PROJECT LOCATION

SHEET#

3-6

9, 10

11-14

15-18

19, 20

DRAWING#

DM-1 TO DM-4

GN-1

DA-1

DRT-1

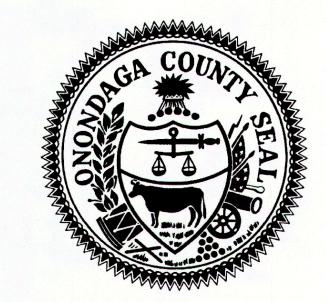
PR-1. PR-2

MD-1, MD-2

APL-1 TO APL-4

APP-1 TO APP-4

WZTC-1 TO WZTC-5 21 - 25





ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION TASK ORDER 2016-007G/005L **CITY OF SYRACUSE**

ONONDAGA COUNTY, NY

OFFICE OF THE COUNTY EXECUTIVE **JOANNE M. MAHONEY COUNTY EXECUTIVE OCDWEP COMMISSIONER TOM RHOADS**

FEBRUARY 2017

	=				

ACKERMAN AVE INFILTRATION TRENCH PROFILES

D.E. TAROLLI, INC. RECORD DRAWINGS 11/27/2017

DRAWING NAME

GENERAL NOTES AND LEGEND

DRAINAGE AREA PLANS

MISCELLANEOUS DETAILS

ACKERMAN AVE DEMOLITION PLANS

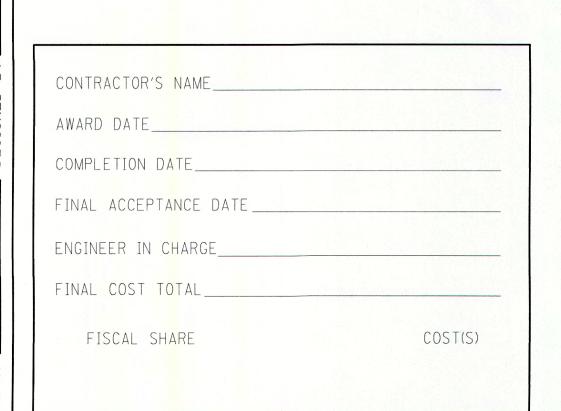
ACKERMAN AVE DRAINAGE TABLE

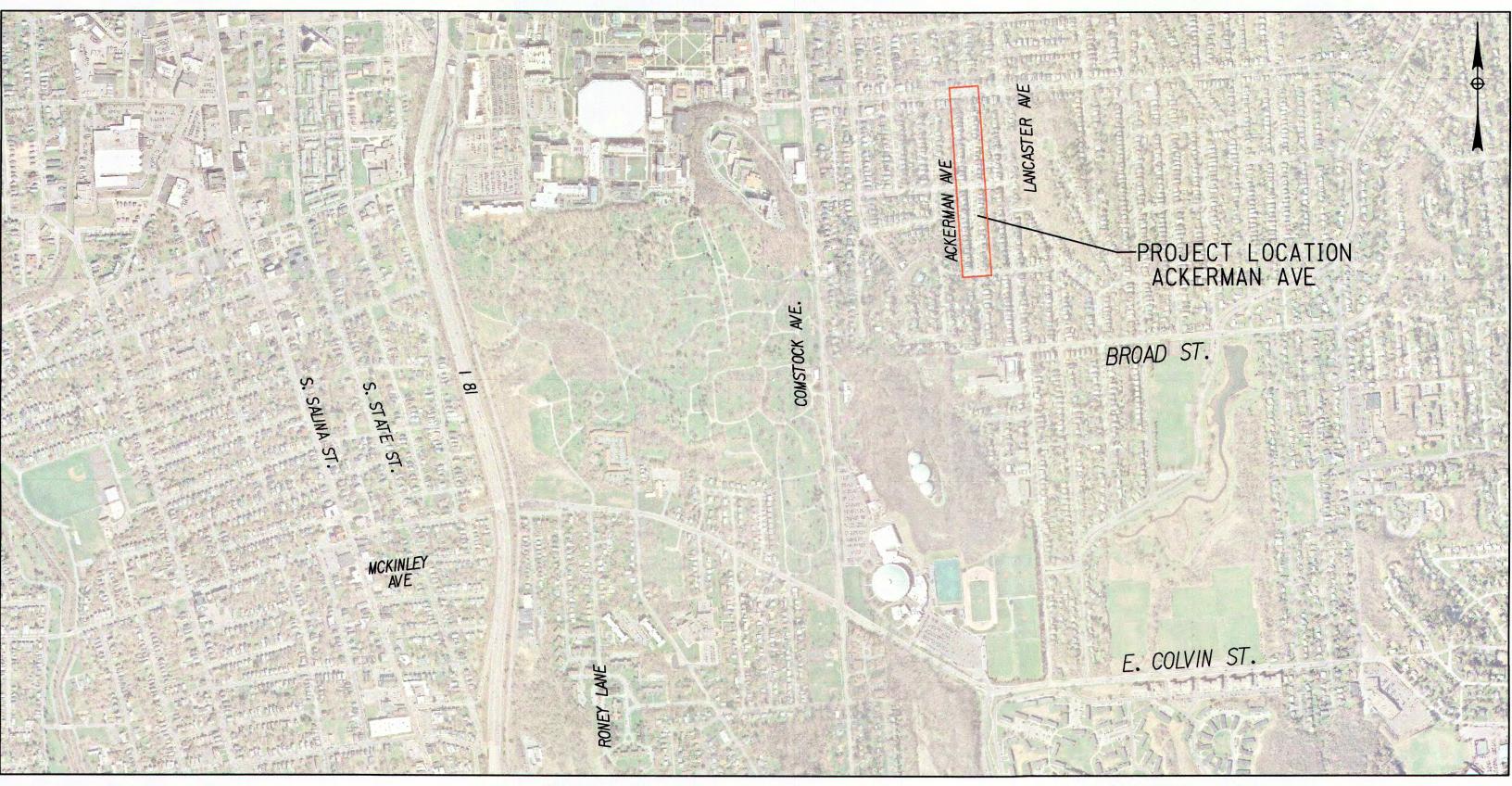
ACKERMAN AVE GENERAL PLANS

ACKERMAN AVE PLANTING PLANS

WORK ZONE TRAFFIC CONTROL

COVER





PROJECT LOCATION

STANDARD SHEETS:
ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY
AND IN CONFORMITY WITH THE ONONDAGA COUNTY GREEN INFRASTRUCTURE
PROGRAM 2015 ANNUAL GREEN STRUCTURES CONTRACT AT VARIOUS LOCATIONS.
CONTRACT NUMBER: 1G - GENERAL; 1L - LANDSCAPE BID REFERENCE NUMBER: 7724 VOLUME II OF II: STANDARD DETAILS

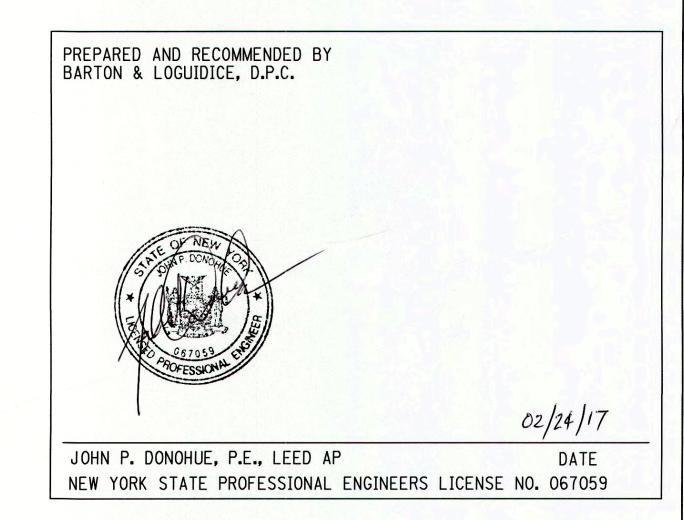
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE. THE DATE OF SUCH ALTERATION, AND A SPECIFIC

RECOMMENDED BY

OCDWEP COMMISSIONER

DESCRIPTION OF THE ALTERATION.





CSO 060/077 GREEN STREETS PROJECT

TASK ORDER: 2016-007G/005L

ONONDAGA CO. DEPT. OF WATER ENVIRONMENT PROTECTION

CITY OF SYRACUSE, ONONDAGA COUNTY

FED. ROAD REG. NO. SHEET NO. STATE TOTAL SHEETS 25

FEDERAL AID PROJECT NO.

CAPITAL PROJECT IDENTIFICATION NO.

GENERAL NOTES

STANDARD DETAIL REFERENCES IN THE PLANS REFER TO THE ONONDAGA COUNTY GREEN INFRASTRUCTURE 2015 ANNUAL GREEN STRUCTURES CONTRACT AT VARIOUS LOCATIONS, VOLUME II OF II: STANDARD DETAILS.

GENERAL CONSTRUCTION

EXISTING TOPOGRAPHY, STRUCTURES, AND SITE FEATURES ARE SHOWN SCREENED AND/OR LIGHT-LINED. NEW FINISH GRADE, STRUCTURES, AND SITE FEATURES ARE SHOWN HEAVY-LINED.

ALL DISTURBED SIGNS SHALL BE RE-INSTALLED IN KIND IN THE SAME LOCATION AS PER THE ONONDAGA COUNTY GREEN INFRASTRUCTURE PROGRAM 2016 ANNUAL GREEN STRUCTURES DETAIL TU.04, UNLESS OTHERWISE NOTED.

COORDINATES AND DIMENSIONS SHOWN FOR ROADWAY IMPROVEMENTS ARE TO FACE OF CURB OR EDGE OF PAVEMENT.

PROVIDE TEMPORARY FENCING AS NECESSSARY TO MAINTAIN SAFETY AND SECURITY AT ALL TIMES. SEE THE GENERAL SPECIFICATIONS SECTION S-041.

ELEVATIONS GIVEN ARE TO FINSH GRADE UNLESS OTHERWISE NOTED.

SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.

UNLESS SHOWN. ALL DISTURBED AREAS NOT RECEIVING A HARD SURFACE SHALL BE RESTORED WITH GRASS AS SPECIFIED.

NOTIFY DIG SAFELY NEW YORK (811) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.

AGGREGATE FOR STORMWATER INFILTRATION TRENCHES SHALL BE CLEAN-WASHED PRIOR TO PLACEMENT.

MAINTAIN LOOSE AND UNDISTRUBED STORMWATER INFILTRATION TRENCH SUBGRADE. SCARIFY TOP 6 INCHES. DO NOT ALLOW CONSTRUCTION EQIUPMENT ON TRENCH BOTTOM SURFACE.

PROTECT EXISTING TREES IDENTIFIED ON THE PLANS TO REMAIN, DURING CONSTRUCTION.

UNLESS OTHERWISE NOTED, EXISTING GRANITE CURBING IS TO BE LEFT IN PLACE OR REPLACED TO THE NEAREST JOINT FROM THE DISTURBED AREA. WHERE DISTRUBED DURING CONSTRUCTION, ALL EXISTING MANHOLE AND CATCH BASIN FRAMES AND COVERS SHALL BE REINSTALLED UPON A MINIMUM OF 2 COURSES OF BRICK, WHICH SHALL BE REPLACED IN KIND. THIS WORK SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.

CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR VEHICULAR AND PEDESTRIAN TRAFFIC IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). TRAFFIC CONTROL PLAN SHALL BE APPROVED BY THE CITY OF SYRACUSE PRIOR TO THE COMMENCEMENT OF ALL CONSTRUCTION ACTIVITIES. ALL TRAFFIC CONTROL DEVICES SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED FOR THE DURATION OF THE WORK.

WHERE DISTURBED, CONCRETE SIDEWALK TO BE REPLACED IN FULL WIDTH TO CLOSEST JOINT FROM DISTURBED AREA.

ADJUST TOPS OF EXISTING DRAINAGE STRUCTURES IN ACCORDANCE WITH NYSDOT STANDARD SHEET 604-2.

AT CLOSE OF PROJECT, RECORD DRAWINGS VERIFYING ALL STRUCTURES ELEVATIONS SHALL BE COMPLETED BY A NYS LICENSED SURVEYOR.

AT CLOSE OF PROJECT, CONTRACTOR SHALL VACUUM ALL STRUCTURES CONNECTED TO AND

ALL WATER VALVE BOXES, SEWER CLEANOUTS, AND SEWER VENTS SHALL BE RESET TO MATCH NEW GRADES.

INSPECT AND CLEAN ALL EXISTING CATCH BASIN LATERALS PRIOR TO CONNECTING OVERFLOWS. CONNECTION SHALL BE MADE BY AN ONONDAGA COUNTY LICENSED PLUMBER AND REQUIRES A PLUMBLING PERMIT THROUGH ONONDAGA COUNTY.

IF A LATERAL IS FOUND DAMAGED, CONTACT THE ENGINEER IMMEDIATELY. ONONDAGA COUNTY PLUMBING TO VERIFY WITH A PHOTO OR INSPECT. REPAIR SHALL OCCUR UNDER SEPARATE CHANGE ORDER.

IF FIRE HYDRANTS LEAKS ARE FOUND CONTACT THE ENGINEER AND SYRACUSE WATER DEPARTMENT IMMEDIATELY.

UNLESS OTHERWISE APPROVED BY THE CITY OF SYRACUSE, PEDESTRIAN AND VEHICULAR ACCESS TO WALKWAYS, BUSINESSES, AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES. SAFETY FENCING SHALL BE PER SECTION S-041 OF THE GENERAL SPECIFICATIONS.

PREPARED BY: BARTON & LOGUIDICE, D.P.C. ON: FEBRUARY 24, 2017



EROSION AND SEDIMENT CONTROL

PROVIDE EROSION AND SEDIMENT CONTROL MEASURES WHERE AND WHEN APPROPRIATE AS PER THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AUGUST 2005, OR LATEST EDITION). PROTECT EXISTING SITE FEATURES UNLESS OTHERWISE NOTED. CONSULT ENGINEER PRIOR TO INFILTRATION TRENCH INSTALLATION.

DURING CONSTRUCTION, NO WET OR FRESH CONCRETE SHALL BE ALLOWED TO ESCAPE INTO ANY WATERS, NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES BE ALLOWED TO ENTER ANY WATERS OR SEWERS. CONCRETE WASHOUTS SHALL BE USED. WASHOUT AREAS SDHALL NOT BE LOCATED IN GREEN INFRASTRUCTURE AREAS.

CONTRACTOR SHALL TAKE ALL OTHER MEASURES TO POSITIVELY PRECLUDE ERODED MATERIALS FROM LEAVINGTHE SITE. CONTRACTOR TO SUBMIT EROSION CONTROL PLAN.

EROSION CONTROLS MUST BE CONSTRUCTED, STABLIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS.

AFTER FINAL SITE STABLIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATLEY.

UNTIL THE SITE IS STABILIZED, ALL EROSION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK. INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION CONTROLS FAIL TO PERFORM AS EXPECTED, REPLACEMENT CONTROLS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

PROTECT INFILTRATION TRENCH SUBGRADE FROM SEDIMENT DEPOSITION AND/OR COMPACTION DURING CONSTRUCTION. DO NOT ALLOW CONSTRUCTION VEHICLES TO TREAD ON THE INFILTRATION BED SUBGRADE.

CONTRACTOR SHALL FOLLOW INFILTRATION TRENCH AND DRAINAGE CONTROL REQUIREMENTS AS SPECIFIED BY ENGINEER.

SURVEY

COORDINATES AND NORTH ORIENTATION SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, TRANSVERSE MERCATOR PROJECTION, NAD 83/96 2011 EPOCH 2010.00 USING GPS PROCEDURES AND THE NEW YORK STATE DOT CORS NETWORK.

ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 USING GPS PROCEDURES.

UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM FIELD LOCATIONS, VISIBLE AT THE TIME OF SURVEY, AND UTILITY COMPANY RECORD DRAWINGS. THE LOCATIONS OF ALL UNDERGROUND UTILITIES SHOULD BE STAKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO ANY CONSTRUCTION.

THE LOCATIONS OF STREET RIGHT-OF-WAYS ARE BASED ON A BOUNDARY SURVEY PERFORMED BY FISHER ASSOCIATES ON MARCH 29. 2016. USING INFORMATION RESEARCHED AT THE CITY OF SYRACUSE SURVEYORS OFFICE. PROPERTY LINES SHOWN HEREON ARE APPROXIMATE AND PLOTTED FOR GRAPHICAL REPRESENTATION ONLY.

THE CITY OF SYRACUSE SURVEY MONUMENTS SHALL NOT BE DISTURBED OR DESTROYED. IF THERE IS A CONFLICT OR A SURVEY MONUMENT IS WITHIN FIVE FEET OF CONSTRUCTION, THE CITY OF SYRACUSE DEPARTMENT OF ENGINEERING MUST BE CONTACTED AT (315) 448-8207 BEFORE ANY DEMOLITION OR CONSTRUCTION BEGINS.

SITE PROTECTION NOTES

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES A SAFE AND ADEQUATE INGRESS AND EGRESS TO AND FROM ALL PRIVATE AND PUBLIC PLACES OF BUSINESS.

THE CONTRACTOR SHALL COORDINATE WITH ANY AND ALL CONTRACTORS PERFORMING WORK ON THIS OR IMMEDIATELY ADJACENT TO THIS JOB SITE.

THE CONTRACTOR SHALL AT THEIR OWN EXPENSE, RESTORE LAWNS, DRIVEWAYS, CULVERTS, FENCES, GUIDERAILS, SIGNS AND OTHER PUBLIC AND PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD A CONDITION AS BEFORE BEING DISRUPTED.

EXCAVATED SPOILS NOT DESIGNATED FOR USE ON SITE SHALL BE REMOVED AT THE END OF EACH WORK DAY.

ALL BACKFILL MATERIAL STORED ON SITE SHALL BE COVERED TO PREVENT DUST AND MOISTURE INCREASE.

ALL TRUCKS ENTERING AND LEAVING THE SITE SHALL BE COVERED BY LAW TO REDUCE DUST AND ODOR. ALL MATERIALS (HAZARDOUS) SHALL BE LOCKED IN APPROPRIATE STORAGE UNITS.

CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE AT ALL TIMES. AT THE END OF THE WORK DAY ALL EQUIPMENT AND MATERIALS SHALL BE STORED IN THE DESIGNATED STAGING AREA. ALL SOIL, DUST AND MUD SHALL BE REMOVED FROM THE PROJECT AREA AND OUTSIDE THE PROJECT AREA. AT THE END OF THE DAY, TIRES OF CONSTRUCTION VEHICLES SHALL BE CLEANED OF SOIL AND MUD BEFORE BEING ALLOWED ON CITY STREETS. ANY SOIL OR MUD DEPOSITED ON CITY STREETS BY CONSTRUCTION VEHICLES SHALL BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL PRESERVE AND MAINTAIN ALL EXISTING FACILITIES INCLUDING SIDEWALKS, SURVEY MONUMENTS, LIGHTING, CURBING AND PAVEMENT WITHIN THE PROJECT LIMITS.

