

- 1. STONE SIZE USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. 2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- 3. THICKNESS NO LESS THAN 6".
- 4. WIDTH 12-FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24-FOOT IF SINGLE ENTRANCE TO SITE.
- 5. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. 6. SURFACE WATER - CULVERTS SHALL BE INSTALLED TO DIVERT ALL SURFACE WATER ACROSS CONSTRUCTION ENTRANCES. CULVERT PIPES SHALL BE SIZED APPROPPRIATLY FOR THE SIZE OF THE DITCH BEING CROSSED. A MOUNTABLE BERM WITH 5:1 SLOPES SHALL BE INSTALLED TO PROVIDE PROPER COVER FOR CULVERT PIPES WHERE NEEDED.
- 7. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. SEDIMENT ON PUBLIC ROADWAYS MUST BE REMOVED IMMEDIATELY.
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT. THE CULVERT PIPE SHAL BE INSPECTED WEEKLY. REPLACE DAMAGED PIPES WITHING 8 HOURS OF DISCOVERY.

STABILIZED CONSTRUCTION ENTRANCE N.T.S









TREE/PLANTING PROTECTION BARRIER



NOTES:

- REQUIRED.
- ACCOMMODATE THE LARGEST EQUIPMENT USED.
- MAT (IF NECESSARY).

TYPICAL AIR BRIDGE WITH TIMBER MATS DETAIL N.T.S.



1. TEMPORARY ACCESS ROAD: 18" NYSDOT TYPE 2 CRUSHED STONE PLACED ON MIRAFI 500X OR EQUIVALENT. 2. REMOVE ALL STONE AND MIRAFI ONCE ACESS ROAD USE IS COMPLETE.

3. BOX OUT MATERIAL TO BE REPLACED. 4" TOPSOIL AT SURFACE. SEED AND MULCH.



SECTION A-A

1. ADDITIONAL TIMBER MATS CAN BE PUT SIDE BY SIDE IF EXTRA WIDTH IS

2. TIMBER MATS TYPICALLY CONSTRUCTED OF HARDWOOD: MUST

3. ROCK PADS OR CRUSHED STONE SHALL BE USED AT ENTRRANCE TO THE TIMBER



NOTES:

1. ADDITIONAL MATS CAN BE PUT SIDE BY SIDE IF EXTRA WIDTH IS REQUIRED.

- 2. EQUIPMENT MAT TYPICALLY CONSTRUCTED OF HARDWOOD: MUST ACCOMMODATE THE
- LARGEST EQUIPMENT USED. 3. ROCK PADS OR CRUSHED STONE SHALL BE USED AT ENTRANCE TO THE EQUIPMENT PADS (IF
- NECESSARY).
- 4. GEOTEXILE MATERIAL SHALL BE INSTALLED UNDER, AROUND THE SIDE, AND AFFIXED TO THE TOP OF THE PROPOSED BRIDGE TO MINIMIZE SILTATION INTO THE WATERBODY.

TEMPORARY EQUIPMENT CROSSING - TIMBER MAT BRIDGE DETAIL N.T.S.









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		CK:	D.G.	FILE: S:\job\Energy East\2016 Projects\16-E056\DWG\			
		APP:	M.P.	PAGE:			
		SCALE:	N.T.S.	SH 23 0			
DESCRIPTION	APP.	DATE:	11/7/2017				



- 1. WATERBARS ARE TO BE CONSTRUCTED AT SPACING AS INDICATED IN WATERBAR SPACING GUIDELINE DETAIL.
- 2. WATER SHALL BE DIVERTED OFF THE DISTURBED RIGHT-OF-WAY AT AN OUTSLOPE OF THREE TO FIVE PERCENT BY CONSTRUCTING WATERBARS ACCORDING TO THE FOLLOWING PROCEDURE:
- AT THE PROPOSED WATERBAR INTERCEPTOR LOCATION ESTABLISH A HORIZONTAL CONTOUR LINE (USING A POCKET TRANSIT OR HAND HELD LEVEL) WHICH EXTENDS COMPLETELY ACROSS THE DISTURBED RIGHT-OF-WAY. THIS LINE WILL ALWAYS BE PERPENDICULAR TO THE DIRECTION OF WATER FLOW AND SHOULD BE PARALLEL TO MAP CONTOURS SHOWN ON THE PLAN DRAWINGS.
- 4. DETERMINE WHICH SIDE OF THE RIGHT-OF-WAY IS BEST SUITED FOR THE WATERBAR OUTLET (EVALUATE VEGETATION DENSITY, LOCAL TOPOGRAPHY, ETC.) AND DEVIATE WATERBARS AWAY FROM THE HORIZONTAL CONTOUR LINE SLIGHTLY DOWNWARD TOWARD THE SELECTED OUTLET SIDE MAINTAINING A THREE TO FIVE PERCENT SLOPE.
- 5. WHEN OUTLETING NEAR WATER BODIES, STREAMS, DITCHES AND CROP FIELDS, A SEDIMENT BARRIER SHALL BE PLACED ON THE OUTLET END OF THE INTERCEPT WATERBAR.
- PERMANENT TRENCH BREAKER SANDBAGS SHALL NOT BE FILLED WITH TOPSOIL..
   SPACING SHOWN ARE RECOMMENDED GUIDELINES. RG&E REPRESENTATIVE MAY ADJUST SPACING IN THE
- FIELD. 8. ONE TRENCH BREAKER IS REQUIRED AT ALL STREAM BANKS AND AT WETLAND BOUNDARIES.

