



INVITATION FOR BIDS

TOWN OF CHILMARK

**PROJECT: 2011-MLR-ROADS-II  
ADDENDUM # 2-Drip Edge, Peastone  
MIDDLE LINE ROAD COMMUNITY  
HOUSING PROGRAM  
FINISH ROADWORK**

**DUE DATE: AUGUST 24, 2011  
4:30 PM**

Section 32 1500 Aggregate Surfacing

Part 1 - General

- 1.0 RELATED DOCUMENTS: This section is only a portion of the Contract Documents. All of the Contract Documents, including Conditions of the Contract and Division 1 General Requirements, apply to this section.
- 1.1 SECTION INCLUDES:
- A. Furnish and Install: Aggregate surfacing including roof edge drip strip and driveway.
  - B. Related Sections: Without limitation, related sections include:  
Division 31 Earth Work  
Section 32 9413 Landscape Edging
- 1.2 SUBMITTALS:
- A. Verification Samples: Minimum 20 pounds of visible aggregate.
- 1.3 DELIVERY, STORAGE, HANDLING: Comply with Division 1 - General Requirements and manufacturer's instructions and recommendations.

Part 2 - Products

- 2.1 AGGREGATE SURFACING AT DRIVEWAY: ASTM C33 Standard Specification for Concrete Aggregates; crushed natural stone.
- A. Color: Brown to match Architect approved sample.
  - B. Size, Gradation: ASTM C33 Size Number 8.
- 2.2 AGGREGATE SURFACING AT DRIP STRIP: ASTM C33 Standard Specification for Concrete Aggregates.
- A. Color: Brown to match Architect approved sample.
  - B. Size, Gradation: Uniform 0.375 inch.
  - C. Shape, Appearance: Rounded, weathered, washed.
- 2.3 SUBBASE CRUSHED STONE: ASTM C33 Standard Specification for Concrete Aggregates.
- A. Size, Gradation: ASTM C33 Size Number 4 to 67.

Part 3 - Execution

- 3.1 INSTALLATION OF AGGREGATE SURFACING:
- A. Subgrade: Compact to at least 95 percent of maximum dry density, Method C, ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort.
  - B. Subbase Crushed Stone at Driveways: Provide minimum 9 inches compacted depth placed in two lifts.
    - 1. Compact each lift to at least 95 percent of maximum dry density, Method C, ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort.
  - C. Subbase Crushed Stone at Drip Strip: No subbase required.
  - D. Aggregate Surfacing:
    - 1. Provide minimum 4 inches compacted depth of aggregate surfacing.
    - 2. Control elevations and meet finished grades shown.
    - 3. Compact to at least 93 percent of maximum dry density, Method C, ASTM D1557 Standard Test

Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort,

E. Final Appearance: Provide uniform, raked appearance with no noticeable patterns.

End of Section

Section 32 9413 Landscape Edging

Part 1 - General

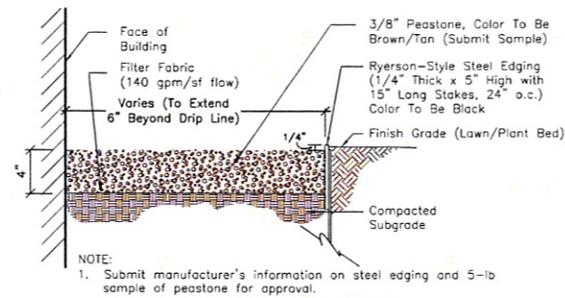
- 1.0 **RELATED DOCUMENTS:** This section is only a portion of the Contract Documents. All of the Contract Documents, including Conditions of the Contract and Division 1 General Requirements, apply to this section.
- 1.1 **SECTION INCLUDES:**
  - A. **Furnish and Install:** Landscape edging.
  - B. **Related Sections:** Without limitation, related sections include:  
Division 31 Earth Work  
Section 32 1413 Precast Concrete Unit Paving  
Section 32 1500 Aggregate Surfacing
- 1.2 **SUBMITTALS:**
  - A. **Product Data:** Manufacturer's data including instructions, recommendations, and restrictions.
  - B. **Shop Drawings:** Show joint locations, installation details.
  - C. **Verification Samples:** Minimum 12 linear inches.
- 1.3 **DELIVERY, STORAGE, HANDLING:** Comply with Division 1 - General Requirements and manufacturer's instructions and recommendations.

