SKANEATELES MARINA

TOWN OF SKANEATELES, ONONDAGA COUNTY, NEW YORK

GENERAL NOTES

1. THE PROJECT SITE IS LOCATED AT THE INTERSECTION OF N.Y.S. ROUTE 41A (WEST LAKE ROAD) AND LAKE ROAD (FOX LAKE 941), SKANEATELES, NEW YORK.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY BUILDING PERMITS PRIOR TO INITIATING CONSTRUCTION AND SHALL MAINTAIN ALL REQUIRED SET-BACK DISTANCES.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL CONSTRUCTION IS IN CONFORMANCE WITH APPLICABLE REQUIREMENTS OF THE FOLLOWING AGENCIES:
   - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
   - THE TOWN OF SKANEATELES BUILDING CODES DEPARTMENT
   - INTERNATIONAL BUILDING CODE FOR NEW YORK STATE, LATEST EDITION, AS APPLICABLE
   - NYS OFFICE OF GENERAL SERVICES
   - NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
   - THE UNITED STATES ARMY CORPS OF ENGINEERS
   - THE CITY OF SYRACUSE WATER DEPARTMENT
4. THE CONTRACTOR SHALL PROVIDE HAZARD BARRIERS PLACED CONSPICUOUSLY AROUND ALL PARTS OF CONSTRUCTION TO SAFEGUARD PUBLIC AND TRAFFIC AGAINST HAZARDOUS CONDITIONS. ALL TRAFFIC CONTROL SHALL BE PROVIDED AND MAINTAINED IN CONFORMANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
5. EACH CONTRACTOR SHALL PROVIDE SITE SAFETY AND HEALTH PLAN IN ACCORDANCE WITH ALL APPLICABLE OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
6. PRIOR TO INITIATION CONSTRUCTION, THE CONTRACTOR SHALL GIVE TIMELY NOTIFICATION TO ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA AND CONTACT THE LOCAL UNDERGROUND FACILITY PROTECTIVE ORGANIZATION (DIGS NY) AT 811.
7. EACH CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS WHILE WORKING TO SAFEGUARD EXISTING STRUCTURES, UTILITIES AND SURFACE MARKING. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THEIR WORK BEING PERFORMED.
8. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN ACCURATE RECORD DRAWING OF ALL EQUIPMENT INSTALLED, UNDERGROUND STRUCTURES AND UTILITIES ENCOUNTERED.
9. ANY MATERIAL REMOVED FROM THE PROJECT SITE SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH THE APPLICABLE AGENCIES LISTED ABOVE IN GENERAL NOTE 3.

SITE LOCATION MAP

INDEX TO SHEETS

DRAWING TITLE	SHEET NUMBER
PROPOSED SITE PLAN DURING BOATING SEASON (MAY-OCT.)	SP-1
PROPOSED SITE PLAN DURING NON-BOATING SEASON (NOV.-APR.)	SP-2
EROSIONS AND SEDIMENT CONTROL PLAN	ES-1
EROSIONS AND SEDIMENT CONTROL DETAILS AND SPECIFICATIONS	ES-2
GRADING AND DRAINAGE SYSTEMS PLAN	GD-1
GRADING AND DRAINAGE SYSTEMS DETAILS	GD-2
GRADING AND DRAINAGE SYSTEMS DETAILS	GD-3
GRADING AND DRAINAGE SYSTEMS DETAILS	GD-4
PHOTOMETRIC LIGHTING PLAN	PL-1
LIGHTING DETAILS	PL-2

PROJECT No. 2007072
NOVEMBER 2025

REVISIONS:
1. REVISED PER TOWN ENGINEER COMMENTS 12-08-25

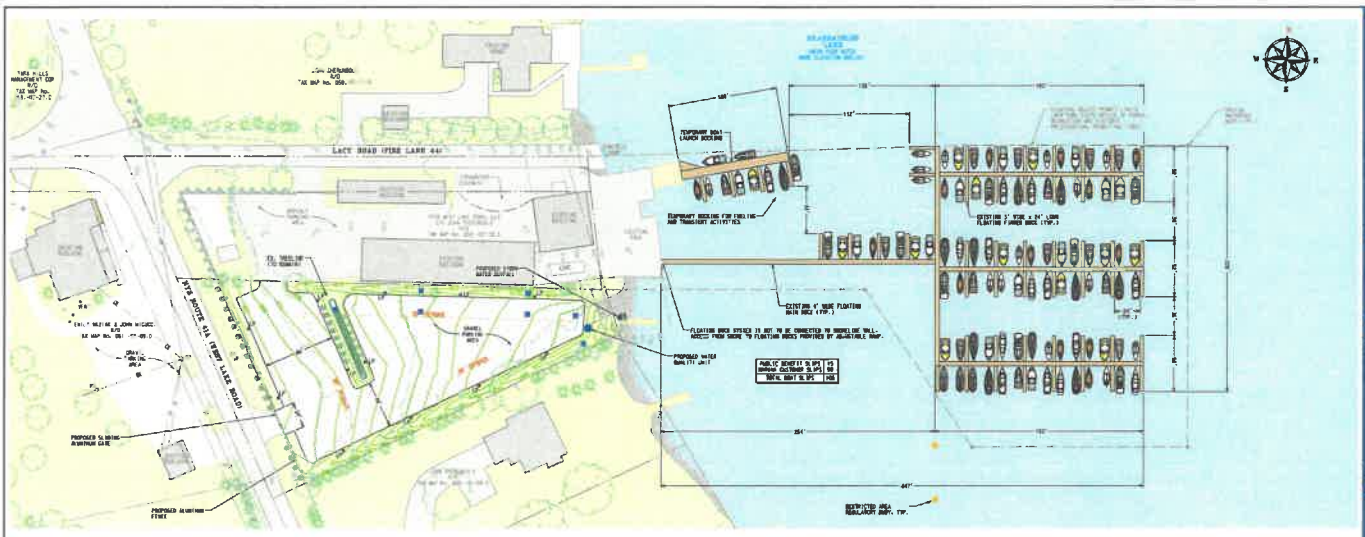
NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

UDIG·NY

PRELIMINARY
NOT FOR CONSTRUCTION

12-05-25

TDK Engineering Associates, PC



KEY

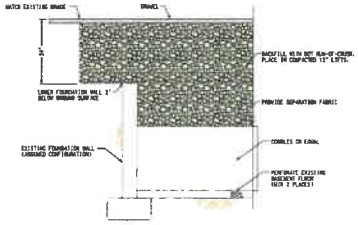
EXISTING	PROPOSED
PROPERTY LINE	TOPOGRAPHIC CONTOUR
RIGHT-OF-WAY LINE	FENCE LINE
FLOATING OBJECT PERMIT LIMITS	LIGHT POLE
FENCE LINE	CATCH BASIN
POWER POLE	DRAINAGE MANHOLE
OVERHEAD ELECTRIC	INFLIET FALL PROTECTION
END FLARE SECTION	SIGNAGE
DRAINAGE PIPE	
DRAINAGE SWALE	
TOPOGRAPHIC CONTOUR	

PROPOSED SITE PLAN DURING BOATING SEASON (MAY-OCT.)

1" = 40' SCALE — 40 0 40 80 FEET

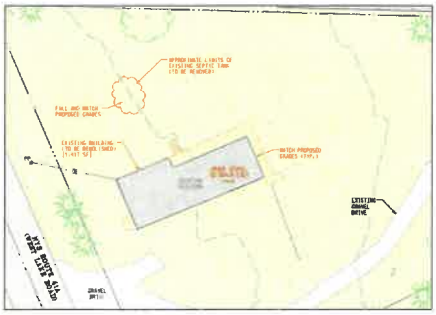
BASEMAP REFERENCES:

1. "SCHEME A - OVERWORLD BAR" AS PREPARED BY ZAGNOLI-PRISCO DESIGN & ARCHITECTURE/DESIGNS/BUILDERS | PROJECT NUMBER 70011 DATED AUGUST 1, 2007.
2. "TOPOGRAPHIC MAP - PART OF LOT 86 - TOWN OF SKANEATELES" AS PREPARED BY CUTTRELL LAND SURVEYORS; ID NUMBER 08-01-104 DATED MARCH 23, 2009.
3. SITE EVALUATION PERFORMED BY TDK ENGINEERING ON SEPTEMBER 21, 2009.
4. "No. 1928 LACY ROAD - PART OF LOT 86" AS PREPARED BY CUTTRELL LAND SURVEYORS, P.C.; I.D. No. 08-01-104 DATED MARCH 3, 2005/ RECERTIFIED ON JANUARY 17, 2010.
5. "PARCELS OF LAND - PART OF MILITARY LOT 86" AS PREPARED BY PAUL JAMES ELSESSER, P.L.S., "ALICE PROJECT No. 3628-07-88. 4B & 10A DATED JANUARY 10, 2022.
6. "PARCELS OF LAND - PART OF MILITARY LOT 86" AS PREPARED BY PAUL JAMES ELSESSER, P.L.S., "ALICE PROJECT No. 3628-07-88. 4B & 10A DATED FEBRUARY 11, 2022.



TYPICAL WALL SECTION (ASSUMED)

NOT TO SCALE



NOTES:

1. REMOVE EXISTING FOUNDATION 5' BELOW EXISTING GRADE.
2. BACKFILL WITH D.O.T. RUN-OF-CRUSH. PLACE IN COMPACTED 12-INCH LIFTS.
3. PERFORATE EXISTING BASEMENT FLOOR (WITH 2 PLACES)

DEMOLITION PARTIAL PLAN

1" = 20' SCALE — 10 0 20 40 FEET

PRELIMINARY 12-06-25 NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

12-06-25

REVISIONS	DATE
1 REVISED PER TOWN COMMENTS	12-06-25

PROJECT: SKANEATELES MARINA

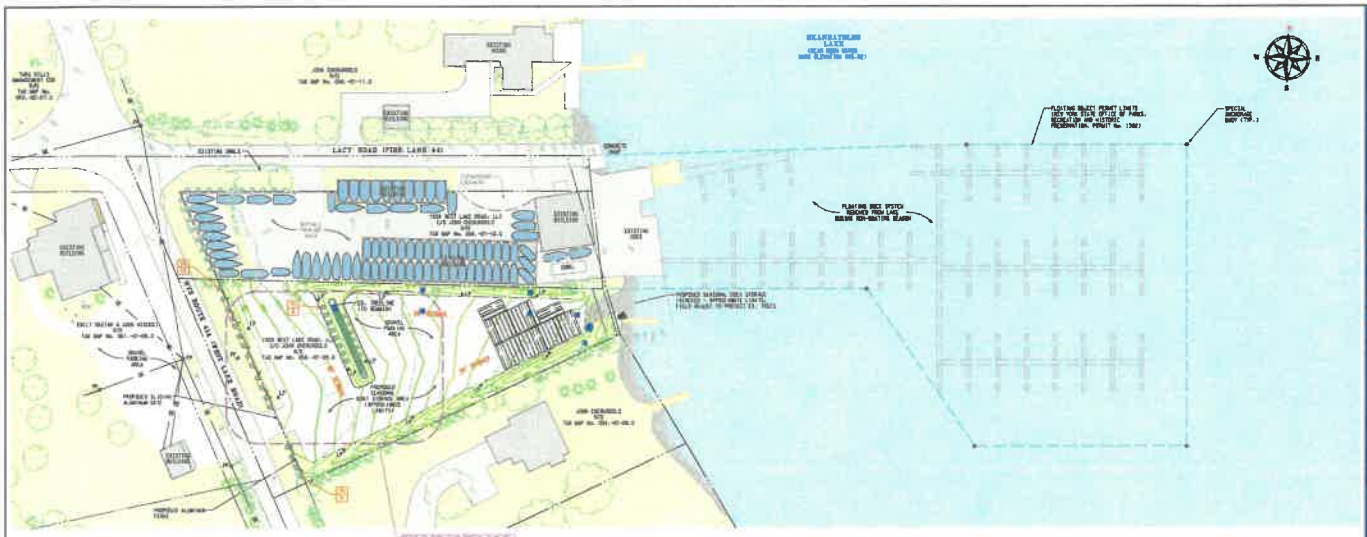
CLIENT: 1928 WEST LAKE ROAD, LLC

LOCATION: TOWN OF SKANEATELES, ONONDAGA COUNTY, NEW YORK

DRAWING TITLE: PROPOSED SITE PLAN DURING BOATING SEASON (MAY-OCT.)

