Agenda
City of Springboro Planning Commission Meeting
Wednesday, August 9, 2023, 6:00 p.m.
Council Chambers, City Building, 320 West Central Avenue

I. Call to Order

II. Approval of Minutes

A. July 12, 2023 Planning Commission Meeting

III. Agenda Items

A. Final Approval, Site Plan Review, 55 Edwards Drive, building addition for Thaler Machine manufacturing/warehouse facility

B. Final Approval, Final Development Plan, Village Park PUD-MU, Planned Unit Development-Mixed Use, office component, Southwest of Intersection of Gardner Road and Village Park Drive, proposed Clearcreek Fire Station No. 24

C. Final Approval, Record Plan, Midway Meadows, Section Three

D. Preliminary Review, Preliminary Plan, Cedar Creek subdivision, 7878 & 7914 Sharts Road

E. Preliminary Review, Final Development Plan, Village Park PUD-MU, Planned Unit Development-Mixed Use, 748 Gardner Road, retail development

F. Preliminary Review, Rezoning, R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential, 1525 South Main Street (SR 741), proposed single-family residential subdivision

G. Preliminary Review, General Plan, R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential, 1525 South Main Street (SR 741), proposed single-family residential subdivision

IV. Guest Comments

V. Planning Commission and Staff Comments

VI. Adjournment

Background Information & Staff Comments/Recommendations
City of Springboro Planning Commission Meeting
Wednesday, August 9, 2023, 6:00 p.m.
Council Chambers, City Building, 320 West Central Avenue

III. Agenda Items

A. Final Approval
Site Plan, 55 Edwards Drive, building addition for Thaler Machine manufacturing/warehouse facility

Background Information

This agenda item is a request for site plan review approval for the construction of a 1,938-square foot building addition for Thaler Machine Company for their manufacturing/warehouse facility located at 55 Edwards Drive. The building is located immediately to the south of Thaler Machine's main operation on the north side of Edwards Drive. The site plan for the 14,022-square foot building was approved by the Planning Commission in July 2022.

As indicated in the submitted plans, the proposed addition would fill the present loading dock for the warehouse/manufacturing facility. In addition to the existing Thaler Machine operation to the north, adjacent land uses in the vicinity include the Cascade Car Wash to the east, located at the corner of Edwards Drive and Hiawatha Trail, a multi-tenant commercial buildings to the south, the site of the proposed Sheetz convenience store/fueling center/restaurant to the southwest on the west side of Tahlequah Trail, and the former site of Intregity Interiors general contractors to the northwest. Properties to the northwest and north are zoned ED, Employment Center District, while lands to the east, south and west are all zoned HBD District.

Given that the site is developed and the size of the addition, this item may proceed to final approval. No City Council action is required on this agenda item.

Staff Recommendation

City staff recommends approval of the site plan for the proposed addition on the condition of compliance with the following staff comments:

1. Eliminate dumpster enclosure; structures are not permitted in the building setback.
2. All testing of systems shall be scheduled through the Springboro Building Department at (937)-748-9791. All test shall be scheduled 48 hours in advance of testing. The Clearcreek fire District will witness all testing.

B. Final Approval

Final Development Plan, Village Park PUD-MU, Planned Unit Development-Mixed Use, office component, Southwest of Intersection of Gardner Road and Village Park Drive, proposed fire station

Background Information

This agenda item is the final approval of a final development plan for the development of Clearcreek Fire District Station No. 24 on Gardner Road between Village Park Drive and Anna Drive in the office component of the Village Park PUD-MU, Planned Unit Development-Mixed Use. The final development plan, submitted by KZF Design, Cincinnati, would allow for the construction of a four-bay, drive-through bay for apparatus, fire district administrative offices, living areas for Station No. 24 personnel, and training areas. The 4.0635-acre site will also include in the long-term space for use by the City of Springboro Public Works Department to be constructed at a later date.

The proposed site is vacant and is located in the office component of the Village Park PUD-MU. The use is permitted in this location as an essential service. Direct access for the apparatus bays will be to Gardner Road. Secondary access will be provided by private access drives shared with other properties to the north and south of the fire station.

