

PROPOSED SCHOOL BUS PARKING FACILITY

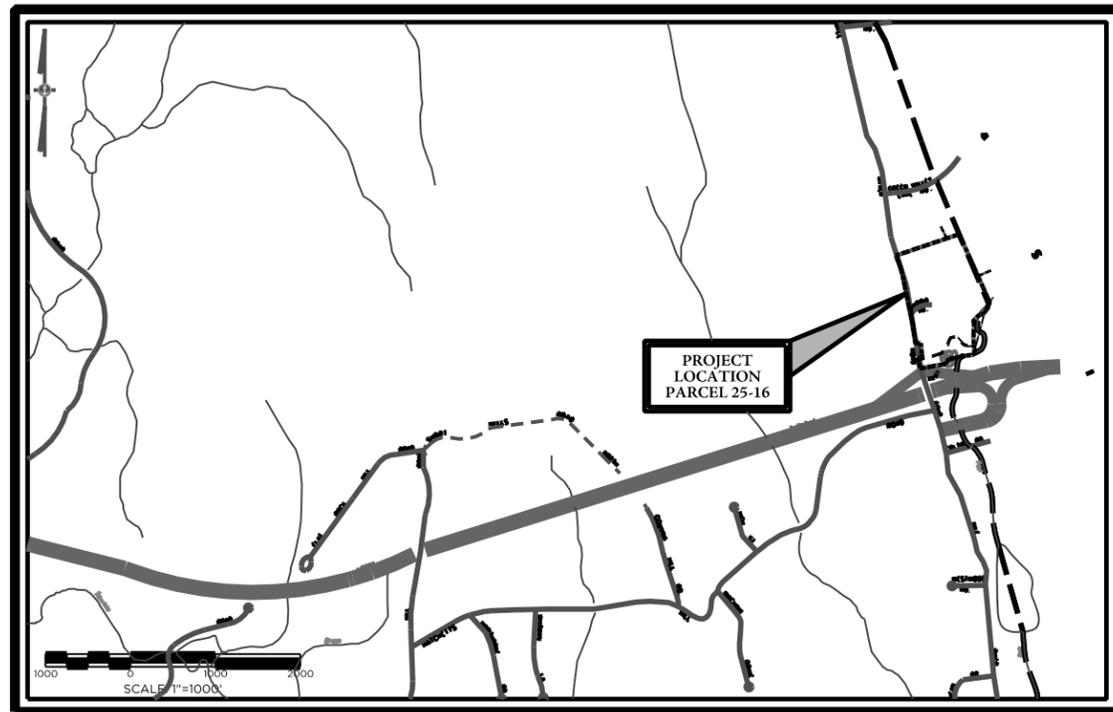
AT

109 FOUR MILE RIVER ROAD

OLD LYME, CT

PREPARED FOR
TOWN OF OLD LYME

52 LYME STREET
OLD LYME, CT 06371



LOCATION MAP
SCALE: 1" = 1000'



LOCATION MAP
SCALE: NOT TO SCALE

LIST OF SHEETS

DATE: 3/16/09 REVISED: 6/8/09
REVISED: 5/15/09 REVISED: 9/30/09
REVISED 6/1/09

ABUTTERS LIST		
ADDRESS	OWNER OF RECORD	MAILING ADDRESS
106 FOUR MILE RIVER RD	SPEIRS, JAMES A. & JEANETTE C.	3 BRIGHTON RD, OLD LYME, CT 06371
117 FOUR MILE RIVER RD	FAIRCLOTH, RUSSELL & SALLY L.	117 FOUR MILE RIVER RD, OLD LYME, CT 06371
5 GREEN VALLEY LAKES RD	ROHRBERG, MARK A. TRUSTEE	5 GREEN VALLEY LAKES RD, OLD LYME, CT 06371
6 VISTA DR	EASTPORT, LLC.	P.O. BOX 941, OLD LYME, CT 06371
I-95 & COMMUTER LOT, OLD LYME	STATE OF CONNECTICUT	210 CAPITOL AVENUE, HARTFORD, CT 06106
SPRING ROCK ROAD, EAST LYME	MARIC, RAJKO	26 JOHNSON PLACE, ARDSLEY, NY 10502
EAST LYME PARCEL - NO ADDRESS	TOWN OF OLD LYME	52 LYME STREET, OLD LYME, CT 06371

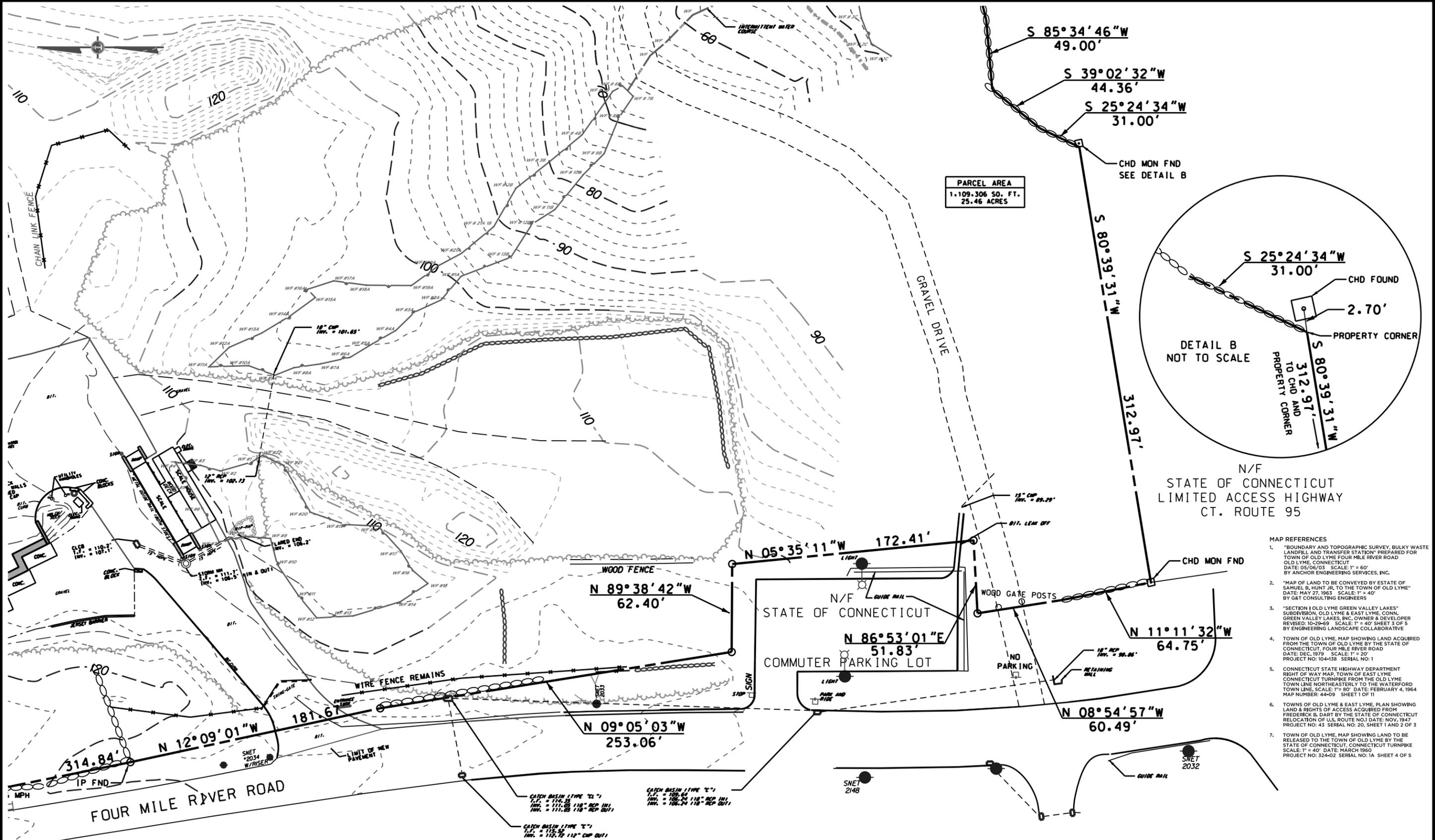
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PREPARED BY:

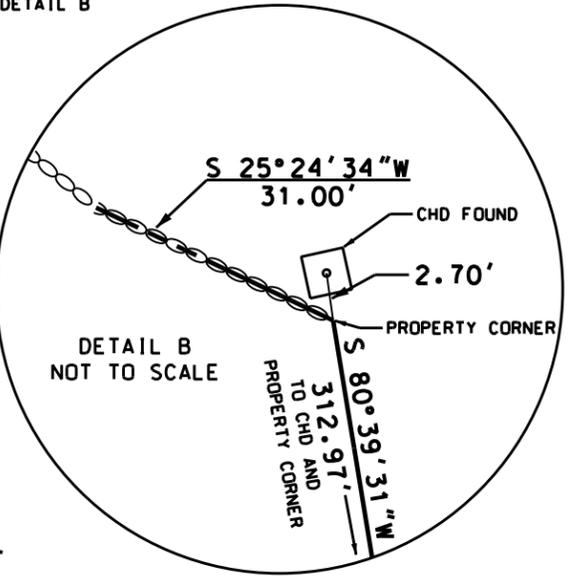
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PARCEL AREA
 1,109,306 SQ. FT.
 25.46 ACRES



N/F
 STATE OF CONNECTICUT
 LIMITED ACCESS HIGHWAY
 CT. ROUTE 95

- MAP REFERENCES
- "BOUNDARY AND TOPOGRAPHIC SURVEY, BULKY WASTE LANDFILL AND TRANSFER STATION" PREPARED FOR TOWN OF OLD LYME FOUR MILE RIVER ROAD OLD LYME, CONNECTICUT DATE: 05/06/03 SCALE: 1" = 60' BY ANCHOR ENGINEERING SERVICES, INC.
 - "MAP OF LAND TO BE CONVEYED BY ESTATE OF SAMUEL B. HUNT, JR. TO THE TOWN OF OLD LYME" DATE: MAY 27, 1963 SCALE: 1" = 40' BY G&T CONSULTING ENGINEERS
 - "SECTION I OLD LYME GREEN VALLEY LAKES" SUBDIVISION, OLD LYME & EAST LYME, CONN. GREEN VALLEY LAKES, INC. OWNER & DEVELOPER REVISED: 10-29-89 SCALE: 1" = 40' SHEET 3 OF 5 BY ENGINEERING LANDSCAPE COLLABORATIVE
 - TOWN OF OLD LYME, MAP SHOWING LAND ACQUIRED FROM THE TOWN OF OLD LYME BY THE STATE OF CONNECTICUT, FOUR MILE RIVER ROAD DATE: DEC, 1975 SCALE: 1" = 20' PROJECT NO: 10-138 SERIAL NO: 1
 - CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP, TOWN OF EAST LYME CONNECTICUT TURNPIKE FROM THE OLD LYME TOWN LINE NORTHEASTERLY TO THE WATERFORD TOWN LINE, SCALE: 1" = 80' DATE: FEBRUARY 4, 1964 MAP NUMBER: 44-09 SHEET 1 OF 11
 - TOWNS OF OLD LYME & EAST LYME, PLAN SHOWING LAND & RIGHTS OF ACCESS ACQUIRED FROM FREDERICK S. DART BY THE STATE OF CONNECTICUT RELOCATION OF U.S. ROUTE NO.1 DATE: NOV. 1947 PROJECT NO: 43 SERIAL NO: 20, SHEET 1 AND 2 OF 3
 - TOWN OF OLD LYME, MAP SHOWING LAND TO BE RELEASED TO THE TOWN OF OLD LYME BY THE STATE OF CONNECTICUT, CONNECTICUT TURNPIKE SCALE: 1" = 40' DATE: MARCH 1960 PROJECT NO: 324-02 SERIAL NO: 1A SHEET 4 OF 5

CATCH BASIN TYPE "C"
 T.C. = 110.43
 INV. = 117.00 118" DEP INT.
 INV. = 117.00 118" DEP INT.

CATCH BASIN TYPE "C"
 T.C. = 108.64
 INV. = 106.24 118" DEP INT.
 INV. = 106.24 118" DEP INT.

CATCH BASIN TYPE "C"
 T.C. = 110.30
 INV. = 112.70 118" DEP INT.

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES- MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ENFORCED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. IT IS A LIMITED PROPERTY SURVEY. BOUNDARY DETERMINATION CATEGORY DEPENDANT SURVEY, CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND A TOPOGRAPHIC SURVEY CONFORMING TO VERTICAL ACCURACY CLASS T-2.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

WILLIAM E. WERTZ, CT. L.S. #70067

ANY ORIGINAL OR DUPLICATE OF THIS MAP IS NOT VALID UNLESS IT BEARS THE EMBOSSED SEAL OF THE SURVEYOR WHOSE REGISTRATION NUMBER APPEARS ABOVE NO OTHER CERTIFICATION OR WARRANTY IS EXPRESSED OR IMPLIED.



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SCHOOL BUS PARKING FACILITY

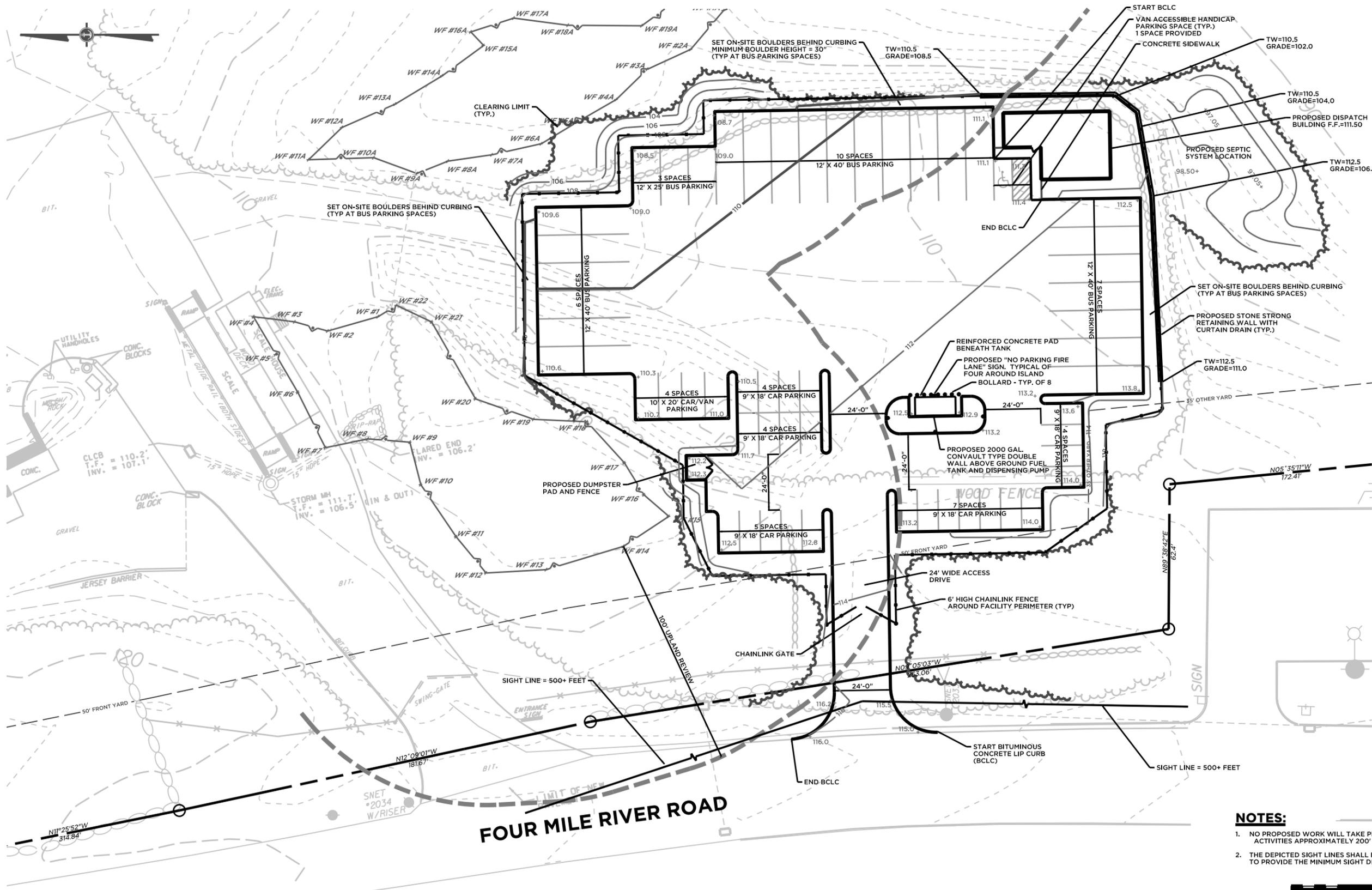
PREPARED FOR
TOWN OF OLD LYME

EXISTING CONDITIONS

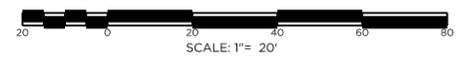
109 FOUR MILE RIVER ROAD OLD LYME, CT

PROJECT	DATE	SHEET NO.	1	OF 14
717-10	3/16/09			

SCALE: 1"=30'



- NOTES:**
- NO PROPOSED WORK WILL TAKE PLACE WITHIN FLOOD HAZARD ZONE. PROPOSED ACTIVITIES APPROXIMATELY 200' AWAY FROM FLOOD HAZARD ZONE.
 - THE DEPICTED SIGHT LINES SHALL BE CLEARED AND MAINTAINED AS REQUIRED TO PROVIDE THE MINIMUM SIGHT DISTANCE NOTED.



