INDEX

SHEET NO.	STREETS COVERED
1	COVER SHEET
2	NOTES AND KEY PLAN
3	SITE PLAN
4	PLAN & PROFILE
5 & 6	BYPASS PUMPING PLAN 1 & 2
7 & 8	DETAILS 1 & 2
9 & 10	MAINTENANCE AND PROTECTION OF TRAFFIC PLANS 1 & 2
11	DETOUR PLAN

CITY OF WARWICK, RHODE ISLAND

SYSTEM OF SEWERS

CONTRACT NO. 103

AIRPORT INTERCEPTOR
AMTRAK CROSSING

LOCATION PLAN

HONORABLE FRANK J. PICOZZI, MAYOR

WARWICK SEWER AUTHORITY

GARY C. JARVIS, CHAIRMAN

THOMAS H. CHADRONET
CARLO E. PISATURO, JR
SCOTT GOODINSON
SCOTT PHILLIPS
GARY P. MARINO
PETER GINAITT

AUGUST 2022

a division of **GM2**

TODD A. RAVENELLE
No. 5928
REGISTERED PROFESSIONAL ENGINEER

GENERAL NOTES

1. SPECIFICATIONS GOVERNING THIS PROJECT SHALL BE THE RIDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (AMENDED AUGUST 2013, INCLUDING ALL REVISIONS, ADDENDA AND SUPPLEMENTAL SPECIFICATIONS; AND THE "RHODE ISLAND STANDARD DETAILS" (1998, INCLUDING ALL REVISIONS. ALL PROJECT SITE IMPROVEMENTS SHALL CONFORM TO THE APPLICABLE STANDARDS SET FORTH IN THESE DOCUMENTS (AND THE SUB-REFERENCES INCORPORATED THEREIN) UNLESS OTHERWISE INDICATED IN THE CONTRACT DOCUMENTS.

2. THE PROJECT LIMITS OF CLEARING AND SURFACE DISTURBANCE SHALL BE LIMITED TO EXISTING CITY EASEMENTS AND TEMPORARY CONSTRUCTION AGREEMENT. THE CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING (THROUGH PROVISION AND PLACEMENT OF LOAM AND SEED) ANY UNPAVED AREAS OUTSIDE OF THE PROJECT LIMITS OF DISTURBANCE IMPACTED BY CONSTRUCTION OPERATIONS. ANY REQUIRED RESTORATION OUTSIDE THE PROJECT LIMITS OF DISTURBANCE SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER AND AT THE CONTRACTOR'S EXPENSE.

3. ANY DAMAGE CAUSED BY THE CONTRACTOR TO EXISTING CURBING, SIDEWALKS, PAVEMENTS, FENCES, OR OTHER SITE FEATURES TO REMAIN IN PLACE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXCESS EXCAVATED PAVEMENTS, CURBING, SIDEWALKS, CURB STOPS, AND OTHER CONSTRUCTION WASTE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS.

5. THE CONTRACTOR SHALL MAINTAIN ALL EXCAVATION IN A DRY CONDITION. NO SEPARATE PAYMENT OR ALLOWANCE SHALL BE MADE FOR DEWATERING.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENTS FROM DEWATERING OPERATION DISCHARGES THROUGH THE USE OF STILLING BASINS, FILTER FABRIC DEVICES, AND/OR OTHER SUITABLE MEANS AS APPROVED BY THE ENGINEER.

7. THE CONTRACTOR SHALL PROVIDE CONTINUOUS DUST CONTROL (USING WATER AND/OR CALCIUM CHLORIDE OR OTHER APPROVED METHODS) FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS AND SURFACES OF BACK FILLED TRENCHES, IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

8. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED NOTICES AND COMPLY WITH ALL PERMITS, LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN AND SPECIFIED IN THE CONTRACT DOCUMENTS.

9. IN ACCORDANCE WITH CURRENT STATE "DIG SAFE" LAWS AND RULES, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE SYSTEM ELEMENTS AND UTILITIES (BOTH UNDERGROUND AND OVERHEAD) BEFORE ANY EXCAVATION MAY COMMENCE. THE CONTRACTOR IS ADVISED THAT (A) NOT ALL UTILITY PROVIDERS SUBSCRIBE TO THE DIGSAFE PROGRAM, AND (B) IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL POTENTIALLY AFFECTED UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO THE COMMENCEMENT OF WORK. EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY MUNICIPAL, STATE OR FEDERAL AGENCY OR AUTHORITY HAVING JURISDICTION OVER THE WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD OR UNMARKED UTILITIES (AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY) SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.

10. THE CONTRACTOR IS ADVISED THAT WORK UNDER EXISTING OVERHEAD UTILITIES IS REQUIRED, AND THAT MINIMUM CLEARANCES SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. THIS MAY REQUIRE SPECIAL MEANS AND METHODS IN ORDER TO PROPERLY COMPLETE THE WORK. SHOULD THE CONTRACTOR ELECT TO RELOCATE EXISTING OVERHEAD UTILITIES, THEN THE CONTRACTOR SHALL CONDUCT ALL COORDINATION WITH THE AFFECTED UTILITY COMPANIES AND BEAR ALL COSTS ASSOCIATED WITH UTILITY RELOCATIONS NOT INCLUDED IN THE CONTRACT.

11. PRIOR TO WORK, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED OR REMOVED. ANY VARIATION FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, WHEREUPON WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.

12. ALL EXISTING PIPE, SUBSURFACE STRUCTURES, PAVEMENTS, EXCESS EXCAVATED MATERIALS AND MISCELLANEOUS MATERIALS REMOVED IN THE COURSE OF WORK SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AT AN OFFSITE LOCATION.

13. SEWER SERVICES TO EXISTING BUILDINGS AND FACILITIES SHALL BE MAINTAINED TO THE MAXIMUM EXTENT POSSIBLE. SERVICE SHALL NOT BE SHUT-DOWN WITHOUT NOTIFICATION AND APPROVAL OF THE WARWICK SEWER AUTHORITY.

14. THE CONTRACTOR SHALL CALL DIGSAFE AT 811 AT LEAST 72 HOURS, SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED, PRIOR TO EXCAVATING AT ANY LOCATION. A COPY OF THE DIGSAFE PROJECT REFERENCE NUMBER(S) SHALL BE GIVEN TO THE OWNER BY THE CONTRACTOR PRIOR TO EXCAVATION.

15. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED.

16. THE CONTRACTOR SHALL MAINTAIN SIDE SLOPES AND DRAINAGE SWALES DURING CONSTRUCTION TO PREVENT PONDING AND EROSION.

17. THE CONTRACTOR SHALL NOT STORE ANY APPARATUS, MATERIALS, SUPPLIES, AND EQUIPMENT ON DRAINAGE STRUCTURES OR WITHIN 100 FEET OF WETLANDS.

18. THE CONTRACTOR SHALL GRADE TO MEET EXISTING CONDITIONS.

19. THE CONTRACTOR SHALL NOT TRACK OR SPILL EARTH, DEBRIS, OR OTHER CONSTRUCTION MATERIAL ON PUBLIC OR PRIVATE STREETS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE ASSOCIATED CLEAN UP.

20. ALL CATCH BASINS, MANHOLES, VALVE PITS, VALVE BOXES AND OTHER BURIED FACILITIES WITH SURFACE ACCESS SHALL BE ADJUSTED TO MATCH FINAL GRADES, UNLESS OTHERWISE INDICATED.

21. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS AND EXCESS EXCAVATED MATERIAL FROM WITHIN THE CONSTRUCTION LIMIT OF WORK TO A SUITABLE SITE PROVIDED BY THE CONTRACTOR IN COMPLIANCE WITH ALL STATE AND LOCAL REGULATIONS.

22. WHERE EXISTING MATERIAL IS REMOVED AND REPLACED, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATED FINE GRADING WITH THE ENGINEER.

23. REFER TO SPEC, DIVISION 15 FOR PIPE INFORMATION.

24. ALL PIPE LINES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS OR SAGS IN PIPING WILL BE PERMITTED. OPENINGS FOR PIPE IN PRECAST STRUCTURES SHALL BE CAST IN THE REQUIRED LOCATIONS DURING MANHOLE MANUFACTURE. FIELD CUT OPENINGS WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER.

25. ANY SETTLEMENT OCCURRING WITHIN ONE YEAR OF FINAL COMPLETION OF THE WORK SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST.

26. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ALL OTHER OVERSIGHT AGENCIES.

27. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO ANY TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. DAMAGE TO ANY SUCH STRUCTURES CAUSED BY OR RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE OWNER.

28. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION SHALL BE EITHER: NOT DISTURBED, PROTECTED IN PLACE OR RELOCATED.

29. ALL EXISTING UTILITIES REPLACED OR RELOCATED SHALL BE CONSTRUCTED OF NEW MATERIALS APPROVED BY THE ENGINEER AND SIMILAR TO THOSE OF THE EXISTING UTILITY.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK AS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

31. THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEW /COORDINATED WITH, AND ACCEPTABLE TO, THE OWNER AND ENGINEER.

32. WRITTEN DIMENSIONS SHALL PREVAIL OVER SCALE DISTANCES FROM THE DRAWINGS, REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL SUBMIT A SOIL EROSION AND SEDIMENTATION CONTROL PLAN FOR APPROVAL BY THE OWNER TO BE EMPLOYED ON THE PROJECT. CONTROL MEASURES SHALL BE FURNISHED, INSTALLED, MAINTAINED FOR THE DURATION OF CONSTRUCTION, AND SUBSEQUENTLY REMOVED, ALL IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" (REVISED 2014), AND ANY SITE-SPECIFIC EROSION AND SEDIMENT CONTROL / POLLUTION PREVENTION PLAN INCLUDED IN THE CONTRACT DOCUMENTS.

2. ALL CLEARING, GRADING AND EARTHWORK ACTIVITIES SHALL BE MINIMIZED.

3. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATIONS, THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, AND THE APPLICABLE CONDITIONS OF ANY REGULATORY/ENVIRONMENTAL PERMITS ISSUED FOR THE PROJECT.

4. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS; HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION.

5. PERIMETER EROSION CONTROL BARRIERS (STAKED COMPOST FILTER SOCK, SILT FENCE, OR OTHER DEVICES AS INDICATED) SHALL BE INSTALLED IN CONTINUOUS UNINTERRUPTED RUNS AND MAINTAINED IN EFFECTIVE CONDITION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH VEGETATION. FOLLOWING SUCCESSFUL STABILIZATION OF DISTURBED AREAS, ALL PERIMETER EROSION CONTROL BARRIERS SHALL BE REMOVED. PRIOR TO REMOVAL OF THE DEVICES, ALL ACCUMULATED SEDIMENT AND DEBRIS TRAPPED BY THE BARRIERS SHALL BE REMOVED AND DISPOSED OF LEGALLY AT A SUITABLE OFFSITE LOCATION.

