

Stantec

3 Columbia Circle Suite 6  
Albany, NY 12203  
Tel: 518.452.4358  
Fax: 518.452.9234  
www.stantec.com

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LVA91000100-00

## STORMWATER MANAGEMENT DETAILS - BASINS A &amp; B

VAN DYKE SPINNEY  
AT DELMAR, NEW YORK

VAN DYKE ROAD

TOWN OF BETHLEHEM - COUNTY OF ALBANY - STATE OF NEW YORK

## PLANT LIST BASINS A &amp; B

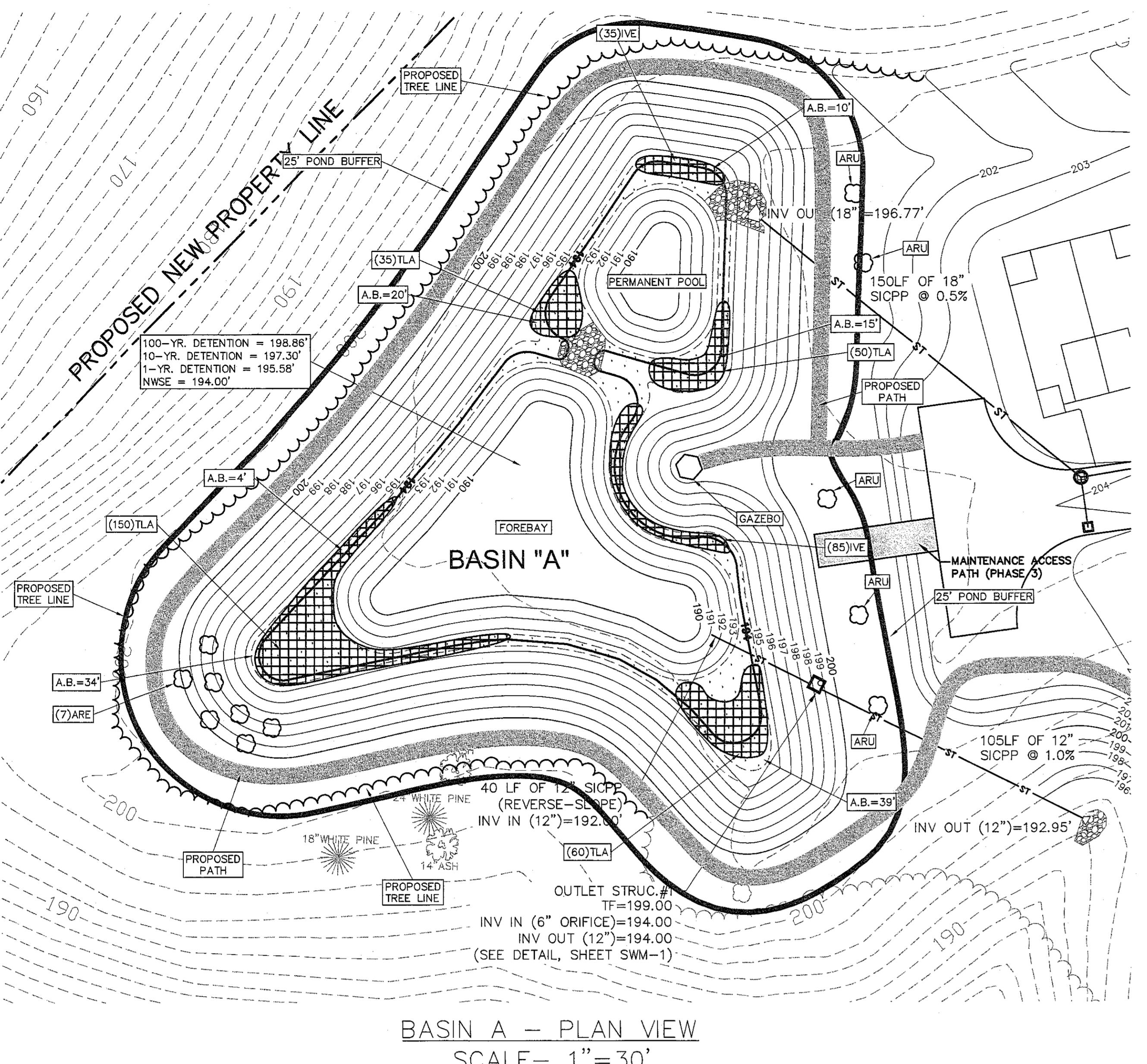
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY.	BASIN A	BASIN B
TIA	TYPIA SP.	CATTAIL	TUBES	SPACED EVENLY	295	40	
SAC	SCIRPUS AUCUTUS	HARDSTEM BULRUSH	TUBES	SPACED EVENLY	0	0	
IVE	IRIS VERSICOLOR	BLUE FLAG IRIS	TUBES	SPACED EVENLY	35	40	
ARE	ALNUS REGOSA	SPCKLED ALDER	7 GAL.	AS SHOWN	7	0	
ARU	ACER RUBRUM	RED MAPLE	15 GAL.	AS SHOWN	5	0	
BNI	BETULA NIGRA	RIVER BIRCH	N/A	N/A	0	0	
CSE	CORNUS SERICEA 'CARDINAL'	RED OSIER DOGWOOD	N/A	N/A	0	0	
COC	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	N/A	N/A	0	0	
IVER	ILEX VERTICILLATA	WINTERBERRY	3' - 4'	AS SHOWN	0	5	
GBI	GINGKO BILOBA	GINGKO	N/A	N/A	0	0	
SAF	SAIX FLAME	WILLOW	N/A	N/A	0	0	