ZONING COMPLIANCE TABLE		
ZONE: RU-80	REQUIRED	PROVIDED
MINIMUM LOT AREA	80,000 SF (1.84 AC)	1,109,306 SF (25.46 AC)
WETLANDS/WATER COURSE RESTRICTIONS	50%	6.4 %
MAXIMUM BUILDING STORIES	2 1/2	1
MAXIMUM BUILDING HEIGHT	35 FT	< 35 FT
MINIMUM FRONT YARD SETBACK	50 FT	> 50 FT
MINIMUM REAR YARD SETBACK	35 FT	> 35 FT
MINIMUM OTHER YARD SETBACK	35 FT	> 35 FT
MAXIMUM FLOOR AREA	15% LOT AREA	0.4% LOT AREA
MAXIMUM LOT COVERAGE BY BUILDINGS	10% LOT AREA	0.4% LOT AREA
MAXIMUM TOTAL LOT COVERAGE	30% LOT AREA	7.0% LOT AREA

PARKING SUMMARY TABLE PROPOSED OLD LYME BUS PARKING LOT						
Vehicle Type	Vehicle Dimensions		Parking Space Dimensions		# of Spaces	
	Length	Width	Length	Width	Required	Provided
Student Transportation Vehicles						
Type I Bus	33'-4"	9'-8"	40'-0"	12'-0"	19	23
35 Passenger Bus	24'-5"	9'-7"	40'-0"	12'-0"	1	
Type II Bus	19'-9"	9'-6"	25'-0"	12'-0"	3	3
Wheelchair Van	16'-8"	7'-6"	20'-0"	10'-0"	2	4
Car	-	-	20'-0"	10'-0"	2	
Employee Vehicles						
Regular Parking Space	-	-	18'-0"	9'-0"	22	24
Handicap Parking Space	-	-	18'-0"	16'-0"	1	1

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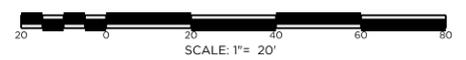
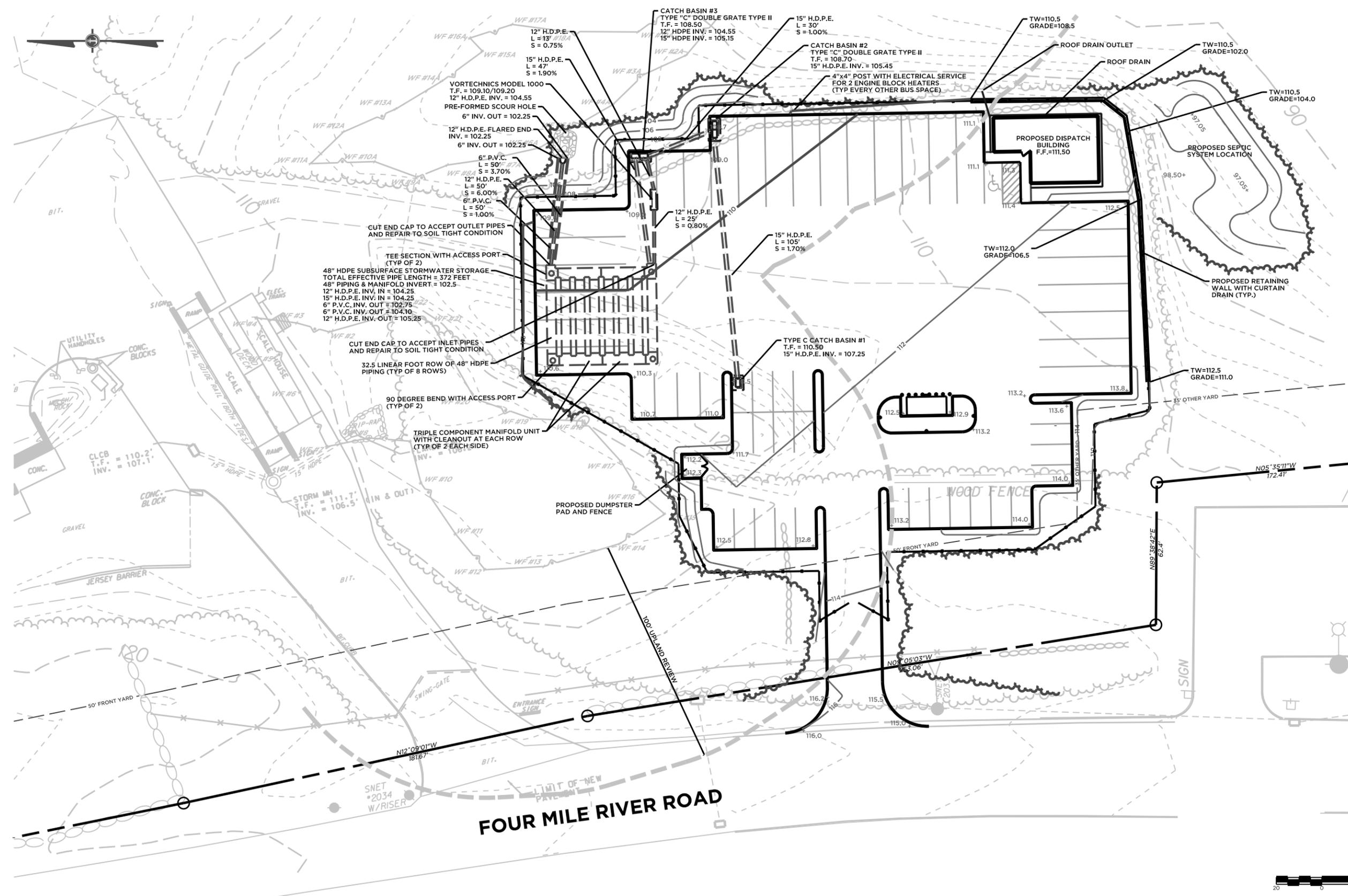
PROJECT: SCHOOL BUS PARKING FACILITY
PREPARED FOR: TOWN OF OLD LYME
SITE LAYOUT & GRADING PLAN
109 FOUR MILE RIVER ROAD, OLD LYME, CT

REVISIONS:

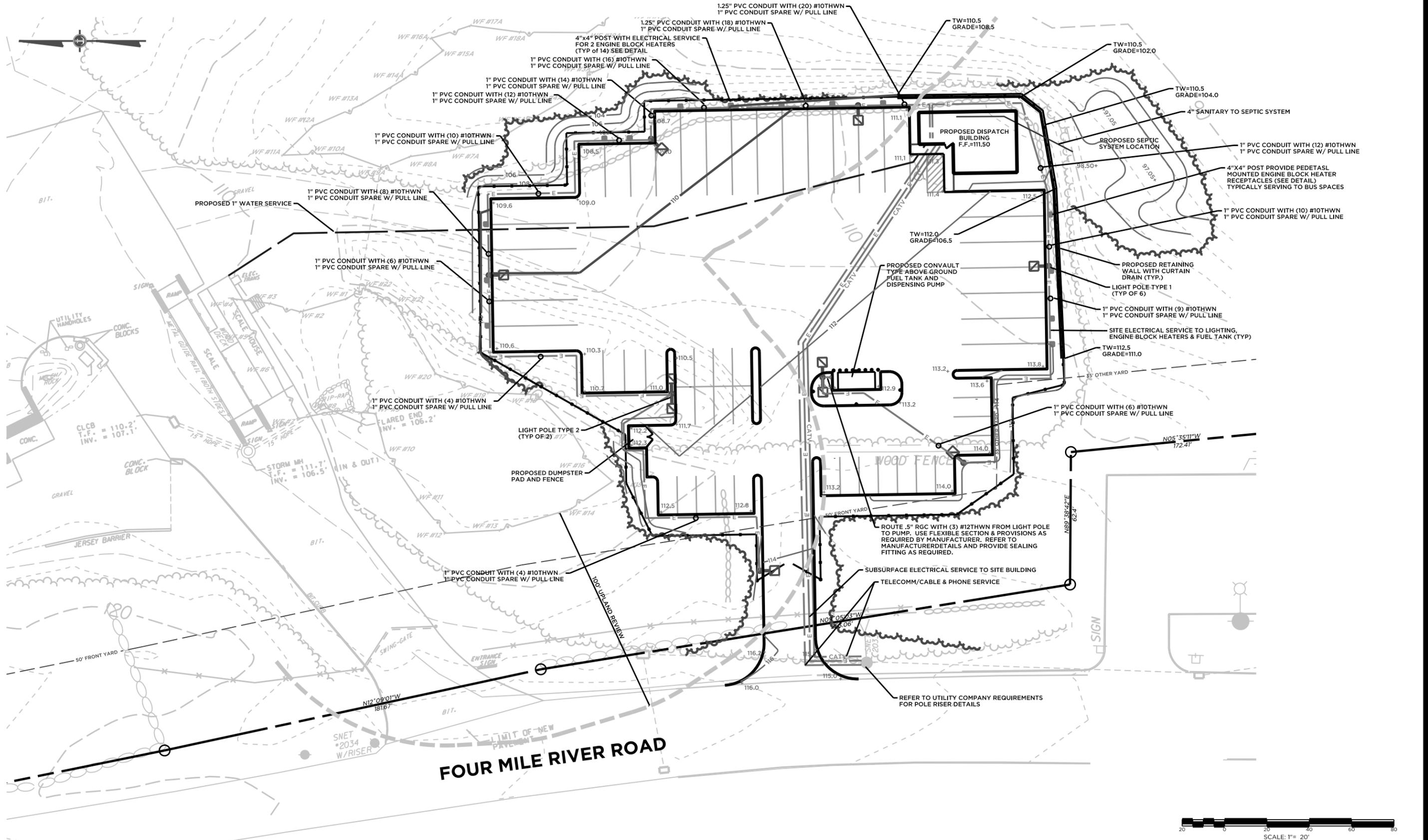
5/15/09	
6/1/09	
6/8/09	
9/30/09	

PROJECT: 717-10 DATE: 3/16/09 SHEET NO. 2 OF 14

SCALE: 1"=20'



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		PROJECT: 717-10 DATE: 3/16/09 SHEET NO. 3 OF 14	
PROJ. ENGINEER: MKG PROJ. MANAGER: MNB OFFICE REVIEW: MNB		SCHOOL BUS PARKING FACILITY PREPARED FOR TOWN OF OLD LYME DRAINAGE PLAN 109 FOUR MILE RIVER ROAD, OLD LYME, CT	
REVISIONS 5/15/09 6/7/09 6/8/09 9/30/09		SCALE: 1"=20'	



NOTES:

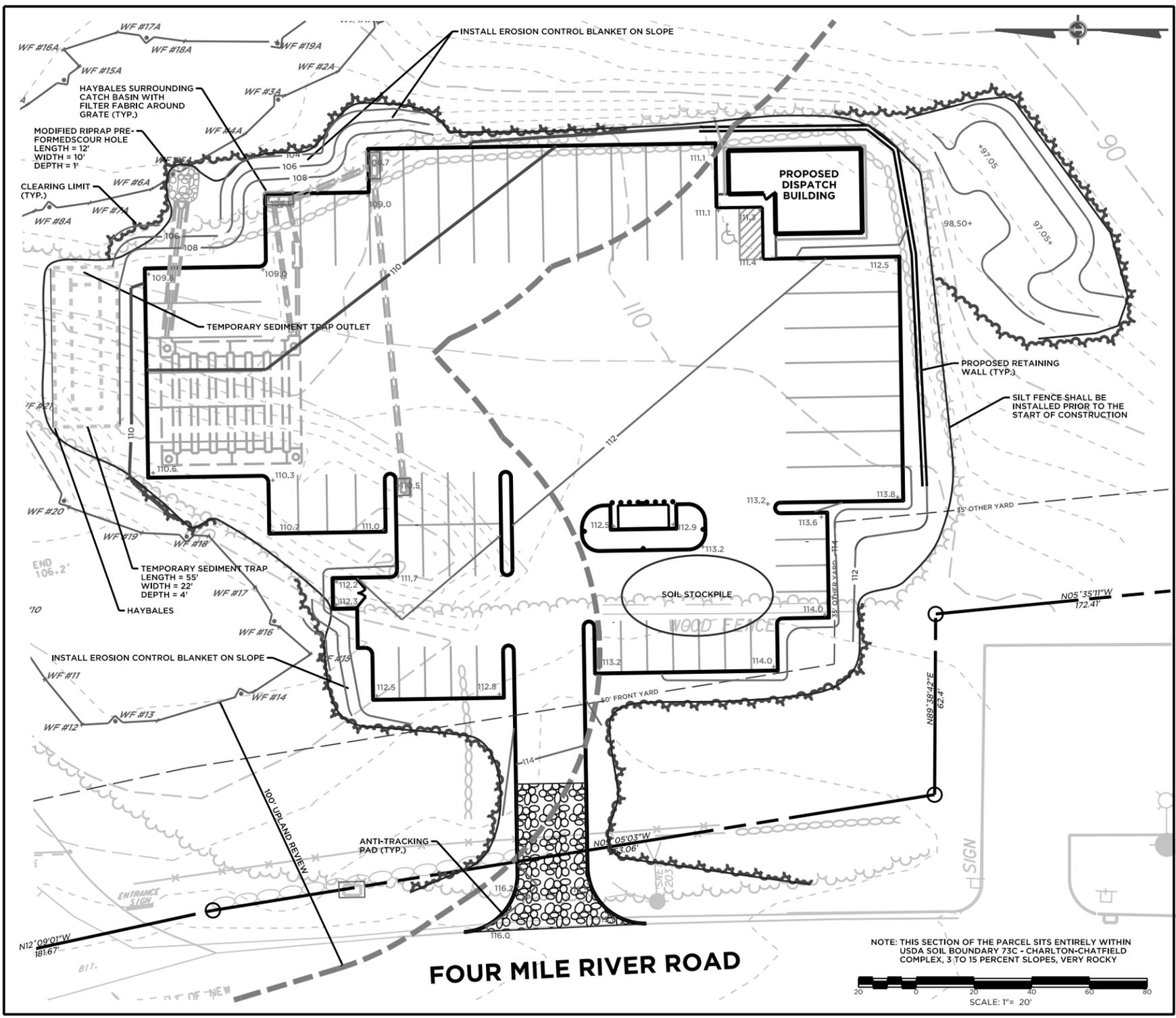
1. ALL SITE UTILITIES TO BE LOCATED UNDERGROUND
2. SITE LIGHTING HAS BEEN DESIGNED TO PROVIDE A MINIMUM ILLUMINATION LEVEL OF 0.25 FOOT CANDLES IN ACCESS DRIVE, PARKING LOT AND IN PEDESTRIAN AREAS.



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Civil Engineering		Environmental Consulting		Land Surveying		Construction Management	
PROJ. ENGINEER	MRG	SCHOOL BUS PARKING FACILITY		PREPARED FOR			
PROJ. MANAGER	MNB	TOWN OF OLD LYME		SCHOOL BUS PARKING FACILITY			
OFFICE REVIEW	MNB	109 FOUR MILE RIVER ROAD		OLD LYME, CT			
REVISIONS		PROJECT	DATE	SHEET NO.		OF	
5/15/09		717-10	3/16/09	4	14		
6/1/09							
6/8/09							
9/30/09							
SCALE: 1"=20'							



EROSION & SEDIMENT CONTROL PLAN:

1. THE LIMIT OF CLEARING AND EROSION CONTROL LINE SHALL BE STAKED IN THE FIELD AND INSPECTED BY THE TOWN OF OLD LYME'S ENGINEER PRIOR TO ANY SITE DISTURBANCE.
2. ALL EROSION AND CONTROL MEASURES SHALL BE INSTALLED AT THE PROJECT SITE PRIOR TO CONSTRUCTION WHEREVER POSSIBLE.
3. AN ANTI-TRACKING APRON WILL BE INSTALLED AT THE ENTRANCE TO THE CONSTRUCTION SITE IN ORDER TO PREVENT THE TRANSPORT OF SEDIMENTS OFF THE CONSTRUCTION SITE BY TRUCK AND CONSTRUCTION EQUIPMENT TRAFFIC. THE SURROUNDING ROAD SURFACES SHALL BE SWEEPED AS REQUIRED.
4. CATCH BASINS WITHIN THE PROJECT AREA, IF ANY, WILL BE PROTECTED WITH HAYBALES THROUGHOUT THE CONSTRUCTION PERIOD. IN ADDITION, THE CATCH BASIN GRATES SHALL BE WRAPPED IN FILTER FABRIC. THE HAYBALES AND FILTER FABRIC SHALL REMAIN IN PLACE UNTIL THE AREAS DISTURBED DURING THE CONSTRUCTION PHASES ARE STABILIZED.
5. AN EROSION CONTROL SYSTEM SHALL BE INSTALLED AROUND ALL ON-SITE STOCKPILES OF SOIL.
6. A TEMPORARY SILTATION BASIN SHALL BE CONSTRUCTED PRIOR TO THE START OF CONSTRUCTION. STORMWATER RUNOFF FROM THE AREA SURROUNDING THE ON-SITE WETLANDS SHALL BE DIRECTED TOWARD THE BASIN IN ORDER TO MINIMIZE THE POTENTIAL FOR SEDIMENT RELEASE INTO THE WETLANDS.
7. DUST CONTROL MEASURES SHALL BE APPLIED THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.

EROSION & SEDIMENT CONTROL NOTES:

1. CONSTRUCTION WILL COMMENCE IN THE SPRING OF 2009 AND WILL BE COMPLETED IN THE FALL OF 2009, WEATHER PERMITTING.
2. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE TOWN PRIOR TO CONSTRUCTION.
3. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", DATED 2002, AS AMENDED AND THE TOWN OF OLD LYME REGULATIONS.
4. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED OR REPLACED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD AS NECESSARY OR AS REQUIRED BY THE ENGINEER OR THE TOWN OF OLD LYME.
5. SEDIMENT REMOVED FROM ANY CONTROL STRUCTURES SHALL BE DISPOSED OF IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN.
6. ADDITIONAL EROSION CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY OR REQUIRED BY THE ENGINEER OR THE TOWN OF OLD LYME.
7. THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING ALL EROSION AND SEDIMENTATION CONTROL DEVICES AS SHOWN ON THESE PLANS OR AS ORDERED BY THE ENGINEER.
8. ALL DISTURBED AREAS ARE TO BE RAKED, SEEDED AND FERTILIZED PER "TURF ESTABLISHMENT" SPECIFICATION IN CT DOT 816, AT THE COMPLETION OF PROJECT.
9. AREAS OUTSIDE OF PAVED AREAS, WALKS, AND BUILDINGS ARE TO RECEIVE A MINIMUM 4" OF TOPSOIL OR ROLLED GRAVEL.
10. THE FOLLOWING DATES FOR SEEDING SHALL BE USED:
 SPRING: APRIL 15 TO JUNE 15
 FALL: AUGUST 15 TO SEPTEMBER 15

11. THE FOLLOWING GRASS SEED MIXTURES SHALL BE APPLIED AT A RATE NO LESS THAN 100LBS PER ACRE:

SPECIES	PROPORTION BY WEIGHT (POUNDS)	MINIMUM PURITY (PERCENT)	MINIMUM GERMINATION (PERCENT)
CREeping RED FESCUE (FESTUCA REBRA)	50	98	85
K-31 TALL FESCUE (FESTUCA ARUNDINACEA VAR. KENTUCKY 31)	20	98	85
PERENNIAL RYEGRASS (LOLIUM PERENNE)	25	98	90
ALSIKE CLOVER (TRIFOLIUM HYBRIDUM)	5	96	85

12. TEMPORARY GRASS SEEDING, IF NECESSARY, SHALL BE PERENNIAL RYE GRASS (LOLIUM PERENNE) APPLIED AT A RATE OF 100 LBS. PER ACRE.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE WORK TO BE PERFORMED.
2. THE CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS OF ALL LOCAL AGENCIES OF THE TOWN OF OLD LYME.

