

CITY OF RICHMOND, VIRGINIA

DEPARTMENT OF PUBLIC WORKS

TRANSPORTATION ENGINEERING DIVISION



2020 REPAVING BIKE LANE PROJECTS (6 CORRIDORS)

ROWEN AVENUE / N. 5TH STREET BIKE LANES
(FROM ROUNDABOUT / TRIGG STREET TO 5TH STREET BRIDGE)
PROJECT # _____, AWARD # _____

REVISIONS

| NO. | DATE | COMMENTS |
|-----|------|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

CITY OF RICHMOND

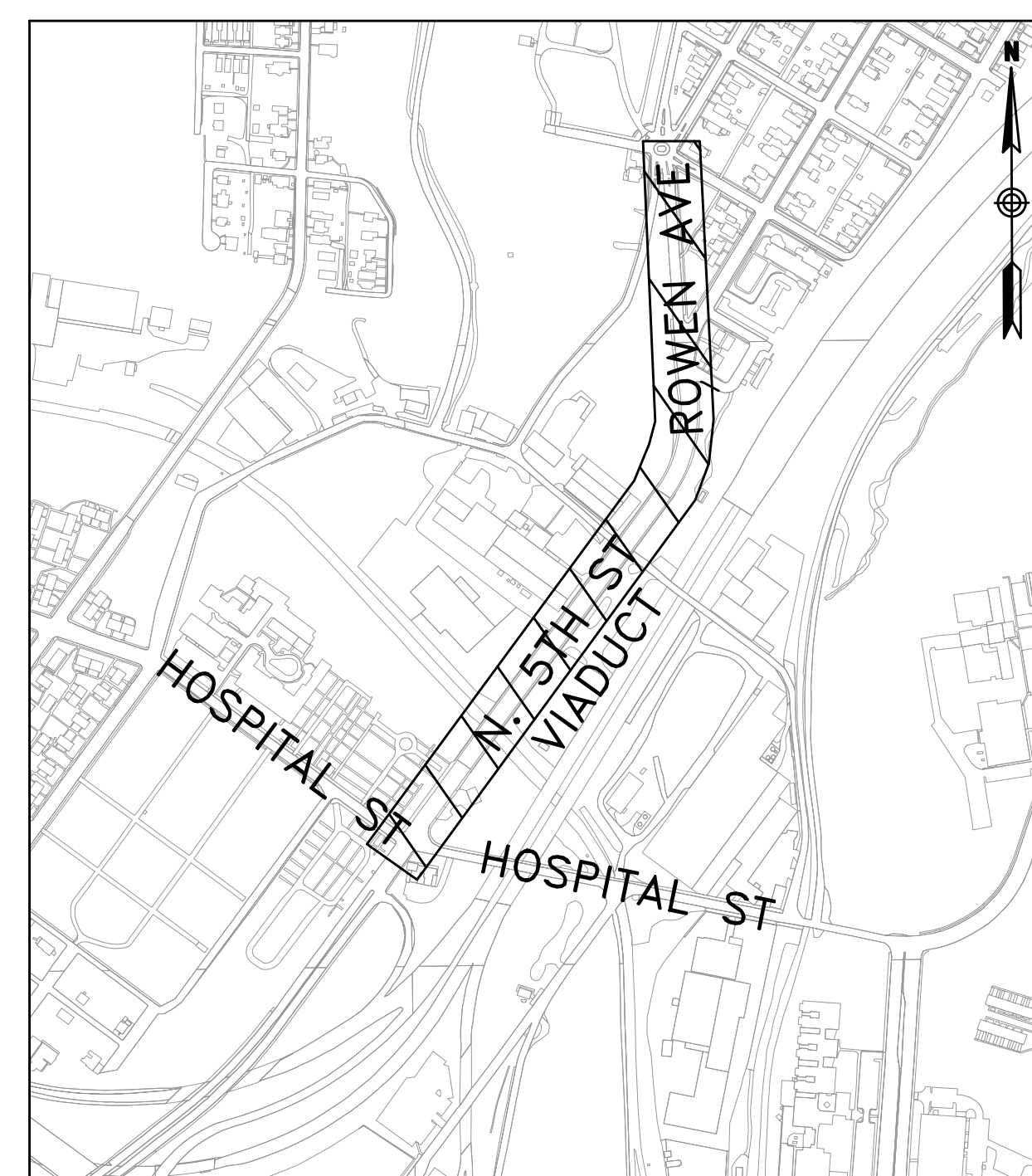
APPROVED FOR CONSTRUCTION

| | |
|------|--------------------------------|
| DATE | SURVEYS SUPERINTENDENT |
| DATE | PROJECT MANAGER |
| DATE | MAINTENANCE ENGINEER |
| DATE | CITY TRANSPORTATION ENGINEER |
| DATE | CAPITAL PROJECTS ADMINISTRATOR |
| DATE | CITY ENGINEER |
| DATE | DIRECTOR OF PUBLIC WORKS |

INDEX OF SHEETS

| SHEET TITLE | SHEET NO. |
|---|-----------|
| TITLE SHEET | 1 |
| QUANTITIES / DETAILS | 2 |
| EXISTING CONDITIONS PLAN | 3-4 |
| PROPOSED PAVEMENT MARKING AND SIGNAGE PLAN PLAN | 5-6 |

LOCATION MAP



 PROJECT AREA

Not To Scale

**60% COMPLETE -
NOT FOR
CONSTRUCTION**

CITY OF RICHMOND

DEPARTMENT OF PUBLIC WORKS

RICHMOND, VIRGINIA

DRAWING NO.: X-XXXX

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE CITY OF RICHMOND. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE 2016 VDOT ROAD AND BRIDGE SPECIFICATIONS, 2016 VDOT ROAD AND BRIDGE STANDARDS, 2009 FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH REVISIONS 1 AND 2 DATED MAY 2012, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL (REVISION 2, DATED SEPTEMBER 1, 2019), APPLICABLE CITY OF RICHMOND STANDARDS AND SPECIFICATIONS, AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC VERSION OF THE PLAN ASSEMBLY.

NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT.

