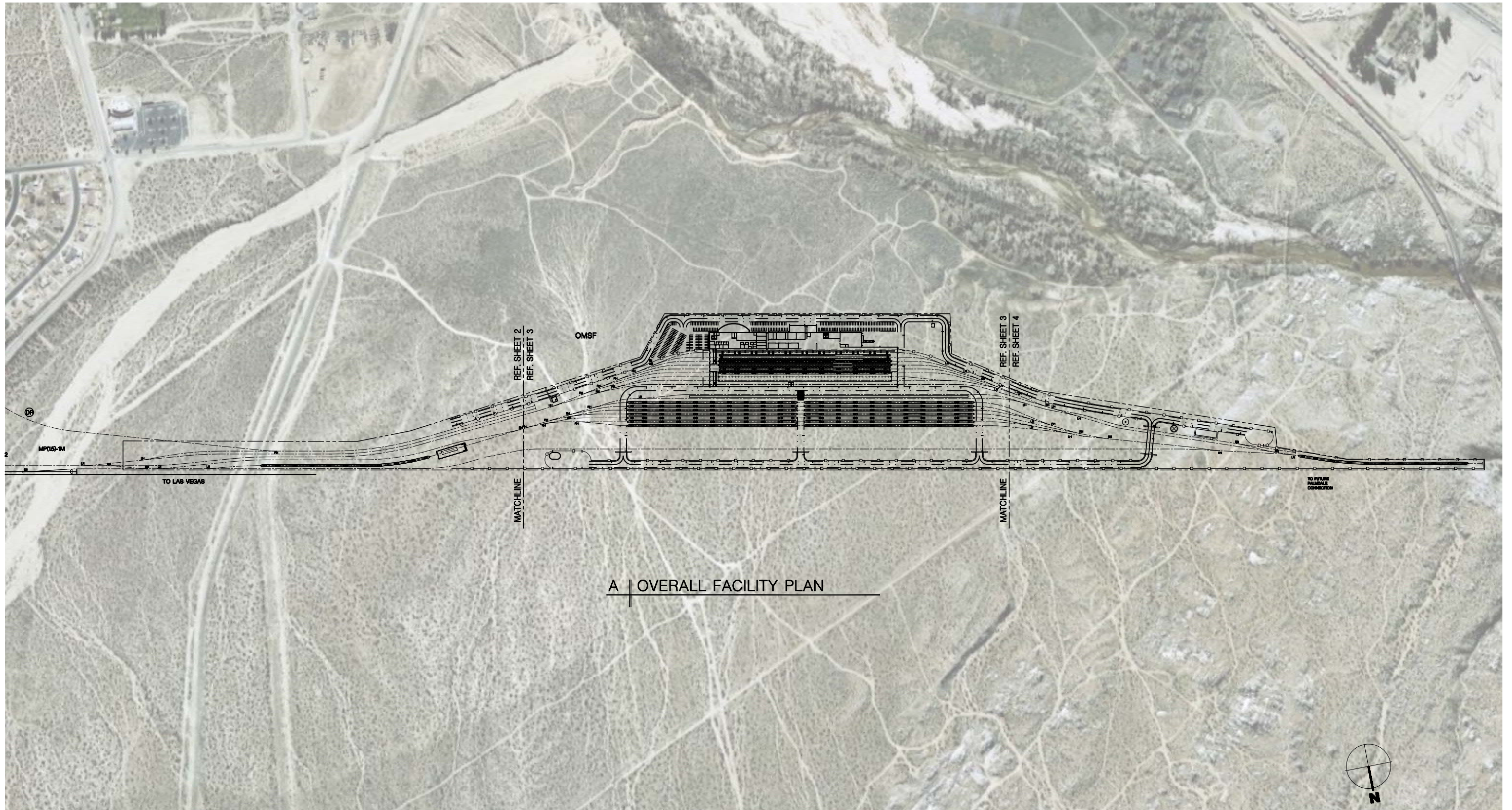


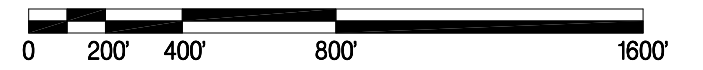
APPENDIX A-4

DETAILED MAINTENANCE FACILITY SITE PLANS AND ELEVATIONS

Victorville – Operations, Maintenance, and Storage Facility Site Option 1

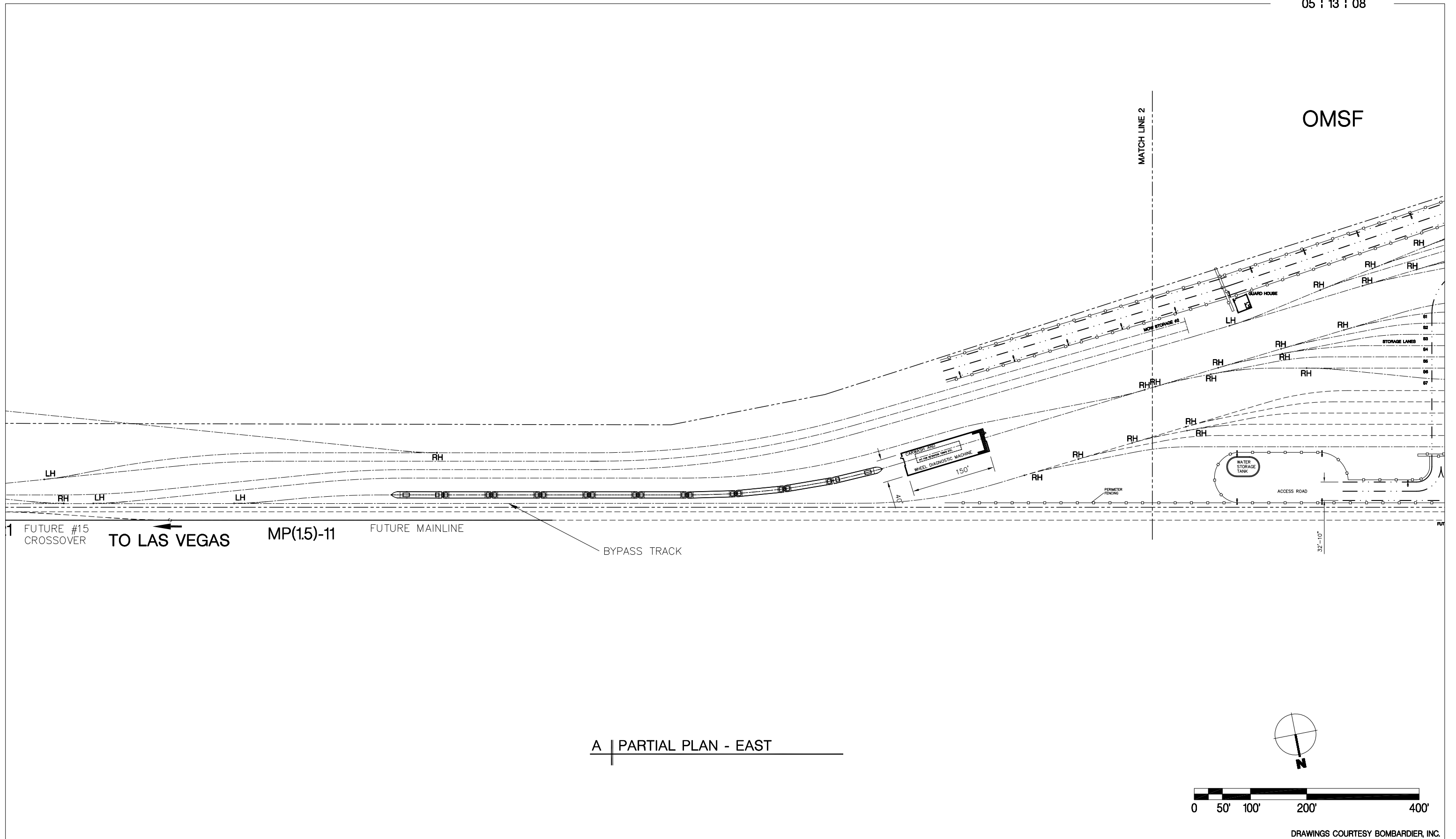


A | OVERALL FACILITY PLAN



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OMSF

MATCH LINE 2

GUARD HOUSE

MON STORAGE #8

STORAGE LINES

WATER STORAGE TANK

ACCESS ROAD

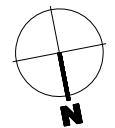
CARBON DIOXIDE WHEEL DIAGNOSTIC MACHINE

150'

BYPASS TRACK

1 FUTURE #15 CROSSOVER TO LAS VEGAS MP(1.5)-11 FUTURE MAINLINE

A PARTIAL PLAN - EAST

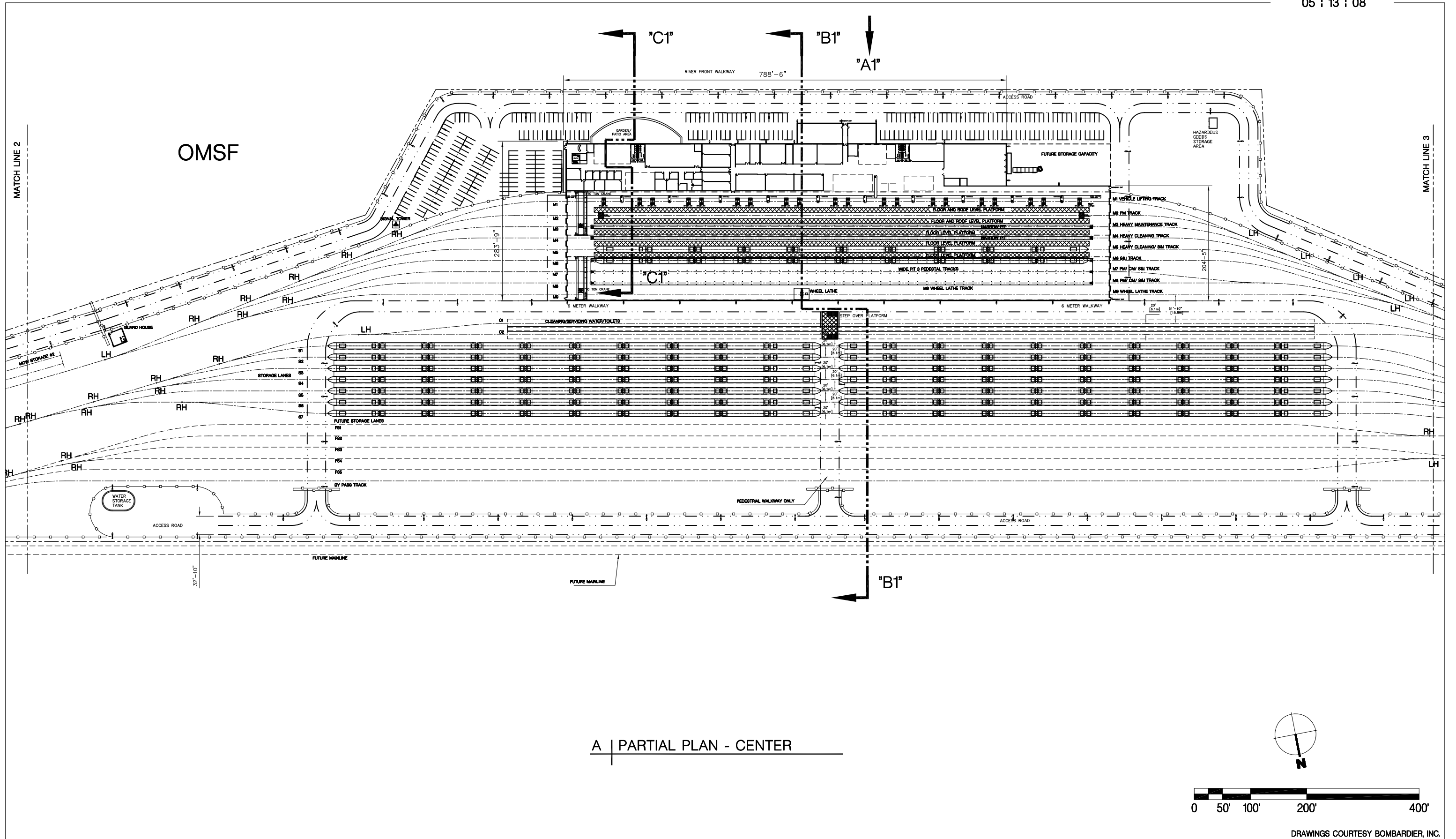


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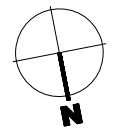