SEQUENCE OF CONSTRUCTION:

1. COORDINATE AND COMPLETE A PRE-CONSTRUCTION MEETING WITH TOWN, REGULATORY AGENCIES, AND TOWN'S ENGINEER. RESPONSIBLE PARTIES TO BE IDENTIFIED AND EMERGENCY PHONE NUMBERS PROVIDED.
2. INSTALL EROSION CONTROL MEASURES, TEMPORARY SILTATION BASIN AND ANTI-TRACKING APRON AT LOCATION INDICATED ON PLANS.
3. CLEAR AND GRUB AREAS AS REQUIRED.
4. EXCAVATE FOR PROPOSED DRIVEWAYS, FOUNDATIONS & UTILITIES.
5. CONSTRUCTION OF PROPOSED DISPATCH BUILDING & STORMWATER MANAGEMENT SYSTEM.
6. INSTALLATION OF SUBSURFACE SEWAGE DISPOSAL SYSTEM.
7. FINISH GRADE SITE. INSTALL BITUMINOUS CONCRETE PAVEMENT & CURBING WITHIN PARKING LOT AREA. INSTALL PROPOSED LANDSCAPING. APPLY SEED MIXTURE, MULCH AND FERTILIZER TO ALL UNPAVED DISTURBED AREAS.
8. REMOVE EROSION AND SEDIMENTATION CONTROLS WHEN PERMANENT VEGETATIVE COVER IS ESTABLISHED.

STORM WATER FACILITY OPERATION AND MAINTENANCE PROGRAM:

- EXISTING AND PROPOSED TRAP HOOD EQUIPPED CATCH BASIN INLETS
1. INSPECT SEDIMENT DEPTH, PUMP OUT IF GREATER THAN 1 FOOT - QUARTERLY
 2. PUMP OUT SEDIMENT AND ACCUMULATED LIQUID CONTAMINANTS - ANNUALLY
- PROPOSED VORTECHNICS UNIT
1. INSPECT SEDIMENT DEPTH AND PUMP OUT IF WITHIN 12" TO 18" OF THE DRY WEATHER WATER SURFACE ELEVATION - QUARTERLY
 2. PUMP OUT SEDIMENT AND ACCUMULATED LIQUID CONTAMINANTS - ANNUALLY
 3. INSPECT FLOATABLE LIQUID DEPTH AND PUMP OUT IF THICKNESS REACHES 1 INCH OR MORE - QUARTERLY.
 4. IN CASE OF OIL SPILL AT SITE, INSPECT UNIT AND PUMP OUT ANY ACCUMULATED FLOATABLES.
- PROPOSED SUBSURFACE STORMWATER STORAGE SYSTEM
1. INSPECT SUBSURFACE PIPING FOR EVIDENCE OF SEDIMENT COLLECTION, PUMP OUT IF DEPTH IS GREATER THAN 6" - ANNUALLY
 2. INSPECT OUTLET FOR EVIDENCE OF BLOCKAGES, CLEAR ANY BLOCKAGES - QUARTERLY
- WINTER SAND/SALT APPLICATION
1. APPLY SAND SPARINGLY
 2. AVOID USE OF ANY DE-ICING SALT, IF POSSIBLE
 3. IF NECESSARY FOR SAFETY, USE CALCIUM CHLORIDE AT MINIMUM APPLICATION RATE
 4. AVOID THE USE OF SODIUM CHLORIDE

NOTE: THIS SECTION OF THE PARCEL SITS ENTIRELY WITHIN USDA SOIL BOUNDARY 73C - CHARLTON-CHATFIELD COMPLEX, 3 TO 15 PERCENT SLOPES, VERY ROCKY

SCALE: 1" = 20'

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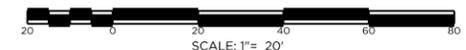
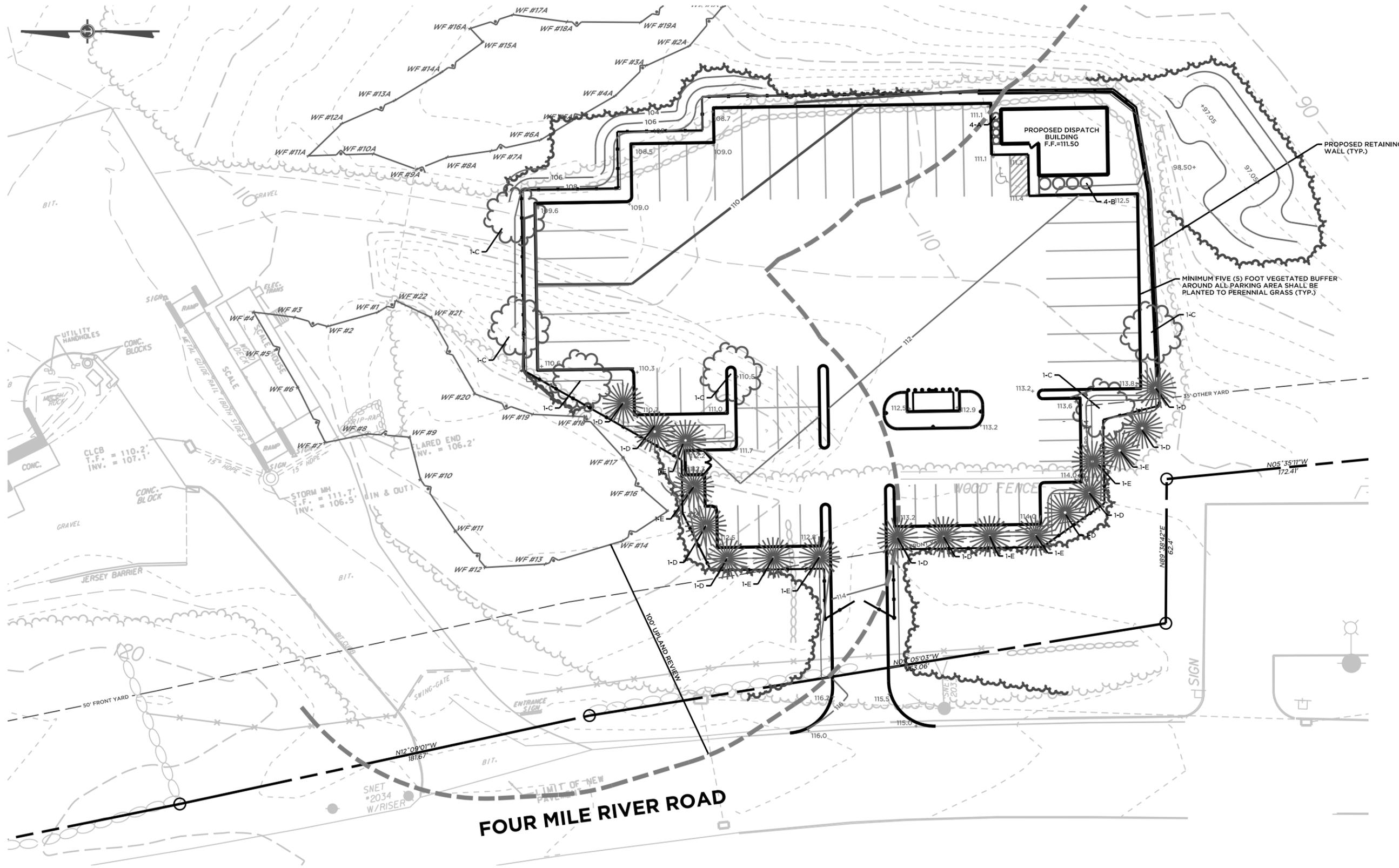
EROSION & SEDIMENT CONTROL PLAN

109 FOUR MILE RIVER ROAD, OLD LYME, CT

PROJ. ENGINEER	MIK
PROJ. MANAGER	MNB
OFFICE REVIEW	MNB

REVISIONS	
5/15/09	
6/1/09	
6/8/09	
9/30/09	

SCALE: 1"=20'	PROJECT: 717-10	DATE: 3/16/09	SHEET NO. 5 OF 14
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SITE PLANTING SCHEDULE					
LABEL	TOTAL	COMMON NAME	LATIN NAME	SIZE	ROOT
A	4	SHAMROCK INKBERRY	ILEX GLABRA 'SHAMROCK'	3 GAL.	CG
B	4	SNOWMOUND SPIREA	SPIREA NIPPONICA 'SNOWMOUND'	3 GAL.	CG
C	6	PIN OAK	QUERCUS PALUSTRIS	10' MIN.	B&B
D	10	WHITE PINE	PINUS STROBUS	6' MIN.	B&B
E	8	NORWAY SPRUCE	PICEA ABIES	6' MIN.	B&B



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PROJ. MANAGER MNB
OFFICE REVIEW MNB

REVISIONS

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6/8/09	
9/30/09	

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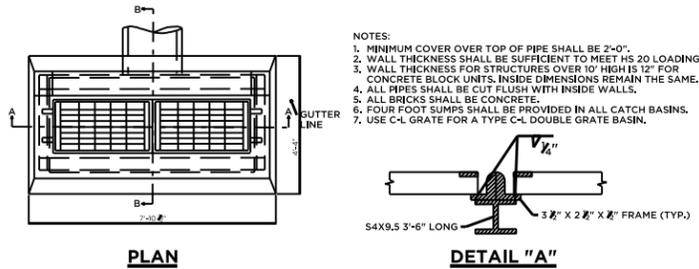
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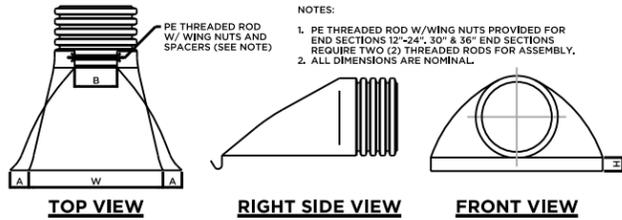
LANDSCAPING PLAN

109 FOUR MILE RIVER ROAD, OLD LYME, CT

PROJECT	DATE	SHEET NO.	OF
717-10	3/16/09	6	14

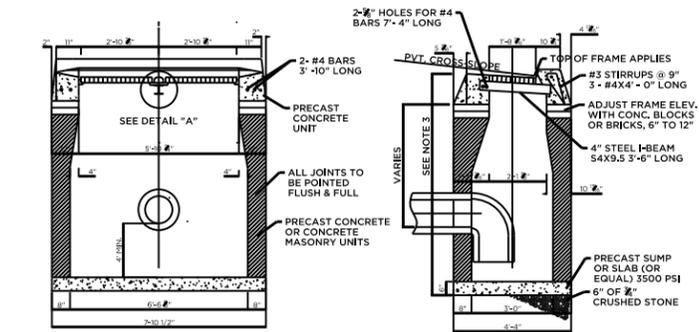


- NOTES:
1. MINIMUM COVER OVER TOP OF PIPE SHALL BE 2'-0".
 2. WALL THICKNESS SHALL BE SUFFICIENT TO MEET HS 20 LOADING.
 3. WALL THICKNESS FOR STRUCTURES OVER 10' HIGH IS 12" FOR CONCRETE BLOCK UNITS. INSIDE DIMENSIONS REMAIN THE SAME.
 4. ALL PIPES SHALL BE CUT FLUSH WITH INSIDE WALLS.
 5. ALL BRICKS SHALL BE CONCRETE.
 6. FOUR FOOT SUMPS SHALL BE PROVIDED IN ALL CATCH BASINS.
 7. USE C-4 GRATE FOR A TYPE C-4 DOUBLE GRATE BASIN.

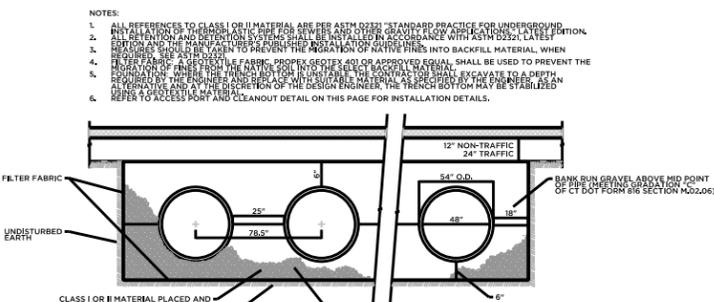


PART #	PIPE SIZE	A	B (MAX.)	H	L	W
1210NP	12"	6.5"	10.00"	6.5"	25.00"	29.00"
1510NP	15"	6.5"	10.00"	6.5"	25.00"	29.00"
1810NP	18"	7.5"	15.00"	6.5"	32.00"	35.00"
2410NP	24"	7.5"	18.00"	6.5"	36.00"	45.00"
3015NP	30"	7.5"	12.00"	8.6"	58.00"	63.00"
3615NP	36"	7.5"	25.00"	8.6"	58.00"	63.00"

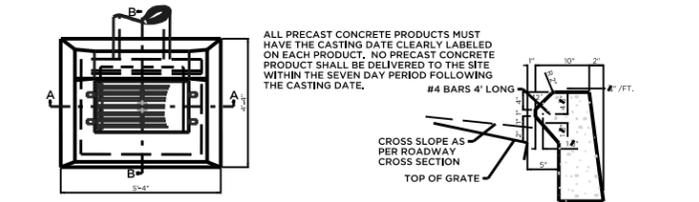
FLARED END DETAIL
NOT TO SCALE



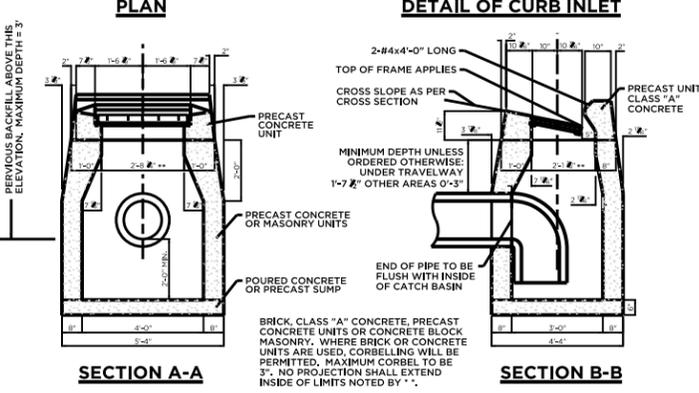
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II
NOT TO SCALE



SUBSURFACE STORMWATER STORAGE
NOT TO SCALE

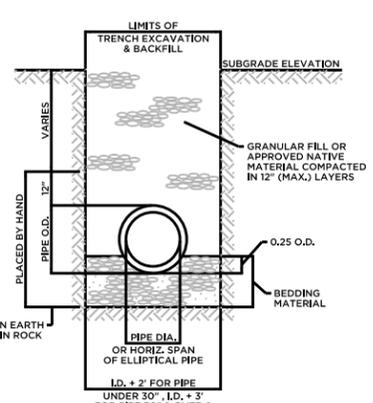


ALL PRECAST CONCRETE PRODUCTS MUST HAVE THE CASTING DATE CLEARLY LABELED ON EACH PRODUCT. NO PRECAST CONCRETE PRODUCT SHALL BE DELIVERED TO THE SITE WITHIN THE SEVEN DAY PERIOD FOLLOWING THE CASTING DATE.



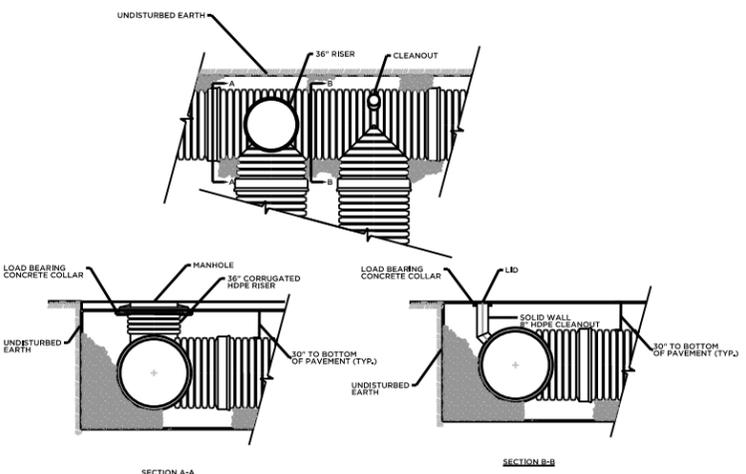
- NOTES:
1. WHERE TYPE "C" CATCH BASIN IS CONSTRUCTED IN PAVEMENT AREA, THE NORMAL CROSS SLOPE OF THE GUTTER SHALL BE VARIED TO MATCH CROSS SLOPE OF GRATE.
 2. WALLS OF ALL CATCH BASINS OVER 10 FEET DEEP TO BE INCREASED TO 12" THICK. INSIDE DIMENSIONS TO REMAIN THE SAME.
 3. THE CATCH BASINS SHOWN ARE TO BE INSTALLED ON PRIVATE PROPERTY ONLY AND NOT WITHIN THE TOWN RIGHT-OF-WAY.

TYPE "C" CATCH BASIN (PRIVATE)
NOT TO SCALE

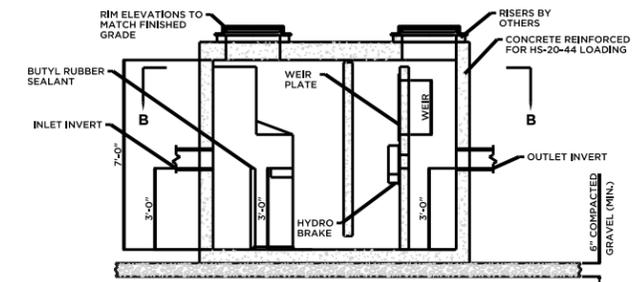
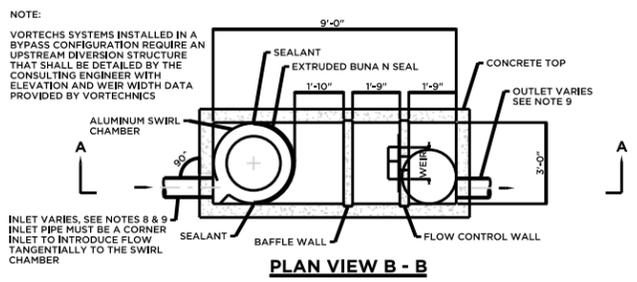


- NOTES:
1. ALL PIPE TO BE RCP CLASS IV UNLESS OTHERWISE SPECIFIED.
 2. USE WATERTIGHT RUBBER GASKETS IN ALL PIPE JOINTS.

