERA - REFER TO TABLE BELOW FOR CAMERA TYPE
- D EXISTING ANALOG CAMERA - 15 FPS

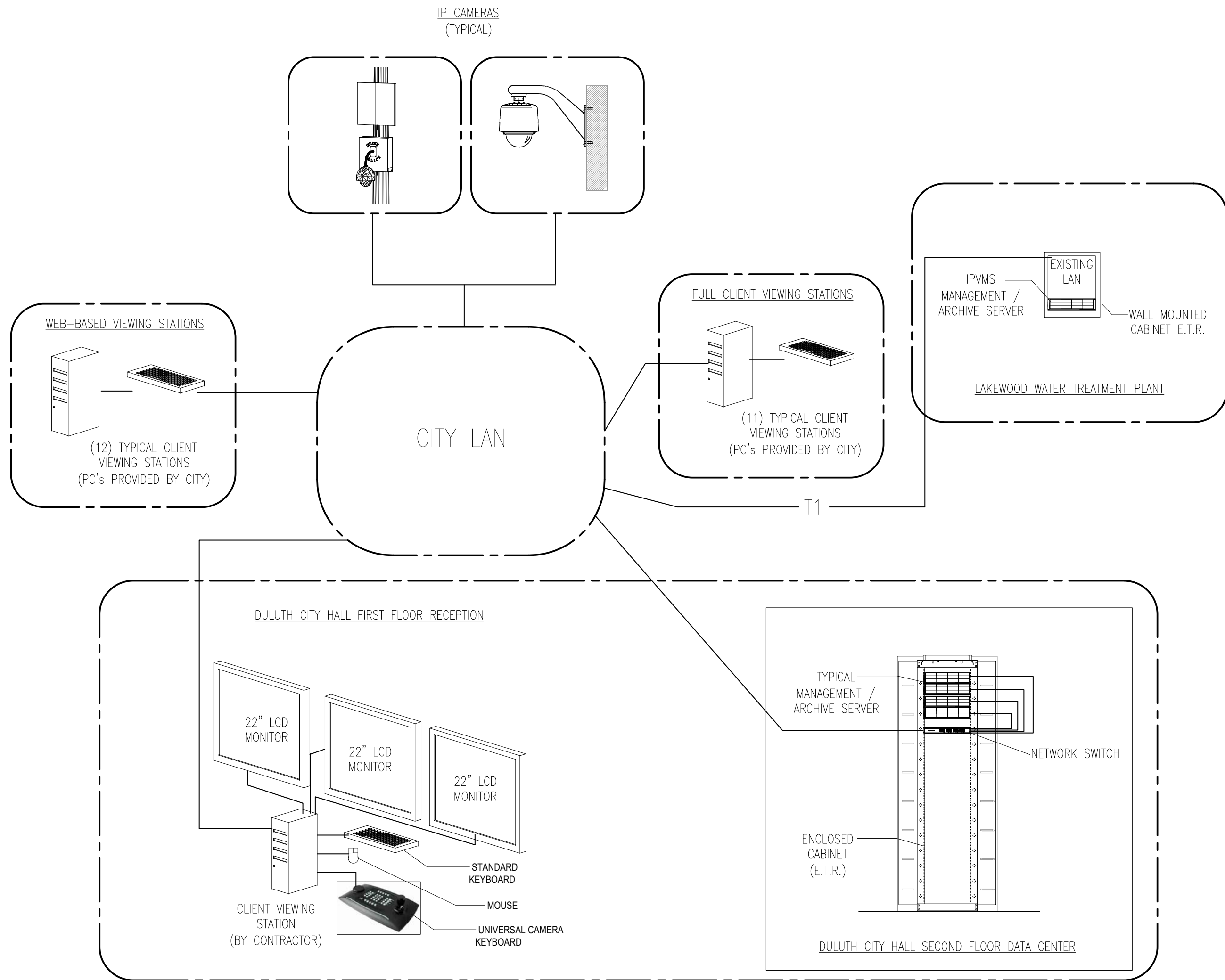
Camera	Location	View	Camera Type	Notes/Recommendation
1	Highway 39 Bridge	Position to view vehicle traffic on bridge	Fixed w/SD storage	Connection via cellular modem
2	Highway 39 Bridge	Position to view waterway to north of bridge	Fixed w/SD storage	Connection via cellular modem
3	Garfield Building	Position to view waterway to north of bridge	Exterior PTZ	Building Mount
4	Garfield Building	Position to view waterway to north of bridge	Exterior PTZ	Building Mount
5	Light Pole south of Garfield	Position to view waterway to north of bridge	Exterior PTZ	Pole Mount with Pole Mount Enclosure
6	Bayfront Pavilion	Position to view north and west sides of pavilion	Exterior PTZ	Corner mount on NW column
7	Bayfront Pavilion	Position to view north side of Pavilion	Exterior 8MP 180°	Surface mount on NE column
8	Bayfront Pavilion	Position to view south and east sides of pavilion	Exterior PTZ	Corner mount on SE column
9	Lift Bridge	Vehicle traffic view - North side of bridge	Exterior Fixed	Mount at bridge entrance 12' above street
10	Lift Bridge	Vehicle traffic view - South side of bridge	Exterior Fixed	Mount at bridge entrance 12' above street
11	Lift Bridge	NE corner of north bridge tower	Exterior PTZ	Surface mount approx 150' above sea level
12	Lift Bridge	SE corner of south bridge tower	Exterior PTZ	Surface mount approx 150' above sea level
13	Lift Bridge	NW corner of north bridge tower	Exterior PTZ	Surface mount approx 150' above sea level
14	Lift Bridge	SW corner of south bridge tower	Exterior PTZ	Surface mount approx 150' above sea level
15	Lake Street	Position to view vehicle traffic and Boardwalk	Exterior PTZ	Pole Mount with Pole Mount Enclosure
16	Boardwalk	Position to view shore and Boardwalk	Exterior PTZ	Pole Mount with Pole Mount Enclosure
17	Boardwalk	Position to view shore and Boardwalk	Exterior PTZ	Pole Mount with Pole Mount Enclosure
18	Boardwalk	Position to view shore and Boardwalk	Exterior PTZ	Pole Mount with Pole Mount Enclosure
19	Lakewood Treatment	Position to view shore	Exterior PTZ	Building Mount - Camera with Wireless flash card with exterior 802.11 antenna
20	Lakewood Treatment	Position to view shore	Exterior PTZ	Building Mount - Camera with Wireless flash card with exterior 802.11 antenna
21	City Hall	Position to view SE side of Building	Exterior PTZ	Alternate 1 - Corner mount at roof
22	City Hall	Position to view SW side of Building	Exterior PTZ	Alternate 1 - Corner mount at roof
23	Blatnik Bridge	Position to view vehicle traffic on bridge	Exterior PTZ	Alternate # - Pending MNDOT approval
24	Blatnik Bridge	Position to view waterway to west of bridge	Exterior PTZ	Alternate # - Pending MNDOT approval
25	Bong Bridge	Position to view vehicle traffic on bridge	Exterior PTZ	Alternate # - Pending MNDOT approval
26	Bong Bridge	Position to view waterway to west of bridge	Exterior PTZ	Alternate # - Pending MNDOT approval
27	Mobile Kit Camera	Mobile kit - Include mounting hardware for wall or Pole option	Exterior PTZ	mount enclosure
28	Thermal Imaging Camera	Fixed exterior Thermal Imaging Camera System at Lift Bridge	Exterior PTZ	mount enclosure