AUGUST 2020

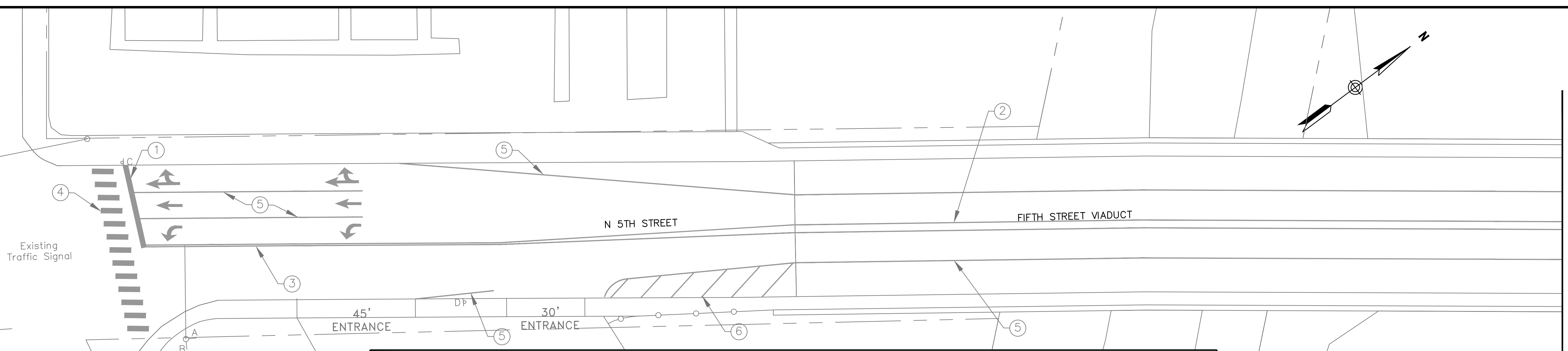


P: 804.782.1903
2100 E. Cary St. Suite 309 | Richmond, VA 23223

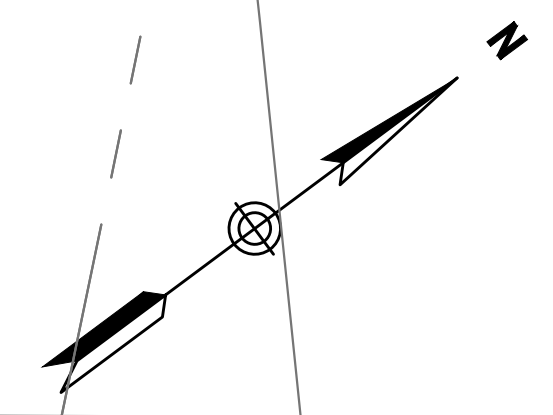
Engineers | Construction Managers | Planners | Scientists
www.rkk.com

Responsive People | Creative Solutions

HOSPITAL STREET



MATCHLINE - SEE THIS SHEET



| EXISTING SIGN LEGEND | | |
|--|---|---------------------------|
| A: N 5TH ST STREET NAME SIGN | F: NO PARKING TOW AWAY LEFT ARROW SIGN | N: YIELD SIGN AHEAD SIGN |
| B: HOSPITAL ST STREET NAME SIGN | G: SPEED LIMIT 35 SIGN | O: YIELD SIGN |
| C: GRTC BUS STOP SIGN STOP # 160 ROUTES 3A, 3B, 3C | H: COURT ST 1500 STREET NAME SIGN | P: TRAFFIC IN CIRCLE SIGN |
| D: GRTC BUS STOP SIGN STOP # 159 ROUTES 3A, 3B, 3C | I: 4TH AV 1500 STREET NAME SIGN | |
| E: CHEVRON ALIGNMENT (LEFT) WARNING SIGN | J: STOP SIGN | |
| | K: ATTRACTIONS / RICHMOND RACEWAY SIGN CONFIGURATION WITH DIRECTIONAL ARROW (RIGHT) | |
| | L: RIGHT CURVE (ARROW) WARNING SIGN | |
| | M: SPEED LIMIT 25 SIGN | |



\\oadr-hk.com\Fis\Cad\Projects\2017\17141_RichCIP\28_Repaving Bike Lane Projects\Rowen Avenue\CADD\Construction Drawings\3- EXISTING CONDITIONS.dwg / 8/5/2020 3:19:37 PM By ----

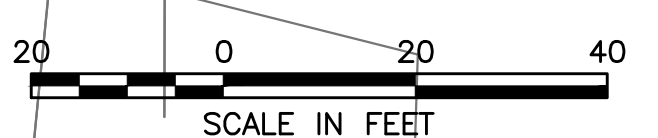
MATCHLINE - SEE THIS SHEET

FIFTH STREET VIADUCT

VALLEY ROAD

MATCHLINE - SEE SHEET 4

| EXISTING PAVEMENT MARKINGS LEGEND | |
|--|--|
| ①: 24" SOLID WHITE STOP BAR | ⑩: 4" SOLID YELLOW LINE |
| ②: 4" SOLID YELLOW LINE (DOUBLE) WITH 3' SPACE | ↔ PAVEMENT MESSAGE MARKING ELONGATED ARROW DOUBLE (THRU-RIGHT) |
| ③: 4" SOLID YELLOW LINE (DOUBLE) WITH 4" SPACE | ← PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE (THRU) |
| ④: 24" SOLID WHITE CROSSWALK LADDER BARS | ↩ PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE (LEFT) |
| ⑤: 4" SOLID WHITE LINE | |
| ⑥: 4" SOLID WHITE CROSSHATCH LINE (45 DEGREE) | |
| ⑦: 8" SOLID WHITE LINE | |
| ⑧: 8" WHITE SKIP LINE (3' LINE, 2.5' SKIP) | |
| ⑨: 12" SOLID WHITE CROSSWALK LADDER BARS | |



