THE LOFTS AT BLACK BIRCH COUNTRY CLUB

COMMUNITY CENTER REDEVELOPMENT

EAST HADDAM, CONNECTICUT

APPLICANT: THE LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

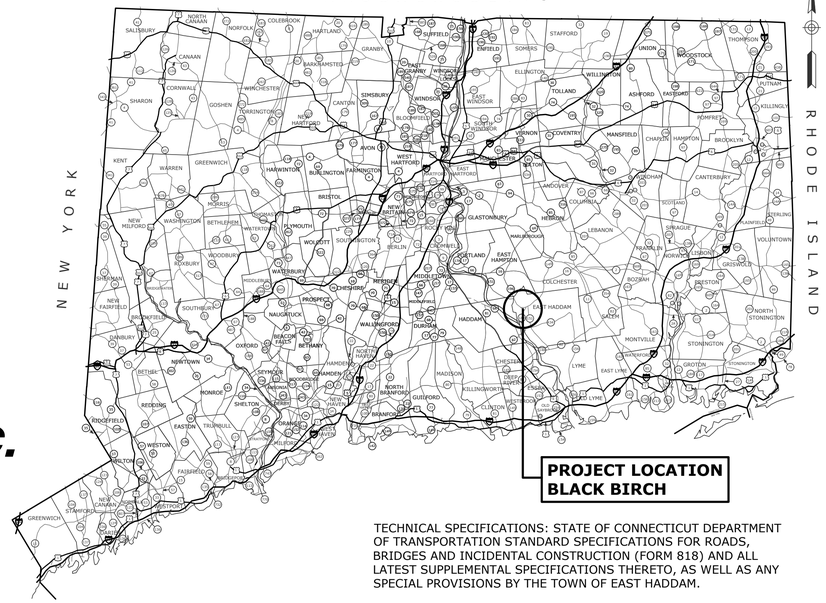
GENERAL NOTES:

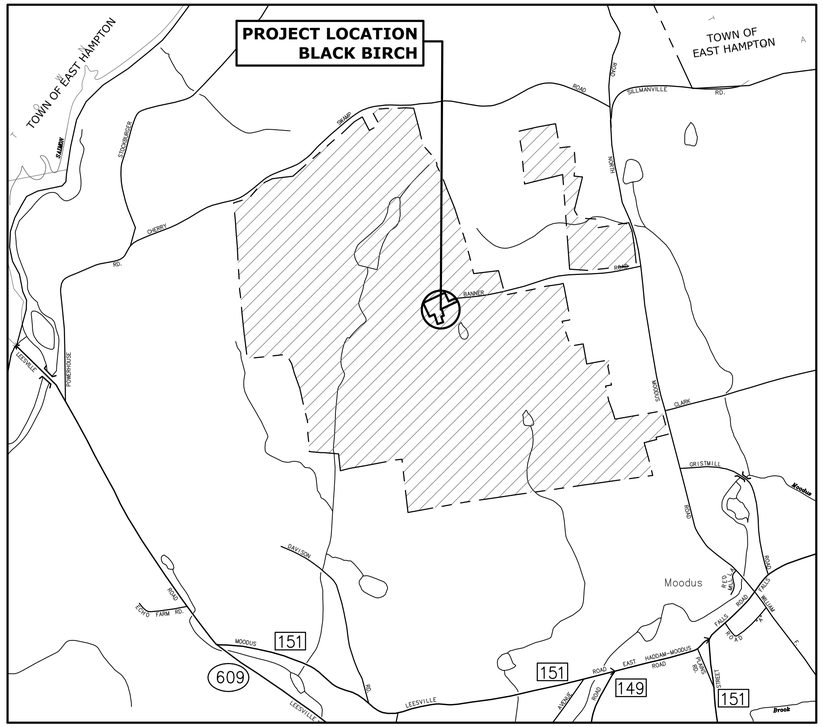
1. MAP REFERENCES:
A. VOL.683, PG. 333.
B. MAP SHOWING, "PROPERTY MAP PREPARED FOR EDITH C. DAVIDSON, EAST HADDAM, CONNECTICUT." SCALE 1" = 100', DATED SEPT. 1968 BY FERDINAND A. CZWACZKA, L.S. (EHLR MAP NO. 601)
C. MAP SHOWING, "BOUNDARY SURVEY PORTION OF LAND OF BANNER LODGE, NORTH MOODUS ROAD, EAST HADDAM, CONNECTICUT." SCALE 1" = 40', DATED 10-22-74 BY FREDERICK M. HAYES ASSOCIATES, INC. (EHLR MAP NO. 818)
D. MAP SHOWING, "MAP OF A PORTION OF PROPERTY OF THE BANNER LODGE COMPANY, SHOWING PROPOSED, PLANNED DEVELOPMENT, EAST HADDAM, CONNECTICUT." SCALE 1" = 100', REV. 8-31-78 BY M.D. HELFGOTT. (EHLR MAP NO. 1040)
E. MAP SHOWING "PARCEL OF LAND BEING CONVEYED FROM SEYMOUR PIVNICK AND PHYLLIS PIVNICK TO THE BANNER LODGE COMPANY, EAST HADDAM, CONNECTICUT." SCALE 1" = 100', DATED 1-18-79, BY M.D. HELFGOTT (EHLR MAP NO. 1065)
F. MAP SHOWING, "MAP OF PORTION OF PROPERTY OF THE BANNER LODGE COMPANY SHOWING PROPOSED PLANNED DEVELOPMENT, EAST HADDAM, CONNECTICUT." SCALE 1" = 100', REV. 6-8-79, (EHLR MAP NO. 1103)
G. MAP SHOWING, "PROPERTY DIVISION FOR JOEL R. AND HENRIETTA S. PEAR, TOWN OF EAST HADDAM, CONNECTICUT." SCALE 1" = 40', DATED 9-22-84 BY RICHARD J. ZIOBRON (EHLR MAP NO. 1533)
H. MAP SHOWING, "BOUNDARY SURVEY PREPARED FOR BANNER LODGE COMPANY, AND MIDDLESEX DEVELOPMENT COMPANY, BANNER ROAD AND CHERRY SWAMP ROAD, EAST HADDAM, CONNECTICUT." SCALE 1" = 20', DATED 12-5-85, BY FREDERICK M. HAYES ASSOCIATES, INC.
I. MAP SHOWING, "MAP PREPARED FOR STEPHEN RICHARD HITRIZ, CHERRY SWAMP ROAD, EAST HADDAM, CONNECTICUT." SCALE 1" - 20' DATED 11-12-87 BY DESIGN DEVELOPMENT GROUP.
J. MAP SHOWING, " PORTION OF LANDS OF WILLIAMS ASSOCIATES IV AND ALPHA BANNER LIMITED, CHERRY SWAMP ROAD AND BANNER ROAD, EAST HADDAM, CONNECTICUT." SCALE 1" = 100', DATED JUNE 14, 1988, BY ARTHUR E. BARDEN.
K. MAP SHOWING, "SURVEY MAP FOR WILLIAMS ASSOCIATES IV, TOWN OF EAST HADDAM, CONNECTICUT." SCALE 1" = 50', DATED NOV. 21, 1987 BY RICHARD ZIOBRON.
L. MAP SHOWING, "BANNER ESTATES CHERRY SWAMP ROAD AND BANNER ROAD, EAST HADDAM, CONNECTICUT." SCALE 1" = 200', DATED 5-11-05 BY MERLYN J. JENKINS & ASSOCIATES, INC.
2. INLAND WETLANDS AS FLAGGED IN 2005 AND 2012 BY TOM PIETRAS (SSES), CERTIFIED SOIL SCIENTIST.
3. ELEVATIONS SHOWN HEREON ARE BASED ON THE LATEST APPLICABLE U.S. COAST AND GEODETIC SURVEY.
4. ALL CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH APPLICABLE TOWN OF EAST HADDAM ROAD AND DRAINAGE CONSTRUCTION STANDARDS, SITEPLAN STANDARDS, ANSI STANDARDS, AND SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 818 AND ADDENDUM.
5. CHOSEN CONTRACTOR WILL SERVE AS CONTACT PERSON FOR INSTALLATION, INSPECTION AND MAINTENANCE OF EROSION AND SEDIMENTATION MEASURES.
6. ANY NEW UTILITIES, INCLUDING CATV, TO BE INSTALLED UNDERGROUND. THE EXACT LOCATION AND SIZE OF ANY ELECTRIC, TELEPHONE, CABLE, WATER AND GAS ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY COMPANIES.
7. WMC CONSULTING ENGINEERS, INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
8. ALL DIMENSIONS AND ELEVATION SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY FOR DETERMINATION.
9. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM THE THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
10. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4" TOPSOIL, AND BE SEEDED WITH GRASS.
11. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
12. ALL STORM DRAIN PIPE SHALL BE SMOOTH LINED HIGH DENSITY POLYETHYLENE PIPE (HDPE) UNLESS OTHERWISE INDICATED.
13. ALL SANITARY SEWER PIPE SHALL BE PVC SDR35 UNLESS OTHERWISE INDICATED.
14. GUTTERS, ROOF DRAINS AND FOUNDATIONS DRAINS SHALL BE TIED INTO THE STORM DRAINAGE SYSTEMS WHERE FEASIBLE OR UNDERGROUND INFILTRATION SYSTEMS UNLESS FIELD CONDITIONS AND GRADING DO NOT ALLOW.
15. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER COMPANY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODES.
16. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
17. PROVIDE PAINTED LINES AND SIGNAGE AS REQUIRED BY THE FIRE MARSHALL AND POLICE DEPARTMENT.
18. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS FROM LOCAL AND STATE AGENCIES, AS APPLICABLE.
19. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE CLEANING OF NEARBY STREETS AS ORDERED BY THE TOWN OR STATE, OF ANY DEBRIS FROM HIS CONSTRUCTION.
20. ALL STORM DRAINAGE SYSTEMS, SANITARY SEWER, AND ROADWAY IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF EAST HADDAM STANDARDS.
21. ALL WATER MAIN AND SERVICE INSTALLATIONS SHALL CONFORM TO THE SPECIFICATIONS OF CONNECTICUT WATER CO.
22. DRY HYDRANTS AND FIRE PROTECTION TANKS AND ASSOCIATED CONNECTIONS SHALL BE INSTALLED TO MEET CURRENT FIRE DEPARTMENT SPECIFICATIONS.
23. ANY REQUIRED STREET OR TRAFFIC SIGNS ARE TO BE INSTALLED BY THE DEVELOPER, WITH THE DEVELOPER RESPONSIBLE FOR ALL INSTALLATION COSTS.
24. ALL LIGHTING SHALL BE DARK SKY COMPLIANT AND FULL CUT OFF. LIGHTING FIXTURES PROPOSED SHALL MATCH EXISTING CONDITIONS. LIGHT POLES SHOWN ARE CONCEPTUAL. THE CONTRACTOR SHALL PROVIDE THE TOWN WITH A LIGHTING PHOTOMETRIC PLAN, AS REQUESTED, PRIOR TO CONSTRUCTION AND OBTAINING BUILDING PERMITS.
25. FIRE LANES, IF REQUESTED BY THE LOCAL FIRE MARSHAL, SHALL BE INSTALLED AND MAINTAINED ON SITE IN ACCORDANCE WITH LOCAL REGULATIONS.
26. PRIOR TO INSTALLATION ANY FIRE PROTECTION TANK, THE APPLICANT SHALL CONTACT THE EAST HADDAM FIRE CHIEF TO REVIEW EQUIPMENT COMPATIBILITY FOR THE FIRE PROTECTION TANKS AND THE TOWN'S EQUIPMENT.
27. ALL CURB/ HANDICAP RAMP DESIGNS SHALL CONFORM TO ADA/ANSI STANDARDS OR TOWN OF EAST HADDAM SITE PLAN STANDARDS, WHICHEVER IS MORE RESTRICTIVE.
28. CALL BEFORE YOU DIG AT 1-800-922-4455 WILL BE CONTACTED PRIOR TO INITIATION OF THIS PROJECT.

PREPARED FOR

THE LOFTS AT BLACK BIRCH LLC.

JUNE 3, 2021
REVISED OCTOBER 1, 2021





0 500'1000' 2000'
SCALE: 1"= 1000'

PROJECT LOCATION MAP

TECHNICAL SPECIFICATIONS: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION (FORM 818) AND ALL LATEST SUPPLEMENTAL SPECIFICATIONS THERETO, AS WELL AS ANY SPECIAL PROVISIONS BY THE TOWN OF EAST HADDAM.

SURVEY: ALL COORDINATES ON THE PROJECT ARE BASED ON NAD 83. ALL ELEVATIONS ARE BASED ON NAVD 1988.