WATERBAR CONSTRUCTION DETAIL & SPACING GUIDLINE







NOTES:

A.) INSTALLATION REQUIREMENTS PLACE SILT FENCE:

I.) BETWEEN DISTURBED AREAS AND DOWNSLOPE OF ENVIRONMENTAL RESOURCE AREAS.2.) AT THE BASE OF ALL SLOPES NEXT TO WETLANDS.

3.) AT THE BASE OF ALL SLOPES NEXT TO ROADS.

4.) AT THE INLET AND OUTLET OF OPEN DRAINAGE STRUCTURES AS NECESSARY.

5.) APPROXIMATELY 6 FEET BEYOND THE TOE OF THE SLOPE TO GIVE SEDIMENT A PLACE TO COLLECT.

6.) GENERAL NOTES

a.) USE SANDBAGS OR BACKFILL TO KEY IN AREAS WHERE IT IS NOT FEASIBLE TO TRENCH

THE SILT FENCE (LEDGES, ROCKY SOIL, LARGE TREE ROOTS, ETC.)

b.) SILT FENCE INSTALLATION REQUIREMENT MAY CHANGE TO ADAPT TO FIELD

CONDITIONS. B.) MAINTENANCE

I .) INSPECT SILT FENCE DAILY IN ACTIVE AREAS OF ACTIVE CONSTRUCTION & FOLLOWING EACH MAJOR STORM EVENT.

2.) REPAIR OR REPLACE SILT FENCE AS NEEDED AND BY THE END OF THE WORK DAY.3.) REMOVE ACCUMULATED SEDIMENTS TO AN UPLAND AREA AS NEEDED.

SILT FENCE DETAIL

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		CK:	D.G.	FILE: S:\job\Energy East\2016 Projects\16-E056\DWG\			
		APP:	M.P.	PAGE: REV:			
		SCALE:	N.T.S.	SH 24 0			
DESCRIPTION	APP.	DATE:	11/7/2017				



- 1. REMOVE TOPSOIL FROM THE TRENCH, SPOIL STORAGE AND WORK AREAS. STORE TOPSOIL ONE OR BOTH SIDES OF THE RIGHT-OF-WAY ADJACENT TO THE STRIPPED AREA.
- 2. EXCAVATE TOPSOIL AND STORE ON SPOIL SIDE ADJACENT TO THE TRENCH. ALLOW FOR AT
- LEAST A TWO FOOT SEPARATION BETWEEN THE TOPSOIL PILE AND TRENCH SPOIL PILE. 3. IN DETAIL "B" AN ALTERNATE METHOD SHOWS THE TOPSOIL PILED TO THE FAR EDGE OF THE
- WORKING SIDE. THIS METHOD ENSURES THAT THERE IN NO TOPSOIL AND SUBSOIL MIXING.
- 4. THE RIGHT-OF-WAY WIDTHS MAY VARY DEPENDING ON THE THICKNESS OF THE TOPSOIL LAYER BEING STRIPPED.
- 5. THIS TYPE OF STRIPPING IS USED IN AGRICULTURAL FIELDS AND IN IMPROVED PASTURE AREAS. 6. WHEN THIS TYPE OF STRIPPING IS USED THE AGRICULTURAL FIELDS, FOLLOW THE AGRICULTURAL MITIGATION MEASURES WITH RESPECT TO DRAINAGE MITIGATION BACKFILL, ROCK PICKING. DECOMPACTION AND TRENCH CROWNING AS OUTLINE IN THE AGRICULTURAL MITIGATION
- SECTION OF ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION STANDARDS AND PRACTICES. 7. THIS STRIPPING TYPE CAN BE USED IN WETLAND AREAS THAT ARE UNDERLAIN BY BEDROCK AT A
- DEPTH OF 6 TO 15 INCHES. THE TOPSOIL AND SUBSOIL WILL BE PILED, IN SEPARATE PILES, ON THE SPOIL SIDE OF THE RIGHT-OF-WAY. THIS METHOD WOULD PRESERVE TOPSOIL DURING TRENCHING AND BLASTING ACTIVITIES.

### FULL WIDTH TOPSOIL STRIPPING DETAIL



- ON DETAIL.
- 3. INSTALL SILT FENCE PRIOR TO STOCKPILING OF MATERIAL. REPLACE ANY SILT FENCE REMOVED FOR VEHICULAR ACCESS AFTER EACH WORK DAY. 4. APPLY A TEMPORARY SEED MIX AND MULCH WHEN PILE WILL REMAIN FOR
- 14 DAYS OR MORE.

TEMPORARY STOCKPILE N.T.S.



