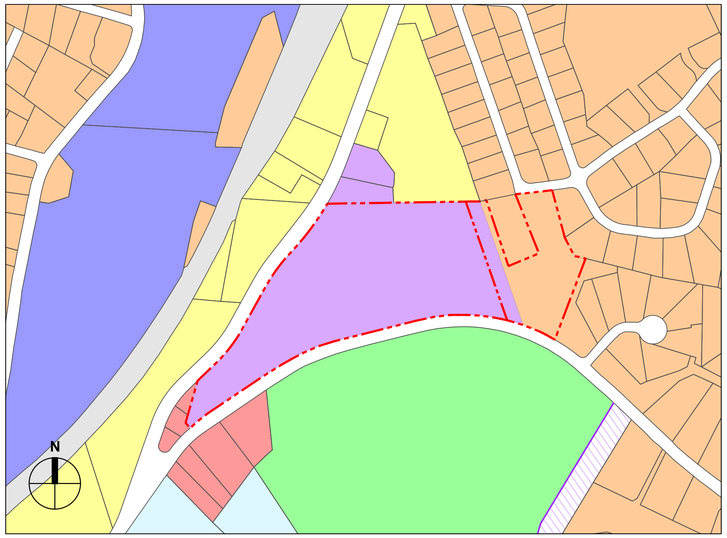
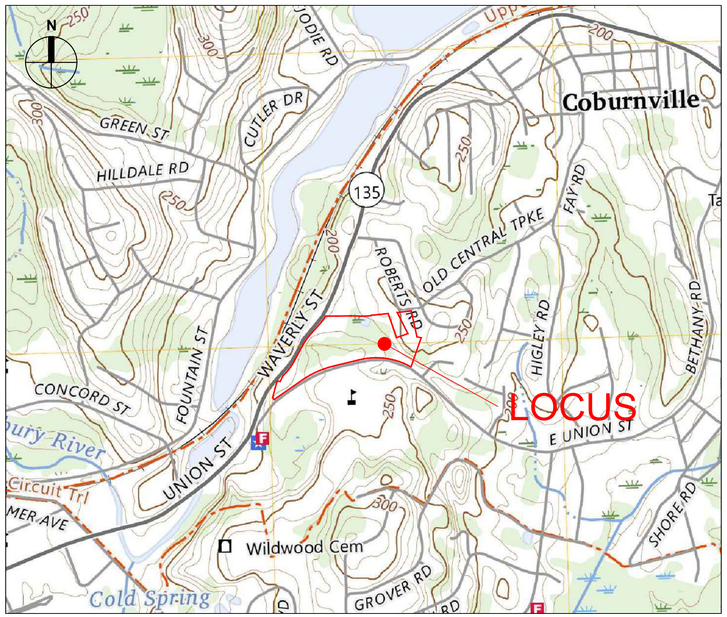


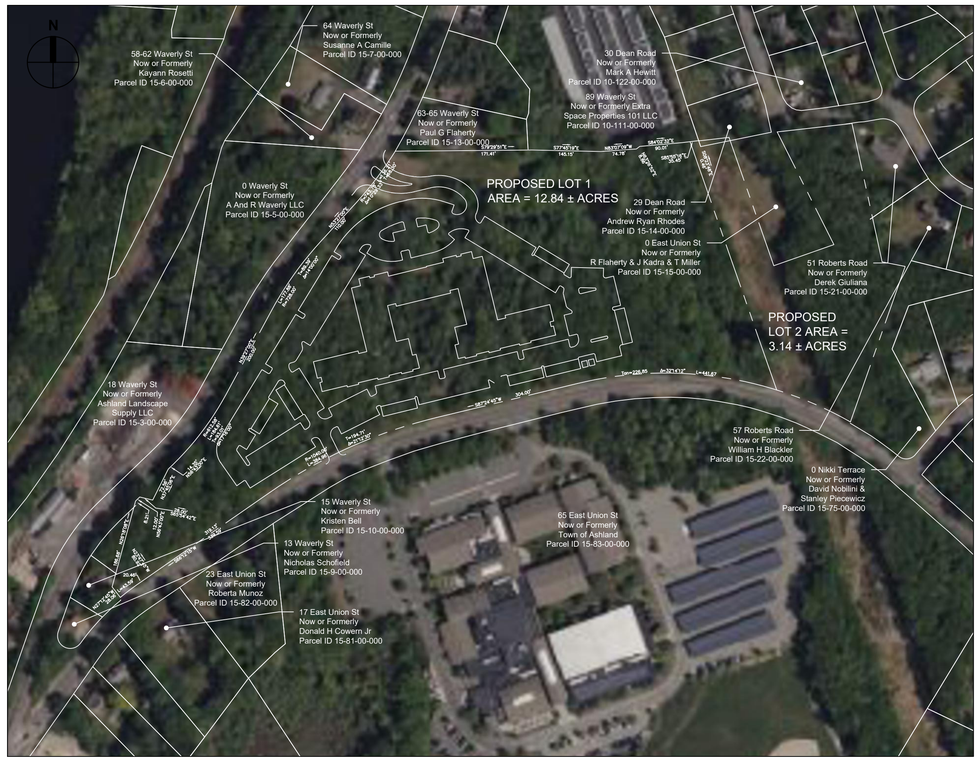
ZONING MAP
SCALE: 1"=300'



USGS-LOCUS
SCALE: 1"=800'

LEGEND

- WILDWOOD MIXED USE DISTRICT B
- WILDWOOD MIXED USE DISTRICT C
- WILDWOOD MIXED USE DISTRICT D
- WILDWOOD MIXED USE DISTRICT E
- WILDWOOD MIXED USE DISTRICT BUFFER
- RESIDENTIAL A
- SURFACE WATER BODY
- RAIL RIGHT OF WAY
- HIGHWAY COMMERCE



KEY PLAN
SCALE: 1"=150'

PROJECT TEAM:

APPLICANT / DEVELOPER
THE GUTIERREZ COMPANY
200 SUMMIT DRIVE, SUITE 400
BURLINGTON, MA 01803

CIVIL ENGINEER / LANDSCAPE ARCHITECT
SMMA
1000 MASSACHUSETTS AVENUE
CAMBRIDGE, MA 02138

ARCHITECT
CUBE3
56 HIGH STREET
ANDOVER, MA 01845

TRAFFIC ENGINEER
LANGAN
100 CAMBRIDGE STREET, SUITE 1310
BOSTON, MA 02114

WETLAND SCIENTIST
GODDARD CONSULTING, LLC
291 MAIN STREET, SUITE 8
NORTHBOROUGH, MA 01532

GEOTECHNICAL ENGINEER
SANBORN, HEAD & ASSOCIATES, INC.
6 BEDFORD FARMS DRIVE
BEDFORD, NH 03110

SURVEYOR
GLM ENGINEERING CONSULTANTS, INC.
19 EXCHANGE STREET
HOLLISTON, MA 01746

the Gutierrez company

THE RESIDENCES AT ASHLAND
61 WAVERLY STREET
ASHLAND, MA

RESPONSE TO COMMENTS — JANUARY 23, 2026

smma

EXISTING CONDITIONS PLAN
ASHLAND, MASSACHUSETTS

(MIDDLESEX COUNTY)

SCALE: 1"=60' AUGUST 15,2004

REVISED DEC. 22, 2024

PREPARED FOR:
A and R WAVERLY LLC
PO BOX 539
ASHLAND, MASSACHUSETTS

PREPARED BY:

GLM Engineering Consultants, Inc.
19 EXCHANGE STREET
HOLLISTON, MA 01746
P: 508-429-1100 F: 508-429-7160
www.GLMengineering.com
JOB #: 30148T

27,466_EC

THE SURVEY SHOWN ON THIS PLAN WAS PERFORMED IN THE MONTH OF JULY, 2014 ALL TOPOGRAPHY AND ELEVATIONS SHOWN ARE SUBJECT TO CHANGE. ALL ELEVATIONS SHOULD VERIFIED IN FIELD PRIOR TO CONSTRUCTION.

WETLAND LINE SHOWN ON THIS PLAN WAS DELINEATED BY OTHERS.

JOYCE E. HASTINGS
No. 39393

JEHastings 12/26/24
JOYCE E. HASTINGS , P.L.S. DATE

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

ASSESSORS REFERENCE:
15-012-00-000

ZONING: WMUSD "D"

MIXED USE SPECIAL DISTRICT

MIN. LOT SIZE	30,000 S.F.
MIN. FRONTAGE	150'

MIN. SETBACKS
FRONT SET BACKS = 25'
SIDE SETBACKS =25
REAR SETBACKS =25'

ZONING: RESIDENTIAL "A"

MIN. LOT SIZE	30,000 S.F.
MIN. FRONTAGE	150'

MIN. SETBACKS
FRONT SET BACKS = 40'
SIDE SETBACKS =10'
REAR SETBACKS =30'

OWNER OF RECORD:
A and R WAVERLY LLC
P.O. BOX 539
ASHLAND, MA 01746

DEED REFERENCE:
MIDDLESEX SOUTH DISTRICT
REGISTRY OF DEEDS
BOOK 44359
PAGES 306-441

PLAN REFERENCES:
MIDDLESEX SOUTH DISTRICT REGISTRY OF DEEDS
PLAN No.168 OF 2009

LEGEND

CB ■	CONCRETE BOUND	W	WELL
	HYDRANT		AREA DRAIN
S	SEWER MANHOLE		SEWER LINE
D	DRAIN MANHOLE		DRAIN LINE
	SIGN		WATER LINE
	DECIDUOUS TREE		GAS LINE
G	GAS METER	-X-X-X-X-	CHAIN LINK FENCE
	GAS VALVE		WOOD FENCE
	CATCH BASIN		UNDERGROUND CABLE
	BOLLARD		TELEPHONE LINE
	WATER VALVE		OVERHEAD WIRES
	UTILITY POLE		STONE WALL
	CONIFER TREE		TREE LINE
	MANHOLE (UNKNOWN TYPE)	39	1' CONTOURS
	METAL COVER	40	5' CONTOURS
	LIGHT POLE		PROPERTY LINE
T	TELEPHONE MANHOLE		ABUTTERS PROPERTY LINE
	FLAG POLE		SOIL BORING
	MONITORING WELL	(OW)	SOIL BORING WITH OBSERVATION WELL
AC	AIR CONDITIONER UNIT	▲WF#	WETLAND FLAG
V	VALVE		WETLAND LINE
	HANDICAP PARKING STALL		BOLLARD
	SIGN	CONC.	CONCRETE
	PILLAR	BIT. CONC.	BITUMINOUS CONCRETE
(R)	FROM RECORD DRAWINGS	10.00x	SPOT GRADE
		VGC	VERTICAL GRANITE CURBING
		CLF	CHAIN LINK FENCE
		BCB	BITUMINOUS CONCRETE BERM

SURVEY NOTES:

1) THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ALTA/NSPS LAND TITLE SURVEY CONDUCTED IN THE FIELD BY GLM ENGINEERING CONSULTANTS, INC. IN JULY 2014.
2) THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE COMPILED FROM THE SURVEY NOTED ABOVE, IN ADDITION TO INFORMATION FROM DEEDS AND PLANS OF RECORD.
3) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.
4) HORIZONTAL DATUM IS BASED ON MASS GRID SYSTEM, STATE PLANE NAD 1983. ELEVATIONS SHOWN ON THIS PLAN REFER TO THE VERTICAL DATUM NGVD OF 1929.
5) WETLAND FLAG SERIES GCA#XX, GCC#XX, AND GCS#XX WERE DELINEATED AND FIELD LOCATED BY GODDARD CONSULTING IN NOVEMBER 2024 AND MODIFIED WITH THE ASHLAND CONSERVATION COMMISSION IN NOVEMBER 2025.
6) WETLAND FLAG SERIES WET#XX ARE BASED ON DRAWING ENTITLED "SEPTIC SYSTEM CONSTRUCTION 63-65 WAVERLY STREET, ASHLAND", PREPARED BY CIVILIZED SOLUTIONS, DATED AUGUST 6, 2014.
7) THE EXISTING CONDITIONS DEPICTED ON THIS DRAWING ARE COMPILED FROM THE ABOVE REFERENCED SURVEY, AERIAL IMAGERY, AND INFORMATION BASED ON DRAWINGS ENTITLED "WAVERLY ST. / EAST UNION ST. WATER MAIN INSTALLATION", PREPARED BY HALEY WARD, DATED AUGUST 2021, AND "ASHLAND HIGH SCHOOL - SITE UTILITIES PLAN", PREPARED BY MORIECE & GARY LANDSCAPE ARCHITECTS, LAST REVISED 12/09/03.

N

NOTE: SHEET C-101 SHOWN AT 1"=50' SCALE TO DEPICT PARCEL LIMITS. ALL REMAINING SHEETS DEPICT PROJECT LIMITS AT 1"=40' SCALE.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

smma

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Phone: 617.547.5400
Fax: 617.507.7885

the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

MARK:	DATE:	DESCRIPTION:
	01/23/2026	RESPONSE TO COMMENTS
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	10/16/2025	PLANS OF RECORD
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	05/20/2025	RESPONSE TO COMMENTS
	02/10/2025	COMPREHENSIVE PERMIT

ISSUE LOG

△ = CLOUDED CHANGE

SCALE	1"=50'
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

EXISTING CONDITIONS PLAN

C-101

LEGEND

FES	FLARED END SECTION
	PROPOSED TREELINE
D	DRAIN LINE
CB	CATCH BASIN
DMH	DRAIN MANHOLE
x97.25	SPOT GRADE
95	EXISTING CONTOUR
95	PROPOSED CONTOUR
	RIPRAP
CPE	CORRUGATED POLYETHYLENE PIPE
LOW	LIMIT OF WORK
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
	VEHICLE ACCESS
X X	SILT FENCE WITH STRAW WATTLE
	BUILDING
	EDGE OF PAVEMENT
	DIRECTION OF SURFACE RUNOFF
	REMOVE BITUMINOUS PAVEMENT AND ADJACENT CURBING
	REMOVE LIGHT POLE
	REMOVE TREES
	TEMPORARY OUTLET STRUCTURE

GENERAL EROSION CONTROL NOTES:

1. CONFORM TO CONDITIONS LISTED IN THE ORDER OF CONDITIONS ISSUED FOR THIS PROJECT. A COPY OF THE ORDER OF CONDITIONS IS TO BE KEPT ON-SITE.

2. CONFORM TO CONDITIONS OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND THE NPDES GENERAL PERMIT. A COPY OF THE SWPPP IS TO BE KEPT ON-SITE.

3. STABILIZE SOIL STOCKPILES AND EXPOSED SOIL AREAS WHERE CONSTRUCTION ACTIVITIES WILL CEASE FOR 14 DAYS OR MORE, IN ACCORDANCE WITH THE NPDES GENERAL PERMIT.

4. PERFORM EARTHWORK ACTIVITY ON THE SITE IN A MANNER SUCH THAT RUNOFF IS DIRECTED TO TEMPORARY DRAINAGE SWALES AND TEMPORARY SEDIMENTATION BASINS. TEMPORARY DRAINAGE FEATURES ARE TO BE ADJUSTED AND RELOCATED AS NECESSARY THROUGHOUT CONSTRUCTION.

5. FOLLOWING THE INSTALLATION OF PROPOSED CATCH BASINS AS SHOWN ON SHEET C-131, INSTALL SEDIMENT BAGS FOR INLET PROTECTION.

GENERAL EROSION CONTROL NOTES (CONTINUED):

5. THE DETENTION BASINS AND FOREBAYS DESIGNATED ON THE PLANS MAY BE USED AS TEMPORARY SEDIMENTATION BASINS THROUGHOUT CONSTRUCTION AND ARE TO BE PERIODICALLY CLEANED DURING CONSTRUCTION. AT THE END OF CONSTRUCTION, CLEAN AND REFURBISH PERMANENT BASINS USED DURING CONSTRUCTION, INCLUDING LAYERS OF SOIL CONTAINING SILT DEPOSITS AND RE-VEGETATE SURFACES. ADDITIONAL TEMPORARY SEDIMENTATION BASINS ARE TO BE CONSTRUCTED AND USED THROUGHOUT THE SITE AS NECESSARY TO CONTROL RUNOFF DURING CONSTRUCTION.

6. CONSTRUCT TEMPORARY SEDIMENTATION BASINS TO CONTAIN A VOLUME OF RUNOFF EQUAL TO THE RESULTANT VOLUME OF RUNOFF FROM A 2-YEAR, 24-HOUR STORM EVENT FOR THE AREA THAT IS TRIBUTARY TO THE BASIN.

