

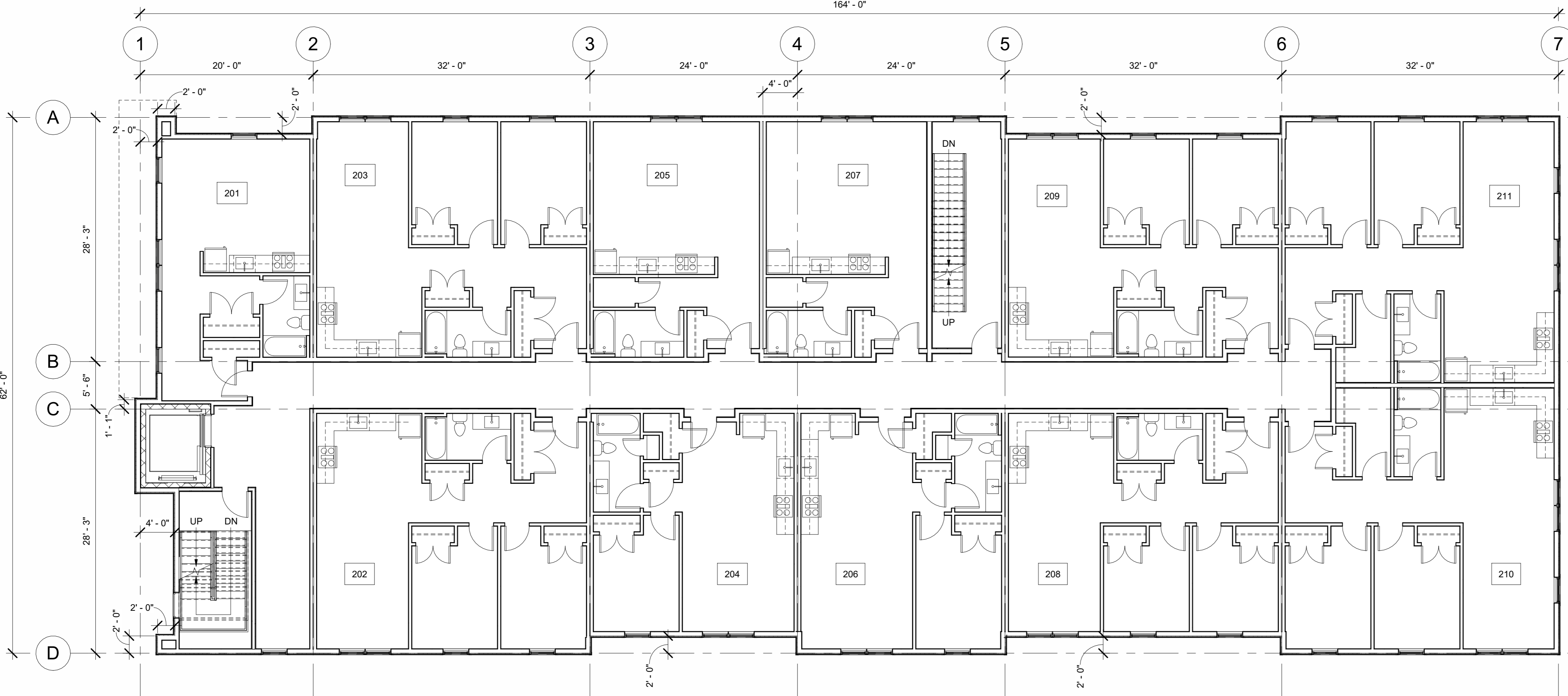


Daniel Goltzman Design & Development

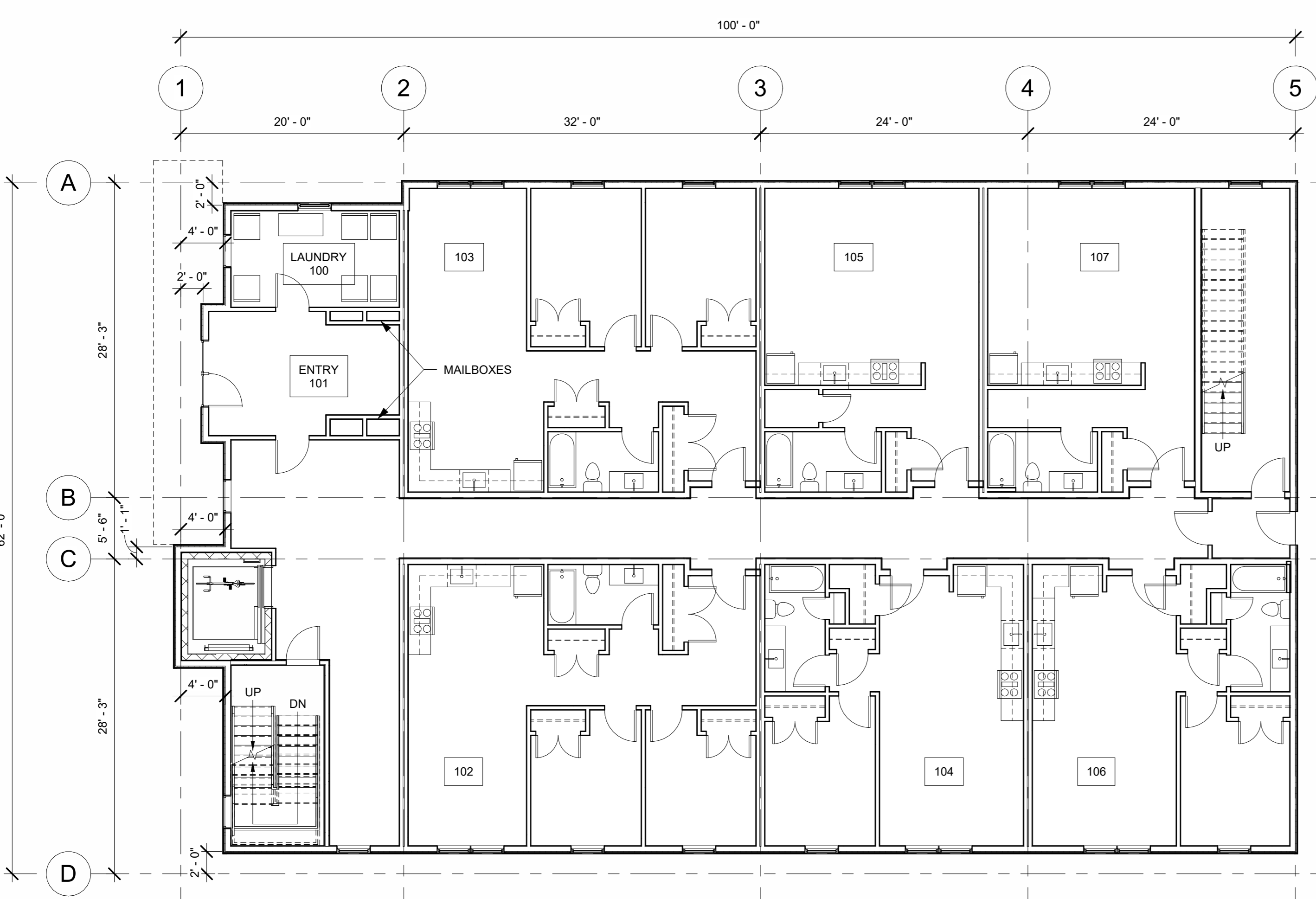
119 Caroline Street
Burlington, Vermont 05401
646-957-4248

Krebs & Lansing Cons Eng
164 Main Street
Colchester, VT
802-878-0375

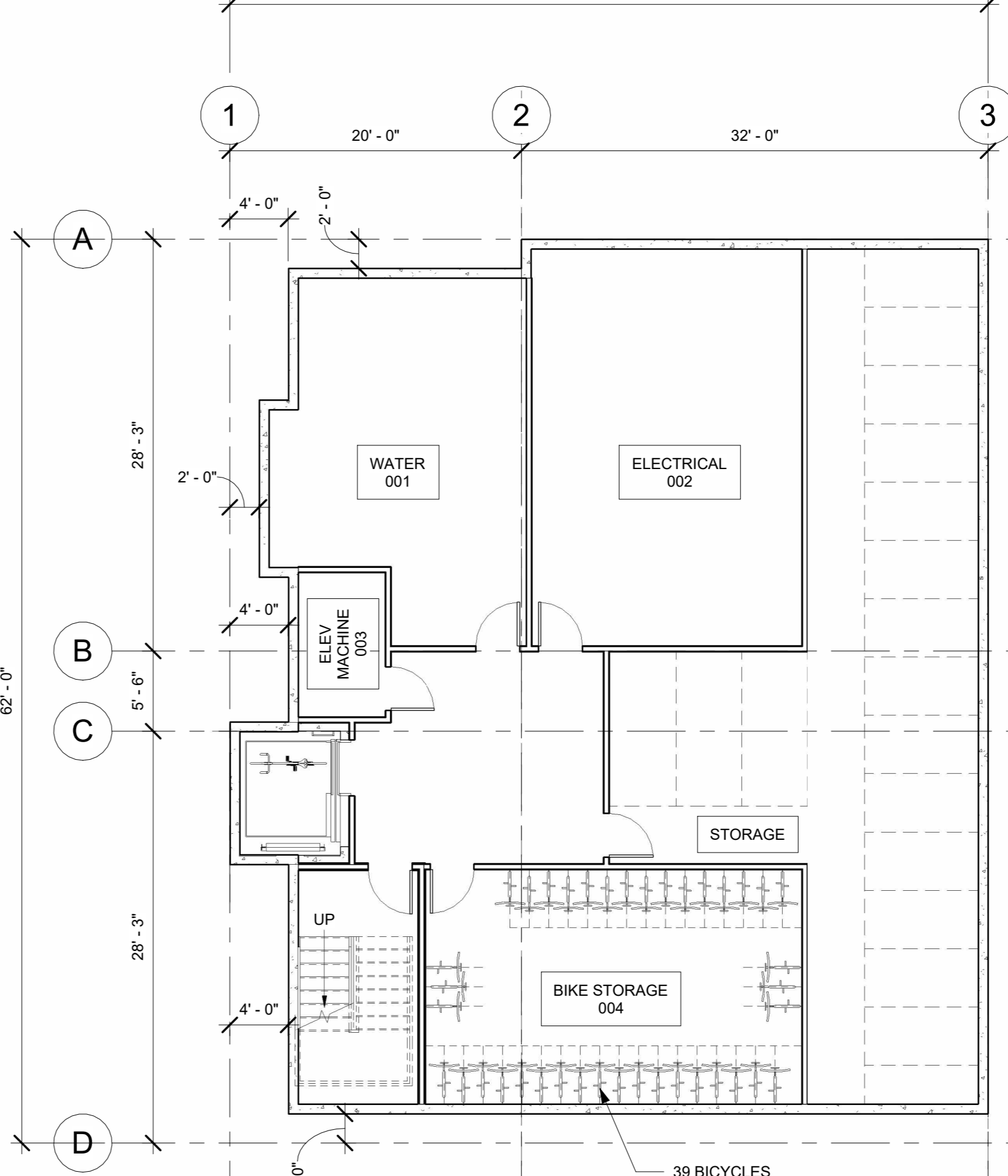
	Studio	1-BR	2-BR	Total
Level One	2	2	2	6
Level Two	3	2	6	11
Level Three	3	2	6	11
Level Four	3	2	6	11
Total	11	8	20	39



③ Level 2, 3 & 4
1/8" = 1'-0"



② Level 1
1/8" = 1'-0"



① Basement
1/8" = 1'-0"

No.	Description	Date

Gabe Handy
227-229 Pearl St
Essex Junction

Floor Plans
Project number: 23010
Date: 31 May 2024
Drawn by: DLG
Checked by: DLG
Project Phase: Zoning Permit

A101
Scale: 1/8" = 1'-0"

No.	Description	Date
-----	-------------	------

Gabe Handy

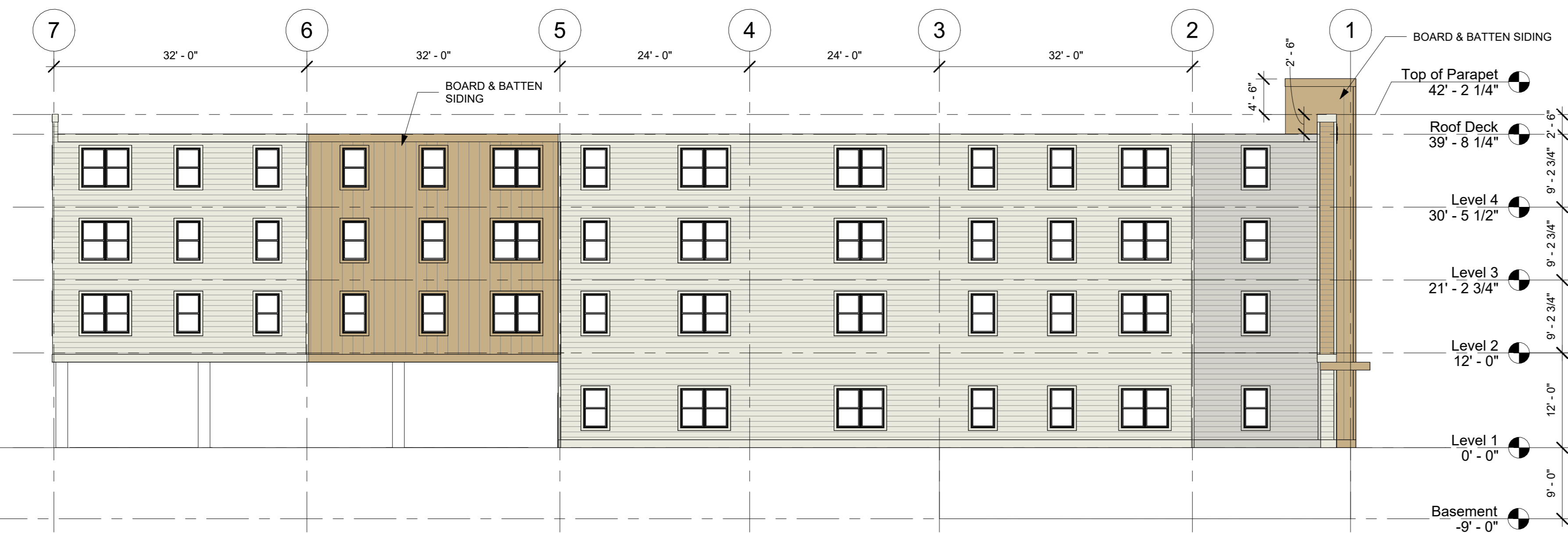
227-229 Pearl St
Essex Junction

Elevations

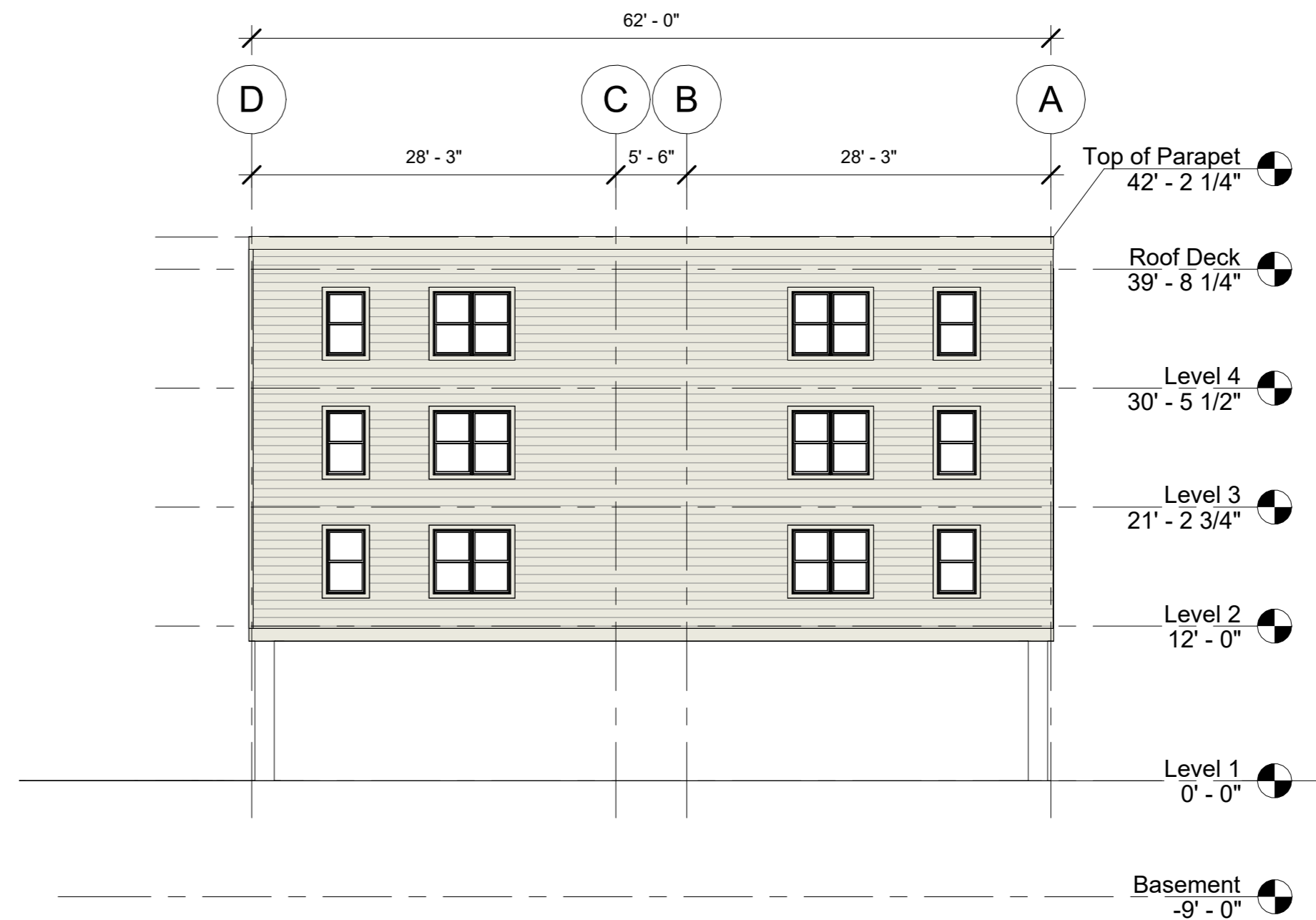
Project number :	23010
Date :	31 May 2024
Drawn by :	DLG
Checked by :	DLG
Project Phase :	Zoning Permit

A200

Scale : 3/32" = 1'-0"

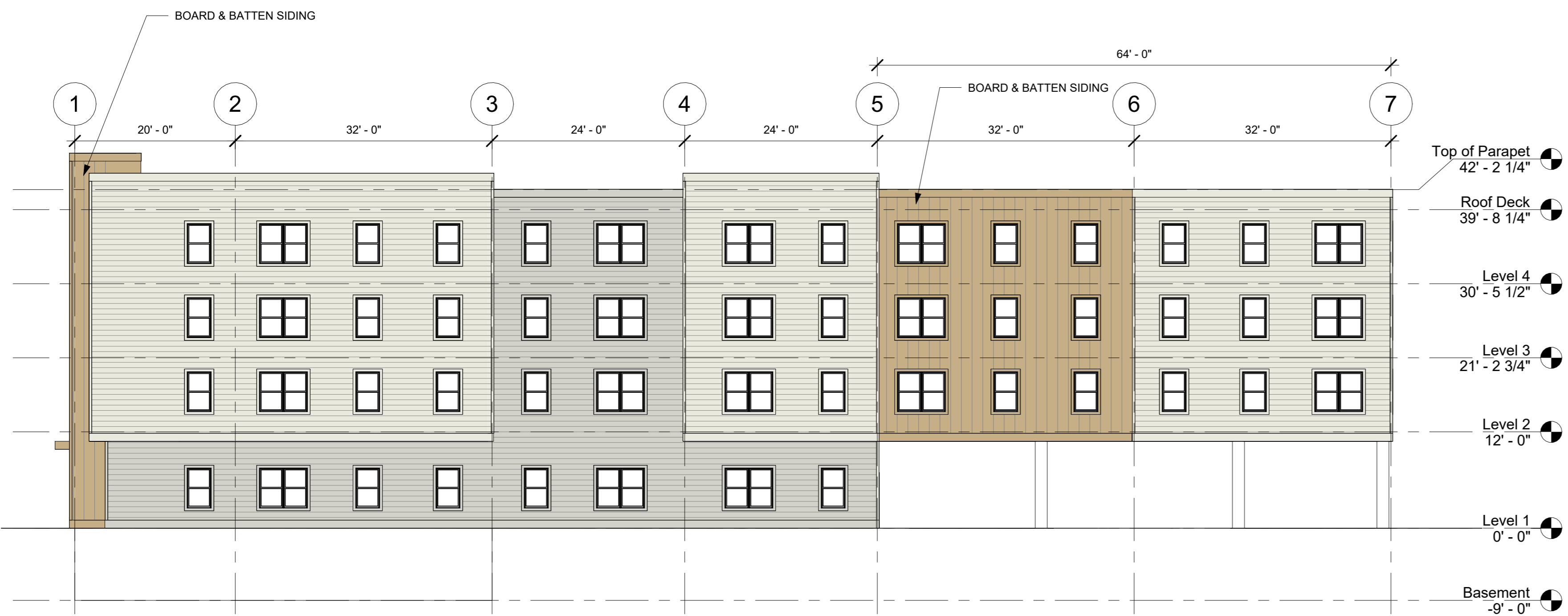


④ West
3/32" = 1'-0"

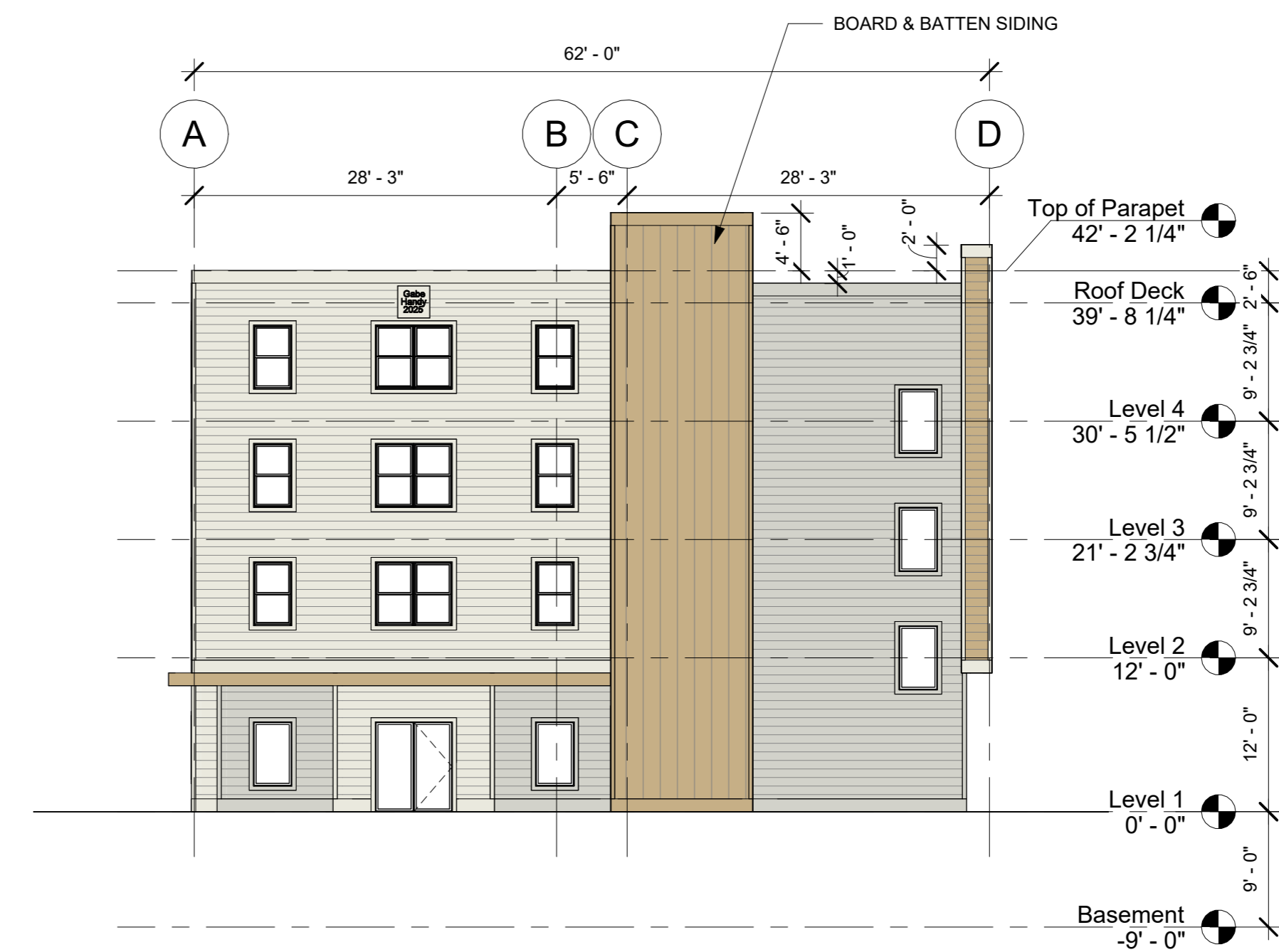


③ North
3/32" = 1'-0"

NOTE:
- PROPOSED SIDING IS LP SMARTSIDE LAP SIDING- TREATED ENGINEERED WOOD- THROUGHOUT, EXCEPT WHERE NOTED
- PROPOSED COLORS- FACTORY FINISH ACRYLIC LATEX PAINT- ARE LP SMARTSIDE EXPERTFINISH DESERT STONE, HARVEST HONEY, QUARRY GRAY



② East
3/32" = 1'-0"



① South
3/32" = 1'-0"