<u>NOTES</u>

- DETAIL "A" 1. REMOVE TOPSOIL FROM OVER TRENCH AREA AND PLACE IT NEAR THE FAR EDGE OF SPOIL SIDE
- OF UNDISTURBED TOPSOIL. 2. DIG TRENCH AND PLACE DITCH SPOIL BETWEEN THE STRIPPED TOPSOIL PILE AND THE TRENCH.
- 3. KEEP AT LEAST TWO FOOT DISTANCE BETWEEN THE SPOIL AND STORED TOPSOIL PILE TO AVOID MIXING.
- 4. THIS TYPE OF STRIPPING IS USED IN WETLANDS TO SEGREGATE TOPSOIL FROM SUBSOIL TO PRESERVE THE ROOT MASS IN THE TOPSOIL LAYER. DETAIL "B"
- 1. REMOVE TOPSOIL FROM OVER TRENCH AREA AND PLACE IT NEXT TO THE TRENCH LINE ON THE WORKING SIDE OF THE TIGHT-OF-WAY.
- 2. DIG TRENCH AND PLACE DITCH SPOIL ON SPOIL SIDE OF RIGHT-OF-WAY NEXT TO TRENCH. 3. THIS METHOD IS USED IN WETLAND WHERE THERE ARE RESTRICTED RIGHT-OFWAY WIDTHS. WHEN PILING THE TOPSOIL NEXT TO THE DITCH, IT EFFECTIVELY REDUCES RIGH-OF-WAY WIDTH AND GIVE YOU A PLACE TO FABRICATE PIPE. THIS METHOD IS A FIELD CALL AND DEPENDS ON SOIL STABILITY.

### DITCH LINE STRIPPING DETAIL FOR WETLAND AREAS



NOTES:

- 1. TEMPORARY TRENCH BREAKERS WILL BE INSTALLED TO PROVIDE CROSSING AS NECESSARY FOR PROPERTY OWNERS, FARMERS AND WILDLIFE OR TO CURTAIL THE FLOW OF WATER ALONG THE DITCH, IN AREAS OF SLOPE.
- 2. TEMPORARY TRENCH BREAKERS WILL BE MAINTAINED DURING THE VARIOUS STAGES OF CONSTRUCTION AND WILL BE REMOVED IMMEDIATELY PRIOR TO LOWERING-IN OPERATIONS.
- 3. ANY PONDED WATER BEHIND THE SOFT PLUG SHALL BE PUMPED OUT OF THE DITCH BEFORE THE REMOVAL OF THE SOFT PLUG.
- 4. TEMPORARY SLOPE BREAKERS SHOULD BE INSTALLED IN THE SAME LOCATION AS THE TRENCH BREAKERS TO DIVERT WATER OFF OF THE RIGHT-OF-WAY.

TEMPORARY TRENCH BREAKERS - SOFT PLUGS DETAIL





# NOTES:

- 1. THIS METHOD CAN BE USED TO REDUCE THE RIGHT-OF-WAY WIDTH REQUIREMENTS FOR STOCKPILING EXCAVATED SOILS AND THEREBY REDUCE THE AMOUNT OF CLEARING AND GRADING FOR CONSTRUCTION.
- 2. THIS METHOD MAY BE USED IN THE FOLLOWING AREAS:
- a. BRUSH LANDS
- b. FORREST LANDS c. NATIVE PASTURE

SEGREAGATION.

d. WETLANDS WHERE SEVERELY SATURATED SOILS OR STANDING WATER HINDER EFFECTIVE

## NO TOPSOIL STRIPPING DETAIL





## PERMANENT TRENCH BREAKER DETAIL

# 12" TYPICAL 24" AG LANDS VARIES SANDBAGS VARIES NOTE 5 GAS PIPE 6" BENTONITE KEY ----INTO EXISTING GRADE **PROFILE VIEW** GAS MAIN BENTONITE SEAL NOTE 4 6" BENTONITE KEY INTO EXISTING GRADE SANDBAG BARRIER "FORMWORK" TYP. SECTION A-A

# PERMANENT TRENCH BREAKER WITH BENTONITE SEAL DETAIL

### WNER ENGINEEF PPROVAL STAMP PE STAMP CONFIDENTIAL, P **YSEG** ACCEPTED BY OE: /ING PREPARED B 45 HENDRIX ROAD WEST HENRIETTA, NY 14586 PHONE: (585) 340-7540 FAX: (585) 340-7541 REV. DATE

- 3. SAND BAG BARRIER WIDTH SHALL BE MINIMUM 1 BAG WIDE AND/OR AS FIELD DETERMINED TO PROVIDE STABILITY.
- SURROUND THE PIPE AND FILL THE VOID FROM BOTTOM OF THE TRENCH TO A HEIGHT 6" ABOVE THE LEVEL OF IMPORTED PADDING MATERIAL WHICH IS INSTALLED ON THE EXTERIOR SIDE OF THE SANDBAG BARRIER IN THE WETLAND ZONE.
- 5. AFTER BENTONITE PLACEMENT, INSTALL SAND BAGS ON TOP OF THE PERMANENT TRENCH BREAKER AND BENTONITE SEAL TO THE REQUIRED HEIGHT PER DETAIL AND BACKFILL EXTERIOR SIDE OF SAND BAG BARRIERS.

- NOTES: 1. CONSTRUCT ON SLOPING TERRAIN.
- 2. INSTALL AS DITCH IS COMPLETED, AND LATER MODIFY TO ACCOMMODATE
- PIPE INSTALLATION. 3. PRIOR TO LOWERING IN PIPE, REMOVE ALL DECOMPOSABLE MATERIAL
- AND LARGE ROCKS. 4. BREAKERS MAY BE COMPOSED OF SANDBAGS, OR OTHER APPROVED MATERIAL. 5. PERMANENT TRENCH BREAKER SANDBAGS SHALL NOT BE FILLED WITH TOPSOIL. 6. TRENCH BREAKERS SHALL BE PLACED IN ACCORDANCE WITH THE SPACING REQUIREMENTS FOR SLOPE BREAKERS AT A MINIMUM.
- 7. PERMANENT TRENCH BREAKERS ARE USUALLY INSTALLED JUST UPSLOPE OF PERMANENT SLOPE BREAKERS AND HAVE THE SAME SPACING REQUIREMENTS.
- 8. ONE IMPERVIOUS TRENCH BREAKER IS REQUIRED AT ALL STREAM BANKS AND AT ALL WETLAND BOUNDARIES.