All lands in the vicinity are within the Village Park PUD-MU, Planned Unit Development-Mixed Use, which was approved in September 2004. Immediately to the north of the proposed fire station site is Wade Insurance, 775 Gardner Road, to the south are two platted vacant office sites and Goddard School, 705 Gardner Road, and to the west is the City of Springboro's Gardner Park in the open space component of the PUD. To the east is the retail component of the PUD including Springboro Wine & Spirits, 748 Gardner Road, the vacant parcel that brought about tonight's Public Hearing, and Farmers & Merchants Bank/Biggby's Coffee, 720 Gardner Road. Zoning for all lands in the vicinity is controlled by the Village Park PUD-MU.

This agenda item was reviewed on a preliminary basis at the July 12th Planning Commission meeting at which time the Planning Commission authorized this item to be placed on a future agenda for final approval.

Staff Recommendation

City staff recommends approval of the final development plan for Fire Station No. 24 subject to the following comments:

1. Lighting plan as proposed complies with Chapter 1273, Exterior Lighting, of Planning and Zoning Code. Light fixtures to match Village Park PUD-MU design standards (Holophane Hallbrook) used in office component.
2. For landscaping plan provide 5 additional shade trees and 1 additional ornamental tree on Gardner Road frontage, and provide 33 additional trees (ornamental or shade/evergreen) for site requirement. Note that existing vegetation to remain on site may in-part satisfy landscaping requirement.
3. While not part of final development plan review process, signage to be reviewed by Zoning Inspector for compliance with Sign Code and Village Park PUD-MU design standards. Same applies to construction and other temporary signage.

4. C200 – Concrete apron at Gardner Road has incorrect material callout. Change H-C201 to read F-C201.
5. Provide minimum 4 foot width of sidewalk on both sides of proposed monument sign adjacent to Gardner Road.
6. Provide width of concrete channel connecting the drive aisle to the parking lot on the west side.
7. Provide record plan replatting the lot lines and establishing/vacating any necessary easements.
8. Provide water and sanitary sewer lateral details (material, size, meter, mtu) of which water laterals to be min 1" K copper with meter and mtu inside building. Sewer laterals to be min 6" SDR 35 with 2% slope.
9. Maintain 54" cover on water mains. Revise C003 and add on profile sheet accordingly.
10. Remove water system general notes on C003 and replace with city standard water main general notes.
11. Final revised and approved site plan shall be submitted to include all comments by staff and planning commission to have signature of the owner or duly authorized officer and stamped certified by a professional engineer.
12. An "As Built" drawing showing as built location and elevations of all improvements shall be submitted prior to the issuance of an occupancy permit.
13. Fire Department Connections (FDC) for all sprinkled buildings shall be with-in 75 feet of a fire hydrant on the public water system.

C. Final Approval
Record Plan, Midway Meadows, Section Three

Background Information

This agenda item is a record plan for the future Sheetz convenience store/fueling center/restaurant development proposed for 800 West Central Avenue (SR 73), the former site of Edwards Furniture. It contains approximately 2.4 acres, of which 2.0 acres are in the platted lot and 0.4 acres are in dedicated right-of-way. The northern Edwards Drive right-of-way dedication is for a future east/west connection from Tahlequah Trail to Greenwood Lane, the construction of which is undetermined. The record plan will proceed to City Council upon approval of Planning Commission.

Staff Recommendation

Staff recommends approval of the record plan subject to compliance with the following comments:

1. Submit to Warren County for review and make revisions, if any.
2. Clearcreek Fire District has no comments on the record plan.

D. Preliminary Review
Preliminary Plan, Cedar Creek subdivision, 7878 & 7914 Sharts Road

Background Information

This agenda item is based on a request filed by Associate Construction of Carlisle, Ohio, property owner, requesting preliminary review of the subdivision for the proposed Cedar Creek subdivision

located on approximately 42.08 acres of land at 7878 and 7914 Sharts Road. The subject property is vacant.