## ANTI-SEEP COLLAR DESIGN

DESIGN IN ACCORDANCE WITH NYSEC, "STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".

SYMBOL	DIM. "Y"	EMB. SLOPE "Z"	PIPE SLOPE "S"	PIPE DIA.	SATURATION LENGTH "L"	COLLAR SIZE	QUANTITY
A	4.86	4:1	1.0%	1"	41'	3' X 3'	(3)
B	2.92	4:1	2.0%	1"	26'	3' X 3'	(2)

COLLARS TO BE "AGRI-RAIN ANTI-SEEP COLLARS" OR APPROVED EQUAL.  
COLLAR INSTALLATION SPACING TO BE DIVIDED EQUALLY ACROSS SATURATION LENGTH "L" AS SHOWN IN THIS TABLE. SATURATION LENGTH BEGINS AT BASIN OUTLET STRUCTURE.



NOTE: NO EMERGENCY SPILLWAY PROVIDED. RISER DROP INLET IS FOR EMERGENCY USE ONLY.

DETENTION POND PLANTING SPECIFICATIONS  
1. SHALLOW WATER EROSION CONTROL MEASURES  
2. PROTECTIVE PLANTING POND BANKS TO A LEVEL THAT WILL FACILITATE INSTALLATION OF EROSION CONTROL MEASURES.  
3. PLANTS SHALL BE A MINIMUM SIZE OF 2 INCHES IN DIAMETER AND 4 INCHES IN DEPTH. EACH PLUG SHALL BE THOROUGHLY ROOTED.  
4. PLANTS SHALL BE PLANTED IN A 12" X 12" HOLE, 4 INCHES DEEP, IN THE EROSION CONTROL MEASURES.  
5. PLANTS SHALL BE EVENLY DISTRIBUTED AROUND THE POND, PLANTING IN GROUPS OF 5 - 7 PLANTS FOR EACH SPECIES AND SPACED 6 INCHES ON CENTER.  
6. NO PLANTING SHALL OCCUR UNTIL TEMPORARY STABILIZATION OF THE LOT HAS OCCURED AND THE WATER LEVEL OF THE PERMANENT POOL HAS BEEN REACHED AND SUSTAINED.  
7. TREES OR SHRUBS ARE TO BE PLANTED WITHIN EMBANKMENT BUFFER.

ESTABLISHING AND MAINTAINING TREES, SHRUBS, AND VINES  
GENERAL  
1. PLANTS SHALL CONFORM TO THE SPECIES, VARIETY, SIZE, NUMBER, AND CONDITIONS AS STATED ON LANDSCAPE DRAWINGS. "AMERICAN STANDARD FOR NURSERY STOCK", QUALITY OF PLANT MATERIALS.  
2. BUNDLES OF PLANTS, LABELS, COMMON NAME AND CULTIVAR SHALL BE SECURELY ATTACHED TO PLANTS.  
3. BUNDLES OF SEEDLINGS, CONTAINERS, AND/OR PLATES, ENGINEERS OR LANDSCAPE ARCHITECT.  
4. PLANTS OR PLATELINES SHALL BE PLANTED AS SPECIFIED ON LANDSCAPE DRAWINGS OR AS SPECIFIED IN THE FIELD BY THE DESIGN ENGINEERS OR LANDSCAPE ARCHITECT.  
5. PLANTS OR PLATELINES SHALL BE TOUCHING OR OVERLAPPING BY ONLY 1 OR 2 FEET.