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A | PARTIAL PLAN - CENTER

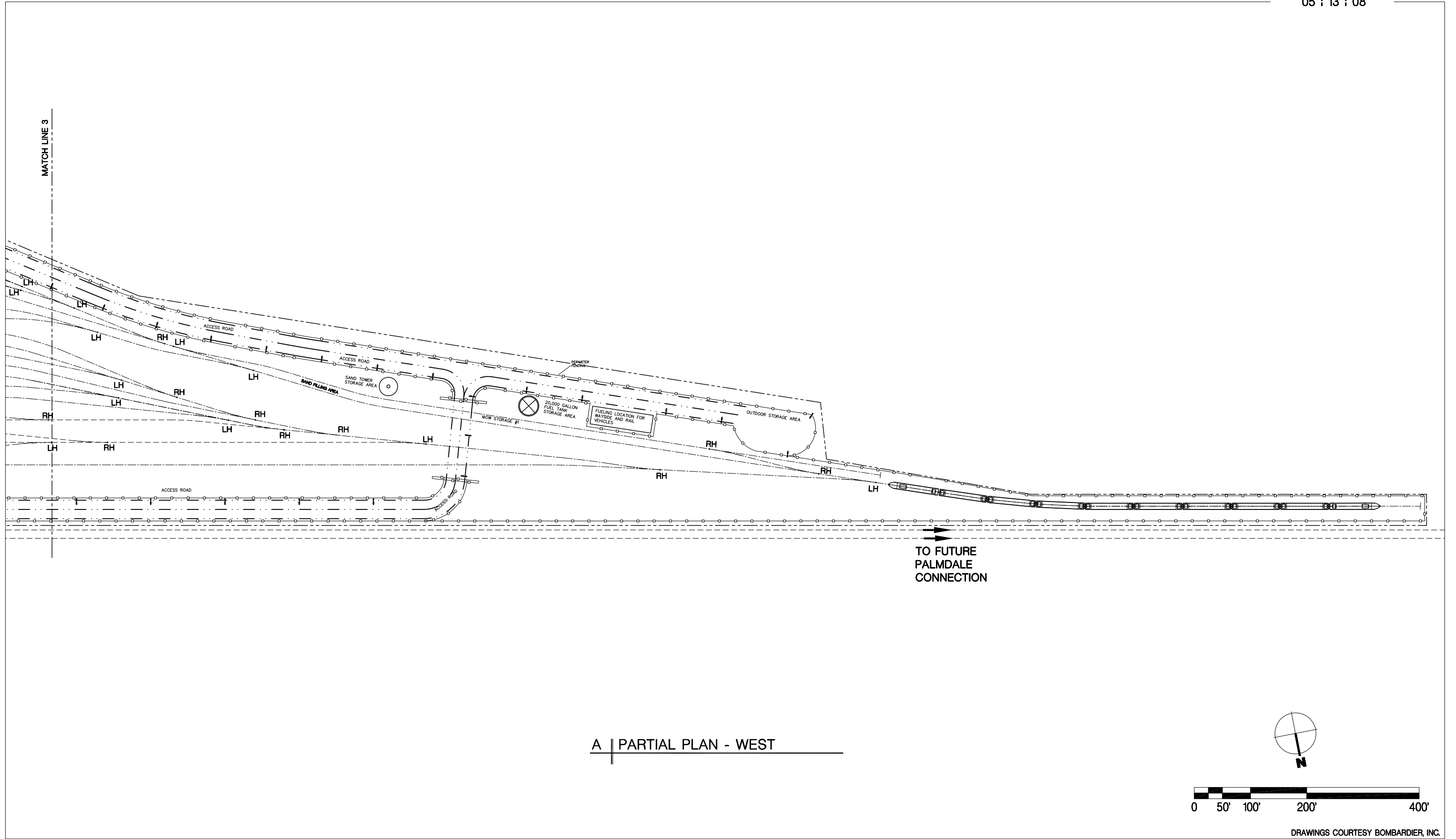


DRAWINGS COURTESY BOMBARDIER, INC.



DESERTXPRESS : VICTORVILLE OMSF - SITE 1

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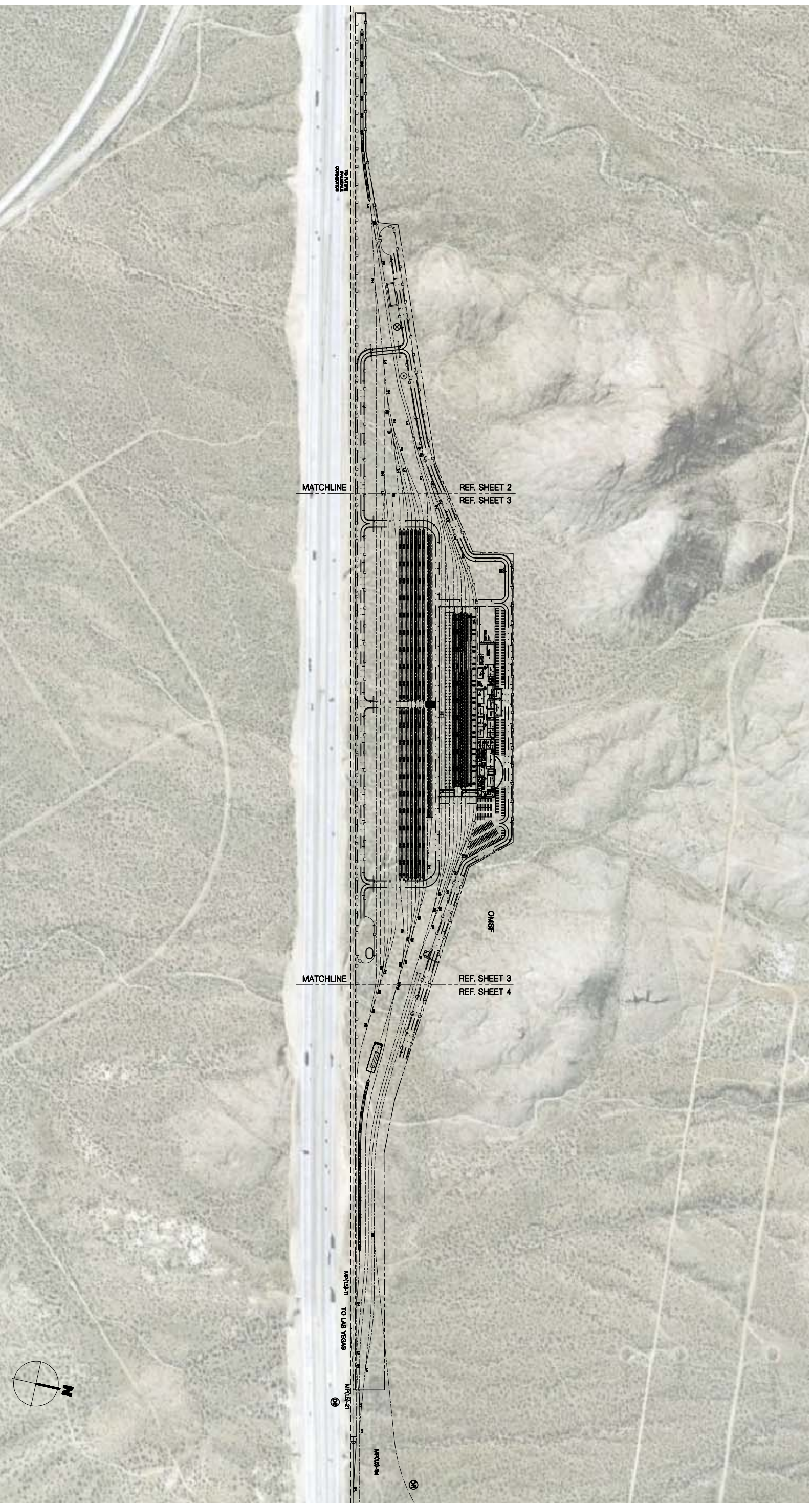
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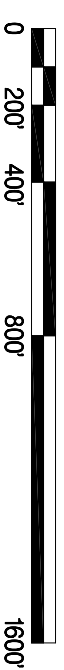
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**Victorville – Operations, Maintenance, and
Storage Facility Site Option 2**



A | OVERALL FACILITY PLAN



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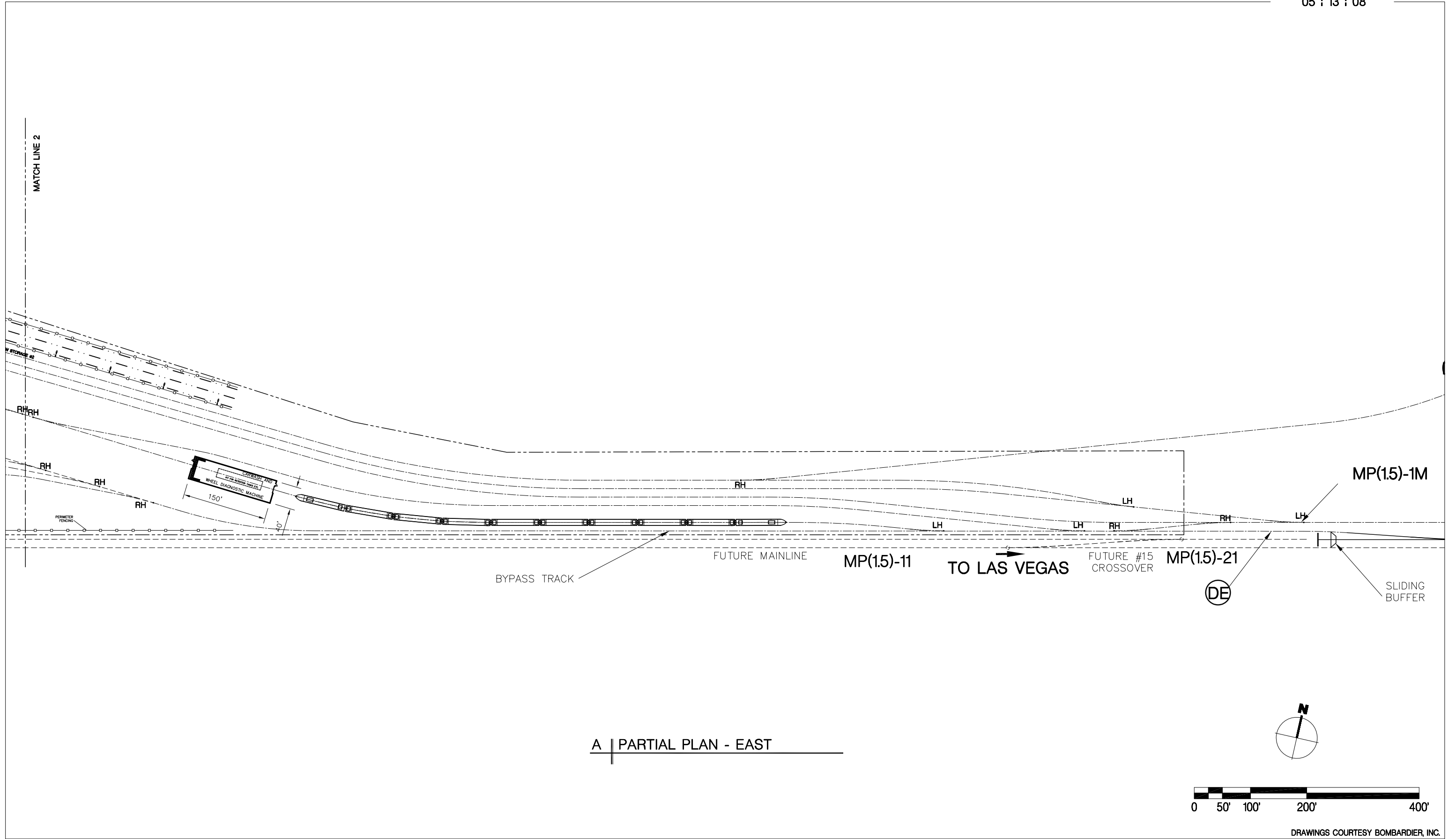


