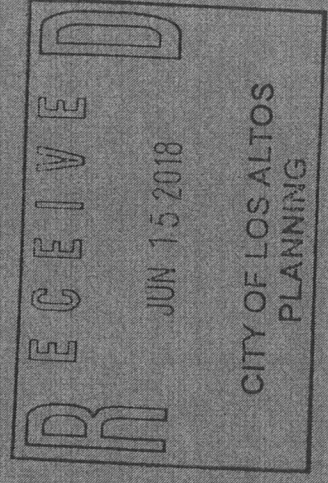
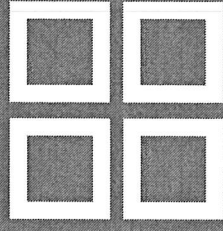


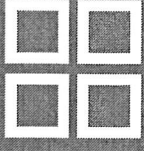
**city**lift

**PUZZLE**



**SPECIFICATION SHEET**

# PUZZLE

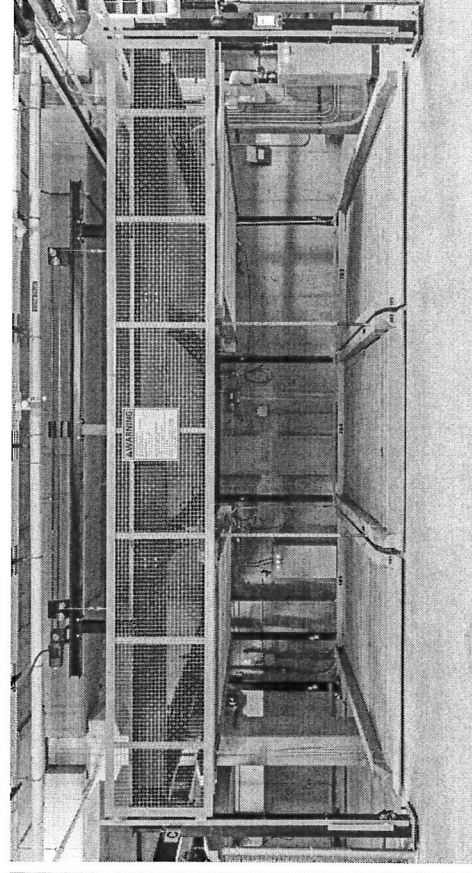
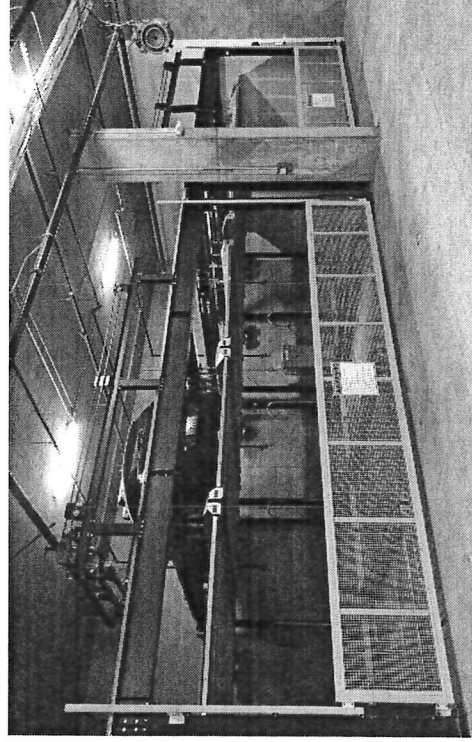
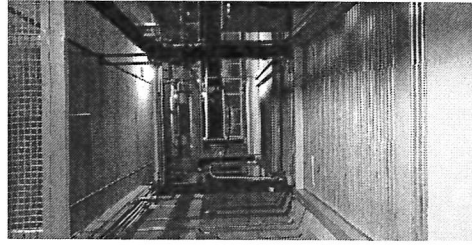


**33 SECONDS**  
AVERAGE RETRIEVAL TIME

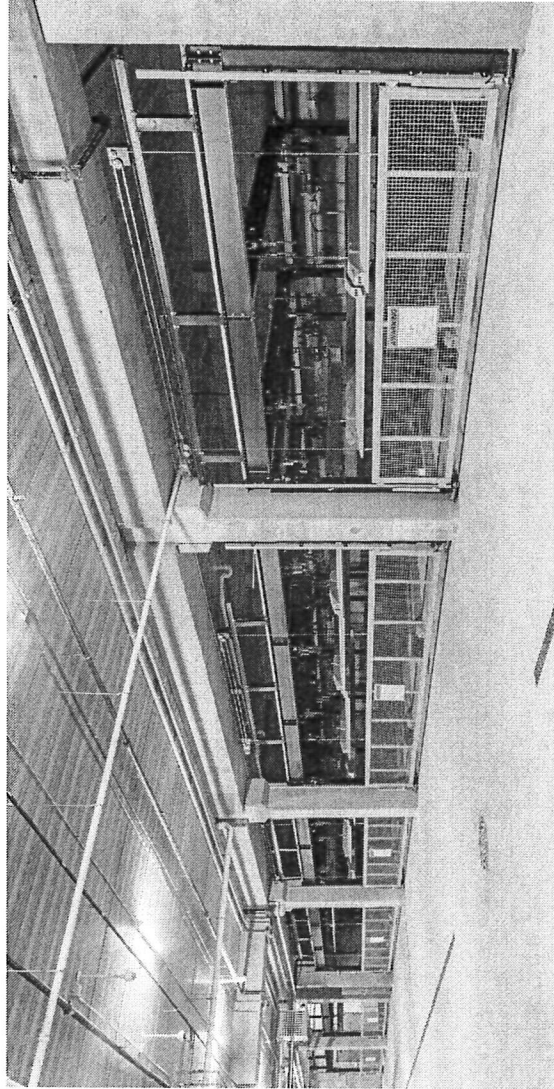
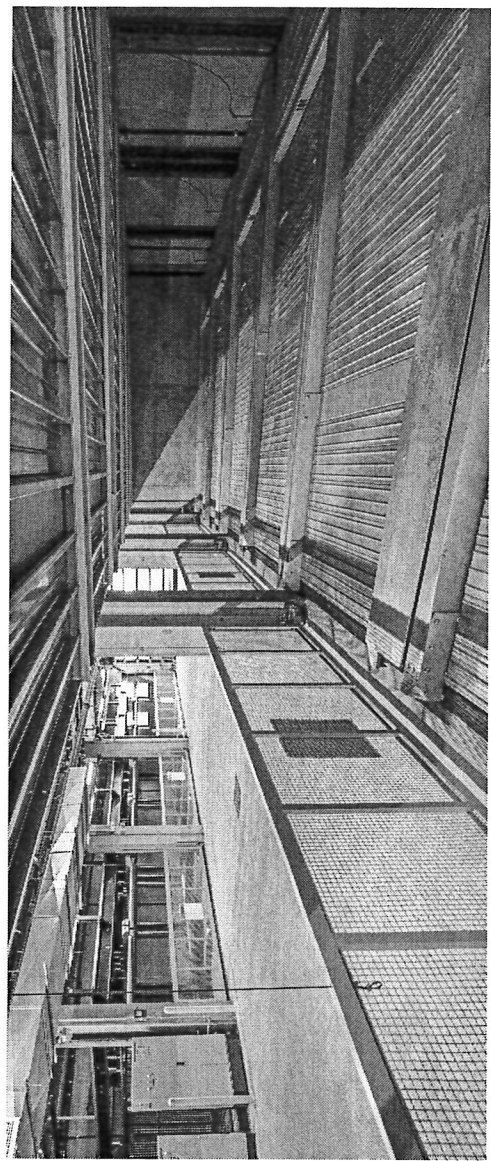
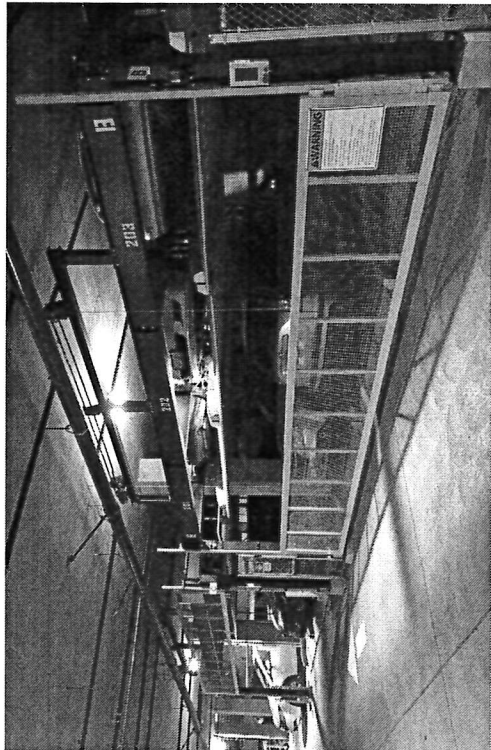
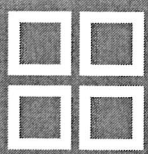
**UP TO 7 LEVELS**  
2 - 7 LEVEL CONFIGURATIONS

