YPSILANTI TOWNSHIP
— PLANNING & ZONING DEPARTMENT —

REGULAR MEETING AGENDA

Tuesday, April 8, 2025
6:30 P.M.

If you need any assistance due to a disability, please contact the Planning Department at least 48 hours in advance of the meeting at planning@ypsitownship.org or 734-544-4000 ext. 1.

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF THE March 11, 2025, REGULAR MEETING MINUTES
4. APPROVAL OF AGENDA
5. PUBLIC HEARINGS
6. OLD BUSINESS
   A. **PRELIMINARY SITE PLAN – UPH YPSILANTI PROPERTY, LLC – 1410 S. HURON STREET – PARCEL K-11-38-280-018 –** TO CONSIDER THE PRELIMINARY SITE PLAN APPLICATION OF UPH YPSILANTI PROPERTY, LCC TO PERMIT THE CONSTRUCTION OF A 4,330 SQ. FT. CULVER'S RESTAURANT WITH A DRIVE-THROUGH FOR A 3.43-ACRE SITE ZONED TC, TOWN CENTER WITH A SITE TYPE D DESIGNATION.
7. NEW BUSINESS
8. OPEN DISCUSSION FOR ISSUES NOT ON THE AGENDA
   A. CORRESPONDENCE RECEIVED
   B. PLANNING COMMISSION MEMBERS
   C. MEMBERS OF THE AUDIENCE
9. TOWNSHIP BOARD REPRESENTATIVE REPORT
10. ZONING BOARD OF APPEALS REPRESENTATIVE REPORT
11. TOWNSHIP ATTORNEY REPORT
12. PLANNING DEPARTMENT REPORT
13. OTHER BUSINESS
14. ADJOURNMENT

CHARTER TOWNSHIP OF YPSILANTI
PLANNING COMMISSION MEETING
Tuesday, March 11, 2025
6:30 pm

COMMISSIONERS PRESENT

Elizabeth El-Assadi
Gloria Peterson
Larry Doe
Daryl Kirby
Amy Kehrer

STAFF AND CONSULTANTS

Sally Elmiger - Carlisle Wortman
Dennis McLain – Township Attorney

- **CALL TO ORDER/ESTABLISH QUORUM**

  MOTION: Ms. El-Assadi called the meeting to order at 6:30 pm.

- **APPROVAL OF FEBRUARY 25, 2025, REGULAR MEETING MINUTES**

  MOTION: Mr. Doe **MOVED** to approve the February 25, 2025, regular meeting minutes. The **MOTION** was **SECONDED** by Mr. Kirby and **PASSED** by unanimous consent.

- **APPROVAL OF AGENDA**

  MOTION: Ms. Peterson **MOVED** to approve the agenda as presented. The **MOTION** was **SECONDED** by Mr. Doe and **PASSED** by unanimous consent.

- **PUBLIC HEARINGS**

  A. **CONDITIONAL REZONING** – THE WASHTENAW PACE INC. / BRIO LIVING SERVICES – 2940 ELLSWORTH ROAD – PARCEL K-11-07-300-075 – TO CONSIDER A CONDITIONAL REZONING REQUEST APPLICATION TO REZONE 2940 ELLSWORTH ROAD FROM R-4, ONE-FAMILY RESIDENTIAL DISTRICT TO RM-MD, MULTIPLE FAMILY MEDIUM DENSITY

DISTRICT TO PERMIT THE CONSTRUCTION OF A 3-STORY SENIOR ASSISTED AND/OR INDEPENDENT LIVING FACILITY ON THE VACANT PORTION OF THIS 6.4-ACRE SITE.

PUBLIC HEARING OPENED AT 7:03 PM

Resident asked question regarding taxes in comparison to this project

PUBLIC HEARING ENDED AT 7:07 PM

MOTION: Ms. Peterson **MOVED** to recommend approval to the Township Board with the condition of a Certificate of Occupancy to be obtained by/within 4 years of approval; if Certificate of Occupancy is not obtained within that timeframe, the applicant will return to the Township Board to request an extension.

The **MOTION** was **SECONDED** by Mr. Doe.

Roll Call Vote: Mr. Doe (Yes); Ms. El-Assadi (Yes); Mr. Kirby (Yes); Ms. Peterson (Yes); Ms. Kehrer (Yes).

MOTION PASSED.

- **OLD BUSINESS**

None

- **NEW BUSINESS**

A. **CONDITIONAL REZONING** – THE WASHTENAW PACE INC./BRIO LIVING SERVICES – 2940 ELLSWORTH ROAD – PARCEL K-11-07-300-075 – TO CONSIDER A CONDITIONAL REZONING REQUEST APPLICATION TO REZONE 2940 ELLSWORTH ROAD FROM R-4, ONE-FAMILY RESIDENTIAL DISTRICT TO RM-MD, MULTIPLE FAMILY MEDIUM DENSITY DISTRICT TO PERMIT THE CONSTRUCTION OF A 3-STORY SENIOR ASSISTED AND/OR INDEPENDENT LIVING FACILITY ON THE VACANT PORTION OF THIS 6.4-ACRE SITE.

The Planning Commission noted that they considered this request and made their decision as part of the Public Hearing agenda item, as described above.

B. **MAJOR PD CHANGE** – ALLIED SIGNS, INC. – 2010 WHITTAKER ROAD – PARCEL K-11 21-200-040 – TO CONSIDER PROPOSED AMENDMENTS TO THE KROGER SIGN PACKAGE ILLUSTRATED ON THE FINAL PLANNED DEVELOPMENT (PD) SIGN PLAN FOR THE PAINT CREEK CROSSINGS SHOPPING CENTER.

MOTION: Ms. Peterson **MOVED** to recommend approval to the Township Board

The **MOTION** was **SECONDED** by Mr. Kirby.

Roll Call Vote: Mr. Doe (Yes); Ms. El-Assadi (Yes); Mr. Kirby (Yes); Ms. Peterson (Yes); Ms. Kehrer (Yes).

MOTION PASSED.

- **OPEN DISCUSSIONS FOR ISSUES NOT ON AGENDA**

  - **Correspondence Received**

    None to Report.

  - **Planning Commission members**

    None to Report.

  - **Members of the audience**

    None to Report.

- **TOWNSHIP BOARD REPRESENTATIVE REPORT**

  None to Report.

- **ZONING BOARD OF APPEALS REPRESENTATIVE REPORT**

  None to Report

- **TOWNSHIP ATTORNEY REPORT**

  None to Report

- **PLANNING DEPARTMENT REPORT**

  None to Report

- **OTHER BUSINESS**

  None to Report

- **ADJOURNMENT**

  MOTION: Mr. Doe **MOVED** to adjourn at 7:38 pm. The **MOTION** was **SECONDED** by Ms. Kirby and **PASSED** by unanimous consent.

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Respectively Submitted by

Lauren Doppke
Ypsilanti Township Staff Planner

Planning Department Report

Project Name:	Culver's Restaurant
Location:	1410 S. Huron Street, Ypsilanti, MI 48197
Date:	April 03, 2025

- [x] Full Preliminary Site Plan Review # 2
- [ ] Sketch Preliminary Site Plan Review #
- [ ] Administrative Preliminary Site Plan Review #
- [ ] Detailed Engineering/Final Site Plan Review #
- [x] Special Use Permit
- [ ] Public Hearing
- [ ] Rezoning
- [ ] Tentative Preliminary Plat
- [ ] Final Preliminary Plat
- [ ] Final Plat Process
- [ ] Planned Development Stage I
- [ ] Planned Development Stage II

Contact / Reviewer	Consultants, Departments, & Agencies	Approved	Approved with Conditions	Denied	N/A	See email/letter attached or comments below
Planning Department	Township Planning Department	☐	☑	☐	☐	See comments below
Carlisle/Wortman Associates	Planning Consultant	☐	☑	☐	☐	See letter dated 01-24-2025
OHM / Stantec	Engineering Consultant	☐	☑	☐	☐	See letter dated 01-07-2025
Steven Wallgren, Fire Marshal	Township Fire Department	☑	☐	☐	☐	See letter dated 01-02-2025
Dave Bellers, Building Official	Township Building Department	☐	☐	☐	☑	
Brian McCleery, Deputy Assessor	Township Assessing Department	☐	☐	☐	☑	
Scott Westover, Engineering Manager	Ypsilanti Community Utilities Authority	☐	☑	☐	☐	See letter dated 01-21-2025
Gary Streight, Project Manager	Washtenaw County Road Commission	☐	☐	☐	☑	See email dated 01-31-2025
Theresa Marsik, Stormwater Engineer	Washtenaw County Water Resources Commission	☐	☐	☐	☑	See letter dated 01-15-2025
James Drury, Permit Agent	Michigan Department of Transportation	☐	☐	☐	☐	

Planning Department Recommended Action:

The proposed Culver's Restaurant Preliminary Site Plan and Special Land Use request came before the Township Planning Commission at their regularly scheduled meeting on February 25, 2025. The Planning Commission held a public hearing, and discussed the project with the applicant (see attached minutes). The Planning Commission postponed a decision on the project to give the applicant time to obtain the variances outlined in the staff reports. All requested variances were approved by the Zoning Board of Appeals at their April 2, 2025 meeting. The applicant is now returning to the Planning Commission. The Planning Department recommends granting Preliminary Site Plan and Special Land Use approval. There are some outstanding comments from various reviewing agencies that will need to be addressed as part of Final Site Plan Review. We encourage the applicant to continue working with these agencies to resolve all outstanding review items.

CHARTER TOWNSHIP OF YPSILANTI
PLANNING COMMISSION MEETING
Tuesday, February 25, 2025
6:30 pm

COMMISSIONERS PRESENT

Bill Sinkule
Elizabeth El-Assadi
Gloria Peterson
Larry Doe
Bianca Tyson
Daryl Kirby
Amy Kehrer

STAFF AND CONSULTANTS

Fletcher Reyher, Planning and Development Coordinator
Sally Elmiger - Carlisle Wortman
Dennis McLain – Township Attorney

- **CALL TO ORDER/ESTABLISH QUORUM**

  MOTION: Mr. Sinkule called the meeting to order at 6:30 pm.

- **APPROVAL OF JANUARY 14, 2025, REGULAR MEETING MINUTES**

  MOTION: Mr. Doe **MOVED** to approve the January 14, 2025, regular meeting minutes. The **MOTION** was **SECONDED** by Mr. Kirby and **PASSED** by unanimous consent.

- **APPROVAL OF AGENDA**

  MOTION: Ms. El-Assadi **MOVED** to approve the agenda as presented. The **MOTION** was **SECONDED** by Mr. Doe and **PASSED** by unanimous consent.

- **PUBLIC HEARINGS**

SPECIAL LAND USE – UPH YPSILANTI PROPERTY, LLC – 1410 S. HURON STREET PARCEL K-11-38-280-018 – TO CONSIDER THE SPECIAL CONDITIONAL USE PERMIT APPLICATION OF UPH YPSILANTI PROPERTY, LCC TO PERMIT THE CONSTRUCTION OF A 4,330 SQ. FT. CULVER'S RESTAURANT WITH A DRIVE-THROUGH FOR A 3.43-ACRE SITE ZONED TC, TOWN CENTER WITH A SITE TYPE D DESIGNATION.

Mr. Fletcher Reyher, Planning and Development Coordinator, presented the Preliminary Site Plan and Special Land Use Application from UPH Ypsilanti Property, LLC for a proposed 4,330 sq. ft. restaurant & drive-through with 104 seats, and a 65-space parking lot. Other site features include an outdoor patio, sidewalk connection to Huron Street, lighting, and landscaping. The applicant is purchasing the 3.34-acre site from the Township. The restaurant will occupy a portion of the parcel, and the remaining portion of the site will remain vacant for now. All access will be off Brinker Way via the access road developed by the Aldi project. The property is zoned TC, Town Center with a Site Type D Designation. Restaurants are permitted and uses with drive-through facilities are allowed via special land use.

Mr. Fletcher Reyher presented an aerial view of the land and informed the Commission that the site plan submitted has been reviewed by township staff and consultants in accordance with all procedures. Carlisle Wortman Associates reviewed the site plan and has recommended multiple items to be discussed with the planning commission prior to the applicant going to the Zoning Board of Appeals.

Reviews of different departments:

- **OHM:** The Townships Engineering consultant recommended approval of the site plans in their letter dated January 7, 2025. OHM has provided the applicant with detailed engineering comments that would be addressed at the time of final site plan and detailed engineering review.
- **Ypsilanti Community Utilities Authority:** YCUA recommended approval in their letter dated January 21, 2025.
- **Ypsilanti Township Fire Department**: YTFD has recommended approval in a letter dated January 2, 2025.

- **Water Resources Commission:** WRC asked the applicant to address four items in their most recent letter dated January 15, 2025. These items will be addressed at the time of final site plan review.
- Washtenaw County Road Commission also shared a handful of comments with the planning department. These comments will be addressed at the time of the final site plan.

Mr. Fletcher Reyher, Planning and Development Coordinator, informed the Commission that Sally Elmiger (Planning Consultant - Carlisle Wortman) would provide the report from Carlisle Wortman.

Ms. Elmiger informed the Commission that she reviewed the project, and a postponement from the Planning Commission would have the project to be presented to the ZBA for decisions on the variances.

Ms. Elmiger stated that Carlisle Wortman recommended approval of the Special Land use as it is consistent with the Master Plan and the vision for the town center area.

Ms. Elmiger suggested that the Planning Commission to consider having the discussion with the applicant on the following:

- To discuss the need for excess impervious surface due to parking space length.
- To consider waiver of striping/signage of loading space for deliveries.
- Applicant to obtain a variance to locate service lane/waiting spaces in front yard.
- Planning Commission to consider ordinance criteria regarding waiving/modifying requirement for 30 deficient landscape trees.
- Provide downward facing, shielded alternative for light fixture “P” due to higher than permitted Kelvin rating, and higher than permitted footcandles, to be evaluated at Final Site Plan review. The color temperature is 4000 Kelvin, above the 3500 Kelvin requirement. An alternative fixture that meets the Kelvin requirement could be used and evaluated at Final Site Plan review.

Commissioner inquired about the proposed underground water storage system under the parking lot and the concern of having it fixed during a technical issue and the possibility of moving the trees away from the area (since the roots of the trees can in filtrate the water system); The Township Engineer Stacie Monte (OHM) informed the Planning Commission that they discourage in planting trees above utilities. Since

the storm sewer is privately owned and operated it would be the owners right/ discretion on the choice. Ultimately OHM would request the applicant to provide maintenance schedule on the plans.

Commissioner Kirby inquired about the problems that could arise due to the deficiency of trees; Matt Cole (site engineer) shared with the Planning Commission that the ordinance requires trees to be planted for every square foot on the site. Trees would be placed around the edge and in places that would require them. Matt Cole stated that there would be about seven feet of soil over the top of the underground water system (stone and fabric), and it would not cause any problem to the roots. A revised draft on the lights (that meets the ordinance) has been submitted to Mr. Fletcher Reyher for review.

Commissioner Peterson inquired about the reason for the long parking spaces/ loading spaces; Mr. Cole stated that the best parking space that is always recommended to clients is a 20-foot-long space and a 24-foot drive aisle. Some municipalities allow it to go down to 16-18 feet. The problem arises when parking SUVs and other similar cars, it would be difficult to reverse. The restaurant serves lunch/ dinner and opens at 10 am. Deliveries are usually around 8 am or earlier. The vehicle pulls close to the door to drop supplies off.

PUBLIC HEARING OPENED AT 6:45 PM

Hearing None.

PUBLIC HEARING ENDED AT 6:45 PM

MOTION: Ms. El-Assadi **MOVED** to postpone the Special Land Use request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018 to allow the applicant time to obtain the required variances as outlined in the Planning Commission Packet.

The **MOTION** was **SECONDED** by Mr. Doe.

Roll Call Vote: Mr. Doe (Yes); Ms. Tyson (Yes); Mr. Sinkule (Yes); Ms. El-Assadi (Yes); Mr. Kirby (Yes); Ms. Peterson (Yes); Ms. Kehrer(Yes).

MOTION PASSED.

- **OLD BUSINESS**

None to Report

- **NEW BUSINESS**

a. **PRELIMINARY SITE PLAN** – UPH YPSILANTI PROPERTY, LLC – 1410 S. HURON STREET – PARCEL K-11-38-280-018 – TO CONSIDER THE PRELIMINARY SITE PLAN APPLICATION OF UPH YPSILANTI PROPERTY, LCC TO PERMIT THE CONSTRUCTION OF A 4,330 SQ. FT. CULVER'S RESTAURANT WITH A DRIVE-THROUGH FOR A 3.43-ACRE SITE ZONED TC, TOWN CENTER WITH A SITE TYPE D DESIGNATION.

MOTION: Ms. El-Assadi **MOVED** to postpone the Preliminary Site Plan request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018 to allow the applicant time to obtain the required variances as outlined in the Planning Commission Packet.

The **MOTION** was **SECONDED** by Mr. Kirby.

Roll Call Vote: Mr. Doe (Yes); Ms. Tyson (Yes); Mr. Sinkule (Yes); Ms. El-Assadi (Yes); Mr. Kirby (Yes); Ms. Peterson (Yes); Ms. Kehrer (Yes).

MOTION PASSED.

b. **SPECIAL LAND USE** – ZAWIYAH FOUNDATION, LLC – 5718 WHITTAKER ROAD – PARCEL K-11-21-300-034 – TO CONSIDER THE SPECIAL CONDITIONAL USE PERMIT APPLICATION OF ZAWIYAH FOUNDATION, LLC TO PERMIT THE ESTABLISHMENT OF A HOUSE OF

WORSHIP FOR A 0.71-ACRE SITE ZONED NB, NEIGHBORHOOD BUSINESS.

Mr. Fletcher Reyher, Planning and Development Coordinator, presented the Preliminary Site Plan and Special Land Use Application from Zawiyah Foundation LLC to use the existing building located at 5718 Whittaker Road for worship and prayer for the Zawiyah Foundation.

Mr. Fletcher Reyher informed the Planning Commission that Zawiyah Foundation LLC was present at the January 14, 2025, meeting and the request for preliminary site plan and special land use was postponed for the applicant to address certain items that the commissioners had requested.

At the January 14, 2025, meeting the Planning Commission had requested the following:

- Applicants plan once their members grow from the current 12 to 19 when the maximum occupancy of the current building configuration is 19 persons.
- The applicant to address the deficient number of trees and shrubs in their landscaping plan.
- The applicant to install an eight-foot-wide safety path along the street frontage, instead of the five-foot proposed sidewalk.
- The applicant to provide documentation that no loading/ unloading zone is needed for their use.

Mr. Fletcher Reyher informed the Planning Commission that Zawiyah Foundation LLC did provide a response letter to these specific requests and have revised their plans.

Ms. Elmiger informed the Commission that she reviewed the project, and the applicant had provided additional information as requested. The applicant has stated that they would present a request to the Planning Commission in case they do outgrow the space (requesting the expansion of the building). The applicant has proposed the increase of trees/ shrubs adding landscaping to the site (west side of the property; residential side). The applicant has provided a three-foot extension; the current five-foot-wide sidewalk will be extended to eight feet, which meets the ordinance requirement. The applicant has provided documentation on not having the requirement for the loading zone.

Commissioner Kehrer inquired about the large tree at the front that could tamper with the power lines/ utilities; Ms. Elmiger stated that the tree was a hackberry, and the Commissioners could request the applicant to modify the landscaping.

Sebastian Robbins (representing Zawiyah Foundation) shared about increasing the five-foot sidewalk to eight-foot sidewalk, which was modified. The applicant made changes to the landscaping as requested (the green barrier towards the neighboring residents) and the need for a loading zone is not required. The increase in members is most likely not to occur but if it does happen and an expansion of the building is needed, it would be brought to the Planning Commission.

Commissioner Peterson inquired about the type of organization/ parking lot; Sebastian Robbins stated that Zawiyah means corner, a place for prayer (Sufi Organization); opened for five daily prayers. The property currently has ten parking lots plus a dedicated handicap parking space. Usually there are about six people at a prayer session.

Commissioner Peterson inquired about the future plans in case of an expansion; Ms. Elmiger informed Commissioner Peterson that the foundation cannot have more than 19 people and the parking lot is available only for 12 vehicles, any expansion would require the applicant to present a request to the Planning Commission.

MOTION: Ms. El-Assadi **MOVED** to approve the Special Land Use Permit submitted by Zawiyah Foundation, LLC to permit establishment of a house of worship, utilizing the existing building on the 0.71-acre site zoned NB, Neighborhood Business, located at 5718 Whittaker Road, Ypsilanti, MI 48197, Parcel K-11-21-300-034, as the proposal meets the criteria in Article 10, Special Land Use with the following conditions:

- The applicant shall address all outstanding comments from reviewing agencies prior to Final Site Plan Approval. The applicant shall revise all plan sheets to reflect the results of this evening's discussion.
- The applicant shall obtain all applicable internal and outside agency permits prior to construction.
- All vehicles must be parked in the designated spaces in the parking lot, as outlined in the plans dated November 19, 2024, and included in tonight's Packet. Parking in undesignated spaces or on unpaved areas outside of the

designated spaces is prohibited. The construction of an additional car park is prohibited without the required Township review and approval.

- The building is limited to an occupant load of nineteen (19) people, as shown on the plans in tonight's packet.
- Change of shade tree at the front to ornamental trees/ shrubs that will not grow taller than the lowest utility line out front (the tree below the power line) and any other conditions based upon the planning commission discussion.

The **MOTION** was **SECONDED** by Mr. Kirby.

Roll Call Vote: Mr. Doe (Yes); Ms. Tyson (Yes); Mr. Sinkule (Yes); Ms. El-Assadi (Yes); Mr. Kirby (Yes); Ms. Peterson (Yes); Ms. Kehrer (Yes).

MOTION PASSED.

c. **PRELIMINARY SITE PLAN** – ZAWIYAH FOUNDATION, LLC – 5718 WHITTAKER ROAD –PARCEL K-11-21-300-034 – TO CONSIDER THE PRELIMINARY SITE PLAN APPLICATION OF ZAWIYAH FOUNDATION, LLC TO PERMIT THE ESTABLISHMENT OF A HOUSE OF WORSHIP FOR A 0.71-ACRE SITE ZONED NB, NEIGHBORHOOD BUSINESS.

MOTION: Ms. El-Assadi **MOVED** to approve the Preliminary Site Plan submitted by Zawiyah Foundation, LLC, to
permit establishment of a house of worship, utilizing the existing building on the 0.71-acre site zoned NB, Neighborhood Business, located at 5718 Whittaker Road, Ypsilanti, MI 48197, Parcel K-11-21-300-034, with the following conditions:

- The applicant shall address all outstanding comments from reviewing agencies prior to Final Site Plan Approval. The applicant shall revise all plan sheets to reflect the results of this evening's discussion.
- The applicant shall obtain all applicable internal and outside agency permits prior to construction.
- All vehicles must be parked in the designated spaces in the parking lot, as outlined in the plans dated November 19, 2024, and included in tonight's Packet. Parking in undesignated spaces or on unpaved areas outside of the

designated spaces is prohibited. The construction of additional parking is prohibited without the required Township review and approval.

- The building is limited to an occupant load of nineteen (19) people, as shown on the plans in tonight's packet.
- Change of shade trees at the front to ornamental trees/ shrubs that will not grow taller than the lowest utility line out front (the tree below the power line) and any other conditions based upon the planning commission discussion.

The **MOTION** was **SECONDED** by Mr. Kirby.

Roll Call Vote: Mr. Doe (Yes); Ms. Tyson (Yes); Mr. Sinkule (Yes); Ms. El-Assadi (Yes); Mr. Kirby (Yes); Ms. Peterson (Yes); Ms. Kehrer (Yes).

MOTION PASSED.

d. **ELECTION OF OFFICERS FOR 2025 CALENDER YEAR** – AT THE FIRST REGULAR MEETING EACH YEAR, THE PLANNING COMMISSION SHALL SELECT FROM ITS MEMBERSHIP A CHAIRPERSON, VICE CHAIRPERSON, AND SECRETARY.

Mr. Fletcher Reyher, Planning and Development Coordinator, informed the Planning Commissioners that they would need to elect a Chairperson, a Vice Chairperson and a secretary (at the first regular meeting each year). February 25, 2025, was the first meeting with all members present.

Ms. Peterson nominated Ms. Elizabeth El-Assadi as Chair; Ms. Elizabeth El-Assadi accepted the nomination.

Ms. Peterson nominated Mr. Sinkule as Vice Chair; Mr. Sinkule accepted the nomination.

Mr. Larry Doe nominated Mr. Daryl Kirby as Secretary.

MOTION: Ms. Peterson **MOVED** to nominate Ms. Elizabeth El-Assadi as Chair; Mr. Bill Sinkule as Vice Chair and Mr. Larry Doe nominated Mr. Daryl Kirby as Secretary for the year of 2025 Planning Commission.

The **MOTION** was **SECONDED** by Ms. Tyson.

Roll Call Vote: Mr. Doe (Yes); Ms. Tyson (Yes); Mr. Sinkule (Yes); Ms. El-Assadi (Yes); Mr. Kirby (Yes); Ms. Peterson (Yes); Ms. Kehrer (Yes).

MOTION PASSED.

- **OPEN DISCUSSIONS FOR ISSUES NOT ON AGENDA**

  - **Correspondence Received**

    None to Report.

  - **Planning Commission members**

    None to Report.

  - **Members of the audience**

    None to Report.

- **TOWNSHIP BOARD REPRESENTATIVE REPORT**

  Ms. Peterson informed the Planning Commission of the upcoming second senior budget meeting from Washtenaw County.

- **ZONING BOARD OF APPEALS REPRESENTATIVE REPORT**

  None to Report

- **TOWNSHIP ATTORNEY REPORT**

  None to Report

- **PLANNING DEPARTMENT REPORT**

  None to Report

- **OTHER BUSINESS**

  Mr. Fletcher Reyher informed the Planning Commission that this was his last Planning Commission meeting with Ypsilanti Township since he has accepted a new role with Dexter Township.

- **ADJOURNMENT**

  MOTION: Ms. El-Assadi **MOVED** to adjourn at 7:20 pm. The **MOTION** was **SECONDED** by Ms. Peterson and **PASSED** by unanimous consent.

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Respectively Submitted by Minutes Services

Carlisle | Wortman
ASSOCIATES, INC.
117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: August 21, 2024
Rev.: January 24, 2025

Preliminary Site Plan and Special Use Review
For
Ypsilanti Township, Michigan

Applicant:	UPH Ypsilanti Property LLC (Represented by Charles Paisley)
Project Name:	Culver's Restaurant and Drive-Through
Plan Date:	July 18, 2024
Latest Revision:	December 20, 2024
Location:	1410 Huron St. (On west side of South Huron Street, just north of Aldi site at Brinker Way)
Zoning:	FB, Form Based District – Town Center
Action Requested:	Preliminary Site Plan and Special Use Approval

PROJECT AND SITE DESCRIPTION

The applicant is proposing to develop a Culver's restaurant on the west side of Huron St., just north of the new Aldi food store. Culvers is proposing to construct a 4,330 sq/ft building with 104 seats, and 65-space parking lot. The business will include a drive-through component, with two order stations. Other site features include an outdoor patio, sidewalk connection to Huron St., landscaping, and lighting.

The applicant is purchasing the 3.43-acre site from the Township. The restaurant will occupy a portion of the parcel, and the remaining portion of the site will remain vacant for now. All access will be off Brinker Way via the access road developed by the Aldi project.

The subject site is zoned FB, Form Based Mixed Use – Town Center, and is categorized as a Site Type D. Food uses (such as restaurants) are permitted, and uses with drive-through facilities are allowed via special use. Single-tenant, single-story buildings (Building Type B) are permitted. An aerial of the subject site is provided below.

Figure 1. Aerial Image of Subject Site and Vicinity

Source: MapWashtenaw (Image Capture 2022)

Size of Subject Site:
3.43 acres

Current Use of Subject Site:
Vacant

Current Zoning:
FB, Form Based – Town Center District

Proposed Use of Subject Property:
Restaurant with Drive-through

Adjacent zoning and land uses are as follows:

Direction	Zoning	Use
North	FB, Form Based Mixed Use- Town Center	Vacant
South	FB, Form Based Mixed Use- Town Center	Aldis Grocery Store
East	FB, Form Based Mixed Use- Town Center	Automotive Glass Co. (Across Huron St.)
West	FB, Form Based Mixed Use- Town Center	Printing Co. & Multi-tenant commercial building

Remainder of Property

As mentioned above, the proposed project does not occupy the entire 3.43 acres. The cover letter with the first submission (dated July 29, 2024) stated that: "*At this time, it is unknown what will become of the undeveloped northern portion of the property. The owner may elect to let it remain undeveloped or he may attempt to develop it in the future at a later date*."

The property is designated a "Site Type D." If the northern portion of this property is split off in the future, then the Culver's site must be a minimum of 2-acres in size to be consistent with the "Site Type D" standards that allow a drive-through component (drive-through facilities are only permitted on "Site Type D" properties). We recommend that this be a condition of any approval of the plans. The applicant's most recent response memo (dated December 26, 2024) acknowledges this requirement.

Also, because the possibility of a land division is feasible, any ordinance requirements for the Culver's Site Plan must be located/satisfied on land that would reasonably be included in the parcel occupied by the Culver's restaurant.

Items to be Addressed: *1) Recommend conditioning any approval of the Culver's Site Plan on any future land division to result in a minimum 2-acre property for the Culver's site to comply with the minimum site area for drive-through facilities and the Site Type D standards.*

MASTER PLAN

The site is designated as Township Core and is intended to be the urbanized core of the community. It includes the governmental center made up of the Civic Center, County Courthouse, and the district library. Huron Street and the immediate surrounding area is meant to host a mix of uses from multiple-family residential to commercial to light industrial. Neighborhood scale retail and services including restaurants that offer various food options are encouraged in this district.

Applicable design concepts in the Master Plan that apply to this project include:

- *Architectural design must create an interesting visual experience for both sidewalk users at close range and for those viewing the skyline from a distance.*
- *Design creativity with regard to materials will be encouraged, although low quality materials or building designs that inhibit activity on the corridor will not be permitted.*

The building architecture clearly uses quality materials, creating an attractive corporate design for business identification. The revised site plan locates the building closer to Huron St. and reduces the amount of vehicle pavement/uses in the front yard, strengthening the pedestrian connection between the patio/bike parking and the sidewalk along Huron. These changes create a more welcoming experience for pedestrians, as envisioned by the Master Plan.

The proposed use of the site as a restaurant that can both serve the regional market, but also local neighborhoods is consistent with the Master Plan.

NATURAL FEATURES

Topography: The site has significant topography, sloping down from Huron Street to the east. The west boundary of the subject site is approximately 21 feet lower than the elevation of the Huron St. sidewalk. While the site slopes downward from the street, there is a gentler cross grade change north-to-south.

Aldis raised the level of their site approximately 14 to 18-feet to bring the finished floor of their building up to the elevation of the Huron St. sidewalk adjacent to their property. Culvers is proposing to do something similar, but not to the same degree. The finished floor of their building will be a few feet lower than the elevation of the Huron St. sidewalk.

Woodlands/Wetlands: In 2006, when the property was purchased by the Township, they completed a woodland and wetland delineation. According to Township records, the Township addressed all environmental requirements to prepare the site for development.

Items to be Addressed: *None.*

AREA, WIDTH, HEIGHT, SETBACKS

The proposed development is being constructed under "Building Form B" requirements. Building placement and orientation are also discussed under Sec. 507(B) of the Form-Based ordinance.

	Required / Allowed	Provided	Complies with Ordinance
Front Setback (Huron Street)	10-foot to 30-foot build-to-line	Building located 74 feet from the Huron Street ROW	Requires Variance **(See Below)**
Side Setback	No minimum side setback / if provided, minimum of 5 feet	245 feet (north) 44 feet (south)	Complies
Rear Setback	10 feet	211 feet	Complies
Impervious Surface	80% maximum	64.6%	Complies
Building Height (Feet)	Minimum: 14 feet Maximum: 38 feet	23 feet	Complies
Building Height (Stories)	Minimum: 1 story Maximum: 3 stories	1 story	Complies

Front Setback: Our previous review discussed some differences between the siting of the Aldi building and the Culver's building; however, the applicant's response memo explains that the elevation of the access driveway (west side of Aldis) that will extend to Culver's dictates the elevation of the Culver's building to allow acceptable grades for ADA access.

Regarding the front setback, the revised plans have shifted the building 11.5-feet closer to Huron St., reducing the size of the needed variance. The applicant has worked with the Planning staff to try and meet the form-based requirements. However, they note that due to significant site topography and the existing elevation of the access road, they seek a variance for the Huron Street frontage. The variance is to be considered by the Zoning Board of Appeals.

Impervious Surface. As requested, Sheet C-105 indicates that the project has an impervious calculation of 64.6%. Also as requested, the plans indicate that this calculation only includes the land that will be included in the future land division (or the proposed parcel after the northern portion is split off in the future).

Items to be Addressed: *1) Applicant to obtain front setback variance.*

PARKING, LOADING

Sec. 1205, *Parking requirements*, Sec. 507(C), *Design standards*, and Sec. 1118, *Drive-in and drive-through facilities*, require the following regarding parking:

Parking Requirements	Number of Spaces Required	Number of Spaces Provided	Complies with Ordinance
Number of Spaces for Drive-Through Restaurant	0.7 per seat (alt. 3 spaces for every 4 seats) = (0.7 x 104 seats; or 3 x (104/4)) = 73 to 78 spaces	65 parking spaces (including 2 "bus" spaces) + 8 "waiting" spaces for drive-through customers and 3 spaces for food delivery services = 76 spaces	Complies
Barrier-Free Spaces	3 spaces (including one "van-accessible" BF space)	3 spaces (including one "van-accessible" BF space)	Complies
Stacking Spaces	10 spaces	13 spaces	Complies
Loading spaces	1 space	1 space	Complies **(See Below)**
Bicycle parking	2 spaces	2 spaces	Complies
Parking Location	Located in a side or rear yard; screened with a minimum 30-inch masonry wall on the required building line, or within 5 feet of the required building line.	Parking is located in a front, side, and rear yard. No screen wall is proposed	Requires Variance **(See Below)**
Parking Adjacent to Required Building Line (build-to line)	No more than 25% of total lineal feet or 60 feet, whichever is less, shall be occupied by parking along the building line	The Parking lot is located behind the front face of the building, and not adjacent to the required Building Line. Therefore, this provision doesn't apply to this project.	N.A.

Parking Space Size. The ordinance requirements for a typical parking space is 9' x 18'. The proposed parking spaces are 20-feet-long, and could be shortened to minimize impervious surface on site. The 20-foot-long spaces (not adjacent to sidewalk/greenbelt) could be shortened to 18-feet-long, and the spaces that abut a 7-foot-wide sidewalk (next to building) could be shortened to 16-feet-long. The spaces that abut the vacant portion of the site (north property line) are shown at 18-feet-long, and could also be shortened to 16-feet. So much of the site is occupied by impervious surfaces, the Planning Commission could discuss these reductions permitted by the ordinance.

Loading/Unloading Space. The Form-Based ordinance and site plan requirements state that a loading/unloading space and specifications be shown on the plans. The revised plans show a 10' x 55' loading space on the north side of the building. The Form-Based ordinance goes on to state that the loading space shall be designated by markings or signage to limit conflicts between delivery vehicles and patrons. Sheet C-102 explains that this space will not be stripped in the field, and loading will only occur during non-business hours. Sec. 1207(2)(F) gives the Planning Commission the ability to grant a waiver in the loading space requirements. The Planning Commission should determine if striping/signage is needed to identify the loading space on site.

Parking Location/Parking Adjacent to Required Build-To Line.

a. As mentioned in our previous review, three (3) parking spaces are located directly in front of the dumpster screen. Sheet C-102 on the revised plans notes that trash haulers will be scheduled during non-business hours (or 7am-10am) and will not conflict with customer use of the adjacent parking spaces or sidewalk. As requested, the turning movements of a trash hauler are shown on the plans.

b. The service lane is an integral part of the parking lot, and the ordinance requires locating parking facilities in the side or rear yard. While most of the parking complies with this requirement, the service lane and approximately five "waiting" spaces are located in the front yard, and do not comply with the ordinance. The plans have been revised to reduce the extent of the service lane/waiting spaces in the front yard, but this condition can't be helped given the orientation of the drive-thru and needed vehicular circulation. A variance will be required.

c. When parking is located in a side yard, the side abutting the required building (build-to) line adjacent to the right-of-way must be screened with a minimum 30-inch-tall masonry screen wall on the build-to line, or within five-feet of this line. The applicant's response memo explains that the site will be 4.5-feet below the elevation of the street, and a 2.5-foot-tall wall will not screen the lot. The landscape plan shows shrubs (between 3-5 feet tall) are proposed along most of the parking lot that fronts on the build-to line, which will help to screen this lot from the street. The Form-Based ordinance allows the Planning Commission the ability to modify greenbelt provisions, as long as the modification does not pose a safety issue, the modification is compatible with adjacent uses and the Master Plan and won't adversely impact public utilities/services or off-site natural features.

Items to be Addressed: *1) Planning Commission to discuss need for excess impervious surface due to parking space length. 2) Planning Commission to consider waiver of striping/signage of loading space for deliveries, as described on Sheet C-102. 3) Applicant to obtain a variance to locate service lane/waiting spaces in front yard. 4) Planning Commission to determine if no screen wall along parking lot edge facing Huron St. meets the criteria in ordinance to waive the masonry screen wall.*

SITE ACCESS, CIRCULATION, AND TRAFFIC

The project will be accessed via a new roadway constructed by the Aldis project off Brinker Way. The roadway across Aldis' property is located in an access easement to allow vehicles to enter the Culvers' property from this road.

The pavement design will allow vehicles to circulate around the site. Also, an "escape lane" is provided for the drive-through lane, which is a positive safety feature of the plan.

Fire truck and delivery truck turning movements are shown on Sheet C-102.

Pedestrian Facilities.

1) The Form-Based ordinance calls for a site layout that provides safe and convenient pedestrian and bicycle access to and within the subject site and between adjacent sites. The Culver's plan shows a sidewalk connection from the Huron St. sidewalk to the patio. This sidewalk crosses the vehicle access lane (from the drive-thru) and is located so that vehicles have sufficient distance to see pedestrians. The bike rack is directly next to the outdoor patio, which will be convenient for people arriving by bike. (See our comments regarding access to the bike rack from the sidewalk under the "*Screening & Landscaping*" section below.)
2) A sidewalk connection is also provided on the west side of the site that connects to the Aldis sidewalk along the shared roadway easement. This sidewalk then directly connects pedestrians to the Culver's front door, along the entrance driveway to the restaurant.
3) A seven-foot-wide sidewalk is proposed along the north side (front) of the building that connects to the outdoor dining patio. This sidewalk also connects to a service door along the west side (rear) of the building.
4) One pedestrian door is also located on the south side of the building. As requested, a paved surface has been added to allow customers/employees to use this door if needed.
5) The Form-Based ordinance also encourages sidewalks fronting the public right-of-way to be designed to accommodate space for activities such as outdoor dining. The plan shows an outdoor patio (approx. 680 s.f. in size) on the north side of the site.

Items to be Addressed: *None.*

SCREENING & LANDSCAPING

	Required	Provided	Compliance
Street Yard Landscaping, per frontage: • 1 large deciduous tree per 40 l.f. • 1 ornamental tree per 100 l.f. • 1 shrub per 10 l.f.	251 l.f./40 l.f. = 6 large dec. trees 251 l.f./100 l.f. = 3 orn. trees 251 l.f./10 = 25 shrubs	6 dec. trees 3 orn. trees 25 shrubs	Complies
General Landscaping: 1 tree per 1,000 s.f. 1 shrub per 500 s.f.	24,254 s.f./1,000 s.f. = 24 large trees* 24,254 s.f./500 s.f. = 48 shrubs *Mix deciduous and evergreen	0 trees + 48 shrubs	Deficient by 24 trees; Complies for shrubs **(See Below)**
Parking Lot Interior: 1 large deciduous tree per 2,000 s.f. of pavement	37,835 s.f./2,000 s.f. = 19 large trees	13 trees	Deficient by 6 trees **(See Below)**
Parking Lot Perimeter: 1 large deciduous tree per 40 lineal feet of perimeter	900 l.f./40 l.f. = 22 trees	22 trees	Complies
Mitigation	Information provided; 2 large trees	0 trees	**(See Below)**

A. <u>Street Yard Landscaping:</u>

1) Due to the possibility that the northern portion of the site could be split off in the future, the calculations are based on a frontage calculation that would create a 2-acre parcel, or 251-lineal feet. We consider this appropriate.
2) As requested, trees that are outside of the 2-acre parcel boundaries are not counted toward the Culver's Front Yard Landscaping requirements.

B. <u>Landscape Plan Requirements</u>: The landscape plans have been revised and have addressed our previous comments regarding a Plant Schedule (i.e., Plant List), a perennial planting detail, and calculations for General Landscaping, Parking Lot Interior landscaping, and Parking Lot Perimeter landscaping. How the revisions meet the ordinance requirements are summarized below. Also, please note the ordinance provision for Planning Commission modifications/waivers below.

1) All of the trees shown on the plans were counted toward the other landscaping requirements; there were no trees left over to count toward the **General Landscaping** requirements. The ordinance does not permit "double counting" plant material toward more than one requirement. The General Landscaping proposed is deficient by 24 large trees; however, they did add evergreen trees to the plant mix, which is a positive change.
2) The plans are deficient by six (6) **Parking Lot Interior** trees.
3) The plans meet the **Parking Lot Perimeter** requirements.

C. <u>Proposed Plant Material:</u>

1) As requested, the species that are prohibited by the ordinance were switched out for species that are allowed.

2) Also, the proposed plant material sizes listed in our previous review were adjusted to meet ordinance requirements. (Note that the Plant List should update the size of the 'Spilled Wine' Weigela to be a minimum size of 30-inches.)

D. Irrigation: The ordinance requires that the Landscape Plan include a note stating that the site will have an underground irrigation system for all landscaped areas. This is provided in Note #8 on Sheet L-1.

The Planning Commission may waive or modify the above standards (B above) in the following situations (Note: We only list the criteria that apply to a new development):

1) Where a proposed modification cannot be reasonably accomplished in strict adherence to this section due to existing site or building constraints.
2) Where the addition of new landscape material would serve no good purpose due to its relation to existing plant material, changes in grade, or other site characteristics.
3) Where the intent of this Section can be met through reasonable alternatives.

In our opinion, the site has areas outside of the proposed watermain easement and access road easement that could accommodate additional trees. The Planning Commission will need to consider whether the proposal meets the criteria in the ordinance to waive/modify the landscaping requirements.

Other Requirements

Bike Rack Access: The landscape plan shows plant material between the sidewalk from Huron St., and the bike rack. This means that someone on a bike will need to walk their bike through the patio to lock it up on the rack. Could a small portion of the landscape bed next to the bike rack be a concrete pad that would allow someone on a bike to access the rack from the sidewalk vs. through the patio?

Raingardens: Sec. 1301(F) requires non-single-family residential site plans to incorporate raingardens and bioswales per the Washtenaw County Water Resource Commissioner's standards, unless the applicant can prove to the satisfaction of the Township engineer that these features are not practical. We defer this ordinance requirement to the Township Engineer.

Trash and Recycling Containers: The site plan shows a dumpster screen behind the building. The access gates to the dumpsters face the north side of the site. The pedestrian entry point faces the west side of the building, screening view of the dumpster through this pedestrian access from view of the parking lot.

A dumpster screen detail is provided on Sheet C-1, showing an 8-foot-tall dumpster screen. The Form-Based ordinance requires that the screen's materials be consistent with the building walls. The screen details indicate that the veneer on the screen will be manufactured stone to match the building, meeting this requirement.

Equipment Screening: At-grade equipment appears to be screened.

Existing Trees: The Woodland Protection ordinance (Chapter 24, Article III) states that existing trees of eight-inch diameter at breast height (DBH) or greater shall be shown on a site plan. The existing trees shall be tagged in the field, and identified on the plan by their location, common and botanical name, DBH, condition, and if the tree is to remain or removed.

Replacement trees are required if trees will be removed outside of grading, buildings, or pavement. In reviewing the plans, the project proposes to remove 25 native trees that are 8-DBH in size or greater. However, all but two (2) of these trees are within the proposed grading, building, or pavement. Therefore, Sec. 24-68 requires that two (2) trees, a minimum of 2-caliper-inches in size, be planted to mitigate for the proposed tree removal. Note that trees planted to meet the landscaping requirements cannot be double counted as mitigation trees.

Items to be Addressed: *1) Planning Commission to consider ordinance criteria regarding waiving/modifying requirement for 30 deficient landscape trees. 2) Consider small concrete pad between front sidewalk and bike rack so a cyclist doesn't have to walk their bike through the patio to get to the rack. 3) Defer evaluation of raingardens/bioswale requirement to Township Engineer. 4) Provide two (2) mitigation trees on site, a minimum of 2-caliper inches in size.*

LIGHTING

A Lighting Plan has been submitted. We have the following comments:

1) We requested manufacturer cut sheets of building-mounted light fixture "N," which has been provided. This fixture is a downward-facing fixture recessed in the building canopies. This fixture comes in the required 3500 Kelvin color temperature. It doesn't appear to come with a house-side shield; however, the light source is recessed into the canopy, creating a shield.
2) A manufacturer cut sheet of light fixture "P" has been provided. This building-mounted fixture is located on the rear façade (near the service door), shines light downward, and the housing shields the light source, as required. The color temperature is 4000 Kelvin, above the 3500 Kelvin requirement. An alternative fixture that meets the Kelvin requirement could be used and evaluated at Final Site Plan review.
3) A manufacturer cut sheet of light fixture "S" has been provided. This is a decorative fixture that's located at the four corners of the building. The fixture is shielded but only comes in 4000 Kelvin color temperature. However, the ordinance allows higher Kelvin ratings if used exclusively for the decorative illumination of certain building façade features. The applicant should state if this fixture is for decorative illumination through color of certain building façade features. This fixture is specified on the photometric plan to only shine light in a downward direction, as required.
4) The pole-mounted fixtures are downward facing and meet the color temperature and height requirements in the ordinance. They also can accept house-side shields, as required.
5) The light levels at the property lines meet ordinance requirements.
6) The light levels around the building have been adjusted to be within the 20-foot-candle maximum, except for the fixture "P" at the rear service door (footcandle reading of 28.9). As mentioned above, it may be possible to use another fixture that complies with this requirement as well as the Kelvin rating.
7) The pole-mounted light fixtures around the perimeter of the building have been adjusted so that they do not conflict with the proposed tree locations.
8) The previous building elevations indicated "optional blue LED accent lighting" around the parapet over the front door. Since the ordinance prohibits this type of lighting, the revised elevations have removed it.
9) In our previous review, we asked if any lighting will be provided along the sidewalk from Huron St.? The plans do not show any new light fixtures along the sidewalk between Huron St. and the building.

Items to be Addressed: *1) Provide downward-facing, shielded alternative for light fixture "P" due to higher than permitted Kelvin rating, and higher than permitted footcandles, to be reviewed at Final Site Plan review. 2) Applicant to explain if light fixture "S" (with higher than permitted Kelvin rating) is used exclusively for the decorative illumination of certain building façade features; Planning Commission to consider higher than allowed Kelvin rating for this fixture.*

ELEVATIONS AND FLOORPLANS

Floorplans and elevations have been provided.

Elevations: As requested, the elevations label the direction of each. Since the building has been re-oriented on the site, the building elevations have been modified to reflect this change. We noticed that the proposed awnings are not above the windows or door on the South Elevation drawing; is this intentional?

Façade Variation:
Façade variation is provided on all building elevations through the use of varying colors and materials.

Transparency:
First floors of buildings facing a ROW are required to provide 50% transparency, and 30% transparency along facades facing a side street or parking area. As requested, a table has been provided with the architectural drawings, indicating that the façade facing Huron St. does not meet the 50% transparency requirement (providing 41%), and the façade facing the parking lot to the north does not meet the 30% requirement (providing 21%).

Regarding the front façade, the transparency of the front of the building will either need to be adjusted, or the applicant seek a variance.

Regarding the side façade, Sec. 507(H) of the ordinance offers "transparency alternatives" that can be used singularly or in combination for any side facing façade, for up to 50% of the transparency requirement. The north façade is deficient by 30% of the required transparency (or 9% deficient from the required 30% transparency). The patio on the north side of the building could be used to bring the north side transparency up to the required 30%. The Planning Commission should discuss this alternative.

Materials:
The building includes a mix of varied materials. The primary materials are brick and composite siding, with accents of veneered stone.

Items to be Addressed: *1) Confirm proposed awning location on South Elevation. 2) Applicant to modify the front façade to bring up to 50% transparency requirement, or obtain a variance. 3) Planning Commission to consider "transparency alternative" for the parking lot side (north façade), using the patio to count toward the 30% transparency requirement on this façade.*

SPECIAL USE

In the Town Center, drive-through facilities require Special Use approval from the Planning Commission. Standards for Special Use review are set forth in Section 1003. The Planning Commission, and the Board of Trustees when required, shall review the particular circumstances and facts of each proposed use in terms of the following standards and required findings, and with respect to any additional standards set forth in this Ordinance. The Planning Commission, either as part of its final decision or in its recommendation, shall find and report adequate data, information, and evidence showing that the proposed use meets all required standards and:

1. Will be harmonious, and in accordance with the objectives, intent, and purpose of this Ordinance.
2. Will be compatible with a natural environment and existing and future land uses in the vicinity.
3. Will be compatible with the Township master plans.
4. Will be served adequately by essential public facilities and services, such as highways, streets, police and fire protection, drainage ways and structures, refuse disposal, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately for such services.
5. Will not be detrimental, hazardous, or disturbing to existing or future neighboring uses, persons, property, or the public welfare.
6. Will not create additional requirements at public costs for public facilities and services that will be detrimental to the economic welfare of the community.

We find that the standards have generally been met:

- S. Huron Street includes a varied use of commercial and other uses. The proposed use as a restaurant with drive-thru and waiting facilities will add to this mix of commercial uses along the corridor. The revised plans have increased the pedestrian-friendly character of the layout which is more compliant with the Form-Based ordinance.
- The proposed use of the site as a restaurant that can both serve the regional market but also local neighborhoods, making the use consistent with the Master Plan.
- With utility and other improvements, the site can adequately be served with public facilities and services.
- We don't believe the proposed use or site layout will be detrimental to existing or future neighbors.

