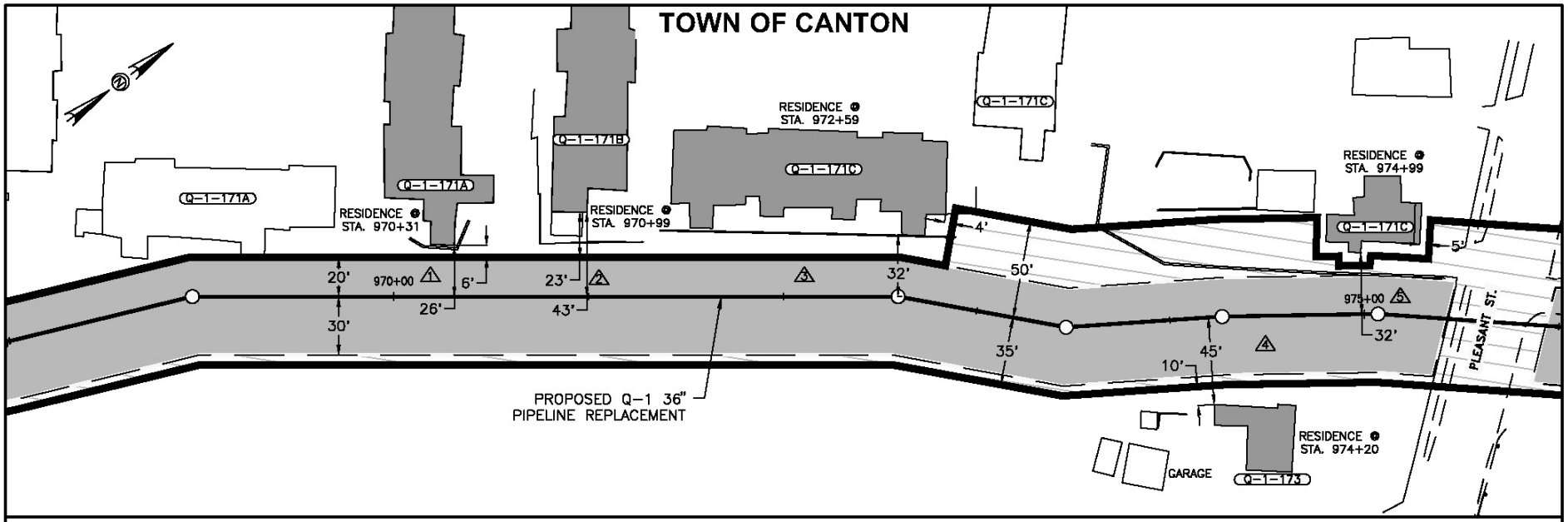


LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- UTILITY TOWER
- EDGE OF PAVEMENT

DESCRIPTION:

1. AT SURVEY STATION 970+31 THERE IS A RESIDENCE 6' LEFT OF THE CWA AND 26' LEFT OF THE CENTERLINE OF THE PROPOSED Q-1 36" PIPELINE REPLACEMENT.
2. AT SURVEY STATION 970+99 THERE IS A RESIDENCE 23' LEFT OF THE CWA AND 43' LEFT OF THE CENTERLINE OF THE PROPOSED Q-1 36" PIPELINE REPLACEMENT.
3. AT SURVEY STATION 972+59 THERE IS A RESIDENCE 4' LEFT OF THE CWA AND 32' LEFT OF THE CENTERLINE OF THE PROPOSED Q-1 36" PIPELINE REPLACEMENT.
4. AT SURVEY STATION 974+20 THERE IS A RESIDENCE 10' RIGHT OF THE CWA AND 45' RIGHT OF THE CENTERLINE OF THE PROPOSED Q-1 36" PIPELINE REPLACEMENT.
5. AT SURVEY STATION 974+99 THERE IS A RESIDENCE 5' LEFT OF THE CWA AND 32' LEFT OF THE CENTERLINE OF THE PROPOSED Q-1 36" PIPELINE REPLACEMENT.

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

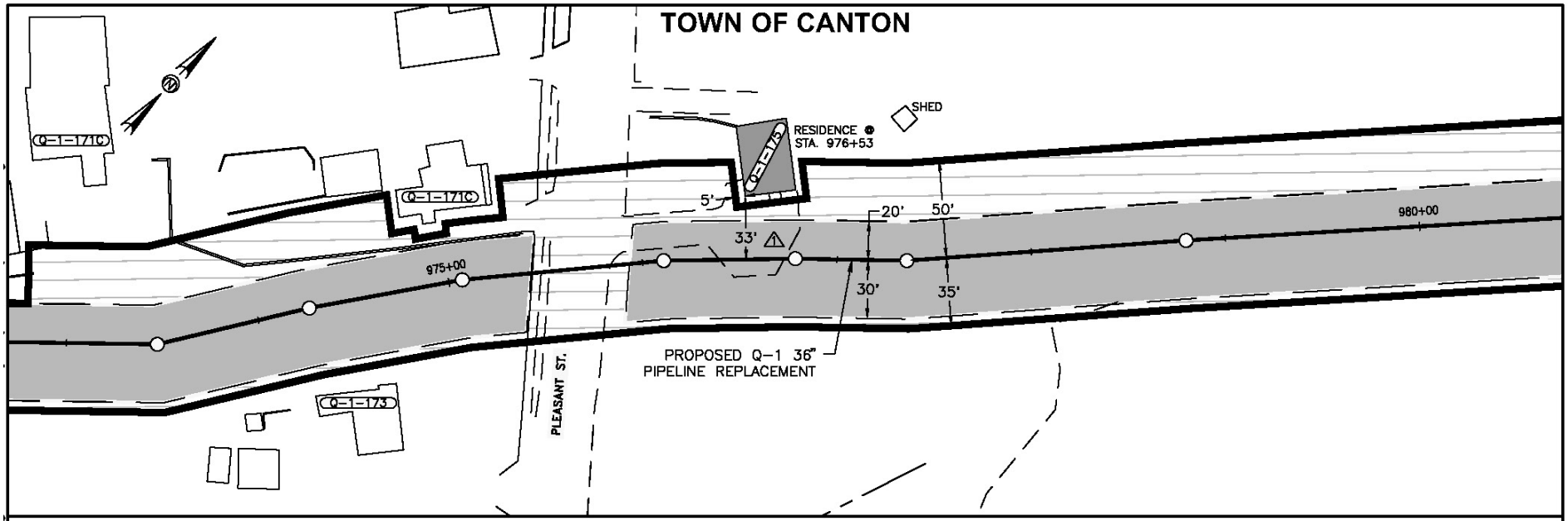
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

Q-1 System Replacement

(Sheet 6 of 7)



DESCRIPTION:

⚠1 AT SURVEY STATION 976+53 THERE IS A RESIDENCE 5' LEFT OF THE CWA AND 33' LEFT OF THE CENTERLINE OF THE PROPOSED Q-1 36" PIPELINE REPLACEMENT.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- UTILITY TOWER
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

