

# COLONIAL PHARMACY

NEW LONDON, NEW HAMPSHIRE  
LATEST ISSUE OCTOBER 4, 2016

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**horizons**  
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(603) 446-3426

LANDSCAPE ARCHITECT:

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SHEET LIST

C101 EXISTING CONDITIONS PLAN

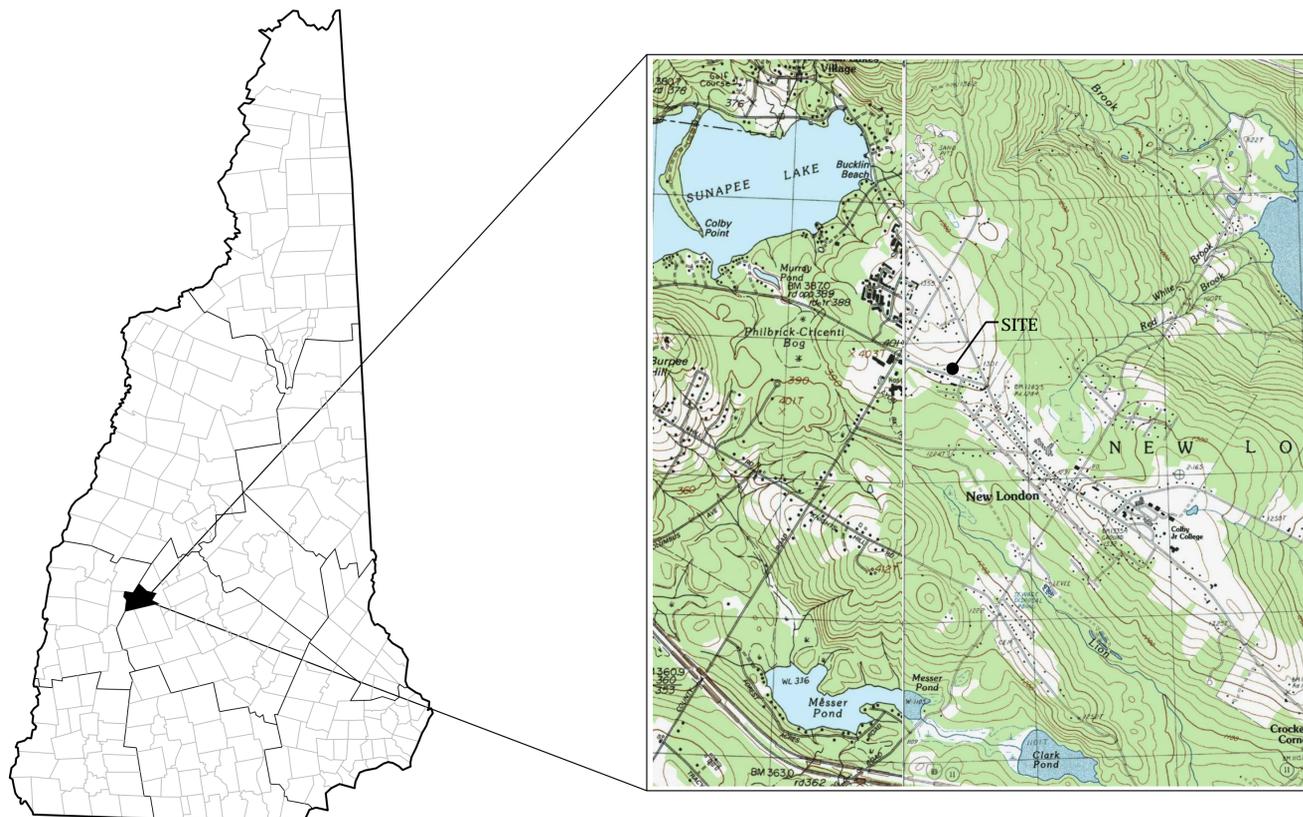
C201 GRADING, DRAINAGE, & UTILITY PLAN  
C202 LAYOUT PLAN  
C203 SEDIMENT & EROSION CONTROL PLAN  
C204 SEWER PLAN & PROFILE

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C302 SEDIMENT & EROSION CONTROL NOTES AND DETAILS  
C303 SANITARY SEWER & WATER SYSTEM NOTES AND DETAILS  
C304 SANITARY SEWER & WATER SYSTEM NOTES AND DETAILS  
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A-1.1 LOWER LEVEL PLAN  
A-1.2 FIRST FLOOR PLAN  
A-1.3 ROOF PLAN  
A-2.1 EXTERIOR ELEVATIONS

LA-1 LANDSCAPING PLAN & DETAILS

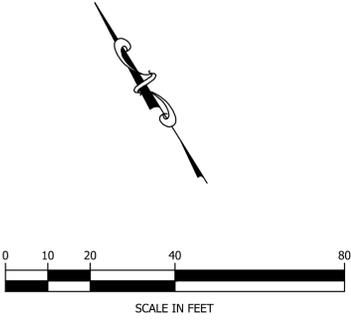
L-1 SITE LIGHTING PLAN



NEW HAMPSHIRE

LOCATION PLAN

SCALE: 1" = 2000'



**LEGEND**

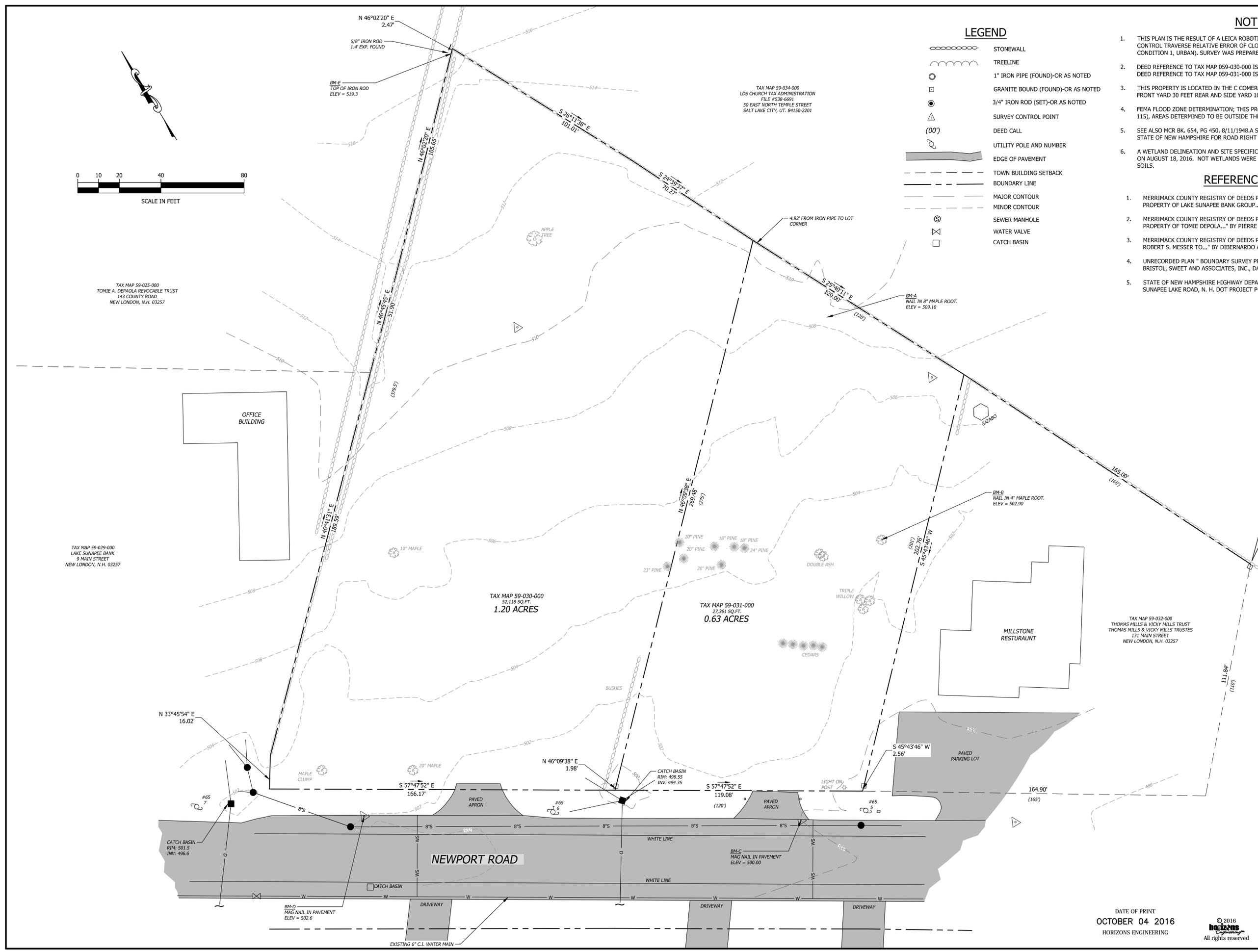
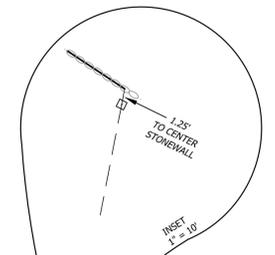
- STONEWALL
- TREELINE
- 1" IRON PIPE (FOUND)-OR AS NOTED
- GRANITE BOUND (FOUND)-OR AS NOTED
- 3/4" IRON ROD (SET)-OR AS NOTED
- SURVEY CONTROL POINT
- DEED CALL
- UTILITY POLE AND NUMBER
- EDGE OF PAVEMENT
- TOWN BUILDING SETBACK
- BOUNDARY LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- SEWER MANHOLE
- WATER VALVE
- CATCH BASIN

**NOTES**

1. THIS PLAN IS THE RESULT OF A LEICA ROBOTIC TOTAL STATION SURVEY, JULY, 2013, HAVING A CONTROL TRAVERSE RELATIVE ERROR OF CLOSURE GREATER THAN 1:15,000 (NH CATEGORY 1, CONDITION 1, URBAN). SURVEY WAS PREPARED BY PIERRE J. BEDARD, P.E.
2. DEED REFERENCE TO TAX MAP 059-030-000 IS MCR BK. 3383, PG. 114, 4/30/2013. DEED REFERENCE TO TAX MAP 059-031-000 IS MCR BK. 3003, PG. 663, 7/13/2007.
3. THIS PROPERTY IS LOCATED IN THE C COMMERCIAL ZONING DISTRICT. STRUCTURE SETBACKS ARE FRONT YARD 30 FEET REAR AND SIDE YARD 10 FEET.
4. FEMA FLOOD ZONE DETERMINATION; THIS PROPERTY IS LOCATED IN ZONE X (MAP 330230, PANEL 115), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
5. SEE ALSO MCR BK. 654, PG 450, 8/11/1948. A SMALL PARCEL OF THIS PROPERTY GRANTED TO THE STATE OF NEW HAMPSHIRE FOR ROAD RIGHT OF WAY.
6. A WETLAND DELINEATION AND SITE SPECIFIC SOILS MAP WERE COMPLETED BY BEAVERTRACKS, LLC ON AUGUST 18, 2016. NOT WETLANDS WERE FOUND ON SITE. THE ENTIRE SITE IS 76, MARLOW SOILS.

**REFERENCE PLANS**

1. MERRIMACK COUNTY REGISTRY OF DEEDS PLAN # 13614, TITLED "PLAN OF SUBDIVISION PROPERTY OF LAKE SUNAPEE BANK GROUP..." BY BEDARD PLATT AND ASSOC. RECORDED MAY 9, 1996.
2. MERRIMACK COUNTY REGISTRY OF DEEDS PLAN # 13901, TITLED "PLAN OF ANNEXATION PROPERTY OF TOMIE DEPOLA..." BY PIERRE J. BEDARD AND ASSOC. RECORDED MARCH 28, 1997.
3. MERRIMACK COUNTY REGISTRY OF DEEDS PLAN # 12055, TITLED "PROPERTY TO BE CONVEYED FROM ROBERT S. MESSER TO..." BY DIBERNARDO ASSOCIATES. RECORDED APRIL 26, 1991.
4. UNRECORDED PLAN "BOUNDARY SURVEY PROPERTY OF LAKE SUNAPEE SAVINGS BANK..." BY BRISTOL, SWEET AND ASSOCIATES, INC., DATED 4/29/1980.
5. STATE OF NEW HAMPSHIRE HIGHWAY DEPARTMENT FEDERAL AID PROJECT #F241 (3) SUNAPEE LAKE ROAD, N. H. DOT PROJECT P-2066.



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NEW LONDON, NEW HAMPSHIRE

**EXISTING CONDITIONS PLAN**

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: SEPT 2016	PROJECT #: 16826
ENGIN'D BY: ---	DRAWN BY: CJH
CHECK'D BY: WTD	ARCHIVE #: H---

SHEET C101

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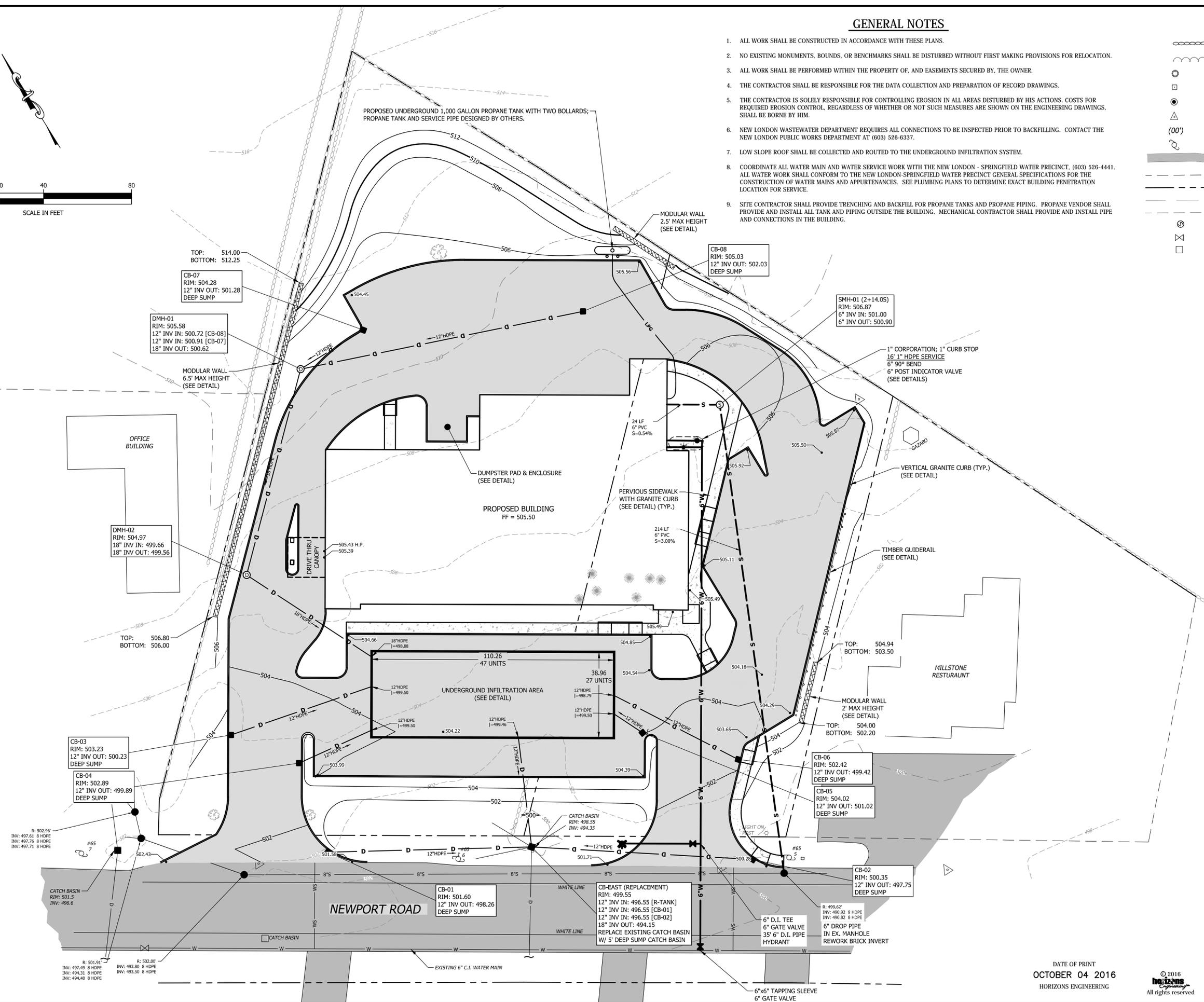
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**GENERAL NOTES**

1. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS.
2. NO EXISTING MONUMENTS, BOUNDS, OR BENCHMARKS SHALL BE DISTURBED WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
3. ALL WORK SHALL BE PERFORMED WITHIN THE PROPERTY OF, AND EASEMENTS SECURED BY, THE OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DATA COLLECTION AND PREPARATION OF RECORD DRAWINGS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONTROLLING EROSION IN ALL AREAS DISTURBED BY HIS ACTIONS. COSTS FOR REQUIRED EROSION CONTROL, REGARDLESS OF WHETHER OR NOT SUCH MEASURES ARE SHOWN ON THE ENGINEERING DRAWINGS, SHALL BE BORNE BY HIM.
6. NEW LONDON WASTEWATER DEPARTMENT REQUIRES ALL CONNECTIONS TO BE INSPECTED PRIOR TO BACKFILLING. CONTACT THE NEW LONDON PUBLIC WORKS DEPARTMENT AT (603) 526-6337.
7. LOW SLOPE ROOF SHALL BE COLLECTED AND ROUTED TO THE UNDERGROUND INFILTRATION SYSTEM.
8. COORDINATE ALL WATER MAIN AND WATER SERVICE WORK WITH THE NEW LONDON - SPRINGFIELD WATER PRECINCT, (603) 526-4441. ALL WATER WORK SHALL CONFORM TO THE NEW LONDON-SPRINGFIELD WATER PRECINCT GENERAL SPECIFICATIONS FOR THE CONSTRUCTION OF WATER MAINS AND APPURTENANCES. SEE PLUMBING PLANS TO DETERMINE EXACT BUILDING PENETRATION LOCATION FOR SERVICE.
9. SITE CONTRACTOR SHALL PROVIDE TRENCHING AND BACKFILL FOR PROPANE TANKS AND PROPANE PIPING. PROPANE VENDOR SHALL PROVIDE AND INSTALL ALL TANK AND PIPING OUTSIDE THE BUILDING. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL PIPE AND CONNECTIONS IN THE BUILDING.

**LEGEND**

- STONEWALL
- TREELINE
- 1" IRON PIPE (FOUND)-OR AS NOTED
- GRANITE BOUND (FOUND)-OR AS NOTED
- 3/4" IRON ROD (SET)-OR AS NOTED
- SURVEY CONTROL POINT
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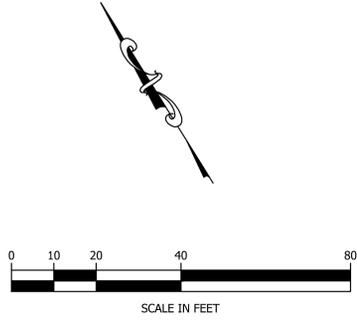
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 NEW LONDON, NEW HAMPSHIRE  
 GRADING, DRAINAGE, & UTILITY PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

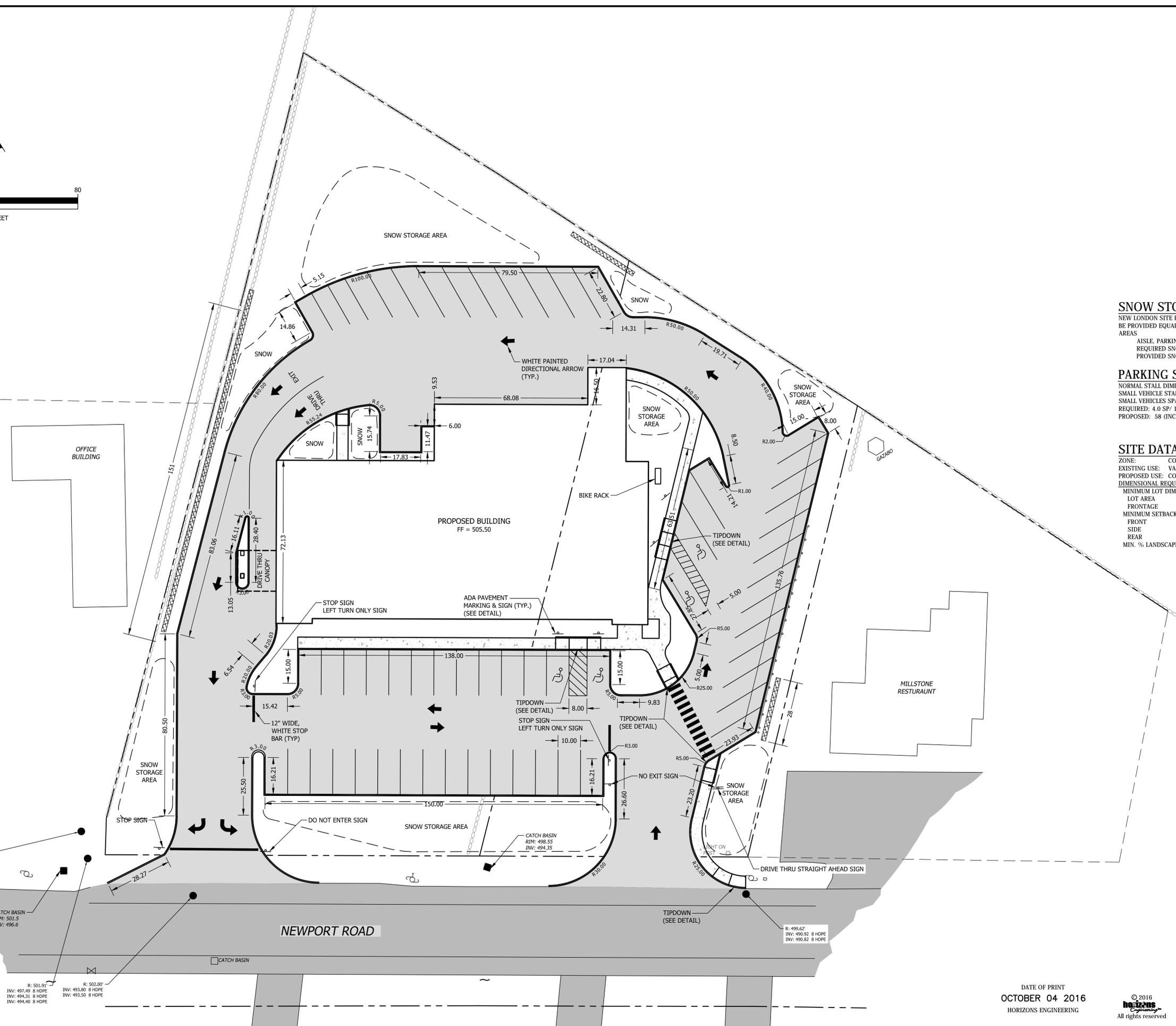
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SCALE IN FEET



**SNOW STORAGE NOTE**  
 NEW LONDON SITE PLAN REVIEW REGULATIONS REQUIRE STORAGE BE PROVIDED EQUAL TO 20% OF PARKING, AISLE, AND DRIVEWAY AREAS  
 AISLE, PARKING, DRIVEWAY : 36,958 SF  
 REQUIRED SNOW STORAGE : 7,392 SF  
 PROVIDED SNOW STORAGE : 10,084 SF

**PARKING SUMMARY**  
 NORMAL STALL DIMENSION: 10FT x 20FT  
 SMALL VEHICLE STALL DIMENSION: 8FT x 18FT  
 SMALL VEHICLE SPACES ALLOWED UP TO 30% OF TOTAL SPACES  
 REQUIRED: 4.0 SP/ 1,000 GSF x 14,025 GSF = 57 SP  
 PROPOSED: 58 (INCLUDING 13 SMALL VEHICLE AND 4 ADA)

**SITE DATA**

ZONE: COMMERCIAL  
 EXISTING USE: VACANT LOT  
 PROPOSED USE: COMMERCIAL BUILDING - PHARMACY

DIMENSIONAL REQUIREMENTS		
MINIMUM LOT DIMENSIONS	REQUIRED	PROVIDED
LOT AREA	-- SF	79,488 SF
FRONTAGE	-- FT	285 FT
MINIMUM SETBACK DIMENSIONS		
FRONT	30 FT	> 30 FT
SIDE	10 FT	> 10 FT
REAR	10 FT	> 15 FT
MIN. % LANDSCAPED OPEN AREA	35%	35.9%

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**LAYOUT PLAN**

NO.	DATE	REVISION DESCRIPTION	ENG.	DWG.

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SHEET C202	

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R: 502.96  
 INV: 497.61 8 HDPE  
 INV: 497.76 8 HDPE  
 INV: 497.71 8 HDPE

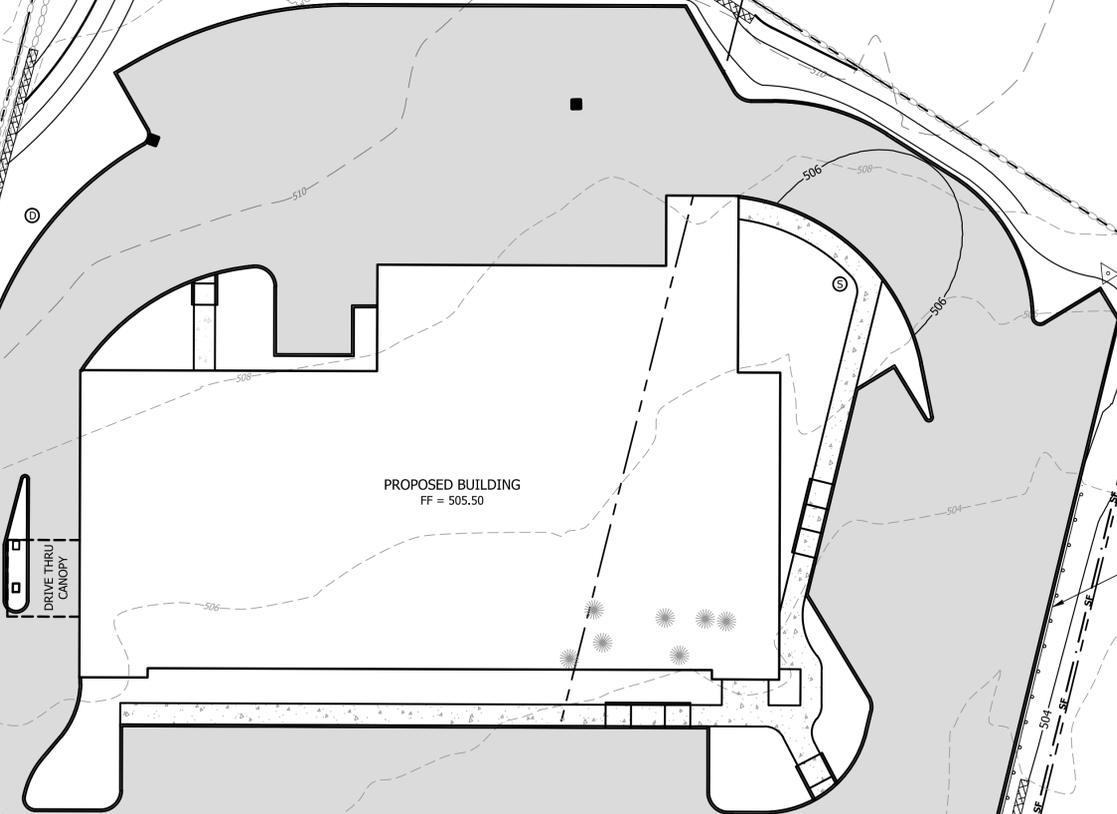
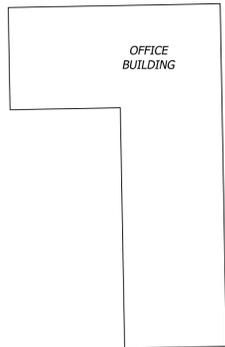
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 INV: 494.40 8 HDPE

R: 502.00  
 INV: 493.80 8 HDPE  
 INV: 493.50 8 HDPE

R: 499.62  
 INV: 490.92 8 HDPE  
 INV: 490.82 8 HDPE



SCALE IN FEET



INLET PROTECTION (SEE DETAIL)

R: 502.96  
INV: 497.61 8 HDPE  
INV: 497.76 8 HDPE  
INV: 497.71 8 HDPE

CATCH BASIN  
RIM: 501.5  
INV: 496.6

R: 501.91  
INV: 497.49 8 HDPE  
INV: 494.31 8 HDPE  
INV: 494.40 8 HDPE

R: 502.00  
INV: 493.80 8 HDPE  
INV: 493.50 8 HDPE

NEWPORT ROAD

WHITE LINE  
INLET PROTECTION (SEE DETAIL)

STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL)

R: 499.62  
INV: 490.92 8 HDPE  
INV: 490.82 8 HDPE

PROPOSED BUILDING  
FF = 505.50

DRIVE THRU CANOPY

SEDIMENT FENCE (SEE DETAIL)

TIMBER GUIDERAIL (SEE DETAIL)

MILLSTONE RESTAURANT

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SEDIMENT & EROSION CONTROL PLAN

