

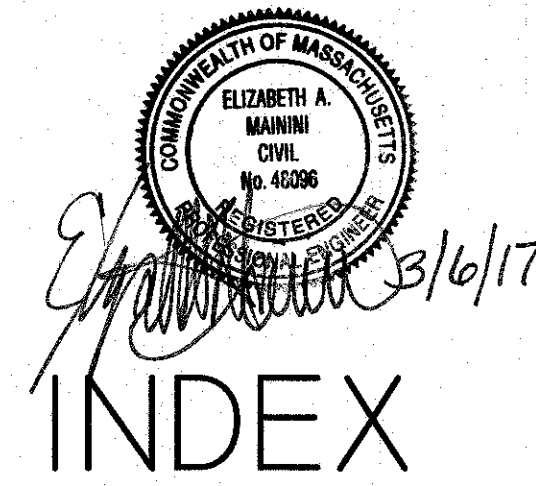
PROPOSED SITE PLAN

FOR
133 WEST UNION STREET
IN
ASHLAND, MASSACHUSETTS

OWNER/APPLICANT:

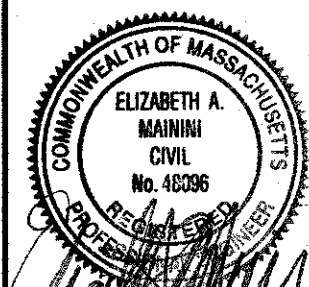
CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100'
SOUTHBORO, MA 01772

PLAN DATE: NOVEMBER 4, 2015
REVISED THRU MARCH 6, 2017



1. COVER SHEET
2. C-1.0 EXISTING CONDITIONS
3. C-2.0 SITE PLAN
4. C-3.0 GRADING PLAN
5. C-4.0 DRAINAGE PLAN
6. C-5.0 UTILITY PLAN
7. C-6.0 EROSION CONTROL PLAN
8. C-7.0 DETAIL SHEET#1
9. C-8.0 DETAIL SHEET#2
10. C-9.0 DETAIL SHEET#3
11. C-10.0 CROSSING DETAIL SHEET





G-9411

DATE: 3-6-17

CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

"WARNING"

EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS.

CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

NOTES

APPROVED DATE:
ASHLAND PLANNING BOARD

SIGNATURE DATE:
BEING A MAJORITY

LEGEND:

- EXISTING TREELINE
- - - EXISTING CONTOUR
- - - PROPOSED CONTOUR
- - - OVERHEAD WIRE
- - - DRAIN LINE
- - - SEWER LINE
- - - WATER LINE
- - - UNDERGROUND ELECTRIC
- - - ROOF DRAIN
- - - PROPOSED FENCE
- - - PROPOSED SILT FENCE
- ⊗ EXISTING SEWER MANHOLE
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- ⊙ EXISTING UTILITY POLE
- ⊙ PROPOSED DRAINAGE MANHOLE

NOTES:

1. THE EXISTING CONDITION TAKEN FROM PLAN PREPARED BY GLM ENGINEERING, DATED OCTOBER 26, 2011, ENTITLED WETLAND DELINEATION PLAN PARCEL A, LOT 1, 2 & 3 (133 WEST UNION STREET, ASHLAND, MASSACHUSETTS).

2. FIELD SURVEY PERFORMED BY GUERRIERE AND HALNON JULY 2013 ALONG THE FRONTAGE OF 133 WEST UNION STREET, ASHLAND, MA.

##	DATE	DESCRIPTION	INIT
1	11/20/15	REVISED LAYOUT.	PML
2	8/25/15	REVISED LAYOUT.	PML
3	8/25/15	REVISED LAYOUT.	PML
4	12/1/14	REVISED PER COMMENT LETTER.	PML
5	9/30/14	REVISED PER COMMENT LETTER.	PML
6	6/6/14	ADDED WETLAND FLAG NUMBERS.	PML
7	5/23/14	FINALIZE DESIGN PER COMMENTS.	PML

OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100
SOUTHBORO, MA 01772

133 WEST UNION STREET

"EXISTING CONDITIONS"
PLAN OF LAND
IN
ASHLAND, MA

SCALE: 1"=30'
DATE: FEBRUARY 21, 2014

Guerriere & Halnon, Inc.
Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

SHEET
C-1.0

G-9411

CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS,
RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER
LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF
THE TITLE.

"WARNING"
EXISTING UTILITY LINES INDICATED OR NOTED ON THESE
DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION
AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR
SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO
EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED
IN WORKING IN THESE AREAS.
CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).

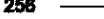
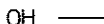
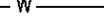
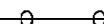
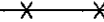
EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

NOTES

APPROVED DATE: _____
ASHLAND PLANNING BOARD

SIGNATURE DATE: _____
BEING A MAJORITY

LEGEND:

- | | |
|---|---------------------------|
|  | EXISTING TREELINE |
|  | EXISTING CONTOUR |
|  | PROPOSED CONTOUR |
|  | OVERHEAD WIRE |
|  | DRAIN LINE |
|  | SEWER LINE |
|  | WATER LINE |
|  | UNDERGROUND ELECTRIC |
|  | ROOF DRAIN |
|  | PROPOSED FENCE |
|  | PROPOSED SILT FENCE |
|  | EXISTING SEWER MANHOLE |
|  | EXISTING DRAIN MANHOLE |
|  | EXISTING CATCH BASIN |
|  | EXISTING UTILITY POLE |
|  | PROPOSED DRAINAGE MANHOLE |

NOTES:

9	3/6/17	REVISED PER CLIENT.	PML
7	12/31/15	REVISED PER COMMENTS	PML
6	11/20/15	REVISED PER MEETINGS.	PML
5	8/25/15	REVISED LAYOUT.	PML
4	12/1/14	REVISED PER COMMENT LETTER.	PML
3	9/30/14	REVISED PER COMMENT LETTER.	PML
2	6/6/14	ADDED WETLAND FLAGS NUMBERS.	PML
1	5/23/14	FINALIZE DESIGN PER COMMENTS.	PML
##	DATE	DESCRIPTION	INIT

OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100'
SOUTHBORO, MA 01772

133 WEST UNION STREET

"GRADING"
PLAN OF LAND
IN
ASHLAND, MA

SCALE: 1"=30'
DATE: FEBRUARY 21, 2014



**Guerriere
&
Halnon, Inc.**

Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

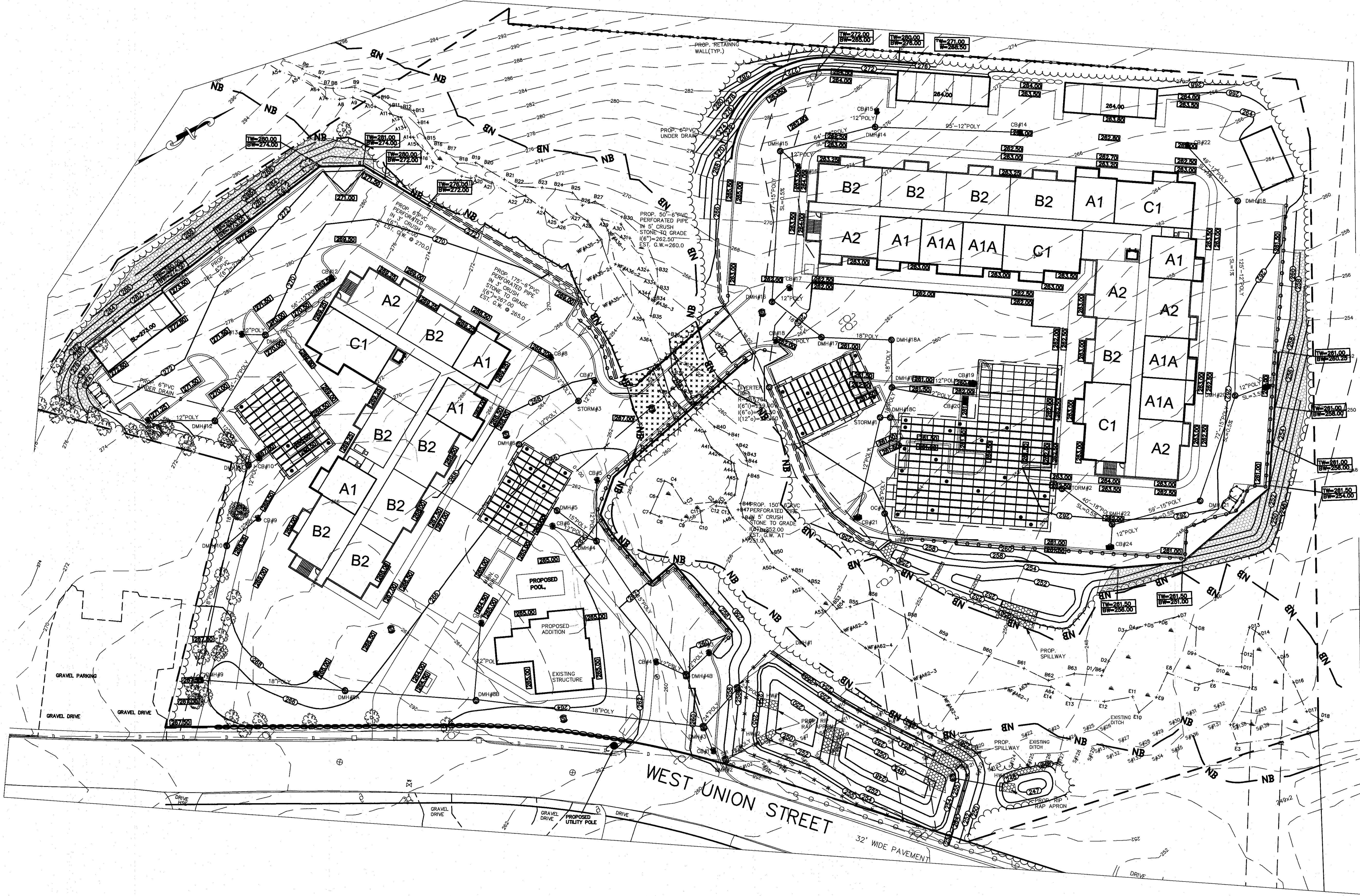
[illegible]

Figure 1 consists of two soil profile diagrams, TWF 3 and TWF 4, showing soil layers and depths. TWF 3 has layers A (0-10.5'), B (10.5-20.5'), and C (20.5-258.0'). TWF 4 has layers A (0-16'), B (16-207.8'), and C (207.8-260.0'). Both profiles show a 54% PERC layer and a CLASS | SOIL boundary.

Profile	Layer	Depth (ft)	Material	PERC (%)	CLASS SOIL
TWF 3	A	0 - 10.5	10B* WATER	N/A	CLASS SOIL
	B	10.5 - 20.5	N/A LEDGE	N/A	
	C	20.5 - 258.0	N/A MOTTLES	N/A	
TWF 4	A	0 - 16	54* PERC	N/A	CLASS SOIL
	B	16 - 207.8			
	C	207.8 - 260.0			

PERC: 7 MIN./NOI

282.0	TH 5	0"	84" WATER	96"	274.0	TH 6
A			<u>N/A</u>	<u>N/A</u>	A	
280.75		15"	<u>N/A</u>	<u>N/A</u>	272.25	
B			<u>N/A</u>	<u>N/A</u>	B	
278.5		15"	<u>N/A</u>	<u>N/A</u>	271.53	
C			CLASS SOIL		C	
275.0	EST. G.K.				266.0	EST. G.K.
272.0		90"			272.0	

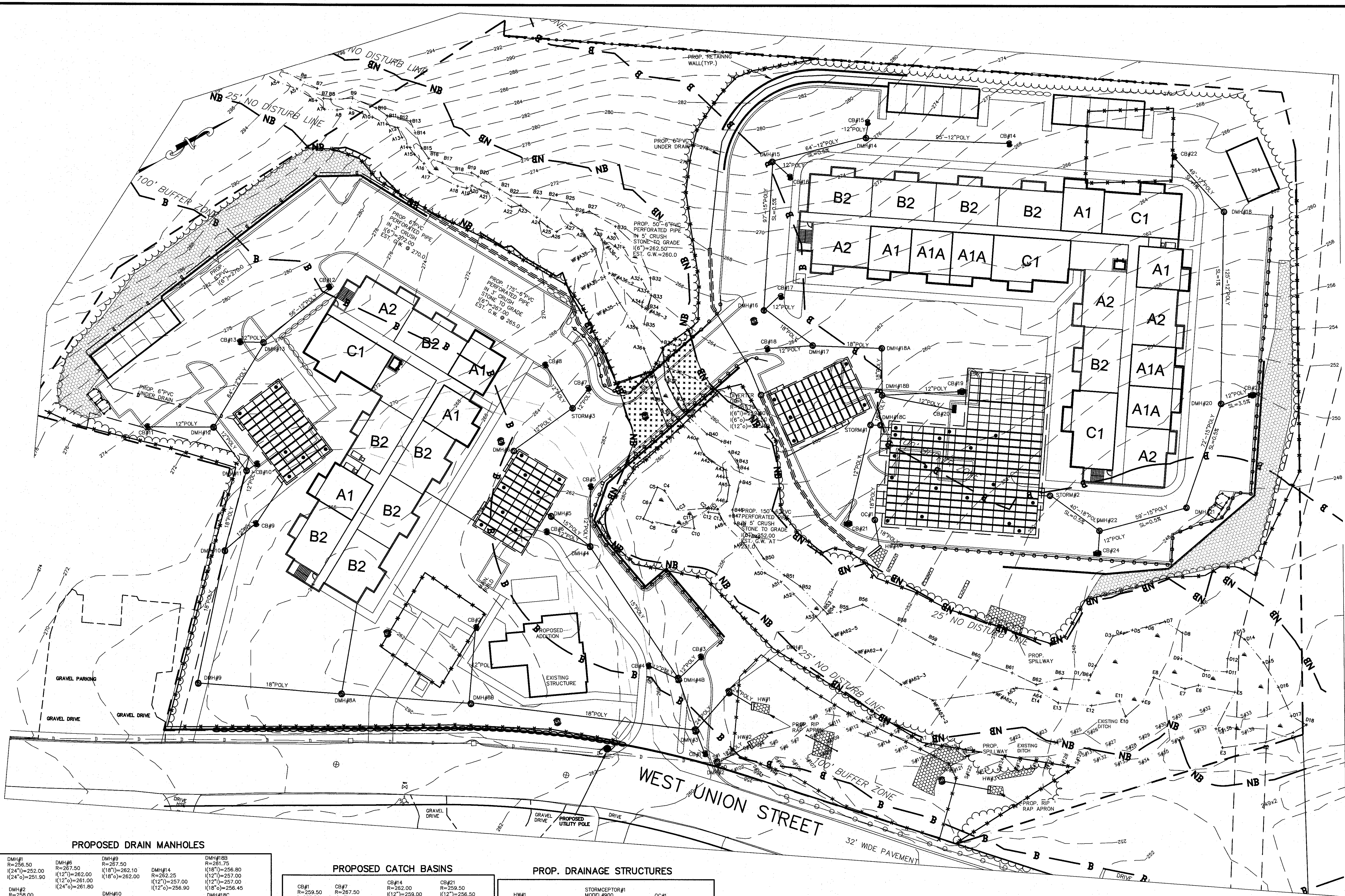
252.25	7	0"	78" WATER 36"	254.0	7	8
A			N/A LEDGE N/A	A		
251.25		12"	N/A MOTTLES 36"	252.0		
B			54" PERC N/A	B		
249.2		18"	CLASS SOIL	251.5		
C				C		
254.75 OUT 1/4"	7			251.0 18" 1/4"	7	
252.25		92"		244.0		

PERC. 7 MIN./MIN

265.0	TP# 9	0"	60"	WATER	72"	248.0	TP# 10
	A		N/A	LEDGE	N/A		A
255.5		18"	N/A	WOTTLES	N/A	247.6	
	B		48"	PERC	45"		B
252.35		14"				245.35	
	C			CLASS	SOIL		C
254.0	EST. CLK					243.0	EST. CLK
246.0		77"				239.0	
PERC. 7 MIN./INCH						PERC. 7 MIN./INCH	

Figure 1 displays two stratigraphic columns, 11 and 12, showing soil profiles. Column 11 has a total height of 25.0 feet, with layers A (24.0 to 24.6), B (24.6 to 24.8), and C (24.8 to 25.0). Column 12 has a total height of 25.6 feet, with layers A (25.0 to 25.2), B (25.2 to 25.4), and C (25.4 to 25.6). Both columns show a 60-inch water level and a 36-inch perc level. The soil is classified as Class I Soil.