- 1. PERMANENT TRENCH BREAKER WITH BENTONITE SEAL IS INTENDED TO PROHIBIT WATER FLOW THROUGH BREAKER.
- 2. PERMANENT TRENCH BREAKER WITH BENTONITE SEAL TO BE INSTALLED AT EDGE OF WETLANDS AND STREAMS.
- 4. BENTONITE IS TO BE INSTALLED IN THE VOID SPACE BETWEEN THE SANDBAG BARRIER "FORMWORK" IN SUCH A MANNER TO COMPLETELY



- WATER SHALL BE DIVERTED OFF THE GRADED RIGHT-OF-WAY AT A SLOPE OF 5
- PERCENT BY CONSTRUCTING BERMS ACCORDING TO THE FOLLOWING PROCEDURE
- 1. THE HORIZONTAL CONTOUR LINE ACROSS THE ENTIRE RIGHT-OF-WAY WIDTH WILL BE ESTABLISHED AT EACH DIVERSION BERM. THE HORIZONTAL CONTOUR LINE WILL BE
- PERPENDICULAR TO THE DIRECTION OF FLOW. A SURVEYORS LEVEL OR HAND LEVEL WILL BE USED TO LOCATE THE CONTOUR LINE.
- 2. CHANNEL THE FLOW TO THE SIDE OF THE GRADED RIGHT-OF-WAY TO AN AREA OF GOOD VEGETATIVE COVER AND TOPOGRAPHY. ALIGN THE BERM TO FLOW WATER WITH A 5 PERCENT GRADE.

DIVERSION SWALES/BERMS N.T.S.







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			SCALE:	N.T.S.	SH 25 0			
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- 1. USE DAM AND PUMP METHOD ON WATER COURSES WITH LIMITED STREAM FLOW TO PREVENT SEDIMENTATION AND INTERRUPTION OF STREAM FLOW DURING CONSTRUCTION, IF FISH PASSAGE IS A CONCERN, THIS METHOD IS NOT APPROPRIATE.
- 2. SCHEDULE CONSTRUCTION DURING LOW FLOW PERIOD, IF POSSIBLE AND INSTALL AN OIL
- ABSORBENT BOOM ACROSS STREAM PRIOR TO IN-STREAM ACTIVITY.
  SET UP PUMP, HOSE AND OIL ABSORBENT BOOMS FOR SILL CONTAINMENT AS SHOWN, OR USE PRACTICAL ALTERNATIVES, PUMP SHOULD HAVE TWICE THE PUMPING CAPACITY OF ANTICIPATED FLOW. HAVE STANDBY PUMP ON SITE. DEPENDING ON STREAM FLOW, DIG SUMP HOLE TO CONCENTRATE WATER AT INTAKE.
- INSTALL UPSTREAM DAM COMPOSED OF SANDBAGS, METAL PLATING OF COMBINATION OF BOTH. INSTALL DOWNSTREAM DAM, IF REQUIRED, TO KEEP STREAM BED DRY,
- AFTER DAMS ARE IN PLACE, IT MAY BE NECESSARY TO USE ADDITIONAL PUMPS TO HANDLE STREAM FLOW.
- 6. EXCAVATE TRENCH AND LOWER IN PIPE UNDER HOSE, MOVE HOSE AS REQUIRED OF
- DISCONNECT, IF TEMPORARY FLOW BLOCKAGE IS ACCEPTABLE. BACKFILL TRENCH. 7. DISMANTLE DOWNSTREAM DAM, THE UPSTREAM DAM. KEEP PUMP RUNNING TO MAINTAIN STREAM FLOW.
- BACKFILL MATERIAL WILL CONSIST OF IMPORTED CLEAN STONE OR APPROVED EXCAVATED STREAMBED MATERIAL. THE UPPER ONE-FOOT AREA OF TRENCH WILL BE FILLED WITH STONE LARGE ENOUGH TO PREVENT STREAMBED SCOURING DURING HIGH WATER FLOW CONDITIONS.
- 9. RESTORE STREAM BANKS AND APPROACHES FOR A MINIMUM DISTANCE OF AT LEAST 50 FEED FROM THE STREAM EDGES AND PERMANENTLY STABILIZE WITHIN 1 DAY OF RESTORATION.

DAM AND PUMP AROUND STREAM CROSSING



- IN WETLANDS THAT ARE UNSTABLE, MATS MAY BE PLACED ON TOP OF EACH OTHER FOR ADDED STABILITY.
- GEOTEXTILE MATERIAL CAN BE PLACED BENEATH THE WOODEN MATS TO PREVENT MUD FLOWING UP THROUGH THE MATS. GEOTEXTILE MATERIAL PLACED UNDER THE WOODEN MATS DECREASES THE SUCTION ON MATS DURING REMOVAL AT WETLAND CLEAN UP AND RESTORATION.
   WHEN APPROPRIATE THE COMPANY MAY BE ABLE TO USE
- 5. WHEN APPROPRIATE, THE COMPANY MAY BE ABLE TO USE INTERLOCKING WOODEN MATS OR AN INTERLOCKING, DURABASE, COMPOSITE MAT SYSTEM AS A SUBSTITUTE FOR THE STANDARD TIMBER MAT ROAD.