Part 2 - Products

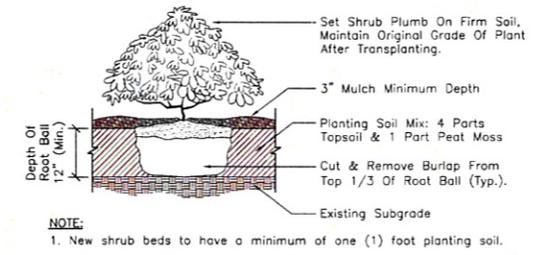
- 2.1 **LANDSCAPE EDGING AT PAVERS:**
  - A. **Basis of Design:** "Pave Edge Pro Rigid and Flexible", Pave Tech, Inc., www.pavetech.com
  - B. **Stakes:** 0.375 inch diameter, 10 inches long, steel, from edge manufacturer.
- 2.2 **LANDSCAPE EDGING AT AGGREGATE SURFACING:**
  - A. **Basis of Design:** "CleanLine Aluminum Landscape Edging", Permaloc Corporation, www.permaloc.com
  - B. **Thickness:** As shown or, if not shown, 0.18 inch.
  - C. **Height:** As shown or, if not shown, 5.5 inches.
  - D. **Finish:** Black anodized for all visible surfaces including stakes.
  - E. **Stakes:** From edge manufacturer.
    1. **Height:** Standard, 12 inches.
    2. **Quantity:** Eight per 16 feet edge section.

Part 3 - Execution

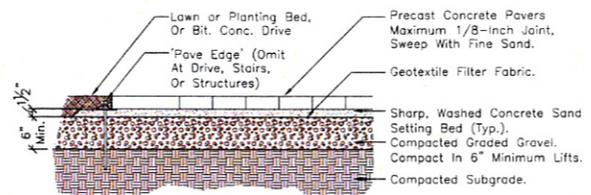
- 3.1 **INSTALLATION OF LANDSCAPE EDGING:** Comply with manufacturer's instructions and recommendations.
  - A. Install landscape edge on top of compacted paver base but not on top of paver setting bed.
  - B. Provide edging at all edges of pavers and aggregate surfacing.
  - C. Anchor edging with stakes spaced maximum 24 inches for straight sections and maximum 12 inches on center for curved sections.
  - D. Connect joints between edging segments.
  - E. Backfill back edge [non paver side] of edging.



**1 Peastone Drip Edge**  
L2.1 Not To Scale

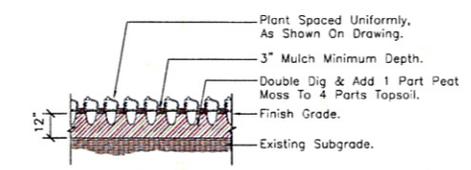


**3 Shrub Planting**  
L2.1 Scale: 1/2" = 1'-0"



- NOTES:
1. Pavers shall be 4" x 8" x 6 cm (2 3/8") thick, precast concrete pavers (Unilock "Hollandstone" or Ideal Concrete Block "Boston Colonial"). Color to be selected by Architect from manufacturer's standard colors.
  2. Outer edges to be banded. Interior pattern to be running bond. See Drawings for layout, patterns and orientation.
  3. Pave Edge shall be secured with landscape spikes, 2'-0" max. on center. Anchor all ends & corners. Stake layout for approval before laying pavers.
  4. Set 8' x 8' Sample Area for approval by Landscape Architect before continuing.