7. ALL EROSION CONTROL MEASURES SHALL BE KEPT IN PLACE PRIOR TO CONSTRUCTION. EROSION CONTROL SHALL CONFIRM TO THE TOWN OF ASHLAND CONSERVATION COMISSION REQUIREMENTS AS STATED IN THE ORDER OF CONDITIONS.

8. SAFETY FENCING SHALL BE PROVIDED FOR ALL STOCKPILES OVER 10 FT IN HEIGHT.

9. TO PROVIDE SLOPE STABILIZATION, EROSION CONTROL BLANKETS (DETAIL C7 / C-501) SHALL BE PROVIDED ALONG SLOPES ADJACENT TO THE WETLAND 25-FOOT NO DISTURB BUFFER ZONE AS REQUIRED BASED ON CONSTRUCTION SEQUENCING.

GENERAL NOTES:

1. NO DISTURB ZONE: EXTENDING 25-FEET BEYOND THE BORDERING VEGETATED WETLANDS, A VEGETATED BUFFER SHALL BE MAINTAINED. ALTERATIONS INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, LANDSCAPING, MOWING, AND EXCAVATION, ARE NOT PERMITTED WI THIN THE 25-FOOT NO DISTURB BUFFER ZONE.

CONCEPTUAL CONSTRUCTION SEQUENCING:

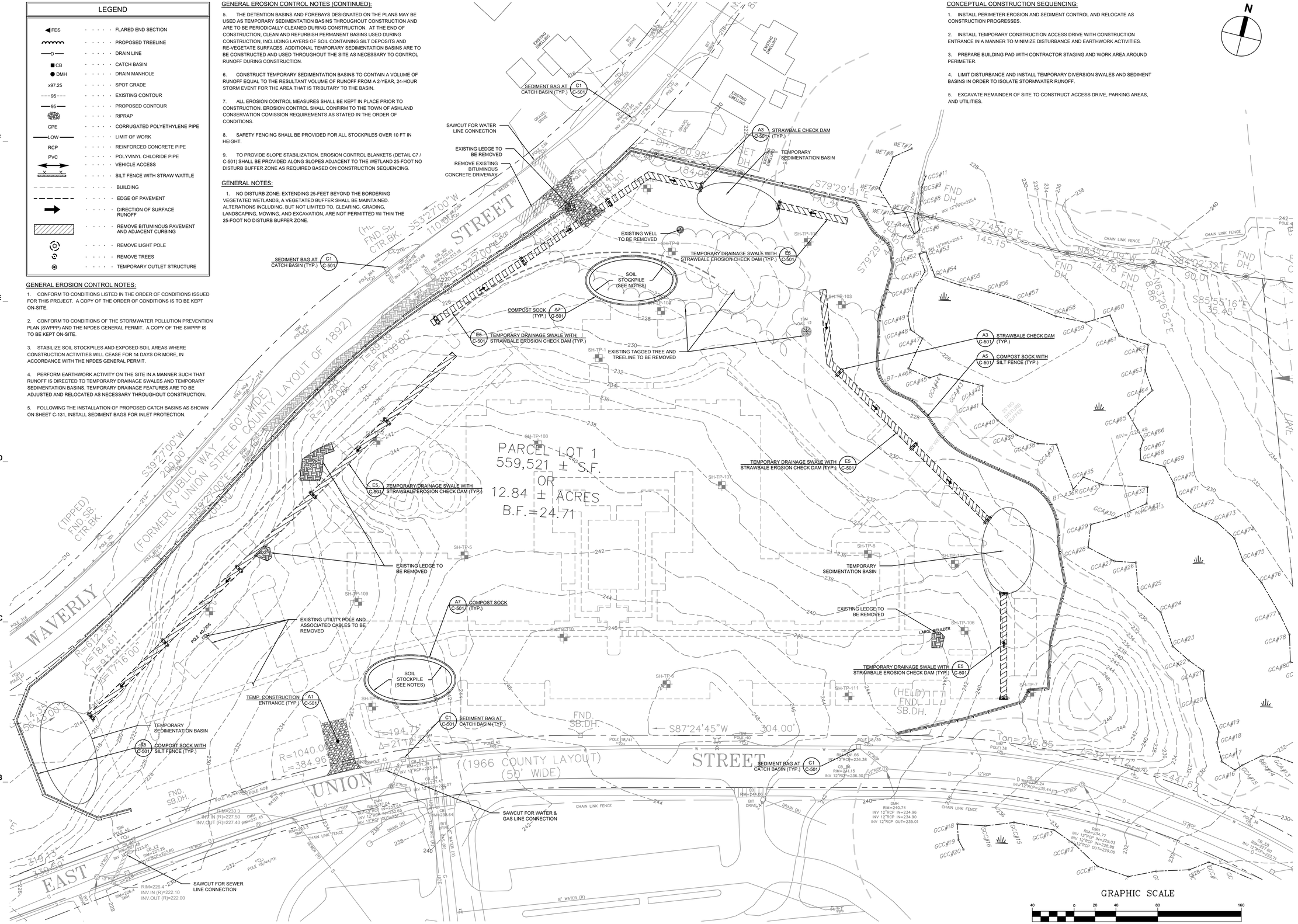
1. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL AND RELOCATE AS CONSTRUCTION PROGRESSES.

2. INSTALL TEMPORARY CONSTRUCTION ACCESS DRIVE WITH CONSTRUCTION ENTRANCE IN A MANNER TO MINIMIZE DISTURBANCE AND EARTHWORK ACTIVITIES.

3. PREPARE BUILDING PAD WITH CONTRACTOR STAGING AND WORK AREA AROUND PERIMETER.

4. LIMIT DISTURBANCE AND INSTALL TEMPORARY DIVERSION SWALES AND SEDIMENT BASINS IN ORDER TO ISOLATE STORMWATER RUNOFF.

5. EXCAVATE REMAINDER OF SITE TO CONSTRUCT ACCESS DRIVE, PARKING AREAS, AND UTILITIES.



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THE RESIDENCES AT ASHLAND

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ASHLAND, MA

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ISSUE LOG

△ = CLOUDED CHANGE

SCALE	1"=40'
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	2414Z.00

SITE PREPARATION PLAN

C-111

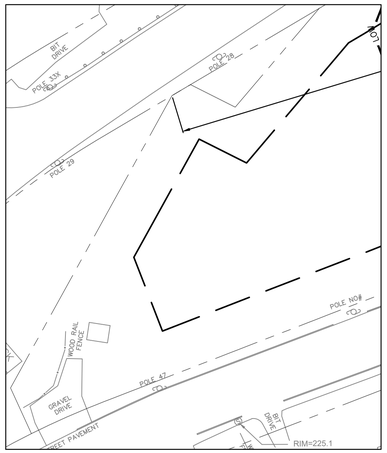
LEGEND

- BOLLARD
- SIGN
- RETAINING WALL
- VERTICAL GRANITE CURB
- SLOPED GRANITE CURB
- ACCESS GRANITE CURB
- PRECAST CONCRETE CURB
- CROSSWALK
- WHEELCHAIR ACCESSIBLE CURB RAMP
- HANDICAP PARKING
- WOOD GUARDRAIL
- METAL GUARDRAIL
- CHAIN LINK FENCE
- PICKET FENCE
- (14) PARKING COUNTS (REGULAR)
- SNOW STORAGE AREA
- EVSE/ EV-READY SPACES
- POROUS PAVEMENT

ZONING
WILDWOOD MIXED USE SPECIAL DISTRICT (WMUSD D)

	REQUIRED	PROPOSED
MIN. LOT AREA (SF)	40,000	559,521
FRONT YARD SETBACK (FT)	25	111.8*
SIDE YARD SETBACK (FT)	25	211.9*
REAR YARD SETBACK (FT)	25	106.3*
MIN. LOT FRONTAGE (FT)	150	1,458
MAX. HEIGHT (STORIES)	3	5 STORIES**; 59'-8"
MIN. OPEN SPACE (%)	-	60.8
INT. PARKING LOT LANDSCAPE (%)	10	>10
LANDSCAPE BUFFER STRIP (FT)	15	>15

* PRINCIPAL USE STRUCTURES ONLY
** MAXIMUM BUILDING HEIGHT WAIVER REQUESTED FOR 5 STORY HEIGHT



INSET A
SCALE: 1" = 40'

LAYOUT & MATERIALS NOTES:

1. DIMENSIONS SHOWN OFF THE BUILDING ARE FROM THE EXTERIOR FACE OF THE FOUNDATION WALL.
2. DIMENSIONS SHOWN IN THE PARKING LOTS AND ROADWAYS ARE FROM THE FACE OF CURB, CENTERLINE OF STRIPING, AND EDGE OF PAVEMENT.
3. DIMENSIONS SHOWN IN THE CONCRETE WALKWAYS AND PLAZAS ARE FROM SCORE JOINTS, EXPANSIONS JOINTS, AND EDGE OF CONCRETE.
4. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND LOCATIONS OF DOORS.
5. COORDINATE WORK IN THE TOWN RIGHT-OF-WAY WITH THE ASHLAND DEPARTMENT OF PUBLIC WORKS.
6. INSTALL GUARDRAIL SO THAT FACE OF RAIL IS 2'-0" FROM FACE OF CURB, UNLESS NOTED OTHERWISE.
7. LIGHTPOLE BASES IN LAWN AREAS ARE TO BE INSTALLED SO THAT THE CENTER OF BASE IS 3'-0" AWAY FROM THE FACE OF CURB OR EDGE OF PAVED AREA, UNLESS OTHERWISE NOTED.
8. INSTALL SITE FEATURES AND FURNISHINGS TO MEET ADA AND MAAB REQUIREMENTS FOR ACCESSIBILITY. NOTIFY THE ARCHITECT OF POTENTIAL CONFLICTS PRIOR TO INSTALLING.
9. REFER TO PAVEMENT MARKINGS AND SIGNAGE PLAN PREPARED BY LANGAN FOR MORE DETAILS ON THE TRAFFIC SIGNS INDICATED ON THIS PLAN, AND SHEET C-505 FOR THE PARKING AND TRAFFIC SIGNS TABLE.
10. SIGNS, LANDSCAPING, AND OTHER FEATURES LOCATED WITHIN SIGHT TRIANGLES AT BOTH ENTRANCE AREAS ALONG WAVERLY STREET AND EAST UNION STREET SHALL BE DESIGNED, INSTALLED, AND MAINTAINED SO AS TO NOT EXCEED 2.0 FEET IN HEIGHT. ANY ACCUMULATED SNOW FALL EXCEEDING 3.5 FEET IN HEIGHT OR OTHERWISE INHIBITING SIGHT LINES WITHIN THE SIGHT TRIANGLES AT BOTH ENTRANCES SHALL BE PROMPTLY REMOVED.

N

smma

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ISSUE LOG
△ = CLOUDED CHANGE

SCALE	1"=40'
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

LAYOUT & MATERIALS PLAN

C-121

PARKING SUMMARY	
REGULAR PARKING SPACES	339 PARKING SPACES
GARAGE PARKING SPACES	42 PARKING SPACES
ACCESSIBLE PARKING SPACES	10 PARKING SPACES
TOTAL PARKING SPACES	391 PARKING SPACES
PARKING RATIO	1.73 SPACES PER UNIT

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

LEGEND

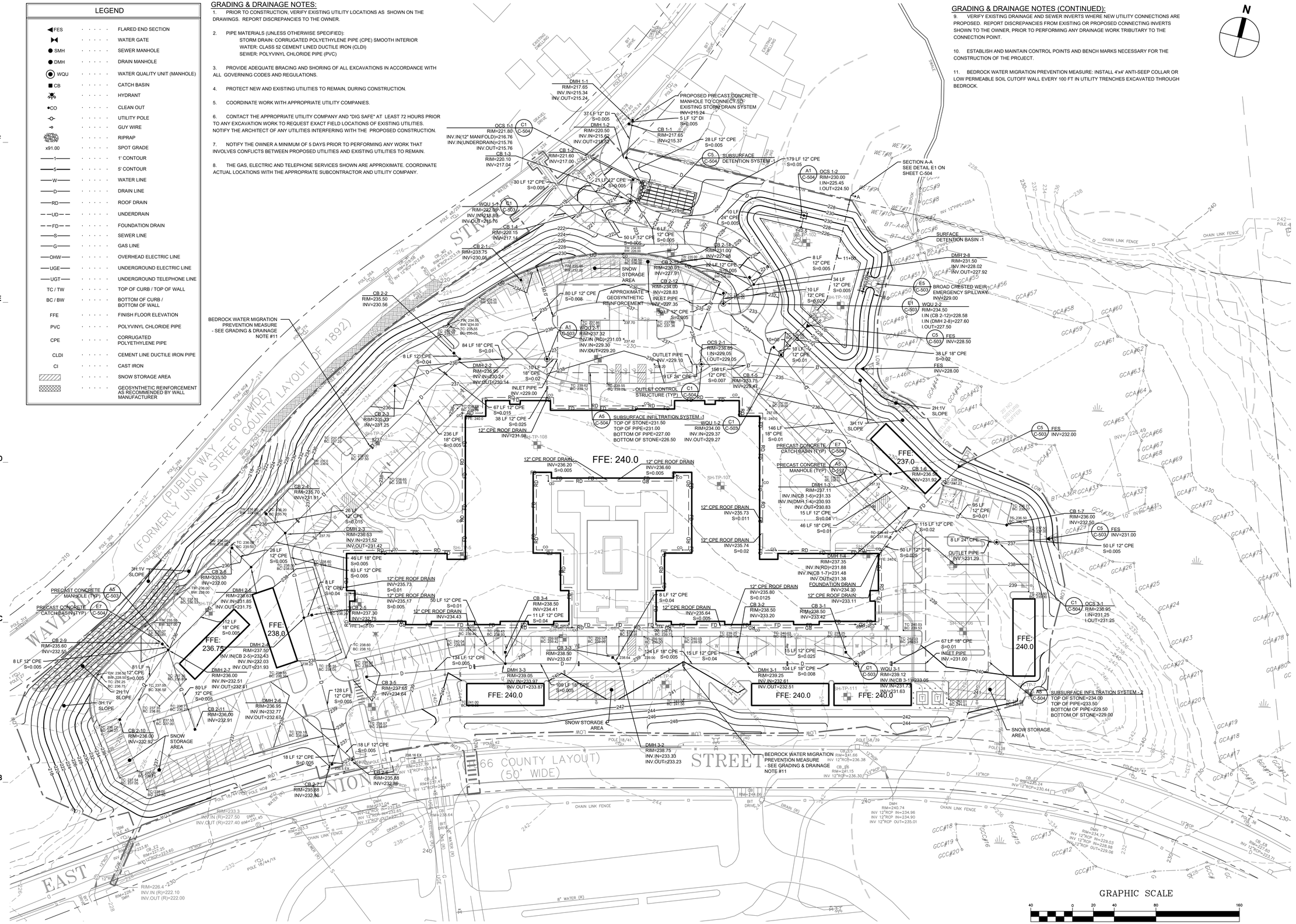
FES	FLARED END SECTION
	WATER GATE
SMH	SEWER MANHOLE
DMH	DRAIN MANHOLE
WQU	WATER QUALITY UNIT (MANHOLE)
CB	CATCH BASIN
	HYDRANT
CO	CLEAN OUT
	UTILITY POLE
	GUY WIRE
	RIPRAP
x91.00	SPOT GRADE
1	1' CONTOUR
5	5' CONTOUR
W	WATER LINE
D	DRAIN LINE
RD	ROOF DRAIN
UD	UNDERDRAIN
FD	FOUNDATION DRAIN
S	SEWER LINE
G	GAS LINE
OHW	OVERHEAD ELECTRIC LINE
UGE	UNDERGROUND ELECTRIC LINE
UGT	UNDERGROUND TELEPHONE LINE
TC / TW	TOP OF CURB / TOP OF WALL
BC / BW	BOTTOM OF CURB / BOTTOM OF WALL
FFE	FINISH FLOOR ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
CPE	CORRUGATED POLYETHYLENE PIPE
CLDI	CEMENT LINE DUCTILE IRON PIPE
CI	CAST IRON
	SNOW STORAGE AREA
	GEOSYNTHETIC REINFORCEMENT AS RECOMMENDED BY WALL MANUFACTURER

GRADING & DRAINAGE NOTES:

1. PRIOR TO CONSTRUCTION, VERIFY EXISTING UTILITY LOCATIONS AS SHOWN ON THE DRAWINGS. REPORT DISCREPANCIES TO THE OWNER.
2. PIPE MATERIALS (UNLESS OTHERWISE SPECIFIED):
   STORM DRAIN: CORRUGATED POLYETHYLENE PIPE (CPE) SMOOTH INTERIOR
   WATER: CLASS 52 CEMENT LINED DUCTILE IRON (CLDI)
   SEWER: POLYVINYL CHLORIDE PIPE (PVC)
3. PROVIDE ADEQUATE BRACING AND SHORING OF ALL EXCAVATIONS IN ACCORDANCE WITH ALL GOVERNING CODES AND REGULATIONS.
4. PROTECT NEW AND EXISTING UTILITIES TO REMAIN, DURING CONSTRUCTION.
5. COORDINATE WORK WITH APPROPRIATE UTILITY COMPANIES.
6. CONTACT THE APPROPRIATE UTILITY COMPANY AND "DIG SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATIONS OF EXISTING UTILITIES. NOTIFY THE ARCHITECT OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION.
7. NOTIFY THE OWNER A MINIMUM OF 5 DAYS PRIOR TO PERFORMING ANY WORK THAT INVOLVES CONFLICTS BETWEEN PROPOSED UTILITIES AND EXISTING UTILITIES TO REMAIN.
8. THE GAS, ELECTRIC AND TELEPHONE SERVICES SHOWN ARE APPROXIMATE. COORDINATE ACTUAL LOCATIONS WITH THE APPROPRIATE SUBCONTRACTOR AND UTILITY COMPANY.