PREPARED BY:

WMC CONSULTING ENGINEERS

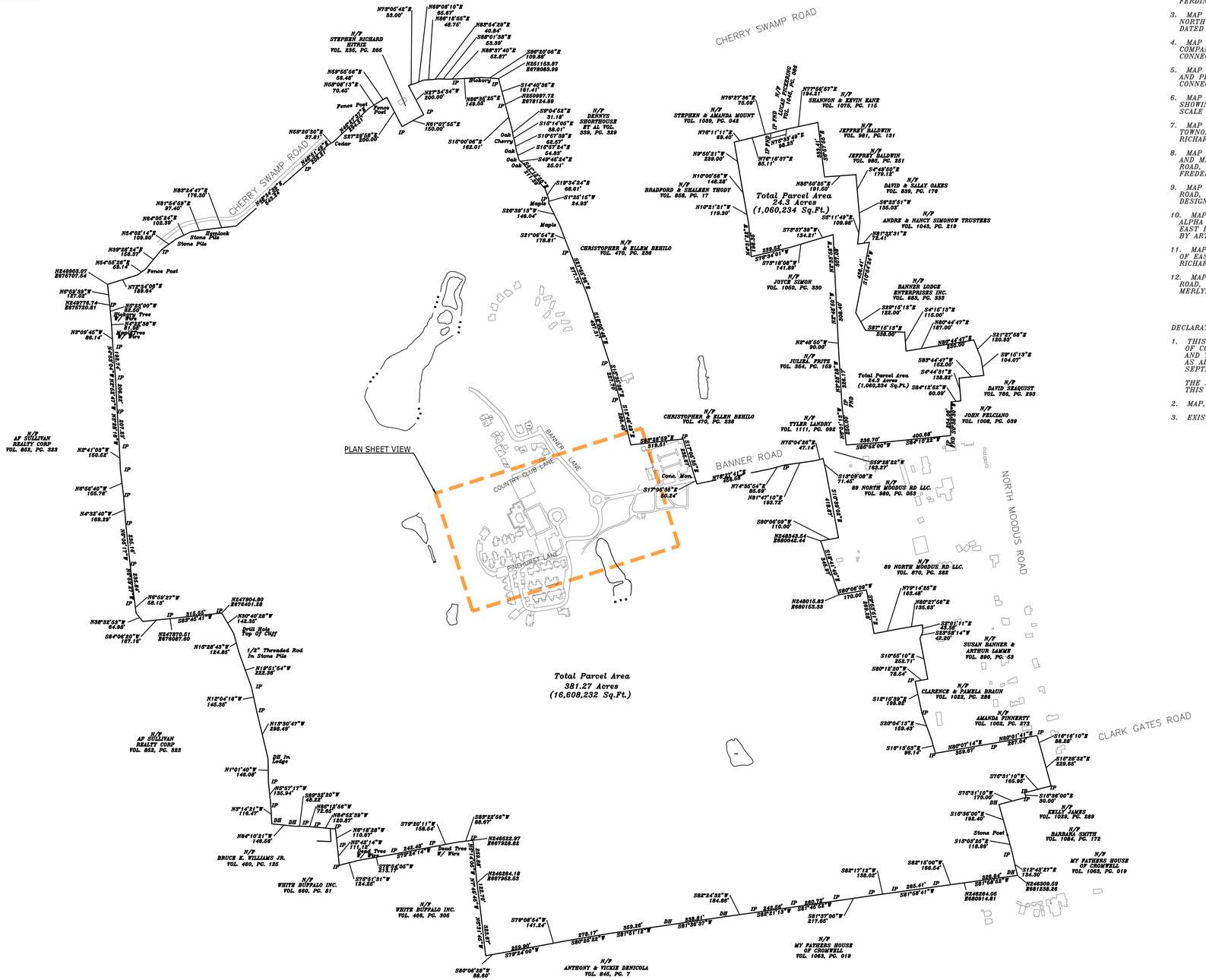
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

SHEET NO. / DESCRIPTION

1	COVER SHEET
2	BOUNDARY SURVEY
3	EXISTING CONDITIONS PLAN
4	SITE LAYOUT PLAN
5	SITE LANDSCAPING PLAN
6	SITE GRADING, DRAINAGE & UTILITY PLAN
7	GRADING ENLARGEMENTS
8	EROSION & SEDIMENTATION CONTROL PLAN
9	DRAINAGE DETAILS
10	SITE CONSTRUCTION DETAILS
11	UTILITY DETAILS
12	SIDEWALK DETAILS
13	EROSION CONTROL DETAILS
14	PLANTING DETAILS
	ARCHITECTURAL ELEVATIONS (BY OTHERS)

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE: _____
EXPIRATION DATE: _____

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE: _____
EXPIRATION DATE: _____


CHERRY SWAMP ROAD
BANNER ROAD
COUNTRY CLUB LANE
PINEHURST LANE
NORTH MOODUS ROAD
CLARK GATES ROAD
PLAN SHEET VIEW
Total Parcel Area
54.3 Acres
(1,060,234 Sq.Ft.)
Total Parcel Area
381.27 Acres
(16,608,232 Sq.Ft.)
N/F
STEPHEN RICHARD HITRIX
VOL. 235, PG. 265
N/F
AP SULLIVAN REALTY CORP
VOL. 852, PG. 323
N/F
CHRISTOPHER & ELLEN BEHILO
VOL. 470, PG. 238
N/F
DENNYS SHORTHOUSE ET AL VOL. 339, PG. 329
N/F
BRUCE K. WILLIAMS JR.
VOL. 490, PG. 135
N/F
WHITE BUFFALO INC.
VOL. 660, PG. 81
N/F
WHITE BUFFALO INC.
VOL. 466, PG. 305
N/F
ANTHONY & VICKIE DENICOLA
VOL. 845, PG. 7
N/F
STEPHEN & AMANDA MOUNT
VOL. 1039, PG. 042
N/F
BRADFORD & SHALEEN THODY
VOL. 858, PG. 17
N/F
JULIEL FRITZ
VOL. 354, PG. 159
N/F
TYLER LANDRY
VOL. 1111, PG. 092
N/F
89 NORTH MOODUS RD LLC.
VOL. 980, PG. 053
N/F
89 NORTH MOODUS RD LLC.
VOL. 870, PG. 252
N/F
SHANNON & KEVIN KANE
VOL. 1075, PG. 115
N/F
JEFFREY BALDWIN
VOL. 861, PG. 151
N/F
JEFFREY BALDWIN
VOL. 986, PG. 251
N/F
DAVID & SALAY OAKES
VOL. 839, PG. 176
N/F
ANDRE & NANCY SIMONOW TRUSTEES
VOL. 1043, PG. 219
N/F
BANNER LODGE ENTERPRISES INC.
VOL. 665, PG. 333
N/F
JOYCE SIMON
VOL. 1050, PG. 330
N/F
DAVID SZAQUIST
VOL. 766, PG. 293
N/F
JOHN PELCIANO
VOL. 1008, PG. 039
N/F
SUSAN BANKER & ARTHUR LAMME
VOL. 890, PG. 53
N/F
CLARENCE & PAMELA BRAUN
VOL. 1022, PG. 288
N/F
AMANDA PINKERTY
VOL. 1002, PG. 273
N/F
KELLY JAMES
VOL. 1029, PG. 289
N/F
BARBARA SMITH
VOL. 1084, PG. 172
N/F
MY FATHERS HOUSE OF CROMWELL
VOL. 1063, PG. 019
N/F
MY FATHERS HOUSE OF CROMWELL
VOL. 1063, PG. 019
Hickory
Oak
Cherry
Maple
Hemlock
Stone Pile
Fence Post
Fence Posts
Drill Hole Top Of Cliff
1/2" Threaded Rod In Stone Pile
DH In Ledge
Dead Tree W/ Fire
Conc. Mon.
Stone Post
N248903.07 E2675707.54
N248776.74 E2675780.81
N247904.80 E2676401.38
N247839.51 E2676987.80
N248309.97 E2677114.89
N248015.83 E2680153.33
N248264.05 E2680914.81
N246228.97 E2677828.88
N246228.18 E2677952.53
N246309.59 E2681238.26
N246843.54 E2680442.44
N246843.54 E2680442.44
N246843.54 E2680442.44

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE: _____
EXPIRATION DATE: _____

COUNTRY CLUB LANE

TENNIS COURTS

150 FT WELL RADIUS

BANNER LANE

WELL #2

PUMP HOUSE

150 FT WELL RADIUS

PRO SHOP

BANNER ROAD

306

POOL

COMMUNITY CENTER

62D

W-14
93334.68 S.F.

SECTION B

SECTION A

Pinehurst Lane

Augusta Drive

4

W-14
334.68 S.F.

APPROXIMATE
WETLANDS (TYP.)

100' UPLAND REVIEW
AREA (TYP.)

100' UPLAND REVIEW
AREA (TYP.)

EXISTING IRRIGATION
POND

50B

57B

57D

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

LEGEND – EXISTING

x 118.0	EXISTING SPOT GRADE
S	SANITARY MANHOLE
	CATCH BASIN
	LIGHT POLE
F	HYDRANT
W	WATER MAIN
	STORM SEWER
S	SANITARY SEWER
E	ELECTRIC
	BUILDING SETBACK
	EDGE OF PAVEMENT W/ CURBING
148	1' CONTOUR
150	5' CONTOUR
W W W W	STONE WALL
	PROPERTY LINE
WF#165	WETLANDS / FLAG NUMBER
	100' WETLANDS BUFFER

NRCS SOIL MAP LEGEND

MAP UNIT SYMBOL	MAP UNIT NAME
3	RIDGEBURY, LEICESTER AND WHITMAN, 0 TO 8 PERCENT, EXTREMELY STONY
4	LEICESTER FINE SANDY LOAM
50B	SUTTON FINE SANDY LOAM, 3 TO 8 PERCENT
57B	GLOUSTER GRAVELLY SANDY LOAM, 3 TO 8 PERCENT
57C	GLOUSTER GRAVELLY SANDY LOAM, 8 TO 15 PERCENT
57D	GLOUSTER GRAVELLY SANDY LOAM, 15 TO 25 PERCENT
62D	CANTON AND CHARLTON FINE SANDY LOAM, 15 TO 35 PERCENT
73C	CHARLTON-CHATFIELD, 0 TO 15 PERCENT, VERY ROCKY
73E	CHARLTON-CHATFIELD, 15 TO 45 PERCENT, VERY ROCKY
306	UDORTHENTS-URBAN LAND COMPLEX

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
1" = 40'

WMC
CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

EXISTING CONDITION PLAN
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

D – BLACK BIRCH APTS – 07056.3 PD – 07056.30 –
SIZE PROJECT FILE NAME NUMBER REV.

SHEET 3
OF 14

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE: _____
EXPIRATION DATE: _____

LAYOUT NOTES:
1) LAYOUT INFORMATION IS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL LAYOUT INFORMATION. BRING ANY DISCREPANCIES TO THE ENGINEER'S ATTENTION FOR REVIEW AND CLARIFICATION.
2) BEFORE STARTING EACH PORTION OF WORK, THE CONTRACTOR SHALL COMPARE THE EXISTING CONDITIONS SHOWN ON THE DRAWINGS, WITH ACTUAL FIELD CONDITIONS. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF ANY DISCREPANCIES, IN WRITING. COMMENCEMENT OF WORK IN ANY AREA SIGNIFIES ACCEPTANCE OF EXISTING CONDITIONS SHOWN ON THE DRAWINGS AS BEING SUBSTANTIALLY CORRECT.
4) ALL CONCRETE SIDEWALKS SHALL PROVIDE A 6 INCH REVEAL WHEN ABUTTING PAVEMENT SURFACES UNLESS OTHERWISE NOTED FOR ADA COMPLIANCE. CONCRETE CURBING MAY BE USED FOR LANDSCAPE ISLANDS WHEN ABUTTING A SIDEWALK.
5) ALL EXPANSION JOINTS AND SCORE JOINTS SHALL BE FLUSH UNLESS NOTED OTHERWISE.

LEGEND – PROPOSED

- EDGE W/O CURB
- EDGE W/ CURB
- ZONE LIMITS
- STRIPING
- 146 1' CONTOUR
- 150 5' CONTOUR
- SANITARY UTILITY
- SANITARY FORCE MAIN
- W W W WATER UTILITY
- E E E ELECTRIC (BY OTHERS)
- SF SF SILT FENCE BARRIER
- STAKED HAY BALES
- CLEARING/CONSTRUCTION LIMITS
- 12 FT POLE AND LIGHT
- CATCH BASIN / DRAIN
- S SANITARY MANHOLE
- +147.0 SPOT GRADE
- HYDRANT

STOP (1) DO NOT ENTER (2) NO PARKING (3) SPEED LIMIT 10 (4)

COUNTRY CLUB LANE
TENNIS COURTS
150 FT WELL RADIUS
BANNER LANE
WELL 2
WELL 1
VISITOR PARKING FOR THE LOFTS (9)
PROPOSED LIGHT (TYP.)
BITUMINOUS PAVEMENT (TYP.)
PROPOSED HYDRANT FOR FIRE SUPPRESSION TANK
PUMP HOUSE
SAWCUT AND SEAL AFTER PAVING (TYP.)
POOL
CURB STOP (TYP.)
DETECTABLE WARNING ALONG PARKING
RAMP & 2'X2' PAVERS SEE ARCHTECTURAL DWGS.
COMMUNITY CENTER REDEVELOPMENT (20±-BEDROOM UNITS)
BOLLARD LIGHTING (TYP.)
INTEGRAL 5' CONCRETE SIDEWALK ALONG ROADWAY
5' CONCRETE SIDEWALK
NEW PEDESTRIAN RAMP
BITUMINOUS CONCRETE LIP CURB (TYP.)
REFUSE PAD SURROUNDED BY 6' WHITE PVC FENCE
BANNER ROAD
PRO SHOP
EVERGREENS TO BE REMOVED (2)
REMOVE EXISTING PAVEMENT (TYP.)
TREE TO REMAIN
END BITUMINOUS CONCRETE LIP CURB
SAWCUT AND SEAL AFTER PAVING (TYP.)
PERMANENT PAVEMENT REPAIR (TYP.)
100' UPLAND REVIEW AREA (TYP.)
PROPOSED RAMP SEE GRADING PLAN ENLARGEMENT 'A'
REMOVE ISLAND AND CONSTRUCT NEW PARKING LOT ENTRANCE
PERMANENT PAVEMENT REPAIR (TYP.)
RECONSTRUCT PARKING LOT
VISITOR PARKING (8) DESIGNATED FOR SECTIONS A & B
EXISTING IRRIGATION POND
SECTION A
SECTION B
Pinehurst Lane
Augusta Drive
W-14 333334.68 S.F.
W-14 334.68 S.F.

GRAPHIC SCALE
40 20 0 20 40 80 160
(IN FEET)
1 inch =40 ft.

ZONING INFORMATION		
	RESORT DISTRICT	PROPOSED
PROJECT AREA	405.57 AC.	
MIN. BUILDABLE LAND	333.21 AC.	
NUMBER UNITS PERMITTED	333 UNITS (APPROVED 2016)	
DENSITY	8 UNITS/BUILDABLE AC.	N/A
UNITS PER BUILDING	4	20
MIN. LOT AREA	1.0 AC.	N/A
MIN. LOT WIDTH	150 FT	N/A
MIN. FRONT YARD	30 FT	N/A
MIN. SIDE YARD	25 FT	N/A
MIN. REAR YARD	25 FT	N/A
BUILDING HEIGHT	35 FT	25 FT
BUILDING COVERAGE	10%	N/A
IMPERVIOUS COVERAGE	20%	N/A
MIN. PARKING REQUIRED	2 SPACES / UNIT	1.5 SPACES / UNIT (PLUS 9 VISITOR) = 39

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
1" = 40'

WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

SITE LAYOUT PLAN
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

D – BLACK BIRCH APTS – 07056.3 PD – 07056.30 – –
SIZE PROJECT FILE NAME NUMBER REV.

SHEET 4 OF 14

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY _____ DATE: _____
EXPIRATION DATE: _____

COUNTRY CLUB LANE

TENNIS COURTS

BANNER LANE

POOL

COMMUNITY CENTER REDEVELOPMENT
(20 1-BEDROOM UNITS)

PUMP HOUSE

PRO SHOP

BANNER ROAD

BOLLARD LIGHTING (TYP.)

PROPOSED LIGHT (TYP.)