The proposed site was the subject of a rezoning application from Franklin Township R1B PUD, Single-Family Residential Planned Unit Development, to City of Springboro R-2, Low Density Residential District. The application was reviewed by the Planning Commission at the April 12th meeting, and approved at the May 10th meeting. A Public Hearing was held before City Council on June 1st; following three readings of the Ordinance, the rezoning was approved at the July 6th City Council meeting and will become effective on August 5th.

The property was annexed into the City of Springboro on July 15th.

The R-2 District allows for the development of moderate density residential areas in the community at the rate of four dwelling units per acre on lots 9,000 square feet or larger. Examples of R-2 District areas in Springboro include the Royal Oaks, Fieldstone, and Creekside subdivisions, as well as the Sawgrass Pointe project also by Associate Construction. The proposed subdivision will include 75 lots, access points to Sharts Road and Advanced Drive, and 8.64 acres of open space on the south end of the property to be purchased by the City as parkland.

Lands to the north, south, and east are generally within the City of Springboro, while lands to the west are generally in Franklin Township. To the north, on the west side Sharts Road is a residential dwelling being developed in Franklin Township, in Springboro Quick Tech on the north side of the Advanced Drive and Sharts Road intersection, to the east in the Stolz Industrial Park are Matrix 5 at 105 Advanced Drive, Hanover Clocks at 125 Advanced Drive, Armstrong Trailer at 175 Advanced Drive, Honest Abe Roofing at 235 Advanced Drive, and Corvexxe at 245 Advanced Drive, to the south the City of Springboro's Clearcreek Park, and a large residential lot to the southwest. To the west in Franklin Township are residential lots and a church, Franklin Faith Tabernacle, all on Sharts Road.

In the City of Springboro, adjacent zoning includes ED, Employment Center District, to the north, PUD, Planned Unit Development, to the east associated with the Stolz Industrial Park on Advanced Drive, and to the south R-2 District overlaying Clearcreek Park and residential uses to the west. To the west in Franklin Township, can be found R2, Two-Family Residential District, regulated in the Warren County Rural Zoning Code.

Following preliminary review of the preliminary plan, the Planning Commission may authorize this item to be placed on a future agenda for formal approval. No City Council action is required on preliminary plans.

Staff Comments

City staff has the following comments regarding this agenda item:

1. Provide housing plans for incorporation into the final development plan approval. All homes to be consistent with Section 1264.06, Development Standards for Specific Uses, Single-Family Dwellings (Detached) for compliance of some of the home plans with (b) Appearance, and (c) Garages with respect to 60% maximum width and side/rear access.
2. Provide landscaping plan for the subdivision consistent with provisions of Chapter 1280 of Planning and Zoning Code including buffer and site landscaping requirements. Applicant

advised that existing vegetation in the non-park dedication portion of the property may be used as credit against open space requirement.

3. Coordinate with Zoning Inspector on subdivision entry signage, if proposed.
4. Site to meet R-2 District zoning requirements.
5. Roadway to meet city specifications, including but not limited to, 50 foot right of way (local road), 29 feet back to back of curb with 24 feet wide pavement, and 5 feet sidewalks on both sides of road.
6. Provide access easement and drive to open space retention lot for maintenance purposes.
7. Verify intersection sight distance is met at Sharts Road and Advanced Drive. If not, make improvements accordingly.
8. Each lot to have a post light with a photoelectric cell and shall be operable at all times.
9. Provide Central Mailbox Units for the development, which shall also be reviewed by the Post Master.
10. An HOA is to be created to maintain items including, but not limited to, sump drains, retention pond, open space, and central mailbox units.
11. Additional engineering comments are reserved until such time when designed construction drawings are submitted for review, including but not limited to, site survey, roadway design, contours, drainage, easements, water, sanitary, storm sewer and retention calculations.
12. The Clearcreek Fire District looks forward to working with the builders and The City of Springboro as these projects move forward. The Clearcreek Fire District may have other comments as these projects move forward.