GRADING & DRAINAGE NOTES (CONTINUED):

9. VERIFY EXISTING DRAINAGE AND SEWER INVERTS WHERE NEW UTILITY CONNECTIONS ARE PROPOSED. REPORT DISCREPANCIES FROM EXISTING OR PROPOSED CONNECTING INVERTS SHOWN TO THE OWNER, PRIOR TO PERFORMING ANY DRAINAGE WORK TRIBUTARY TO THE CONNECTION POINT.
10. ESTABLISH AND MAINTAIN CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT.
11. BEDROCK WATER MIGRATION PREVENTION MEASURE: INSTALL 4'x4' ANTI-SEEP COLLAR OR LOW PERMEABLE SOIL CUTOFF WALL EVERY 100 FT IN UTILITY TRENCHES EXCAVATED THROUGH BEDROCK.


WAVERLY STREET (PUBLIC WAY - 60' WIDE)
(FORMERLY UNION STREET COUNTY LAYOUT OF 1892)
UNION STREET (66 COUNTY LAYOUT) (50' WIDE)
EAST STREET
FFE: 240.0
FFE: 237.0
FFE: 238.0
FFE: 236.75
FFE: 240.0
FFE: 240.0
FFE: 240.0
FFE: 240.0
DMH 1-1 RIM=217.65 INV.IN=215.34 INV.OUT=215.24
PROPOSED PRECAST CONCRETE MANHOLE TO CONNECT TO EXISTING STORM DRAIN SYSTEM INV=215.24
37 LF 12" DI S=0.005
DMH 1-2 RIM=220.50 INV.IN=215.62 INV.OUT=215.52
5 LF 12" DI S=0.005
CB 1-1 RIM=217.65 INV=215.37
28 LF 12" CPE S=0.005
OCS 1-1 RIM=221.80 INV.IN(12" MANIFOLD)=216.76 INV.IN(UNDERDRAIN)=215.76 INV.OUT=215.76
CB 1-2 RIM=221.60 INV=217.00
CB 1-3 RIM=220.10 INV=217.04
C1 C-504 SUBSURFACE DETENTION SYSTEM -1
179 LF 12" CPE S=0.05
A1 C-504 OCS 1-2 RIM=230.00 I.IN=225.45 I.OUT=224.50
SECTION A-A SEE DETAIL E1 ON SHEET C-504
30 LF 12" CPE S=0.005
21 LF 12" CPE S=0.005
WQU 1-1 RIM=222.00 INV.IN=218.89 INV.OUT=218.76
E1 C-503
CB 1-4 RIM=220.15 INV=217.14
CB 2-1 RIM=233.75 INV=230.05
50 LF 12" CPE S=0.005
8 LF 12" CPE S=0.005
10 LF 24" CPE S=0.005
CB 2-14 RIM=231.00 INV=227.98
CB 2-13 RIM=230.91 INV=227.91
CB 2-12 RIM=234.00 INV=228.83
INLET PIPE INV=227.35
26 LF 12" CPE S=0.005
SNOW STORAGE AREA
APPROXIMATE GEOSYNTHETIC REINFORCEMENT
80 LF 12" CPE S=0.008
SURFACE DETENTION BASIN -1
DMH 2-8 RIM=231.50 INV.IN=228.02 INV.OUT=227.92
8 LF 12" CPE S=0.005
34 LF 12" CPE S=0.005
10 LF 12" CPE S=0.025
E5 C-503 BROAD CRESTED WEIR EMERGENCY SPILLWAY INV=229.00
E1 C-503 WQU 2-2 RIM=234.50 I.IN (CB 2-12)=228.58 I.IN (DMH 2-8)=227.60 I.OUT=227.50
C5 C-503 FES INV=228.50
38 LF 18" CPE S=0.02
FES INV=228.00
CB 2-2 RIM=235.50 INV=230.56
BEDROCK WATER MIGRATION PREVENTION MEASURE - SEE GRADING & DRAINAGE NOTE #11
A1 C-503 WQU 2-1 RIM=237.32 INV.IN (RD)=231.05 INV.IN=229.30 INV.OUT=229.20
84 LF 18" CPE S=0.01
8 LF 12" CPE S=0.04
DMH 2-2 RIM=235.95 INV.IN=230.24 INV.OUT=230.14
10 LF 18" CPE S=0.02
OUTLET PIPE INV=229.10
9 LF 24" CPE
OCS 2-1 RIM=238.65 I.IN=229.05 I.OUT=229.05
156 LF 12" CPE S=0.007
CB 1-5 RIM=233.75 INV=229.47
18 LF 12" CPE S=0.01
INLET PIPE INV=229.00
OUTLET CONTROL STRUCTURE (TYP)
C1 C-503
67 LF 12" CPE S=0.015
38 LF 12" CPE S=0.025
12" CPE ROOF DRAIN INV=231.98
A5 C-504 SUBSURFACE INFILTRATION SYSTEM -1 TOP OF STONE=231.50 TOP OF PIPE=231.00 BOTTOM OF PIPE=227.00 BOTTOM OF STONE=226.50
WQU 1-2 RIM=234.00 INV.IN=229.37 INV.OUT=229.27
146 LF 18" CPE S=0.01
PRECAST CONCRETE CATCH BASIN (TYP)
E7 C-504
PRECAST CONCRETE MANHOLE (TYP)
A5 C-504
DMH 1-3 RIM=237.11 INV.IN(CB 1-6)=231.33 INV.IN(DMH 1-4)=230.93 INV.OUT=230.83
15 LF 12" CPE S=0.04
46 LF 18" CPE S=0.01
3H:1V SLOPE
CB 1-6 RIM=236.50 INV=231.92
85 LF 12" CPE S=0.01
CB 1-7 RIM=236.00 INV=232.50
C5 C-503 FES INV=232.00
115 LF 12" CPE S=0.02
8 LF 24" CPE
OUTLET PIPE INV=231.29
50 LF 12" CPE S=0.025
50 LF 12" CPE S=0.005
DMH 1-4 RIM=237.35 INV.IN(RD)=231.88 INV.IN(CB 1-7)=231.48 INV.OUT=231.38
FOUNDATION DRAIN INV=234.30
C1 C-504 OCS 3-1 RIM=236.95 I.IN=231.25 I.OUT=231.25
12" CPE ROOF DRAIN INV=233.11
12" CPE ROOF DRAIN INV=235.80 S=0.0125
CB 3-2 RIM=238.50 INV=233.20
CB 3-1 RIM=238.50 INV=233.42
67 LF 18" CPE S=0.01
INLET PIPE INV =231.00
SUBSURFACE INFILTRATION SYSTEM - 2 TOP OF STONE=234.00 TOP OF PIPE=233.50 BOTTOM OF PIPE=229.50 BOTTOM OF STONE=229.00
SNOW STORAGE AREA
DMH 2-3 RIM=236.00 INV.IN=232.51 INV.OUT=232.41
80 LF 12" CPE S=0.005
DMH 2-6 RIM=236.95 INV.IN=232.77 INV.OUT=232.67
CB 2-11 RIM=236.00 INV=232.91
CB 2-10 RIM=236.00 INV=232.92
CB 2-3 RIM=235.33 INV=231.25
DMH 2-1 RIM=236.63 INV.IN=231.85 INV.OUT=231.75
112 LF 18" CPE S=0.005
CB 2-6 RIM=235.50 INV=232.00
3H:1V SLOPE
PRECAST CONCRETE MANHOLE (TYP)
A5 C-503
PRECAST CONCRETE CATCH BASIN (TYP)
E7 C-504
CB 2-9 RIM=235.60 INV=232.55
8 LF 12" CPE S=0.005
81 LF 12" CPE S=0.005
2H:1V SLOPE
CB 2-7 RIM=235.88 INV=232.86
CB 2-5 RIM=235.88 INV=232.88
18 LF 12" CPE S=0.005
DMH 2-5 RIM=237.50 INV=232.03 INV.OUT=231.93
DMH 2-4 RIM=237.50 INV.IN(CB 2-5)=232.43 INV.IN=232.03 INV.OUT=231.93
CB 2-4 RIM=235.70 INV=231.91
26 LF 12" CPE S=0.015
DMH 2-7 RIM=238.63 INV.IN=231.52 INV.OUT=231.42
28 LF 12" CPE S=0.005
46 LF 18" CPE S=0.005
63 LF 12" CPE S=0.005
12" CPE ROOF DRAIN INV=235.73, S=0.01
12" CPE ROOF DRAIN INV=235.17 S=0.005
12" CPE ROOF DRAIN INV=234.43
8 LF 12" CPE S=0.04
50 LF 12" CPE S=0.005
CB 3-4 RIM=238.50 INV=234.41 11 LF 12" CPE S=0.04
CB 2-8 RIM=237.30 INV=232.75
CB 3-5 RIM=237.65 INV=234.64
DMH 3-3 RIM=239.05 INV.IN=233.97 INV.OUT=233.87
DMH 3-1 RIM=239.25 INV.IN=232.61 INV.OUT=232.51
DMH 3-2 RIM=238.75 INV.IN=233.33 INV.OUT=233.23
CB 3-3 RIM=238.50 INV=233.67
134 LF 12" CPE S=0.005
128 LF 12" CPE S=0.005
124 LF 18" CPE S=0.005
104 LF 18" CPE S=0.008
15 LF 12" CPE S=0.04
15 LF 12" CPE S=0.025
C1 C-503 WQU 3-1 RIM=239.12 INV.IN(CB 3-1)=233.05 INV.IN=231.75 INV.OUT=231.63
FES INV=231.00
50 LF 12" CPE S=0.005
18 LF 12" CPE S=0.005
CB 2-15 RIM=235.88 INV=232.88
BEDROCK WATER MIGRATION PREVENTION MEASURE - SEE GRADING & DRAINAGE NOTE #11
SNOW STORAGE AREA
12" CPE ROOF DRAIN INV=236.20 S=0.005
12" CPE ROOF DRAIN INV=236.60 S=0.005
12" CPE ROOF DRAIN INV=235.73 S=0.011
12" CPE ROOF DRAIN INV=235.74 S=0.02
SH-TP-101
SH-TP-102
SH-TP-103
SH-TP-104
SH-TP-105
SH-TP-106
SH-TP-107
SH-TP-108
SH-TP-109
SH-TP-110
SH-TP-111
SH-TP-112
SH-TP-113
SH-TP-114
SH-TP-115
SH-TP-116
SH-TP-117
SH-TP-118
SH-TP-119
SH-TP-120
SH-TP-121
SH-TP-122
SH-TP-123
SH-TP-124
SH-TP-125
SH-TP-126
SH-TP-127
SH-TP-128
SH-TP-129
SH-TP-130
SH-TP-131
SH-TP-132
SH-TP-133
SH-TP-134
SH-TP-135
SH-TP-136
SH-TP-137
SH-TP-138
SH-TP-139
SH-TP-140

LEGEND

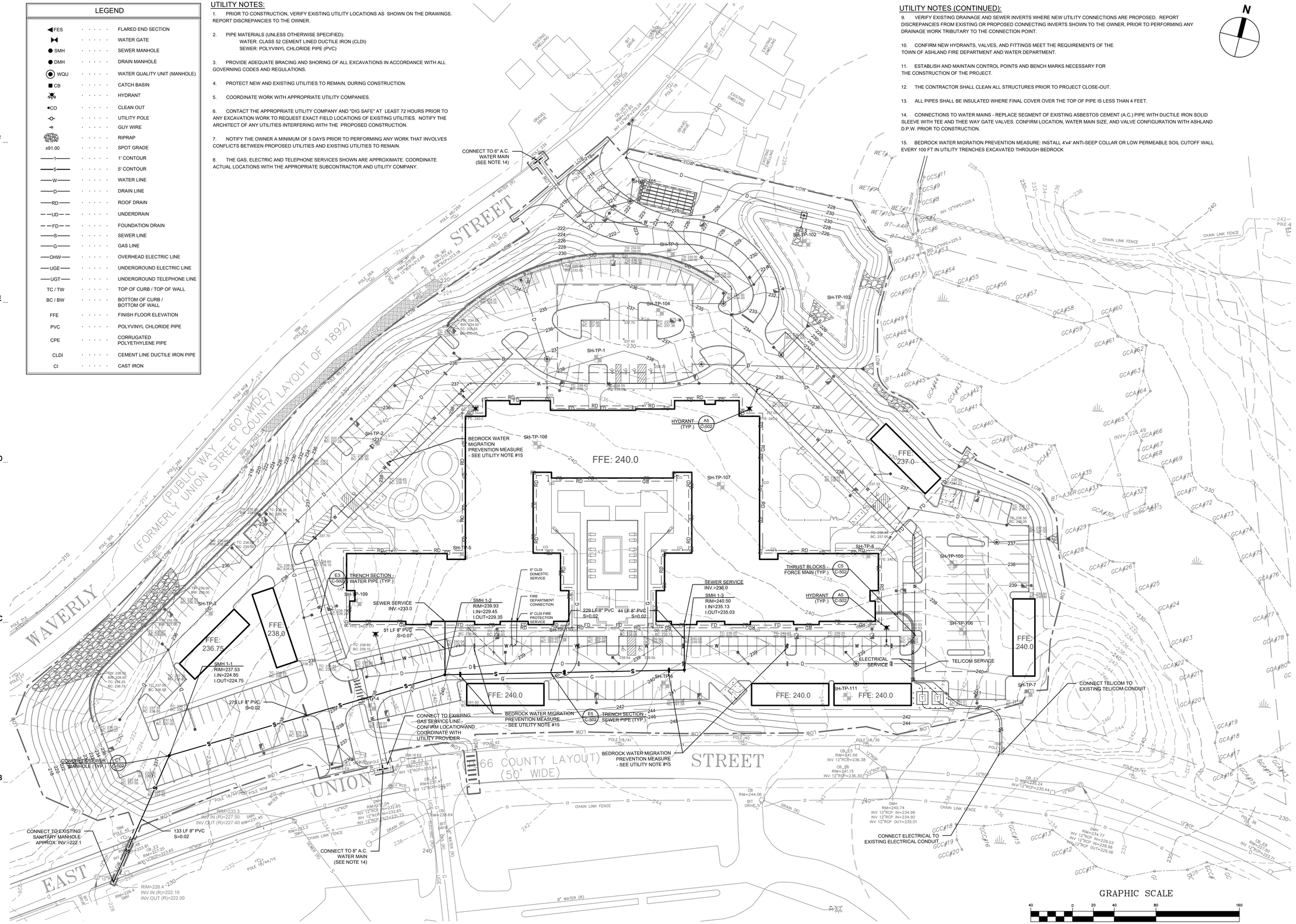
FES	FLARED END SECTION
	WATER GATE
SMH	SEWER MANHOLE
DMH	DRAIN MANHOLE
WQU	WATER QUALITY UNIT (MANHOLE)
CB	CATCH BASIN
	HYDRANT
CO	CLEAN OUT
	UTILITY POLE
	GUY WIRE
	RIPRAP
x91.00	SPOT GRADE
1	1' CONTOUR
5	5' CONTOUR
W	WATER LINE
D	DRAIN LINE
RD	ROOF DRAIN
UD	UNDERDRAIN
FD	FOUNDATION DRAIN
S	SEWER LINE
G	GAS LINE
OHW	OVERHEAD ELECTRIC LINE
UGE	UNDERGROUND ELECTRIC LINE
UGT	UNDERGROUND TELEPHONE LINE
TC / TW	TOP OF CURB / TOP OF WALL
BC / BW	BOTTOM OF CURB / BOTTOM OF WALL
FFE	FINISH FLOOR ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
CPE	CORRUGATED POLYETHYLENE PIPE
CLDI	CEMENT LINE DUCTILE IRON PIPE
CI	CAST IRON

UTILITY NOTES:

1. PRIOR TO CONSTRUCTION, VERIFY EXISTING UTILITY LOCATIONS AS SHOWN ON THE DRAWINGS. REPORT DISCREPANCIES TO THE OWNER.
2. PIPE MATERIALS (UNLESS OTHERWISE SPECIFIED):
   WATER: CLASS 52 CEMENT LINED DUCTILE IRON (CLDI)
   SEWER: POLYVINYL CHLORIDE PIPE (PVC)
3. PROVIDE ADEQUATE BRACING AND SHORING OF ALL EXCAVATIONS IN ACCORDANCE WITH ALL GOVERNING CODES AND REGULATIONS.
4. PROTECT NEW AND EXISTING UTILITIES TO REMAIN, DURING CONSTRUCTION.
5. COORDINATE WORK WITH APPROPRIATE UTILITY COMPANIES.
6. CONTACT THE APPROPRIATE UTILITY COMPANY AND "DIG SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATIONS OF EXISTING UTILITIES. NOTIFY THE ARCHITECT OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION.
7. NOTIFY THE OWNER A MINIMUM OF 5 DAYS PRIOR TO PERFORMING ANY WORK THAT INVOLVES CONFLICTS BETWEEN PROPOSED UTILITIES AND EXISTING UTILITIES TO REMAIN.
8. THE GAS, ELECTRIC AND TELEPHONE SERVICES SHOWN ARE APPROXIMATE. COORDINATE ACTUAL LOCATIONS WITH THE APPROPRIATE SUBCONTRACTOR AND UTILITY COMPANY.