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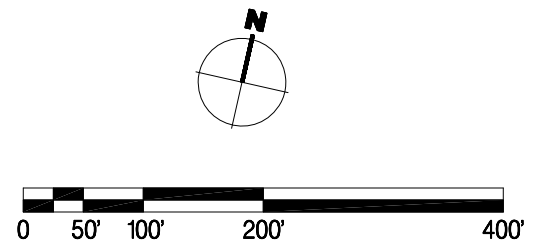


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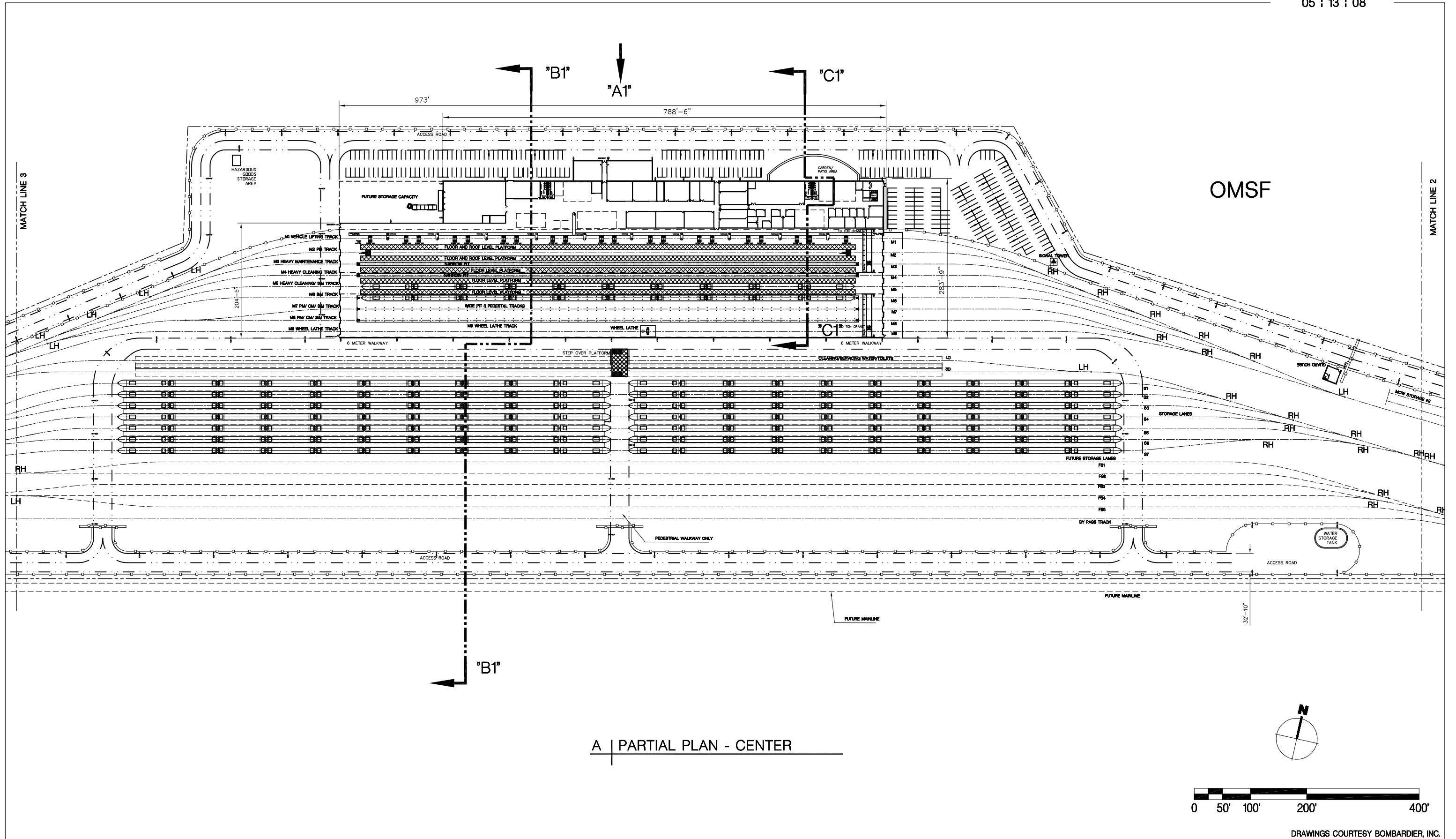


A PARTIAL PLAN - EAST



DRAWINGS COURTESY BOMBARDIER, INC.





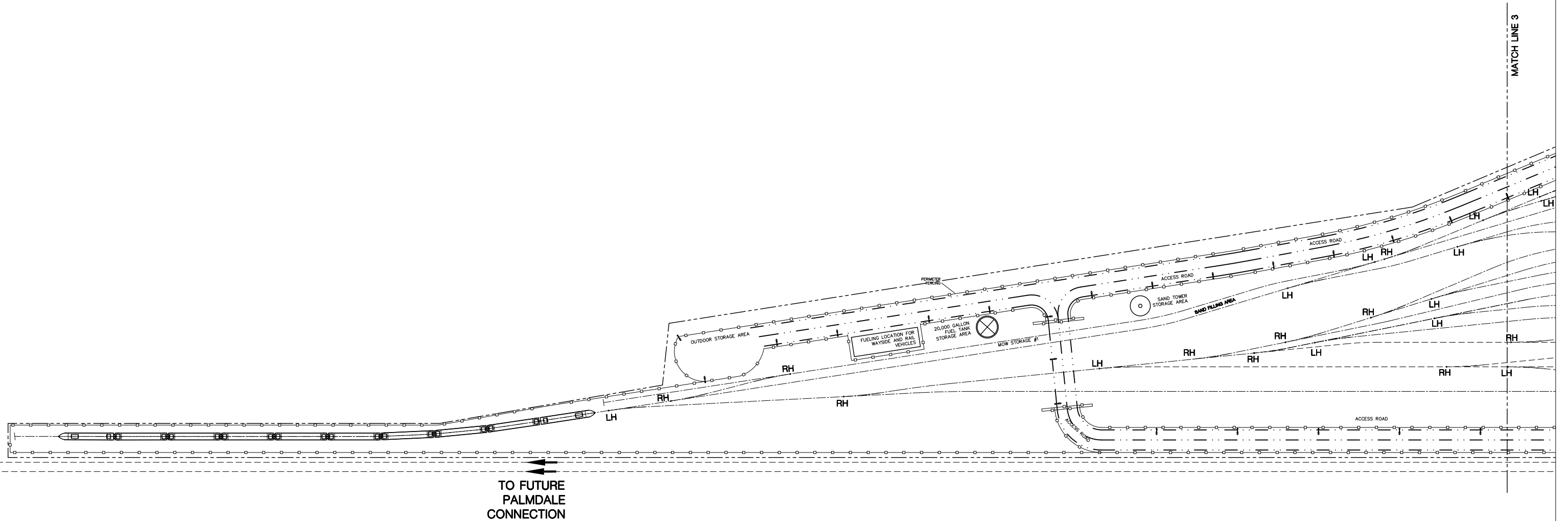
A | PARTIAL PLAN - CENTER

DRAWINGS COURTESY BOMBARDIER, INC.

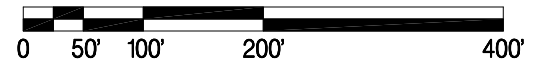
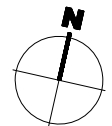


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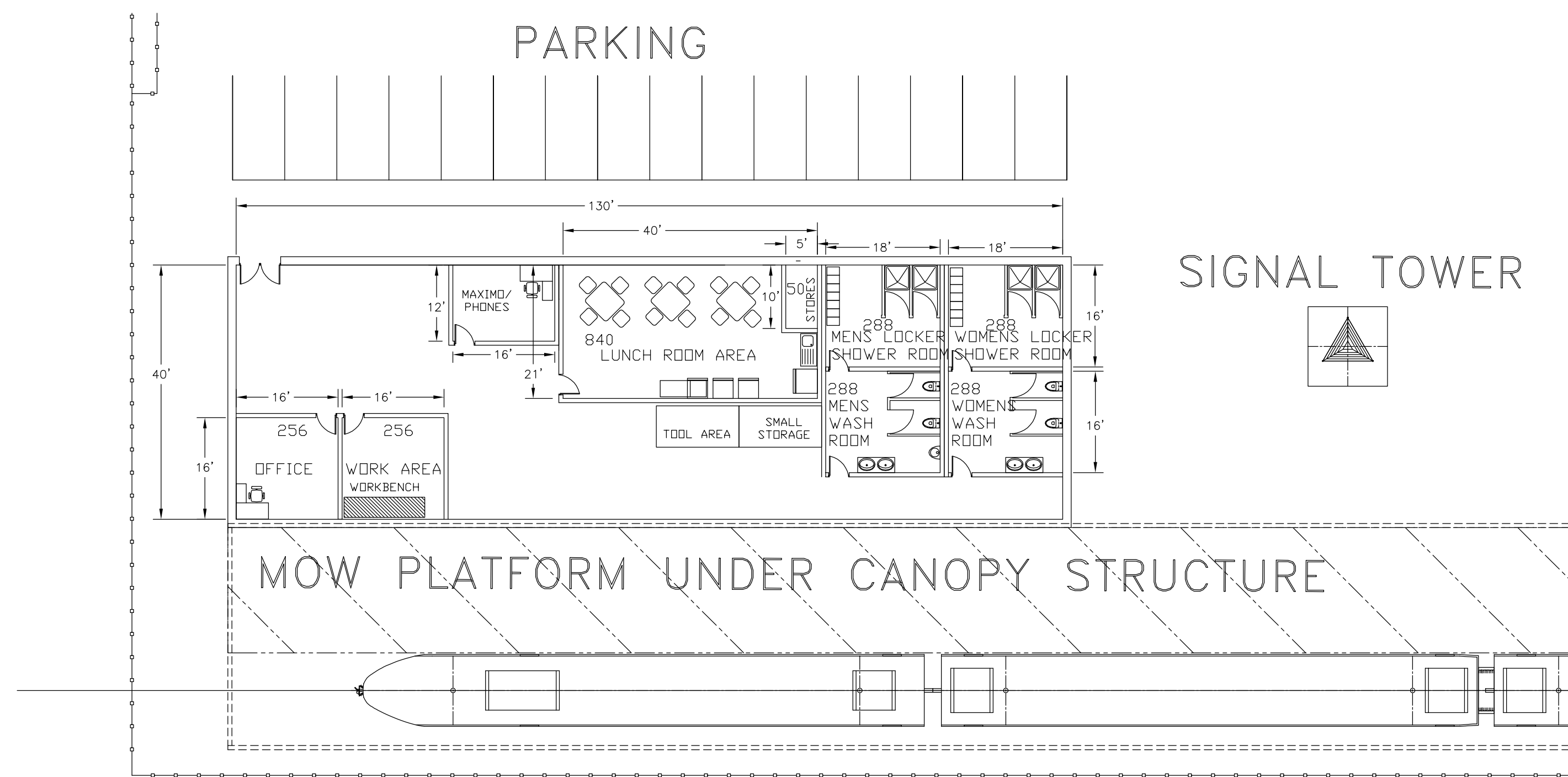
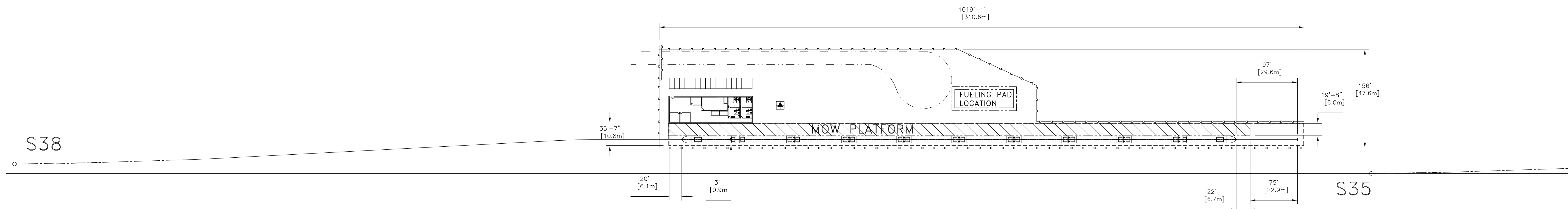
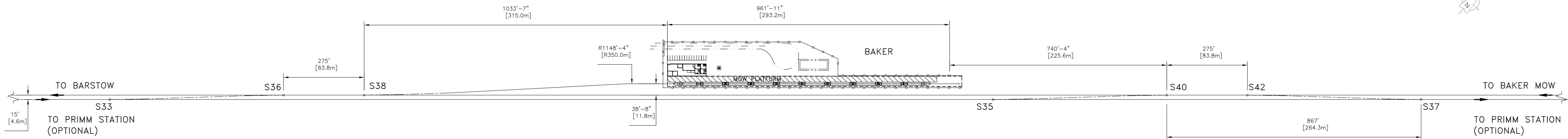
A PARTIAL PLAN - WEST



