ATTACHMENT C

Summary of Freeway and Local Arterial Operations

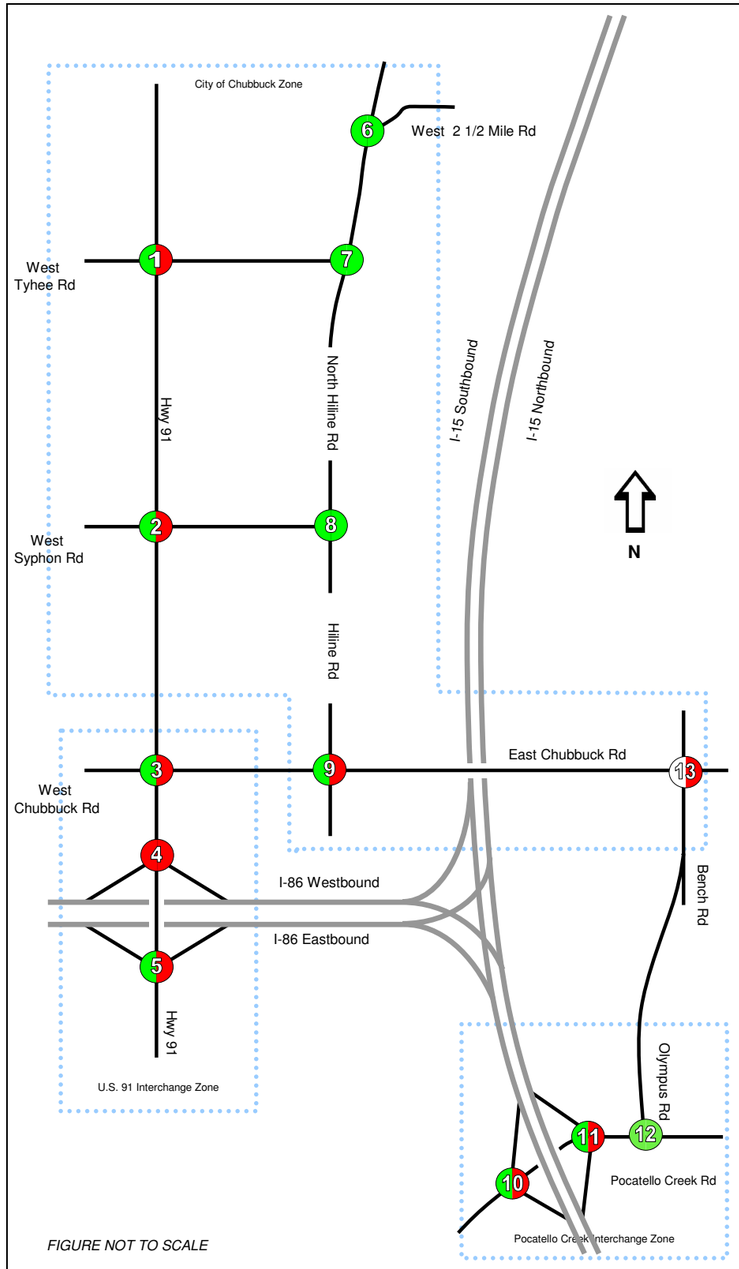


FIGURE NOT TO SCALE

NOTES

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2004 Existing	AWSC	11.0	B
2030 No Build	AWSC	>100	F

70	***540***	***30***		15	***45***
25	190	10		25	***70***
				25	***70***
55	20				
55	20		40	255	60
85	30		***110***	***720***	***170***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2004 Existing	AWSC	20.0	C
2030 No Build	AWSC	>100	F

45	***875***	***45***		25	***70***
15	315	15		15	***45***
				40	***110***
30	10				
50	25		85	405	40
155	55		***235***	***1125***	***110***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2004 Existing	SIGNAL	32.0	C
2030 No Build	SIGNAL	>100	F

105	***1020***	***160***		105	***225***
55	535	85		140	***345***
				150	***325***
105	55				
210	110		325	700	190
450	234		***620***	***1330***	***410***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2004 Existing	SIGNAL	43.0	D
2030 No Build	SIGNAL	>100	F

85	***1730***				
45	910			300	***580***
				310	***600***
			95	850	
			190	***1710***	

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2004 Existing	SIGNAL	12.0	B
2030 No Build	SIGNAL	>100	F

1960	***370***				
1010	195				
190	95				
230	115		885	390	
			1710	***760***	

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2004 Existing	TWSC	9.0	A
2030 No Build	SIGNAL	5.0	A

135	***15***				
45	5		5	***15***	
			25	***60***	
			50	50	
			150	***160***	

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2004 Existing	TWSC	10	A
2030 No Build	TWSC	19.0	C

70	***140***				
25	50				
100	35				
110	40		45	85	
			125	***235***	

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2004 Existing	TWSC	11	B
2030 No Build	TWSC	19.0	C

30	***280***				
10	100				
55	20				
170	60		75	115	
			210	***335***	

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2004 Existing	SIGNAL	26.0	C
2030 No Build	SIGNAL	36.0	D

45	***250***	***85***		30	***85***
15	90	30		165	***460***
				85	***235***
100	40				
395	160		230	140	135
355	145		***495***	***390***	***375***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2004 Existing	SIGNAL	19.0	B
2030 No Build	SIGNAL	51.0	D

	375	***450***			
	225	265		890	***1505***
				350	***595***
1755	1045				
300	180				

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2004 Existing	SIGNAL	19.0	B
2030 No Build	SIGNAL	67.0	E

				165	***275***
				765	***1290***
400	240				
1805	1070		480	255	
			810	***435***	

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2004 Existing	SIGNAL	13.0	B
2030 No Build	SIGNAL	20.0	B

870	***25***	***100***		45	***75***
520	15	60		290	***485***
				15	***25***
1405	840				
835	500		70	25	20
60	35		***120***	***45***	***35***

LEGEND

2030 No Build					***2030 No Build***
2004 Existing					2004 Existing
2030 No Build					
2004 Existing					
2030 No Build					
2004 Existing					
2030 No Build					
2004 Existing					

Peak Hour Turning Volumes

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2004 Existing	TWSC	N/A	N/A
2030 No Build	SIGNAL	72.0	E

175	***175***	***10***		N/A	***10***
N/A	N/A	N/A		N/A	***55***
				N/A	***55***
160	N/A				
55	N/A		300	N/A	N/A
600	260		***600***	***190***	***65***

14

Space Reserved for Build Concepts

15

Space Reserved for Build Concepts

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL Signalized intersection

AWSC All-way stop controlled intersection

TWSC Two-way stop controlled intersection

LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number

8

2004 Existing

2030 No Build

Intersection not applicable

LOS A - C

LOS D - F

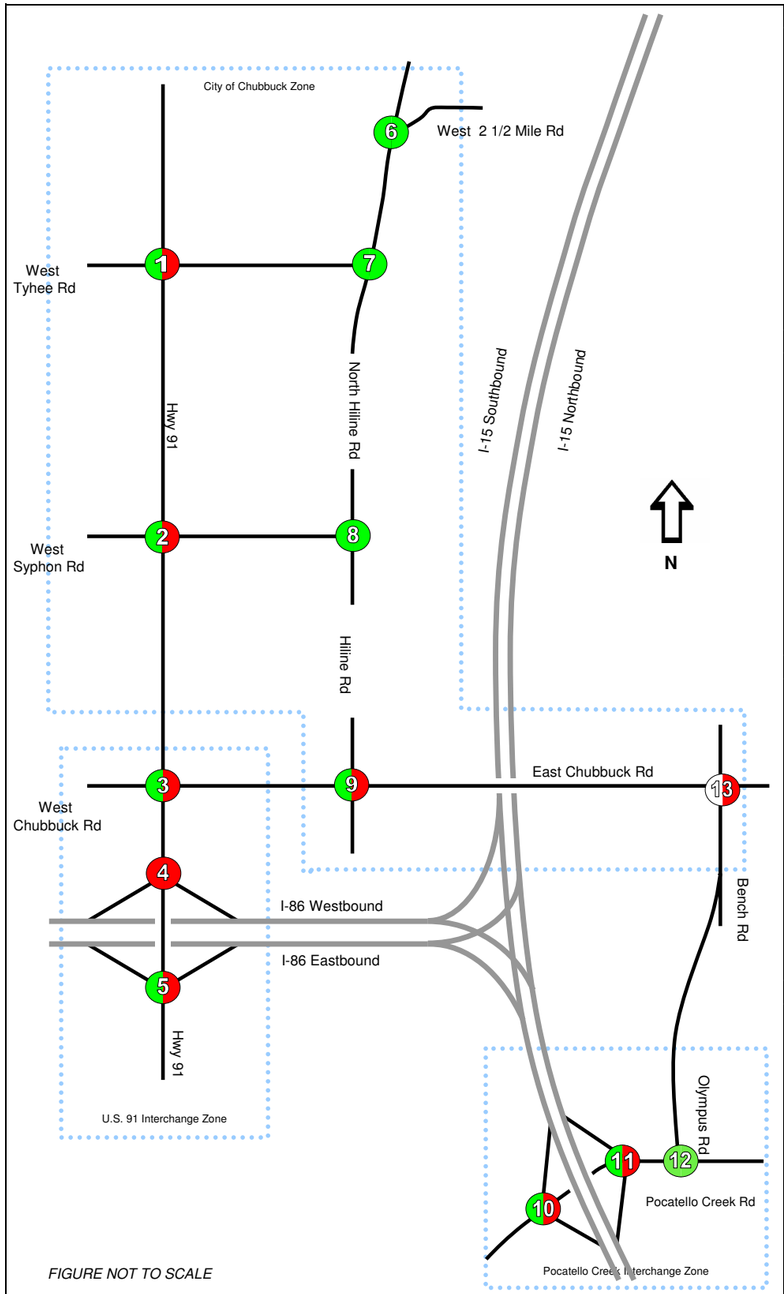
FIGURE 1

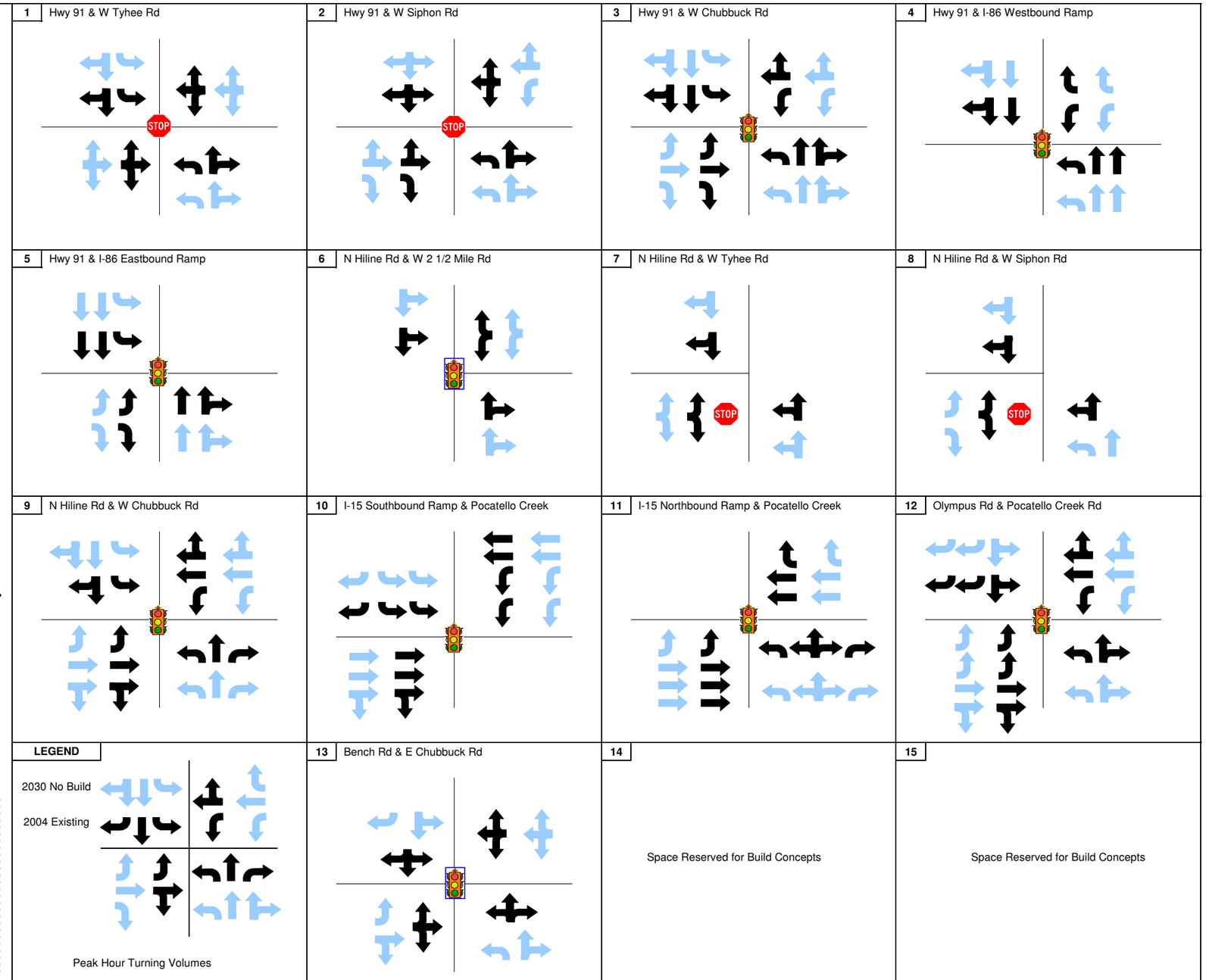
Local Study Area Intersection Volumes & LOS

2004 Existing and 2030 No Build Conditions

I-15 Pocatello Environmental Study

CH2MHILL





NOTES

- 2030 No Build Channelization
- 2004 Existing Lane Channelization
- Stop-controlled Intersection / Approach
- Signalized Intersection
- Intersection is Signalized as part of 2030 No Build

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL Signalized intersection
- AWSC All-way stop controlled intersection
- TWSC Two-way stop controlled intersection
- LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number
2004 Existing
2030 No Build

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 2

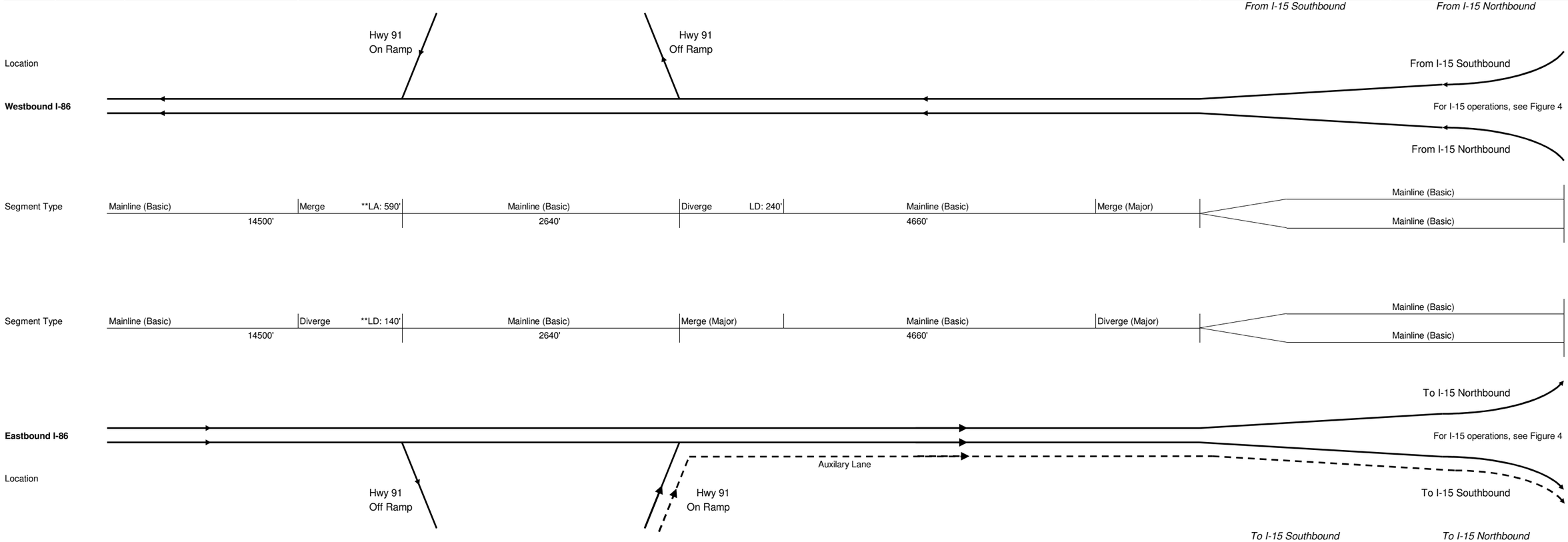
Local Study Area Intersection Channelization

2004 Existing and 2030 No Build Conditions

I-15 Pocatello Environmental Study

CH2MHILL

2004 Existing	**LOS**	A	A	A	B	A	N/A	See I-15 SB	See I-15 NB
	Density	5.8	7.4	4.5	13.3	10.3	N/A	See I-15 SB	See I-15 NB
	Volume	610	140	470	620	1090	N/A	325	765
2030 No Build	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1330	275	1055	1180	2235	N/A	665	1570
								From I-15 Southbound	*From I-15 Northbound*



								To I-15 Southbound	*To I-15 Northbound*
2004 Existing	**LOS**	A	A	A	B	A	N/A	See I-15 SB	See I-15 NB
	Density	5.7	9.2	3.7	11.5	9.3	N/A	See I-15 SB	See I-15 NB
	Volume	600	205	395	580	975	N/A	685	290
2030 No Build	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.5	8.4	N/A	12.5	N/A	See I-15 SB	See I-15 NB
	Volume	1290	420	870	1130	2000	N/A	1405	595

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- Existing and No Build lane configuration
- No Build lane configuration
- Existing lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane

N

Not to Scale

FIGURE 3

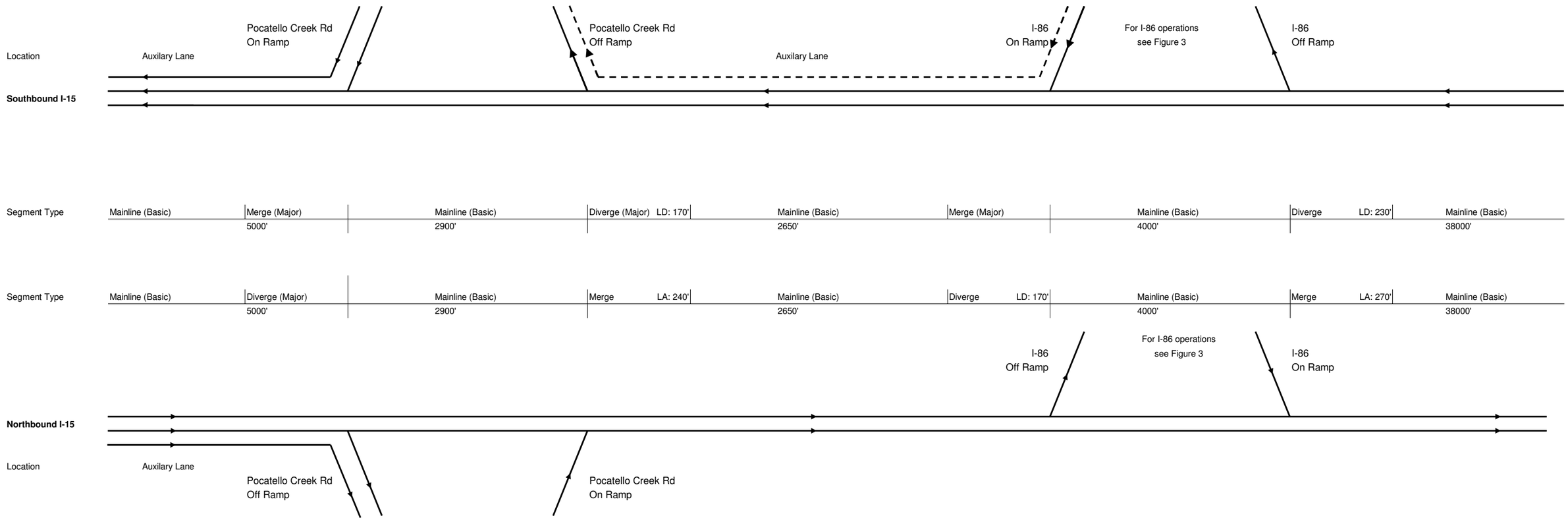
I-86 Freeway Operations

2004 Existing and 2030 No Build Conditions

I-15 Pocatello Environmental Study

CH2MHILL

2004 Existing	**LOS**	A	N/A	A	B	B	B	A	B	A
	Density	8.2	N/A	7.6	16.0	12.3	14.9	5.8	11.8	8.9
	Volume	1330	525	805	490	1295	685	610	325	935
2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5
	Volume	2730	895	1835	825	2660	1405	1255	665	1920



2004 Existing	**LOS**	A	N/A	A	B	B	B	A	B	A
	Density	10.7	N/A	9.5	16.8	17.2	17.2	6.1	12.3	8.8
	Volume	1740	735	1005	400	1405	765	640	290	930
2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- Existing and No Build lane configuration
- No Build lane configuration
- Existing lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 4

