

### LEGEND

- IRON PIPE / CONCRETE MONUMENT FOUND
- EXISTING TREELINE
- EXISTING GRADE CONTOUR LINES (5 FOOT INTERVALS)
- EXISTING GRADE CONTOUR LINES (1 FOOT INTERVALS)
- APPROXIMATE PROPERTY LINES
- EXISTING WOODEN FENCE
- EXISTING SEWER LINE/MANHOLE
- EXISTING SEWER FORCEMAIN
- EXISTING STORM LINE/MANHOLE/BASIN
- EXISTING OVERHEAD ELECTRIC LINE/POWER POLE
- EXISTING UNDERGROUND POWER
- EXISTING WATER LINE/HYDRANT/VALVE/SHUTOFF
- EXISTING UNDERGROUND GAS SYSTEMS
- EXISTING UNDERGROUND COMMUNICATIONS

- ### NOTES:
- ASPECTS OF PLAN ARE APPROXIMATE AND DERIVED FROM AERIAL PHOTOGRAPHY.
  - THE HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 VERMONT STATE PLANE 4400 (US SURVEY FEET). ELEVATIONS ARE BASED ON THE NAVD88 (US SURVEY FEET).
  - EXISTING GROUND CONTOUR ELEVATIONS ARE BASED 2014 STATE OF VERMONT LIDAR AND FIELD SURVEY BY KREBS AND LANSING IN THE FALL OF 2022. KREBS AND LANSING SURVEYED ONLY AREA AROUND THE PROPOSED PROJECT.
  - UTILITIES ARE NOT WARRANTED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL CONTACT DIG SAFE BEFORE BEGINNING ANY EXCAVATION.
  - THIS PLAN IS NOT A BOUNDARY SURVEY. THE PROPERTY LINES SHOWN ARE BASED ON TAX MAPPING AND ARE CONSIDERED APPROXIMATE. PROPERTY LINES HAVE BEEN ADJUSTED BASE ON MONUMENTATION FOUND IN THE FIELD AND EVIDENCE IN AERIAL PHOTOGRAPHY. PROJECT PARCEL IS ALSO SHOWN BASED ON AN EXISTING BOUNDARY SURVEY TITLED "BOUNDARY PLAT OF PEARL STREET VENTURES, LLC" DATED NOVEMBER 7, 2022 BY O'LEARY BURKE CIVIL ASSOCIATES, PLC.

### CALCULATIONS:

NOTE: ALL EXISTING DEVELOPMENT IS WITHIN THE CITY OF ESSEX JUNCTION. THESE VALUES ARE SHOWN BASED ONLY ON THE AREA WITHIN THE CITY OF ESSEX JUNCTION. LAND IN ESSEX TOWN IS NOT INCLUDED IN THESE CALCULATIONS.

EXISTING CONDITIONS:

- PROPERTY AREA IN THE CITY OF ESSEX JCT. = ±41,800 S.F. (0.96 ACRES)
- BUILDING COVERAGE: ±3,950 S.F. (0.09 ACRES) (9.5%)
- OVERALL IMPERVIOUS: ±11,100 S.F. (0.26 ACRES) (26.6%)

### WATER AND WASTEWATER DESIGN FLOW

**EXISTING WASTEWATER DESIGN FLOW:**

- SEVEN (7) 2-BEDROOM APARTMENT DWELLING UNITS (DU)
- 7 2-BEDROOM DU \* 210 GPD/DU = 1,470 GPD

**EXISTING WATER DESIGN FLOW:**

- SEVEN (7) 2-BEDROOM APARTMENT DWELLING UNITS (DU)
- 7 2-BEDROOM DU \* 280 GPD/DU = 1,960 GPD

# SUNDERLAND APARTMENTS

229 Pearl Street  
City of Essex Junction, Vermont

164 Main Street, Suite 201  
Colchester, Vermont 05446

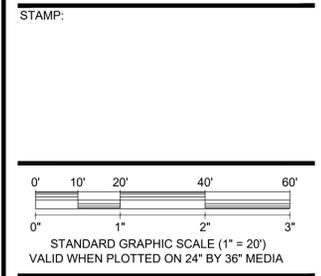
P: (802) 878-0375  
www.krebsandlansing.com

**ISSUED FOR PERMIT REVIEW  
NOT FOR CONSTRUCTION**

APPLICANT/OWNER:  
227 Pearl Street LLC  
c/o Brett Grabowski  
32 Seymour Street #101  
Williston, Vermont 05495

PROPERTY INFORMATION:  
CITY OF ESSEX JUNCTION:  
Address: 227 Pearl Street  
Parcel ID: 1040042000  
SPAN: 207-066-10350  
Area: 0.96 Acres (±41,800 s.f.)  
Zoning: Multi-Family/Mixed Use 1  
Setbacks:  
Front: 20'  
Rear: 10'  
Side: 10'  
Max. Building Height: 58'  
Total Lot Coverage: 65% (80% with waiver)

ESSEX:  
Parcel ID: 2040042000  
SPAN: 207-067-42238  
Area: 0.11 Acres (±4,800 s.f.)  
Zoning: Mixed Use



REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revisions from City comments	05/05/23

DRAWING TITLE:  
**OVERALL PROPERTY PLAN  
EXISTING CONDITIONS**

DATE ISSUED: 04/07/23  
DRAWN BY: GTD  
PROJECT NO.: 22304  
DRAWING NO.: C-0.00

CHECKED BY: GTD  
SCALE: 1" = 20'  
REV. NO.: 1





**GENERAL CONSTRUCTION NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DISTURBED AREAS BACK TO ORIGINAL CONDITION, INCLUDING BUT NOT LIMITED TO CURBING, SIDEWALKS, ROAD, PARKING AREAS, LANDSCAPING, SITE LIGHTING, ELECTRICAL, AND ETC. ALL ASPHALT SHALL BE SAW-CUT PRIOR TO PAVING.
- THE METHODS AND MATERIALS OF CONSTRUCTION SHALL CONFORM TO THE LATEST STANDARDS OF THE STATE OF VERMONT AND CITY OF ESSEX JUNCTION. ALL WORK SHALL BE IN CONFORMANCE WITH ALL PERMITS AND APPROVALS ISSUED FOR THE PROJECT. IN CASE OF CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY AS DIRECTED BY ENGINEER. ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND COMPLETED IN THE TIME SPECIFIED BY OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS SHOWN AND REQUIRED TO MAKE THE JOB COMPLETE. THESE DRAWINGS DO NOT SHOW EVERY FITTING OR APPURTENANCE. MATERIALS SHALL BE AS SPECIFIED ON THE DRAWINGS. MANUFACTURER'S PRODUCT SPECIFICATIONS SHALL BE SUBMITTED FOR ALL MATERIALS TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- THE LOCATION AND SIZE OF EXISTING UNDERGROUND UTILITIES IS NOT WARRANTED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES AND SHALL CONTACT THE AFFECTED UTILITY COMPANY, THE ENGINEER AND THE MUNICIPALITY PRIOR TO MAKING ANY HOOK UPS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXISTING UTILITIES AND THEIR UNINTERRUPTED SERVICES. ALL OFF-SITE BACKFILL, SHEETING, SHORING, DEWATERING, CLEARING AND GRUBBING, EROSION CONTROL, DUST CONTROL, TRAFFIC CONTROL, GRADING, AND ALL INCIDENTALS SHALL BE INCLUDED AS PART OF THE REQUIRED WORK.
- THE CONTRACTOR SHALL VERIFY ALL TEMPORARY BENCH MARKS BEFORE USE.
- THE WORKMEN AND PUBLIC SHALL BE PROTECTED BY THE CONTRACTOR FROM ANY AND ALL HAZARDS CONNECTED WITH THE CONSTRUCTION WORK. OPEN TRENCHES, MATERIALS, OR EQUIPMENT WITHIN THE WORKING LIMITS ARE TO BE GUARDED BY THE USE OF ADEQUATE BARRICADES OR FLAGMEN. ALL BARRICADES LEFT IN POSITION OVERNIGHT ARE TO BE PROPERLY LIGHTED. KEROSENE POTS ARE NOT ACCEPTABLE. WHEN WORK NARROWS THE USABLE PAVEMENT, FLAGMEN SHALL BE EMPLOYED TO AID THE FLOW OF TRAFFIC SO THAT THERE SHALL BE NO UNDUE DELAYS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL WORKMEN, THE GENERAL PUBLIC AND ALL DAMAGES TO PROPERTY OCCURRING FROM OR UPON THE WORK OCCASIONED BY NEGLIGENCE OR OTHERWISE GROWING OUT OF A FAILURE ON THE PART OF THE CONTRACTOR TO PROTECT PERSONS OR PROPERTY FROM HAZARDS OF OPEN TRENCHES, MATERIALS, OR EQUIPMENT AT ANY TIME OF THE DAY OR NIGHT WITHIN THE WORKING AREA. ALL WORK SHALL BE IN CONFORMANCE TO OSHA REGULATIONS, TITLE 19, PARTS 1926.651 AND 1926.652, AND APPLICABLE TO VOSHA REGULATIONS.
- THE CONTRACTOR SHALL VERIFY ALL UTILITY INTERSECTIONS AND CONTACT ENGINEER AND OWNER WITH CONFLICTS.
- THE CONTRACTOR SHALL CALL, DIG SAFE PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL CONTACT THE CITY OF ESSEX JUNCTION 48 HOURS IN ADVANCE OF ANY EXCAVATION SO THEY CAN MARK THE LOCATIONS OF UTILITIES NOT COVERED BY DIG SAFE.
- THE CONTRACTOR SHALL COORDINATE FINAL LOCATION AND INVERTS FOR WATER, SEWER, AND STORM BUILDING CONNECTIONS WITH THE ARCHITECT, STRUCTURAL ENGINEER, AND MECHANICAL ENGINEER.
- ALL STUMPS, ROCK, AND OTHER NON-APPROVED TRENCH BACKFILL MATERIAL DISCOVERED DURING CONSTRUCTION IS THE EXCLUSIVE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROPERTY AND DISPOSED OF IN A STATE APPROVED DISPOSAL LOCATION. ALL EXISTING SOILS REUSED FOR FILL SHALL CONFORM TO ALL APPLICABLE SECTIONS OF VTRANS SPECIFICATIONS SECTION 203-EXCAVATION & EMBANKMENTS. CONTRACTOR SHALL REVIEW SOIL INVESTIGATION REPORT AND SOILS LOGS PRIOR TO BID. ANY SOIL REUSED AS FILL UNDER ROADS AND APPLICABLE CONCRETE SIDEWALKS SHALL PASS A SUBGRADE PROOF ROLL WITH A LOADED TANDEM. FILL SOILS THAT DO NOT PASS A SUBGRADE PROOF ROLL SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL PASSING SIEVE, PROCTOR, AND COMPACTION TESTING EXPENSES SHALL BE PAID BY OWNER. TESTING COORDINATION, ALL OTHER REQUIRED TESTING, AND EXPENSES FOR FAILED TESTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL CONTACT THE GREEN MOUNTAIN POWER (GMP) PRIOR TO ANY WORK IN THE VICINITY OF THE EXISTING ELECTRIC CONDUITS.
- THIS PROJECT WILL LIKELY NOT REQUIRE COVERAGE UNDER AN STATE OF VERMONT GENERAL CONSTRUCTION STORMWATER DISCHARGE PERMIT. THE CONTRACTOR WILL STILL FOLLOW RULES, REGULATIONS, AND DIRECTION OUTLINED IN THE STATE OF VERMONT "LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL" FROM FEBRUARY 2020. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, MAINTAINING AND REMOVING ALL EROSION AND SEDIMENT CONTROL DEVICES SHOWN ON THE PLANS OR DETAILS AND, TO THE MAXIMUM EXTENT PRACTICAL, TO MINIMIZE POTENTIAL CONTAMINATION OF STORMWATER RUNOFF FROM THE CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL "AS-BUILT" MEASUREMENT AND DRAFTING REQUIREMENTS AS OUTLINED ON THE DETAIL SHEETS. ALL TRENCH EXCAVATIONS SHALL REMAIN OPEN UNTIL ALL AS-BUILT SURVEY SHOTS HAVE BEEN TAKEN. PROGRESS RECORD DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AS INDICATED IN THE RECORD DRAWING SPECIFICATIONS.
- SEE EROSION CONTROL AND LOGISTICS PLANS FOR LOCATIONS OF STAGING / STORAGE AREAS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SIGNAGE AND CONSTRUCTION BARRIER/SAFETY FENCING NECESSARY FOR PROVIDING SAFE VEHICULAR AND PEDESTRIAN ACCESS THROUGH OR AROUND THE SITE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE THIS WITH THE CITY OF ESSEX JUNCTION AND THE CITY OF ESSEX JUNCTION DEPARTMENT OF PUBLIC WORKS.
- DEFINITION OF "PRECONSTRUCTION EXCAVATION" FOR THESE CONTRACT DOCUMENTS SHALL BE: THE SITE CONTRACTOR SHALL EXPOSE UTILITIES AND OBTAIN ALL NECESSARY INFORMATION, INCLUDING BUT NOT LIMITED TO, INVERT ELEVATION, SIZE, DEPTH, PIPE TYPE, JOINT LOCATION, ETC. CONTRACTOR SHALL TRANSIT SURVEY THE LOCATION AND ELEVATIONS OF THE UTILITY. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SKETCHES INDICATING HORIZONTAL AND VERTICAL INFORMATION OF PIPE OR CONDUIT TYPE AND SIZE, CROSS-SECTION INFORMATION, CONCRETE ENCASEMENT INFORMATION (TOP AND BOTTOM ELEVATIONS, WIDTH, ETC.), JOINT LOCATION, ETC. OF EACH REQUIRED EXISTING UNDERGROUND UTILITY. ACCURACY OF HORIZONTAL LOCATION IS WITHIN 1 FOOT, AND ACCURACY OF VERTICAL ELEVATION IS WITHIN 0.02 FT. (1/4"). COORDINATE ALL EXCAVATION WITH CITY, OWNER, AND ENGINEER. PRECONSTRUCTION EXCAVATIONS SHALL OCCUR PRIOR TO ORDERING STRUCTURES AND PRIOR TO UTILITY CONSTRUCTION TO FACILITATE REDESIGN AND/OR DESIGN CONFIRMATION.
- THE LOCATION OF THE PRECONSTRUCTION EXCAVATION SYMBOLS DOES NOT NECESSARILY INDICATE THE LOCATION OF THE BURIED UTILITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIND AND EXPOSE THE UTILITY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF IMPORTING AND PLACING TOPSOIL AND/OR COMPOST NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL TEST TOPSOIL FOR APPROVAL BY THE OWNER AND ENGINEER.
- ALL SEWER AND STORM PIPES SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED. ALL NEW SANITARY AND STORM PIPES SHALL BE LAID WITH A LASER TO ELEVATION AND SLOPE AS SHOWN ON THE PLANS.
- CORE AND BOOT ALL EXISTING STRUCTURES UNLESS OTHERWISE NOTED.
- ALL NEW CATCH BASINS AND SANITARY SEWER MANHOLE MUST HAVE ONE 6" PRECAST CONCRETE GRADE RING.
- ALL WATERLINE PIPE SHALL BE DUCTILE IRON CLASS 52. ALL BENDS AND FITTINGS SHALL HAVE POURED IN PLACE CONCRETE THRUST BLOCKS, REDI-MIX AND SACRETE IS NOT ACCEPTABLE.
- TEMPORARY GROUNDWATER, STORMWATER, AND SEWER BY-PASS PUMPING AND/OR DIVERSION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PUMPS AND EQUIPMENT TO PERFORM THE WORK. OVERNIGHT PUMPING IS NOT ALLOWED.
- ALL SIDEWALKS SHALL HAVE 2% MAXIMUM CROSS SLOPE. ALL RAMPS AND STAIRS SHALL HAVE A LANDING AT THE BOTTOM WITH A MAXIMUM SLOPE OF 2% FOR 5 FEET.
- CONTRACTOR TO PIN CONCRETE SIDEWALKS/SLABS TO ALL CONTACT POINTS WITH STAIRS, BUILDING, BIKE SLAB, RETAINING WALLS, ETC.
- CONTRACTOR SHALL MAINTAIN FULL OCCUPANCY AND FIRE DEPARTMENT ACCESS TO ALL SURROUNDING BUILDINGS. COORDINATE ALL TEMPORARY ACCESS WITH THE MUNICIPALITY.
- BURIED NATURAL GAS IS SHOWN FOR ALIGNMENT PURPOSES ONLY. CONTACT VERMONT GAS SYSTEMS FOR DESIGN AND DETAILS OF NEW GAS LINE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXCAVATION, BACKFILL, AND RESTORATION FOR THE CONSTRUCTION OF THE NATURAL GAS LINES. VERMONT GAS SYSTEMS WILL PROVIDE THE PIPING, LABOR TO INSTALL, AND TESTING FOR THE NEW GAS MAIN. COORDINATE WORK AND ALL GAS SHUT DOWN PROCEDURES WITH THE OWNER.
- REMOVAL OF ALL EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR.
- AT THE END OF THE PROJECT, CLEAN THE SUMPS OF ALL NEW AND EXISTING CATCH BASINS AND STORM MANHOLES WITHIN THE PROJECT LIMITS. FOR BASINS WITHIN THE CITY STREET, CONTRACTOR IS REQUIRED TO NOTIFY THE CITY OF ESSEX JUNCTION UPON COMPLETION OF CATCH BASIN CLEANING SO THE CITY CAN INSPECT THE WORK PERFORMED.
- ELECTRICAL AND LIGHTING ARE SHOWN FOR ILLUSTRATIVE/COORDINATION PURPOSES ONLY. REFER TO ELECTRICAL PLANS AND SPECIFICATIONS FOR DESIGN.
- SEE LANDSCAPE AND/OR STRUCTURAL PLANS FOR ALL RETAINING WALLS, UTILITY PADS, STAIRS, AND EXTERIOR CONCRETE AT DOORS.
- REFER TO PLUMBING, MECHANICAL AND/OR FIRE PROTECTION PLANS FOR WATER, SEWER AND STORM DESIGN WITHIN FIVE FEET OF THE BUILDING.

