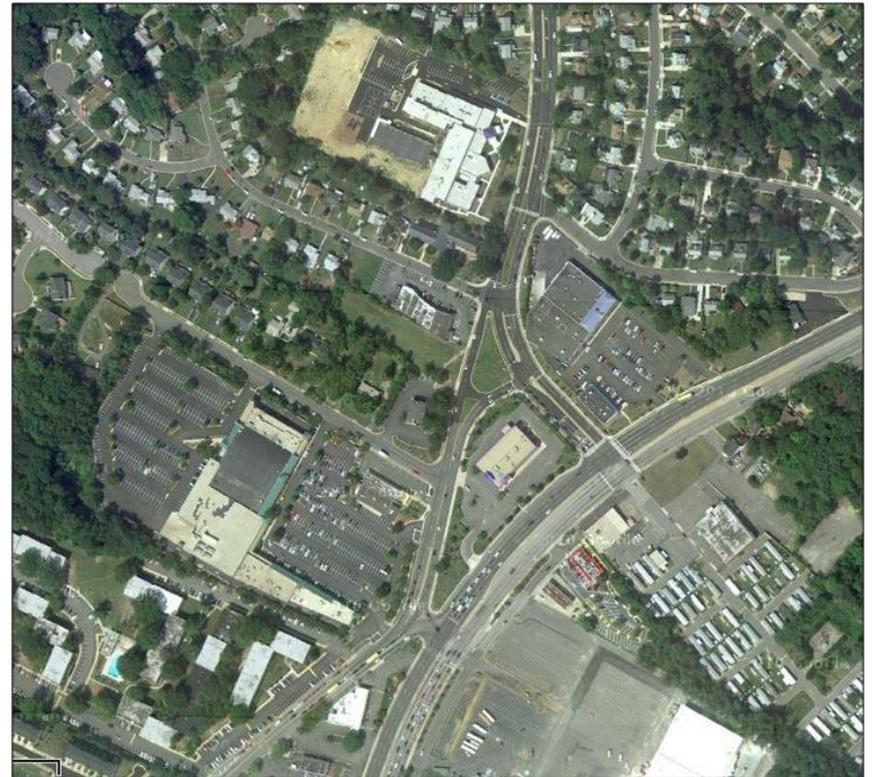




County of Fairfax, Virginia

North Kings Highway (VA 241) Intersection Improvements Study

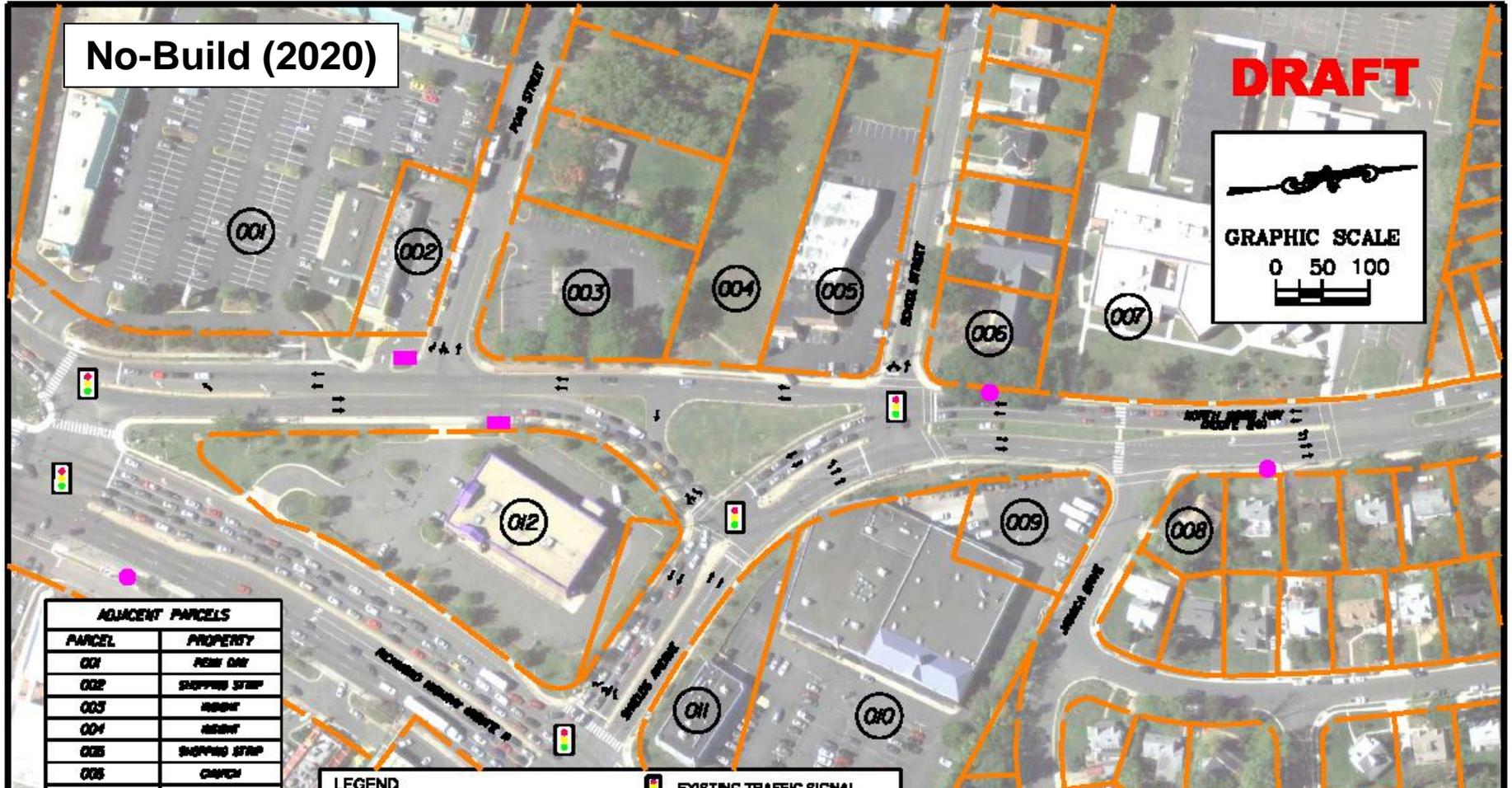
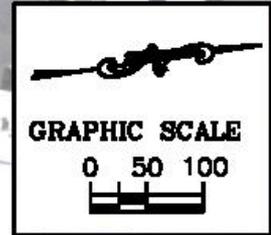
Intersection Options





No-Build (2020)

DRAFT



ADJACENT PARCELS	
PARCEL	PROPERTY
001	RENT CAR
002	SHOPPING STRIP
003	INDUST
004	INDUST
005	SHOPPING STRIP
006	CHURCH
007	SCHOOL
008	RESIDENCE
009	GRANGE
010	GRANGE
011	GRANGE
012	OFFICE BLDG

LEGEND	
	EXISTING PROPERTY LINE
	PROFFER PROPERTY LINE
	PROPOSED RIGHT OF WAY
	PROPOSED SIDEWALK
	PROPOSED CG &S
	PROPOSED CROSSWALK
	EXISTING TRAFFIC SIGNAL
	PROPOSED TRAFFIC SIGNAL
	HAWK BEACON
	RAISED MEDIUM ISLAND
	EXISTING BUS STOP
	PROPOSED BUS SHELTER