**40,000**  
SPACES INSTALLED

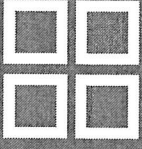
Our most popular and versatile mechanical parking solution is the Puzzle. It comes in 2, 3, 4, 5, 6, and 7-level configurations; with or without pits and is ideal for new construction or retrofits. This mechanical parking lift also works in a tandem configuration without impacting retrieval time. They are widely used in residential, mixed use, and public garages in impacted urban areas. Replacing traditional stackers with the Puzzle can drastically reduce valet costs since each space is independently accessed. The Puzzle can be used indoors or outdoors and requires a minimum clear height of 11' 7 3/4" beginning with the 2 level system.



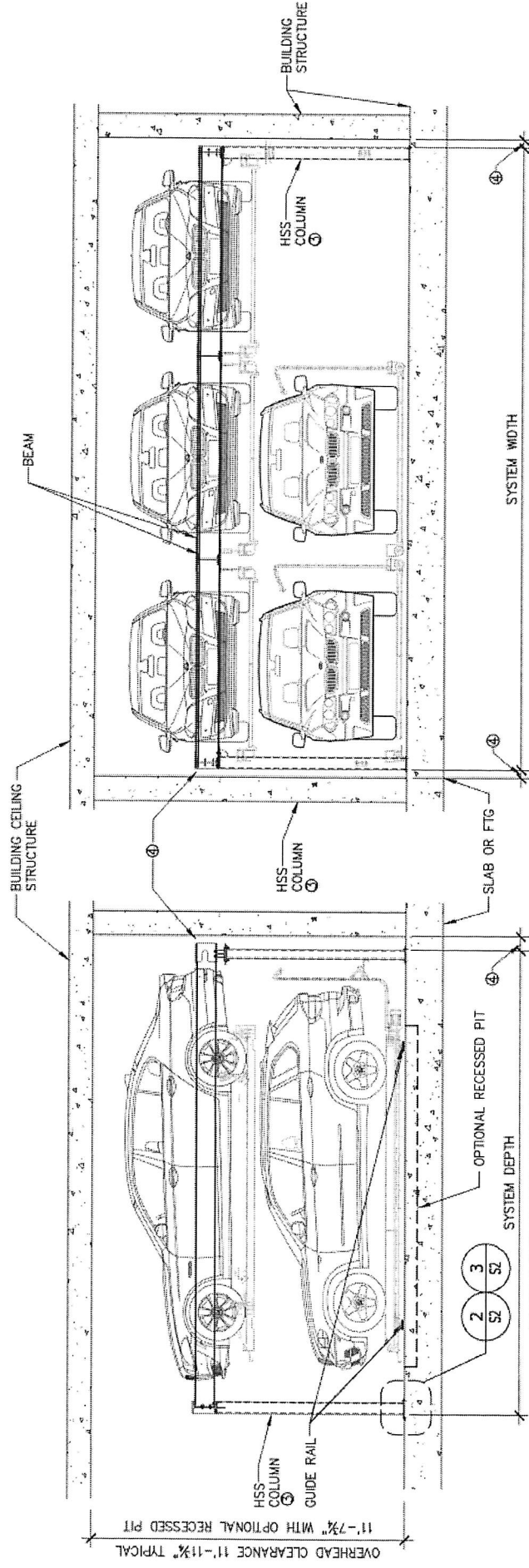
# PUZZLE



# TWO LEVEL PUZZLE



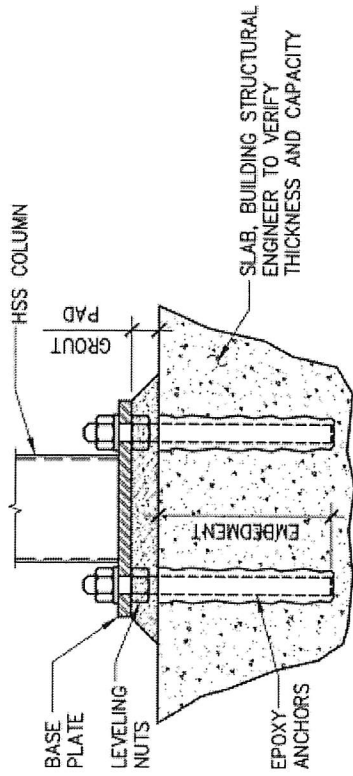
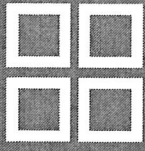
## MODEL NO 2LP



