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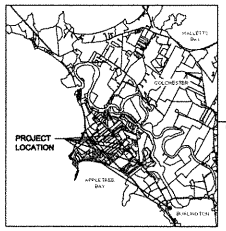
BURLINGTON TAP TA15 (1)
CITY OF BURLINGTON, VERMONT
NORTH AVENUE UNSIGNALIZED PEDESTRIAN CROSSWALKS

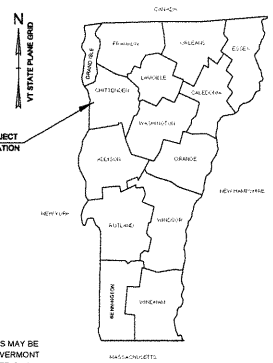
THIS PROJECT INVOLVES THE INSTALLATION OF FIVE (5) NEW UNSIGNALIZED PEDESTRIAN CROSSWALKS ACROSS NORTH AVENUE AT:

- WARD STREET
- BURLINGTON COLLEGE
- KILLARNEY / VILLAGE GREEN DRIVE
- POIRIER PLACE
- GOSSE COURT
- GREEN ACRES DRIVE / CAYUGA COURT

WORK INCLUDES PAVEMENT MARKINGS, WARNING SIGNS AND MARKINGS, CONCRETE SIDEWALKS, MAST ARMS WITH PHB ,CURBING AND LIGHTING.

BURLINGTON





NOTES:

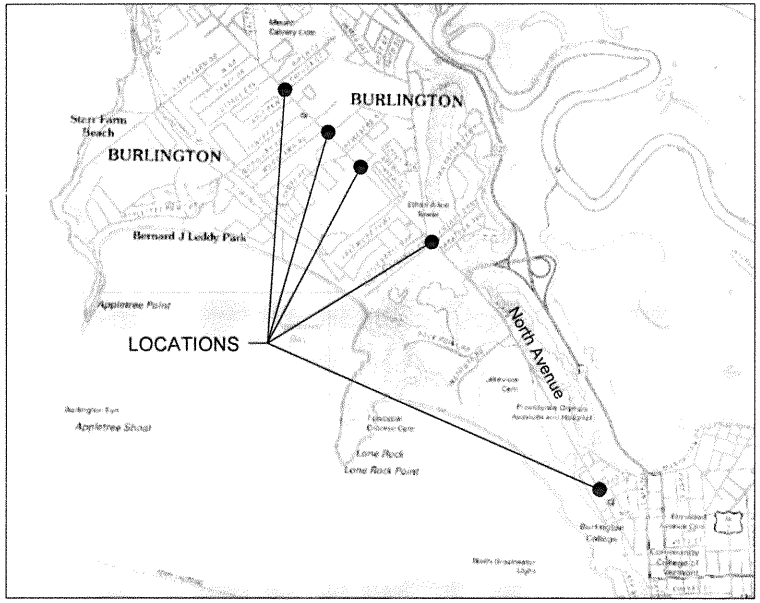
1. THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE VERMONT AGENCY OF TRANSPORTATION. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS INCORPORATED IN THESE PLANS.
2. THE RIGHT-OF-WAYS OF NORTH AVENUE AND ITS INTERSECTING STREETS ARE BASED ON HISTORICAL RIGHT-OF-WAY WIDTHS PROVIDED BY THE CITY OF BURLINGTON, AND ARE LOCATED USING FOUND EVIDENCE PLUS AVAILABLE SURVEY PLATS AND UTILITY MAPPING. INDIVIDUAL PARCEL SIDELINES SHOWN HEREON ARE BASED ON CITY PARCEL MAPS.
3. RIGHT-OF-WAY AND PARCEL LINES SHOWN HEREON SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE ACQUISITION OF LANDS AND RIGHTS FOR THIS PROJECT

INDEX OF SHEETS

SHEET #	TITLE
1	TITLE SHEET
2	TYPICAL DETAILS & SECTIONS
3	WARD STREET
4	KILLARNEY DRIVE / VILLAGE GREEN
5	KILLARNEY DRIVE / VILLAGE GREEN ALTERNATE
6	POIRIER PLACE
7	POIRIER PLACE ALTERNATE
8	GOSSE COURT / DODDS COURT
9	GREEN ACRES DRIVE / CAYUGA COURT
10-12	TRAFFIC CONTROL PLANS

VAOT STANDARD DETAILS

DETAIL #	TITLE	DATE
C-2A	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-2005
C-2B	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-2005
C-3A	SIDEWALK RAMPS	03-10-2008
C-3B	SIDEWALK RAMPS AND MEDIAN ISLANDS	03-10-2008
C-10	CURBING	02-11-2008
E-121	STANDARD SIGN PLACEMENT, CONVENTIONAL ROAD	06-08-1995
E-192	PAVEMENT MARKING DETAILS	10-12-2000
E-193	PAVEMENT MARKING DETAILS	06-19-1995
T-1	TRAFFIC CONTROL GENERAL NOTES	06-06-2012
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	06-06-2012
T-17	TRAFFIC CONTROL MISCELLANEOUS DETAILS	06-06-2002
T-28	CONSTRUCTION SIGN DETAILS	06-06-2012
T-30	CONSTRUCTION SIGN DETAILS	06-06-2012
T-45	SQUARE TUBE SIGN POST AND ANCHOR	01-02-2013