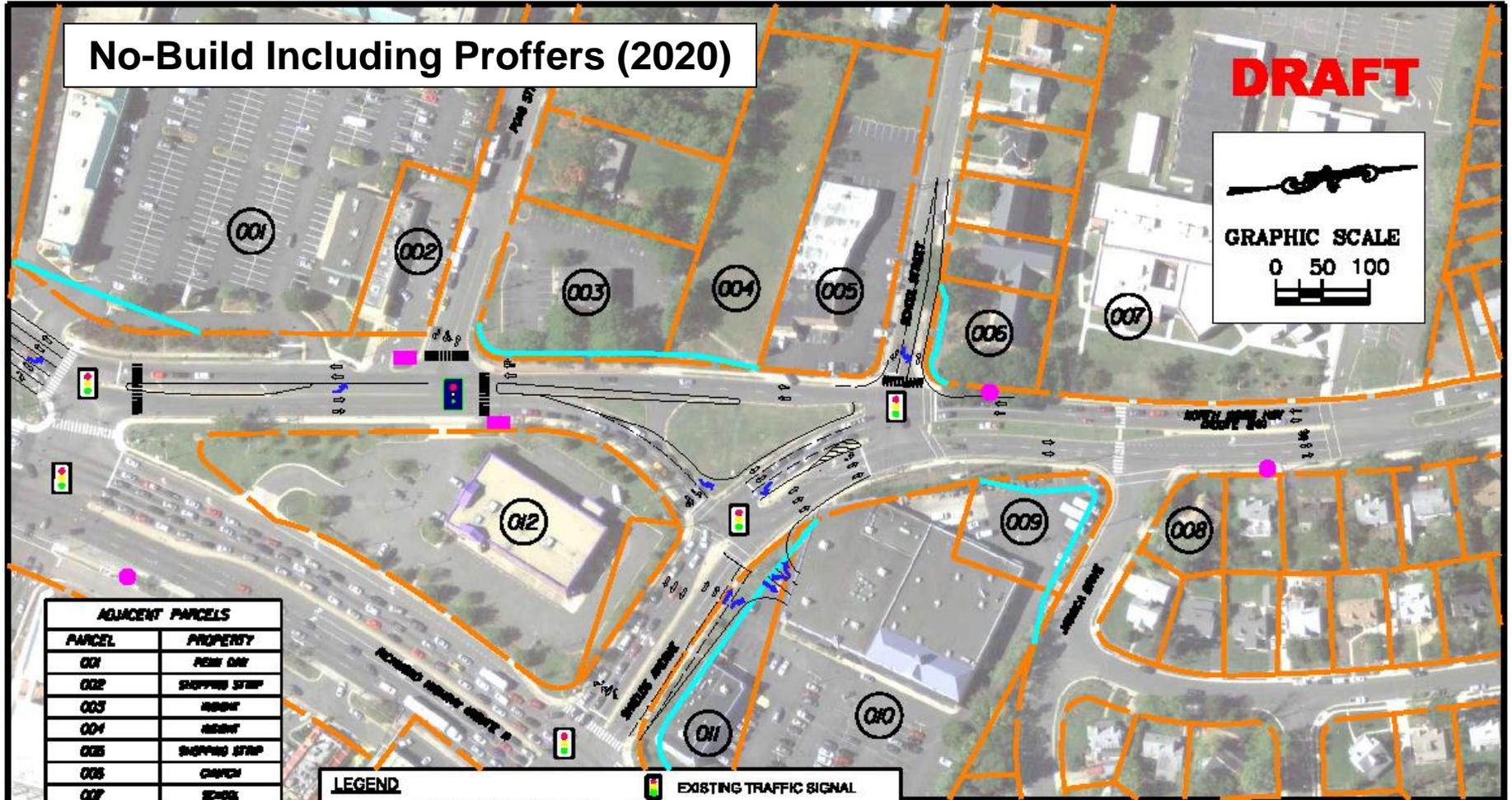
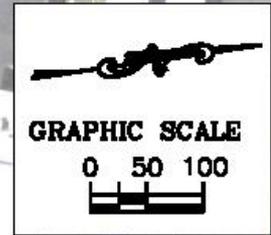
**NORTH KINGS HIGHWAY (ROUTE 241)
INTERSECTION IMPROVEMENTS STUDY
NO BUILD OPTION**





No-Build Including Proffers (2020)

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ADJACENT PARCELS	
PARCEL	PROPERTY
001	RETAIL DRG
002	SHOPPING STRIP
003	INDUST
004	INDUST
005	SHOPPING STRIP
006	CHURCH
007	SCHOOL
008	RESIDENCE
009	GRANGE
010	GRANGE
011	GRANGE
012	OFFICE BLDG

LEGEND	
	EXISTING PROPERTY LINE
	PROFFER PROPERTY LINE
	PROPOSED RIGHT OF WAY
	PROPOSED SIDEWALK
	PROPOSED C&G
	PROPOSED CROSSWALK
	EXISTING TRAFFIC SIGNAL
	PROPOSED TRAFFIC SIGNAL
	PROFFER THROUGH LANE
	PROFFER TURN LANE
	EXISTING BUS STOP
	PROPOSED BUS SHELTER

