

# BURNS AND HINES ACCESS MANAGEMENT PLAN

Prepared for:

# **Oregon Department of Transportation**

Prepared by:

David Evans & Associates, Inc.

January 2001



DAVID EVANS AND ASSOCIATES, INC.

# BURNS AND HINES ACCESS MANAGEMENT PLAN

Prepared for:

Oregon Department of Transportation Region 5 3012 Island Avenue La Grande, OR 97850

Prepared by:

David Evans and Associates, Inc. 2828 SW Corbett Avenue Portland, Oregon 97201

January 2001

## TABLE OF CONTENTS

# Page

OVERVIEW	
EXISTING CONDITIONS	3
City of Burns	
City of Hines	
Existing Approach Spacing	
HISTORICAL AND CURRENT ACCESS MANAGEMENT PROVISIONS	
Historical Provisions	
Current Provisions	8
Comparison of 1991 and 1999 Access Management Spacing Standard Minor Deviation Limits	
SUMMARY OF FUTURE LAND USE ACTIONS ON ACCESS	.12
City of Burns	
City of Hines	
RECOMMENDED ACCESS MANAGEMENT STRATEGIES	.14
1996 Transportation Report Recommendations	.14
Access Management Strategies	.15
Recommended Access Spacing	
TSP Adoption and Implementation	
1 1	

## LIST OF TABLES

# Page

Table 1:	US 20/395: Existing Approach Access Spacing by Side of Highway and Speed Zone	6
Table 2:	OR 78: Existing Access Spacing by Side of Highway and Speed Zone	6
Table 3:	Recommended 1996 US Highway 20/395 Access Management Guidelines	8
	Comparison of 1991 and 1999 Access Management Spacing Standard and Minor Deviation Limits for Statewide Highways - Urban Section	.10
Table 5:	Comparison of 1991 and 1999 Access Management Spacing Standard and Minor Deviation Limits for Regional Highways - Urban Section	.11
Table 6:	Recommended Access Management Guidelines from 1996 Transportation Report	.14
Table 7:	US 20/395 and OR 78 Access Management Recommendations	.17

## APPENDICES

A.	References

- B. 1999 Oregon Highway Plan
   Highway Access Spacing Standards
   Tables B-1 and B-2
- C. Burns and Hines Access Inventory and Comparison to 1999 Oregon Highway Plan Access Spacing Standards Tables C-1 and C-2
- D. Burns and Hines: Access Inventory Sheet A [Index]

#### **OVERVIEW**

Access management along a highway corridor incorporates planning, design and implementation of land use and transportation policies and strategies that control the flow of traffic between the roadway and the surrounding land. Highway access management policies and strategies are designed to achieve a balance between the need to provide safe and efficient travel with the ability to access individual destinations. Implementation of appropriate highway access management measures can provide substantial benefits to a community, including:

- Protecting the functional operation of a highway, thus delaying or preventing costly highway improvements;
- Improving safety conditions along the highway for all users, including pedestrians and bicyclists;
- Facilitating a more constant traffic flow, thus reducing congestion, delays, overall vehicle miles of travel (VMT), fuel consumption and air pollution; and
- Promoting more desirable compact land development patterns.

In Oregon, state statutory law, administrative rules and several state policies and supporting documents guide planning and management of the State Highway System (SHS) including access management of highway segments within both urban and rural areas. Owners of property located adjacent to state highways in Oregon are required to obtain an approach<sup>1</sup> road permit from the Oregon Department of Transportation (ODOT) even if they have a "common law" right of access to the state highway. ODOT is not required to issue an approach permit if an approach would be unsafe or otherwise inappropriate. In some cases, the right of access has been acquired and the property owner no longer h as any common law right of access to the highway.

Statewide Planning Goal 12 serves as the State's general transportation policy and the Transportation Planning Rule (TPR) guides state, regional and local implementation of Goal 12. The TPR requires ODOT and local governments to prepare Transportation System Plans (TSPs) that identify facility and service improvements adequate to meet identified needs over a 20-year planning period. All local TSPs must be consistent with the state TSP and associated modal and facility plans. The Oregon Transportation Plan (OTP) is the State's TSP and the Oregon Highway Plan (OHP) is the highway-specific modal element of the OTP. The TPR also requires that local TSPs consider new connections to arterials and state highways that are consistent with designated access management categories (OAR 660-12-020(2)(b)). The current OHP, adopted by the Oregon Transportation Commission (OTC) in July 1999, contains an access management goal (Goal 3) and several policies that provide guidance for access management along various types of state highway segments.

In 1999, DEA was contracted by ODOT to prepare TSPs for both Burns and Hines. When the Burns and Hines TSPs were being prepared, ODOT was in the process of preparing a new OHP with revised access spacing standards. To avoid potential inconsistencies between the access management standards developed in the TSPs for Burns and Hines, and the Access Management Policy identified in the 1999 OHP, ODOT delayed the review of highway access standards for the Burns and Hines TSPs until the 1999 OHP was adopted. Since the OHP has been adopted, DEA prepared this Access Management Plan

1

<sup>&</sup>lt;sup>1</sup> As defined in Oregon Administrative Rules (OAR) Division 51, *Public approach* refers to a public roadway connection serving multiple properties, which is owned and operated by a public entity, and provides connectivity to the local road system (OAR 734-051-0040(40)); *Private approach* refers to a private roadway or driveway connection serving one or more properties that does not provide connectivity to the local road system (OAR 734-051-0040(40)); *Output* approach refers to a private roadway or driveway connection serving one or more properties that does not provide connectivity to the local road system (OAR 734-051-0040(36)).

for ODOT, Region 5 in collaboration with the cities of Burns and Hines in Harney County, Oregon. This Access Management Plan supplements the TSP prepared for each city by DEA in 1999 and is consistent with OHP Policy 1B and the TPR.

The purpose of this is report is to:

- 1) Complete an inventory of existing access spacing for public and private approaches along the highway segments within the urban growth boundaries (UGBs) of Burns and Hines;
- Compare the existing highway access spacing in Burns and Hines with the access spacing standards and access management provisions contained in the 1999 Oregon Highway Plan (OHP);
- 3) Qualitatively evaluate the general direction of potential future development along the state highways in the urbanizing areas of Burns and Hines in relation to the access management provisions contained in the OHP; and
- 4) Identify recommended access management strategies to be implemented as future development occurs along the highways in Burns and Hines that will be compatible with the State's access management provisions and standards contained in the OHP.

In order to effectively address access management at the planning level, it is critical to focus upon the interdependent relationship between land use and transportation within urban and urbanizing area such as Burns and Hines. ODOT recognizes this nexus and has promulgated a framework for addressing access management through Goal 3: Access Management and related policies contained in the 1999 OHP.

The recommended access management strategies described in this report consist of both land use and transportation policies and regulatory mechanisms, and transportation facility improvements to be implemented by both the cities of Burns and Hines in collaboration with ODOT. The recommendations are aimed at managing the spacing of intersections and approaches along specific highway segments in a manner that is compatible to the existing and anticipated development along the state highways in Burns and Hines. While some of the access management recommendations contained in this plan should be implemented immediately, most of the recommended measures should be applied as redevelopment, new development, change of use, or highway projects affecting existing legal approaches occurs. The optimal solution resulting from the implementation of this access management is a more balanced system that provides access to connecting roadways and adjacent properties while maintaining the safety and efficiency of traffic movement along the state highways in the urban and urbanizing areas of Burns and Hines.

2

## **EXISTING CONDITIONS**

The cities of Burns and Hines are located in Harney County, Oregon, in the southeastern portion of the state. The two cities share a common border and form a self-contained urban area that provides a variety of residential, shopping, employment and recreational opportunities. The population of Burns is approximately 3,000 persons and the population of Hines is approximately 1,600. The economy of both communities has historically been based in forestry, manufacturing, and livestock.

US Highways 20 and 395 (US 20/395), also known as the Central Oregon Highway, share the same alignment through Burns and Hines. US 20/395 is the primary highway that bisects the two contiguous cities. In addition to US 20/395, Oregon State Highway 78 (OR 78), also known as the Steens Highway, serves the eastern portion of Burns. These two state highways serve as the major arterials that carry most traffic through the Burns and Hines urban areas. US 20/395 is also designated in the OHP as a freight route.

## CITY OF BURNS

The City of Burns is the Harney County seat and the county's largest population center and commercial hub. According to the *Burns Comprehensive Plan*, completed in 1997, approximately 248 acres of the City are presently developed for commercial purposes. Of this amount, approximately 87 acres are developed as general commercial uses, primarily the central business district. An additional 161 acres has been developed for highway commercial activities, primarily along the Highway 20/395 corridor through Burns. Approximately 400 acres of the combined Burns/Hines urban area is presently devoted to industrial use.

Burns has generally developed around a traditional grid pattern street system. In Burns, the major arterial network consists of US 20/395 which follows the alignment of Oregon Avenue, Hines Boulevard, Monroe Street, Broadway Avenue and Seneca Drive, and OR 78 which follows the alignment of Monroe Street east of Broadway Avenue. In the downtown area, Broadway Avenue functions in a similar fashion to other state highway segments that serve as the primary commercial artery or "Main Street" to numerous small cities throughout Oregon. Most of the central city street grid system is comprised of street blocks that range in size, but are typically 240 feet square. Block lengths and corresponding street-to-street spacing distances increase along higher speed sections of US 20/395 and OR 78 that are peripheral to the downtown core.

The north-south segment of US 20/395 is a two-lane highway from Monroe Street to the northern city limit. West of Broadway Avenue, US 20/395 is four lanes, with addition of a two-way center turn lane from south of Pierce Street to the south city limit. Curbs and sidewalks are located along US 20/395 from 'D' Street to the south city limit. On street parking is also provided along both sides of Broadway Avenue between Monroe Street and 'D' Street. No curbs, sidewalks, bikeways or on-street parking are provided along US 20/395 north of Foley Drive to the north city limit/UGB. A mix of paved and unpaved roadway shoulders ranging between four and six feet in width are provided along this segment. No shoulders exist along US 20/395 between 'D' Street and Foley Drive.

The posted speed limit on US 20/395 is 25 miles per hour through the central portion of Burns, from a location directly southwest of the highway's intersection with Jackson Street and Harney Avenue to the "Y" intersection north of downtown where the highway diverts east from Broadway Avenue along Seneca Drive. The speed limit increases to 35 miles per hour south of this segment to the south city limit, and

north of this segment the posted speed increases incrementally from 35 to 45 to 55 miles per hour near the north city limit/UGB.

In the Burns downtown commercial area where the grid system is most dense, traffic volumes are relatively low, traffic is slow moving, and turning movements are dispersed over many intersections, eliminating the need for traffic signals. This connective street network is complemented by sidewalks and adjacent commercial properties with shops located close to the street. Convenient on-street parking is available throughout downtown Burns and few properties have parking lots with driveway access off US 20/395. Although the intersection frequency and relatively short block lengths that are characteristic of the traditional urban street grid network in downtown Burns may appear to be in direct conflict with some of the principles of access management, both contribute to improved capacity and traffic flow on US 20/395. This well-connected grid system provides opportunities for local drivers to use the local street system to travel through the community rather than forcing them onto US 20/395 and OR 78. This connectivity also encourages walking and bicycling between surrounding residential neighborhoods and downtown businesses. The addition of new approaches along US 20/395 and OR 78 in Burns' downtown core would adversely affect the safety and operating capacity of the highway and degrade the City's historic downtown character.

US 20/395 diverts from the traditional grid network north of the downtown area beginning at Park Street and west of the City's core beginning at Grand Avenue. The segment of US 20/395 extending southwest of the downtown core toward the Burns-Hines boundary is surrounded by predominantly highwayoriented, commercial "strip" development with roadway and driveway approaches that form angled intersections with the highway.

Within the City of Burns, OR 78 extends east of Broadway Avenue along Monroe Street to the boundary that defines the Burns eastern city limit and UGB. The posted speed limit on OR 78 is 25 miles per hour along the segment between Broadway Avenue and Gordonia Avenue, and 40 miles per hour east of Gordonia Avenue to the city limit/UGB. Within Burns, OR 78 is a two-lane highway with a combination of paved and unpaved shoulders that range between four and six feet in width. No curbs, sidewalks, bikeways or on-street parking are provided along OR 78 in Burns. Existing land uses adjacent to OR 78 generally consist of a mixture of commercial and residential properties interspersed with vacant, undeveloped lots. Without curbs, the interface between the roadway shoulder and adjacent properties is undefined. This continuous "shoulder access" between the highway and adjacent properties is particularly evident along the south side of OR 78 between Alder Avenue and Gordonia Avenue. Access conditions along OR 78 are further complicated by some adjacent businesses that limit off-street parking to "head-on" configurations that result in drivers backing out onto the highway shoulder area.

#### **CITY OF HINES**

After Burns, Hines is the second largest urban area in Harney County. Hines is a predominately residential community with relatively few commercial or industrial uses within the City Limits. The city was platted around a unique pattern of concentric curved blocks combined with a rectangular grid. Circle Drive forms an elliptical loop surrounding a city park. US 20/395 is the only arterial in Hines and it bisects the central core of the city including a small commercial center, vacant public land, the city park and municipal buildings. In the center of Hines, where the posted speed is 35 mph, average block spacing along US Highway 20/395 is approximately 400 feet on the east side of the highway and approximately 700 feet on the west side of the highway. As the highway proceeds northeast towards Burns, commercial strip development is interspersed with vacant land.

## **EXISTING APPROACH SPACING**

The locations of the state highways/major arterials, existing approaches, and adjacent land use (zoning) designations are shown on Sheets numbered 1-11 in Appendix D of this report. In Appendix C, Table C-1 displays a detailed inventory of approaches along US 20/395 through Burns and Hines, and Table C-2 provides this information for OR 78 in Burns.

Table 1 summarizes existing approach spacing distances for different segments of US 20/395 within Burns and Hines. Table 2 provides corresponding information along OR 78 within Burns. The existing posted speed limit (miles per hour) delimits the segments identified in each table. Numbers in **bold text** within each table represent locations where current access spacing meets the 1999 OHP access spacing standards for Statewide highways (including US 20/395) and Regional highways (including OR 78) with or without a minor deviation. Numbers in normal text style do not meet the 1999 OHP access spacing standards.

In general, highway approach spacing within the lower speed, central portions of both the existing Burns and Hines urban areas deviates<sup>2</sup> from the highway access spacing standards contained in both the 1991 and 1999 OHPs. However, the OAR 734-051-0190 states that existing legal approaches are not affected until redevelopment, change of use, or highway projects occur. This administrative rule and the 1999 OHP make clear that future development must make an effort to meet these standards or, at a minimum, move toward meeting the standards.

Some segments of highway that do deviate from the OHP standards may be appropriate for designation as Special Transportation Areas or Urban Business Areas. This designation would, of course, be based on these areas meeting special designation criteria.

