web\_stc\_001 pg1 of \_\_\_ (07/08)

# **Development Application**

-	MINNESOT		Case no.	79841	7-14	
☐ Standard	Staff approval		pplication  Plan Revision	☐ Amended	☐ Rea	pplication
Rezoning Preliminary D Final Develop	Pevelopment Plan oment Plan	Conditional Use Permit Interim Use Permit Final Site and Building Plan	Variance Comprehensive	e Plan Amendme		ordinance Amendment Subdivision
Property address	Site lo			al descuption at nmon name	lfached	
Business addres						
PIN OZ - OZ	7-24-41	-0065 Lot 001	Block OO I Plat	name		
		Proposal Full documentat				
Exterior	modif	ications to e	xisting ba	ildha.	See	
affache	d narrai	five and elec	patron sh	eet for	- de	tails_
			Compared	1	200 100 100 100 100 100 100 100 100 100	
	Comple	te all applicable sections —		son as primary (	contact	
Primary contact	Owner name per		erty owner RERPRILLER		E-mail dani	èlecpnicos c
Additional	Mailing address 2919	KNOX Ne #200	mpls		State MN	IZMO
owners on Back	Business addres				State M/V	Zio
	Daytime phone	Cell phone	- 644-4391	FAX	612-8	823-7059
	Daniel	Oberpuller	Daniel &	lupull		President
	73	ped/printed name	Signa	ture		Title
<b>₹</b> ₩	Bueipess name/s	Arne I /	occupant ^	E-mail .		
Primary contact	Matting adgress	lasma lim VI	and Cours		jim,v Slage	lane OCSI plasma.
	400 Broke	en Sound Blud. AW Soite a	OlyBola Rat	<b>K</b> i	PL	<sup>20</sup> 33487
	Business address	in Sound Blud. NW	Boiak	uton	State FL	Zip 33487
	Deytime phone	78/.37/8 Cell phon 56/	\$76.8884	FAX		<u> </u>
	Jim	Viane	1-1-	<b></b> `	Din	ector of Engineer
	Ŋ	ped/printed name	Signa	ture		ectivat Engineer Tillo Service
NOTE: Applie	ations only accepted documents. See	ted with ALL required support in Elistractions	Received: Dai	nded areas are	2" Y	
The second secon	Deadline for a	gency action	Reviewed: Del		*	ÚŒ □HE
60 Days: <u>5/</u> 3	7/141	20 Days 7/16/19	Fee pald: De		130	22
Plenner D.	i de la companya de l	во 19/A	Vi and the second secon	le Comm. Dev't-Dir. Other	3y _23-P\∎	nning Div. Meneiger
Community	Development	Planning and Economic Dev. 1800 W. Old Shakopee Road Bloomington MN 55431-3027	PH 952-563-8 FAX 952-563-8 TTY 952-563-8	920 E-MAIL p 949 www.ci.bk	comington.	i.bloomington.mn.us mn.us

Case 7984A-14 Rec 3/19/14

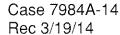
# **Development Application**

Case no.

79844-14

## Complete all applicable sections — Select only ONE person as primary contact

		Additional par	ties			
Primary contact	Business name/name  Mailing address P.O. Box 1005  Business address 900 Johnnie Odds	Architects	Tomare	Smith	E-mail	y.sm. the c now
	Mailing address P.O. Box 1005	City •//	t. Plead	saint	State	Zip 29465 Zip 29465
	Business address 900 Johnnie Godds	D(Jd. #200 City	nt. Flea	asont	State S/L	Zip 29464
	Daytime phone (343) 284 - 070 Z	FAX .				
	Thomas N. Smit	h I	jumil	INS	_ F	resident Title
	Typed/printed name		Signatu			TITIE
	Additional fee property o Business name/name		owners and addresses		E-mail	
	Mailing address	City		· · · · · · · · · · · · · · · · · · ·	State	Zip
	Business address	City			State	Zip
	Daytime phone	Cell phone		FAX		A.A. A.B. A.B.
	Typed/printed name		Signati	ure		Title
	Business name/name				E-mail	
	Mailing address	City		-	State	Zìp
	Business address	City	***************************************		State	Zip
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	Typed/printed name		Signat	ure		Title
	Business name/name				E-mail	
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	Daytime phone	Cell phone	e FAX		x'	
	Typed/printed name		Signal	ture		Title





**Exterior Design Narrative** 

Dennis Fields

City of Bloomington

1800 W. Old Shakopee Road Bloomington, MN 55431-3027

COPY:

TO:

Jim Viane, CSL Plasma

File

VIA:

FedEx

DATE:

March 18, 2014

PROJECT:

CSL BLOOMINGTON, MN

PROJECT NO:

2001-1112.86

FROM:

Amy M Hamrick

SIGNED:

ATTACHMENTS:

**DEVELOPMENT APPLICATION** 

(4) COPIES SHEET A202

\$130 CHECK FOR PROCESSING

RE:

City of Bloomington, MN Administrative Review

#### **REMARKS:**

Mr. Fields,

We are upgrading the exterior facade of the property at 9056 S. Penn Avenue in the following manner:

- Remove existing awning frame system.
- Install new stucco over portions of existing masonry wall with raised corner "feature" element and decorative recessed panels.
- Install new aluminum storefront system with insulated glass.
- Paint existing masonry where remaining exposed.
- Install new pre-engineered metal canopies.
- Install new metal coping.
- Install new wall mounted light fixtures.

# Exterior front wall opening area

Thomas N Smith AIA Debra M Chitwood AIA Joshua C Allison AlA Peggy J Smith CDA

Jerry L Traino AtA

Paul A Fields MCP

Paul R Massengill AIA M Ashley McCormick

Laura K Middleton AlA David J Greer Barrie E King IIDA

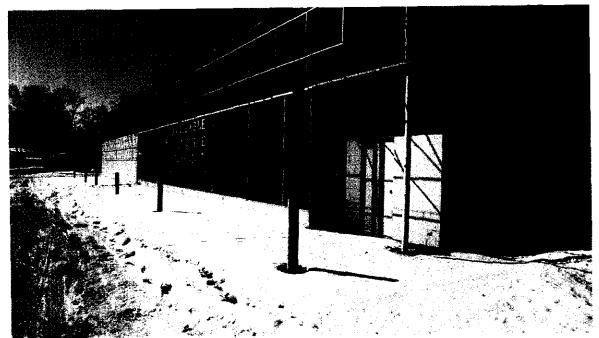
- Existing Total wall area = 2,296 s.f.
  - Opening area = 600 s.f. (26.13%) 0
- Proposed
  - Total wall area (at CSL portion only) = 1,249 s.f. 0
  - Opening area = 466 s.f. (37.31%)

Please see attached photos for existing facade design.

Architecture • Interiors • Planning



Existing front (east) facade



Existing northeast corner



Construction Revision #1

DATE:

April 9, 2014

TO:

General Contractor

PROJECT:

**CSL Plasma New Center** 

Bloomington, MN

FROM:

Ryan Jennings (Novus)

PROJECT NO:

2001-1112.86

NO OF PAGES:

COPY:

Scott Furr (CSL)

Amy Hamrick (Novus)

Debbie Chitwood (Novus)

01 + Attachments

ATTACHMENTS:

S102, S103, L1.0, A100, A101,

A102, A104, A202

Specification Seciton 072419 Specification Section 108213

THIS IS NOT A CHANGE ORDER OR APPROVAL FOR ADDITIONAL COSTS. THE PROJECT MANAGER MUST APPROVE ALL ADDITIONAL COST REVISIONS.

#### DRAWING REVISIONS:

#### Sheet S102: FOUNDATION SLAB PLAN

See revised Sheet S102 for updated floor plan that corresponds with architectural.

## **Sheet S103: ROOF FRAMING PLAN**

See revised Sheet S103 for updated notations.

#### Sheet L1.0: Landscape plan

See revised Sheet L1.0 for landlord landscape plan.

## **Sheet A100: LANDLORD ELVATIONS**

See revised Sheet A100 for landlord elevations. These elevations show finished building facade. Refer to A202 for finishes and notes regarding CSL work vs. landlord work.

Debra M Chitwood AIA Joshua C Allison AlA Peggy J Smith CDA

# Thomas N Smith AIA Sheet A101: DIMENSION PLAN

See revised Sheet A101 for updated wall type schedule and revised floor plan.

Jerry L Traino AIA Paul A Fields MCP

# **Sheet A102: REFERENCE PLAN**

Paul R Massengill AIA M Ashley McCormick See revised Sheet A102 for revised floor plan for inclusion of interior trash storage and location of ships ladder roof access.

Jennifer E Rouse IIDA

# Laura K Middleton AIA Sheet A104: ROOF PLAN

See revised Sheet A104 for screening louvers and decibel levels of hvac equipment.

Michael W Donkle RA Barrie E King IIDA

Architecture + Interiors + Planning

900 Johnnie Dodds Blvd • Suite 200 • PO Box 1005 • Mt Pleasant SC 29465 843 • 849 • 7407 • www.NovusArchitects.com

## **Sheet A202: EXTERIOR ELEVATIONS**

 See revised Sheet A202 for locations of additional storefront to be installed by the landlord.

## **PROJECT MANUAL REVISIONS:**

# Specification Section 072419:

 See specifications section 072419 for EIFS requirements per city comments.

# Roof Screening Specification:

 See specification section 108213 for roof screen assembly as referenced on A104.

# SECTION 072419 - WATER-DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - EIFS-clad drainage-wall assemblies that are field applied over substrate.
  - 2. Water-resistive coatings.

## 1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each EIFS component, trim, and accessory, including water-resistive coatings.
- B. Samples: For each exposed product and for each color and texture specified.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Manufacturer certificates.
- B. Product certificates.
- C. Product test reports.
- D. Field quality-control reports and special inspection reports.
- E. Evaluation reports.

## 1.5 CLOSEOUT SUBMITTALS

A. Maintenance data.

## 1.6 QUALITY ASSURANCE

A. Installer Qualifications: An installer who is certified in writing by EIFS manufacturer as qualified to install manufacturer's system using trained workers.

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by the following:
  - 1. BASF Wall Systems.
  - 2. <u>Dryvit Systems, Inc.</u>
  - 3. Parex USA, Inc.
  - Sto Corp.
- B. Source Limitations: Obtain EIFS from single source from single EIFS manufacturer and from sources approved by EIFS manufacturer as compatible with EIFS components.

#### 2.2 PERFORMANCE REQUIREMENTS

- A. EIFS Performance: Comply with ASTM E 2568 and ICC-ES AC219 and with the following:
  - Weathertightness: Resistant to uncontrolled water penetration from exterior, with a means to drain water entering EIFS to the exterior.
  - Impact Performance: ASTM E 2568, Standard impact resistance, unless otherwise indicated.
  - 3. Bond Integrity: Free from bond failure within EIFS components or between EIFS and substrates, resulting from exposure to fire, wind loads, weather, or other in-service conditions.

## 2.3 EIFS MATERIALS

- A. Primer/Sealer: EIFS manufacturer's standard substrate conditioner designed to protect substrates from moisture penetration and to improve the bond between substrate and insulation adhesive.
- 3. Water-Resistive Coatings: EIFS manufacturer's standard formulation and accessories for use as water-resistive barriers; compatible with substrate and complying with physical and performance criteria of ASTM E 2570.
- C. Flexible-Membrane Flashing: Cold-applied, self-adhering, self-healing, rubberized-asphalt and polyethylene-film composite sheet or tape and primer; EIFS manufacturer's standard or product recommended in writing by EIFS manufacturer.
- D. Insulation Adhesive: EIFS manufacturer's standard formulation designed for indicated use; specifically formulated to be applied to back side of insulation in a manner that creates open vertical channels designed to serve as an integral part of the water-drainage system of the EIFS-clad drainage-wall assembly, compatible with substrate.
- E. Molded, Rigid Cellular Polystyrene Board Insulation: Comply with ASTM C 578, Type I.
  - 1. Foam Build-Outs: Provide with profiles and dimensions indicated on Drawings.
- F. Reinforcing Mesh: Balanced, alkali-resistant, open-weave, glass-fiber mesh treated for compatibility with other EIFS materials, made from continuous multiend strands with retained mesh tensile strength of not less than 120 lbf/in. (21 dN/cm) according to ASTM E 2098.

072419 -

- G. Base-Coat Materials: EIFS manufacturer's standard mixture.
- H. Waterproof Adhesive/Base-Coat Materials: EIFS manufacturer's standard waterproof formulation.
- I. Primer: EIFS manufacturer's standard factory-mixed, elastomeric-polymer primer for preparing base-coat surface for application of finish coat.
- J. Finish-Coat Materials: EIFS manufacturer's standard acrylic-based coating.
  - Colors: Refer to drawings
  - Textures: As selected by Architect from manufacturer's full range.
- K. Trim Accessories: Type as designated or required to suit conditions indicated and to comply with EIFS manufacturer's written instructions; manufactured from UV-stabilized PVC; and complying with ASTM D 1784, manufacturer's standard cell class for use intended, and ASTM C 1063.

## PART 3 - EXECUTION

## 3.1 EIFS INSTALLATION

- A. Comply with ASTM C 1397, ASTM E 2511, and EIFS manufacturer's written instructions for installation of EIFS as applicable to each type of substrate indicated.
- B. Trim: Apply trim accessories at perimeter of EIFS, at expansion joints,[at windowsills,] and elsewhere as indicated. Coordinate with installation of insulation.
- C. Board Insulation: Adhere insulation to substrate in compliance with ASTM C 1397 and the following:
  - Apply adhesive to insulation by notched-trowel method, with notches oriented vertically to produce drainage channels that remain functional after the insulation is adhered to substrate.
  - Coordinate installation of flashing and insulation to produce wall assembly that does not allow water to penetrate behind flashing and water-resistive barrier.
- D. Expansion Joints: Install at locations indicated and where required by EIFS manufacturer.
- E. Waterproof Adhesive/Base Coat: To exposed surfaces of insulation, apply in minimum thickness recommended in writing by EIFS manufacturer over where indicated on Drawings.
- F. Base Coat: Apply to exposed surfaces of insulation and foam build-outs in minimum thickness recommended in writing by EIFS manufacturer.
- G. Reinforcing Mesh: Embed reinforcing mesh in wet base coat to produce wrinkle-free installation with mesh continuous at corners, overlapped not less than 2-1/2 inches (64 mm) or otherwise treated at joints to comply with ASTM C 1397 and EIFS manufacturer's written instructions. Do not lap reinforcing mesh within 8 inches (204 mm) of corners. Completely embed mesh, applying additional base-coat material if necessary, so reinforcing-mesh color and pattern are invisible.