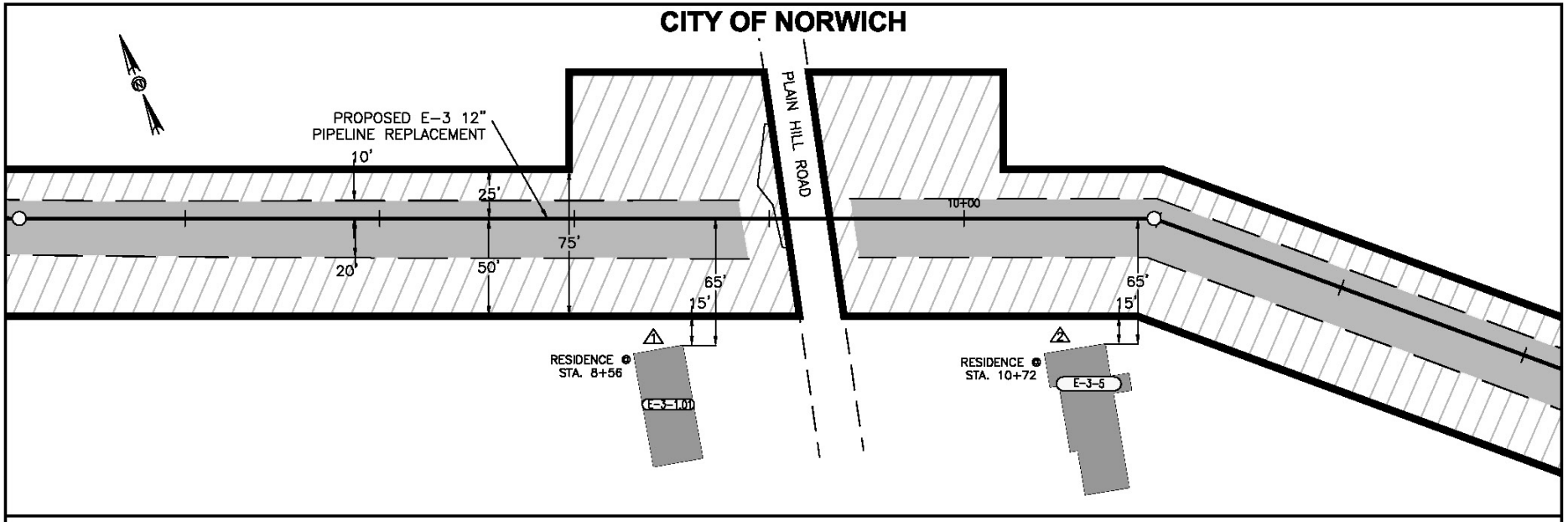
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

Q-1 System Replacement

(Sheet 7 of 7)



DESCRIPTION:

1. AT SURVEY STATION 8+56 THERE IS A RESIDENCE 15' RIGHT OF THE CWA AND 65' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

2. AT SURVEY STATION 10+72 THERE IS A RESIDENCE 15' RIGHT OF THE CWA AND 65' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.

2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

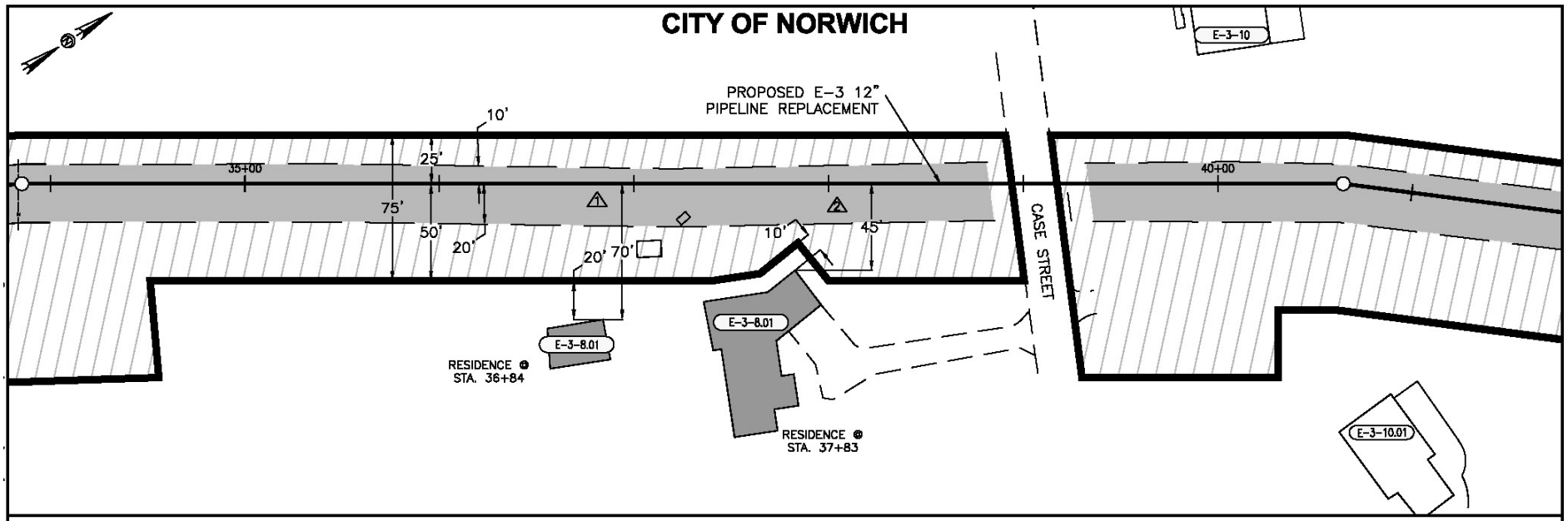
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 1 of 16)



DESCRIPTION:

1. AT SURVEY STATION 36+84 THERE IS A RESIDENCE 20' RIGHT OF THE CWA AND 70' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

2. AT SURVEY STATION 37+83 THERE IS A RESIDENCE 10' RIGHT OF THE CWA AND 45' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