SECTION B

SECTION A

Pinehurst Lane

Augusta Drive

W-14
93334.68 S.F.

W-14
334.68 S.F.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

SHRUBS

IC	6	ILEX CRENATA 'HETZII'	HETZII JAPANESE HOLLY	24" HT.	CONT.
RM	6	RHODODENDRON MAXIMUM	ROSEBAY RHODODENDRON	30" HT.	CONT.
VC	6	VACCINIUM CORYMBOSUM	HIGH BUSH BLUEBERRY	18"-24"	CONT.
IG	6	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	18"-24"	B&B
SV	3	SYRINGA VULGARIS 'PRES. LINCOLN'	PRES. LINCOLN COMMON LILAC	4'-5' HT.	B&B
HR	38	HIBISCUS SYRIACUS 'HELENE'	HELENE ROSE OF SHARON	4'-5' HT.	B&B
RP	16	ROSA 'PINK MEIDILAND'	PINK MEIDILAND ROSE	30"-36" HT.	B&B

PERENNIALS

AA	60	ASTILBE X ARENDSIL	ERICA (PINK) ASTILBE	1 QT.	18" SPACING
HH	60	HEMEROCALLIS ' HAPPY RETURNS'	STELLA DE ORO DAYLILLY	1 QT.	18" SPACING
HF	60	HEMEROCALLIS ' FULVA'	FULVA DAYLILLY	1 QT.	18" SPACING
RF	60	RUDBECKIA FULGIDA 'GOLDSTUM'	BLACKEYED SUSAN	1 QT.	18" SPACING

1. ALL EXTERIOR GROUND AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY BUILDINGS, STRUCTURES, PAVING, CONTINUOUS PLANTING BEDS OR OTHER SITE IMPROVEMENTS SHALL BE GRADED, TOPSOILED TO A MINIMUM DEPTH OF 6" AND GRASS SEEDED.

2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE REQUIREMENTS OF THE CONNECTICUT ASSOCIATION OF LANDSCAPE CONTRACTORS SPECIFICATIONS AND THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION FOR NURSERY STOCK.

3. ALL TREE STAKING OR GUYING SHALL BE DONE IMMEDIATELY AFTER PLANTING, BUT IN NO INSTANCE MORE THAN 24 HOURS AFTER PLANTING. SEE STAKING/GUYING DETAIL. AT COMPLETION OF MAINTENANCE PERIOD REMOVE ALL STAKES, FLAGS, GUYS, TREE WRAP, AND ANCHORS.

4. MULCH ALL NEW SHRUB BEDS AND PLANT PITS TO ACHIEVE A 3" DEPTH (AFTER SETTLEMENT). MULCH ALL GROUND COVER BEDS TO ACHIEVE A 2" DEPTH (AFTER SETTLEMENT). MULCH FOR SAUCERS AND PLANTING AREAS TO BE A DOUBLE SHREDDED BARK MULCH.

5. ALL LAWN AND PLANTING AREA SOIL PREPARATION SHALL BE FERTILIZED AND AMENDED ACCORDING TO RECOMMENDATIONS OF A SOIL ANALYSIS PROVIDED BY AN APPROVED SOIL TESTING LABORATORY.

6. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION ON GENERAL LAWN AREA SEED MIXTURE.

7. ESTABLISH FULL COVERAGE OF TREE OR SHRUB PLANTING, ENVIRONMENTAL PLANT MIX OR GENERAL LAWN IN ALL AREAS OF SELECTIVE CLEARING AS INDICATED ON PLANS.

8. FINAL LOCATION OF PLANT MATERIAL TO BE APPROVED BY OWNER AND LANDSCAPE ARCHITECT IN THE FIELD.

PLANT SCHEDULE

SYM.	NO.	BOTANICAL NAME	COMMON NAME	SIZE	COND.
LT	2	LIRIODENDRON TULIPIFERA	TULIPTREE	3" - 3 1/2" Cal.	B&B
CF	4	CORNUS FLORIDA	FLOWERING DOGWOOD	3" - 3 1/2" Cal.	B&B
PS	4	PRUNUS SERRULATA 'KWANZAN'	JAPANESE FLOWERING CHERRY	3" - 3 1/2" Cal.	B&B
CC	6	CERCIS CANADENSIS	EASTERN RED BUD	3" - 3 1/2" Cal.	B&B

EVERGREEN TREES

PP	4	PICEA PUNGENS	BLUE SPRUCE	6'-8' HT.	B&B
IN	2	ELEX X 'NELLIE R. STEVENS'	NELLIE STEVENS HOLLY	5'-6' HT.	B&B

Luminaire Schedule

Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUG Rating	Description
4	B1	Single	1053	40.4	0.850	B0-U3-G1	GARDCO BRM830-36-54L-116-NW-G2-VOLT-SURGE PROTECTION-BK
1	SL2	Single	3124	29.21993	1.683	B1-U0-G1	HADCO TVLN-MOUNT-S-32-G3-5-2S-740-A-FINISH / MOUNTED TO SSA4-CB-12-T3-BLP
4	SL3B	Single	3369	29.21993	1.683	B1-U0-G1	HADCO TVLN-MOUNT-S-32-G3-5-3W-740-A-FINISH / MOUNTED TO SSA4-CB-12-T3-BLP
5	SL5	Single	3506	29.21993	1.683	B2-U0-G1	HADCO TVLN-MOUNT-S-32-G3-5-5-740-A-FINISH / MOUNTED TO SSA4-CB-12-T3-BLP

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
1" = 40'

WMC
CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

SITE LIGHTING & LANDSCAPING PLAN
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

D – BLACK BIRCH APTS – 07056.3 PD – 07056.30 –
SIZE PROJECT FILE NAME NUMBER REV.

SHEET 5
OF 14

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE: _____
EXPIRATION DATE: _____

GRADING NOTES:

1) BEFORE STARTING EACH PORTION OF WORK, THE CONTRACTOR SHALL COMPARE THE EXISTING CONDITIONS SHOWN ON THE DRAWINGS, WITH ACTUAL FIELD CONDITIONS. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF ANY DISCREPANCIES, IN WRITING. COMMENCEMENT OF WORK IN ANY AREA SIGNIFIES ACCEPTANCE OF EXISTING CONDITIONS SHOWN ON THE DRAWINGS AS BEING SUBSTANTIALLY CORRECT.
2) AFTER CLEARING LIMITS AREA ESTABLISHED, THE AREA THAT IS NOT TO BE GRADED IS TO BE MARKED OUT. THE SITE WILL THEN BE EVALUATED TO DETERMINE IF ANY TREE(S) WARRANT PRESERVATION. ANY TREE(S) DESIGNATED FOR PRESERVATION SHALL BE PROPERLY PROTECTED TO THE DRIPLINE AND FLAGGED PRIOR TO SITE CLEARING.
3) SMOOTHLY BLEND ALL PROPOSED GRADES TO EXISTING CONDITION. ROUND OFF TOP AND TOE OF ALL SLOPES.
4) ALL GRADING SHALL BE PERFORMED TO ELIMINATE LOW POINTS AND DEPRESSIONS WHICH WOULD TRAP SURFACE WATER. CONTACT THE DESIGN ENGINEER IF CHANGES ARE WARRANTED.
5) MINOR GRADING REVISIONS ARE PERMITTED TO MEET FIELD CONDITIONS W/ THE APPROVAL OF THE DESIGN ENGINEER.
6) ALL HANDICAP PARKING SPACES, SEATING AREAS AND PASSENGER LOADING ZONES SHALL NOT EXCEED 2.0% IN ANY DIRECTION.
7) THE CLEARING LIMIT LINE SHALL BE COINCIDENT W/ THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED.

COUNTRY CLUB LANE
TENNIS COURTS
POOL
PRO SHOP
BANNER LANE
BANNER ROAD
Pinehurst Lane
Augusta Drive
SECTION A
SECTION B
COMMUNITY CENTER REDEVELOPMENT (20 1-BEDROOM UNITS)
PUMP HOUSE
150 FT WELL RADIUS
W-14 33334.68 S.F.
W-14 334.68 S.F.

NEW TYPE 'C-L' CB FRAME AND GRATE TF. 350.5± REGRADE AS NECESSARY TO CAPTURE RUNOFF
PROPOSED TYPE 'C' CB #3 TF. 348.25 INV. 344.8±
SEE PORTICO GRADING PLAN ENLARGEMENT 'B'
REMOVE EXISTING CB INSTALL STORMWATER QUALITY UNIT W/ INTERNAL BYPASS TF. 344.5 INV. 339.17
±20' - 15" HDPE @ 2.5%
PROPOSED RAMP SEE GRADING PLAN ENLARGEMENT 'A'
APPROXIMATE LOCATION OF EXISTING SANITARY SEWER. DIG TEST PIT TO CONFIRM LOCATION AND INVERT.
PROPOSED DUPLEX GRINDER PUMP PLUG EXISTING SAN. LATERAL
INSTALL CHECK VALVE
SMH TO REMAIN BULKHEAD 6" PVC INVERT
CONSTRUCT 8' X 8' X 1.5' PLUNGE POOL AT THE TOE OF SLOPE COORDINATE LOCATION WITH ENGINEER IN THE FIELD
INSTALL STANDARD RIPRAP CHANNEL TO TOE OF SLOPE FROM OUTFALL LOCATION SEE DETAIL SHEET 13
INSTALL CURB STOP VALVE AND VALVE BOX
PROPOSED TYPE 'C' CB #1 TF. 343.7 INV. 338.5±
PERMANENT PAVEMENT REPAIR (TYP.)
REPLACE TYPE 'C' CB FRAME AND GRATE CB #7 TF. 346.2±
REPLACE TYPE 'C' CB FRAME AND GRATE CB #6 TF. 346.3±
INSTALL NEW TYPE 'C' CB #2 TF. 347.5 INV. MATCH EXIST.
EXISTING WATER SERVICE TO REMAIN (50 GPM) RESET GATE VALVE
PROPOSED DMH #1 TF. 349.5 INV. 344.4±
±5' - 15" HDPE @ 2.0%
PROPOSED TYPE 'C' CB #4 TF. 349.0 INV. 344.5
PROPOSED DOUBLE TYPE 'C' CB #5 TF. 348.7 INV. 345.0
±20' - 15" HDPE @ 2.5%
TEST PIT AT WATER MAIN ENSURE 4' MIN. COVER RELOCATE AS NECESSARY
4" DIP FIRE PROTECTION
PROPOSED 20,000 GAL. FIRE SUPPRESSION TANK & HYDRANT ASSEMBLY
ALL DRAINAGE PIPES SHALL BE CLEANED AND VIDEO INSPECTED PRIOR TO CONSTRUCTION
RESET GATE VALVES AS NECESSARY (TYP.)
CONVERT CB TO DMH #2 TF. 352.5±
CB AND PIPE TO REMAIN
PROPOSED 1-1/2" PE FORCE MAIN
PROPOSED 1-1/2" PE FORCE MAIN
DISTRIBUTION BOX INV. TBD INV. TBD
±XX' - 4" PVC @ 1.0%
PROPOSED 5,000 GAL. SEPTIC TANK TF. TBD INV. TBD
±XX' - 4" PVC @ 1.0%
DISTRIBUTION BOX INV. TBD INV. TBD
DISTRIBUTION BOX INV. TBD INV. TBD
100' HIGH CAPACITY INFILTRATORS (TYP. OF 4 ROWS) INV. TBD
EXISTING IRRIGATION POND
100' UPLAND REVIEW AREA (TYP.)

GRAPHIC SCALE
40 20 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	06/03/21

SCALE
1" = 40'

WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

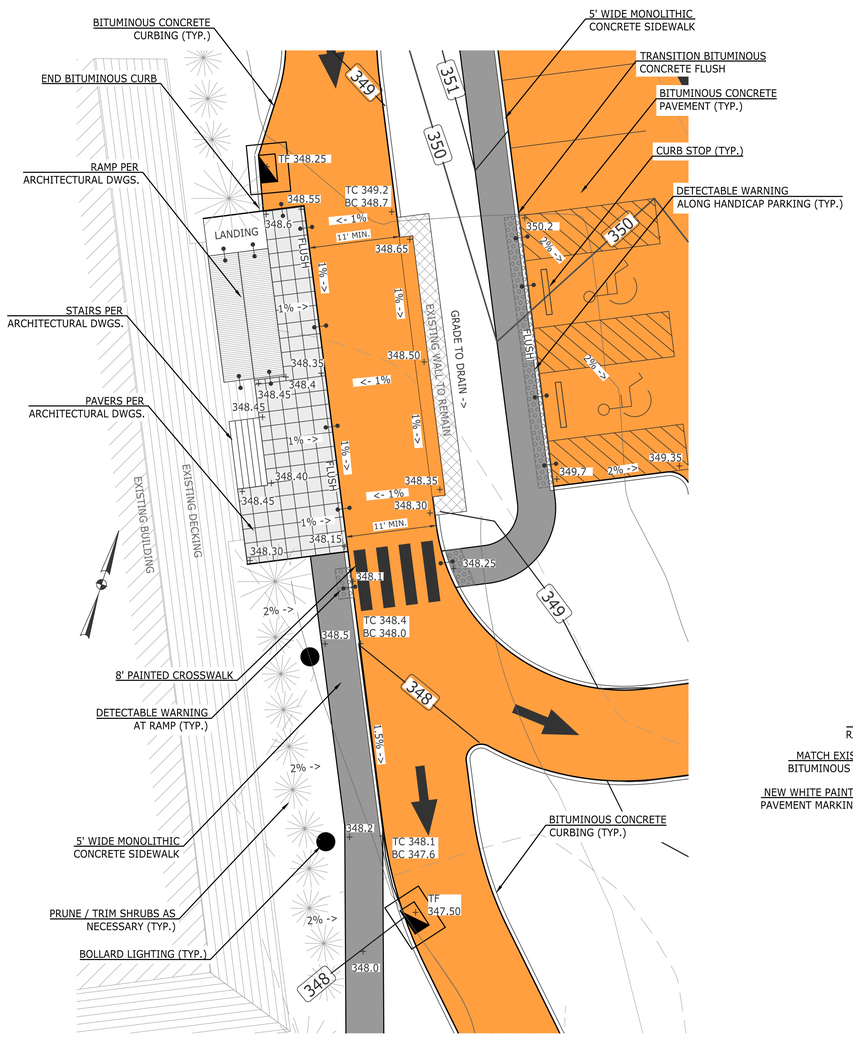
PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

SITE GRADING, DRAINAGE & UTILITY PLAN
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