- H. Double-Layer Reinforcing-Mesh Application: Where indicated or required, apply second base coat and second layer of reinforcing mesh, overlapped not less than 2-1/2 inches (64 mm) or otherwise treated at joints to comply with ASTM C 1397 and EIFS manufacturer's written instructions in same manner as first application. Do not apply until first base coat has cured.
- Additional Reinforcing Mesh: Apply strip reinforcing mesh around openings, extending 4 inches (100 mm) beyond perimeter. Apply additional 9-by-12-inch (230-by-300-mm) strip reinforcing mesh diagonally at corners of openings (re-entrant corners). Apply 8-inch- (200-mm-) wide, strip reinforcing mesh at both inside and outside corners unless base layer of mesh is lapped not less than 4 inches (100 mm) on each side of corners.
- J. Foam Build-Outs: Fully embed reinforcing mesh in base coat.
- K. Double Base-Coat Application: Where indicated, apply second base coat in same manner and thickness as first application, except without reinforcing mesh. Do not apply until first base coat has cured.
- L. Primer: Apply over dry base coat according to EIFS manufacturer's written instructions.
- M. Finish Coat: Apply over dry primed base coat, maintaining a wet edge at all times for uniform appearance, in thickness required by EIFS manufacturer to produce a uniform finish of color and texture matching approved sample and free of cold joints, shadow lines, and texture variations.

#### 3.2 FIELD QUALITY CONTROL

- A. Special Inspections: Engage a qualified special inspector to perform the following special inspections:
  - 1 As stipulated in Ch. 17 of the IBC.
  - 2. According to ICC-ES AC24.
- B. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- C. EIFS will be considered defective if it does not pass tests and inspections.

**END OF SECTION 072419** 

# GUIDE SPECIFICATION

Manufacturer:
CityScapes Inc.
4200 Lyman Court
Hilliard, Ohio 43026
(877) 727-3367 toll free
(800) 726-4817 facsimile
www.cityscapesinc.com

## 3 PART SPEC 10 82 13 [10240]

## **ROOF TOP EQUIPMENT SCREENS**

This guide specification has been prepared by CityScapes Inc. in printed and electronic media, as an aid to specifiers in preparing written construction documents for the Envisor custom fabricated equipment screens intended to be hung from roof top mechanical units. All major roof top hvac unit manufacturer's have approved the use of these screens. Major advantages of the system are two fold. First, costly parapet walls around perimeter of building can be reduced in height since they no longer need to serve as equipment screens. Second, since there are no roof top penetrations associated with this system, potential leaks are eliminated and re-roofing is made considerably easier. Edit entire master to suit project requirements. Modify or add items as necessary. Delete items which are not applicable. Words and sentences within brackets [\_\_\_\_] reflect a choice to be made regarding inclusion or exclusion of a particular item or statement. This section may include performance, proprietary, and descriptive type specifications. Edit to avoid conflicting requirements. Editor notes to guide the specifier are included between lines of asterisks to assist in choices to be made. Remove these notes before final printing of specification. This guide specification is written around the Construction Specifications Institute (CSI), Section Format standards references to section names and numbers are based on MasterFormat 2004. 5 digit numbers are listed in brackets in cast specifier prefers to use MasterFormat 1997. For specification assistance on specific product applications, please contact our offices above. Dimensions shown are hard imperial with soft metric conversions in parenthesis. CityScrapes Inc. reserves the right to modify these guide specifications at any time. Updates to this guide specification will be posted to CityScapes' web site and/or in printed matter as they occur. Manufacturer and distributor make no expressed or implied warranties regarding content, errors, or omissions in the information presented. 

#### PART 1 - GENERAL

- 1.01 SUMMARY
  - A. Section Includes:
    - Pre-formed thermoplastic panel for enclosing roof top mechanical equipment.
    - 2. Aluminum assembly framing for direct attachment of screening panels to mechanical equipment; no base or curb required unless shown otherwise on drawings.
      - Sliding panels to permit easy access to mechanical equipment for servicing
  - B. Products Not Installed or Furnished in This Section:

- 1. Touch-up painting required for scratches and screw heads.
- 2. Field painting of prime painted screens

Utilize the following reference if roof screen system is to be bid as an alternate to conventional roof mounted screens or as an alternate to lowering parapet walls.

#### C. Related Sections:

1. Refer to Alternates, Section 01 23 00 [01230], for direction regarding bidding of equipment screens as alternates.

## 1.02 REFERENCES

- A. American Society for Testing and Materials: Standard Specifications for
  - ASTM B 221-96 Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire Profiles, and Tubes.
- B. The Aluminum Association, Inc.
  - 1. AA ADM-1516166 (1994) Aluminum Design Manual
- C. American Society of Civil Engineers.
  - ASCE 7-95 Minimum Design Loads for Buildings and Other Structures.

## 1.03 SYSTEM DESCRIPTION

- A. Design Criteria:
  - 1. Manufacturer is responsible for the structural design of all materials, assembly and attachments to resist snow, wind, suction and uplift loading at any point without damage or permanent set.
  - 2. Framing shall be designed in accordance with the Aluminum Design Manual to resist the following loading:
    - a. ASCE 7-95 Minimum Design Loads for Buildings and Other Structures; American Society of Civil Engineers.

#### 1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's catalog data, detail sheets, specification and other data sufficient to indicate compliance with these specifications.
- B. Shop Drawings: Indicate layouts heights, component connection details, and details of interface with adjacent construction. Mark data to indicate:
  - Roof top mechanical equipment to be enclosed.
- C. Samples:
  - 1. Samples of Materials: Thermoplastic panels.
  - 2. Color Selection: Submit paint chart with full range of colors available for Architect's selection.
- D. Certification: Manufacturer's Certificate of Compliance certifying that thermoplastic panels supplied meet or exceed requirements specified.
- E. Closeout Submittals: Warranty documents, issued and executed by manufacturer, countersigned by Contractor.

#### 1.05 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with requirements of building authorities having jurisdiction in Project location.
- B. Manufacturer Qualifications: Minimum five (5) years documented experience producing systems specified in this section.
- C. Pre-Installation Meeting:
  - 1. Convene at job site seven (7) calendar days prior to scheduled beginning of construction activities of this section to review requirements of this section.
  - Require attendance by representatives of the installing subcontractor, (who will represent the system manufacturer) and other entities directly affected by construction activities of this section.
  - Notify Architect four (4) calendar days in advance of scheduled meeting date.

10 82 13-1

#### DELIVERY, STORAGE AND HANDLING 1.06

- Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, A. with labels clearly indicating manufacturer and material.
- Storage and Handling: Protect materials and finishes during handling and installation to prevent B. damage.

#### 1.07 PROJECT CONDITIONS

Field Measurements: Take measurements of actual roof top unit for fit without gaps. Indicate Α. measurements on shop drawings fully documenting any field condition that may interfere with the screen system installation.

#### COORDINATION 1.08

- Installer for work under this Section shall be responsible for coordination of panel and framing sizes Α. and required options with the Contractor's requirements.
  - Request information on sizes and options required from the Contractor.
- Submit shop drawings to the Contractor and obtain written approval of shop drawing from the B. Contractor prior to fabrication.

#### WARRANTY 1.09

- If any part of the rooftop equipment screen fails because of a manufacturing defect within one year Α. from the date of substantial completion, the manufacturer will furnish without charge the required replacement part(s). Any local transportation, related service labor or diagnostic call charges are not included.
- This warranty does not cover failure of your rooftop equipment screen if it is damaged by the B. Owner, or if the failure is caused by improper installation. In no event shall Warrantor be liable for incidental or consequential damages.

## PART 2 - PRODUCTS

#### MANUFACTURERS 2.01

- Acceptable Products: Envisor Screening System by CityScapes Incorporated, 4200 Lyman Ct. Α. Hilliard, OH 43026. 1-877-727-3367 www.cityscapesinc.com
- Substitutions: Submit in accordance with Section 01 25 00 [01600]. В.

#### **MATERIALS** 2.02

- Thermoformed Plastic Panels: Fabricated from rigid medium impact thermo-formed ABS (Acrylic Α. Butylene Styrene) sheets.
  - Minimum thickness: 3/16 inch (18 mm).
- Framing: Aluminum Plate, Shapes and Bar: ASTM B 221, alloy 6061-T5 or 6063-T5. B.
- Threaded Fasteners: All screws, bolts, nut and washers shall be Stainless steel. C.
  - Corner assembly fasteners shall be #10-16 x stainless steel TEK screws. Length as required to develop full holding capacity of screw when fastened to Mechanical Equipment.
  - Provide lock washer or other locking device at all bolted connections.

#### **FABRICATION** 2.03

- Provide factory-formed panel systems with continuous interlocking panel connections and indicated Α. or necessary components: Form all components true to shape, accurate in size, square and free from distortion or defects. Cut panels to precise lengths indicated on approved shop drawings.
- Fabricate all panels to slide horizontally to allow access to unit access panels behind. В.

C.	Panel Design, Style, Trim:
*****	Pale Desgi, syle, iiii.
Make s	elections below from manufacturer's full available options. Panel styles and design can also be custom
fabrica	ted to customer's preferences. Decorative top trims are optional.

Panel Style: [Vertical] [Canted] [Stacked] [Custom].

Architect's Project	No. [	1	
Envisor Screening	System	Master	Specification

- 2. Panel Design: [Batten] [Brick] [Louver] [Pan] [Wide Rib] [Custom]
- 3. Decorative Top Trim Profile: [Cove] [Alamo] [Step 1] [Step 2] [Flat]
- D. Trim and Closures: Fabricated from 24 gage metal, and finished with the manufacturers standard coating system, unless shown otherwise on drawings.
- E. Framing: Fabricate and assemble components in largest practical sizes, for delivery to the site.
  - 1. Construct corner assemblies to required shape with joints tightly fitted.
  - 2. Supply components required for anchorage of framing. Fabricate anchors and related components of material and finish as required, or as specifically noted.

Select either 2.04B 1 or 2 below depending on color selected. Contact manufacturer for minimum order for custom colors. Standard colors include 14 available options.

#### 2.04 FINISHES

- A. Aluminum Framing: Mill finish.
- B. Panel Coating: Manufacturer's standard coating system, factory-applied.
  - 1. Color: Selected from full range of manufacturer's standard colors.
  - 2. [Color: Custom color as selected by Architect.]

#### **PART 3 - EXECUTION**

#### 3.01 EXAMINATION

- A. Installer's Examination: Examine conditions under which construction activities of this section are to be performed.
  - Submit written notification to Architect and Screen manufacturer if such conditions are unacceptable.
  - 2. Beginning erection constitutes installer's acceptance of conditions.

## 3.02 INSTALLATION

- A. Install units in accordance with the manufacturer's instructions and approved shop drawings. Keep perimeter lines straight, plumb, and level. Provide brackets, anchors, and accessories necessary for a complete installation.
- B. Fasten structural supports to HVAC units without damaging operation of the unit.
  - 1. Provide corner and mid-span assemblies as required by approved shop drawings so that the panels are supported uniformly.
  - 2. Fastening bottom rail using bolts to permit ease of access to HVAC units.
- C. Insert thermoplastic panels into structural supports, except where fixed attachment points are indicated. Butt thermoplastic panels to adjacent panels for uniform fit. Fasten fixed panels in accordance with the shop drawings.
- D. Metal Separation: Where aluminum materials would contact dissimilar materials, insert rubber grommets at attachment points, thus eliminating where dissimilar metals would otherwise be in contact.
- E. Do not cut or abrade finishes which cannot be restored. Return items with such finishes to shop for required alterations.

#### 3.03 ERECTION TOLERANCES

A. Maximum misalignment from true position: 1/4 inch (12 mm).

## 3.04 CLEANING AND PROTECTION

- A. Remove all protective masking from material immediately after installation.
- B. Protection:
  - Ensure that finishes and structure of installed systems are not damaged by subsequent construction activities.

10 82 13-1

- 2. If minor damage to finishes occurs, repair damage in accordance with manufacturer's recommendations; provide replacement components if repaired finishes are unacceptable to Architect.
- C. Prior to Substantial Completion: Remove dust or other foreign matter from component surfaces; clean finishes in accordance with manufacturer's instructions.
  - 1. Clean units in accordance with the manufacturer's instructions.

**END OF SECTION** 



**Agency Response** 

Sandy Harvey AGENCY:

City of Bioomington Plan Examiner

Londell Pease City of Bloomington Planning Division

PROJECT NO:

DATE:

PROJECT:

2001-1112.86

April 9, 2014

CSL Bloomington, MN

**PROJECT** ADDRESS: 9065 S Penn Ave Bloomington, MN 55431 RESPONSE BY:

Thomas N Smith MN License #: 44403

ATTACHMENTS:

Addendum #1 and Construction

Revision #1

## Agency Comments:

1. Has it been determined yet which alternates noted will be part of the project?

## Response:

Per the project award the alternates accepted are numbers (#'s): 1, 5, 6, 8, & 10.

2. Has anyone applied yet for a SAC (Sewer Availability Charge) review with the Metropolitan Council? Their review time runs about 10 days. Permit cannot be issued without the completed review.

## Response:

Per Karon Cappaert, a Sewer Availability Charge letter was sent to the City of Bloomington April 27. There were no SAC due.

3. Page A101 Grid 1-C shows a freezer wall extending to the exterior wall. The structural plan does not indicate the same footprint. Is the structural plan correct as noted?

#### Response:

Refer to revised sheet S102 for corrections to the structural plan to match the Architectural Floor Plan.

4. I know our Planning Division is working with you on the exterior elements of the project for various ordinances that will apply. Per the building code I will need the specific EIFS product that will be used accompanied by the ICC report and manufacturers installation instructions.

nos N Smith AIA ya M Chitwood AlA ua C Allison AiA igy J Smìth CDA

erry L Traino AIA **JULA Fields MCP** 

₹ Mossengill AIA nley McCormick

Middleton AIA fer E Rouse IIDA

iel W Donkle RA

Architecture • Interiors • Planning

Response:

Refer to the following addressing the various ordinances which apply to the exterior building elements:

- Revised sheet A202, and as a part of CR #1, additional glazing/ opening area at the front of the building has been shown as part of the construction scope of work. See also Sheet A100 from landlord's architect showing finished facade concept to be completed before Certificate of Occupancy will be issued.
- Revised sheet A104 and attached specification for screening louvers for the roof top equipment.
- Revised sheet A104 and sound testing information attached in CR #1, the decibel ratings are indicated as they relate to distance from the roof top equipment..
- Site lighting is being coordinated by the landlord and DJR
   Architecture, Inc., to be addressed in a separate submission. Site lighting work to be completed prior to Certificate of Occupancy.
- Revised sheet A102 for location of new trash storage in adjacent tenant space. CSL Plasma space currently provides trash storage in the Biohazard room and additional trash storage is not required per attached e-mail from Dennis Fields, City Planner.

Refer to the attached EIFS specification section with ICC report and manufacturers installation instructions for the EIFS to be used on the project.

The building does not currently appear to have a roof hatch. Your proposal does not meet the Minnesota Mechanical code for access to the roof. (Please see the code section provided.)

Response:

Refer to revised drawings for location of the roof hatch and attached shop drawing for ships ladder detail accessing the roof hatch per the Minnesota Mechanical code.

 Page A101. Wall 7.2 in the bathroom makes no mention of insulation. Is wall 7.2 being placed in front of 7.1. Please clarify.

Response:

Refer to revised sheet A101 Wall Types schedule indicating that wall type 7.2 shall receive thermal insulation.

7. Accessible handicap signage must be placed on wall of building to meet the MN Accessibility Code. (Please see code provided.)

Response:

Handlcap parking spaces shall be identified with signage to meet the requirements of the MN Accessibility Code.