WETLAND ACCESS ROAD CONSTRUCTION TIMBER MAT ROAD DETAIL



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	DESCRIPTION		APP.	DATE:	11/7/2017				



- 1. WIRE WILL BE SIMILAR TO EXISTING FENCE.
- 2. GATE OPENING TO BE LARGE ENOUGH TO ACCOMMODATE THE VEHICLES AND CONSTRUCTION EQUIPMENT NECESSARY TO GO THROUGH FENCE LINE.
- 3. GATE MAY BE UPGRADED TO PERMANENT AFTER PIPELINE CONSTRUCTION OF REMOVED
- DEPENDING ON COMPANY AND LANDOWNER REQUIREMENTS.
- 4. TWISTED WIRE GATE STAYS MAY BE SUBSTITUTED FOR WOODED GATE STAYS.

## TYPICAL TEMP. CONST. FENCE GATE DETAIL



NOTES:

1. BRACES AND TRUSS RODS SHALL BE USED AT ALL CORNERS.

2. SONOTUBE OR EQUIVALENT REQUIRED FOR ALL VERTICAL FOUNDATIONS.

CHAIN LINK FENCE



# TYPICAL PERMANENT FENCE DETAIL - ELECTRIC WIRE



CHAIN LINK PERSONNEL GATE





TYPICAL PERMANENT FENCE DETAIL - BARBED WIRE



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	DESCRIPTION		APP.	DATE:	11/7/2017				



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			APP:	M.P.	PAGE:		
			SCALE:	N.T.S.	SH 28 0		
DESCRIPTION		APP.	DATE:	11/7/2017			

PER SPEC. 3000.

F LIND TO 0.237 W/ TIG DAIL
PE PUP, API 5L GR X-52, 0.25" WALL, CS, WELD D (12" LG)
2E PUP, API 5L GR B, 0.237" WALL, (12" LG)
° ELBOW, LG RAD, WELD END, ASTME A, 106 R B, 0.237'' WALL
ре, Арі 5l, Gr b, 0.237'' Wall
JRB BOX, FRAME & COVER
DDCO CLOSURE CAP, ANSI 600 W/ SAFETY



4'-0"

2. REINFORCED BARS SHALL BE GRADE 60, STEEL.

1. MINIMUM CONCRETE STRENGTH AT 28 DAYS SHALL BE

4000 PSI (USE CLASS B CONCRETE) ALL CONCRETE WORK

ADJUSTABLE PIPE SUPPORT DETAIL NOT TO SCALE

PROPOSED PIPE









- 1. REPLACEMENT DRAIN LINE TO BE AASHTO M252 DRAIN TUBING: PERFORATED POLYETHYLENE (PLASTIC). PERFORATED, CORRUGATED SINGLE WALL, WHERE SLEEVED THROUGH THE PIPE; AND DOUBLE WALLED, CORRUGATED EXTERIOR/SMOOTH INTERIOR, AASHTO M252 WHERE EXPOSED AND RESTING ON SUPPORT BEAM.
- 2. IF LENGTH OF REPAIR EXCEEDS 20 FT. DUE TO AN OBLIQUE CROSSING, THE COMPANY NEEDS TO RECONFIGURE THE DRAIN LINE CROSSING TO A RIGHT ANGLE TO SHORTEN THE REPAIR LENGTH.
- 3. IF SOLID STEEL OR SCHEDULE 80 PVC PIPE IS USED, TWO ROWS OF  $\frac{1}{2}$ " DIAMETER HOLES MUST BE DRILLED IN THE SUPPORT PIPE WITH A 3" SPACING (SEE DETAIL "A"). THE ROWS SHOULD BE LOCATED 90 DEGREES APART AD POSITIONED AT ABOUT 5 O'CLOCK AND 7 O'CLOCK RESPECTIVELY.
- 4. SCHEDULE 80 PVC PIPE OR IT'S EQUIVALENT SHOULD BE USED FOR THE CROSS TRENCH SUPPORT PIPE. THE MAXIMUM LENGTH OF THE PVC PIPE IS USUALLY 20 FT. THE SCHEDULE 80 PVC PIPE DIAMETER SHOULD BE LARGE ENOUGH SO THE INSTALLED DRAIN LINE CAN EASILY GO THROUGH THE INSIDE OF THE PVC PIPE.
- 5. IN ALL SITUATIONS, THE GRAVITY FLOW OF DRAIN LINES MUST BE MAINTAINED FOR THE INSTALLED REPAIR.