**EPSC GENERAL NOTES:**

- EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PRACTICES SHALL BE IMPLEMENTED IN ALL AREAS WHERE THERE IS AN INCREASED RISK OF EROSION, AND WHERE THERE IS POTENTIAL FOR DISCHARGE OF STORMWATER RUNOFF (EITHER DIRECT OR INDIRECT) TO A WATER BODY.
- EPSC MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBING ACTIVITIES WITHIN A GIVEN DRAINAGE AREA WITH THE EXCEPTION OF LAND DISTURBANCE THAT MAY RESULT FROM ACCESSING THE AREA(S) WITH EQUIPMENT IN WHICH EPSC MEASURES ARE TO BE INSTALLED. THIS EXCEPTION INCLUDES LAND DISTURBANCE THAT MAY RESULT FROM ACCESS OF EQUIPMENT THAT IS NEEDED FOR EXPLORATION AND/OR EPSC MEASURE INSTALLATION PHASES OF THE PROJECT. TEMPORARY SEDIMENT BASINS, TEMPORARY SEDIMENT TRAPS, PERIMETER DIKES, TEMPORARY SEDIMENT BARRIERS, AND OTHER TEMPORARY MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE WITH THE EXCEPTION OF THOSE ACTIVITIES STATED ABOVE. EARTH DISTURBANCE INCLUDES STUMPING AND GRUBBING OF CLEARED AREAS.
- EPSC MEASURES SHALL BE INSTALLED PURSUANT TO THE EPSC PLAN, THE 2020 STATE OF VERMONT LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL, THE 2020 VERMONT EROSION PREVENTION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS, AND/OR ANY OTHER RELEVANT PROJECT PERMITS.
- ALL PROPOSED CHANGES SHALL BE APPROVED BY THE ON-SITE PLAN COORDINATOR (OSPC) OR HIS/HER DESIGNEE PRIOR TO IMPLEMENTATION.
- NO MAJOR CLEARING/LOGGING ACTIVITIES ARE PROPOSED FOR THE PROJECT.
- PERMISSION MUST BE GRANTED BY VT DEC PRIOR TO USE OF ANY SUPPORT ACTIVITIES OCCURRING OUTSIDE OF THE APPROVED PROJECT BOUNDARIES.
- ALL PARTIES ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHO MEET EITHER OF THE FOLLOWING TWO CRITERIA OF "PRINCIPAL OPERATOR" MUST OBTAIN COVERAGE UNDER THE CONSTRUCTION STORMWATER DISCHARGE PERMIT FOR THE PROJECT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES BY THAT OPERATOR:
  - THE PARTY HAS OPERATIONAL CONTROL OVER CONSTRUCTION PLANS AND SPECIFICATION, INCLUDING BUT NOT LIMITED TO THE ABILITY TO MAKE MODIFICATIONS TO THOSE PLANS AND SPECIFICATIONS; OR
  - THE PARTY HAS CONTINUOUS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT THE PROJECT THAT ARE NECESSARY TO ENSURE COMPLIANCE WITH AN EPSC PLAN FOR THE SITE OR OTHER PERMIT CONDITIONS (E.G., THEY ARE AUTHORIZED TO DIRECT WORKERS AT A SITE TO CARRY OUT ACTIVITIES REQUIRED BY THE EPSC PLAN OR COMPLY WITH OTHER PERMIT CONDITIONS).

**EPSC CONSTRUCTION NOTES:**

- EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED TO THE EXTENT PRACTICABLE.
- A VEGETATED BUFFER SHALL BE MAINTAINED FOR WATER BODIES WHERE FEASIBLE (E.G., WETLANDS AND STREAMS).
 
$$L = \frac{SD \cdot \sqrt{P}}{148,000}$$
- TO THE EXTENT PRACTICABLE, SURFACE FLOW SHALL BE DIVERTED AWAY FROM EXPOSED SOILS VIA DIVERSION BERMS, EARTH DIKES, PERIMETER DIKES/WALES, TEMPORARY SWALES, WATER BARS, AND/OR CHECK DAMS.
- RESOURCE AREAS (E.G., WETLANDS, STREAMS, RTE PLANT SPECIES) SHALL BE FLAGGED PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES OCCURRING WITHIN CLOSE PROXIMITY TO THOSE AREAS.
- EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT VIOLATE WATER QUALITY STANDARDS OR CONTRIBUTE TO EROSION. DEWATERING DETAILS SHALL BE REVIEWED AND APPROVED BY OSPC PRIOR TO USE.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN STEEP SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL (SEE DETAILS), FLUME, OR SLOPE DRAIN STRUCTURE.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
  - NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
  - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES, WHERE FEASIBLE, BUT NOT IN RESOURCE AREAS.
- WHERE FEASIBLE, ALL SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES AS PART OF MAINTENANCE SHALL BE DISPOSED OF IN AN AREA THAT IS AT LEAST ONE OF THE FOLLOWING, WITH IMMEDIATE STABILIZATION FOLLOWING DISPOSAL OF MATERIAL:
  - LESS THAN 5% SLOPE
  - AT LEAST 100 FEET FROM ANY DOWNSLOPE WATER BODY OR CONVEYANCE TO A WATER BODY, INCLUDING A DITCH
  - VEGETATED
- DISTURBED AREAS BORDERING OR DRAINING TO EXISTING ROADS SHALL HAVE AN APPROPRIATE SEDIMENT BARRIER (E.G., SILT FENCE) SPANNING THE EDGE OF THE DISTURBANCE TO PREVENT WASHING OF SEDIMENT ONTO ROADWAYS OR INTO ROAD DITCHES.
- IN ADVANCE OF PREDICTED RAINFALL OR SNOWMELT, ALL EPSC MEASURES THAT ARE LOCATED IN ACTIVE AREAS OF EARTH DISTURBANCE SHALL BE INSPECTED AND REPAIRED, AS NEEDED. IF NECESSARY, THIS SHALL INCLUDE TEMPORARY STABILIZATION OF ALL DISTURBED SOILS ON THE SITE IN ADVANCE OF THE ANTICIPATED RUNOFF PERIOD.
- DUST CONTROL SHALL BE HANDLED VIA WATER APPLICATION TO ROADWAYS AND OTHER AREAS WHERE DUST MAY BE GENERATED.

**GENERAL GRADING AND SITE WORK NOTES**

- ALL AREA DISTURBED AND ALL AREAS WITHIN THE CLEARING LIMITS SHALL BE GRADED AND COVERED WITH A MINIMUM OF 6" OF LOAM TOPSOIL. ADDITIONAL TOPSOIL DEPTHS AND SPECIFICATIONS MAY BE OUTLINED BY THE LANDSCAPE ARCHITECT FOR SPECIFIC AREAS. THE AREAS TO BE LOAMED SHALL BE FREE AND CLEAR OF ROOTS, WASTE MATERIAL AND OTHER DELETERIOUS MATERIAL. TOPSOIL SHALL BE SPREAD AND LIGHTLY COMPACTED TO A DEPTH OF 6". TOPSOIL SHALL BE APPROVED BY THE ENGINEER AND/OR LANDSCAPE ARCHITECT. ALL SIDE SLOPES ARE TO BE LOAMED.
- ALL TURF ESTABLISHMENT SHALL BE IN ACCORDANCE WITH SECTION 651 OF THE VT STANDARD SPECIFICATIONS 2018 AND THE MUNICIPALITY SPECIFICATIONS. MULCHING SHALL FOLLOW SEEDING BY NO MORE THAN 24 HOURS.
- ALL CUT SLOPES SHALL BE NO STEEPER THAN 2.0H ON 1.0V. ALL FILL SLOPES SHALL BE NO STEEPER THAN 2.0H ON 1.0V.
- THE CONTRACTOR SHALL NOT DISTURB ANY GROUND BETWEEN OCTOBER 15TH BETWEEN APRIL 15TH WINTER MONTHS, UNLESS APPROVED BY THE ENGINEER.
- TEMPORARY SILT FENCE SHALL BE ERECTED PRIOR TO ANY CLEARING OR CONSTRUCTION. FENCING MAY BE ERECTED IN PHASES, BUT IN NO CASE SHALL GROUND DISTURBANCE PROCEED FENCING. SPECIAL AREAS MAY BE DESIGNATED BY THE OWNER FOR PRESERVATION OF EXISTING TREES. THESE AREAS SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE NO DAMAGE IS DONE TO DESIGNATED TREES.
- EXISTING PLANTINGS ARE LOCATED IN GENERAL AREAS AS SHOWN ON THIS PLAN. CONTRACTOR SHALL PROTECT PLANTINGS SO AS NOT TO DAMAGE THESE OR THEIR ROOT SYSTEMS.
- SLOPE STABILITY BASED UPON UNSATURATED SOIL CONDITIONS. IF DURING CONSTRUCTION SATURATED SOILS ARE ENCOUNTERED, CONTACT THE ENGINEER IMMEDIATELY.

**WATER & SEWER CONSTRUCTION NOTES**

- THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CONSTRUCTION OF WATER MAIN, STORM AND SANITARY SEWER SYSTEMS AS SHOWN ON THE PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL NECESSARY ADAPTERS, FITTINGS, ETC. TO MAKE CONNECTIONS TO THE EXISTING AND PROPOSED UNITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK SHOWN OR IMPLIED ON THE PLANS AND/OR REFERENCED IN THE SPECIFICATIONS AND PERMITS. THE CONTRACTOR SHALL SUBMIT, FOR APPROVAL BY THE ENGINEER, ALL TYPES OF MATERIALS AND PRODUCTS USED.
- THE CONTRACTOR SHALL COORDINATE ALL WORK ON THE WATER SUPPLY SYSTEM WITH THE OWNER, THE CITY OF ESSEX JUNCTION, CITY OF ESSEX JUNCTION DEPARTMENT OF PUBLIC WORKS, ESSEX JUNCTION WATER DEPARTMENT (EWD), AND THE CIVIL ENGINEER. ALL WATER INSTALLATION WORK AND WATER DISTRIBUTION MATERIALS MUST COMPLY WITH THE CURRENT ESSEX JUNCTION WATER DEPARTMENT'S SPECIFICATIONS.
- THESE PLANS ARE NOT RESPONSIBLE FOR DESIGN OF WATER AND SEWER SERVICES WITHIN 5 FEET OF THE BUILDING. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING THE SERVICES TO THE PLUMBING AND/OR FIRE SYSTEM CONNECTION WITHIN THE BUILDING. SEE PLUMBING ENGINEER, MECHANICAL ENGINEER AND/OR FIRE PROTECTION PLANS FOR SCOPE, DESIGN AND SPECIFICATIONS WITHIN 5 FT. OF THE BUILDING.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS AND APPURTENANCES TO COMPLETE THE WATERLINE CONSTRUCTION WORK. THIS INCLUDES TEMPORARY FITTINGS AND GAUGES NECESSARY TO SAFELY COMPLETE THE FLUSHING ACTIVITIES REQUIRED PRIOR TO MAKING CONNECTIONS WITH BUILDING PLUMBING.
- THE PROJECT SHALL BE CONSTRUCTED, COMPLETED, MAINTAINED, AND OPERATED IN ACCORDANCE WITH THE APPROVED PLANS. NO CHANGES SHALL BE MADE IN THE PROJECT WITH OUT THE WRITTEN APPROVAL OF THE CITY, ESSEX JUNCTION WATER DEPARTMENT, AND THE CIVIL ENGINEER. A COPY OF THE FINAL APPROVED PLANS SHALL BE SUBMITTED TO THE CITY PRIOR TO CONSTRUCTION OF THE WATER SYSTEM IMPROVEMENTS.
- THE CITY AND ESSEX JUNCTION WATER DEPARTMENT SHALL BE NOTIFIED IN ADVANCE TO INSPECT ALL MECHANICAL JOINTS FITTINGS, MAIN LINE TAPS, APPURTENANCES, THRUST BLOCKS, WATER LINE CROSSINGS, AND TESTING PRIOR TO OCCURRENCE OR BACKFILLING.
- ALL DOMESTIC SERVICES AND FIRE SPRINKLER SYSTEMS THAT ARE CONNECTED TO THE PUBLIC WATER SYSTEM SHALL BE PROTECTED WITH A BACKFLOW PREVENTION ASSEMBLY, AND AN APPROPRIATE THERMAL EXPANSION SYSTEM. THE MECHANICAL CONTRACTOR SHALL COORDINATE APPROVED BACKFLOW PREVENTION WITH THE CITY AND ESSEX JUNCTION WATER DEPARTMENT.

**WATER MAINS**

- APPLIES TO NEW DOMESTIC WATER MAINS AND SERVICES.
- THE PIPE FOR WATER MAIN GREATER THAN 2" SHALL BE CL52 DOUBLE CEMENT LINED DUCTILE IRON. DUCTILE IRON FITTINGS SHALL CONFORM TO AWWA C110, 350 POUNDS WORKING PRESSURE. VALVES SHALL BE MANUFACTURED TO MEET ALL REQUIREMENTS OF AWWA SPECIFICATION C509 OR C515. FOUR-INCH AND SIX-INCH PIPE SHALL HAVE NO LESS THAN 2 BRASS WEDGES INSTALLED AT EACH JOINT. EIGHT-INCH AND TEN-INCH PIPE SHALL HAVE NO LESS THAN 3 WEDGES INSTALLED AT EACH JOINT. THE PIPE FOR WATER SERVICES LESS THAN 2" SHALL BE K-COPPER.
- ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH AWWA C600. THE PIPE SHALL BE KEPT FREE OF FOREIGN MATTER AND DEBRIS DURING INSTALLATION. WHEN THE PROCESS OF PIPE LAYING HAS STOPPED, ANY OPEN ENDS OF PIPE SHALL BE PLUGGED. THERE SHALL BE A MINIMUM OF 6'-0" COVER OVER ALL PIPE AND SERVICE LINES. ANY PIPE DEFLECTION SHALL NOT EXCEED FIFTY (50%) PERCENT OF RECOMMENDED MANUFACTURER'S MAXIMUM DEFLECTION. BACKFILL MATERIALS AND PROCEDURES SHALL BE AS DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL SHEETING AND/OR SHORING NECESSARY TO COMPLY WITH OSHA - VOSHA REGULATIONS.
- THE TESTING OF THE WATER MAIN SHALL CONSIST OF THE TESTING OF ALL INSTALLED PIPE, SERVICES AND HYDRANTS IN ACCORDANCE WITH AWWA C600. THE TESTING SHALL CONSIST OF A PRESSURE TEST AND LEAKAGE TEST. ALL TESTING SHALL BE DONE WITH POTABLE WATER AND IN THE PRESENCE OF THE ENGINEER, REPRESENTATIVES FROM THE MUNICIPALITY AND THE MUNICIPALITY PUBLIC WORKS. THE PRESSURE TEST CONSISTS OF MAINTAINING A MINIMUM INTERNAL PIPE PRESSURE OF 200 PSI FOR TWO (2) HOURS. THE TESTING ALLOWANCE SHALL BE DEFINED AS THE MAXIMUM QUANTITY OF MAKEUP WATER THAT IS ADDED INTO A PIPELINE UNDERGOING HYDROSTATIC PRESSURE TESTING, OR ANY VALVED SECTION THEREOF, IN ORDER TO MAINTAIN PRESSURE WITHIN +/- 5 PSI OF THE SPECIFIED TEST PRESSURE (AFTER THE PIPELINE HAS BEEN FILLED WITH WATER AND THE AIR HAS BEEN EXPELLED). NO PIPE INSTALLATION WILL BE ACCEPTED IF THE QUANTITY OF MAKEUP WATER IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

L = TESTING ALLOWANCE (MAKEUP WATER), IN GALLONS PER HOUR  
 S = LENGTH OF PIPE TESTED, IN FEET  
 D = NOMINAL PIPE DIAMETER, IN INCHES  
 P = AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST, IN POUNDS PER SQUARE INCH (GAUGE)

- CHLORINATING OF THE SYSTEM SHALL BE ACCOMPLISHED AFTER THE WATER MAIN HAS BEEN SUCCESSFULLY PRESSURE TESTED AND THOROUGHLY FLUSHED. DISINFECTING SHALL BE IN ACCORDANCE WITH AWWA C-651. THE DISINFECTING PROCESS SHALL BE DEEMED ACCEPTABLE ONLY AFTER TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN FROM THE FLUSHED AND DISINFECTED MAIN 24 HOURS APART, SHOWS NO EVIDENCE OF BACTERIOLOGICAL CONTAMINATION. FOR PROPER DISINFECTION USE MINIMUM 25 MG/L CHLORINE CONCENTRATION FOR 24 HOURS. THE CONCENTRATION MUST REMAIN ABOVE 10 MG/L. TABLET DISINFECTING IS NOT ACCEPTABLE. DECHLORINATION SHALL BE REQUIRED WHILE FLUSHING THE ORIGINAL CHLORINE FROM THE NEW LINE. COORDINATE WITH THE MUNICIPALITY AND THE MUNICIPALITY PUBLIC WORKS REGARDING THE THE DISPOSAL OF THE HIGHLY CHLORINATED WATER FLUSHED FROM THE NEW WATERLINE. PRIOR TO WATER SERVICES BEING USED FOR POTABLE WATER, CONTRACTOR SHALL BACTERIA TEST THE WATER SOURCE FROM AN INTERIOR FIXTURE AND GET IT TESTED BY THE VERMONT HEALTH DEPARTMENT OR OTHER APPROVED LAB.
- THE WATER MAIN SHALL BE THOROUGHLY FLUSHED WITH A MINIMUM FLOW VELOCITY OF 2.5 FT/S TO FLUSH FOREIGN MATERIALS OUT OF THE VALVES AND HYDRANTS. AT LEAST 48 HOURS PRIOR TO WATERLINE FLUSHING, THE CONTRACTOR SHALL CONTACT THE OWNER, MUNICIPALITY FIRE DEPARTMENT, THE DISTRICT WATER SUPPLY COMPANY, AND THE ENGINEER. REFER TO FLUSHING REQUIREMENTS ON C-2.01 FOR FIRE SERVICE MAINS.