8. Page S103 Grid E-6 has a question posed on plan. Is that resolved and can it be removed?

Response:

Refer to revised sheet S103 for elimination of the question that was mistakenly placed on the sheet.

Signature



Addendum #1 DATE: March 19, 2014

TO: All bidders (via CSL) PROJECT: CSL Plasma New Center

Bloomington, MN

FROM: Ryan Jennings (Novus) PROJECT NO: 2001-1112.86

COPY: Scott Furr (CSL) NO OF PAGES: 2 + attachments

Mark McCormick (CSL) Debbie Chitwood (Novus) Tommy Smith (Novus) Amy Hamrick (Novus)

ATTACHMENTS: D101; A103

Specification Sections 077233

079200, 087100

This addendum forms a part of the Contract Documents and modifies the original drawings / specifications, cover sheet dated, January 30, 2014. The bid date will remain unchanged.

#### DRAWING REVISIONS:

#### **Sheet D101 DEMO SHEET:**

See revised sheet D101 for updated demolition scope.

## **Sheet A103 REFLECTED CEILING PLAN:**

See revised sheet A103 for updated luminous ceiling panel location.

## **PROJECT MANUAL REVISIONS:**

## Specification Section 077233 Roof Hatch:

 See attached sample roof hatch specification to be used in lieu of currently specified roof hatch. In addition a 60 degree ships ladder should be priced in lieu of the current ladder. A revised location of the hatch and ladder will be determined prior to construction.

## Specification Section 079200 Joint Sealants:

See attached specification section for joint sealants.

## Specification Section 087100 Door Hardware:

See revised Door Hardware specification with acceptable manufacturers listed.

## **BIDDER QUESTIONS:**

- Can round duct be used in lieu of designed rectangular duct work? Round duct can be used in lieu of rectangular duct as long as design criteria is met with duct sizes and no ceiling heights are affected by using round ductwork.
- 2. Under landlord work are the exterior canopies under General Contractor scope or landlord scope? The existing canopies will be removed by the landlord, the new exterior metal canopies are to be done under the GC scope of work.
- 3. Is door hardware substitution allowed? Please provide per updated 087100 Specification

Barrie E King IIDA 3. 15 GOOT TRAIG

Thomas N Smith AIA Debra M Chitwood AIA Joshua C Allson AIA Peggy J Smith CDA

Jerry L Traino AfA

Paul A Fields MCP

Paul R Massengill AIA

M Ashley McCormick

Laura K Middleton AIA

Jennifer E Rouse IIDA

Michael W Donkle RA

Architecture • Interiors • Planning

#### Section.

- 4. The plans show an 800 Amp utility service coming into the building in the southwest corner. Currently the 400 Amp service is coming into the building in at the west wall near grid line C. The work is not specifically called out under G001 as part of the "separate utilities for CSL's suite and adjacent space". Per Jim Fann, DWG provide the 800A 208/120V service as shown on the plans. The service is to be priced to be provided by the GC per E400.
- 5. Where are luminous panels to be installed per the specifications? Please see revised A103 for locations of LTC-1.
- 6. What type of insulation should be used for acoustical insulation referred to on A103? See specification secit092900 2.5 for sound attenuation blanket information.

## **SECTION 077233 ROOF HATCHES**

#### **PART 1 GENERAL**

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Prefabricated roof hatches.
- B. Related Sections:
  - 1. Division 07 Section Membrane Roofing
  - 2. Division 07 Section Prefinished Flashing and Sheet Metal: Flashing roof hatches to roof
  - 3. Division 09 Section Painting: Field painting.

#### 1.2 SUBMITTALS

A. Product Data: For each type of product indicated. Include construction details, materials, dimensions of individual components and profiles, and finishes.

#### **QUALITY ASSURANCE** 1.3

- A. Standards: Comply with the following:
  - 1. SMACNA's "Architectural Sheet Metal Manual" details for fabrication of units, including flanges and cap flashing to coordinate with type of roofing indicated.
  - 2. NRCA's "Roofing and Waterproofing Manual" details for installing units.

#### **PART 2 PRODUCTS**

#### **MANUFACTURERS** 2.1

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Roof Hatches (RH-1):
    - a. Bilco Company.
    - b. Babcock-Davis Hatchways
    - c. Milcor Incorporated
    - d. Nystrom Products.

#### **ROOF HATCHES**

- A. Product: Bilco Company: Type L-20, Stair Access
  - 1. Size: 2 feet 6 inches by 8 feet.

# 2.3 ROOF HATCH FABRICATION

- A. Performance characteristics:
  - 1. Cover: Reinforced to support a minimum live load of 40 psf with a maximum deflection of 1/150th of the span or 20 psf wind uplift.
  - 2. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.
  - Operation of the cover shall not be affected by temperature.
  - 4. Entire scuttle shall be weathertight with fully welded corner joints on cover and curb.

- B. Cover: 14 gauge paint bond G-90 galvanized steel with a 3" beaded flange with formed reinforcing members. Cover shall have a heavy extruded thermoplastic rubber gasket fitted into a retainer that is mechanically fastened to the cover interior to assure a continuous seal when compressed to the top surface of the curb.
- C. Cover insulation: Fiberglass of 1" thickness, fully covered and protected by a metal liner 22 gauge paint bond G-90 galvanized steel.
- D. Curb: 12" in height and of 14 gauge paint bond G-90 galvanized steel. Curb formed with a 3-1/2" flange with 7/16" holes provided for securing to the roof deck.
  - 1. Equipped with an integral metal cap flashing of the same gauge and material as the curb, fully welded at the corners, with flashing system, including stamped tabs, 6" on center, to be bent inward to hold roofing membrane securely in place.
- E. Curb insulation: Rigid, high-density fiberboard of 1 inch thickness on outside of curb.
- F. Lifting mechanisms: Manufacturer's compression spring operators enclosed in telescopic tubes to provide, smooth, easy, and controlled cover operation throughout the entire arc of opening and closing. The lower tube shall interlock with a flanged support shoe [for aluminum construction: welded to the curb assembly; for steel construction: through bolted to the curb assembly].
- G. Hardware
  - 1. Hinges: Heavy pintle type.
  - 2. Cover: Equipped with a spring latch with interior and exterior turn handles.
  - 3. Roof scuttle: Equipped with interior padlock hasps.
  - 4. Latch strike: Stamped component bolted to the curb assembly.
  - 5. Cover: Automatically lock in the open position with a rigid hold open arm equipped with a 1" diameter red vinyl grip handle to permit easy release for closing.
  - 6. Compression spring tubes: Constructed of anti-corrosive composite material.
  - 7. Other hardware: Zinc plated and chromate sealed.
  - 8. Springs: Electrocoated acrylic finish for corrosion resistance.
  - 9. Cover hardware: Bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.
- H. Finishes: Factory primed alkyd based red oxide primed steel with baked enamel finish paint system. Color selected from manufacturers standard colors.

#### **PART 3 EXECUTION**

#### 3.1 INSPECTION

A. Verify that roof scuttle installation will not disrupt other trades. Verify that the substrate is dry, clean, and free of foreign matter. Report and correct defects prior to any installation.

#### 3.2 INSTALLATION

- A. Install roof hatches in accordance with manufacturer's recommendations.
- B. Coordinate with installation of roofing system and related flashings. Provide weather tight installation.
- C. Anchor units securely to supporting structural substrates, adequate to withstand lateral and thermal stresses as well as inward and outward loading pressures.
- D. Test operate units and adjust for proper operation.
- E. Clean and lubricate joints and hardware.

#### **END OF SECTION 077233**

## SECTION 079200 - JOINT SEALANTS

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Silicone joint sealants.
  - 2. Urethane joint sealants.
  - Latex joint sealants.
  - Preformed joint sealants.

# 1.3 PRECONSTRUCTION TESTING

- A. Preconstruction Compatibility and Adhesion Testing: Submit to joint-sealant manufacturers, for testing indicated below, samples of materials that will contact or affect joint sealants.
  - Use manufacturer's standard test method to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
  - Submit not fewer than eight pieces of each kind of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
  - 3. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  - 4. For materials failing tests, obtain joint-sealant manufacturer's written instructions for corrective measures including use of specially formulated primers.
  - 5. Testing will not be required if joint-sealant manufacturers submit joint preparation data that are based on previous testing, not older than 24 months, of sealant products for adhesion to, and compatibility with, joint substrates and other materials matching those submitted.

#### 1.4 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Joint-Sealant Schedule: Include the following information:
  - 1. Joint-sealant application, joint location, and designation.
  - Joint-sealant manufacturer and product name.
  - Joint-sealant formulation.
  - Joint-sealant color.

- D. Qualification Data: For qualified Installer.
- E. Product Certificates: For each kind of joint sealant and accessory, from manufacturer.
- F. Sealant, Waterproofing, and Restoration Institute (SWRI) Validation Certificate: For each sealant specified to be validated by SWRI's Sealant Validation Program.
- G. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.
- H. Preconstruction Compatibility and Adhesion Test Reports: From sealant manufacturer, indicating the following:
  - 1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility and adhesion with joint sealants.
  - 2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.
- I. Warranties: Sample of special warranties.

#### 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.
- C. Product Testing: Test joint sealants using a qualified testing agency.
  - Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.
  - 2. Test according to SWRI's Sealant Validation Program for compliance with requirements specified by reference to ASTM C 920 for adhesion and cohesion under cyclic movement, adhesion-in-peel, and indentation hardness.

## 1.6 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
  - When joint substrates are wet.
  - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  - Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

#### 1.7 WARRANTY

- A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer's standard form in which joint-sealant manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period for Silicone Sealants: 20 years from date of Substantial Completion.
  - 2. Warranty Period for Urethane Sealants: 5 years from date of Substantial Completion.
- C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
  - 1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
  - 2. Disintegration of joint substrates from natural causes exceeding design specifications.
  - 3. Mechanical damage caused by individuals, tools, or other outside agents.
  - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

#### PART 2 - PRODUCTS

## 2.1 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. VOC Content of Interior Sealants: Provide sealants and sealant primers for use inside the weatherproofing system that comply with the following limits for VOC content when calculated according to 40 CFR 59, Part 59, Subpart D (EPA Method 24):
  - 1. Architectural Sealants: 250 g/L.
  - 2. Sealant Primers for Nonporous Substrates: 250 g/L.
  - 3. Sealant Primers for Porous Substrates: 775 g/L.
- C. Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- D. Stain-Test-Response Characteristics: Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- E. Suitability for Contact with Food: Where sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.

F. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

#### 2.2 SILICONE JOINT SEALANTS

- A. Single-Component, Nonsag, Neutral-Curing Silicone Joint Sealant: ASTM C 920, Type S, Grade NS, Class 100/50, for Use NT.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Dow Corning Corporation; 790.
    - b. GE Advanced Materials Silicones; SilPruf LM SCS2700.
    - c. Pecora Corporation; 890.
    - d. Sika Corporation, Construction Products Division; SikaSil-C990.
    - e Tremco Incorporated; Spectrem 1.

#### 2.3 URETHANE JOINT SEALANTS

- A. Single-Component, Pourable, Traffic-Grade, Urethane Joint Sealant: ASTM C 920, Type S, Grade P, Class 25, for Use T.
  - Products:
    - a. BASF Building Systems; Sonolastic SL 1.
    - b. Bostik, Inc.; Chem-Calk 950.
    - c. Pecora Corporation; Urexpan NR-201.
    - d. Sika Corporation. Construction Products Division; Sikaflex 1CSL.
    - e. Tremco Incorporated, Vulkem 45.
- B. Single-Component, Nonsag, Urethane Joint Sealant: ASTM C 920, Type S, Grade NS, Class 25, for Use NT.
  - 1. Products:
    - a. Sika Corporation, Inc.; Sikaflex 1a.
    - b. BASF Building Systems; Sonolastic NP1.
    - c. Tremco; Vulkem 116.
- C. Multicomponent, Nonsag, Urethane Joint Sealant: ASTM C 920, Type M, Grade NS, Class 25, for Use NT.
  - 1. Products:
    - a. BASF Building Systems; Sonolastic NP 2.
    - b. Bostik, Inc.; Chem-Calk 500.
    - c. Pecora Corporation; Dynatrol II.
    - d. Tremco Incorporated; Dymeric 240.
    - e. Sika Corporation, Construction Products Division; Sikaflex 2c NS.
- D. Rapid Cure Joint Sealant: ASTM C 920, Type M, Grade NS, Class 50.
  - 1. Product: Concrete Sealants, Inc.; Conseal CS-1500.

## 2.4 LATEX JOINT SEALANTS

- A. Latex Sealant: Comply with ASTM C 834, Type P, Grade NF.
- B. Products:
  - 1. Pecora Corporation; AC-20+.
  - 2. Sonneborn, Division of ChemRex Inc.; Sonolac.
  - Tremco: Tremflex 834.

#### 2.5 PREFORMED JOINT SEALANTS

- A. Preformed Foam Joint Sealant: Manufacturer's standard preformed, closed-cell foam sealant manufactured from isomeric polymers. Factory produce fit joint widths indicated; conforms to ASTM D5249, type 2...
  - 1. Products: Subject to compliance with requirements, provide the following:
    - a. W.R. Meadows; Ceramar Flexible Foam Expansion Joint.

## 2.6 JOINT-SEALANT BACKING

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin) or other type, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide selfadhesive tape where applicable.

## 2.7 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

#### 3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - Do not leave gaps between ends of sealant backings.
  - Do not stretch, twist, puncture, or tear sealant backings.

- 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
- F. Installation of Preformed Foam Sealants: Install each length of sealant immediately after removing protective wrapping. Do not pull or stretch material. Produce seal continuity at ends, turns, and intersections of joints. For applications at low ambient temperatures, apply heat to sealant in compliance with sealant manufacturer's written instructions.

#### 3.4 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

#### 3.5 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

#### 3,6 JOINT-SEALANT SCHEDULE

- A. Interior joints in horizontal traffic surfaces:
  - 1. Joint Locations:
    - a. Isolation joints in cast-in-place concrete slabs.
    - b. Control and expansion joints in tile flooring.
    - c. Other joints as indicated.
  - Joint Sealant: Pourable urethane sealant.
  - 3. Joint-Sealant Color: As selected by Architect from manufacturer's full range.

- B. Interior joints in vertical surfaces and horizontal nontraffic surfaces:
  - 1. Joint Locations:
    - a. Control and expansion joints on exposed interior surfaces of exterior walls.
    - b. Joints between solid phenolic wall panels.
    - c. Perimeter joints of exterior openings where indicated.
    - d. Tile control and expansion joints.
    - e. Vertical joints on exposed surfaces of interior unit masonry and concrete walls and partitions.
    - f. Perimeter joints between interior wall surfaces and frames of interior doors and windows.
    - g. Other joints as indicated.
  - 2. Joint Sealant: Single-component neutral-curing silicone sealant or single component nonsag urethane sealant, as recommended by manufacturer.
  - 3. Joint-Sealant Color: As selected by Architect from manufacturer's full range.
- C. Mildew-resistant interior joints in vertical surfaces and horizontal nontraffic surfaces:
  - 1. Joint Location: Joints between plumbing fixtures and adjoining walls, floors, and counters.
  - 2. Joint Sealant: Mildew resistant, single component, nonsag, neutral curing, Silicone.
  - 3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.
- D. Perimeter joints between interior wall surfaces and casework, and frames of interior doors and windows.
  - Joint Sealant: Latex sealant.
  - 2. Joint-Sealant Color: As selected by Architect from manufacturer's full range.