60% COMPLETE:
NOT FOR CONSTRUCTION

| NOTES | |
|---|--|
| 1. Lot dimensions in parentheses are from deed. | |
| 2. Property owners correct as of _____ 20__ | |
| 3. Ordinance Number _____ | |
| 4. Adopted _____ | |
| 5. Accepted _____ | |

| EXISTING LEGEND | | PROPOSED LEGEND | |
|---|------|---------------------------|-------|
| - Curb & Gutter | --- | - Curb & Gutter | --- |
| - Sidewalk | ---- | - Brick Sidewalk | ----- |
| - Basin | ---- | - Alley Crossing/Driveway | ---- |
| - Storm Sewer | ---- | - Fire Hydrant | ---- |
| - Sewer Manhole | ○ | - Edge of Pavement | ---- |
| - Sanitary Sewer (round) | ○ | - Fence | ---- |
| - Sanitary Sewer (rect. man) | ○ | - Cornerstone | ---- |
| - Gas Line | ---- | - Property Pin | ---- |
| - Electric Line | ---- | - Utility Pole | ---- |
| - Telephone/Telegraph | ---- | - Proposed Sewer | ---- |
| - TV Cable | ---- | - Manhole | ○ |
| - Water Line | ---- | - Basin | ○ |
| - Tree / Exst. Tree To Be Removed / Stamp | ○ | - Curb & Gutter | --- |
| - Property Line | ---- | - Asphalt | ---- |



| Technical | Administrative |
|------------------------------|-------------------------------|
| Surveys Superintendent | Capital Project Administrator |
| Project Manager | City Engineer |
| Maintenance Engineer | Director of Public Works |
| City Transportation Engineer | |

DEPARTMENT OF PUBLIC WORKS
RICHMOND, VIRGINIA

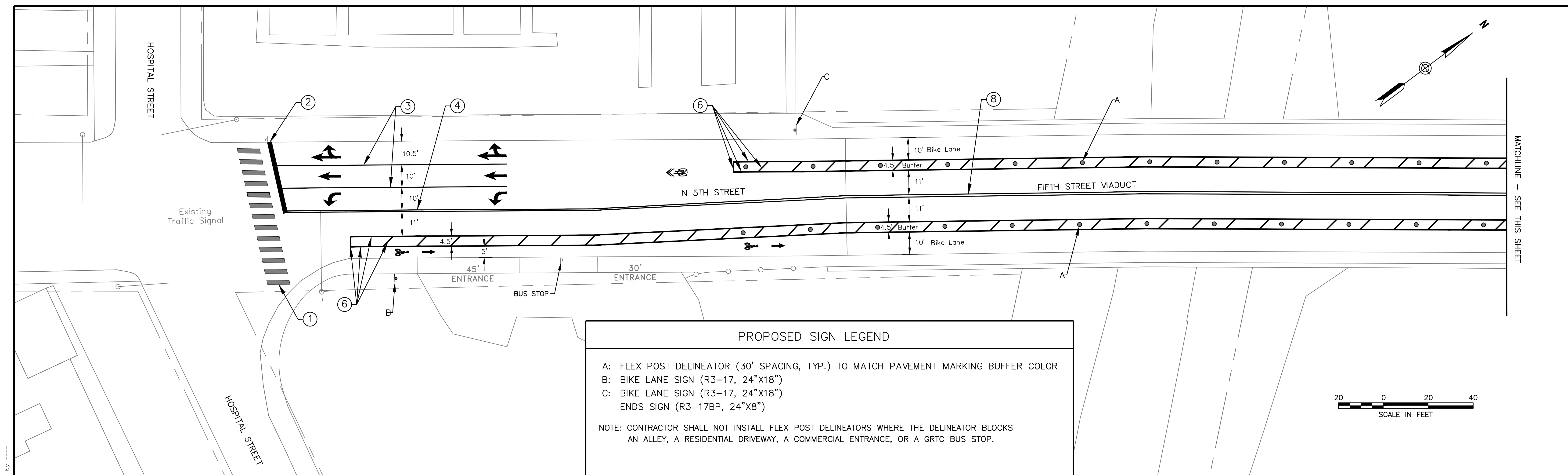
RK&K 2020 REPAVING BIKE LANE PROJECTS (6 CORRIDORS)
ROWEN AVENUE / N. 5TH STREET BIKE LANES
EXISTING CONDITIONS