6. UNTIL VEGETATIVE COVER IS ESTABLISHED AND DISTURBED AREAS ARE FULLY STABILIZED, TRAPPED SEDIMENTS SHALL BE PERIODICALLY REMOVED FROM PERIMETER EROSION CONTROL BARRIERS. AT A MINIMUM, MATERIAL SHALL BE REMOVED ONCE THE DEPTH OF ACCUMULATED SEDIMENT REACHES SIX (6) INCHES OR ONE-HALF THE BARRIER HEIGHT, WHICHEVER IS LESS. ALL REMOVED MATERIAL SHALL BE DISPOSED OF LEGALLY AT A SUITABLE OFFSITE LOCATION.

7. ALL MATERIAL STOCKPILES SHALL BE SURROUNDED BY A SECURED PERIMETER OF COMPOST FILTER SOCK.

8. ALL EXISTING AND CONSTRUCTED DRAINAGE SYSTEM INLETS SHALL BE PROVIDED WITH INLET PROTECTION DEVICES (FILTER BAGS/SILT SACKS, SANDBAGS, WATTLES, ETC.). ALL INLET PROTECTION DEVICES SHALL BE INSTALLED, MAINTAINED, AND CLEANED FOR THE DURATION OF CONSTRUCTION AND UNTIL ALL STORMWATER CONTROLS ARE FULLY STABILIZED AND ONLINE, AT WHICH TIME THEY SHALL BE REMOVED.

9. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.

10. EROSION CONTROL DEVICES SHOULD BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS EXCEEDING ONE HALF INCH (½") IN ANY 24-HOUR PERIOD. MAINTENANCE AND REPAIRS SHALL BE COMPLETED WITH 24 HOURS OF THE INSPECTION.

11. TEMPORARY SURFACE STABILIZATION TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS FIBER MESH, EROSION CONTROL BLANKETS, OR OTHER MATTING. THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS DIRECTED BY THE ENGINEER. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3,000-4,000 POUNDS PER ACRE (1.9-2.5 POUNDS PER SQUARE YARD). IF NEEDED, TEMPORARY SEEDING (PROVIDED IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND EROSION AND SEDIMENT CONTROL GUIDANCE) MAY BE EMPLOYED TO FURTHER MINIMIZE EROSION.

12. TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE, FREE OF SUBSOIL, STONES, ROCKS, ROOTS, BRUSH, REFUSE, CONSTRUCTION DEBRIS AND OTHER DELETERIOUS MATERIALS AND SHALL CONFORM TO SUBSECTION M.18.01 OF THE RIDOT STANDARD SPECIFICATIONS.

13. THE SEEDED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.

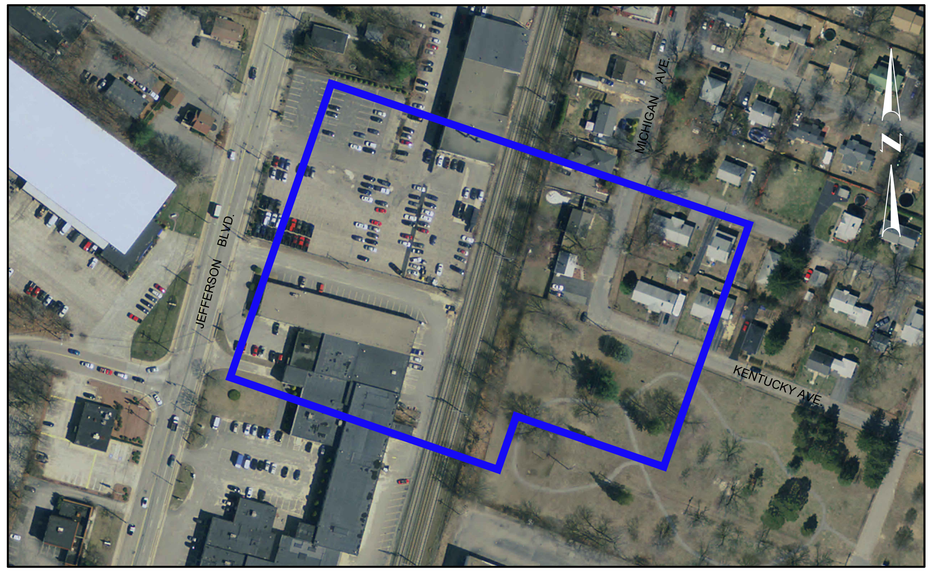
14. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING AND BE APPLIED AT A SEEDING RATE OF 100 POUNDS PER ACRE:

COMPONENT	% BY WEIGHT
RED FESCUE	70
KENTUCKY BLUEGRASS	15
COLONIAL BENTGRASS	5
PERENNIAL RYEGRASS	10

15. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1 - JUNE 1 AND AUGUST 15 - OCTOBER 15.

16. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 14 DAYS OF FINAL RESTORATION. PLANTING OF GRASS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION.

17. THE CONTRACTOR MUST REPAIR AND OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE (1) CALENDAR YEAR AND SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE OWNER.



KEY PLAN AIRPORT INTERCEPTOR
AMTRAK CROSSING
SCALE: 1" = 100'

AMTRAK NOTES:

1. ALL WORK ON OR ADJACENT RAILROAD PROPERTY MUST COMPLY WITH AMTRAK ENGINEERING PRACTICES EP3014 - MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC DURING CONTRACTOR OPERATIONS.

2. WORK CANNOT PROCEED UNTIL A SUPPORT OF EXCAVATION PLAN IS SUBMITTED TO AMTRAK ENGINEERING FOR REVIEW AND APPROVAL.

3. DESIGN AND CONSTRUCTION MUST COMPLY WITH AMTRAK ENGINEERING PRACTICES EP3005 - PIPELINE OCCUPANCY. PRIOR TO CONSTRUCTION OPERATIONS, CONTRACTOR MUST SUBMIT, AT A MINIMUM, THE FOLLOWING TO AMTRAK FOR REVIEW AND APPROVAL: CONSTRUCTION PROCEDURE MEANS AND METHODS, SCHEDULE, DEWATERING SYSTEM (IF ANY), AND CALCULATIONS, AS APPLICABLE. ALL CALCULATIONS MUST BE SIGNED AND STAMPED / SEALED BY A LICENSED ENGINEER REGISTERED IN THE STATE.

4. ALL UNDERGROUND UTILITIES, CABLE AND FACILITIES MUST BE LOCATED AND PROTECTED BEFORE ANY EXCAVATING, DRILLING, BORING / DIRECTIONAL DRILLING, GROUND PENETRATING ACTIVITIES, OR CONSTRUCTION TAKES PLACE. THIS INCLUDES RAILROAD AND COMMERCIAL UTILITIES, CABLES, DUCT LINES, AND FACILITIES. THESE ACTIVITIES WILL NOT BE PERFORMED IN CLOSE PROXIMITY TO THE RAILROAD DUCT LINES UNLESS MONITORED BY ON-SITE AMTRAK COMMUNICATIONS AND SIGNAL (C&S) DEPARTMENT PERSONNEL. HAND DIGGING MAY BE REQUIRED, AS DIRECTED BY AMTRAK THROUGH THE ON-SITE AMTRAK C&S SUPPORT PERSONNEL. AMTRAK MAINTAINS THE RIGHT TO ACCESS ALL EXISTING CABLES AND CONDUITS AND CONDUITS IN THE AFFECTED AREA. THE "ONE-CALL" PROCESS MUST BE FOLLOWED. BE AWARE THAT AMTRAK IS NOT PART OF THE ONE-CALL PROCESS; CONTACT AMTRAK ENGINEERING TO HAVE ALL RAILROAD UNDERGROUND UTILITIES AND ASSETS LOCATED. IF REQUESTED BY AMTRAK, EXISTING DEPTHS OF UTILITIES BEING CROSSED MUST BE VERIFIED THROUGH TEST PITS PERFORMED BY THE CONTRACTOR AS DIRECTED BY AND UNDER THE DIRECT SUPERVISION OF AMTRAK C&S SUPPORT PERSONNEL. PRECAUTIONS MUST BE TAKEN TO PREVENT ANY INTERRUPTION TO RAILROAD OPERATION.

5. ANY WORK (OR EQUIPMENT BEING STAGED ONSITE DURING CONSTRUCTION) PERFORMED AT OR NEAR A RAILROAD CROSSING MUST NOT OBSTRUCT THE VIEW OF FLASHING LIGHT UNITS OR GATES TO ONCOMING TRAFFIC.

6. PRIOR TO ENTERING AMTRAK'S PROPERTY FOR ANY WORK, THE CONTRACTOR MUST EXECUTE AMTRAK'S STANDARD TEMPORARY PERMIT TO ENTER UPON PROPERTY (PTE). THE FULLY EXECUTED PTE, WRITTEN NOTICE TO PROCEED FROM AMTRAK THAT ALL REQUIREMENTS OF THE PTE HAVE BEEN MET AND PROOF OF SAFETY TRAINING MUST, ALL TIMES, BE FURNISHED BY THE CONTRACTOR AT THE PROJECT SITE.

7. ALL PERSONS THAT ARE ON OR ADJACENT TO THE RAILROAD PROPERTY MUST SUCCESSFULLY COMPLETE THE CONTRACTOR ORIENTATION TRAINING. ALL CONTRACTORS MUST CARRY THEIR "AMTRAK CONTRACTOR ROADWAY WORKER PROTECTION" CARD WITH THEM AT ALL TIMES WHILE ON OR ADJACENT TO RAILROAD PROPERTY.

8. ANY DEBRIS OR DAMAGE RESULTING FROM THE WORK SHALL IMMEDIATELY REPORTED TO THE RAILROAD. RAILROAD SHALL BE REPAIRED BY RAILROAD FORCES AT PROJECT EXPENSE.

9. ELECTROMAGNETIC INTERFERENCE (EMI) CAUSED BY HIGH VOLTAGE TRANSMISSION LINES CAN HAVE AN IMPACT ON BURIED PIPELINES AND COMMUNICATION CABLE. EMI CAN HAVE AN IMPACT ON RAILROAD TRACK CIRCUITS, SIGNAL CIRCUITS AND FREQUENCIES ASSOCIATED WITH APPROACH OVERLAY AND ISLAND CIRCUITS FOR GRADE CROSSING EQUIPMENT. THE TRANSMISSION OWNER AND CONSTRUCTION COMPANY IS RESPONSIBLE THE ELECTROMAGNETIC COMPATIBILITY BETWEEN THE TRANSMISSION LINES INSTALLED AND THE AMTRAK C&S SYSTEM TO MITIGATE THE RISK OF UNINTENTIONAL GENERATION, PROPAGATION AND RECEPTION OF ELECTROMAGNETIC WAVES THAT CAN CAUSE EMI OR EVEN PHYSICAL DAMAGE.

10. SHOULD EMI BE FOUND AT THIS LOCATION, THE TRANSMISSION OWNER MUST CONDUCT APPROPRIATE EMI /EMF STUDIES AND PROVIDE REMEDIES TO CORRECT ANY INDUCTIVE INTERFERENCE WITH RAILROAD FACILITIES AT OWNER'S EXPENSE.