Column	Layer	Start Elevation (ft)	End Elevation (ft)	Soil Description
11	A	24.0	24.6	60" WATER, 36" PERC
11	B	24.6	24.8	60" WATER, 36" PERC
11	C	24.8	25.0	60" WATER, 36" PERC
12	A	25.0	25.2	60" WATER, 36" PERC
12	B	25.2	25.4	60" WATER, 36" PERC
12	C	25.4	25.6	60" WATER, 36" PERC



PROPOSED DRAIN MANHOLES

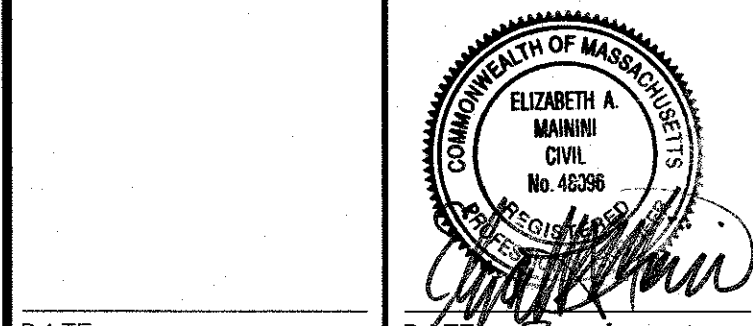
DMH#1 R=258.50 (24")=252.00 (12")=251.90	DMH#6 R=267.50 (12")=262.00 (18")=261.80	DMH#9 R=267.50 (12")=262.00 (18")=261.80	DMH#14 R=262.25 (12")=257.00 (18")=256.90	DMH#18B R=261.75 (12")=256.80 (18")=256.45
DMH#2 R=258.00 (12")=256.00 (18")=255.90	DMH#7 R=267.75 (12")=263.10 (18")=263.00	DMH#10 R=268.25 (12")=263.10 (18")=263.00	DMH#15 R=262.50 (12")=256.30 (18")=256.20	DMH#18C R=261.25 (12")=255.80 (18")=255.70
DMH#3 R=258.80 (12")=256.80 (18")=256.70	DMH#8A R=266.25 (12")=261.05 (18")=260.90	DMH#11 R=268.00 (12")=263.00 (18")=262.90	DMH#16 R=262.50 (12")=256.30 (18")=256.20	DMH#19 R=262.50 (12")=256.30 (18")=256.20
DMH#4 R=263.85 (12")=257.87 (18")=257.77	DMH#8B R=266.25 (12")=261.05 (18")=260.90	DMH#12 R=270.50 (12")=266.25 (18")=266.15	DMH#17 R=262.50 (12")=256.30 (18")=256.20	DMH#20 R=261.85 (12")=256.30 (18")=256.20
DMH#5 R=264.25 (12")=259.25 (18")=259.15	DMH#8C R=266.25 (12")=261.05 (18")=260.90	DMH#13 R=270.50 (12")=266.25 (18")=266.15	DMH#21 R=262.50 (12")=256.30 (18")=256.20	DMH#22 R=261.85 (12")=256.30 (18")=256.20

PROPOSED CATCH BASINS

CB#1 R=259.50 (12")=255.50	CB#7 R=267.50 (12")=263.50	CB#14 R=267.50 (12")=259.00	CB#21 R=259.50 (12")=255.50
CB#2 R=263.80 (12")=259.80	CB#8 R=267.50 (12")=263.50	CB#15 R=267.50 (12")=259.00	CB#22 R=267.50 (12")=259.00
CB#3 R=263.80 (12")=259.80	CB#9 R=267.50 (12")=263.50	CB#16 R=267.50 (12")=259.00	CB#23 R=267.50 (12")=259.00
CB#4 R=261.00 (12")=257.00	CB#10 R=267.50 (12")=263.50	CB#17 R=267.50 (12")=259.00	CB#24 R=267.50 (12")=259.00
CB#5 R=261.00 (12")=257.00	CB#11 R=267.50 (12")=263.50	CB#18 R=267.50 (12")=259.00	CB#25 R=267.50 (12")=259.00
CB#6 R=261.00 (12")=257.00	CB#12 R=267.50 (12")=263.50	CB#19 R=267.50 (12")=259.00	CB#26 R=267.50 (12")=259.00

PROP. DRAINAGE STRUCTURES

HW#1 TW=255.00 (12")=252.00	STORM#1 MODEL#900 R=261.25 (12")=256.20	OC#1 R=254.50 (12")=251.75
HW#2 TW=255.00 (12")=252.00	STORM#2 MODEL#900 R=261.25 (12")=256.20	OC#2 R=260.00 (12")=254.00
HW#3 TW=249.00 (12")=247.00	STORM#3 MODEL#900 R=261.25 (12")=256.20	OC#3 R=255.25 (12")=252.25
HW#4 TW=255.00 (12")=252.00	STORM#4 MODEL#900 R=261.25 (12")=256.20	OC#4 R=255.25 (12")=252.25



DATE: 3-6-17
CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

"WARNING"
EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS.
CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).
EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

NOTES

APPROVED DATE:
ASHLAND PLANNING BOARD

SIGNATURE DATE:
BEING A MAJORITY

LEGEND:

- EXISTING TREELINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- OVERHEAD WIRE
- DRAIN LINE
- SEWER LINE
- WATER LINE
- UNDERGROUND ELECTRIC
- ROOF DRAIN
- PROPOSED FENCE
- PROPOSED SILT FENCE
- EXISTING SEWER MANHOLE
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- EXISTING UTILITY POLE
- PROPOSED DRAINAGE MANHOLE

##	DATE	DESCRIPTION	INIT
9	3/6/17	REVISED PER CLIENT.	PM
7	12/31/15	REVISED PER COMMENTS	PM
6	11/20/15	REVISED PER MEETINGS	PM
5	8/25/15	REVISED LAYOUT	PM
4	12/1/14	REVISED PER COMMENT LETTER.	PM
3	9/30/14	REVISED PER COMMENT LETTER.	PM
2	6/6/14	ADDED WETLAND FLAG NUMBERS.	PM
1	5/23/14	FINALIZE DESIGN PER COMMENTS.	PM

OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100
SOUTHBORO, MA 01772

133 WEST UNION STREET

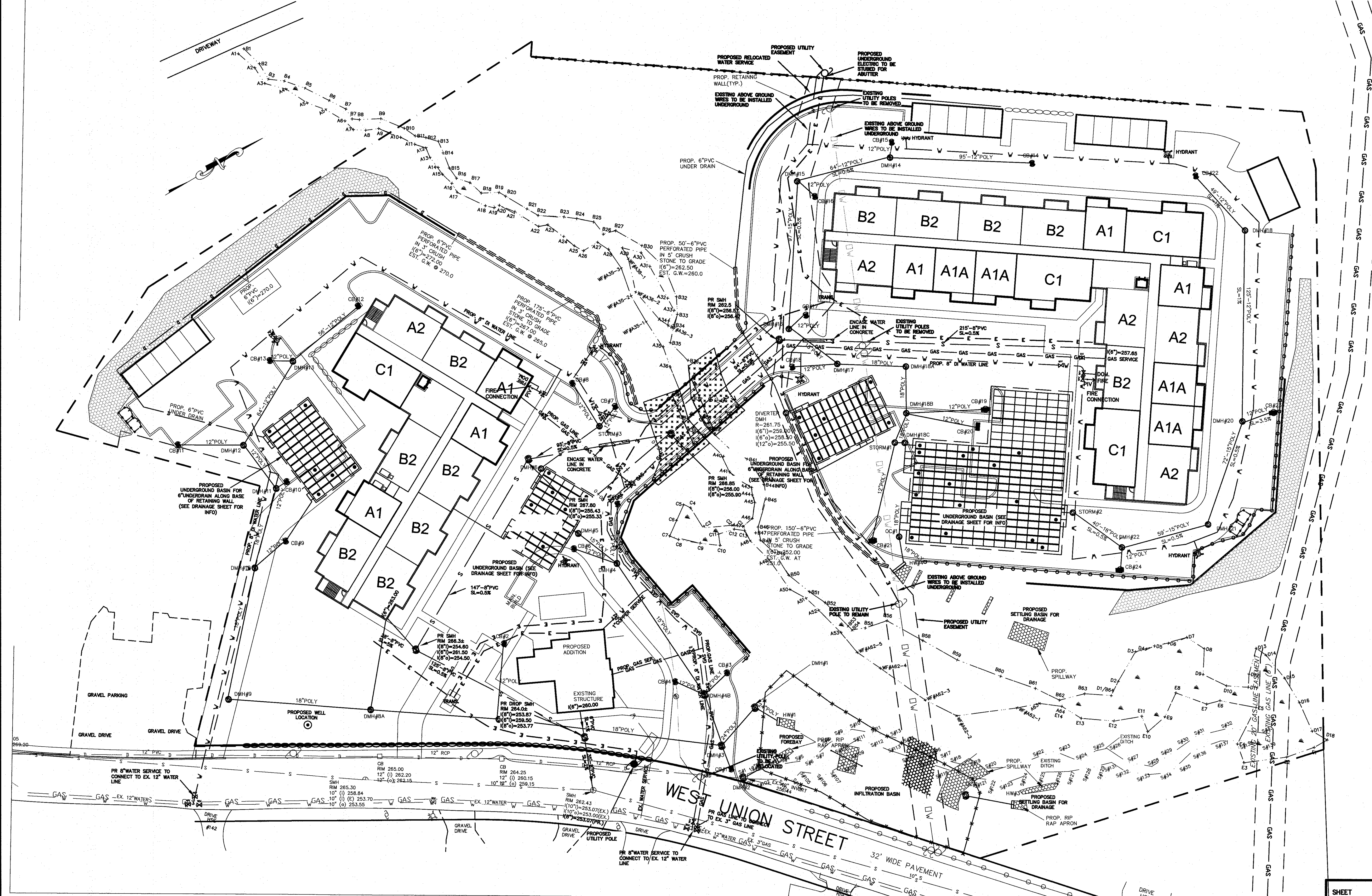
"DRAINAGE"
PLAN OF LAND
IN
ASHLAND, MA
SCALE: 1"=30'
DATE: FEBRUARY 21, 2014

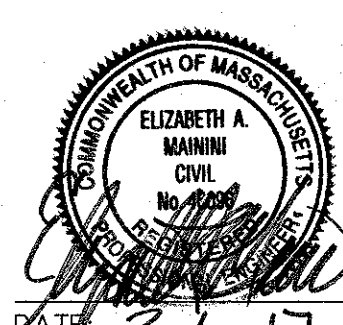
Guerriere & Halnon, Inc.
Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

SHEET
C-4.0

NOTES

1. REFER TO GRADING & DRAINAGE PLAN FOR INFORMATION ON ALL DRAINAGE STRUCTURES.
2. REFER TO DETAILSHEET FOR ALL DETAILS ON THE UNDERGROUND BASINS.
3. CONTRACTOR TO CONTACT THE REQUIRED UTILITY COMPANIES PRIOR TO START OF CONSTRUCTION.
4. ALL WATER AND HYDRANTS TO BE INSTALLED BEFORE BEGINNING TO BUILD VERTICALLY.
5. HEAT DETECTION FOR GARAGES AND GARAGES TO BE CONNECTED TO MAIN BUILDING'S FIRE ALARM SYSTEM.
6. GAS LINE TO HAVE SHUT OFF VALVE LOCATED IN FIELD PRIOR TO START OF WORK.





DATE: 3-6-17

CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

WARNING:
EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS.
CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

APPROVED DATE:
ASHLAND PLANNING BOARD

SIGNATURE DATE: _____
BEING A MAJORITY

LEGEND:

- EXISTING TREE LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- OVERHEAD WIRE
- DRAIN LINE
- SEWER LINE
- WATER LINE
- UNDERGROUND ELECTRIC
- ROOF DRAIN
- PROPOSED FENCE
- PROPOSED SILT FENCE
- ⊗ EXISTING SEWER MANHOLE
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- ⊕ EXISTING UTILITY POLE
- ⊙ PROPOSED DRAINAGE MANHOLE

#	DATE	DESCRIPTION	INIT
9	3/6/17	REVISED PER CLIENT.	PML
7	12/31/15	REVISED PER COMMENTS	PML
6	11/20/15	REVISED PER MEETINGS.	PML
5	8/25/15	REVISED LAYOUT.	PML
4	12/1/14	REVISED PER COMMENT LETTER.	PML
3	9/30/14	REVISED PER COMMENT LETTER.	PML
2	6/6/14	ADDED WETLAND FLAG NUMBERS.	PML
1	5/23/14	FINALIZE DESIGN PER COMMENTS.	PML

OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100
SOUTHBORO, MA 01772

133 WEST UNION STREET

"UTILITY"
PLAN OF LAND
IN
ASHLAND, MA

SCALE: 1"=30'
DATE: FEBRUARY 21, 2014

 **Guerriere & Halon, Inc.**
Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

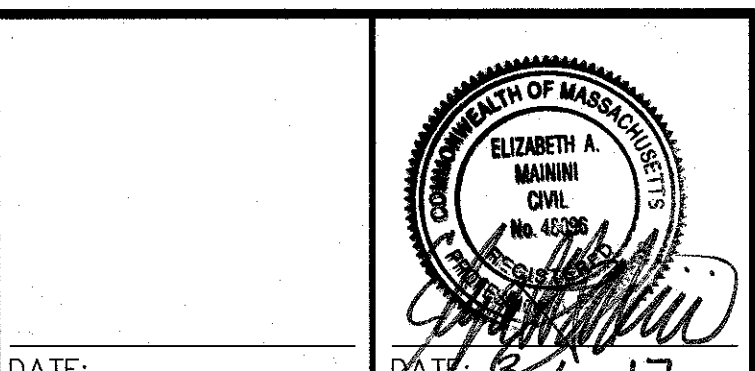
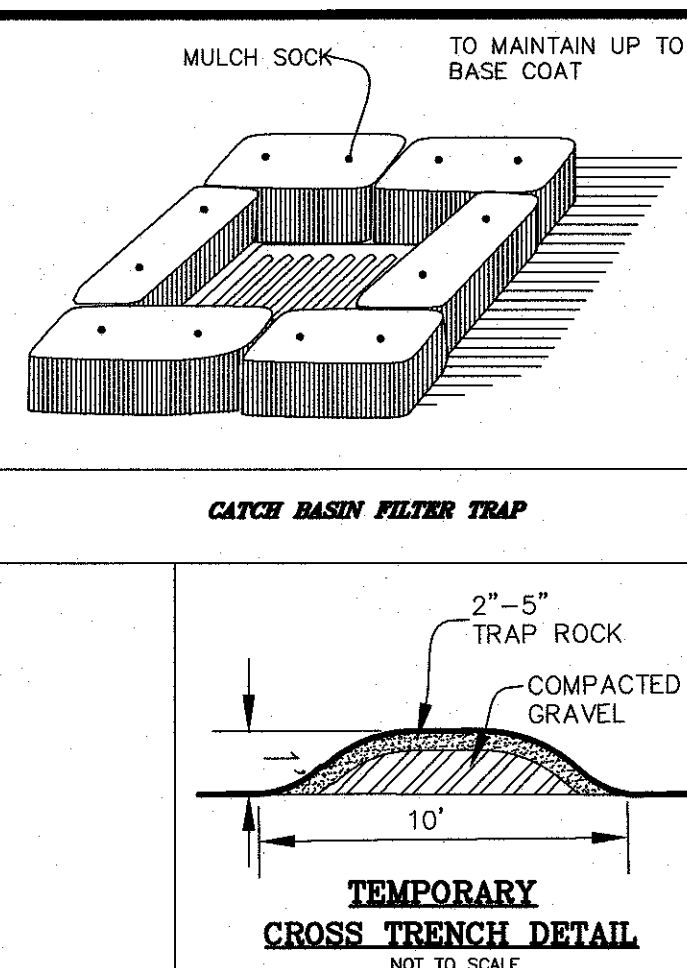
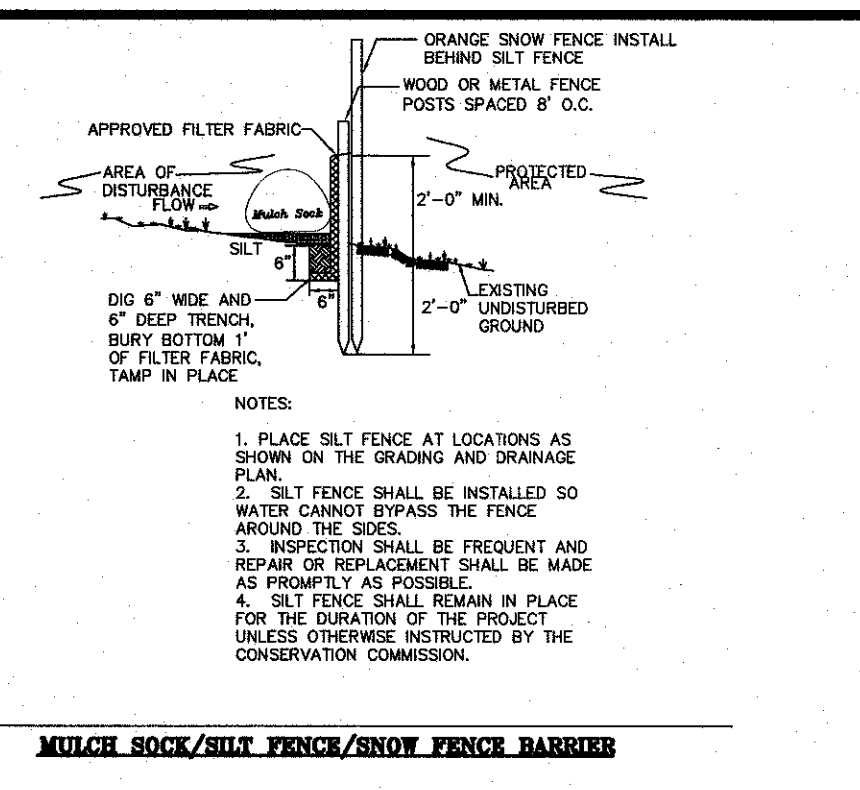
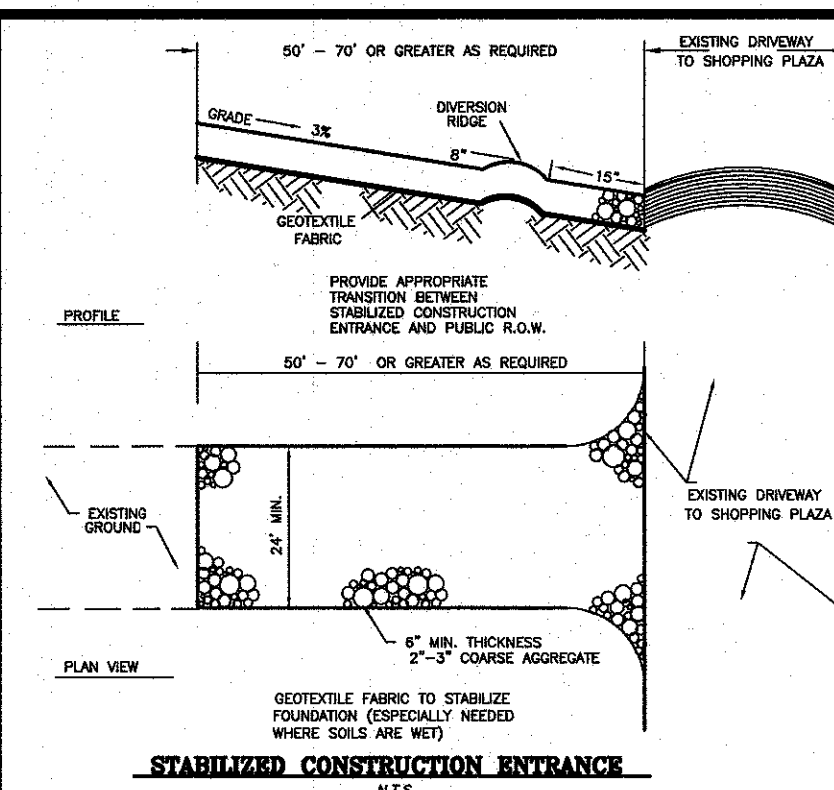
SHEET
C-5.0

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

- IT IS THE INTENT OF THIS PLAN TO CONTROL EROSION IN ALL PORTIONS OF THE PROJECT. THE CONTRACTOR SHALL MAINTAIN A PERMANENT VEGETATIVE COVER, TO BE ESTABLISHED AS SOON AS POSSIBLE. DISTURBED AREAS THAT ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL BE RECOVERED WITH A PERMANENT VEGETATIVE COVER AS SOON AS PRACTICABLE. CONTOURS ARE ESTABLISHED. TEMPORARY VEGETATIVE COVER IS TO BE ESTABLISHED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES WILL NOT REQUIRE ADDITIONAL DISTURBANCE FOR A PERIOD OF THIRTY DAYS OR MORE. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A VEGETATIVE COVER, DISTURBED AREAS SHALL BE MULCHED AND SEEDING WHEN WEATHER CONDITIONS ALLOW. EROSION CONTROL BLANKETS SHALL BE USED ON ALL VEGETATED SLOPES GREATER THAN 3 TO 1.
- AS CONDITIONS IN THE FIELD WARRANT, ALL ADDITIONAL MEASURES REQUIRED SHALL BE IMPLEMENTED IMMEDIATELY.
- THE CONTRACTOR SHALL IMPLEMENT ALL REASONABLE EROSION AND SEDIMENTATION CONTROLS PRIOR TO THE ACTUAL COMMENCEMENT OF CONSTRUCTION ACTIVITIES INCLUDING CLEARING AND/OR GRUBBING ANY PORTION OF THE PROJECT. THESE MEASURES SHALL BE MAINTAINED IN EFFECT THROUGHOUT THE ENTIRE CONSTRUCTION PHASE, OR UNTIL THE PROJECT HAS BECOME STABILIZED.
- THE CONTRACTOR SHALL MAINTAIN AN ADEQUATE STOCKPILE OF EROSION CONTROL MATERIALS ON PROJECT AT ALL TIMES FOR EMERGENCY OR ROUTINE REPLACEMENTS. THIS SHALL INCLUDE MATERIALS NECESSARY TO REPLACE SILT FENCES OR HAYBALES.
- THE CONTRACTOR SHALL INSPECT ALL CONTROLS WEEKLY AND AFTER EACH RAIN EVENT OF 0.5" OR GREATER. ALL DEFICIENCIES SHALL BE REPAIRED IMMEDIATELY AND UNDER NO CIRCUMSTANCES SHALL A DEFICIENCY BE ALLOWED TO GO UNCORRECTED DURING A RAINFALL EVENT. THE EROSION CONTROL DEVICES SHALL BE MAINTAINED, REINFORCED, OR REPLACED IF NECESSARY. ALL ACCUMULATED SEDIMENTS SHALL BE REMOVED AND DISPOSED OF IN A MANNER THAT IS CONSISTENT WITH THE PLAN IN AN UPLAND AREA.
- TEMPORARY EARTH OR STONE Dikes, DRAINAGE SWALES AND/OR TEMPORARY SLOPE DRAINS SHALL BE INSTALLED WHERE NEEDED PRIOR TO SURFACE EROSION SUCH THAT IT WILL BE NECESSARY TO DIVERT THE FLOW AROUND THE PROJECT OR PREVENT EROSION WITHIN THE LIMITS OF WORK.
- STORM DRAIN INLET PROTECTION SHALL BE USED FOR ALL EXISTING AND PROPOSED CATCH BASIN IN THE PROJECT AREA, PRIOR TO COMPLETION OF THE PROJECT. ALL CATCH BASINS WITHIN THE PROJECT AREA SHALL BE CLEANED.
- ALL SETTING STREET TO BE INSPECTED DAILY AND DETERMINED AT END OF THE DAY IF STREET CLOSING IS NECESSARY.
- TEMPORARY SETTING BASINS AS SHOWN ON EROSION CONTROL PLANS SHALL BE CLEAN AS NEEDED.
- CONTRACTOR TO AVEY ADDITIONAL SILT FENCE & DRAINAGE MATERIAL ON SITE AT ALL TIMES.
- ALL DISTURBED EARTH SLOPES ARE TO BE STABILIZED WITH A PERMANENT VEGETATIVE COVER, TO BE ESTABLISHED AS SOON AS POSSIBLE. DISTURBED AREAS THAT ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL BE RECOVERED WITH A PERMANENT VEGETATIVE COVER AS SOON AS PRACTICABLE. CONTOURS ARE ESTABLISHED. TEMPORARY VEGETATIVE COVER IS TO BE ESTABLISHED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES WILL NOT REQUIRE ADDITIONAL DISTURBANCE FOR A PERIOD OF THIRTY DAYS OR MORE. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A VEGETATIVE COVER, DISTURBED AREAS SHALL BE MULCHED AND SEEDING WHEN WEATHER CONDITIONS ALLOW. EROSION CONTROL BLANKETS SHALL BE USED ON ALL VEGETATED SLOPES GREATER THAN 3 TO 1.
- DIRECT DISCHARGE OF DRAINAGE OPERATIONS INTO ANY WETLAND, WATERCOURSE, OR DRAINAGE SYSTEM IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE CONSERVATION COMMISSION. ANY DRAINAGE DISCHARGE SHALL BE PASSED THROUGH A SEDIMENTATION CONTROL DEVICE TO REMOVE ANY SOLIDS. THE CONTRACTOR IS TO MAINTAIN SAID SEDIMENTATION CONTROL DEVICES THROUGHOUT THE ENTIRE DRAINAGE OPERATION AND IMMEDIATELY REPAIR DEFICIENCIES.
- ALL STOCKPILES OF LOAM, FILL MATERIALS, BLASTED ROCK AND OTHER CONSTRUCTION MATERIALS SHALL NOT BE PLACED INSIDE THE 100-FOOT WETLAND BUFFER ZONE.
- THE DETENTION BASINS AND FOREBAY ARE TO BE USED AS SILTATION BASINS DURING CONSTRUCTION. THESE AREAS SHALL BE CLEANED OF SEDIMENT AS NEEDED IF ANY SEDIMENT ENTER THEM.
- A COPY OF THE EROSION CONTROL PLAN AND ALL INSPECTION REPORTS SHALL BE MAINTAINED ON SITE AT ALL TIMES.
- ALL OUTLETS TO BE TEMPORARILY PROTECTED WITH FENCE & HAYBALES UNTIL SILTATION IS REMOVED AND DISTURBED AREAS ARE STABILIZED.
- ALL SEDIMENT SHALL BE DISPOSED OF BY FOLLOW STATE AND LOCAL REGULATIONS. ALL SURPLUS MATERIAL SHALL BE STOCKPILED OUTSIDE OF THE BUFFER ZONE.
- ALL PROPOSED WORK WITHIN THE WETLAND CROSSING AREA SHALL BE DONE DURING THE YEAR THAT NO FLOW IS PRESENT TO MINIMIZE THE DISTURBANCE AND SILL. ONCE INSTALLATION IS DONE MATING SHALL BE USED TO RESTORE THE AREA. BELLINGHAM CONSERVATION SHALL APPROVE THE MATING FOR THE AREA PRIOR TO START.
- WASH OFF AND REFUELING OF TRUCK TO BE DONE IN DESIGNATED AREAS, WHICH WILL BE OUTSIDE THE BUFFER ZONE.
- TRASH WILL BE PICKED UP IN WORK AREA AT THE END OF THE DAY AND DEPOSED OF IN THE STOCKPILE AREAS LOCATED OUTSIDE OF THE BUFFER ZONE.
- ANY CHANGE IN STOCKPILE SIZE AND LOCATION SHALL BE BROUGHT TO ASHLAND CONSERVATION ATTENTION IN WRITING.

DEWATERING PLAN

- IT IS THE INTENT OF THIS PLAN TO MAINTAIN THE DEWATERING OF THE PROPOSED WORK THAT WILL OCCUR WITHIN THE GROUND WATER TABLE FOR THE INSTALLATION. THE PROPOSED UTILITIES WITHIN CROSSING AND WITHIN THE CONSTRUCTION OF THE SLOPES ON THE HIGH SIDE OF THE SITE.
- PROPOSED SILTATION LINE TO BE STAKED OUT BY A PROFESSIONAL LAND SURVEYOR.
- DUE TO SOIL TESTING FOR THE ADJACENT LOTS ON SILVER LAKE ROAD THE GROUND WATER ELEVATION ALONG SILVER LAKE ROAD WAS DETERMINED TO BE 221.02. THE SOIL TYPE THAT WAS FOUND IN THE AREA WAS FINE SAND MATERIAL.
- THE CONCEPT DESIGN WILL BE A SUMP AND PUMP METHOD.
- ALL PUMPING OF GROUND WATER WILL BE PERFORMED WITHIN THE TRENCH AND PUMPED TO DESIGNATED AREAS FOR DISCHARGE.
- THE GROUNDWATER WILL BE PUMPED INTO FILTER BAGS ADJACENT TO SETTLING BASINS AS SHOWN ON THE OVERALL EROSION CONTROL PLAN.
- THE PROPOSED SETTLING BASINS WILL NOT HAVE ANY DIRECT DISCHARGE TOWARD WETLANDS. SETTLING BASINS WILL HAVE RP RAP SPILLWAYS LINED WITH FILTER FABRIC TO CREATE A SHEET FLOW DISCHARGE. ALL DISCHARGE FROM SETTLING BASINS WILL BE A MINIMUM OF 25' AWAY FROM THE WETLANDS.
- ALL DRAINAGE SHALL BE MONITORED AND WRITTEN REPORT SHALL BE SUBMITTED TO THE ASHLAND CONSERVATION COMMISSION.
- CONTRACTOR SHALL CONTACT SUPPLIER OF DEWATERING FILTER BAGS PRIOR TO START OF PROJECT. CONTRACTOR TO USE GRANITE ENVIRONMENTAL DEWATERING BAG MODEL NUMBER 0010210 (SIZE 10X25", 10 G2 NON-MOVOL). THE DEWATERING BAG REPLACEMENT DEPENDS ON SITE CONDITIONS AND SOIL CONDITIONS AND WILL BE DETERMINED IN THE FIELD. BAGS WILL HAVE A 3" HOSE ATTACHED TO IT FROM THE PUMP IN THE TRENCH.