**SANITARY SEWER**

- ALL SEWER LINES AND MANHOLES SHALL BE THOROUGHLY TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION RULES (04/12/2019).
- ALL SANITARY MANHOLES SHALL BE VACUUM TESTED IN THE PRESENCE OF THE ENGINEER. THE STRUCTURE SHALL BE TESTED PRIOR TO BACKFILL WITH THE LOWEST SEAM EXPOSED. TEST PROCEDURES AND PRESSURE SHALL BE DETERMINED JOINTLY BY THE LOCAL APPROVAL AGENCY AND THE ENGINEER. FAILURE OF ANY VACUUM TEST SHALL NECESSITATE REPAIR AND/OR REPLACEMENT OF THE STRUCTURE AND RETEST. WATER TESTING MANHOLES IS NOT ACCEPTABLE.
- ALL SANITARY MAINS SHALL BE AIR TESTED IN THE PRESENCE OF THE ENGINEER. AT A MINIMUM, THE TEST PRESSURE SHALL BE 4 POUNDS PER SQUARE INCH AT THE HIGHEST POINT ALONG THE TEST FOR 4 MINUTES. SANITARY LINES SHALL ALSO BE TESTED TO THE REQUIREMENTS OF THE CITY OF ESSEX JUNCTIONS LDC SECTION 115.D.
- UTILITY TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING SANITARY TESTING AT A MINIMUM OF 24 HOURS PRIOR TO THE TEST. BASED ON AVAILABILITY OF ENGINEER'S STAFF, THE ENGINEER SHALL ACCOMMODATE THE TESTING SCHEDULE WITHIN 24 HOURS OF THE CONTRACTOR REQUESTED TEST DATE/TIME.
- THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENGINEER IF PRE-SCHEDULED TESTING AND/OR WATER/SEWER CONSTRUCTION IS CANCELED. IF CONTRACTOR DOES NOT CONTACT ENGINEER AND ENGINEER VISITS THE SITE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENGINEER'S FEES/MILEAGE FOR SITE VISIT.

**ADDITIONAL NOTES AND TESTING REQUIREMENTS**

- IN ADDITION TO THE ABOVE REQUIREMENTS AND APPLIES TO WATER AND SANITARY SEWER.
- ALL WATER LINES AND SEWER LINES SHALL BE THOROUGHLY TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION RULES (04/12/2019) AND THE CHAPTER 21 WATER SUPPLY RULES (03/17/2020) (THE MORE STRINGENT RULE SHALL APPLY).
- ALL PRIVATE OR MUNICIPAL WATERLINES SHALL BE TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN AWWA C600 AND/OR NFPA 24.
- NO WATER MAIN SHALL BE CLOSER THAN TEN (10) FEET TO ANY SANITARY SEWER OR SANITARY MANHOLE AND FIVE (5) FEET TO ANY CATCH BASIN OR STORM SEWER LINE. PROVIDE MINIMUM OF 18" VERTICAL SEPARATION BETWEEN WATER MAIN AND STORM/SANITARY SEWER CROSSING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AS-BUILTS TO SERVICE LOCATIONS, AND ANY WATER MAIN FITTINGS. AS-BUILTS SHALL BE RECORDED IN ACCORDANCE WITH THE OUTLINED PROCEDURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ENGINEER AND A REPRESENTATIVE FROM THE CITY OF ESSEX JUNCTION AT LEAST 24 HOURS PRIOR TO STARTING CONSTRUCTION ON ANY PORTION OF THE EXTERIOR WATER OR SANITARY SYSTEMS. THIS NOTIFICATION REQUIREMENT SHALL CONTINUE TO THE COMPLETION OF THE WATER AND SANITARY SYSTEMS.
- UTILITY TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING WATER AND SANITARY TESTING, WITH THE ENGINEER AND MUNICIPALITY PUBLIC WORKS, AT A MINIMUM OF 24 HOURS PRIOR TO THE TEST. BASED ON AVAILABILITY OF ENGINEER'S STAFF, THE ENGINEER SHALL ACCOMMODATE THE TESTING SCHEDULE WITHIN 24 HOURS OF THE CONTRACTOR REQUESTED TEST DATE/TIME.
- THE CONTRACTOR SHALL PRE-TEST WATER FOR 2 HOURS. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF PRE-TEST FAILED.
- THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENGINEER IF PRE-SCHEDULED TESTING AND/OR WATER/SEWER CONSTRUCTION IS CANCELED. IF CONTRACTOR DOES NOT CONTACT ENGINEER AND ENGINEER VISITS THE SITE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENGINEER'S FEES/MILEAGE FOR SITE VISIT.
- THE CONTRACTOR SHALL COORDINATE WATER/SEWER CONSTRUCTION WITH THE MUNICIPALITY. THE CONTRACTOR SHALL LEAVE THRUST BLOCKS AND OTHER REQUIRED SECTIONS OF NEW LINE EXPOSED UNTIL MUNICIPALITY HAS INSPECTED AND APPROVED IT.

ALL SEWER, WATER, AND STORM DRAINAGE UTILITIES INSTALLED ON THE PROJECT SIDE TO BE OBSERVED BY AN AUTHORIZED REPRESENTATIVE OF THE CITY OF ESSEX JUNCTION PRIOR TO BACKFILLING THE UTILITY BEING INSTALLED

**SUNDERLAND APARTMENTS**

229 Pearl Street  
City of Essex Junction, Vermont



**ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION**

**APPLICANT/OWNER:**

227 Pearl Street LLC  
c/o Brett Grabowski  
32 Seymour Street #101  
Williston, Vermont 05495

**PROPERTY INFORMATION:**

CITY OF ESSEX JUNCTION:  
Address: 227 Pearl Street  
Parcel ID: 1040042000  
SPAN: 207-066-10350  
Area: 0.96 Acres (+41,800 s.f.)  
Zoning: Multi-Family/Mixed Use 1  
Setbacks:  
Front: 20'  
Rear: 10'  
Side: 10'  
Max. Building Height: 58'  
Total Lot Coverage: 65% (80% with waiver)

ESSEX:  
Parcel ID: 2040042000  
SPAN: 207-067-42238  
Area: 0.11 Acres (+4,800 s.f.)  
Zoning: Mixed Use

**STAMP:**

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revisions from City comments	05/05/23

DRAWING TITLE:

**DETAILS**

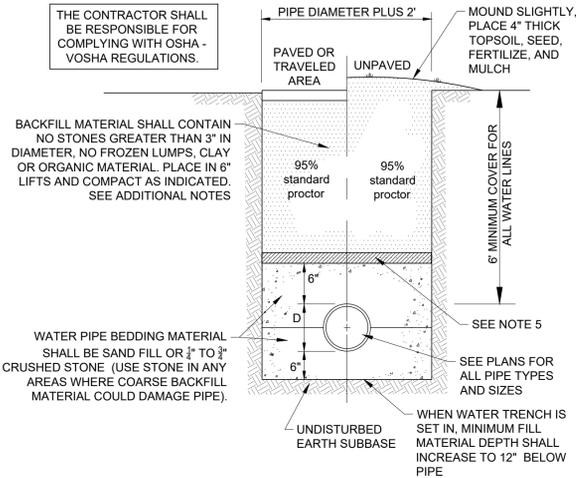
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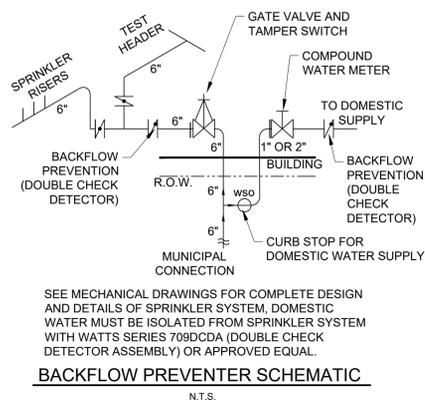
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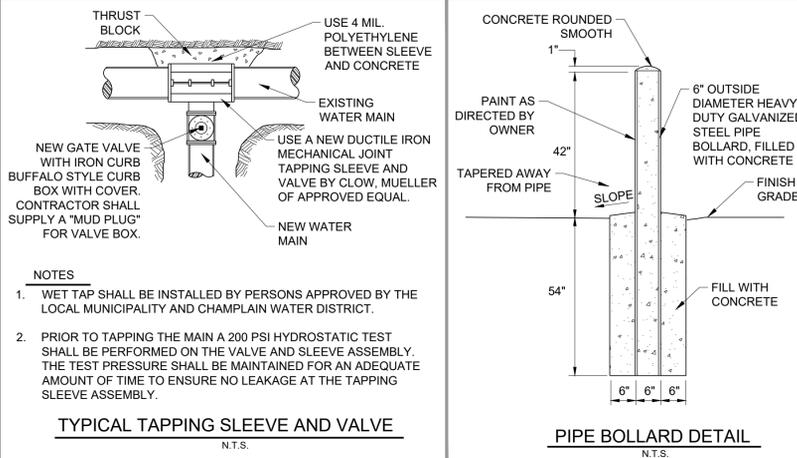
- NOTES**
- THE CONTRACTOR SHALL KEEP THE TRENCH ENTIRELY FREE OF WATER AT ALL TIMES UNTIL THE WORK IS COMPLETE AND READY FOR BACKFILLING.
  - THE SIDES OF THE TRENCHES SHALL BE SHEETED OR SLOPED TO THE ANGLE OF REPOSE IF THE TRENCH IS 4' OR MORE IN DEPTH.
  - BACKFILL TRENCH IN 6" LIFTS AND COMPACT EACH LIFT TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR.
  - BACKFILL SHALL HAVE NO STONES LARGER THAN 1.5-INCHES IN DIAMETER.
  - SEE DETAIL WATERLINE PIPE INSULATION REQUIREMENTS.
  - ALL WORK SHALL CONFORM TO THESE SPECIFICATIONS AND PLANS UNLESS OTHERWISE SPECIFIED.
  - INSTALL A CONTINUOUS SHEATHED SOLID CONDUCTOR COPPER TRACER WIRE OVER PIPE. THE WIRE SHALL BEGIN IN A TEST BOX ADJACENT TO ONE HYDRANT AND RUN TO A TEST BOX ADJACENT TO THE NEXT HYDRANT.

**WATER TRENCH DETAIL**  
N.T.S.

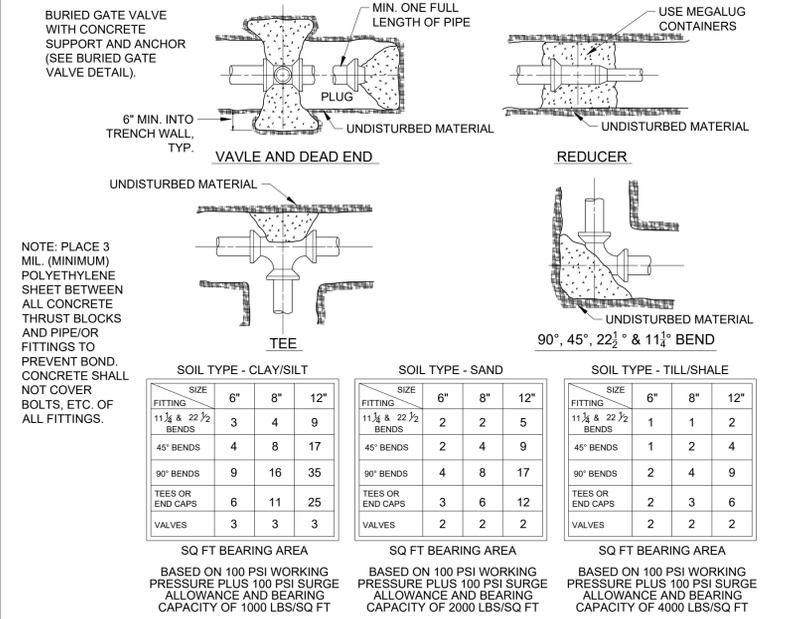


**BACKFLOW PREVENTER SCHEMATIC**  
N.T.S.

ALL SEWER, WATER, AND STORM DRAINAGE UTILITIES INSTALLED ON THE PROJECT SIDE TO BE OBSERVED BY AN AUTHORIZED REPRESENTATIVE OF THE CITY OF ESSEX JUNCTION PRIOR TO BACKFILLING THE UTILITY BEING INSTALLED

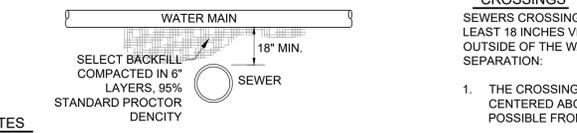


**TYPICAL TAPPING SLEEVE AND VALVE**  
N.T.S.



**THRUST BLOCK DETAIL**  
N.T.S.

- NOTES**
- A THRUST BLOCK SHALL BE INSTALLED AT ALL WATER MAIN BENDS, REDUCERS, END CAPS AND TEES.
  - PRECAST THRUST BLOCKS ARE NOT ACCEPTABLE.
  - POURED CONCRETE (3,500 PSI MIN) MUST BE USED FOR THRUST BLOCKS. RED-MIX AND SACRETE IS NOT ACCEPTABLE.
  - USE EBAA MEGA-LUG, SIGMA, OR EQUAL, WEDGE-ACTION MECHANICAL JOINT RESTRAINTS WITH TWIST OFF NUTS AT ALL FITTINGS.



**CROSSINGS**

SEWERS CROSSING WATER MAINS SHALL BE LAID BENEATH THE WATER MAIN WITH AT LEAST 18 INCHES VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER MAIN. WHEN IT IS POSSIBLE TO MAINTAIN THE 18" VERTICAL SEPARATION:

- THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS.
- THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICHEVER IS GREATER.
- THE SECTION CONSTRUCTED TO WATER STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 PSI FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS.
- WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

**WATER AND SEWER CROSSINGS DETAIL**  
N.T.S.

**FIRE SERVICE MAIN**

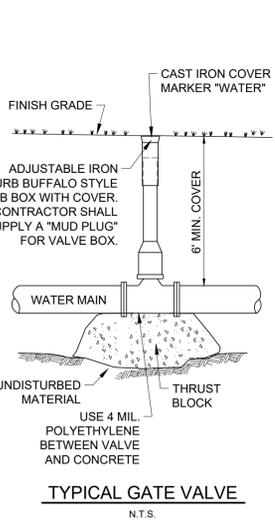
UNDERGROUND PIPING, FROM THE WATER SUPPLY TO THE SYSTEM RISER, AND LEAD-IN CONNECTIONS TO THE SYSTEM RISER SHALL BE COMPLETELY FLUSHED BEFORE THE CONNECTION IS MADE TO DOWNSTREAM FIRE PROTECTION SYSTEM PIPING. ACCEPTABLE WATER MAIN FLUSHING REQUIREMENTS ARE PROVIDED BELOW. PRIOR TO FLUSHING, THE CONTRACTOR SHALL CONTACT THE OWNER, MUNICIPAL FIRE DEPARTMENT, THE DISTRICT WATER SUPPLY COMPANY, AND THE ENGINEER. THE FLUSHING OPERATION SHALL BE CONTINUED FOR A SUFFICIENT TIME TO ENSURE THOROUGH CLEANING. THE MINIMUM RATE OF FLOW SHALL BE NOT LESS THAN ONE OF THE FOLLOWING:

Pipe Size in. mm	Flow Rate gpm L/min
4 102	390 1,476
6 152	880 3,331
8 203	1,560 5,905
10 254	2,440 9,235
12 305	3,520 13,323

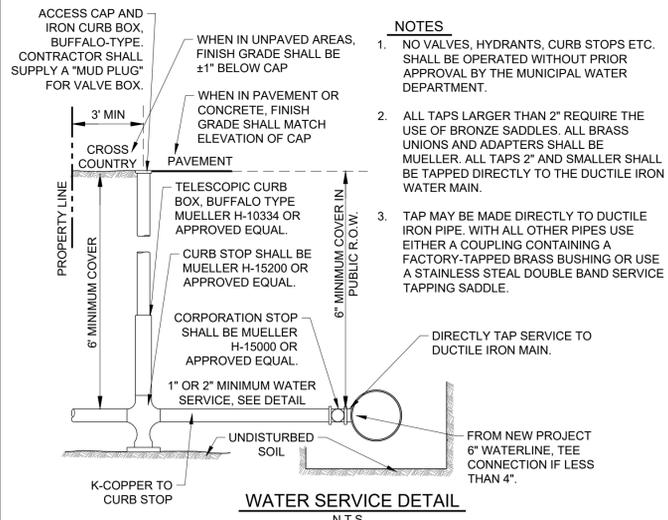
- HYDRAULICALLY CALCULATED WATER DEMAND FLOW RATE OF THE SYSTEM, INCLUDING ANY HOSE REQUIREMENTS. (PROVIDED BY THE MECHANICAL/SPRINKLER CONSULTANT)
- FLOW NECESSARY TO PROVIDE A VELOCITY OF 10 FT/SEC (3.1 M/SEC) IN ACCORDANCE WITH THE TABLE.
- MAXIMUM FLOW RATE AVAILABLE TO THE SYSTEM UNDER FIRE CONDITIONS. FLOW REQUIRED TO PRODUCE A VELOCITY OF 10 FT/SEC (3 M/S) IN PIPES

**NOTES**

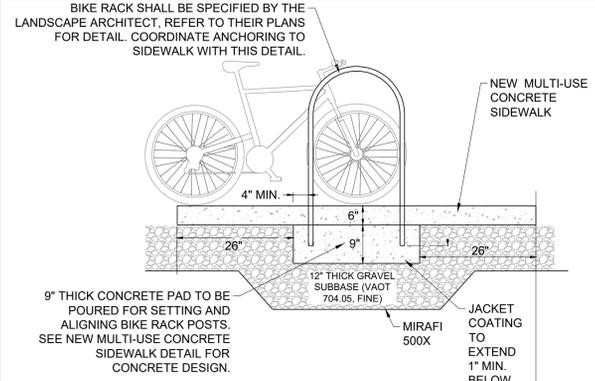
- THE CONTRACTOR SHALL CONFIRM ALL VALVE SPECIFICATIONS WITH THE MUNICIPALITY PUBLIC WORKS BEFORE ORDERING.
- GATE VALVES SHALL MEET ALL REQUIREMENTS OF A.W.W.A. C509 AND C515 STANDARDS (LATEST EDITION). VALVES WITH MECHANICAL JOINTS OF SIZES AS REQUIRED ON THE PLANS.
- ALL VALVES SHALL BE OF CAST OR DUCTILE IRON BODY AND SHALL BE COATED WITH FUSION BONDED EPOXY COMPLYING WITH AWWA C-550 AND BE NSF 61 APPROVED. VALVE SHALL HAVE MANUFACTURER'S NAME, PRESSURE RATING, AND MANUFACTURE DATE CAST ON THE BODY.
- ALL VALVES SHALL INCLUDE NON-RISING STEM, HIGH STRENGTH BRONZE STEM AND NUT, 100% COATED WEDGE, "O" RING STEM SEALS ABOVE AND BELOW THE THRUST COLLAR, A 2" SQUARE OPERATING NUT, MECHANICAL JOINT ENDS, AND CORROSION RESISTANT STAINLESS STEEL BODY BOLTS AND NUTS.
- CHECK WITH THE MUNICIPALITY FOR OPENING AND CLOSING ROTATIONS AND MINIMUM WORKING PRESSURE.
- VALVES SHALL BE EQUIPPED WITH A TWO PIECE, SLIDING TYPE CAST IRON VALVE BOX FOR A MINIMUM 6 FT. OF COVER MATERIAL.