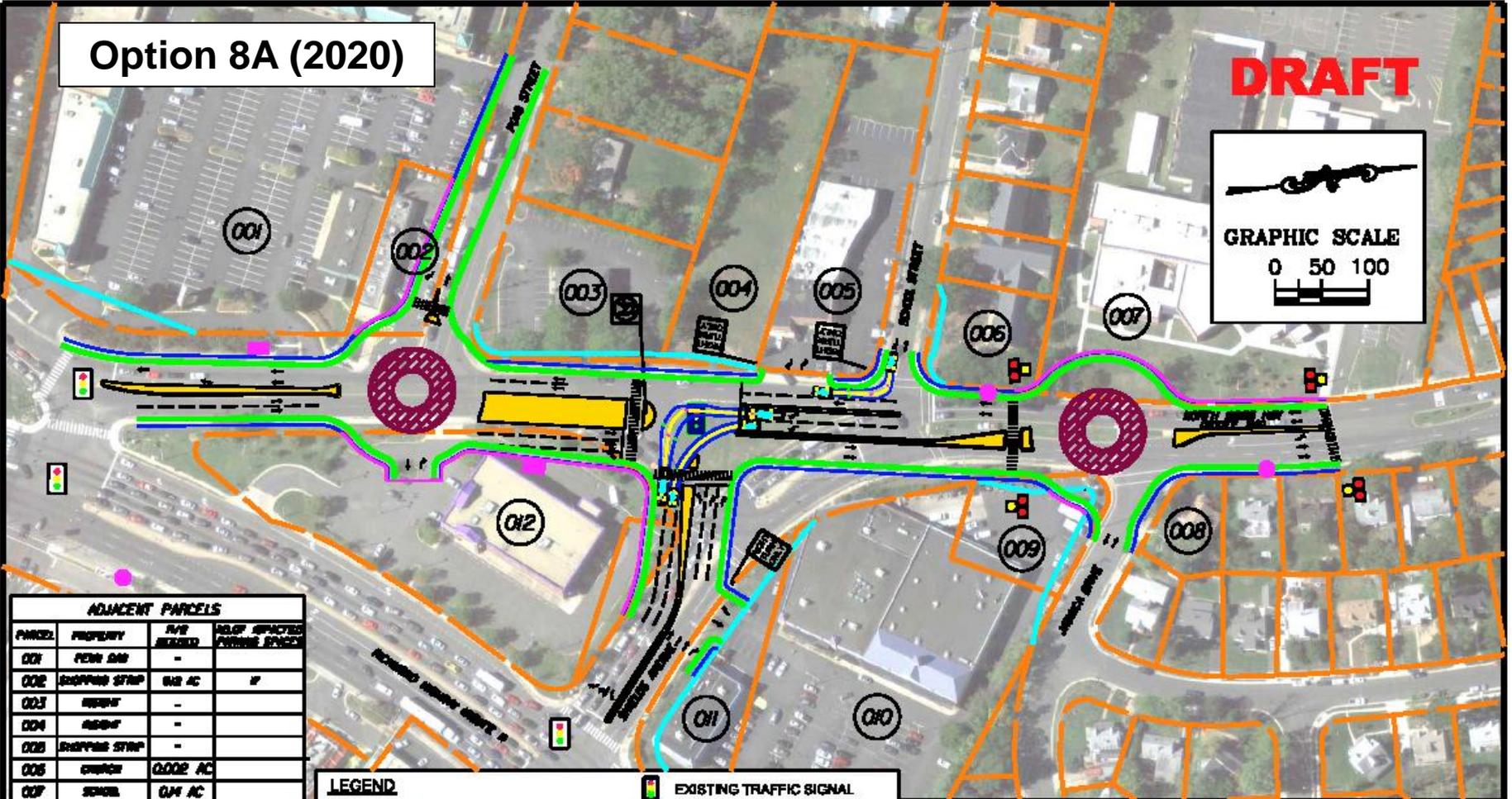
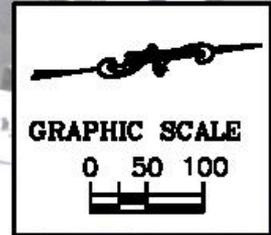
**NORTH KINGS HIGHWAY (ROUTE 241)
INTERSECTION IMPROVEMENTS STUDY
NO BUILD OPTION (INCLUDING PROFFERS)**





Option 8A (2020)

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ADJACENT PARCELS			
PARCEL	PROPERTY	R/W METERS	ADJ. SPACES/FUTURE SPACES
001	FEIN 540	-	
002	SHOPPING STRIP	0.82 AC	17
003	RESIDENT	-	
004	RESIDENT	-	
005	SHOPPING STRIP	-	
006	CHURCH	0.002 AC	
007	SCHOOL	0.14 AC	
008	RESIDENCE	-	
009	SHED	0.02 AC	3
010	SHED	-	
011	SHED	-	7
012	OFFICE BLDG	0.89 AC	16