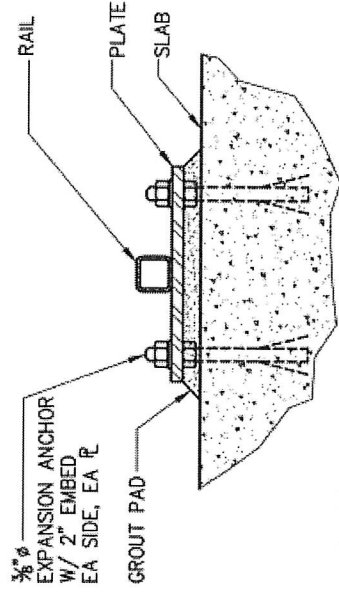
CAR LENGTH	SYSTEM DEPTH
15' - 9"	17' - 9"
16' - 5"	18' - 4 7/8"
17' - 0 3/4"	19' - 3 1/4"

CAR WIDTH	SYSTEM WIDTH
6' - 0 3/4"	24' - 1 5/8"
6' - 2 3/4"	24' - 7 1/2"
6' - 4 3/4"	25' - 1 3/8"
6' - 6 3/4"	25' - 7 1/4"
6' - 8 3/4"	25' - 11 3/8"

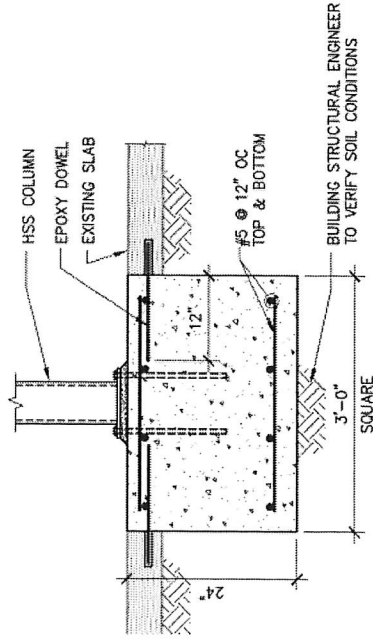
# TWO LEVEL PUZZLE



**BASE PLATE SECTION AT SLAB**



**RAIL ANCHORAGE**

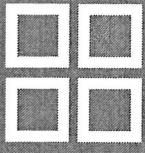


**FOOTING OPTION**

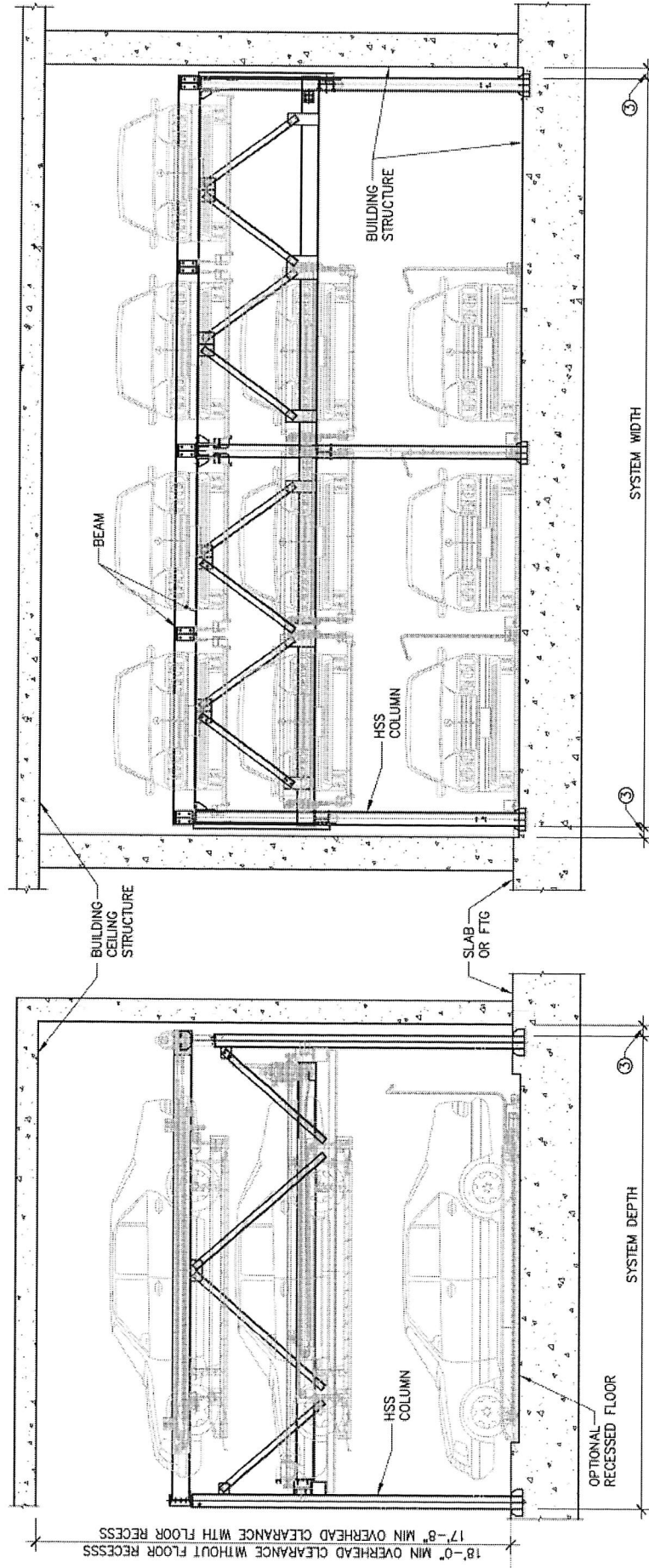
**NOTES:**

- Depth depends on the concrete strength specified
- Typical base plate dimensions are 12"x12" design may vary based on design
- 5/8" thick plate with 1/4" HSS design may vary based on actual design