TRENCHING & BACKFILLING
NOT TO SCALE



SUBSURFACE STORMWATER STORAGE ACCESS PORT AND CLEANOUT
NOT TO SCALE



VORTECHS MODEL 1000
SCALE: NOT TO SCALE

- NOTE:
- VORTECHS SYSTEMS INSTALLED IN A BYPASS CONFIGURATION REQUIRE AN UPSTREAM DIVERSION STRUCTURE THAT SHALL BE DETAILED BY THE CONSULTING ENGINEER WITH ELEVATION AND WEIR WIDTH DATA PROVIDED BY VORTECHS.
- INLET VARIES. SEE NOTES 8 & 9. INLET PIPE MUST BE A CORNER INLET TO INTRODUCE FLOW TANGENTIALLY TO THE SWIRL CHAMBER.
- NOTES:
1. STORMWATER TREATMENT SYSTEM (SWTS) SHALL HAVE:
 - PEAK TREATMENT CAPACITY: 1.6 CFS
 - SEDIMENT STORAGE: 0.75 CU YD
 - SEDIMENT CHAMBER DIA. 3.0' MIN.
 2. SWTS SHALL BE CONTAINED IN ONE RECTANGULAR STRUCTURE.
 3. SWTS REMOVAL EFFICIENCY SHALL BE DOCUMENTED BASED ON PARTICLE SIZE.
 4. SWTS SHALL RETAIN FLOATABLE AND TRAPPED SEDIMENT UP TO AND INCLUDING PEAK TREATMENT CAPACITY.
 5. SWTS INVERTS IN AND OUT ARE TYPICALLY AT THE SAME ELEVATION.
 6. SWTS SHALL NOT BE COMPROMISED BY EFFECTS OF DOWNSTREAM TAILWATER.
 7. SWTS SHALL HAVE NO INTERNAL COMPONENTS THAT OBSTRUCT MAINTENANCE ACCESS.
 8. INLET PIPE MUST BE PERPENDICULAR TO THE STRUCTURE.
 9. PIPE ORIENTATIONS MAY VARY; SEE SITE PLAN FOR ASSEMBLY AND LOCATION.
 10. PURCHASER SHALL NOT BE RESPONSIBLE FOR ASSEMBLY OF UNIT.
 11. MANHOLE FRAMES AND PERFORATED COVERS SUPPLIED WITH SYSTEM, NOT INSTALLED.
 12. PURCHASER TO PREPARE EXCAVATION AND PROVIDE CRANE FOR OFF-LOADING & SETTING AT TIME OF DELIVERY.
 13. CONTACT VORTECHS INC. @ (207) 885-9630 FOR ORDERING INFORMATION.

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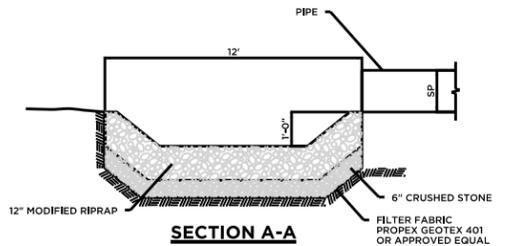
PROJ. ENGINEER: MKG
PROJ. MANAGER: MNB
OFFICE REVIEW: MNB

SCHOOL BUS PARKING FACILITY
PREPARED FOR
TOWN OF OLD LYME
DRAINAGE DETAILS
109 FOUR MILE RIVER ROAD
OLD LYME, CT

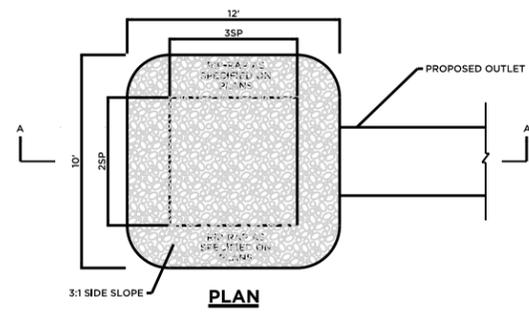
REVISIONS	
5/15/09	
6/1/09	
6/8/09	
9/30/09	

PROJECT: 717-10	DATE: 3/16/09	SHEET NO. 8 OF 14
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SCALE: NOT TO SCALE



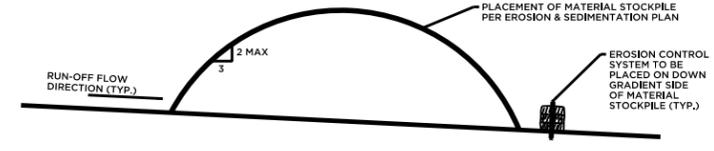
SECTION A-A



PLAN

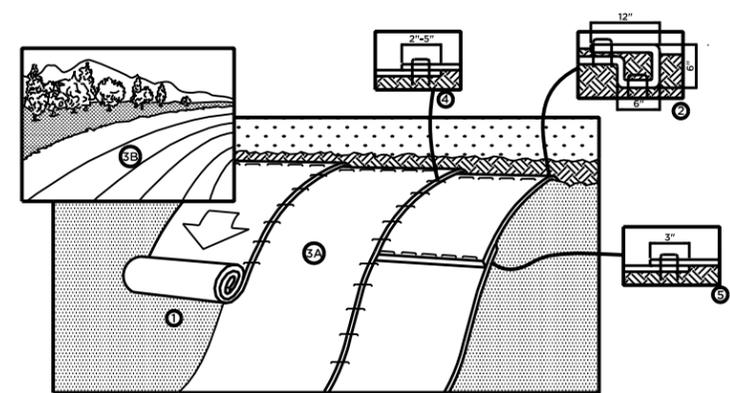
PREFORMED SCOUR HOLE

NOT TO SCALE



SOIL STOCKPILE DETAIL

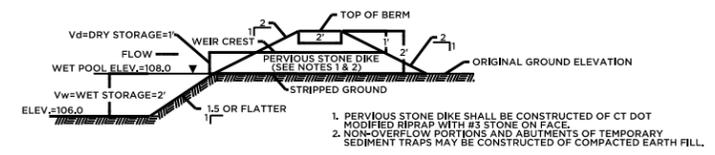
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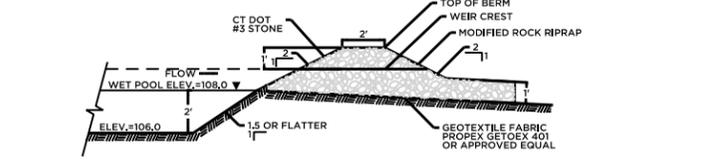
- NOTES:**
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING AND NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S 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 RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
 3. ROLL THE RECP'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
 4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON RECP'S TYPE.
 5. CONSECUTIVE RECP'S SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROX. 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.
 6. RECP-TO BE NORTH AMERICAN GREEN SC-150 OR APPROVED EQUAL.

EROSION CONTROL BLANKET SLOPE INSTALLATION

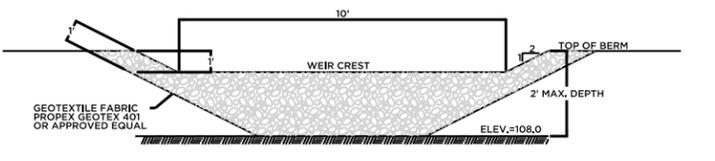
NOT TO SCALE



TYPICAL BERM



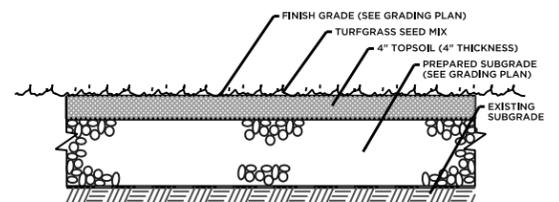
OUTLET CROSS SECTION



OUTLET PROFILE

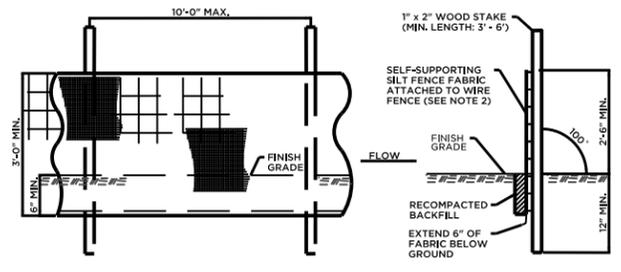
TEMPORARY SEDIMENT TRAP

NOT TO SCALE



TURF ESTABLISHMENT

NOT TO SCALE



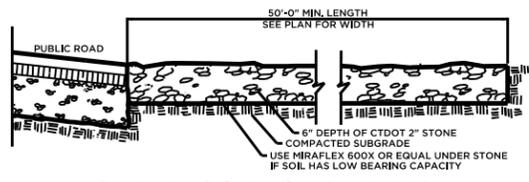
ELEVATION

SECTION

- NOTES:**
1. INSTALL SILT FENCE & WOOD STAKES AS RECOMMENDED BY MANUFACTURER.
 2. SILT FENCE SUBJECT TO HEAVY LOADS SHALL BE REINFORCED WITH FARM FENCING & STEEL POSTS (0.5 # STEEL/L.F.). THE MINIMUM POST LENGTH SHALL BE 5'-0".
 3. SILT FENCE FABRIC SHALL BE A PERVIOUS SHEET OF WOVEN PROPYLENE, NYLON, POLYESTER OR POLYETHYLENE FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER.

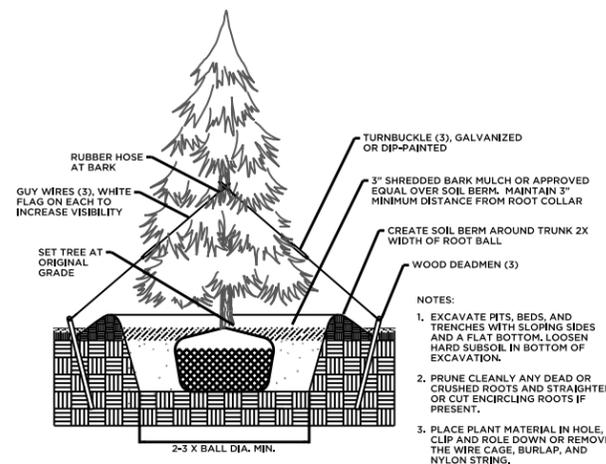
SILT FENCE

NOT TO SCALE



ANTI-TRACKING PAD DETAIL

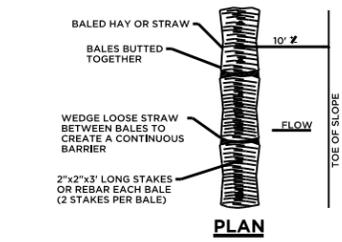
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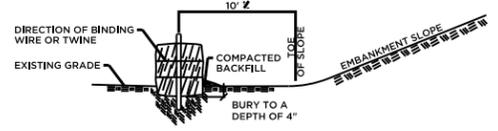
CONIFEROUS TREE PLANTING

NOT TO SCALE

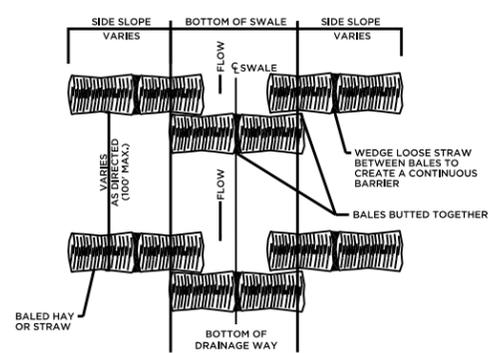
- NOTES:**
1. EXCAVATE PITS, BEDS, AND TRENCHES WITH SLOPING SIDES AND A FLAT BOTTOM. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
 2. PRUNE CLEANLY ANY DEAD OR CRUSHED ROOTS AND STRAIGHTEN OR CUT ENCIRCLING ROOTS IF PRESENT.
 3. PLACE PLANT MATERIAL IN HOLE. CLIP AND ROLL DOWN OR REMOVE THE WIRE CAGE, BURLAP, AND NYLON STRING.