LEGEND	
	EXISTING PROPERTY LINE
	PROFFER PROPERTY LINE
	PROPOSED RIGHT OF WAY
	PROPOSED SIDEWALK
	PROPOSED C&G
	PROPOSED CROSSWALK
	EXISTING TRAFFIC SIGNAL
	PROPOSED TRAFFIC SIGNAL
	HAWK BEACON
	RAISED MEDIUM ISLAND
	EXISTING BUS STOP
	PROPOSED BUS SHELTER

**NORTH KINGS HIGHWAY (ROUTE 241)
INTERSECTION IMPROVEMENTS STUDY
OPTION 8A**

JUNE 4, 2014

SHEET: 3 OF 8

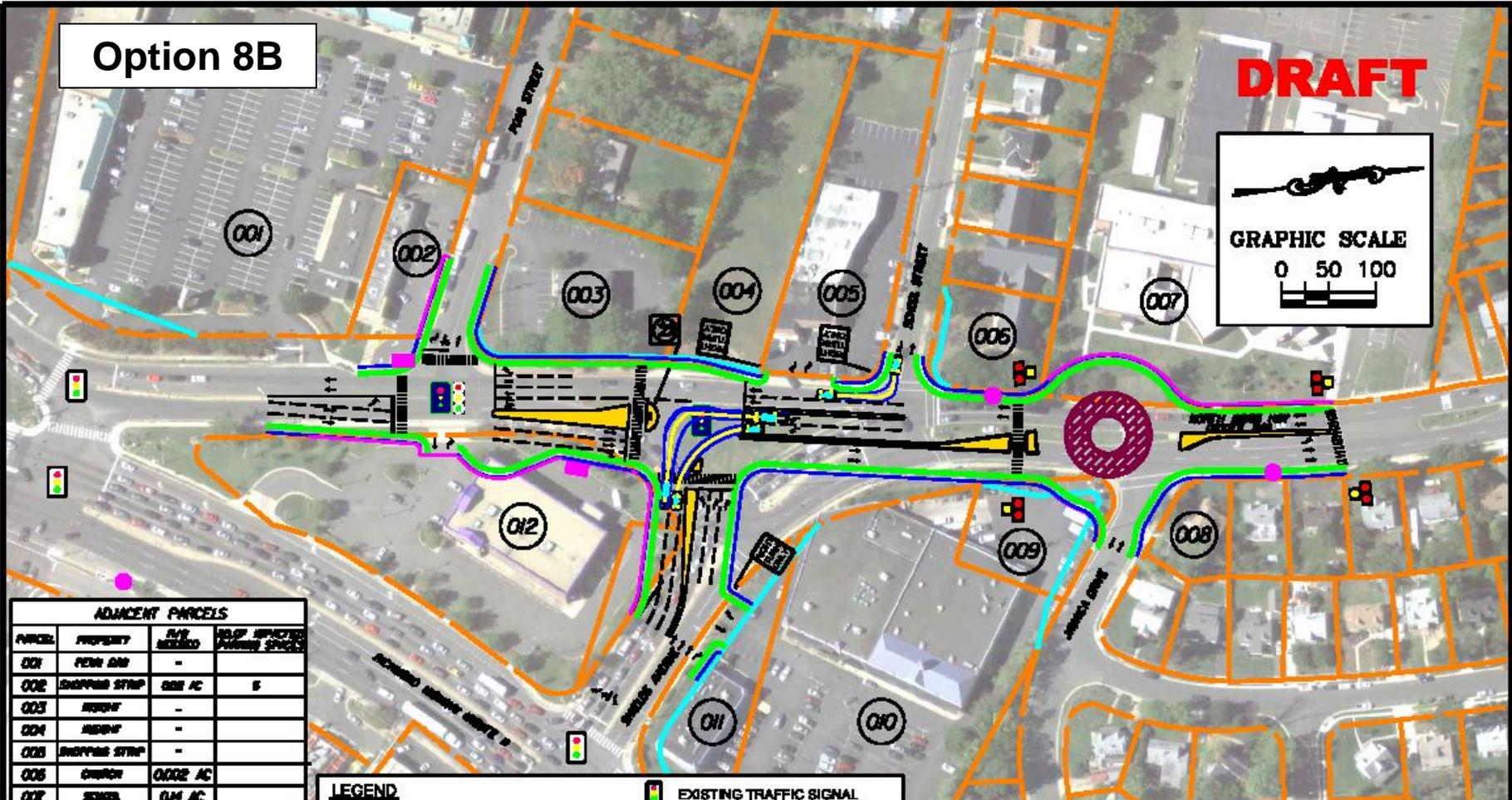




Option 8B

DRAFT

GRAPHIC SCALE
0 50 100



ADJACENT PARCELS			
PARCEL	PROPERTY	AVL AC	DEVELOPMENT
001	FEIN 010	-	
002	SHOPPING STRIP	0.08 AC	5
003	RESIDENT	-	
004	RESIDENT	-	
005	SHOPPING STRIP	-	
006	CHURCH	0.002 AC	
007	SCHOOL	0.04 AC	
008	RESIDENCE	-	
009	GRANDE	0.02 AC	3
010	GRANDE	-	
011	GRANDE	-	7
012	OFFICE BLDG	0.25 AC	6

LEGEND

- EXISTING PROPERTY LINE
- PROFFER PROPERTY LINE
- PROPOSED RIGHT OF WAY
- PROPOSED SIDEWALK
- PROPOSED C&G
- PROPOSED CROSSWALK
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- HAWK BEACON
- RAISED MEDIUM ISLAND
- EXISTING BUS STOP
- PROPOSED BUS SHELTER

