

RECEIVED
 OCT 25 2013
 PLANNING/ZONING

FINNEY CROSSING

A PLANNED UNIT DEVELOPMENT
 U.S. ROUTE 2, WILLISTON, VERMONT

PHASE 3A & 4A PLAN SET

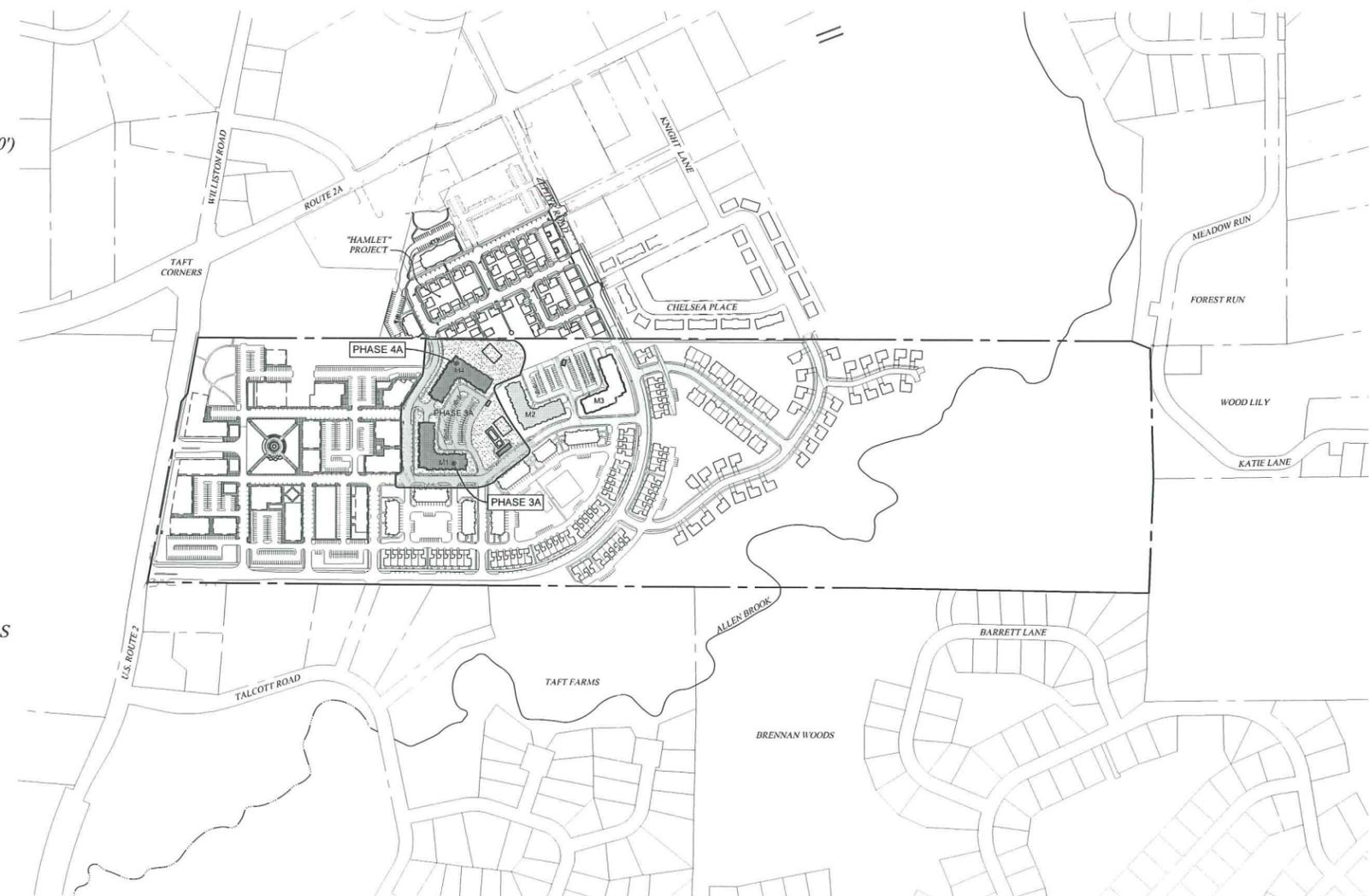


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- PH CONSTRUCTION PHASING PLAN
 - BUILDING M1 CONCEPT ELEVATIONS
 - BUILDING M4 CONCEPT ELEVATIONS
 - DUMPSTER BUILDING

THE FOLLOWING PLANS LISTED BELOW ARE PART OF THE FINNEY CROSSING FINAL PLAN SET, AND SHALL BE USED FOR PHASE 3A & 4A CONSTRUCTION WHERE APPLICABLE:

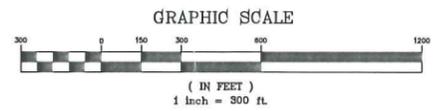
- 5 ZEPHYR ROAD STATION 115+50-126+50
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UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 28 DAY OF JAN 2014

Ken Bulfin
 ADMINISTRATOR'S SIGNATURE



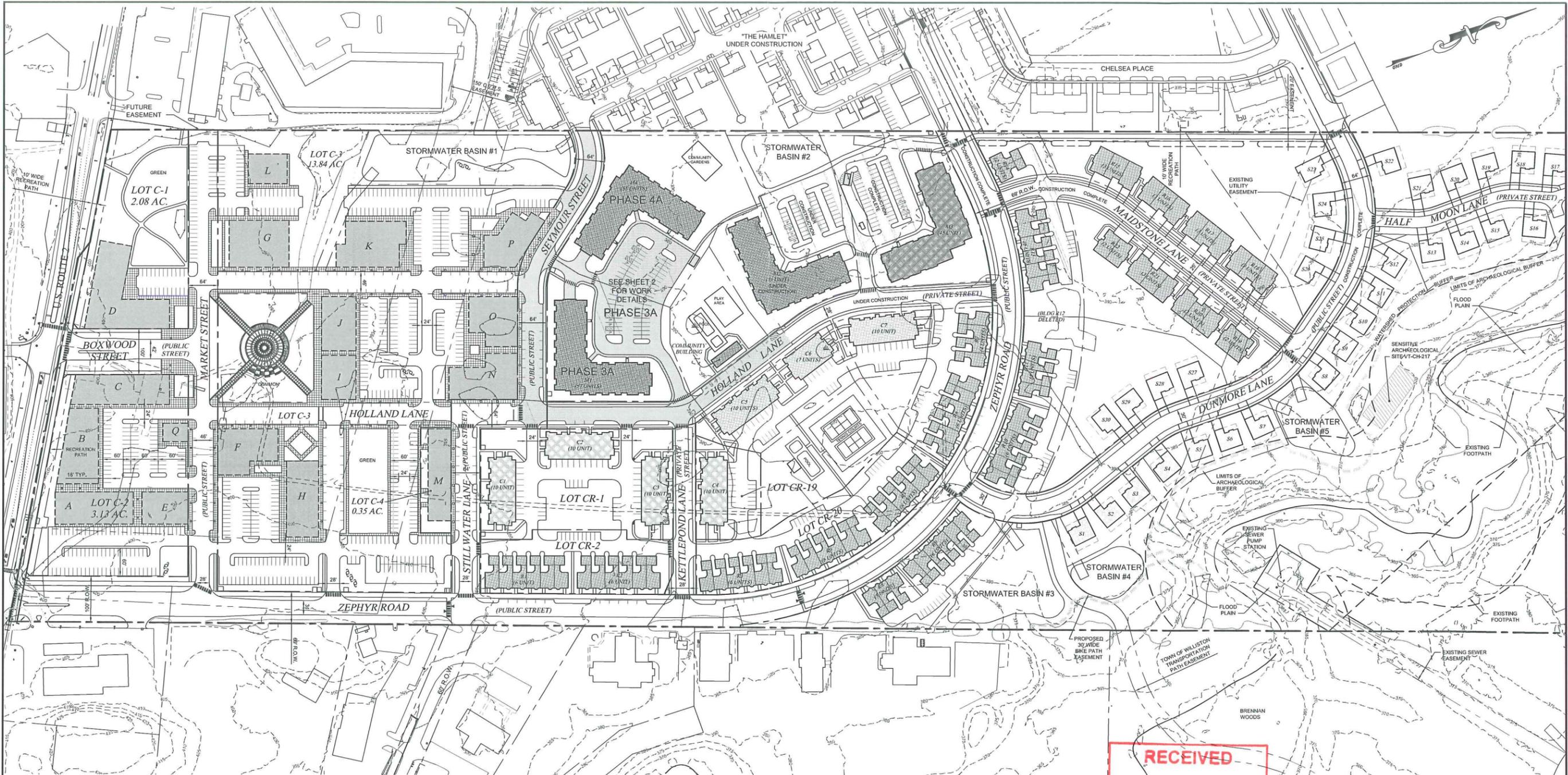
APPLICANT:

THE SNYDER TAFT CORNERS, LLC
 4076 SHELBURNE ROAD
 SUITE 6
 SHELBURNE, VT. 05482

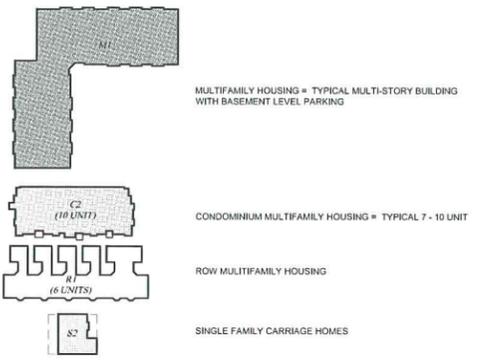
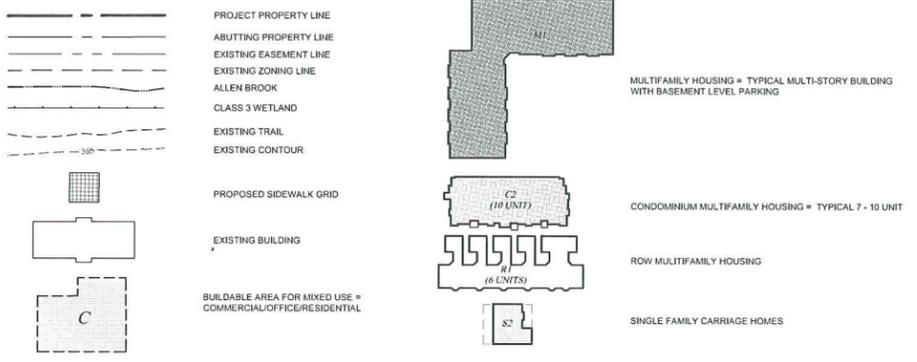
L LAMOUREUX & DICKINSON
 Consulting Engineers, Inc.
 14 Morse Drive
 Essex Junction, VT 05452
 (802) 878-4450

WILLISTON DISCRETIONARY PERMIT #DP-09-01

FINAL PLANS

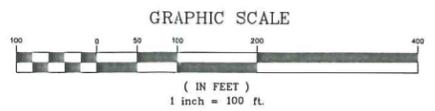


LEGEND



SUMMARY OF RESIDENTIAL UNITS

KEY	DESCRIPTION	TOTAL UNITS
M1-M4	MULTI-STORY BUILDING WITH BASEMENT LEVEL GARAGE	216 UNITS
C1-C7	MULTI-FAMILY FLATS WITH ONE CAR GARAGE	67 UNITS
R1-R14	MULTI-FAMILY ROWHOMES (2 CAR GARAGE)	67 UNITS
R15-R22	MULTI-FAMILY TOWNHOUSES (2 CAR GARAGE)	22 UNITS
S1-S30	SINGLE FAMILY CARRIAGE HOMES (2 CAR GARAGE)	30 UNITS
TOTAL =		402 UNITS



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Kan Bellis
ADMINISTRATOR'S SIGNATURE

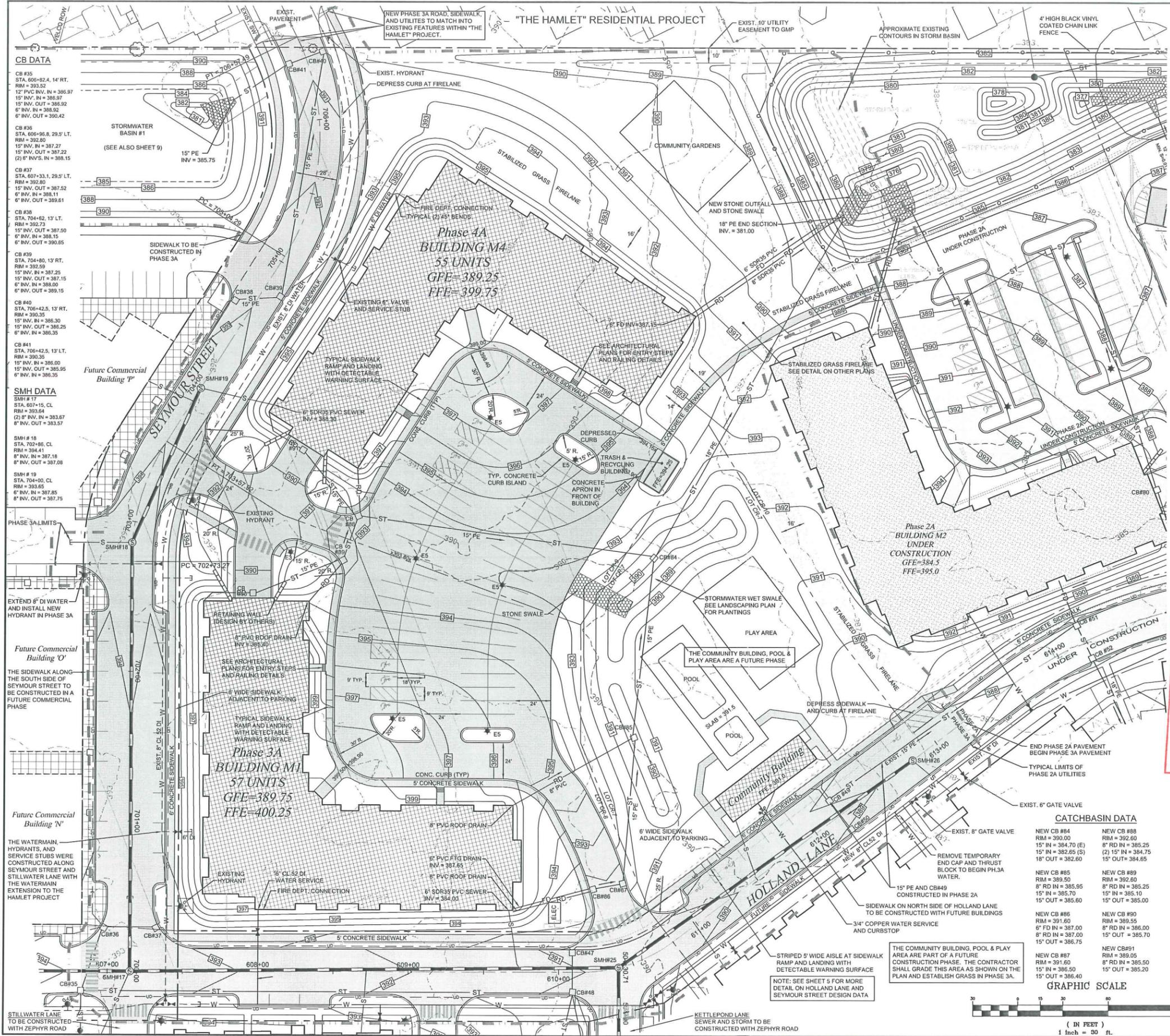
FINAL PLANS

07-23-13	REVISE BLDG M1 / M4 AND PARKING LAYOUT	ABR
REVISIONS		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
<input type="checkbox"/>	SKETCH/CONCEPT	
<input type="checkbox"/>	PRELIMINARY	
<input checked="" type="checkbox"/>	FINAL	
<input type="checkbox"/>	RECORD DRAWING	
FINNEY CROSSING A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT		proj. no. 01-087 survey L&D design DJG/ABR drawn L&D checked DJG/ABR date 06/06/13 scale 1" = 100' sht. no. 1
DEVELOPMENT AREA SITE PLAN PHASE 3A & 4A		
LAMOUREUX & DICKINSON Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450		

WILLISTON DISCRETIONARY PERMIT DP-09-01
TAX PARCEL # 08104010, 08143502, 004, & 010

"THE HAMLET" RESIDENTIAL PROJECT

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



LIGHTING SPECIFICATIONS				
LEGEND	DESCRIPTION	LAMP TYPE	DISTRIBUTION TYPE	MOUNTING HEIGHT
E3	BETA EDGE LED AREA LIGHT	60 LED, 6000K COLOR TEMP.	TYPE III - CUTOFF	16 FEET POLE MOUNTED
E5	BETA EDGE LED AREA LIGHT	100 LED, 6000K COLOR TEMP.	TYPE V - CUTOFF	24 FEET POLE MOUNTED

CB DATA

CB #35
STA. 606+82.4, 14' RT.
RIM = 393.52
12" PVC INV. IN = 395.97
15" INV. IN = 386.97
15" INV. OUT = 385.92
6" INV. IN = 388.92
6" INV. OUT = 390.42

CB #36
STA. 606+96.8, 29.5' LT.
RIM = 392.80
15" INV. IN = 387.27
15" INV. OUT = 387.22
(2) 6" INVS. IN = 388.15

CB #37
STA. 607+33.1, 29.5' LT.
RIM = 392.80
15" INV. IN = 387.52
6" INV. IN = 385.11
6" INV. OUT = 389.61

CB #38
STA. 704+62, 13' RT.
RIM = 392.73
15" INV. IN = 387.50
6" INV. IN = 385.15
6" INV. OUT = 390.85

CB #39
STA. 704+80, 13' RT.
RIM = 392.50
15" INV. IN = 387.25
15" INV. OUT = 387.15
6" INV. IN = 385.00
6" INV. OUT = 389.15

CB #40
STA. 705+42.5, 13' RT.
RIM = 390.35
15" INV. IN = 386.30
15" INV. OUT = 386.25
6" INV. IN = 386.35

CB #41
STA. 706+42.5, 13' LT.
RIM = 390.35
15" INV. IN = 386.00
15" INV. OUT = 385.95
6" INV. IN = 386.35

SMH DATA

SMH #17
STA. 607+15, CL
RIM = 393.64
(2) 6" INV. IN = 393.67
6" INV. OUT = 383.57

SMH #18
STA. 702+85, CL
RIM = 394.41
6" INV. IN = 387.18
6" INV. OUT = 387.08

SMH #19
STA. 704+00, CL
RIM = 393.65
6" INV. IN = 387.85
6" INV. OUT = 387.75

PROJECT DATA:

ZONING DISTRICT: TAFT CORNERS ZONING DISTRICT

PHASE 3A: PARCEL CR-8 AREA = 1.83 ACRES (BLDG. M1)
PHASE 4A: PARCEL CR-9 AREA = 2.41 ACRES (BLDG. M4)
FUTURE PHASE: PARCEL CR-7 AREA = 0.85 ACRES (COMMUNITY BLDG.)

PHASE 3A & 4A PARKING DATA - BUILDINGS M1 & M4

REQUIRED PARKING = 196 SPACES
BUILDING M1: 1.75 SPACES PER MULTI-FAMILY UNIT X 55 UNITS = 96 SPACES
BUILDING M4: 1.75 SPACES PER MULTI-FAMILY UNIT X 57 UNITS = 100 SPACES

PROPOSED TOTAL PARKING SPACES = 196 SPACES
PROPOSED EXTERIOR SURFACE PARKING SPACES = 80 SPACES
PROPOSED INTERIOR GARAGE SPACES = 116 SPACES
(58 SPACES WILL BE PROVIDED IN EACH GARAGE, INCLUDING TWO ACCESSIBLE SPACES IN EACH GARAGE)
THE BYLAW REQUIRES 11 ACCESSIBLE SPACES, 11 ACCESSIBLE SPACES ARE PROVIDED (7 EXTERIOR AND 2 SPACES IN EACH GARAGE)

PARKING LOT LANDSCAPING (UNIFIED DEVELOPMENT BYLAW 23.5.1)
- LANDSCAPED ISLANDS OR MEDIANS SHALL OCCUPY A MIN. OF 5% OF PARKING AREA
- LANDSCAPED ISLANDS = 5.4% (2050 SF ISLANDS) / 38,000 SF PARKING AREA

BICYCLE PARKING:
BICYCLE PARKING AND STORAGE SPACE TO BE PROVIDED IN EACH GARAGE.

TOTAL REQUIRED BICYCLE PARKING = 20 SPACES (10% OF VEHICULAR)
19 BICYCLE SPACES - BUILDING M1 (IN GARAGES)
10 BICYCLE SPACES - BUILDING M4 (IN GARAGE)

LONG TERM BICYCLE PARKING = 28 SPACES (0.25 SPACES/UNIT)
14 BICYCLE SPACES - BUILDING M1
14 BICYCLE SPACES - BUILDING M4

- NOTES:**
- COORDINATE THE HORIZONTAL LOCATION OF THE WATER, SEWER, FOOTING DRAIN, AND ROOF DRAIN SERVICE CONNECTIONS TO EACH BUILDING WITH THE OWNER AND ARCHITECTURAL PLANS.
 - PRIOR TO CONSTRUCTION, THE ELEVATIONS OF THE SEWER, FOOTING DRAIN, AND ROOF DRAIN SERVICES FROM THE ARCHITECTURAL PLANS SHALL BE COMPARED TO THE ELEVATION OF THE COLLECTION MAINS AND SERVICES SHOWN ON THESE PLANS. REPORT ANY DISCREPANCIES TO THE ENGINEER.
 - COORDINATE THE LOCATION OF THE SIDEWALK ENTRANCES TO EACH BUILDING WITH THE OWNER. UNLESS STEPS ARE PROPOSED, THE MAXIMUM SLOPE ON ANY SIDEWALK IS 5%.
 - DETECTABLE WARNING STRIPS SHALL BE INSTALLED AT ALL SIDEWALK AND PAVED PATH RAMP AT CROSSWALKS AND AT ADDITIONAL LOCATIONS NOTED ON THE PLANS. AT PAVED PATHS, DETECTABLE WARNING STRIPS SHALL BE INSTALLED IN CONCRETE.
 - AN ACCESS EASEMENT OF UNDEFINED LOCATION ACROSS PRIVATE STREETS AND / OR DRIVES SHALL BE CONVEYED TO THE TOWN OF WILLISTON FROM THE PUBLIC STREET TO THE STORMWATER BASIN.
 - THE CONTRACTOR SHALL PROVIDE STUBS BEYOND PHASE LIMITS FOR FUTURE EXTENSION INTO OTHER PHASES (SEWER, WATER, STORM, UD, ETC.).
 - UTILITY LAYOUTS SHOWN ON THIS PLAN ARE FOR REVIEW PURPOSES ONLY. REFER TO DESIGN DRAWINGS BY EACH RESPECTIVE UTILITY FOR CONSTRUCTION.
 - ALL PIPE SLOPES ARE IN FEET / FEET.

CONSTRUCTION SEQUENCING:

- COMMENCE CONSTRUCTION ON THE REMAINDER OF ZEPHYR ROAD, STILLWATER LANE, AND THE SEWER AND STORM PIPES ON KETTLEPOND LANE.
- COMMENCE CONSTRUCTION ON THE SEGMENT OF HOLLAND LANE AND SEYMOUR STREET SHOWN ON THIS PLAN.
- COMMENCE CONSTRUCTION ON BUILDING M1. A TEMPORARY GRAVEL DRIVE (MIN. 14' WIDE) CONNECTING HOLLAND LANE AND THE HAMLET VIA SEYMOUR STREET SHALL BE IN PLACE PRIOR TO PROCEEDING WITH BUILDING FRAMING.
- ZEPHYR ROAD, STILLWATER LANE, SEYMOUR STREET AND THE SEGMENT OF HOLLAND LANE SHOWN ON THIS PLAN SHALL HAVE BASE COURSE PAVEMENT IN PLACE AND BE OPEN TO PUBLIC TRAFFIC PRIOR TO THE OCCUPANCY OF EITHER BUILDING M1 OR BUILDING M4.