**2 Precast Concrete Pavers On Sand**  
L2.1 Scale: 1" = 1'-0"



**4 Perennial/Groundcover Planting**  
L2.1 Scale: 3/8" = 1'-0"

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landscape architecture  
urban design  
interior design

Job: 0609  
Scale: As Noted  
Drawn: DJC Chkd.: CCB  
Date: 2/19/10

LANDSCAPE DETAILS

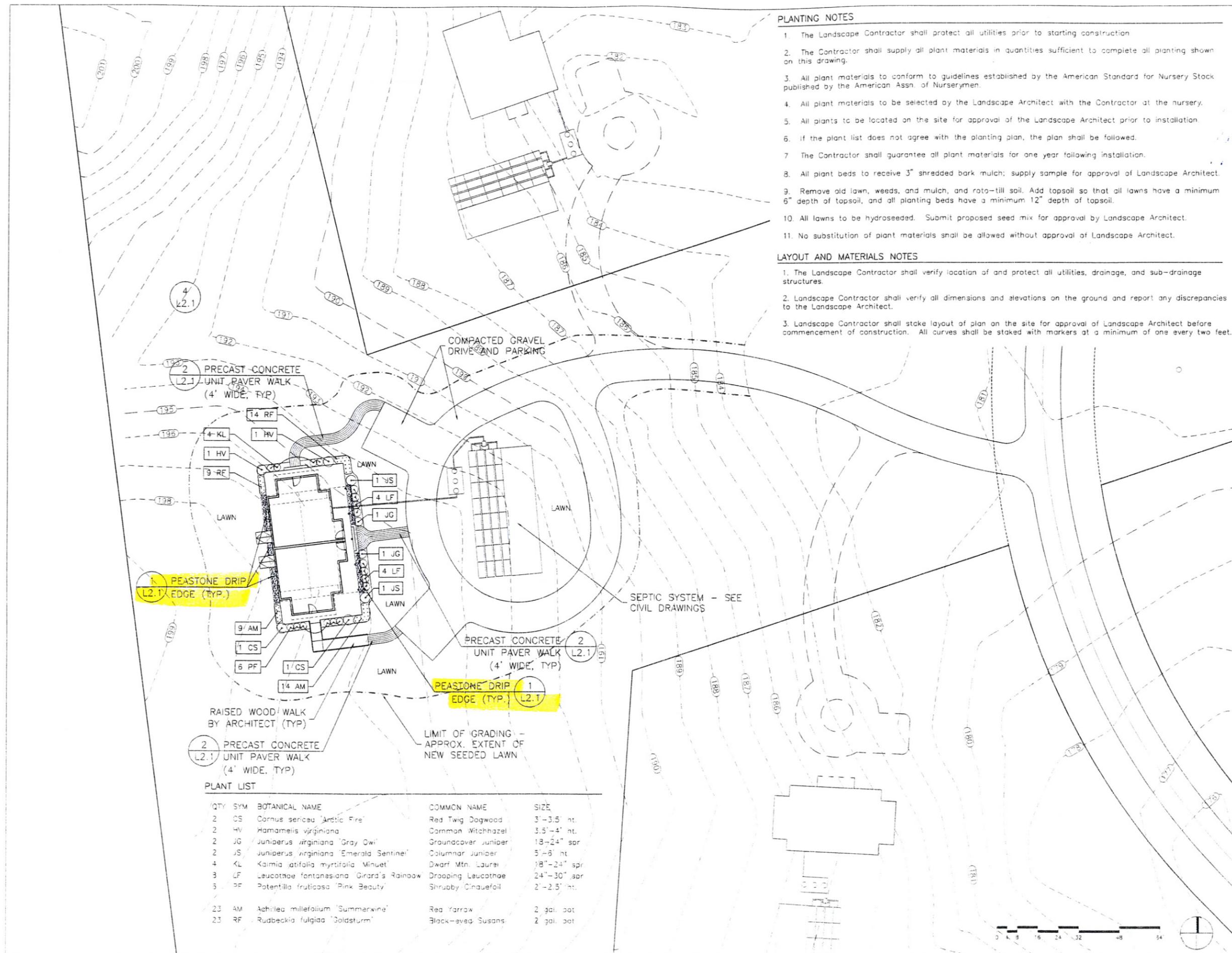
**L2.1**  
**Site 2**

PLANTING NOTES

1. The Landscape Contractor shall protect all utilities prior to starting construction.
2. The Contractor shall supply all plant materials in quantities sufficient to complete all planting shown on this drawing.
3. All plant materials to conform to guidelines established by the American Standard for Nursery Stock published by the American Assn. of Nurserymen.
4. All plant materials to be selected by the Landscape Architect with the Contractor at the nursery.
5. All plants to be located on the site for approval of the Landscape Architect prior to installation.
6. If the plant list does not agree with the planting plan, the plan shall be followed.
7. The Contractor shall guarantee all plant materials for one year following installation.
8. All plant beds to receive 3" shredded bark mulch; supply sample for approval of Landscape Architect.
9. Remove old lawn, weeds, and mulch, and roto-till soil. Add topsoil so that all lawns have a minimum 6" depth of topsoil, and all planting beds have a minimum 12" depth of topsoil.