DATE: 12-3-17

CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

WARNING: EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS. CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

NOTES

APPROVED DATE: ASHLAND PLANNING BOARD

SIGNATURE DATE: BEING A MAJORITY

LEGEND:

- EXISTING TREELINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- OVERHEAD WIRE
- DRAIN LINE
- SEWER LINE
- WATER LINE
- UNDERGROUND ELECTRIC
- ROOF DRAIN
- PROPOSED FENCE
- PROPOSED SILT FENCE
- EXISTING SEWER MANHOLE
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- EXISTING UTILITY POLE
- PROPOSED DRAINAGE MANHOLE

##	DATE	DESCRIPTION	INIT
9	3/6/17	REVISED PER CLIENT.	PMI
7	12/31/15	REVISED PER COMMENTS	PMI
6	11/20/15	REVISED PER MEETINGS.	PMI
5	8/25/15	REVISED LAYOUT.	PMI
4	12/11/14	REVISED PER COMMENT LETTER.	PMI
3	9/30/14	REVISED PER COMMENT LETTER.	PMI
2	6/6/14	ADDED WETLAND FLAGS NUMBERS.	PMI
1	5/23/14	FINALIZE DESIGN PER COMMENTS.	PMI

OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100'
SOUTHBORO, MA 01772

133 WEST UNION STREET

"EROSION CONTROL" PLAN OF LAND

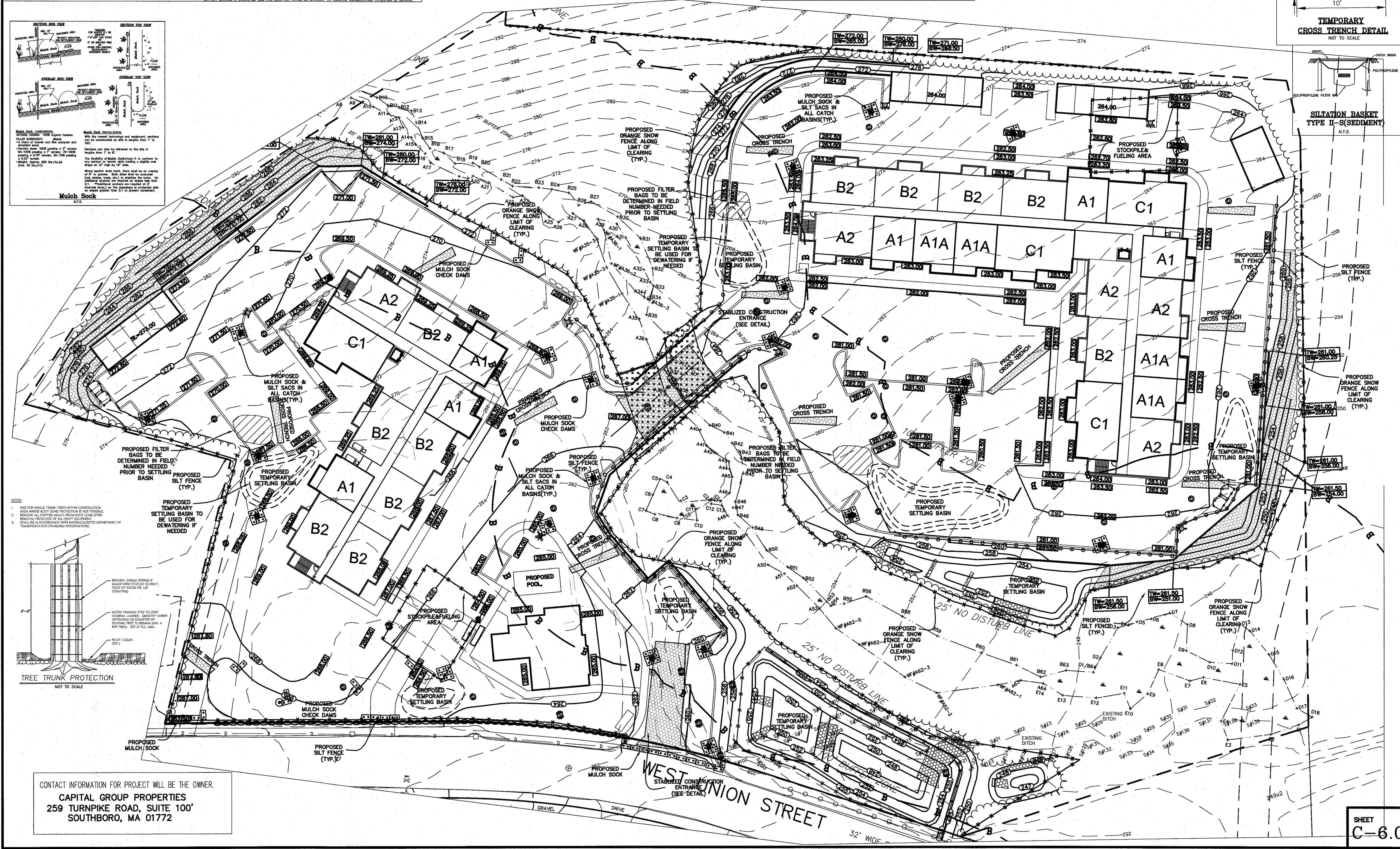
IN
ASHLAND, MA

SCALE: 1"=40'
DATE: JANUARY 30, 2014

Guerriere & Halnon, Inc.

Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

SHEET C-6.0

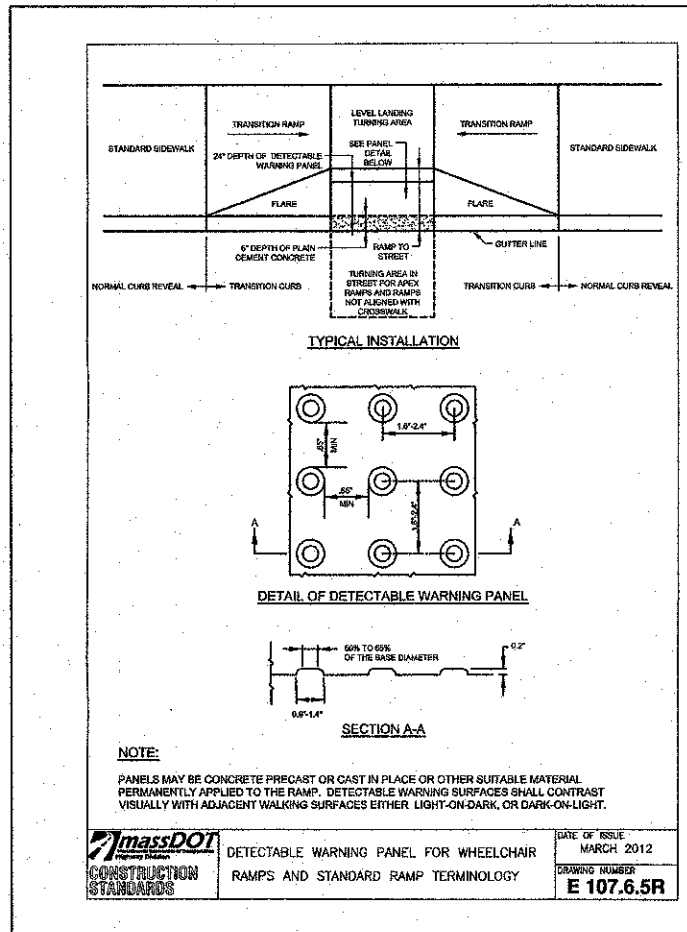


CONTACT INFORMATION FOR PROJECT WILL BE THE OWNER.
CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100'
SOUTHBORO, MA 01772

G-9411



**SPACING OF "G" REBARS VARIES - SEE SECTION.
 *FACE OF WALL TO BE BATTERED 1" OVER ENTIRE HEIGHT WHERE "A" IS GREATER THAN 5'-6" AND LESS THAN OR EQUAL TO 9'-0".
 *FACE OF WALL TO BE BATTERED 2" OVER ENTIRE HEIGHT WHERE "A" IS GREATER THAN 9'-0".
 CONT. = CONTINUOUS GA = GAUGE HORIZ. = HORIZONTAL LENG. = LENGTH MAX. = MAXIMUM O.C. = ON CENTER QUAN. = QUANTITY SPAC. = SPACING VERT. = VERTICAL



"WARNING"
EXISTING UTILITY LINES INDICATED OR NOTED ON THESE
DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION
AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR
SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO
EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED
IN WORKING IN THESE AREAS.
CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATION AS TO POSSIBLE UNMARKED UTILITY LINES.

APPROVED DATE: _____
ASHLAND PLANNING BOARD

SIGNATURE DATE: _____
BEING A MAJORITY

LEGEND:

- | | |
|--|---------------------------|
|  | EXISTING TREELINE |
|  | EXISTING CONTOUR |
|  | PROPOSED CONTOUR |
|  | OVERHEAD WIRE |
|  | DRAIN LINE |
|  | SEWER LINE |
|  | WATER LINE |
|  | UNDERGROUND ELECTRIC |
|  | ROOF DRAIN |
|  | PROPOSED FENCE |
|  | PROPOSED SILT FENCE |
|  | EXISTING SEWER MANHOLE |
|  | EXISTING DRAIN MANHOLE |
|  | EXISTING CATCH BASIN |
|  | EXISTING UTILITY POLE |
|  | PROPOSED DRAINAGE MANHOLE |

9	3/6/17	REVISED PER CLIENT.	PM
7	12/31/15	REVISED PER COMMENTS	PM
8	11/20/15	REVISED PER MEETINGS.	PM
5	8/25/15	REVISED LAYOUT.	PM
4	12/1/14	REVISED PER COMMENT LETTER.	PM
3	9/30/14	REVISED PER COMMENT LETTER.	PM
2	6/6/14	ADDED WETLAND FLAGS NUMBERS.	PM
1	5/23/14	FINALIZE DESIGN PER COMMENTS.	PM
##	DATE	DESCRIPTION	INI

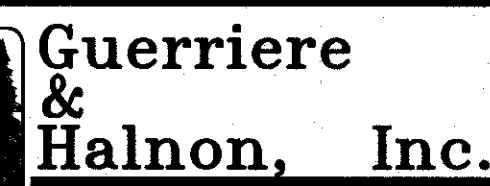
OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100
SOUTHBORO, MA 01772

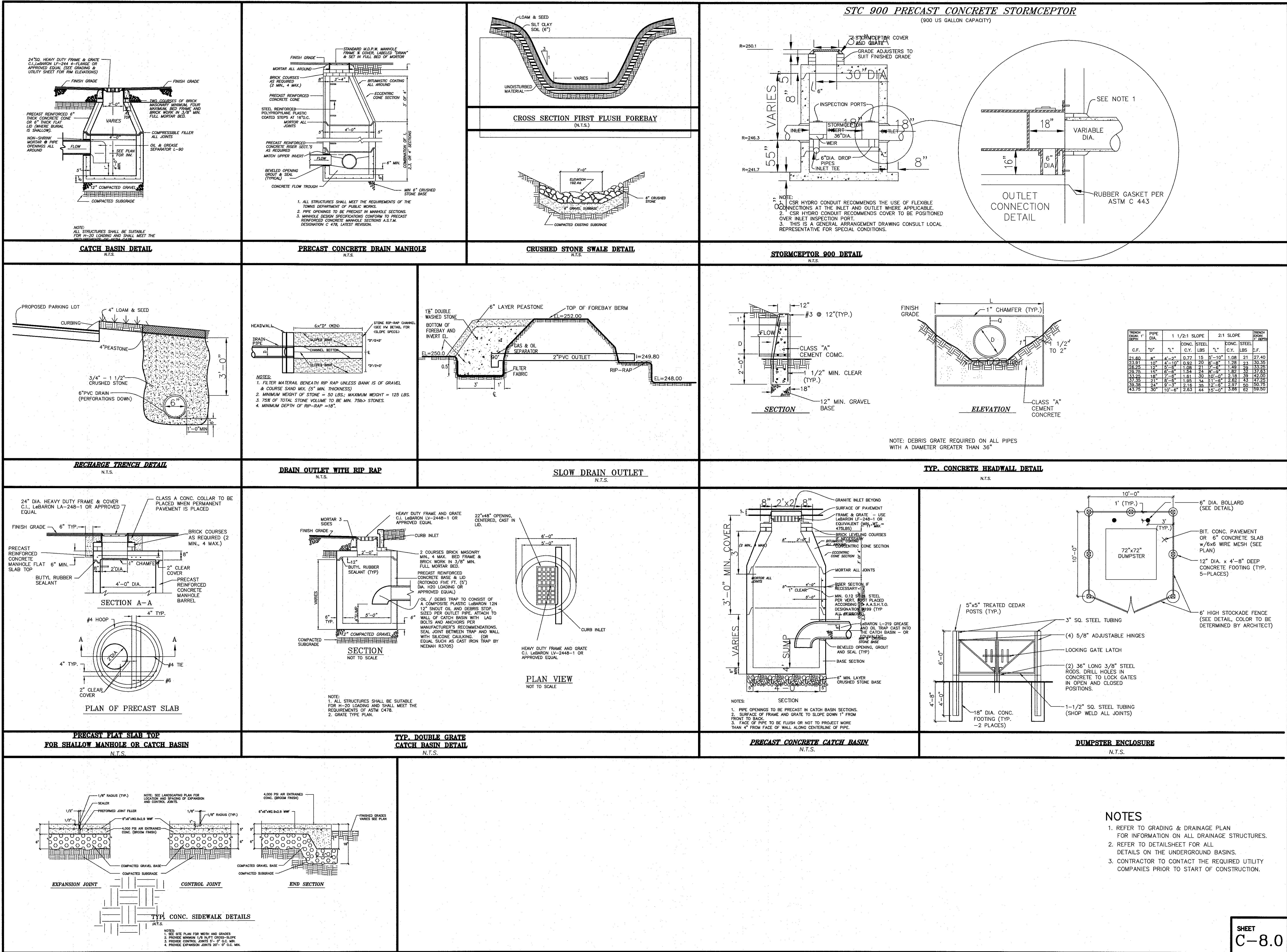
133 WEST UNION STREET

"DETAIL SHEET #1"
PLAN OF LAND
IN
SHLAND, MA

SCALE: 1"=30'
DATE: FEBRUARY 21, 2014



Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-824



DATE: 3-6-17

CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

WARNING:
EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS.
CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

APPROVED DATE:
ASHLAND PLANNING BOARD

SIGNATURE DATE:
BEING A MAJORITY

LEGEND:

EXISTING TREELINE

EXISTING CONTOUR

PROPOSED CONTOUR

OVERHEAD WIRE

DRAIN LINE

SEWER LINE

WATER LINE

UNDERGROUND ELECTRIC

ROOF DRAIN

PROPOSED FENCE

PROPOSED SILT FENCE

EXISTING SEWER MANHOLE

EXISTING DRAIN MANHOLE

EXISTING CATCH BASIN

EXISTING UTILITY POLE

PROPOSED DRAINAGE MANHOLE

9 3/6/17 REVISED PER CLIENT. PML

7 12/31/15 REVISED PER COMMENTS PML

6 11/20/15 REVISED PER MEETINGS. PML

5 8/25/15 REVISED LAYOUT. PML

4 12/1/14 REVISED PER COMMENT LETTER. PML

3 9/30/14 REVISED PER COMMENT LETTER. PML

2 6/6/14 ADDED WETLAND FLAGS NUMBERS. PML

1 5/23/14 FINALIZE DESIGN PER COMMENTS. PML

DATE DESCRIPTION INIT

OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100'
SOUTHBORO, MA 01772

133 WEST UNION STREET

"DETAIL SHEET#2"
PLAN OF LAND
IN
ASHLAND, MA

SCALE: 1"=30'