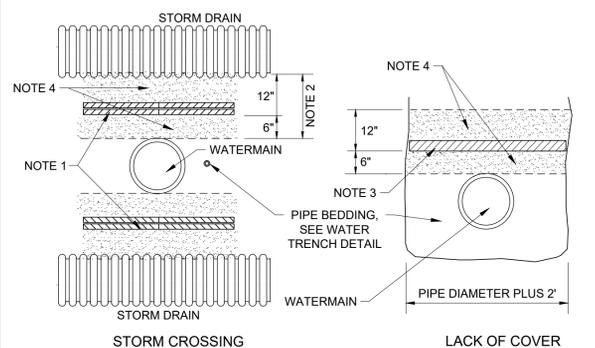
**TYPICAL GATE VALVE**  
N.T.S.



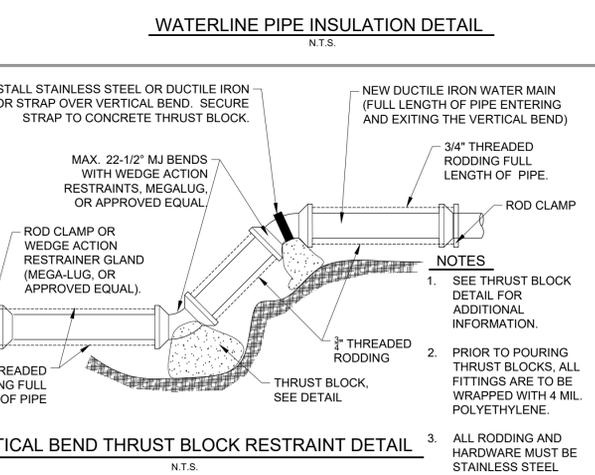
**WATER SERVICE DETAIL**  
N.T.S.



**BIKE RACK DETAIL**  
N.T.S.



- NOTES:**
- INSULATION THICKNESS BETWEEN WATER MAINS AND STORM DRAINS SHALL BE A MINIMUM OF 4" IN THICKNESS. EACH SHEET SHALL BE OFFSET ON EACH LAYER SO AS TO NOT CREATE Voids. INSULATION IS REQUIRED IF THE SEPARATIONS IS LESS THAN 18".
  - THE ISOLATION DISTANCES FOR INSULATING STORM DRAINS UNDER WATER MAINS ARE THE SAME AS CROSSING OVER.
  - IF COVER OVER SERVICE IS BETWEEN 5'-6", PLACE 2" THICK INSULATION BOARD OVER PIPE. IF COVER IS BETWEEN 4'-5" THEN PLACE 4" THICK INSULATION BOARD OVER PIPE. IN NO CASE SHALL THERE BE LESS THAN 5" OF COVER IN PAVED AREAS OR 4" OF COVER IN GRASS AREAS.
  - BACKFILL WITH APPROVED EXCAVATED MATERIAL IN 6" LIFTS AND COMPACT EACH LIFT TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE. BACKFILL SHALL HAVE NO STONES LARGER THAN 1.5-INCHES, IN ORDER TO AVOID DAMAGING INSULATION.
  - ALL WORK SHALL CONFORM TO THESE SPECIFICATIONS AND PLANS UNLESS OTHERWISE SPECIFIED.



**VERTICAL BEND THRUST BLOCK RESTRAINT DETAIL**  
N.T.S.

**SUNDERLAND APARTMENTS**

229 Pearl Street  
City of Essex Junction, Vermont



**ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION**

**APPLICANT/OWNER:**  
227 Pearl Street LLC  
c/o Brett Grabowski  
32 Seymour Street #101  
Williston, Vermont 05495

**PROPERTY INFORMATION:**  
CITY OF ESSEX JUNCTION:  
Address: 227 Pearl Street  
Parcel ID: 1040042000  
SPAN: 207-066-10350  
Area: 0.96 Acres (±41,800 s.f.)  
Zoning: Multi-Family/Mixed Use 1  
Setbacks:  
Front: 20'  
Rear: 10'  
Side: 10'  
Max. Building Height: 58'  
Total Lot Coverage: 65% (80% with waiver)

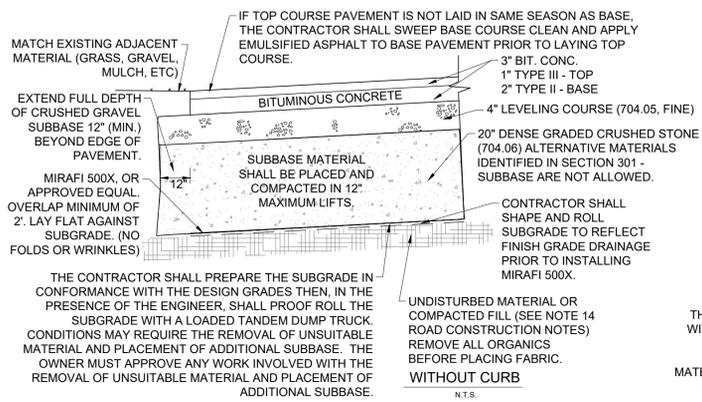
**ESSEX:**  
Parcel ID: 2040042000  
SPAN: 207-067-42238  
Area: 0.11 Acres (±4,800 s.f.)  
Zoning: Mixed Use

**STAMP:**

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revisions from City comments	05/05/23

DRAWING TITLE:	
<b>DETAILS</b>	
DATE ISSUED: 04/07/23	CHECKED BY: GTD
DRAWN BY: GTD	SCALE: N/A
PROJECT NO.: 22304	DRAWING NO.:
	REV. NO.:

**C-2.01** **1**

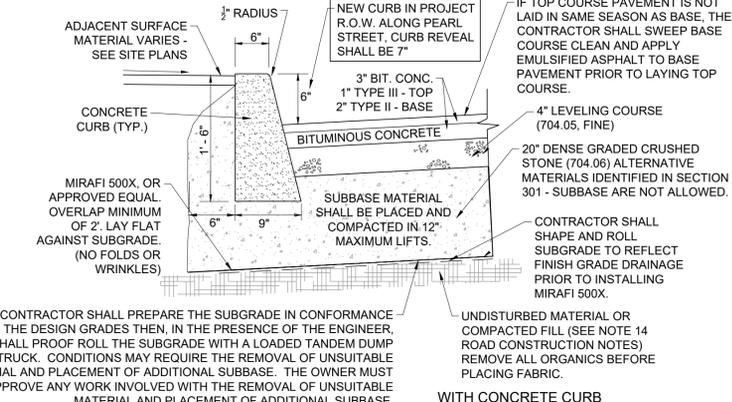


**TYPICAL ROAD CROSS SECTION DETAILS - WITH CONCRETE CURBS AND WITHOUT CURBS**  
N.T.S.

**GRAVEL NOTES**

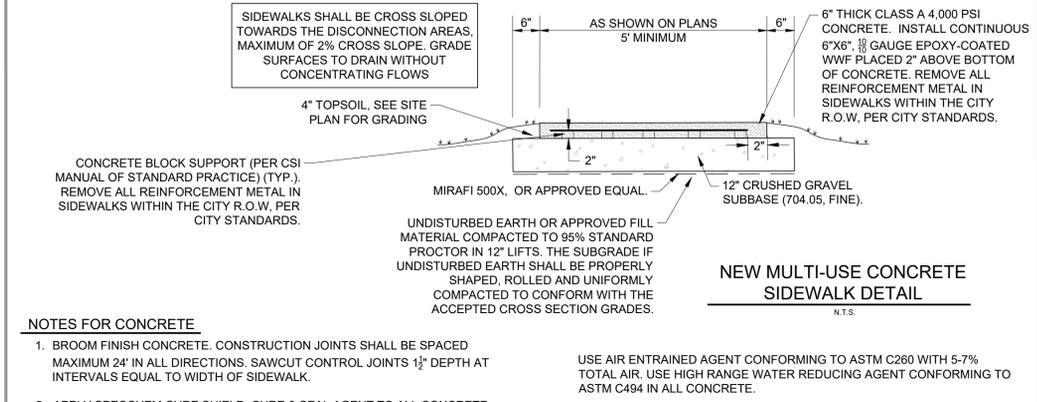
- THE CONTRACTOR TO TAKE SIEVE ANALYSIS OF GRAVEL AS SOON IT ARRIVES ON SITE OR REQUIRE QUARRY TO PROVIDE A CERTIFIED ANALYSIS FOR ENGINEERS REVIEW.
- TRAVEL OVER GRAVEL WITH ANY VEHICLE TRACKING SOIL PRIOR TO PLACEMENT OF PAVEMENT IS PROHIBITED.
- IF GRAVEL IS CONTAMINATED AFTER PLACEMENT, THE SITE CONTRACTOR SHALL BE RESPONSIBLE REMOVAL OF ALL CONTAMINATED GRAVEL AND PAYING FOR ALL RECOMMENDED SIEVE ANALYSIS AS DETERMINED BY THE ENGINEER.

CONTRACTOR SHALL MATCH EXISTING SUBBASE AND PAVEMENT DEPTHS. COORDINATE WITH THE CITY OF ESSEX JUNCTION.



**NOTES FOR CONCRETE CURB**  
N.T.S.

- BROOM FINISH CONCRETE, ALL JOINTS TO BE TOOL FINISHED, EXPANSION/CONTRACTION JOINTS EVERY 20' WITH 1/2" JOINT FILLER, SCORE 1/3 TOTAL DEPTH AT 10' INTERVALS
- APPLY 2 COATS OF CERTI-VEX AC 1315 CURE/SEAL COMPOUND TO ALL CONCRETE SURFACES, PER THE MANUFACTURER'S SPECIFICATIONS.
- CONCRETE MAY NOT BE POURED IF FROST IS PRESENT OR THAWING IN THE SUBGRADE, IF THE TEMPERATURE IS 40° F OR LESS, OR DURING UNSEASONABLE WEATHER CONDITIONS.
- CONCRETE CURB RADII LESS THAN 200 FT SHALL BE FORMED WITH FLEXIBLE FORMS. ALL CONCRETE USED IN THE CONSTRUCTION OF CONCRETE CURB SHALL BE AIR ENTRAINED AND MADE WITH PORTLAND CEMENT. THE CONCRETE SHALL MEET SECTION 541 OF THE STATE OF VERMONT STANDARD SPECIFICATION FOR CLASS A CONCRETE AND HAVE 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- JOINT FILLER SHALL BE RESILIENT NON-EXTRUDING CELLULAR FIBER JOINT, UNIFORMLY SATURATED WITH ASPHALT, OFFERING A MINIMUM OF 70% RECOVERY AFTER COMPRESSION.
- THE ENGINEER SHALL BE CONTACTED AT LEAST 24 HOURS PRIOR TO FORMING CONCRETE CURB TO REVIEW LAYOUT.



**NOTES FOR CONCRETE**

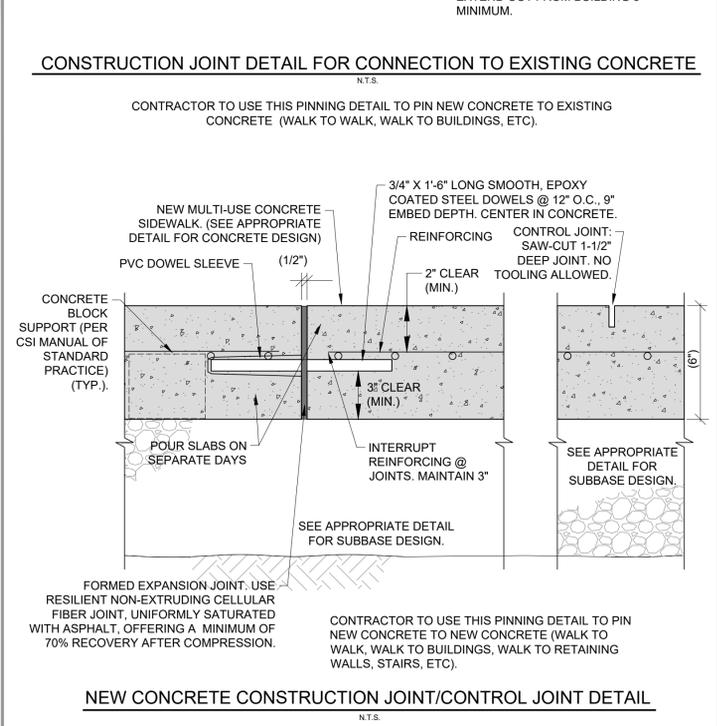
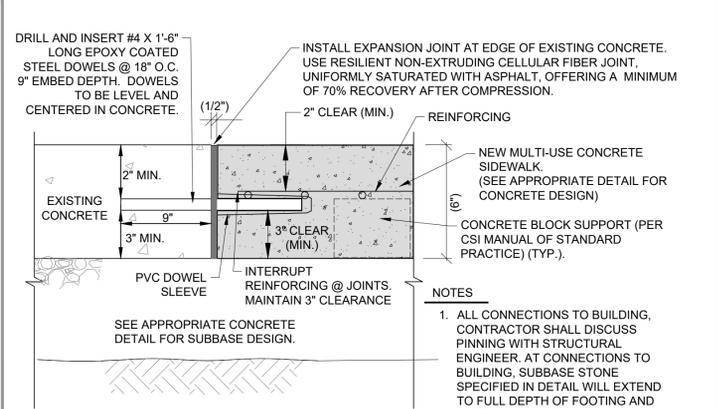
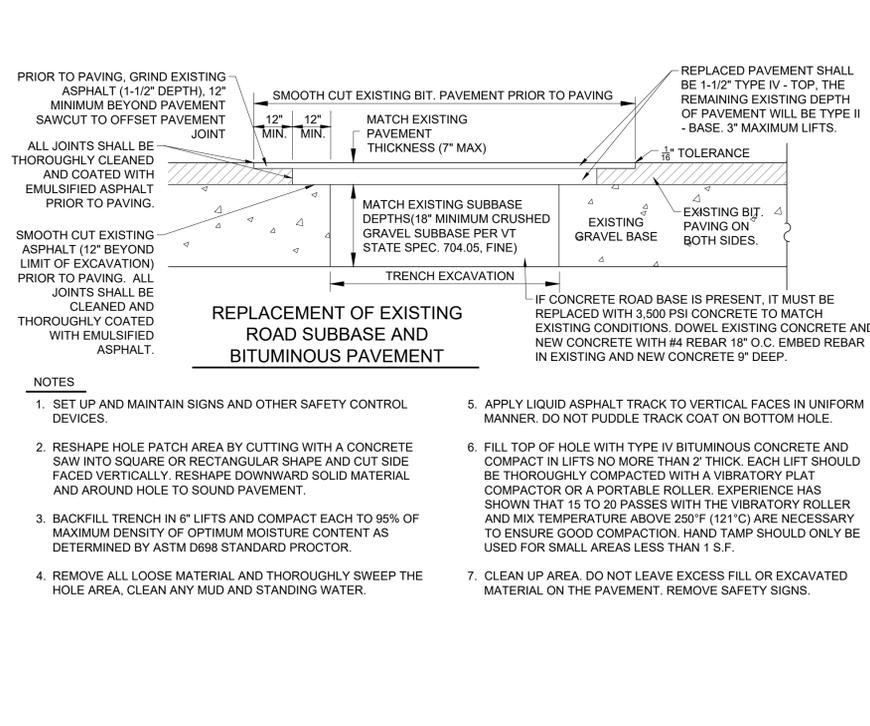
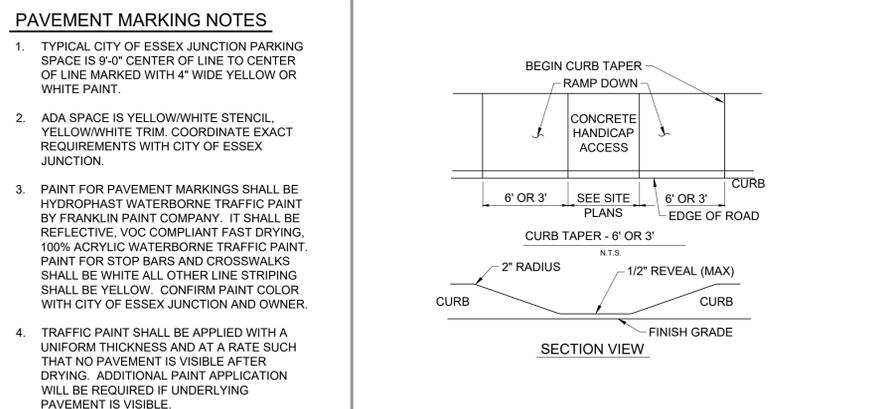
- BROOM FINISH CONCRETE. CONSTRUCTION JOINTS SHALL BE SPACED MAXIMUM 24' IN ALL DIRECTIONS. SAWCUT CONTROL JOINTS 1/2" DEPTH AT INTERVALS EQUAL TO WIDTH OF SIDEWALK.
- APPLY SPECHEM CURE SHIELD, CURE & SEAL AGENT TO ALL CONCRETE SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- CONCRETE CONSTRUCTION AND CURING SHALL CONFORM TO SECTION 618.03 OF THE CURRENT VAOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- CONCRETE MAY NOT BE POURED IF FROST IS PRESENT OR THAWING IN THE SUBGRADE, IF THE TEMPERATURE IS 40° F OR LESS, OR DURING UNSEASONABLE WEATHER CONDITIONS.
- ALL CONCRETE USED IN THE CONSTRUCTION OF MULTI-USE CONCRETE SHALL BE MADE WITH PORTLAND CEMENT. THE CONCRETE SHALL MEET SECTION 541 OF THE STATE OF VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION, HAVE 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI, AND MEET THE FOLLOWING MIX DESIGN.