I-15 Freeway Operations

2004 Existing and 2030 No Build Conditions

I-15 Pocatello Environmental Study

CH2MHILL

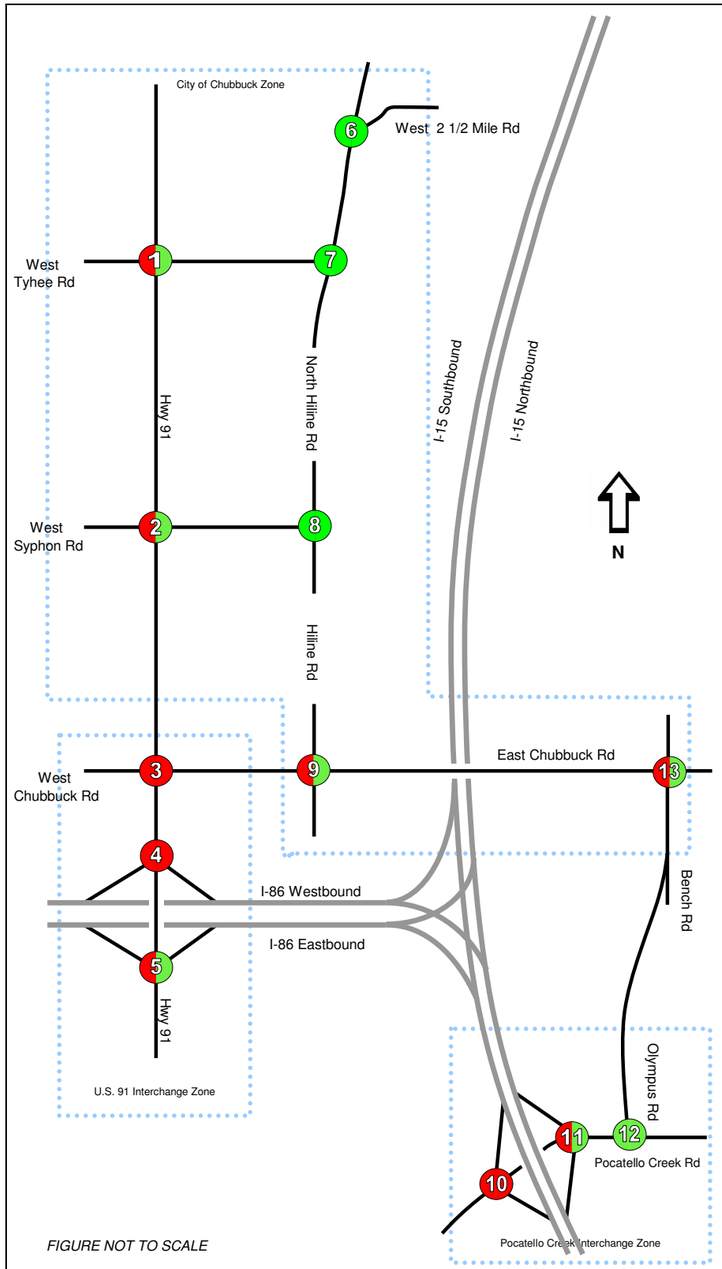


FIGURE NOT TO SCALE

NOTES

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB	AWSC	>100	F
2030 NB TSM	SIGNAL	28.0	C

	2030 NB	***2030 NB TSM***
Left	70	***70***
Thru	540	***540***
Right	30	***30***
Left	45	***45***
Thru	70	***70***
Right	70	***70***
Left	55	***55***
Thru	55	***55***
Right	85	***85***
Left	110	***110***
Thru	720	***720***
Right	170	***170***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB	AWSC	>100	F
2030 NB TSM	SIGNAL	31.0	C

	2030 NB	***2030 NB TSM***
Left	45	***45***
Thru	875	***875***
Right	45	***45***
Left	70	***70***
Thru	45	***45***
Right	110	***110***
Left	30	***30***
Thru	50	***50***
Right	155	***155***
Left	235	***235***
Thru	1125	***1125***
Right	110	***110***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	>100	F
2030 NB TSM	SIGNAL	36.0	D

	2030 NB	***2030 NB TSM***
Left	105	***105***
Thru	1020	***1020***
Right	160	***160***
Left	225	***225***
Thru	345	***345***
Right	325	***325***
Left	105	***105***
Thru	210	***210***
Right	450	***450***
Left	620	***620***
Thru	1330	***1330***
Right	410	***410***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	>100	F
2030 NB TSM	SIGNAL	41.0	D

	2030 NB	***2030 NB TSM***
Thru	85	***85***
Thru	1730	***1730***
Right	85	***85***
Thru	1730	***1730***
Left	580	***580***
Right	600	***600***
Left	190	***190***
Thru	1710	***1710***

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	>100	F
2030 NB TSM	SIGNAL	23.0	C

	2030 NB	***2030 NB TSM***
Thru	1960	***1960***
Right	370	***370***
Thru	1960	***1960***
Right	370	***370***
Left	190	***190***
Right	230	***230***
Thru	1710	***1710***
Right	760	***760***

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	5.0	A
2030 NB TSM	SIGNAL	5.0	A

	2030 NB	***2030 NB TSM***
Thru	135	***135***
Right	15	***15***
Thru	135	***135***
Right	15	***15***
Left	15	***15***
Right	60	***60***
Thru	150	***150***
Right	160	***160***

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB	TWSC	19.0	C
2030 NB TSM	TWSC	19.0	C

	2030 NB	***2030 NB TSM***
Thru	70	***70***
Left	140	***140***
Thru	70	***70***
Left	140	***140***
Thru	100	***100***
Right	110	***110***
Left	125	***125***
Right	235	***235***

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB	TWSC	19.0	C
2030 NB TSM	TWSC	19.0	C

	2030 NB	***2030 NB TSM***
Thru	30	***30***
Left	280	***280***
Thru	30	***30***
Left	280	***280***
Thru	55	***55***
Right	170	***170***
Left	210	***210***
Right	335	***335***

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	36.0	D
2030 NB TSM	SIGNAL	30.0	C

	2030 NB	***2030 NB TSM***
Left	45	***45***
Thru	250	***250***
Right	85	***85***
Left	45	***45***
Thru	250	***250***
Right	85	***85***
Left	85	***85***
Thru	460	***460***
Right	235	***235***
Thru	100	***100***
Right	395	***395***
Left	355	***355***
Left	495	***495***
Thru	390	***390***
Right	375	***375***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	51.0	D
2030 NB TSM	SIGNAL	36.0	D

	2030 NB	***2030 NB TSM***
Thru	375	***375***
Right	450	***450***
Thru	375	***375***
Right	450	***450***
Left	1505	***1505***
Right	595	***595***
Thru	1755	***1755***
Right	300	***300***

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	67.0	E
2030 NB TSM	SIGNAL	29.0	C

	2030 NB	***2030 NB TSM***
Left	275	***275***
Left	1290	***1290***
Thru	400	***400***
Thru	1805	***1805***
Left	810	***810***
Right	435	***435***

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	20.0	B
2030 NB TSM	SIGNAL	22.0	C

	2030 NB	***2030 NB TSM***
Thru	870	***870***
Left	25	***25***
Right	100	***100***
Left	870	***870***
Thru	25	***25***
Right	100	***100***
Left	75	***75***
Thru	485	***485***
Right	25	***25***
Thru	1405	***1405***
Right	835	***835***
Left	60	***60***
Thru	1405	***1405***
Right	835	***835***
Left	60	***60***
Left	120	***120***
Thru	45	***45***
Right	35	***35***

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB	SIGNAL	72.0	E
2030 NB TSM	SIGNAL	30.0	C

	2030 NB	***2030 NB TSM***
Thru	175	***175***
Thru	175	***175***
Right	10	***10***
Left	175	***175***
Thru	175	***175***
Right	10	***10***
Left	10	***10***
Thru	55	***55***
Right	55	***55***
Thru	160	***160***
Right	55	***55***
Left	600	***600***
Thru	600	***600***
Left	600	***600***
Thru	190	***190***
Right	65	***65***

14

Space Reserved for Build Concepts

15

Space Reserved for Build Concepts

LEGEND

2030 NB TSM
2030 NB

Peak Hour Turning Volumes

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL	Signalized intersection
AWSC	All-way stop controlled intersection
TWSC	Two-way stop controlled intersection
LOS	Level of Service of Intersection, based on approach delay in seconds

Intersection Number

8

2030 NB — 2030 NB TSM

	Intersection not applicable
	LOS A - C
	LOS D - F

FIGURE 5

Local Study Area Intersection Volumes & LOS

2030 No Build and 2030 No Build TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

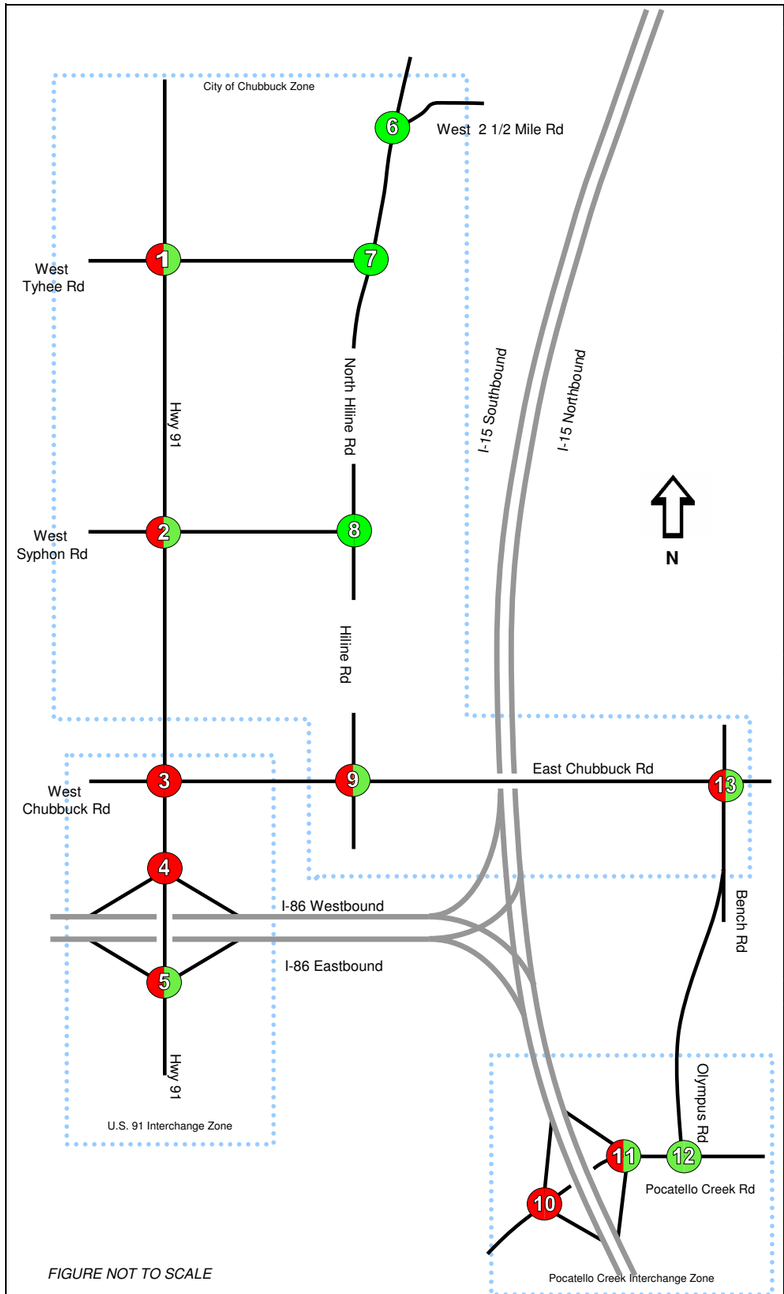
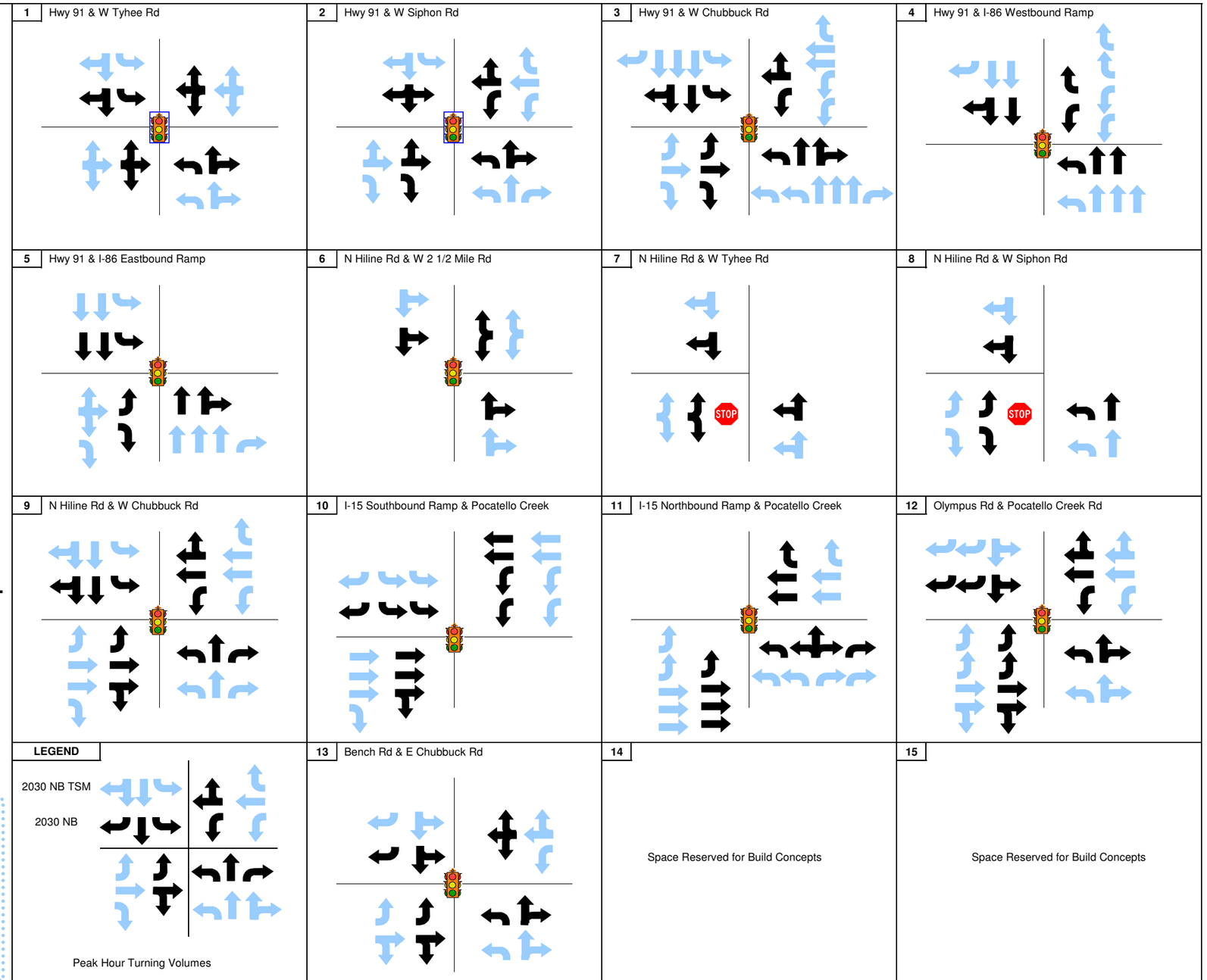


FIGURE NOT TO SCALE



NOTES

- 2030 No Build TSM
- 2030 No Build Channelization
- STOP Stop-controlled Intersection / Approach
- Signalized Intersection
- Intersection is Signalized as part of 2030 NB TSM

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL Signalized intersection
- AWSC All-way stop controlled intersection
- TWSC Two-way stop controlled intersection
- LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number
8
2030 NB
2030 NB TSM

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 6

Local Study Area Intersection Channelization

2030 No Build and 2030 No Build TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

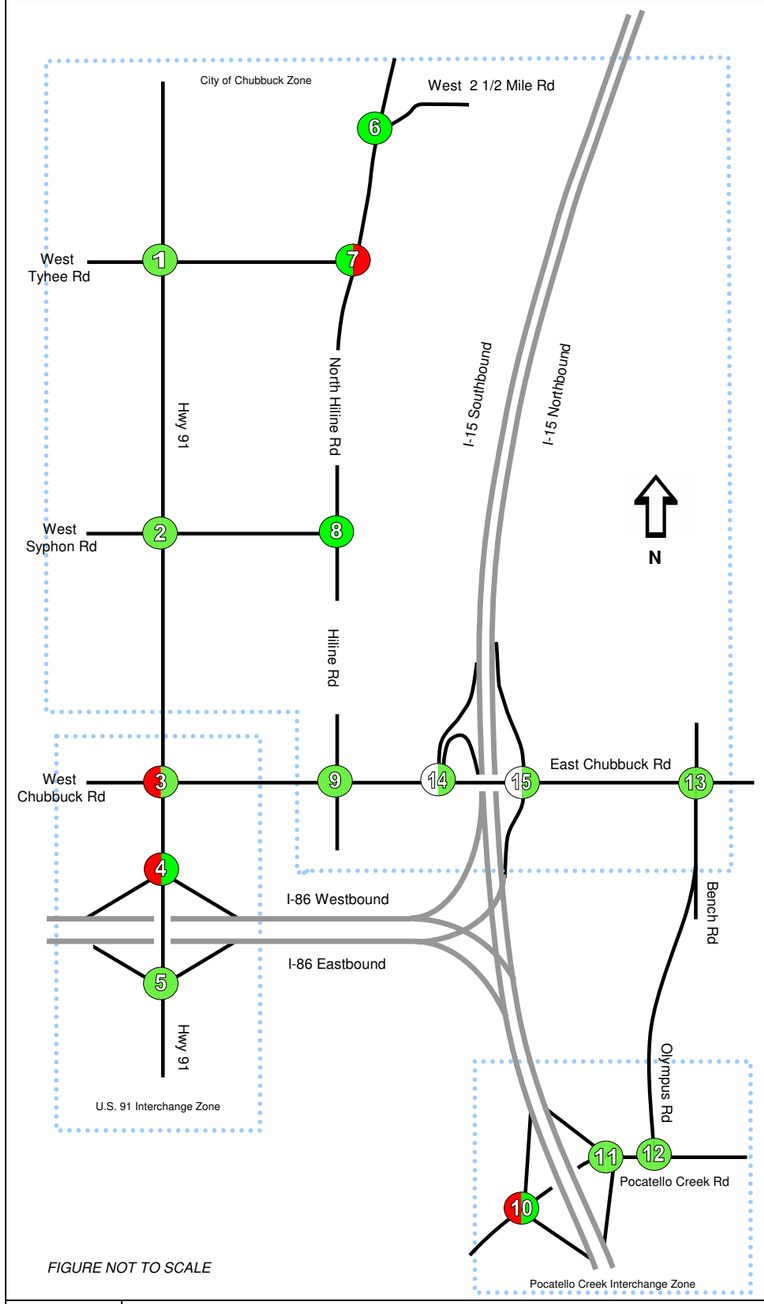


FIGURE NOT TO SCALE

NOTES

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	28.0	C
Conc. 11 TSM	SIGNAL	27.0	C

70	***525***	***30***		45	***45***
70	540	30		70	***70***
				70	***65***
55	55				
55	55		110	720	170
110	85		***130***	***690***	***165***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	31.0	C
Conc. 11 TSM	SIGNAL	35.0	C

45	***855***	***90***		70	***75***
45	875	45		45	***55***
				110	***110***
30	30				
60	50		235	1125	110
145	155		***230***	***1090***	***110***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 11 TSM	SIGNAL	33.0	C

105	***920***	***220***		225	***325***
105	1020	160		345	***395***
				325	***250***
105	105				
265	210		620	1330	410
410	450		***550***	***1155***	***330***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	41.0	D
Conc. 11 TSM	SIGNAL	30.0	C

60	***1575***				
85	1730			580	***300***
				600	***600***
			190	1710	
			190	***1670***	

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	23.0	C
Conc. 11 TSM	SIGNAL	15.0	B

1960	***215***				
1960	370				
150	190				
230	230		1710	760	
			1710	***760***	

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	5.0	A
Conc. 11 TSM	SIGNAL	6.0	A

160	***15***				
135	15		15		***15***
			60		***100***
			150	160	
			180	***215***	

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 11 TSM	TWSC	33.0	D

70	***205***				
70	140				
100	100				
140	110		125	235	
			160	***320***	

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 11 TSM	TWSC	22.0	C

30	***355***				
30	280				
55	55				
215	170		210	335	
			225	***335***	

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 11 TSM	SIGNAL	28.0	C

50	***250***	***215***		85	***215***
45	250	85		460	***615***
				235	***190***
85	100				
515	395		495	390	375
345	355		***490***	***390***	***275***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 11 TSM	SIGNAL	32.0	C

	375	***475***			
	375	450		1505	***1455***
				595	***520***
1755	1755				
275	300				

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	29.0	C
Conc. 11 TSM	SIGNAL	25.0	C

				275	***300***
				1290	***1215***
400	400				
1830	1805		810	435	
			760	***260***	

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	22.0	C
Conc. 11 TSM	SIGNAL	17.0	B

795	***25***	***100***		75	***75***
870	25	100		485	***445***
				25	***25***
1280	1405				
800	835		120	45	35
60	60		***120***	***45***	***35***

LEGEND

	Conc. 11 TSM			2030 NB TSM	***Conc. 11 TSM***
	2030 NB TSM				
Conc. 11 TSM	2030 NB TSM				
				2030 NB TSM	
				Conc. 11 TSM	

Peak Hour Turning Volumes

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 11 TSM	SIGNAL	21.0	C

125	***165***	***10***		10	***10***
175	175	10		55	***40***
				55	***55***
245	160				
75	55		600	240	15
475	600		***360***	***165***	***60***