PROPOSED PIPELINE	
EXISTING PIPELINE	
CONSTRUCTION WORK AREA	
PERMANENT EASEMENT	
EDGE OF PAVEMENT	

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

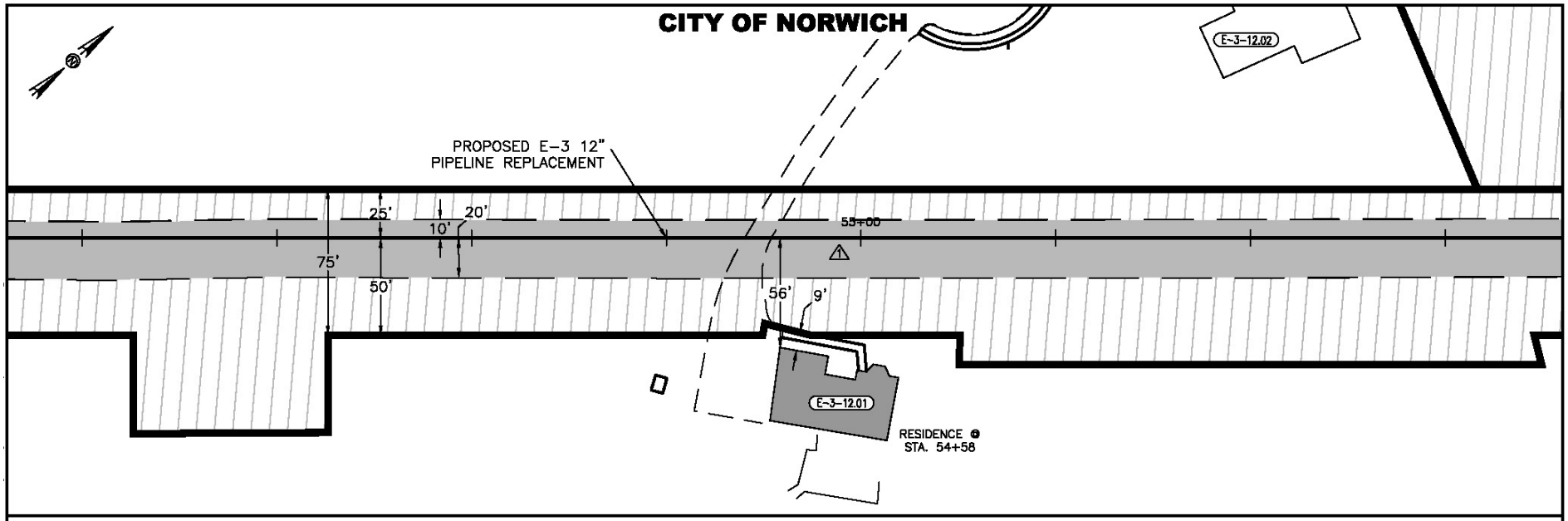
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 2 of 16)



DESCRIPTION:

⚠ AT SURVEY STATION 54+58 THERE IS A RESIDENCE 9' RIGHT OF THE CWA AND 56' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

PROPOSED PIPELINE

EXISTING PIPELINE

CONSTRUCTION WORK AREA

PERMANENT EASEMENT

EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

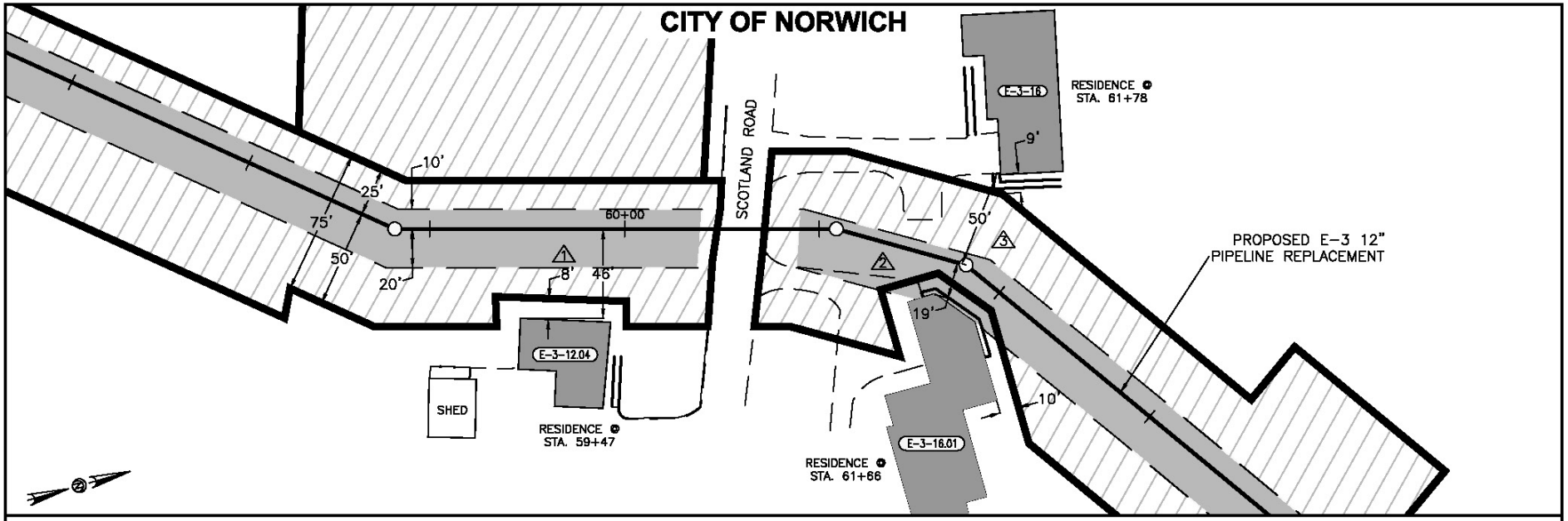
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 3 of 16)



DESCRIPTION:

1. AT SURVEY STATION 59+47 THERE IS A RESIDENCE 8' RIGHT OF THE CWA AND 46' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

2. AT SURVEY STATION 61+66 THERE IS A RESIDENCE 10' RIGHT OF THE CWA AND 19' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

3. AT SURVEY STATION 61+78 THERE IS A RESIDENCE 9' LEFT OF THE CWA AND 50' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.

2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

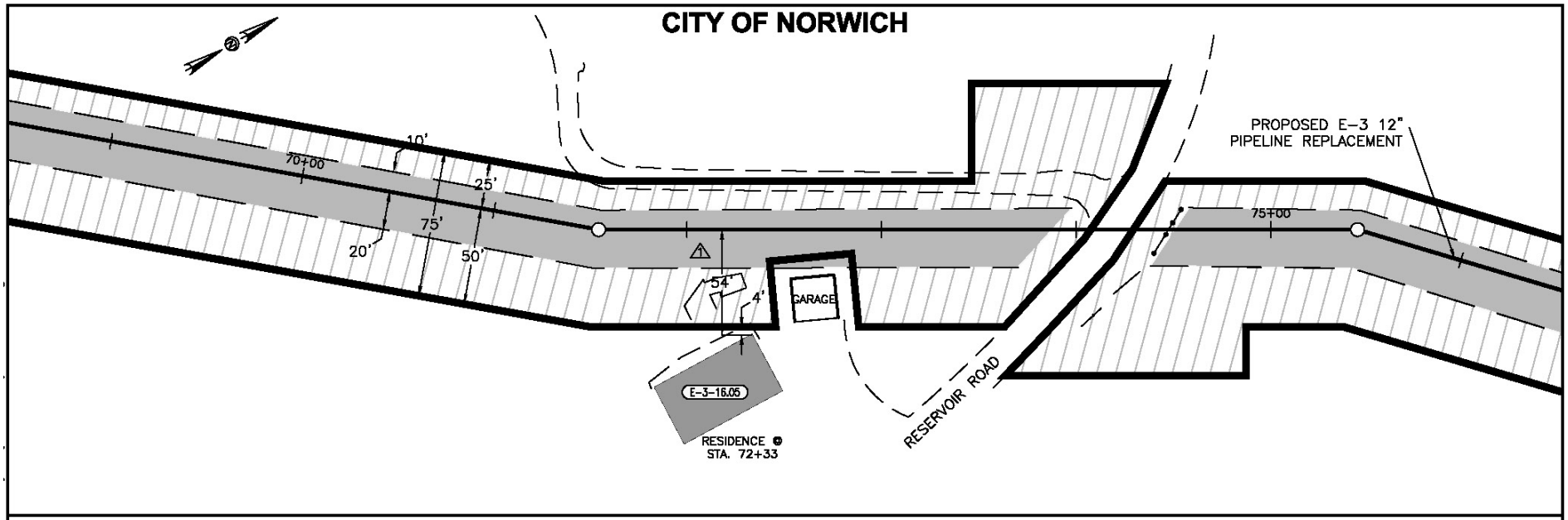
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 4 of 16)