RECOMMENDATIONS

We think the development of this site, in combination with Aldi, will greatly advance the goals of the Town Center. We appreciate the applicant working with the Township to address some key zoning issues. We support the development but ask the applicant to address the following items prior to Planning Commission consideration:

Undeveloped Land

1) *Recommend conditioning any approval of the Culver's Site Plan on any future land division to result in a minimum 2-acre property for the Culver's site to comply with the minimum site area for drive-through facilities and the Site Type D standards.*

Area, Width, Height, Setbacks

1) *Applicant to obtain a front setback variance.*

Parking, Loading

1) *Planning Commission to discuss need for excess impervious surface due to parking space length.*
2) *Planning Commission to consider waiver of striping/signage of loading space for deliveries, as described on Sheet C-102.*
3) *Applicant to obtain a variance to locate service lane/waiting spaces in front yard.*
4) *Planning Commission to determine if no screen wall along parking lot edge facing Huron St. meets the criteria in ordinance to waive the masonry screen wall.*

Screening and Landscaping

1) *Planning Commission to consider ordinance criteria regarding waiving/modifying requirement for 30 deficient landscape trees.*
2) *Consider small concrete pad between front sidewalk and bike rack so a cyclist doesn't have to walk their bike through the patio to get to the rack.*
3) *Defer evaluation of raingardens/bioswale requirement to Township Engineer.*
4) *Provide two (2) mitigation trees on site, a minimum of 2-caliper inches in size.*

Lighting

1) *Provide downward-facing, shielded alternative for light fixture "P" due to higher than permitted Kelvin rating, and higher than permitted footcandles, to be evaluated at Final Site Plan review.*
2) *Applicant to explain if light fixture "S" (with higher than permitted Kelvin rating) is used exclusively for the decorative illumination of certain building façade features; Planning Commission to consider higher than allowed Kelvin rating of this fixture.*

Elevations and Floor Plans

1) *Confirm proposed awning location on South Elevation.*
2) *Applicant to modify the front façade to bring up to 50% transparency requirement, or obtain a variance.*
3) *Planning Commission to consider "transparency alternative" for the parking lot side (north façade), using the patio to count toward the 30% transparency requirement on this facade.*

Benjamin R. Carlisle

CARLISLE/WORTMAN ASSOC.,INC
Benjamin R. Carlisle, AICP, LEED AP
President

Sally M. Elmiger

CARLISLE/WORTMAN ASSOC., INC.
Sally M. Elmiger, AICP, LEED AP
Principal

YPSILANTI TOWNSHIP
— PLANNING & ZONING DEPARTMENT —

Special Land Use:

Motion to Postpone:
"I move to postpone the Special Land Use request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018 to allow the applicant time to address the comments made at this evening's meeting and resubmit, and/or provide additional information, as discussed tonight."

Motion to Approve:
"I move to approve the Special Land Use request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018, as the proposal meets the criteria in Article 10, *Special Land Use*, in the Zoning ordinance with the following conditions:

1. Any future land divisions of this property will result in a minimum 2-acre parcel for the Culver's site to comply with the minimum site area for drive-through facilities and the Site Type D standards.
2. The proposal as presented receives Preliminary and Final Site Plan approval.

Motion to Deny:
"I move to deny the Special Land Use request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018, due to the following reasons:"

1._____

2._____

3._____

YPSILANTI TOWNSHIP
— PLANNING & ZONING DEPARTMENT —

Preliminary Site Plan:

Motion to Postpone:
"I move to postpone the Preliminary Site Plan request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018 to allow the applicant time to address the comments made at this evening's meeting and resubmit, and/or provide additional information, as discussed tonight."

Motion to Approve:
"I move to approve the Preliminary Site Plan request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018, as the proposal meets the requirements and standards in the Zoning ordinance with the following conditions:

1. Any future land divisions of this property will result in a minimum 2-acre parcel for the Culver's site to comply with the minimum site area for drive-through facilities and the Site Type D standards.
2. Planning Commission waives **[*or modification discussed at meeting*]** striping/signage of loading space for deliveries, as described on Sheet C-102.
3. Planning Commission determines that no screen wall ***[or modification discussed at meeting]*** along the parking lot edge facing Huron St. meets the criteria in the ordinance to waive the masonry screen wall.
4. Planning Commission waives [***or modification discussed at meeting***] the requirement for 30 deficient landscape trees.
5. Planning Commission considers the patio to count ***[or modification as discussed at meeting]*** as a "transparency alternative" for the 30% transparency requirement on the parking lot (north façade) of the building.
6. The applicant shall revise all plan sheets to reflect the results of this evening's discussion before submitting the plans for Final Site Plan review.
7. The applicant shall address all outstanding comments from reviewing agencies during the Final Site Plan stage.
8. The applicant shall obtain all applicable internal and outside agency permits prior to construction.
9. ***[Any other conditions based on discussion at meeting]***"

Motion to Deny:
"I move to deny the Preliminary Site Plan request for the construction of a 4,330 sq. ft. restaurant and drive-through at the property located at 1410 S. Huron Street, Ypsilanti, MI 48197, Parcel K-11-38-280-018, due to the following reasons:"

1._____

YPSILANTI TOWNSHIP
— PLANNING & ZONING DEPARTMENT —

2._____

3._____

ARCHITECTS. ENGINEERS. PLANNERS.

OHM Advancing Communities®

January 7, 2025

Mr. Fletcher Reyher
Township Planning and Development Coordinator
Charter Township of Ypsilanti
7200 S. Huron River Drive
Ypsilanti, MI 48197

RE: Culvers (1410 S Huron St)
Preliminary Site Plan Review #2

Dear Mr. Reyher:

We have completed the second preliminary site plan review of the plans dated July 18, 2024, with a latest revision date of December 20, 2024, and received by OHM Advisors on December 30, 2024.

At this time, the plans are recommended for approval for the Planning Commission's consideration, contingent on the following comment being addressed. Preliminary detailed engineering comments have been provided to the applicant as a courtesy and shall be addressed prior to submitting detailed engineering plans for review.

A brief description of the project has been provided below, followed by our comments and a list of anticipated required permits and approvals. Comments in Section C are detailed in nature, do not influence the overall site layout, and can be addressed during the detailed engineering drawing submittal.

A. PROJECT AND SITE DESCRIPTION

The applicant is proposing a 4,330 square-foot Culvers restaurant at the currently vacant 3.43-acre lot located at 1410 S Huron Street, the southwest corner of S Huron Street and Joe Hall Drive. A double drive-thru and associated parking and landscaping improvements are also being proposed.

The site will be serviced by connection to the existing 8-inch water main to the south of the site and connection to an extension of the 10-inch sanitary sewer on the west side of the internal private drive. The stormwater quality (first flush) volume is proposed to be managed by an underground dry well and traditional conveyance system, while the remaining runoff will be managed by the nearby Seaver Farms regional stormwater basin.

B. SITE PLAN COMMENTS

Site Layout

1. The applicant shall provide a fire truck turning template on the south and east side of the proposed building, as well as within the hammerhead turnaround on the private drive. The applicant shall note that no parking signage may be required within the turnaround area. This office defers to the Ypsilanti Township Fire Department on the review and approval of site accessibility.

OHM Advisors
34000 PLYMOUTH ROAD
LIVONIA, MICHIGAN 48150
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OHM-Advisors.com

C. PRELIMINARY DETAILED ENGINEERING COMMENTS

The following comments shall be addressed by the applicant during the detailed engineering drawing submittal, and do not affect the recommendation for approval to the Township of Ypsilanti Planning Commission. It should be noted that this is not an all-inclusive list and additional comments may be generated as new information is presented.

1. The applicant shall provide additional spot elevations at all four (4) corners of all barrier-free parking spaces, access aisles, ramps, and level landings, as well as along both sides of all sidewalk at 50-foot intervals. The applicant shall note that the cross-slope shall not exceed 2% per ADA Standards.

2. The applicant shall revise the conveyance calculations (Sheet C-105) to be in ascending order from upstream to downstream for clarity and verify the calculations as needed.

3. The applicant shall provide a Certificate of Outlet, signed and sealed by a registered engineer in the State of Michigan, on the plans.

4. The applicant shall clarify if soil borings were performed. If so, their logs and locations shall be included on the plans and a copy of the geotechnical report shall be provided to this office for the project file.

5. The applicant shall note that storm sewer pipe shall be RCP C-76, per Township Standards, or the load carrying design analysis for use of other materials for the proposed depth conditions shall be provided on the plans.

6. The applicant shall verify the invert elevations of CB-6 as there appears to be discrepancies between the plan view (Sheet C-103) and the profile view (Sheet C-203).

7. The applicant shall provide the hydraulic grade line on all storm sewer profiles.

8. The applicant shall overlay all existing and proposed utilities on the Landscape Plan (Sheet L-1) and note that trees shall not be placed directly above any utilities.

9. The applicant shall verify the rim/invert elevations and the name of the proposed sanitary sewer manhole on to the northwest as there appears to be discrepancies between the plan view (Sheet C-103) and the profile view (Sheet C-202).

10. The applicant shall provide a detail of the proposed grease trap on the plans.

11. It is recommended that the applicant provide a minimum HMA cross-section of four (4) inches for ease of future maintenance. It is also recommended that the applicant utilize a different HMA mix design (i.e. 4E) due to experience with 13A mix designs prematurely failing.

12. The applicant shall provide a brief project narrative on the Cover Sheet.

13. The applicant shall provide all YCUA / Ypsilanti Township Standard Detail Sheets within the plan set, including the sheets for storm sewer and SESC. These can be obtained by emailing stacie.monte@ohm-advisors.com. The applicant shall remove any details provided within the plan that conflict with the Standard Detail Sheets.

D. REQUIRED PERMITS & APPROVALS

The following outside agency reviews and permits will be required for the project. Copies of any correspondence between the applicant and the review agencies, as well as the permit or waiver, shall be sent to both the Township and OHM Advisors (email: stacie.monte@ohm-advisors.com).

- **Ypsilanti Community Utilities Authority (YCUA):** Review and approval of all water main and sanitary sewer improvements is required.
- **Ypsilanti Township Fire Department:** Review and approval is required.
- **Washtenaw County Water Resources Commissioner's Office (WCWRC):** Review and approval is required.
- **Washtenaw County Road Commission (WCRC):** Review and approval may be required.
- **Michigan Department of Environment, Great Lakes & Energy (EGLE):** An EGLE Act 399 and Part 41 permit will be required for construction of all public water main and sanitary sewer systems improvements.
- **Michigan Department of Environment, Great Lakes & Energy (EGLE):** An EGLE permit will be required for any work and/or stormwater discharge into the wetlands.
- **Ypsilanti Township Office of Community Standards:** A Soil Erosion and Sedimentation Control permit shall be secured from the Ypsilanti Township Office of Community Standards.

Should you have any questions regarding this matter, please contact this office at (734) 466-4580.

Sincerely,
OHM Advisors

Stacie L. Monte

Matthew D. Parks, P.E.

SLM/MDP

cc: Doug Winters, Township Attorney
Steven Wallgren, Township Fire Marshall
Scott Westover, P.E., YCUA
File

P:\0000_0100\SITE_YpsilantiTwp\2024\0098241020_1410 S Huron St_Culvers\MUNI\01_SITE\PSP#2\Culvers_PSP#2_2025-01-07.docx

CHARTER TOWNSHIP OF YPSILANTI FIRE DEPARTMENT

BUREAU OF FIRE PREVENTION

222 South Ford Boulevard, Ypsilanti, MI 48198

January 2, 2025

Fletcher Reyher, Planning and Development Coordinator
Charter Township of Ypsilanti
7200 S. Huron River Drive
Ypsilanti, MI 48197

RE: Preliminary (non-residential) Site Plan Review #3

Project Name:	Culver's Restaurant
Project Location:	1410 S. Huron St. Ypsilanti, MI 48197
Project Number:	231072
Revised Plan Date:	12/20/2024
Applicable Codes:	IFC 2018
Engineer:	Roosien & Associates
Engineer Address:	5055 Plainfield Ave. NE Grand Rapids, MI 49525

Status of Review

Status of review: Approved as Submitted

All pages were reviewed, and changes are acceptable.

Sincerely,

Steve Wallgren, Fire Marshal
Charter Township of Ypsilanti Fire Department
CFPS, CFI I

Dedicated to Providing Top Quality, Cost Effective, and
Environmentally Safe Water and Wastewater Services to Our Customers

YPSILANTI COMMUNITY UTILITIES AUTHORITY

2777 STATE ROAD
YPSILANTI, MICHIGAN 48198-9112
TELEPHONE: 734-484-4600
WEBSITE: www.ycua.org

January 21, 2025

VIA ELECTRONIC MAIL

Mr. Feltcher Reyher, Planning and Development Coordinator
Office of Community Standards
CHARTER TOWNSHIP OF YPSILANTI
7200 S. Huron River Drive
Ypsilanti, MI 48197

Re: Preliminary (non-residential) Site Plan Review #2
Culver's
Charter Township of Ypsilanti (Plan Date: 12-20-2024)

Dear Mr. Reyher:

In response to the electronic mail message from your office dated December 30, 2024, we have reviewed both the referenced plans with regards to water supply and wastewater system design. The plans are acceptable to YCUA for this stage of review. However, the following comments need to be addressed by the Applicant and/or the Applicant's design engineer prior to Detailed Engineering plans being deemed acceptable to YCUA.

1. For better water quality it is recommended that at least the proposed domestic water service be connected from either the 8" diameter water main parallel to the southerly property line or the proposed 12" diameter water main parallel to South Huron Street. The same recommendation applies to the proposed fire suppression service, but water quality is not as critical for fire suppression as it is for domestic service.
2. It is recommended that sanitary sewer cleanouts not be located in paved surfaces and definitely not in vehicular travel areas.
3. Although the Applicant has indicated the northerly portion of the parcel will not be developed in the future, it is recommended that a sanitary lateral be installed from just south of proposed sanitary manhole A to the east side of the proposed access road to eliminate the need to remove and replace pavement to complete a future sanitary connection.

As noted in the August 19, 2024, letter from this office, connection fees for the proposed project. Please note that the total cash price for connection fees, **$11,126.32 plus the construction phase escrow deposit, Authority administration fee, and record plan guarantee**, must be paid to YCUA by the Applicant, with a receipt delivered to the Township, before either the building or soil and grading permit is issued. The construction phase escrow deposit and associated fees and deposits and the entity responsible for maintaining those accounts will be determined during the Detailed Engineering phase of the project in conjunction with your office and the Township

Engineer. Should there be any questions please contact this office.

Sincerely,

SDW Digital Signature

SCOTT D. WESTOVER, P.E., Direcotor of Engineering
Ypsilanti Community Utilities Authority

cc: Mr. Luke Blackburn, Mr. Sean Knapp, File, YCUA
Mr. Steve Wallgren, Township Fire Department
Mr. Matt Parks, P.E., Ms. Stacie Monte, Township Engineer
UPH Ypsilanti, LLC, Applicant
Mr. Matthew Cole, P.E., Applicant's design engineer

G:\CDproj\YpsiTwp\2024 - Culver's\PNRSP Rev#2.docx

1410 S. Huron Street - Culver's Comments

SG

Streight, Gary<streightg@wcroads.org>

To: Fletcher Reyher

Reply | Reply all | Forward

Fri 1/31/2025 9:12 AM

Fletcher,

I will want to see a memo for their driveway, indicating usage anticipated that is associated with their restaurant.

Gary Streight, P.E.
Senior Project Manager

Washtenaw County Road Commission
555 N. Zeeb Road, Ann Arbor, Michigan

Direct: (734) 327-6692 | Main: (734) 761-1500
wcroads.org | Follow us on Facebook

...

Reply | Forward

GRETCHEN DRISKELL

Water Resources Commissioner
705 N Zeeb Road
Ann Arbor, MI 48103
734-222-6860

Drains@washtenaw.org

Harry Sheehan
Chief Deputy Water Resources Commissioner

Scott Miller P.E.
Deputy Water Resources Commissioner

Theo Eggermont
Public Works Director

January 15, 2025

Mr. Matthew Cole, P.E.
Roosian & Associates
5055 Plainfield NE, Suite A
Grand Rapids, Michigan 49525

RE: Culver's – 1410 S. Huron
Ypsilanti Township, Michigan
WCWRC Project No. 11205

Dear Mr. Cole:

This office has reviewed the site plans for the above-referenced project to be located in Ypsilanti Township. These plans have a job number of 231072, a date of December 20, 2024, and were received via e-mail on December 30, 2024. As a result of our review, we would like to offer the following comments:

1. The site is located within the Seaver Farms development. A regional basin was constructed as part of the development in 2006. Ypsilanti Township petitioned the Washtenaw County Water Resources Commissioner (WCWRC) to establish a drainage district under chapter 3 of the drain code to encompass the Seaver Farms development. The Township has also petitioned the WCWRC to establish a county drain within the district, under chapter 4 of the drain code. The chapter 4 petition process in currently on-going. As mentioned in my last review letter, the regional basin has a limited volume available for runoff from the proposed site. In order to accommodate the runoff from the proposed development, first flush treatment will be required on-site and the regional basin will need to be expanded to accommodate the difference between the calculated detention volume (including a penalty for no infiltration) and the calculated first flush volume.
    a. As noted in the Stormwater Notes on plan sheet C-105, expansion of the regional basin is anticipated to occur "prior to or congruent with the development of this project."
2. The plan set must include the runoff calculation worksheets W1 through W13 that can be found in the rules of this office. **Repeat Comment.**
    a. All worksheets are applicable, with the exception of W3, in determining both the first flush volume and the penalty for providing no infiltration.
    b. The runoff coefficients and curve numbers must correspond to those listed in the rules of this office for the cover type for the specified area. Pervious and impervious cover areas must not be combined.

3. Based on the calculated first flush volume and the outlet configuration, it appears that the time of detention for the proposed on-site water quality treatment system is less than 24 hours. The minimum time of detention for the first flush volume is 24 hours. Calculations confirming that this has been achieved must be included in the plan set. **Repeat Comment.**
    a. Outlet calculations should follow the example shown in the rules for a single-stage outlet, with a detention time greater than 24 hours for the selected outlet orifice configuration.
4. Please see the attached invoice for the current fees and remit these fees upon receipt. As requested, the invoice is being submitted directly to UPH Ypsilanti Property, LLC.

At your convenience, please send us a complete set of revised plans and the additional information requested above so that we may continue our review. If you have any questions, please contact our office.

Sincerely,

Theresa M. Marsik, P.E.
Stormwater Engineer
(approval\Culver's rev2 - revised)

cc: Charles Paisley, UPH Ypsilanti Property, LLC
Lauren Doppke, Ypsilanti Township Staff Planner
Fletcher Reyher, Ypsilanti Township Planning & Development Coordinator
Doug Winters, McLain and Winters
Matt Parks, P.E., Ypsilanti Township Engineer (OHM)
Stacie Monte, Ypsilanti Township Engineer (OHM)

Roosien & Associates
SURVEYING AND ENGINEERING

5055 Plainfield NE, Suite A
Grand Rapids, MI 49525

P (616) 361-7220
www.roosien-assoc.com

Transmittal

TO	Ypsilanti Township
ATTENTION	Mr. Fletcher Reyher
ADDRESS	7200 S. Huron River Drive Ypsilanti, MI 48197

DATE	December 30, 2024
PROJECT NAME	Culvers – Ypsilanti Township
PROJECT NO	231072

Remarks:
Dear Fletcher,
Enclosed are the documents associated with the resubmittal. We look forward to presenting the project to the Township Planning Commission on the earliest available meeting date. Please let us know when that will be.

If you have any questions or comments, please contact me at your earliest convenience.

COPIES	# SHEETS PER COPY	DATE ON SHEET	DESCRIPTION	DOCUMENT SIZE
3	13	12-20-2024	Civil Site Plan	24 x 36
3	5	12-26-2024	Architectural Floor Plan, Elevation Plan, and Dumpster Details	24 x 36
3	1	12-23-2024	Site Photometric Plan	24 x 36
1	13	12-20-2024	Civil Site Plan	11 x 17
1	5	12-26-2024	Architectural Floor Plan, Elevation Plan, and Dumpster Details	11 x 17
1	1	12-23-2024	Site Photometric Plan	11 x 17
1	6	12-26-2024	Response Letter	8.5 x 11
1	40	12-23-2024	Lighting cut sheets	8.5 x 11
			Fees – directly by owner under separate cover	

TRANSMIT VIA ☐ US Mail ☒ UPS ☐ Overnight ☐ Fed Ex ☐ Hand Delivery ☒ Email

Desired Arrival Date 12/31/2024 Addressee Email freyher@ypsitownship.org

Follow-Up Required? ☐ No ☒ Yes, Please Explain Ensure received

COPY TO:	**Client, File**	**SIGNATURE**	*Matthew D Cole*

Charter Township of Ypsilanti
Office of Community Standards
7200 S. Huron Drive, Ypsilanti, MI 48197
Phone: (734) 544-4000 ext. #1
Website: https://ypsitownship.org

SPECIAL CONDITIONAL USE/ USES SUBJECT TO SPECIAL CONDITIONS APPLICATION

I. PROJECT LOCATION

Address: 1410 S. Huron Street Parcel ID #: K-11-38-280-018 Zoning TC, Town Center
Lot Number: _____ Subdivision: _____
Describe proposed use: Proposed quick service restaurant with drive through including two order stations.
Site is Zoned TC, Town Center, Site Type B and will need to change to Site Type D to allow drive throughs

II. APPLICANT/PROPERTY OWNER

Applicant: UPH Ypsilanti Property LLC Phone: 248-860-8365
Address: 49169 Alpha Drive City: Wixom State: MI Zip: 48393
Property Owner (if different than applicant): Charter Twp of Ypsilanti Phone: _____
Address: _____ City: _____ State: ____ Zip: _____

III. FEES

Total: $ 2,000

Breakdown of fee:

Non-refundable: **$1,000**
Refundable: **$1,000**

IV. APPLICANT SIGNATURE

The following are attached to this application:

- ☑ Name(s) and address(es) of all record owner(s) and proof of ownership.
  - ☐ If applicant is not the fee-simple owner, the owner's signed authorization for application must be attached to this application.
- ☑ Scaled and accurate survey drawing, correlated with a legal description and showing all existing buildings, drives and other improvements.
- ☑ Section of Zoning Ordinance involved in this request 2122.(1): Sec. 506.1.B.(2)
- ☐ [Daycare only]
- ☐ Copy of State license.
- ☐ Copy of inspection reports.
- ☐ Drawing or pictures of the house layout, showing the rooms that you will utilize for the daycare.

DocuSigned by: Charles Paisley 2380380CAFBD443...

Applicant Signature	Print Name	Date
	Charles Paisley	7/26/2024

☐ Approved
☐ Denied

Zoning Administrator Signature	Print Name	Date

Please note: Application cannot be appealed to the Board of Appeals. If denied by the Planning Commission, re-application can be made to the Planning Commission after 365 days, after the date of this application, except on the grounds of new evidence or proof of changed conditions found by the Planning Commission to be valid.

Charter Township of Ypsilanti
Office of Community Standards
7200 S. Huron Drive, Ypsilanti, MI 48197
Phone: (734) 544-4000 ext. #1
Website: https://ypsitownship.org

OFFICE USE ONLY

All special conditional use applications	
☐ The application is filled out in its entirety and includes the signature of the applicant and, if different than the applicant, the property owner. ☐ Name(s) and address(es) of all record owner(s) and proof of ownership. If the applicant is not the property owner, written and signed permission from the property owner is required ☐ A detailed description of the proposed use. ☐ A site plan, if requested by the planning commission ☐ Fees	☐ Scaled and accurate survey drawing, correlated with a legal description and showing: ☐ All property lines and dimensions ☐ All existing and proposed structures and dimensions ☐ Locations of drives, sidewalks, and other paved areas on the property and on the adjacent streets ☐ Location and dimensions of the nearest structures on adjacent properties ☐ Easements and dimensions, if applicable

Charter Township of Ypsilanti
Office of Community Standards
7200 S. Huron Drive, Ypsilanti, MI 48197
Phone: (734) 544-4000 ext. #1
Website: https://ypsitownship.org

SITE PLAN REVIEW APPLICATION

I. APPLICATION/DEVELOPMENT TYPE

Development:

- ☐ Subdivision
- ☐ Multi-family/Condominium
- ☐ Site Condominium
- ☐ Planned Development
- ☑ Non-residential

Application:

- ☐ Administrative Site Plan Review
- ☐ Sketch Site Plan Review
- ☑ Full Site Plan Review
- ☐ Revisions to approved plan
- ☐ Tentative Preliminary Plat
- ☐ Final Preliminary Plat
- ☐ Final Plat Process
- ☐ Stage I (for Planned Development)
- ☐ Stage II (for Planned Development)

II. PROJECT LOCATION

Address: 1410 S. Huron Street City: Ypsilanti State: MI Zip: 48197
Parcel ID #: K-11- 38-280-018 Zoning TC, Town Center
Lot Number: _____ Subdivision: _____
Property dimensions: 347' x 508' Acreage: 3.43 acres
Name of project/Proposed development: Culver's Restaurant
Legal description of Property:

See attached plans

Describe Proposed Project (including buildings/ structures/ # units):
Propose the construction of a quick service restaurant with double drive through and appurtenances.

III. APPLICANT INFORMATION

Applicant: UPH Ypsilanti Property LLC Phone: 248-860-8365
Address: 49169 Alpha Drive City: Wixom State: MI Zip: 48393
Fax: _____ Email: Charles@unionpacificholdings.com
Property owner (if different than applicant): Charter Twp of Ypsilanti Phone: _____
Address: _____ City: _____ State: ____ Zip: _____
Fax: _____ Email: _____
Engineer: Matt Cole of Roosien & Associates Phone: 616-361-0155
Address: 5055 Plainfield Avenue, Suite A City: Grand Rapids State: MI Zip: 49525
Fax: _____ Email: matt@roosien-assoc.com

Charter Township of Ypsilanti
Office of Community Standards
7200 S. Huron Drive, Ypsilanti, MI 48197
Phone: (734) 544-4000 ext. #1
Website: https://ypsitownship.org

SITE PLAN REVIEW APPLICATION

VI. SCHEDULE OF FEES

Preliminary Site Plan Review		
	Non-refundable fee	Refundable deposit
Full	$500	Less than one (1) acre: $2,000 One (1) acre to five acres: $4,000 Over five (5) acres to ten (10) acres: $5,500 Greater than ten (10) acres: $5,500 + $50 per acre over ten (10) acres
Sketch	$500	Less than one (1) acre: $1,500 One (1) acre to five acres: $2,000 Over five (5) acres to ten (10) acres: $2,500 Greater than ten (10) acres: 25,500 + $50 per acre over ten (10) acres
Administrative	$100	Less than one (1) acre: $1,000 One (1) acre to five acres: $1,200 Over five (5) acres to ten (10) acres: $1,500 Greater than ten (10) acres: $1,500 + $50 per acre over ten (10) acres
Planned Development Stage I and Rezoning	$1,500 + $20 per acre	Less than one (1) acre: $3,000 One (1) acre to five acres: $4,000 Over five (5) acres to ten (10) acres: $5,500 Greater than ten (10) acres: $5,500 + $50 per acre over ten (10) acres
Final Site Plan Review		
	Non-refundable fee	Refundable deposit
Full	$500	Less than one (1) acre: $3,000 One (1) acre to five acres: $4,000 Over five (5) acres to ten (10) acres: $5,500 Greater than ten (10) acres: $5,500 + $50 per acre over ten (10) acres
Sketch	$500	Less than one (1) acre: $1,500 One (1) acre to five acres: $2,000 Over five (5) acres to ten (10) acres: $2,500 Greater than ten (10) acres: $2,500 + $50 per acre over ten (10) acres
Administrative	$100	Less than one (1) acre: $1,000 One (1) acre to five acres: $1,200 Over five (5) acres to ten (10) acres: $1,500 Greater than ten (10) acres: $1,500 + $50 per acre over ten (10) acres
Planned Development Stage I and Rezoning	$1,500 + $20 per acre	Less than one (1) acre: $3,000 One (1) acre to five acres: $4,000 Over five (5) acres to ten (10) acres: $5,500 Greater than ten (10) acres: $5,500 + $50 per acre over ten (10) acres

S _____ FEE TOTAL

V. APPLICANT SIGNATURE

DocuSigned by:
Charles Paisley
2330380CAFBD443...
Applicant Signature

Charles Paisley
Print Name

7/26/2024
Date

Charter Township of Ypsilanti
Office of Community Standards
7200 S. Huron Drive, Ypsilanti, MI 48197
Phone: (734) 544-4000 ext. #1
Website: https://ypsitownship.org

SITE PLAN REVIEW APPLICATION

Site Plan Review applications

- ☑ The application is filled out in its entirety and includes the signature of the applicant and, if different than the applicant, the property owner.
- ☑ Fees
  - ☑ Check made out to Ypsilanti Township with appropriate fees. *Please note: The same preliminary site plan review fee will be charged for each subsequent submittal*
  - ☐ Fees paid separately to Ypsilanti Community Utilities Authority
  - ☑ Fees paid separately to Washtenaw County Road Commission and Water Resources Commissioner's Office
- ☐ Additional Documents:
  - ☐ Woodland Protection application or the No Tree Affidavit, if applicable
  - ☐ Traffic Impact Questionnaire
  - ☑ Appropriate application and plans submitted to the Washtenaw County Road Commission and Water Resources Commissioner's Office
- ☑ Proposed Plans
  - ☑ One (1) signed and sealed copies (24"x36") of the proposed plan
  - ☑ One (1) copy (11"x17") of the proposed plan
  - ☑ One (1) PDF digital copy of the proposed plan
  - ☑ All contents detailed on the next pages for administrative, sketch, and full site plans.

Know what's **below.**
Call before you dig.

BENCHMARK NO. 1 ELEV. = 764.57'
NORTHWEST BOLT ON LIGHT POLE BASE
LOCATED ±60' WEST OF HURON ST C/L
AND ±339' NORTH OF BRINKER WAY
(N.A.V.D. 88)

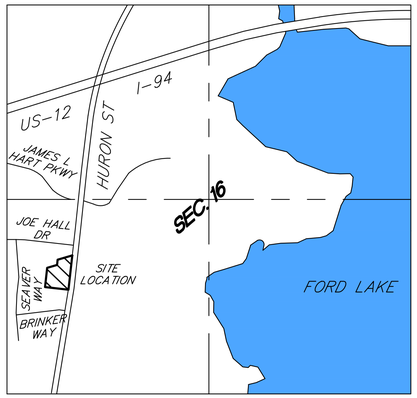
BENCHMARK NO. 2 ELEV. = 759.59'
BENCH TIE SOUTH FACE UP ON POWER POLE,
LOCATED ±60' WEST OF HURON ST C/L AND
±70' SOUTH OF JOE HALL DRIVE C/L
(N.A.V.D. 88)

BENCHMARK NO. 3 ELEV. = 759.17'
SOUTHWEST BOLT ON LIGHT POLE BASE,
LOCATED ±71' WEST OF HURON STREET
AND ±21' NORTH OF JOE HALL DRIVE C/L
(N.A.V.D. 88)

CULVER'S RESTAURANT

1410 S HURON STREET

YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN



LOCATION MAP
NOT TO SCALE

QUANTITIES		
ITEM DESCRIPTION	ITEM UNITS	ESTIMATED QUANTITY
Soil Erosion and Sedimentation Control	Lsum	1
Clear and Grub (including all site removals)	Lsum	1
Topsoil Striping and Stockpiling	Acre	3.3
Site Grading, Cut = 500 yards, Fill = 25,200 yards	Lsum	1
Surface Restoration, 4" (minimum) Topsoil, and Seed	Acre	1.8
Bit Mix	Ton	1,098
Aggregate Base, 21AA - 6"(CIP)	Syd	5,152
Concrete Sidewalk, 4" thick (incl: base)	Sft	4,518
Concrete Pavement, 6" thick	Sft	771
Concrete Pavement, 8" thick	Sft	682
24" Conc. Curb and Gutter (incl: base)	Lft	1,993
6" Sock Wrap Perf Underdrain	Lft	200
6" PVC Pipe	Lft	47
6" Cleanout	Ea	1
12" Storm Sewer, SLCPP	Lft	275
12" Storm Sewer, Sock Wrap Perf	Lft	129
15" Storm Sewer, SLCPP	Lft	260
18" Storm Sewer, SLCPP	Lft	40
15" Flared End Section with stone	Ea	1
18" Flared End Section with stone	Ea	1
Underground Detention System	Lsum	1
4' Dia. Storm Catch Basin	Ea	5
Outlet Control Structure (Per Detail)	Ea	1
4' Dia. Manhole	Ea	1
10" Sanitary Main	Lft	200
Grease Trap	Ea	1
6" Cleanout	Ea	4
6" Lateral (including property line riser)	Lft	336
6" Watermain	Lft	152
12" Watermain	Lft	478
6" Valve and Box	Ea	2
6"x6" Tee	Ea	1
8"X6" Tee	Ea	1
5" Hydrant Assembly (including valve and main)	Ea	1
2" Curb Stop & Box (including copper service line)	Ea	1

INDEX OF SHEETS

STATE OF MICHIGAN
MATTHEW D COLE
ENGINEER
No. 62010485
LICENSED PROFESSIONAL ENGINEER

REVISIONS:
DRAWN BY: YS
APPROVED BY: MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

Roosien & Associates
SURVEYING AND ENGINEERING
5505 PLAINFIELD AVE. NE MAIL@ROOSIEN-ASSOC.COM
GRAND RAPIDS, MI 49525 TELE: (616) 361-7220

TITLE SHEET
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
UPH YPSILANTI, LLC
49169 ALPHA DRIVE
WIXOM, MI 48393
(248) 971-0252

PROJECT NO.
231072

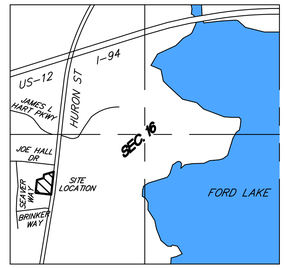
C-100

Know what's **below.**
Call before you dig.

BENCHMARK NO. 1 ELEV. = 764.57'
NORTHWEST BOLT ON LIGHT POLE BASE LOCATED ±60' WEST OF HURON ST C/L AND ±339' NORTH OF BRINKER WAY (N.A.V.D. 88)

BENCHMARK NO. 2 ELEV. = 759.59'
BENCH TIE SOUTH FACE UP ON POWER POLE, LOCATED ±60' WEST OF HURON ST C/L AND ±70' SOUTH OF JOE HALL DRIVE C/L (N.A.V.D. 88)

BENCHMARK NO. 3 ELEV. = 759.17'
SOUTHWEST BOLT ON LIGHT POLE BASE, LOCATED ±71' WEST OF HURON STREET AND ±21' NORTH OF JOE HALL DRIVE C/L (N.A.V.D. 88)



LOCATION MAP
NOT TO SCALE

ADDRESS: 1410 S HURON STREET, YPSILANTI, MI 48197

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

EXISTING LEGEND

SURVEY: PROPERTY IRON FOUND	TREES: DECIDUOUS TREE
WATER: MANHOLE, HYDRANT	ELECTRICAL: UTILITY POLE, GUY WIRE, LIGHT POLE
SANITARY SEWER: MANHOLE	STORM SEWER: CURB CATCH BASIN, ROUND CATCH BASIN, FLARED END SECTION
MISC: SIGN	
CONCRETE	
BITUMINOUS	
EXIST. GRAVEL REMOVAL	
CENTER LINE	
PROPERTY LINE	
750 CONTOUR LINE (MAJOR)	
749 CONTOUR LINE (MINOR)	
EXIST. TREE LINE	
EXIST. TREE LINE REMOVAL	
WTR WATER MAIN	
SAN SANITARY SEWER	
STM STORM SEWER	
G NATURAL GAS	
OH-E OVERHEAD ELECTRIC	

LEGAL DESCRIPTION
That part of the Southwest 1/4 of Section 16, Town 3 South, Range 7 East, Ypsilanti Township, Washtenaw County, Michigan and described as follows: Commencing at the Southeast Corner of Lot 10 of "Washtenaw Business Park," part of French Claim 680 & 681, Town 3 South, Range 7 East, Ypsilanti Township, Washtenaw County, Michigan, according to the plat thereof, as recorded in Liber 33 of Plats, Pages 19 through 27, inclusive, Washtenaw County Records; thence N72deg 40' 20"E 820.92 feet along the South line of said "Washtenaw Business Park" to the West line of Whittaker Road a.k.a. South Huron Street (60-foot wide 1/2 Right-of-Way) to the PLACE OF BEGINNING; thence S05deg16'09"W 507.79 feet along the West line of said Whittaker Road a.k.a. Huron Street; thence N84deg43'51"W 380.01 feet; thence N05deg16'09"E 272.02 feet; thence N72deg40'20"E 186.88 feet; thence N05deg15'56"E 77.61 feet; thence N72deg40'20"E 224.73 feet to PLACE OF BEGINNING. Subject to the ingress & egress easement over the West 33 feet.

NINE EXISTING NON-INVASIVE TREES ARE TO BE REMOVED AND MUST BE REPLACED. SEE TREE SURVEY AND PROPOSED LANDSCAPE PLAN FOR REMOVALS AND PROPOSED TREES.

NOTE: EXISTING CONDITIONS PLAN WAS CREATED FROM INFORMATION PROVIDED BY NOWAK & FRAUS ENGINEERS ON AUGUST 5, 2024 AND ALDI'S ENGINEER, DESINE, INC.

REVISIONS:

DRAWN BY: YS
APPROVED BY: MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

Roosien & Associates
SURVEYING AND ENGINEERING
5955 PLAINFIELD AVE. NE MAIL@ROOSIEN-ASSOC.COM
GRAND RAPIDS, MI 49525 TELE: (616) 364-7260

EXIST. CONDITIONS & REMOVALS PLAN
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
UPH YPSILANTI, LLC
49169 ALPHA DRIVE
WIXOM, MI 48393
(248) 971-0252

PROJECT NO.
231072

C-101

225 JOE HALL DRIVE
K-11-17-363-800
DEMCO 29 LLC

ZONED: TC, TOWN CENTER, SITE TYPE A

1415 SEAVER DRIVE
K-11-38-280-019
CHARTER TWP OF YPSILANTI

ZONED: PD, PLANNED DEVELOPMENT

PARCEL "A"
3.43 ACRES

ZONED: TC, TOWN CENTER, SITE TYPE B

1420 S HURON STREET
K-11-38-280-017
ALDI INC. (MICHIGAN)

WHITTAKER ROAD A.K.A. S. HURON STREET
120' WIDE R.O.W.

N72°40'20"E 224.73'
S05°15'56"W 77.61'
S72°40'20"W 151.14'
S72°40'20"W 35.74'
S05°16'09"W 507.79'
N84°43'51"W 33.00'
S84°43'51"E 347.01'
S05°16'09"W 254.25'
S05°16'09"W 272.02'

EASEMENT GRANTED TO DEMATTIA / WASHTENAW BUSINESS PARK ASSOCIATION AND WASHTENAW COUNTY DRAIN COMMISSION PER L4586 P910

PROPOSED BUILDING
4,330 SFT
FFE = 757.50

BM#1

SITE DATA:

SITE:	3.43 ACRES (3.22 ACRES EXCLUDING R.O.W.)	
ZONED:	TC, TOWN CENTER, SITE TYPE B	
USE:	DRIVE THRU RESTAURANT; HOURS FROM 10AM TO 11PM SEVEN DAYS A WEEK; 60 TOTAL EMPLOYEES WITH MAX OF 18 EMPLOYEES AT ONE TIME	
	REQUIRED	PROVIDED
MAXIMUM BUILDING HEIGHT:	38'	23'
FRONT BUILDING RBL:	10'	74'
SIDE BUILDING SETBACK:	5'	43.5' TO SOUTH
REAR BUILDING SETBACK:	10'	317'

PARKING DATA:

MIN. REQUIRED PARKING: 73 SPACES
(0.7 SPACES PER SEAT) = (104 * 0.7) = 72.8

PROPOSED PARKING: 65 SPACES
(INCLUDES 3 BARRIER FREE SPACES AND 2 BUS SPACES)

STACKING FROM WINDOW:	10 SPACES REQ.	13 SPACES PROP.
PULL AHEAD WAITING: 8 SPACES		
FOOD DELIVERY: 3 SPACES		

PARKING SPACE:	90 DEG.	9' x 18'	9' x 18' MIN.
	PARALLEL	8.5' x 24'	8.5' x 24' MIN.
DRIVE AISLE WIDTH	(TWO WAY):	24'	24' MIN.
	(ONE WAY):	12'	12' MIN.

REFUSE WILL BE COLLECTED DURING NON-BUSINESS HOURS BETWEEN 7AM AND 10AM, SO THERE IS NO CONFLICT WITH PARKING ACCESSING THE DUMPSTER.
LOADING WILL OCCUR DURING NON BUSINESS HOURS BY BONDED CARRIER. AS A RESULT, NO LOADING ZONE IS REQUIRED FOR OPERATIONS. THE LOADING ZONE SHOWN WILL NOT BE STRIPED IN THE FIELD. IT IS FOR INFORMATIONAL PURPOSES ONLY.

NOTES

A) ALL DIMENSIONS SHOWN TO THE CONCRETE CURB AND GUTTER ARE TO THE FACE OF THE CURB (6 INCHES FROM THE BACK OF THE CURB) UNLESS NOTED OTHERWISE.
B) THE CONCRETE GUTTER PAN IS TO TIP IN THE SAME DIRECTION AS THE ADJACENT PAVEMENT. THE GUTTER PAN IN THE BARRIER FREE SPACES SHALL BE PLACED FLAT.
C) THE LAST 3 FEET OF ALL OF THE CURB SHALL BE DUBBED DOWN UNLESS NOTED OTHERWISE.
D) REFER TO ARCHITECTURAL PLANS FOR DETAILS OF CONCRETE DOOR STOOPS, DUMPSTER ENCLOSURE, DETAIL OF BUILDING, EXACT BUILDING DIMENSIONS, AND EXACT LOCATION OF DRIVE THROUGH MENU BOARDS, ORDER STATIONS, AND HEIGHT CLEARANCE BAR.
E) ALL BARRIER FREE SPACES AND SIDEWALKS SHALL MEET A.D.A. REQUIREMENTS.
F) ALL SIGNAGE SHALL CONFORM TO YPSILANTI TOWNSHIP STANDARDS.

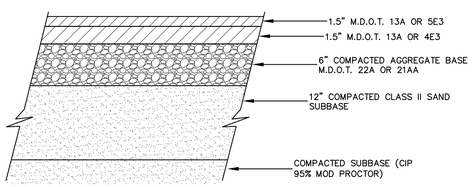
SITE PLAN KEY NOTES

1. RAISED CONCRETE SIDEWALK
2. FLUSH SLAB EDGE AND BARRIER FREE RAMP
3. DUMPSTER ENCLOSURE (SEE ARCH)
4. MDOT F-4 CURB AND GUTTER
5. ORDER STATION AND MENU BOARD
6. HEIGHT CLEARANCE BAR

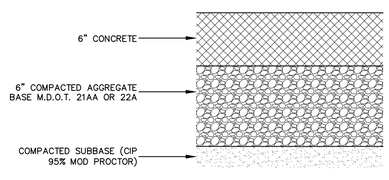
GRAPHIC SCALE
30' 0 15' 30'
(IN FEET)
1 inch = 30 ft.

LEGEND

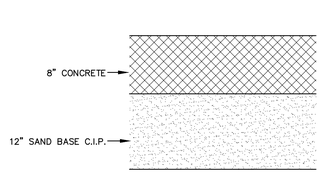
- 750 EXISTING MAJOR CONTOUR
- 749 EXISTING MINOR CONTOUR
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC.
- BUMP BLOCK
- BP BUMP POST
- PROPOSED LIGHT POLE



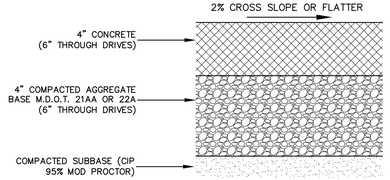
BIT PAVEMENT-SECTION
NOT TO SCALE



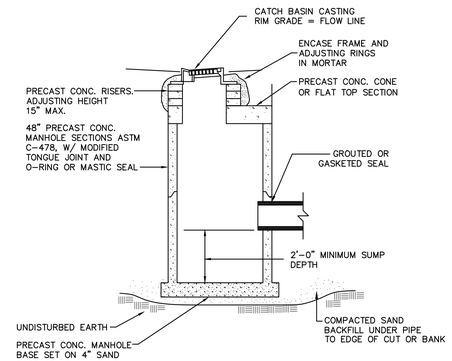
CONCRETE PAVEMENT
NOT TO SCALE



HEAVY-DUTY CONCRETE FOR DUMPSTER ENCLOSURE
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE



TYPICAL CATCH BASIN
NOT TO SCALE

REVISIONS:

DRAWN BY: YS
APPROVED: SYI MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

Roosien & Associates
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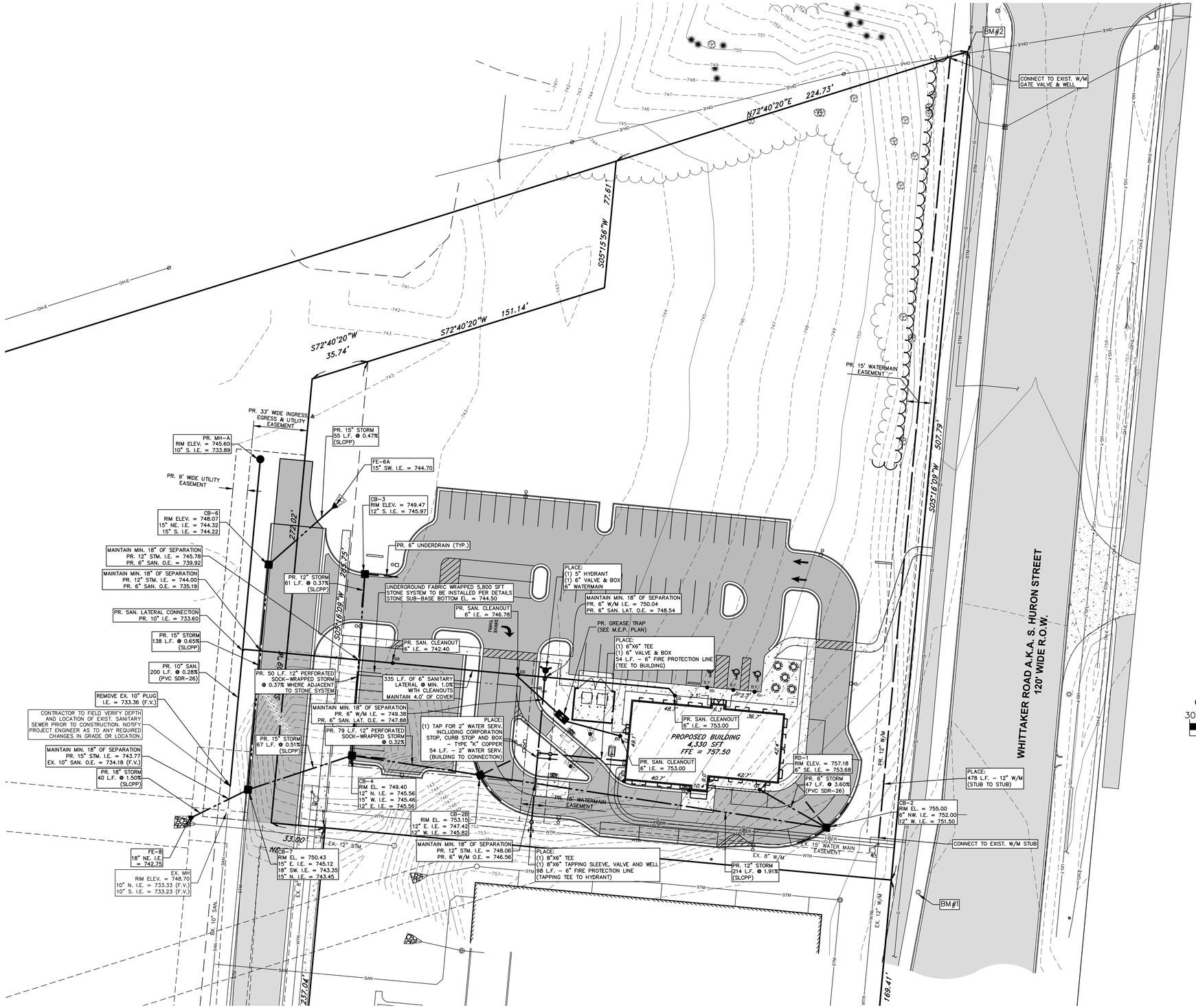
GRAND RAPIDS, MI 49525 TELE: (616) 364-7220

SITE LAYOUT PLAN
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
UPH YPSILANTI, LLC
49169 ALPHA DRIVE
WIXOM, MI 48393
(248) 971-0252

PROJECT NO.
231072

C-102



GENERAL PRIVATE UTILITY NOTES:

PROPOSED PRIVATE UTILITY SERVICE AS SHOWN IS SCHEMATIC ONLY. ACTUAL LOCATION TO BE COORDINATED WITH INDIVIDUAL UTILITY COMPANY AND APPROVED BY OWNER.

CONTRACTOR SHALL COORDINATE LOCATION OF ALL PRIVATE UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.) WITH THE LOCAL UTILITY COMPANIES AND THE MECHANICAL DRAWINGS. COORDINATE ALL PRIVATE UTILITY LOCATIONS WITH ALL SUB-SURFACE SITE UTILITIES SHOWN ON THIS PLAN.

GENERAL STORM SEWER NOTES:

SITE CONTRACTOR TO END STORM CONNECTION 5' FROM BUILDING WITH A CLEAN-OUT AND TEMPORARY CAP, COORDINATE CONNECTION WITH BUILDING PLUMBING CONTRACTOR.

UNLESS NOTED OTHERWISE ON THE PLAN, STORM SEWER PIPE SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE PER AASHTO M294 TYPE S. JOINTS SHALL BE WATER TIGHT IN ACCORDANCE WITH ASTM F477.

UNDERDRAIN (4"-10") SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE TYPE S, PER AASHTO M252 AND PRE-WRAPPED WITH A GEOTEXTILE FILTER SOCK. PAVEMENT SUBGRADE TO BE GRADED TO SLOPE TOWARDS THE PROPOSED UNDERDRAIN TRENCHES THROUGHOUT THE SITE.

ROOF DRAIN PIPE OR PIPE INDICATED TO BE PVC SHALL MEET THE REQUIREMENTS OF ASTM D3034, SDR 35. JOINTS TO BE ELASTOMERIC SEALS IN ACCORDANCE WITH ASTM F477.

MATERIALS, INSTALLATION, AND TESTING OF THE STORM SEWER SYSTEM SHALL CONFORM TO YPSILANTI TOWNSHIP STANDARDS.

GENERAL WATER SERVICE NOTES:

SITE CONTRACTOR TO END FIRE PROTECTION LINE 12" ABOVE FINISHED FLOOR INSIDE THE BUILDING WITH A TEMPORARY CAP. COORDINATE CONNECTION WITH BUILDING PLUMBING CONTRACTOR.

IRRIGATION WATER SERVICE TO BE TAPPED OFF WATER SERVICE INSIDE BUILDING UTILITY ROOM. COORDINATE WITH LANDSCAPER AND BUILDING PLUMBER.

WATER MAIN AND FIRE PROTECTION LINE PIPE SHALL BE CLASS 53 DUCTILE IRON PER ANSI/AWWA C151/A21.51, THICKNESS CLASS PER ANSI/AWWA C110/A21.50. FITTINGS SHALL BE DUCTILE IRON PER ANSI/AWWA C153/21.53, PRESSURE CLASS 350.

DOMESTIC SERVICE SHALL BE COPPER, TYPE K, ANNEALED AND SOFT TEMPER PER ASTM B-88. FITTINGS SHALL CONFORM TO ASTM B-88.
MINIMUM COVER OVER PIPE SHALL BE 5.5'.