<sup>&</sup>lt;sup>2</sup> Includes both *major deviations*, which depart from the purpose and intent of the State's access management standards or which potentially have a significant negative impact on safety or traffic operations), and *minor deviations*, where the proposed approach placement, or access management technique substantially complies with the purpose and intent of the access management and design standards. Major deviations fall outside the minor deviation limits. (OAR 734-51-040(26) and (27))

Speed Zone	Milepost	Side of Highway	Street-to-Street spacing (ft)	Driveway-to-Driveway or Driveway-to-Street spacing (ft)
Hines				
45 mph	128.23-128.69	NW/SE	976/1,722	469/1,286
35 mph	128.69-130.09	NW/SE	652/415	168/281
Burns				
35 mph	130.14-131.00	NW/SE	1,401/380	225/122
25 mph	131.00-132.17	NW/SE	238/272	114/94
35 mph	132.17-132.32	NW/SE	774/1000	774/189
45 mph	132.32-132.57	NW/SE	740/1,320	660/343

TABLE 1
US 20/395: EXISTING APPROACH SPACING IN BURNS AND HINES
BY SIDE OF HIGHWAY AND SPEED ZONE

Note: Numbers in bold typeface indicate spacing that presently meets the 1999 OHP access spacing standards for statewide highways. Numbers in normal typeface indicate spacing does not meet 1999 OHP access spacing standards.

Source: Field measurements of approach locations conducted by David Evans and Associates, Inc.

OR 78: I	EXISTING ACCES		BLE 2 Y SIDE OF HIGHWA	Y AND SPEED ZONE
Speed Zone	Milepost	Side of Highway	Street-to-Street spacing (ft)	Driveway-to-Driveway or Driveway-to-Street spacing (ft)
25 mph	0.00- 0.32	N/S	290/350	100/70
40 mph	0.40- 0.63	N/S	730/400	370/400

Note: Numbers in bold typeface indicate spacing that presently meets the 1999 OHP access spacing standards for regional highways. Numbers in normal typeface indicate spacing does not meet 1999 OHP access spacing standards.

Source: Field measurements of locations conducted by David Evans and Associates, Inc.

6

## HISTORICAL AND CURRENT ACCESS MANAGEMENT PROVISIONS

The 1999 OHP is the most current document containing access management policies and standards. Previously, the 1991 OHP was the guiding document for access management.

Under a 1996 contract with the Oregon Department of Transportation (ODOT), DEA prepared a transportation report<sup>3</sup> that included an analysis of prevailing highway access conditions along US 20/395 in Burns and Hines and recommended access spacing standards which attempt to comply with the 1991 Oregon Highway Plan (OHP), where possible.

#### **HISTORICAL PROVISIONS**

Appendix A, Level of Importance (LOI) Policy, of the 1991 OHP classified the state highway system into four LOI categories (Interstate, Statewide, Regional and District) which were based on the relative significance and level of access control in effect along a particular highway section. The Levels of Importance were established to provide direction for managing limited resources to provided efficient highway service. In recognition of funding limitations, the 1991 OHP also designated some of the statewide highways as the Access Oregon Highway system to focus needed improvements on a system of highways that link major economic and geographic centers. Appendix B, Access Management Policy, of the 1991 OHP further classified the state highway system into six different categories based on projected cumulative effects of highway access considering several factors<sup>4</sup>.

At the time that the 1996 transportation report was prepared, US 20/395 through Burns and Hines was categorized in the 1991 OHP as a Statewide LOI, Category 4 - Limited Control highway, while OR 78 in Burns was categorized as a Regional LOI, Category 4 – Limited Control highway. In an urban area, both of these categories permit at-grade intersections or interchanges at a spacing of 1/4 mile (400 meters) and private driveways are limited to intervals of 500 feet (150 meters).

Table 3 presents the recommended access spacing standards from the 1996 transportation report for US 20/395 in Burns and Hines.

<sup>&</sup>lt;sup>3</sup> Transportation Report, US Highway 20 Traffic Analysis Burns/Hines Urban Area Section, David Evans and Associates, Inc. (DEA), August 27, 1996.

<sup>&</sup>lt;sup>4</sup> As identified on pages B-2 and B-3 of the 1991 OHP, these include: projected future traffic volumes; amounts of development authorized by comprehensive plans; existing and proposed roadside development patterns; regional and local comprehensive plans and TSPs; the potential for increasing the use of local roads to provide property access and local circulation; topography, drainage or other land characteristics; existing access agreements between the State and local jurisdictions; and other operational aspects of access.

Location	Milepost	Intersection Spacing	Driveway Spacing		
Oregon Avenue South of Study Area to MP 127.95		$\begin{cases} 1991 \text{ OHP} - \text{Category 4} - \\ 400 \text{ meters (1/4 mile)} \end{cases}$	{1991 OHP - Category 4 - 150 meters (500 feet)		
Oregon Avenue	MP 127.95 to MP 130.51	{300 meters (984 feet)	{150 meters (492 feet) full access 75 meters (246 feet) right in/out		
Hines Boulevard Monroe Street	MP 130.51 to MP 131.11 MP 131.11 to MP 131.50	Major Crossing 450 meters (1476 feet) Others only as extension of existing grid system	60 meters (197 feet) 1 per block maximum		
Broadway Avenue	MP 131.50 to MP 131.95	Only as extensions of existing grid system	{No new access		
Broadway Avenue Seneca Drive	MP 131.95 to MP 132.13 MP 132.13 to North of Study Area	$\begin{cases} 1991 \text{ OHP} - \text{Category 4} - \\ 400 \text{ meters } (1/4 \text{ mile}) \end{cases}$	{1991 OHP - Category 4 - 150 meters (500 feet)		

 TABLE 3

 RECOMMENDED 1996 US HIGHWAY 20/395 ACCESS MANAGEMENT GUIDELINES

Source: US Highway 20 Traffic Analysis Burns/Hines Urban Area Section, David Evans and Associates, Inc., August 27, 1996.

The following excerpt from the 1996 transportation report details the specific access recommendations.

#### **Recommended access spacing guidelines from 1996 report:**

Along Monroe Street and Hines Boulevard, commercial development is more likely to have off-street parking with driveway access off Highway 20. Major crossings, which either have traffic signals or may eventually become signalized, should be limited to a distance of 4 to 5 blocks. Driveways should be located off side streets when possible or combined and limited to one mid-block access. Limiting driveway access to right in/right out only would force vehicles to turn around on local streets before returning to the highway, increasing overall traffic volumes.

Along Oregon Avenue, the grid system concentrates around Barnes Avenue with longer blocks further north and south. It would be difficult to develop all adjacent land parcels with access on side streets only since some parcels might be several hundred feet from a side street. We recommend limiting full access to one per block at an average of 150meter (492-foot) spacing. Right in/right out access at a spacing of 75 meters (246 feet) would enable parcels that cannot share driveways or access side streets to use the highway. Highway 20 would be improved to a 3-lane section for this roadway segment. A preliminary analysis of available capacity indicates that the system could accommodate the recommended level of access for the next 20 years.

#### **CURRENT PROVISIONS**

Similar to the 1991 OHP, the 1999 OHP classifies state highway segments into different categories based on function. The five broad classifications defined in Policy 1A of the 1999 OHP include Interstate, Statewide, Regional, District, and Local Interest Roads. The Local Interest Road category was not included in the 1991 OHP. US 20/395 is classified as a Statewide Highway through Burns and Hines and OR 78 is classified as a Regional Highway in Burns.

The 1999 OHP supplements the five broad state highway categories described in Policy 1A with specific subcategories and special highway designations that are defined in other policies within the OHP. These supplemental categories and designations address special conditions affecting portions of the highway system that can be attributed to land uses, truck movement, the Scenic Byway designation, and significance as an emergency response route.

As described in the 1999 OHP, Policy 1B: Land Use and Transportation, recognizes that ODOT and local governments must work in unison to achieve accessibility and mobility goals for a balanced transportation system. Policy 1B implements the Oregon Transportation Plan's Urban Accessibility Policy to "assure balanced, multimodal accessibility to existing and new development within urban areas to achieve the state goal of compact, highly livable urban areas." As described in the 1999 OHP, application of Policy 1B is appropriate for three different circumstances listed below. Each of these circumstances is applicable to different segments of the state highways through Burns and Hines:

- Existing conditions which do not meet the policy objectives. In these circumstances, the policy will be used to gain closer levels of compliance with the objectives and/or actions.
- A mixture of existing non-compliant conditions and new proposals, projects or developments where higher levels of compliance with the objectives and/or actions would be desirable. In these circumstances, ODOT, the affected local government and/or affected parties need to work out a way to best achieve compliance with the objectives and/or actions.
- New conditions or developments where there is an ability to fully comply with the policy objectives and/or actions.

In addition to the general highway classification spacing standards, the 1999 OHP includes provisions for special highway designations in urban areas such as Burns-Hines to address the three types of circumstances listed above. These special designations include *Special Transportation Areas* (STAs) and *Urban Business Areas* (UBAs).

An STA is a designation that may be applied to a state highway, when a downtown, business district or community center straddles the state highway within a community's UGB. The primary objective of an STA is to provide access to community activities, businesses and residences, and to accommodate pedestrian, and bicycle movements along and across the highway in a compact central business district. Access management in STAs corresponds to the existing city block for public road connections and discourages private driveways. However, where driveways are allowed and land use patterns permit, the minimum spacing for driveways is 175 feet or mid-block if the current city block spacing is less than 350 feet. In addition, the need for local access outweighs the consideration of maintaining highway mobility within a STA.

A UBA is a highway segment designation which recognizes existing areas of commercial activity or future nodes or various types of centers of commercial activity within urban growth boundaries on district, regional or certain statewide highways where vehicular accessibility is important to continued economic viability. The primary objective of the state highway in an Urban Business Area (UBA) is to maintain existing speeds while balancing the access needs of abutting properties with the need to move through traffic. UBAs may be located on regional highways where speeds are 35 miles per hour (55 kilometers per hour) or less and may be located on statewide highways where speeds are 35 miles per hour (55 kilometers per hour) or less under specific circumstances:

• Designations for existing UBAs are limited to only those special circumstances where the need for local access clearly equals or is greater than the need for mobility.

• Designations for new UBAs are limited to circumstances where the need for local access is greater than the need for mobility.

# COMPARISON OF 1991 AND 1999 ACCESS MANAGEMENT SPACING STANDARD MINOR DEVIATION LIMITS

Table 4 presents a comparison of highway access management spacing standard and minor deviation limits for statewide highways such as US 20/395 from the 1991 and 1999 OHP documents. Table 5 presents a comparison of highway access management spacing standardminor deviation limits for regional highways such as OR 78 from the 1991 and 1999 OHP documents. Both the 1991 and 1999 OHPs provide highway access management spacing standard minor deviation limits that prescribe appropriate distances between street intersections, and driveway-to-driveway and driveway-to-intersection spacing. The 1999 OHP also implements a procedure by which an applicant may request consideration of a deviation from adopted access management standards and policies. Allowable driveway-to-driveway and driveway-to-street spacing has generally decreased under the 1999 OHP unless a minor deviation in spacing standards is granted. Minor deviations may be allowed if certain criteria are met. Any requests for spacing at less than the minimum deviation limit is considered a major deviation that requires technical review and approval from ODOT's Region Access Management Engineer.

TABLE 4 COMPARISON OF 1991 AND 1999 OREGON HIGHWAY PLAN ACCESS MANAGEMENT SPACING STANDARD AND MINOR DEVIATION LIMITS FOR STATEWIDE HIGHWAYS – URBAN SECTION (FT)

	1991 OHP	1991 OHP 1999 OHP						
			Street*		Street*			
Speed	Street	Other	Deviation	UBA	Deviation		STA	
≥55 mph	1320	1320	1000					
50 mph	1320	1100	810					
40 & 45 mph	1320	990	740					
30 & 35 mph	1320	770	600	720	600	Existing	City Block Spac	
≤25 mph	1320	550	400	520	400	Existing	City Block Spac	

	1991 OHP				1999 OHP			
Speed	Driveway	Other	Driveway* Deviation	UBA	Driveway* Deviation		STA	· · · · · · · · · · · · · · · · · · ·
>=55 mph	500	1320	870				·	<u></u>
50 mph	500	1100	640					
40 & 45 mph	500	.990	530				If drivew	ays are allowed
30 & 35 mph	500	770	350	720	350	175	Or	mid-block
<= 25 mph	500	550	250	520	250	175	Or	mid-block

Note: UBA- Urban Business Area, STA- Special Transportation Area

\* This is not a standard, and is allowed if certain criteria are met. Minor deviation tables are "Limits" used as the lowest point a minor deviation can go if all criteria are met. These can not be used as standards.

Source: 1991 OHP- Appendix B and 1999 Oregon Highway Plan- Appendix C.

#### TABLE 5

#### COMPARISON OF 1991 AND 1999 OREGON HIGHWAY PLAN ACCESS MANAGEMENT SPACING STANDARD AND MINOR DEVIATION LIMITS FOR REGIONAL HIGHWAYS – URBAN SECTION (FT)

Street-to-Stree					1000 011				
	1991 OHP		1999 OHP						
			Street*		Street*				
Speed	Street	Other	Deviation	UBA	Deviation		STA		
≥55 mph	1320	990	870						
50 mph	1320	830	680						
40 & 45 mph	1320	750	550						
30 & 35 mph	1320	600	375	425	375	Existing b	lock spacir	ıg	
≤25 mph	1320	450	350	350	350	Existing t	lock spacin	ıg	
Driveway-to-D	riveway or 1	Driveway-	to-Street Com	parison			đ.,		
	1991 OHP				1999 OH	<u>P</u>		· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·			Driveway*		Driveway*			· · · · · · · · · · · · · · · · · · ·	
Speed	Driveway	Other	Deviation	UBA	Deviation		STA		
>=55 mph	900	900	700	200					
50 mph	830	830	540	540					
40 & 45 mph	750	750	460	460			If drivew	ays are allowed,	
30 & 35 mph	600	600	300	425	300	175	Or	mid-block	
<= 25 mph	450	450	220	350	220	175	Or	mid-block	
Shaded cells	indicate that 19	999 OHP Ac	cess Spacing Stat	ndards are gre	eater than 1991	<b>OHP</b> Standa	rds		

## SUMMARY OF FUTURE LAND USE ACTIONS ON ACCESS

This section presents the results of a qualitative evaluation of general future land use actions related to access management along US 20/395 in Burns and Hines and along OR 78 in Burns. This evaluation was based upon review of existing information, including the most current Comprehensive Plan and land use/zoning maps for each city.

# **CITY OF BURNS**

With the exception of a few areas that are zoned to preserve existing residential areas, public facilities, and open space, the majority of land located adjacent to US 20/395 and OR 78 in Burns is designated as General Commercial (CG) use. As described in the City's existing Zoning Ordinance, "*The General (CG) Commercial zone is intended to preserve and enhance areas within the City dedicated to providing business goods and services to the resident population and the traveler. The intent is to provide compatible standards for the central business district, which is generally oriented to-pedestrians, and for the outlying commercial areas that are generally oriented to vehicles." While development and redevelopment of adjacent commercial properties will likely have the greatest impact on highway access management along US 20/395, development that includes other uses and intensities in other parts of the city may also affect traffic volume and access management along the highway. Access management strategies must be responsive to this possibility.* 

As conveyed in the comprehensive plan, the City uses a relatively aggressive growth rate of approximately 1.5% per year as the basis for projecting future community needs. Future commercial development is expected to continue according to past trends, with modest increases in shopping facilities, service outlets, and office space occurring over the planning period. Based on past community trends, and commercial land-use in other comparable cities, it is expected that 2.8 acres per 100 persons will be required for new commercial development through the year 2020. This need equates to 15 acres of land needed for general commercial purposes, and 28 acres needed for highway commercial uses.