UTILITY NOTES (CONTINUED):

9. VERIFY EXISTING DRAINAGE AND SEWER INVERTS WHERE NEW UTILITY CONNECTIONS ARE PROPOSED. REPORT DISCREPANCIES FROM EXISTING OR PROPOSED CONNECTING INVERTS SHOWN TO THE OWNER, PRIOR TO PERFORMING ANY DRAINAGE WORK TRIBUTARY TO THE CONNECTION POINT.
10. CONFIRM NEW HYDRANTS, VALVES, AND FITTINGS MEET THE REQUIREMENTS OF THE TOWN OF ASHLAND FIRE DEPARTMENT AND WATER DEPARTMENT.
11. ESTABLISH AND MAINTAIN CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT.
12. THE CONTRACTOR SHALL CLEAN ALL STRUCTURES PRIOR TO PROJECT CLOSE-OUT.
13. ALL PIPES SHALL BE INSULATED WHERE FINAL COVER OVER THE TOP OF PIPE IS LESS THAN 4 FEET.
14. CONNECTIONS TO WATER MAINS - REPLACE SEGMENT OF EXISTING ASBESTOS CEMENT (A.C.) PIPE WITH DUCTILE IRON SOLID SLEEVE WITH TEE AND THEE WAY GATE VALVES. CONFIRM LOCATION, WATER MAIN SIZE, AND VALVE CONFIGURATION WITH ASHLAND D.P.W. PRIOR TO CONSTRUCTION.
15. BEDROCK WATER MIGRATION PREVENTION MEASURE: INSTALL 4'x4' ANTI-SEEP COLLAR OR LOW PERMEABLE SOIL CUTOFF WALL EVERY 100 FT IN UTILITY TRENCHES EXCAVATED THROUGH BEDROCK



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the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

MARK:	DATE:	DESCRIPTION:
	01/23/2026	RESPONSE TO COMMENTS
	10/29/2025	NOTICE OF INTENT
	10/16/2025	PLANS OF RECORD
	06/27/2025	REVISION TO CURB CUT LAYOUT
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	06/09/2025	REVISION TO CURB CUT LAYOUT
	05/20/2025	RESPONSE TO COMMENTS
	02/10/2025	COMPREHENSIVE PERMIT

ISSUE LOG
△ = CLOUDED CHANGE

SCALE	1"=40'
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

UTILITIES PLAN

C-141

PLANTING NOTES

1. SEE SPECIFICATION SECTION 02900.
2. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOC. OF NURSERYMEN, INC. IN ADDITION, ALL NEW PLANT MATERIAL FOR THE PROJECT SHALL BE OF SPECIMEN QUALITY.
3. ALL NEW PLANTS TO BE BALLED AND BURLAPPED OR CONTAINER-GROWN, UNLESS OTHERWISE NOTED ON THE PLANT LIST.
4. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS OR PLANT SCHEDULE, WHICH EVER IS GREATER,
5. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
6. ALL NEW PLANTS SHALL BE TAGGED AND APPROVED BY THE LANDSCAPE ARCHITECT AT THE NURSERY PRIOR TO DIGGING OR DELIVERY TO THE SITE.
7. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT.
8. NO TREES, SHRUBS, GROUNDCOVER, SEED, OR SOD SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING. TREES SHALL BEAR THE SAME RELATIONSHIP TO GRADE AS THEY BORE TO PREVIOUS GRADE.
9. STAKE LOCATION OF ALL TREE AND SHRUB PLANTING FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF PLANTING.
10. PREPARE ALL SHRUB PLANTING BEDS TO A MINIMUM DEPTH OF EIGHTEEN INCHES (18") WITH LOAM.
11. ALL PLANT BEDS AND INDIVIDUAL TREE PITS SHALL RECEIVE THREE INCHES (3") OF BARK MULCH PER SPECIFICATIONS.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED, STOLEN, DEAD, DECLINING OR LOST MATERIAL UNTIL COMPLETION OF MAINTENANCE PERIODS.
13. ALL AREAS TO BE SEEDED OR SODDED SHALL RECEIVE SIX INCHES (6") OF LOAM, MEASURED AFTER COMPACTION UNLESS OTHERWISE NOTED.
14. SPECIFIC EXISTING LAWN AREAS DESIGNED TO REMAIN SHALL BE AERATED, FERTILIZED AND OVERSEEDED, AS DIRECTED BY THE LANDSCAPE ARCHITECT.
15. ALL DISTURBED AREAS DUE TO CONSTRUCTION ACTIVITIES NOT DESIGNATED FOR SEEDING OR SODDING SHALL BE SEEDED PER APPLICABLE SEEDING SPECIFICATIONS,

PLANTING LEGEND

	PROPOSED DECIDUOUS TREE		NEW ENGLAND WET MIX
	PROPOSED FLOWERING TREE		NEW ENGLAND WILDLIFE SEED MIX- DRY
	PROPOSED EVERGREEN TREE		LAWN AREA
	PROPOSED MULTI STEM TREE		REINFORCED LAWN AREA

Deciduous Trees

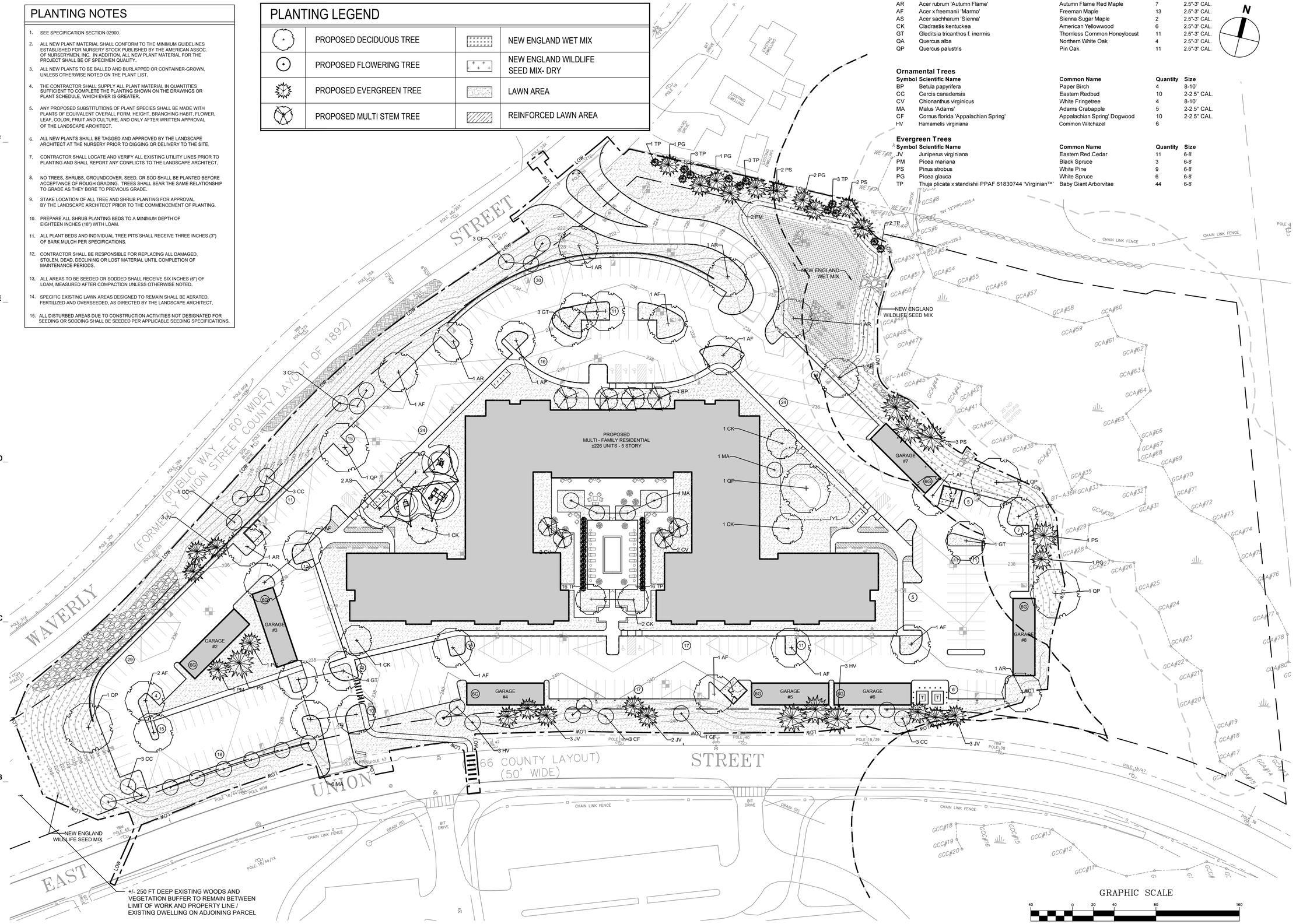
Symbol	Scientific Name	Common Name	Quantity	Size
AR	Acer rubrum 'Autumn Flame'	Autumn Flame Red Maple	7	2.5"-3" CAL.
AF	Acer x freemanii 'Marmo'	Freeman Maple	13	2.5"-3" CAL.
AS	Acer sachharum 'Sienna'	Sienna Sugar Maple	2	2.5"-3" CAL.
CK	Cladrastis kentuckea	American Yellowwood	6	2.5"-3" CAL.
GT	Gleditsia tricanthos f. inermis	Thornless Common Honeylocust	11	2.5"-3" CAL.
QA	Quercus alba	Northern White Oak	4	2.5"-3" CAL.
QP	Quercus palustris	Pin Oak	11	2.5"-3" CAL.

Ornamental Trees

Symbol	Scientific Name	Common Name	Quantity	Size
BP	Betula papyrifera	Paper Birch	4	8-10'
CC	Cercis canadensis	Eastern Redbud	10	2-2.5" CAL.
CV	Chionanthus virginicus	White Fringetree	4	8-10'
MA	Malus 'Adams'	Adams Crabapple	5	2-2.5" CAL.
CF	Cornus florida 'Appalachian Spring'	Appalachian Spring' Dogwood	10	2-2.5" CAL.
HV	Hamamelis virginiana	Common Witchazel	6	

Evergreen Trees

Symbol	Scientific Name	Common Name	Quantity	Size
JV	Juniperus virginiana	Eastern Red Cedar	11	6-8'
PM	Picea mariana	Black Spruce	3	6-8'
PS	Pinus strobus	White Pine	9	6-8'
PG	Picea glauca	White Spruce	6	6-8'
TP	Thuja plicata x standishii PPAF 61830744 'Virginian™'	Baby Giant Arborvitae	44	6-8'



smma

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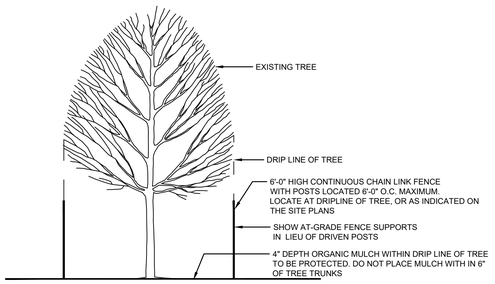
ISSUE LOG
△ = CLOUDED CHANGE

SCALE	1"=40'
DRAWN BY	WWP
CHECK BY	JAH
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

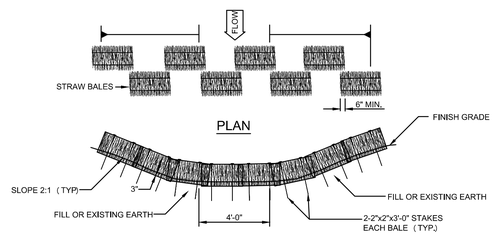
PLANTING PLAN

C-151



SECTION

E3 TREE PROTECTION DETAIL
N.T.S.

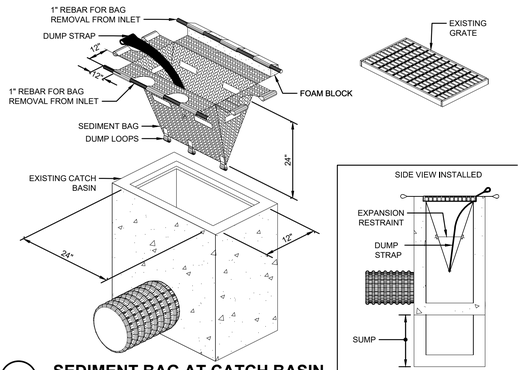


SECTION

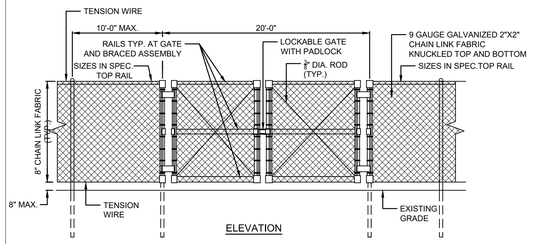
E5 TEMPORARY DRAINAGE SWALE WITH STRAWBALE EROSION CHECK DAM
N.T.S.

NOTE:

1. INSTALL REBAR PRIOR TO GRATE REMOVAL.
2. USE FOAM BLOCK ONLY WHEN ADJACENT TO CURB INLET.

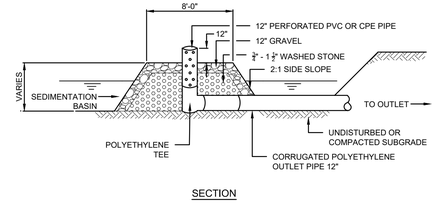


C1 SEDIMENT BAG AT CATCH BASIN
N.T.S.



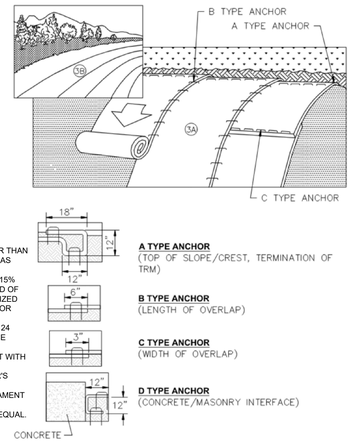
ELEVATION

C3 TEMPORARY CONSTRUCTION FENCE W/GATE IN GROUND POSTS
N.T.S.



SECTION

C5 TEMPORARY SEDIMENTATION BASIN OUTLET DEVICE
N.T.S.



