



LSC TRANSPORTATION CONSULTANTS, INC.
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DeYoung Subdivision/
Mancave Storage
Transportation Memorandum
(LSC #195110)
December 23, 2019
MS-20-001

See comment letter
also.

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.



12/30/19
Date



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Engineering Review

02/03/2020 1:33:02 PM

dsdrice

JeffRice@elpasoco.com

(719) 520-7877

EPC Planning & Community
Development Department

December 23, 2019

Lisa Peterson
Hammers Construction
1411 Woolsey Heights
Colorado Springs, CO 80915

DeYoung
Subdivision/

RE: Mancave Storage
El Paso County, CO
Transportation Memorandum
LSC #195110

Dear Ms. Peterson,

LSC Transportation Consultants, Inc. has prepared this trip generation technical memorandum the proposed Mancave Storage site in El Paso County, CO. Located at El Paso County parcel ID 5301000016, the 17.35-acre site is located approximately one-quarter mile north of the intersection of Bent Grass Meadows Drive/Woodmen North Frontage Road. Access to the site is to Bent Grass Meadows Drive. This report presents the estimated vehicle-trip generation for the currently planned development and has been prepared for submittal to El Paso County.

PROPOSED LAND USE

The site plan for Mancave Storage shows the following proposed land uses:

- 104 mini storage units (ranging from 400 square feet to 1,400 square feet)
- 65 individual RV/boat storage parking spaces (each 34.5 feet x 15 feet)

SITE ACCESS

Proposed access to the site is to Bent Grass Meadows Drive approximately 1,550 feet north of the intersection of Bent Grass Meadows Drive/Woodmen Frontage Road (centerline spacing). The access point would align with the existing storage access point on the west side of the street. The access would be full-movement and stop sign-controlled.. A copy of the site plan is attached for reference.

ACCESS SIGHT DISTANCE

Bent Grass Meadows Boulevard north and south of the site access has (and will have) a straight horizontal alignment and no vertical curves within the distance required for ECM standard sight

distance. Site landscaping, signs, buildings and any other features should not be placed within the ECM-required line of sight “triangles” to the north and south of the access point.

AREA STREETS & ROADWAYS

Streets & roads in the vicinity of the site are identified below, followed by a brief description of each:

Bent Grass Meadows Drive is a Non-Residential Collector that currently extends north from the Woodmen North frontage road for about 2,000 feet and west from Meridian Road for just under one-half mile. Bent Grass Meadows Drive will be extended further west and then curve south to connect to the existing section adjacent to this site with Bent Grass Residential Filing No. 2. The Bent Grass Meadows Drive/Meridian Road intersection is planned to be signalized in the short-term.

Woodmen Road is shown on the El Paso County *2040 Major Transportation Corridors Plan* and the *Preserved Corridor Network Plan* as a four-lane Expressway in the vicinity of the site. The posted speed limit on Woodmen Road in the vicinity of Golden Sage Road is 55 mph.

Woodmen North Frontage Road is a paved two-lane frontage road along the north side of Woodmen Road. The Woodmen frontage road extends west from just west of Meridian Road to its current terminus west of Golden Sage Road. The Woodmen North Frontage Road will soon be extended east through the Falcon Marketplace development to the intersection of Meridian Road/Eastonville Road.

TRIP GENERATION ESTIMATE

Estimates of the vehicle-trips projected to be generated by the proposed Mancave Storage have been made using the nationally published average trip generation rates from the following land use codes in *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE):

- 151 – Mini-Storage
- 416 – RV/Boat Storage

Table 1 below presents a summary of the estimated additional site trip generation. A detailed trip generation estimate for the site, including ITE rates for the proposed land uses, is presented in Table 2 (attached).

Table 1: Estimated Site Vehicle-Trip Generation

Analysis Period	Weekday		
	In	Out	Total
Morning peak hour (vehicle-trips/hour)	2	2	4
Evening peak hour (vehicle-trips/hour)	2	3	5
Weekday – 24-hour total (vehicle-trips/day)	16	16	32

Based on the ITE estimate for the proposed land use, Mancave Storage would generate about 32 vehicle-trips on the average weekday, with half entering and half exiting the site. During the weekday morning peak hour, approximately 2 vehicles would enter, and 2 vehicles would exit the site. During the weekday afternoon peak hour, approximately 2 entering vehicles and 3 exiting vehicles are projected for the site.