The availability of industrial land and urban services to accommodate economic opportunities in the area is the next consideration in planning economic growth and diversification for the City. The demand for new undeveloped industrial and commercial land in Burns is likely to be quite limited, in light of the realistic forms of economic expansion and diversification in the City and County. The commercial and industrial lands inventoried above should provide a sufficient supply of land for the demand in new industrial land in the City and County during the 20-year planning period.

# **CITY OF HINES**

Compared to its population, the City of Hines has a relatively limited supply of commercial facilities. The citizens of Hines currently rely on the commercial establishments in Burns to meet much of their shopping and service needs. Only two percent of the Hines developed area, which encompasses approximately eight acres, is dedicated to commercial uses. Commercial uses in Hines are concentrated in two separate areas: the central portion of the community which contains a few restaurants, a store, a credit union, and a post office; and the commercial activity strip along Highway 20/395, both north and south of the City's central core.

Similar to the situation in Burns described in the previous section, most of the land adjacent to US 20/395 in Hines is zoned for future commercial use. In its zoning ordinance, the City of Hines identifies two types of commercial designations: Commercial (C) and Commercial Highway (CH). These designations provide opportunities for commercial growth in the future as demand for commercial uses increases with

population growth. As described in the Hines Zoning Ordinance, the purpose of the "C" designation is, "To serve the City of Hines as a center of commerce and government. It is further intended to contain an interrelationship of retail and service commercial enterprises, together with office, financial and governmental services and proximity to residential developments designed and situated so as to encourage a close relationship of one use to another. To provide adequate protection between differing uses and to provide means to help assure compatibility between neighboring uses." According to the zoning ordinance, the "CH" designation is applied, "To provide for a wide range of business activity and for those businesses which are appropriate to major thoroughfare or highway locations adjacent to existing built-up areas of the City." Except for a few areas that are zoned to preserve existing public uses including a central park and public golf course, land zoned as "C" aligns the segment of US 20/395 in the central portion of Hines from Pettibone Avenue south to the south city limit. Land zoned as "CH" extends along US 20/395 north of Pettibone Avenue to the north city limit, including a large area located east of the highway directly south of the north city limit.

The City of Hines Comprehensive Plan accounts for future residential, commercial and industrial growth within the UGB, including a substantial amount directed to undeveloped and underdeveloped areas located along the US 20/395 corridor between the central portion of Hines and the north city limit. As mentioned in the previous section, future commercial development along the highway will have the most direct access management implications compared to overall growth of other land uses in other areas of the community. The following narrative from page 99 of the Hines Comprehensive Plan pertains to potential future growth and strengthens the justification for access management of US 20/395 in Hines:

# "...it is obvious that the majority of residential and commercial growth for the City of Hines should continue in a linear fashion along the highway axis."

However, while the comprehensive plan calls for this linear development along the highway, the plan must also be sensitive to avoid strip development and follow land use pattern recommendations found in the 1999 OHP. Policy 1B-Action 1B.12 of the OHP encourages local governments to cluster commercial development in community centers or commercial centers with limited access to a state highway in order to reduce vehicle trips. Action 1B.10 encourages development in STAs to be developed off of the highway or only on one side of the highway. The comprehensive plan must reflect a commitment to creating a compact urban form and to incorporating OHP recommendations.

13

#### **RECOMMENDED ACCESS MANAGEMENT STRATEGIES**

The access management strategies described in this section include:

- Access management guidelines that were recommended in the 1996 Transportation Report, US Highway 20 Traffic Analysis, Burns/Hines Urban Area Section;
- Recommended access spacing standards that are consistent with the standards defined in the 1999 OHP, plus additional access management recommendations for OR 78; and
- Recommended actions to proceed with adoption and implementation of the Burns and Hines Transportation System Plans (TSPs) which contain recommended plan and ordinance amendments to promote access management.

The access management recommendations described herein are intended to protect the function of the state highways and to maintain a reasonable level of access to adjacent properties in Burns and Hines while not compromising safety and mobility for all highway users. The recommended access management spacing standards are generally not intended to eliminate existing intersections or driveways. However, in cases where traffic safety and efficiency are clearly served by closing or relocating connections, this option should be explored, along with ways to mitigate any negative impacts of the relocation.

#### **1996 TRANSPORTATION REPORT RECOMMENDATIONS**

The transportation report prepared by DEA in 1996 provides access management guidelines for the urban section of US 20/395 in Burns and Hines. In addition to the access management recommendations described further in this section, it is recommended that the Cities of Burns and Hines apply the access management guidelines from the 1996 report that are compatible with the 1999 OHP. Table 6 provides a summary of the recommended guidelines from the 1996 transportation report that are still considered to be applicable given the access management provisions contained in the 1999 OHP.

RECOMMENDED	-r <sup></sup>	EMENT GUIDELINES FROM 199	06 TRANSPORTATION REPORT Driveway Spacing
Oregon Avenue	Milepost 127.95 to 130.51	Intersection Spacing 300 meters (984 feet; only consistent if Oregon Ave. is <45mph.	150 meters (492 feet): full access 75 meters (246 feet): right in/out
Hines Boulevard Monroe Street	130.51 to 131.11 131.11 to 131.50	Major crossing: 450 meters (1476 feet); others only as extension of existing grid system	60 meters (197 feet) One per block maximum
Broadway Avenue	131.50 to 131.95	Only as extensions of existing grid system if in the designated STA at <35 mph. *	No new approaches

TABLE 6
US 20/395 (STATEWIDE HIGHWAY) THROUGH BURNS AND HINES:
ECOMMENDED ACCESS MANAGEMENT GUIDELINES FROM 1996 TRANSPORTATION REPORT

Note: \* These are not designated STAs at this time.

## ACCESS MANAGEMENT STRATEGIES

In addition to the relevant access management guidelines provided in the 1996 transportation report, the recommended TSP adoption and implementation procedure described above, this section provides a description of access management recommendations that are compatible with the standards defined in the 1999 OHP for specific state highway segments through Burns and Hines. Table 7 provides a summary of the recommended access management strategies for US 20/395 and OR 78 in Burns and for US 20/395 in Hines.

In general, the recommendations described in this section support the continuing development of a connective grid street system with stronger access control further from the central areas of both Burns and Hines.

Both the City of Burns and the City of Hines should work with adjacent property owners and ODOT to identify opportunities to reduce and modify the number of direct, full access approaches along US 20/395 and OR 78. Recommended general options to reduce and manage the highway approaches include, but are not limited to:

- 1. Relocation of the highway approach to an intersecting or parallel roadway of lower functional classification.
- 2. Where Option 1 is not feasible, consolidation of multiple approaches into a single highway approach.
- 3. Use of a shared approach (joint driveway) between two or more individual properties.
- 4. Prohibition of left turn movements to and from the highway at intersections and driveways that do not meet the spacing standards as prescribed in the 1999 OHP.
- 5. Acquisition (by ODOT) of access rights-of-way at adjacent properties.
- 6. Improvement of off-system circulation to reduce the need for direct, full-access approaches.

## **RECOMMENDED ACCESS SPACING**

The spacing standards and other recommendations summarized in Table 7 (refer to pages 17 and 18) include designation of an STA between 'D' Street and Monroe Street on Broadway Avenue in downtown Burns, and consideration of potential UBA designations on US 20/395 from Broadway Avenue to Harney Avenue and through the central portion of Hines between the intersections with Byrd Street/Hotchkiss Lane and Bennett Avenue West. It is also recommended that the City of Burns consider designation of a UBA on the segment of OR 78 between Broadway Avenue and Gordonia Avenue.

- 1. In downtown Burns, the area along US 20/395 (Broadway Avenue) between 'D' Street and Monroe Street exemplifies the design features of a historic downtown. Within this eight-block segment, buildings (primarily commercial) are spaced close together, parking is on-street, sidewalks bind the street to the buildings, and the posted speed limit is 25 miles per hour. These elements, along with a compact development pattern with sufficient connectivity to the local street system may qualify this area for a STA highway segment designation.
- 2. Along with the suggestion in the adopted TSP, the City of Burns and ODOT will need to address the STA Management Plan directives under Policy 1B of the 1999 Oregon Highway Plan if the City decides to proceed with designation of an STA. Upon adoption of the TSP by the Burns City Council, a finding of Policy 1B compliance by ODOT's Transportation Development Division Deputy Director and a management plan is developed as an intergovernmental

agreement or memorandum of understanding potential, the City of Burns could designate this segment of US 20/395 as an STA. An STA designation allows reduced mobility standards, accommodates existing public street spacing and compact development patterns, and enhances opportunities to provide improvements for pedestrians and bicyclists in the downtown area.

- 3. One existing constraint related to the potential designation of an STA along US 20/395 is the highway's existing designation as a Freight Route. Implementation of the TSP recommendation to designate an alternate truck route around Burns (Option 6, Alternative 4 Fry Lane and Highway 78 in the TSP) would facilitate an STA designation for the downtown segment of Broadway Avenue.
- 4. The spacing of existing approaches to adjacent commercial properties in the potential UBA segments identified in Table 7 and described above indicates that the need for local access is equal to or greater than the need for mobility in these areas. Each city should consider designation of these segments as a UBA and work with ODOT to formulate and implement a UBA Management Plan if the City and ODOT proceed with this designation.
- 5. At a minimum, spacing standards that meet the access management spacing standards specified in the 1999 OHP for the Statewide (US 20/395) and Regional (OR 78) Other highway segment category are recommended to be applied to highway segments that are not appropriate "candidates" for STA or UBA designation in Burns and Hines. Tables B-1 and B-2 in Appendix B provide a summary comparison of the access management spacing standards to these standards that would be applied under this recommendation to the highway segments identified in Table 7, which are located outside the central portions of Burns and Hines.
- 6. As previously described, existing conditions along OR 78 include a lack of sidewalks and poorly defined, continuous shoulder access to adjacent properties. In addition to the recommended spacing standards listed in Table 7, construction of curbs and sidewalks is recommended along OR 78 to facilitate safe and convenient access for pedestrians, bicyclists, and drivers. It is recommended that the implementation of these improvements concur with related access management actions to reduce the number and width of driveways that are clearly defined by curb cuts along OR 78.

16

TABLE 7
US 20/395 AND OR 78 ACCESS MANAGEMENT RECOMMENDATIONS

Segment	78 ACCESS MANAGEMENT RECOMMENDATIONS Recommendations
Burns: US 20/395	
(Sheet ID, Metric Station)	
North Burns City Limit <i>to</i> Broadway Avenue/Alder Avenue East intersection (9, 1+715 <i>to</i> 9, 1+079)	<ul> <li>New roadway approaches only as extensions of street grid system that meet the OHP standard for intersections (990 ft.) for Statewide Highway, Urban Other segments with 40-45 mph speed limits.</li> <li>Where no reasonable alternative access is available, limit driveways to meet the OHP standard for driveways (990 ft.) through shared access between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>
Broadway Avenue/Alder Avenue East	No new roadway intersections.
intersection <i>to</i> 'D' Street (9, 1+079 <i>to</i> Sheet 8, 0+781)	<ul> <li>Driveway approach spacing should meet the OHP standard for driveways (550 ft.) for Other Urban Statewide Highway segments with 25 mph or lower speed limits.</li> <li>Where no reasonable alternative access is available, limit driveways to one per</li> </ul>
	<ul> <li>block through shared access point between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>
'D' Street <i>to</i> Monroe Street (8, 0 +781 <i>to</i> 7, 0+100)	<ul> <li>No new approaches.</li> <li>STA designation by City through coordination with ODOT as described under 1999 OHP Policy 1B.</li> </ul>
	<ul> <li>As redevelopment occurs, locate approaches on local streets and consider acquisition of existing approaches or access rights along US 20/395.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> </ul>
Broadway Avenue <i>to</i> Harney Avenue South (7, 54+ 363 <i>to</i> 6, 53+617)	<ul> <li>No new approaches.</li> <li>Consideration of UBA designation by City through coordination with ODOT.</li> <li>Driveway access spacing should meet the OHP standard for driveways (520 ft.) for a UBA with 25 mph or lower speed limit.</li> </ul>
	<ul> <li>As redevelopment occurs, locate approaches on local streets and consider acquisition of existing approaches or access rights along US 20/395.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>
Harney Avenue South <i>to</i> Pierce Street East (6, 53+617 <i>to</i> 5, 52+668)	<ul> <li>No new approaches.</li> <li>Driveway access spacing should meet the OHPstandard for driveways (770 ft.) for Other Urban Statewide Highway segments with 30 and 35 mph speed limits.</li> <li>As redevelopment occurs, locate driveway approaches on local streets and consider acquisition of existing approaches or access rights along US 20/395.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>
Pierce Street East <i>to</i> Burns-Hines City Limit (5, 52+668 <i>to</i> 5, 52+150)	<ul> <li>New roadway approaches only as extensions of existing grid system that meet the OHP standard for intersections (770 ft.) for Statewide Highway, Urban Other segments with 30 and 35 mph speed limits.</li> <li>Driveway access spacing should meet the OHP standard for driveways (770 ft.) for Other Urban Statewide Highway segments with 30 or 35 mph speed limits.</li> <li>As redevelopment occurs, locate driveway access on local street.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>

Segment Hines: US 20/395	Recommendation
Hines – Burns City Limit <i>to</i> Bennett Avenue West (4, 52+150 <i>to</i> 3, 51+080)	<ul> <li>New roadway approaches only as extensions of existing grid system that meet the OHP standard for intersections (770 ft.) for Statewide Highway, Urban Other segments with 30 and 35 mph speed limits.</li> <li>Driveway access spacing should meet the OHP standard for driveways (770 ft.) for Other Urban Statewide Highway segments with 30 or 35 mph speed limits.</li> <li>As redevelopment occurs, locate driveway approaches on local streets.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Hines Subdivision Ordinance.</li> </ul>
Bennett Avenue West <i>to</i> Hotchkiss Lane (3, 51+080 <i>to</i> 1, 48+850)	<ul> <li>No new approaches.</li> <li>Consideration of UBA designation by City through coordination with ODOT.</li> <li>Driveway access spacing should meet the OHP standard for driveways (720 ft.) for a UBA with 30 and 35 mph speed limit.</li> <li>As redevelopment occurs, locate approaches on local streets and consider acquisition of existing approaches or access rights along US 20/395.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>
Hotchkiss Lane <i>to</i> south of study area (1, 48+850 <i>to</i> south of study area)	<ul> <li>New roadway approaches only as extensions of a connective street system that meets the OHP standard for intersections (990 ft.) for Statewide Highway, Urban Other segments with 40-45 mph speed limits.</li> <li>Where no reasonable alternative access is available, limit driveways to meet (at a minimum) the minor deviation limits for driveways (530 feet) through shared access between adjacent properties.</li> <li>Modify existing driveways as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>

Segment Burns: OR 78	Recommendation
Broadway Avenue to Gordonia Avenue (10, 54+363 to 11, 55+001)	<ul> <li>No new approaches.</li> <li>Consideration of UBA designation by City through coordination with ODOT.</li> <li>Driveway access spacing should meet the OHP standard for driveways (520 ft.) for a UBA with 25 mph or lower speed limit.</li> <li>As development and redevelopment occurs, locate approaches on local streets and consider acquisition of existing approaches or access rights along OR 78.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> <li>Construct curbs and sidewalks and accommodate only driveways that meet the above spacing standards and design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>
Gordonia Avenue to Burns City Limit/UGB (11, 55+001 to 11, Burns City Limits/UGB)	<ul> <li>No new intersections.</li> <li>Driveway access spacing should meet the OHP standard for driveways (750 ft.) for Other Urban Regional Highway segments with 40 and 45 mph speed limits.</li> <li>As development and redevelopment occurs, locate approaches on local streets and consider acquisition of existing approaches or access rights along OR 78.</li> <li>Where no reasonable alternative access is available, limit driveways to one per block through shared access point between adjacent properties.</li> <li>Modify existing driveways that meet above spacing standards as necessary to meet design standards defined in the adopted City of Burns Subdivision Ordinance.</li> </ul>

#### TSP ADOPTION AND IMPLEMENTATION

To assure that the function of the state highways through Burns and Hines is protected through appropriate access management measures, it is recommended that each city work in collaboration with ODOT to implement the following four local policy-related measures to protect the existing and future function of the state highways, and to bring non-compliant highway segments into compliance upon redevelopment:

- 1. Adopt the Transportation System Plan (TSP) completed in October 1999 and implement the recommended improvements as described in the TSP.
- 2. Amend the existing comprehensive land use plan to incorporate the goals and objectives that are defined in Chapter 2 of the TSP, and the recommended policies contained in Chapter 9 of the TSP.
- 3. Amend the existing zoning and land division ordinances to incorporate the applicable recommended ordinances that are identified in Chapter 9 of the TSP.
- 4. Adopt the amended documents listed in items 1 and 2 above.