**NORTH KINGS HIGHWAY (ROUTE 241)
INTERSECTION IMPROVEMENTS STUDY
OPTION 8B (WITH U-TURN BULB-OUT)**

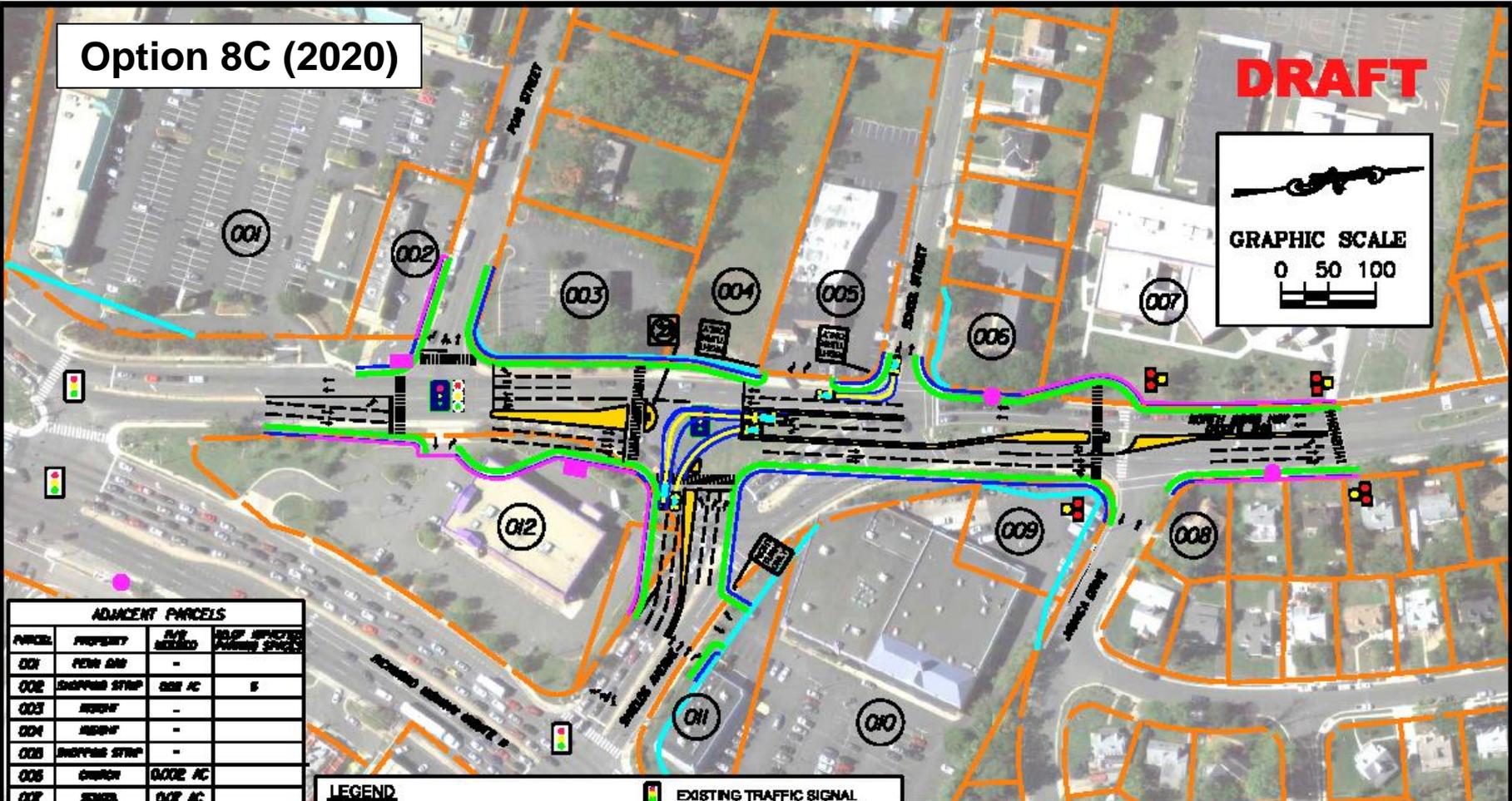




Option 8C (2020)

DRAFT

GRAPHIC SCALE
0 50 100



ADJACENT PARCELS			
PARCEL	PROPERTY	AVL AC	ADJACENT IMPROVEMENTS
001	FEIN 010	-	
002	SHOPPING STRIP	0.08 AC	5
003	RESIDENT	-	
004	RESIDENT	-	
005	SHOPPING STRIP	-	
006	CHURCH	0.002 AC	
007	SCHOOL	0.07 AC	
008	RESIDENCE	0.002 AC	
009	GRASS	-	3
010	GRASS	-	7
012	OFFICE BLDG	0.25 AC	6

LEGEND

- EXISTING PROPERTY LINE
- PROFFER PROPERTY LINE
- PROPOSED RIGHT OF WAY
- PROPOSED SIDEWALK
- PROPOSED C&G
- PROPOSED CROSSWALK
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- HAWK BEACON
- RAISED MEDIUM ISLAND
- EXISTING BUS STOP
- PROPOSED BUS SHELTER

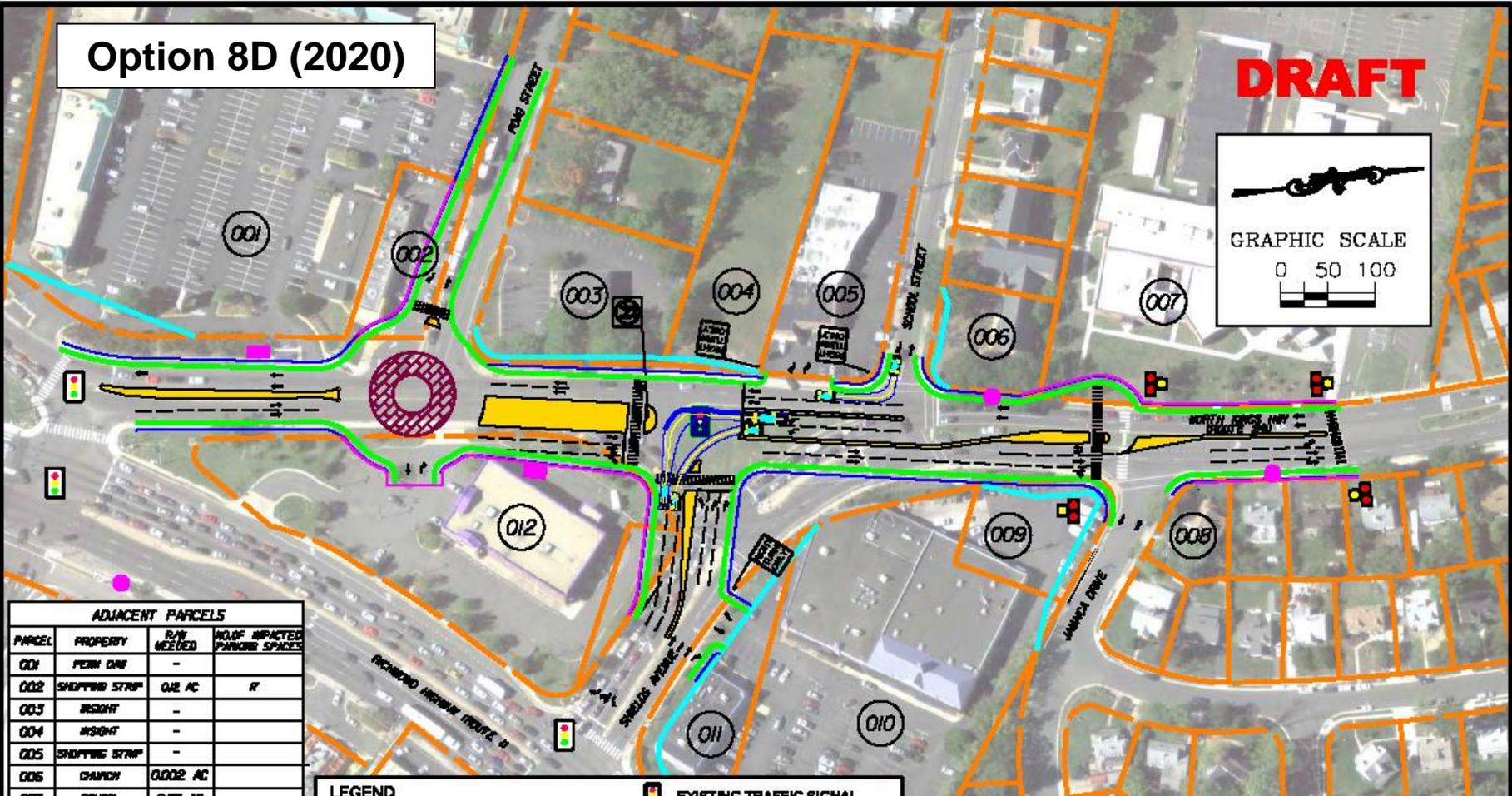
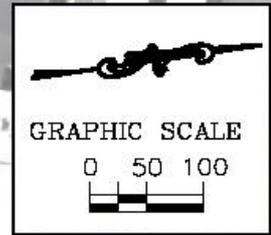
**NORTH KINGS HIGHWAY (ROUTE 241)
INTERSECTION IMPROVEMENTS STUDY
OPTION 8C (WITH U-TURN BULB-OUT)**