DESCRIPTION:

⚠1 AT SURVEY STATION 72+33 THERE IS A RESIDENCE 4' RIGHT OF THE CWA AND 54' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

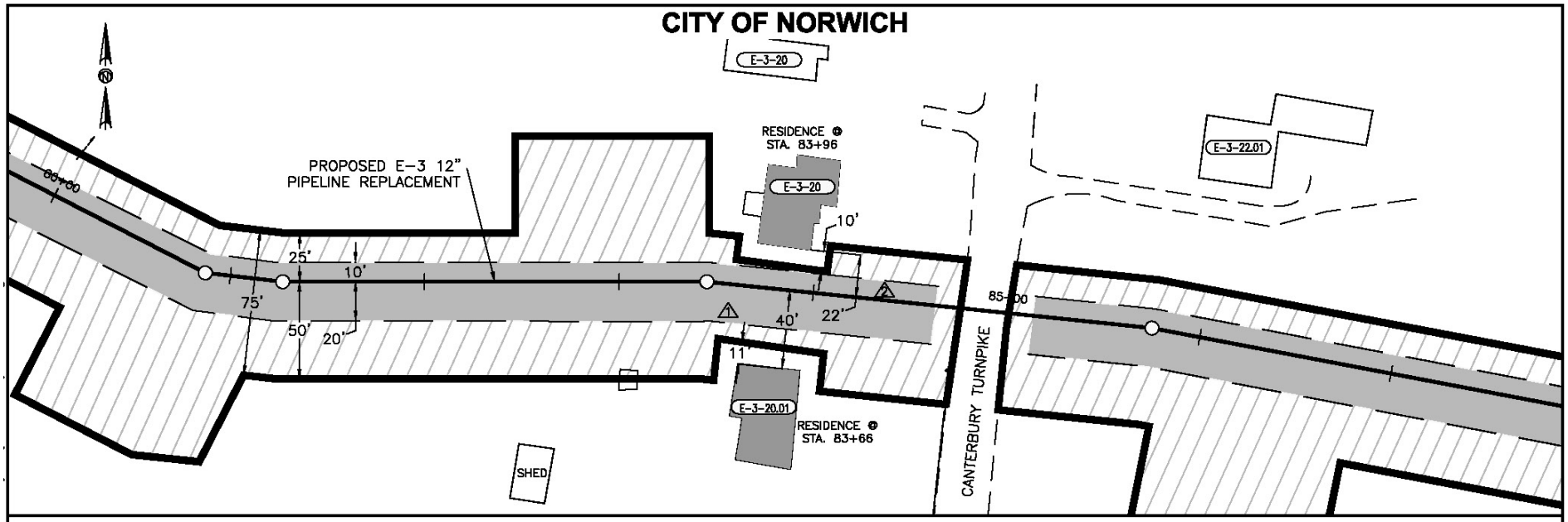
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 5 of 16)



DESCRIPTION:

1. AT SURVEY STATION 83+66 THERE IS A RESIDENCE 11' RIGHT OF THE CWA AND 40' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

2. AT SURVEY STATION 83+96 THERE IS A RESIDENCE 10' LEFT OF THE CWA AND 22' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

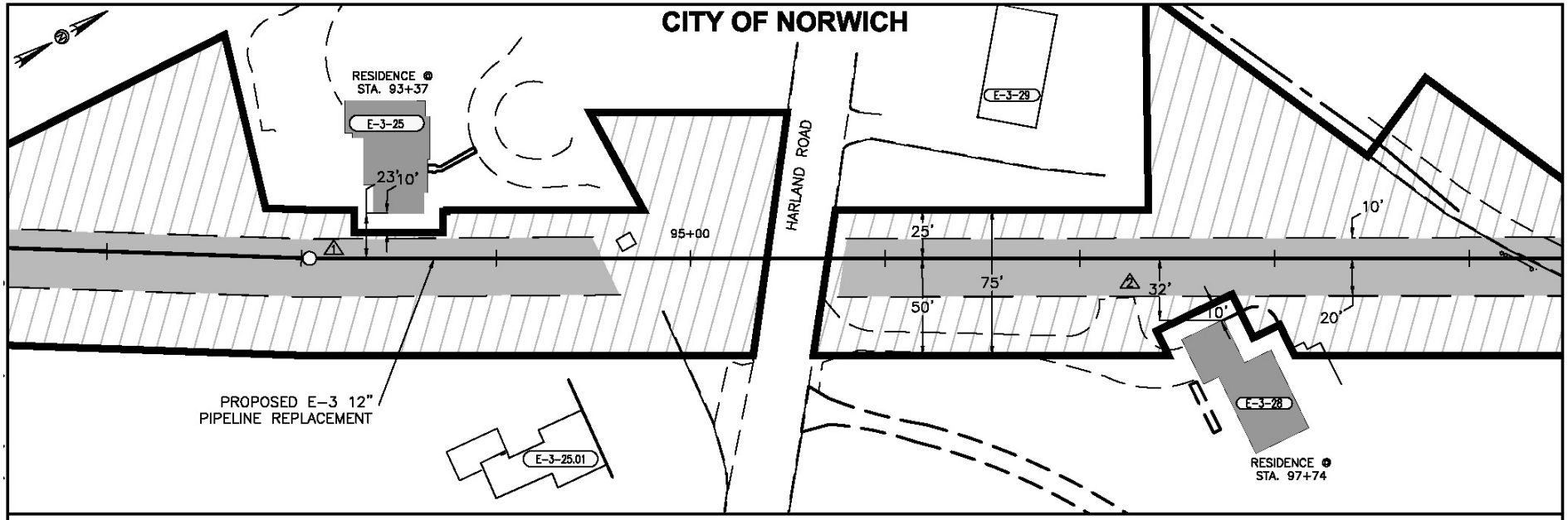
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 6 of 16)



DESCRIPTION:

1. AT SURVEY STATION 93+37 THERE IS A RESIDENCE 10' LEFT OF THE CWA AND 23' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

2. AT SURVEY STATION 97+74 THERE IS A RESIDENCE 10' RIGHT OF THE CWA AND 32' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