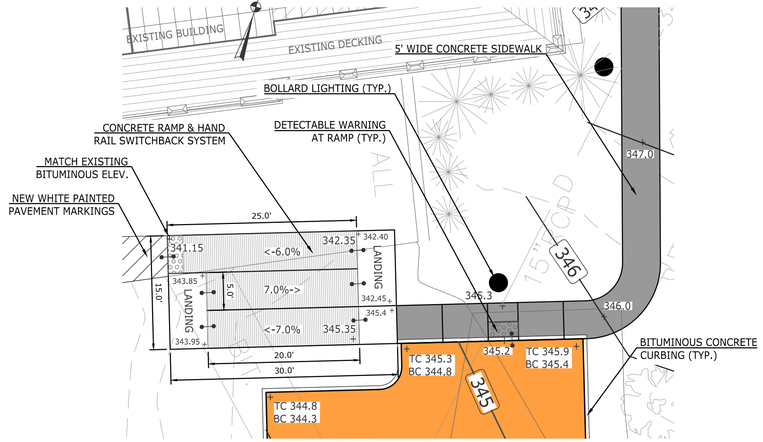
SIZE	PROJECT	FILE NAME	NUMBER	REV.
D	BLACK BIRCH APTS	07056.3 PD	07056.30	-

SHEET 6 OF 14

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE: _____
EXPIRATION DATE: _____



PORTICO ENTRANCE ENLARGEMENT A
SCALE: 1" = 10'



SOUTH RAMP ENLARGEMENT B
SCALE: 1" = 10'



SIGHTLINE IMPROVEMENT PLAN
SCALE: 1" = 40'

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	06/03/21

SCALE
AS NOTED

WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

GRADING ENLARGEMENTS
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

SIZE	PROJECT	FILE NAME	NUMBER	REV.
D	BLACK BIRCH APTS	07056.3 PD	07056.30	

SHEET 7 OF 14

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE: _____
EXPIRATION DATE: _____

NOTE:

1) SEQUENCE OF CONSTRUCTION IS GENERAL AND SHOULD BE FURTHER DEVELOPED BY THE CONSTRUCTION MANAGER/CONTRACTOR AND COORDINATED WITH THE TOWN REGULATORY STAFF, ARCHITECT, ENGINEER AND CONTRACTOR PRIOR TO INITIATION OF ANY WORK.
2) THE CONTRACTOR SHALL HAVE THE CLEARING LIMITS ACCURATELY SURVEYED PRIOR TO CONSTRUCTION.
3) ALL SLOPES 3H:1V AND STEEPER THAT ARE GREATER THAN 5 FT IN HEIGHT SHALL BE PROTECTED WITH EROSION CONTROL MATTING.
4) THE CHOSEN CONTRACTOR SHALL BE THE PERSON RESPONSIBLE FOR EROSION CONTROL MEASURES.
5) EROSION MEASURES SHOWN ARE THE MINIMUM ACCEPTABLE PRACTICES TO PREVENT SOIL EROSION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND INSTALLING ADDITIONAL MEASURES AS FIELD CONDITIONS WARRANT AT NO ADDITIONAL EXPENSE TO THE OWNER.
6) ADDITIONAL EROSION / SEDIMENTATION CONTROL MAY BE REQUIRED / MODIFIED BY THE TOWN OF EAST HADDAM. THE APPROVED / SIGNED PLAN IS A MINIMAL REQUIREMENT.
7) EROSION / SEDIMENTATION CONTROLS ARE TO BE INSTALLED AND INSPECTED BY THE ZONING ENFORCEMENT OFFICER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR TO CONTACT ZONING ENFORCEMENT OFFICER (ZEO) FOR INSPECTION/APPROVAL OF ALL EROSION/SEDIMENTATION CONTROLS INSTALLED.
8) THE CONTRACTOR MAY DEVIATE FROM THIS EROSION CONTROL PLAN WITH REVIEW AND APPROVAL BY THE ENGINEER AND TOWN OF EAST HADDAM ZONING ENFORCEMENT STAFF.
9) IN AREAS WHERE GEOTEXTILE SILT FENCE AND HAY BALE BARRIERS RUN ACROSS THE SLOPE PERPENDICULAR WINGS ARE REQUIRED TO BREAK WATER VELOCITIES. FOR SLOPES >5:1 PLACE WINGS EVERY 100 FT: FOR 3:1 TO 5:1 EVERY 75 FT; FOR 2:1 TO 3:1 EVERY 50 FT.
10) WOOD CHIPS MAY BE USED AS EROSION CONTROL MEASURES, IE. BERMS, TRAVEL PATHS.
11) ADJACENT ROADS SHALL BE SWEPT DAILY OR AS NEEDED AS DETERMINED BY THE SITE CONTRACTOR AND/OR THE TOWN OF EAST HADDAM ZONING ENFORCEMENT STAFF.

CONSTRUCTION SEQUENCING:

1) FIELD STAKE CONSTRUCTION LIMITS
2) INSTALL PERIMETER EROSION CONTROL MEASURES
3) INSTALL CONSTRUCTION ENTRANCE(S)
4) CLEAR AND GRUB SITE
5) STRIP AND STOCKPILE TOPSOIL
6) INSTALL TEMPORARY/PERMANENT DIVERSIONS SWALES AS APPLICABLE
7) EXCAVATE/FILL MATERIAL TO SUBGRADE AND STOCKPILE
8) INSTALL SANITARY SYSTEM FROM BUILDING
9) INSTALL DRAINAGE STRUCTURES/UTILITIES AS NECESSARY
10) PLACE SUBBASE AND PROCESSED BASE COURSE
11) INSTALL CONCRETE WALKWAYS
12) FINE GRADE PARKING AREAS
13) PLACE BITUMINOUS BINDER COURSE AND SPECIFIED CURBING
14) FINE GRADE SHOULDER LIMITS AND SEED/PROTECT SLOPES
15) PLACE BITUMINOUS WEARING COURSE
16) SEED AND INSTALL SITE PLANTINGS
17) REMOVE ALL EROSION CONTROL MEASURES ONCE SITE IS COMPLETELY VEGETATED OR UPON ENGINEER'S APPROVAL

COUNTRY CLUB LANE
TENNIS COURTS
BANNER LANE
POOL
COMMUNITY CENTER REDEVELOPMENT (20 1-BEDROOM UNITS)
PUMP HOUSE
PRO SHOP
BANNER ROAD
CONSTRUCTION ENTRANCE (TYP.)
SEDIMENTATION CONTROL AT CB - SILT SAC (TYP.)
CONTRACTOR STAGING AREA
SEDIMENTATION CONTROL AT NEW CB (TYP.)
SEDIMENTATION CONTROL AT CB - SILT SAC (TYP.)
SEDIMENTATION CONTROL SILT FENCE (TYP.)
INSTALL STANDARD RIPRAP CHANNEL TO TOE OF SLOPE FROM OUTFALL LOCATION SEE DETAIL SHEET X
SECTION B
SECTION A
Pinehurst Lane
Augusta Dr
W-14 334.68 S.F.
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
1" = 40'

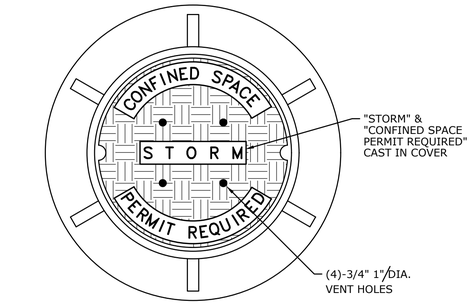
WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

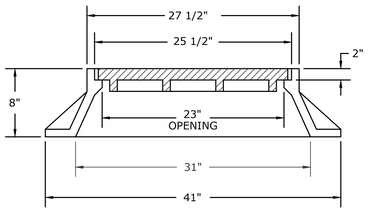
PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

EROSION CONTROL PLAN
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

SIZE	PROJECT	FILE NAME	NUMBER	REV.
D	BLACK BIRCH APTS	07056.3 PD	07056.30	–

SHEET 8
OF 14





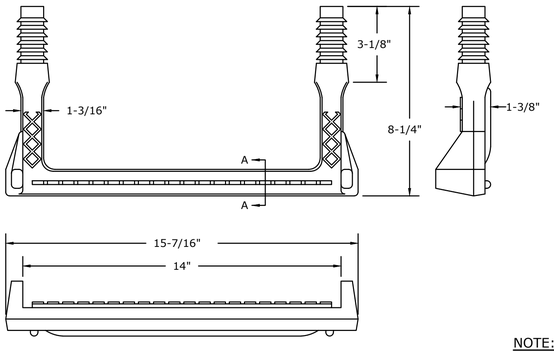
FRAME AND COVER SHALL BE:

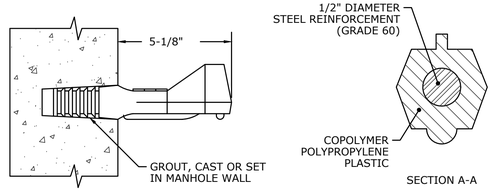
LeBARON FOUNDARY CATALOG NO. LK 310

MINIMUM WEIGHT OF FRAME AND COVER = 500 LBS.

STANDARD MANHOLE FRAME AND COVER DETAILS

N.T.S.





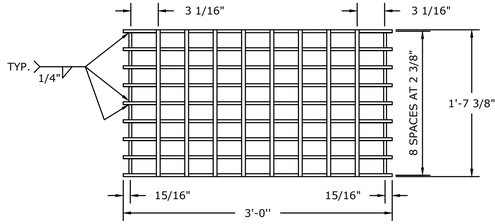
MANHOLE STEP

N.T.S.

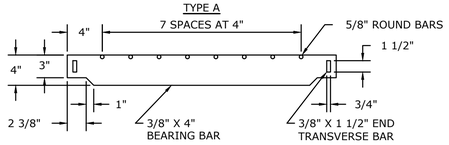
APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION

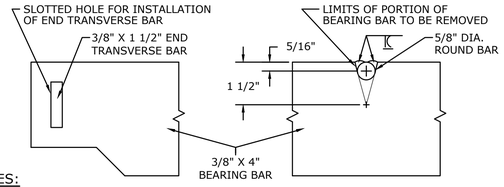
CHAIRMAN/SECRETARY _____ *DATE:* _____

EXPIRATION DATE: _____



TYPE A



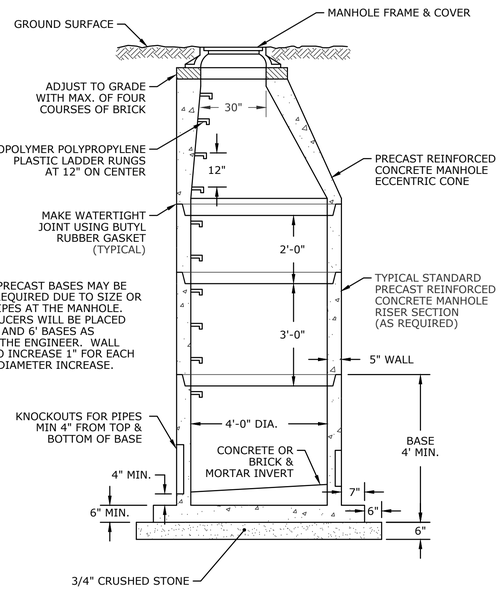


NOTES:

1. CATCH BASIN GRATE SHALL CONFORM TO CONNECTICUT D.O.T. STANDARD DRAWING #507K TYPE-A.
2. STEEL FRAMES AND GRATES SHALL BE GALVANIZED IN ACCORDANCE WITH M.06.03 OF D.O.T. FORM 816.
3. ALL BARS SHALL BE WELDED AT ALL INTERSECTIONS.
4. ALL METAL UNITS SUBJECT TO MANUFACTURING TOLERANCES.
5. ONLY LOW HYDROGEN ELECTRODES SHALL BE USED.
6. DIMENSIONAL TOLERANCES MAY BE ±1/16".
7. WELDING WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION.

STEEL FRAME AND GRATE

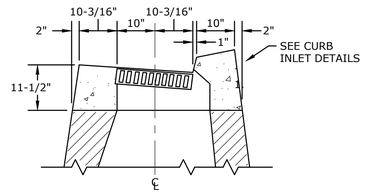
N.T.S.



NOTE: 5' OR 6' DIA. PRECAST BASES MAY BE USED WHEN REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' AND 6' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE 1" FOR EACH 1' OF INSIDE DIAMETER INCREASE.

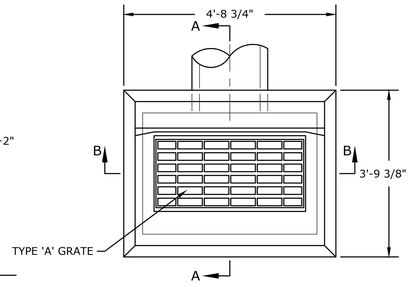
PRECAST CONCRETE MANHOLE

N.T.S.



NOTE:

TYPE 'C' CATCH BASIN TOP SHALL CONFORM TO CONNECTICUT DEPT. OF TRANSPORTATION STANDARD SPECIFICATION FORM 818 SECTION: M. 08. 02-4.

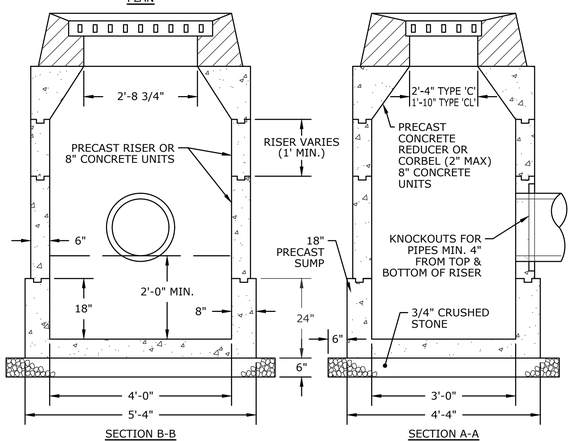


TYPE 'C' CATCH BASIN TOP

N.T.S.

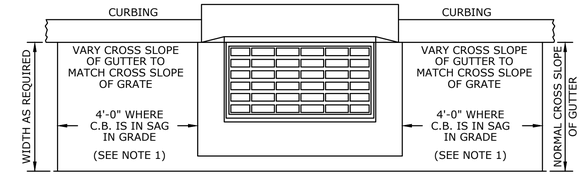
NOTES:

1. IN PRECAST RISER SECTIONS, THE KNOCKOUTS OR OPENINGS AROUND THE PIPES SHALL BE MORTARED TO 6".
2. PRECAST REDUCER SHALL BE SPECIFICALLY SIZED & PLACED FOR THE TYPE OF TOP USED.
3. PLACE ALL PRECAST UNITS, TOPS AND CONCRETE BLOCKS IN A CEMENT MORTAR BED.
4. PRECAST UNITS SHALL BE REINFORCED WITH WELDED WIRE FABRIC.

