

NEEDHAM PLANNING BOARD

Thursday, January 21, 2021

8:30 a.m.

Virtual Meeting using Zoom

Meeting ID: **826-5899-3198**

(Instructions for accessing below)

To view and participate in this virtual meeting on your phone, download the “Zoom Cloud Meetings” app in any app store or at www.zoom.us. At the above date and time, click on “Join a Meeting” and enter the following Meeting ID: **826-5899-3198**

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us click “Join a Meeting” and enter the following ID: **826-5899-3198**

1. Highway Commercial 1 Rezoning and Planning Study: Review of Urban Design Plan, Traffic Impact, Discussion of Next Steps and Project Schedule.
2. Minutes.
3. Correspondence.
4. Report from Planning Director and Board members.

(Items for which a specific time has not been assigned may be taken out of order.)

HIGHWAY COMMERCIAL 1 ZONING DISTRICT PLANNING

NEEDHAM, MA

JANUARY 21, 2021



PREPARED BY:

STUDIO ENÉE

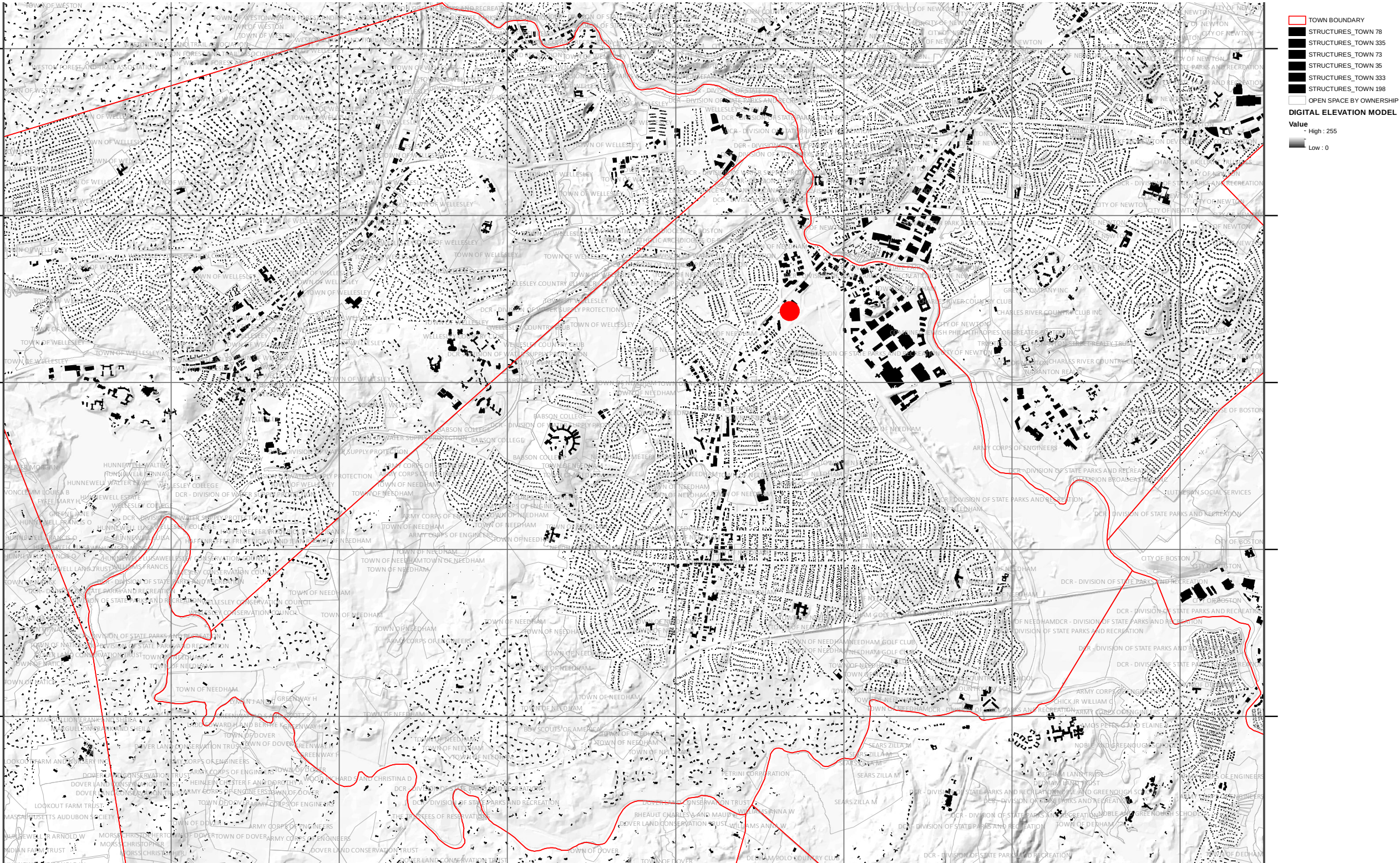
AGENDA

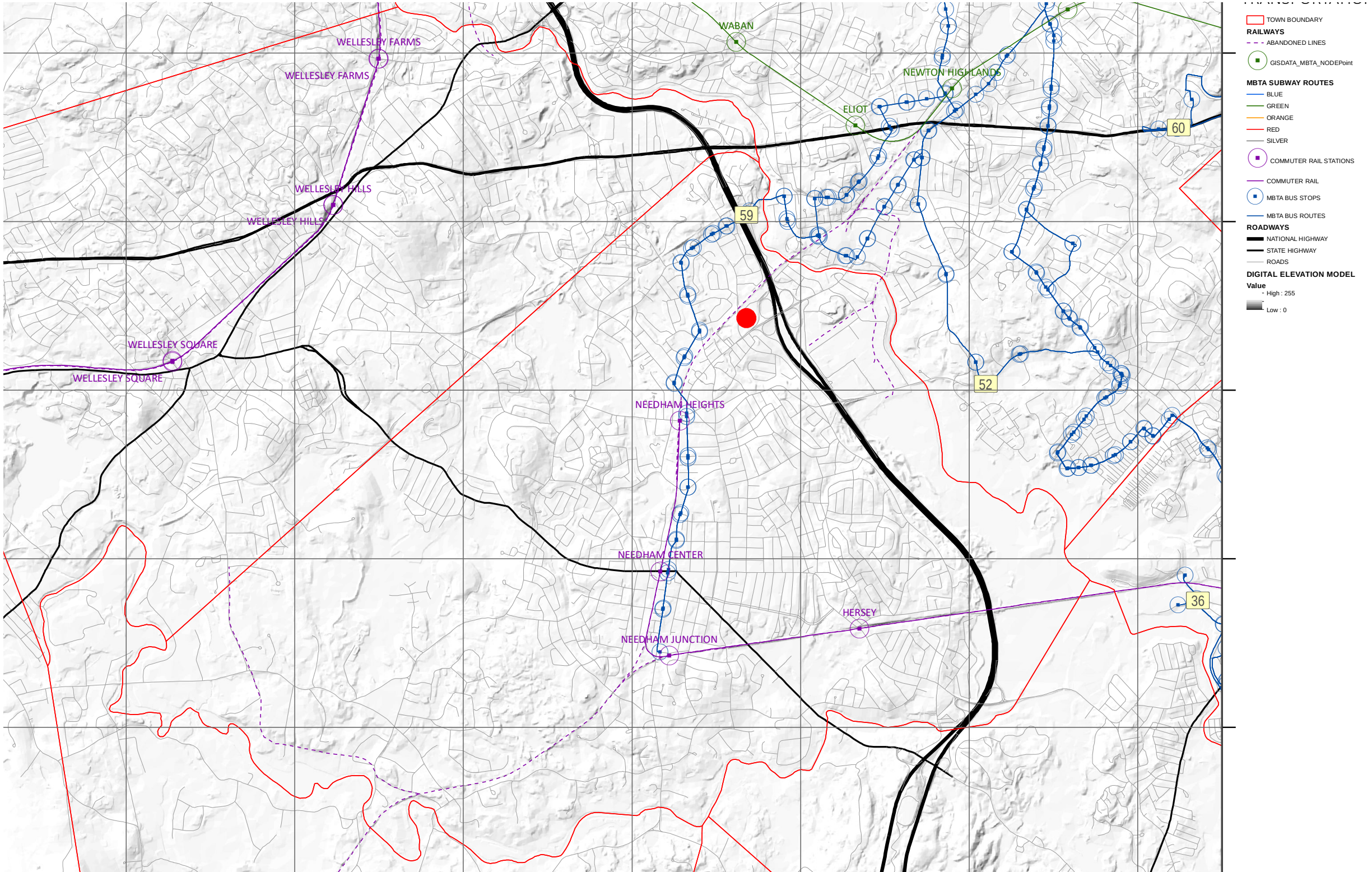
1. Goals for Community Meeting
2. Review of Zoning Drawings
 - A. Existing Zoning
 - FAR = 0.5
 - B. As of Right Zoning
 - FAR = 1.0
 - Option 1 Program: commercial use
 - Option 2 Program: mixed use - commercial and residential
 - C. Special Permit Zoning
 - FAR = 1.35
 - Option 1 Program: commercial use
 - Option 2 Program: mixed use - commercial and residential
3. Recommendations for Sustainable Development Strategies

GOALS FOR COMMUNITY MEETING

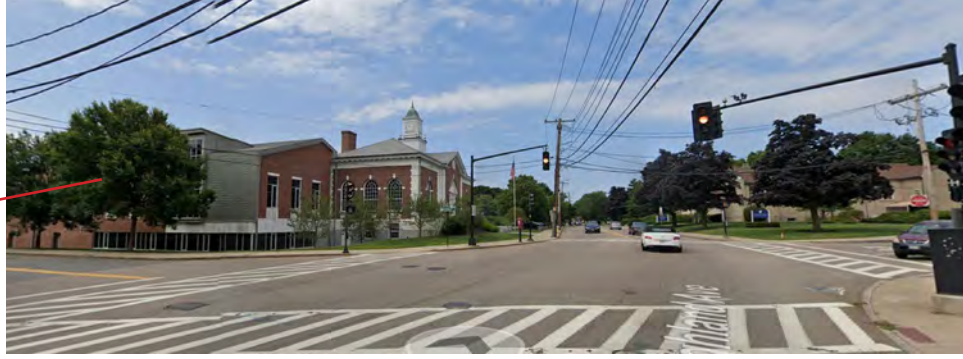
- Historical overview of the planning process as relates to the study area.
- Presentation of an analysis of existing study area conditions, including land use, zoning, parking, and traffic.
- Brief presentation of the earlier development scheme
- Presentation of the proposed scheme for the study area
- Questions & Answers

DENSITY





HIGHLAND AVENUE : CIVIC AND COMMERCIAL CORRIDOR



ZONING COMPARISON - DIMENSIONS

Zoning Element	Existing By-law		Previous Proposal		New Proposal	
	By Right	Special Permit	By Right	Special Permit	By Right	Special Permit
FAR	0.5	0.65-0.75	1.00	1.75	1.00	1.35
Height	30'		70'*	84'*	70'*****	70'*****
Front Setback	Gould + Highland)		5'**	5'**	5'**	5'**
Side Setback	20'		10' ***	10' ***	10' ***	10' ***
Rear Setback	10'		10' ****	10' ****	10' ****	10' ****
Min Lot Area (SF)	20,000		20,000	20,000	20,000	20,000
Min Lot Frontage	100		100	100	100	100
Max Lot Coverage	no requirement	no requirement	65%	65%	65%	65%
Traffic Mitigation		\$ by Developer		\$ by Developer		\$ by Developer

Legend

*Except a building within 150 feet of Highland Avenue and 200 feet of Gould Street is limited to a height of 42 feet or 48 feet if under a pitched roof or recessed from the face of the building in a manner approved by the Planning Board.

**Except where building height exceeds 42 feet, in which case the front setback increases to 15 feet, or the building sits on Highland Avenue, Gould Street and/or the layout of Route 95/128, where a 20-foot landscaped vegetative buffer is required.

***Except where building height exceeds 42 feet, in which case the side setback is increased to 20 feet for all side setbacks not abutting the MBTA right-of-way.

**** Except where building height exceeds 42 feet, in which case the rear setback is increased to 20 feet for all rear setbacks not abutting the MBTA right-of-way.

*****Except a building within 180 feet of Highland Avenue, dimensioned from the extent of Highland Avenue, and 200 feet of Gould Street is limited to a height of 42 feet or 48 feet if under a pitched roof or recessed from the face of the building in a manner approved by the Planning Board.

ZONING COMPARISON - USES

Zoning Element	Existing By-law		Previous Proposal		New Proposal	
	By Right	Special Permit	By Right	Special Permit	By Right	Special Permit
Uses	farm, church, school, lib/mus, muni water tower, park, passenger station, childcare, single family, boarding house, dormitory, retail up to 5750 sf, accessory manufacturing, offices, banks, various services, theaters, movie houses, sport facilities, entertainment buildings, fitness, distribution warehouse, storage, machine shop, bottling plant, equipment rental, garment manufacturing, laboratory, radio/TV studio, light manufacturing, municipal building, accessory use for home office or small repairs	agriculture, nursing home, private club, private school, retail over 5750 sf, fitness, trucking terminal, gas station, vehicle repair, laundry, junk yard, lumber establishment, hotel, restaurant, veterinary, medical clinic, medical marijuana, car sales and parking, welding, food processing, genetic research, medical lab, off-street parking	Chapter 40A exempt uses, public parks, municipal buildings or uses, retail up to 10,000sf, accessory manufacturing, various services, offices, banks, medical laboratory or laboratory engaged in research and development, radio or television studio, manufacturing, more than one building or use on a lot.	Light-rail train station, adult day care, private school or nursery, retail establishment from 10,000 to 25,000sf, equipment rental service, grocery store up to 25,000sf, restaurant, veterinary office, indoor athletic or exercise facility, drive-up window, medical group practice, live performance theater, bowling alley, and similar commercial amusement or entertainment places.	No change from previous proposal	Residential multi-family use of up to 240 units added to previous proposal

A. EXISTING ZONING

VIEW FROM HIGHLAND TOWARDS NEWTON



VIEW FROM GOULD STREET TOWARDS HIGHLAND AVE.



VIEW FROM HIGHLAND AVE BRIDGE TOWARDS NEEDHAM

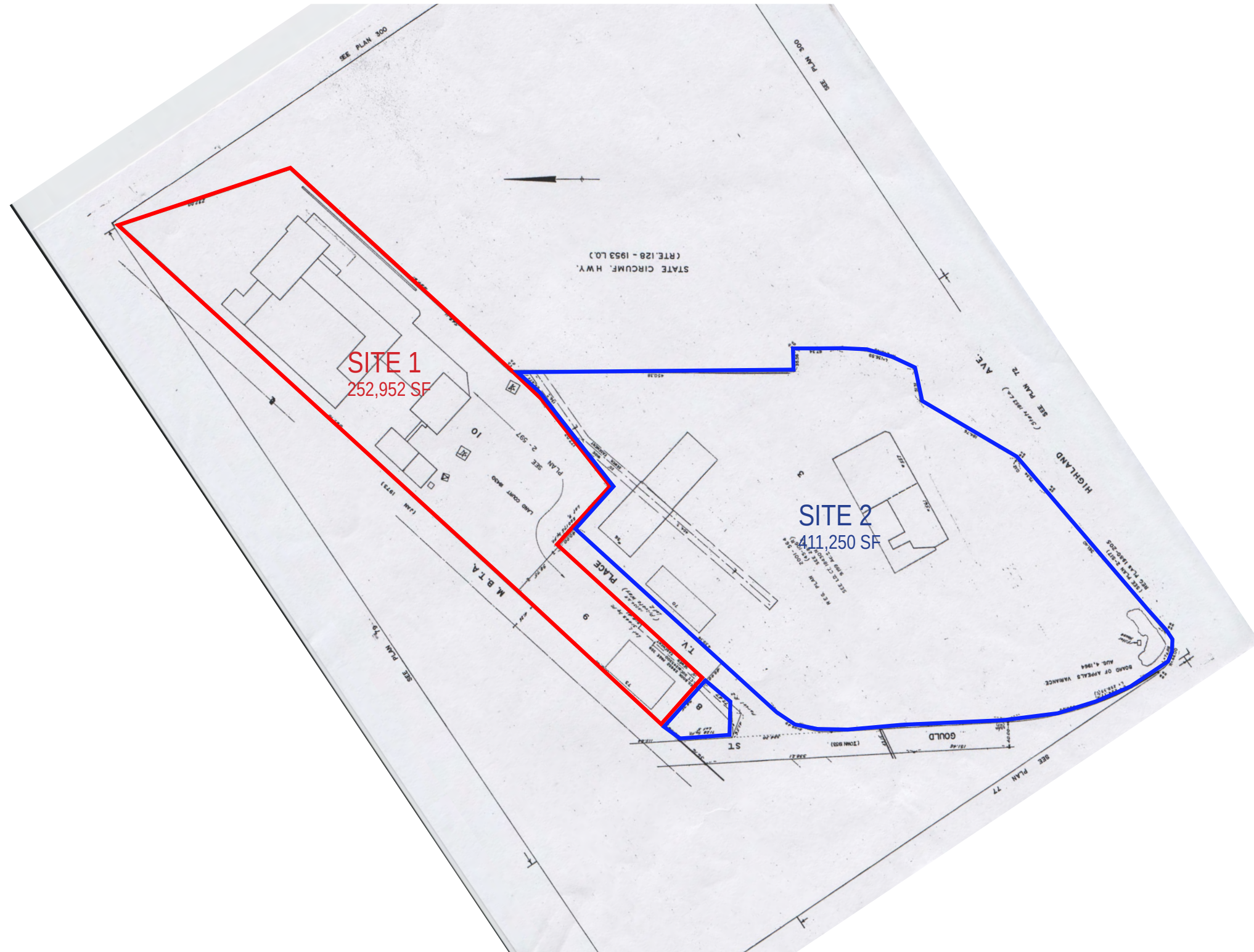


VIEW FROM HIGHWAY EXIT 19B



EXISTING AERIAL VIEW





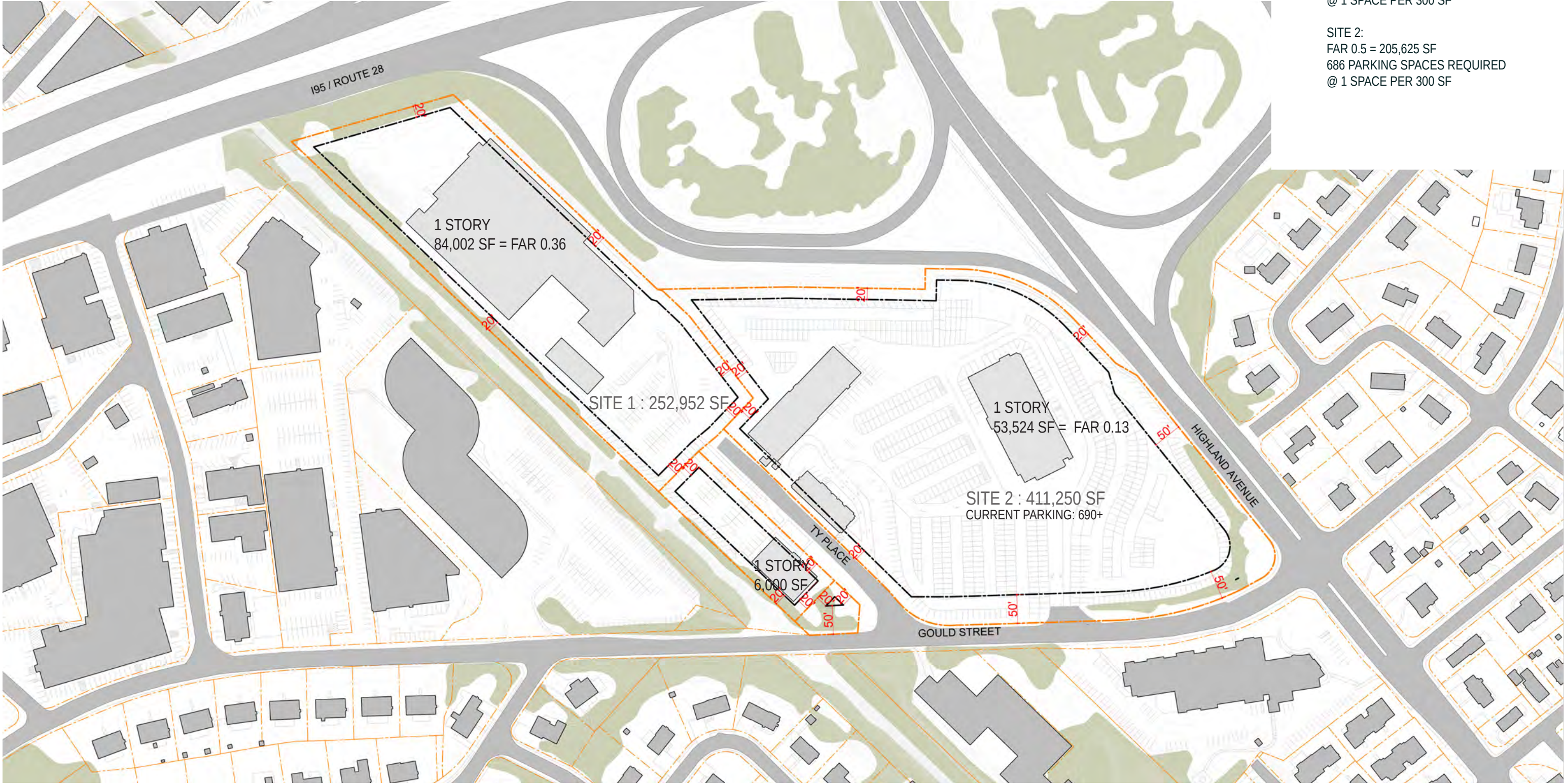
EXISTING SITE PLAN

----- BUILDING SETBACKS
- - - - - PROPERTY LINES

EXISTING ZONING REQUIREMENTS

SITE 1:
FAR 0.5 = 126,476 SF
422 PARKING SPACES REQUIRED
@ 1 SPACE PER 300 SF

SITE 2:
FAR 0.5 = 205,625 SF
686 PARKING SPACES REQUIRED
@ 1 SPACE PER 300 SF



B. AS OF RIGHT ZONING SITE PLAN

AS OF RIGHT ZONING - SITE PLAN - OPTION 1A (1 BUILDING)
FAR = 1.0

- BUILDING SETBACKS
- PROPERTY LINES
- HEIGHT LIMIT 70'

AS OF RIGHT ZONING LEGEND

SITE 1:
FAR 1.0 = 252,952 SF
843 PARKING SPACES REQUIRED*

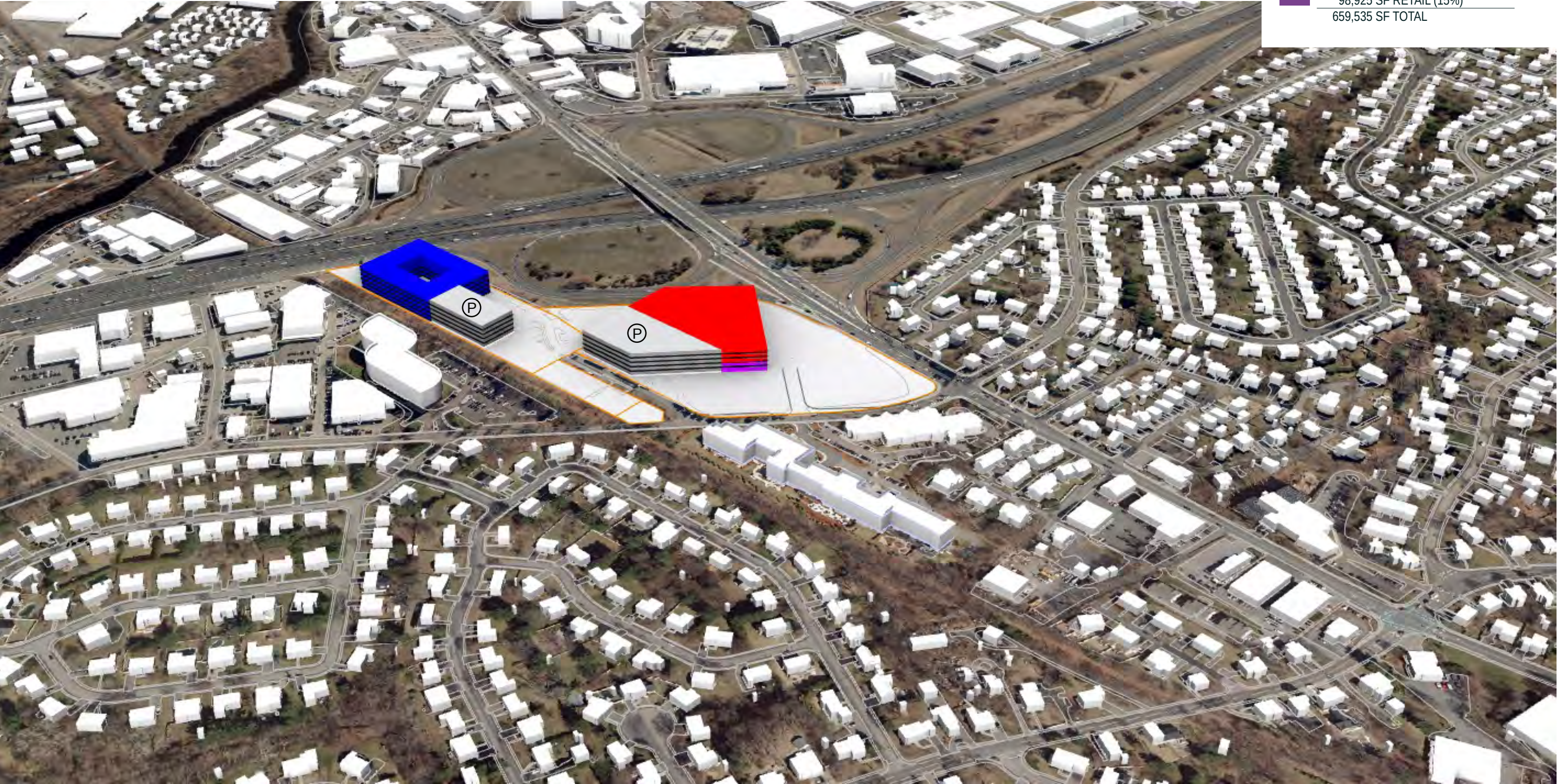
SITE 2:
FAR 1.0 = 411,250 SF
1371 PARKING SPACES REQUIRED*

* PARKING SHOWN: 2 LEVEL UNDER-
GROUND BELOW PARKING GARAGE AND
MAIN BUILDINGS AND 5 LEVEL PARKING
GARAGE + SITE PARKING

- PROGRAM OPTION 1 = COMMERCIAL
- 280,305 SF CORP. HQ (42.5%)
 - 280,305 SF R&D (42.5%)
 - 98,925 SF RETAIL (15%)
 - 659,535 SF TOTAL



AS OF RIGHT ZONING - AERIAL VIEW - OPTION 1A (1 BUILDING)



AS OF RIGHT ZONING - VIEW FROM GOULD STREET TOWARDS HIGHLAND AVE. - OPTION 1A (1 BUILDING)



AS OF RIGHT ZONING - VIEW FROM HIGHLAND AVE. TOWARDS NEWTON - OPTION 1A (1 BUILDING)



AS OF RIGHT ZONING - VIEW FROM HIGHLAND AVE BRIDGE TOWARDS NEEDHAM - OPTION 1A (1 BUILDING)



AS OF RIGHT ZONING - VIEW FROM EXIT 19B - OPTION 1A (1 BUILDING)



AS OF RIGHT ZONING - SITE PLAN - OPTION 1B (MULTIPLE BUILDINGS)
FAR = 1.0

- BUILDING SETBACKS
- PROPERTY LINES
- HEIGHT LIMIT 70'

AS OF RIGHT ZONING LEGEND

SITE 1:
FAR 1.0 = 252,952 SF
843 PARKING SPACES REQUIRED*

SITE 2:
FAR 1.0 = 411,250 SF
1371 PARKING SPACES REQUIRED*

* PARKING SHOWN: 2 LEVEL UNDER-
GROUND BELOW PARKING GARAGE AND
MAIN BUILDINGS AND 5 LEVEL PARKING
GARAGE + SITE PARKING

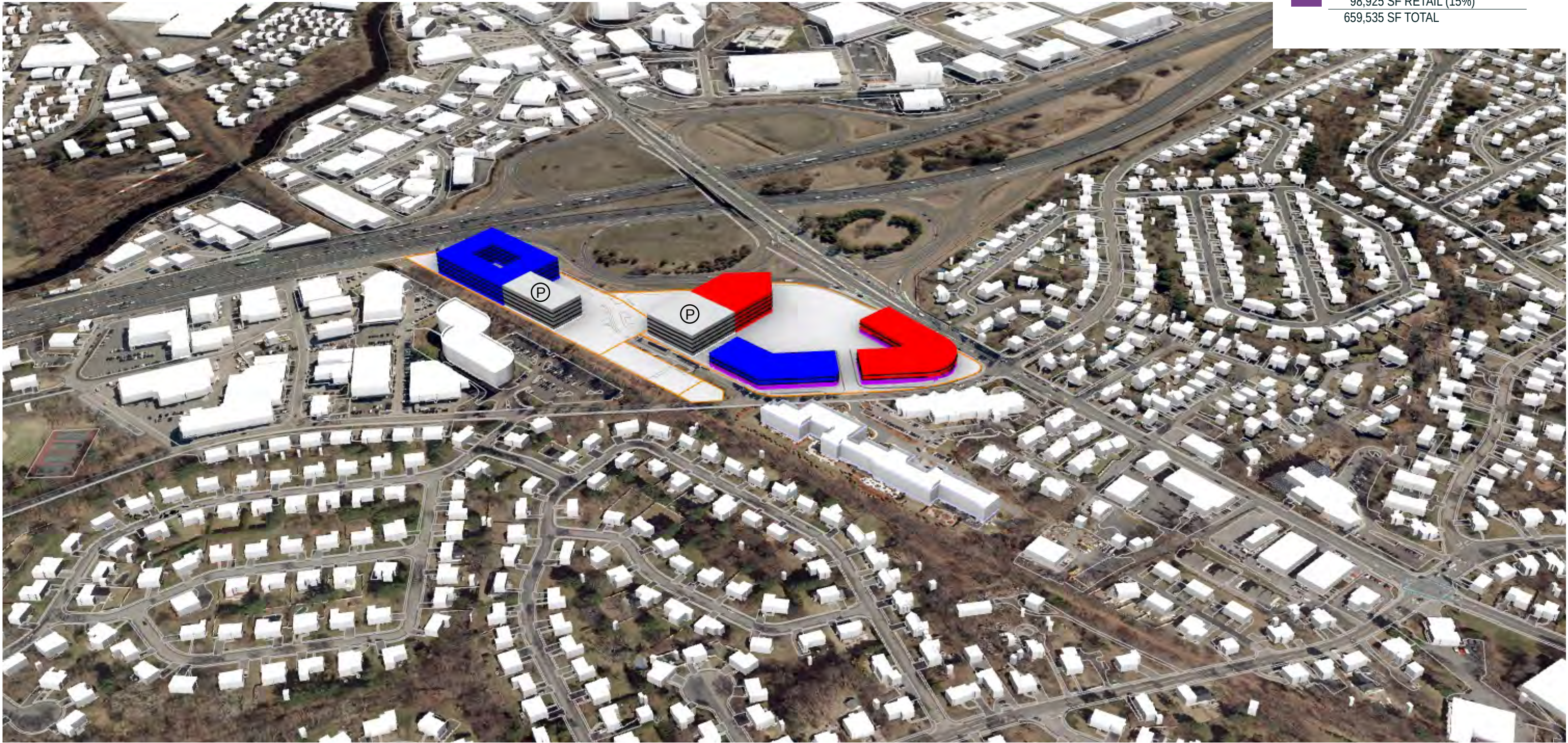
PROGRAM OPTION 1 = COMMERCIAL	
	280,305 SF CORP. HQ (42.5%)
	280,305 SF R&D (42.5%)
	98,925 SF RETAIL (15%)
659,535 SF TOTAL	



AS OF RIGHT ZONING - AERIAL VIEW - OPTION 1B (MULTIPLE BUILDINGS)

PROGRAM OPTION 1 = COMMERCIAL

	280,305 SF CORP. HQ (42.5%)
	280,305 SF R&D (42.5%)
	98,925 SF RETAIL (15%)
	659,535 SF TOTAL



AS OF RIGHT ZONING - VIEW FROM GOULD STREET TOWARDS HIGHLAND AVE. - OPTION 1B (MULTIPLE BUILDINGS)



AS OF RIGHT ZONING - VIEW FROM HIGHLAND AVE BRIDGE TOWARDS NEEDHAM - OPTION 1B (MULTIPLE BUILDINGS)



AS OF RIGHT ZONING - VIEW FROM HIGHLAND AVE. TOWARDS NEWTON - OPTION 1B (MULTIPLE BUILDINGS)



AS OF RIGHT ZONING - VIEW FROM EXIT 19B - OPTION 1B (MULTIPLE BUILDINGS)



AS OF RIGHT ZONING - MASSING SITE PLAN - OPTION 2 (MIXED USE)
FAR = 1.0

- BUILDING SETBACKS
- PROPERTY LINES
- HEIGHT LIMIT 70'

AS OF RIGHT ZONING LEGEND

SITE 1:
FAR 1.0 = 252,952 SF
843 PARKING SPACES REQUIRED *

SITE 2:
FAR 1.0 = 411,250 SF
1371 SPACES REQUIRED *

* PARKING SHOWN: 2 LEVEL UNDER-
GROUND BELOW PARKING GARAGE AND
MAIN BUILDINGS AND 5 LEVEL PARKING
GARAGE + SITE PARKING

PROGRAM OPTION 2 = MIXED USE

197,860 SF CORP. HQ (30%)
197,860 SF R&D (30%)
69,250 SF RETAIL (10.5%)
194,565 SF RESIDENTIAL (29.5 %)
659,535 SF TOTAL



AS OF RIGHT ZONING - AERIAL VIEW - OPTION 2 (MIXED USE)

PROGRAM OPTION 2 = MIXED USE

	197,860 SF CORP. HQ (30%)
	197,860 SF R&D (30%)
	69,250 SF RETAIL (10.5%)
	194,565 SF RESIDENTIAL (29.5%)
	<u>659,535 SF TOTAL</u>



AS OF RIGHT ZONING - VIEW FROM GOULD STREET TOWARDS HIGHLAND AVE. - OPTION 2 (MIXED USE)



AS OF RIGHT ZONING - VIEW FROM HIGHLAND AVENUE TOWARDS NEWTON - OPTION 2 (MIXED USE)



AS OF RIGHT ZONING - VIEW FROM HIGHLAND AVE BRIDGE TOWARDS NEEDHAM - OPTION 2 (MIXED USE)





B. SPECIAL PERMIT ZONING SITE PLAN

SPECIAL PERMIT ZONING - MASSING SITE PLAN - OPTION 1A (1 BUILDING)
FAR = 1.35

- BUILDING SETBACKS
- PROPERTY LINES
- HEIGHT LIMIT 70'

SPECIAL PERMIT ZONING LEGEND

SITE 1:
FAR 1.35 = 341,485 SF
1138 PARKING SPACES REQUIRED

SITE 2:
FAR 1.35 = 555,187 SF
1851 PARKING SPACES REQUIRED

* PARKING SHOWN: 2 LEVEL UNDER-
GROUND BELOW PARKING GARAGE AND
MAIN BUILDINGS AND 5 LEVEL PARKING
GARAGE + SITE PARKING

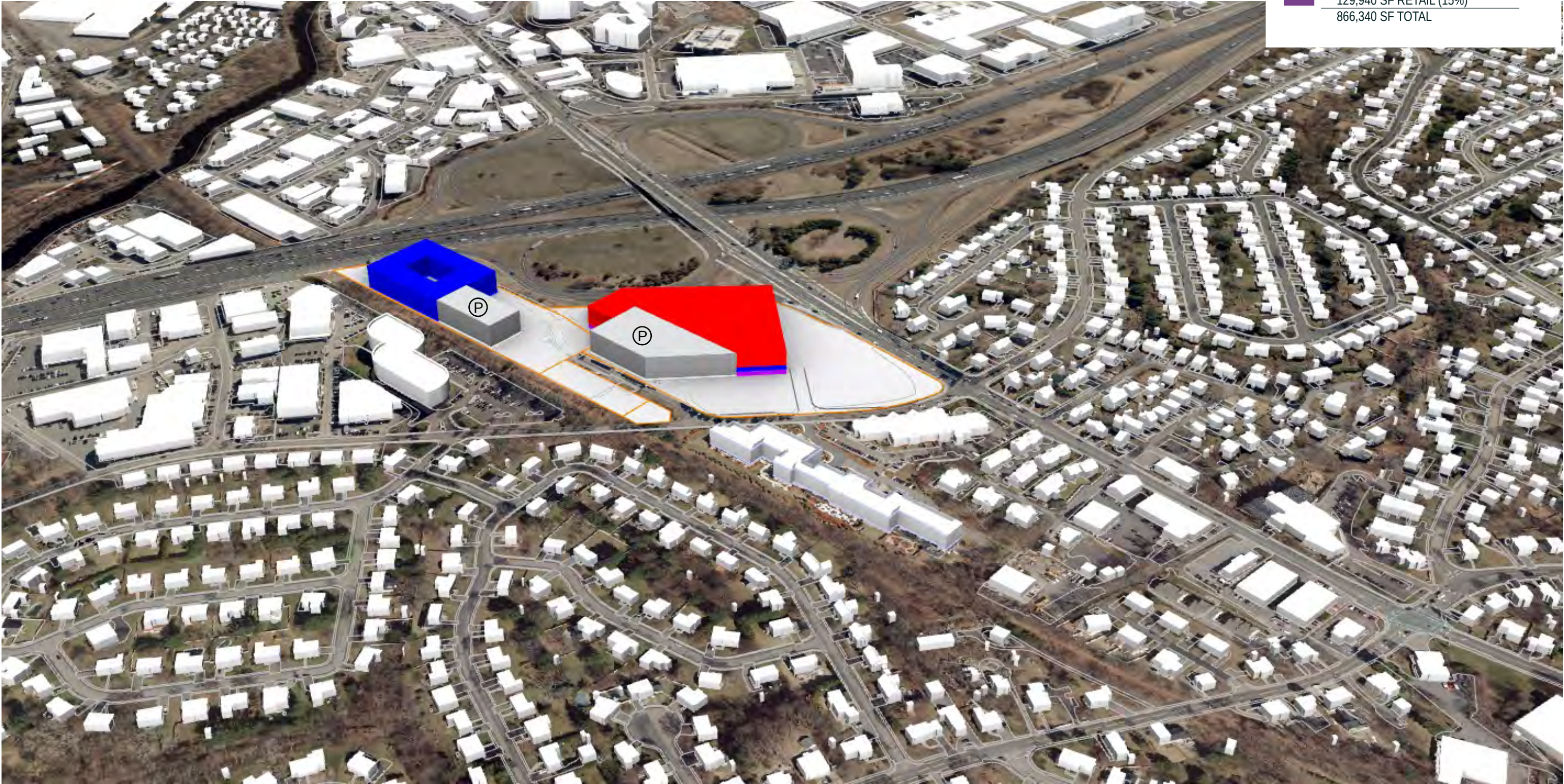
PROGRAM OPTION 1 = COMMERCIAL	
	368,200 SF CORP. HQ (42.5%)
	368,200 SF R&D (42.5%)
	129,940 SF RETAIL (15%)
	866,340 SF TOTAL



SPECIAL PERMIT ZONING - AERIAL VIEW - OPTION 1A (1 BUILDING)

PROGRAM OPTION 1 = COMMERCIAL

	368,200 SF CORP. HQ (42.5%)
	368,200 SF R&D (42.5%)
	129,940 SF RETAIL (15%)
	866,340 SF TOTAL



SPECIAL PERMIT ZONING - VIEW FROM GOULD STREET TOWARDS HIGHLAND AVE. - OPTION 1A (1 BUILDING)



SPECIAL PERMIT ZONING - VIEW FROM HIGHLAND AVE BRIDGE TOWARDS NEEDHAM - OPTION 1A (1 BUILDING)



SPECIAL PERMIT ZONING - VIEW FROM HIGHLAND AVENUE TOWARDS NEWTON - OPTION 1A (1 BUILDING)



SPECIAL PERMIT ZONING - VIEW FROM EXIT 19B - OPTION 1A (1 BUILDING)



SPECIAL PERMIT ZONING - MASSING SITE PLAN - OPTION 1B (MULTIPLE BUILDINGS)
FAR = 1.35

- BUILDING SETBACKS
- PROPERTY LINES
- HEIGHT LIMIT 70'

SPECIAL PERMIT ZONING LEGEND

SITE 1:
FAR 1.35 = 341,485 SF
1138 PARKING SPACES REQUIRED

SITE 2:
FAR 1.35 = 555,187 SF
1851 PARKING SPACES REQUIRED

* PARKING SHOWN: 2 LEVEL UNDER-
GROUND BELOW PARKING GARAGE AND
MAIN BUILDINGS AND 5 LEVEL PARKING
GARAGE + SITE PARKING

PROGRAM OPTION 1 = COMMERCIAL

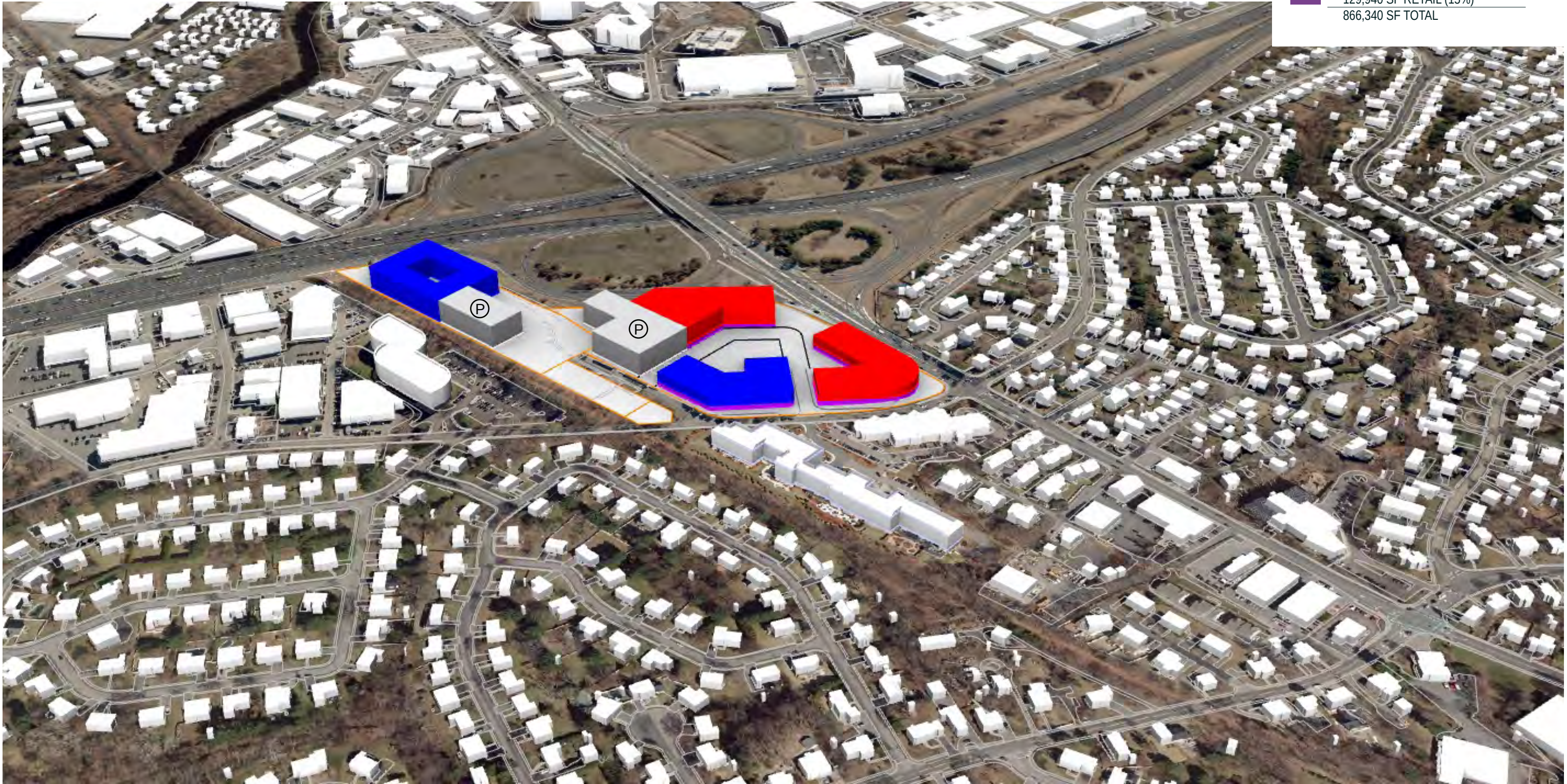
368,200 SF CORP. HQ (42.5%)
368,200 SF R&D (42.5%)
129,940 SF RETAIL (15%)
866,340 SF TOTAL



SPECIAL PERMIT ZONING - AERIAL VIEW - OPTION 1B (MULTIPLE BUILDINGS)

PROGRAM OPTION 1 = COMMERCIAL

	368,200 SF CORP. HQ (42.5%)
	368,200 SF R&D (42.5%)
	129,940 SF RETAIL (15%)
	866,340 SF TOTAL



SPECIAL PERMIT ZONING - VIEW FROM GOULD STREET TOWARDS HIGHLAND AVE. - OPTION 1B (MULTIPLE BUILDINGS)



SPECIAL PERMIT ZONING - VIEW FROM HIGHLAND AVE BRIDGE TOWARDS NEEDHAM - OPTION 1B (MULTIPLE BUILDINGS)



SPECIAL PERMIT - VIEW FROM HIGHLAND AVENUE TOWARDS NEWTON - OPTION 1B (MULTIPLE BUILDINGS)



SPECIAL PERMIT ZONING - VIEW FROM EXIT 19B - OPTION 1B (2 BUILDINGS)



SPECIAL PERMIT - MASSING SITE PLAN - OPTION 2 (MIXED USE)
FAR = 1.35

- BUILDING SETBACKS
- PROPERTY LINES
- HEIGHT LIMIT 70'

SPECIAL PERMIT ZONING LEGEND

SITE 1:
FAR 1.35 = 341,485 SF
1138 PARKING SPACES REQUIRED

SITE 2:
FAR 1.35 = 555,187 SF
1851 PARKING SPACES REQUIRED

* PARKING SHOWN: 2 LEVEL UNDER-
GROUND BELOW PARKING GARAGE AND
MAIN BUILDINGS AND 5 LEVEL PARKING
GARAGE + SITE PARKING

PROGRAM OPTION 2 = MIXED USE

	259,130 SF CORP. HQ (30%)
	259,130 SF R&D (30%)
	91,460 SF RETAIL (10.5%)
	256,620 SF RESIDENTIAL (29.5%)
	866,340 SF TOTAL



SPECIAL PERMIT ZONING - AERIAL VIEW - OPTION 2 (MIXED USE)



SPECIAL PERMIT ZONING - VIEW FROM GOULD STREET TOWARDS HIGHLAND AVE. - OPTION 2 (MIXED USE)



SPECIAL PERMIT ZONING - VIEW FROM HIGHLAND AVE BRIDGE TOWARDS NEEDHAM - OPTION 2 (MIXED USE)



SPECIAL PERMIT - VIEW FROM HIGHLAND AVENUE TOWARDS NEWTON - OPTION 2 (MIXED USE)



SPECIAL PERMIT ZONING - VIEW FROM EXIT 19B - OPTION 2 (MIXED USE)



EXISTING ZONING - AERIAL VIEW W/ NEW WAREHOUSE AND PARKING



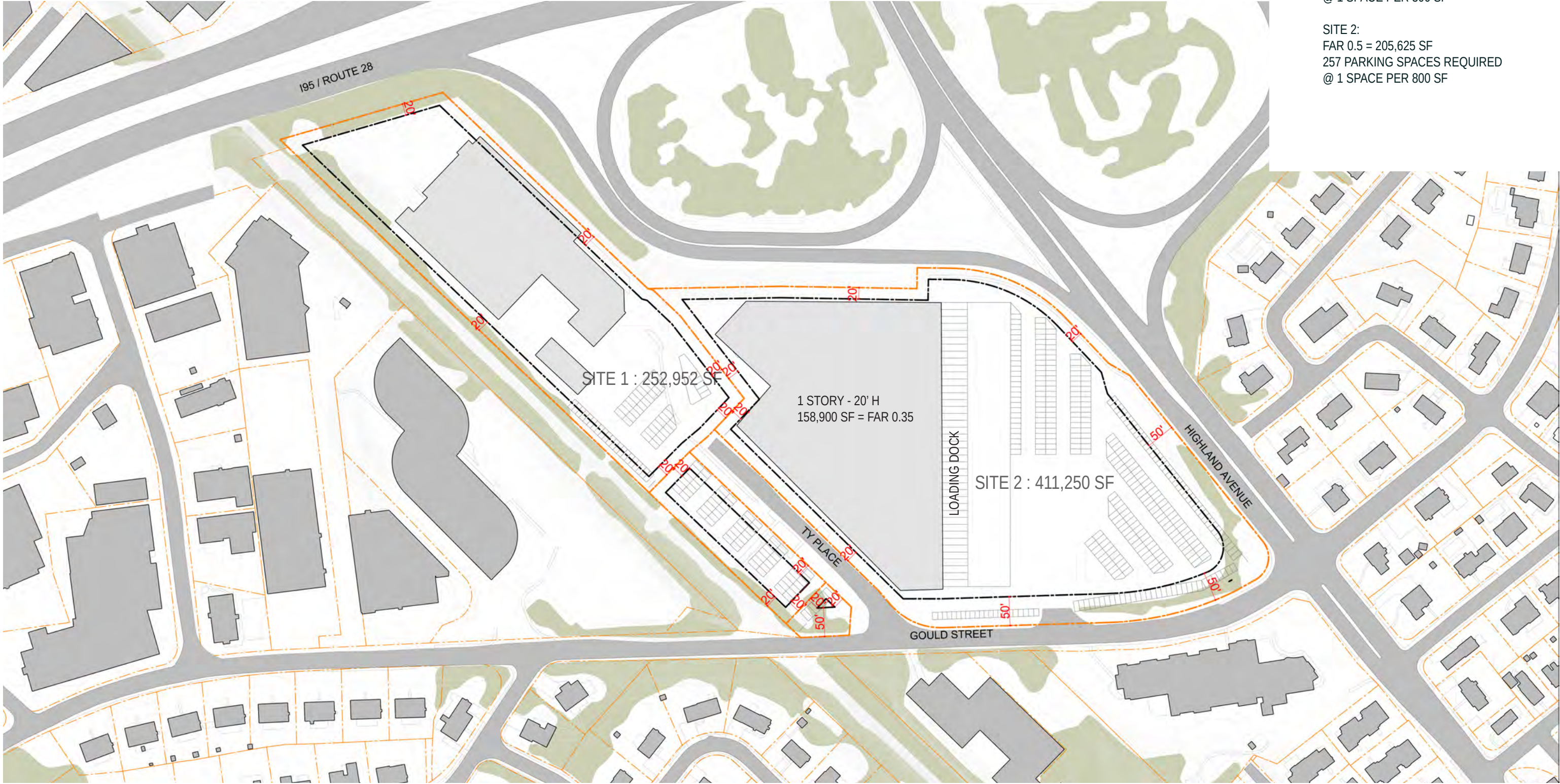
EXISTING ZONING - SITE PLAN W/ NEW WAREHOUSE AND PARKING
FAR = 0.5

----- BUILDING SETBACKS
----- PROPERTY LINES

EXISTING ZONING REQUIREMENTS

SITE 1:
FAR 0.5 = 126,476 SF
422 PARKING SPACES REQUIRED
@ 1 SPACE PER 300 SF

SITE 2:
FAR 0.5 = 205,625 SF
257 PARKING SPACES REQUIRED
@ 1 SPACE PER 800 SF

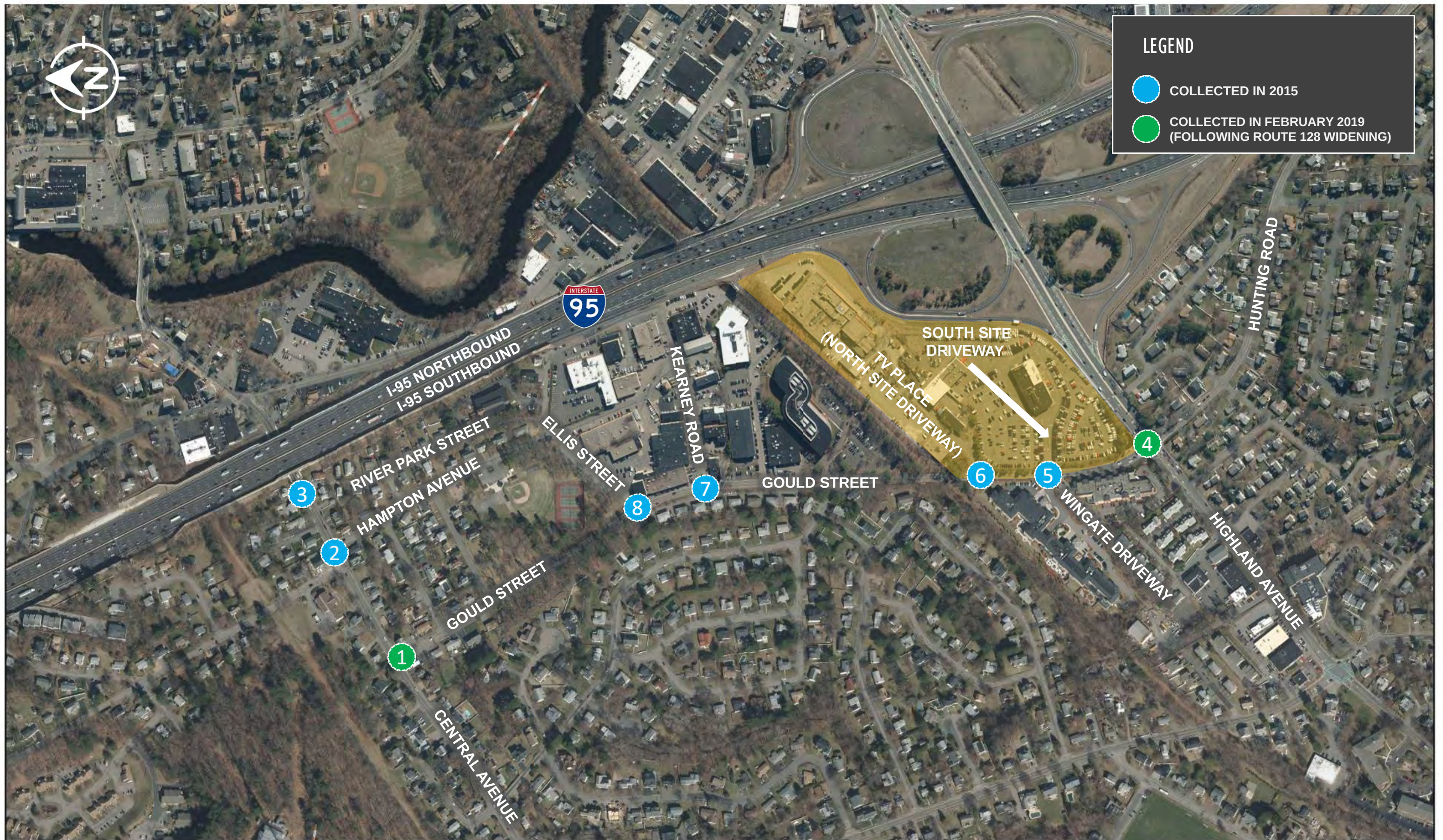


Highway Commercial 1 Needham, Massachusetts

Community Meeting
February 3, 2021

GPI





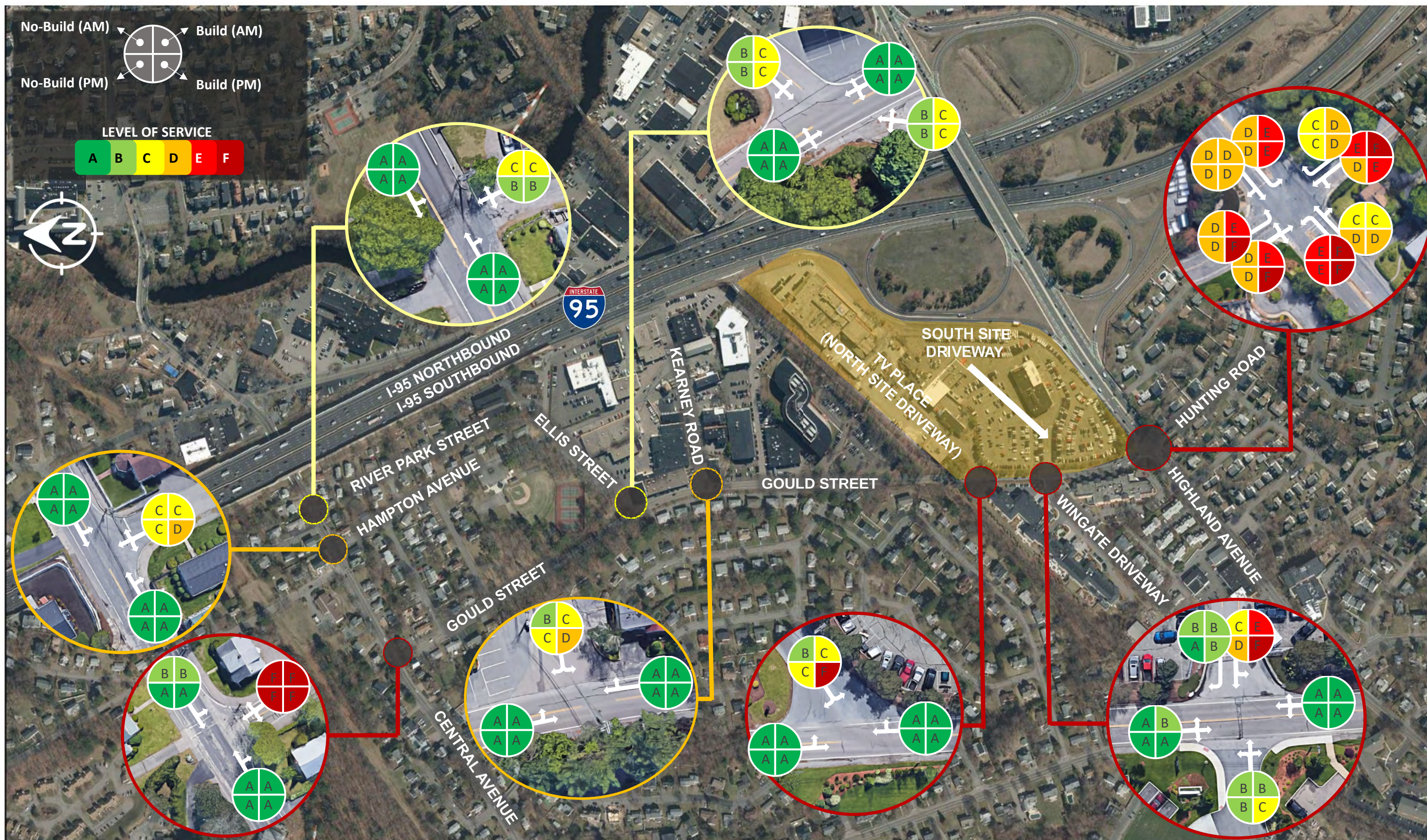
LEGEND

- COLLECTED IN 2015
- COLLECTED IN FEBRUARY 2019
(FOLLOWING ROUTE 128 WIDENING)

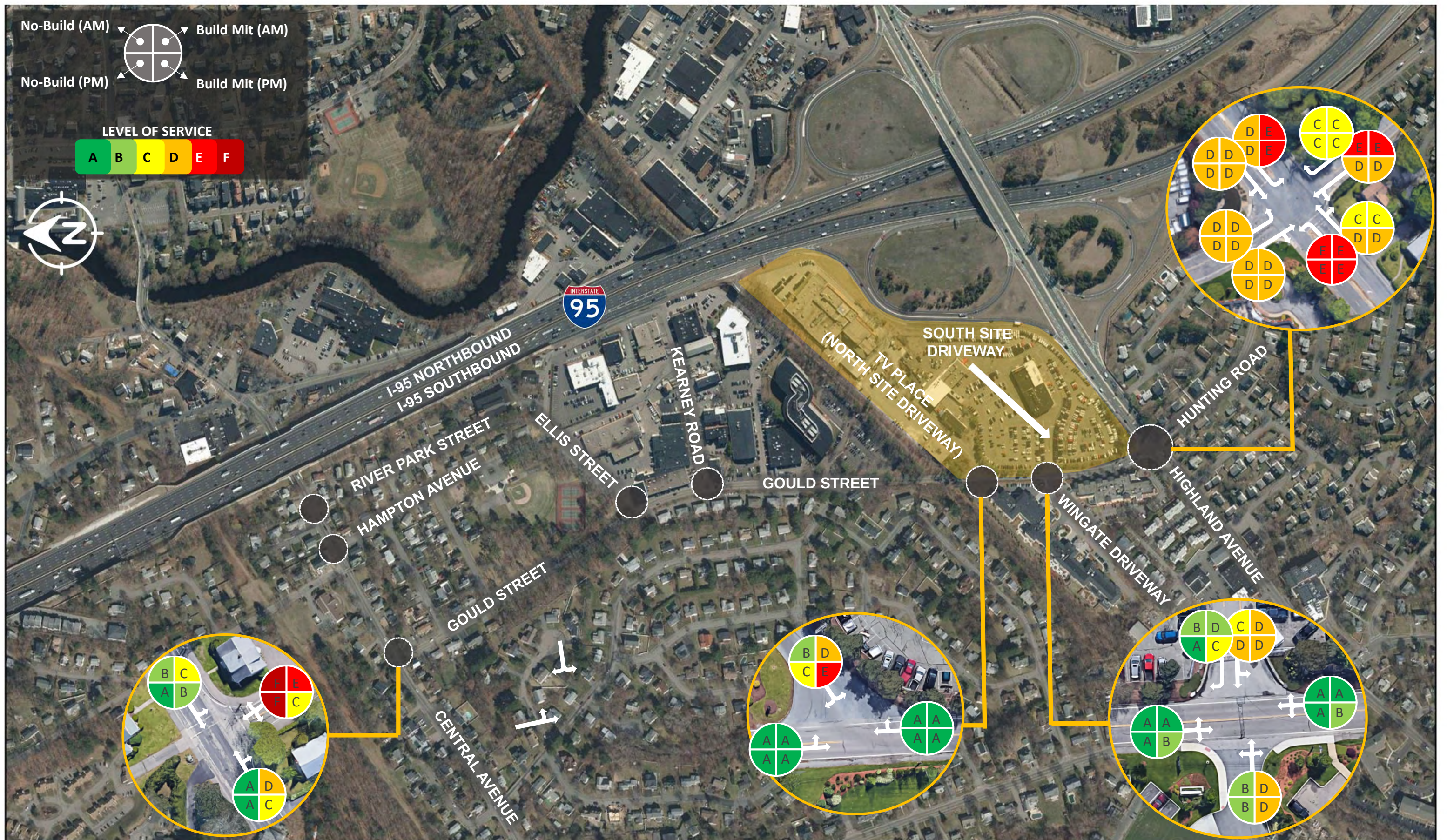
Time Period / Direction	Existing Trips	Proposed Trips	Net Increase
Weekday Daily	--	10,402	--
Weekend AM Peak Hour			
Enter	126	766	640
Exit	65	75	10
Total	191	841	650
Weekday PM Peak Hour			
Enter	33	239	206
Exit	103	926	823
Total	136	1,165	1,029











QUESTIONS?

GPI





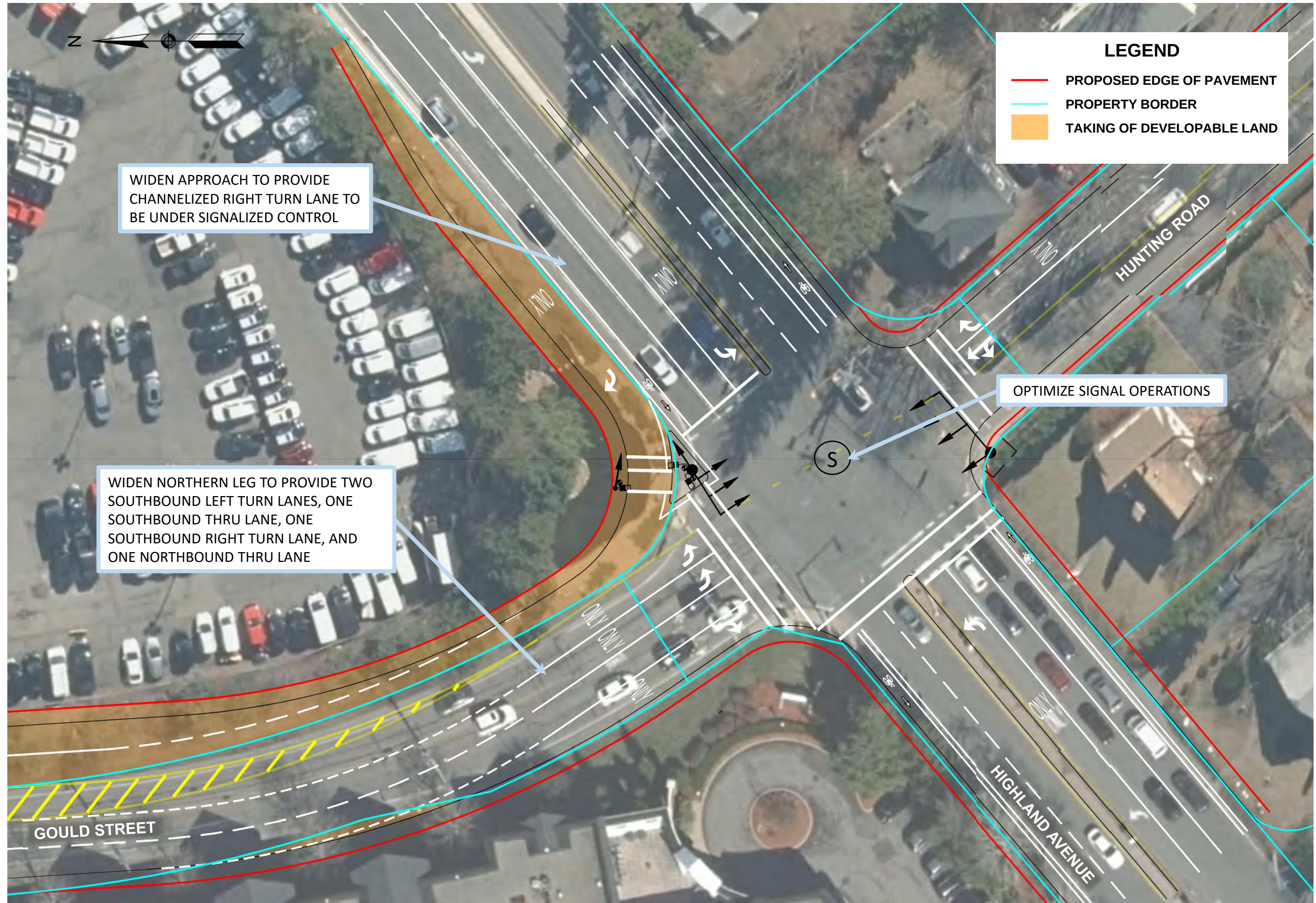


FIGURE 11

ALTERNATIVE 1 — GOULD STREET AT HIGHLAND AVENUE

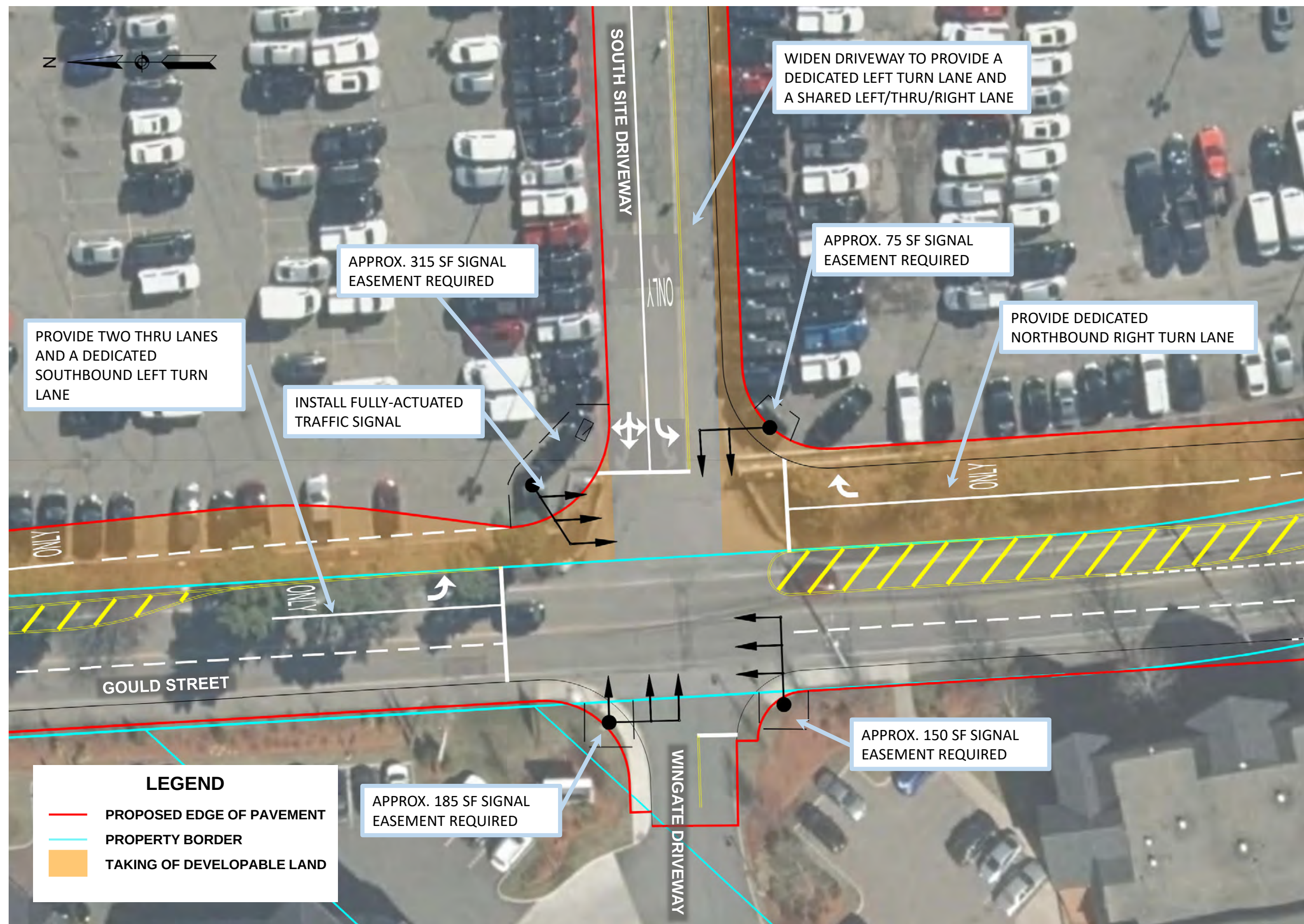


FIGURE 12

ALTERNATIVE 1 — GOULD STREET AT SOUTH SITE DRIVEWAY

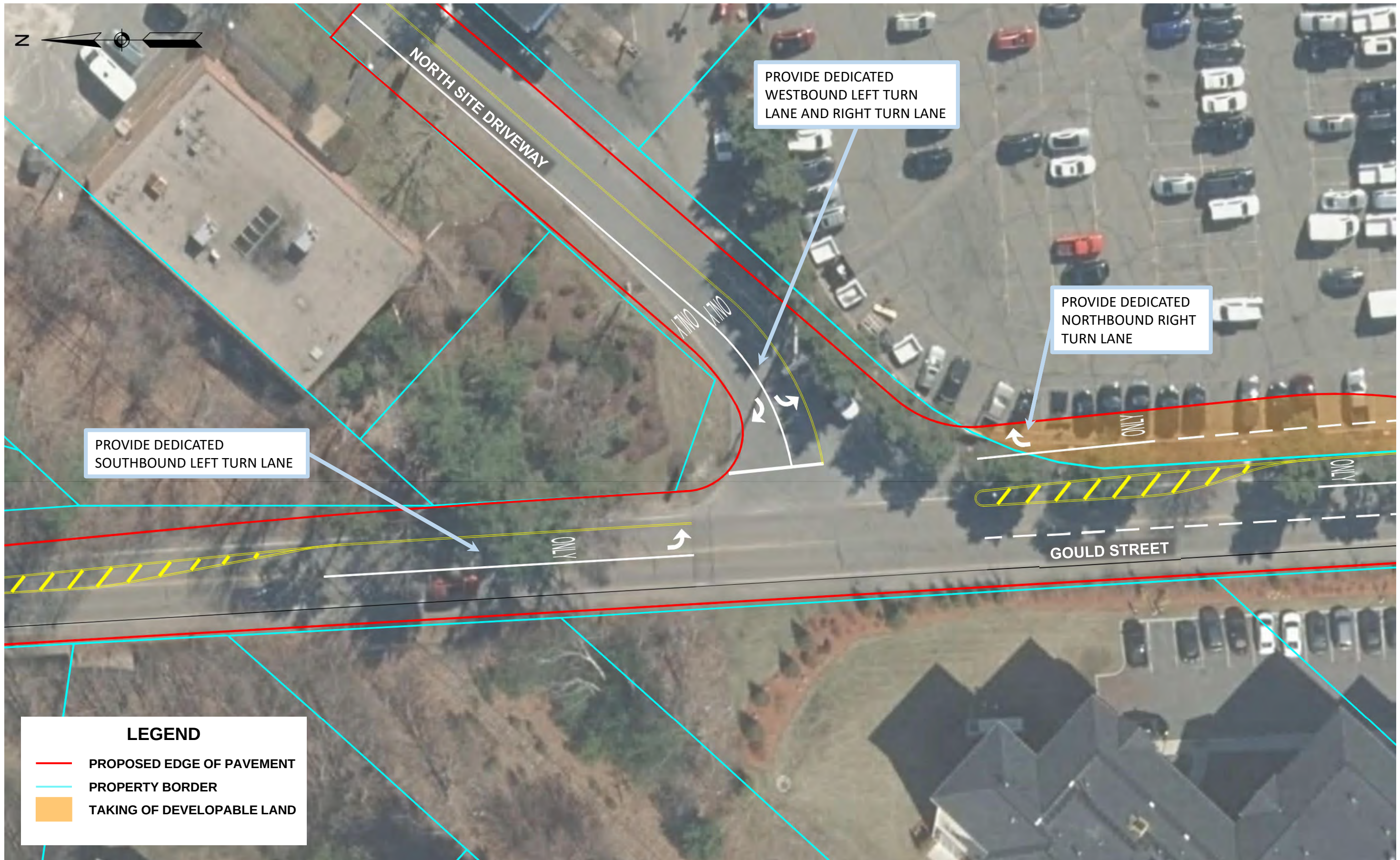


FIGURE 13

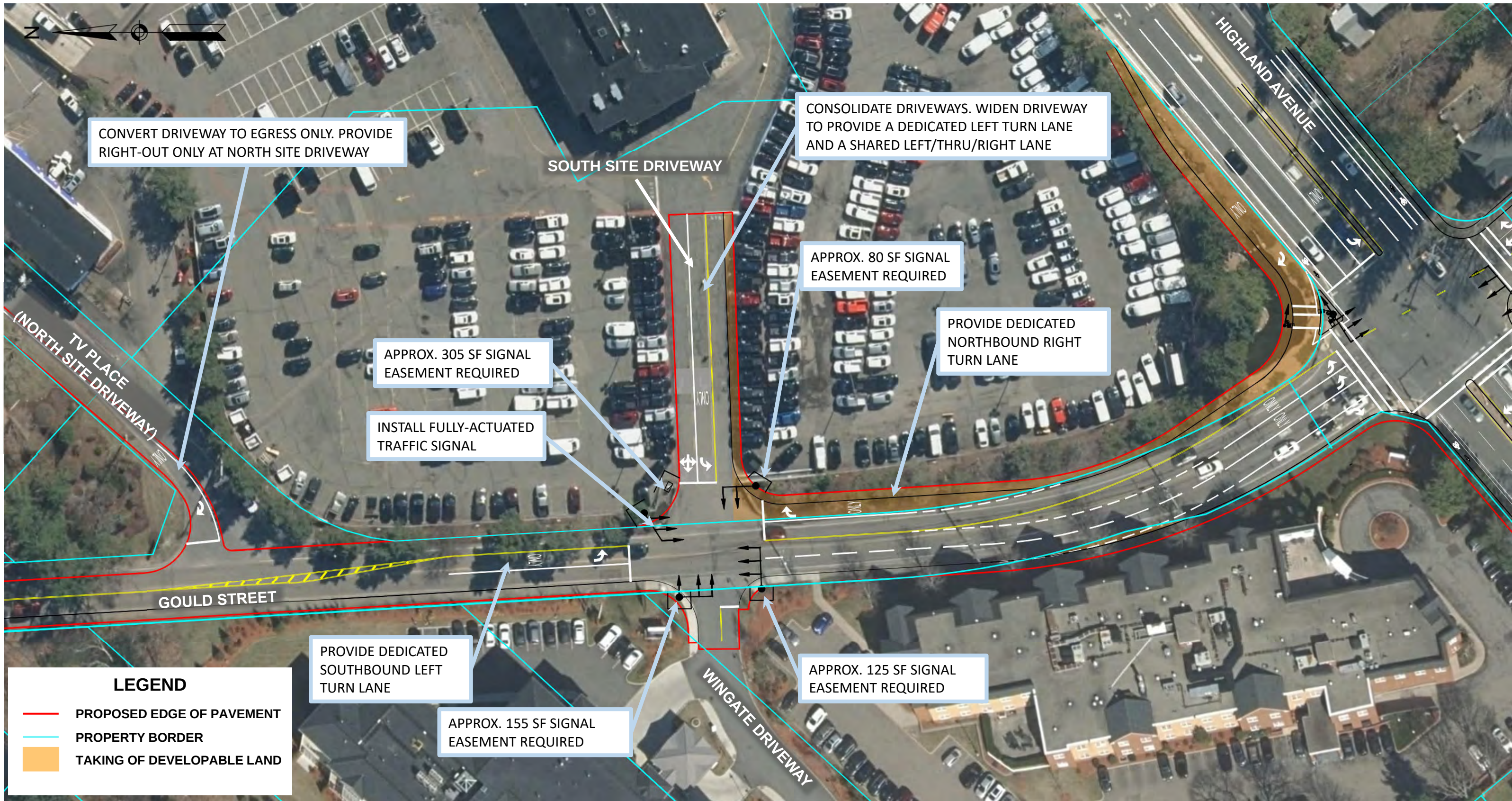
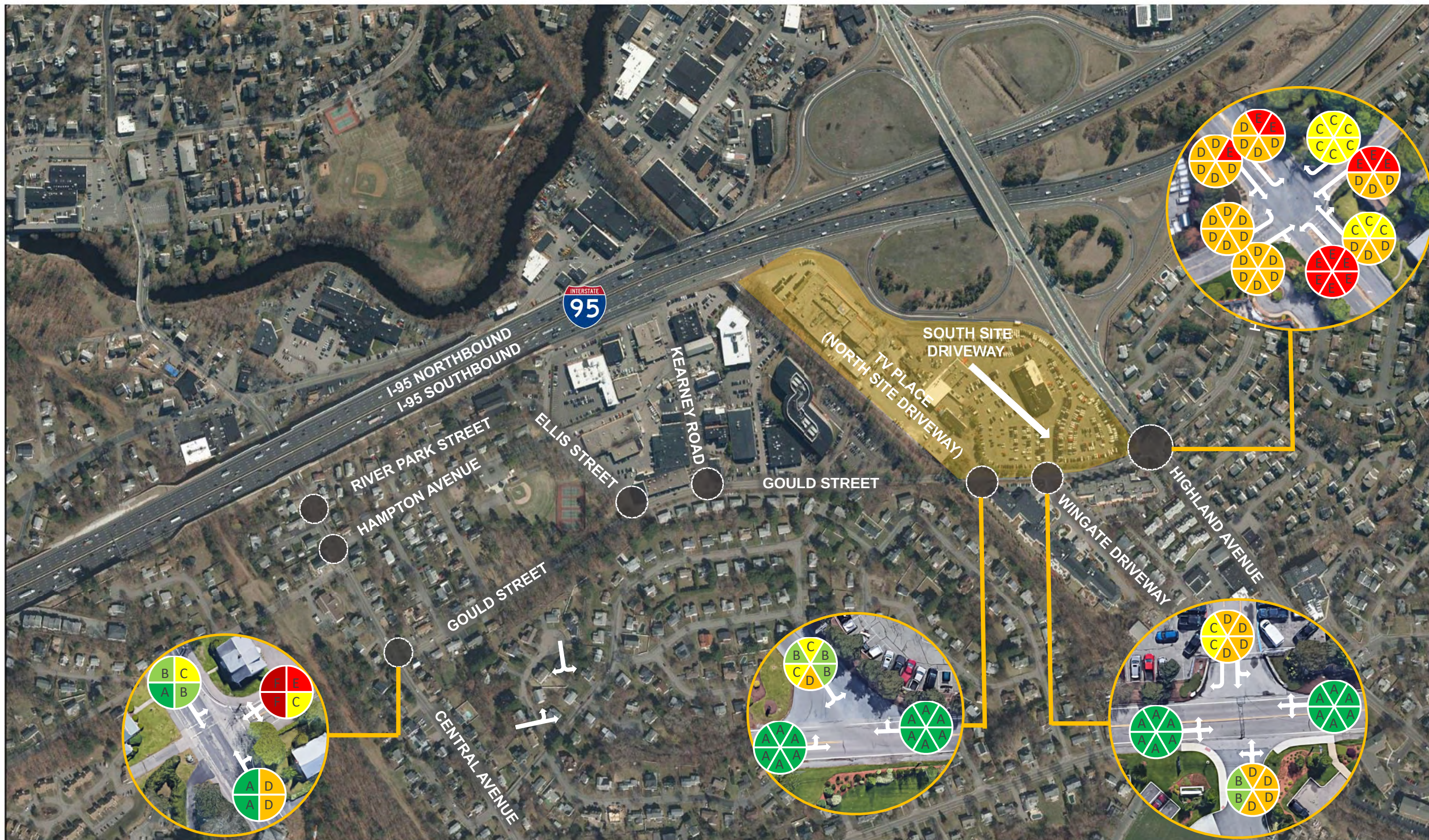


FIGURE 14
CONCEPT PLAN — ALTERNATIVE 2





XX(XX) = WEEKDAY AM (WEEKDAY PM)

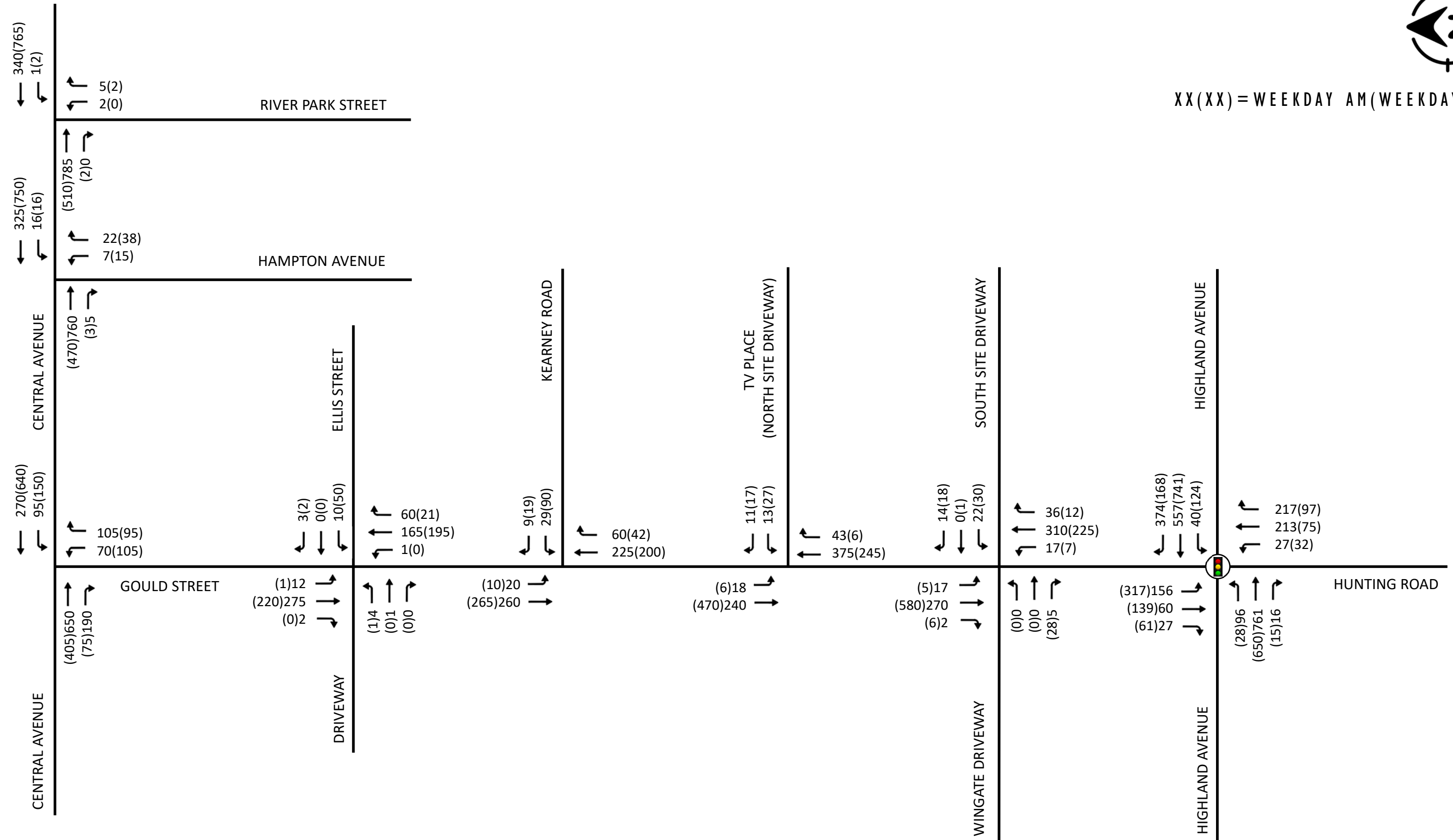
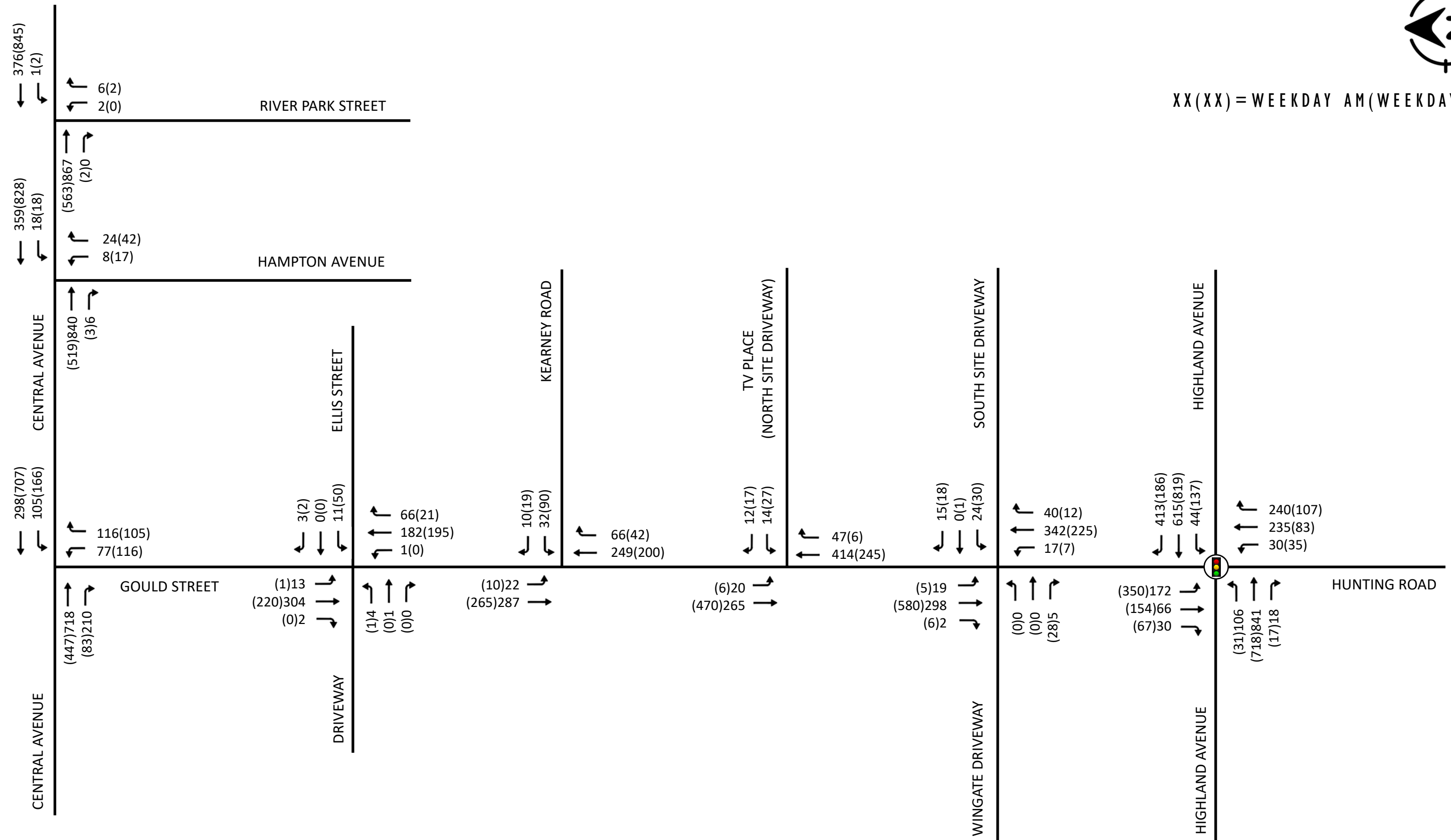


FIGURE 2

2020 EXISTING TRAFFIC VOLUMES



XX(XX) = WEEKDAY AM (WEEKDAY PM)



	Total Trips				External Trips			
Time Period / Direction	Corporate Office Trips	R&D Trips	Retail Trips	Total Trips	Total External Trips	Existing Trips	Pass-By Trips	New Primary Trips
Weekday Daily	2,730	3,972	7,184	13,886	10,402	--	1,414	8,988
Weekend AM Peak Hour								
Enter	458	271	135	864	766	126	15	625
Exit	35	56	82	173	75	65	15	-5
Total	493	327	217	1,037	841	191	30	620
Weekday PM Peak Hour								
Enter	49	63	317	429	239	33	80	126
Exit	440	333	343	1,116	926	103	80	743
Total	489	396	660	1,545	1,165	136	160	869



TABLE I
TRIP GENERATION SUMMARY

	Build Option A (No Residential)			Build Option B (with Residential)			Net Difference		
Time Period / Direction	Total Trips	Pass-By Trips	New Primary Trips	Total Trips	Pass-By Trips	New Primary Trips	Total Trips	Pass-By Trips	New Primary Trips
Weekday Daily	10,402	1,414	8,988	8,064	988	7,066	-2,338	-416	-1,922
Weekend AM Peak Hour									
Enter	766	15	751	597	15	582	-169	0	-169
Exit	75	15	60	115	15	100	40	0	40
Total	841	30	811	712	30	682	-129	0	-129
Weekday PM Peak Hour									
Enter	239	80	159	200	56	144	-39	-24	-15
Exit	926	80	846	673	56	617	-253	-24	-229
Total	1,165	160	1,005	873	112	761	-292	-48	-244



TABLE 2
TRIP GENERATION COMPARISON



XX(XX) = WEEKDAY AM (WEEKDAY PM)

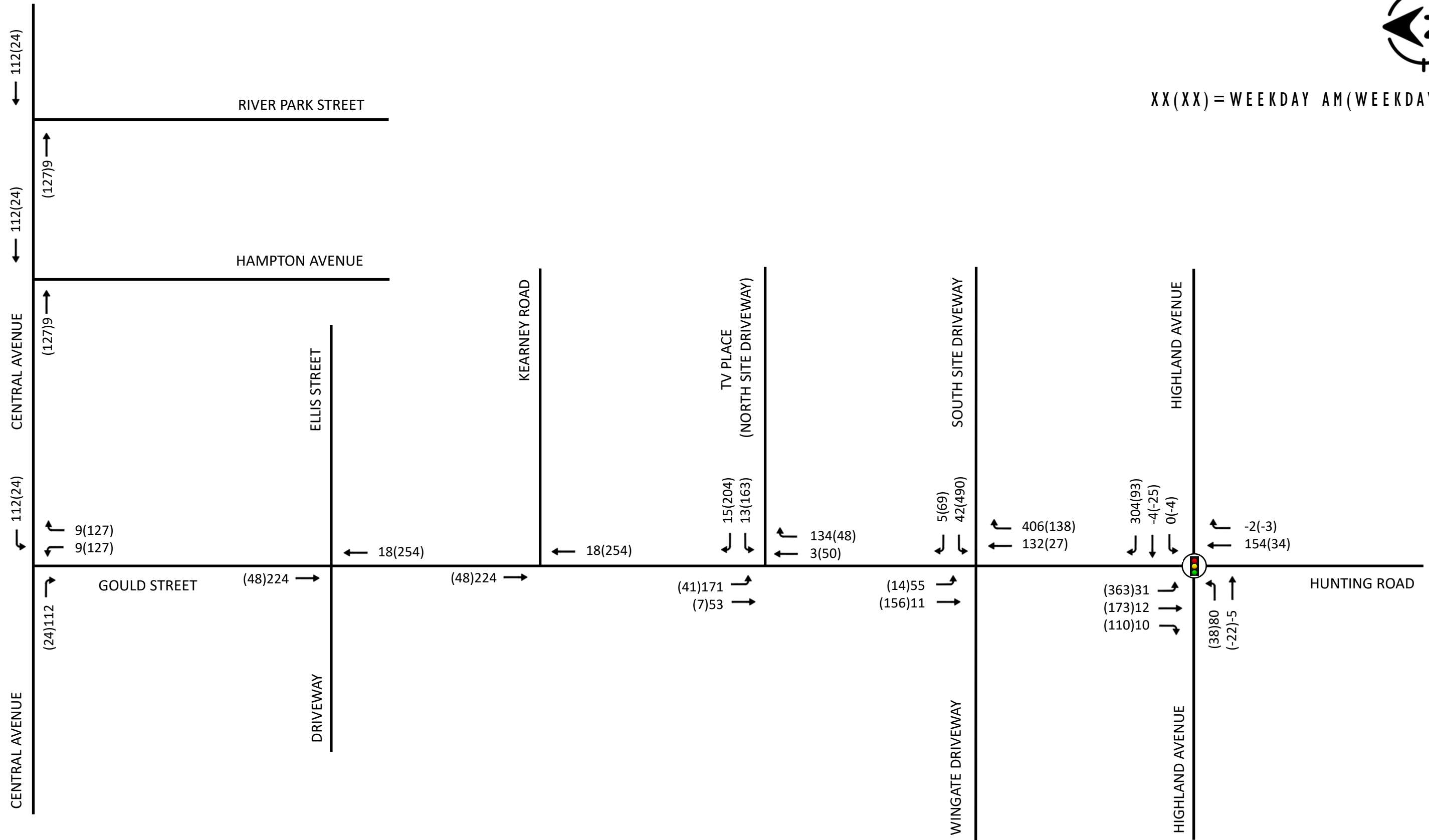


FIGURE 6
SITE-GENERATED VEHICLE TRIPS
WEEKDAY PEAK HOUR



XX(XX) = WEEKDAY AM (WEEKDAY PM)

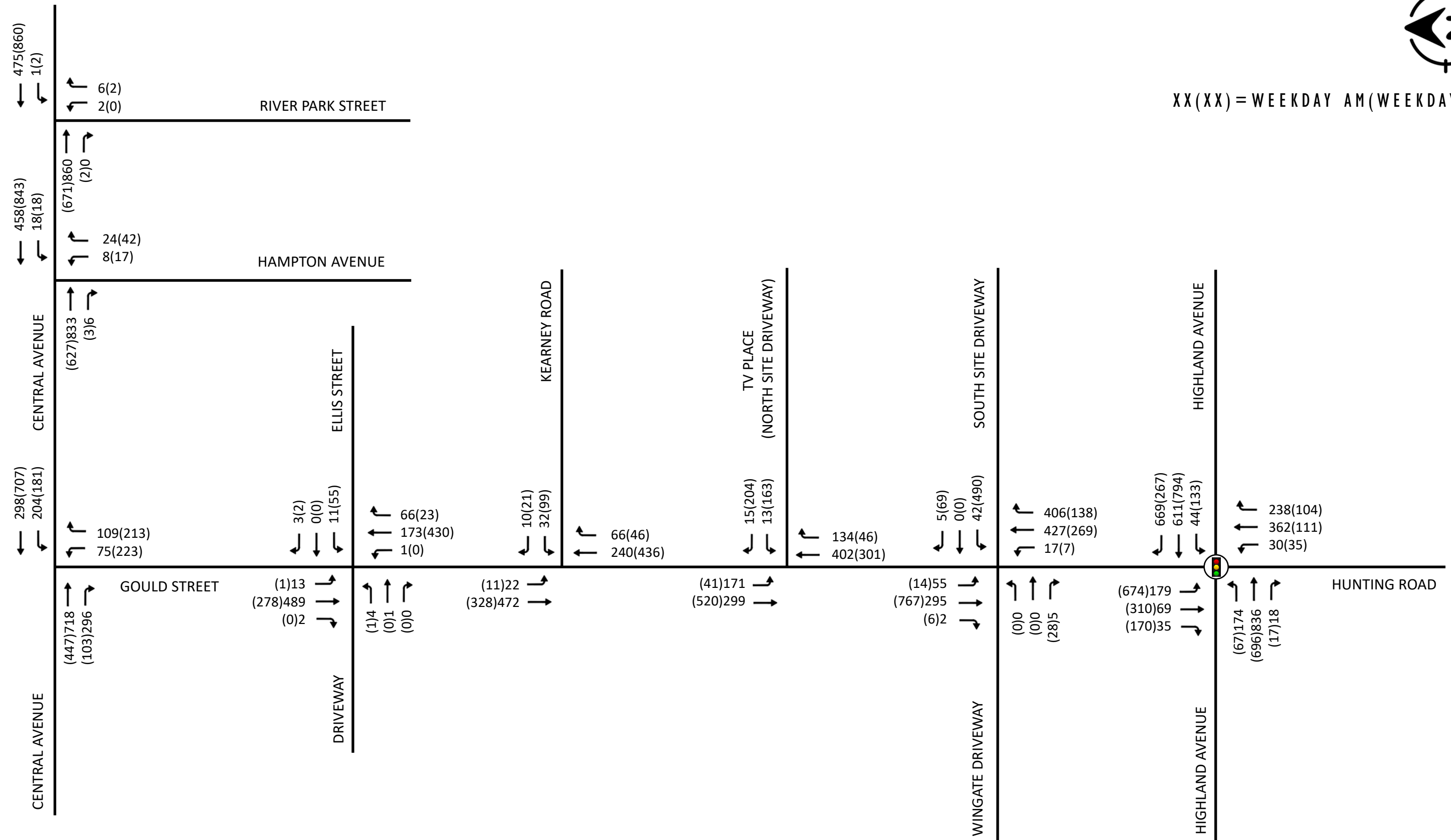


FIGURE 7
2030 BUILD TRAFFIC VOLUMES

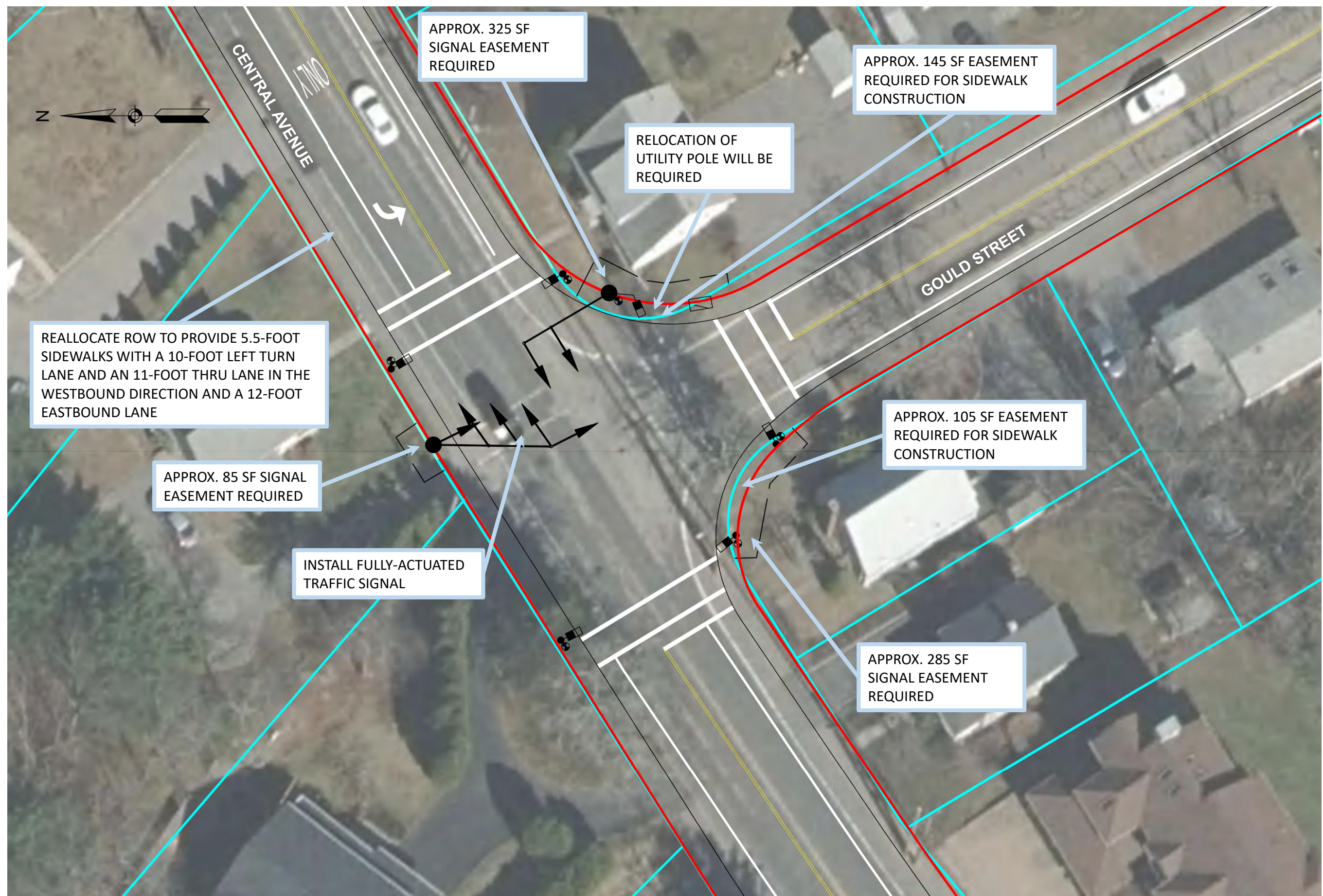


FIGURE 9