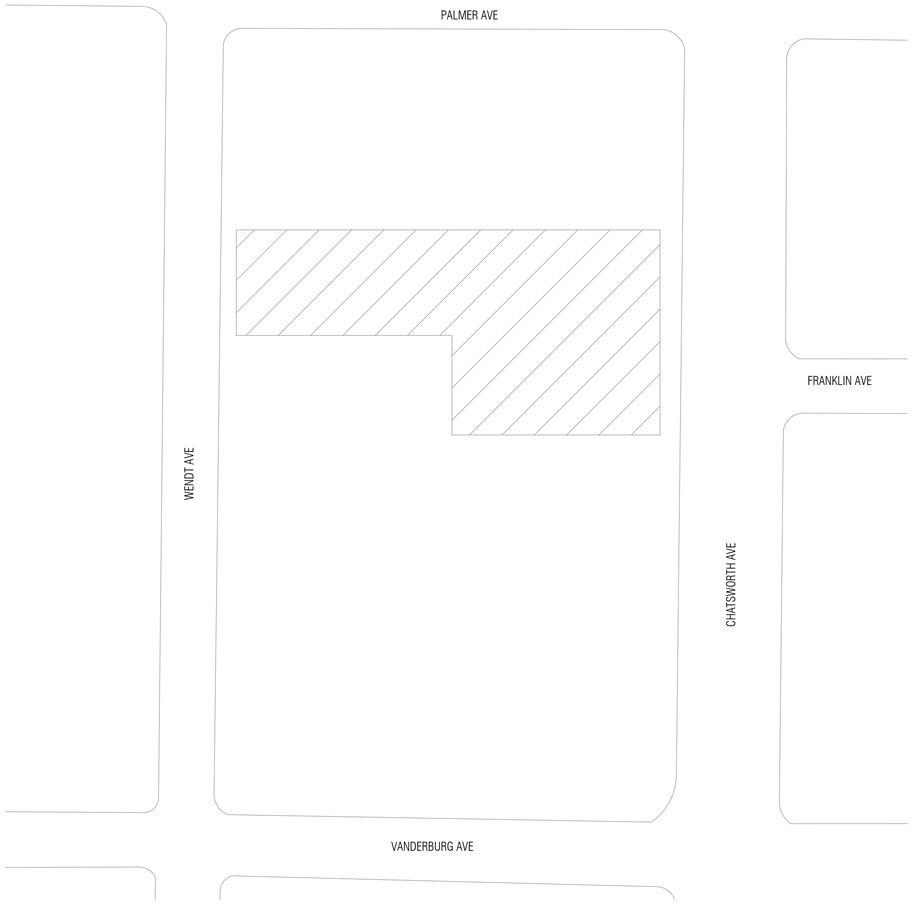

1 SITE PLAN

PARKING SPACE COUNT

LEVEL	MECH LIFT	# MECH SPACE	TOTAL
GROUND	1 x LS 2H9W	17	26
GROUND	1 x LS 2H5W	9	

2 PARKING COUNT

GENERAL NOTES

ALL WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH THE MOST RECENT EDITION OF THE LOCAL BUILDING CODE, CITY LABOR LAWS, CITY ORDINANCES, CITY/ COUNTY ZONING CODES, RULES AND REGULATIONS, AND ANY APPLICABLE CODES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS TO CARRY OUT THE WORK DESCRIBED IN THE CONSTRUCTION DOCUMENTS.

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS. ANY DISCREPANCIES WITH THE DRAWINGS, DIMENSIONS OR OTHERWISE SHALL BE BROUGHT TO THE DELEGATED ENGINEER ATTENTION PRIOR TO INSTALLATION.

THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL THE EXISTING CONDITIONS AT THE SITE RELATIVE TO SCOPE OF WORK RELATING TO THE MECHANICAL PARKING SYSTEM DESIGN, AS WELL AS ALL OTHER CONDITIONS NECESSARY FOR THE PROCUREMENT OF AN ACCURATE AND COMPLETE PROJECT BID.

CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES IN RELATION TO THE MECHANICAL PARKING SYSTEM TO BE INSTALLED.