10. All lawns to be hydroseeded. Submit proposed seed mix for approval by Landscape Architect.
11. No substitution of plant materials shall be allowed without approval of Landscape Architect.

LAYOUT AND MATERIALS NOTES

1. The Landscape Contractor shall verify location of and protect all utilities, drainage, and sub-drainage structures.
2. Landscape Contractor shall verify all dimensions and elevations on the ground and report any discrepancies to the Landscape Architect.
3. Landscape Contractor shall stake layout of plan on the site for approval of Landscape Architect before commencement of construction. All curves shall be staked with markers at a minimum of one every two feet.



PLANT LIST

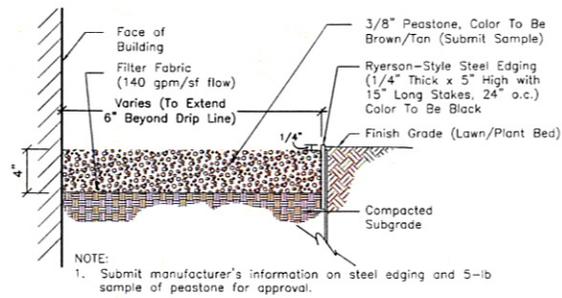
QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE
2	CS	<i>Cornus sericea</i> 'Arctic Fire'	Red Twig Dogwood	3'-3.5' ht.
2	HV	<i>Hamamelis virginiana</i>	Common Witchhazel	3.5'-4' ht.
2	JG	<i>Juniperus virginiana</i> 'Gray Owl'	Groundcover Juniper	18"-24" spr
2	JS	<i>Juniperus virginiana</i> 'Emerald Sentinel'	Columnar Juniper	5'-6' ht.
4	KL	<i>Kalmia latifolia myrtifolia</i> 'Minuet'	Dwarf Mtn. Laurel	18"-24" spr
3	LF	<i>Leucothoe fontanesiana</i> 'Girard's Rainbow'	Drooping Leucothoe	24"-30" spr
5	PF	<i>Potentilla fruticosa</i> 'Pink Beauty'	Shrubby Cinnaefoil	2'-2.5' ht.
23	AM	<i>Achillea millefolium</i> 'Summerwine'	Red Yarrow	2 gal. pot.
23	RF	<i>Rudbeckia fulgida</i> 'Goldsturm'	Black-eyed Susans	2 gal. pot.