LOCATION MAP
NTS

LEGEND

- SURVEY CONTROL POINT
- EXISTING SIGNS
- NEW SIGN
- EXISTING TREE
- EXISTING SHRUBS
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- EXISTING UTILITY POLE & OVERHEAD WIRES
- EXISTING DRAINAGE MANHOLE
- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING WATER HYDRANT
- NEW LIGHT POLE WITH LUMINAIRE

QUALITY ASSURANCE PROGRAM:
INSPECTION LEVEL 3

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83(1996)

FUNDING ASSISTANCE FOR THIS PROJECT IS BEING FURNISHED BY FHWA, VTRANS AND THE CITY OF BURLINGTON

CITY OF BURLINGTON

APPROVED _____ DATE _____
CITY ENGINEER

CONCEPTUAL PLANS
AUGUST, 2016

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4150 www.LDengineering.com

Visit the DPW Project Web Site for Project Updates: https://www.burlingtonvt.gov/DPW/North-Avenue-Unsignalized-Crosswalks

GENERAL CONSTRUCTION SPECIFICATIONS

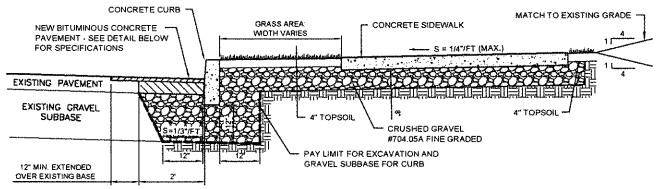
1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2011 AND ITS LATEST REVISIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION) AND THESE PLANS.
2. THE CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" AND THE CITY OF BURLINGTON PRIOR TO ANY EXCAVATION.
3. UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. EXPLORATORY EXCAVATION SHALL BE COORDINATED WITH AND SUBJECT TO THE RESIDENT ENGINEER'S APPROVAL. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. THE CONTRACTOR SHALL CONNECT OR RECONNECT ALL UTILITIES TO THE NEAREST SOURCE THROUGH COORDINATION WITH THE UTILITY OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. THE CONTRACTOR SHALL WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER AND/OR SWEEP ASPHALT ROADS WITH A POWER BROOM (TYPE 1) OR A STREET SWEEPER (POWER BROOM TYPE II) AS DUST CONTROL ON A DAILY BASIS, OR AT MORE FREQUENT INTERVALS AS DIRECTED BY THE ENGINEER AND/OR OWNER.

CONCRETE SIDEWALK NOTES:

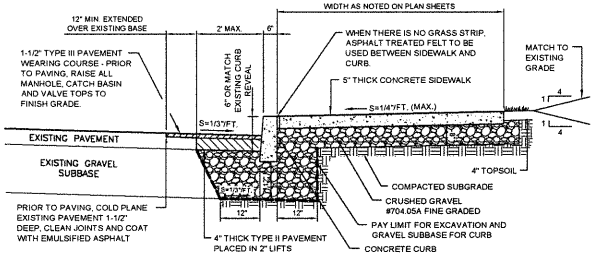
1. SIDEWALKS TO BE CAST IN 100' SECTIONS (MAX.) WITH A BROOM FINISH AND 1/4" TRANSVERSE EXPANSION JOINTS PLACED AT INTERVALS NOT EXCEEDING 50 FT. PREFORMED JOINT FILLER SHALL BE INSTALLED AT THE EXPANSION JOINTS. ALL EDGES SHALL BE TOOL ROUNDED WITH AN EDGE HAVING A 1/4" RADIUS. SIDEWALKS SHALL BE SCORED TO A 1" DEPTH EVERY 5' (CONTROL JOINTS).
2. FINE GRADED CRUSHED GRAVEL (VTRANS STD. SPEC. 704.05) SUBBASE SHALL BE COMPACTED TO A 95% OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST, ACCORDING TO ASTM D698.
3. CONCRETE SHALL MEET THE FOLLOWING SPECIFICATIONS:
   a. 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
   b. 7" MAXIMUM SLUMP
   c. 7.0% (+/-1.5%) AIR CONTENT
   d. 20% FLY ASH OR 25% GGBFS SUBSTITUTION FOR PORTLAND CEMENT
4. ALL NEW CONCRETE SIDEWALK SHALL BE CURED FOR A PERIOD OF 7 DAYS OF ORIGINAL PLACEMENT.
5. ALL NEW CONCRETE SIDEWALK SHALL BE TREATED WITH A SILANE WATER REPELLENT SEALER APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS BETWEEN 14-40 DAYS OF ORIGINAL CONCRETE PLACEMENT.