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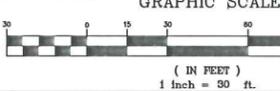
Ken Bull
ADMINISTRATOR'S SIGNATURE

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FINAL PLANS

CATCHBASIN DATA

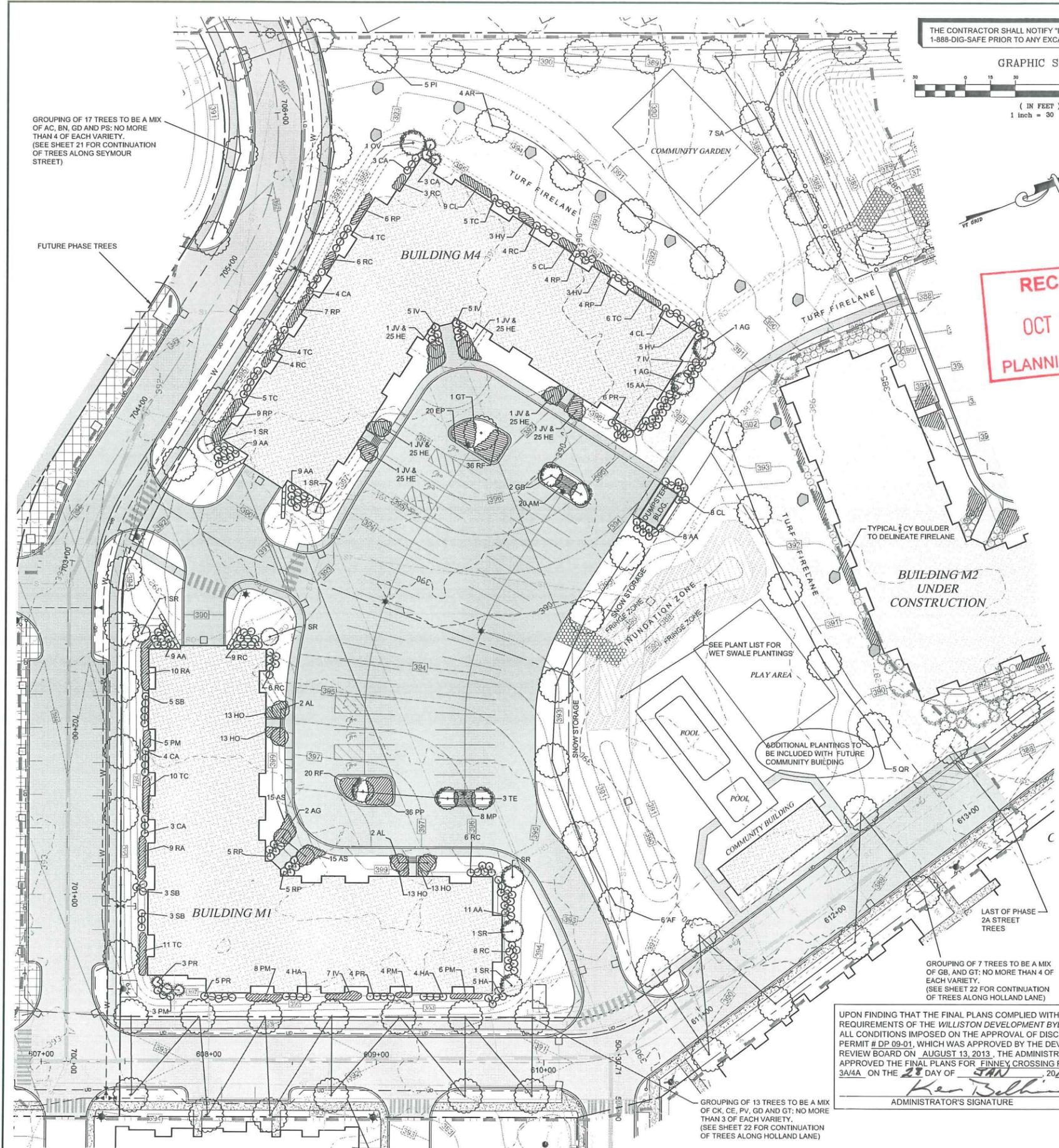
NEW CB #84 RIM = 390.00 15" IN = 384.70 (E) 15" IN = 382.65 (S) 18" OUT = 382.60	NEW CB #88 RIM = 392.60 8" RD IN = 385.25 (2) 15" IN = 384.75 15" OUT = 384.65
NEW CB #85 RIM = 389.50 8" RD IN = 385.95 15" IN = 385.70 15" OUT = 385.60	NEW CB #89 RIM = 392.60 8" RD IN = 385.25 15" IN = 385.10 15" OUT = 385.00
NEW CB #86 RIM = 391.60 8" RD IN = 387.00 15" IN = 386.50 15" OUT = 386.75	NEW CB #90 RIM = 389.05 8" RD IN = 386.00 15" IN = 385.50 15" OUT = 385.70
NEW CB #87 RIM = 391.60 15" IN = 386.50 15" OUT = 386.40	NEW CB #91 RIM = 389.50 8" RD IN = 385.50 15" OUT = 385.20



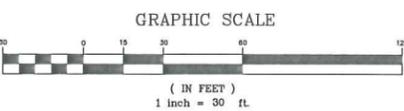
10-17-13	REVISE PARKING LOT ISLANDS, PARKING NOTES	ABR
08-30-13	REVISE STORM POND #1 GRADING	ABR
07-23-13	REVISE BUILDING M1 / M4 AND PARKING LAYOUT	ABR
REVISIONS		
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<input type="checkbox"/>	SKETCH/CONCEPT	# OF SHEETS
<input type="checkbox"/>	PRELIMINARY	
<input checked="" type="checkbox"/>	FINAL	
<input type="checkbox"/>	RECORD DRAWING	
FINNEY CROSSING		proj. no. 01-087
A PLANNED UNIT DEVELOPMENT		survey L&D
WILLISTON, VERMONT		design DUG/ABR
PHASE 3A & 4A SITE PLAN		draw L&D
		checked DUG/ABR
		date 06/06/13
		scale 1" = 30'
		sht. no. 2
		PHASE 3A/4A

LAMOUREUX & DICKINSON
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14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450

WILLISTON DISCRETIONARY PERMIT DP-09-01
TAX PARCEL # 08-106010, 08-1436002, 004, & 010



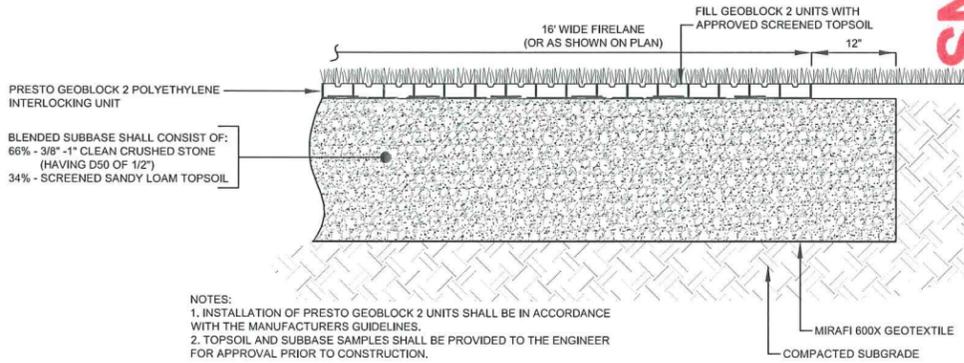
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PLANT LIST

Key	Botanical Name	Common Name	Size	Remarks
Deciduous Trees				
AF	<i>Acer x Freemanii 'Autumn Fantasy'</i>	Freeman Maple	2" to 2 1/2" Cal.	B&B, 6 foot branching height
AG	<i>Ameletier x grandiflora</i>	Apple Serviceberry	2" to 2 1/2" Cal.	B&B, 6 foot branching height
AL	<i>Ameletier lucida</i>	Allegheny Serviceberry	2" to 2 1/2" Cal.	B&B, 6 foot branching height
AR	<i>Acer rubrum 'Autumn Flame'</i>	Red Maple	2" to 2 1/2" Cal.	B&B, 6 foot branching height
BN	<i>Betula nigra 'Heritage'</i>	Heritage River Birch	2" to 2 1/2" Cal.	B&B, 6 foot branching height
CA	<i>Cornus alternifolia</i>	Pagoda Dogwood	2" to 2 1/2" Cal.	B&B, 6 foot branching height
GB	<i>Ginkgo biloba 'Autumn Gold'</i>	Autumn Gold Ginkgo	2 1/2" to 3" Cal.	B&B, 6 foot branching height
GT	<i>Gleditsia triacanthos 'Shademaster'</i>	Honeylocust	2 1/2" to 3" Cal.	B&B, 6 foot branching height
OV	<i>Ostrya virginiana</i>	American Hophornbeam	2 1/2" to 3" Cal.	B&B, 6 foot branching height
PS	<i>Prunus sargentii</i>	Sargent Cherry	2 1/2" to 3" Cal.	B&B, 6 foot branching height
QR	<i>Quercus rubra</i>	Northern Red Oak	2 1/2" to 3" Cal.	B&B, 6 foot branching height
SA	<i>Sorbus aucuparia</i>	European Mountain Ash	2 1/2" to 3" Cal.	B&B, 6 foot branching height
SR	<i>Syringa reticulata 'Ivory Silk'</i>	Japanese Tree Lilac	2" to 2 1/2" Cal.	B&B, 6 foot branching height
TE	<i>Tilia x cuneata</i>	Crimean Linden	2 1/2" to 3" Cal.	B&B, 6 foot branching height
Evergreen Trees				
JV	<i>Juniperus virginiana 'Emerald Sentinel'</i>	Eastern Red Cedar	6' to 7' Height	B&B
PI	<i>Pinus strobus</i>	Eastern White Pine	6' to 7' Height	B&B
TN	<i>Thuja occidentalis 'Nigra'</i>	Dark American Arborvitae	6' to 7' Height	B&B
Deciduous Shrubs				
AA	<i>Aronia arbutifolia 'Brilliantissima'</i>	Red Chokeberry	18" to 24" Height	B&B
CL	<i>Clethra aladefolia</i>	Summersweet	18" to 24" Height	B&B, shrub form
HA	<i>Hydrangea arborescens 'Annabelle'</i>	Annabelle Hydrangea	18" to 24" Height	B&B
HV	<i>Hamamelis vernalis</i>	Vernal Witchhazel	18" to 24" Height	B&B
IV	<i>Ilex verticillata</i>	Winterberry	18" to 24" Height	B&B
MP	<i>Myrica pensylvanica</i>	Northern Bayberry	18" to 24" Height	B&B
PR	<i>Prunus maritima</i>	Beach Plum	18" to 24" Height	B&B
RP	<i>Rhododendron x 'PJM'</i>	PJM Rhododendron	18" to 24" Height	B&B, use 'Aglio', 'Olga Mezitt' and 'Roseum Elegans' cultivars
RC	<i>Rhododendron catawbiense</i>	Catawba Rhododendron	18" to 24" Height	B&B, use 'Catawbiense Album' and 'Boursalt' cultivars
RA	<i>Rhus aromatica 'Gris-Lee'</i>	Fragrant Sumac	18" to 24" Height	B&B
SB	<i>Spiraea x bumalda 'Anthony Waterer'</i>	Anthony Waterer Spirea	18" to 24" Height	B&B
Evergreen Shrubs				
JH	<i>Juniperus horizontalis</i>	Creeping Juniper	18" to 24" Height	B&B or Container
JP	<i>Juniperus procumbens 'Nana'</i>	Japanese Garden Juniper	18" Height	B&B or Container
PM	<i>Pinus mugo var. mugo</i>	Dwarf Mugo Pine	18" to 24" Height	B&B or Container
TC	<i>Taxus canadensis 'Greenwave'</i>	Japanese Yew	18" to 24" Height	B&B or Container
Perennials				
AM	<i>Achillea millefolium</i>	Yarrow	#1 Container (1 gal)	Red or pink flower cultivars
AS	<i>Astilbe x arcuata</i>	Astilbe	#1 Container (1 gal)	Red or pink flower cultivars
CS	<i>Chrysanthemum x superbum</i>	Shasta Daisy	#1 Container (1 gal)	
EP	<i>Echinacea purpurea</i>	Purple Coneflower	#1 Container (1 gal)	
HE	<i>Heimerocallis spp.</i>	Daylily	#SP5 Container	1 or 2 Fan Division, Heavy Root System, Use Yellow and Red Varieties
HO	<i>Hosta spp.</i>	Plantainlily	#1 Container (1 gal)	Lavender or white flower cultivars
NE	<i>Nepeta x fauensis 'Six Hills Giant'</i>	Catmint	#1 Container (1 gal)	
PP	<i>Phlox paniculata</i>	Garden Phlox	#1 Container (1 gal)	
RF	<i>Rudbeckia fulgida 'Goldstrum'</i>	Black-eyed Susan	#1 Container (1 gal)	
SE	<i>Sedum x 'Autumn Joy'</i>	Autumn Joy Sedum	#1 Container (1 gal)	12" - 18" spacing
VE	<i>Veronica x 'Darwin's Blue'</i>	Speedwell	#1 Container (1 gal)	



NOTES:
1. INSTALLATION OF PRESTO GEOBLOCK 2 UNITS SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS GUIDELINES.
2. TOPSOIL AND SUBBASE SAMPLES SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

TURF FIRELANE CROSS SECTION

PLANT LIST - WET SWALE

Key	Botanical Name	Common Name	Size	Quantity
Inundation Zone				
AP	<i>Arisema plantago-aquatica</i>	Common Water-Plantain	Plug	75
IR	<i>Iris versicolor</i>	Blue Flag Iris	Plug	75
PC	<i>Pontedericia cordata</i>	Pickerswee	Plug	75
SL	<i>Sagittaria latifolia</i>	Broadleaf Arrowhead	Plug	75
SA	<i>Scheuchzeria palustris</i>	Hardstem Bulrush	Plug	75
SP	<i>Scheuchzeria palustris</i>	Common Threesquare	Plug	75
ST	<i>Scheuchzeria palustris</i>	Softstem Bulrush	Plug	75
Fringe Zone				
AS	<i>Asclepias incarnata</i>	Swamp Milkweed	Plug	80
CV	<i>Carex vulpinoidea</i>	Fox Sedge	Plug	80
EM	<i>Eupatorium perfoliatum</i>	Spotted Joe Pye Weed	Plug	80
EP	<i>Eupatorium perfoliatum</i>	Boneset	Plug	80
LC	<i>Lobelia cardinalis</i>	Cardinal Flower	Plug	80
PV	<i>Panicum virgatum</i>	Switchgrass	Plug	80
SY	<i>Symphoricarion ovum-angliae</i>	New England Aster	Plug	80
VII	<i>Verbena hastata</i>	Blue Vervain	Plug	80

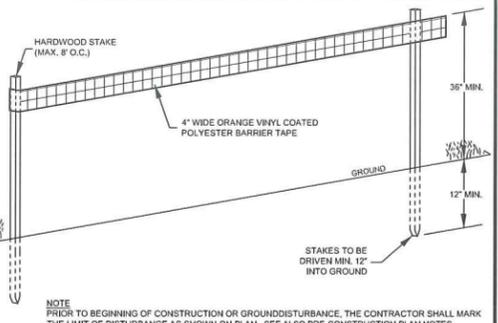
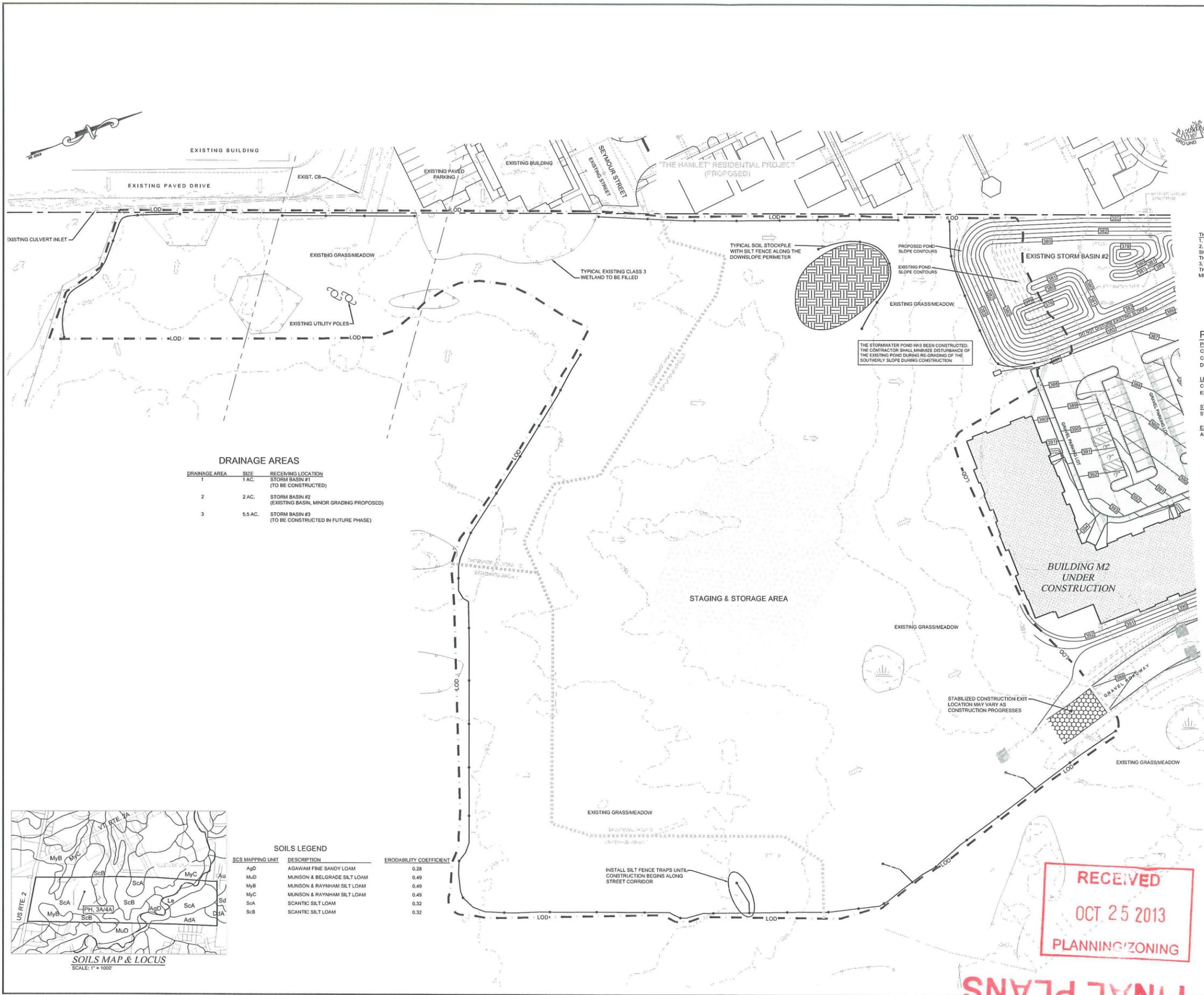
Plant in zone indicated and space 24" apart in all directions. For each zone, use an approximately equal number of the indicated species and plant in groups of 4 to 6 of each species. Before planting, moisten soil if there is any weed growth. After planting, immediately apply 2 to 3 inches of bark or wood chip mulch.

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Ken Bellin
ADMINISTRATOR'S SIGNATURE

10-17-13	ADD TREES WEST SIDE BLDG M4 PER DRB APPROVAL	ABR
07-23-13	REVISE BUILDING M1 / M4 AND PARKING LAYOUT	ABR
REVISIONS		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
<input type="checkbox"/>	SKETCH/CONCEPT	# OF SHEETS
<input type="checkbox"/>	PRELIMINARY	
<input checked="" type="checkbox"/>	FINAL	
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FINNEY CROSSING		
A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT		
PHASE 3A & 4A		
LANDSCAPE PLAN		
proj. no. 01-087	design DJG/ABR	scale 1" = 30' sht. no. 3
survey L&D	drawn DJG/ABR	
checked DJG/ABR	date 06/06/13	
LAMOUREUX & DICKINSON Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450		

FINAL PLANS



TYPICAL BARRIER TAPE INSTALLATION
NTS

THE EXISTING STORMWATER BASIN SHALL BE USED AS A SEDIMENTATION BASIN DURING CONSTRUCTION.
 1. THE BASIN FOREBAY SHALL BE OVER-EXCAVATED TO A DEPTH OF 1 FOOT BELOW THE GRADES SHOWN.
 2. THE DEPTH OF SEDIMENT IN THE FOREBAY SHALL BE MONITORED THROUGHOUT CONSTRUCTION AND SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 2 FEET (OR 2 FEET FROM THE NORMAL WATER LEVEL TO THE TOP OF SEDIMENT).
 3. SEDIMENT REMOVED FROM THE BASIN SHALL BE DISPOSED IN AN UPLAND LOCATION ON A SLOPE LESS THAN 5% AND NO LESS THAN 50 FEET FROM A WETLAND OR STREAM. THE MATERIAL SHALL BE SEEDED AND MULCHED IMMEDIATELY TO ESTABLISH VEGETATIVE COVER.

PRE CONSTRUCTION PLAN

PURPOSE: THIS PLAN PRESENTS THE EXISTING SITE CONDITIONS AND EROSION PREVENTION & SEDIMENT CONTROL MEASURES THAT MUST BE IMPLEMENTED PRIOR TO INITIATING MAJOR EARTHWORK. THE SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN SHALL BE COMPLETE AND IN PLACE PRIOR TO EARTH DISTURBANCE FOR SITE WORK OR THE BUILDING.
LIMITS OF DISTURBANCE: LOD SHALL BE MARKED WITH ONE OF THE FOLLOWING: SNOW FENCE, CONSTRUCTION FENCE, 4\"/>

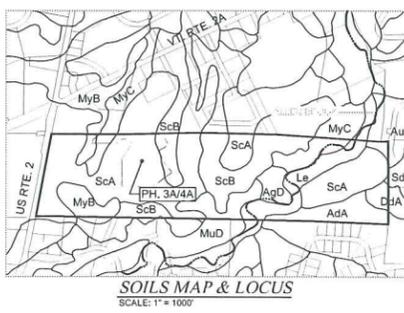
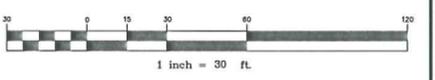
DRAINAGE AREAS

DRAINAGE AREA	SIZE	RECEIVING LOCATION
1	1 AC.	STORM BASIN #1 (TO BE CONSTRUCTED)
2	2 AC.	STORM BASIN #2 (EXISTING BASIN, MINOR GRADING PROPOSED)
3	5.5 AC.	STORM BASIN #3 (TO BE CONSTRUCTED IN FUTURE PHASE)

LEGEND

	LOD	LIMIT OF DISTURBANCE
	SILT FENCE	
	STABILIZED CONSTRUCTION EXIT	
	STABILIZED TEMPORARY ACCESS & STAGING/STORAGE AREA	
	CATCH BASIN INLET PROTECTION	

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 28 DAY OF JAN 2014.
Kan Bell
 ADMINISTRATOR'S SIGNATURE



SOILS LEGEND

SCS MAPPING UNIT	DESCRIPTION	ERODABILITY COEFFICIENT
AgD	AGAWAM FINE SANDY LOAM	0.28
MuD	MUNSON & BELGRADE SILT LOAM	0.49
MyB	MUNSON & RAYNHAM SILT LOAM	0.49
MyC	MUNSON & RAYNHAM SILT LOAM	0.49
ScA	SCANTIC SILT LOAM	0.32
ScB	SCANTIC SILT LOAM	0.32

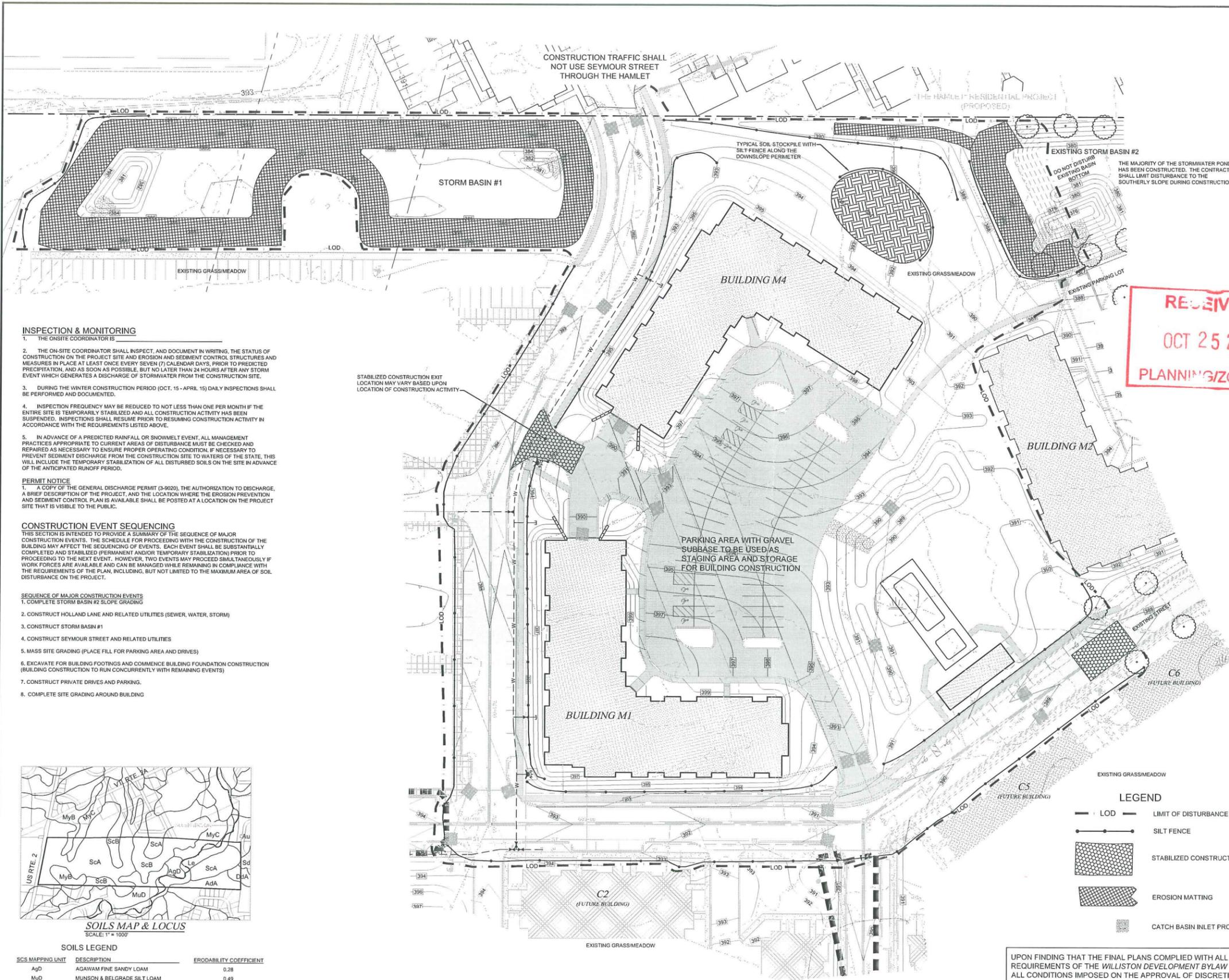
INSTALL SILT FENCE TRAPS UNTIL CONSTRUCTION BEGINS ALONG STREET CORRIDOR

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FINAL PLANS

REVISIONS		# OF SHEETS
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
<input type="checkbox"/>	SKETCH/CONCEPT	
<input type="checkbox"/>	PRELIMINARY	
<input checked="" type="checkbox"/>	FINAL	
<input type="checkbox"/>	RECORD DRAWING	
FINNEY CROSSING A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT		proj. no. 01-087
PHASE 3A & 4A - EPC PRE CONSTRUCTION PLAN		survey L&D
LAMOUREUX & DICKINSON Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450		design DJG/ABR
		drawn L&D
		checked DJG/ABR
		date 07/16/12
		scale 1" = 30'
		sh. no. 4A

WILLISTON DISCRETIONARY PERMIT DP-09-01
TAX PARCEL # 08-104-010, 08-143-002, 004, & 010



EROSION PREVENTION AND SEDIMENT CONTROL PERMIT REQUIREMENTS
 PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL OBTAIN CO-PERMITTEE COVERAGE UNDER GENERAL PERMIT 3-9020 WHICH REGULATES STORMWATER RUNOFF FROM CONSTRUCTION SITES.

THIS PROJECT QUALIFIES AS HAVING A MEDIUM RISK FOR IMPACTS TO WATER QUALITY, BASED UPON THE FOLLOWING:
 - A TOTAL AREA OF SOIL DISTURBANCE LESS THAN 2 ACRES
 - A MAXIMUM OF 14 CONSECUTIVE DAYS BEFORE DISTURBED EARTH IS TEMPORARILY OR PERMANENTLY STABILIZED.

THESE CRITERIA FORM THE BASIS FOR THE MEDIUM RISK DETERMINATION. ANY CHANGES TO THESE CRITERIA REQUIRE THAT THE RISK ANALYSIS BE RE-EVALUATED TO DETERMINE IF THE POTENTIAL RISK TO WATER QUALITY, AND THE RELATED PERMITTING REQUIREMENTS, HAVE CHANGED.