E. Preliminary Review
Final Development Plan, Village Park PUD-MU, Planned Unit Development-Mixed Use, 748 Gardner Road, retail development

Background Information

This agenda item is based on an application filed by Dryden Builders on behalf of Sahana Properties, LLC, requesting preliminary review for the development of commercial property in the retail component of the Village Park PUD-MU, Planned Unit Development-Mixed Use, located southwest of the intersection of North Main Street (SR 741) and Pennyroyal Road.

This action is contingent on the approval of the major revision to the approved general plan for the Village Park PUD-MU that would allow drive-though and drive-in facilities. City Council is scheduled to review the Resolution at their meeting on August 3rd.

Two commercial buildings are proposed for the site. Building A would have frontage on North Main Street and would be approximately 5,993-square feet in area and would include a drive-through window on the north side of the building. Building B with frontage on Gardner Road is also proposed and would be 2,971 square feet in area.

Adjacent uses to the subject property include Springboro Wine & Spirits to the north, Huntington Bank to the east on the east side of North Main Street, Biggby's/Farmers & Merchants Bank to the south, and vacant land to the west on the west side of Gardner Road that is proposed to be developed as Clearcreek Fire Station No. 24.

Zoning adjacent to the subject property is PUD-MU, for properties to the north, south, and west as part of the Village Park mixed-use development, and PUD for property to the east that is part of the Settlers Walk development on the east side of North Main Street.

Final development plan is the second stage of the PUD approval process. Following preliminary review Planning Commission may authorize this item to be placed on a future meeting agenda for final approval.

Staff Comments

City staff has the following comments on this agenda item:

1. Indicate proposed building populations that are driving the volume of parking proposed for the site.
2. Proposed drive-through facility to be screened from North Main Street with landscaping, walls and fencing.
3. Following preliminary review of final development plan, provide exterior lighting plan consistent with Chapter 1273, Exterior Lighting, of Planning and Zoning Code, and Village Park PUD-MU design standards.
4. Following preliminary review of final development plan, provide landscaping plan consistent with Chapter 1280, Landscaping, of Planning and Zoning Code, and Village Park PUD-MU design standards.
5. While not part of final development plan review process, signage to be reviewed by Zoning Inspector for compliance with Sign Code and Village Park PUD-MU design standards. Same applies to construction and other temporary signage.
6. Consolidate the two lots into one.
7. Remove and replace curb & gutter along Gardner road curb cut to depressed ODOT Type 2 curb and gutter.
8. Water laterals to be min 1" K copper with meter inside building and with remote reader (mtu). Sewer laterals to be min 6" SDR 35 with 2% slope.
9. Additional engineering comments are reserved until such time when designed improvements are completed on construction drawings, including but not limited to: site survey, contours, drainage, easements, water, sanitary, and storm sewer.
10. The Clearcreek Fire District has no comments at this time.

F. Preliminary Review, Rezoning, R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential, 1525 South Main Street (SR 741), proposed single-family residential subdivision

G. Preliminary Review, General Plan, R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential, 1525 South Main Street (SR 741), proposed single-family residential subdivision

Background Information

These agenda items are based on a request filed by M/I Homes of Cincinnati, LLC, seeking rezoning and general plan approval for the proposed Whispering Pines subdivision, a residential subdivision on an approximately 35.62-acre site located at 1525 South Main Street (SR 73). The applicant is requesting rezoning and general plan approval under the City's Planned Unit

Development (PUD) process from R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential. This item was reviewed on a preliminary basis at the July 12th Planning Commission meeting at which time the Planning Commission asked the applicants to consider the comments made at the meeting and present another plan for preliminary review.

The applicant proposes to develop a total of 75 single-family residential units on the site, down from the 95 lots proposed in the previous proposal. The proposed development density is 2.11 units per acre, down from the 2.67 units/acre proposed at the July 12th Planning Commission meeting, with typical lots proposed to be 8,370 square feet and an average of 9,000 square feet. Current R-1 District zoning permits two units per acre on lots no less than 20,000 square foot lots. Two access points are proposed for the subdivision, both from the frontage on South Main Street, one at the midpoint of the property frontage, and a second on the northeast corner aligned with the intersection of Heatherwoode Boulevard. A stub street is also proposed for the west end of the site. That stub street would project into lands in Clearcreek Township. A total of 13.72 acres of open space is shown, or 38.5% of the land area. Residential PUDs require a minimum 25% open space. This is an increase from the July proposal of 10.6 acres of open space or 30% of the land area.