PAVING & CURB NOTES:

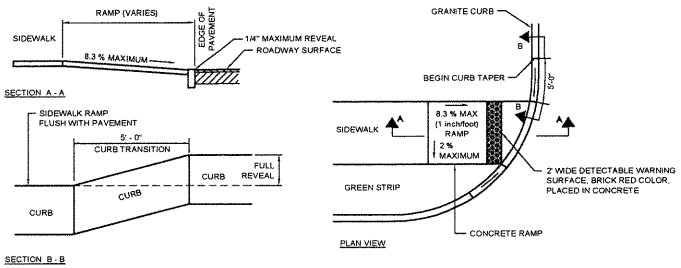
1. THE CONTRACTOR SHALL APPLY EMULSION TO THE FULL WIDTH OF THE BASE COURSE/EXISTING PAVEMENT BEFORE INSTALLING THE TYPE III PAVEMENT WEARING COURSE. EMULSION SHALL BE PLACED ON THE FACE OF THE CURB WHERE IT WILL BE IN CONTACT WITH THE PAVEMENT. EMULSIFIED ASPHALT, TO BE APPLIED AT THE RATE OF 0.015 GAL./SQ.YD.
2. BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +1/4" - (FOR TOTAL THICKNESS OF BASE AND/OR WEARING COURSE)
3. BITUMINOUS CONCRETE PAVEMENT SHALL BE 75 BLOW MARSHALL MIX AND PERFORMANCE GRADED BINDER SHALL BE PG 58-34.
4. CURBING SHALL BE CONSTRUCTED IN 10' SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS.
5. CURBING EXPANSION JOINTS SHALL BE CONSTRUCTED EVERY 20' AND SHALL BE CONSTRUCTED OF MATERIAL CONFORMING TO AASHTO DESIGNATION M-153 (1/2" SPONGE RUBBER OR CORK.).



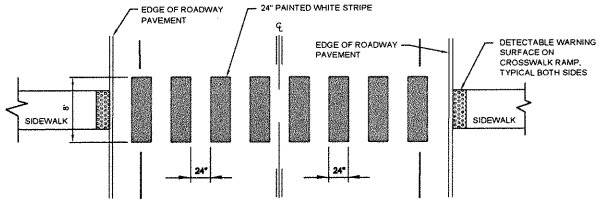
TYPICAL CONCRETE SIDEWALK WITH CONCRETE CURB AND GRASS STRIP SECTION
NTS



TYPICAL CONCRETE SIDEWALK WITH CONCRETE CURB
NTS



TYPICAL HANDICAP RAMP DETAIL
NTS



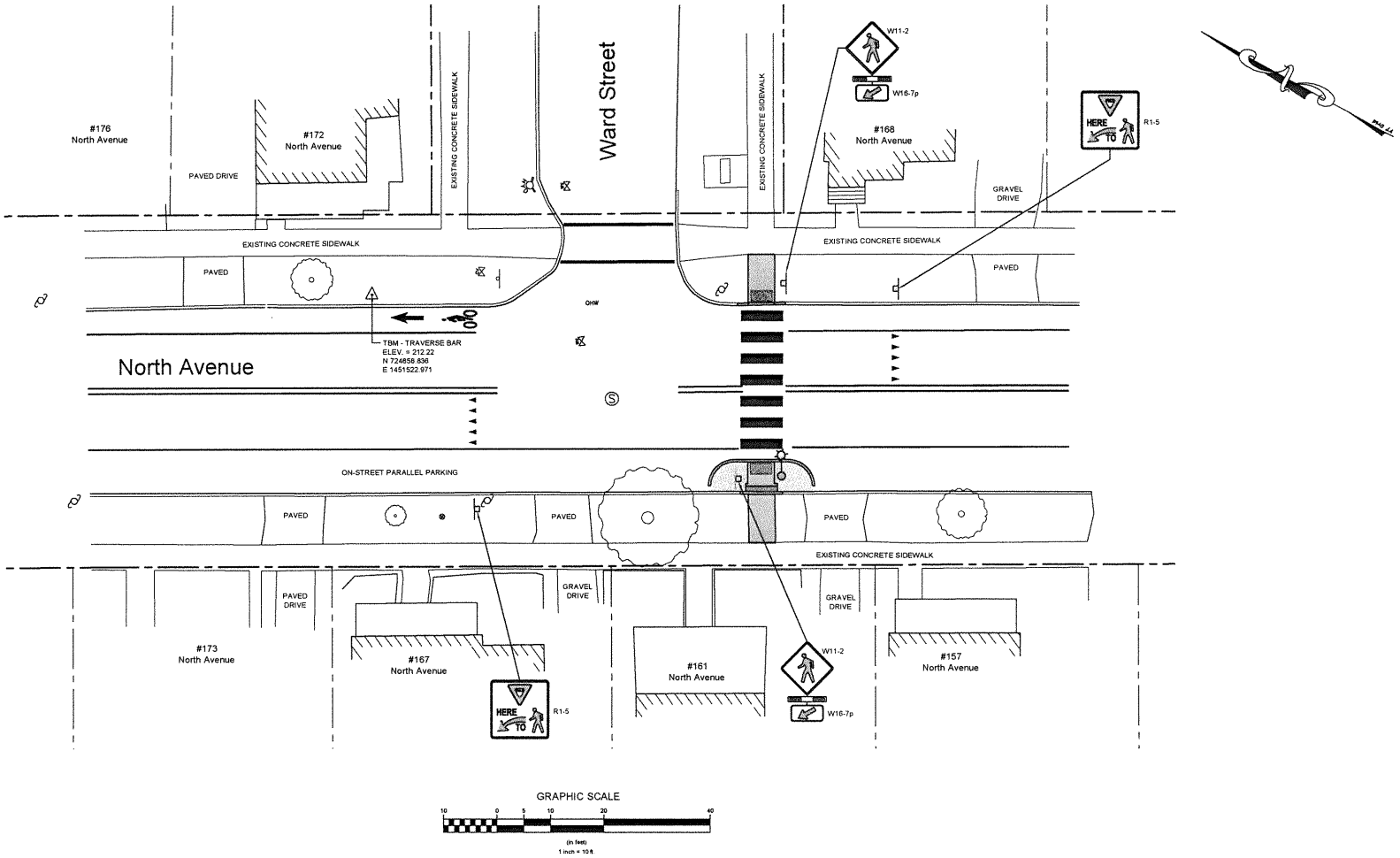
PAINTED BLOCK PATTERN CROSSWALK DETAIL
NTS