DRAINAGE TILE REPAIR CROSS TRENCH







- NOTES: 1. EROSION CONTROL MAT TO BE MANUFACTURED USING WEED FREE STRAW FROM AGRICULTURAL CROPS. STRAW SHALL BE MIN. 1/4 INCH THICK ON PHOTODEGRADABLE POLYPROPLINE MESH AND ATTACHED WITH HIGH STRENGTH THREAD. MANUFACTURE TO BE NORTH AMERICAN GREEN, COMTECH ERO MAT OR APPROVED EQUAL. 2. EROSION CONTROL MAT IS TO BE SECURED TO THE SLOPED AREA WITH U SHAPED STAPLES. SIZE AND LOCATION SHALL BE PER THE MANUFACTURER'S SPECIFICATIONS.
- 3. TOPSOIL SHALL BE FINE GRADED AND ROLLED OR TAMPED TO PREVENT SETTLING. BEFORE SEEDING, TOPSOIL SHALL BE TRIMMED AND RAKED. OBJECTIONABLE MATERIALS SHALL BE REMOVED AND A FINELY PULVERIZED SEED BED SHALL BE FORMED.
- 4. HYDROSEED MIX SHALL BE A COMBINATION OF PERENNIAL RYEGRASS, FESCUE AND KENTUCKY BLUEGRASS. TACTIEFIER AND FERTILIZER SHALL BE ADDED TO THE HYDROSEED MIX.
- 5. THE RESTORED AREA SHALL BE WATERED AND MAINTAINED BY THE CONTRACTOR FOR TWO MOWINGS. ANY AREAS WHICH FAIL TO SHOW A UNIFORM CATCH SHALL BE RESEEDED BY THE CONTRACTOR.

EROSION CONTROL MAT DETAIL NOT TO SCALE



MINIMUM DEPTH TO THE TOP OF PIPE SHALL BE 3 FEET.

SEED, MULCH AND EROSION NETTING NOT TO SCALE

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		ONTARIO COUNTY. NEW YORK					
		DR:	M.N.				
		Ск: D.G.					
		APP:	M.P.	PAGE· S:\job\Energy East\2016 Projects\16-E056\DWG\			
		SCALE:	N.T.S.	SH 29			
DESCRIPTION	APP.	DATE:	11/7/2017				

## TRAFFIC CONTROL PLAN NOTES

- NYSDOT ROADWAY TO BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES. ROADSIDE DRAINAGE TO BE MAINTAINED AT ALL TIMES.
- MATERIALS, EQUIPMENT AND VEHICLES ARE NOT TO BE STORED OR PARKED WITHIN THE NEW YORK STATE RIGHT-OF-WAY.
- 4. MAINTENANCE AND PROTECTION OF TRAFFIC MUST COMPLY WITH THE CURRENT NATIONAL MUTCD WITH NYS SUPPLEMENT, SECTION 619 OF THE CURRENT NYSDOT STANDARD SPECIFICATIONS, THESE PLANS AND AS ORDERED BY THE ASSISTANT RESIDENT ENGINEER. ON A NYSDOT CONSTRUCTION PROJECT, MAINTENANCE AND PROTECTION OF TRAFFIC MUST COMPLY WITH THESE PLANS AND BE IN ACCORDANCE WITH THE NYSDOT CONTRACT DOCUMENTS AS DEEMED NECESSARY BY THE NYS ENGINEER-IN-CHARGE.
- 5. NOTIFY MARK ELLSWORTH, THE N.Y.S.D.O.T. ASSISTANT RESIDENT ENGINEER, AT (585 352-3471 THREE (3) WORK DAYS PRIOR TO WORKING IN THE N.Y.S. RIGHT-OF-WAY.
- 6. NOTIFY THE NYSDOT SIGNAL MAINTENANCE FACILITY AT (585) 753-7780 5 DAYS PRIOR TO WORKING WITHIN 350' OF A SIGNALIZED INTERSECTION. NOTIFY DIG SAFELY NEW YORK 2 WORK DAYS PRIOR TO DIGGING, DRILLING OR BLASTING AT 811 FOR A UTILITY STAKE-OUT.
- 7. ALL MATERIALS USED WITHIN THE STATE RIGHT-OF-WAY MUST COMPLY WITH THE CURRENT NEW YORK STATE DEPARTMENT OF TRANSPORTATION
- SPECIFICATIONS ALONG WITH ANY APPROPRIATE CURRENT NYS DEPARTMENT OF TRANSPORTATION'S STANDARD SHEETS. 8. QUALITY CONTROL OF ASPHALT CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 401 OF THE STANDARD SPECIFICATIONS. ALL ASPHALT PRODUCED AS PART OF SECTION 401 WILL BE PAID AT A FINAL QUANTITY ADJUSTMENT FACTOR OF 1.0. ASPHALT COURSE DEPTHS SHOWN ON THE PLANS ARE COMPACTED DEPTHS.
- 9. NO NIGHT WORK SHALL BE ALLOWED UNLESS APPROVED PRIOR TO START OF PROJECT. ADDITIONAL MAINTENANCE AND PROTECTION OF TRAFFIC MAY BE REQUIRED INCLUDING THE ADDITION OF REFLECTIVE MATERIALS AND LIGHTING.
- 10. HAZARDOUS WASTE NOTIFICATION THE PERMITTEE ACCEPTS THE RIGHT-OF-WAY OF THE STATE HIGHWAY IN ITS "AS IS" CONDITION. THE DEPARTMENT OF TRANSPORTATION MAKES NO REPRESENTATION AS TO THE ABSENCE OF UNDERGROUND TANKS, STRUCTURES, FEATURES OR SIMILAR IMPEDIMENTS TO THE COMPLETION OF THE WORK PERMITTED HEREUNDER. SHOULD PERMITTEE FIND SOME PREVIOUSLY UNKNOWN UNDERGROUND IMPEDIMENTS TO ITS WORK, THE DEPARTMENT OF TRANSPORTATION SHALL HAVE NO OBLIGATION TO CURE, REMOVE, REMEDY OR OTHERWISE DEAL WITH SUCH PREVIOUSLY UNKNOWN UNDERGROUND IMPEDIMENTS. THE PERMITTEE IS REQUIRED TO REMOVE, MODIFY OR OTHERWISE DEAL WITH SUCH UNDERGROUND TANKS, STRUCTURES, FEATURES OR IMPEDIMENTS IN A MANNER WHICH MEETS ACCEPTABLE ENGINEERING PRACTICE AND IS APPROVED BY THE DEPARTMENT OF TRANSPORTATION.
- 11. ADA COMPLIANCE ALL WORK ON PEDESTRIAN FACILITIES SHALL BE COMPLIANT WITH THE AMERICANS WITH DISABILITIES ACT (ADA). 12. NO PAVEMENT CUTS ARE TO BE LEFT UNFILLED OVER NIGHT.
- 13. THE TYPICAL DETAILS DEPICTED ON THE STANDARD SHEETS AND IN THE MUTCD, REFLECT THE MINIMUM REQUIREMENTS 14. THE CONTRACTOR MUST SUBMIT TO THE ENGINEER, IN WRITING, PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN FOR REVIEW AND
- APPROVAL BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE FIVE (5) WORK DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH PROPOSED REVISIONS, EXCEPT FOR CHANGES THAT ALTER THE SCOPE OF THE TRAFFIC CONTROL PLAN. SUCH CHANGES IN SCOPE MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE THIRTY (30) WORKING DAYS PRIOR TO IMPLEMENTATION OF SUCH REVISIONS.
- 15. THE CONTRACTOR SHALL PROVIDE THE ENGINEER, IN WRITING, WITH THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF STAFF WHO ARE AUTHORIZED TO SECURE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS OUTSIDE NORMAL WORKING HOURS. THE ENGINEER WILL PROVIDE THE SUBMITTED INFORMATION TO REGIONAL MANAGEMENT, THE NEW YORK STATE POLICE, THE RESIDENT ENGINEER, AND THE LOCAL POLICE.