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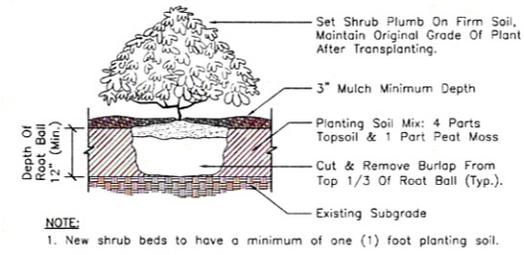
CBIA Landscape Architects LLC  
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www.cbialandscape.com | www.cbiamaine.com  
LANDSCAPE ARCHITECTURE  
URBAN DESIGN  
MASTER PLANNING

Job: 0609  
Scale: 1/16" = 1'-0"  
Drawn: DJC Chkd: CCB  
Date: 2/19/10

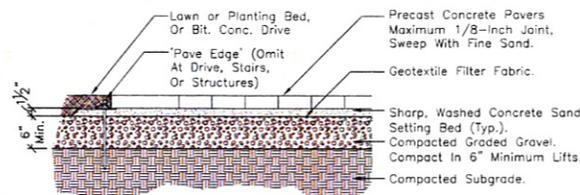
LANDSCAPE MATERIALS  
AND PLANTING PLAN  
**L1.2**  
Site 2



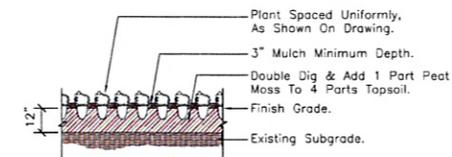
**1** Peastone Drip Edge  
L2.1 Not To Scale



**3** Shrub Planting  
L2.1 Scale: 1/2" = 1'-0"



**2** Precast Concrete Pavers On Sand  
L2.1 Scale: 1" = 1'-0"



**4** Perennial/Groundcover Planting  
L2.1 Scale: 3/8" = 1'-0"

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landscape architecture  
urban design  
interior design