CONCEPTUAL PLANS
August 12, 2016

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Mome Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

PROJECT NAME:	Burlington TAP TA15 (1) North Avenue Unsignalized Crosswalks
PROJECT #: 16026	DATE: JUNE 21, 2016
PROJECT LEADER: RD	DRAWN BY: WH
DESIGNED BY: RD	CHECKED BY: RD
TYPICAL DETAILS & SECTIONS	SHEET 2 OF 12

Visit the DPW Project Web Site for Project Updates: https://www.burlingtonvt.gov/DPW/North-Avenue-Unsignalized-Crosswalks



GRAPHIC SCALE

10 0 5 10 20 40

(in feet)
1 inch = 10 ft

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PROPOSED LAYOUT	SHEET 3 OF 12

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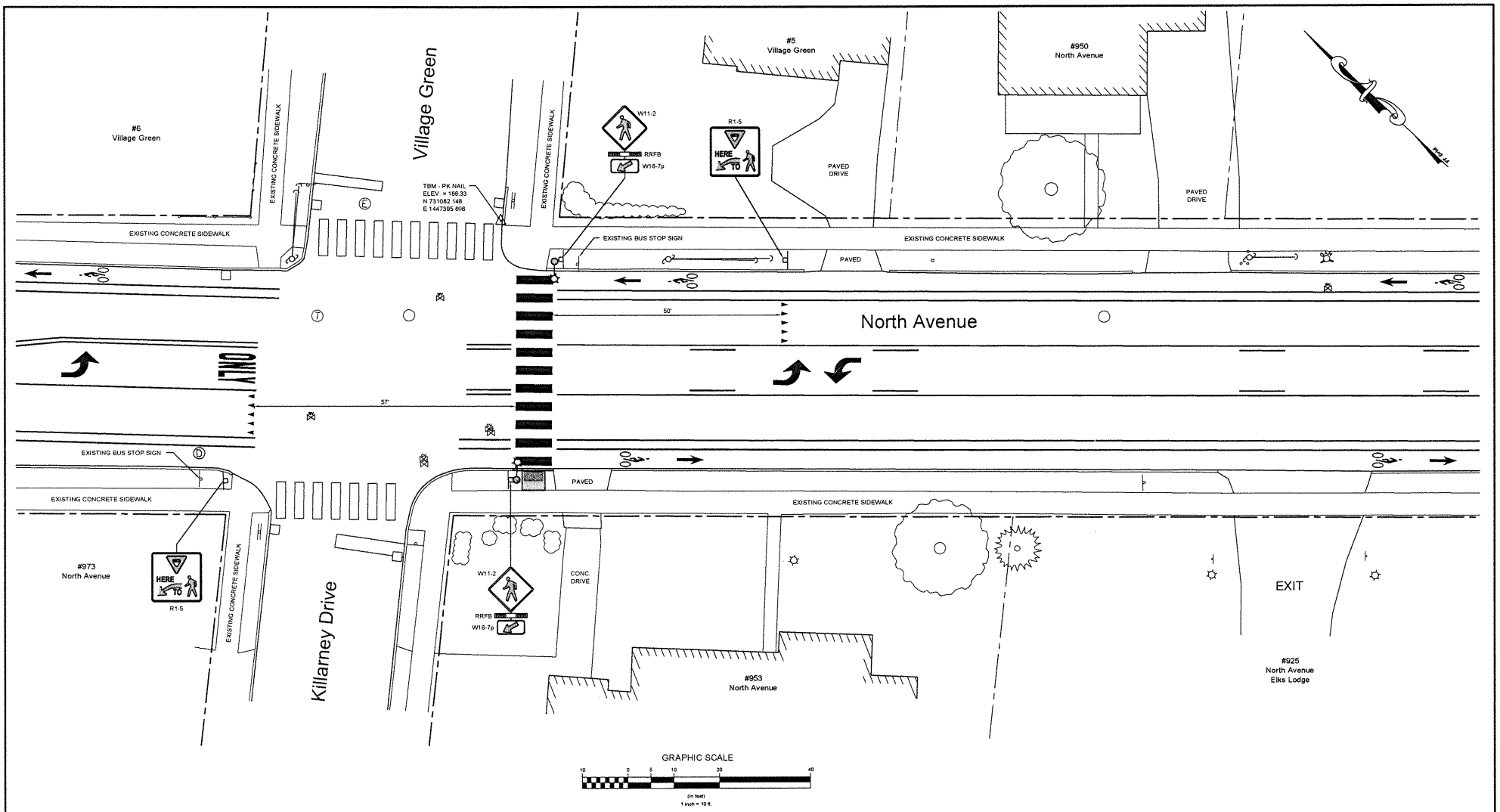