PROJECT No.	20070172
SCALE:	AS NOTED
DATE:	12-06-25
REVISED BY	N/A
DRAWN BY	DMC
CHECKED BY	TFT

SHEET No. SP-1



KEY

EXISTING	PROPOSED
PROPERTY LINE	TOPOGRAPHIC CONTOUR
RIGHT-OF-WAY LINE	FENCE LINE
FLOATING OBJECT PERMIT LIMITS	LIGHT POLE
FENCE LINE	DATA BASIN
POWER POLE	DRAINAGE MANHOLE
OVERHEAD ELECTRIC	OUTLET FALL PROTECTION
END FLARE SECTION	SHRUBS
DRAINAGE PIPE	BOAT IN STORAGE
DRAINAGE SWALE	PLANT DESIGNATION
TOPOGRAPHIC CONTOUR	PLANT QUANTITIES

LOT COVERAGE CALCULATION TABLE (TAX PARCEL 58-01-00.0)

TOTAL LOT AREA *	41,172 S.F. (0.945 ACRES)		
IMPERMEABLE SURFACES	EXISTING	PROPOSED	EXPERIENCE BETWEEN EXISTING & PROPOSED
BUILDINGS	1,488 S.F.	0 S.F.	-1,488 S.F.
ASPHALT PARKING AREA	1,880 S.F.	21,298 S.F.	19,417 S.F.
TOTAL IMPERMEABLE SURFACES	3,371 S.F.	21,298 S.F.	17,927 S.F.
TOTAL % IMPERMEABLE SURFACE COVERAGE	10.2%	51.7%	41.5%
PERMEABLE SURFACE	EXISTING	PROPOSED	EXPERIENCE BETWEEN EXISTING & PROPOSED
GRASS	38,801 S.F.	0 S.F.	-38,801 S.F.
TOTAL PERMEABLE SURFACE	38,801 S.F.	0 S.F.	-38,801 S.F.
OPEN SPACE CALCULATION	EXISTING	PROPOSED	EXPERIENCE BETWEEN EXISTING & PROPOSED
TOTAL LOT COVERAGE	42,172 S.F.	21,298 S.F.	-20,874 S.F.
LOT AREA	41,172 S.F.	41,172 S.F.	0 S.F.
TOTAL % OPEN SPACE	89.8%	48.3%	-41.5%

* NOTE:
1. TOTAL ACREAGE CALCULATED DOES NOT INCLUDE WEST LAKE ROAD PIPE ROUTE 41A1 AND LACY ROAD (FIRE LANE 4-6) 66' WIDE RIGHT-OF-WAY (1140-5.121).

LOT COVERAGE CALCULATION TABLE (MARINA LOT)

TOTAL LOT AREA *	54,026.30 S.F. (1.240 ACRES)		
IMPERMEABLE SURFACES	EXISTING	PROPOSED	EXPERIENCE BETWEEN EXISTING & PROPOSED
BUILDINGS	9,326.0 S.F.	9,326.0 S.F.	0 S.F.
ASPHALT PARKING AREA	268.75 S.F.	268.75 S.F.	0 S.F.
GRAVEL DRIVEWAYS & PARKING AREAS	10,606.07 S.F.	10,606.07 S.F.	0 S.F.
CONCRETE PADS OR SIDEWALKS	136.63 S.F.	136.63 S.F.	0 S.F.
DOCK	5,041.70 S.F.	5,041.70 S.F.	0 S.F.
TOTAL IMPERMEABLE SURFACES	24,026.30 S.F.	24,026.30 S.F.	0 S.F.
TOTAL % IMPERMEABLE SURFACE COVERAGE	44.49%	44.49%	0.00
PERMEABLE SURFACES	EXISTING	PROPOSED	EXPERIENCE BETWEEN EXISTING & PROPOSED
TOTAL PERMEABLE SURFACE	0 S.F.	0 S.F.	0 S.F.
OPEN SPACE CALCULATION	EXISTING	PROPOSED	EXPERIENCE BETWEEN EXISTING & PROPOSED
TOTAL LOT COVERAGE	24,026.30 S.F.	24,026.30 S.F.	0 S.F.
LOT AREA	54,026.30 S.F.	54,026.30 S.F.	0 S.F.
TOTAL % OPEN SPACE	55.51%	55.51%	0.00

* NOTE:
1. TOTAL ACREAGE CALCULATED DOES NOT INCLUDE WEST LAKE ROAD PIPE ROUTE 41A1 AND LACY ROAD (FIRE LANE 4-6) 66' WIDE RIGHT-OF-WAY (1140-5.121).

SEASONAL DOCK STORAGE PLAN (2025-2026)

1" = 40'
SCALE 40 0 40 80 FEET

GENERAL NOTES:

1. "SCHEME A - SKANEATELES MARINA" AS PREPARED BY CASAMAS-STUDIO (SCHEME A DRAWING/BUILDING PROJECT NUMBER 19070 DATED AUGUST 1, 2021).
2. "TOPOGRAPHIC MAP - PART OF LOT NO. - TOWN OF SKANEATELES" AS PREPARED BY DITTELL LAND SURVEYORS (JOB NUMBER 08-21-110, DATED AUGUST 23, 2021).
3. SITE INSPECTION PERFORMED BY TDK ENGINEERING ON SEPTEMBER 21, 2021.
4. "ALL TOWN LACY ROAD - PART OF LOT NO. 58 PREPARED BY DITTELL LAND SURVEYORS, P.C.," (JOB NO. 08-21-110 DATED MARCH 1, 2021; RECERTIFIED ON JANUARY 17, 2023).
5. "PARCELS OF LAND - PART OF MILITARY LOT NO. 46 PREPARED BY PAUL JAMES SLEZIAN, P.L.S., PLLC; PROJECT NO. 1030-01-06, ON A 1(A) DATED JANUARY 16, 2023.
6. "PARCELS OF LAND - PART OF MILITARY LOT NO. 46 PREPARED BY PAUL JAMES SLEZIAN, P.L.S., PLLC; PROJECT NO. 1030-01-06, ON A 1(A) DATED FEBRUARY 15, 2023.

TOWN OF SKANEATELES ZONING ORDINANCE REVIEW

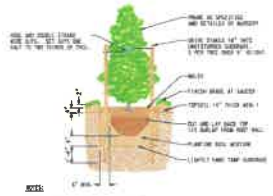
EXISTING	PROPOSED
1. LOT SUMMARY: A. AREA: 0.945 ACRES (41,172 SQ. FT.) B. ROAD FRONTAGE: 208.6 FT. (WEST LAKE ROAD)	1. LOT SUMMARY: A. AREA: 0.945 ACRES (41,172 SQ. FT.) B. ROAD FRONTAGE: 208.6 FT. (WEST LAKE ROAD)
2. STRUCTURE SUMMARY: A. FRONT YARD SETBACK: 60 FT. MIN. (WEST LAKE ROAD) B. SIDE YARD SETBACK: 30 FT. MIN. C. REAR YARD SETBACK: 50 FT. MIN.	2. STRUCTURE SUMMARY: A. FRONT YARD SETBACK: 60 FT. MIN. (WEST LAKE ROAD) B. SIDE YARD SETBACK: 30 FT. MIN. C. REAR YARD SETBACK: 50 FT. MIN.
3. PARKING SUMMARY:	3. PARKING SUMMARY: A. DIMENSIONS: 18 FT. WIDE x 20 FT. LONG B. NUMBER OF PARKING SPACES: MARINA DATIONS: 48 SPACES

EXISTING ZONING: CLIT RURAL & FARMING DISTRICT
LAKE WATERSHED OVERLAY DISTRICT (LWOD)

NOTE:
1. THE TOWN OF SKANEATELES MINIMUM PARKING SPACE SIZE IS 9 FEET WIDE BY 20 FEET LONG (1140-56).

PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE / ROOT
CONIFEROUS TREE			
TO	Thuja 'Green Giant'	Green Giant arborvitae	5'-6' / 10 gal. cont.



NOTES:
1. TREES SHALL BE 2-INCH CALIPER AT PLANTING.
2. TREES SHALL BE PLANTED WITHIN ONE YEAR OF THE START OF THE DEVELOPMENT.