11. PROVIDE A TRACK MONITORING PLAN IN COMPLIANCE WITH AMTRAK EP2031, "TRACK MONITORING FOR WORK DISTURBING ROADBED." THE CONTRACTOR MUST SUBMIT THE LOCATIONS OF TRACK MONITORING POINTS AND THE MONITORING DETAILS FOR AMTRAK'S REVIEW AND APPROVAL.

12. THIS PROJECT MUST COMPLY WITH AMTRAK ENGINEERING PRACTICE EP 3016, "STORM WATER DRAINAGE AND DISCHARGE FROM ADJACENT PROPERTY ONTO AMTRAK RIGHT-OF-WAY," AND AMTRAK SPECIFICATION 150, "STORMWATER MANAGEMENT POLICY." NO STORMWATER RUNOFF SHALL FLOW ONTO AMTRAK PROPERTY DURING OR AFTER CONSTRUCTION.

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE
AS NOTED

DWG. NO. 2 OF 11

FILE NO. 1960

CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

AIRPORT INTERCEPTOR AMTRAK CROSSING

NOTES AND KEY PLAN

GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND

ABAND. SERVICE CAPPED

MH 18 STA. 5+62
RIM 57.84
INV 41.24 (48")

6

282 / 201
N/F BAR RI LLC
340 JEFFERSON BLVD.

2"G

48"

299'

PARKING AREA

282/201
340 JEFFERSON BLVD.

SIGN LOCATION
(SEE DETAIL-1)

COMPOST FILTER SOCK

SMH 17 STA 8+61
RIM 61.80
INV. 41.47 (48")

48"

85'

7

N/F
AMTRAK

1

310/409
N/F AMBER M. MULLER
141 MICHIGAN AVE.

BURIED
SMH 17A STA 9+49.5
RIM UNKNOWN
INV. 41.57 (48")

48"

121'

MICHIGAN AVE

2"G

G

500 GPM

6"W AC

10"VC

1¼"W

PUMPING BYPASS
(SEE SHEETS 5 & 6)

BURIED

KEYSTOP ON 1¼"

6" GV (OFF POSITION)

6"W CI

1¼"W

KENTUCKY AVE

2"G

8"VC

300 GPM

2"G

WG

SMH 16 STA 10+70 = 0+00
RIM 58.24
INV. 41.66 (48")
INV. 45.99 (10")
INV. 46.16 (8")

SIGN LOCATION
(SEE DETAIL-1)

48"

310 / 001
N/F
STATE OF RHODE ISLAND

8

205'

BYPASS

5,700 GPM

PL (APPROX.)

PARKING AREA

270/1
N/F LINCOLN THOMAS
DEVELOPMENT LLC
380 JEFFERSON BLVD.

1500'±

GP

AMTK 177

LEGEND

- EXISTING INTERCEPTOR TO BE LINED
- EXISTING INTERCEPTOR
- EXISTING SEWER CONNECTIONS
- PRIMARY SEWER BYPASS (ABOVE GRADE)
- PRIMARY SEWER BYPASS (BELOW GRADE)
- PROJECT WORK AREA
- PROPERTY LINE (APPROX.)
- SEWER ACCESS EXCAVATION PIT (APPROX.)
- EXISTING MANHOLE
- 5 PROPERTY IMPACTED
- 5 DRIVEWAY CROSSING
- 5 ROADWAY CROSSING

20 0 10 20 40 80

GRAPHIC SCALE

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE
1" = 20'

DWG. NO. 3 OF 11

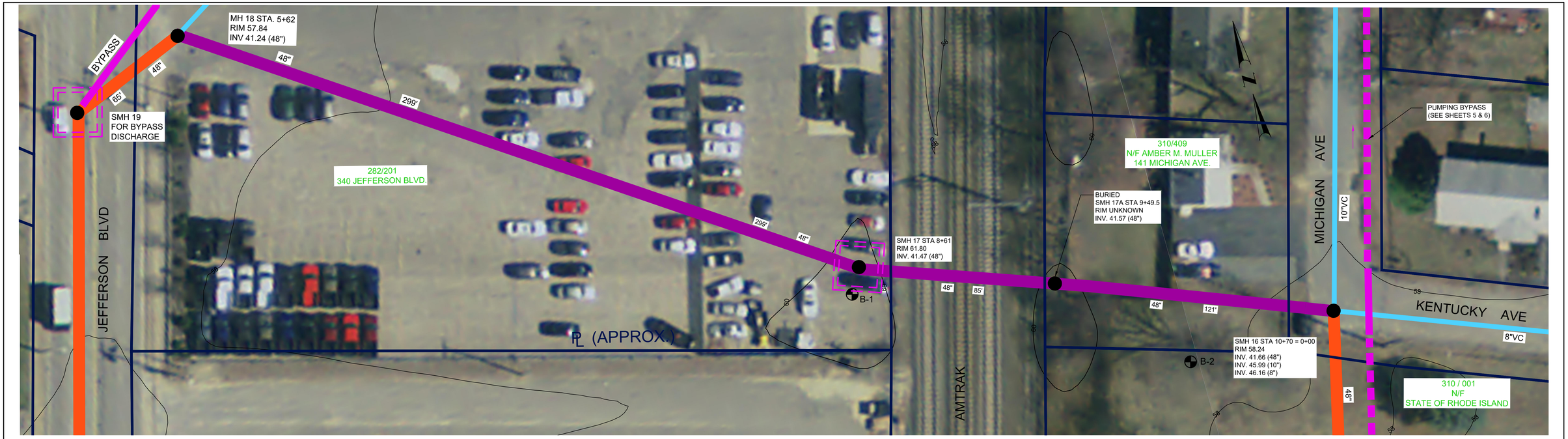
FILE NO. 1960

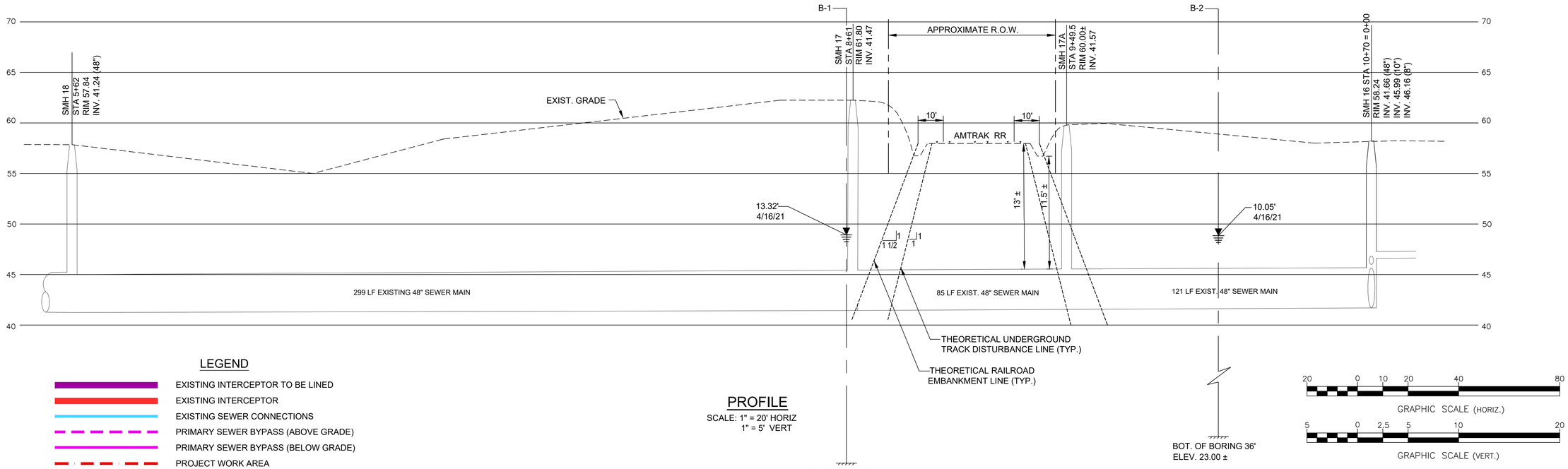
CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

AIRPORT INTERCEPTOR AMTRAK CROSSING

SITE PLAN

GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND





PROFILE

SCALE: 1" = 20' HORIZ
1" = 5' VERT

BOT. OF BORING 36'
ELEV. 26.00 ±

BOT. OF BORING 36'
ELEV. 23.00 ±

LEGEND

- EXISTING INTERCEPTOR TO BE LINED
- EXISTING INTERCEPTOR
- EXISTING SEWER CONNECTIONS
- PRIMARY SEWER BYPASS (ABOVE GRADE)
- PRIMARY SEWER BYPASS (BELOW GRADE)
- PROJECT WORK AREA
- PROPERTY LINE (APPROX.)
- SEWER ACCESS EXCAVATION PIT (APPROX.)
- EXISTING MANHOLE
- 5 — PROPERTY IMPACTED
- 5 — DRIVEWAY CROSSING
- 5 — ROADWAY CROSSING