# THREE LEVEL PUZZLE



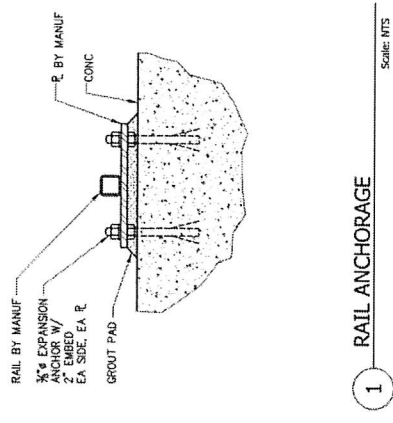
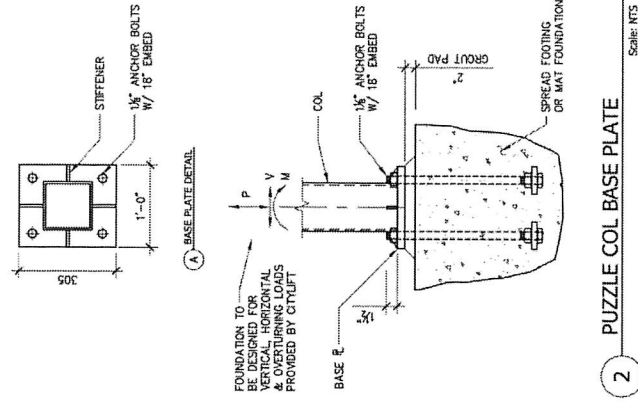
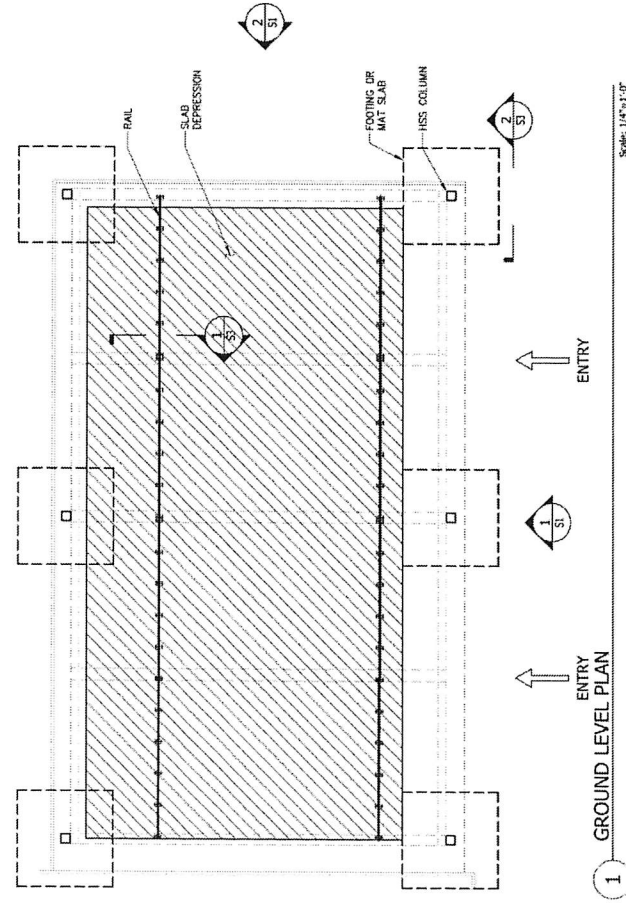
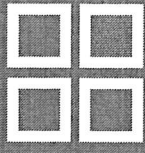
## MODEL NO 3LP



CAR LENGTH	SYSTEM DEPTH
15' - 9"	17' - 9"
16' - 5"	18' - 4 <sup>7</sup> / <sub>8</sub> "
17' - 0 <sup>3</sup> / <sub>4</sub> "	19' - 3 <sup>1</sup> / <sub>4</sub> "

CAR WIDTH	SYSTEM WIDTH
6' - 0 <sup>3</sup> / <sub>4</sub> "	24' - 1 <sup>5</sup> / <sub>8</sub> "
6' - 2 <sup>3</sup> / <sub>4</sub> "	24' - 7 <sup>1</sup> / <sub>2</sub> "
6' - 4 <sup>3</sup> / <sub>4</sub> "	25' - 1 <sup>3</sup> / <sub>8</sub> "
6' - 6 <sup>3</sup> / <sub>4</sub> "	25' - 7 <sup>1</sup> / <sub>4</sub> "
6' - 8 <sup>3</sup> / <sub>4</sub> "	25' - 11 <sup>3</sup> / <sub>8</sub> "

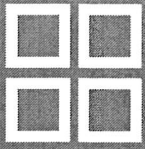
# THREE LEVEL PUZZLE



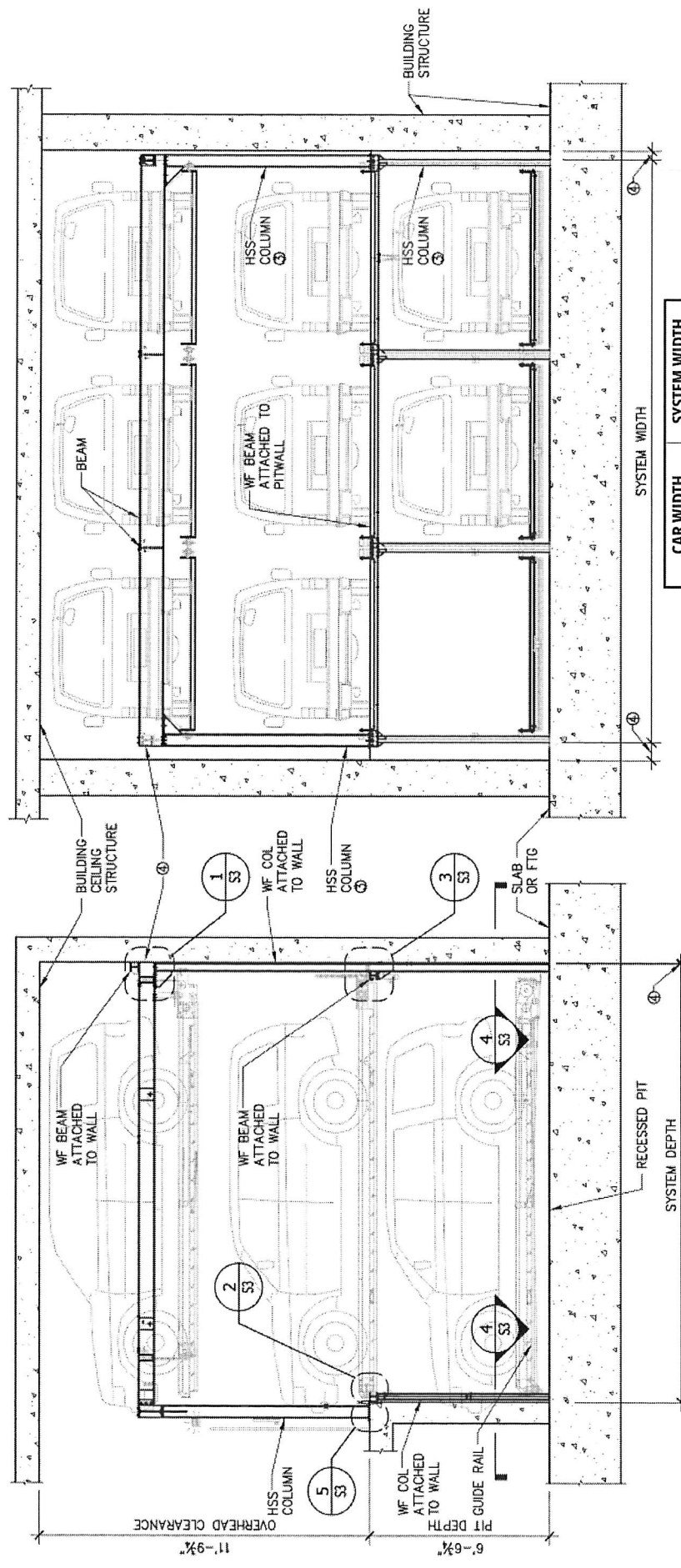
**NOTES:**

- Dimensions will vary depending on size of platform and design of structure
- See next page for schedule