MAX. WATER-CEMENT RATIO (LB./LB.)	0.44
MIN. CEMENT FACTOR (LBS/C.Y.)	660
ENTRAINED AIR CONTENT (%)	5 - 7
SLUMP (INCHES, BEFORE ADDING HRWR)	2 - 4

THIS DETAIL IS FOR PROJECT USE ONLY, CONTRACTOR SHALL CONSTRUCT SIDEWALK WITHIN THE CITY R.O.W. BASED ON THE DETAIL ON PAGE C-2.05

- ROAD CONSTRUCTION NOTES**
- ALL REFERENCES TO ROAD SHALL APPLY TO PARKING AREAS AS WELL.
  - NEW ROAD SHALL BE CONSTRUCTED TO THE LINE AND GRADE SHOWN ON THE DRAWINGS. THE ROAD AND UTILITY LOCATIONS SHALL BE AS TYPICALLY DETAILED UNLESS OTHERWISE SHOWN.
  - ALL ROAD AND PARKING CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE VERMONT AGENCY OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" 2018, HEREAFTER CALLED VERMONT HIGHWAY SPECIFICATIONS. SPECIFICATIONS FOUND ON THESE PLANS, AND CITY/TOWN SPECIFICATIONS. IN CASE OF CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY AS DETERMINED BY THE ENGINEER. ALL GRAVEL AND STORM SEWER STRUCTURES SHALL BE APPROVED BY CITY ENGINEER.
  - THE CONTRACTOR SHALL FOLLOW VERMONT HIGHWAY SPECIFICATIONS (2018) SECTION 203.11 FOR PLACING AND SPREADING EMBANKMENTS.
  - FILL MATERIAL FOR ROAD EMBANKMENT SHALL BE APPROVED BY THE ENGINEER. FILL SHALL BE PLACED IN 12" LIFTS, WETTED AND COMPACTED WITH SATISFACTORY COMPACTION EQUIPMENT TO 95% OF MAXIMUM DENSITY (STANDARD PROCTOR).
  - ROAD IN FILL SECTIONS SHALL BE PLACED AND COMPACTED A MINIMUM OF 3 FEET ABOVE TOP OF ANY UTILITY TO BE INSTALLED BEFORE TRENCH IS EXCAVATED FOR PIPE PLACEMENT. IN TRENCHES AND CUT SECTIONS, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHEETING, SHORING AND BRACING TO MAINTAIN COMPLIANCE WITH ALL OSHA/VOSH REGULATIONS.
  - METHODS FOR CONSTRUCTION OF SUBGRADE SHALL CONFORM TO VERMONT HIGHWAY SPECIFICATIONS (2018) 203.12 OR AS DETERMINED BY THE ENGINEER.
  - ANY SUBGRADE OR SUBBASE DISTURBED BY CONTRACTOR, OR RENDERED UNSUITABLE BY CONSTRUCTION MACHINERY, SHALL BE REMOVED AND REPLACED WITH APPROVED GRANULAR BACKFILL AT THE CONTRACTOR'S EXPENSE. THE SUBGRADE SHALL BE COMPACTED TO ATTAIN AT LEAST 95% OF THE MAXIMUM DENSITY (STANDARD PROCTOR) BEFORE PLACING ROAD OR EMBANKMENT MATERIALS.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF COMPACTION IN THE ROAD AND UTILITY TRENCHES.
  - SAND FILL SHALL CONFORM TO VERMONT HIGHWAY SPECIFICATIONS (2018) 703.03, TABLE 703.03A. GRANULAR BORROW SHALL CONFORM TO THE VERMONT HIGHWAY SPECIFICATIONS 703.04 GRANULAR BORROW, TABLE 703.04A.
  - GRAVEL SUBBASE FOR PAVEMENT SHALL CONFORM TO VERMONT HIGHWAY SPECIFICATIONS (2018) 704.05, TABLE 704.05A, COARSE.
  - LEVELING COURSE SHALL CONFORM TO VERMONT HIGHWAY SPECIFICATIONS (2018) 704.05, TABLE 704.05A, FINE. SHOULDERS SHALL CONFORM TO SECTION 704.12, AGGREGATE FOR SHOULDERS.
  - BITUMINOUS CONCRETE PAVEMENT SHALL CONFORM TO VERMONT HIGHWAY SPECIFICATIONS (2018) SECTION 404 AND 406. BINDER COURSE SHALL BE TYPE II, AND FINISH WEARING COURSE SHALL BE TYPE III OR IV. BASE COURSE PAVING TO BE PLACED FIRST YEAR, SURFACE COURSE TO BE PLACED THE SECOND OR THIRD YEAR, DETERMINED BY THE ENGINEER.
  - EMBANKMENT FILL FOR ROAD AND PARKING SHALL BE A SIEVE SPECIFICATION AS FOLLOWS:
- | SIEVE | % FINER    |
|-------|------------|
| 4"    | 100        |
| 2"    | 85-100     |
| #4    | 60-100     |
| #200  | 12 MAXIMUM |
- IF PROOF ROLL FAILS, CONTRACTOR SHALL REMOVE THE SITE SOIL AND REPLACE IT WITH SAND WITH THE ABOVE SPEC. UNTIL A PROOF ROLL CAN BE PLACED WITHOUT FAILING. ENGINEER WILL JUDGE PASS/FAILURE OF PROOF ROLL. THIS WILL BE PERFORMED WITHOUT FURTHER COSTS TO THE OWNER.

ALL SEWER, WATER, AND STORM DRAINAGE UTILITIES INSTALLED ON THE PROJECT SIDE TO BE OBSERVED BY AN AUTHORIZED REPRESENTATIVE OF THE CITY OF ESSEX JUNCTION PRIOR TO BACKFILLING THE UTILITY BEING INSTALLED



# SUNDERLAND APARTMENTS

229 Pearl Street  
City of Essex Junction, Vermont

**KREBS & LANSING**  
CONSULTING ENGINEERS  
164 Main Street, Suite 201  
Colchester, Vermont 05446  
P: (802) 878-0375  
www.krebsandlansing.com

**ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION**

**APPLICANT/OWNER:**  
227 Pearl Street LLC  
c/o Brett Grabowski  
32 Seymour Street #101  
Williston, Vermont 05495

**PROPERTY INFORMATION:**  
CITY OF ESSEX JUNCTION  
Address: 227 Pearl Street  
Parcel ID: 1040042050  
SPAN: 207-066-10350  
Area: 0.96 Acres (±41,800 s.f.)  
Zoning: Multi-Family/Mixed Use 1  
Setbacks:  
Front: 20'  
Rear: 10'  
Side: 10'  
Max. Building Height: 58'  
Total Lot Coverage: 65% (80% with waiver)

**ESSEX:**  
Parcel ID: 2040042000  
SPAN: 207-067-42238  
Area: 0.11 Acres (±4,800 s.f.)  
Zoning: Mixed Use

**STAMP:**

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revisions from City comments	05/05/23

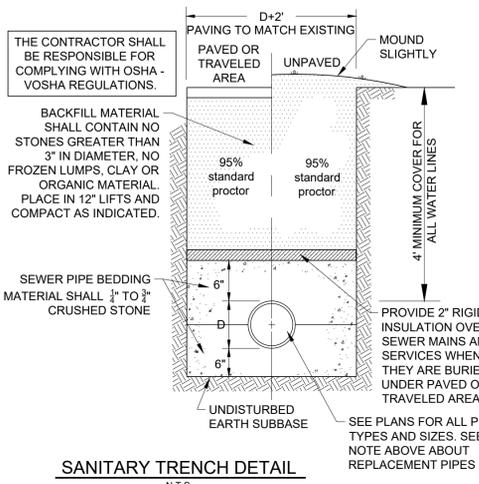
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**DETAILS**

DATE ISSUED: 04/07/23  
DRAWN BY: GTD  
CHECKED BY: GTD  
PROJECT NO.: 22304  
SCALE: N/A  
DRAWING NO.:  
REV. NO.:

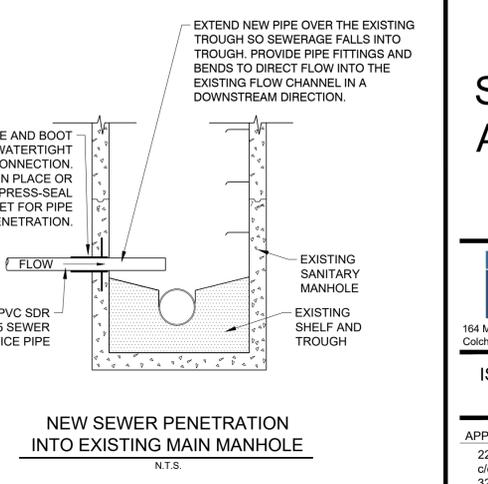
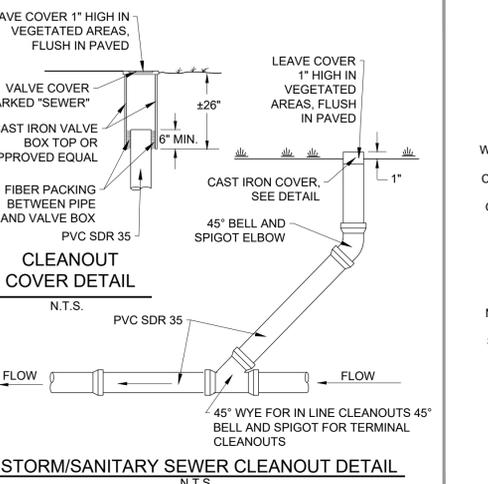
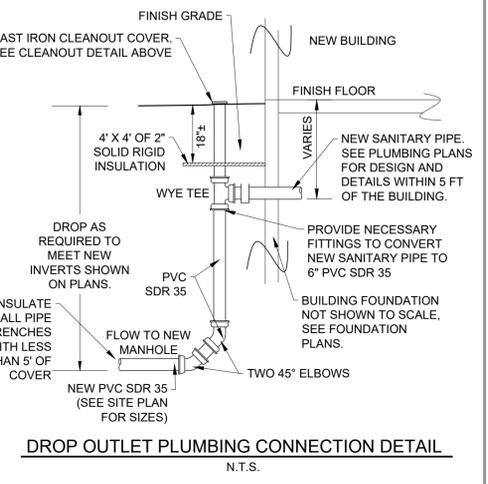
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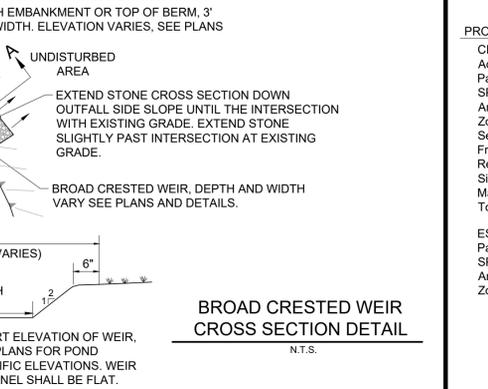
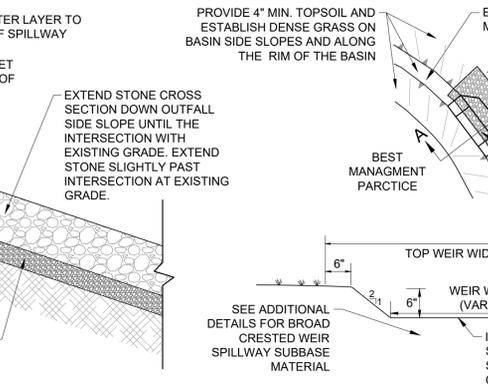
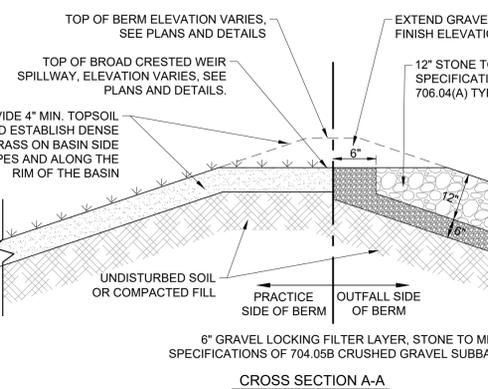
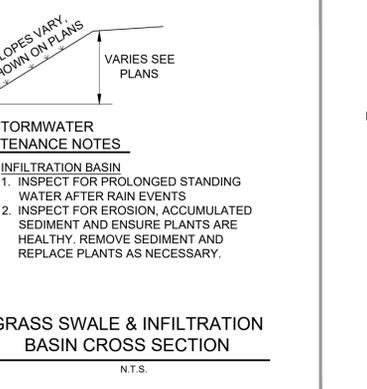
**SANITARY MAINS NOTES**

- THE PIPE AND FITTINGS FOR SANITARY SEWER SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D3034 FOR 4" - 15" SDR 35 AND F679 FOR 18" - 27". ALL PIPE SHALL BE LAID TO THE LINE AND GRADE SHOWN ON THE PLANS.
- THE PIPE FOR GRAVITY SANITARY SEWER SHALL BE AS SHOWN ON THE PLANS AND DETAILED BELOW:
  - ALL PIPE SHALL BE LAID TO THE LINE AND GRADE AS SHOWN ON THE PLANS.
  - PVC SDR 35 POLYVINYL CHLORIDE PIPE - PIPE SHALL CONFORM TO ASTM SPECIFICATION D-3034 OR F679, (PVC) SEWER PIPE AND FITTINGS, SDR35.
  - PIPE WITH RECYCLED CONTENT IS NOT ACCEPTABLE.
- PVC SDR 35 SANITARY AND STORM PIPES SHALL BE INSTALLED SO THAT THE INITIAL DEFLECTION SHALL BE LESS THAN 5%.
- PVC SDR 35 PIPE SHALL NOT BE INSTALLED WHEN THE TEMPERATURE DROPS BELOW 32° F OR GOES ABOVE 100° F UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER. EXTRA CARE IS REQUIRED WHEN HANDLING PVC PIPE DURING COLD WEATHER. PVC PIPE SHALL NOT BE STORED OUTSIDE AND EXPOSED TO PROLONGED PERIODS OF SUNLIGHT AS PIPE DISCOLORATION AND REDUCTION IN PIPE IMPACT STRENGTH WILL OCCUR. IF PVC PIPE IS TO BE STORED ON SITE FOR 1 MONTH OR LONGER IT SHALL BE COVERED WITH CANVAS OR OTHER OPAQUE MATERIAL.
- THE INSTALLED GRAVITY SANITARY SEWER PIPE SHALL BE LOW PRESSURE AIR TESTED IN THE PRESENCE OF THE ENGINEER. AFTER CLEANING THE PIPE, THE PIPE SECTION (MANHOLE TO MANHOLE) SHALL BE TESTED ACCORDING TO THE PROCEDURES OUTLINED IN THE STATE OF VERMONT WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES, EFFECTIVE APRIL 12, 2019.



**NOTES**

- TYPICAL GRASS SWALE & INFILTRATION BASIN CROSS SECTION. SEE PLAN VIEW FOR LOCATIONS.
- MAXIMUM SIDE SLOPES TO BE 3:1.
- DURING CONSTRUCTION TEMPORARILY SEEDED AND HEAVILY MULCHED. POST CONSTRUCTION CONTRACTOR SHALL RE-GRADE ANY EROSION, REMOVE BUILD UP SEDIMENTS, PERMANENT SEED AND HEAVILY RE-MULCH.
- CROSS-SECTION SHALL BE EXCAVATED TO NEAT LINES AND GRADES. OVER-EXCAVATED AREAS SHALL BE BACKFILLED WITH MOIST SOIL COMPACTED TO DENSITY OF SURROUNDING MATERIAL.
- ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF IN APPROVED UPLAND AREA (PER OSPC) SUCH THAT IT DOES NOT INTERFERE WITH FUNCTION.
- MINIMIZE STORING SNOW DURING THE WINTER MONTHS IN THE INFILTRATION BASIN TO THE EXTENT PRACTICAL.



**POST-CONSTRUCTION SOIL DEPTH AND QUALITY NOTES**

**SOIL RETENTION:** RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE.

**SOIL QUALITY:** ALL AREAS SUBJECT TO THE STANDARD SHALL DEMONSTRATE THE FOLLOWING:

A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 4% DRY WEIGHT IN PLANTING BEDS AND TURF AREAS. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF 4 INCHES, EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA.