CONTRACTOR SHALL REMOVE. OR PROPERLY CONTAINERIZE UNNECESSARY CONSTRUCTION DEBRIS AT THE END OF EACH WORK DAY.

UTILITIES

THE APPROXIMATE LOCATION OF THE UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE TRUE LOCATION BEFORE COMMENCING WORK, AND NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS OR DISCREPENCIES. BEFORE ANY PIPE IS PLACED, THE CONTRACTOR SHALL UNCOVER ALL UTILITIES AT PIPE CROSSINGS TO ENABLE THE ENGINEER TO VERIFY THE PROPOSED PIPE WITH GRADES SHOWN ON THE PLANS IS NOT OBSTRUCTED BY EXISTING UTILITIES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES ENCOUNTERED IN THIS WORK, WHERE NECESSARY, THE CONTRACTOR SHALL PROVIDE TIMBER, OR OTHER APPROVED MATERIALS AND SECURELY BRACE AND PROTECT THESE UTILITIES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.

WHEN UTILITIES ARE ENCOUNTERED WITHIN THE REQUIREMED STORMWATER FACILITY EXCAVATION, CONTRACTOR SHALL WRAP EXISTING UTILITIES WITH 40 MIL GEOMEMBRANE SHEETING AND SECURE WITH PVC TAPE AT 2 FT OC (MAX); OVERLAP SHEETING BY 2 FT (MIN.); EXTEND SHEETING 12 INCHES BEYOND BOTH ENDS OF STORMWATER FACILITY. OVERLAP GEOMEMBRANE SHEETING A MINIMUM OF 57#64 OF THE PIPE CIRCUMFERENCE AND ENSURE OVERLAP RUNS ALONG CROWN OF PIPE. SLEEVES AND CASINGS SHALL BE MOISTURE-FREE BEFORE SEALING.

DURING UTILITY RELOCATION WORK REQUIRED FOR THIS CONTRACT, THE CONTRACTOR SHALLCOOPERATE IN EVERY WAY WITH THE UTILITY OWNER, AND WILL SCHEDULE WORK IN SUCH A WAY AS TO COMPLY WITH SHUTDOWN TIMES AND ANY OTHER REQUIREMENTS OF THE UTILITY OWNER. NO ADDITIONAL PAYMENTS WILL BE MADE FOR ANY COST INCURRED DUE TO COMPLYING WITH OTHERS REQUIREMENTS. SUCH COSTS WILL BE INCLUDED IN PRICES BID FOR VARIOUS ITEMS IN THE CONTRACT.

THE FOLLOWING UTILITIES MAY BE ENCOUNTERED IN THE FIELD:

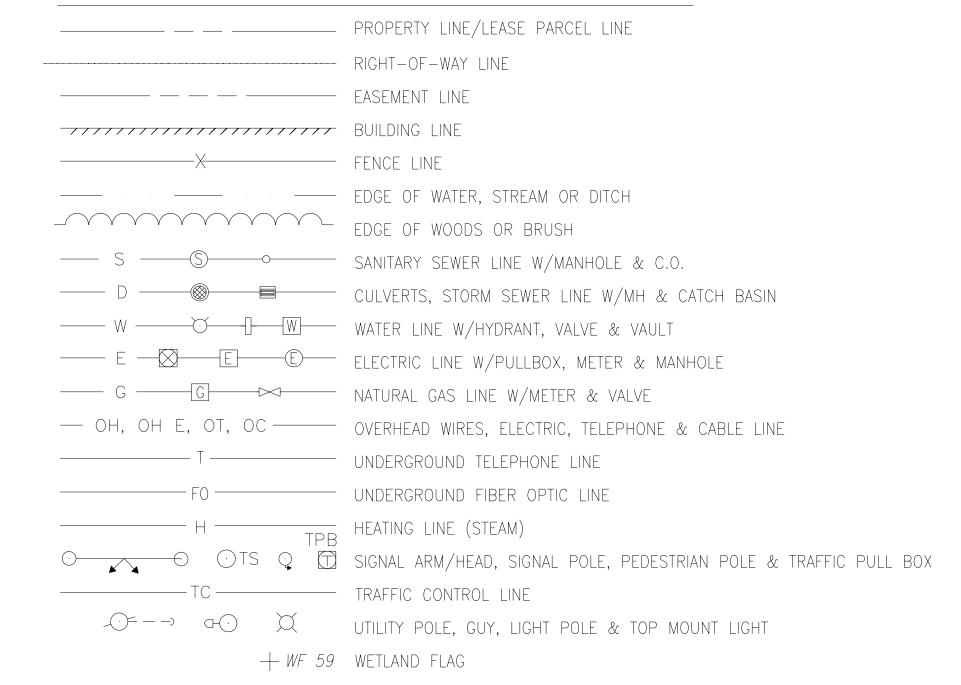
ELECTRIC. NATIONAL GRID: DONALD AMBROSE - 315.440.2115 - DONALD.AMBROSE@NATIONALGRID.COM GAS, NATIONAL GRID: KATIE AYLING - 315.428.3379 - KATHERINE.AYLING@NATIONALGRID.COM WATER, CITY OF SYRACUSE: KIM KELCHNER - 315.473.2609 x238 SANITARY/STORM SEWER, OCDWEP: JAMIE ISGAR - 315.744.0892 - JAMIEISGAR@ONGOV.NET TELEPHONE, VERIZON: JOHN CONSIDINE - JOHN.J.CONSIDINE@VERIZON.COM CABLE TELEVISION, TIME WARNER: STEVEN HICKS - 315.634.6225 - STEVEN.HICKS@TWCABLE.COM PLUMBING CONTROL, OCDWEP: JOHN WILLIAMS - 315.435.6614 - JOHNWILLIAMS@ONGOV.NET STORM SEWER/GI, OCDWEP: ADAM WOODBURN - 315.435.5402 - ADAMWOODBURN@ONGOV.NET

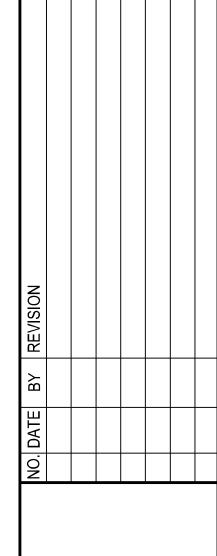
THE DEGREE OF ACCURACY FOR ALL UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS IS QUALITY LEVEL C/D.

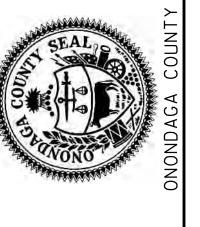
NATIONAL GRID WILL BE RETIRING THE EXISTING GAS MAIN ON THE WEST SIDE OF ACKERMAN AVENUE PRIOR TO THE CONSTRUCTION OF THIS PROJECT. A NEW GAS MAIN WILL BE INSTALLED BY NATIONAL GRID ON THE EAST SIDE OF ACKERMAN AVENUE. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE RETIRED GAS MAIN AS NECESSARY FOR THE COMPLETION OF THIS WORK.

EXISTING CONDITIONS LEGEND

● BORING LOCATION





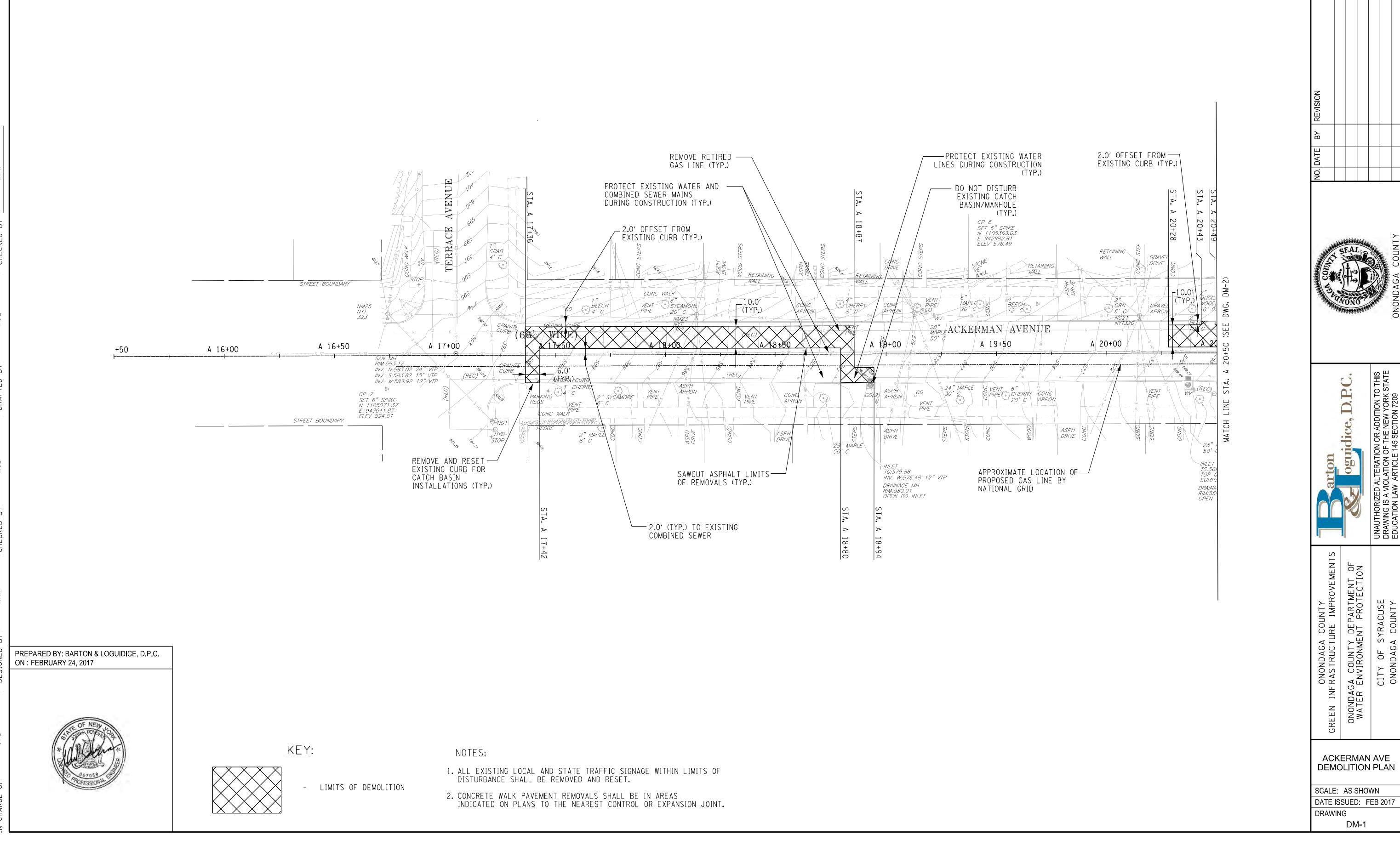


JNTY IMPROVEMENTS A COUNTY DEPARTMENT OF ENVIRONMENT PROTECTION A COL TURE

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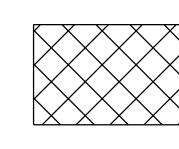
GENERAL NOTES AND LEGEND

SCALE: AS SHOWN DATE ISSUED: FEB 2017 DRAWING GN-1



DM-2

ON: FEBRUARY 24, 2017



2. CONCRETE WALK PAVEMENT REMOVALS SHALL BE IN AREAS INDICATED ON PLANS TO THE NEAREST CONTROL OR EXPANSION JOINT.

— DO NOT DISTURB EXISTING INLET (TYP.) REMOVE AND RESET EXISTING CURB FOR PROTECT EXISTING WATER AND ——— COMBINED SEWER MAINS CATCH BASIN INSTALLATIONS (TYP.) DURING CONSTRUCTION (TYP.) - DO NOT DISTURB EXISTING INLET (TYP.) 2.0' OFFSET FROM — EXISTING CURB (TYP.) ASPH DRIVE J 1" DOGWOOD 553.27 £ 553.30 553.39 553.36 TREET BOUNDARY ASPH DRIVE PROTECT DURING CONSTRUCTION STA. A 26+04 - EXISTING MANHOLE TO REMAIN, PROTECT AND SUPPORT DURING CONSTRUCTION (TYP.) - APPROXIMATE LOCATION OF PROPOSED GAS LINE BY NATIONAL GRID DO NOT DISTURB — EXISTING INLET (TYP.) ONONDAGA COUNTY GREEN INFRASTRUCTURE IMPROVEMENTS PREPARED BY: BARTON & LOGUIDICE, D.P.C. NOTES: KEY: 1. ALL EXISTING LOCAL AND STATE TRAFFIC SIGNAGE WITHIN LIMITS OF DISTURBANCE SHALL BE REMOVED AND RESET. LIMITS OF DEMOLITION





ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION

ACKERMAN AVE DEMOLITION PLAN

SCALE: AS SHOWN DATE ISSUED: FEB 2017 DRAWING

DM-3

NAME = I:\Shared\ØØ@\Ø55 DATE = 3/21/2017 TIME = 8:42:26 AM



PREPARED BY: BARTON & LOGUIDICE, D.P.C. ON: FEBRUARY 24, 2017

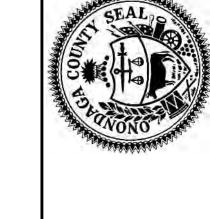
LEGEND DRAINAGE BASIN AREA

LANCASTER AVENUE

ACKERMAN AVENUE DRAINAGE BASIN NUMBER

DIRECTION OF SURFACE STORM WATER FLOW

DRAINAGE	BASIN AREA
A 1	0.74 AC.
A2	1.21 AC.
А3	0.81 AC.
Α4	0.73 AC.
A5	0.18 AC.
Α6	0.61 AC.
Α7	1.05 AC.
A8	1.69 AC.
Α9	0.52 AC.
A10	0.64 AC.
A11	0.71 AC.



ONONDAGA COUNTY GREEN INFRASTRUCTURE IMPROVEMENTS ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION CITY OF SYRACUSE ONONDAGA COUNTY

ACKERMAN AVENUE DRAINAGE AREAS

SCALE: AS SHOWN DATE ISSUED: FEB 2017 DRAWING DA-1

1"=200'

ACKERMAN DRAINAGE STRUCTURES (DOME OUTLETS & CATCH BASINS) ACKERMAN DRAINAGE STRUCTURES (DOME OUTLETS & CATCH BASINS) SIZE/ RIM SIZE/ RIM SUMP DETAIL SUMP NO. | STATION | SIDE | OFFSET | TYPE | ELEV. ELEV. NO. | STATION | SIDE | OFFSET | TYPE | ELEV. ELEV. PIPE INSTALLATION DESCRIPTION ELEV. ELEV. W: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE N (OVERFLOW CONNECTION): INSTALL 20' OF SOLID HDPE PIPE TO COMBINED DR-04 590.50 583.70 4 17+40 | RT | W = 585.70SEWER WITH FILTER INSERT AND TRAP. CONTRACTOR TO VERIFY DEPTH AND A1-1 E = 546.71INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 583.80. A 24+70 | LT | 92' 24" | 550.89 | 544.87 N (OVERFLOW CONNECTION): INSTALL 10' OF SOLID HDPE PIPE TO EXISTING LATERAL LOCATION. TOP OF WEIR AT ELEV 547.22. LOW FLOW ORIFICE AT ELEV 546.61. INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH W/ FILTER INSERT & TRAP. CONTRACTOR TO VERIFY LATERAL DEPTH AND LOCATION. TOP OF WEIR AT ELEV 578.52, LOW FLOW ORIFICE AT ELEV 576.96. E = 547.70A 25+11 RT A 580.53 574.96 83' 24" | 551.70 | 545.87 W: TOP OF WEIR AT ELEV. 548.74, LOW FLOW ORIFICE AT ELEV 547.70. 4 18+82 | RT 12' W = 577.06INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH. W: INSTALL 19' OF SOLID HDPE PIPE AT 0.5% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 576.97. E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO 569.40 561.79 E = 563.7913' A 20+46 | LT NFILTRATION TRENCH UNDERDRAIN AT ELEV 563.29. W: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE A 20+73 | RT 566.82 561.11 W = 563.11 A2-1 INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 561.21. E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO 554.50 E = 556.50 561.21 A 21+64 LT 14' INFILTRATION TRENCH UNDERDRAIN AT ELEV 556.00. N (OVERFLOW CONNECTION): INSTALL 16' OF SOLID HDPE PIPE TO EXISTING LATERAL W/FILTER INSERT & TRAP. CONTRACTOR TO VERIFY LATERAL DEPTH AND LOCATION. TOP OF WEIR AT ELEV 558.29, LOW FLOW ORIFICE AT ELEV 556.22. N = 556.22A 560.37 554.22 A 21+70 | RT | 12' W = 556.47INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH. W: INSTALL 19' OF SOLID HDPE PIPE AT 2.5% SLOPE, USE SOLID HDPE TEE TO TIE INTO | NFILTRATION TRENCH UNDERDRAIN AT ELEV 556.00. W: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE | 557.52 | 549.50 | W = 551.50 A 22+24 RT 12' INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 549.60. N (OVERFLOW CONNECTION): INSTALL 13' OF SOLID HDPE PIPE TO STORM SEWER W/ FILTER INSERT & TRAP. CONTRACTOR TO VERIFY LATERAL DEPTH AND LOCATION. N = 550.31TOP OF WEIR AT ELEV 552.44, LOW FLOW ORIFICE AT ELEV 550.31 A 23+15 | RT | 12' A | 554.65 | 548.31 W = 550.56INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH. W: INSTALL 19' OF SOLID HDPE PIPE AT 5.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO | INFILTRATION TRENCH UNDERDRAIN AT ELEV 549.60. W: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE 547.13 W = 559.13 553.48 12' 4 23+83 | RT INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.23. E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO 553.37 13' 545.73 | E = 547.73 INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.23. W: INSTALL 19' OF SOLID HDPE PIPE AT 5.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO | 552.43 | 546.18 | W = 548.18 \ 24+59 | RT 12' INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.23. N (OVERFLOW CONNECTION): INSTALL 15' OF SOLID HDPE PIPE TO EXISTING STORM SEWER W/FILTER INSERT & TRAP. CONTRACTOR TO VERIFY LATERAL DEPTH AND A 24+60 LT | 14' | A | 552.30 | 545.58 OCATION. TOP OF WEIR AT ELEV 550.01, LOW FLOW ORIFICE AT ELEV 547.23. E: INSTALL 6' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.23. E = 547.62A 24+70 | RT W: TOP OF WEIR AT ELEV 548.66, LOW FLOW ORIFICE AT ELEV 547.62. 53' 24" | 551.72 | 546.02 W = 547.62A2-1 W (OVERFLOW CONNECTION): INSTALL 20' OF SOLID HDPE PIPE TO EXISTING LATERAL WITH FILTER INSERT AND TRAP. CONTRACTOR TO VERIFY DEPTH AND E = 546.9824" | 551.33 | 545.48 A 24+70 | RT | 35' LOCATION. TOP OF WEIR AT ELEV 547.92, LOW FLOW ORIFICE AT ELEV 546.88. A2-2 W = 547.08INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH.