#### APPENDICES

- A. References
- B. 1999 Oregon Highway Plan Highway Access Spacing Standards Tables B-1 and B-2
- C. Burns and Hines Access Inventory and Comparison to 1999 Oregon Highway Plan Access Spacing Standards Tables C-1 and C-2
- D. Burns and Hines: Access Inventory Sheet A [Index] Sheets 1-11

# **APPENDIX A**

# REFERENCES

#### REFERENCES

- "City of Burns Transportation System Plan." Prepared by David Evans and Associates, Inc, October 1999.
- "City of Hines, Oregon. Comprehensive Plan." Prepared by Morgan, Ryan & Associates, Inc; Revised 1986.
- "City of Hines Transportation System Plan." Prepared by David Evans and Associates, Inc, October 1999.
- "Highway Approaches, Access Control, Spacing Standards and Medians." Division 51, February 2000.
- "The Oregon Administrative Rule Division 51: Highway Approaches, Access Control, Spacing Standards and Medians." The Department of Transportation, Transportation Operations. November 2000.
- "Oregon Highway Plan." The Oregon Department of Transportation. 1999
- "Oregon Highway Plan." The Oregon Department of Transportation. 1991
- "Reformatted Comprehensive Plan for the City of Burns, Oregon." Prepared by Tenneson Engineering Corporation; August 1997.
- "US Highway 20 Traffic Analysis Burns/Hines Urban Area Section." Transportation Report. Prepared by David Evans and Associates, Inc; August 1996.
- "Zoning Ordinances for the City of Burns, Oregon.", Prepared by Tenneson Engineering Corporation; April 1997.

# APPENDIX B

# 1999 OREGON HIGHWAY PLAN HIGHWAY ACCESS SPACING STANDARDS TABLES B-1 AND B-2

#### TABLE B-1 SPACING STANDARDS FOR STATEWIDE HIGHWAY (FEET) - URBAN SECTION Street\_to\_Street and Driveway-to\_Driveway or Driveway-to\_Street Comparison

	Other				τ	JBA	STA			
	Minor Deviation								Minor Deviation	
		Minor Deviation*	Driveway-to-Driveway/*	UB	Minor Deviation*	• •		Minor Deviation*	Driveway-to-Driveway/*	
Speed	Other	Street-to-Street	Driveway-to-Street	A	Street-to-Street	Driveway-to-Street	STA	Street-to-Street	Driveway-to-Street	
>=55 mph	1320	1000	870							
50 mph	1100	810	640							
40 & 45 mph	990	740	530							
30 & 35 mph	770	600	350	720	600	350	175**			
<= 25 mph	550	400	250	520	400	250	175**			

Source: 1999 Oregon Highway Plan

Note: \* This is not a standard, and is allowed if certain criteria are met. Minor deviation tables are "Limits" used as the lowest point a minor deviation can go if all criteria are met. These can not be used as standards.

\*\* If driveways are allowed, the 175 feet spacing standard is discouraged.

#### TABLE B-2 SPACING STANDARDS FOR REGIONAL HIGHWAY (FEET) - URBAN SECTION Street-to-Street and Driveway-to-Driveway or Driveway-to-Street Comparison

······	Other				l	UBA	STA			
		Minor Deviation						Minor Deviation		
		Minor Deviation*	Driveway-to-Driveway/*	UB	Minor Deviation*	Driveway-to-Driveway/*		Minor Deviation*	Driveway-to-Driveway/*	
Speed	Other	Street-to-Street	Driveway-to-Street	A	Street-to-Street Driveway-to-Street S		STA	Street-to-Street	Driveway-to-Street	
>=55 mph	990	870	700							
50 mph	830	640	540							
40 & 45 mph	750	550	460							
30 & 35 mph	600	375	300	425	375	300	175**			
<= 25 mph	450	350	220	350	350	220	175**			

Source: 1999 Oregon Highway Plan

Note: \* This is not a standard, and is allowed if certain criteria are met. Minor deviation tables are "Limits" used as the lowest point a minor deviation can go if all criteria are met. These can not be used as standards.

\*\* If driveways are allowed, the 175 feet spacing standard is discouraged.

1) The elimination of separate standards for street-to-street spacing versus general approach spacing has allowed more flexibility for existing grid systems in cities.

2) The access management spacing standards themselves are more severe for private approaches for both the Other and UBA classification. Even the deviations are more severe at higher speeds for the Other classification.

App\_A,B,C&D.xls;jed

# APPENDIX C

# BURNS AND HINES ACCESS INVENTORY AND COMPARISON TO 1999 OREGON HIGHWAY PLAN ACCESS SPACING STANDARDS TABLES C-1 AND C-2

## TABLE C-1 US 20/395 THROUGH HINES AND BURNS COMPARISON TO 1999 OHP ACCESS SPACING STANDARDS FOR STATEWIDE HIGHWAY STANDARDS

Sheet	Driveway	Access /	Metric	Spacing Between	Compliance	Average Spacing/ Segment	Compliance	Block	Average Spacing/ Block	# Driveways/
ID	ID	Property Use	Station	Approaches (feet)	Compnance	(feet)	Compnance	Length (feet)	(feet)	# Driveways/ Block
		SOUTH HINES NW (Speed 45 MPH)	Station	(icet)	petricul matter 3	(IEEL)		(leet)	(1001)	DIUCK
- Historia - The State of Stat	Segment 1	Hines Logging Road	48+851	453	nin etterette og bleved	469		1473	447	2
	1	Truck Stop	48+989	692	ADD					-
	1A	Power Substation	49+200	328						
	••••	Hines Road West	49+300	315				820	484	1
	2	Tectron	49+396	505						
		Hibbard Street West	49+550	633	A			633	495	0
2		Bardwell Street West	49+743	358						
	3	Virgil's	49+852			· · · · · · · · · · · · · · · · · · ·	-		an a	
<u>dois</u> a		SOUTH HINES SE (Speed 45 MPH)							<u>an 2000 (n</u>	
1	1B	Tectron	49+248	158		528				
		Hibbard Avenue East	49+635	898	A <sup>DD</sup>			873	528	0
2	anto, a 2005 de como de com	Lottery Lane East	49+901	and an exception of the second se	MINIMUS - 100 527 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 578 - 5					
	Segment 2 M	NORTH HINES NW (Speed 35 MPH)								
2		Red Cinder Road West	49+924	53		169		56	106	0
		Byrd Street West	49+941	158				866	111	8
	5	Old Gas Station	49+980	53						
	6	Tan House	50+010	106						
	8	J & L Stove	50+035	53						
	10	J & L Stove	50+053	106						
	12	Whiles Mechanic Shop	50+082	53						
	14	Yekels Auto Repair	50+102	158						
	16	Worst Food in Oregon	50+152	53						
	18	Worst Food in Oregon	50+170	158						
		Hanley Boulevard West	50+205	211				561	264	2
	22	House across from Neil's	50+276	211						
	24	Knotty Pine Motel	50+345	106						
		South Circle Drive West	<u>50+376</u>	528	$A^{DD}, \underline{B}^{DD}, C$			528	554	0
3		Barnes Avenue West	50+537	581	$A^{DD}, B^{DD}, C$			541	396	0

Sheet	•		Metric	Spacing Between Approaches	Compliance	Average Spacing/ Segment	Compliance	Block Length	Average Spacing/ Block	# Driveways/
ID	ID		Station	(feet)	······	(feet)		(feet)	(feet)	Block
		North Circle Drive West	50+702	211				456	185	2
	26	212 Highway 20 (white res.)	50+770	53						
	27	220 Highway 20 (grey res.)	50+795	158						
		Pettibonne Avenue West	50+841	317	C			784	158	4
	28	Tan Residence	50+938	53			-			
	29	328 Highway 20 (white res.)	50+955	106						
	30	328 Highway 20 (white res.)	50+978	106						
	31	344 Highway 20 (pink res.)	51+017	211	С					
		Bennett Avenue West	51+080	158				781	167	5
	33	Exxon	51+131	158						
	34	Exxon	51+170	53						
	35	Egan's Tavern	51+184	158						
	36	Egan's Tavern	51+235	158						
	37	B & B Sporting Goods	51+280	106						
4		Conley Avenue West	51+318	370	$A^{DD}, B^{DD}, C$			712	224	2
	38	Sundown Motel	51+426	264	С					
	39	Sundown Motel	51+510	106						
		Jameson Avenue West	51+535	158				1237	220	4
	41	Comfort Inn	51+585	264	С					
	43	Smerski	51+664	211	С					
	45	Taylor's Equipment Locators	51+724	211	С					
	47	Apple Peddler Restaurant	51+801	370	$A^{DD}, B^{DD}$					
		Roe Davis Avenue West	51+912	106					92	4
	49	Ebar Oil	51+943	158						
	51	Ebar Oil	51+992	53						
	52	Leather's Oil (aka Texaco)	52+010	53						
	53	Leather's Oil (aka Texaco)	52+027							
		NORTH HINES SE (Speed 35 MPH)			hitti ana ana ana ana ana ana ana ana ana an	united and the second states				
2	4	Government Building (USFS, BLM, Polic	49+954	211	C	283	С			
	7	Government Building (USFS, BLM, Polic		53						
	9	Government Building (USFS, BLM, Polic		158						
	11	Government Building (USFS, BLM, Polic		53				4		
						e de la constante de		I		

Sheet ID	Driveway ID	Access / Property Use	Metric Station	Spacing Between Approaches (feet)	Compliance	Average Spacing/ Segment (feet)	Compliance	Block Length (feet)	Average Spacing/ Block (feet)	# Driveways/ Block
	13	Desert Trading Post	50+098	106						
	15	205 Highway 20 (white res.)	50+134	106						
	17	205 Highway 20 (white res.)	50+164	53						
	19	Hines Auto Motors	50+174	53						
	20	Hines Auto Motors	50+192	53						
		Hanley Boulevard East	50+209	106				256	106	1
	21	Neil's Tavern	50+250	158						
		Ogden Avenue East	50+287	53				279	264	1
	23	Sinclair	50+311	211	С					
		South Circle Drive East	50+372	528	$A^{DD}, B^{DD}, C$			541	554	0
3		Barnes Avenue East	50+537	581	A <sup>DD</sup> , B <sup>DD</sup> , C			535	370	0
		North Circle Drive East	50+700	158				463	352	1
	25	213 Highway 20 (green res.)	50+750	264	С					
		Pettibonne Avenue East	50+841	634	B <sup>DD</sup> , C				521	8
	32	Valley Golf Club	51+033	1795	$\mathbf{A}, \mathbf{A}^{DD}, \mathbf{B}, \mathbf{B}^{DD}$					
	40	505 Highway 20 (green res.)	51+571	53						
	42	509 Highway 20 (blue/green res.)	51+588	264	С					
	44	Grandma's	51+668	317	С					
	46	CFN	51+764	211	С					
	48	CFN	51+823	422	A <sup>DD</sup> , B <sup>DD</sup> , C			1		
	50	Payless	51+955	475	A <sup>DD</sup> , B <sup>DD</sup> , C					
	54	Erickson's Sentry Market	52+092	Ĩ				1		
	Segment 3 8	SOUTH BURNS_NW (Speed 35 MPH)								
5		Hilander Avenue (High School) West	52+185	528	$A^{DD}, B^{DD}, C$	227	С	1887	206	8
	59	High School	52+347	475	$A^{DD}, B^{DD}, C$	-				
	60	Vacant lot	52+476	370	$A^{DD}, B^{DD}, C$	-				
	64	Hereford Restaurant	52+593	106		-				
	66	House	52+622	53		-				
	67	Bennett Used Cars	52+646	106		•				
	69	Bennett Muffler	52+675	53		-				
	71	Dairy Queen	52+699	106		-				
	72	Dairy Queen	52+716	106		-				

Sheet	Driveway	Access /	Metric	Spacing Between Approaches	Compliance	Average Spacing/ Segment	Compliance	Block Length	Average Spacing/ Block	# Driveways/
ID	ID	Property Use	Station	(feet)		(feet)	•	(feet)	(feet)	Block
		Hines Boulevard West	52+757	158		-		925	334	4
	76	Burns Propane et al.	52+809	211	С	-				
	78	Harney Electric Co-Op	52+871	158		-				
	81	Highland Rock & Gem	52+920	106		-				
	82	_Bill Blake Gems	52+954	317		·····				
6		Taylor Street West	53+039	1056	$\mathbf{A}, \mathbf{A}^{DD}, \mathbf{B}, \mathbf{B}^{DD}, \mathbf{C}$	•			282	6
	94	Tony's Repair	53+361	106		-				
	95	Tony's Repair	53+402	158		-				
	96	Jiffy Mart	53+440	106		-				
	97	Jiffy Mart	53+469	53		-				
	98	Wagner's Furniture	53+494	211	С	-				
	102	Oregon Dept. of HR	53+557					entropy a terrory approximately back (101 (101 (10		
Hard Street		SOUTH BURNS SE (Speed 35 M			and the second se				0.0000000000000000000000000000000000000	Contraction of the second second
5	55	Ranch & Home	52+185	317	С	123				
	56	Subway Sandwich Shop	52+275	106		-				
	57	Subway Sandwich Shop	52+304	53		-				
	58	House	52+322	581	$A^{DD}, B^{DD}, C$	-				
	61	Royal Inn	52+506	158		-				
	62	Royal Inn	52+541	106		-				
	63	Fenced lot	52+580	106	1	-				
	65	Jerry's Restaurant	52+619	106		-				
	68	Jerry's Restaurant	52+649	106		-				
		Pierce Street East	52+668	53		-		591	98	5
	70	Town & Country Insurance	52+693	106		-				
	73	Ponderosa Village Mall	52+719	106		-				
	74	Ponderosa Village Mall	52+749	106		-				
	75	Vacant lot	52+790	106		-				
	77	Vacant lot	52+819	106		-				
		Filmore Street East	52+848	106		.=		289	92	2
	79	Leathers Oil	52+879	106		-				
	80	Leathers Oil	52+910	53		-				
		McGowan Avenue South	52+936	106		-		384	79	4
	83	Vacant lot	52+956	53		-				
	84	Vacant lot	52+976	53		-		-		