GRAPHIC SCALE (HORIZ.) 20 0 10 20 40 80

GRAPHIC SCALE (VERT.) 5 0 2.5 5 10 20

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE
AS NOTED

DWG. NO. 4 OF 11

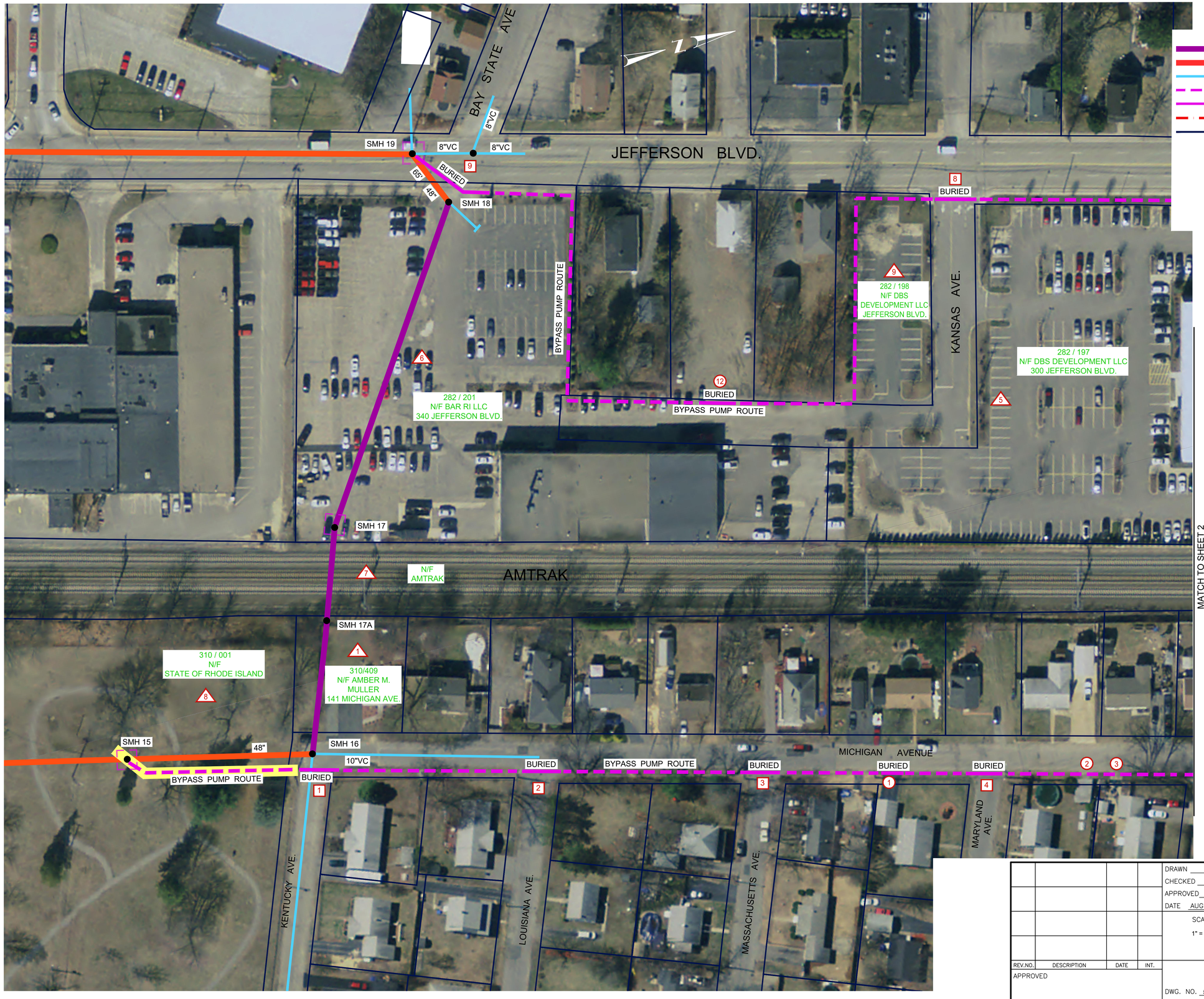
FILE NO. 1960

CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

AIRPORT INTERCEPTOR
AMTRAK CROSSING

PLAN AND PROFILES

GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND



LEGEND

- EXISTING INTERCEPTOR TO BE LINED
- EXISTING INTERCEPTOR
- EXISTING SEWER CONNECTIONS
- PRIMARY SEWER BYPASS (ABOVE GRADE)
- PRIMARY SEWER BYPASS (BELOW GRADE)
- PROJECT WORK AREA
- PROPERTY LINE (APPROX.)
- SEWER ACCESS EXCAVATION PIT (APPROX.)
- EXISTING MANHOLE
- 5 PROPERTY IMPACTED
- (5) DRIVEWAY CROSSING
- [5] ROADWAY CROSSING

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE
1" = 40'

DWG. NO. 5 OF 11

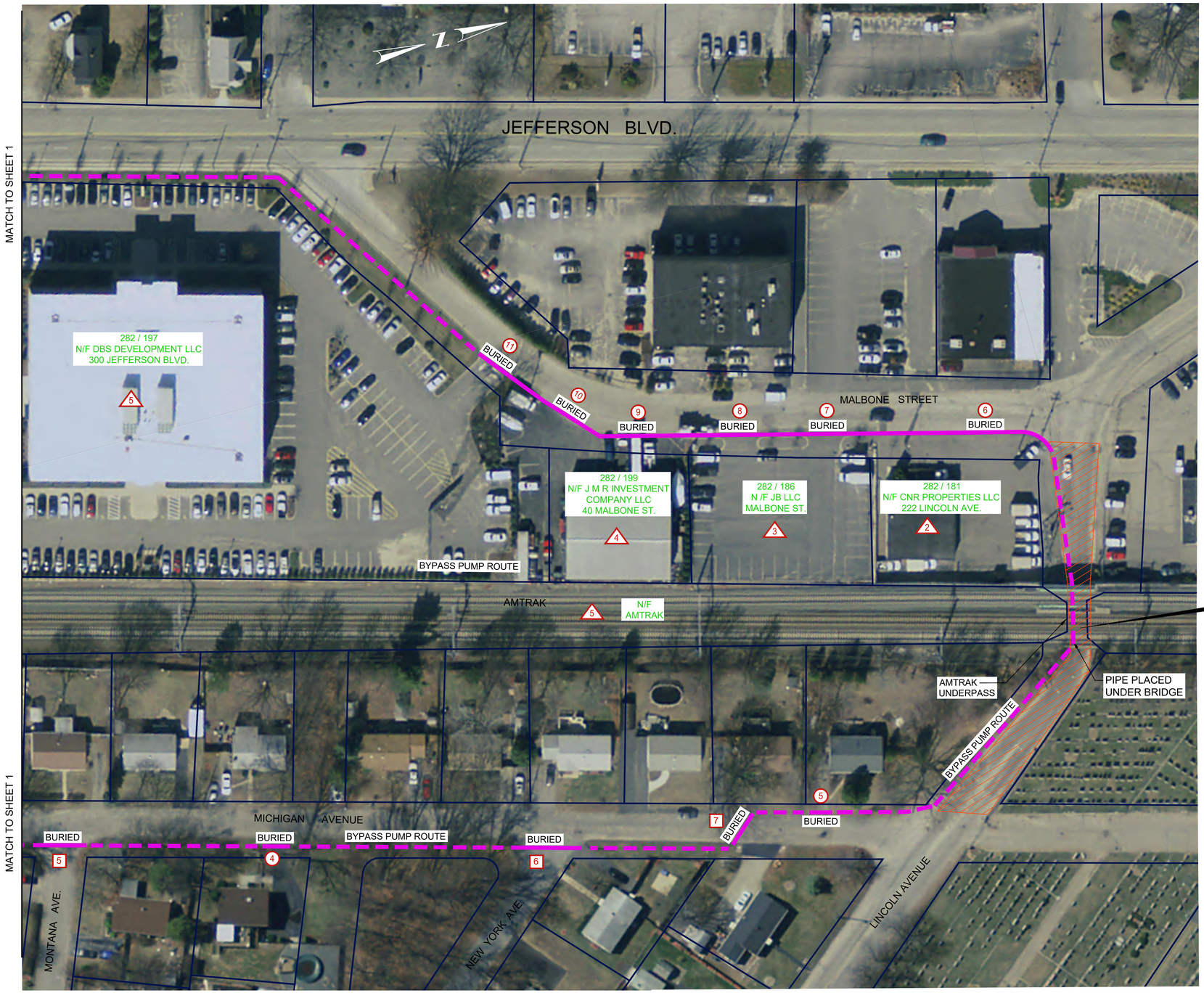
FILE NO. 1960

CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

AIRPORT INTERCEPTOR AMTRAK CROSSING

BYPASS PUMPING PLAN 1

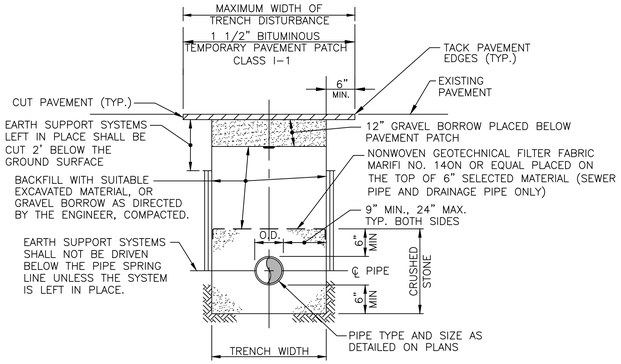
GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND



LEGEND

- EXISTING INTERCEPTOR TO BE LINED
- EXISTING INTERCEPTOR
- EXISTING SEWER CONNECTIONS
- PRIMARY SEWER BYPASS (ABOVE GRADE)
- PRIMARY SEWER BYPASS (BELOW GRADE)
- PROJECT WORK AREA
- PROPERTY LINE (APPROX.)
- SEWER ACCESS EXCAVATION PIT (APPROX.)
- EXISTING MANHOLE
- PROPERTY IMPACTED
- DRIVEWAY CROSSING
- ROADWAY CROSSING

				DRAWN LBD	CITY OF WARWICK, RHODE ISLAND WARWICK SEWER AUTHORITY SYSTEM OF SEWERS CONTRACT NO. 103
				CHECKED	
				APPROVED TAR	
				DATE AUGUST 2022	
				SCALE 1" = 40'	AIRPORT INTERCEPTOR AMTRAK CROSSING BYPASS PUMPING PLAN 2
REV.NO.	DESCRIPTION	DATE	INT.		
APPROVED				DWG. NO. 6 OF 11	
WARWICK SEWER AUTHORITY				FILE NO. 1960	GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS 200 MAIN STREET, PAWTUCKET, RHODE ISLAND

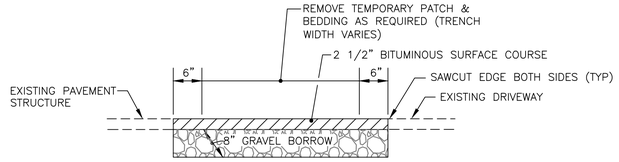


TYPICAL TRENCH DETAIL FOR SEWER

NOT TO SCALE

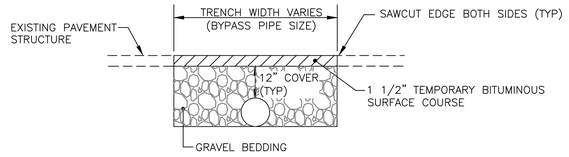
NOTES:

1. THE HORIZONTAL LIMIT FOR ROCK EXCAVATION IN TRENCHES SHALL BE 27" BEYOND THE O.D. OF THE PIPE. THE VERTICAL LIMIT SHALL BE 6" BELOW THE O.D. OF THE PIPE. CONTRACTOR TO TAKE ALL ROCK QUANTITIES INDEPENDENT OF THE ENGINEER AND CONFIRM THESE QUANTITIES ON A WEEKLY BASIS WITH THE ENGINEER FOR APPROVAL. ALL APPROVED CALCULATIONS AND QUANTITIES SHALL BE SUBMITTED TO THE WSA FOR REVIEW.
2. CONTRACTOR SHALL ADJUST THE WIDTH OF SAW CUT OF EXISTING PAVEMENT BASED ON ACTUAL EQUIPMENT AND EARTH SUPPORT SYSTEM USED. MAXIMUM WIDTH OF DISTURBANCE SHALL BE WIDTH OF EARTH SUPPORT SYSTEM PLUS 1'-0".
3. BEDDING MATERIAL FOR SEWER PIPE SHALL BE CRUSHED STONE.
4. CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE AND IS RESPONSIBLE FOR REPAIR OF ALL UTILITIES DAMAGED OUTSIDE THE LIMIT OF DISTURBANCE.