COMPOST AND OTHER MATERIALS SHALL BE USED THAT MEET THE FOLLOWING REQUIREMENTS:

- THE COMPOST OR OTHER MATERIALS SHALL HAVE A CARBON TO NITROGEN RATIO BELOW 25:1.
- COMPOST SHALL MEET THE DEFINITION OF "COMPOST" IN THE AGENCY'S SOLID WASTE MANAGEMENT RULES OR SHALL MEET THE CONTAMINANT STANDARDS IN THE VERMONT SOLID WASTE MANAGEMENT RULES §6-1104(G)(6-7), §6-1105(E)(8-9), AND §6-1106(E)(7-9). COMPOST OR OTHER ORGANIC MATERIALS MAY BE AMENDED TO MEET THE FOREGOING REQUIREMENTS.
- EXCEPTIONAL QUALITY BIOSOLIDS (EQ BIOSOLIDS) MAY BE USED AS A SOIL AMENDMENT, AT A MAXIMUM PROPORTION OF 35% OF THE TOTAL SOIL VOLUME, AND SHALL BE WELL MIXED WITH EXISTING SOIL BEFORE OR DURING APPLICATION.
- THE RESULTING SOIL SHALL BE CONDUCTIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.

THE SOIL QUALITY REQUIREMENTS SHALL BE MET BY USING ONE OR A COMBINATION OF THE FOLLOWING METHODS:

- OPTION 1: LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION. FAILURE TO ESTABLISH AND MAINTAIN EXCLUSIONARY CONTROLS AROUND THESE AREAS DURING THE CONSTRUCTION PHASE MAY TRIGGER THE REQUIREMENT TO RESTORE SOILS PER ONE OF THE FOLLOWING OPTIONS.
- OPTION 2: AMEND EXISTING SITE TOPSOIL OR SUBSOIL IN PLACE.
  - SCARIFY OR TILL SUBSOILS TO 4 INCHES OF DEPTH OR TO DEPTH NEEDED TO ACHIEVE A TOTAL DEPTH OF 8 INCHES OF UNCOMPACTED SOIL AFTER CALCULATED AMOUNT OF AMENDMENT IS ADDED. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
  - AMEND SOIL TO MEET ORGANIC CONTENT REQUIREMENTS:
    - PRE-APPROVED RATE: PLACE 1 INCH OF COMPOSTED MATERIAL WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 65% AND ROTOTILL INTO 3 INCHES OF SOIL, OR
    - CALCULATED RATE: PLACE CALCULATED AMOUNT OF COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AND ROTOTILL INTO DEPTH OF SOIL NEEDED TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT. CALCULATION TO PROVIDE CALCULATION AND SITE SKETCH INDICATING AREAS USED FOR CALCULATIONS.
  - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER; AND
  - WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.
- OPTION 3: REMOVE AND STOCKPILE EXISTING TOPSOIL DURING GRADING.
  - STOCKPILE SOIL ON SITE IN A DESIGNATED CONTROLLED AREA, AT LEAST 50 FEET FROM SURFACE WATERS, WETLANDS, FLOODPLAINS, OR OTHER CRITICAL RESOURCE AREAS;
  - SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION;
  - STOCKPILED TOPSOIL SHALL ALSO BE AMENDED, IF NEEDED, TO MEET THE ORGANIC CONTENT REQUIREMENTS:
    - PRE-APPROVED RATE: COMPOST SHALL BE INCORPORATED WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 65% INTO THE TOPSOIL AT A RATIO 1:3, OR
    - CALCULATED RATE: INCORPORATE COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AT A CALCULATED RATE TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT;
  - REPLACE STOCKPILED TOPSOIL PRIOR TO PLANTING, SCREEN TOPSOIL, AND;
  - RAKE TO LEVEL, AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.
  - OPTION 4: IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DEPTH.
  - SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION;
  - PLACE 4 INCHES OF IMPORTED TOPSOIL MIX ON SURFACE. THE IMPORTED TOPSOIL MIX SHALL CONTAIN 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE USDA. SHOP DRAWING SUBMITTAL IS REQUIRED. FIND USDA SIEVE FOR SAND AND SANDY LOAM.
  - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER;
  - WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

**SOIL MANAGEMENT**

- IDENTIFIES AREAS ON THE SITE SUBJECT TO THE STANDARD;
- SOIL DEPTH AND QUALITY SHALL BE ESTABLISHED TOWARDS THE END OF CONSTRUCTION AND ONCE ESTABLISHED, PROTECTED FROM COMPACTION, SUCH AS FROM LARGE MACHINERY, VEHICLE TRAFFIC, AND FROM EROSION;
- AFTER SOIL AMENDMENTS AND PLACEMENT IS COMPLETE, AND PRIOR TO SEEDING AND MULCHING, CONTRACTOR SHALL PERFORM VERIFICATION SAMPLING IN LOCATIONS INDICATED ON SAMPLING PLAN. VERIFICATION SAMPLING SHALL INCLUDE NINE, 8 INCH DEEP (MIN) TEST HOLES PER ACRE OF AREA SUBJECT TO THE STANDARD. TEST HOLES SHALL BE EXCAVATED USING ONLY A SHOVEL DRIVEN SOLELY BY INSPECTOR'S WEIGHT AND SHALL BE AT LEAST 50 FEET APART FROM EACH OTHER.
- A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER TURF AREAS.

**ADDITIONAL SOILS RESTORATION**

- SOIL DEPTH AND QUALITY SHALL BE ESTABLISHED TOWARDS THE END OF CONSTRUCTION, AND ONCE ESTABLISHED, BE PROTECTED FROM COMPACTION.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF THE POST CONSTRUCTION SOIL DEPTH AND QUALITY.
- VERIFICATION SHALL BE VIA A SAMPLING SCHEME THAT INCLUDES NINE (9) DEEP TEST HOLES PER ACRE OF AREA SUBJECT TO THE STANDARD.
- TEST HOLES SHALL BE EXCAVATED USING ONLY A SHOVEL DRIVEN SOLELY BY THE INSPECTOR'S WEIGHT AND SHALL BE AT LEAST 50 FEET APART FROM EACH OTHER.
- ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS (LOD) ARE SUBJECT TO THE POST-CONSTRUCTION SOIL DEPTH AND QUALITY STANDARD

**ALL SEWER, WATER, AND STORM DRAINAGE UTILITIES INSTALLED ON THE PROJECT SIDE TO BE OBSERVED BY AN AUTHORIZED REPRESENTATIVE OF THE CITY OF ESSEX JUNCTION PRIOR TO BACKFILLING THE UTILITY BEING INSTALLED**

**WINTER EROSION CONTROL PROCEDURES**  
(FOR ANY EARTH WORK PERFORMED BETWEEN OCTOBER 15TH AND APRIL 15TH)

**WINTER EROSION CONTROL NARRATIVE:**  
OBJECTIVE - ANY SITE WORK PERFORMED LATER THAN OCTOBER 15TH WILL RESULT IN EXPOSED SOIL THROUGH THE WINTER. THIS PRESENTS A POTENTIAL FOR EROSION THROUGH THE WINTER. THE WINTER EROSION CONTROL MEASURES ARE INTENDED TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION ZONE DURING THAWS AND RAINSTORMS.

**WINTER EROSION CONTROL SEQUENCE:**  
ON-SITE COORDINATOR - THE ON-SITE COORDINATOR SHALL BE SURE ALL EROSION CONTROL MEASURES REQUIRED FOR WINTER CONSTRUCTION ARE INSTALLED BY OCTOBER 15TH AND PRIOR TO GROUND FREEZING. IF A PERMITTED AREA CAN BE LEFT UNDISTURBED UNTIL THE SPRING THE CONTRACTOR SHALL MAKE EVERY EFFORT TO LIMIT THESE AREAS OF DISTURBANCE.

THE CONTRACTOR SHALL STABILIZE ANY PORTION OF THE SITE THAT IS BEING WORKED AND DISTURBED PRIOR TO BEGINNING CONSTRUCTION AT ANOTHER AREA OF THE SITE. AT NO TIME DURING WINTER CONSTRUCTION SHALL THERE BE MORE THAN 1 ACRE OF EXPOSED SOIL ON SITE.

ANTICIPATED WINTER CONSTRUCTION ACTIVITIES WILL INCLUDE ALL ASPECTS OF THE PROJECT PROPOSED DURING SUMMER CONSTRUCTION. THIS IS A CONTINUATION OF WORK WHICH WAS NOT COMPLETED DURING THE SUMMER. MAJOR GRADING IS EXPECTED TO BE COMPLETE BEFORE OCTOBER 15TH.

LIMITS OF DISTURBANCE - LOD WILL BE MOVED AND/OR REPLACED TO REFLECT THE BOUNDARY OF WINTER WORK. CONTRACTOR WILL MAINTAIN A MINIMUM 25' BUFFER FROM PERIMETER CONTROLS TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.

SNOW STORAGE ON SITE - CONTRACTOR WILL CREATE A SNOW MANAGEMENT PLAN. PLAN WILL IDENTIFY LOCATIONS FOR ADEQUATE SNOW STORAGE AND CONTROL SNOW MELT. SNOW STORAGE WILL BE DOWN GRADIENT OF ALL DISTURBED AREAS AND WILL NOT PROHIBIT THE FUNCTION OF ALL PERMANENT STORMWATER TREATMENT STRUCTURES. CONTRACTOR SHALL KEEP ALL DRAINAGE STRUCTURES OPEN AND FREE OF SNOW AND ICE DAMS.

INSTALL SILT FENCE - SILT FENCE SHALL BE INSTALLED ON THE DOWNHILL SIDE OF THE WINTER CONSTRUCTION AREAS AND SOIL STOCKPILE AREAS, AS SHOWN ON THE PLAN, BY OCTOBER 15TH. IF THE GROUND IS UNFROZEN THE SILT FENCE SHALL BE DUG IN AS NORMAL. IF THE GROUND IS FROZEN CONTACT THE ENGINEER FOR ALTERNATE OPTIONS (STONE BERM, FILTEREXX SILT SOXX, STRAW WATTLE, ETC.).

STABILIZED CONSTRUCTION ENTRANCE - THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL STABILIZED CONSTRUCTION ENTRANCES TO PREVENT SEDIMENT TRACKING OFF SITE. CONTRACTOR SHALL ENLARGE THE WIDTH OF ACCESS TO PROVIDE ADDITIONAL ROOM FOR SNOW STOCKPILING, IF NEEDED. ADDITIONAL STONE SHALL BE ADDED OR THE LENGTH SHALL BE INCREASED, IF ICE AND SNOW LIMITS CONSTRUCTION ENTRANCE'S ABILITY TO HOLD SEDIMENTS ON SITE.

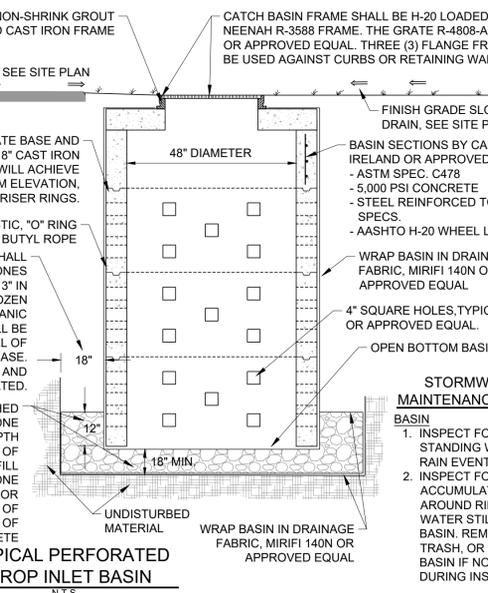
WINTER STABILIZATION - ALL DISTURBED AREAS NOT INVOLVED IN WINTER CONSTRUCTION SHALL BE AT LEAST TEMPORARILY STABILIZED BY OCTOBER 15. AFTER OCTOBER 15TH, ALL AREAS DISTURBED DURING WINTER CONSTRUCTION SHALL BE STABILIZED DAILY TO PREVENT EXPOSURE FROM RAIN EVENTS AND ACCUMULATION OF SNOWFALL (SEE EXCEPTIONS BELOW). CONTRACTOR SHALL ADD ADDITIONAL STONE, AS NECESSARY, TO PROVIDE STABILIZATION THROUGH WINTER CONSTRUCTION ON ALL AREAS WHERE CONSTRUCTION TRAFFIC IS ANTICIPATED.

**EXCEPTIONS:**

- HYDROSEEDING AFTER OCTOBER 15TH AND BEFORE APRIL 15TH MUST BE STABILIZED WITH STRAW MULCH OR EROSION CONTROL MATTING.
- SNOW AND/OR ICE MUST BE REMOVED TO, AT MOST, ONE INCH PRIOR TO APPLYING MULCH OR EROSION CONTROL STABILIZATION MATTING.
- IF NO PRECIPITATION, WITHIN 24 HOURS, IS FORECASTED AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
- DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS OPEN UTILITY TRENCHES, REQUIRE STABILIZATION AT THE END OF EACH WORK WEEK.

MAINTENANCE - ALL DISTURBED AREAS SHALL BE MONITORED BY THE CONTRACTOR AND THE ON-SITE PLAN COORDINATOR IN ACCORDANCE WITH THE INSPECTION REQUIREMENT OUTLINED IN THE INDIVIDUAL CONSTRUCTION STORMWATER PERMIT. THE CONTRACTOR AND ON-SITE PLAN COORDINATOR SHALL EVALUATE THE SITE AFTER A THAW OR RAINSTORM. THE CONTRACTOR OR ON-SITE PLAN COORDINATOR SHALL NOTIFY THE ENGINEER IF ANY EROSION CONTROL MEASURES APPEAR TO BE INADEQUATE. THE CONTRACTOR OR ON-SITE PLAN COORDINATOR SHALL IMMEDIATELY (WITHIN THE SAME BUSINESS DAY) IMPLEMENT ANY FURTHER EROSION CONTROL MEASURES SPECIFIED BY THE ENGINEER. THE CONTRACTOR OR ON-SITE PLAN COORDINATOR SHALL ADD MULCH, AS NECESSARY, THROUGHOUT THE WINTER AFTER THAWS OR RAINSTORMS. THE MULCH DEPTH SHALL BE BROUGHT UP TO 2". THE MULCH AND SILT FENCE SHALL BE MAINTAINED UNTIL A PERMANENT GROUND COVER (70% STABILIZATION) IS ESTABLISHED IN THE SPRING. THE SITE SHALL BE REMULCHED AND RESEED, IN THE SPRING, AS REQUIRED TO ESTABLISH A VIGOROUS PERMANENT GROUND COVER.

INSPECTION - THE ON-SITE COORDINATOR SHALL BE RESPONSIBLE FOR, AT A MINIMUM, DAILY WRITTEN INSPECTIONS WHILE THE SITE IS DISTURBED OR WEEKLY IF EVERYTHING IS STABILIZED BUT CONSTRUCTION IS ON-GOING. IF, DURING WINTER CONSTRUCTION, EARTH DISTURBANCE ACTIVITIES TEMPORARILY CEASE AND THE SITE HAS BEEN FULLY STABILIZED, INSPECTION AND MONITORING REQUIREMENTS FOR THE ON-SITE COORDINATOR MAY BE REDUCED TO ONCE PER MONTH MINIMUM. ALL INSPECTION SHEETS SHALL BE KEPT ON SITE AND BE AVAILABLE UPON REQUEST.



**STORMWATER MAINTENANCE NOTES**

- INSPECT FOR PROLONGED STANDING WATER AFTER RAIN EVENTS
- INSPECT FOR EROSION, ACCUMULATED SEDIMENT AROUND RIM, MAKE SURE WATER STILL DRAINS TO BASIN. REMOVE SEDIMENT, TRASH, OR ORGANICS IN BASIN IF NOTICEABLE DURING INSPECTION.