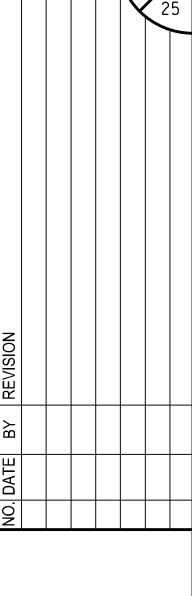
	LEGEND					
	DI	DRAINAGE INLET				
DI	DI	(CATCH BASIN)				
AX-N	Χ	PLAN DRAWING NUMBER				
	N	STRUCTURE NUMBER				
DO	DO	DOME OUTLET				
AX-N	Χ	PLAN DRAWING NUMBER				
<i>F</i> (X-1)	N	STRUCTURE NUMBER				

PREPARED BY: BARTON & LOGUIDICE, D.P.C. ON: FEBRUARY 24, 2017



- ALL STRUCTURES WITH A DIRECT CONNECTION TO THE COMBINED SEWER MUST HAVE TRAPS.
- ALL CATCH BASINS AND PVC RISER STRUCTURES SHALL HAVE FILTER INSERTS INSTALLED (P.I. 1.19A OR P.I. 1.19D).
- ORIFICE DIAMETER FOR ALL STRUCTURES IS 1 INCH. ALL ORIFICES ARE TO BE PROVIDED WITH REMOVABLE PLUGS.
- ALL PIPE RUNS (PERFORATED OR SOLID) ARE 8" DIAMETER HDPE UNLESS SHOWN OTHERWISE.

	DO A2-5	A 25+11	RT	54'	24"	550.95	545.17	E = 547.00 W = 547.00	W: TOP OF WEIR AT ELEV. 548.04, LOW FLOW ORIFICE AT ELEV 547.00.	DR-03	
DR-04 DR-04	DO A2-6	A 25+11	RT	31'	24"	550.23	544.30		W (OVERFLOW CONNECTION): INSTALL 20' OF SOLID HDPE PIPE TO EXISTING LATERAL. CONTRACTOR TO VERIFY DEPTH AND LOCATION. TOP OF WEIR AT ELEV 546.74. LOW FLOW ORIFICE AT ELEV 546.13. INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH.	DR-03	REVISION
DR-04	DI A2-10	A 25+23	RT	12'	А	552.03	545.72	W = 547.68	W: INSTALL 19' OF SOLID HDPE PIPE AT 0.5% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59.	DR-04	E BY
DR-04	DI A2-11	A 25+23	LT	13'	А	552.03	545.84		S (OVERFLOW CONNECTION): INSTALL 15' OF SOLID HDPE PIPE TO EXISTING LATERAL W/FILTER INSERT & TRAP. CONTRATOR TO VERIFY LATERAL DEPTH AND LOCATION. TOP OF WEIR AT ELEV. 549.85, LOW FLOW ORIFICE AT ELEV 547.84. E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59. INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH.	DR-04	NO. DAT
DR-04	DI A3-1	A 26+07	LT	13'	Α	552.45	546.09	E = 548.09	E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59.	DR-04	
	DI A3-2	A 26+52	RT	12'	Α	552.43	547.49	W = 549.49	W: INSTALL 19' OF SOLID HDPE PIPE AT 8.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59.	DR-04	
DR-04		A 27+48	RT	12'	-	552.69	-	S = 549.24	S: INSTALL 23' OF SOLID HDPE PIPE AT 7.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59.	-	**************************************
	EXIST.	A 27+52	LT	13'	-	557.55	549.24	S = 548.39	S: INSTALL 8' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59.	-	
DR-04	DI A3-3	A 29+03	LT	13'	Α	553.27	546.09	E = 548.09	E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59.	DR-04	
DR-04	DI A3-4	A 29+09	RT	13'	А	553.26	547.49	W = 549.49	W: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 547.59.	DR-04	
DR-04	DI A3-5	A 29+76	RT	13'	Α	553.59	548.31	W = 550.56	W: INSTALL 19' OF SOLID HDPE PIPE AT 4.5% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 549.63.	DR-04	
DR-04	DI A3-6	A 29+76	LT	13'	Α	553.56	547.88	S= 549.88	S (OVERFLOW CONNECTION): INSTALL 12' OF SOLID HDPE PIPE TO EXISTING LATERAL W/ FILTER INSERT & TRAP. CONTRACTOR TO VERIFY LATERAL DEPTH AND LOCATION. TOP OF WEIR AT ELEV 552.71, LOW FLOW ORIFICE AT ELEV 549.88. INSTALL ANTI-SEEP COLLAR WHERE PIPE LEAVES INFILTRATION TRENCH. E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 549.63.	DR-04	
DR-03	DI A4-1	A 31+12	LT	13'	А	555.75	548.13	E = 550.13	E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 549.63.	DR-04	
DR-03	DI A4-2	A 31+09	RT	13'	Α	555.38	549.53	W = 551.53	W: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 549.63.	DR-04	
JK-03	DI A4-3	A 32+12	RT	13'	А	559.22	552.25	W = 554.25	W: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 553.75.	DR-04	L
	DI A4-4	A 31+89	LT	13'	Α	558.42	551.64	E = 553.64	E: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 551.74.	DR-04	
	DI A4-5	A 32+92	RT	13'	A	562.41	555.72	W = 557.72	W: INSTALL 19' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 555.82.	DR-04	
	DI A4-6	A 32+93	LT	13'	А	562.44	554.32	E = 556.32	E: INSTALL 5' OF SOLID HDPE PIPE AT 10.0% SLOPE, USE SOLID HDPE TEE TO TIE INTO INFILTRATION TRENCH UNDERDRAIN AT ELEV 555.82.	DR-04	; ;



DETAIL

NO.

DR-03

DR-03

PIPE INSTALLATION DESCRIPTION



ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION

SYRA(

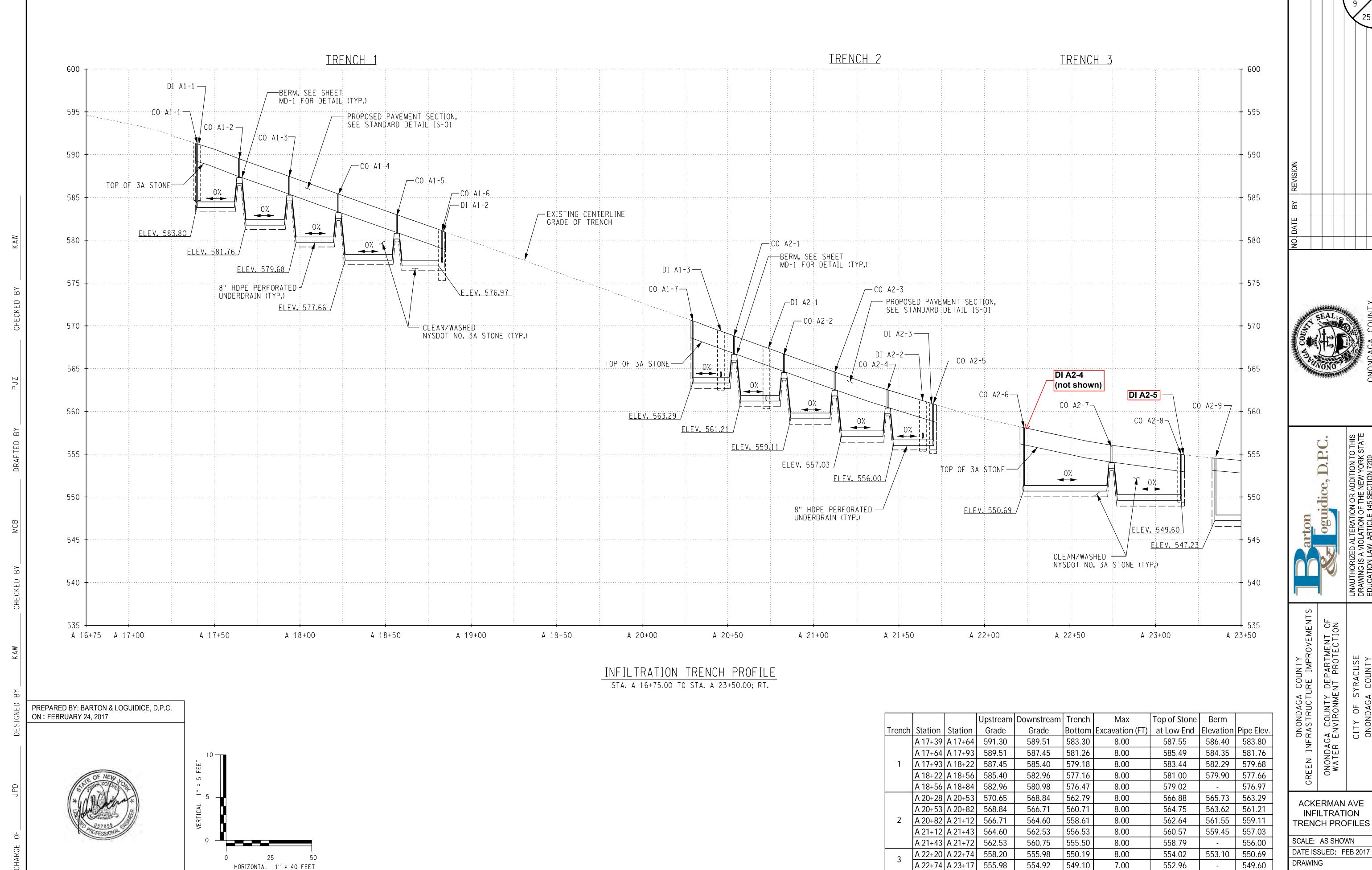
DRAINAGE **TABLE**

SCALE: AS SHOWN DATE ISSUED: FEB 2017 DRAWING

DRT-1



HORIZONTAL 1" = 40 FEET



PR-1

NAME = I:\Shared\@@O\(DATE = 3/21/2017 TIME = 8:42:30 AM

A 30+25 A 30+50 A 31+50 A 31+00 PREPARED BY: BARTON & LOGUIDICE, D.P.C. ON: FEBRUARY 24, 2017 = 5 FEET HORIZONTAL 1" = 40 FEET

_0% ___

8" HDPE SOLID UNDERDRAIN (TYP.)

IRENCH 4

A 24+00

∕—CO A2-10

CO A2-117

ELEV. 547.23

A 24+50

- PROPOSED PAVEMENT SECTION, SEE STANDARD DETAIL IS-01

DI A4-1-

DI A4-2

BERM, SEE SHEET ---

MD-1 FOR DETAIL (TYP.)

0% **▼**

CO A4-1 —

DI A2-7

TOP OF 3A STONE -

DI A2-6

555

550

540

A 23+50

565

560

555

545

540

CO A3-7-

— DI A2-8 AND DI A2-9

ELEV. 547.59 /

TOP OF 3A STONE -

A 25+00

DI A4-3-

CO A4-2-

DI 44-4-

\ELEV. 551.74

\ELEV. 549.63

IRENCH 6

EXISTING CENTERLINE

GRADE OF TRENCH -

CO A2-15

DI A2-10 AND **DI A2-11**

0%

A 25+50



A 32+00

			Upstream	Downstream	Trench	Max	Top of Stone	Berm	
Trench	Station	Station	Grade	Grade	Bottom	Excavation (FT)	at Low End	Elevation	Pipe Elev.
4	A 23+33	A 24+57	554.57	552.47	546.73	7.84	550.51	-	547.23
5	A 25+20	A 29+57	553.68	552.31	547.09	6.59	550.35	-	547.59
	A 29+74	A 31+52	557.26	553.73	549.13	8.00	551.77	-	549.63
6	A 31+52	A 32+04	559.21	557.26	551.24	8.00	555.30	554.30	551.74
O	A 32+04	A 32+61	561.38	559.21	553.25	8.00	557.25	556.36	553.75
	A 32+61	A 32+95	562.57	561.38	555.32	8.00	559.42	558.42	555.82

A 33+00

PROPOSED PAVEMENT SECTION, SEE STANDARD DETAIL IS-01

A 26+50

EXISTING CENTERLINE

GRADE OF TRENCH

TOP OF 3A STONE

ELEV. 555.82

___CO A3-1

A 26+00

DI A4-5 AND DI A4-6 —

CO A4-3 — CO A4-4 —

A 32+50

ELEV. 553.75

- CLEAN/WASHED
NYSDOT NO. 3A STONE (TYP.)

___ DI A3-1

___ DI A3-2

— CO A3-2

— 8" HDPE PERFORATED UNDERDRAIN (TYP.)

A 27+00

INFILTRATION TRENCH PROFILE

STA. A 23+50.00 TO STA. A 30+25.00; RT.

565

560

555

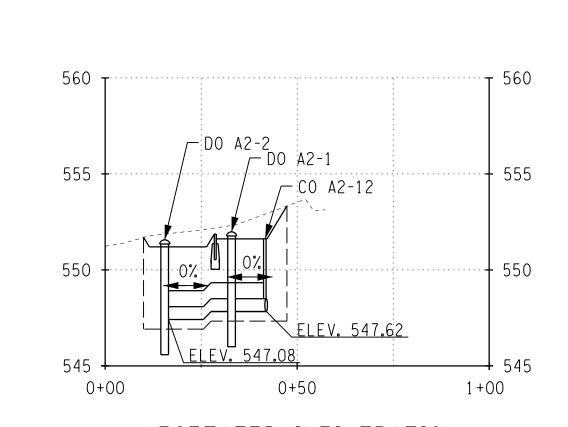
550

545

540

535

A 33+50



A 28+00

IRENCH 5

CO A3-3

A 27+50

- PROPOSED PAVEMENT SECTION, SEE STANDARD DETAIL IS-01

DI A3-3 -

CO A3-4

- CLEAN/WASHED NYSDOT NO. 3A STONE (TYP.)

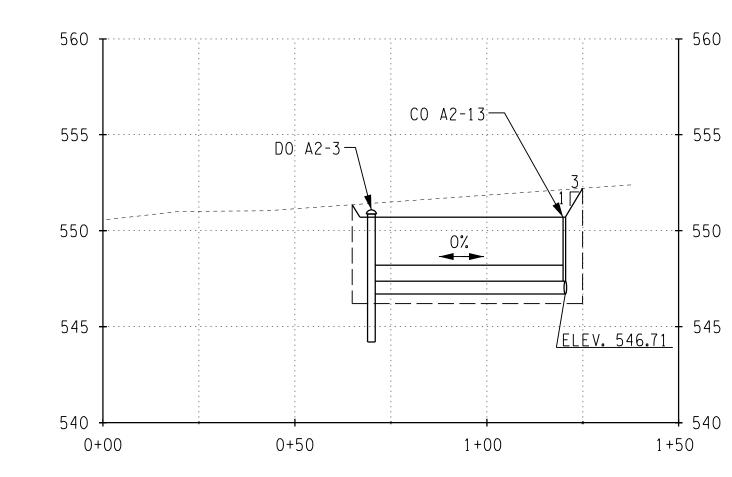
A 28+50

DI A3-4

A 29+00

VEGETATED INFILTRATION TRENCH ON STRAFFORD AVE STA. A 24+70 RT.

NOTE: DETAIL FOR THIS PROFILE IS ON SHEETS MD-1 & MD-2.



CO A3-6

ELEV. 549.63

A 29+50

CO A3-5

← DI A3-5 AND

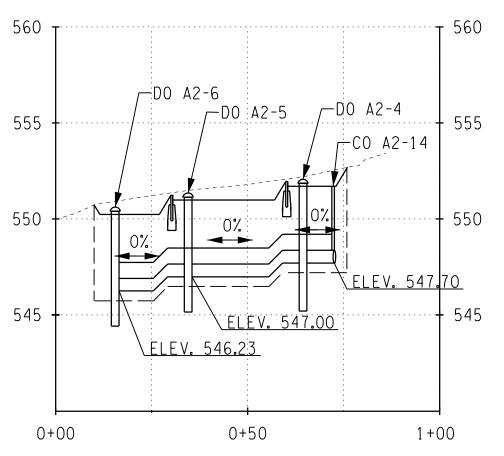
0% \rightarrow

A 30+00 A 30+25

DI A3-6

VEGETATED INFILTRATION TRENCH ON STRAFFORD AVE STA. A 24+70 LT.

NOTE: DETAILS FOR THIS PROFILE ARE ON SHEETS MD-1 & MD-2.



VEGETATED INFILTRATION TRENCH ON STRAFFORD AVE STA. A 25+11 RT.

NOTE: DETAILS FOR THIS PROFILE ARE ON SHEETS MD-1 & MD-2.