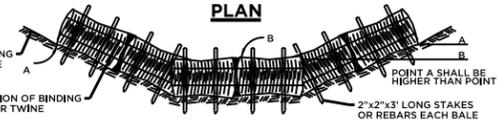
PLAN



SECTION AT TOE OF SLOPE



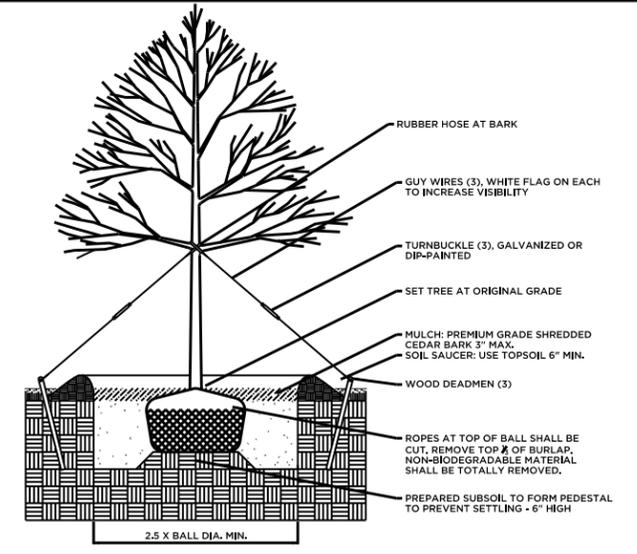
PLAN



SECTION AT SWALE

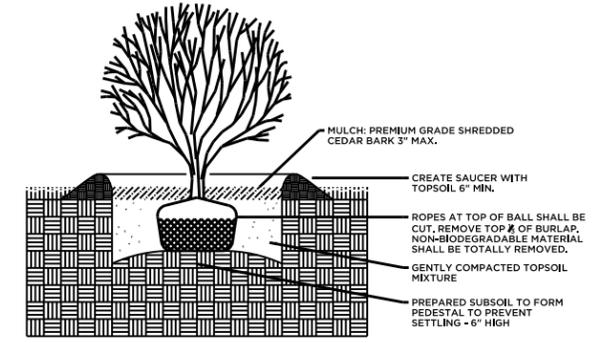
HAY BALES

NOT TO SCALE



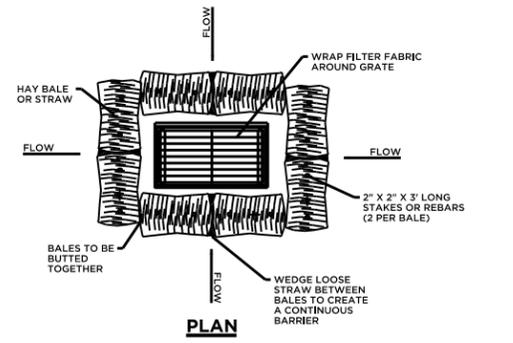
DECIDUOUS TREE PLANTING

NOT TO SCALE



SHRUB PLANTING

NOT TO SCALE

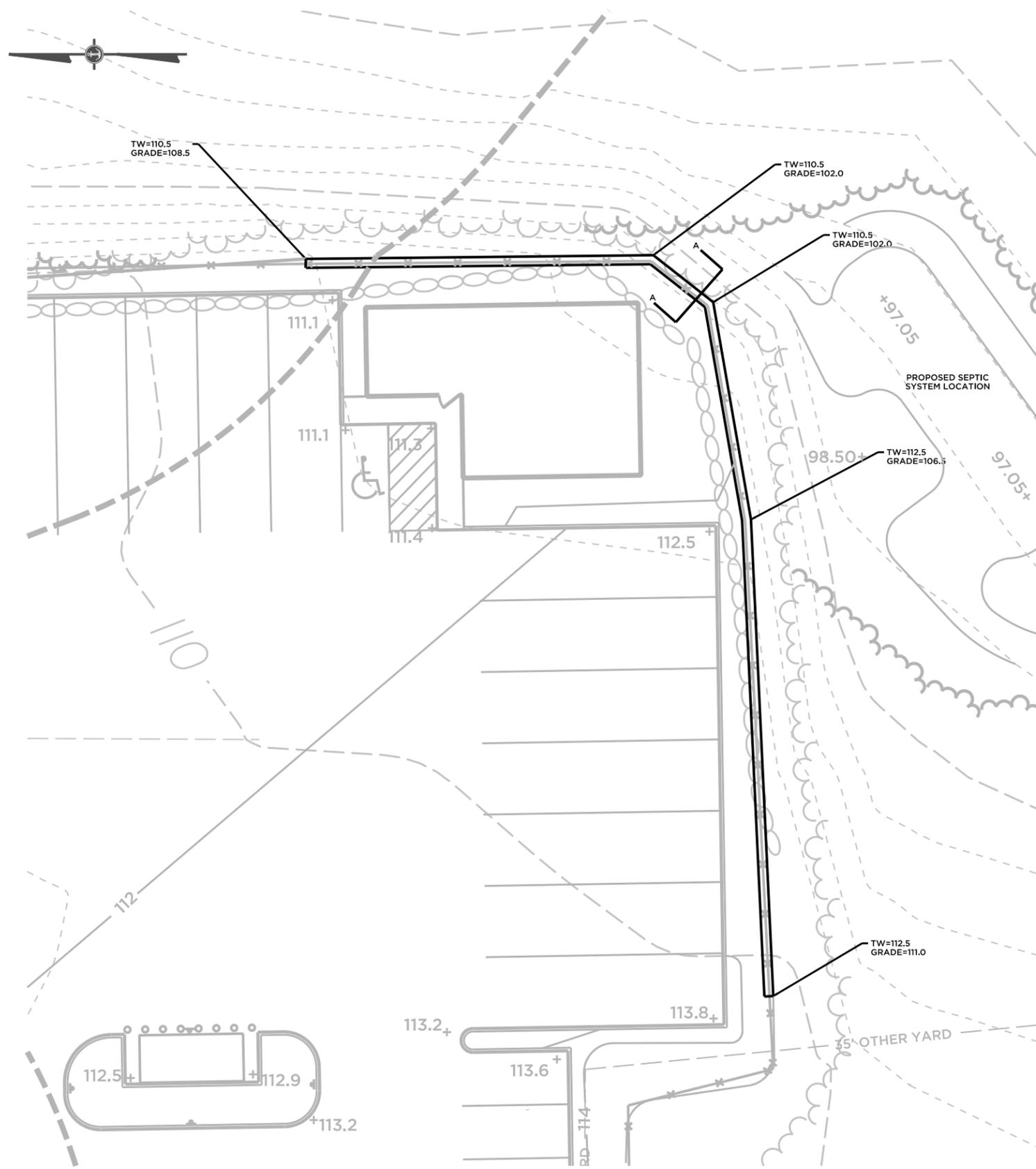


PLAN

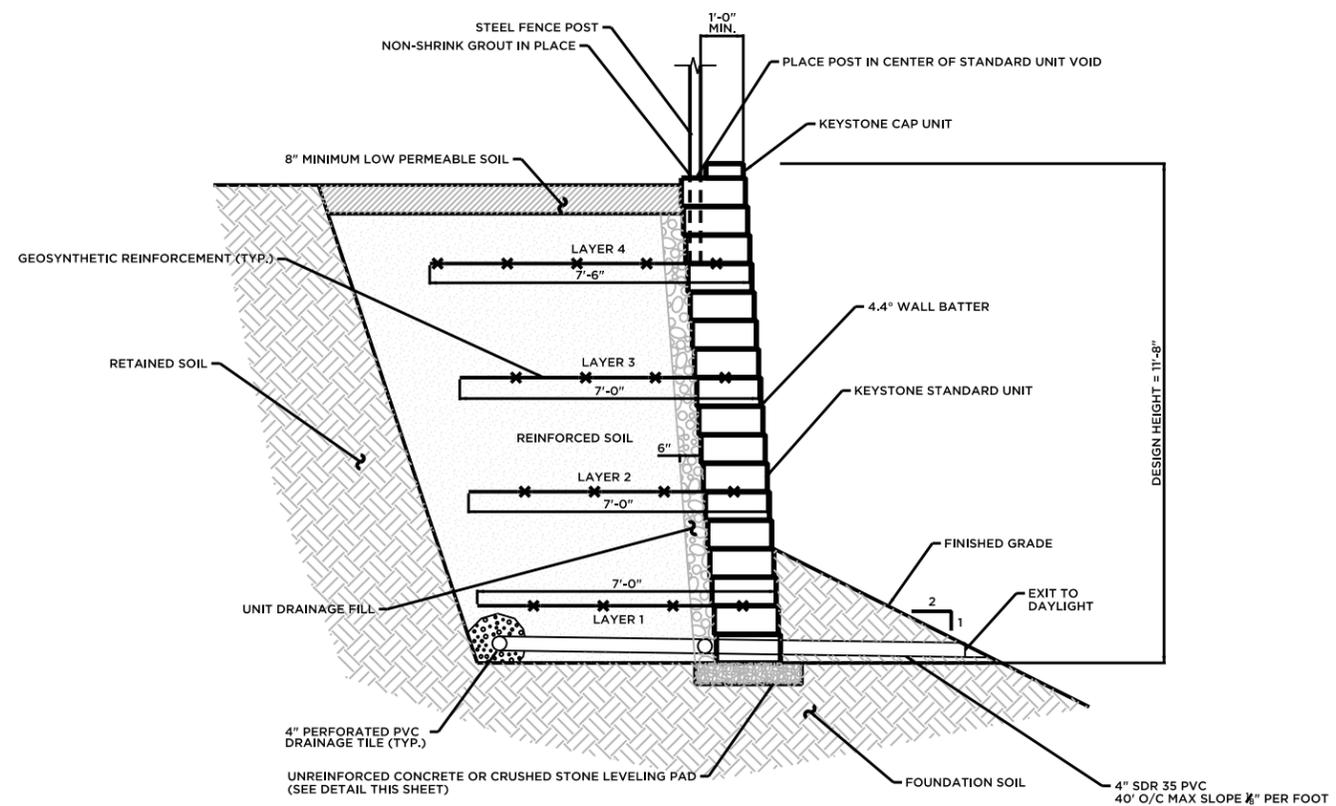
HAY BALES AROUND CATCH BASIN

NOT TO SCALE

		SCHOOL BUS PARKING FACILITY PREPARED FOR TOWN OF OLD LYME E&S AND LANDSCAPE DETAILS	
		109 FOUR MILE RIVER ROAD OLD LYME, CT	
PROJ. ENGINEER MKG PROJ. MANAGER MNB OFFICE REVIEW MNB	5/15/09 6/1/09 6/8/09 9/30/09	DATE 3/16/09	SHEET NO. 9 OF 14

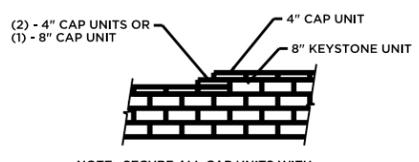


PLAN
SCALE: 1" = 10'



REINFORCED WALL SECTION A-A

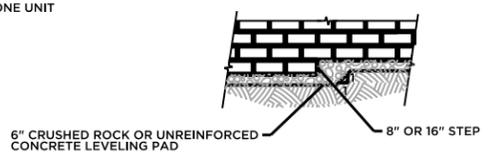
SCALE: 1/2" = 1'-0"



NOTE: SECURE ALL CAP UNITS WITH KEYSTONE KAPSEAL OR EQUAL

WALL CAP STEP DETAIL

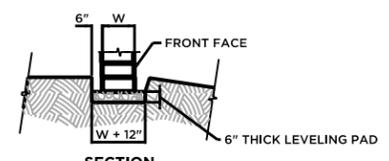
SCALE: 1/2" = 1'-0"



NOTE: THE LEVELING PAD IS TO BE CONSTRUCTED OF CRUSHED STONE OR 2000 PSI UNREINFORCED CONCRETE

WALL FOUNDATION STEP DETAIL

SCALE: 1/2" = 1'-0"



NOTE: THE LEVELING PAD IS TO BE CONSTRUCTED OF CRUSHED STONE OR 2000 PSI UNREINFORCED CONCRETE

LEVELING PAD DETAIL

SCALE: 1/2" = 1'-0"

NOTES

- FOUNDATION EXCAVATIONS SHALL EXTEND TO UNDISTURBED NATURAL SOIL DEPOSITS. ALL EXISTING LOOSE MATERIAL, TOPSOIL, FILL, ORGANIC AND OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE AREA TO BE OCCUPIED BY THE WALL AND REPLACED WITH STRUCTURAL FILL. REMOVE UNSUITABLE FOUNDATION SOILS TO THE LATERAL EXTENT OF THE WALLS AND GEOGRIDS. UPON COMPLETION OF THE EXCAVATION, THE NATURAL SOILS SHALL BE COMPACTED WITH A MINIMUM OF TWO PASSES WITH HAND-OPERATED VIBRATORY COMPACTION EQUIPMENT.
- BASE LEVELING PAD SHALL BE CONSTRUCTED OF DENSE GRADED CRUSHED STONE OR CRUSHED GRAVEL. A CONCRETE LEVELING PAD CONSISTING OF LEAN UNREINFORCED CONCRETE MAY BE USED AT THE WALL CONTRACTOR'S OPTION.
- GEOSYNTHETIC REINFORCEMENT SHALL BE MARAFI 3XT GEOGRIDS, OR APPROVED EQUAL, AND CONSIST OF GEOGRIDS MANUFACTURED SPECIFICALLY FOR SOIL REINFORCEMENT APPLICATIONS AND SHALL BE MANUFACTURED FROM HIGH TENACITY POLYESTER YARN OR HIGH DENSITY POLYETHYLENE. POLYESTER GEOGRID SHALL BE KNITTED FROM HIGH TENACITY POLYESTER FILAMENT YARN WITH A MOLECULAR WEIGHT EXCEEDING 25,000 Meg/m AND A CARBOXYL END VALUE LESS THAN 30. POLYESTER GEOGRID SHALL BE COATED WITH AN IMPREGNATED PVC COATING THAT RESISTS PEELING, CRACKING, AND STRIPPING.
- CONTRACTOR SHALL SWEEP CLEAN TOP OF ALL PRECAST CONCRETE BLOCKS PRIOR TO SETTING GEOGRID AND NEXT LAYER OF CONCRETE BLOCK.
- UNIT DRAINAGE FILL SHALL CONSIST OF CLEAN 1" MINUS CRUSHED STONE MEETING THE FOLLOWING GRADATION PER ASTM D422. GEOTEXTILE SHALL NOT BE SUBSTITUTED FOR UNIT DRAINAGE FILL.

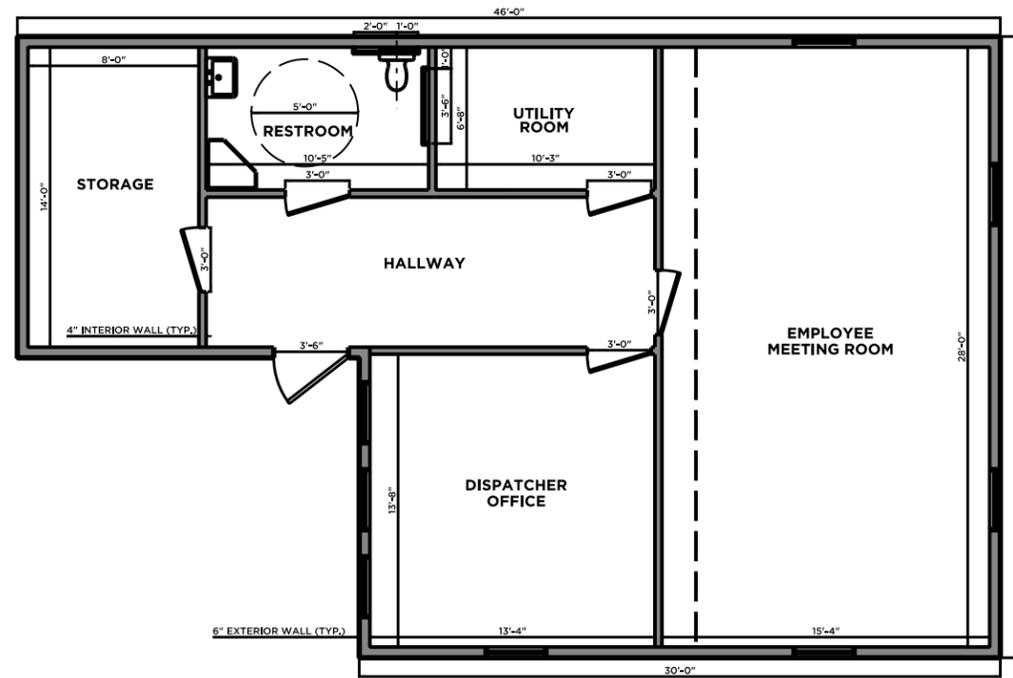
SIEVE SIZE	PERCENT PASSING
1 INCH	100
3/4 INCH	75-100
NO. 4	0-10
NO. 50	0-5
- REINFORCED BACKFILL SHALL CONSIST OF SOIL WITH LESS THAN 35% PASSING THE NO. 200 SIEVE PER ASTM D422 WITH A MAXIMUM SIZE OF 3/4 INCHES AND SHALL BE COMPACTED TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY.
- FOR WALL DESIGN HEIGHTS LESS THAN THE MAXIMUM SHOWN, OMIT LAYERS AS FOLLOWS:
FOR H <= 9' - 2" OMIT LAYER 4
FOR H <= 6' - 8" OMIT LAYERS 3 AND 4

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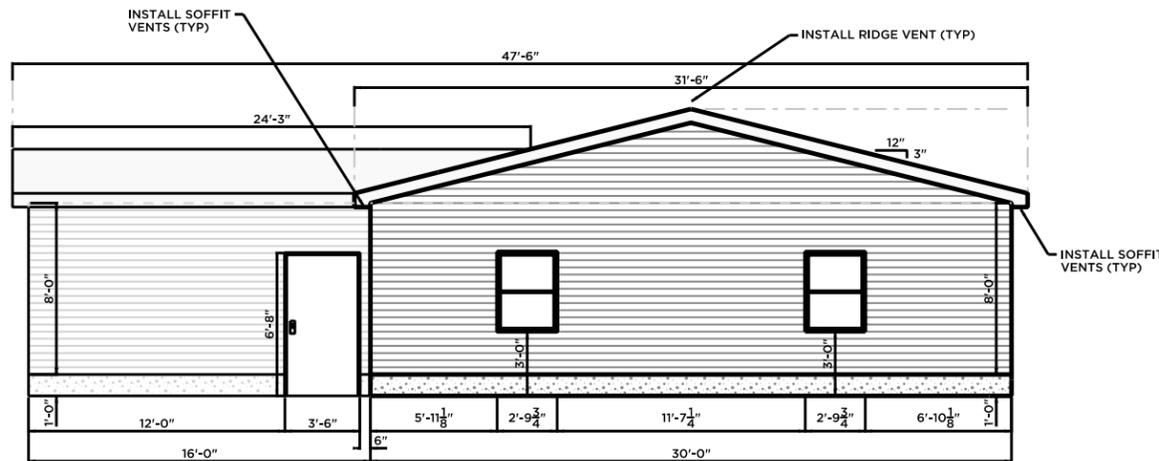
SCHOOL BUS PARKING FACILITY
PREPARED FOR
TOWN OF OLD LYME
RETAINING WALL SECTION & DETAILS
109 FOUR MILE RIVER ROAD, OLD LYME, CT

PROJ. ENGINEER	MRG	PROJ. MANAGER	MNB	DATE	9/30/09
OFFICE REVIEW	MNB	SCALE:	AS NOTED	SHEET NO.	10 OF 14

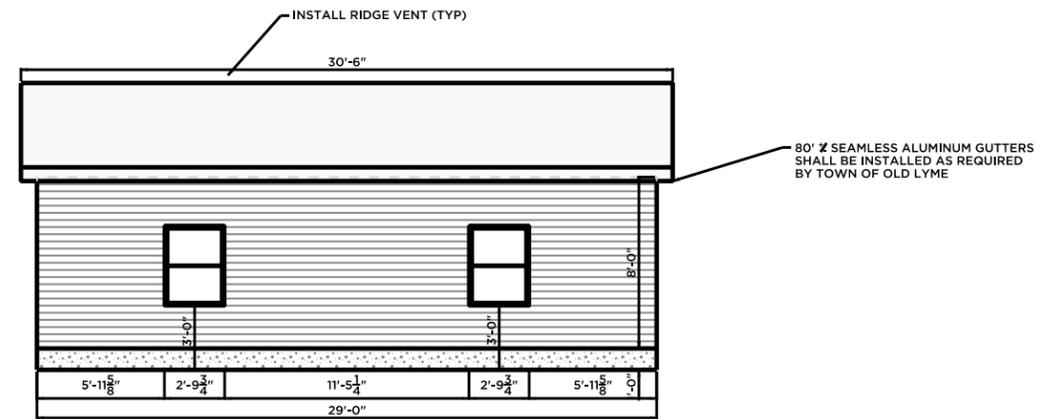


DISPATCH BUILDING FLOOR PLAN

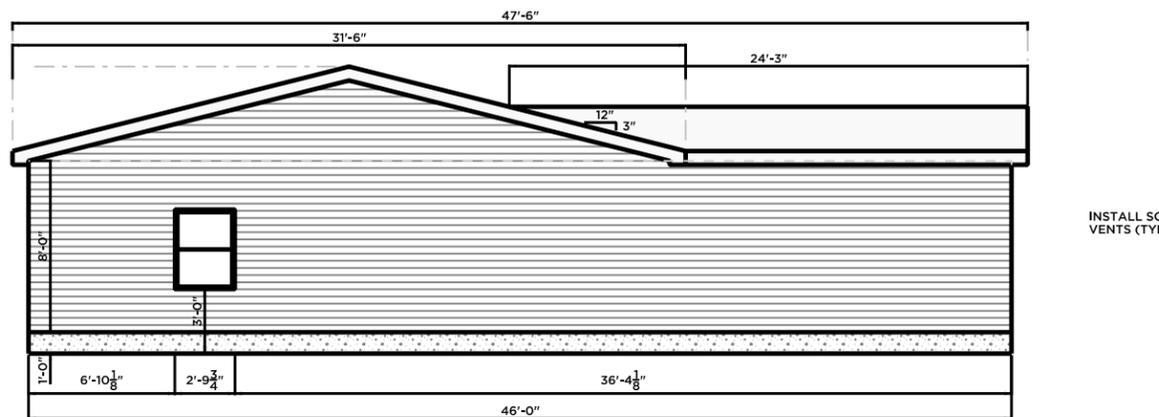
SCALE: 1/8" = 1'-0"