The proposed rezoning/general plan appears as two separate items on the Planning Commission work session agenda. Rezoning together with general plan review and approval are the first step in the three-step PUD review and approval process. Approval by both Planning Commission and City Council are required. Final development plan, similar to the City's site plan review process, review and approval by Planning Commission is the second stage in the process. Final development plan may be submitted in a number of sections in conjunction with a site's incremental development. Record plan review and approval by both Planning Commission and City Council is the last step in the PUD approval process. This allows for the subdivision of lots and the dedication of right-of-way and open spaces. As with final development plans, record plans may be submitted in a number of sections as the development is completed.

The subject property is presently zoned R-1, Estate-Type Residential District. That classification dates to 2015 when large parts of Springboro were reclassified to R-1 District from Township or (T)R-1 District. The (T)R-1 designation was allowed to remain on properties annexed over time from lands originally in Clearcreek and Franklin Townships. The R-1 and (T)R-1 have similar development densities, however moving to R-1 District allows the City to manage its own long-range development though its own Planning and Zoning Code.

Adjacent land uses in Springboro include large lot residential to the west in Clearcreek Township, and to the north in the City. To the east, on the east side of South Main Street, cluster housing on Glencoe Court, Dunnington Court within the Heatherwoode PUD, and large lot residential, and to the south the Springboro Community Schools Junior High School and athletic facilities.

Adjacent zoning in the Springboro portion of the vicinity is R-1 District to the north and southeast, PUD to the east encompassing the Heatherwoode PUD, and PUD to the south incorporating the Junior High School and other school property to the south. Lands to the west in Clearcreek Township are zoned SR-1, Suburban Residence, which allows development up to two units per acre when connected to a centralized sewage system.

The *Springboro Master Plan*, adopted by City Council in February 2022, includes recommendations for the long-range development of the community. It is divided into 16 policy areas that make specific recommendations for smaller portions of the community and are grouped together because of proximity, land use patterns, date of development and other general

characteristics. Policy Area 16, Heatherwoode, includes the subject area and land including the Heatherwoode, Farms of Heatherwoode, and Ashton Woods subdivisions, the City's Heatherwoode Golf Course, and the Springboro Community Schools main campus. The policy area recommends residential development and redevelopment that conforms to the existing character of adjoining neighborhoods. The plan also recommends connecting neighborhoods in the area, and improving pedestrian and bicycle access.

The three residential subdivisions in the vicinity were developed at the following densities:

- Ashton Woods, 21 units on 10.62 acres, 1.98 units/acre
- Farms of Heatherwoode, 162 units on 80.79 acres, 1.78 units/acre
- Heatherwoode, 221 units on 105.71 acres, 2.08 units/acre. This includes Glencoe Court and Dunnington Court. The golf course is not included in the density calculation.

Aside from school property, lands immediately abutting the property are 11.23 acres (west), and 16.65 acres (north) in area.

Courtesy notification letters were sent out to all property owners within 300 feet of the subject property prior to the July 12th meeting. Should this proposal move forward, the same property owners will be notified of a Public Hearing of City Council on the rezoning of the property.