No.	Description	Date
-----	-------------	------



④ 3D View 4



⑤ 3D View 5



③ 3D View 3



② View to Northeast



① View to Northwest

Gabe Handy

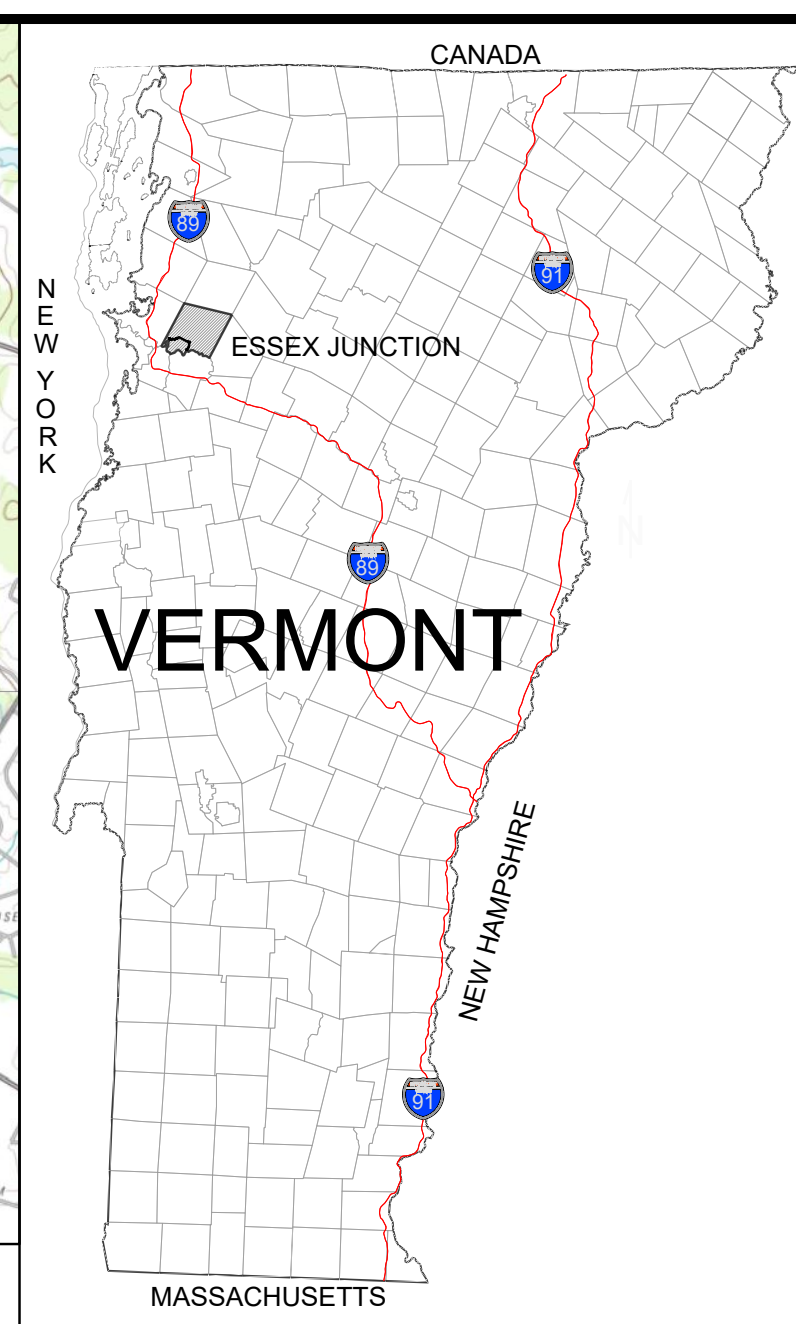
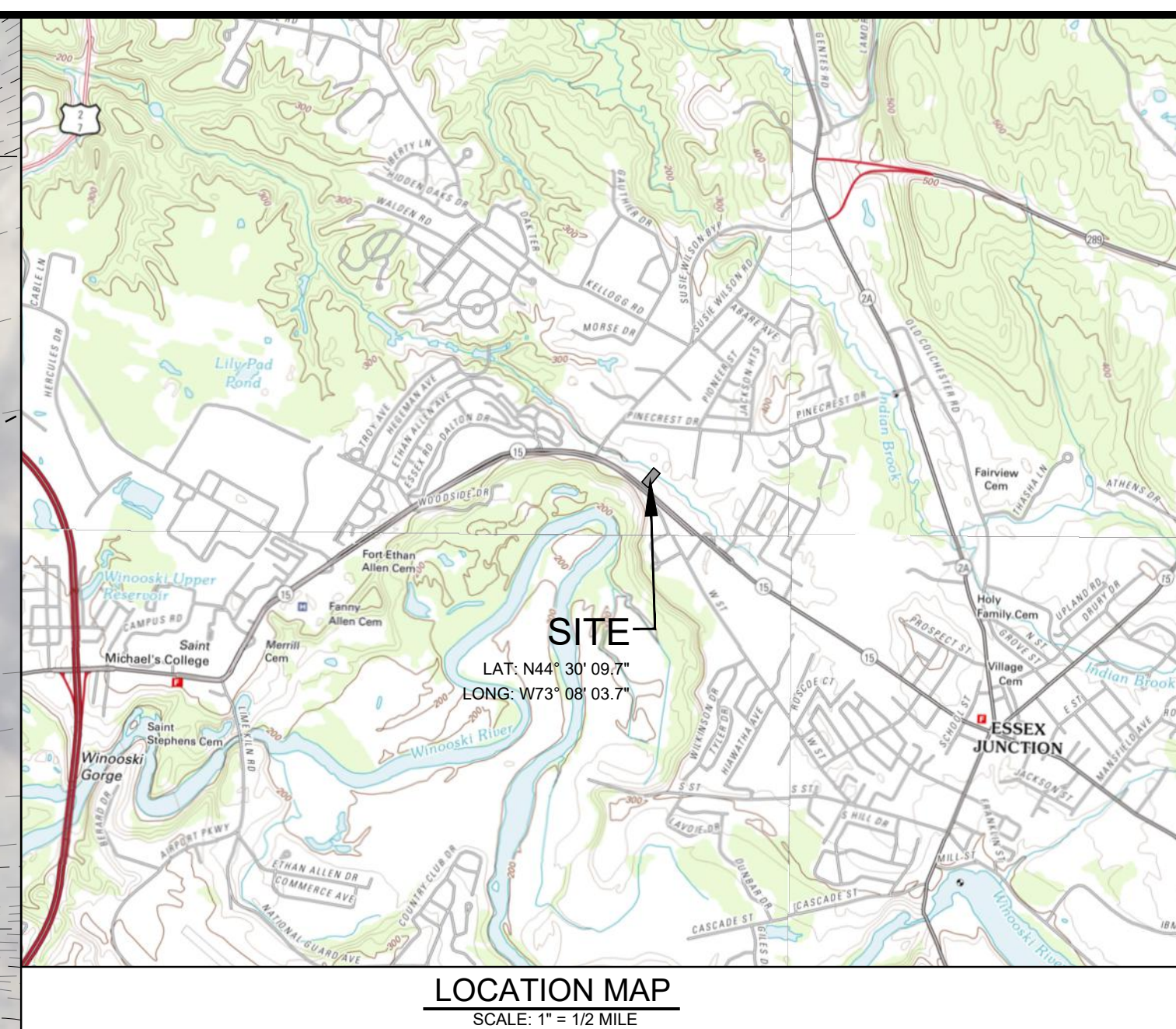
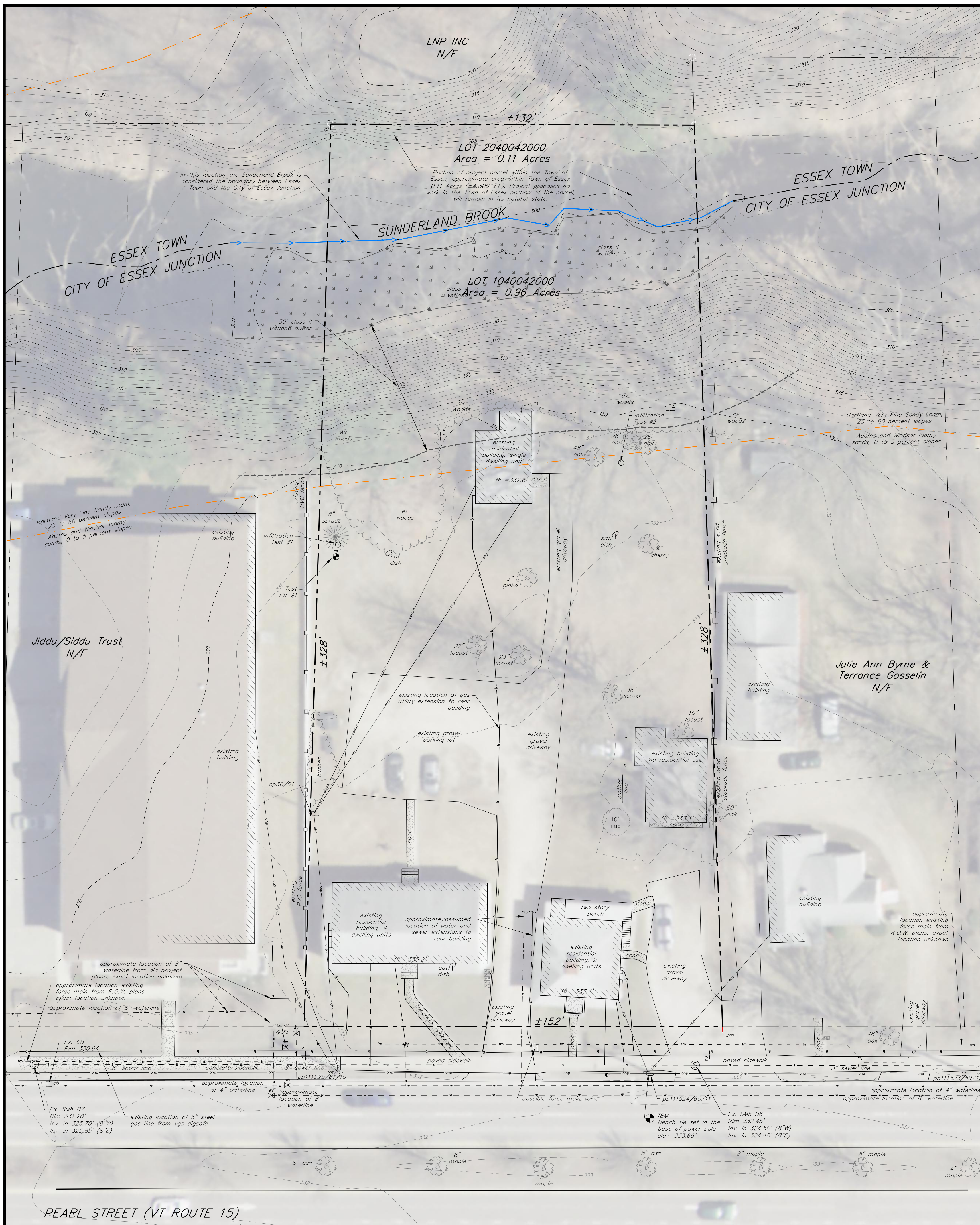
227-229 Pearl St
Essex Junction

3D Views

Project number :	23010
Date :	31 May 2024
Drawn by :	DLG
Checked by :	DLG
Project Phase :	Zoning Permit

A500

Scale :



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%)

PLEASE NOTE BUILDINGS HAVE BEEN RECENTLY DEMOLISHED.

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

227 Pearl Street
City of Essex Junction, Vermont

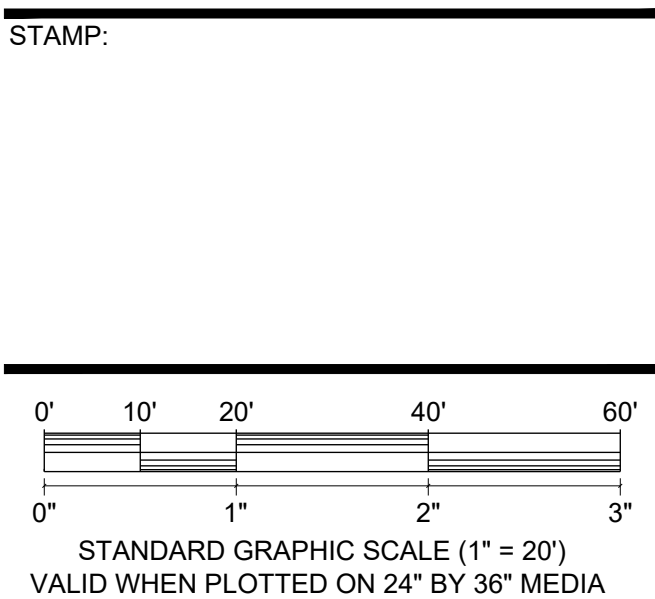
KREBS & LANSING
CONSULTING ENGINEERS
164 Main Street, Suite 201 P: (802) 878-0375
Colchester, Vermont 05446 www.krebsandlansing.com

**ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION**

APPLICANT AND OWNER:
Handy Hotels & Rentals LLC
c/o Gabe Handy
197 Pearl Street, Suite 100
Essex Junction, 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

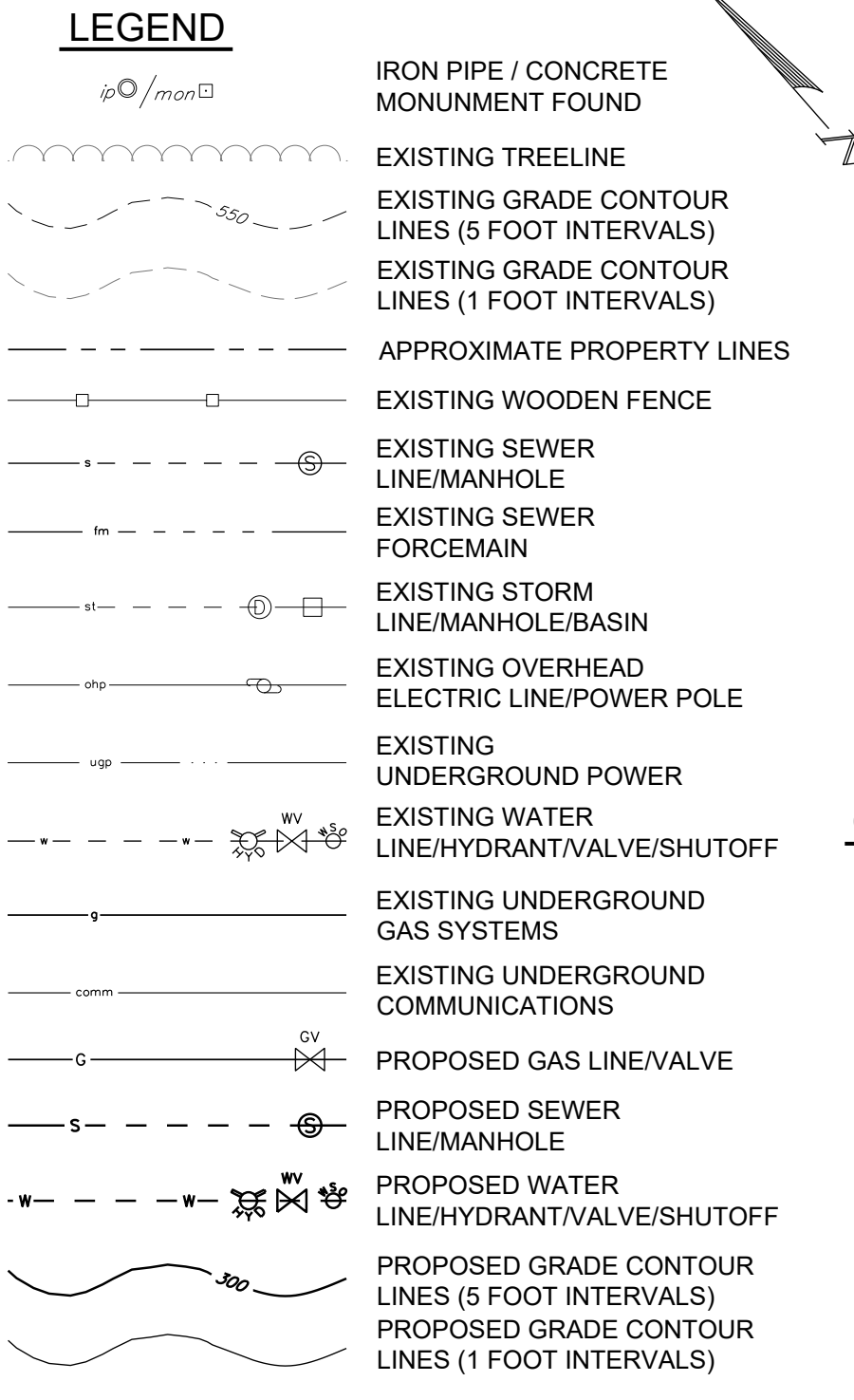
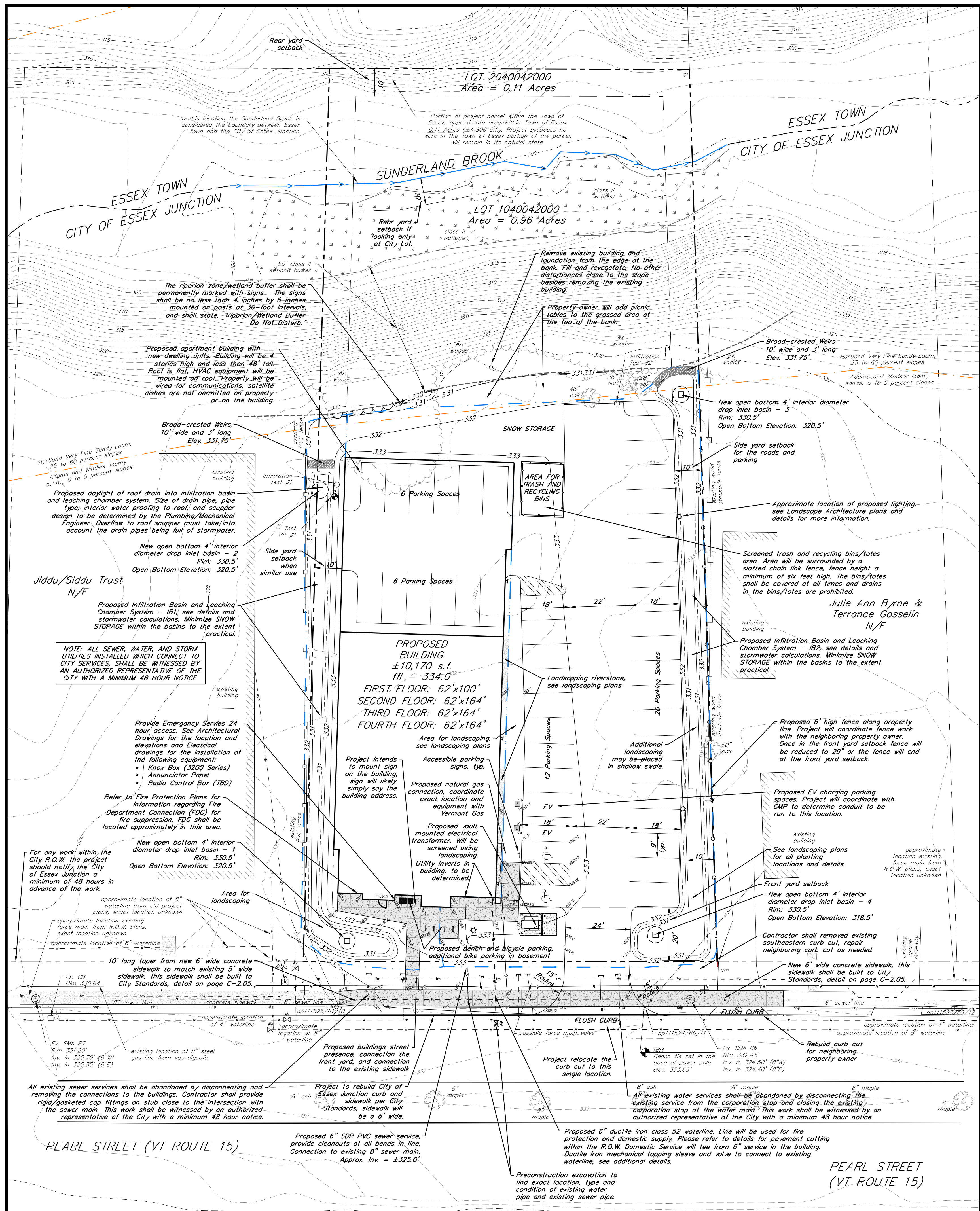


REV. NO.	REVISIONS/COMMENTS	DATE

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

DATE ISSUED: 05/06/24
DRAWN BY: GTD CHECKED BY: GTD
PROJECT NO.: 23288 SCALE: 1" = 20'
DRAWING NO.: C-0.00 REV. NO.:

C-0.00



- ### 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, P.L.C.

- ### 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%)
- PROPOSED CONDITIONS:
- PROPERTY AREA IN THE CITY OF ESSEX JCT. = ±41,800 S.F. (0.96 ACRES)
 - BUILDING COVERAGE: ±10,170 S.F. (0.23 ACRES) (24.3%)
 - OVERALL IMPERVIOUS: ±21,700 S.F. (0.49 ACRES) (51.9%)
 - 44 PARKING SPACES

DETERMINATION OF ORDINARY HIGH SEASONAL WATER (OHSW):

KREBS AND LANSING CONDUCTED A TEST PIT ON SITE TO REVIEW THE SOILS. SOILS WERE FOUND TO BE DEEP STRUCTURELESS, SINGLE GRAIN LOAMY SANDS. NO EVIDENCE OF ORDINARY HIGH SEASONAL WATER TABLE (OHSW) WAS OBSERVED TO THE DEPTH OF THE TEST PIT WHICH WAS 4.5' DEEP. THE TEST PIT WAS EXCAVATED TO A TOTAL DEPTH OF 54" (ELEV. ±325.5'). THE PROJECT IS ALSO IN THE PROCESS OF PERFORMED SOIL TESTING FOR STRUCTURAL INTEGRITY, APRIL OF 2023. THIS WILL INCLUDE MULTIPLE BORINGS TO FEAR DEEPER DEPTHS. THE INVESTIGATION INTENDS TO REVIEW GROUND WATER DEPTH AT THAT TIME AS WELL. WE FEEL THE WATER TABLE IS FAR LOWER THAN THE TEST PIT DUG BASED ON THE PROXIMITY TO THE SUNDERLAND BROOK WHICH IS AT ELEVATION ±300.0'

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

PROPOSED SEWER DESIGN FLOW:

- 39 PROPOSED APARTMENT DWELLING UNITS (DU)
- STUDIO AND SINGLE BEDROOM DWELLING UNITS: 19 DU * 140 GPD/DU = 2,660 GPD
- MULTI-BEDROOM DWELLING UNITS: 20 DU * 210 GPD/DU = 4,200 GPD
- TOTAL PROPOSED SEWER DEMAND = 6,860 GPD

PROPOSED WATER DESIGN FLOW:

- 39 PROPOSED APARTMENT DWELLING UNITS (DU)
- STUDIO AND SINGLE BEDROOM DWELLING UNITS: 19 DU * 140 GPD/DU = 2,660 GPD
- MULTI-BEDROOM DWELLING UNITS: 20 DU * 280 GPD/DU = 5,600 GPD
- TOTAL PROPOSED SEWER DEMAND = 8,260 GPD

PROPOSED APARTMENT PROJECT WILL RESULT IN AN INCREASE OF 5,390 GPD FOR SEWER FLOWS AND 6,300 GPD FOR WATER FLOWS FROM THE PREVIOUS USE.

INFILTRATION/PERCOLATION RATES:

INFILTRATION/PERMEABILITY TESTS:

- PT#1 = 119.0 in/hr
- PT#2 = 117.7 in/hr
- AVERAGE = 118.4 in/hr

FOR MODELING PURPOSES THE INFILTRATION RATE USED WAS APPROXIMATELY 1/3 THAT VALUE = 40.0 in/hr

SOIL TEST PIT:

DATE: NOVEMBER 15, 2022
 WEATHER: 35° F, SUNNY
 PRESENT: CAMERON GOODRICH, KREBS & LANSING CONSULTING ENGINEERS, INC.

NLTD = NO LEDGE TO DEPTH
 NWT = NO WATER TO DEPTH
 HSWT = HIGH SEASONAL WATER TABLE

TP-1:
 0' - 5" 10YR 4/3 BROWN, SANDY LOAM, STRUCTURELESS, SINGLE GRAIN, DRY, LOOSE, ROOT MATS, WORMS
 5' - 20" 2 S/V 4/4 OLIVE BROWN, LOAMY SAND, STRUCTURELESS, SINGLE GRAIN, CLEAN, LOOSE, DRY, ROOTS
 20' - 54" 10YR 4/4 DARK YELLOWISH BROWN, LOAMY SAND, STRUCTURELESS, SINGLE GRAIN, LOOSE, DRY, CLEAN, ROOTS TO DEPTH OF LAYER

NLTD, NWT, NO EVIDENCE OF HSWT

PROJECT TRAFFIC

ALL VALUES CALCULATED BELOW WERE GENERATED USING VALUES PUBLISHED BY THE "INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) TRIP GENERATION MANUAL, 10TH EDITION". VALUES ARE LISTED AS VEHICLE TRIP ENDS (VTE) BASED ON SPECIFIC USES IN THE MANUAL. MANUAL USES USED IN ANALYSIS ARE RESIDENTIAL PLANNED UNIT DEVELOPMENT BASE ON NUMBER OF UNITS (MANUAL #270). BELOW IS THE EVALUATION, WE ROUNDED UP ON ALL VALUES.

- #### EXISTING ANALYSIS 1: TRAFFIC VALUES:
- 7 UNITS WITHIN DEVELOPMENT
 - WEEKDAY AVERAGE VTE = 7 UNITS * 7.38 VTE/PER UNIT = 52 VTE
 - WEEKDAY AM PEAK HOUR VTE = 7 UNITS * 0.58 VTE/PER UNIT = 5 VTE
 - WEEKDAY PM PEAK HOUR VTE = 7 UNITS * 0.72 VTE/PER UNIT = 6 VTE
- #### PROPOSED TRAFFIC VALUES:
- 39 UNITS WITHIN DEVELOPMENT
 - WEEKDAY AVERAGE VTE = 39 UNITS * 7.38 VTE/PER UNIT = 288 VTE
 - WEEKDAY AM PEAK HOUR VTE = 39 UNITS * 0.58 VTE/PER UNIT = 23 VTE
 - WEEKDAY PM PEAK HOUR VTE = 39 UNITS * 0.72 VTE/PER UNIT = 28 VTE
- #### PROPOSED TRAFFIC INCREASES
- WEEKDAY AVERAGE VTE = 236 VTE
 - WEEKDAY AM PEAK HOUR VTE = 18 VTE
 - WEEKDAY PM PEAK HOUR VTE = 22 VTE

THERE WILL CLEARLY BE AN EFFECT ON TRAFFIC WITH THE INCREASE IN DWELLING UNITS ON THE PROJECT SITE. HOWEVER, THIS PROJECT WILL ONLY BE ABLE TO ENTER AND EXIT USING THE NORTHBOUND LANE OF PEARL STREET ALSO KNOWN AS VERMONT ROUTE 15. THIS AREA IS ALSO HAS TRAFFIC SIGNALS ON EITHER SIDE OF THE EGRESS, ALLOWING TIMING WINDOWS TO ENTER AND EXIT THE PARCEL. THIS IS A BUSY SECTION OF ROADWAY, HOWEVER THIS SMALL INCREASE TO TRAFFIC DOES NOT OUTWEIGH THE POSITIVE AFFECT OF ADDITIONAL HOUSING NEEDS.

THE PROJECT ALSO FEELS THERE ARE MANY TRANSPORTATION DEMAND MANAGEMENT (TDM) STRATEGIES THIS PARCEL HAS THE OPPORTUNITY TO TAKE ADVANTAGE OF. THE PROJECT IS CENTRALLY LOCATED BETWEEN ESSEX & WINDOOSKI, AS WELL AS BEING CLOSE TO BURLINGTON & WILLISTON. THIS PROVIDES SHORT COMMUTES TO WORK AND LEISURE ACTIVITIES. IT IS ON LOCAL BUSING ROUTES WITH A BUS STOP APPROXIMATELY 350' NORTHWEST OF THE PARCEL. THE SITE IS ALSO LOCATED ON BIKING PATHS WITH A NEW BIKE PATH RECENTLY INSTALLED ALONG ROUTE 15, WHICH CONNECTS TO SUSIE WILSON ROAD, AND EXTENDS TO THE SIDEWALK THAT RUNS ALONG PEARL STREET. THAT SIDEWALK ALSO CONNECTS ALL THE WAY TO THE CENTER OF ESSEX JUNCTION. ALL THESE CONNECTIONS WILL ALLOW FOR A SHORT BIKE/WALK TO MANY ESSENTIAL SERVICES.

FURTHER THE PROJECT REVIEWED HISTORICAL TRAFFIC DATA PROVIDED BY VTRANS. FOR THIS STRETCH OF ROADWAY THERE HAVE BEEN NUMEROUS TRAFFIC COUNTS AND EVALUATIONS FOR ANNUAL AVERAGE DAILY TRAFFIC (AADT). WE FOUND AND AVERAGED FOURTEEN YEARS OF AADT DATA, FOR THIS AREA WE FOUND AN AVERAGE OF 10,189 AADT. FROM THE CALCULATION ABOVE THIS PROJECT WILL RESULT IN 236 WEEKDAY VTES THIS WOULD ONLY INCREASE THE AADT BY 2.32%.

SUNDERLAND APARTMENTS

227 Pearl Street
 City of Essex Junction, Vermont

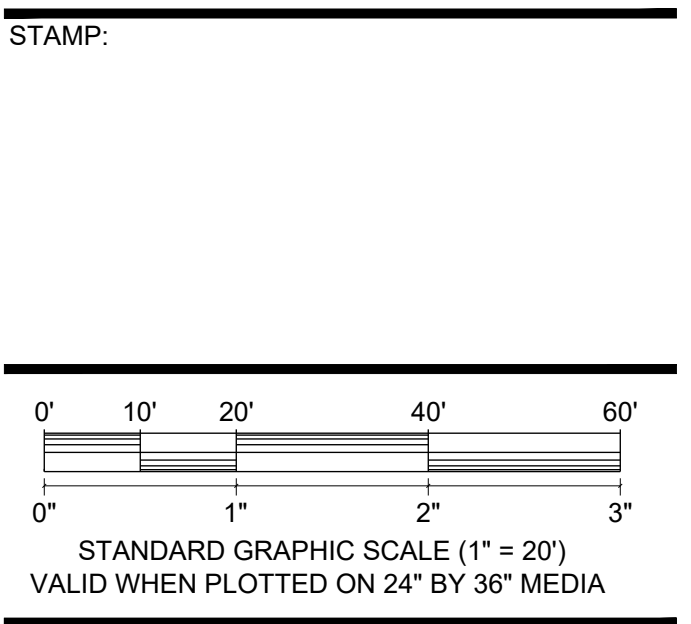


ISSUED FOR PERMIT REVIEW
 NOT FOR CONSTRUCTION

APPLICANT AND OWNER:
 Handy Hotels & Rentals LLC
 c/o Gabe Handy
 197 Pearl Street, Suite 100
 Essex Junction, 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

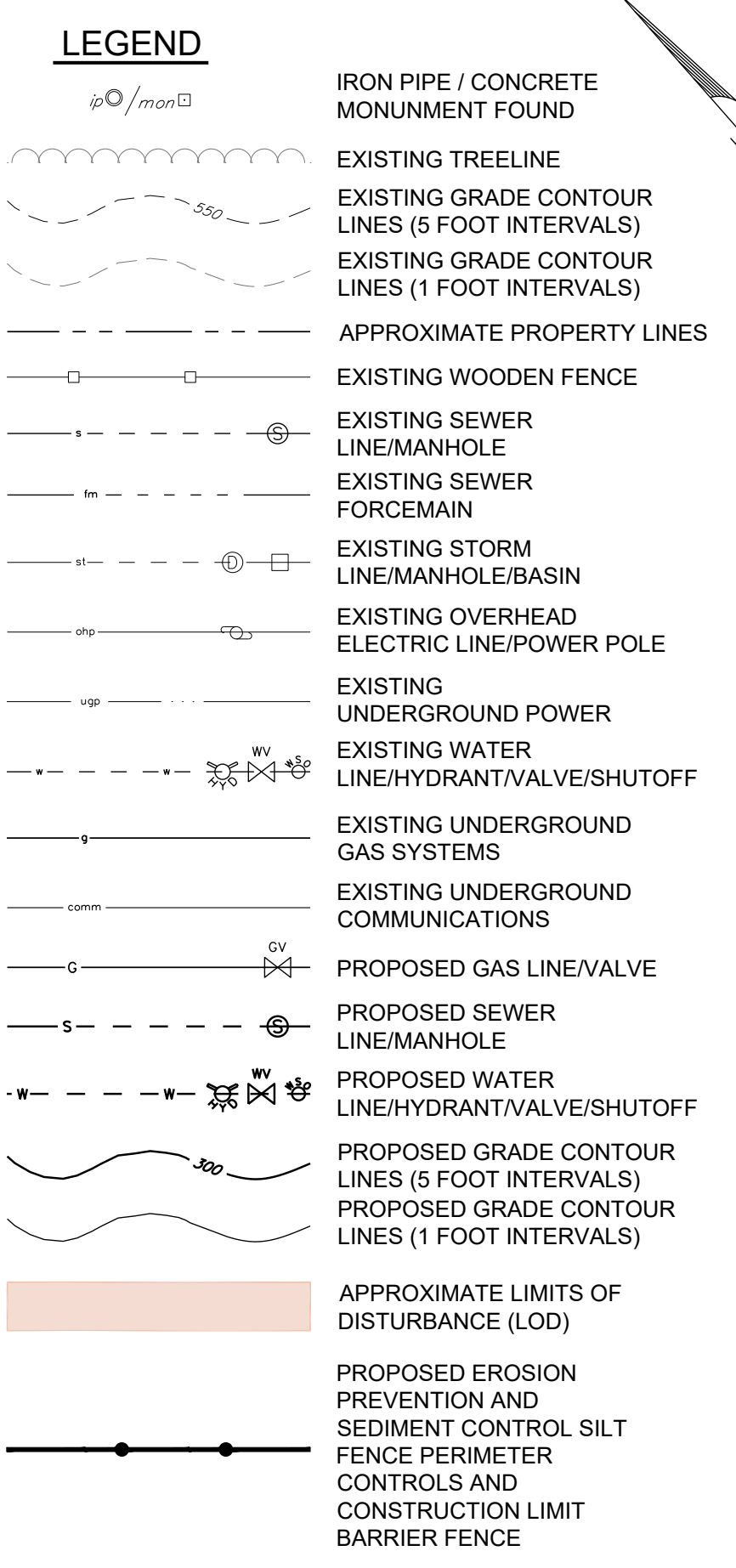
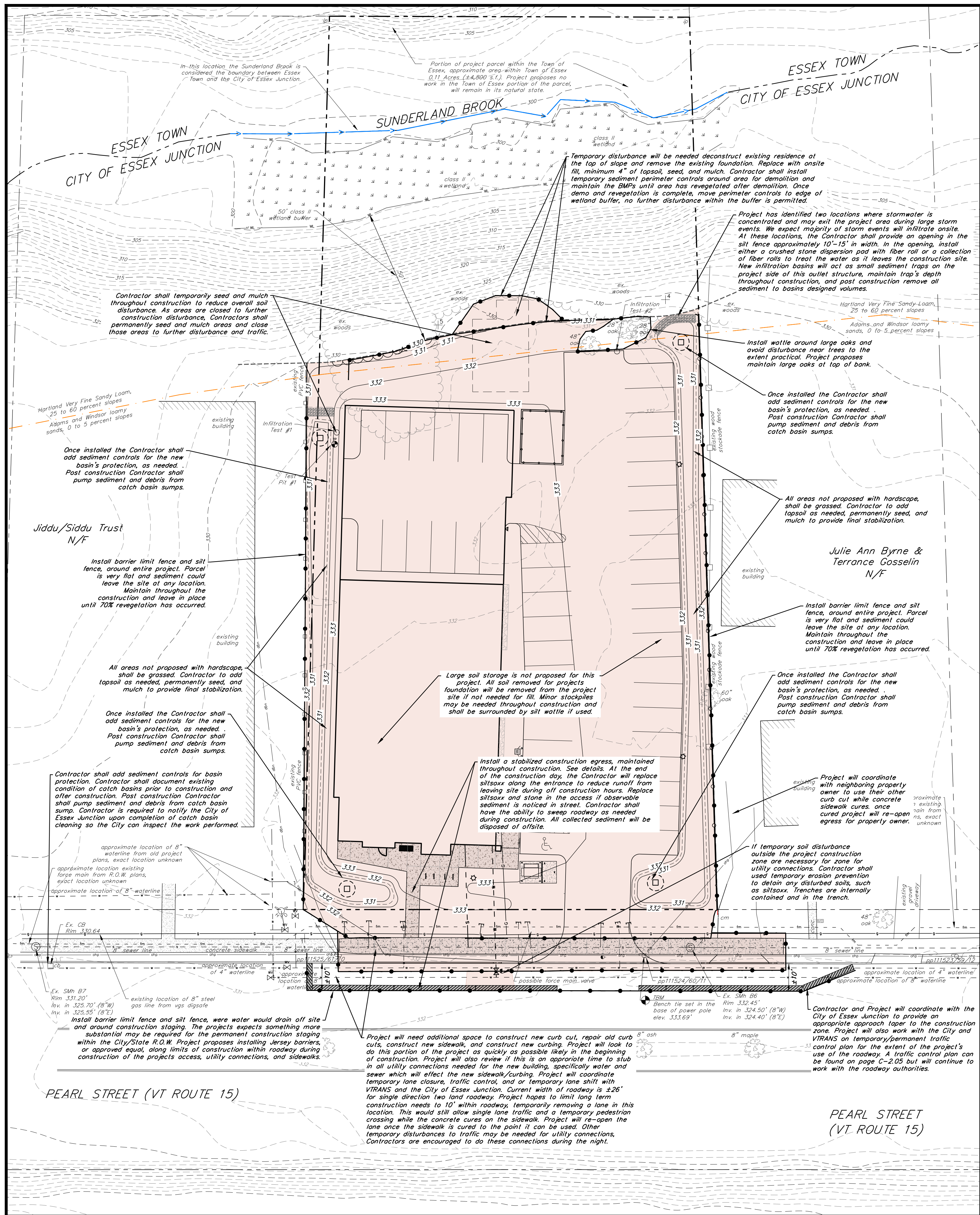


REV. NO.	REVISIONS/COMMENTS	DATE
1.	Changes to match Architect and Landscape Architect. Revisions from City Staff and Engineer.	5/29/24

DRAWING TITLE:	
PROPOSED SITE PLAN	
DATE ISSUED: 05/06/24	CHECKED BY: GTD
DRAWN BY: GTD	PROJECT NO.: 23288
DRAWING NO.:	SCALE: 1" = 20'
REV. NO.:	

C-1.00 1

DBC NAME: 227-Pearl-Street-Boss_Handy.dwg



- 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, P.L.C.