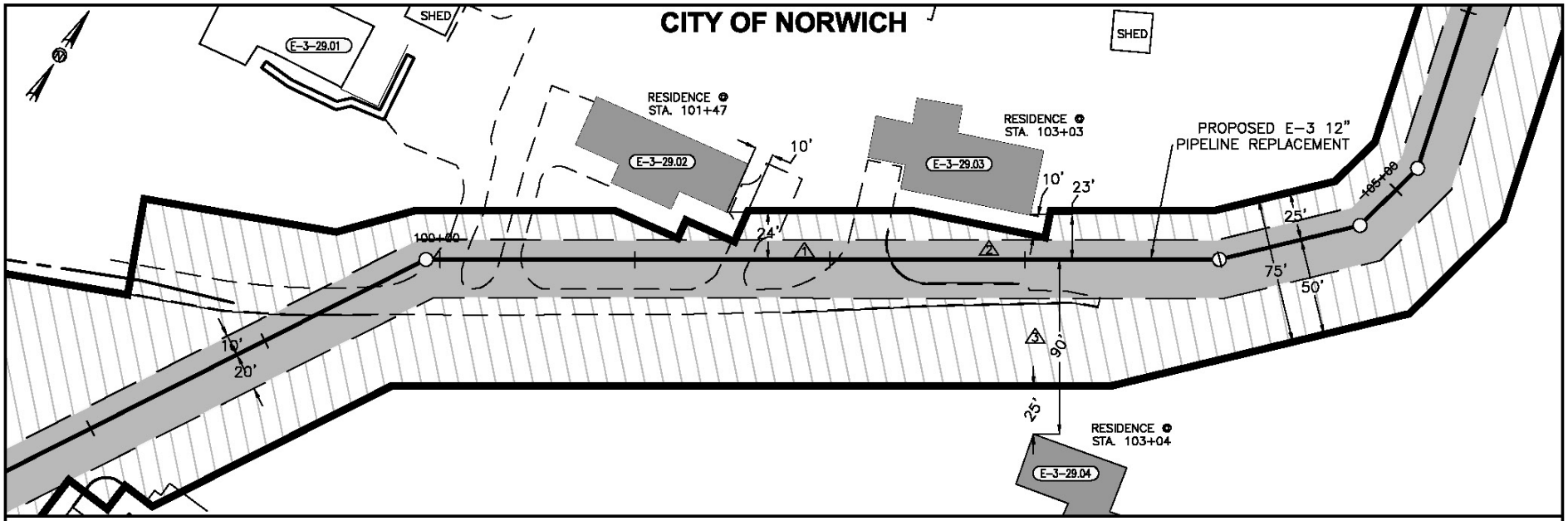
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 7 of 16)



DESCRIPTION:

1. AT SURVEY STATION 101+47 THERE IS A RESIDENCE 10' LEFT OF THE CWA AND 24' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

2. AT SURVEY STATION 103+03 THERE IS A RESIDENCE 10' LEFT OF THE CWA AND 23' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

3. AT SURVEY STATION 103+04 THERE IS A RESIDENCE 25' RIGHT OF THE CWA AND 90' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.

2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

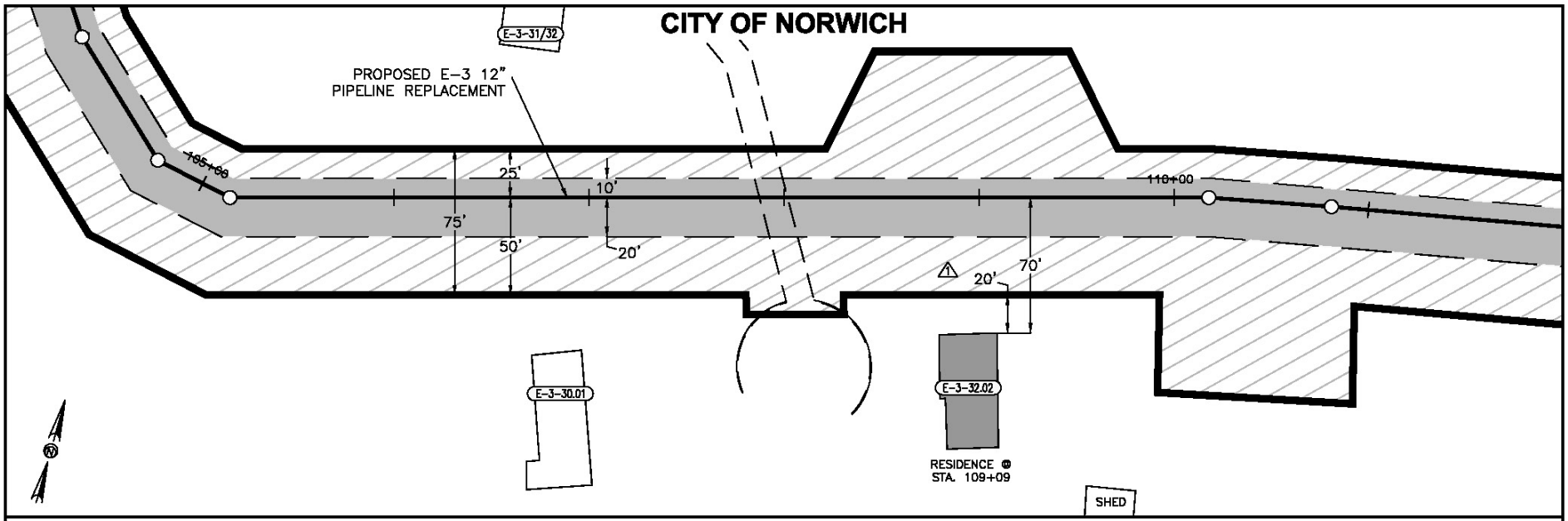
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 8 of 16)



DESCRIPTION:

1. AT SURVEY STATION 109+09 THERE IS A RESIDENCE 20' RIGHT OF THE CWA AND 70' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
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LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

