LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

Short Stop Hamburgers
Transportation Memorandum
(LSC #184880)
September 27, 2018
PCD File No. PPR1847

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.

COLORADO LICENSED
JEFFREY C. HODSDON
31684
9-27-18
PROFESSIONAL ENGINEER

Developer's Statement

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

9/27/18
Date

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September 27, 2018

John Nelson
John P. Nelson Associates
1626 East Pikes Peak Avenue
Colorado Springs, CO 80909

RE: Short Stop Hamburgers
El Paso County, Colorado
Transportation Memorandum
LSC #184880

Dear John:

In response to your request, LSC Transportation Consultants, Inc. has prepared this Transportation Memorandum for the proposed Short Stop Hamburgers fast food restaurant (without indoor seating) to be located within the existing shopping center located south of Palmer Park Boulevard and east of and Powers Boulevard in El Paso County, Colorado. Figure 1 shows the site location.

SITE LAND USE AND ACCESS

Short Stop Hamburgers is a proposed 754-square-foot fast food restaurant with one drive-through window and no indoor seating. The proposed 754-square foot building is within an existing 5.5-acre parcel (El Paso County parcel number 5406304050). This parcel is only a part of the greater shopping center located east of Powers Boulevard between Palmer Park Boulevard to the north and Omaha Boulevard to the south. A copy of the site plan is attached. Several existing restaurants and commercial land uses are located within this existing shopping center.

The overall shopping center, of which this site is a part, currently has two primary full-movement access points and two additional service access points. The primary shopping center access to Palmer Park is a signalized intersection and the primary access to Omaha Boulevard is two-way, Stop sign controlled.

EXISTING ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The roadways in the study area are shown on Figure 1 and are described below.

- **Powers Boulevard** (State Highway 21) is a six-lane median-divided expressway (classified as a "Freeway" by CDOT), with planned north/south continuity throughout the Colorado Springs

metropolitan area. The Powers Boulevard/Palmer Park Boulevard intersection is currently signalized; however, an interchange is planned in the future. The Omaha/Powers intersection has recently been converted to a right-in/right-out.

- **Palmer Park Boulevard** extends from Union Boulevard east to Shawnee Drive. Palmer Park Boulevard is classified by El Paso County as a Principal Arterial between Powers Boulevard and Peterson Boulevard. In the site's vicinity, Palmer Park Boulevard has two through lanes in each direction plus a center two-way left-turn lane and a posted speed limit of 35 miles per hour (mph). The full-movement intersections along Palmer Park Boulevard in the site's vicinity are located at Powers Boulevard, the Wendy's/shopping center access, the shopping center rear/service access and Waynoka Road.

- **Omaha Boulevard** is a four-lane Urban Non-Residential Collector street that extends east from Powers Boulevard to just east of Peterson Road. The intersection of Powers/Omaha is Stop-sign controlled, and has recently been converted to a right-in/right-out intersection.

TRIP GENERATION

An estimate of the vehicle-trips expected to be generated by the proposed Short Stop Hamburgers restaurant has been made using the nationally published trip generation rates found in *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). Table 1 shows the trip generation estimate.

Pass-by Trips

The estimated total number of vehicle-trips generated accounts for the "pass-by" phenomena. A pass-by trip is made by a motorist who would already be on the adjacent roadways regardless of the proposed development, but who stops in at the site while passing by. The motorist would then continue on his or her way to a final destination in the original direction. Primary and pass-by percentages are shown in Table 1. These are estimates by LSC based in part on data contained in the *Trip Generation Handbook - An ITE Proposed Recommended Practice, 3rd Edition, 2014* by ITE.

Projected Trip Generation

The proposed Short Stop Hamburgers restaurant is projected to generate about 346 total vehicle-trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the midday peak hour (approximately between 12:00 noon and 1:00 p.m.), about 26 vehicles would enter and 25 vehicles would exit the site. During the evening peak hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 16 vehicles would enter and 16 vehicles would exit the site. These trip estimates do not include any potential reduction due to internal trip capture within the shopping center. Therefore, these estimates are more conservative than they would be with an internal trip adjustment.