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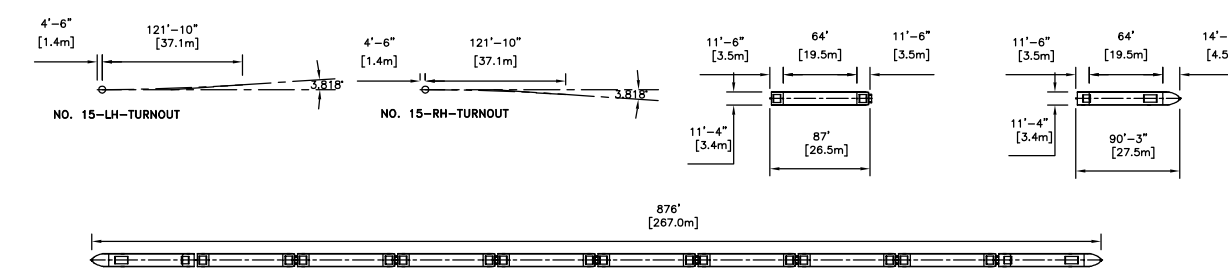


Baker Maintenance Facility of Way



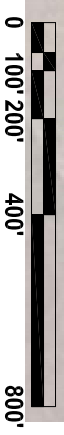
PRELIMINARY
 DATE : 2007-01-26

- NOTES:
- 1- CONCEPTION DESIGN ONLY NOT FOR CONSTRUCTION PURPOSES.
 - 2- DIMENSIONS SHOWN IN IMPERIAL AND (METRIC).



CONCU DESIGNED	CONCU DESIGNED	APPROUVE APPROVED	-	-
POUCE [mm]	POUCE [mm]	MILLIMETRE [POUCE]	DESCRIPTION DE LA REVISION / REVISION DESCRIPTION	DATE
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APPROVED				SIZE
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1			REVISION	

**Las Vegas – Sloan Road Maintenance and
Storage Facility Site Option**



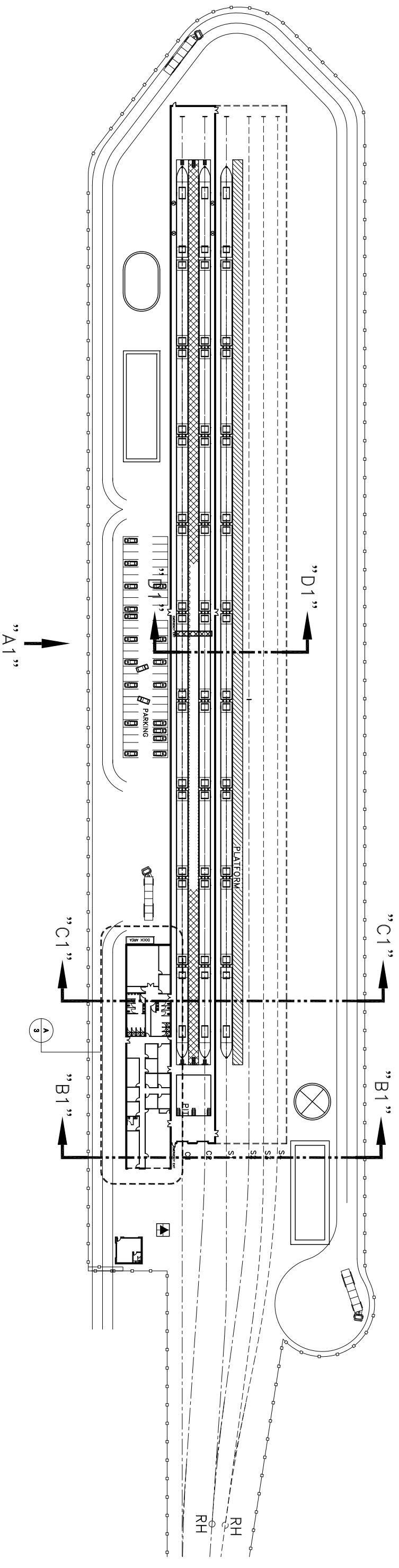
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DESERTXPRESS : LAS VEGAS MSF - SLOAN ROAD



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A | OVERALL FACILITY PLAN

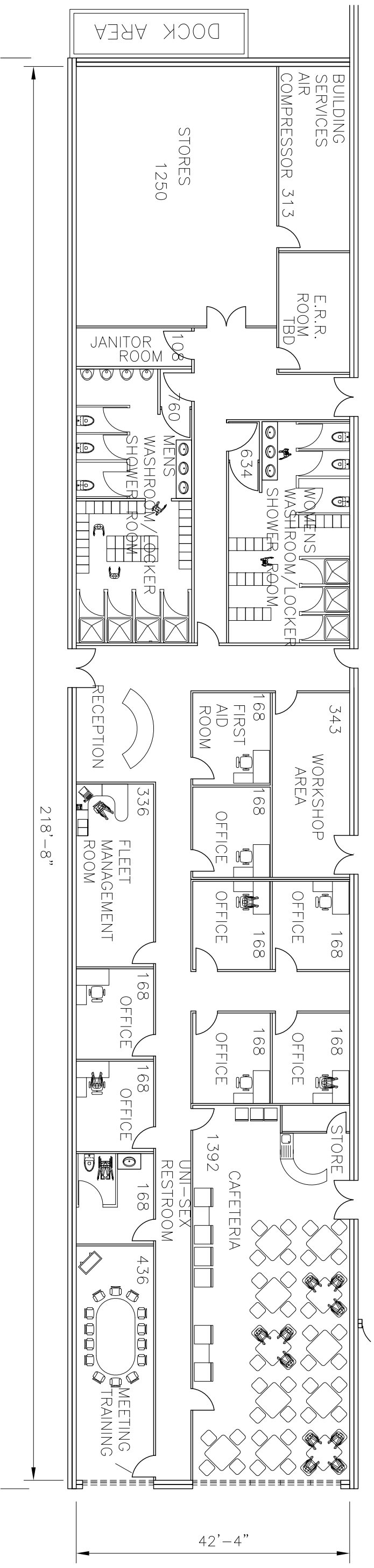


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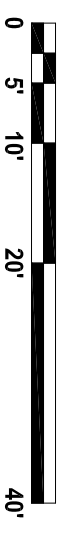


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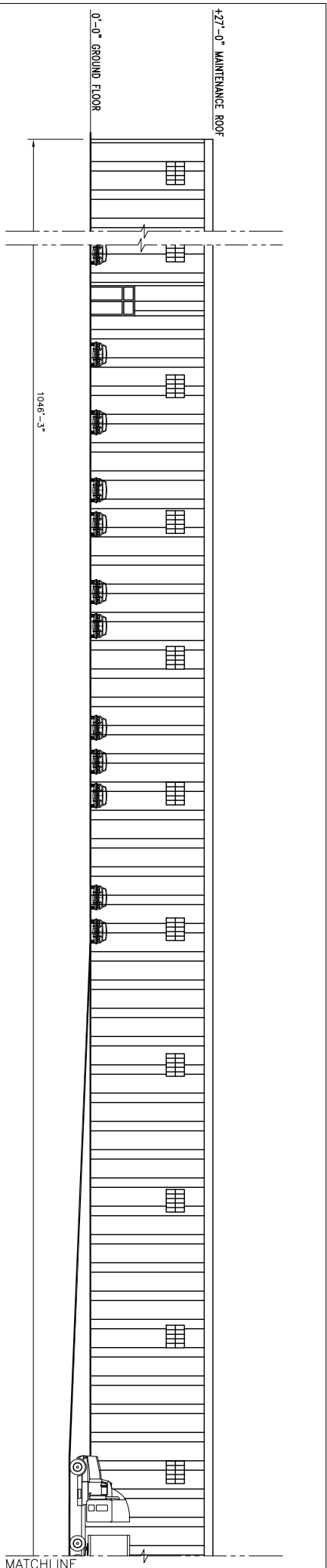


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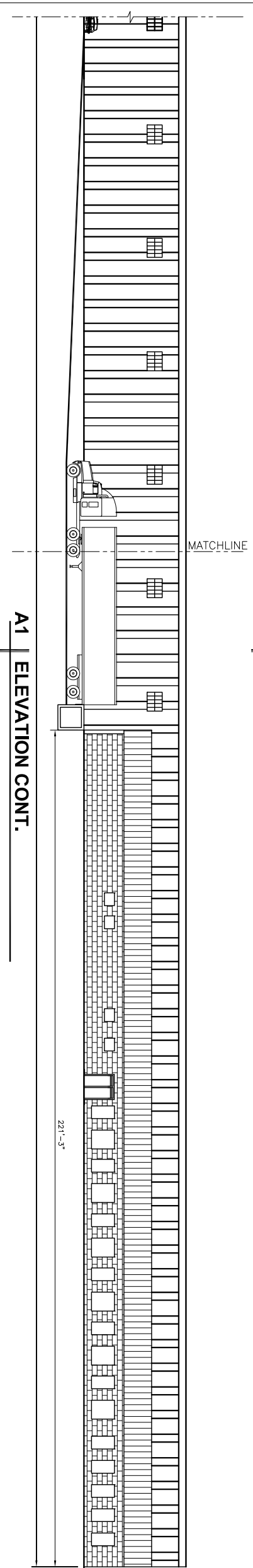


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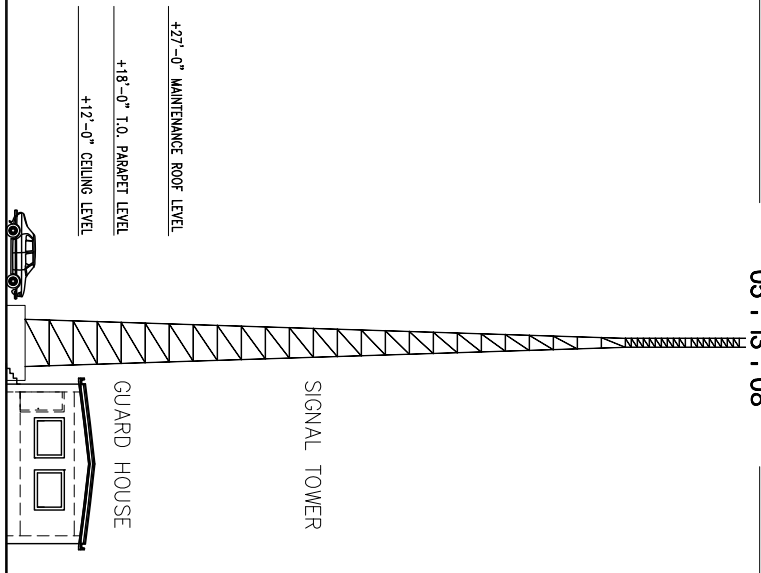
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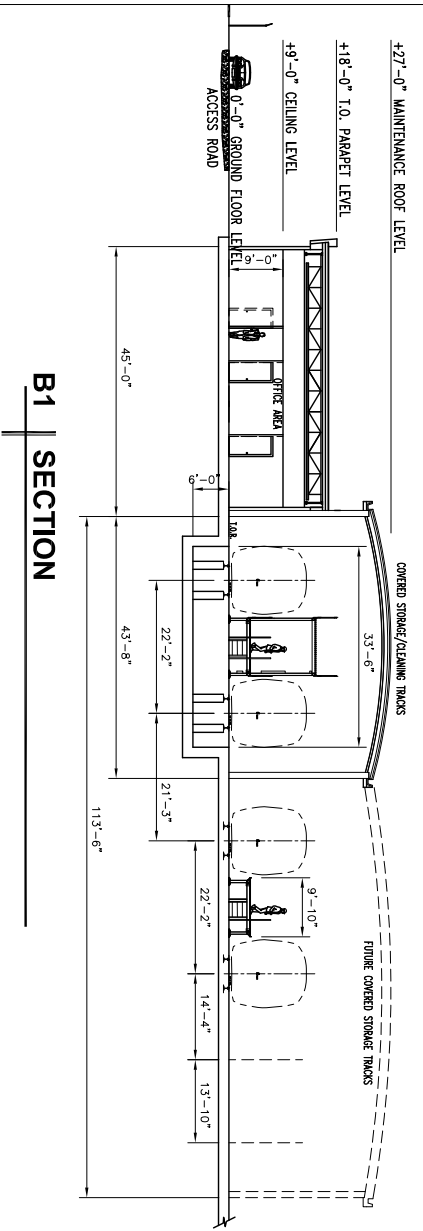
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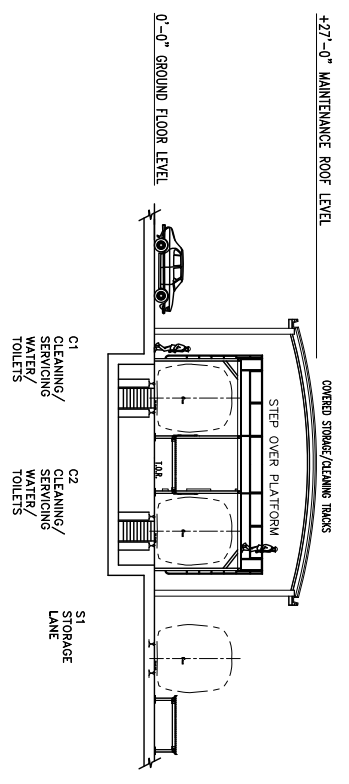
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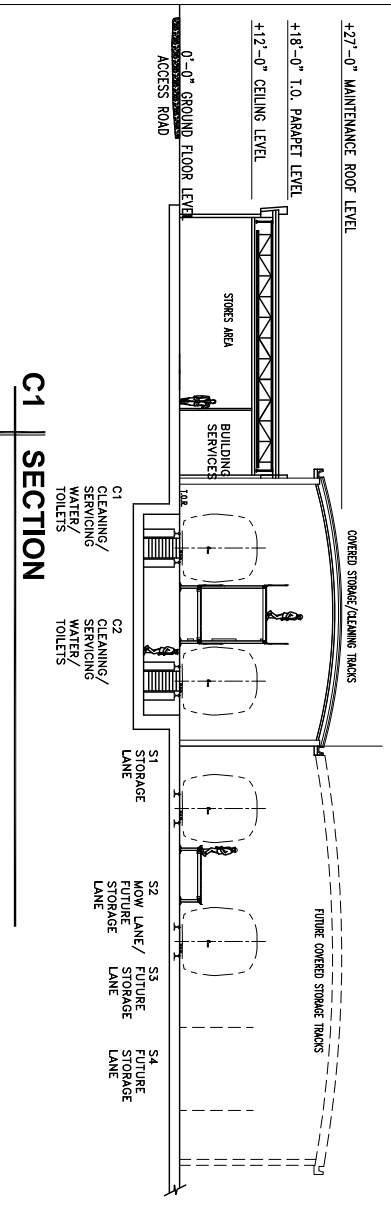
GUARD HOUSE
SIGNAL TOWER



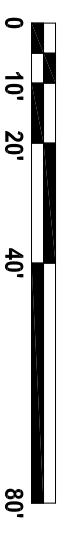
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D1 | SECTION



C1 | SECTION



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**Las Vegas – Robindale Avenue
Maintenance and Storage Facility Site
Option**

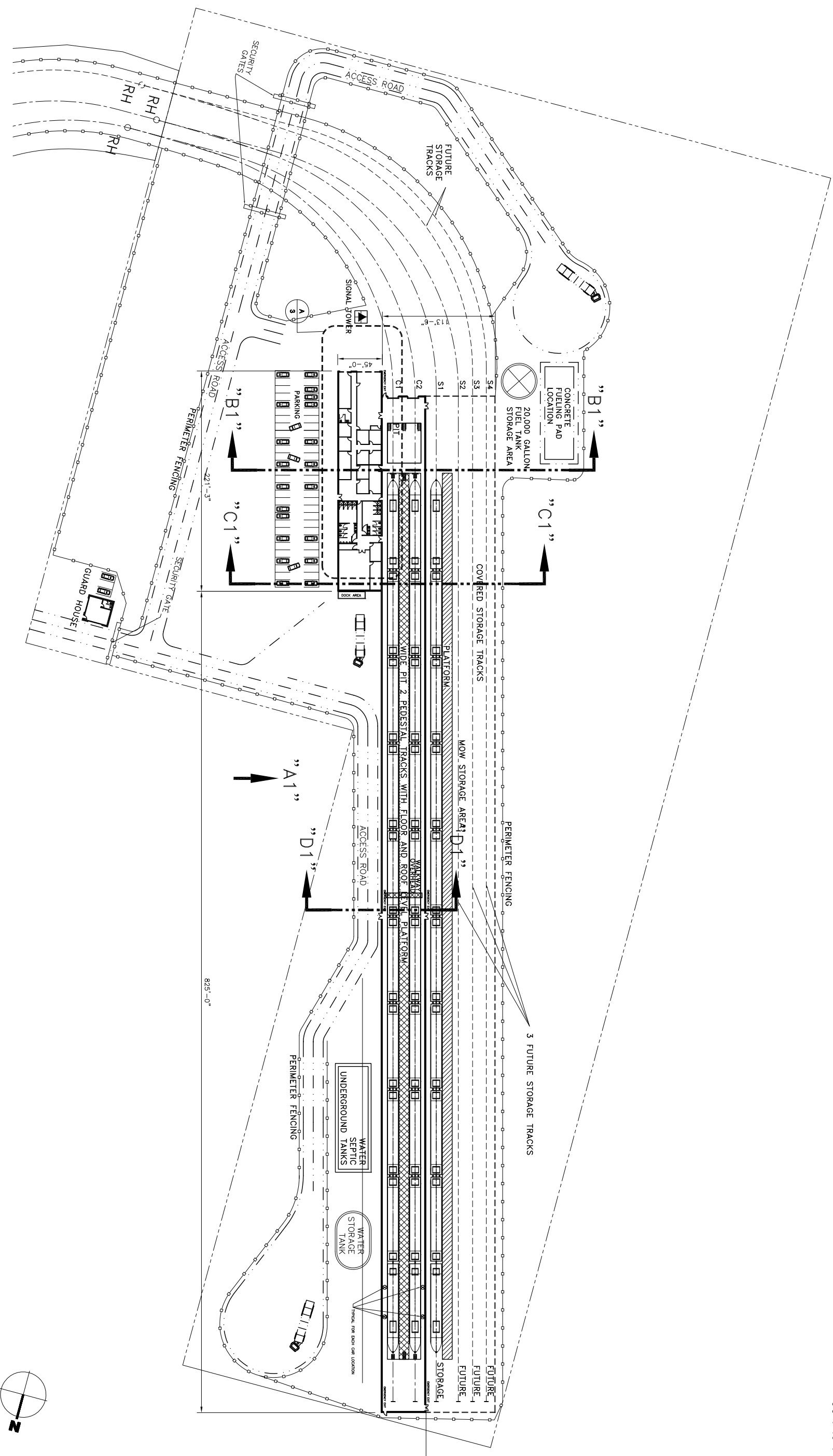


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A | OVERALL FACILITY PLAN

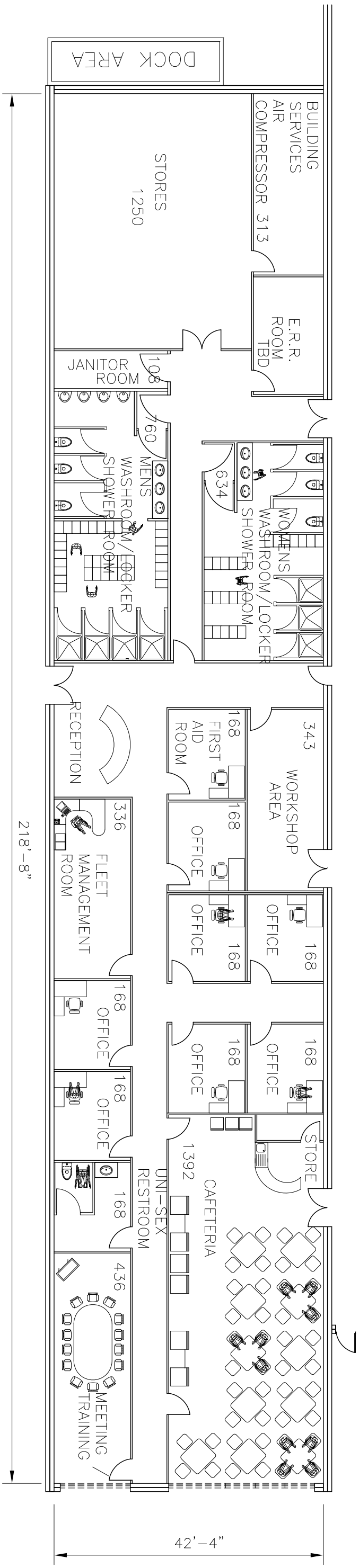


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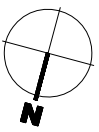


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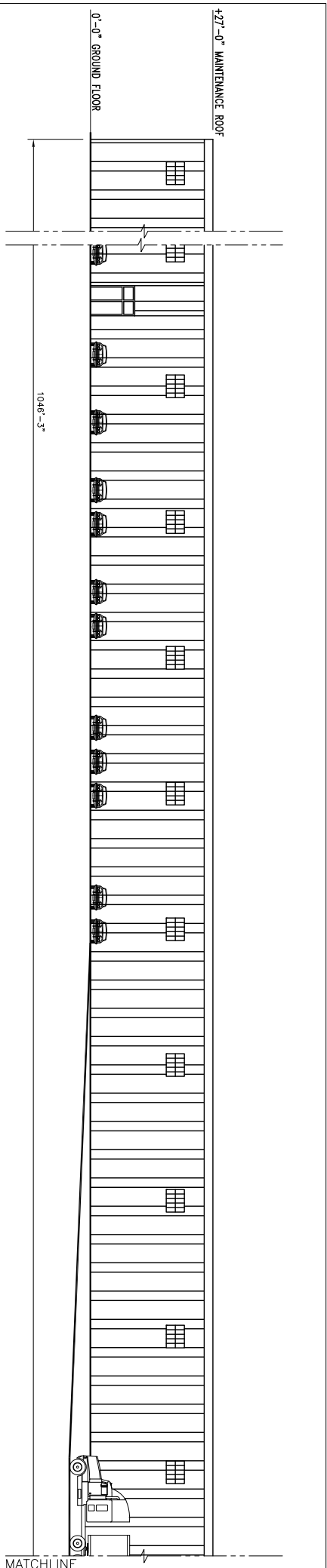


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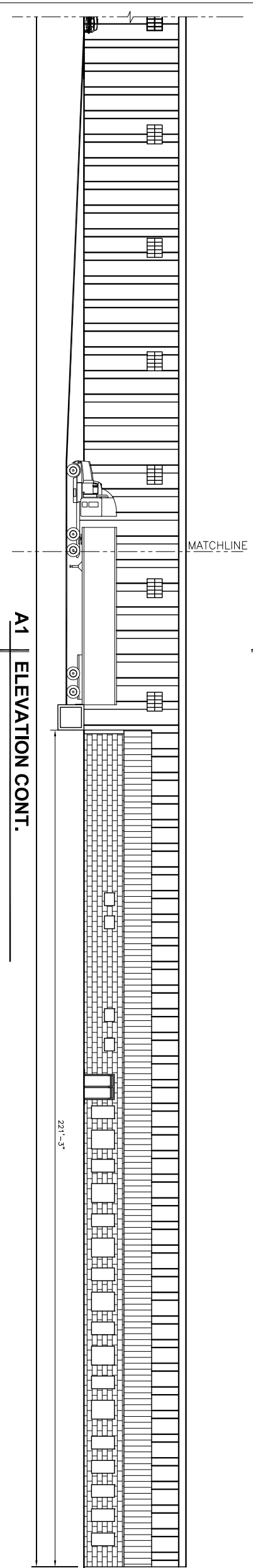


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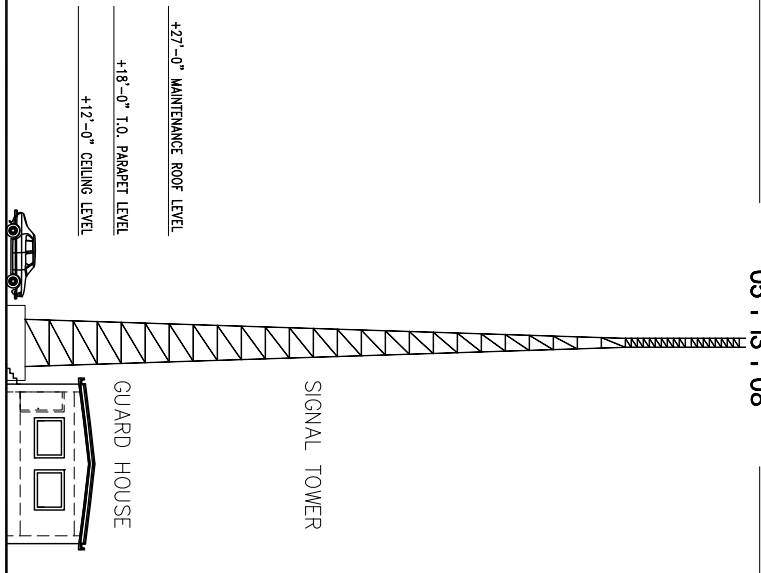
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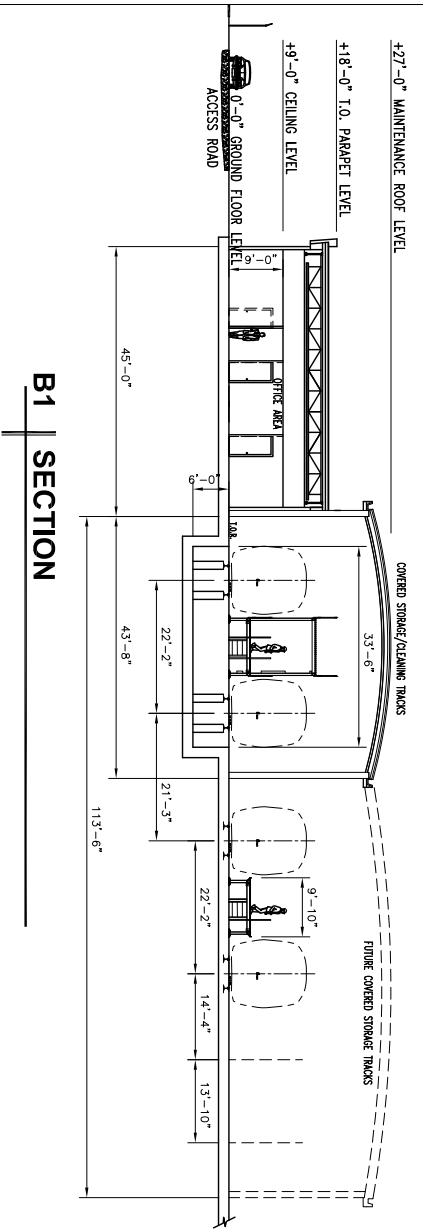
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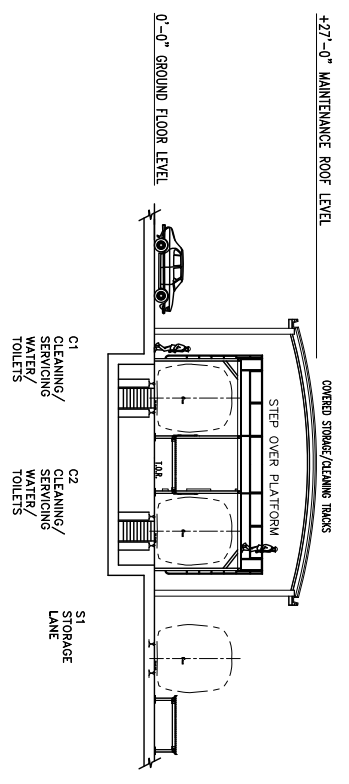
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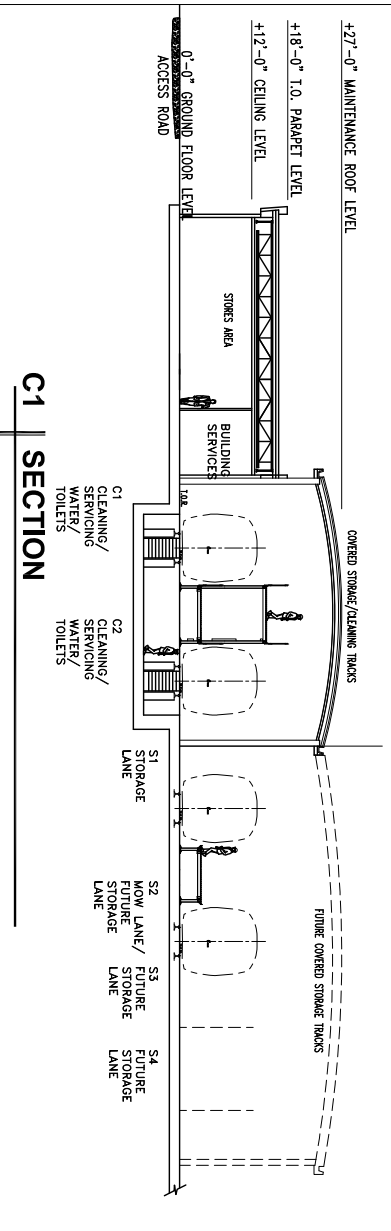
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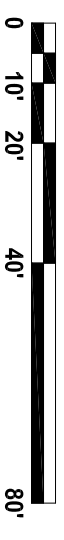
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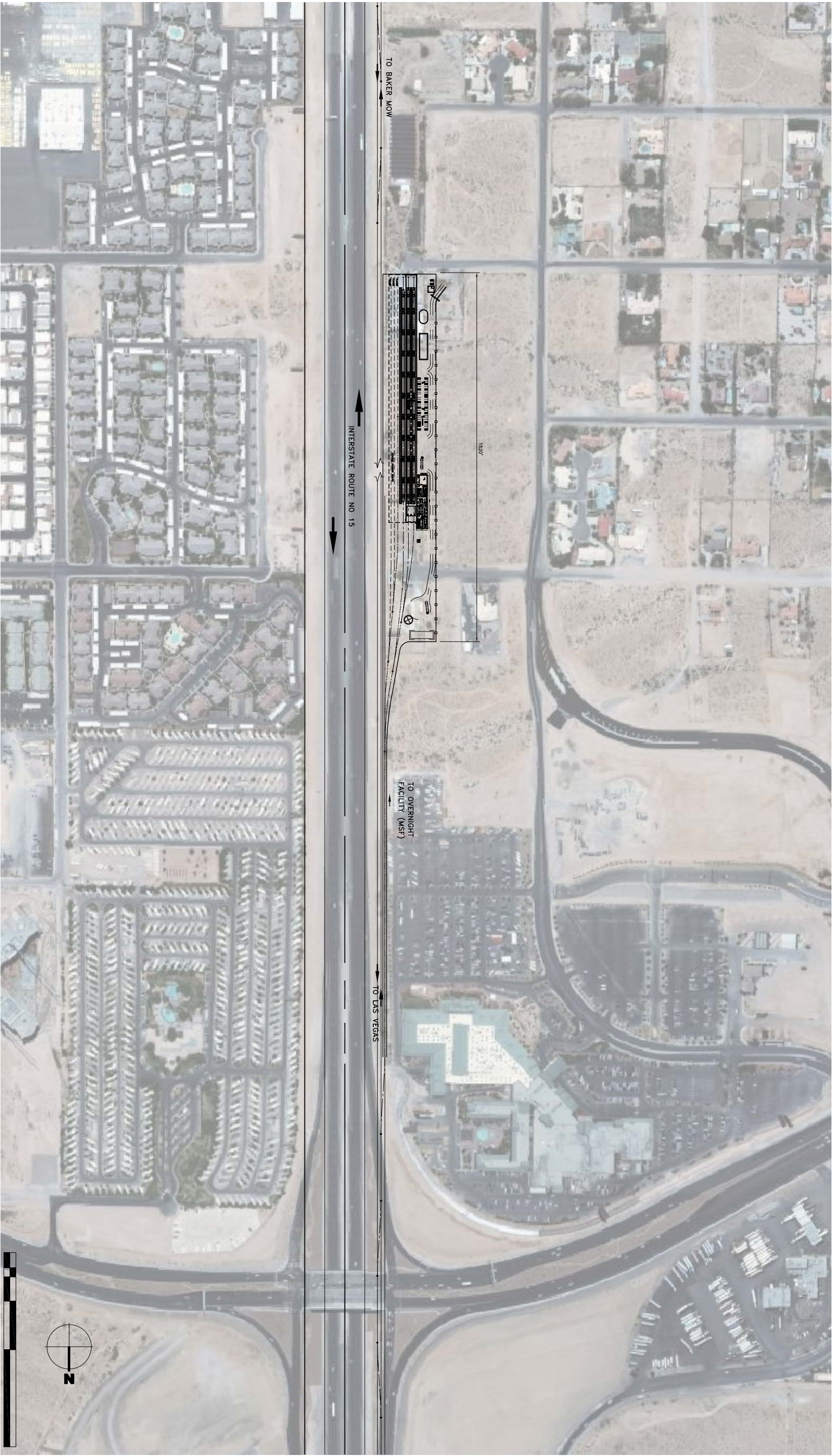
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**Las Vegas – Wigwam Avenue Maintenance
and Storage Facility Site Option**



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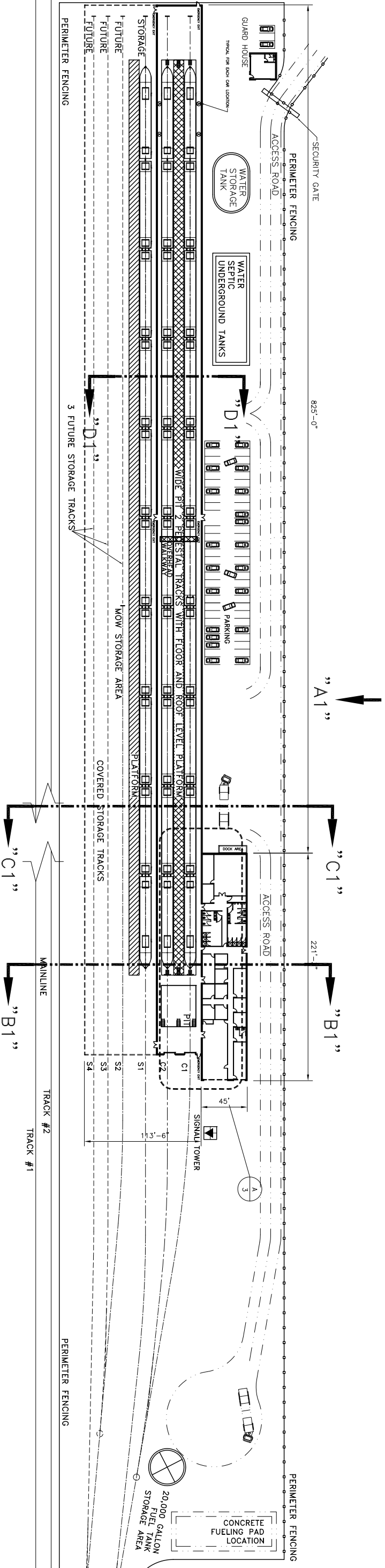


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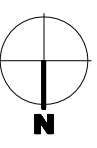
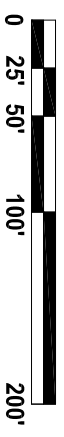
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A | OVERALL FACILITY PLAN

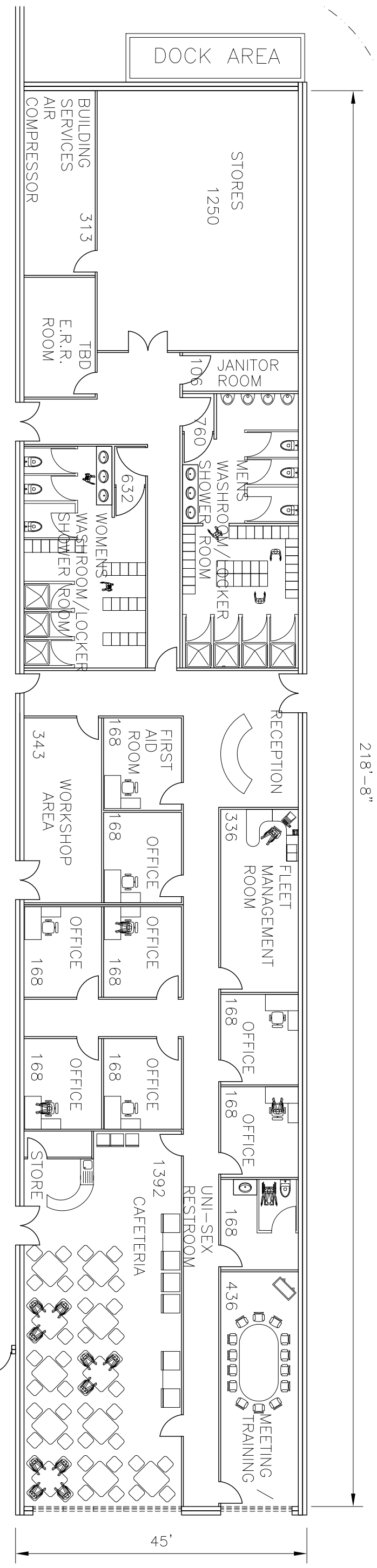


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DESERTXPRESS : LAS VEGAS MSF - WIGWAM AVENUE

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A | ENLARGED FACILITY PLAN

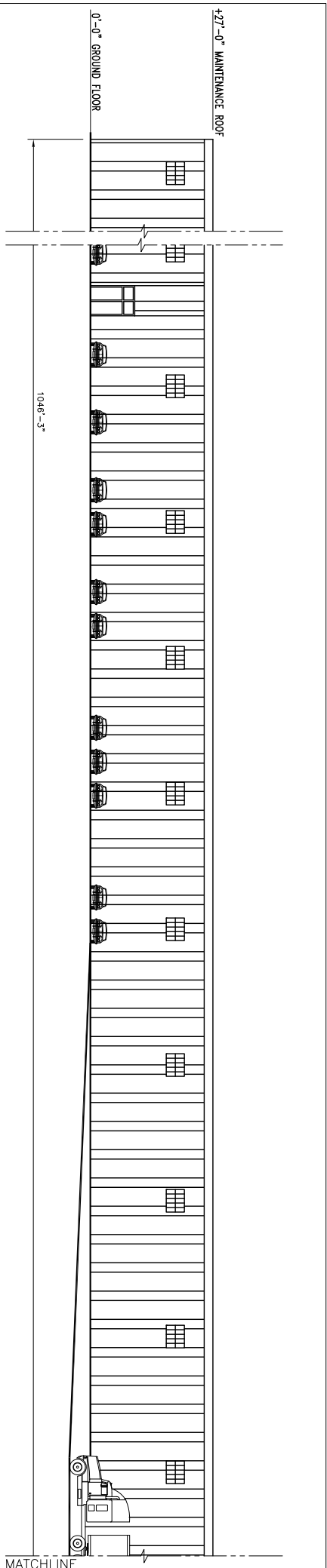
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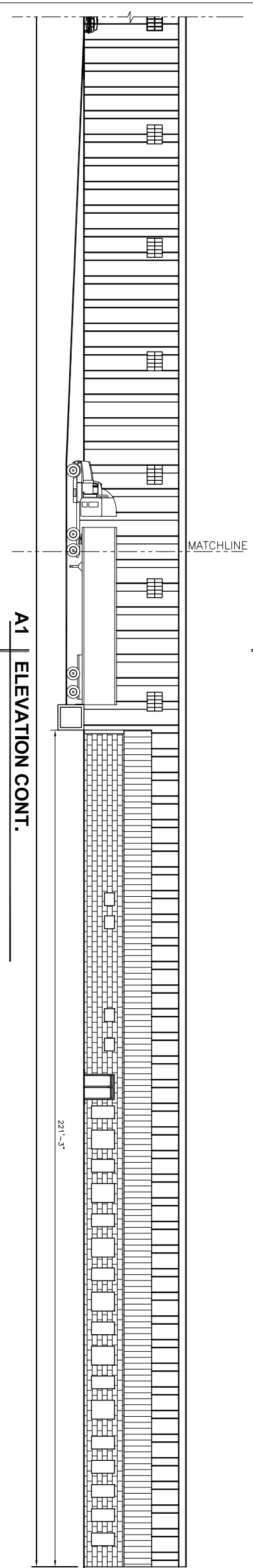
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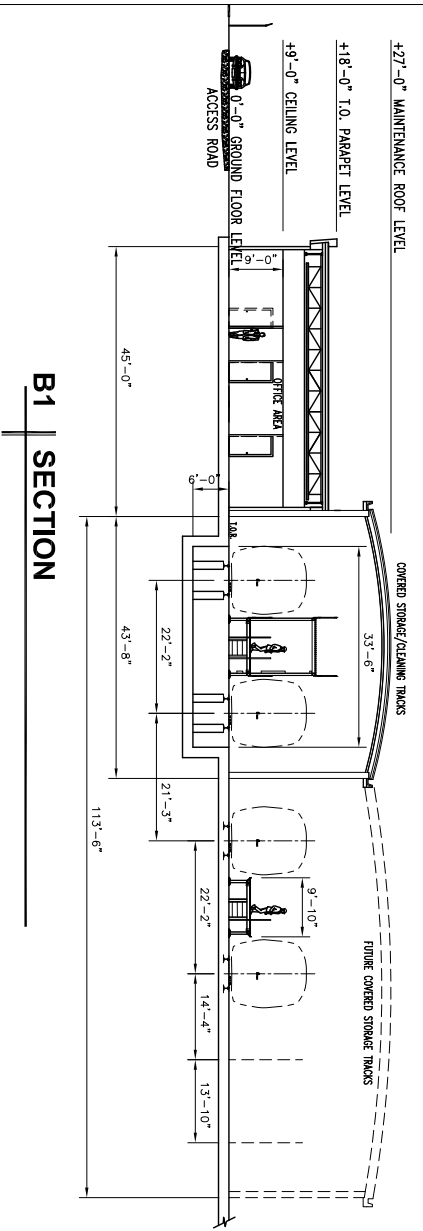
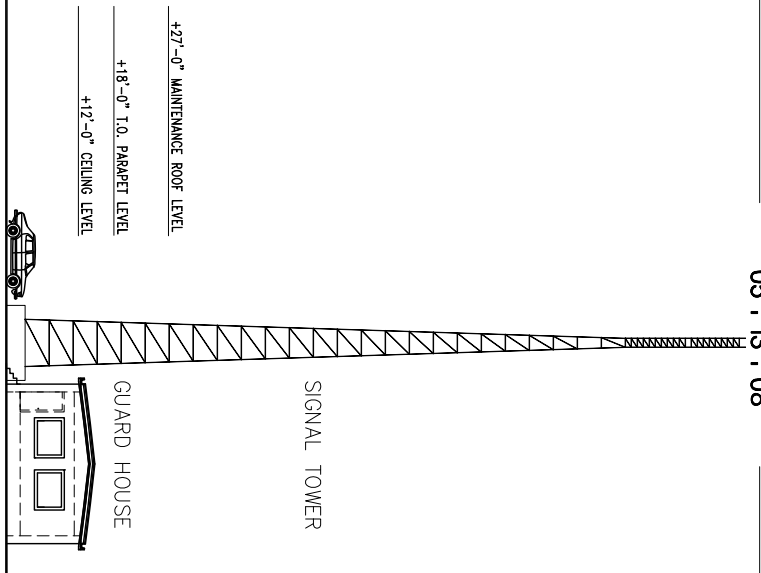
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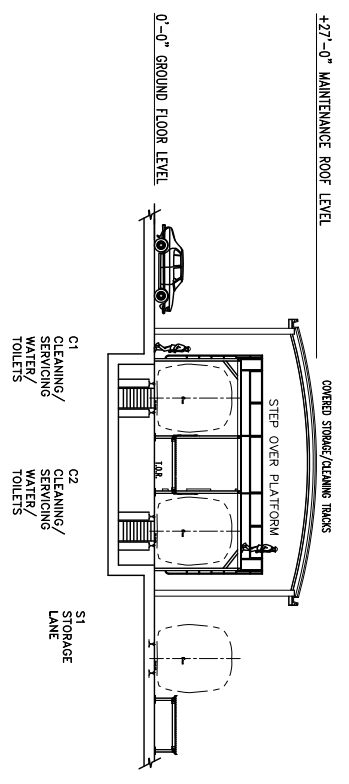
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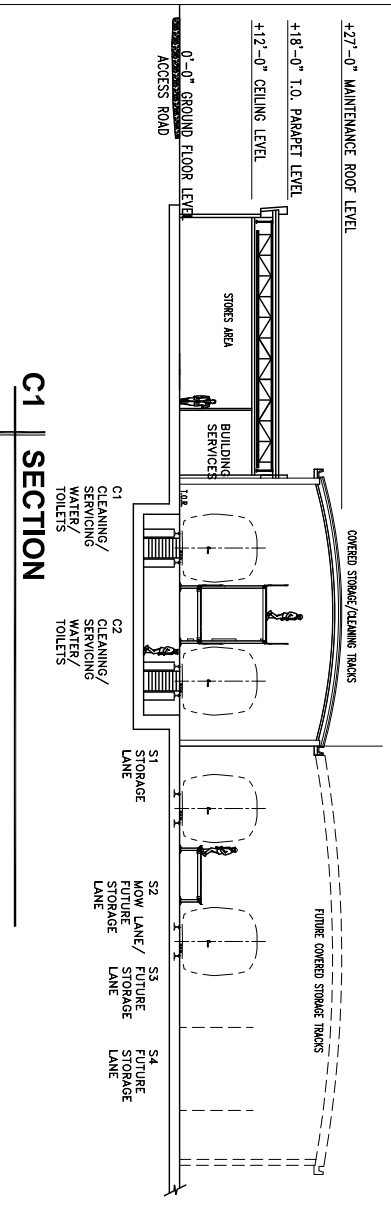
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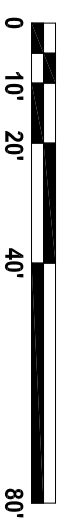
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D1 | SECTION



C1 | SECTION



DRAWINGS COURTESY BOMBARDIER, INC.

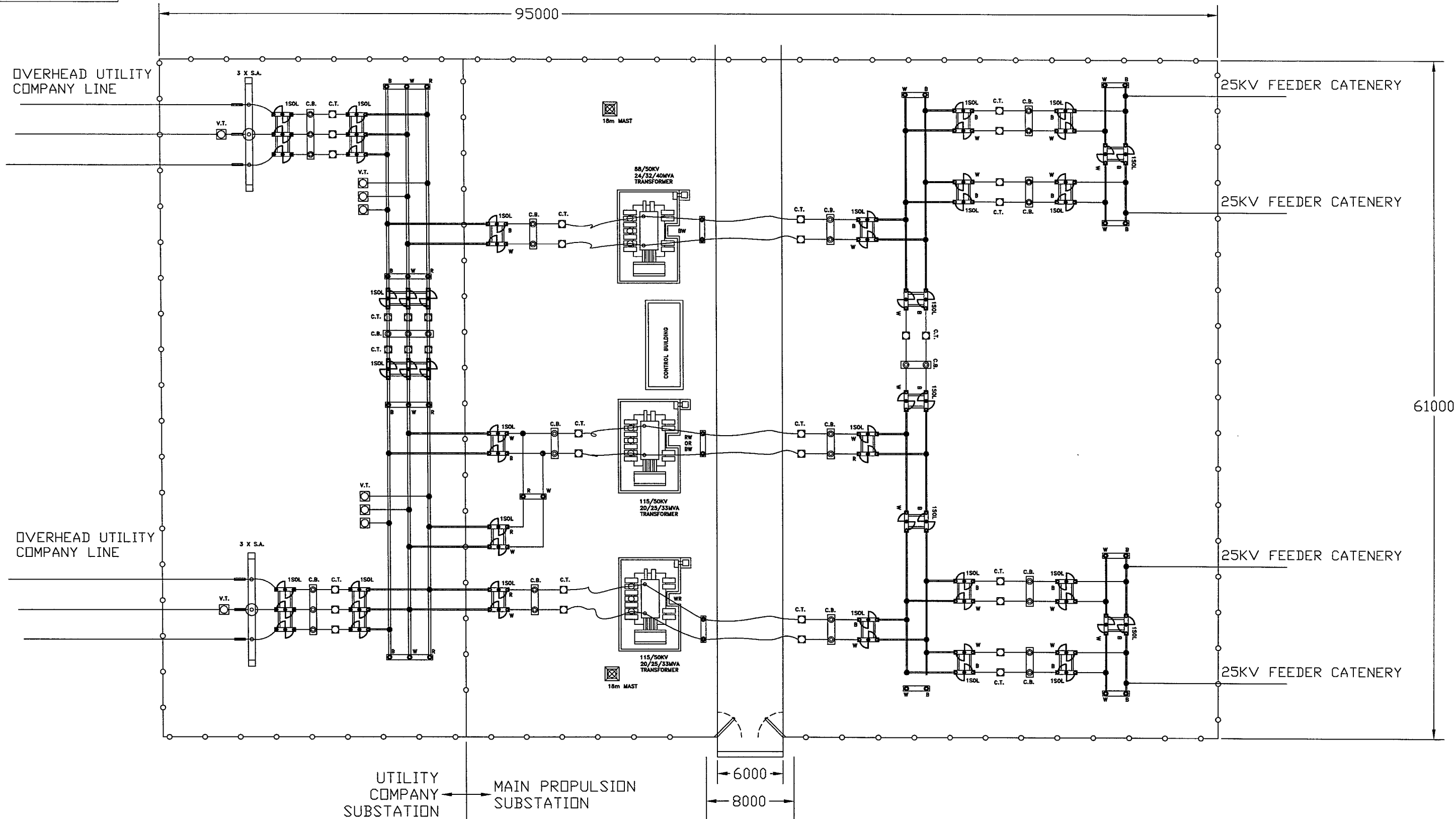


DESERTXPRESS : LAS VEGAS MSF - WIGWAM AVENUE

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APPENDIX A-4.1

SUBSTATION TYPICAL PLAN



- NOTES:
- 1- CONCEPTION DESIGN ONLY NOT FOR CONSTRUCTION PURPOSES.
 - 2- DIMENSIONS SHOWN IN MILLIMETERS.

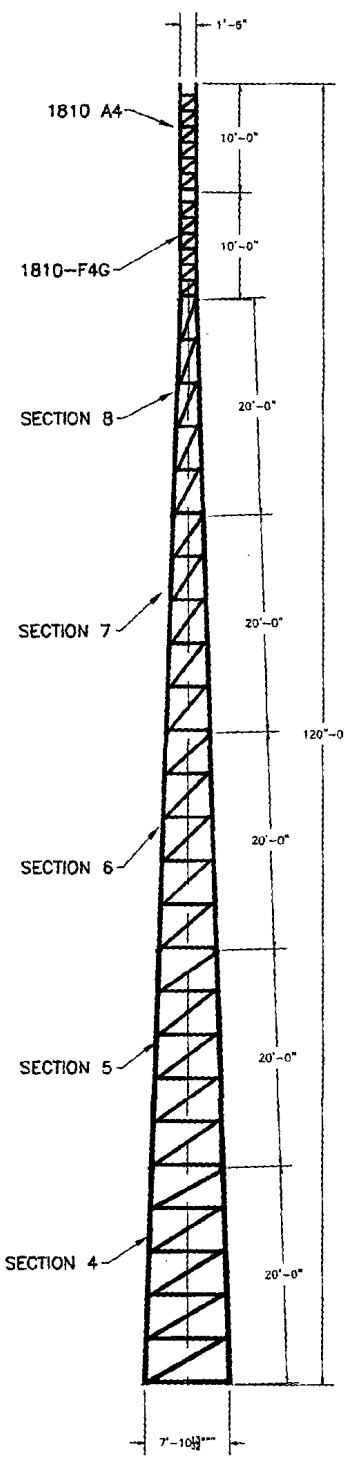
PRELIMINARY
DATE : 2007-01-23

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DIMENSIONS				
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DESSINE	S.PRIMEAU		07/01/23	SCALE
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APPROUVE	T.BURG		07/01/23	A1
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TITRE				REV. NO.
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C806-SWD-0601-0001				1 of 1
DRAWING NUMBER				SHEET
				1

APPENDIX A-4.2

TYPICAL SIGNAL TOWER ELEVATION

ASTM		*	
LEGS	2.875" x 0.276"	2.375" x 0.218"	2.0" x 10 GA
DIAGONALS	L2 1/2x2 1/2x3/16	L1 3/4 x 1 3/4 x 1/8	L3/4 x 3/4 x 1/8
GIRTS	L2 1/2x2 1/2x3/16	L1 3/4 x 1 3/4 x 1/8	L1 1/4x1 1/4x1/8
BRACE BOLTS	(4)-3/4"	(1)-5/8"	-SHOP WELDED-
SPICE BOLTS	(4)-1"	(4)-5/8"	(2)-1/2"
ANCHOR BOLTS	(4)-1" (C1018 THREADED ROD)	(4)-1/2"	GRADE 5



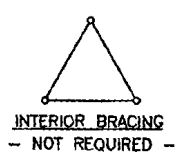
According to ANSI/EIA-222-F 1996
90 mph/78 mph + 1/2" radial ice w/ (3 second gust) per OBC AND IBC

	CaAa	Flat Plate Area	Weight	Elevation
No Ice	32 sq ft	17.78 sq ft	200 lbs	120 ft
1/2" Ice	40 sq ft	22.22 sq ft	350 lbs	120 ft
No Ice	55.5 sq ft	30.83 sq ft	350 lbs	120 ft to 90 ft
1/2" Ice	67 sq ft	37.22 sq ft	600 lbs	120 ft to 90 ft
(1)-7/8" coax Elevation 0 ft to 120 ft				
Climbing Ladder Elevation 0 ft to 100 ft				

70 mph/61 mph + 1/2" radial ice (Fastest MPH) per EIA-222-F

	CaAa	Flat Plate Area	Weight	Elevation
No Ice	33.9 sq ft	18.83 sq ft	200 lbs	120 ft
1/2" Ice	41 sq ft	22.78 sq ft	350 lbs	120 ft
No Ice	58 sq ft	32.22 sq ft	350 lbs	120 ft to 90 ft
1/2" Ice	70 sq ft	38.88 sq ft	600 lbs	120 ft to 90 ft
(1)-7/8" coax Elevation 0 ft to 120 ft				
Climbing Ladder Elevation 0 ft to 100 ft				

* PIPE LEGS 42 KSI MIN YIELD
10 GA TUBE LEGS 30 KSI MIN YIELD

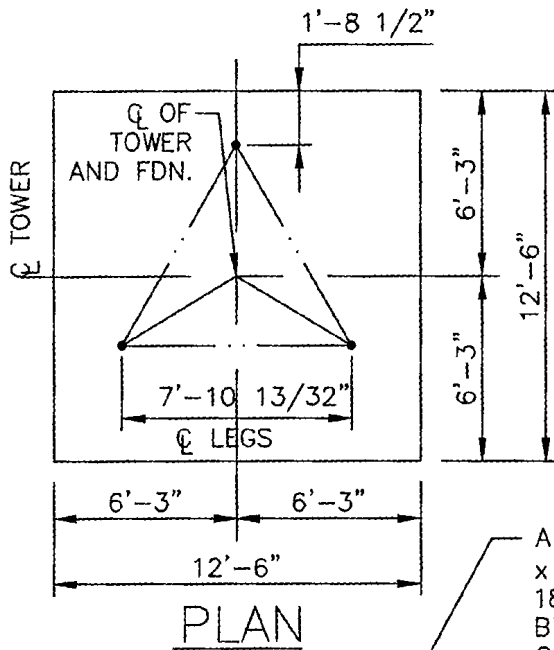


FOUNDATION REACTIONS
TOTAL MOMENT: 294 FT-KIPS
TOTAL SHEAR: 5 KIPS
TOTAL DOWNLOAD: 7 KIPS

AMERICAN TOWER COMPANY
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120' STANDARD

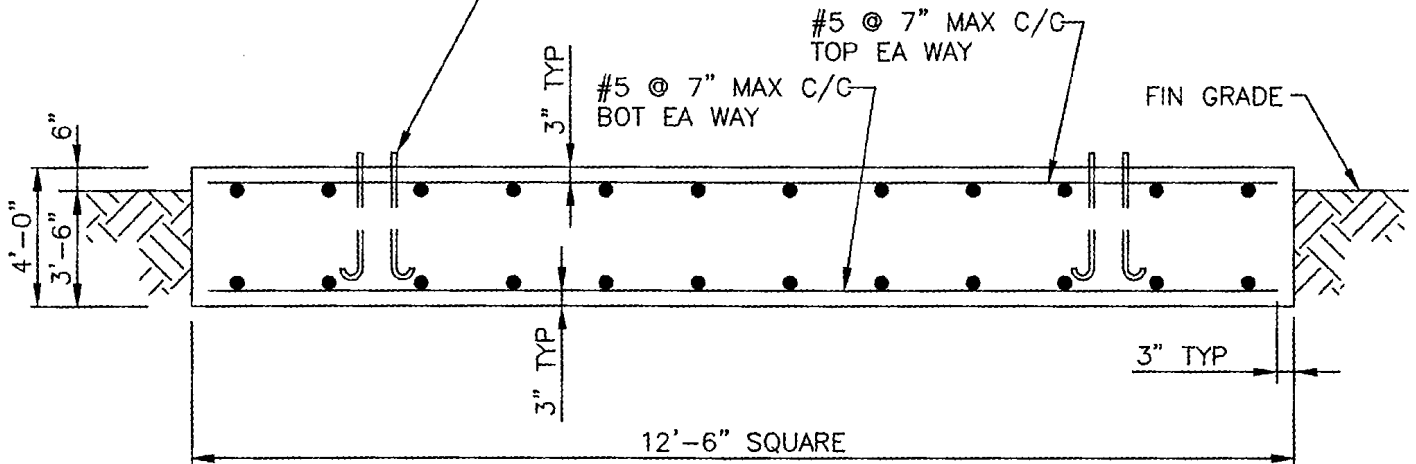
BY: DOW DATE: 12/21
DWG NO. 1060



NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS.
2. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 (GRADE 60).
3. TOTAL CONCRETE = 18 CUBIC YARDS.
4. FOUNDATION DESIGN BASED UPON ASSUMED SOIL PARAMETERS AS FOLLOWS:
 ALLOW BEARING PRESSURE: 2000 PSF
 UNIT SOIL WEIGHT: 100 PCF
 WATER AND ROCK LOCATED BELOW FOOTING

ANCHOR BOLTS BY AMERICAN TOWER, 1"Ø x 3'-6" MIN EMBEDMENT INTO CONCRETE. 180° END HOOK PER ACI. SEE DRAWINGS BY AMERICAN TOWER FOR ANCHOR BOLT ORIENTATION.



MAT FOUNDATION

FOOTING MUST BEAR ON UNDISTURBED SOIL OR COMPACTED BACKFILL.

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120' STANDARD FOUNDATION

BY: DOW

DATE: 12/21/02

DWG NO. 1060 A