Job: 0609  
Scale: As Noted  
Drawn: DJC Chkd.: CCB  
Date: 2/19/10

LANDSCAPE DETAILS

L2.1  
Site 5

**PLANTING NOTES**

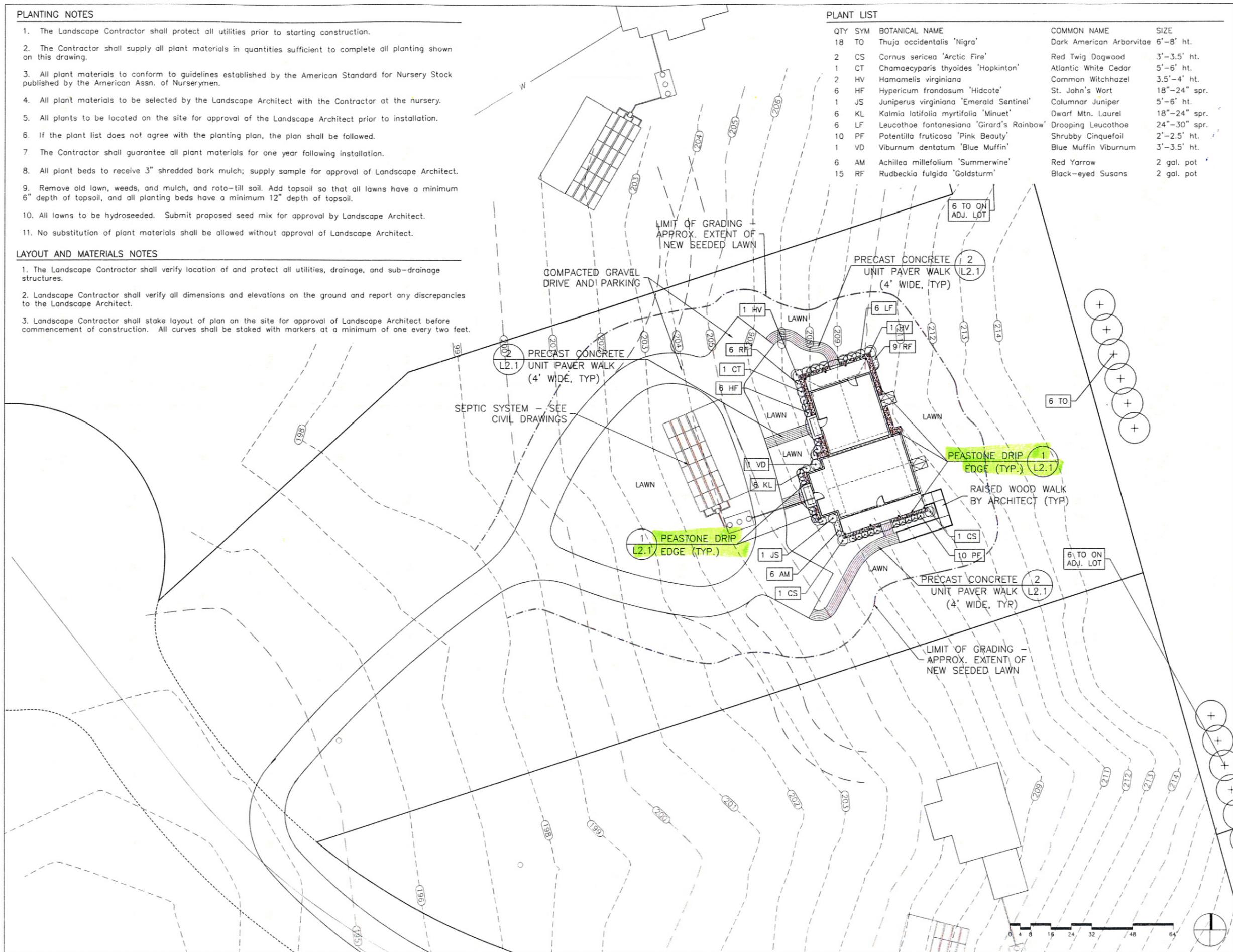
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7. The Contractor shall guarantee all plant materials for one year following installation.
8. All plant beds to receive 3" shredded bark mulch; supply sample for approval of Landscape Architect.
9. Remove old lawn, weeds, and mulch, and roto-till soil. Add topsoil so that all lawns have a minimum 6" depth of topsoil, and all planting beds have a minimum 12" depth of topsoil.
10. All lawns to be hydroseeded. Submit proposed seed mix for approval by Landscape Architect.
11. No substitution of plant materials shall be allowed without approval of Landscape Architect.

**LAYOUT AND MATERIALS NOTES**

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**PLANT LIST**

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE
18	TO	<i>Thuja occidentalis</i> 'Nigra'	Dark American Arborvitae	6'-8' ht.
2	CS	<i>Cornus sericea</i> 'Arctic Fire'	Red Twig Dogwood	3'-3.5' ht.
1	CT	<i>Chamaecyparis thyoides</i> 'Hopkinton'	Atlantic White Cedar	5'-6' ht.
2	HV	<i>Hamamelis virginiana</i>	Common Witchhazel	3.5'-4' ht.
6	HF	<i>Hypericum frondosum</i> 'Hidcote'	St. John's Wort	18"-24" spr.
1	JS	<i>Juniperus virginiana</i> 'Emerald Sentinel'	Columnar Juniper	5'-6' ht.
6	KL	<i>Kalmia latifolia</i> 'Minuet'	Dwarf Mtn. Laurel	18"-24" spr.
6	LF	<i>Leucothoe fontanesiana</i> 'Girard's Rainbow'	Drooping Leucothoe	24"-30" spr.
10	PF	<i>Potentilla fruticosa</i> 'Pink Beauty'	Shrubby Cinquefoil	2'-2.5' ht.
1	VD	<i>Viburnum dentatum</i> 'Blue Muffin'	Blue Muffin Viburnum	3'-3.5' ht.
6	AM	<i>Achillea millefolium</i> 'Summerwine'	Red Yarrow	2 gal. pot
15	RF	<i>Rudbeckia fulgida</i> 'Goldsturm'	Black-eyed Susans	2 gal. pot