THE CONSTRUCTION DOCUMENTS WERE BASED UPON A PRE-ENGINEERED SYSTEM BY OTHERS. CHARACTERISTICS OF THE PRE-ENGINEERED SYSTEM INDICATED ON THE DRAWINGS WERE PROVIDED BY THE CONTRACTOR, AND WERE DETERMINED TO THE BEST OF THE DELEGATED ENGINEER'S KNOWLEDGE. THE CONTRACTOR SHALL BE RESPONSIBLE TO INFORM THE DELEGATED ENGINEER OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND AS-BUILT MEASUREMENTS.

MATERIALS SHALL BE NEW, OF QUALITY SPECIFIED, DELIVERED IN A TIMELY FASHION AND AMPLE QUANTITY TO PREVENT DELAY OF WORK. IN THE EVENT OF SUBSTITUTIONS, MODIFICATIONS, CONFLICTS, OR DISCREPANCIES, THE CONTRACTOR SHALL OBTAIN THE WRITTEN APPROVAL FROM THE DELEGATED ENGINEER PRIOR TO ANY SUBSTITUTIONS OR MODIFICATIONS.

IN THE EVENT OF ANY UNFORESEEN CONDITIONS AFFECTING THE INSTALLATION OF THE MECHANICAL PARKING SYSTEM, THE GENERAL CONTRACTOR SHALL NOTIFY THE DELEGATED ENGINEER OF THE EVENT.

STRUCTURAL DESIGN CRITERIA

THE STRUCTURAL ADEQUACY OF THE MECHANICAL PARKING SYSTEMS WAS VERIFIED IN ACCORDANCE WITH THE LOCAL BUILDING CODE, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-10), AND THE STEEL CONSTRUCTION MANUAL, 14TH EDITION (AISC 360-10).

LIVE LOAD:
VEHICLE WEIGHT = 6000#

LOAD DISTRIBUTION:
LATERAL FORCE = 20% OF THE VERTICAL LIVE LOAD
LONGITUDINAL FORCE = 10% OF THE VERTICAL LIVE LOAD

MECHANICAL PARKING NOTES

THE NOISE OR VIBRATION FROM THE OPERATION OF MECHANICAL PARKING LIFTS SHALL NOT BE PLAINLY AUDIBLE TO OR FELT BY ANY INDIVIDUAL STANDING OUTSIDE AN APARTMENT OR HOTEL UNIT AT ANY ADJACENT OR NEARBY PROPERTY. NOISE AND VIBRATION BARRIERS SHALL BE UTILIZED TO ENSURE THAT SURROUNDING WALLS DECREASE SOUND AND VIBRATION EMISSIONS OUTSIDE OF THE PARKING GARAGE.

ALL VEHICLE PLATFORMS SHALL BE FULLY LOAD-BEARING. PLATFORMS SHALL BE SEALED AND OF A SUFFICIENT WIDTH AND LENGTH TO PREVENT DRIPPING LIQUIDS OR DEBRIS ONTO THE VEHICLE BELOW.

ALL FREE-STANDING MECHANICAL PARKING LIFTS MUST BE DESIGNED SO THAT POWER IS REQUIRED TO LIFT THE VEHICLE, BUT THAT NO POWER IS REQUIRED TO LOWER THE VEHICLE. ALL MECHANICAL PARKING LIFTS SHALL HAVE BACKUP SO THAT IN THE EVENT OF A POWER OUTAGE, THE LIFT CAN BE LOWERED AND THE TOP VEHICLE CAN BE ACCESSED.

ALL MECHANICAL LIFTS SHALL BE DESIGNED TO PREVENT LOWER OF THE LIFTS WHEN A VEHICLE IS PARKING BELOW THE LIFT.

ALL COMPONENTS OF THE MECHANICAL PARKING LIFTS MUST BE INSPECTED AND CERTIFIED AS SAFE AND IN GOOD WORKING ORDER BY A LICENSED MECHANICAL ENGINEER AT LEAST ONCE PER YEAR. THE FINDINGS OF THE INSPECTION SHALL BE SUMMARIZED IN A REPORT SIGNED BY THE SAME LICENSED MECHANICAL ENGINEER OR FIRM. SUCH REPORT SHALL BE FURNISHED TO THE PLANNING DIRECTOR AND THE BUILDING OFFICIAL.

ALL COMPONENTS OF THE MECHANICAL PARKING SYSTEM SHALL BE MAINTAINED AND KEPT IN GOOD WORKING ORDER.