MATERIALS, INSTALLATION, AND TESTING OF WATER SERVICE LINES SHALL CONFORM TO YPSILANTI COMMUNITY UTILITIES AUTHORITY STANDARDS AND THE STATE PLUMBING CODE.

GENERAL SANITARY SEWER NOTES:

SITE CONTRACTOR TO END SANITARY LATERAL 5' FROM BUILDING WITH A CLEAN-OUT AND TEMPORARY CAP. COORDINATE CONNECTION WITH BUILDING PLUMBING CONTRACTOR.

SANITARY SEWER LATERALS AND FITTINGS SHALL BE PVC PER ASTM D3034, SDR 26. JOINTS TO BE ELASTOMERIC SEALS IN ACCORDANCE WITH ASTM D3212.

SANITARY SEWER SERVICE SHALL NOT BE LOCATED WITHIN OR UNDER THE UNDERGROUND DRY WELL.

MATERIALS, INSTALLATION, AND TESTING OF SANITARY SEWER SHALL CONFORM TO THE YPSILANTI COMMUNITY UTILITIES AUTHORITY STANDARDS.

MINIMUM COVER OVER SANITARY LATERAL SHALL BE 4.0'.

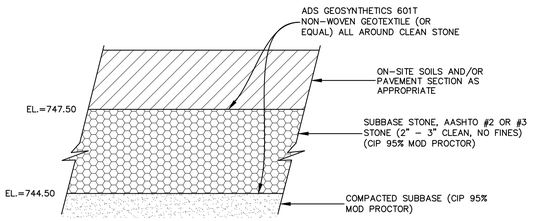
LEGEND

- 750 — EXISTING MAJOR CONTOUR
- 749 — EXISTING MINOR CONTOUR
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY LINE
- CO PROPOSED CLEAN OUT
- UG-E UNDERGROUND ELECTRIC
- UG-T UNDERGROUND TELEPHONE
- G NATURAL GAS

GRAPHIC SCALE
30' 0 15' 30'
(IN FEET)
1 inch = 30 ft.

SANITARY SEWER CAPACITY DESIGN:

EQUIVALENT RESIDENTIAL UNIT FOR RESTAURANTS: 4 UNITS PER 1,000 SFT
4,330 SFT * 4 UNITS/1000 SFT = 17.32 UNITS
POPULATION EQUIVALENT: 3.5 PEOPLE PER UNIT
3.5 PEOPLE * 17.32 UNIT = 60.62 PEOPLE
AVERAGE FLOW: 100 GPD/PERSON * 60.62 PEOPLE = 6,062 GPD
MAXIMUM FLOW: 2* AVERAGE FLOW = 12,124 GPD



UNDERGROUND FABRIC WRAPPED STONE SECTION
NOT TO SCALE

REVISIONS:
DRAWN BY: YS
APPROVED: SYI MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

Roosien & Associates
SURVEYING AND ENGINEERING
5055 PLAINFIELD AVE. NE MAIL@ROOSIEN-ASSOC.COM
GRAND RAPIDS, MI 49525 TELE: (616) 447-7220

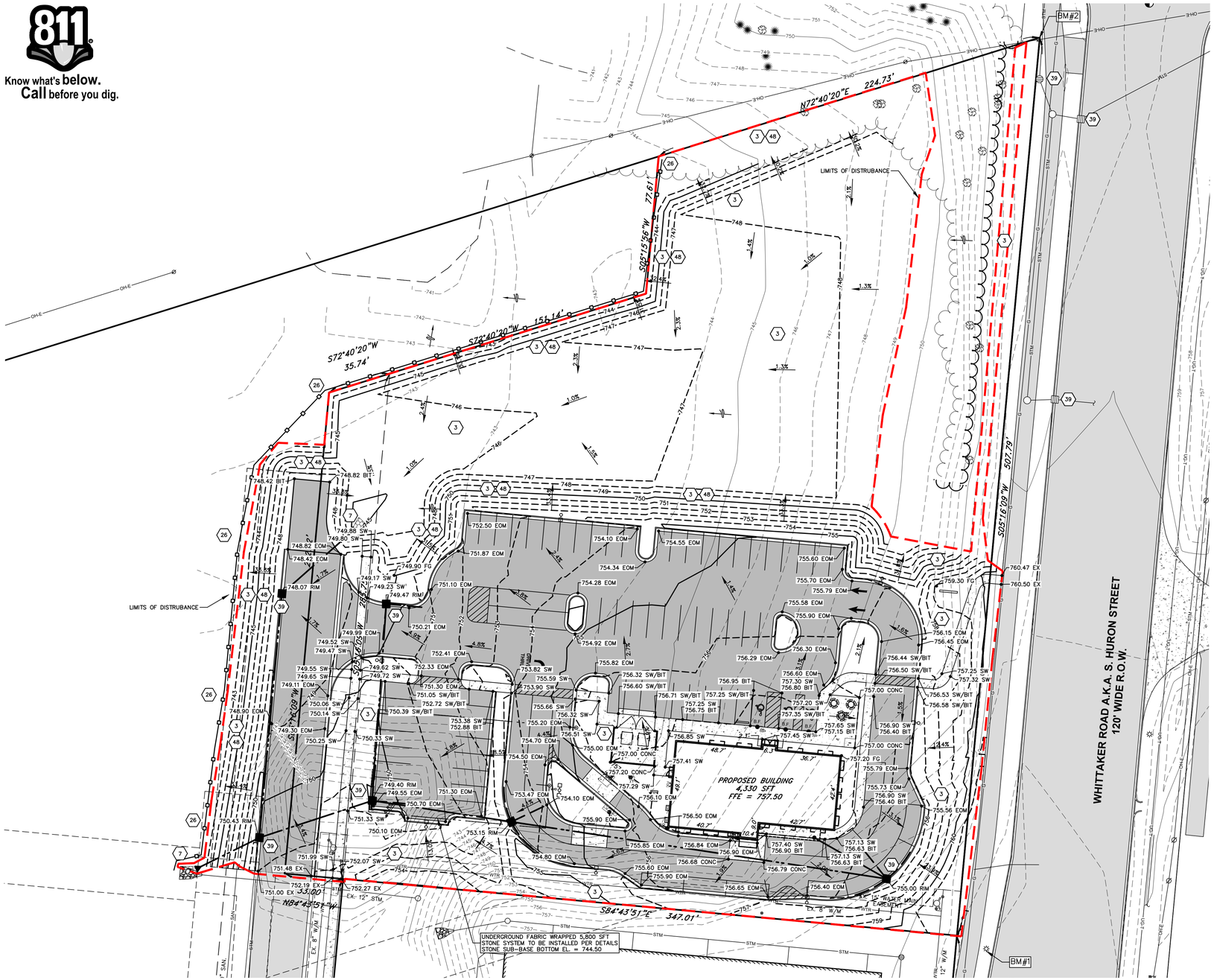
SITE UTILITY PLAN
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

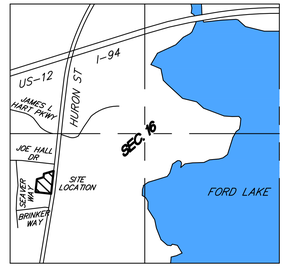
CLIENT:
UPH YPSILANTI, LLC
49169 ALPHA DRIVE
WIXOM, MI 48393
(248) 971-0252

PROJECT NO.
231072

C-103

Know what's **below.**
Call before you dig.





LOCATION MAP
NOT TO SCALE

ADDRESS: 1410 S HURON STREET,
YPSILANTI, MI 48197

GRAPHIC SCALE
30' 0 15' 30'
(IN FEET)
1 inch = 30 ft.

SOIL EROSION CONTROL KEY

3	PERMANENT/TEMPORARY SEEDING
7	RIP RAP
26	GEOTEXTILE SILT FENCE
39	INLET PROTECTION WITH GEOTEXTILE AND STONE
48	SOIL EROSION CONTROL BLANKET (N.A.G. S-150 OR EQUAL)

LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSED STORM SEWER
- DRAINAGE ARROW
- PROPOSED SPOT ELEVATION (750.00)
- GRADE BREAK LINE
- SIDEWALK RAMP W/ LANDINGS AT EACH END
- LIMITS OF DISTURBANCE

CONSTRUCTION SEQUENCE	2025 JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	REMARKS
INSTALL SILT FENCING AND INLET PROTECTION													REQUIRED
CLEAR VEGETATION AND STRIP AND STOCKPILE TOPSOIL													
ROUGH GRADE SITE													
CONSTRUCT BUILDING													
INSTALL UTILITIES													
INSTALL CURBING AND PAVEMENT													
FINISH GRADE, PLACE PLANTINGS, TOPSOIL AND SEED, AND MULCH BLANKETS													
CLEAN PAVEMENTS AND STORM SEWER													
REMOVE TEMPORARY EROSION CONTROL													

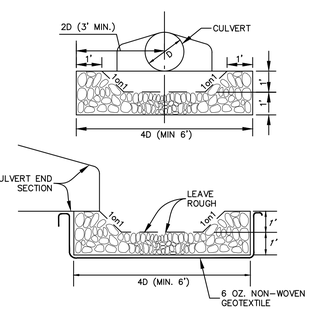
STORM WATER MANAGEMENT SYSTEM MAINTENANCE

THE STORM SEWER AND DETENTION SYSTEMS MUST BE INSPECTED AND MAINTAINED ON A REGULAR BASIS FOR OPTIMAL PERFORMANCE. SEE CHART BELOW FOR SUGGESTED INTERVALS.
ESTIMATED ANNUAL BUDGET FOR MAINTENANCE IS $800.

PROPERTY OWNER IS RESPONSIBLE FOR MAINTENANCE OF SYSTEM

TASKS	COMPONENTS: UNDERGROUND DETENTION SYSTEM	CATCH BASIN INLETS	CATCH BASIN SUMPS	STORM SEWER SYSTEM	SCHEDULE
INSPECT FOR ACCUMULATION	●	●	●	●	ANNUALLY
REMOVE SEDIMENT ACCUMULATION	●	●	●	●	EVERY 2-5 YEARS AS NEEDED
INSPECT FOR DEBRIS (DEAD VEGETATION AND TRASH)	●	●	●	●	EARLY SPRING, FALL AND AFTER MAJOR STORMS
CLEAN DEBRIS	●	●	●	●	AS NEEDED

NOTE:
- REFER TO MDOT SOIL EROSION & SEDIMENTATION CONTROL MANUAL.
- CONTRACTOR SHALL PLACE NA-GREEN S-150 (OR APPROVED EQUAL) EROSION CONTROL BLANKET ON ALL SLOPES 1 ON 3 OR STEEPER AND IN THE BOTTOM ONE FOOT OF THE DRAINAGE SWALES.
- SITE SOILS CONSIST OF CLAY LOAM AND CLAY PER USDA NRCS MAPS.
- TOTAL DISTURBED AREA IS 3.32 ACRES.
- SEAVER FARMS DETENTION BASIN IS LOCATED 420 FEET WEST OF THE SITE.
- CONTRACTOR SHALL SWEEP THE STREET OF ANY DIRT TRACKED ONTO IT BY THE CONSTRUCTION OPERATION AS NEEDED AND AS DIRECTED BY COUNTY SESC AGENT.
- THESE MEASURES ARE MINIMUM REQUIRED. CONTRACTOR MAY NEED ADDITIONAL MEASURES DEPENDING ON WEATHER, TIMING, ETC.



RIPRAP APRON
NOT TO SCALE

REVISIONS:

DRAWN BY: YS
APPROVED: SYI MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

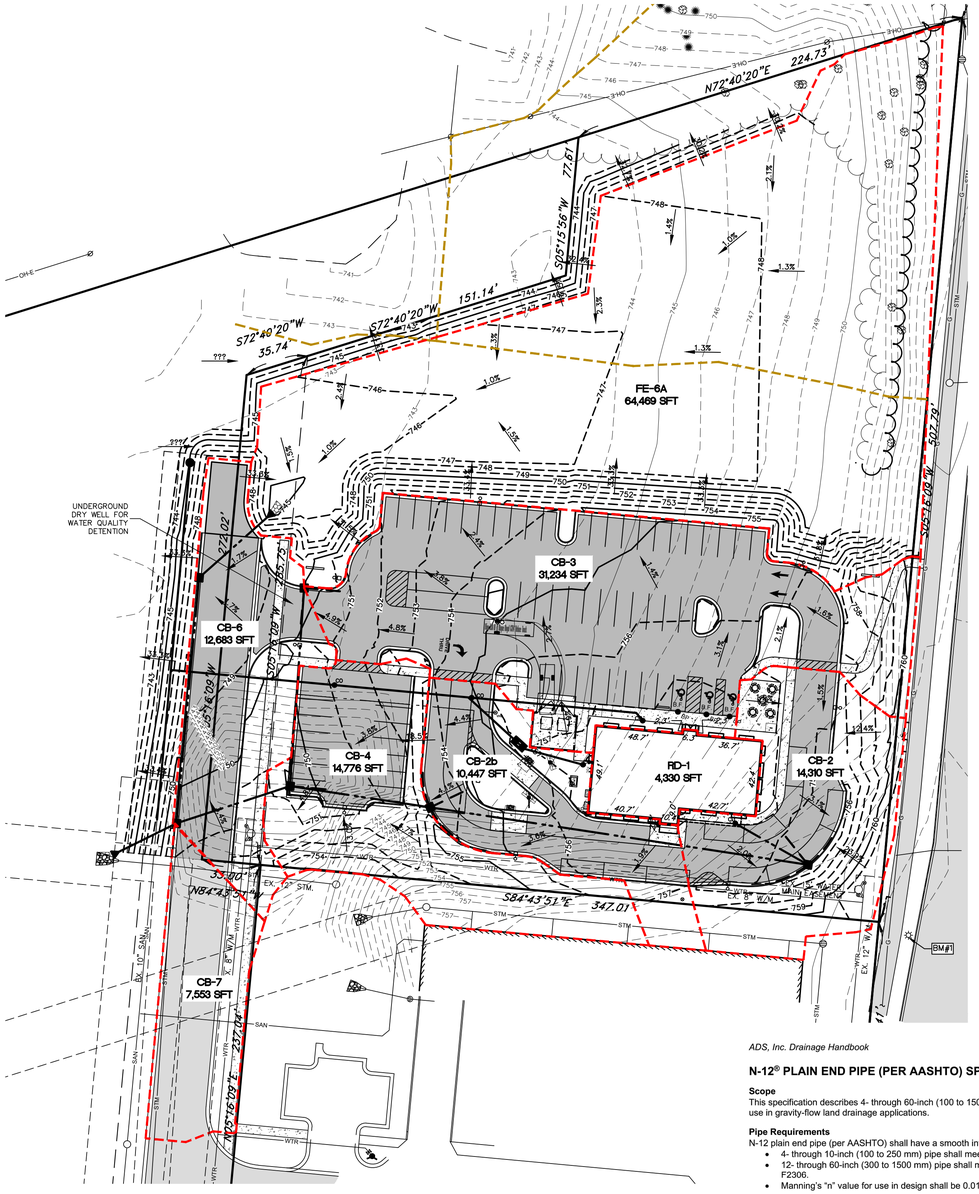
Roosien & Associates
SURVEYING AND ENGINEERING
5055 PLAINFIELD AVE. NE MAIL@ROOSIEN-ASSOC.COM
GRAND RAPIDS, MI 49525 TELE: (616) 361-7220

SITE GRADING AND SESC PLAN
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
UPH YPSILANTI, LLC
49169 ALPHA DRIVE
WIXOM, MI 48393
(248) 971-0252

PROJECT NO.
231072

C-104



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

LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSED STORM SEWER
- DRAINAGE ARROW
- 750.00 PROPOSED SPOT ELEVATION
- GRADE BREAK LINE
- SIDEWALK RAMP W/ LANDINGS AT EACH END
- LIMITS OF DISTURBANCE

STORMWATER NOTES:
THE PROPOSED LOT IS A PORTION OF THE TOWNSHIP SEAVER FARM PROPERTY. THE TOWNSHIP HAS CONSTRUCTED A REGIONAL STORMWATER BASIN FOR THE MASTER DEVELOPEMENT INCLUDING THIS PROPERTY. THE REGIONAL DETENTION BASIN DOES REQUIRE SOME ADDITIONAL CONSTRUCTION WORK AND EXPANSION. THIS WORK IS SCHEDULED TO OCCUR PRIOR TO OR CONGRUENT WITH THE DEVELOPMENT OF THIS PROJECT. AS A RESULT, STORM WATER QUALITY VOLUME IS THE ONLY REQUIREMENT THAT MUST BE MET FOR THIS PROJECT. THE PROPOSED UNDERGROUND DRY WELL WILL MEET THIS REQUIREMENT.

THE PROPOSED IMPERVIOUS AREA FOR THIS SITE EXCLUDING THE AREA MORE THAN TEN FEET NORTH OF THE NORTHERN PARKING SPACES IS 1.15 ACRES OF THE 1.78 ACRES OR 64.6% OF THE PROJECT.

ADS, Inc. Drainage Handbook *Specifications ♦ 1-11*

N-12® PLAIN END PIPE (PER AASHTO) SPECIFICATION

Scope
This specification describes 4- through 60-inch (100 to 1500 mm) N-12 plain end pipe (per AASHTO) for use in gravity-flow land drainage applications.

Pipe Requirements
N-12 plain end pipe (per AASHTO) shall have a smooth interior and annular exterior corrugations.
- 4- through 10-inch (100 to 250 mm) pipe shall meet AASHTO M252, Type S or SP.
- 12- through 60-inch (300 to 1500 mm) pipe shall meet AASHTO M294, Type S or SP, or ASTM F2306.
- Manning's "n" value for use in design shall be 0.012.

Joint Performance
Pipe shall be joined with coupling bands covering at least two full corrugations on each end of the pipe. Standard connections shall meet or exceed the soil-tight requirements of AASHTO M252, AASHTO M294, or ASTM F2306.

Gasketed connections shall incorporate a closed-cell synthetic expanded rubber gasket meeting the requirements of ASTM D1056 Grade 2A2. Gaskets, when applicable, shall be installed by the pipe manufacturer.

Fittings
Fittings shall conform to AASHTO M252, AASHTO M294, or ASTM F2306.

Material Properties
Material for pipe and fitting production shall be high density polyethylene conforming with the minimum requirements of cell classification 424420C for 4- through 10-inch (100 to 250 mm) diameters, and 435400C for 12- through 60-inch (300 to 1500 mm) diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. The 12- through 60-inch (300 to 1500mm) pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Sections 9.5 and 5.1 of AASHTO M294 and ASTM F2306 respectively.

Installation
Installation shall be in accordance with ASTM D2321 and ADS recommended installation guidelines, with the exception that minimum cover in trafficked areas for 4- through 48-inch (100 to 1200 mm) diameters shall be one foot. (0.3 m) and for 60-inch (1500 mm) diameter the minimum cover shall be 2 ft. (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted), Class 2 (minimum 90% SPD) or Class 3 (minimum 95%) material. Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.01. Contact your local ADS representative or visit our website at www.adspipe.com for a copy of the latest installation guidelines.

Build America, Buy America (BABA)
N-12 Plain End pipe (per AASHTO), manufactured in accordance with AASHTO M252, AASHTO M294 or ASTM F2306, complies with the requirements in the Build America, Buy America (BABA) Act.

Pipe Dimensions

Nom. Dia. in (mm)	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)	42 (1050)	48 (1200)	60 (1500)
Pipe O.D.* in	4.8	6.9	9.1	11.4	14.5	18	22	28	36	42	48	54	67
(mm)	(122)	(175)	(231)	(290)	(368)	(457)	(559)	(711)	(914)	(1067)	(1219)	(1372)	(1702)

*Pipe O.D. values are provided for reference purposes only, values stated for 12 through 60-inch are ±1 inch. Contact a sales representative for exact values
**All diameters available with or without perforations.

WEIGHTED "C"

Calculated by: YS Date: 11/11/2024 Project Name: Culver's - Ypsilanti
Checked by: MDC Date: 11/19/2024 Project # 231072

Pavement: c = 0.95
Gravel : c = 0.85
Green Space / Lawn: c = 0.55
Water Surface: c = 1.00

Structure	Area (sft)	Area (acres)	Hard Surface (sft)	Hard Surface (acres)	Gravel Surface (acres)	RIM (feet)	CALC "C"	C X A
RD-1	4,330	0.10	4,330	0.10	0.00	757.16	0.95	0.09
CB-2	14,310	0.33	6,404	0.15	0.00	755.00	0.73	0.24
CB-2b	10,447	0.24	7,098	0.16	0.00	753.15	0.82	0.20
CB-3	31,234	0.72	26,995	0.62	0.00	749.47	0.90	0.64
CB-4	14,776	0.34	5,111	0.12	0.00	749.40	0.69	0.23
FE-6A	64,393	1.48	0	0.00	0.00	N/A	0.89	1.32
CB-6	12,638	0.29	9,223	0.21	0.00	748.07	0.84	0.24
CB-7	7,553	0.17	6,119	0.14	0.00	750.43	0.87	0.15
FE-8	0	0.00	0	0.00	0.00	N/A	0.00	0.00
Dev Totals =		1.72		1.15	0.00			1.41

Weighted C_w = 0.82

Required Detention Basin Volume Calculation

Project Name: Culver's - Ypsilanti
Project Number: 231072
Date: November 11, 2024
Subcatchment: Area to Basin

Required Water Quality:

Rainfall: 1.0 in
Runoff Coefficient (C): 0.82
Proposed Developed Area: 1.72 acres
Required Water Quality Volume: **5,107 cft**
Max Flow: 0.12 cfs (to drain in 24 hours)

Underground Storage System Design:

Stone wrapped with fabric
Stone System Area: 5,800 sft
Stone Storage Thickness: 3.00 feet
Void Ratio: 30%
Wrapped Stone Storage Capacity: **5,220 cft**

Basin Elevations

Basin Bottom: 744.50
Water Quality: 747.50
Outlet Rim: 749.40

Outlet Design $Q = C * A_o * (2*g*H)^{1/2}$

	Sediment	Bank Erosion	Flood Control
C=		0.60	
Outlet Dia. (in)=	1.50	0.00	3.50
Area / hole (sft)=	0.0123	0.0000	0.0668
# of Holes=	1	0	0
g (ft / s^2)=		32.2	

	Sediment Control		Bank Erosion		Flood Control		Total
Stage	Head (ft)	Flow (cfs)	Head (ft)	Flow (cfs)	Head (ft)	Flow (cfs)	Flow (cfs)
Water Quality:	2.94	0.10					0.10

Primary Spillway - 10 year

Q (design):
Runoff Coeff (C) = 0.82
I10 (in / hr) = 3.96
Area (ac) = 1.72
Q (design) = 5.61 cfs

Q (proposed): $Q = C * L * H^{3/2}$
C = 2.6
Width (at base; ft) = 4.00
H (ft) = 0.667
Q (cfs) = 5.67

Section IV: Computational Requirements For Stormwater Management Systems

Section IV: Computational Requirements For Stormwater Management Systems

Part E.
STANDARD METHOD RUNOFF VOLUME WORK SHEETS

W1 Determining Post-Development Cover Types, Areas, Curve Numbers, and Runoff Coefficients

Total Site Area = 1.73 ac
Total Site Area Excluding "Self- Crediting" BMPs = 1.73 ac[A]

Rational Method Variables[B]

Cover Type	Soil Type	Area (ft²)	Area(ac)	Runoff Coefficient (c)	(C) (Area)
		4,330	0.10	0.95	0.09
		14,310	0.33	0.73	0.24
		31,234	0.72	0.90	0.64
		14,776	0.34	0.69	0.23
		10,447	0.24	0.82	0.20

Total - ∑(C)(Area) = 1.41
Area Total - ∑ac or ∑sf = 1.72
Weighted C - ∑(C)(Area)/∑ac or ∑sf = 0.82

NRCS Variables[C]

Pervious Cover Type	Soil Type	Area (ft²)	Area(ac)	Curve Number	(CN) (Area)

Total - ∑(CN)(Area) =
Area Total - ∑ac or ∑sf =
Weighted CN - ∑(CN)(Area)/∑ac or ∑sf =

NRCS Variables[C]

Impervious Cover Type	Soil Type	Area (ft²)	Area(ac)	Curve Number	(CN) (Area)

Total - ∑(CN)(Area) =
Area Total - ∑ac or ∑sf =
Weighted CN - ∑(CN)(Area)/∑ac or ∑sf =

[A] Use this area for the remainder of the runoff calculations
[B] Required for first flush runoff calculations
[C] Required for bankfull and 100-year runoff calculations

W2 Standard Method Runoff Volume Calculations

First Flush Runoff Calculations (V_{ff})

A.

$V_{ff}=(1")\left(\frac{1'}{12"}\right)\left(\frac{43560ft^2}{1ac}\right)AC$

$V_{ff}=(1")\left(\frac{1'}{12"}\right)\left(\frac{43560ft^2}{1ac}\right)(0.82)(1.73)$

$V_{ff}=5,123\ ft^3$

A = Total Site Areas (ac) excluding "Self-Crediting" BMPs from Worksheet 1
C= Weighted Runoff Coefficient from Worksheet 1

STORM SEWER COMPUTATION SHEET

Calculated by: YS Date: November 11, 2024
Checked by: MC Date: November 19, 2024

Pipe Design Storm 10 Yr. Frequency

Project Name: Culver's - Ypsilanti
Project # 231072

Minimum Time of Concentration: 15 minutes
Minimum Cover: 2.5 feet
Pipe elev change at structures: 0.1 feet
Pipe Material Used: PE
Manning "n" value: 0.011 per Municipality

Gravity Pipe Flow: $Q = 1.486/n * A * R^{2/3} * S^{1/2}$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Structure ID		Area (INPUT @ 2) (ACRES)	C For Input @ Col. 2	C x A	SUM OF C x A	Time of Conc. Tc (min)	Rainfall Intensity "I" (in/hr)	Design Flow 2.CdA x I (cfs)	Pipe Diameter (in)	Slope of Energy Grade Line (%)	Actual Pipe Slope (%)	Gravity Full Flow Discharge (cfs)	Gravity Full Flow Velocity (fps)	Pipe Length (ft)	Travel Time (min)	Pipe Invert Elevation		Rim Elevation		HGL Elevation		Rim - HGL
Notes:	From	To															Upper End	Lower End	Upper End	Lower End	Upper End	Lower End	(ft)
	RD-1	CB-2	0.10	0.95	0.09	0.09	15.0	3.96	0.37	6	0.32%	3.60%	1.26	6.41	47	0.12	753.68	752.00	757.18	755.00	752.39	752.25	4.79
	CB-2	CB-2b	0.33	0.73	0.24	0.33	15.1	3.95	1.32	12	0.10%	1.91%	5.82	7.41	214	0.48	751.50	747.42	755.00	753.15	748.13	747.92	6.87
	CB-2b	CB-4	0.24	0.82	0.20	0.53	15.6	3.90	2.07	12	0.25%	0.32%	2.38	3.03	79	0.43	745.82	745.56	753.15	749.40	746.28	746.08	6.87
	CB-3	CB-4	0.72	0.90	0.64	0.64	15.0	3.96	2.54	12	0.37%	0.37%	2.56	3.26	111	0.57	745.97	745.56	749.47	749.40	746.50	746.08	2.98
	CB-4	CB-7	0.34	0.69	0.23	1.41	16.0	3.87	5.44	15	0.51%	0.51%	5.45	4.44	67	0.25	745.46	745.12	749.40	750.43	746.08	745.74	3.32
	FE-6A	CB-6	1.48	0.89	1.32	1.32	15.0	3.96	5.20	15	0.47%	0.47%	5.23	4.26	55	0.21	744.70	744.44	N/A	748.07	745.78	745.52	
	CB-6	CB-7	0.29	0.84	0.24	1.56	15.2	3.94	6.14	15	0.65%	0.65%	6.15	5.02	138	0.46	744.34	743.45	748.07	750.43	745.52	744.62	2.55
	CB-7	FE-8	0.17	0.87	0.15	3.12	16.3	3.84	11.99	18	0.94%	1.50%	15.20	8.60	40	0.08	743.35	742.75	750.43	N/A	744.62	744.25	5.81

Roosien & Associates
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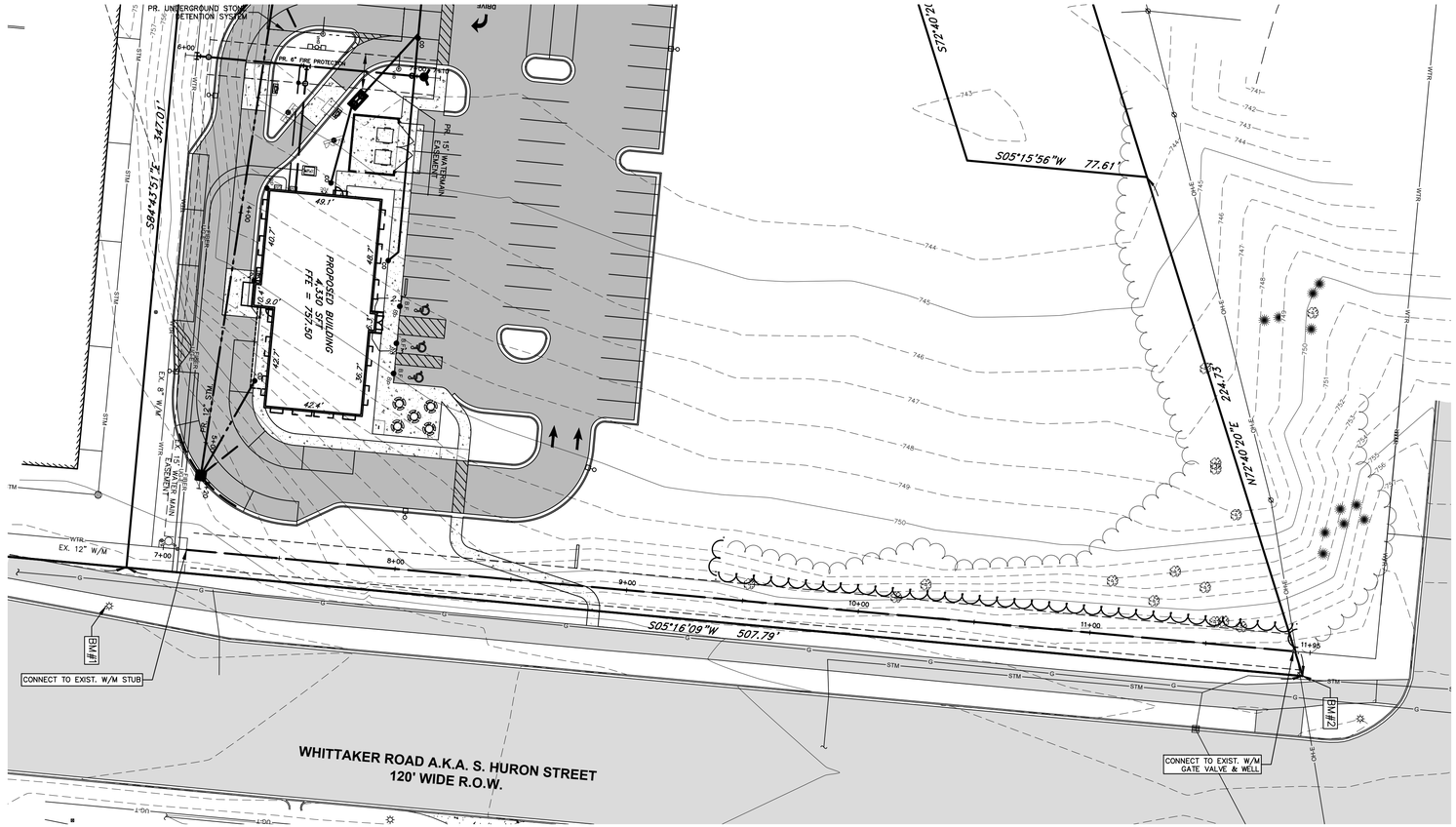
REVISIONS:
REVISIONS:
DRAWN BY: YS
APPROVED: SH MDC
DATE: JULY 18, 2024
DECEMBER 20, 2024 TOWNSHIP COMMENTS

TRIBUTARY MAP
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
UPH YPSILANTI, LLC
49169 ALPHA DRIVE
WIXOM, MI 48393
(248) 971-0252

PROJECT NO.
231072

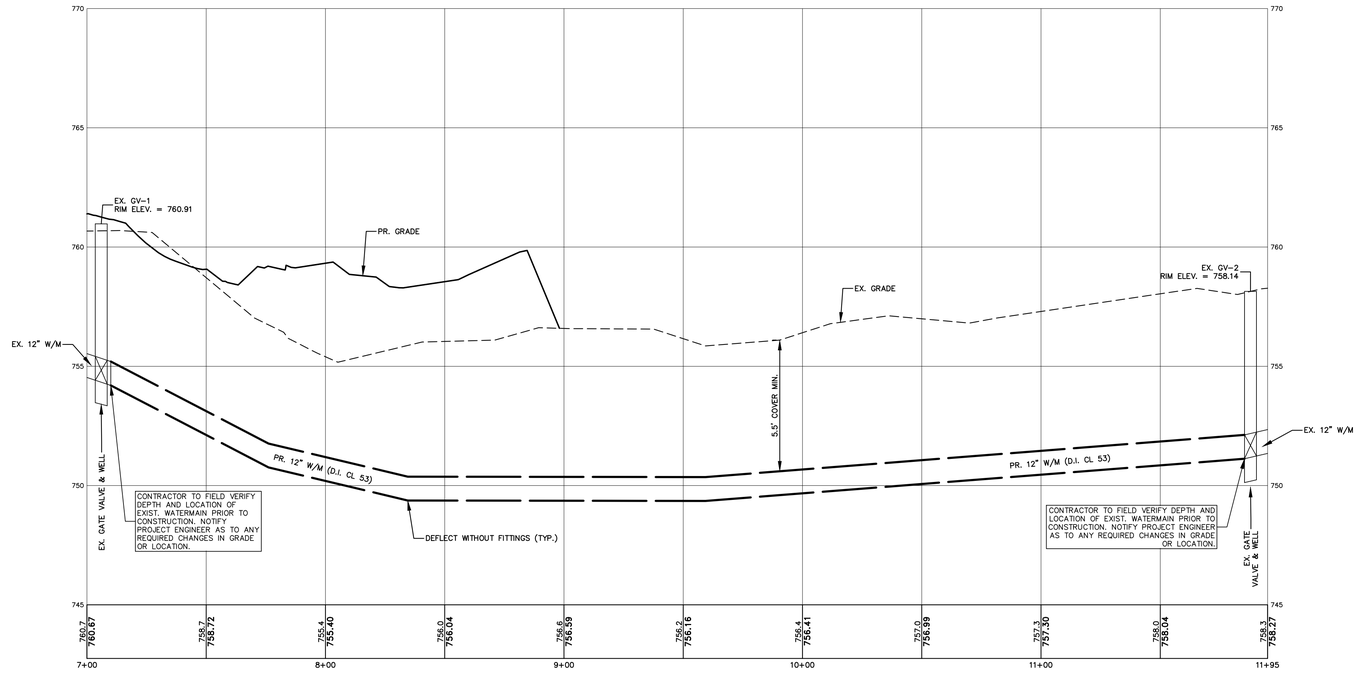
C–105



GRAPHIC SCALE
30' 0 15' 30'
(IN FEET)
1 inch = 30 ft.

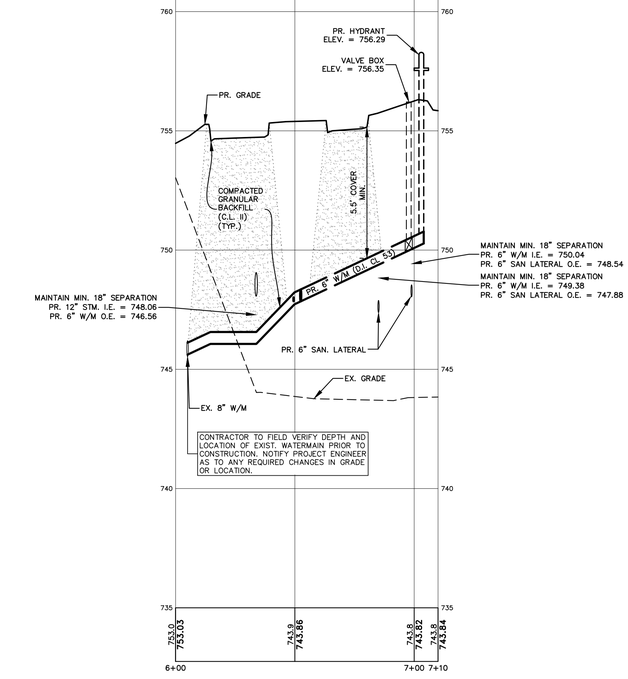
LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY LINE
- PROPOSED CLEAN OUT
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- NATURAL GAS



WATERMAIN PROFILE

SCALE: 1"=30' HORZ. 1"=3' VERT.



WATERMAIN PROFILE

SCALE: 1"=30' HORZ. 1"=3' VERT.

REVISIONS:

DRAWN BY: VS
APPROVED BY: MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

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WATERMAIN PROFILE PLAN
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
UPH YPSILANTI, LLC
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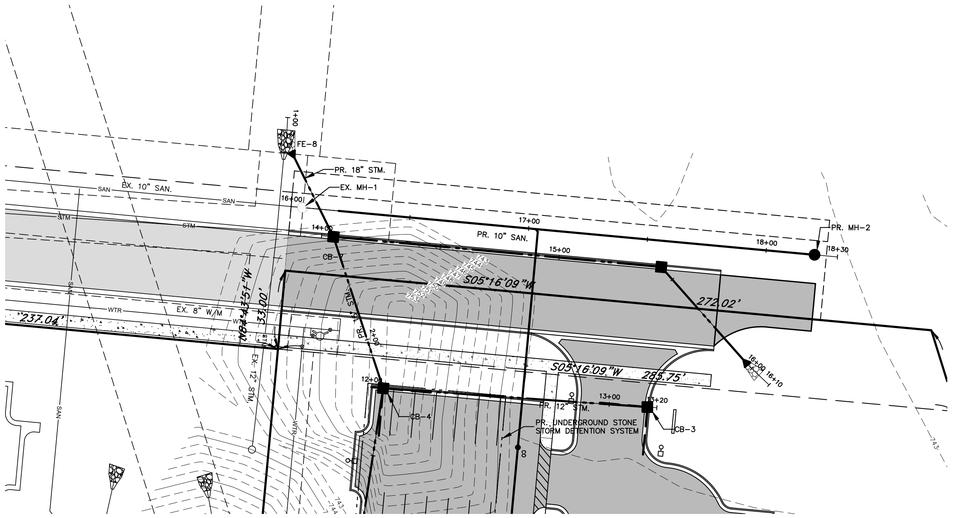
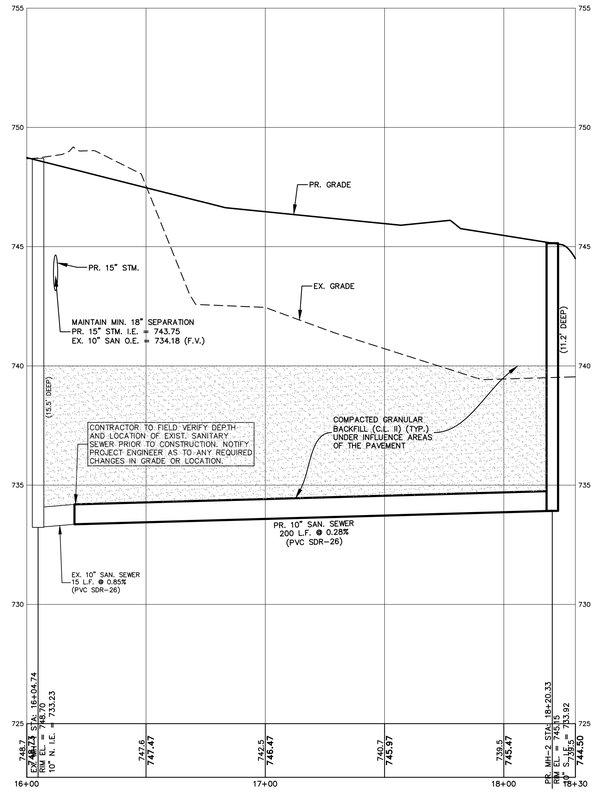
PROJECT NO.
231072

C-201





SANITARY PROFILE

SCALE: 1"=30' HORZ. 1"=3' VERT.

GRAPHIC SCALE

30' 0 15' 30'

(IN FEET)

1 inch = 30 ft.

LEGEND

- 750 — EXISTING MAJOR CONTOUR
- 749 — EXISTING MINOR CONTOUR
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY LINE
- CO PROPOSED CLEAN OUT
- UG-E UNDERGROUND ELECTRIC
- UG-T UNDERGROUND TELEPHONE
- G NATURAL GAS

REVISIONS:

DRAWN BY: YS
APPROVED: SYI MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

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SANITARY PROFILE PLAN
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
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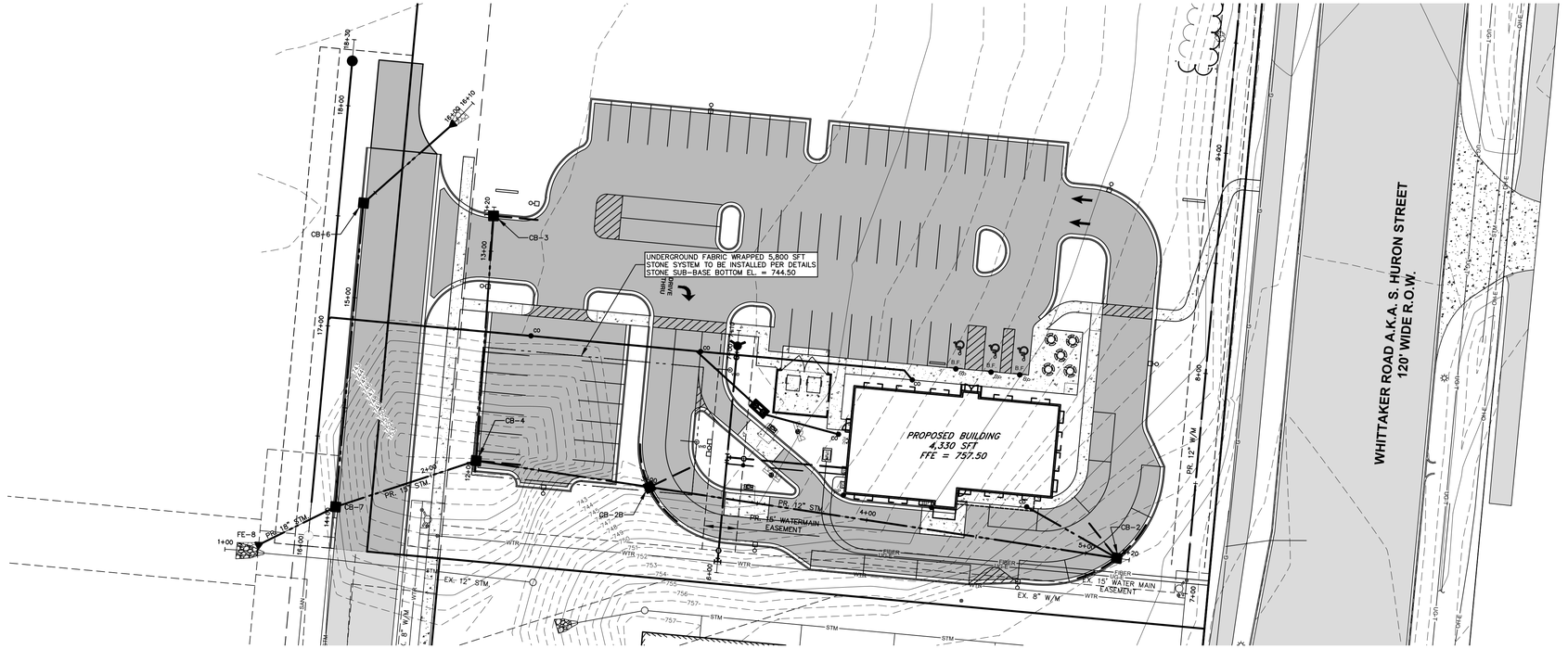
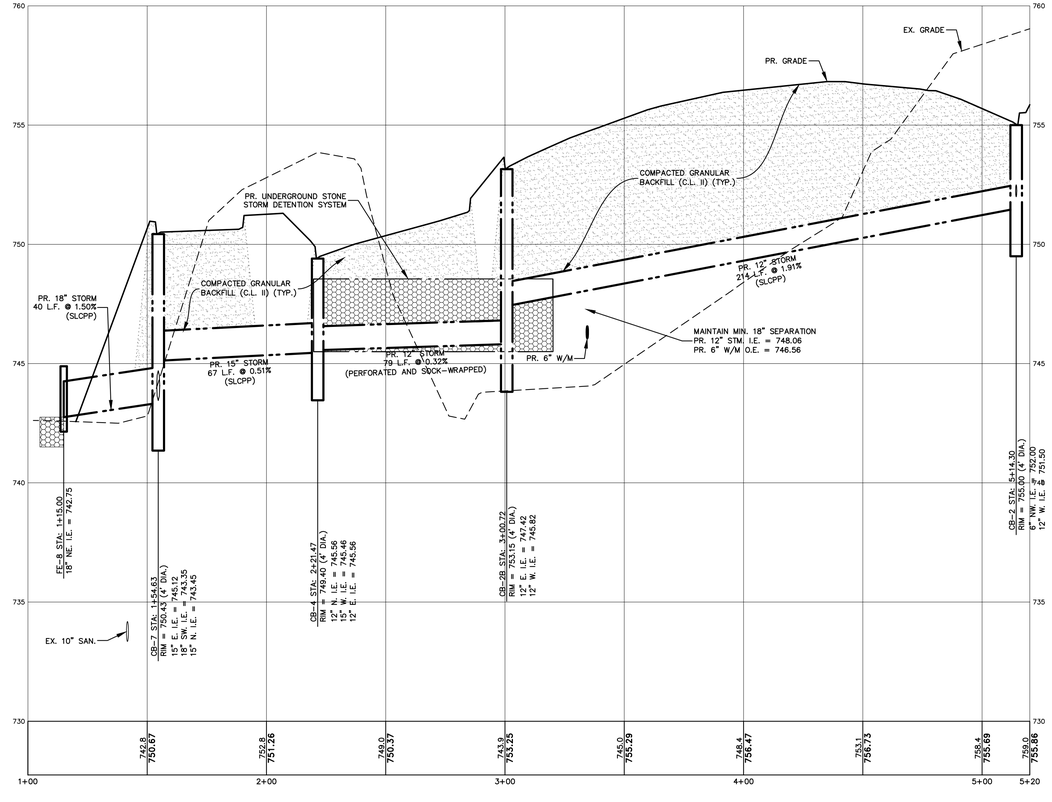
PROJECT NO.
231072

C-202



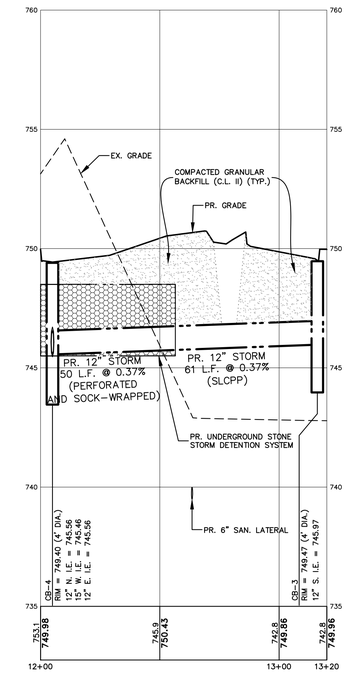
LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY LINE
- PROPOSED CLEAN OUT
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- NATURAL GAS



STORM SEWER PROFILE

SCALE: 1"=30' HORZ. 1"=3' VERT.



STORM SEWER PROFILE

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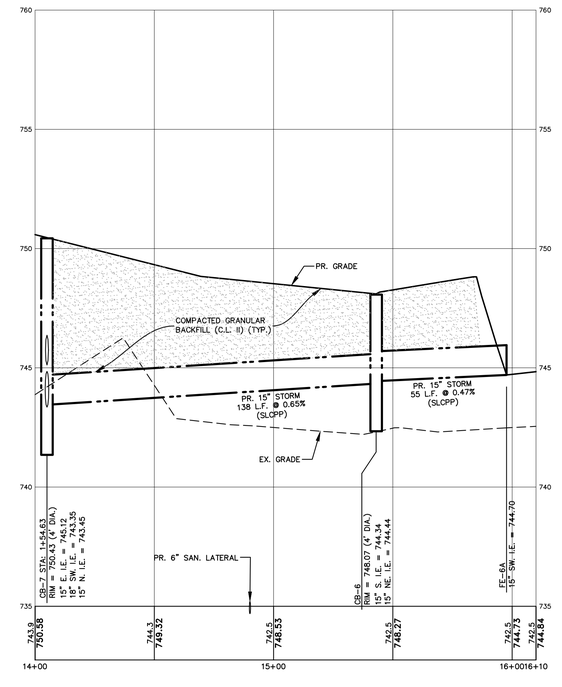

STORM SEWER PROFILE

SCALE: 1"=30' HORZ. 1"=3' VERT.

REVISIONS:

DRAWN BY: YS
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DATE: JULY 18, 2024
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STORM PROFILE PLAN
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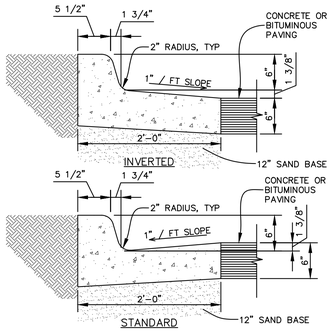
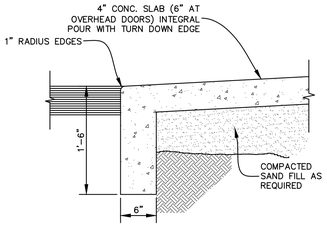
PROJECT NO.
231072

C-203



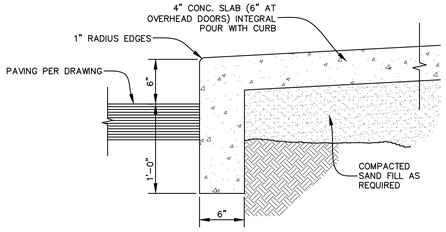
24" CURB AND GUTTER

NOT TO SCALE



FLUSH SIDEWALK EDGE

NOT TO SCALE



RAISED SIDEWALK EDGE

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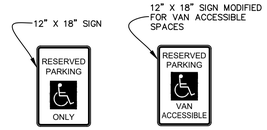


SIGN MATERIALS:

GENERAL: SIGNS SHALL CONFORM WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

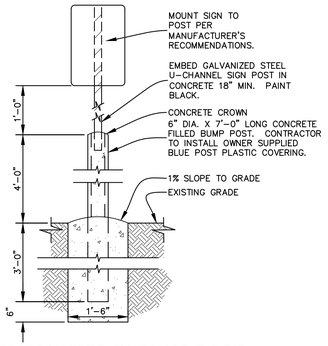
MOUNTING HARDWARE: STAINLESS STEEL.