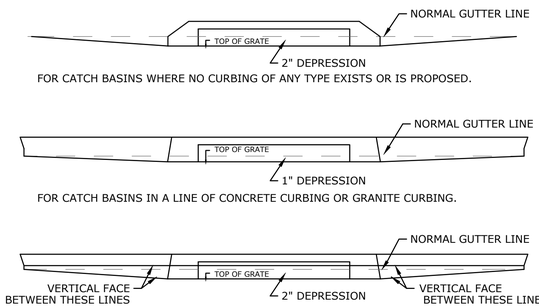


PRECAST CATCH BASIN

N.T.S.



PLAN

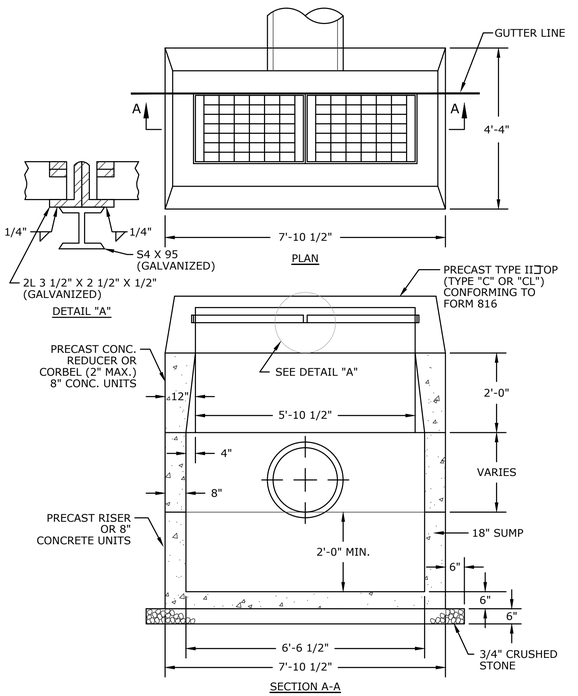


NOTE:

1. 6'-0" ON UPGRADE SIDE OF CONTINUOUS GRADE, 1'-0" ON DOWNGRADE SIDE OF CONTINUOUS GRADE OR AS DIRECTED.

CATCH BASIN GUTTER DEPRESSION

N.T.S.



PRECAST DOUBLE CATCH BASIN

N.T.S.

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	06/03/21

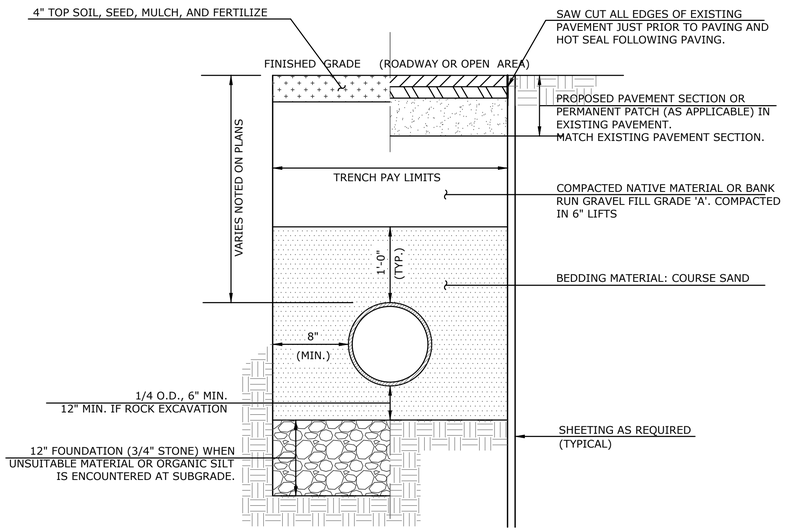
SCALE
N.T.S.

WMC
CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

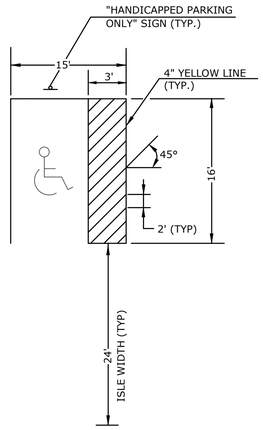
PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

DRAINAGE DETAILS
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

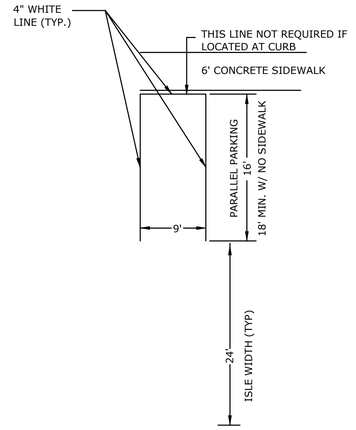
SIZE	PROJECT	FILE NAME	NUMBER	REV.	SHEET	OF
D	BLACK BIRCH APTS	07056.3 PD	07056.30		9	14



STORM PIPE TRENCH
N.T.S.



STANDARD HANDICAPPED



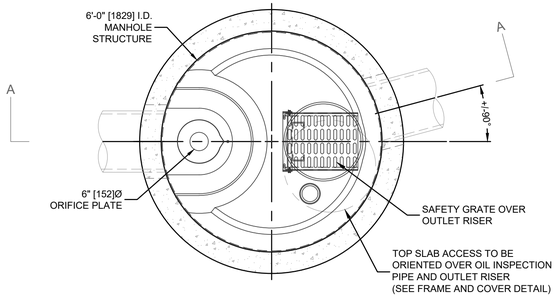
REGULAR STALL

PARKING STALL STRIPING
N.T.S.

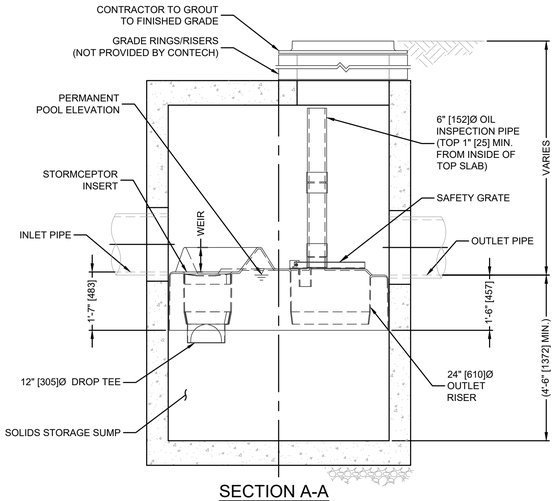
SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
NOTES / SPECIAL REQUIREMENTS:			

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STORMCEPTOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. STORMCEPTOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

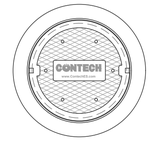
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



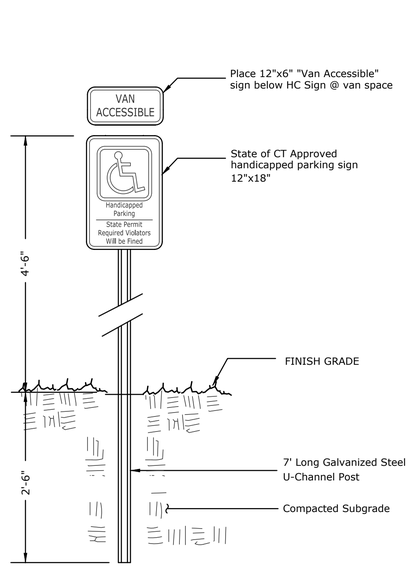
PLAN VIEW
TOP SLAB NOT SHOWN



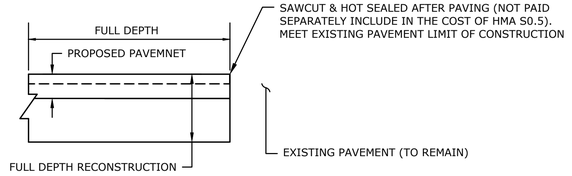
SECTION A-A
STORMCEPTOR OSR 900
N.T.S.



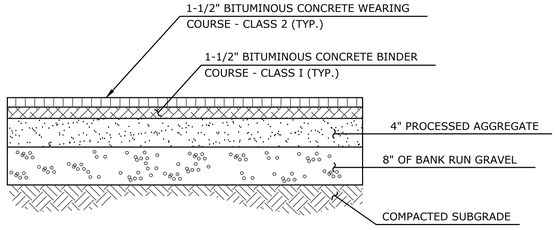
COVER
N.T.S.



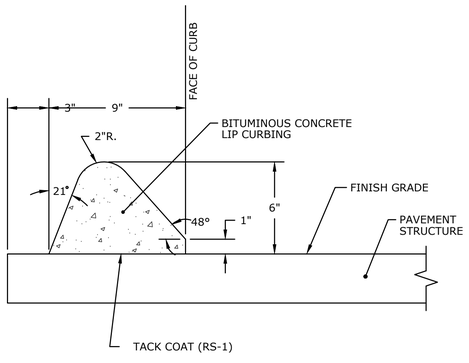
SITE TRAFFIC SIGNAGE
N.T.S.



ROADWAY PAVEMENT TRANSITION DETAIL AT CONSTRUCTION LIMITS
N.T.S.

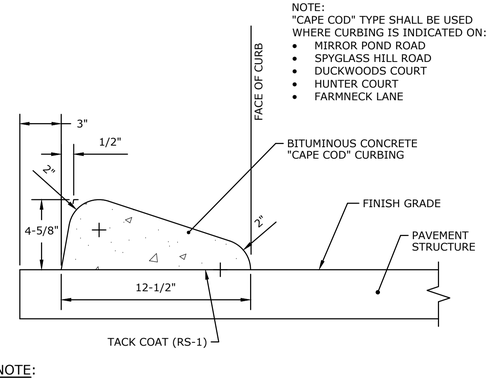


BITUMINOUS CONCRETE PAVEMENT SECTION
N.T.S.



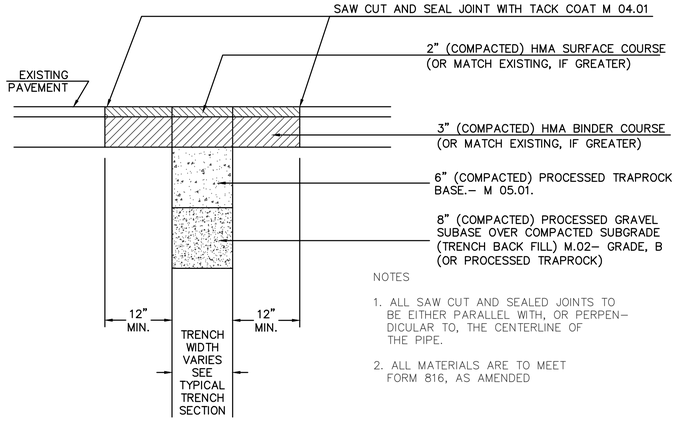
NOTE:
1. USE BITUMINOUS CONCRETE CLASS 3 FOR CURBING.

BITUMINOUS CONCRETE CURBING DETAIL
N.T.S.



NOTE:
1. USE BITUMINOUS CONCRETE CLASS 3 FOR CURBING.

BITUMINOUS CONCRETE "CAPE COD" CURBING DETAIL
N.T.S.



NOTES
1. ALL SAW CUT AND SEALED JOINTS TO BE EITHER PARALLEL WITH, OR PERPENDICULAR TO, THE CENTERLINE OF THE PIPE.
2. ALL MATERIALS ARE TO MEET FORM 816, AS AMENDED

PERMANENT PAVEMENT PATCHING DETAIL
N.T.S.

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY_____ DATE:_____
EXPIRATION DATE:_____

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M. | DESIGN R.E.B. | DRAWN R.E.B. | CHECKED S.R.M. | DATE 06/03/21

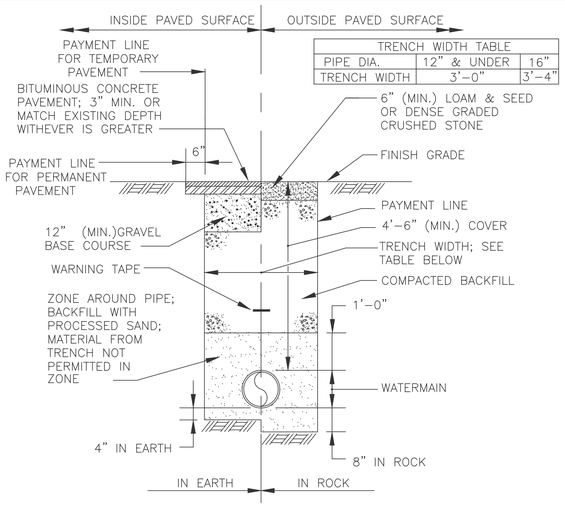
SCALE
N.T.S.

WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

SITE CONSTRUCTION DETAILS
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

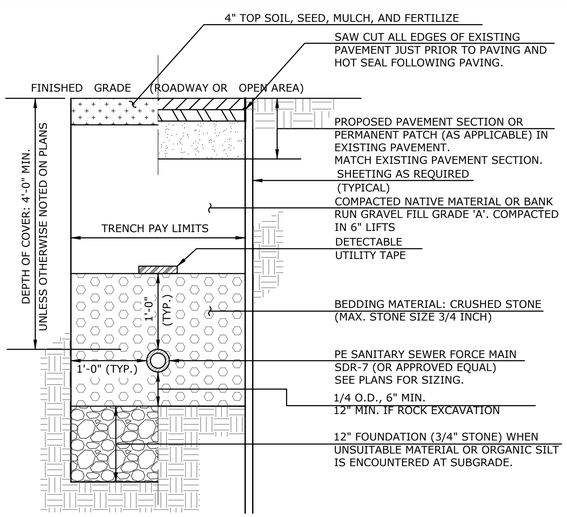
SIZE	PROJECT	FILE NAME	NUMBER	REV.	SHEET	OF
D	BLACK BIRCH APTS	07056.3 PD	07056.30		10	14



TRENCH WIDTH TABLE		
PIPE DIA.	12" & UNDER	16"
TRENCH WIDTH	3'-0"	3'-4"

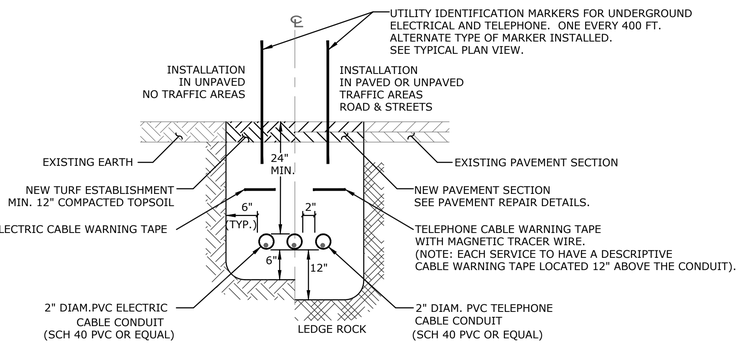
TRENCH SECTION FOR WATER MAIN PIPE

N.T.S.