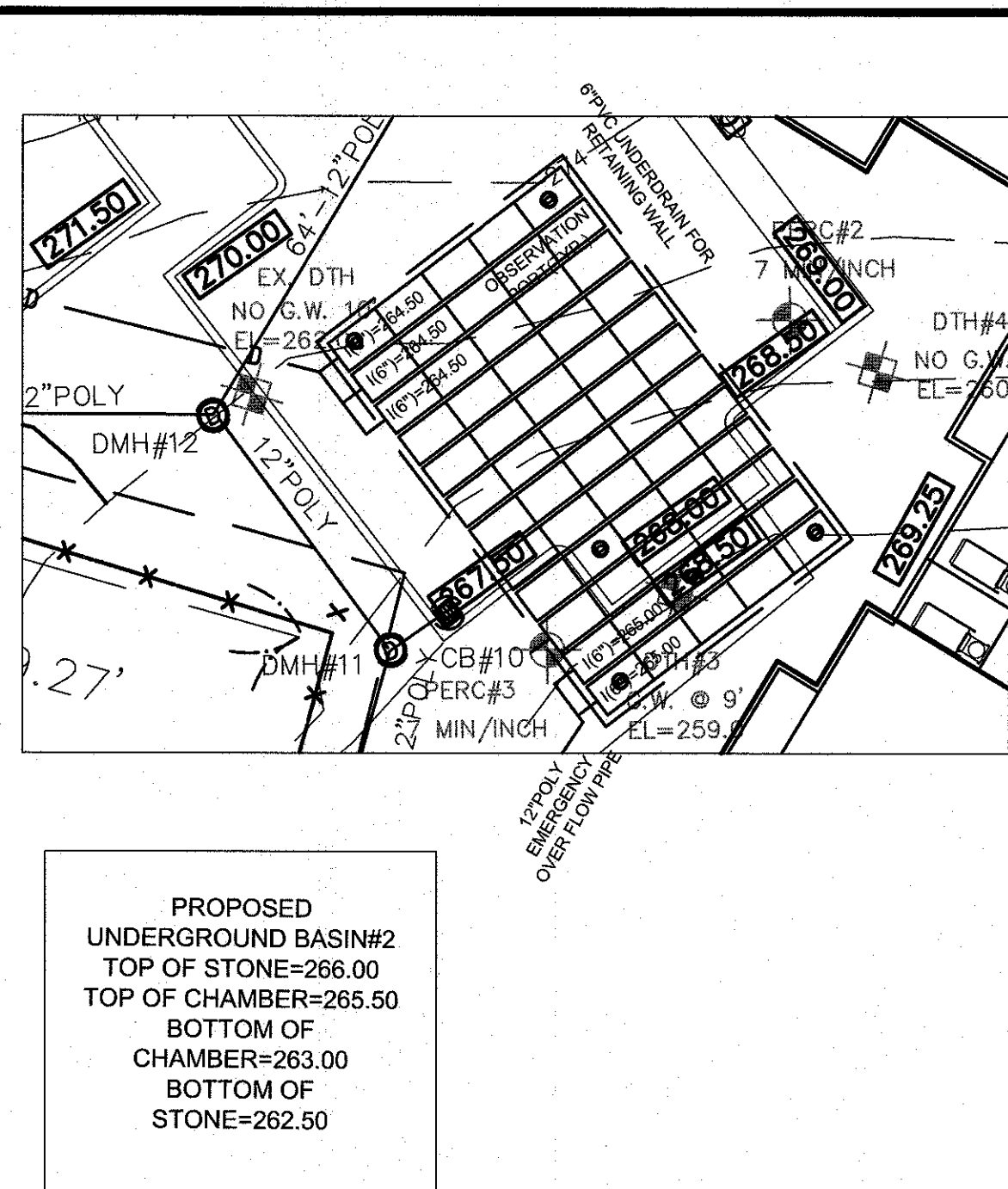
DATE: FEBRUARY 21, 2014

Guerriere
&
Halon, Inc.

Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

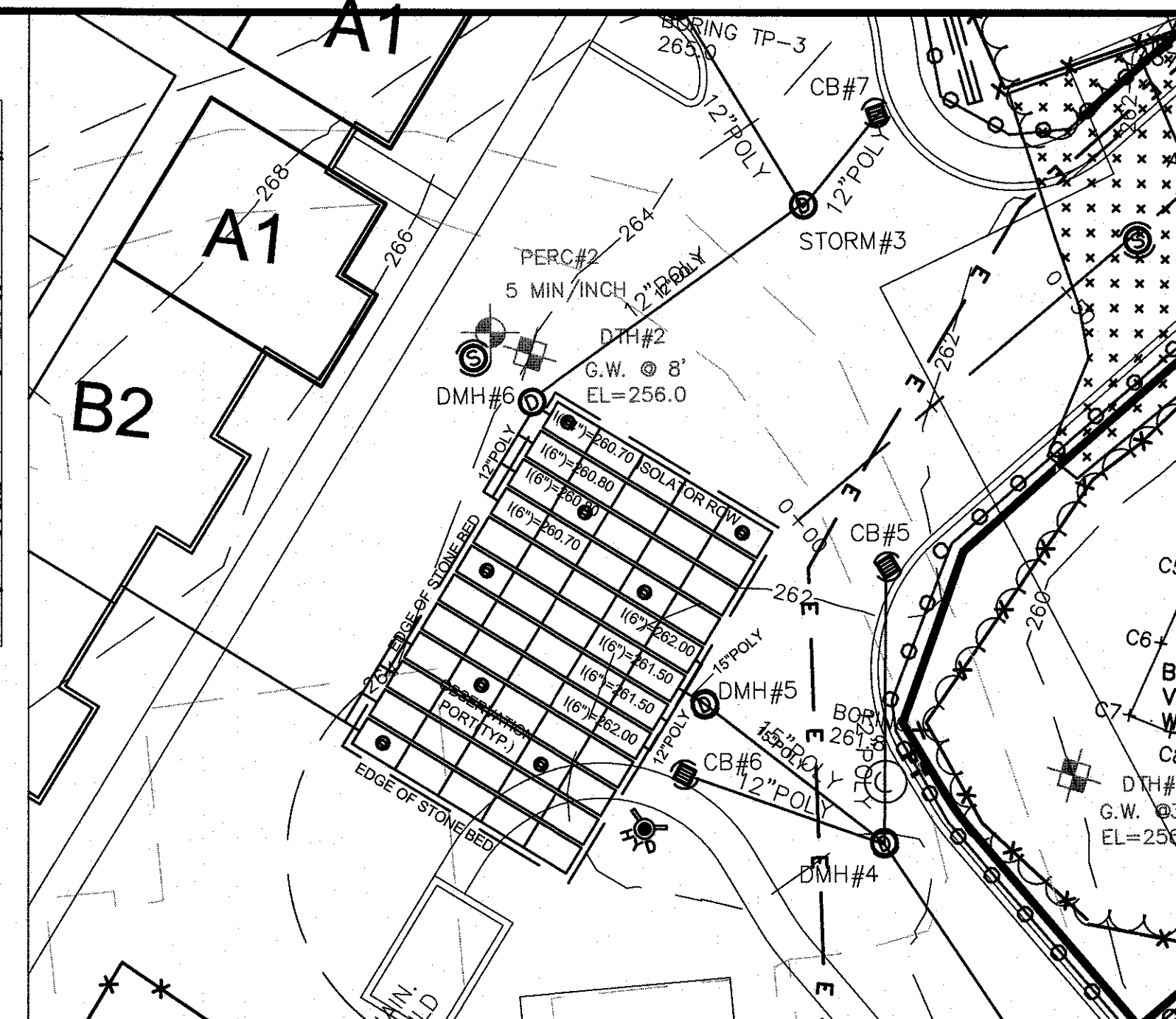
SHEET
C-8.0

NOTES
1. REFER TO GRADING & DRAINAGE PLAN
FOR INFORMATION ON ALL DRAINAGE STRUCTURES.
2. REFER TO DETAIL SHEET FOR ALL
DETAILS ON THE UNDERGROUND BASINS.
3. CONTRACTOR TO CONTACT THE REQUIRED UTILITY
COMPANIES PRIOR TO START OF CONSTRUCTION.



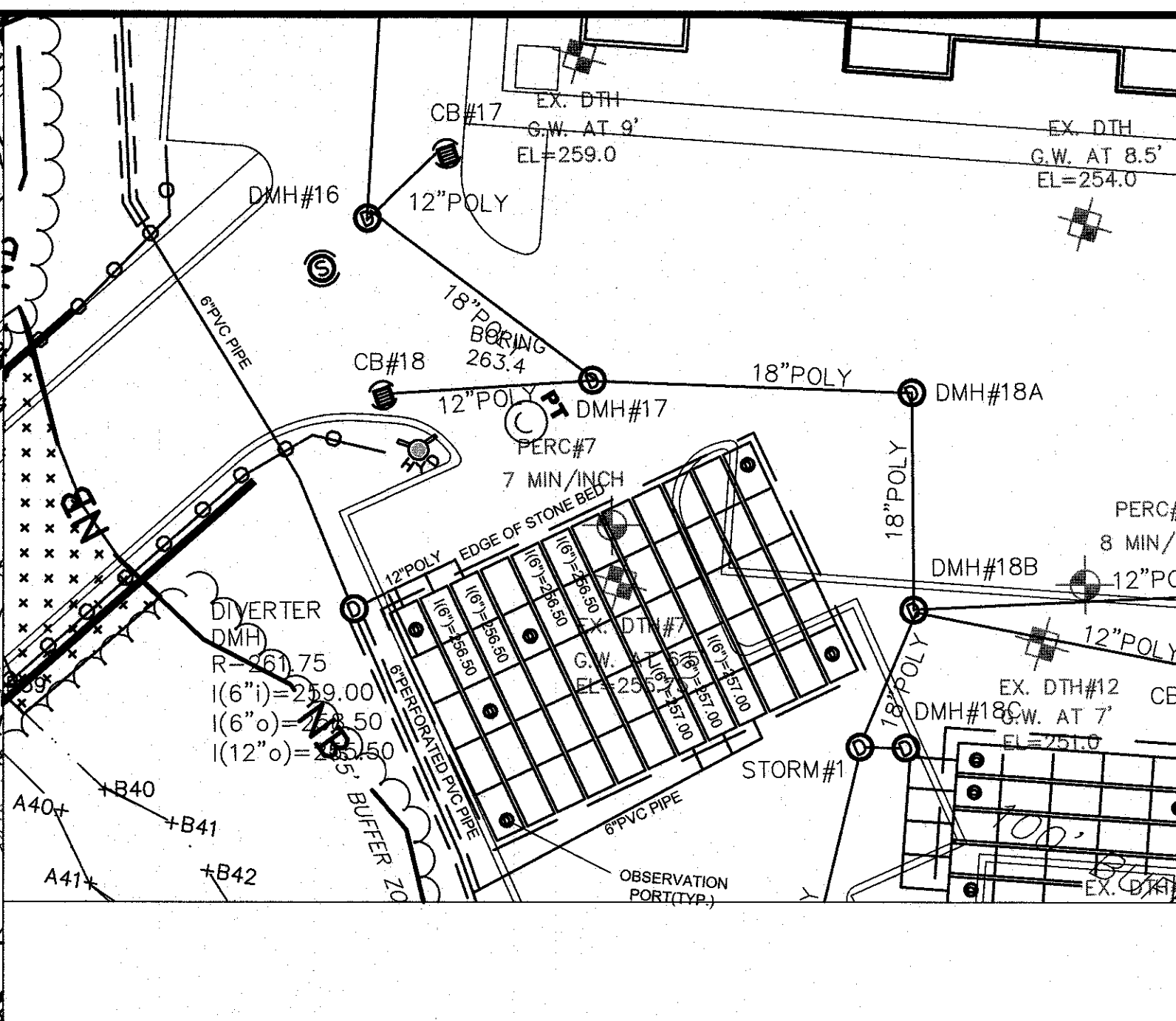
PLAN VIEW LAYOUT
U/G BASIN#2

SCALE=1"=20'



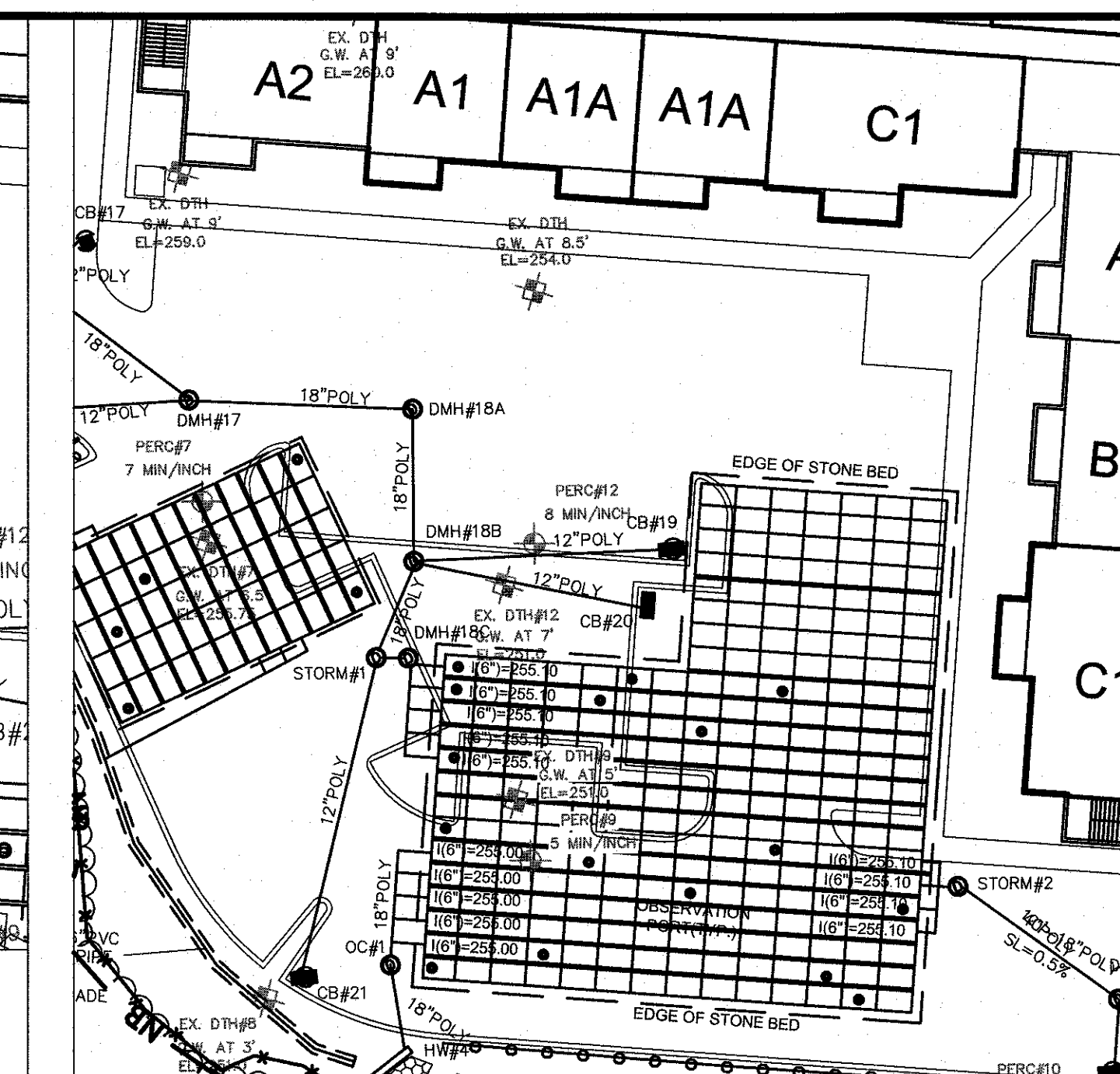
PLAN VIEW LAYOUT
U/G BASIN#3

SCALE=1"=20'