14 Chubbuck Rd & I-15 Southbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 11 TSM	SIGNAL	21	C

	195	***35***			
	N/A	N/A		N/A	***25***
				N/A	***1075***
420	N/A				
735	N/A				

15 Chubbuck Rd & I-15 Northbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 11 TSM	SIGNAL	18	B

				N/A	***30***
				N/A	***535***
170	N/A				
565	N/A		N/A	N/A	
			565	***250***	

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL Signalized intersection

AWSC All-way stop controlled intersection

TWSC Two-way stop controlled intersection

LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number

2030 NB TSM — 8 — Conc. 11 TSM

Intersection not applicable

LOS A - C

LOS D - F

FIGURE 7

Local Study Area Intersection Volumes & LOS

2030 No Build TSM and 2030 Concept 11 TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

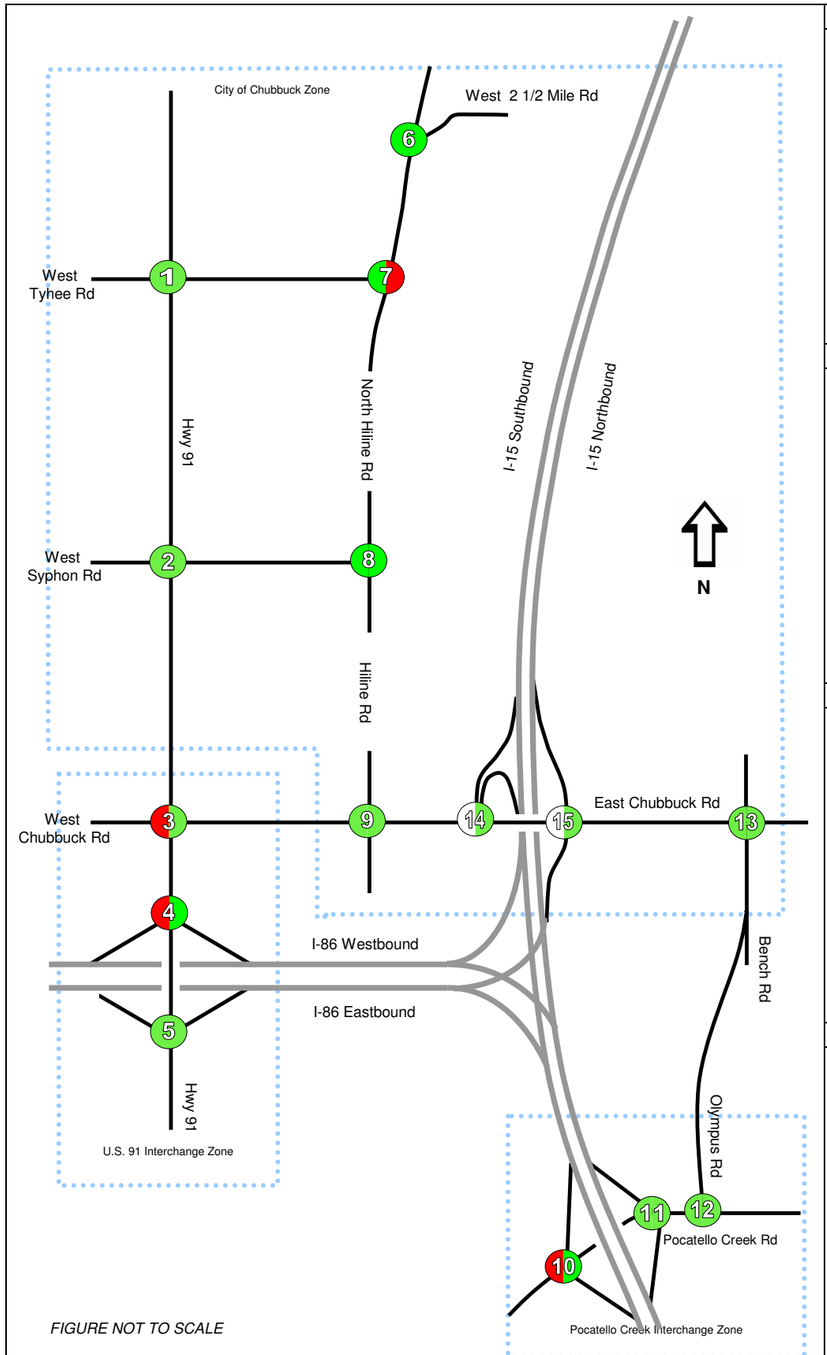
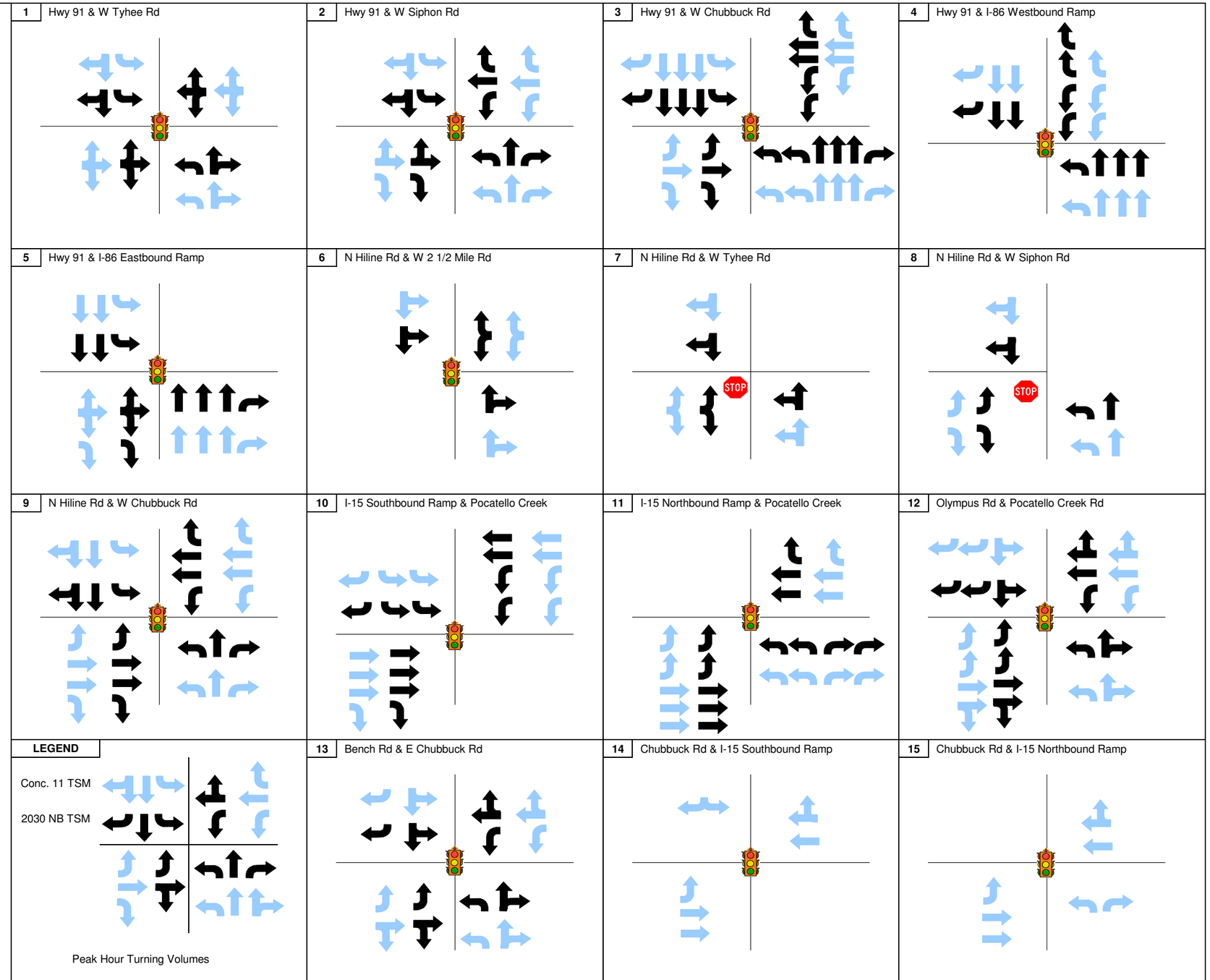


FIGURE NOT TO SCALE



NOTES

- 2030 Conc. 11 Channelization
- 2030 No Build TSM
- STOP Stop-controlled Intersection / Approach
- Signalized Intersection
- Intersection is Signalized as part of Concept 11

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL Signalized intersection
- AWSC All-way stop controlled intersection
- TWSC Two-way stop controlled intersection
- LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number
8
2030 NB TSM
Conc. 11 TSM

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 8

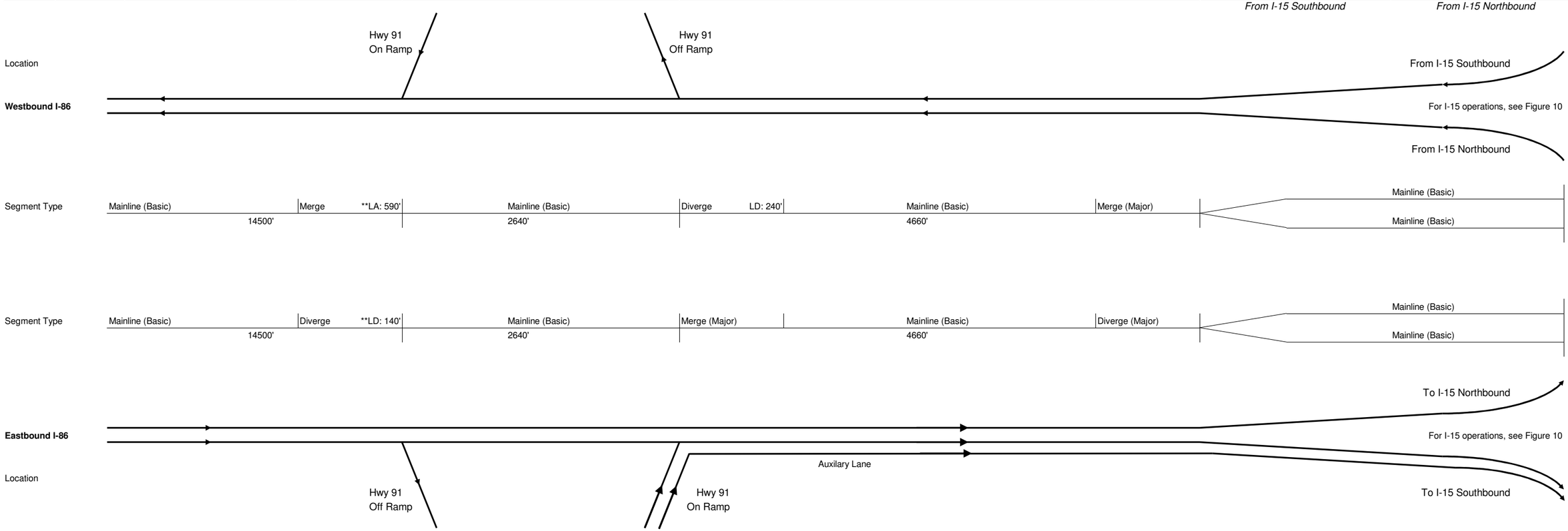
Local Study Area Intersection Channelization

2030 No Build TSM and 2030 Concept 11 TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1330	275	1055	1180	2235	N/A	665	1570
2030 Conc. 11	**LOS**	B	B	C	C	C	N/A	See I-15 SB	See I-15 NB
	Density	13.9	15.3	11.5	23.9	20.1	N/A	See I-15 SB	See I-15 NB
	Volume	1440	250	1190	900	2090	N/A	565	1525
								From I-15 Southbound	*From I-15 Northbound*



								To I-15 Southbound	*To I-15 Northbound*
2030 No Build	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.5	8.4	N/A	12.5	N/A	See I-15 SB	See I-15 NB
	Volume	1290	420	870	1130	2000	N/A	1405	595
2030 Conc. 11	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.1	16.1	8.5	N/A	11.6	N/A	See I-15 SB	See I-15 NB
	Volume	1260	380	880	975	1855	N/A	1205	650

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 11 lane configuration
- 2030 Concept 11 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane

N

Not to Scale

FIGURE 9

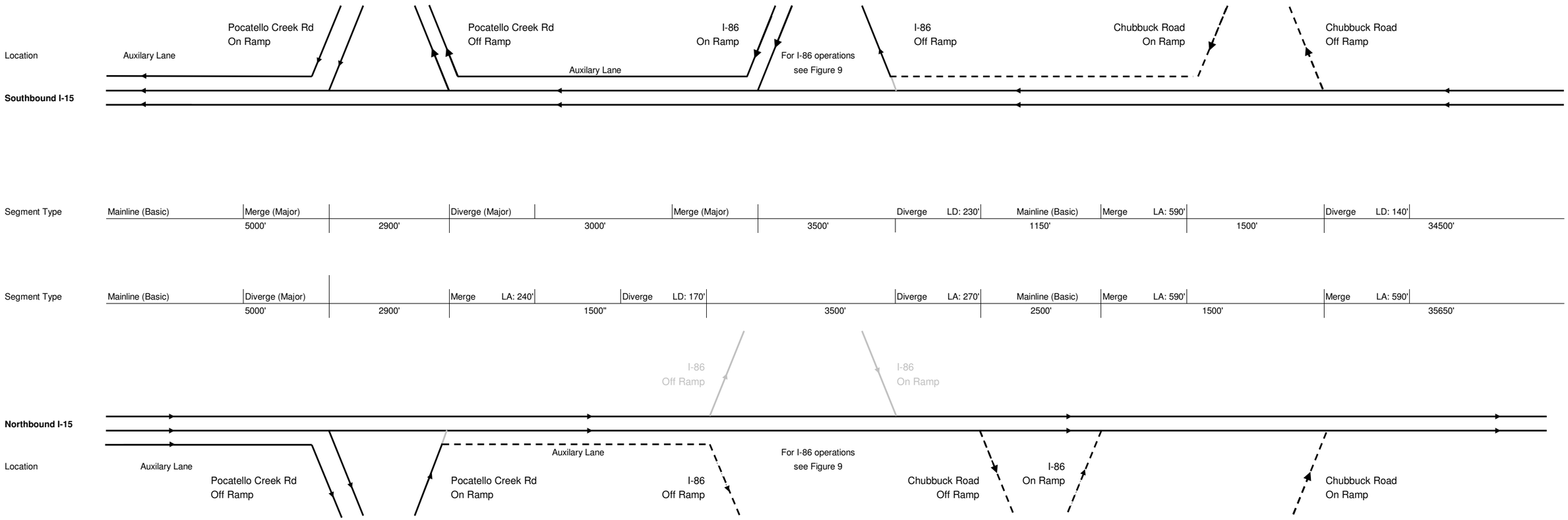
I-86 Freeway Operations

2030 No Build Conditions and 2030 Concept 11

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 11	**LOS**	B	N/A	C	N/A	B	N/A	B	B			B	C	C
	Density	17.1	N/A	18.5	N/A	17.4	N/A	15.1	17.3			16.3	22.7	18.5
	Volume	2720	795	1925	850	2775	1205	1570	565	2135	445	1690	230	1920



2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 11	**LOS**	C	N/A	C	D			B	B	A	B	B	B	B
	Density	22.5	N/A	24.7	33.8			16.7	19.9	10.8	16.4	15.2	18.8	17.1
	Volume	3585	1020	2565	700	3265	1525	1740	620	1120	455	1575	200	1775

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 11 lane configuration
- 2030 Concept 11 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 10

I-15 Freeway Operations

2030 No Build Conditions and 2030 Concept 11

I-15 Pocatello Environmental Study

CH2MHILL

I-15TrafficAnalysisCombined_TS_011807.xls: F_10_I-15

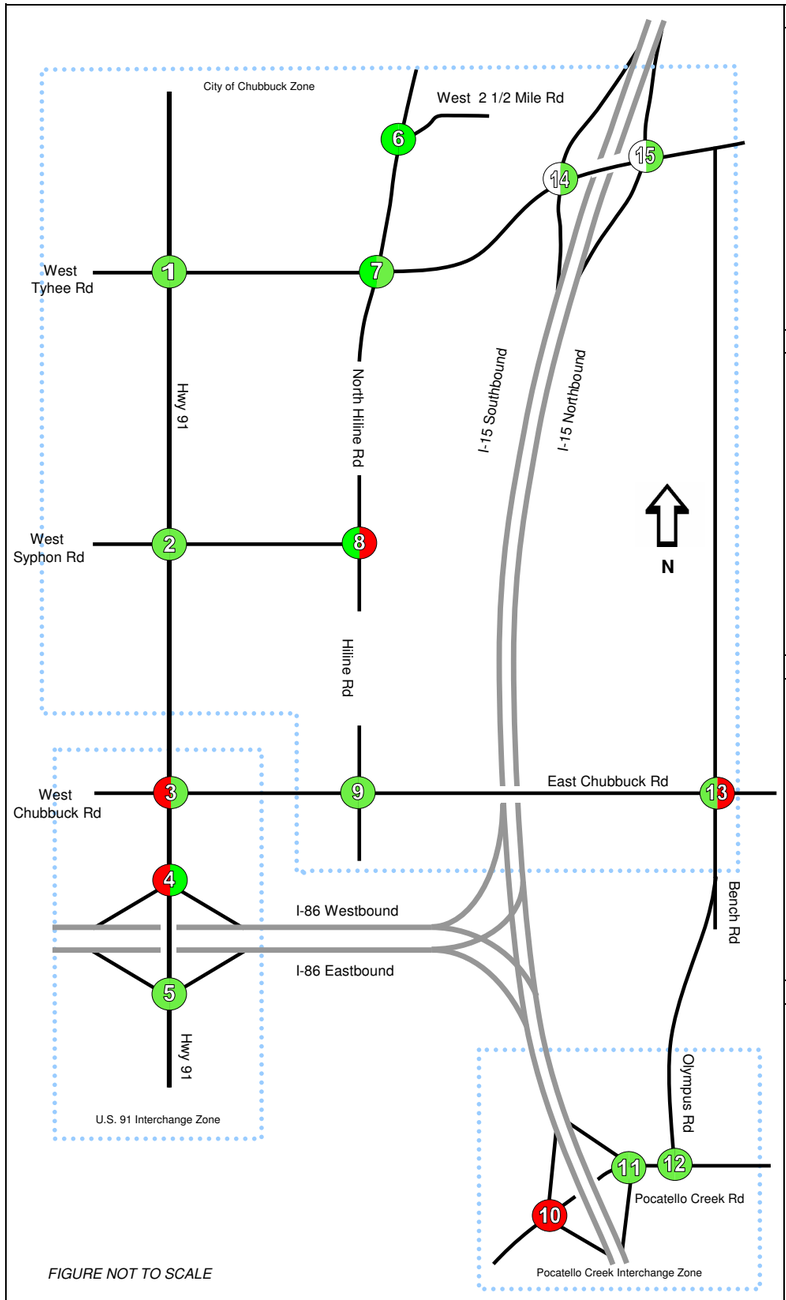


FIGURE NOT TO SCALE

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	28.0	C
Conc. 12C TSM	SIGNAL	27.0	C

70	***495***	***75***		45	***110***
70	540	30		70	***150***
				70	***75***
55	55				
155	55			110	720	170
75	85			***100***	***675***	***170***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	31.0	C
Conc. 12C TSM	SIGNAL	30.0	C

45	***810***	***45***		70	***70***
45	875	45		45	***70***
				110	***130***
30	30				
80	50			235	1125	110
120	155			***195***	***1055***	***135***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 12C TSM	SIGNAL	33.0	C

105	***860***	***160***		225	***225***
105	1020	160		345	***345***
				325	***300***
105	105				
210	210			620	1330	410
380	450			***545***	***1160***	***385***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	41.0	D
Conc. 12C TSM	SIGNAL	25.0	C

85	***1445***			580	***280***
85	1730			600	***600***
				190	1710
				190	***1710***

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	23.0	C
Conc. 12C TSM	SIGNAL	14.0	B

	1960	***85***			
	1960	370			
190	190			1710	760
230	230			***###***	***760***

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	5.0	A
Conc. 12C TSM	SIGNAL	5.0	A

	260	***15***			
	135	15		15	***15***
				60	***55***
				150	160
				240	***155***

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 12C TSM	SIGNAL	22.0	C

70	***135***	***125***		N/A	***90***
N/A	70	140		N/A	***205***
				N/A	***80***
100	100				
210	110			125	235	N/A
110	N/A			***125***	***230***	***75***

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 12C TSM	TWSC	52.0	F

	80	***310***			
	30	280			
115	55				
170	170			210	335
				210	***355***

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 12C TSM	SIGNAL	32.0	C

50	***260***	***95***		85	***85***
45	250	85		460	***455***
				235	***235***
95	100				
390	395			495	390	375
345	355			***495***	***400***	***375***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 12C TSM	SIGNAL	42.0	D

	450	***515***			
	375	450		1505	***1480***
				595	***550***
1755	1755				
280	300				

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	29.0	C
Conc. 12C TSM	SIGNAL	30.0	C

				275	***275***
				1290	***1245***
435	400				
1835	1805			810	435
				785	***425***

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	22.0	C
Conc. 12C TSM	SIGNAL	20.0	B

845	***25***	***100***		75	***75***
870	25	100		485	***485***
				25	***25***
1380	1405				
835	835			120	45	35
60	60			***120***	***45***	***35***

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 12C TSM	SIGNAL	40.0	D

	175	***205***	***20***		
	175	175	10		10	***10***
					55	***55***
					55	***55***
165	160				
55	55			600	190	65
590	600			***590***	***225***	***60***

14 W Tyhee Rd & I-15 Southbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 12C TSM	TWSC	18	C

	130	***45***			
	N/A	N/A		N/A	***475***
				N/A	***5***
130	N/A				
505	N/A				

15 W Tyhee Rd & I-15 Northbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 12C TSM	SIGNAL	14	B

				N/A	***40***
				N/A	***5***
140	N/A				
5	N/A			N/A	N/A
				475	***5***

LEGEND

	Conc. 12C TSM			2030 NB TSM	***Conc. 12C TSM***
	2030 NB TSM				
Conc. 12C TSM	2030 NB TSM			2030 NB TSM	
				2030 NB TSM	
				Conc. 12C TSM	

Peak Hour Turning Volumes

NOTES

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL	Signalized intersection
AWSC	All-way stop controlled intersection
TWSC	Two-way stop controlled intersection
LOS	Level of Service of Intersection, based on approach delay in seconds