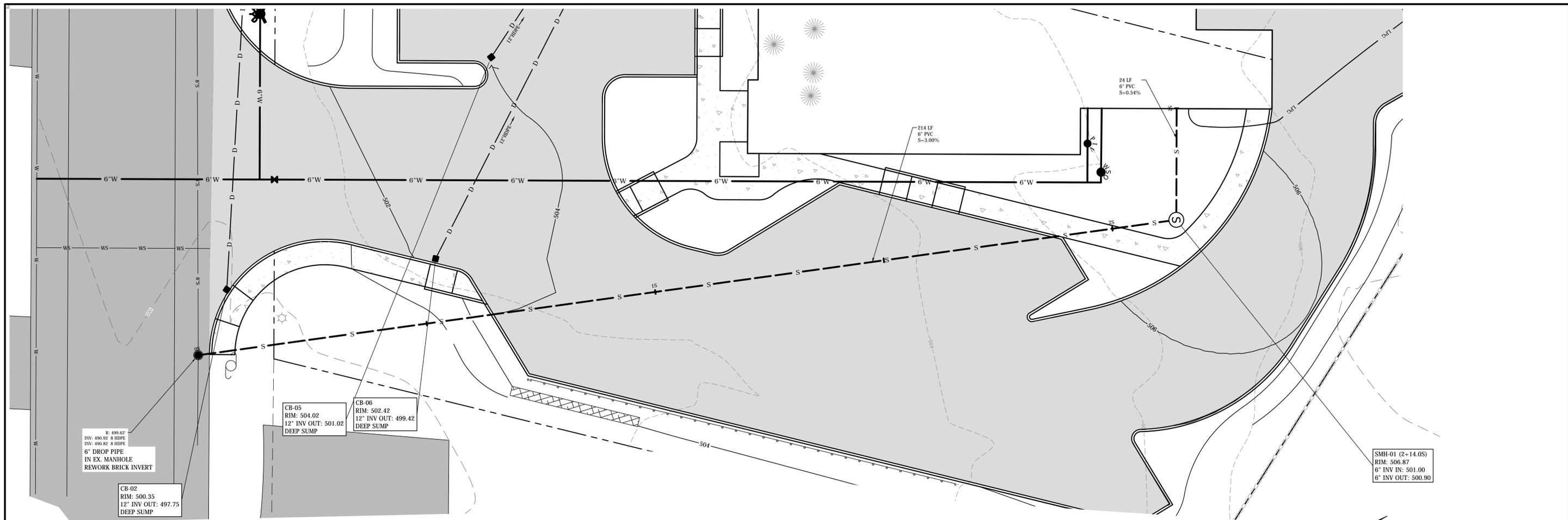
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DATE: SEPT 2016 PROJECT #: 16826  
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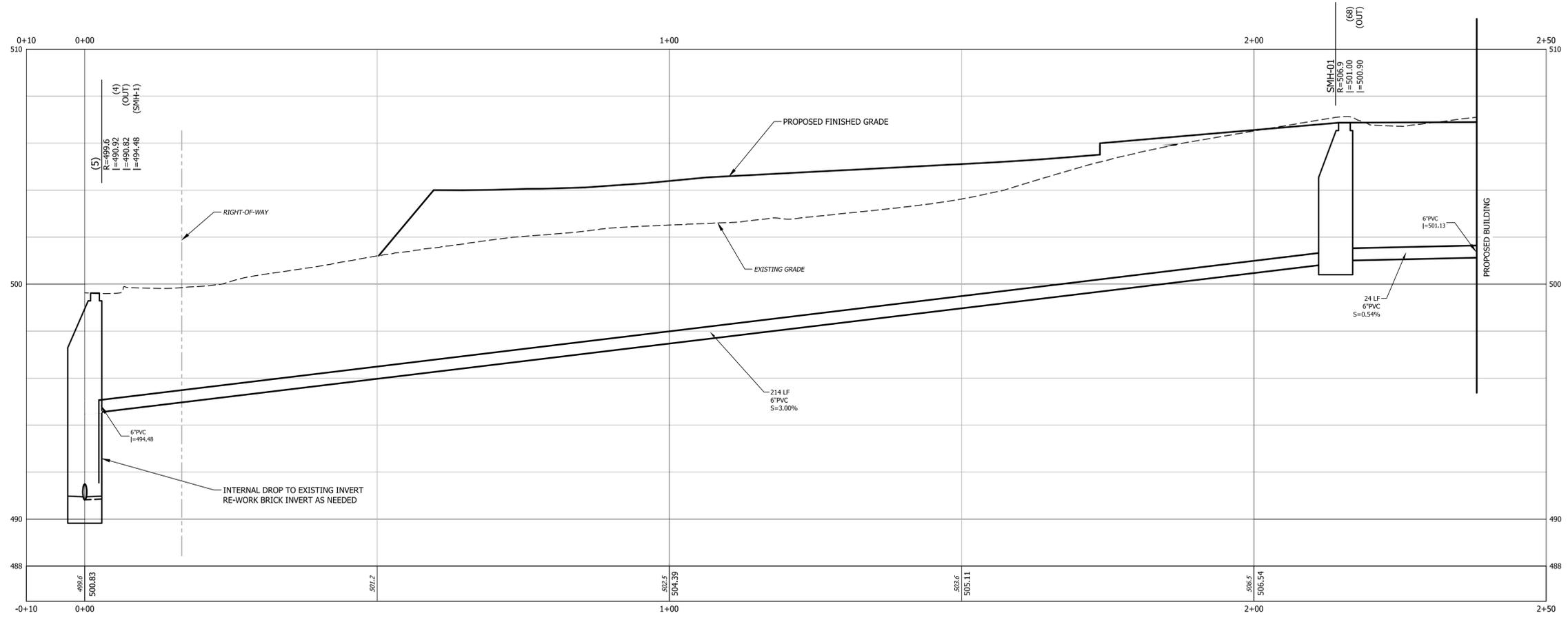
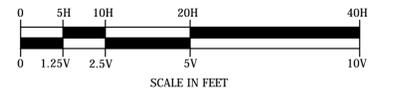
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INV: 490.92 8 HDPE  
INV: 490.82 8 HDPE  
6" DROP PIPE  
IN EX. MANHOLE  
REWORK BRICK INVERT

CB-02  
RIM: 500.35  
12" INV OUT: 497.75  
DEEP SUMP

CB-05  
RIM: 504.02  
12" INV OUT: 501.02  
DEEP SUMP

CB-06  
RIM: 502.42  
12" INV OUT: 499.42  
DEEP SUMP

SMH-01 (2+14.05)  
RIM: 506.87  
6" INV IN: 501.00  
6" INV OUT: 500.90



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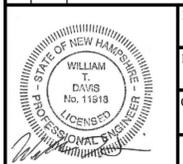
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**SEWER PLAN AND PROFILE**

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**SHEET C204**

## SEEDING RECOMMENDATIONS

- THESE NOTES ARE INTENDED TO BE A GUIDELINE FOR EROSION CONTROL PURPOSES. PLEASE SEE LANDSCAPING PLANS FOR PREFERRED SEED MIXES.
- GRADING AND SHAPING
  - SLOPES SHALL NOT BE STEEPER THAN 2:1. 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- SEEDBED PREPARATION
  - SURFACE AND SEEDBED WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
  - STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME THOROUGHLY INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- ESTABLISHING VEGETATION
  - LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
    - AGRICULTURAL LIMESTONE: 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT.
    - NITROGEN (N): 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ. FT.
    - PHOSPHATE (P O<sub>2</sub>): 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.
    - POTASH (K O): 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.
 (NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10).
  - SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

USE	SEEDING MIXTURE (SEE 3D)	SOIL TYPE			
		DROUGHTY	WELL DRAINED	MOD. WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	GOOD	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNSEED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR

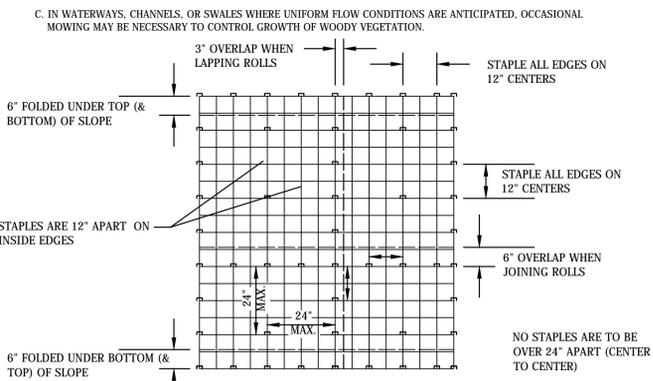
MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A TALL RESCUE	20	0.45
CREeping RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL:	42	0.95
B TALL FESCUE	15	0.35
CREeping RED FESCUE	10	0.25
CROWN VETCH OR FLATPEA	15 OR 30	0.35 OR 0.75
TOTAL:	40 OR 55	0.95 OR 1.35
C TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL:	50	1.20

- WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO SEPTEMBER 15. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.

### TEMPORARY SEEDING RATES:

SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.	REMARKS
WINTER RYE	112	2.5	BEST FOR FALL SEEDING. SEED FROM AUGUST TO SEPTEMBER 5TH FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	80	2.0	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15TH FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40	1.0	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30	0.7	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1ST AND JUNE 1ST AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

- MULCH
  - HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
  - MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING.
- MAINTENANCE TO ESTABLISH A STAND
  - PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
  - FERTILIZATION NEEDS SHOULD BE DETERMINED BY ON SITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.



## MULCH NETTING DETAIL

NO SCALE SOURCE: USDA SOIL CONSERVATION SERVICE

## EROSION CONTROL GENERAL NOTES

- KEEP SITE MODIFICATION TO A MINIMUM
  - EXPOSE AREAS OF BARE SOIL TO EROSION ELEMENTS FOR THE SHORTEST TIME POSSIBLE.
  - SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.
  - LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND MAINTAINED.
  - AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.
- MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES
  - STOCKPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOCKPILES MUST BE PROTECTED FROM EROSION.
  - PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.
  - USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.
  - USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.
  - USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.
  - PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.
- PROTECT AREA AFTER CONSTRUCTION
  - ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEEDED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.
  - MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE 'BEST MANAGEMENT PRACTICES' DURING THE CONSTRUCTION PERIOD.
  - MAINTAIN NEEDED STRUCTURAL 'BEST MANAGEMENT PRACTICES' AND REMOVE SEDIMENT FROM DETENTION PONDS AND SEDIMENT BASINS AS NEEDED.
  - DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT 'BEST MANAGEMENT PRACTICES'.
  - IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, GRADED AREAS ARE TO BE STABILIZED WITH NORTH AMERICAN GREEN DS150 MATTING OR EQUAL.

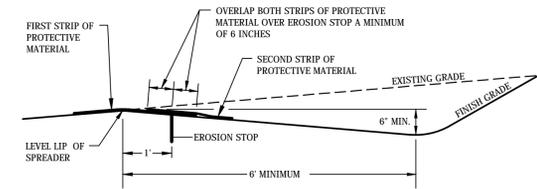
## COLD WEATHER SITE STABILIZATION REQUIREMENTS

TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING ADDITIONAL STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1:

- THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO ONE ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
- ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
- ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
- INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX, MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH.
- INSTALLATION OF EROSION CONTROL BLANKETS SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
- ALL PROPOSED STABILIZATION IN ACCORDANCE WITH NOTES 2 OR 3 ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
- AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2006, ITEM NO. 304.1 OR 304.2.

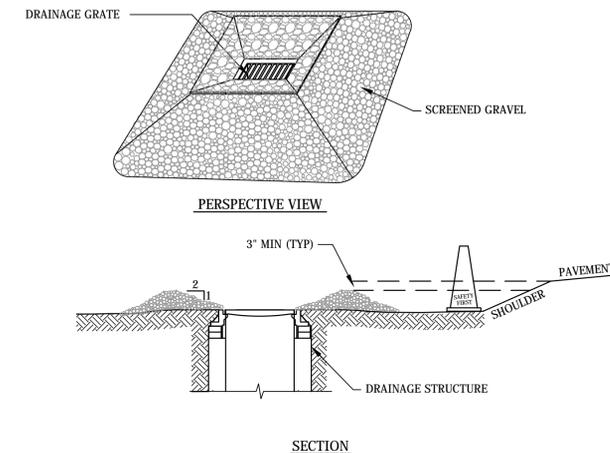
## LEVEL LIP SPREADER INSTALLATION

- CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
- LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
- AN EROSION STOP SHALL BE PLACED VERTICALLY A MINIMUM OF SIX INCHES DEEP IN A SLIT TRENCH ONE FOOT BACK OF THE LEVEL LIP AND PARALLEL TO THE LIP. THE EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP.
- THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OR EXCELSIOR MATTING ALONG THE LIP. EACH STRIP SHALL OVERLAP THE EROSION STOP BY AT LEAST SIX INCHES.
- THE ENTRANCE CHANNEL TO THE LEVEL SPREADER SHALL NOT EXCEED A 1 PERCENT GRADE FOR AT LEAST 50 FEET BEFORE ENTERING INTO THE SPREADER.
- THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE-CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.
- PROTECTIVE MATERIAL AND EROSION STOP SHALL BE NORTH AMERICAN GREEN C125 EROSION CONTROL BLANKET OR APPROVED EQUAL.



## LEVEL SPREADER DETAIL

NO SCALE  
SOURCE: ROCKINGHAM COUNTY CONSERVATION SERVICE



**MATERIALS SPECIFICATIONS:**  
1. SCREENED GRAVEL: UNIFORMLY GRADED 1" TO 4" DIA. STONE.

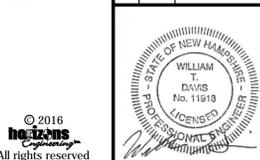
**CONSTRUCTION SPECIFICATIONS:**  
1. INSTALL GRAVEL INLET PROTECTION WHERE INDICATED OR WARRANTED.  
2. FOR ALL INSTALLATIONS WHERE INLET PROTECTION IS WITHIN 8' OF EDGE OF PAVEMENT, A ROADWAY CONE SHALL BE USED BETWEEN CATCH BASIN AND SHOULDER.  
3. ENSURE CREST OF GRAVEL PLACED AROUND CATCH BASIN IS AT LEAST 3" BELOW ELEVATION OF EDGE OF PAVEMENT.

## CATCH BASIN INLET PROTECTION DETAIL

NO SCALE

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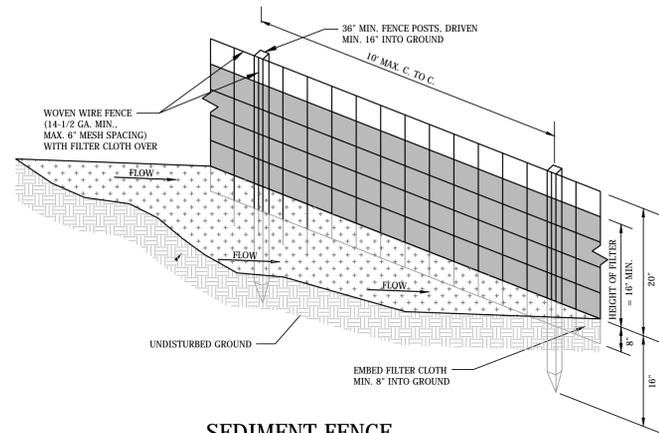
DATE: SEPT 2016  
PROJECT #: 16826  
ENGIN'D BY: WILLIAM T. DAVIS  
DRAWN BY: WTD  
CHECK'D BY: ARCHIVE #:  
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SHEET C301

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## FRANK ANZALONE ASSOCIATES COLONIAL PHARMACY

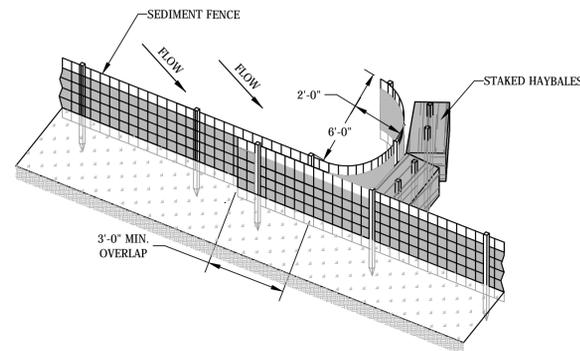
### SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

NO.	DATE	REVISION DESCRIPTION	ENG	DWG



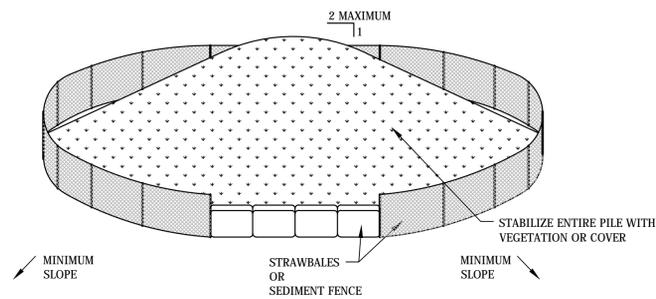
**SEDIMENT FENCE**

NO SCALE



**SEDIMENT FENCE POCKET**

NO SCALE



SOIL STOCKPILING IS TO BE USED WHERE TOPSOIL IS NECESSARY FOR REGRADING AND VEGETATING DISTURBED AREAS.

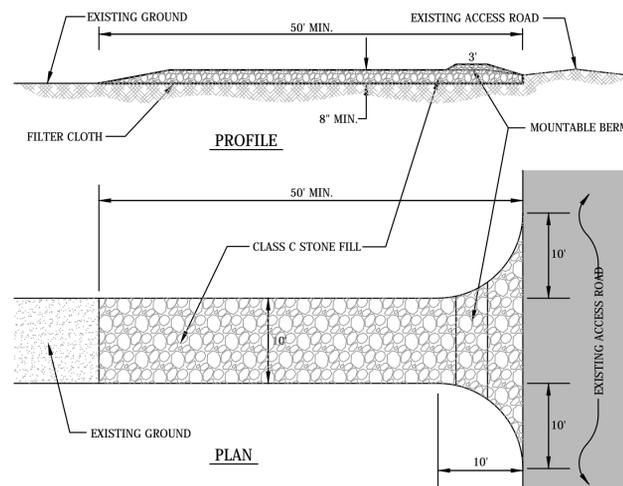
TEMPORARY STOCKPILE STABILIZATION MEASURES INCLUDE VEGETATIVE COVERS, MULCH, NON-VEGETATIVE COVERS, AND PERIPHERAL SEDIMENT TRAPPING BARRIERS. THE STABILIZATION MEASURE(S) SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND REQUIRED PERIOD OF USE.