PANEL MATERIAL: ALUMINUM SHEET.

SIGN FACE: REFLECTORIZED BACKGROUND, REFLECTORIZED LEGEND.

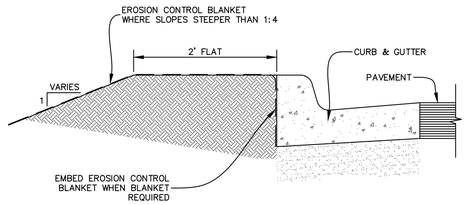
BARRIER FREE SIGNS

NOT TO SCALE



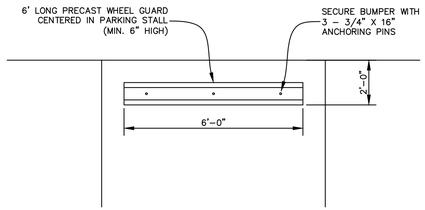
SIGN MOUNTED IN BUMP POST

NOT TO SCALE



SLOPE BEHIND CURB IN FILL SECTION

NOT TO SCALE



BUMPER BLOCK DETAIL

NOT TO SCALE

PROJECT NOTES AND SPECIFICATIONS

GENERAL NOTES

A) ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, CODES, RULES AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED BY STATE AND LOCAL AGENCIES RELATED TO SOIL EROSION AND SEDIMENTATION.

B) ALL ITEMS OF WORK NOT COVERED BY THESE SPECIFICATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE YPSILANTI TOWNSHIP SPECIFICATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF MICHIGAN DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE MOST STRINGENT REQUIREMENTS AS LISTED IN THE GEOTECHNICAL REPORT, PLANS AND SPECIFICATIONS SHALL APPLY.

C) ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE BEGINNING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS DIG AT 811/482-7171 AT LEAST 3 WORKING DAYS PRIOR TO ANY UNDERGROUND CONSTRUCTION.

D) CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER 48 HOURS BEFORE WORK BEGINS.

E) ROOSIEN AND ASSOCIATES AS THE DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE OR LIABLE FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE DRAWINGS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH RISE FROM OTHERS' FAILURE TO OBTAIN AND FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

F) CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY, CONSTRUCTION MEANS, CONTROLS, TECHNIQUES, SEQUENCES AND PROCEDURES.

GENERAL SPECIFICATIONS

A) ALL CONSTRUCTION AREAS SHALL BE CLEARED OF ALL TREES, BRUSH, WEEDS, ETC. ALL SPOIL MATERIAL IS TO BE DISPOSED OF IN AREAS DESIGNATED BY THE OWNER AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.

B) STRIP ALL TOPSOIL AND ORGANIC MATERIAL ON SITE WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT WHERE GRADES ARE TO BE CHANGED, OR IN AREAS TO BE IMPROVED. IF MATERIAL IS FREE OF ROOTS, ROCKS AND DEBRIS, AND IS APPROVED BY THE ENGINEER, IT SHALL BE TEMPORARILY STOCKPILED ON SITE FOR LATER USE.

C) CONSTRUCTION ACCESS AND MATERIAL STORAGE IS LIMITED TO THE AREAS DESIGNATED ON THE DRAWINGS OR AS APPROVED BY THE OWNER.

D) WHERE IT IS NECESSARY TO WORK OUTSIDE THE PROPERTY CONTROLLED BY THE OWNER, THE CONTRACTOR SHALL OBTAIN LEGAL AUTHORITY FROM ADJACENT PROPERTY OWNERS TO COMPLETE THE WORK AS OUTLINED IN THESE DOCUMENTS.

E) ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE BROUGHT TO FINISH GRADES AS SHOWN ON THE DRAWINGS. ALL AREAS DISTURBED SHALL BE RESTORED WITH A MINIMUM OF 4" OF TOPSOIL, SEEDED AND MULCHED.

F) THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION ON THE NEED FOR IMPORTED OR EXPORTED MATERIAL. THE PROPOSED GRADING PLAN MAY NOT PROVIDE FOR A "BALANCED" SITE.

G) ALL AREAS DISTURBED DUE TO SITE ACCESS SHALL BE RESTORED TO THE PRECONSTRUCTION CONDITION OR BETTER.

H) BACKFILL AND COMPACTION: ALL BACKFILL SHALL BE CLEAN, FREE OF LARGE ROCKS, DEBRIS AND ORGANIC MATERIAL. COMPACT ALL BACKFILL TO 95% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST, ASTM D-1557. BACKFILL SHALL BE PLACED IN A MAXIMUM OF 12" LIFTS.

I) STORM SEWER CATCH BASINS AND OUTLET STRUCTURES TO BE 4' DIA., UNLESS OTHERWISE NOTED. ALL CATCH BASINS SHALL HAVE A 2' DEEP SUMP. CATCH BASIN GRATE SHALL BE E.J.I.W. #7045 TYPE M1 UNLESS OTHERWISE NOTED.

SITE CONCRETE FLATWORK

A) MATERIALS: READY MIXED CONCRETE: ASTM C94. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 3,500 PSI FOR ALL EXTERIOR CONCRETE. 1. SLUMP RANGE: 2 INCHES TO 4 INCHES. 2. AIR CONTENT: 4 PERCENT TO 7 PERCENT. 3. LIMESTONE AGGREGATE SHALL BE USED.

B) CURING MATERIAL: ASTM C171 WHITE, OPAQUE POLYETHYLENE FILM TYPE.

C) EXPANSION JOINT FILLERS: SHALL BE ASTM D1751 PREFORMED, BITUMINOUS FIBER TYPE WITH EXPANSION BOARD CAP AND REMOVABLE TOP CAP SECTION.

D) CONCRETE SEALER: SEALANT TO BE 2-PART URETHANE PAVING SEALANT. SEALANT TO BE POURABLE, CHEMICALLY CURING COMPLYING WITH FS SS-S-200 WITH MINIMUM MOVEMENT CAPABILITY OF 12.5 PERCENT. HYDROZO, ENVIROSEAL 40.

E) CONSTRUCTION JOINTS FLATWORK 1) MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS 100 FEET, UNLESS OTHERWISE SHOWN. SCORE CONTROL JOINTS EQUAL TO THE WIDTH OF THE WALK, OR DRIVE BUT NOT TO EXCEED THE LESSER OF 12 FEET OR 24 TIMES THE THICKNESS. 2) INSTALL EXPANSION JOINTS MATERIAL AT ABUTMENT TO CURBS AND ADJACENT STRUCTURES, UNLESS OTHERWISE SHOWN.

F) CONSTRUCTION JOINTS CURBS AND GUTTERS 1) MAXIMUM CONSTRUCTION BETWEEN EXPANSION JOINTS 20 FEET, STRAIGHT CURB 10 FEET.

G) PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL SHOWN ON THIS DRAWING.

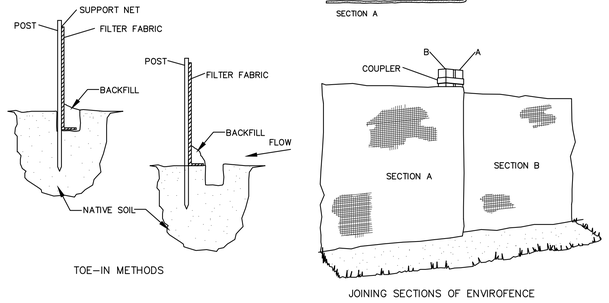
H) PRIOR TO PLACEMENT OF GRAVEL, THE SAND SUBBASE SHALL BE ROLLED TO OBTAIN A MINIMUM OF 95% OF MAXIMUM DENSITY PER THE MODIFIED PROCTOR TEST, ASTMD-1557

I) PRIOR TO PLACEMENT OF ASPHALT, THE GRAVEL SHALL BE PROOF ROLLED AND COMPACTED TO 98% OF MAXIMUM UNIT DENSITY PER THE MODIFIED PROCTOR TEST, ASTMD-1557

STRIPING

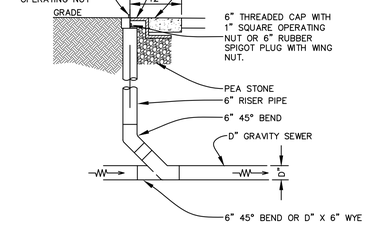
A) PARKING LOT STRIPING SHOULD FOLLOW THE BELOW COLOR SCHEDULE.
- PARKING AND STORAGE LOT STALLS SHOULD BE STRIPED IN YELLOW PAINT.
- BARRIER-FREE STALLS SHOULD BE STRIPED IN BLUE PLAINT

B) FOR UNCURED SURFACES USE SETFAST WATERBORNE TRAFFIC MARKING PAINT.



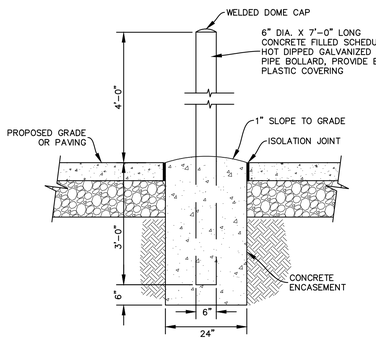
FABRIC SILTATION FENCING

NOT TO SCALE



GRAVITY SEWER CLEAN OUT

NOT TO SCALE



BUMP POST

NOT TO SCALE

INLET PROTECTION - FABRIC DROP SPECIFICATIONS

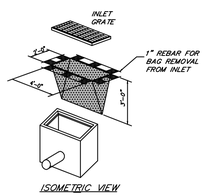
S58

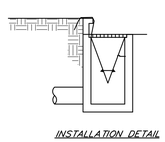
When	• *When sediment laden stormwater requires treatment before entering a stormwater drainage system.*
Why	• *To prevent sediment from entering stormwater systems.*
Where	• *Use in or at stormwater inlets, especially at construction sites or in streets.*
How	*1. A filter fabric bag is hung inside the inlet, beneath the grate.* *2. Replace grate, which will hold bag in place.* *3. Anchor filter bag with 1" rebar for removal from inlet.* *4. Flaps of bag that extend beyond the bag can be buried in soil in earth areas.*
Maintenance	• *Drop inlet filters should be inspected routinely and after each major rain event.* • *Damaged filter bags should be replaced.* • *Clean and/or replace filter bag when 1/2 full.* • *Replace clogged fabric immediately.* • *If needed, initiate repairs immediately upon inspection.* • *Remove entire protective mechanism when upgradient areas are stabilized and streets have been swept.*
Limitations	• *Can only accommodate small flow quantities.* • *Requires frequent maintenance.* • *Ponding may occur around storm drains if filter is clogged.*

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET

INLET PROTECTION - FABRIC DROP

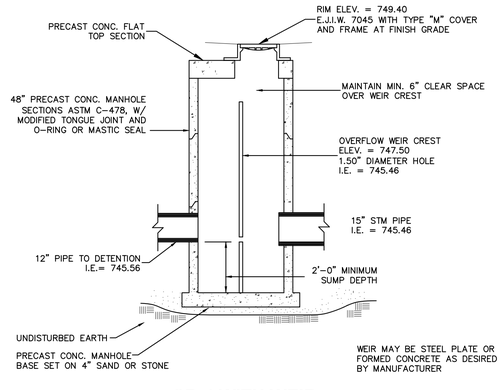
S58





INSTALLATION DETAIL

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET



CB-4 WITH WEIR

NOT TO SCALE

REVISIONS:

DRAWN BY: VS
APPROVED BY: MDC
DATE: JULY 18, 2024
REVISIONS:
DECEMBER 20, 2024 TOWNSHIP COMMENTS

Roosien & Associates
SURVEYING AND ENGINEERING
5505 PLAINFIELD AVE. NE MAIL@ROOSIEN-ASSOC.COM
GRAND RAPIDS, MI 49525 TELE: (616) 361-7220

DETAIL PLAN
CULVERS - YPSILANTI
PART OF SECTION 16, T3S, R7E
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CLIENT:
UPH YPSILANT, LLC
49169 ALPHA DRIVE
WIXOM, MI 48393
(248) 971-0252

PROJECT NO.
231072

C-501

Section 130: Landscape Requirements

B. General landscaping.

(1) A mixture of evergreen and deciduous trees shall be planted at the rate of one (1) tree for each one thousand (1,000) square feet or fraction thereof of lawn area,

(2) One (1) shrub for every five hundred (500) square feet or fraction thereof of lawn area.

Provided based on 24,254 sf of lawn area: 33 deciduous trees, 3 ornamental trees, 8 evergreen trees and 137 shrubs (note: total number of trees and shrubs for entire site)

C. Street yard landscaping.

Whenever, in this ordinance, a landscaped setback is required between a public or private street and a parking or building setback, all such yards shall be landscaped in accordance with the following:

(1) A minimum of one (1) large deciduous tree shall be planted for each forty (40) lineal feet of frontage, or portion thereof, plus
(2) A minimum of one (1) ornamental tree shall be planted for each one hundred (100) lineal feet of frontage or portion thereof, plus
(3) A minimum of one (1) shrub shall be planted for each ten (10) lineal feet of frontage, or portion thereof.
(4) Creative placement of the trees, such as staggering, clustering, and/or other methods, is encouraged in an effort to eventually achieve a canopy.

Provided based on 251 ln. ft. of street frontage: 6 canopy trees, 3 ornamental trees and 59 shrubs.

D. Parking lot landscaping

(1) Interior requirements:

One (1) large deciduous tree shall be required for each two thousand (2,000) square feet of paved driveway and parking lot surface, provided that no less than two (2) trees are provided.

Provided based on 37835 sf of pavement: 18 trees

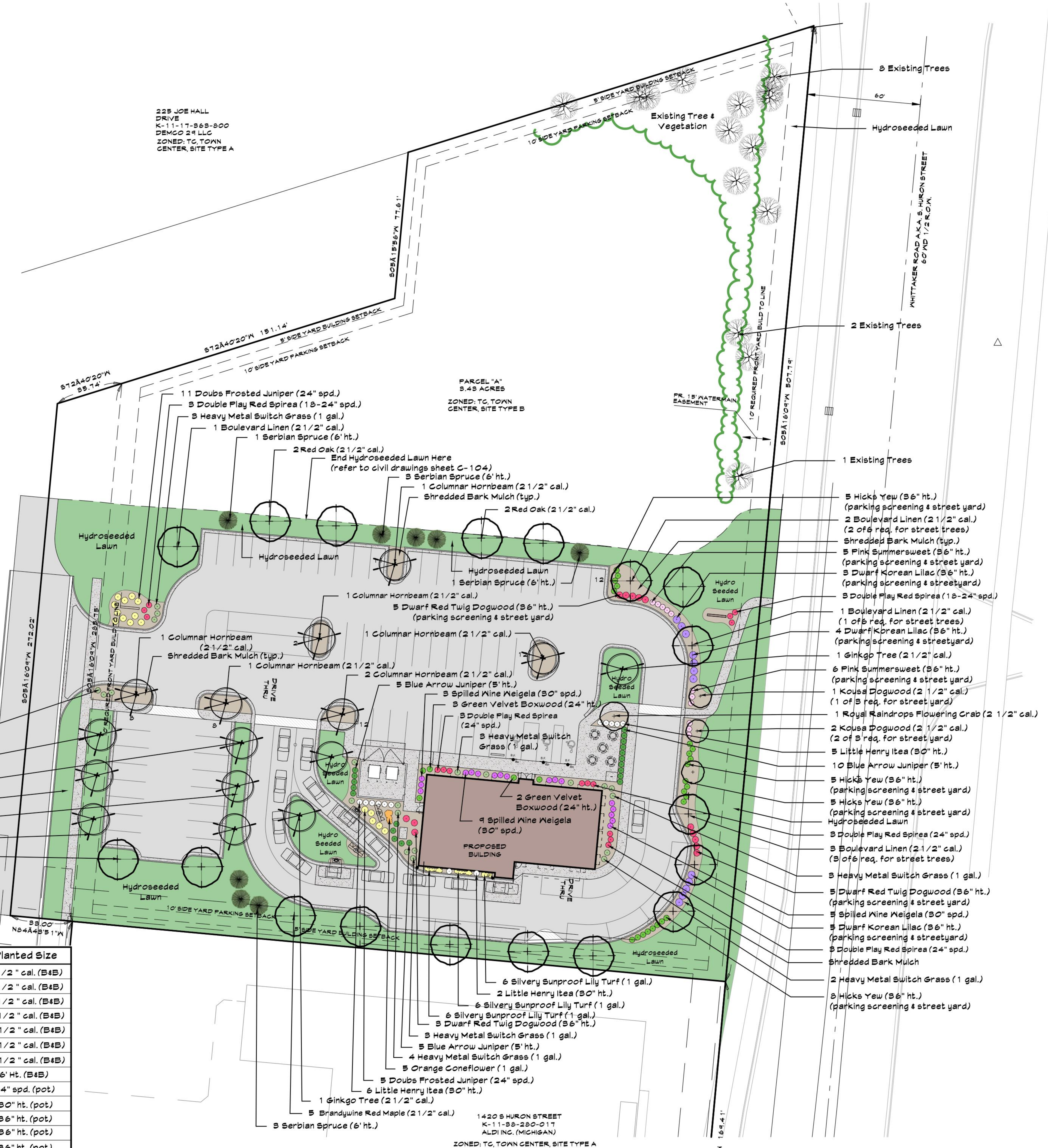
(2) Perimeter

Canopy trees shall be provided along the perimeter of a parking lot at a minimum rate of one (1) tree per forty (40) feet of lot perimeter; however, trees need not be planted on forty (40) foot centers.

Provided based on 900 lf of perimeter: 24 trees

Where an off-street parking area is located within a required front yard, a landscape berm or continuous minimum three (3) foot tall hedge row shall be provided within the greenbelt between parking area and the road right-of-way.

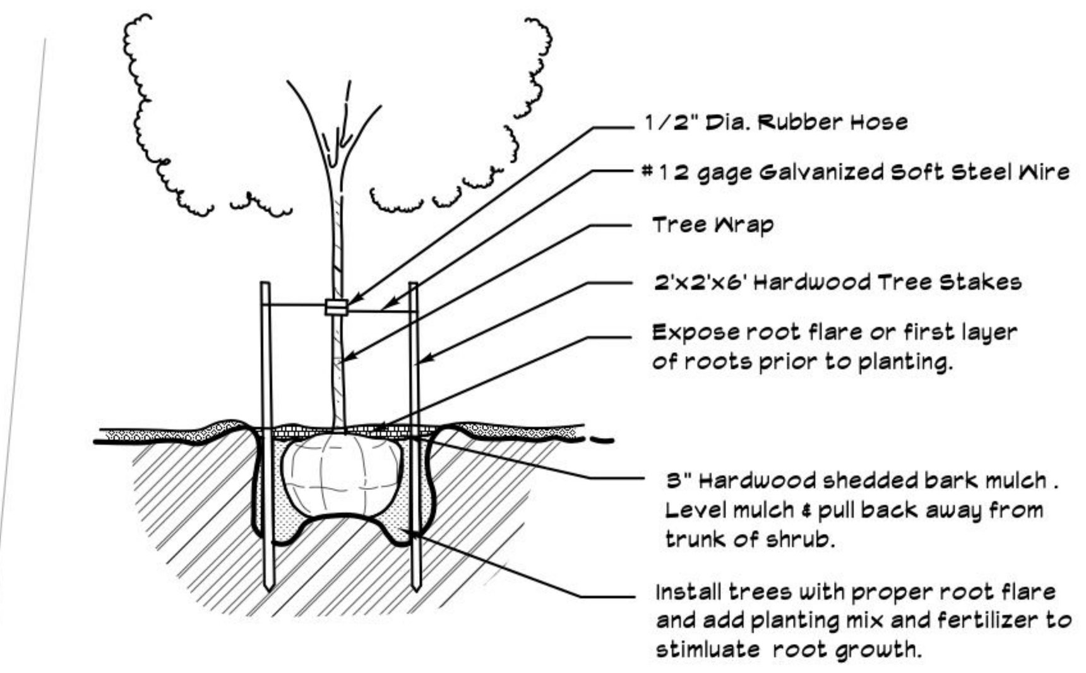
Provided 36" tall shrub screen



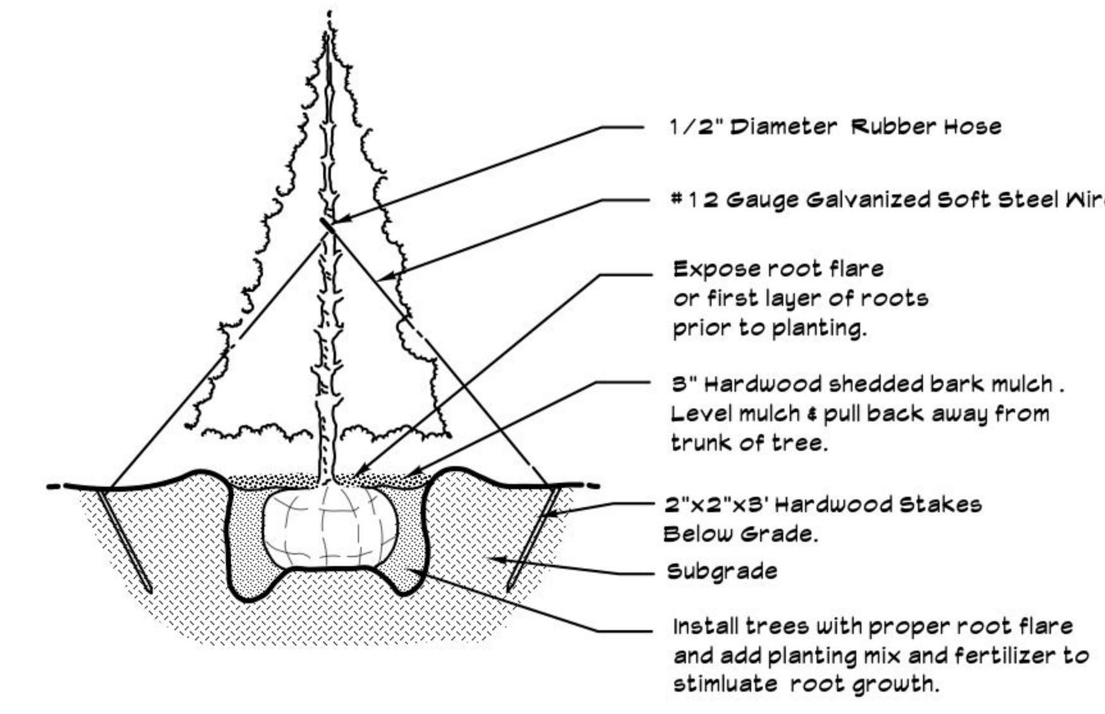
Plant List

Quantity	Common Name	Latin Name	Planted Size
7	Brandywine Red Maple	Acer rubrum 'Brandywine'	2 1/2" cal. (B&B)
4	Red Oak	Quercus rubra	2 1/2" cal. (B&B)
8	Ginkgo Tree	Ginkgo biloba	2 1/2" cal. (B&B)
7	Columnar Hornbeam	Carpinus betulus 'Frans Fontaine'	2 1/2" cal. (B&B)
7	Boulevard American Linden	Tilia americana 'Boulevard'	2 1/2" cal. (B&B)
3	Kousa Dogwood	Cornus Kousa	2 1/2" cal. (B&B)
1	Royal Raindrops Flowering Crab	Malus 'Royal Raindrops'	2 1/2" cal. (B&B)
8	Serbian Spruce	Picea omorika	6' Ht. (B&B)
12	Double Play Red Spirea	Spirea japonica 'Double Play Red'	24" spd. (pot)
13	Little Henry Itea	Itea virginica 'Sprich'	30" ht. (pot)
13	Dwarf Red Twig Dogwood	Cornus stolonifera 'Artic Fire'	36" ht. (pot)
23	Hick's Yew	Taxus 'Hicksii	36" ht. (pot)
12	Dwarf Korean Lilac	Syringa meyeri 'Palibin'	36" ht. (pot)
20	Blue Arrow Juniper	Juniperus virginiana 'Blue Arrow'	5' ht. (B&B)
17	Spilled Wine Weigela	Weigela florida 'Bokraspiwi'	24" spd. (pot)
11	Pink Summersweet	Clethra alnifolia 'Ruby Spice'	36" ht. (pot)
16	Doubs Frosted Juniper	Juniperus chinensus 'Doubs Frosted'	24" spd. (pot)
21	Heavy Metal Switch Grass	Panicum virgatum 'Heavy Metal'	1 gal. (pot)
5	Orange Coneflower	Echinacea sombrero 'Adobe Orange'	1 gal. (pot)
18	Silvery Sunproof Lily Turf	Lirope 'Silvery Sunproof'	1 gal. (pot)

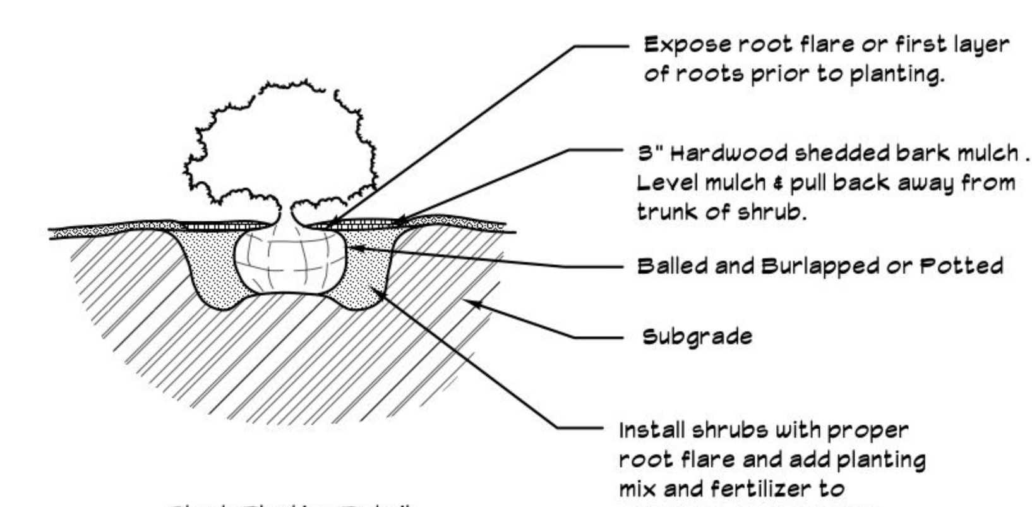
(note: Plant list for ordinance purposes only, the landscape contractor is responsible for plant quantities shown on the landscape plan)



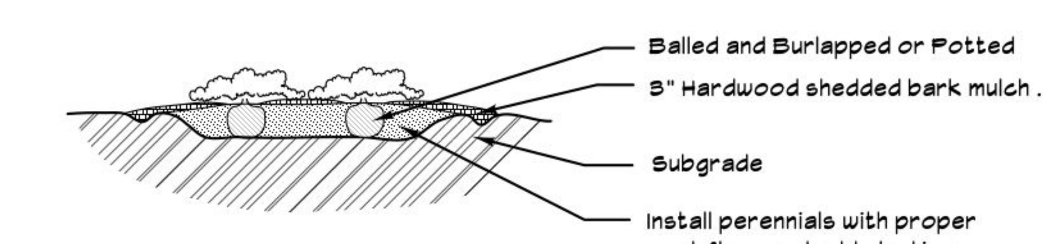
Deciduous Trees 3" Caliper and Smaller



Evergreen Planting Detail-5' and Taller



Shrub Planting Detail



Perennial Planting Detail

North

811 Know what's below. Call before you dig.

Notes:

1. All landscaping shall be installed by a qualified Landscape Contractor. Plant sizes specified on the landscape plan shall be the size planted. Plants smaller then specified will be rejected. Substitutions of any kind must be approved by the Landscape Architect.
2. All plantings shall be mulched with 3" shredded premium hardwood bark mulch. Trees in lawn areas shall receive a 6' diameter bark ring 3" deep..
3. The landscape contractor shall remove any twine that is wrapped around the trunk of a tree or shrub as well as the top third of any burlap. Remove excess soil on the top of the root ball to expose the root flare or first layer of roots prior to planting. Use a wire cutter to make 3-5 cuts in the wire basket to allow roots to grow through.
4. When planting trees in the lawn area or on the berm the existing soil within a 10 foot diameter shall be loosened by tilling or similar and amended with composted manure or peat at a depth of 6-12".
5. Planting areas shall be edged with a mechanical bed edger to define a border for the shedded bark mulch.
6. Parking Islands shall be back filled with at least 24" of topsoil. Amend the topsoil with composted manure and mix into the topsoil at a depth of 6-12". Any aggregate or stone from the construction of the parking lot shall be removed prior to backfill.
7. Lawn areas shall recieve at least 4" of topsoil and hydroseeded. Check with specifications for topsoil availability or contact project manager. Topsoil for lawns shall be appropriate for growing and sustaining a healthy lawn. All lawns shall be hydroseeded with a seed blend consisting of 30% Kentucky Bluegrass, 20% Perennial Ryegrass, 10% Hard Fescue, 20% Creeping Red Fescue and 20% Chewings Fescue.
8. All lawn and shrub bed areas shall be watered by an automatic irrigation system. The irrigation system shall be designed and installed by the Landscape Contractor. Shrub areas shall be irrigated with drip irrigation.
9. Maintenance of the landscape shall be provided for by the owner and include fertilizing of lawn and plant material, yearly pruning, top dressing of mulch areas every other year and provide 1" of water per week during the growing season.
10. Plant materials shall be chosen and installed in accordance with standards recommended by the County Cooperative Extension Service or American Nursery Association.

DESIGN SCAPES
Residential and Commercial Landscape Design
7357 40th Avenue Hudsonville, Michigan 49426
616-669-8004

STATE OF MICHIGAN
JOYCE E. WEISE
LANDSCAPE ARCHITECT
No. 1202
LICENSED LANDSCAPE ARCHITECT

Landscape Plan Drawn By:
Joyce E. Weise PLA, ASLA

PROPOSED LANDSCAPE PLAN FOR:

Culvers Restaurant

Ypsilanti Twp., Michigan

AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

PROJECT NUMBER: RA. #231072

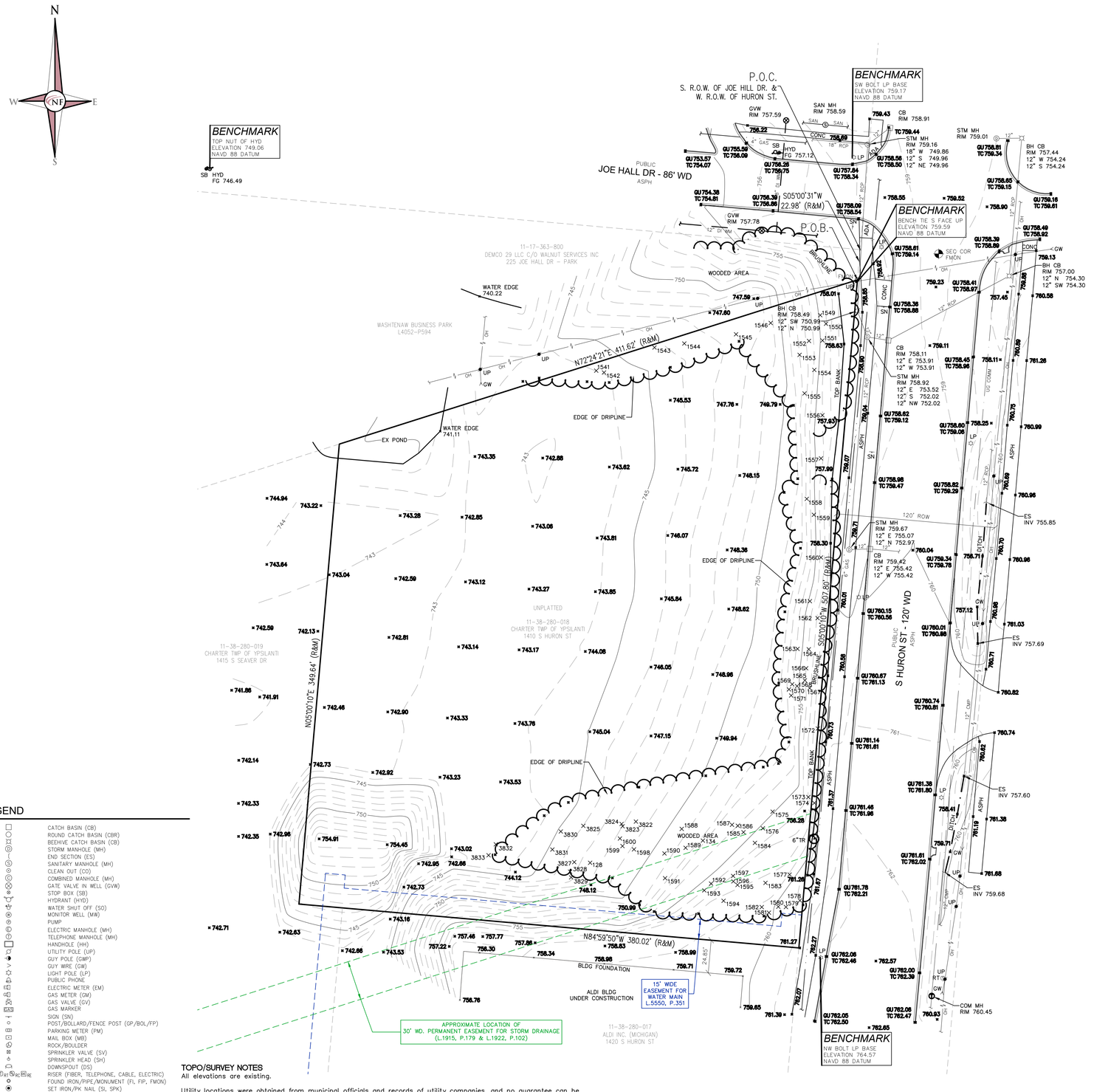
DRAWN BY: Joyce E. Weise PLA, ASLA

DRAWING DATE: 072424

ISSUED FOR:
07/25/24 Site Plan Approval
12/20/24 Revision

SCALE 1"=30'

SHEET NUMBER L-1



LEGEND

- CATCH BASIN (CB)
- ROUND CATCH BASIN (CBR)
- BEEHIVE CATCH BASIN (CB)
- STORM MANHOLE (MH)
- END SECTION (ES)
- SANITARY MANHOLE (MH)
- CLEAN OUT (CO)
- COMBINED MANHOLE (MH)
- GATE VALVE IN WELL (GVW)
- STOP BOX (SB)
- HYDRANT (HYD)
- WATER SHUT OFF (SO)
- MONITOR WELL (MW)
- PUMP
- ELECTRIC MANHOLE (MH)
- TELEPHONE MANHOLE (MH)
- HANDHOLE (HH)
- UTILITY POLE (UP)
- GUY POLE (GWP)
- GUY WIRE (GW)
- LIGHT POLE (LP)
- PUBLIC PHONE
- ELECTRIC METER (EM)
- GAS METER (GM)
- GAS VALVE (GV)
- GAS MARKER
- SIGN (SN)
- POST/BOLLARD/FENCE POST (GP/BOL/FP)
- PARKING METER (PM)
- MAIL BOX (MB)
- ROCK/BOULDER
- SPRINKLER VALVE (SV)
- SPRINKLER HEAD (SH)
- DOWNSPOUT (DS)
- RISER (FIBER, TELEPHONE, CABLE, ELECTRIC)
- FOUND IRON/PIPE/MONUMENT (FI, FIP, FMON)
- SET IRON/PK NAIL (SI, SPK)
- DOOR
- (R) RECORD MEASUREMENT
- (M) SURVEYED MEASUREMENT
- x 000.00 GROUND ELEVATION
- STORM SEWER (STM)
- SANITARY SEWER (SAN)
- WATER MAIN (WATER, WM)
- GAS MAIN (GAS)
- OVERHEAD LINES (OH)
- UNDERGROUND LINES (UG)

TOPO/SURVEY NOTES

All elevations are existing.

Utility locations were obtained from municipal officials and records of utility companies, and no guarantee can be made to the completeness, or exactness of location.

All utilities are underground unless otherwise noted.

The utilities shown on this survey were determined by field observation. All locations are approximate. The location of any other underground services which may exist can only be depicted if a Utility Plan is furnished to the surveyor.

NOTE: DTE has new regulations that may impact development outside their easement or the public right of way. Client shall contact DTE to determine the "New Structures and Power Line" requirements as they may apply to any future building or renovation of a structure. DTE Energy can be contacted at 800-477-4747

811 / UTILITY DISCLAIMER NOTE

a 811 ticket number 2024071103583, pursuant to Michigan Public Act 174 was entered for the surveyed property. due to the extended reporting period for underground facility owners to provide their records, the survey may not reflect all the utilities at the time the survey was issued on August 05, 2024. the survey only reflects those utilities which could be observed by the surveyor in the field or as depicted by the utility company records furnish prior to the date this survey was issued. the client and/or their authorized agent shall verify with the facility owners and/or their authorized agents, the completeness and exactness of the utilities location.

LEGAL DESCRIPTION

Land in the Township of Ypsilanti, Washtenaw County, MI, described as follows:

Commencing at the intersection of the Southerly right of way of Joe Hall Drive and the Westerly right of way of Huron Street, thence South 05 degrees 00 minutes 31 seconds West 22.98 feet to Point of Beginning, thence South 05 degrees 00 minutes 10 seconds West 507.80 feet, thence North 84 degrees 59 minutes 50 seconds West 380.02 feet, thence North 05 degrees 00 minutes 10 seconds East 349.64 feet, thence North 72 degrees 24 minutes 21 seconds East 411.62 feet to Point of Beginning.

BASIS OF BEARING NOTE

The basis of bearing for this survey was established by the legal description from the title commitment.

ACCESS NOTE

The subject land has direct vehicle and pedestrian access to publicly dedicated S. Huron Street.

TITLE NOTES

ALL EXCEPTIONS SHOWN OR NOTED ON THIS SURVEY WERE OBTAINED FROM TITLE COMMITMENT NO. NCS-1219363, ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, WITH AN EFFECTIVE DATE OF APRIL 23, 2024.

2. Any facts, rights, interests or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or by making inquiry of persons in possession of the Land.

3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.

7. The terms, provisions and easement(s) contained in the document entitled "Right of Way" recorded August 17, 1971 as Liber 1368, Page 42 of Official Records. [THE DESCRIBED RIGHT OF WAY OR EASEMENTS ON 44 ARE NOT WITHIN AND NOT ADJACENT TO THE SURVEYED LAND & ARE NOT PLOTTED].

8 The terms, provisions and easement(s) contained in the document entitled "Storm Drainage Easement" recorded February 14, 1984 as Liber 1915, Page 179 of Official Records. [30' PERMANENT DRAINAGE EASEMENT IS WITHIN THE SURVEYED LAND AND ITS APPROXIMATE LOCATION IS SHOWN; TEMPORARY CONSTRUCTION EASEMENTS ARE NOT SHOWN].

Re-recorded April 4, 1984 in Liber 1922, Page 102. [30' PERMANENT DRAINAGE EASEMENT IS WITHIN THE SURVEYED LAND AND ITS APPROXIMATE LOCATION IS SHOWN; TEMPORARY CONSTRUCTION EASEMENTS ARE NOT SHOWN].

9. The terms, provisions and easement(s) contained in the document entitled "Public Utility Easement" recorded April 10, 2024 as Liber 5550, Page 351 of Official Records. [EASEMENT IS WITHIN THE SURVEYED LAND AND ITS LOCATION IS SHOWN].

10. Rights of the United States, State of Michigan and the public for commerce, navigation, recreation and fishery, in any portion of the land bordering on or comprising the bed of Pond.

11. The nature, extent or lack of riparian rights, or the riparian rights of riparian owners and the public, in and to the use of waters of Pond.

12. Interest of others in oil, gas and mineral rights, if any, whether or not recorded in the Public Records.

13. Interest, if any, of the United States, State of Michigan, or any political subdivision thereof, in the oil, gas and minerals in and under and that may be produced from the captioned land.

14. Rights of tenants under unrecorded leases.

15. Any rights, title, interest or claim thereof to that portion of the land taken, used or granted for streets, roads or highways.

SITE DATA

Gross Land Area: 162,922 Square Feet or 3.740 Acres.
Total Striped Parking: (0) striped spaces including (0) barrier free (handicap) spaces.

Zoned: TC Township Center

See Sections 506 & 507 of the Zoning Ordinance for various building standards.

The above zoning and zoning requirements were obtained from the Ypsilanti Township online Zoning Map and Zoning Ordinance.

NOTE: The setbacks & height restrictions noted above are for reference purposes only and should not be used for design or construction and should not be used to determine compliance. A surveyor cannot make a certification on the basis of an interpretation or opinion of another party. A zoning endorsement letter should be obtained from Ypsilanti Township to insure conformity as well as make a final determination of the required building setback & height requirements.

FLOOD HAZARD NOTE

The Property described on this survey does not lie within a Special Flood Hazard Area as defined by the Federal Emergency Management Agency; the property lies within Zone X of the current available Flood Insurance Rate Map identified as Map No. 26161C0426E bearing an effective date of April 3, 2012.

CEMETERY NOTE

There was no observable evidence of cemeteries or burial grounds within the subject property.

TABLE A NOTES

10: Based on an exterior survey of the property, the surveyor did not observe any party walls.

11(a)/11(b): SEE 811/UTILITY NOTE

16: There was no observable evidence of current earth moving work, building construction or building additions observed in the process of conducting the fieldwork.

17: There are no known proposed changes in street right-of-way lines available from the controlling jurisdiction.

18: There was no observable evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.

19: Improvements within offsite easements or servitudes as provided by the Title Company are shown within 25 feet of the subject land only.

SURVEYOR'S CERTIFICATION

certified to:

UPH Ypsilanti Property LLC, a Michigan limited liability company

First American Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 minimum standard detail requirements for ALTA/NSPS Land Title surveys, jointly established and adopted by ALTA and NSPS, and include items 1, 2, 3, 4, 5, 6, 7(a), 7(b)(1), 7(c), 8, 9, 10, 11(a), 11(b), 13, 14, 16, 17, 18 and 19 of Table A thereof.

The field work was completed on July 25, 2024.

Kevin Navaroli, P.S. NO. 4001053503,
within the state of Michigan
Dated: August 05, 2024

STATE OF MICHIGAN
KEVIN CHRISTOPHER NAVAROLI
LICENSE NO. 4001053503
LICENSED PROFESSIONAL SURVEYOR

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

PROJECT LOCATION
No. 1410 S. Huron St.
Part of French Claim 681,
Town 3 South, Range 7 East,
Ypsilanti Township,
Washtenaw County, Michigan

SHEET
Topographic
Tree
ALTA/NSPS Land Title Survey

811 Know what's below Call before you dig.

REVISIONS
12-10-24 ADD TREE SURVEY

DRAWN BY:
J. Nelson
PROJECT MANAGER:
B. Fraus
APPROVED BY:
K. Navaroli
EMAIL:
knavaroli@nfe-engr.com
DATE:
August 05, 2024
SCALE: 1" = 40'
40 20 0 20 40 60

NFE JOB NO. O257
SHEET NO. 1 of 2

Tree Inventory List

Job Number: O257
Job Location: 1410 South Huron St, Ypsilanti
Date: 12/6/2024
Performed By: A. Simon

Condition Description Notes:
"Good" - no observed structural defects*
"Fair" - minor structural defects, marginal form, some insect activity noted*
"Poor" - major structural defects, poor form, insect infested*

**Structural defects may include decayed wood, cracks, root problems, weak branch unions cankers, poor tree architecture, dead/failed branches due to various causes.*

Tree #	Tag #	Dia. (in)	Other Dia.	Botanical Name	Common Name	Condition	Comment 1	Comment 2
1	1541	9.4		Acer negundo	boxelder	fair	asymmetric crown	
2	1542	9.5	5.4	Acer negundo	boxelder	fair	co-dominant trunks	heavy vine
3	1543	14.9		Acer negundo	boxelder	fair	asymmetric crown	heavy vine
4	1544	10.8		Acer negundo	boxelder	fair	pruned for OH lines	asymmetric crown
5	1545	14.2		Acer negundo	boxelder	fair	pruned for OH lines	twisted or bent trunk
6	1546	26.4	23	Acer negundo	boxelder	fair	pruned for OH lines	leaning
7	1547				tag not used			
8	1548				tag not used			
9	1549	26.2		Populus deltoides	eastern cottonwood	fair	pruned for OH lines	asymmetric crown
10	1550	30		Populus deltoides	eastern cottonwood	fair	pruned for OH lines	co-dominant trunks at 5 ft
11	1551	17		Populus deltoides	eastern cottonwood	fair	pruned for OH lines	asymmetric crown
12	1552	10.5	6.1	Acer negundo	boxelder	fair	co-dominant trunks	45 degree lean
13	1553	7.3		Acer negundo	boxelder	fair	asymmetric crown	leaning
14	1554	7.8		Acer negundo	boxelder	fair	asymmetric crown	suckers
15	1555	8.1		Acer negundo	boxelder	fair	heavy vine	
16	1556	27		Acer negundo	boxelder	good		
17	1557	4.6		Ulmus americana	American elm	good		
18	1558	11.1	9.5	Morus alba	white mulberry	fair	co-dominant trunks	heavy vine
19	1559	15.5	13	Acer negundo	boxelder	fair	co-dominant trunks	broken or dead limbs
20	1560	23		Acer negundo	boxelder	good		
21	1561	21		Populus deltoides	eastern cottonwood	good		
22	1562	13.2		Acer negundo	boxelder	fair	asymmetric crown	
23	1563	8.4	5.8	Morus alba	white mulberry	fair	co-dominant trunks	asymmetric crowns
24	1564	9.9	9	Acer negundo	boxelder	fair	co-dominant trunks	asymmetric crowns
25	1565	26		Populus deltoides	eastern cottonwood	good		
26	1566	6.6		Acer negundo	boxelder	fair	asymmetric crown	leaning
27	1567	10		Acer negundo	boxelder	good		
28	1568	8.2		Populus deltoides	eastern cottonwood	good		
29	1569	11.8		Populus deltoides	eastern cottonwood	good		
30	1570	8		Populus deltoides	eastern cottonwood	good		
31	1571	11.2		Populus deltoides	eastern cottonwood	good		
32	1572	14.1		Acer negundo	boxelder	fair	missing over 30% bark	
33	1573	7.7		Acer negundo	boxelder	fair	asymmetric crown	leaning
34	1574	20.2		Ulmus americana	American elm	good		
35	1575	8		Acer negundo	boxelder	fair	twisted or bent trunk	
36	1576	6.4		Rhamnus cathartica	common buckthorn	fair	asymmetric crown	
37	1577	11.2	6	Morus alba	white mulberry	fair	40 degree lean	windfall leaning on tree
38	1578	12.8	10.7	Morus alba	white mulberry	fair	co-dominant trunks	
39	1579	8.2		Acer negundo	boxelder	good		
40	1580	7.5		Acer negundo	boxelder	good		
41	1581	6.3		Acer negundo	boxelder	poor	large crack in trunk	
42	1582	6.8		Acer negundo	boxelder	good		
43	1583	7.7		Acer negundo	boxelder	good		
44	1584	11	6.2	Morus alba	white mulberry	good	co-dominant trunks	
45	1585	6.4		Acer negundo	boxelder	fair	twisted or bent trunk	40 degree lean
46	1586	9.3		Acer negundo	boxelder	good		
47	1587	10.1		Acer negundo	boxelder	fair	twisted or bent trunk	
48	1588	20.5		Acer negundo	boxelder	fair	60 degree bend	heavy vine
49	1589	7.5		Celtis occidentalis	northern hackberry	fair	twisted or bent trunk	
50	1590	10.5		Morus alba	white mulberry	fair	twisted or bent trunk	heavy vine
51	1591	7.7		Acer negundo	boxelder	fair	broken or dead limbs	heavy vine
52	1592	6.8		Acer negundo	boxelder	good		
53	1593	10.1		Acer negundo	boxelder	good		
54	1594	6.7		Acer negundo	boxelder	good		
55	1595	6.2		Acer negundo	boxelder	good		
56	1596	9.3		Acer negundo	boxelder	fair	broken or dead limbs	
57	1597	7.3		Acer negundo	boxelder	good		
58	1598	6		Acer negundo	boxelder	fair	twisted or bent trunk	heavy vine
59	1599	7.3		Malus sp.	crabapple sp.			
60	1600	9.7		Acer negundo	boxelder	fair	broken or dead limbs	30 degree lean
61	3822	7.9		Acer negundo	boxelder	fair	twisted or bent trunk	
62	3823	7.8		Acer negundo	boxelder	fair	twisted or bent trunk	
63	3824	8.7	5	Acer negundo	boxelder	fair	co-dominant trunks	30 degree lean
64	3825	6.1	5.4	Morus alba	white mulberry	good	weeping at union	
65	3826	5.8		Ulmus americana	American elm	good	windfall leaning on tree	
66	3827	8.5		Acer negundo	boxelder	good		
67	3828	6		Acer negundo	boxelder	fair	45 degree lean	
68	3829	11		Acer negundo	boxelder	good		
69	3830	7.1		Acer negundo	boxelder	good		
70	3831	15.5	3	Acer negundo	boxelder	good		
71	3832	9.2		Ulmus americana	American elm	good		
72	3833	7.8		Populus deltoides	eastern cottonwood	good		
73	128	14.5	13.4	Acer negundo	boxelder	poor	co-dominant trunks	multiple dead trunks
74	134	18.1	15.3	Acer negundo	boxelder	fair	co-dominant trunks	twisted or bent trunks

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

PROJECT LOCATION
No. 1410 S. Huron St.
Part of French Claim 681,
Town 3 South, Range 7 East,
Ypsilanti Township,
Washtenaw County, Michigan

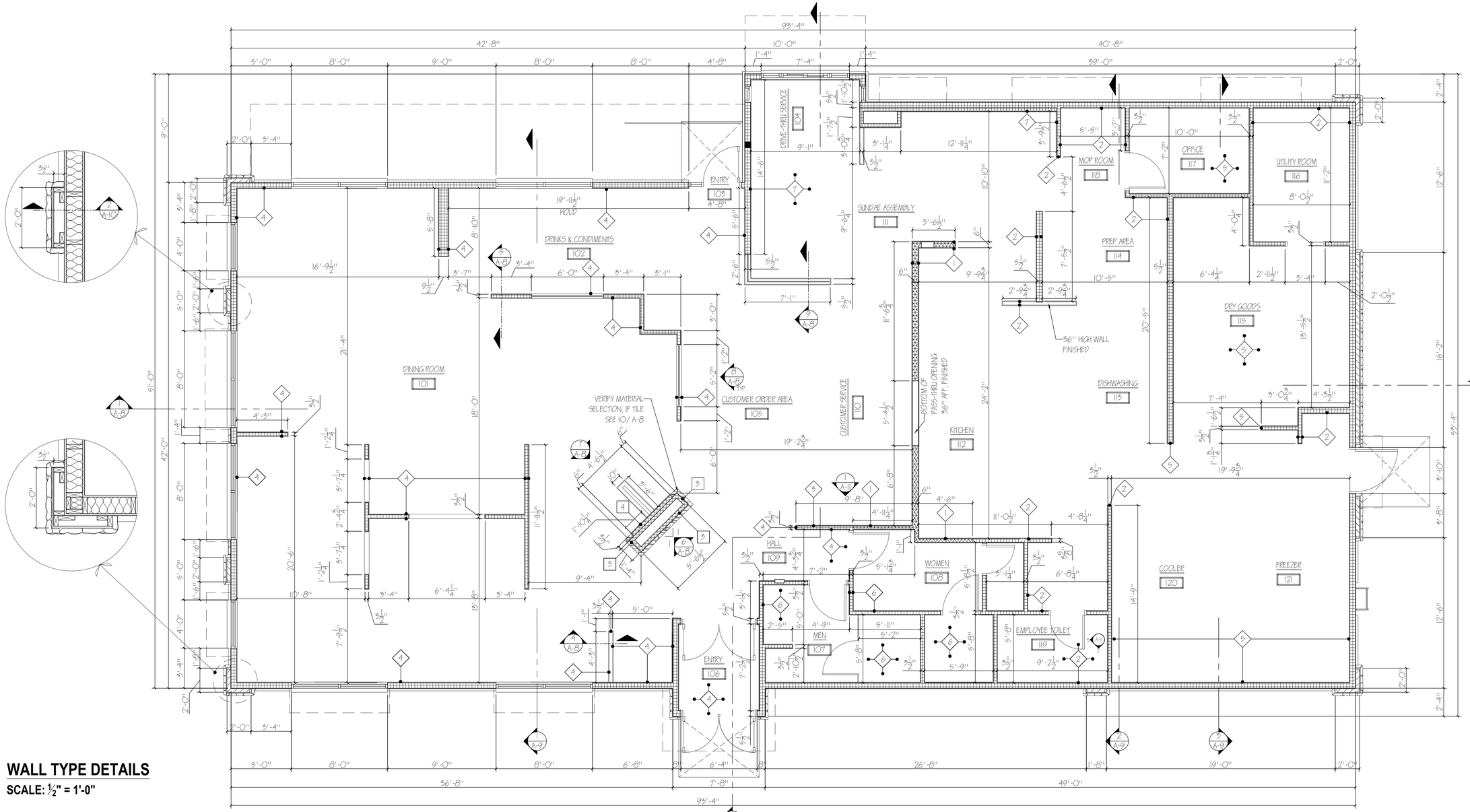
SHEET
Topographic
Tree
ALTA/NSPS Land Title Survey

Know what's **below** **Call** before you dig.