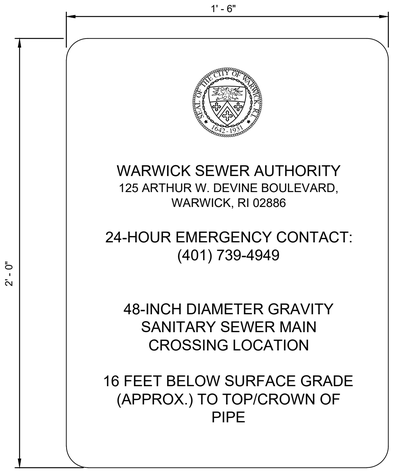
PERMANENT PAVEMENT RESTORATION (DRIVEWAYS)

NOT TO SCALE



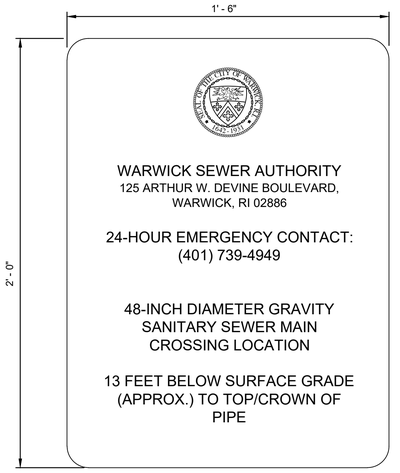
BYPASS PIPE TRENCH DETAIL

NOT TO SCALE



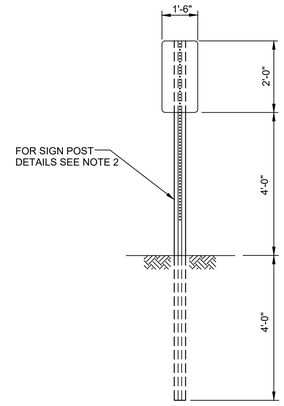
WEST SIDE SIGN

NOT TO SCALE



EAST SIDE SIGN

NOT TO SCALE

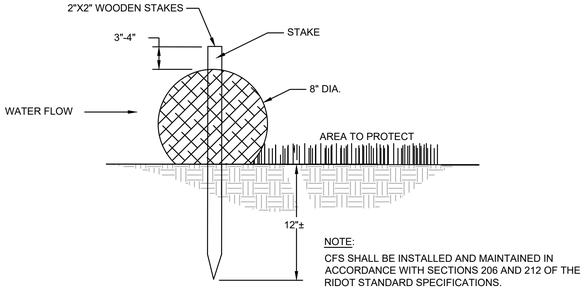


NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION T.19 OR THE R.I. STANDARD SPECIFICATIONS.
2. POSTS FOR MARKERS SHALL CONFORM TO R.I. STD. 24.6.0
3. SEE SHEET 3 OF 11 FOR LOCATION.

SIGN MOUNTING DETAIL

NOT TO SCALE

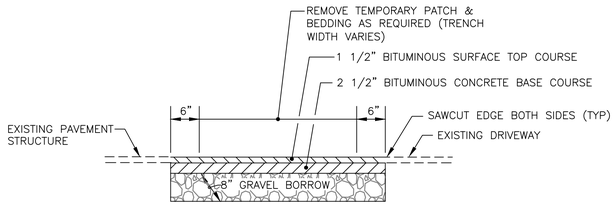


NOTE:

CFS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SECTIONS 206 AND 212 OF THE RIDOT STANDARD SPECIFICATIONS.

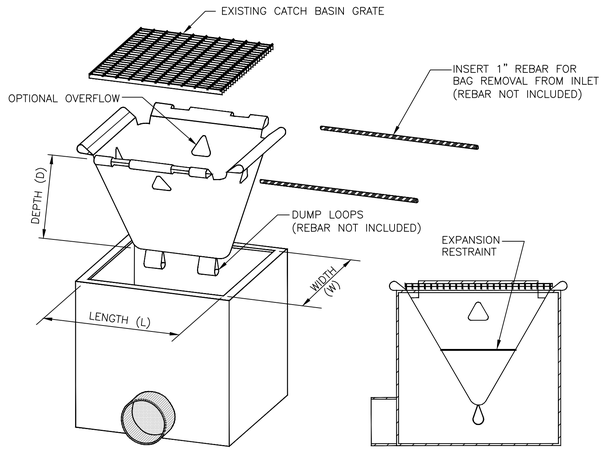
8" COMPOST FILTER SOCK

NOT TO SCALE



PERMANENT PAVEMENT RESTORATION

NOT TO SCALE



SIZE = L" X W" X D"

CATCH BASIN PROTECTION DETAIL

NOT TO SCALE

				DRAWN LBD	CITY OF WARWICK, RHODE ISLAND WARWICK SEWER AUTHORITY SYSTEM OF SEWERS CONTRACT NO. 103
				CHECKED	
				APPROVED TAR	
				DATE AUGUST 2022	
				SCALE AS NOTED	AIRPORT INTERCEPTOR AMTRAK CROSSING DETAILS - 1
REV.NO.	DESCRIPTION	DATE	INT.		
APPROVED				DWG. NO. 7 OF 11	GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS 200 MAIN STREET, PAWTUCKET, RHODE ISLAND
WARWICK SEWER AUTHORITY				FILE NO. 1960	

PROPERTIES IMPACTED BY AIRPORT INTERCEPTOR AMTRAK CROSSING

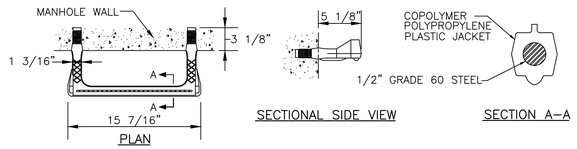
NO.	PROPERTY ADDRESS	PROP. ID	TYPE	OWNER
1	141 MICHIGAN AVENUE	310/0409	ACCESS SEWER MANHOLE	MULLER, AMBER M, 141 MICHIGAN AVE., WARWICK RI 02888
2	MALBONE STREET	282/0181	BYPASS	CNR PROPERTIES LLC, 222 LINCOLN AVE., WARWICK, RI 02888
3	MALBONE STREET	282/0186	BYPASS	JB LLC, 200 JEFFERSON BLVD., WARWICK, RI 02888
4	40 MALBONE STREET	282/0199	BYPASS	J M R INVESTMENT CO. LLC, 40 MALBONE ST. WARWICK, RI 02888
5	300 JEFFERSON BLVD	282/0197	BYPASS	DBS DEVELOPMENT LLC, 300 JEFFERSON BLVD. SUITE 211, WARWICK RI 02888
6	340 JEFFERSON BLVD	282/0201	ACCESS SEWER MANHOLE, BYPASS, STAGING	BAR RI LLC. 122 DOTY CIRCLE, WEST SPRINGFIELD, MA 01089
7	AMTRAK	UNKNOWN	LINING	AMTRAK
8	PARK	310/0001	ACCESS SEWER MANHOLE	STATE OF RHODE ISLAND, 2 CAPITOL HILL, RM 130A, PROVIDENCE RI 02903
9	JEFFERSON BLVD	282/0198	BYPASS	DBS DEVELOPMENT LLC, 300 JEFFERSON BLVD. SUITE 211, WARWICK RI 02888

AIRPORT INTERCEPTOR AMTRAK CROSSING - DRIVEWAY CROSSING IMPACTS

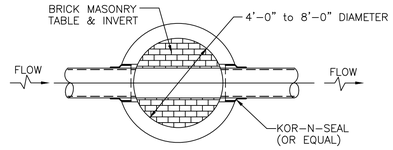
NO.	PROPERTY ADDRESS	PROP. ID	TYPE	OWNER	TREATMENT	REASON
1	208 MARYLAND AVE.	310/0079	DRIVEWAY	SUSAN J. ROGERS	BURIED	BYPASS TO LARGE
2	209 MARYLAND AVE.	310/0100	DRIVEWAY -2	WENDELL RIVERA DAVILLA	CLOSED	2ND DRIVEWAY
3	54 MONTANA AVE.	310/0101	DRIVEWAY- 2	JOSE FERREIRA DASILVA	CLOSED	2ND DRIVEWAY
4	48 MICHIGAN AVE	310/0120	DRIVEWAY	ANTONIA Y. ORTEGA HERNANDEZ	BURIED	BYPASS TO LARGE
5	7 MICHIGAN AVE	310/0447	DRIVEWAY	MARY F. SUPER	BURIED	BYPASS TO LARGE
6	222 LINCOLN AVE	282/0181	DRIVEWAY	CNR PROPERTIES, LLC	BURIED	BYPASS TO LARGE
7	MALBONE STREET	282/0186	DRIVEWAY-1	JB LLC	BURIED	BYPASS TO LARGE
8	MALBONE STREET	282/0186	DRIVEWAY-2	JB LLC	BURIED	BYPASS TO LARGE
9	40 MALBONE STREET	282/0199	DRIVEWAY-1	JMR INVESTMENT CO. LLC	BURIED	BYPASS TO LARGE
10	40 MALBONE STREET	282/0199	DRIVEWAY-2	JMR INVESTMENT CO. LLC	BURIED	BYPASS TO LARGE
11	300 JEFFERSON BLVD	282/0197	DRIVEWAY	DBS DEVELOPMENT LLC	BURIED	BYPASS TO LARGE
12	322 JEFFERSON BLVD	282/0080	DRIVEWAY	BAR RI LLC	BURIED	BYPASS TO LARGE

AIRPORT INTERCEPTOR AMTRAK CROSSING - ROADWAY CROSSINGS

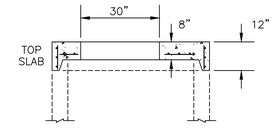
NO.	LOCATION	REFERENCE	TREATMENT	REASON
1	KENTUCKY AVENUE	AT SMH 16	BURIED	CITY STREET/BYPASS PUMPING
2	LOUISIANA AVENUE	AT MICHIGAN AVENUE	BURIED	CITY STREET
3	MASSACHUSETTS AVENUE	AT MICHIGAN AVENUE	BURIED	CITY STREET
4	MARYLAND AVENUE	AT MICHIGAN AVENUE	BURIED	CITY STREET
5	MONTANA AVENUE	AT MICHIGAN AVENUE	BURIED	CITY STREET
6	NEW YORK AVENUE	AT MICHIGAN AVENUE	BURIED	CITY STREET
7	MICHIGAN AVENUE	AT LINCOLN AVE	BURIED	CITY STREET
8	VERMONT AVENUE	AT BELISE COLLISON	BURIED	CITY STREET
9	JEFFERSON BLVD,	AT SMH 18	BURIED	CITY STREET/BYPASS DISCHARGE