Staff Comments

City staff has the following comments on the general plan and rezoning for 1525 South Main Street:

1. What is warranting a development density at the high range for the surrounding area as recommended in Master Plan Policy Area 16 (2.11 dwelling units proposed, three nearby subdivisions developed at 1.72 to 2.10 units/acre)?
2. Home plans to comply with Section 1264.06, Design Standards for Single-Family Detached Dwellings, of Planning and Zoning Code.
3. Indicate proposed exterior building materials for the subdivision.
4. What is the proposed breakdown of ranch and two-story homes proposed?
5. Provide minimum lot sizes for all proposed lots. Note that side yard setbacks are measured from the roof overhang.
6. Indicate percentage of open space that is set aside for storm water detention, that is buffering to adjacent development, and set aside for amenities within the subdivisions.
7. Reorganize the proposed open space plan so that it provides future residents with more quality open space this is contiguous and usable, then drains the property, then buffers neighboring development in that preference order.
8. Plan to incorporate an east-west multiuse trail into the design of the subdivision to connect Heatherwoode on the east with land fronting Weidner Road to the west.
9. Proposed name of development to be changed. Whispering Pines is an existing street.
10. Streets to be built to City specifications, including 29 feet back to back of curb with 5 feet sidewalks. Back of sidewalk to be along the right of way line.
11. An HOA shall be developed to maintain all common elements, including but not limited to: detention facilities, sump drains, identification signage, central mailbox unit(s) and open space.
12. Provide location of Central Mailbox Unit(s), which are to be reviewed by the Post Master.

13. Engineering comments are reserved until such time when designed improvements are completed on construction drawings, including but not limited to: water, sanitary, storm sewer and detention basin design.
14. Traffic study is currently being reviewed.
15. Dedicate the right of way along South Main Street (SR 741) and make any necessary roadway improvements, including but not limited to roadway widening (if needed), pavement markings and signage.
16. Consider implementing traffic calming controls on Glasgow and Morris Streets.
17. Clearcreek Fire District has no comments at this time.

The information contained in this report is based on material provided to the City of Springboro as of Wednesday, August 2, 2023 at 12:00 p.m.

APPLICATION—SITE PLANS, SUBDIVISIONS & RECORD PLANS
CITY OF SPRINGBORO PLANNING COMMISSION

☐ SITE PLAN ☑ REVISION TO APPROVED SITE PLAN ☐ CONCEPT PLAN ☐ PRELIMINARY SUBDIVISION ☐ RECORD PLAN

The undersigned requests the approval identified above. Site Plan Review approvals subject to expiration provided for in Section 1284.18 of the Planning and Zoning Code. For all approvals under this application, it is understood that it shall only authorize the approval described in this application, subject to any conditions or safeguards required by the Planning Commission, and/or City Council.