- General Notes:
- Contractor shall provide recording 15 frames per second (4CIF Resolution) during motion events unless noted otherwise.
Contractor shall provide recording 7.5 frames per second for the 8MP camera at the Pavilion.
Contractor shall provide recording at 1 frame per second (CIF resolution) on Hwy 39 Bridge cameras back to City Hall.
Contractor shall provide recording at 5 frames per second (4CIF resolution) on Hwy 39 Bridge cameras to local SD storage.
Contractor shall anticipate video recording 75% of the time on each camera.
 - Contractor shall anticipate 21 days of storage. The Owner reserves the right to modify this at any time.
Alternate #5 increases storage time to 30 days.
 - Contractor shall anticipate Compression Percentage of 30%.
 - Contractor shall provide and install three (3) Pivot3 RAID 6e Cloudbank appliances at City Hall Data Center.
Contractor shall provide and install a 4th Pivot3 RAID 6e Cloudbank appliances as part of Alternate #5.
 - Contractor shall provide and install one (1) Pivot3 RAID 6e Cloudbank appliance at the Water Treatment Center.


1 CAMERA CONNECTIVITY DIAGRAM

SCALE: NONE

Drawn By:	J.C.	Project Title City of Duluth	Date: 08/09/10
Designed By:	T.C.		Project No. 3502
Checked By:	T.C.		Sheet T301
elert & associates 140 Third Street South Stillwater, MN 55082 651.430.2772 fax: 651.430.2661		Drawing Title Port Security Project	




1 **CCTV LOGICAL DIAGRAM**
SCALE: NONE

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1 LIFT BRIDGE DETAIL
SCALE: NONE

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