DISTURBED SOILS CALCULATION

PROPOSED DISTURBED SOIL

- DISTURBANCES FOR CONSTRUCTION PROPOSED DIRECT EXCAVATION WORK. SHOWN IN LIGHT BROWN ON PLAN = ±35,500 S.F. (0.82 ACRES)

SUNDERLAND APARTMENTS

227 Pearl Street
City of Essex Junction, Vermont



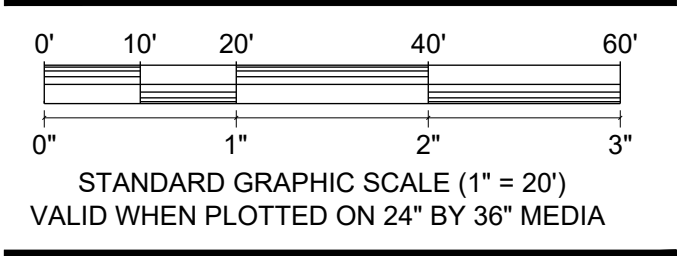
**ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION**

APPLICANT AND OWNER:
Handy Hotels & Rentals LLC
c/o Gabe Handy
197 Pearl Street, Suite 100
Essex Junction, 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.	Changes to match Architect and Landscape Architect. Revisions from City Staff and Engineer.	5/29/24

DRAWING TITLE:

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

DATE ISSUED: 05/06/24
DRAWN BY: GTD CHECKED BY: GTD
PROJECT NO.: 23288 SCALE: 1" = 20'
DRAWING NO.: REV. NO.:

C-1.01 1

SUNDERLAND APARTMENTS

227 Pearl Street
City of Essex Junction, Vermont



**ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION**

APPLICANT AND OWNER:

Handy Hotels & Rentals LLC
c/o Gabe Handy
197 Pearl Street, Suite 100
Essex Junction, 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
Setback:
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.	Changes to match Architect and Landscape Architect. Revisions from City Staff and Engineer.	5/29/24

DRAWING TITLE: **DETAILS**

DATE ISSUED: 05/06/24
DRAWN BY: GTD
PROJECT NO.: 23288
DRAWING NO.: **C-2.01**

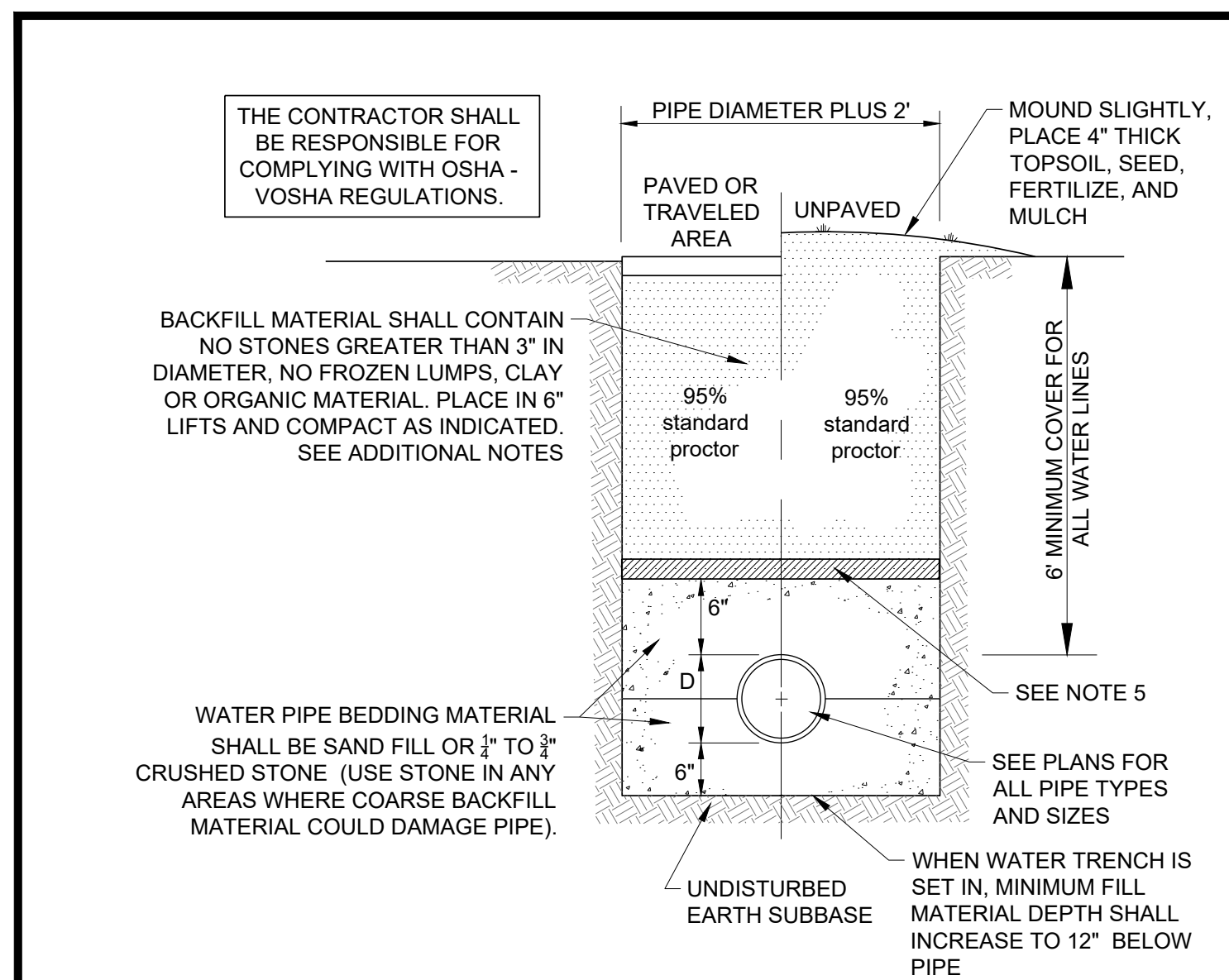
CHECKED BY: GTD
SCALE: N/A
REV. NO.: **1**

DATE ISSUED: 05/06/24
DRAWN BY: GTD
PROJECT NO.: 23288
DRAWING NO.: **C-2.01**

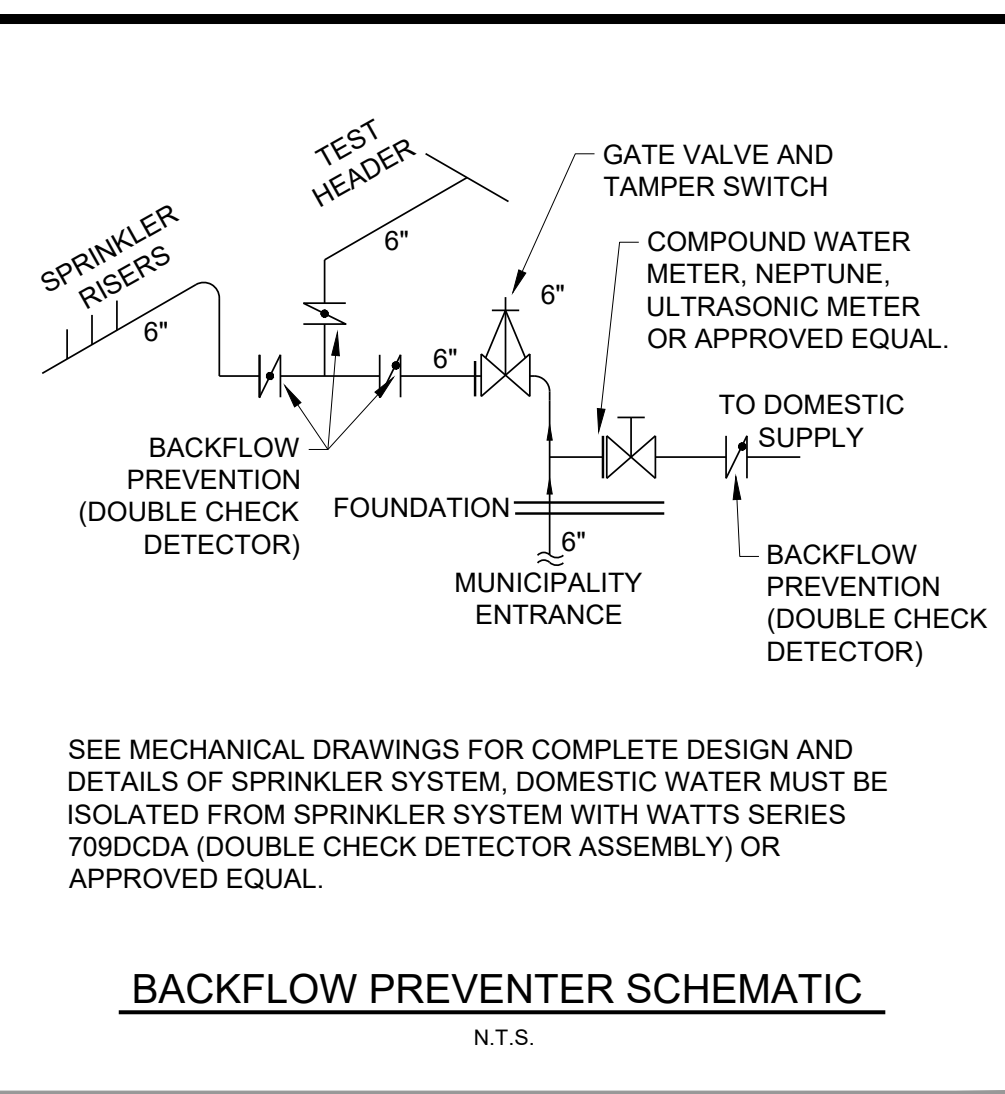
CHECKED BY: GTD
SCALE: N/A
REV. NO.: **1**

DATE ISSUED: 05/06/24
DRAWN BY: GTD
PROJECT NO.: 23288
DRAWING NO.: **C-2.01**

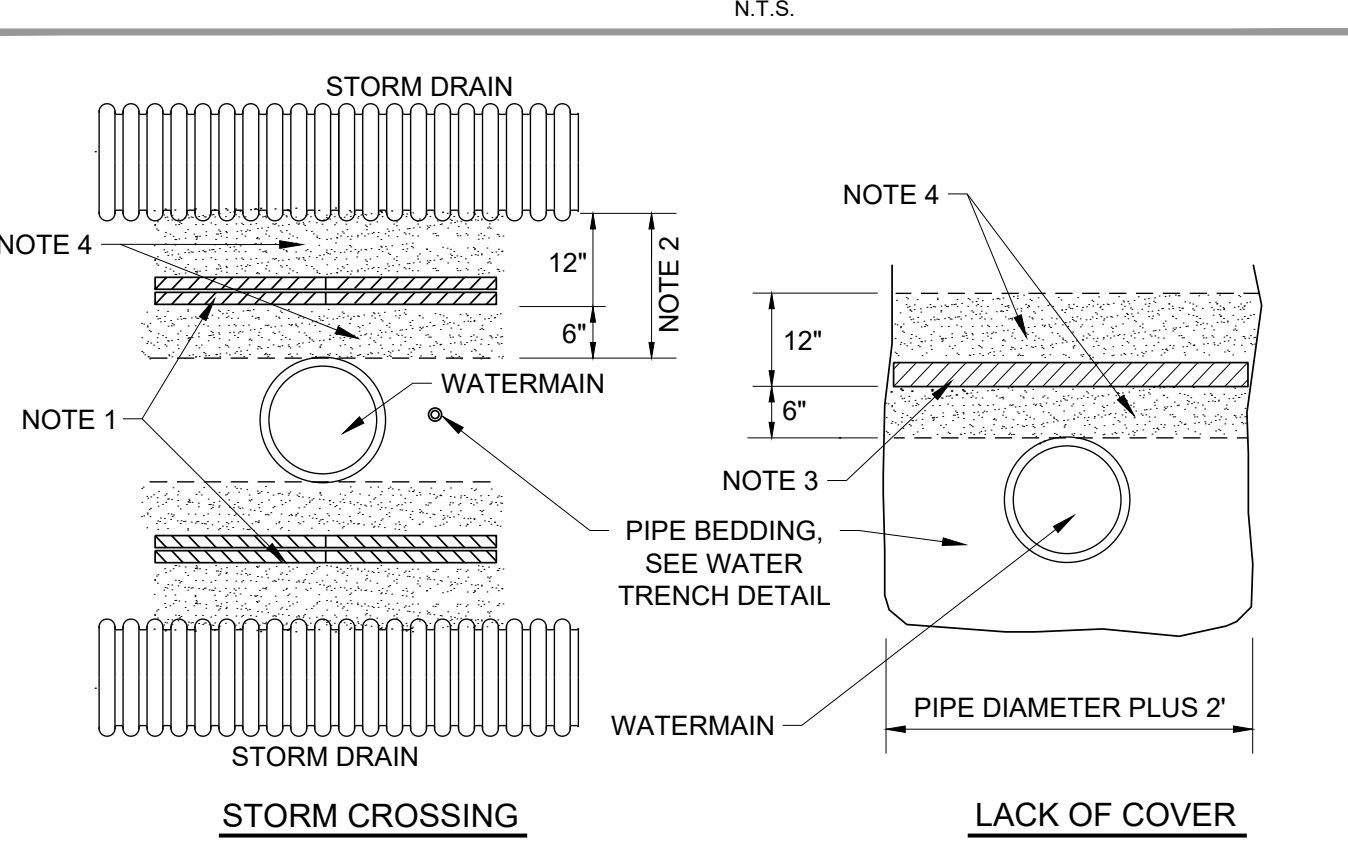
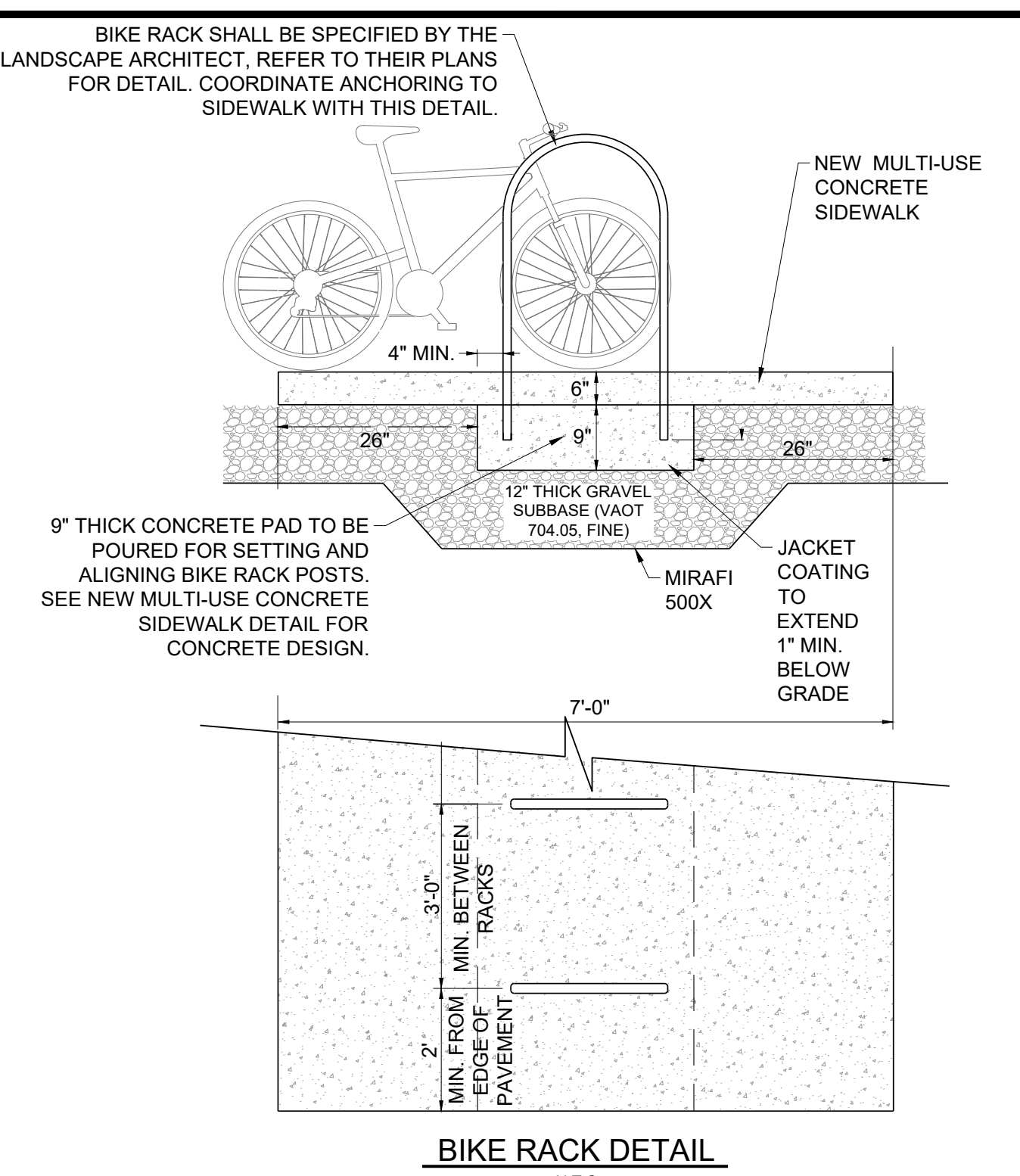
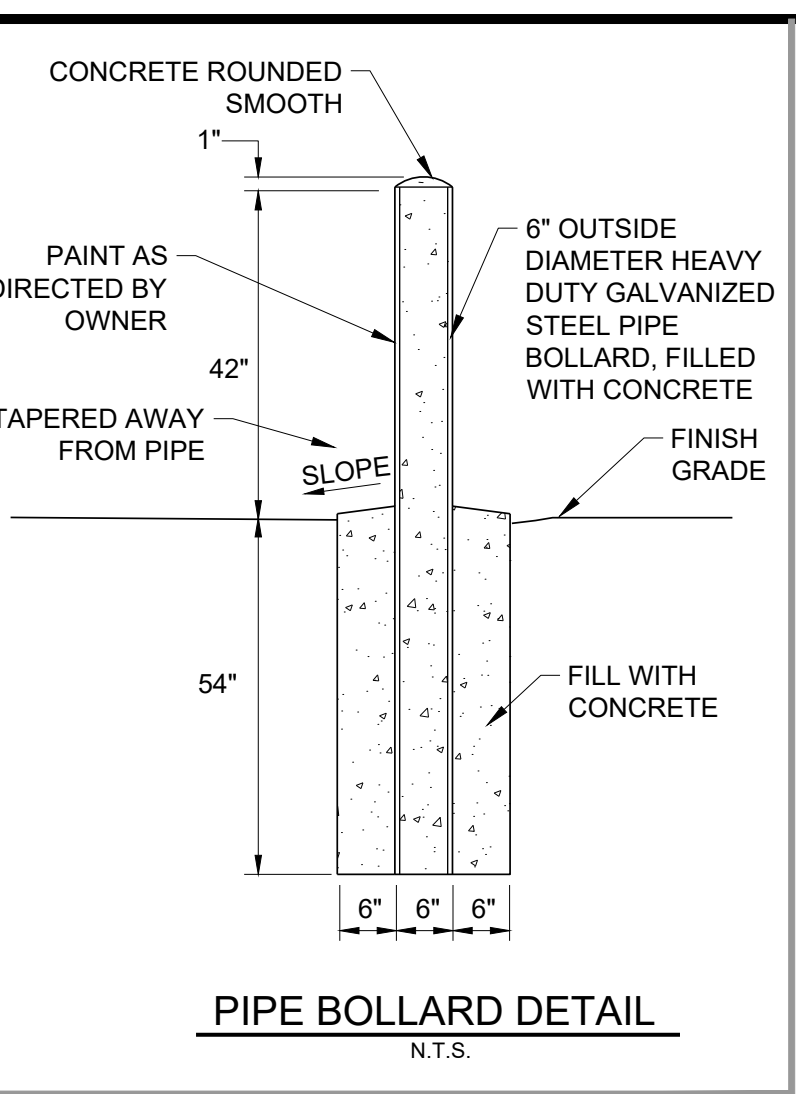
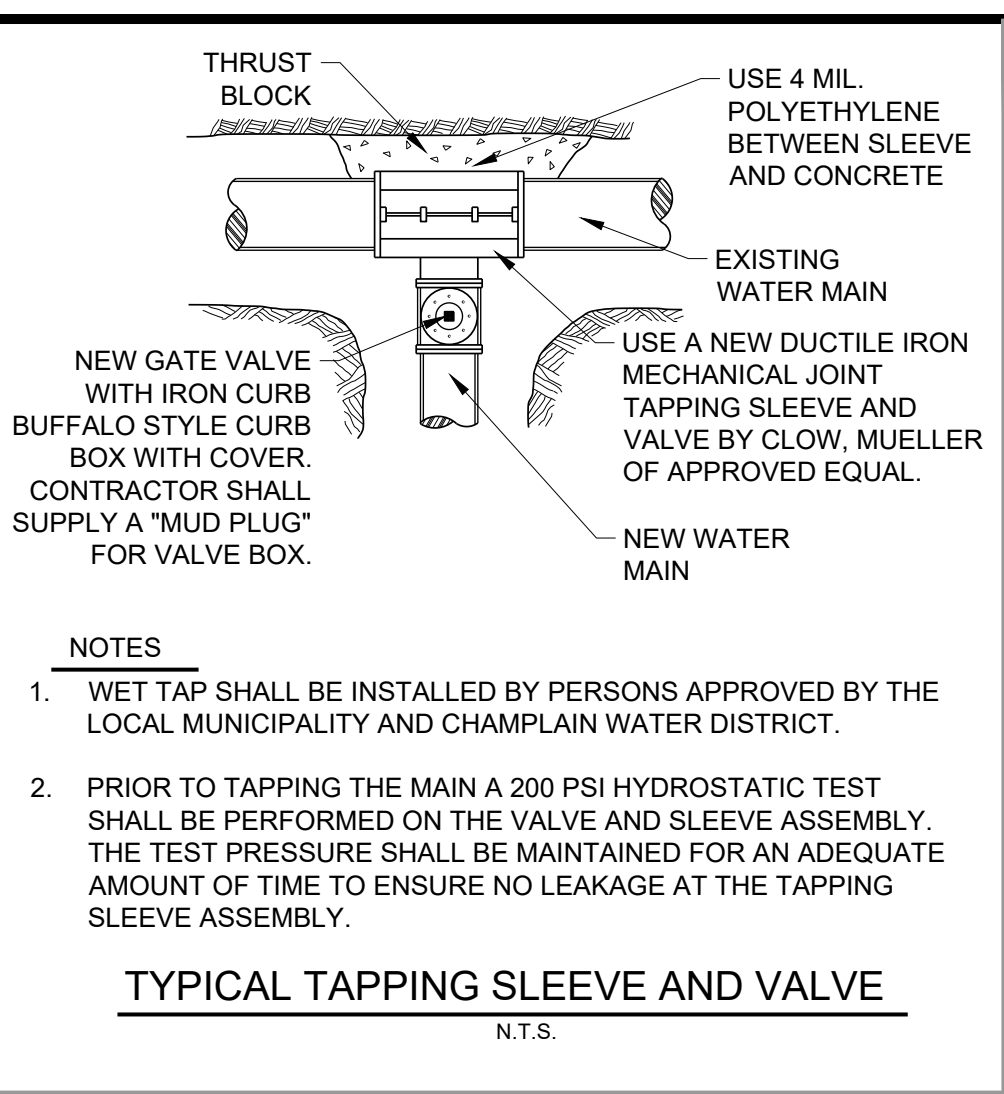
CHECKED BY: GTD
SCALE: N/A
REV. NO.: **1**



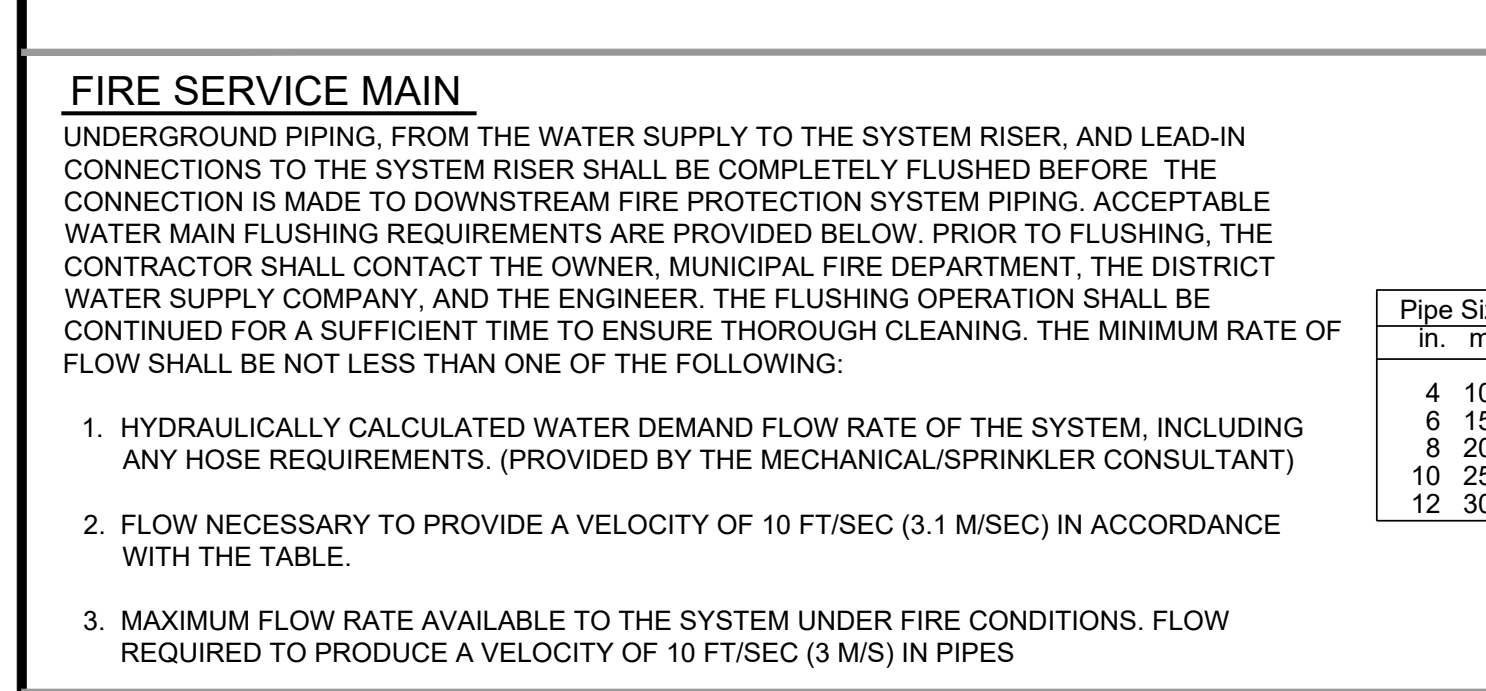
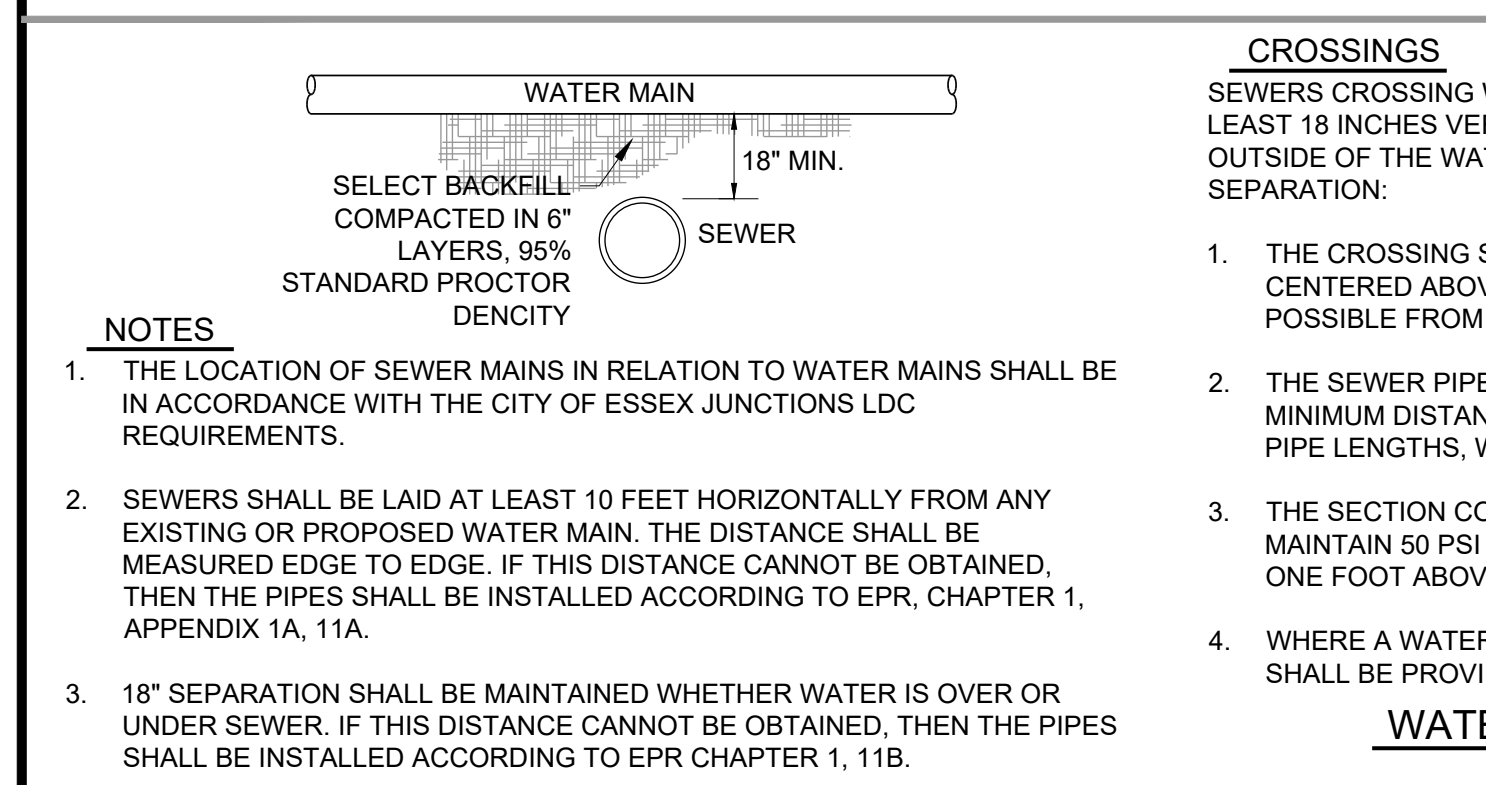
- NOTES**
- THE CONTRACTOR SHALL KEEP THE TRENCH ENTIRELY FREE OF WATER AT ALL TIMES UNTIL THE WORK IS COMPLETE AND READY FOR BACKFILLING.
 - THE SIDES OF THE TRENCHES SHALL BE SHEETED OR SLOPED TO THE ANGLE OF REPOSE IF THE TRENCH IS 4' OR MORE IN DEPTH.
 - BACKFILL TRENCH IN 6" LIFTS AND COMPACT EACH LIFT TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR.
 - BACKFILL SHALL HAVE NO STONES LARGER THAT 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.