END OF SECTION 079200

#### SECTION 087100 - DOOR HARDWARE

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section includes:

- Mechanical door hardware for the following:
  - a. Swinging doors.
- 2. Cylinders for door hardware specified in other Sections.
- Electrified door hardware.
- B. Products furnished, but not installed, under this Section include the products listed below. Coordinating and scheduling the purchase and delivery of these products remain requirements of this Section.
  - Pivots thresholds weather stripping and lock cylinders to be installed under other Sections.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Details of electrified door hardware.
- C. Other Action Submittals:
  - 1. Door Hardware Schedule: Prepared by or under the supervision of Installer, detailing fabrication and assembly of door hardware, as well as installation procedures and diagrams. Coordinate final door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
    - a. Format: Use same scheduling sequence and format and use same door numbers as in the Contract Documents.
    - b.
    - c. Content: Include the following information:
      - 1) Identification number, location, hand, fire rating, size, and material of each door and frame.
      - Locations of each door hardware set, cross-referenced to Drawings on floor plans and to door and frame schedule.
      - Complete designations, including name and manufacturer, type, style, function, size, quantity, function, and finish of each door hardware product.
      - 4) Description of electrified door hardware sequences of operation and interfaces with other building control systems.

- 2. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- 3. Keying Schedule: Prepared by or under the supervision of Installer, detailing Owner's final keying instructions for locks.

#### 1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Supplier of products and an employer of workers trained and approved by product manufacturers and an Architectural Hardware Consultant who is available during the course of the Work to consult with Contractor, Architect, and Owner about door hardware and keying.
- B. Architectural Hardware Consultant Qualifications: A person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and who is currently certified by DHI as follows:
  - 1. For door hardware, an Architectural Hardware Consultant (AHC) .
- C. Source Limitations: Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated. Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.
- D. Fire-Rated Door Assemblies: Where fire-rated door assemblies are indicated, provide door hardware rated for use in assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C, unless otherwise indicated.
- E. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meet requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
  - 1. Air Leakage Rate: Maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at the tested pressure differential of 0.3-inch wg (75 Pa) of water.
- F. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- G. Means of Egress Doors: Latches do not require more than 15 lbf (67 N) to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.
- H. Accessibility Requirements: For door hardware on doors in an accessible route, comply with ICC/ANSI A117.1.
  - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf (22.2 N).
  - 2. Comply with the following maximum opening-force requirements:
    - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.

- b. Sliding or Folding Doors: 5 lbf (22.2 N) applied parallel to door at latch.
- c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
- 3. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch (13 mm) high.
- 4. Adjust door closer sweep periods so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches (75 mm) from the latch, measured to the leading edge of the door.

## 1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver keys to Owner by registered mail or overnight package service.

#### 1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
  - Warranty Period: Three years from date of Substantial Completion, unless otherwise indicated.
    - a. Manual Closers: 10 years from date of Substantial Completion.

#### PART 2 - PRODUCTS

## 2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in this Section.
  - 1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and products equivalent in function and comparable in quality to named products.
  - 2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.

## 2.2 HINGES AND PIVOTS

#### A. Manufacturers:

- 1. Hinges:
  - a. Hager Companies.
  - b. McKinney Products Company; Div. of ESSEX Industries, Inc.
  - c. Stanley Commercial Hardware; Div. of The Stanley Works.
- B. Cylinders: Manufacturer's standard tumbler type, constructed from brass or bronze, stainless steel, or nickel silver, and complying with the following:
  - 1. Number of Pins: Six.
  - Mortise Type: Threaded cylinders with rings and straight- or clover-type cam.

- C. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:
  - 1. Interchangeable Cores: Core insert, removable by use of a special key.
  - 2. Removable Cores: Core insert, removable by use of a special key, and for use with only the core manufacturer's cylinder and door hardware.
- D. Keying System: Unless otherwise indicated, provide a factory-registered keying system complying with the following requirements:
  - 1. Grand Master Key System: Change keys, a master key, and a grand master key operate cylinders.
- E. Keys: Provide nickel-silver keys complying with the following:
  - 1. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:
    - a. Notation: "DO NOT DUPLICATE."
  - Quantity: In addition to one extra blank key for each lock, provide the following:
    - a. Cylinder Change Keys: Three.
    - b. Master Keys: Five.
    - c. Grand Master Keys: Five.

#### 2.3 EXIT DEVICES

- A. Exit Devices: BHMA A156.3, Grade 1.
- B. Accessibility Requirements: Where handles, pulls, latches, locks, and other operating devices are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."
  - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf (22 N).
- C. Exit Devices for Means of Egress Doors: Comply with NFPA 101. Exit devices shall not require more than 15 lbf (67 N) to release the latch. Locks shall not require use of a key, tool, or special knowledge for operation.
- D. Panic Exit Devices: Listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing according to UL 305.
- E. Fire Exit Devices: Devices complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252.
- F. Manufacturers:
  - 1. LCN
  - 2. Von Duprin; an Ingersoll-Rand Company.

#### 2.4 PUSH/PULL UNITS

- A. Standard: BHMA A156.6.
- B. Manufacturers:
  - Baldwin.
  - IVES Hardware; an Ingersoll-Rand Company (IVS).

#### 2.5 PROTECTIVE TRIM UNITS

- A. Fasteners: Manufacturer's standard machine or self-tapping screws.
- B. Metal Protective Trim Units: BHMA A156.6; beveled top and 2 sides; fabricated from material indicated in door hardware sets.
  - 1. Manufacturers:
    - a. Baldwin Hardware Corporation.
    - b. IVES Hardware; an Ingersoll-Rand Company.
    - c. Trimco.

#### 2.6 STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated.

#### 2.7 CLOSERS

- A. Manufacturers:
  - 1. Surface-Mounted Closers:
    - a. Dorma.
    - b. LCN.
    - c. Norton.
- B. Certified Products: Provide door closers listed in BHMA's "Directory of Certified Door Closers."
- C. Size of Units: Unless otherwise indicated, comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

#### 2.8 FABRICATION

- A. Manufacturer's Nameplate: Do not provide manufacturers' products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise approved by Architect.
  - 1. Manufacturer's identification will be permitted on rim of lock cylinders only.

DOOR HARDWARE CSL Plasma New Center, Bloomington, MN. 2001-1112.86

- B. Base Metals: Produce door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18 for finishes. Do not furnish manufacturer's standard materials or forming methods if different from specified standard.
- C. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to commercially recognized industry standards for application intended. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.
  - Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
  - 2. Steel Machine or Wood Screws: For the following fire-rated applications:
    - a. Mortise hinges to doors.
    - b. Strike plates to frames.
    - Closers to doors and frames.
  - 3. Steel Through Bolts: For the following fire-rated applications, unless door blocking is provided:
    - a. Surface hinges to doors.
    - b. Closers to doors and frames.
    - c. Surface-mounted exit devices.
  - 4. Spacers or Sex Bolts: For through bolting of hollow metal doors.
  - 5. Fasteners for Wood Doors: Comply with requirements of DHI WDHS.2, "Recommended Fasteners for Wood Doors."

#### 2.9 FINISHES

- A. Standard: Comply with BHMA A156.18.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. BHMA Designations: Comply with base material and finish requirements indicated by the following:
  - 1. BHMA 619: Satin nickel plated, clear coated, over brass or bronze base metal.
  - BHMA 626: Satin chromium plated over nickel, over brass or bronze base metal.
  - 3. BHMA 627: Satin aluminum, clear coated, over aluminum base metal.
  - 4. BHMA 628: Satin aluminum, clear anodized, over aluminum base metal.
  - 5. BHMA 630: Satin stainless steel, over stainless-steel base metal.

6. BHMA 652: Satin chromium plated over nickel, over steel base metal.

#### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
- B. Wood Doors: Comply with DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
- C. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
  - Standard Steel Doors and Frames: ANSI/SDI A250.8.
  - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- D. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.
  - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
  - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- E. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- F. Intermediate Offset Pivots: Where offset pivots are indicated, provide intermediate offset pivots in quantities indicated in door hardware schedule but not fewer than one intermediate offset pivot per door and one additional intermediate offset pivot for every 30 inches (750 mm) of door height greater than 90 inches (2286 mm).
- G. Lock Cylinders: Install construction cores to secure building and areas during construction period.
  - 1. Replace construction cores with permanent cores as indicated in keying schedule.
- H. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Section 079200 "Joint Sealants."
- I. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- J. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

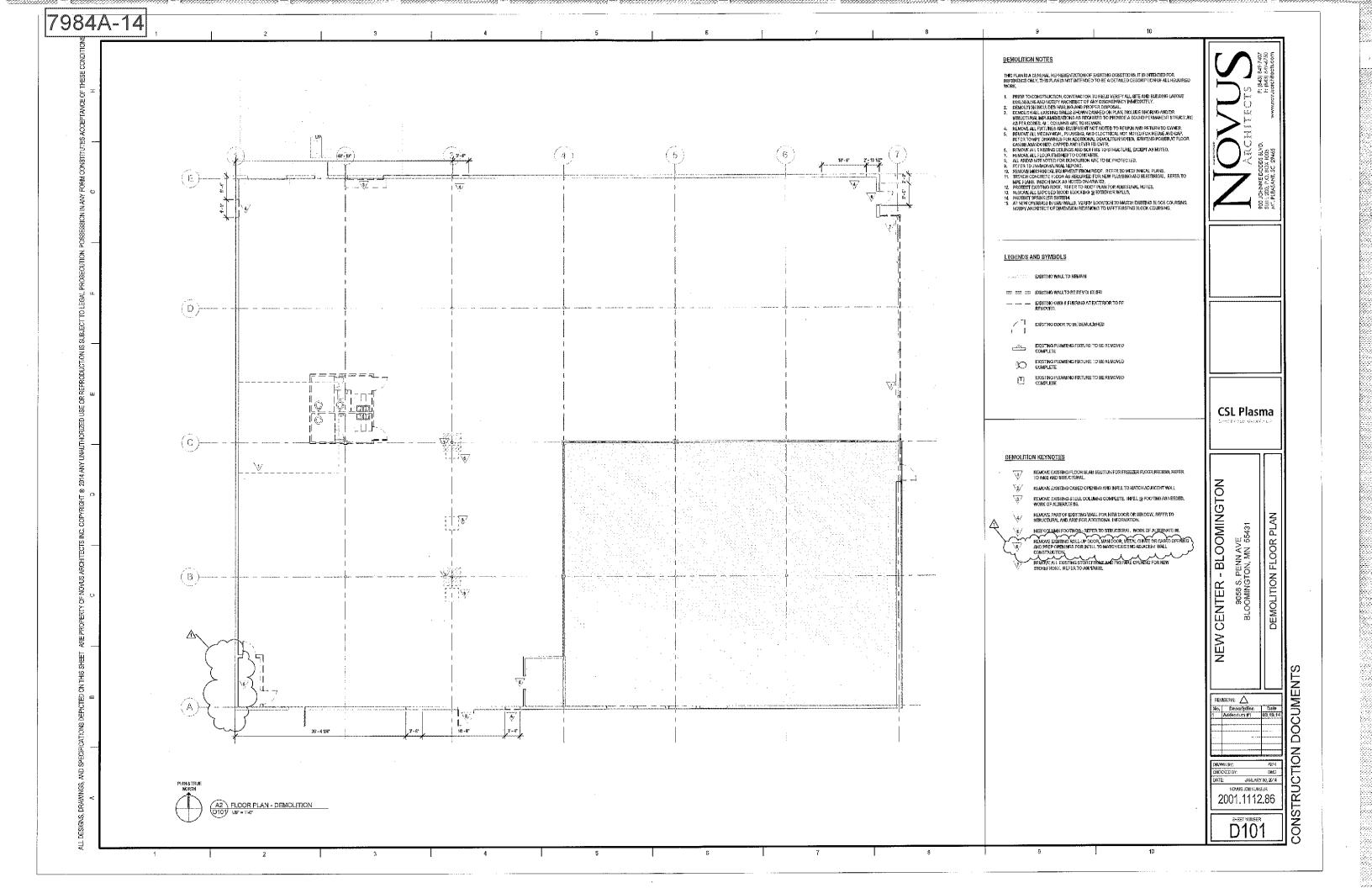
- K. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- L. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.
- M. Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