NOTES:
1. DISTURBED STEEP SLOPES (GREATER THAN 15%) ARE TO BE MINIMIZED AS MUCH AS PRACTICABLE.
2. DISTURBED SLOPES GREATER THAN 15% THAT WILL BE INACTIVE FOR A PERIOD OF 14 OR MORE DAYS ARE TO BE STABILIZED WITH EROSION CONTROL BLANKETS OR VEGETATION TO PREVENT EROSION.
3. BLANKETS SHALL BE PLACED WITHIN 24 HOURS OF SEED BEING SOWED IN THE AREA BEING COVERED.
4. INSTALL EROSION CONTROL BLANKET WITH THE ANCHORS SHOWN AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. STABILIZATION MATS WITH MONOFILAMENT ARE NOT PERMITTED.
6. PROVIDE COIR MATS OR APPROVED EQUAL.

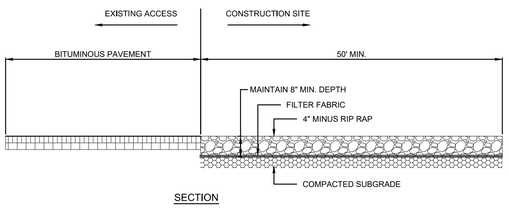
A TYPE ANCHOR (TOP OF SLOPE/CREST, TERMINATION OF TRM)

B TYPE ANCHOR (LENGTH OF OVERLAP)

C TYPE ANCHOR (WIDTH OF OVERLAP)

D TYPE ANCHOR (CONCRETE/MASONRY INTERFACE)

C7 EROSION CONTROL BLANKET
N.T.S.

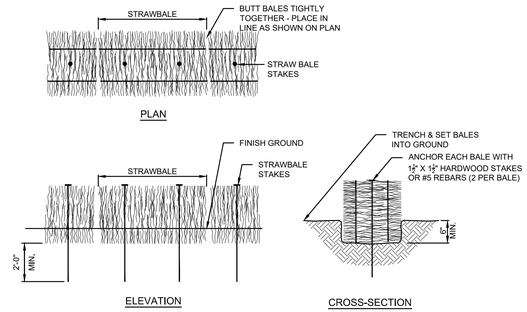


SECTION

A1 TEMPORARY CONSTRUCTION ENTRANCE
N.T.S.

NOTE:

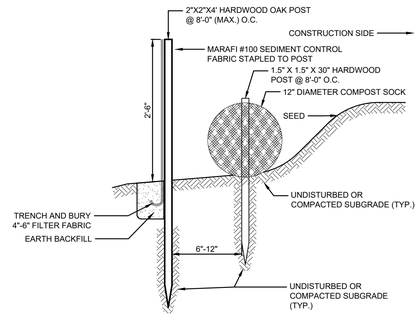
1. CONTRACTOR SHALL REPLACE STRAWBALES AS REQUIRED TO INSURE PROPER FUNCTION AS EROSION CONTROL.



A3 STRAWBALE CHECK DAM
N.T.S.

NOTE:

1. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS

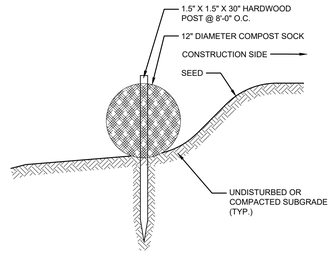


SECTION

A5 COMPOST SOCK WITH SILT FENCE
N.T.S.

NOTE:

1. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
2. WATTLE OR SOCK TO BE 100% BIODEGRADABLE.



SECTION

A7 COMPOST SOCK
N.T.S.

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ISSUE LOG

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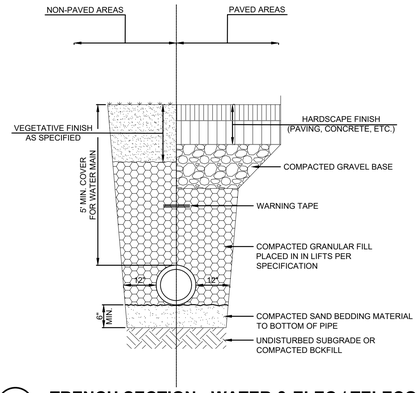
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS I

C-501

NOTE:

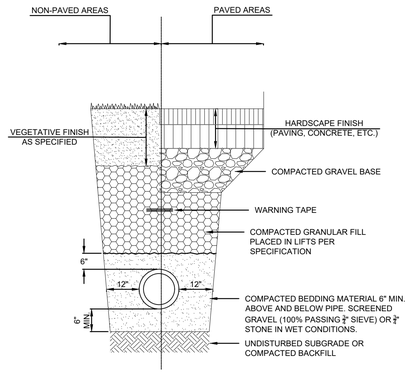
1. SEE APPLICABLE HARDSCAPE DETAIL FOR THICKNESS OF HARDSCAPE MATERIAL AND GRAVEL BASE COURSE.



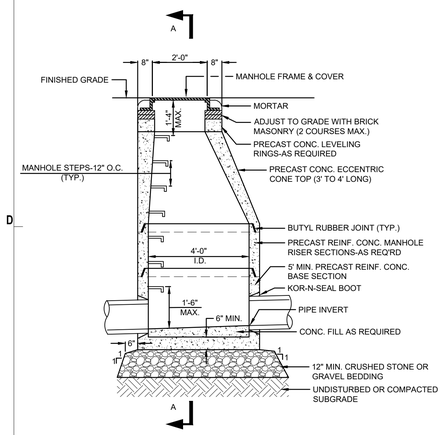
E3 **TRENCH SECTION - WATER & ELEC / TELECOM / GAS**
N.T.S.

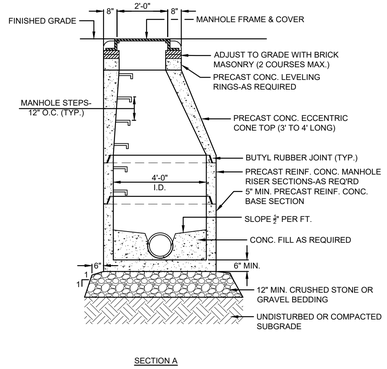
NOTE:

1. SEE APPLICABLE HARDSCAPE DETAIL FOR THICKNESS OF HARDSCAPE MATERIAL AND GRAVEL BASE COURSE.



E5 **TRENCH SECTION - SEWER PIPE**
N.T.S.

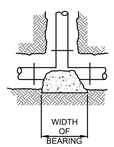




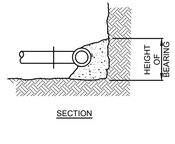
SECTION A

C1 **STANDARD SEWER MANHOLE**
N.T.S.

NOTE:
1. WIDTH & HEIGHT OF BEARING AREAS SHALL BE APPROX. THE SAME.
2. BEARING SHALL BE ON UNDISTURBED SOIL



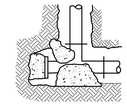
TEE



SECTION

BEND

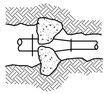
MINIMUM BEARING AREA (SQUARE FEET)							
FITTINGS PIPE SZ.	BENDS				CAPS & TEES	VALVES	REDUC.
	90 °	45 °	22-1/2"	11-1/4"			
6"	4	2	2	2	3	3	3
8"	6	3	3	3	5	5	5
10"	9	4	4	4	6	6	6
12"	12	7	4	3	9	9	9



PLAN

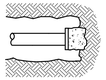
CAPPED TEE

PLAN



PLAN

REDUCER



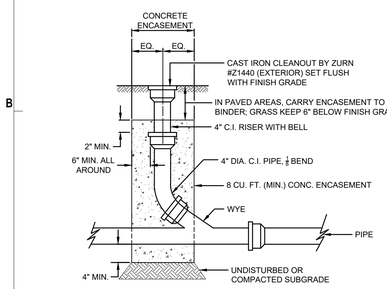
PLAN

CAP

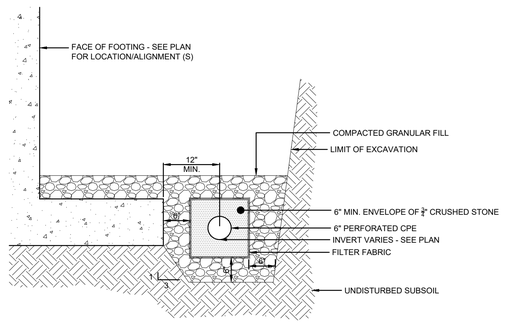
ELEVATION

VALVE

C5 **THRUST BLOCKS - FORCE MAIN**
N.T.S.



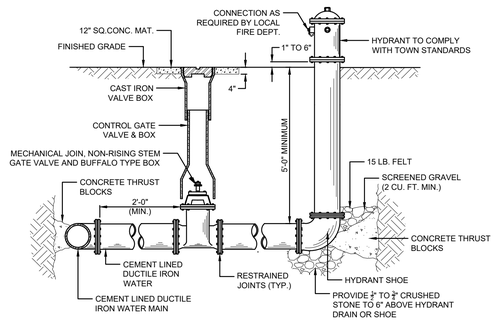
A1 **CLEANOUT**
N.T.S.



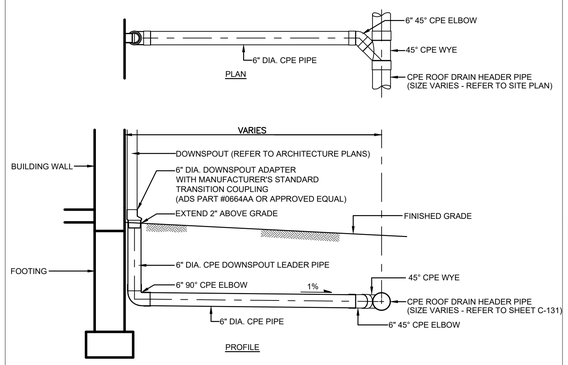
A3 **FOUNDATION DRAIN**
N.T.S.

NOTES:

1. EXTEND RISER SECTION AS REQUIRED TO ESTABLISH PROPER HYDRANT ELEVATION.
2. SEE THRUST BLOCK DETAIL FOR CONCRETE THRUST BLOCK REQUIREMENTS.



A5 **HYDRANT**
N.T.S.



A7 **DOWNSPOUT CONNECTION**
N.T.S.

SMMA
1000 Massachusetts Ave.
Cambridge, MA 02138
Phone: 617.547.5400
Fax: 617.507.7885

the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

MARK:	DATE:	DESCRIPTION:
	01/23/2026	RESPONSE TO COMMENTS
	10/29/2025	NOTICE OF INTENT
	10/16/2025	PLANS OF RECORD
	06/27/2025	REVISION TO CURB CUT LAYOUT
	06/19/2025	RESPONSE TO COMMENTS
	06/09/2025	REVISION TO CURB CUT LAYOUT
	05/20/2025	RESPONSE TO COMMENTS
	02/10/2025	COMPREHENSIVE PERMIT

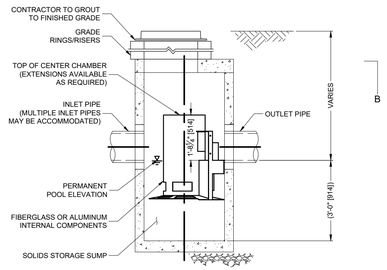
ISSUE LOG

△ = CLOUDED CHANGE

SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS II

C-502

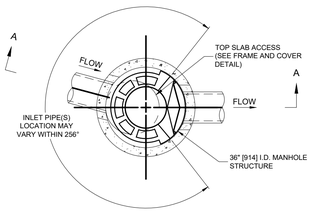


ELEVATION A-A
NOT TO SCALE

E1 WATER QUALITY UNIT - CS-3
N.T.S.

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. CASCADE SEPARATOR 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. CASCADE SEPARATOR 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. CASCADE SEPARATOR 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 CASCADE SEPARATOR 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 B-B
NOT TO SCALE

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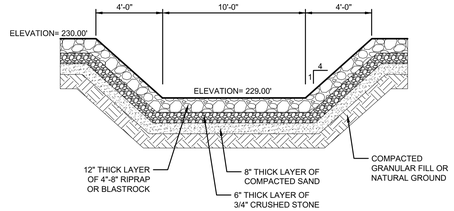
www.contechES.com
5660 Greenwood Plaza Blvd., Suite 455, Englewood, CO 80111
800-526-3999 303-796-2233 303-796-2239 FAX

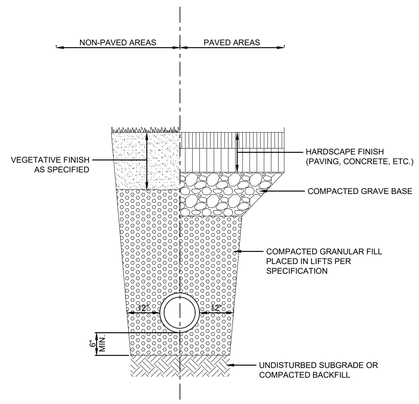
CS-3
CASCADE SEPARATOR
STANDARD DETAIL



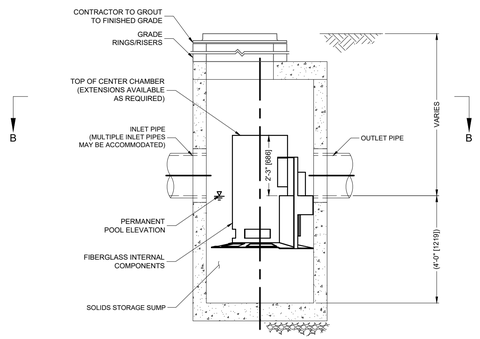
E5 SPILLWAY SECTION
N.T.S.

NOTE:

1. SEE APPLICABLE HARDSCAPE DETAIL FOR THICKNESS OF HARDSCAPE MATERIAL AND GRAVEL BASE COURSE.



C7 TRENCH SECTION - CPE DRAINS
N.T.S.

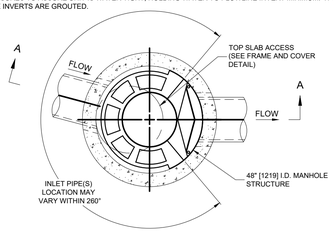


ELEVATION A-A
NOT TO SCALE

C1 WATER QUALITY UNIT - CS-4
N.T.S.

GENERAL NOTES
1. CS-4 RATED TREATMENT CAPACITY IS 2.0 CFS, OR PER LOCAL REGULATIONS. THE STANDARD CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
2. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
3. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CASCADE SEPARATOR 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.
5. CASCADE SEPARATOR 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.
6. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
7. 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 CASCADE SEPARATOR 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.

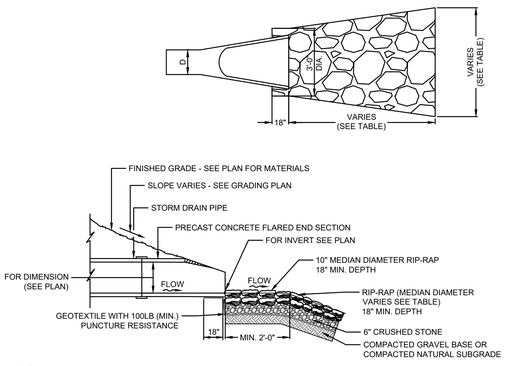


PLAN VIEW B-B
NOT TO SCALE

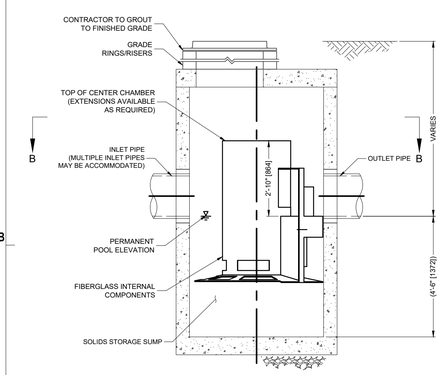
CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
5660 Greenwood Plaza Blvd., Suite 455, Englewood, CO 80111
800-526-3999 303-796-2233 303-796-2239 FAX

CS-4
CASCADE SEPARATOR
STANDARD DETAIL

	DETENTION BASIN INLET	FOUNDATION DRAIN OUTLET	INFILTRATION BASIN 1 OUTLET	INFILTRATION BASIN 2 OUTLET
LENGTH OF APRON, FT	21'-7"	16'-0"	9'-5"	7'-4"
WIDTH OF APRON, FT	26'-1"	10'-0"	12'-5"	10'-4"
MEDIAN STONE DIAMETER, IN	8"	6"	6"	6"



C5 FLARED END
N.T.S.



ELEVATION A-A
NOT TO SCALE

A1 WATER QUALITY UNIT - CS-5
N.T.S.