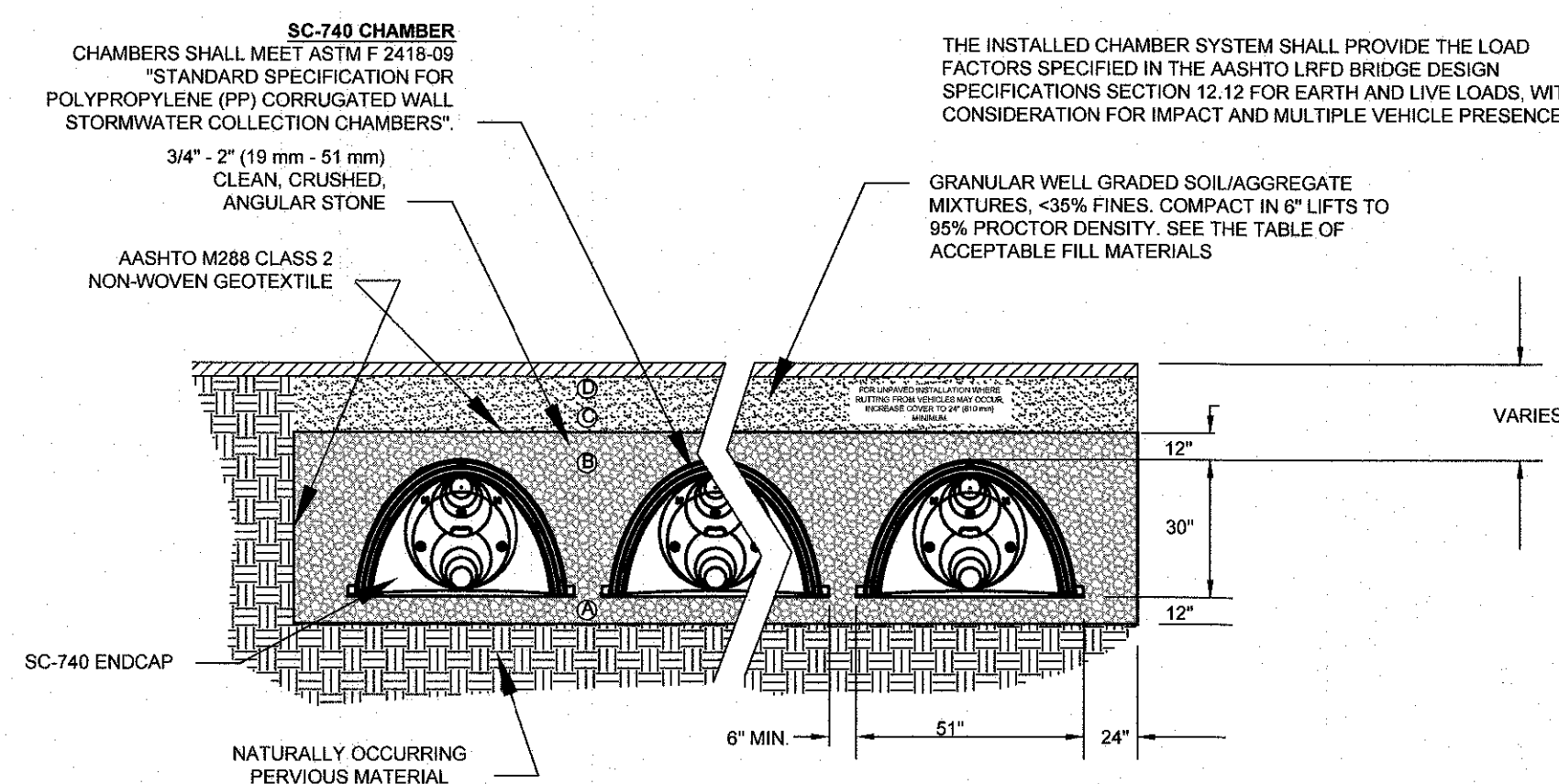
PLAN VIEW LAYOUT
U/G BASIN#4

SCALE=1"=30'



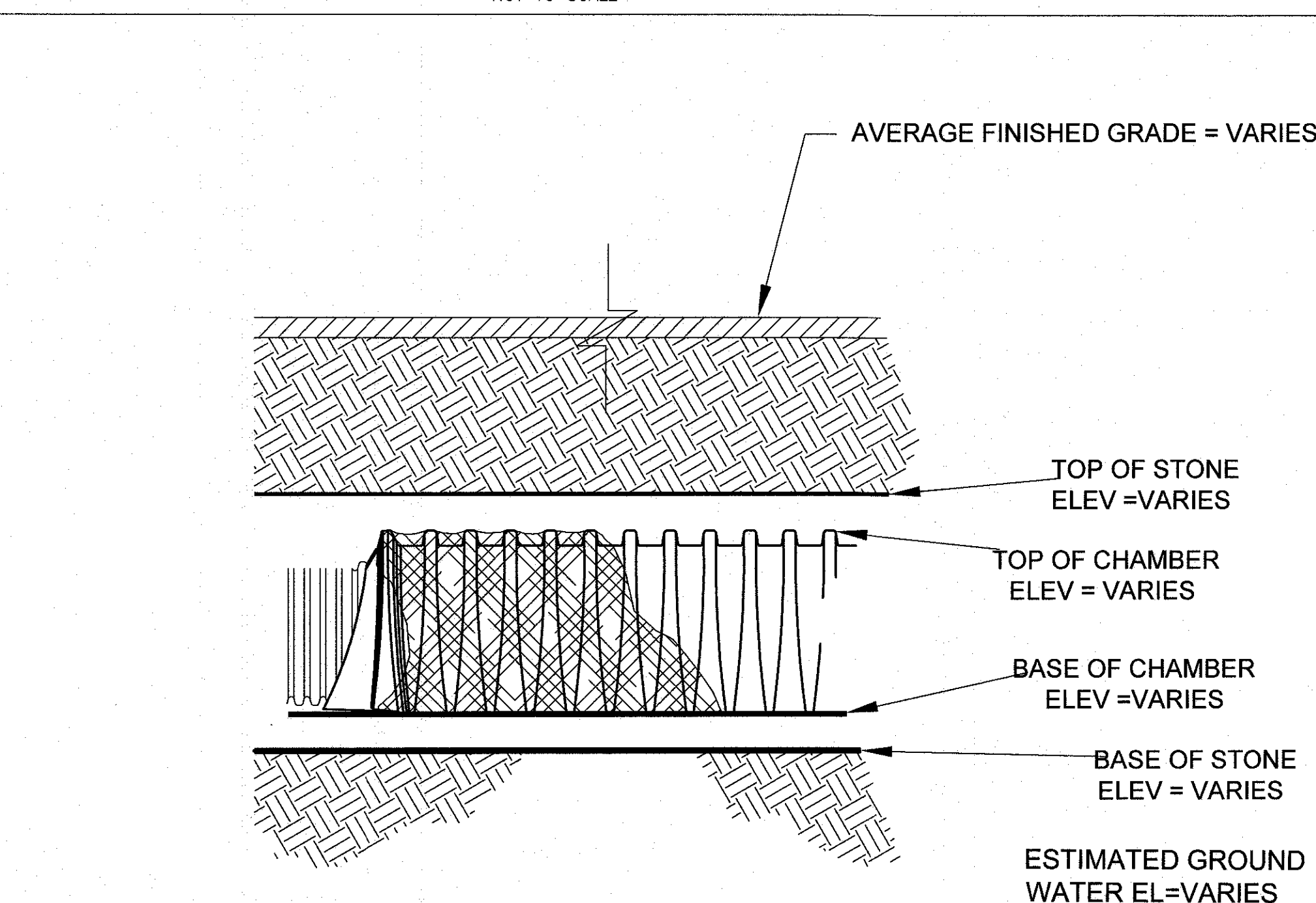
PLAN VIEW LAYOUT
U/G BASIN#1

SCALE=1"=30'