ACKERMAN AVE INFILTRATION TRENCH PROFILES SCALE: AS SHOWN

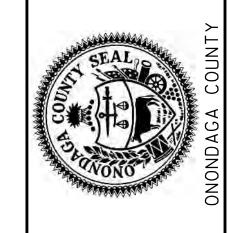
т 560

555

550

545

540

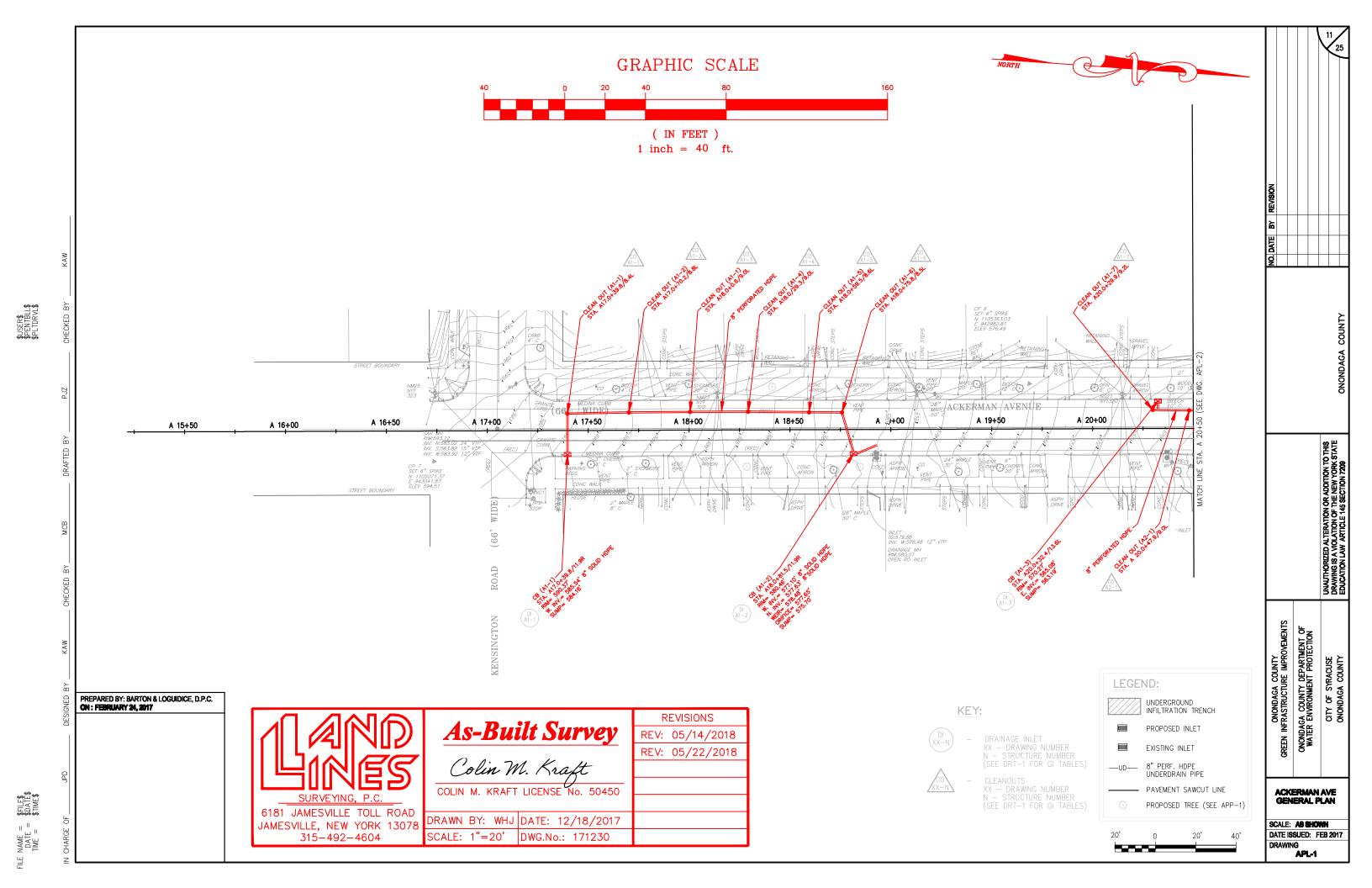


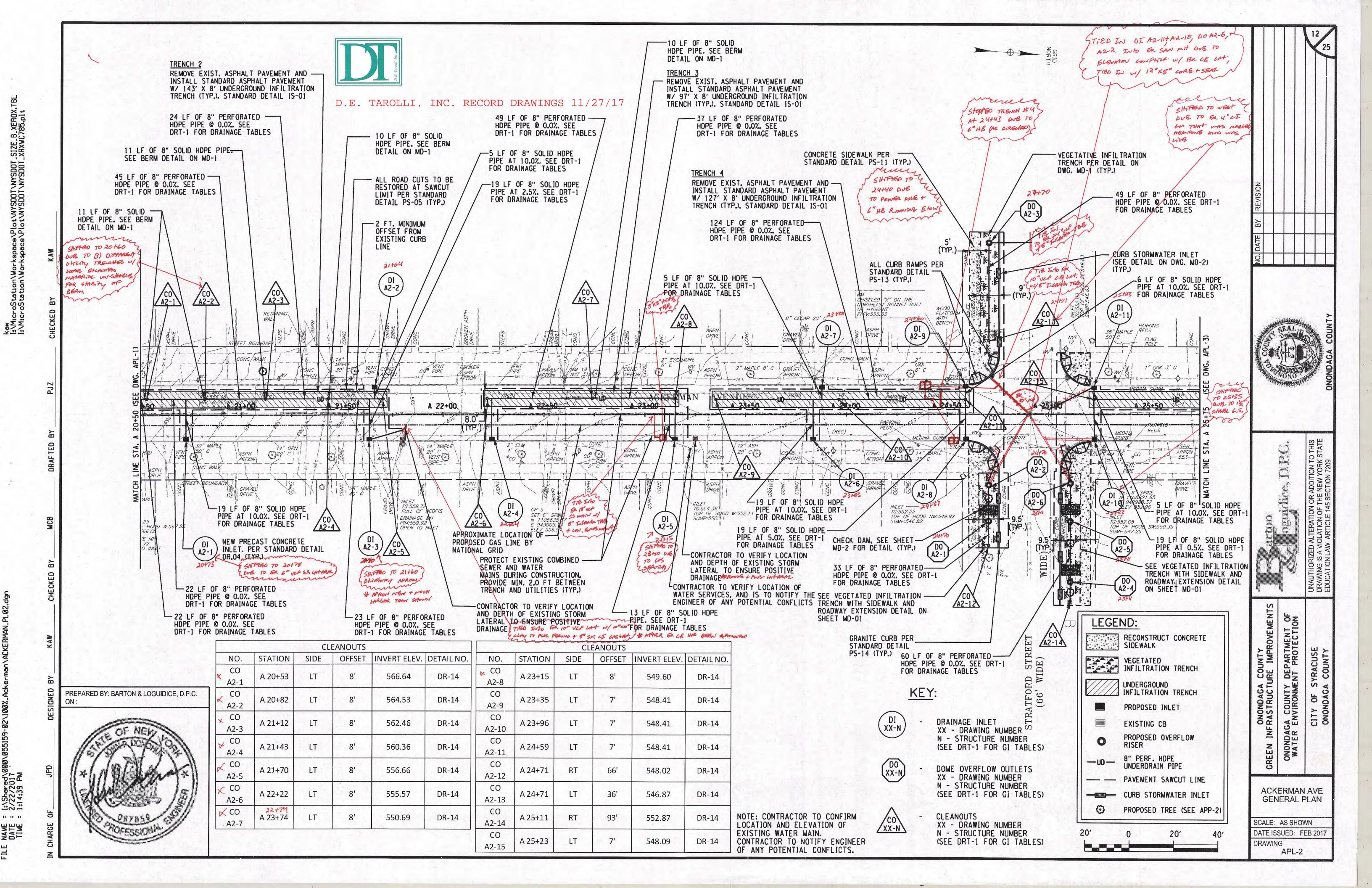


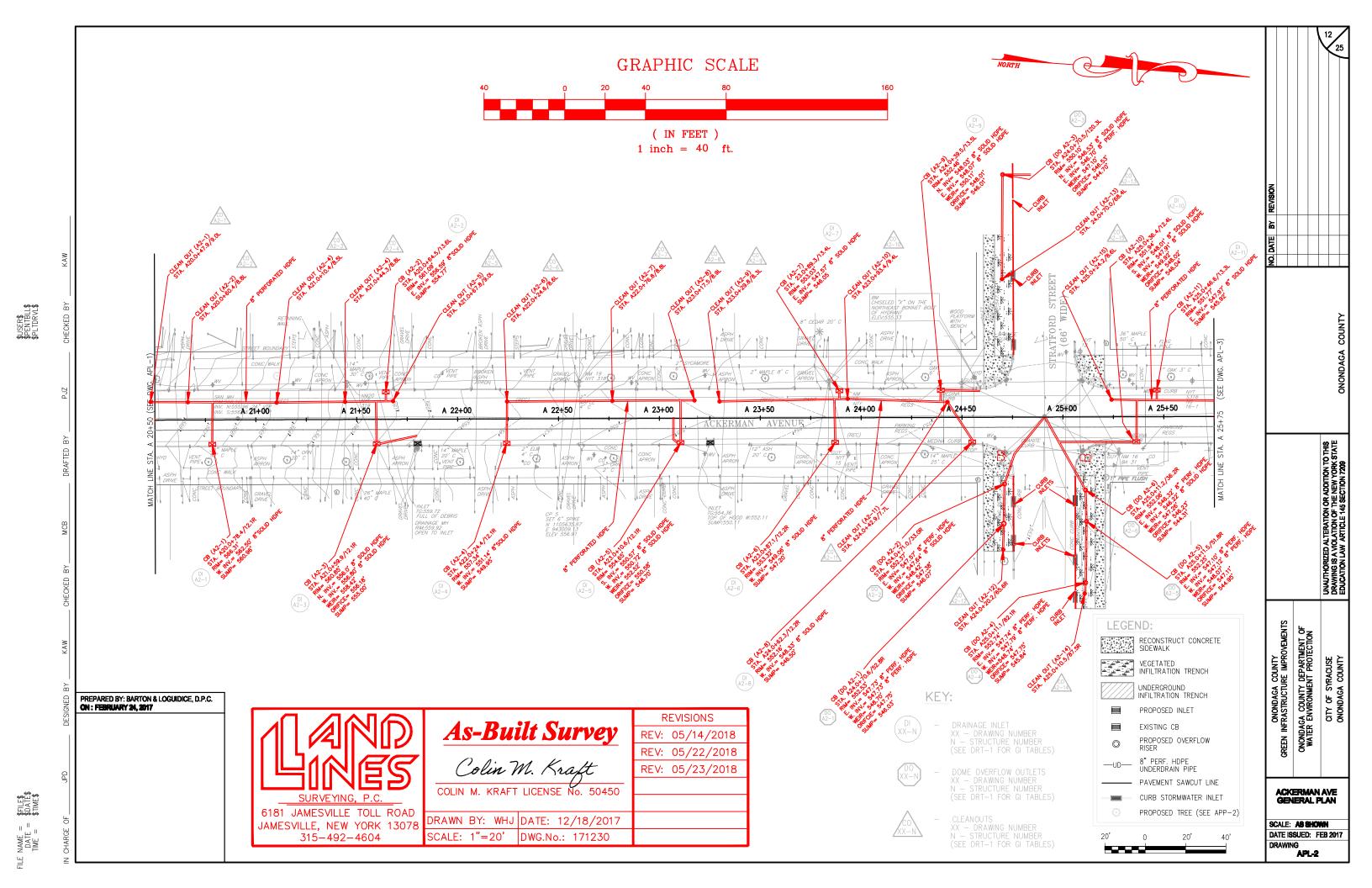
ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION CITY OF SYRACUSE ONONDAGA COUNTY

DATE ISSUED: FEB 2017 DRAWING PR-2

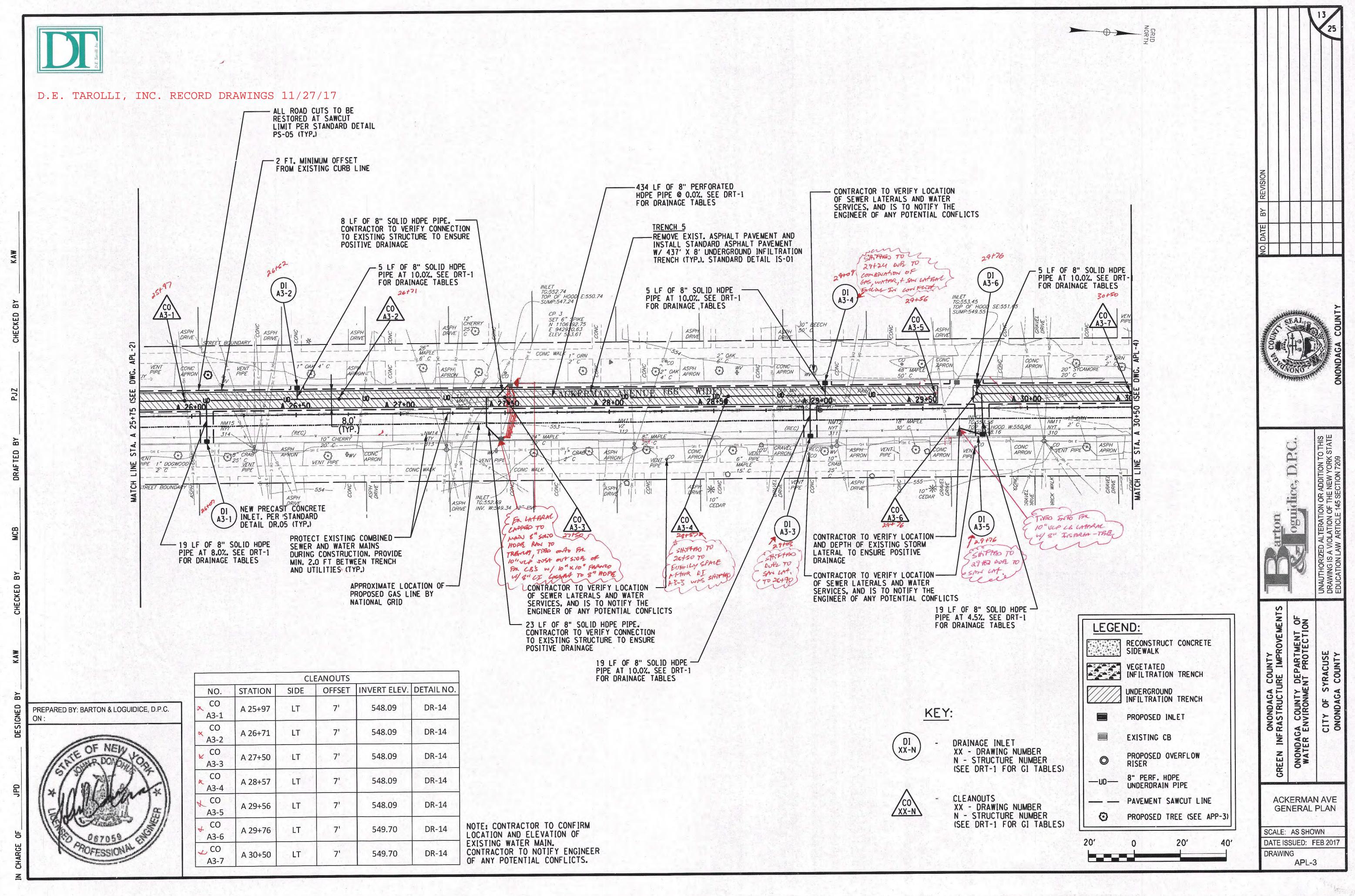
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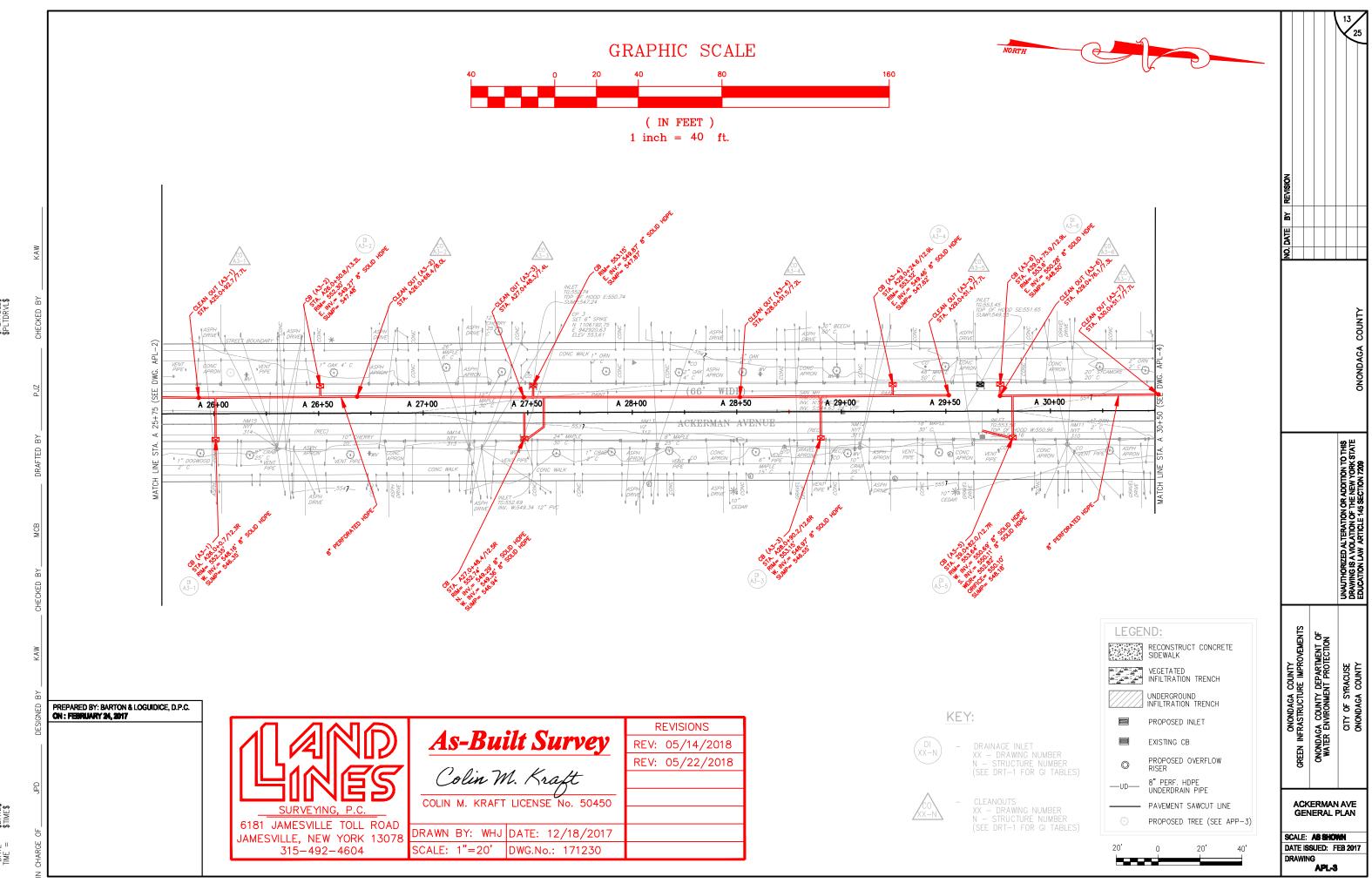












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DATE = \$DATE\$
TIME = \$TIME\$

CKED



D.E. TAROLLI, INC. RECORD DRAWINGS 11/27/17 -CONTRACTOR TO VERIFY LOCATION OF SEWER LATERALS AND WATER SERVICES, AND IS TO NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS TRENCH 6 - REMOVE EXIST. ASPHALT PAVEMENT AND INSTALL STANDARD ASPHALT PAVEMENT W/ 320' X 8' UNDERGROUND INFILTRATION TRENCH (TYP.). STANDARD DETAIL IS-01 -2 FT. MINIMUM OFFSET FROM EXISTING CURB LINE - 45 LF OF 8" PERFORATED HDPE PIPE @ 0.0%. SEE DRT-1FOR DRAINAGE TABLES -172 LF OF 8" PERFORATED 7 5 LF OF 8" SOLID HDPE PIPE AT 10.0%. SEE DRT-1 HDPE PIPE @ 0.0%. SEE -5 LF OF 8" SOLID HDPE PIPE AT 10.0%. SEE DRT-1 DRT-1FOR DRAINAGE TABLES/ FOR DRAINAGE TABLES 128 LF OF 8" PERFORATED HDPE PIPE @ 0.0%. SEE FOR DRAINAGE TABLES DRT-1 FOR DRAINAGE TABLES HDPE PIPE. SEE BERM - 12 LF OF 8" SOLID HDPE PIPE. DETAIL ON MD-1 A4-2 SEE BERM DETAIL ON MD-1 A4-3 WOOD PLATFORM WITH BENGH - 5 LF OF 8" SOLID HDPE PIPE AT 10.0%. SEE DRT-1 FOR DRAINAGE TABLES CONC WAL A 33+50 INV. NE:556.41 12" VTP INV. E:554.41 15" VTP - 19 LF OF 8" SOLID HDPE PIPE AT 10.0%. SEE DRT-1 INV. SW:554.16 15" VTP FOR DRAINAGE TABLES APRON CONC WALK GRANITE OI A4-6 SAFAGO TO SAN MH / RIM:562.67 1 ASPH 32+85 DUR TO FX 12"VCA INV. N:549.87 12" INV. NE:551.87 15" VTP INV. NE:549.97 24" VTP INV. S:550.02 24" VTP INV. NW:550.07 15" VTP 19 LF OF 8" SOLID HDPE PIPE AT 10.0%. SEE DRT-1 FOR DRAINAGE TABLES unhouse HAMBIA, PIPE CLEAN DI A4-5 DI A4-4 AND DRY, BROKE OUR OF FEXCHURTION ABPAIRBO W/ 12" KIZ" PIERNES + +7' 12" SDR IS DIRPUTED DI NEW PRECAST CONCRETE INLET. PER STANDARD DETAIL DR.05 (TYP.) - 19 LF OF 8" SOLID HDPE PIPE AT 3.0%. SEE DRT-1 FOR DRAINAGE TABLES HDPE PIPE @ 0.0%. SEE DRT-1FOR DRAINAGE TABLES PROTECT EXISTING COMBINED
SEWER AND WATER MAINS
DURING CONSTRUCTION, PROVIDE
MIN. 2.0 FT BETWEEN TRENCH
AND UTILITIES (TYP.) -CONTRACTOR TO VERIFY LOCATION OF SEWER LATERALS AND WATER SUMPTRO TO 32+89 SERVICES, AND IS TO NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS DUR TO FIX LOUATION of NM POWER POLE IT 8 AND APPROXIMATE LOCATION OF PROPOSED GAS LINE BY by with The AMPIA OR ORGINA PROPOSED BACANKHOW NATIONAL GRID

PREPARED BY: BARTON & LOGUIDICE, D.P.C.