REVISIONS
12-10-24 ADD TREE SURVEY

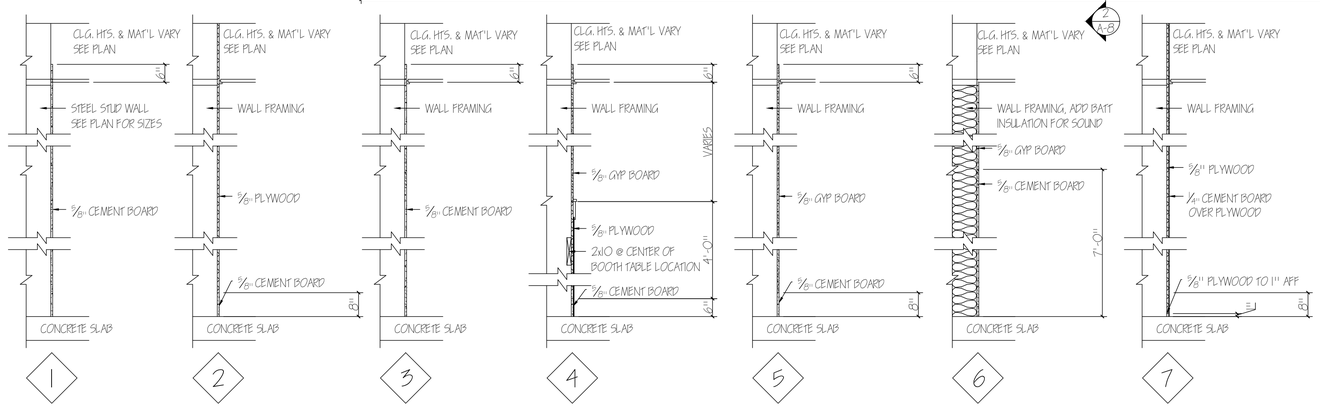
DRAWN BY: J. Nelson
PROJECT MANAGER: B. Fraus
APPROVED BY: K. Navaroli
EMAIL: knavaroli@nfe-engr.com
DATE: August 05, 2024
SCALE: 1" = 40'
40 20 0 20 40 60

NFE JOB NO. O257
SHEET NO. 2 of 2



WALL TYPE DETAILS

SCALE: ½" = 1'-0"



GENERAL NOTES

1. DIMENSIONS SHOWN ARE TO FACE OF STUD UNLESS NOTED OTHERWISE.
2. ALL INTERIOR GYPSUM TO RECEIVE PAINT OR VWC SHOULD BE TAPED, SEALED, AND SANDED TO RECEIVE FINISH.

DIMENSIONED FLOOR PLAN - METRO L - 2024 PROTOTYPE

SCALE: ¼" = 1'-0" **4,310 SQUARE FEET**

NORTH

LEFT SIDE · FRONT · REAR · RIGHT SIDE

SEE SITE PLAN FOR NORTH ORIENTATION

HENRICKSON
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415 Leonard St. NW, Suite 201
Grand Rapids, MI. 49504
616.458.5554

STATE OF MICHIGAN
DANNY SCOTT HENRICKSON
ARCHITECT
NO. 33209
LICENSED ARCHITECT

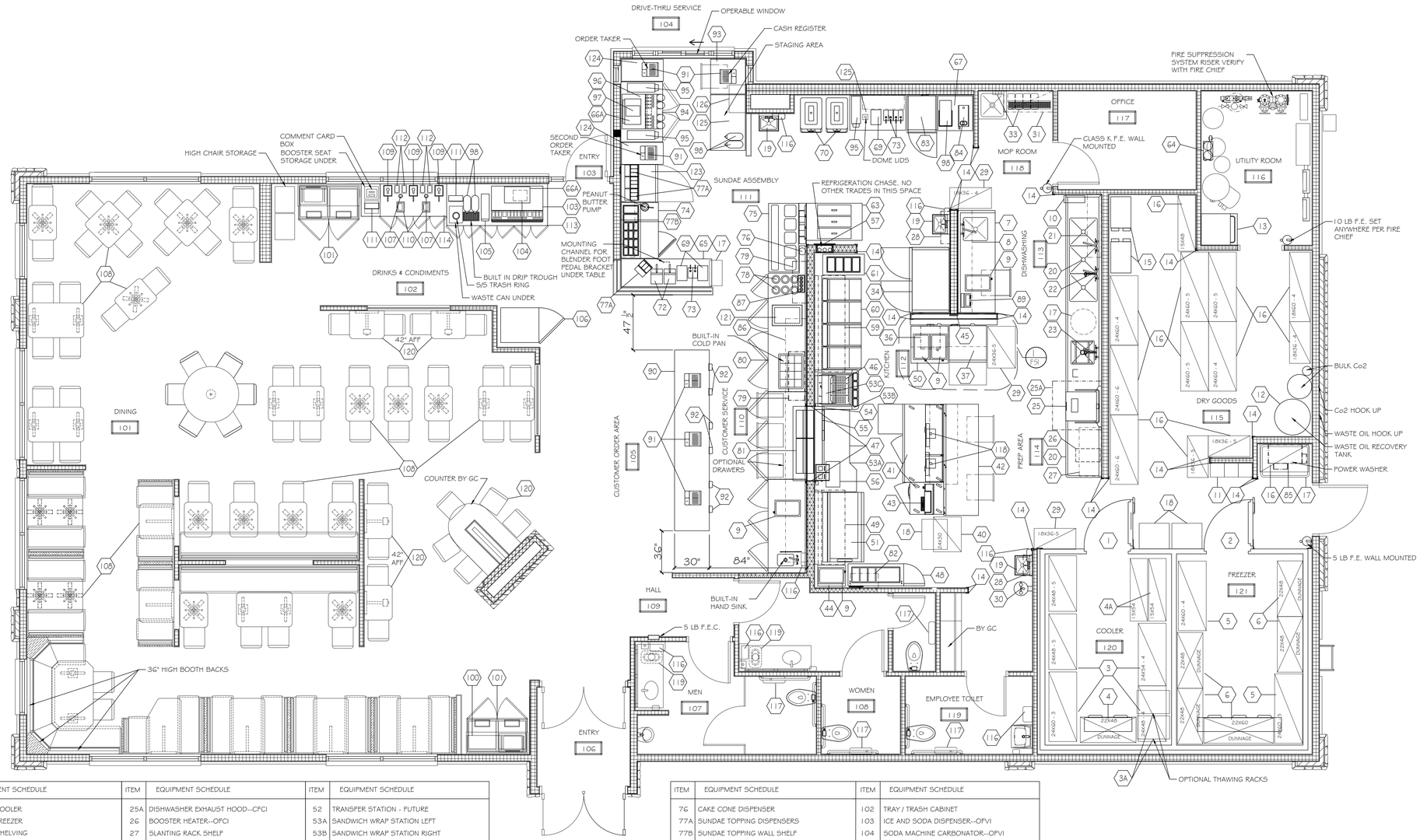
Metro L - 2024

S. HARBOR STREET & JOE HALL DRIVE
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

Culver's

RESUBMITTAL	12.26.24
DRAWN BY:	
CHECKED:	DSH
PROJECT No.	240504

NOT FOR CONSTRUCTION



ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE
1	WALK IN COOLER	25A	DISHWASHER EXHAUST HOOD--CFCI	52	TRANSFER STATION - FUTURE
2	WALK IN FREEZER	26	BOOSTER HEATER--OFCI	53A	SANDWICH WRAP STATION LEFT
3	COOLER SHELVING	27	SLANTING RACK SHELF	53B	SANDWICH WRAP STATION RIGHT
3A	THAWING RACKS	28	FIRE SUPPRESSION SYSTEMS--CFCI	53C	WALL SHELF
4	COOLER DUNNAGE RACK	29	CLEAN PAN SHELVING	54	ORDER BARS
4A	MOBILE CUSTARD MIX RACKS	30	EYE WASH STATION--OFCI	55	WRAP PAPER HOLDERS--OFOI
5	FREEZER SHELVING	31	JANITORS SHELVING	56	HEATED BUN WARMER--OFOI
6	FREEZER DUNNAGE RACKS	32	OPEN NUMBER	57	S/S REFRIGERATION CHASE COVER
7	WORKTABLE/SINK	33	CHEMICAL DISPENSING SYSTEM--OFVI	58	FRY STATION HEAT LAMP
8	WALL SHELF	34	REACH-IN FREEZER	59	EXHAUST HOOD--CFCI
9	COOKER/WARMERS--OFOI	35	OPEN NUMBER	60	FRYERS
10	KETCHUP DISPENSER--OFCI	36	MICROWAVE OVEN--OFOI	61	CUSTOM FISH REFRIGERATOR
11	LOCKERS-OPTIONAL	37	REFRIGERATED DRAWER BASE	62	OPEN NUMBER
12	WASTE OIL RECOVERY SYSTEM--OFVI	38	DUAL FRY DISPENSER	63	TRIPLE CUSTARD MACHINE--OFVI
13	WASHER/DRYER--OFCI	39	OPEN NUMBER	64	WATER FILTER--OFCI
14	WALL CORNER GUARDS	40	BREAD SHELF	65	WORKTABLE
15	BAG IN BOX SYSTEM--OFVI	41	REFRIGERATED WORKTABLES	66	OPEN NUMBER
16	STORAGE SHELVING	42	MOBILE WORKTABLE/OVERSHELF	66A	REMOTE ICE MAKERS
17	TRASH CANS/CART--OFOI	43	BUN TOASTER--OFOI	67	WORKTABLE
18	BUN RACKS--OFVI	44	GRILL SIDE WARMER CART	68	WALL SHELF
19	HAND SINKS--OFCI	45	S/S WALL CAP/ELECTRICAL CHASE COVER	69	ASTRO BLENDERS--OFOI
20	DISHTABLES AND UTENSIL SINKS	46	HEATED FRY BIN	70	SHAKE MACHINE--OFVI
21	WALL SHELF	47	FRONT PASS-THRU S/S TRIM	71	OPEN NUMBER
22	PRE-RINSE SPRAY ASSEMBLY--OFCI	48	REFRIGERATED MEAT CART	72	HEATED SYRUP DISPENSERS--OFOI
23	PRE-RINSE SPRAY ASSEMBLY--OFCI	49	EXHAUST HOOD--CFCI	73	LIQUID TOPPING DISPENSER--OFOI
24	OPEN NUMBER	50	MOBILE WORKTABLE	74	REFRIGERATED TOPPING TABLE
25	DISHWASHER--OFCI	51	GRILL AND GRILL STAND	75	CUSTARD DIPPING CABINET

ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE
76	CAKE CONE DISPENSER	102	TRAY / TRASH CABINET
77A	SUNDAE TOPPING DISPENSERS	103	ICE AND SODA DISPENSER--OFVI
77B	SUNDAE TOPPING WALL SHELF	104	SODA MACHINE CARBONATOR--OFVI
78	CUP AND DISH DISPENSER	105	LID DISPENSER--OFOI
79	WALL SHELVES	106	REACH IN RETAIL FREEZER
80	REFRIGERATED S/S BACKCOUNTER	107	CONDIMENT CUP DISPENSERS
81	HEATED PASS-THRU UNIT	108	TABLES/CHAIRS/BOOTHS
82	TOOL SHELF	109	CONDIMENT DISPENSERS
83	REACH IN REFRIGERATOR	110	NAPKIN DISPENSERS
84	COFFEE MAKER--OFVI	111	STRAW DISPENSERS--OFOI
85	POWER WASHER-OPTIONAL--OFVI	112	CONDIMENT PANS--OFOI
86	MENU BOARD--OFVI	113	BEVERAGE COUNTER
87	WAFFLE CONE DISPENSER--OFOI	114	CONDIMENT COUNTER
88	OPEN NUMBER	115	OPEN NUMBER
89	FOOD LABEL MAKER--OFVI	116	HAND TOWEL DISPENSERS--OFCI
90	FRONT SERVICE COUNTER	117	TOILET PAPER DISPENSERS--OFCI
91	CASH REGISTERS AND SYSTEM--OFVI	118	MONITOR BRACKETS--OFVI
92	CUP DISPENSERS	119	WASTE RECEPTACLE
93	S/S DRIVE-THRU COUNTER	120	HIGH TOP TABLES AND CHAIRS
94	S/S DRIVE-THRU COUNTER	121	DROP IN CUSTARD COLD PAN
95	CUP DISPENSERS	122	OPEN NUMBER
96	ICE AND SODA DISPENSER--OFVI	123	WORKTOP REFRIGERATOR
97	SODA MACHINE CARBONATOR--OFVI	124	WORKTABLE
98	ICED TEA BREWER/DISPENSERS--OFVI	125	MOBILE WORKTABLE
99	OPEN NUMBER	126	SLANTING WALL SHELF
100	DISPLAY CABINET-OPTIONAL	300	TRIM PACKAGE (NOT SHOWN)
101	TRAY / TRASH / RECYCLE CABINET	505	REFRIGERATION SYSTEMS (NOT SHOWN)

GENERAL NOTES:

ALL DRAWINGS FS-1 THROUGH FS-9 SHOULD BE INCLUDED IN ALL ARCHITECTURAL SETS

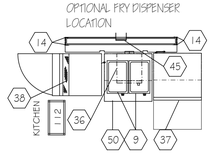
SEATING SUMMARY	
SIX PERSON TABLES	(2) X 6 = 12
FOUR PERSON TABLES	(12) X 4 = 48
THREE PERSON TABLES	(1) X 3 = 3
TO-GO COUNTER	(1) X 5 = 5
TWO PERSON TABLES	(18) X 2 = 36
TOTAL SEATING CAPACITY	104
TOTAL TABLE TOPS	34

EQUIPMENT KEY

ALL ITEMS ARE OWNER FURNISHED, EQUIPMENT CONSOLIDATOR INSTALLED, EXCEPT AS FOLLOWS.

OFCI--OWNER FURNISHED CONTRACTOR INSTALLED
OFOI--OWNER FURNISHED OWNER INSTALLED
CFCI--CONTRACTOR FURNISHED CONTRACTOR INSTALLED
OFVI--OWNER FURNISHED VENDOR INSTALLED

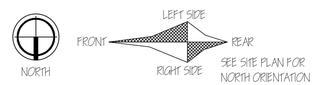
ALL ROUGH-INS AND FINAL CONNECTIONS OF ALL EQUIPMENT BY OTHERS



1 / FS1 DETAIL - OPTIONAL FRY DISPENSER LOCATION
SCALE: 1/4" = 1'-0"

FOODSERVICE PLAN - METRO L - 2024 PROTOTYPE

SCALE: 1/4" = 1'-0"



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616.458.5554

STATE OF MICHIGAN
DANNY SCOTT HENRICKSON
ARCHITECT
NO. 33289
LICENSED ARCHITECT

Culver's

Metro L - 2024
S. HARBOR STREET & JOE HALL DRIVE
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

NOT FOR CONSTRUCTION

RESUBMITTAL	• 12.26.24
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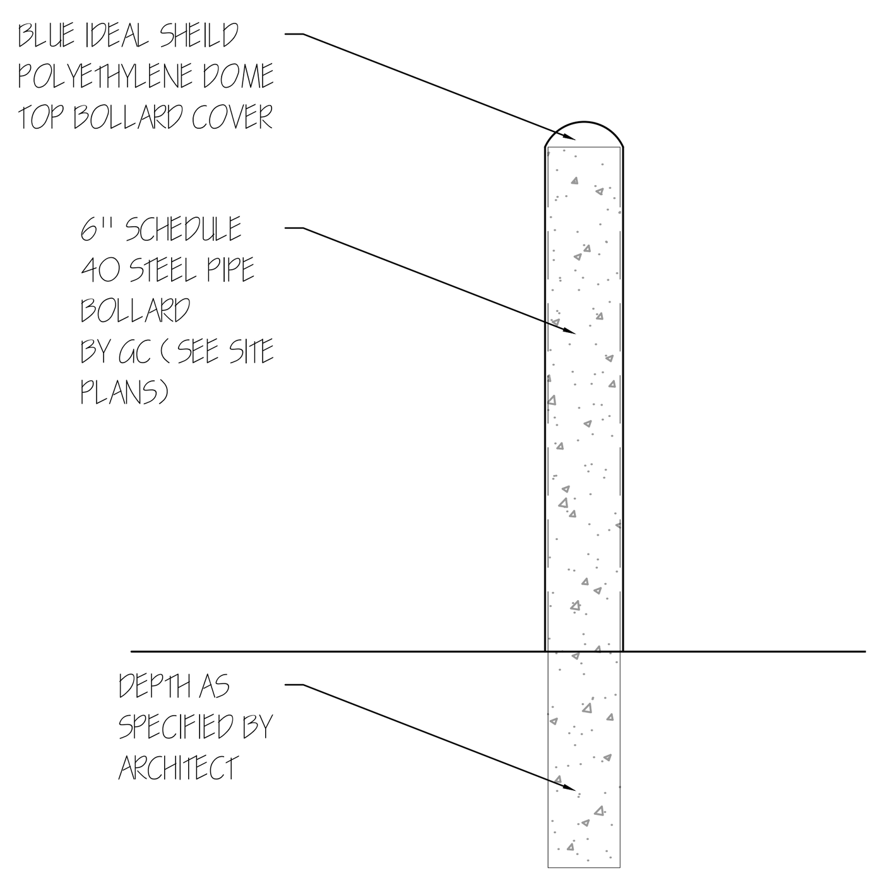
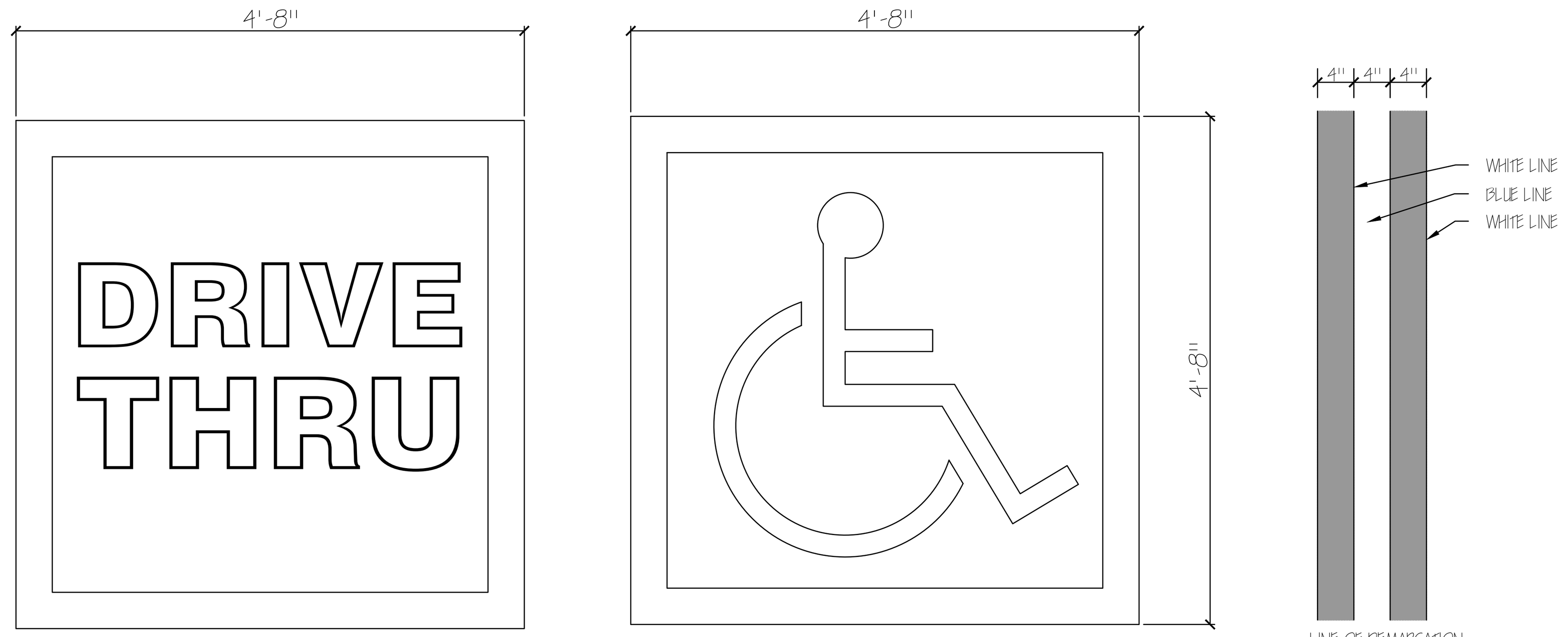
DRAWN BY:	•
CHECKED:	• DSH
PROJECT No.	• 240504



1 BOLLARD (TYP.)
C-1 SCALE: 3/4" = 1'-0"



NOTE: ALL PARKING LOT SYMBOLS TO HAVE WHITE TEXT AND BORDER WITH BLUE BACKGROUND
STRIPING: ALL PARKING LOT STRIPING TO BE WHITE WITH TRIPLE LINE SHOWN AT RIGHT FOR DRIVE THRU

2 PAINTED SYMBOL & STRIPING STANDARDS
C-1 SCALE: 3/4" = 1'-0"

NATIONAL ACCOUNTS PROGRAM:

1. CRESCENT ELECTRIC SUPPLY COMPANY: INTERIOR AND EXTERIOR LIGHTING, LIGHTING CONTROLS, DISTRIBUTION GEAR, DEVICES, COVER PLATES, AND LIGHT POLES/ HEADS.

   NATIONAL ACCOUNT SUPPORT: culvers@cesco.com
   CONTACT FOR SITE PHOTOMETRIC PLAN

TYPICAL SITE LIGHTING SPECS:

LA — LITHONIA D-SERIES SIZE 3 LED FLOOD LIGHT. (FOR OPTIONAL FLAG POLE)

TYPICAL PARKING LOT LIGHTING SPECS:
(VERIFY WITH CRESCENT ELECTRIC)

P1 — PARKING LOT FIXTURE
LITHONIA D-SERIES SIZE 1, DSXILED. VERIFY EXACT SPECS AND POLE HEIGHT WITH SITE PHOTOMETRICS AND CITY REQUIREMENTS NOT SHOWN. VERIFY WITH CIVIL PLANS

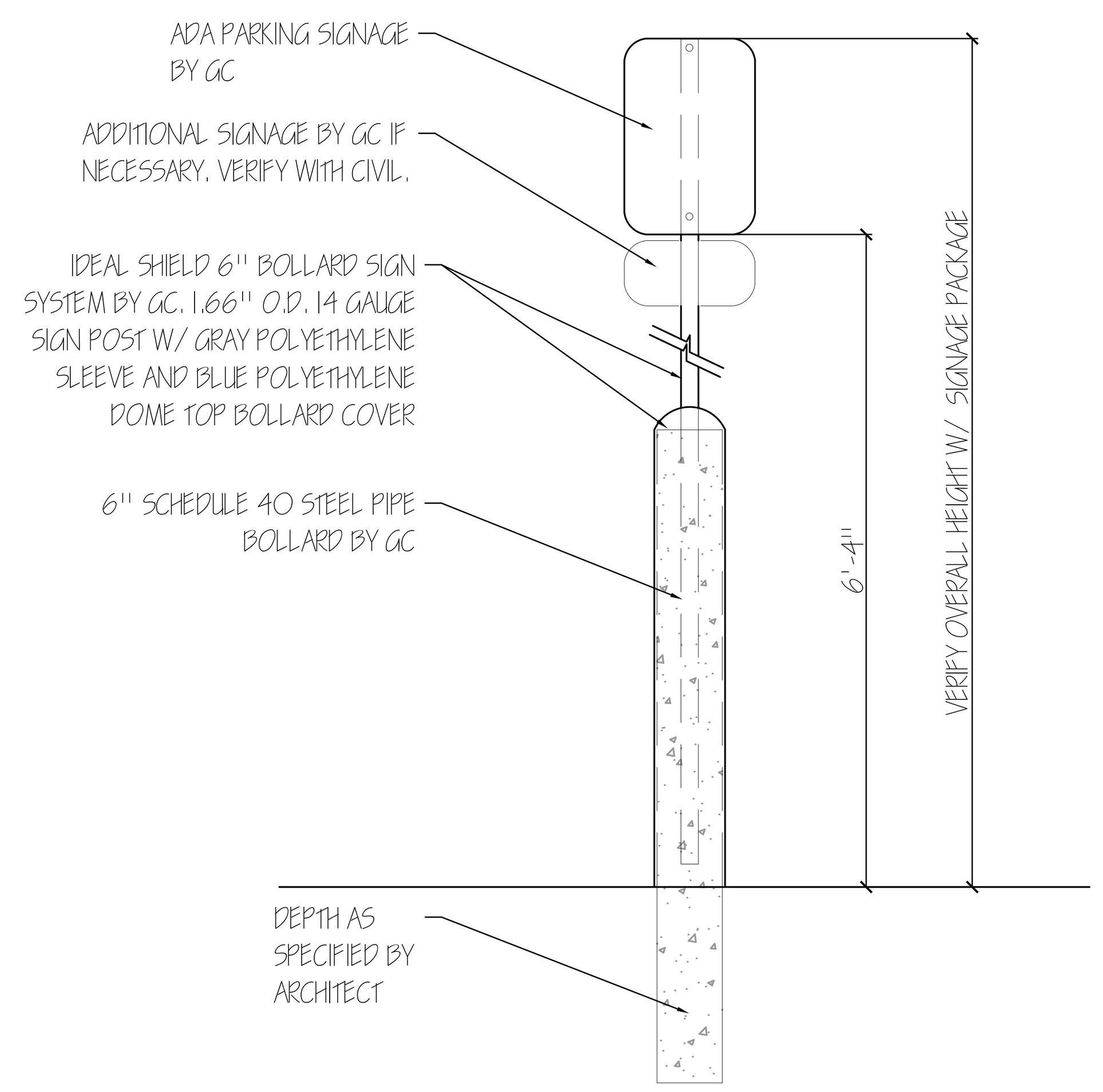
GENERAL NOTES:

1. THIS IS A GENERIC SITE / BUILDING PLAN. PLEASE SEE PROJECT SPECIFIC SITE, BUIDLING, AND CIVIL PLANS FOR ACTUAL CONDITIONS AND SIGNAGE LOCATIONS.
2. COORDINATE PATIO AND LANDSCAPE LIGHTING WITH OWNER.
3. CONTRACTOR TO VERIFY SIGNAGE REQUIREMENTS WITH ASSIGNED SIGN VENDOR PRIOR TO ROUGH-INS.
4. PARKING LOT LIGHTING, MAIN BUILDING SIGNAGE, AND MENU BOARD SIGNAGE TO BE CONTROLLED SEPARATELY. SEE SHEET E-6 FOR EXTERIOR LIGHT SWITCHING
5. DETAILS LISTED ARE SUGGESTED STANDARD DETAILS. ARCHITECT AND ENGINEER FOR EACH PROJECT ARE RESPONSIBLE TO MODIFY AS NECESSARY TO COMPLY WITH LOCAL CODES OR CONDITIONS.

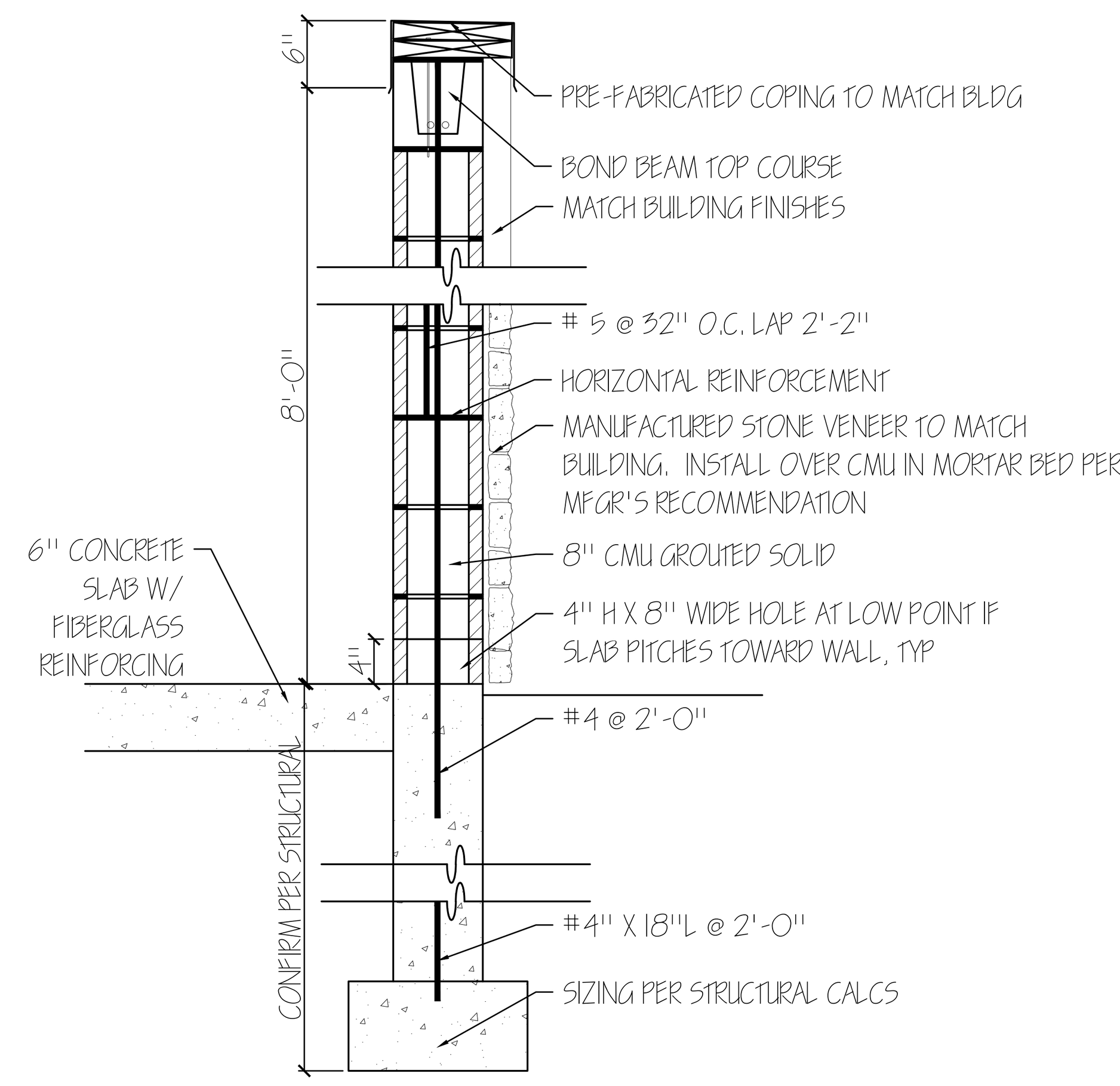
SUGGESTED LANDSCAPE GUIDELINES:

1. LANDSCAPING SHOULD UTILIZE PLANTINGS NATIVE TO THE LOCATION AND BLEND WITH THE DOMINANT EXISTING OR PLANNED CHARACTER OF THE SITE.
2. LANDSCAPING SHOULD BE PROVIDED AT PERIMETER OF BUILDING TO HELP ANCHOR STRUCTURE TO SITE AND SCREEN MATERIAL TRANSITION TO FOUNDATION.
3. SHRUBS OR TREES THAT ARE LOCATED IN FRONT OF THE BUILDING OR SITE SIGNAGE SHOULD BE NO TALLER THEN 4 FEET IN HEIGHT.
4. DRIVE THRU AREAS WITH SITE LINES TO UTILITY BOXES OR OTHER SIMILAR ELEMENTS SHOULD BE SCREENED WITH PLANTINGS.
5. GRASS, VEGETATIVE GROUND COVER, MULCH, OR ROCK SHALL BE USED IN ALL OPEN SPACE INCLUDING PARKING LOT BUMPOUTS AND ISLANDS.
6. PERIMETER OF PATIO SHOULD HAVE PLANTINGS OR LANDSCAPE FEATURE TO HELP SCREEN VIEW OF PARKING LOT.
7. ANY WATER FEATURES SHOULD BE PONDLESS AND POTENTIAL LIABILITY SHOULD BE CONSIDERED FOR ANY SIMILAR LANDSCAPE FEATURES.

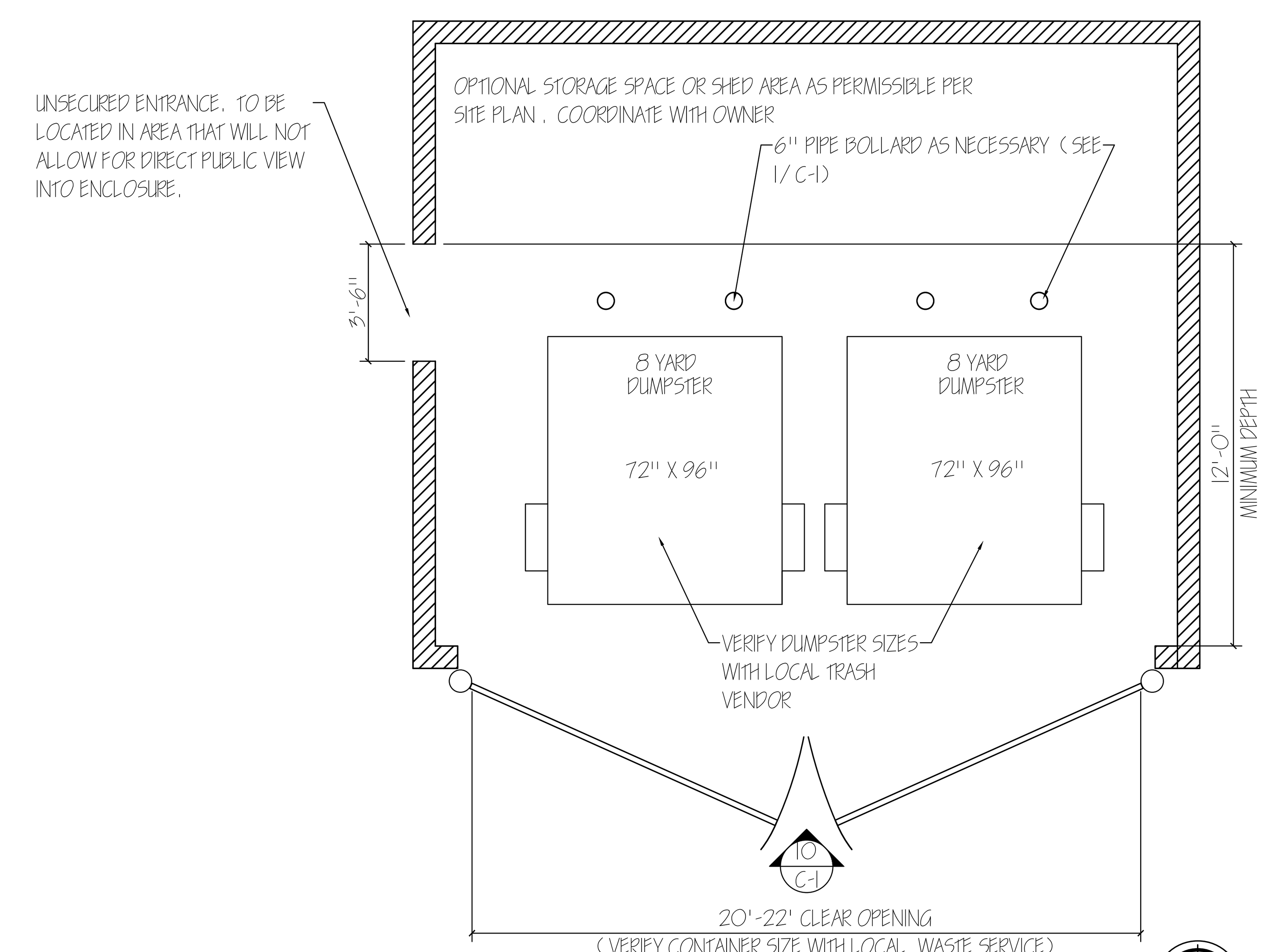
DETAIL 4 - NOT USED



3 BOLLARD SIGN SYSTEM
C-1 SCALE: 3/4" = 1'-0"

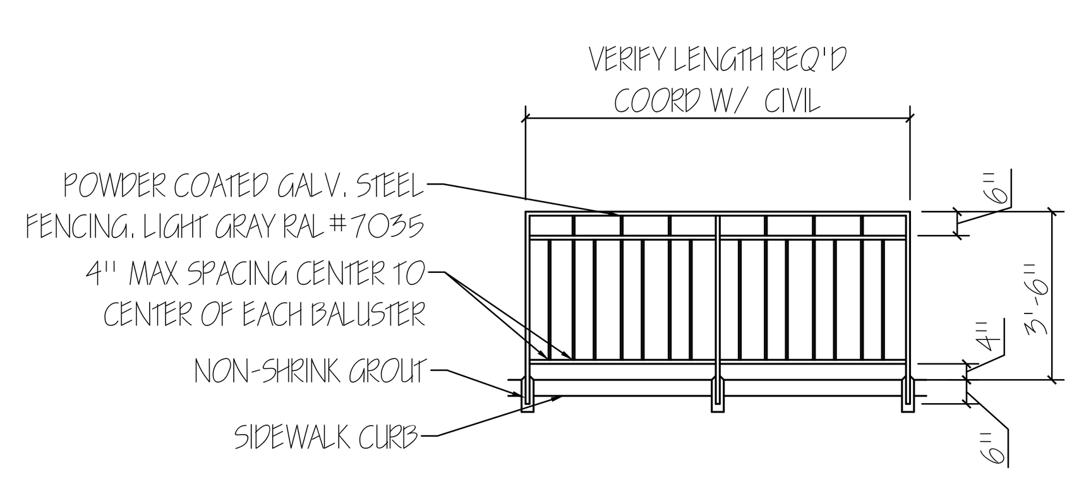


5 SECT. - DUMPSTER ENCLOSURE
C-1 SCALE: 3/4" = 1'-0" (ATTACHED TO BUILDING)



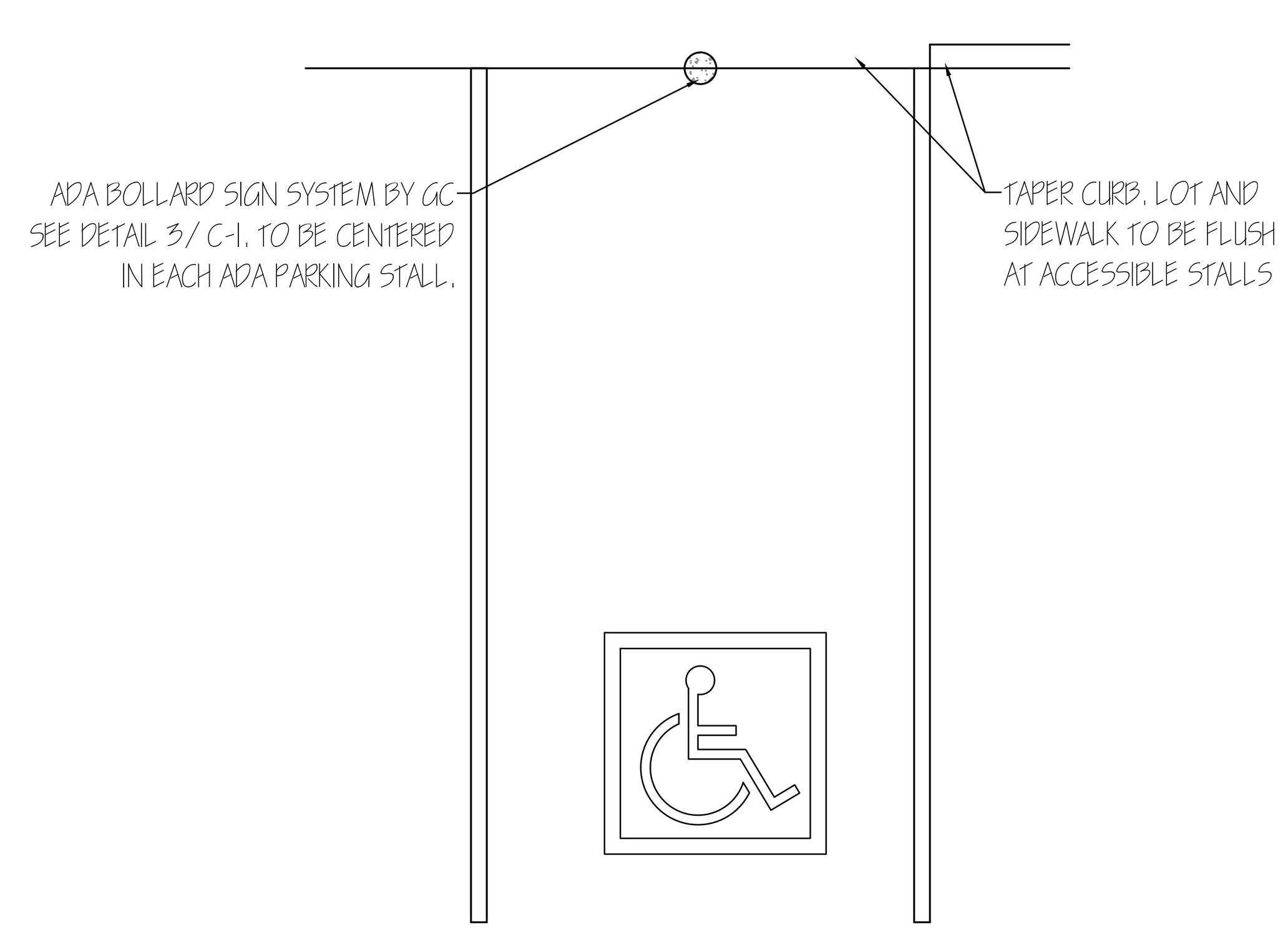
6 SCHEMATIC DUMPSTER PLAN - DETACHED
C-1 SCALE: 1/4" = 1'-0"

DETAIL 7 - NOT USED

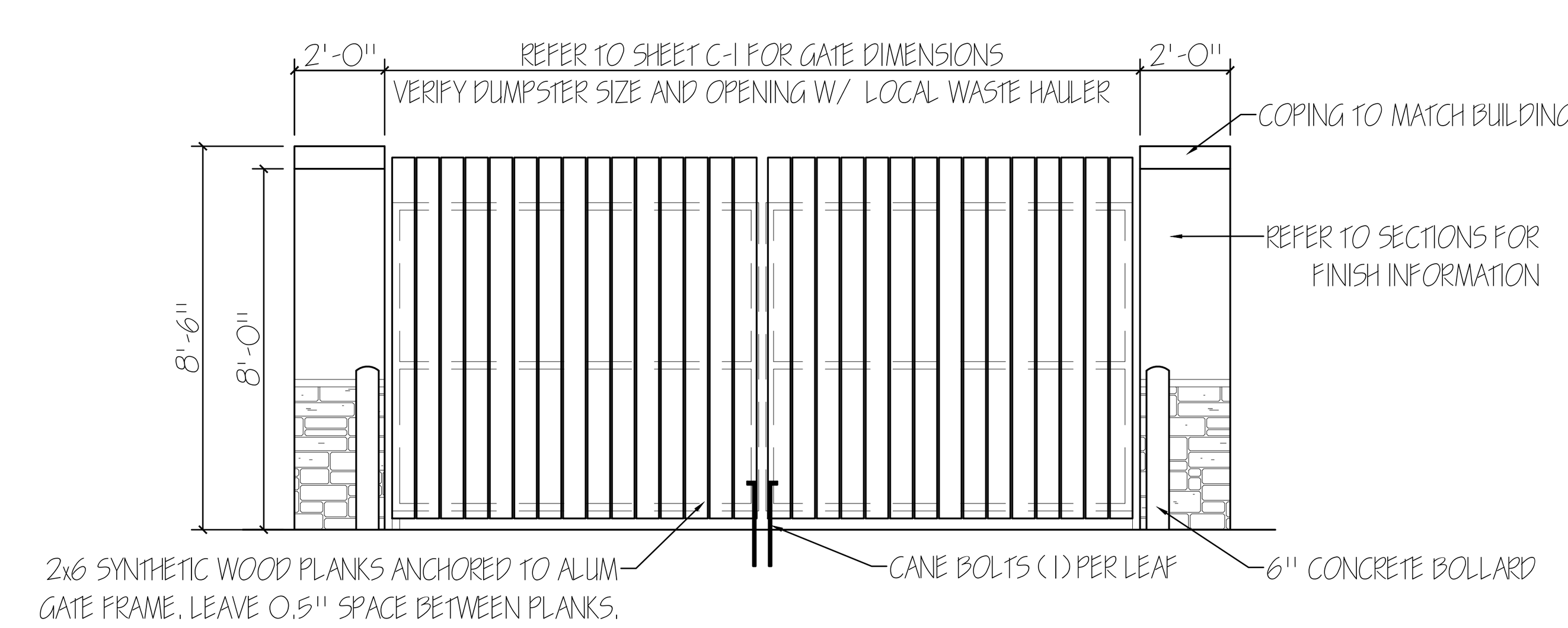


@ DRIVE-THRU DOOR

8 ELEV. GUARD RAIL
C-1 SCALE: 1/4" = 1'-0"



9 TYP. ADA STALL
C-1 SCALE: 1/4" = 1'-0"



NOTE: DUMPSTER MAY BE ATTACHED OR DETACHED. REFER TO PROJECT SPECIFIC SITE PLAN.