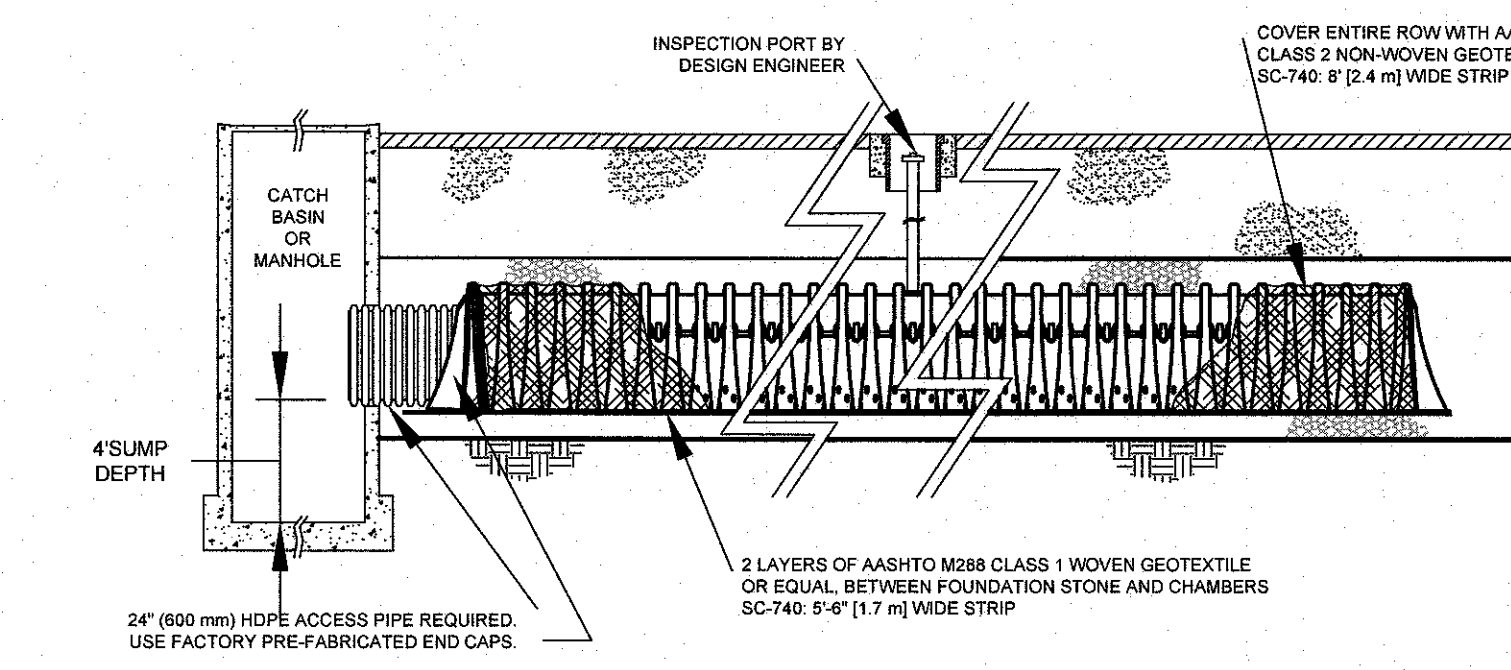


SC-740 STANDARD CROSS SECTION

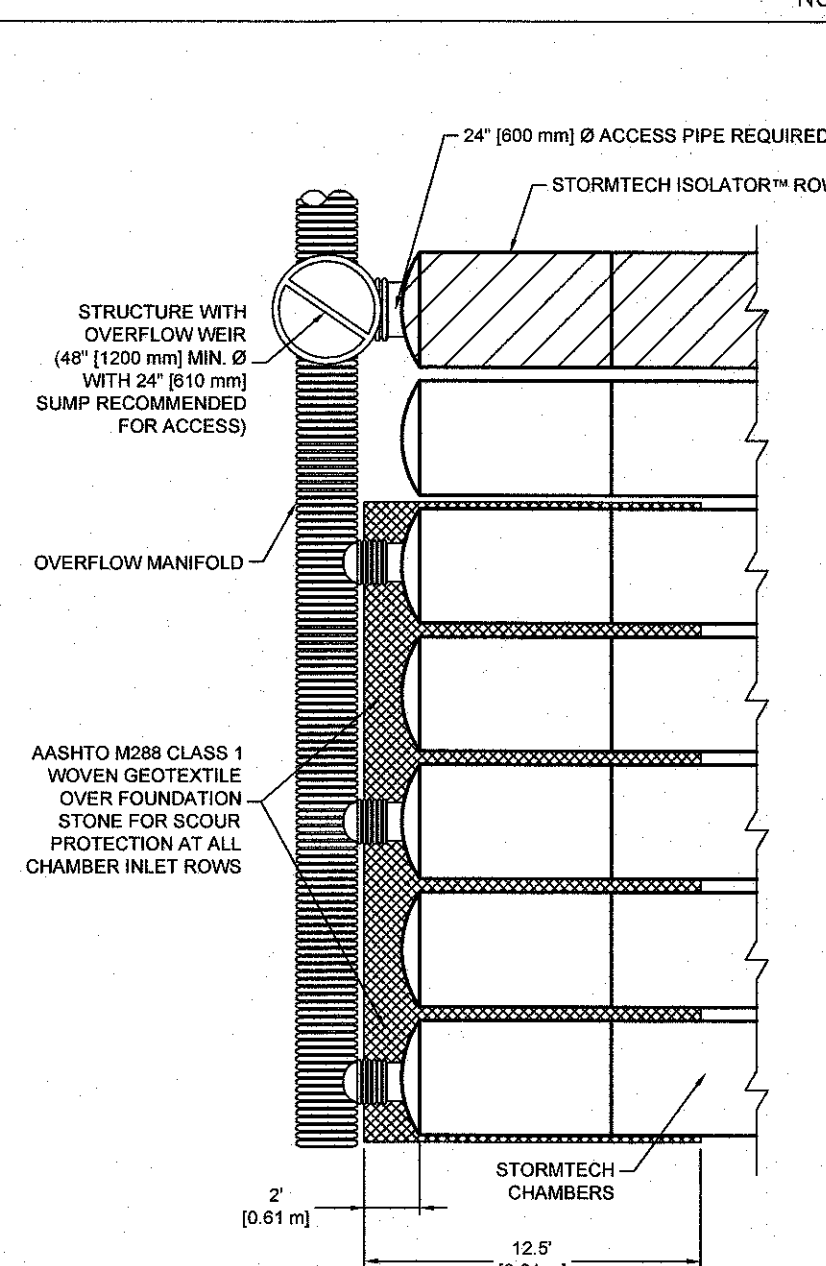
NOT TO SCALE



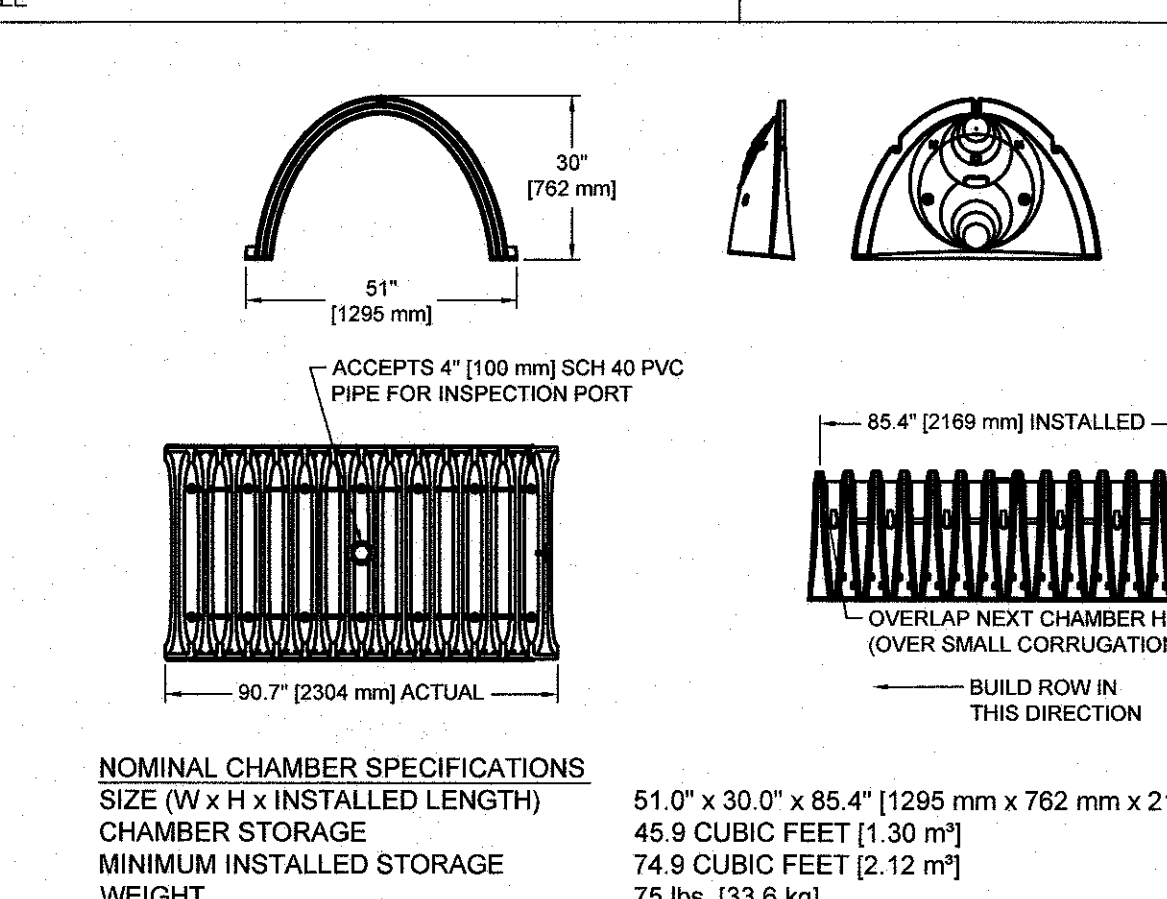
SC-740 ELEVATIONS
NOT TO SCALE



SC-740 ISOLATOR ROW™ DETAIL
NOT TO SCALE



SC-740 MANIFOLD DETAIL
NOT TO SCALE

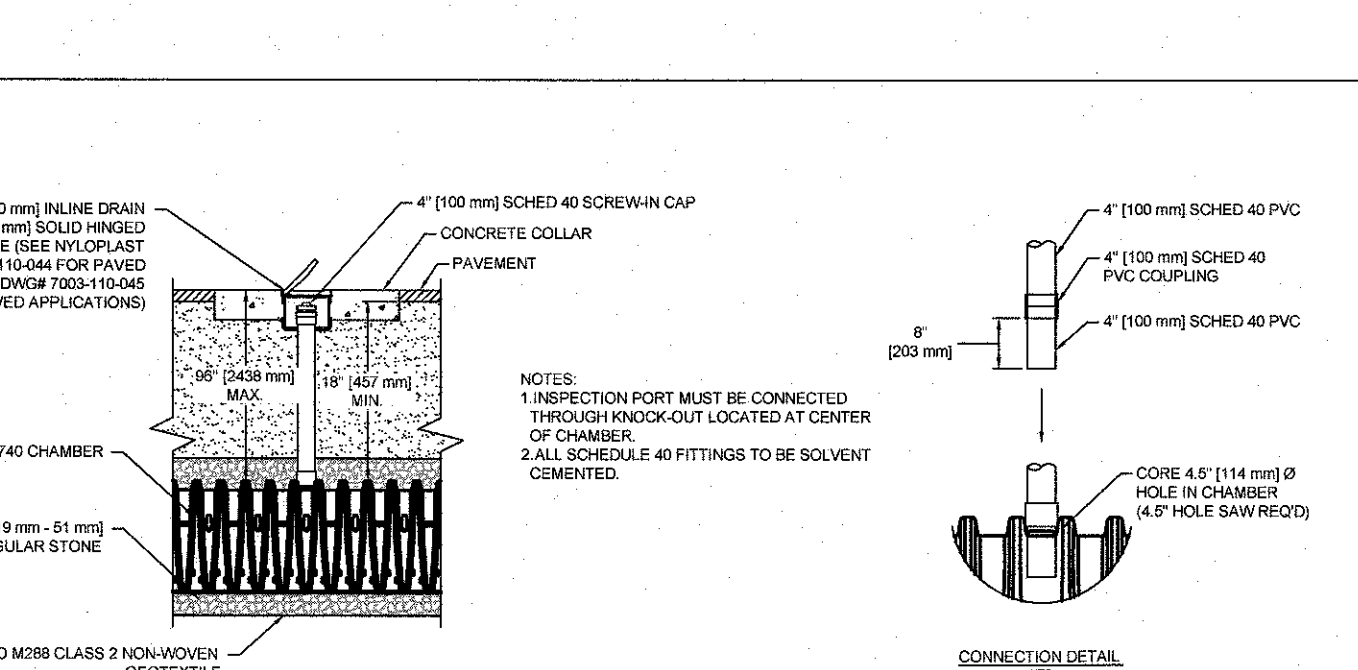


SC-740 TECHNICAL SPEC.

NOT TO SCALE

- ALL DESIGN SPECIFICATIONS FOR STORMTECH SC-740 CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL.
- THE INSTALLATION OF STORMTECH SC-740 CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND LOAD FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

SC-740 NOTES
NOT TO SCALE

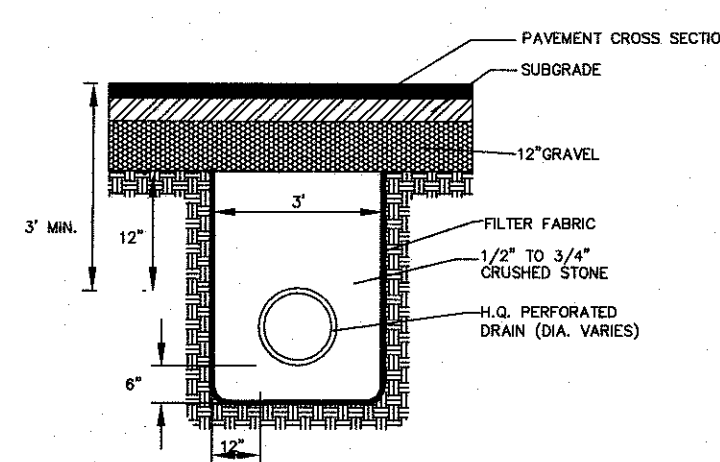


SC-740 INSPECTION PORT DETAIL
NOT TO SCALE

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART#	STUB	A	B	C
SC740EPE08T	6" (150 mm)	10.90' (277 mm)	18.50' (470 mm)	N/A
SC740EPE08B	6" (150 mm)	10.90' (277 mm)	N/A	0.50' (13 mm)
SC740EPE08T	8" (200 mm)	12.20' (310 mm)	16.50' (419 mm)	N/A
SC740EPE08B	8" (200 mm)	12.20' (310 mm)	N/A	0.60' (15 mm)
SC740EPE10T	10" (250 mm)	13.40' (340 mm)	14.50' (368 mm)	N/A
SC740EPE10B	10" (250 mm)	13.40' (340 mm)	N/A	0.70' (18 mm)
SC740EPE12T	12" (300 mm)	14.70' (373 mm)	12.50' (318 mm)	N/A
SC740EPE12B	12" (300 mm)	14.70' (373 mm)	N/A	1.20' (30 mm)
SC740EPE15T	15" (375 mm)	18.40' (467 mm)	9.00' (229 mm)	N/A
SC740EPE15B	15" (375 mm)	18.40' (467 mm)	N/A	1.30' (33 mm)
SC740EPE18T	18" (450 mm)	19.70' (500 mm)	5.00' (127 mm)	N/A
SC740EPE18B	18" (450 mm)	19.70' (500 mm)	N/A	1.60' (41 mm)
SC740EPE24B	24" (600 mm)	18.50' (470 mm)	N/A	0.10' (3 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL
ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.
*FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75' (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.



TYPICAL TRENCH DETAIL H.Q. DRAIN PIPE
N.T.S.

ELIZABETH A. MAHONEY
CIVIL
No. 45096
Professional Seal

DATE: 3-6-17

DATE: 3-6-17

CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

"WARNING"
EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS.
CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).
EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

APPROVED DATE:
ASHLAND PLANNING BOARD

SIGNATURE DATE: _____
BEING A MAJORITY

LEGEND:
— EXISTING TREELINE
— EXISTING CONTOUR
— PROPOSED CONTOUR
— OH — OVERHEAD WIRE
— D — DRAIN LINE
— S — SEWER LINE
— W — WATER LINE
— U — UNDERGROUND ELECTRIC
— RD — ROOF DRAIN
— X — PROPOSED FENCE
— X — PROPOSED SILT FENCE
— EXISTING SEWER MANHOLE
— EXISTING DRAIN MANHOLE
— EXISTING CATCH BASIN
— EXISTING UTILITY POLE
— PROPOSED DRAINAGE MANHOLE

NOTES:
1. REFER TO GRADING & DRAINAGE PLAN FOR INFORMATION ON ALL DRAINAGE STRUCTURES.
2. REFER TO DETAILSHEET FOR ALL DETAILS ON THE UNDERGROUND BASINS.
3. CONTRACTOR TO CONTACT THE REQUIRED UTILITY COMPANIES PRIOR TO START OF CONSTRUCTION.
4. CONTRACTOR TO CONTACT MANUFACTURE REGARDING OBSERVATION PORT LOCATIONS AND REQUIRED NUMBER OF PORTS PER UNDERGROUND BASIN.

#	DATE	REVISION PER CLIENT.	P.M.
9	3/6/17	REVISED PER CLIENT.	P.M.
7	12/31/15	REVISED PER COMMENTS	P.M.
6	11/20/15	REVISED PER MEETINGS.	P.M.
5	8/25/15	REVISED LAYOUT.	P.M.
4	12/1/14	REVISED PER COMMENT LETTER.	P.M.
3	9/30/14	REVISED PER COMMENT LETTER.	P.M.
2	6/6/14	ADDED WETLAND FLAG NUMBERS.	P.M.
1	5/23/14	FINALIZE DESIGN PER COMMENTS.	P.M.
##	DATE	DESCRIPTION	INIT

OWNER/APPLICANT
CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100
SOUTHBORO, MA 01772

133 WEST UNION STREET

"DETAIL SHEET#3"
PLAN OF LAND
IN
ASHLAND, MA
SCALE: 1"=30'
DATE: FEBRUARY 21, 2014

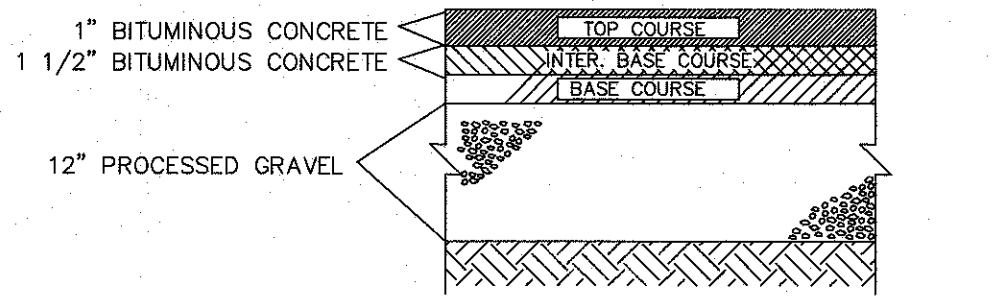
Guerriere & Halnon, Inc.
Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

C-9.0

G-9411

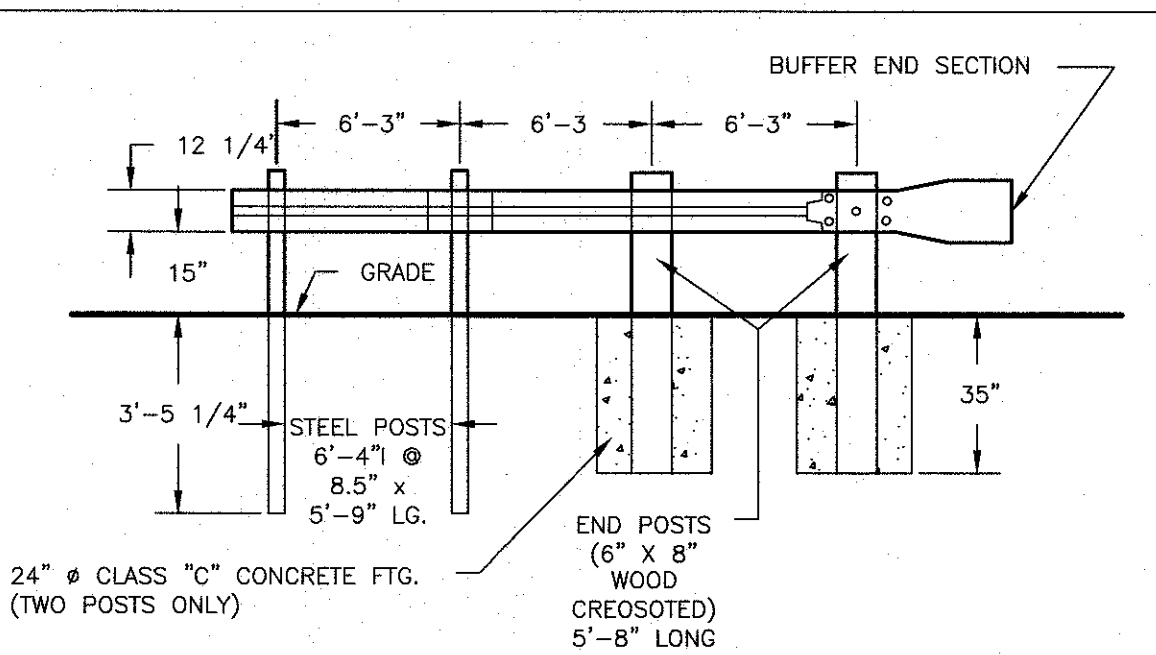
NOTES:
1. SILTATION CONTROLS SHALL BE INSPECT AT THE END OF THE DAY WHEN WORKING IN CLOSE LOCATION TO THE WETLANDS.
2. CONTRACTOR TO COORDINATE WITH CONSERVATION COMMISSION BEFORE CONSTRUCTION STARTS.

3. ALL PROPOSED WORK WITHIN THE WETLAND CROSSING AREA SHALL BE DONE DURING THE TIME OF YEAR THAT NO FLOW IS PRESENT TO MINIMIZE THE DISTURBANCE AND SILT.
4. ONCE INSTALLATION IS DONE MATTING SHALL BE USED TO RESTORE THE BANK AREAS.
5. ASHLAND CONSERVATION SHALL APPROVE THE MATTING FOR THE AREA PRIOR TO START.
6. TRASH WILL BE PICKED UP IN WORK AREA AT THE END OF THE DAY AND DISPOSED OF IN DUMPSTER FOUND IN THE STOCKPILE AREAS LOCATED OUTSIDE OF THE BUFFER ZONE.
7. EXISTING CONCRETE APRON WILL BE REPLACED WITH RIP RAP APRON FROM NEW HEADWALL.
8. PROPOSED OPEN BOTTOM CULVERT WILL BE EMBEDDED 24 INCHES AND EXISTING CHANNEL TO REMAIN AND NOT TO BE DISTURBED.



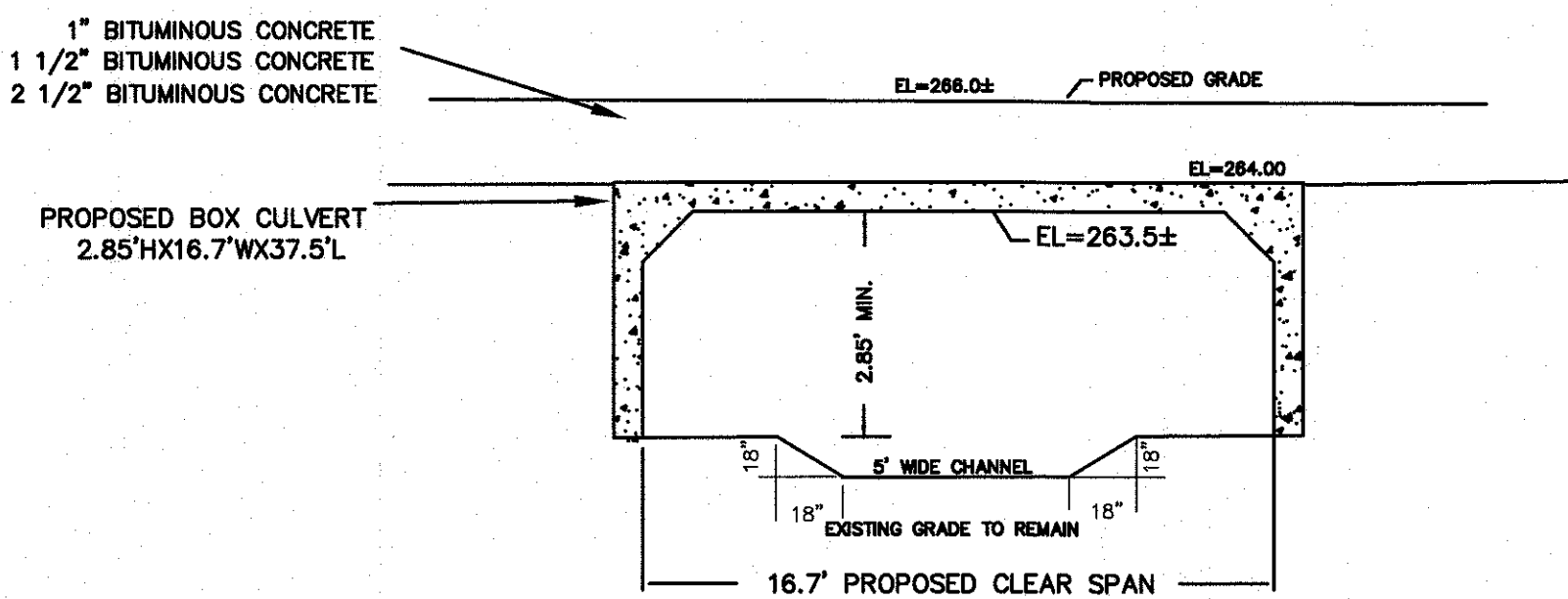
BITUMINOUS PAVEMENT DETAIL

N.T.S.