MANHOLE STEP DETAIL
NOT TO SCALE

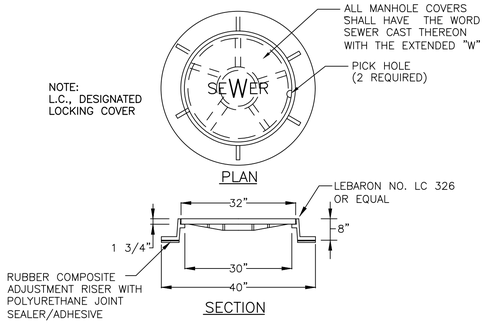


PLAN-INVERT TABLE
NOT TO SCALE



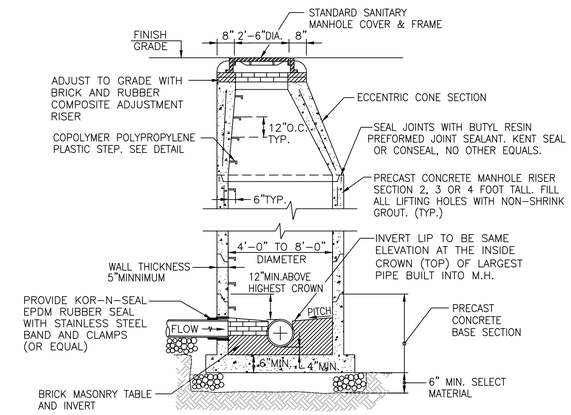
SLAB SHALL BE DESIGNED FOR H–20 HIGHWAY LOADING AND SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM–C–478

FLAT SLAB TOP DETAIL
NOT TO SCALE



ALL MANHOLES SHALL BE STANDARD COVERS UNLESS OTHERWISE INDICATED ON THE PLANS

MANHOLE COVER DETAILS
NOT TO SCALE



SANITARY SEWER MANHOLE DETAIL
NOT TO SCALE

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE AS NOTED

DWG. NO. 8 OF 11

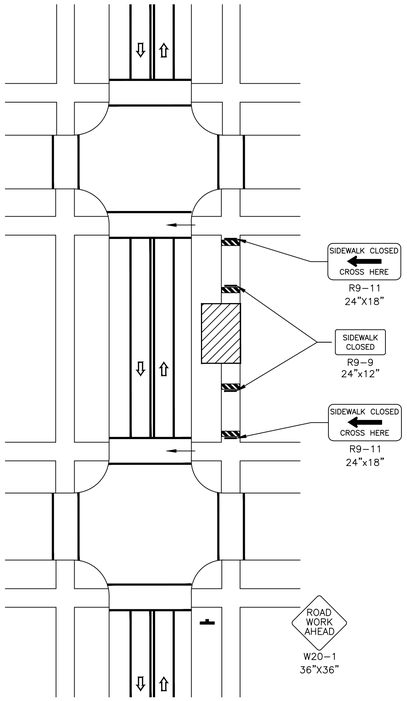
FILE NO. 1960

CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

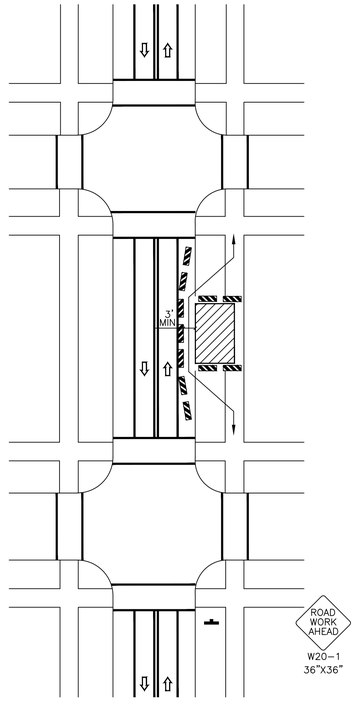
AIRPORT INTERCEPTOR AMTRAK CROSSING

DETAILS - 2

GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND



SIDEWALK DETOUR



SIDEWALK DIVERSION

NOTES:

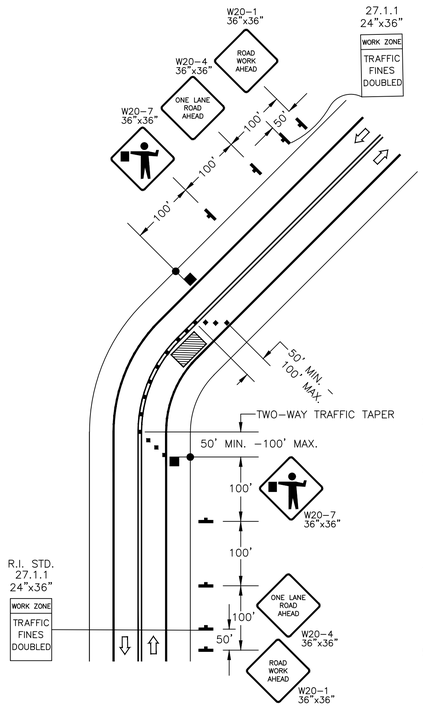
1. WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITIES ARE CLOSED OR RELOCATED, TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.
2. WHERE HIGH SPEEDS ARE ANTICIPATED, A TEMPORARY TRAFFIC BARRIER AND, IF NECESSARY, A CRASH CUSHION SHOULD BE USED TO SEPARATE THE TEMPORARY SIDEWALKS FROM VEHICULAR TRAFFIC.
3. AUDIBLE INFORMATION DEVICES SHOULD BE CONSIDERED WHERE MID BLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.
4. ONLY THE TTC DEVICES RELATED TO PEDESTRIANS ARE SHOWN. OTHER DEVICES, SUCH AS LANE CLOSURE SIGNING OR ROAD NARROWS SIGNS, SHALL BE USED TO CONTROL VEHICULAR TRAFFIC.
5. FOR NIGHTTIME CLOSURES, TYPE A FLASHING WARNING LIGHTS MAY BE USED ON BARRICADES THAT SUPPORT SIGNS AND CLOSE SIDEWALKS.
6. SIGNS, SUCH AS KEEP RIGHT(LEFT), MAY BE PLACED ALONG A TEMPORARY SIDEWALK TO GUIDE OR DIRECT PEDESTRIANS.

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL SET-UPS AND DEVICES AND THEIR INSTALLATION, MAINTENANCE, AND REMOVAL SHALL CONFORM TO THE LATEST EDITION OF "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH ALL REVISIONS, AND THE LATEST EDITION OF THE "RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WITH ALL REVISIONS.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK.
3. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
4. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
5. WHERE A SIDE STREET OR RAMP INTERSECTS THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH PART 6 OF THE MUTCD.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN A RHODE ISLAND STANDARD 26.2.0 BARRICADE WITH APPROPRIATE MARKINGS AT EACH LOCATION WHERE ADJUSTMENT TO UTILITY STRUCTURES HAVE BEEN MADE UNTIL RESURFACING WORK HAS BEEN PERFORMED. OTHER TYPES OF PROTECTIVE DEVICES MAY BE USED IF APPROVED BY THE ENGINEER.
7. R.I. STD. 26.1.0 CONES SHALL BE USED WHEN TRAFFIC CONTROL SET-UP IS UTILIZED ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY REMOVED AT THE END OF THE WORKDAY. R.I. STD. 26.2.0 SHALL BE USED WHEN A TRAFFIC CONTROL SET-UP WILL REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT..
8. THE SIZES OF ALL DIAMOND SHAPED ADVANCE WARNING SIGNS SHALL BE 36"X36", UNLESS OTHERWISE NOTED.
9. MAXIMUM SPACING OF THE CHANNELIZATION DEVICES IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.
10. IF THE WORK SPACE EXTENDS ACROSS A CROSSWALK, THE CROSSWALK SHOULD BE CLOSED USING THE INFORMATION AND DEVICES SHOWN IN SIDEWALK DETOUR.

LEGEND

- CHANNELIZING DEVICE
- TRAFFIC CONE (R.I. STD. 26.1.0)
- DRUM BARRICADE (R.I. STD. 26.2.0)
- SIGN ON PORTABLE SIGN SUPPORT
- TYPE III BARRICADE
- FLASHING ARROW BOARD
- TRAFFIC PERSON
- WORK SPACE
- DIRECTION OF TRAVEL
- WORK VEHICLE
- TRUCK-MOUNTED ATTENUATOR
- ARROW PANEL

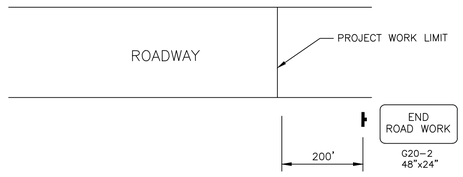


LANE CLOSURE ON TWO
LANE ROAD USING FLAGGERS

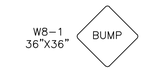
NOTES:

1. FOR LOW-VOLUME APPLICATIONS, WITH SHORT WORK ZONES ON STRAIGHT ROADWAYS WHERE THE FLAGGER IS VISIBLE TO ROAD USERS FROM BOTH DIRECTIONS, A SINGLE FLAGGER, POSITIONED TO BE VISIBLE TO ROAD USERS APROACHING FROM BOTH DIRECTIONS MAY BE USED.
2. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
3. THE BUFFER SPACE SHOULD BE EXTENDED IF NECCESSARY SO THAT THE 100' MAX. TWO-WAY TRAFFIC TAPER IS PLACED BEFORE A HORIZONTAL (OR CREST VERTICAL) CURVE TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGER AND A QUEUE OF STOPPED VEHICLES.
4. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN THE 100' MAX. TWO-WAY TRAFFIC TAPERS IS 25 FEET. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.
5. MINIMUM LANE WIDTH IS TO BE 10 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZATION DEVICES OR TEMPORARY BARRIER.