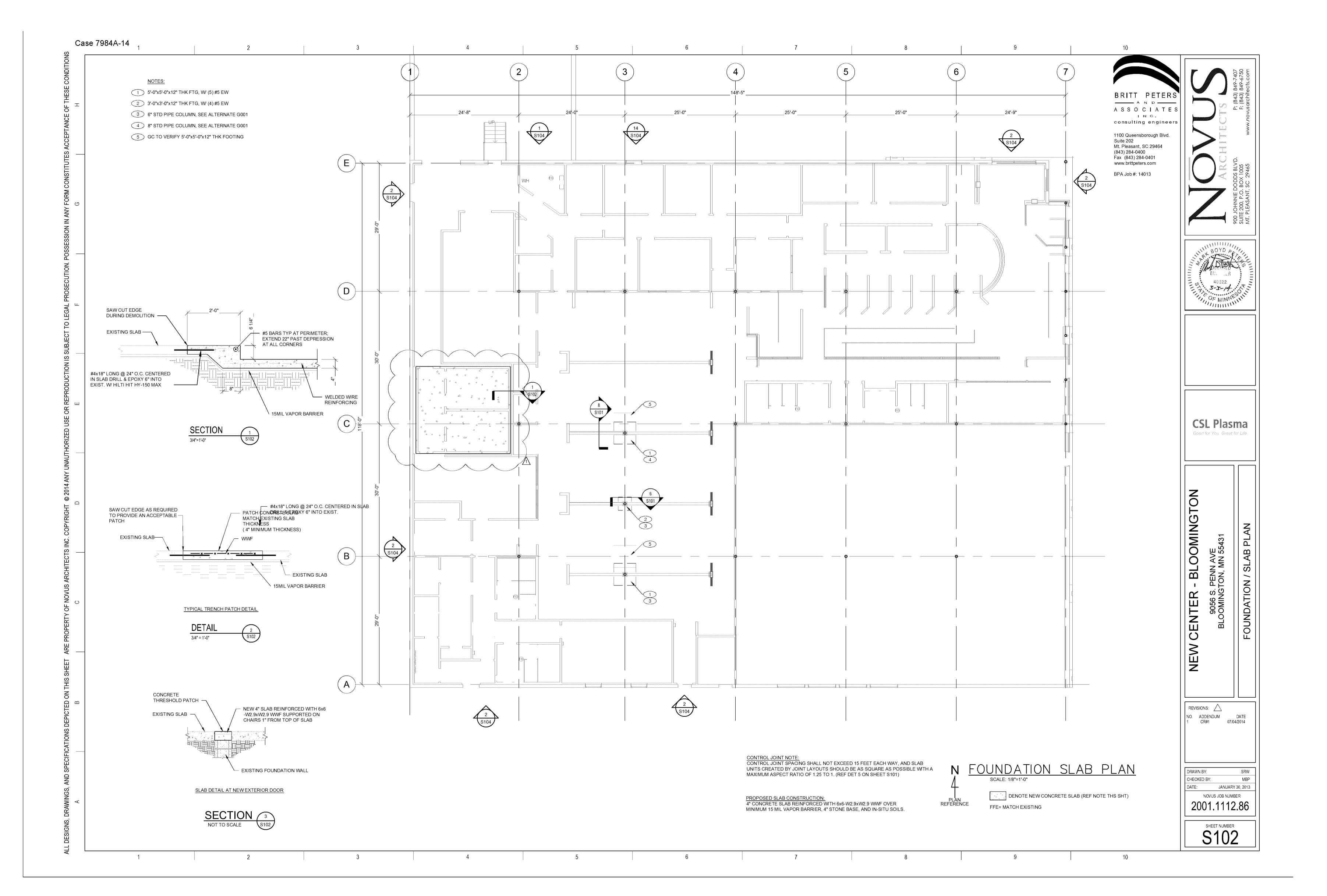
#### 3.2 FIELD QUALITY CONTROL

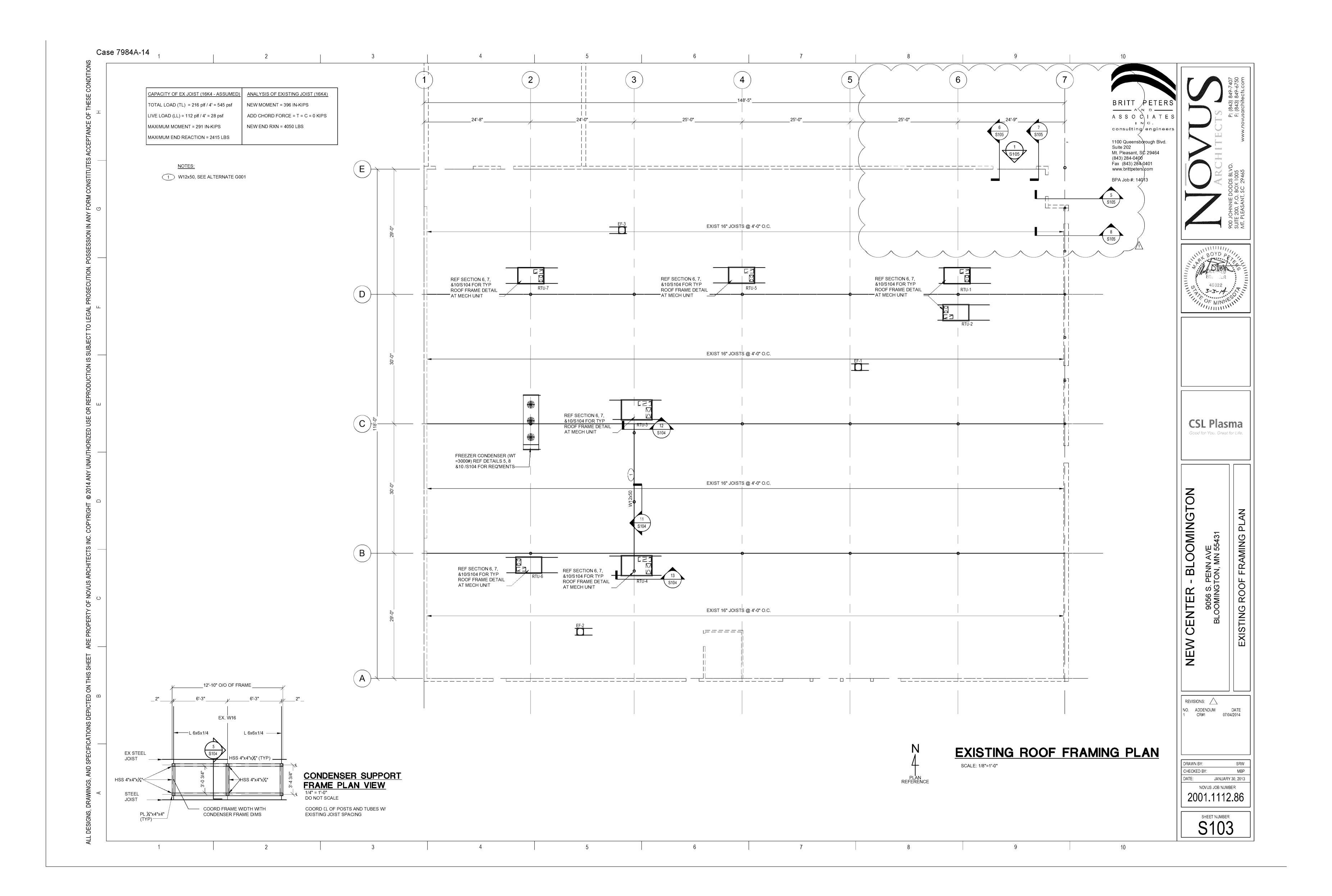
A. Independent Architectural Hardware Consultant: Owner will engage a qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.