Sheet	Driveway		Metric	Spacing Between Approaches	Compliance	Average Spacing/ Segment	Compliance	Block Length	Average Spacing/ Block	# Driveways/
ID	ID	Property Use	Station	(feet)		(feet)		(feet)	(feet)	Block
	85	Vacant lot	53+003	106		-				
	86	Vacant lot	53+026	106		···		L		
6		Liberty Avenue South	53+053	53		-		384	84	3
	87	Western Auto	53+071	106		-				
	88	Western Auto	53+107	106		· •				
	89	Western Auto	53+141	106		-				
		Kearney Avenue South	53+170	53		-		361	132	2
	90	House and Ken's Mowers	53+191	158		- 1				
	91	Vacant lot	53+236	158		-				
		Juntura Avenue South	53+280	158		-		427	158	2
	92	RJs Drive-In	53+327	106		-				
	93	RJs Drive-In	53+358	158		-				
		Imperial Avenue South	53+410	211	С	-		223	158	0
		Van Buren Street East	53+478	106		-			88	4
	99	Les Schwab Tire Center	53+505	53		-				
	100	Les Schwab Tire Center	53+531	106		-				
	101	Les Schwab Tire Center	53+556							
n in an a Although	STURNER	entrug en la source ante		en gallering wie ter in die der Beiteren Gebeuren geschenzeligten	9 a. Mangarahan di Katalah Mangarahan di Katalah	an a	્રે પુરંત કે જેવા છે. આ પ્રાપ્ય પ્રાપ્ય કે પ્ આ પ્રાપ્ય કે બાદ કે બ		egi pel de la construction de la sectión A destructiones de la construction de la construction de la construction de la construction de la construction A de la construction de la construct	e ferfiligen van der stakken i Rykterigen van der Staken in der
6	103	Oregon Dept. of HR	53+601	106		126				
	104	Teague GMC West	53+637	106		- 1		75	185	0
		Harney Avenue North	53+660	264	A <sup>DD</sup> , B <sup>DD</sup> , C	-		302	185	0
		Monroe Street East/West	53+752	106		-		69	79	0
		Grand Street North	53+773	53		-		269	106	2
7	108	Ray's Repair	53+802	106				<b>_</b>		
	110	House	53+833	106		-				
		Fairview Avenue North	53+855	158		-		279	141	1
	113	Pioneer Bank	53+910	106		-				
		Egan Avenue North	53+940	158		-		266	141	1
	116	Big A Auto Parts	53+983	106		-				
		Diamond Avenue North	54+021	158		-		279	92	2
	118	House	54+061	53		-				
	120	Lafollette's Chapel	54+090	53		-				
		Court Avenue North	54+106	106		-		282	106	2
	122	Safeway Market	54+128	106		_				

Sheet ID	Driveway ID	Access / Property Use	Metric Station	Spacing Between Approaches (feet)	Compliance	Average Spacing/ Segment (feet)	Compliance	Block Length (feet)	Average Spacing/ Block (feet)	# Driveways/ Block
	124	Safeway Market	54+169	106		-				
		Buena Vista Avenue North	54+192	106		-		282	123	1
	126	Ye Olde Castle Restaurant	54+234	158		-				
		Alvord Avenue North	54+278	106		-		279	66	2
	129	Bontemps Motel	54+307	53		-				
	131	Pet Shop	54+331	106		-				
		Broadway Avenue North/South	54+363	0		-		279	200	0
		Monroe Street East/West	0+000	399	$A^{DD}, B^{DD}, C$	-		279	185	2
	133	Pet Shop	0+121	76		-				
	135	Former gas station	0+138	158		-				
		Madison Street West	0+185	106		-		282	119	2
	138	BPOE	0+218	53		-				
	140	Burns Ford	0+235	106		-				
		Jefferson Street West	0+270	211	С	-		279	194	1
	142	Palace Cafe & Lounge	0+334	53						
8		Adams Street West	0+356	317	$A^{DD}, B^{DD}, C$	-		279	290	0
		Washington Street West	0+441	264	$A^{DD}, B^{DD}, C$	_		282	211	0
		"A" Street West	0+526	158	, ,	-		279	106	2
	143	Texaco Service Station	0+573	53		-		r		
	144	Texaco Service Station	0+593	53		-				
	111	"B" Street West	0+612	158		-		282	106	2
	146	BP Service Station	0+654	53		-				
	147	BP Service Station	0+678	106		_				
		"C" Street West	0+697	106		-		407	137	3
	149	Whittier Offices	0+735	53		-				
	151	Vacant lot	0+746	53		-				
	152	Vacant lot	0+763	53		-				
		"D" Street West	0+783	422	$A^{DD}, B^{DD}, C$	-		112	264	0
9		Foley Drive (South Connection) West	0+907	106		···		226	158	3
,		Foley Drive (North Connection) West	0+941	211	С	_				
		Broadway Avenue North	1+010		õ					
in and the		MARKAN AND AND AND AND AND AND AND AND AND A		Support and the second of the		l Sales and the sale		galagijska smiri Nej	and protection which	we have been a started at the
6		Harney Avenue South	53+617	106		95	ananan in Seriegi (da Seriegi - S	98	106	0
v		Jackson Street East	53+647	106				384	119	2

Sheet ID	Driveway ID	Access / Property Use	Metric Station	Spacing Between Approaches (feet)	Compliance	Average Spacing/ Segment (feet)	Compliance	Block Length (feet)	Average Spacing/ Block (feet)	# Driveways/ Block
ID	105		53+676	106		-		(ieet)	(leet)	DIOCK
		Harney County FCU	53+676	108						
	106	Harney County FCU Grand Street South	53+764	106		<b>-</b>		292	92	2
7	107	Windmill Pizza	53+764	106		-		272	92	2
	107	ACW Rental	53+822	106		-				
	109		53+822	53		-		262	63	3
		Fairview Avenue South				-		202	03	5
	111	Best Western	53+880	106		-				
	112	Pine Room Lounge	53+900	0		-				
	114	Pine Room Lounge	53+913	106		-			100	•
		Egan Avenue South	53+933	53		-		289	106	2
	115	Lariat Lanes	53+962	158		-				
	117	A-1 Machine	54+000	53		-				_
		Diamond Avenue South	54+021	158		-		279	106	1
	119	Unmarked building	54+064	106		-				
		Court Avenue South	54+106	53		-		282	106	3
	121	NAPA Auto Parts	54+121	106		-				
	132	NAPA Auto Parts	54+144	106		-				
	125	NAPA Auto Parts	54+173	53		-				
		Buena Vista Avenue South	54+192	211	С	-		282	123	1
	127	Vacant lot	54+259	53		-				
		Alvord Avenue South	54+278	106		-		279	79	5
	128	Motel (closed)	54+304	53		-				
	130	Conoco Car Care	54+320	53		-				
	131	Conoco Car Care	54+345							
	134	Tuning's Studio	0+124	53		150				
	136	A-1 Used Cars	0+138	158		-				
		Madison Street East	0+185	53		-		279	106	2
	137	Chevron Gas Station	0+202	53		-				
	139	Chevron Gas Station	0+221	158		-				
	157	Jefferson Street East	0+221	158		_		279	194	1
	141	Klamath 1st Federal	0+324	106		_				•
8		Adams Street East	0+356	317	C	+ <u>-</u>		282	290	0
		Washington Street East	0+441	264	c			279	264	Ő
		"A" Street East	0+441 0+526	264	C			279	185	0
				106	L	1 -		279	123	1
		"B" Street East	0+612	100		-		282	125	1

Sheet ID	Driveway ID	Access / Property Use	Metric Station	Spacing Between Approaches (feet)	Compliance	Average Spacing/ Segment (feet)	Compliance	Block Length (feet)	Average Spacing/ Block (feet)	# Driveways/ Block
	145	Unmarked buiding	0+642	211	С	-				
		"C" Street East	0+697	53		-		279	119	2
	148	Dalton Distributing Co.	0+712	53		-				
	150	Silver Spur Motel	0+738	158		-				
		"D" Street East	0+781	211	С	-		276	172	4
	153	House	0+841	422	A <sup>DD</sup> , B <sup>DD</sup> , C	-				
9	154	House	0+969	0		-				
	155	House	0+975	53		-				
	156	House	0+993							
	Segment 5 l	NORTH CENTRAL BURNS NW	(Speed 35 MPH)		1994) 	A CONTRACTOR OF STREET				
9		Alder Avenue West	1+074	792	$\mathbf{A}, \mathbf{A}^{DD}, \mathbf{B}, \mathbf{B}^{DD}, \mathbf{C}$	792	$\mathbf{A}, \mathbf{A}^{DD}, \mathbf{B}, \mathbf{B}^{DD}, \mathbf{C}$	774	792	0
	Segment 5 I	NORTH CENTRAL BURNS SE (	Speed 35 MPH)	Conditional and a second s	and the second				No. 2	
9		Alder Avenue East	1+079	264	C	211	С		211	3
	157	Hasbroock Heating	1+151	158		-				
	158	House	1+194							
	Segment 6 I	NORTH_BURNS_NW (Speed 45	MPH)							1987 - Angeles Angeles - A
9	159	House	1+310	370		660	A <sup>DD</sup>		660	3
	160	House	1+421	950	$A, A^{DD}, B, B^{DD}, C$	-				
	163	House	1+712							
		Silvies River (North UGB)	1+735							
	Segment 6 I	NORTH BURNS SE (Speed 45 M	IPH)							
9		Date Avenue South	1+489	475		343			343	4
	161	Village RV Park	1+628	211		-				
	162	Village RV Park	1+699			1	•			
		Silvies River (North UGB)	1+735							
		Footnote:								
	# Does not meet spacing standards for statewide Highways for 'Other', 'UBA', or 'STA'.									
		# A	Meets access spacing standards for statewide Highways for 'Other'.							
		# A <sup>DD</sup>		•	• •		tewide Highways fo	r 'Other'.		
		# B	Meets access spacing standards for statewide Highways for 'UBA'. Meets access driveway deviation spacing standards for statewide Highways for 'UBA'.							
		# B <sup>DD</sup>								
		# C	Meets acce	ss spacing stand	lards for statewide	Highways fo	or 'STA'.			

## TABLE C-2

## US 78 THROUGH HINES AND BURNS COMPARISON TO 1999 OHP ACCESS SPACING STANDARDS FOR REGIONAL HIGHWAY STANDARDS

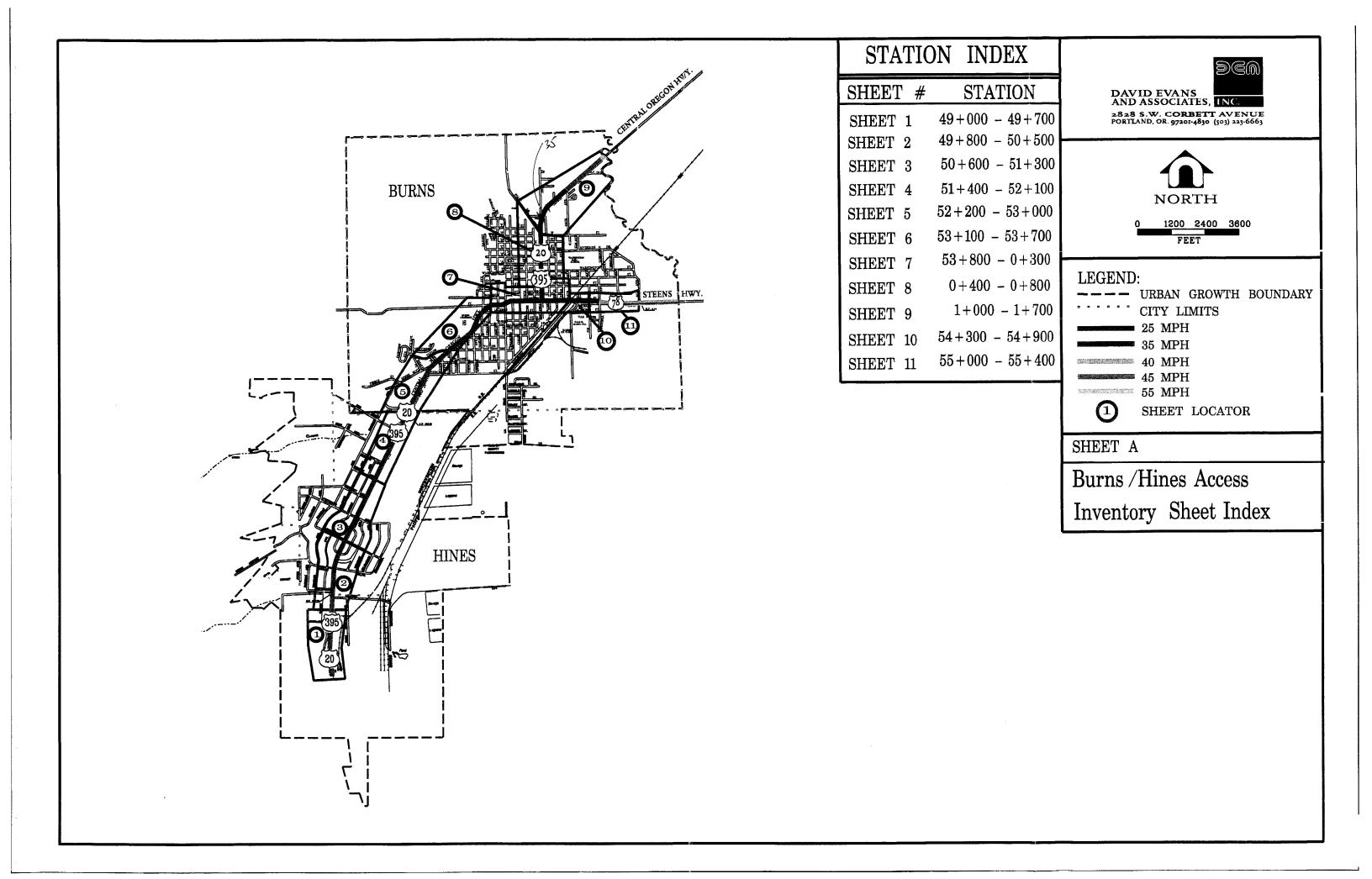
ID	ID	Access / Property Use	Metric Station	Spacing Between Approaches (feet)	Compliance	Average Spacing/ Segment (feet)	Compliance	Block Length (feet)	Average Spacing/ Block (feet)	# Driveways/ Block
10	STANDAR	HNURAL LAST BURNS N (SPER) Broadway Avenue	54+363	125		98		279.000	91	2
10	165	Tuning's Studio	54+401	66						
	166	J&F Auto Body	54+421	89		-				
	100	Alder Avenue	54+448	85		-		279	94	3
	167	Unmarked building	54+474	43						
	169	Lot	54+487	95		-				
	171	Lot	54+516	56		-				
		Birch Avenue	54+533	190	С	-		279	165	1
	175	Junk Yard	54+591	89		-				
		Cedar Avenue	54+618	217	С	-		217	167	0
		Date Avenue	54+684	118		-		348	101	3
	182	House	54+720	75		-				
	183	House	54+743	75		-				
	184	House	54+766	79		-				
		Elm Avenue	54+790	157		-		354	89	3
	190	House	54+838	66		-				
	193	House	54+858	46						
	195	House	54+872	85		-				
		Fir Avenue	54+898							
an a	<b>MARIAN</b> (MARK)	UPSTRICT APPROXIMATION OF CONSIGNATION	a Alimina ( ) ( ) ( ) San Alimina ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (						n an	lan shi dhire
10		Broadway Avenue	54+363	102		71		279.000	122	1
	164	Copeland Lumber	54+394	177	С	-				
		Alder Avenue	54+448	89		-		279	65	4
	168	Harney County Senior Center	54+475	75		-				
	170	Harney County Senior Center	54+498	72		-				
	172	Harney County Senior Center	54+520	20		-				
	173	Harney County Senior Center	54+526	23		-				
		Birch Avenue	54+533	108		-		604	94	7
	174	Vacant lot	54+566	125	and a second second	-				
	176	Powerhouse Restaurant	54+604	46		-	· .			
	177	Powerhouse Restaurant	54+618	26		-				
	178	Powerhouse Restaurant	54+626	46		-				
	179	Houses	54+640	43		-				
	180	Garage	54+653	49		_				