THE CONTRACTOR SHALL REFER TO THESE PLANS AND THE STANDARD EPSC REQUIREMENTS FOR EROSION PREVENTION AND SEDIMENT CONTROL MEASURES TO BE IMPLEMENTED ON THE SITE. AT A MINIMUM, THESE SHALL INCLUDE:
 - MARKING THE LIMITS OF DISTURBANCE TO PRESERVE EXISTING VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION
 - LIMITING THE DISTURBED AREA TO THAT WHICH IS ACTIVELY BEING WORKED
 - LIMITING THE DURATION OF EXPOSURE OF DISTURBED AREAS
 - INSTALLATION OF A STABILIZED CONSTRUCTION EXIT
 - INSTALLATION OF SILT FENCE ALONG THE DOWNSLOPE PERIMETER OF THE DISTURBED AREA AND AROUND ALL SOIL STOCKPILES
 - PLACEMENT OF EROSION MATTING IN CHANNELS, ON ALL SLOPES 3H:1V OR STEEPER, AND MULCHING ALL OTHER DISTURBED AREAS
 - TEMPORARY STABILIZATION OF DISTURBED AREAS WHERE WORK IS SUSPENDED OR AFTER THE INITIAL 14 DAYS

RECOMMENDED MAINTENANCE - CATCHBASINS

ACTIVITY	SCHEDULE
INSPECT SUMPS	ANNUALLY IN SPRING
<ul style="list-style-type: none"> Remove sediment when sumps are 50% full Dispose of sediment in a suitable stabilized upland location 	

RECOMMENDED MAINTENANCE - STORM POND

ACTIVITY / INSPECTION	SCHEDULE
DEBRIS REMOVAL	MONTHLY
<ul style="list-style-type: none"> Contributing areas clean of litter Outlet structures grates clear 	

NOTES: _____

PAVEMENT SWEEPING

ACTIVITY	SCHEDULE
Sweep streets, drives and parking lot to remove salt and sand	SPRING

NOTES: _____

VEGETATION

ACTIVITY	SCHEDULE
<ul style="list-style-type: none"> Good vegetative coverage in pond and on slopes No evidence of erosion on sideslopes Prune trees and shrubs as needed Undesirable vegetation removed Thickness of organic mat in bottom of pond (remove when thickness reaches normal water level or impedes flow in pond) 	SPRING & FALL

SEDIMENT DEPOSITION

ACTIVITY	SCHEDULE
<ul style="list-style-type: none"> Depth/accumulation of sediment at inlet forebay Remove sediment when forebay is 1/2 full - when depth of water in sump is 24" or less. Sediment to be removed from site and placed in a stabilized upland location. Contributing drainage area stabilized - no erosion on the site 	SPRING & FALL

DEPTH OF SEDIMENT AT INLET FOREBAY: _____

NOTES: _____

ENERGY DISSIPATOR

ACTIVITY	SCHEDULE
No evidence of erosion at inlet pipes	SPRING & FALL

NOTES: _____

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INSPECTION & MONITORING

- THE ON-SITE COORDINATOR IS
- THE ON-SITE COORDINATOR SHALL INSPECT, AND DOCUMENT IN WRITING, THE STATUS OF CONSTRUCTION ON THE PROJECT SITE AND EROSION AND SEDIMENT CONTROL STRUCTURES AND MEASURES IN PLACE AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS, PRIOR TO PREDICTED PRECIPITATION, AND AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER ANY STORM EVENT WHICH GENERATES A DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.
- DURING THE WINTER CONSTRUCTION PERIOD (OCT. 15 - APRIL 15) DAILY INSPECTIONS SHALL BE PERFORMED AND DOCUMENTED.
- INSPECTION FREQUENCY MAY BE REDUCED TO NOT LESS THAN ONE PER MONTH IF THE ENTIRE SITE IS TEMPORARILY STABILIZED AND ALL CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED. INSPECTIONS SHALL RESUME PRIOR TO RESUMING CONSTRUCTION ACTIVITY IN ACCORDANCE WITH THE REQUIREMENTS LISTED ABOVE.
- IN ADVANCE OF A PREDICTED RAINFALL OR SNOWMELT EVENT, ALL MANAGEMENT PRACTICES APPROPRIATE TO CURRENT AREAS OF DISTURBANCE MUST BE CHECKED AND REPAIRED AS NECESSARY TO ENSURE PROPER OPERATING CONDITION. IF NECESSARY TO PREVENT SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE TO WATERS OF THE STATE, THIS WILL INCLUDE THE TEMPORARY STABILIZATION OF ALL DISTURBED SOILS ON THE SITE IN ADVANCE OF THE ANTICIPATED RUNOFF PERIOD.

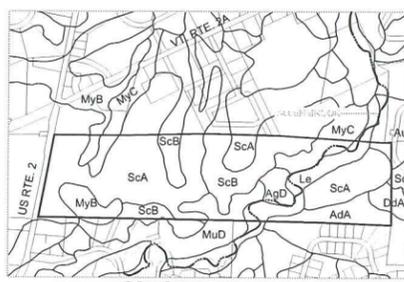
PERMIT NOTICE

- A COPY OF THE GENERAL DISCHARGE PERMIT (3-9020), THE AUTHORIZATION TO DISCHARGE, A BRIEF DESCRIPTION OF THE PROJECT, AND THE LOCATION WHERE THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN IS AVAILABLE SHALL BE POSTED AT A LOCATION ON THE PROJECT SITE THAT IS VISIBLE TO THE PUBLIC.

CONSTRUCTION EVENT SEQUENCING

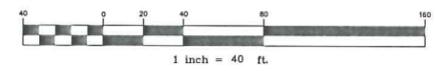
THIS SECTION IS INTENDED TO PROVIDE A SUMMARY OF THE SEQUENCE OF MAJOR CONSTRUCTION EVENTS. THE SCHEDULE FOR PROCEEDING WITH THE CONSTRUCTION OF THE BUILDING MAY AFFECT THE SEQUENCING OF EVENTS. EACH EVENT SHALL BE SUBSTANTIALLY COMPLETED AND STABILIZED (PERMANENT AND/OR TEMPORARY STABILIZATION) PRIOR TO PROCEEDING TO THE NEXT EVENT. HOWEVER, TWO EVENTS MAY PROCEED SIMULTANEOUSLY IF WORK FORCES ARE AVAILABLE AND CAN BE MANAGED WHILE REMAINING IN COMPLIANCE WITH THE REQUIREMENTS OF THE PLAN, INCLUDING, BUT NOT LIMITED TO THE MAXIMUM AREA OF SOIL DISTURBANCE ON THE PROJECT.

- SEQUENCE OF MAJOR CONSTRUCTION EVENTS**
- COMPLETE STORM BASIN #2 SLOPE GRADING
 - CONSTRUCT HOLLAND LANE AND RELATED UTILITIES (SEWER, WATER, STORM)
 - CONSTRUCT STORM BASIN #1
 - CONSTRUCT SEYMOUR STREET AND RELATED UTILITIES
 - MASS SITE GRADING (PLACE FILL FOR PARKING AREA AND DRIVES)
 - EXCAVATE FOR BUILDING FOOTINGS AND COMMENCE BUILDING FOUNDATION CONSTRUCTION (BUILDING CONSTRUCTION TO RUN CONCURRENTLY WITH REMAINING EVENTS)
 - CONSTRUCT PRIVATE DRIVES AND PARKING.
 - COMPLETE SITE GRADING AROUND BUILDING



SOILS LEGEND

SCS MAPPING UNIT	DESCRIPTION	ERODABILITY COEFFICIENT
AgD	AGAWAM FINE SANDY LOAM	0.28
MuD	MUNSON & BELGRADE SILT LOAM	0.49
MyB	MUNSON & RAYNHAM SILT LOAM	0.49
MyC	MUNSON & RAYNHAM SILT LOAM	0.49
ScA	SCANTIC SILT LOAM	0.32
ScB	SCANTIC SILT LOAM	0.32



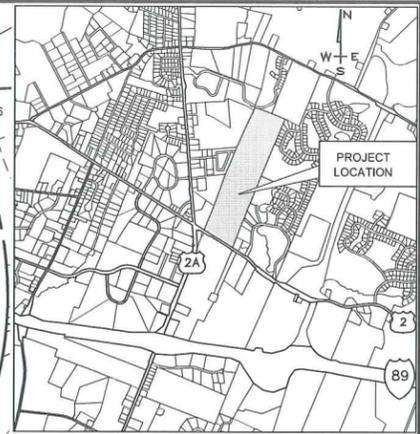
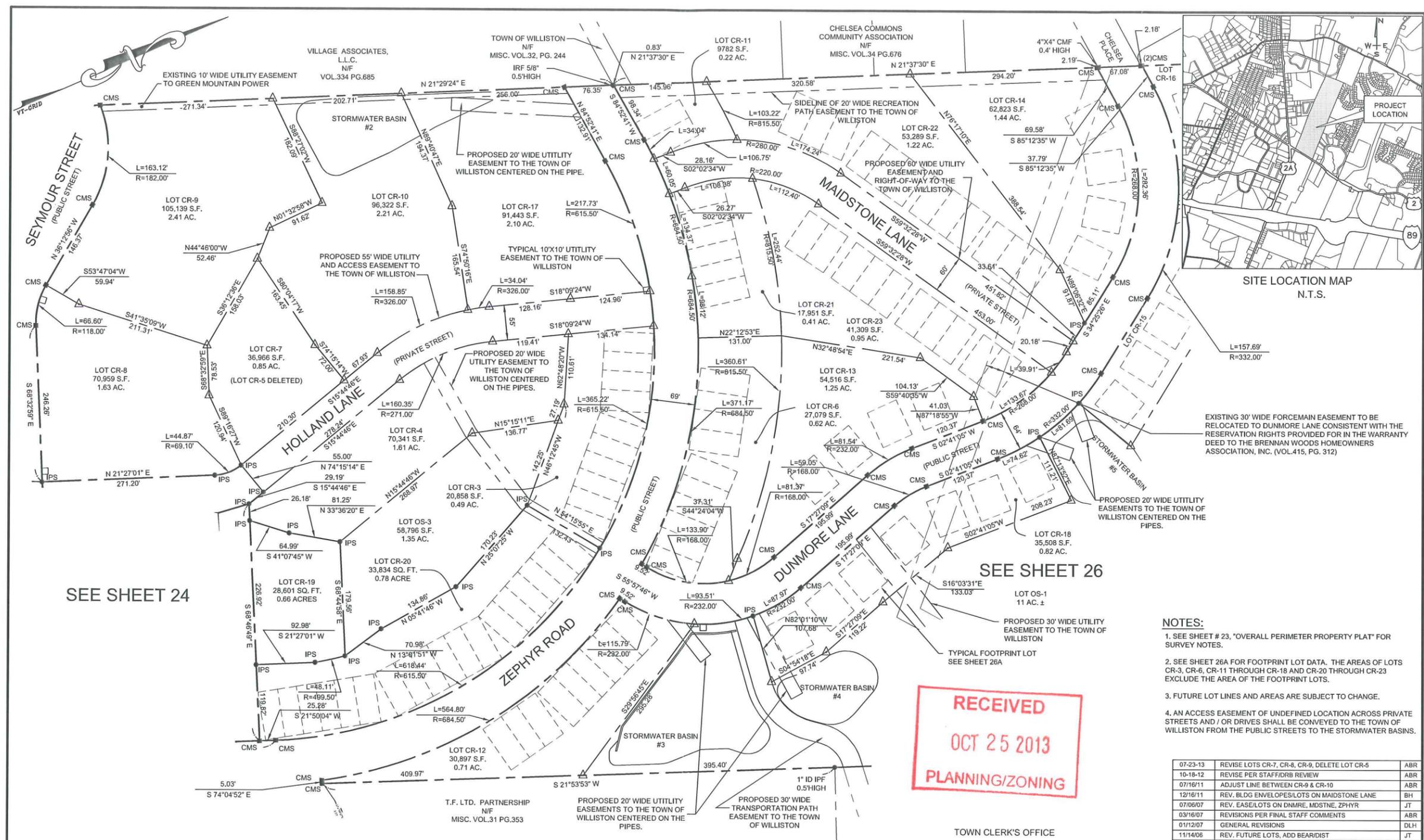
UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 20 DAY OF JAN 20 2014

ADMINISTRATOR'S SIGNATURE

FINAL PLANS

07-23-13	REVISE BUILDING M1 & M4 GRADING LAYOUT	ABR
REVISIONS THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
<input type="checkbox"/>	SKETCH/CONCEPT	# OF SHEETS
<input type="checkbox"/>	PRELIMINARY	
<input type="checkbox"/>	FINAL	
<input type="checkbox"/>	RECORD DRAWING	
FINNEY CROSSING A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT		proj. no. 01-087 survey L&D design DJG/ABR drawn L&D checked DJG/ABR date 06/06/13
PHASE 3A & 4A EROSION PREVENTION AND SEDIMENT CONTROL PLAN		scale 1" = 30' sht. no. 4B
 LAMOUREUX & DICKINSON Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450		

WILLISTON DISCRETIONARY PERMIT DP-09-01
 TAX PARCEL # 08-104-010, 08-143-002, 004, & 010



SITE LOCATION MAP
N.T.S.

EXISTING 30' WIDE FORCEMAIN EASEMENT TO BE RELOCATED TO DUNMORE LANE CONSISTENT WITH THE RESERVATION RIGHTS PROVIDED FOR IN THE WARRANTY DEED TO THE BRENNAN WOODS HOMEOWNERS ASSOCIATION, INC. (VOL.415, PG. 312)

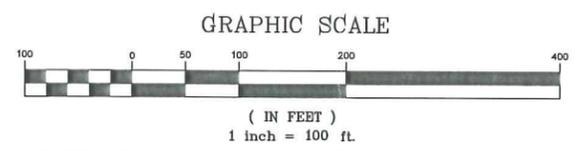
SEE SHEET 24

SEE SHEET 26

- NOTES:**
- SEE SHEET # 23, "OVERALL PERIMETER PROPERTY PLAT" FOR SURVEY NOTES.
 - SEE SHEET 26A FOR FOOTPRINT LOT DATA. THE AREAS OF LOTS CR-3, CR-6, CR-11 THROUGH CR-18 AND CR-20 THROUGH CR-23 EXCLUDE THE AREA OF THE FOOTPRINT LOTS.
 - FUTURE LOT LINES AND AREAS ARE SUBJECT TO CHANGE.
 - AN ACCESS EASEMENT OF UNDEFINED LOCATION ACROSS PRIVATE STREETS AND / OR DRIVES SHALL BE CONVEYED TO THE TOWN OF WILLISTON FROM THE PUBLIC STREETS TO THE STORMWATER BASINS.

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PLANNING/ZONING

TOWN CLERK'S OFFICE
TOWN OF WILLISTON, VT. _____, 2013
RECEIVED FOR RECORD AT _____ O'CLOCK __ M.,
AND RECORDED IN SLIDE # _____
ATTEST _____ TOWN CLERK



UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT #DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PH. 3A/4A ON THE 28 DAY OF JAN 2014.

Kurt B. Johnson, Esq.
DEVELOPMENT REVIEW BOARD - PRESIDING MEMBER SIGNATURE

FINAL PLANS

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, THIS PLAT IS BASED ON INFORMATION ABSTRACTED FROM PERTINENT DEEDS AND/OR OTHER OFFICIAL RECORDS, AND MARKERS EVIDENT ON THE PROPERTY, AND CONFORMS WITH THE REQUIREMENTS OF 27 VSA § 1403.

DATED THIS ____ DAY OF _____, 2013

LEGEND:

—	PROJECT PROPERTY LINE	●	IRON PIPE OR REBAR SHOWN ON PREVIOUS SURVEY
- - -	ABUTTING PROPERTY LINE	■	CONCRETE MONUMENT SHOWN ON PREVIOUS SURVEY
- - - -	SIDELINE OF EXISTING EASEMENT	● IRF	IRON REBAR FOUND
- - - -	SIDELINE OF PROPOSED EASEMENT	● IPF	IRON PIPE FOUND
NIF	NOW OR FORMERLY	● IPS	IRON PIPE SET
N35°25'45"E 124.54'	BEARINGS & DISTANCES DETERMINED BY SURVEY	■ CMF	CONCRETE MONUMENT FOUND
△	POINT NOT DETERMINED BY SURVEY	■ CMS	CONCRETE MONUMENT SET
(124.54)	RECORD DISTANCE		

DP-09-01

date	description	by
07-23-13	REVISE LOTS CR-7, CR-8, CR-9, DELETE LOT CR-5	ABR
10-18-12	REVISE PER STAFF/DRB REVIEW	ABR
07/16/11	ADJUST LINE BETWEEN CR-9 & CR-10	ABR
12/16/11	REV. BLDG ENVELOPES/LOTS ON MAIDSTONE LANE	BH
07/06/07	REV. EASEL/LOTS ON DNMR, MDSTNE, ZPHYR	JT
03/16/07	REVISIONS PER FINAL STAFF COMMENTS	ABR
01/12/07	GENERAL REVISIONS	DLH
11/14/06	REV. FUTURE LOTS, ADD BEARDIST	JT

THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:

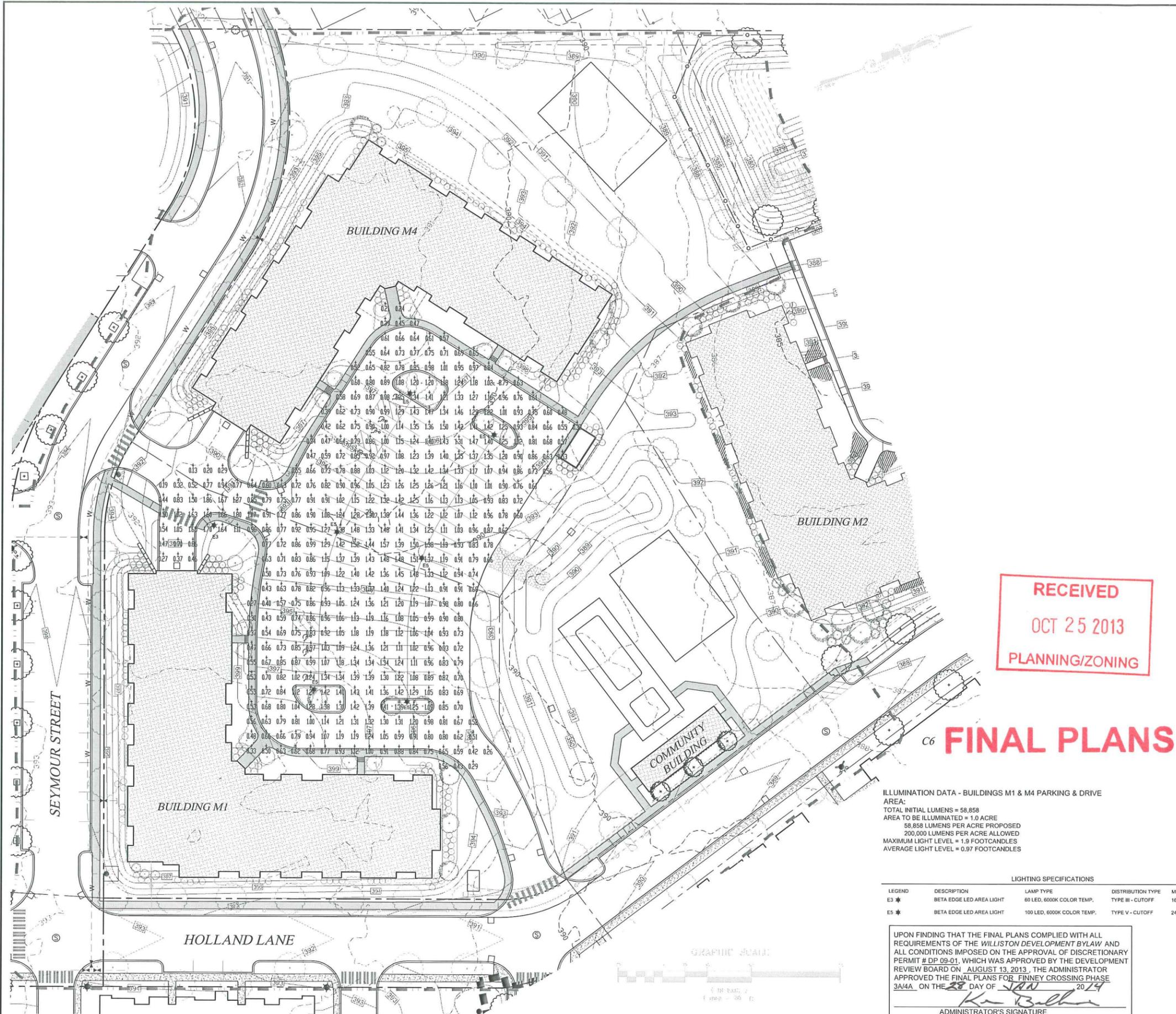
<input type="checkbox"/>	SKETCH/CONCEPT	
<input type="checkbox"/>	PRELIMINARY	
<input type="checkbox"/>	FINAL	
<input checked="" type="checkbox"/>	RECORD DRAWING	

proj. no. 01087
survey BFD/MJG
design

FINNEY CROSSING
5987 WILLISTON ROAD, VERMONT 05495

drawn JMD
checked LAL/DLH
date 11-30-05
scale 1" = 100'
sheet no. 25
2 of 4

LAMOUREUX & DICKINSON
Consulting Engineers Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450
Engineers-Planners-Surveyors



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FINAL PLANS

LEGEND

DESCRIPTION	LAMP TYPE	DISTRIBUTION TYPE	MOUNTING HEIGHT
E3 * BETA EDGE LED AREA LIGHT	60 LED, 6000K COLOR TEMP.	TYPE III - CUTOFF	16 FEET POLE MOUNTED
E5 * BETA EDGE LED AREA LIGHT	100 LED, 6000K COLOR TEMP.	TYPE V - CUTOFF	24 FEET POLE MOUNTED

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 28 DAY OF JAN 2014

K. Walker
 ADMINISTRATOR'S SIGNATURE

ARE-EDG-3M-DA THE EDGE® LED Area Light - Type III Medium

BetaLED Catalog # ARE-EDG-3M-DA-D

Beam Spread	Beam Diameter	Beam Length	Beam Area	Beam Volume
10°	10.0"	1.74'	0.79 sq ft	0.14 cu ft
15°	15.0"	2.61'	1.77 sq ft	0.32 cu ft
20°	20.0"	3.46'	3.14 sq ft	0.57 cu ft
25°	25.0"	4.30'	4.91 sq ft	0.87 cu ft
30°	30.0"	5.10'	7.07 sq ft	1.27 cu ft
35°	35.0"	5.88'	9.62 sq ft	1.75 cu ft
40°	40.0"	6.63'	12.57 sq ft	2.31 cu ft
45°	45.0"	7.35'	15.91 sq ft	2.95 cu ft
50°	50.0"	8.04'	19.64 sq ft	3.67 cu ft
55°	55.0"	8.70'	23.76 sq ft	4.47 cu ft
60°	60.0"	9.33'	28.27 sq ft	5.34 cu ft
65°	65.0"	9.93'	33.17 sq ft	6.28 cu ft
70°	70.0"	10.50'	38.48 sq ft	7.29 cu ft
75°	75.0"	11.04'	44.19 sq ft	8.37 cu ft
80°	80.0"	11.55'	50.31 sq ft	9.52 cu ft
85°	85.0"	12.03'	56.84 sq ft	10.74 cu ft
90°	90.0"	12.48'	63.79 sq ft	12.04 cu ft

FACTORY-INSTALLED OPTIONS

REVISIONS

LED PERFORMANCE DATA

Beam Spread	Beam Diameter	Beam Length	Beam Area	Beam Volume	Initial Lumens	Initial Footcandle	Initial Lux													
10°	10.0"	1.74'	0.79 sq ft	0.14 cu ft	58858	74.12	7412	74.12	7412	74.12	7412	74.12	7412	74.12	7412	74.12	7412	74.12	7412	74.12
15°	15.0"	2.61'	1.77 sq ft	0.32 cu ft	58858	33.25	3325	33.25	3325	33.25	3325	33.25	3325	33.25	3325	33.25	3325	33.25	3325	33.25
20°	20.0"	3.46'	3.14 sq ft	0.57 cu ft	58858	18.74	1874	18.74	1874	18.74	1874	18.74	1874	18.74	1874	18.74	1874	18.74	1874	18.74
25°	25.0"	4.30'	4.91 sq ft	0.87 cu ft	58858	12.00	1200	12.00	1200	12.00	1200	12.00	1200	12.00	1200	12.00	1200	12.00	1200	12.00
30°	30.0"	5.10'	7.07 sq ft	1.27 cu ft	58858	8.33	833	8.33	833	8.33	833	8.33	833	8.33	833	8.33	833	8.33	833	8.33
35°	35.0"	5.88'	9.62 sq ft	1.75 cu ft	58858	6.12	612	6.12	612	6.12	612	6.12	612	6.12	612	6.12	612	6.12	612	6.12
40°	40.0"	6.63'	12.57 sq ft	2.31 cu ft	58858	4.69	469	4.69	469	4.69	469	4.69	469	4.69	469	4.69	469	4.69	469	4.69
45°	45.0"	7.35'	15.91 sq ft	2.95 cu ft	58858	3.70	370	3.70	370	3.70	370	3.70	370	3.70	370	3.70	370	3.70	370	3.70
50°	50.0"	8.04'	19.64 sq ft	3.67 cu ft	58858	2.99	299	2.99	299	2.99	299	2.99	299	2.99	299	2.99	299	2.99	299	2.99
55°	55.0"	8.70'	23.76 sq ft	4.47 cu ft	58858	2.47	247	2.47	247	2.47	247	2.47	247	2.47	247	2.47	247	2.47	247	2.47
60°	60.0"	9.33'	28.27 sq ft	5.34 cu ft	58858	2.08	208	2.08	208	2.08	208	2.08	208	2.08	208	2.08	208	2.08	208	2.08
65°	65.0"	9.93'	33.17 sq ft	6.28 cu ft	58858	1.77	177	1.77	177	1.77	177	1.77	177	1.77	177	1.77	177	1.77	177	1.77
70°	70.0"	10.50'	38.48 sq ft	7.29 cu ft	58858	1.51	151	1.51	151	1.51	151	1.51	151	1.51	151	1.51	151	1.51	151	1.51
75°	75.0"	11.04'	44.19 sq ft	8.37 cu ft	58858	1.31	131	1.31	131	1.31	131	1.31	131	1.31	131	1.31	131	1.31	131	1.31
80°	80.0"	11.55'	50.31 sq ft	9.52 cu ft	58858	1.16	116	1.16	116	1.16	116	1.16	116	1.16	116	1.16	116	1.16	116	1.16
85°	85.0"	12.03'	56.84 sq ft	10.74 cu ft	58858	1.03	103	1.03	103	1.03	103	1.03	103	1.03	103	1.03	103	1.03	103	1.03
90°	90.0"	12.48'	63.79 sq ft	12.04 cu ft	58858	0.92	92	0.92	92	0.92	92	0.92	92	0.92	92	0.92	92	0.92	92	0.92

ARE-EDG-5M-R4 THE EDGE® LED Amber Area Light - Type V Medium

BetaLED Catalog # ARE-EDG-5M-R4-D

Beam Spread	Beam Diameter	Beam Length	Beam Area	Beam Volume
10°	10.0"	1.74'	0.79 sq ft	0.14 cu ft
15°	15.0"	2.61'	1.77 sq ft	0.32 cu ft
20°	20.0"	3.46'	3.14 sq ft	0.57 cu ft
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30°	30.0"	5.10'	7.07 sq ft	1.27 cu ft
35°	35.0"	5.88'	9.62 sq ft	1.75 cu ft
40°	40.0"	6.63'	12.57 sq ft	2.31 cu ft
45°	45.0"	7.35'	15.91 sq ft	2.95 cu ft
50°	50.0"	8.04'	19.64 sq ft	3.67 cu ft
55°	55.0"	8.70'	23.76 sq ft	4.47 cu ft
60°	60.0"	9.33'	28.27 sq ft	5.34 cu ft
65°	65.0"	9.93'	33.17 sq ft	6.28 cu ft
70°	70.0"	10.50'	38.48 sq ft	7.29 cu ft
75°	75.0"	11.04'	44.19 sq ft	8.37 cu ft
80°	80.0"	11.55'	50.31 sq ft	9.52 cu ft
85°	85.0"	12.03'	56.84 sq ft	10.74 cu ft
90°	90.0"	12.48'	63.79 sq ft	12.04 cu ft

FACTORY-INSTALLED OPTIONS

REVISIONS

WILLISTON DISCRETIONARY PERMIT DP-09-01
 TAX PARCEL # 08-1045010, 08-143-002, 004, & 010

DATE	REVISIONS	BY
07-23-13	REVISE BUILDING M1 / M4 AND PARKING LAYOUT	ABR

THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:

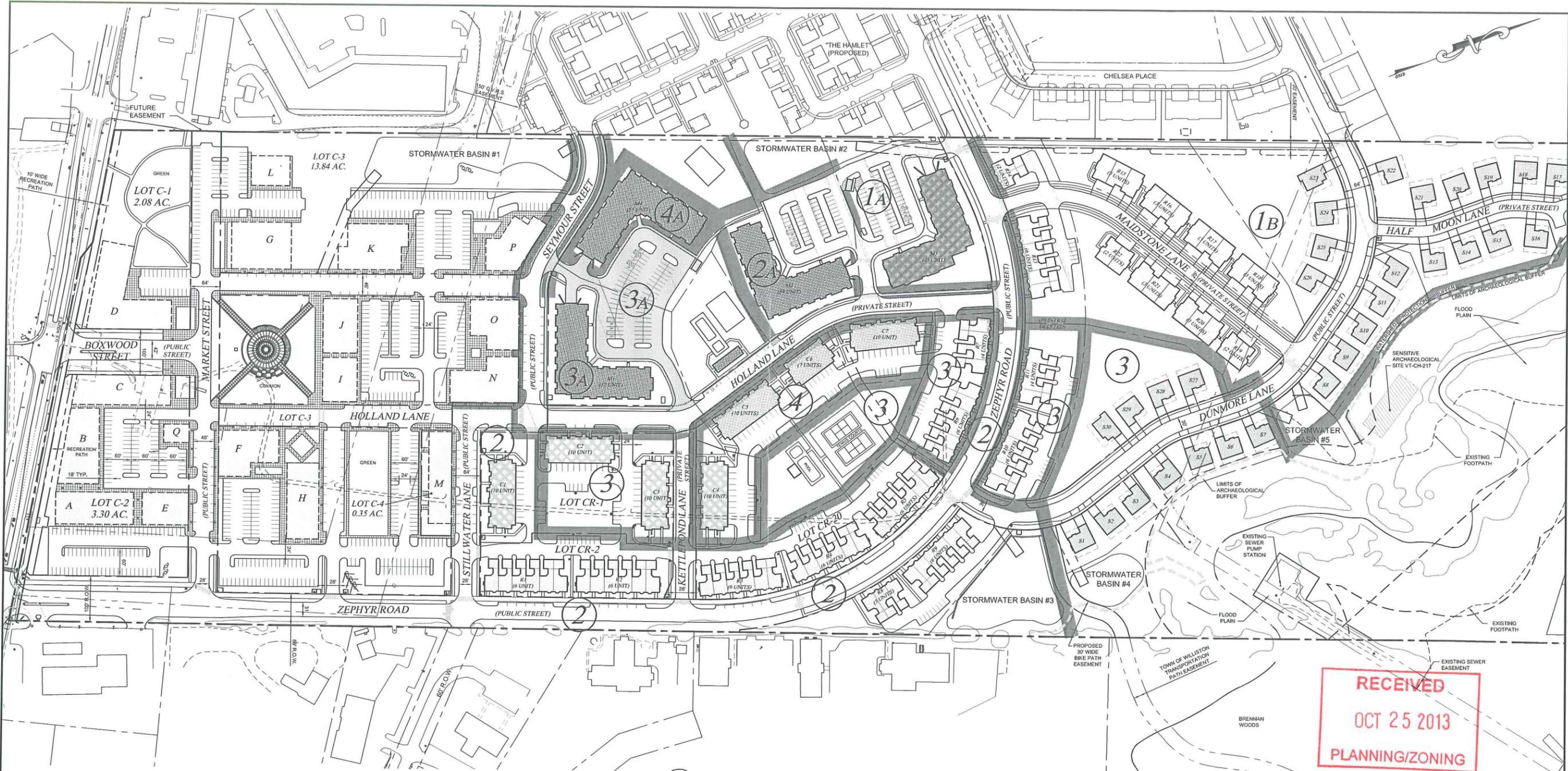
SKETCH/CONCEPT
 PRELIMINARY
 FINAL
 RECORD DRAWING

FINNEY CROSSING
 A PLANNED UNIT DEVELOPMENT
 WILLISTON, VERMONT

PHASE 3A & 4A
 LIGHTING PLAN

proj. no. 01-087
 survey L&D
 design DJG/ABR
 drawn DJG/ABR
 checked DJG/ABR
 date 06/06/13
 scale 1" = 30'
 sht. no. L

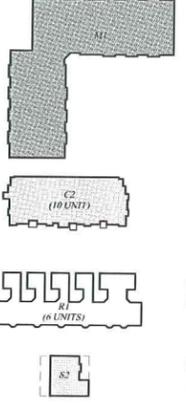
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 Consulting Engineers, Inc.
 14 Morse Drive
 Essex Junction, VT 05452
 (802) 878-4450



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LEGEND

- PROJECT PROPERTY LINE
- ABUTTING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING ZONING LINE
- ALLEN BROOK
- CLASS 3 WETLAND
- EXISTING TRAIL
- EXISTING CONTOUR
- PROPOSED SIDEWALK GRID
- EXISTING BUILDING
- BUILDABLE AREA FOR MIXED USE = COMMERCIAL/OFFICE/RESIDENTIAL



APARTMENT FLATS

MULTIFAMILY HOUSING WITH BASEMENT LEVEL PARKING

FLATS

CONDOMINIUM MULTIFAMILY HOUSING = TYPICAL 7 & 10 UNIT

ROW HOMES / TOWNHOMES

ROW MULTIFAMILY HOUSING

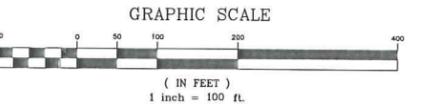
CARRIAGE HOMES

SINGLE FAMILY CARRIAGE HOMES

SUMMARY OF RESIDENTIAL UNITS

KEY	DESCRIPTION	TOTAL UNITS
M1-M4	MULTI-STORY BUILDING WITH BASEMENT LEVEL GARAGE	216 UNITS
C1-C7	MULTI-FAMILY FLATS WITH ONE CAR GARAGE	67 UNITS
R1-R14	MULTI-FAMILY ROWHOMES (2 CAR GARAGE)	67 UNITS
R15-R22	MULTI-FAMILY TOWNHOMES (2 CAR GARAGE)	22 UNITS
S1-S30	SINGLE FAMILY CARRIAGE HOMES (2 CAR GARAGE)	30 UNITS
		TOTAL = 402 UNITS

FINAL PLANS



ZEPHYR ROAD & PHASE 3A / 4A CONSTRUCTION SEQUENCING NOTES:

1. COMMENCE CONSTRUCTION ON THE REMAINDER OF ZEPHYR ROAD, STILLWATER LANE, AND THE SEWER AND STORM PIPING ON KETTLEPOND LANE
2. COMMENCE CONSTRUCTION OF PHASE 3A CONSISTING OF A SEGMENT OF HOLLAND LANE AND ALL OF SEYMOUR STREET.
3. COMMENCE CONSTRUCTION ON BUILDING M1. A TEMPORARY GRAVEL DRIVE (MIN. 14' WIDE) CONNECTING HOLLAND LANE AND THE HAMLET VIA SEYMOUR STREET SHALL BE IN PLACE PRIOR TO PROCEEDING WITH BUILDING FRAMING.
4. ZEPHYR ROAD, STILLWATER LANE, SEYMOUR STREET AND THE SEGMENT OF HOLLAND LANE SHOWN ON THIS PLAN SHALL HAVE BASE COURSE PAVEMENT IN PLACE AND BE OPEN TO PUBLIC TRAFFIC PRIOR TO THE OCCUPANCY OF EITHER BUILDING M1 OR BUILDING M4.

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 25 DAY OF JAN 2014

ADMINISTRATOR'S SIGNATURE

DATE	REVISIONS	BY
07-23-13	REVISE BUILDINGS M1 & M4 IN PHASES 3A & 4A	ABR
08-28-12	REVISE PHASES 3 & 4 FOR BUILDINGS M1 & M4	ABR
09-27-12	REVISE PHASE 2A / HOLLAND LANE LIMITS	ABR
07-16-12	REVISE BUILDING LAYOUT PER PHASE 2A	ABR
10-03-11	ADJUST PHASING PER 08-09-11 DRB APPROVAL	ABR
09-24-11	2011 CONSTRUCTION PHASING	ABR

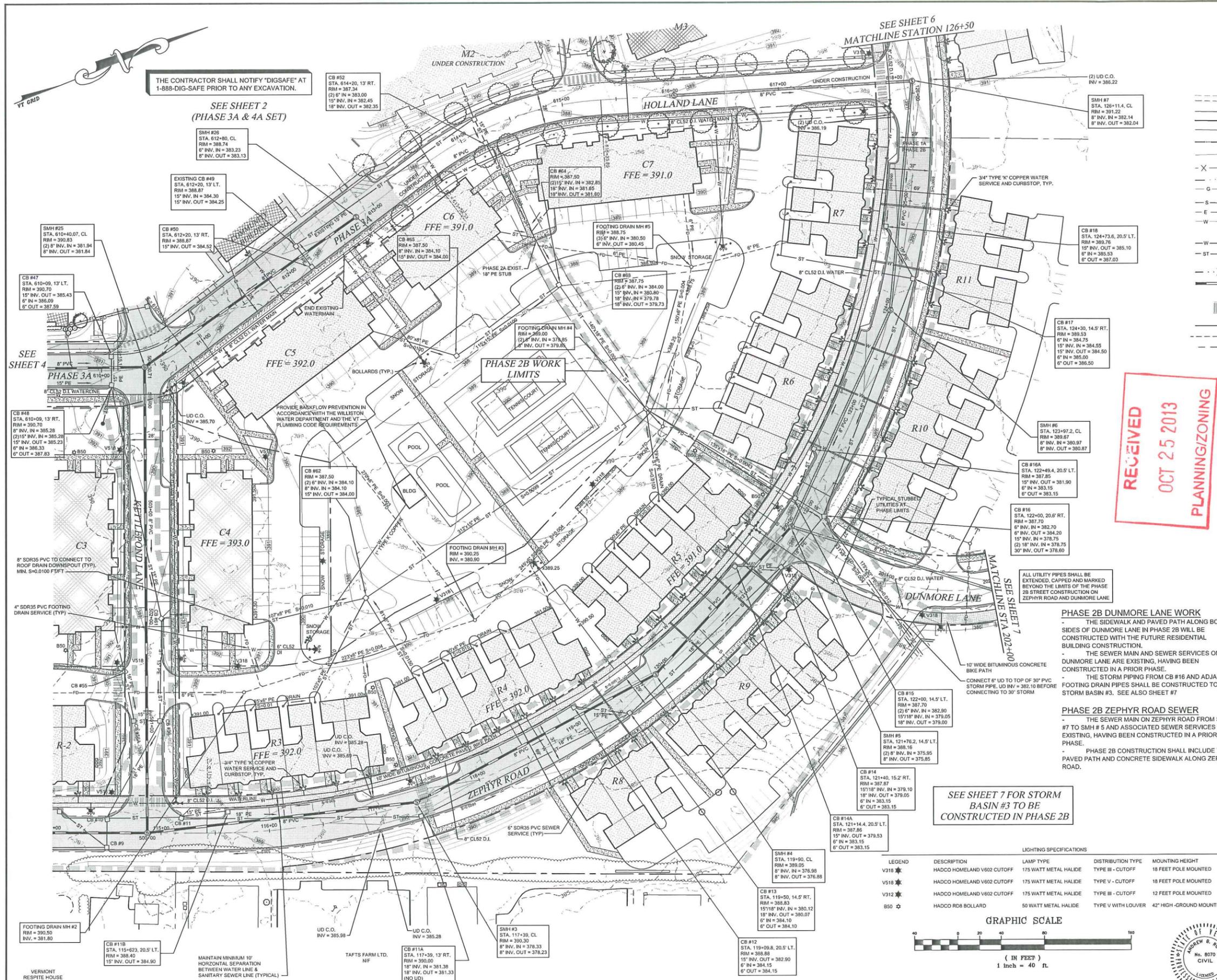
REVISIONS	# OF SHEETS
<input type="checkbox"/> SKETCH/CONCEPT <input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> FINAL <input type="checkbox"/> RECORD DRAWING	

FINNEY CROSSING
A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT

CONSTRUCTION PHASING

proj. no. 01-087	 LAMOUREUX & DICKINSON Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450
survey L&D	
design DJG/ABR	
drawn JET/BH	
checked DJG/ABR	
date 11/30/05	scale 1" = 100'
	sht. no. PH

WILLISTON DISCRETIONARY PERMIT DP-09-01
 TAX PARCEL # 08-104010, 08-143002004, & 010



LEGEND

- EXISTING UTILITY POLE & GUY WIRE
- EXISTING TREES
- EXISTING TREE LINE
- EXISTING BUSHES
- EXISTING CONTOUR LINES
- ABUTTING PROPERTY BOUNDARY
- PROJECT BOUNDARY
- EXISTING EASEMENT
- EXISTING STREAM
- DELINEATED WETLAND BOUNDARY
- EXISTING BARBED WIRE FENCE
- EXISTING DRAINAGE SWALE
- EXISTING GAS LINE & VALVE
- EXISTING SEWER LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING WATER LINE, VALVE & HYDRANT
- PROPOSED WATER LINE, VALVE & HYDRANT
- PROPOSED STORM LINE, CATCH BASIN & END SECTION WITH STONE OUTFALL
- PROPOSED DRAINAGE SWALE
- PROPOSED SEWER LINE, MANHOLE & SERVICE
- PROPOSED SPEED TABLE / PAINTED CROSSWALK
- PROPOSED FINISH GRADE CONTOUR
- PROPOSED BUILDING FOOTING DRAIN
- PROPOSED ROAD UNDERDRAIN & CLEANOUT
- PROPOSED LUMINAIRE

- ### NOTES:
- COORDINATE THE HORIZONTAL LOCATION OF THE WATER, SEWER, FOOTING DRAIN, AND ROOF DRAIN SERVICE CONNECTIONS TO EACH BUILDING WITH THE OWNER AND ARCHITECTURAL PLANS.
 - PRIOR TO CONSTRUCTION, THE ELEVATIONS OF THE SEWER, FOOTING DRAIN, AND ROOF DRAIN SERVICES FROM THE ARCHITECTURAL PLANS SHALL BE COMPARED TO THE ELEVATION OF THE COLLECTION MAINS AND SERVICES SHOWN ON THESE PLANS. REPORT ANY DISCREPANCIES TO THE ENGINEER.
 - COORDINATE THE LOCATION OF THE SIDEWALK ENTRANCES TO EACH BUILDING WITH THE OWNER. UNLESS STEPS ARE PROPOSED, THE MAXIMUM SLOPE ON ANY SIDEWALK IS 8%.
 - DETECTABLE WARNING STRIPS SHALL BE INSTALLED AT ALL SIDEWALK AND PAVED PATH RAMPS AT CROSSWALKS.
 - UTILITIES LAYOUT WITHIN COMMERCIAL AREA TO BE DEVELOPED BASED UPON DEMANDS OF PROPOSED USES.
 - THE CONTRACTOR SHALL PROVIDE STUBS BEYOND PHASE LIMITS FOR FUTURE EXTENSION INTO OTHER PHASES (SEWER, WATER, STORM, UD, ETC.).
 - WATER SERVICES TO EACH INDIVIDUAL UNIT IN BUILDINGS R1-R22 AND TO BUILDINGS S1-S30 SHALL BE 3/4" TYPE 'K' COPPER WITH AN INDIVIDUAL CURBSTOP FOR EACH UNIT. WATER SERVICES TO BUILDINGS C1-C7 SHALL BE 6" CL52 DI WITH AN INDIVIDUAL GATE VALVE FOR EACH BUILDING.

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 25 DAY OF JAN 2014

Andrew B. Rowe
ADMINISTRATOR'S SIGNATURE

DATE	DESCRIPTION	BY
10-17-13	ADD ZEPHYR ROAD CROSSWALK SOUTH OF BLDG RB PER DRB	ABR
06-06-13	ADDED PH.3A LIMITS/MODIFIED WATER SERVICES	DUG
08-12-11	DELETED SEWER FROM SMH8 TO SMH 7	ABR
1-29-08	DELETED BUILDING R-12	ABR
07-06-07	REVISED STORM & UNDERDRAIN	ABR/JT
06-15-07	REVISED PER WATER SUPPLY REVIEW	JPL
05-16-07	REVISED PER TOWN AND STATE REVIEWS	DJG/JT
01-12-07	REVISED ZEPHYR ROAD CURBING / DRAINAGE	JT
8-7-06	REVISED STORM WATER SYSTEM	DH/ABR
6-26-06	REVISED PER DESIGN ADVISORY COMMITTEE REVIEW	JT/ABR

REVISIONS

REVISIONS	# OF SHEETS
<input type="checkbox"/> SKETCH/CONCEPT <input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> FINAL <input type="checkbox"/> RECORD DRAWING	

FINNEY CROSSING
A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT

ZEPHYR ROAD
- PLAN -
STATION 115+50 TO 126+50

LAMOUREUX & DICKINSON
Consulting Engineers, Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450

proj. no. 01-087
survey L&D
design DJG/ABR
drawn JET/BH
checked DJG/ABR
date 11/30/05
scale 1" = 40'
shl. no. 5

LIGHTING SPECIFICATIONS

LEGEND	DESCRIPTION	LAMP TYPE	DISTRIBUTION TYPE	MOUNTING HEIGHT
V318	HADCO HOMETOWN V602 CUTOFF	175 WATT METAL HALIDE	TYPE III - CUTOFF	18 FEET POLE MOUNTED
V518	HADCO HOMETOWN V602 CUTOFF	175 WATT METAL HALIDE	TYPE V - CUTOFF	18 FEET POLE MOUNTED
V312	HADCO HOMETOWN V602 CUTOFF	175 WATT METAL HALIDE	TYPE III - CUTOFF	12 FEET POLE MOUNTED
B50	HADCO RDB BOLLARD	50 WATT METAL HALIDE	TYPE V WITH LOUVER	42" HIGH - GROUND MOUNTED

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

SEE SHEET 2
(PHASE 3A & 4A SET)

SEE SHEET 6
MATCHLINE STATION 126+50

SEE SHEET 4

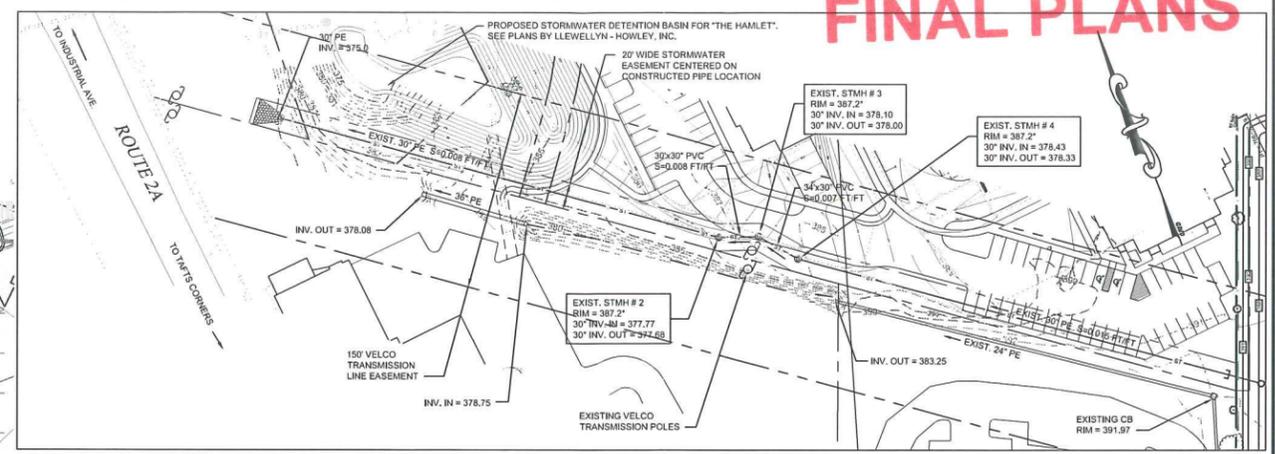
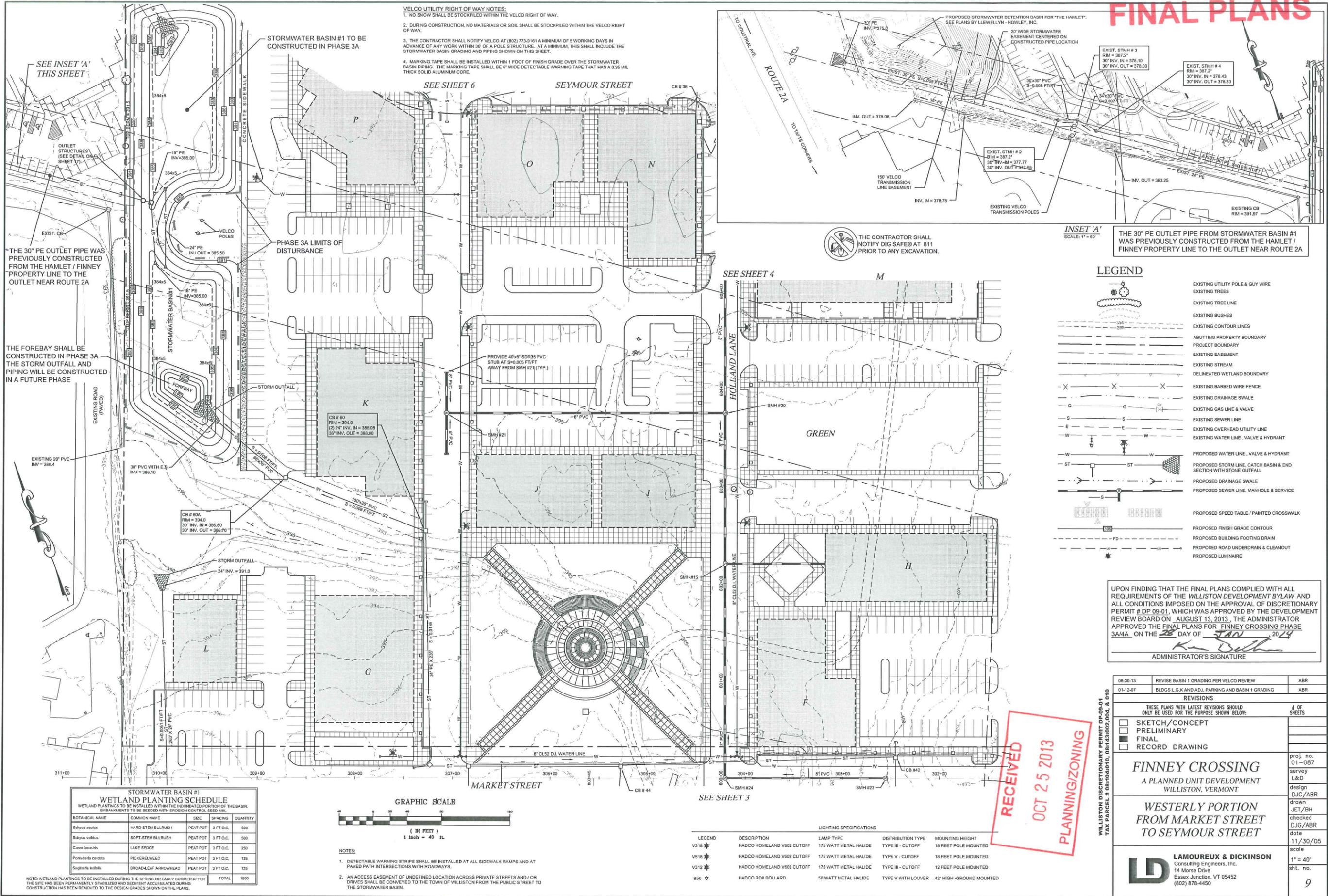
SEE SHEET 7
MATCHLINE STA 202+00

SEE SHEET 7 FOR STORM
BASIN #3 TO BE
CONSTRUCTED IN PHASE 2B

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PLANNING/ZONING



FINAL PLANS



VELCO UTILITY RIGHT OF WAY NOTES:

- NO SNOW SHALL BE STOCKPILED WITHIN THE VELCO RIGHT OF WAY.
- DURING CONSTRUCTION, NO MATERIALS OR SOIL SHALL BE STOCKPILED WITHIN THE VELCO RIGHT OF WAY.
- THE CONTRACTOR SHALL NOTIFY VELCO AT (802) 773-9161 A MINIMUM OF 5 WORKING DAYS IN ADVANCE OF ANY WORK WITHIN 30' OF A POLE STRUCTURE. AT A MINIMUM, THIS SHALL INCLUDE THE STORMWATER BASIN GRADING AND PIPING SHOWN ON THIS SHEET.
- MARKING TAPE SHALL BE INSTALLED WITHIN 1' FOOT OF FINISH GRADE OVER THE STORMWATER BASIN PIPING. THE MARKING TAPE SHALL BE 6" WIDE DETECTABLE WARNING TAPE THAT HAS A 0.35 MIL THICK SOLID ALUMINUM CORE.

THE CONTRACTOR SHALL NOTIFY DIG SAFE@ 811 PRIOR TO ANY EXCAVATION.

INSET 'A'
SCALE: 1" = 60'

THE 30" PE OUTLET PIPE FROM STORMWATER BASIN #1 WAS PREVIOUSLY CONSTRUCTED FROM THE HAMLET / FINNEY PROPERTY LINE TO THE OUTLET NEAR ROUTE 2A

LEGEND

- EXISTING UTILITY POLE & GUY WIRE
- EXISTING TREES
- EXISTING TREE LINE
- EXISTING BUSHES
- EXISTING CONTOUR LINES
- ABUTTING PROPERTY BOUNDARY
- PROJECT BOUNDARY
- EXISTING EASEMENT
- EXISTING STREAM
- DELINEATED WETLAND BOUNDARY
- EXISTING BARBED WIRE FENCE
- EXISTING DRAINAGE SWALE
- EXISTING GAS LINE & VALVE
- EXISTING SEWER LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING WATER LINE, VALVE & HYDRANT
- PROPOSED WATER LINE, VALVE & HYDRANT
- PROPOSED STORM LINE, CATCH BASIN & END SECTION WITH STONE OUTFALL
- PROPOSED DRAINAGE SWALE
- PROPOSED SEWER LINE, MANHOLE & SERVICE
- PROPOSED SPEED TABLE / PAINTED CROSSWALK
- PROPOSED FINISH GRADE CONTOUR
- PROPOSED BUILDING FOOTING DRAIN
- PROPOSED ROAD UNDERDRAIN & CLEANOUT
- PROPOSED LUMINAIRE

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 28 DAY OF JAN 2014

Kim Dalk
ADMINISTRATOR'S SIGNATURE

08-30-13	REVISE BASIN 1 GRADING PER VELCO REVIEW	ABR
01-12-07	BLDGS L&K AND ADJ. PARKING AND BASIN 1 GRADING	ABR

REVISIONS		# OF SHEETS
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
<input type="checkbox"/>	SKETCH/CONCEPT	
<input type="checkbox"/>	PRELIMINARY	
<input checked="" type="checkbox"/>	FINAL	
<input type="checkbox"/>	RECORD DRAWING	

FINNEY CROSSING
A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT

**WESTERLY PORTION
FROM MARKET STREET
TO SEYMOUR STREET**

LAMOUREUX & DICKINSON
Consulting Engineers, Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450

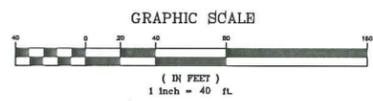
proj. no. 01-087
survey L&D
design DJG/ABR
drawn JET/BH
checked DJG/ABR
date 11/30/05
scale 1" = 40'
sh. no. 9

**STORMWATER BASIN #1
WETLAND PLANTING SCHEDULE**

WETLAND PLANTINGS TO BE INSTALLED WITHIN THE INDICATED PORTION OF THE BASIN. EMBANKMENTS TO BE SEEDED WITH EROSION CONTROL SEED MIX.