**INSTALLATION NOTES:**

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES AND THEN STABILIZED WITH VEGETATION OR COVERED.

**SOIL STOCKPILING DETAIL**

NOT TO SCALE



**STABILIZED CONSTRUCTION ENTRANCE**

NOT TO SCALE

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NEW LONDON, NEW HAMPSHIRE

**SEDIMENT AND EROSION CONTROL NOTES AND DETAILS**

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	SEPT 2016	16826
	ENGIN'D BY:	DRAWN BY:
	WTD	CJH
CHECK'D BY:	ARCHIVE #:	
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## SEWER NOTES

1. **GENERAL**  
CONSTRUCTION OF ALL COMPONENTS OF THE SANITARY SEWER SYSTEM SHALL CONFORM TO THE MOST CURRENT VERSION OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES ENV-WQ 700.

2. **TYPES OF SEWERS**  
A. THERE SHALL BE NO CONNECTION BETWEEN SANITARY SEWERS AND STORM SEWERS.  
B. RUNOFF FROM ROOFS, STREETS, AND OTHER AREAS AND GROUNDWATER FROM FOUNDATION DRAINS, SUMP PUMPS, OR OTHER SUBSURFACE DRAINS SHALL BE EXCLUDED FROM SANITARY SEWERS.

3. **SEWER SIZE AND COVER**  
A. MINIMUM PIPE SIZE FOR GRAVITY SEWER MAINS SHALL BE 8 INCHES.  
B. MINIMUM PIPE SIZE FOR GRAVITY SEWER SERVICES SHALL BE 4 INCHES.  
C. MINIMUM PIPE SIZE FOR FORCE MAIN SEWER SERVICES SHALL BE 2 INCHES.  
D. SANITARY SEWERS SHALL HAVE 6 FEET MINIMUM COVER IN ALL ROADWAY LOCATIONS AND 4 FEET MINIMUM COVER IN ALL CROSS-COUNTRY LOCATIONS.

4. **PIPE AND FITTING MATERIALS:**  
A. DUCTILE IRON PIPE

DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION:  
(1) AWWA C151 FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND LINED MOLDS, FOR WATER OR OTHER LIQUIDS;  
(2) AWWA C150 FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A 536 IRON CASTINGS; AND  
(3) JOINTS SHALL BE MECHANICAL TYPE, PUSH-ON TYPE, OR BALL-AND-SOCKET TYPE;

B. PVC (POLY VINYL CHLORIDE) PIPE  
PVC PIPE AND FITTINGS SHALL BE APPROVED FOR SEWAGE SERVICE AND CONFORM TO THE FOLLOWING:  
(1) PVC PIPE USED FOR GRAVITY SEWERS SHALL BE TYPE SDR 35 CONFORMING TO ASTM D3034;  
(2) PVC PIPE USED FOR FORCE MAINS SHALL BE TYPE SDR 26 CONFORMING TO ASTM D2241 OR ASTM D1785;  
(3) JOINTS SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE HAVING OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212.

5. **BEDDING**  
PIPE BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67. BEDDING SHALL EXTEND FROM THE SPRING LINE OF THE PIPE TO A MINIMUM DEPTH OF 6" BELOW THE BOTTOM OF THE PIPE OUTSIDE SURFACE.

100% PASSING	1 INCH SCREEN
90-100% PASSING	¾ INCH SCREEN
20-55% PASSING	½ INCH SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

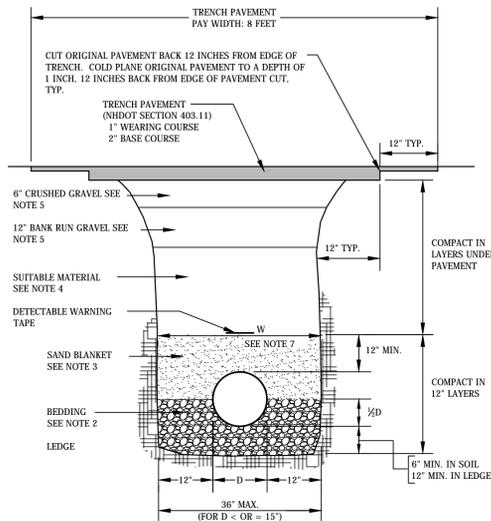
6. **MANHOLES**  
A. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C478.  
B. MANHOLES SHALL BE DESIGNED FOR H-20 LOADING.  
C. HORIZONTAL JOINTS BETWEEN BARREL SECTIONS SHALL BE OF AN OVERLAPPING TYPE WHICH SHALL DEPEND UPON A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT FOR WATER TIGHTNESS.  
D. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:  
(1) ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;  
(2) CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;  
(3) ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND  
(4) NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.  
E. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.

7. **PROTECTION OF WATER SUPPLIES**  
A. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE WATER SUPPLY SYSTEM AND A SEWER OR SEWER APPURTENANCE WHICH WOULD PERMIT THE PASSAGE OF SEWAGE OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.  
B. NO SEWER SHALL BE LOCATED WITHIN THE WELL PROTECTIVE RADII ESTABLISHED IN ENV-WS 300 FOR ANY PUBLIC WATER SUPPLY WELLS OR WITHIN 100 FEET OF ANY PRIVATE WATER SUPPLY WELL.  
C. SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.  
D. A DEVIATION FROM THE SEPARATION REQUIREMENTS OF (B) OR (C) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS, PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN ENV-WQ 704.06.  
E. WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS:  
(1) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND  
(2) SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.

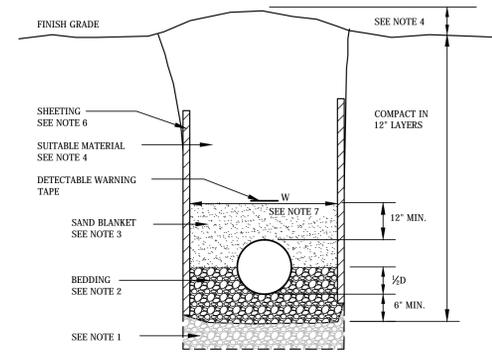
## STANDARD TRENCH NOTES - WATER & SEWER

1. **ORDERED EXCAVATION OF UNSUITABLE MATERIAL**, BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.  
2. **BEDDING:** SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67.  
3. **SAND BLANKET:** CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A ½ INCH SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.  
4. **SUITABLE MATERIAL:** IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.  
5. **BASE COURSE FOR TRENCH REPAIR** SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.  
6. **SHEETING:** ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.

7. **TRENCH DIMENSIONS:** W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.  
8. **PIPE INSULATION OVER SEWER AT STORM DRAIN CROSSING:** INSTALL 2" THICK RIGID FOAM INSULATION OVER SEWER AT STORM DRAIN CROSSINGS, EXTEND INSULATION 4 FEET EITHER SIDE OF STORM DRAIN ALONG SEWER.  
9. **WATER/SEWER SEPARATION:** WATER MAINS SHALL BE SEPARATED FROM SANITARY SEWER BY A MINIMUM OF 10 FEET HORIZONTALLY AND A MINIMUM OF 18 INCHES VERTICALLY, WITH THE WATER MAIN ABOVE THE SEWER.  
10. **PIPE COVER:** COVER OVER WATER SHALL BE 6 FEET MINIMUM IN ALL LOCATIONS.



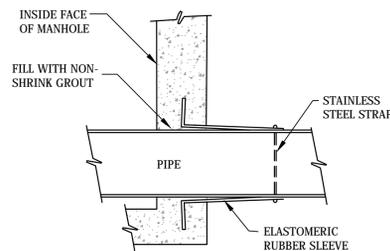
NOTE: MINIMUM BEDDING DEPTH AND MAXIMUM PAYMENT LIMIT FOR LEDGE EXCAVATION = ½D (12" MINIMUM)  
**LEDGE/SUB PAVEMENT CONSTRUCTION**



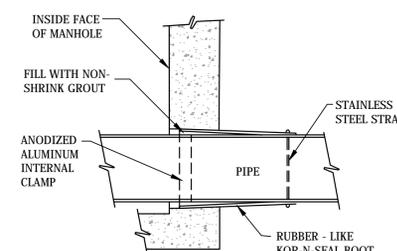
**EARTH CONSTRUCTION WITH OR WITHOUT SHEETING**

## STANDARD WATER & SEWER TRENCH SECTIONS

NOT TO SCALE



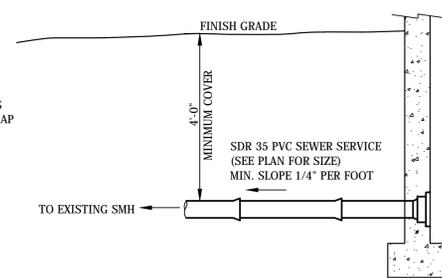
**LOCK-JOINT FLEXIBLE MANHOLE SLEEVE**



**KOR-N-SEAL JOINT SLEEVE**

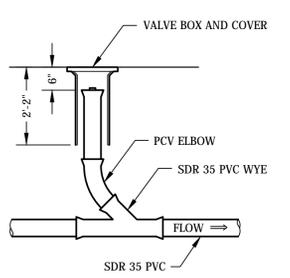
## JOINTING DETAILS

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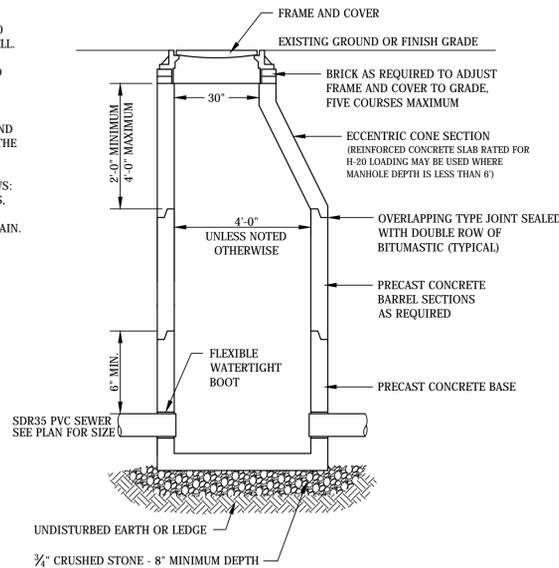
**SEWER SERVICE DETAIL**

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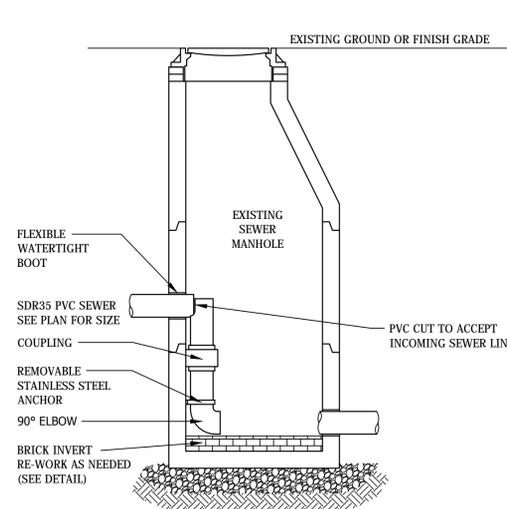
**SEWER CLEANOUT DETAIL**

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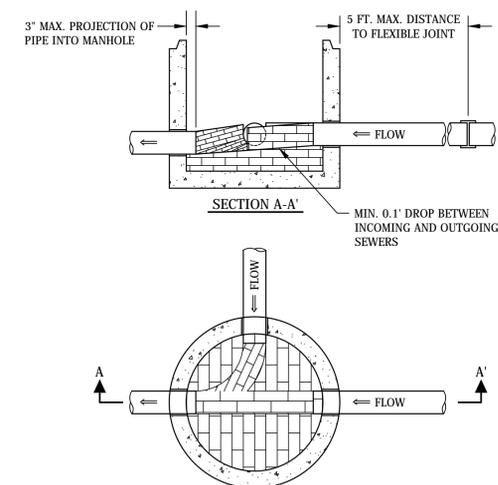
**SANITARY SEWER MANHOLE DETAIL**

NOT TO SCALE



**INSIDE DROP MANHOLE DETAIL**

NOT TO SCALE



**MANHOLE INVERT DETAILS**

NOT TO SCALE

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**SANITARY SEWER & WATER SYSTEM NOTES AND DETAILS**

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- BLOCKS MUST BE POURED AGAINST UNDISTURBED SOIL
- THE PIPE JOINT AND BOLTS MUST BE ACCESSIBLE.
- CONCRETE SHOULD BE CURED FOR AT LEAST 5 DAYS AND SHOULD HAVE A COMPRESSION STRENGTH OF 3,000 LBS. AT 28 DAYS.
- BLOCKS MUST BE POSITIONED TO COUNTERACT THE DIRECTION OF THE RESULTANT THRUST FORCE.

RESTRAINED JOINTS MAY BE USED FOR RESISTING THRUST FORCES WHERE THERE IS A SHORTAGE OF SPACE OR WHERE THE SOIL BEHIND A FITTING WILL NOT PROVIDE ADEQUATE SUPPORT. THIS RESTRAINING METHOD INVOLVES PLACEMENT OF THESE SPECIAL JOINTS AT APPROPRIATE FITTINGS AND FOR A PREDETERMINED NUMBER OF PIPE LENGTHS ON EACH SIDE. (MINIMUM 15 FEET).

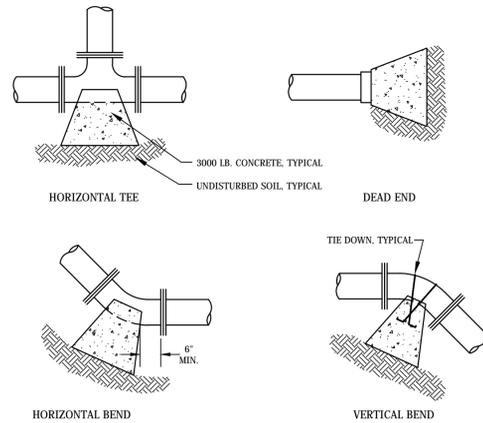
NOMINAL PIPE DIA. (INCHES)	TOTAL THRUST (POUNDS)				
	DEAD END	90° BEND	45° BEND	22½° BEND	11¼° BEND
4	1,810	2,550	1,385	706	355
6	3,739	5,288	2,862	1,459	733
8	6,433	9,097	4,923	2,510	1,261
10	9,677	13,685	7,406	3,776	1,897
12	13,985	19,353	10,474	5,340	2,683
14	18,385	26,001	14,072	7,174	3,604
16	23,779	33,628	18,199	9,278	4,661
18	29,865	42,235	22,858	11,653	5,855
20	36,644	51,822	28,046	14,298	7,183
24	52,279	73,934	40,013	20,398	10,249

NOTE:  
TO DETERMINE THRUST AT PRESSURES OTHER THAN 100 PSI, MULTIPLY THE THRUST OBTAINED IN THE TABLE BY THE RATIO OF THE PRESSURE TO 100. FOR EXAMPLE, THE THRUST ON A 12 INCH, 90° BEND AT 125 PSI IS:

$$\frac{19,353 \times 125}{100} = 24,191 \text{ POUNDS}$$

TO DETERMINE THE SIZE OF A CONCRETE THRUST BLOCK, DIVIDE THE TOTAL FORCE BY THE BEARING VALUE OF THE SOIL. THE QUOTIENT WILL BE THE SIZE OF THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET. APPROXIMATE VALUES FOR VARIOUS TYPES OF SOIL ARE LISTED BELOW.