GUARD RAIL DETAIL

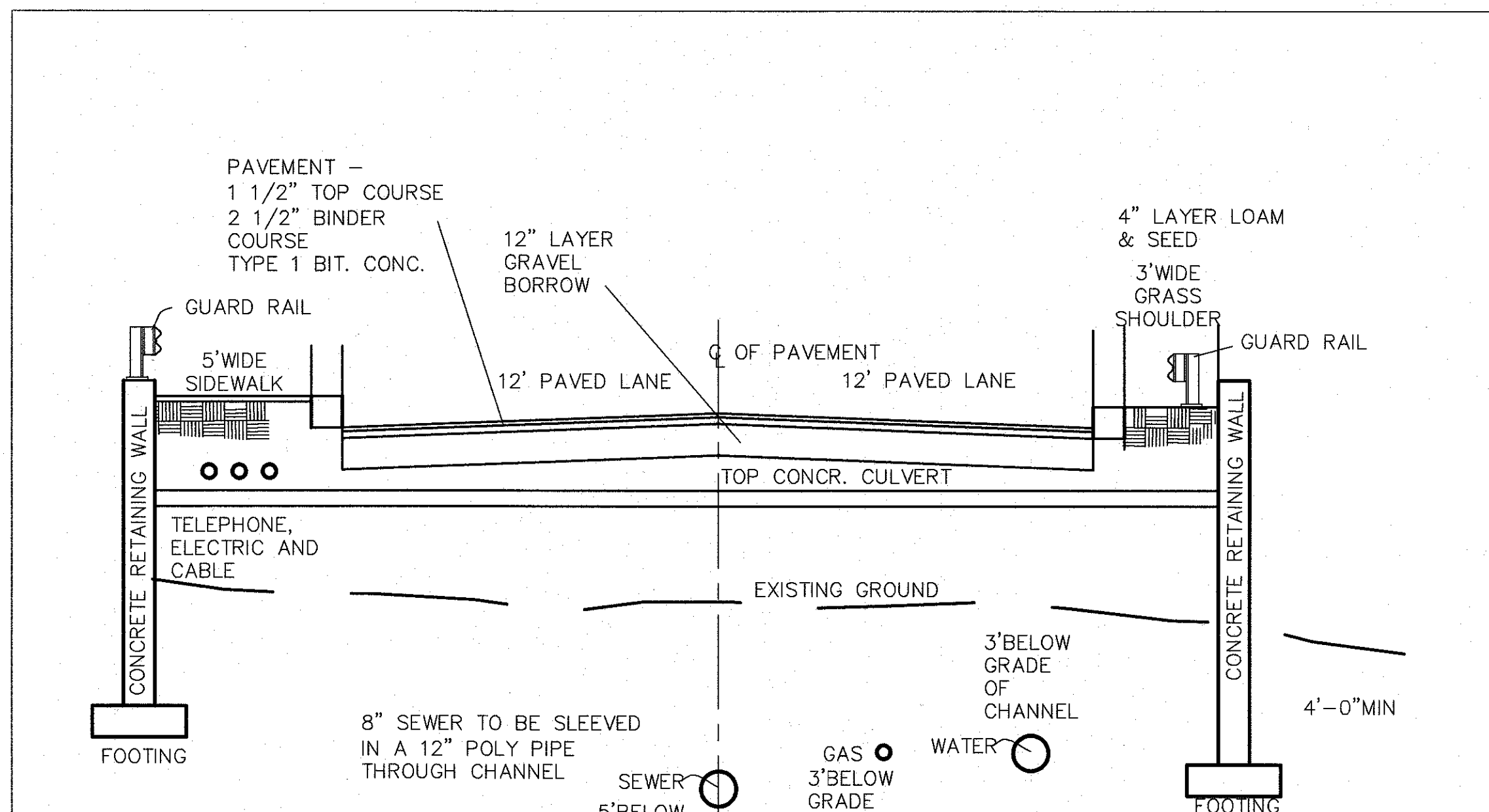
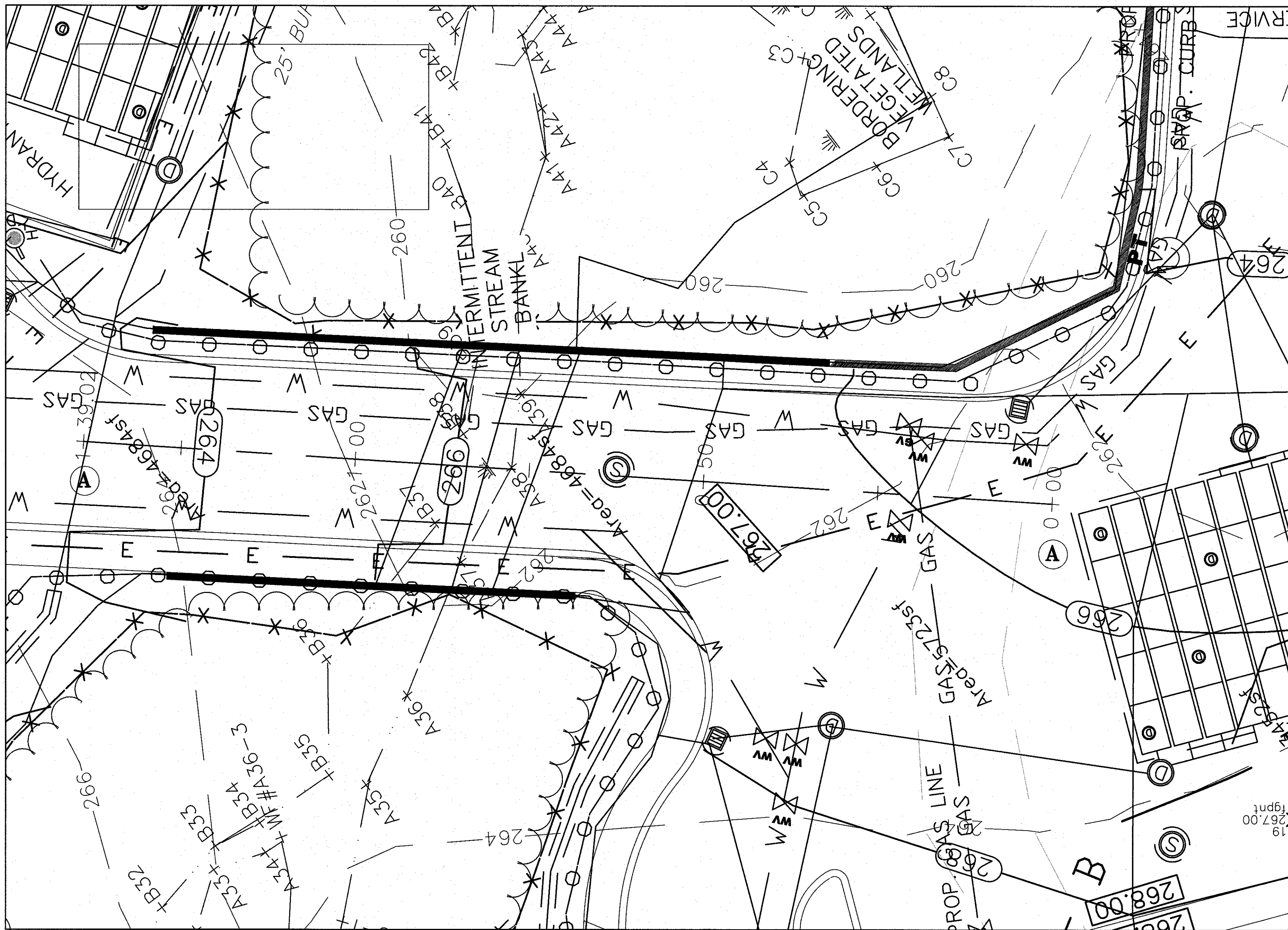
N.T.S.



OPEN BOTTOM BOX CULVERT
OPENNESS RATIO & BANKFULL WIDTH DETAIL

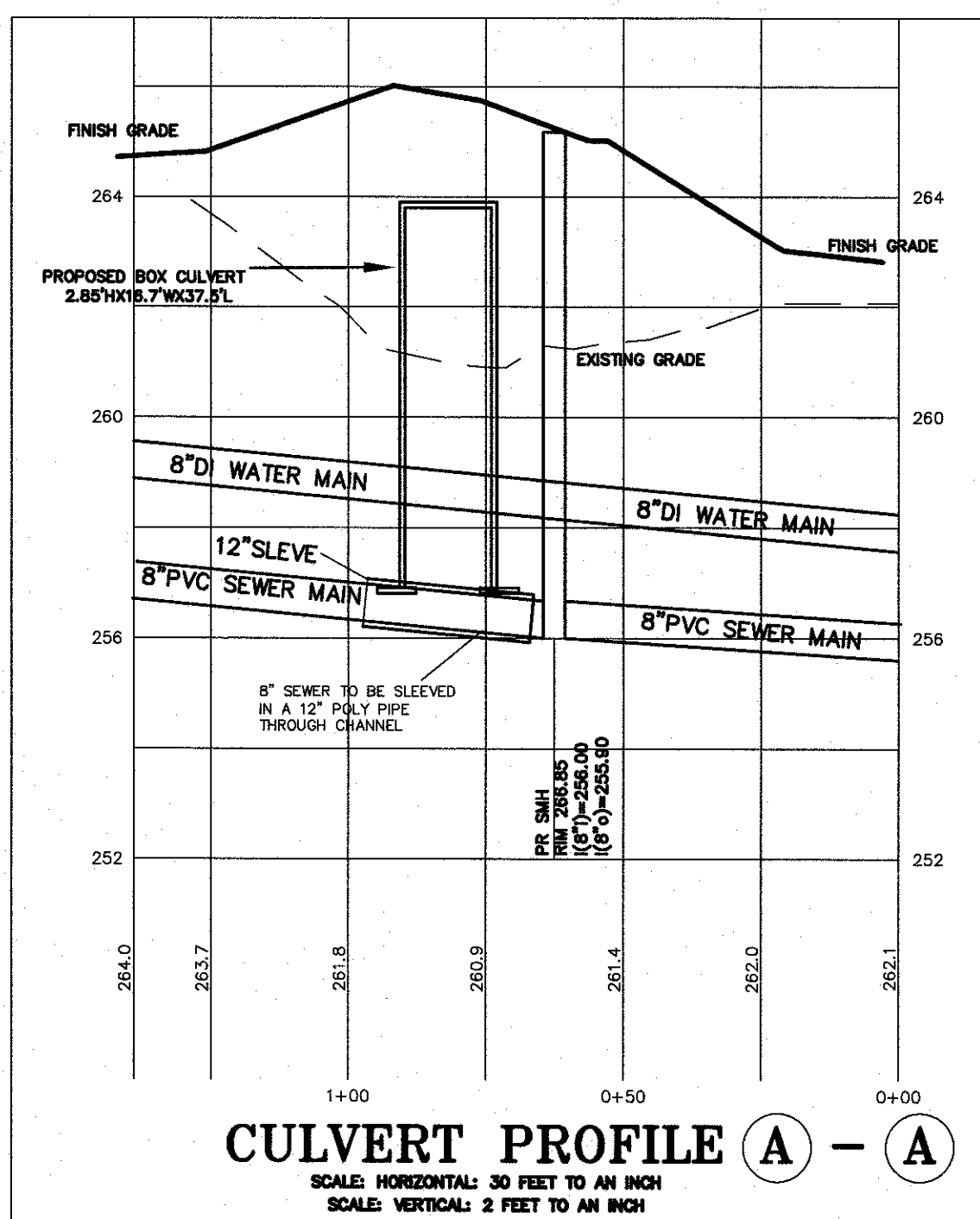
NOT TO SCALE

NOTE:
1. EROSION CONTROL TO BE STAKED BY SURVEYOR PRIOR TO ANY CONSTRUCTION.
2. THE PROPOSED EMBEDMENT OF THE BOX CULVERT SHALL BE 4'.
3. THE PROPOSED CHANNEL WIDTH SHALL BE 1.2 TIMES THE BANKFULL WIDTH. (SHALL BE A MINIMUM OF 9.6' WIDE)
4. THE OPENNESS RATIO IS FOR PROPOSED BOX CULVERT IS 0.38 ((5.09Wx0.868H)/(11.439L=0.31)
5. THE BOTTOM OF THE BOX CULVERT SHALL NOT DISTURB THE NATURAL DRAINAGE CHANNEL.



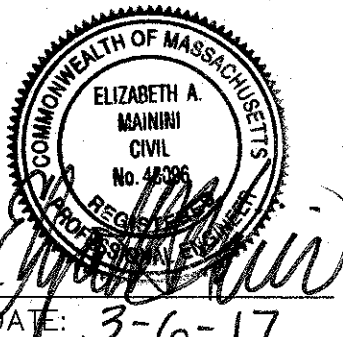
CROSS SECTION OF ROADWAY

SCALE: HORIZONTAL: 40 FEET TO AN INCH
SCALE: VERTICAL: 4 FEET TO AN INCH



CULVERT PROFILE A - A

SCALE: HORIZONTAL: 30 FEET TO AN INCH
SCALE: VERTICAL: 2 FEET TO AN INCH



DATE: 3-6-17
CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

"WARNING"
EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS.
CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233).

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

APPROVED DATE:
ASHLAND PLANNING BOARD

SIGNATURE DATE:
BEING A MAJORITY

LEGEND:

- EXISTING TREELINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- OH OVERHEAD WIRE
- D DRAIN LINE
- S SEWER LINE
- W WATER LINE
- U UNDERGROUND ELECTRIC
- RD ROOF DRAIN
- PROPOSED FENCE
- PROPOSED SILT FENCE
- EXISTING SEWER MANHOLE
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- EXISTING UTILITY POLE
- PROPOSED DRAINAGE MANHOLE

9	3/8/17	REVISED PER CLIENT.	PMI
7	12/31/15	REVISED PER COMMENTS	PMI
6	11/20/15	REVISED PER MEETINGS.	PMI
5	8/25/15	REVISED LAYOUT.	PMI
4	12/1/14	REVISED PER COMMENT LETTER.	PMI
3	9/30/14	REVISED PER COMMENT LETTER.	PMI
2	6/6/14	ADDED WETLAND FLAG NUMBERS.	PMI
1	5/23/14	FINALIZE DESIGN PER COMMENTS.	PMI
##	DATE	DESCRIPTION	INIT

OWNER/APPLICANT

CAPITAL GROUP PROPERTIES
259 TURNPIKE ROAD, SUITE 100'
SOUTHBORO, MA 01772

133 WEST UNION STREET

"DETAIL SHEET#2"
PLAN OF LAND

IN
ASHLAND, MA

SCALE: 1"=30'
DATE: FEBRUARY 21, 2014

Guerriere
&
Halnon, Inc.
Engineering & Land Surveying
333 WEST STREET, MILFORD, MASS. 01757
(508) 473-6630 FAX: (508) 473-8243

SHEET
C-10