FORCE MAIN TRENCH

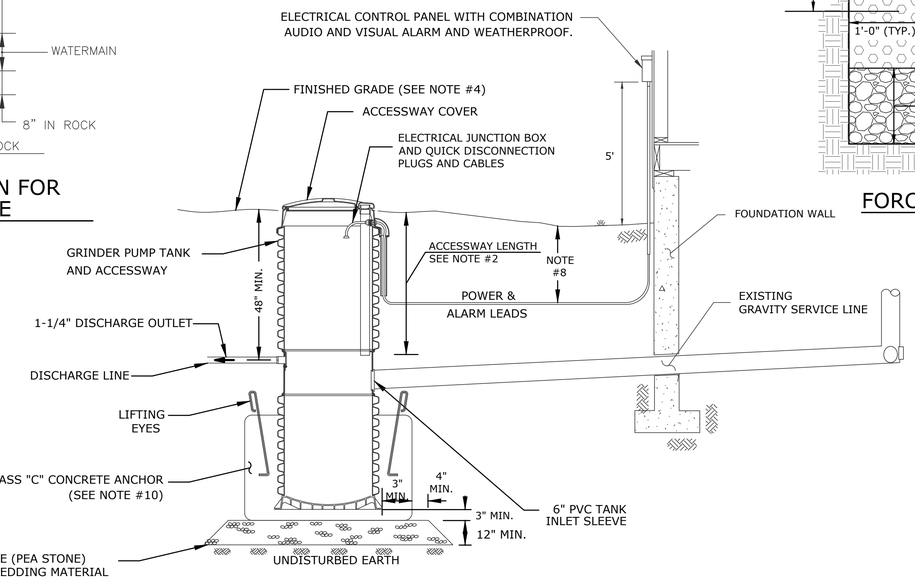
N.T.S.



NOTE: 1) DIMENSIONS SHOWN ARE MINIMUM REQUIRED.
2) LIMIT OF TRENCH PAYMENT IS 24" WIDTH AND 32" DEPTH.
3) INSTALL THIRD CONDUIT IN CENTER OF TRENCH WITH PULL CABLE FOR FUTURE USE.
4) EACH CONDUIT TO BE INSTALLED WITH A PULL CABLE FOR THE RESPECTIVE UTILITY COMPANIES USE IN INSTALLING THEIR CABLE(S).
5) BACKFILL MATERIAL SHALL BE SCREENED SAND A MINIMUM OF 6" BELOW AND 12" ABOVE THE CONDUIT. THE SAND SHALL MEET THE REQUIREMENTS OF PASSING A 3/8" MESH SCREEN AND SHALL CONTAIN NO ANGULAR STONE.
6) THE TRENCH BACKFILL SHALL NOT CONTAIN ASHES, CINDERS, SHELL, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION.
7) ORIENTATION OF CONDUITS IN TRENCH TO BE DETERMINED BY UTILITY COMPANIES.
8) USE SCHEDULE 40 PVC UL CONDUIT FOR U/G ELEC. AND TELE.

UNDERGROUND ELECTRIC & TELEPHONE TRENCH DETAIL

N.T.S.



GRINDER PUMP INSTALLATION

N.T.S.

NOTES: 1) ALL GRINDER PUMPS ARE TO BE DUPLEX MODEL DH152 (GP 2014) OR EQUAL OR AS CALLED FOR ON PLANS AND MANUFACTURED BY ENVIRONMENT / ONE, SCHENECTADY, NEW YORK, OR APPROVED EQUAL.

2) STANDARD ACCESSWAY LENGTHS VARY BY MANUFACTURER'S SPECIFICATION. STANDARD ACCESSWAY LENGTHS FOR ENVIRONMENT/ONE PUMPS ARE AS FOLLOWS:

MODEL DH152 (GP 2014) 0' - 10'

INSTALLATION OF A MINIMUM OF 48" OF ACCESSWAY SHALL BE INCLUDED IN THE COST FOR INSTALLATION OF THE PUMP. ALL ADDITIONAL ACCESSWAY SHALL BE PAID SEPARATELY.

3) CONTROL PANEL CONNECTION TO MAIN POWER SUPPLY TO BE INSTALLED BY OTHERS AND ACCORDING TO LOCAL AND STATE CODES.

4) GRADE LINE TO BE 6" BELOW TOP OF ACCESSWAY AND SLOPE AWAY FROM ACCESSWAY OPENING.

5) EFFLUENT GRAVITY SEWER SERVICE LINE TO BE LOCATED IN THE FIELD REFER TO LOCAL CODES & ORDINANCES FOR CONSTRUCTION DETAILS AND MIN. SLOPE.

6) ALL PUMPS TO BE PROVIDED WITH ONE REDUNDANT CHECK VALVE OF SAME TYPE AND MANUFACTURER AS THE INTERNAL CHECK VALVE FOR EXTERNAL INSTALLATION. A SUBSTITUTE VALVE TYPE MAY BE USED AT APPROVAL OF THE ENGINEER.

7) GRINDER PUMP INSTALLATION SHALL INCLUDE THE COST OF THE WATERPROOF GOR-TEX GASKET WHEN REQUIRED. SEE PLAN VIEWS FOR LOCATIONS.

8) WIRING: -ALL EXTERNAL ELECTRICAL WIRING SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES. HOWEVER, MINIMUM STANDARDS AS FOLLOWS: -MIN. DIRECT BURIAL CABLE DEPTH BEYOND 12" OF PUMP CHAMBER = 18" (EXCEPT IN ROCK)
-CABLE IN ROCK BETWEEN 6" AND 18" DEEP SHALL BE IN RIGID CONDUIT.
-CABLE IN ROCK LESS THAN 6" DEEP SHALL BE IN RIGID CONDUIT ENCASED IN 3" OF CONCRETE.
-ALL BURIED CABLE SHALL BE MARKED BY PLACING 2" YELLOW UTILITY RIBBON 6" ABOVE THE WIRE.
-ALL INTERNAL PUMP WIRING, INCLUDING QUICK DISCONNECTION PLUGS, SHALL BE INCLUDED IN THE COST OF THE PUMP OR ACCESSWAY.

9) FILL LOWER SECTION OF GRINDER PUMP TANK WITH WATER PRIOR TO PLACING CONCRETE. FOR ANCHORS CAST BEFORE TANK PLACEMENT, A MINIMUM OF THREE (3) LIFTING RINGS SHOULD BE CAST INTO ANCHORS FOR LOADING AND UNLOADING. MINIMUM WEIGHT OF ANCHOR PER MANUFACTURER.

SLEEVE IS REQUIRED FOR INLET/DISCHARGE PIPES IF ANCHOR IS POURED TO A LEVEL ABOVE THESE PIPES.

10) PRECAST CONCRETE ANCHORS & ATTACHMENTS SHALL BE APPROVED PRIOR TO PLACEMENT.

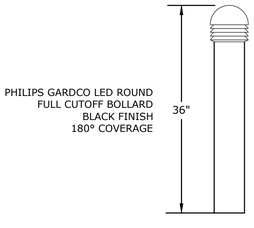
11) CONTROL PANEL, ALARM, QUICK DISCONNECTION PLUGS AND EMERGENCY GENERATOR RECEPTACLE ARE TO BE INCLUDED IN COST OF PUMP. ALL WIRING AND CONNECTIONS TO BE INCLUDED IN COST OF PUMP INSTALLATION.

12) ALL GRINDER PUMPS TO BE VENTED.

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY _____ *DATE:* _____
EXPIRATION DATE: _____

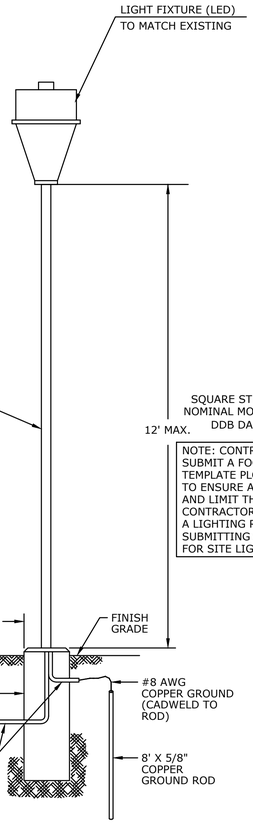


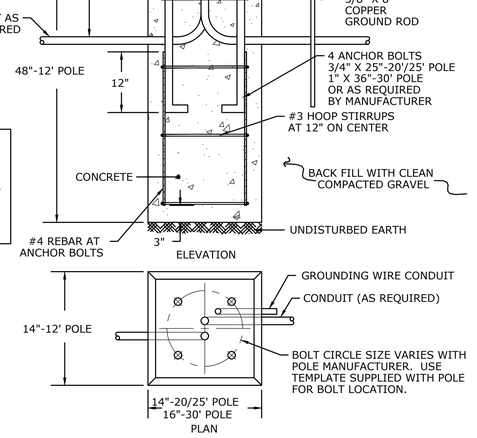
NOTE:
ALL LIGHTING SHALL BE DARK SKY COMPLIANT.



BOLLARD LIGHT

N.T.S.





NOTES:
1. AFTER PLUMBING POLE, INSTALL NON-SHRINK GROUT BETWEEN POLE ANCHOR BASE AND TOP OF FOOTING. PROVIDE WEEP HOLE FOR MOISTURE TO DRAIN.
2. FOOTING SIZES SHOWN ARE MINIMUM. A LICENSED PROFESSIONAL ENGINEER SHALL VERIFY SIZE BASED ON SOIL CONDITIONS, WIND CONDITIONS, AND POLE AND LUMINAIRE SIZE AND WEIGHT.
3. PRECAST FOOTINGS MAY BE USED WITH APPROVAL BY THE TOWN.

LIGHT POLE FOOTING

N.T.S.

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
N.T.S.

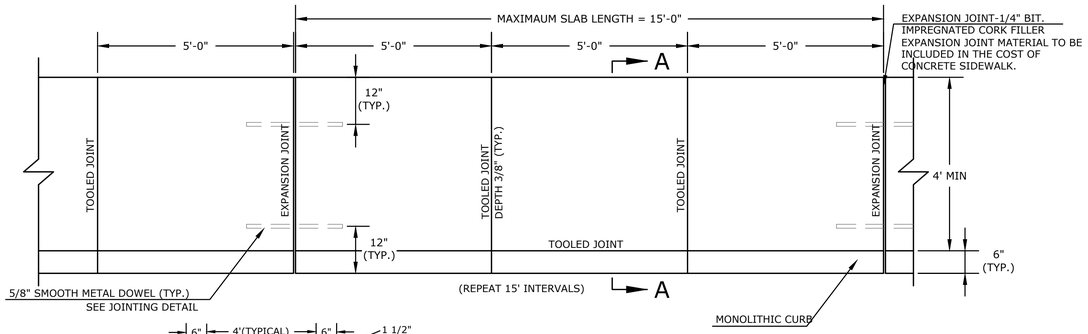
WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

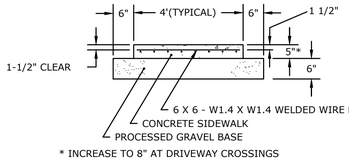
PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

UTILITY DETAILS
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

D – BLACK BIRCH APTS – 07056.3 PD – 07056.30 –
SIZE PROJECT FILE NAME NUMBER REV.

SHEET 11
OF 14



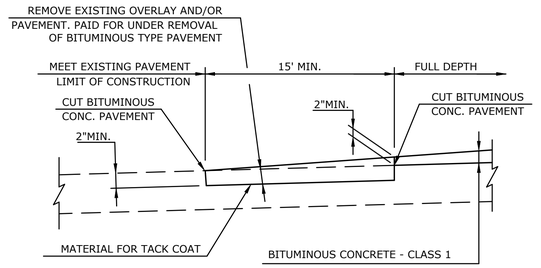


SECTION (NO CURB)

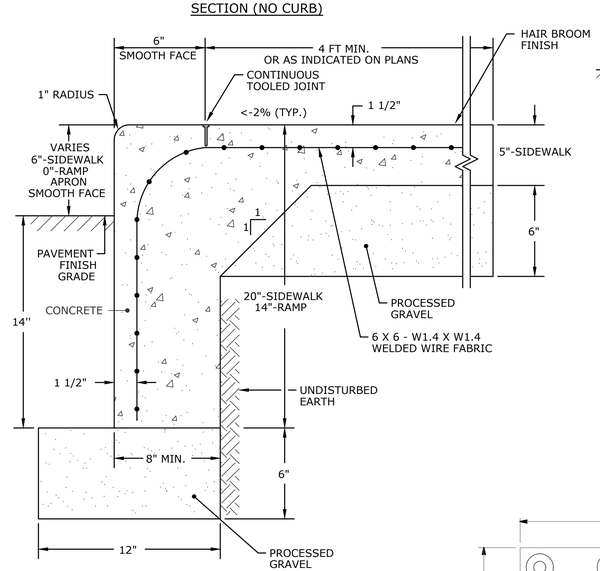
CONCRETE SIDEWALK
N.T.S.