MIDDLE LINE HOUSING

CHILMARK, MASSACHUSETTS

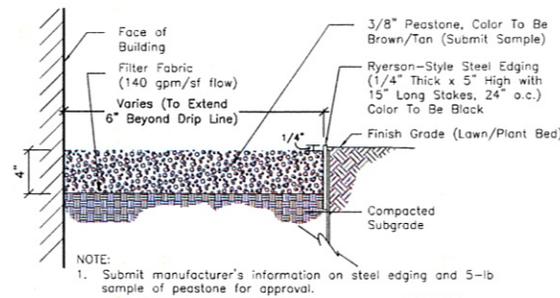
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 landscape architecture  
 urban design  
 master planning

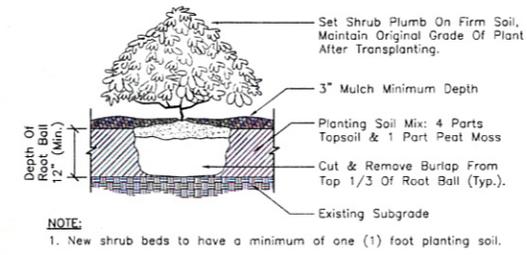
Job: 0609  
 Scale: 1/16" = 1'-0"  
 Drawn: DJC Chkd.: CCB  
 Date: 2/19/10

LANDSCAPE MATERIALS AND PLANTING PLAN  
**L1.2**  
 Site 5

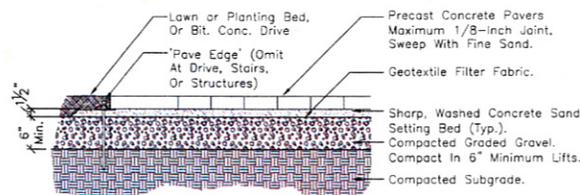




1 Peastone Drip Edge  
L2.1 Not To Scale

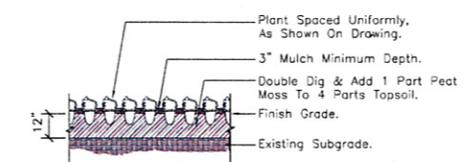


3 Shrub Planting  
L2.1 Scale: 1/2" = 1'-0"



- NOTES:
1. Pavers shall be 4" x 8" x 6 cm (2 3/8") thick, precast concrete pavers (Unilock "Hollandstone" or Ideal Concrete Block "Boston Colonial"). Color to be selected by Architect from manufacturer's standard colors.
  2. Outer edges to be bonded, interior pattern to be running bond. See Drawings for layout, patterns and orientation.
  3. Pave Edge shall be secured with landscape spikes, 2'-0" max. on center. Anchor all ends & corners. Stake layout for approval before laying pavers.
  4. Set 8' x 8' Sample Area for approval by Landscape Architect before continuing.

2 Precast Concrete Pavers On Sand  
L2.1 Scale: 1" = 1'-0"



4 Perennial/Groundcover Planting  
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Job: 0609  
Scale: As Noted  
Drawn: DJC Chkd.: CCB  
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LANDSCAPE DETAILS