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#6
Village Green

EXISTING CONCRETE SIDEWALK

Village Green

TBM - PK NAIL
ELEV = 189.33
N 731082.148
E 1447395.698

EXISTING CONCRETE SIDEWALK

W11-2

W16-7p

R10-14b
STOP HERE ON FLASHING RED

#5
Village Green

PAVED DRIVE

#950
North Avenue

PAVED DRIVE

EXISTING CONCRETE SIDEWALK

OHW

EXISTING BUS STOP SIGN

EXISTING CONCRETE SIDEWALK

OHW

PAVED

OHW

OHW

PAVED

OHW

60'

50'

North Avenue

PEDESTRIAN HYBRID BEACONS (PHB)
SEE DETAIL BELOW

OHW

EXISTING BUS STOP SIGN

EXISTING CONCRETE SIDEWALK

PAVED

EXISTING CONCRETE SIDEWALK

PAVED

STOP HERE ON FLASHING RED
R10-14b

#973
North Avenue

EXISTING CONCRETE SIDEWALK

OHW

Killarney Drive

EXISTING CONCRETE SIDEWALK

W11-2

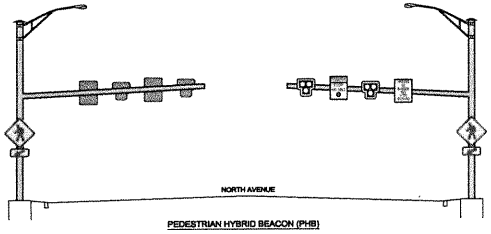
W16-7p

CONC. DRIVE

#953
North Avenue

EXIT

#925
North Avenue
Elks Lodge



PEDESTRIAN HYBRID BEACON (PHB)

GRAPHIC SCALE

10 0 5 10 20 40

(in feet)
1 inch = 10 ft.