10 ELEV. DUMPSTER ENCLOSURE
C-1 SCALE: 1/4" = 1'-0"

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STATE OF MICHIGAN
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Metro L - 2024
S. HARBOR STREET & JOE HALL DRIVE
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

RESUBMITTAL • 12.26.24

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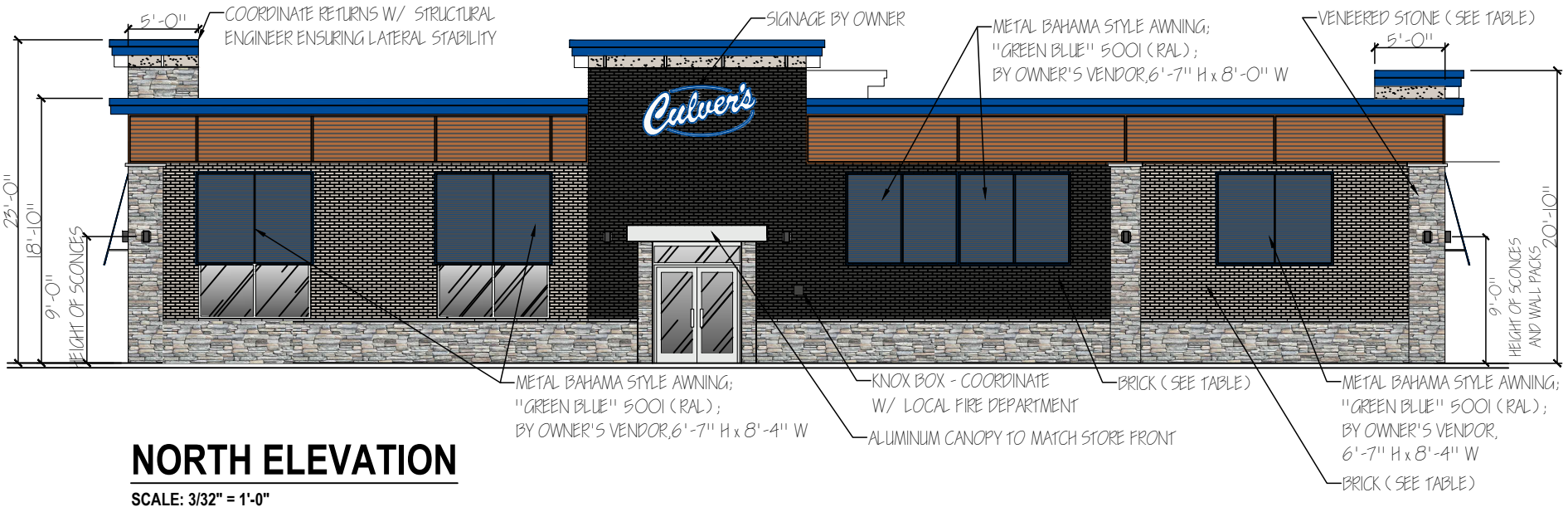
DRAWN BY: • JMV
CHECKED: • DSH

SHEET INDEX
GENERAL NOTES

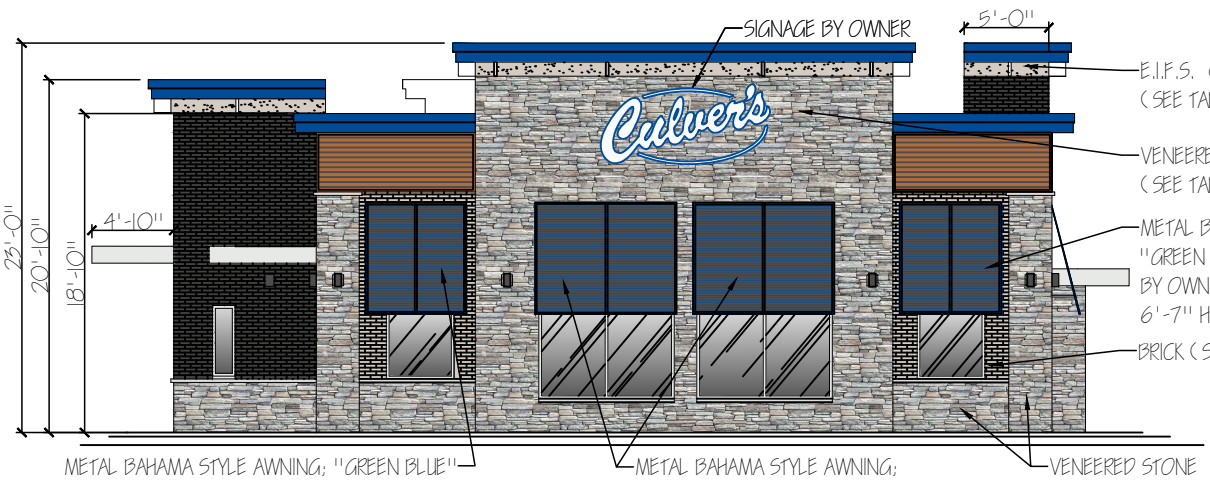
PROJECT No. • 240504

C-1



NORTH ELEVATION

SCALE: 3/32" = 1'-0"



BAHAMA STYLE AWNINGS
(OWNER SUPPLIED/ VENDOR INSTALLED)

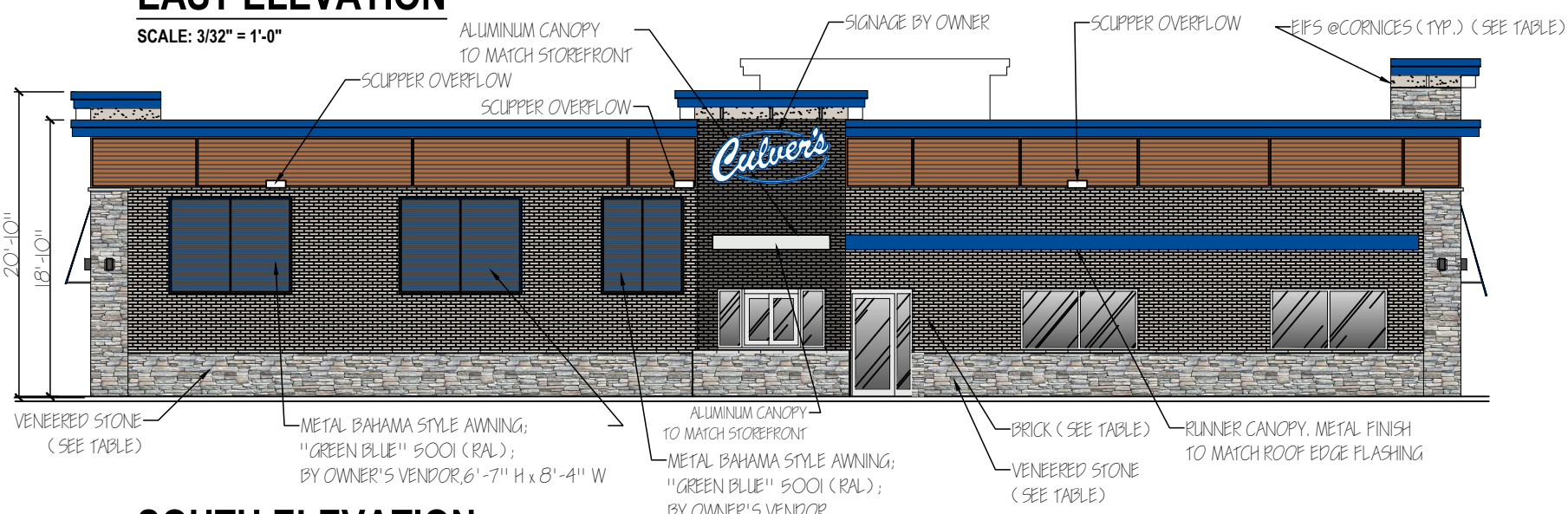
QUANTITIES:
5 - METAL AWNINGS @ 6'-7" H x 8'-4" W x 2'-0" D
4 - METAL AWNINGS @ 6'-7 H x 8'-0" W x 2'-0" D
3 - METAL AWNINGS @ 6'-7"H x 6'-0" W x 2'-0" D
1 - METAL AWNING @ 5'-6" H x 6'-0" W x 2'-0" D
13 - TOTAL

METAL AWNING COLOR SPECIFICATIONS:

- "GREEN BLUE" 5001 (RAL) BY OWNER'S VENDOR

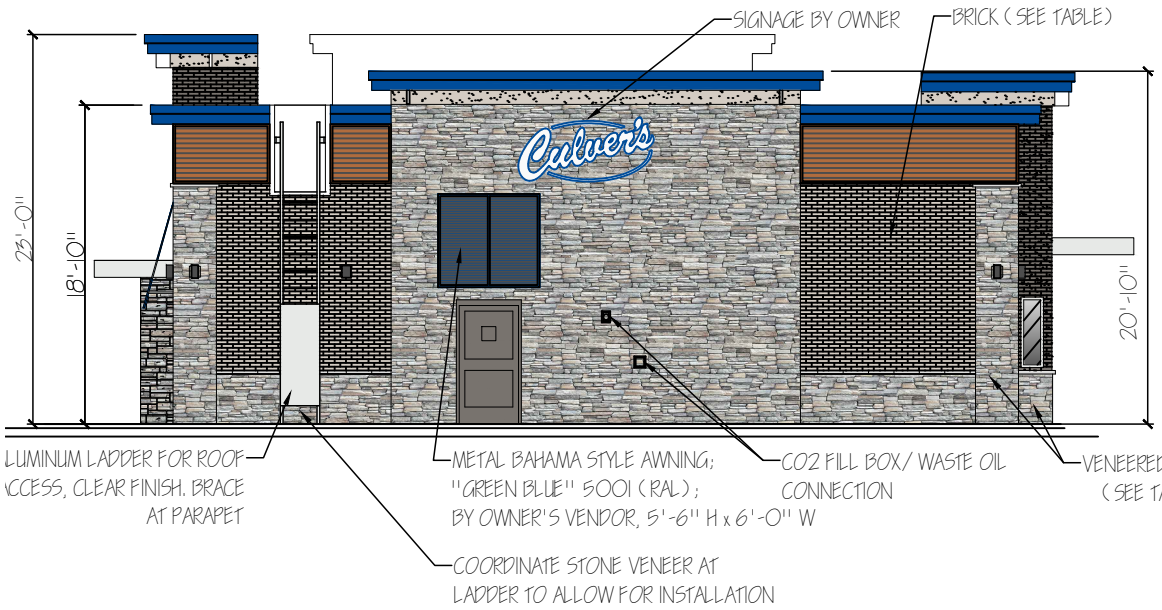
EAST ELEVATION

SCALE: 3/32" = 1'-0"



SOUTH ELEVATION

SCALE: 3/32" = 1'-0"



WEST ELEVATION

SCALE: 3/32" = 1'-0"

EXTERIOR MATERIAL OPTIONS: SEE EXTERIOR FINISH DOCUMENT FOR SELECTIONS

GENERAL NOTES:

1. METAL COMPRESSION EDGE AT PARAPET COLOR: "HARBOR BLUE"
2. DO NOT DRYSTACK CULTURED STONE

MATERIAL OPTIONS:

STONE:

- ENVIRONMENTAL STONEWORKS, STYLE: TUSCAN LEDGE, COLOR: "ANDES SUMMIT" OR
- BORAL STONE, STYLE: COUNTRY LEDGESTONE; COLOR: MATCH "ANDES SUMMIT"

COMPOSITE CLADDING:

- NEWTECHWOOD, "ULTRASHIELD NATURALE" WOOD-LOOK CLADDING; COLOR: "BRAZILIAN IPE"

SILL & ACCESSORIES:

- COORDINATE COLOR PER MFG. RECOMMENDATION, FLAT LIGHT STONES TO BE USED AT SCONCE FIXTURES

MAIN FIELD MATERIAL:

- BRICK: MEDIUM SAND FINISH. COLOR: SW6071 "POPULAR GRAY"

TOWERS & ENTRY ACCENT:

- BRICK: MEDIUM SAND FINISH, COLOR: SW7019 "GAUNTLET GRAY" (DARK COLOR)
- E.I.F.S.@ CORNICE: MEDIUM SAND FINISH. COLOR: SW6071 "POPULAR GRAY"

OTHER EXTERIOR BUILDING FINISHES

EXTERIOR HOLLOW METAL:	PAINT TO MATCH "GAUNTLET GRAY"
REMOVABLE MULLION:	SILVER, TO MATCH ALUMINUM
BOLLARD COVER:	ACCESSIBLE BLUE
ALUMINUM FRAMES & DOORS:	CLEAR ANODIZED FINISH
TRANSITION BASE FLASHING:	PREFINISHED, MATCH UPPER MATERIAL
ROOF LADDER:	MILL FINISH, ALUMINUM
LIGHT FIXTURES:	SEE ELECTRICAL

CLADDING ALTERNATE

IN LIEU OF ULTRASHIELD COMPOSITE CLADDING, PROVIDE LONGBOARD CLADDING SYSTEM COMPLETE W/ MFGR. CLIPS & TRIMS. INSTALL ON FURRING STRIPS PER MANUFACTURER SPECIFICATIONS.

S.P.A.
EXTERIOR ELEVATIONS

PROJECT No.	240504
DRAWN BY:	JMV
DATE:	12.26.2024

A-3

Metro - L

S. HURON STREET & JOE HALL DR.
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN
DANNY SCOTT HENRICKSON
ARCHITECT
NO. 33200
LICENSED ARCHITECT

HENRICKSON
ARCHITECTURE + PLANNING

CULVERS - YPSILANTI

Material	North		South		East		West	
	Material Sf.	% of Total	Material Sf.	% of Total	Material Sf.	% of Total	Material Sf.	% of Total
Solid	444	79%	433	77%	180	59%	306	100%
Storefront	116	21%	127	23%	126	41%	0	0%
	0	0%	0	0%	0	0%	0	0%
	0	0%	0	0%	0	0%	0	0%
Total	**560**	**100%**	**560**	**100%**	**306**	**100%**	**306**	**100%**

D-Series Size 1
LED Area Luminaire

Catalog Number: DSX 1 LED P1 35K 80CRI T2M HS

Notes:

Type: SL2

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 0.69 ft² (0.06 m²)

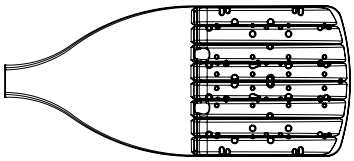
Length: 32.71" (83.1 cm)

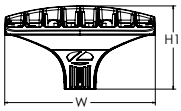
Width: 14.26" (36.2 cm)

Height H1: 7.88" (20.0 cm)

Height H2: 2.73" (6.9 cm)

Weight: 34 lbs (15.4 kg)





Design Select options indicated by this color background.

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature [2]	Color Rendering Index [2]	Distribution		Voltage	Mounting
DSX1 LED	**Forward optics** P1 P6 P2 P7 P3 P8 P4 P9 P5 **Rotated optics** P10 [1] P12 [1] P11 [1] P13 [1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare [3] T4M Type IV medium T4LG Type IV low glare [3] TFTM Forward throw medium	T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control [3] BLC4 Type IV backlight control [3] LCCO Left corner cutoff [3] RCCO Right corner cutoff [3]	MVOLT (120V-277V) [4] HVOLT (347V-480V) [5,6] XVOLT (277V - 480V) [7,8] 120 [16, 26] 208 [16, 26] 240 [16, 26] 277 [16, 26] 347 [16, 26] 480 [16, 26]	**Shipped included** SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPA5 Square pole mounting #5 drilling [9] RPA5 Round pole mounting #5 drilling [9] SPA8N Square narrow pole mounting #8 drilling WBA Wall bracket [10] MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options

Shipped installed

NLTAIR2 PIRHN	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. [11, 12, 20, 21]
PIR	High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc [13, 20, 21]
PER	NEMA twist-lock receptacle only (controls ordered separate) [14]
PER5	Five-pin receptacle only (controls ordered separate) [14, 21]
PER7	Seven-pin receptacle only (controls ordered separate) [14, 21]
FAO	Field adjustable output [15, 21]
BL30	Bi-level switched dimming, 30% [16, 21]
BL50	Bi-level switched dimming, 50% [16, 21]
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) [17]
DS	Dual switching [18, 19, 21]

Other options

Shipped installed

SPD20KV	20KV surge protection
HS	Houseside shield (black finish standard) [22]
L90	Left rotated optics [1]
R90	Right rotated optics [1]
CCE	Coastal Construction [23]
HA	50°C ambient operation [24]
BAA	Buy America(n) Act and/or Build America Buy America Qualified
SF	Single fuse (120, 277, 347V) [26]
DF	Double fuse (208, 240, 480V) [26]

Shipped separately

EGSR	External Glare Shield (reversible, field install required, matches housing finish)
BSDB	Bird Spikes (field install required)

Finish *(required)*

DDBXD	Dark Bronze
DBLXD	Black
DNAXD	Natural Aluminum
DWHXD	White
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white

Ordering Information

Accessories

Ordered and shipped separately.

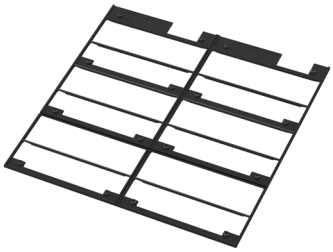
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK	Shorting cap [25]
DSX1HS P#	House-side shield (enter package number 1-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSX1EGSR (FINISH)	External glare shield (specify finish)
DSX1BSDB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1 or P10. XVOLT not available with fusing (SF or DF).
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1 and P10 using XVOLT.
13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS. PIR not available with P1 and P10 using HVOLT. PIR not available with P1 and P10 using XVOLT.
14 PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18 DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.
20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
21 Reference Controls Options table on page 4.
22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
24 Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
26 Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories

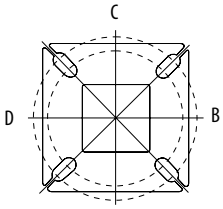
External Glare Shield (EGSR)

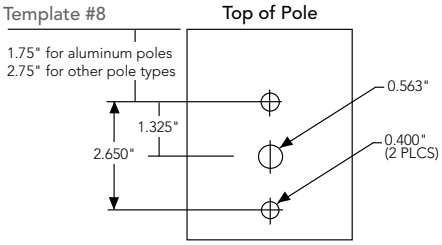


House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION





Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
		Minimum Acceptable Outside Pole Dimension					
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX1 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX1 with SPA	0.69	1.38	1.23	1.54	---	1.58
DSX1 with SPA5, SPA8N	0.70	1.40	1.30	1.66	---	1.68
DSX1 with RPA, RPA5	0.70	1.40	1.30	1.66	1.60	1.68
DSX1 with MA	0.83	1.66	1.50	2.09	2.09	2.09

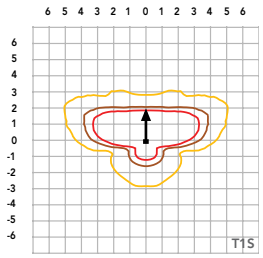
Photometric Diagrams

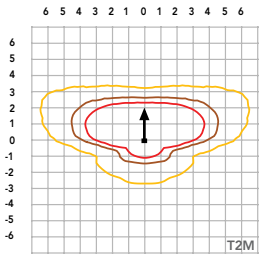
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

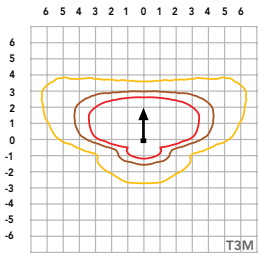
Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').

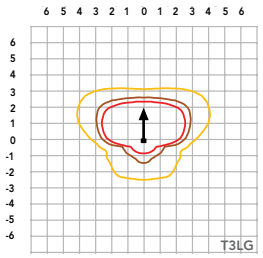
LEGEND

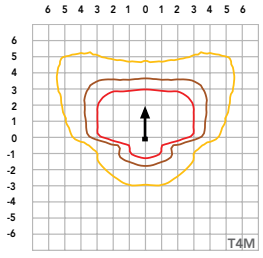
- 0.1 fc
- 0.5 fc
- 1.0 fc

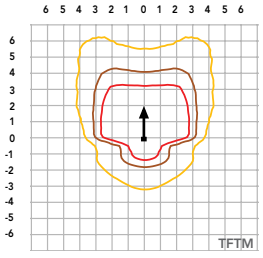


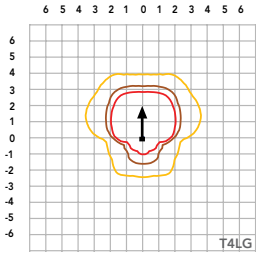


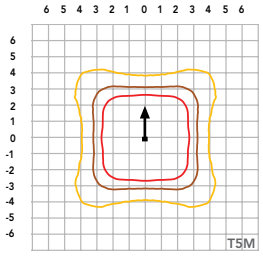


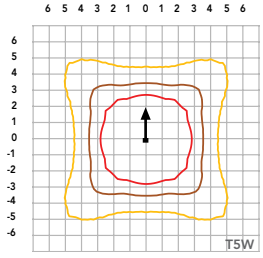


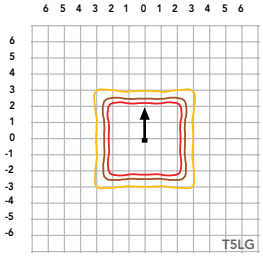


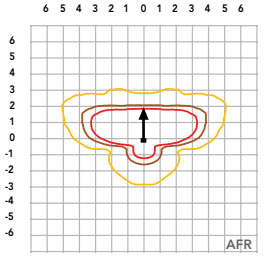


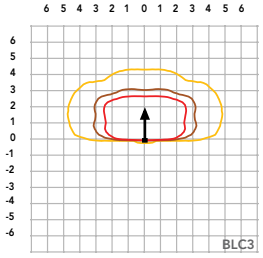


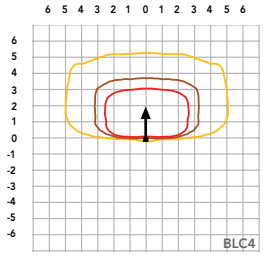


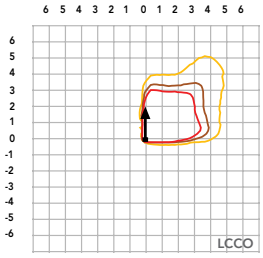


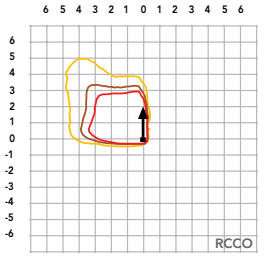












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Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°C**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.81

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use maximum published values by package listed on specification sheet (input watts and lumens by optic type).

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P2	30	700	68	0.56	0.33	0.28	0.24	0.20	0.14
	P3	30	1050	104	0.85	0.49	0.43	0.37	0.29	0.21
	P4	30	1250	125	1.03	0.60	0.52	0.45	0.36	0.26
	P5	30	1400	142	1.15	0.66	0.58	0.50	0.40	0.29
	P6	40	1250	167	1.38	0.79	0.69	0.60	0.48	0.34
	P7	40	1400	188	1.54	0.89	0.77	0.67	0.53	0.38
	P8	60	1100	216	1.80	1.04	0.90	0.78	0.62	0.45
	P9	60	1400	279	2.31	1.33	1.15	1.00	0.80	0.58
Rotated Optics (Requires L90 or R90)	P10	60	530	101	0.84	0.49	0.42	0.37	0.29	0.21
	P11	60	700	135	1.12	0.65	0.56	0.49	0.39	0.28
	P12	60	1050	206	1.72	0.99	0.86	0.74	0.59	0.43
	P13	60	1400	279	2.30	1.33	1.15	1.00	0.79	0.57

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Phototcell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	30	530	T1S	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
				T2M	7,203	1	0	3	142	7,507	2	0	3	147	7,653	2	0	3	150
				T3M	7,287	1	0	3	143	7,594	1	0	3	149	7,742	1	0	3	152
				T3LG	6,509	1	0	1	128	6,783	1	0	1	133	6,916	1	0	1	136
				T4M	7,395	1	0	3	145	7,707	1	0	3	151	7,857	1	0	3	154
				T4LG	6,726	1	0	1	132	7,010	1	0	1	138	7,146	1	0	1	140
				TFTM	7,446	1	0	3	146	7,760	1	0	3	152	7,912	1	0	3	155
				T5M	7,609	3	0	2	149	7,930	3	0	2	156	8,084	3	0	2	159
				T5W	7,732	3	0	2	152	8,058	4	0	2	158	8,215	4	0	2	161
				T5LG	7,631	3	0	1	150	7,953	3	0	1	156	8,108	3	0	1	159
				BLC3	5,300	0	0	2	104	5,524	0	0	2	109	5,631	0	0	2	111
				BLC4	5,474	0	0	3	108	5,705	0	0	3	112	5,816	0	0	3	114
				RCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				LCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				AFR	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
P2	68W	30	700	T1S	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
				T2M	9,260	2	0	3	137	9,651	2	0	3	142	9,839	2	0	3	145
				T3M	9,368	2	0	3	138	9,763	2	0	3	144	9,953	2	0	3	147
				T3LG	8,368	1	0	2	123	8,721	1	0	2	129	8,891	1	0	2	131
				T4M	9,507	2	0	3	140	9,909	2	0	3	146	10,102	2	0	3	149
				T4LG	8,647	1	0	2	128	9,012	1	0	2	133	9,187	1	0	2	136
				TFTM	9,573	2	0	3	141	9,977	2	0	3	147	10,172	2	0	3	150
				T5M	9,782	4	0	2	144	10,195	4	0	2	150	10,393	4	0	2	153
				T5W	9,940	4	0	2	147	10,360	4	0	2	153	10,562	4	0	2	156
				T5LG	9,810	3	0	1	145	10,224	3	0	1	151	10,423	3	0	1	154
				BLC3	6,814	0	0	2	101	7,101	0	0	2	105	7,240	0	0	2	107
				BLC4	7,038	0	0	3	104	7,334	0	0	3	108	7,477	0	0	3	110
				RCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				LCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				AFR	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
P3	102W	30	1050	T1S	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147
				T2M	13,055	2	0	3	128	13,605	2	0	3	133	13,871	2	0	3	136
				T3M	13,206	2	0	4	129	13,763	2	0	4	135	14,031	2	0	4	137
				T3LG	11,797	2	0	2	115	12,294	2	0	2	120	12,534	2	0	2	123
				T4M	13,403	2	0	4	131	13,968	2	0	4	137	14,241	2	0	4	139
				T4LG	12,190	2	0	2	119	12,704	2	0	2	124	12,952	2	0	2	127
				TFTM	13,496	2	0	4	132	14,065	2	0	4	138	14,339	2	0	4	140
				T5M	13,790	4	0	2	135	14,371	4	0	2	141	14,652	4	0	2	143
				T5W	14,013	4	0	3	137	14,605	4	0	3	143	14,889	4	0	3	146
				T5LG	13,830	3	0	2	135	14,413	3	0	2	141	14,694	3	0	2	144
				BLC3	9,606	0	0	2	94	10,011	0	0	2	98	10,206	0	0	2	100
				BLC4	9,921	0	0	3	97	10,340	0	0	3	101	10,541	0	0	3	103
				RCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				LCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				AFR	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P4	124W	30	1250	T1S	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
				T2M	15,207	3	0	4	123	15,849	3	0	4	128	16,158	3	0	4	130
				T3M	15,383	2	0	4	124	16,032	2	0	4	129	16,345	2	0	4	132
				T3LG	13,742	2	0	2	111	14,321	2	0	2	116	14,600	2	0	2	118
				T4M	15,613	2	0	4	126	16,272	2	0	4	131	16,589	2	0	4	134
				T4LG	14,200	2	0	2	115	14,799	2	0	2	119	15,087	2	0	2	122
				TFTM	15,721	2	0	4	127	16,384	2	0	4	132	16,703	2	0	4	135
				T5M	16,063	4	0	2	130	16,741	4	0	2	135	17,067	4	0	2	138
				T5W	16,324	5	0	3	132	17,013	5	0	3	137	17,344	5	0	3	140
				T5LG	16,110	3	0	2	130	16,790	4	0	2	135	17,117	4	0	2	138
				BLC3	11,190	0	0	3	90	11,662	0	0	3	94	11,889	0	0	3	96
				BLC4	11,557	0	0	3	93	12,044	0	0	3	97	12,279	0	0	4	99
				RCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				LCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				AFR	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
P5	138W	30	1400	T1S	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
				T2M	16,723	3	0	4	121	17,428	3	0	4	126	17,768	3	0	4	129
				T3M	16,917	3	0	4	122	17,630	3	0	4	128	17,974	3	0	4	130
				T3LG	15,111	2	0	2	109	15,749	2	0	2	114	16,055	2	0	2	116
				T4M	17,169	3	0	5	124	17,893	3	0	5	130	18,242	3	0	5	132
				T4LG	15,615	2	0	2	113	16,274	2	0	2	118	16,591	2	0	2	120
				TFTM	17,288	2	0	4	125	18,017	2	0	5	130	18,368	3	0	5	133
				T5M	17,664	5	0	3	128	18,410	5	0	3	133	18,768	5	0	3	136
				T5W	17,951	5	0	3	130	18,708	5	0	3	135	19,073	5	0	3	138
				T5LG	17,716	4	0	2	128	18,463	4	0	2	134	18,823	4	0	2	136
				BLC3	12,305	0	0	3	89	12,824	0	0	3	93	13,074	0	0	3	95
				BLC4	12,709	0	0	4	92	13,245	0	0	4	96	13,503	0	0	4	98
				RCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				LCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				AFR	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
P6	165W	40	1250	T1S	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135
				T2M	19,482	3	0	4	118	20,303	3	0	4	123	20,699	3	0	4	125
				T3M	19,708	3	0	5	119	20,539	3	0	5	124	20,939	3	0	5	127
				T3LG	17,604	2	0	2	107	18,347	2	0	2	111	18,704	2	0	2	113
				T4M	20,001	3	0	5	121	20,845	3	0	5	126	21,251	3	0	5	129
				T4LG	18,191	2	0	2	110	18,959	2	0	2	115	19,328	2	0	2	117
				TFTM	20,140	3	0	5	122	20,989	3	0	5	127	21,398	3	0	5	129
				T5M	20,579	5	0	3	125	21,447	5	0	3	130	21,865	5	0	3	132
				T5W	20,912	5	0	3	127	21,795	5	0	3	132	22,219	5	0	3	134
				T5LG	20,638	4	0	2	125	21,509	4	0	2	130	21,928	4	0	2	133
				BLC3	14,335	0	0	3	87	14,940	0	0	3	90	15,231	0	0	3	92
				BLC4	14,805	0	0	4	90	15,430	0	0	4	93	15,731	0	0	4	95
				RCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				LCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				AFR	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79.
Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P7	184W	40	1400	T1S	22,741	2	0	3	123	23,700	2	0	3	129	24,162	3	0	3	131
				T2M	21,066	3	0	4	114	21,955	3	0	4	119	22,383	3	0	4	121
				T3M	21,311	3	0	5	116	22,210	3	0	5	120	22,642	3	0	5	123
				T3LG	19,036	2	0	2	103	19,839	2	0	3	108	20,226	2	0	3	110
				T4M	21,628	3	0	5	117	22,541	3	0	5	122	22,980	3	0	5	125
				T4LG	19,671	2	0	2	107	20,501	2	0	3	111	20,900	2	0	3	113
				TFTM	21,778	3	0	5	118	22,697	3	0	5	123	23,139	3	0	5	125
				T5M	22,252	5	0	3	121	23,191	5	0	3	126	23,643	5	0	3	128
				T5W	22,613	5	0	3	123	23,567	5	0	4	128	24,027	5	0	4	130
				T5LG	22,317	4	0	2	121	23,258	4	0	2	126	23,712	4	0	2	129
				BLC3	15,501	0	0	3	84	16,155	0	0	4	88	16,470	0	0	4	89
				BLC4	16,010	0	0	4	87	16,685	0	0	4	90	17,010	0	0	4	92
				RCCO	15,641	1	0	3	85	16,301	1	0	3	89	16,619	1	0	3	90
				LCCO	15,641	1	0	3	85	16,301	1	0	3	89	16,619	1	0	3	90
				AFR	22,741	2	0	3	123	23,700	2	0	3	129	24,162	3	0	3	131
P8	216W	60	1100	T1S	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
				T2M	26,587	3	0	5	123	27,709	3	0	5	128	28,249	3	0	5	131
				T3M	26,895	3	0	5	125	28,030	3	0	5	130	28,576	3	0	5	132
				T3LG	24,025	3	0	3	111	25,038	3	0	3	116	25,526	3	0	3	118
				T4M	27,296	3	0	5	127	28,448	3	0	5	132	29,002	3	0	5	134
				T4LG	24,826	3	0	3	115	25,873	3	0	3	120	26,378	3	0	3	122
				TFTM	27,485	3	0	5	127	28,645	3	0	5	133	29,203	3	0	5	135
				T5M	28,084	5	0	4	130	29,269	5	0	4	136	29,839	5	0	4	138
				T5W	28,539	5	0	4	132	29,743	5	0	4	138	30,323	5	0	4	141
				T5LG	28,165	4	0	2	131	29,354	4	0	2	136	29,926	4	0	2	139
				BLC3	19,563	0	0	4	91	20,388	0	0	4	94	20,786	0	0	4	96
				BLC4	20,205	0	0	5	94	21,057	0	0	5	98	21,468	0	0	5	99
				RCCO	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				LCCO	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				AFR	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
P9	277W	60	1400	T1S	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134
				T2M	32,255	3	0	5	116	33,616	3	0	5	121	34,271	3	0	5	124
				T3M	32,629	3	0	5	118	34,006	3	0	5	123	34,668	3	0	5	125
				T3LG	29,146	3	0	3	105	30,376	3	0	4	110	30,968	3	0	4	112
				T4M	33,116	3	0	5	120	34,513	3	0	5	125	35,185	3	0	5	127
				T4LG	30,119	3	0	3	109	31,389	3	0	4	113	32,001	3	0	4	116
				TFTM	33,345	3	0	5	120	34,751	3	0	5	125	35,429	3	0	5	128
				T5M	34,071	5	0	4	123	35,509	5	0	4	128	36,201	5	0	4	131
				T5W	34,624	5	0	4	125	36,084	5	0	4	130	36,788	5	0	4	133
				T5LG	34,170	5	0	3	123	35,612	5	0	3	129	36,306	5	0	3	131
				BLC3	23,734	0	0	4	86	24,735	0	0	4	89	25,217	0	0	4	91
				BLC4	24,513	0	0	5	88	25,547	0	0	5	92	26,045	0	0	5	94
				RCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				LCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				AFR	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134

Performance Data

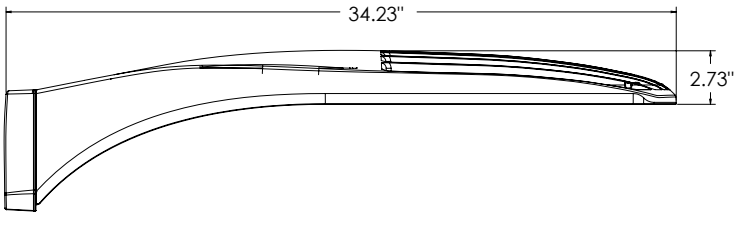
Lumen Output

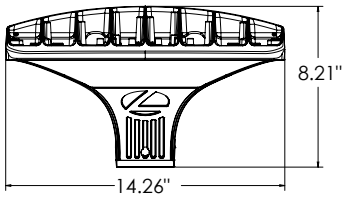
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79.
Contact factory for performance data on any configurations not shown here.

Rotated Optics

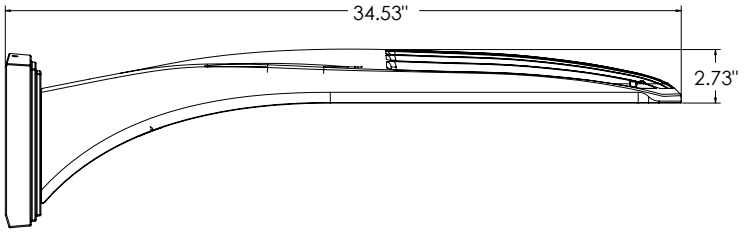
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	101W	60	530	T1S	15,164	3	0	3	150	15,803	3	0	3	156	16,112	3	0	3	159
				T2M	14,047	4	0	4	139	14,640	4	0	4	145	14,925	4	0	4	147
				T3M	14,208	4	0	4	140	14,807	4	0	4	146	15,096	4	0	4	149
				T3LG	12,693	3	0	3	125	13,229	3	0	3	131	13,487	3	0	3	133
				T4M	14,420	4	0	4	142	15,028	4	0	4	148	15,321	4	0	4	151
				T4LG	13,115	3	0	3	129	13,668	3	0	3	135	13,934	3	0	3	138
				TFTM	14,522	4	0	4	143	15,134	4	0	4	149	15,429	4	0	4	152
				T5M	14,836	4	0	2	146	15,462	4	0	2	153	15,763	4	0	2	156
				T5W	15,076	4	0	3	149	15,712	5	0	3	155	16,019	5	0	3	158
				T5LG	14,879	3	0	2	147	15,507	3	0	2	153	15,809	3	0	2	156
				BLC3	10,335	3	0	3	102	10,771	4	0	4	106	10,981	4	0	4	108
				BLC4	10,674	4	0	4	105	11,124	4	0	4	110	11,341	4	0	4	112
				RCCO	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109
				LCCO	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109
				AFR	15,164	3	0	3	150	15,803	3	0	3	156	16,112	3	0	3	159
P11	135W	60	700	T1S	19,437	4	0	4	144	20,257	4	0	4	150	20,651	4	0	4	153
				T2M	18,005	4	0	4	133	18,765	4	0	4	139	19,131	4	0	4	142
				T3M	18,211	4	0	4	135	18,980	4	0	4	141	19,350	4	0	4	143
				T3LG	16,270	3	0	3	121	16,957	3	0	3	126	17,287	4	0	4	128
				T4M	18,483	4	0	4	137	19,263	5	0	5	143	19,638	5	0	5	146
				T4LG	16,810	3	0	3	125	17,519	3	0	3	130	17,861	3	0	3	132
				TFTM	18,614	4	0	4	138	19,399	4	0	4	144	19,777	5	0	5	147
				T5M	19,017	5	0	3	141	19,819	5	0	3	147	20,205	5	0	3	150
				T5W	19,325	5	0	3	143	20,140	5	0	3	149	20,533	5	0	3	152
				T5LG	19,072	4	0	2	141	19,876	4	0	2	147	20,264	4	0	2	150
				BLC3	13,247	4	0	4	98	13,806	4	0	4	102	14,075	4	0	4	104
				BLC4	13,682	4	0	4	101	14,259	4	0	4	106	14,537	4	0	4	108
				RCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105
				LCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105
				AFR	19,437	4	0	4	144	20,257	4	0	4	150	20,651	4	0	4	153
P12	206W	60	1050	T1S	27,457	4	0	4	133	28,616	4	0	4	139	29,174	4	0	4	142
				T2M	25,436	5	0	5	124	26,509	5	0	5	129	27,025	5	0	5	131
				T3M	25,727	5	0	5	125	26,812	5	0	5	130	27,335	5	0	5	133
				T3LG	22,984	4	0	4	112	23,954	4	0	4	116	24,421	4	0	4	119
				T4M	26,110	5	0	5	127	27,212	5	0	5	132	27,742	5	0	5	135
				T4LG	23,747	4	0	4	115	24,749	4	0	4	120	25,231	4	0	4	123
				TFTM	26,295	5	0	5	128	27,404	5	0	5	133	27,938	5	0	5	136
				T5M	26,864	5	0	4	130	27,997	5	0	4	136	28,543	5	0	4	139
				T5W	27,299	5	0	4	133	28,451	5	0	4	138	29,006	5	0	4	141
				T5LG	26,942	4	0	2	131	28,078	4	0	2	136	28,626	4	0	2	139
				BLC3	18,714	4	0	4	91	19,504	4	0	4	95	19,884	4	0	4	97
				BLC4	19,327	5	0	5	94	20,143	5	0	5	98	20,535	5	0	5	100
				RCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97
				LCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97
				AFR	27,457	4	0	4	133	28,616	4	0	4	139	29,174	4	0	4	142
P13	276W	60	1400	T1S	34,436	5	0	5	125	35,889	5	0	5	130	36,588	5	0	5	133
				T2M	31,900	5	0	5	116	33,246	5	0	5	121	33,894	5	0	5	123
				T3M	32,265	5	0	5	117	33,626	5	0	5	122	34,282	5	0	5	124
				T3LG	28,826	4	0	4	105	30,042	4	0	4	109	30,628	4	0	4	111
				T4M	32,746	5	0	5	119	34,128	5	0	5	124	34,793	5	0	5	126
				T4LG	29,782	4	0	4	108	31,039	4	0	4	113	31,644	5	0	4	115
				TFTM	32,978	5	0	5	120	34,369	5	0	5	125	35,039	5	0	5	127
				T5M	33,692	5	0	4	122	35,113	5	0	4	127	35,797	5	0	4	130
				T5W	34,238	5	0	4	124	35,682	5	0	4	129	36,378	5	0	4	132
				T5LG	33,789	5	0	3	122	35,215	5	0	3	128	35,901	5	0	3	130
				BLC3	23,471	5	0	5	85	24,461	5	0	5	89	24,937	5	0	5	90
				BLC4	24,240	5	0	5	88	25,262	5	0	5	92	25,755	5	0	5	93
				RCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91
				LCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91
				AFR	34,436	5	0	5	125	35,889	5	0	5	130	36,588	5	0	5	133

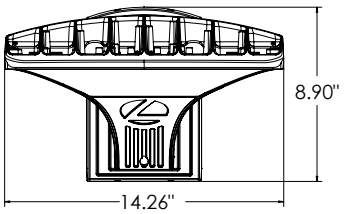
Dimensions



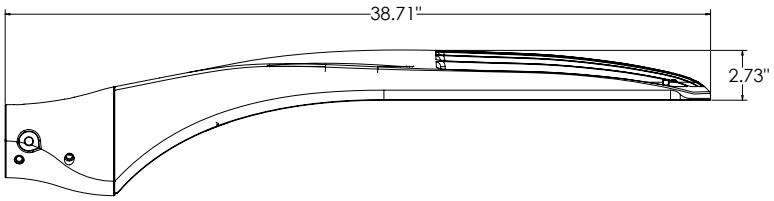


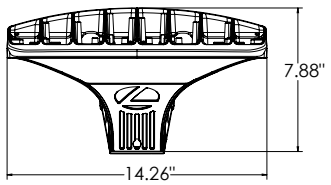
DSX1 with RPA, RPA5, SPA5, SPA8N mount
Weight: 36 lbs





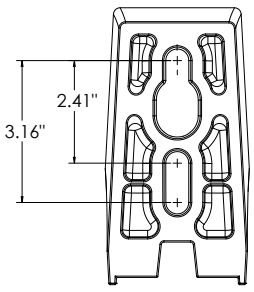
DSX1 with WBA mount
Weight: 38 lbs



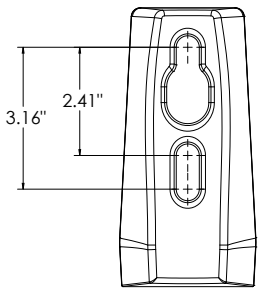


DSX1 with MA mount
Weight: 39 lbs

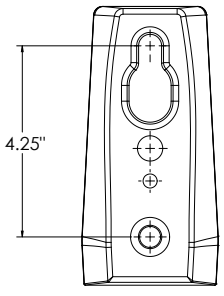
SPA (STANDARD ARM)



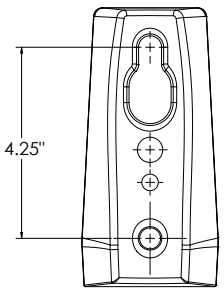
RPA



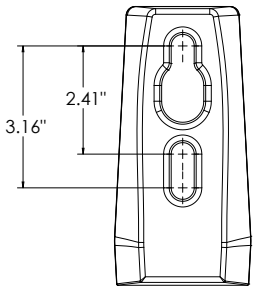
SPA5



RPA5



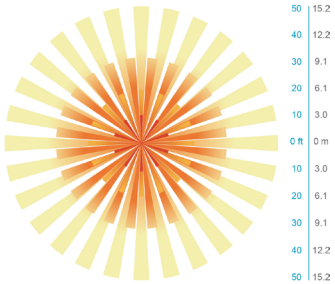
SPA8N



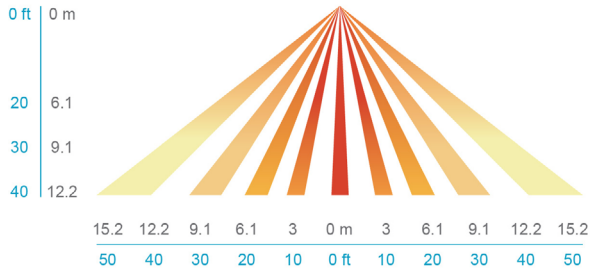
nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern

NLTAIR2 PIRHN



Top



Side

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G for SPA and MA. 1.5G for mountings RPA, RPA5, SPA5 and SPA8N. Low EPA (0.69 ft^2) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L81/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX1 LED area luminaire has a number of control options. DSX Size 1, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40ºC minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

D-Series Size 2
LED Area Luminaire

Catalog Number: DSX 2 LED P1 35K 80CRI T3M HS

Notes:

Type: SL1

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 1.06 ft² (0.10 m²)

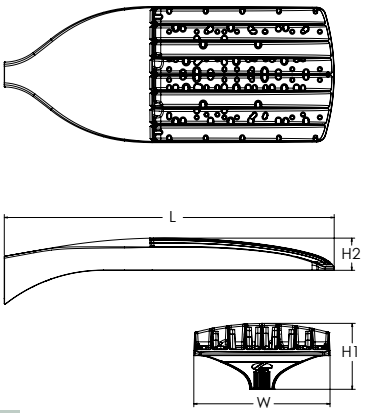
Length: 40.59" (103.1 cm)

Width: 16.76" (42.6 cm)

Height H1: 8.11" (20.6 cm)

Height H2: 3.96" (10.1 cm)

Weight: 46 lbs (20.9 kg)



Design Select options indicated by this color background.

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of up to 80% vs. 1000W HID and expected service life of over 100,000 hours.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Ordering Information

EXAMPLE: DSX2 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX2 LED

Series	LEDs	Color temperature [2]	Color Rendering Index [2]
DSX2 LED	**Forward optics** P1 P5 P2 P6 P3 P7 P4 P8 **Rotated optics** P10 [1] P13 [1] P11 [1] P14 [1] P12 [1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI

Distribution			
AFR	Automotive front row	T5M	Type V medium
T1S	Type I short	T5LG	Type V low glare
T2M	Type II medium	T5W	Type V wide
T3M	Type III medium	BLC3	Type III backlight control [3]
T3LG	Type III low glare [3]	BLC4	Type IV backlight control [3]
T4M	Type IV medium	LCCO	Left corner cutoff [3]
T4LG	Type IV low glare [3]	RCCO	Right corner cutoff [3]
TFTM	Forward throw medium		

Voltage	
MVOLT	(120V-277V) [4]
HVOLT	(347V-480V) [5,6]
XVOLT	(277V - 480V) [7,8]
120 [16,26]	
208 [16,26]	
240 [16,26]	
277 [16,26]	
347 [16,26]	
480 [16,26]	

Mounting	
Shipped included	
SPA	Square pole mounting (#8 drilling)
RPA	Round pole mounting (#8 drilling)
SPA5	Square pole mounting #5 drilling [9]
RPA5	Round pole mounting #5 drilling [9]
SPA8N	Square narrow pole mounting #8 drilling
WBA	Wall bracket [10]
MA	Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options

Shipped installed

NLTAIR2 PIRHN	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. [11,12,20,21]
PIR	High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc [13,20,21]
PER	NEMA twist-lock receptacle only (controls ordered separate) [14]
PER5	Five-pin receptacle only (controls ordered separate) [14,21]
PER7	Seven-pin receptacle only (controls ordered separate) [14,21]
FAO	Field adjustable output [15,21]
BL30	Bi-level switched dimming, 30% [16,21]
BL50	Bi-level switched dimming, 50% [16,21]
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) [17]
DS	Dual switching [18,19,21]

Other options

Shipped installed

SPD20KV	20KV surge protection
HS	Houseside shield (black finish standard) [22]
L90	Left rotated optics [1]
R90	Right rotated optics [1]
CCE	Coastal Construction [23]
HA	50°C ambient operation [24]
BAA	Buy America(n) Act and/or Build America Buy America Qualified
SF	Single fuse (120, 277, 347V) [26]
DF	Double fuse (208, 240, 480V) [26]
3G	Vibration rated for 3G [27]

Shipped separately

EGSR	External Glare Shield (reversible, field install required, matches housing finish)
BSDB	Bird Spikes (field install required)

Finish *(required)*

DDBXD	Dark Bronze
DBLXD	Black
DNAXD	Natural Aluminum
DWHXD	White
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white

Ordering Information

Accessories

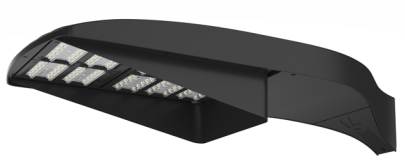
Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK	Shorting cap [25]
DSX2HS P#	House-side shield (enter package number 1-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSX2EGSR (FINISH)	External glare shield (specify finish)
DSX2BSDB (FINISH)	Bird spike deterrent bracket (specify finish)

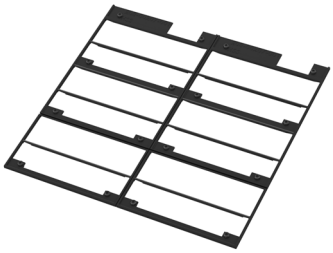
NOTES

1 Rotated optics available with packages P10, P11, P12, P13 and P14. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in package P10. XVOLT not available with fusing (SF or DF).
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P10 using HVOLT. NLTAIR2 PIRHN not available with P10 using XVOLT.
13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS. PIR not available with P10 using HVOLT. PIR not available with P10 using XVOLT.
14 14) PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18 DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads on P1, P2, P3, P4, P5 (2 drivers). Note: Provides 60/40 operation using (2) different sets of leads on P6, P7, P8, P9, P10, P11, P12, P13, P14 (3 drivers).
20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
21 Reference Controls Options table on page 4.
22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
24 Option HA not available with performance packages P5, P6, P7, P8, P13 and P14.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
26 Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
27 Option 3G for use with (MA) mast arm mount only when 3G vibration is required.