CONIFEROUS TREE PLANTING DETAIL

NOT TO SCALE

PRELIMINARY
12-05-25
NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

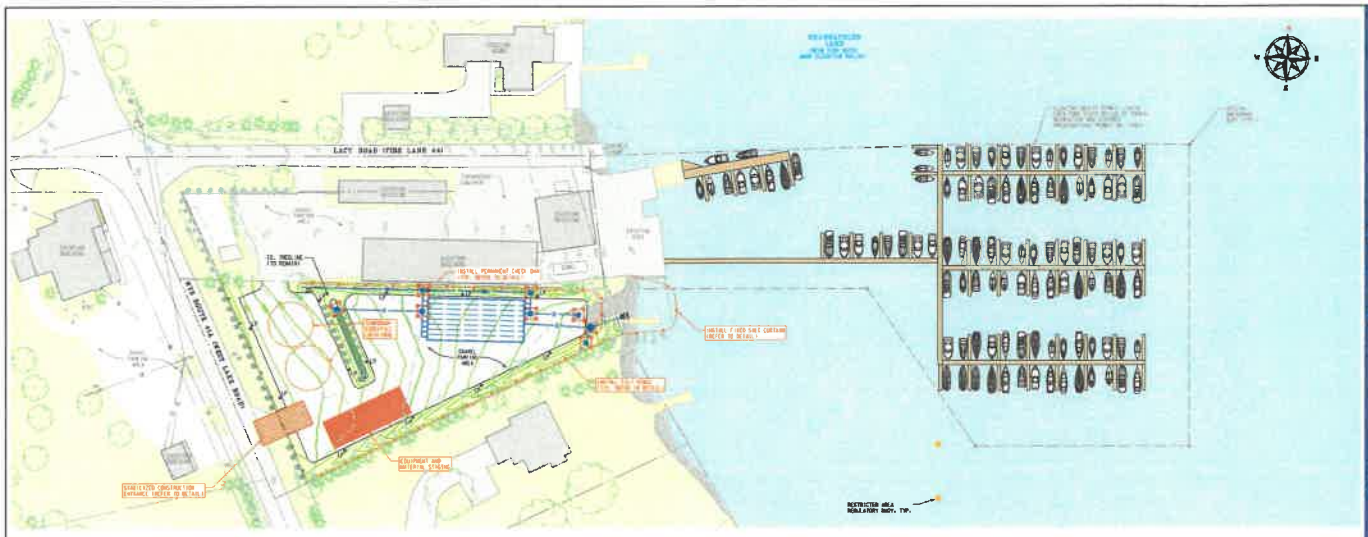
REVISIONS PER TOWN ENGINEER COMMENTS	12-05-25

SKANEATELES MARINA
1938 WEST LAKE ROAD, LLC
TOWN OF SKANEATELES ONONDAGA COUNTY NEW YORK

DRAWING TITLE: INTERIM SEASONAL DOCK STORAGE PLAN (2025-2026)

PROJECT No. 20010172
SCALE AS NOTED
DATE 12-05-25
REV'S DATE N/A
DRAWN BY ALP
CHECKED BY TFS

SP-2



EROSION AND SEDIMENT CONTROL PLAN

1" = 40'
40 0 40 80
SCALE FEET

BASELINE REFERENCE:

1. "SCHLAE 4 - CHENANGO BAR" AS PREPARED BY SHANKER-REISCH SCRUTON & HEGARTY ARCHITECTS/PLANNERS PROJECT NUMBER 7007A DATED AUGUST 7, 2007.
2. "TOPOGRAPHIC MAP - PART OF LOT 88 - TOWN OF SKANEATELES" AS PREPARED BY COTTRELL LAND SURVEYORS IN NUMBER 98-01-190 DATED AUGUST 24, 2007.
3. SITE EVALUATION PERFORMED BY TDK ENGINEERING ON SEPTEMBER 27, 2007.
4. "No. 1999 LACY ROAD - PART OF LOT 88" AS PREPARED BY COTTRELL LAND SURVEYORS, P.C.; I.D. No. 98-01-190 DATED MARCH 5, 2004; RECERTIFIED ON JANUARY 17, 2014.
5. "PARCELS OF LAND - PART OF MILLPORT LOT 88" AS PREPARED BY PAUL JAMES ELECTRIC; P.L.S.; PLLC; PROJECT No. 9130-01-08, 08 & 10A DATED JANUARY 16, 2013.
6. "PARCELS OF LAND - PART OF MILLPORT LOT 88" AS PREPARED BY PAUL JAMES ELECTRIC; P.L.S.; PLLC; PROJECT No. 9130-01-08, 08 & 10A DATED FEBRUARY 13, 2013.

KEY

EXISTING	PROPOSED
PROPERTY LINE	TOPOGRAPHIC CONTOUR
R.O.W. RIGHT-OF-WAY LINE	FENCE LINE
FLOATING OBJECT PERMIT LIMITS	LIGHT POLE
FENCE LINE	CLEANOUT
POWER POLE	DRAINAGE PIPE
OH OVERHEAD ELECTRIC	DRAINAGE SWALE
END FLARE SECTION	CATCH BASIN
DRAINAGE PIPE	DRAINAGE BRANCH
DRAINAGE SWALE	SHRUBS
TOPOGRAPHIC CONTOUR	

EROSION & SEDIMENT CONTROL KEY

PROPOSED

- SILT FENCE
- INLET PROTECTION
- PERMANENT CHECK DAM
- FIXED SILT CURTAIN

PRELIMINARY 12-06-21 NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

12-06-21

REVISED PER TOWN ENGINEER 12-06-21

PROJECT: SKANEATELES MARINA
CLIENT: 1938 WEST LAKE ROAD LLC
LOCATION: TOWN OF SKANEATELES ONONDAGA COUNTY NEW YORK

DRAWING TITLE: EROSION AND SEDIMENT CONTROL PLAN

PROJECT No. 2001012
SCALE: AS NOTED
DATE: 12-06-21
DWG. D BY: KJA
DRAWN BY: ALY/DMC
CHECKED BY: STS

ES-1

CONSTRUCTION SCHEDULE AND SEQUENCE

CONSTRUCTION OF THE PROJECT IS EXPECTED TO BEGIN IN THE SPRING OF 2024. THE GENERAL SITE WORK AND ANTICIPATED CONSTRUCTION SEQUENCE FOR THE SITE IMPROVEMENTS CONSIST OF THE FOLLOWING:

GENERAL NOTES:

1. ONE (1) WEEK PRIOR TO BEGINNING LAND/WORK OPERATIONS, A PRE-CONSTRUCTION MEETING WILL BE HELD TO DISCUSS THE EROSION AND SEDIMENT CONTROL PLAN.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY PLACED PRIOR TO BEGINNING ANY LAND DISTURBANCE ACTIVITIES. THE DEVICES PROVIDING PROTECTION TO A GIVEN AREA SHALL NOT BE REMOVED UNTIL THE DISTURBED LANDS IN THAT AREA ARE STABILIZED.
3. NO DISTURBED AREA SHALL REMAIN EXPOSED FOR MORE THAN 7 CALENDAR DAYS, EXCEPT FOR PORTIONS OF THE SITE ON WHICH WORK WILL BE CONTINUED BEYOND 7 DAYS (E.G., THE BUILDING FOOTPRINT). TEMPORARY VEGETATION SHALL BE PROVIDED IN ALL AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR GREATER THAN 7 CALENDAR DAYS.
4. A TRAINED CONTRACTOR SHALL BE ON-SITE DURING ALL LAND DISTURBANCE CONSTRUCTION ACTIVITIES IN ORDER TO INSPECT THE EROSION AND SEDIMENT CONTROL MEASURES SPECIFIED IN THIS DOCUMENT AND THE CONSTRUCTION DRAWINGS. ACTIVE CONSTRUCTION ZONES SHALL BE INSPECTED DAILY TO ENSURE THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES. CORRECTIVE MEASURES TO ADDRESS ANY DEFICIENCIES IDENTIFIED BY THE TRAINED CONTRACTOR SHALL BE IMPLEMENTED WITHIN 24 HOURS.

CONSTRUCTION SEQUENCE:

SITE PREPARATION

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS DIRECTED BY THE ESC PLAN.

SITE GRADING

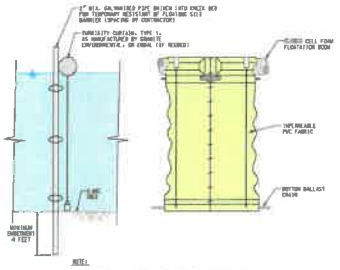
1. CREATE EQUIPMENT STAGING AND MATERIAL STOCKPILE LOCATIONS, AS INDICATED ON THE ESC PLAN.
2. STRIP AND STOCKPILE TOPSOIL, SORE ACE AND SUBSOIL FROM PROPOSED IMPROVEMENT AREA AS NEEDED.
   - STOCKPILE THE REMOVED MATERIAL AT THE DESIGNATED SPOILS AREA INDICATED ON THE ESC PLAN.
   - ERECT STOCKPILE AND PERIMETER SILT FENCING AROUND THE PERIMETER OF STAGED SPOILS AND/OR TEMPORARILY STABILIZE PILES OF FILL.
3. INSTALL ADDITIONAL SILT FENCE, AS NEEDED, DOWN-GRADIENT FROM LOCALIZED AREAS OF CONSTRUCTION ACTIVITIES.
4. SILT FENCE SHALL BE INSTALLED PARALLEL TO ELEVATION CONTOURS.
5. COMPLETE EARTHWORK AND GRADING OPERATIONS. ENSURING PLACEMENT OF FILL TO ELEVATIONS INDICATED. NOTE THAT FINAL GRADING OF THE STORMWATER MANAGEMENT AREAS SHALL NOT BE INITIATED UNTIL ALL UPSLOPE DISTURBED AREAS ARE STABILIZED.
6. UPON THE STABILIZATION OF ALL UPSTREAM AREAS. PERFORM FINAL DRY SWALE GRADING.
7. CONTINUALLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES DURING GRADING OPERATIONS.

RESTORATION

1. SEED, MULCH AND STABILIZE ALL DISTURBED GROUND COVER (I.E., LAWN AND DETENTION BASIN AREAS).
2. INSTALL LANDSCAPING FEATURES (I.E., PLANTS, MULCH, ETC.).
3. REMOVE TEMPORARY EROSION CONTROL DEVICES ONCE VEGETATION HAS BEEN ESTABLISHED.

EROSION & SEDIMENT CONTROL INSPECTION PROCEDURES AND MAINTENANCE

1. A TRAINED CONTRACTOR (AS DEFINED IN SPDES GENERAL PERMIT GP-0-25-001) WITH A VALID "CERTIFICATE OF EROSION AND SEDIMENT CONTROL TRAINING" ISSUED BY THE HYDRIC SHALL BE ON-SITE DURING ALL LAND DISTURBANCE CONSTRUCTION ACTIVITIES IN ORDER TO INSPECT THE EROSION AND SEDIMENT CONTROL MEASURES SPECIFIED IN THESE CONSTRUCTION DRAWINGS. ACTIVE CONSTRUCTION ZONES SHALL BE INSPECTED DAILY TO ENSURE THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES. CORRECTIVE MEASURES TO ADDRESS ANY DEFICIENCIES IDENTIFIED BY THE TRAINED CONTRACTOR SHALL BE IMPLEMENTED WITHIN 24 HOURS.
2. DURING CONSTRUCTION, THE SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED ONCE PER WEEK BY A QUALIFIED INSPECTOR. (AS REQUIRED IN SPDES GENERAL PERMIT GP-0-25-001)
   - INSPECTION FREQUENCY TO BE INCREASED TO TWICE EVERY 7 CALENDAR DAYS IF DISTURBANCE AREA EXCEEDS 5 ACRES.
   - A1- DAILY INSPECTIONS TO BE SCHEDULED BY ACCURDO TWO (2) CALENDAR DAYS
   - INSPECTION REPORTS SHALL BE EMAILED TO THE TOWN CODE ENFORCEMENT OFFICER AND TOWN ENGINEER WITHIN 24 HOURS OF THE INSPECTION.
   - THE OWNER (DEVELOPER) WILL BE RESPONSIBLE TO ENSURE THAT THESE REQUIRED INSPECTIONS ARE ADEQUATELY PERFORMED.
   A. STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER THE SITE IS STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT.
   B. STRUCTURAL CONTROLS: SILT FENCES, STRAW BALE BARRIERS, AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER INSTALLATION, MAINTENANCE, AND EFFECTIVENESS IN TRAPPING SEDIMENT. SEDIMENT WILL BE REMOVED AS NEEDED FROM UPSTREAM SIDE OF BALE, SIDE OF THE SILT FENCES AND CHECK DAMS. AS NEEDED OR VERTICALLY SEE FENCE.
   C. DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM EXPERIENCE RECEIVING WATERS.
   D. CONSTRUCTION ENTRANCES: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
3. ALL DISCHARGE AREAS SHALL BE DOCUMENTED AS FOLLOWS:
   A. PRIORITY DISCHARGE AREAS WITH STAKES, STRING AND BRIGHTLY COLORED FLAGGING. PROTECT SEEDED AREAS UNTIL VEGETATION HAS BEEN ESTABLISHED.