-ALL ROAD CUTS TO BE RESTORED AT SAWCUT

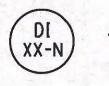
LIMIT PER STANDARD DETAIL PS-05 (TYP.)



		CL	EANOUTS		
NO.	STATION	SIDE	OFFSET	INVERT ELEV.	DETAIL NO.
✓ CO A4-1	A 31+52	ĹΤ	7'	550.29	DR-14
CO A4-2	A 32+04	LT	7'	555.21	DR-14
∠ CO A4-3	A 32+61	LΤ	7'	557.27	DR-14
CO A4-4	A 32+92	LT	7'	559.33	DR-14

NOTE: CONTRACTOR TO CONFIRM ELEVATION OF EXISTING WATER MAIN. CONTRACTOR TO NOTIFY ENGINEER OF ANY POTENTIAL CONFLICTS.

KEY:



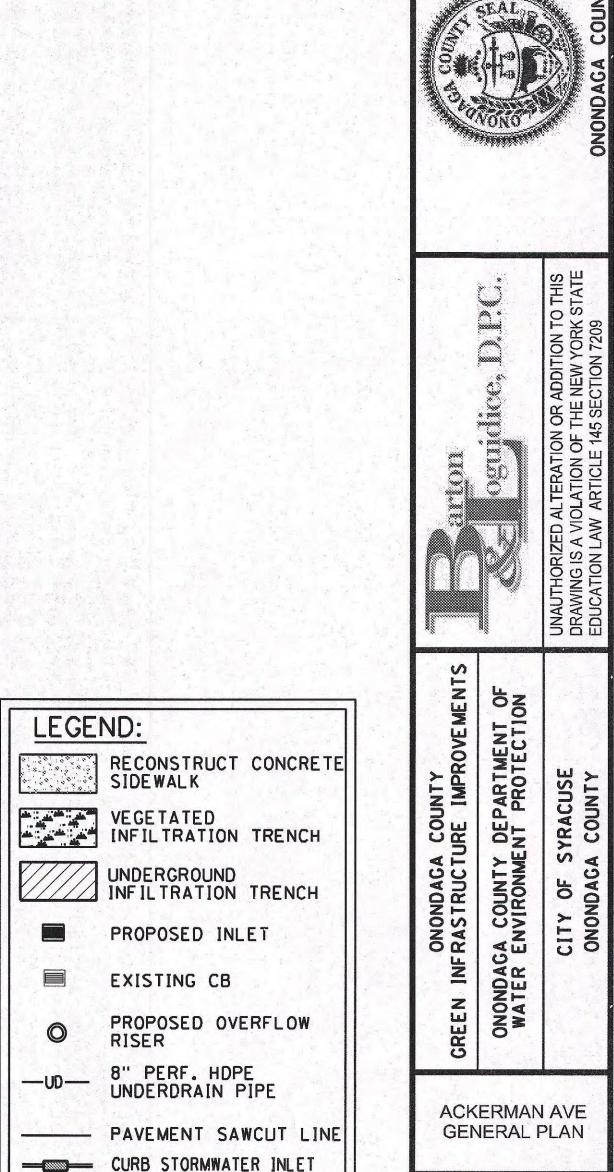
DRAINAGE INLET
XX - DRAWING NUMBER N - STRUCTURE NUMBER (SEE DRT-1 FOR GI TABLES)



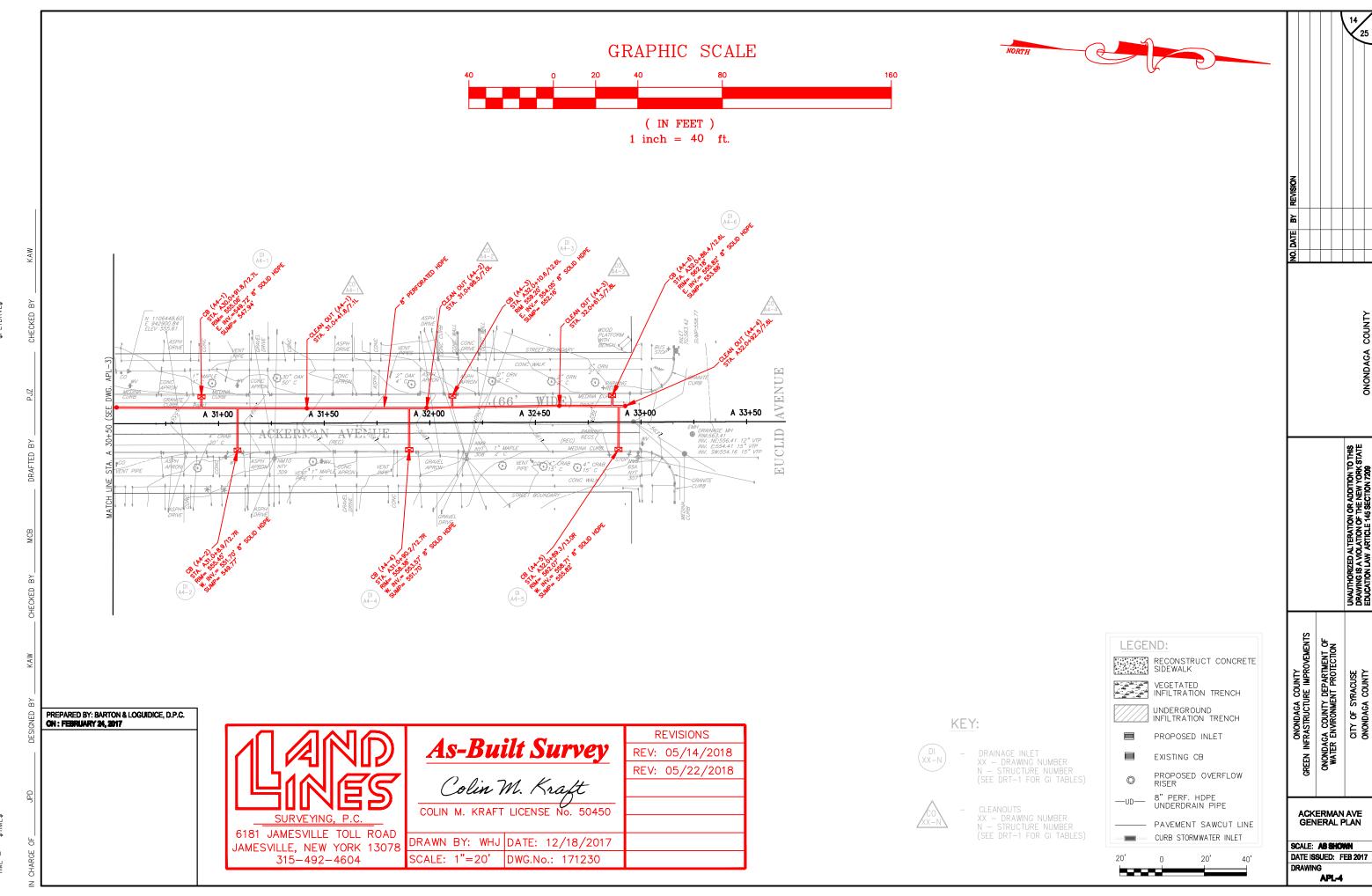
CLEANOUTS XX - DRAWING NUMBER N - STRUCTURE NUMBER (SEE DRT-1 FOR GI TABLES)

	0 20'
	PAVEMENT SAWCUT LI
—UD—	8" PERF. HDPE UNDERDRAIN PIPE
0	PROPOSED OVERFLOW RISER
	EXISTING CB
20VIII.0	PROPOSED INLET
	UNDERGROUND INFILTRATION TRENCH

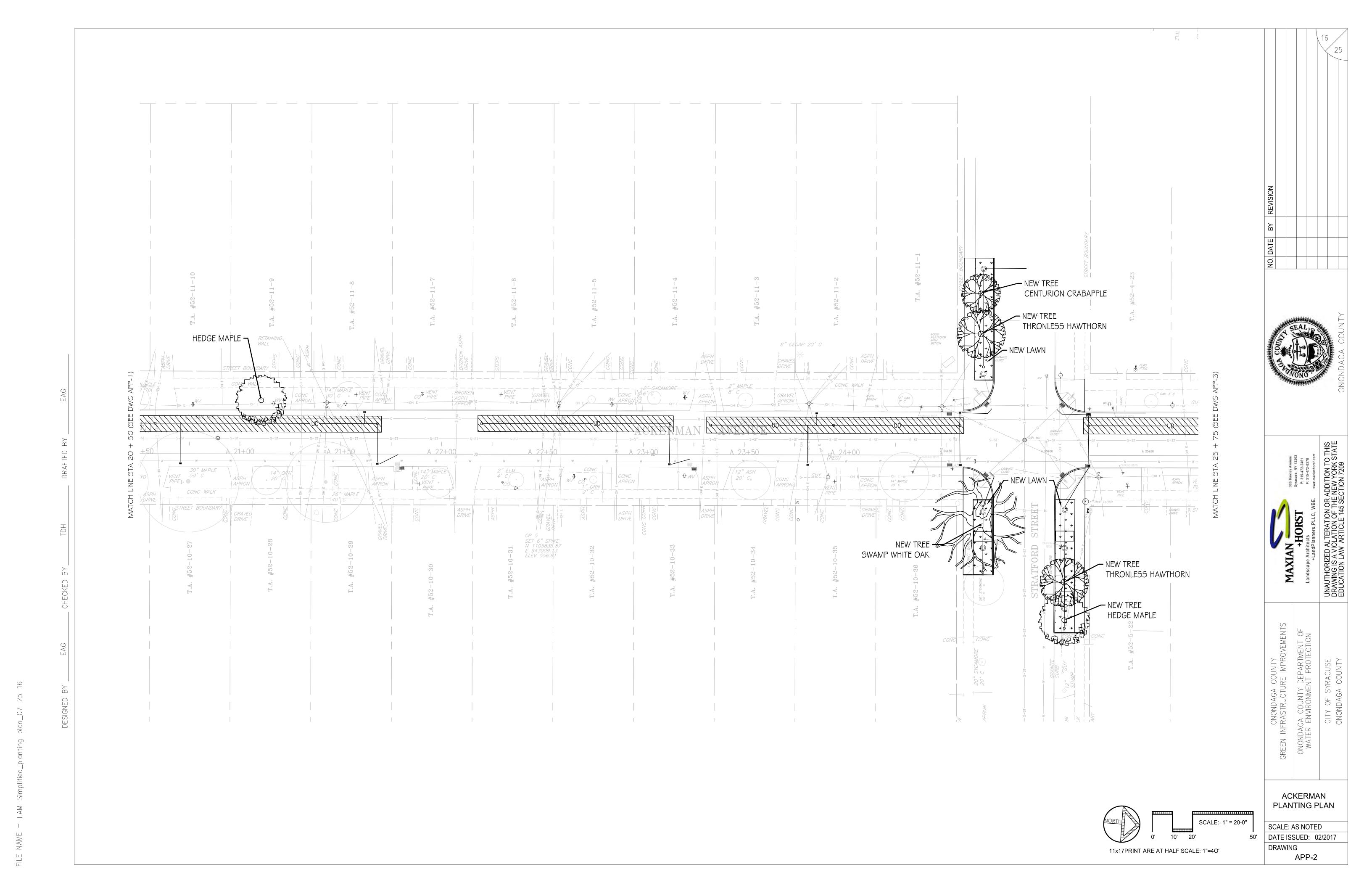
LEGEND:



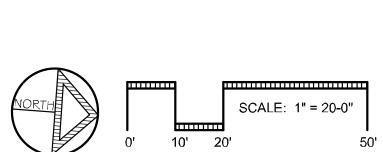
SCALE: AS SHOWN DATE ISSUED: FEB 2017 DRAWING APL-4



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DATE = \$DATE\$
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CENTURION CRABAPPLE



11x17PRINT ARE AT HALF SCALE: 1"=40'

MAXIAN +HORST +HORST

UNAUTHORIZED ALTERATION C DRAWING IS A VIOLATION OF TI EDUCATION LAW ARTICLE 145

ONONDAGA COUNTY
GREEN INFRASTRUCTURE IMPROVEMENTS
ONONDAGA COUNTY DEPARTMENT OF
WATER ENVIRONMENT PROTECTION
CITY OF SYRACUSE
ONONDAGA COUNTY

ACKERMAN PLANTING PLAN

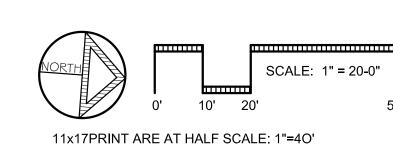
SCALE: AS NOTED DATE ISSUED: 02/2017 DRAWING APP-3

T.A. #52-4-5 T.A. #52-4-6 T.A. #52-5-1 T.A. #52-5-2

PLANT SCHEDULE: TREES - ACKERMAN

SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
DECIDUO	DUS TREES	j			
Ac	2	Cataegus inermis	Thornless Hawthorn	2.5"	Tree Form B\$B
Af	2	Acer campestrii	Hedge Maple	2.5"	B≰B
Gd	1	Gymnocladus diocius	Kentucky Coffee Tree	2.5"	B≰B
Мс	3	Malus centurion	Centurion Crabapple	2.5"	B≰B
Ра	1	Quercus bicolor	Swamp White Oak	2.5"	B≰B
Sg	1	Syrınga reticulata	Japanese Lilac Tree	2.5"	Tree Form B\$B

* NOTE: ALL TREES TO BE PLANTED AT THE PROPER DEPTH AND SO AS NOT TO OBSTRUCT THE FLOW OF WATER IN SWALES



ACKERMAN
PLANTING PLAN

SCALE: AS NOTED

DATE ISSUED: 02/2017

DRAWING

APP-4

ONONDAGA COUNTY
GREEN INFRASTRUCTURE IMPROVEMENTS
ONONDAGA COUNTY DEPARTMENT OF
WATER ENVIRONMENT PROTECTION
CITY OF SYRACUSE
ONONDAGA COUNTY

GRANITE CURB WHERE ADJACENT

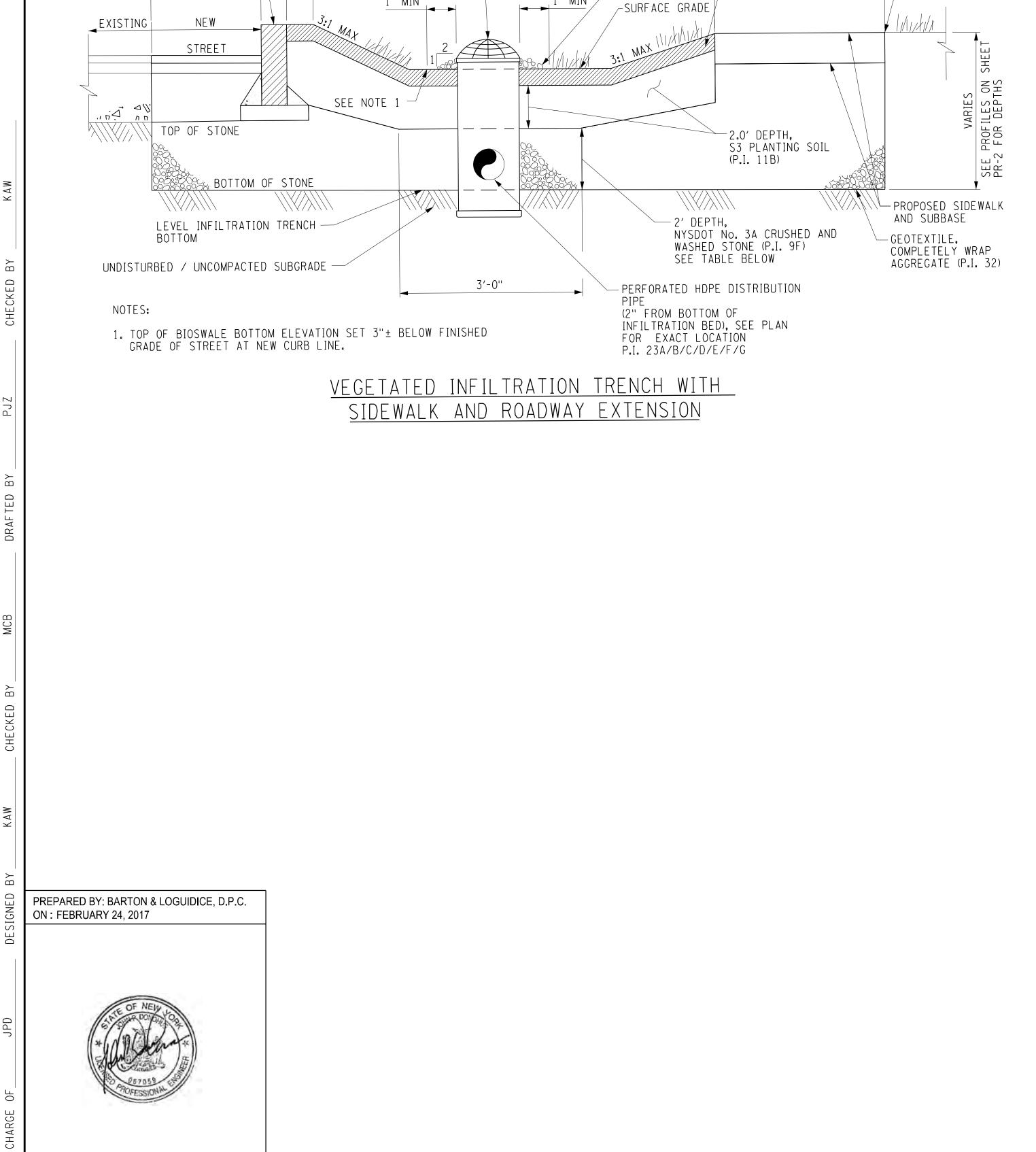
TO STREET

4' WIDTH AT STA 24+70 —

1' WIDTH AT STA 25+11

NOT INC. IN P.I.