<ol> <li>ACTIVITY AREA</li> <li>1. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 500' LONGITUDINAL DISTANCE BETWEEN CONSTRUCTION OPERATIONS ON ALTERNATE SIDES OF THE ROADWAY, UNLESS OTHERWISE APPROVED BY THE ENGINEER.</li> <li>2. WHEN TWO OR MORE AREAS ARE ADJACENT, OVERLAP, OR ARE IN CLOSE PROXIMITY, THE CONTRACTOR SHALL ENSURE THERE ARE NO CONFLICTING SIGNS AND THAT LANE CONTINUITY IS MAINTAINED THROUGHOUT ALL WORK AREAS.</li> </ol>	DF 1. T C 2. T
<ol> <li>SCOTTSVILLE-CHILI RD (N.Y.S. ROUTE 386) - 55 MPH</li> <li>HUMPHREY RD - 30 MPH.</li> <li>BALLANTYNE RD (TOWNSHIP) SOUTH OF ARCHER ROAD - 30 MPH.</li> <li>BROOK RD - 30 MPH.</li> <li>BALLANTYNE RD (N.Y.S. ROUTE 252) EAST OF ARCHER ROAD - 45 MPH.</li> </ol>	LANE 1. U E 2. T A E
<ul> <li>SIGNS</li> <li>1. THE LOCATIONS OF THE SIGNS SHOWN ON THE WORK ZONE TRAFFIC CONTROL PLANS AND DETAILS MAY BE ADJUSTED BASED ON SIGHT DISTANCE AND OTHER CONSIDERATIONS. THE FINAL LOCATIONS OF SIGNS ARE SUBJECT TO APPROVAL OF THE ENGINEER.</li> <li>2. ANY EXISTING SIGNS, INCLUDING OVERHEAD SIGNS, WHICH CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGN LAYOUT SHALL BE COVERED, REMOVED, STORED OR RESET, AS APPROVED BY THE ENGINEER. ALL APPROPRIATE EXISTING SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND/OR LOCATION UNLESS OTHERWISE REPLACED IN THIS CONTRACT.</li> <li>3. SIGNS AT OR NEAR INTERSECTIONS SHALL BE PLACED SO THAT THEY DO NOT OBSTRUCT A MOTORIST'S LINE OF SIGHT.</li> <li>4. ALL WARNING AND REGULATORY SIGNS SHALL BE POSTED ON BOTH SIDES OF MULTI-LANE NOTO BIGHT. SHALL BE POSTED ON THE RIGHT SIDE THE ACTIVE TRAVEL LANE, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.</li> <li>5. SIGNS MOUNTED ON THE MEDIAN OF DIVIDED HIGHWAYS WHERE MEDIAN BARRIER IS IN PLACE MAY BE MOUNTED ON THE BARRIER WITH A SADDLE TYPE BRACKET. LAYING THE SIGN DOWN IN A HORIZONTAL POSITION IS NOT PERMITTED.</li> <li>6. THE DIMENSIONS OF WORK ZONE TRAFFIC CONTROL SIGNS ARE DESCRIBED IN THE MUTCD. ANY CHANGES TO THE DIMENSIONS SHALL BE APPROVED BY THE REGIONAL DIRECTOR OR BY HIS/HER DESIGNEE.</li> <li>7. NYR9-12 MAY BE USED IN PLACE OF NYR9-11.</li> </ul>	TEMP THEF LISTE EXC CLC ANE OF CON ROA 201 N
<ul> <li>CHANNELIZING DEVICES</li> <li>1. WHERE POSSIBLE ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM 2' LATERAL CLEARANCE TO T TRAVELED WAY.</li> </ul>	L T HE C