RESPONSIVE PEOPLE • CREATIVE SOLUTIONS

AUTHORITY: CITY OF RICHMOND

| | | | | | |
|-----------------|--------------|---------------|-------------------|------------------|--------------------|
| DESIGN BY: BMR | REVIEWED BY: | SCALE: 1"=20' | DATE: AUGUST 2020 | PROJECT: SHEET 3 | DRAWING NO. X-XXXX |
| DRAWN BY: KJF | FIELD NOTES: | | | | |
| CHECKED BY: OLP | | | | | |

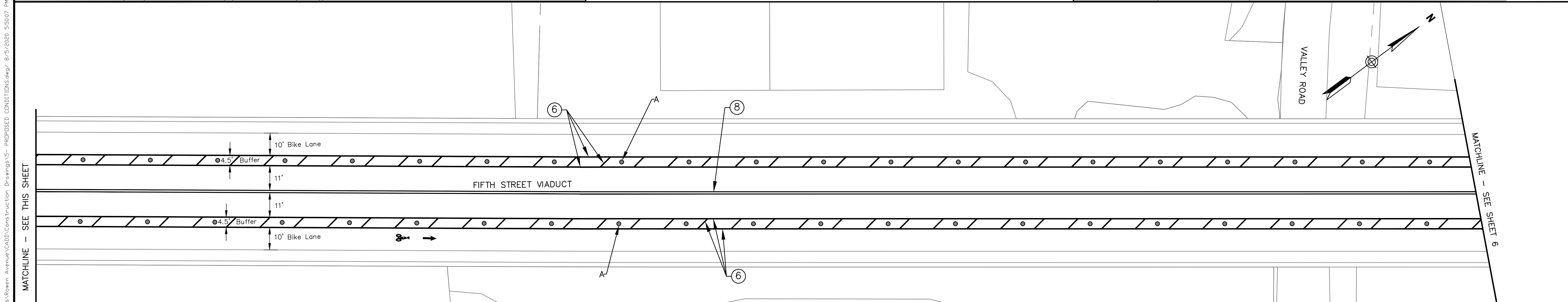
VDOT PROJECT NO.: N/A



PROPOSED SIGN LEGEND

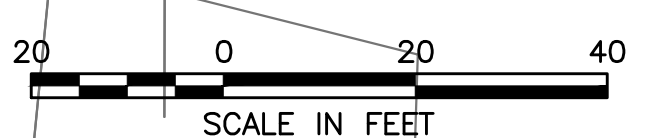
A: FLEX POST DELINEATOR (30' SPACING, TYP.) TO MATCH PAVEMENT MARKING BUFFER COLOR
 B: BIKE LANE SIGN (R3-17, 24"X18")
 C: BIKE LANE SIGN (R3-17, 24"X18")
 ENDS SIGN (R3-17BP, 24"X8")

NOTE: CONTRACTOR SHALL NOT INSTALL FLEX POST DELINEATORS WHERE THE DELINEATOR BLOCKS AN ALLEY, A RESIDENTIAL DRIVEWAY, A COMMERCIAL ENTRANCE, OR A GRTC BUS STOP.