Option 8D (2020)

DRAFT



ADJACENT PARCELS			
PARCEL	PROPERTY	R/W WIDENED	NO. OF IMPACTED PARKING SPACES
001	PERM ONE	-	
002	SHOPPING STRIP	0.02 AC	R
003	INDUST	-	
004	INDUST	-	
005	SHOPPING STRIP	-	
006	DWELL	0.002 AC	
007	SCHOOL	0.07 AC	
008	RESIDENCE	0.002 AC	
009	SPRINK	-	J
010	SPRINK	-	
011	SPRINK	-	R
012	OFFICE DEPOT	0.28 AC	13

LEGEND

- EXISTING PROPERTY LINE
- PROFFER PROPERTY LINE
- PROPOSED RIGHT OF WAY
- PROPOSED SIDEWALK
- PROPOSED C&G
- PROPOSED CROSSWALK
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- HAWK BEACON
- RAISED MEDIUM ISLAND
- EXISTING BUS STOP
- PROPOSED BUS SHELTER

**NORTH KINGS HIGHWAY (ROUTE 241)
INTERSECTION IMPROVEMENTS STUDY
OPTION 8D (WITH U-TURN BULB-OUT)**





Summary / Comparison

Factor / Option		No-Build	No-Build with Proffers	Alt 8A (Dual Roundabouts)	Alt 8B (Jamaica Dr Roundabout)	Alt 8C (No Roundabouts)	Alt 8D (Poag St Roundabout)
Cost ⁽¹⁾		None	Developer	\$6.55M	\$5.05M	\$4.75M	\$6.35M
ROW Impact		None	Proffered	High ⁽²⁾⁽³⁾	Moderate ⁽³⁾⁽⁴⁾	Low ⁽⁴⁾	Moderate ⁽²⁾
System Delay Savings Vs. No-Build w Proffers Peak Hour (hour)	AM	-	-	-17	-9	-9	-17
	PM	-	-	-38	-37	-37	-40
North Kings Highway Travel Time Savings Vs. No-Build w Proffers Peak Hour, Dir (sec)	AM NB	-	-	-14	-7	-13	-20
	PM SB	-	-	-22	-28	-37	-30
Pedestrian Safety, Walkability		Low	Moderate	Moderate	High	High	Moderate
Vehicular Safety		Low	Low	High	Moderate	Moderate	High

(1) Assumes VDOT Planning Level Cost Estimates Plus ROW & Business Impacts (\$50/SF + \$50,000/Parking Space)

(2) Potentially significant impact to Parcel 002 (Zipps Dry Cleaners)

(3) Potentially significant impact to Parcel 007 (Mount Eagle Elementary School)

(4) Potentially significant impact to Parcel 012 (Office Depot)