FRONT ELEVATION



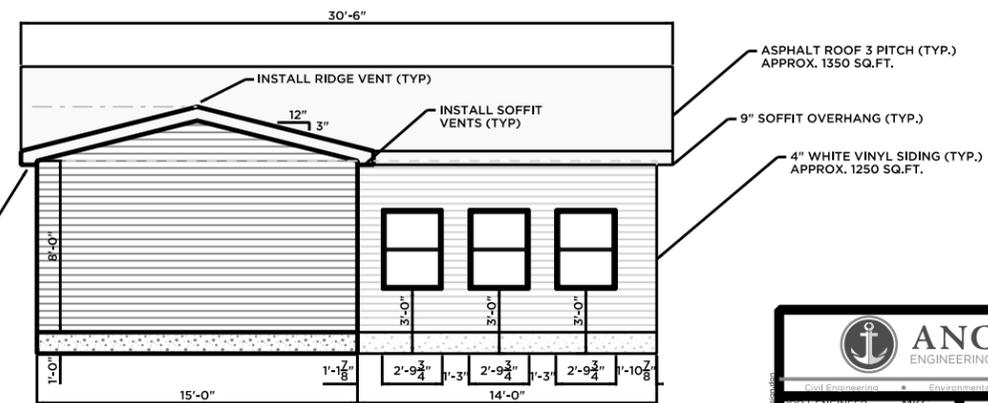
SOUTH ELEVATION



REAR ELEVATION

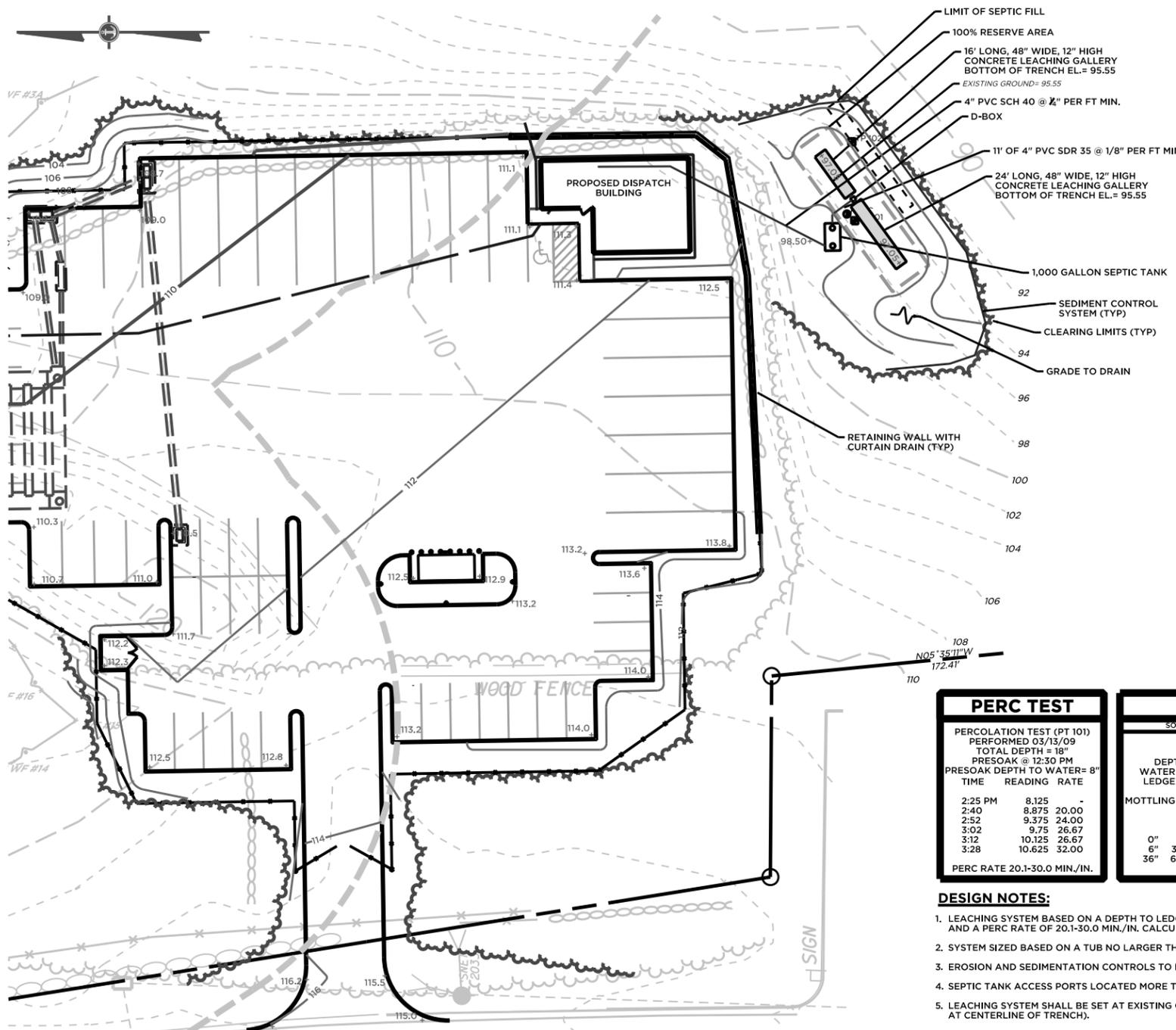
ELEVATIONS

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



NORTH ELEVATION

<p>ANCHOR ENGINEERING SERVICES, INC.</p> <p>41 Sequin Drive Glastonbury, CT 06033 Phone: (860) 633-9770 Fax: (860) 633-9971 www.anchorengr.com</p>		<p>SCHOOL BUS PARKING FACILITY</p> <p>PREPARED FOR TOWN OF OLD LYME</p> <p>FLOOR PLAN & ELEVATIONS</p> <p>109 FOUR MILE RIVER ROAD OLD LYME, CT</p>	
		<p>PROJ. ENGINEER MKG</p> <p>PROJ. MANAGER MNB</p> <p>OFFICE REVIEW MNB</p>	<p>REVISIONS</p> <p>5/15/09</p> <p>6/1/09</p> <p>6/8/09</p> <p>9/30/09</p>
<p>SCALE: AS NOTED</p>		<p>CONSTRUCTION MANAGEMENT</p>	



DESIGN DATA SUMMARY

DEPTH TO RESTRICTIVE:	36" (TP 101)
DEPTH TO LEDGE:	48" (TP 102)
AVERAGE SLOPE:	10.1-15.0%
PERC RATE:	20.1-30.0 MIN./IN.

EFFECTIVE LEACHING AREA (ELA)

ANTICIPATED DAILY OCCUPANTS= 2
 MAXIMUM DAILY OCCUPANTS= 20
 DAILY DESIGN FLOW= 10 GPD/PER EMPLOYEE
 ELA = DESIGN FLOW/ APP. RATE
 TABLE #8 NON-PROBLEMATIC= 220/ 0.9= 244.4 SQ FT
 ELA REQUIRED= 244.4 SQ FT
 PROVIDED: 40' GALLERY TRENCH, 4' STONE TRENCH
 ELA PROVIDED= 248 SQ FT

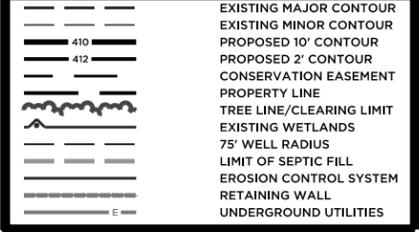
MIN. LEACHING SYSTEM SPREAD (MLSS)

MLSS (IN FEET) = HF x FF x PF
 HYD. FACTOR: 36" TO RESTRICTIVE & 14% SLOPE= 20
 NON-RESIDENTIAL FLOW FACTOR: 244.4 GPD/300= 0.8
 PERC FACTOR: 20.1-30.0 MIN./IN. PERC= 2.0
 MLSS = 20 x 0.8 x 2.0 = 32 LF
 MLSS PROVIDED= 40 LF

SCHEDULE OF INVERTS

INV. AT BUILDING:	97.80
INV. INTO TANK:	96.80
INV. OUT OF TANK:	96.55
INV. INTO D-BOX:	96.25
INV. OUT D-BOX:	96.15
BOTTOM OF TRENCH:	95.55

LEGEND



PERC TEST

PERCOLATION TEST (PT 101)
 PERFORMED 03/13/09
 TOTAL DEPTH = 18"
 PRESOAK @ 12:30 PM
 PRESOAK DEPTH TO WATER= 8"
 TIME READING RATE

2:25 PM	8.125	20.00
2:40	8.875	20.00
2:52	9.375	24.00
3:02	9.75	26.67
3:12	10.125	26.67
3:28	10.625	32.00

PERC RATE 20.1-30.0 MIN./IN.

SOIL TESTING RESULTS

SOIL TESTING OBSERVED BY TOWN OF OLD LYME SANITARIAN: 03/13/09

TEST PIT #:	TP 101	TEST PIT #:	TP 102
PERFORMED:	03/13/09	PERFORMED:	03/13/09
DEPTH OF TEST PIT:	60"	DEPTH OF TEST PIT:	48"
WATER OBSERVED AT:	58"	WATER OBSERVED AT:	N/A
LEDGE OBSERVED AT:	60"	LEDGE OBSERVED AT:	48"
ROOTS AT:	36"	ROOTS AT:	34"
MOTTLING OBSERVED AT:	36"	MOTTLING OBSERVED AT:	N/A
SEEPS AT:	N/A	SEEPS AT:	N/A

SOIL DESCRIPTION		SOIL DESCRIPTION	
0"	6"	0"	6"
6"	36"	6"	34"
36"	60"	34"	48"

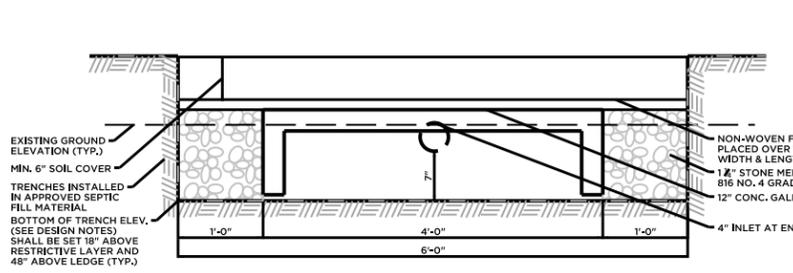
DESIGN NOTES:

- LEACHING SYSTEM BASED ON A DEPTH TO LEDGE OF 48" WITNESSED IN TEST PIT #102 AND A PERC RATE OF 20.1-30.0 MIN./IN. CALCULATED ON PERC TEST SHOWN.
- SYSTEM SIZED BASED ON A TUB NO LARGER THAN 100 GAL & NO GARBAGE DISPOSAL.
- EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED PRIOR TO CONSTRUCTION.
- SEPTIC TANK ACCESS PORTS LOCATED MORE THAN 12" BELOW GROUND REQUIRE RISERS.
- LEACHING SYSTEM SHALL BE SET AT EXISTING GRADE OF 95.55, (3" ABOVE EXISTING GRADE AT CENTERLINE OF TRENCH).

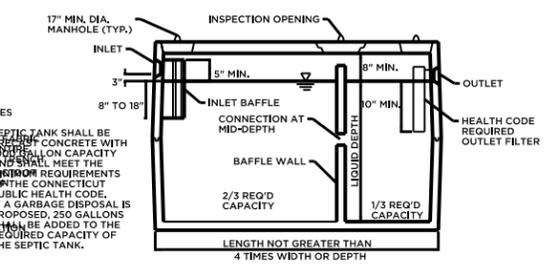
GENERAL NOTES

- DESIGN BASIS**
 THE SANITARY DESIGN IS BASED UPON AN ESTIMATED DESIGN FLOW OF 10 GAL PER OCCUPANT AND A TOTAL OCCUPANT COUNT OF 22 AND AN APPLICATION RATE OF 0.9. THE CONSTRUCTION OF THE SANITARY DISPOSAL SYSTEM AND ITS COMPONENTS SHALL COMPLY IN ALL RESPECTS WITH THE LATEST REVISION OF THE DEPARTMENT OF HEALTH SERVICES' REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS, AND THE REQUIREMENTS OF THE TOWN OF OLD LYME SANITARIAN.
- SOIL TESTING**
 SOIL TESTING AND PERCOLATION RATE TESTING WAS PERFORMED BY ANCHOR ENGINEERING SERVICES ON 03/13/09 AND IS SHOWN ON THE PLAN.
- GRADING**
 EXISTING CONTOURS HAVE BEEN FIELD LOCATED. PROPOSED CONTOURS ARE SHOWN IN AREAS OF PROPOSED CONSTRUCTION. FINISH GRADING SHALL BE ACCOMPLISHED AS INDICATED BY THE PROPOSED CONTOURS. DRAINAGE SWALES SHALL BE CONSTRUCTED AS INDICATED TO DIVERT SURFACE WATER RUNOFF AWAY FROM THE LEACHING SYSTEM.
- SEWER PIPE**
 SEWER PIPE FROM THE HOUSE TO THE SEPTIC TANK SHALL BE PVC SCH. 40 OR OTHER APPROVED TIGHT PIPING. PIPING FROM THE SEPTIC TANK TO THE LEACHING SYSTEM SHALL BE PVC SDR. 35 OR APPROVED EQUAL. ALL PIPING SHALL BE A MINIMUM OF FOUR INCHES IN DIAMETER AND SHALL BE INSTALLED AT A MINIMUM PITCH OF 1/4 INCH PER FOOT OR AS NOTED ON THE PLAN. ALL CHANGES OF PIPE DIRECTION SHALL BE MADE WITH PROPER FITTINGS. PIPE LEADING INTO AND OUT OF THE SEPTIC TANK AND DISTRIBUTION BOX SHALL BE PROPERLY SECURED INTO PLACE AFTER THE PIPE INSTALLATION IS COMPLETE. INSTALLED PIPING SHALL BE PROTECTED DURING CONSTRUCTION AND GRADING TO AVOID CRUSHING OR DISPLACING.
- SEPTIC TANK, PUMP STATION AND DISTRIBUTION BOXES**
 THE SEPTIC TANK, DISTRIBUTION BOXES SHALL BE PRECAST CONCRETE WITH OUTLETS AS SHOWN AND SHALL BE STANDARD PRODUCTS OF A SUPPLIER REGULARLY ENGAGED IN THE MANUFACTURE OF SUCH UNITS. THE SEPTIC TANK SHALL BE OF 1,000-GALLON MINIMUM CAPACITY, AND SHALL BE SET LEVEL ON A FIRM BED OF NATIVE SOIL OR SAND FILL. THE PUMP CHAMBER SHALL BE SET LEVEL ON A FIRM BED OF NATIVE SOIL OR SAND FILL. THE DISTRIBUTION BOXES SHALL BE SET LEVEL ON PRECAST CONCRETE PAD (APPROXIMATELY 30-INCH DIAMETER AND 2 INCH THICK) IN A FULLY EXCAVATED TRENCH AFTER BACK FILLING WITH APPROVED SEPTIC FILL.
- LEACHING SYSTEM**
 THE LEACHING SYSTEM SHALL CONSIST OF A MINIMUM 40 LINEAR FEET OF 12" TO INVERT, 48" WIDE CONCRETE LEACHING GALLERY UNITS LAID OUT AND CONSTRUCTED TO THE DETAILS AS SHOWN ON THE DRAWING. THE PROPOSED LEACHING SYSTEM WILL PROVIDE AN "EFFECTIVE AREA" OF 248 SQUARE FEET (INCLUDING ONE FOOT OF STONE ON THE ENDS OF THE TRENCHES). THE TRENCHES SHALL BE EXCAVATED TO THE ELEVATION SHOWN IN THE CROSS SECTION AND SHALL BE LEVEL.
- LEACHING SYSTEM INSTALLATIONS**
 THE AREA WHERE THE PROPOSED LEACHING SYSTEM TO BE INSTALLED SHALL BE PROPERLY PREPARED ACCORDING TO THE FOLLOWING REQUIREMENTS PRIOR TO REFORMING ANY ACTUAL INSTALLATION OF THE LEACHING TRENCHES. THE AREA FOR THE PROPOSED LEACHING SYSTEM SHALL MEAN THE ENTIRE AREA WITHIN THE PERIMETER 15 FEET OUTSIDE THE ENDS AND SIDES OF THE PRIMARY LEACHING TRENCHES AS INDICATED.
 - WHERE THE PLAN INDICATES THAT THE FILLING SHALL OCCUR, ALL VEGETATION SHALL BE REMOVED AND THE TOPSOIL CAREFULLY STRIPPED AND STOCKPILED FOR LATER REPLACEMENT OVER THE FILLED AREA.
 - THE AREA TO BE FILLED SHALL BE ROUGHENED BY HAND OR MACHINE, IN A DIRECTION PARALLEL TO PROPOSED LEACHING TRENCHES, TO ALLOW PROPER UNITING WITH THE PROPOSED FILL AFTER PREPARATION. THIS AREA SHALL BE PROTECTED FROM TRAFFIC.
 - THE AREA TO BE FILLED SHALL BE ROUGHENED BY HAND OR MACHINE, IN A DIRECTION PARALLEL TO PROPOSED LEACHING TRENCHES, TO ALLOW PROPER UNITING WITH THE PROPOSED FILL AFTER PREPARATION. THIS AREA SHALL BE PROTECTED FROM TRAFFIC.
 - THE FILL MATERIAL SHALL CONFORM TO THE FILL SPECIFICATIONS OUTLINED IN THE SECTION VIIIA OF THE LATEST REVISION TO THE CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEM. ALL MANTIS LEACHING SYSTEM INSTALLATIONS UTILIZE ASTM C-33 SPECIFIED MEDIUM COURSE WASHED CONCRETE SAND WITH LESS THAN 10% PASSING THE #100 SIEVE AND LESS THAN 5% PASSING THE #200 SIEVE. ALL FILL SHALL BE ACCEPTABLE TO THE TOWN OF OLD LYME SANITARIAN.
 - THE FILL MATERIAL SHALL BE DUMPED ON THE UP HILL SIDE OF THE PROPOSED LEACHING AREA AND SPREAD TOWARD THE DOWNHILL SIDE WITH A BULLDOZER, TAKING CARE THAT MACHINERY RIDES ONLY ON NEW FILL.
 - THE FILL SHALL BE SPREAD OVER THE ENTIRE AREA IN 12" LIFTS AND THEN COMPACTED BY HEAVY MACHINERY, TO A POINT WHERE IT IS FIRM. UPON COMPLETION OF SPREADING AND COMPACTING, THE ENTIRE FILLED AREA SHALL BE BACKBLADED FROM THE UPHILL SIDE TO THE DOWNHILL SIDE. SPECIAL PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT THE ENTIRE FILL AREA, AND ESPECIALLY THE TOE OF THE SLOPE, IS EVENLY AND ADEQUATELY COMPACTED.
 - AFTER THE AREA FOR THE PROPOSED LEACHING SYSTEM HAS BEEN PROPERLY FILLED, THE LEACHING TRENCHES SHALL BE INSTALLED AS FOLLOWS:
 - EXCAVATE FOR LEACHING TRENCHES.
 - HAND RAKE THE BOTTOM AND SIDES OF ALL TRENCHES TO ELIMINATE ANY SOIL SHEARS AND FOOTPRINTS BEFORE PLACING THE CONCRETE GALLERY UNITS.
 - INSTALL THE CONCRETE GALLERY UNITS. BACKFILL WITH FILL MATERIAL AND COVER AREA WITH A MIN. 6" LAYER OF SOIL, OF WHICH A MINIMUM OF 4" IS TOPSOIL.
 - FINE GRADE AREA TO THE PROPOSED GRADES AS SHOWN ON THE PLAN.
- WATER SUPPLY**
 WATER SUPPLY SHALL BE SUPPLIED BY THE EXISTING ON SITE WELL SUPPLY WELL. WATER SUPPLY CONNECTION SHALL BE MADE FROM EXISTING SCALE HOUSE.