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QUANTITY
<i>Scirpus acutus</i>	HARD-STEM BULRUSH	PEAT POT	3 FT O.C.	500
<i>Scirpus validus</i>	SOFT-STEM BULRUSH	PEAT POT	3 FT O.C.	500
<i>Carex lasiocarpa</i>	LAKE SEDGE	PEAT POT	3 FT O.C.	250
<i>Potamogeton nodosus</i>	PICKERELWEED	PEAT POT	3 FT O.C.	125
<i>Sagittaria latifolia</i>	BROAD-LEAF ARROWHEAD	PEAT POT	3 FT O.C.	125
	TOTAL			1500

NOTE: WETLAND PLANTINGS TO BE INSTALLED DURING THE SPRING OR EARLY SUMMER AFTER THE SITE HAS BEEN PERMANENTLY STABILIZED AND SEDIMENT ACCUMULATED DURING CONSTRUCTION HAS BEEN REMOVED TO THE DESIGN GRADES SHOWN ON THE PLANS.



NOTES:

- DETECTABLE WARNING STRIPS SHALL BE INSTALLED AT ALL SIDEWALK RAMP AND AT PAVED PATH INTERSECTIONS WITH ROADWAYS.
- AN ACCESS EASEMENT OF UNDEFINED LOCATION ACROSS PRIVATE STREETS AND/OR DRIVES SHALL BE CONVEYED TO THE TOWN OF WILLISTON FROM THE PUBLIC STREET TO THE STORMWATER BASIN.

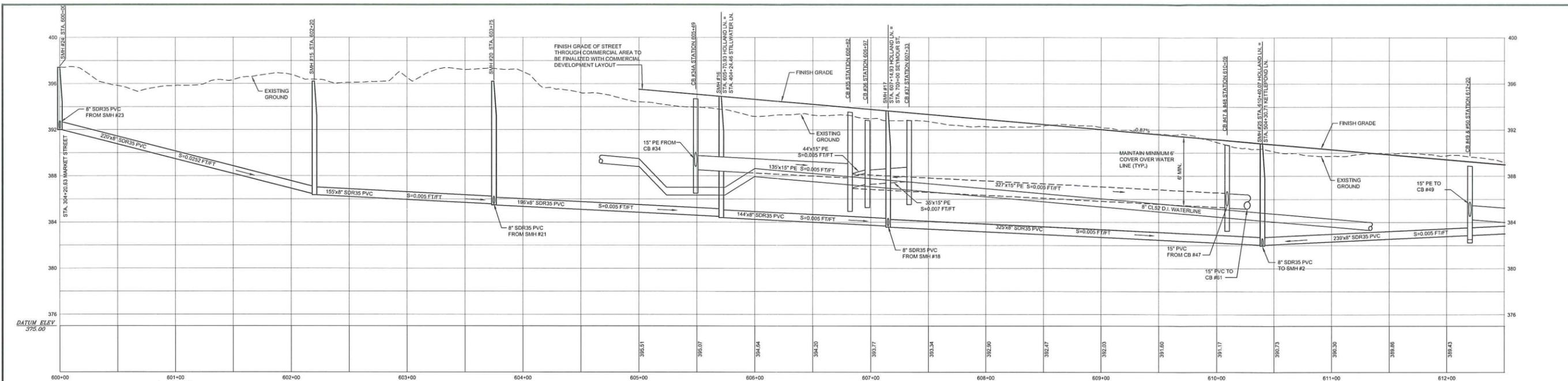
LEGEND

LEGEND	DESCRIPTION	LAMP TYPE	DISTRIBUTION TYPE	MOUNTING HEIGHT
V318	HADCO HOMELAND V602 CUTOFF	175 WATT METAL HALIDE	TYPE III - CUTOFF	18 FEET POLE MOUNTED
V518	HADCO HOMELAND V602 CUTOFF	175 WATT METAL HALIDE	TYPE V - CUTOFF	18 FEET POLE MOUNTED
V312	HADCO HOMELAND V602 CUTOFF	175 WATT METAL HALIDE	TYPE III - CUTOFF	12 FEET POLE MOUNTED
B50	HADCO RDB BOLLARD	50 WATT METAL HALIDE	TYPE V WITH LOUVER	42" HIGH - GROUND MOUNTED

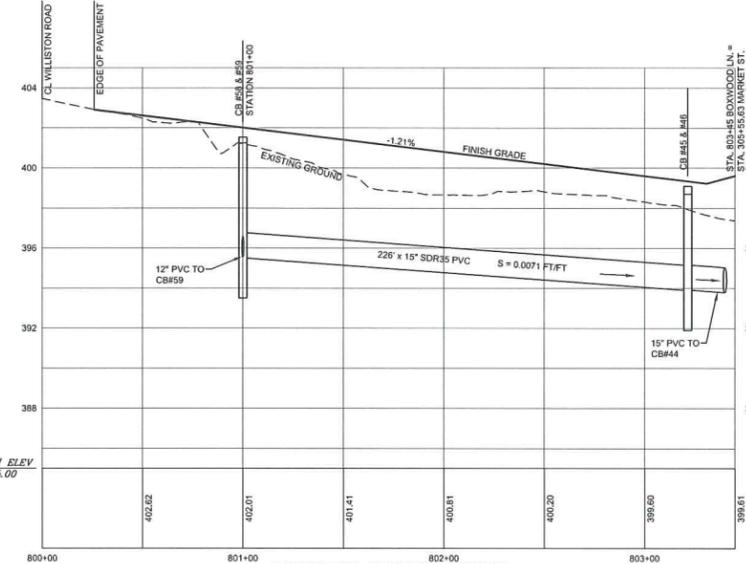
LIGHTING SPECIFICATIONS

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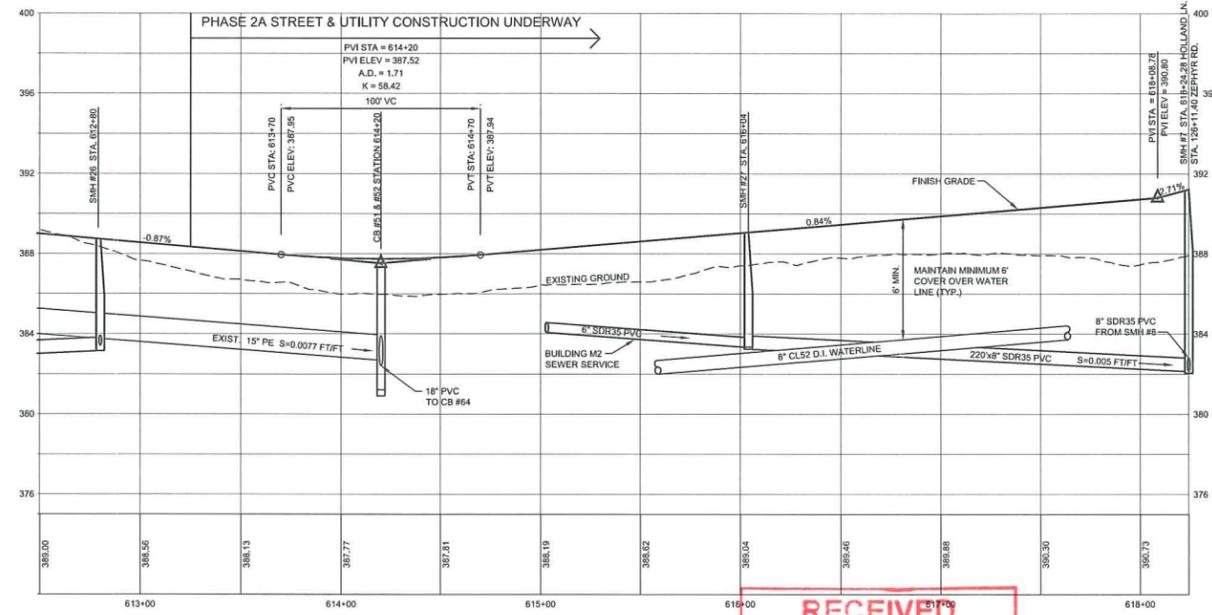
WILLISTON DISCRETIONARY PERMIT DP 09-01
TAX PARCEL # 081104010, 081433002, 004, & 010



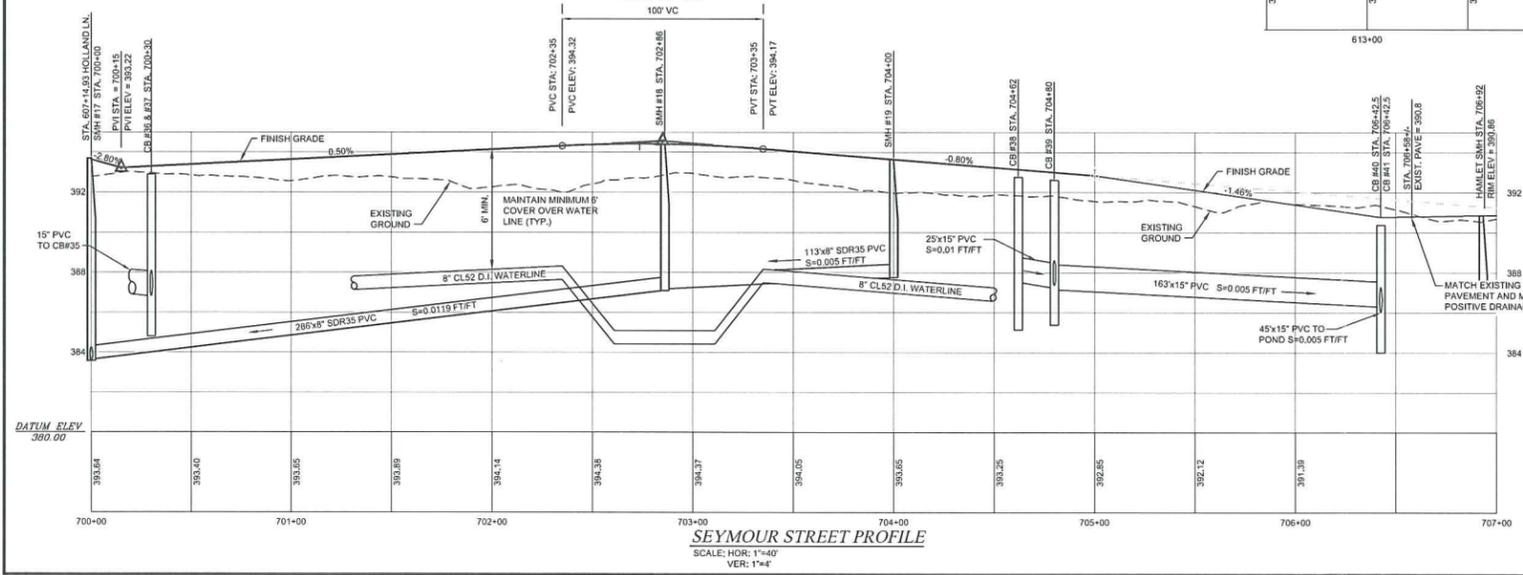
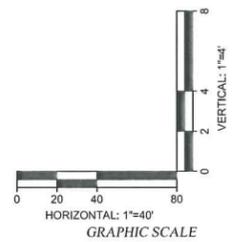
HOLLAND LANE PROFILE
SCALE: HOR: 1"=40'
VER: 1"=4'



BOXWOOD STREET PROFILE
SCALE: HOR: 1"=40'
VER: 1"=4'



HOLLAND LANE PROFILE
SCALE: HOR: 1"=40'
VER: 1"=4'

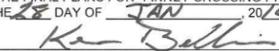


SEYMOUR STREET PROFILE
SCALE: HOR: 1"=40'
VER: 1"=4'

RECEIVED
OCT 25 2013
PLANNING/ZONING

FINAL PLANS

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 28 DAY OF JAN 2014


 ADMINISTRATOR'S SIGNATURE



DATE	REVISIONS	BY
07-23-13	REVISED CB #40 & 41 LOCATION	DJG
06-11-13	REVISED SMH #26 LOCATION	DJG
10-15-12	REVISE PER STAFF/DORS REVIEW	ABR
07-16-12	REVISE CDS #1 & #2	ABR
05-15-07	REVISED PER TOWN AND STATE REVIEWS	DJG/UT
01-12-07	GENERAL REVISIONS FOR FINAL PLAN SUBMITTAL	JT

REVISIONS	# OF SHEETS
<input type="checkbox"/> SKETCH/CONCEPT <input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> FINAL <input type="checkbox"/> RECORD DRAWING	

FINNEY CROSSING

A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT

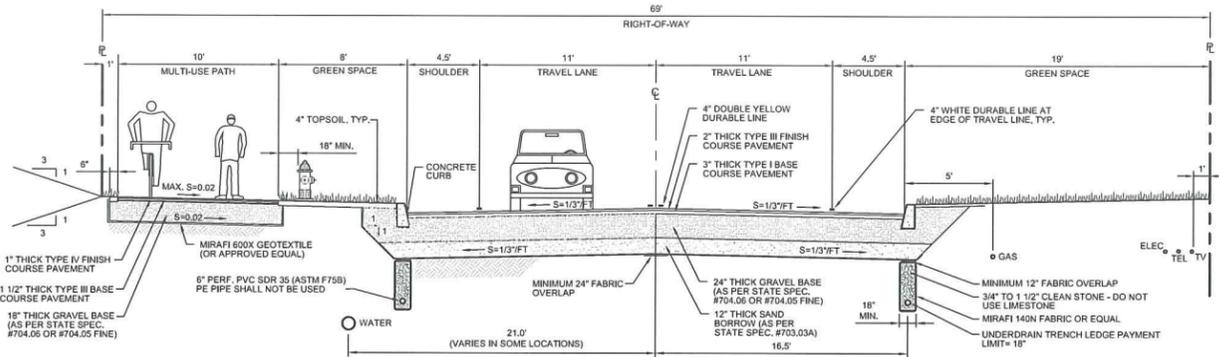
**HOLLAND LN.,
BOXWOOD ST. &
SEYMOUR ST. PROFILES**

proj. no. 01-087
survey L&D
design DJG/ABR
drawn JET/BH
checked DJG/ABR
date 11/30/05

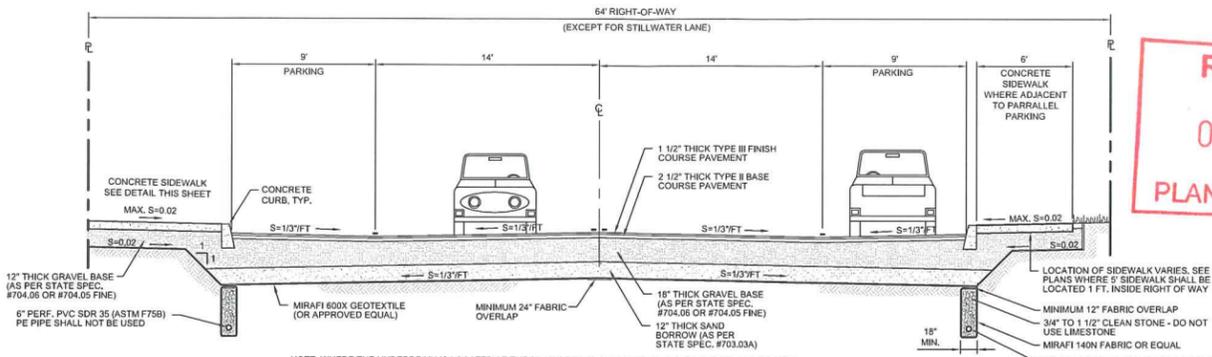
LAMOUREUX & DICKINSON
Consulting Engineers, Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450

scale: H: 1"=40'
V: 1"=4'
shl. no. 13

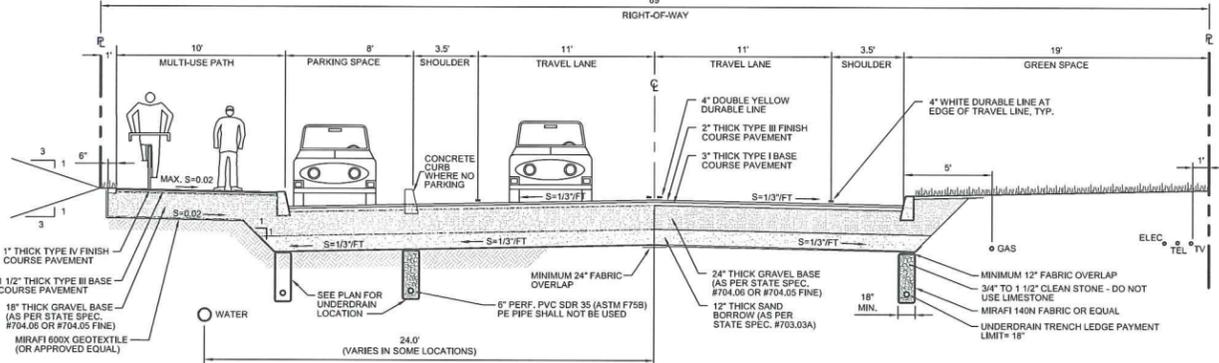
RECEIVED
OCT 25 2013
PLANNING/ZONING



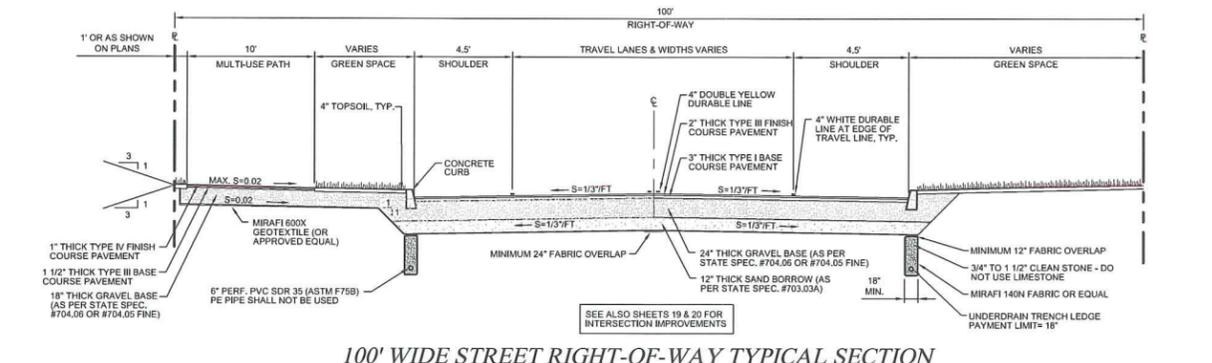
69' WIDE STREET RIGHT-OF-WAY TYPICAL SECTION
SCALE: NTS ZEPHYR ROAD: STATION 106+00 TO STATION 129+82 (STATION 104+50 TO STATION 106+00 PAVEMENT WIDTH VARIES)



64' WIDE SEYMOUR, HOLLAND & STILLWATER RIGHT-OF-WAY TYPICAL SECTION
SCALE: NTS FOR PORTIONS OF ROADWAY WITH ON-STREET PARALLEL PARKING

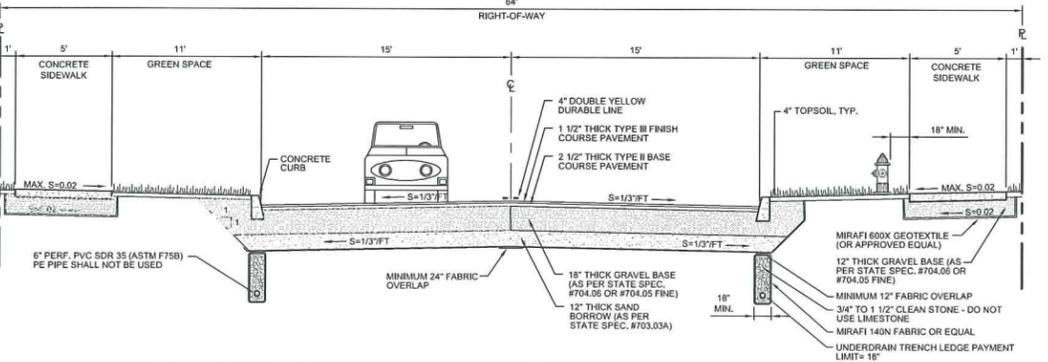


ZEPHYR ROAD ON-STREET PARKING TYPICAL SECTION
SCALE: NTS ZEPHYR ROAD: STATION 110+50 TO STATION 125+50 (ON STREET PARKING IS NOT CONTINUOUS, SEE SITE PLAN)

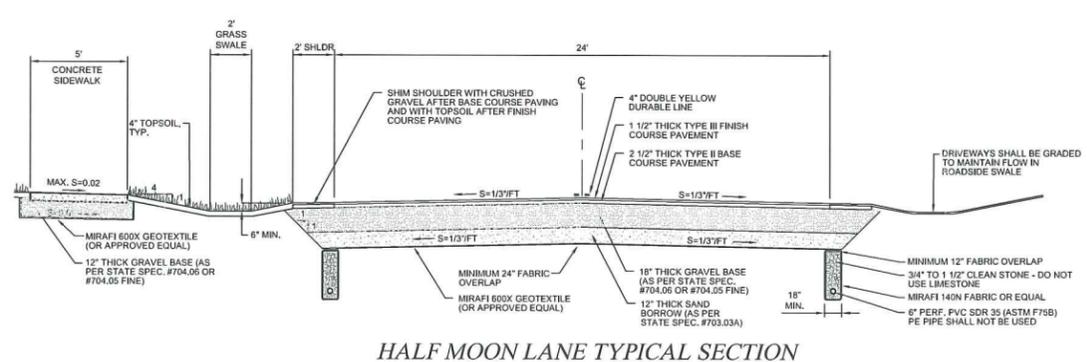


100' WIDE STREET RIGHT-OF-WAY TYPICAL SECTION
SCALE: NTS ZEPHYR ROAD: STATION 100+21 TO STATION 104+76 MARKET STREET

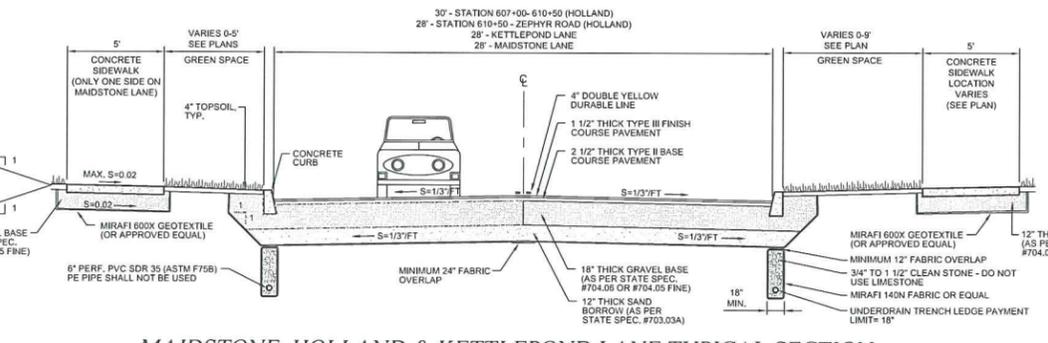
- NOTES:**
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN PUBLIC WORKS SPECIFICATIONS, THE 2006 VERMONT STATE STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE APPROVED ENGINEERING PLANS AND SPECIFICATIONS.
 - EMULSION WILL BE PLACED ON THE FACE OF THE CURB WHERE IT WILL BE IN CONTACT WITH THE PAVEMENT.
 - EMULSION WILL BE PLACED BETWEEN THE BASE AND FINISH COATS OF PAVEMENT WHEN THE FINISH COURSE IS NOT PLACED IMMEDIATELY AFTER THE BASE COURSE PLACEMENT.
 - THE STREET FINISH GRADE SHALL HAVE A MINIMUM SLOPE OF 0.5%.
 - WHERE LEGS EXIST IT SHALL BE SHATTERED TO A MINIMUM OF 2'-6" BELOW SUBGRADE.
 - YELLOW OR ORANGE WARNING TAPE SHALL BE BURIED 15" ABOVE ALL GAS, ELECTRIC, TELEPHONE AND T.V. LINES.
 - PRIOR TO INSTALLING THE UNDERDRAINS, THE FABRIC AND GRAVEL, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR INSPECTION OF THE SUBGRADE SOILS. THE CONTRACTOR SHALL FURNISH A LOADED DUMP TRUCK FOR TRAVELING ON THE SUBGRADE WHEN THE ENGINEER PERFORMS THE INSPECTION. THE CONTRACTOR SHALL OVER-EXCAVATE UNSUITABLE SOILS AND ADD ADDITIONAL SAND BASE AS REQUESTED BY THE ENGINEER.
 - PRIOR TO PLACEMENT OF SAND BORROW OR GRAVEL BASE MATERIALS, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A GRADATION ANALYSIS FOR EACH MATERIAL. SOURCE TO BE USED DEMONSTRATING COMPLIANCE WITH THE REQUIRED SPECIFICATION. THIS GRADATION ANALYSIS SHALL BE REPRESENTATIVE OF THE MATERIAL TO BE USED. SUBSEQUENT SAMPLES SHALL BE TAKEN FROM ON-SITE MATERIAL IN PLACE FOR GRADATION ANALYSIS BY THE ENGINEER.
 - ALL PAVEMENT MARKINGS ON PUBLIC STREETS, AND ALL CROSSWALKS (PUBLIC OR PRIVATE STREETS) SHALL BE DURABLE MARKINGS (3M TAPE). TEMPORARY PAINT MARKINGS SHALL BE PROVIDED ON BASE COURSE PAVEMENT.



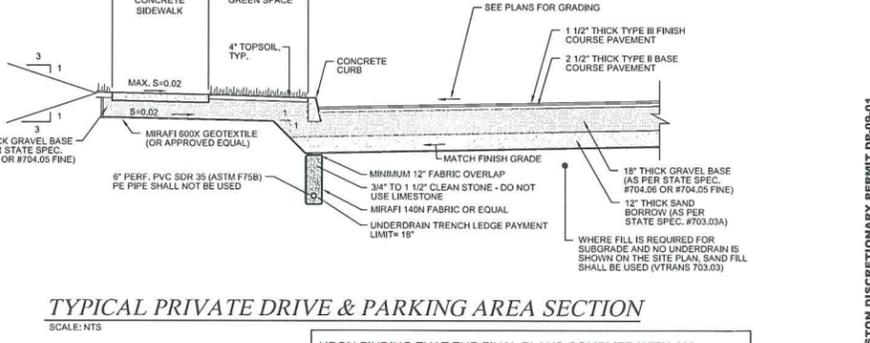
64' WIDE DUNMORE LANE RIGHT-OF-WAY TYPICAL SECTION
SCALE: NTS



HALF MOON LANE TYPICAL SECTION
SCALE: NTS



MAIDSTONE, HOLLAND & KETTLEPOND LANE TYPICAL SECTION
SCALE: NTS MAIDSTONE LANE: STATION 607+00 TO ZEPHYR ROAD KETTLE POND LANE



TYPICAL PRIVATE DRIVE & PARKING AREA SECTION
SCALE: NTS

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 26 DAY OF JAN 2014

Ren Belbin
ADMINISTRATOR'S SIGNATURE

TYPICAL STREET, DRIVE & PARKING AREA CROSS-SECTION NOTES

SCALE: N.T.S.