SIDEWALK AND RAMP NOTES:

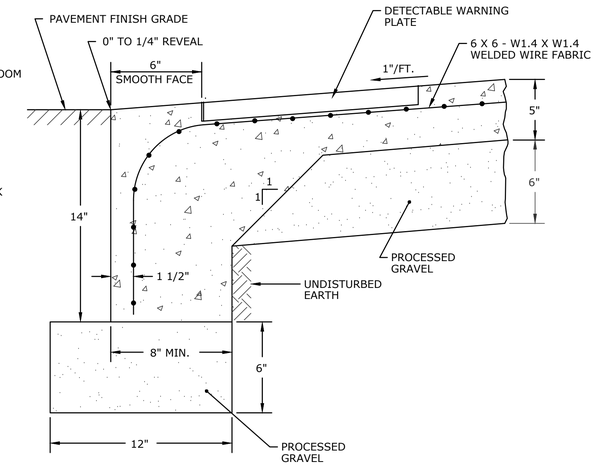
1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP OR ACCESSIBLE ROUTE SHOULD NOT EXCEED 20:1.
2. CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND ABRUPT GRADE CHANGES.
3. ALL SIDEWALKS SHALL BE CONSTRUCTED OF CLASS "F" (4,000 PSI - 28 DAY STRENGTH) CONCRETE IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS ARTICLE M.03.01 OR AS SPECIFIED IN CONTRACT DOCUMENTS.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE ALONG ACCESSIBLE ROUTES SHALL BE STABLE, FIRM AND SLIP RESISTANT IN COMPLIANCE WITH ADAAG SECTION 4.5. DETECTABLE WARNING SURFACES SHALL BE INSTALLED FLUSH AT ALL RAMPS AND EXTEND 24" MIN. FROM BACK EDGE OF CURBING ALONG TRAVEL WAY.
5. DIAGONAL SIDEWALK RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
6. REMOVAL OF ANY EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION/CONTRACTIONS JOINT OR DUMMY JOINT, 12:1 MAY NO BE ACHIEVABLE DUE TO SIDEWALK GRADE. IN RECOGNITION OF THIS, A MINIMUM LIMIT OF 15' FOR A PARALLEL RAMP SHALL BE USED. REMOVAL SHALL NOT BE FURTHER THAN 2' FROM THE PROPOSED RAMP UNLESS DIRECTED BY THE ENGINEER. SAW CUT REQUIRED FOR DUMMY JOINTS SHALL BE INCLUDED IN THE COST OF 'CONCRETE SIDEWALK'.
7. SAWCUT REQUIRED FOR DUMMY JOINTS SHALL BE INCLUDED IN THE COST OF "CONCRETE SIDEWALK RAMP".
8. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 15' UNLESS OTHERWISE NOTED.
9. HANDICAP RAMPS SHALL CONFORM WITH CONNECTICUT GENERAL STATUTES, SEC. 7-118A.
10. TRANSITION TO FULL HEIGHT CURB. INSTALL CURB TYPES AS INDICATED ON THE PLANS.
11. INSTALL THE EDGE OF THE DETECTABLE WARNING 6" FROM EDGE OF PAVEMENT.
12. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, ALIGN DOMES ON A SQUARE GRID IN THE DIRECTION OF PEDESTRIAN TRAVEL.



CUT AND MATCH PAVEMENT DETAIL
N.T.S.

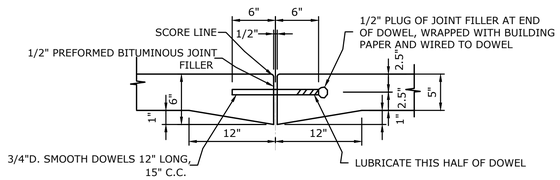


MONOLITHIC CURB
N.T.S.



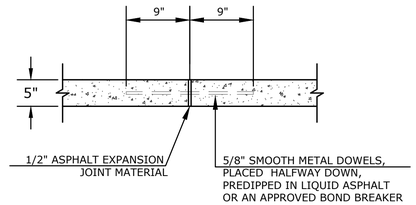
HANDICAP RAMP & CURB
N.T.S.

NOTE:
EXPANSION JOINTS SHALL BE SPACED EVERY 30'-0" O.C. AND SCORE LINES 5'-0" O.C., OR AS DIRECTED

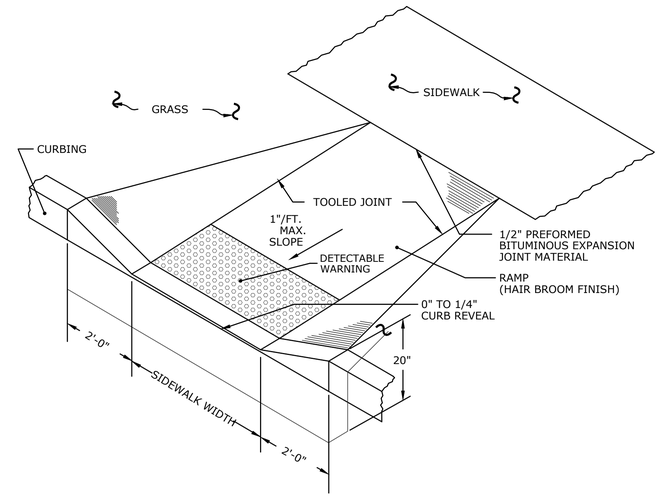


WHERE ABUTTING EXISTING SIDEWALKS

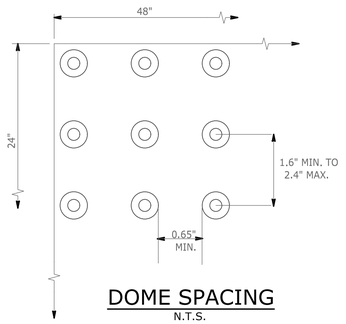
SIDEWALK CONTRACTION JOINT DETAIL
N.T.S.



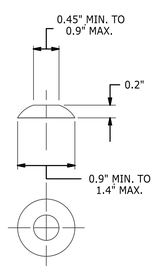
SIDEWALK EXPANSION JOINT DETAIL
N.T.S.



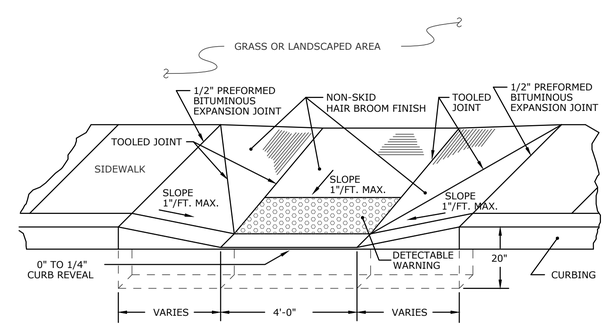
HANDICAP RAMP - TYPE III
N.T.S.



DOME SPACING
N.T.S.



DOME SECTION
N.T.S.



HANDICAP RAMP - TYPE II
N.T.S.

DETECTABLE WARNING PLATE
N.T.S.

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY _____ *DATE:* _____
EXPIRATION DATE: _____

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
N.T.S.

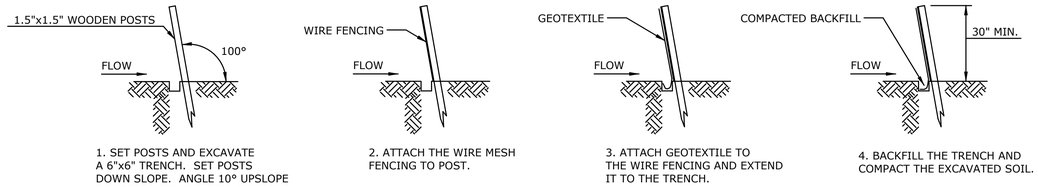
WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

SITE LAYOUT & LANDSCAPING PLAN
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

SIZE	PROJECT	FILE NAME	NUMBER	REV.
D	BLACK BIRCH APTS	07056.3 PD	07056.30	

SHEET 12
OF 14



1. SET POSTS AND EXCAVATE A 6"x6" TRENCH. SET POSTS DOWN SLOPE. ANGLE 10° UPSLOPE FOR STABILITY AND SELF CLEANING.

2. ATTACH THE WIRE MESH FENCING TO POST.

3. ATTACH GEOTEXTILE TO THE WIRE FENCING AND EXTEND IT TO THE TRENCH.

4. BACKFILL THE TRENCH AND COMPACT THE EXCAVATED SOIL.

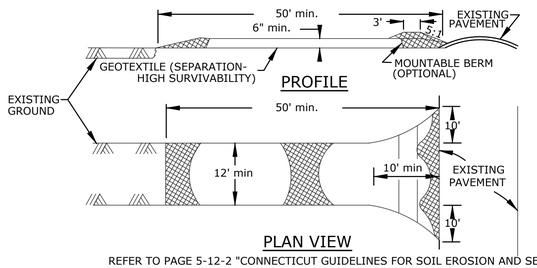
* WHEN INSTALLATION OF TRENCH IS IMPRACTICAL, ALTERNATE INSTALLATION SHALL BE TO LAY 6" FLAP HORIZONTALLY ON GROUND AND BURY FLAP BY RAMP SOIL OR STONE UP TO CONTROL FENCE. DEPTH OF RAMP SHALL BE AS REQUIRED TO HOLD DOWN FLAP WITHOUT LEAKAGE UNDER CONTROL FENCE WHILE MAINTAINING MINIMUM HEIGHT.

GEOTEXTILE FENCE SYSTEM

REFER TO PAGE 5-11-35 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" AND PAGE 55 "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

SEDIMENTATION CONTROL SYSTEM INSTALLATION

N.T.S.



PROFILE

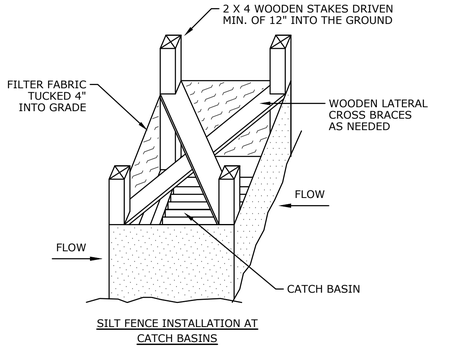
PLAN VIEW

REFER TO PAGE 5-12-2 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" AND PAGE 50 "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

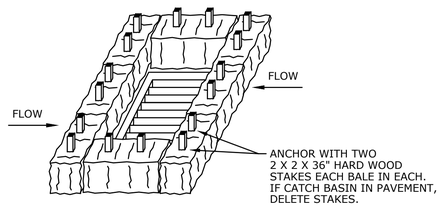
CONSTRUCTION SPECIFICATION:
1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FT (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN 6".
4. WIDTH - 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. GEOTEXTILE WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SETTLING AREA SIZED TO HOLD THE VOLUME OF WATER USED DURING ANY 2-HOUR PERIOD.
9. PERIODIC INSPECTION AND NECESSARY MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL.
10. THE COST OF CONSTRUCTING THE STABILIZED CONSTRUCTION ENTRANCE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE GENERAL WORK.

STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



SILT FENCE INSTALLATION AT CATCH BASINS

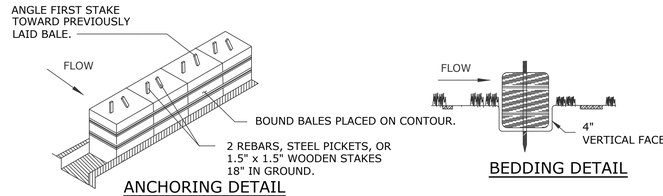


HAY BALE INSTALLATION AT CATCH BASINS

NOTE:
1. FILTER FABRIC SHALL BE MIRAFI "SILT FENCE", EXXON GTF 180, AMOCO 1380 OR APPROVED EQUAL.

CATCH BASIN BARRIERS

N.T.S.



ANCHORING DETAIL

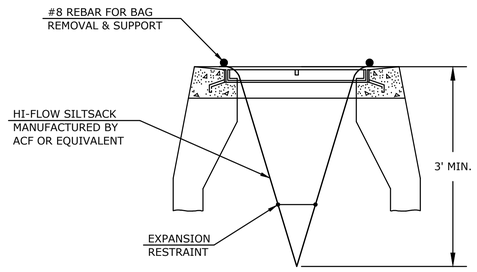
BEDDING DETAIL

HAY BALE CONSTRUCTION SPECIFICATIONS:
1. HAY BALES SHALL BE PLACED AROUND NEWLY INSTALLED CATCH BASINS IN SAGS AND DROP INLETS TO PREVENT SEDIMENTATION AND OTHER DEBRIS FROM ACCUMULATING ON THE GRATE OR IN THE SUMP. HAY BALES SHOULD BE KEPT CLEAN AND FREE OF DEBRIS TO FACILITATE FLOW.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4", AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

REFER TO PAGE 5-11-30 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" AND PAGE 53 "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

HAY BALE DETAIL

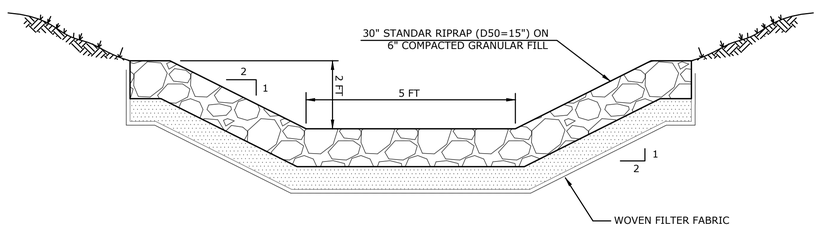
N.T.S.



SILTSACKS SHALL BE EMPTIED WHEN THEY HAVE COLLECTED 1 TO 1.5 FEET OF SEDIMENT. INSPECT EVERY WEEK OR AFTER EVERY RAINFALL EVENT.

SILTATION SAC IN CATCH BASIN

N.T.S.



RIPRAP SWALE

N.T.S.