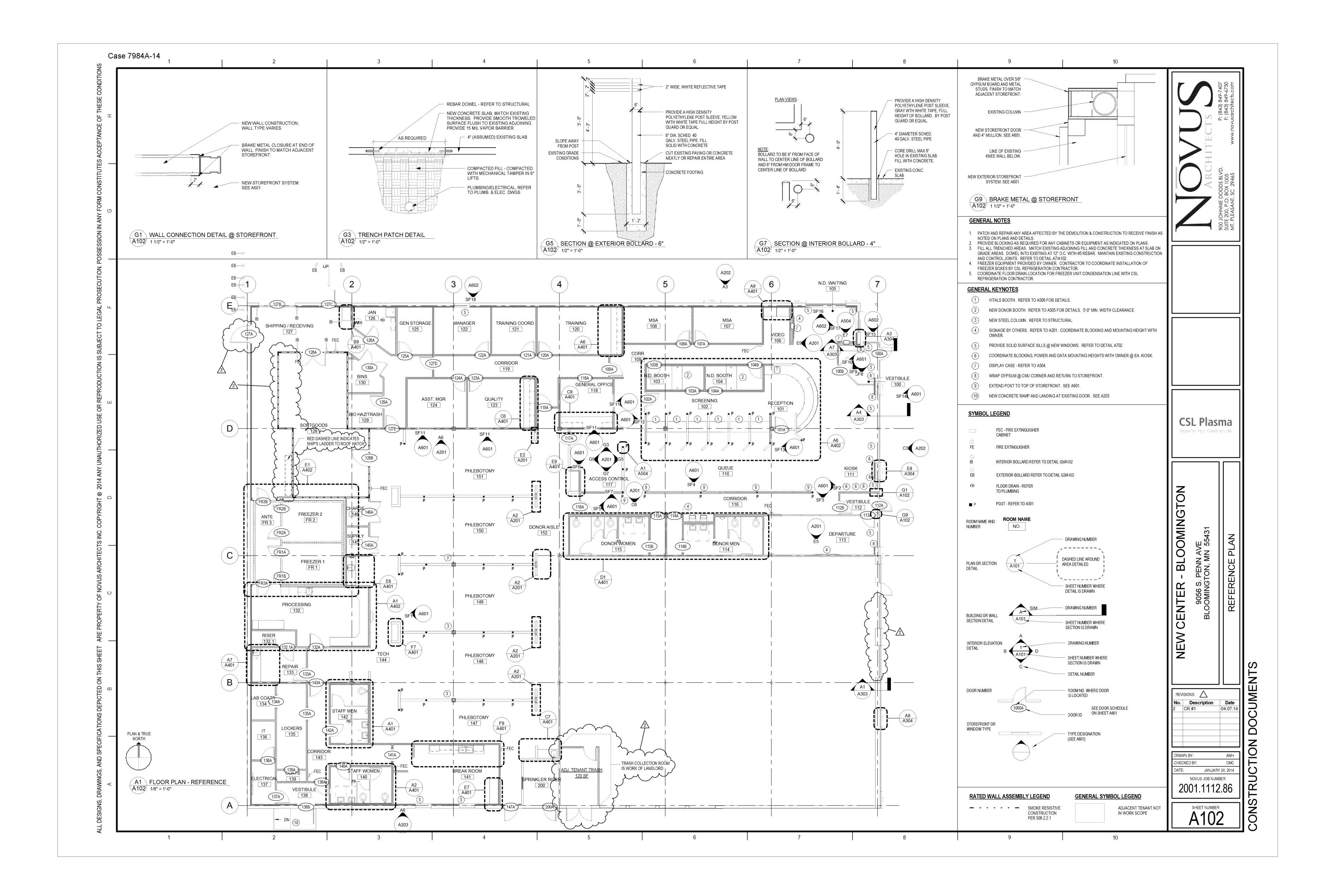
END OF SECTION 087100

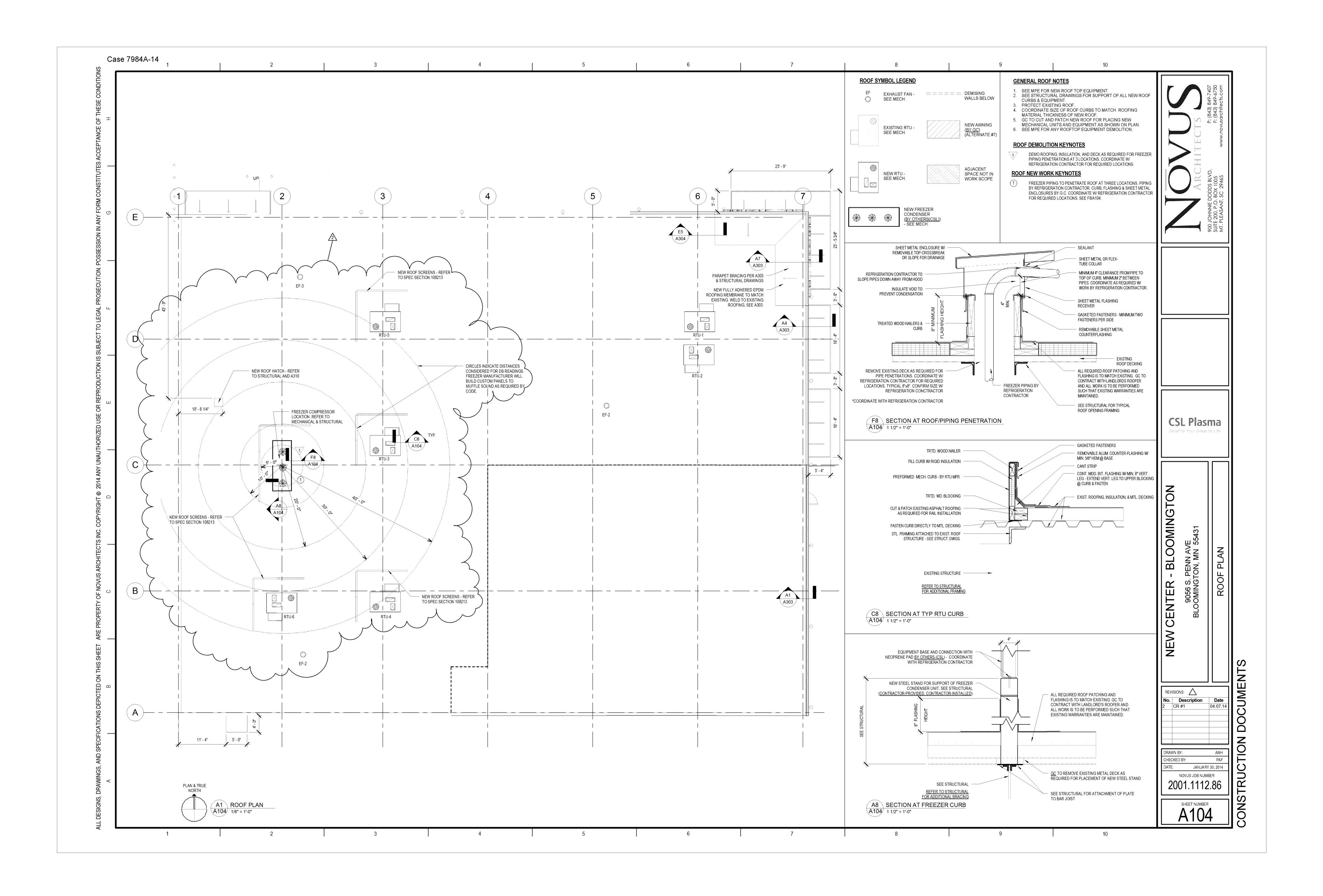
ATTACHMENT: HARDWARE SCHEDULE

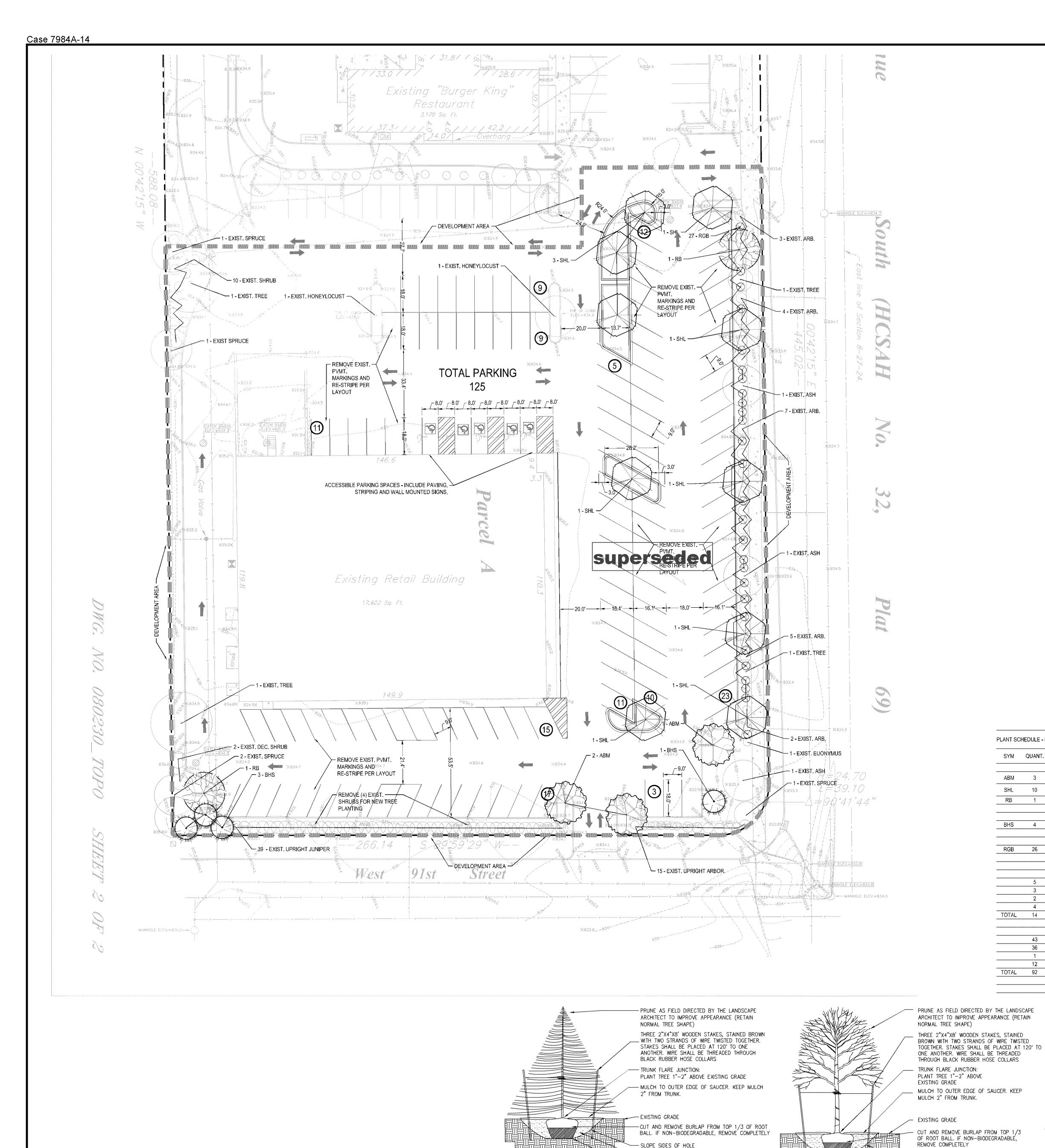












BACKFILL AS SPECIFIED

THREE TIMES WIDTH

OF ROOTBALL

NEVERGREEN TREE

DO NOT EXCAVATE BELOW ROOTBALL

#### LANDSCAPE NOTES:

- 1. ALL SHRUB BEDS SHALL BE MULCHED WITH 4" DEPTH OF DOUBLE SHREDDED HARDWOOD MULCH OVER WEED BARRIER. OWNER'S REP SHALL APPROVE MULCH SAMPLE PRIOR TO INSTALLATION. EDGING SHALL BE METAL EDGING OR APPROVED
- 2. PLANT MATERIALS SHALL CONFORM WITH THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND SHALL BE OF HARDY STOCK, FREE FROM DISEASE, DAMAGE AND DISFIGURATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PLUMBNESS OF PLANT MATERIAL FOR DURING OF ACCEPTANCE PERIOD.
- 3. UPON DISCOVERY OF A DISCREPANCY BETWEEN THE QUANTITY OF PLANTS SHOWN ON THE SCHEDULE AND THE QUANTITY SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.
- 4. CONDITION OF VEGETATION SHALL BE MONITORED BY THE LANDSCAPE ARCHITECT THROUGHOUT THE DURATION OF THE CONTRACT, LANDSCAPE MATERIALS PART OF THE CONTRACT SHALL BE WARRANTED FOR ONE (1) FULL GROWING SEASONS FROM SUBSTANTIAL COMPLETION DATE.
- 5. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL RECEIVE 4" LAYER LOAM AND SOD AS SPECIFIED UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 6. COORDINATE LOCATION OF VEGETATION WITH UNDERGROUND AND OVERHEAD UTILITIES, LIGHTING FIXTURES, DOORS AND WINDOWS, CONTRACTOR SHALL STAKE IN THE FIELD FINAL LOCATION OF TREES AND SHRUBS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 7. ALL PLANT MATERIALS SHALL BE WATERED AND MAINTAINED UNTIL ACCEPTANCE.
- 8. REPAIR AT NO COST TO OWNER ALL DAMAGE RESULTING FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.
- 9. SWEEP AND MAINTAIN ALL PAVED SURFACES FREE OF DEBRIS GENERATED FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.

### **SPECIALITY NOTES:**

1. TOPSOIL AREAS WITH DEPTH GREATER THAN 6" WILL BE SLOPED AND SUPPORTED TYPAR GEOCELL 220/200 SLOPE STABILIZATION AS PROVIDED BY BODDINGTONS USA, ROSEVILLE, MN 651.33.2920. HTTP://WWW.BODDINGTONSONLINE.COM. BUILT-UP AREAS GREATER THAN 12" DEPTH FROM FINISH GRADE TO TOP OF SLAB/STRUCTURE WILL BE BUILT UP WITH DOW CAVITYMATE RIGID INSULATION.

LANDSCAPE REQUIREMENTS TREE: 1 PER 2,500 SF DLA SHRUB: 1 PER 1,000 SF DLA DLA = DEVELOPABLE LANDSCAPE AREA 86,954.35 TREE REQ. PER ORIGINAL PLANS LESS EXIST. PROPOSED TREES SHRUB REQ. = 86,954.35 / 1,000 = PROPOSED SHRUBS LESS EXIST.

#### PROPOSED LANDSCAPE SEE PLANTING SCHEDULE

PARKING PROVIDED =

— SLOPE SIDES OF HOLE

- BACKFILL AS SPECIFIED

DO NOT EXCAVATE

BELOW ROOTBALL

OF ROOTBALL

EXCESS SHRUBS

PARKING REQUIREMENTS: RETAIL BETWEEN 10,000 SF - 99,999 SF 55 SPACES + 1 SPACE PER 220 SF OVER 10,000 SF

GROSS BLDG. SF = 17922 =

#### **IRRIGATION NOTES:**

CONTRACTOR,

- ENTIRE SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION,
- SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS.
- CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND/ABOVE GROUND FACILITIES PRIOR TO ANY EXCAVATION/INSTALLATION. ANY DAMAGE TO UNDERGROUND/ABOVE GROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COSTS ASSOCIATED WITH CORRECTING DAMAGES SHALL BE BORNE ENTIRELY BY THE
- SERVICE EQUIPMENT AND INSTALLATION SHALL BE PER LOCAL UTILITY COMPANY STANDARDS AND SHALL BE PER NATIONAL AND LOCAL CODES. EXACT LOCATION OF SERVICE EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.
- CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR THE PROPOSED
- IRRIGATION WATER LINE CONNECTION SIZE IS 1-1/2" AT BUILDING. VERIFY WITH MECHANICAL
- ALL MAIN LINES SHALL BE 18" BELOW FINISHED GRADE.

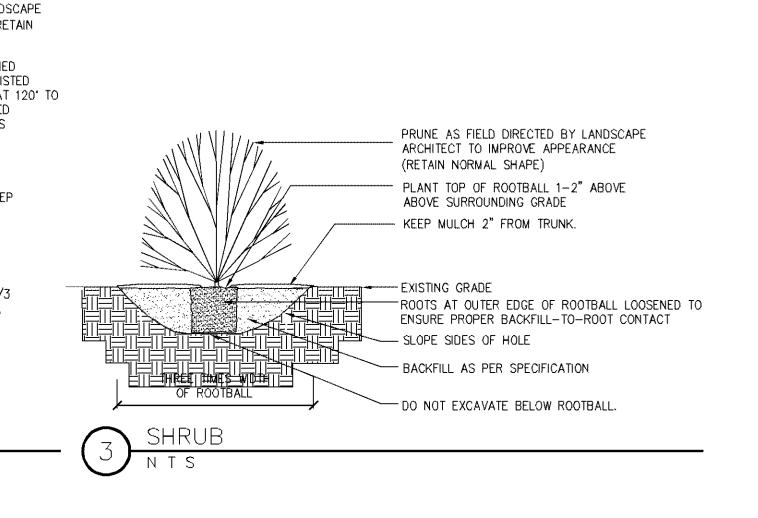
ELECTRICAL SERVICE AND METERING FACILITIES.

- 8. ALL LATERAL LINES SHALL BE 12" BELLOW FINISHED GRADE.
- 9. ALL EXPOSED PVC RISERS, IF ANY, SHALL BE GRAY IN COLOR.

PLANT BED AREAS WHENEVER POSSIBLE.

- 10. CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT.
- 11. CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL "ELLED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.
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- 13. BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.
- 14. ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR. 15. GROUP VALVE BOXES TOGETHER FOR EASE WHEN SERVICE IS REQUIRED. LOCATE IN
- 16. IRRIGATION CONTROLLER LOCATION SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTIVE.
- 17. CONTROL WIRES: 14 GAUGE DIRECT BURIAL, SOLID COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPLICES AND SPLICE ONLY AT VALVES OR PULL BOXES. RUN SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER, LABEL OR COLOR CODE ALL
- 18. AVOID OVERSPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC
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- 22. ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.
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- 24. THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.

SYM	QUANT.	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	COMMENTS
		DECIDUOUS TREES				
ABM	3	AUTUMN BLAZE MAPLE	Acer x freemanii 'Jeffersred'	2.5"	B&B	STRAT. LEADER. FULL FO
SHL	10	SUNBURST HONEY LOCUST	Gleditsia triacanthos 'Suncole'	2.5"	B&B	STRAT, LEADER, FULL FO
RB	1	RIVER BIRCH	Betula nigra	2.5"	B&B	STRAT. LEADER. FULL FO
		EVERGREEN TREES				
BHS	4	BLACK HILLS SPRUCE	Picea glauca 'Densata'	6' H <b>T.</b>	B&B	SINGLE LEADER
		DECIDUOUS SHRUBS				
	26	ROSE GLOW JAPANESE BARBERRY	Berberis thunbergii 'Rose Glow'	#5	CONT	
RGB	20	ROSE GLOW JAPANESE BARBERRY	beidens mundergii Rose Glow	#3	CONT.	
		EISTING MATERIAL TO REMAIN		***************************************	***************************************	1700-1700-1700-1700-1700-1700-1700-1700
		TREES				
	5	SPRUCE SPECIES				
	3	ASH SPECIES				
	2	HONEYLOCUST SPECIES				
	4	DECIDUOUS TREE			***************************************	
TOTAL	14					
		SHRUBS				
	43	JUNIPER SPECIES				
	36	ARBORVITAE SPECIES				
	1	EUONYMUS SPECIES				
	12	DECIDUOUS SHRUB				
TOTAL	92					











I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIREC SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDE THE LAWS OF THE STATE OF MINNESOTA

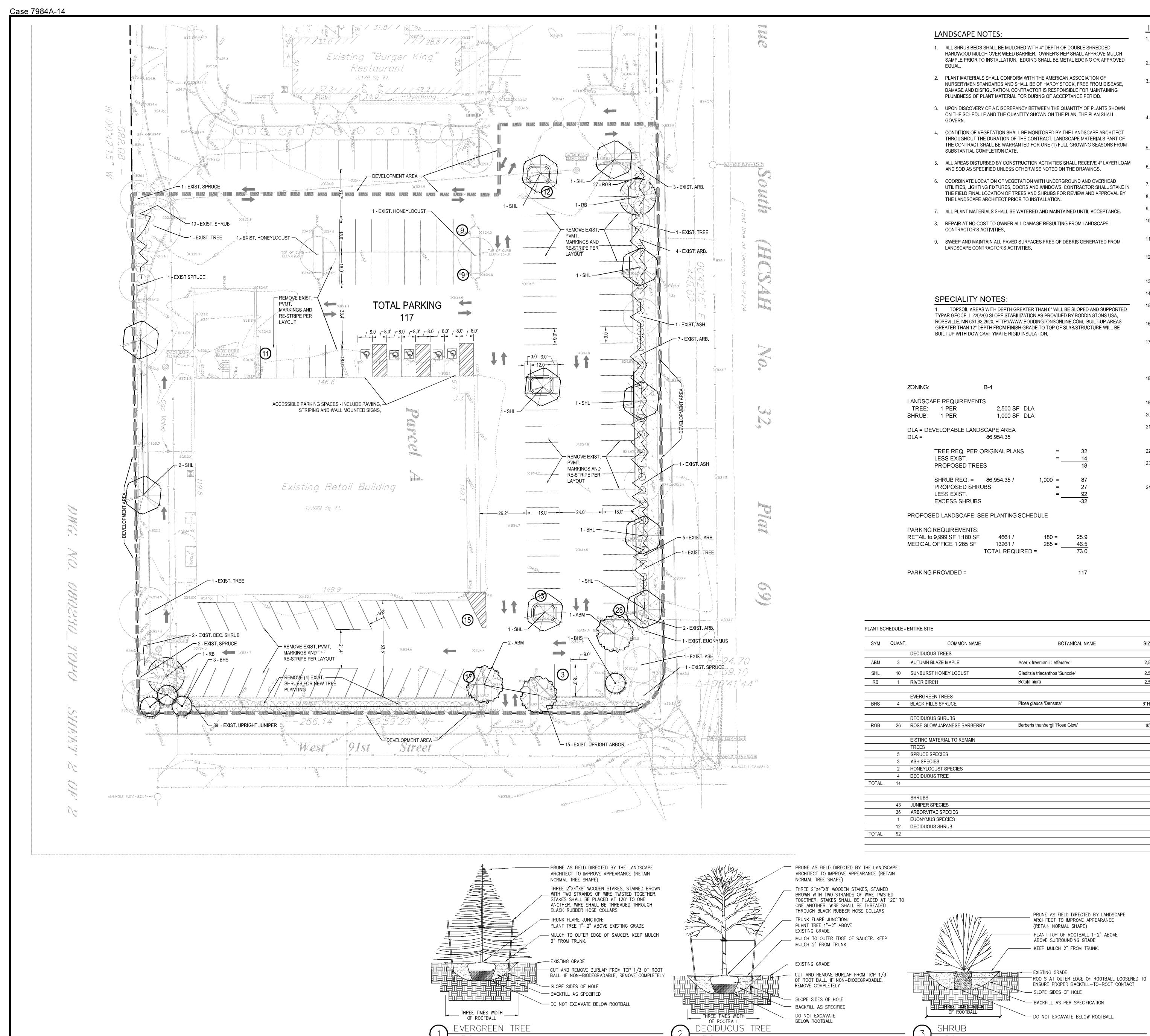
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DATE 05/02/14 LICENSE NO. 24904 ISSUE/SUBMITTAL SUMMARY DATE DESCRIPTION

> REVISION SUMMARY DATE DESCRIPTION

> > LANDSCAPE PLAN

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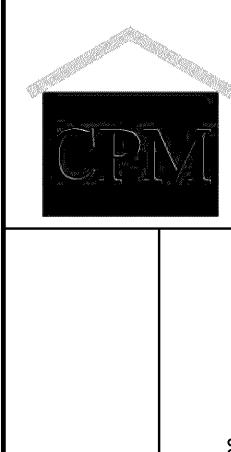
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RB	1	RIVER BIRCH	Betula nigra	2.5"	B&B	STRAT. LEADER. FULL FORM
		EVERGREEN TREES				
BHS	4	BLACK HILLS SPRUCE	Picea glauca 'Densata'	6' HT.	B&B	SINGLE LEADER
		DECIDUOUS SHRUBS				
RGB	26	ROSE GLOW JAPANESE BARBERRY	Berberis thunbergii 'Rose Glow'	#5	CONT.	
		EISTING MATERIAL TO REMAIN				
		TREES				
	5	SPRUCE SPECIES				
	3	ASH SPECIES				
	2	HONEYLOCUST SPECIES				
	4	DECIDUOUS TREE				
TOTAL	14					
		SHRUBS				
	43	JUNIPER SPECIES				
	36	ARBORVITAE SPECIES				
	1	EUONYMUS SPECIES				
	12	DECIDUOUS SHRUB				<u> </u>
TOTAL	92					



GROUP 4931 W. 35TH ST. SUITE 200 ST. LOUIS PARK, MN 55416 CivilSiteGroup.com 763-213-3944

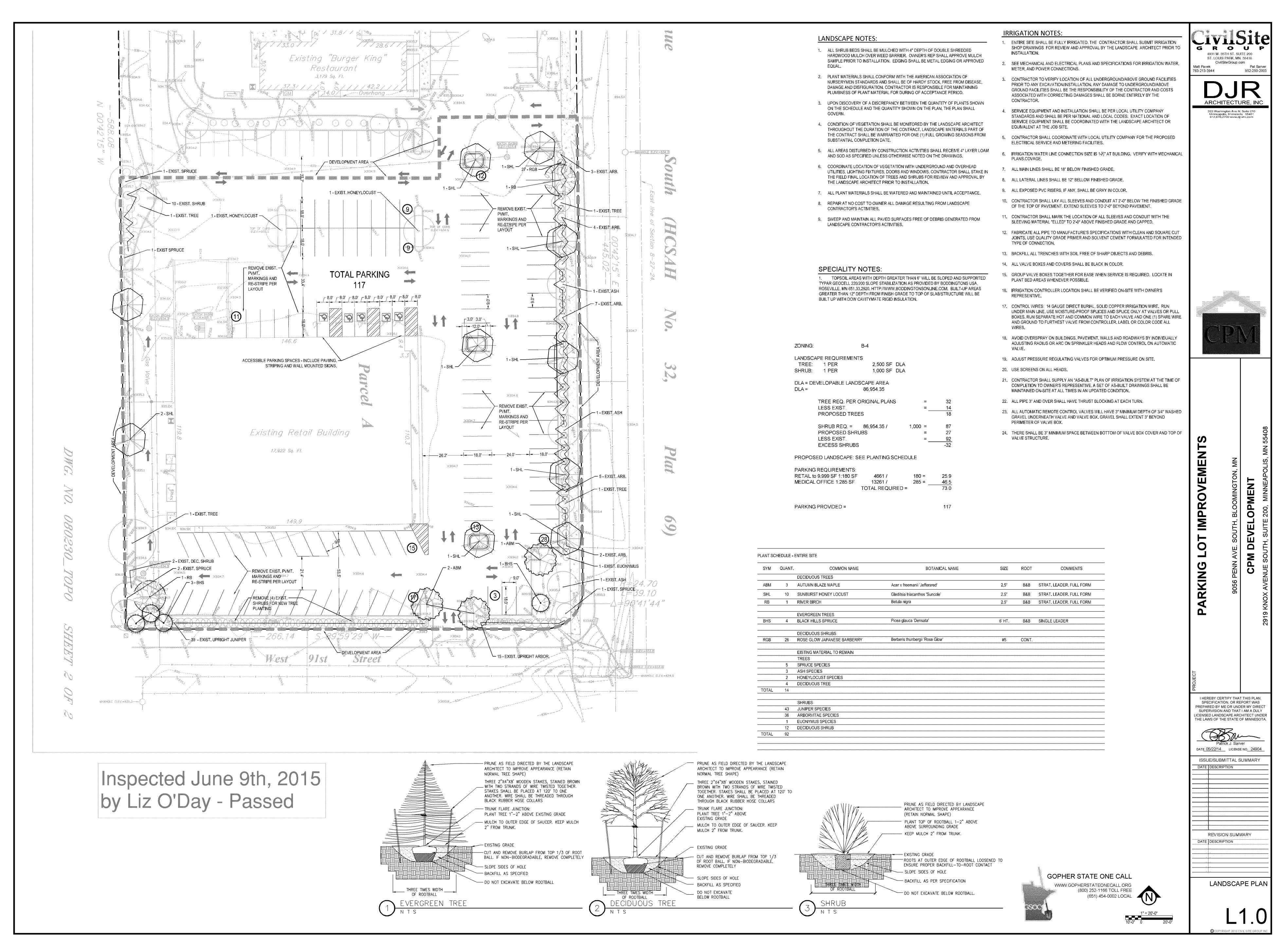
952-250-2003 ARCHITECTURE, INC

333 Washington Ave N, Suite 210 Minneapolis, Minnesota 55401 612,676,2700 www.djr-inc.com

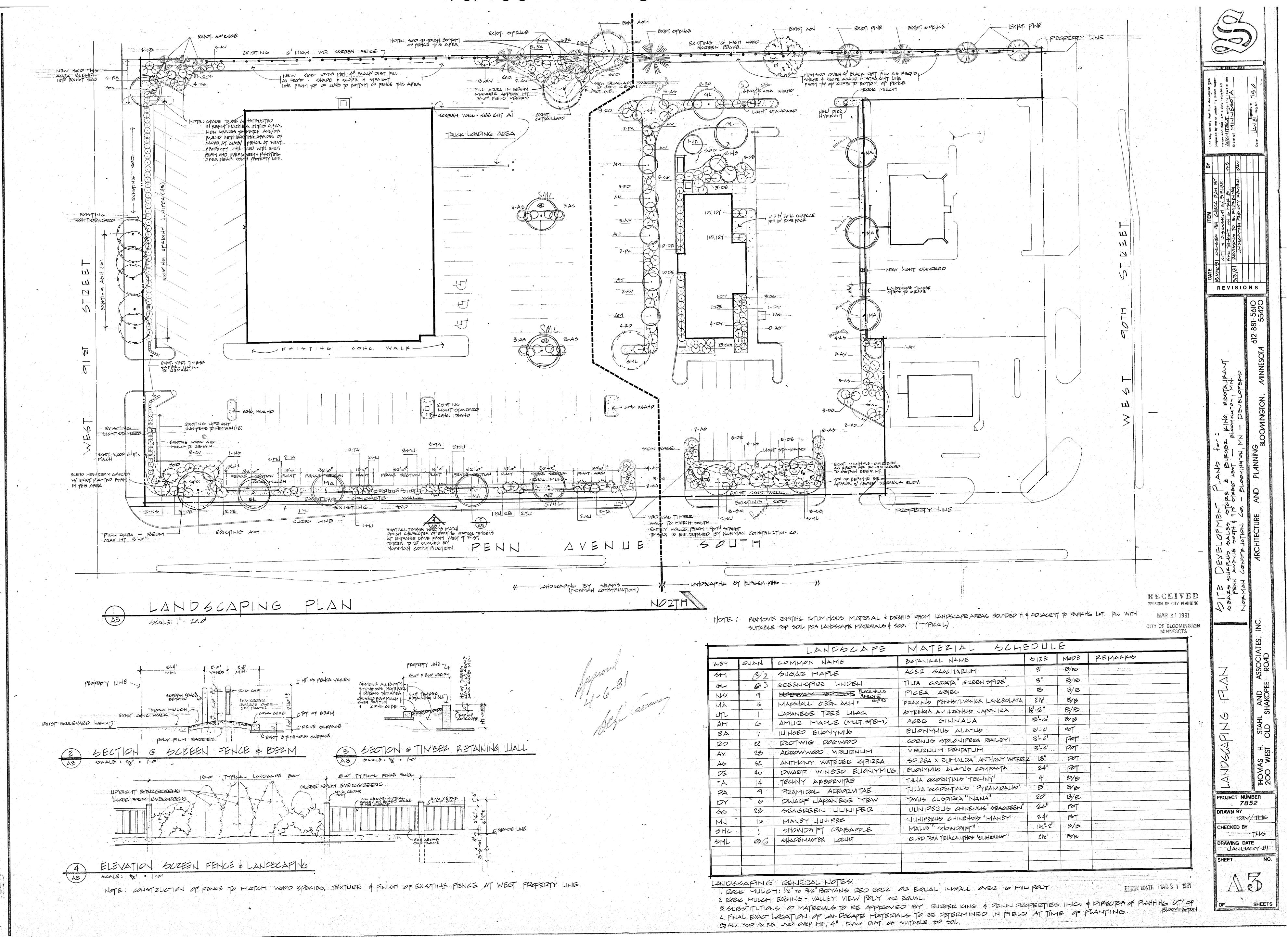


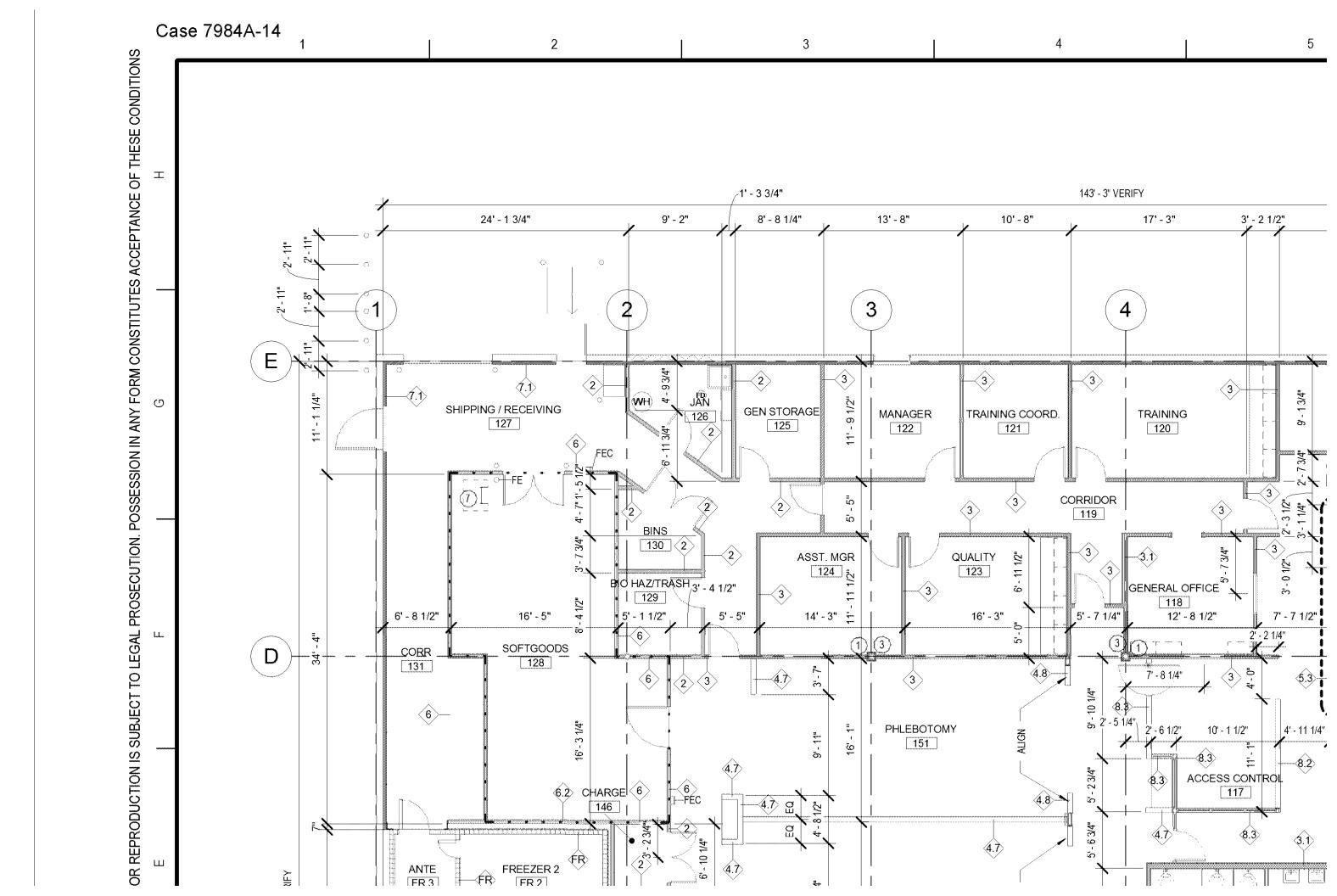
C I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA DATE 05/22/14 LICENSE NO. 24904 ISSUE/SUBMITTAL SUMMARY DATE DESCRIPTION REVISION SUMMARY DATE DESCRIPTION

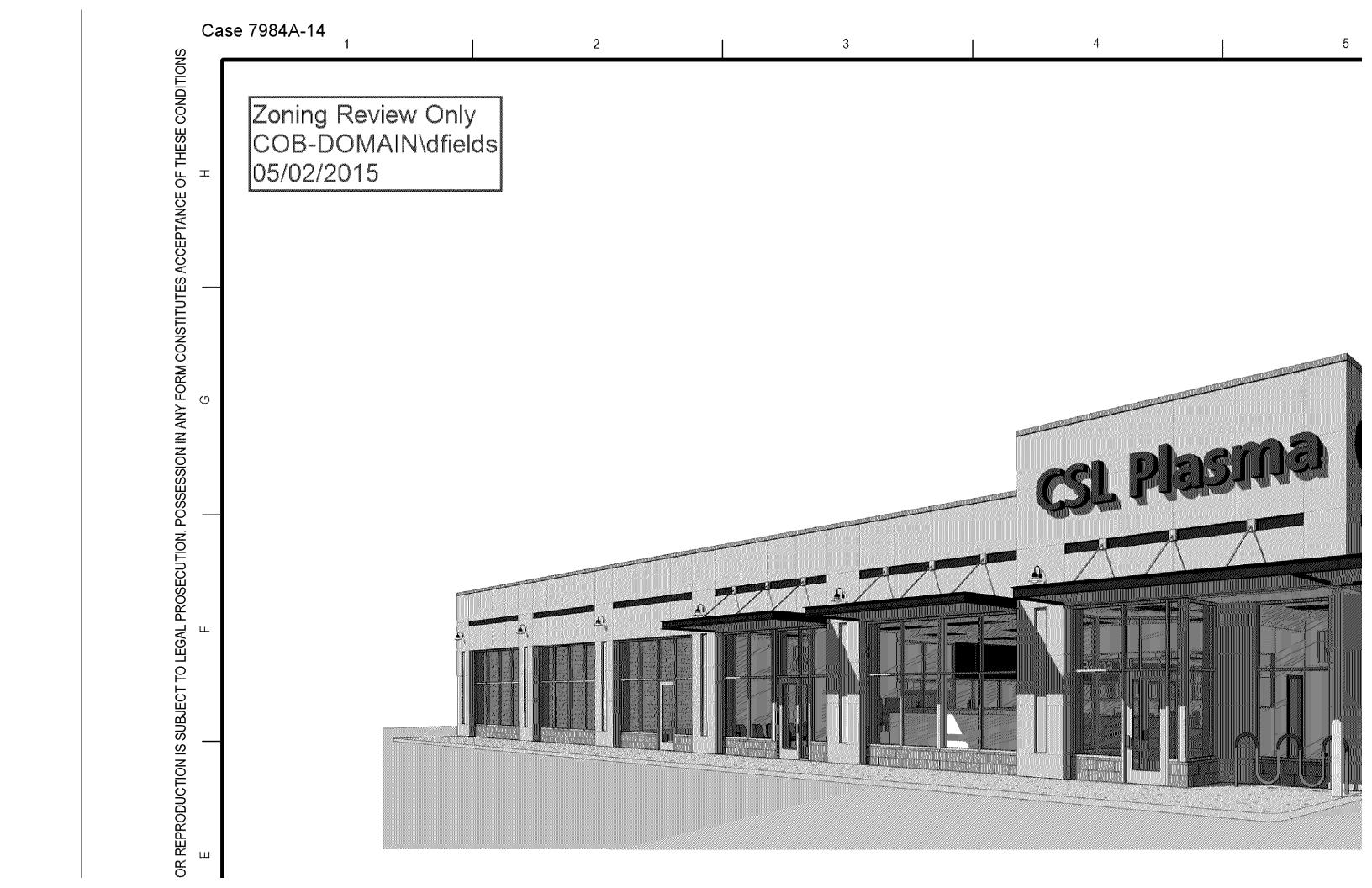
LANDSCAPE PLAN

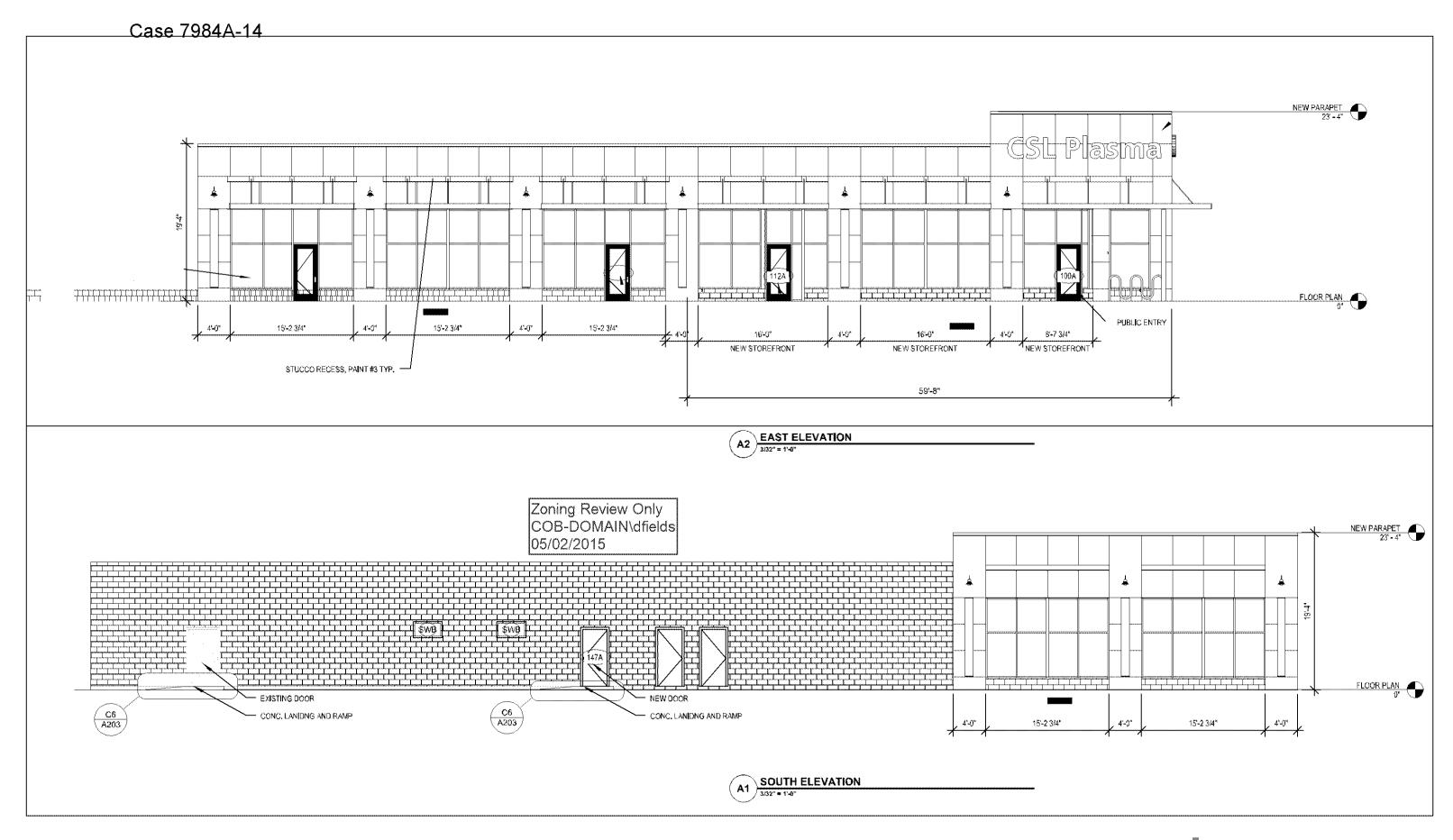


# 4/6/1981 APPROVED PLAN









#### 90th & Penn

Copyright 2014 DJR Architecture, Inc.

ARCHITECTURE, INC

DRAWING REFEENCE SHEET REFEENCE

9056 S Penn Ave, Bloomington, MN 55431

Project #:
Date:
Drawn by:
Checked by:

10-0000 XX-XX-10 XXX



Revisions

PENN AVE 00 0000 O 1.71 1.62 1.58 1.69 1.66 1.90 1.78 1.93 1.62 1.68 2.01 1.92 1.66 1.88 1.76 2.15 2.05 2.42 2.48 2.06 1.87 1.88 1.88 2.14 2.69 2.90 2.05 1.88 1.94 1.87 1.99 2.02 2.05 1.90 1.79 1.87 1.91 2.23 2.09 1.99 2.17 2.28 2.53 2.43 2.33 2.53 2.24 2.05 2.02 2.02 2.39 2.28 2.43 2.41 289 M3 2.05 1.86 2.09 1.97 2.40 2.25 2.59 3.16 4-02 3.38 2.09 1.75 1.82 1.80 2.33 2.43 2.53 2.53 2.10 1.90 1.84 1.76 2.35 2.51 2.70 2.19 2.03 2.46 2.44 2.19 2.7 2.68 3.97 7.43 6.04 2.00 1.65 1.83 1.91 1.97 1.94 1.70 1.71 2.21 1.69 2.08 1.96 2.09 2.57 2.18 1. 2.00 2.54 2.06 1.71 2.03 2.27 2.36 2.07 2 2 2.27 3.41 2.05 2.04 2.04 3.43 05 0.71 1.99 2.47 2.52 2.08 2 2 2 2.80 4.40 1.68 2.07 1.63 1.95 2.04 2.01 2.16 1.96 2 A 2.92 4.91 6.56 4 38 2.02 2.04 2.03 2.11 2 2.24 2.79 2.11 1.85 MH:129K 2.447 1.99 1.12 0.46 2.22 1.83 1.81 2.27 2 2 2.57 3.61 9.16 1 88 14 2.20 2.21 2.09 1.90 2.18 1 2 2.25 2.20 3.16 4.13 1.57 1.94 1.86 1.55 1.94 1.87 1.88 2.03 1.81 2.34 3.90 4.62 2 97 1.89 2.66 2.11 1.54 2.01 2.69 3.69 5.87 4.62 1.81 2.21 2.10 .... 0.43 1.75 2.90 10.59 1.57 2.24 1.70 1.91 6.46 3.24 11.98 14.41

3.47 4.90 3.63

3.23 5.26 4 16

Scale: 1 inch= 30 Ft.

Luminaire S	Schedule					
Symbol	Qty	Label	Arrangement	Lumens	LLF	Description
	3	M3	SINGLE	23000	0.750	LSI GFM-3-250-PSMV-F
Constitution Const	4	V5	BACK-BACK	23000	0.750	LSI GFM-5-250-PSMV-F
(100.000.000.000.000.000.000.000.000.000	5	W1	SINGLE	22000	0.750	LSI GBWM-FT-250-PSMH-F

Calculation Summary	G = 1 = M = = =	77 L	70	B.f	N. d	7) / 1) (1)	NA /NA
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking	Illuminance	Fc	2.42	19.47	0.20	12.10	97.35
Inner parking	Illuminance	Fc	2.75	19.47	1.07	2.57	18.20
Outer parking	Illuminance	FC	1.34	3.27	0.20	6.70	16.35

By Londell Pease at 10:56 am, Aug 19, 2014

APPROVED

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2.14 2.80 2.16 1.85 0.46

MH:1287 2.42 1.90 .... 0:-6) 0.28

2.81 .2.92 2.24 1.64

4.07 .4.12 2.38 1.33 1832 0.34

16.82 5.96 2.41 ... 0:01 0.29

# **INSPECTIONS REQUIRED**

- 1) Prior to the installation, an inspection to verify delivery of the approved lamp, fixture, and pole must be completed.
- 2) Before a Certificate of Occupancy may be issued, a postinstallation inspection by the Issuing Authority must verify compliance with the approved plan depicting the initial foot-

Individual points may not vary more than 20 percent from the initial light level on the approved plan.

Any deviation below the Code requirements for the plan must be remedied prior to the issuance of a Certificate of Occupancy. (See City Code Section 21.307.07)

CALL (952) 563-8920 for an inspection.

These drawings are for conceptual use only and are not intended for construction. Values represented are an approximation generated from manufacturers photometric inhouse or independent lab tests with data supplied by lamp manufacturers, by Dennis Fields.

PASSED INSPECTION

Inspected on August 18, 2014

See inspection noted on plan.

Revisions

LSI Greenbrier MH Intial South **Penn Ave** 9026

APPROVED

By Londell Pease at 10:57 am, Aug 19, 2014

## INSPECTIONS REQUIRED

- 1) Prior to the installation, an inspection to verify delivery of the approved lamp, fixture, and pole must be completed.
- 2) Before a Certificate of Occupancy may be issued, a postinstallation inspection by the Issuing Authority must verify compliance with the approved plan depicting the initial foot-

Individual points may not vary more than 20 percent from the initial light level on the approved plan.

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CALL (952) 563-8920 for an inspection.

PENN AVE 

2.28 2.17 2.10 2.26 2.21 2.54 2.37 2.58 2.16 2.24 2.67 2.56 2.22 2.51 2.35 2.87 2.73 3.23 3.30 2.74 2.49 2.50 2.50 2.49 2.86 3.59 3.86 2.73

2.73 2.49 2.78 2.63 3.20 3.00 3.45 4.22 5.36 4.51 2.78 2.34 2.43 2.40 3.11 3.24 3.37 3.37 2.81 2.53 2.45 2.35 3.14 3.35 3.60 2.92 2.71 3.28 3.25 2.92 3.63 3.57 5.30 9.90 8 66 2.67 2.19 2.44 2.55 2.63 2.59 2.27 2.29 2.95 2.26 2.78 2.62 2.78 3.42 2.91 2 2.71 3.03 3.15 2.77 2 3.02 4.54 <u>-2.65</u> <u>3.29</u> <u>3.36</u> <u>2.78</u> 3.74 5.86 **5** 10

2.72 2.68 2.88 2.61 3 4 3.89 6.54 8.74 5.89 2.69 2.72 2.71 2.82 3.

2.95 2.42 2.41 3.03 2 3.42 4.81 12.22 23.14 14 2.91 1.95 3.00 2.94 4.22 5.51 2.59 2.49 2.51 2.71 2.41 3.12 5.20 6.16 3 96 2.68 3.59 4.92 7.82 6.16

2.34 3.87 14.11

4.32 15.98 19.22 4.62 6.54 4.84 4.30 7.01 5 54

MH:2290 3.23 2.54 1.49 0.82 0.37 3.74 3.89 2.99 2.19 1.21 0.49 5.42 5.50 3.17 1.85 1:06 0.46

2.66 3,39 2.74 2.28

2.74 2.72 2.72 1.91 1.40 0.95

2.24 2.76 2.17 2.61 1.52 0.78

2.99 3.72 2.81 2.46 1.39 0.66

MH:22292 3.30 2.66 1.71 1.01 0.53

2.94 2.94 2.79 2.54 1.58 0.73

2.52 3.54 2.82 2.06 1.13 0.65

2.41 2.95 2.80 1.92 1.13 0.66

2.10 2.98 2.27 2.55 1.56 0.62

2.85 3.73 2.88 2.47 1737 0.61

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22.42 7.95 3.21 1.43 0:68 0.39

(A) (D) (D) (D) (D)

Scale: 1 inch= 30 Ft.

Luminaire S	Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Lumens	LLF	Description			
	3	M3	SINGLE	23000	1.000	LSI GFM-3-250-PSMV-F			
	4	V5	BACK-BACK	23000	1.000	LSI GFM-5-250-PSMV-F			
	5	W1	SINGLE	22000	1.000	LSI GBWM-FT-250-PSMH-F			

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking	Illuminance	Fc	3.23	25.96	0.26	12.42	99.85
Inner parking	Illuminance	Fc	3.67	25.96	1.43	2.57	18.15
Outer parking	Illuminance	Fc	1.79	4.36	0.26	6.88	16.77

These drawings are for conceptual use only and are not intended for construction. Values represented are an approximation generated from manufacturers photometric inhouse or independent lab tests with data supplied by lamp manufacturers,



5430 Douglas Drive North Crystal, MN 55429 763-585-6742 main 763-585-6757 fax Email: steen@steeneng.com

July 9, 2014

Mr. Sheldon Berg DJR Architecture 333 Washington Avenue North Suite 210, Union Plaza Minneapolis, Minnesota 55401

Re: Parking Lot Improvements Photometrics

9056 Penn Ave South Bloomington, MN

Dear Sheldon:

We have reviewed the photometric plans for this project generated by Luma Sales dated 7/2/2014.

These photometric plans comply with the City of Bloomington requirements.

If you have any questions or comments, please call.

Sincerely,

Steen Engineering Inc.

Steven M. Youngs PE MN 16544

Principal



May 28, 2014

Thomas N. Smith Novus Architects PO Box 1005 Mt. Pleasant, SC 29465

**RE:** Case 07984A-14

CSL Plasma - 9056 Penn Avenue, Bloomington, MN

Dear Mr. Smith:

As set forth in City Code Section 21.501.03(c), I administratively approved Minor Revisions to the Final Development Plans for exterior modifications and parking lot improvements at 9056 Penn Avenue subject to the following conditions:

- 1) The exterior modifications are limited to those shown on the approved plans in Case 07984A-14; and
- 2) All parking, loading, and unloading must take place within the property and off the adjacent public streets;

and subject to the following Code requirements:

- Landscape plan must be approved by the Planning Manager and landscape surety filed (19.52)prior to the issuance of a building permit;
- 2) Parking lot and site security lighting plans must be revised to satisfy the requirements of Section 21.301.07 of the City Code prior to the issuance of a building permit;
- 3) Fire lanes must be posted as approved by the Fire Marshal (MN State Fire Code Sec. 503.3);
- 4) Trash and recyclable materials be stored and screened inside the principal building (Sec. 19.51);
- 5) Signs must be in conformance with the requirements of Chapter 19, Article X of the City Code; and
- 6) A uniform sign design be submitted for approval by the Planning Manager

Should you have any questions regarding this action, please contact Dennis Fields, Planner at (952) 563-8925.

Thomas N. Smith May 28, 2014

Sincerely,

Muheyard
Glen Markegard
Planning Manager

F:\PLANNING\TRANSMITTAL LETTERS\2014\07984A-14