ROADWAY IMPROVEMENTS

- Given the projected low trip generation, auxiliary turn lanes would not be necessary on Bent Grass Meadows Boulevard with this development. The Non-Residential Collector cross section allows for potential future striping for a center, two-way left turn lane (or dedicated left turn lanes).
- This project may be required to participate in a fair and equitable manner towards future improvements at Golden Sage/Woodmen N. Frontage Road, Golden Sage Woodmen Road, Woodmen N. Frontage Road/Bent Grass Meadows Drive. Any required pro-rata share would be a small amount due to the low relative traffic impacts.

ROADWAY IMPROVEMENT FEE PROGRAM

This site is located within the Woodmen Road Metropolitan District, and as such will be required to pay applicable Woodmen Road District fees in leu of participation in the El Paso County Road Improvement Fee Program.

* * * * *

Please contact me if you have any questions.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Colleen Guillotte, P.E., PTOE, RSP
Engineer

JCH:JAB:CRG:jas

Enclosures: Table 2
Site Plan Exhibit

Table 2: Trip Generation Table

Buildings	ITE		Value	Units ¹	Trip Generation Rates ²					Total Trips Generated				
	Code	Description			Average	A.M.		P.M.		Average	A.M.		P.M.	
					Weekday	In	Out	In	Out	Weekday	In	Out	In	Out
E, J	416	RV/Vehicle Storage	0.65	Occupied Spaces (100s)	20.00	2.28	1.37	1.98	2.81	13	1	1	1	2
A-D, F-I	151	Mini-Warehousing	1.04	Storage Units (100s)	17.96	0.71	0.68	0.98	0.98	19	1	1	1	1
									Total	32	2	2	2	3

¹ KSF = 1,000 square feet of gross floor area, HOC = hundred occupied spaces, SU = storage units (multiple of 100)

² Source: *Trip Generation*, 10th Edition, 2017, by the Institute of Transportation Engineers (ITE)

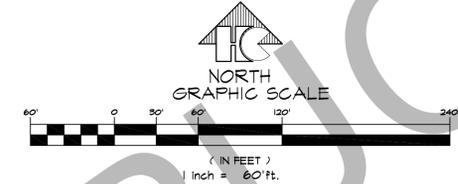
Note: "RV/Vehicle Storage" rates based on RV storage facility turning movement counts conducted by LSC in El Paso County (2018)

BUILDING TABULATION / PHASE 1									
BLDG	BLDG OCCUP	18'-0" X 45'-0"	20'-0" X 40'-0"	20'-0" X 45'-0"	20'-0" X 60'-0"	SF OF REST-ROOM	SF OF CLUB HOUSE	SF OF COVERED RV STORAGE	TOTAL SF OF BUILDING
A	B/S-I	-	2	-	-	-	-	3,300	4,900 SF
B	S-I	-	-	-	22	-	-	-	26,400 SF
C	S-I	-	-	-	11	149	-	-	13,349 SF
D	S-I	12	-	8	-	-	-	-	16,920 SF
E	S-I	-	-	-	-	-	-	20	20,835 SF
TTL # OF UNITS		12	2	8	33	= 55 TOTAL UNITS			
TOTAL SF		9,720	1,600	7,200	39,600	149	3,300	20,835	82,404 SF
TOTAL SQUARE FOOTAGE OF UNITS: 58,120 SF									

BUILDING TABULATION / PHASE 2									
BLDG	BLDG OCCUP	18'-0" X 45'-0"	18'-0" X 50'-0"	20'-0" X 45'-0"	20'-0" X 60'-0"	SF OF REST-ROOM	SF OF CLUB HOUSE	SF OF COVERED RV STORAGE	TOTAL SF OF BUILDING
F	S-I	-	-	-	13	-	-	-	15,600 SF
G	S-I	-	16	-	-	-	-	-	14,400 SF
H	S-I	8	-	6	-	-	-	-	11,880 SF
I	S-I	-	-	-	6	149	-	-	7,349 SF
J	S-I	-	-	-	-	-	-	17	17,190 SF
TTL # OF UNITS		8	16	6	19	= 49 TOTAL UNITS			
TOTAL SF		6,480	14,400	5,400	22,800	149	-	17,190	66,419 SF
TOTAL SQUARE FOOTAGE OF UNITS: 49,080 SF									

DRAWING INDEX

VICINITY MAP



PROJECT INFORMATION

PROPERTY INFORMATION
 OWNER NAME: DEYOUNG RANDALL L
 2190 N ACADEMY BLVD # 150
 COLORADO SPRINGS, CO 80917

LEGAL DESCRIPTION:
 TR IN S/4 SEC 1-13-65 DESC AS
 FOLS BEG AT NE COR LATIGO
 BUSINESS CENTER FIL NO 1 TH
 89442'50" E 1190.72 FT, S 00°07'47"
 W 627.84 FT, N 89°42'50" W 1192.23
 FT, N 00°16'02"E 627.84 FT TO POB

PARCEL NUMBER: 53010-00-016
ZONING: 1-2
LOT SIZE: 75,766 SF (1.735 ACRES)
CURRENT USE: VACANT
FLOODPLAIN STATEMENT: ZONE X (MAP NO. 08041005536, DATED DEC. 01, 2018)

BUILDING INFORMATION
GROSS BUILDING AREA: 148,812 SF
PHASE 1: 82,404 SF
PHASE 2: 66,419 SF
BUILDING OCCUPANCY: S-1/A-3/B
TYPE OF CONSTRUCTION: NOT SPRINKLED
FIRE SYSTEMS: NONE
AREA SEPARATION WALLS: SEE PLANS

ZONING CODE STUDY
PROPOSED PRINCIPAL USE: MINI RV STORAGE / MEMBERSHIP CLUBHOUSE

STRUCTURAL COVERAGE OF LOT: 20%
PAVEMENT COVERAGE: 40%
NEW BUILDING STRUCTURAL HEIGHT: 21'-10 3/4"
FRONT YARD SETBACK: 30'-0"
SIDE YARD SETBACK: 30'-0"
REAR YARD SETBACK: 105'-0"

REQUIRED PARKING SPACES
PHASE 1:
 MINI STORAGE-(1 SPACE/100 UNITS)
 92 UNITS / 100 UNITS
 H.C.-(1 SPACE/25 REQ'D)
TOTAL PARKING SPACES REQUIRED: 19
TOTAL PARKING PROVIDED: 18
H.C. SPACES PROVIDED: 1

DEVELOPMENT SCHEDULE
CONSTRUCTION: SPRING 2020
LANDSCAPING: SPRING 2020

DEVELOPMENT APPLICANT
COMPANY: HAMMERS CONSTRUCTION, INC.
 1411 WOOLSEY HEIGHTS
 COLO. SPRINGS, CO 80915
PHONE NUMBER: (719)-510-1544
FAX NUMBER: (719)-510-1008
APPLICANT NAME: LISA PETERSON
APPLICANT E-MAIL: lpeterson@hammersconstruction.com

HAMMERS CONSTRUCTION INC.
 COMMERCIAL GENERAL CONTRACTORS SPECIALIZING IN DESIGN/BUILD
 PRESIDENT: STEVE R. HAMMERS
 VICE PRES: DAVID J. HAMMERS
 1411 WOOLSEY HEIGHTS
 COLORADO SPRINGS, CO 80915
 (719) 510-1599 FAX (719) 510-1008
 www.hammersconstruction.com

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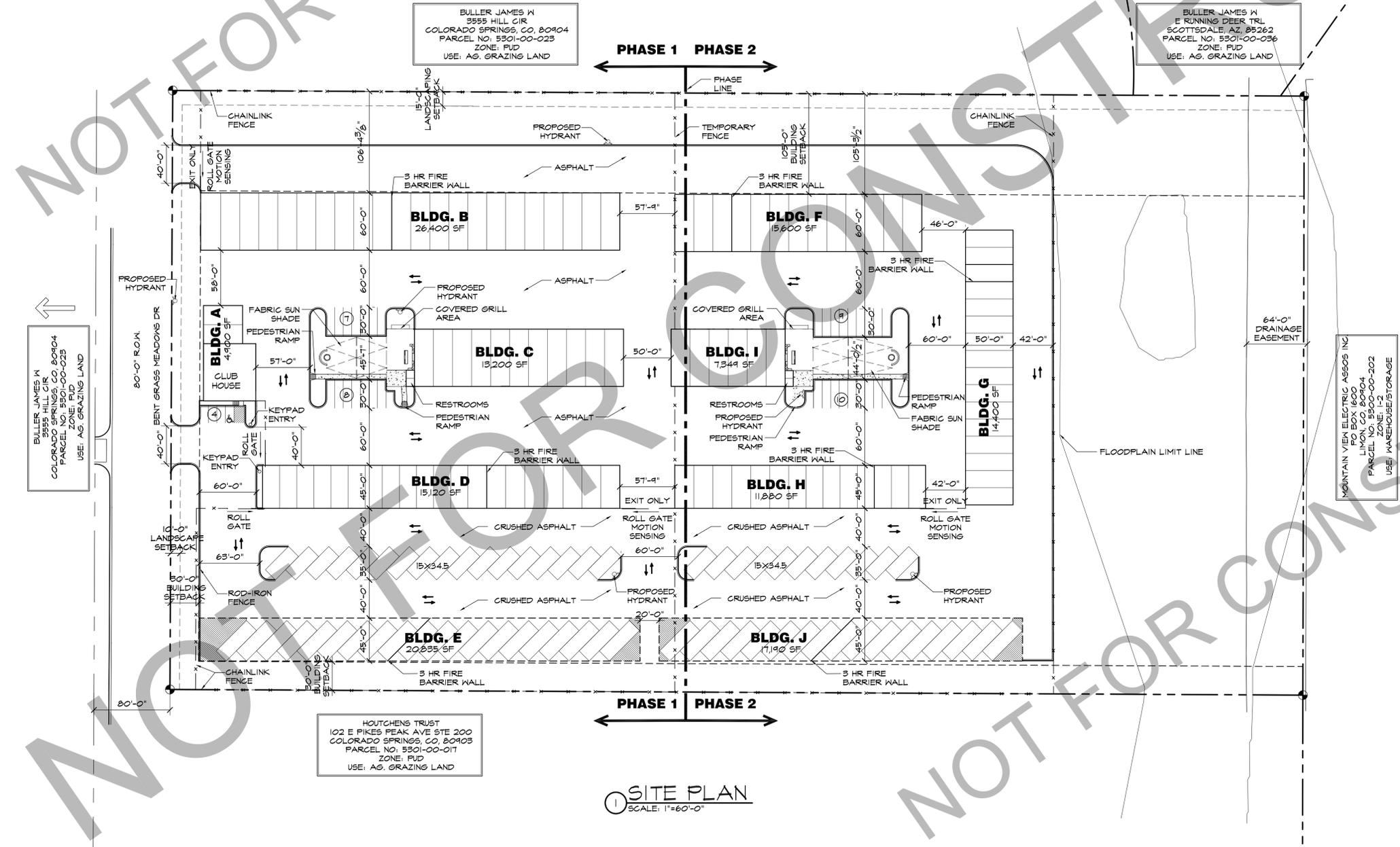
MANGAVE STORAGE
 MINI RV STORAGE
 BENT GRASS MEADOWS DR
 PEYTON, CO 80831
 EL PASO COUNTY, COLORADO

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

DATE: AUG 20, 2019
 DRAWN BY: A. MADALONE
 PROJ. MGR: Y. DYACHENKO
 SCALE: SEE PLAN
 APPROVED BY:
 JOB NO: 1068

RESUBMITTALS:



① SITE PLAN
 SCALE: 1"=60'-0"