Intersection Number

8

2030 NB TSM — Conc. 12C TSM

Intersection not applicable

LOS A - C

LOS D - F

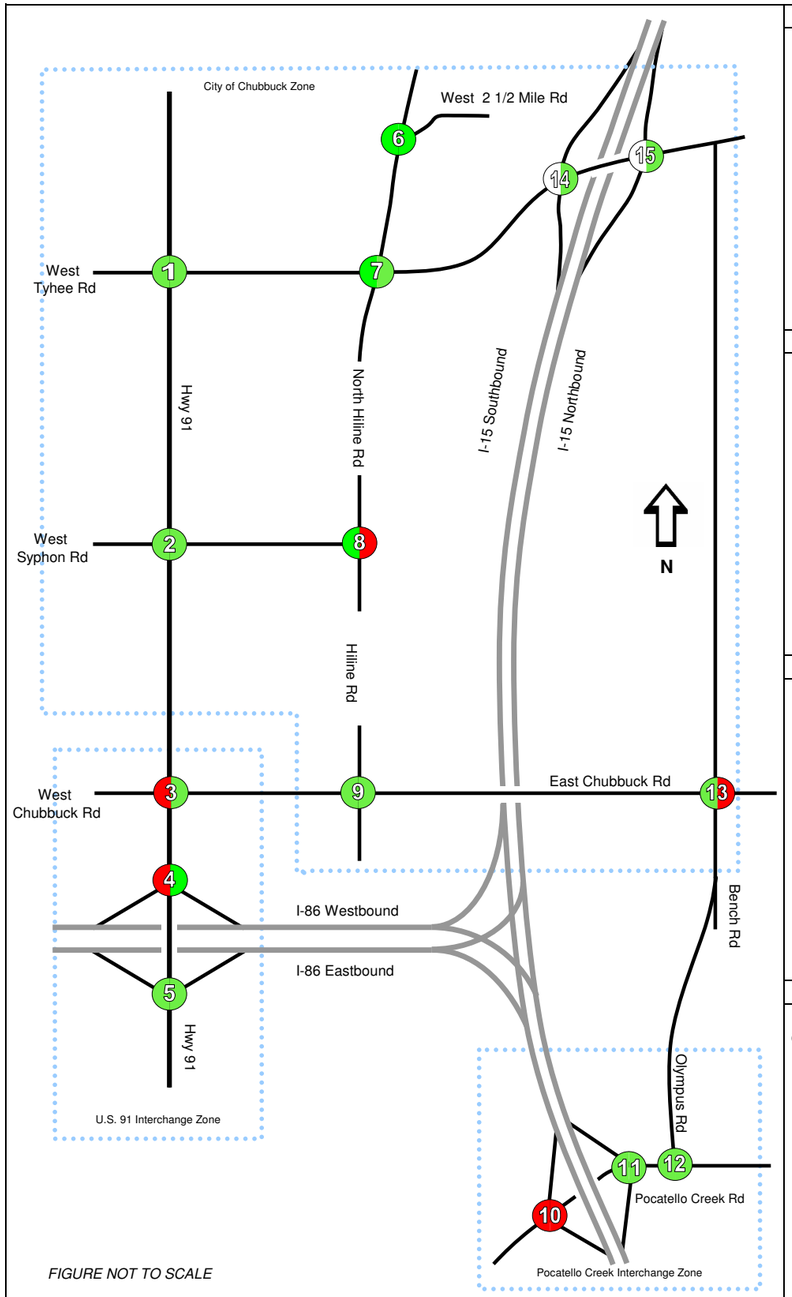
FIGURE 11

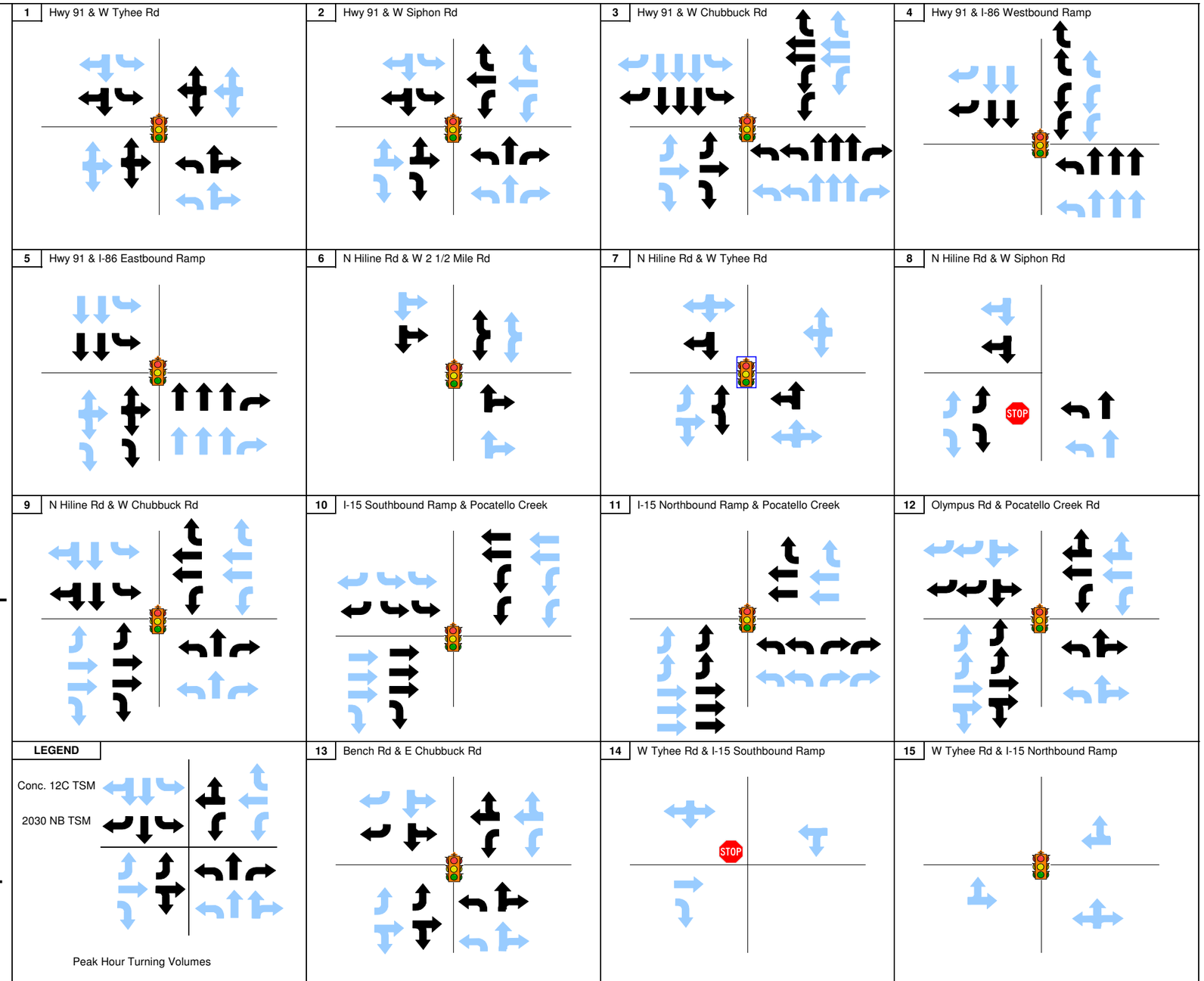
Local Study Area Intersection Volumes & LOS

2030 No Build TSM and 2030 Concept 12C TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL





NOTES

- 2030 Conc. 12C Channelization
- 2030 No Build TSM
- STOP Stop-controlled Intersection / Approach
- Signalized Intersection
- Intersection is Signalized as part of Concept 12C

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL Signalized intersection
- AWSC All-way stop controlled intersection
- TWSC Two-way stop controlled intersection
- LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number
8
2030 NB TSM
Conc. 12C TSM

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 12

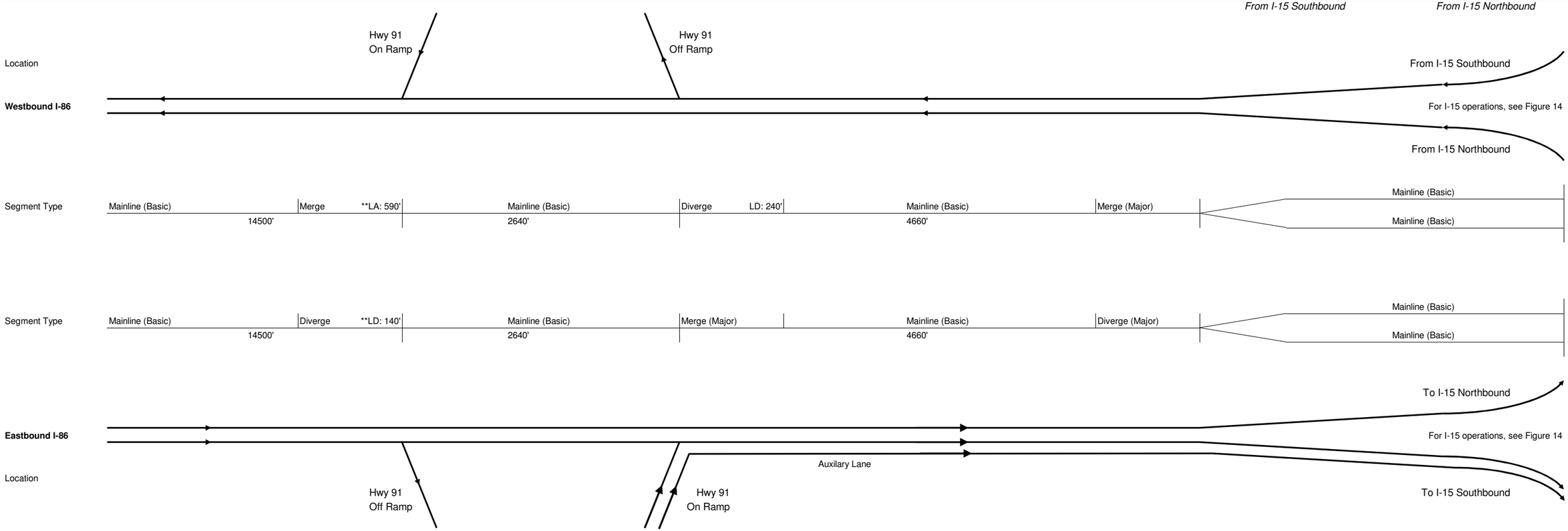
Local Study Area Intersection Channelization

2030 No Build TSM and 2030 Concept 12C TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1330	275	1055	1180	2235	N/A	665	1570
2030 Conc. 12C	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	13.5	14.9	10.8	23.0	19.3	N/A	See I-15 SB	See I-15 NB
	Volume	1400	275	1125	880	2005	N/A	590	1415
								From I-15 Southbound	*From I-15 Northbound*



								To I-15 Southbound	*To I-15 Northbound*
2030 No Build	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.5	8.4	N/A	12.5	N/A	See I-15 SB	See I-15 NB
	Volume	1290	420	870	1130	2000	N/A	1405	595
2030 Conc. 12C	**LOS**	B	B	A	N/A	A	N/A	See I-15 SB	See I-15 NB
	Density	12.1	16.1	8.0	N/A	10.5	N/A	See I-15 SB	See I-15 NB
	Volume	1255	420	835	845	1680	N/A	1175	505

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 12C lane configuration
- 2030 Concept 12C lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane

N

Not to Scale

FIGURE 13

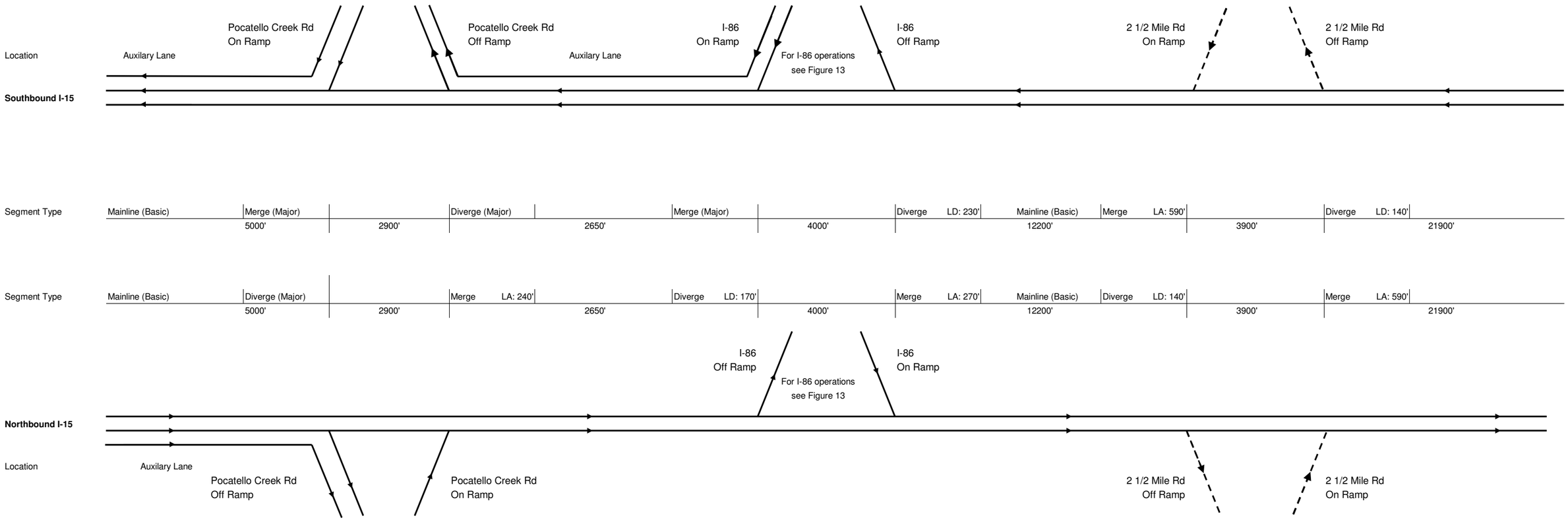
I-86 Freeway Operations

2030 No Build Conditions and 2030 Concept 12C

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 12C	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	C	B	C	C
	Density	17.0	N/A	18.0	N/A	17.8	N/A	16.0	25.7	21.7	22.8	16.8	23.0	18.5
	Volume	2705	830	1875	965	2840	1175	1665	590	2255	510	1745	175	1920



2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 12C	**LOS**	C	N/A	C	D	D	D	B	C	C	C	B	B	B
	Density	22.2	N/A	22.5	32.4	34.5	34.5	15.7	23.8	20.6	25.3	16.0	19.0	17.6
	Volume	3545	1205	2340	710	3050	1415	1635	505	2140	480	1660	170	1830

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 12C lane configuration
- 2030 Concept 12C lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 14

I-15 Freeway Operations

2030 No Build Conditions and 2030 Concept 12C

I-15 Pocatello Environmental Study

CH2MHILL

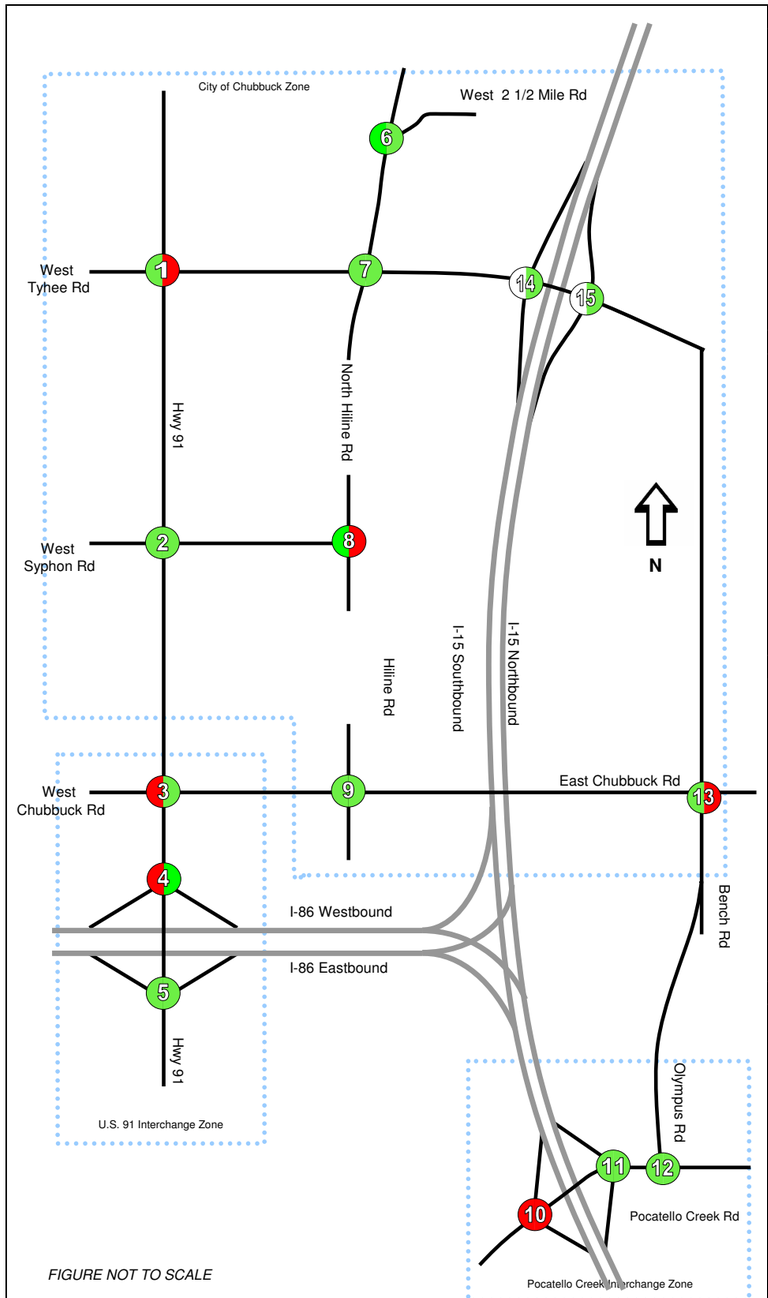


FIGURE NOT TO SCALE

NOTES

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	>100	C
Conc. 13 TSM	SIGNAL	44.0	D

70	***490***	***140***		45	***135***
70	540	30		70	***235***
				70	***75***
55	55				
215	55		110	720	170
75	85		***100***	***665***	***170***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	>100	C
Conc. 13 TSM	SIGNAL	28.0	C

45	***800***	***45***		70	***70***
45	875	45		45	***70***
				110	***130***
30	30				
75	50		235	1125	110
115	155		***185***	***1040***	***130***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	>100	D
Conc. 13 TSM	SIGNAL	33.0	C

105	***835***	***160***		225	***225***
105	1020	160		345	***345***
				325	***300***
105	105				
210	210		620	1330	410
370	450		***530***	***1125***	***380***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	>100	D
Conc. 13 TSM	SIGNAL	23.0	C

85	***1405***				
85	1730		580		***225***
			600		***600***
			190	1710	
			190	***1725***	

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	>100	C
Conc. 13 TSM	SIGNAL	14.0	B

	1960	***45***			
	1960	370			
205	190				
230	230		1710	760	
			1710	***760***	

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	5.0	A
Conc. 13 TSM	SIGNAL	12.0	B

	270	***15***			
	135	15		15	***15***
				60	***210***
			150	160	
			280	***310***	

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 13 TSM	SIGNAL	29.0	C

70	***135***	***290***		N/A	***290***
N/A	70	140		N/A	***340***
				N/A	***90***
100	100				
360	110		125	235	N/A
110	N/A		***125***	***230***	***65***

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 13 TSM	TWSC	40.0	E

	80	***295***			
	30	280			
105	55				
170	170		210	335	
			210	***345***	

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	C
Conc. 13 TSM	SIGNAL	32.0	C

45	***260***	***90***		85	***85***
45	250	85		460	***455***
				235	***235***
90	100				
390	395		495	390	375
345	355		***495***	***400***	***375***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	51.0	D
Conc. 13 TSM	SIGNAL	52.0	D

	485	***565***			
	375	450		1505	***1475***
				595	***560***
1800	1755				
280	300				

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	67.0	C
Conc. 13 TSM	SIGNAL	30.0	C

				275	***280***
				1290	***1255***
445	400				
1920	1805		810	435	
			780	***415***	

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	20.0	C
Conc. 13 TSM	SIGNAL	20.0	B

845	***25***	***100***		75	***75***
870	25	100		485	***485***
				25	***25***
1385	1405				
835	835		120	45	35
60	60		***120***	***45***	***35***

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	72.0	C
Conc. 13 TSM	SIGNAL	37.0	D

175	***210***	***15***		10	***20***
175	175	10		55	***55***
				55	***50***
165	160				
55	55		600	190	65
585	600		***590***	***270***	***65***

14 W Tyhee Rd & I-15 Southbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 13 TSM	TWSC	21	C

	125	***40***			
	N/A	N/A		N/A	***575***
				N/A	***5***
120	N/A				
585	N/A				

15 W Tyhee Rd & I-15 Northbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 13 TSM	SIGNAL	11	B

				N/A	***35***
				N/A	***10***
120	N/A				
45	N/A			N/A	
				475	

LEGEND

	Conc. 13 TSM			2030 NB TSM	***Conc. 13 TSM***
	2030 NB TSM				
Conc. 13 TSM	2030 NB TSM				
			2030 NB TSM		
			Conc. 13 TSM		