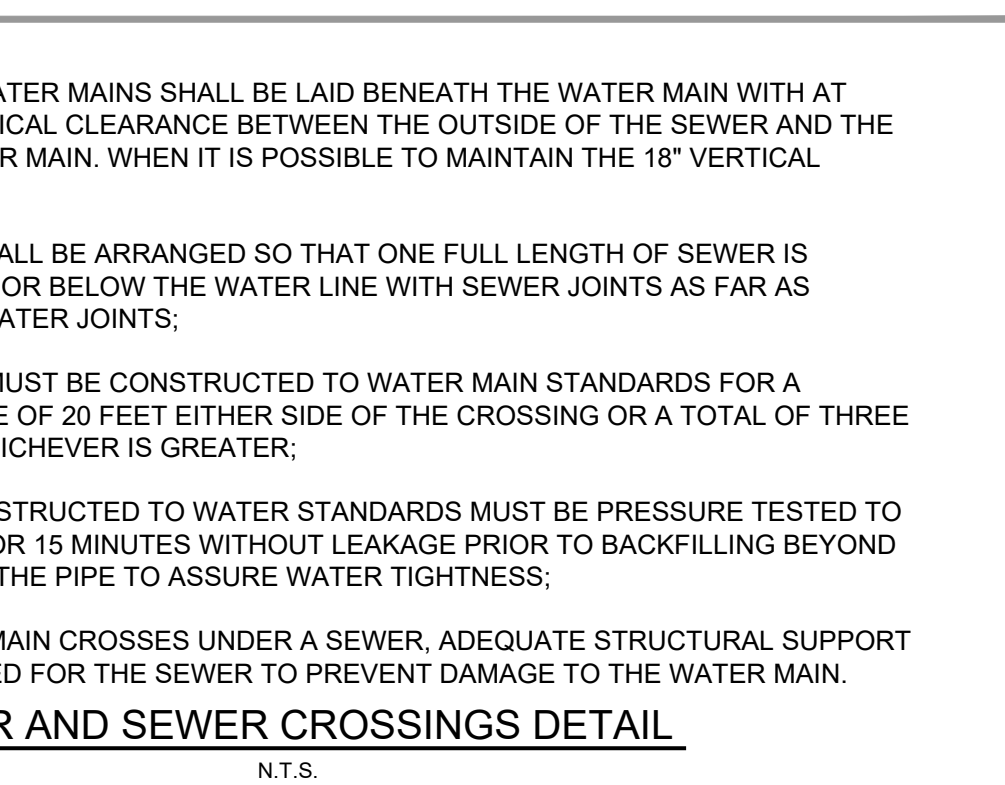
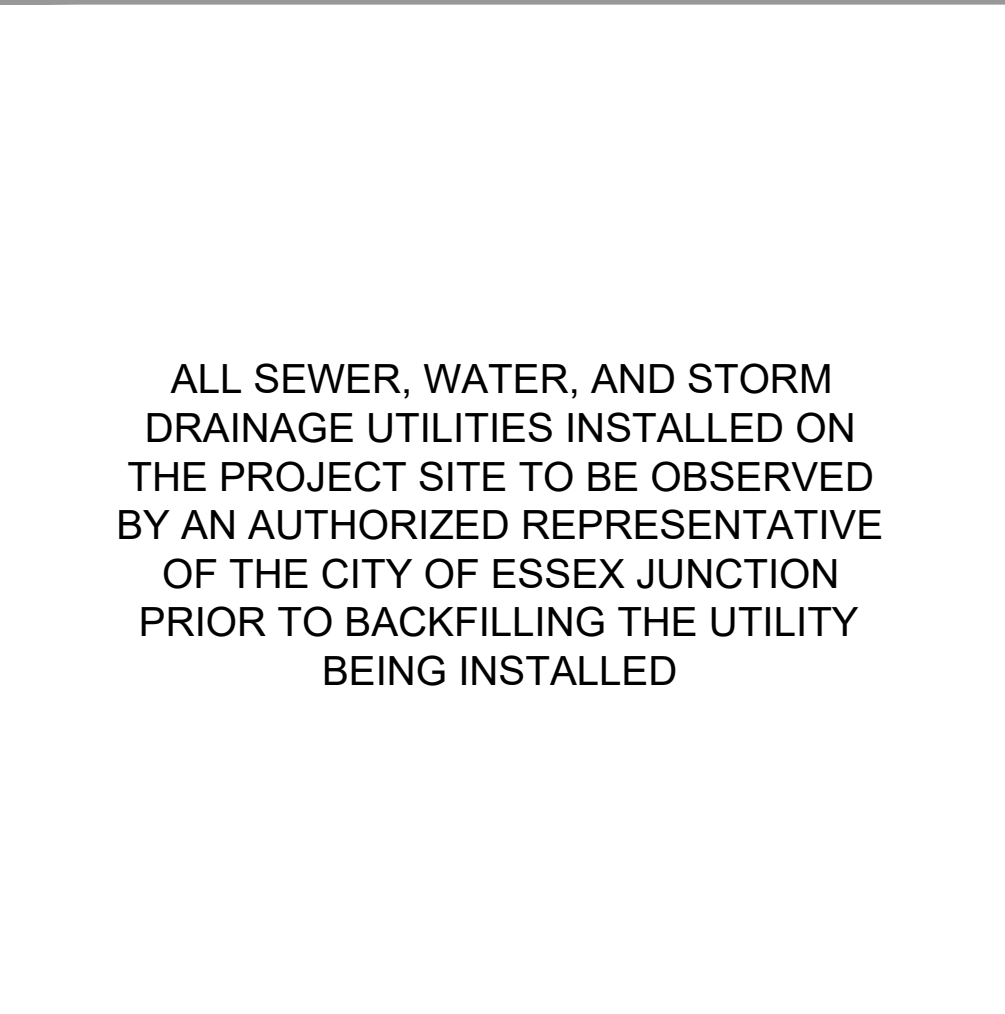
ALL SEWER, WATER, AND STORM DRAINAGE UTILITIES INSTALLED ON THE PROJECT SITE TO BE OBSERVED BY AN AUTHORIZED REPRESENTATIVE OF THE CITY OF ESSEX JUNCTION PRIOR TO BACKFILLING THE UTILITY BEING INSTALLED



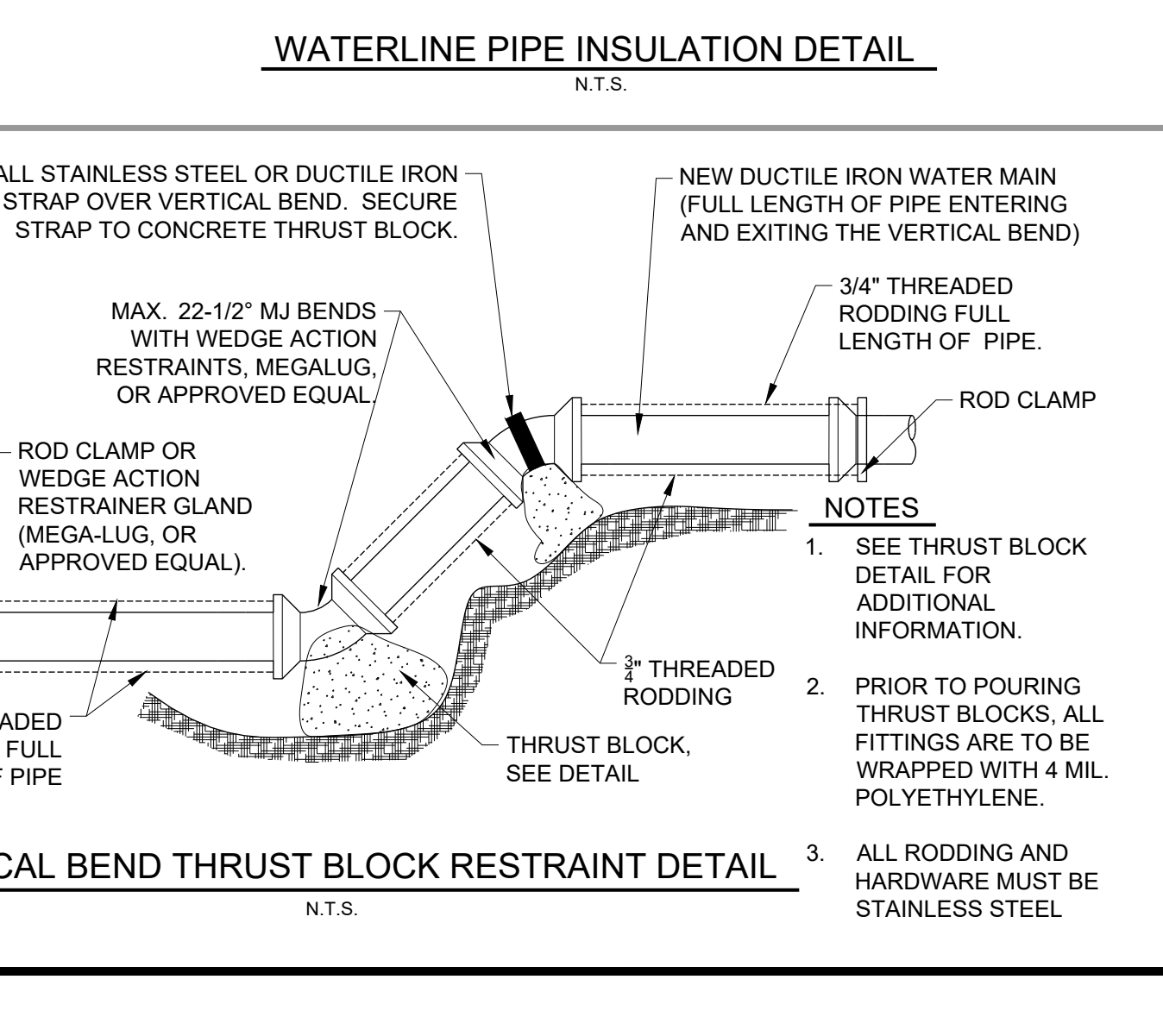
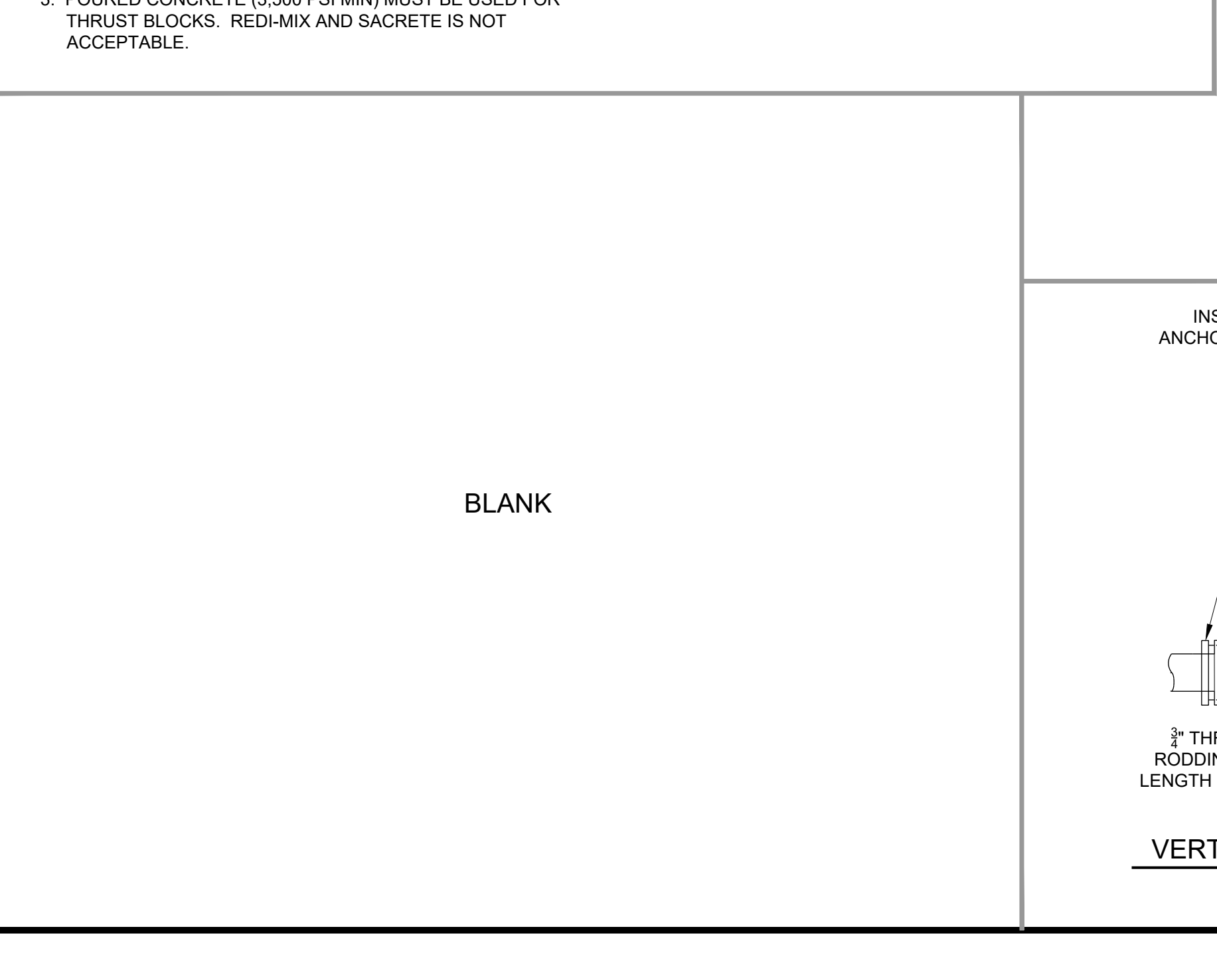
- NOTES:**
- INSULATION THICKNESS BETWEEN WATER MAINS AND STORM DRAINS SHALL BE A MINIMUM OF 4" IN THICKNESS. EACH SHEET SHALL BE OFFSET ON EACH LAYER SO AS TO NOT CREATE VOIDS. INSULATION IS REQUIRED IF THE SEPARATIONS IS LESS THAN 18".
 - THE ISOLATION DISTANCES FOR INSULATING STORM DRAINS UNDER WATER 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.

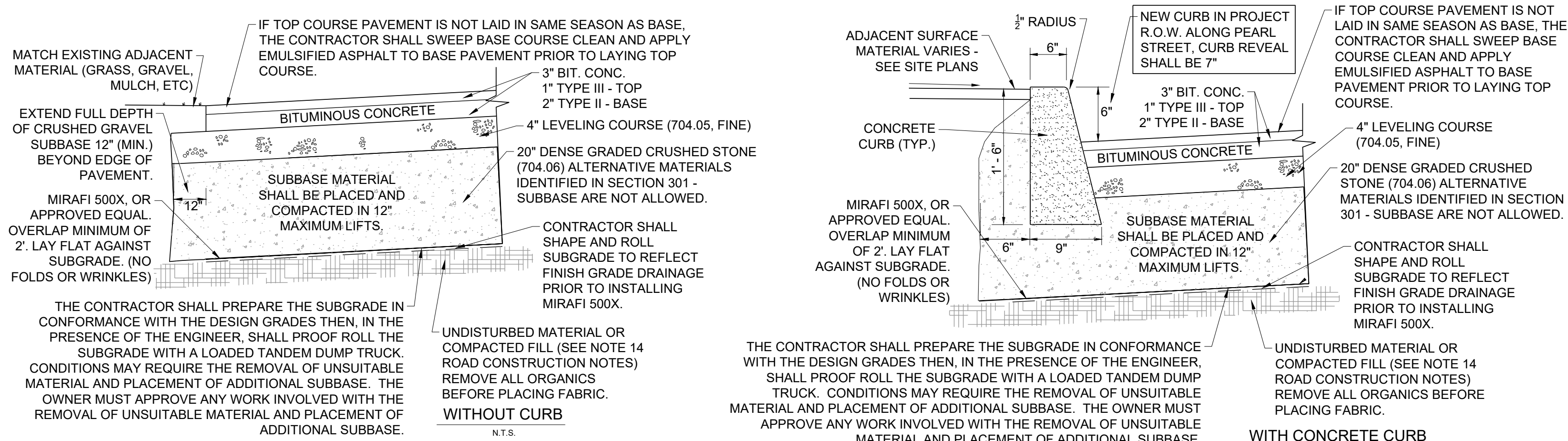


- NOTES**
- THE CONTRACTOR SHALL CONFIRM ALL VALVE SPECIFICATIONS WITH THE MUNICIPALITY PUBLIC WORKS BEFORE ORDERING.
 - GATE VALVES SHALL MEET ALL REQUIREMENTS OF A.W.W.A. C509 AND C515 STANDARDS (LATEST EDITION), VALVES WITH MECHANICAL JOINTS OF SIZES AS REQUIRED ON THE PLANS.
 - ALL VALVES SHALL BE 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.
 - THE CITY OF ESSEX JUNCTION REQUIRES A MINIMUM WORKING PRESSURE OF 200 PSI AND THE INSTALLED VALVES MUST BE "OPEN LEFT" ROTATING GATE VALVES.
 - VALVES SHALL BE EQUIPPED WITH A TWO PIECE, SLIDING TYPE CAST IRON VALVE BOX FOR A MINIMUM 6 FT. OF COVER MATERIAL.

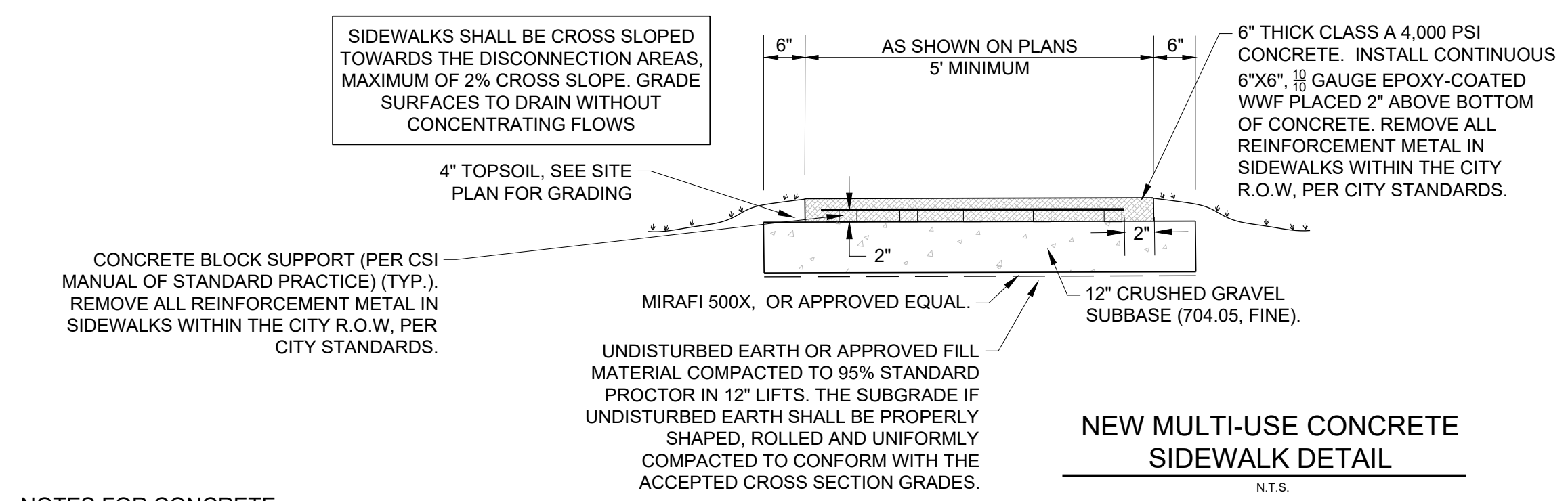


- NOTES**
- A THRUST BLOCK SHALL BE INSTALLED AT ALL WATER MAIN BENDS, REDUCERS, END CAPS AND TEES.
 - PRECAST THRUST BLOCKS ARE NOT ACCEPTABLE.
 - POURED CONCRETE (3,500 PSI MIN) MUST BE USED FOR THRUST BLOCKS. RED-MIX AND SACRETE IS NOT ACCEPTABLE.
 - USE EBAA MEGA-LUG, SIGMA, OR EQUAL, WEDGE-ACTION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





- 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.**
- TYPICAL ROAD CROSS SECTION DETAILS - WITH CONCRETE CURBS AND WITHOUT CURBS**
- NOTES FOR CONCRETE CURB**
- 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.



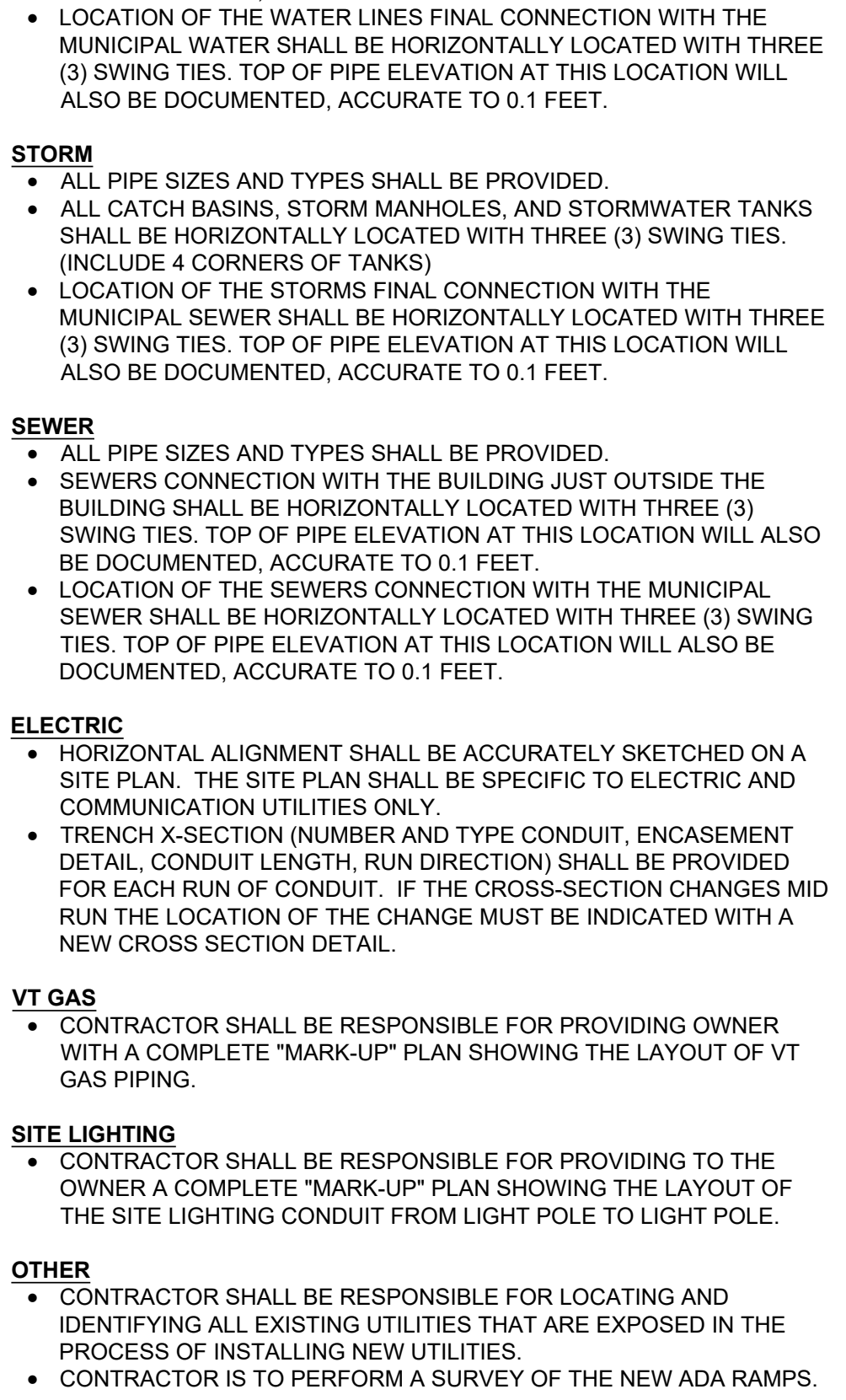
- NOTES FOR CONCRETE**
- BROOM FINISH CONCRETE. CONSTRUCTION JOINTS SHALL BE SPACED MAXIMUM 24' IN ALL DIRECTIONS. SAWCUT CONTROL JOINTS 1/2" DEPTH AT INTERVALS EQUAL TO WIDTH OF SIDEWALK.
 - APPLY SPECHEM CURE SHIELD, CURE & SEAL AGENT TO ALL CONCRETE SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
 - 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 |
- CONSTRUCTION JOINT DETAIL FOR CONNECTION TO EXISTING CONCRETE**
- CONTRACTOR TO USE THIS PINNING DETAIL TO PIN NEW CONCRETE TO EXISTING CONCRETE (WALK TO WALK, WALK TO BUILDINGS, ETC).
- NEW CONCRETE CONSTRUCTION JOINT/CONTROL JOINT DETAIL**
- CONTRACTOR TO USE THIS PINNING DETAIL TO PIN NEW CONCRETE TO NEW CONCRETE (WALK TO WALK, WALK TO BUILDINGS, WALK TO RETAINING WALLS, STAIRS, ETC).