ALTERNATE PLAN FOR
4-LANE ROADWAY

CONCEPTUAL PLANS
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PROPOSED LAYOUT	SHEET 5 OF 12

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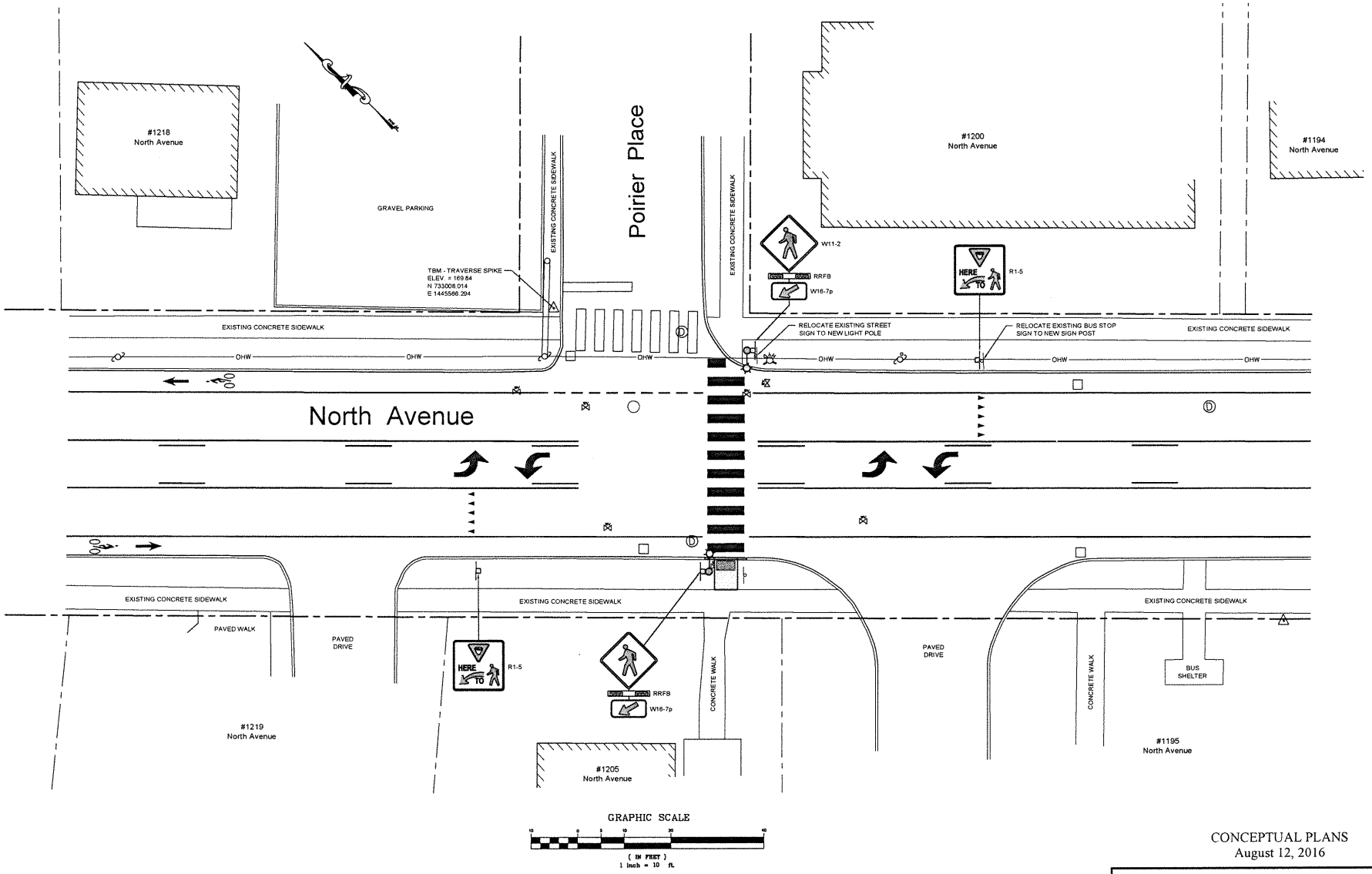

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PROPOSED LAYOUT	SHEET 6 OF 12

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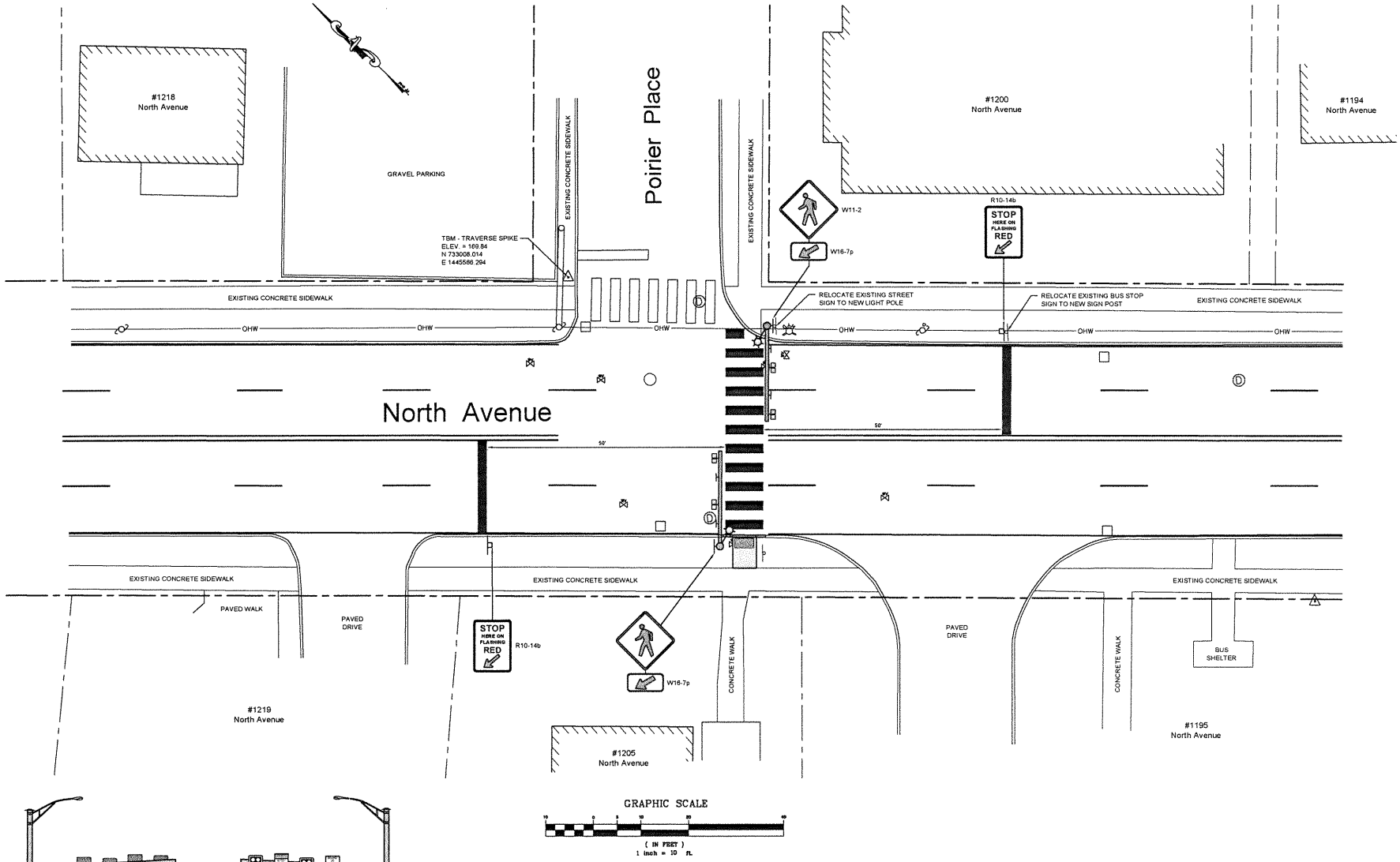