02-29-12	ADD SIDEWALK BOTH SIDES DUNMORE LN. AND ON HALF MOON LANE	ABR
01-27-12	REV. PER DPW REVIEW - ADD SIDEWALK AND SUBGRADE SLOPE	ABR
08-12-11	ADD HALF MOON LN & DRIVEWAY / PARKING SECTION, EDIT GENERAL NOTES	ABR
05-16-07	REVISED PER TOWN AND STATE REVIEWS	DJG/T
01-12-07	ADDED ZEPHYR ROAD ON-STREET PARKING DETAIL	PMP

REVISIONS

<input type="checkbox"/> SKETCH/CONCEPT <input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> FINAL <input type="checkbox"/> RECORD DRAWING	# OF SHEETS
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FINNEY CROSSING
A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT

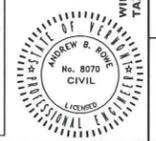
DETAILS & SPECIFICATIONS
ROADS

proj. no. 01-087
survey L&D
design DJG/ABR
drawn JET/BH
checked DJG/ABR
date 11/30/05
scale AS SHOWN
sh. no. 14

LAMOUREUX & DICKINSON
Consulting Engineers, Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450

14
01987-phase1.dwg

FINAL PLANS

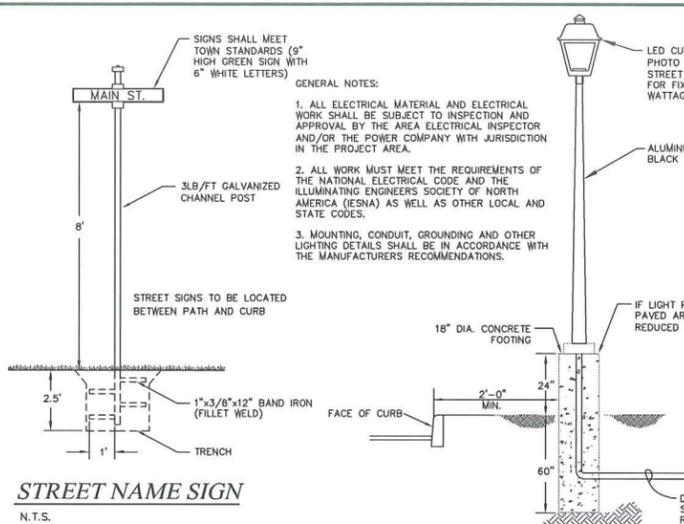


GENERAL CONSTRUCTION SPECIFICATIONS

- UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. CONTRACTOR SHALL VERIFY EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. CONTRACTOR SHALL VERIFY NEW TAP LOCATIONS AND SHALL CONNECT ALL UTILITIES TO NEAREST SOURCE THROUGH COORDINATION WITH UTILITY OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING VEGETATION, PAVEMENT, AND STRUCTURES NECESSARY TO COMPLETE THE WORK UNLESS NOTED ON THESE PLANS. CONTRACTOR SHALL REMOVE ALL TRASH FROM SITE UPON COMPLETION OF CONSTRUCTION. ANY SURFACES, LINES OR STRUCTURES WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO BEGINNING OF CONSTRUCTION.
- SEE OTHER DETAIL SHEETS OF THESE PLANS FOR ADDITIONAL DETAILS, REQUIREMENTS AND SPECIFICATIONS.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2006 VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE TOWN OF WILISTON PUBLIC WORKS SPECIFICATIONS AND THESE PLANS.
- NEW PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH NOTE #4 ABOVE. ALL EXISTING PAVEMENT MARKINGS CONFLICTING WITH THE NEW IMPROVEMENTS SHALL BE REMOVED BY GRINDING OR BURNING.
- A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. CONTINUOUS TWO-WAY TRAFFIC WILL BE REQUIRED AT NIGHT PEAK-HOURS, AND WHENEVER POSSIBLE DURING ACTUAL CONSTRUCTION ACTIVITIES. IF DEEMED NECESSARY BY THE OWNER, MUNICIPALITY OR ENGINEER, A UNIFORMED TRAFFIC CONTROL OFFICER SHALL DIRECT TRAFFIC DURING PEAK HOURS. TEMPORARY CONSTRUCTION SIGNS AND TRAFFIC CONTROL SIGNS SHALL BE ERRECTED BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND TOWN STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OR HER OWN EXPENSE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR SAFETY HAZARD. WHERE AND WHEN DEEMED NECESSARY, THE CONTRACTOR WILL BE REQUIRED TO WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER, APPLY CALCIUM CHLORIDE, OR SWEEP THE ROADWAY WITH A POWER BROOM FOR DUST CONTROL.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS IN ADVANCE OF STARTING ANY WORK, CUTTING PAVEMENT, BEGINNING THE INSTALLATION OF ANY UTILITIES, BRINGING IN ANY NEW GRAVEL OR STONE FOR THE NEW BASE PAVING, ALL TESTING, AND FINAL INSPECTION, IN ORDER TO ENSURE COMPLIANCE WITH THE PLANS.
- PRIOR TO BEGINNING CONSTRUCTION, ALL MATERIALS SHALL BE APPROVED BY THE ENGINEER AND THE TOWN.
- ALL FILL SHALL BE PLACED IN 6 INCH LIFTS AND THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM 99 STANDARD PROCTOR, AND SHALL BE TESTED AT 500' INTERVALS, UNLESS OTHERWISE SPECIFIED.
- BACKFILL UNDER PIPES IN FILL AREAS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT. THE PIPES SHALL ONLY BE INSTALLED OVER ADEQUATELY COMPACTED SOILS.
- THE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED, MAINTAINED AND REPAIRED BY THE CONTRACTOR PRIOR TO AND AFTER EVERY RAINFALL EVENT. ALL DISTURBED AREAS HAVE BEEN PAVED OR GRASSED AND APPROVED BY THE ENGINEER. THE MAINTENANCE OF SEDIMENTATION CONTROL DEVICES WILL INCLUDE THE REMOVAL OF ANY ACCUMULATED SEDIMENTATION.
- CONSTRUCTION OBSERVATION AND CERTIFICATION IS OFTEN REQUIRED BY STATE AND LOCAL PERMITS. IT IS RECOMMENDED THAT CONSTRUCTION OF THE IMPROVEMENTS DETAILED ON THESE PLANS BE OBSERVED BY LAMOUREUX & DICKINSON CONSULTING ENGINEERS INC. (L&D) TO DETERMINE THE WORK IS BEING PERFORMED IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. L&D WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT MAY ARISE FROM FAILURE TO FOLLOW THESE PLANS AND SPECIFICATIONS AND THE DESIGN INTENT THAT THEY CONVEY. ANY CHANGES MADE IN THE PLANS AND SPECIFICATIONS OR IN THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS WITHOUT L&D'S PRIOR KNOWLEDGE AND CONSENT, AND/OR FAILURE TO SCHEDULE OBSERVATION OF THE WORK AND TESTING PROGRESS.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION AND INSTALLATION OF THE INDIVIDUAL UNIT OR LOT CURB CUTS AND PIPE SERVICES WITH THE OWNER AT THE TIME OF CONSTRUCTION.
- ALL SLOPES, DITCHES AND DISTURBED AREAS SHALL BE GRADED SMOOTH, CLEAN AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.

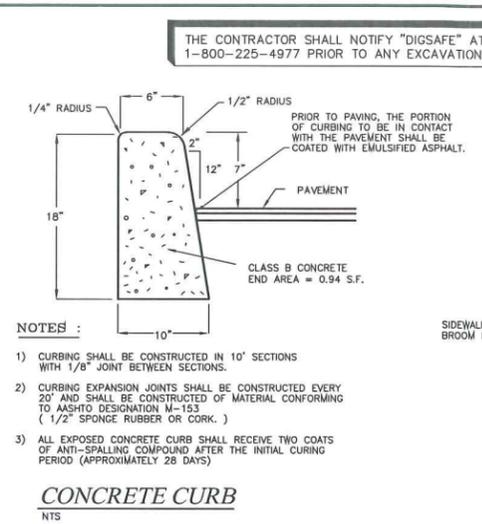
LEDGE REMOVAL SPECIFICATIONS

- ALL LEDGE BLASTING AND REMOVAL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL EXCAVATE ROCK, IF ENCOUNTERED, TO THE LINES AND GRADES INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PROPERLY DISPOSE OF THE ROCK AND BACKFILL WITH ACCEPTABLE MATERIAL. GENERALLY, ROCK IN PIPE TRENCHES SHALL BE EXCAVATED SO AS NOT TO BE LESS THAN SIX INCHES FROM THE BOTTOM OF THE PIPE AFTER IT HAS BEEN LAID.
- ROCK EXCAVATION SHALL MEAN BOULDERS EXCEEDING ONE CUBIC YARD IN VOLUME OR SOLID LEDGE ROCK WHICH, IN THE OPINION OF THE ENGINEER, REQUIRES ITS REMOVAL BY DRILLING AND BLASTING, WEDGING, SLEDGING, OR BARRING. NO HARDBAN, SFT, OR DISTORTED ROCK WHICH CAN BE REMOVED WITH A PICK, LOOSE, SHAVEN, OR PREVIOUSLY BLASTED ROCK OR BROKEN STONE SMALLER THAN ONE CUBIC YARD IN VOLUME OR ROCK EXCAVATION OR ELSEWHERE, AND NO ROCKS EXTERIOR TO THE MAXIMUM LIMITS OF EXCAVATIONS BY THE APPROVED BY THE ENGINEER WHICH MAY FALL INTO THE TRENCH OR OTHER EXCAVATIONS, WILL BE MEASURED OR ALLOWED AS ROCK EXCAVATION.
- IN ROCK EXCAVATION, IT IS ESPECIALLY REQUIRED THAT BLASTING SHALL BE CONDUCTED WITH ALL POSSIBLE CARE SO AS TO AVOID INJURY TO PERSONS AND PROPERTY; THAT ROCK SHALL BE WELL COVERED WITH EFFECTIVE APPLIANCES; THAT SUFFICIENT WARNING SHALL BE GIVEN TO ALL PERSONS IN THE VICINITY OF WORK BEFORE BLASTING; THAT CARE SHALL BE TAKEN TO AVOID INJURY TO WATER PIPES, GAS PIPES, SEWERS, DRAINS, OR OTHER STRUCTURES; AND THAT CAPS OR OTHER PRIMERS SHALL NOT BE KEPT IN THE SAME PLACE WHERE DYNAMITE OR OTHER EXPLOSIVES ARE STORED.
- THE CONTRACTOR SHALL OBSERVE ALL LAWS AND ORDINANCES RELATING TO STORAGE AND HANDLING OF EXPLOSIVES.
- THE CONTRACTOR SHALL BE PAID FOR BLASTING AND REMOVAL OF ROCK ONLY TO THE LEDGE PAYMENT LIMITS SHOWN ON THE PLANS.

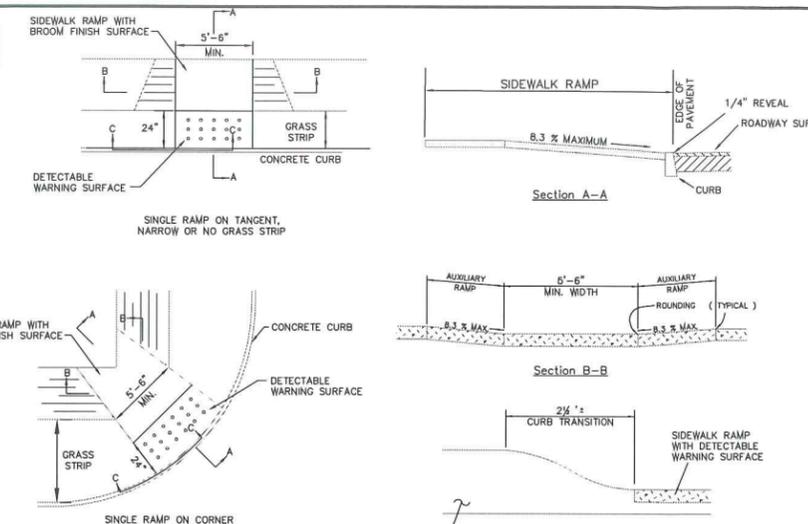


STREET NAME SIGN
N.T.S.

TYPICAL STREET LIGHT
N.T.S.

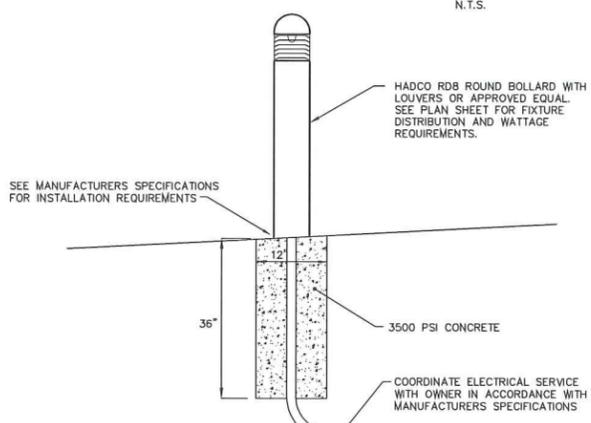


CONCRETE CURB
N.T.S.

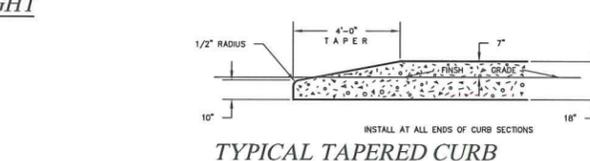


SIDEWALK RAMP
N.T.S.

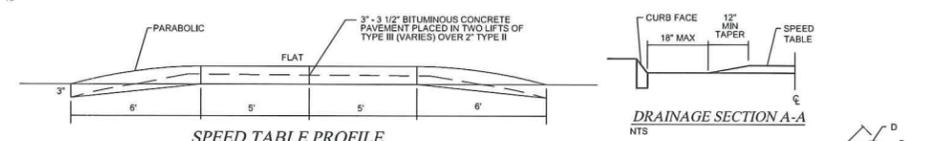
DRAINAGE SECTION A-A
N.T.S.



BOLLARD LIGHT FIXTURE
N.T.S.

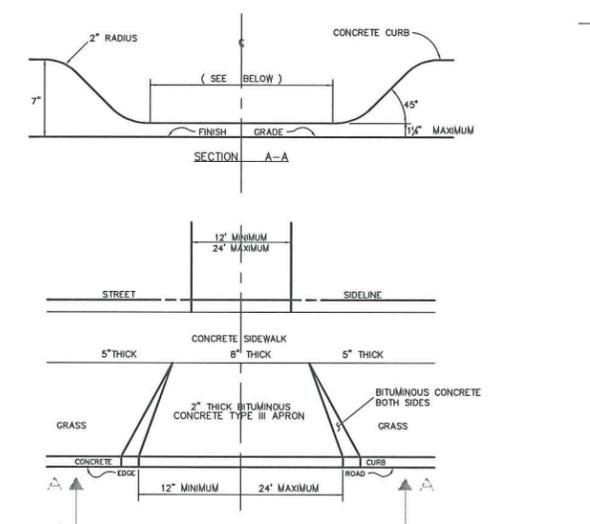


TYPICAL TAPERED CURB
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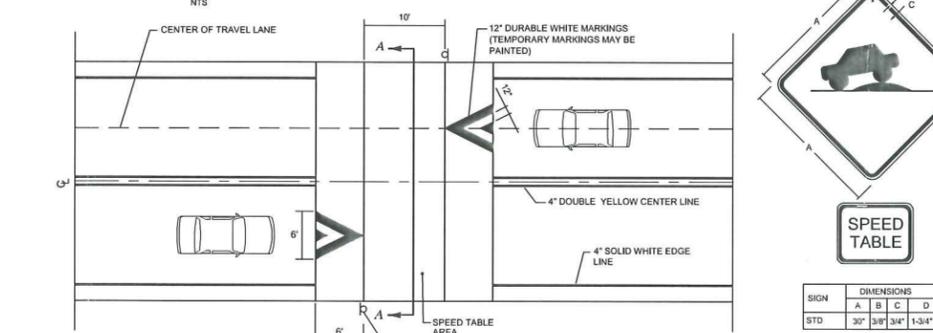


SPEED TABLE PROFILE
N.T.S.

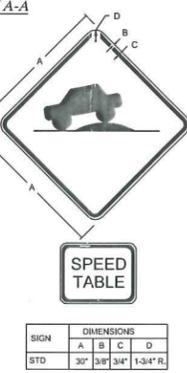
DRAINAGE SECTION A-A
N.T.S.



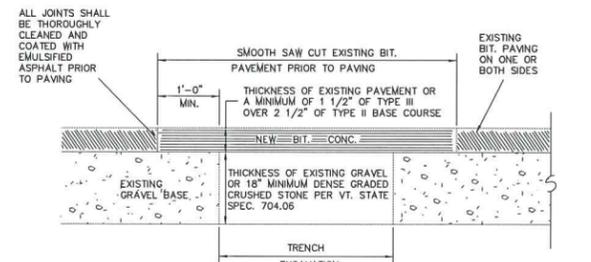
DRIVEWAY APRON & CURB CUT
N.T.S.



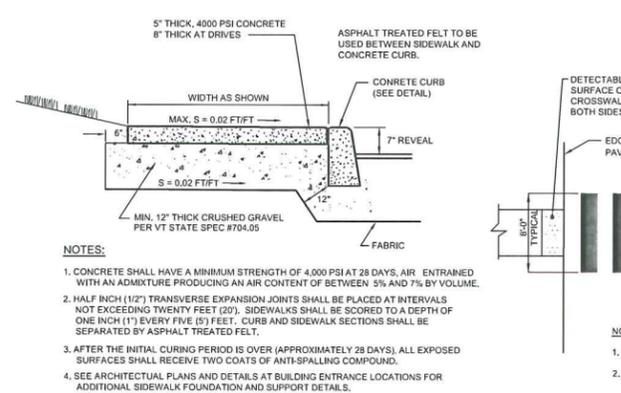
SPEED TABLE
N.T.S.



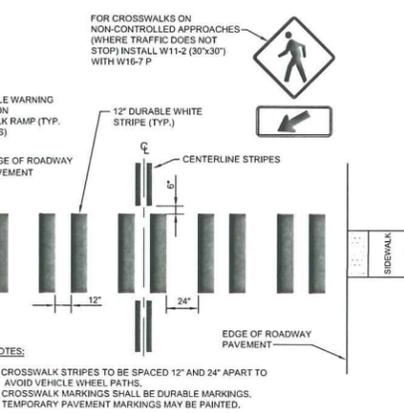
SIGN	A	B	C	D
STD	30"	30"	34"	1-3/4" R.



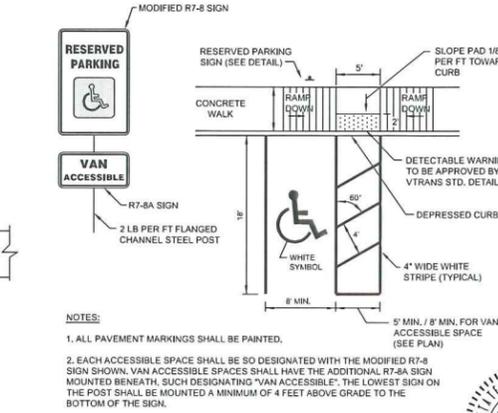
REPLACEMENT of EXISTING BITUMINOUS PAVEMENT
N.T.S.



CONCRETE SIDEWALK DETAIL
N.T.S.



CROSSWALK DETAIL
N.T.S.



ACCESSIBLE PARKING SPACE DETAIL
N.T.S.

FINAL PLANS

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 35th DAY OF JAN, 2014.

Ken Bellon
ADMINISTRATOR'S SIGNATURE

DATE	REVISIONS	BY
01-27-12	REV PER DPW - ADD SIDEWALK AND SUBGRADE SLOPE	ABR
12-16-11	REVISE STREET LIGHT TO LED	ABR
08-12-11	REVISE SW DETAIL PER DPW SPEC	ABR
01-12-07	ADD SPEED TABLE & ACCESSIBLE PARKING SPACE DETAILS	PMP

REVISIONS	# OF SHEETS
SKETCH/CONCEPT	
PRELIMINARY	
FINAL	
RECORD DRAWING	

FINNEY CROSSING
A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT

DETAILS & SPECIFICATIONS
ROADWAY & MISC.

LAMOUREUX & DICKINSON
Consulting Engineers, Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450



RECEIVED
OCT 25 2013
PLANNING/ZONING

RECEIVED
OCT 25 2013
PLANNING/ZONING

FINAL PLANS

WATER DISTRIBUTION SPECIFICATIONS

1.1 GENERAL:
This item shall consist of the labor, equipment, and material required for the complete construction of the watermain and services which shall include excavation, backfilling, pipe, valves, tees, hydrants, elbows, reducers, and all other appurtenances necessary for a complete watermain system as indicated on the accepted drawings. All materials and installations shall be approved by the local municipal water authority.

1.2 WATER MAIN PIPE MATERIALS:
DUCTILE IRON PIPE
Pipe shall be a minimum diameter of eight inches (8") and conform to current AWWA C600 or ANSI Specification A21.51. Push-on joint pipe shall be minimum thickness Class 52.
Pipe shall be cement mortar-lined on the inside in accordance with AWWA C151.51 or ANSI Specification A21.4 except that the cement-mortar thickness shall not be less than three-sixteenths inch (3/16"). A plus tolerance of one-eighths inch (1/8") will be permitted.

1.3 FITTINGS:
Ductile iron fittings shall be cement-lined, have 350 pounds working pressure, and be in accordance with AWWA C-10/ANSI A21.10 and AWWA C152/ANSI 21.53 for compact fittings. Mechanical joint nuts and bolts shall be high strength, low alloy steel per ANSI A-21.11. Ductile iron fittings larger than twelve inches (12") shall have a standard body length equal to Class 250 cast iron fittings. Cast iron Class 250 fittings will be allowed in lieu of ductile iron fittings in sizes larger than twelve inches (12").
Megulog retainer glands or an approved equal shall be used on all vertical bends and as shown on the plans.

1.4 GATE VALVE RESILIENT SEAT:
Gate valves shall be AWWA C 509 Standard Gate Valves with mechanical joints of sizes as required on the plans. All valves shall be of cast or ductile iron body, parallel brass seats, non-rising stem, inside screw, double disk construction with "O" Ring Stem Seals. All valves to be equipped with a valve box for a minimum of 5.5' of cover material. The gate valves shall open left and be designed for a working pressure of 200 psi.
Each valve shall have maker's name, pressure rating, and year in which manufactured cast on the body. Prior to shipment from the factory, each valve shall be tested by the hydrostatic pressure of the valve to twice the specified working pressure. Buried valves shall be installed with a valve box.

1.5 VALVE BOXES:
Cast iron three-piece slide-type; five and one-fourths inch (5 1/4") shaft; six foot (6') trench depth.
Cast iron cover marked "WATER" and indicating direction of opening.

1.6 FIRE HYDRANTS:
All hydrants are to be 3-way, 5" minimum diameter and limited to the following makes: Mueller Super Centurion or Kennedy Guardian K-BIK, and shall conform with AWWA C502.
Main Valve Opening: 5 1/4 inches
Nozzle Arrangement: Two 2 1/2 inch hose nozzles NST threads.
Inlet Connection: One 4 1/2 inch pumper nozzle NST threads.
Operating Nut: 6 inch mechanical joint, MEGA-LUG and thrust block
Direction of Opening: Standard 1" pentagon
Color: Counter-clockwise
Depth of Bury: Enamelled hydrant red body, top color as determined by Town. Hydrant shall be installed to the manufacturer's instructions with nozzles about 18" above finish grade.

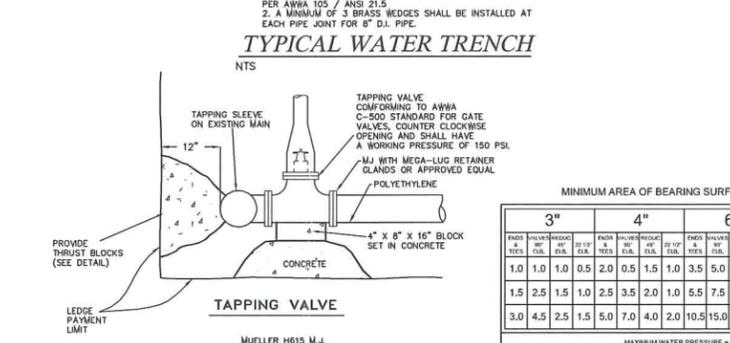
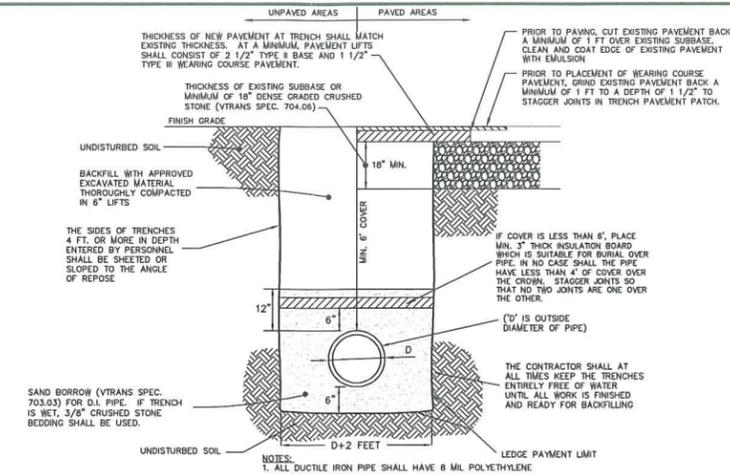
1.7 HYDRANT BRANCHES:
Hydrant assemblies shall consist of a six inch (6") mechanical joint gate valve conforming to AWWA C-509 of length of six inch (6") Class 52 ductile iron pipe with a cement-lining; and the fire hydrant. MEGA-LUG retainer glands or approved equal shall be used.

1.8 WATER SERVICE CONNECTION:
A. GENERAL REQUIREMENTS
The Contractor shall install three-fourths inch (3/4") to two inch (2") copper type K services as indicated on the Contract Drawings or as directed by the Engineer. Each service shall consist of a corporation, curbstop, copper tubing, and a curb box with service rod. Corporation shall be attached to the ductile iron pipe by means of a direct tap.
B. CORPORATIONS
Corporations shall be Waterworks Brass and manufactured in accordance with AWWA C600. Corporations shall have Mueller threads, adopted as AWWA Figure # 1, at the inlet and a compression-type fitting at the outlet. Both inlet and outlet shall be of the same size. Corporations shall be used for all tops larger than three-fourths inch (3/4") in diameter.
Corporations shall be directly tapped into ductile iron pipe larger than two inches (2") in diameter. In no other instance, except when a tapping sleeve and valve is used, shall a top be made on a corporation installed without the use of a tapping saddle. Corporations shall be Mueller H-1500B or equal.
C. CURBSTOPS
Curbstops shall be a quarter-turn, plug-type valve with an "O" ring-type seal and shall be manufactured of Waterworks Brass in accordance with AWWA C600. The curbstop shall open left and have a positive stop. No curbstop shall have the ability to drain the service line. Both inlet and outlet of the curbstop shall have compression-type fittings. The tee head of the curbstop shall have provision for the connection of a service rod. Curbstops shall be Mueller H-15209 or equal. (Mueller 300 Ball Valves are not acceptable.)
D. SERVICE LINES
Copper tubing shall be type "K", soft-temper, conforming to ASTM B88. The name or trademark of the manufacturer and type shall be stamped at regular intervals along the pipe. Water services greater than 2" in diameter shall be ductile iron.
All domestic services and domestic fire sprinkler systems that are connected to the public water system shall be protected according to their degree of hazard, with a backflow prevention assembly, and with an appropriate thermal expansion system.

E. CURB BOXES AND RODS
Curb boxes shall be of the sliding adjustable-type capable of adjusting from five feet to six feet (5' - 6'). The base of the box shall be arch-type so as to prevent the box from resting directly on the curbstop. The adjustable upper section shall be one inch (1") in diameter for use with three-fourths and one inch (3/4" and 1") curbstops. For larger curbstops, the upper section shall be one and one-fourths inches (1 1/4") in diameter.
Stationary rods affixed to the key of the curbstop shall be thirty inches (30") in length for three-fourths and one inch (3/4" and 1") curbstops and twenty-four inches (24") for larger curbstops. The cover of the box shall be by "Mueller" with the two-hole cover. The word "WATER" shall be inscribed on the cover of the box.
F. HOUSE SERVICES CONSTRUCTION METHODS
The Contractor shall make all necessary taps into the watermain and will install for each lot an approved brass connection stop.
The Contractor shall also connect the type "K" copper service pipe to the flanged joint, which shall be connected to the brass type curbstop with inlet and outlet for the appropriate type "K" copper service pipe. Such curbstop shall be located not less than six feet (6') below the ground surface and shall be accessible from the surface through an approved valve box.

1.9 CONSTRUCTION METHODS
A. INSPECTION AND TESTING
All pipe and fittings shall be inspected and tested in accordance with the manufacturer's specifications and the aforementioned AWWA Specifications. The Contractor shall furnish for approval certification from the pipe manufacturer that all tests have been performed with satisfactory results. Pipe shall not be installed without the Engineer's or Water Authority's approval.
B. INSTALLATION
Pipes, fittings, and accessories shall be carefully handled to avoid damage. Prior to the date of acceptance of the project work by the Owner, the Contractor shall replace any new pipe or accessory found to be defective at any time, including after installation, at no expense to the Owner. All installation and testing shall be done in accordance with AWWA Standard C-600 and ANSI Specification A21.11.
All pipes showing cracks shall be rejected. If cracks occur in the pipe, the Contractor may, at his own expense and with the approval of the Engineer, cut off the cracked portions at a point at least twelve inches (12") from the visible limits of the crack and use the sound portion of the pipe. All pipes and fittings shall be cleared of all foreign matter and debris prior to installation and shall be kept clean until the time of acceptance by the Owner.
At all times, when the pipe laying is not actually in progress, the open ends of the pipe shall be closed by temporary watertight plugs or by other approved means. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed. The pipe shall be installed in trenches and at the line and grade shown on the Contract Drawings.
Any deflection joints shall be within the limits specified by the manufacturer. All piping and appurtenances connected to the equipment shall be supported so that no strain will be imposed on the equipment. If the equipment manufacturer's specifications include that piping loads are not to be transferred, the Contractor shall submit certification of compliance.
Concrete thrust blocks shall be installed on all plugs, tees, and bends deflecting 1 1/4 degrees or more. Care shall be taken to ensure that concrete will not come in contact with flanges, joints, or bolts. The required area of thrust blocks are indicated on the plans or shall be as approved by the Engineer.
Whenever sewers cross under watermain, the watermain shall be laid at such an elevation that the bottom of the watermain is at least 18 inches above the top of the sewer. This vertical separation shall be maintained for that portion of the watermain located within ten feet (10') horizontally of any sewer it crosses.
There shall be no physical connection between the distribution system and any pipes, pumps, hydrants, or tanks which are supplied or may be supplied with water that is, or may be, contaminated. In instances where the use of different types of pipe require joining, the Contractor shall furnish and install all necessary adapters.
All trenching safety standards shall be in conformance with all applicable State and Federal Guidelines and as specified on the Plans.
The Contractor shall, at all times, keep the trenches entirely free of water until work is finished and ready for backfilling. After the various pipelines have been installed, the trenches and other areas to be filled shall be backfilled to subgrade with, wherever possible, material excavated from the trench. No backfilling will be allowed until any concrete masonry has set sufficiently, as determined by the Engineer.
All material for backfilling shall be free of roots, stumps, and frost. Materials used for backfilling trenches shall be free of stones weighing over 30 pounds. No stones measuring over one and one-half inches (1 1/2") in the longest dimension shall be placed within one foot (1') of the pipeline being backfilled.
Backfill for all pipelines shall be placed in six inch (6") layers, each layer being thoroughly compacted to not less than 95 percent of maximum dry density as determined by the AASHTO-T-99 Standard Proctor. Particular precautions shall be taken in the placement and compaction of the backfill material in order not to damage the pipe or structure. The backfill shall be brought up evenly. All watermain shall be installed with a minimum cover depth of six (6').
Surplus excavated materials not used for backfill shall be disposed of in a manner satisfactory to the Engineer. All surplus material or spoil shall be removed promptly and disposed of so as not to be objectionable to abutters or to the general public.
Valve boxes are to be installed on all buried valves. The boxes shall be cast iron with a minimum five and one-fourths inch (5 1/4") diameter and long enough to extend from the valve to finished grade. The boxes shall enclose the operating nut and stuffing box of the valve. Valve boxes shall not transfer loads into the valve. Covers shall be close fitting and dirt-tight with the top of the cover flush with the top of the box rim. Covers shall be marked "Water" with an arrow indicating the direction of opening. Valve boxes shall be three piece slip-type.
The contractor shall provide a stable, temporary PVC marker approved by the Engineer at all gate valves, curb stops, and at the end of waterlines to a point six inches (6") above finish grade. The marker shall be seated securely into the ground.
C. FIELD TESTING
Except as otherwise directed, all pipelines shall be tested. Pipelines laid in excavation or bedded in concrete shall be tested prior to backfilling or the placing of concrete, and any exposed piping shall be tested prior to field painting. The Contractor shall furnish all gauges, testing plugs, cops, and all other necessary equipment and labor to perform leakage and pressure tests in accordance with approved lengths. Each welded section or a maximum of one thousand feet (1,000') of the pipe shall be tested. All water required for testing shall be potable. All testing shall be conducted in the presence of the Engineer.
For the pressure test, the Contractor shall develop and maintain 200 pounds per square inch for two hours. Failure to hold the designated pressure for the required period constitutes a failure of the section tested. The leakage test shall be performed concurrently with the pressure test. During the test, the Contractor shall measure the quantity of water required to maintain the test pressure. Leakage shall not exceed the quantity given by:
$$L = \frac{SD}{148,000}$$

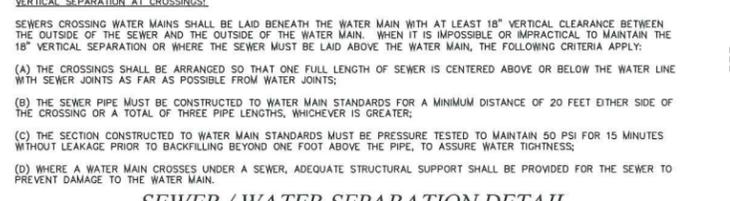
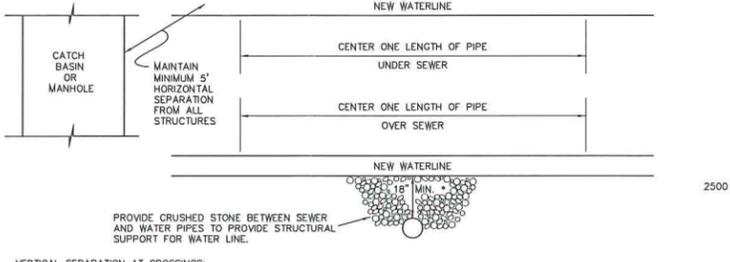
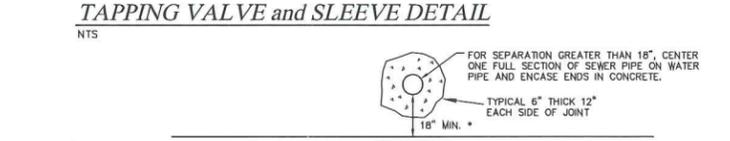
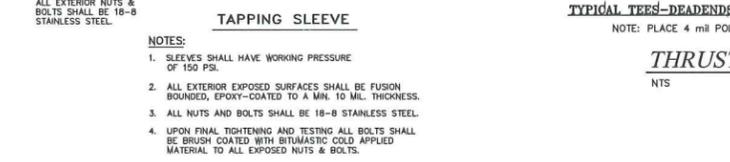
where:
L = Leakage in gallons/hour
S = Length of pipeline tested
D = Diameter of pipe in inches
P = Average test pressure in psi
All testing shall be conducted in accordance with AWWA C-600 latest revision. Should any section of the pipe fail either the pressure or leakage tests, the Contractor shall do everything necessary to locate and repair or replace the defective pipe, fittings, or joints at no expense to the Owner.
D. DISINFECTION:
Chlorination of the watermain shall be conducted only after the main has been flushed and a clear stream is obtained as determined by the Engineer.
The Contractor shall furnish all labor, equipment, materials, and tools necessary to disinfect the pipe and appurtenances in accordance with the AWWA Standard for Disinfecting Watermains, C-651, with the exception of the tablet method.
The method of disinfection shall be by the continuous feed method unless otherwise approved by the Engineer. After filling, flushing, and the addition of chlorine solution, the free chlorine concentration within the pipe shall be at least 25 mg/L. The chlorinated water shall remain in the main for a period of at least 24 hours. At the end of this period, the treated water in all portions of the main shall not have a residual of less than 10 mg/L of free chlorine. All disinfection shall be performed under the supervision of the Engineer. The disinfection process shall be deemed acceptable only after (2) samples of water from the flushed, disinfected main taken by the Engineer and tested at an approved laboratory show no evidence of bacteriological contamination. Disinfection shall conform to the latest AWWA C-651 revision.
The pipeline and appurtenances shall be maintained in an uncontaminated condition until final acceptance. Disinfection shall be repeated when and where required at no expense to the Owner until final acceptance by the Owner.
E. FROST PROTECTION OF SHALLOW WATERLINES
Waterlines with less than six feet (6') of cover over the crown, or where indicated on the plans, shall be protected against freezing by installation of four inch (4") thick Styrofoam SM insulating sheets with a total width of four feet (4') or twice the pipe diameter, whichever is greater. The sheets shall be placed six inches (6") above the crown of the main after completion of the six inch (6") lift immediately above the crown. Care shall be exercised by the Contractor during backfill and compaction over the styrofoam sheets to prevent damage to the sheets. Styrofoam SM sheets shall meet the compressive strength requirements of ASTM D1621-73 and shall be as manufactured by Dow Chemical Company, Midland, Michigan, or equivalent. In no case shall the waterlines have less than four feet (4') of cover over the top of the pipe.



MINIMUM AREA OF BEARING SURFACE OF CONCRETE THRUST BLOCK (IN SQUARE FEET)

PIPE DIA.	3"		4"		6"		8"		12"		SAFE BEARING LOAD (PSF)										
	ENDS	SPANS																			
1.0	1.0	1.0	0.5	2.0	0.5	1.5	1.0	3.5	5.0	3.0	1.5	6.0	8.5	5.0	2.5	13.0	18.5	10.0	5.0	COARSE & FINE (CONCRETE SAND)	3,000
1.5	2.5	1.5	1.0	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2.0	9.0	13.0	7.0	3.5	20.0	27.5	15.0	8.0	MEDIUM CLAY (CAN BE SPADED)	2,000
3.0	4.5	2.5	1.5	5.0	7.0	4.0	2.0	10.5	15.0	8.0	4.0	18.0	25.0	14.0	7.0	39.0	55.0	30.0	15.0	SOFT CLAY	1,000

MAXIMUM WATER PRESSURE = 300 PSI / 150 PSI WORKING PRESSURE PLUS A 2:1 SAFETY FACTOR



VERTICAL SEPARATION AT CROSSINGS:

SEWERS CROSSING WATER MAINS SHALL BE LAID BENEATH THE WATER MAIN WITH AT LEAST 18" VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER MAIN. WHEN IT IS IMPOSSIBLE OR IMPRACTICAL TO MAINTAIN THE 18" VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN, THE FOLLOWING CRITERIA APPLY:

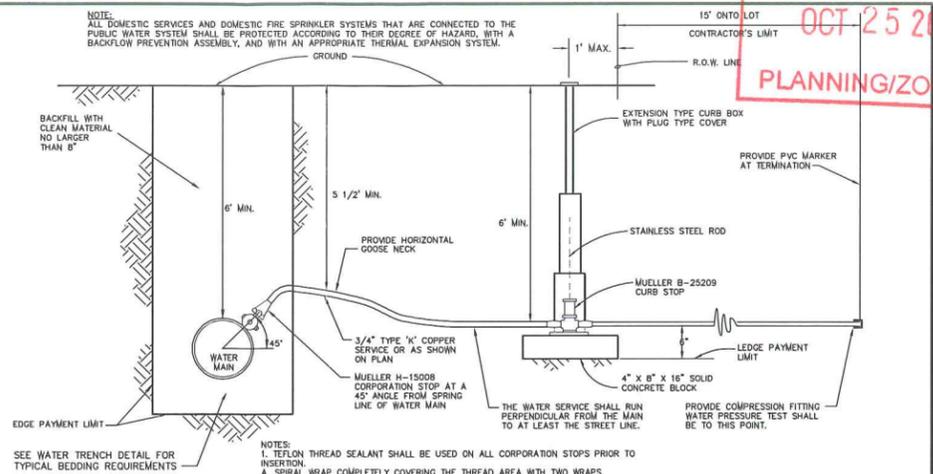
(A) THE CROSSINGS SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS;

(B) 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;

(C) THE SECTION CONSTRUCTED TO WATER MAIN 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;

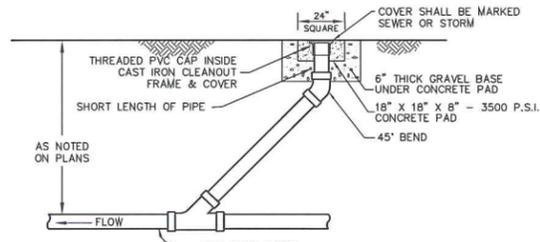
(D) WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

PIPE DIAMETER D	H	W
0-6"	D+8"	D+8"
8-12"	2D	2D
12-36"	D+12"	D+12"

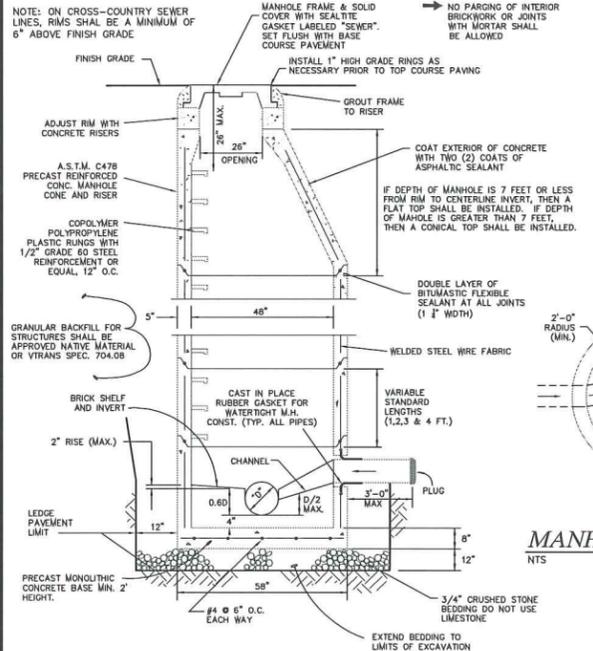


SANITARY & STORM SPECIFICATIONS

- SANITARY AND STORM SEWER PIPES SHALL BE OF THE SIZE AND TYPE INDICATED ON THE PLANS. PVC PIPE SHALL BE SDR 35 CONFORMING TO ASTM D-3034, ASTM D-3212, AND ASTM F-477. CORRUGATED METAL PIPE SHALL CONFORM TO AASHTO M-190 FOR ACCOMP PIPE AND AASHTO M-246 TYPE B FOR POLYMERIC COATED STEEL PIPE. CORRUGATED POLYETHYLENE PIPE SHALL CONFORM TO AASHTO M294-90, TYPE S (SMOOTH LINED).
- ALL NEW GRAVITY SANITARY SEWER MAINS SHALL BE LEAK TESTED BY A LOW PRESSURE AIR TEST AND DEFLECTION TESTED. THE LOW PRESSURE AIR TEST WILL BE USED TO SIMULATE INFILTRATION OR EXFILTRATION INTO OR OUT OF ALL GRAVITY SANITARY SEWERS. ALL TESTING WILL BE CONDUCTED UNDER THE SUPERVISION OF THE ENGINEER. AIR TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM C828-80. THE MINIMUM ALLOWED TIME FOR A PRESSURE DROP FROM 3.5 PSI TO 2.5 PSI SHALL BE 1.2 MINUTES PER 100 FEET OF 8" SEWER. AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS, THE DEFLECTION TEST MAY BE PERFORMED. NO PIPE SHALL EXCEED A DEFLECTION OF FIVE PERCENT (5%). IF THE DEFLECTION TEST IS RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. ALL MANHOLE AND PIPELINE MATERIALS, METHODS AND TESTING SHALL BE IN ACCORDANCE WITH TOWN AND STATE STANDARDS AND THESE PLANS.
- ALL SANITARY SEWER MANHOLES SHALL BE TESTED PRIOR TO CONSTRUCTION OF THE INVERT BY THE VACUUM TEST METHOD DESCRIBED IN THE TECHNICAL SPECIFICATIONS. FOR MANHOLES UP TO 10' DEEP THE MINIMUM ALLOWED TIME FOR A VACUUM DROP FROM 10" TO 9" OF MERCURY SHALL BE 2 MINUTES. FOR MANHOLES 10'-15' DEEP THE MINIMUM ALLOWED TIME SHALL BE 2 MINUTES AND 30 SECONDS.

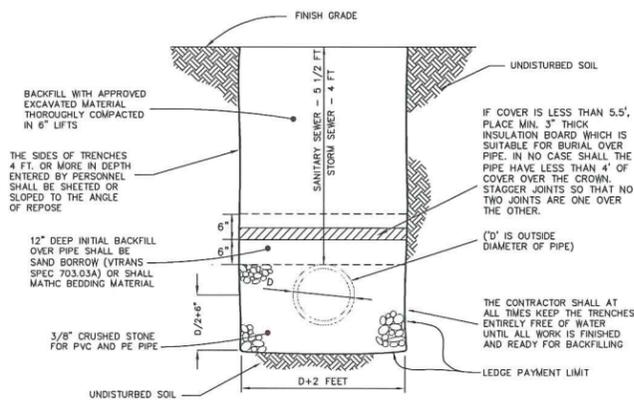


CLEANOUT DETAIL (STORM & GRAVITY SEWER)
NTS

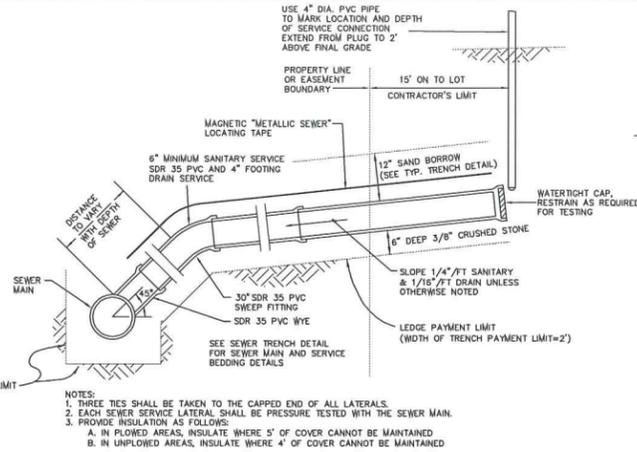


MANHOLE CHANNEL
NTS

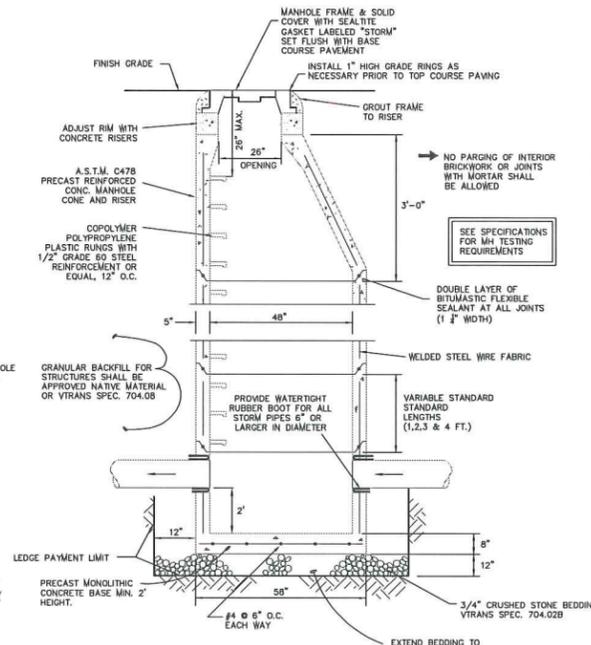
TYPICAL PRECAST SANITARY MANHOLE
NTS



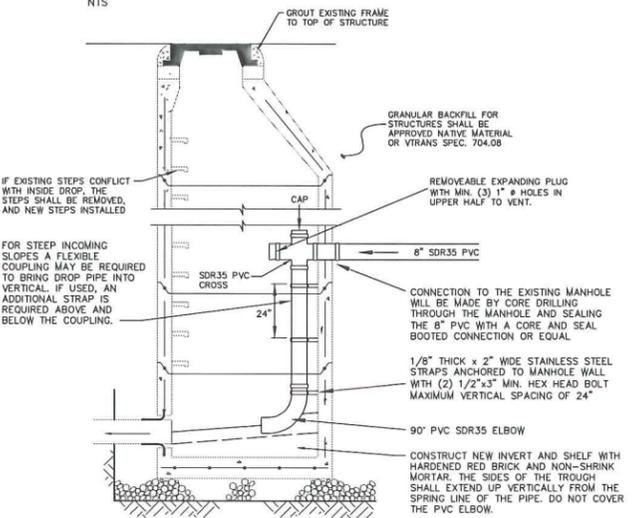
TYPICAL SANITARY SEWER & STORM TRENCH
NTS



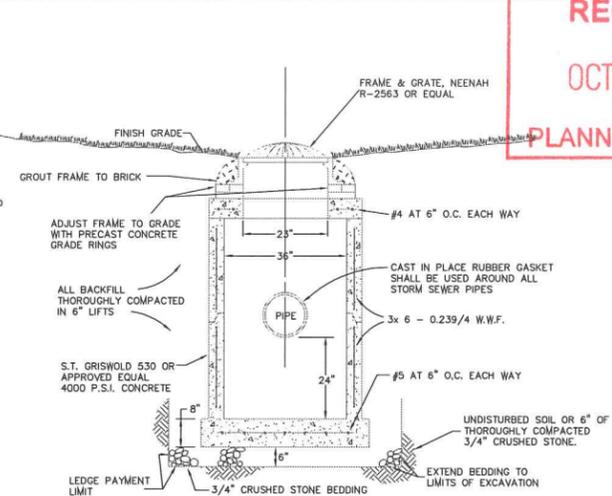
SANITARY SEWER OR FOOTING
DRAIN SERVICE CONNECTION
NTS



TYPICAL PRECAST STORM MANHOLE
NTS



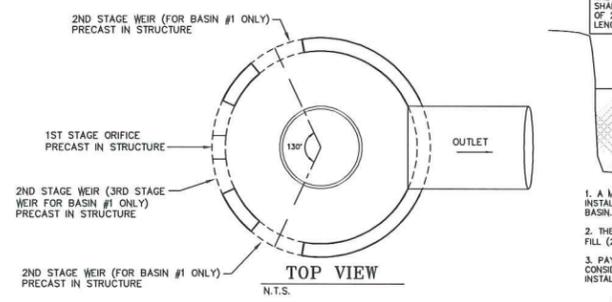
DROP INTO EXISTING MANHOLE
NTS (EXISTING SEWER MANHOLE TO BRENNAN P.S.)



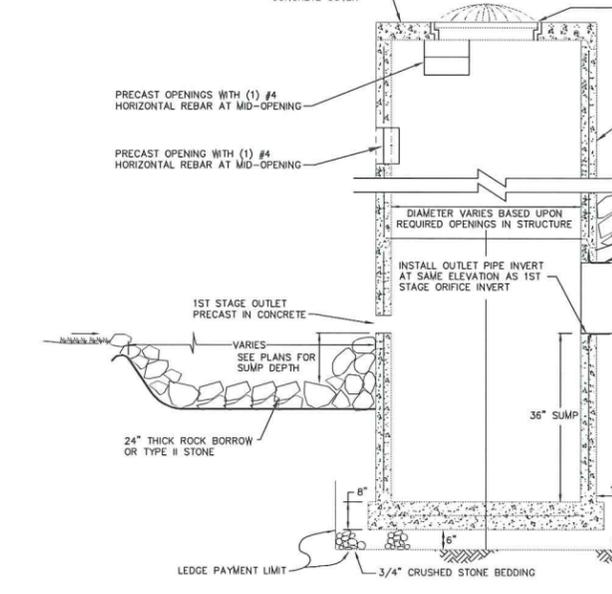
YARD INLET
NTS

OUTLET STRUCTURE	1ST STAGE ORIFICE	2ND STAGE ORIFICE	3RD STAGE WEIR(S)	OVERFLOW WEIR(S)	TOP / GRATE	TYPE GRATE
BASIN #1	4" ORIFICE=365.00	6.5" ORIFICE=366.85	(2) 12"x30" WEIRS = 368.00	(2) 12"x30" WEIRS=369.00	GRATE=390.66	NEENAH R-2560-G
BASIN #2	3" ORIFICE=360.00	3.5" ORIFICE=360.85	12" X 36" WEIR = 362.00	N / A	GRATE=363.66	NEENAH R-2560-G
BASIN #3	4.5" ORIFICE=374.00	4.5" ORIFICE=375.75	15" X 36" WEIR = 378.00	(2) 12"x24" WEIRS=379.25	TOP=381.25	2'X2' OPENING W/ RACK
BASIN #4	4.5" ORIFICE=373.00	-	12" X 24" WEIR = 374.60	N / A	GRATE=376.25	NEENAH R-2560-G
BASIN #5	2.8" ORIFICE=375.00	-	(2) 12"W X 24"H = 378.00	N / A	GRATE=379.67	LEBARON LF 248

- WEIR DIMENSIONS ARE WIDTH X HEIGHT
- ALL ELEVATIONS ARE FOR THE INVERT OF THE ORIFICE AND BOTTOM OF WEIR
- RACKS SHALL BE HDPE STRUCTURAL PLASTIC AS MANUFACTURED BY PLASTIC SOLUTIONS, INC. OR APPROVED EQUAL
- RACK SHALL BE BOLTED TO TOP OF STRUCTURE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

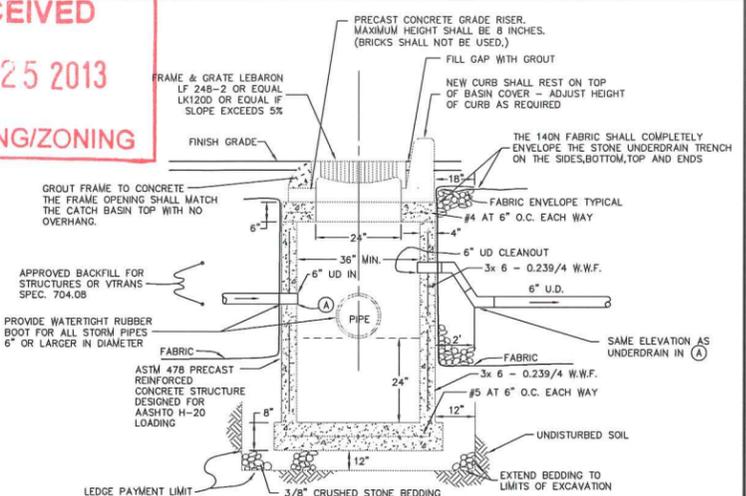


BASIN OUTLET STRUCTURE ORIFICE
HOOD DETAIL
NTS



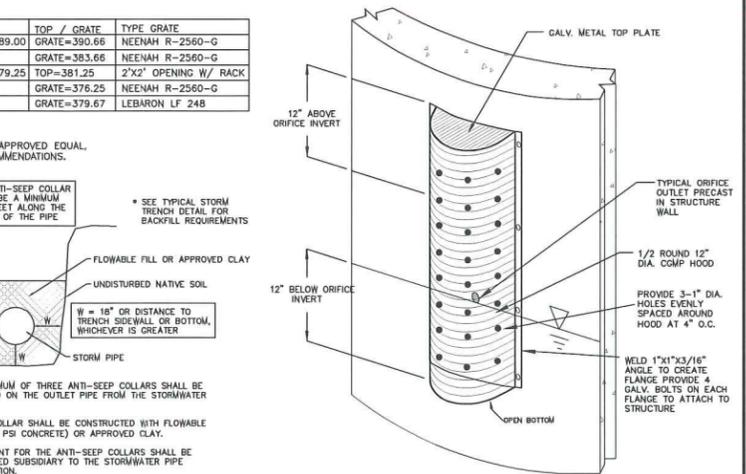
BASIN OUTLET STRUCTURE
NTS

RECEIVED
OCT 25 2013
PLANNING/ZONING



- PROVIDE FLANGE GRATE AND FRAME.
- STRUCTURES SHALL BE DESIGNED FOR H-20 LOADING.
- ALL STRUCTURE JOINTS SHALL HAVE FLEXIBLE BITUMASTIC SEALANT AND SHALL BE GROUTED ON THE EXTERIOR.

PRECAST CATCH BASIN
NTS



BASIN OUTLET STRUCTURE ORIFICE
HOOD DETAIL
NTS

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 28 DAY OF JAN 20 2014

Kim Belk
ADMINISTRATOR'S SIGNATURE

DATE	REV PER DPW - DROP MANHOLE STRAPS & STEPS	ABR
01-27-12	REV PER DPW - DROP MANHOLE STRAPS & STEPS	ABR
11-07-11	REVISE OUTLET STRUCTURE DETAIL FOR POND 5	ABR
08-12-11	REVISED PER DPW SPECIFICATIONS	ABR
05-16-07	REVISED PER TOWN AND STATE REVIEWS	DJG/JT
1-22-07	REVISIONS FOR STORMWATER PERMITTING	ABR

THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:

SKETCH/CONCEPT
 PRELIMINARY
 FINAL
 RECORD DRAWING

proj. no. 01-087
survey L&D
design DJG/ABR
draw JET/BH
checked DJG/ABR
date 11/30/05
scale AS SHOWN
sheet no. 17

FINNEY CROSSING
A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT

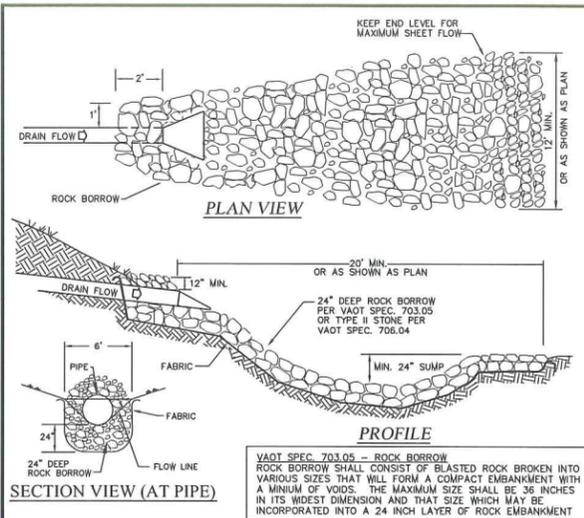
DETAILS & SPECIFICATIONS
SEWER & STORM

LAMOUREUX & DICKINSON
Consulting Engineers, Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450

WILLISTON DISCRETIONARY PERMIT DP-09-01
TAX PARCEL # 081104010, 08143302, 004, & 010

ANDREW B. BROWN
No. 8070
CIVIL
LICENSED

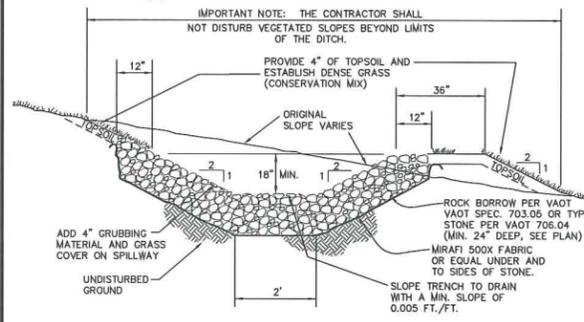
01087-phs01-04



STORM OUTFALL DETAIL

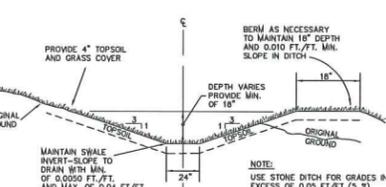
NTS

IMPORTANT NOTE: THE CONTRACTOR SHALL NOT DISTURB VEGETATED SLOPES BEYOND LIMITS OF THE DITCH.



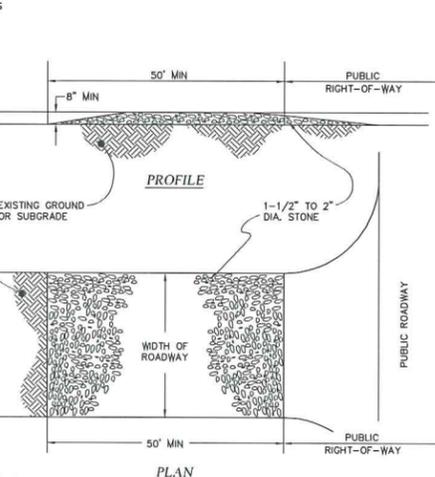
TYPICAL SPECIAL DRAINAGE SWALE

NTS



TYPICAL STABILIZED CONSTRUCTION EXIT

NTS



- NOTES:
- THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT TRACKED, SPILLED, OR WASHED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
 - THE USE OF CALCIUM CHLORIDE OR WATER MAY BE NECESSARY TO CONTROL DUST DURING CONSTRUCTION.
 - PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION EXIT AND PUBLIC RIGHT-OF-WAY.

STABILIZED CONSTRUCTION EXIT

NTS

TURF ESTABLISHMENT SPECIFICATIONS

ALL DISTURBED AREAS THAT DO NOT HAVE AN IMPERVIOUS SURFACE (PAVEMENT, SIDEWALKS, ROOFS) OR ARE NOT LANDSCAPED WITH BARK MULCH, SHALL BE STABILIZED NEW GRASS COVER. ALL SEEDING AND MULCHING FOR ESTABLISHING NEW GRASS COVER SHALL BE COMPLETE PRIOR TO SEPTEMBER 15. PLACEMENT OF TOPSOIL, AND THE APPLICATION OF SEED, FERTILIZER, LIME (WHERE APPLICABLE), AND MULCH SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- A MINIMUM OF 4" OF APPROVED TOPSOIL SHALL BE PLACED IN ALL AREAS. PLACEMENT OF TOPSOIL SHALL NOT BE DONE WHEN THE GROUND OR TOPSOIL IS FROZEN, EXCESSIVELY WET, OR OTHERWISE IN A CONDITION DETRIMENTAL TO THE WORK. FOLLOWING PLACEMENT OF TOPSOIL, THE SURFACE SHALL BE RAKED, ALL STONES, LUMPS, ROOTS, OR OTHER OBJECTIONAL MATERIAL SHALL BE REMOVED.
- URBAN SEED MIXTURE SHALL BE SPREAD UNIFORMLY IN ALL AREAS AT THE SPECIFIED RATE.
- FERTILIZER SHALL BE APPLIED ONLY AFTER PERFORMING A SOIL TEST AND BE APPLIED BASED UPON SOIL DEFICIENCIES. LIME SHALL ONLY BE APPLIED AS NEEDED BASED UPON A SOIL pH TEST.
- MULCHING SHALL FOLLOW THE SEEDING OPERATION BY NOT MORE THAN 24 HOURS. MULCH SHALL BE SPREAD UNIFORMLY OVER THE AREA AT A MINIMUM RATE OF 2 TONS PER ACRE. SITE CONDITIONS MAY WARRANT THE APPLICATION OF A TACKIFIER TO HOLD THE MULCH IN PLACE. IF NECESSARY TO RETAIN THE MULCH, THE CONTRACTOR SHALL APPLY AN APPROVED TACKIFIER WITHOUT ADDITIONAL COST TO THE OWNER.
- ALL SLOPES STEEPER THAN 3H:1V SHALL HAVE EROSION MATTING APPLIED OVER THE SEED. ALL DITCH CENTERLINE GRADES GREATER THAN 5% OR AS SHOWN ON THE PLANS SHALL HAVE EROSION MATTING APPLIED OVER THE SEED. EROSION CONTROL BLANKET WITH 100% AGRICULTURAL STRAW MATRIX STITCH BOUNDED WITH DEGRADABLE THREAD BETWEEN TWO BIODEGRADABLE JUTE FIBER NETTINGS, NORTH AMERICAN GREEN S150BN OR EQUAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR A FULL GROWTH OF GRASS IN ALL DISTURBED AREAS TO BE RE-VEGETATED. VEGETATION GROWTH SHALL BE PERMANENT AND SUFFICIENT TO PREVENT EROSION OF THE UNDERLYING SOIL UNDER ALL CONDITIONS OF PRECIPITATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND CARING FOR SEEDS, MULCH, AND AREAS OF ESTABLISHED VEGETATION UNTIL FINAL ACCEPTANCE OF THE WORK BY THE OWNER.

CONSERVATION MIX GRASS SEED

% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
35	35	CREeping RED FESCUE
23	23	KENTUCKY BLUEGRASS
15	15	ANNUAL RYE
11	11	WINTER HARDY, PERENNIAL RYE (VARIETY PENNINE, MANHATTAN OR SIMILAR VARIETY)
6	6	WHITE CLOVER
10	10	HIGHLAND BENTGRASS
100	100#	LIVE SEED / ACRE

CONSERVATION SEED MIX SHALL BE USED IN ALL OPEN SPACE AREAS

URBAN MIX GRASS SEED

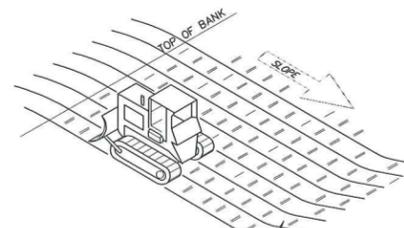
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
31.5	45	CREeping RED FESCUE
37.25	37.5	KENTUCKY BLUEGRASS
31.25	37.5	WINTER HARDY, PERENNIAL RYE
100	120 #	LIVE SEED PER ACRE

URBAN SEED MIX SHALL BE USED ALONG THE NEW STREETS AND ALL LAWN AREAS

STUMP DISPOSAL SPECIFICATIONS

THE TREES THAT MUST BE CUT WILL BE USED AS FIREWOOD. THE STUMPS, BRUSH, AND EXCESS UNSUITABLE EARTH WILL BE DISPOSED OF AT THE LOCATION DESIGNATED BY THE ENGINEER AS A STUMP DISPOSAL AREA WELL ABOVE THE SEASONAL HIGH WATER OR HAULED OFF-SITE TO A STATE-APPROVED LANDFILL. IF ON-SITE STUMP DISPOSAL IS IMPLEMENTED, THE FOLLOWING GUIDELINES SHALL BE MET:

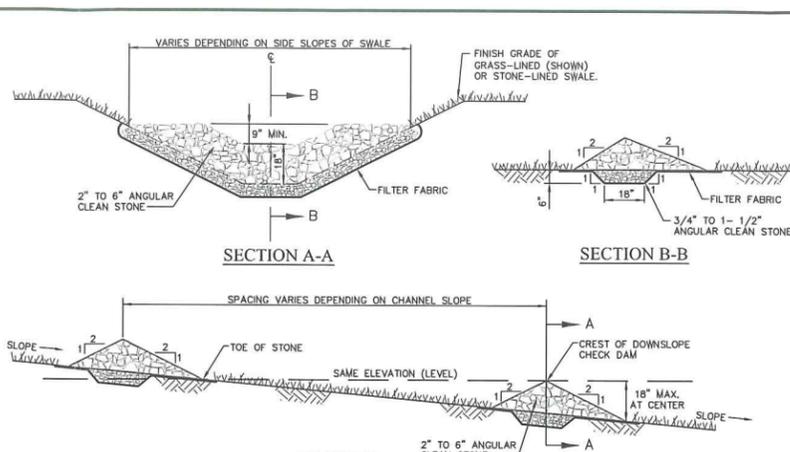
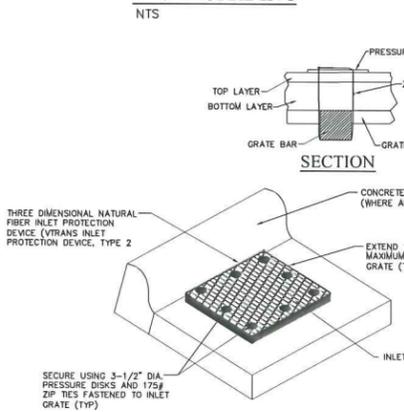
- WHENEVER POSSIBLE, STUMP DISPOSAL SITES SHOULD BE LOCATED ON NEARLY LEVEL TO MODERATELY SLOPING LANDS (SLOPES LESS THAN 12%).
- DISPOSAL SITES WILL NOT BE LOCATED IN OR WITHIN 100 FEET OF FLOWING WATERCOURSES OR STREAMS OR IN ACTIVELY ERODING GULLIES.
- DISPOSAL SITES SHALL NOT BE LOCATED IN FLOODED OR FLOOD-PRONE LANDS, MARSHES, OR OTHER AQUIFER RECHARGE AREAS.
- STUMPS WILL BE PLACED ON THE SITE IN A SINGLE LIFT PRIOR TO BACKFILLING. WHEN ADDITIONAL STUMPS ARE TO BE DEPOSITED ON THE SAME SITE, EACH SUCCESSIVE LAYER OR LIFT OF STUMPS WILL BE BACKFILLED.
- A MINIMUM OF TWO FEET (2') OF OVERBURDEN WILL BE PLACED OVER ALL DISPOSAL SITES.



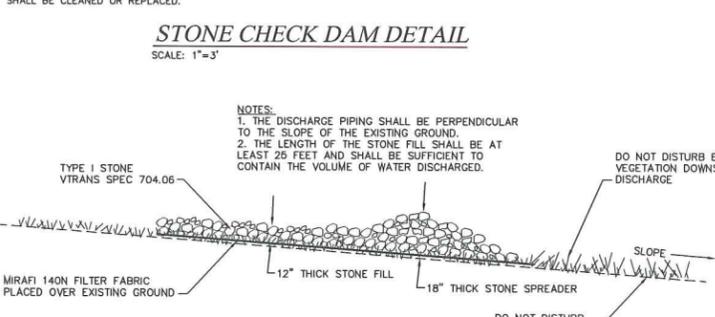
- SEQUENCE OF EVENTS:
TOPSOIL, SEED, MULCH, AND INSTALL MATTING, OR HYDROSEED WITH APPROVED BINDER AFTER SURFACE ROUGHENING.

FLAT TYPE INLET PROTECTION

NTS



- NOTES:
- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
 - SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
 - PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
 - ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.
 - THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING CLOGGING / SILTATION OF THE STONE CHECK DAM DURING AND IMMEDIATELY AFTER CONSTRUCTION, UNTIL THE PROJECT'S PERMANENT EROSION CONTROLS ARE IN PLACE (VEGETATION ESTABLISHED, STREETS PAVED, ETC.) AND THE PROJECT HAS BEEN ACCEPTED BY THE OWNER. IF NECESSARY, STONE SHALL BE CLEANED OR REPLACED.



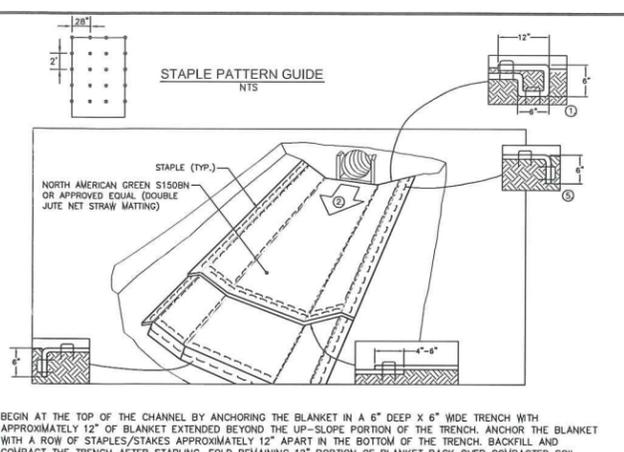
TEMPORARY SILT FENCE

NTS

- NOTES:
- SILT FENCE INSTALLED WITHIN 100 FEET OF A WETLAND, STREAM, OR RECEIVING WATER SHALL BE REINFORCED WITH WOVEN WIRE FENCE (MIN. 14 GAUGE WIRE WITH 6" MAX. MESH SPACINGS)
 - USE ONLY MANUAL METHODS OF INSTALLATION AND CLEANING WITHIN WETLAND AND BUFFER ZONE.
 - PRIOR TO BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS SILT FENCE AT THE LIMIT OF DISTURBANCE SHOWN ON THE SITE PLAN.
 - FROZEN MATERIAL SHALL NOT BE USED TO KEY IN THE BOTTOM OF THE SILT FENCE. IF NECESSARY, GRANULAR BORROW SHALL BE USED BY THE CONTRACTOR TO KEY IN THE SILT FENCE RATHER THAN FROZEN NATIVE MATERIAL.
 - THE CONTRACTOR SHALL INSTALL SILT FENCE AROUND THE PERIMETER OF TOPSOIL STOCKPILES AND AT OTHER LOCATIONS AS NEEDED.

TEMPORARY SILT FENCE

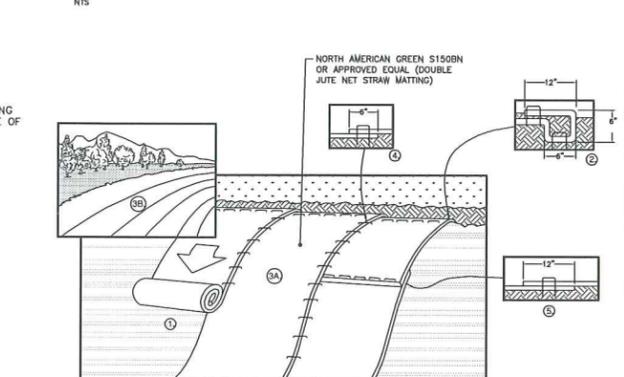
NTS



- BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. FOLD REMAINING 12" PORTION OF BLANKET BACK OVER COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN ABOVE IN THE STAPLE PATTERN GUIDE.
- PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
- FULL LENGTH EDGE OF BLANKETS ALONG SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

EROSION MATTING FOR SLOPES

NTS



- EROSION MATTING WILL BE USED ON SLOPES STEEPER THAN 3H:1V OR AS SHOWN ON THE PLANS.
- PREPARE SOIL BEFORE INSTALLING MATTING, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. SOIL SURFACE SHALL BE GRADED SMOOTH WITHOUT ROOTS, STONES OR OTHER PROTRUSIONS THAT WILL PREVENT THE MATTING FROM BEING APPLIED IN FULL CONTACT WITH THE SOIL SURFACE.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE MATTING IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF MATTING EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE MATTING WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF MATTING BACK OVER SEED AND COMPACTED SOIL. SECURE MATTING OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" PART ACROSS THE WIDTH OF THE MATTING.
- ROLL THE MATTING (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. INSURE THAT THE APPROPRIATE SIDE OF THE MATTING IS AGAINST THE SOIL SURFACE. ALL MATTING MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE MANUFACTURER'S STAPLE PATTERN GUIDE. FOR THE PARTICULAR PRODUCT AND APPLICATION, IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE MATTING.
- THE EDGES OF PARALLEL MATTING MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP DEPENDING ON MATTING TYPE.
- CONSECUTIVE MATTING SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE - WITH THE UPPER MATTING PLACED OVER THE TOP OF THE LOWER MATTING) WITH AN APPROXIMATE 12" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE MATTING WIDTH.

EROSION MATTING FOR SLOPES

NTS

10-30-12	ADD FIBER FILTER CB INLET PROTECTION	ABR
02-14-12	ADD REINF. TO SILT FENCE/REV. RECP BIODEGRAD. SPEC.	ABR

REVISIONS

THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:

	# OF SHEETS
<input type="checkbox"/> SKETCH/CONCEPT	
<input type="checkbox"/> PRELIMINARY	
<input type="checkbox"/> FINAL	
<input type="checkbox"/> RECORD DRAWING	

proj. no. 01-087
survey L&D
design DJG/ABR
drawn JET/BH
checked DJG/ABR
date 11/30/05
scale AS SHOWN
sht. no. 18

FINNEY CROSSING
A PLANNED UNIT DEVELOPMENT
WILLISTON, VERMONT
DETAILS & SPECIFICATIONS
EROSION PREVENTION & SEDIMENT CONTROL

LAMOUREUX & DICKINSON
Consulting Engineers, Inc.
14 Morse Drive
Essex Junction, VT 05452
(802) 878-4450

WILLISTON DISCRETIONARY PERMIT DP-09-01
NO. 8070
CIVIL
TAX PARCEL # 08R104010, 08R143002, 00R1000, 00R1001

RECEIVED
OCT 25 2013
PLANNING/ZONING

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT # DP 09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 13, 2013, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 3A/4A ON THE 28 DAY OF JAN 2014

ADMINISTRATOR'S SIGNATURE



East Elevation



West Elevation

RECEIVED
OCT 25 2013
PLANNING/ZONING

BRICK AT GARAGE ENTRANCE
NOTE: GRADE WILL VARY - VERIFY WITH SITE PLAN

Building M1 Concept Elevations

Finney Crossing Apartments

Williston, Vermont

FINAL PLANS

Ken Belkin, Z.A. 1/28/2014



bel.design.com

The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e., applicable codes, structural, and MEP design requirements, unit plans / floor plan changes, etc.)

07-18-2013
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East Elevation



West Elevation

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PLANNING/ZONING

FINAL PLANS

**Building M4 Concept Elevations
Finney Crossing Apartments**

Williston, Vermont



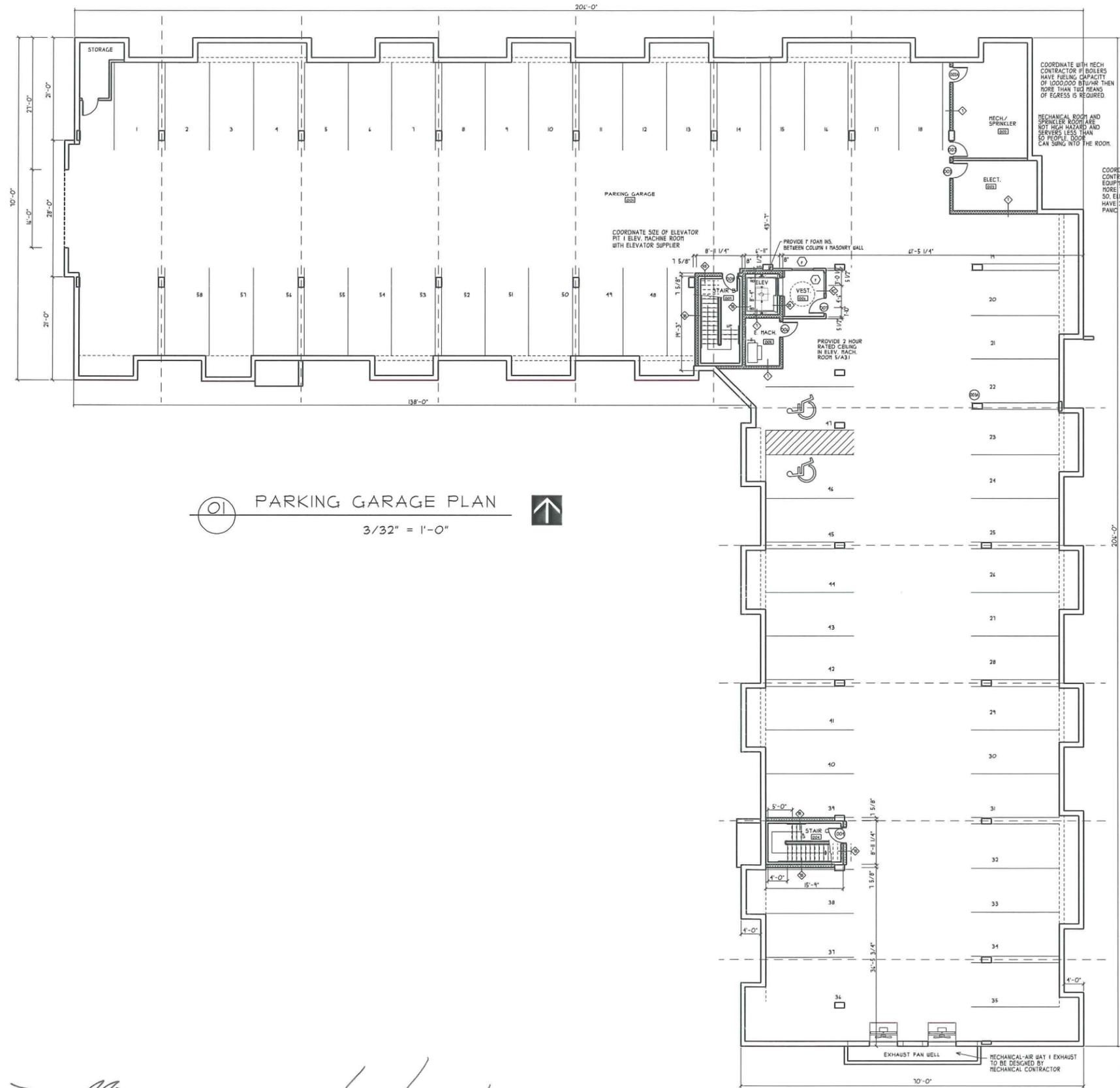
bsbdesign.com

The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable codes, structural, and MEP design requirements, unit plan / floor plan changes, etc.)

Ken Bellin, E.A. 1/28/2014

07-18-2013
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01 PARKING GARAGE PLAN
 3/32" = 1'-0" ↑

COORDINATE WITH MECH CONTRACTOR IF BOILERS HAVE FUELING CAPACITY OF 1000.000 BTU/HR THEN MORE THAN 120 MEANS OF EGRESS IS REQUIRED.

MECHANICAL ROOM AND SPRINKLER ROOM ARE NOT HIGH HAZARD AND SERVICES LESS THAN 50 PEOPLE. DOORS CAN swing INTO THE ROOM.

COORDINATE W/ DESIGN-BUILD ELECT. CONTRACTORS IF SWITCHES OR ELECT. EQUIPMENT IS RATED TO BE AT OR IS MORE THAN 200 AMPS. IF SO, ELECT. ROOM IS REQUIRED TO HAVE 2ND MEANS OF ESCAPE AND PANIC HARDWARE.

PROVIDE 2 HOUR RATED CEILING IN ELEV. MACH. ROOM 5/A31

PROVIDE 7 FDM INS. BETWEEN COLUMN & MASONRY WALL

COORDINATE SIZE OF ELEVATOR PIT & ELEV. MACHINE ROOM WITH ELEVATOR SUPPLIER

RECEIVED
 OCT 25 2013
 PLANNING/ZONING

FINAL PLANS

Ken Bellin, Z.A. 1/28/2014

Revision	
Date	
No.	
NOTE:	
INNOVATIVE DESIGN, INC. 8 CARMICHAEL STREET, SUITE #104 ESSEX JCT., VT. 05452 PHONE: (802) 872-8430 FAX: 872-8347 EMAIL: RMDUFRES@SOVER.NET	
project name	
FINNEY CROSSING BUILDING M1 & M4 WILLISTON, VERMONT	
drawing title	
PARKING GARAGE PLAN OVERALL	
scale	NONE
date	01-14-13
designed by	MD
approved by	
project no.	sheet no. A1.1