TRIP DISTRIBUTION AND ASSIGNMENT

Figure 1 shows LSC's directional distribution estimates on the north and south ends of the primary access drive for the shopping center. Directional percentages are shown for both primary trips and pass-by trips. Estimates have been based on the following factors: the proposed land use, the site location, the adjacent street and roadway system, and the existing traffic volumes on adjacent major streets and roadways.

Site-generated traffic volumes at the north access point on Palmer Park Boulevard and the south access point on Omaha Boulevard have been calculated by applying the directional distribution percentages estimated by LSC (from Figure 1) to the trip generation estimates (from Table 1). Figure 2 shows the projected site-generated traffic volumes for the weekday midday and evening peak hours.

FINDINGS/CONCLUSIONS

- During the midday peak hour (approximately between 12:00 noon and 1:00 p.m.), about 26 vehicles would enter and 25 vehicles would exit the site.

- During the evening peak hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 16 vehicles would enter and 16 vehicles would exit the site.

- The proposed Short Stop Hamburgers would add an additional northbound approach volume of about 14 percent during the noon peak hour and 8 percent during the afternoon peak hour at the main shopping center access on Palmer Park Boulevard (Based on traffic counts conducted in October 2017). Note: These percentages are significantly higher than they would otherwise be if the existing shopping center tenant vacancy was not at such a high level.

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E., PTOE
Principal

JCH/JAB:bjwb

Enclosures: Table 1
Figures 1-2
Site Plan

Table 1: Trip Generation Table

ITE		Value	Units	Trip Generation Rates [1]					Total Trips Generated				
				Average Weekday Traffic	Mid-Day Peak Hour of Generator		Evening Peak Hour of Adjacent Street Traffic		Average Weekday Traffic	Mid-Day Peak Hour of Generator		Evening Peak Hour of Adjacent Street Traffic	
Code	Description				In	Out	In	Out		In	Out	In	Out
935	Fast-Food Restaurant with Drive-Through Window and No Indoor Seating	0.754	KSF	459.20	34.39	33.05	21.75	20.90	346	26	25	16	16

ITE		% Primary	% Pass-by	"New"/Primary Trips Generated				
				Average Weekday Traffic	Mid-Day Peak Hour of Generator		Evening Peak Hour of Adjacent Street Traffic	
Code	Description				In	Out	In	Out
935	Fast-Food Restaurant with Drive-Through Window and No Indoor Seating	30%	70%	104	5	5	5	5