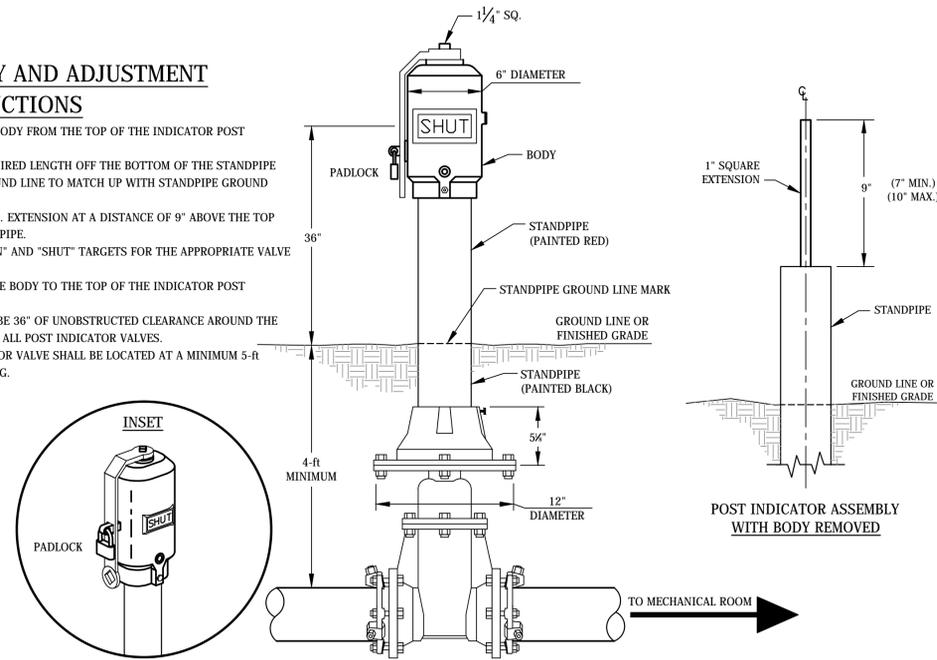
SOIL	BEARING LOAD (LBS./SQ. FT.)
MUCK	0
SOFT CLAY	1,000
SILT	1,500
SANDY SILT	3,000
SAND	4,000
SANDY CLAY	6,000



**THRUST BLOCK NOTES & DETAILS**  
NOT TO SCALE

**ASSEMBLY AND ADJUSTMENT INSTRUCTIONS**

1. REMOVE THE BODY FROM THE TOP OF THE INDICATOR POST ASSEMBLY.
2. CUT THE REQUIRED LENGTH OFF THE BOTTOM OF THE STANDPIPE FOR THE GROUND LINE TO MATCH UP WITH STANDPIPE GROUND LINE MARK.
3. CUT THE 1" SQ. EXTENSION AT A DISTANCE OF 9" ABOVE THE TOP OF THE STANDPIPE.
4. SET THE "OPEN" AND "SHUT" TARGETS FOR THE APPROPRIATE VALVE SIZE.
5. RE-ATTACH THE BODY TO THE TOP OF THE INDICATOR POST ASSEMBLY.
6. THERE SHALL BE 36" OF UNOBSTRUCTED CLEARANCE AROUND THE PERIMETER OF ALL POST INDICATOR VALVES.
7. POST INDICATOR VALVE SHALL BE LOCATED AT A MINIMUM 5-FR FROM BUILDING.



**POST-INDICATOR VALVE DETAIL**

NOT TO SCALE  
ADAPTED FROM TOWN OF CARY, NC STANDARD DETAIL

last revised: 2007 DEC 26

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**SANITARY SEWER & WATER SYSTEM NOTES AND DETAILS**

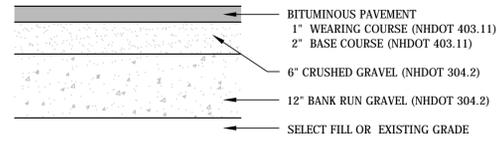
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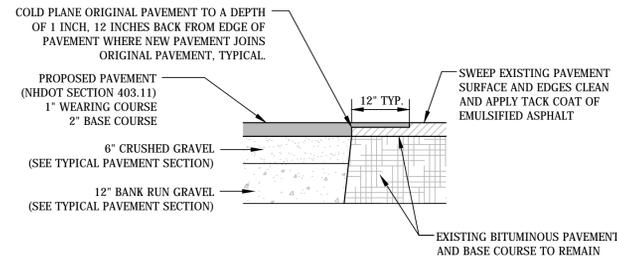
DATE OF PRINT  
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**C304**



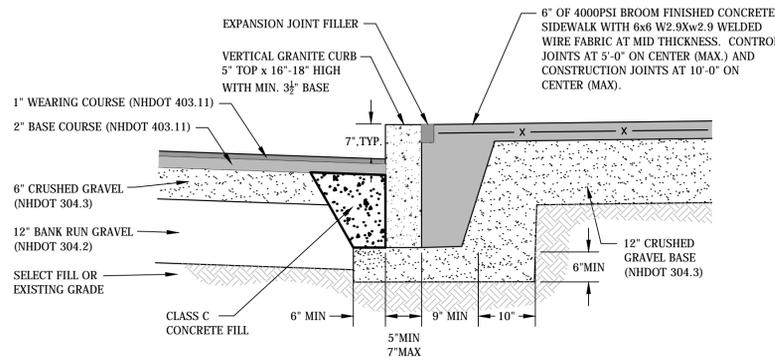
**TYPICAL PAVEMENT SECTION**

NOT TO SCALE



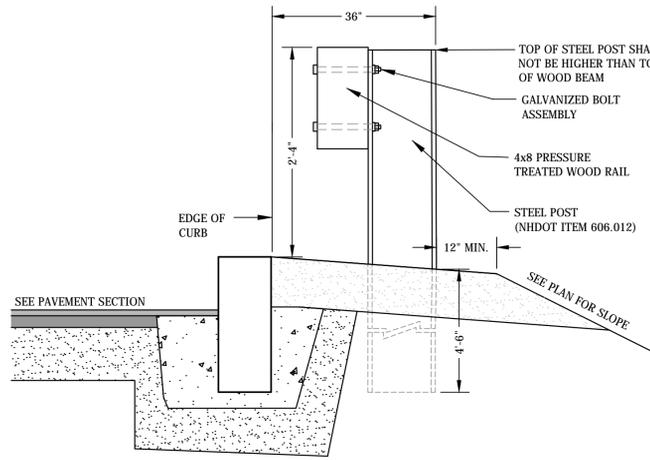
**PAVEMENT JOINING DETAIL**

NOT TO SCALE



**CONCRETE SIDEWALK WITH VERTICAL CURB DETAIL**

NOT TO SCALE

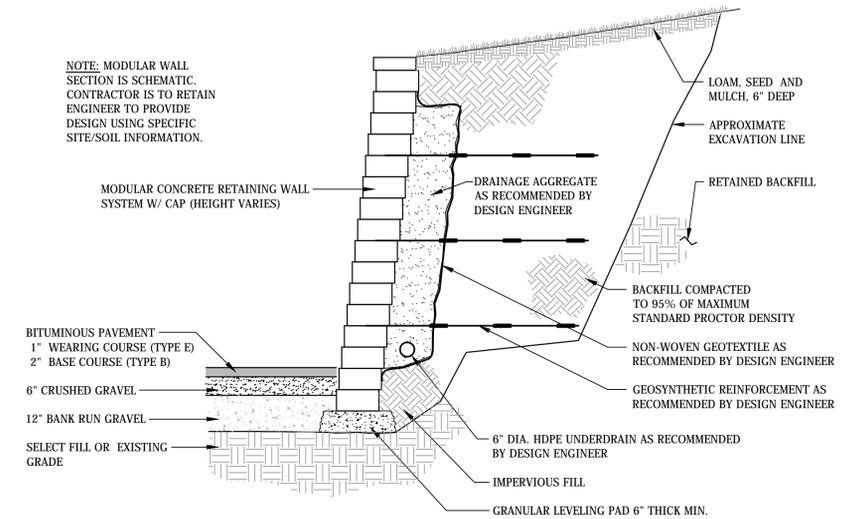


- NOTES:**
- STEEL POST SHALL BE SPACED 6'-3" CENTER TO CENTER
  - CONTRACTOR SHALL SUBMIT SHOP DRAWING PRIOR TO FABRICATION.

**BEAM GUIDE RAIL / STEEL POSTS**

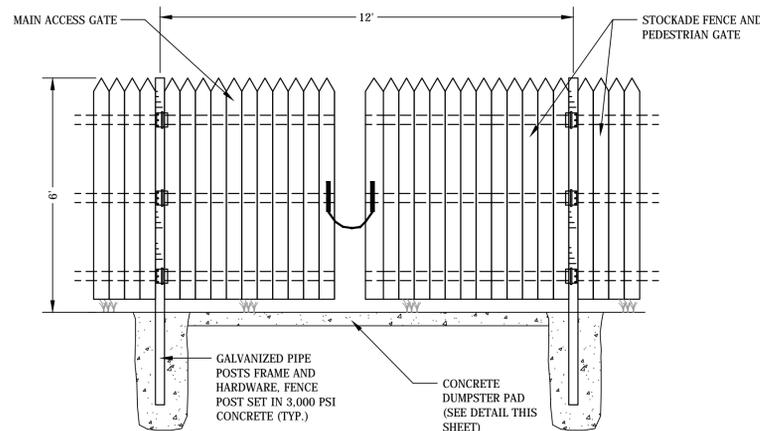
NOT TO SCALE

**NOTE:** MODULAR WALL SECTION IS SCHEMATIC. CONTRACTOR IS TO RETAIN ENGINEER TO PROVIDE DESIGN USING SPECIFIC SITE/SOIL INFORMATION.



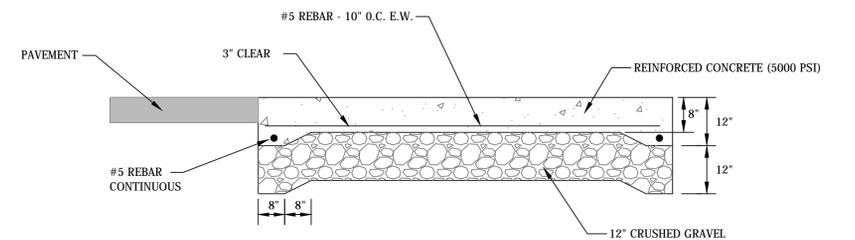
**MODULAR RETAINING WALL DETAIL**

NO SCALE



**SCREEN FENCE AND GATE FOR DUMPSTER PAD**

NOT TO SCALE

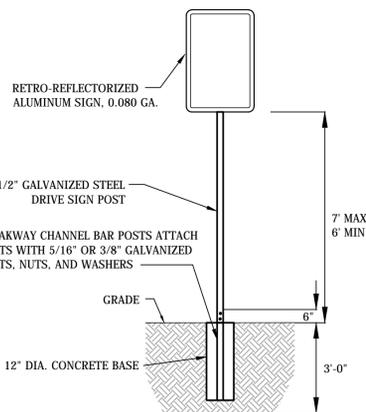


**DUMPSTER PAD DETAIL**

NOT TO SCALE

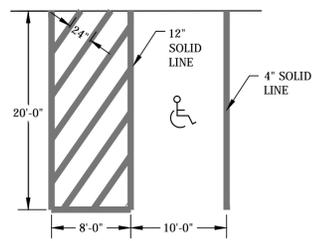
**SIGN SUMMARY**

M.U.T.C.D. NUMBER	SPECIFICATION		DESC.
	WIDTH	HEIGHT	
R1-1	24"	24"	
---	12"	18"	
---	12"	18"	
---	18"	18"	
R7-8	12"	18"	
R7-8B	12"	6"	



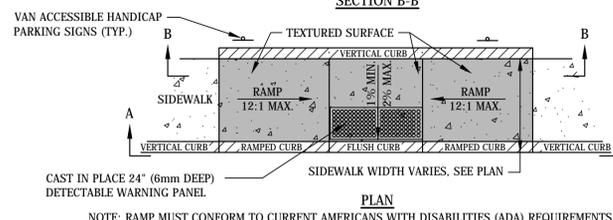
**SIGNAGE DETAIL**

NOT TO SCALE



**ADA ACCESSIBLE PARKING DETAIL**

NOT TO SCALE

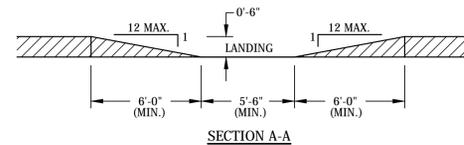


**SIDEWALK RAMP DETAIL**

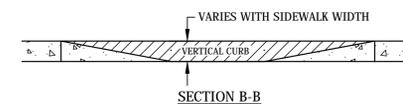
NOT TO SCALE

**SCREEN FENCE AND GATE FOR DUMPSTER PAD**

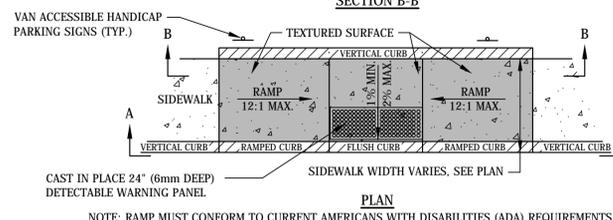
NOT TO SCALE



SECTION A-A



SECTION B-B

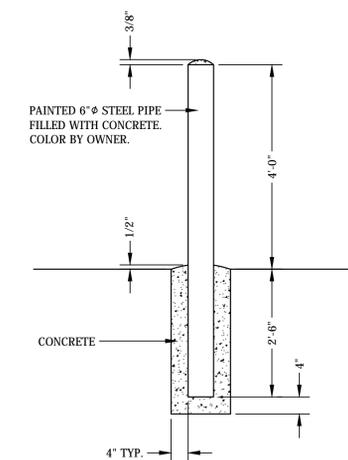


PLAN

NOTE: RAMP MUST CONFORM TO CURRENT AMERICANS WITH DISABILITIES (ADA) REQUIREMENTS

**CONCRETE FILLED BOLLARD DETAIL**

NOT TO SCALE



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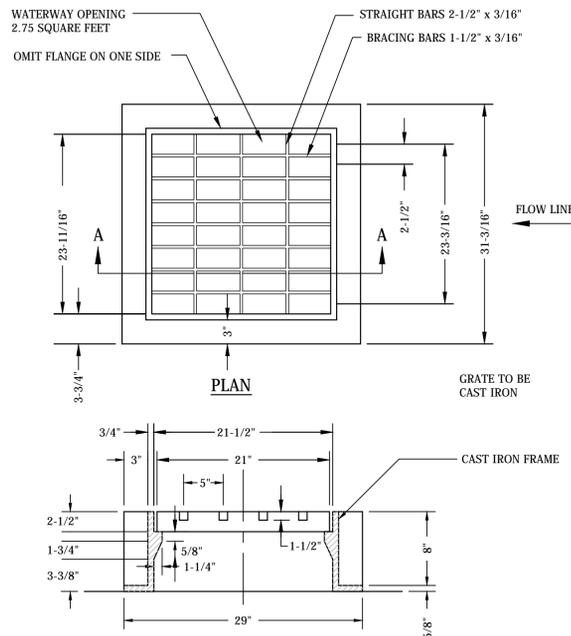
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**FRANK ANZALONE ASSOCIATES**  
COLONIAL PHARMACY  
NEW LONDON, NEW HAMPSHIRE