Peak Hour Turning Volumes

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL Signalized intersection

AWSC All-way stop controlled intersection

TWSC Two-way stop controlled intersection

LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number

8

2030 NB TSM — Conc. 13 TSM

Intersection not applicable

LOS A - C

LOS D - F

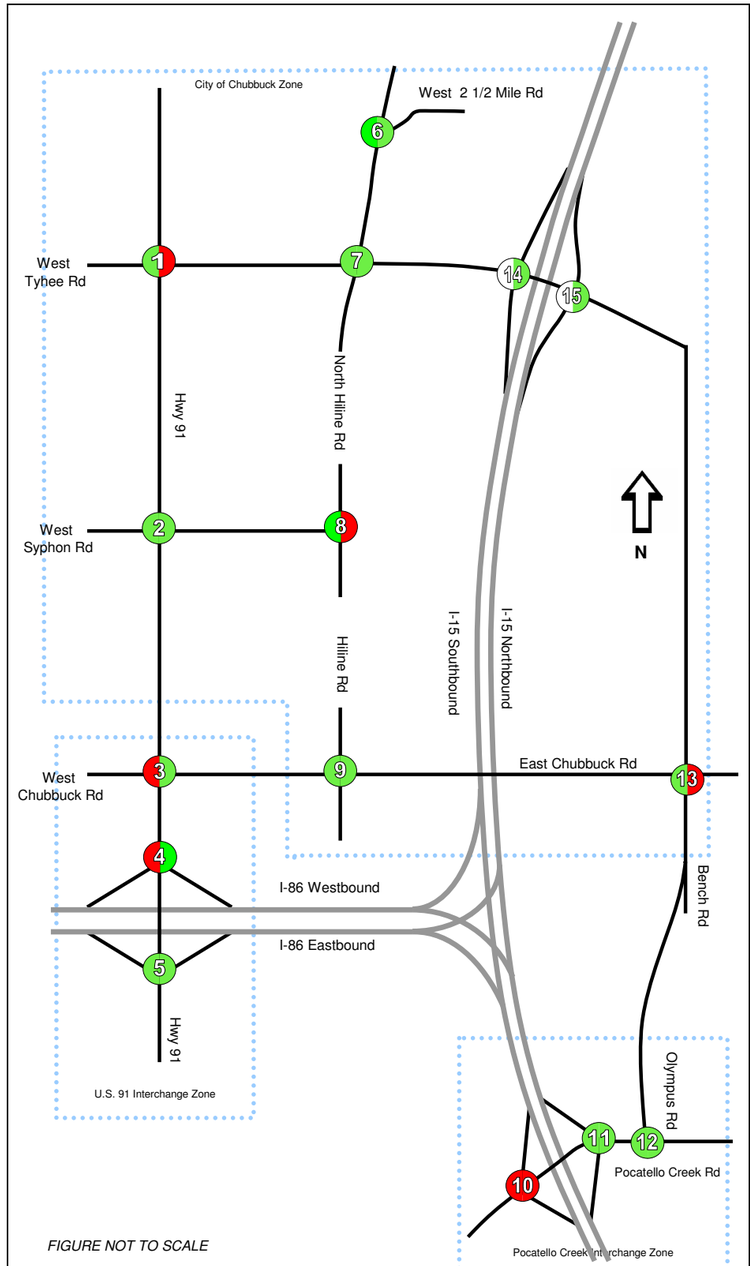
FIGURE 15

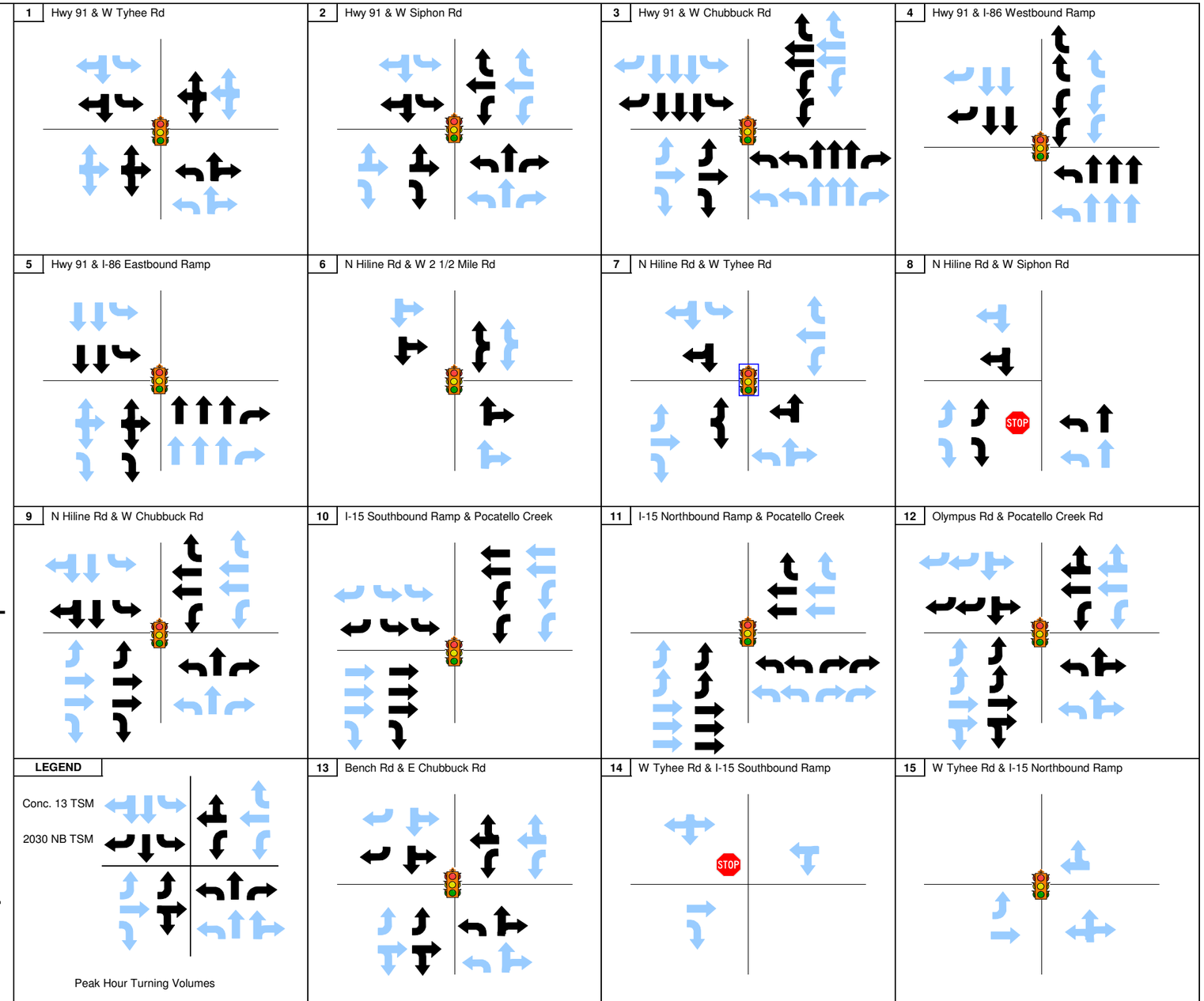
Local Study Area Intersection Volumes & LOS

2030 No Build TSM and 2030 Concept 13 TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL





NOTES

- 2030 Conc. 13 Channelization
- 2030 No Build TSM
- Stop-controlled Intersection / Approach
- Signalized Intersection
- Intersection is Signalized as part of Concept 13

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL — Signalized intersection
- AWSC — All-way stop controlled intersection
- TWSC — Two-way stop controlled intersection
- LOS — Level of Service of Intersection, based on approach delay in seconds

Intersection Number: 8
2030 NB TSM | Conc. 13 TSM

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 16

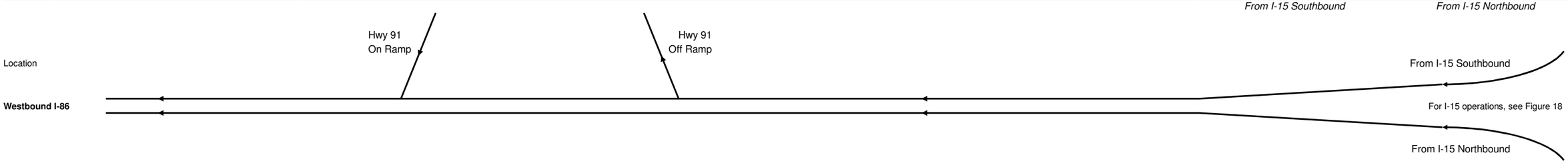
Local Study Area Intersection Channelization

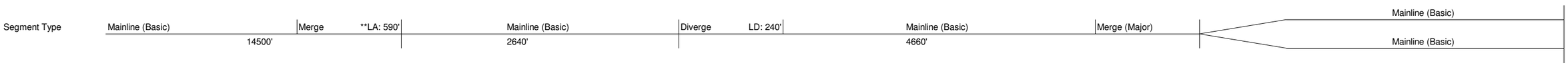
2030 No Build TSM and 2030 Concept 13 TSM Conditions

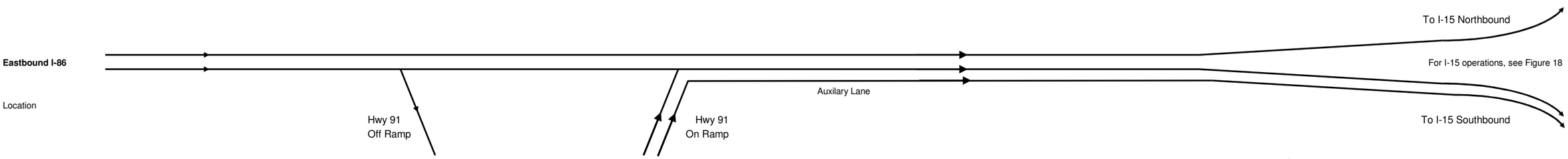
I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1330	275	1055	1180	2235	N/A	665	1570
2030 Conc. 13	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	13.2	14.6	10.5	22.1	18.4	N/A	See I-15 SB	See I-15 NB
	Volume	1375	285	1090	825	1915	N/A	540	1375
								From I-15 Southbound	*From I-15 Northbound*







								To I-15 Southbound	*To I-15 Northbound*
2030 No Build	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.5	8.4	N/A	12.5	N/A	See I-15 SB	See I-15 NB
	Volume	1290	420	870	1130	2000	N/A	1405	595
2030 Conc. 13	**LOS**	B	B	A	N/A	A	N/A	See I-15 SB	See I-15 NB
	Density	12.1	16.1	7.9	N/A	10.2	N/A	See I-15 SB	See I-15 NB
	Volume	1255	435	820	805	1625	N/A	1140	485

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 13 lane configuration
- 2030 Concept 13 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane

N

Not to Scale

FIGURE 17

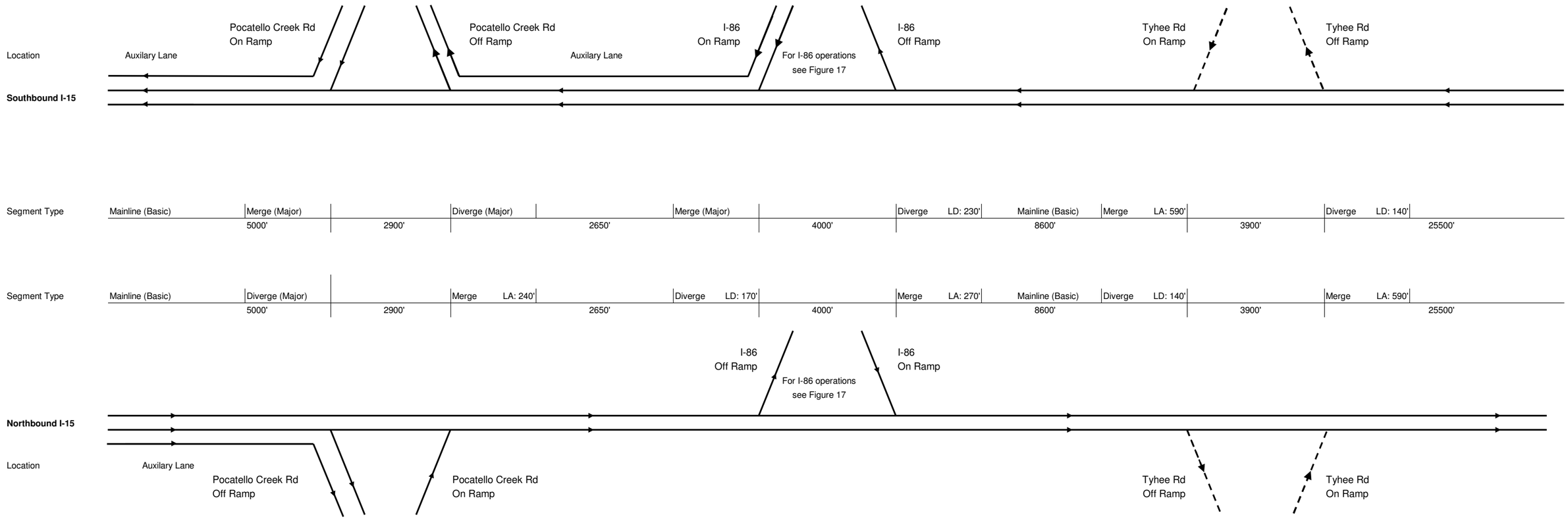
I-86 Freeway Operations

2030 No Build Conditions and 2030 Concept 13

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 13	**LOS**	B	N/A	C	N/A	C	N/A	B	C	C	C	B	C	C
	Density	17.1	N/A	18.2	N/A	18.4	N/A	17.3	26.6	22.5	23.6	16.9	23.0	18.5
	Volume	2730	840	1890	1050	2940	1140	1800	540	2340	585	1755	165	1920



2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 13	**LOS**	C	N/A	C	D	E	E	B	C	C	C	B	B	B
	Density	22.8	N/A	23.5	33.6	35.8	35.8	17.3	25.1	22.0	26.8	16.5	19.3	18.0
	Volume	3640	1195	2445	725	3170	1375	1795	485	2280	570	1710	155	1865

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 13 lane configuration
- 2030 Concept 13 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 18

I-15 Freeway Operations

2030 No Build Conditions and 2030 Concept 13

I-15 Pocatello Environmental Study

CH2MHILL

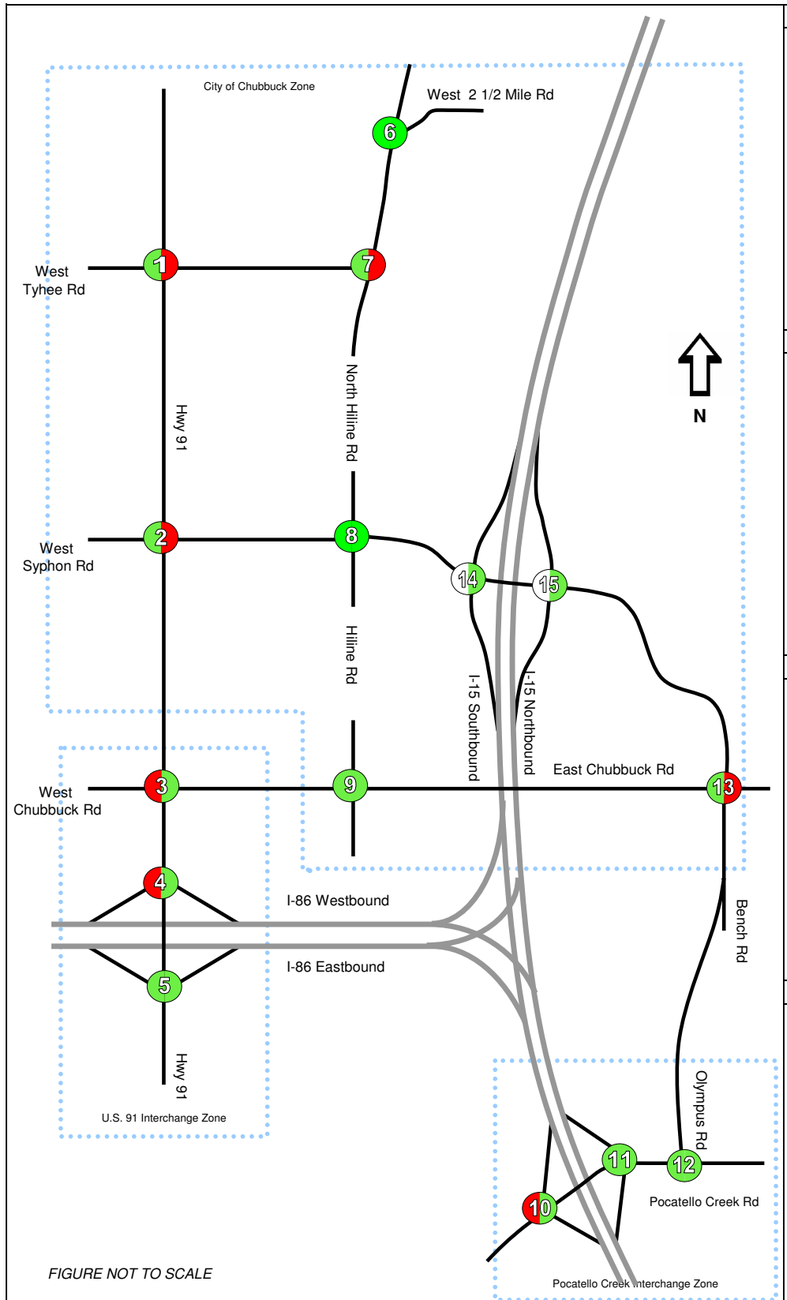


FIGURE NOT TO SCALE

NOTES

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	28.0	C
Conc. 14 TSM	SIGNAL	45.0	D

70	***600***	***50***	45	***175***
70	540	30	70	***125***
			70	***60***
55	55			
80	55		110	720	170
180	85		***55***	***715***	***160***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	31.0	C
Conc. 14 TSM	SIGNAL	>100	F

45	***690***	***395***	70	***310***
45	875	45	45	***405***
			110	***170***
30	30			
350	50		235	1125	110
115	155		***115***	***830***	***125***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 14 TSM	SIGNAL	34.0	C

105	***800***	***100***	225	***80***
105	1020	160	345	***360***
			325	***305***
105	105			
225	210		620	1330	410
375	450		***495***	***965***	***375***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	41.0	D
Conc. 14 TSM	SIGNAL	21.0	C

85	***1380***	580	***80***
85	1730	600	***545***
190	1710
190	***###***

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	23.0	C
Conc. 14 TSM	SIGNAL	13.0	B

1855	***70***
1960	370
190	190
230	230
1710	760
1630	***575***

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	5.0	A
Conc. 14 TSM	SIGNAL	11.0	B

210	***15***	15	***15***
135	15	60	***185***
150	160
230	***305***

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 14 TSM	SIGNAL	79.0	E

70	***350***
N/A	70
100	100
225	110
125	235
375	***460***

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 14 TSM	SIGNAL	32.7	C

30	***235***	***370***	N/A	***535***
30	280	N/A	N/A	***740***
			N/A	***95***
55	55			
580	170		210	335	N/A
170	N/A		***210***	***325***	***5***

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 14 TSM	SIGNAL	31.0	C

70	***280***	***60***	85	***30***
45	250	85	460	***305***
			235	***235***
85	100			
360	395		495	390	375
340	355		***490***	***390***	***400***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 14 TSM	SIGNAL	28.0	C

375	***450***
375	450	1505	***1410***
		595	***445***
1705	1755
250	300

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	29.0	C
Conc. 14 TSM	SIGNAL	20.0	B

275	***275***
1290	***###***
400	400
1755	1805
810	435
795	***375***

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	22.0	C
Conc. 14 TSM	SIGNAL	24.0	C

870	***25***	***100***	75	***75***
870	25	100	485	***485***
			25	***25***
###	1405			
835	835		120	45	35
60	60		***120***	***45***	***35***

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 14 TSM	SIGNAL	37.0	D

175	***315***	***10***	10	***10***
175	175	10	55	***55***
			55	***90***
240	160			
75	55		600	190	65
475	600		***385***	***485***	***135***

14 W Siphon Rd & I-15 Southbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 14 TSM	SIGNAL	7	A

185	***30***
N/A	N/A	N/A	***###***
		N/A	***160***
245	N/A
860	N/A

15 W Siphon Rd & I-15 Northbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 14 TSM	SIGNAL	31	C

N/A	***115***
N/A	***440***
100	N/A
175	N/A
N/A	N/A
905	***55***

LEGEND

Conc. 14 TSM
2030 NB TSM

Peak Hour Turning Volumes

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL	Signalized intersection
AWSC	All-way stop controlled intersection
TWSC	Two-way stop controlled intersection
LOS	Level of Service of Intersection, based on approach delay in seconds

Intersection Number

8

2030 NB TSM — Conc. 14 TSM

Intersection not applicable

LOS A - C

LOS D - F

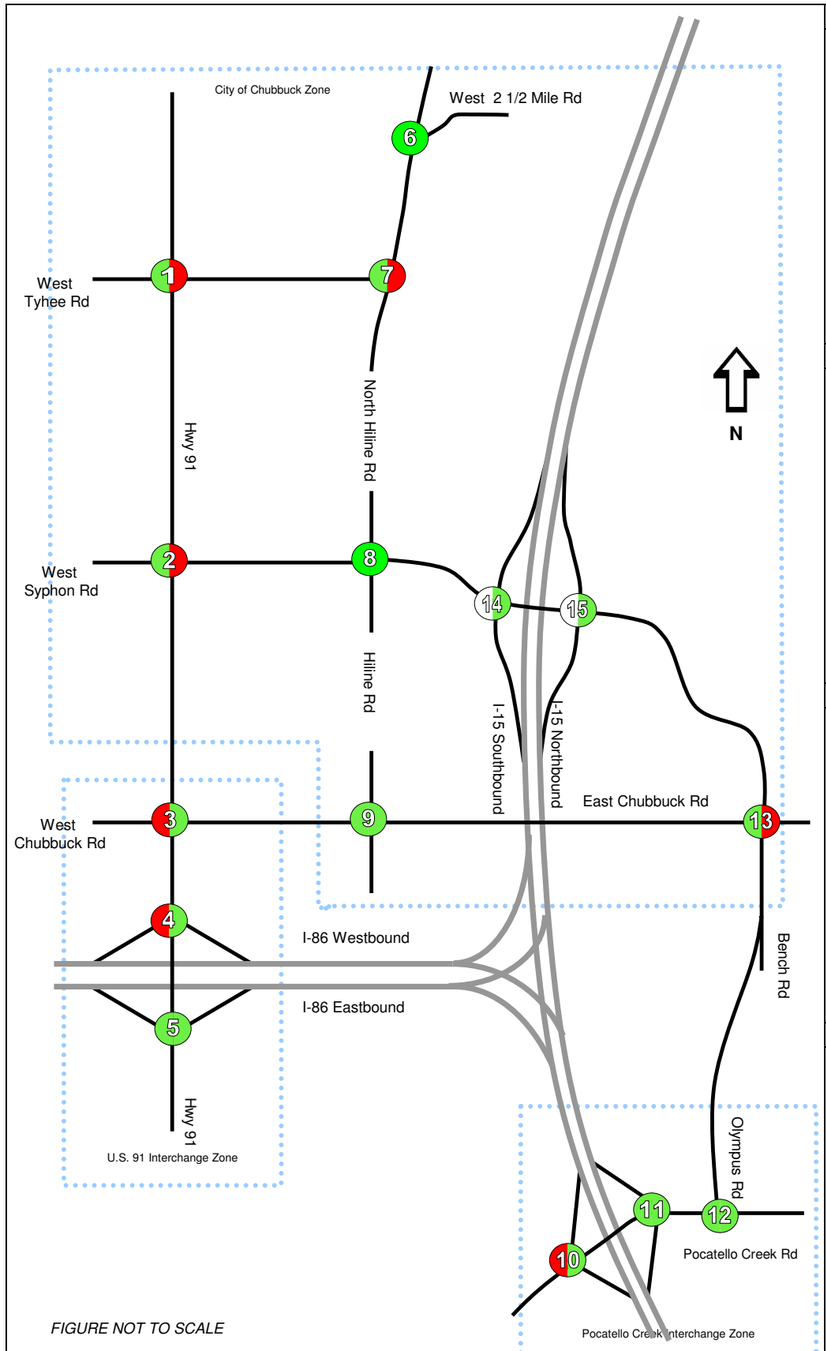
FIGURE 19

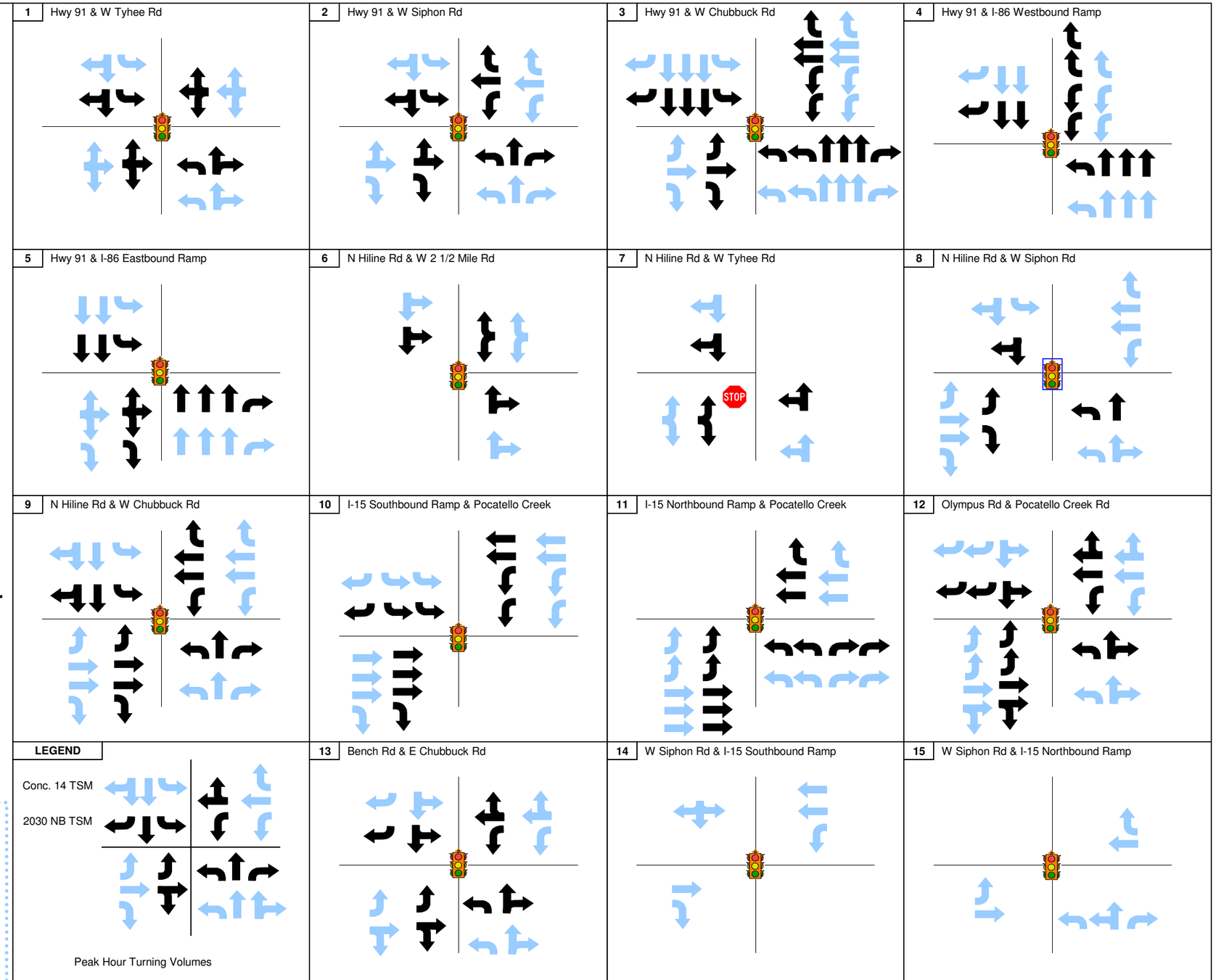
Local Study Area Intersection Volumes & LOS