PLANTING TIME  
1. DECIDUOUS TREES AND SHRUBS, APRIL 1 TO JUNE 1 AND OCTOBER 15 TO DECEMBER 15.  
2. EVERGREEN TREES AND SHRUBS, APRIL 1 TO JUNE 1 AND SEPTEMBER 1 TO NOVEMBER 15.  
SPACING  
1. TREES AND SHRUBS SHALL BE PLANTED AS SPECIFIED ON LANDSCAPE DRAWINGS OR AS SPECIFIED IN THE FIELD BY THE DESIGN ENGINEERS OR LANDSCAPE ARCHITECT.  
2. FOR PLANTING, PLANT SPACING SO NATURE SHRUBS WILL BE TOUCHING OR OVERLAPPING BY ONLY 1 OR 2 FEET.

SITE PREPARATION  
1. INDIVIDUAL SITES FOR PLANTING SEEDLINGS SHALL BE PREPARED BY SCALING THE SOIL AWAY FROM A FOUR FOOT SQUARE AREA WHERE THE TREE SHRUB IS TO BE PLANTED.  
2. ALL PLANTING BEDS SHALL BE CULTIVATED TO A DEPTH OF 8 INCHES, OR CHEMICALLY TREATED FOR WEED CONTROL.

PLANTING  
1. PLANTS SHALL BE LOCATED AS SHOWN ON PLANS AND/OR DRAWINGS AND, WHERE NECESSARY, LOCATED ON THE SITE BY STAKES.  
2. PROTECTIVE PLANTING POND SECURING ROOT BALL, UNITE AND ROLL DOWN BURLAP OR REMOVE AS MUCH TREATED BURLAP AS POSSIBLE.  
3. THE PLANTING HOLE SHALL BE THREE TIMES WIDER THAN THE DIAMETER OF THE PLANT, AT A DEPTH THAT ALLOWS THE ROOT FLAT TO THE GRADE.  
4. THE PLANTING HOLE SHALL BE THREE TIMES WIDER THAN THE DIAMETER OF THE PLANT, AT A DEPTH THAT ALLOWS THE ROOT FLAT TO THE GRADE.  
5. ALL PLANTS SHALL BE THOROUGHLY WATERED ON THE SAME DAY OF PLANTING. PLANTS THAT HAVE SETTLED SHALL BE RESET TO GRADE.

WRAPPING  
1. IMMEDIATELY AFTER PLANTING, WRAP DECIDUOUS TREE TRUNKS FROM THE BOTTOM TO THE FIRST LIMB WITH A 4 INCH WIDE BITUMINOUS IMPREGNATED, INSECT RESISTANT TAPE OR PLASTIC MANUFACTURED FOR THAT PURPOSE, TIE WITH JUTE (BAG STRINGS) AT TOP AND BOTTOM. THE WRAP SHOULD BE REMOVED PER NURSERY RECOMMENDATIONS.

MULCHING  
1. REMOVE THE DISTURBED AREA AROUND INDIVIDUAL TREES AND SHRUBS WITH A 2-3" LAYER OF WOOD CHIPS. PULL WOOD CHIPS 1 INCH

CLEANUP AND MAINTENANCE  
1. AFTER ALL WORK IS COMPLETE, ALL EXCESS SOIL, DEBRIS, ETC., SHALL BE REMOVED FROM THE SITE.  
2. WATER PLANTS TWO WEEKS AFTER PLANTING, FOR TWO YEARS. WATER PLANTS EVERY TWO WEEKS DURING DRY PERIODS, WHICH EXCEED THREE INCHES OF DROUGHT. WATER PLANTS 20 GALLONS AND SHRUBS 30 GALLONS TO 50 GALLONS FOR EACH WATERING.

3. REMOVE TRUNK WRAP ONE YEAR AFTER PLANTING OR AS RECOMMENDED BY NURSERY.

PRUNING  
1. REMOVE TREES, LIMBS, AND LIMB STUBS TO THE FOLLOWING WIDTHS AND HEIGHTS SPECIFIED FOR THE INTENDED USE.