- 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

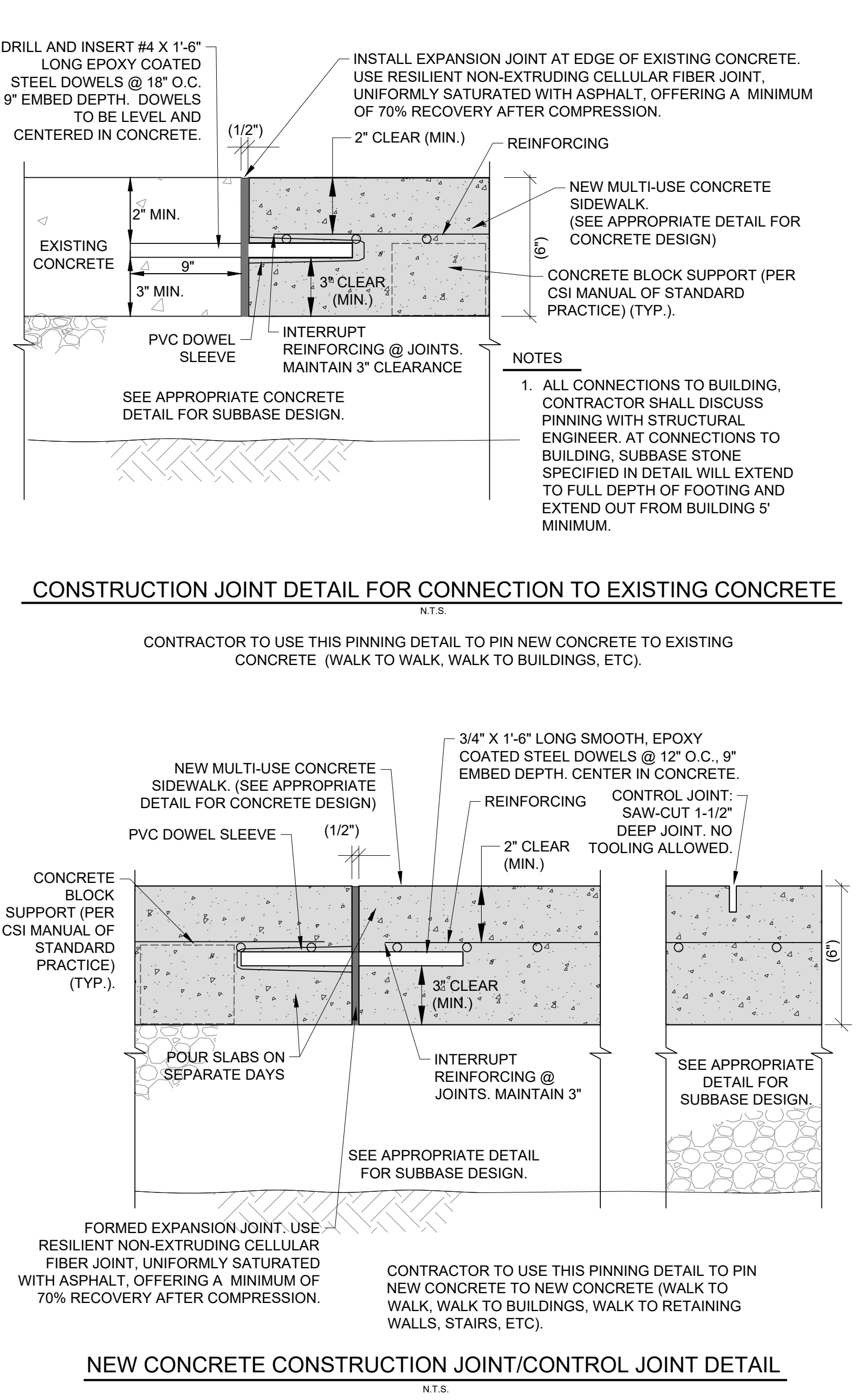
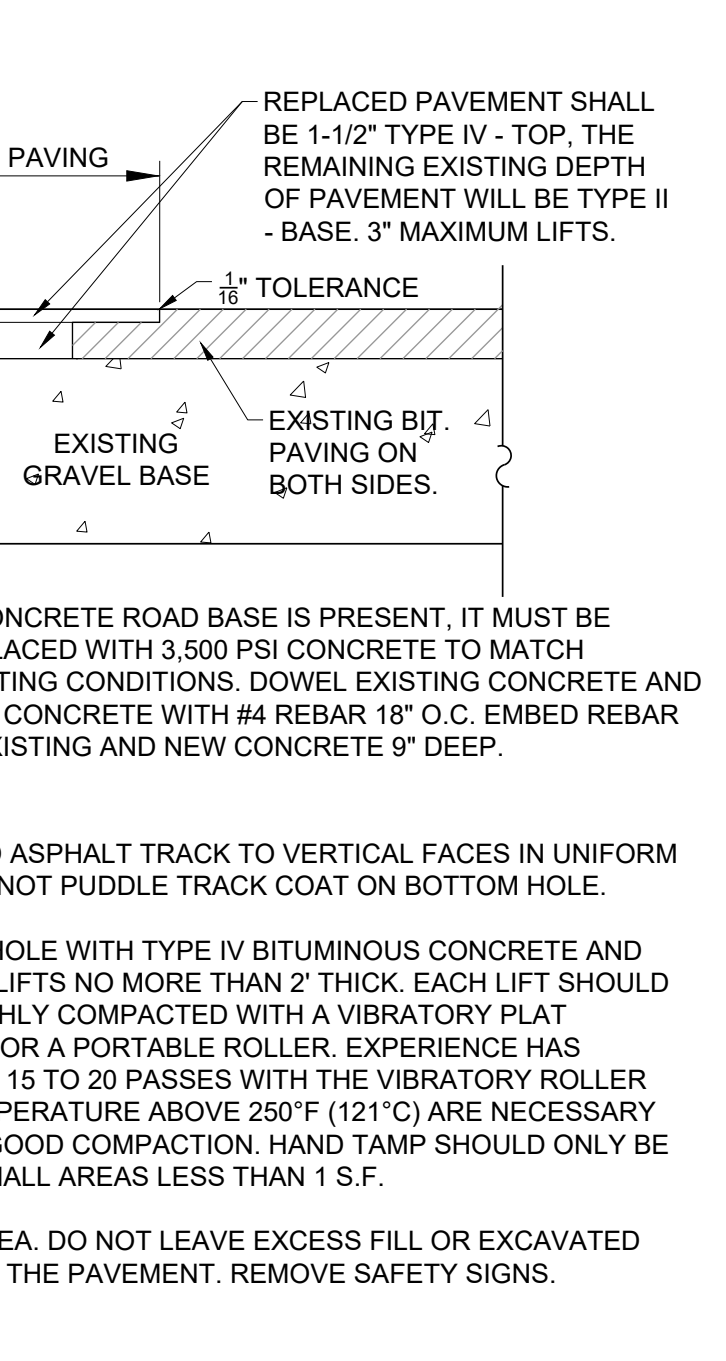
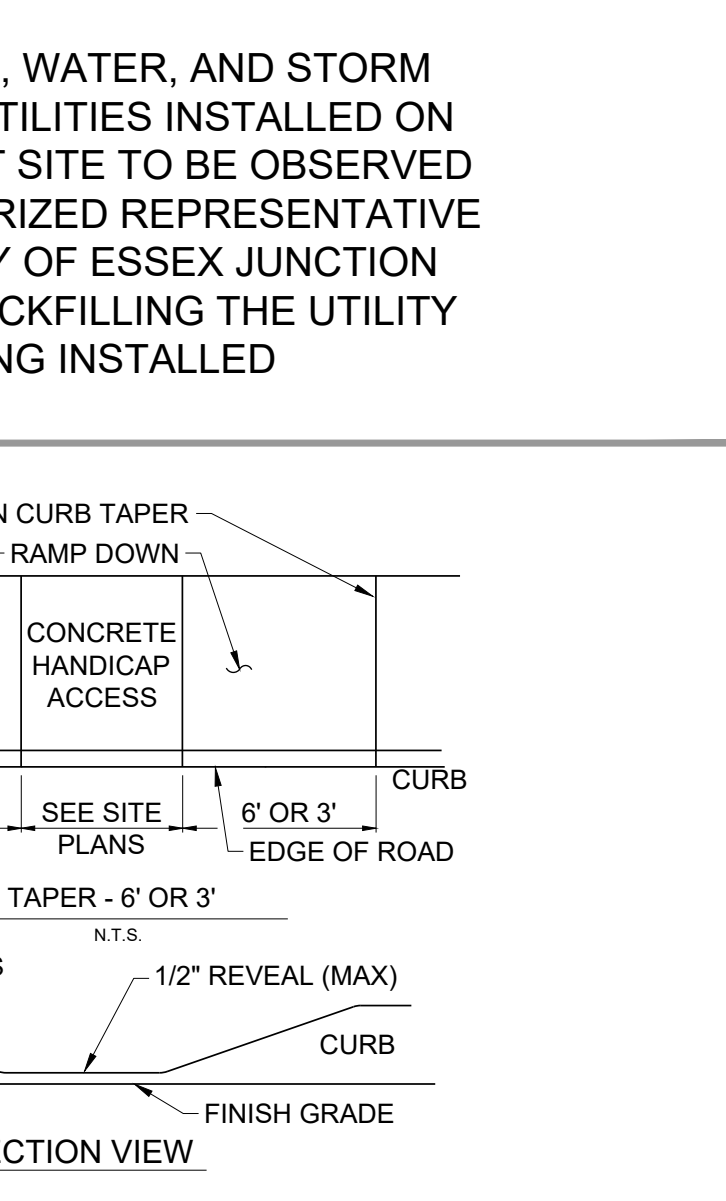
- IF PROOF ROLL FAILS, CONTRACTOR SHALL REMOVE THE SITE SOIL AND REPLACE IT WITH SAND WITH THE ABOVE SPEC. UNTIL A PROOF ROLL CAN BE PLACED WITHOUT FAILING. ENGINEER WILL JUDGE PASS/FAILURE OF PROOF ROLL, THIS WILL BE PERFORMED WITHOUT FURTHER COSTS TO THE OWNER.

- AS-BUILT (RECORD) DRAWINGS FOR SITE UTILITIES**
- AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE OWNER WITH A COMPLETE UTILITY RECORD DRAWING IN AUTOCAD AND PDF FORMAT. AUTOCAD FILE SHALL HAVE A HORIZONTAL COORDINATE SYSTEM BASED ON NAD83 VERMONT STATE PLANE 4400 (US SURVEY FOOT), ELEVATIONS SHALL BE BASED ON THE NAVD88 (US SURVEY FOOT). CONTRACTOR TO PROVIDE ALL INFORMATION TO THE ENGINEER TO MAKE RECORD MATERIALS FOR THE CITY OF ESSEX JUNCTION, WHICH WILL BE IN THE SAME DATUM AND FILE TYPES REQUESTED. THE RECORD DRAWING SHALL MEETS THE SPECIFICATIONS BELOW.
- UTILITY**
- WATER**
- ALL PIPE SIZES AND TYPES SHALL BE PROVIDED.
 - PROVIDE RECORD ALIGNMENT AND PROFILE. WATERLINE.
 - ALL WATER GATE VALVES AND SHUT-OFF VALVES SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES.
 - ALL BENDS, FITTINGS, CAPS, CONNECTIONS, ETC. SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES AND THE TOP OF PIPE ELEVATION SHALL BE PROVIDED ACCURATE TO 0.1 FEET.
 - BOTH WATER CONNECTIONS WITH THE BUILDING JUST OUTSIDE THE BUILDING SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES. TOP OF PIPE ELEVATION AT THIS LOCATION WILL ALSO BE DOCUMENTED, ACCURATE TO 0.1 FEET.
 - LOCATION OF THE WATER LINES FINAL CONNECTION WITH THE MUNICIPAL WATER SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES. TOP OF PIPE ELEVATION AT THIS LOCATION WILL ALSO BE DOCUMENTED, ACCURATE TO 0.1 FEET.
- STORM**
- ALL PIPE SIZES AND TYPES SHALL BE PROVIDED.
 - ALL CATCH BASINS, STORM MANHOLES, AND STORMWATER TANKS SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES. (INCLUDE 4 CORNERS OF TANKS)
 - LOCATION OF THE STORMS FINAL CONNECTION WITH THE MUNICIPAL SEWER SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES. TOP OF PIPE ELEVATION AT THIS LOCATION WILL ALSO BE DOCUMENTED, ACCURATE TO 0.1 FEET.
- SEWER**
- ALL PIPE SIZES AND TYPES SHALL BE PROVIDED.
 - SEWERS CONNECTION WITH THE BUILDING JUST OUTSIDE THE BUILDING SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES. TOP OF PIPE ELEVATION AT THIS LOCATION WILL ALSO BE DOCUMENTED, ACCURATE TO 0.1 FEET.
 - LOCATION OF THE SEWERS CONNECTION WITH THE MUNICIPAL SEWER SHALL BE HORIZONTALLY LOCATED WITH THREE (3) SWING TIES. TOP OF PIPE ELEVATION AT THIS LOCATION WILL ALSO BE DOCUMENTED, ACCURATE TO 0.1 FEET.
- ELECTRIC**
- HORIZONTAL ALIGNMENT SHALL BE ACCURATELY SKETCHED ON A SITE PLAN. THE SITE PLAN SHALL BE SPECIFIC TO ELECTRIC AND COMMUNICATION UTILITIES ONLY.
 - TRENCH X-SECTION (NUMBER AND TYPE CONDUIT, ENCASEMENT DETAIL, CONDUIT LENGTH, RUN DIRECTION) SHALL BE PROVIDED FOR EACH RUN OF CONDUIT. IF THE CROSS-SECTION CHANGES MID RUN THE LOCATION OF THE CHANGE MUST BE INDICATED WITH A NEW CROSS SECTION DETAIL.
- VT GAS**
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING OWNER WITH A COMPLETE "MARK-UP" PLAN SHOWING THE LAYOUT OF VT GAS PIPING.
- SITE LIGHTING**
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TO THE OWNER A COMPLETE "MARK-UP" PLAN SHOWING THE LAYOUT OF THE SITE LIGHTING CONDUIT FROM LIGHT POLE TO LIGHT POLE.
- OTHER**
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND IDENTIFYING ALL EXISTING UTILITIES THAT ARE EXPOSED IN THE PROCESS OF INSTALLING NEW UTILITIES.
 - CONTRACTOR IS TO PERFORM A SURVEY OF THE NEW ADA RAMPS.



- PAVEMENT MARKING NOTES**
- TYPICAL CITY OF ESSEX JUNCTION PARKING SPACE IS 9'-0" CENTER OF LINE TO CENTER OF LINE MARKED WITH 4" WIDE YELLOW OR WHITE PAINT.
 - ADA SPACE IS YELLOW/WHITE STENCIL, YELLOW/WHITE TRIM. COORDINATE EXACT REQUIREMENTS WITH CITY OF ESSEX JUNCTION.
 - PAINT FOR PAVEMENT MARKINGS SHALL BE HYDROPHAST WATERBORNE TRAFFIC PAINT BY FRANKLIN PAINT COMPANY. IT SHALL BE REFLECTIVE, VOC COMPLIANT FAST DRYING, 100% ACRYLIC WATERBORNE TRAFFIC PAINT. PAINT FOR STOP BARS AND CROSSWALKS SHALL BE WHITE ALL OTHER LINE STRIPING SHALL BE YELLOW. CONFIRM PAINT COLOR WITH CITY OF ESSEX JUNCTION AND OWNER.
 - TRAFFIC PAINT SHALL BE APPLIED WITH A UNIFORM THICKNESS AND AT A RATE SUCH THAT NO PAVEMENT IS VISIBLE AFTER DRYING. ADDITIONAL PAINT APPLICATION WILL BE REQUIRED IF UNDERLYING PAVEMENT IS VISIBLE.
- SECTION VIEW**
- BEGIN CURB TAPER RAMP DOWN
- CONCRETE HANDICAP ACCESS
- 6' OR 3'
- SEE SITE PLANS
- 6' OR 3'
- CURB
- EDGE OF ROAD
- CURB TAPER - 6' OR 3'
- 2" RADIUS
- 1/2" REVEAL (MAX)
- FINISH GRADE

- REPLACEMENT OF EXISTING ROAD SUBBASE AND BITUMINOUS PAVEMENT**
- PRIOR TO PAVING, GRIND EXISTING ASPHALT (1-1/2" DEPTH), 12" MINIMUM BEYOND PAVEMENT SAWCUT TO OFFSET PAVEMENT JOINT
- SMOOTH CUT EXISTING BIT. PAVEMENT PRIOR TO PAVING
- 12" MIN. 12" MIN.
- MATCH EXISTING PAVEMENT THICKNESS (7" MAX)
- 1/8" TOLERANCE
- REPLACED PAVEMENT SHALL BE 1-1/2" TYPE IV - TOP, THE REMAINING EXISTING DEPTH OF PAVEMENT WILL BE TYPE II - BASE. 3" MAXIMUM LIFTS.
- ALL JOINTS SHALL BE THOROUGHLY CLEANED AND COATED WITH EMULSIFIED ASPHALT PRIOR TO PAVING.
- SMOOTH CUT EXISTING ASPHALT (12" BEYOND LIMIT OF EXCAVATION) PRIOR TO PAVING. ALL JOINTS SHALL BE CLEANED AND THOROUGHLY COATED WITH EMULSIFIED ASPHALT.
- MATCH EXISTING SUBBASE DEPTHS (18" MINIMUM CRUSHED GRAVEL SUBBASE PER VT STATE SPEC. 704.05, FINE)
- EXISTING GRAVEL BASE
- EXISTING BIT. PAVING ON BOTH SIDES.
- TRENCH EXCAVATION
- IF CONCRETE ROAD BASE IS PRESENT, IT MUST BE REPLACED WITH 3,500 PSI CONCRETE TO MATCH EXISTING CONDITIONS. DOWEL EXISTING CONCRETE AND NEW CONCRETE WITH #4 REBAR 18" O.C. EMBED REBAR IN EXISTING AND NEW CONCRETE 9" DEEP.
- NOTES**
- SET UP AND MAINTAIN SIGNS AND OTHER SAFETY CONTROL DEVICES.
 - RESHAPE HOLE PATCH AREA BY CUTTING WITH A CONCRETE SAW INTO SQUARE OR RECTANGULAR SHAPE AND CUT SIDE FACED VERTICALLY. RESHAPE DOWNWARD SOLID MATERIAL AND AROUND HOLE TO SOUND PAVEMENT.
 - BACKFILL TRENCH IN 6" LIFTS AND COMPACT EACH TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR.
 - REMOVE ALL LOOSE MATERIAL AND THOROUGHLY SWEEP THE HOLE AREA. CLEAN ANY MUD AND STANDING WATER.
 - APPLY LIQUID ASPHALT TRACK TO VERTICAL FACES IN UNIFORM MANNER. DO NOT PUDDLE TRACK COAT ON BOTTOM HOLE.
 - FILL TOP OF HOLE WITH TYPE IV BITUMINOUS CONCRETE AND COMPACT IN LIFTS NO MORE THAN 2" THICK. EACH LIFT SHOULD BE THOROUGHLY COMPACTED WITH A VIBRATORY PLAT COMPACTOR OR A PORTABLE ROLLER. EXPERIENCE HAS SHOWN THAT 15 TO 20 PASSES WITH THE VIBRATORY ROLLER AND MIX TEMPERATURE ABOVE 250°F (121°C) ARE NECESSARY TO ENSURE GOOD COMPACTION. HAND TAMP SHOULD ONLY BE USED FOR SMALL AREAS LESS THAN 1 S.F.
 - CLEAN UP AREA. DO NOT LEAVE EXCESS FILL OR EXCAVATED MATERIAL ON THE PAVEMENT. REMOVE SAFETY SIGNS.



SUNDERLAND APARTMENTS

227 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 AND OWNER:

Handy Hotels & Rentals LLC
c/o Gabe Handy
197 Pearl Street, Suite 100
Essex Junction, 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
Substack:
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.	Changes to match Architect and Landscape Architect Revisions from City Staff and Engineer.	5/29/24

DRAWING TITLE:

DETAILS

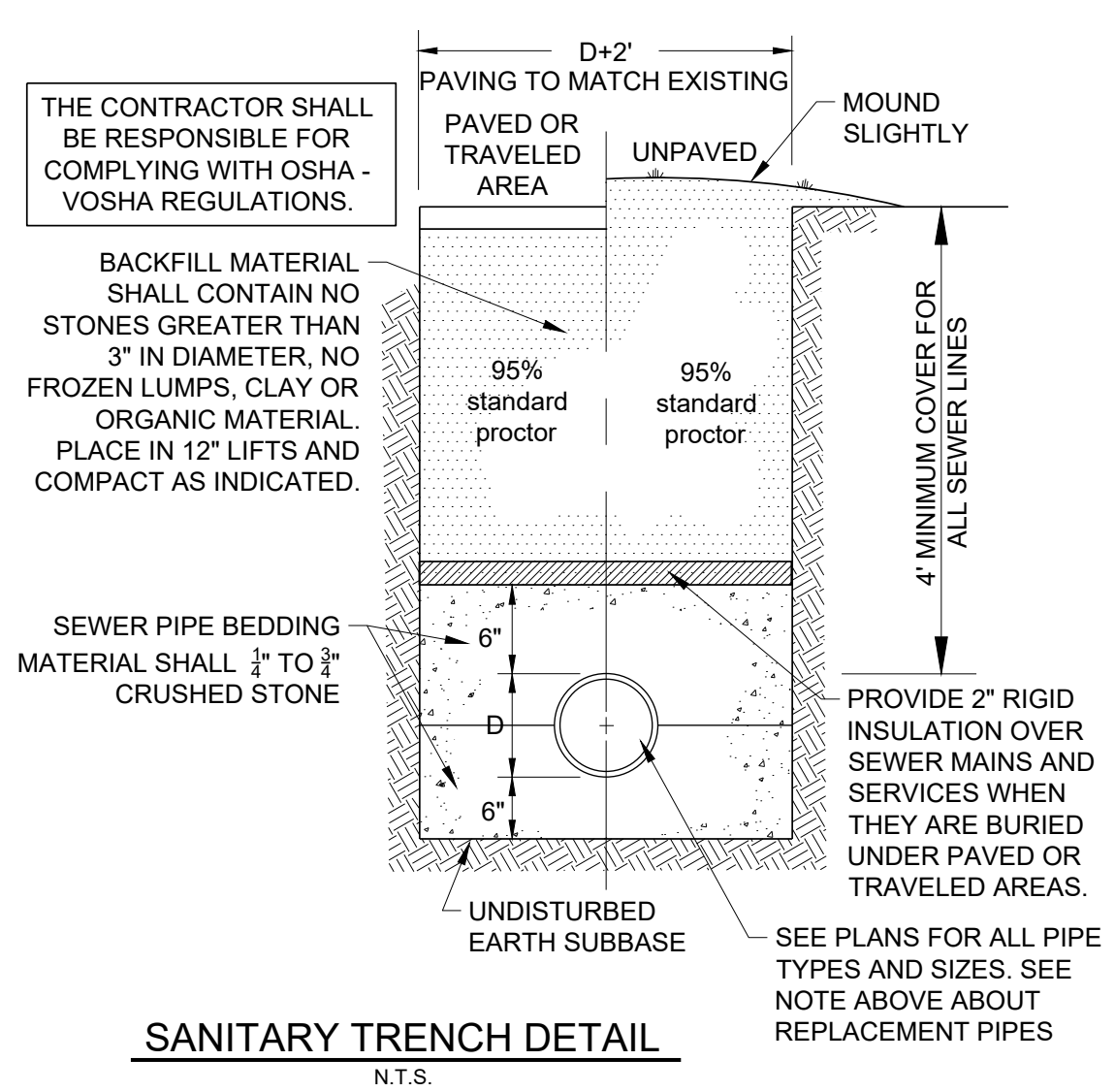
DATE ISSUED: 05/06/24

DRAWN BY: GTD CHECKED BY: GTD

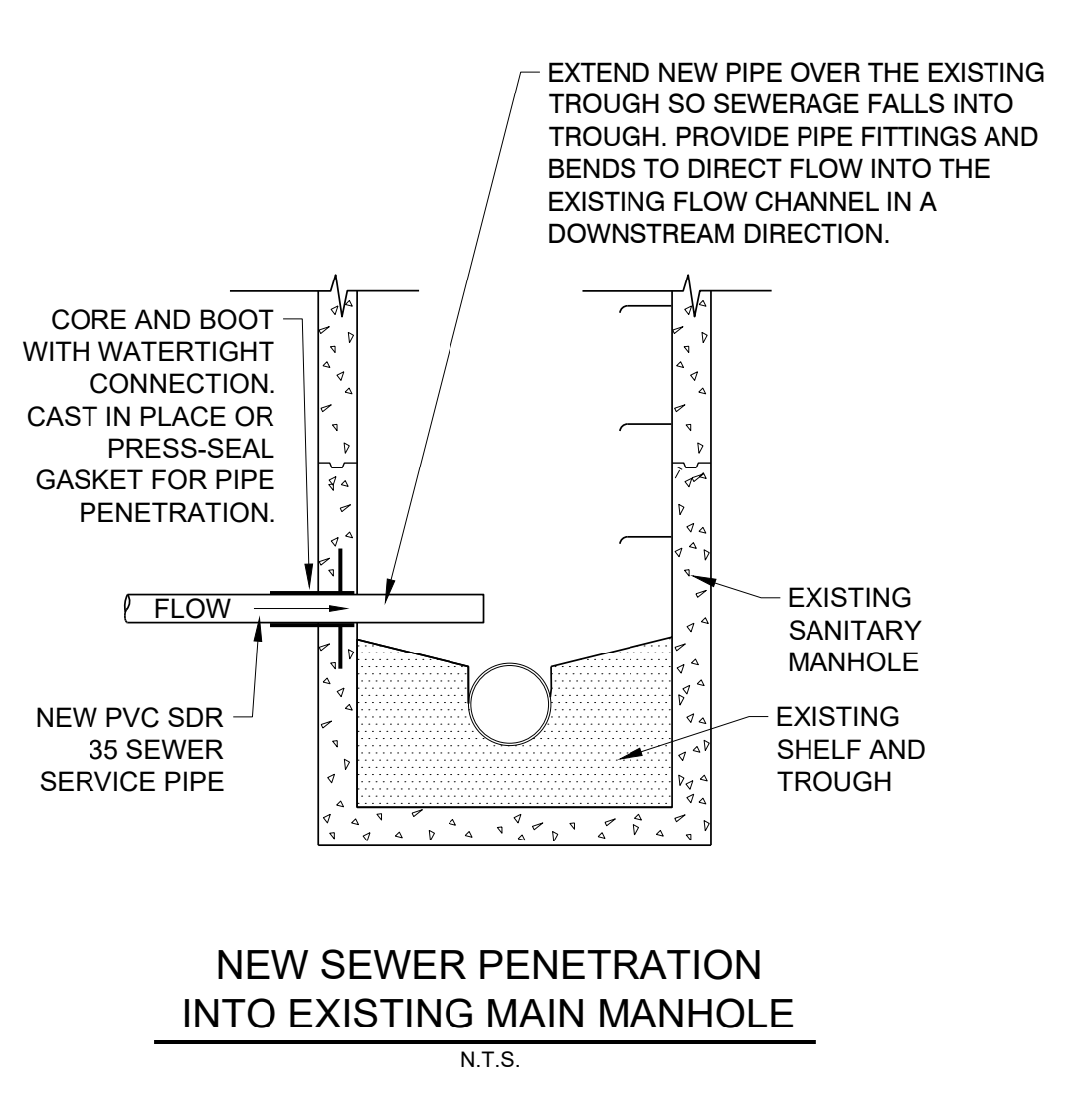
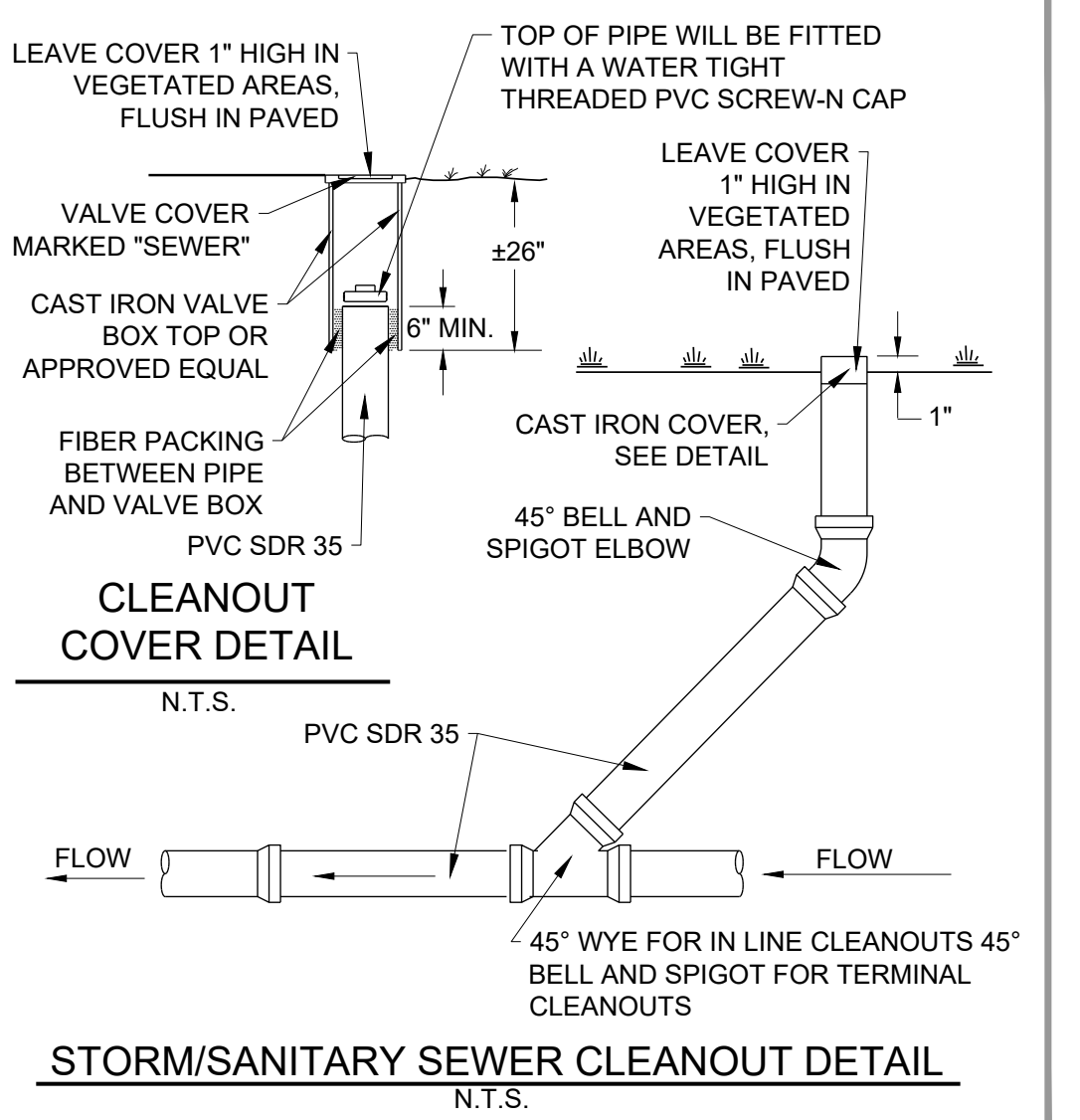
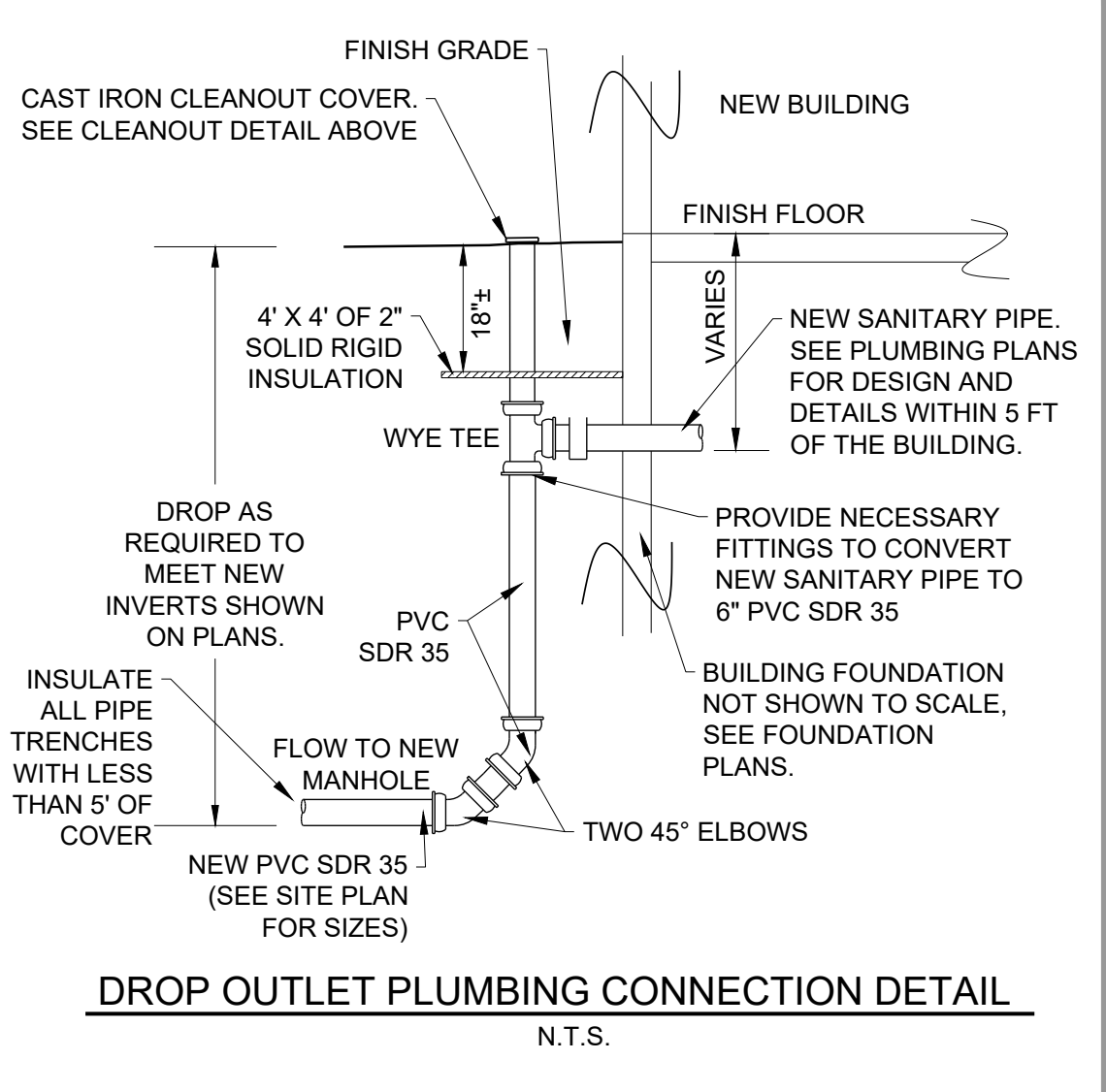
PROJECT NO.: 23288 SCALE: N/A