# THREE LEVEL PUZZLE W/PIT



## MODEL NO 3LPWP

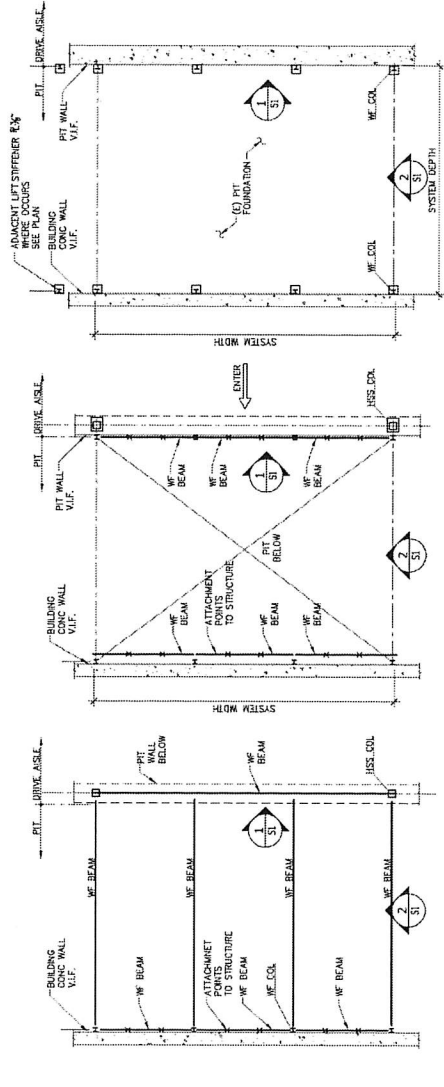
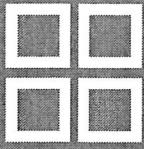


CAR WIDTH	SYSTEM WIDTH
6' - 0 <sup>3/4</sup> "	24' - 1 <sup>5/8</sup> "
6' - 2 <sup>3/4</sup> "	24' - 7 <sup>1/2</sup> "
6' - 4 <sup>3/4</sup> "	25' - 1 <sup>3/8</sup> "
6' - 6 <sup>3/4</sup> "	25' - 7 <sup>1/4</sup> "
6' - 8 <sup>3/4</sup> "	25' - 11 <sup>3/8</sup> "

CAR LENGTH	SYSTEM DEPTH
15' - 9"	17' - 9"
16' - 5"	18' - 4 <sup>7/8</sup> "
17' - 0 <sup>3/4</sup> "	19' - 3 <sup>4</sup> "



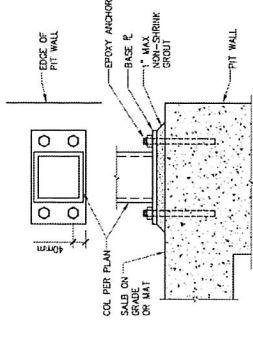
# THREE LEVEL PUZZLE W/PIT



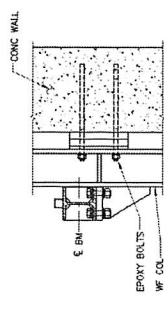
3 UPPER LEVEL PLAN  
Scale: NTS

2 MID/ENTRY LEVEL PLAN  
Scale: NTS

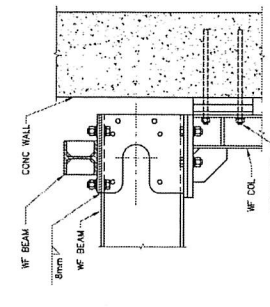
1 PIT LEVEL PLAN  
Scale: NTS



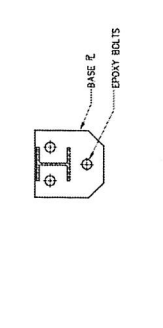
5 HSS COLUMN-ANCHOR PIT WALL  
Scale: NTS



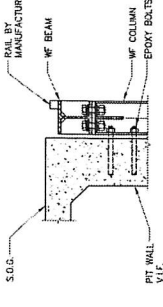
3 DETAIL  
Scale: NTS



1 DETAIL  
Scale: NTS



4 DETAIL  
Scale: NTS



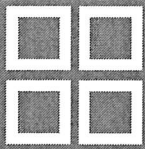
2 DETAIL  
Scale: NTS

**NOTES:**

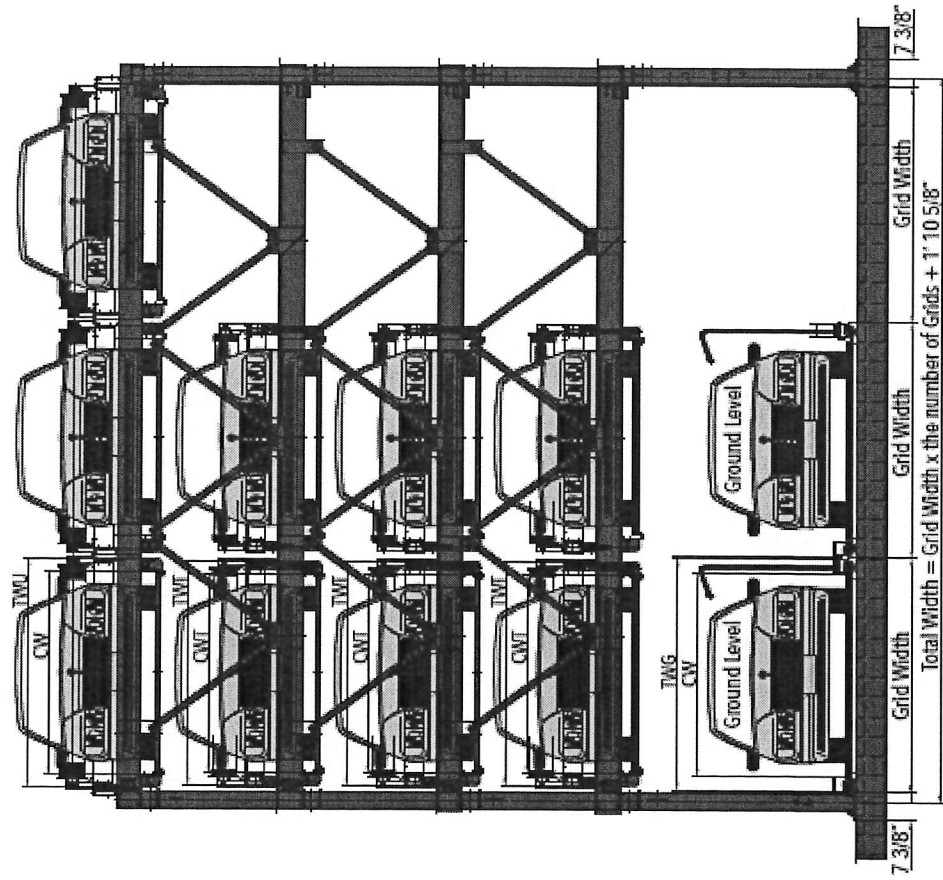
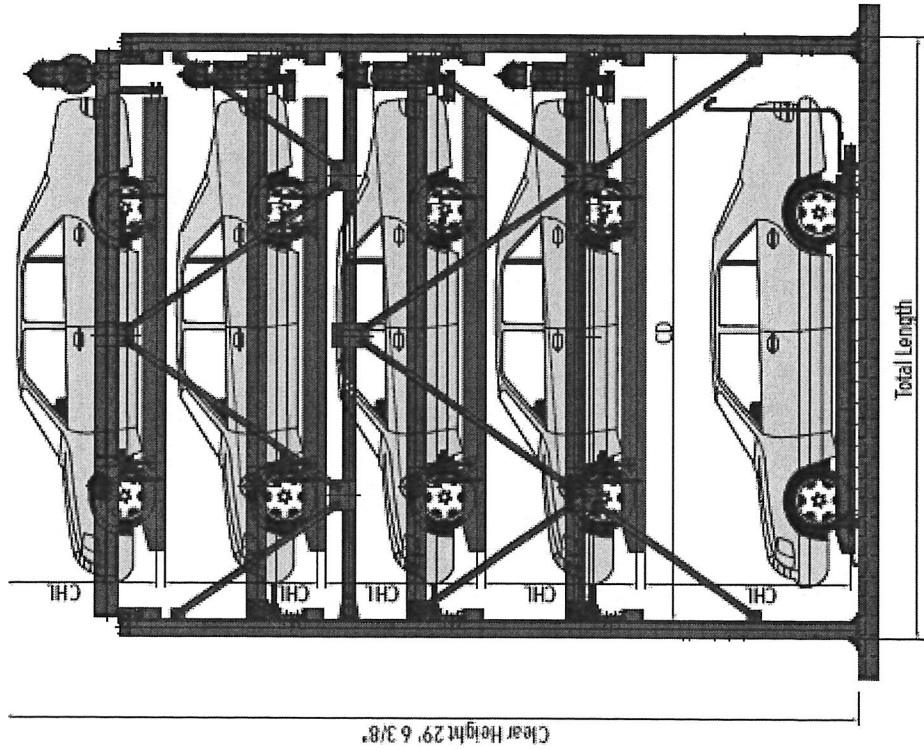
- Rod inbedment and size varies on structural wall design