2030 No Build TSM and 2030 Concept 14 TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL





NOTES

- 2030 Conc. 14 Channelization
- 2030 No Build TSM
- STOP Stop-controlled Intersection / Approach
- Signalized Intersection
- Intersection is Signalized as part of Concept 14

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL Signalized intersection
- AWSC All-way stop controlled intersection
- TWSC Two-way stop controlled intersection
- LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number
8
2030 NB TSM
Conc. 14 TSM

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 20

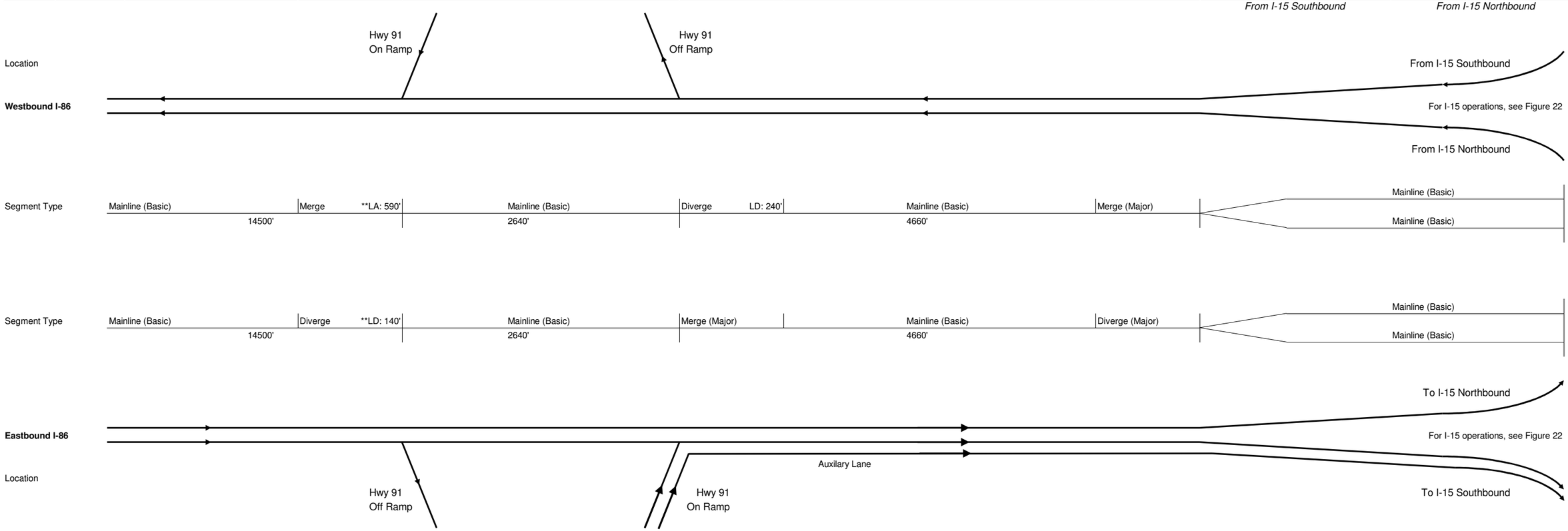
Local Study Area Intersection Channelization

2030 No Build TSM and 2030 Concept 14 TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1330	275	1055	1180	2235	N/A	665	1570
2030 Conc. 14	**LOS**	B	B	A	B	B	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.3	19.8	16.4	N/A	See I-15 SB	See I-15 NB
	Volume	1325	250	1075	625	1700	N/A	615	1085
								From I-15 Southbound	*From I-15 Northbound*



								To I-15 Southbound	*To I-15 Northbound*
2030 No Build	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.5	8.4	N/A	12.5	N/A	See I-15 SB	See I-15 NB
	Volume	1290	420	870	1130	2000	N/A	1405	595
2030 Conc. 14	**LOS**	B	B	A	N/A	A	N/A	See I-15 SB	See I-15 NB
	Density	12.1	16.1	8.0	N/A	9.2	N/A	See I-15 SB	See I-15 NB
	Volume	1255	425	830	645	1475	N/A	990	485

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 14 lane configuration
- 2030 Concept 14 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane

N

Not to Scale

FIGURE 21

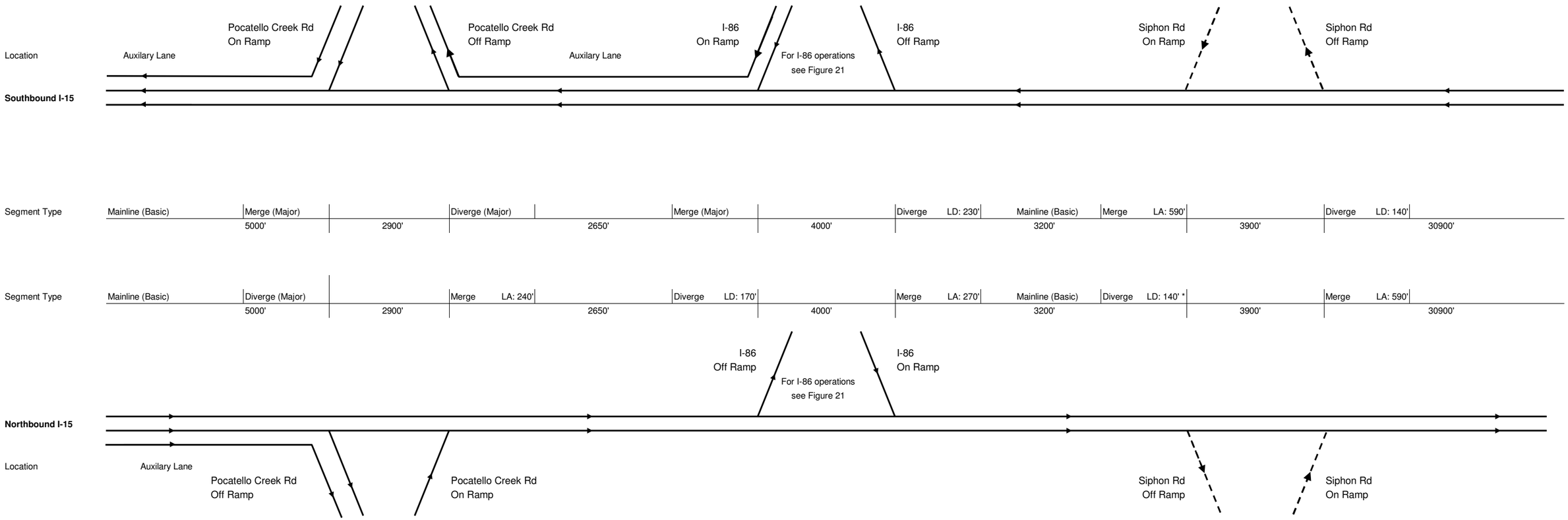
I-86 Freeway Operations

2030 No Build Conditions and 2030 Concept 14

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 14	**LOS**	B	N/A	C	N/A	C	N/A	C	**D**	**D**	C	B	C	C
	Density	17.6	N/A	20.3	N/A	19.4	N/A	20.3	30.6	26.3	27.0	16.4	23.0	18.5
	Volume	2805	695	2110	990	3100	990	2110	615	2725	1020	1705	215	1920



2030 No Build	**LOS**	C	N/A	C	**D**	**D**	**D**	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 14	**LOS**	C	N/A	C	**D**	**E**	**E**	C	**D**	C	**D**	B	B	C
	Density	23.8	N/A	25.3	34.7	36.9	36.9	21.1	28.9	25.8	31.0	16.6	20.0	18.6
	Volume	3800	1170	2630	650	3280	1085	2195	485	2680	960	1720	215	1935

ASSUMPTIONS
- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND
- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 14 lane configuration
- 2030 Concept 14 lane configuration
- 2030 No Build lane configuration only

NOTES
- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area
- * LD is increased to 250' for the build concept

N
Not to Scale

FIGURE 22

I-15 Freeway Operations

2030 No Build Conditions and 2030 Concept 14

I-15 Pocatello Environmental Study

CH2MHILL

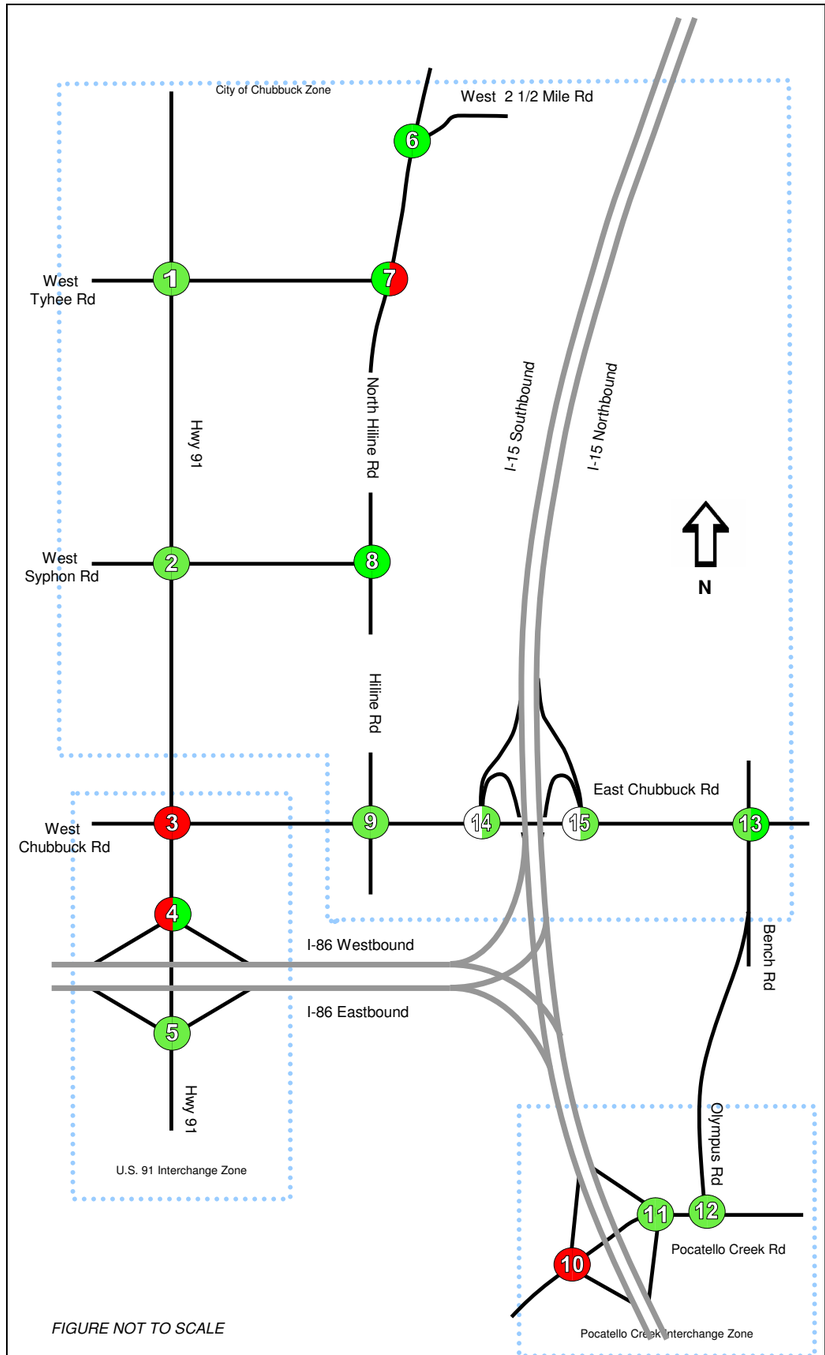


FIGURE NOT TO SCALE

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	28.0	C
Conc. 16 TSM	SIGNAL	25.0	C

70	***500***	***30***	45	***45***	
70	540	30	70	***70***	
			70	***60***	
55	55				
55	55		110	720	170
85	85		***115***	***720***	***170***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	31.0	C
Conc. 16 TSM	SIGNAL	25.0	C

45	***800***	***55***	70	***75***	
45	875	45	45	***50***	
			110	***110***	
30	30				
55	50		235	1125	110
125	155		***235***	***1075***	***105***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 16 TSM	SIGNAL	46.0	D

105	***840***	***350***	225	***250***	
105	1020	160	345	***355***	
			325	***255***	
105	105				
315	210		620	1330	410
375	450		***555***	***1255***	***350***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	41.0	D
Conc. 16 TSM	SIGNAL	24.0	C

60	***1430***				
85	1730		580	***320***	
			600	***600***	
			190	1710	
			190	***1670***	

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	23.0	C
Conc. 16 TSM	SIGNAL	12.0	B

1960	***70***				
1960	370				
150	190		1710	760	
230	230		***1710***	***755***	

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	5.0	A
Conc. 16 TSM	SIGNAL	7.0	A

160	***15***				
135	15		15	***15***	
			60	***105***	
			150	160	
			155	***215***	

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 16 TSM	TWSC	30.0	D

70	***215***				
70	140				
100	100		125	235	
115	110		***150***	***295***	

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
Conc. 16 TSM	TWSC	24.0	C

30	***360***				
30	280				
55	55		210	335	
175	170		***215***	***390***	

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 16 TSM	SIGNAL	33.0	C

30	***285***	***180***	85	***175***	
45	250	85	460	***525***	
			235	***215***	
95	100				
735	395		495	390	375
355	355		***490***	***390***	***310***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
Conc. 16 TSM	SIGNAL	36.0	D

395	***545***				
375	450		1505	***1505***	
			595	***545***	
1755	1755				
275	300				

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	29.0	C
Conc. 16 TSM	SIGNAL	28.0	C

			275	***240***	
			1290	***1240***	
400	400				
1900	1805		810	435	
			810	***420***	

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	22.0	C
Conc. 16 TSM	SIGNAL	23.0	C

810	***25***	***100***	75	***75***	
870	25	100	485	***470***	
			25	***25***	
1480	1405				
850	835		120	45	35
60	60		***120***	***45***	***35***

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
Conc. 16 TSM	SIGNAL	35.0	C

145	***170***	***10***	10	***10***	
175	175	10	55	***50***	
			55	***55***	
180	160				
55	55		600	190	65
535	600		***500***	***190***	***65***

14 Chubbuck Rd & I-15 Southbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 16 TSM	SIGNAL	19	B

180	***30***				
N/A	N/A		N/A	***25***	
			N/A	***970***	
615	N/A				
740	N/A				

15 Chubbuck Rd & I-15 Northbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	N/A	N/A	N/A
Conc. 16 TSM	SIGNAL	13	B

270	***140***				
N/A	N/A		N/A	***30***	
			N/A	***725***	
160	N/A				
610	N/A				

LEGEND

Conc. 16 TSM	2030 NB TSM			2030 NB TSM	***Conc. 16 TSM***
Conc. 16 TSM	2030 NB TSM			2030 NB TSM	***Conc. 16 TSM***

Peak Hour Turning Volumes

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL Signalized intersection

AWSC All-way stop controlled intersection

TWSC Two-way stop controlled intersection

LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number

8

2030 NB TSM — Conc. 16 TSM

Intersection not applicable

LOS A - C

LOS D - F

NOTES

FIGURE 23

Local Study Area Intersection Volumes & LOS

2030 No Build TSM and 2030 Concept 16 TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

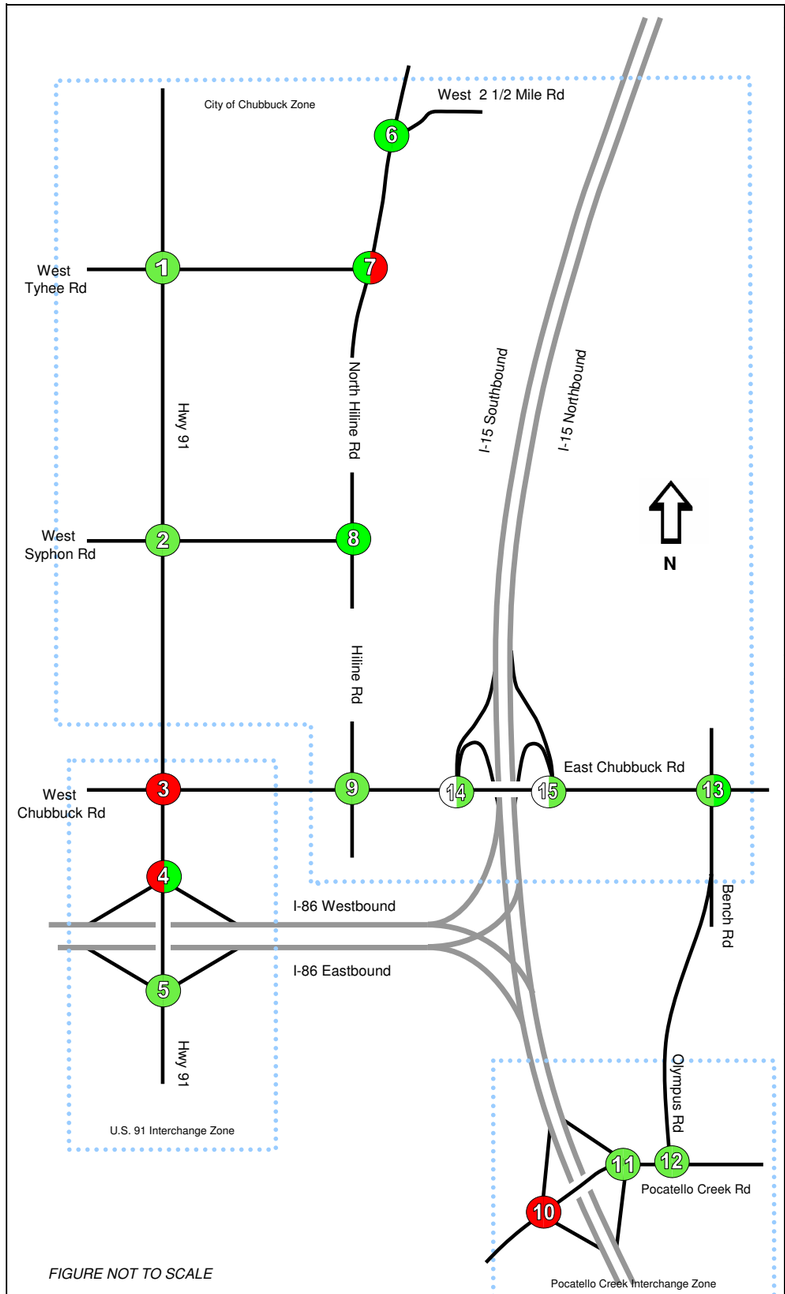
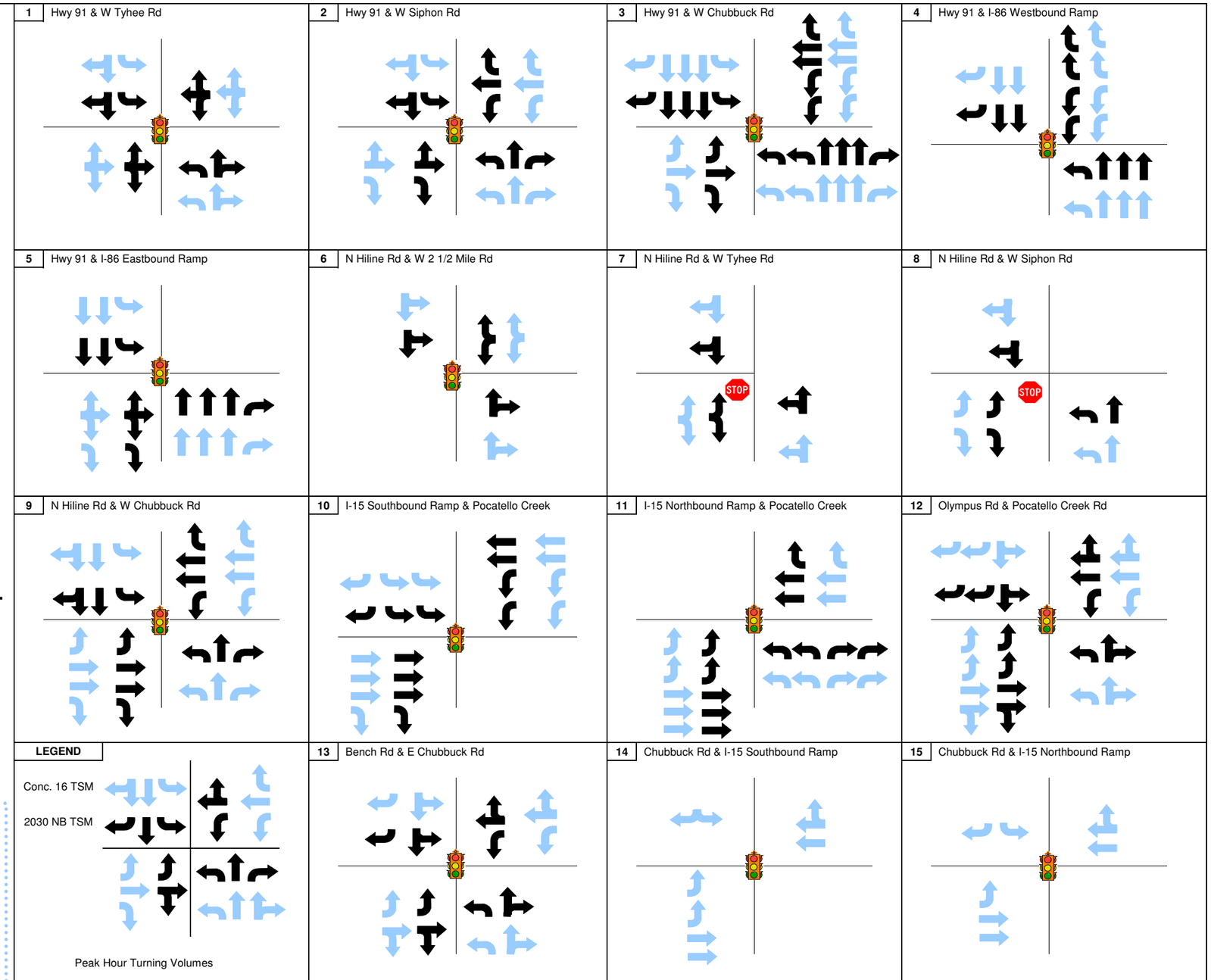