## PUBLIC AREAS

- 1. PROPERTY OWNERS WHOSE DRIVEWAYS WILL BE MADE INACCESSIBLE SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 24 HOURS PRIOR TO RESTRICTING USE OF THE DRIVEWAY. FOR MULTIPLE ACCESS PROPERTIES, AT LEAST ONE DRIVEWAY SHALL BE OPEN AT ALL TIMES. ACCESS SHALL
- BE RESTORED TO ALL DRIVEWAYS AS SOON AS POSSIBLE. 2. SUITABLE RAMPS SHALL BE INSTALLED TO MAINTAIN SMOOTH TRANSITIONS FROM RESIDENTIAL AND COMMERCIAL DRIVEWAYS TO AND FROM THE
- WORK AREA.



**ROAD WITH LOW TRAFFIC VOLUMES** 

OWNER ENGINEER:	APPROVAL STAMP:	PE STAMP:	EN CONFIDENTIAL, PROPR			
DRAWING PREPARED BY:	ACCEPTED BY OE:					
45 HENDRIX ROAD WEST HENRIETTA, NY 14586 PHONE: (585) 340-7540 EAX: (565) 340-7540						
FAX: (585) 340-7541			REV.	DATE	BY	

### CLOSURES

HE CONTRACTOR SHALL LOCATE LANE CLOSURES TO PROVIDE OPTIMUM VISIBILITY, I.E. BEFORE CURVES AND CRESTS, TO THE EXTENT CONDITIONS PERMIT. THE ENGINEER MAY REQUIRE THAT ALL LANES BE RE-OPENED AT ANY TIME IF THE ROUTE IS NEEDED FOR EMERGENCY PURPOSES. THIS COULD

NCLUDE INCIDENTS AT LOCATIONS OUTSIDE THE CONTRACT LIMITS.

### WIDTHS

INLESS AUTHORIZED BY THE ENGINEER, THE MINIMUM LANE WIDTHS FOR WORK ZONE TRAVEL LANES SHALL BE AS FOLLOWS: FREEWAYS AND/OR EXPRESSWAYS IS 11'. THE MINIMUM LANE WIDTH FOR ALL OTHER TYPES OF ROADWAYS IS 10'. THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE ENGINEER, A MINIMUM OF 21 CALENDAR DAYS IN ADVANCE OF PERFORMING ANY WORK THAT RESULTS IN THE REDUCED WIDTH OF AN EXISTING ROADWAY, SO THAT THE ENGINEER MAY NOTIFY THE REGIONAL PERMIT ENGINEER IN A TIMELY MANNER.

### PORARY LANE CLOSURE RESTRICTIONS FOR MAJOR HOLIDAYS (2016 & 2017) NOTES: RE SHALL BE NO TEMPORARY LANE CLOSURES ON ROADWAY FACILITIES OWNED AND/OR MAINTAINED BY NYSDOT ON THE MAJOR HOLIDAYS

ED BELOW.

EPTIONS CAN ONLY BE MADE UNDER THE FOLLOWING CONDITIONS: EMERGENCY WORK, WORK WITHIN LONG-TERM STATIONARY LANE DSURES, OR SAFETY WORK THAT DOES NOT ADVERSELY IMPACT TRAFFIC MOBILITY AND HAS BEEN AUTHORIZED BY THE OFFICE OF TRAFFIC SAFETY D MOBILITY.

NSTRUCTION ACTIVITIES THAT WILL RESULT IN TEMPORARY LANE CLOSURES SHALL BE SUSPENDED TO MINIMIZE TRAVEL DELAYS ASSOCIATED WITH AD WORK FOR MAJOR HOLIDAYS AS FOLLOWS:

- TEW YEAR'S DAY MONDAY JANUARY 1. BEGINNING 6:00 AM FRIDAY, DECEMBER 29 AND ENDING 6:00 AM TUESDAY, JANUARY 2.
- MEMORIAL DAY MONDAY MAY 28. BEGINNING 6:00 AM FRIDAY, MAY 25 AND ENDING 6:00 AM TUESDAY, MAY 29. NDEPENDENCE DAY - WEDNESDAY JULY 4. BEGINNING 6:00 AM TUESDAY, JULY 3 AND ENDING 6:00 AM THURSDAY, JULY 5.
- ABOR DAY MONDAY, SEPTEMBER 3. BEGINNING 6:00 AM FRIDAY, AUGUST 31 AND ENDING 6:00 AM TUESDAY, SEPTEMBER 4.

HANKSGIVING DAY - THURSDAY, NOV. 22. BEGINNING 6:00 AM WEDNESDAY, NOVEMBER 21 AND ENDING 6:00 AM MONDAY, NOVEMBER 26. CHRISTMAS DAY - TUESDAY, DECEMBER 25. BEGINNING 6:00 AM FRIDAY, DECEMBER 21 AND ENDING 6:00 AM WEDNESDAY, DECEMBER 26.

### 2019

NEW YEAR'S DAY - TUESDAY JANUARY 1. BEGINNING 6:00 AM FRIDAY, DECEMBER 28 AND ENDING 6:00 AM WEDNESDAY, JANUARY 2. MEMORIAL DAY - MONDAY MAY 27. BEGINNING 6:00 AM FRIDAY, MAY 24 AND ENDING 6:00 AM TUESDAY, MAY 28.