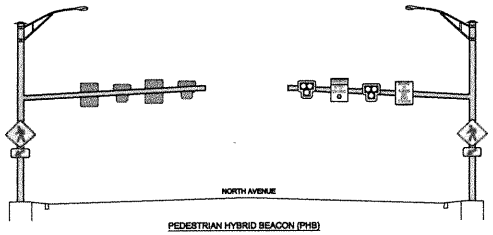

PEDESTRIAN HYBRID BEACON (PHB)

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PROPOSED LAYOUT	SHEET 7 OF 12

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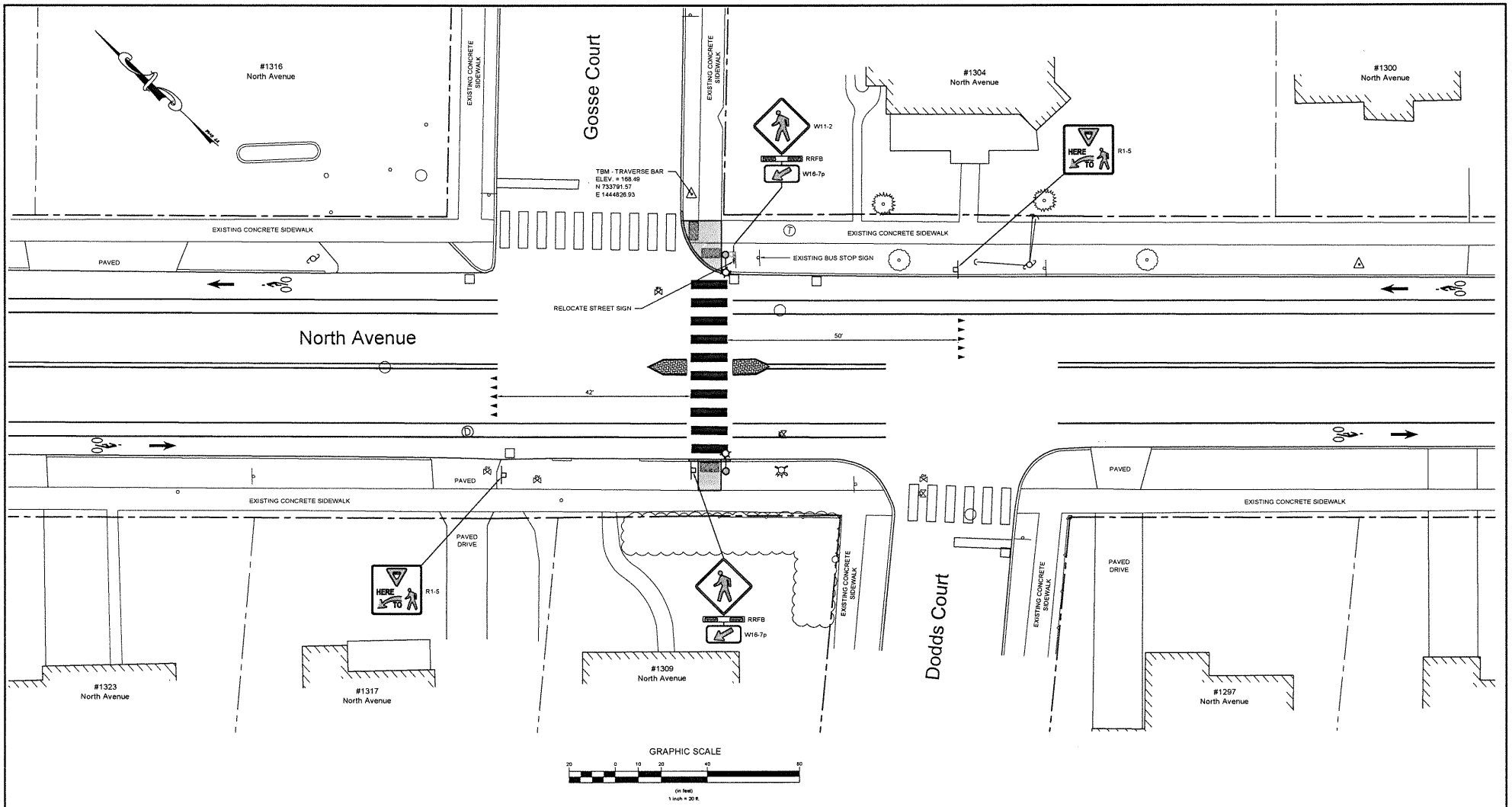