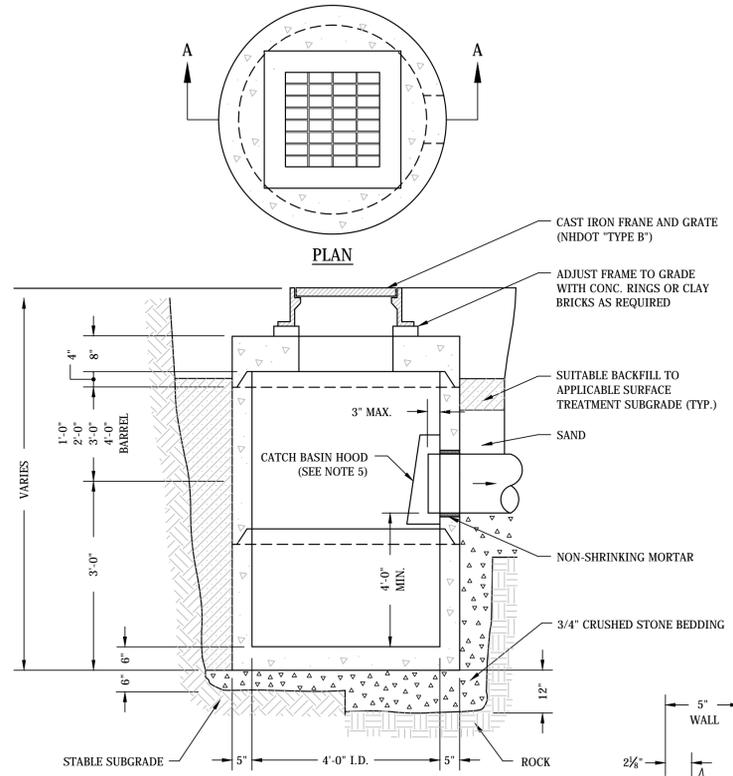
**DETAILS**

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: SEPT 2016 PROJECT #: 16826  
 ENG'D BY: WTD DRAWN BY: CJH  
 CHECK'D BY: --- ARCHIVE #: H-  
 C305

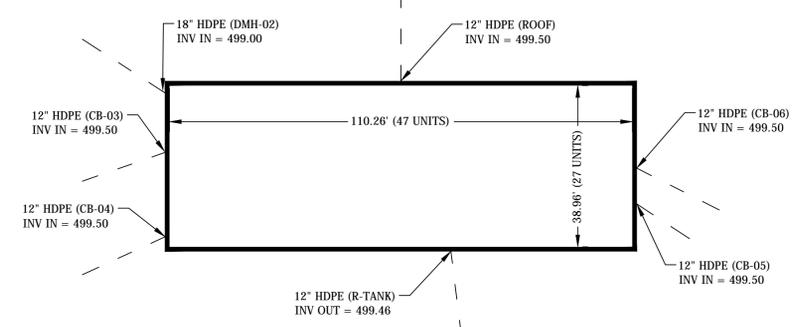
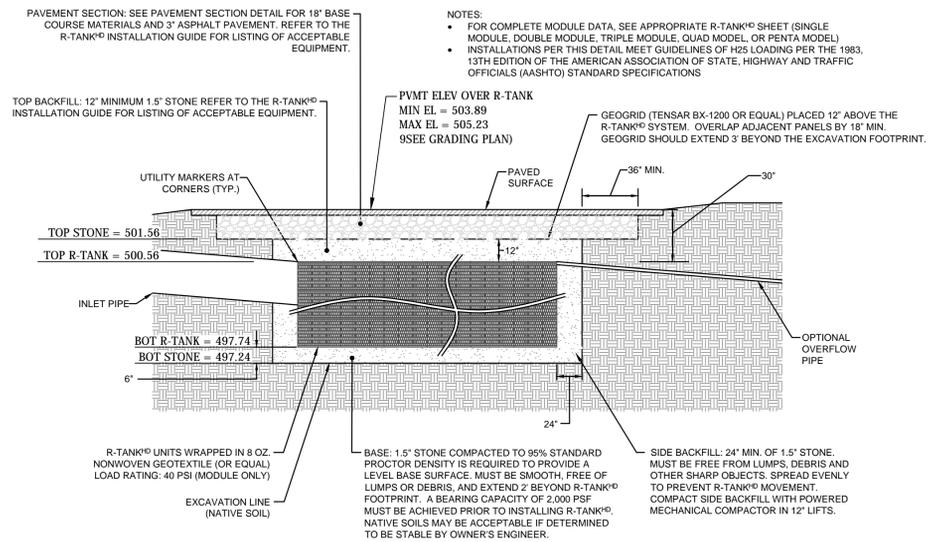


**SECTION A - A**  
 REFERENCE:  
 NH DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
 PLATE 2 OF STANDARD NO. 3  
**NHDOT TYPE "B" GRATE DETAIL**  
 NOT TO SCALE



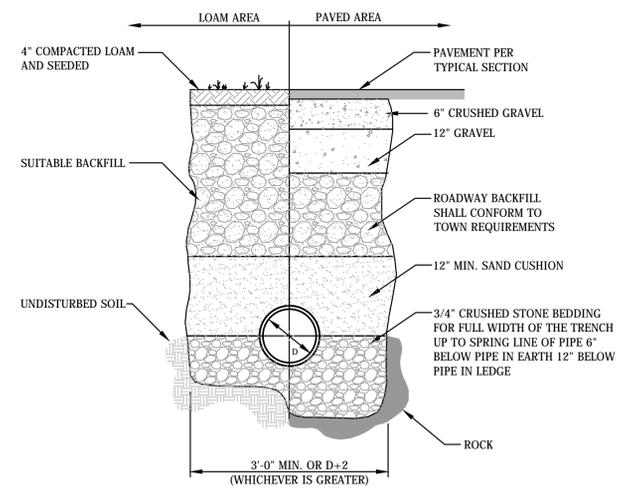
- NOTES:**
- CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
  - REINFORCING H-20 LOADING 4 x 4/4 x 4 W.W.M.
  - SHIP LAP JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT. AND SHALL BE SEALED WITH 1 STRIP OF 1" DIA. BUTYL RUBBER SEALANT.
  - EACH CASTING TO HAVE LIFTING HOLES CAST IN.
  - THE CATCH BASIN HOOD SHALL BE CONSTRUCTED FROM SOLID WALL HDPE PIPE GRADE PLATE. THE HOOD SHALL BE CONSTRUCTED SO THAT IT FORMS A BAFFLE AGAINST FLOATABLE LITTER AND OIL. THE HOOD SHALL PROTRUDE AT LEAST SIX INCHES OR 1/3 OF THE PIPE'S INSIDE DIAMETER, WHICHEVER IS GREATER. BELOW THE INVERT. THE CATCH BASIN HOOD SHALL BE SEALED TO THE CATCH BASIN STRUCTURE WITH AN OIL RESISTANT FOAM GASKET. VENT HOLES SHALL BE INSTALLED ON THE TOP OF THE HOOD TO ALLOW AIR FLOW INTO PIPE. THE CATCH BASIN HOOD SHALL BE ATTACHED TO THE STRUCTURE WITH STAINLESS STEEL ANCHOR STUDS AND NUTS, ALLOWING THE HOOD TO BE REMOVED AND INSTALLED WITH MINIMUM EFFORT. THE CATCH BASIN HOOD IS TO BE AS MANUFACTURED BY PLASTIC PIPE FABRICATION OR ENGINEER APPROVED EQUAL.

**DEEP SUMP CATCH BASIN DETAIL**  
 NOT TO SCALE

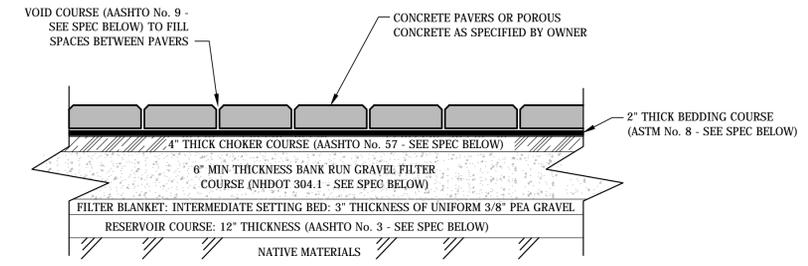


**R-TANK<sup>HD</sup> - H25 LOADS**

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



**TYPICAL DRAINAGE TRENCH DETAIL**  
 NOT TO SCALE



U.S. STANDARD SIEVE SIZE	PERCENT PASSING (%)					
	VOID COURSE (ASTM No. 9)	BEDDING COURSE (ASTM No. 8)	CHOKER COURSE (AASHTO No. 57)	FILTER COURSE (NHDOT 304.1)	RESERVOIR COURSE (AASHTO No. 3)	RESERVOIR COURSE ALT. (AASHTO No. 5)
6" (150mm)	-	-	-	100	100	-
2 1/2" (63mm)	-	-	-	-	90-100	-
2" (50mm)	-	-	-	-	35-70	-
1 1/2" (37.5mm)	-	-	100	-	0-15	100
1" (25mm)	-	-	95-100	-	0-15	90-100
3/4" (19mm)	-	-	25-60	-	0-5	20-55
1/2" (12.5mm)	-	100	-	-	0-5	0-10
3/8" (9.5mm)	100	85 TO 100	-	-	-	0-5
#4 (4.75mm)	85 TO 100	10 TO 30	0-10	75-100	-	-
#8 (2.36mm)	10 TO 40	0 TO 10	0-5	0-12	-	-
#16 (1.18mm)	0 TO 10	-	-	-	-	-
#50 (0.30mm)	0 TO 5	-	-	-	-	-

\*ALTERNATE GRADATION (e.g. AASHTO No. 5) FOR RESERVOIR COURSE MAY BE ACCEPTED WITH ENGINEER'S APPROVAL.  
**NOTE:**  
 THE CONTRACTOR AND OWNER ARE ADVISED TO REFERENCE THE 'UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS' FOR CONSTRUCTION AND MAINTENANCE OF THE PAVEMENT SECTION.

**TYPICAL PERVIOUS SIDEWALK**  
 NOT TO SCALE

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**FRANK ANZALONE ASSOCIATES**  
 COLONIAL PHARMACY  
 NEW LONDON, NEW HAMPSHIRE

**DETAILS**

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

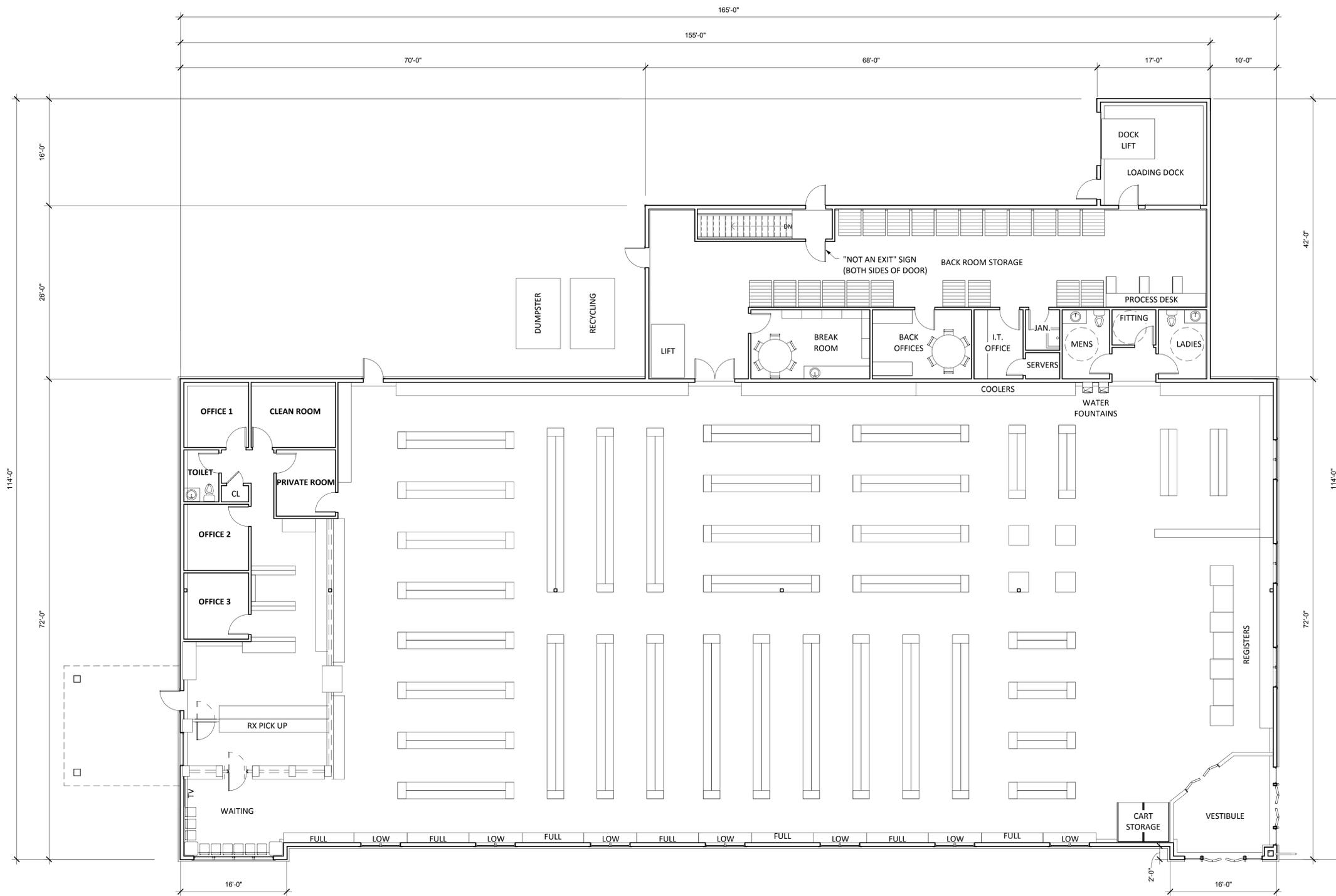
DATE: SEPT 2016	PROJECT #: 16826
ENG'D BY: WILLIAM T. DAVIS	DRAWN BY: CJH
CHECK'D BY: ARCHIVE #:	H-

DATE OF PRINT: OCTOBER 04 2016  
 HORIZONS ENGINEERING

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STATE OF NEW HAMPSHIRE  
 WILLIAM T. DAVIS  
 No. 11619  
 LICENSED PROFESSIONAL ENGINEER

C306



**1** FIRST FLOOR PLAN  
SCALE: 1/8" = 1'-0"

**Frank Anzalone Associates**  
Architects and Planners  
P.O. Box 1016  
New London, NH 03257  
Phone: 603.526.8911  
Fax: 603.526.8922  
www.faa-arch.com