LANDSCAPING ACCORDING TO PLANS

LOCKABLE PVC DOMED RISER (P.I. 21 A/B/C/D/E)

SEE PLAN FOR LOCATIONS -

-CLEAN, ROUND NYSDOT #2 (P.I. 9H) 1' RING AROUND

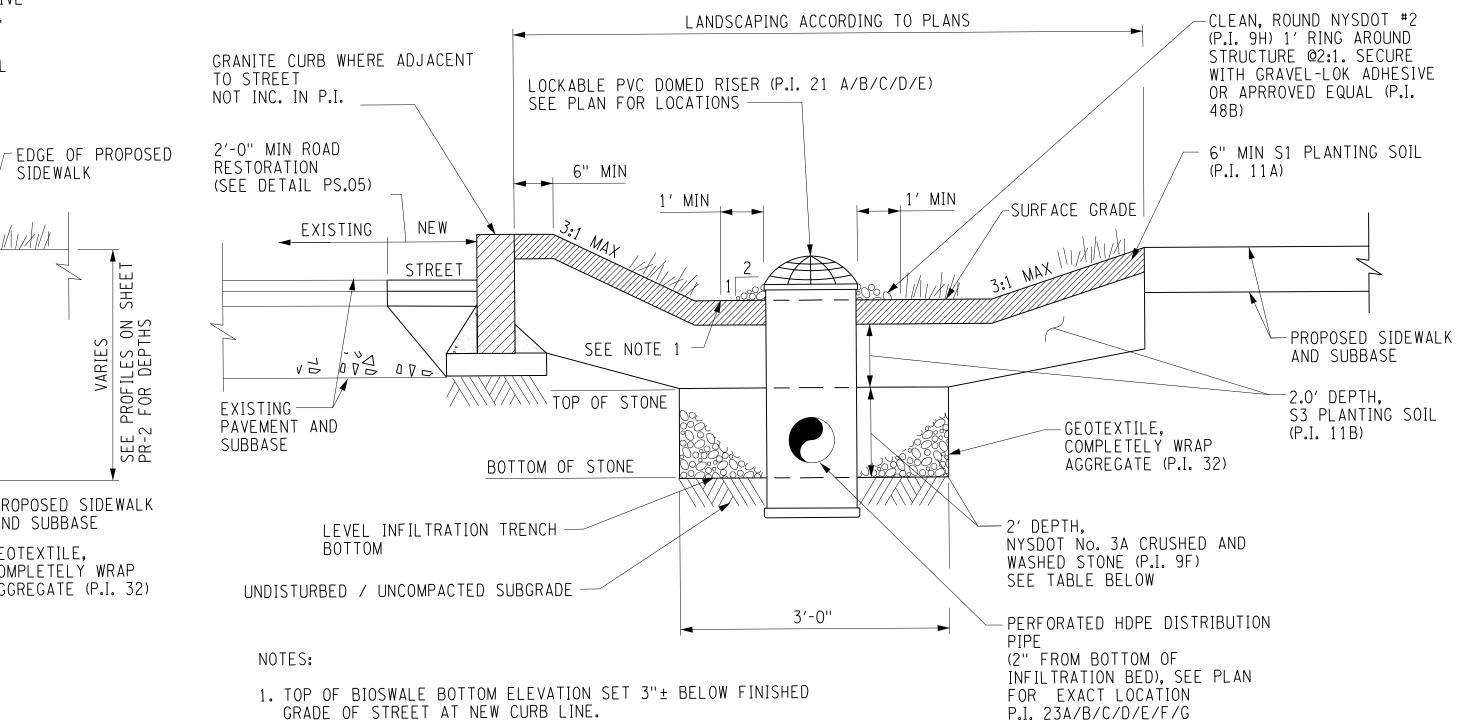
STRUCTURE @2:1. SECURE WITH GRAVEL-LOK ADHESIVE OR APRROVED EQUAL (P.I.

6" MIN S1 PLANTING SOIL

SIDEWALK

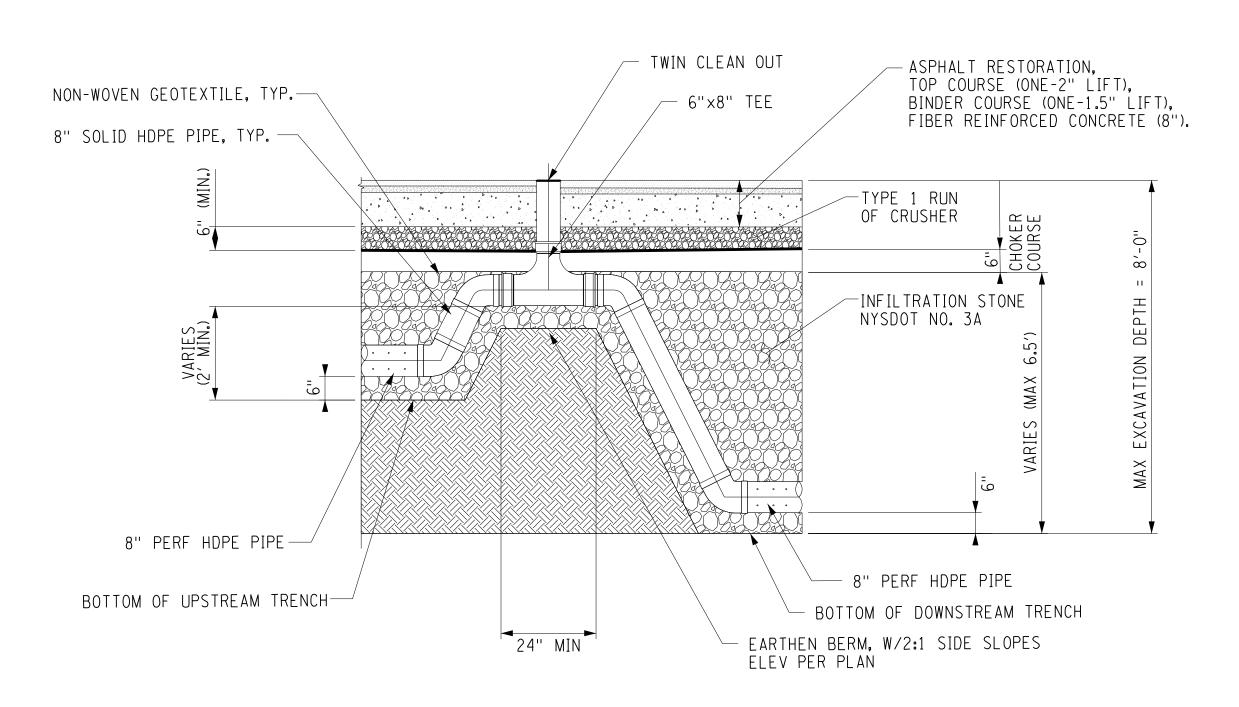
(P.I. 11A)

5' SIDEWALK



VEGETATED INFILTRATION TRENCH NTS

	Ackerman Vegetative Infiltration Area Elevations							
Start Station	Start Offset	End Station	End Offset	Side	Surface Grade EL	Top of Stone EL	Bottom of Stone EL	Pipe Invert EL
A 24+70	37'	A 24+70	90'	LT	550.70	548.21	546.21	546.71
A 24+70	65'	A 24+70	50'	RT	551.62	549.12	547.12	547.62
A 24+70	45'	A 24+70	36'	RT	551.08	548.58	546.58	547.08
A 25+11	92'	A 25+11	80'	RT	551.70	549.20	547.20	547.70
A 25+11	74'	A 25+11	50'	RT	551.00	548.50	546.50	547.00
A 25+11	44'	A 25+11	35'	RT	550.23	547.73	545.73	546.23



TRENCH BERM DETAIL

DETAILS SCALE: AS SHOWN

> DATE ISSUED: FEB 2017 DRAWING MD-1

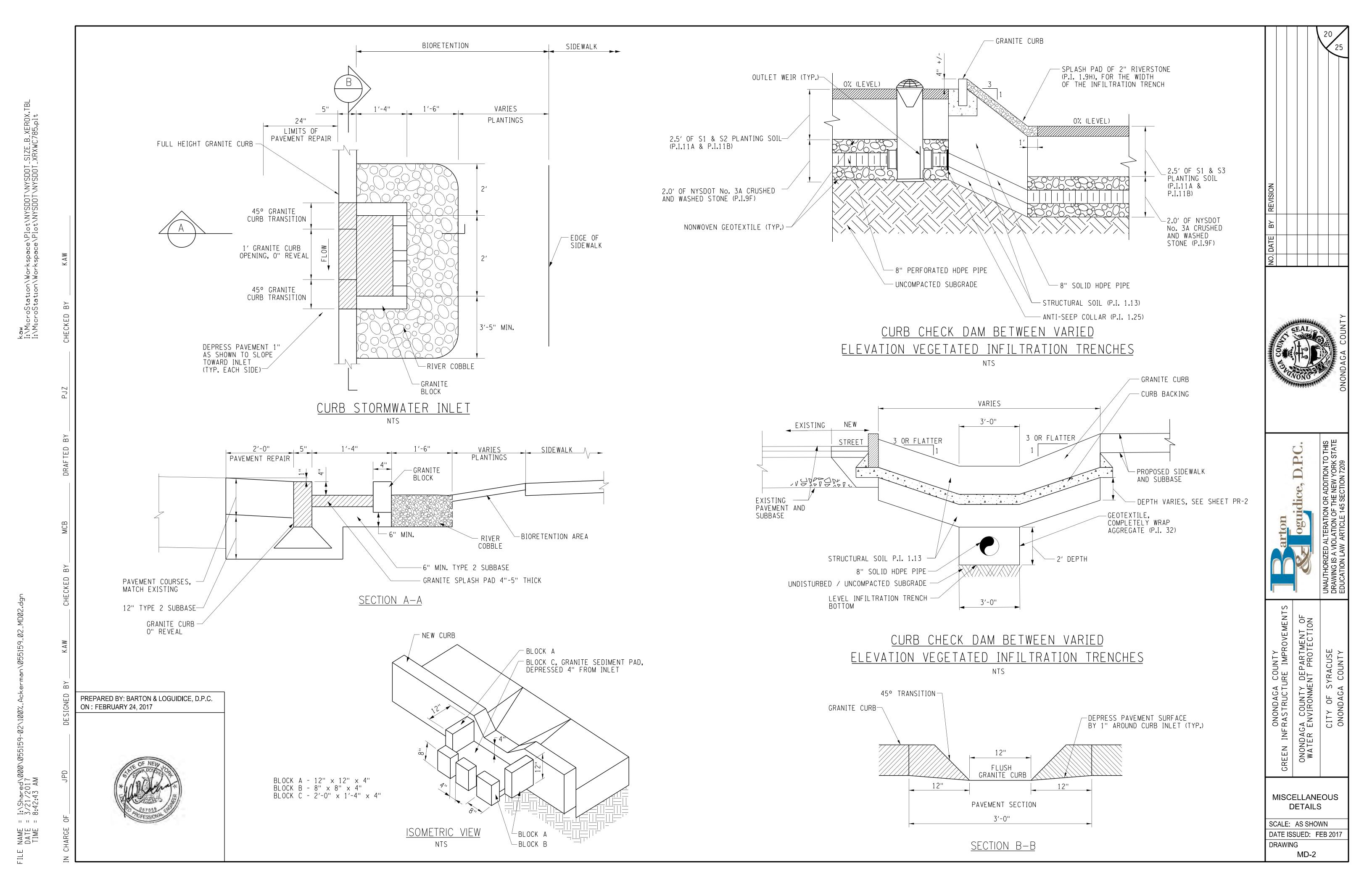
MISCELLANEOUS

ONONDAGA COUNTY INFRASTRUCTURE IMPROVEMENTS

GREEN

ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION

CITY OF SYRACUSE ONONDAGA COUNTY



WORK ZONE TRAFFIC CONTROL NOTES

1. GENERAL

- A. THE CONTRACTOR SHALL MAINTAIN TRAFFIC THROUGHOUT THE LENGTH AND DURATION OF THE CONTRACT IN ACCORDANCE WITH THE WORK TRAFFIC DETAILS IN THE PLANS AND PROPOSAL OR AOBE.
- B. FOR TYPICAL APPLICATIONS OF TRAFFIC CONTROL DEVICES IN CONSTRUCTION AREAS NOT SPECIFED IN THE PROPOSAL, THE PROVISIONS OF THE MUTCD AND THE NEW YORK STATE SUPPLEMENT, ALL APPLICABLE REVISIONS SHALL APPLY. THE STANDARDS OF APPLICATION NOTED THEREIN AND ON THE PROPOSAL ARE TO BE CONSIDERED MINIMAL STANDARDS. WHERE OPTIONS EXIST FOR SIGN SHAPE, THE DIAMOND SHAPE SHALL BE USED.
- C. PRIOR TO ANY WORK ZONE SET-UP THE ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF ALL SIGNS, TRAFFIC CONTROL DEVICES AND WORK ZONE TRAFFIC CONTROL DEVICES.
- D. PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED FOR THE REVIEW AND APPROVAL BY THE REGIONAL TRAFFIC ENGINEER 30 DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH REVISIONS.
- E. ANY AND ALL WORK RELATED TO WORK ZONE TRAFFIC CONTROL IS CONSIDERED SKILLED AND SPECIALIZED WORK. ALL WORKERS ENGAGED IN WORK ZONE TRAFFIC CONTROL WORK SHALL HAVE SUFFICIENT EXPERIENCE IN SUCH WORK TO SATISFACTORILY PERFORM IT. IDENENTIFICATION OF EACH WORKER, ALONG WITH DOCUMENTATION OF EXPERIENCE, SHAL BE PROVIDED TO THE ENGINEER PRIOR TO THE WORKER ENGAGING IN WORK ZONE TRAFFIC CONTROL WORK THE TRAFFIC CONTROL SUPERVISIOR SHALL BE IN COMPLIANCE ACCORDING TO SECTION 619.3.20 OF THE NYSDOT STANDARD SPECIFICATION. DETERMINATION OF COMPETENCY AND DISCHARGING OF INDIVIDUALS SHALL BE AS PER SECTION 105-02 OF THE NYSDOT STANDARD SPECIFICATION.
- F. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THESE HIGHWAYS WILL BE DESIGNATED AS RESTRICTED UNDER THIS CONTRACT.

2. LANE CLOSURES

- A. THE CONTRACTOR SHALL SCHEDULE WORK SO THAT ALL TRAVEL LANES IN EACH DIRECTION ARE OPEN WHEN THE CONTRACTOR'S OPERATIONS ARE CLOSED DOWN OR SUBSTANTIALLY CLOSED DOWN. THE MINIMUM WIDTH OF A TRAVEL LANE SHALL BE 10.0 FT UNLESS OTHERWISE SHOWN IN THE PLANS OR PROPOSAL.
- B. IF, IN THE OPINION OF THE ENGINEER LANE CLOSURES ARE CREATING SIGNIFICANT DELAYS TO TRAFFIC OR ARE CREATING A SAFETY CONCERN DUE TO SLOWED OR STOPPED TRAFFIC. AFFECTED LANE CLOSURES SHALL BE REMOVED AND THE ROADWAY OPENED TO TRAFFIC AS DIRECTED BY THE ENGINEER.

3. WORK AREA COORDINATION

- A. WHEN TWO OR MORE WORK AREAS ARE ADJACENT, OVERLAP, OR ARE IN CLOSE PROXIMITY AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL COORDINATE ALL CONTRACT WORK WITH ANY, UTILITY WORK, SUBCONTRACTOR WORK, PUBLIC MAINTENANCE OPERATIONS OR OTHER CONSTRUCTION ACTIVITIES IN THE AREA TO ENSURE THAT THERE ARE NO WORK ZONE TRAFFIC CONTROL CONFLICTS, SIGNING AND LANE CONTINUITY, AND THAT WORK ZONE TRAFFIC CONTROL IS PER STANDARDS.
- B. ALL VEHICLES, EQUIPMENT, WORKERS AND ACTIVITIES SHALL BE RESTRICTED TO ONE SIDE OF THE ROADWAY AT A TIME, UNLESS OTHERWISE SHOWN IN THE PLANS OR PROPOSAL.
- C. THE CONTRACTOR SHALL COORDINATE ALL CONTRACT WORK WITH ANY ADJACENT PROJECTS TO ENSURE THERE ARE NO WORK ZONE TRAFFIC CONTROL CONFLICTS, SIGNING AND LANE CONTINUITY, AND THAT WORKZONE TRAFFIC CONTROL IS PER STANDARDS.

4. CONES, DRUMS, BARRICADES AND MARKERS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.

ON: FEBRUARY 24, 2017

- A. ALL CHANNELIZING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM OF 2.0 FT MIN. CLEARANCE TO THE TRAVELED WAY UNLESS OTHERWISE SHOWN ON THE PLANS. WHERE POSSIBLE ALATERAL BUFFER SPACE OF 2.0 FT MIN. SHOULD BE PROVIDED BETWEEN THE WORK SPACE AND THE LINE OF DELINEATION DEVICES.
- B. LONGITUDINAL SPACING SHALL BE 40 FT FOR POSTED SPEED LIMITS OVER 40 MPH AND 20 FT FOR SPEED LIMITS 40 MPH AND UNDER. THROUGHOUT THE WORK ZONE, REDUCED SPACING MAY BE REQUIRED AS SHOWN IN THE PLANS, SPECIFICATIONS OR AOBE. INTERSECTIONS AND DRIVEWAYS SHALL BE CHANNELIZED AT 5.0 FT SPACING.
- C. DRUMS OR VERTICAL PANELS (8" x 36" OR 12" x 24") SHALL BE USED DURING THE HOURS OF DARKNESS. "TYPE B" LIGHTS SHALL BE REQUIRED ON THE FIRST DEVICE AND ON THE FIRST DEVICE AFTER EACH INTERSECTION.