PROPOSED PAVEMENT MARKINGS LEGEND

| | |
|--|--|
| ①: 24" SOLID WHITE CROSSWALK LADDER BAR | PAVEMENT MESSAGE MARKING BICYCLIST ARROW (THRU) AND HELMETED BICYCLIST |
| ②: 24" SOLID WHITE STOP BAR | PAVEMENT MESSAGE MARKING SHARROW |
| ③: 4" SOLID WHITE LINE | PAVEMENT MESSAGE MARKING ELONGATED ARROW DOUBLE (THRU-RIGHT) |
| ④: 4" SOLID YELLOW LINE (DOUBLE) WITH 4" SPACE | PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE (THRU) |
| ⑤: 4" SOLID YELLOW LINE (SINGLE) | PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE (LEFT) |
| ⑥: 6" SOLID WHITE LINE | |
| ⑦: 6" WHITE SKIP LINE (2' LINE, 6" SKIP) | |
| ⑧: 4" SOLID YELLOW LINE (DOUBLE) WITH 8" SPACE | |



60% COMPLETE:
NOT FOR
CONSTRUCTION

NOTES

- Lot dimensions in parentheses are from deed.
- Property owners correct as of _____ 20__
- Ordinance Number _____
- Adopted _____
- Accepted _____

REFERENCES

REVISIONS

| Existing | | Proposed | |
|---|--|-------------------------|--|
| Curb & Gutter | | Curb Cut Ramp | |
| Sidewalk | | Coping | |
| Basin | | Alley Crossing/Driveway | |
| Storm Sewer | | Fire Hydrant | |
| Sewer Manhole | | Edge of Pavement | |
| Sanitary Sewer (new) | | Fence | |
| Sanitary Sewer (in place) | | Cornerstone | |
| Gas Line | | Property Pin | |
| Electric Line | | Utility Pole | |
| Telephone/Telegraph | | Proposed Sewer | |
| TV Cable | | Manhole | |
| Water Line | | Basin | |
| Tree / Exst. Tree To Be Removed / Stamp | | Curb & Gutter | |
| Property Line | | Asphalt | |



| Technical | Administrative |
|------------------------------|-------------------------------|
| Surveys Superintendent | Capital Project Administrator |
| Project Manager | City Engineer |
| Maintenance Engineer | Director of Public Works |
| City Transportation Engineer | |

DEPARTMENT OF PUBLIC WORKS
RICHMOND, VIRGINIA

2020 REPAVING BIKE LANE PROJECTS (6 CORRIDORS)
ROWEN AVENUE / N. 5TH STREET BIKE LANES
PROPOSED CONDITIONS

VDOT PROJECT NO.: N/A

| | | | | | | |
|-----------------|--------------|--------------|---------------|-------------------|------------------|--------------------|
| DESIGN BY: BMR | REVIEWED BY: | FIELD NOTES: | SCALE: 1"=20' | DATE: AUGUST 2020 | PROJECT: SHEET 5 | DRAWING NO: X-XXXX |
| CHECKED BY: KLF | | | | | | |
| OLP | | | | | | |