FOUR MILE RIVER ROAD



12" GALLERY TRENCH DETAIL
NOT TO SCALE



SEPTIC TANK CROSS SECTION
NOT TO SCALE



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SCHOOL BUS PARKING FACILITY

PREPARED FOR
TOWN OF OLD LYME

SEPTIC SYSTEM DESIGN PLAN

109 FOUR MILE RIVER ROAD, OLD LYME, CT

PROJ. ENGINEER	KRK
PROJ. MANAGER	MNB
OFFICE REVIEW	MNB
REVISIONS	
6/7/09	
6/8/09	
9/30/09	
PROJECT	DATE
717-10	3/16/09
SCALE: 1"=20'	SHEET NO. 12 OF 14

ELECTRIC & MECHANICAL PROJECT NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL AND STATE CODES, LOCAL ORDINANCES, THE LOCAL INSPECTORS AND IN CONFORMANCE WITH THE OWNER'S MECHANICAL AND ELECTRICAL REQUIREMENTS.
- WORK SHALL BE PERFORMED IN A WORKMANLIKE AND TIMELY MANNER SUBJECT TO THE APPROVAL OF THE OWNER.
- ALL WIRING AND EQUIPMENT IS DEPICTED DIAGRAMMATICALLY. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD AND ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO INSTALLATION.
- CONTRACTORS SHALL VISIT SITE PRIOR TO SUBMITTING BID.
- MECHANICAL CONTRACTOR SHALL FURNISH DISCONNECTS, STARTERS, AND CONTROLS WITH MECHANICAL EQUIPMENT.
- ELECTRICAL CONTRACTOR SHALL FURNISH ANY OTHER CONTROL, BRANCH CKTS, POWER DISTRIBUTION AND LIGHTING.
- CONTRACTORS SHALL BE RESPONSIBLE FOR ALL CHARGES FROM THE UTILITY, TEL, ETC. CO'S AND ALL FEES AND PERMITS REQUIRED FOR THE LEGAL PERFORMANCE OF THE WORK.
- COORDINATE WORK WITH THAT OF ALL OTHER TRADES. REPORT ANY CONFLICTS TO THE OWNER PRIOR TO CONSTRUCTION.
- CONTRACTORS SHALL CARRY ALL INSURANCE REQUIRED ON ALL NEW EQUIPMENT.
- ELECTRICAL PANEL SHALL BE BALANCED WITH TYPED DIRECTORIES
- SHOP DRAWINGS ARE TO BE SUBMITTED ON EQUIPMENT.
- ALL LIGHTING FIXTURES SHALL BE AS SHOWN WITH HIGH EFFICIENCY, LAMPS AND BALLASTS.
- REFER TO PLANS.
- ALL WORK AND NEW PRODUCTS SHALL BE GUARANTEED FOR 1YR. AFTER ACCEPTANCE BY OWNER.
- FEED NEW EQUIPMENT AS REQUIRED. ADJUST BRANCH CIRCUITS AS REQUIRED.
- COORDINATE LOCATIONS OF ALL OUTLETS WITH EQUIPMENT/FURNISHINGS AND OWNER REQUIREMENTS.

FIRE ALARM SYSTEM LEGEND

- PULL STATION WITH CABLE TO FAP, TYP.
- SMOKE DETECTOR PLUS CABLE AS REQ'D
- HEAT DETECTOR WITH CABLE TYP. OF ALL DEVICES
- STROBE/HORN ASSEMBLY
- FIRE ALARM PANEL, (4) ZONE CLASS B
- PULL STATION

FIRE ALARM SYSTEM NOTES

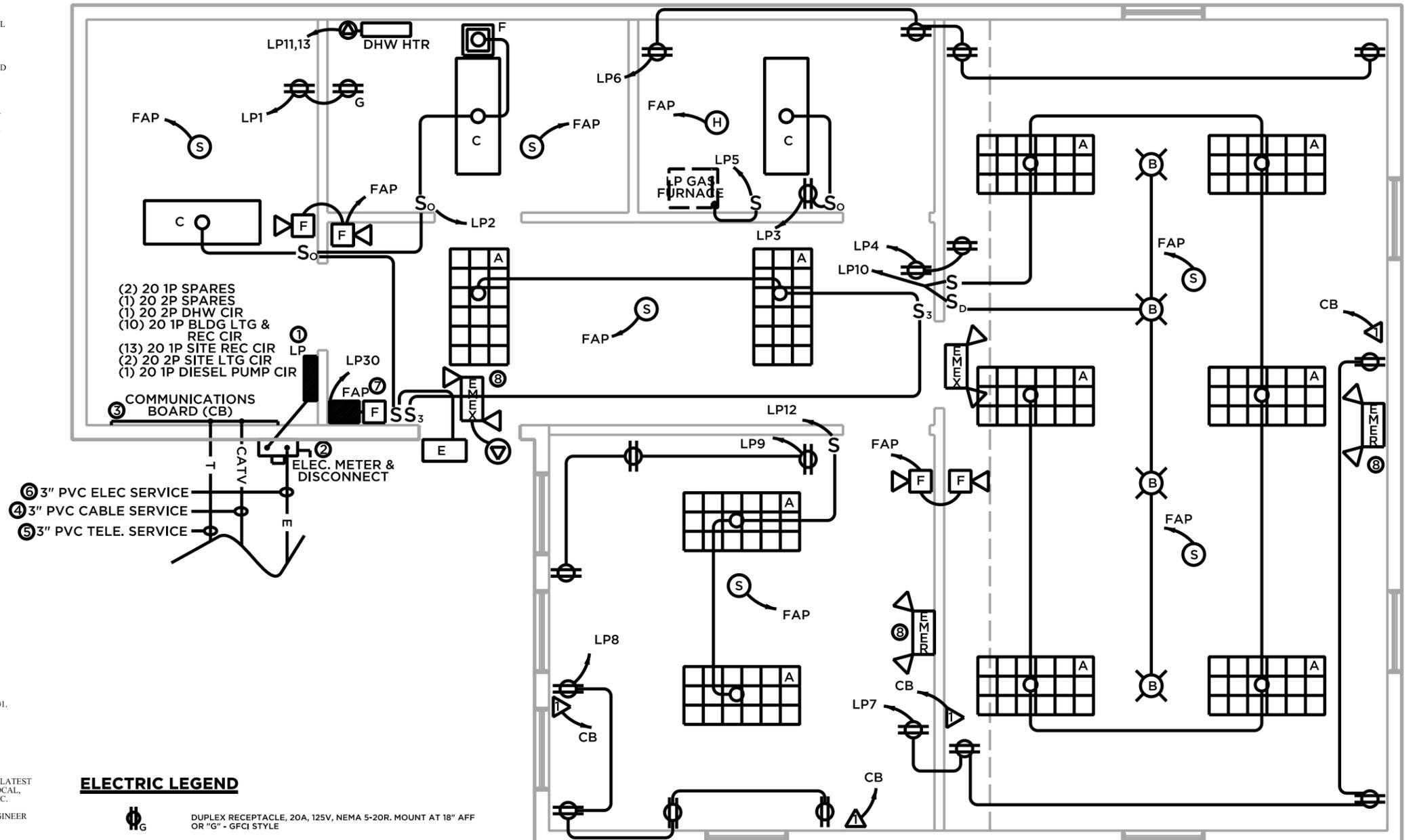
- ALL CONDUIT AND ELECTRICAL EQUIPMENT SHALL BE INSTALLED, WIRED AND GROUNDED IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE NATIONAL FIRE ALARM CODE, NFPA #72, & THE LIFE SAFETY CODE NFPA #01. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES HAVING JURISDICTION, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND FEES.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH THE PROJECT MANAGER, OWNERS REPRESENTATIVE, AND THE ARCHITECT.
- ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS.
- ALL DEVICES & COMPONENTS ARE NOT NECESSARILY SHOWN. PROVIDE SYSTEM AS MINIMALLY REQUIRED PER NFPA #101.

GENERAL ELECTRIC LEGEND

- ALL CONDUIT AND ELECTRICAL EQUIPMENT SHALL BE INSTALLED, WIRED AND GROUNDED IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, FEES, ETC.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH THE PROJECT MANAGER, OWNER'S REPRESENTATIVE, AND THE ENGINEER
- ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS; ALL ELECTRICAL DEVICES SHALL BARE "UL" LABEL.
- ALL WIRING SHALL BE COPPER (OR ALUMINUM PER NOTE 5) & SHALL BE INSTALLED PER NEC REQMTS. PROVIDE A SEPARATE GREEN GROUND WIRE. ALL WIRING SHALL BE COLOR CODED. "MC" & NONMETALLIC SHEATHED CABLE SHALL BE RUN CONCEALED ABOVE CEILINGS AND IN STUD WALLS. RUNS CONNECTING VIBRATING EQUIPMENT SUCH AS MOTORS ARE TO BE USING "MC" TYPE CABLE OR LIQUID TIGHT FLEXIBLE CONDUIT.
- CONDUCTOR SIZING IS BASED UPON COPPER CONDUCTORS. USE OF ALUMINUM CONDUCTORS REQUIRES UPSIZING & PROPER INSTALLATION TECHNIQUES.
- CONDUIT RUNS ARE SHOWN SCHEMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS & WALLS
- CONDUITS SHALL BE TERMINATED SO AS TO PERMIT NEAT CONNECTIONS TO MOTORS AND OTHER EQUIPMENT. VIBRATING EQUIPMENT SHALL BE CONNECTED WITH FLEXIBLE CONDUIT OR BUS CORD.
- NO CONDUIT SMALLER THAN 1/2" PIPE OR WIRE SMALLER THAN NO. 12 A.W.G. COPPER SHALL BE USED UNLESS OTHERWISE NOTED. ALL SIZES SHOWN ARE BASED UPON COPPER.
- SWITCHES SHALL BE MOUNTED 48" ABOVE FINISHED FLOOR. UNLESS OTHERWISE NOTED. RECEPTACLES SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR IN WORK ROOMS OR SHOP AREAS AND 18" AFF IN OFFICE AND GENERAL PURPOSE AREAS EXCEPT WHERE FURNISHINGS DICTATE OTHERWISE.
- WIRING FOR EQUIPMENT, LIGHTING FIXTURES, SWITCHES, OUTLETS AND/OR RECEPTACLES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR & SHALL BE:
 - 1/2" (MIN.) IMC OR EMT WITH MC OR NMS EXTENSIONS TO FIXTURES AND APPARATUS RUN.
 - NO. 12 CU. WIRE (MIN.) TYPE THHN, NO. OF WIRES AS REQUIRED.
 - GLUE & SOCKET OR COMPRESSION TYPE CONNECTORS SHALL BE USED AT EXTERIOR LOCATIONS
 - ADJUST CONDUIT LOCATIONS AS REQUIRED TO ACCOMMODATE EQUIPMENT PROVIDED.
- SIGNAL AND CONTROL CONDUCTORS SUCH AS FIRE ALARM SHALL NOT BE RUN IN THE SAME CONDUIT AS THOSE FOR POWER.
- PVC CONDUIT IS TO BE USED WHERE EXPOSED TO MOISTURE SUCH AS IN CONCRETE & BURIED
- ALL DAMP OR WET LOCATIONS EXPOSED FLEXIBLE CONDUIT IS TO BE PVC COATED, LIQUID TIGHT.
- ALL INSTRUMENT CABLE TO BE PER MANUFACTURERS REQUIREMENTS, OR, IF NO INFORMATION IS AVAILABLE IS TO BE 2 CONDUCTOR #18 AWG STRANDED AND SHIELDED WITH DRAIN WIRE, UNLESS NOTED.
- PULL BOXES ARE NOT NECESSARILY SHOWN. PROVIDE PULL BOXES OR A FITTING AFTER (3) 90° BENDS OR AFTER 250 FEET OF CONDUIT.
- CONDUCTORS WHICH ARE BURIED SHALL BE IN CONDUIT.
- CATALOG NUMBER MAY NOT CONTAIN ALL FEATURES AND ALL COMPONENTS REQUIRED. PROVIDE EQUIPMENT WITH FEATURES PER GENERIC DESCRIPTIONS, FIELD CONDITIONS AND REQUIREMENTS.
- REFER TO OTHER ELECTRICAL INSTALLATION NOTES & SPECIFICATIONS & MANUFACTURER'S REQUIREMENTS.
- CONTRACTOR SHALL TEST ALL EQUIPMENT FOR PROPER OPERATION TO THE OWNERS SATISFACTION
- ALL EXTERIOR LIGHTS ARE TO BE CONTROLLED VIA TIME CLOCK ("OFF") AND PHOTOCELL ("ON") COMBINATION

ELECTRIC LEGEND

- DUPLEX RECEPTACLE, 20A, 125V, NEMA 5-20R. MOUNT AT 18" AFF OR "G" - GFCI STYLE
- SPECIAL PURPOSE OUTLET AS REQUIRED BY EQUIPMENT
- SINGLE POLE TOGGLE SWITCH, 20A, 120/277V. MOUNT AT 48" AFF
- SINGLE POLE, DOUBLE THROW SWITCH, 20A, 120/277V. MOUNT AT 48" AFF
- DIMMER SWITCH FOR 1000W INCANDESCENT LOAD, EQUAL TO LUTRON #S-1000V. MOUNT AT 48" AFF
- OCCUPANCY SENSOR SWITCH - SINGLE POLE PASSIVE INFRARED WALL MOUNTED, 120/277V. EQUAL TO SENSOR SWITCH #WSD-1
- EMERGENCY EXIT SIGN COMBINATION, 120/277V, (2) 6V-5.4W T-5 WEDGE BASED LAMPS, (2) LED BARS, WHITE THERMOPLASTIC HOUSING, 6" RED LETTERS, SEALED LEAD CALCIUM BATTERY WITH REMOTE HEAD. EQUAL TO RUUD #EXPCRWH-HD & EMRFW1220WH
- EQUAL TO "EMEX" EXCEPT WITHOUT EXIT SIGN FEATURE. EQUAL TO RUUD #EMP22WH & EMR10506WH
- TYPE A FIXTURE, 2'x4', 18 DEEP CELL PARABOLIC TROFFER WITH (3) 32 WATT T8 LAMPS WITH FLANGE OR HARDWARE FOR CEILING TYPE. EQUAL TO RUUD #J24PG3001
- TYPE B FIXTURE, 8" APERTURE INCANDESCENT, 60W DOWN LIGHT IC HOUSING, WITH BLACK GROOVED BAFFLE TRIM
- TYPE C FIXTURE, SURFACE MOUNTED 14"x48" FLUORESCENT FIXTURE WITH TRANSLUCENT WHITE ACRYLIC LENS, (2) 32W T8 LAMPS. EQUAL TO RUUD #J14SL001
- TYPE E FIXTURE, 150W PS METAL HALIDE FULL CUTOFF WALL PACK, 120V WITH PHOTOCELL. EQUAL TO RUUD #MGWC0615-M-P



MEP SITE NOTES

ELECTRICAL NOTES - ELECTRICAL TRADE

- SITE ELECTRIC POWER IS TO BE DISTRIBUTED WITH PVC CONDUIT, WITH 6' OF SAND ON ALL SIDES OF CONDUIT AND SERVICE REQUIREMENTS AS PER CL&P.
- CONTRACTOR SHALL PROVIDE SERVICE TRENCHES AND BACKFILLING, EXCAVATION AND STRUCTURES SUCH AS POWER POSTS SHOWN OR AS REQUIRED.
- CL&P SHALL PROVIDE SERVICE WIRE, TRANSFORMERS, METERS, HIGH VOLTAGE AND ALL UTILITY DISTRIBUTION SYSTEM WORK. ALL COSTS TO BE INCLUDED BY CONTRACTOR IN BID.
- THE CONTRACTOR SHALL CONFORM TO N.U. DTR & SPC PUBLICATIONS INFORMATION/REQUIREMENTS FOR ELECTRIC SUPPLY BELOW 600 VOLTS AND THE N.E.C.

TELEPHONE & CATV SERVICE NOTES - ELECTRICAL TRADE

- SITE TELEPHONE & CABLE SHALL BE BY CABLE IN CONDUIT METHOD AND WITHIN THE SAME TRENCHES AS ELECTRIC POWER.
- CATV AND PHONE SERVICE TO BE PROVIDED BY FUTURE BUILDING OCCUPANT.
- TELEPHONE AND CABLE UTILITIES SHALL BE LOCATED A MINIMUM OF FIVE (5) FEET FROM ALL WATER AND SEWER FACILITIES. CONTRACTOR SHALL MARK OUT ALL EXISTING AND PROPOSED UTILITIES PRIOR TO INSTALLATION.

ELECTRIC NOTES:

- PROVIDE (1) 42 CIRCUIT, 125 AMP, SINGLE PHASE 240 VAC, FLUSH MOUNTED-MAIN BREAKER STYLE, WITH BOTTOM FEED, SEPARATED GROUND AND NEUTRAL BARS, SHORT CIRCUIT CURRENT RATING, NQOD PANEL BOARD.
- PROVIDE (1) 125 AMP, 240 VAC, SELF CONTAINED COLD SEQUENCE CL&P APPROVED MANUAL LEVER OPERATED BY-PASS METER SOCKET.
- PROVIDE (1) 4'x8'x1/2" CDX PLYWOOD COMMUNICATIONS EQUIPMENT MOUNTING BOARD & COORDINATE MOUNTING POSITION WITH UTILITY COMPANIES AND DATA EQUIPMENT.
- PROVIDE 3" PVC CABLE SERVICE CONDUIT WITH 1/4" POLY PULL LINE.
- PROVIDE 3" PVC TELEPHONE SERVICE CONDUIT WITH 1/4" POLY PULL LINE.
- PROVIDE 3" PVC ELECTRIC SERVICE CONDUIT WITH 1/4" POLY PULL LINE.
- AS AN OPTION, PROVIDE FIRE ALARM PANEL AND DEVICES AS SHOWN. PROVIDE (1) FOUR ZONE STYLE B (CLASS B) INITIATING DEVICE CIRCUITS AND (2) STYLE Y (CLASS B) NOTIFICATION APPLIANCE CIRCUITS, 24V GELLED ELECTROLYTE BATTERIES, SINGLE ACTION N.O. PULL STATION, WALL MOUNT 15/75 CANDELA 95 DBA AUDIBLE STROBE DEVICES, SINGLE CIRCUIT N.O. 135 DEGREE FIXED HEAT DETECTOR AND PHOTOELECTRIC/THERMAL DETECTOR
- WIRE EMERGENCY & EXIT UNITS TO LOCAL LIGHT CIRCUITS CONSTANT FEED.