FIGURE NOT TO SCALE



NOTES

- 2030 Conc. 16 Channelization
- 2030 No Build TSM
- STOP Stop-controlled Intersection / Approach
- Signalized intersection
- Intersection is Signalized as part of Concept 16

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL Signalized intersection
- AWSC All-way stop controlled intersection
- TWSC Two-way stop controlled intersection
- LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number: 8
2030 NB TSM — Conc. 16 TSM

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 24

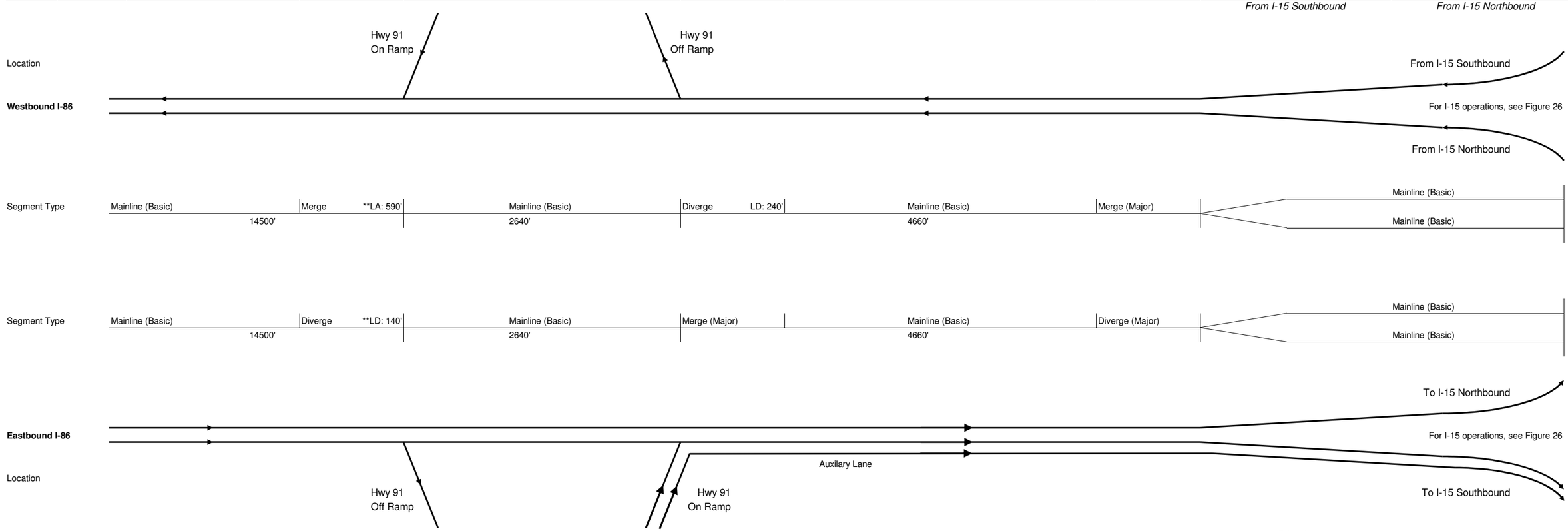
Local Study Area Intersection Channelization

2030 No Build TSM and 2030 Concept 16 TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1330	275	1055	1180	2235	N/A	665	1570
2030 Conc. 16	**LOS**	B	B	B	C	C	N/A	See I-15 SB	See I-15 NB
	Density	13.7	15.1	11.3	24.0	20.2	N/A	See I-15 SB	See I-15 NB
	Volume	1425	250	1175	920	2095	N/A	560	1535
								From I-15 Southbound	*From I-15 Northbound*



								To I-15 Southbound	*To I-15 Northbound*
2030 No Build	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.5	8.4	N/A	12.5	N/A	See I-15 SB	See I-15 NB
	Volume	1290	420	870	1130	2000	N/A	1405	595
2030 Conc. 16	**LOS**	B	B	A	N/A	A	N/A	See I-15 SB	See I-15 NB
	Density	12.1	16.1	8.5	N/A	10.7	N/A	See I-15 SB	See I-15 NB
	Volume	1260	380	880	825	1705	N/A	1115	590

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 16 lane configuration
- 2030 Concept 16 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane

N

Not to Scale

FIGURE 25

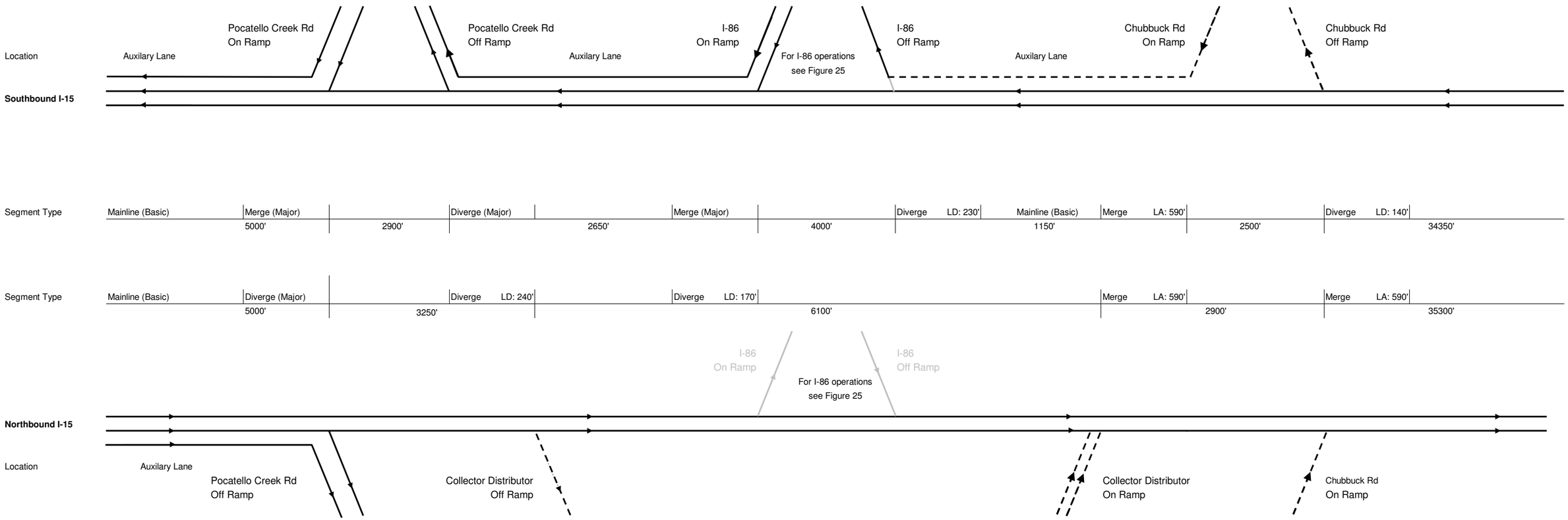
I-86 Freeway Operations

2030 No Build Conditions and 2030 Concept 16

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 16	**LOS**	B	N/A	C	N/A	C	N/A	B	B			B	C	C
	Density	17.5	N/A	18.9	N/A	18.2	N/A	17.2	19.9			16.5	23.0	18.5
	Volume	2785	820	1965	940	2905	1115	1790	560	2350	640	1710	210	1920



2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 16	**LOS**	C	N/A	C	C	A					B	B	B	B
	Density	22.3	N/A	22.3	27.2	8.6					12.9	15.5	18.7	17.3
	Volume	3550	1230	2320	1425	895					710	1605	190	1795

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 16 lane configuration
- 2030 Concept 16 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 26

I-15 Freeway Operations

2030 No Build Conditions and 2030 Concept 16

I-15 Pocatello Environmental Study

CH2MHILL

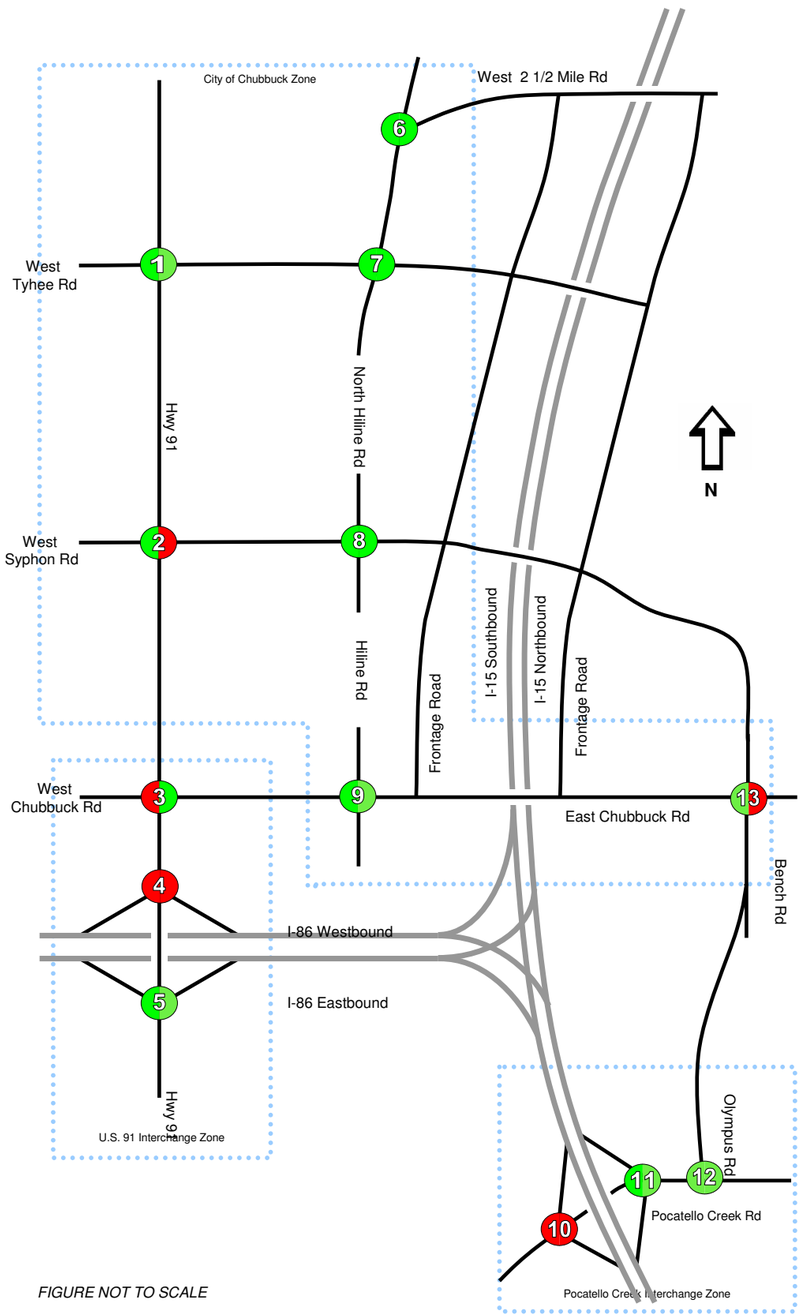


FIGURE NOT TO SCALE

1 Hwy 91 & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	28.0	C
2030 Local TSM	SIGNAL	27.0	C

70	***520***	***35***	45	***45***	
70	540	30	70	***70***	
			70	***65***	
55	55				
55	55		110	720	170
85	85		***120***	***715***	***160***

2 Hwy 91 & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	31.0	C
2030 Local TSM	SIGNAL	36.0	D

45	***805***	***90***	70	***80***	
45	875	45	45	***55***	
			110	***110***	
30	30				
50	50		235	1125	110
145	155		***230***	***1120***	***100***

3 Hwy 91 & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
2030 Local TSM	SIGNAL	34.0	C

105	***975***	***110***	225	***190***	
105	1020	160	345	***345***	
			325	***305***	
105	105				
210	210		620	1330	410
440	450		***625***	***1330***	***420***

4 Hwy 91 & I-86 Westbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	41.0	D
2030 Local TSM	SIGNAL	39.0	D

95	***1665***				
85	1730		580	***580***	
			600	***600***	
			190	1710	
			190	***1730***	

5 Hwy 91 & I-86 Eastbound Ramp

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	23.0	C
2030 Local TSM	SIGNAL	20.0	B

1960	***305***				
1960	370				
205	190		1710	760	
230	230		***1710***	***760***	

6 N Hiline Rd & W 2 1/2 Mile Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	5.0	A
2030 Local TSM	SIGNAL	3.0	A

135	***15***				
135	15		15	***15***	
			60	***25***	
			150	160	
			150	***120***	

7 N Hiline Rd & W Tyhee Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
2030 Local TSM	TWSC	15.0	B

70	***95***	***10***	N/A	***10***	
70	140	N/A	N/A	***5***	
			N/A	***5***	
100	100				
5	N/A		125	235	N/A
125	110		***130***	***185***	***5***

8 N Hiline Rd & W Siphon Rd

	Control	Delay (sec)	LOS
2030 NB TSM	TWSC	19.0	C
2030 Local TSM	SIGNAL	11.0	B

30	***225***	***25***	N/A	***30***	
30	280	N/A	N/A	***30***	
			N/A	***5***	
55	55				
45	N/A		210	335	N/A
170	170		***210***	***265***	***5***

9 N Hiline Rd & W Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
2030 Local TSM	SIGNAL	31.0	C

50	***250***	***25***	85	***35***	
45	250	85	460	***435***	
			235	***235***	
105	100				
355	395		495	390	375
355	355		***495***	***390***	***375***

10 I-15 Southbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	36.0	D
2030 Local TSM	SIGNAL	37.0	D

	375	***335***			
	375	450	1505	***1505***	
			595	***665***	
1710	1755				
300	300				

11 I-15 Northbound Ramp & Pocatello Creek

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	29.0	C
2030 Local TSM	SIGNAL	31.0	C

			275	***275***	
			1290	***1360***	
355	400				
1690	1805		810	435	
			810	***535***	

12 Olympus Rd & Pocatello Creek Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	22.0	C
2030 Local TSM	SIGNAL	23.0	C

1040	***25***	***100***	75	***75***	
870	25	100	485	***475***	
			25	***25***	
1440	1405				
725	835		120	45	35
60	60		***120***	***45***	***35***

13 Bench Rd & E Chubbuck Rd

	Control	Delay (sec)	LOS
2030 NB TSM	SIGNAL	30.0	C
2030 Local TSM	SIGNAL	48.0	D

175	***280***	***10***	10	***10***	
175	175	10	55	***55***	
			55	***80***	
175	160				
60	55		600	190	65
535	600		***515***	***300***	***100***

14

No Build Concept

15

No Build Concept

LEGEND

2030 Local TSM	2030 NB TSM	2030 NB TSM	***2030 Local TSM***
2030 Local TSM	2030 NB TSM	2030 NB TSM	***2030 Local TSM***

Peak Hour Turning Volumes

Traffic Volume Forecasting Zones

Turning Movement Direction

SIGNAL Signalized intersection

AWSC All-way stop controlled intersection

TWSC Two-way stop controlled intersection

LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number

8

2030 NB TSM 2030 Local TSM

Intersection not applicable

LOS A - C

LOS D - F

NOTES

FIGURE 27

Local Study Area Intersection Volumes & LOS

2030 No Build TSM and 2030 Local TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

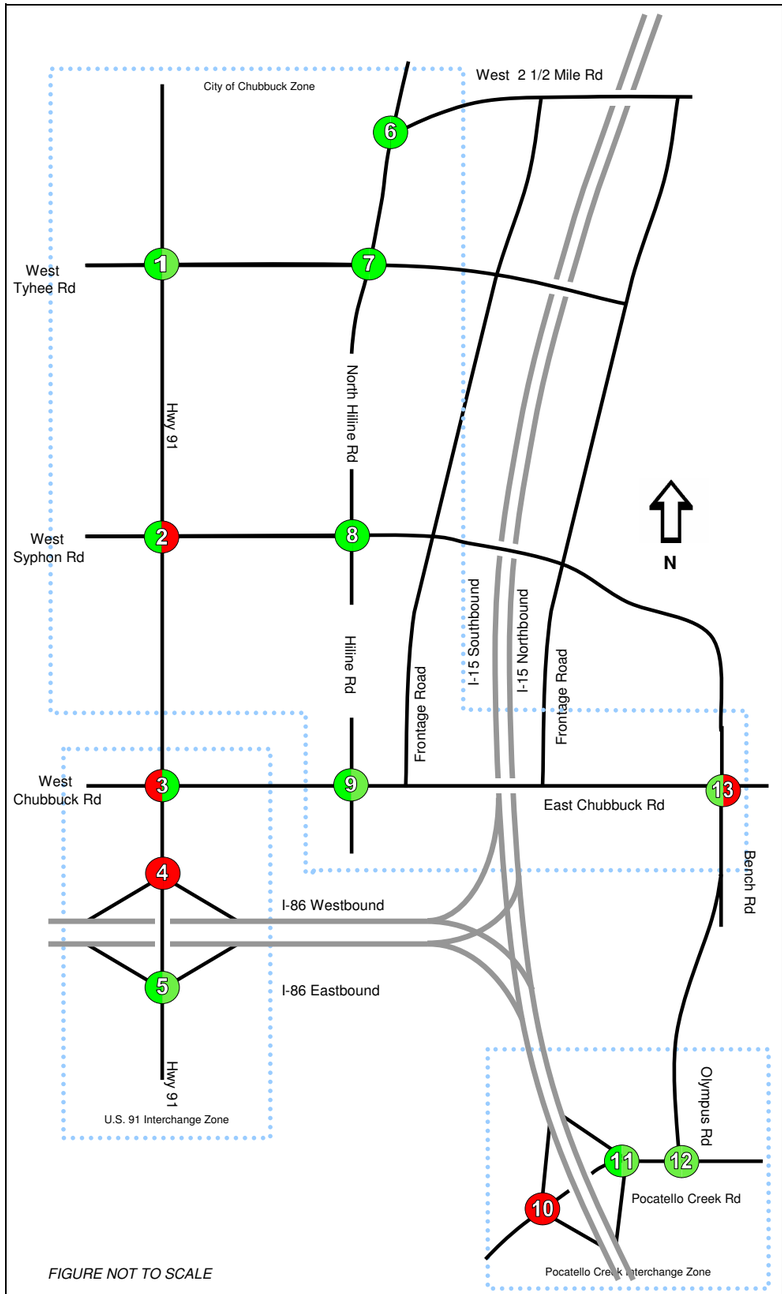
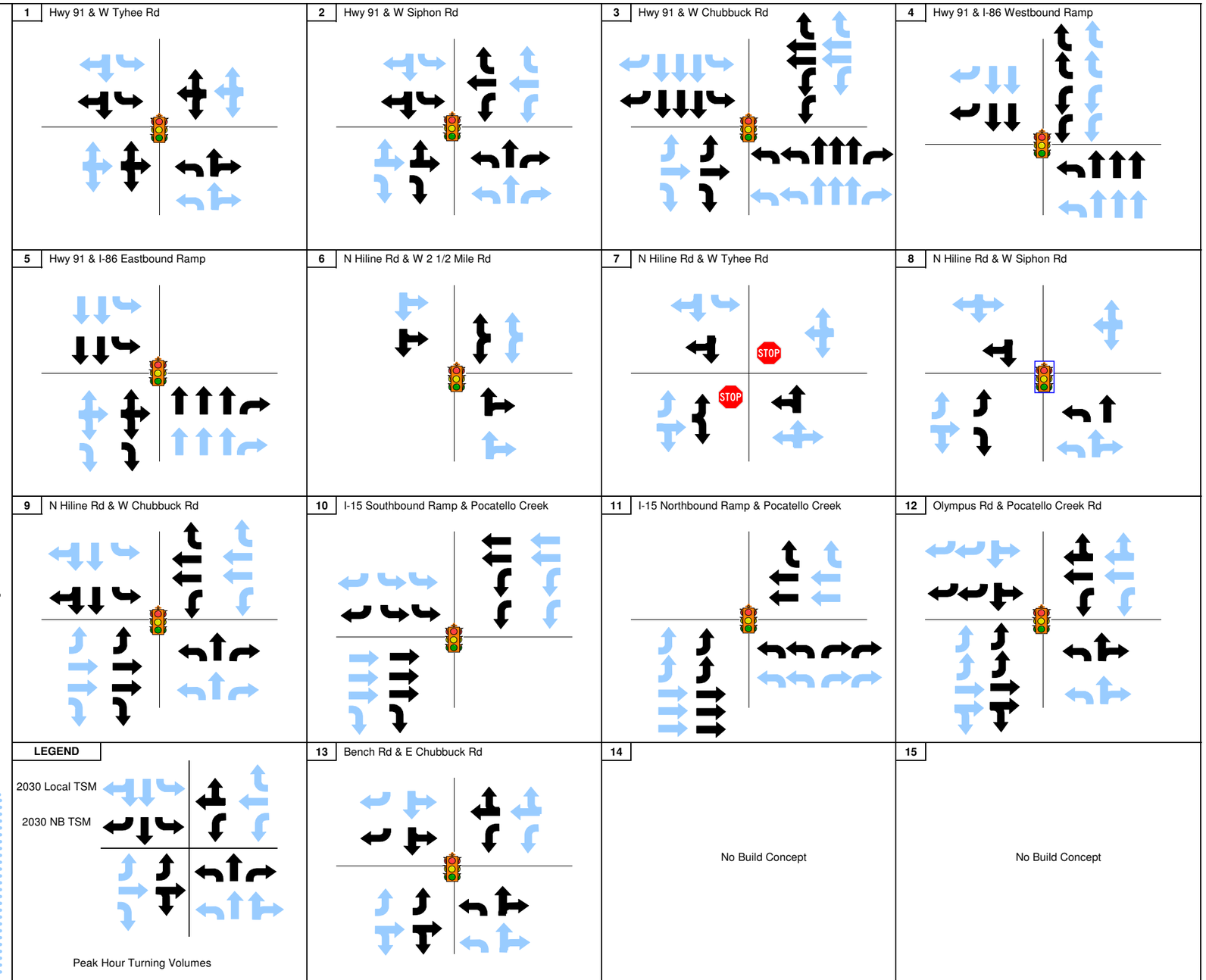