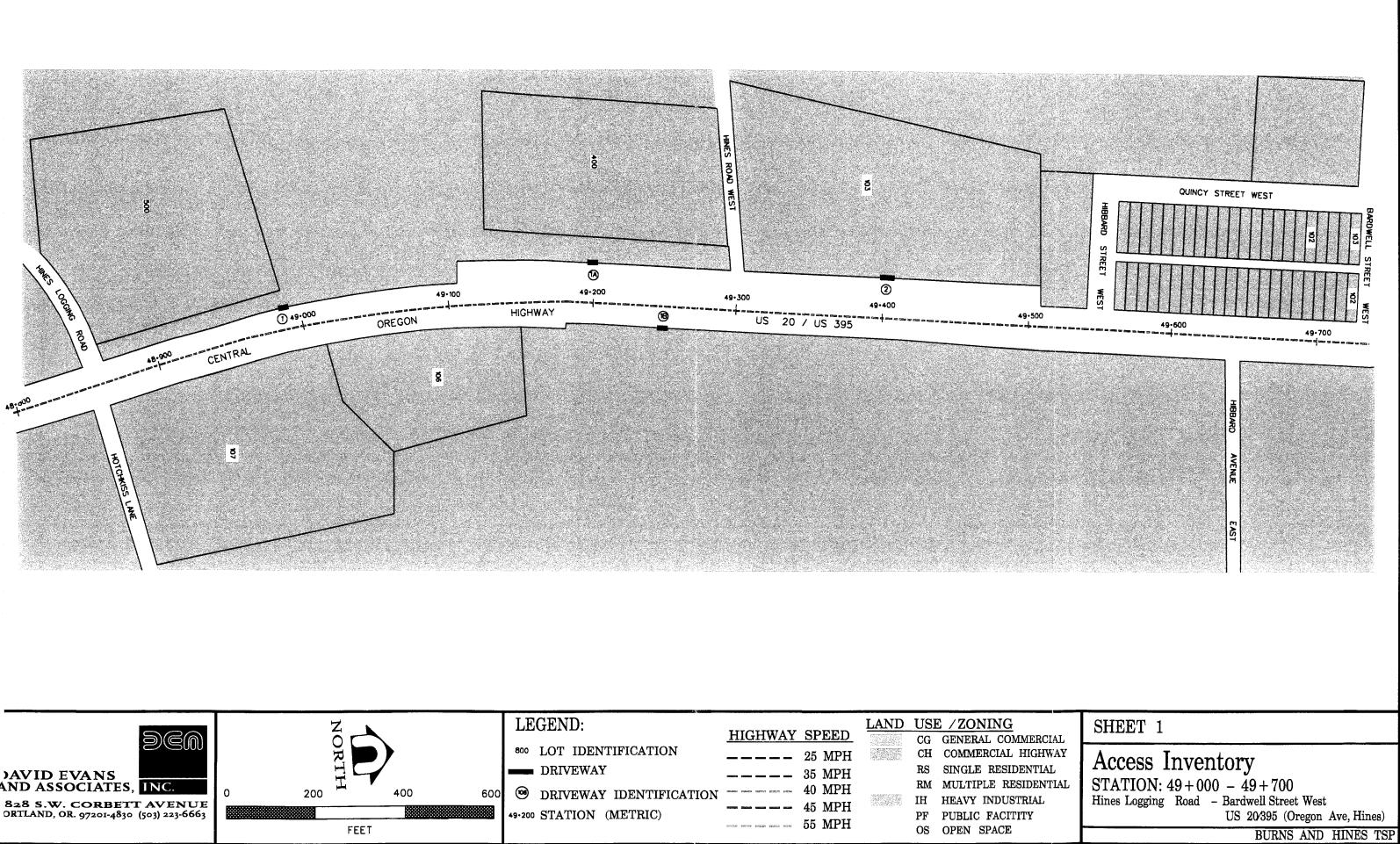
				Spacing Between		Average Spacing/		Block	Average Spacing/	
heet	Driveway	Access /	Metric	Approaches	Compliance	Segment	Compliance	Length	Block	# Driveways/
ID	ID	Property Use	Station	(feet)		(feet)		(feet)	(feet)	Block
	181	Houses	54+668	161		-				
		Railroad Avenue/Crane Boulevard	54+717	240	С	-		240	135	0
		Elm Avenue	54+790	30		-		354	47	11
	185	House	54+799	26		-				
	186	House	54+807	16		-				
	187	House	54+812	16		-				
	188	Garage	54+817	46		-				
	189	House	54+831	46		-				
	191	Yard	54+845	26		-				
	192	House	54+853	26		-				
	194	Garage	54+861	59		-				
	196	House	54+879	62		-				
		Fir Avenue	54+898	167						··· <b>—</b> ··· <b>—</b> ···
11	197	Vacant lot	54+949							
	Segment 8 I	CAST BURNS N (Speed 40 MPH)	den an							
1		Gordonia Avenue	55+001	463		321		738.000	408	1
	198	Houses	55+142	276		-				
		Ivy Avenue	55+226	486		-		725	289	3
	199	Veterinary Clinic	55+374	240		-				
		Koa Avenue	55+447	141						
		Burns City Limits/East UGB	55+490							
e comes	Segment 8 I	ASTEBURNS SI(Speed 40 MPH)								
1		Gordonia Avenue	55+001	400		802		400.000	802	3
		Crane Boulevard	55+123	1204		-				
		Burns City Limits/East UGB	55+490							

Footnote:	
#	Does not meet spacing standards for statewide Highways for 'Other', 'UBA', or 'STA'.
# A	Meets access spacing standards for statewide Highways for 'Other'.
# A <sup>DD</sup>	Meets access driveway deviation spacing standards for statewide Highways for 'Other'.
# B	Meets access spacing standards for statewide Highways for 'UBA'.
# B <sup>DD</sup>	Meets access driveway deviation spacing standards for statewide Highways for 'UBA'.
# C	Meets access spacing standards for statewide Highways for 'STA'.