STEEL NOTES

THE STEEL USED WAS ASSUMED TO BE:
YOUNG'S MODULUS: E = 29,730 ksi
POISSON RATIO: v = 0.3
MIN. TENSILE YIELD STRESS: Fy = 34 ksi
MIN. TENSILE ULTIMATE STRESS: Fu = 46 ksi

ALL STEEL MUST BE PRIMED AND PAINTED

BOLT NOTES

MINIMUM PROPERTIES OF GRADE 8.8 HEXHEAD BOLTS:
DESIGN YIELD STRESS: Fy = 72 ksi
ULTIMATE TENSILE STRESS: Fut = 90ksi
DESIGN BEARING STRESS: Fb = 108ksi
DESIGN SHEAR STRESS: Fv = 36 ksi

BOLTS SHALL BE INSTALLED USING THE TURN-OF-THE-NUT METHOD, TO A RECOMMENDED TORQUE OF 40 FT-LBF. UNLESS NOTED OTHERWISE, ALL BOLTED CONNECTIONS REQUIRE A SPRING WASHER AND HEX NUT, WITH THE SPRING WASHER PLACED BETWEEN THE BOLT HEAD AND OUTER EDGE OF THE CONNECTING MATERIAL.

POST-INSTALLED ANCHORS

1. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS (OR SIMILAR).
   a) ANCHORAGE TO CONCRETE
      i) ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE WITH Safe Set™ TECHNOLOGY:
         (1) HILTI HIT-HY 200 ADHESIVE ANCHORING SYSTEM INSTALLED USING THE HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) WITH HAS-B7 THREADED ROD OR DEFORMED REBAR PER ICC-ES ESR-3187 FOR FAST CURE APPLICATIONS.
         (2) HILTI HIT-HY 200 ADHESIVE ANCHORING SYSTEM WITH THE HILTI HIT-B7 ROD PER ICC-ES ESR-3187 FOR FAST CURE APPLICATIONS.
      ii) ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE WITH STANDARD CLEANING PROCEDURES:
         (1) HILTI HIT-HY 200 ADHESIVE ANCHORING SYSTEM WITH HAS-B7 THREADED ROD OR DEFORMED REBAR PER ICC-ES ESR-3187 FOR FAST CURE APPLICATIONS.
         (2) HILTI HIT-RE 500 V3 EPOXY ADHESIVE ANCHORING SYSTEM WITH HAS-B7 THREADED ROD OR DEFORMED REBAR PER ICC-ES ESR-3814 FOR SLOW CURE APPLICATIONS
      iii) MEDIUM DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE:
         (1) HILTI KWIK HUS EZ AND KWIK HUS EZ-I SCREW ANCHORS PER ICC-ES ESR 3027
         (2) HILTI KWIK BOLT-TZ EXPANSION ANCHORS PER ICC-ES ESR-1917
         (3) HILTI KWIK BOLT 3 EXPANSION ANCHORS (UNCRACKED CONCRETE ONLY) PER ICC-ES ESR-2302
      iv) HEAVY DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE:
         (1) HILTI HDA UNDERCUT ANCHORS PER ICC-ES ESR 1546
         (2) HILTI HSL-3 EXPANSION ANCHORS PER ICC-ES ESR 1545
2. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC-ES ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
3. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
4. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
5. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.

PRELIMINARY DRAWINGS, NOT FOR CONSTRUCTION PURPOSES

DRAWING LIST
MP-0.0 - COVER SHEET
MP-1.0 - PARKING LAYOUT
MP-2.0 - SECTIONS

REV	DESCRIPTION	BY	DATE

PARKPLUS
HIGH DENSITY VEHICLE STORAGE
Leaders in high density parking systems

83 BROAD AVENUE
FAIRVIEW, NJ 07022
TEL: +1-201-917-5778
FAX: +1-201-917-3192
www.parkplusinc.com

DISCLAIMER: ALL DATA AND INFORMATION PROVIDED ON THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. ACCURACY, COMPLETENESS AND VALIDITY REMAINS THE RESPONSIBILITY OF THE CLIENT/ OWNER.

THE INFORMATION CONTAINED HEREIN REPRESENTS PROPRIETARY AND CONFIDENTIAL INFORMATION OF PARK PLUS FLORIDA, INC. THE INFORMATION CONTAINED HEREIN SHALL BE DISCLOSED ONLY TO THE BUILDING OWNER, GENERAL CONTRACTOR, ARCHITECT OF RECORD, ENGINEERING CONSULTANTS, AND BUILDING OFFICIALS SPECIFICALLY INVOLVED WITH THIS CONSTRUCTION PROJECT.

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PROJECT NAME
ELK HOMES
65 WENDT AVE
LARCHMONT, NY 10538

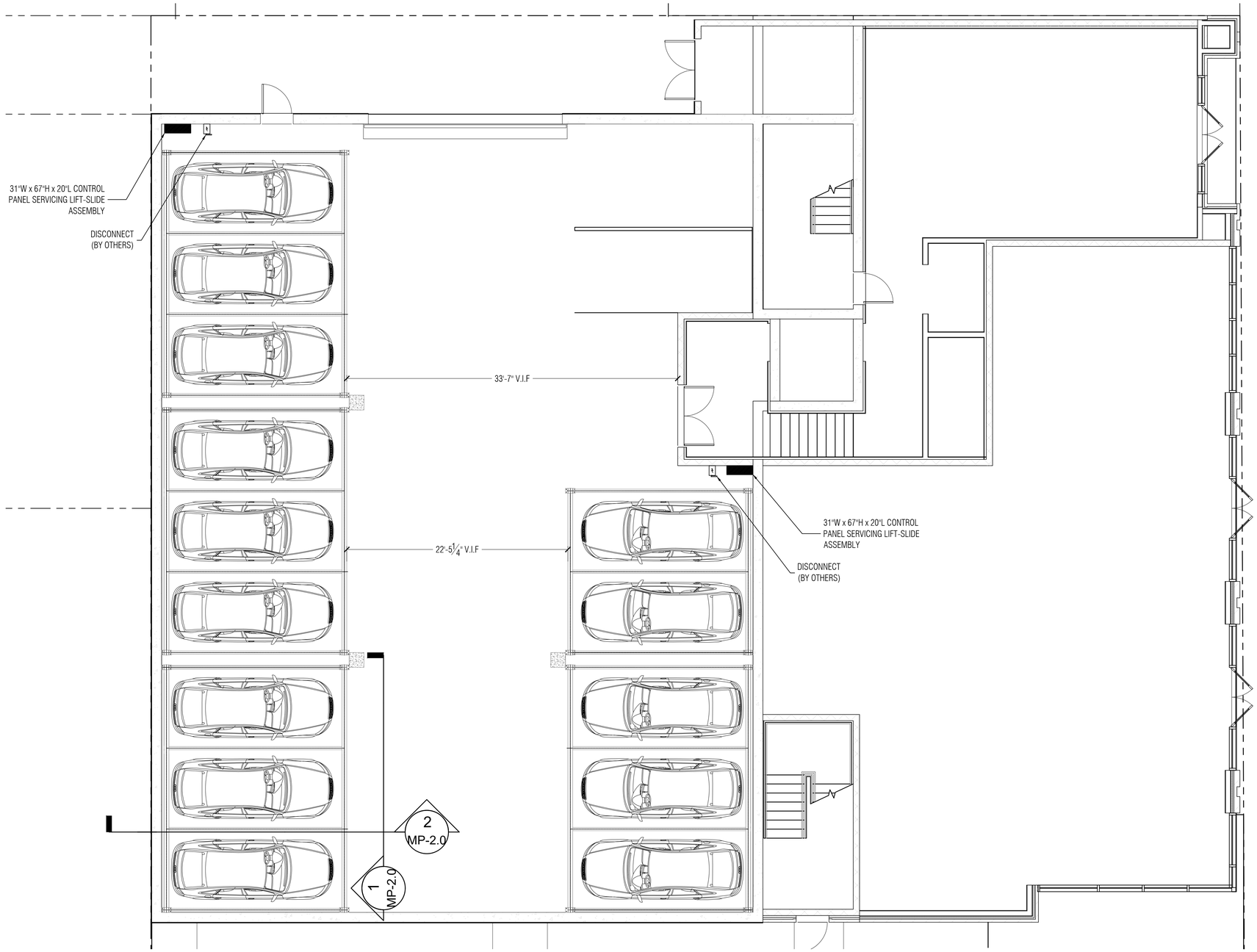
PROJECT NUMBER EW2006

TITLE
COVER SHEET

DRAWN	CHECKED	APPROVED	DATE
SM	MB	EW	02/10/2020

BEARING
N

DRAWING NUMBER
MP-0.0



1 LIFT SLIDING
GROUND
SCALE: 3/16" = 1'-0"

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ELK HOMES
65 WENDT AVE
LARCHMONT, NY 10538

PROJECT NUMBER EW2006

TITLE

PARKING LAYOUT

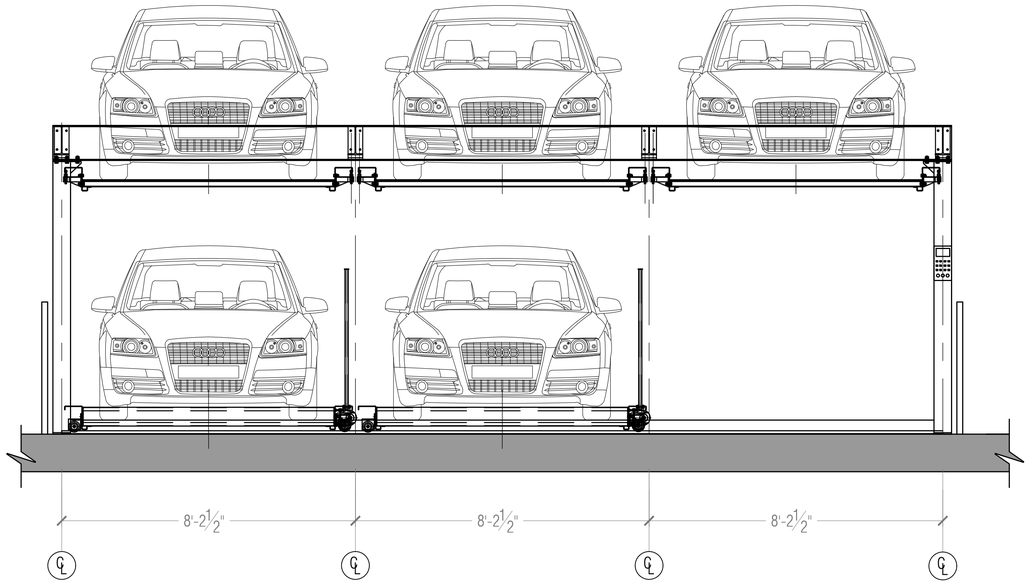
DRAWN	CHECKED	APPROVED	DATE
SM	MB	EW	02/10/2020

BEARING

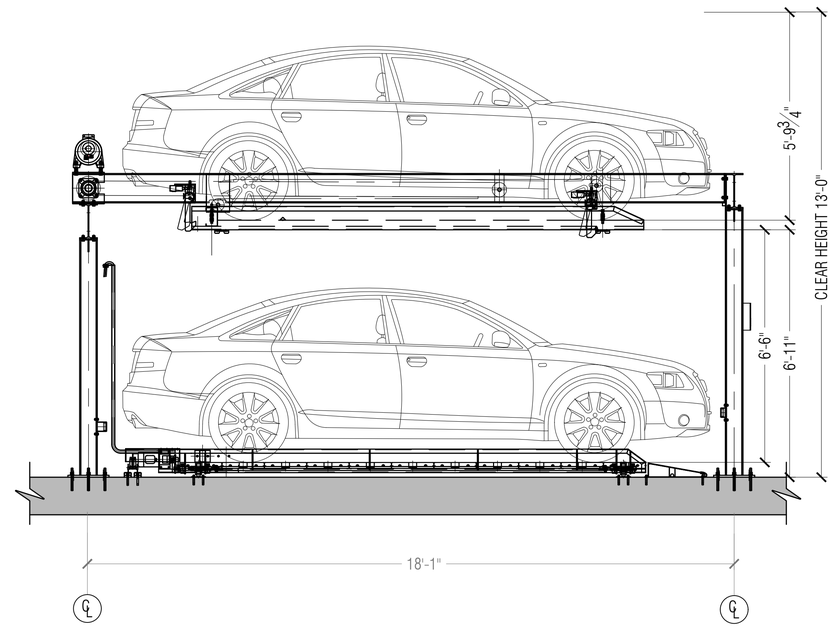
N

DRAWING NUMBER

MP-1.0



1 SECTION
SCALE: 1/2" = 1'-0"



2 SECTION
SCALE: 1/2" = 1'-0"

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REV	DESCRIPTION	BY	DATE

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65 WENDT AVE
LARCHMONT, NY 10538

PROJECT NUMBER EW2006

TITLE

SECTIONS

DRAWN	CHECKED	APPROVED	DATE
SM	MB	EW	02/10/2020

BEARING

DRAWING NUMBER

MP-2.0