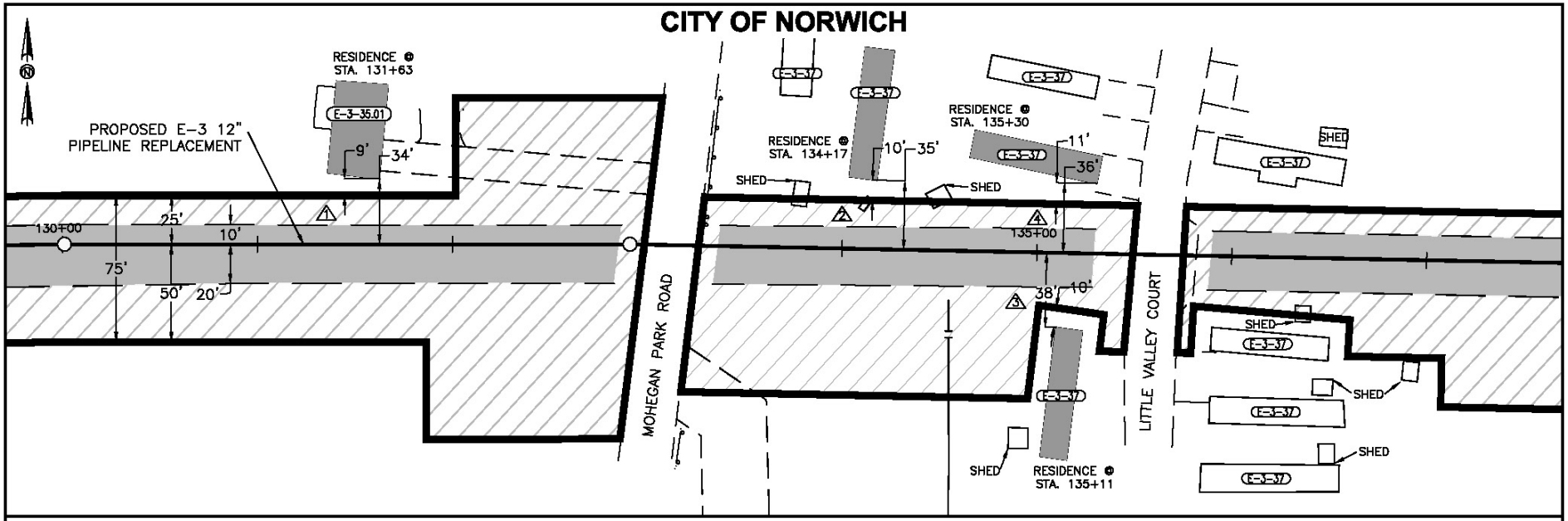
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 9 of 16)



DESCRIPTION:

1. AT SURVEY STATION 131+63 THERE IS A RESIDENCE 9' LEFT OF THE CWA AND 34' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
2. AT SURVEY STATION 134+17 THERE IS A RESIDENCE 10' LEFT OF THE CWA AND 35' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
3. AT SURVEY STATION 135+11 THERE IS A RESIDENCE 10' RIGHT OF THE CWA AND 38' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
4. AT SURVEY STATION 135+30 THERE IS A RESIDENCE 11' LEFT OF THE CWA AND 36' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

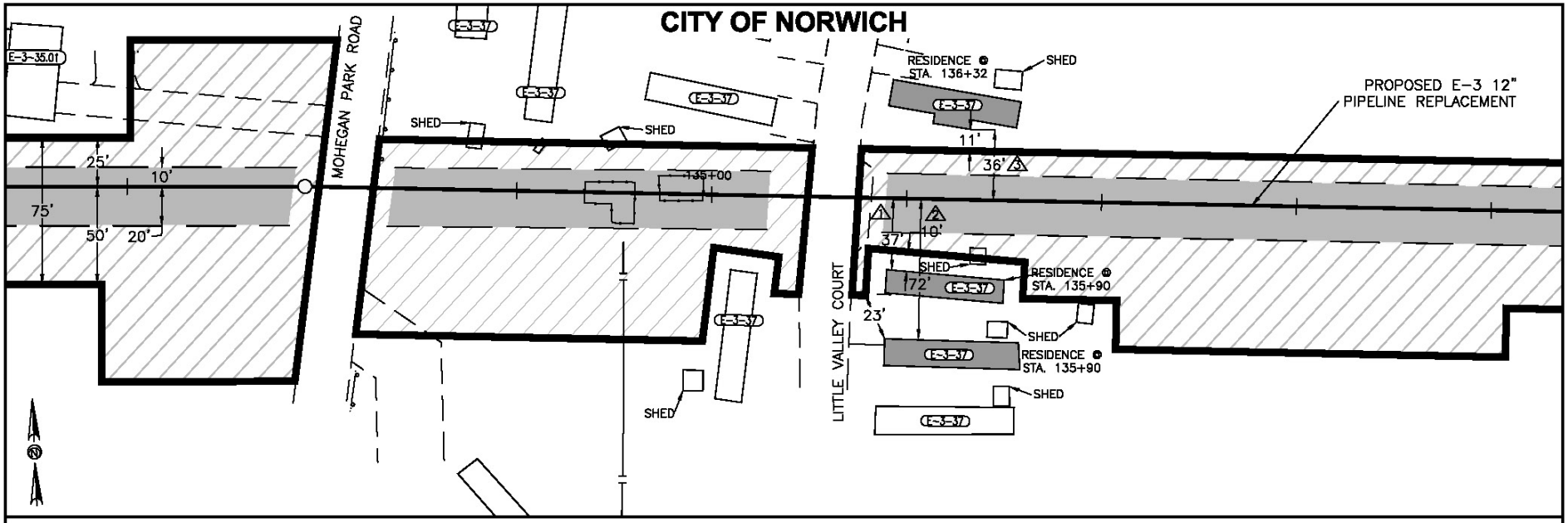
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 10 of 16)



DESCRIPTION:

1. AT SURVEY STATION 135+90 THERE IS A RESIDENCE 10' RIGHT OF THE CWA AND 37' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
2. AT SURVEY STATION 135+90 THERE IS A RESIDENCE 23' RIGHT OF THE CWA AND 72' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
3. AT SURVEY STATION 136+32 THERE IS A RESIDENCE 11' LEFT OF THE CWA AND 36' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

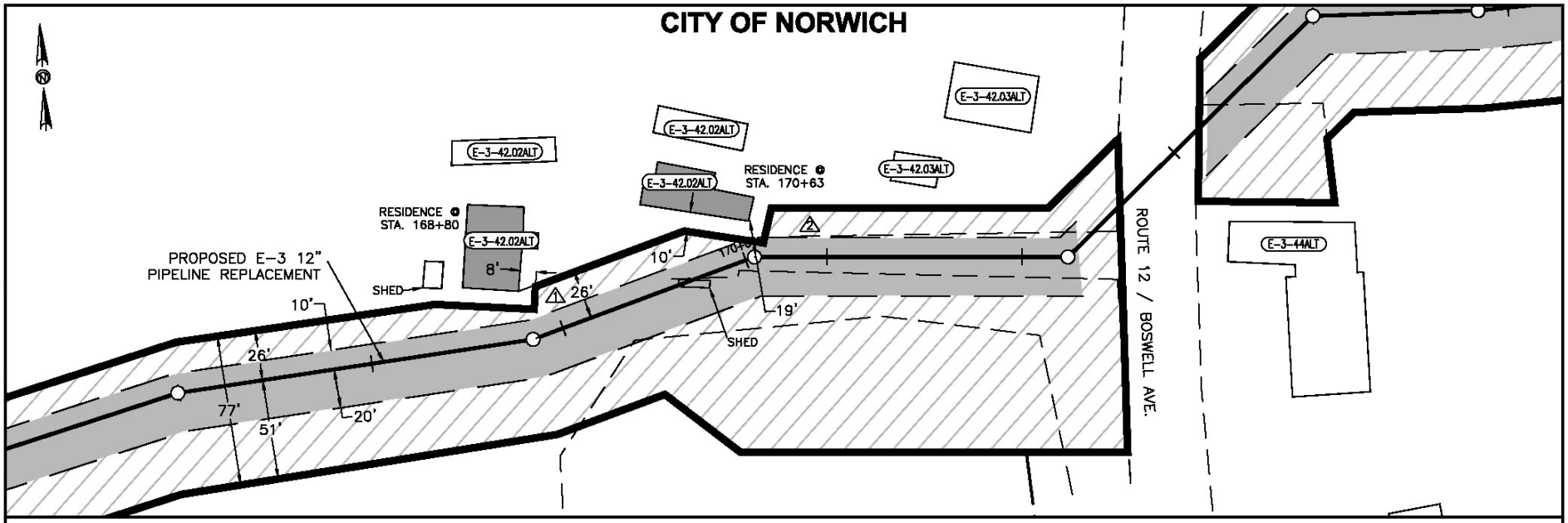
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 11 of 16)