CONE SPACING	
TAPER	TANGENT
25'	50'



TYPICAL PROJECT LIMIT DETAIL



MISCELLANEOUS USE SIGNS

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE
AS NOTED

DWG. NO. 9 OF 11

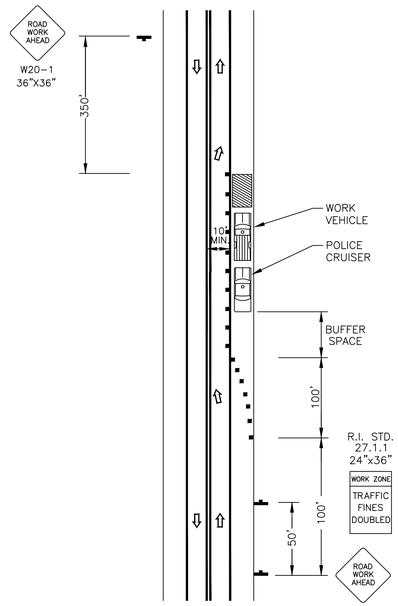
FILE NO. 1960

CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

AIRPORT INTERCEPTOR AMTRAK CROSSING

MAINTANANCE AND PROTECTION OF TRAFFIC PLAN 1

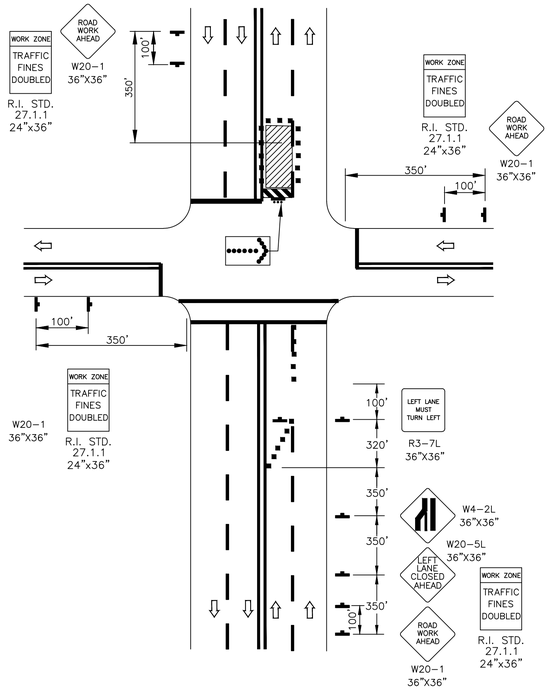
GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND



NOTES:

1. ALL LANES SHOULD BE A MINIMUM OF 10 ft. IN WIDTH AS MEASURED TO THE NEAR FACE OF THE CHANNELIZING DEVICES.
2. THE TREATMENT SHOWN SHOULD BE USED ON A MINOR ROAD HAVING LOW SPEEDS. FOR HIGHER-SPEED TRAFFIC CONDITIONS, A LANE CLOSURE SHOULD BE USED.
3. WHERE THE OPPOSITE SHOULDER IS SUITABLE FOR CARRYING VEHICULAR TRAFFIC AND OF ADEQUATE WIDTH, LANES MAY BE SHIFTED BY USE OF CLOSELY SPACED CHANNELIZED DEVICES, PROVIDED THAT THE MINIMUM LANE WIDTH OF 10 ft. IS MAINTAINED.
4. MAXIMUM SPACING OF THE CHANNELIZATION DEVICES IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.

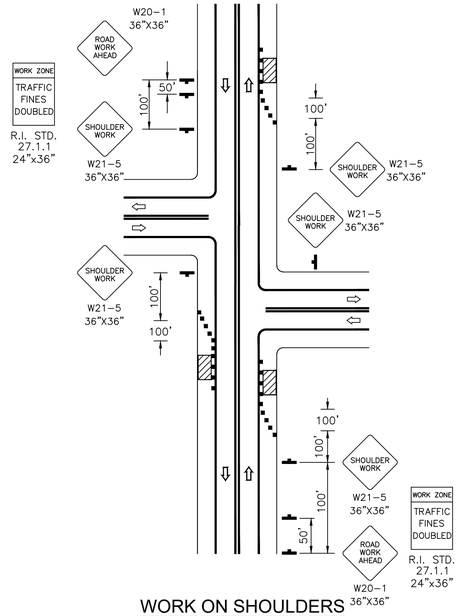
SHOULDER WORK WITH MINOR ENCROACHMENT



LEFT LANE CLOSURE ON FAR SIDE OF INTERSECTION

NOTES:

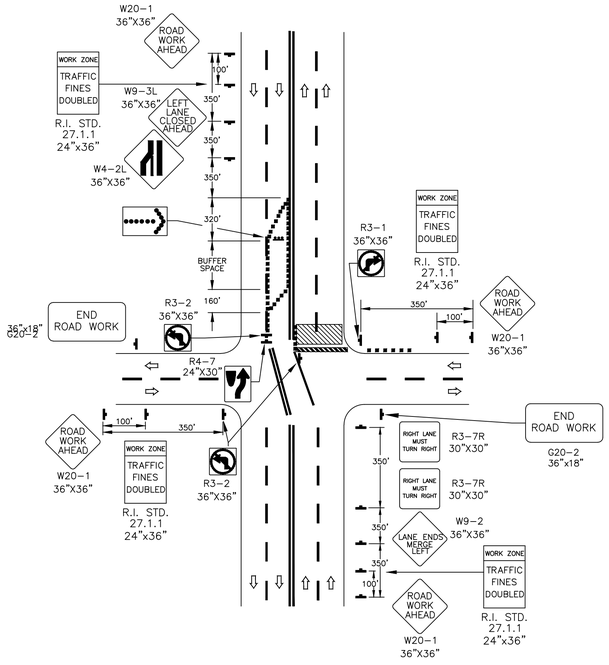
1. IF THE WORK SPACE EXTENDS ACROSS A CROSSWALK, THE CROSSWALK SHOULD BE CLOSED USING THE INFORMATION AND DEVICES SHOWN IN SIDEWALK DETOUR.
2. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ADVANCE WARNING SIGNS.
3. THE NORMAL PROCEDURE IS TO CLOSE ON THE NEAR SIDE OF THE INTERSECTION ANY LANE THAT IS NOT CARRIED THROUGH THE INTERSECTION. HOWEVER, WHEN THIS RESULTS IN THE CLOSURE OF A LEFT LANE HAVING SIGNIFICANT LEFT-TURNING MOVEMENTS, THEN THE LEFT LANE MAY BE REOPENED AS A TURN BAY FOR LEFT TURNS ONLY, AS SHOWN.
4. BY FIRST CLOSING OFF THE LEFT LANE AND THEN REOPENING IT AS A TURN BAY, AN ISLAND IS CREATED WITH CHANNELIZING DEVICES THAT ALLOWS THE **LEFT LANE MUST TURN LEFT** SIGN TO BE REPEATED ON THE LEFT ADJACENT TO THE LANE THAT IT CONTROLS.



WORK ON SHOULDERS

NOTES:

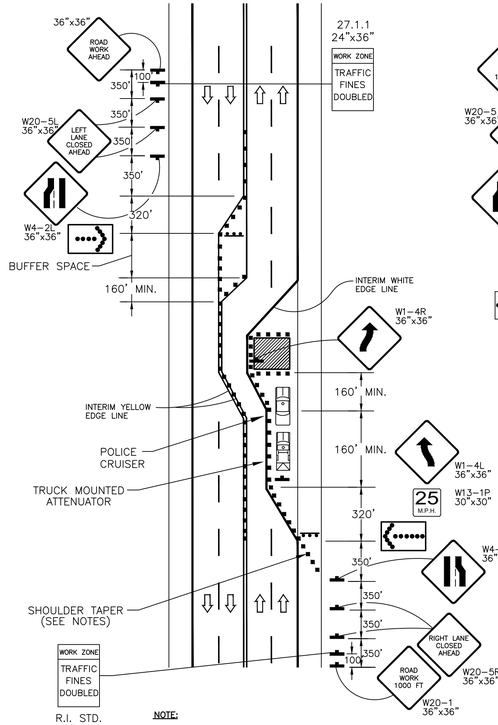
1. A **SHOULDER WORK** SIGN SHOULD BE PLACED ON THE LEFT SIDE OF THE ROADWAY FOR A DIVIDED OR ONE-WAY STREET ONLY IF THE LEFT SHOULDER IS AFFECTED.
2. THE **SHOULDER WORK AHEAD** SIGN ON AN INTERSECTING ROADWAY MAY BE OMITTED WHERE DRIVERS EMERGING FROM THAT ROADWAY WILL ENCOUNTER ANOTHER ADVANCE WARNING SIGN PRIOR TO THIS ACTIVITY AREA.
3. FOR SHORT-DURATION OPERATIONS OF 60 MINUTES OR LESS, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH ACTIVATED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS IS USED.
4. VEHICLE HAZARD WARNING SIGNALS MAY BE USED TO SUPPLEMENT HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.
5. VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.
6. WHEN PAVED SHOULDERS HAVING A WIDTH OF 8 ft. OR MORE ARE CLOSED, AT LEAST ONE ADVANCE WARNING SIGN SHALL BE USED. IN ADDITION, CHANNELIZING DEVICES SHALL BE USED TO CLOSE THE SHOULDER IN ADVANCE TO DELINEATE THE BEGINNING OF THE WORK SPACE AND DIRECT VEHICULAR TRAFFIC TO REMAIN WITHIN THE TRAVELED WAY.



NOTES:

1. IF THE WORK SPACE EXTENDS ACROSS THE CROSSWALK, THE CROSSWALK SHOULD BE CLOSED USING THE INFORMATION AND DEVICES SHOWN IN CROSSWALK CLOSURES AND PEDESTRIAN DETOURS.
2. WHEN TURN PROHIBITIONS ARE IMPLEMENTED, TWO TURN PROHIBITION SIGNS SHOULD BE USED, ONE ON THE NEAR SIDE AND, SPACE PERMITTING, ONE ON THE FAR SIDE OF THE INTERSECTION.
3. A BUFFER SPACE MAY BE USED BETWEEN OPPOSING DIRECTIONS OF VEHICULAR TRAFFIC AS SHOWN IN THIS APPLICATION.
4. THE NORMAL PROCEDURE IS TO CLOSE ON THE NEAR SIDE OF THE INTERSECTION ANY LANE THAT IS NOT CARRIED THROUGH THE INTERSECTION. HOWEVER, IF THERE IS A SIGNIFICANT RIGHT-TURNING MOVEMENT, THEN THE RIGHT LANE MAY BE RESTRICTED TO RIGHT TURNS ONLY, AS SHOWN.
5. WHERE THE TURNING RADIUS IS LARGE, A RIGHT-TURN ISLAND USING CHANNELIZING DEVICES OR PAVEMENT MARKINGS MAY BE USED.
6. THERE MAY BE INSUFFICIENT SPACE TO PLACE THE BACK-TO-BACK **KEEP RIGHT** SIGN AND **NO LEFT TURN** SYMBOL SIGNS AT THE END OF THE ROW OF CHANNELIZING DEVICES SEPARATING OPPOSING VEHICULAR TRAFFIC FLOWS. IN THIS SITUATION, THE **NO LEFT TURN** SYMBOL SIGN MAY BE PLACED ON THE RIGHT AND THE **KEEP RIGHT** SIGN MAY BE OMITTED.
7. FOR INTERSECTION APPROACHES REDUCED TO A SINGLE LANE, LEFT-TURNING MOVEMENTS MAY BE PROHIBITED TO MAINTAIN CAPACITY FOR THROUGH VEHICULAR TRAFFIC.