5. SIGNS

A. BLANK COVERS USED TO COVER PORTIONS OF EXISTING SIGNS SHALL BE OF A COLOR AND REFLECTORIZED MATERIAL MATCHING THAT OF THE SIGN BEING PARTIALLY COVERED. B. WHERE SHOULDER WIDTHS ARE LIMITED AND SIGNS CAN NOT BE ERECTED BEYOND THE SHOULDER, TEMPORARY SIGNS MAY NEED TO BE MOUNTED ON CONCRETE MEDIAN BARRIER OR BRIDGE PARAPETS, ETC.. PRIOR TO ERECTING THOSE SIGNS THE CONTRACTOR SHALL PROVIDE MOUNTING DETAILS TO AND RECEIVE APPROVAL FROM THE ENGINEER. SIGNS SHALL NOT ENCROACH MORE THAN 4" INTO SHOULDERS USED BY PEDESTRIANS OR BICYCLES. C. SIGNS SHALL BE MOUNTED AS SHOWN IN CHAPTER 6F OF THE MUTCD AND THE NEW YORK STATE SUPPLEMENT.

6. BUMPS

- A. THE CONTRACTOR SHALL TAKE ALL ACTION AS DIRECTED BY THE ENGINEER, TO ELIMINATE BUMPS, WHICH ARE DEFINED AS, A PAVEMENT CONDITION CONSIDERED BY THE ENGINEER TO BE SUFFICIENTLY ABRUPT ENOUGH TO CAUSE CONSIDERABLE DISCOMFORT, CARGO SHIFTING, OR DEFLECTION OF A VEHICLE FROM ITS TRUE COURSE AT PREVAILING DRIVING SPEEDS. ONLY WHEN IT IS NOT POSSIBLE OR FEASIBLE IN THE OPINION OF THE ENGINEER TO ELIMINATE A BUMP, SHALL A BUMP BE ALLOWED TO REMAIN.
- B. BUMPS SHALL BE RAMPED AT A MINIMUM RATE OF. SPEED LIMIT HORIZONTAL TO 1 VERTICAL, (IE; 55 HORIZONTAL TO 1 VERTICAL FOR 55 MPH).
- C. WB-1 BUMP SIGNS SHALL BE PLACED ON ALL APPROACHES TO A BUMP OR DIP CAUSED BY CONSTRUCTION OPERATIONS (IE: ROAD PLATES, MILLED PAVEMENT TERMINATION, ETC...) PER TABLE NY2C-4. NUMEROUS BUMPS OR DIPS SHALL WARRANT THE USE OF W8-8 "ROUGH ROAD" SIGNS INSTEAD OF THE W8-1 SIGN. W8-1 SIGNS SHALL BE SUPPLEMENTED WITH W16-4 "NEXT XXX FEET" PANELS AND POSTED ON THE MAINLINE IN ADVANCE OF THE CONDITION AND REPEATED AT EACH INTERSECTION.
- D. AN OM1-3 MARKER SHALL BE LOCATED RIGHT AT OR IMMEDIATELY IN ASDVANCE OF THE BUMP AND SHALL BE USED IN CONJUNCTION WITH THE W8-1 SIGN, AND EQUIPPED WITH A "TYPE B" WARNING LIGHT.

7. PUBLIC INGRESS AND EGRESS

- A. THE CONTRACTOR SHALL PROVIDE PROPERTY OWNERS WITH PROPER ACCESS AS SHOWN IN THE PLANS AND AOBE, TO THEIR DRIVEWAYS AND SHALL MAINTAIN THEM THROUGH ALL PHASE WORK AREAS AND SHALL DELININEATE THEM BY MEANS OF SIGNS AND CHANNELIZING DEVICES AOBE.
- B. WHERE DIRECT ACCESS TO DRIVEWAYS IS NOT POSSIBLE DUE TO NECESSARY CONSTRUCTION OPERATIONS, THE CONTRCTOR SHALL PLAN ALTERNATE MEANS OF ACCESS AND SUBMIT SUCH PLANS TO THE ENGINEER FOR APPROVAL. PROPERTY OWNERS/OCCUPANTS SHALL HAVE 24 HOUR NOTICE OF ANY CHANGES.
- C. WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED AND FLAGGERS POSTED AT APPROPRIATE LOCATIONS OR AOBE.

8. CONSTRUCTION INGRESS AND EGRESS

A. VEHICLES. MATERIALS AND/OR EQUIPMENT. INCLUDING OUT OF SERVICE SIGNS. SHALL NOT BE PARKED OR STORED WITHIN 30 FT OF A ROADWAY USED BY THE GENERAL PUBLIC. OR ANY OTHER TRAVERSABLE AREAS IN WHICH AN ERRANT VEHICLE MAY STRIKE THE OBJECT.

9. EMERGENCY ACCESS

A. DURING WORK OPERATIONS ON OR NEAR SIDE ROADS AND DRIVEWAYS, THE CONTRACTOR SHALL MAINTAIN ACCESS TO THOSE SIDE ROADS AND DRIVEWAYS FOR EMERGENCY VEHICLES. AOBE. EVEN WHEN THE FACILITY IS CLOSED TO NORMAL TRAFFIC.

10. PAVEMENT MARKINGS

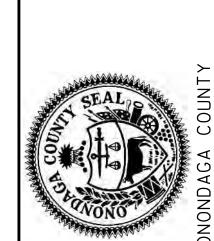
- A. THE CONTRACTOR SHALL PROVIDE PAVEMENT MARKINGS AT ALL TIMES, ON ALL PAVEMENT, WHETHER EXISTING, TEMPORARY OR NEW, UNTIL PERMANENT MARKINGS ARE INSTALLED OR RESTORED. THIS SHALL INCLUDE AT ALL LOCATIONS, EDGE LINES, CENTERLINE, LANE LINES (SOLID OR BROKEN). CHANNELIZING LINES, DOTTED LINES PLUS ANY MARKINGS ORDERED BY THE ENGINEER. ALL MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE MUTCD AND NEW YORK STATE SUPPLEMENT AND SHALL INDICATE ACTUAL CONDITIONS AT ALL TIMES. THESE MARKINGS SHALL BE PAID FOR AS SHOWN IN THE CONTRACT PLANS.
- B. TEMPORARY OR INTERIM PAVEMENT MARKINGS COMPRISED OF TRAFFIC MARKING PAINT SHALL BE REPAINTED AT NO ADDITIONAL COST, WHEN 10% OF THE UNDERLYING PAVEMENT IS VISIBLE THROUGH THE PAVEMENT MARKING OR WHEN THE ENGINEER DEEMS REFLECTIVITY IS INADEQUATE.

11. PEDESTRIANS

- A. WHERE WALKWAYS EXIST AND PEDESTRIANS CAN BE SAFELY MAINTAINED ON THEM, THEN PEDESTRIAN TRAFFIC SHALL BE MAINTAINED ON THEM.
- B. IF THE PEDESTRIAN WALKWAY IS LESS THAN 5.0 FT WIDE AND OVER 200 FT IN LENGTH THE CONTRACTOR SHALL FURNISH A 5.0 FT AREA WHERE WHEELCHAIRS CAN PASS EVERY 200 FT. THESE WALKWAYS SHALL BE A MINIMUM OF 4.0 FT, UNLESS OTHERWISE SHOWN ON THE PLANS.
- C.FOR INSTANCES OF VERY SHORT SHOULDER CLOSURES AND LOW VEHICLE AND OR PEDESTRIAN VOLUMES, IN LIEU OF IMPLEMENTING THE CHANNELIZED PEDESTRIAN WALKWAY AS SHOWN ON THE PLANS, A FLAGGER CAN BE POSTED AT THE BEGINNING OF THE SHOULDER CLOSURE. THE FLAGGER SHALL STOP ALL APPROACHING TRAFFIC AND KEEP SUCH TRAFFIC STOPPED TO ALLOW PEDESTRIANS TO PASS THE WORK AREA, ANOTHER FLAGGER WOULD BE POSTEDTO ASSISTTHE PEDESTRIANS IN THE TRAVERSING OF THE WORK ZONE. WHERE THE LENGTH OF THE SHOULDER CLOSURE, VOLUME OF PEDESTRIAN TRAFFIC, THE VOLUME OF VEHICULAR TRAFFIC OR OTHER FACTORS RENDER THIS TREATMENT INEFFECTIVE, AS DETERMINED BY THE ENGINEER, THE CHANNELIZED PEDESTRIAN WALKWAY SHALL BE IMPLEMENTED.

11. PEDESTRIANS CONTINUED

D. WHERE IT IS DETERMINED BY THE ENGINEER THAT THERE IS A LIKELYHOOD OF PEDESTRIANS LEAVING THE DEDICATED WALKWAY TO CROSS THE ACTIVE LANE OF TRAFFIC, THE CHANNELIZING DEVICES SHALL BE SUPPLEMENTED WITH A R9-30 "NO PEDESTRIAN CROSSING SYMBOL" SIGN TO RESTRICT THE PEDESTRIAN MOVEMENT.



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WORK ZONE TRAFFIC CONTROL NOTES

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GREEN

SCALE: AS SHOWN DATE ISSUED: FEB 2017 DRAWING WZTC-1

PREPARED BY: BARTON & LOGUIDICE, D.P.C.

ON: FEBRUARY 24, 2017

TABLE NY1-A

BARRIER VEHICLE USE REQUIREMENTS
(LONG TERM, INTERMEDIATE TERM, AND SHORT TERM STATIONARY CLOSURES)

		USE REQUIREMENTS 4,5					
CLOSURE TYPE	EXPOSURE CONDITION 1	FDFFWAV	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)				
		FREEWAY	≥ 45 MPH	35-40 MPH	≤ 30 MPH		
	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED ³	REQUIRED ³	REQUIRED ³	OPTIONAL ²		
LANE CLOSURE	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED ³	REQUIRED ³	OPTIONAL ²	OPTIONAL ²		
CHOIL DED OF OCHDE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED ³	REQUIRED ³	OPTIONAL ²	OPTIONAL ²		
SHOULDER CLOSURE	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED ³	OPTIONAL ²	OPTIONAL ²	OPTIONAL ²		

- 1. THE EXPOSURE CONDITIONS DESCRIBED IN TABLE NY1-A ASSUMES THERE IS NO POSITIVE PROTECTION (TEMPORARY TRAFFIC BARRIER) PRESENT. WHERE WORKERS OR HAZARDS ARE PROTECTED BY A TEMPORARY TRAFFIC BARRIER, BARRIER VEHICLES ARE NOT REQUIRED.
- 2. WHERE THE REQUIREMENT IS "OPTIONAL", EITHER A BARRIER VEHICLE OR THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
- 3. REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE BARRIER VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE BARRIER VEHICLE SHALL BE REPOSITIONED ACCORDINGLY. BARRIER VEHICLES PROTECTING NON-TRANSVERSABLE HAZARDS SHALL REMAIN IN PLACE DURING BOTH WORKING AND NON-WORKING HOURS UNTIL THE HAZARD NO LONGER EXISTS. EXCEPTIONS TO THESE REQUIREMENTS MAY BE MADE, AS APPROVED BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE WHERE BARRIER VEHICLE PLACEMENT WOULD BE INEFFECTIVE OR WOULD INTERFERE WITH THE SAFE OPERATION OF TRAFFIC.
- 4. BARRIER VEHICLES ARE NOT REQUIRED FOR MILLING AND/OR PAVING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
- 5. BARRIER VEHICLES ARE NOT REQUIRED FOR FLAGGING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE6C-2) SHALL BE PROVIDED.

TABLE NY1-B SHADOW VEHICLE USE REQUIREMENTS (MOBILE CLOSURES)					
			USE REQUI	REMENTS	
CLOSURE TYPE	EXPOSURE CONDITION	FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIM		
		INCLWAI	≥ 45 MPH	35-40 MPH	≤ 30 MPH
LANE CLOSURE	WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}
SHOULDER CLOSURE	WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}

1. A MOBILE CLOSURE SHALL BE USED FOR ANY WORK ACTIVITY THAT MOVES CONTINUOUSLY OR INTERMITTENTLY ALONG THE TRAVELED WAY OR SHOULDER SLOWER THAN THE PREVAILING SPEED OF TRAFFIC. CHANNELIZING DEVICES ARE NOT USED FOR MOBILE CLOSURES.

- 2. SHADOW VEHICLES SHALL BE EQUIPPED WITH AN APPROVED REAR MOUNTED ATTENUATOR (TRUCK MOUNTED OR TRAILER MOUNTED) FOR THE FOLLOWING MOBILE CLOSURES: LANE CLOSURES ON FREEWAYS, LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 35 MPH OR MORE, SHOULDER CLOSURES ON FREEWAYS, AND SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE.
- 3. FOR MOBILE LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 30 MPH OR LESS AND MOBILE SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 40 MPH OR LESS, SHADOW VEHICLES ARE NOT REQUIRED TO BE EQUIPPED WITH A REAR MOUNTED ATTENUATOR.
- 4. A SHADOW VEHICLE IS USED TO PROTECT EXPOSED WORKERS (ON FOOT OR IN A VEHICLE) AND SHALL BE REQUIRED FOR ALL MOBILE CLOSURES. SHADOW VEHICLE REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE SHADOW VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH.

TABLE 6H-4 FORMULAS FOR DETERMINING TAPER LENGTHS						
SPEED LIMIT (S) (MPH)	TAPER LENGTH (L) (FT.)	L - TADED LENGTH				
(40 MPH) OR LESS	L = WS ² /60	L = TAPER LENGTH W = WIDTH OF OFFSET (FT.) S = PRECONSTRUCTION POSTED SPEED LIMIT (MPH)				
(45 MPH) OR MORE	L = WS					
CTANDADD TARED LENGTHS						

(45 MPH) UR MURE L = WS										
STANDARD TAPER LENGTHS										
LATERAL SHIFT OF TRAFFIC		TEMPORARY TRAFFIC CONTROL ZONE POSTED SPEED LIMIT								
FLOW PATH	(25 MPH)	(30 MPH)	(35 MPH)	(40 MPH)	(45 MPH)	(50 MPH)	(55 MPH)	(60 MPH)	(65 MPH)	(70 MPH)
4	45	60	85	110	180	200	220	240	260	280
5	55	75	105	1 35	225	250	275	300	325	350
6	65	90	125	160	270	300	330	360	390	420
7	75	105	145	190	315	350	385	420	455	490
8	85	120	165	215	360	400	440	480	520	560
9	95	135	185	240	405	450	495	540	585	630
10	105	150	205	270	450	500	550	600	650	700
11	115	165	225	295	495	550	605	660	715	770
12	125	180	245	320	540	600	660	720	780	840

TABLE 6C-3 TAPER LENGTH FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH (L)
MERGING TAPER	L
SHIFTING TAPER	L/2
SHOULDER TAPER	L/3
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT. MAXIMUM
DOWNSTREAM TAPER	100 FT. PER LANE

TABLE 6C-2 LONGITUDINAL BUFFER SPACE					
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	DISTANCE				
25	155 FT.				
30	200 FT.				
35	250 FT.				
40	305 FT.				
45	360 FT.				
50	425 FT.				
55	495 FT.				
60	570 FT.				

645 FT.

	TABLE	NY2	<u>2</u> -A	
PLACEMENT	DISTANCE	FOR	BARRIER	VEHICLES

PRECONSTRUCTION	PLACEMENT DISTANCE (FT.)						
POSTED	BARRIER VEHICLES*						
SPEED LIMIT	(18000	LBS.)	(24000 LBS.)				
(MPH)	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM			
> 55	100 FT.	200 FT.	100 FT.	200 FT.			
45 - 55	100 FT.	200 FT.	85 FT.	165 FT.			
< 45	85 FT.	165 FT.	50 FT.	100 FT.			

* AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619:

BARRIER VEHICLE - VEHICLE USED FOR STATIONARY SHOULDER CLOSURES, LANE CLOSURES, AND OTHER STATIONARY WORK ZONES.

MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE NY2-B PLACEMENT DISTANCE FOR SHADOW VEHICLES

PRECONSTRUCTION POSTED	PLACEMENT DISTANCE (FT.)						
		SHADOW VEHICLES**					
	SPEED LIMIT	(18000	LBS.)	(24000	LBS.)		
	(MPH)	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM		
	> 55	230 FT.	330 FT.	180 FT.	280 FT.		
	45 - 55	180 FT.	280 FT.	150 FT.	250 FT.		
	< 45	100 FT.	200 FT.	100 FT.	200 FT.		
			I	I	I		

* AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619: SHADOW VEHICLE - VEHICLE USED FOR MOBILE OR SHORT DURATION WORK OPERATIONS.

MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE 619-4 FLARE RATES FOR POSITIVE BARRIER

FLARE RATES FOR POSITIVE BARRIER							
	POSTED SPEED LIMIT						
TYPE OF POSITIVE BARRIER	30 MPH	40 MPH	50 MPH	55 MPH	65 MPH		
TEMPORARY CONCRETE BARRIER	8:1	11:1	14:1	16:1	20:1		
BOX BEAM OR HEAVY POST CORRUGATED BEAM 7:1 9:1 11:1 12:1 15:1							

TABLE NY6H-3 ADVANCE WARNING SIGN SPACING

ADVANCE WARNING SIGN SPACING							
	DISTANCE	BETWEE	N SIGNS	SIGN LEGEND			
ROAD TYPE	A (FT.)	B (FT.)	C (FT.)	XX	YY		
URBAN (≤ 30 MPH*)	100	100	100	AHEAD	AHEAD		
URBAN (35-40 MPH*)	200	200	200	AHEAD	AHEAD		
URBAN (≥ 45 MPH*)	350	350	350	1000 FT.	AHEAD		
RURAL	500	500	500	1500 FT.	1000 FT.		
EXPRESSWAY / FREEWAY	1000	1500	2640	1 MILE	√ ₂ MILE		

* PRECONSTRUCTION POSTED SPEED LIMIT

URBAN: (MEETS MORE THAN 1 OF THE FOLLOWING CRITERIA) SIDEWALKS, BICYCLE USAGE, CURBING, CLOSED DRAINAGE SYSTEMS, DRIVEWAY DENSITIES GREATER THAN 24 DRIVEWAYS PER MILE, MINOR COMMERCIAL DRIVEWAY DENSITIES OF 10 DRIVEWAYS PER MILE OR GREATER, MAJOR COMMERCIAL DRIVEWAYS, NUMEROUS RIGHT OF WAY CONSTRAINTS, HIGH DENSITY OF CROSS STREETS, 85TH PERCENTILE SPEEDS OF 45 MPH OR LESS.

RURAL: ANY AREA NOT EXHIBITING MORE THAN ONE OF THE ABOVE CHARACTERISTICS.

EXPRESSWAY: DIVIDED HIGHWAYS FOR TRAFFIC WITH FULL OR PARTIAL CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS AT MAJOR CROSSROADS.

FREEWAYS/INTERSTATE: LOCAL OR INTER REGIONAL HIGH-SPEED, DIVIDED, HIGH-VOLUME FACILITIES WITH FULL OR PARTIAL CONTROL OF ACCESS.

WORK DURATION DEFINITIONS

LONG-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS.

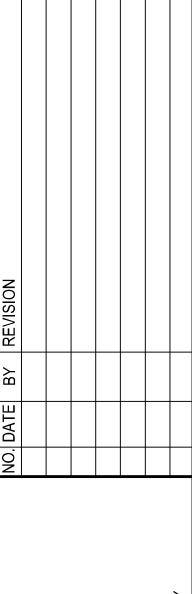
INTERMEDIATE-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.

SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

| MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

WOR	WORK ZONE TRAFFIC CONTROL LEGEND					
SYMBOL	DESCRIPTION					
•••••	ARROW PANEL					
• •	ARROW PANEL, CAUTION MODE					
•••	ARROW PANEL TRAILER OR SUPPORT					
Н	CHANGEABLE MESSAGE SIGN (PVMS)					
•	CHANNELIZING DEVICE					
	CRASH CUSHION/TEMPORARY IMPACT ATTENUATOR					
	DIRECTION OF TEMPORARY TRAFFIC DETOUR					
	DIRECTION OF TRAFFIC					
•	FLAGGER					
•	FLAG TREE					
•	LUMINAIRE					
	PAVEMENT MARKINGS THAT SHALL BE REMOVED FOR A LONG TERM PROJECT					
F	SIGN, TEMPORARY					
	TEMPORARY BARRIER					
•	TEMPORARY BARRIER WITH WARNING LIGHTS					
	TRAFFIC OR PEDESTRIAN SIGNAL					
	TYPE III BARRICADE					
0	WARNING LIGHTS					
	WORK SPACE					
	WORK VEHICLE					
	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR					







ONONDAGA COUNTY
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ONONDAGA COUNTY DEPARTMENT OF
WATER ENVIRONMENT PROTECTION
CITY OF SYRACUSE
ONONDAGA COUNTY

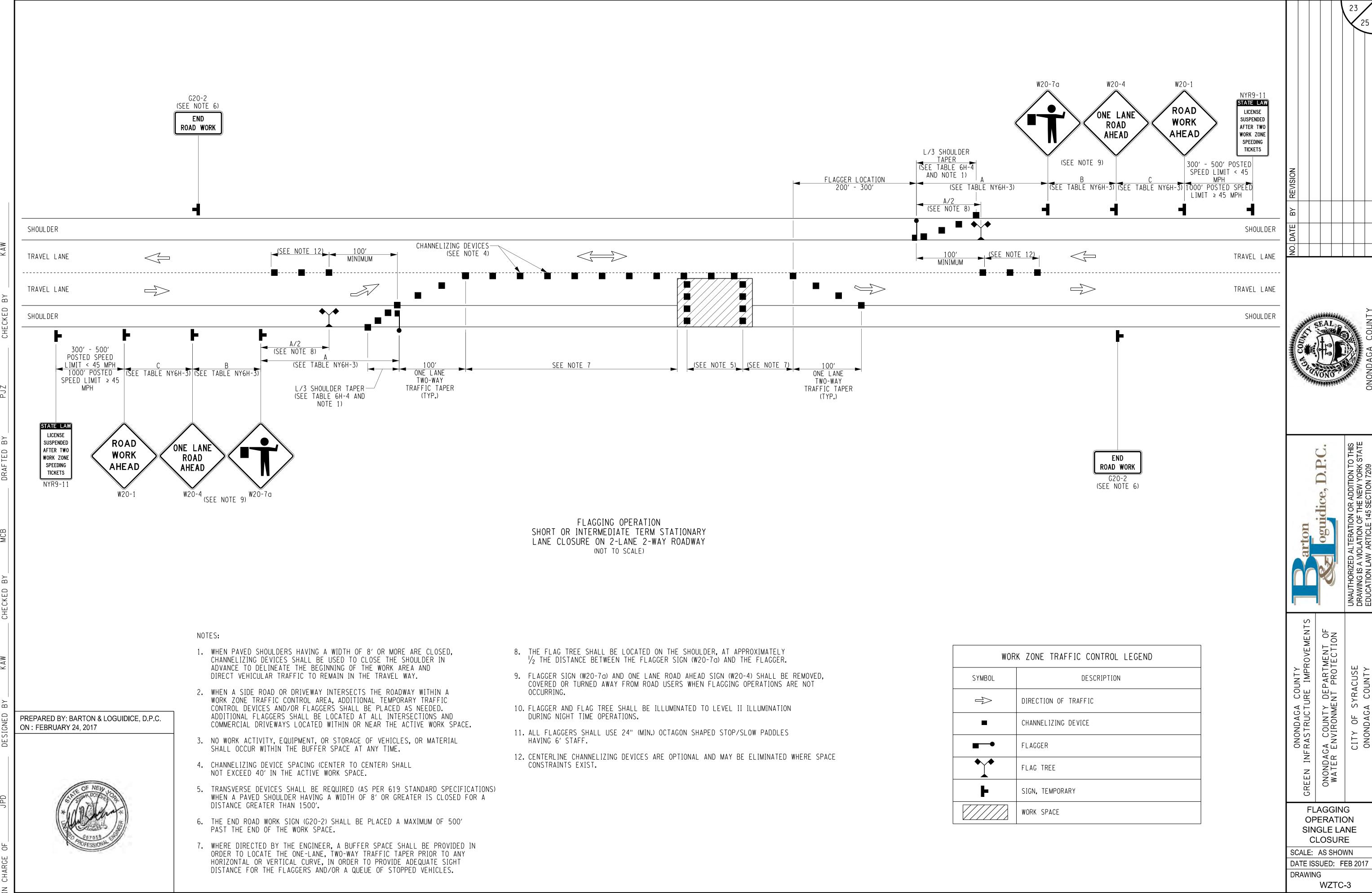
WORK ZONE TRAFFIC CONTROL TABLES AND SYMBOLS

SCALE: AS SHOWN

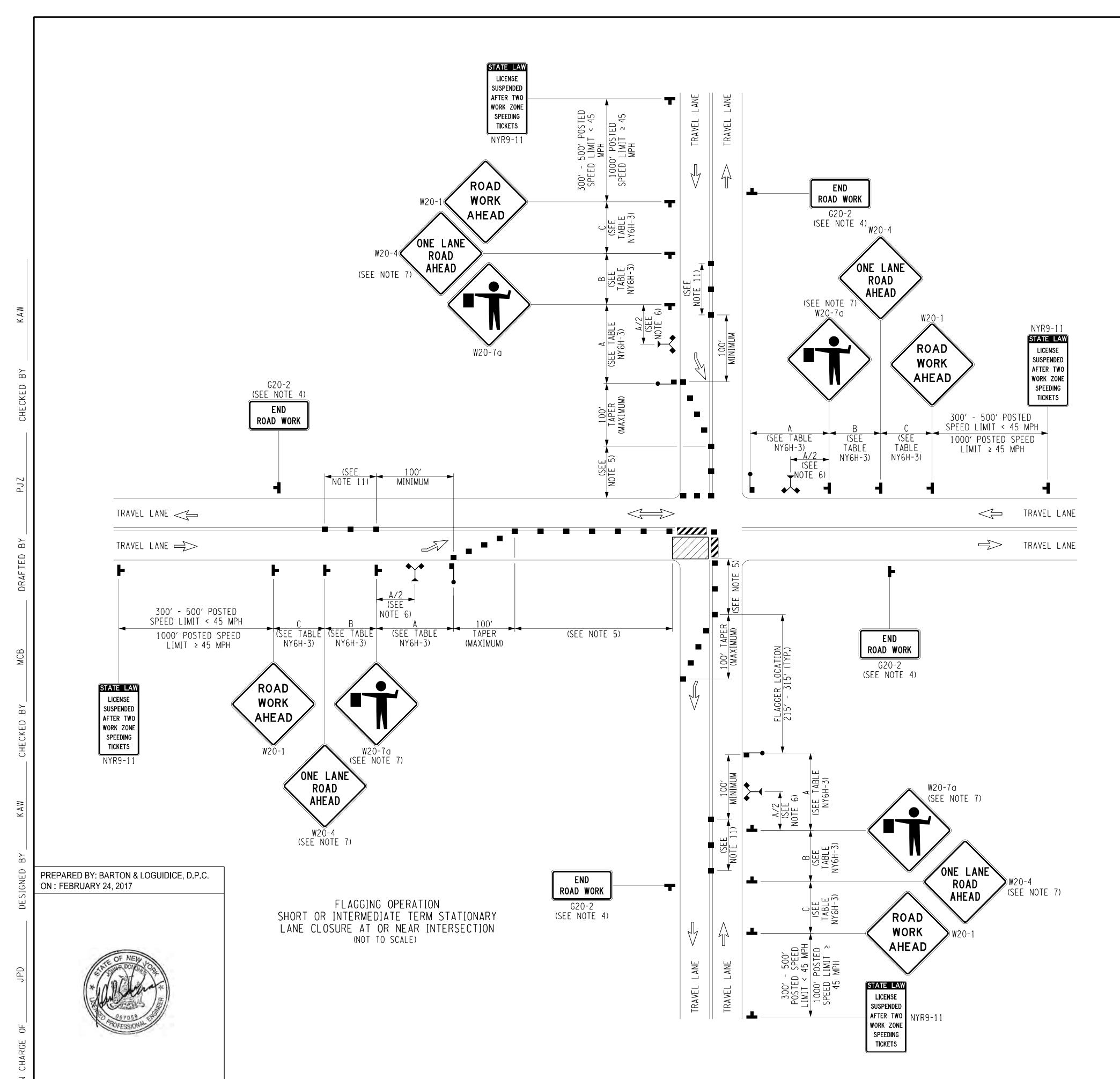
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WZTC-2



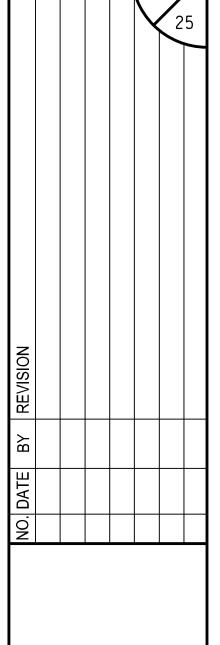




NOTES:

- 1. AT SIGNALIZED INTERSECTIONS, SIGNALS SHALL BE TURNED OFF FOR ANY FLAGGING OPERATIONS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- 2. WHEN PAVED SHOULDERS HAVING A WIDTH OF 8' OR MORE ARE CLOSED, CHANNELIZING DEVICES SHALL BE USED TO CLOSE THE SHOULDER IN ADVANCE TO DELINEATE THE BEGINNING OF THE WORK AREA AND DIRECT VEHICULAR TRAFFIC TO REMAIN IN THE TRAVEL
- 3. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 40' IN THE ACTIVE WORK SPACE.
- 4. THE END ROAD WORK SIGN (G20-2) SHALL BE PLACED A MAXIMUM OF 500' PAST THE END OF THE WORK SPACE.
- 5. WHERE DIRECTED BY THE ENGINEER, A BUFFER SPACE SHALL BE PROVIDED IN ORDER TO LOCATE THE ONE-LANE, TWO-WAY TRAFFIC TAPER PRIOR TO ANY HORIZONTAL OR VERTICAL CURVE, IN ORDER TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGERS AND/OR A QUEUE OF STOPPED VEHICLES.
- 6. THE FLAG TREE SHALL BE LOCATED ON THE SHOULDER, AT APPROXIMATELY $\frac{1}{2}$ THE DISTANCE BETWEEN THE FLAGGER SIGN (W20-7a) AND THE FLAGGER.
- 7. FLAGGER SIGN (W20-7a) AND ONE LANE ROAD AHEAD SIGN (W20-4) SHALL BE REMOVED, COVERED OR TURNED AWAY FROM ROAD USERS WHEN FLAGGING OPERATIONS ARE NOT OCCURRING.
- 8. FLAGGER AND FLAG TREE SHALL BE ILLUMINATED TO LEVEL II ILLUMINATION DURING NIGHT TIME OPERATIONS.
- 9. ALL FLAGGERS SHALL USE 24" (MIN.) OCTAGON SHAPED STOP/SLOW PADDLES HAVING 6' STAFF.
- 10. ADDITIONAL FLAGGERS SHALL BE LOCATED AT ALL INTERSECTIONS AND COMMERCIAL DRIVEWAYS LOCATED WITHIN OR NEAR THE ACTIVE WORK AREA.
- 11. CENTERLINE CHANNELIZING DEVICES ARE OPTIONAL AND MAY BE ELIMINATED WHERE SPACE CONSTRAINTS EXIST.
- 12. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME.
- 13. FOR PEDESTRIAN DETOUR ACCOMMODATIONS REFER TO THE STANDARD SHEETS TITLED "SIDEWALK DETOUR OR DIVERSION" AND "CROSSWALK CLOSURE AND PEDESTRIAN DETOUR".

WORK ZONE TRAFFIC CONTROL LEGEND				
SYMBOL	DESCRIPTION			
	DIRECTION OF TRAFFIC			
	CHANNELIZING DEVICE			
-	FLAGGER			
• • • • • • • • • • • • • • • • • • • •	FLAG TREE			
F	SIGN, TEMPORARY			
	TYPE III BARRICADE			
	WORK SPACE			





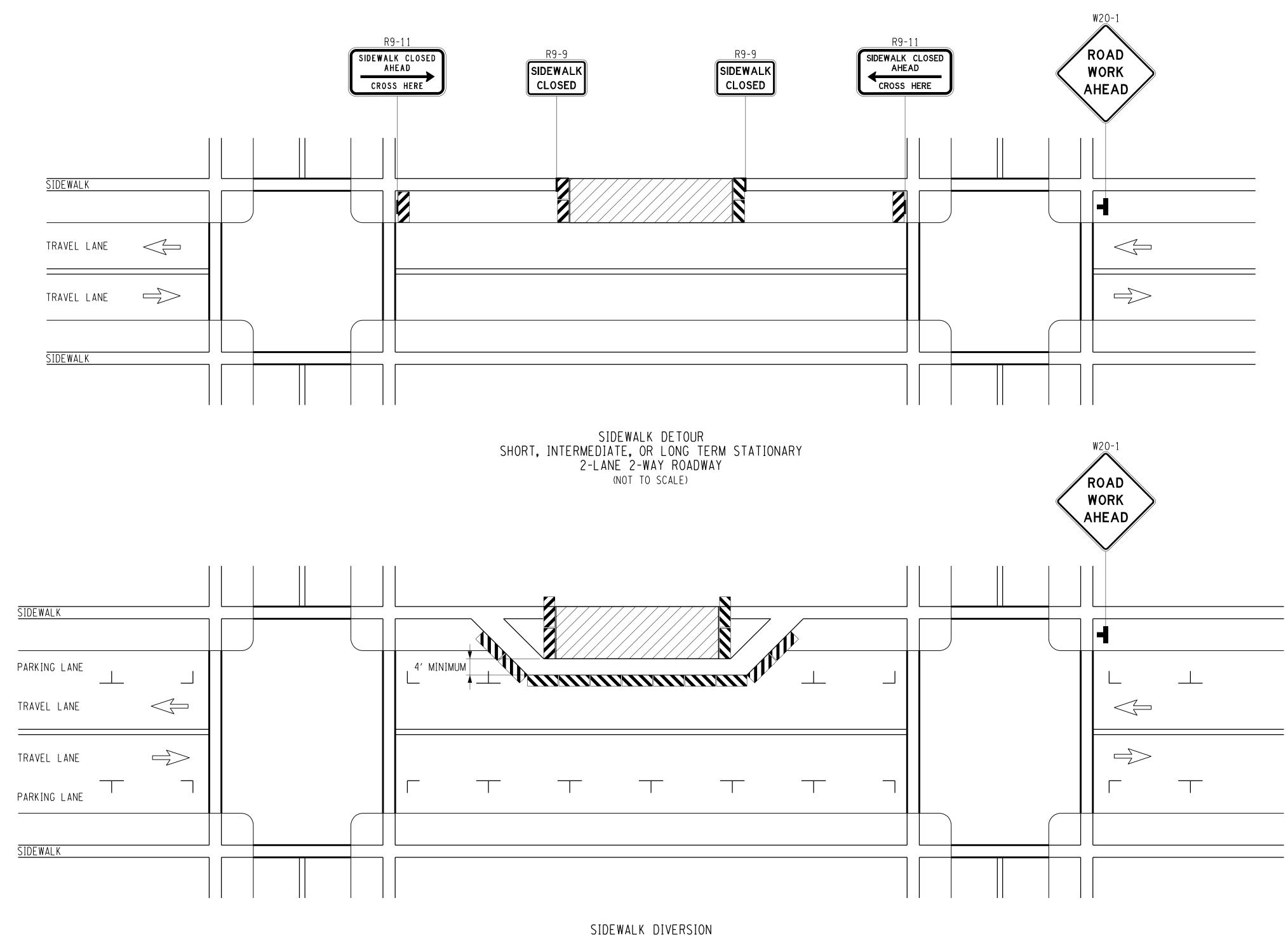
ONONDAGA COUNTY INFRASTRUCTURE IMPROVEMENTS ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION CITY OF SYRACUSE ONONDAGA COUNTY GREEN

FLAGGING **OPERATION** LANE CLOSURE AT INTERSECTION

SCALE: AS SHOWN

DATE ISSUED: FEB 2017 DRAWING WZTC-4





SHORT, INTERMEDIATE, OR LONG TERM STATIONARY
2-LANE 2-WAY ROADWAY
(NOT TO SCALE)

PREPARED BY: BARTON & LOGUIDICE, D.P.C. ON: FEBRUARY 24, 2017



WORK ZONE TRAFFIC CONTROL LEGEND				
SYMBOL	DESCRIPTION			
	DIRECTION OF TRAFFIC			
+	SIGN, TEMPORARY			
	TYPE III BARRICADE			
	WORK SPACE			

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 FACILITY.
- 2. WHERE HIGH SPEEDS ARE ANTICIPATED, A TEMPORARY TRAFFIC BARRIER AND TEMPORARY IMPACT ATTENUATOR SHOULD BE USED TO SEPARATE THE TEMPORARY SIDEWALKS FROM VEHICULAR TRAFFIC.
- 3. ONLY THE WORK ZONE TRAFFIC CONTROL DEVICES RELATED TO PEDESTRIANS ARE SHOWN. OTHER DEVICES, SUCH AS LANE CLOSURE SIGNING OR ROAD NARROWS SIGNS (W5-4), MAY BE USED TO CONTROL VEHICULAR TRAFFIC.
- 4. FOR NIGHTTIME CLOSURES, FLASHING WARNING LIGHTS SHALL BE USED ON BARRICADES SUPPORTING SIGNS AND CLOSING SIDEWALKS.
- 5. SIGNS SUCH AS KEEP RIGHT (LEFT) SHALL BE PLACED ALONG A TEMPORARY SIDEWALK, WHERE APPLICABLE AND ACCORDING TO AMERICAN WITH DISABILITIES STANDARDS, TO GUIDE OR DIRECT PEDESTRIANS.
- 6. TYPE II BARRICADES MAY BE SUBSTITUTED FOR TYPE III BARRICADES AS PER 619 NYSDOT STANDARD SPECIFICATIONS.

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ONONDAGA COUNTY GREEN INFRASTRUCTURE IMPROVEMEN

ONONDAGA COUNTY DEPARTMENT O WATER ENVIRONMENT PROTECTION

SIDEWALK DETOUR OR **DIVERSION**

SCALE: AS SHOWN DATE ISSUED: FEB 2017 DRAWING

WZTC-5