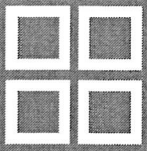
# FIVE LEVEL PUZZLE



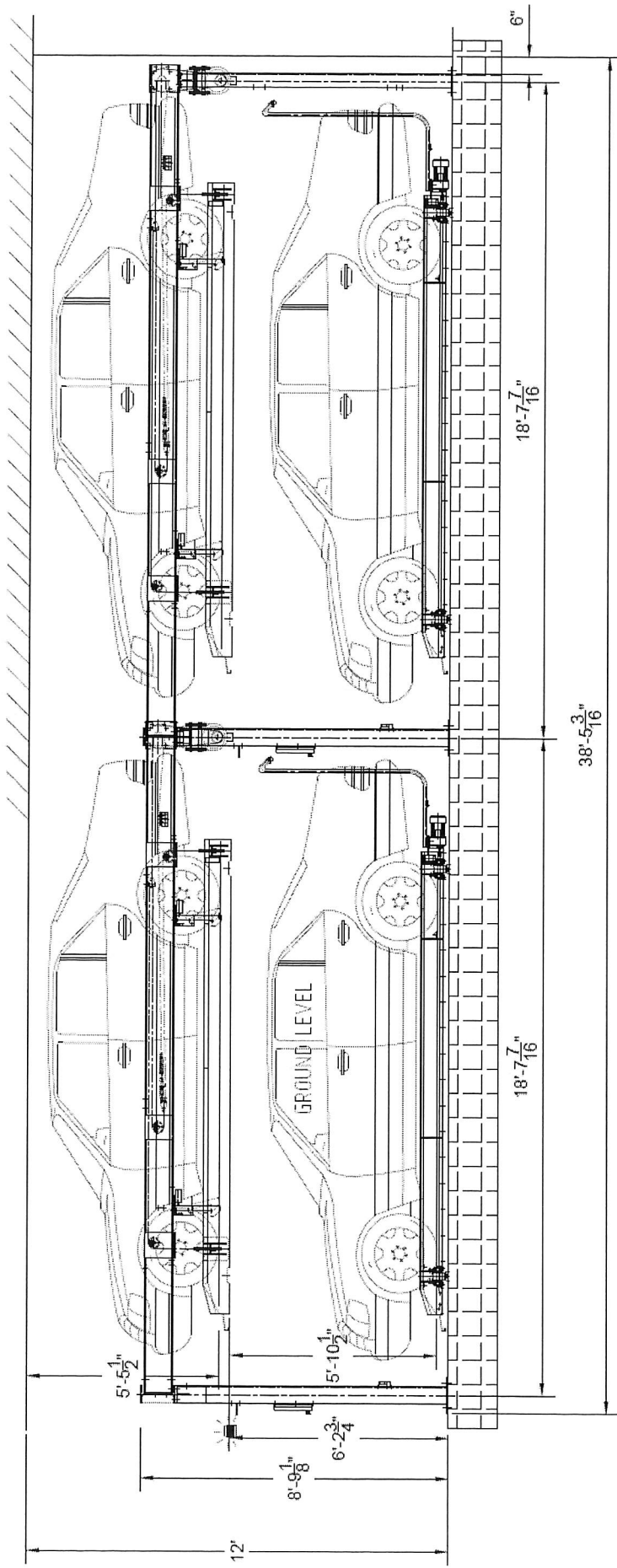
## MODEL NO 5LP



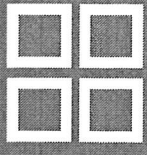
# TWO-ROW (TANDEM)



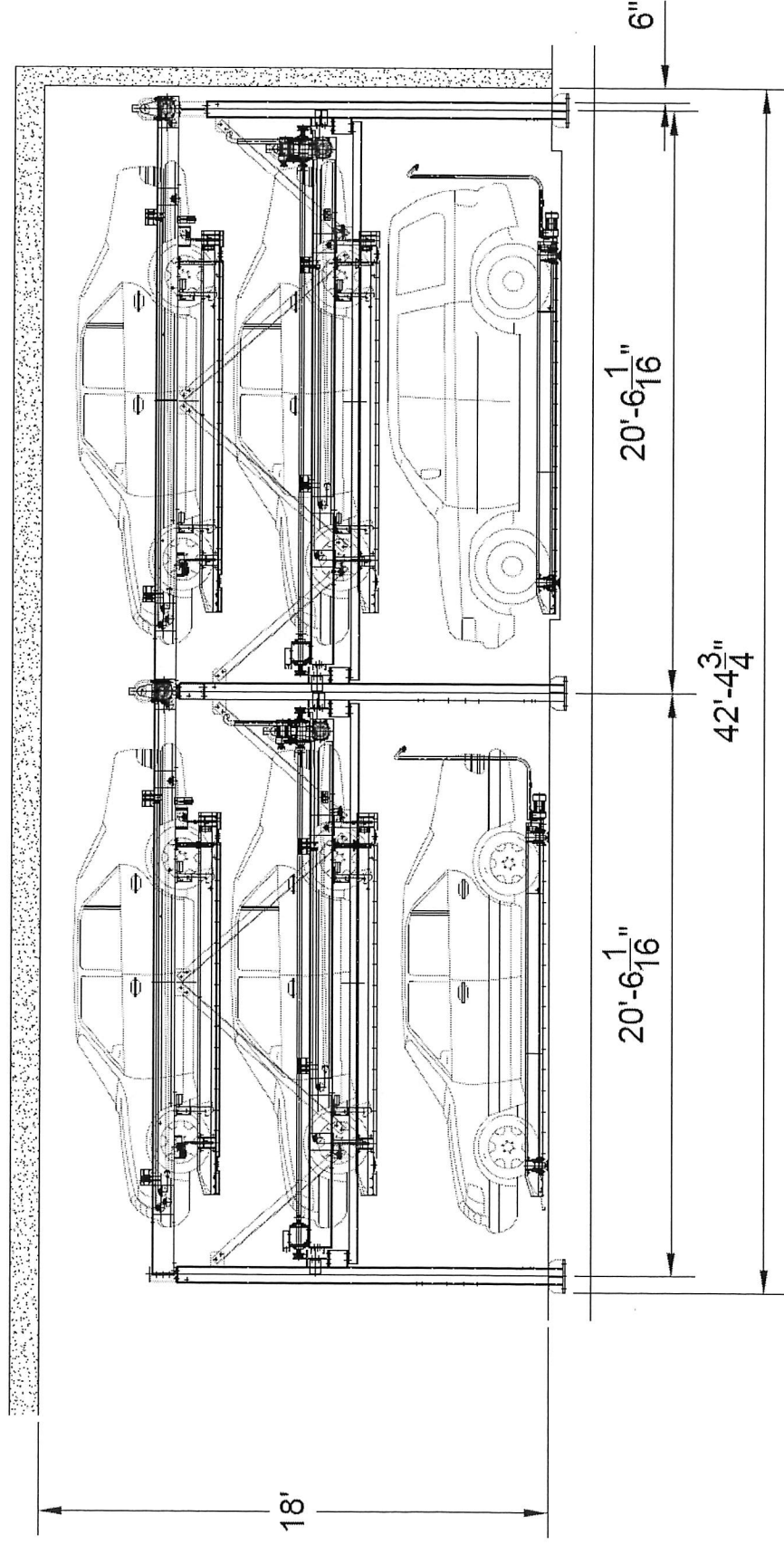
## MODEL NO 2LPNPT



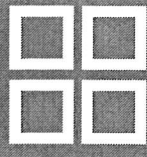
# TWO-ROW (TANDEM)



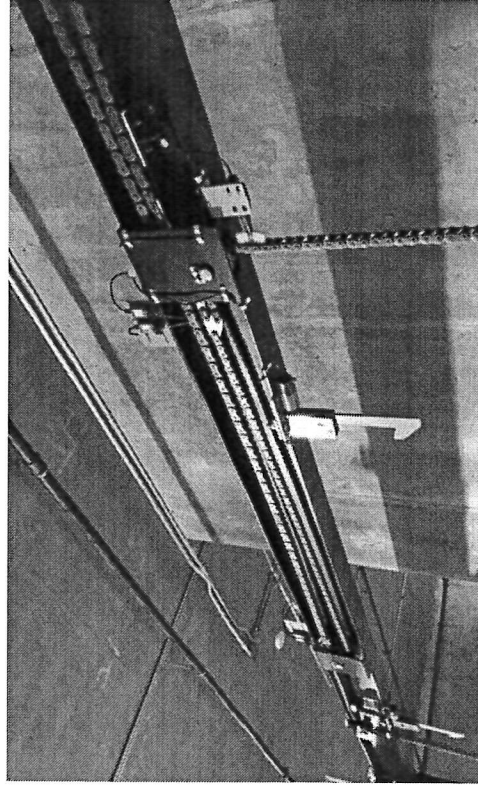
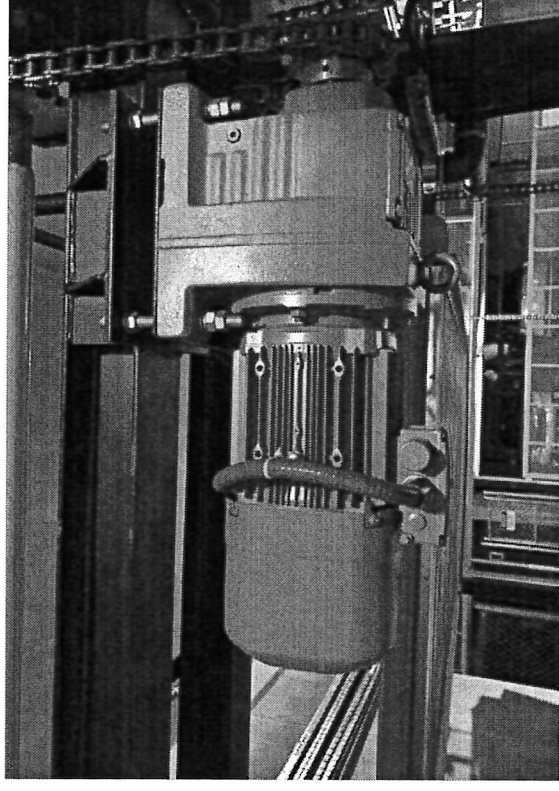
MODEL NO 3LPNPT



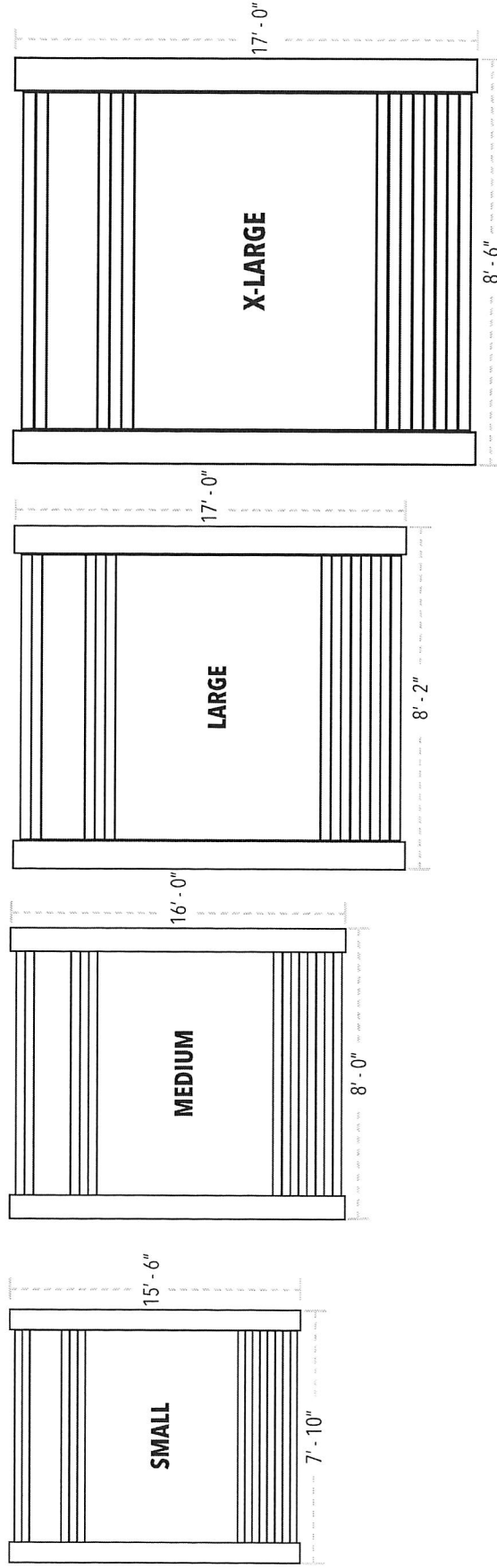
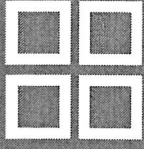
# TECHNICAL SPECS