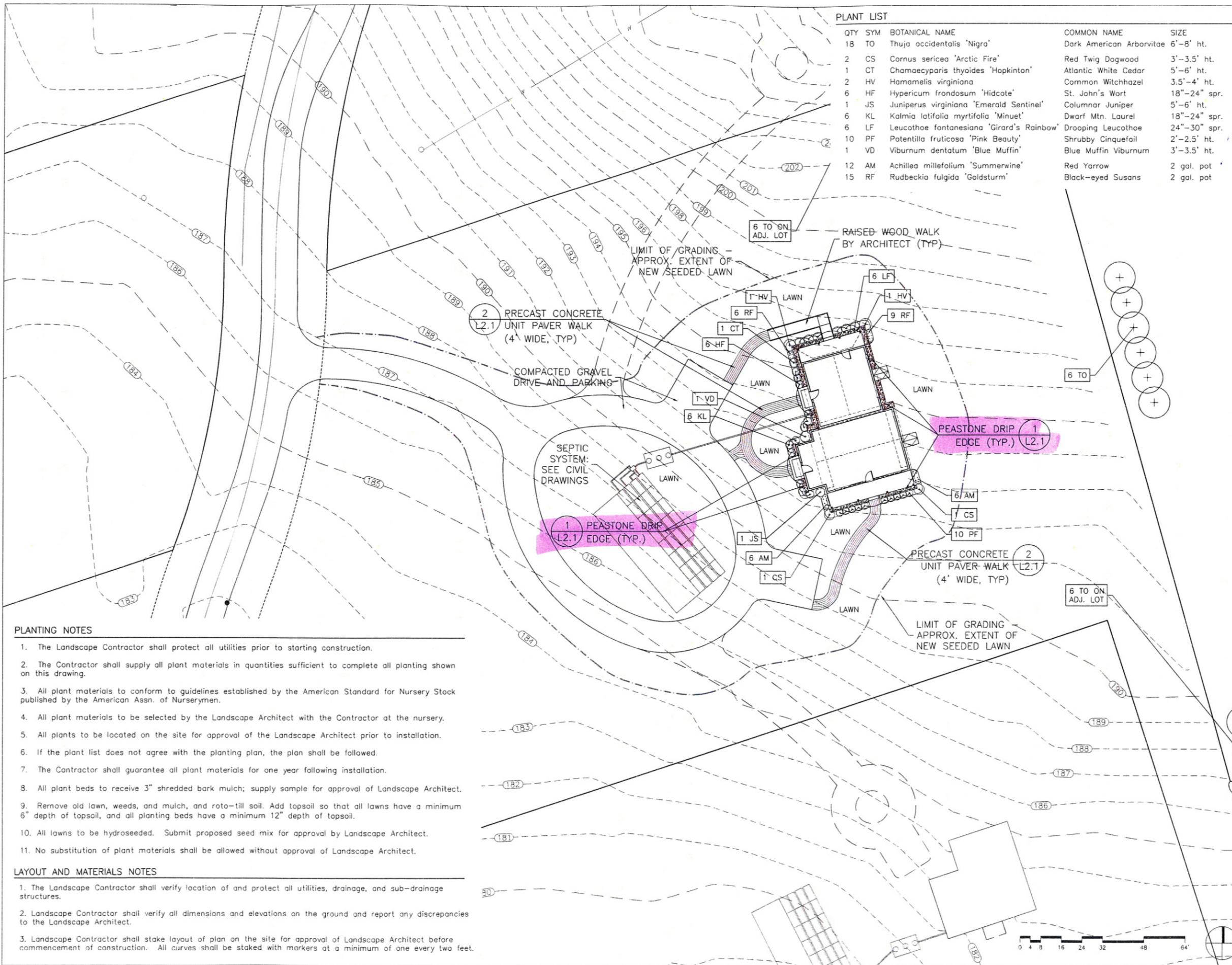
L2.1  
Site 8

MIDDLE LINE HOUSING

CHILMARK, MASSACHUSETTS

PLANT LIST

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE
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landscape architecture  
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Job: 0609  
Scale: 1/16" = 1'-0"  
Drawn: DJC Chkd.: CCB  
Date: 2/19/10

LANDSCAPE MATERIALS AND PLANTING PLAN

L1.2  
Site 8