Note: Peak Hour of the Generator occurs from approximately 12:00 pm - 1:00 pm

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

(2) KSF = 1,000 square feet

Figure 1

Site Location and Directional Distribution

184880 – Short Stop Hamburgers

Figure 2

Site-Generated Traffic

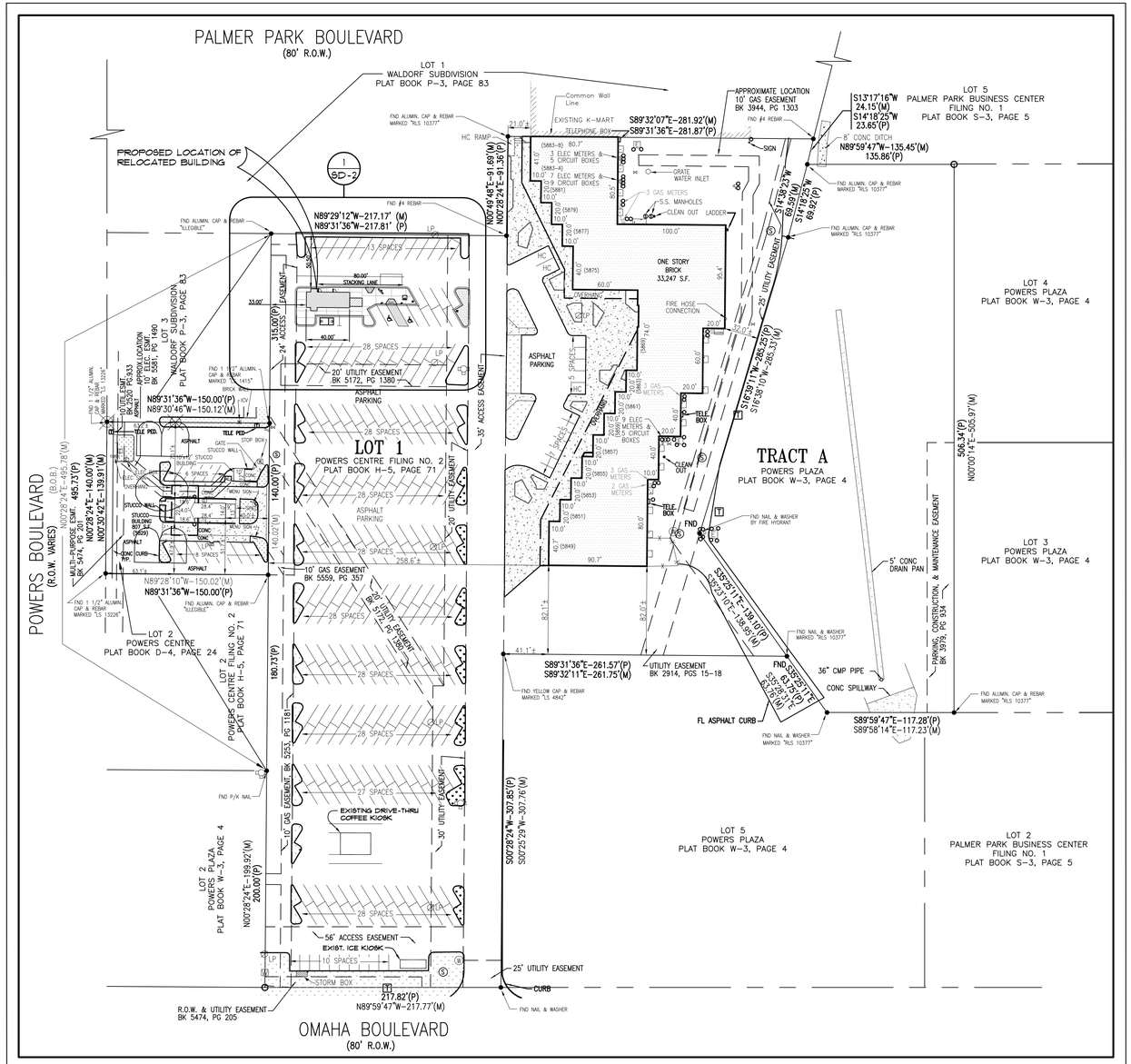
184880 – Short Stop Hamburgers

SHORT STOP

DEVELOPMENT PLAN MINOR AMMENDMENT

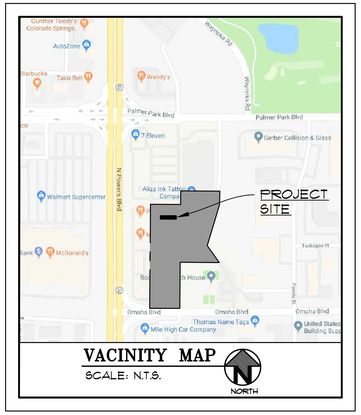
5819 PALMER PARK BLVD.

COLORADO SPRINGS, COLORADO 80915



1 SD-1 **SITE DEVELOPMENT PLAN**
SCALE: 1:60

NORTH



LEGAL DESCRIPTION:

LOT 1 POWERS CENTRE FIL NO 3

LOT SETBACKS:

Lot 1: Front - 50' from lot line
Side - 25' from perimeter of PBC district boundary
Rear - 25' from perimeter of PBC district boundary

PARKING SUMMARY:

USE	RATIO	PARKING REQ'D.
COMMERCIAL	1/250	179
TOTAL PARKING PROVIDED		314

PROJECT DATA

OWNER:
COREVET INVESTMENT GROUP LLC
P.O. BOX 38175
COLORADO SPRINGS, CO. 80937-8175

PROPERTY ADDRESS:
5849-5553 PALMER PARK BLVD.
COLORADO SPRINGS, CO

LOT SIZE (SF):
5.55 ACRES (241,758 SF)

EXISTING/PROPOSED BUILDING SIZE:
44,737 SF (NO CHANGE)

EXISTING BUILDING USE:
COMMERCIAL

PROPOSED BUILDING USE:
RETAIL (100%) NO CHANGE

EXISTING LOT COVERAGE: 47%
PROPOSED LOT COVERAGE: NO CHANGE

CPC NV XX-XXXXX

John P. nelson associates
1626 E. Pikes Peak, Colorado Springs, CO 80909 Phone (719) 632-3384
JohnPJnelson.com (719) 632-1181 fax

SHORT STOP BUSINESS RELOCATION
DEVELOPMENT PLAN MINOR AMENDMENT

5819 PALMER PARK BLVD.
COLORADO SPRINGS, CO. 80915

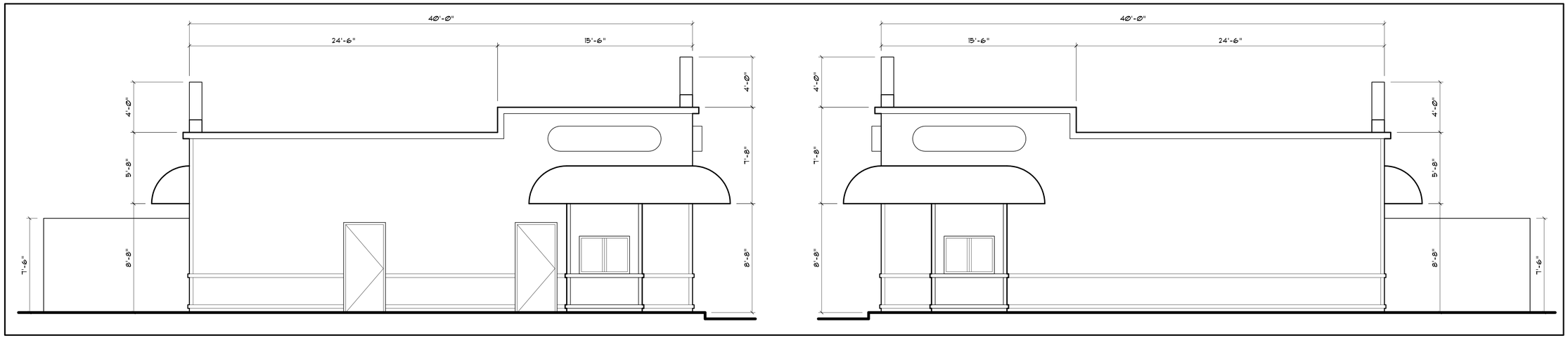
PROJECT NO.

DRN. BY: RMB.

REVISIONS:

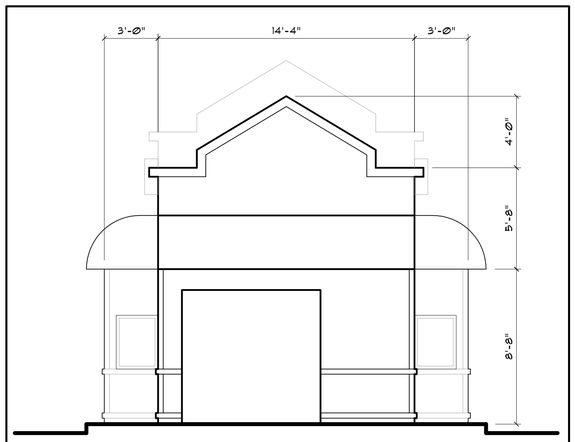
ISSUE DATE: 7-12-18

SHEET: SD-1

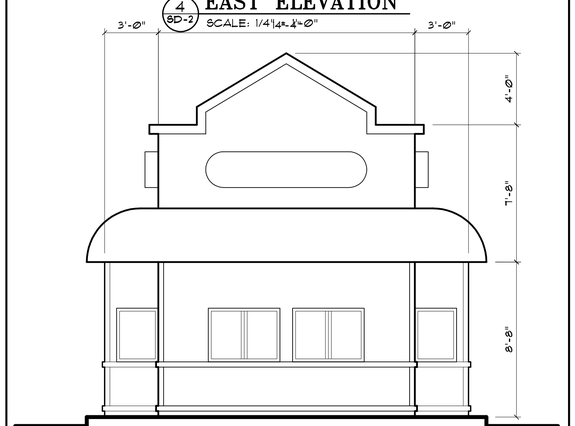


1 SD-2 NORTH ELEVATION
SCALE: 1/4" = 1'-0"

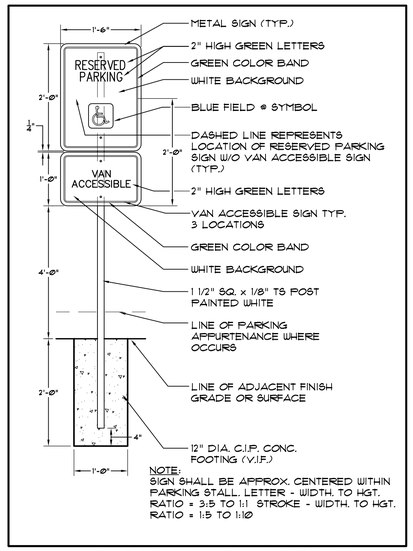
2 SD-2 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



4 SD-2 EAST ELEVATION
SCALE: 1/4"

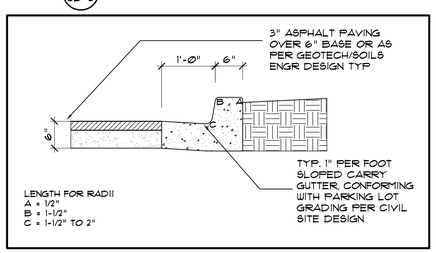


3 SD-2 WEST ELEVATION
SCALE: 1/4" = 1'-0"

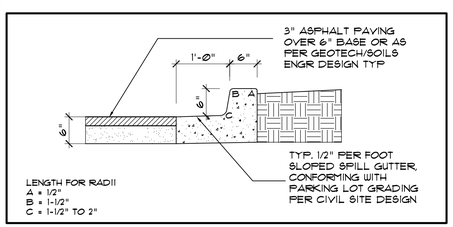


NOTE:
SIGN SHALL BE APPROX. CENTERED WITHIN PARKING STALL. LETTER - WIDTH. TO HGT. RATIO = 3:5 TO 1:1 STROKE - WIDTH. TO HGT. RATIO = 1:5 TO 1:10

5 SD-2 PARKING SIGN DETAIL



LENGTH FOR RADII
A = 1/2"
B = 1-1/2"
C = 1-1/2" TO 2"



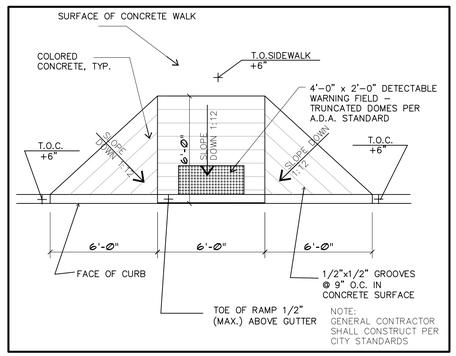
LENGTH FOR RADII
A = 1/2"
B = 1-1/2"
C = 1-1/2" TO 2"

GENERAL NOTES FOR CURBS:
1. EXPANSION JOINTS SHALL BE INSTALLED WHEN ABUTTING EXISTING CONCRETE OR FIXED STRUCTURE. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK AND SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE.