DRAWING NO.: REV. NO.:

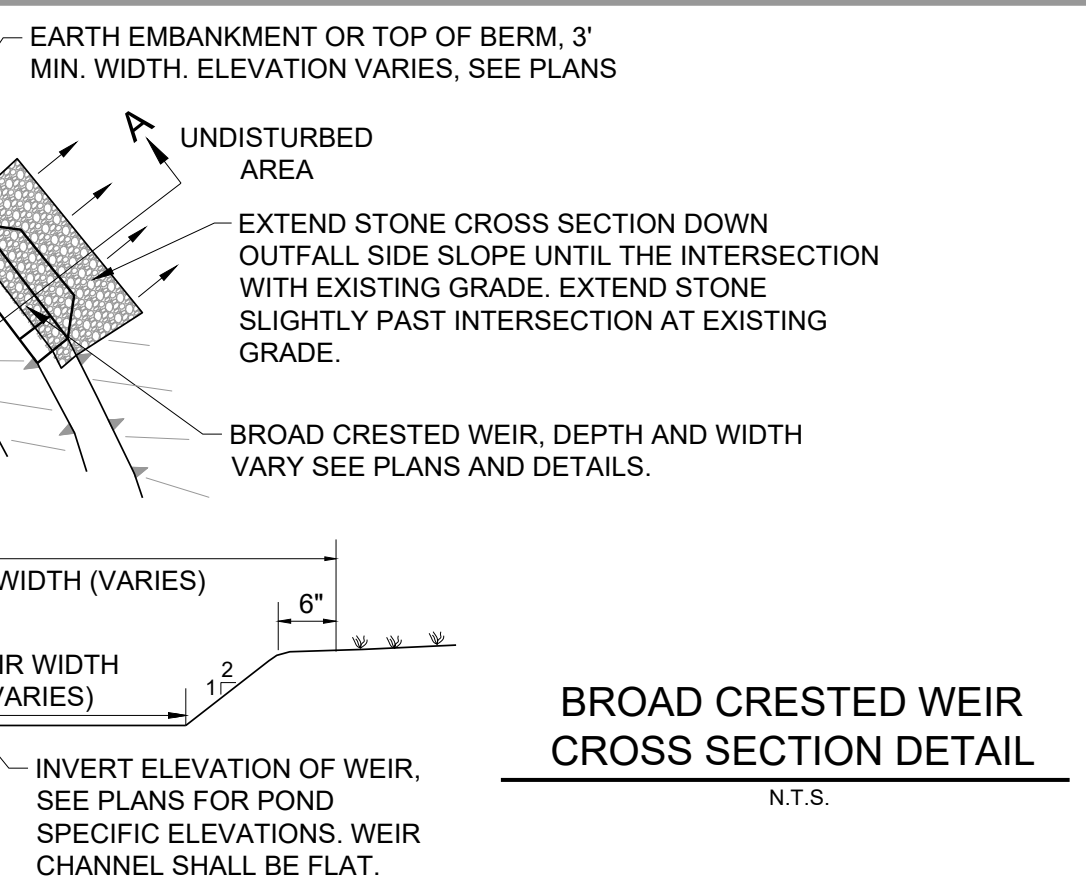
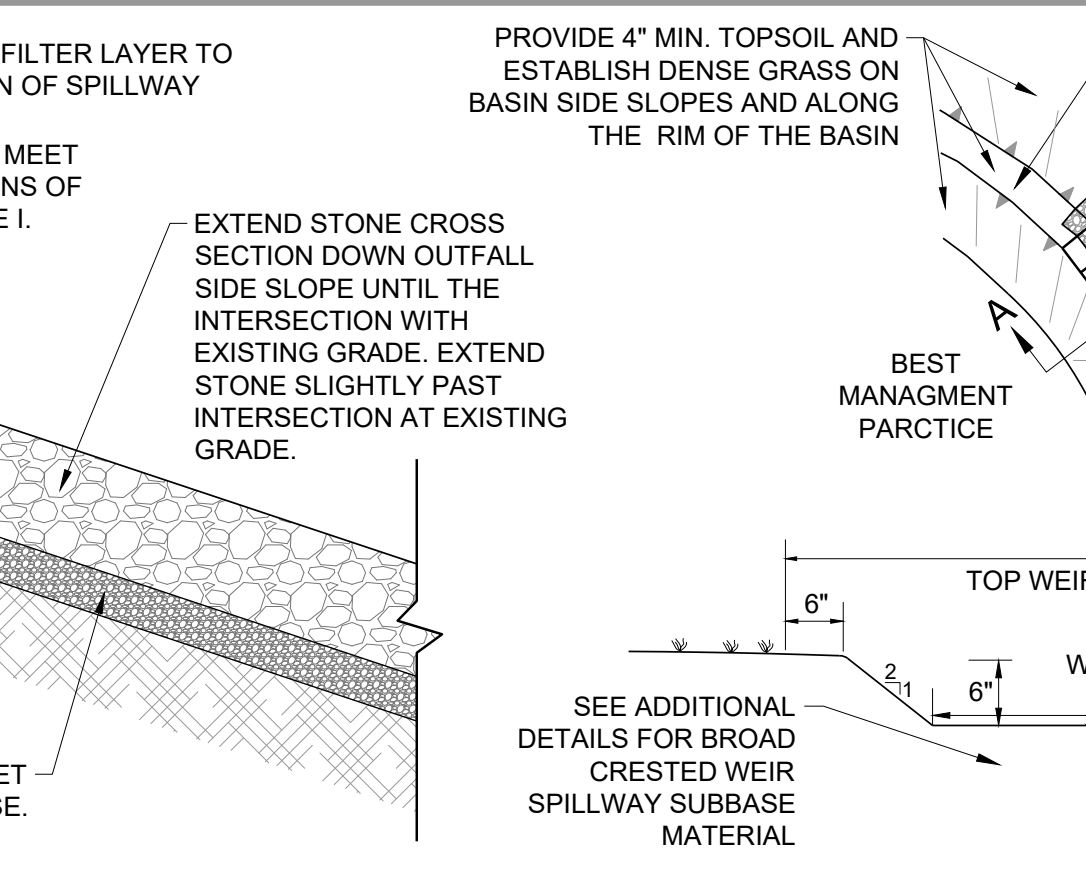
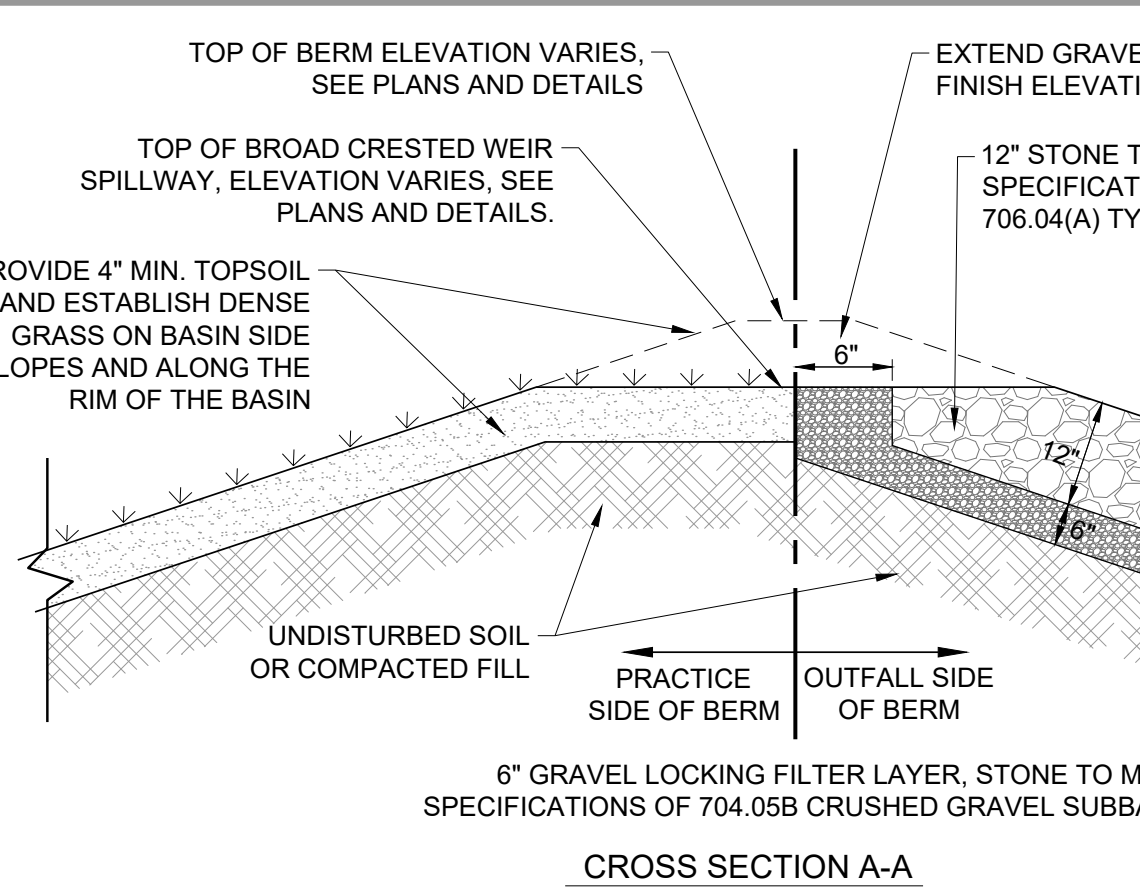
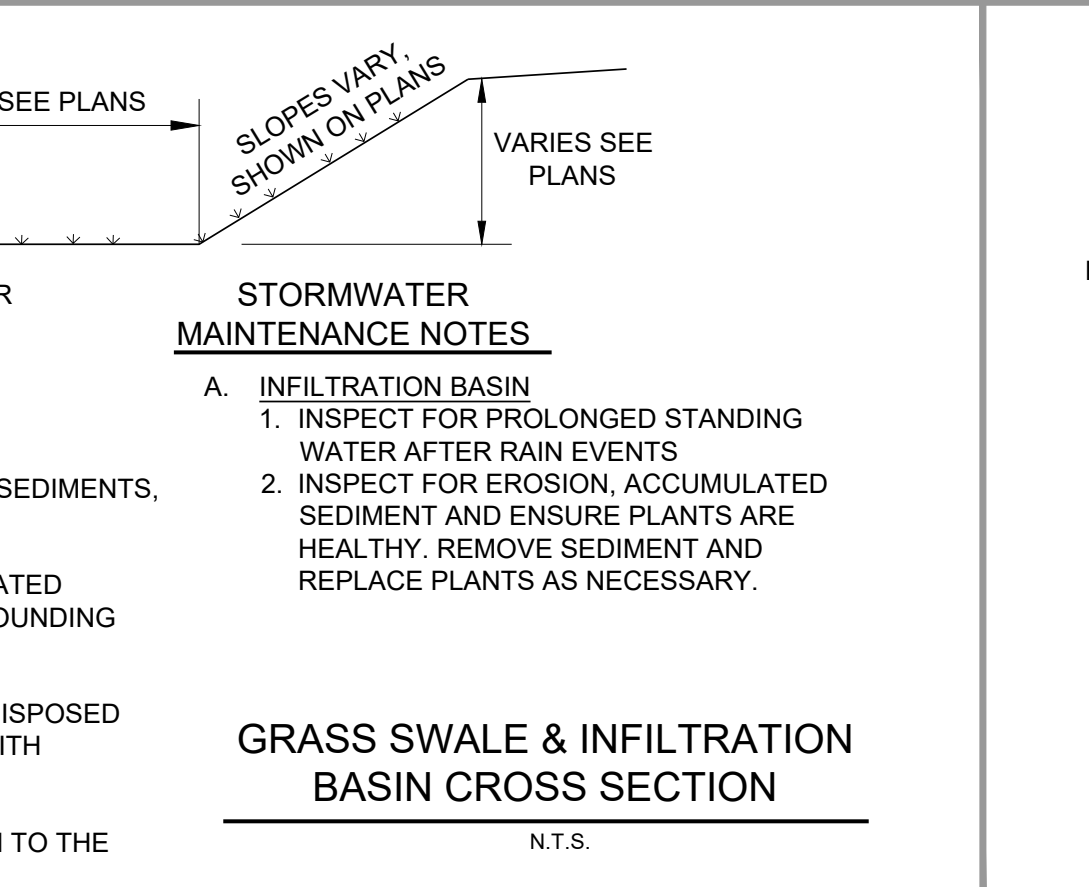
C-2.02 **1**



SANITARY MAINS NOTES
1. 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.
2. 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.
3. PVC SDR 35 SANITARY AND STORM PIPES SHALL BE INSTALLED SO THAT THE INITIAL DEFLECTION SHALL BE LESS THAN 5%.
4. 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.
5. 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 11/06/2023.



NOTES
1. TYPICAL GRASS SWALE & INFILTRATION BASIN CROSS SECTION. SEE PLAN VIEW FOR LOCATIONS.
2. MAXIMUM SIDE SLOPES TO BE 3:1.
3. 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.
4. 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.
5. 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.
6. MINIMIZE STORING SNOW DURING THE WINTER MONTHS IN THE INFILTRATION BASIN TO THE EXTENT PRACTICAL.

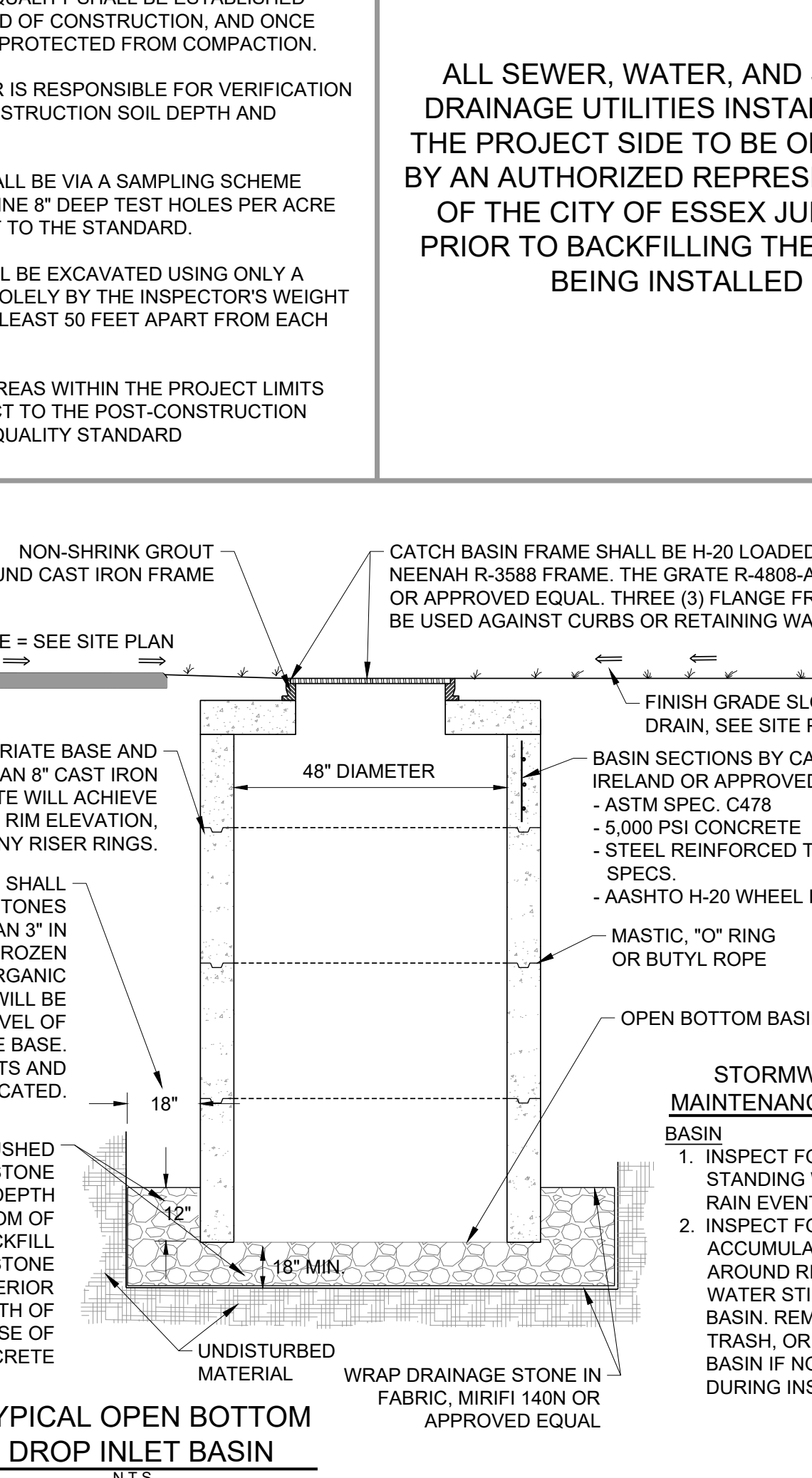


POST-CONSTRUCTION SOIL DEPTH AND QUALITY NOTES

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 §6-1105(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.
a. 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.
b. AMEND SOIL TO MEET ORGANIC CONTENT REQUIREMENTS:
1. 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
2. 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. TO PROVIDE CALCULATION AND SITE SKETCH INDICATING AREAS USED FOR CALCULATIONS.
c. RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER, AND
d. WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

OPTION 3: REMOVE AND STOCKPILE EXISTING TOPSOIL DURING GRADING.
a. STOCKPILE SOIL ON SITE IN A DESIGNATED CONTROLLED AREA, AT LEAST 50 FEET FROM SURFACE WATERS, WETLANDS, FLOODPLAINS, OR OTHER CRITICAL RESOURCE AREAS;
b. 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;
c. STOCKPILED TOPSOIL SHALL ALSO BE AMENDED, IF NEEDED, TO MEET THE ORGANIC CONTENT REQUIREMENTS:
1. PRE-APPROVED RATE: COMPOST SHALL BE INCORPORATED WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 65% INTO THE TOPSOIL AT A RATIO 0.3; OR
2. CALCULATED RATE: INCORPORATE COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AT A CALCULATED RATE TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT.
d. REPLACE STOCKPILED TOPSOIL PRIOR TO PLANTING, SCREEN TOPSOIL, AND;
e. RAKE TO LEVEL, AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.
f. OPTION 4: IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DEPTH.
g. 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;
h. 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.
i. RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER;
j. 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



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, FILTREXX SILT SOXX, STRAW WATTLIES, 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 RESEEDED, 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.

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
227 Pearl Street
City of Essex Junction, Vermont
KREBS & LANSING CONSULTING ENGINEERS
164 Main Street, Suite 201
P: (802) 878-0375
Cochester, Vermont 05446
www.krebsandlansing.com
ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION
APPLICANT AND OWNER: Handy Hotels & Rentals LLC
PROPERTY INFORMATION: CITY OF ESSEX JUNCTION: Address: 227 Pearl Street
DATE ISSUED: 05/06/24
DRAWN BY: GTD CHECKED BY: GTD
PROJECT NO.: 23288 SCALE: N/A
DRAWING NO.: REV. NO.:
C-2.03 1

SUNDERLAND APARTMENTS

227 Pearl Street
City of Essex Junction, Vermont



ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION

APPLICANT AND OWNER:
Handy Hotels & Rentals LLC
c/o Gabe Handy
197 Pearl Street, Suite 100
Essex Junction, 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.	Changes to match Architect and Landscape Architect. Revisions from City Staff and Engineer.	5/29/24

DRAWING TITLE:

DETAILS

DATE ISSUED: 05/06/24

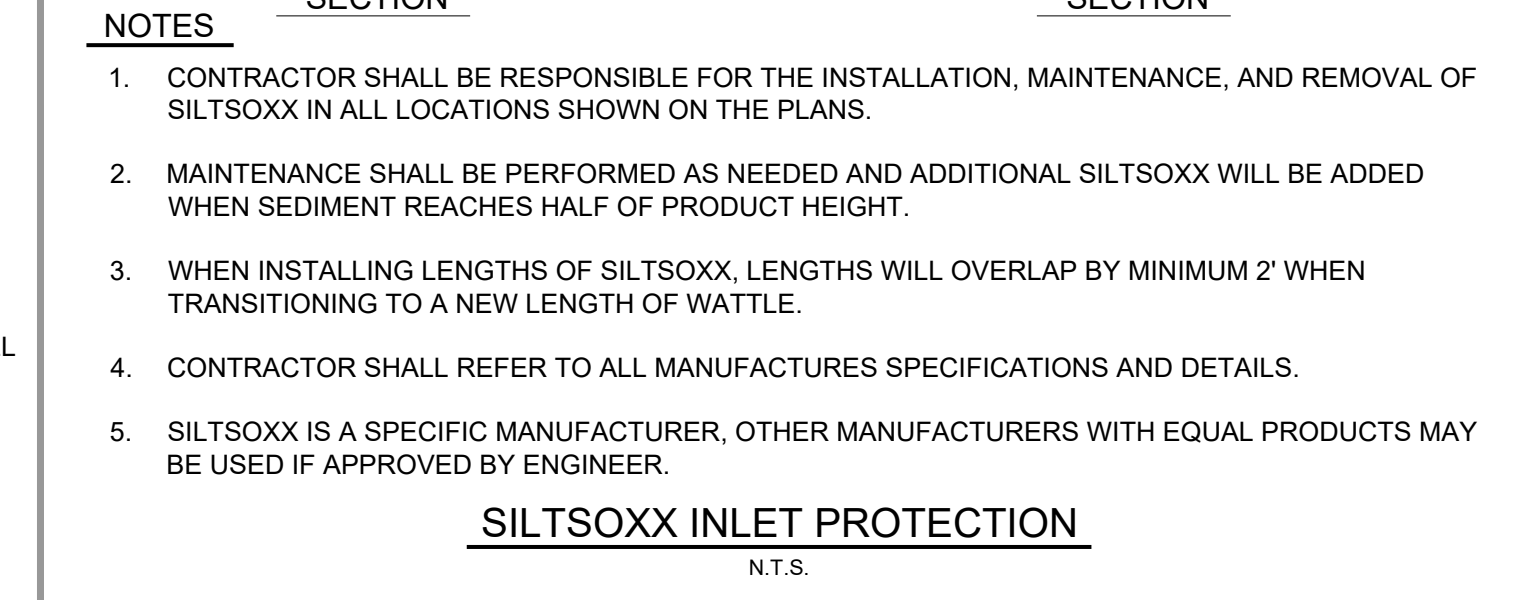
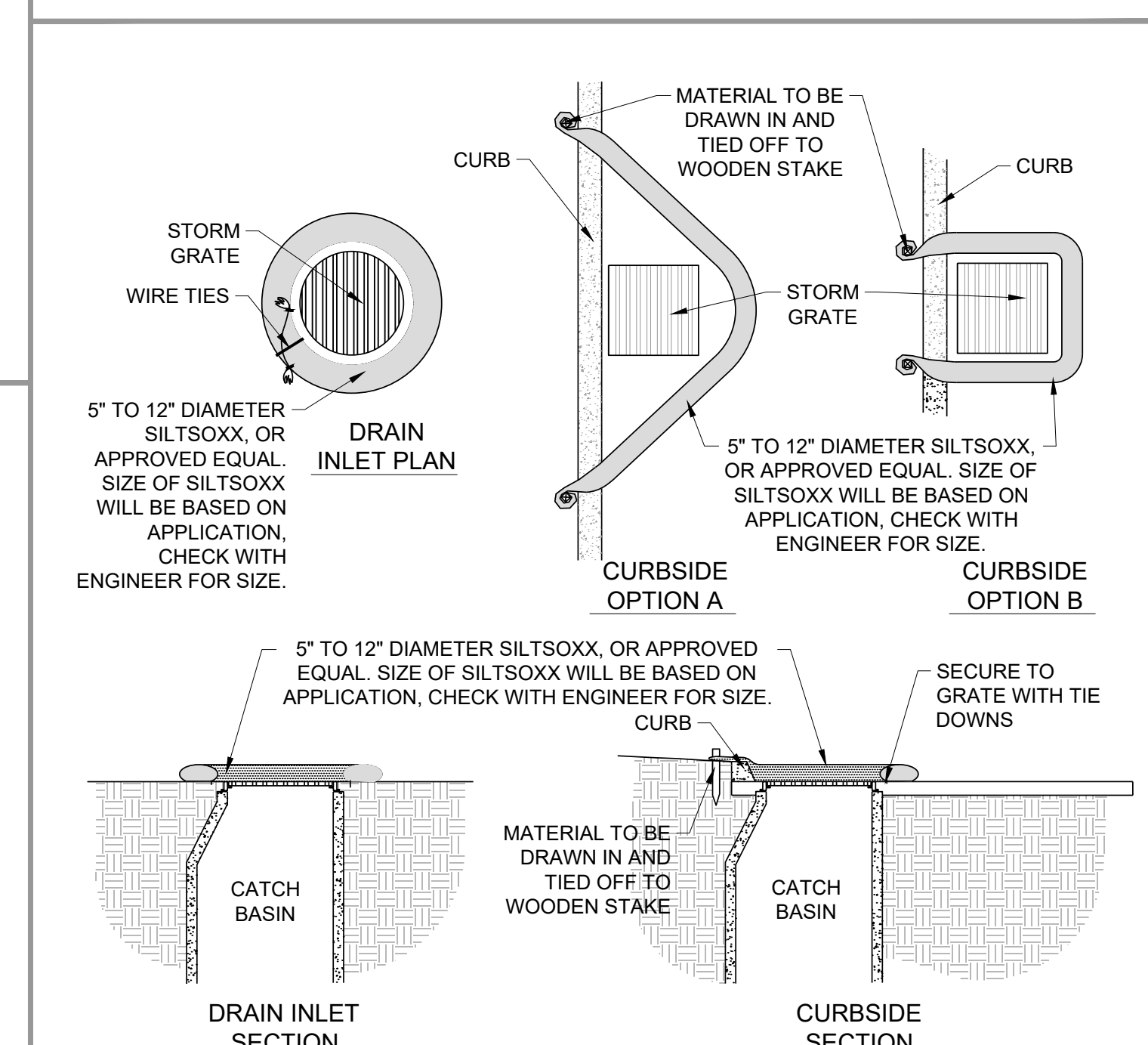
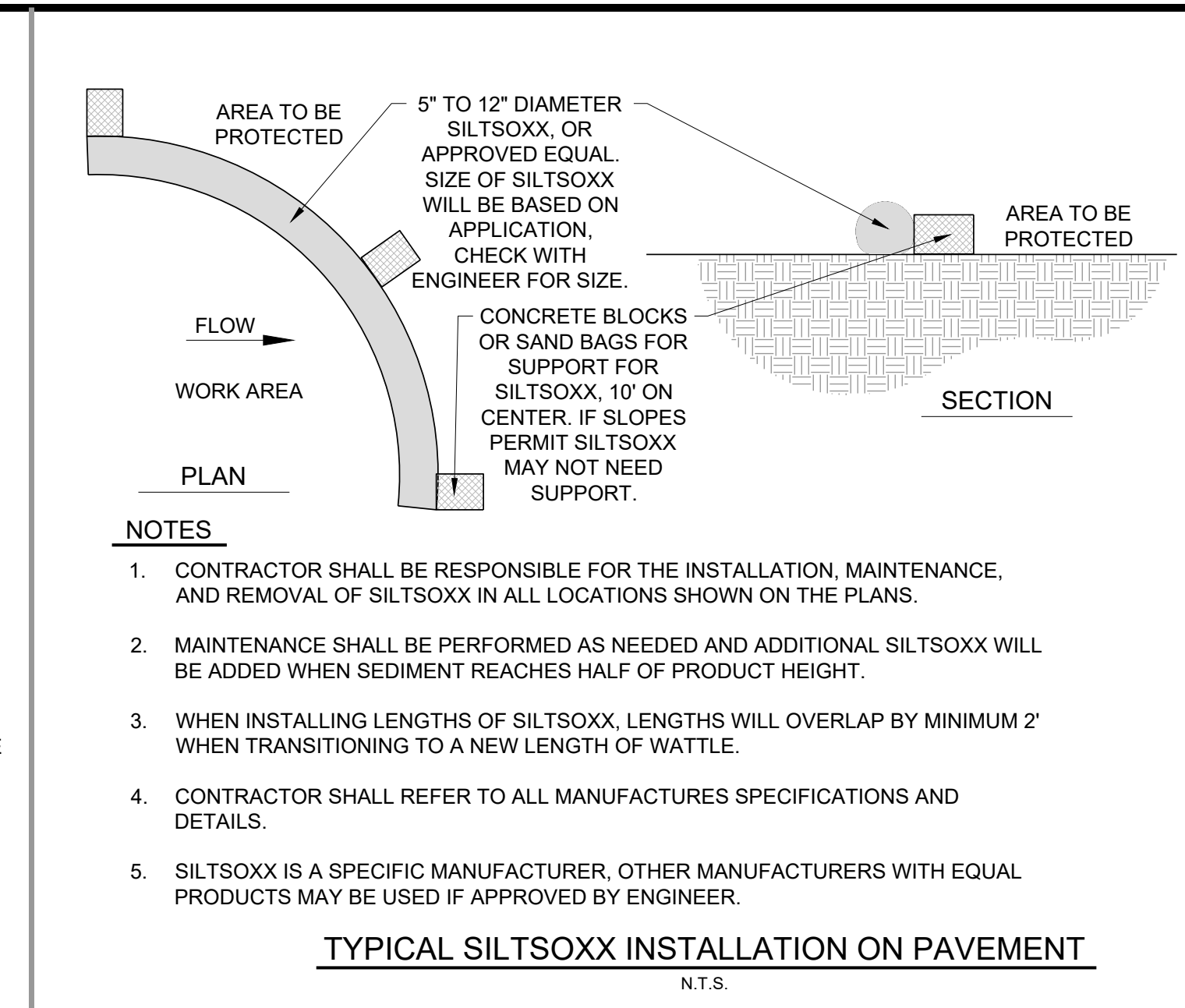
DRAWN BY: GTD CHECKED BY: GTD