2. REMOVE DEAD, DISEASED, OR DYING LIMBS.

3. USE BARK BRANCH RIDGE AS A REFERENCE FOR THE STARTING POINT AND ANGLE OF CUT.

4. USE A CHAINSAW TO MAKE THE CUT. USE A CHAINSAW TO MAKE THE CUT. FIRST CUT ABOUT ONE-THIRD THE WAY THROUGH THE UNDERSIDE OF THE LIMB (ABOUT 6-12 INCHES FROM THE TREE TRUNK), THEN (APPROXIMATELY AN INCH FURTHER OUT) MAKE A SECOND CUT ON THE OTHER SIDE OF THE LIMB. THEN, USE A CHAINSAW TO MAKE A THIRD CUT, WHICH IS APPROXIMATELY 1/2 INCH DEEP. REMOVE THE STUB. IF THE BRANCH IS LARGER THAN 3-6 INCHES IN DIAMETER, USE THE FOUR CUT SYSTEM. CUTS 1 AND 2 REMAIN THE SAME AND CUT 3 SHOULD BE FROM THE UNDERSIDE OF THE LIMB ON THE SIDE OF THE BRANCH COLLAR. CUT 4 SHOULD BE APPROXIMATELY 1/2 INCH DEEP AND 1/3 THE WAY THROUGH THE LIMB. THIS WILL PREVENT THE BARK FROM PEELING DOWN THE TRUNK. DO NOT PAINT THE CUT SURFACE.

PROTECTING TREES IN HEAVY USE AREAS  
1. THE COMPACTATION OF SOIL OVER THE ROOTS OF TREES AND SHRUBS SHOULD BE AVOIDED.  
2. PLANTING IN HEAVY USE AREAS SHALL BE ESTABLISHED AROUND PLANTED TREES AND SHRUBS AND EXISTING TREES AND SHRUBS THAT ARE TO REMAIN. APPLY AND MAINTAIN A 3 TO 4 INCH LAYER OF UNDECAYED WOOD CHIPS OR 2 INCHES OF NO. 2 WASHED, CRUSHED GRAVEL.

TEMPORARY CRITICAL AREA PLANTING SPECIFICATIONS  
1. WATER MANAGEMENT PRACTICES MUST BE INSTALLED AS APPROPRIATE FOR SITE CONDITIONS. THE AREA MUST BE ROUGH GRADED AND EROSION CONTROL MEASURES MUST BE INSTALLED. PLANTING SEEDLINGS SHALL BE SEDED WITHIN 24 HOURS OF DISTURBANCE OR SCARIFICATION OF THE SOIL SURFACE WILL BE NECESSARY PRIOR TO SOWING.

2. EROSION CONTROL MEASURES MUST BE INSTALLED AS APPROPRIATE FOR SITE CONDITIONS.

3. PLANTING IN SPRING OR SUMMER OR EARLY FALL, THEN SEED THE AREA WITH RYGRASS (ANNUAL OR PERENNIAL) AT 30 LBS. PER ACRE (APPROXIMATELY 0.7 LB. /1000 SQ. FT. FOR USE 1 LB. /1000 SQ. FT.).

4. PLANTING IN LATE FALL OR EARLY WINTER, THEN SEED CERTIFIED AGROSTICK WINTER RYE (CEREAL RYE) AT 100 LBS. PER ACRE (2.5 LBS./1000 SQ. FT.).

5. ANY SEDDING METHOD THAT CAN BE USED WILL PROVIDE UNIFORM APPLICATION OF SEED TO THE AREA AND RESULT IN RELATIVELY GOOD SEEDING CONDITIONS.

6. MULCH THE AREA WITH HAY OR STRAW AT APPROX. 90 LBS. /1000 SQ. FT. OR 2 BALES. QUALITY OF HAY OR STRAW SHOULD BE APPROXIMATELY 100% DRY. HAY OR STRAW SHOULD BE PLACED ON THE SOIL SURFACE AND COULD BE RECOMMENDED FOR EROSION CONTROL (NYLON WEB OR MESH) MAY BE USED IF APPLIED ACCORDING TO MANUFACTURERS SPECIFICATION. CAUTION IS ADVISED WHEN USING NYLON OR OTHER SYNTHETIC PRODUCTS. THEY MAY BE DIFFICULT TO REMOVE PRIOR TO FINAL SOWING.

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