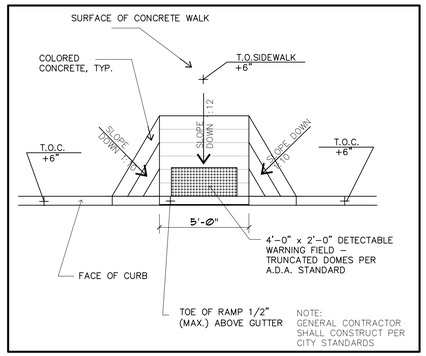
2. CONCRETE SHALL BE CDOT CLASS B.

3. CONTRACTION JOINTS SPACING SHALL BE 5' MINIMUM AND 10' MAXIMUM.

4. SUBGRADE COMPACTION TO BE 95% OPTIMUM DENSITY IAW WITH AASHTO T-99.



NOTE:
GENERAL CONTRACTOR SHALL CONSTRUCT PER CITY STANDARDS



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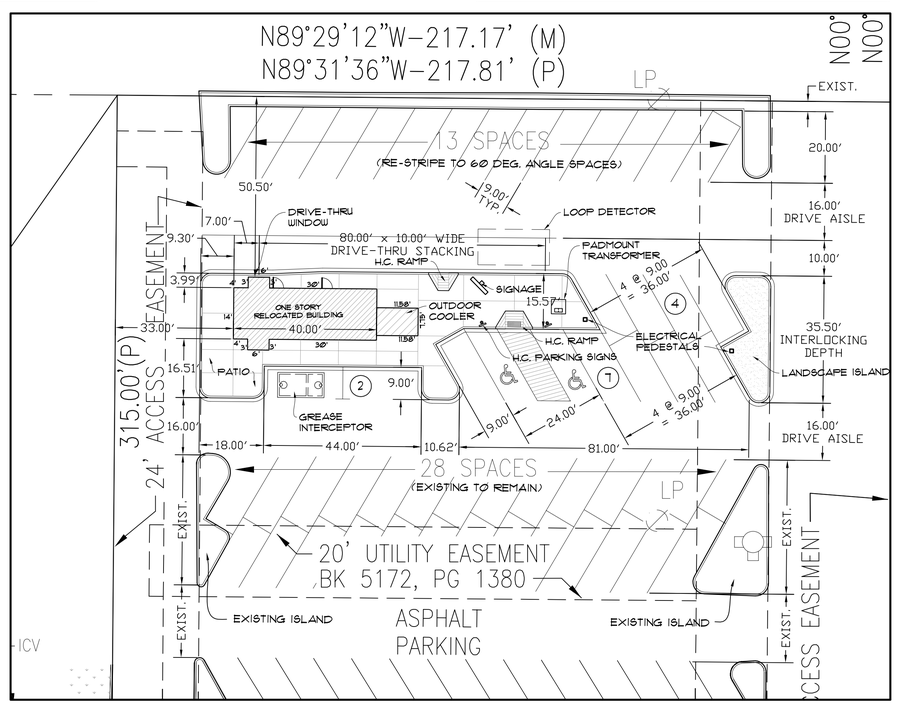

1 SD-2 DETAIL SITE PLAN
SCALE: 1:20

NORTH

CPC NV XX-XXXXX

John P. nelson associates
1626 E. Pikes Peak, Colorado Springs, CO 80909 Phone (719) 632-3384
John@JPNArch.com (719) 632-1181 fax

SHORT STOP BUSINESS RELOCATION DEVELOPMENT PLAN MINOR AMENDMENT

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