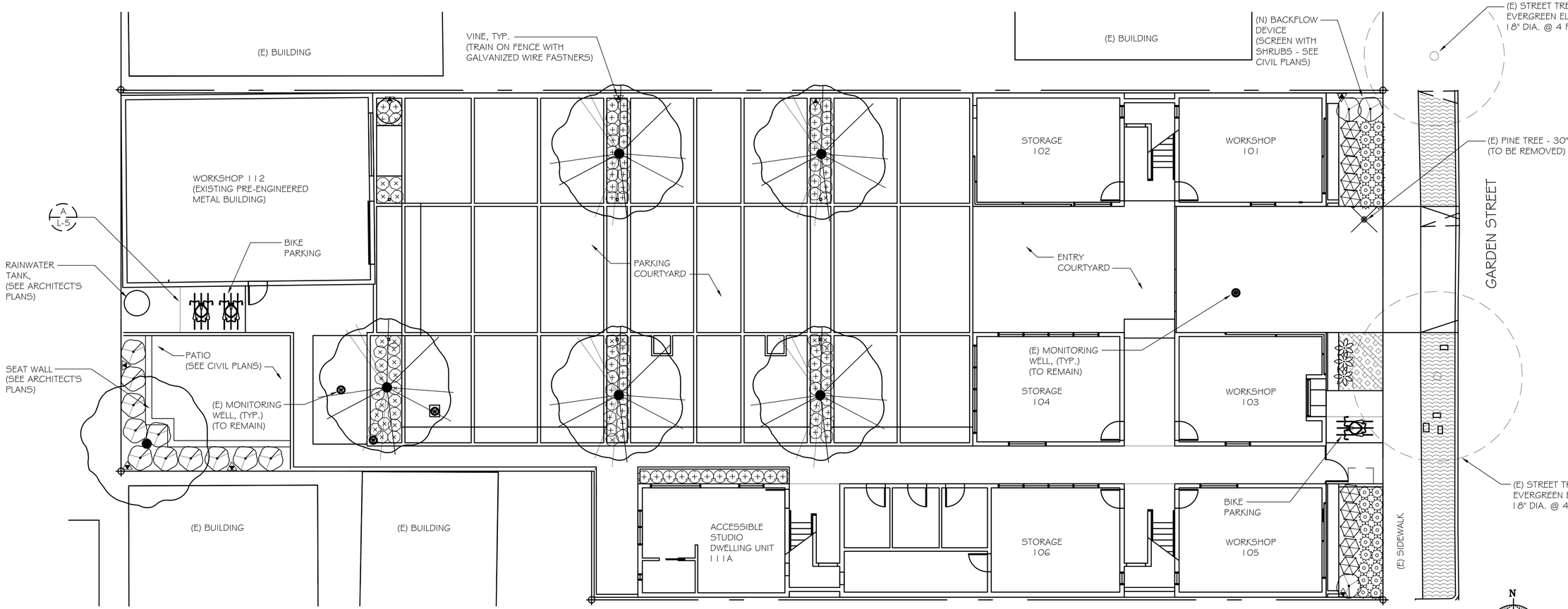

Scale: 1/8" = 1'-0"

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT
	Chilopsis linearis / Desert Willow	24"box
	Quercus englemannii / Engelmann Oak	24"box

SHRUBS	BOTANICAL NAME / COMMON NAME	CONT
	Agave attenuata / Agave	15 gal
	Phormium tenax `Bronze Baby` / Bronze Baby New Zealand Flax	5 gal
	Salvia clevelandii `Winifred Gillman` / Cleveland Sage	5 gal

ANNUALS/PERENNIALS	BOTANICAL NAME / COMMON NAME	CONT
	Anigozanthos flavidus `Bush Ranger` / Kangaroo Paw	1 gal

GRASSES	BOTANICAL NAME / COMMON NAME	CONT
	Calamagrostis foliosa / Cape Mendocino Reed Grass	1 gal
	Lomandra longifolia `Breeze` / Dwarf Mat Rush	1 gal

VINE/ESPALIER	BOTANICAL NAME / COMMON NAME	CONT
	Calystegia macrostegia ssp. macrostegia `Anacapa Pink` / Island False Bindweed	15 gal

GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT	SPACING
	Phormium tenax `Jack Spratt` / New Zealand Flax	1 gal	18" o.c.
	Senecio mandraliscae `Blue Chalk Sticks` / Senecio	1 gal	18" o.c.

CALCULATIONS

TOTAL SQUARE FOOTAGE OF LANDSCAPE AREA: 1,285 SQ FT
GROUND FLOOR: 850 SQ FT
THIRD FLOOR & ROOF LEVEL: 435 SQ FT

SQUARE FOOTAGE OF LANDSCAPE AREA WITH LOW WATER USE PLANTS: 1,185 SQ FT
SQUARE FOOTAGE OF LANDSCAPE AREA WITHOUT LOW WATER USE PLANTS: 100 SQ FT

LANDSCAPE NOTES

-CONTRACTOR SHALL INSTALL 3 INCHES OF MULCH REDWOOD 'WALK-ON-BARK' IN ALL PLANTING AREAS.

-SEE CIVIL PLANS FOR ALL FLAT WORK.

LICENSED LANDSCAPE ARCHITECT
David R. Black No. 2999
SIGNATURE
06.30.14
RENEWAL DATE
DATE
STATE OF CALIFORNIA

DAVID R. BLACK & ASSOCIATES
LANDSCAPE ARCHITECTURE
URBAN DESIGN
1718 PAMPAS AVE.
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Project
Santa Barbara Center for Art, Science, & Technology
513 Garden Street
Santa Barbara, CA 93101

Sheet Title
Planting Plan
Ground Level

Revisions

No.	Date	Revision
	06/12/13	Revision 1
	11/08/13	Revision 2
	2/10/14	Revision 3

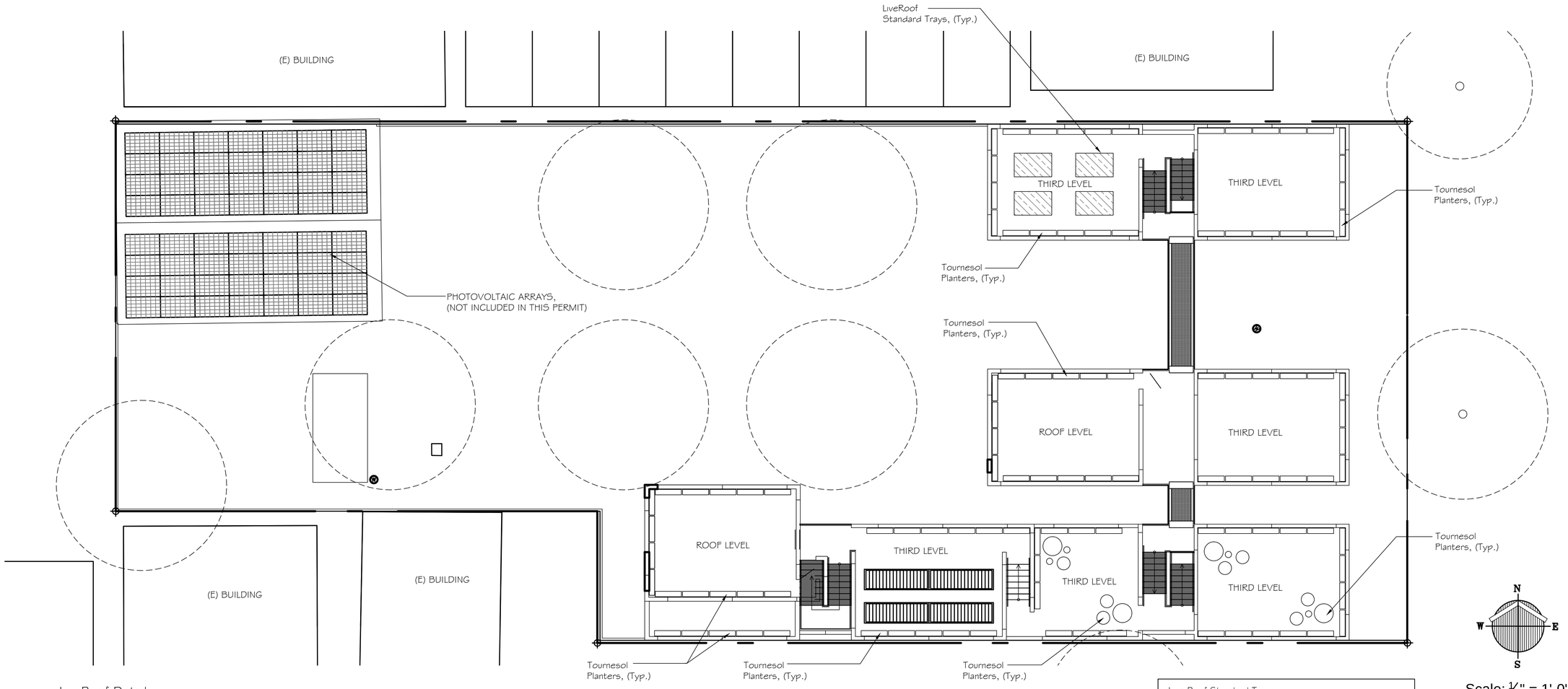
Date
04/10/14 Bid Set

Scale
1/8" = 1'-0"

Drawn
NJ

Job

Sheet Number
L-1

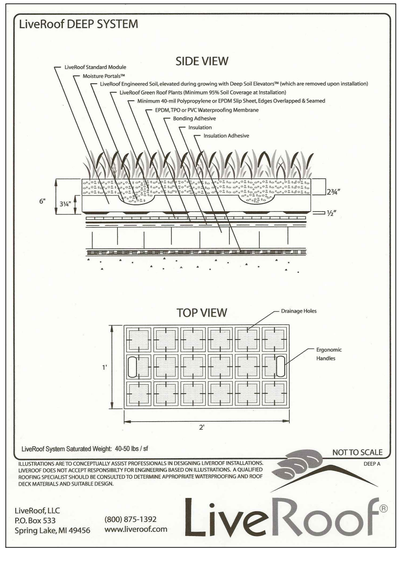


Scale: 1/8" = 1'-0"

Live Roof Standard Trays:
Soil Approx. 4¼" deep
Module Size: 1' x 2' x ¾"
Saturated Weight: 27-29 lbs / sf saturated vegetated.

Maximum allowable dead weight per structural: 30 psf

LiveRoof Detail



PLANT LEGEND

LIVE ROOF
PLANT PALETTE

BOTANICAL NAME / COMMON NAME

Eschscholzia californica / California Poppy
Sedum spathulifolium (Stonecrop)
Armeria maritima / Sea Pink or Thrift
Prunella vulgaris / Common Selheal
Lasthenia californica / Dwarf Goldfields
Lupinus bicolor / Minature Lupine
Plantago erecta / Foothill Plantain
Layia platyglossa / Tidy Tips

TOURNESOL POTS
PLANT PALETTE

BOTANICAL NAME / COMMON NAME

SHRUBS

Achillea millefolium `Paprika` / Red Yarrow
Achillea x `Moonshine` / Moonshine YarroW
Aeonium arboreum / Aeonium
Helictotrichon sempervirens / Blue Oat Grass
Echeveria 'Afterglow' / Echeveria
Muhlenbergia capillaris / Pink Muhly
Muhlenbergia rigens / Deer Grass
Salvia coahuilensis / Sage
Senecio serpens / Senecio

VINE
Calystegia macrostegia ssp. macrostegia 'Anacapa Pink' / California Morning Glory

NOTES

Live Roof

1. The Contractor shall provide and install a LIveRoof (Source: Florasource, 949-498-1131, Contact: Tom Hawkins) green roof system at the roof locations shown on the drawings.
2. The Contractor shall be a certified LiveRoof installer.
3. The LiveRoof shall include but not be limited to waterproof roof membranes, an automated irrigation system, roof edges and pre-vegetated 1' x 2' modules (4" standard type). Modular layout and quantities are shown on the drawings
4. The Contractor shall coordinate with Florasource for the supply and propagation of all plant materials and LiveRoof design components specified for the project by the Landscape Architect.
5. The Contractor shall install the LiveRoof green roof and irrigation system per the manufacturer's standards and specifications as shown on the drawings. The contractor shall coordinate with General Contractor to insure the proper waterproofing and drainage of rooftops as shown on the Architect's drawings.

Tournesol Pots

1. Contractor shall provide Tournesol Pots from the Wilshire Collection. (Source: Tournesol Siteworks, 800-542-2282, tournesolsiteworks.com. Pots shall include all self-watering container irrigation components. Verify sizes with Landscape Architect prior to purchasing.

LICENSED LANDSCAPE ARCHITECT
David R. Black No. 2989
SIGNATURE
06.30.14
RENEWAL DATE
DATE
STATE OF CALIFORNIA

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Project
Santa Barbara Center for Art, Science, & Technology
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Sheet Title
Planting Plan
Third Floor & Roof Level

Revisions

No.	Date	Revision
	06/12/13	Revision 1

Date
04/10/14 Bid Set

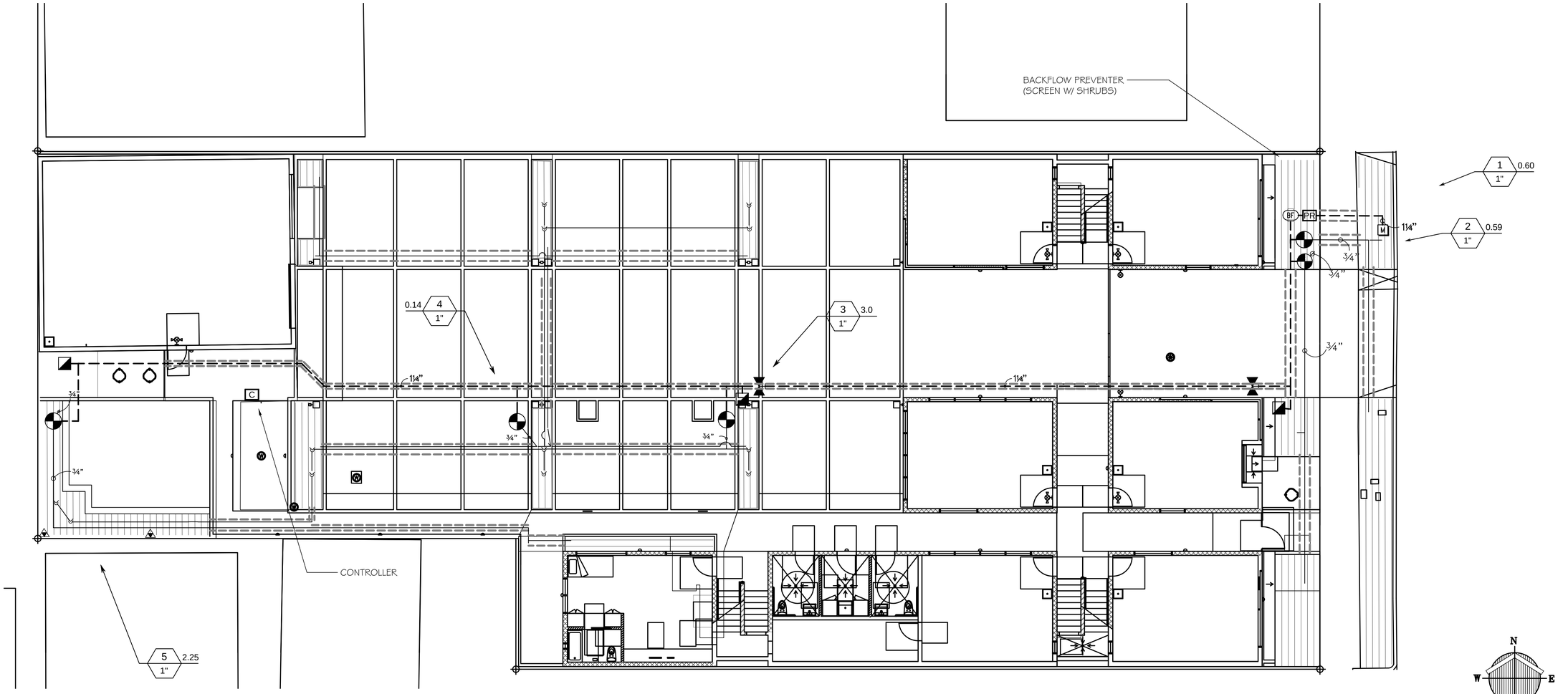
Scale

Drawn
NJ

Job

Sheet Number
L-2

2 of 6



IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
1401 1402 1404 1408	Rain Bird RWS-B-C-P-SOCK Root Watering System with 4" diameter x 36" long with locking grate, semi-rigid mesh tube, check valve and purple reclaimed water cap, with sand sock,and Rain Bird bubbler option as indicated: 1401 (0.25gpm), 1402 (0.5gpm), 1404 (1.0gpm), 1408 (2.0gpm).	12	30
	Area to Receive Dripline Netafim TLCV-26-18 (18) Techline Pressure Compensating Landscape Dripline with Check Valve. 0.26GPH emitters at 18.0" O.C. Dripline laterals spaced at 18.0" apart, with emitters offset for triangular pattern. 17mm.	867 s.f.	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Weathermatic 11024FCR Plastic Remote Control Valve, 1"	5
	Rain Bird 33DLRC 3/4" Quick Coupler Valve, two piece body, locking cover.	3
	KBI BTU-E PVC Blocked True Union Ball Valve S.O.V., 1/2" to 2", same size as pipe	2
BF	Febco 825Y 1" Reduced Pressure Backflow Preventer	1
C	Rain Bird ESP-LXME-ET ET Manager Control Cartridge for flow sensing and management for installation with the ESP-LXME Controller.	1
PR	Honeywell - Braukmann (1 1/2" w/ 0-100 psi gauge)	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Irrigation Lateral Line: Polyethylene and PVC Class 200 Polyethylene SDR-7 up to 1-1/4, then PVC Class 200 SDR 21 for 1-1/2" and larger.	513.4 l.f.
	Irrigation Mainline: PVC Schedule 40	273.4 l.f.
	Pipe Sleeve: PVC Schedule 40 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	309.3 l.f.

Valve Callout
— Valve Number
— Valve Flow
#" — Valve Size

N
W E
S

Scale: ⅛" = 1'-0"

LICENSED LANDSCAPE ARCHITECT
David R. Black No. 2509
SIGNATURE
06.30.14
RENEWAL DATE
DATE
STATE OF CALIFORNIA

DAVID R. BLACK & ASSOCIATES
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Project
Santa Barbara Center for Art, Science, & Technology
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Santa Barbara, CA 93101

Sheet Title
Irrigation Plan - Ground Floor

Revisions

No.	Date	Revision
	06/12/13	Revision 1
	11/08/13	

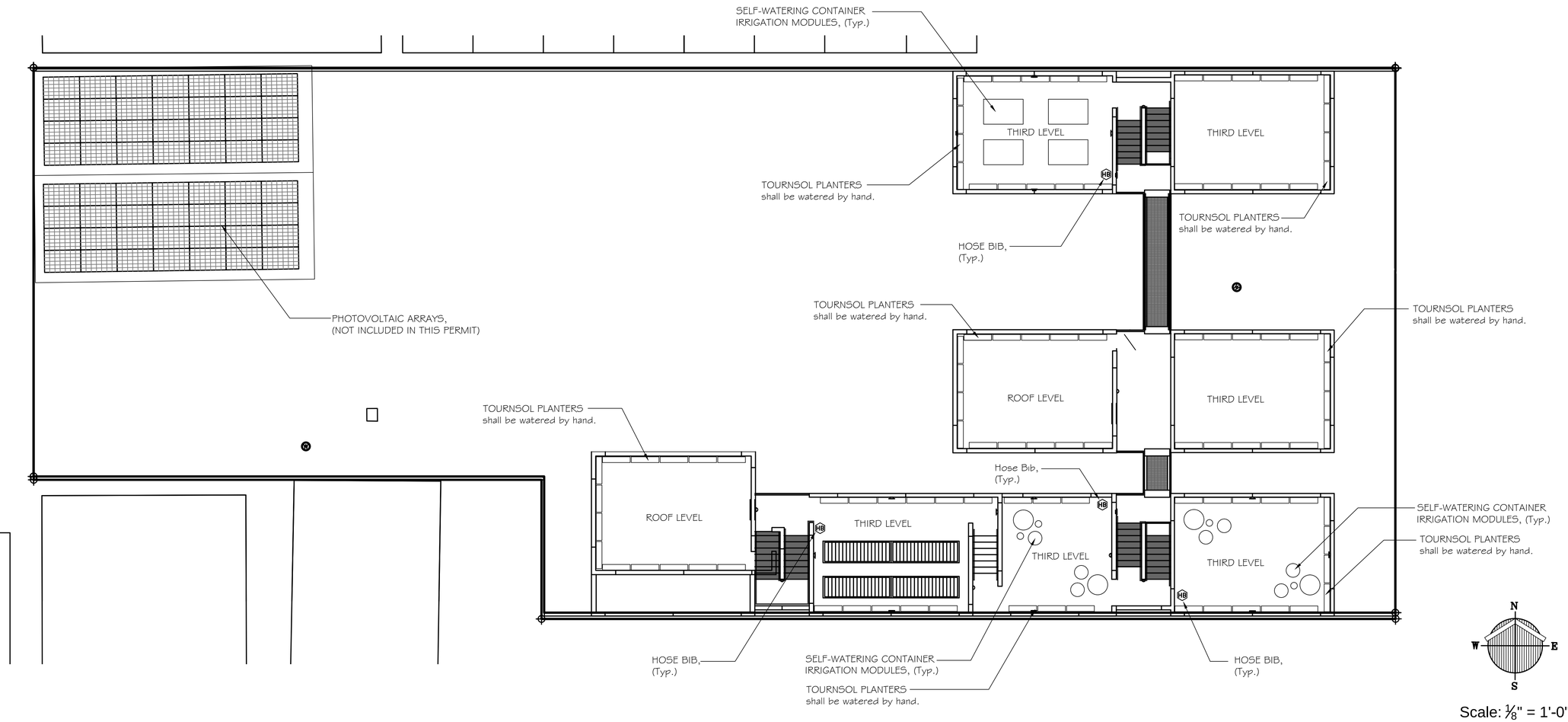
Date
04/10/14 Bid Set

Scale
⅛" = 1'-0"

Drawn
NJ

Job

Sheet Number
L-3



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

Live Roof Standard Trays:
Soil Approx. 4¼" deep
Module Size: 1' x 2' x 3¼"
Saturated Weight: 27-29 lbs / sf saturated vegetated.

Maximum allowable dead weight per structural: 30 psf

NOTE

-VERIFY HOSE BIB LOCATIONS PRIOR TO INSTALLATION.

LICENSED LANDSCAPE ARCHITECT
David R. Black No. 2903
SIGNATURE
06.30.14
RENEWAL DATE
DATE
STATE OF CALIFORNIA

DAVID R. BLACK & ASSOCIATES
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Project
Santa Barbara Center for Art, Science, & Technology
513 Garden Street
Santa Barbara, CA 93101

Sheet Title
Irrigation Plan
Third Floor & Roof Level

Revisions

No.	Date	Revision
	06/12/13	Revision 1

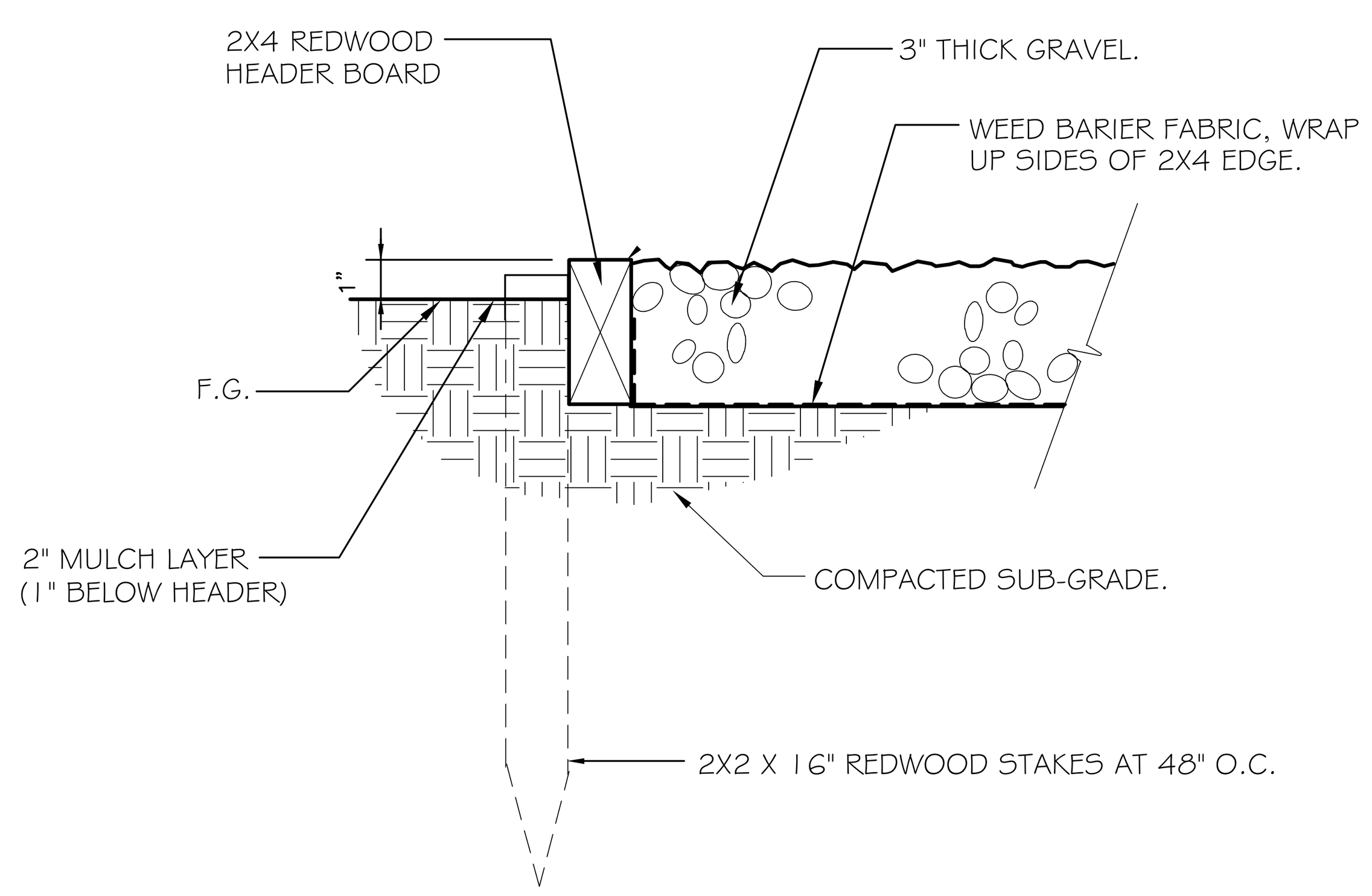
Date
04/10/14 Bid Set

Scale
1/8" = 1'-0"

Drawn
NJ

Job

Sheet Number
L-4



A EDGE AT GRAVEL BIKE PARKING AREA
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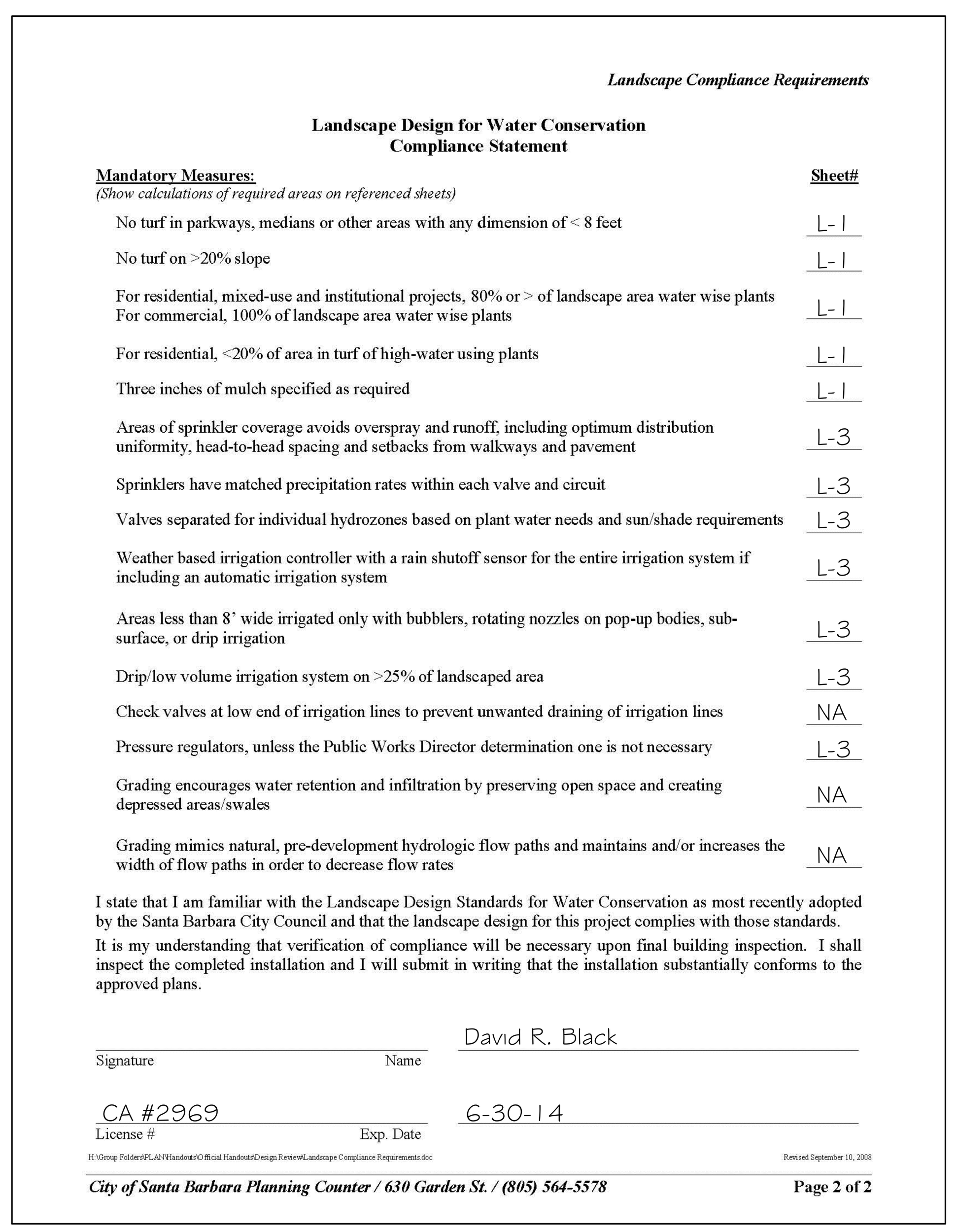

Landscape Compliance Requirements

Landscape Design for Water Conservation
Compliance Statement

Mandatory Measures: *(Show calculations of required areas on referenced sheets)*	Sheet#
No turf in parkways, medians or other areas with any dimension of < 8 feet	L-1
No turf on >20% slope	L-1
For residential, mixed-use and institutional projects, 80% or > of landscape area water wise plants For commercial, 100% of landscape area water wise plants	L-1
For residential, <20% of area in turf of high-water using plants	L-1
Three inches of mulch specified as required	L-1
Areas of sprinkler coverage avoids overspray and runoff, including optimum distribution uniformity, head-to-head spacing and setbacks from walkways and pavement	L-3
Sprinklers have matched precipitation rates within each valve and circuit	L-3
Valves separated for individual hydrozones based on plant water needs and sun/shade requirements	L-3
Weather based irrigation controller with a rain shutoff sensor for the entire irrigation system if including an automatic irrigation system	L-3
Areas less than 8' wide irrigated only with bubblers, rotating nozzles on pop-up bodies, sub-surface, or drip irrigation	L-3
Drip/low volume irrigation system on >25% of landscaped area	L-3
Check valves at low end of irrigation lines to prevent unwanted draining of irrigation lines	NA
Pressure regulators, unless the Public Works Director determination one is not necessary	L-3
Grading encourages water retention and infiltration by preserving open space and creating depressed areas/swales	NA
Grading mimics natural, pre-development hydrologic flow paths and maintains and/or increases the width of flow paths in order to decrease flow rates	NA

I state that I am familiar with the Landscape Design Standards for Water Conservation as most recently adopted by the Santa Barbara City Council and that the landscape design for this project complies with those standards.

It is my understanding that verification of compliance will be necessary upon final building inspection. I shall inspect the completed installation and I will submit in writing that the installation substantially conforms to the approved plans.

Signature ______ Name: David R. Black

License #: CA #2969 Exp. Date: 6-30-14

H:\Group Folders\PLAN\Handouts\Official Handouts\Design Review\Landscape Compliance Requirements.doc — Revised September 10, 2008

City of Santa Barbara Planning Counter / 630 Garden St. / (805) 564-5578 **Page 2 of 2**

Notes

Live Roof

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5. The Contractor shall install the LiveRoof green roof and irrigation system per the manufacturer's standards and specifications as shown on the drawings. The contractor shall coordinate with General Contractor to insure the proper waterproofing and drainage of rooftops as shown on the Architect's drawings.

Plant Notes:

1. All plants are identified by typical symbols. It shall be the responsibility of the Contractor to confirm all plant quantities prior to bidding. In the event of discrepancies in plant count, quantities indicated by plant symbols shall prevail.

2. All plant materials shall be set out as shown on plan. All groundcovers shall be planted to within a distance to the trunks of all trees and shrubs equal to the on-center spacing of the groundcover. Final locations shall be approved by the Landscape Architect prior to planting.

3. All planted areas shall receive decomposed granite mulch. Mulch shall be spread evenly over all shrub and groundcover areas to a minimum depth of three inches (3").

Irrigation Notes:

1. See irrigation legend for a complete description of all symbols shown on this plan.

2. Point of connection (P.O.C.) is at approximate location shown. Provide line size ball valve in valve box. Locate backflow preventor in shrub planting areas and screen with shrubs.

3. Contractor shall provide and install pressure regulator with 0-100 psi gauge on the backflow preventor. Adjust pressure as necessary to ensure optimum irrigation performance.

4. Irrigation system is designed assuming a static water pressure of a minimum of seventy five (70) psi at the point of connection. Prior to installation of irrigation system, Contractor shall verify pressure at point of connection and report any discrepancy to the Project Landscape Architect.

5. It is the intent of the plan to provide adequate irrigation to all planting areas. Contractor shall be responsible for making any and all adjustments to the irrigation system necessary to ensure one hundred percent (100%) irrigation coverage to all planting areas.

6. Irrigation controller shall be wall mounted in locking cabinet at approximate location shown. Provide sweep ells through building wall adequate to accomodate control wires. Verify one hundred-twenty (120) volt electrical source at location indicated prior to bidding.

7. Irrigation controller shall be weather based with rain shutoff sensor component.

8. Valves shall be located in shrub planting areas only. Valves shall be installed in locking plastic valve boxes (green color) adjacent to paved areas (maximum two feet [2'] from edge of pavement) for ease of access. Install one (1) valve per box.

9. All quick couplers shall be located within two feet (2') of pavement for ease of access. Verify final location with Landscape Architect.

10. It shall be the Contractors responsibility to install the irrigation system in accordance with all local codes.

11. Indicated pipe locations are schematic. Do not place pipe under concrete, except where absolutely necessary. Irrigation Contractor shall coordinate pipe installation with other trades.

12. All pipes installed under pavement, through walls or footings shall be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe in the sleeve.

13. Irrigation lines shall be buried at the following minimum depths:
PVC Pressure Mainline..........Eighteen inches (18")
PVC Lateral Line....................Twelve inches (12")

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513 Garden Street
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Sheet Title: Details & Notes

Revisions

No.	Date	Revision

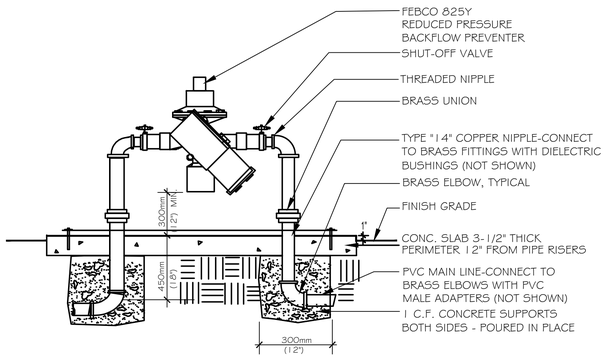
Date: 04/10/14 Bid Set

Scale: ⅛" = 1'-0"

Drawn: NJ

Job:

Sheet Number: L-5



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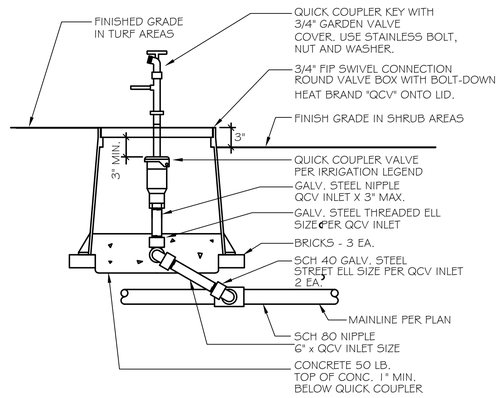

B QUICK COUPLER VALVE
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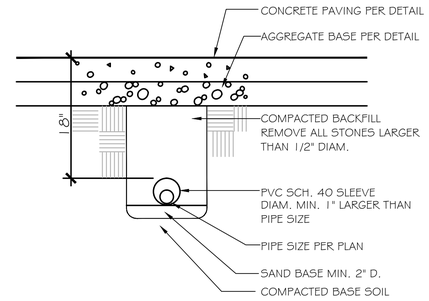

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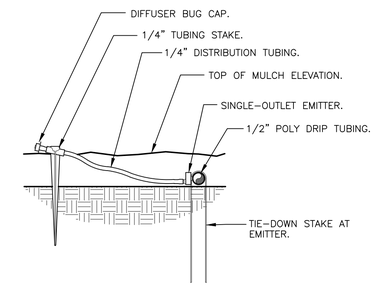

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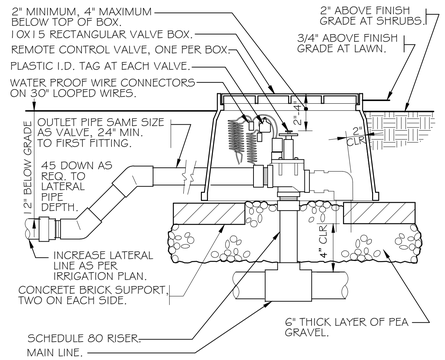

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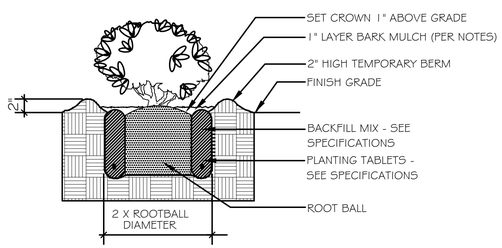

F SHRUB PLANTING AND STAKING
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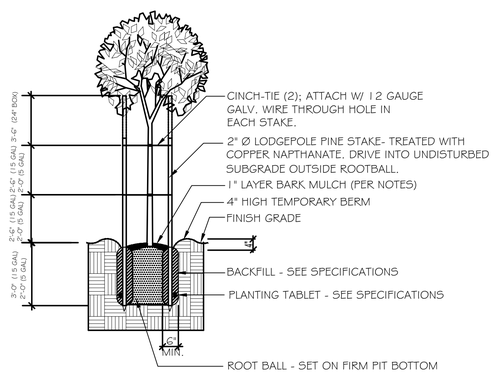

G TREE PLANTING AND STAKING
NOT TO SCALE

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Sheet Title
Planting & Irrigation Details

Revisions

No.	Date	Revision
	06/12/13	Revision 1

Date
04/10/14 Bid Set

Scale
3/4" = 1'-0"

Drawn
NJ

Job

Sheet Number
L-6

6 of 6

LICENSED LANDSCAPE ARCHITECT
DAVID R. BLACK NO. 2978
SIGNATURE
06.30.14
RENEWAL DATE
DATE
STATE OF CALIFORNIA