FIGURE NOT TO SCALE



NOTES

- 2030 Local Channelization
- 2030 No Build TSM
- STOP Stop-controlled Intersection / Approach
- Signalized Intersection
- Intersection is Signalized as part of Concept Local

- Traffic Volume Forecasting Zones
- Turning Movement Direction
- SIGNAL Signalized intersection
- AWSC All-way stop controlled intersection
- TWSC Two-way stop controlled intersection
- LOS Level of Service of Intersection, based on approach delay in seconds

Intersection Number: 8
2030 NB TSM — 2030 Local TSM

- Intersection not applicable
- LOS A - C
- LOS D - F

FIGURE 28

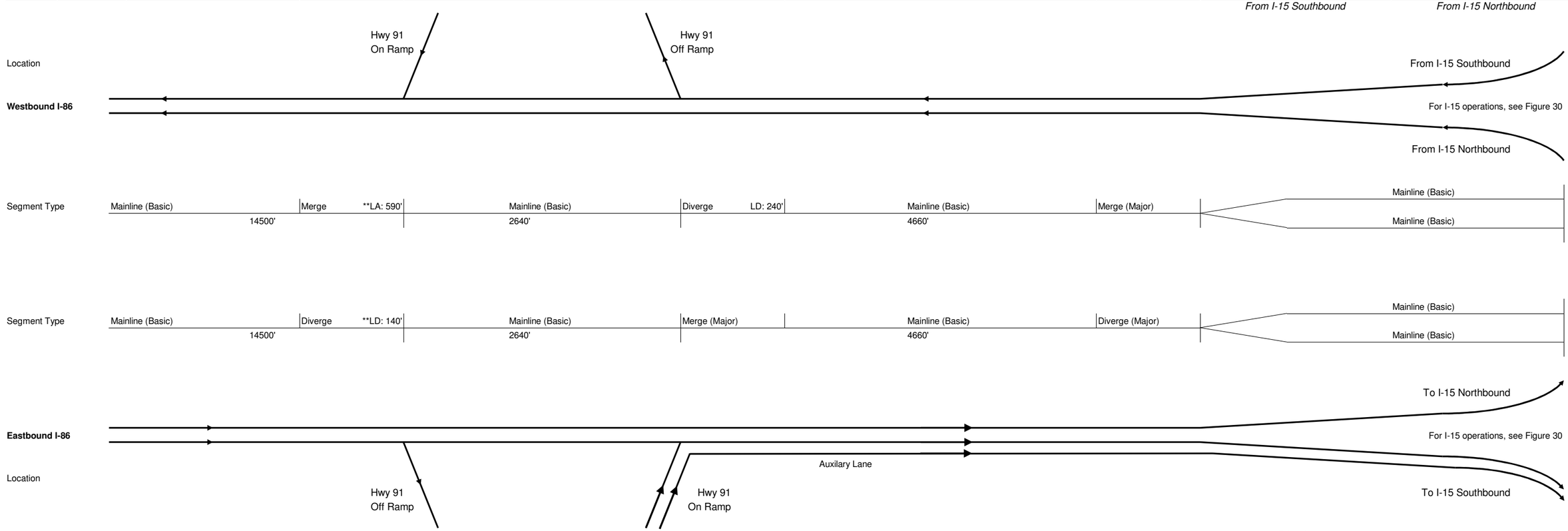
Local Study Area Intersection Channelization

2030 No Build TSM and 2030 Local TSM Conditions

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.8	14.2	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1330	275	1055	1180	2235	N/A	665	1570
2030 Local	**LOS**	B	B	A	C	C	N/A	See I-15 SB	See I-15 NB
	Density	12.9	14.3	10.2	25.4	21.5	N/A	See I-15 SB	See I-15 NB
	Volume	1340	285	1055	1180	2235	N/A	665	1570
								From I-15 Southbound	*From I-15 Northbound*



								To I-15 Southbound	*To I-15 Northbound*
2030 No Build	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.5	8.4	N/A	12.5	N/A	See I-15 SB	See I-15 NB
	Volume	1290	420	870	1130	2000	N/A	1405	595
2030 Local	**LOS**	B	B	A	N/A	B	N/A	See I-15 SB	See I-15 NB
	Density	12.4	16.4	8.2	N/A	12.0	N/A	See I-15 SB	See I-15 NB
	Volume	1285	435	850	1065	1915	N/A	1305	610

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Local Concept lane configuration
- 2030 Local Concept lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane

N

Not to Scale

FIGURE 29

I-86 Freeway Operations

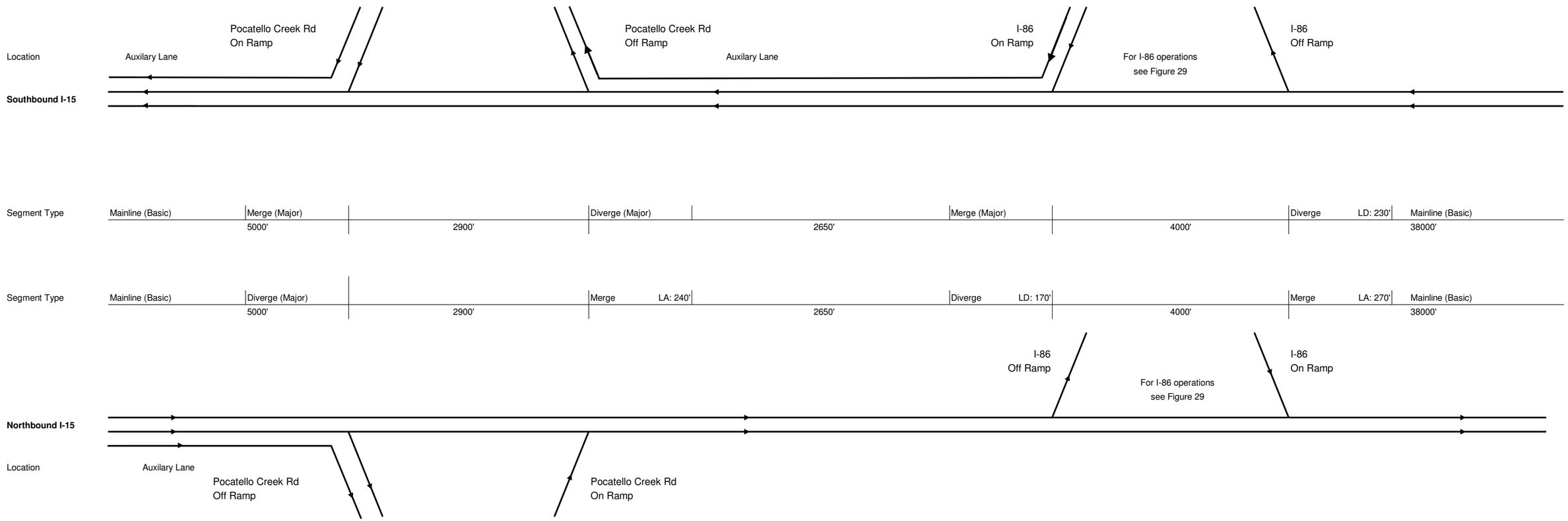
2030 No Build Conditions and 2030 Local Concept

I-15 Pocatello Environmental Study

CH2MHILL

I-15TrafficAnalysisCombined_TS_011807.xls: F_29_I-86

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5
	Volume	2730	895	1835	825	2660	1405	1255	665	1920
2030 Local Conc.	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C
	Density	17.6	N/A	17.8	N/A	16.7	N/A	12.1	22.2	18.5
	Volume	2815	965	1850	710	2560	1305	1255	665	1920



2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910
2030 Local Conc.	**LOS**	C	N/A	C	D	D	D	B	C	C
	Density	22.4	N/A	21.4	30.6	27.7	32.5	12.4	21.4	18.2
	Volume	3570	1345	2225	630	2855	1570	1285	610	1895

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Local Concept lane configuration
- 2030 Local Concept lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 30

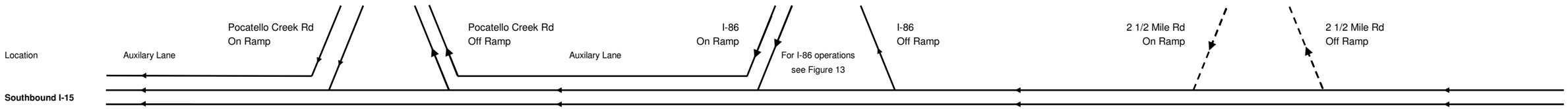
I-15 Freeway Operations

2030 No Build Conditions and 2030 Local Concept

I-15 Pocatello Environmental Study

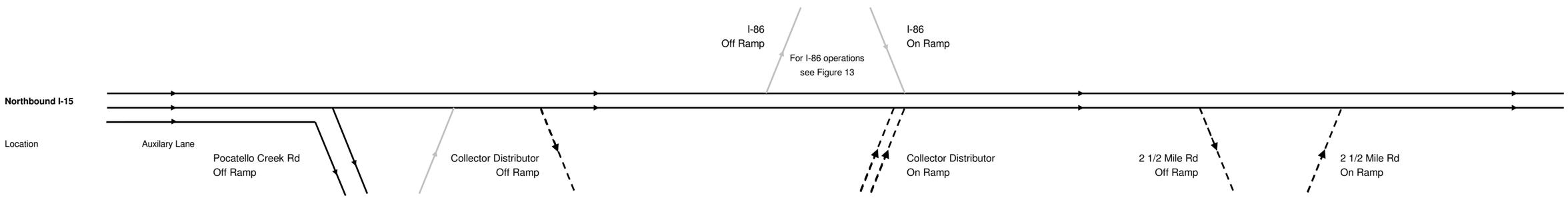
CH2MHILL

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 12C	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	C	B	C	C
	Density	17.0	N/A	18.0	N/A	17.8	N/A	16.0	25.7	21.7	22.8	16.8	23.0	18.5
	Volume	2705	830	1875	965	2840	1175	1665	590	2255	510	1745	175	1920



Segment Type	Mainline (Basic)	Merge (Major)		Diverge (Major)		Merge (Major)		Diverge LD: 230'	Mainline (Basic)	Merge LA: 590'		Diverge LD: 140'	
		5000'	2900'		2650'		4000'		12200'		3900'		21900'

Segment Type	Mainline (Basic)	Diverge (Major)		Merge LA: 240'		Diverge LD: 170'		Merge LA: 270'	Mainline (Basic)	Diverge LD: 140'		Merge LA: 590'	
		5000'	3250'			6100'			10000'		3900'		21900'



2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 12C	**LOS**	C	N/A	C	C	B			B	C	C	B	B	B
	Density	22.2	N/A	22.5	27.4	12.2			17.8	20.6	25.3	16.0	19.0	17.6
	Volume	3545	1205	2340	1075	1265			875	2140	480	1660	170	1830

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 12C lane configuration
- 2030 Concept 12C lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 31

I-15 Freeway Operations

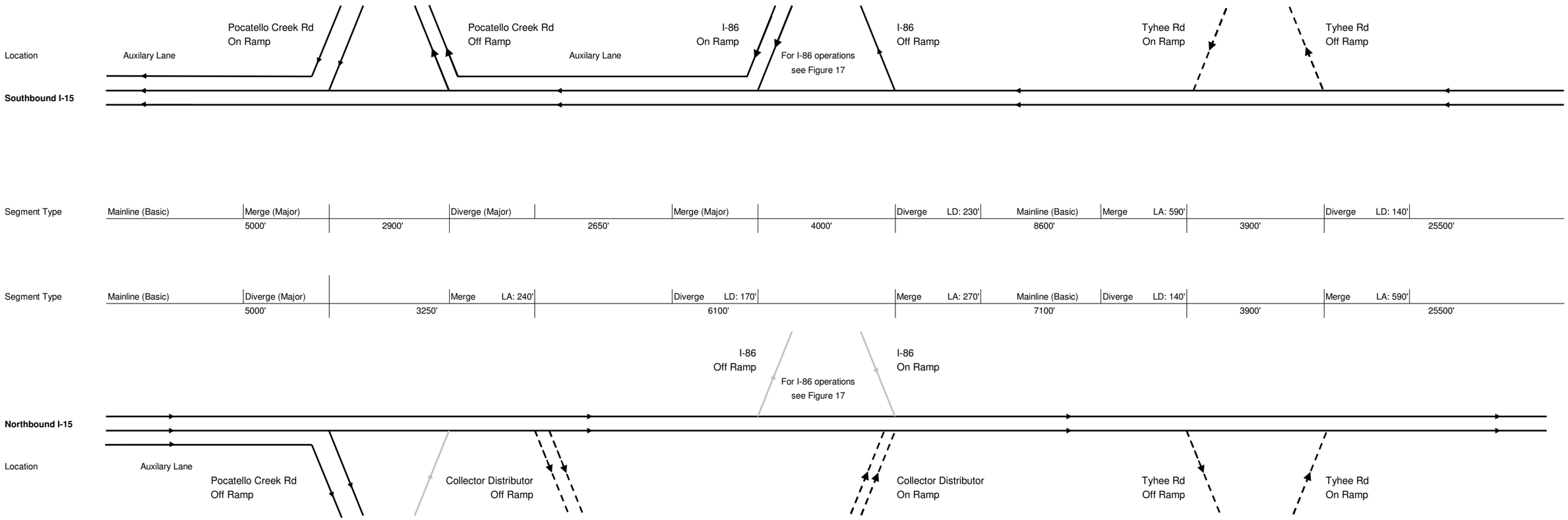
2030 No Build Conditions and 2030 Concept 12C Modified

I-15 Pocatello Environmental Study

CH2MHILL

I-15TrafficAnalysisCombined_TS_011807.xls: F_31_I-15

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 13	**LOS**	B	N/A	C	N/A	C	N/A	B	C	C	C	B	C	C
	Density	17.1	N/A	18.2	N/A	18.4	N/A	17.3	26.6	22.5	23.6	16.9	23.0	18.5
	Volume	2730	840	1890	1050	2940	1140	1800	540	2340	585	1755	165	1920



2030 No Build	**LOS**	C	N/A	C	D	D	D	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 13	**LOS**	C	N/A	C	C	B			B	C	C	B	B	B
	Density	22.8	N/A	23.5	27.2	13.4			19.2	22.0	26.8	16.5	19.3	18.0
	Volume	3640	1195	2445	1050	1395			885	2280	570	1710	155	1865

ASSUMPTIONS

- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND

- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 13 lane configuration
- 2030 Concept 13 lane configuration
- 2030 No Build lane configuration only

NOTES

- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area

N

Not to Scale

FIGURE 32

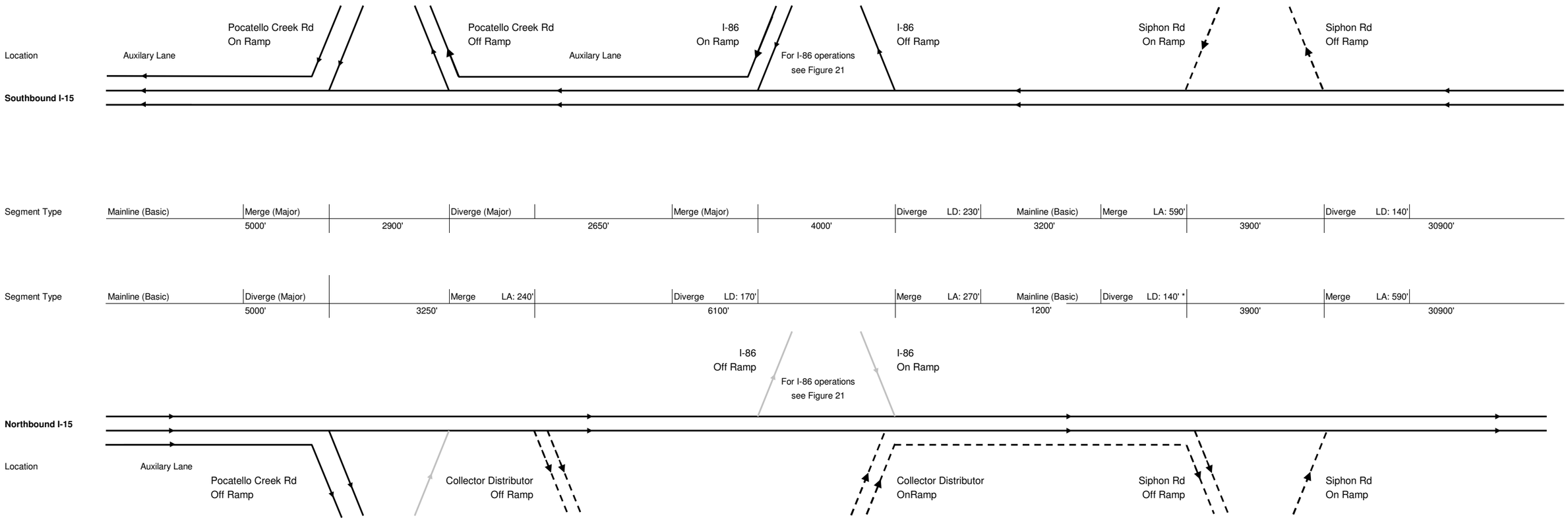
I-15 Freeway Operations

2030 No Build Conditions and 2030 Concept 13 Modified

I-15 Pocatello Environmental Study

CH2MHILL

2030 No Build	**LOS**	B	N/A	B	N/A	B	N/A	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	17.1	N/A	17.7	N/A	16.7	N/A	12.1	22.2	18.5	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	2730	895	1835	825	2660	1405	1255	665	1920	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 14	**LOS**	B	N/A	C	N/A	C	N/A	C	**D**	**D**	C	B	C	C
	Density	17.6	N/A	20.3	N/A	19.4	N/A	20.3	30.6	26.3	27.0	16.4	23.0	18.5
	Volume	2805	695	2110	990	3100	990	2110	615	2725	1020	1705	215	1920



2030 No Build	**LOS**	C	N/A	C	**D**	**D**	**D**	B	C	C	Not Existing	Not Existing	Not Existing	Not Existing
	Density	21.7	N/A	21.3	30.9	32.8	32.8	12.7	21.5	18.4	Not Existing	Not Existing	Not Existing	Not Existing
	Volume	3455	1245	2210	675	2885	1570	1315	595	1910	Not Existing	Not Existing	Not Existing	Not Existing
2030 Conc. 14	**LOS**	C	N/A	C	C	B			C			B	B	C
	Density	23.8	N/A	25.3	250.0	17.0			22.8			16.6	20.0	18.6
	Volume	3800	1170	2630	870	1760			920	2680	960	1720	215	1935

ASSUMPTIONS
- Existing: 10% trucks /buses, 2% RV's Future: 12% trucks /buses, 5% RV's
- Peak Hour Factor: 0.90
- Driver Population Factor: 0.98
- Level Terrain is assumed for all segments
- Freeway Base FSS: 70 mph
- Lane width: 12 feet, Right shoulder clearance: 6 feet
- Freeway FFS for ramp junction analysis is the corresponding mainline FFS
- Ramp FFS: 35 mph
- Interchange Density: 1 intersection / mile
- ** Default acceleration/deceleration lane length is assumed
- All distances between ramps are measured approximately from gore to gore

LEGEND
- Basic mainline segment
- Merge or Diverge segment
- Weaving segement
- Overlapping influence area
- No Build and Concept 14 lane configuration
- 2030 Concept 14 lane configuration
- 2030 No Build lane configuration only

NOTES
- FFS: Free Flow Speed
- LA: Length of Acceleration lane
- LD: Length of Deceleration lane
- LOS: Level of Service
- N/A: Not applicable to segment due to major merge or diverge ramp segments not analyzed in HCS
- Density is measured in passenger cars / mile / lane
- The merge/diverge section with the highest delay is reported on the mainline section for an overlapping influence area
- * LD is increased to 250' for the build concept

N
Not to Scale

FIGURE 33

I-15 Freeway Operations

2030 No Build Conditions and 2030 Concept 14 Modified

I-15 Pocatello Environmental Study

CH2MHILL