**STAMP:**

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revisions from City comments	05/05/23

**DETAILS**

DATE ISSUED: 04/07/23

DRAWN BY: GTD CHECKED BY: GTD

PROJECT NO.: 22304 SCALE: N/A

DRAWING NO.: C-2.03 REV. NO.: 1

**SUNDERLAND APARTMENTS**

229 Pearl Street  
City of Essex Junction, Vermont

**KREBS & LANSING**  
CONSULTING ENGINEERS

164 Main Street, Suite 201 P: (802) 878-0375  
Colchester, Vermont 05446 www.krebsandlansing.com

**ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION**

**APPLICANT/OWNER:**

227 Pearl Street LLC  
c/o Brett Grabowski  
32 Seymour Street #101  
Williston, Vermont 05489

**PROPERTY INFORMATION:**

CITY OF ESSEX JUNCTION:  
Address: 227 Pearl Street  
Parcel ID: 1040042000  
SPAN: 207-066-10350  
Area: 0.96 Acres (±41,800 s.f.)  
Zoning: Multi-Family/Mixed Use 1  
Setbacks:  
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Rear: 10'  
Side: 10'  
Max. Building Height: 58'  
Total Lot Coverage: 65% (80% with waiver)

ESSEX:  
Parcel ID: 2040042000  
SPAN: 207-067-42238  
Area: 0.11 Acres (±4,800 s.f.)  
Zoning: Mixed Use

# SUNDERLAND APARTMENTS

229 Pearl Street  
City of Essex Junction, Vermont



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P: (802) 878-0375  
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## ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION

APPLICANT/OWNER:  
227 Pearl Street LLC  
c/o Brett Grabowski  
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Williston, Vermont 05495

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REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revisions from City comments	05/05/23

DRAWING TITLE:

## DETAILS

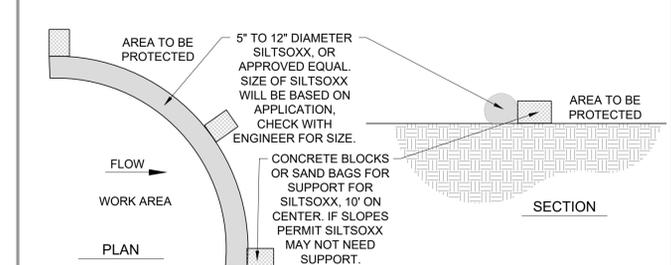
DATE ISSUED: 04/07/23

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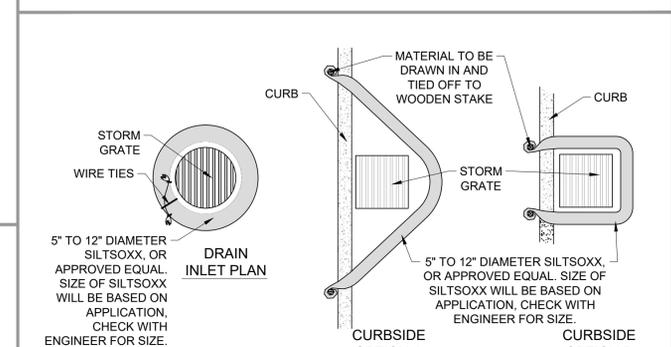
PROJECT NO.: 22304 SCALE: N/A

DRAWING NO.: **C-2.04** REV. NO.: **1**

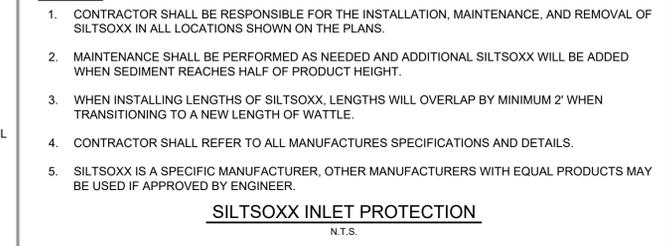
DWG NAME: 227-Pearl-Street-Boss.dwg



- NOTES**
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF SILTISOXX IN ALL LOCATIONS SHOWN ON THE PLANS.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND ADDITIONAL SILTISOXX WILL BE ADDED WHEN SEDIMENT REACHES HALF OF PRODUCT HEIGHT.
  - WHEN INSTALLING LENGTHS OF SILTISOXX, LENGTHS WILL OVERLAP BY MINIMUM 2' WHEN TRANSITIONING TO A NEW LENGTH OF WATTLE.
  - CONTRACTOR SHALL REFER TO ALL MANUFACTURES SPECIFICATIONS AND DETAILS.
  - SILTISOXX IS A SPECIFIC MANUFACTURER, OTHER MANUFACTURERS WITH EQUAL PRODUCTS MAY BE USED IF APPROVED BY ENGINEER.
- TYPICAL SILTISOXX INSTALLATION ON PAVEMENT**  
N.T.S.



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- SILTISOXX INLET PROTECTION**  
N.T.S.



- NOTES**
- CONTRACTOR SHALL STABILIZE CONSTRUCTION ENTRANCE AS REQUIRED TO PREVENT TRACKING OF SEDIMENT OFF-SITE.
  - CONTRACTOR TO USE MIRAFI 500X UNDER STONE FOR TEMPORARY CONSTRUCTION ROADS.
  - CRUSHED STONE SHALL BE ADDED OR REPLACED WHEN 80% OF THE VOIDS ARE FILLED WITH SEDIMENT.
  - STONE SIZE SHALL BE 1-4".
  - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES IS ALLOWED.
- STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.

PERMANENT SEED MIX SHALL BE USED AS EARLY AS PRACTICABLE BETWEEN 5/15 AND 9/15 AND SHALL MEET THE FOLLOWING CRITERIA:

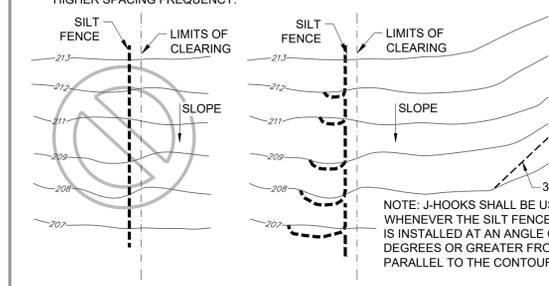
SEED	% WEIGHT
RED FESCUE	50%
SHEEP FESCUE	25%
RED TOP	5%
WHITE CLOVER	10%
ANNUAL RYE	10%

TEMPORARY SEED MIX SHALL BE USED BETWEEN 9/16 AND 5/14 AND SHALL MEET THE FOLLOWING CRITERIA:

SEED	% WEIGHT	%GERMINATION
WINTER RYE	80% MIN.	85% MIN.
RED FESCUE (CREEPING)	4% MIN.	80% MIN.
PERENNIAL RYE GRASS	3% MIN.	90% MIN.
RED CLOVER	3% MIN.	90% MIN.
OTHER CROP GRASS	0.5% MAX.	
NOXIOUS WEED SEED	0.5% MAX.	
INERT MATTER	1% MAX.	

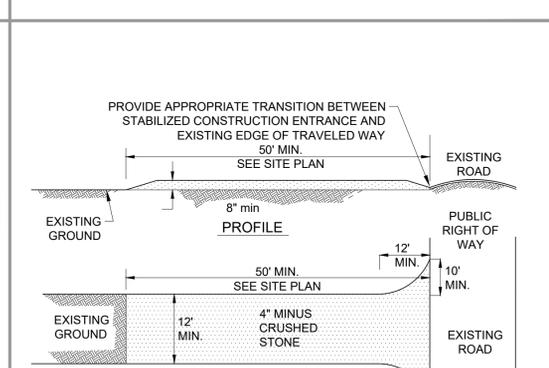
**SEEDING SPECIFICATIONS**

- NOTES**
- PROPER INSTALLATION OF J-HOOKS PROVIDES SILT FENCE THE ABILITY TO TEMPORARILY POND RUNOFF, ALLOWING TIME FOR SEDIMENTS TO SETTLE.
  - LONG RUNS OF SILT FENCE BETWEEN J-HOOKS SHOULD BE AVOIDED REFER TO ADJACENT TABLE FOR PROPER SPACING OF J-HOOKS.
  - J-HOOKS SHOULD BE BUILT ALONG CONTOUR IN A "SMILE" SHAPE WITH A MINIMUM WIDTH OF 20 FEET AND MINIMUM DEPTH OF 10 FEET.
  - ALONG A NARROW RIGHT OF WAY, NARROWER J-HOOKS CAN BE USED WITH A HIGHER SPACING FREQUENCY.

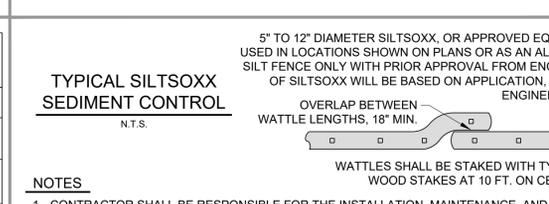


**TYPICAL SILT FENCE "J-HOOK" CONSTRUCTION**  
N.T.S.

SLOPE STEEPNESS	MAXIMUM SPACING BETWEEN SILT FENCE J-HOOKS (FT.)
2:1 SLOPE (50%)	25
3:1 SLOPE (33%)	50
4:1 SLOPE (25%)	75
5:1 SLOPE OR FLATTER (50%)	100

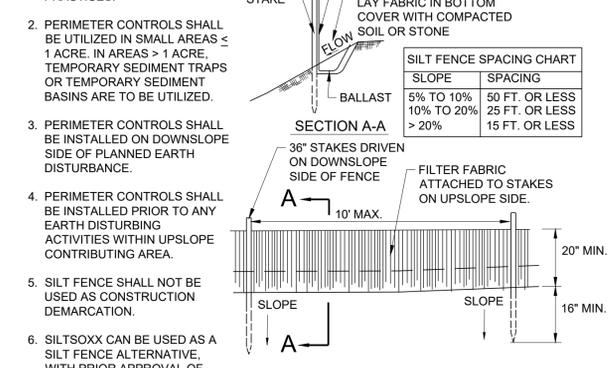


- NOTES**
- ACCEPTABLE EPSC MEASURE DETAILS ARE PROVIDED BELOW.
  - AT A MINIMUM, EPSC MEASURES MEET VT DEC STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL OR PREVIOUSLY APPROVED INTERCHANGEABLE PRACTICES.
  - LIMITS OF DISTURBANCE (OR "CONSTRUCTION DEMARCATION") SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
  - BARRIER TAPE/ROPE: FOR USE WHERE PROPOSED DISTURBANCE BORDERS NON-WOODED, VEGETATED AREAS MORE THAN 100 FT FROM THE NEAREST WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC.). BARRIER TAPE IS HIGH VISIBILITY FIBERGLASS TAPE, MINIMUM 3" IN WIDTH COMMONLY USED IN SKI AREAS FOR DEMARCATING CLOSED AREAS. BARRIER TAPE AND ROPE SHOULD BE ATTACHED TO STAKES, AT A MINIMUM HEIGHT OF 4 FT FROM THE GROUND.
  - MINIMUM 1 TO 2 ROWS OF MESH BARRIER TAPE TO BE INSTALLED ALONG CONSTRUCTION PERIMETER.
  - EACH ROW OF BARRIER TAPE TO BE 3" WIDE MINIMUM.
  - BARRIER TAPE TO BE ORANGE.
  - SECURE BARRIER TAPE TO STAKES OR EXISTING TREE TRUNKS WITH BOTTOM ROW AT 4' DISTANCE FROM GROUND SURFACE (MINIMUM).
  - MAINTAIN AND REPLACE AS NEEDED. REMOVE AT COMPLETION OF PROJECT PER OSPC.
  - IN EVENT THE OSPC DETERMINES BARRIER TAPE IS NOT SUFFICIENT, REPLACE WITH ORANGE CONSTRUCTION FENCE OR SNOW FENCE.

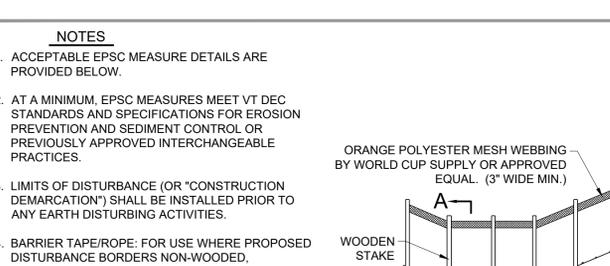


- NOTES**
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF SILTISOXX IN ALL LOCATIONS SHOWN ON THE PLANS. SILTISOXX MAY BE LEFT IN PLACE IF THE CONTRACTOR SEEDS AND MULCHES OVER SILTISOXX FOR GROWTH POST CONSTRUCTION.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND ADDITIONAL WATTLES WILL BE ADDED WHEN SEDIMENT REACHES HALF OF PRODUCT HEIGHT.
  - WHEN INSTALLING LENGTHS OF SILTISOXX, LENGTHS WILL OVERLAP BY MINIMUM 18" WHEN TRANSITIONING TO A NEW LENGTH OF SILTISOXX.
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  - SILTISOXX CAN BE USED AS A SILT FENCE ALTERNATIVE, WITH PRIOR APPROVAL OF THE ENGINEER.

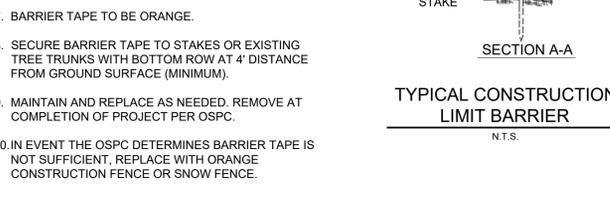
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- AT A MINIMUM, EPSC MEASURES MEET VT DEC STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL OR PREVIOUSLY APPROVED INTERCHANGEABLE PRACTICES.
  - PERIMETER CONTROLS SHALL BE UTILIZED IN SMALL AREAS ≤ 1 ACRE. IN AREAS > 1 ACRE, TEMPORARY SEDIMENT TRAPS OR TEMPORARY SEDIMENT BASINS ARE TO BE UTILIZED.
  - PERIMETER CONTROLS SHALL BE INSTALLED ON DOWNSLOPE SIDE OF PLANNED EARTH DISTURBANCE.
  - PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBING ACTIVITIES WITHIN UPSLOPE CONTRIBUTING AREA.
  - SILT FENCE SHALL NOT BE USED AS CONSTRUCTION DEMARCATION.
  - SILTISOXX CAN BE USED AS A SILT FENCE ALTERNATIVE, WITH PRIOR APPROVAL OF THE ENGINEER. SEE DETAIL.
  - IF SILT FENCE IS INSTALLED WHEN GROUND IS FROZEN, A GRAVEL, SHOT ROCK, OR SAND BALLAST MUST BE USED.



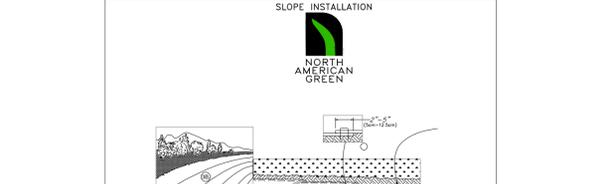
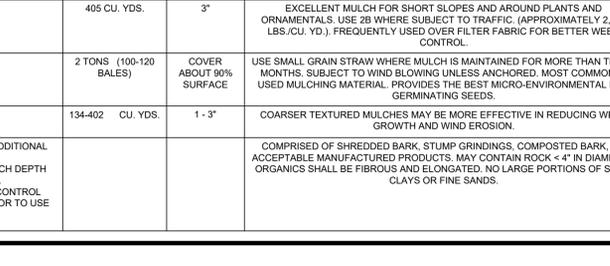
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  - SEED AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH WITH APPROXIMATELY 1/2" (12mm) OF BALLAST EXTENDING BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH. PORTION OF BALLAST BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
  - ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE BEARING THE TOP SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE WITH STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
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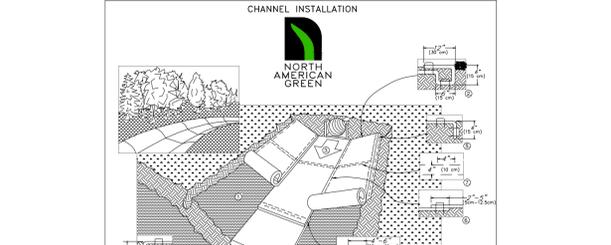
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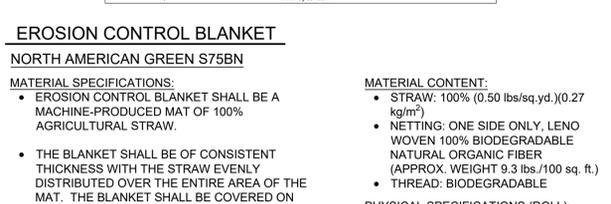
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  - SEED AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH WITH APPROXIMATELY 1/2" (12mm) OF BALLAST EXTENDING BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH. PORTION OF BALLAST BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
  - ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE BEARING THE TOP SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE WITH STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
  - SEAL LONGER EDGE OF BLANKET AT TOP OF SLOPE WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
  - IN CASE OF CHANNEL APPLICATIONS, A DOUBLE ROW OF STAPLES IS RECOMMENDED AT 20' TO 40' (7.6m-12.2m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED AT 15" (3.8cm) APART AND 4" (10cm) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
  - THE TRENCH END OF THE BLANKET MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 4" (10cm) DEEP X 4" (10cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



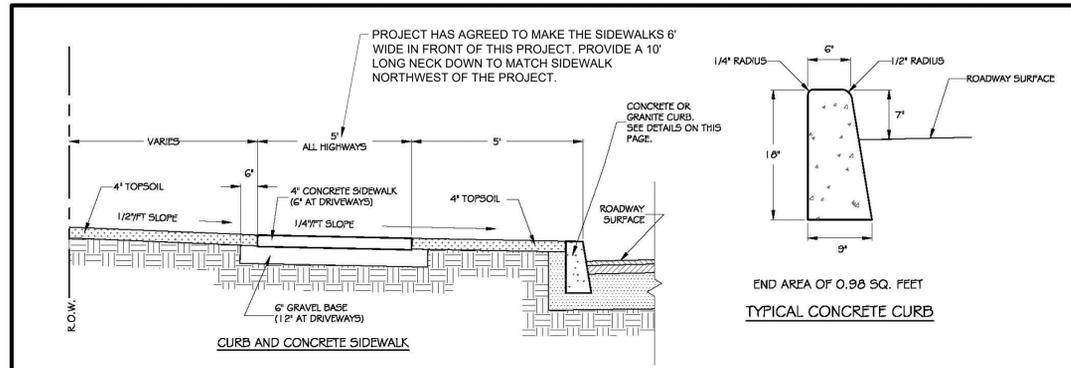
## EROSION CONTROL BLANKET

NORTH AMERICAN GREEN S75BN

- MATERIAL SPECIFICATIONS:**
- EROSION CONTROL BLANKET SHALL BE A MACHINE-PRODUCED MAT OF 100% AGRICULTURAL STRAW.
  - THE BLANKET SHALL BE OF CONSISTENT THICKNESS WITH THE STRAW EVENLY DISTRIBUTED OVER THE ENTIRE AREA OF THE MAT. THE BLANKET SHALL BE COVERED ON THE TOP SIDE WITH 100% BIODEGRADABLE WOVEN NATURAL ORGANIC FIBER NETTING HAVING AN APPROXIMATE 1/2" X 1" MESH AND BE SEWN TOGETHER WITH BIODEGRADABLE THREAD.
  - STRAW EROSION CONTROL BLANKET SHALL BE S75BN AS MANUFACTURED BY NORTH AMERICAN GREEN, INC. (812-867-6632) OR EQUIVALENT. EROSION CONTROL BLANKET SHALL HAVE THE FOLLOWING PROPERTIES:
- MATERIAL CONTENT:**
- STRAW: 100% (0.50 lbs/sq.yd.)(0.27 kg/m<sup>2</sup>)
  - NETTING: ONE SIDE ONLY, LENO WOVEN 100% BIODEGRADABLE NATURAL ORGANIC FIBER (APPROX. WEIGHT 9.3 lbs./100 sq. ft.)
  - THREAD: BIODEGRADABLE
- PHYSICAL SPECIFICATIONS (ROLL):**
- WIDTH: 6.67 feet (2.03 m)
  - LENGTH: 108 feet (32.92 m)
  - WEIGHT: 46.4 lbs. ± 10% (21.05 kg)
  - AREA: 80 sq. yd. (50 m<sup>2</sup>)