GENERAL NOTES
1. CS-5 RATED TREATMENT CAPACITY IS 3.50 CFS, OR PER LOCAL REGULATIONS. THE STANDARD CS-5 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
2. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
3. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CASCADE SEPARATOR 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.
5. CASCADE SEPARATOR 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.
6. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
7. 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 CASCADE SEPARATOR MANHOLE STRUCTURE.
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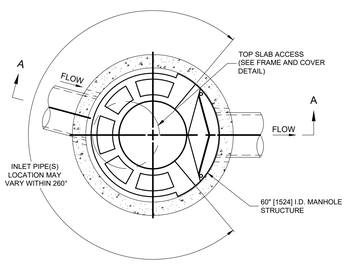

PLAN VIEW B-B
NOT TO SCALE

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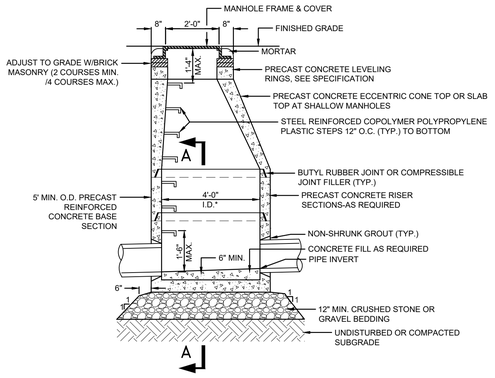
www.contechES.com
5660 Greenwood Plaza Blvd., Suite 455, Englewood, CO 80111
800-526-3999 303-796-2233 303-796-2239 FAX

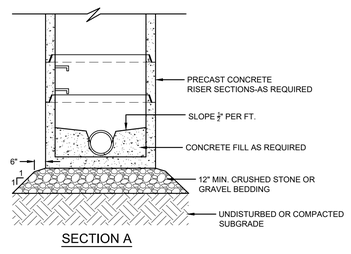
CS-5
CASCADE SEPARATOR
STANDARD DETAIL

NOTE:

1. STRUCTURE ADEQUATE FOR H-20 LOADING.
2. * PROVIDE 5' I.D, OR 6' I.D, SECTIONS AS REQUIRED FOR MULTIPLE/LARGE DIAMETER PIPES.



A5 PRECAST CONCRETE DRAIN MANHOLE
N.T.S.



SECTION A

SMMA
1000 Massachusetts Ave.
Cambridge, MA 02138
Phone: 617.547.5400
Fax: 617.507.7885

the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

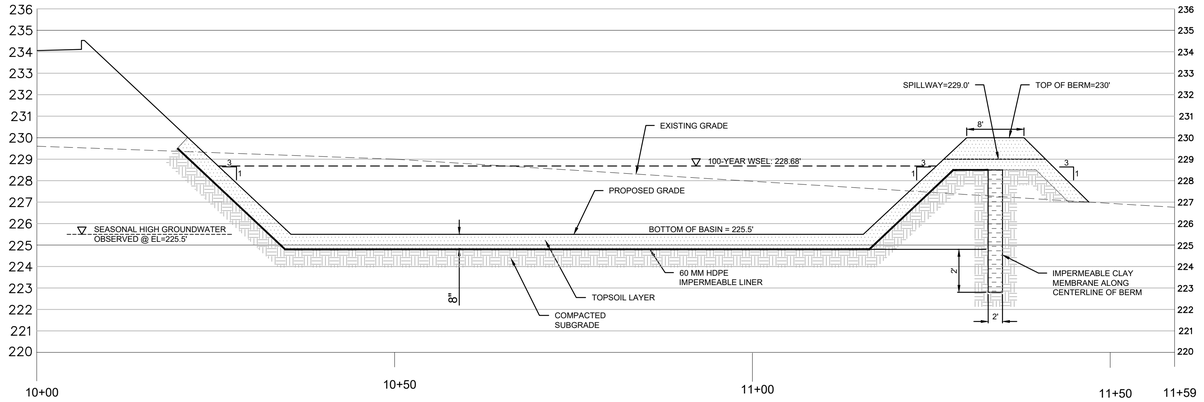
MARK:	DATE:	DESCRIPTION:
	01/23/2026	RESPONSE TO COMMENTS
	10/29/2025	NOTICE OF INTENT
	10/16/2025	PLANS OF RECORD
	06/27/2025	REVISION TO CURB CUT LAYOUT
	06/19/2025	RESPONSE TO COMMENTS
	06/09/2025	REVISION TO CURB CUT LAYOUT
	05/20/2025	RESPONSE TO COMMENTS
	02/10/2025	COMPREHENSIVE PERMIT

ISSUE LOG
△ = CLOUDED CHANGE

SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS III

C-503

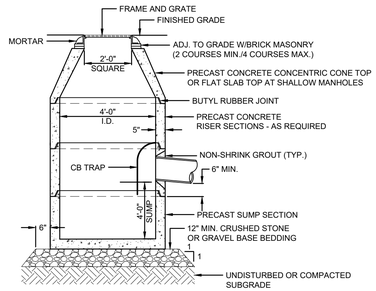


E1 SURFACE DETENTION BASIN - 1 SECTION A-A

H: 1"=10'; V: 1"=3.33' (3:1 VERTICAL EXAGGERATION)

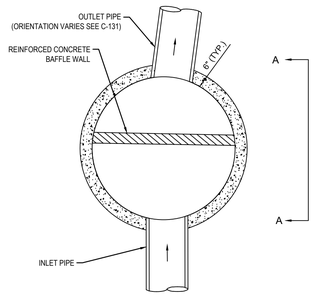
NOTES:

1. STRUCTURE ADEQUATE FOR H-20 LOADING.

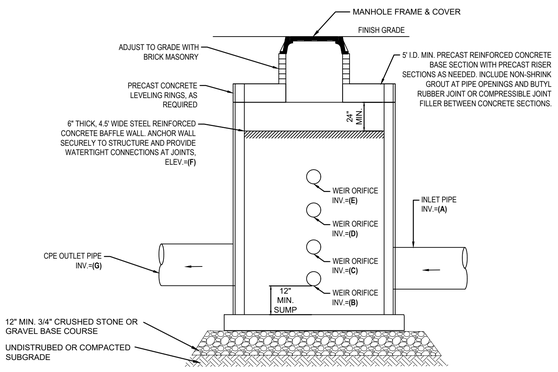


E7 PRECAST CONCRETE CATCH BASIN

N.T.S.



PLAN VIEW



ELEVATION (A-A SECTION)

ELEVATION TABLE

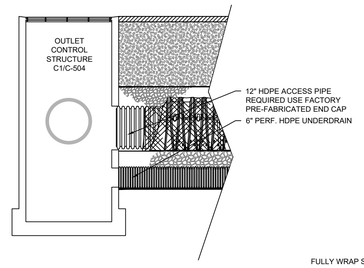
	"A"	"B"	"C"	"D"	"E"	"F"	"G"
OCS 1-1	216.76' 215.76'	215.76' 1/4"	216.76' 1"	217.25' 3"	217.50' 6"	218.25	215.76
OCS 2-1	229.05'	229.10' 1"	229.15' 1"	229.15' 1"	N/A	N/A	231.25	229.05
OCS 3-1	231.25'	231.29' 2"	N/A	N/A N/A	N/A	N/A	233.95	231.25

C1 OUTLET CONTROL STRUCTURE

N.T.S.

NOTES

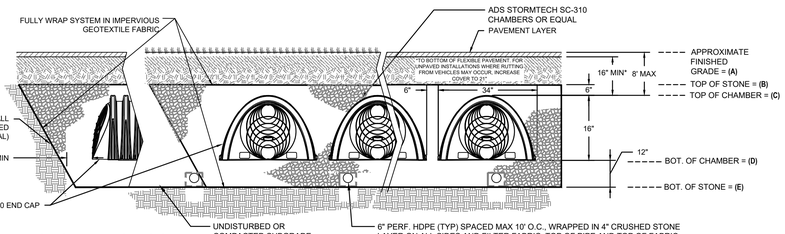
1. STRUCTURE SHALL HAVE 5' INTERNAL DIAMETER
2. STRUCTURE MUST CONFORM WITH H-20 LOADING REQUIREMENTS
3. REFER TO GRADING AND DRAINAGE PLAN



NOTE:

1. REFER TO C-131 GRADING & DRAINAGE PLAN FOR MANIFOLD AND STUB LOCATIONS.
2. SC-310 CHAMBERS (OR APPROVED EQUAL) SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. SC-310 CHAMBERS (OR APPROVED EQUAL) SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

SUBSURFACE DETENTION SYSTEM (SDS) INFORMATION TABLE	
	UFS 1
TOTAL STORAGE (ABOVE FILTER MEDIA)	1,664 CF (53.04'x21.50')
INLET MANIFOLD PIPE ELEVATION	12" HDPE @ 216.76'
OUTLET MANIFOLD PIPE ELEVATION	24" HDPE @ 216.76'
APPROXIMATE FINISH GRADE RANGE **(A)**	221.95'-226.00'
TOP OF STONE **(B)**	218.60'
TOP OF CHAMBER **(C)**	218.10'
BOTTOM OF CHAMBER **(D)**	216.76'
BOTTOM OF STONE **(E)**	215.76'

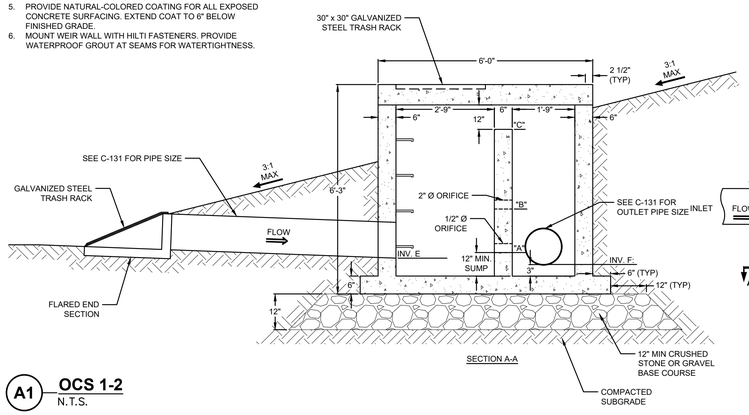


C5 SUBSURFACE DETENTION SYSTEM (STORMTECH SC-310)

N.T.S.

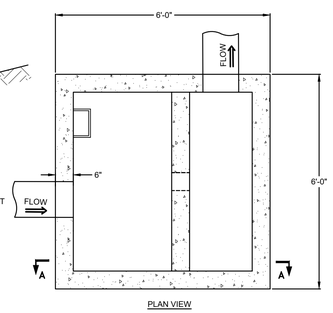
NOTE:

1. STRUCTURE AND CASTINGS ADEQUATE FOR H-20 LOADING
2. SEE GRADING AND UTILITY PLAN FOR PIPE SIZES
3. GALVANIZED STEEL 19W4 TOP GRATE SECURED WITH 1/2"Ø STAINLESS STEEL ANCHOR BOLTS.
4. GALVANIZED STEEL TRASH RACK SECURED WITH 1/2"Ø STAINLESS STEEL ANCHOR BOLTS.
5. PROVIDE NATURAL-COLORED COATING FOR ALL EXPOSED CONCRETE SURFACING. EXTEND COAT TO 6" BELOW FINISHED GRADE.
6. MOUNT WEIR WALL WITH HILTI FASTENERS. PROVIDE WATERPROOF GROUT AT SEAMS FOR WATERTIGHTNESS.



ELEVATION TABLE

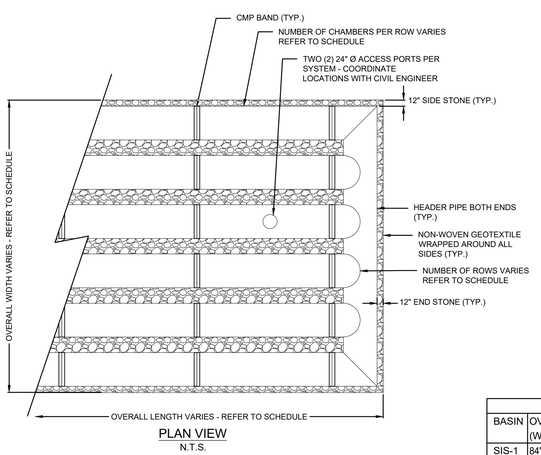
	"A"	"B"	"C"	INV. E	INV. F	RIM
OCS 2-1	225.50	227.00	228.50	225.45	224.50	230.00



PLAN VIEW

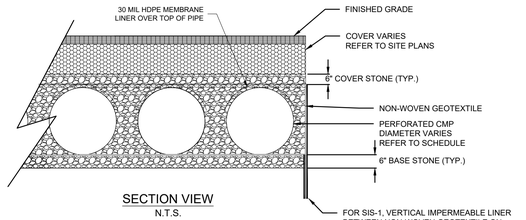
A1 OCS 1-2

N.T.S.



PLAN VIEW

N.T.S.



SECTION VIEW

N.T.S.

A5 SUBSURFACE INFILTRATION SYSTEM (SIS)

N.T.S.

NOTES:

1. STRUCTURE SHALL MEET HS20 (AASHTO M 306) LOAD RATING.
2. CMP PIPE WALL TYPE: PERFORATED
3. STEEL GAGE: 14
4. COATING: ALUMINIZED STEEL
5. PROVIDE TWO (2) 1.5" Ø GALVANIZED STEEL DRIVE-POINT WELLS PER CHAMBER SYSTEM OUTSIDE THE FOOTPRINT OF THE SYSTEM. COORDINATE LOCATIONS WITH CIVIL ENGINEER PRIOR TO INSTALLATION.

SYSTEM DIMENSIONS AND ELEVATIONS SCHEDULE								
BASIN	OVERALL DIM. (W X L X H)	STORAGE VOL.	CMP PIPE INV.	NO. OF ROWS	CHAMBERS PER ROW	CMP PIPE DIAM.	BOTTOM OF STONE ELEV.	ESHGW (EL. FT)
SIS-1	84' X 130' X 5'	35,743 C.F.	227.00'	14	6	48"	226.50'	<218.00'
SIS-2	60' X 130' X 5'	25,522 C.F.	229.50'	10	6	48"	229.00'	<225.00'*

*NO GROUND WATER OR REDOXIMORPHIC FEATURES OBSERVED IN TEST PITS. ESTIMATED SEASONAL HIGH GROUND WATER (ESHGW) ELEVATION NOT DETERMINED DUE TO REFUSAL AT LARGE BOULDERS, ESHGW ELEVATION BASED ON ADJACENT TEST PIT SH-TP-8.

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the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

MARK:	DATE:	DESCRIPTION:
	01/23/2026	RESPONSE TO COMMENTS
	10/29/2025	NOTICE OF INTENT
	10/16/2025	PLANS OF RECORD
	06/27/2025	REVISION TO CURB CUT LAYOUT
	06/19/2025	RESPONSE TO COMMENTS
	06/09/2025	REVISION TO CURB CUT LAYOUT
	05/20/2025	RESPONSE TO COMMENTS
	02/10/2025	COMPREHENSIVE PERMIT

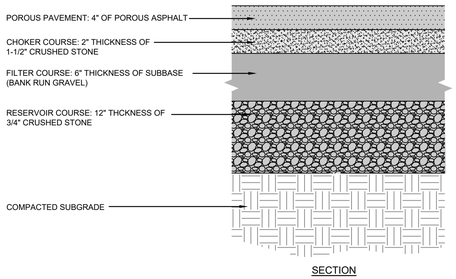
ISSUE LOG

△ = CLOUDED CHANGE

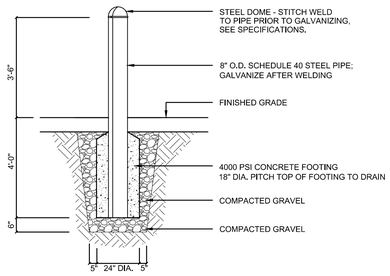
SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS IV

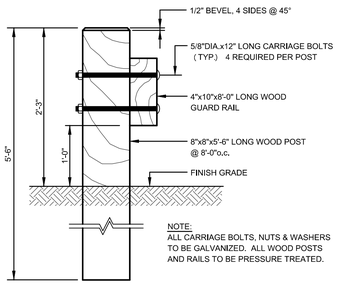
C-504



E1 POROUS PAVEMENT
N.T.S.



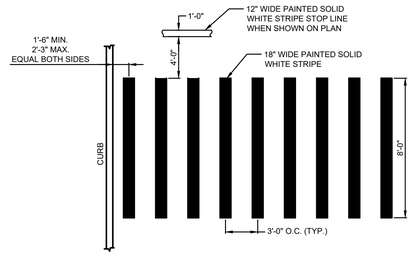
C5 STEEL BOLLARD
N.T.S.