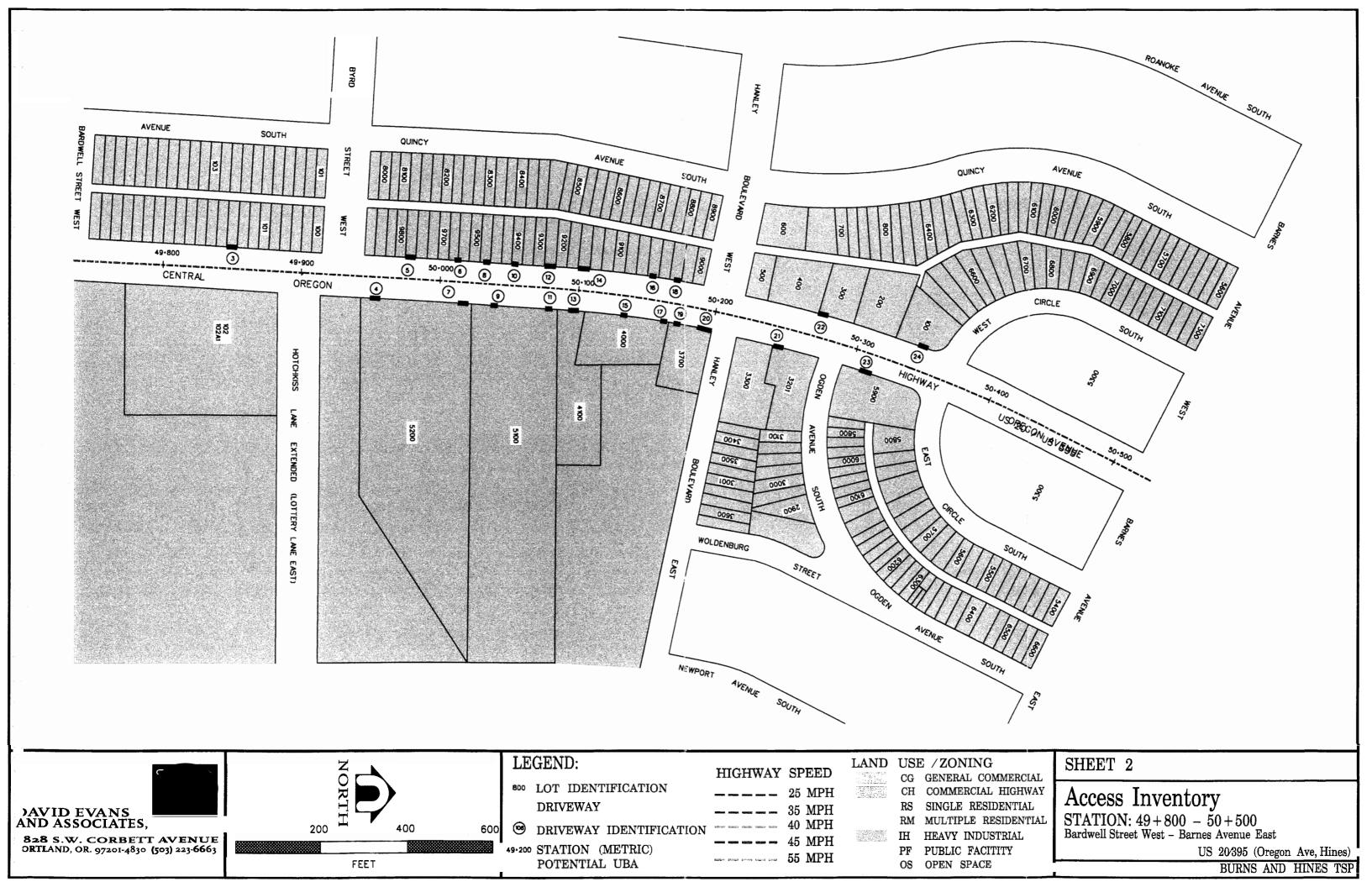
## APPENDIX D

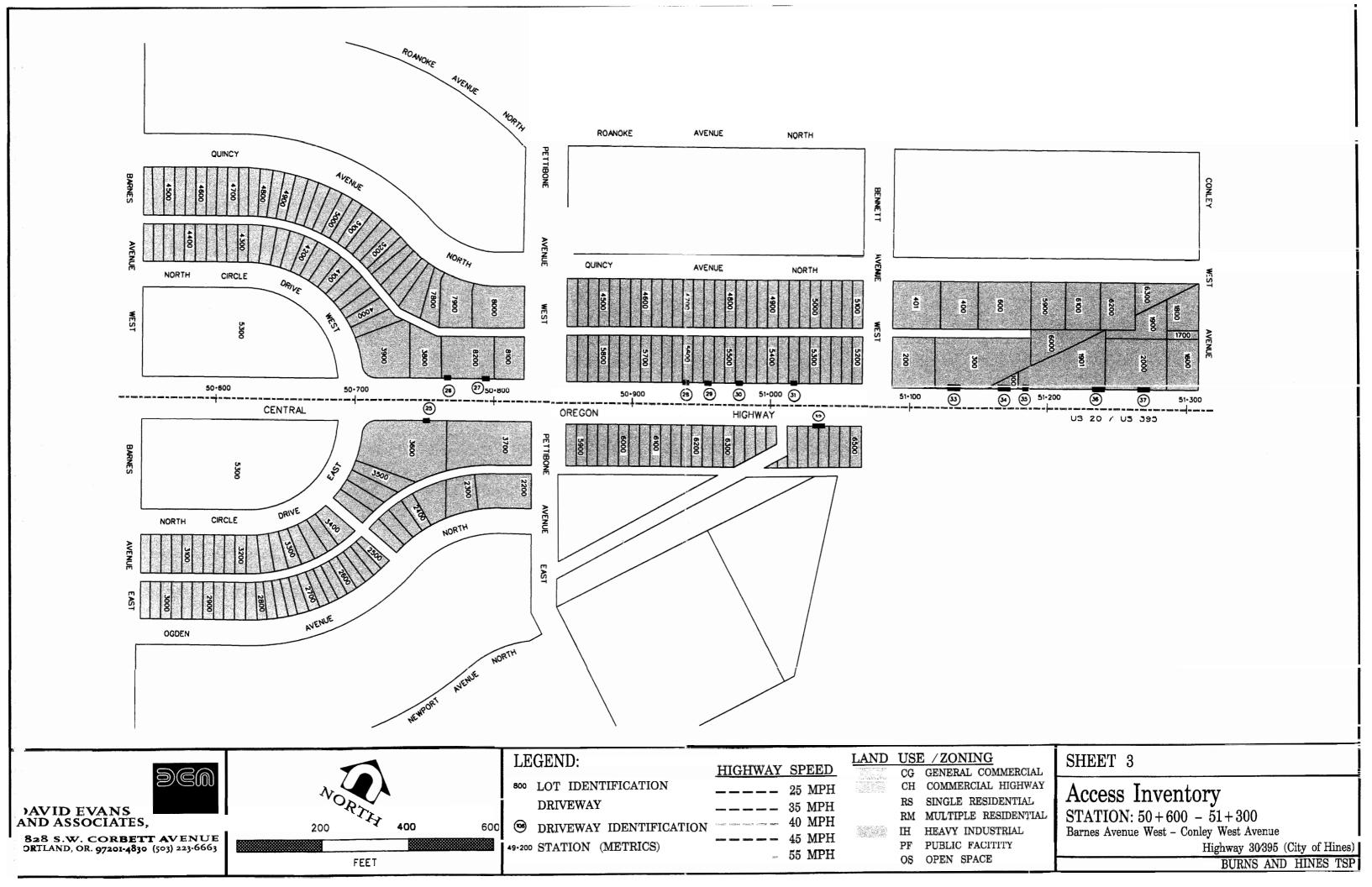
## BURNS AND HINES: ACCESS INVENTORY SHEET A [INDEX] SHEETS 1-11

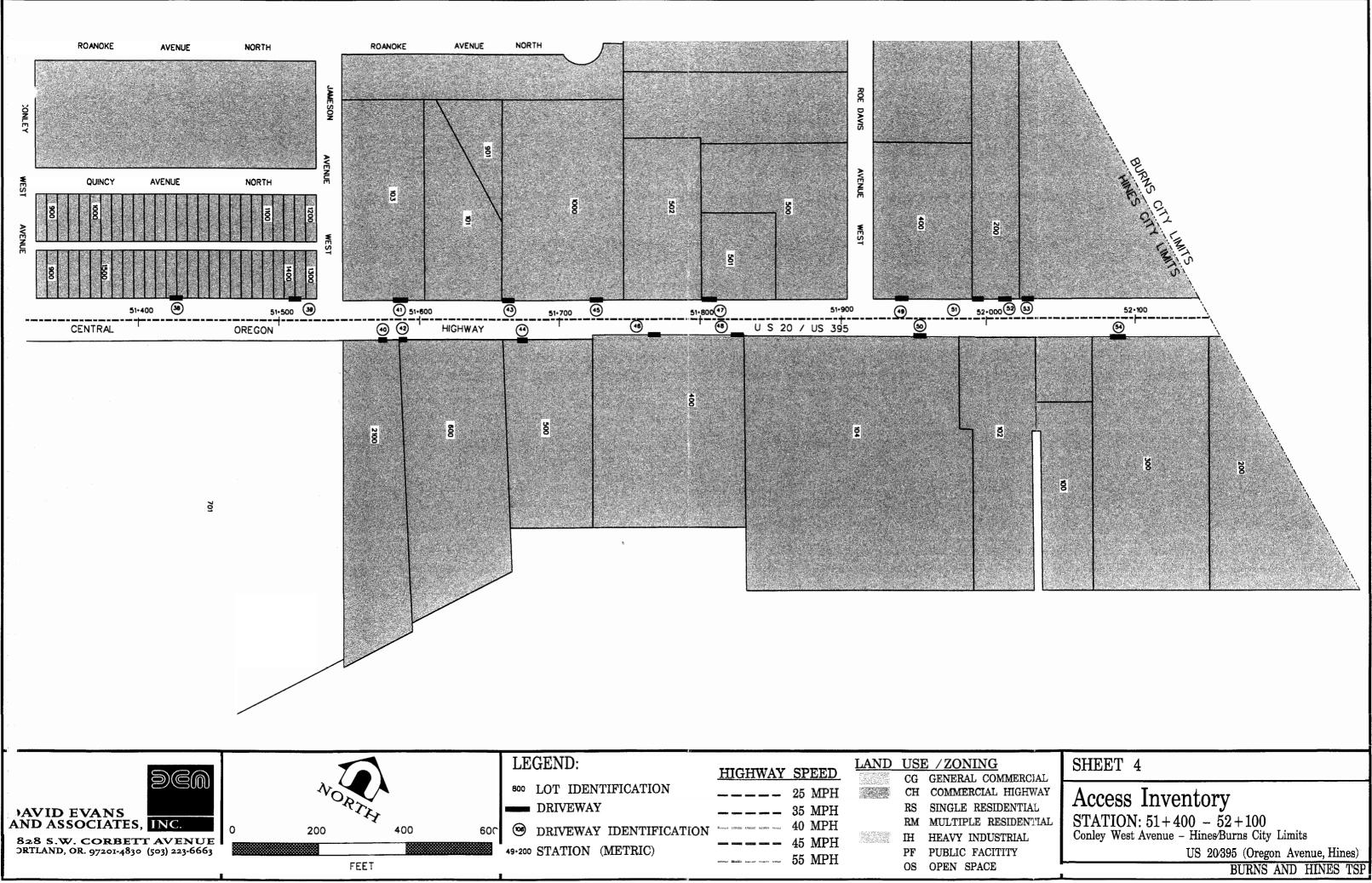


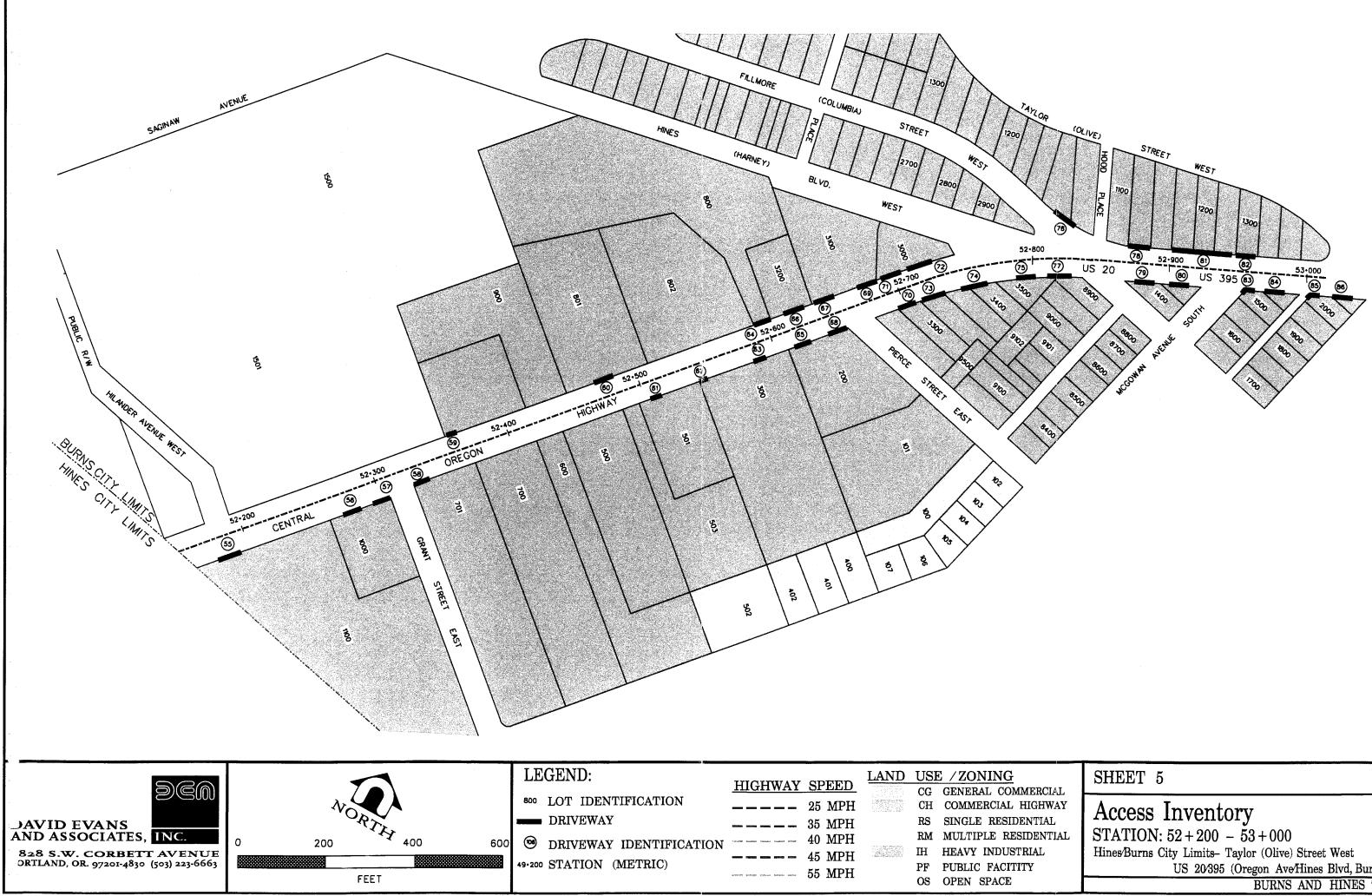


	Z 🔺	LEGEND:	HIGHWAY SPEED	LAND	USE / ZONING
) Jen		800 LOT IDENTIFICATION	25  MPH		CG GENERAL COMMERC CH COMMERCIAL HIGH
AVID EVANS		DRIVEWAY	35 MPH		RS SINGLE RESIDENTL
AND ASSOCIATES, INC.	0 200 400 600	DRIVEWAY IDENTIFICATION	40 MPH	3287-5272	RM MULTIPLE RESIDEN IH HEAVY INDUSTRIAL
828 S.W. CORBETT AVENUE ORTLAND, OR. 97201-4830 (503) 223-6663		49·200 STATION (METRIC)	45 MPH	25125550	PF PUBLIC FACITITY
No.	FEET		100000 AND A REAL AND 55 MPH		OS OPEN SPACE

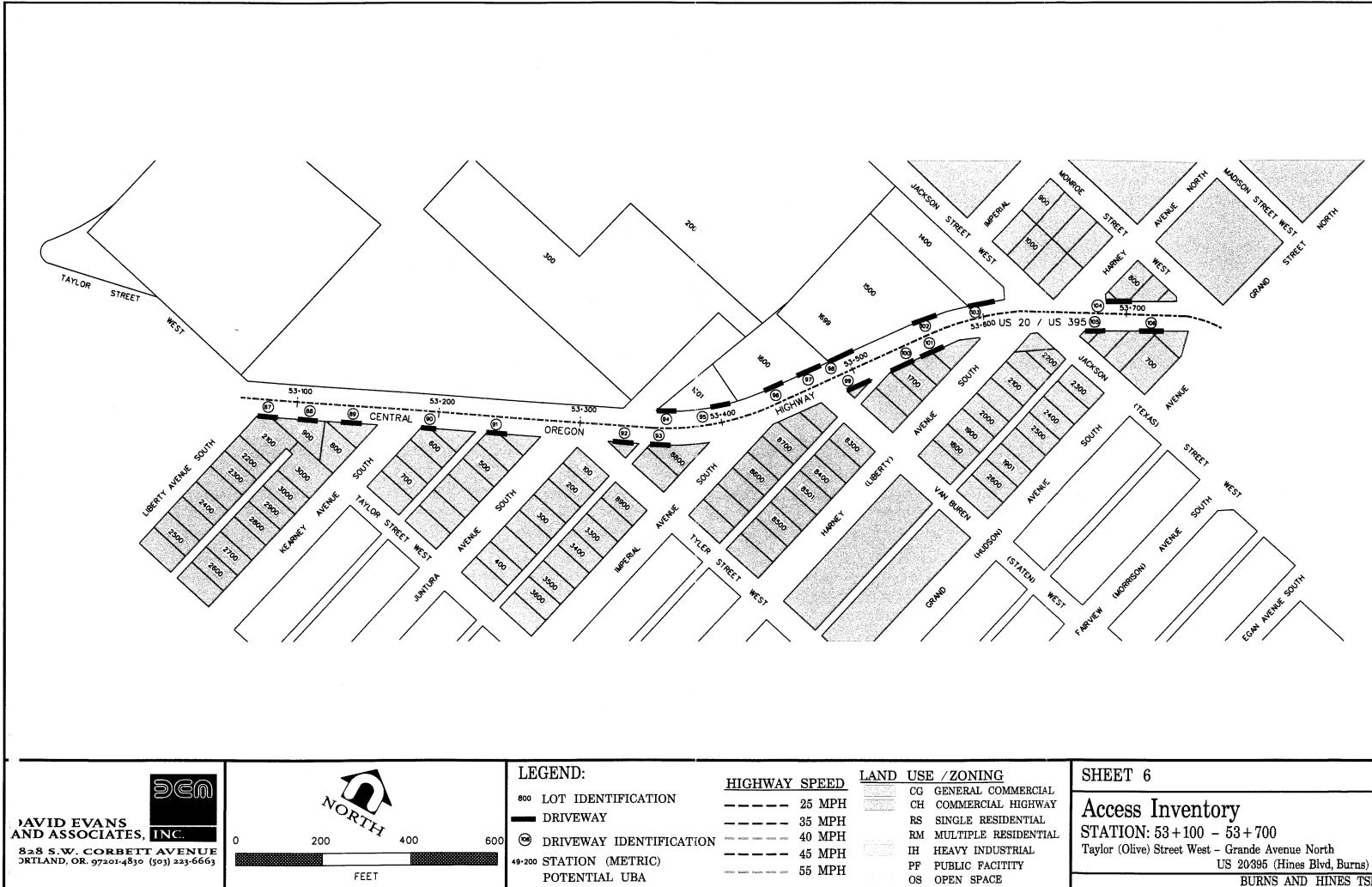








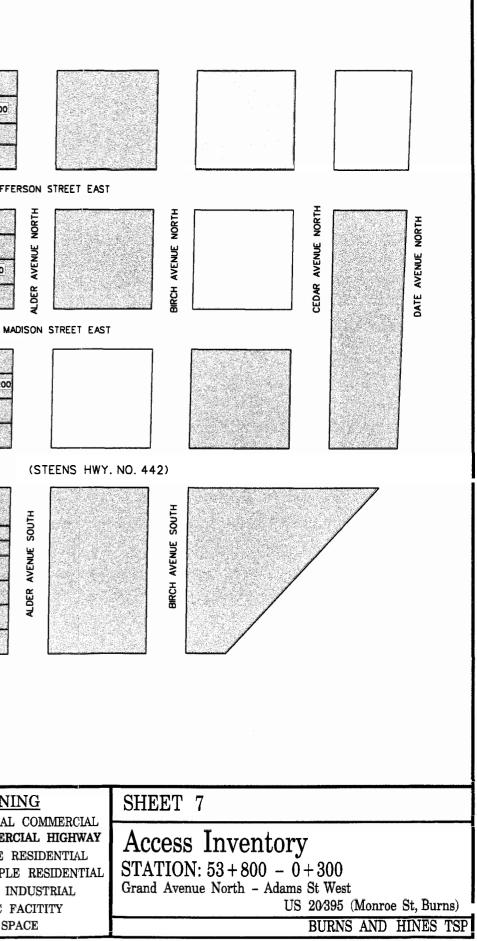
RCLAL	SHEET 5
GHWAY TIAL ENTIAL AL	Access Inventory STATION: 52 + 200 - 53 + 000 Hines/Burns City Limits- Taylor (Olive) Street West US 20/395 (Oregon Ave/Hines Blvd, Burns) BURNS AND HINES TSP