DESCRIPTION:

1. AT SURVEY STATION 168+80 THERE IS A RESIDENCE 8' LEFT OF THE CWA AND 26' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
2. AT SURVEY STATION 170+63 THERE IS A RESIDENCE 10' LEFT OF THE CWA AND 19' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

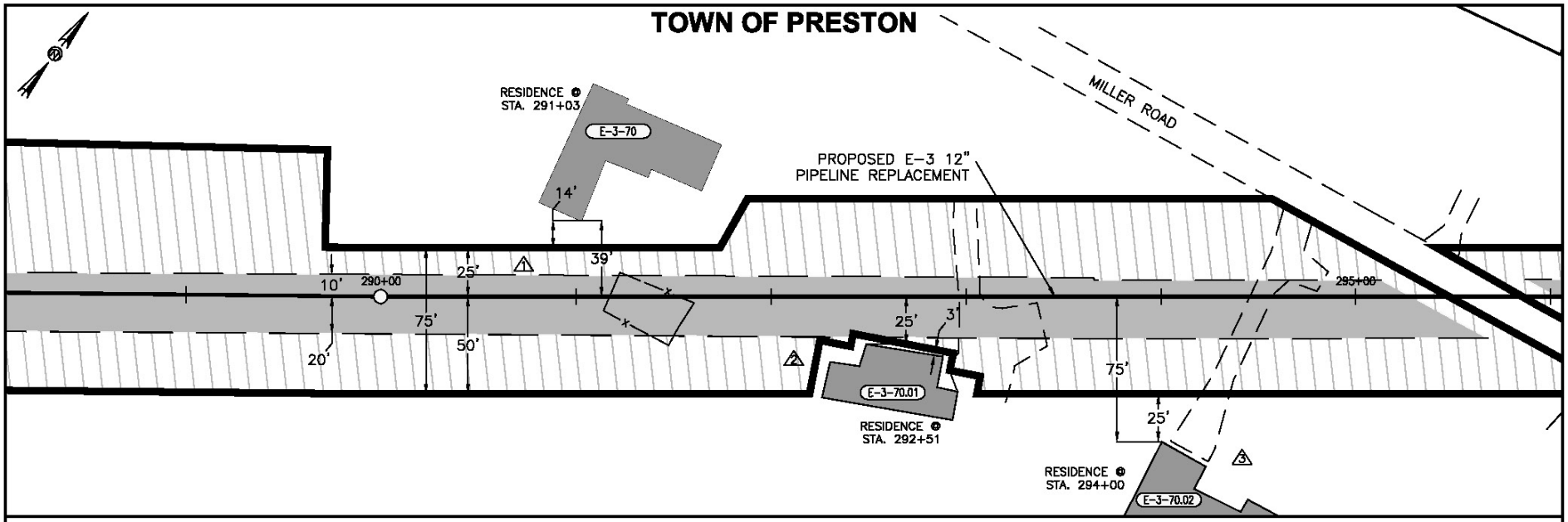
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 12 of 16)



DESCRIPTION:

1. AT SURVEY STATION 291+03 THERE IS A RESIDENCE 14' LEFT OF THE CWA AND 39' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
2. AT SURVEY STATION 292+51 THERE IS A RESIDENCE 3' RIGHT OF THE CWA AND 25' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
3. AT SURVEY STATION 294+00 THERE IS A RESIDENCE 25' RIGHT OF THE CWA AND 75' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

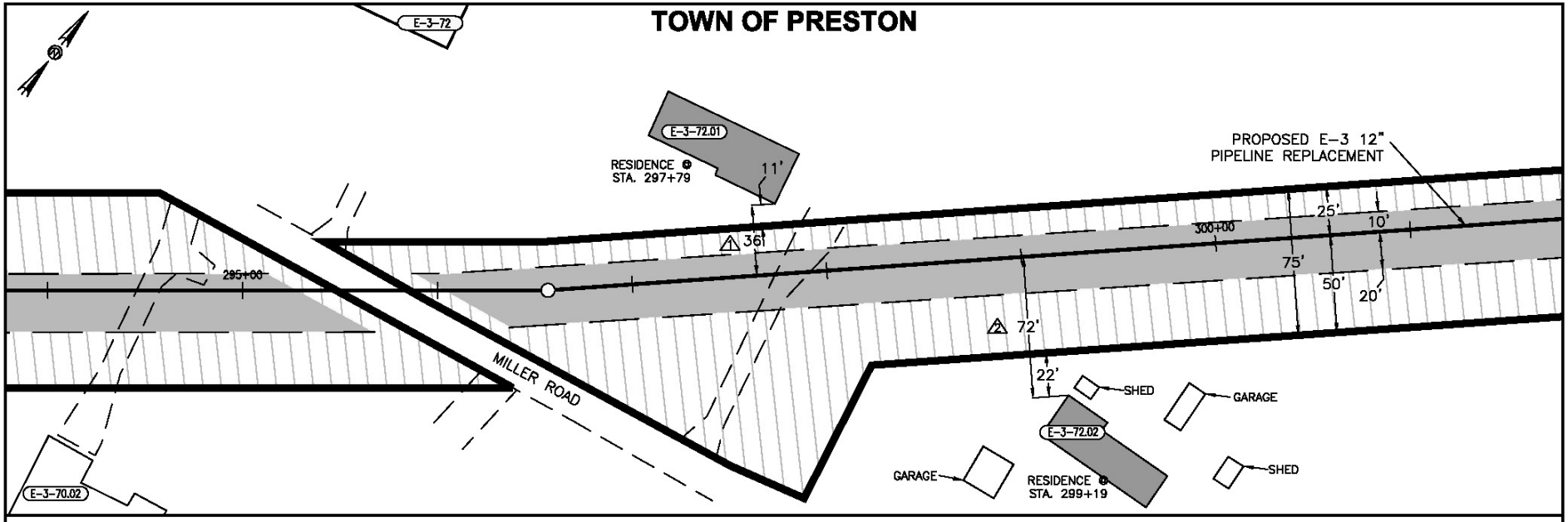
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 13 of 16)



DESCRIPTION:

1. AT SURVEY STATION 297+79 THERE IS A RESIDENCE 11' LEFT OF THE CWA AND 36' LEFT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.
2. AT SURVEY STATION 299+19 THERE IS A RESIDENCE 22' RIGHT OF THE CWA AND 72' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