NOTE:
1. WELD TWO SECTIONS OF TURBIDITY CURTAIN WIDTH EACH OTHER. CONNECT PER MANUFACTURER'S REQUIREMENTS.

FIXED TURBIDITY (SILT) CURTAIN DETAIL
NOT TO SCALE

LANDSCAPE SPECIFICATIONS

TOPSOIL

TOPSOIL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NYSDOT SPECIFICATION SECTION 713-01. IT SHALL BE SUITABLE MATERIAL FREE OF SUBSOIL UNDER 1-INCH DIAMETER AND OTHER DELETERIOUS MATERIAL APPROVED BY THE PROJECT ENGINEER.

MINIMUM THICKNESS OF 4-INCHES.

AREAS REQUIRING TOPSOIL SHALL BE LEFT NEATLY GRADED AND READY TO RECEIVE SEEDING.

SEEDING

WORK FOR SEEDING SHALL CONSIST OF PREPARING GROUND SURFACES, FERTILIZING AND APPLYING PERTINENT SEED, AND MULCH TO THE AREAS INDICATED BY THE PLANS. STANDARD DETAILS AND OTHER AREAS AS DIRECTED BY THE PROJECT ENGINEER.

MATERIALS FOR SEED, FERTILIZER AND MULCH SHALL CONFORM TO THE REQUIREMENTS OF NYSDOT SPECIFICATION SECTION 713- OR SHALL BE APPROVED BY THE PROJECT ENGINEER.

THE AREAS TO BE SEEDED SHALL BE THOROUGHLY PREPARED PRIOR TO SEEDING. SEEDS, FERTILIZER AND MULCH SHALL BE EVENLY DISTRIBUTED. MULCH SHALL BE APPLIED IN THE AMOUNTS SPECIFIED BELOW.

NORTHEASTERN SEED MIX (OR EQUAL):

DISTURBED AREAS

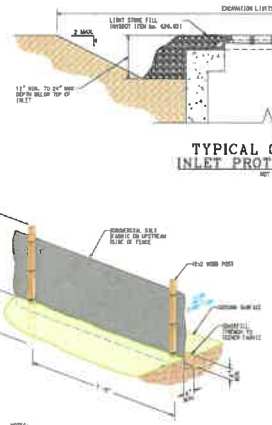
NAME	MIX (lbs/ACRE)	MIX (lbs/1,000 SQ. FT.
KENTUCKY BLUEGRASS	80-114	2.0-2.6
70% PERENNIAL RYEGRASS	70-99	0.6-0.9
15% FINE FESCUE	13-20	0.4-0.6
TOTAL	170-175	3.0-4.0

MIX-PURE LIVE SEED

MULCH ONLY ON STEEP SLOPES SHALL CONSIST OF BALED WHEAT, OAT, RYE OR BARLEY STRAWS AND BE APPLIED AT THE RATE OF 2 TONS PER ACRE. THE MULCH SHALL BE ANCHORED WITH A COMMERCIALLY AVAILABLE MULCH ANCHORING PRODUCT.

ANCHORING BIODEGRADABLE EROSION CONTROL BLANKET

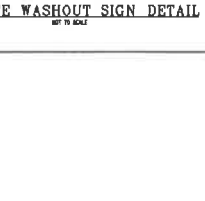
HYDROMULCH SHALL BE COMPOSED OF WOOD CELLULOSE FIBER HAVING THE FOLLOWING CHARACTERISTICS:
- HYDROMULCH SHALL BE COLORED GREEN. HYDROSEED / HYDROMULCH SHALL BE APPLIED AT THE RATE OF 2,500 POUNDS PER ACRE.
- MOISTURE MOISTURE CONTENT: 5.0% ± 2.0%
- MOISTURE HYDRAULIC MATTER: 95.75% ±0.00%
- PH: 4.0 TO 8.0 ACCEPTABLE: 6.25 ±0.2%
- PH: 4.0 TO 8.0
- WATER HOLDING CAPACITY: MIN. 1,150 GRAMS WATER / 100 GRAMS FIBER



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE EROSION & SEDIMENT CONTROL PLAN.
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.6 FEET BEYOND THE BITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
6. STONE SIZE: USE GRADED STONE 2 TO 10 INCHES IN SIZE (NYSDOT LIGHT STONE FILL MEETS THESE REQUIREMENTS).
7. FILTER FABRIC: WOVEN SHOW OR NON SHOW WOVEN WEEDTABLE.

CHECK DAM DETAIL
NOT TO SCALE

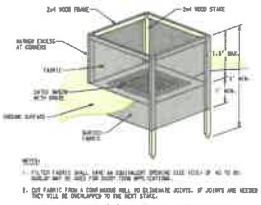


CONCRETE WASHOUT SIGN DETAIL
NOT TO SCALE

TYPICAL CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE

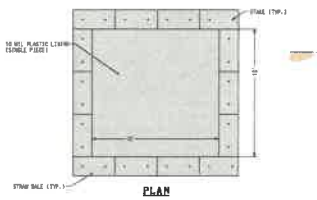
NOTES:
1. FILTER FABRIC SHALL BE MORFLEX FORM, "STABILON TYPE", OR A PREFABRICATED UNIT IS STABLIZED USE EQUIVALENT.
2. WHEN TWO SECTIONS OF FILTER CLOTH JOINING EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



NOTES:
1. FILTER FABRIC SHALL HAVE AN EQUIVALENT OPENING SIZE EQUAL OR NOT TO BE: EQUAL MAY BE USED FOR SHORT TERM NPDES SYSTEMS.
2. USE FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKES WILL BE STANDARD 2"x4" WOOD OR METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. EDGE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPACE GREATER THAN 3 FEET MAY BE NECESSARY WITH THE USE OF SOME MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"x4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVERFLOW STABILITY.
7. AS NECESSARY EVERY INLET INSPECTION MAY BE PERFORMED UPON REVIEW AND APPROVAL FROM PROJECT ENGINEER.

FILTER FABRIC INLET PROTECTION
NOT TO SCALE



PLAN

CROSS SECTION

CONCRETE WASHOUT DETAIL
NOT TO SCALE

NOTES:
1. ALL MATERIALS MUST BE REMOVED WHEN THE WASHOUT BECOMES NO MORE THAN 75% FILLED.
2. ALL HARDENED MATERIALS SHALL BE CLEANED OUT AND DISPOSED OF PROPERLY.
3. ALL WASHOUTS SHALL BE INSPECTED A MINIMUM OF ONCE A WEEK AND AFTER EACH RAIN EVENT AND ANY REPAIRS MADE AS NEEDED WITHIN 48 HOURS.
4. INSTALL A STABILIZED ACCESS TO THE WASHOUT AREA.
5. INSTALL THE CONCRETE WASHOUT SIGN WITHIN 100' OF THE FACILITY.

SECTION

NOTES
1. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MINIMUM6 BERM WITH 5:1 SLOPES WILL BE PERMITTED.
2. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
4. INSPECTION AND MAINTENANCE SHALL BE PERFORMED AS NECESSARY AFTER EACH RAIN.
5. CRUSHED STONE SIZE: 1-4 INCH STONE.
6. WIDTH 24' (TYP., REFER TO PLAN FOR LENGTH)

CONSTRUCTION ENTRANCE
NOT TO SCALE

PWL: PRELIMINARY
NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

REV.	DATE	DESCRIPTION
A	11-26-24	REVISED PER TOWN ENGINEER COMMENTS

PROJECT: SKANEATELES MARINA
OWNER: 1938 WEST LAKE ROAD, LLC
LOCATION: TOWN OF SKANEATELES, ONONDAGA COUNTY, NEW YORK

DRAWING TITLE: GRADING & DRAINAGE DETAILS & SPECIFICATIONS

PROJECT No. 2021072
SCALE: AS NOTED
DATE: 11-06-24
DRAWN BY: ALP
CHECKED BY: TFT

SHEET: ES-2

KEY

EXISTING	PROPOSED
PROPERTY LINE	TOPOGRAPHIC CONTOUR
R.O.W. RIGHT-OF-WAY LINE	15 LF - 24" DIA. HDPE @ 1.1% — LENGTH, DIAMETER, MATERIAL AND SLOPE DRAINAGE PIPE
FLOATING OBJECT PERMIT LIMITS	B.E. RIM ELEVATION
X FENCE LINE	I.E. INVERT ELEVATION
PP POWER POLE	DRAINAGE SWALE
OE OVERHEAD ELECTRIC	CATCH BASIN
CMP FLARE SECTION	DRAINAGE MANHOLE
DRAINAGE PIPE	PERMANENT CHECK DAM
DRAINAGE SWALE	FENCE LINE
TOPOGRAPHIC CONTOUR	LP LIGHT POLE
	CO CLEANOUT
	SHRUBS

GRADING AND DRAINAGE SYSTEMS PLAN

1" = 30'
20 0 20 40
SCALE FEET

BASEMAP REFERENCES:

1. "PROJECT A - CHENANGO'S BAR" AS PREPARED BY ZAUNBER-FRISCH SCRUTON & ABRAMAL DESIGNERS/BUILDERS; PROJECT NUMBER 7001; DATED MARCH 1, 2007.
2. "TOPOGRAPHIC MAP - PART OF LOT 86 - TOWN OF SKANEATELES" AS PREPARED BY CATTRELL LAND SURVEYORS; LB NUMBER 50-01-104 DATED AUGUST 23, 2007.
3. SITE EVALUATION PERFORMED BY TDK ENGINEERING ON SEPTEMBER 17, 2007.
4. "No. 1020 LAKE DRIVE - PART OF LOT 86" AS PREPARED BY CATTRELL LAND SURVEYORS, P.L.S. J.D. No. 06-01-104 DATED MARCH 5, 2014 RECERTIFIED ON JANUARY 17, 2019.
5. "PARCELS OF LAND - PART OF MILITARY LOT 86" AS PREPARED BY PAUL JAMES OLSZEWSKI, P.L.S.; PLLCS PROJECT No. 5030-01-08; 4b & 10b DATED JANUARY 18, 2022.
6. "PARCELS OF LAND - PART OF MILITARY LOT 86" AS PREPARED BY PAUL JAMES OLSZEWSKI, P.L.S.; PLLCS PROJECT No. 5030-01-08; 4b & 10b DATED FEBRUARY 13, 2023.