A5 WOOD GUARDRAIL
N.T.S.

PARKING AND TRAFFIC SIGNS

SIGN	SIGN NUMBER	DIMENSIONS OF SIGN		DESCRIPTION	MOUNT HEIGHT (TO BOTTOM)
		WIDTH	HEIGHT		
STOP	R1-1	30"	30"	WHITE ON RED	7'-0"
RESERVED PARKING	R7-8	12"	18"	BLUE & GREEN ON WHITE	5'-6"
VAN ACCESSIBLE	R7-8P	18"	6"	GREEN ON WHITE	5'-0"
SPEED LIMIT 30	R2-1	24"	30"	BLACK ON WHITE	9'-4"
YOUR SPEED 42	W13-20	40"	40"	BLACK ON YELLOW	6'-0"
	W1-5	30"	30"	BLACK ON YELLOW	7'-6"
30 MPH	W13-1P	18"	18"	BLACK ON YELLOW	6'-0"
S1-1 AHEAD W16-9P	S1-1/ W16-9P	36"/ 24"	36"/ 12"	BLACK ON FLUORESCENT YELLOW	7'-0"/ 6'-0"
	W11-2	36"	36"	BLACK ON FLUORESCENT YELLOW	7'-9"
	W16-7PL	21"	15"	BLACK ON FLUORESCENT YELLOW	6'-0"
	W16-7PR	21"	15"	BLACK ON FLUORESCENT YELLOW	6'-0"
NO PARKING TOW ZONE SNOW REMOVAL CONDITIONS EXIST	SPECIAL-1	12"	18"	RED ON WHITE	5'-0"
NOTICE WETLAND AREA NO PARKING, NO IDLING, NO CLEARING	SPECIAL-2	18"	12"	BLUE AND BLACK ON WHITE	5'-0"
SHORT TERM PARKING 15 MINUTES MAXIMUM	SPECIAL-3	12"	18"	BLACK ON WHITE	5'-0"
RESERVED VISITOR PARKING	SPECIAL-4	12"	18"	BLACK ON WHITE	5'-0"
7 AM - 9 AM MON. - FRI.	SPECIAL-5	12"	18"	BLACK AND RED ON WHITE	6'-0"



A7 CROSSWALK
N.T.S.

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ISSUE LOG
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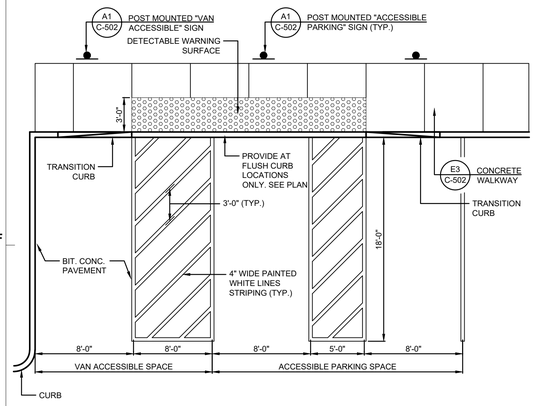
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS V

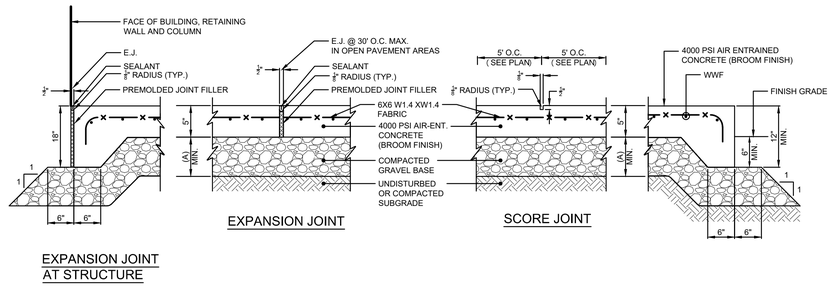
C-505



E1 ACCESSIBLE PARKING SPACES
N.T.S.

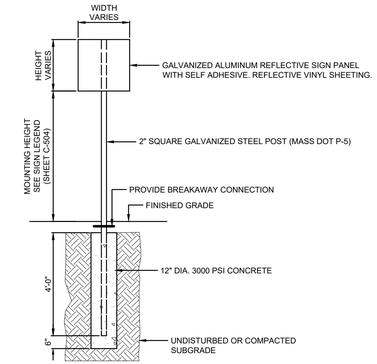
NOTES:
1. MAXIMUM CROSS SLOPE = 2%
2. MAXIMUM GRADIENT = 5%
3. PROVIDE EXPANSION JOINT AT FACE OF ABUTTING SLABS AND STRUCTURES.
4. PROVIDE VERTICAL GRANITE OR PRECAST CONCRETE CURBING PER SHEET C3.

WALKWAY TYPE	BASE COURSE MATERIAL	THICKNESS (A)
STANDARD	GRAVEL BASE COURSE	12"
WITHIN 20' OF A STRUCTURE	CRUSHED STONE	30"

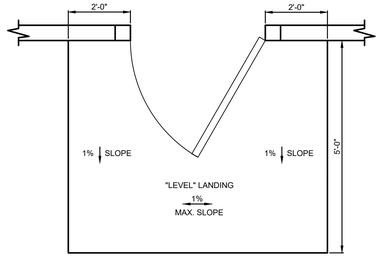


E3 CONCRETE WALKWAY
N.T.S.

NOTES FOR TEMPORARY SIGNS:
1. 2" SQUARE GALVANIZED STEEL POST SHALL BE REPLACED WITH GALVANIZED STEEL CHANNEL.
2. POST SHALL BE SET 4'-0" INTO EXISTING GROUND WITHOUT CONCRETE BASE.



E7 TRAFFIC SIGN
N.T.S.



C1 LEVEL LANDING AT BUILDING ENTRANCES
N.T.S.

NOTES:

ACCESSIBLE PARKING SPACES:
1. MAXIMUM SLOPE 2% IN ANY DIRECTION.
2. LOCATE SIGN WITHIN 10' OF ACCESSIBLE SPACE.
3. PROVIDE AN ACCESSIBLE CURB CUT AT EACH ACCESS AISLE BETWEEN ACCESSIBLE SPACES.

SIDEWALKS AND PLAZAS:
1. SLOPE REQUIREMENTS APPLY TO ALL WALKWAY SURFACES INCLUDING BITUMINOUS, PORTLAND CEMENT, PAVERS AND CHIPSEAL.
2. SLOPE REQUIREMENTS APPLY TO ALL SIDEWALKS AND PLAZAS AND ARE NOT LIMITED TO ACCESSIBLE ROUTES.
3. PROVIDE A 5' LEVEL LANDING AT ALL BUILDING DOORWAYS.
4. IN THE EVENT OF DISCREPANCY BETWEEN THE MAXIMUM ACCESSIBLE CROSS SLOPE OR RUNNING SLOPE PER THE DETAILS AND THE GRADING SHOWN ON THE DRAWINGS, NOTIFY THE ARCHITECT PRIOR TO CONSTRUCTING THE PAVEMENT.

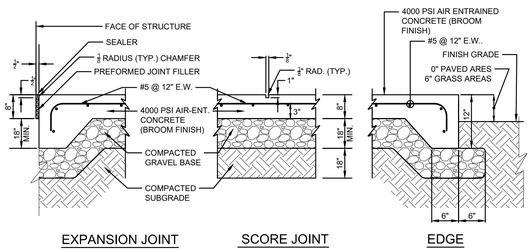
CURB CUTS:
1. PROVIDE FLUSH TRANSITION FROM CURB CUTS TO ADJACENT WALKS AND STREETS, FREE OF CHANGES IN LEVEL GREATER THAN 1/2-INCH.
2. THE SLOPE OF THE LEVEL LANDING AT THE TOP OF THE CURB CUT SHALL NOT EXCEED 1% IN ANY DIRECTION.
3. ALL CURB CUTS ARE TO BE CONSTRUCTED OUT OF PORTLAND CEMENT CONCRETE UNLESS OTHERWISE NOTED ON PLANS.

LEVEL LANDINGS:
1. PROVIDE LEVEL LANDINGS WITH MAXIMUM SLOPE IN ANY DIRECTION OF 1%.

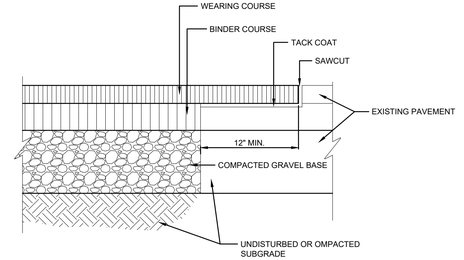
TACTILE WARNING DEVICES:
1. EXTEND FULL WIDTH OF CURB RAMP AND A LENGTH OF 24 INCHES.
2. MATERIAL CONTRASTS WITH ADJACENT MATERIAL BY AT LEAST 70%.
3. DOME SIZE
   HEIGHT: 0.2 INCHES
   BASE DIAMETER: 0.9 TO 1.4 INCHES
   TOP DIAMETER: 50% TO 60% OF BASE DIAMETER
4. DOME SPACING:
   PATTERN: SQUARE GRID PATTERN
   CENTER-TO-CENTER: 1.6 TO 2.4 INCHES
   BASE TO BASE: 0.65 MINIMUM, BETWEEN CLOSEST DOMES IN GRID

C3 NOTES
N.T.S.

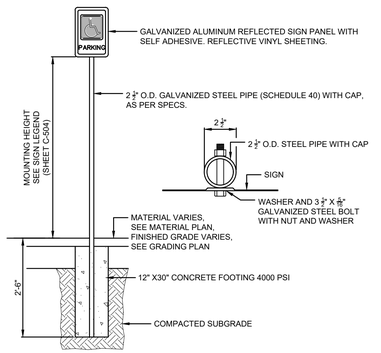
NOTE:
1. PROVIDE SCORE JOINT ONLY AS INDICATED ON PLAN.



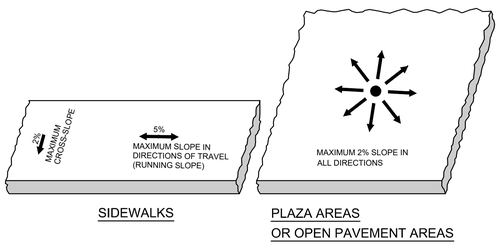
C5 EQUIPMENT PAD
N.T.S.



C7 BITUMINOUS CONCRETE AT EXISTING PAVEMENT
N.T.S.

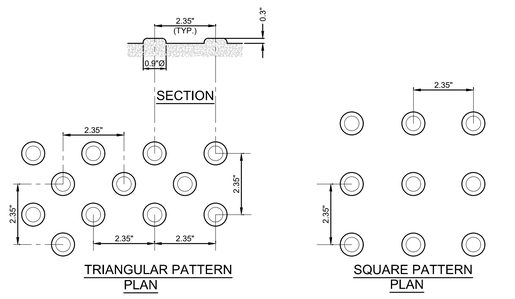


A1 PARKING SIGN
N.T.S.



A3 PAVEMENT SLOPES
N.T.S.

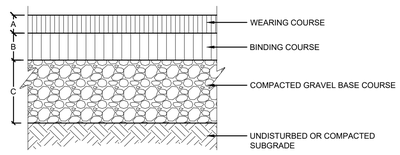
NOTES:
1. THE DETECTABLE SURFACE MUST CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES. A HEIGHT OF NOMINAL 0.2 INCHES AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST CONTRAST WITH THE SURROUNDING SURFACES (EITHER LIGHT-ON-DARK)
2. DETECTABLE WARNING SURFACE TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON C3.0



A5 DETECTABLE WARNING SURFACE
N.T.S.

NOTE:
1. FOR BITUMINOUS CONCRETE SIDEWALK USE 8" OF COMPACTED GRAVEL BASE.

	WEARING COURSE "A"	BINDER COURSE "B"	GRAVEL BASE "C"
STANDARD DUTY	1½"	2½"	12"
HEAVY DUTY	2"	2½"	18"



A7 BITUMINOUS CONCRETE PAVEMENT
N.T.S.

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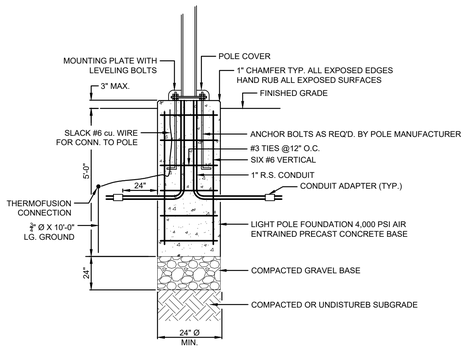
ISSUE LOG
△ = CLOUDED CHANGE

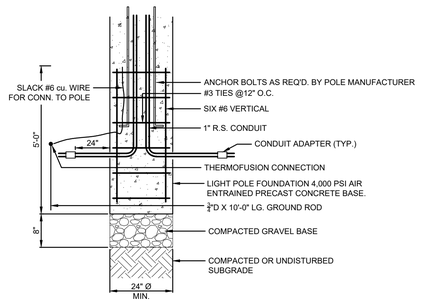
SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS VI

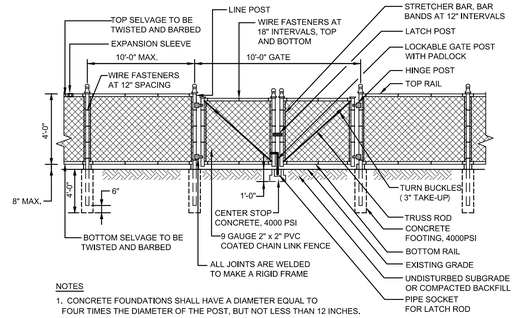
C-506



E1 LIGHTPOLE BASE IN LAWN AREAS
N.T.S.

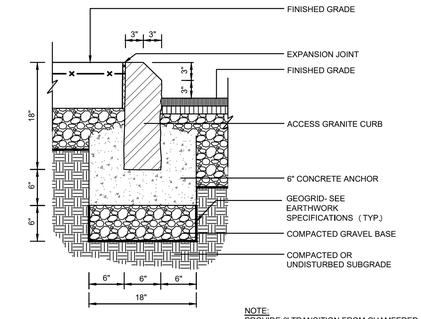


E3 LIGHTPOLE BASE IN PAVEMENT
N.T.S.



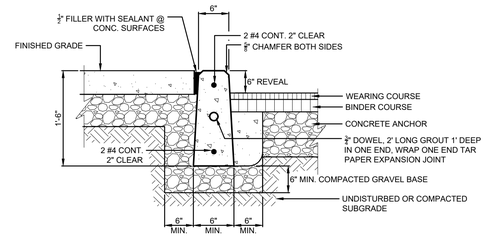
NOTES
1. CONCRETE FOUNDATIONS SHALL HAVE A DIAMETER EQUAL TO FOUR TIMES THE DIAMETER OF THE POST, BUT NOT LESS THAN 12 INCHES.
2. ALL POST, RAILS, BRACES AND CAPS BARS, TIES, FASTENERS TO BE PVC COATED

E5 4 FT. HIGH CHAIN LINK FENCE WITH DOUBLE GATE
N.T.S.



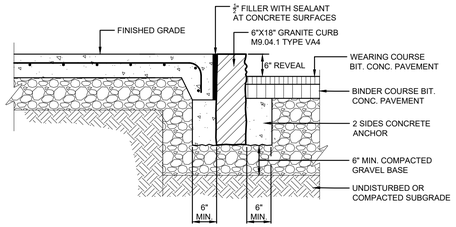
NOTE:
PROVIDE 6' TRANSITION FROM CHAMFERED EDGE OF ACCESS CURB TO SQUARE EDGE OF ADJACENT CURB.

E7 ACCESS GRANITE CURB
N.T.S.

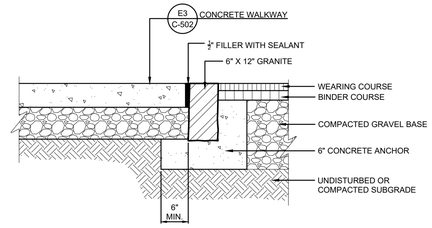


C1 PRECAST CONCRETE CURB 4,000 PSI
N.T.S.

NOTE:
1. WHEN VERTICAL GRANITE CURB IS TO BE INSTALLED ADJACENT TO EXISTING PAVEMENT, CONTRACTOR SHALL SAWCUT THE EXISTING PAVEMENT.