- PROPOSED PIPELINE
- EXISTING PIPELINE
- CONSTRUCTION WORK AREA
- PERMANENT EASEMENT
- EDGE OF PAVEMENT

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

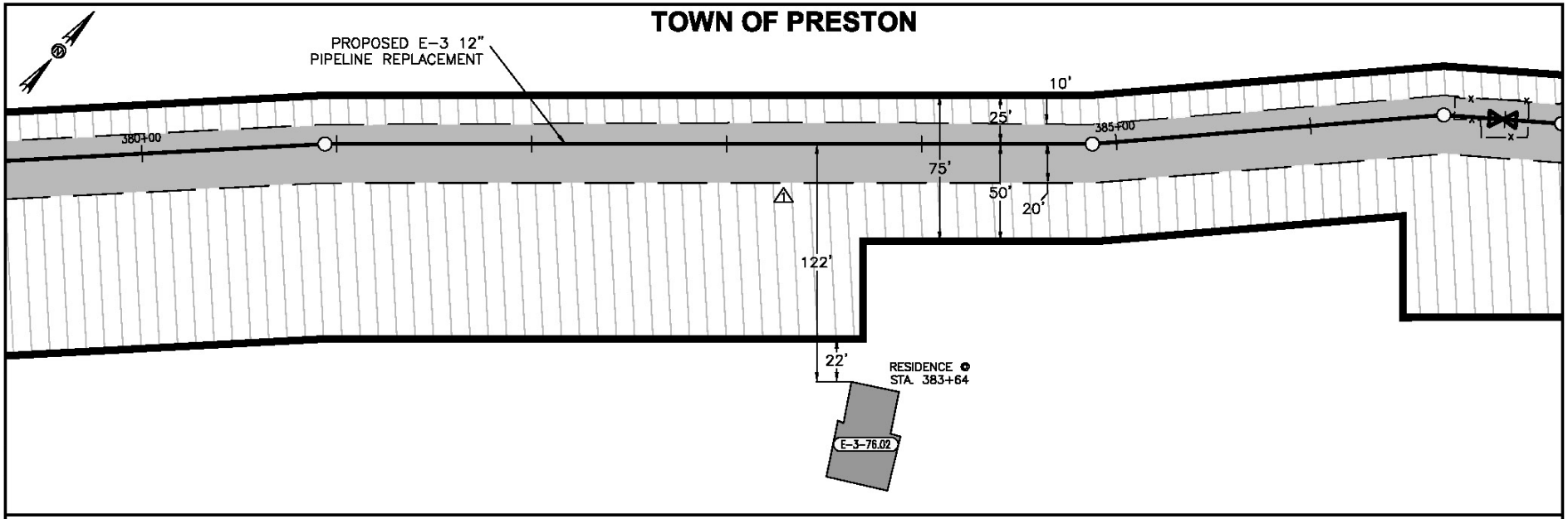
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 14 of 16)



DESCRIPTION:

⚠1 AT SURVEY STATION 383+64 THERE IS A RESIDENCE 22' RIGHT OF THE CWA AND 122' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

PROPOSED PIPELINE	
EXISTING PIPELINE	
CONSTRUCTION WORK AREA	
PERMANENT EASEMENT	
EDGE OF PAVEMENT	

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

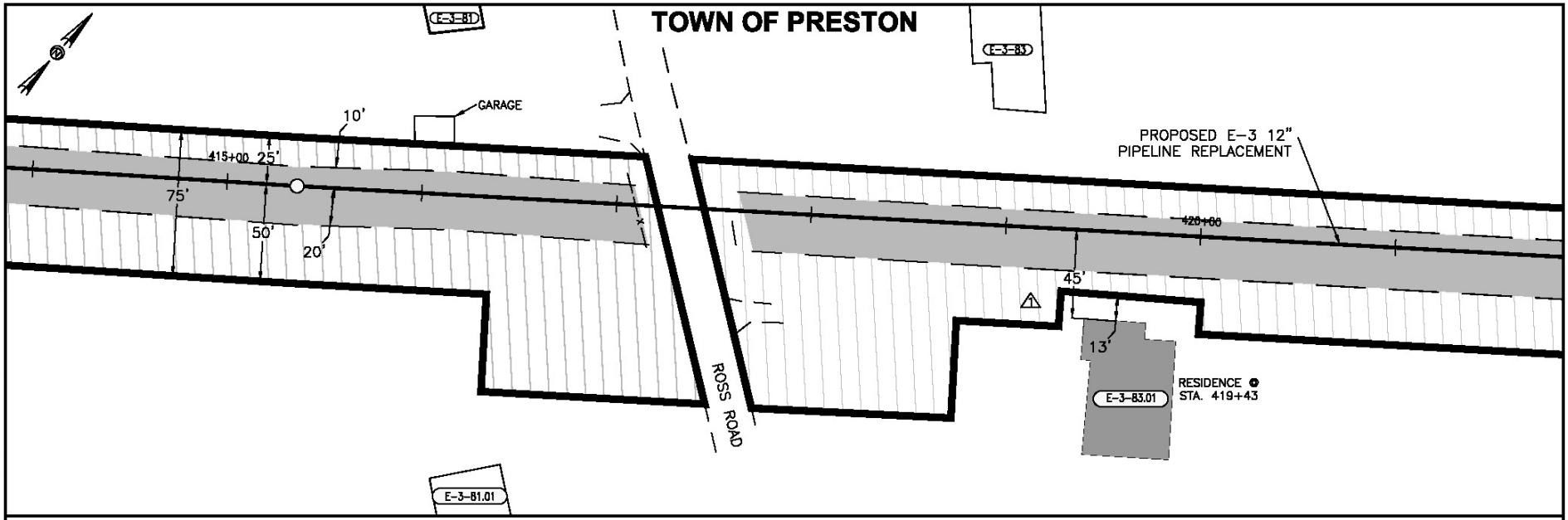
PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 15 of 16)



DESCRIPTION:

1 AT SURVEY STATION 419+43 THERE IS A RESIDENCE 13' RIGHT OF THE CWA AND 45' RIGHT OF THE CENTERLINE OF THE PROPOSED E-3 12" PIPELINE REPLACEMENT.

LEGEND

PROPOSED PIPELINE	
EXISTING PIPELINE	
CONSTRUCTION WORK AREA	
PERMANENT EASEMENT	
EDGE OF PAVEMENT	

NOTES:

1. (CWA) REFERS TO THE CONSTRUCTION WORK AREA
2. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY FOR A DISTANCE OF 100' FEET ON EITHER SIDE OF THE RESIDENCE.

CONSTRUCTION TECHNIQUES:

ONE OF THE FOLLOWING TECHNIQUES SHALL BE UTILIZED FOR A LONGITUDINAL DISTANCE OF 100' FEET EITHER SIDE OF THE RESIDENCE

1. THE SEWER LINE TECHNIQUE TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/INDUSTRIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

GRAPHIC SCALE

0 50' 100'

REDUCED SCALE

PRELIMINARY 10/9/2008

Appendix J

HubLine/East to West Project

E-3 System Replacement

(Sheet 16 of 16)