PRELIMINARY
10-02-25
NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

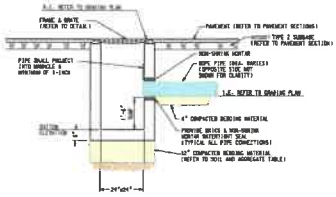
REVISIONS	DATE	BY
1	10-02-25	TFJ

PROJECT: SKANEATELES MARINA
OWNER: 1938 WEST LAKE ROAD, LLC
LOCATION: TOWN OF SKANEATELES ONONDAGA COUNTY NEW YORK

DRAWING TITLE: GRADING AND DRAINAGE SYSTEMS PLAN

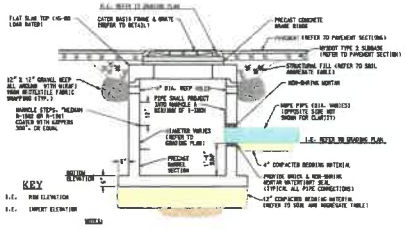
PROJECT No: 2007072
SCALE: AS NOTED
DATE: 12-08-06
REV'D DATE: N/A
DRAWN BY: BRC
CHECKED BY: TFJ

SHEET: GD-1



TYPICAL PRECAST SQUARE CONCRETE CATCH BASIN DETAIL

NOT TO SCALE



KEY

I.E. RIM ELEVATION

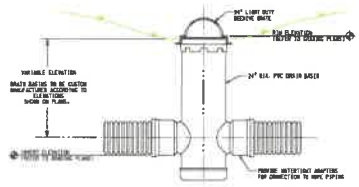
I.E. INVERT ELEVATION

NOTES:

1. ALL PRECAST CONCRETE CATCH BASINS SHALL CONFORM WITH NEW CATB AND SHALL BE PROVIDED FROM A SOURCE ON THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S APPROVED SUPPLIERS LIST.
2. TOP OF FRAME AND GRATE TO MEET FINISHED GRADE.
3. REFER TO GRADING PLAN FOR ADDITIONAL INFORMATION.

TYPICAL PRECAST CONCRETE CATCH BASIN DETAIL

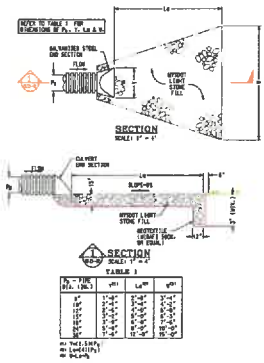
SCALE: 1/2" = 1'-0"



"NYLOPLAST" YARD DRAIN

NOT TO SCALE

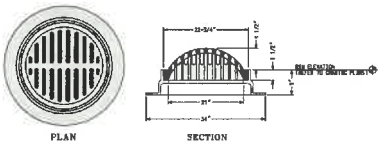
REF: "NYLOPLAST" DRAIN BASIN & TRENC DRAIN AR MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. - (866) 800-8475.



SECTION

SECTION

OUTLET PROTECTION DETAILS



PLAN

SECTION

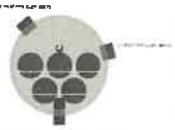
BEE HIVE FRAME & GRATE

NOTE:

1. THE FRAME & GRATE SHALL BE NEENAH FOUNDRY R-2560-B4 BEE HIVE FRAME AND GRATE, OR APPROVED EQUAL.

TYPICAL GRAVEL SECTION

NOT TO SCALE



PART NUMBER	QUANTITY	DESCRIPTION
1	5	3-IN PVC TEE WITH 1.5-IN FLOWORSE
2	3	3-IN PVC TEE
3	5	523 CARTRIDGES
4	4	DRAINDOWN
5	1	12" STANDPIPE
6	2	INLET PIPE
7	1	3-IN FLEXIBLE COUPLER
8	8	3-IN PVC PLUG
9	2	HOLD DOWN BAR
10	1	3-IN PVC 6" LONG
11	6	3-IN PVC 12" LONG
12	1	3-IN PVC 23.5" LONG

PRELIMINARY 12-06-25 NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

SKANEATELES MARINA

1939 WEST LAKE ROAD, LLC

TOWN OF SKANEATELES ONONDAGA COUNTY NEW YORK

GRADING & DRAINAGE DETAILS & SPECIFICATIONS

PROJECT NO. 2006012

SCALE AS NOTED

DATE 12-06-25

REVISED BY N/A

DRAWN BY ALP

CHECKED BY TTE

GD-2

ADS
Advanced Drainage Systems, Inc.

DC-780 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH DC-780.
2. CHAMBERS SHALL BE NEW, UNUSED AND SHALL BE MANUFACTURED FROM NEW, VIRGIN POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F 761, "STANDARD PRACTICE FOR THE PERPENDICULAR PLATE COMPRESSION TEST OF THERMOPLASTIC PIPE AND FITTINGS".
4. CHAMBERS ALONE (WITHOUT STONE) SHALL BE CAPABLE OF SUPPORTING A MINIMUM OF 1,000 PSF WITH A MAXIMUM DEFLECTION OF 5% WITHOUT EXCEEDING THE ELASTIC LIMIT. ALSO, THE CHAMBER SHALL BE CAPABLE OF SUPPORTING A MINIMUM OF 250 PSF WITH A MAXIMUM DEFLECTION OF 2% WITHOUT EXCEEDING THE ELASTIC LIMIT. THE CHAMBER SHALL NOT CONTAIN PERFORATIONS IN THE CHAMBER SIDEWALLS THAT WOULD ALLOW SOIL TO ENTER THE CHAMBER FROM THE SIDES.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL MODEL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE CHAMBERS ARE ADEQUATE TO SATISFY THE ABOVE REQUIREMENTS FOR A MINIMUM OF 75 YEARS. THE STRUCTURAL DESIGN SHALL ALSO ENSURE THAT THE CHAMBERS ARE ADEQUATE TO SATISFY THE ABOVE REQUIREMENTS WHEN SUBJECTED TO THE FOLLOWING: DEAD LOADS AND SUSTAINED LIVE LOADS, SUCH AS THE WEIGHT OF SOIL AND VEHICLES ON THE SITE, AND SHORT TERM LIVE LOADS, SUCH AS THE WEIGHT OF VEHICLES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALSO INSTALLED USING CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F 761 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED PIPE AND FITTINGS", ASTM F 1216 "STANDARD PRACTICE FOR RETAINING WALL, EMBANKMENT, AND FOUNDATION INSTALLATION", AND ASTM D 2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF FLEXIBLE THERMOPLASTIC SEWER PIPE". THE CHAMBER LOADS AND ALLOWABLE DEFLECTIONS SHALL BE PROVIDED FROM REPUTABLE TEST DATA OR FINITE ELEMENT ANALYSIS.
7. UPON CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WHO IS AN AREA OFFICIAL INCLUDED IN THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR THE PROJECT THAT INCLUDES THE FOLLOWING INFORMATION:
   - THE STRUCTURAL EVALUATION SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE SUPERIOR THAN OR EQUAL TO THOSE SPECIFIED IN THE CURRENT ASTM STANDARD FOR THE CHAMBER. THE SAFETY FACTORS ARE DEFINED IN SECTIONS 4 AND 5 OF THE CURRENT ASTM STANDARD SPECIFICATION FOR THERMOPLASTIC SEWER PIPE.
   - THE SITE DESIGN ENGINEER SHALL SUBMIT THE STRUCTURAL EVALUATION TO THE CHAMBER MANUFACTURER PRIOR TO PROJECT BIDDING SO THAT IT SHALL BE THE TIMELINE MODULE USED FOR BIDDING.
8. CHAMBERS AND END CAPS SHALL BE MANUFACTURED IN THE USA FROM THERMOPLASTIC RESIN PELLETS.
9. ALL CHAMBERS SHALL BE STABILIZED AND INTERCONNECTED BY CHAMBER ROWS. CONNECTIONS BETWEEN CHAMBERS SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURE.
10. ADS DOES NOT DESIGN OR PROVIDE INSURANCE UNDER PATENTS TO ANYONE THE LICENSED ENTITY TO USE ADS PATENTED DESIGNS. THE MINIMUM UNIT SYSTEM SHALL BE DESIGNED BY A MATHEMATICIAN OR PROFESSIONAL ENGINEER AND INSTALLED BY A CERTIFIED CONTRACTOR.

DC-780 TECHNICAL SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH DC-780.
2. CHAMBERS SHALL BE NEW, UNUSED AND SHALL BE MANUFACTURED FROM NEW, VIRGIN POLYPROPYLENE COPOLYMERS.
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7. UPON CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WHO IS AN AREA OFFICIAL INCLUDED IN THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR THE PROJECT THAT INCLUDES THE FOLLOWING INFORMATION:
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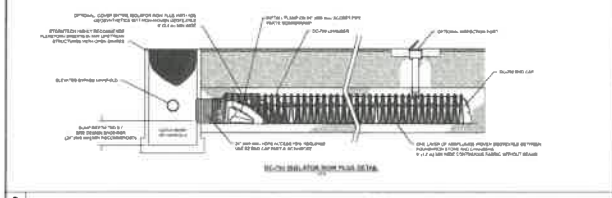
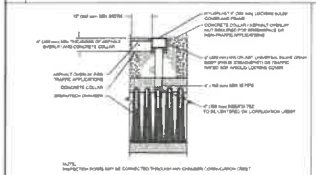


3 DC-780 ISOLATOR ROW PLUS DETAIL



4" PVC INSPECTION PORT DETAIL
(SC SERIES CHAMBER)
N/T

4 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
   A. INSPECTION PORTS (IF PRESENT)
      A.1 REMOVE/OPEN LID ON NEARBY STORM DRAIN
      A.2 REMOVE AND CLEAN FLUSHING PLUG IF PRESENT
      A.3 USING A FLASHLIGHT AND TAPE MEASURE, INSPECT FOR SEDIMENT AND RECORD THE DEPTH OF SEDIMENT
      A.4 IF SEDIMENT IS PRESENT IN THE ISOLATOR ROW PLUS, DETERMINE IF MAINTENANCE IS DUE BASED ON ANTICIPATED DEPTH OF SEDIMENT AND INTENDED USE OF SITE
      A.5 IF SEDIMENT IS 3" OR GREATER, 3" OR MORE PROVIDED AS STEP 1 IF NOT, PROCEED TO STEP 2
   B. ALL ISOLATOR PLUS ROWS
      B.1 REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
      B.2 REMOVE FLUSHING PLUG IF PRESENT. INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
         a. MARKING ON PIPE 3 FT ON CHAMBER MAY BE USED TO AVOID A CONVENIENT SPACE BEHIND
         b. FOLLOW THAT REMOVE/REPLACE ONE SUSPECT STONE BELOW IF SUSPECT SEDIMENT
      B.3 IF SEDIMENT IS 3" OR MORE, 3" OR MORE PROVIDED AS STEP 1, IF NOT, PROCEED TO STEP 2