PROJECT NO.: 23288 SCALE: N/A

DRAWING NO.: REV. NO.:

C-2.04 1

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



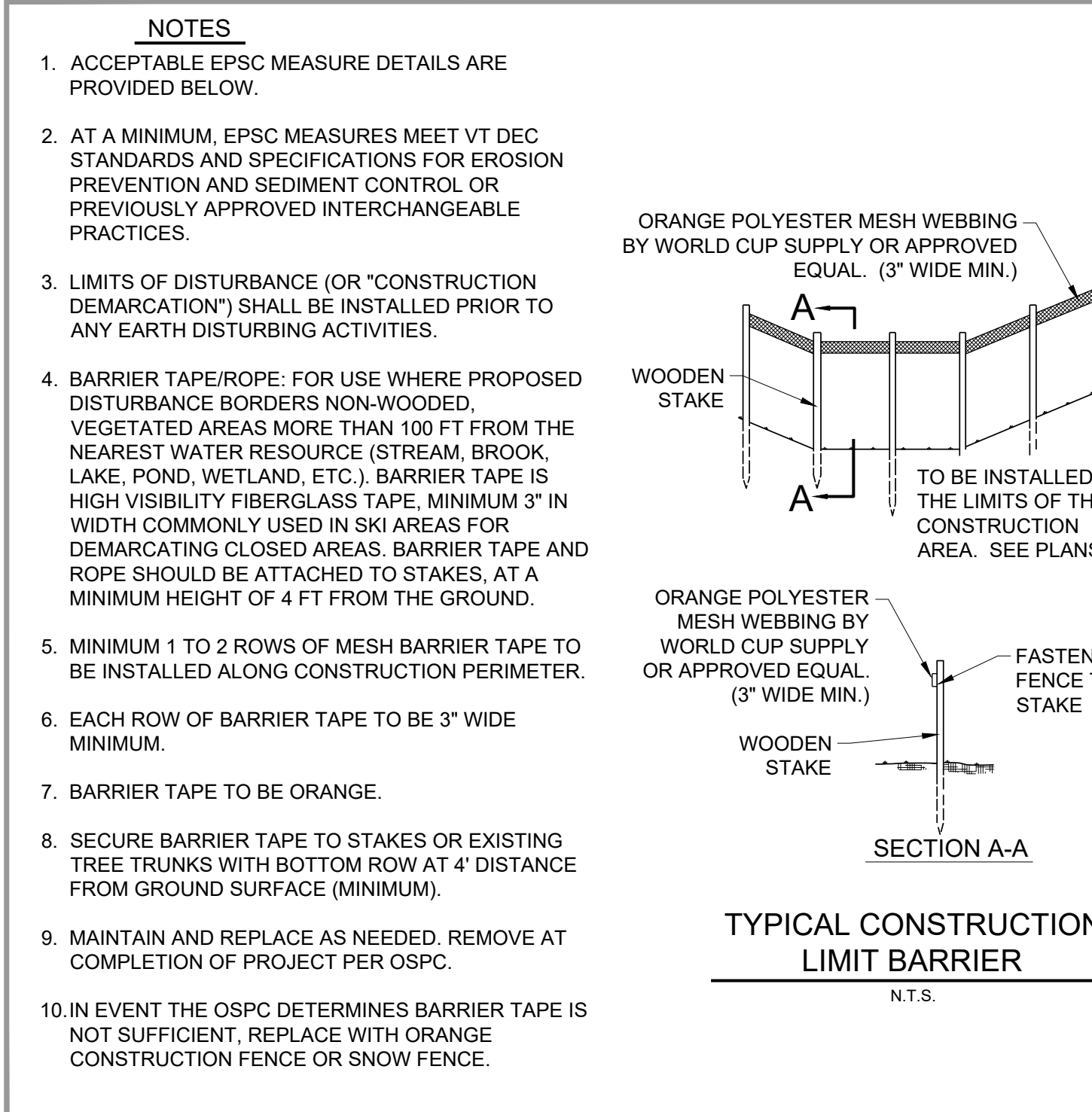
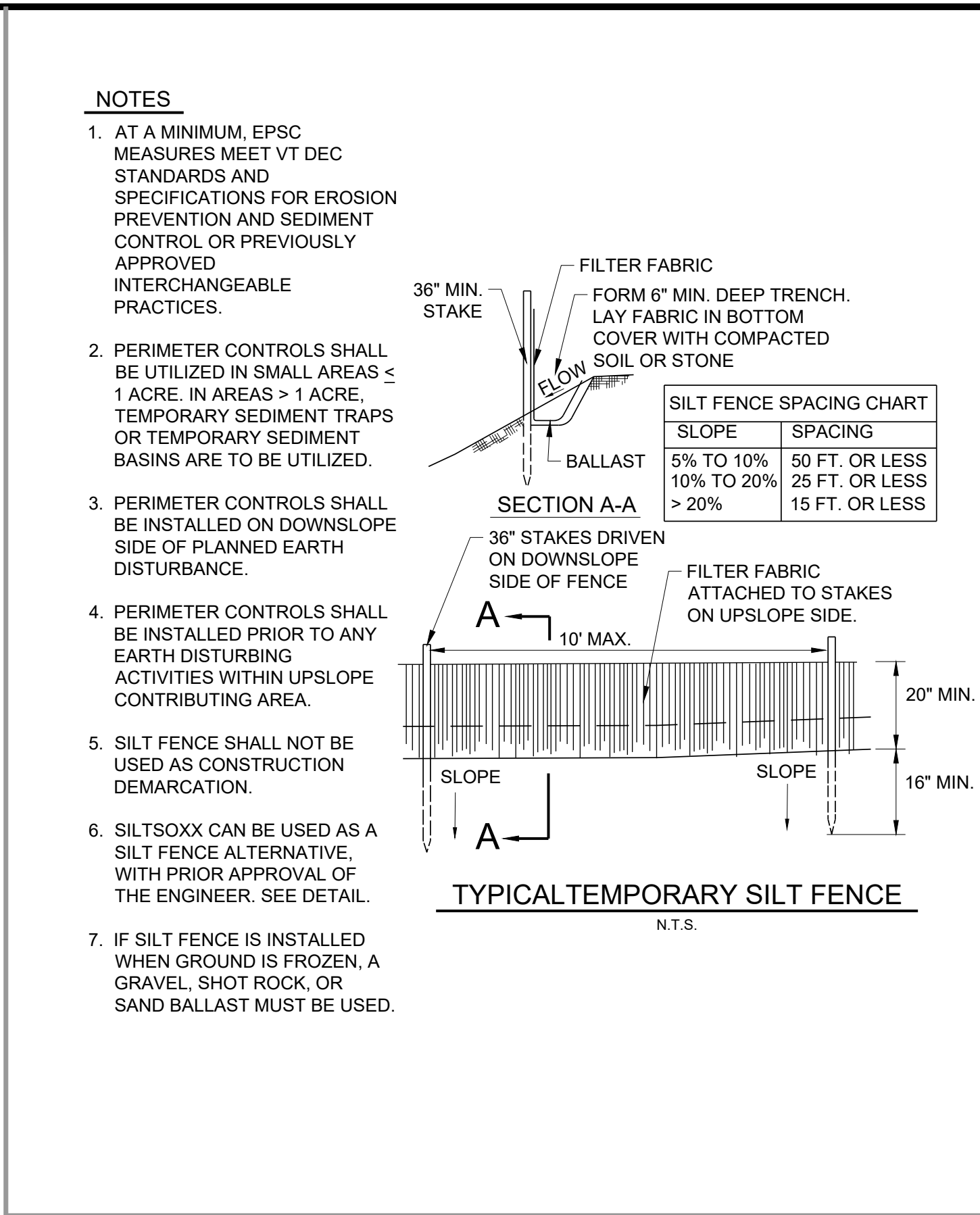
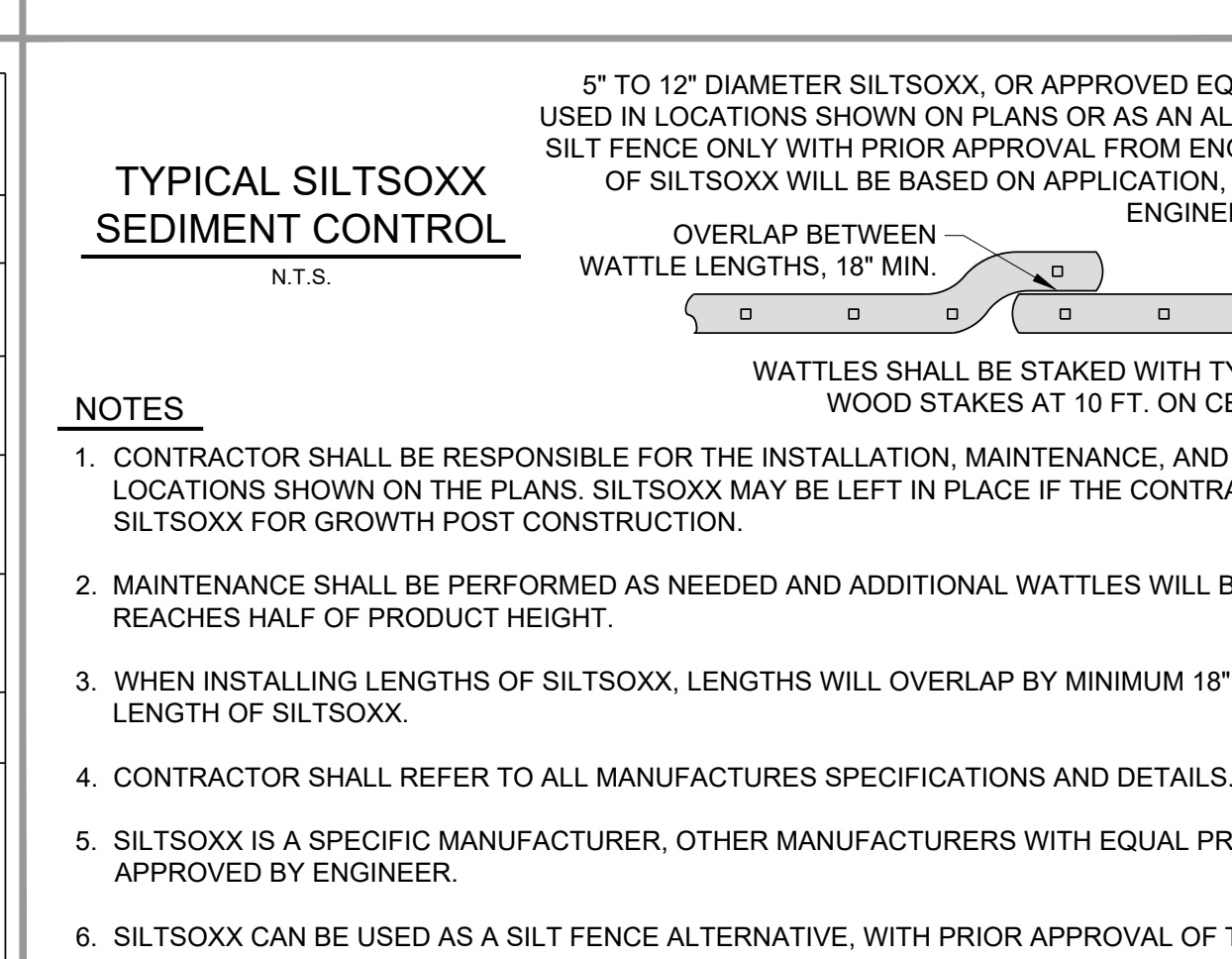
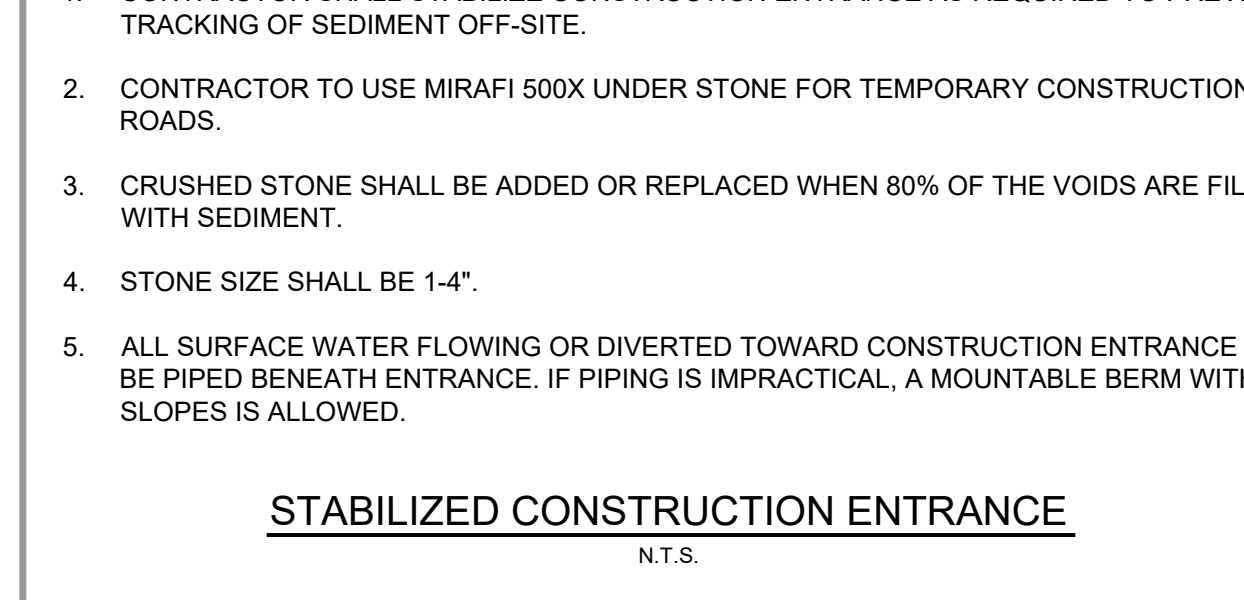
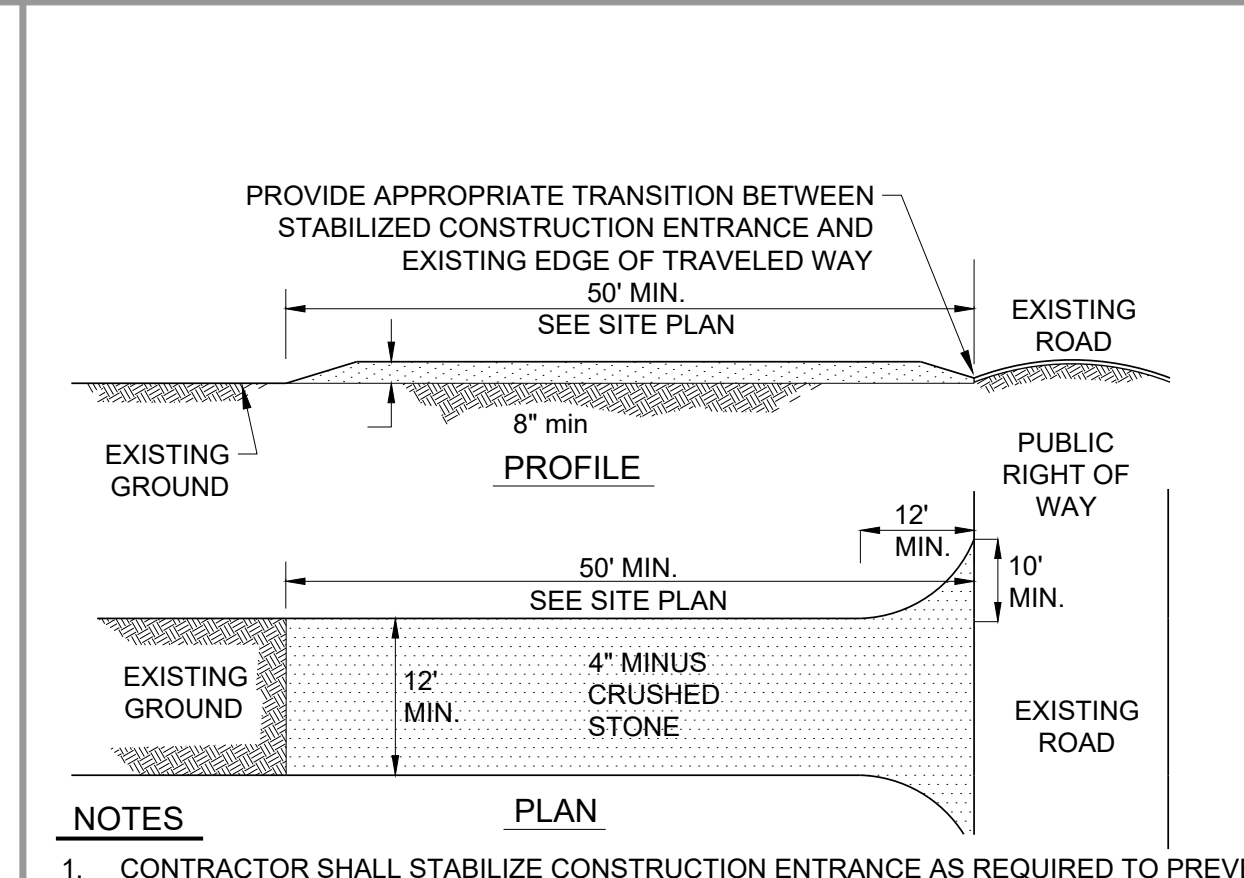
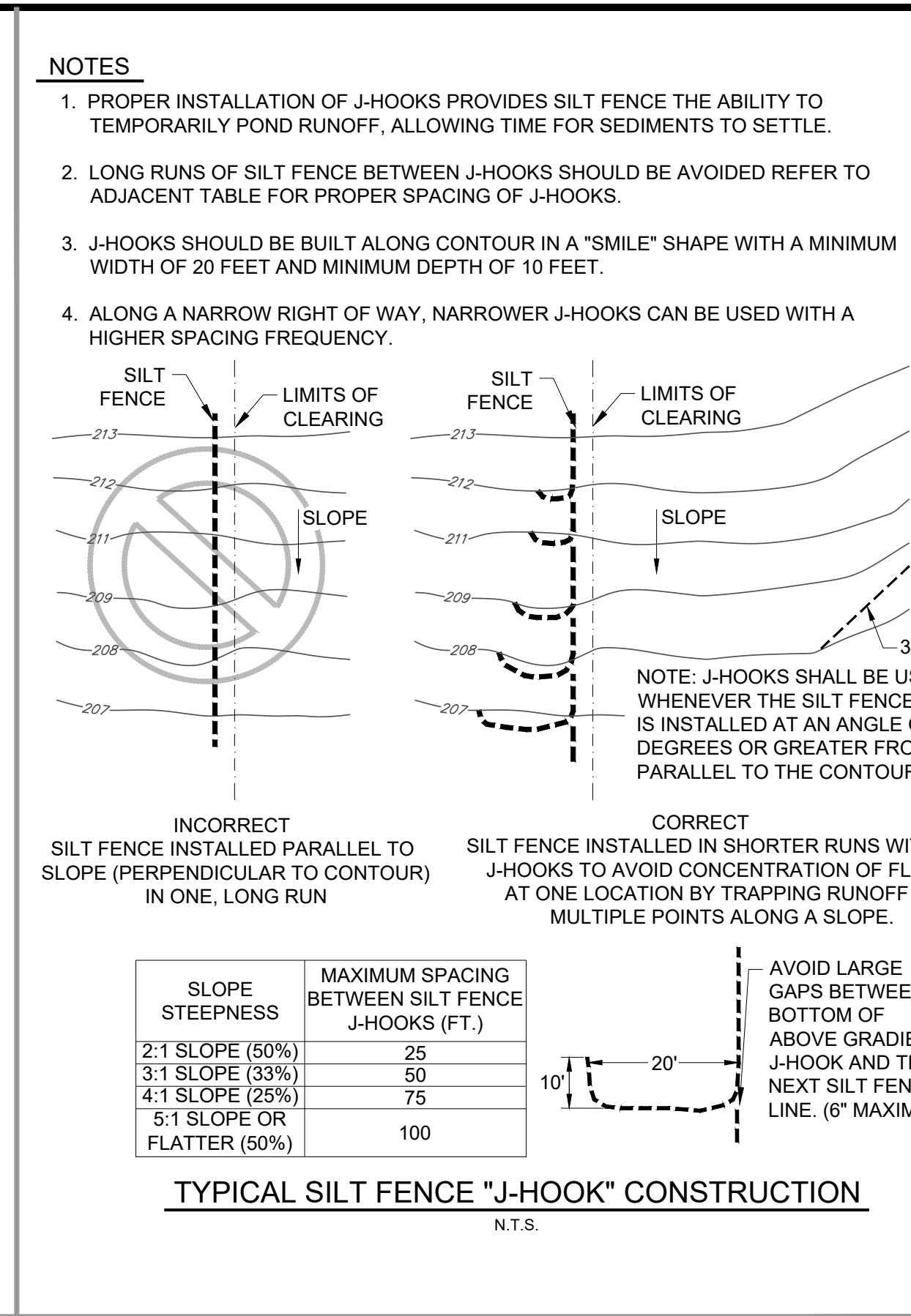
PERMANENT SEED MIX SHALL BE USED AS EARLY AS PRACTICABLE BETWEEN 5/15 AND 9/15 AND SHALL MEET THE FOLLOWING CRITERIA:

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:

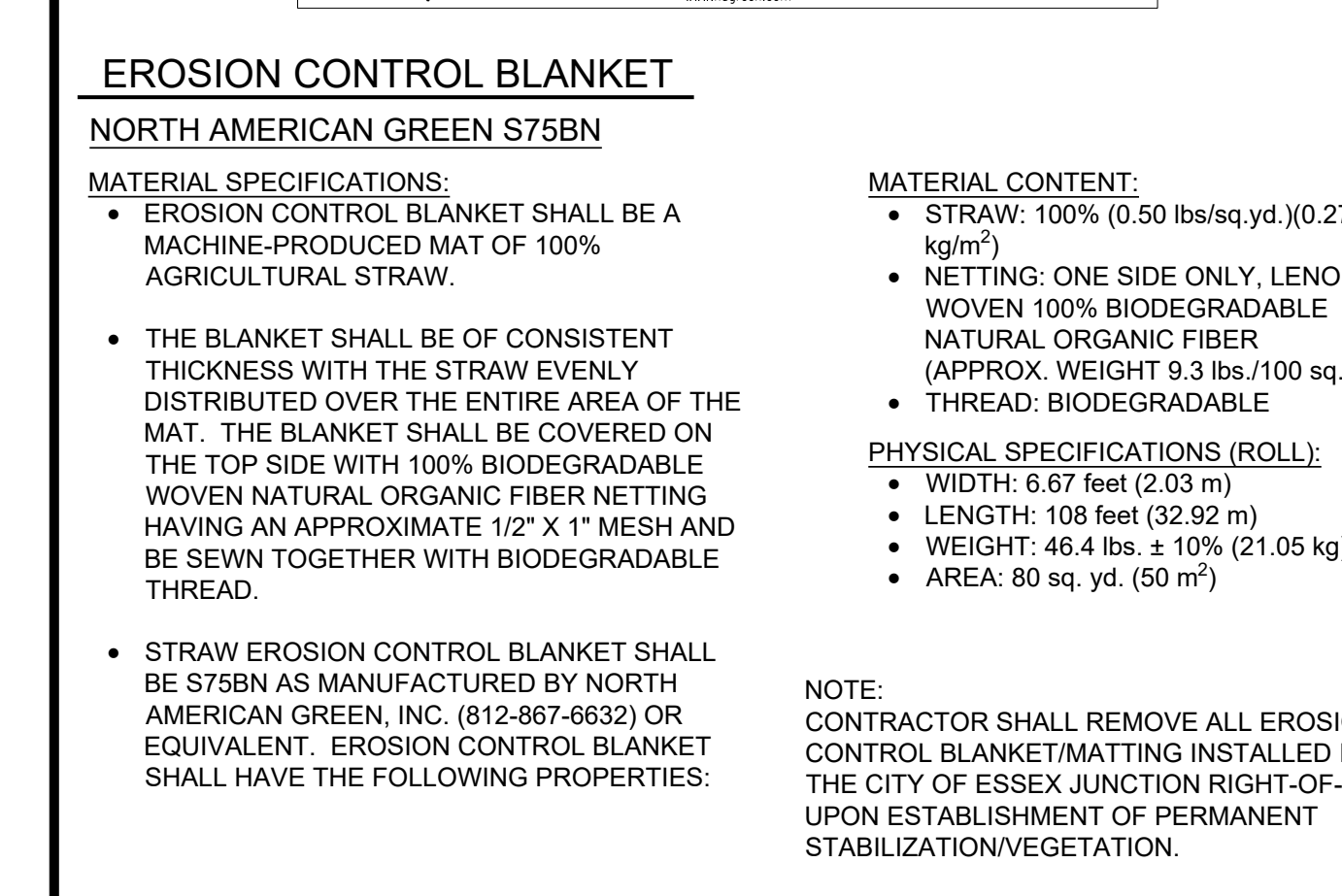
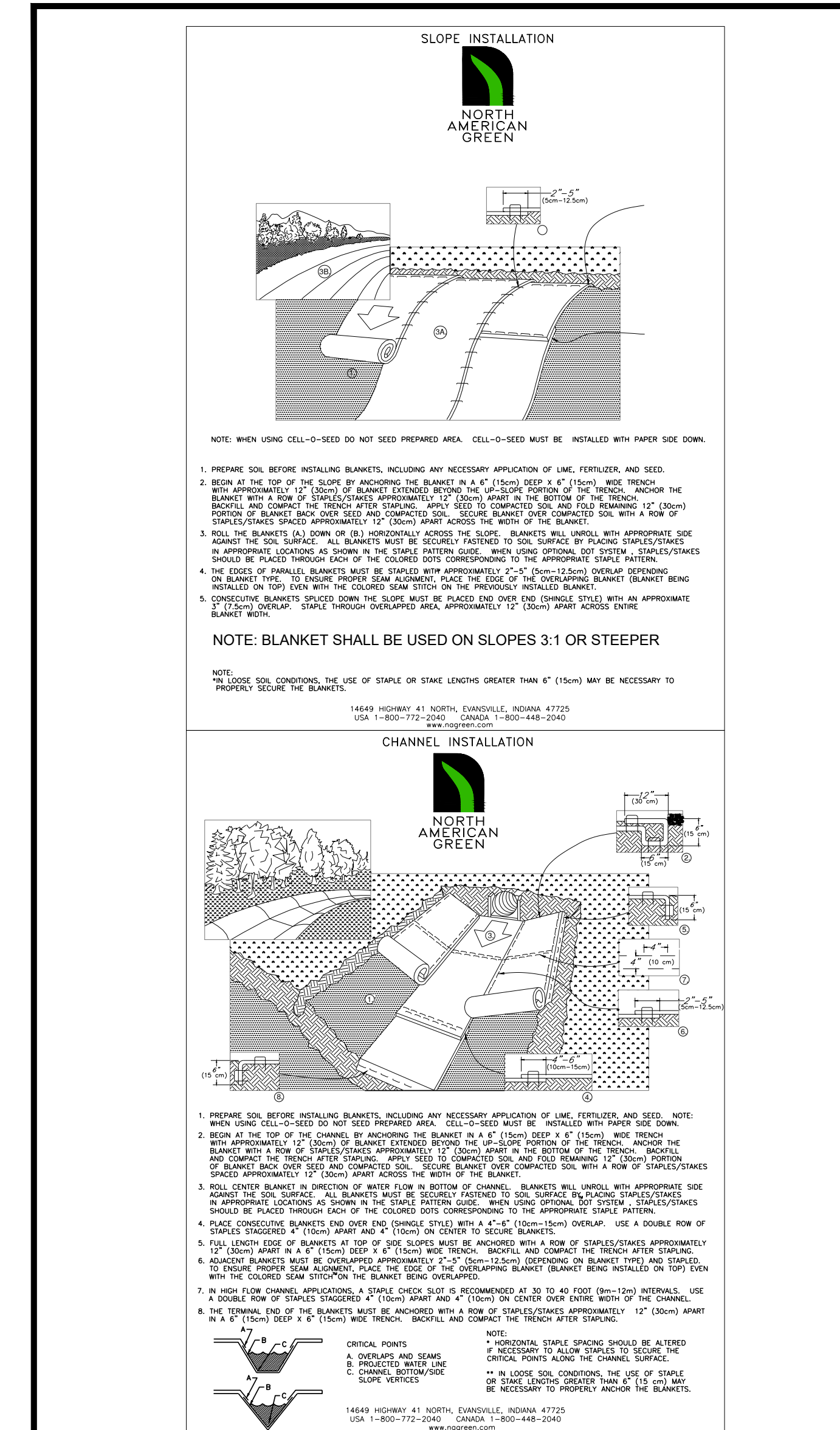
SEED	% WEIGHT	%GERMINATION
WINTER RYE	80% MIN.	85% MIN.
RED FESCUE (CREEPING)	4% MIN.	80% MIN.
PERENNIAL RYE GRASS	3% MIN.	90% MIN.
RED CLOVER	3% MIN.	90% MIN.
OTHER CROP GRASS	0.5% MAX.	
NOXIOUS WEED SEED	0.5% MAX.	
INERT MATTER	1% MAX.	