GENERAL NOTES  
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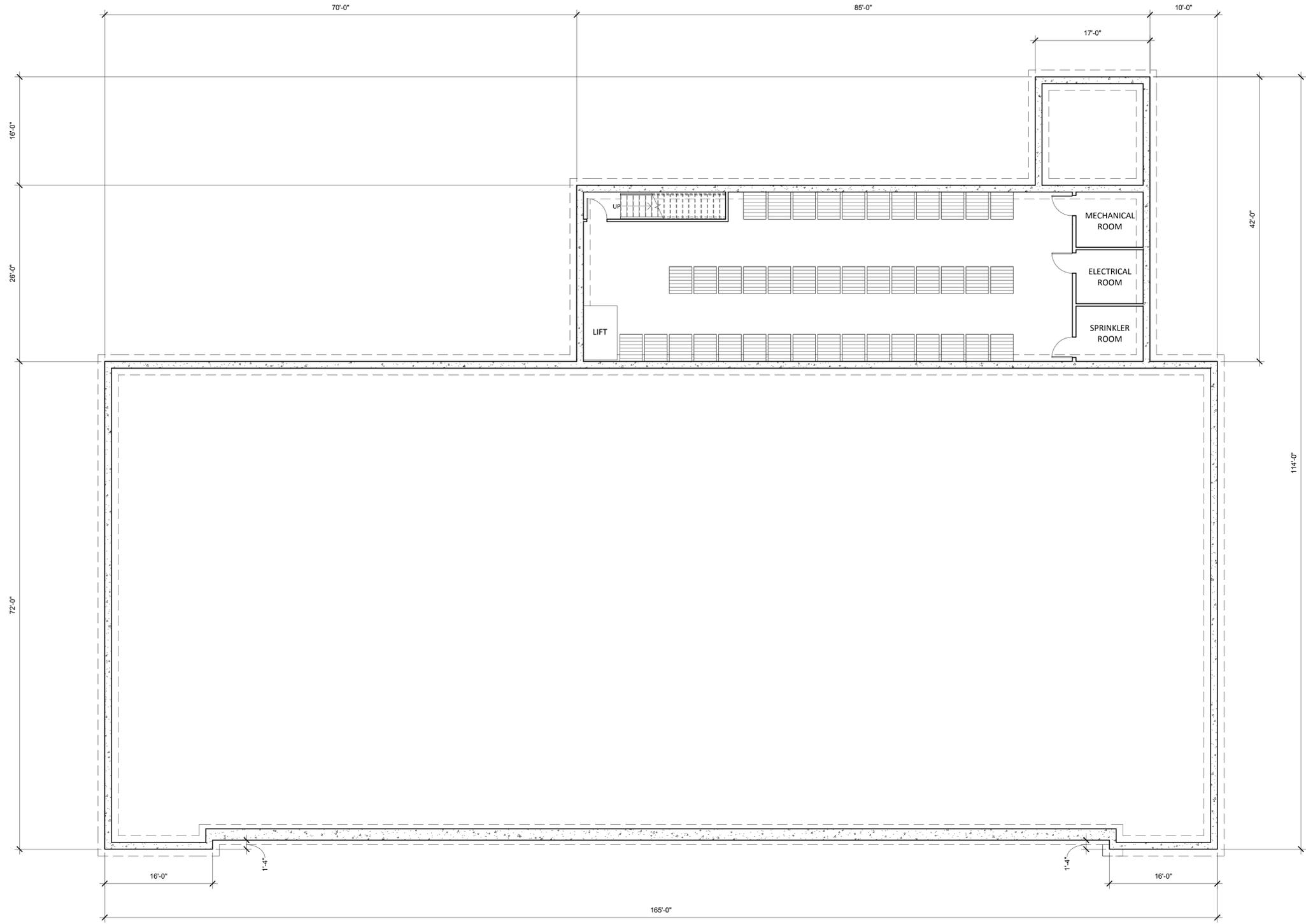
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No.	Description	Date

**COLONIAL PHARMACY**  
NEWPORT ROAD  
NEW LONDON, NH

**COLONIAL PHARMACY**  
**FIRST FLOOR**  
**PLAN**

Project Number: 16010  
Date: 10.03.16  
Scale: 1/8" = 1'-0"  
Sheet: A-1.1



**1** LOWER LEVEL PLAN  
SCALE: 1/8" = 1'-0"

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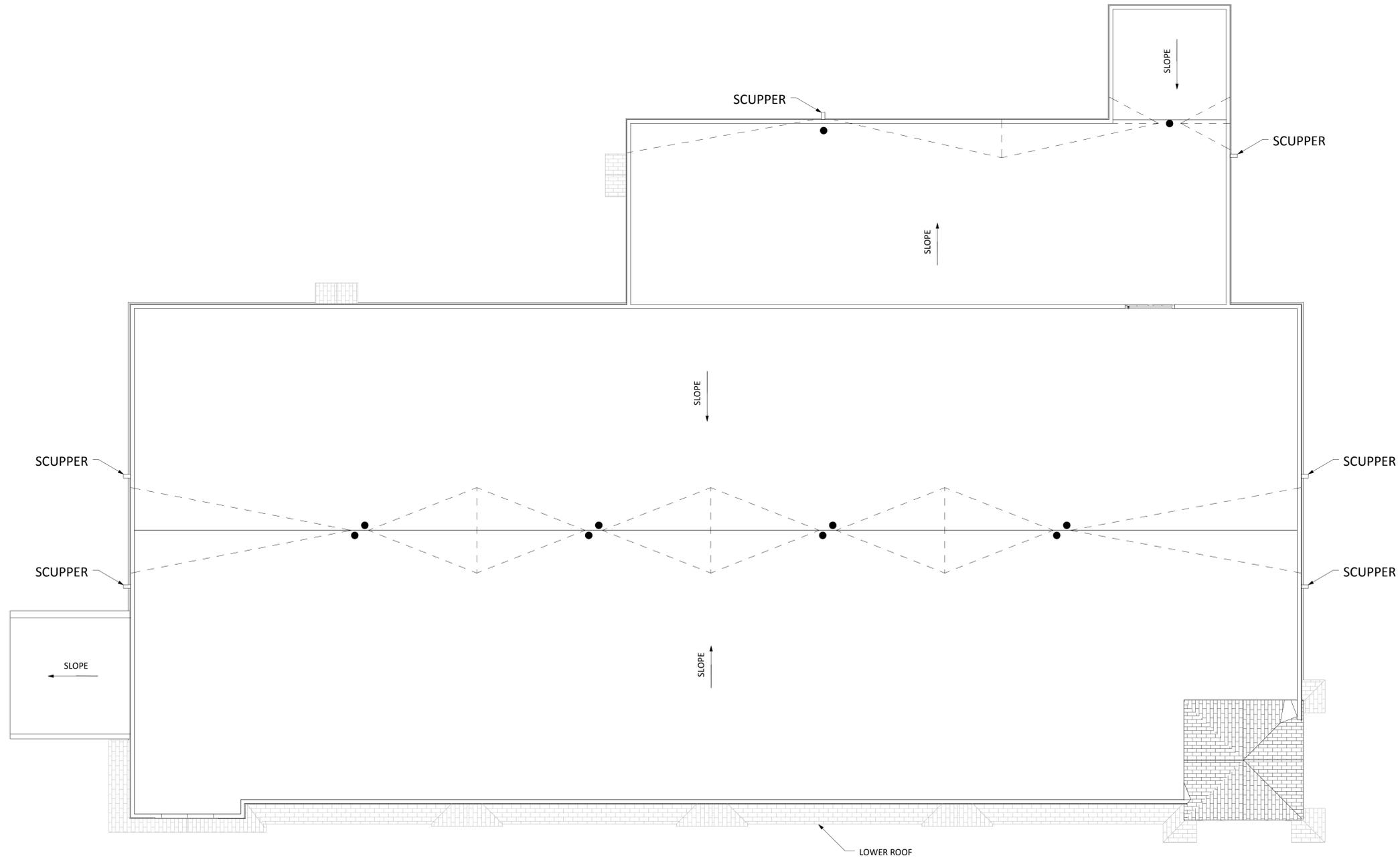
NOT FOR CONSTRUCTION

No.	Description	Date

**COLONIAL PHARMACY**  
NEWPORT ROAD  
NEW LONDON, NH

**COLONIAL PHARMACY**  
**LOWER LEVEL**  
**PLAN**

Project Number: 16010  
Date: 10.03.16  
Scale: 1/8" = 1'-0"  
Sheet: **A-1.2**



1 ROOF PLAN  
SCALE: 1/8" = 1'-0"

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NOT FOR CONSTRUCTION

No.	Description	Date

**COLONIAL PHARMACY**  
NEWPORT ROAD  
NEW LONDON, NH

**COLONIAL PHARMACY**  
**ROOF PLAN**

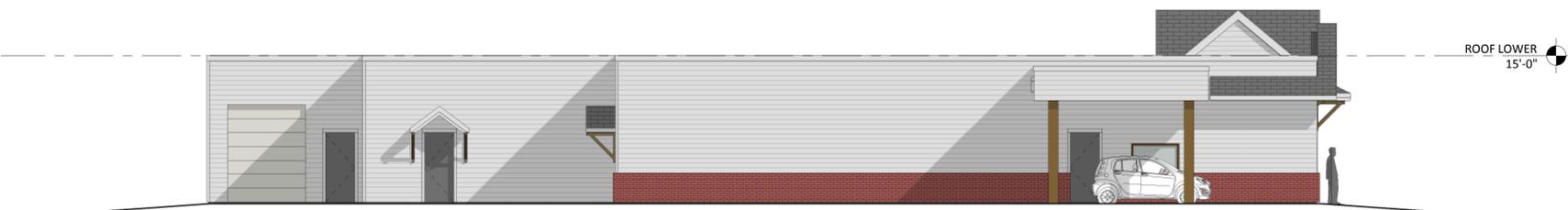
Project Number: 16010  
Date: 10.03.16  
Scale: 1/8" = 1'-0"  
Sheet: A-1.3



1 EXTERIOR ELEVATION - SOUTH  
SCALE: 1/8" = 1'-0"



2 EXTERIOR ELEVATION - NORTH  
SCALE: 1/8" = 1'-0"



3 EXTERIOR ELEVATION - WEST  
SCALE: 1/8" = 1'-0"



4 EXTERIOR ELEVATION - EAST  
SCALE: 1/8" = 1'-0"

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No.	Description	Date

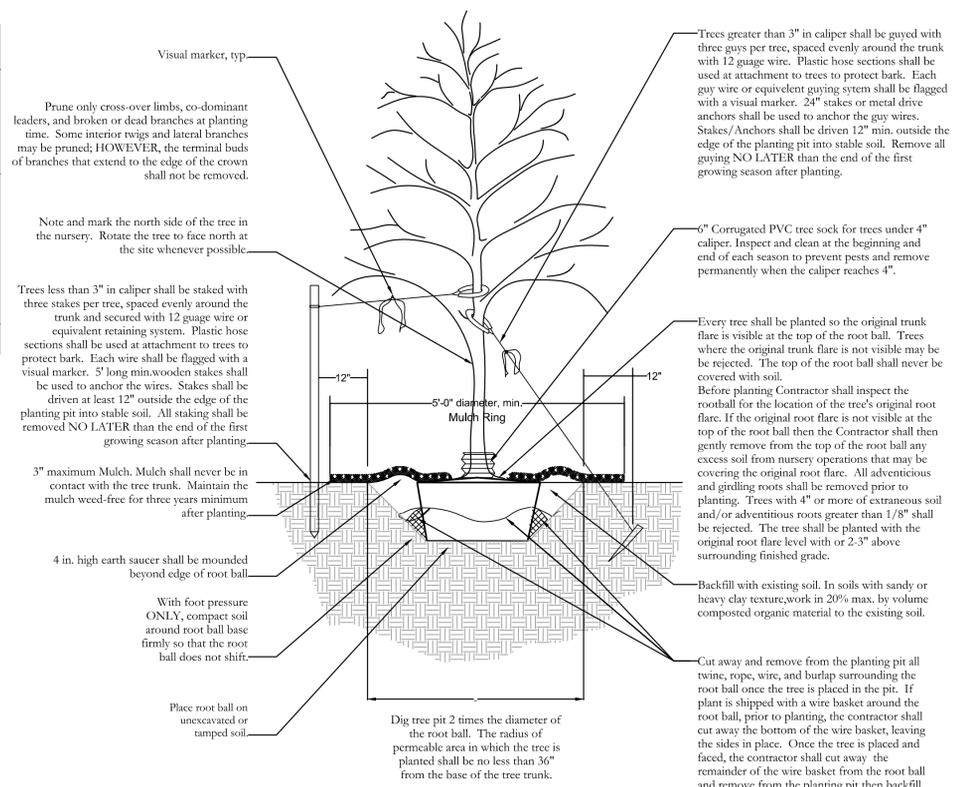
**COLONIAL PHARMACY**  
NEWPORT ROAD  
NEW LONDON, NH

**COLONIAL PHARMACY**  
**EXTERIOR**  
**ELEVATIONS**

Project Number: 16010  
Date: 10.03.16  
Scale: 1/8" = 1'-0"  
Sheet: A-2.1

**PLANT LIST**

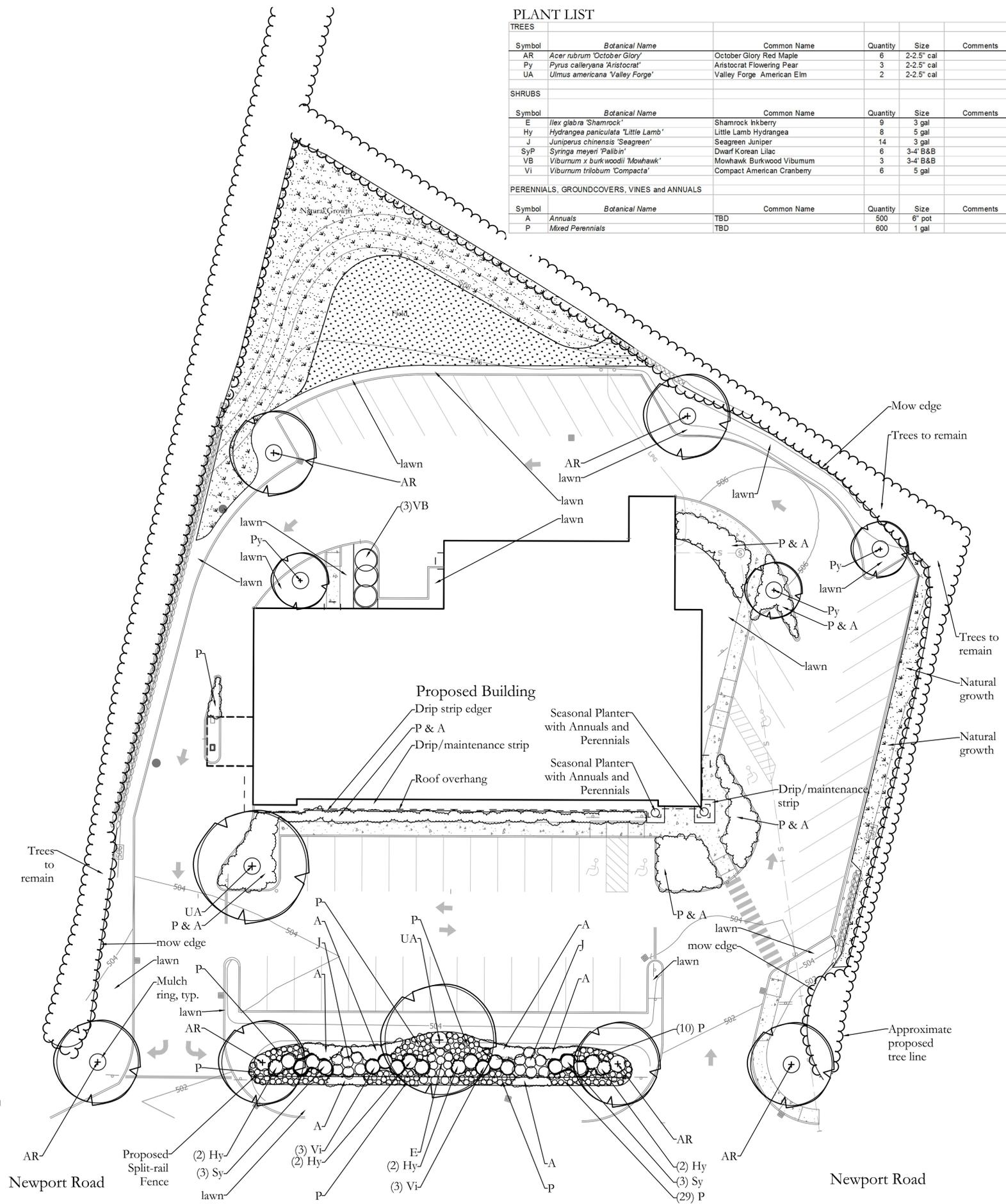
TREES					
Symbol	Botanical Name	Common Name	Quantity	Size	Comments
AR	<i>Acer rubrum</i> 'October Glory'	October Glory Red Maple	6	2-2.5' cal	
Py	<i>Pyrus calleryana</i> 'Aristocrat'	Aristocrat Flowering Pear	3	2-2.5' cal	
UA	<i>Ulmus americana</i> 'Valley Forge'	Valley Forge American Elm	2	2-2.5' cal	
SHRUBS					
Symbol	Botanical Name	Common Name	Quantity	Size	Comments
E	<i>Ilex glabra</i> 'Shamrock'	Shamrock Inkberry	9	3 gal	
Hy	<i>Hydrangea paniculata</i> 'Little Lamb'	Little Lamb Hydrangea	8	5 gal	
J	<i>Juniperus chinensis</i> 'Seagreen'	Seagreen Juniper	14	3 gal	
SyP	<i>Syringa meyeri</i> 'Palibin'	Dwarf Korean Lilac	6	3-4' B&B	
VB	<i>Viburnum x burkwoodii</i> 'Mowhawk'	Mowhawk Burkwood Viburnum	3	3-4' B&B	
Vi	<i>Viburnum trilobum</i> 'Compacta'	Compact American Cranberry	6	5 gal	
PERENNIALS, GROUNDCOVERS, VINES and ANNUALS					
Symbol	Botanical Name	Common Name	Quantity	Size	Comments
A	Annuals	TBD	500	6" pot	
P	Mixed Perennials	TBD	600	1 gal	