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETTING PROCESS
   A. JETTER SHOULD BE RATED FOR USE WITH THE SIZE OF CHAMBERS. ADDITIONAL TWO DIRECTIONAL JETTERS MAY BE NECESSARY IN LARGER CHAMBERS
   B. APPLY CLEAN WATER TO EVENLY COAT THE INSIDE OF CHAMBERS WITH A THIN LAYER OF WATER. START JETTING THE FARTHEST CHAMBER FROM THE ISOLATOR ROW PLUS
   C. VACUUM SEDIMENT AS NECESSARY

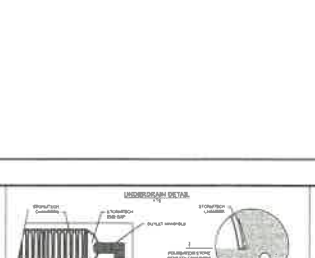
*STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND SUMPS DAILY UPSTREAM OF THE ISOLATOR ROW PLUS

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. SCHEDULE JETTING AND VACUUTRUCK ANNUALLY OR BASED ON INSPECTION RESULTS. THE MAINTENANCE IS ADDITIONAL

5 UNDERDRAIN DETAIL



6 INSERTA-TEE SIDE INLET DETAIL

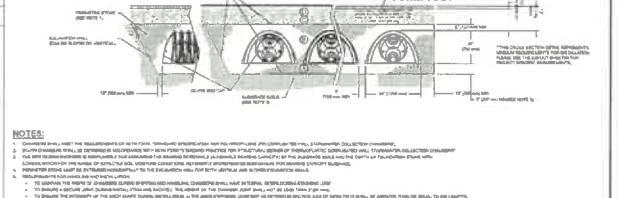
2 DC-780 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH DC-780 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL FILL MATERIAL FOR LAYER D STARTING FROM THE TOP OF THE CHAMBER TO THE BOTTOM OF THE FLEXIBLE PAVEMENT OR FINAL GRADE. SHALL BE A LOW PLASTICITY MATERIAL SUITABLE FOR THE FLEXIBLE PAVEMENT SUBGRADE. SEE DETAIL OF THE SITE PLANS.	ANY SEASONAL MOISTURE CONDITIONING MAY BE REQUIRED TO ACHIEVE THE REQUIRED COMPACTION.	NONE	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PROVIDE IMPLEMENT AND VERIFY STORMTECH MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL FILL MATERIAL FOR LAYER C STARTING FROM THE TOP OF THE SUBGRADE STONE OR LARGE, TO 24" (610 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	ANY SEASONAL MOISTURE CONDITIONING MAY BE REQUIRED TO ACHIEVE THE REQUIRED COMPACTION.	AASHTO M145[1] A-1, A-2-4, A-3 OR A-57 M 43[3] 3, 357, 4, 467, 5, 56, 6, 67, 7, 78, 8, 89, 9, 10	SEVER CLEARING STONES TO ZONE OF SATISFACTORY COMPACTION. COMPACT ADDITIONAL LAYERS IN 12" (305 mm) MAX LIFTS TO ACHIEVE A MINIMUM OF 95% PROCTOR DENSITY FOR FINE GRADED MATERIALS AND 85% FOR COARSE GRADED MATERIALS. ADD LIFTS UNTIL DESIRED COMPACTION IS ACHIEVED. PROVIDE IMPLEMENT AND VERIFY STORMTECH MATERIAL AND PREPARATION REQUIREMENTS.
B	EMBEDMENT STONE FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (IF PRESENT) TO THE 1" LAYER	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE	AASHTO M43[3] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FIRST BOTTOM OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE	AASHTO M43[3] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[4]

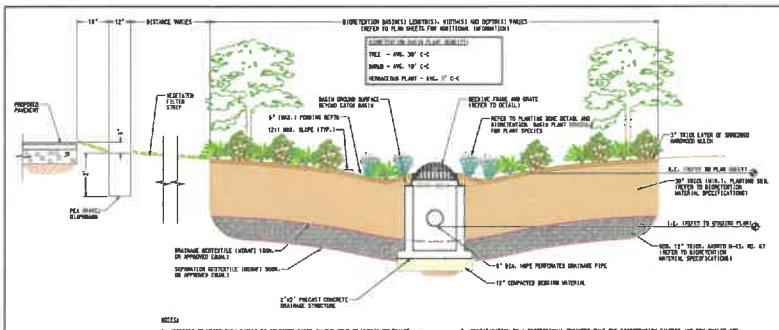
FILL NOTES:

1. ALL MATERIALS MEET AASHTO DESIGNATIONS AND FOR GRANULAR MATERIALS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, HIGH SCHEMICAL SPECIFICATIONS OF STONE AND ALSO STONE FILL, CLEAN, CRUSHED, ANGULAR NO. 1 AASHTO M43 STONE.
2. STORMTECH CONSTRUCTION MATERIALS MUST MEET FOR A LOCATION WITHIN 3 MILES FLEXIBLE AND CONFORMING WITH A MINIMUM COMPACTION.
3. AASHTO M43 THE TWO SUITABLE MATERIALS MAY BE CONTAMINATED BY CONSTRUCTION. A FLAT SURFACE MUST BE ACHIEVED BY RAKING OR GRADING WITHOUT ADDITIONAL EQUIPMENT FOR EFFECTIVE LOAD SPREADING. CONTACT STORMTECH FOR ADDITIONAL INFORMATION.
4. SHALL LIMIT E. B. PLACEMENT. ANY SUBLAYER SHALL CAN BE PLACED IN LIFT 5% OF 36 THE PREFERRED SINGLE LIFT PROVIDED IT SUBGRADE SHALL CAN BE USED TO REACH LIFT THE ASSUMPTIONS OTHERWISE CALCULATED. REFERENCE NOTE 5 FOR REDUCED COMPACTION SPECIFICATION, SHOWN.
5. PRIOR INSTALLED COMPACTED MATERIALS MUST BE PROTECTED FROM INCOMPATIBLE MATERIALS. REFERENCE NOTE 5 FOR REDUCED COMPACTION SPECIFICATION, SHOWN.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F34-14 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED PIPE, STORMWATER COLLECTION CHAMBERS".
2. STORM CHAMBERS SHALL BE DESIGNED BY INCORPORATING THE FOLLOWING: "DESIGN PRACTICES FOR THERMOPLASTIC SEWER PIPE BY PLASTICS PIPE INSTITUTE, STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE ACCEPTABILITY OF THE STORMTECH MATERIAL CONTAINED BY THE ENGINEER WHO HAS THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR SEDIMENT AND/OR FOR SUBGRADE SOIL MOISTURE CONDITIONS. FOR ADDITIONAL INFORMATION FOR DRAINAGE SUPPORT BUSINESS.
4. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO ASSURE THE REQUIRED CHAMBER SPACING DURING BACKFILLING, CHAMBERS SHALL HAVE INTEGRAL SPACER DIAPHRAGMS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE JOINT OF THE CHAMBER JOINT SHALL HAVE 2 RIBS.
   - TO ENSURE THE INTEGRITY OF THE JOINT DURING INSTALLATION, THE JOINT OF THE CHAMBER SHALL BE PROVIDED BELOW THE 1/2" (12 mm)

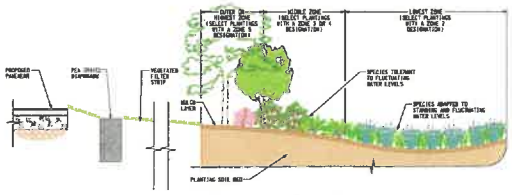


NOTES:

1. APPROPRIATE VEGETATION SHOULD BE SELECTED BASED ON THE ZONE OF HYDRIC TOLERANCE. REFER TO PLANTING ZONES DETAIL AND HYDROLOGIC ZONES TABLE FOR ADDITIONAL INFORMATION.
2. SPECIES EXPOSE SHOULD BEGENERALLY BE RANDOM AND NATURAL.
3. WOODY VEGETATION SHOULD NOT BE PLACED IN THE VICINITY OF INFLOW LOCATIONS.
4. TREES SHOULD BE PLANTED PRIMARILY ALONG PERIMETER OF THE BIORETENTION AREA.
5. CERTIFICATION BY A PROFESSIONAL ENGINEER THAT THE BIORETENTION FILTERS AND DRY SWALES ARE CONSTRUCTED IN FULL COMPLIANCE WITH APPROVED DRAWINGS AND PROJECT SUPPLY IS REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
6. TOPOGRAPHIC RE-BUILT DRAWINGS OF ALL ONSITE AND OFFSITE DRAINAGE FACILITIES AND STORMWATER MANAGEMENT PRACTICES IS REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
7. ALL DRAINAGE FEATURES AND STORMWATER MANAGEMENT PRACTICES MUST BE IN FULL COMPLIANCE WITH THE APPROVED DRAWINGS AND PROJECT SUPPLY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

TYPICAL BIORETENTION BASIN SECTION AT CATCH BASIN

SCALE: 1" = 2'



PLANTING ZONES DETAIL

SCALE: 1" = 2'

HYDROLOGIC ZONES

ZONE #	ZONE DESCRIPTION	HYDROLOGIC CONDITIONS
ZONE 1	DEEP WATER POND	1-6 FEET DEEP PERMANENT POOL
ZONE 2	SHALLOW WATER BENCH	6 INCHES TO 1 FOOT DEEP
ZONE 3	SHORELINE FRINGE	REGULARLY INUNDATED
ZONE 4	RIPARIAN FRINGE	PERIODICALLY INUNDATED
ZONE 5	FLOODPLAIN TERRACE	INFREQUENTLY INUNDATED
ZONE 6	UPLAND SLOPES	SELDOM OR NEVER INUNDATED

NOTE:

1. EVERY FACILITY DOES NOT NECESSARILY REFLECT ALL OF THESE ZONES.

BIORETENTION PLANTING SOIL CHARACTERISTICS

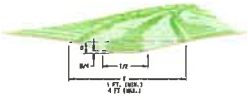
PARAMETER	VALUE
PH RANGE	5.2 TO 7.0
ORGANIC MATTER	1.5 TO 4%
MAGNESIUM	35 LBS. PER ACRE, MIN.
POTASSIUM (P2O)	85 LBS. PER ACRE, MIN.
SOLUBLE SALTS	500 PPM
CLAY	10 TO 25%
SILT	30 TO 50%
SAND	35 TO 60%