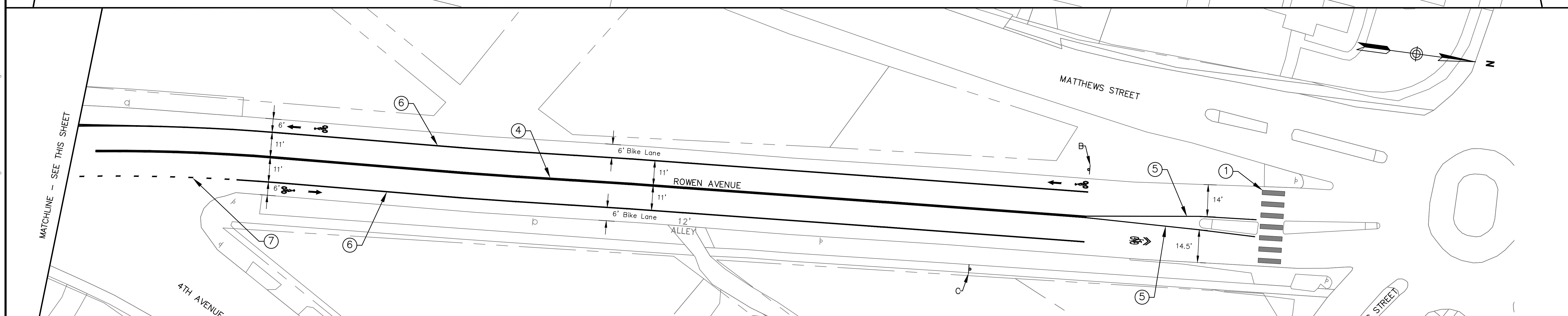
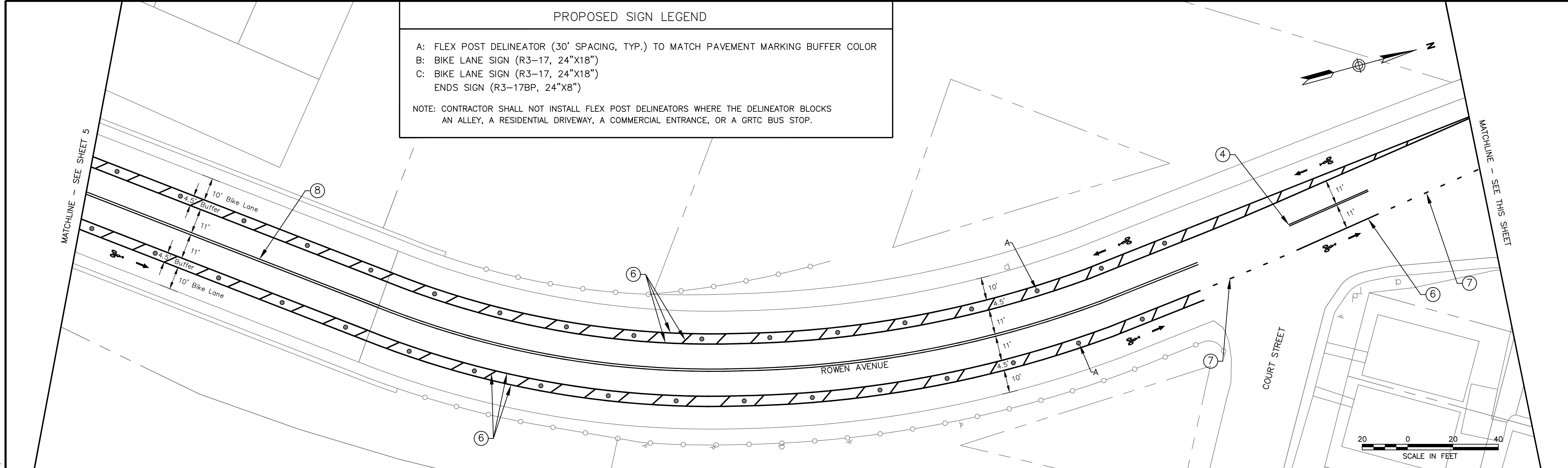
AUTHORITY: CITY OF RICHMOND

\\oad-rk.com\Fis\Ciudad\Projects\2017\17141_Rich\2017\17141_Rich\CIP\28_Repaving Bike Lane Projects\Rowen Avenue\CADD\Construction Drawings\5- PROPOSED CONDITIONS.dwg, 8/5/2020 5:50:07 PM by ----

PROPOSED SIGN LEGEND

- A: FLEX POST DELINEATOR (30' SPACING, TYP.) TO MATCH PAVEMENT MARKING BUFFER COLOR
- B: BIKE LANE SIGN (R3-17, 24"X18")
- C: BIKE LANE SIGN (R3-17, 24"X18")
- ENDS SIGN (R3-17BP, 24"X8")

NOTE: CONTRACTOR SHALL NOT INSTALL FLEX POST DELINEATORS WHERE THE DELINEATOR BLOCKS AN ALLEY, A RESIDENTIAL DRIVEWAY, A COMMERCIAL ENTRANCE, OR A GRTC BUS STOP.