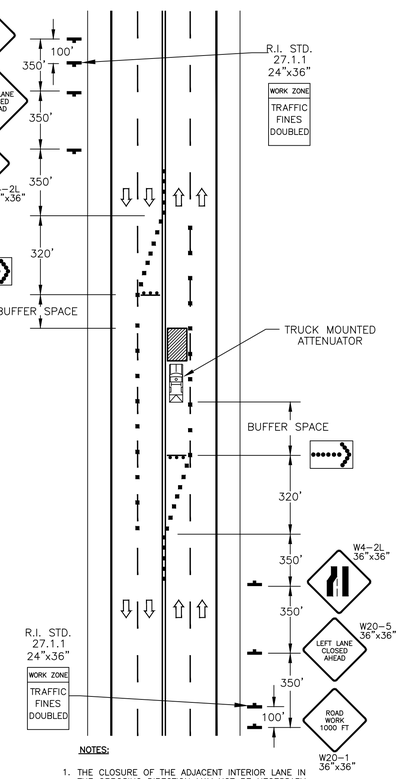
HALF ROAD CLOSURE ON FAR SIDE OF INTERSECTION



NOTE:

1. FOR INTERMEDIATE-TERM SITUATIONS, WHEN IT IS NOT FEASIBLE TO REMOVE AND RESTORE PAVEMENT MARKINGS, THE CHANNELIZATION MUST BE MADE DOMINANT BY USING A VERY CLOSE DEVICE SPACING. THIS IS ESPECIALLY IMPORTANT IN LOCATIONS OF CONFLICTING INFORMATION, SUCH AS WHERE TRAFFIC IS DIRECTED OVER A DOUBLE YELLOW CENTERLINE. IN SUCH LOCATIONS A MAXIMUM CHANNELIZING DEVICE SPACING SHOULD BE 0.5 S, WHERE S = SPEED IN M.P.H.
2. SHADOW VEHICLES WITH A TRUCK-MOUNTED ATTENUATOR SHALL ONLY BE USED WHEN DIRECTED BY THE ENGINEER.
3. IF THE SHOULDER WIDTH IS GREATER THAN 8', CHANNELIZING DEVICES SHALL BE USED.

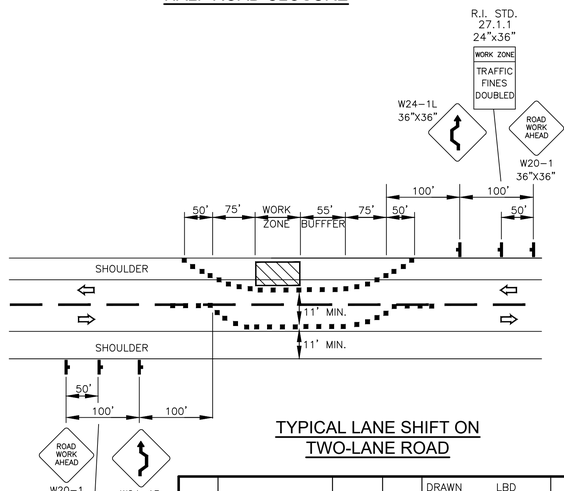
HALF ROAD CLOSURE



NOTES:

1. THE CLOSURE OF THE ADJACENT INTERIOR LANE IN THE OPPOSING DIRECTION MAY NOT BE NECESSARY, DEPENDING UPON THE ACTIVITY BEING PREFORMED AND THE WORK SPACE NEEDED FOR THE OPERATION.
2. SHADOW VEHICLES WITH A TRUCK-MOUNTED ATTENUATOR SHALL ONLY BE USED WHEN DIRECTED BY THE ENGINEER.

INTERIOR LANE CLOSURE



NOTES:

1. THE MAXIMUM ALLOWABLE LENGTH OF THE SHIFTED TANGENT SECTION FOR THE TEMPORARY TRAFFIC CONTROL SET-UP SHOWN IS 600 FEET.
2. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH. SHORTER SPACINGS SHOULD BE USED FOR CHANNELIZATION DEVICES INSTALLED BETWEEN TRAFFIC TRAVELING IN OPPOSITE DIRECTION WHERE ADDITIONAL EMPHASIS IS NEEDED TO CLEARLY DEFINE THE DESIRED TRAVEL PATHS.
3. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZATION DEVICES.

TYPICAL LANE SHIFT ON TWO-LANE ROAD

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE
NONE

DWG. NO. 10 OF 11

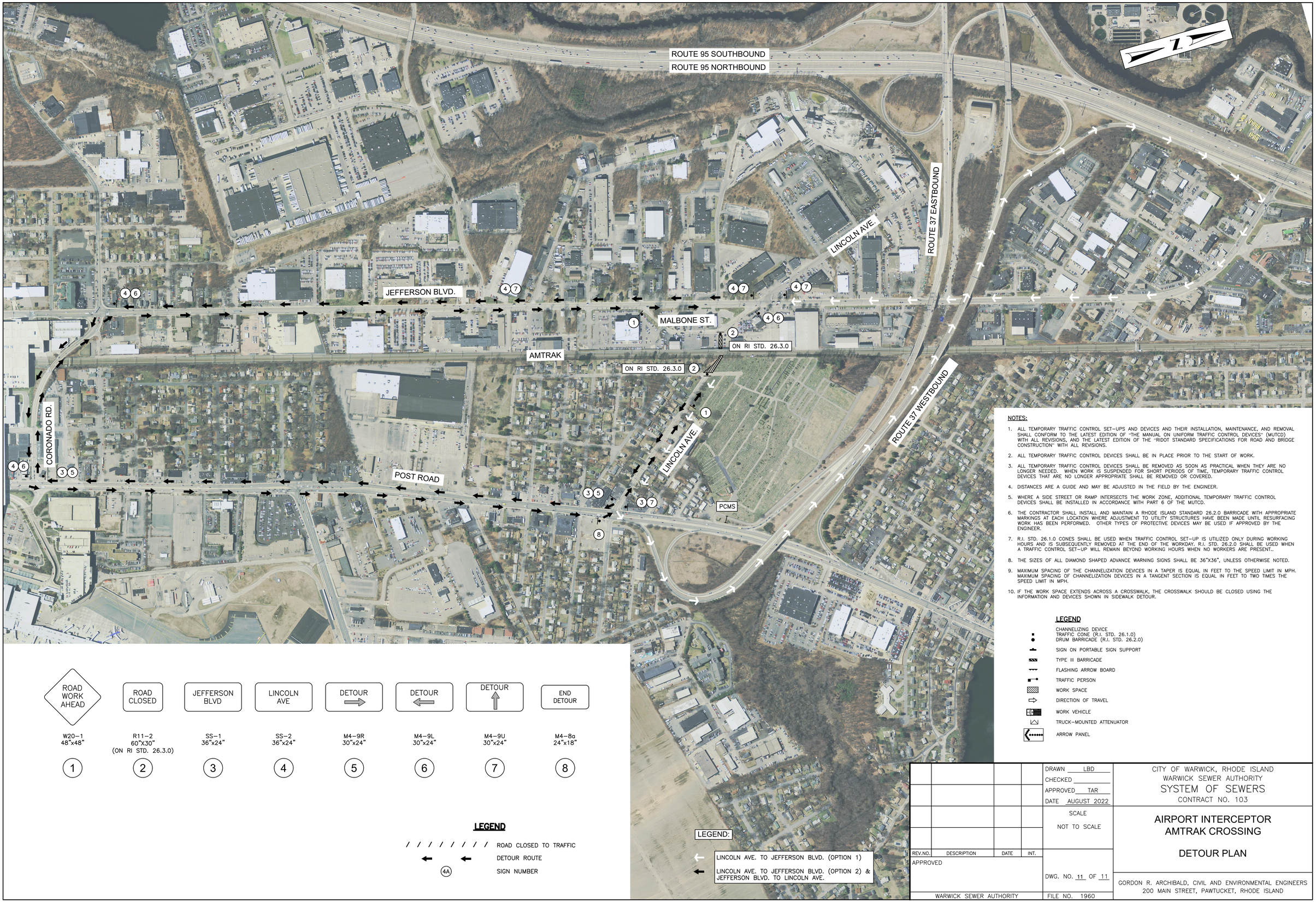
FILE NO. 1960

CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

AIRPORT INTERCEPTOR AMTRAK CROSSING

MAINTANANCE AND PROTECTION OF TRAFFIC PLAN 2

GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND



NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL SET–UPS AND DEVICES AND THEIR INSTALLATION, MAINTENANCE, AND REMOVAL SHALL CONFORM TO THE LATEST EDITION OF "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH ALL REVISIONS, AND THE LATEST EDITION OF THE "RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WITH ALL REVISIONS.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK.
3. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
4. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
5. WHERE A SIDE STREET OR RAMP INTERSECTS THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH PART 6 OF THE MUTCD.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN A RHODE ISLAND STANDARD 26.2.0 BARRICADE WITH APPROPRIATE MARKINGS AT EACH LOCATION WHERE ADJUSTMENT TO UTILITY STRUCTURES HAVE BEEN MADE UNTIL RESURFACING WORK HAS BEEN PERFORMED. OTHER TYPES OF PROTECTIVE DEVICES MAY BE USED IF APPROVED BY THE ENGINEER.
7. R.I. STD. 26.1.0 CONES SHALL BE USED WHEN TRAFFIC CONTROL SET–UP IS UTILIZED ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY REMOVED AT THE END OF THE WORKDAY. R.I. STD. 26.2.0 SHALL BE USED WHEN A TRAFFIC CONTROL SET–UP WILL REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT..
8. THE SIZES OF ALL DIAMOND SHAPED ADVANCE WARNING SIGNS SHALL BE 36"X36", UNLESS OTHERWISE NOTED.
9. MAXIMUM SPACING OF THE CHANNELIZATION DEVICES IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.
10. IF THE WORK SPACE EXTENDS ACROSS A CROSSWALK, THE CROSSWALK SHOULD BE CLOSED USING THE INFORMATION AND DEVICES SHOWN IN SIDEWALK DETOUR.

LEGEND

- CHANNELIZING DEVICE
- TRAFFIC CONE (R.I. STD. 26.1.0)
- DRUM BARRICADE (R.I. STD. 26.2.0)
- SIGN ON PORTABLE SIGN SUPPORT
- TYPE III BARRICADE
- FLASHING ARROW BOARD
- TRAFFIC PERSON
- WORK SPACE
- DIRECTION OF TRAVEL
- WORK VEHICLE
- TRUCK–MOUNTED ATTENUATOR
- ARROW PANEL

ROAD WORK AHEAD	ROAD CLOSED	JEFFERSON BLVD	LINCOLN AVE	DETOUR ⇨	DETOUR ⇦	DETOUR ⇧	END DETOUR
W20–1 48"x48"	R11–2 60"X30" (ON RI STD. 26.3.0)	SS–1 36"x24"	SS–2 36"x24"	M4–9R 30"x24"	M4–9L 30"x24"	M4–9U 30"x24"	M4–8a 24"x18"
1	2	3	4	5	6	7	8

LEGEND

- / / / / / / / / / ROAD CLOSED TO TRAFFIC
- ← ← DETOUR ROUTE
- 4A SIGN NUMBER

REV.NO.	DESCRIPTION	DATE	INT.

APPROVED

WARWICK SEWER AUTHORITY

DRAWN LBD
CHECKED
APPROVED TAR
DATE AUGUST 2022

SCALE
NOT TO SCALE

DWG. NO. 11 OF 11

FILE NO. 1960

CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 103

AIRPORT INTERCEPTOR AMTRAK CROSSING

DETOUR PLAN

GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND