

# FINNEY CROSSING

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

RECEIVED  
 NOV 02 2012  
 PLANNING/ZONING

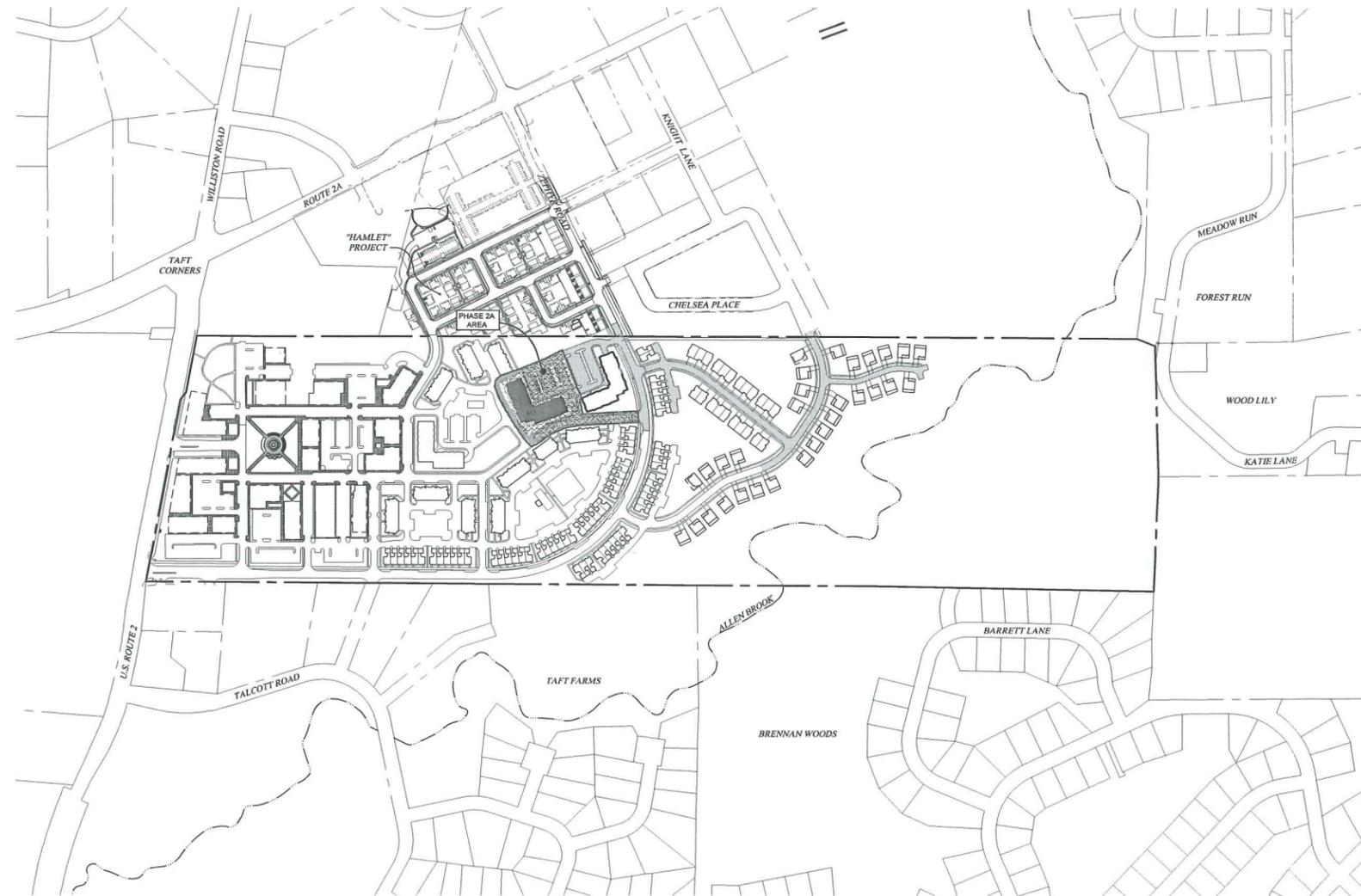
## SHEET INDEX

- 1 PHASE 2A SITE LOCATION PLAN (1"=100')
- 2 PHASE 2A SITE PLAN (1"=30')
- 3 PHASE 2A LANDSCAPING PLAN
- 4 PHASE 2A EROSION CONTROL PLAN
- 25 SUBDIVISION PLAT (CENTRAL)

- CONSTRUCTION PHASING PLAN
- BUILDING - NORTH ELEVATION
- BUILDING - SOUTH ELEVATION
- GARAGE LAYOUT

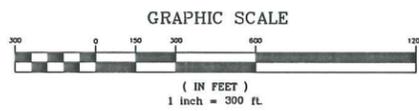
THE FOLLOWING PLANS LISTED BELOW ARE PART OF THE FINNEY CROSSING FINAL PLAN SET, AND SHALL BE USED FOR PHASE 2A CONSTRUCTION WHERE APPLICABLE:

- 5 ZEPHYR ROAD STATION 115+50-126+50
- 7 DUMORE LANE STATION 200+00-207+00
- 11 ZEPHYR ROAD PROFILE
- 12 DUMORE LANE, HALF MOON LANE PROFILES
- 13 HOLLAND LN., BOXWOOD ST. AND SEYMOUR ST. PROFILES
- 14 ROADWAY DETAILS AND SPECIFICATIONS
- 15 ROADWAY & MISC. DETAILS AND SPECIFICATIONS
- 16 WATER DETAILS AND SPECIFICATIONS
- 17 SEWER AND STORM DETAILS AND SPECIFICATIONS
- 18 EROSION PREVENTION & SEDIMENT CONTROL DETAILS AND SPECIFICATIONS



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 28, 2012, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A AMENDMENT ON THE 6 DAY OF NOV, 2012.

*Ken Belbin*  
 ADMINISTRATOR'S SIGNATURE

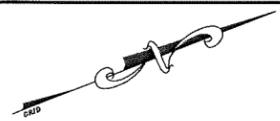
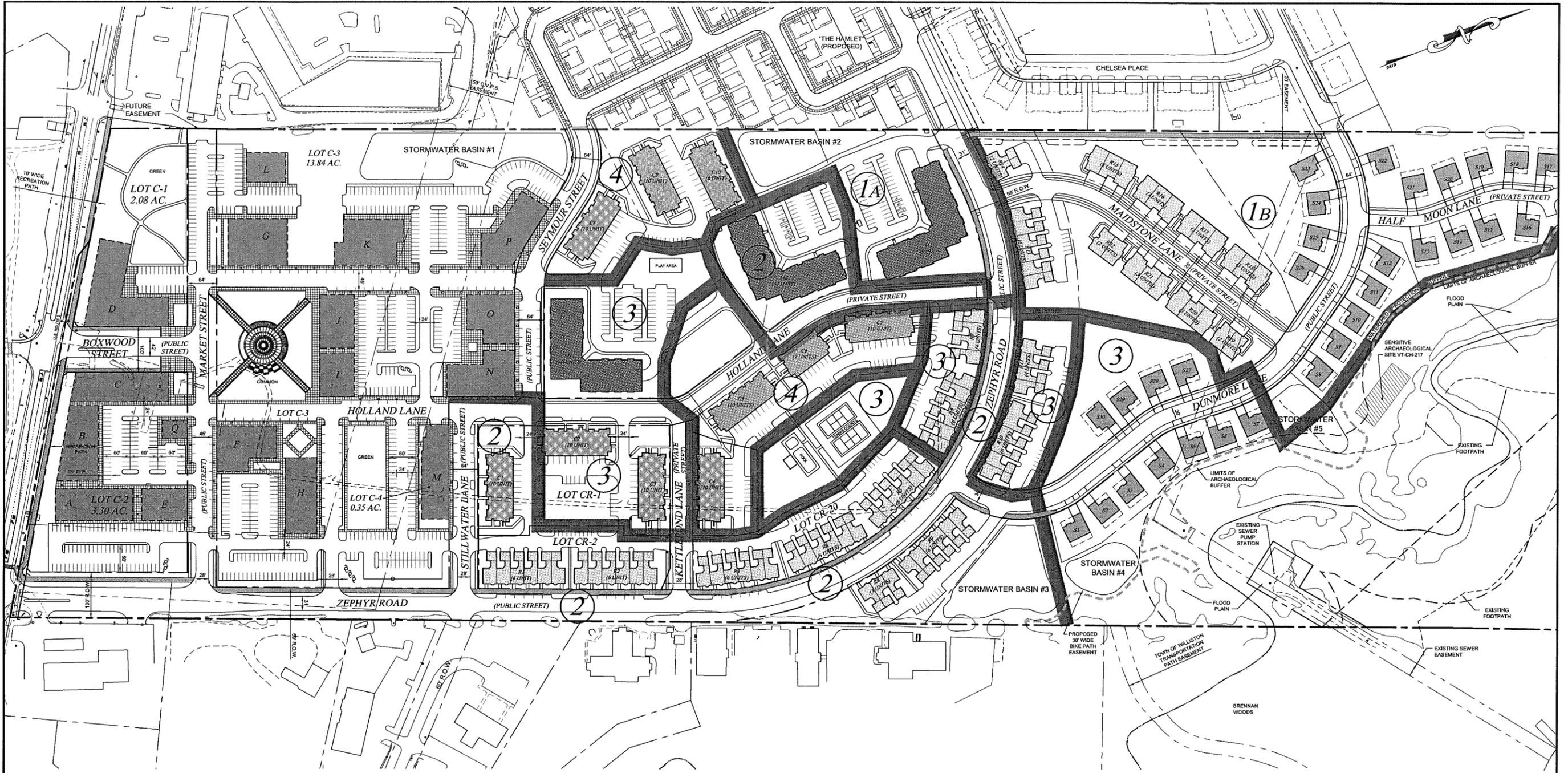


### APPLICANTS:

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

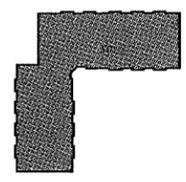
**L** LAMOUREUX & DICKINSON  
 Consulting Engineers, Inc.  
 14 Morse Drive  
 Essex Junction, VT 05452  
 (802) 878-4450

WILLISTON DISCRETIONARY PERMIT #DP-09-01



**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**

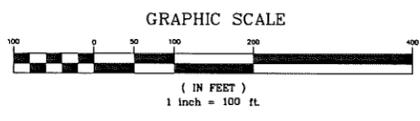
SINGLE FAMILY CARRIAGE HOMES

**SUMMARY OF RESIDENTIAL UNITS**

KEY	DESCRIPTION	TOTAL UNITS
M1-M4	MULTI-STORY BUILDING WITH BASEMENT LEVEL GARAGE	142 UNITS
C1-C7	MULTI-FAMILY FLATS WITH ONE CAR GARAGE	95 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
<b>TOTAL =</b>		<b>356 UNITS</b>

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 Aug 27, 2012, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A AMENDMENT ON THE 6 DAY OF Nov, 2012

*Kenneth Sullivan*  
ADMINISTRATOR'S SIGNATURE



08-27-12	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
08-24-11	2011 CONSTRUCTION PHASING	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	

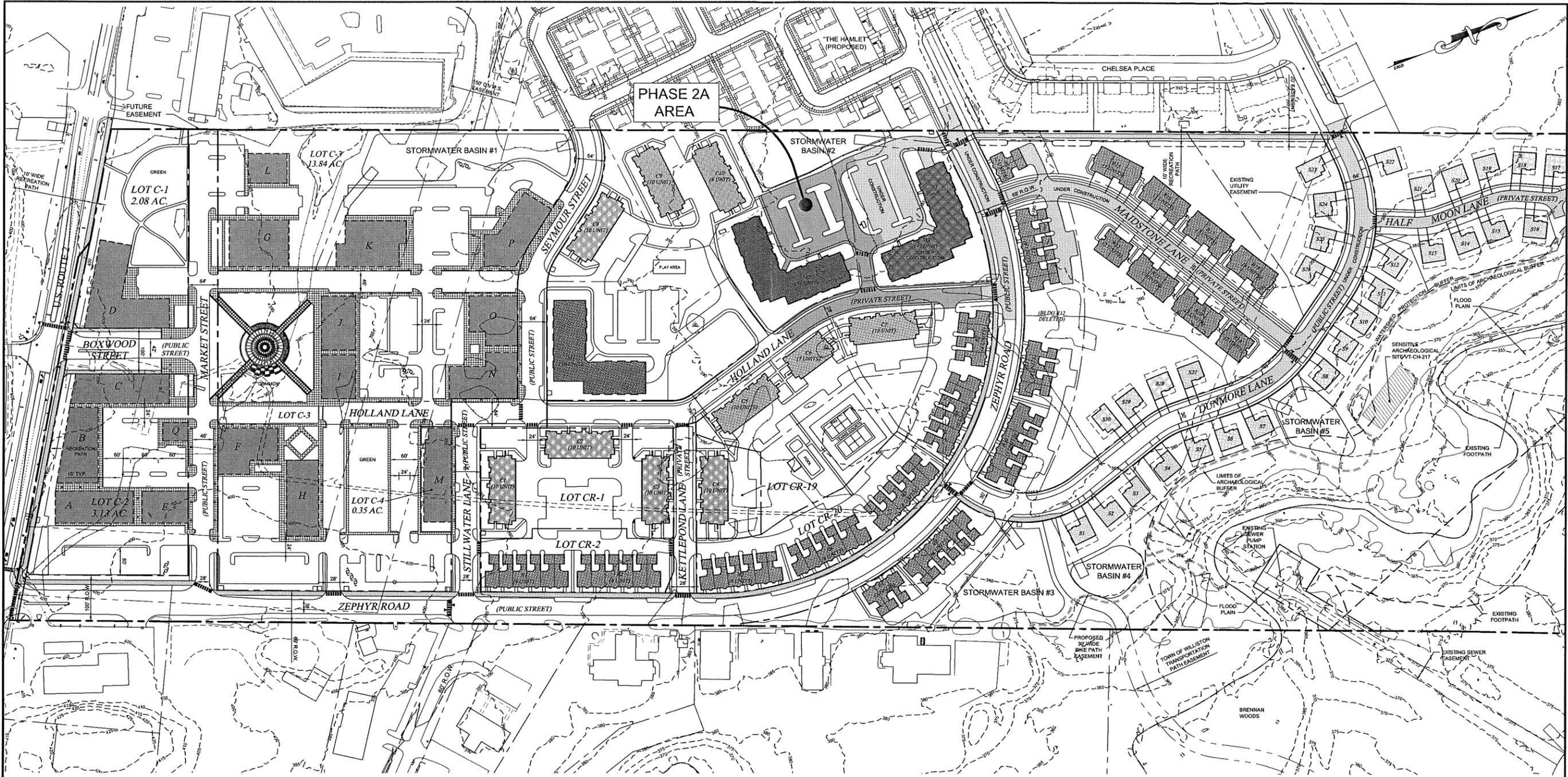
**FINNEY CROSSING**  
A PLANNED UNIT DEVELOPMENT  
WILLISTON, VERMONT

**CONSTRUCTION PHASING**

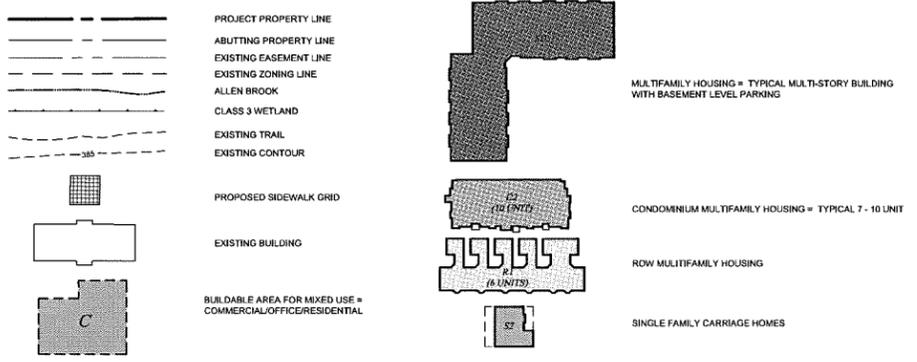
**LAMOUREUX & DICKINSON**  
Consulting Engineers, Inc.  
14 Morse Drive  
Essex Junction, VT 05452  
(802) 878-4450

proj. no. 01-087  
survey L&D  
design DJG/ABR  
drawn JET/BH  
checked DJG/ABR  
date 11/30/05  
scale 1" = 100'  
shl. no. PH

WILLISTON DISCRETIONARY PERMIT DP-09-01  
TAX PARCEL # 08104010, 08143002, 004, & 010



**LEGEND**

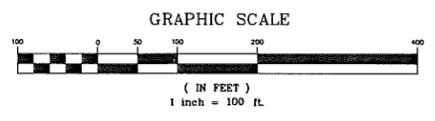


**SUMMARY OF RESIDENTIAL UNITS**

KEY	DESCRIPTION	TOTAL UNITS
M1-M3	MULTI-STORY BUILDING WITH BASEMENT LEVEL GARAGE	142 UNITS
C1-C10	MULTI-FAMILY FLATS WITH ONE CAR GARAGE	95 UNITS
R1-R14	MULTI-FAMILY ROWHOMES (2 CAR GARAGE)	67 UNITS
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*Kam Dillan*  
ADMINISTRATOR'S SIGNATURE



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	
<p><b>FINNEY CROSSING</b> A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT</p> <p><b>DEVELOPMENT AREA</b> SITE PLAN PHASE 2A</p>		<p>proj. no. 01-087</p> <p>survey L&amp;D</p> <p>design DJG/ABR</p> <p>drawn L&amp;D</p> <p>checked DJG/ABR</p> <p>date 07/16/12</p> <p>scale 1" = 100'</p> <p>shL. no. 1</p>
<p><b>LAHOUREUX &amp; DICKINSON</b> Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450</p>		

WILLISTON DISCRETIONARY PERMIT DP-09-01  
TAX PARCEL # 08104010, 08143002, 004, & 010

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

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*Kan Dalbin*  
ADMINISTRATOR'S SIGNATURE

"THE HAMLET" RESIDENTIAL PROJECT

LIGHTING SPECIFICATIONS				
LEGEND	DESCRIPTION	LAMP TYPE	DISTRIBUTION TYPE	MOUNTING HEIGHT
V318	HADCO HAGERSTOWN LED	80 LED / 4000K	TYPE III - CUTOFF	18 FEET POLE MOUNTED
E3	BETA EDGE LED AREA LIGHT	80 LED, 4000K COLOR TEMP.	TYPE III - CUTOFF	16 FEET POLE MOUNTED
E5	BETA EDGE LED AREA LIGHT	100 LED, 4000K COLOR TEMP.	TYPE V - CUTOFF	24 FEET POLE MOUNTED

PROJECT DATA:

ZONING DISTRICT: TAFT CORNERS ZONING DISTRICT  
 PARCEL: CR-10 AREA = 2.21 ACRES  
 LOT COVERAGE DATA:  
 LOT AREA = 2.21 ACRES  
 LOT COVERAGE = 1.14 ACRE  
 (WALKS, DRIVES, BUILDINGS, TEMP. FIRELANE)  
 PERCENT LOT COVERAGE = 51.8%

PARKING DATA - BUILDINGS M2 & M3  
 REQUIRED PARKING = 179 SPACES  
 BUILDING M2: 1.75 SPACES PER MULTI-FAMILY UNIT X 57 UNITS = 100 SPACES  
 BUILDING M3: 1.75 SPACES PER MULTI-FAMILY UNIT X 45 UNITS = 79 SPACES

PROPOSED TOTAL PARKING SPACES = 179 SPACES  
 PROPOSED EXTERIOR SURFACE PARKING SPACES = 79 SPACES  
 PROPOSED INTERIOR GARAGE SPACES = 100 SPACES  
 (50 SPACES WILL BE PROVIDED IN EACH GARAGE, INCLUDING TWO ACCESSIBLE SPACES IN EACH GARAGE)

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

TOTAL REQUIRED BICYCLE PARKING = 18 SPACES (10% OF VEHICULAR)  
 10 BICYCLE SPACES - BUILDING M2  
 8 BICYCLE SPACES - BUILDING M3

LONG TERM BICYCLE PARKING = 28 SPACES (0.25 SPACES/UNIT)  
 15 BICYCLE SPACES - BUILDING M2  
 11 BICYCLE SPACES - BUILDING M3

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 RAMPS 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 UNDERNEED 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, LD, 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.

DATE	REVISION	BY
10-31-12	REVISE CB INVERTS PER DPW REVIEW	ABR
10-18-12	REVISE PER STAFF/DRS REVIEW	ABR

REVISIONS		# OF SHEETS
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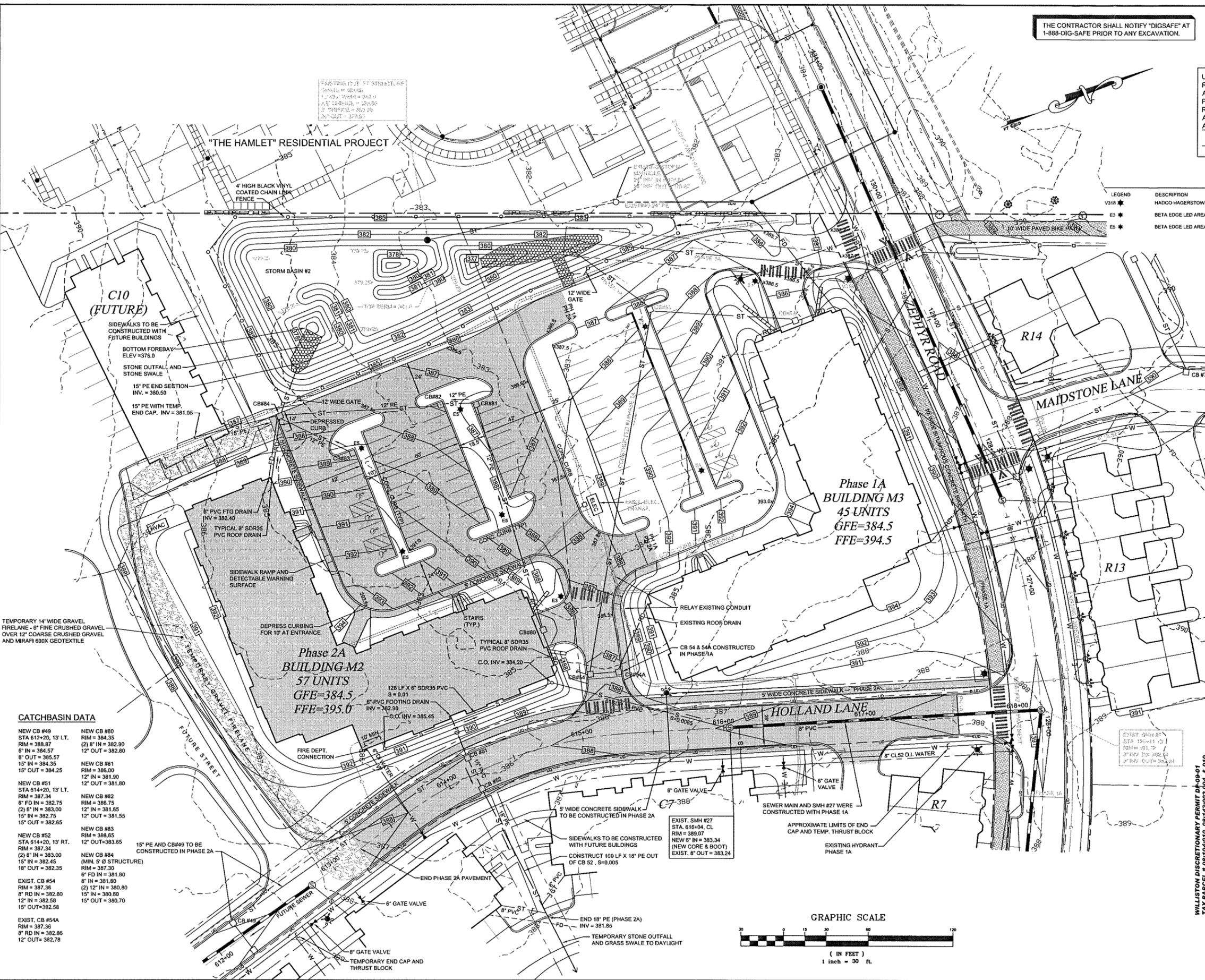
**FINNEY CROSSING**  
 A PLANNED UNIT DEVELOPMENT  
 WILLISTON, VERMONT

PHASE 2A  
 SITE PLAN

**LAMOUREUX & DICKINSON**  
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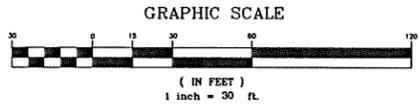
proj. no. 01-087  
 survey L&D  
 design DJG/ABR  
 drawn L&D  
 checked DJG/ABR  
 date 07/16/12  
 scale 1" = 30'  
 sht. no. 2

WILLISTON DISCRETIONARY PERMIT DP-09-01  
 TAX PARCEL # 08104010, 08142020, 0814 & 010



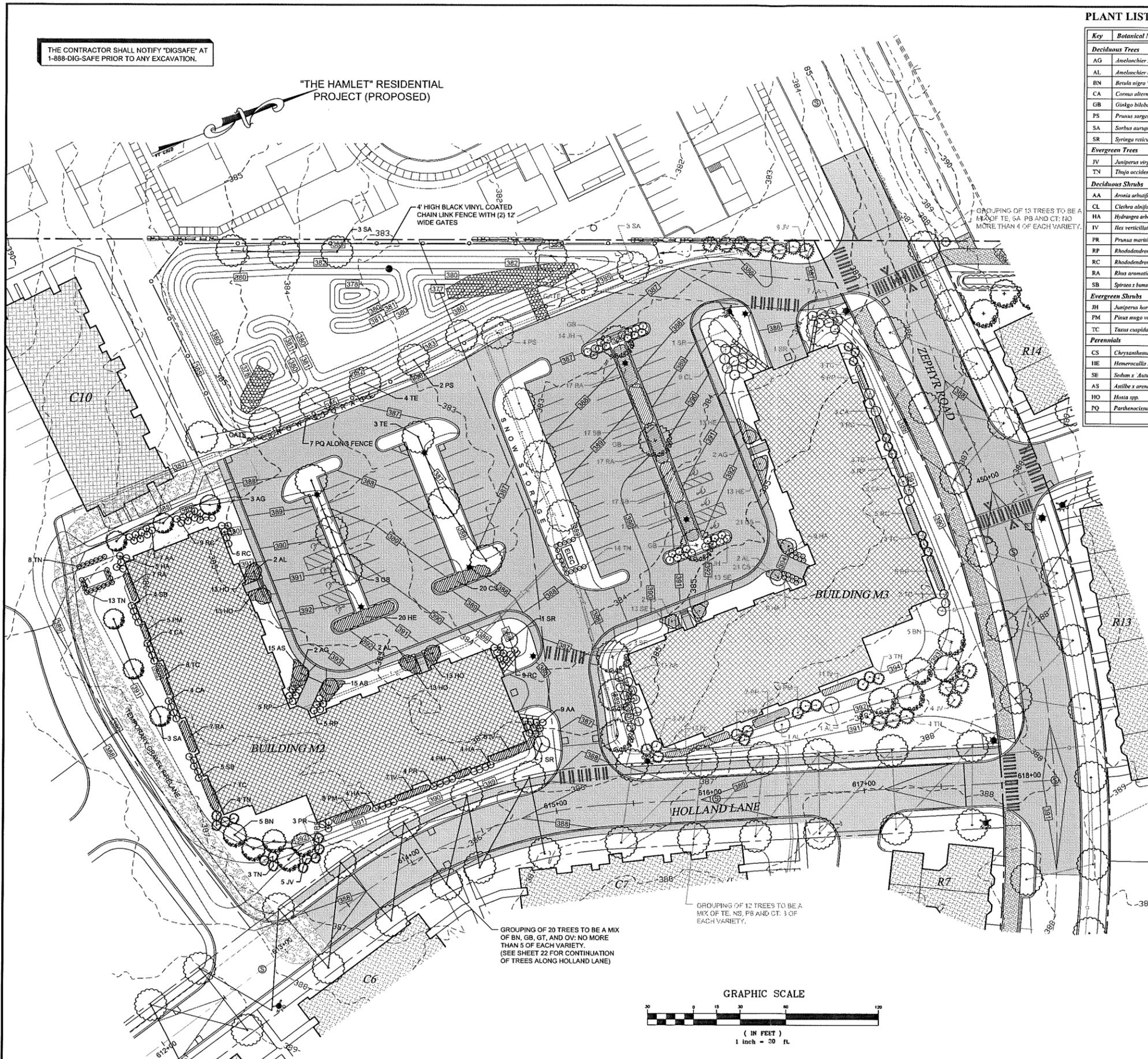
CATCHBASIN DATA

NEW CB #49 STA 612+20, 13' LT. RIM = 388.87 6" IN = 384.57 6" OUT = 385.57 15" IN = 384.35 15" OUT = 384.25	NEW CB #80 RIM = 384.35 (2) 8" IN = 382.90 12" OUT = 382.80
NEW CB #51 STA 614+20, 13' LT. RIM = 387.34 6" FD IN = 382.75 (2) 6" IN = 383.00 15" IN = 382.75 15" OUT = 382.65	NEW CB #81 RIM = 386.00 12" IN = 381.90 12" OUT = 381.80
NEW CB #52 STA 614+20, 13' RT. RIM = 387.34 (2) 6" IN = 383.00 15" IN = 382.45 15" OUT = 382.35	NEW CB #82 RIM = 386.75 12" IN = 381.65 12" OUT = 381.55
EXIST. CB #54 RIM = 387.36 8" RD IN = 382.80 12" IN = 382.58 15" OUT = 382.58	NEW CB #83 RIM = 388.65 12" OUT = 383.65
EXIST. CB #54A RIM = 387.35 8" RD IN = 382.86 12" OUT = 382.78	NEW CB #84 (MIN. 5' @ STRUCTURE) RIM = 387.30 6" FD IN = 381.80 8" IN = 381.60 (2) 12" IN = 380.80 15" IN = 380.80 15" OUT = 380.70



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

"THE HAMLET" RESIDENTIAL PROJECT (PROPOSED)



PLANT LIST - Building M2

Key	Botanical Name	Common Name	Size	Remarks
<b>Deciduous Trees</b>				
AG	<i>Amelanchier x grandiflora</i>	Shadblow Serviceberry	2" to 2 1/2" Cal.	B&B, 6 foot branching height
AL	<i>Amelanchier laevis</i>	Allegheny Serviceberry	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
PS	<i>Prunus sargentii</i>	Sargent Cherry	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
<b>Evergreen Trees</b>				
JV	<i>Juniperus virginiana</i>	Eastern Red Cedar	6' to 7' Height	B&B
TN	<i>Thuja occidentalis 'Nigra'</i>	Dark American Arborvitae	6' to 7' Height	B&B
<b>Deciduous Shrubs</b>				
AA	<i>Aronia arbutifolia 'Brilliantissima'</i>	Red Chokeberry	18" to 24" Height	B&B
CL	<i>Clethra alnifolia</i>	Summersweet	18" to 24" Height	B&B, shrub form
HA	<i>Hydrangea arborescens 'Annabelle'</i>	Annabelle Hydrangea	18" to 24" Height	B&B
IV	<i>Ilex verticillata</i>	Winterberry	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 'Agla', 'Olga Meixner' and 'Rossum Elegans' cultivars
RC	<i>Rhododendron catawbiense</i>	Catawba Rhododendron	18" to 24" Height	B&B, use 'Catawbiense Albom' and 'Boursart' cultivars
RA	<i>Rhus aromatica 'Gro-Low'</i>	Fragrant Sumac	18" to 24" Height	B&B
SB	<i>Spiraea x humboldt 'Anthony Waterer'</i>	Anthony Waterer Spiraea	18" to 24" Height	B&B
<b>Evergreen Shrubs</b>				
JH	<i>Juniperus horizontalis</i>	Creeping Juniper	18" to 24" Height	B&B
PM	<i>Pinus mugo var. 'Mugho'</i>	Dwarf Mugo Pine	18" to 24" Height	B&B
TC	<i>Taxus cuspidata</i>	Japanese Yew	18" to 24" Height	B&B
<b>Perennials</b>				
CS	<i>Chrysanthemum x superbum</i>	Shasta Daisy	#1 Container (1 gal)	
HE	<i>Hemerocallis spp.</i>	Daylily	#SP5 Container	1 or 2 Fan Division, Heavy Root System, Use Yellow and Red Varieties
SE	<i>Sedum x 'Autumn Joy'</i>	Autumn Joy Sedum	#1 Container (1 gal)	
AS	<i>Astilbe x arendii</i>	Astilbe	#1 Container (1 gal)	Red or pink flower cultivar
HO	<i>Hosta spp.</i>	Plantainlily	#1 Container (1 gal)	Lavender or white flower cultivar
PQ	<i>Parthenocissus quinquefolia</i>	Virginia Creeper	#1 Container (1 gal)	

PLANT LIST ZEPHYR ROAD & HOLLAND LANE STREET TREES (SEE ALSO SHEET 22)

Key	Botanical Name	Common Name	Size	Remarks
<b>Deciduous Trees</b>				
BN	<i>Betula nigra 'Heritage'</i>	Heritage River Birch	1 1/2" to 1 3/4" Cal.	B&B, 6 foot branching height
CT	<i>Corylus colurna</i>	Turkish Filbert	2 1/2" to 3" 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, male cultivar only
GT	<i>Gleditsia triacanthos</i>	Honeylocust	2 1/2" to 3" Cal.	B&B, 6 foot branching height, use 'Halka' and 'Shademaster' cultivars
NS	<i>Nyssa sylvatica</i>	Black Tupelo	2 1/2" to 3" Cal.	B&B, 6 foot branching height
OV	<i>Osyrus virginiana</i>	American Hophornbeam	2 1/2" to 3" Cal.	B&B, 6 foot branching height
PS	<i>Prunus sargentii</i>	Sargent Cherry	1 1/2" to 1 3/4" Cal.	B&B, 6 foot branching height
PB	<i>Pyrus calleryana 'Autumn Blaze'</i>	Autumn Blaze Callery Pear	2 1/2" to 3" Cal.	B&B, 6 foot branching height
SA	<i>Sorbus aucuparia</i>	European Mountain Ash	1 1/2" to 1 3/4" Cal.	B&B, 6 foot branching height
SR	<i>Syringa reticulata 'Ivory Silk'</i>	Japanese Tree Lilac	1 1/2" to 1 3/4" Cal.	B&B, 6 foot branching height
TE	<i>Tilia x euclora</i>	Crimcan Linden	2 1/2" to 3" Cal.	B&B, 6 foot branching height

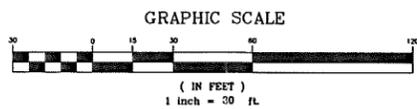
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*Kenneth Belcher*  
ADMINISTRATOR'S SIGNATURE

GROUPING OF 17 TREES TO BE A MIX OF NS, OV, SA, SR, PS AND SA; NO MORE THAN 3 OF EACH VARIETY. (SEE ALSO SHEET 22 FOR CONTINUATION OF TREES ALONG ZEPHYR ROAD)

GROUPING OF 20 TREES TO BE A MIX OF BN, GB, GT, AND OV; NO MORE THAN 5 OF EACH VARIETY. (SEE SHEET 22 FOR CONTINUATION OF TREES ALONG HOLLAND LANE)

GROUPING OF 12 TREES TO BE A MIX OF TE, NS, PB AND CT; 3 OF EACH VARIETY.



WILLISTON DISCRETIONARY PERMIT DP-09-01 TAX PARCEL # 08104010, 08143002, 004, & 010

10-18-12	REVISED PER STAFF/DRB REVIEW	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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<b>FINNEY CROSSING</b>		proj. no. 01-087
A PLANNED UNIT DEVELOPMENT		survey L&D
WILLISTON, VERMONT		design DJG/ABR
<b>PHASE 2A</b>		drawn
<b>LANDSCAPE PLAN</b>		L&D
		checked DJG/ABR
		date 07/16/12
		scale 1" = 30'
		sh. no. 3
<b>LD LAMOUREUX &amp; DICKINSON</b>		
Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450		

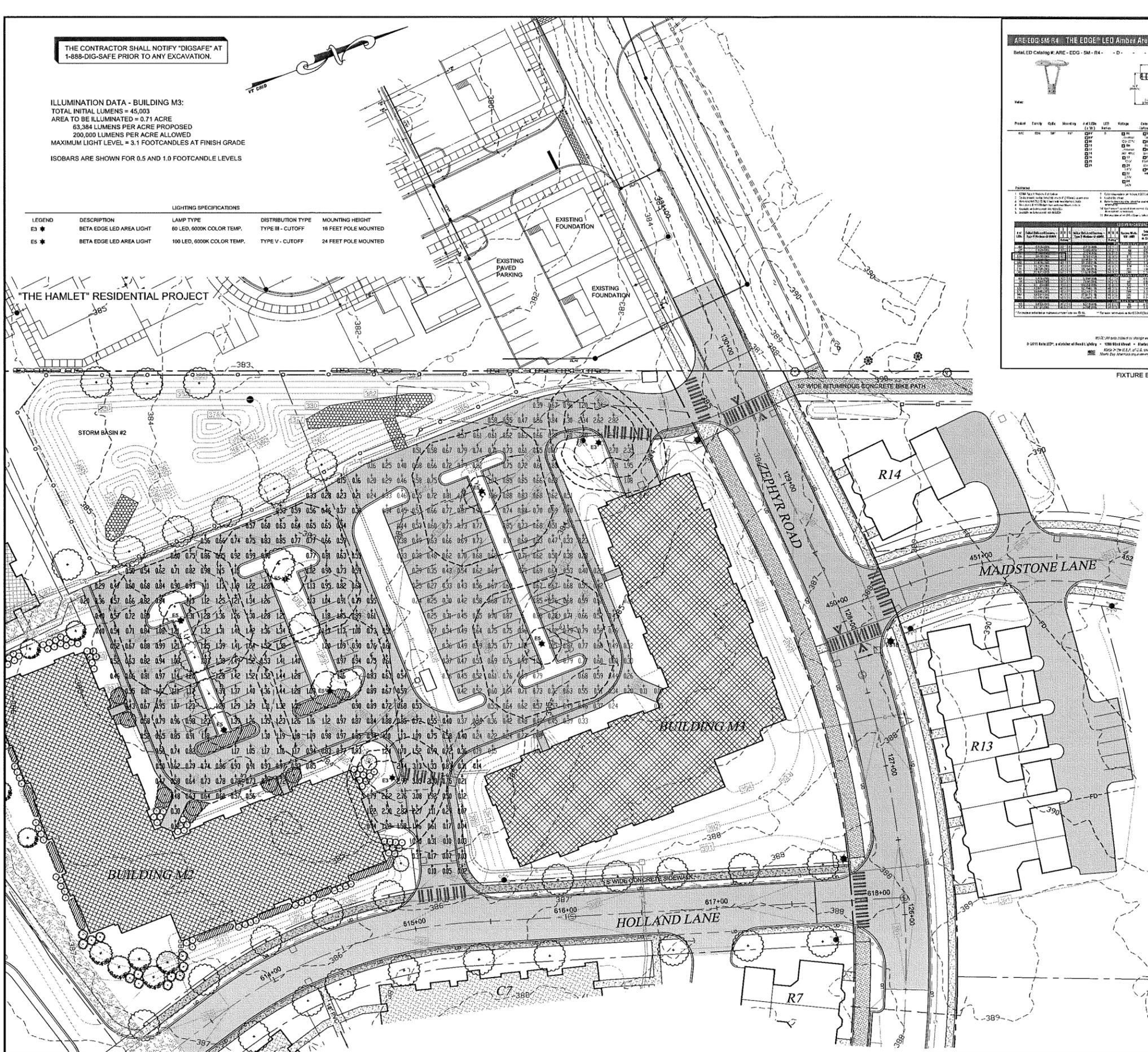
THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

ILLUMINATION DATA - BUILDING M3:  
 TOTAL INITIAL LUMENS = 45,003  
 AREA TO BE ILLUMINATED = 0.71 ACRE  
 63,384 LUMENS PER ACRE PROPOSED  
 200,000 LUMENS PER ACRE ALLOWED  
 MAXIMUM LIGHT LEVEL = 3.1 FOOTCANDLES AT FINISH GRADE  
 ISOBARIS ARE SHOWN FOR 0.5 AND 1.0 FOOTCANDLE LEVELS

LIGHTING SPECIFICATIONS			
LEGEND	DESCRIPTION	LAMP TYPE	DISTRIBUTION TYPE
E3 *	BETA EDGE LED AREA LIGHT	60 LED, 6000K COLOR TEMP.	TYPE III - CUTOFF
E5 *	BETA EDGE LED AREA LIGHT	100 LED, 6000K COLOR TEMP.	TYPE V - CUTOFF



"THE HAMLET" RESIDENTIAL PROJECT



ARE-EDG-SM-R4 THE EDGE® LED Amber Area Light - Type V Medium R4 (Rev. 02/08)

BetaLED Catalog #: ARE-EDG-SM-R4 - D

Product	Family	Code	Mounting	Height (ft)	Beam	Color	Temp	Warranty	Notes
ARE-EDG-SM-R4	ARE-EDG	SM	R4	24	120°	Amber	6000K	5 Year	See notes for details.

Notes:  
 1. See BetaLED website for details.  
 2. See BetaLED website for details.  
 3. See BetaLED website for details.  
 4. See BetaLED website for details.  
 5. See BetaLED website for details.  
 6. See BetaLED website for details.  
 7. See BetaLED website for details.  
 8. See BetaLED website for details.  
 9. See BetaLED website for details.  
 10. See BetaLED website for details.

FIXTURE E5

ARE-EDG-SM-R4 THE EDGE® LED Area Light - Type III Medium R4 (Rev. 02/08)

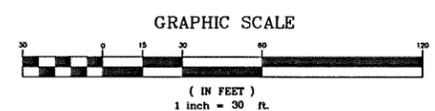
BetaLED Catalog #: ARE-EDG-SM-R4 - D

Product	Family	Code	Mounting	Height (ft)	Beam	Color	Temp	Warranty	Notes
ARE-EDG-SM-R4	ARE-EDG	SM	R4	16	120°	Amber	6000K	5 Year	See notes for details.

Notes:  
 1. See BetaLED website for details.  
 2. See BetaLED website for details.  
 3. See BetaLED website for details.  
 4. See BetaLED website for details.  
 5. See BetaLED website for details.  
 6. See BetaLED website for details.  
 7. See BetaLED website for details.  
 8. See BetaLED website for details.  
 9. See BetaLED website for details.  
 10. See BetaLED website for details.

FIXTURE E3

DP 09-01 PHASE 2A  
 Ken Colbin, ZA  
 11/6/2012



WILLISTON DISCRETIONARY PERMIT DP-09-01  
 TAX PARCEL # 08104010, 08143002, 004, & 010

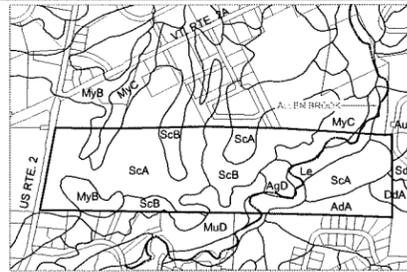
REVISIONS	DATE	BY	DESCRIPTION	NO. OF SHEETS
SKETCH/CONCEPT				
PRELIMINARY				
FINAL				
RECORD DRAWING				

**FINNEY CROSSING**  
 A PLANNED UNIT DEVELOPMENT  
 WILLISTON, VERMONT

**PHASE 2A LIGHTING PLAN**

proj. no. 01-087  
 survey L&D  
 design DUG/ABR  
 draw L&D  
 checked DUG/ABR  
 date 07/16/12  
 scale 1" = 30'  
 sht. no. L

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



SOILS MAP & LOCUS  
SCALE: 1" = 100'

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

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

**INSPECTION & MONITORING**

1. THE ON-SITE COORDINATOR IS
2. 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 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.
3. DURING THE WINTER CONSTRUCTION PERIOD (OCT. 15 - APRIL 15) DAILY INSPECTIONS SHALL BE PERFORMED AND DOCUMENTED.
4. 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.
5. 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**

1. 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**

1. CONSTRUCT HOLLAND LANE AND RELATED UTILITIES (SEWER, WATER, STORM)
2. MASS SITE GRADING (PLACE FILL FOR PARKING AREA AND DRIVES)
3. BEGIN SITE UTILITIES TO NEW BUILDING.
4. EXCAVATE FOR BUILDING FOOTINGS AND COMMENCE BUILDING FOUNDATION CONSTRUCTION (BUILDING CONSTRUCTION TO RUN CONCURRENTLY WITH REMAINING EVENTS)
5. CONSTRUCT PRIVATE DRIVES AND PARKING.
6. COMPLETE SITE GRADING AROUND BUILDING

**EROSION PREVENTION AND SEDIMENT CONTROL PERMIT REQUIREMENTS**

PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL OBTAIN CO-FERRETEE COVERAGE UNDER GENERAL PERMIT 3-9020 WHICH REGULATES STORMWATER RUNOFF FROM CONSTRUCTION SITES.

THIS PROJECT QUALIFIES AS HAVING A LOW RISK FOR IMPACTS TO WATER QUALITY, BASED UPON THE FOLLOWING:

- A TOTAL AREA OF SOIL DISTURBANCE LESS THAN 2 ACRES
- ALL RUNOFF FROM DISTURBED AREAS PASSING THROUGH A 50 FEET WIDE VEGETATED BUFFER PRIOR TO REACHING THE RECEIVING STREAM, DITCH, OR DRAINAGEWAY.
- A MAXIMUM OF 14 CONSECUTIVE DAYS BEFORE DISTURBED EARTH IS TEMPORARILY OR PERMANENTLY STABILIZED.

THESE CRITERIA FORM THE BASIS FOR THE LOW 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 THE LOW RISK SITE HANDBOOK 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
- 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

**RECOMMENDED MAINTENANCE - CATCHBASINS**

ACTIVITY	SCHEDULE
INSPECT SUMPS	ANNUALLY IN SPRING
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
Contributing areas clean of litter	
Outlet structures grates clear	

NOTES: \_\_\_\_\_

ACTIVITY	SCHEDULE
PAVEMENT SWEEPING	SPRING
Sweep drives and parking lot to remove salt and sand	

NOTES: \_\_\_\_\_

**VEGETATION** SPRING & FALL

- 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)

**SEDIMENT DEPOSITION** SPRING & FALL

- Depth/accumulation of sediment at inlet sump
- Remove sediment when sump 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

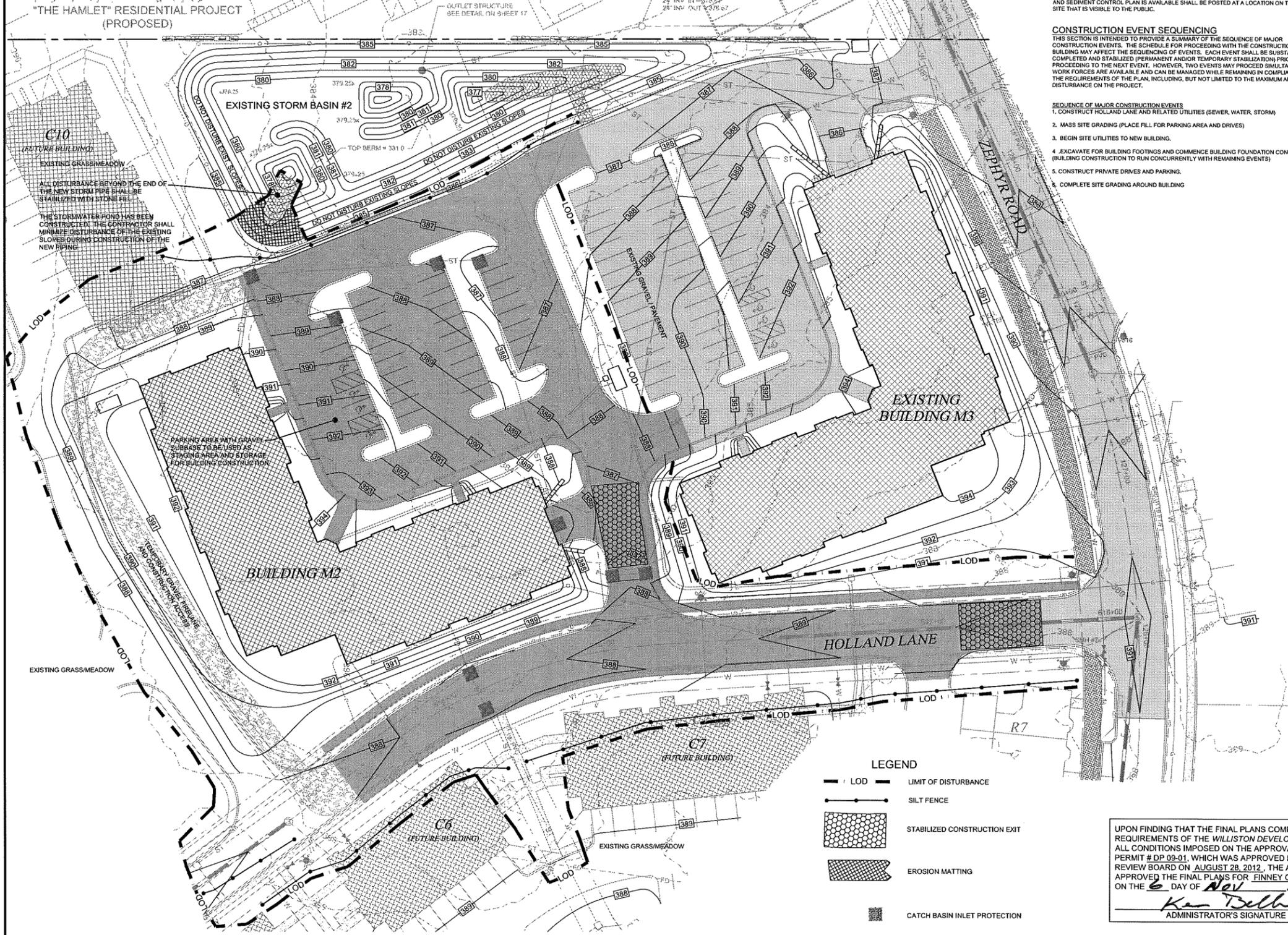
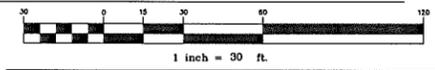
DEPTH OF SEDIMENT AT INLET SUMP: \_\_\_\_\_

NOTES: \_\_\_\_\_

**ENERGY DISSIPATOR** SPRING & FALL

- No evidence of erosion at inlet pipes

NOTES: \_\_\_\_\_



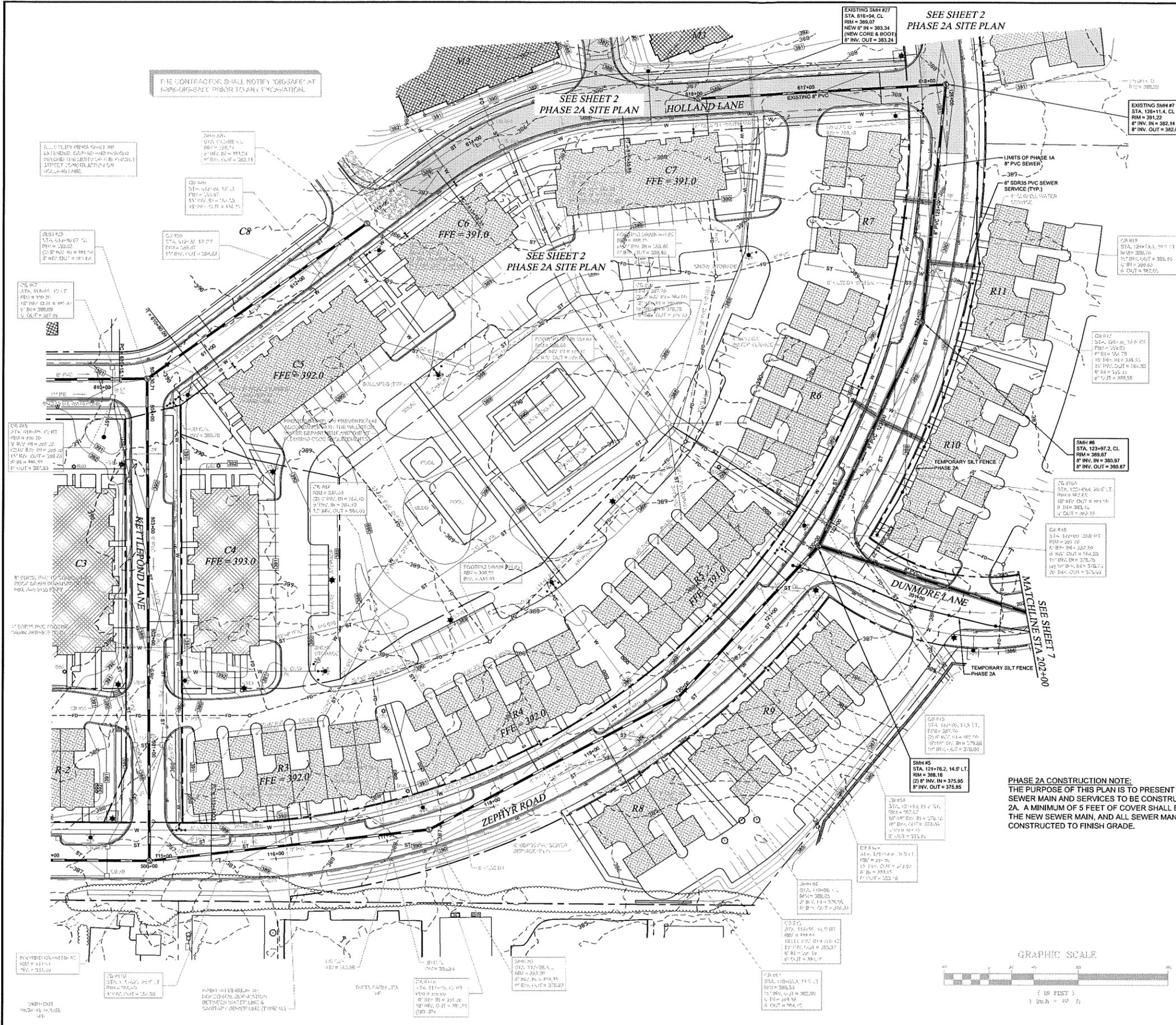
**LEGEND**

- LOD — LIMIT OF DISTURBANCE
- SILT FENCE
- STABILIZED CONSTRUCTION EXIT
- EROSION MATTING
- 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 28, 2012, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE 6 DAY OF Nov 2012

*Kan Belbin*  
ADMINISTRATOR'S SIGNATURE

10-18-12	REVISED PER STAFF / DRB REVIEW	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		
<b>FINNEY CROSSING</b>		proj. no. 01-087
A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT		survey L&D
<b>PHASE 2A</b>		design DJG/ABR
<b>EROSION PREVENTION AND SEDIMENT CONTROL PLAN</b>		drawn L&D
<b>LD</b>		checked DJG/ABR
LAMOUREUX & DICKINSON Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450		date 07/16/12
scale 1" = 30'		sht. no. 4



THE CONTRACTOR SHALL NOTIFY "GASSAFE" AT 800-645-6242 PRIOR TO ANY EXCAVATION.

SEE SHEET 2  
PHASE 2A SITE PLAN

SEE SHEET 2  
PHASE 2A SITE PLAN

SEE SHEET 2  
PHASE 2A SITE PLAN

SEE SHEET 7  
MATCHLINE STA 202+00

**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-08-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 28, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE 6 DAY OF NOV 2012

*Ken Bullock*  
DEVELOPMENT REVIEW BOARD - PRESIDING MEMBER SIGNATURE

**PHASE 2A CONSTRUCTION NOTE:**  
THE PURPOSE OF THIS PLAN IS TO PRESENT THE PROPOSED SEWER MAIN AND SERVICES TO BE CONSTRUCTED IN PHASE 2A. A MINIMUM OF 5 FEET OF COVER SHALL BE PLACED OVER THE NEW SEWER MAIN, AND ALL SEWER MANHOLES SHALL BE CONSTRUCTED TO FINISH GRADE.

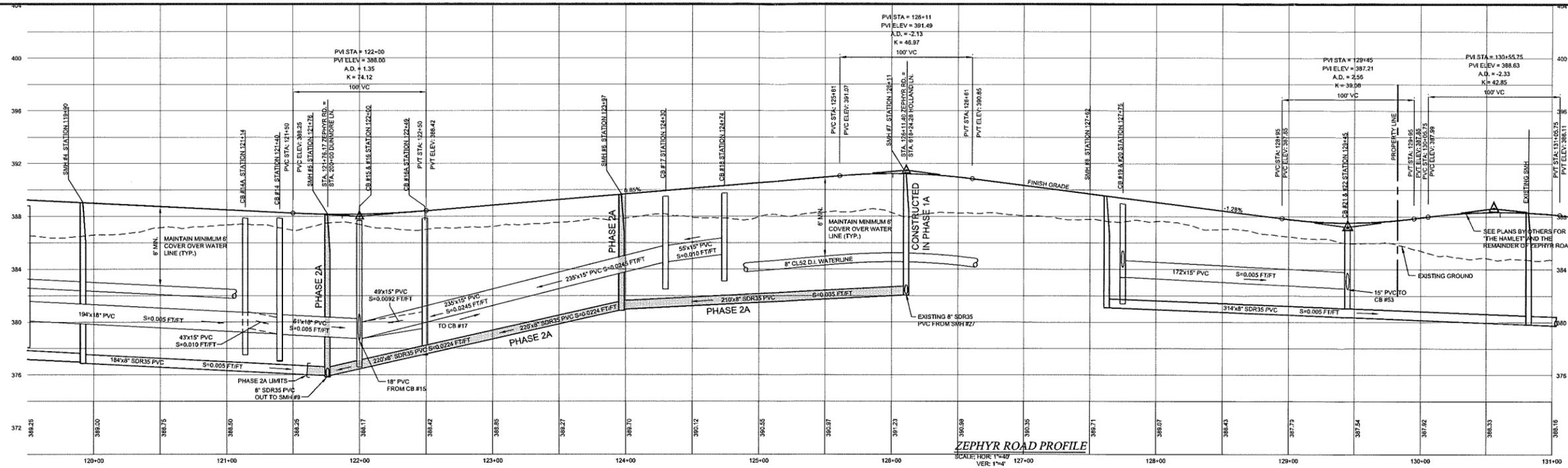
GRAPHIC SCALE



10-18-12	ADD PHASE 2A NOTES FOR SEWER MAIN CONSTRUCTION	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	
<input type="checkbox"/>	RECORD DRAWING	
<p><b>FINNEY CROSSING</b> A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT</p> <p><b>PHASE 2A SEWER MAIN</b> <b>ZEPHYR ROAD</b> <b>STATION 115+50 TO 126+50</b></p>		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
<p><b>LA MOUREUX &amp; DICKINSON</b> Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450</p>		

WILLISTON DISCRETIONARY PERMIT DP-08-01  
TAX PARCEL # 08104010, 08143002, 004, & 010

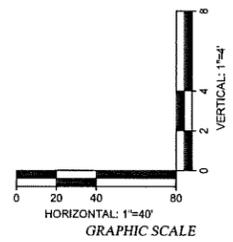


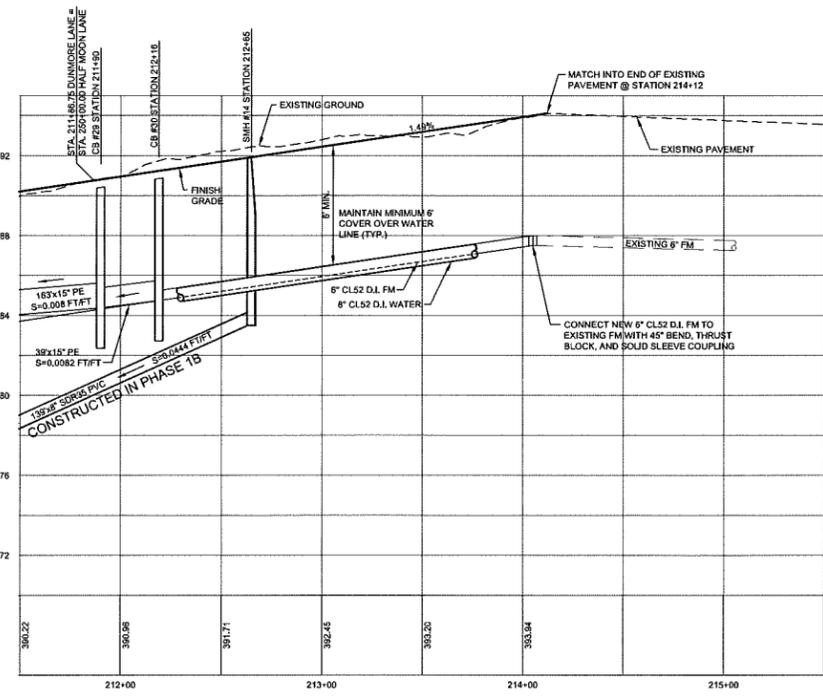
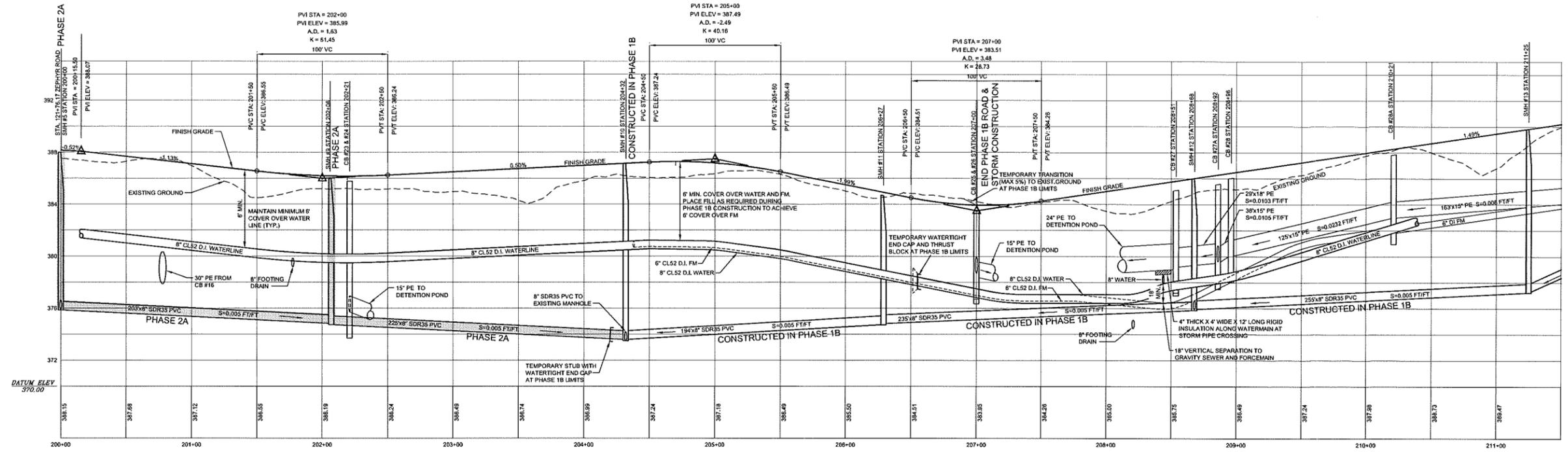


ZEPHYR ROAD PROFILE  
SCALE: HORIZ: 1"=40'  
VERT: 1"=4'

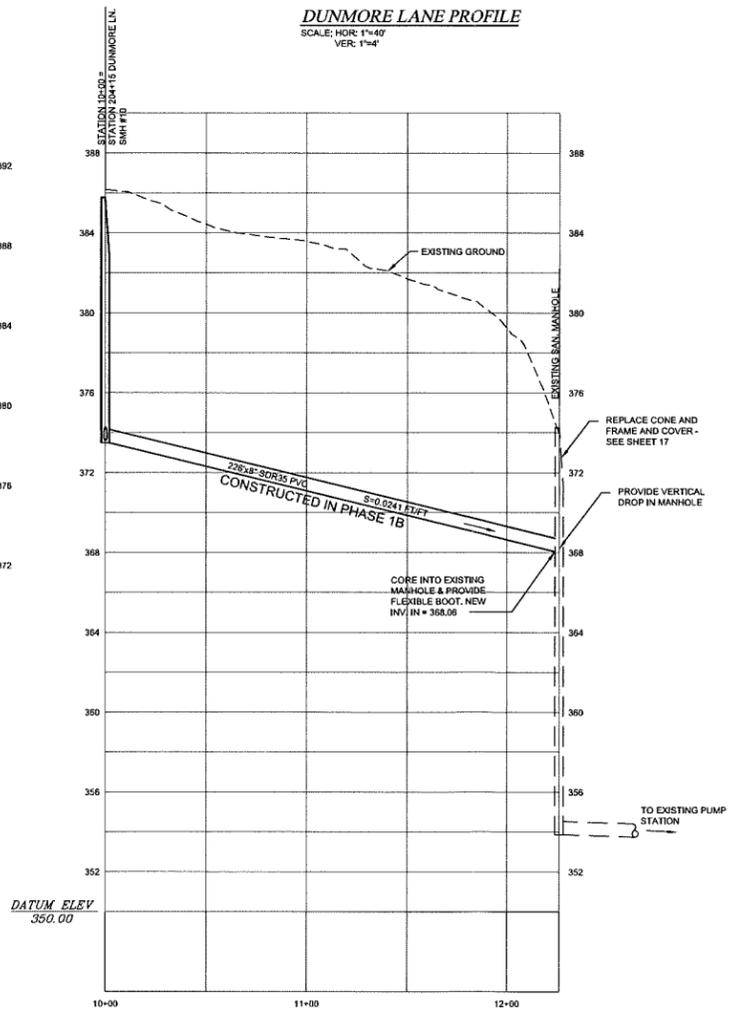
UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BYLAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT #DP-09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 28, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE 6 DAY OF NOV. 12, 2012.  
*Ken D. Bullen*  
DEVELOPMENT REVIEW BOARD - PRESIDING MEMBER SIGNATURE

10-18-12 ADD PHASE 2A NOTES FOR SEWER MAIN CONSTRUCTION		ABR
REVISIONS		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		# OF SHEETS
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<input type="checkbox"/> PRELIMINARY		
<input checked="" type="checkbox"/> FINAL		
<input type="checkbox"/> RECORD DRAWING		
<b>FINNEY CROSSING</b> A PLANNED UNIT DEVELOPMENT WILLISTON, VERMONT		proj. no. 01-087 survey L&D design DJG/ABR drawn JET/BH checked DJG/ABR date 11/30/05 scale H: 1"=40' V: 1"=4' sht. no. 11
<b>ZEPHYR RD STA. 123+00 TO 130+55,</b> <b>ROAD PROFILES</b>		
<b>LAMOREUX &amp; DICKINSON</b> Consulting Engineers, Inc. 14 Morse Drive Essex Junction, VT 05452 (802) 878-4450		

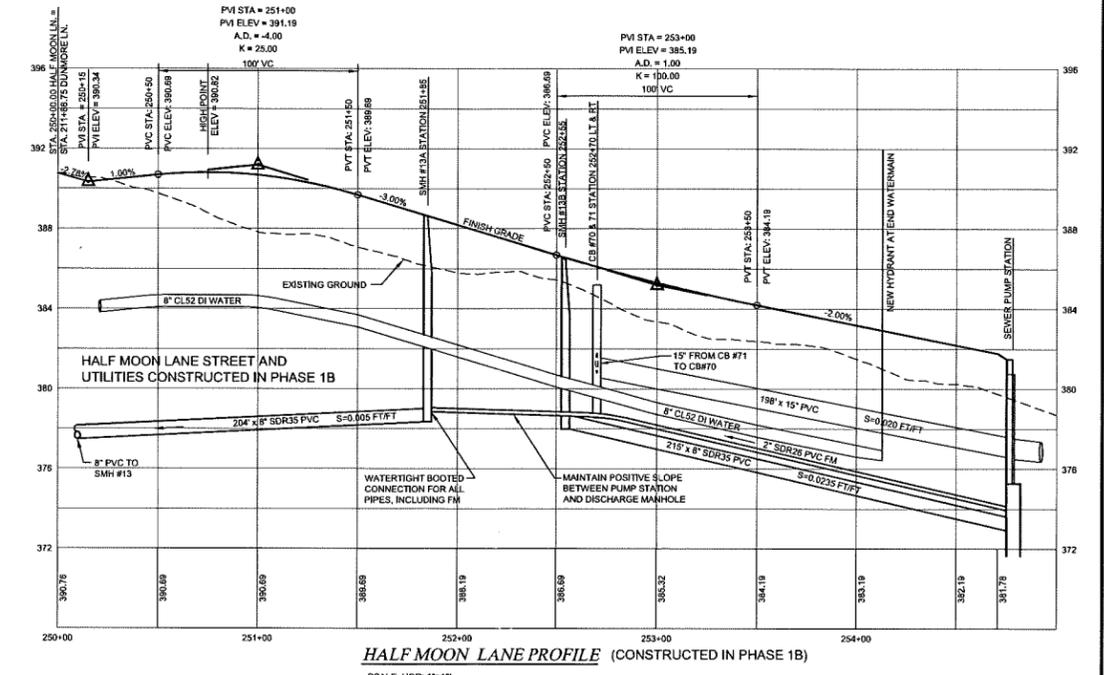




**DUNMORE LANE PROFILE**  
SCALE: HOR: 1"=40'  
VER: 1"=4'



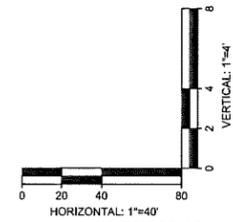
**CROSS COUNTRY SANITARY SEWER PROFILE** (CONSTRUCTED IN PHASE 1B)  
SCALE: HOR: 1"=40'  
VER: 1"=4'



**HALF MOON LANE PROFILE** (CONSTRUCTED IN PHASE 1B)  
SCALE: HOR: 1"=40'  
VER: 1"=4'

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*Ken Belcher*  
DEVELOPMENT REVIEW BOARD - PRESIDING MEMBER SIGNATURE



NO.	DATE	DESCRIPTION	BY
10-18-12		ADD PHASE 2A NOTES FOR SEWER MAIN CONSTRUCTION	ABR
01-27-12		REV PER TOWN REVIEW - ADD FM AND PHASE 1B LIMITS TO DUNMORE/HALF MN	ABR
08-12-11		REVISED HALF MOON LANE STORM & SEWER	ABR
07-06-07		REVISED DUNMORE LANE STORM SYSTEM	ABR/UT
01-12-07		GENERAL REVISIONS FOR FINAL PLAN SUBMITTAL	JT



REVISIONS	
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:	
	# OF SHEETS
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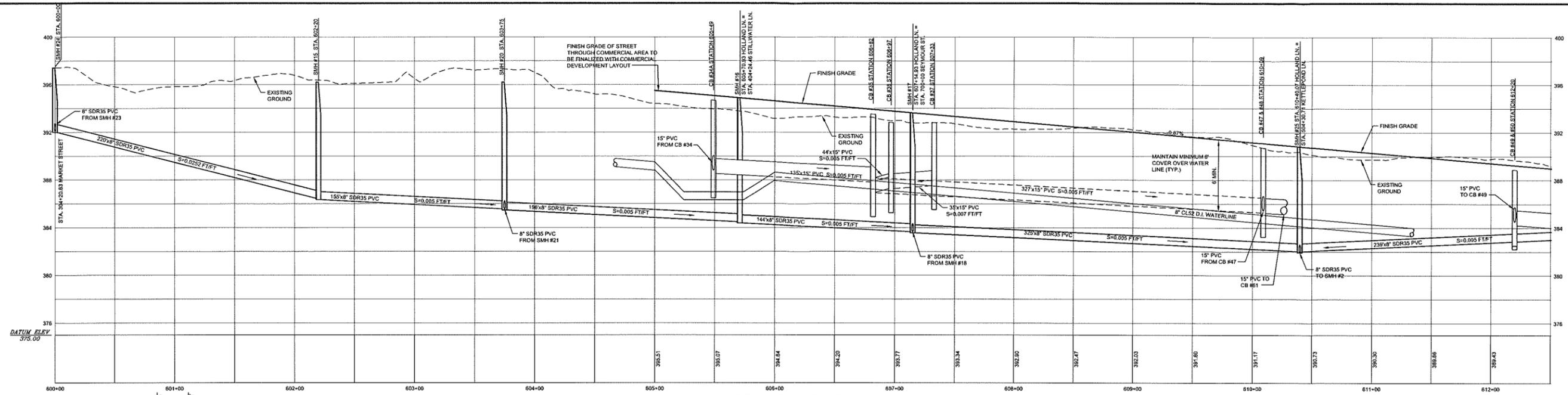
**FINNEY CROSSING**  
A PLANNED UNIT DEVELOPMENT  
WILLISTON, VERMONT

**DUNMORE LANE PROFILE**  
STATION 200+00 TO 215+00,  
**HALF MOON LANE PROFILE & CROSS COUNTRY SEWER PROFILE**

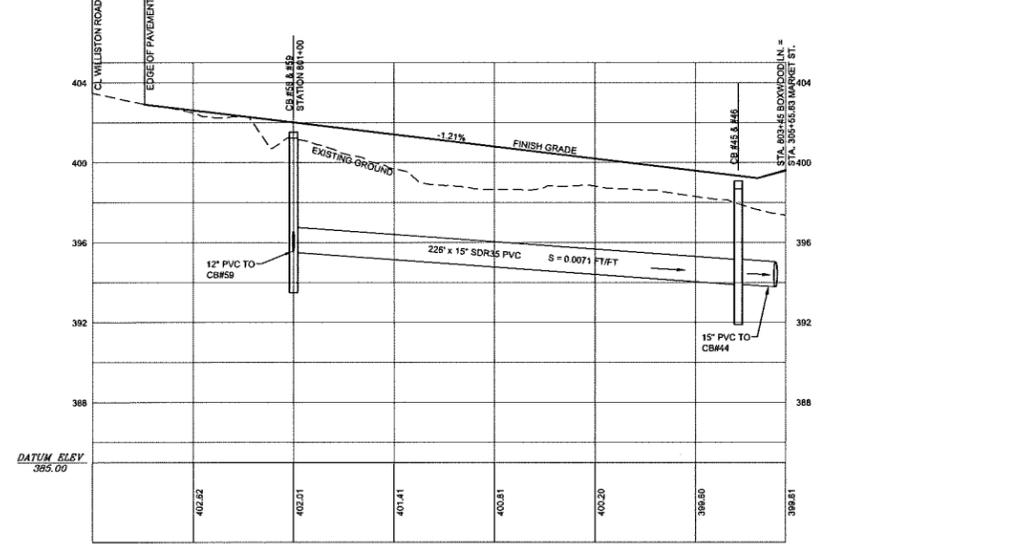
proj. no. 01-087  
survey L&D  
design DJG/ABR  
drawn JET/BH  
checked DJG/ABR  
date 11/30/05  
scale HOR: 1"=40'  
VER: 1"=4'  
sh. no.

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

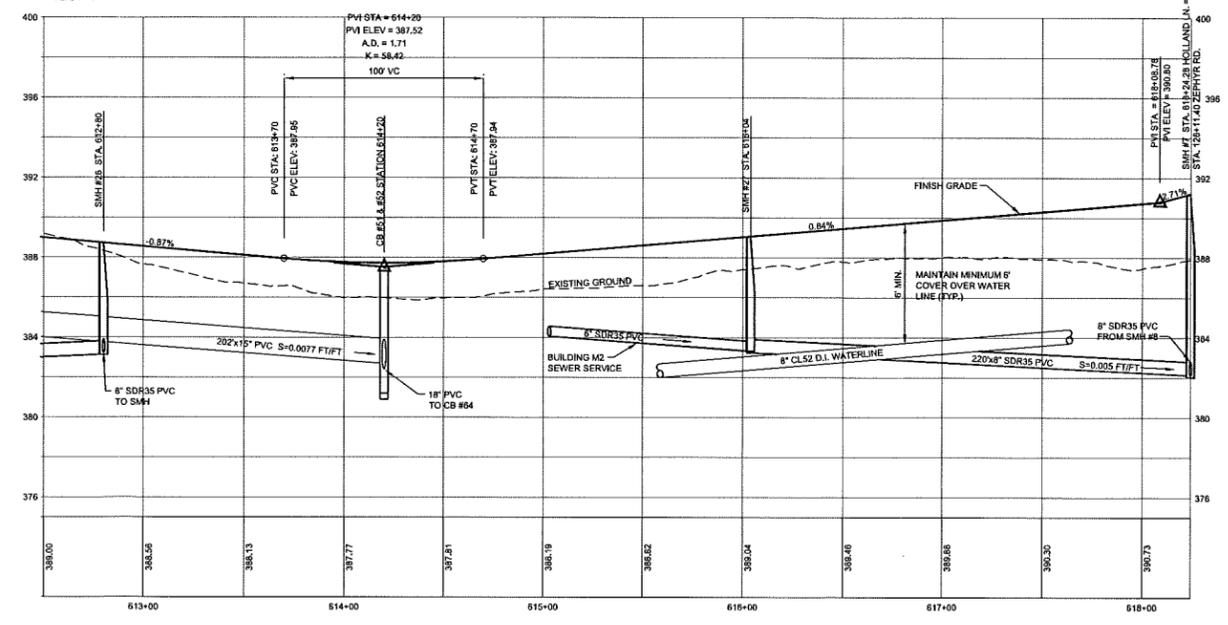
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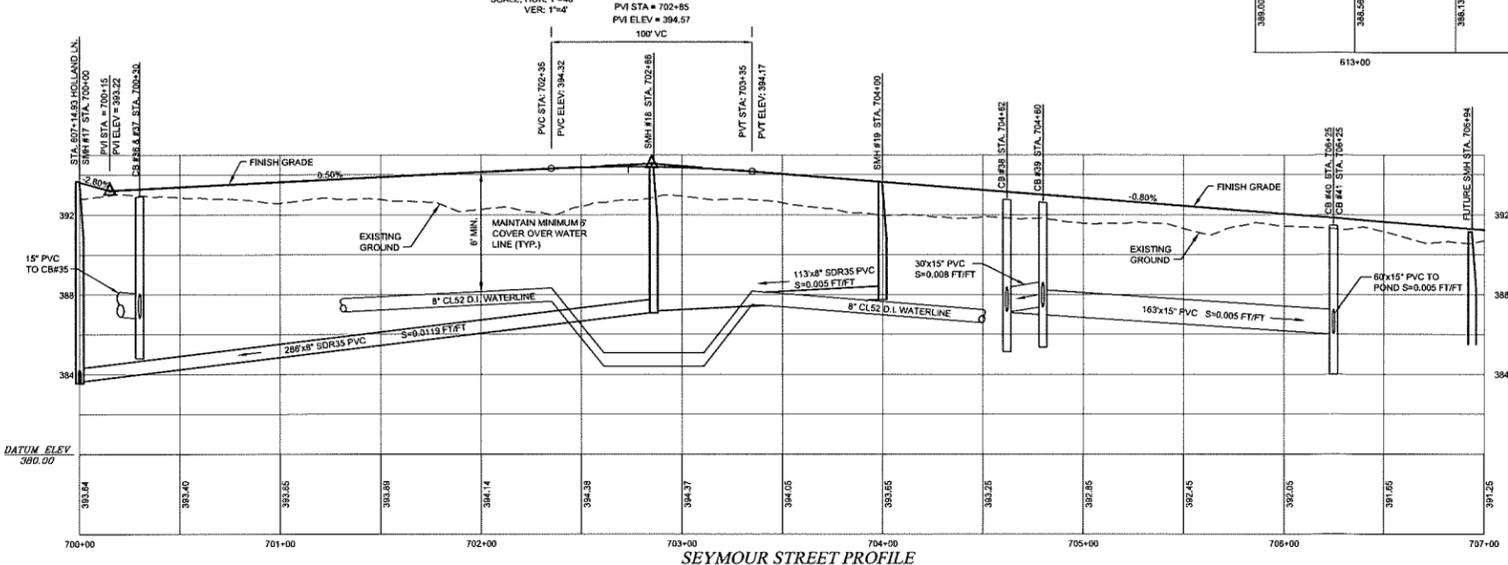
**HOLLAND LANE PROFILE**  
SCALE: HOR: 1"=40'  
VER: 1"=4'



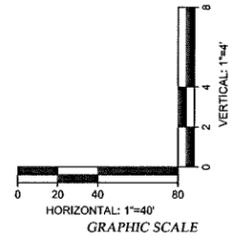
**BOXWOOD STREET PROFILE**  
SCALE: HOR: 1"=40'  
VER: 1"=4'



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



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



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*Kent Belcher*  
ADMINISTRATOR'S SIGNATURE



10-18-12	REVISE PER STAFF/DJR REVIEW	ABR
07-18-12	REVISE CIP'S 51 & 52	ABR
05-18-07	REVISED PER TOWN AND STATE REVIEWS	DJ/GJT
01-12-07	GENERAL REVISIONS FOR FINAL PLAN SUBMITTAL	JT

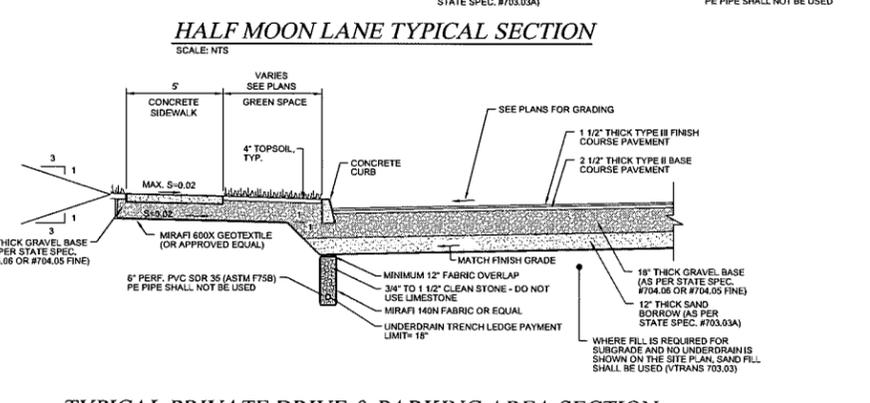
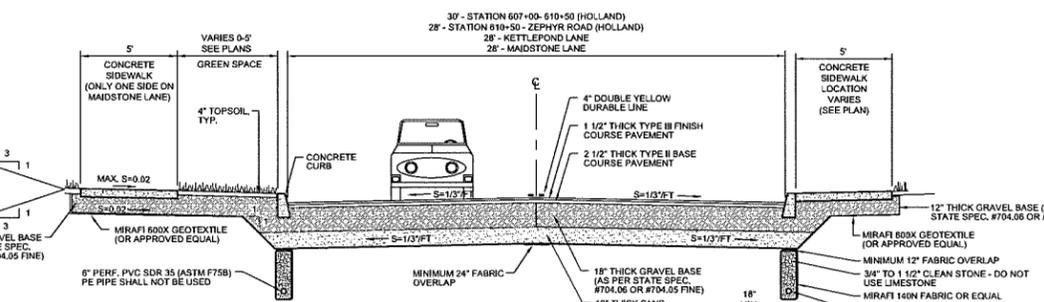
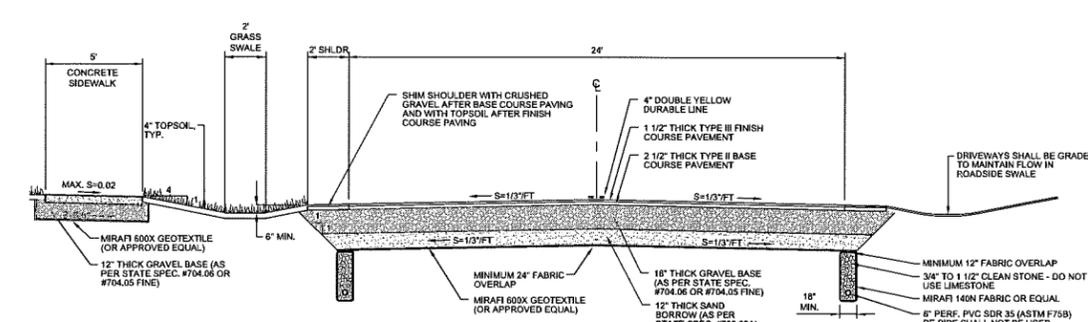
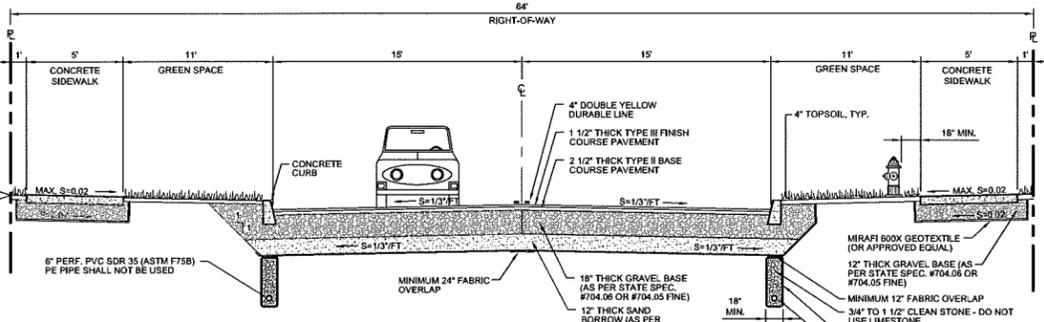
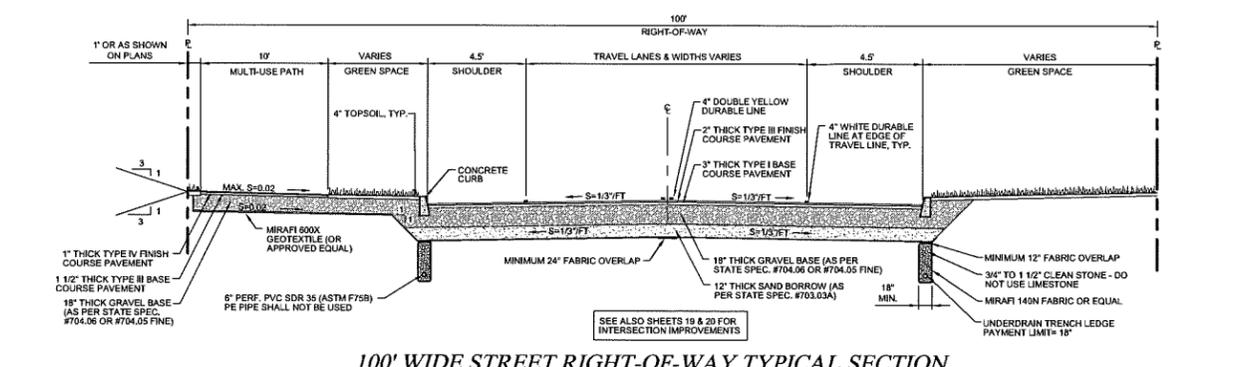
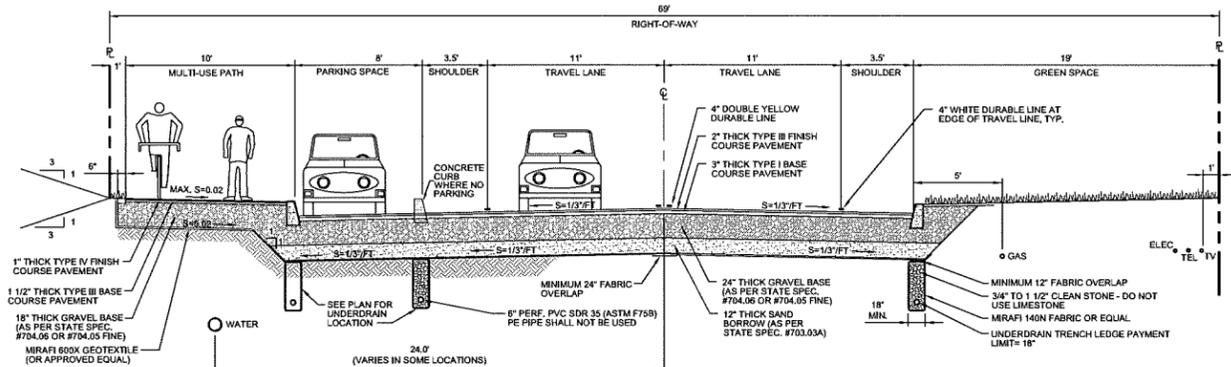
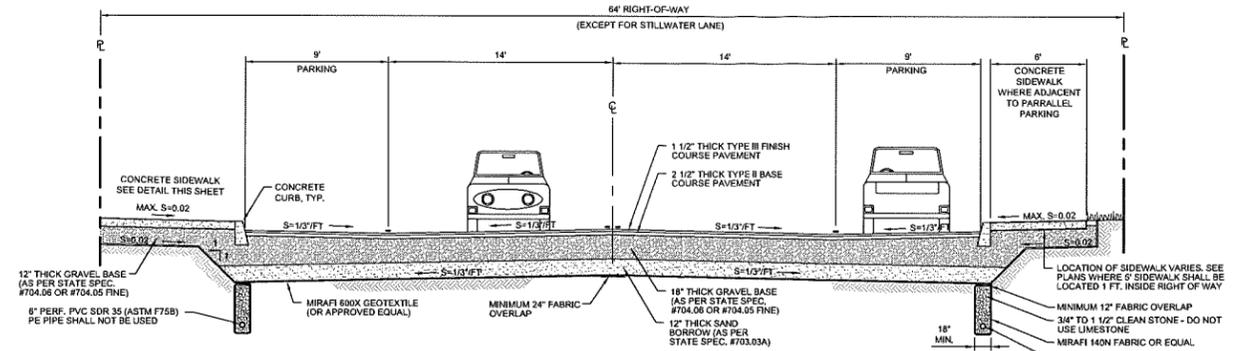
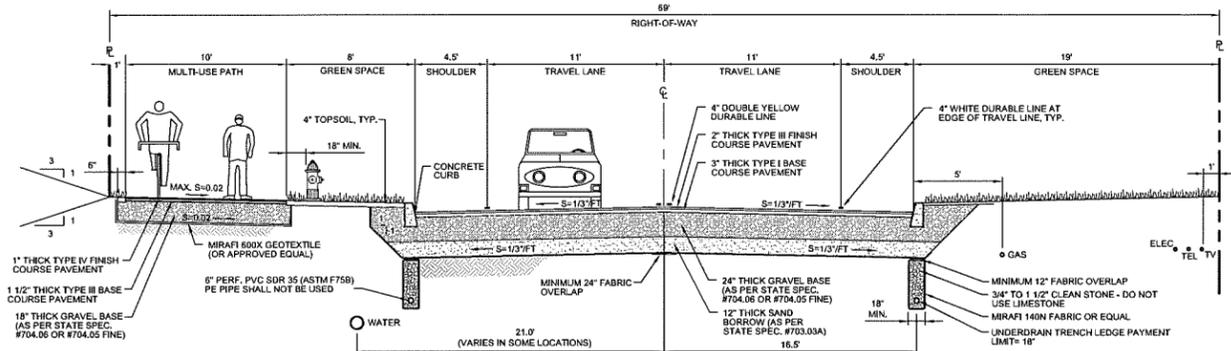
REVISIONS	
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:	
	# OF SHEETS
<input type="checkbox"/> SKETCH/CONCEPT	
<input type="checkbox"/> PRELIMINARY	
<input checked="" type="checkbox"/> FINAL	
<input type="checkbox"/> RECORD DRAWING	

**FINNEY CROSSING**  
A PLANNED UNIT DEVELOPMENT  
WILLISTON, VERMONT

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

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



- NOTES:**
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN PUBLIC WORKS SPECIFICATIONS, THE 2008 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 PAVEMENT.
  - THE STREET FINISH GRADE SHALL HAVE A MINIMUM SLOPE OF 0.5%.
  - WHERE LEDGE EXISTS 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 CLAMP 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 (M TAPE). TEMPORARY PAINT MARKINGS SHALL BE PROVIDED ON BASE COURSE PAVEMENT.

**TYPICAL STREET, DRIVE & PARKING AREA CROSS-SECTION NOTES**

SCALE: N.T.S.

DATE	REVISIONS	BY
10-19-12	REVISE PER STAFF/ORB REVIEW	ABR
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/JJT
01-12-07	ADDED ZEPHYR ROAD ON-STREET PARKING DETAIL.	PMP

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

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

**DETAILS & SPECIFICATIONS**  
ROADS

**LA MOUREUX & 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 AS SHOWN  
sheet no. 14

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 28, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A, ON THE DAY OF NOV 20 2012

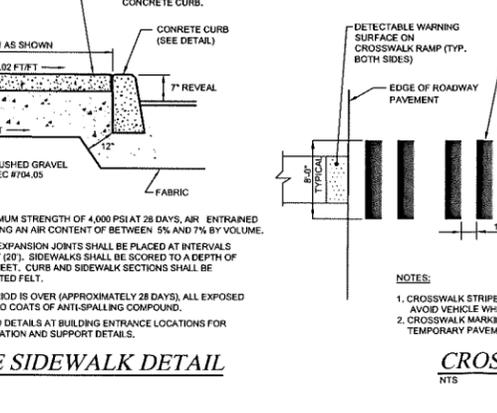
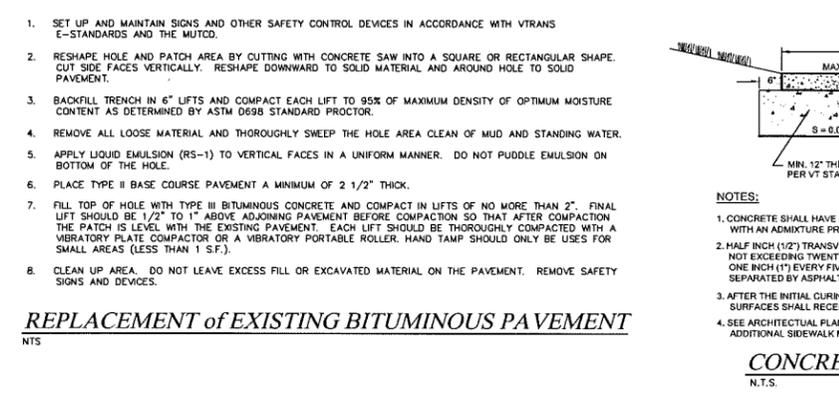
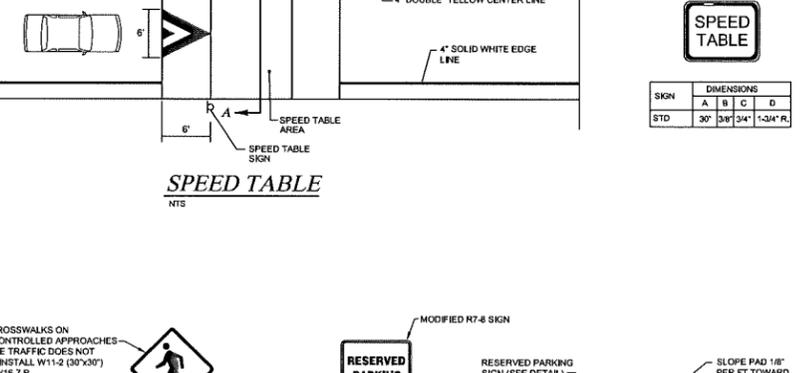
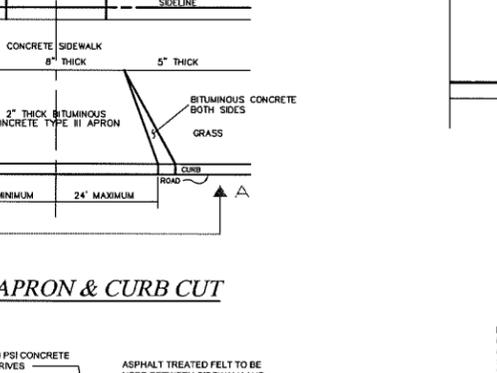
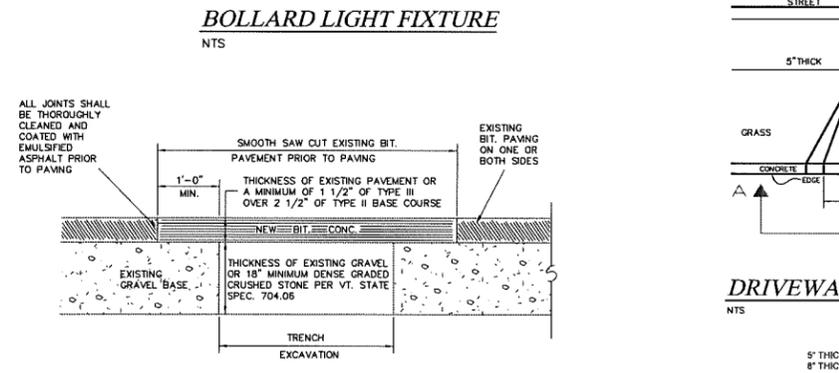
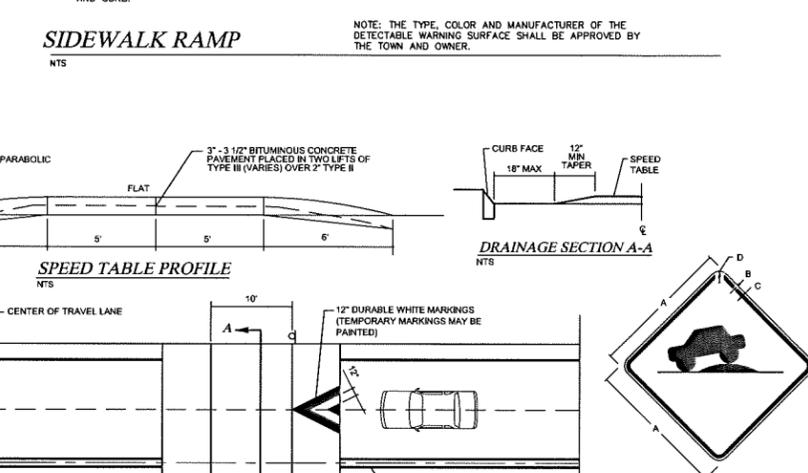
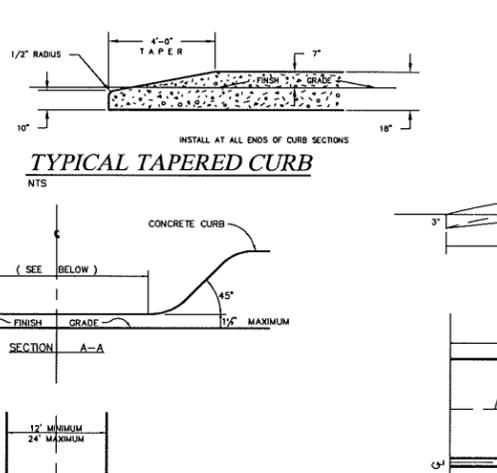
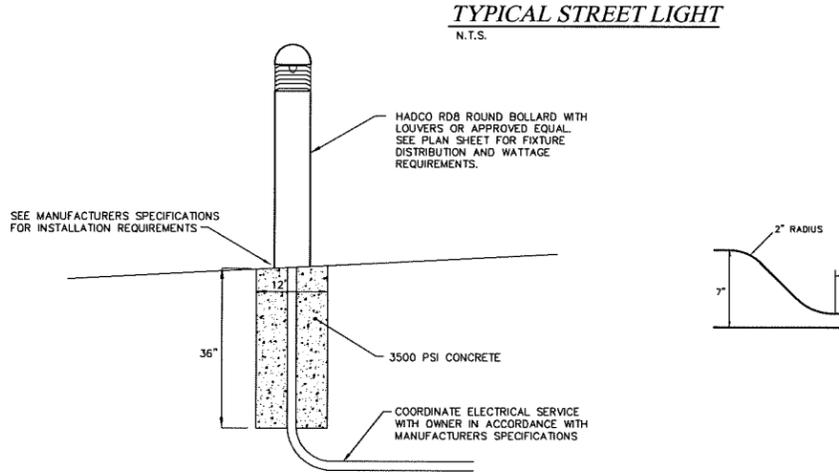
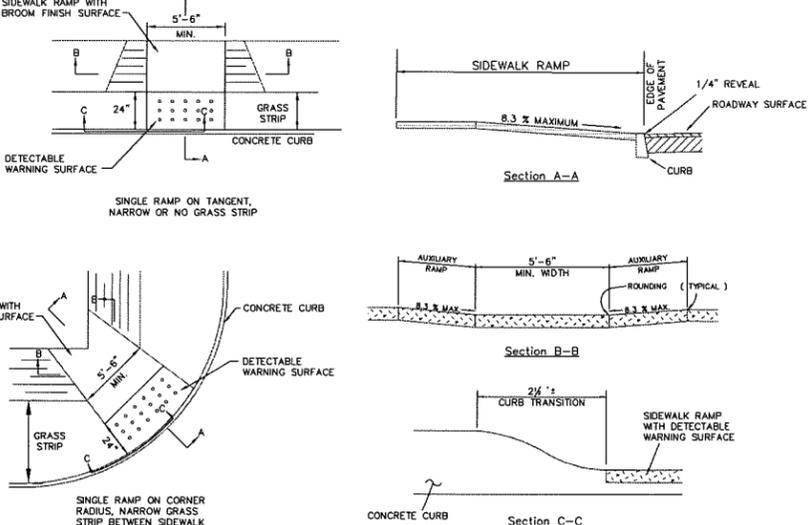
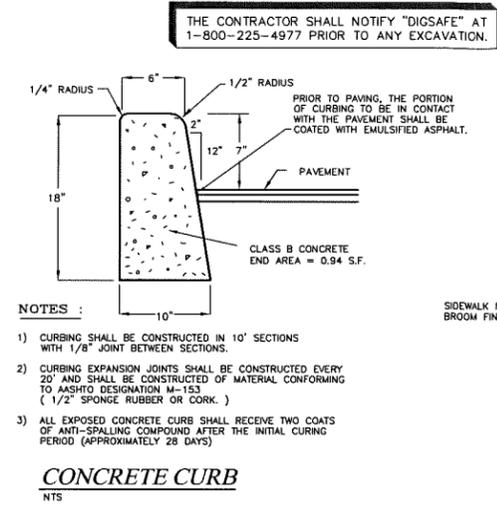
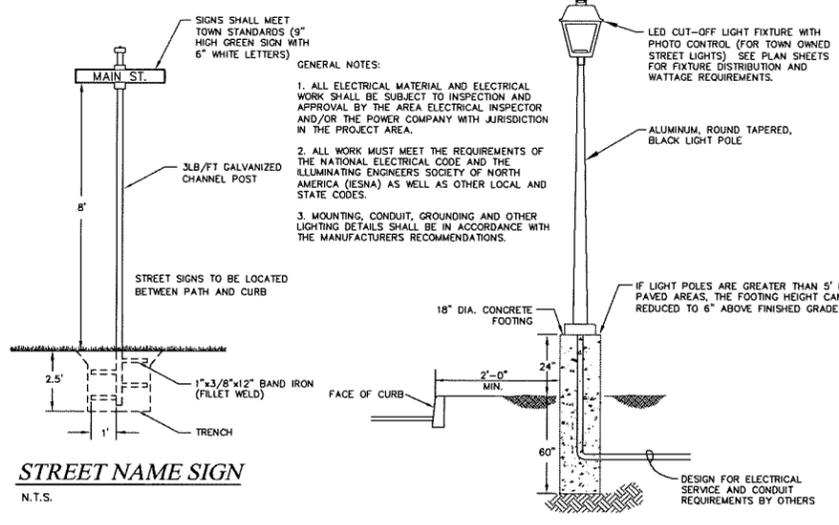
*Kan Bell*  
DEVELOPMENT REVIEW BOARD - PRESIDING MEMBER SIGNATURE



WILLISTON DISCRETIONARY PERMIT DP-09-01 TAX PARCEL # 08104010, 08143202, 004, & 010

**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, BEFORE OR NOT SHOWN HEREON. CONTRACTOR SHALL VERIFY NEW TAG 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 DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE TOWN OF WILLISTON PUBLIC WORKS SPECIFICATIONS AND THESE PLANS.
- NEW 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 ERECTED 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 HAZARDOUS 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 SLOPE 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 AASHTO T-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 UNTIL ALL DISTURBED AREAS HAVE BEEN PLANTED OR GRASSED AND APPROVED BY THE ENGINEER. THE MAINTENANCE OF THE EROSION 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 LAPOUREUX & DICKINSON CONSULTING ENGINEERS INC. (L&D) TO DETERMINE IF 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 COVER; 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 DRILLING AND BLASTING, WEDGING, SLEDGING OR BARRING, NO HARDHAM, SOFT, OR DISINTEGRATED ROCK WHICH CAN BE REMOVED WITH A PICK, LOOSE, SHAKEN, OR PREVIOUSLY BLASTED ROCK OR BROKEN STONE SMALLER THAN ONE CUBIC YARD IN VOLUME OR EXCESSIVE 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.
- 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.

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL REQUIREMENTS OF THE WILLISTON DEVELOPMENT BY-LAW AND ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT #DP-09-01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 28, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE 6 DAY OF NOV 12, 2012.

*Ken Bullock*  
DEVELOPMENT REVIEW BOARD - PRESIDING MEMBER SIGNATURE

REV	DESCRIPTION	DATE	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
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	

proj. no.	01-087
survey	L&D
design	DIG/ABR
drawn	JET/BH
checked	DIG/ABR
date	11/30/05
scale	AS SHOWN
sht. no.	15

WILLISTON DISCRETIONARY PERMIT DP-09-01 TAX PARCEL # 08-104010, 08-143002, 004, & 010



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

# 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 C500 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-lining 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-110/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-211.1. 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").

Megalog 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 plan. Prior to shipment from the factory, each valve shall be tested by hydrostatic pressure equal 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-81K, and shall conform with AWWA C502.  
Main Valve Opening: 5 1/4 inches  
Nozzle Arrangement: Two 2 1/2 inch hose nozzles NST threads.  
One 4 1/2 inch pumper nozzle NST threads.  
Inlet Connection: 6 inch mechanical joint, MECA-LUG and thrust block  
Standard "1" pentagon  
Direction of Opening: Counterclockwise  
Color: Enamelled hydrant red body, top color as determined by Town.  
Depth of Bury: 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; a length of six inch (6") Class 52 ductile iron pipe with a cement-lining; and the fire hydrant. MECA-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 service 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 C800. 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 taps 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 tap be made and a corporation installed without the use of a tapping saddle. Corporations shall be Mueller H-15009 or equal. (Mueller 300 Ball Valves are not acceptable.)

**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 C800. 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 curb-stop 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.

**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 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 Mueller with the two-hole cover. The word "WATER" shall be inscribed on the cover of the box.

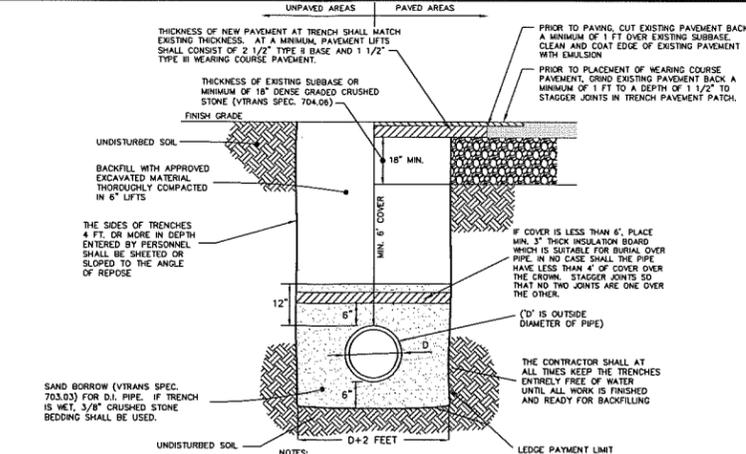
**F. HOUSE SERVICES CONSTRUCTION METHODS**  
The Contractor shall make all necessary taps into the watermain and will install for each lot an approved cross corporation stop.  
The Contractor shall also connect the type "K" copper service pipe to the flanged joint, which shall be connected to the brass 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 portion 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 water-tight 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. Core shall be taken to ensure that concrete will not come in contact with fittings, 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 all 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-99 Standard Practice. 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 set-right 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 sealed securely into the ground.

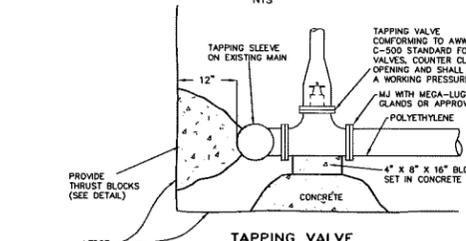
**C. FIELD TESTING**  
Except as otherwise directed, all pipelines shall be tested. Pipelines laid in excavation or bedded in concrete shall be tested prior to backfilling or the placing of concrete, and any exposed piping shall be tested prior to field painting. The Contractor shall furnish all gauges, testing plugs, caps, and all other necessary equipment and labor to perform leakage and pressure test in sections of an approved length. Each valved 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 two-hour 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:  
 $L = SD (\text{Square root of } P) / 148,000$   
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.

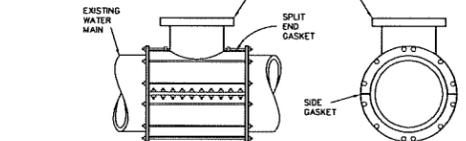
**E. FROST PROTECTION OF SHALLOW WATERLINES**  
Waterlines with less than six feet (6') of cover over the crown, or where indicated on the plans, shall be protected against freezing by installation of four inch (4") thick Styrofoam SM insulating sheets with a total width of four feet (4') or twice the 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. The cover shall be exercised by the Contractor during backfill and the 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 equivalent. In no case shall the waterlines have less than four feet (4') of cover over the top of the pipe.



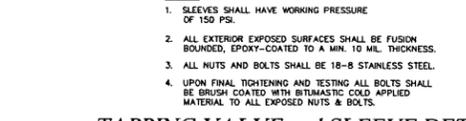
**TYPICAL WATER TRENCH**  
NTS



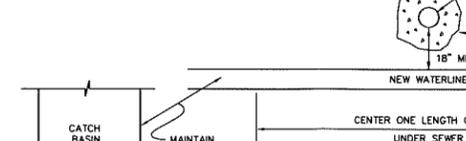
**TAPPING VALVE**  
NTS



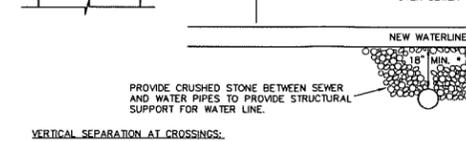
**TAPPING SLEEVE**  
NTS



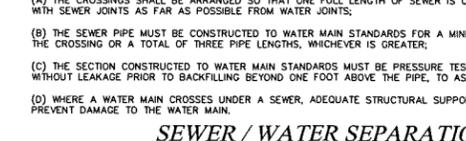
**TAPPING VALVE and SLEEVE DETAIL**  
NTS



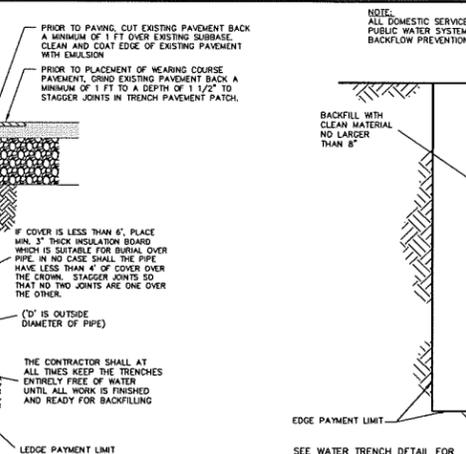
**STORM/WATER SEPARATION DETAIL**  
NTS



**SEWER/WATER SEPARATION DETAIL FOR CROSSINGS**  
NTS



**CONCRETE ENCASEMENT DETAIL**  
NTS

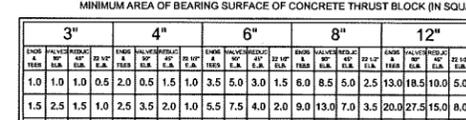


**WATER SERVICE DETAIL**  
NTS

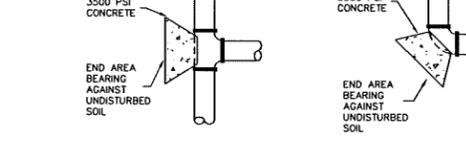
MINIMUM AREA OF BEARING SURFACE OF CONCRETE THRUST BLOCK (IN SQUARE FEET)

PIPE SIZE	3"		4"		6"		8"		12"		SAFE BEARING LOAD (PSF)	
	MIN.	MAX.										
COARSE & FINE COMPACT SAND	1.0	1.0	1.0	0.5	2.0	0.5	1.5	1.0	3.5	5.0	3.0	3,000
MEDIUM CLAY (CAN BE SPREAD)	1.5	2.5	1.5	1.0	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2,000
SOFT C.A.Y.	3.0	4.5	2.5	1.5	5.0	7.0	4.0	2.0	10.5	15.0	8.0	1,000

MAXIMUM WATER PRESSURE = 300 PSI (100 PSI WORKING PRESSURE PLUS A 2:1 SAFETY FACTOR)



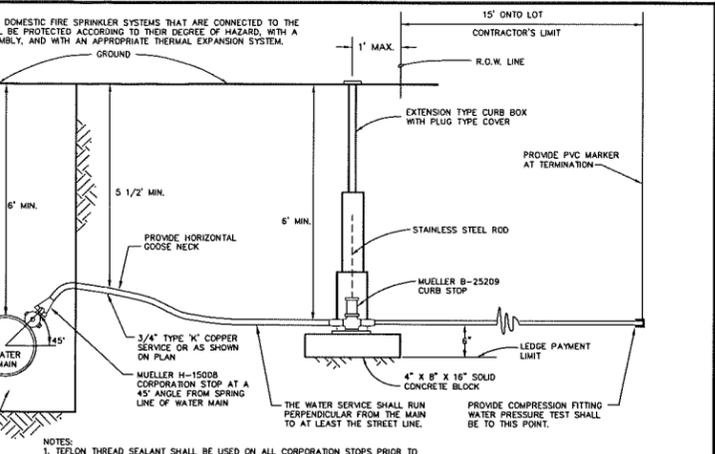
**TYPICAL TEES-DEADENDS-CAPS**  
NTS



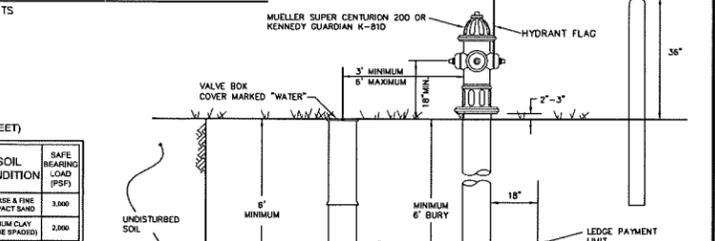
**TYPICAL BENDS**  
NTS



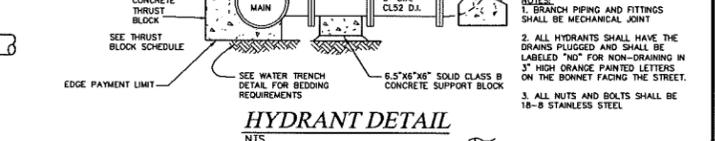
**THRUST BLOCK END AREA**  
NTS



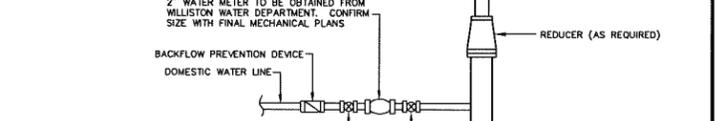
**HYDRANT DETAIL**  
NTS



**WATER SERVICE BACKFLOW PREVENTION DETAIL**  
NTS



**SEWER/WATER SEPARATION DETAIL**  
NTS



**CONCRETE ENCASEMENT DETAIL**  
NTS

UPON FINDING THAT THE FINAL PLANS COMPLIED WITH ALL CONDITIONS IMPOSED ON THE APPROVAL OF DISCRETIONARY PERMIT FOR 08/01, WHICH WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON AUGUST 28, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A, ON THE DAY OF THE REVIEW BOARD MEETING.

DATE: 09/11/2012  
BY: [Signature]  
TITLE: [Title]

**WATER SERVICE BACKFLOW PREVENTION DETAIL**  
NTS

DATE	REVISION	BY
10-18-12	REVISED PER STAFF/DRB REVIEW	ABR
08-12-11	REVISED PER DPW SPECIFICATIONS	ABR
06-15-07	REVISED PER WATER SUPPLY REVIEW	JPL
05-16-07	REVISED PER TOWN AND STATE REVIEWS	DJG/JT
11-08-06	ADD BACKFLOW PREVENTION DETAIL	ABR

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

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

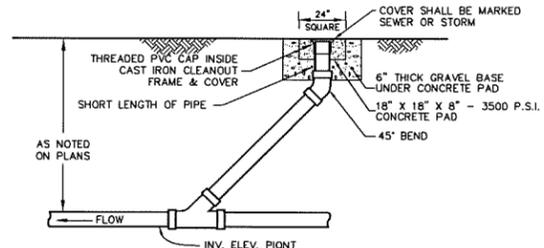
**DETAILS & SPECIFICATIONS**  
WATER

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

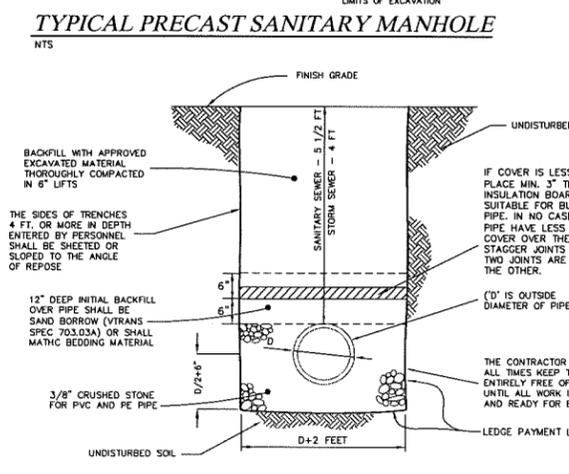
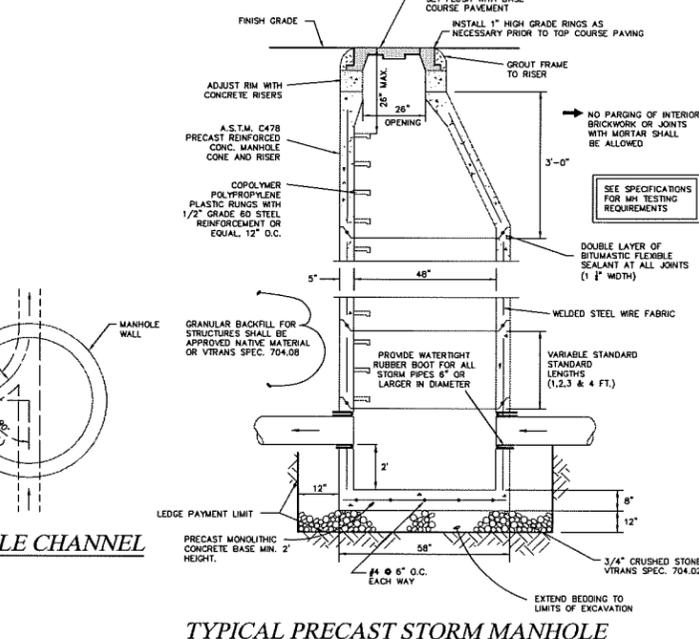
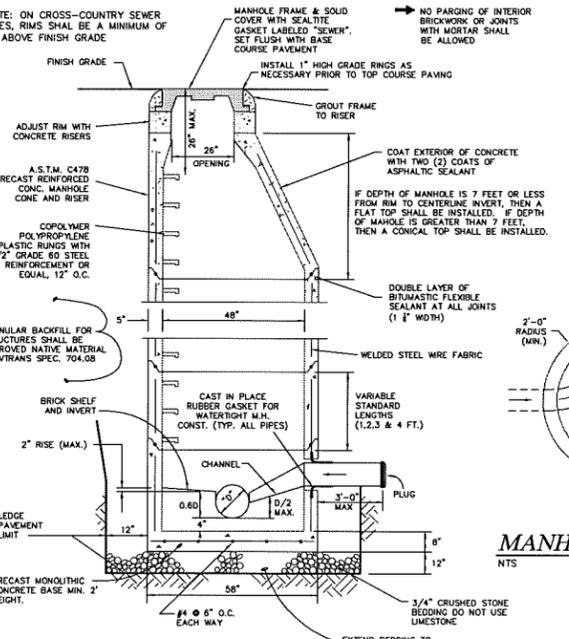
DATE: 11/30/05  
SCALE: AS SHOWN  
SHEET NO. 16

**SANITARY & STORM SPECIFICATIONS**

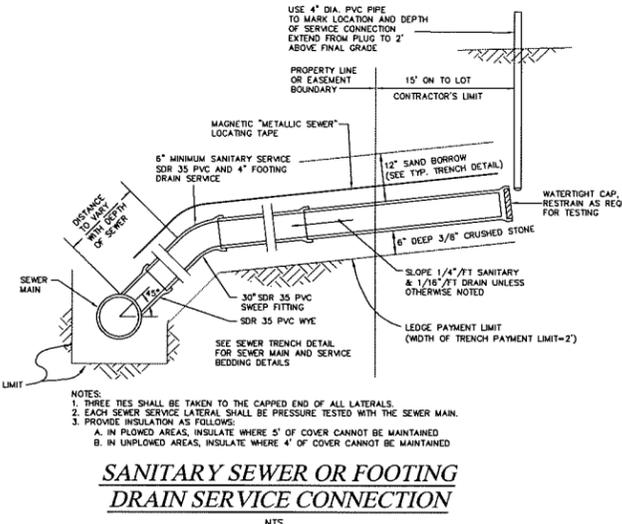
- 1) SANITARY AND STORM SEWER PIPES SHALL BE OF THE SIZE AND TYPE INDICATED ON THE PLANS. PVC PIPE SHALL BE SDR 35 CONFORMING TO ASTM D-3034, ASTM D-3212, AND ASTM F-477. CORRUGATED METAL PIPE SHALL CONFORM TO AASHTO M-190 FOR ACCOMP PIPE AND AASHTO M-246 TYPE B FOR POLYMERIC COATED STEEL PIPE. CORRUGATED POLYETHYLENE PIPE SHALL CONFORM TO AASHTO M294-90, TYPE S (SMOOTH LINED).
- 2) 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 C929-90. 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.
- 3) 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.



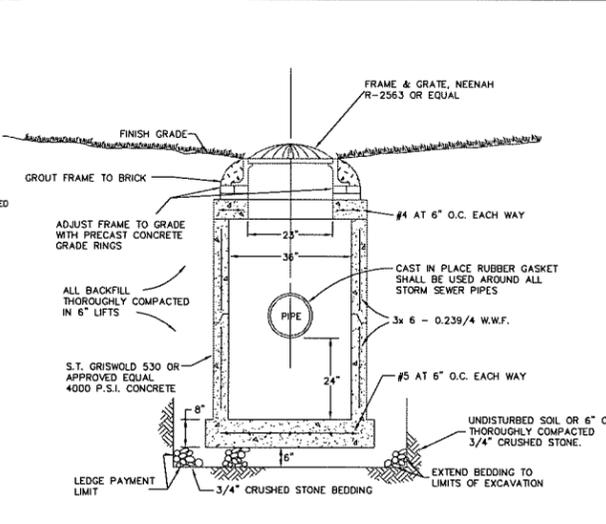
**CLEANOUT DETAIL (STORM & GRAVITY SEWER)**  
NTS



**TYPICAL SANITARY SEWER & STORM TRENCH**  
NTS



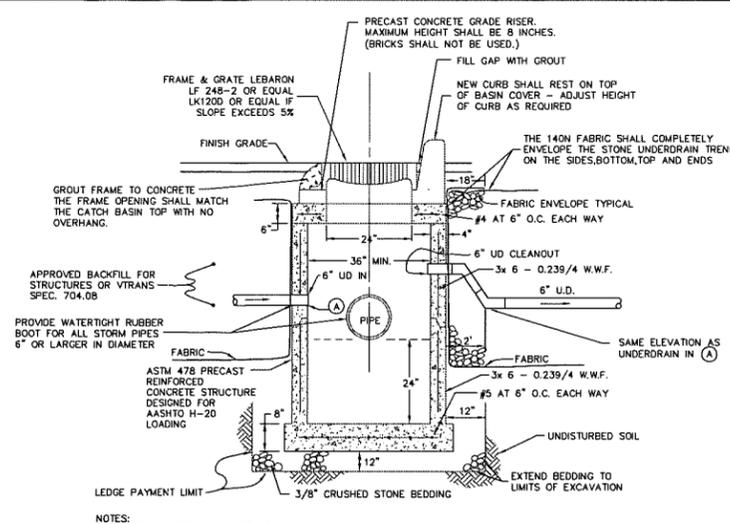
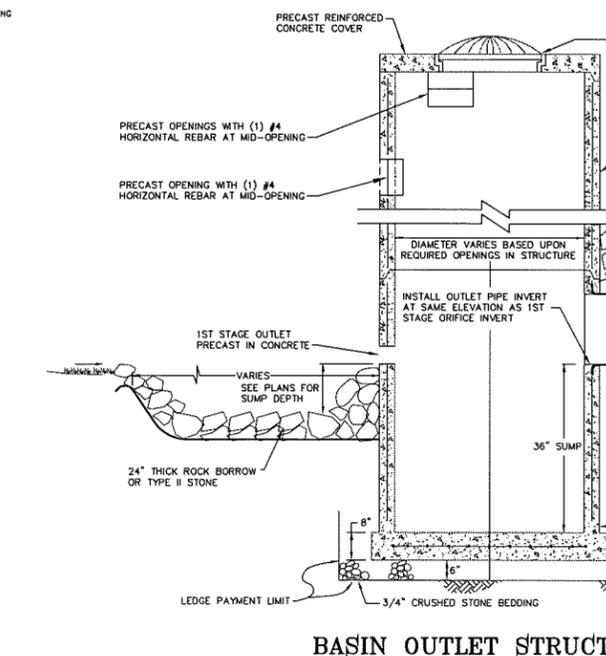
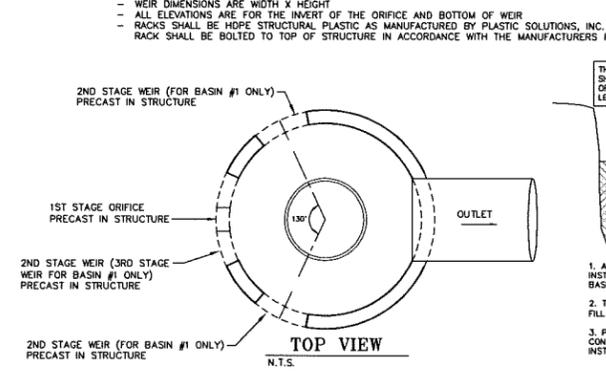
**SANITARY SEWER OR FOOTING DRAIN SERVICE CONNECTION**  
NTS



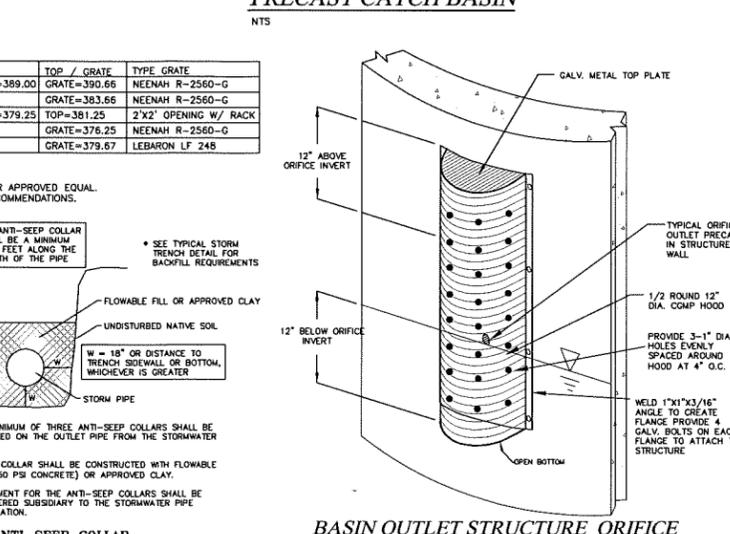
**YARD INLET**  
NTS

**BASIN OUTLET STRUCTURE ELEVATIONS**

OUTLET STRUCTURE	1ST STAGE ORIFICE	2ND STAGE ORIFICE	3RD STAGE WEIR(S)	OVERFLOW WEIR(S)	TOP / GRATE	TYPE GRATE
BASIN #1	4" ORIFICE=385.00	6.5" ORIFICE=386.85	(2) 12" X 30" WEIRS = 388.00	(2) 12" X 30" WEIRS=389.00	GRATE=390.66	NEENAH R-2560-G
BASIN #2	3" ORIFICE=380.00	3.5" ORIFICE=380.85	12" X 36" WEIR = 382.00	N / A	GRATE=383.66	NEENAH R-2560-G
BASIN #3	4.5" ORIFICE=374.00	4.5" ORIFICE=375.75	15" X 36" WEIR = 378.00	(2) 12" X 24" WEIRS=379.25	TOP=381.25	2' X 2' 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" X 24" W = 378.00	N / A	GRATE=379.67	LEBARON LF 248



**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 28, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE 6 DAY OF NOV 2012.

*Kan Bellin*  
DEVELOPMENT REVIEW BOARD - PRESIDING MEMBER SIGNATURE

**REVISIONS**

REV	DATE	DESCRIPTION	BY
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	

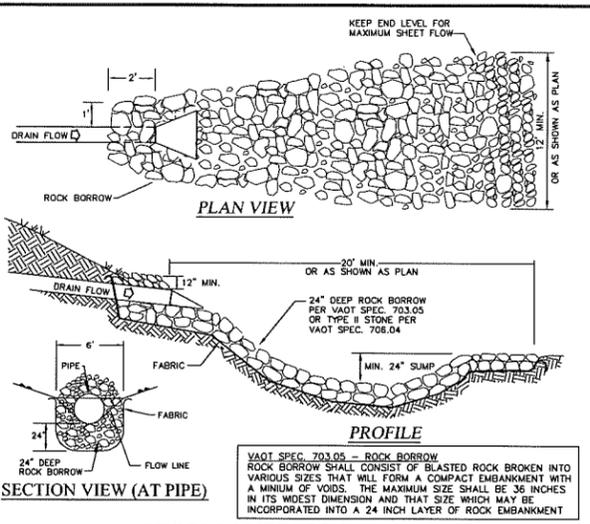
- THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:
- SKETCH/CONCEPT
  - PRELIMINARY
  - FINAL
  - RECORD DRAWING

**FINNEY CROSSING**  
A PLANNED UNIT DEVELOPMENT  
WILLISTON, VERMONT

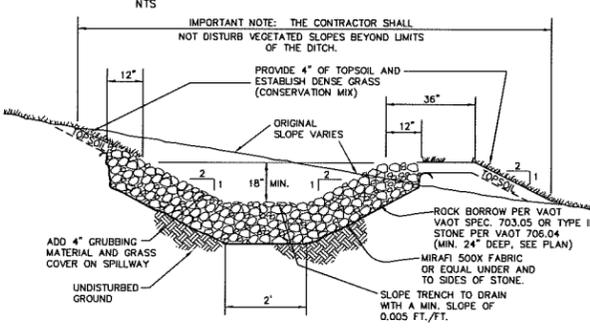
**DETAILS & SPECIFICATIONS**  
SEWER & STORM

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

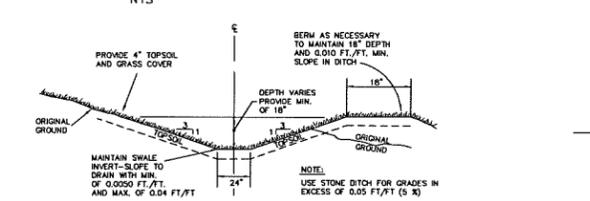
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design DJG/ABR  
drawn JET/BH  
checked DJG/ABR  
date 11/30/05  
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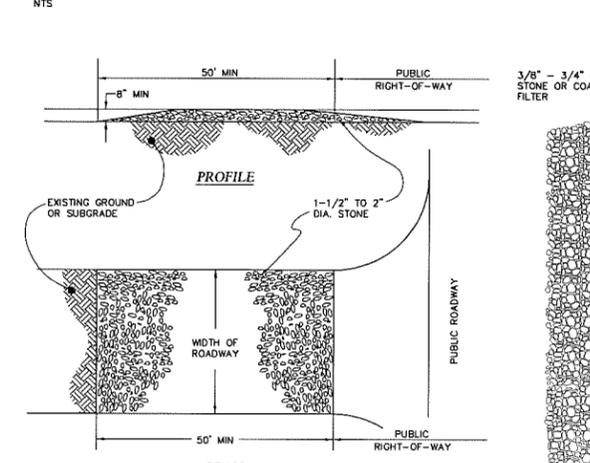
**STORM OUTFALL DETAIL**



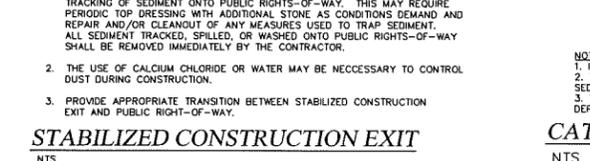
**TYPICAL STONE DITCH DETAIL**



**TYPICAL SPECIAL DRAINAGE SWALE**



**STABILIZED CONSTRUCTION EXIT**



**TURF ESTABLISHMENT SPECIFICATIONS**

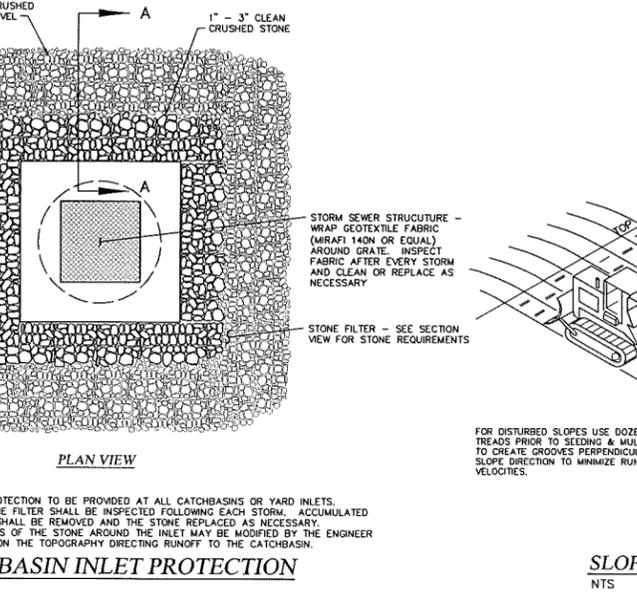
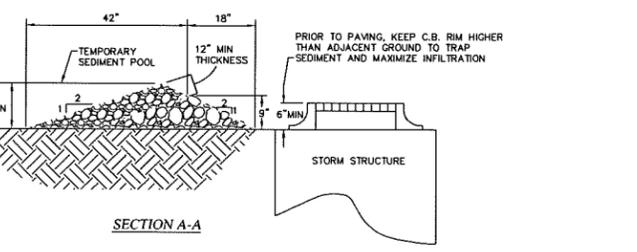
- ALL DISTURBED AREAS THAT DO NOT HAVE AN IMPERVIOUS SURFACE (PAVEMENT, SIDEWALKS, ROOFS) OR ARE NOT LANDSCAPED WITH BARK MULCH, SHALL BE STABILIZED NEW GRASS COVER. ALL SEEDING AND MULCHING FOR ESTABLISHING NEW GRASS COVER SHALL BE COMPLETE PRIOR TO SEPTEMBER 15. PLACEMENT OF TOPSOIL, AND THE APPLICATION 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 TACKLER TO HOLD THE MULCH IN PLACE. IF NECESSARY TO RETAIN THE MULCH, THE CONTRACTOR SHALL APPLY AN APPROVED TACKLER 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 5X OR AS SHOWN ON THE PLANS SHALL HAVE EROSION MATTING APPLIED OVER THE SEED. EROSION MATTING SHALL CONSIST OF 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			URBAN MIX GRASS SEED		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED	% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
35	35	CREeping RED FESCUE	31.5	45	CREeping RED FESCUE
23	23	KENTUCKY BLUEGRASS	37.25	37.5	KENTUCKY BLUEGRASS
15	15	ANNUAL RYE	31.25	37.5	WINTER HARDY, PERENNIAL RYE
11	11	WINTER HARDY, PERENNIAL RYE (VARIETY PENNINE, MANHATTAN OR SIMILAR VARIETY)	100	120 #	LIVE SEED PER ACRE
6	6	WHITE CLOVER			
10	10	HIGHLAND BENTGRASS			
100	100 #	LIVE SEED / ACRE			

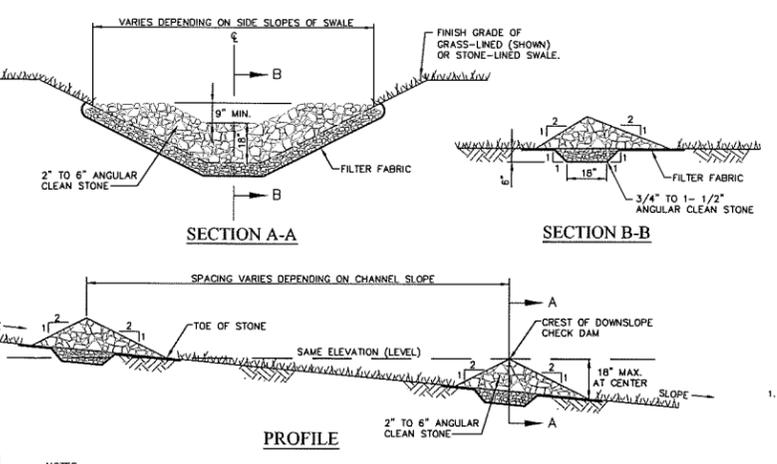
CONSERVATION SEED MIX SHALL BE USED IN ALL OPEN SPACE AREAS

**STUMP DISPOSAL SPECIFICATIONS**

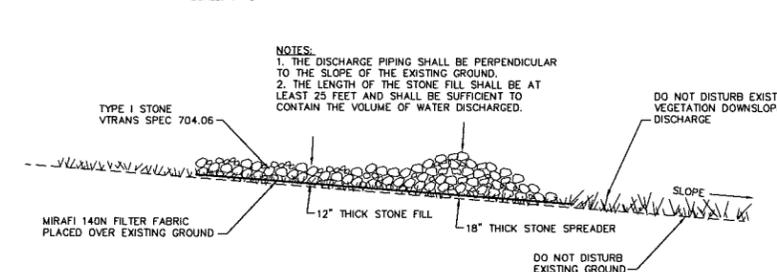
- THE TREES THAT MUST BE CUT WILL BE USED AS FIREWOOD. THE STUMPS, BRUSH, AND EXCESS UNSUITABLE EARTH WILL BE DISPOSED OF AT THE LOCATION DESIGNATED BY THE ENGINEER AS A STUMP DISPOSAL AREA WELL ABOVE THE SEASONAL HIGH WATER OR HALLED OFF-SITE TO A STATE-APPROVED LANDFILL. IF ON-SITE STUMP DISPOSAL IS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



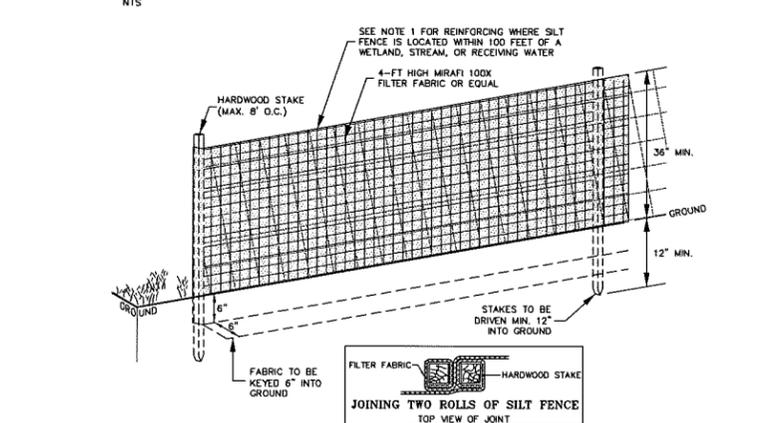
**CATCH BASIN INLET PROTECTION**



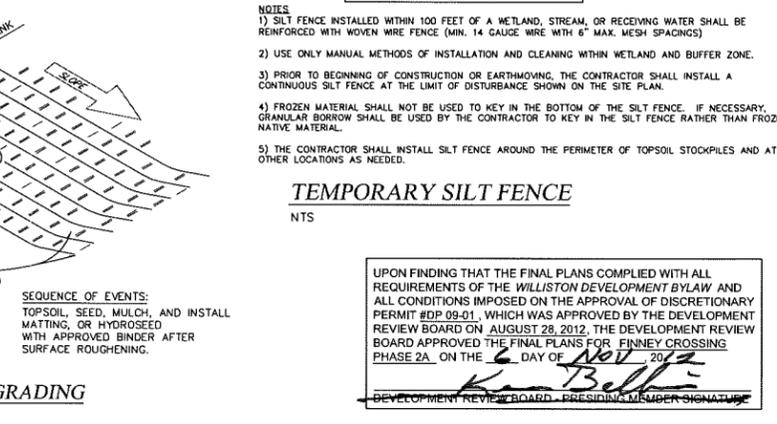
**STONE CHECK DAM DETAIL**



**TEMPORARY STONE DISCHARGE SPREADER**

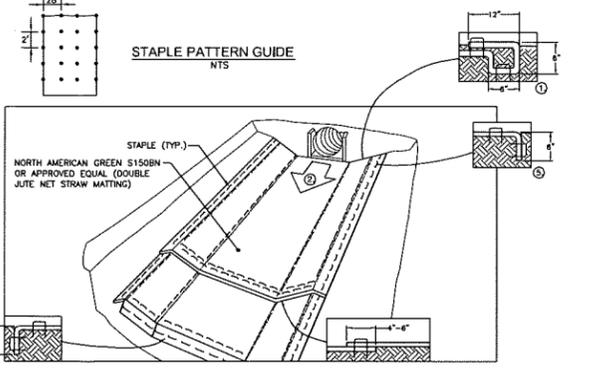


**TEMPORARY SILT FENCE**



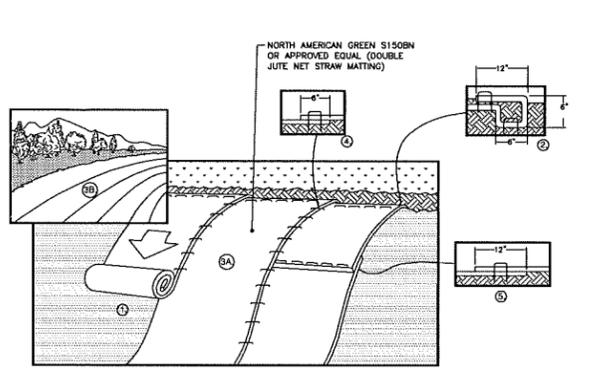
**SLOPE GRADING**

- FOR DISTURBED SLOPES USE DOZER TRENDS PRIOR TO SEEDING & MULCHING TO CREATE GROOVES PERPENDICULAR TO SLOPE DIRECTION TO MINIMIZE RUNOFF VELOCITIES.
- SEQUENCE OF EVENTS:**  
TOPSOIL, SEED, MULCH, AND INSTALL MATTING, OR HYDROSEED WITH APPROVED BINDER AFTER SURFACE ROUGHENING.



- 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 CHANNELS**



- 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 SPUNCE 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**

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:

SKETCH/CONCEPT  
PRELIMINARY  
FINAL  
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  
sheet no. 18

**FINNEY CROSSING**  
A PLANNED UNIT DEVELOPMENT  
WILLISTON, VERMONT

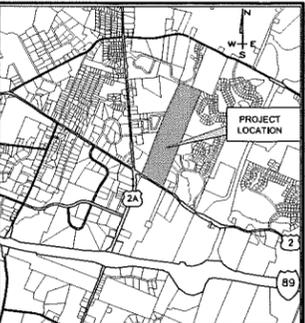
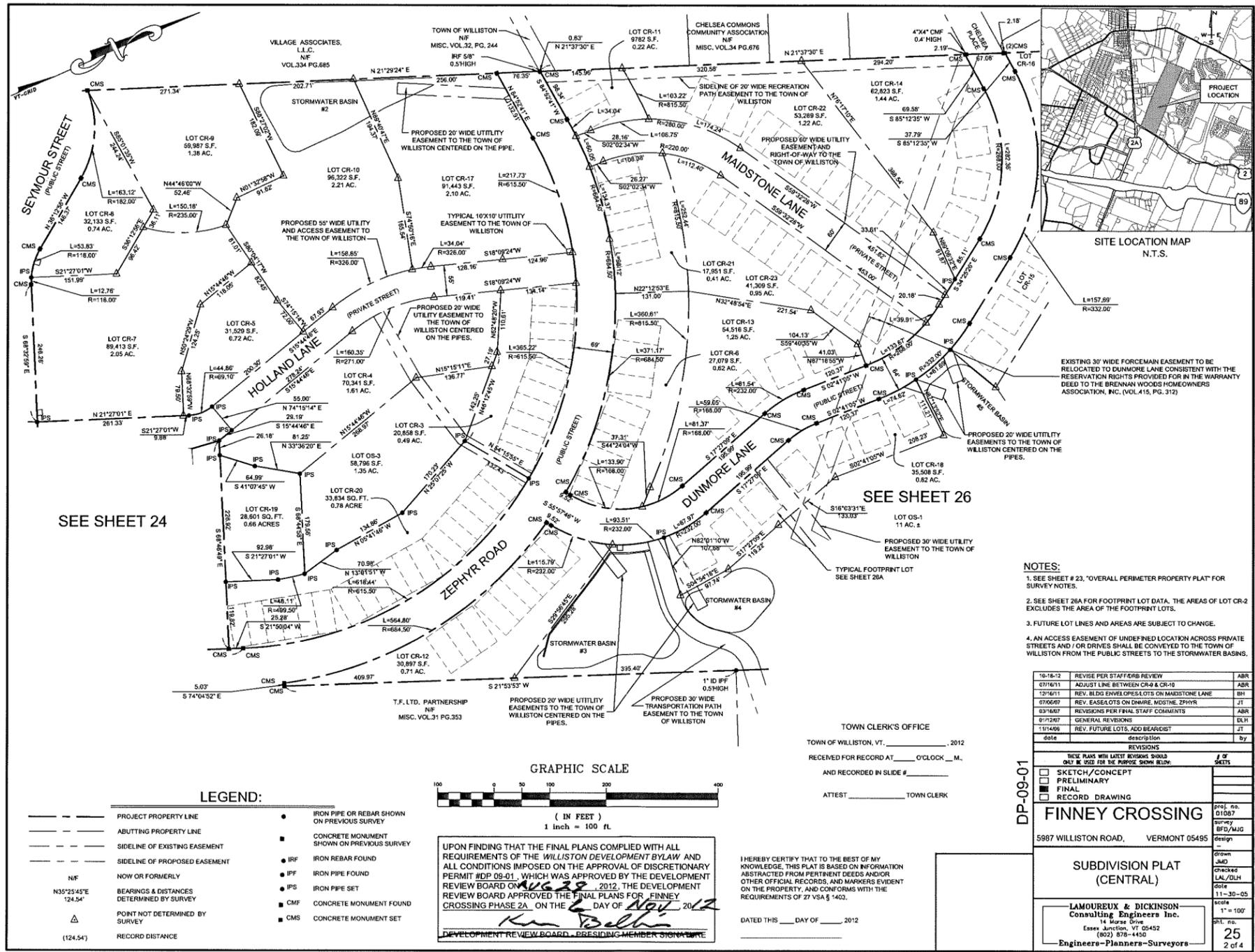
**DETAILS & SPECIFICATIONS**  
EROSION PREVENTION & SEDIMENT CONTROL

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

WILLISTON DISCRETIONARY PERMIT DP-09-01  
TAX PARCEL # 08104010, 081432002, 004, & 010

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 28, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE 6th DAY OF NOV 2012.

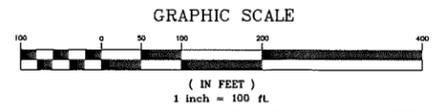
DEVELOPMENT REVIEW BOARD PRESIDENT MEMBER SIGNATURE



SEE SHEET 24

SEE SHEET 26

- LEGEND:**
- PROJECT PROPERTY LINE
  - ABUTTING PROPERTY LINE
  - - - SIDELINE OF EXISTING EASEMENT
  - - - SIDELINE OF PROPOSED EASEMENT
  - N/F NOW OR FORMERLY
  - N30°23'45"E 124.54' BEARINGS & DISTANCES DETERMINED BY SURVEY
  - △ POINT NOT DETERMINED BY SURVEY
  - (124.54) RECORD DISTANCE
  - IRON PIPE OR REBAR SHOWN ON PREVIOUS SURVEY
  - CONCRETE MONUMENT SHOWN ON PREVIOUS SURVEY
  - IRF IRON REBAR FOUND
  - IPF IRON PIPE FOUND
  - IPS IRON PIPE SET
  - CMF CONCRETE MONUMENT FOUND
  - CMS CONCRETE MONUMENT SET



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 AUG 29, 2012, THE DEVELOPMENT REVIEW BOARD APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE DAY OF NOV 20, 2012.

*Kim Bellin*  
 DEVELOPMENT REVIEW BOARD, PRESIDING MEMBER STORMWATER

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 V.S.A. § 1402.

DATED THIS \_\_\_ DAY OF \_\_\_, 2012

TOWN CLERK'S OFFICE  
 TOWN OF WILLISTON, VT., \_\_\_\_\_, 2012  
 RECEIVED FOR RECORD AT \_\_\_ O'CLOCK \_\_\_ M.  
 AND RECORDED IN SLIDE # \_\_\_\_\_  
 ATTEST \_\_\_\_\_ TOWN CLERK

- NOTES:**
- SEE SHEET # 23, "OVERALL PERIMETER PROPERTY PLAT" FOR SURVEY NOTES.
  - SEE SHEET 26A FOR FOOTPRINT LOT DATA. THE AREAS OF LOT CR-2 EXCLUDES 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.

10-18-12	REVISE PER STAFF/ARB 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 DUNMORE, MIDSTONE, ZEPHYR	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
date	description	by

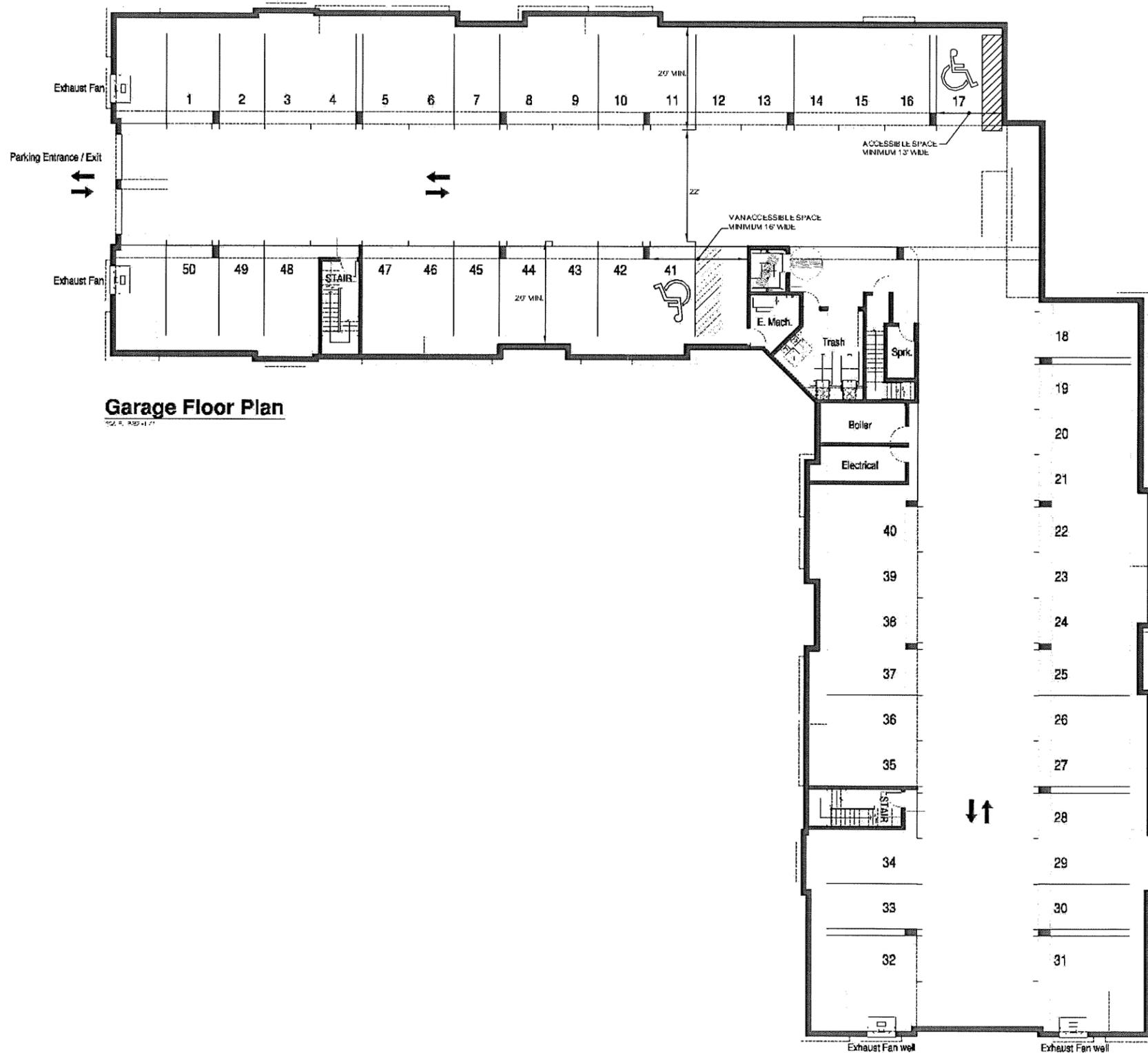
REVISIONS	#	OF
description	SKETCH/CONCEPT	SHEETS
SEEK RAKE WITH LATEST KNOWLEDGE SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:	<input type="checkbox"/>	
SKETCH/CONCEPT	<input type="checkbox"/>	
PRELIMINARY	<input type="checkbox"/>	
FINAL	<input type="checkbox"/>	
RECORD DRAWING	<input checked="" type="checkbox"/>	

**FINNEY CROSSING** proj. no. 01087  
 5987 WILLISTON ROAD, VERMONT 05495 survey BFD/MJG design

**SUBDIVISION PLAT (CENTRAL)**  
 drawn JMD  
 checked L.A./J.M.H.  
 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) 878-1450  
 Engineers-Planners-Surveyors

DP-09-01



**Garage Floor Plan**

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 28, 2012, THE ADMINISTRATOR APPROVED THE FINAL PLANS FOR FINNEY CROSSING PHASE 2A ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_.

ADMINISTRATOR'S SIGNATURE \_\_\_\_\_



bbdesign.com

The drawings presented are indicative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable codes, structural, and Me-11 design requirements, unit plan / floor plan changes, etc.)

**Midrise Building Plans**

**Finney Crossing**  
Williston, VT



08-12-2011  
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North Elevation



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.)

*SDP 09-01 PHASE 2A  
 Ken Belbin, ZA  
 11/6/2012*

**Finney Crossing**  
 Williston, Vermont

August 19, 2011  
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South Elevation



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.)

DP 09-21 PHASE 2A  
 Ken Zillich, ZA  
 11/6/2012

**Finney Crossing**  
 Williston, Vermont

August 18, 2011  
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