BIORETENTION BASIN PLANT SCHEDULE

BOTANICAL NAME	COMMON NAME	ZONE	MATURE HEIGHT/SPREAD
TREES (DECIDUOUS)			
Acer saccharinum	Silver Maple	3,4	50 - 70 FEET / 30 - 40 FEET
Quercus bicolor	Swamp White Oak	3,4,5	60 - 80 FEET / 40 - 60 FEET
Celtis occidentalis	Hackberry	5	40 - 60 FEET / 30 - 40 FEET
Quercus rubra	Red Oak	3,4,5,6	60 - 80 FEET / 40 - 60 FEET
Betula nigra	River Birch	3,4,5	5 - 10 FEET / 5 - 10 FEET
Acer rubrum	Swamp Maple	3,4,5	35 - 50 FEET / 30 - 40 FEET
Quercus bicolor	Swamp White Oak	3,4,5	60 - 80 FEET / 40 - 60 FEET
Liriodendron tulipifera	Tulip Tree	5,6	60 - 80 FEET / 30 - 40 FEET
Nyssa sylvatica var. biflora	Tupelo	3,4,5	30 - 50 FEET / 20 -30 FEET
TREES (CONIFEROUS)			
Juniperus virginiana	Eastern Red Cedar	4,5,6	30 - 40 FEET / 5 - 15 FEET
Larix laricina	Larch, Tamarack	3,4	50 - 70 FEET / 25 - 40 FEET
SHRUBS (DECIDUOUS)			
Cephalanthus occidentalis	Buttonbush	3,4,5	6 - 8 FEET / 4 - 6 FEET
Cornus sericea	Common Dogwood	3,4,5	6 - 12 FEET / 6 - 12 FEET
Ilex verticillata	Common Winter Berry	3,4,5,6	5 - 12 FEET / 5 - 12 FEET
Prunus virginiana	Red Chokeberry	3,4,5	8 - 20 FEET / 5 - 8 FEET
Amelanchier canadensis	Shadbush, Serviceberry	4,5,6	15 - 20 FEET / 15 - 20 FEET
Cornus amomum	Silky Dogwood	3,4,5	4 -6 FEET / 4 - 6 FEET
Alnus rugosa	Speckled Alder	3,4	12 - 20 FEET / 6 - 12 FEET
Ilex verticillata	Winterberry	3,4,5	5 - 12 FEET / 5 - 12 FEET
Viburnum trilobum	Hobb Bush	4,5	15 - 20 FEET / 15 - 20 FEET
HERBACEOUS PLANTS			
Peltandra virginica	Arrow arum	2,3	1 - 4 FEET AIRM
Sagittaria latifolia	Arrowhead, Duck Potato	2,3	1 - 4 FEET / 1 TO 3 FEET
Saururus cernuus	Lizard's Tail	2,3	1 - 4 FEET / 1 - 3 FEET
Sparganium eurycarpum	Bur Bur-reed	2,3	4 - 6 FEET / 2 - 4 FEET
Typha sp.	Cattail	2,3	4 - 8 FEET / 1 - 4 FEET
Saururus cernuus	Lizard's Tail	2,3	1.5 - 4 FEET / 1 - 3 FEET
Pontederia cordata	Pickerel Weed	2,3	1 - 4 FEET / 1 - 3 FEET
Zizania aquatica	Southern Wild-rice	2,3	5 - 8 FEET / 2 - 3 FEET
Polygonum spp.	Smartweed	2,3,4	2 FEET AIRM
Elymus riparius	Wild Rye	2	10 FEET / 10 INCHES

NOTE:

TREES TO HAVE A MINIMUM OF 2 - 2 1/2" CALIPER. SHRUBS TO BE IN 3 GALLON CONTAINERS. HERBACEOUS PLANTS TO HAVE A HEIGHT OF 1 FOOT MINIMUM IN A 1 - 2 GALLON CONTAINER.



CONSTRUCTION SPECIFICATIONS

1. ALL TREES, SHRUBS, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. FILL SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED WATERWAY.
4. ALL EARTH DISPOSED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
5. STABILIZATION SHALL BE DONE ACCORDING TO THE APPROPRIATE STANDARD AND SPECIFICATIONS FOR VEGETATIVE PRACTICES.
   1. FOR DESIGN VELOCITIES OF LESS THAN 3.0 FEET PER SECOND, MULCHING AND MULCHING MUST BE USED FOR THE ESTABLISHMENT OF THE VEGETATION. IT IS RECOMMENDED THAT, WHEN CONDITIONS PERMIT, TEMPORARY DIVERSIONS OR OTHER MEANS SHOULD BE USED TO PREVENT WATER FROM ENTERING THE WATERWAY DURING THE ESTABLISHMENT OF THE VEGETATION.

GRASSED SWALE DETAIL

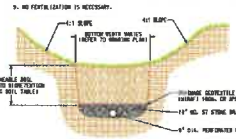
NOT TO SCALE

MATERIAL SPECIFICATIONS FOR BIORETENTION

PARAMETER	SPECIFICATION	SIZE	NOTES
PLANTINGS	[illegible] SPECIFICATIONS	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL	SAND: 35-60% SILT: 30-50% CLAY: 10-25%	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM OR LOAM
MULCH	HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM
PEA GRAVEL, DISCHARGE AND CHECKS DAMS	PEA GRAVEL	0.25" TO 0.75"	
GEOTEXTILE	MIRAFI 500X OR ADS 200N (SEPARATION) MIRAFI 180N (DRAINAGE)	N/A	FOR USE AS NECESSARY WHERE INDICATED
UNDERDRAIN GRAVEL	AASHTO M-43, NO. 57	0.5" TO 2"	
UNDERDRAIN PIPING	ASTM-D-1785 OR AASHTO M-278	6" DIAMETER PERFORATED HDPE	SLOTTED PIPE

BIORETENTION PLANTING SPECIFICATIONS

1. ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM THE SOURCE TO THE JOB SITE.
2. THE DIAMETER OF THE PLANTING HOLE MUST BE SIX INCHES WIDER THAN THE DIAMETER OF THE BALL.
3. THE PLANTING HOLE SHALL BE DEEP ENOUGH TO ALLOW 1/8TH OF THE BALL TO BE ABOVE EXISTING GROUND. TAMP LOOSE SOIL AT THE BOTTOM OF THE HOLE BY HAND.
4. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS.
5. BACKFILL THE PIT WITH EXISTING SOIL.
6. TREES SHALL BE STAKED USING 2" X 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL. REFER TO DETAIL ON THIS SHEET.
7. PLANTING NON-GRASS GROUND COVER:
   - DIG HOLES THROUGH THE MULCH WITH HAND TROWEL, SHOVEL, BULB PLANTER OR HOE.
   - SPLIT BIODEGRADABLE POTS AND REMOVE NON-BIODEGRADABLE POTS.
   - SURROUND THE ROOTS WITH SOIL BELOW THE MULCH. SET POTTED PLANTS SO THAT THE TOP OF THE POT IS EVEN WITH EXISTING GRADE. COVER BARE ROOT PLANTS IN THE CROWN.
   - THOROUGHLY WATER THE ENTIRE GROUND COVER BED.
8. GRADES AND LEGUME SEED SHALL BE TILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLANS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.
9. NO FERTILIZATION IS NECESSARY.



NOTES:

1. UNDERDRAIN 3/8" PERFORATIONS AT 6" CENTERS, 4 HOLES PER ROW.
2. REFER TO PROJECT SUPPLY FOR INSPECTION AND MAINTENANCE REQUIREMENTS.
3. 6" DIA. UNDERDRAIN SHALL BE PERFORATED ADS N-12, OR APPROVED EQUAL. HDPE PIPE SHALL BE RIGID "SIGN" LENGTHS. COIL PIPE IS NOT ACCEPTABLE.

CONSTRUCTION SPECIFICATIONS

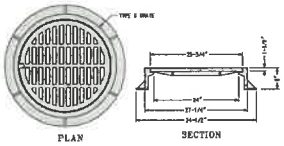
1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. FILL SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETE WATERWAY.
4. ALL EARTH DISPOSED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
5. STABILIZATION SHALL BE DONE ACCORDING TO THE APPROPRIATE STANDARD AND SPECIFICATIONS FOR VEGETATIVE PRACTICES.
   1. FOR DESIGN VELOCITIES OF LESS THAN 3.0 FEET PER SECOND, MULCHING AND MULCHING MUST BE USED FOR THE ESTABLISHMENT OF THE VEGETATION. IT IS RECOMMENDED THAT, WHEN CONDITIONS PERMIT, TEMPORARY DIVERSIONS OR OTHER MEANS SHOULD BE USED TO PREVENT WATER FROM ENTERING THE WATERWAY DURING THE ESTABLISHMENT OF THE VEGETATION.

REFERENCES:

1. DPW STORMWATER MANAGEMENT DESIGN MANUAL, ORIGINALLY PREPARED BY CENTER FOR WATERSHED PROTECTION FOR DPWMEC. UPDATED BY DPWMEC JANUARY 2003.
2. DESIGN OF STORMWATER FILTERING SYSTEMS, PREPARED BY CENTER FOR WATERSHED PROTECTION FOR THE CHESAPEAKE RESEARCH CONSORTIUM, DECEMBER 1996.

DRY SWALE DETAIL

NOT TO SCALE



TYPICAL CATCH BASIN FRAME & GRATE

SCALE: 1" = 1'-0"

NOTE:

1. THE FRAME & GRATE SHALL BE EAST JORDAN IRON WORKS PART NUMBERS 1707 AND 1020N7, HORIZONTALLY, INLET FRAME AND GRATE WATER FOR HEAVY DUTY PERFORMANCE (40-200). OR APPROVED EQUAL.

DRY SWALE PERMEABLE SOIL CHRACTERISTICS

PARAMETER	VALUE
PH RANGE	5.2 TO 7.0
ORGANIC MATTER	1.5 TO 4%
MAGNESIUM	35 LBS. PER ACRE, MIN.
PHOSPHORUS (P O)	75 LBS. PER ACRE, MIN.
POTASSIUM (K O)	85 LBS. PER ACRE, MIN.
SOLUBLE SALTS	500 PPM
CLAY	10 TO 25%
SILT	30 TO 50%
SAND	35 TO 60%

PRELIMINARY 06-25 NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

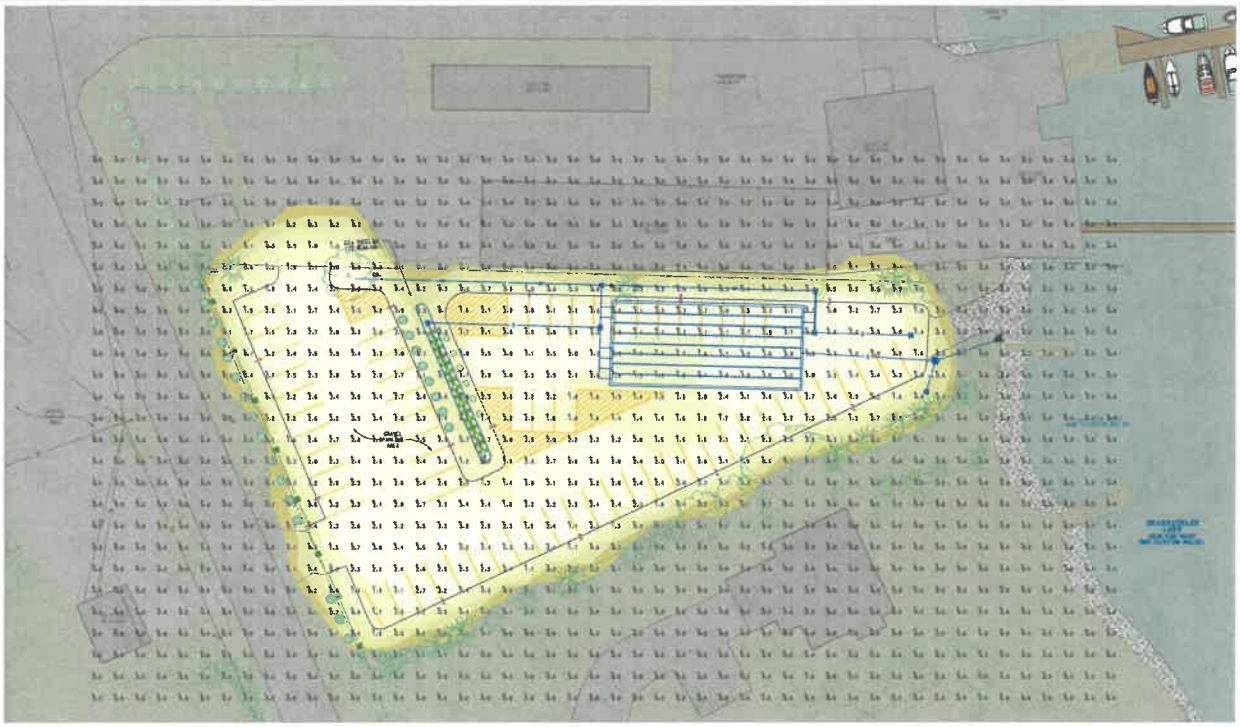
REVISIONS PER TOWN ENGINEER COMMENTS	12-06-25