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PROJ. ENGINEER	MRG	SCHOOL BUS PARKING FACILITY PREPARED FOR TOWN OF OLD LYME DISPATCH BUILDING ELECTRICAL PLAN 109 FOUR MILE RIVER ROAD, OLD LYME, CT	
PROJ. MANAGER	MNB		
OFFICE REVIEW	MNB		
REVISIONS		PROJECT	DATE
5/15/09		717-10	3/16/09
6/1/09			
6/8/09			
9/30/09			
SCALE: 1/2" = 1'-0"		SHEET NO.	13 OF 14

HVAC NOTES:

1. PROVIDE OUTSIDE AIR FIELD ASSEMBLED INTAKE ASSEMBLY USING AN EXTRUDED ALUMINUM STATIONARY LOUVER WITH DRAINABLE HEAD FEATURE & SIZED FOR 6" WALL EQUAL TO GREENHECK EDJ601 WITH BIRDSCREEN. ATTACH A BALANCING DAMPER INSIDE EQUAL TO PHILIPS AIRE #PA-1.
2. PROVIDE A 92% AFUE LP GAS FIRED FURNACE WITH SCALED COMBUSTION, PVC VENTING & COMBUSTION AIR, UPFLOW STYLE, 1100/1600 CFM, 70K BTU/HR OUTPUT, 34"x21"Wx28"L, SUPPLY DIM. 20"x19". EQUAL TO DAYTON MODEL MGRA-07EYBGS WITH CONCENTRIC VENT KIT & PIPING, SIDE FILTER RACK AND NEUTRALIZER KIT.
3. PROVIDE .75" CSS LPG PIPING WITHOUT FITTING OR JOINTS FROM TANK TO UTILITY ROOM. PROVIDE SHUTOFF IN UTILITY ROOM.
4. PROVIDE 12"x14" BACK TO BACK SIGHT PROOF STEEL GRILLS FOR RETURN AIR, LOW ON WALL. EQUAL TO METALAIR #4538-1.
5. PROVIDE 8"x10" BACK TO BACK SIGHT PROOF STEEL GRILLS FOR RETURN AIR, LOW ON WALL. EQUAL TO METALAIR #4538-1.
6. DOUBLE DEFLECTION ALUMINUM SIDE WALL SURFACE MOUNT SUPPLY GRILLE - 10"x4" WITH A NC-25 WITH OPPOSED BLADE DAMPER. EQUAL TO METALAIR #H4004D-1.
7. DOUBLE DEFLECTION ALUMINUM SIDE WALL SURFACE MOUNT SUPPLY GRILLE AS IN 6, EXCEPT 8"x4".
8. PROVIDE TIME OF DAY THERMOSTAT CAPABLE OF 3 DIFFERENT DAILY SETBACK SCHEDULES, 24V & COMPATIBLE WITH FURNACE.

VENTILATION NOTES

1. ADJUST OA DAMPER AND SUPPLY DIFFUSERS & EXHAUST FAN TO PROVIDE THE CFM INDICATED, MINIMUM. DIRECT EXHAUST FAN CONTROL TO PROVIDE FAN OPERATION WITH LIGHT SWITCH OR VIA OCCUPANCY DETECTION.

GENERAL MECHANICAL SYSTEM NOTES

1. THE MECHANICAL SYSTEMS ARE TO BE COMPLETED IN COMPLIANCE WITH ALL PROJECT REQUIREMENTS AND ARE TO PROVIDE COMPLETE & FUNCTIONING SYSTEMS WITHOUT COSTS, ADDITIONAL TO THE BID. COSTS ARE TO BE INCLUDED IN THE BID FOR ALL MATERIALS, LABOR & ASSOCIATED ACTIVITY TO PROVIDE THE DETAIL NOT SHOWN. THE CONTRACTOR IS TO ANTICIPATE ALL COSTS TO COMPLETE THIS PROJECT.
2. ALL PLUMBING WORK IS TO BE COMPLETED WITH ADA, THE IPC & ALL OTHER APPLICABLE CODES & REGULATIONS.
3. THE NEW DHW EQUIPMENT IS AN UNDERSINK STYLE INSTANTANEOUS OR TANKLESS.
4. ALL MECHANICAL WORK IS TO BE COMPLETED IN ACCORDANCE WITH THE IMC & AS REQUIRED.
5. PLUMBING MODELS ARE GIVEN AS A GENERAL REQUIREMENT OF QUALITY AND MAY BE SUBSTITUTED PER THE ENGINEER'S APPROVAL.
6. COVER ALL WATER PIPING WITH 1/2" THICK FORMED PLASTIC INSULATION.
7. WATER AND WASTE PIPING TO LABORATORIES SHALL BE COVERED WITH HANDI-LAVAGUARD OR EQUAL URETHANE INSULATION SYSTEM.
8. PROVIDE SHUTOFF VALVES IN ACCESSIBLE LOCATIONS PER OWNER'S APPROVAL. PIPING TO EQUIPMENT IS TO BE GENERALLY OF PEX OR COPPER & PVC MATERIALS. COORDINATE EXACT LOCATIONS OF PLUMBING TO EQUIPMENT & FURNITURE REQUIREMENTS.

LP GAS PLUMBING NOTES

1. WORK TO BE INSTALLED IN FULL ACCORD WITH NFPA #54 & #58.
2. PIPING TYPES ARE:
UNDERGROUND & OUTSIDE: THERMOPLASTIC & POLYURETHANE GAS PIPE, MECHANICALLY PROTECTED OR COPPER TYPE 'K'.
INTERIOR LOCATIONS: CORRUGATED STAINLESS STEEL TUBING WITH MECHANICAL PROTECTION AS REQUIRED WHERE EXPOSED OR BLACK STEEL THREADED.
3. PROVIDE DRIPS & SHUT OFF VALVES FOR EACH PIECE OF EQUIPMENT REQUIRING LPG.
4. COORDINATE WITH EQUIPMENT SUPPLIERS LPG REQUIREMENTS AND ADJUST PIPING IN ORDER TO PROVIDE ADEQUATE GAS PRESSURE WHEN ALL EQUIPMENT IS OPERATING COINCIDENTALLY. INITIAL SIZING BASED UPON 2 PSIG.

SANITARY NOTES

1. ALL APPLICABLE PLUMBING WORK SHALL BE INSTALLED IN FULL ACCORD WITH IPC, APPLICABLE CODES & REGULATIONS.
2. EXPOSED WATER AND WASTE PIPING TO LAVATORIES SHALL BE COVERED WITH HANDI-LAVAGUARD, A URETHANE INSULATION SYSTEM.
3. COORDINATE EXACT LOCATIONS OF SANITARY AND WASTE TO EQUIPMENT REQUIREMENTS.

MEP SITE NOTES

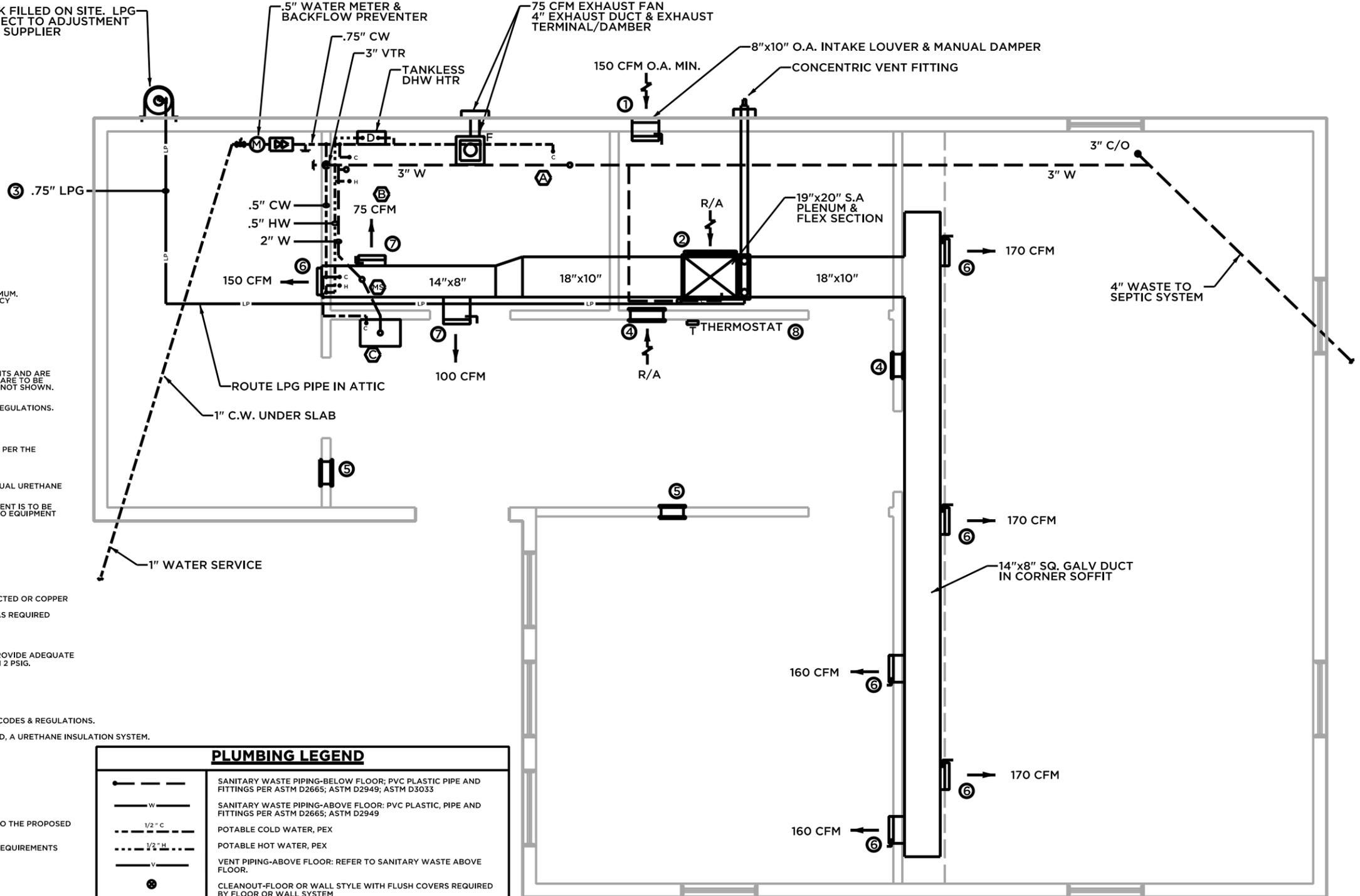
SANITARY AND WATER SERVICE NOTES: PLUMBING TRADE

1. PROVIDE TRENCHES AND PIPING FOR SANITARY AND WATER SERVICES FROM THE BUILDING TO THE PROPOSED SUBSURFACE SEPTIC SYSTEM. REFER TO CIVIL WORK.
2. COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANY AND CONFORM TO THEIR REQUIREMENTS FOR SERVICE.
3. MAINTAIN AT LEAST 10 FEET SEPARATION BETWEEN SANITARY AND WATER LINES.

GENERAL PLUMBING NOTES:

1. ALL PLUMBED EQUIPMENT WILL BE FURNISHED AND INSTALLED EXCEPT AS NOTED. EQUIPMENT WILL BE FURNISHED WITH TRIM AND FAUCETS, EXCEPT AS NOTED. PLUMBING CONTRACTOR SHALL PROVIDE ALL ROUGH-IN TRAPS AND MAKE ALL FINAL CONNECTIONS. ALL PLUMBING IS NEW. PROVIDE FITTINGS AS REQUIRED TO ACCOMMODATE FIXTURES.
2. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPING SYSTEMS SHOWN & MAKE ALL FINAL CHECKOUT OF EQUIPMENT FOR PROPER OPERATION OF PLUMBED ASPECTS.
3. ALL PIPING IS SHOWN DIAGRAMMATICAL, EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. SEE FOUNDATION PLAN FOR CRITICAL DIMENSIONS. EQUIPMENT LOCATIONS INDICATED ARE APPROXIMATE, COORDINATE EXACT LOCATIONS WITH ALL TRADES BEFORE INSTALLATION. CONTRACTOR IS TO MODIFY OR CREATE ADDITIONAL PLAN TO COORDINATE LOCATIONS. REFER TO KLC REQUIREMENTS.
4. ALL PIPING SHALL BE RUN CONCEALED IN FINISHED AREAS.
5. ALL UNDERGROUND WATER LINES SHALL BE SOFT ANNEALED TYPE "K" COPPER TUBING WITH 1/2" THICK "ARMPLEX" INSULATION OR POLYETHYLENE AS ALLOWED BY AHJ.
6. SEE DATA SHEETS FOR EQUIPMENT CONNECTION REQUIREMENTS.
7. REFER TO FIXTURES & EQUIPMENT MANUFACTURER'S DRAWINGS FOR EXACT LOCATIONS OF PLUMBING CONNECTIONS.
8. ALL ELEVATIONS SHALL BE VERIFIED AT THE JOB SITE.
9. PROVIDE BACK-FLOW PREVENTER & BACK WATER DEVICES AT THE LOCATIONS PROVIDED BY CODE AND ALL GOVERNING AUTHORITIES.
10. PROVIDE ALL ROOF PENETRATION FOR PLUMBING WORK.
11. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
12. REFER TO STANDARD PLUMBING DETAILS.

120 GAL LP TANK FILLED ON SITE. LPG LAYOUT IS SUBJECT TO ADJUSTMENT IN FIELD BY LPG SUPPLIER



PLUMBING LEGEND

	SANITARY WASTE PIPING-BELOW FLOOR: PVC PLASTIC PIPE AND FITTINGS PER ASTM D2665; ASTM D2949; ASTM D3033
	SANITARY WASTE PIPING-ABOVE FLOOR: PVC PLASTIC, PIPE AND FITTINGS PER ASTM D2665; ASTM D2949
	POTABLE COLD WATER, PEX
	POTABLE HOT WATER, PEX
	VENT PIPING-ABOVE FLOOR: REFER TO SANITARY WASTE ABOVE FLOOR.
	CLEANOUT-FLOOR OR WALL STYLE WITH FLUSH COVERS REQUIRED BY FLOOR OR WALL SYSTEM
	CONDENSATE PIPING, PVC
	LP GAS, SCHED. 40 BLACK IRON PIPE
	DHW HTR - SEE SCHEDULE
	COUNTERTOP MOUNTED LAV. WITH 1/2" COLD WATER & STOP, 1/2" HOT WATER & STOP 1-1/2" WASTE WITH TRAP & DRAIN & 1-1/2" VENT.
	TANK STYLE CLOSET WITH SEAT, 1.6 GPF. WITH 2" VENT MIN. & 0.5" COLD WATER. PROVIDE PLUMBING FIXTURES & FITTINGS.
	HOSE BIBB-WOODFORD #ZU-415 OR FREEZE PROOF AS REQ'D.
	HOT WATER TERMINAL AT HEIGHT REQ'D BY PLUMBING FIXTURE AND WITH STOP, FLUSH VALVE, AND APPROPRIATE FITTINGS.
	COLD WATER TERMINAL AT HEIGHT REQ'D BY PLUMBING FIXTURE AND WITH STOP, FLUSH VALVE, AND APPROPRIATE FITTINGS.

PLUMBING FIXTURE SCHEDULE

FIXTURE	SYMBOL	SOIL OR WASTE	VENT	COLD WATER	HOT WATER	MOUNTED	DESCRIPTION
WATER CLOSET ADA	A	3"	2"	1/2"	---	FLOOR	KOHLER WELWORTH EB, WHITE, TANK #K4620, ELONGATED BOWL #K4276, VITREOUS CHINA, CHURCH #9500 OPEN FRONT WHITE SEAT, 1.6GPF WITH POWER ASSISTED FLUSH.
LAVATORY ADA	B	1 1/2"	1 1/2"	1/2"	---	WALL MOUNTED COUNTERTOP	CAST POLYMER LAV. COUNTER TOP, 22" DEEP WITH BACK & END SPLASHES, SYN-MAR PRODUCTS (860-872-8505). FAUCETS-CHROME OPERATED, SELF-CLOSING-10 SEC. MINIMUM PER ANSI A117-1998 REQMTS.
DRINKING FOUNTAIN	C	1 1/4"	1 1/4"	1/2"	---	WALL	BARRIER FREE BUBBLER STYLE WATER FOUNTAIN MEETING ADA REQMTS. PROVIDE FREEZE PROTECTION & DRAIN-DOWN VALVE.
SERVICE SINKS	MS	2"	1 1/2"	1/2"	1/2"	FLOOR	KOHLER #K-6710, WHITE BY ENAMELED CORNER STYLE, DIM:13"DX28"X28" & PER ANSI, A112-19.1 WITH FAUCET #K-8904-RP
DHW HEATER	D	-	-	1/2"	1/2"	WALL	INSTANTANEOUS, 12"WX3"DX6.6"H 3.5 KW TEMP RISE OF 48°F @.5 GPM POWERSTREAM #RP-7

NOTE: PROVIDE SUPPLIES WITH STOPS & DRAINS, MIXING VALVES, & ACCESSORY FITTINGS ARE REQ'D TO PROVIDE COMPLETE FUNCTIONING EQUIPMENT. ALL NEW PLUMBING FIXTURES ARE TO BE ACCESSIBLE STYLE ALLOWING BARRIER FREE OPERATION OF FLUSH VALVES & FAUCETS. ROUTE SUPPLIES FROM THE MECHANICAL ROOM. ALL PLUMBING FIXTURES ARE AS APPROVED BY ENGINEER.

<p>41 Sequin Drive Glastonbury, CT 06033 Phone: (860) 633-6770 Fax: (860) 633-5971 www.anchorengr.com</p>		<p>SCHOOL BUS PARKING FACILITY</p> <p>PREPARED FOR TOWN OF OLD LYME</p> <p>DISPATCH BUILDING MECHANICAL & PLUMBING PLAN</p> <p>109 FOUR MILE RIVER ROAD OLD LYME, CT</p>																
		<p>PROJECT: 717-10</p> <p>DATE: 3/16/09</p> <p>SHEET NO. 14 OF 14</p>	<p>PROJ. ENGINEER: MKG</p> <p>PROJ. MANAGER: MNB</p> <p>OFFICE REVIEW: MNB</p>															
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