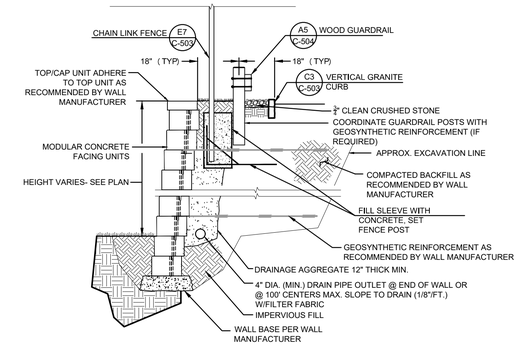


C3 VERTICAL GRANITE CURB
N.T.S.

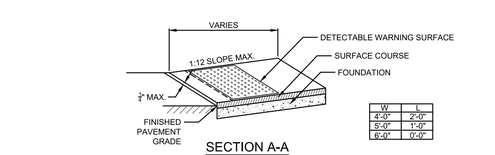


C5 FLUSH VERTICAL GRANITE CURB
N.T.S.

NOTE:
1. RETAINING WALL TO BE DESIGNED BY THE MANUFACTURER.

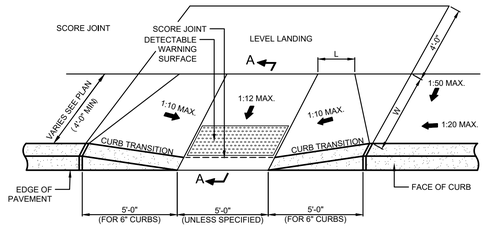


C7 MODULAR BLOCK RETAINING WALL
N.T.S.

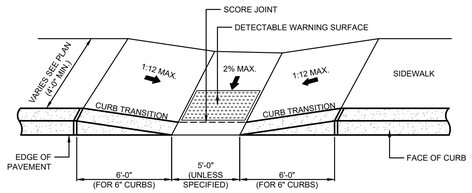


W	L
4'-0"	2'-0"
5'-0"	1'-0"
6'-0"	0'-0"

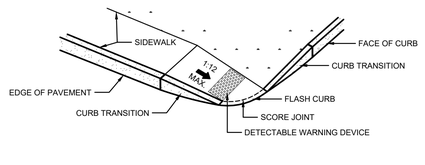
SECTION A-A



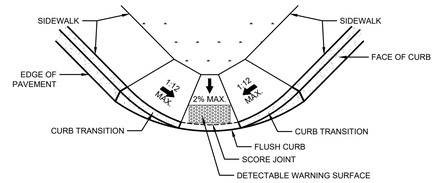
A1 ACCESSIBLE CURB CUT (TYPE 1)
N.T.S.



A3 ACCESSIBLE CURB CUT (TYPE 2)
N.T.S.



A5 ACCESSIBLE CURB CUT (TYPE 4)
N.T.S.



A7 ACCESSIBLE CURB CUT (TYPE 5)
N.T.S.

SMMA
1000 Massachusetts Ave.
Cambridge, MA 02138
Phone: 617.547.5400
Fax: 617.507.7885

the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

MARK:	DATE:	DESCRIPTION:
	01/23/2026	RESPONSE TO COMMENTS
	10/29/2025	NOTICE OF INTENT
	10/16/2025	PLANS OF RECORD
	06/27/2025	REVISION TO CURB CUT LAYOUT
	06/19/2025	RESPONSE TO COMMENTS
	06/09/2025	REVISION TO CURB CUT LAYOUT
	05/20/2025	RESPONSE TO COMMENTS
	02/10/2025	COMPREHENSIVE PERMIT

ISSUE LOG

△ = CLOUDED CHANGE

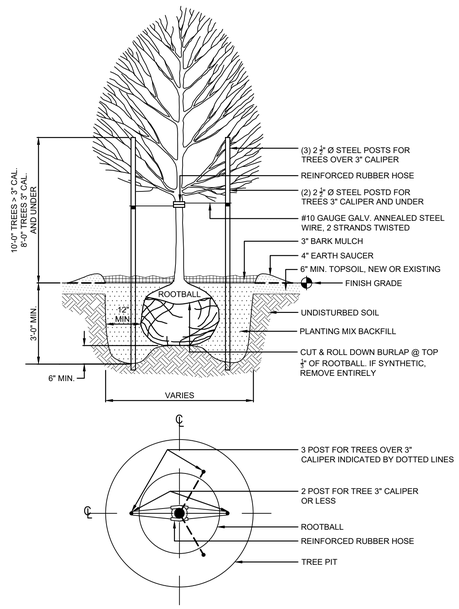
SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS VII

C-507

NOTE:

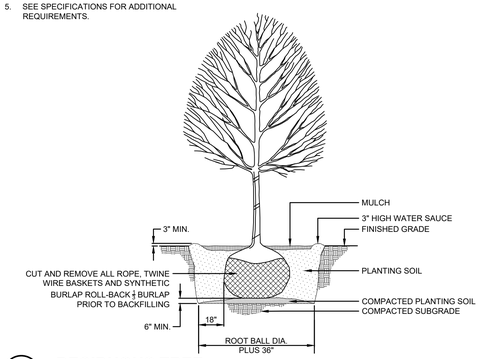
1. ALL TREES SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING.



C1 DECIDUOUS TREE PLANTING-STAKED
N.T.S.

NOTES:

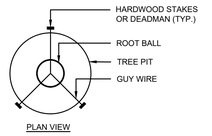
1. NO PRUNING OR CUTTING UNLESS DIRECTED BY THE LANDSCAPE ARCHITECT.
2. SET TREE PLUMB
3. SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING.
4. TREE SHALL BE PLANTED SO THAT CROWN IS 3" ABOVE FINISHED GRADE.
5. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



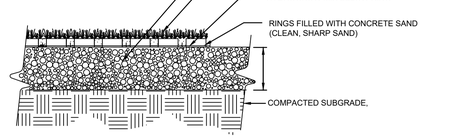
E3 DECIDUOUS TREE
N.T.S.

NOTE:

1. CUT & REMOVE BURLAP AND/OR WIRE BASKET FROM TOP ⅓ OF ROOT BALL (MIN). IF SYNTHETIC WRAP IS USED, REMOVE ENTIRELY BEFORE BACKFILLING. UNTIE ROPE FROM TRUNK AND PULL BACK.



PLAN VIEW

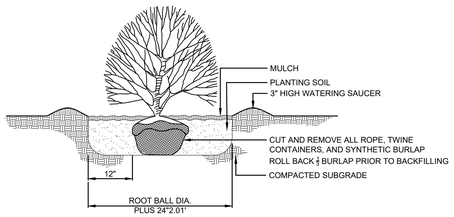


C5 REINFORCED TURF
N.T.S.

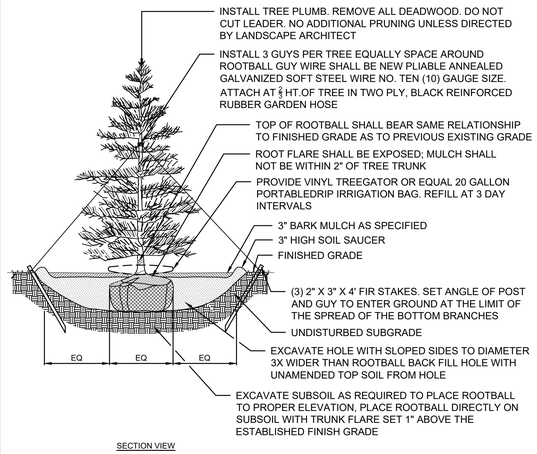
C7 GROUNDCOVER
N.T.S.

NOTES:

1. NO PRUNING OR CUTTING UNLESS DIRECTED BY THE LANDSCAPE ARCHITECT
2. SHRUBS SHALL BE SET PLUMB
3. SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING
4. SHRUB SHALL BE PLANTED SO THAT CROWN IS 2" ABOVE FINISHED GRADE
5. SEE PLANTING SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS



A1 SHRUB
N.T.S.



SECTION VIEW

A3 TYPICAL EVERGREEN TREE PLANTING
N.T.S.

SMMA
1000 Massachusetts Ave.
Cambridge, MA 02138
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Fax: 617.507.7885

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ISSUE LOG

△ = CLOUDED CHANGE

SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS VIII

C-508

U.S. ARCHITECTURAL LIGHTING

AREA & ROADWAY LIGHTING

RAZAR SERIES - LED

LOW PROFILE AREA LUMINAIRE

Optical Housing
Heavy cast aluminum assembly minimum wall thickness .188". LED Module mounting area is machined to within a 0.005" surface flatness variance for maximum surface contact and thermal conductivity from the LED modules to the radiating fins. Passive radiating fins above the LED Optics provide superior thermal management and long LED life. The optical and electrical compartments are integrated with the support arm to create one assembly. Cast and hinged driver compartment cover allows access to the drivers and wiring.

Electrical Housing w/ Integrated Arm
Heavy cast aluminum assembly with integral cooling ribs surrounding the electrical compartment and a flat surface on the top of the arm to accommodate a photocell receptacle. Solid barrier wall separates optical and electrical compartments. The optical compartment and electrical compartment with the integrated support arm combines to create one assembly. Minimum wall thickness is .188" Cast and hinged driver assembly cover is integrated with wiring compartment cover.

Mast Arm Fitter/Electrical Housing
Replaces standard Electrical Housing. Fits standard 2 3/8" O.D. horizontal tenon. Two (2) straps with two (2) bolts each encircle the lower half of the tenon. Upper half of the tenon rests on self-centering steps that position the angle of the luminaire at 0°, +1.5°, +3.5° or +5° up from the horizontal. All hardware is stainless steel.

PLED™ Optics
Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side, maximizing usable light. Optional house side shields are available that cover each individual optic. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments. Quick-disconnects are provided above each panel for fast field replacement. All fixture optical options will provide a "U0" no uplight optical package and is are dark sky friendly.

LED Emitters
LED thermal management is designed to maintain LED operating temperature below 90 °C, well below the manufacturers thermal max of 150 °C for long life, high lumen maintenance and color stability. High Power White LED's are driven between 350mA and 870mA for a maximum output of 213 Watts nominal. LED's are available in standard Warm White (2700K & 3000K), Neutral White (4000K), or Cool White (5000K). All Standard LED's have a minimum of 70 CRI. Consult Factory for other LED options. Lumen Maintenance of (94 of 60,000 hours (TM-21 calculated at 6x Test Time).

True Amber LED's TM-Plus Amber LED's emit light in the amber spectral bandwidth centered on 585-590nm. True Amber has negligible blue light and is suitable for wildlife.

LED Driver
Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40ºF/-40ºC. Driver(s) is/are UL and cUL recognized. Inline terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120/277V, 50/60Hz or 347V-480V, 50/60Hz. 0 - 10V dimmable driver is standard. Driver has a minimum of 3kV internal surge protection. Luminaire supplied with a separate 10kV surge protector for field installation.

Finish
Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

RZR

(Models: RZRM, RZR, RZR-G & RZRMAF)

Fixture	A	B	C	D
RZR-G	15" 381mm	26.5" 673mm	3" 76mm	7" 178mm
RZR	14.75" 375mm	28.25" 718mm	5.75" 146mm	6.5" 165mm
RZRM	11.4" 290mm	25" 635mm	2.5" 64mm	6.25" 159mm
RZR-MAF	15" 381mm	28.25" 718mm	2.5" 64mm	4" 102mm

UL Listed for Wet Location

2024283

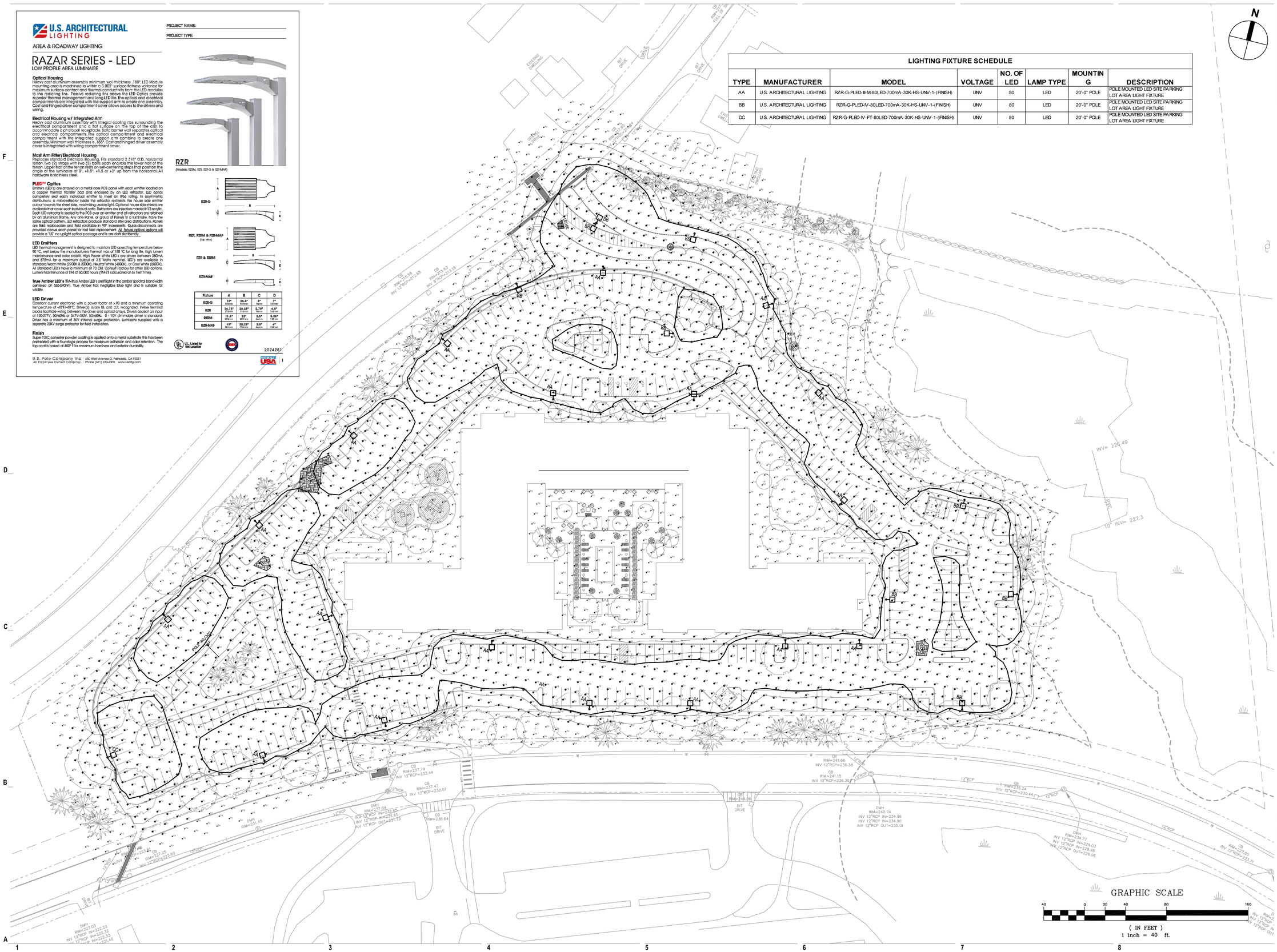
U.S. Pole Company Inc | An Employee Owned Company | 660 West Avenue O, Palmdale, CA 93551 | Phone (661) 233-2300 | www.uspoleusa.com

PROJECT NAME:

PROJECT TYPE:

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	MODEL	VOLTAGE	NO. OF LED	LAMP TYPE	MOUNTING	DESCRIPTION
AA	U.S. ARCHITECTURAL LIGHTING	RZR-G-PLED-III-M-80LED-700mA-30K-HS-UNV-1-(FINISH)	UNV	80	LED	20'-0" POLE	POLE MOUNTED LED SITE PARKING LOT AREA LIGHT FIXTURE
BB	U.S. ARCHITECTURAL LIGHTING	RZR-G-PLED-V-80LED-700mA-30K-HS-UNV-1-(FINISH)	UNV	80	LED	20'-0" POLE	POLE MOUNTED LED SITE PARKING LOT AREA LIGHT FIXTURE
CC	U.S. ARCHITECTURAL LIGHTING	RZR-G-PLED-IV-FT-80LED-700mA-30K-HS-UNV-1-(FINISH)	UNV	80	LED	20'-0" POLE	POLE MOUNTED LED SITE PARKING LOT AREA LIGHT FIXTURE



smma

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ISSUE LOG

△ = CLOUDED CHANGE

SCALE	1"=40'
DRAWN BY	AMB
CHECK BY	JA
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

SITE LIGHTING PHOTOMETRICS PLAN

ES100