GENERAL

THIS PLAN PROPOSES EROSION CONTROL MEASURES TO HELP CONTROL ACCELERATED EROSION AND SEDIMENTATION AND REDUCE THE DANGER FROM STORM WATER RUNOFF AT THE SITE. THE RUNOFF SHALL BE CONTROLLED BY THE INTERCEPTION, DIVERSION, AND SAFE DISPOSAL OF PRECIPITATION. RUNOFF SHALL ALSO BE CONTROLLED BY STAGING CONSTRUCTION ACTIVITY AND PRESERVING NATURAL VEGETATION WHENEVER POSSIBLE. EXISTING VEGETATION SHALL BE PROTECTED AND ONLY THAT CLEARING AND GRUBBING ABSOLUTELY NECESSARY FOR THE PROPOSED CONSTRUCTION SHALL BE PERFORMED. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND CONTOUR, UNLESS OTHERWISE INDICATED ON THE PLANS. THE CONTRACTOR SHALL TAKE SPECIAL CARE WITH HIS CONSTRUCTION METHODS AND SHALL COMPLY WITH THE FOLLOWING GUIDELINES. REFERENCE IS MADE TO THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" (2002), AS AMENDED. THE GUIDELINES ARE OBTAINABLE FROM THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, 79 ELM STREET, HARTFORD, CONNECTICUT 06106, AND SHOULD BE USED AS A REFERENCE IN CONSTRUCTING THE EROSION AND SEDIMENTATION CONTROLS INDICATED ON THESE PLANS. AN ADDITIONAL REFERENCE IS THE 1994 CONNDOT PUBLICATION "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

EROSION CONTROL

ALL AREAS SHALL BE PROTECTED FROM EROSION DURING AND AFTER CONSTRUCTION, PARTICULARLY THE STORAGE OF EXCAVATED OR STOCKPILED MATERIAL. THE CONTRACTOR SHALL CAREFULLY STRIP ALL TOPSOIL, LOAM, OR ORGANIC MATTER PRIOR TO TRENCHING OR OTHER OPERATIONS AND SHALL STORE THEM SEPARATELY FROM ALL OTHER MATERIALS DURING EXCAVATION. EACH STOCKPILE MUST BE ADEQUATELY RINGED WITH SEDIMENTATION CONTROL SYSTEM (I.E. HAY BALES AND/OR GEOTEXTILE FENCE). DEBRIS AND OTHER WASTE RESULTING FROM EQUIPMENT MAINTENANCE AND CONSTRUCTION WILL NOT BE DISCARDED ON SITE. STABILIZING OF SLOPES SHALL BE DONE IMMEDIATELY AFTER CONSTRUCTION OF SLOPES. SLOPES STEEPER THAN 4:1 SHALL BE PROTECTED WITH EROSION CONTROL MATTING. THIS MATTING IS MANUFACTURED COMBINATIONS OF MULCH AND NETTING AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL OTHER AREAS SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 2 TO 3 TONS PER ACRE. STRAW OR HAY MULCH MUST BE ANCHORED IMMEDIATELY AFTER SPREADING TO PREVENT WINDBLOWING. THE METHODS RECOMMENDED BY THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" SHALL BE USED FOR THE ANCHORING OF MULCH OR NETTING.

EROSION AND SEDIMENTATION CONTROL PLAN

AN EROSION AND SEDIMENTATION CONTROL PLAN MUST BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
SEDIMENTATION CONTROL SYSTEM - THE SEDIMENTATION CONTROL SYSTEM SHALL CONSIST OF A GEOTEXTILE BARRIER FENCE. THE SEDIMENTATION CONTROL SYSTEM SHALL BE INSTALLED IMMEDIATELY AFTER A CUT SLOPE HAS BEEN GRADED, BEFORE A FILL SLOPE HAS BEEN CREATED AND AS INDICATED ON THE PLANS. THE SYSTEM IS DESIGNED TO INTERCEPT SILT AND SEDIMENT BEFORE IT REACHES THE WETLANDS OR WATERCOURSES. DEPOSITS OF SEDIMENT AND SILT ARE TO BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE FENCE. THIS MATERIAL IS TO BE SPREAD AND STABILIZED IN AREAS NOT SUBJECT TO EROSION, OR IN AREAS WHICH ARE NOT TO BE PAVED OR BUILT ON. THE SEDIMENTATION CONTROL SYSTEM IS TO BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. THE SYSTEM IS TO REMAIN IN PLACE AND BE MAINTAINED TO INSURE EFFICIENT SILTATION CONTROL UNTIL ALL AREAS ABOVE THE FENCE ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED.

STACKED HAY BALES - HAY OR STRAW BALES USED FOR EROSION CONTROL SHALL BE STACKED AT CATCH BASINS WHERE SEDIMENT MAY ENTER THE CATCH BASIN OR AS DIRECTED BY THE RESIDENT ENGINEER. DEPOSITS OF SEDIMENT AND SILT ARE TO BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE EROSION CHECKS. THIS MATERIAL IS TO BE SPREAD AND STABILIZED IN AREAS NOT SUBJECT TO EROSION, OR IN AREAS WHICH ARE NOT TO BE PAVED OR BUILT ON. HAY OR STRAW BALES ARE TO BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. THE SYSTEM IS TO REMAIN IN PLACE AND BE MAINTAINED TO INSURE EFFICIENT SILTATION CONTROL UNTIL ALL AREAS ABOVE THE EROSION CHECKS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED.

IN ALL AREAS, REMOVAL OF TREES, BUSHES, AND OTHER VEGETATION, AND DISTURBANCE OF THE SOIL, IS TO BE KEPT TO AN ABSOLUTE MINIMUM WHILE ALLOWING PROPER DEVELOPMENT OF THE SITE.

DURING CONSTRUCTION, AS SMALL AN AREA OF SOIL AS POSSIBLE SHOULD BE EXPOSED FOR AS SHORT A TIME AS POSSIBLE. AFTER CONSTRUCTION, GRADE, RESPREAD TOPSOIL, AND STABILIZE SOIL BY SEEDING AND MULCHING AS TO PREVENT EROSION.

EROSION AND SEDIMENTATION CONTROL MAINTENANCE PROCEDURES

ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED DURING CONSTRUCTION ON A DAILY BASIS AND FOLLOWING ALL STORMS BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL MAINTAIN AND MAKE REPAIRS AND REMOVE SEDIMENT AS REQUESTED BY THE RESIDENT ENGINEER. THIS WORK SHALL BE PERFORMED WITHIN 24 HOURS OF THE REQUEST AND THERE SHALL BE NO SEPARATE PAYMENT FOR THIS WORK.

THE CONTRACTOR SHALL CLEAN SEDIMENT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, AND PIPES AT THE COMPLETION OF CONSTRUCTION, AND AS REQUESTED BY THE RESIDENT INSPECTOR TO KEEP THE SYSTEM FUNCTIONING PROPERLY DURING CONSTRUCTION.

FOLLOWING COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REPAIR ALL ERODED AREAS AND ENSURE A GOOD STAND OF TURF IS ESTABLISHED THROUGHOUT. THE CONTRACTOR SHALL REPAIR ALL ERODED OR DISPLACED RIPRAP, AND CLEAN SEDIMENT COVERED STONES.

ALL APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE ESTABLISHED PRIOR TO AND BE MAINTAINED THROUGH ALL CONSTRUCTION PHASES.

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY _____ *DATE:* _____
EXPIRATION DATE: _____

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
N.T.S.

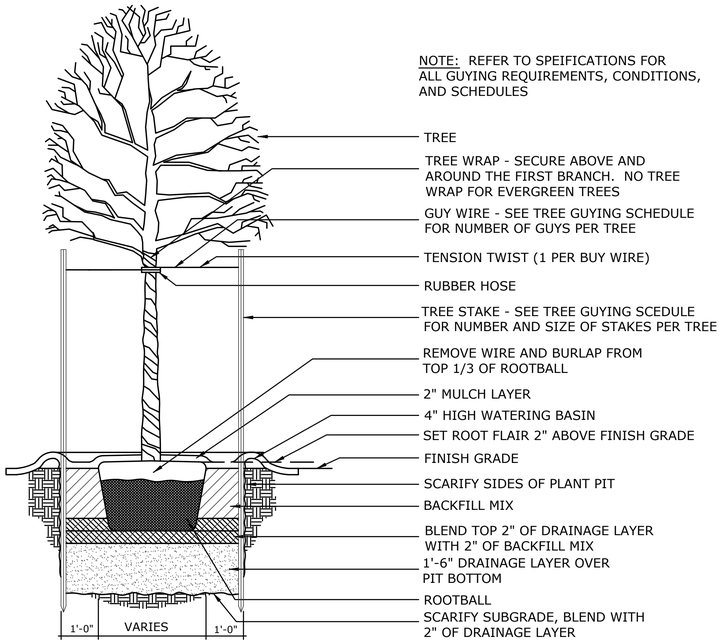
WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

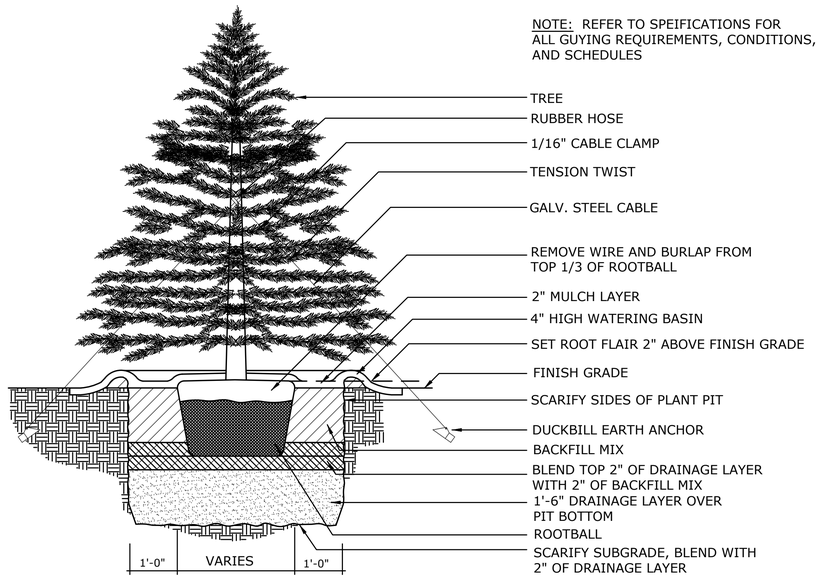
EROSION CONTROL DETAILS
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

SIZE	PROJECT	FILE NAME	NUMBER	REV.
D	BLACK BIRCH APTS	07056.3 PD	07056.30	

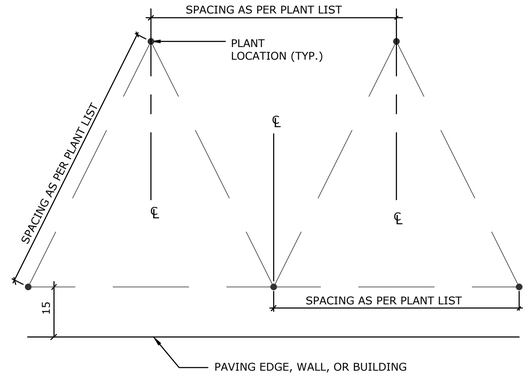
SHEET 13
OF 14



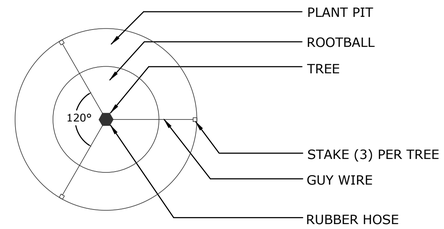
DECIDUOUS TREE PLANTING
N.T.S.



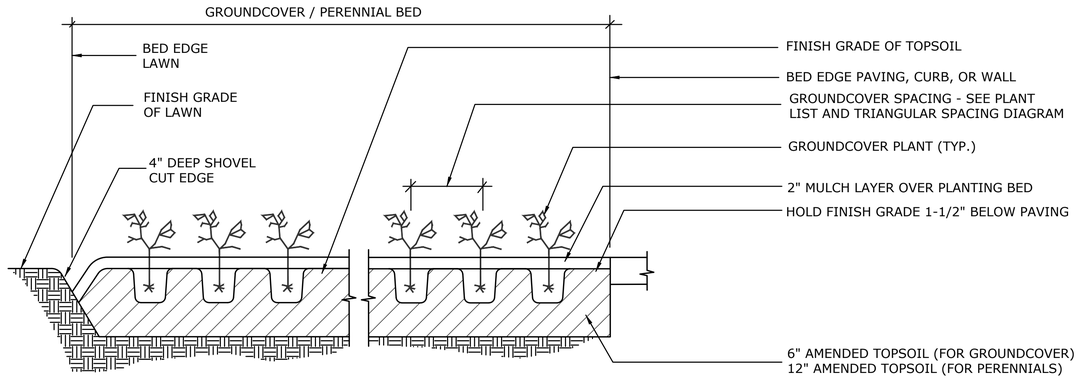
EVERGREEN TREE PLANTING
N.T.S.



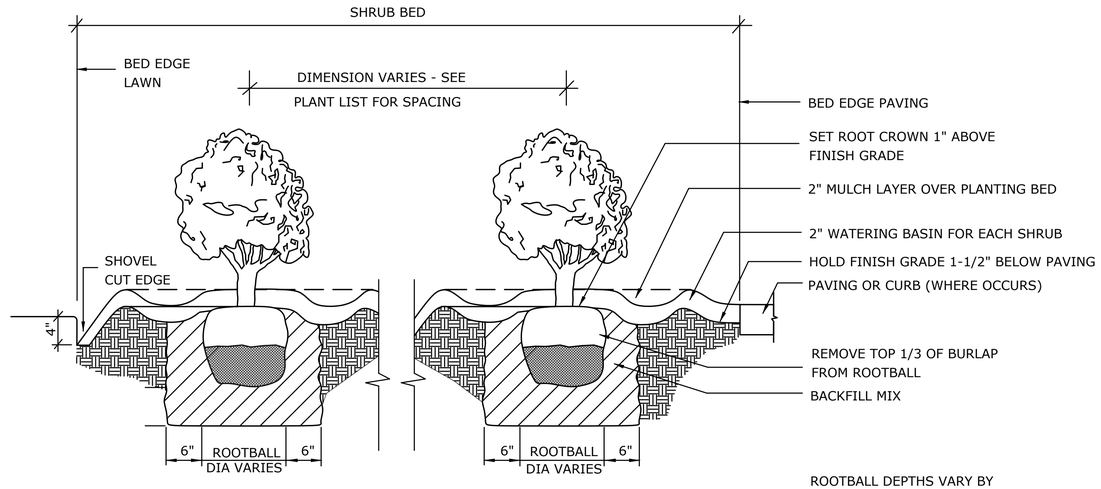
PLANT SPACING DIAGRAM
N.T.S.



TREE STAKING PLAN
N.T.S.



GROUND COVER PLANTING
N.T.S.



SHRUB PLANTING
N.T.S.

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
CHAIRMAN/SECRETARY _____ *DATE:* _____
EXPIRATION DATE: _____

NO.	DATE	DESCRIPTION
1	7/20/21	REVISED PER VENTRES COMMENTS 7/1/21
2	10/1/21	REVISED PER JACOBSON COMMENTS 7/8/21

REVISIONS

SUPV. S.R.M.
DESIGN R.E.B.
DRAWN R.E.B.
CHECKED S.R.M.
DATE 06/03/21

SCALE
N.T.S.

WMC CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
LOFTS AT BLACK BIRCH LLC.
1 BANNER ROAD
EAST HADDAM, CT 06423

PLANTING DETAILS
THE LOFTS AT BLACK BIRCH - COMMUNITY CENTER REDEVELOPMENT
BANNER LANE - EAST HADDAM, CONNECTICUT

SIZE	PROJECT	FILE NAME	NUMBER	REV.	SHEET	OF
D	BLACK BIRCH APTS	07056.3 PD	07056.30	-	14	14