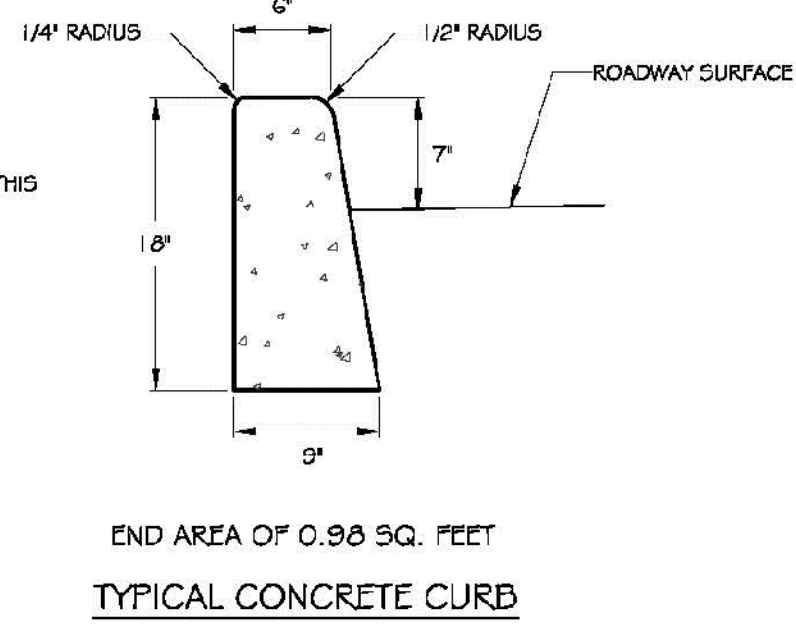
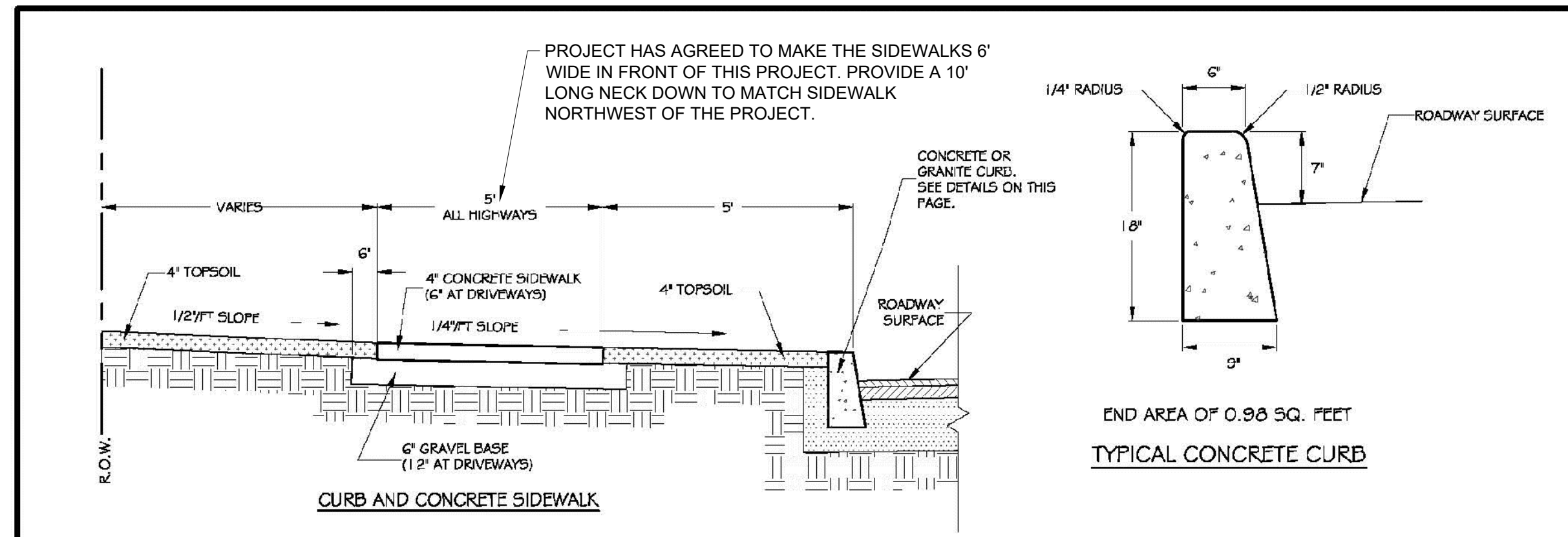
SEEDING SPECIFICATIONS



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



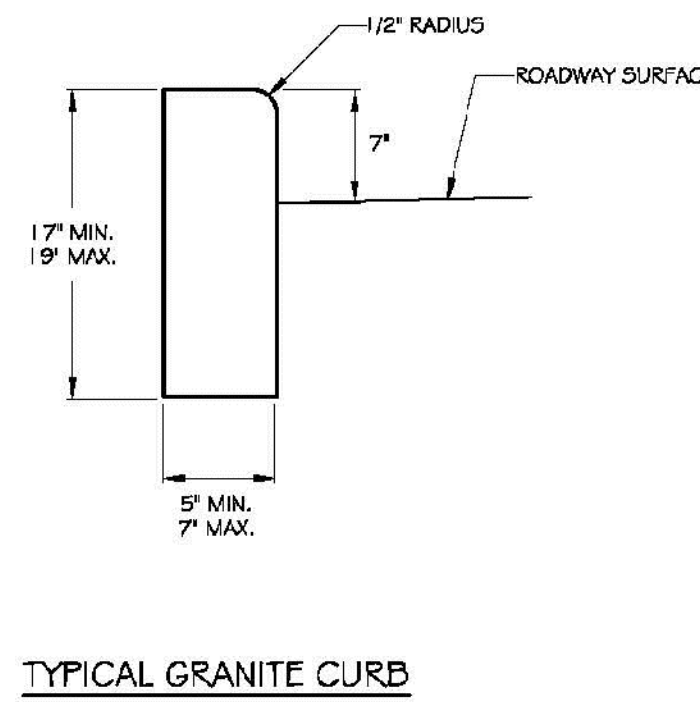


1. ALL CURB RADII LESS THAN 200' SHALL BE FORMED USING FLEXIBLE FORMS.
2. CURB REVEAL AT DRIVEWAYS SHALL BE 1" MAX. AND 1/4" MAX. AT HANDICAP ACCESS RAMPS.
3. CURBING SHALL BE CONSTRUCTED IN 10 FOOT SECTIONS WITH 1/8" JOINTS BETWEEN SECTIONS.
4. SIDEWALK SHALL BE CAST IN 100' SECTIONS WITH NO EXPANSION 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-VEK 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.



**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 COPIES OF ATTENDANCE COURSE CERTIFICATION TO THE CITY OF ESSEX JUNCTION AND THE STATE OF VERMONT (IF NEEDED).
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 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.

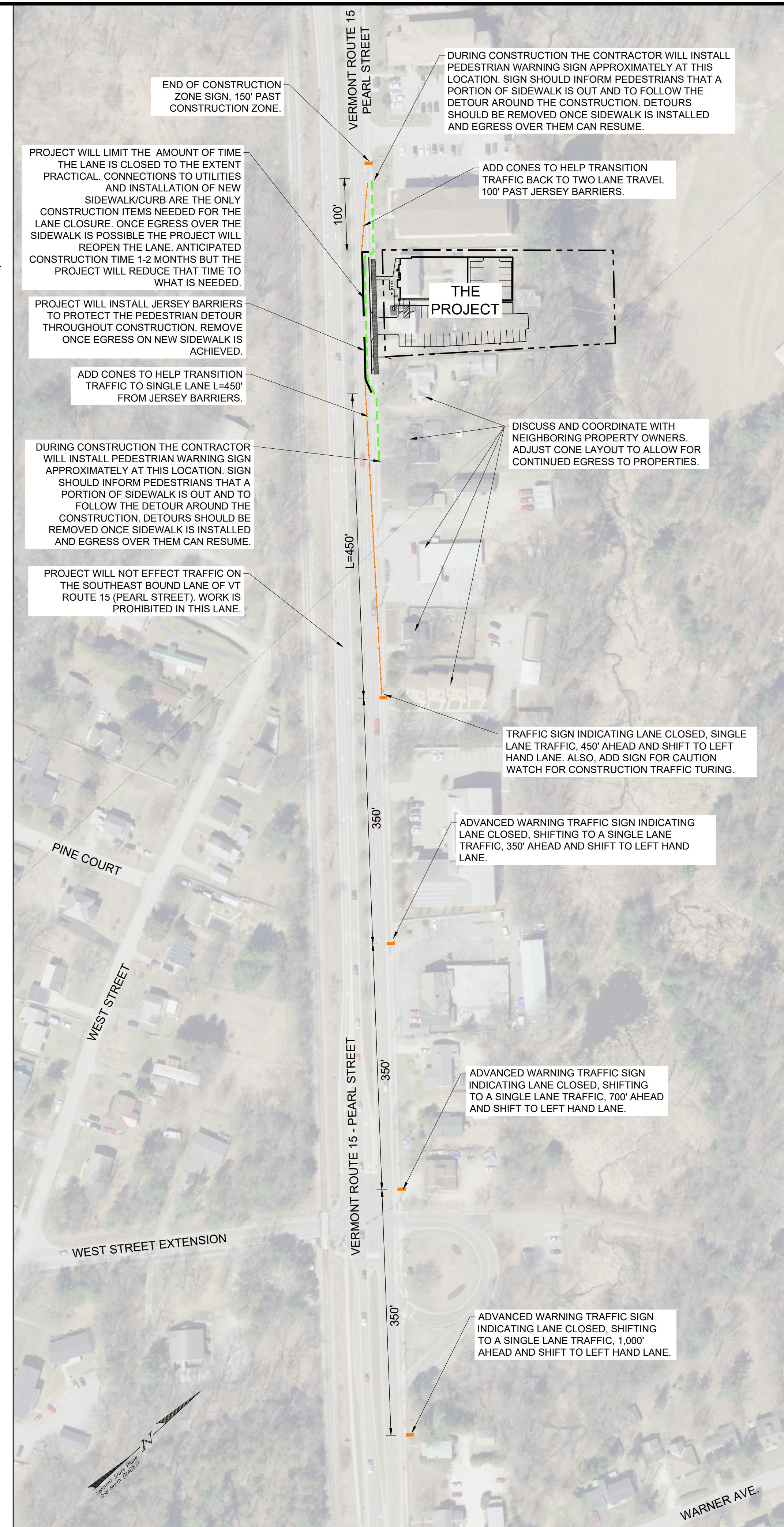
IF ADDITIONAL FLAGGING AND TRAFFIC MITIGATION IS NEEDED WITHIN THE R.O.W. WHICH IS NOT PERMANENTLY CLOSED, THE WORK WILL BE PERFORMED BETWEEN THE HOURS OF 9AM AND 3PM, OR AT NIGHT. THIS IS TO AVOID FURTHER LANE CLOSURE DURING THE RUSH HOUR TIMES.

ADDITIONAL NOTES

1. POSTED SPEED LIMIT = 45 MPH.
2. FIELD CONDITIONS SHALL DICTATE THE ACTUAL SIGN PLACEMENT.
3. USE "TRUCKS ENTERING" WARNING SIGNS FOR APPROACH INSTALLED 500' IN ADVANCE OF ACCESS DRIVE WHEN TRUCK ACTIVITY IS AT A MINIMUM.
4. CALCULATION OF TAPER LENGTH L IN FEET.
 - $L = W \times S$
 - W = WIDTH OF OFFSET IN FEET
 - S = SPEED LIMIT
 - $L = 10' \times 45 \text{ MPH} = 450'$
5. MINIMUM DISTANCE BETWEEN ADVANCED WARNING SIGNS BASED ON URBAN HIGH SPEED, 350' BETWEEN SIGNS.
6. 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.

**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 ERRECTED 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 ERRECTED 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, DEFACED 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.



SCHEMATIC TRAFFIC PLAN
SCALE: 1" = 100'

**SUNDERLAND
APARTMENTS**

227 Pearl Street
City of Essex Junction, Vermont



**ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION**

APPLICANT AND OWNER:

Handy Hotels & Rentals LLC
c/o Gabe Handy
197 Pearl Street, Suite 100
Essex Junction, 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
Setback:
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.	Changes to match Architect and Landscape Architect. Revisions from City Staff and Engineer.	5/29/24

DRAWING TITLE:

DETAILS

DATE ISSUED: 05/06/24

DRAWN BY: GTD CHECKED BY: GTD

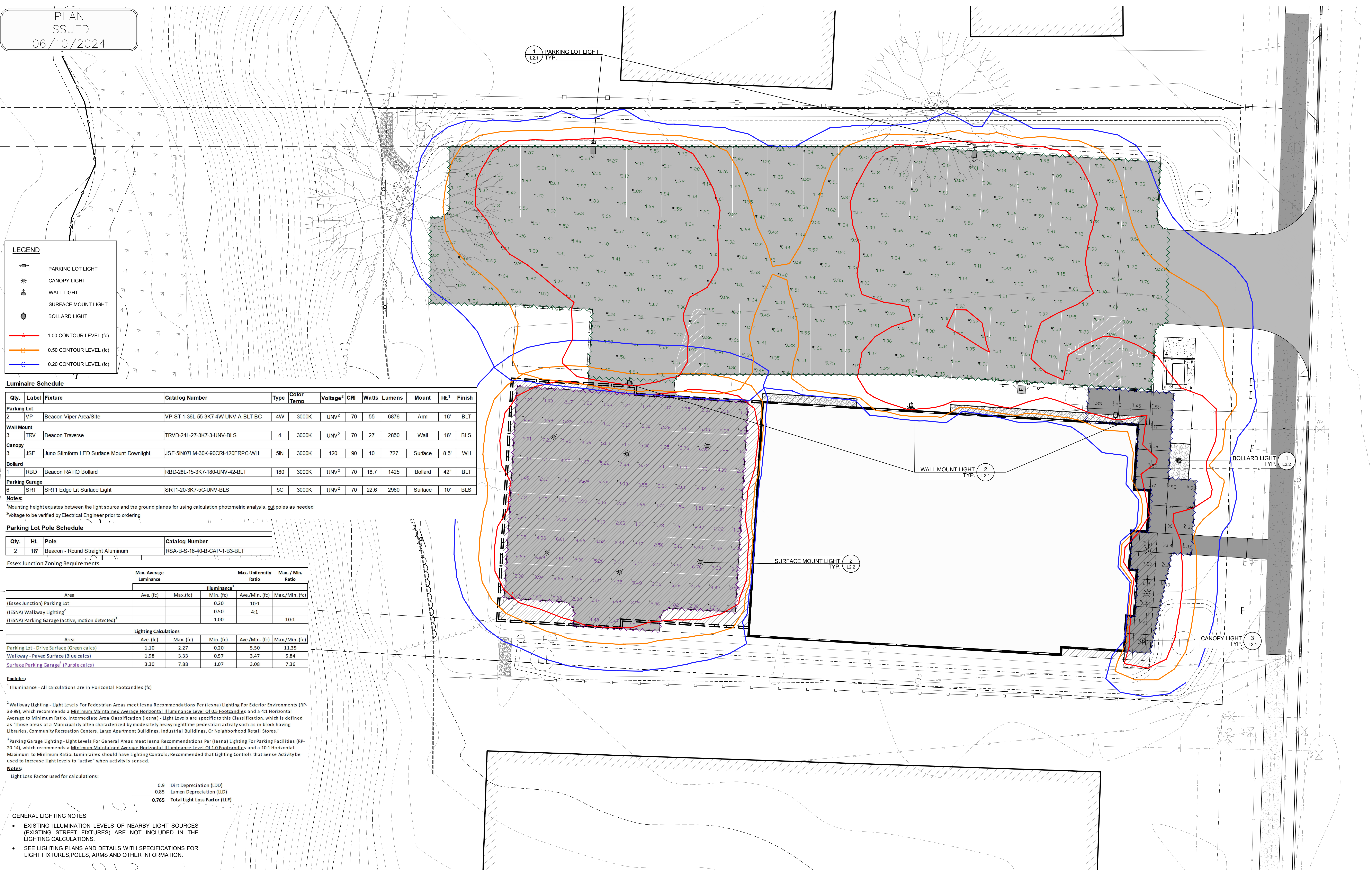
PROJECT NO.: 23288 SCALE: N/A

DRAWING NO.: REV. NO.:

C-2.05

1

PLAN
ISSUED
06/10/2024



LEGEND

- PARKING LOT LIGHT
- CANOPY LIGHT
- WALL LIGHT
- SURFACE MOUNT LIGHT
- BOLLARD LIGHT
- 1.00 CONTOUR LEVEL (fc)
- 0.50 CONTOUR LEVEL (fc)
- 0.20 CONTOUR LEVEL (fc)

Luminaire Schedule

Qty.	Label	Fixture	Catalog Number	Type	Color Temp	Voltage ²	CRI	Watts	Lumens	Mount	Ht. ¹	Finish
Parking Lot												
2	VP	Beacon Viper Area/Site	VP-ST-1-36L-55-3K7-4W-UNV-A-BLT-BC	4W	3000K	UNV ²	70	55	6876	Arm	16'	BLT
Wall Mount												
3	TRV	Beacon Traverse	TRVD-24L-27-3K7-3-UNV-BLS	4	3000K	UNV ²	70	27	2850	Wall	16'	BLS
Canopy												
3	JSF	Juno Slimform LED Surface Mount Downlight	JSF-5IN07LM-30K-90CRI-120FRPC-WH	5IN	3000K	120	90	10	727	Surface	8.5'	WH
Bollard												
1	RBD	Beacon RATIO Bollard	RBD-28L-15-3K7-180-UNV-42-BLT	180	3000K	UNV ²	70	18.7	1425	Bollard	42"	BLT
Parking Garage												
6	SRT	SRT1 Edge Lit Surface Light	SRT1-20-3K7-5C-UNV-BLS	5C	3000K	UNV ²	70	22.6	2960	Surface	10'	BLS

Notes:
¹Mounting height equates between the light source and the ground planes for using calculation photometric analysis, cut poles as needed
²Voltage to be verified by Electrical Engineer prior to ordering

Parking Lot Pole Schedule

Qty.	Ht.	Pole	Catalog Number
2	16'	Beacon - Round Straight Aluminum	RSA-B-S-16-40-B-CAP-1-B3-BLT

Essex Junction Zoning Requirements

Area	Max. Average Luminance		Max. Uniformity Ratio		Max. / Min. Ratio
	Ave. (fc)	Max. (fc)	Min. (fc)	Ave./Min. (fc)	Max./Min. (fc)
(Essex Junction) Parking Lot			0.20	10:1	
(IESNA) Walkway Lighting ²			0.50	4:1	
(IESNA) Parking Garage (active, motion detected) ³			1.00		10:1

Area	Lighting Calculations		Ave./Min. (fc)		Max./Min. (fc)
	Ave. (fc)	Max. (fc)	Min. (fc)	Ave./Min. (fc)	Max./Min. (fc)
Parking Lot - Drive Surface (Green calcs)	1.10	2.27	0.20	5.50	11.35
Walkway - Paved Surface (Blue calcs)	1.98	3.33	0.57	3.47	5.84
Surface Parking Garage ³ (Purple calcs)	3.30	7.88	1.07	3.08	7.36

Footnotes:
¹ Illuminance - All calculations are in Horizontal Footcandles (fc)
² Walkway Lighting - Light Levels For Pedestrian Areas meet Iesna Recommendations Per (Iesna) Lighting For Exterior Environments (RP-33-99), which recommends a **Minimum Maintained Average Horizontal Illuminance Level Of 0.5 Footcandles** and a 4:1 Horizontal Average to Minimum Ratio. **Intermediate Area Classification (Iesna)** - Light Levels are specific to this Classification, which is defined as "Those areas of a Municipality often characterized by moderately heavy nighttime pedestrian activity such as in block having Libraries, Community Recreation Centers, Large Apartment Buildings, Industrial Buildings, Or Neighborhood Retail Stores."
³ Parking Garage Lighting - Light Levels For General Areas meet Iesna Recommendations Per (Iesna) Lighting For Parking Facilities (RP-20-14), which recommends a **Minimum Maintained Average Horizontal Illuminance Level Of 1.0 Footcandles** and a 10:1 Horizontal Maximum to Minimum Ratio. Luminaires should have Lighting Controls; Recommended that Lighting Controls that Sense Activity be used to increase light levels to "active" when activity is sensed.
Notes:
 Light Loss Factor used for calculations:
 0.9 Dirt Depreciation (LDD)
 0.85 Lumen Depreciation (LD)
0.765 Total Light Loss Factor (LLF)

GENERAL LIGHTING NOTES:

- EXISTING ILLUMINATION LEVELS OF NEARBY LIGHT SOURCES (EXISTING STREET FIXTURES) ARE NOT INCLUDED IN THE LIGHTING CALCULATIONS.
- SEE LIGHTING PLANS AND DETAILS WITH SPECIFICATIONS FOR LIGHT FIXTURES, POLES, ARMS AND OTHER INFORMATION.

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

ORDERING GUIDE

Example: SRT1-35-3K7-5QW-UNV-BLT-WG

Series	Engine	CCT	Distribution	Voltage	Color/Finish	Options
SRT1 Edge-Lit Parking Garage Size 1	15 5W Nominal 2000 lm 3K7 3000K 70 CR	5QW Type 5 Square Wide	UNV 120V 277V	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte DBS Dark Bronze Glass Smooth GTT Granite Matte Textured LGS Light Grey Gloss Smooth PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VGT Verde Green Textured CC Custom Colors	WG Wire Guard UD Uplight Module ¹ F Single Flush 120/277V LD3 30° Lead Length ² LD6 72° Lead Length ² LD9 108° Lead Length ² SPROK 12kV Surge Protection ³ LMB Level Mounting Bracket	
20 20W Nominal 2000 lm Size 2	3K3 3000K 80 CR	5QW Concentrated	120 120V 208 208V 240 240V 277 277V	OTT LGS PSS WHT WHS VGT CC		
35 35W Nominal 4500 lm	3K8 3000K 80 CR 4K7 4000K 70 CR 4K8 4000K 80 CR 5K7 5000K 70 CR					
55 55W Nominal 6500 lm						

Accessories (Order Separately)

<input type="checkbox"/> SRT1-WG	Wire Guard
<input type="checkbox"/> SRT1-MB	Mounting bracket for pre-installation
<input type="checkbox"/> SRT1-B5-XXX	Bed detent shroud for SRT1 version, not available with uplight
<input type="checkbox"/> SCP-REMOTE	Remote control for SCP option, order at least one per project to program and control
<input type="checkbox"/> CLEDSIK	Whiteway stem and junction box

Notes:
 1 Must specify voltage
 2 Standard wire lead length 24"
 3 SPROK, 4K and 5K not available with uplight
 4 120V or 277V only

PERFORMANCE DATA

Nominal Watts	Nominal Lumens	Distribution	5K (5000K NOMINAL 70 CR)				4K (4000K NOMINAL 70 CR)				3K (3000K NOMINAL 70 CR)							
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	
15	2500	5QW	5C	2470	148.61	1	0	1	2459	145.91	1	0	1	2364	140.30	1	0	1
			5G	2378	141.15	1	0	1	2367	140.48	1	0	1	2276	135.07	1	0	1
			5C	3093	138.86	1	0	1	3078	136.21	1	0	1	2960	130.97	1	0	1
20	3000	5QW	5C	2974	131.60	1	0	1	2960	130.97	1	0	1	2846	125.63	1	0	1
			5C	4757	131.05	2	0	1	4734	130.42	2	0	1	4552	125.41	2	0	1
			5G	4574	126.01	2	0	1	4552	125.41	2	0	1	4377	120.58	2	0	1
35	4500	5QW	5C	6884	127.13	2	0	1	6782	126.52	2	0	1	6521	121.66	2	0	1
			5C	6562	122.24	3	0	1	6521	121.66	3	0	1	6270	116.98	3	0	1

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

FEATURES

- For ceiling mount and parking garage applications from an 8-15 foot mounting height
- Edge-lit flat lens for optimal visual comfort and uniformity across the lens
- Two optical distributions specifically design for parking garage and canopy applications are available making the Beacon Edge-Lit luminaires both versatile and functional
- UL/cUL listed for wet locations, IP65 and 3G vibration rated
- Occupancy sensor available for complete on/off and dimming operation



CONTROL TECHNOLOGY

DLC LISTED PREMIUM C US **IP65**

Weight
SRT1 8 lbs / 3.6 kg

SPECIFICATIONS

- HOUSING**
- Die-cast aluminum housing ensures long electrical component life and luminaire performance
 - Corrosion resistant powder coat finish both protects and provides architectural appearance
 - One piece molded silicone gasket ensures weather proof seal
- INSTALLATION**
- Standard quick mount plate over standard 4" junction box or octagonal junction box and allows for simplified future installation and reliability
 - Standard luminaire accepts a rigid or 3/4" NPT stem for pendant mounting via wet location j-box (by others)
 - Optional bird deterrent shroud available for field installation
- OPTIONS/CONTROLS**
- Standalone occupancy sensor available for on/off or dimming operation
 - Uplight option provides approximately 800 lumens and consumes only 8 additional watts
 - Vandal resistant wire guard available as an option for factory installation or as an accessory for field installation
 - Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- ELECTRICAL**
- 120V-277V 50/60Hz available
 - 0-10V dimming drivers are RoHS compliant
 - Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 24" standard
- CERTIFICATIONS**
- Listed to UL1598 for use in wet location, listed for -40°C to 40°C applications
 - IDA approved with zero uplight for 3000K and warmer CCTs
 - DLC* (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
 - IP65
- WARRANTY**
- 5 year warranty

QTY: 6

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

ORDERING GUIDE

Example: RBD-56L-30-360-42-4K7-UNV-DBT

Model	# LEDs	Wattage	CCT/CR	Distribution	Voltage	Height
RBD Ratio Bollard	14L-7	750 lumens	3K7 3000K/70 CR	90 90 Degree Beam	UNV Universal 120-277V	24 24" High
	28L-15	1500 lumens	4K7 4000K/70 CR	180 180 Degree Adjacent Beam	120 DOV	30 30" High
			5K7 5000K/70 CR	180 180 Degree Opposing Beam	208 208V	36 36" High
	42L-23	2250 lumens		270 270 Degree Beam	240 240V	42 42" High
	56L-30	3000 lumens		360 360 Degree Beam	347 347V	48 48" High

Color

BLE Black Matte Textured
 DBT Dark Bronze Matte Textured
 GTT Granite Matte Textured
 LGS Light Grey Gloss Smooth
 PSS Platinum Silver Smooth
 WHT White Matte Textured
 VGT Verde Green Textured
 LEG Legacy Colors
 CC Custom Color

Options

F Flushing locally voltage
 PC Photocast

Color Option
 CC Custom Color

ACCESSORIES AND REPLACEMENT PARTS (ORDERED SEPARATELY)

Catalog Number	Description
RBD-MP	Ratio Bollard Mounting Plate

PERFORMANCE DATA

Series	Nominal Watts	System Watts	5K (5000K nominal, 70 CR)		4K (4000K nominal, 70 CR)		3K (3000K nominal, 70 CR)	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
RBD	14L-7	9.4	723	76.9	719	76.5	687	73.1
	28L-15	18.7	1500	80.2	1493	79.8	1425	76.2
	42L-23	27.2	2206	81.1	2195	80.7	2096	77.0
	56L-30	33.9	2778	81.9	2764	81.5	2639	77.8

1 Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of field environment and application.

1 BOLLARD LIGHT FIXTURE (RBD) SPEC SHEET, NTS

QTY: 1

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

FEATURES

- Rectilinear Bollard luminaire to match the Ratio Area, Flood and Wall product lines
- Includes a variety of distributions in 90° increments for lighting applications such as parks, schools, retail, and corporate campuses
- Available in 24", 30", 36" and 42" heights
- Options including button photo control and fusing
- Full cut-off luminaire produces no light above 90 degrees which makes all configurations UL0.



CONTROL TECHNOLOGY

DLC LISTED PREMIUM C US **IP65**

SPECIFICATIONS

- CONSTRUCTION**
- Luminaire consists of die-cast aluminum top housing and baseplate with extruded base that can be customized to 24", 30", 36" and 42" heights
 - Top housing attaches to extruded base with four countersunk screws on two opposing sides of the fixture, leaving two sides with no visible hardware
 - Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
 - External hardware is corrosion resistant
- OPTICS**
- Available in 3000K, 4000K and 5000K CCT at 70 CRI
 - TIR Optical lenses are clear injection molded PMMA acrylic
 - One-piece silicone gasket ensures a weatherproof seal around each optical bezel
 - All configurations are full cut-off with zero up-light from the source
- INSTALLATION**
- Fixture includes a rotatable base plate ideal for placement and aiming of asymmetric light patterns
 - Uses four anchor bolts in a 4" diameter circle for mounting. Anchor bolt template can be found on page 4
 - Unit includes four 1/2" x 10" anchor bolts and cast aluminum 360 alloy mounting plate
- ELECTRICAL**
- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
 - Ambient operating temperature -40°C to 40°C
 - Drivers have greater than 90% power factor and less than 20% THD
 - LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
 - Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3. Automatically takes fixture off-line for protection when device is compromised
 - Complies with FCC 47 CFR Part 18.
- CONTROLS**
- Photo control available for 120-277V applications for on/off control. Photo control is mounted on the side of the extruded housing
 - Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
 - 0-10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard
- CERTIFICATIONS**
- Listed to UL1598 and CSA C22.2 #250.0-24 for wet locations and 40°C ambient temperatures
 - Fixture head is IP65 rated
 - Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
 - This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions
- WARRANTY**
- 5 year limited warranty

KEY DATA

Lumen Range	687-2778
Wattage Range	9-34
Efficacy Range (LPW)	73-82
Weights lbs. (kg)	16-22 (7.3-10)