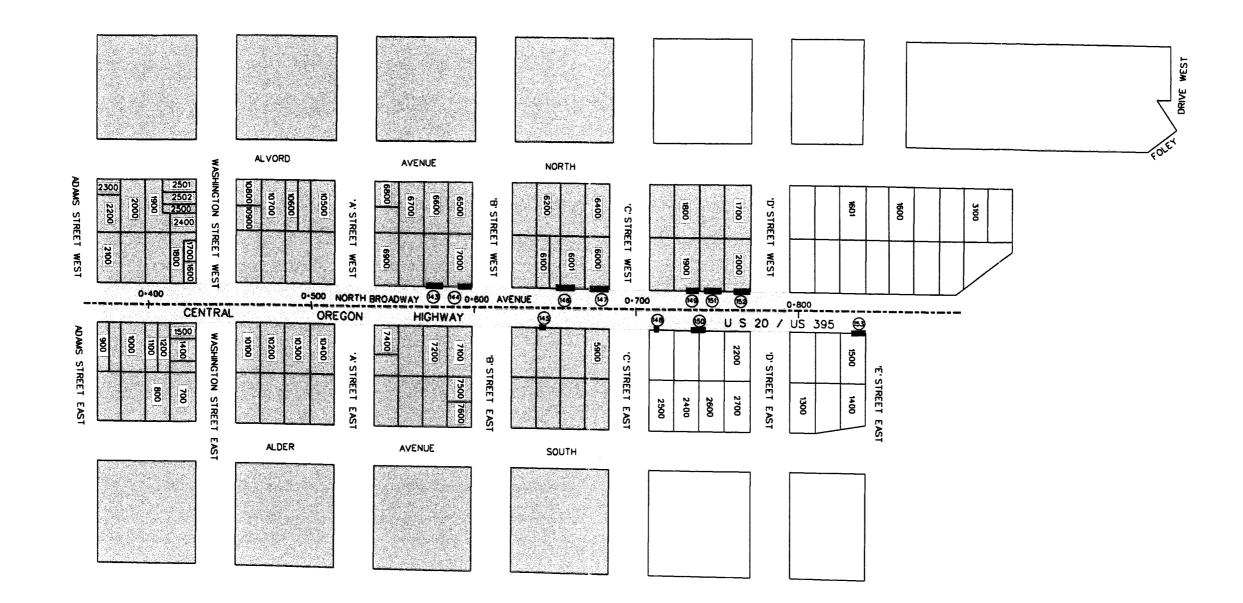


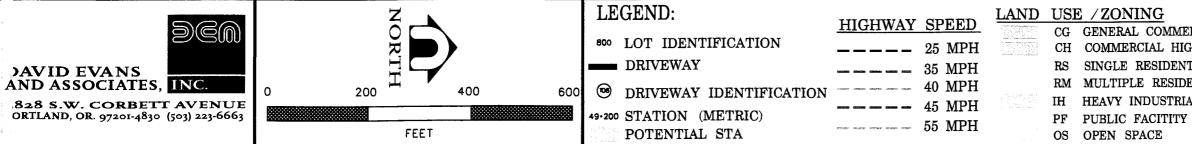
EBOIAI	SHEET 6
ERCIAL IGHWAY NTIAL DENTIAL IAL Y	Access Inventory STATION: 53+100 - 53+700 Taylor (Olive) Street West - Grande Avenue North US 20/395 (Hines Blvd, Burns) BURNS AND HINES TSP

ADAMS STREET WEST 2900 2600 3000 10  $\odot$ 2800 3100 3400 ğ 3200 2700 3300 15 JEFFERSON STREET WEST 18 JEFFERSON STREET EAST NORTH S 6800 NORTH NORTH NOR 6900 NORTH 6700 AVENUE AVENUE NORTH AVENUE NORTH 0 6400 NURTH AVENUE AVENUE AVENUE 6600 6600A1 **@** |**@** 6500 7000 VISTA AVENUE VORD A) ENUE ALDER 200 COURT O Ş BUENA FAIRVIEW GRAND DIAM EGAN MADISON STREET WEST ļ₽ 7900 4800 5000 5300 5400 8000 5600 7100 4900 5500 8100 8200 7800 7200 69 7201 5100 5200 7400 5601 7700 7100 6700 7500 0.0 7300 7500 **0** ® ® 54:000 W. MONROE ST 20 54-100 54·300 @ 16 2 54-200 0 7300 7200 (3354.363 0 1 CENTRAL E. MONROE ST 1 (17) • OREGON 1 SOUTH 6300 6200 SOUTH 6000 6100 5800 09 <u>53</u>-800 00 SOUTH 5700 10300 10100 53.900 SOUTH 10200 SOUTH SOUTH 1 AVENUE SOUTH AVENUE 93 SOUTH SOUTH 1900 1800 1400 AVENUE 1300 600 5700 AVENUE AVENUE AVENUE 500 400 300 200 100 AVENUE 1700 1200 700 800 VISTA 700 AVENUE AVENUE BROADWAY COURT AL VORD 1600 1100 DIAMOND 800 500 900 ALDER 100 600 BUENA **ARVIEW** 600 GRAND EGAN 1500 400 200 1000 900 300 JACKSON STREET WEST

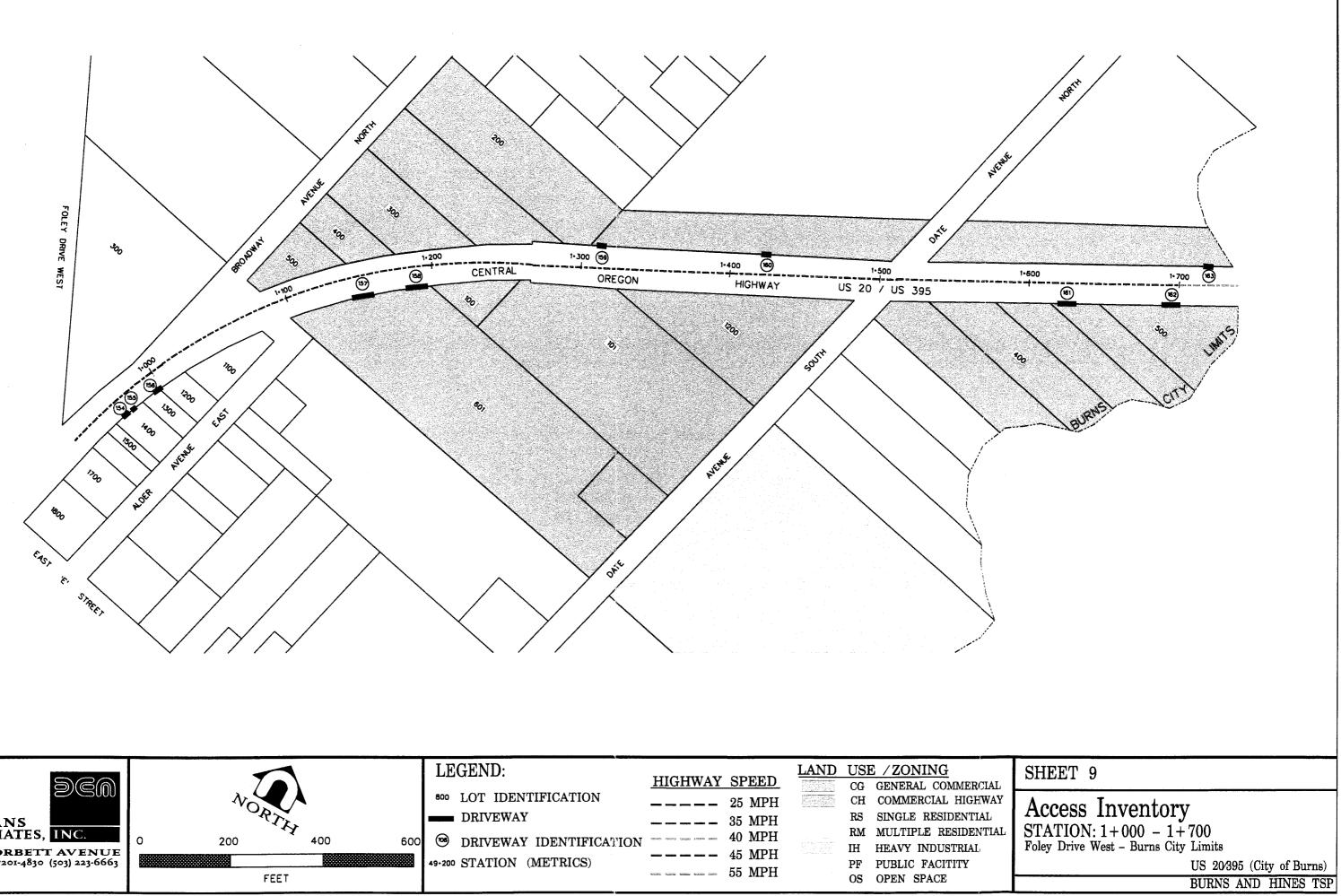
	$\overline{}$	LE	GEND:	HIGHWAY	SDEED	LAND	USI	E / ZONING
)(Em		800	LOT IDENTIFICATION	<u>IIIGHWAI</u>	SPEED		CG	GENERAL COMMEN
			DRIVEWAY		25  MPH		CH	COMMERCIAL HIG
AVID EVANS	NORTH	(106)	DRIVEWAY IDENTIFICATION	Alarma parties and alarma	35 MPH		$\mathbf{RS}$	SINGLE RESIDENT
AND ASSOCIATES,	- 200 400 600	-	STATION (METRIC)	isterior contare standare informa estatut	40 MPH		RM	MULTIPLE RESIDE
828 S.W. CORBETT AVENUE			· · · · · · · · · · · · · · · · · · ·		45 MPH		IH	HEAVY INDUSTRIA
ORTLAND, OR. 97201-4830 (503) 223-6663		P2704	POTENTIAL STA	manna proper Vilgo screen came	55 MPH		PF	PUBLIC FACITITY
	FEET		POTENTIAL UBA	Balan Babar Collo Gran came	50 MII 11		OS	OPEN SPACE



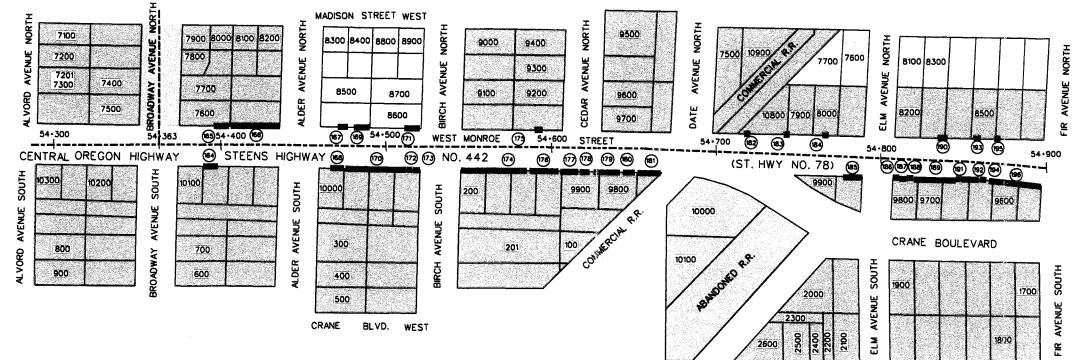




,	
ERCIAL	SHEET 8
GHWAY TIAL ENTIAL AL	Access Inventory STATION: 0+400 - 0+800 Adams Street West - Foley Drive US 20395 (Broadway Ave, Burns) BURNS AND HINES TSP



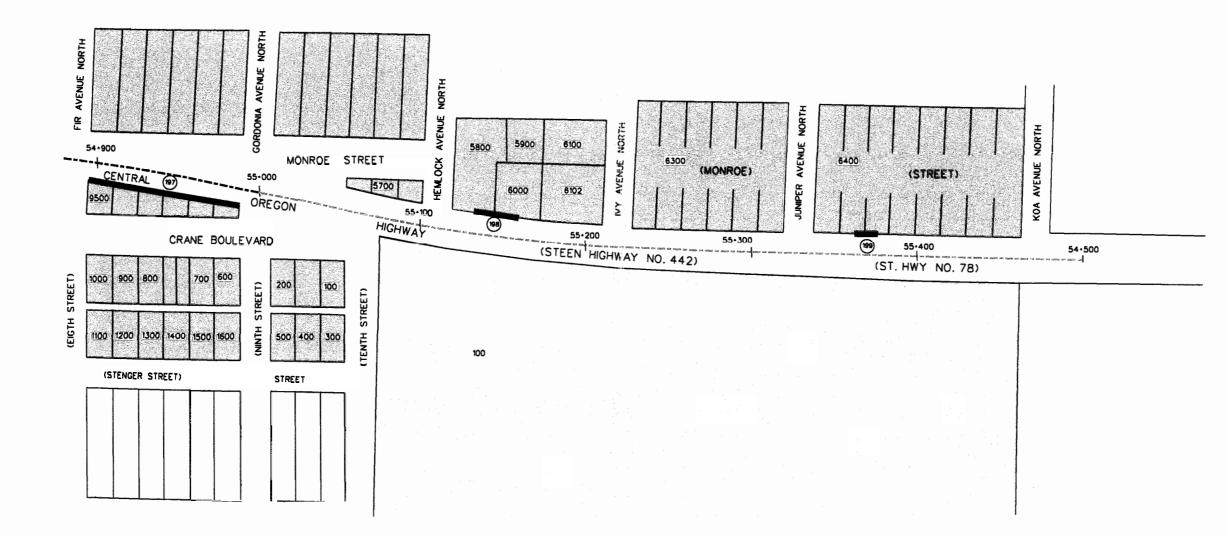
			LEGEND:	HIGHWAY SPEED	177.000 to 10000	USE / ZONING
	) Den		800 LOT IDENTIFICATION	25 MPH		CG GENERAL COMMEN
	OAVID EVANS	RIA	DRIVEWAY	35 MPH	ang padi binan kabanan ta	RS SINGLE RESIDENT
	AND ASSOCIATES, INC.	0 200 400 600	ORIVEWAY IDENTIFICATION			RM MULTIPLE RESIDE
	.828 S.W. CORBETT AVENUE ORTLAND, OR. 97201-4830 (503) 223-6663		49-200 STATION (METRICS)	45 MPH		PF PUBLIC FACITITY
ľ		FEET		55 MPH		OS OPEN SPACE

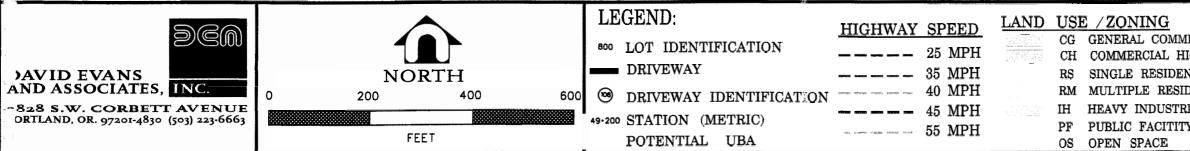


AVID EVANS AND ASSOCIATES, ^828 S.W. CORBETT AVENUE DRTLAND, OR. 97201-4830 (503) 223-6663 FEET	LEGEND: 800 LOT IDENTIFICATIONHIGHWAY SPEEDDRIVEWAY 25 MPHImage: Driveway identification 35 MPH49·200 STATION (METRIC) 40 MPHPOTENTIAL STA 45 MPHPOTENTIAL UBA55 MPH		USE / ZONING CG GENERAL COMMER CH COMMERCIAL HIGH RS SINGLE RESIDENTI RM MULTIPLE RESIDEN IH HEAVY INDUSTRIAL PF PUBLIC FACITITY OS OPEN SPACE
---	---	--	---

	1700	
18/20		

RCIAL HWAY FIAL ENTIAL L	SHEET 10
	Access Inventory STATION: 54 + 300 - 54 + 900 Alvord Avenue North - Fir Avenue North OR 78 (Monroe St, Burns)
	BURNS AND HINES TSP





ERCIAL	
GHWAY	
ITIAL	
DENTIAL	
IAL	
Y	

SHEET 11

Access Inventory STATION: 55+000 - 55+400 Fir Avenue North - Koa Avenue North

OR 78 (City of Burns)

BURNS AND HINES TSP