Shield Accessories



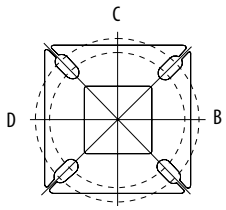
External Glare Shield (EGSR)



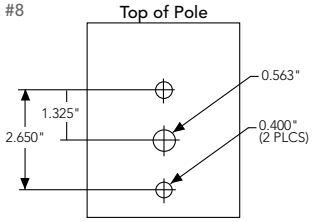
House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION



Template #8



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
		Minimum Acceptable Outside Pole Dimension					
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX2 Area Luminaire - EPA

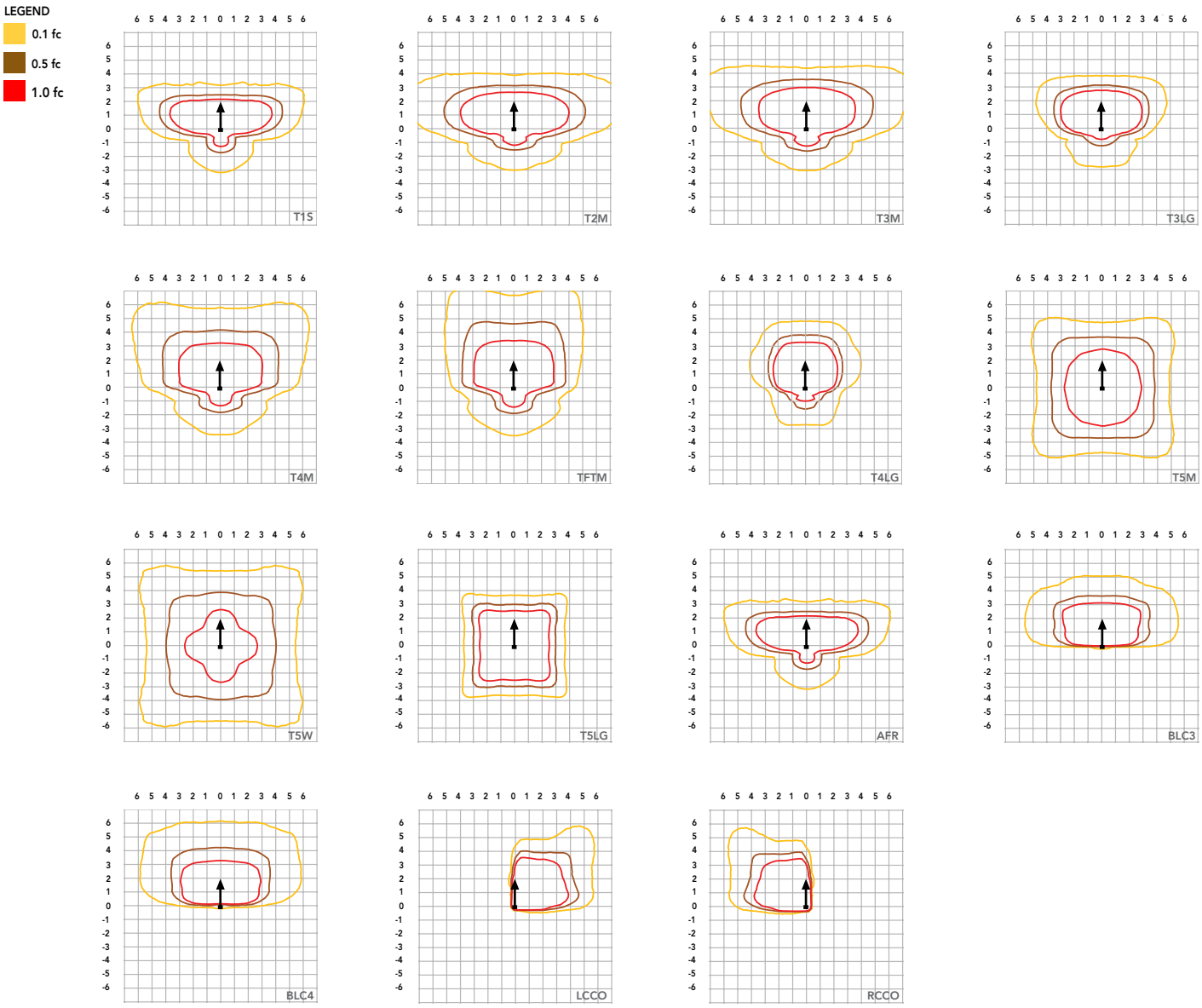
*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX2 with SPA	1.06	2.12	1.84	2.32	---	2.33
DSX2 with SPA5, SPA8N	1.07	2.14	1.90	2.43	---	2.44
DSX2 with RPA, RPA5	1.07	2.14	1.90	2.43	2.31	2.44
DSX2 with MA	1.20	2.40	2.12	3.00	2.92	3.00

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

Isofootcandle plots for the DSX2 LED P8 40K 70CRI. Distances are in units of mounting height (40').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.03
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.82

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

Electrical Load

					Current (A)					
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	80	530	135	1.12	0.65	0.56	0.49	0.39	0.28
	P2	80	700	181	1.49	0.86	0.75	0.65	0.52	0.37
	P3	80	850	222	1.83	1.05	0.91	0.79	0.63	0.46
	P4	80	1050	277	2.27	1.31	1.14	0.98	0.79	0.57
	P5	80	1250	333	2.72	1.57	1.36	1.18	0.94	0.68
	P6	100	1050	345	2.85	1.64	1.42	1.23	0.98	0.71
	P7	100	1250	414	3.41	1.97	1.70	1.48	1.18	0.85
	P8	100	1400	466	3.85	2.22	1.93	1.67	1.33	0.96
Rotated Optics (Requires L90 or R90)	P10	90	530	152	1.27	0.73	0.63	0.55	0.44	0.32
	P11	90	700	203	1.69	0.97	0.84	0.73	0.58	0.42
	P12	90	850	249	2.06	1.19	1.03	0.89	0.71	0.52
	P13	90	1200	358	2.95	1.70	1.47	1.28	1.02	0.74
	P14	90	1400	421	3.46	2.00	1.73	1.50	1.20	0.87

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	135W	80	530	T1S	19,946	2	0	3	148	20,787	2	0	3	155	21,192	2	0	3	158
				T2M	18,477	3	0	4	137	19,256	3	0	4	143	19,632	3	0	4	146
				T3M	18,691	3	0	5	139	19,480	3	0	5	145	19,859	3	0	5	148
				T3LG	16,696	2	0	2	124	17,400	2	0	2	129	17,740	2	0	2	132
				T4M	18,970	3	0	5	141	19,770	3	0	5	147	20,155	3	0	5	150
				T4LG	17,253	2	0	2	128	17,981	2	0	2	134	18,331	2	0	2	136
				TFTM	19,101	3	0	5	142	19,907	3	0	5	148	20,295	3	0	5	151
				T5M	19,517	5	0	3	145	20,341	5	0	3	151	20,737	5	0	3	154
				T5W	19,834	5	0	3	147	20,670	5	0	3	154	21,073	5	0	3	157
				T5LG	19,574	4	0	2	146	20,400	4	0	2	152	20,797	4	0	2	155
				BLC3	13,595	0	0	3	101	14,169	0	0	3	105	14,445	0	0	3	107
				BLC4	14,042	0	0	4	104	14,634	0	0	4	109	14,919	0	0	4	111
				RCCO	13,718	1	0	3	102	14,297	1	0	3	106	14,576	1	0	3	108
				LCCO	13,718	1	0	3	102	14,297	1	0	3	106	14,576	1	0	3	108
				AFR	19,946	2	0	3	148	20,787	2	0	3	155	21,192	2	0	3	158
P2	179W	80	700	T1S	25,520	3	0	3	142	26,597	3	0	3	148	27,116	3	0	3	151
				T2M	23,641	3	0	5	132	24,638	3	0	5	137	25,118	3	0	5	140
				T3M	23,915	3	0	5	133	24,924	3	0	5	139	25,410	3	0	5	142
				T3LG	21,363	3	0	3	119	22,264	3	0	3	124	22,698	3	0	3	127
				T4M	24,272	3	0	5	135	25,296	3	0	5	141	25,789	3	0	5	144
				T4LG	22,075	3	0	3	123	23,006	3	0	3	128	23,455	3	0	3	131
				TFTM	24,440	3	0	5	136	25,471	3	0	5	142	25,967	3	0	5	145
				T5M	24,972	5	0	3	139	26,026	5	0	3	145	26,533	5	0	4	148
				T5W	25,377	5	0	4	142	26,448	5	0	4	148	26,963	5	0	4	150
				T5LG	25,045	4	0	2	140	26,101	4	0	2	146	26,610	4	0	2	148
				BLC3	17,395	0	0	4	97	18,129	0	0	4	101	18,482	0	0	4	103
				BLC4	17,966	0	0	4	100	18,724	0	0	5	104	19,089	0	0	5	107
				RCCO	17,552	1	0	4	98	18,293	1	0	4	102	18,649	1	0	4	104
				LCCO	17,552	1	0	4	98	18,293	1	0	4	102	18,649	1	0	4	104
				AFR	25,520	3	0	3	142	26,597	3	0	3	148	27,116	3	0	3	151
P3	219W	80	850	T1S	30,127	3	0	4	137	31,398	3	0	4	143	32,010	3	0	4	146
				T2M	27,908	3	0	5	127	29,085	3	0	5	133	29,652	3	0	5	135
				T3M	28,232	3	0	5	129	29,423	3	0	5	134	29,996	3	0	5	137
				T3LG	25,218	3	0	3	115	26,282	3	0	3	120	26,794	3	0	3	122
				T4M	28,652	3	0	5	131	29,861	3	0	5	136	30,443	3	0	5	139
				T4LG	26,059	3	0	3	119	27,159	3	0	3	124	27,688	3	0	3	126
				TFTM	28,851	3	0	5	132	30,068	3	0	5	137	30,654	3	0	5	140
				T5M	29,479	5	0	4	134	30,723	5	0	4	140	31,322	5	0	4	143
				T5W	29,957	5	0	4	137	31,221	5	0	4	142	31,830	5	0	4	145
				T5LG	29,565	4	0	2	135	30,812	5	0	2	140	31,413	5	0	2	143
				BLC3	20,535	0	0	4	94	21,401	0	0	4	98	21,818	0	0	4	99
				BLC4	21,209	0	0	5	97	22,104	0	0	5	101	22,534	0	0	5	103
				RCCO	20,720	1	0	4	94	21,594	1	0	4	98	22,015	1	0	4	100
				LCCO	20,720	1	0	4	94	21,594	1	0	4	98	22,015	1	0	4	100
				AFR	30,127	3	0	4	137	31,398	3	0	4	143	32,010	3	0	4	146
P4	273W	80	1050	T1S	35,879	3	0	4	132	37,392	3	0	4	137	38,121	3	0	4	140
				T2M	33,236	3	0	5	122	34,638	3	0	5	127	35,313	3	0	5	130
				T3M	33,622	3	0	5	123	35,040	3	0	5	129	35,723	3	0	5	131
				T3LG	30,033	3	0	4	110	31,300	3	0	4	115	31,910	3	0	4	117
				T4M	34,123	3	0	5	125	35,562	3	0	5	130	36,255	3	0	5	133
				T4LG	31,035	3	0	4	114	32,344	3	0	4	119	32,974	3	0	4	121
				TFTM	34,359	3	0	5	126	35,808	3	0	5	131	36,506	3	0	5	134
				T5M	35,108	5	0	4	129	36,589	5	0	4	134	37,302	5	0	4	137
				T5W	35,677	5	0	4	131	37,182	5	0	5	136	37,907	5	0	5	139
				T5LG	35,209	5	0	3	129	36,695	5	0	3	135	37,410	5	0	3	137
				BLC3	24,456	0	0	4	90	25,487	0	0	4	93	25,984	0	0	5	95
				BLC4	25,258	0	0	5	93	26,324	0	0	5	97	26,837	0	0	5	98
				RCCO	24,676	1	0	4	91	25,717	1	0	4	94	26,218	1	0	4	96
				LCCO	24,676	1	0	4	91	25,717	1	0	4	94	26,218	1	0	4	96
				AFR	35,879	3	0	4	132	37,392	3	0	4	137	38,121	3	0	4	140

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79.
Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P5	327W	80	1250	T1S	41,149	3	0	4	126	42,885	3	0	4	131	43,721	3	0	4	134
				T2M	38,118	4	0	5	117	39,727	4	0	5	122	40,501	4	0	5	124
				T3M	38,561	3	0	5	118	40,187	3	0	5	123	40,971	3	0	5	125
				T3LG	34,445	3	0	4	105	35,898	3	0	4	110	36,598	3	0	4	112
				T4M	39,135	3	0	5	120	40,786	3	0	5	125	41,581	3	0	5	127
				T4LG	35,594	3	0	4	109	37,095	3	0	4	114	37,818	3	0	4	116
				TFTM	39,406	3	0	5	121	41,069	3	0	5	126	41,869	3	0	5	128
				T5M	40,265	5	0	4	123	41,964	5	0	4	128	42,782	5	0	5	131
				T5W	40,918	5	0	5	125	42,644	5	0	5	131	43,475	5	0	5	133
				T5LG	40,382	5	0	3	124	42,085	5	0	3	129	42,906	5	0	3	131
				BLC3	28,048	0	0	5	86	29,231	0	0	5	90	29,801	0	0	5	91
				BLC4	28,969	0	0	5	89	30,191	0	0	5	92	30,779	0	0	5	94
				RCCO	28,301	2	0	5	87	29,495	2	0	5	90	30,070	2	0	5	92
				LCCO	28,301	2	0	5	87	29,495	2	0	5	90	30,070	2	0	5	92
				AFR	41,149	3	0	4	126	42,885	3	0	4	131	43,721	3	0	4	134
P6	342W	100	1050	T1S	45,968	3	0	4	135	47,907	3	0	5	140	48,841	3	0	5	143
				T2M	42,582	4	0	5	125	44,379	4	0	5	130	45,244	4	0	5	132
				T3M	43,076	4	0	5	126	44,894	4	0	5	131	45,769	4	0	5	134
				T3LG	38,479	3	0	4	113	40,102	3	0	4	117	40,884	3	0	4	120
				T4M	43,719	4	0	5	128	45,563	4	0	5	133	46,451	4	0	5	136
				T4LG	39,762	3	0	4	116	41,439	3	0	4	121	42,247	3	0	4	124
				TFTM	44,021	3	0	5	129	45,878	4	0	5	134	46,772	4	0	5	137
				T5M	44,980	5	0	5	132	46,878	5	0	5	137	47,792	5	0	5	140
				T5W	45,710	5	0	5	134	47,638	5	0	5	139	48,566	5	0	5	142
				T5LG	45,111	5	0	3	132	47,014	5	0	3	138	47,930	5	0	3	140
				BLC3	31,333	0	0	5	92	32,655	0	0	5	96	33,291	0	0	5	97
				BLC4	32,361	0	0	5	95	33,726	0	0	5	99	34,384	0	0	5	101
				RCCO	31,615	2	0	5	93	32,949	2	0	5	96	33,591	2	0	5	98
				LCCO	31,615	2	0	5	93	32,949	2	0	5	96	33,591	2	0	5	98
				AFR	45,968	3	0	4	135	47,907	3	0	5	140	48,841	3	0	5	143
P7	409W	100	1250	T1S	52,692	3	0	5	129	54,915	3	0	5	134	55,986	3	0	5	137
				T2M	48,811	4	0	5	119	50,871	4	0	5	124	51,862	4	0	5	127
				T3M	49,378	4	0	5	121	51,461	4	0	5	126	52,464	4	0	5	128
				T3LG	44,107	3	0	4	108	45,968	3	0	4	112	46,864	3	0	5	115
				T4M	50,114	4	0	5	122	52,228	4	0	5	128	53,246	4	0	5	130
				T4LG	45,579	3	0	4	111	47,501	3	0	4	116	48,427	3	0	4	118
				TFTM	50,460	4	0	5	123	52,589	4	0	5	129	53,614	4	0	5	131
				T5M	51,560	5	0	5	126	53,735	5	0	5	131	54,783	5	0	5	134
				T5W	52,396	5	0	5	128	54,607	5	0	5	133	55,671	5	0	5	136
				T5LG	51,710	5	0	4	126	53,891	5	0	4	132	54,941	5	0	4	134
				BLC3	35,916	1	0	5	88	37,431	1	0	5	91	38,161	1	0	5	93
				BLC4	37,095	0	0	5	91	38,660	0	0	5	94	39,413	0	0	5	96
				RCCO	36,240	2	0	5	89	37,769	2	0	5	92	38,505	2	0	5	94
				LCCO	36,240	2	0	5	89	37,769	2	0	5	92	38,505	2	0	5	94
				AFR	52,692	3	0	5	129	54,915	3	0	5	134	55,986	3	0	5	137
P8	462W	100	1400	T1S	57,662	3	0	5	125	60,094	4	0	5	130	61,266	4	0	5	132
				T2M	53,415	4	0	5	116	55,668	4	0	5	120	56,753	4	0	5	123
				T3M	54,034	4	0	5	117	56,314	4	0	5	122	57,412	4	0	5	124
				T3LG	48,267	3	0	5	104	50,304	3	0	5	109	51,284	4	0	5	111
				T4M	54,840	4	0	5	119	57,154	4	0	5	124	58,268	4	0	5	126
				T4LG	49,877	3	0	5	108	51,981	3	0	5	112	52,994	3	0	5	115
				TFTM	55,219	4	0	5	119	57,549	4	0	5	124	58,671	4	0	5	127
				T5M	56,423	5	0	5	122	58,803	5	0	5	127	59,949	5	0	5	130
				T5W	57,338	5	0	5	124	59,757	5	0	5	129	60,921	5	0	5	132
				T5LG	56,586	5	0	4	122	58,974	5	0	4	128	60,123	5	0	4	130
				BLC3	39,303	1	0	5	85	40,962	1	0	5	89	41,760	1	0	5	90
				BLC4	40,593	0	0	5	88	42,306	0	0	5	91	43,130	0	0	5	93
				RCCO	39,658	2	0	5	86	41,331	2	0	5	89	42,137	2	0	5	91
				LCCO	39,658	2	0	5	86	41,331	2	0	5	89	42,137	2	0	5	91
				AFR	57,662	3	0	5	125	60,094	4	0	5	130	61,266	4	0	5	132

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Rotated Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	152W	90	530	T1S	22,798	4	0	4	150	23,760	4	0	4	156	24,223	4	0	4	159
				T2M	21,119	5	0	5	139	22,010	5	0	5	145	22,439	5	0	5	148
				T3M	21,361	5	0	5	141	22,262	5	0	5	147	22,696	5	0	5	149
				T3LG	19,084	4	0	4	126	19,889	4	0	4	131	20,277	4	0	4	133
				T4M	21,679	5	0	5	143	22,594	5	0	5	149	23,034	5	0	5	152
				T4LG	19,717	4	0	4	130	20,549	4	0	4	135	20,950	4	0	4	138
				TFTM	21,833	5	0	5	144	22,754	5	0	5	150	23,197	5	0	5	153
				T5M	22,305	5	0	3	147	23,246	5	0	3	153	23,699	5	0	3	156
				T5W	22,667	5	0	3	149	23,623	5	0	4	155	24,084	5	0	4	158
				T5LG	22,370	4	0	2	147	23,314	4	0	2	153	23,768	4	0	2	156
				BLC3	15,539	4	0	4	102	16,194	4	0	4	107	16,510	4	0	4	109
				BLC4	16,048	4	0	4	106	16,725	4	0	4	110	17,051	4	0	4	112
				RCCO	15,679	1	0	3	103	16,340	1	0	3	108	16,659	1	0	3	110
				LCCO	15,679	1	0	3	103	16,340	1	0	3	108	16,659	1	0	3	110
				AFR	22,798	4	0	4	150	23,760	4	0	4	156	24,223	4	0	4	159
P11	203W	90	700	T1S	29,222	4	0	4	144	30,455	4	0	4	150	31,048	4	0	4	153
				T2M	27,070	5	0	5	134	28,212	5	0	5	139	28,762	5	0	5	142
				T3M	27,380	5	0	5	135	28,535	5	0	5	141	29,091	5	0	5	144
				T3LG	24,462	4	0	4	121	25,493	4	0	4	126	25,990	4	0	4	128
				T4M	27,788	5	0	5	137	28,960	5	0	5	143	29,525	5	0	5	146
				T4LG	25,273	4	0	4	125	26,339	4	0	4	130	26,853	4	0	4	133
				TFTM	27,985	5	0	5	138	29,165	5	0	5	144	29,734	5	0	5	147
				T5M	28,591	5	0	4	141	29,797	5	0	4	147	30,377	5	0	4	150
				T5W	29,054	5	0	4	143	30,280	5	0	4	149	30,870	5	0	4	152
				T5LG	28,673	4	0	2	142	29,883	4	0	2	148	30,465	5	0	2	150
				BLC3	19,917	4	0	4	98	20,757	4	0	4	102	21,162	4	0	4	104
				BLC4	20,570	5	0	5	102	21,437	5	0	5	106	21,855	5	0	5	108
				RCCO	20,097	1	0	4	99	20,945	1	0	4	103	21,353	1	0	4	105
				LCCO	20,097	1	0	4	99	20,945	1	0	4	103	21,353	1	0	4	105
				AFR	29,222	4	0	4	144	30,455	4	0	4	150	31,048	4	0	4	153
P12	248W	90	850	T1S	34,526	5	0	5	139	35,983	5	0	5	145	36,684	5	0	5	148
				T2M	31,984	5	0	5	129	33,333	5	0	5	135	33,983	5	0	5	137
				T3M	32,350	5	0	5	131	33,715	5	0	5	136	34,372	5	0	5	139
				T3LG	28,902	4	0	4	117	30,121	4	0	4	122	30,708	4	0	4	124
				T4M	32,832	5	0	5	133	34,217	5	0	5	138	34,884	5	0	5	141
				T4LG	29,861	4	0	4	121	31,120	4	0	4	126	31,727	5	0	4	128
				TFTM	33,064	5	0	5	134	34,459	5	0	5	139	35,131	5	0	5	142
				T5M	33,780	5	0	4	136	35,205	5	0	4	142	35,891	5	0	4	145
				T5W	34,327	5	0	4	139	35,776	5	0	4	145	36,473	5	0	4	147
				T5LG	33,878	5	0	3	137	35,307	5	0	3	143	35,995	5	0	3	145
				BLC3	23,532	5	0	5	95	24,525	5	0	5	99	25,003	5	0	5	101
				BLC4	24,303	5	0	5	98	25,328	5	0	5	102	25,822	5	0	5	104
				RCCO	23,745	1	0	4	96	24,747	1	0	4	100	25,229	1	0	4	102
				LCCO	23,745	1	0	4	96	24,747	1	0	4	100	25,229	1	0	4	102
				AFR	34,526	5	0	5	139	35,983	5	0	5	145	36,684	5	0	5	148

Performance Data

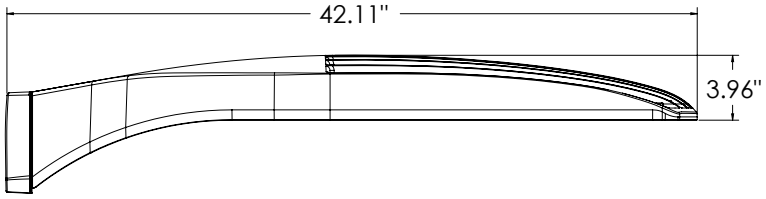
Lumen Output

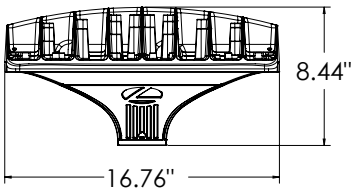
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79.
Contact factory for performance data on any configurations not shown here.

Rotated Optics

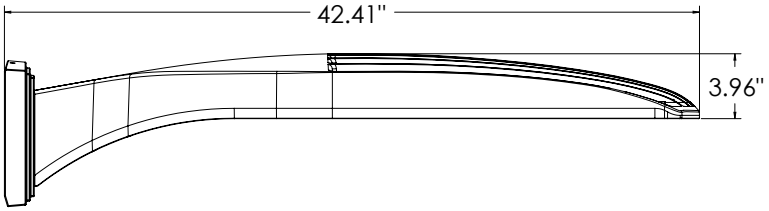
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P13	354W	90	1200	T1S	45,748	5	0	5	129	47,678	5	0	5	135	48,608	5	0	5	137
				T2M	42,380	5	0	5	120	44,168	5	0	5	125	45,029	5	0	5	127
				T3M	42,865	5	0	5	121	44,673	5	0	5	126	45,544	5	0	5	129
				T3LG	38,296	5	0	5	108	39,911	5	0	5	113	40,689	5	0	5	115
				T4M	43,503	5	0	5	123	45,339	5	0	5	128	46,222	5	0	5	131
				T4LG	39,566	5	0	5	112	41,235	5	0	5	117	42,039	5	0	5	119
				TFTM	43,811	5	0	5	124	45,659	5	0	5	129	46,549	5	0	5	132
				T5M	44,760	5	0	5	126	46,648	5	0	5	132	47,557	5	0	5	134
				T5W	45,485	5	0	5	129	47,404	5	0	5	134	48,328	5	0	5	137
				T5LG	44,889	5	0	3	127	46,783	5	0	3	132	47,695	5	0	3	135
				BLC3	31,181	5	0	5	88	32,496	5	0	5	92	33,130	5	0	5	94
				BLC4	32,202	5	0	5	91	33,561	5	0	5	95	34,215	5	0	5	97
				RCCO	31,463	2	0	5	89	32,790	2	0	5	93	33,429	2	0	5	94
				LCCO	31,463	2	0	5	89	32,790	2	0	5	93	33,429	2	0	5	94
				AFR	45,748	5	0	5	129	47,678	5	0	5	135	48,608	5	0	5	137
P14	415W	90	1400	T1S	51,272	5	0	5	123	53,435	5	0	5	129	54,476	5	0	5	131
				T2M	47,497	5	0	5	114	49,500	5	0	5	119	50,465	5	0	5	121
				T3M	48,040	5	0	5	116	50,067	5	0	5	121	51,043	5	0	5	123
				T3LG	42,919	5	0	5	103	44,730	5	0	5	108	45,602	5	0	5	110
				T4M	48,756	5	0	5	117	50,813	5	0	5	122	51,803	5	0	5	125
				T4LG	44,343	5	0	5	107	46,214	5	0	5	111	47,115	5	0	5	113
				TFTM	49,101	5	0	5	118	51,172	5	0	5	123	52,169	5	0	5	126
				T5M	50,164	5	0	5	121	52,280	5	0	5	126	53,299	5	0	5	128
				T5W	50,977	5	0	5	123	53,127	5	0	5	128	54,163	5	0	5	130
				T5LG	50,309	5	0	4	121	52,432	5	0	4	126	53,453	5	0	4	129
				BLC3	34,945	5	0	5	84	36,420	5	0	5	88	37,130	5	0	5	89
				BLC4	36,090	5	0	5	87	37,613	5	0	5	91	38,346	5	0	5	92
				RCCO	35,261	2	0	5	85	36,749	2	0	5	88	37,465	2	0	5	90
				LCCO	35,261	2	0	5	85	36,749	2	0	5	88	37,465	2	0	5	90
				AFR	51,272	5	0	5	123	53,435	5	0	5	129	54,476	5	0	5	131

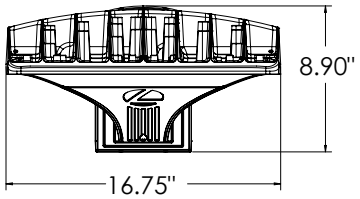
Dimensions



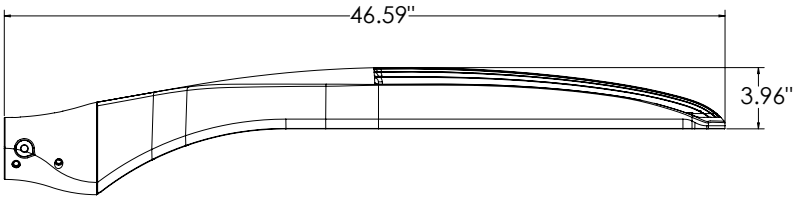


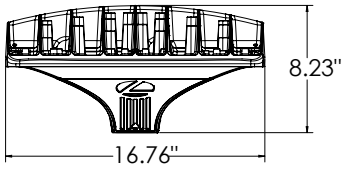
DSX2 with RPA, RPA5, SPA5, SPA8N mount
Weight: 48 lbs





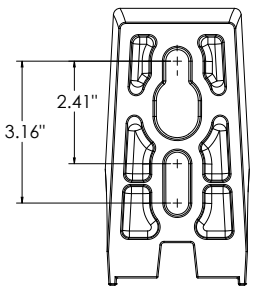
DSX2 with WBA mount
Weight: 50 lbs



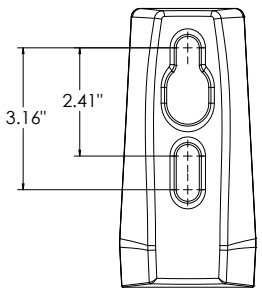


DSX2 with MA mount
Weight: 50 lbs

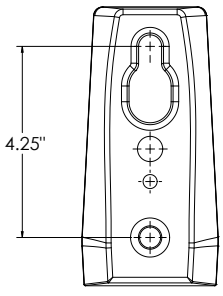
SPA (STANDARD ARM)



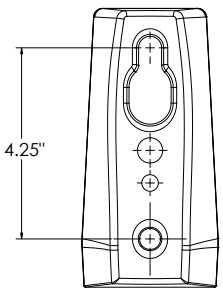
RPA



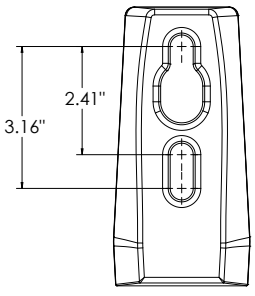
SPA5



RPA5



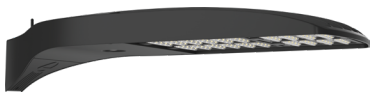
SPA8N

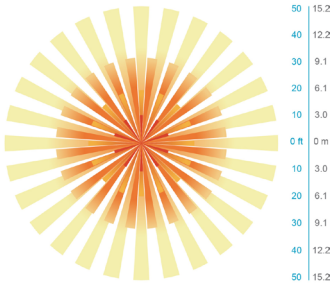


nLight Control - Sensor Coverage and Settings

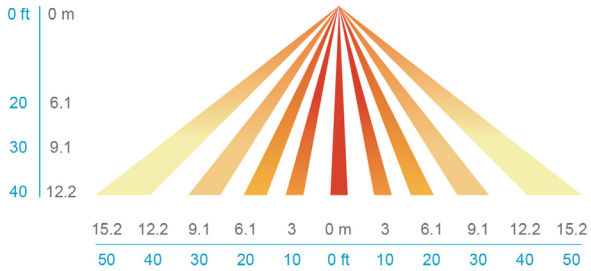
nLight Sensor Coverage Pattern

NLTAIR2 PIRHN





Top



Side

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Area Size 2 reflects the embedded high performance LED technology. It is ideal for applications like car dealerships and large parking lots adjacent to malls, transit stations, grocery stores, home centers, and other big-box retailers.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 1.5G. 3G vibration rated available for (MA) mast arm mount when specifying option 3G. Low EPA (1.06 ft^2) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K, or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 2 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L82/100,000 hrs at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily-serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

STANDARD CONTROLS

The DSX2 LED area luminaire has a number of control options. DSX Size 2, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX2 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

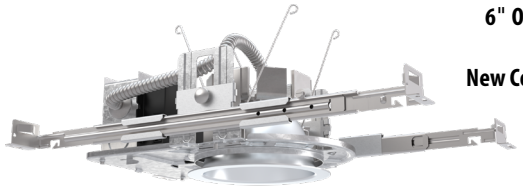
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

LITHONIA LIGHTING®

Catalog Number	LDN6 40/15 LO6AR LS
Notes	
Type	N

LDN6 STATIC WHITE

6" Open and Wallwash LED
Non-IC
New Construction Downlight



Open Trim

Wallwash Trim

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.

CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment.

Two combination ½"-3/4" and four ½" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.

Accommodates 12"-24" joist spacing.

Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

OPTICS — LEDs are binned to a 3-step MacAdam Ellipse; 80 CRI minimum. 90 CRI optional.

LED light source concealed with diffusing optical lens.

General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

A+ CAPABLE LUMINAIRE — This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning when used with Acuity Brands controls products. All configurations of this luminaire are calibrated and tested to meet the Acuity Brands' specifications for chromatic consistency – including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates. To learn more about A+ standards, specifications, and testing visit www.acuitybrands.com/aplus.

UGR — UGR is zero for fixtures aimed at nadir with a cut-off equal to or less than 60deg, per CIE 117-1996 Discomfort Glare in Interior Lighting.

ELECTRICAL — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

LUMEN MAINTENANCE — 70% lumen maintenance at 60,000 hours. L70/60,000 hours

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated. Drivers are RoHS compliant

GOVERNMENT PROCUREMENT — BAA – Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

PERFORMANCE DATA

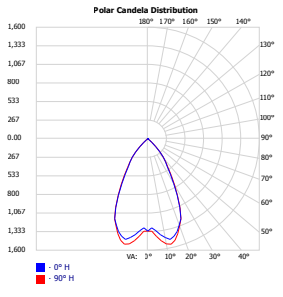
LDN6 3500K AR LSS 80CRI			
Nominal Lumens	**Lumens**	**Wattage**	**Lm/W**
500	527.9	5.8	90.5
750	758.1	8.9	85.1
1000	950.1	10.4	91.0
1500	1514	17.5	86.4
2000	2006	22.5	89.1
2500	2504	28.3	88.6
3000	3021	34.8	86.9
4000	4008	44.3	90.6
5000	4975	57.7	86.3

Notes

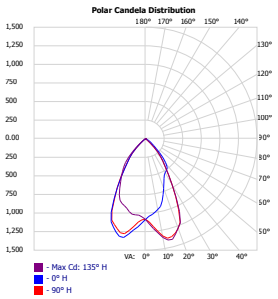
- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

battery pack

DISTRIBUTIONS



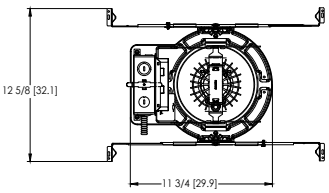
Open

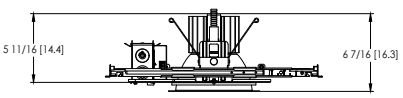


Wallwash

DIMENSIONS

LDN6 500-3000 Lumens





Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

See page 4 for other fixture dimensions

LDN6

Design Select options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: LDN6 35/15 LO6 AR LSS MVOLT EZ10

LDN6							
Series	**Color temperature**	**Lumens ‡**	**Trim Style**	**Trim Color**	**Trim Finish**	**Flange Color ‡**	**Voltage**
LDN6 6" round	27/ 2700K	05 500 lumens	LO6 Downlight	AR Clear	LSS Semi-specular	TRW White painted flange	MVOLT Multi-volt
	30/ 3000K	07 750 lumens	LW6 Wallwash	WR ‡ White	LD Matte diffuse	TRBL Black painted flange	120 120V
	35/ 3500K	10 1000 lumens		BR ‡ Black	LS Specular	FCPC Custom painted flange only	277 277V
	40/ 4000K	15 1500 lumens		TCPC ‡ Custom painted trim		FRALTBD RAL painted flange only	347 ‡ 347V
	50/ 5000K	20 2000 lumens		TRALTBD ‡ RAL painted trim			
		25 2500 lumens					
		30 3000 lumens					
		40 4000 lumens					
		50 5000 lumens					

Driver	**Emergency ‡**	**Control Input ‡**	**Options**
GZ10 0-10V driver dims to 10%	(blank) No Emergency Needed	(blank) No Control Input Needed	HAO ‡ High ambient option (40°C)
GZ1 0-10V driver dims to 1%	EL Battery pack (10W constant power), non-T20 compliant, integral test switch	JOT Wireless room control with "Just One Touch" pairing	CP ‡ Chicago Plenum
D10 Minimum dimming 10% driver for use with JOT	ELR Battery pack (10W constant power), non-T20 compliant, remote test switch	NPP16D nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).	RRL__ RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S.
D1 Minimum dimming 1% driver for use with JOT	ELSD Self-diagnostic battery pack (10W constant power), non-T20 compliant, integral test switch	NPP16DER nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.	BAA Buy America(n) Act and/or Build America Buy America Qualified
EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	ELRSD Self-diagnostic battery pack (10W constant power), non-T20 compliant, remote test switch	NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers (EZ1).	90CRI High CRI (90+)
EDAB eldoLED DALI SOLDRIVE dim to dark	E10WCP Battery pack (10W constant power), T20 compliant, integral test switch	NPS80EZER nLight® dimming pack controls 0-10V eldoLED drivers (EZ1). ER controls fixtures on emergency circuit.	SF ‡ Single fuse
	E10WCPR Battery pack (10W constant power), T20 compliant, remote test switch	N80 nLight™ Lumen Compensation	
	E10WRSTAR Emergency battery pack, 10W with remote test switch and Iota STAR technology	NLTAIR2 nLight® Air enabled	
		NLTAIRER2 nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options	
		NLTAIREM2 nLight® AIR Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Available with battery pack options.	

‡ Option Value Ordering Restrictions

Option value	Restriction
Lumens	Overall height varies based on lumen package; refer to dimensional chart.
WR, BR	Not available with finishes.
347	Not available with emergency options.
SF	Must specify voltage 120V or 277V.
TRW, TRBL	Available with clear (AR) reflector only.
EL, ELR, ELSD, ELRSD, E10WCP, E10WCPR	12.5" of plenum depth or top access required for battery pack maintenance.
NPP16D, NPP16DER, NPS80EZ, NPS80EZER	Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed. See UL 924 Sequence of Operation table.
N80	Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ1 drivers.
NLTAIR, NLTAIR2, NLTAIRER2, NLTAIREM2	Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options. not recommended for metal ceiling installations.
HAO	Fixture height is 6.5" for all lumen packages with HAO.
CP	Must specify voltage for 3000lm and above. 5000lm with marked spacing 24 L x 24 W x 14 H. Not available with emergency battery pack option.
JOT	Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation. Not for use with emergency backup power systems other than battery packs.
Reloc® Options	Refer to RRL specification sheet on acuitybrands.com for further details.
RRLAE	Commercial fixtures should disconnect the TSPL before unplugging the RRL so it does not go into discharge mode.
RRLC12S	RRLC12S option is to be used with the OnePass OCU, OCS, OD, OFC and OD for 0-24V integrated single-circuit or 0-10V low voltage controls applications. Not available with integral dimming sensors.
TRALTBD, FRALTBD	RALTBD for pricing only. Replace with applicable RAL number and finish when ready to order. See the RAL BROCHURE for available color options.
TCPC, FCPC	CPC options for pricing only. Custom color chip needs to be sent in to your Customer Resolution specialist before order can be processed. Click HERE for more details
E10WRSTAR	Not available with wet location, EC1, EC6, QDS, CP, 347V, NPS80EZ ER, NLTAIRER2, NLTAIREM2, ALO3 & ALO4 w/DALI, OR 2000-4500 lumens w/JOT. Top access installation or 17.5" plenum clearance required for roomside installation. Not available with integral test switch

Accessories: *Order as separate catalog number.*

EAC ISSM 375	Compact interruptible emergency AC power system
EAC ISSM 125	Compact interruptible emergency AC power system
GRA68 JZ	Oversized trim ring with 8" outside diameter
SCA6	Sloped Ceiling Adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

(Maximum order quantity for design select lead times is 112.)

Emergency Battery Pack Options - Field Installable

Battery Model Number	Wattage	Runtime (Minutes)	Lumen Output* @ 120 Lumens/Watt	Other
ILB CP07 2H A	7W	120	840	Storm Shelter / 2 Hour Runtime
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A+	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A+	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic
ILBHI CP10 HE SD A+	10W	90	1200	347-480V AC Input, Title 20, Self Diagnostic
ILBHI CP15 HE SD A+	15W	90	1800	347-480V AC Input, Title 20, Self Diagnostic

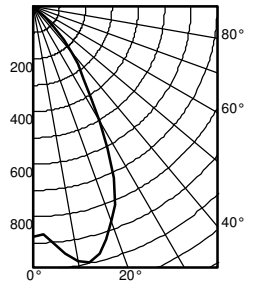
All the above are UL Listed products that are certified for field install external/remote to the fixture.
*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.
The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.
Please contact us at techsupport@iotaengineering.com for any Emergency Battery related questions.

LDN6

PHOTOMETRY

Distribution Curve	Distribution Data	Output Data	Illuminance Data at 30" Above Floor for a Single Luminaire

LDN6 35/10 LO6AR, input watts: 10.44, delivered lumens: 987.10, LM/W = 94.54, spacing criterion at 0= 1.02, test no. ISF 30716P262.



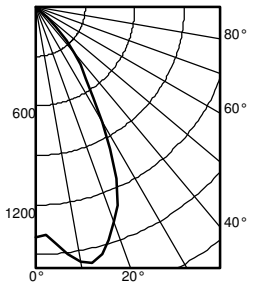
	Ave	Lumens
0	876	
5	905	89
15	971	269
25	720	322
35	330	214
45	110	87
55	1	4
65	1	1
75	0	0
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	680.7	69.0
0° - 40°	895.0	90.7
0° - 60°	986.0	99.9
0° - 90°	987.0	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	987.0	*100.0

*Efficiency

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	29.0	5.7	14.5	9.6	2.9
10.0	15.6	7.7	7.8	13.1	1.6
12.0	9.7	9.8	4.9	16.6	1.0
14.0	6.6	11.8	3.3	20.1	0.7
16.0	4.8	13.9	2.4	23.6	0.5

LDN6 35/15 LO6AR, input watts: 17.52, delivered lumens: 1572.9, LM/W = 89.77, spacing criterion at 0= 1.02, test no. ISF 30716P265.



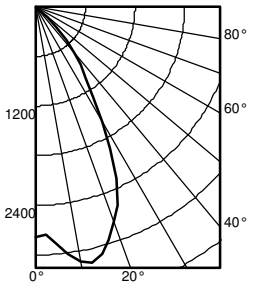
	Ave	Lumens
0	1396	
5	1442	142
15	1547	429
25	1147	514
35	526	342
45	176	139
55	2	6
65	1	1
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	1084.6	69.0
0° - 40°	1426.2	90.7
0° - 60°	1571.3	99.9
0° - 90°	1572.9	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	1572.9	*100.0

*Efficiency

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	46.2	5.7	23.1	9.6	4.6
10.0	24.8	7.7	12.4	13.1	2.5
12.0	15.5	9.8	7.7	16.6	1.5
14.0	10.6	11.8	5.3	20.1	1.1
16.0	7.7	13.9	3.8	23.6	0.8

LDN6 35/30 LO6AR, input watts: 34.75, delivered lumens: 3138.5, LM/W = 90.31, spacing criterion at 0= 1.02, test no. ISF 30716P274.



	Ave	Lumens
0	2786	
5	2877	284
15	3087	855
25	2289	1025
35	1049	682
45	350	277
55	5	12
65	2	2
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	2164.3	69.0
0° - 40°	2845.9	90.7
0° - 60°	3135.3	99.9
0° - 90°	3138.5	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	3138.5	*100.0

*Efficiency

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	92.1	5.7	46.1	9.6	9.2
10.0	49.5	7.7	24.8	13.1	5.0
12.0	30.9	9.8	15.4	16.6	3.1
14.0	21.1	11.8	10.5	20.1	2.1
16.0	15.3	13.9	7.6	23.6	1.5

HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

The LPW rating is also available at Designlight Consortium.

LUMEN OUTPUT MULTIPLIERS - FINISH	Clear (AR)	White (WR)	Black (BR)
Specular (LS)	1.0	N/A	N/A
Semi-specular (LSS)	0.950	N/A	N/A
Matte diffuse (LD)	0.85	N/A	N/A
Painted	N/A	0.87	0.73

LUMEN OUTPUT MULTIPLIERS - CRI	
80	1.0
90	0.874

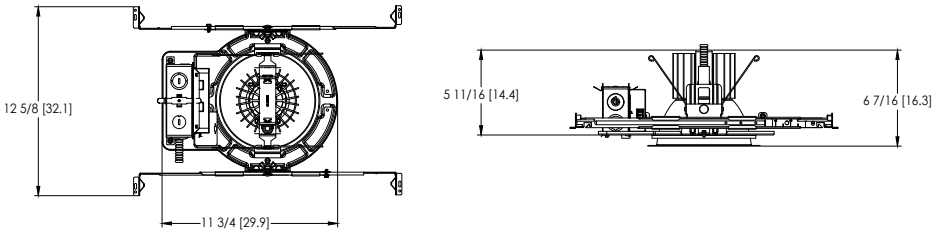
LUMEN OUTPUT MULTIPLIERS - CCT	2700K	3000K	3500K	4000K	5000K
80CRI	0.950	0.966	1.000	1.025	1.101

Notes

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

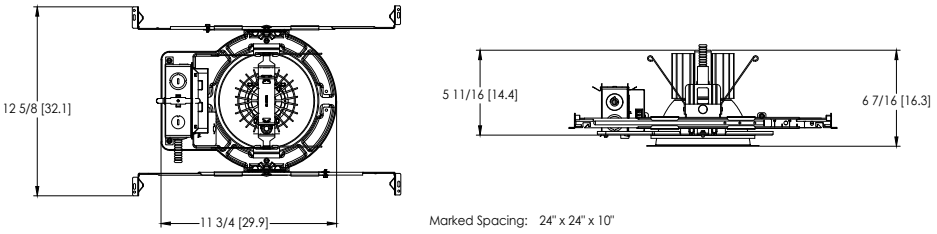
* All dimensions are inches (centimeters) unless otherwise noted.

LDN6 500-3000 Lumens



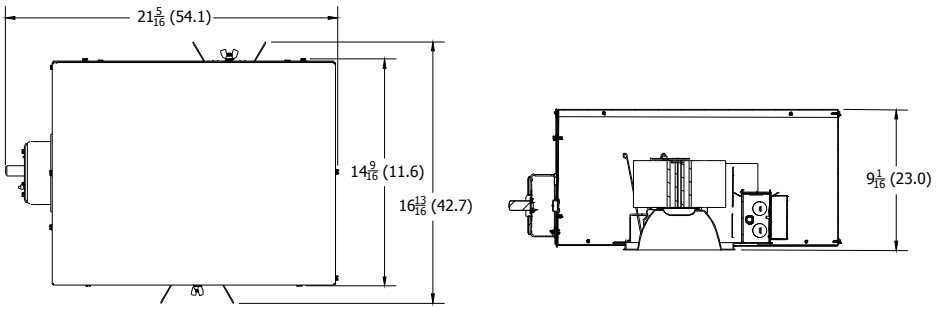
Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

LDN6 4000-5000 Lumens



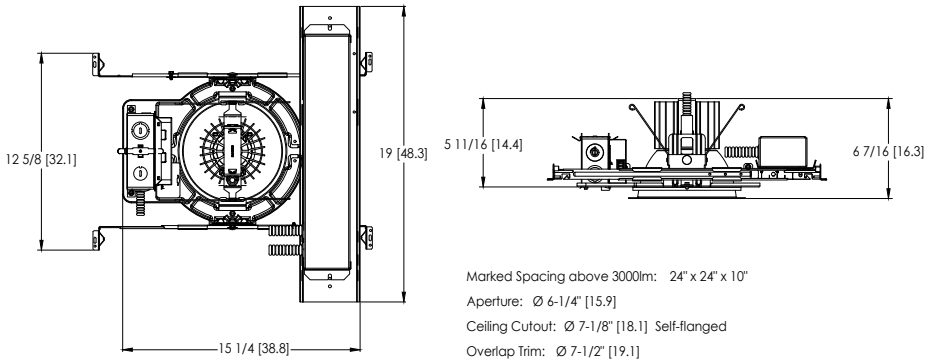
Marked Spacing: 24" x 24" x 10"
Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

LDN6 CP



Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 EL



Marked Spacing above 3000lm: 24" x 24" x 10"
Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

ADDITIONAL DATA

JOT
JUST ONE TOUCH

The Sensor Switch JOT enabled solution offers a wireless, app-free approach to single room lighting control. JOT enabled products use Bluetooth® Low Energy (BLE) technology to enable wireless dimming and switching.

Diagram

LDN6 Series

Sensor Switch
WSXA JOT

1. **Power:** Install JOT enabled fixtures and controls as instructed.
2. **Pair:** Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. **Play:** Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

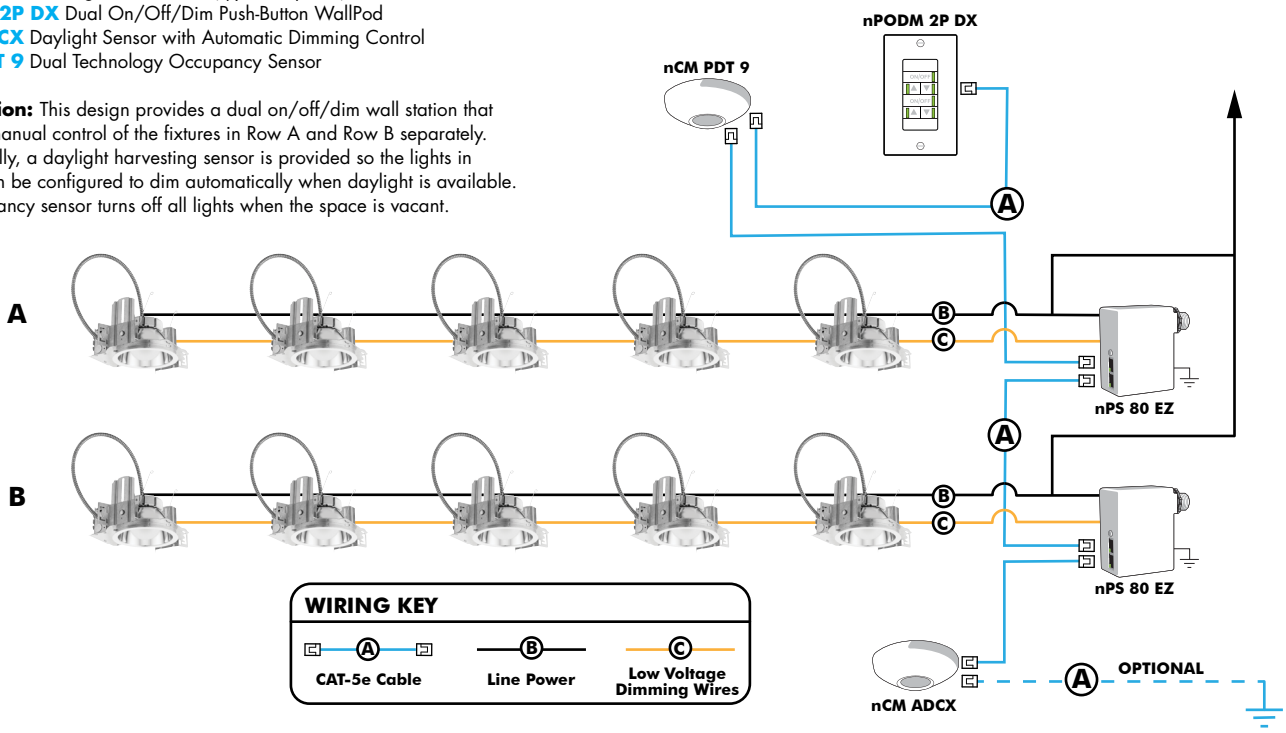
COMPATIBLE 0-10V WALL-MOUNT DIMMERS		
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE
Lutron®	Diva® DVTV	
	Diva® DVSCTV	
	Nova T® NTFTV	
	Nova® NFTV	
Leviton®	AWSMT-7DW	CN100
	AWSMG-7DW	PE300
	AMRMG-7DW	
	Leviton Centura Fluorescent Control System	
	IllumaTech® IP7 Series	
Synergy®	ISD BC	RDMFC
	SLD LPCS	
	Digital Equinox (DEQ BC)	
Douglas Lighting Controls	WPC-5721	
Entertainment Technology	Tap Glide TG600FAM120 (120V)	
	Tap Glide Heatsink TGH1500FAM120 (120V)	
	Oasis 0A2000FAMU	
Honeywell	EL7315A1019	EL7305A1010 (optional)
	EL7315A1009	
HUNT Dimming	Preset slide: PS-010-IV and PS-010-WH	
	Preset slide: PS-010-3W-IV and PS-010-3W-WH	
	Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V	
	Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V	
	Remote mounted unit: FD-010	
Lehigh Electronic Products	Solitaire	PBX
PDM Electrical Products	WPC-5721	
Starfield Controls	TR61 with DALI interface port	RT03 DALInet Router
WattStopper®	LS-4 used with LCD-101 and LCD-103	

LDN6

EXAMPLE
Group Fixture Control*
*Appiication diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty: 2 required)
nPODM 2P DX Dual On/Off/Dim Push-Button WallPod
nCM ADCX Daylight Sensor with Automatic Dimming Control
nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in Row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Choose Wall Controls

nLight offers multiple styles of wall controls - each with varying features and user experience.

Push-Button Wallpod
Traditional tactile buttons and LED user feedback

Graphic Wallpod
Full color touch screen provides a sophisticated look and feel

nLight® Wired Controls Accessories:			
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight for complete listing of nLight controls.			
WallPod Stations	**Model number**	**Occupancy sensors**	**Model Number**
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16
Photocell controls	**Model Number**	Wall Switch w/ Raise/Lower (PIR/dual tech)	nWSX LV DX / nWSX PDT LV DX
Dimming	nCM ADCX	**Cat-5 cables (plenum rated)**	**Model Number**
		10', CAT5 10FT	CAT5 10FT J1
		15, CAT5 15FT	CAT5 15FT J1

nLight® AIR Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Model number
On/Off single pole	rPODB [color]
On/Off two pole	rPODB 2P [color]
On/Off & raise/lower single pole	rPODB DX [color]
On/Off & raise/lower two pole	rPODB 2P DX [color]
On/Off & raise/lower single pole	rPODBZ DX WH[1]

Notes

1 Can only be ordered with the RES7Z zone control sensor version.

UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CL**AIR**ITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

nLight AIR

nLight AIR is the ideal solution for retrofit or new construction spaces where adding communication is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each Lithonia LDN Luminaire. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CL**AIR**ITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

nLight AIR rPODB 2P DX

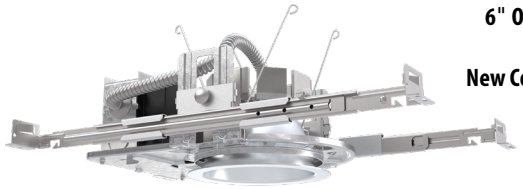
Mobile Device

LITHONIA LIGHTING®

Catalog Number	LDN6 40/07 LO6AR LS
Notes	
Type	N1

LDN6 STATIC WHITE

6" Open and Wallwash LED
Non-IC
New Construction Downlight



Open Trim

Wallwash Trim

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.

CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment.

Two combination ½"-3/4" and four ½" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.

Accommodates 12"-24" joist spacing.

Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

OPTICS — LEDs are binned to a 3-step MacAdam Ellipse; 80 CRI minimum. 90 CRI optional.

LED light source concealed with diffusing optical lens.

General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

A+ CAPABLE LUMINAIRE — This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning when used with Acuity Brands controls products. All configurations of this luminaire are calibrated and tested to meet the Acuity Brands' specifications for chromatic consistency – including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates. To learn more about A+ standards, specifications, and testing visit www.acuitybrands.com/aplus.