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PROPOSED LAYOUT	SHEET 8 OF 12

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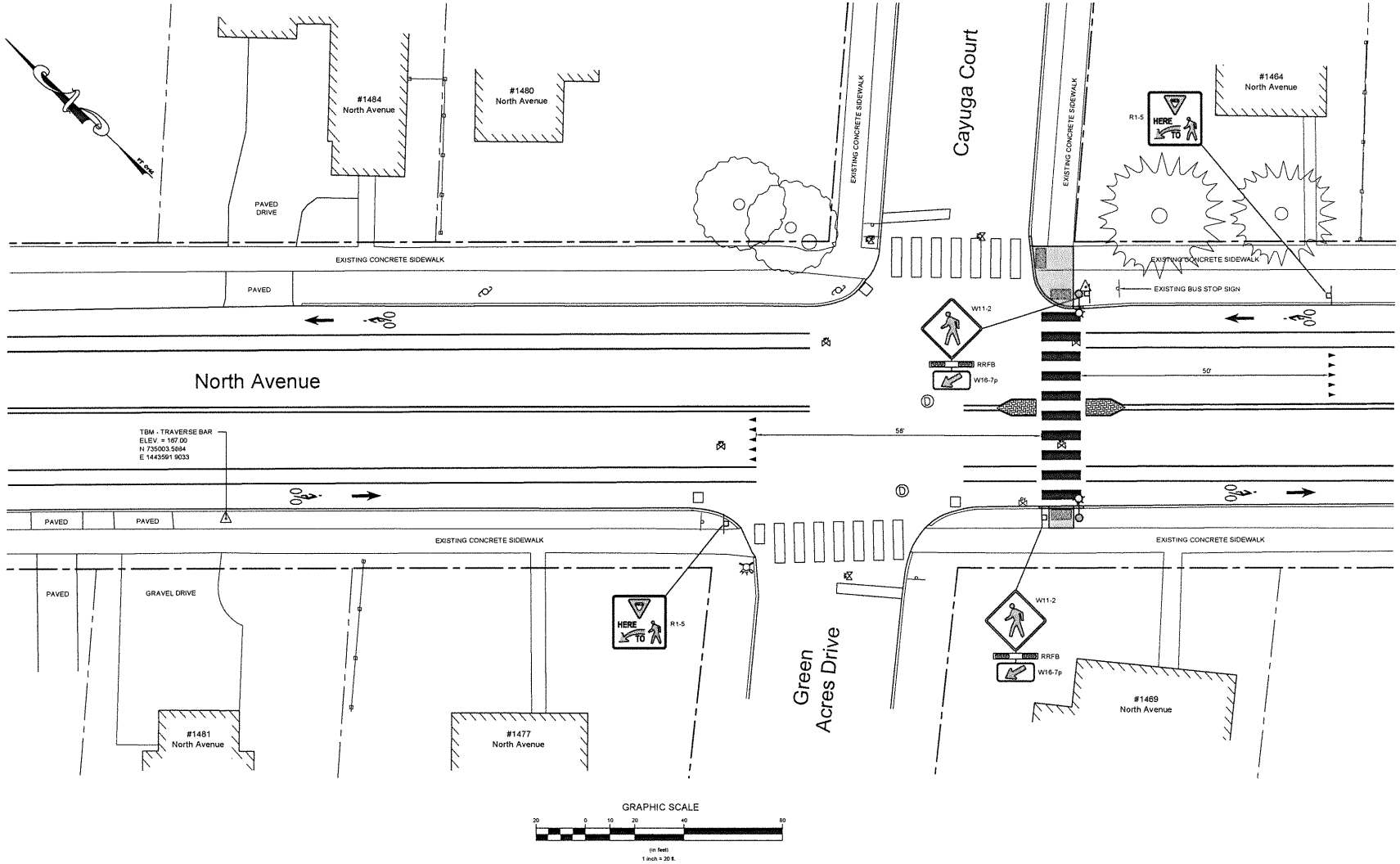

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PROPOSED LAYOUT	SHEET 9 OF 12

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