PROJECT: SKANEATELES MARINA
1938 WEST LAKE ROAD, LLC
TOWN OF SKANEATELES ONONDAGA COUNTY NEW YORK

DRAWING TITLE: GRADING & DRAINAGE DETAILS & SPECIFICATIONS

PROJECT NO. 2000TA172
SCALE AS NOTED
DATE 12-02-25
ENG'D BY N/A
DRAWN BY ALP
CHECKED BY TJT

SHEET GD-4



KEY

EXISTING	PROPOSED
PROPERTY LINE	DRAINAGE PIPE
RIGHTS-OF-WAY LINE	CATCH BASIN
FLOATING OBJECT PERMIT LIMITS	DRAINAGE MANHOLE
FENCE LINE	DRAINAGE SWALE
POWER POLE	LIGHT POLE (SINGLE HEAD) TYPE "F" LUMINAIRE MOUNTED ON 20' ALUM POLE WITH 2' HIGH CONCRETE BASE (NPT-1-04-SGL-1-200-WHT)
OVERHEAD ELECTRIC	
END FLARE SECTION	
DRAINAGE SWALE	

PHOTOMETRIC LIGHTING PLAN

1" = 20' — 20 0 20 40 SCALE FEET

DRAWING REFERENCES:

1. "SCHEME 2 - CHERRYWOOD BAY" AS PREPARED BY LANDMARK-PATRICK SCANTON & ASSOCIATES, RESTORED/MODIFIED PROJECT NUMBER 7001; DATED AUGUST 7, 2007.
2. "TOPOGRAPHIC MAP - PART OF LOT 86 - TOWN OF SKANEATELES" AS PREPARED BY CATTRELL LAND SURVEYORS; ID NUMBER 06-01-104 DATED AUGUST 23, 2007.
3. SITE VALIDATION PERFORMED BY TDK ENGINEERING ON SEPTEMBER 21, 2007.
4. "Lot. 1038 LAKE ROAD - PART OF LOT 86" AS PREPARED BY CATTRELL LAND SURVEYORS, P.C.; J.O. No. 06-01-104 DATED MARCH 3, 2003; RECERTIFIED ON JANUARY 17, 2013.
5. "PARCELS OF LAND - PART OF MILITARY LOT 86" AS PREPARED BY PAUL JAMES HUSZTONI, P.L.S., PELCI PROJECT No. 3030-01-08, DR & MM DATED JANUARY 16, 2002.
6. "PARCELS OF LAND - PART OF MILITARY LOT 86" AS PREPARED BY PAUL JAMES HUSZTONI, P.L.S., PELCI PROJECT No. 3030-01-08, DR & MM DATED FEBRUARY 13, 2002.

LIGHTING KEY

- 8.0 FOOT CANDLES
- 3.0 FOOT CANDLES
- 1.0 FOOT CANDLES
- 0.5 FOOT CANDLES
- 0.2 FOOT CANDLES
- 0.1 FOOT CANDLES

PARKING LOT STATISTICAL SUMMARY

AVERAGE	MAXIMUM	MINIMUM	MIN./AVG.	MIN./MAX.
2.47 FC	4.0 FC	0.0 FC	1.00	1.00

NOTES:

1. MAINTAINED FOOTCANDLE VALUES SHOWN ARE AT GRADE.
2. A MAINTENANCE FACTOR OF 0.95 WAS USED FOR LED LUMINAIRES.
3. AVERAGE FOOTCANDLES ARE FOR PARKING LOT LIGHTS.

INFORMATION BASED ON ILLUMINANCE FROM

PROPOSED 100-WATT AREA LIGHTS MOUNTED ON 20' HIGH POLES.

PRELIMINARY 12-05-25 NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

12-05-25

REVISED PER TOWN COMMENTS 12-08-25

SKANEATELES MARINA

1038 WEST LAKE ROAD, LLC

TOWN OF SKANEATELES ONONDAGA COUNTY NEW YORK

PHOTOMETRIC LIGHTING PLAN

PROJECT No. 2007072

SCALE AS NOTED

DATE 11-07-25

FIELD BK N/A

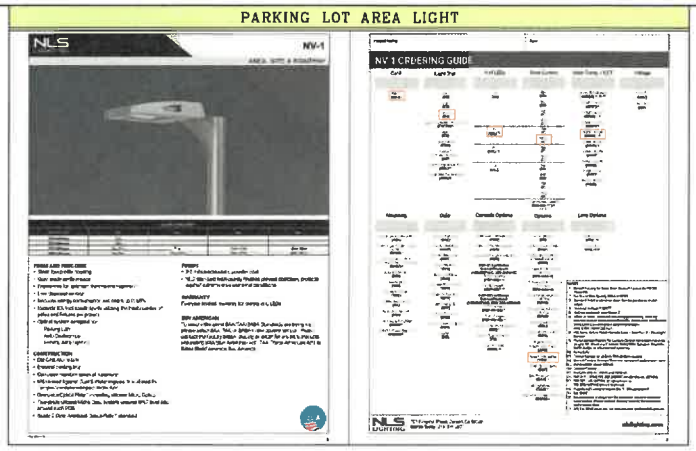
DRAWN BY DEC

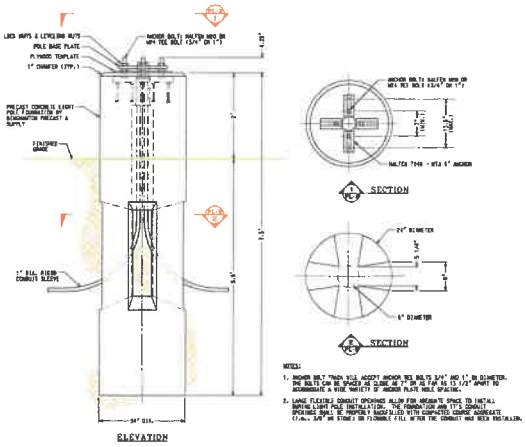
CHECKED BY TFT

REV.

PL-1

PARKING LOT AREA LIGHT



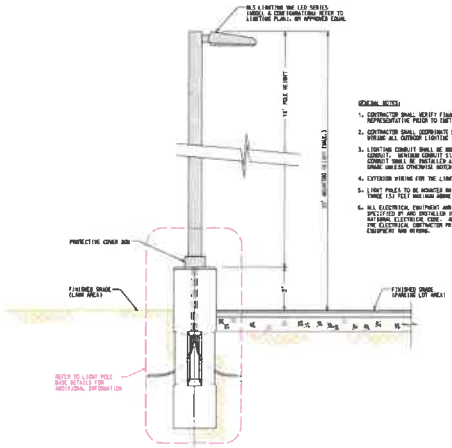


NOTES:

1. ANCHOR BOLT TYPE VIA ANCHOR BOLTS 3/4" AND 1" IN DIAMETER. THE BOLTS CAN BE SPACED FOR CLOSE NO 7" ON CENTER TO 12 1/2" APART TO ACCOMMODATE A WIDE VARIETY OF ANCHOR PLATE HOLE SPACING.
2. LARGE FLEXIBLE CONDUIT OPENINGS ALLOW FOR ADEQUATE SPACE TO INSTALL BURIED LIGHT POLE INSTALLATION. THE FOUNDATION AND IT'S CONDUIT OPENINGS SHALL BE PROPERLY BACKFILLED WITH COMPACTED COARSE AGGREGATE (7/8in. 3/4" OR STONE) OR FLOWABLE FILL AFTER THE CONDUIT HAS BEEN INSTALLED.

PRECAST CONCRETE LIGHT POLE BASE DETAILS

SCALE: 1" = 1'



GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY FINAL LIGHT LOCATIONS WITH CLIENT'S REPRESENTATIVE PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL COORDINATE LOCATION, TYPE AND METHOD OF WIRING ALL OUTDOOR LIGHTING WITH THE CLIENT'S REPRESENTATIVE.
3. LIGHTING CONDUIT SHALL BE ROUTED IN GALVANIZED HEAVY WALL CONDUIT. WIRING INSTALLED IN THE SHALL BE ONE 1/2 INCH CONDUIT. WIRING INSTALLED IN A MINIMUM OF 24 INCHES BELOW GRADE UNLESS OTHERWISE NOTED.
4. EXTERIOR WIRING FOR THE LIGHT POLES SHALL BE #10 AWG COPPER.
5. LIGHT POLES TO BE MOUNTED ON PRECAST CONCRETE PEDESTALS THREE (3) FEET ABOVE ADJACENT GROUND SURFACE.
6. ALL ELECTRICAL EQUIPMENT AND WIRING SHALL BE OF THE TYPE SPECIFIED BY AND INSTALLED OR MODIFIED BY/IN NFPA 70, NATIONAL ELECTRICAL CODE. ALL AREAS TO BE CLASSIFIED BY THE ELECTRICAL CONTRACTOR PRIOR TO INSTALLING ELECTRICAL EQUIPMENT AND WIRING.

LIGHT POLE DETAIL

SCALE: 1" = 3'

PRELIMINARY
12-05-25
NOT FOR CONSTRUCTION

TDK Engineering Associates, PC

REVISION	DATE
1 REVISED PER TOWN COMMENTS	12-05-25

PROJECT: SKANEATELES MARINA
CLIENT: 1938 WEST LAKE ROAD, LLC
LOCATION: TOWN OF SKANEATELES, ONONDAGA COUNTY, NEW YORK

DRAWING TITLE: LIGHTING DETAILS

PROJECT NO.	2501072
SCALE	AS NOTED
DATE	12-05-25
REC'D BY	N/A
DRAWN BY	DRC
CHECKED BY	TFT

SHEET: PL-2