PROPOSED PAVEMENT MARKINGS LEGEND

- ① : 24" SOLID WHITE CROSSWALK LADDER BAR
 - ② : 24" SOLID WHITE STOP BAR
 - ③ : 4" SOLID WHITE LINE
 - ④ : 4" SOLID YELLOW LINE (DOUBLE) WITH 4" SPACE
 - ⑤ : 4" SOLID YELLOW LINE (SINGLE)
 - ⑥ : 6" SOLID WHITE LINE
 - ⑦ : 6" WHITE SKIP LINE (2' LINE, 6' SKIP)
 - ⑧ : 4" SOLID YELLOW LINE (DOUBLE) WITH 8" SPACE
- ← BICYCLIST PAVEMENT MESSAGE MARKING BICYCLIST ARROW (THRU) AND HELMETED BICYCLIST
 - ← BICYCLIST PAVEMENT MESSAGE MARKING SHARROW
 - ← PAVEMENT MESSAGE MARKING ELONGATED ARROW DOUBLE (THRU-RIGHT)
 - ← PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE (THRU)
 - ← PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE (LEFT)

NOTES

- Lot dimensions in parentheses are from deed.
- Property owners correct as of _____ 20__
- Ordinance Number _____
- Adopted _____
- Accepted _____

REFERENCES

| Existing | Proposed |
|---|---|
| Curb & Gutter | Curb & Gutter |
| Sidewalk | Sidewalk |
| Basin | Basin |
| Storm Sewer | Storm Sewer |
| Sewer Manhole | Sewer Manhole |
| Sanitary Sewer (round) | Sanitary Sewer (round) |
| Sanitary Sewer (rect. man) | Sanitary Sewer (rect. man) |
| Gas Line | Gas Line |
| Electric Line | Electric Line |
| Telephone/Telegraph | Telephone/Telegraph |
| TV Cable | TV Cable |
| Water Line | Water Line |
| Tree / Exst. Tree To Be Removed / Stamp | Tree / Exst. Tree To Be Removed / Stamp |
| Property Line | Property Line |

| Existing | Proposed |
|-------------------------|-------------------------|
| Curb Cut Ramp | Curb Cut Ramp |
| Coping | Coping |
| Alley Crossing/Driveway | Alley Crossing/Driveway |
| Fire Hydrant | Fire Hydrant |
| Edge of Pavement | Edge of Pavement |
| Fence | Fence |
| Cornerstone | Cornerstone |
| Property Pin | Property Pin |
| Utility Pole | Utility Pole |
| Manhole | Manhole |
| Basin | Basin |
| Curb & Gutter | Curb & Gutter |
| Asphalt | Asphalt |

| | | | |
|--|--|---|--|
| <p>Technical</p> <p>Surveys Superintendent</p> <p>Project Manager</p> <p>Maintenance Engineer</p> <p>City Transportation Engineer</p> | | <p>Administrative</p> <p>Capital Project Administrator</p> <p>City Engineer</p> <p>Director of Public Works</p> | |
| <p>DEPARTMENT OF PUBLIC WORKS RICHMOND, VIRGINIA</p> | | | |
| <p>RK&K Responsive People • Creative Solutions</p> | | <p>2020 REPAVING BIKE LANE PROJECTS (6 CORRIDORS) ROWEN AVENUE / N. 5TH STREET BIKE LANES PROPOSED CONDITIONS</p> | |
| <p>DESIGN BY: BMR DRAWN BY: KLF CHECKED BY: OLP</p> | | <p>REVIEWED BY: _____ FIELD NOTES: _____ SCALE: 1"=20' DATE: AUGUST 2020 PROJECT: SHEET 6 DRAWING NO.: X-XXXX</p> | |

60% COMPLETE:
NOT FOR
CONSTRUCTION

\\oadr\hkh.com\Fis\Cloud\Projects\2017\17141_Richmond\Construction Drawings\6- PROPOSED CONDITIONS.dwg, 8/5/2020 5:56:34 PM by -----