**TREE PLANTING DETAIL**  
scale: NTS

**LANDSCAPE NOTES**

- Design is based on drawings by Horizons Engineering received 10/04/2016 and on drawings by Frank Anzalone Associates received 9/19/2016 and layout in the field may require adjustment due to actual field conditions.
- This plan is for REVIEW purposes only, NOT for Construction. Construction Documents will be provided upon request.
- The Contractor shall obtain required permits prior to the start of construction.
- The Contractor shall verify grades and layout and shall notify the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grades prior to construction.
- Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Tree Protection Fencing shall be located at the drip line of trees at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. In order to protect the health and viability of the roots, branches, trunk and bark of the tree(s) NO vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Storage of refuse or construction materials or portables within the tree protection area shall not be allowed.
- The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the project site from erosion. Erosion Control shall be installed prior to construction. Erosion Control shall comply with New Hampshire Highway Department Standards and at a minimum shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
- The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
- Prior to any landscape construction activities Contractor shall have all existing loam and loam from off-site intended to be used for lawns and plant areas tested using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.
- The Contractor shall provide and plant all plants shown and listed on the construction drawings. All plants shall be nursery-grown under climatic conditions similar to those in the project's locality. Plants shall meet the standards of nomenclature, size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. stated in the latest version of American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
- A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
- All plants shall be legibly tagged with proper botanical name.
- Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
- No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
- The Contractor shall guarantee all plants for not less than one year from time of acceptance.
- All landscaping shall be provided with either an underground irrigation system OR an outside hose attachment within 150 feet. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas. Maintaining irrigation heads is the responsibility of the owner alone.
- All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
- Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and 1/2" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall have a 5' diameter min. mulch saucer. Color of mulch shall be natural or black.
- Areas designated as LAWN shall be mown once per year after September to deter woody growth. Field grass shall NOT be mown when the ground is wet to reduce the chance of compaction that decreases infiltration and rutting that causes erosion.
- Areas designated as NATURAL GROWTH shall be protected and shall remain in a natural state, native tree, shrub, grass and forb areas changing without intervention. If exotic invasive plants need to be removed, the soil shall remain undisturbed. Mulch placed around trees in this area shall only be maintained until the proposed plant is fully established.
- Owner is solely responsible for maintaining vehicular and pedestrian vision lines pertaining to vegetation growth.
- Drip strip shall extend to 6" beyond roof overhang and shall be edged with 3/16" thick metal edger and dressed with 2-3" of rounded indigenous river rock.
- In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
- Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height between 6'-8' to allow clear and safe passage of vehicles and pedestrians under tree canopy.
- Snow shall be stored at a minimum of five feet away from the base of all trees and shrub areas.
- Landscape Architect is not responsible for the means and methods of the contractor.



Wendy S. Anderson, ASLA  
Landscape Architecture  
New Durham, NH 03855  
603.581.5756

Design By:  
WSA  
Drawn By:  
WSA  
Date:  
October 4, 2016

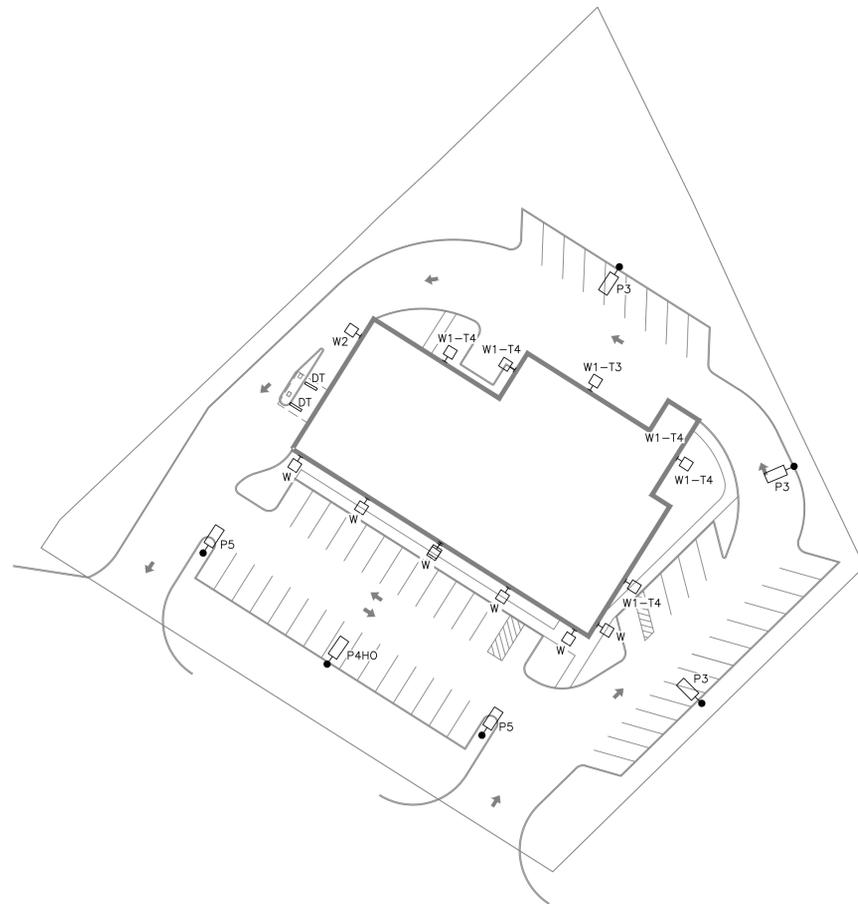
Scale:  
1"=20'-0"  
0 20' 40'

**Colonial Pharmacy**  
Landscape Plan  
Newport Road, New London, New Hampshire

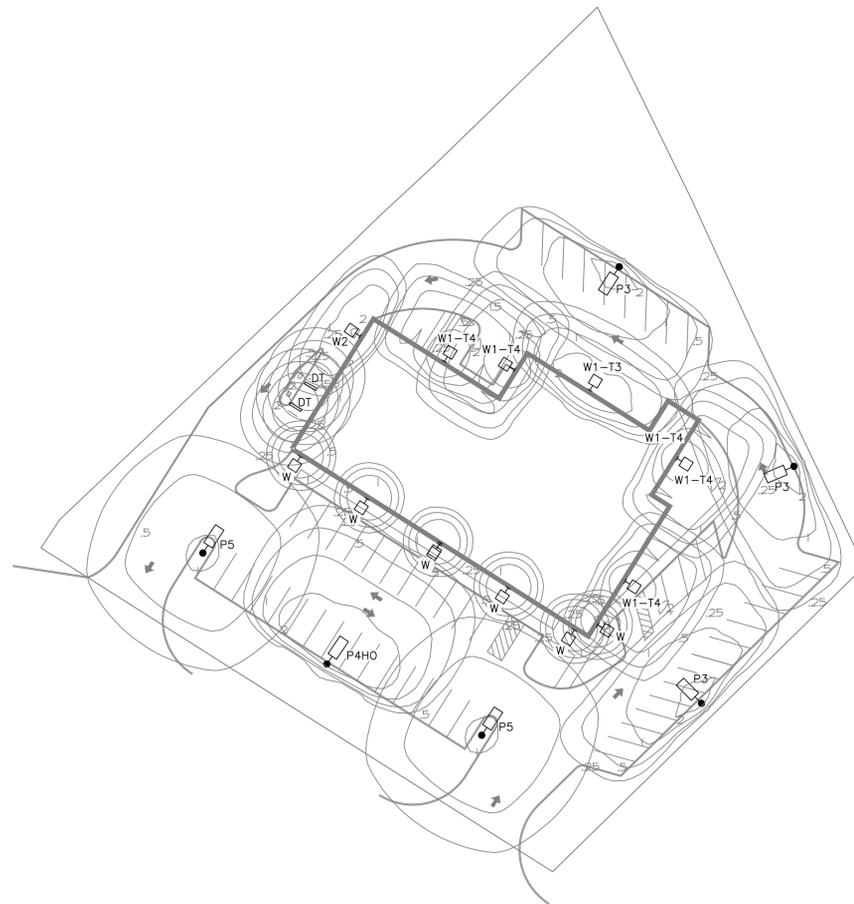
Revisions:  
Oct 4, 2016 PB Submission

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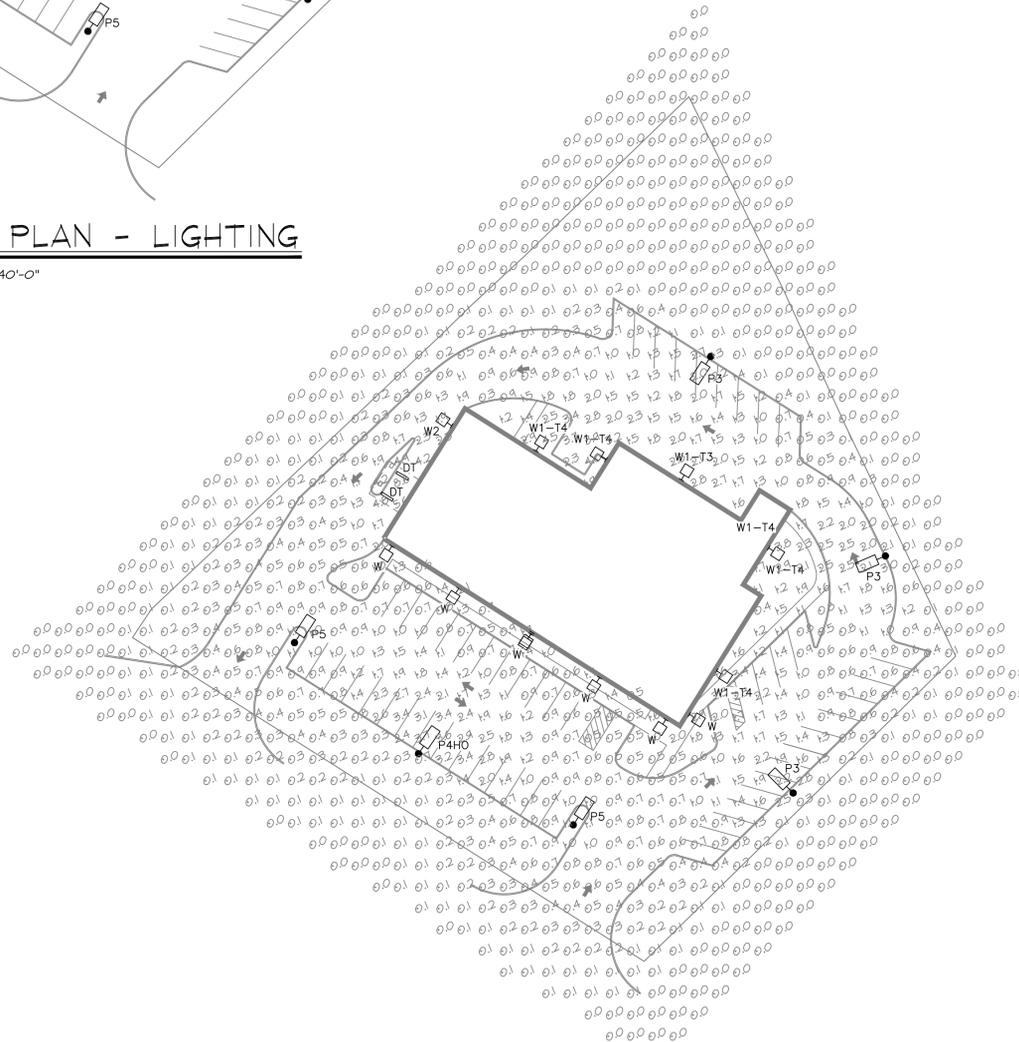
Sheet:  
**LA-1**



1 SITE PLAN - LIGHTING  
SCALE: 1" = 40'-0"



2 SITE PLAN - ISO FOOTCANDLE DISPLAY  
SCALE: 1" = 40'-0"



3 SITE PLAN - POINT-BY-POINT DISPLAY  
SCALE: 1" = 40'-0"



4 TYPE "DT" FIXTURE  
SCALE: NONE



5 TYPE "P" FIXTURES  
SCALE: NONE

LIGHT FIXTURE SCHEDULE				
LIGHT	MANUFACTURER	MODEL NO.	LAMP TYPE/WATTS/LUMENS	MOUNTING
DT	FAILSAFE	FPS-LD4-2-STD-40-OPL	LED 60W / 7000 LUMENS	UNDER DRIVE-THRU CANOPY
P3	MCGRAW EDISON	GLEON-AF-O1-LED-EI-SL3-H65	LED 30W / 3190 LUMENS	20' SQUARE STEEL POLE
P4HO	MCGRAW EDISON	GLEON-AF-O2-LED-EI-SL4-H66	LED 54W / 5826 LUMENS	20' SQUARE STEEL POLE
P5	MCGRAW EDISON	GLEON-AF-O1-LED-EI-5KQ	LED 30W / 3300 LUMENS	20' SQUARE STEEL POLE
W	TMS	3X-ISLED-FC5	LED 15W / 1850 LUMENS	EXTERIOR BUILDING FRONT WALL AT ~ 12' -15'
W1-T3	INVUE	ENC-E02-LED-EI-BL3-8030	LED 47W / 5400 LUMENS	EXTERIOR WALL AT ~ 14'
W1-T4	INVUE	ENC-E02-LED-EI-BL4-8030	LED 47W / 5225 LUMENS	EXTERIOR WALL AT ~ 14'
W2	INVUE	ENC-E01-LED-EI-BL3-8030	LED 25W / 2700 LUMENS	EXTERIOR WALL AT ~ 12' -14'

**LIGHT FIXTURE SCHEDULE NOTES**

- ALL FIXTURES MEET OR EXCEED IES-NA 9TH EDITION "FULL CUT-OFF" CLASSIFICATION.
- ILLUMINATION LEVELS ON THE MAIN DRIVE AND PARKING AREAS ARE AS FOLLOWS: AVE=1.2FC; MAX=3.7FC; MIN=0.4FC; AVE/MIN=3; MAX/MIN=9



6 TYPE "W" FIXTURE  
SCALE: NONE



7 TYPE "W1" & "W2" FIXTURES  
SCALE: NONE

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**FRANK ANZALONE ASSOCIATES PHARMACY**  
NEW LONDON, NEW HAMPSHIRE

**SITE PLAN - LIGHTING LAYOUT**

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: SEPT 22, 2016	PROJECT #: 16826
ENG'D BY: ---	DRAWN BY: ---
CHECK'D BY: ---	ARCHIVE #: H----