<b>Average Retrieval Time</b>	33 Seconds
<b>Maximum Vehicle Weight</b>	40lbs per SF, per level. 5,200 pounds
<b>Electrical Requirement</b>	480 3-Phase or 208 3-Phase
<b>Lifting Motor</b>	Two options: 4.0kW-4P or 2.2 kW-4P
<b>Traverse Motor</b>	0.37 kW-4P
<b>Control Method</b>	PLC control
<b>Circuit Breaker</b>	ABB S204-C40
<b>Operation Method</b>	Button type or touch panel control
<b>Emergency Stop Switch</b>	XB2-BS542C
<b>Optoelectronic Switch</b>	LA31/K31/25/31/115
<b>Remote Monitoring</b>	Primitive Logic / AMI
<b>Drive System/Motor</b>	SEW-Germany
<b>PLC/Sensor</b>	Rockwell
<b>Applicable Code</b>	CA Building Code, 2016 edition
<b>Seismic Loads</b>	Ch. 15 ASCE 7-10: Steel ordinary moment frame
<b>Machine Bolts</b>	Min tensile strength = 900 MP
<b>Anchor Bolts/Rods</b>	ASTM F1554, GR.55
<b>Welding Electrodes</b>	480 MP (E-70 KSI) MIN



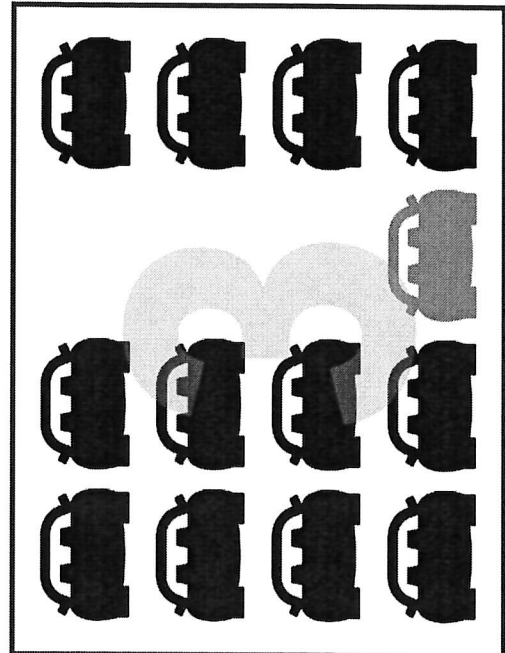
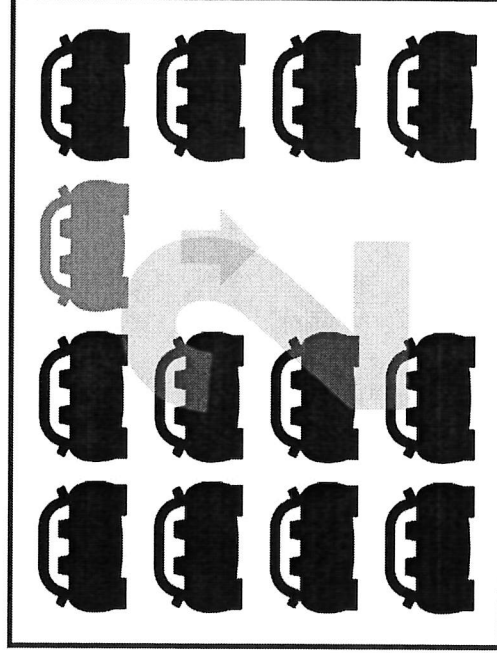
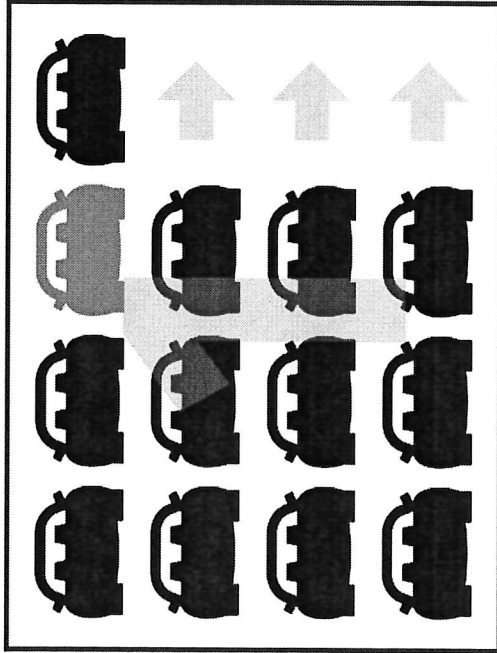
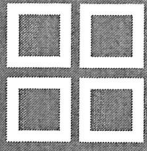
# PLATFORM SIZES



<b>SMALL</b>			
Acura ILX	BMW 3-Series	Honda Civic	Lexus IS
<b>MEDIUM</b>			
Audi A6	BMW X5	Dodge Durango	Jeep Grand Cherokee
<b>LARGE</b>			
BMW 5-Series	Chrysler 300	Honda CR-V	Volvo XC60
<b>X-LARGE</b>			
Audi Q5	Chevrolet Corvette	Honda Pilot	Tesla Model S

**Note:** Standard load is 5,200 lbs per vehicle. Heavier loads available. Individual cars should be measured for size fit. Above is a sample list of 2016 model cars that can fit on the different platform sizes given a 6' horizontal clear height. This list is not meant to be comprehensive or exhaustive.

# CAR RETRIEVAL



1. Except for the top level, one space will be missing from each level. This allows for each car to be independently accessible via kiosk or remote key fob. For the blue car to be retrieved, 3 cars from levels 1-3 will move to the right.
2. This allows for the blue car to drop to ground level.
3. Blue car is ready to be retrieved.



# cityLift

## **CITYLIFT PARKING**

2335 Broadway, Suite 100, Oakland, CA 94612

[contact@cityliftparking.com](mailto:contact@cityliftparking.com)

844.388.0424

[www.cityliftparking.com](http://www.cityliftparking.com)

Oakland | Los Angeles | Chicago | Miami | Boston