**GUIDE TO MULCH MATERIALS, RATES, AND USES**

QUALITY STANDARDS	PER 1000 SQ. FT.	PER ACRE	DEPTH OF APPLICATION	REMARKS
WOOD CHIPS OR SHAVINGS AIR-DRIED, FREE OF OBJECTIONABLE COARSE MATERIAL	500-900 LBS	10-20 TONS	2-7"	USED PRIMARILY AROUND SHRUB AND TREE PLANTINGS AND RECREATION TRAILS TO INHIBIT WEED COMPETITION. RESISTANT TO WIND BLOWING. DECOMPOSES SLOWLY.
WOOD FIBER CELLULOSE (PARTLY DIGESTED WOOD FIBERS)	50 LBS	2,000 LBS.	-	APPLY WITH HYDROMULCHER. NO TIE DOWN REQUIRED. LESS EROSION CONTROL PROVIDED THAN 2 TONS OF HAY OR STRAW.
GRAVEL, CRUSHED STONE OR SLAG WASHED, SIZE 28 OR 3A - 1/2"	9 CU. YDS.	405 CU. YDS.	3"	EXCELLENT MULCH FOR SHORT SLOPES AND AROUND PLANTS AND ORNAMENTALS. USE 28 WHERE SUBJECT TO TRAFFIC. (APPROXIMATELY 2,000 LBS./CU. YD.). FREQUENTLY USED OVER FILTER FABRIC FOR BETTER WEED CONTROL.
HAY OR STRAW AIR-DRIED, FREE OF UNDESIRABLE SEEDS & COARSE MATERIALS	90-100 LBS 2-3 BALES	2 TONS (100-120 BALES)	COVER ABOUT 90% SURFACE	USE SMALL GRAIN STRAW WHERE MULCH IS MAINTAINED FOR MORE THAN THREE MONTHS. SUBJECT TO WIND BLOWING UNLESS ANCHORED. MOST COMMONLY USED MULCHING MATERIAL. PROVIDES THE BEST MICRO-ENVIRONMENTAL FOR GERMINATING SEEDS.
COMPOST UP TO 3" PIECES, MODERATELY TO HIGHLY STABLE	3-9 CU. YDS.	134-402 CU. YDS.	1-3"	COARSER TEXTURED MULCHES MAY BE MORE EFFECTIVE IN REDUCING WEED GROWTH AND WIND EROSION.
EROSION CONTROL MIX WELL-GRADED MIXTURE OF PARTICLE SIZES. ORGANIC CONTENT BETWEEN 80-100%. DRY WEIGHT. PARTICLE SIZE SHALL PASS 6" SCREEN (100%)				* SLOPES 3/4H:1(VERT) OR FLATTER = 2 INCH DEPTH PLUS ADDITIONAL 1/2 INCH DEPTH PER 20 FT. OF SLOPE UP TO 100 FT. ** SLOPES BETWEEN 3/4H:1(VERT) AND 2H:1(VERT) = 4 INCH DEPTH PLUS ADDITIONAL 1/2 INCH PER 20 FT. OF SLOPE UP TO 100 FT. *** SLOPES STEEPER THAN 2H:1(VERT) USE OF EROSION CONTROL MIX AND MULCH DEPTH TO BE REVIEWED AND APPROVED PRIOR TO USE BY OSPC OR EPSC SPECIALIST



1. ALL CURB RADII LESS THAN 200' SHALL BE FORMED USING FLEXIBLE FORMS.
2. CURB REVEAL AT DRIVEWAYS SHALL BE 1" MAX. AND 1/4" MAX. AT HANDICAP ACCESS RAMP.
3. CURBING SHALL BE CONSTRUCTED IN 10 FOOT SECTIONS WITH 1/8" JOINTS BETWEEN SECTIONS.
4. SIDEWALK SHALL BE CAST IN 100' SECTIONS WITH NO EXPANSION JOINTS. CONNECTION TO EXISTING SIDEWALK AND BETWEEN 100 FOOT SECTIONS SHALL BE ACCOMPLISHED WITH STEEL DOWELS, SPACED 12" ON CENTER. SIDEWALK ADJACENT TO CURB SHALL BE SEPARATED BY 4 MIL POLYETHYLENE. SIDEWALK JOINTS SHALL BE SAW CUT AT 5' INTERVALS TO 1/3 THE SIDEWALK DEPTH. STRUCK TRANSVERSE FALSE JOINTS SHALL NOT BE UTILIZED.
5. ALL MATERIALS AND CONSTRUCTION TO BE ACCORDING TO SPECIFICATIONS.
6. SOME AREAS REQUIRE WALKS OF GREATER WIDTH OF THE DISCRETION OF THE VILLAGE.
7. CONCRETE WALKS SHALL BE 6" THICKNESS ACROSS DRIVES.
8. ALL SIDEWALKS SHALL BE TREATED WITH CERTI-VEX AC 1315, PER THE MANUFACTURERS INSTRUCTIONS.

**STREET DETAIL**

NOT TO SCALE  
CURB AND CONCRETE SIDEWALK

PAGE D-4 04/21/2016

**SIDEWALK DETAIL FOR SIDEWALKS WITHIN THE R.O.W. ALONG PEARL STREET**

N.T.S.

**TEMPORARY TRAFFIC CONTROL GENERAL NOTES (VAOT STANDARD T-1)**

1. TRAFFIC CONTROL DEVICES NOT DETAILED IN THE VERMONT AGENCY OF TRANSPORTATION (VAOT) "STANDARD DRAWINGS" OR THE PROJECT PLANS SHALL BE IN ACCORDANCE WITH THE "MANUAL ON TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
2. CONSTRUCTION SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER.
3. DIAMOND SHAPED CONSTRUCTION SIGNS SHALL BE 48 INCH BY 48 INCH.
4. CONSTRUCTION SIGN COVERS SHALL CONSIST OF A PANEL, PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL SHALL BE OF WOOD, PLYWOOD, HARDBOARD OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.
5. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFAUCED OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.
6. NO CROSS-BRACING OR BACK-BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE FOUNDATIONS, COLLARS OR SOIL BEARING PLATES ARE NOT PERMITTED. CONSTRUCTION SIGNS SHALL BE PLACED ON TWO POSTS.
7. CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST FIVE FEET ABOVE THE EDGE OF PAVEMENT AND THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT, FOUR FEET OUTSIDE GUARDRAIL, OR TWO FEET OUTSIDE CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IN URBAN AREAS, THE BOTTOM OF THE SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE SIDEWALK OR EDGE OF PAVEMENT, WHICHEVER IS HIGHER.
8. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
9. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
10. ROLL UP CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VI AND TYPE VII UNLESS OTHERWISE NOTED.
11. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VI I OR IX REQUIREMENTS UNLESS OTHERWISE NOTED.
12. WHERE CONSTRUCTION SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POSTS. WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.
13. ROADWAY AND SHOULDER WIDTHS DEPICTED ON THE STANDARD DRAWINGS MAY VARY.
14. THESE STANDARD DRAWINGS ARE INTENDED TO SERVE AS VTRANS STANDARD OPERATING PROCEDURE. IT IS NOTED THAT COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY BE MODIFIED DUE TO FIELD CONDITIONS, AT THE DISCRETION OF THE ENGINEER.
15. REFER TO TABLES 6H-3 & 6H-4 FOR SPACING OF SIGNS AND CONES.
16. MAINTAIN 12' TRAVEL LANES WHENEVER POSSIBLE. REFER TO THE FOLLOWING 2009 MUTCD TYPICAL APPLICATIONS FOR VARYING FIELD CONDITIONS:  
USE TA-1 FOR WORK BEYOND SHOULDER, PAGE 634.  
USE TA-6 FOR SHOULDER WORK WITH MINOR ENCROACHMENT, PAGE 644.  
USE TA-10 FOR LANE CLOSURE ON 2 LANE ROAD USING FLAGGERS, PAGE 652.  
USE TA-14B WHEN MOBILIZING SOLAR PANELS AND EQUIPMENT TO THE SITE, PAGE 660.
17. EXTRA CARE SHALL BE GIVEN DURING PEAK TRAFFIC FLOW TO LIMIT STOPPING TRAFFIC FOR EXTENDED PERIODS OF TIME.
18. IF EQUIPMENT TRAVELS ON THE ROADWAY, THE EQUIPMENT SHOULD BE EQUIPPED WITH APPROPRIATE FLAGS, HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS, AND/OR A SLOW MOVING VEHICLE SIGN.

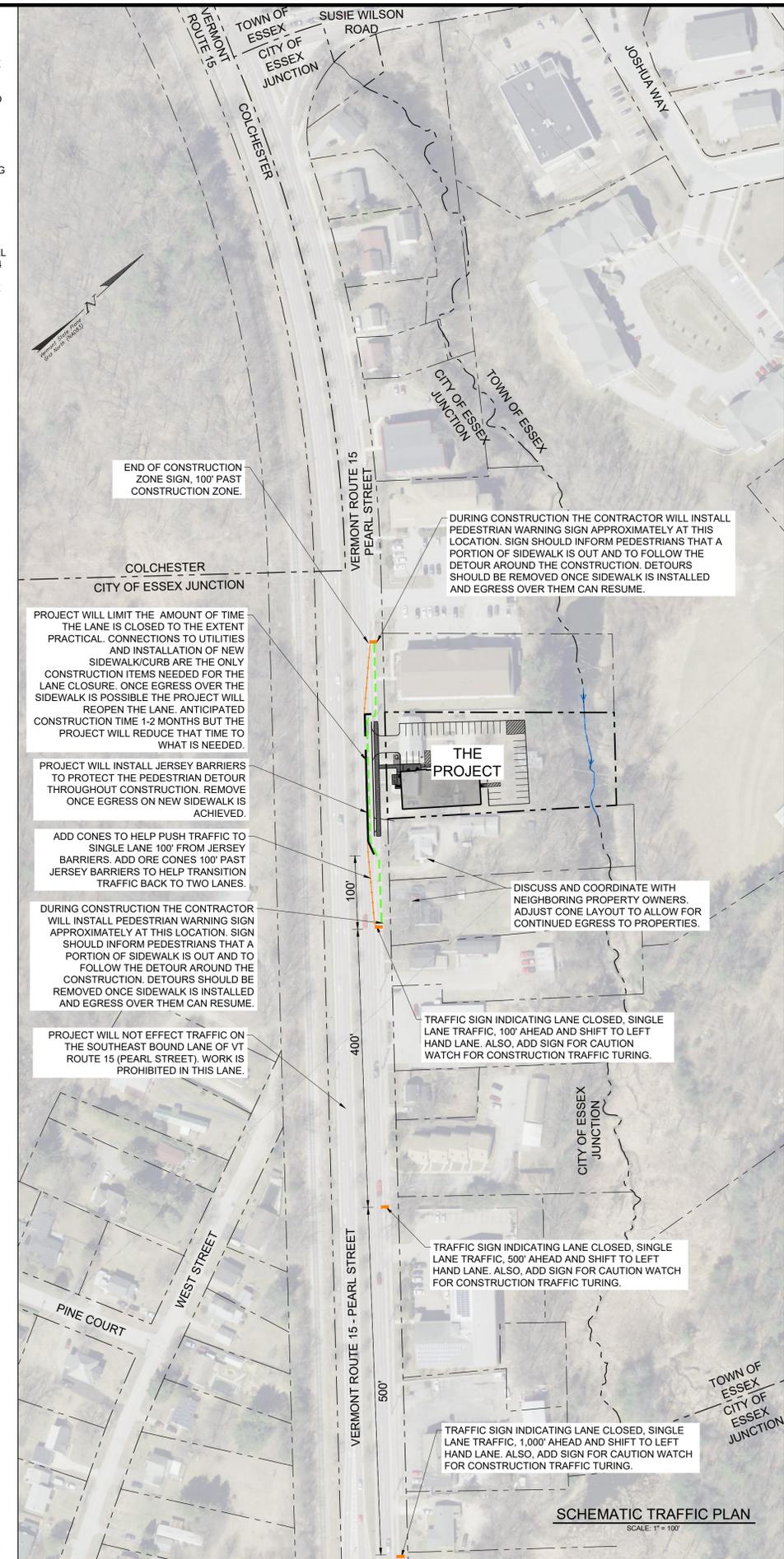
**FLAGGERS AND UNIFORMED TRAFFIC OFFICERS**

1. PROJECT IS PROPOSING PERMANENT CLOSURE THROUGH THE CONSTRUCTION PERIOD TO CONNECT UTILITIES AND BUILDING SIDEWALK AND CURB. FLAGGERS ARE NOT NEEDED FOR THIS PERMANENT CLOSURE. HOWEVER, FLAGGERS MAY BE NEEDED FOR CONSTRUCTION TURNING AND OTHER MISC. TIMES. IF FLAGGERS ARE DEEMED NECESSARY THE CONTRACTOR WILL HIRE PROFESSIONAL TRAFFIC FLAGGERS AND FOLLOW THE FOLLOWING ITEMS.
2. FLAGGERS SHALL HAVE CURRENT DOCUMENTATION OF HAVING COMPLETED AN APPROVED 4 HOUR TRAINING COURSE. THE CONTRACTOR SHALL PROVIDE THE STATE OF VERMONT WITH COPIES OF CERTIFICATION OF THE COURSE ATTENDED.
3. ALL FLAGGERS AND UTO WORKING TRAFFIC CONTROL SHALL WEAR SAFETY APPAREL MEETING REQUIREMENTS OF ISEA "AMERICAN NATIONAL STANDARD FOR HIGH-VISIBILITY APPAREL AND HEADWEAR" AND LABELED AS MEETING THE ANSI 107-2004 STANDARD PERFORMANCE FOR CLASS II RISK EXPOSURE. INDIVIDUALS ENGAGED IN TRAFFIC CONTROL SHALL WEAR THE HIGH-VISIBILITY VEST WITH "TRAFFIC CONTROL" VISIBLE WITHOUT EXCEPTION.
4. UNIFORM TRAFFIC CONTROL OFFICERS OR TRAINED FLAG PERSONS SHALL DIRECT TRAFFIC WHENEVER REQUIRED.
5. NOTE THAT THE UTO, UNDER AUTHORITY GRANTED BY LAW (TITLE 23 VSA) MAY DIRECT AND CONTROL TRAFFIC. SUITABLE EXAMPLES IN WORK ZONES MIGHT INCLUDE THE DIRECTION AND CONTROLS OF TRAFFIC AT INTERSECTIONS WHERE SIGNALS ARE NOT FUNCTIONING. IN THESE INSTANCES WHERE THE PRESENCE OF THE BLUE LIGHT MAY NOT BE NECESSARY. THE WEARING OF DEPARTMENTALLY REQUIRED AND APPROVED REFLECTIVE GARMENTS IS REQUIRED.
6. FLAGGERS ARE ALLOWED TO STOP AND RELEASE TRAFFIC AS INDICATED IN THE 2009 MUTCD, SECTION 6E.07 FLAGGER PROCEDURES.

IF ADDITIONAL FLAGGING AND TRAFFIC MITIGATION IS NEEDED WITHIN THE R.O.W. WHICH IS NOT PERMANENTLY CLOSED. THE WORK WILL BE PERFORMED BETWEEN THE HOURS OF 9AM AND 3PM, OR AT NIGHT. THIS IS TO AVOID FURTHER LANE CLOSURE DURING THE RUSH HOUR TIMES.

**ADDITIONAL NOTES**

1. POSTED SPEED LIMIT = 45 MPH.
2. FIELD CONDITIONS SHALL DICTATE THE ACTUAL SIGN PLACEMENT.
3. SIGN SPACING IS 500 FT. (SHOWN APPROXIMATELY TO SCALE)
4. USE "TRUCKS ENTERING" WARNING SIGNS FOR APPROACH INSTALLED 500' IN ADVANCE OF ACCESS DRIVE WHEN TRUCK ACTIVITY IS AT A MINIMUM.
5. CONTRACTOR SHALL HAVE CONTINUED COORDINATION WITH THE CITY OF ESSEX JUNCTION AND THE VERMONT AGENCY OF TRANSPORTATION (VTRANS). THIS COORDINATION WILL OCCUR BEFORE CONSTRUCTION, DURING CONSTRUCTION, AND AFTER CONSTRUCTION.



**SUNDERLAND APARTMENTS**

229 Pearl Street  
City of Essex Junction, Vermont

**KREBS & LANSING**  
CONSULTING ENGINEERS  
164 Main Street, Suite 201 Colchester, Vermont 05446 P: (802) 878-0375 www.krebsandlansing.com

**ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION**

**APPLICANT/OWNER:**

227 Pearl Street LLC  
c/o Brett Grabowski  
32 Seymour Street #101  
Williston, Vermont 05495

**PROPERTY INFORMATION:**

CITY OF ESSEX JUNCTION:  
Address: 227 Pearl Street  
Parcel ID: 1040042000  
SPAN: 207-066-10350  
Area: 0.96 Acres (±41,800 s.f.)  
Zoning: Multi-Family/Mixed Use 1  
Setbacks:  
Front: 20'  
Rear: 10'  
Side: 10'  
Max. Building Height: 58'  
Total Lot Coverage: 65% (80% with waiver)

ESSEX:  
Parcel ID: 2040042000  
SPAN: 207-067-42238  
Area: 0.11 Acres (±4,800 s.f.)  
Zoning: Mixed Use

**STAMP:**

REV. NO.	REVISIONS/COMMENTS	DATE

DRAWING TITLE:

**DETAILS**

DATE ISSUED: 05/05/23

DRAWN BY: GTD CHECKED BY: GTD

PROJECT NO.: 22304 SCALE: N/A

DRAWING NO.: REV. NO.:

**C-2.05**