UGR — UGR is zero for fixtures aimed at nadir with a cut-off equal to or less than 60deg, per CIE 117-1996 Discomfort Glare in Interior Lighting.

ELECTRICAL — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

LUMEN MAINTENANCE — 70% lumen maintenance at 60,000 hours. L70/60,000 hours

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated. Drivers are RoHS compliant

GOVERNMENT PROCUREMENT — BAA – Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

PERFORMANCE DATA

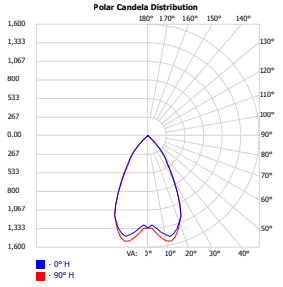
LDN6 3500K AR LSS 80CRI			
Nominal Lumens	**Lumens**	**Wattage**	**Lm/W**
500	527.9	5.8	90.5
750	758.1	8.9	85.1
1000	950.1	10.4	91.0
1500	1514	17.5	86.4
2000	2006	22.5	89.1
2500	2504	28.3	88.6
3000	3021	34.8	86.9
4000	4008	44.3	90.6
5000	4975	57.7	86.3

Notes

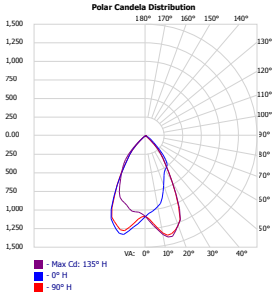
- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

battery pack

DISTRIBUTIONS



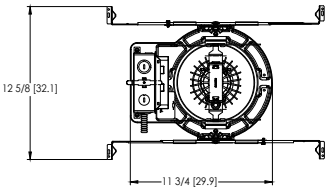
Open

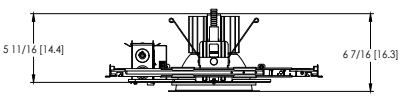


Wallwash

DIMENSIONS

LDN6 500-3000 Lumens





Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

See page 4 for other fixture dimensions

LDN6

Design Select options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: LDN6 35/15 LO6 AR LSS MVOLT EZ10

LDN6							
Series	**Color temperature**	**Lumens ‡**	**Trim Style**	**Trim Color**	**Trim Finish**	**Flange Color ‡**	**Voltage**
LDN6 6" round	27/ 2700K	05 500 lumens	LO6 Downlight	AR Clear	LSS Semi-specular	TRW White painted flange	MVOLT Multi-volt
	30/ 3000K	07 750 lumens	LW6 Wallwash	WR ‡ White	LD Matte diffuse	TRBL Black painted flange	120 120V
	35/ 3500K	10 1000 lumens		BR ‡ Black	LS Specular	FCPC Custom painted flange only	277 277V
	40/ 4000K	15 1500 lumens		TCPC ‡ Custom painted trim		FRALTBD RAL painted flange only	347 ‡ 347V
	50/ 5000K	20 2000 lumens		TRALTBD ‡ RAL painted trim			
		25 2500 lumens					
		30 3000 lumens					
		40 4000 lumens					
		50 5000 lumens					

Driver	**Emergency ‡**	**Control Input ‡**	**Options**
GZ10 0-10V driver dims to 10%	(blank) No Emergency Needed	(blank) No Control Input Needed	HAO ‡ High ambient option (40°C)
GZ1 0-10V driver dims to 1%	EL Battery pack (10W constant power), non-T20 compliant, integral test switch	JOT Wireless room control with "Just One Touch" pairing	CP ‡ Chicago Plenum
D10 Minimum dimming 10% driver for use with JOT	ELR Battery pack (10W constant power), non-T20 compliant, remote test switch	NPP16D nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).	RRL__ RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S.
D1 Minimum dimming 1% driver for use with JOT	ELSD Self-diagnostic battery pack (10W constant power), non-T20 compliant, integral test switch	NPP16DER nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.	BAA Buy America(n) Act and/or Build America Buy America Qualified
EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	ELRSD Self-diagnostic battery pack (10W constant power), non-T20 compliant, remote test switch	NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers (EZ1).	90CRI High CRI (90+)
EDAB eldoLED DALI SOLDRIVE dim to dark	E10WCP Battery pack (10W constant power), T20 compliant, integral test switch	NPS80EZER nLight® dimming pack controls 0-10V eldoLED drivers (EZ1). ER controls fixtures on emergency circuit.	SF ‡ Single fuse
	E10WCPR Battery pack (10W constant power), T20 compliant, remote test switch	N80 nLight™ Lumen Compensation	
	E10WRSTAR Emergency battery pack, 10W with remote test switch and Iota STAR technology	NLTAIR2 nLight® Air enabled	
		NLTAIRER2 nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options	
		NLTAIREM2 nLight® AIR Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Available with battery pack options.	

‡ Option Value Ordering Restrictions

Option value	Restriction
Lumens	Overall height varies based on lumen package; refer to dimensional chart.
WR, BR	Not available with finishes.
347	Not available with emergency options.
SF	Must specify voltage 120V or 277V.
TRW, TRBL	Available with clear (AR) reflector only.
EL, ELR, ELSD, ELRSD, E10WCP, E10WCPR	12.5" of plenum depth or top access required for battery pack maintenance.
NPP16D, NPP16DER, NPS80EZ, NPS80EZER	Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed. See UL 924 Sequence of Operation table.
N80	Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ1 drivers.
NLTAIR, NLTAIR2, NLTAIRER2, NLTAIREM2	Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options. not recommended for metal ceiling installations.
HAO	Fixture height is 6.5" for all lumen packages with HAO.
CP	Must specify voltage for 3000lm and above. 5000lm with marked spacing 24 L x 24 W x 14 H. Not available with emergency battery pack option.
JOT	Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation. Not for use with emergency backup power systems other than battery packs.
Reloc® Options	Refer to RRL specification sheet on acuitybrands.com for further details.
RRLAE	Commercial fixtures should disconnect the TSPL before unplugging the RRL so it does not go into discharge mode.
RRLC12S	RRLC12S option is to be used with the OnePass OCU, OCS, OD, OFC and OD for 0-24V integrated single-circuit or 0-10V low voltage controls applications. Not available with integral dimming sensors.
TRALTBD, FRALTBD	RALTBD for pricing only. Replace with applicable RAL number and finish when ready to order. See the RAL BROCHURE for available color options.
TCPC, FCPC	CPC options for pricing only. Custom color chip needs to be sent in to your Customer Resolution specialist before order can be processed. Click HERE for more details
E10WRSTAR	Not available with wet location, EC1, EC6, QDS, CP, 347V, NPS80EZ ER, NLTAIRER2, NLTAIREM2, ALO3 & ALO4 w/DALI, OR 2000-4500 lumens w/JOT. Top access installation or 17.5" plenum clearance required for roomside installation. Not available with integral test switch

Accessories: *Order as separate catalog number.*

EAC ISSM 375	Compact interruptible emergency AC power system
EAC ISSM 125	Compact interruptible emergency AC power system
GRA68 JZ	Oversized trim ring with 8" outside diameter
SCA6	Sloped Ceiling Adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

(Maximum order quantity for design select lead times is 112.)

Emergency Battery Pack Options - Field Installable

Battery Model Number	Wattage	Runtime (Minutes)	Lumen Output* @ 120 Lumens/Watt	Other
ILB CP07 2H A	7W	120	840	Storm Shelter / 2 Hour Runtime
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A+	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A+	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic
ILBHI CP10 HE SD A+	10W	90	1200	347-480V AC Input, Title 20, Self Diagnostic
ILBHI CP15 HE SD A+	15W	90	1800	347-480V AC Input, Title 20, Self Diagnostic

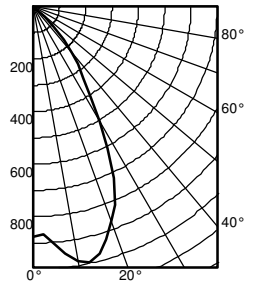
All the above are UL Listed products that are certified for field install external/remote to the fixture.
*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.
The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.
Please contact us at techsupport@iotaengineering.com for any Emergency Battery related questions.

LDN6

PHOTOMETRY

Distribution Curve	Distribution Data	Output Data	Illuminance Data at 30" Above Floor for a Single Luminaire

LDN6 35/10 LO6AR, input watts: 10.44, delivered lumens: 987.10, LM/W = 94.54, spacing criterion at 0= 1.02, test no. ISF 30716P262.



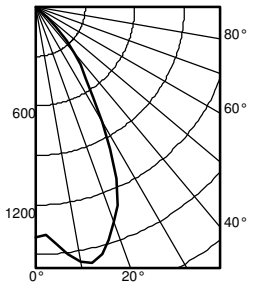
	Ave	Lumens
0	876	
5	905	89
15	971	269
25	720	322
35	330	214
45	110	87
55	1	4
65	1	1
75	0	0
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	680.7	69.0
0° - 40°	895.0	90.7
0° - 60°	986.0	99.9
0° - 90°	987.0	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	987.0	*100.0

*Efficiency

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	29.0	5.7	14.5	9.6	2.9
10.0	15.6	7.7	7.8	13.1	1.6
12.0	9.7	9.8	4.9	16.6	1.0
14.0	6.6	11.8	3.3	20.1	0.7
16.0	4.8	13.9	2.4	23.6	0.5

LDN6 35/15 LO6AR, input watts: 17.52, delivered lumens: 1572.9, LM/W = 89.77, spacing criterion at 0= 1.02, test no. ISF 30716P265.



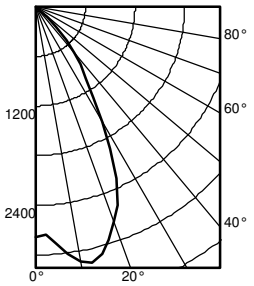
	Ave	Lumens
0	1396	
5	1442	142
15	1547	429
25	1147	514
35	526	342
45	176	139
55	2	6
65	1	1
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	1084.6	69.0
0° - 40°	1426.2	90.7
0° - 60°	1571.3	99.9
0° - 90°	1572.9	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	1572.9	*100.0

*Efficiency

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	46.2	5.7	23.1	9.6	4.6
10.0	24.8	7.7	12.4	13.1	2.5
12.0	15.5	9.8	7.7	16.6	1.5
14.0	10.6	11.8	5.3	20.1	1.1
16.0	7.7	13.9	3.8	23.6	0.8

LDN6 35/30 LO6AR, input watts: 34.75, delivered lumens: 3138.5, LM/W = 90.31, spacing criterion at 0= 1.02, test no. ISF 30716P274.



	Ave	Lumens
0	2786	
5	2877	284
15	3087	855
25	2289	1025
35	1049	682
45	350	277
55	5	12
65	2	2
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	2164.3	69.0
0° - 40°	2845.9	90.7
0° - 60°	3135.3	99.9
0° - 90°	3138.5	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	3138.5	*100.0

*Efficiency

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	92.1	5.7	46.1	9.6	9.2
10.0	49.5	7.7	24.8	13.1	5.0
12.0	30.9	9.8	15.4	16.6	3.1
14.0	21.1	11.8	10.5	20.1	2.1
16.0	15.3	13.9	7.6	23.6	1.5

HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

The LPW rating is also available at Designlight Consortium.

LUMEN OUTPUT MULTIPLIERS - FINISH	Clear (AR)	White (WR)	Black (BR)
Specular (LS)	1.0	N/A	N/A
Semi-specular (LSS)	0.950	N/A	N/A
Matte diffuse (LD)	0.85	N/A	N/A
Painted	N/A	0.87	0.73

LUMEN OUTPUT MULTIPLIERS - CRI	
80	1.0
90	0.874

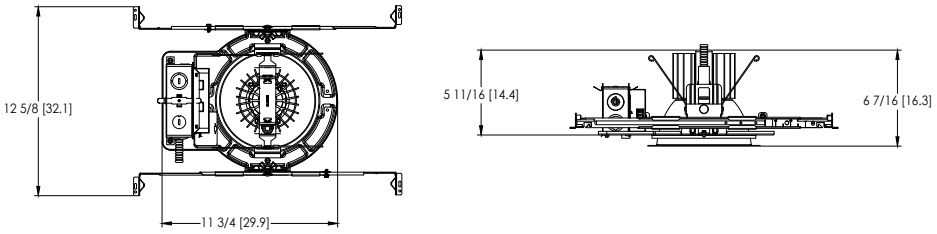
LUMEN OUTPUT MULTIPLIERS - CCT	2700K	3000K	3500K	4000K	5000K
80CRI	0.950	0.966	1.000	1.025	1.101

Notes

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

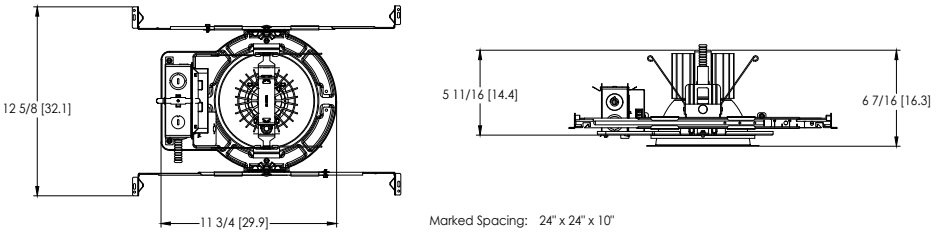
* All dimensions are inches (centimeters) unless otherwise noted.

LDN6 500-3000 Lumens



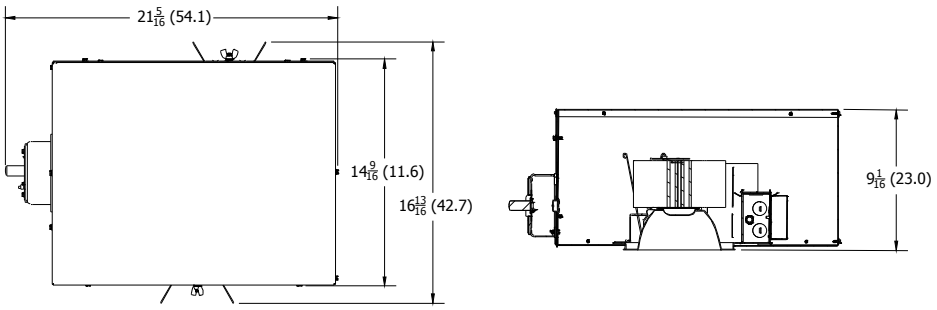
Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

LDN6 4000-5000 Lumens



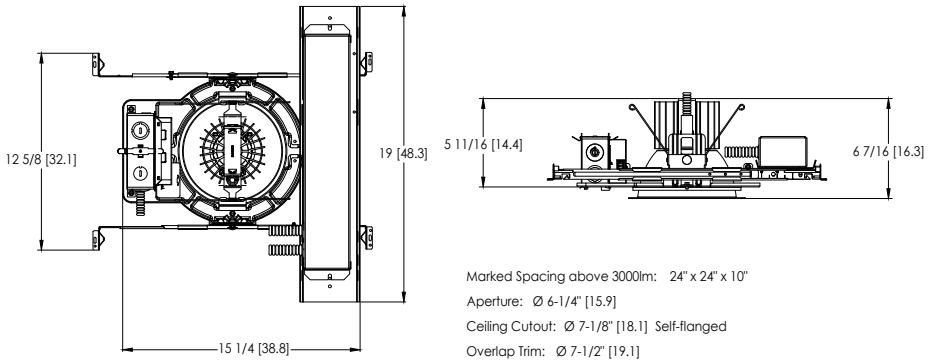
Marked Spacing: 24" x 24" x 10"
Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

LDN6 CP



Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 EL



Marked Spacing above 3000lm: 24" x 24" x 10"
Aperture: Ø 6-1/4" [15.9]
Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged
Overlap Trim: Ø 7-1/2" [19.1]

ADDITIONAL DATA

JOT
JUST ONE TOUCH

The Sensor Switch JOT enabled solution offers a wireless, app-free approach to single room lighting control. JOT enabled products use Bluetooth® Low Energy (BLE) technology to enable wireless dimming and switching.

Diagram

LDN6 Series

Sensor Switch
WSXA JOT

1. **Power:** Install JOT enabled fixtures and controls as instructed.
2. **Pair:** Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. **Play:** Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

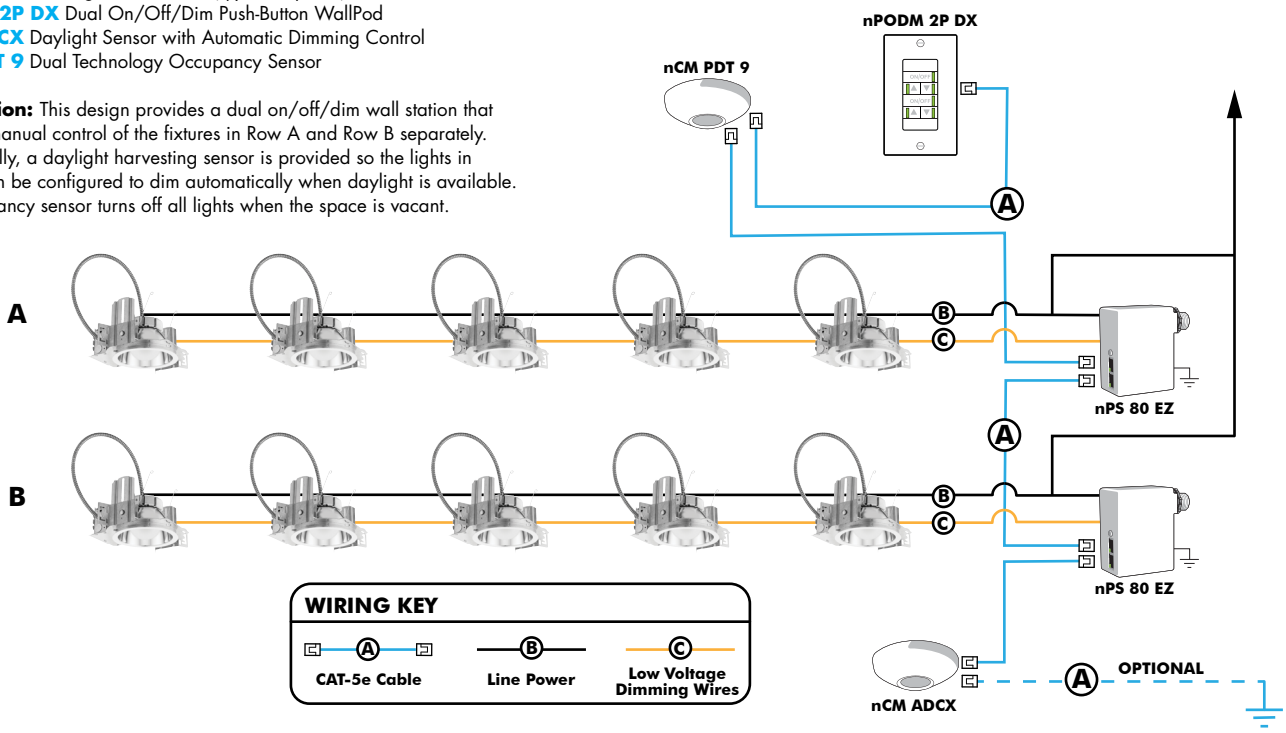
COMPATIBLE 0-10V WALL-MOUNT DIMMERS		
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE
Lutron®	Diva® DVTV	
	Diva® DVSCTV	
	Nova T® NTFTV	
	Nova® NFTV	
Leviton®	AWSMT-7DW	CN100
	AWSMG-7DW	PE300
	AMRMG-7DW	
	Leviton Centura Fluorescent Control System	
	IllumaTech® IP7 Series	
Synergy®	ISD BC	RDMFC
	SLD LPCS	
	Digital Equinox (DEQ BC)	
Douglas Lighting Controls	WPC-5721	
Entertainment Technology	Tap Glide TG600FAM120 (120V)	
	Tap Glide Heatsink TGH1500FAM120 (120V)	
	Oasis 0A2000FAMU	
Honeywell	EL7315A1019	EL7305A1010 (optional)
	EL7315A1009	
HUNT Dimming	Preset slide: PS-010-IV and PS-010-WH	
	Preset slide: PS-010-3W-IV and PS-010-3W-WH	
	Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V	
	Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V	
	Remote mounted unit: FD-010	
Lehigh Electronic Products	Solitaire	PBX
PDM Electrical Products	WPC-5721	
Starfield Controls	TR61 with DALI interface port	RT03 DALInet Router
WattStopper®	LS-4 used with LCD-101 and LCD-103	

LDN6

EXAMPLE
Group Fixture Control*
*Appiication diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty: 2 required)
nPODM 2P DX Dual On/Off/Dim Push-Button WallPod
nCM ADCX Daylight Sensor with Automatic Dimming Control
nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in Row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Choose Wall Controls

nLight offers multiple styles of wall controls - each with varying features and user experience.

Push-Button Wallpod
Traditional tactile buttons and LED user feedback

Graphic Wallpod
Full color touch screen provides a sophisticated look and feel

nLight® Wired Controls Accessories:			
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight for complete listing of nLight controls.			
WallPod Stations	**Model number**	**Occupancy sensors**	**Model Number**
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16
Photocell controls	**Model Number**	Wall Switch w/ Raise/Lower (PIR/dual tech)	nWSX LV DX / nWSX PDT LV DX
Dimming	nCM ADCX	**Cat-5 cables (plenum rated)**	**Model Number**
		10', CAT5 10FT	CAT5 10FT J1
		15, CAT5 15FT	CAT5 15FT J1

nLight® AIR Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Model number
On/Off single pole	rPODB [color]
On/Off two pole	rPODB 2P [color]
On/Off & raise/lower single pole	rPODB DX [color]
On/Off & raise/lower two pole	rPODB 2P DX [color]
On/Off & raise/lower single pole	rPODBZ DX WH[1]

Notes

1 Can only be ordered with the RES7Z zone control sensor version.

UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CL**AIR**ITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

nLight AIR

nLight AIR is the ideal solution for retrofit or new construction spaces where adding communication is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each Lithonia LDN Luminaire. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CL**AIR**ITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

nLight AIR rPODB 2P DX

Mobile Device

LITHONIA LIGHTING®

Catalog Number	OLLWD LED P1 40K 120 DDB
Notes	
Type	S

FEATURES & SPECIFICATIONS

INTENDED USE

Provides years of maintenance-free illumination for outdoor use in residential & commercial applications. Ideal for applications such as lighting walkways and stairways for safety and security.

CONSTRUCTION

Cast-aluminum housing with corrosion-resistant paint in either dark bronze or white finish.

ADA compliant.

OPTICS

4000K CCT LEDs.

Polycarbonate lens protects the LED from moisture, dirt and other contaminants.

LUMEN MAINTENANCE: The LED will deliver 70% of its initial lumens at 50,000 hour average LED life. See Lighting Facts label on page 2 for performance details.

ELECTRICAL

MVOLT driver operates on any line voltage from 120-277V

Operating temperature -30ºC to 40ºC.

1KV surge protection standard.

INSTALLATION

Surface mounts to universal junction box (provided by others).

LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations.

Tested in accordance with IESNA LM-79 and LM-80 standards.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

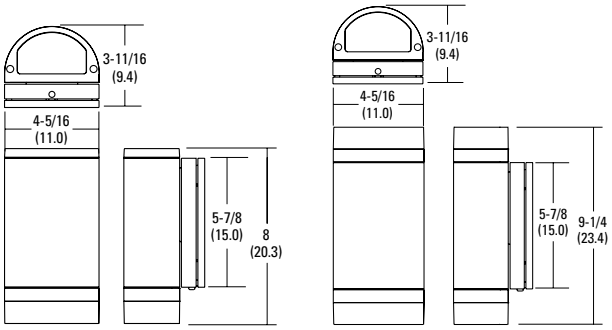
Outdoor General Purpose

OLLWD & OLLWU

LED WALL CYLINDER LIGHT

Specifications

All dimensions are inches (centimeters)



ORDERING INFORMATION For shortest lead times, configure products using **bolded options**.

Example: OLLWD LED P1 40K MVOLT DDB

Series	Performance Package	Color temperature (CCT)	Voltage	Finish
OLLWD LED Downlight **OLLWU LED** Up & downlight	**P1**	**40K** 4000K	**MVOLT** 120V-277V **120** 120V[1]	**DDB** Dark bronze **WH** White[2]

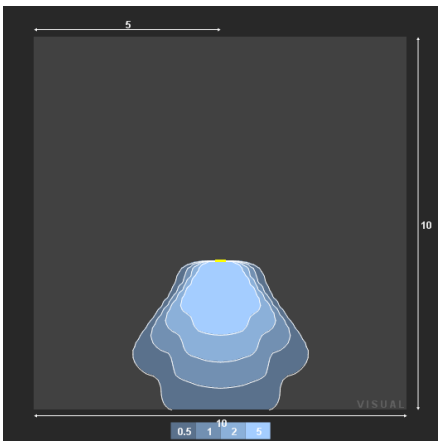
Notes

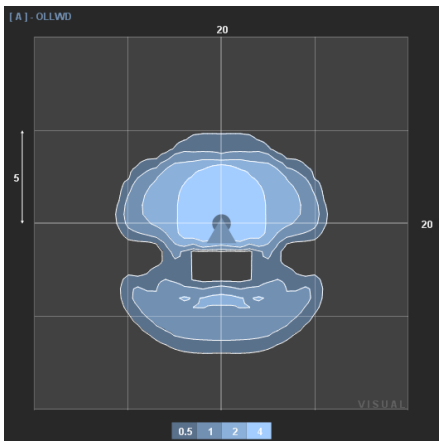
1. Only available with OLLWU and in DDB.
2. Only available with OLLWU.

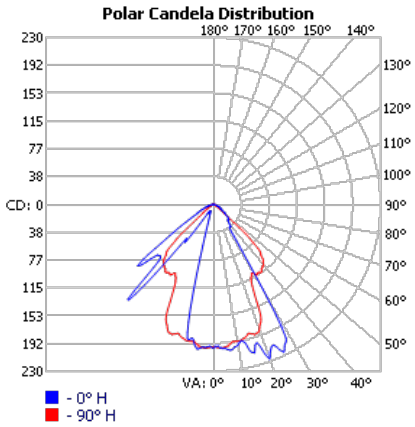
PHOTOMETRICS

To see complete photometric reports or download .ies files for this product,visit Lithonia Lighting's Outdoor LED homepage
Tested in accordance with IESNA LM-79 and LM-80 standards.

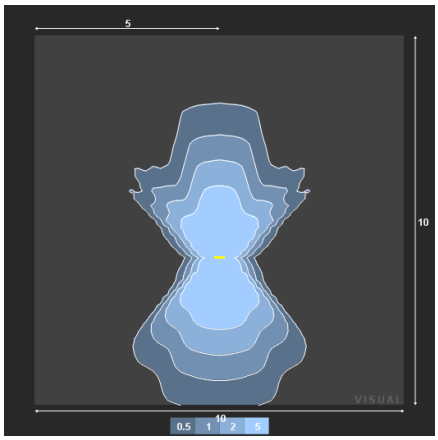
OLLWD

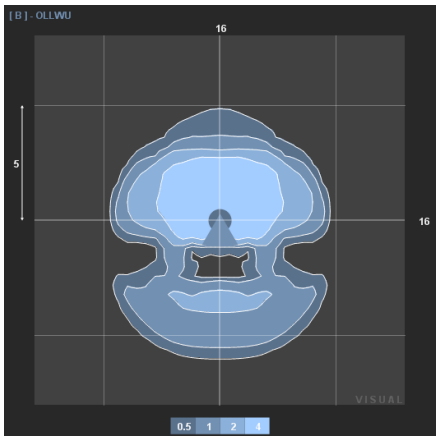


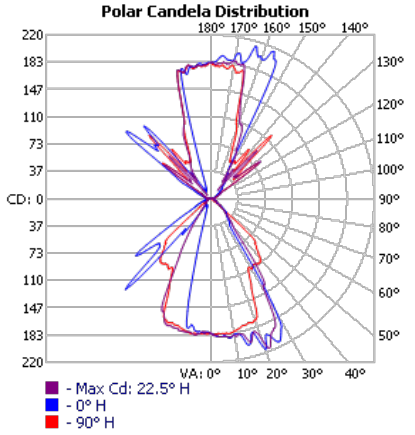




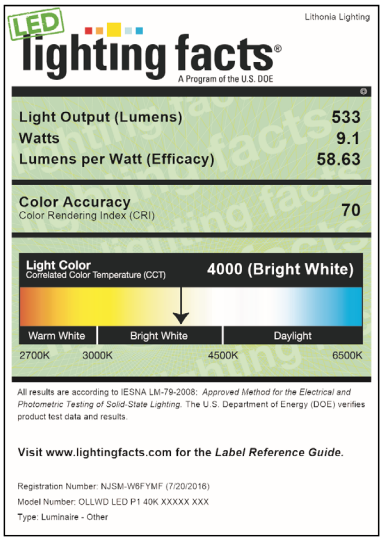
OLLWU



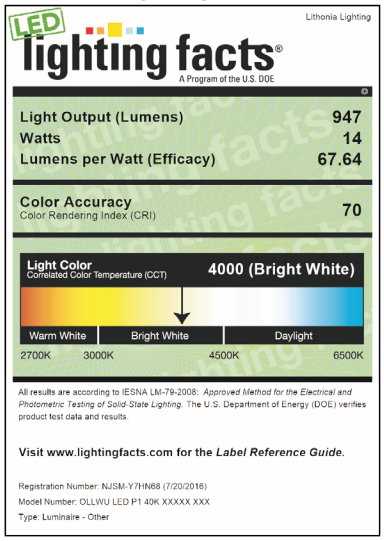




OLLWD



OLLWU



DECORATIVE INDOOR & OUTDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com

SLIM18N USA

12, 18 and 26 Watt SLIM wall packs are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.1 lbs

Project:	**Type:** SLIM18
Prepared By:	**Date:**

Driver Info

Type	Constant Current
120V	0.18A
208V	0.11A
240V	0.09A
277V	0.08A
Input Watts	21.3W

LED Info

Watts	18W
Color Temp	4000K (Neutral)
Color Accuracy	74 CRI
L70 Lifespan	100,000 Hours
Lumens	2,547 lm
Efficacy	119.6 lm/W

Technical Specifications

Compliance

UL Listed:
Suitable for wet locations. Suitable for mounting within 4ft (1.2m) of the ground.

IP Rating:
Ingress protection rating of IP66 for dust and water

ADA Compliant:
SLIM™ is ADA Compliant

IESNA LM-79 & LM-80 Testing:
RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:
This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: P0000171P

LED Characteristics

LED:
Multi-chip, long-life LED

Color Consistency:
3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:
LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:
RAB's range of Correlated Color Temperature follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Performance

Lifespan:
100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:
Equivalent to 100W Metal Halide

Construction

Cold Weather Starting:
The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:
Suitable for use in up to 40°C (104°F)

Housing:
Precision die-cast aluminum housing

Lens:
Tempered glass lens

Reflector:
Specular thermoplastic

Gaskets:
High-temperature silicone

Finish:
Formulated for high durability and long-lasting color

Green Technology:
Mercury and UV free. RoHS-compliant components.

Installation

Mounting:
Heavy-duty mounting bracket with hinged housing for easy installation

Recommended Mounting Height:
Up to 14 ft

Other

Patents:
The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Technical Specifications (continued)

HID Replacement Range:
Replaces 100W Metal Halide

Warranty:
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

FTC Country of Origin:
This product was assembled in the USA by RAB using imported components

Buy American Act Compliance:
This product complies with the Buy American Act

Optical

BUG Rating:
B1 U0 G0

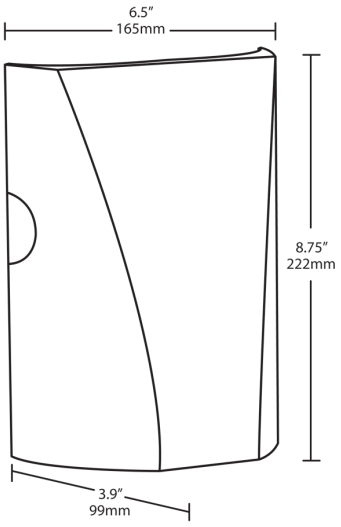
Electrical

Driver:
Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 120V: 0.19A, 208V: 0.11A, 240V: 0.10A, 277V: 0.08A

THD:
11% at 120V, 21% at 277V

Power Factor:
99.2% at 120V, 91.5% at 277V

Dimensions



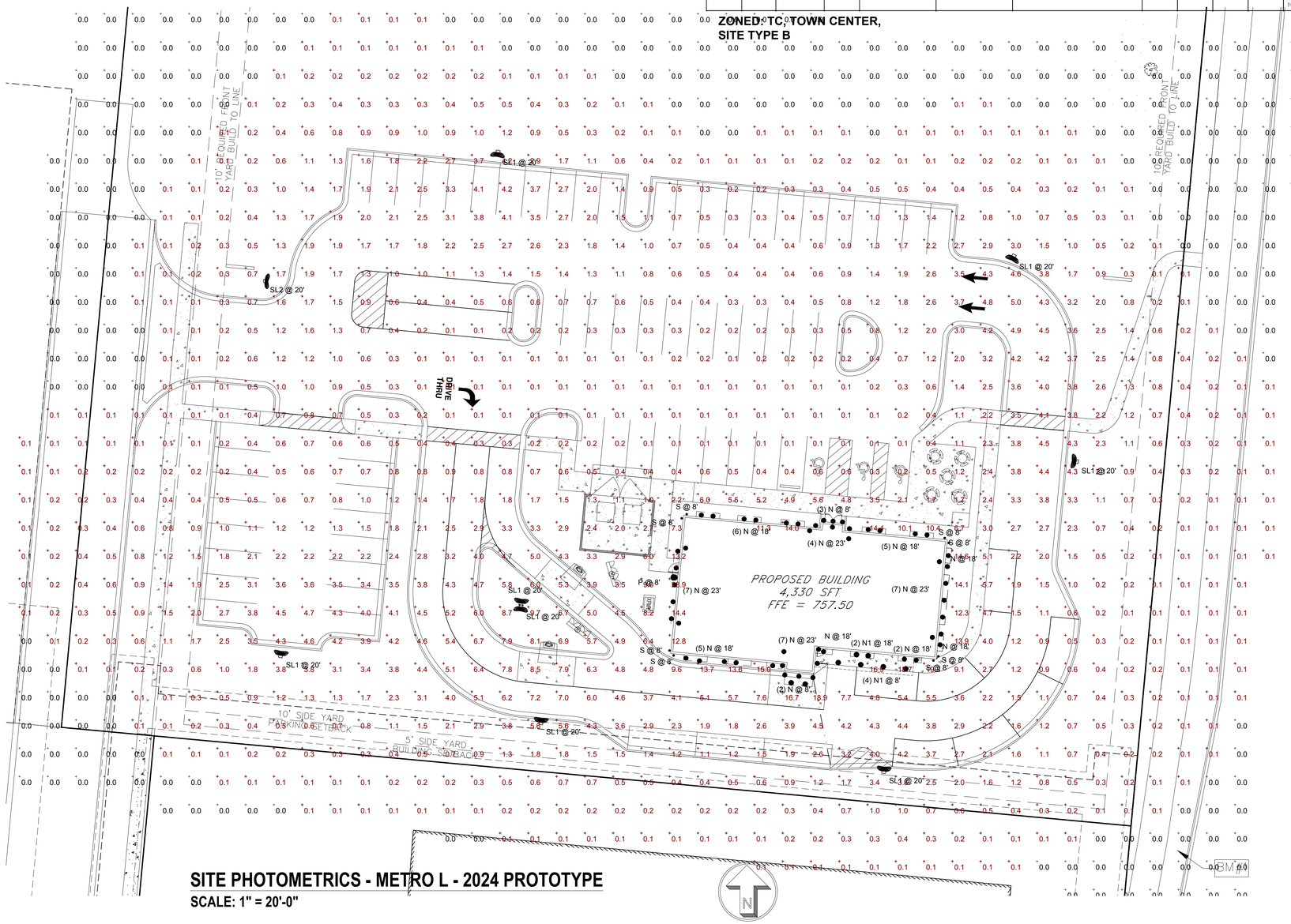
Features

- Full cutoff, fully shielded LED wall pack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year, No-Compromise Warranty

Schedule											
Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
◯	N		49	Lithonia Lighting	LDN6 40/15 LO6AR LS	6IN LDN, 4000K, 1500LM, CLEAR, SPECULAR REFLECTOR, CRI80	1	1596	0.9	17.52	Maxi: 1656cd
▭	P		1	RAB LIGHTING INC. RC LIGHTING	SLIM18	CAST BROWN PAINTED FINNED METAL HOUSING, 1 CIRCUIT BOARD WITH 1 LED, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH, CLEAR FLAT GLASS LENS IN CAST BROWN PAINTED METAL LENS FRAME.	1	2564	0.9	21	Maxi: 1549cd
▯	SL1		8	Lithonia Lighting	DSX2 LED P1 35K 80CRI T3M HS	D-Series Size 2 Area Luminaire P1 Performance Package 3500K CCT 80 CRI Type 3 Medium Houseside Shield	1	15189	1	134.5029	Maxi: 12630cd
▭	S		8	Lithonia Lighting	OLLWD LED P1 40K MVOLT	OUTDOOR LED WALL CYLINDER DOWN LIGHT & 4000K NICHIA 219C	1	576	1	9.02	Maxi: 2104cd
▯	SL2		1	Lithonia Lighting	DSX1 LED P1 35K 80CRI T2M HS	D-Series Size 1 Area Luminaire P1 Performance Package 3500K CCT 80 CRI Type 2 Medium Houseside Shield	1	5859	1	50.9015	Maxi: 5159cd

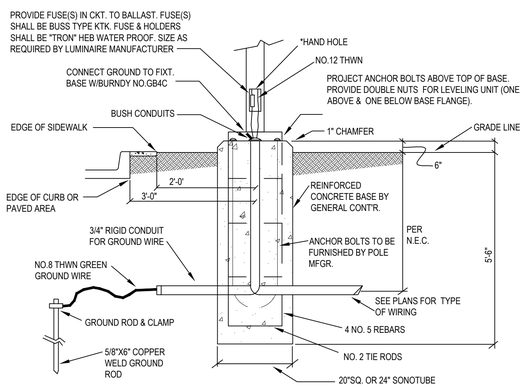
Statistics						
Description	Symbol	Avg	Min	Max/Min	Avg/Min	Max
SITE	+	1.4 fc	0.0 fc	N/A	N/A	28.9 fc

ZONED TC, TOWN CENTER, SITE TYPE B



SITE PHOTOMETRICS - METRO L - 2024 PROTOTYPE

SCALE: 1" = 20'-0"



BASE DETAIL- OUTDOOR LIGHTING STANDARDS

NOT TO SCALE

HENRICKSON
ARCHITECTURE + PLANNING
2325 Belmont Center Dr., Ste. B
Belmont, MI. 49306
616.458.5554

Culver's

Mirrored Metro L - 2024

YPSILANTI, MICHIGAN

REVIEW	•	12.23.24
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DRAWN BY:	•	
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NOT FOR CONSTRUCTION

PROJECT No. • 240504

E-9

Roosien & Associates
SURVEYING AND ENGINEERING

December 26, 2024

Fletcher Reyher
Charter Township of Ypsilanti
7200 S. Huron River Drive
Ypsilanti, MI 48197
freyher@ypsitownship.org

RE: Review Response Letter
Culver's Restaurant – 1410 S Huron St

Dear Mr. Reyher,

We are in receipt of the Township Planner's plan review letter dated 8/21/24, Township Engineer's plan review letter dated 8/9/24, and the WCWRC's review letter dated 8/23/24. In response to the items addressed, we offer the following comments in **bold**:

PLANNING COMMENTS

1. Recommend conditionaing any approval of the Culver's Site Plan upon any future land division to result in a minimum 2-acre property for the Culver's site to comply with the minimum site area for drive-through facilities and the Site Type D Standards.
   Noted.

2. Lack of consistency between the elevation of the Culver's building and the Existing Huron Street sidewalk and the relationship between the Aldis building and Huron Street sidewalk, requiring a modification in the plan, or a variance from Sec. 507(B).
   The access driveway to Aldi from the west is at a much higher elevation than the access drive to Culvers at the west as the Township approved Aldi's plan to construct the north end of the western private road at a much lower elevation. In order to provide ADA access throughout the site, the finished floor of Culver's must be lower as shown.

3. Applicant to consider moving the building closer to Huron St. than proposed to either avoid a variance altogether or minimize the variance to site their building in a consistent manner with the Aldis building.
   Site layout modified and supported by Township staff and planner per communications.

4. Show impervious surface calculation on plans using the land area occupied by the project.
   Provided as requested on Sheet C-105.

5. PC to discuss need for excess impervious surface due to parking space length.
   Noted.

6. Variance required for deficiency in number of stacking spaces.
   This is incorrect. Per conversations, the proposed stacking exceeds the required amount.

7. Applicant to provide documentation regarding loading/unloading activities, and lack of loading unloading space shown on the plans.
   Sheet C-102 describes unloading activities and shows the required space.

8. Applicant to describe how trash will be handled and at what time of day to confirm it does not conflict with adjacent parking spaces.
   Sheet C-102 describes refuse handling activities and timing.

9. Show trash hauler turning movements on the plans to confirm dumpster can be accessed.
   Provided as requested on Sheet C-102.

10. Relocate service/escape lanes out of the front yard or seek variance.
    Site layout modified and supported by Township staff and planner per communications.

11. Amend plans to reduce visibility of drive-through lanes from public right-of-way.
    Site layout modified and supported by Township staff and planner per communications.

12. Revise layout or obtain variance for more than 60 lineal feet of stacking spaces located in the front yard.
    Site layout modified and supported by Township staff and planner per communications.

13. Provide 30-inch-tall masonry screen wall along parking facilities located along the Huron St. right-of-way.
    Due to proposed grades with the vehicle access aisles more than 4.5 feet below the grade of the street a 2.5 feet tall wall will provide no benefit.

14. Show how delivery trucks will circulate around the site.
    Provided as requested on Sheet C-102.

15. Reconsider design of sidewalk connection to eliminate the need to cross vehicular travel lanes.
    Site layout modified and supported by Township staff and planner per communications.

16. Redesign pedestrian connection from westerly sidewalk to building entrance to route that is more convenient.
    Site layout modified and supported by Township staff and planner per communications.

17. Add paved surface adjacent to second door on the north facade.
    Pavement added as requested.

PLANNING LANDSCAPING COMMENTS

1. Add four more deciduous Street Yard landscape trees.
   Asked landscape architect to address, see landscape plan.

2. Remove “existing” trees from count toward meeting the ordinance requirements on the Culver’s site.
   Asked landscape architect to address, see landscape plan.

3. Add the following to the Landscape Plan: a. Plant Schedule table; b. Perennial Planting Detail; c. Total area planted in lawn; d. Large evergreen trees to plant mix; e. Total area of paved driveway and parking lot surface; f. Increase size of two parking lot islands to 150 s.f. minimum; g. Total dimension of the parking lot perimeter (including the service lanes); h. Replace prohibited invasive species with non-invasive (and preferably native) species; i. Increase plant size, as indicated in review; j. Note on plans indicating an underground sprinkler system will be installed in all landscape areas.
   Asked landscape architect to address, see landscape plan. All proposed parking islands meet the minimum size requirements.

4. Show location, species, DBH, condition of existing trees on the site plan.
   A tree survey is provided to meet this request.

5. Incorporate raingardens/bioswales per Township Engineer's assessment.
   None required or proposed.

6. If berm remains, meet requirements of Sec. 1301(I).
   No berm is proposed. Slopes are proposed as required to match existing grades at project boundaries.

7. Applicant to respond to suggestion of shifting the dumpster screen so the opening faces the parking spaces directly behind the building so that it's not visible from street.
   Site layout modified and supported by Township staff and planner per communications.

8. Applicant to describe if "optional" screen wall shown on dumpster screen detail will be used to block views into unsecured dumpster screen entrance.
   Architect has removed all references to "optional" to clarify proposed project.

9. Add pier and fencing enclosure to site plan.
   Architect has removed these details as none were or are proposed.

10. Screen at-grade utility/electrical equipment.
    Asked landscape architect to address, see landscape plan.

PLANNING LIGHTING COMMENTS

1. Provide manufacturer cut sheets for light fixtures N, P and S.
   Asked electrical contractor to address, see updated lighting plan.

2. Modify light fixture S to a fixture that only shines downward.
   Asked electrical contractor to address, see updated lighting plan.

3. Reduce light levels around building to a maximum of 20 foot-candles.
   Asked electrical contractor to address, see updated lighting plan.

4. Adjust tree/pole-mounted light fixtures on north side of parking lot and in landscape island on south side of building closes to drive-through entrance.
   Asked electrical contractor to address, see updated lighting plan.

5. Remove “optional blue LED accent lighting” from building elevations.
   Asked architect to address, see updated elevation plan.

6. Indicate proposed lighting along sidewalk from Huron St.
   No public right-of-way lighting is proposed.

ENGINEERING COMMENTS

Site Utilities

1. This office defers to YCUA on the review and approval of the proposed water main and water service layout. It is our understanding that YCUA doesn’t typically allow long dead-ends and may prefer for the watermain to be looped through the site by bringing it around the north and west sides of the building with the water services off the north side. At a minimum, the applicant shall consider providing a water main stub to the west to ensure the single point of vehicular access to Culvers isn’t disturbed in the future when the western portion of the “Seaver Farms” site develops.
   Not required per communication with YCUA.

2. The applicant shall note that the proposed sanitary sewer service shall not be located within or under the underground dry well. The applicant shall review and revise accordingly.
   Proposed sanitary sewer relocated as requested.

3. The applicant shall provide the public sanitary sewer easement limits on the plans for reference. The applicant shall note that the sanitary sewer easement width shall be twice the depth of the pipe plus the diameter of the pipe plus 2 feet, or 25 feet, whichever is greater, per Township Standards.
   25 feet wide easement provided as requested.

Stormwater Management

4. It appears that the northern section of the property is not being developed at this time; however, the drainage area still needs to be accounted for and future drainage access should be provided. It is recommended that the drainage areas be revised to include this area with the current C-factor and a note be provided to clarify the intent on how this area will be accounted for in terms of stormwater management.
   Modified as requested. A stub has been added to the north of the proposed site to collect stormwater.

5. The applicant shall clarify if the stormwater quality volume is the first flush volume. The applicant shall note that the first flush volume is required to be managed on-site. This office defers to the Washtenaw County Water Resources Commissioner’s office on the review and approval of the proposed stormwater management system.
   First flush volume is the stormwater quality volume.

Paving/Grading/Site Layout

6. The applicant shall address the following regarding the proposed crosswalks within the parking lot to allow for better pedestrian visibility:
   a. Re-align the eastern crosswalk to be perpendicular to the drive-thru entrance to avoid potential conflict with stacking.
      Modified as requested.
   b. Re-align the western crosswalk to be through the northwestern parking island.

Modified as requested.

7. It appears the proposed grading around the dead-end of the private drive and the northern property line will create a low area that may or may not drain. It is recommended that a storm sewer stub with a "bee-hive" structure be provided or the grading be revised to ensure positive drainage of this area. It is noted that the northern portion of the property may eventually be developed; however, creating a low area could promote new unregulated wetlands to form and create a nuisance area that will be difficult to maintain (e.g. mowed).
   Grading is revised and positive drainage is provided by adding a flared end section at a low spot that connects to the storm sewer system.

8. The applicant shall adjust the dumpster enclosure location such that the open doors won't block the sidewalk. The applicant shall provide a note on the plans clarifying the time of garbage pickup and the parking spaces in front of the dumpster shall be hatched.
   Garbage pickup time is 7am to 10am which is not an operating time for the restaurant.

9. The office defers to the Ypsilanti Township Fire Department on the review and approval of the private drive turnaround. The applicant shall note that a temporary hammerhead or cul-de-sac- may be required, and no parking signage shall be provided within the turnaround area.
   Hammerhead is formed with the north drive as discussed and approved at the pre-application meeting.

10. The applicant shall provide a fire truck turning template on the north and east side of the proposed building. This office defers to the Ypsilanti Township Fire Department on the review and approval of site accessibility.
    Fire code only requires that fire truck reaches within 150' of entire building.

11. The applicant shall provide a garbage truck turning template to verify sufficient space for accessibility to the dumpster enclosure has been provided.
    Garbage truck turning template has been added as requested.

12. It is noted that loading will occur during non-business hours; however, the applicant shall identify the location of the loading zone on the plans.
    Loading zone added as requested.

General

13. It currently appears that the applicant utilized old Seaver Farms topography that was collected prior to the expansion of Pond A. The applicant shall verify all grades on-stie and within 100 feet beyond the property lines. The applicant shall also label the WCWRC easement to the north of the property.
    Topographical survey updated and easement added as requested.

14. The applicant shall provide the location of all benchmarks on the plans for reference.
    Benchmark provided as requested.

WCWRC COMMENTS

1. In order to accommodate the runoff from the proposed development, first flush treatment will be required on-site and the regional basin will need to be expanded to accommodate the difference between the calculated detention volume (including a penalty for no infiltration) and the calculated first flush volume.

Noted. It is anticipated that if the regional basin has not been expanded prior to the start of construction for this site, it will occur concurrently so that the excavated material can be utilized as fill on this site.

2. All existing drainage easements must be indicated on the plan sheets.
   The existing drainage easements have been added as requested.

3. The on-site water quality feature should be called out on each plan sheet where it is depicted.
   The callout has been added as requested.

4. The plan set must include the runoff calculation worksheets W1 through W13.
   The applicable sheets have been added as requested.

5. Geotechnical information showed that the on-site native soils cannot meet the minimum accepted infiltration rate for infiltration BMPs.
   Noted.

6. The underground fabric wrapped stone section detail shown on plan sheet C-103 indicates the bottom of the stone bed has been set at Elevation 744.50. The perforated pipe running between CB-3 and CB-4 appears to be the only means to direct runoff into the stone bed. The pipe invert is noted as Elevation 744.50. Since the site cannot provide infiltration, it is unclear how any runoff will enter utilize the stone storage bed since the volume in the stone above the pipe will not be utilized unless the perforated pipe is full of water and there is an outlet structure located within CB-4. Reference to a 1/5=inch diameter outlet orifice is made on plan sheet C-105 but no outlet detail is provided. a. Outlet calculations should follow the example shown in the rules for a single-stage outlet.
   As discussed with staff, the outlet was previously provided on Sheet C-501 and the stone system will function to provide water quality detention as required.

7. The minimum time of detention for the first flush volume is 24 hours. Calculations confirming that this has been achieved must be included in the plan set.
   The requested calculations were previously provided on Sheet C-105.

8. An estimated annual budget must be included with the long-term stormwater maintenance plan.
   An estimated annual cost has been added to Sheet C-104 as requested.

9. Please see attached invoice for the current fees and remit these fees upon receipt.
   Fees have been paid as requested.

I trust that our responses adequately address your concerns. We have included an updated quantity list and engineer's estimate. Please feel free to contact our office at (616) 361-0155 if you have any questions or further comment.

Sincerely,

ROOSIEN & ASSOCIATES

Matt Cole, P.E., LEED AP
Senior Civil Engineer