- ❑ Owner
- ❑ Agent
- ❑ Lessee
- ❑ Signed Purchase Contract

APPLICANT NAME: John Roll, Roll & Assoc

Address: 3176 Kettering Blvd.
Dayton, OH 45439

Telephone No. (937) 299-4243

Fax No. (937) 299-3254

Email Address jroll@rollassoc.com

PROPERTY OWNER NAME (IF OTHER): Thaler Machine

Address: 216 Tahlequa Trail
Springboro, OH 45066

Telephone No. (937) 550-2400

Property Address or General Location: 55 Edwards Drive

Parcel Number(s): _____ Zoning District: _____

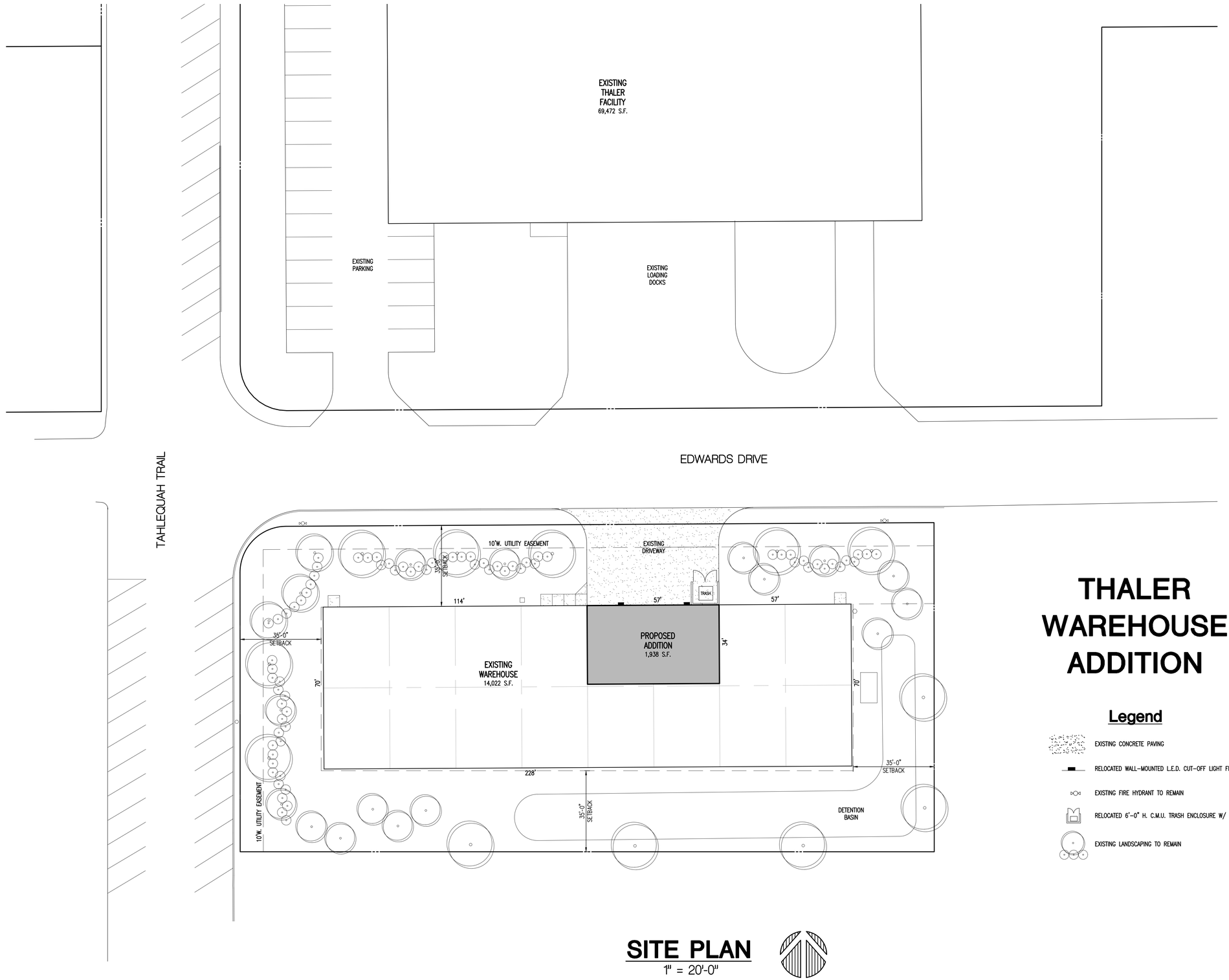
Proposed Use: Addition to Existing Warehouse

The applicant or representative who is authorized to speak on behalf of the request must also be present at all meetings.

John Roll
(Signature of Applicant and/or Agent)

7-21-23
(Date)

John Roll
Printed Name



SITE PLAN

1" = 20'-0"

THALER WAREHOUSE ADDITION

Legend

- EXISTING CONCRETE PAVING
- RELOCATED WALL-MOUNTED L.E.D. CUT-OFF LIGHT FIXTURE
- EXISTING FIRE HYDRANT TO REMAIN
- RELOCATED 6'-0" H. C.M.U. TRASH ENCLOSURE W/ GATES
- EXISTING LANDSCAPING TO REMAIN

DATE	DESCRIPTION
7-21-23	PLANNING SUBMITTAL

STATE OF OHIO * ARCHITECT * REGISTERED
JOHN M. ROLL 10658

ROLL & ASSOCIATES, INC.
ARCHITECTS & PLANNERS
3176 KETTERING BOULEVARD DAYTON, OHIO 45439
PHONE (937) 299-4243 FAX (937) 299-3254

THALER MACHINE COMPANY
216 TAHLEQUAH TRAIL, SPRINGBORO, OH 45066

PROJECT NO.
56462

PROJECT TITLE
WAREHOUSE ADDITION

DWG. TITLE
SITE PLAN

DWG. NO.
1

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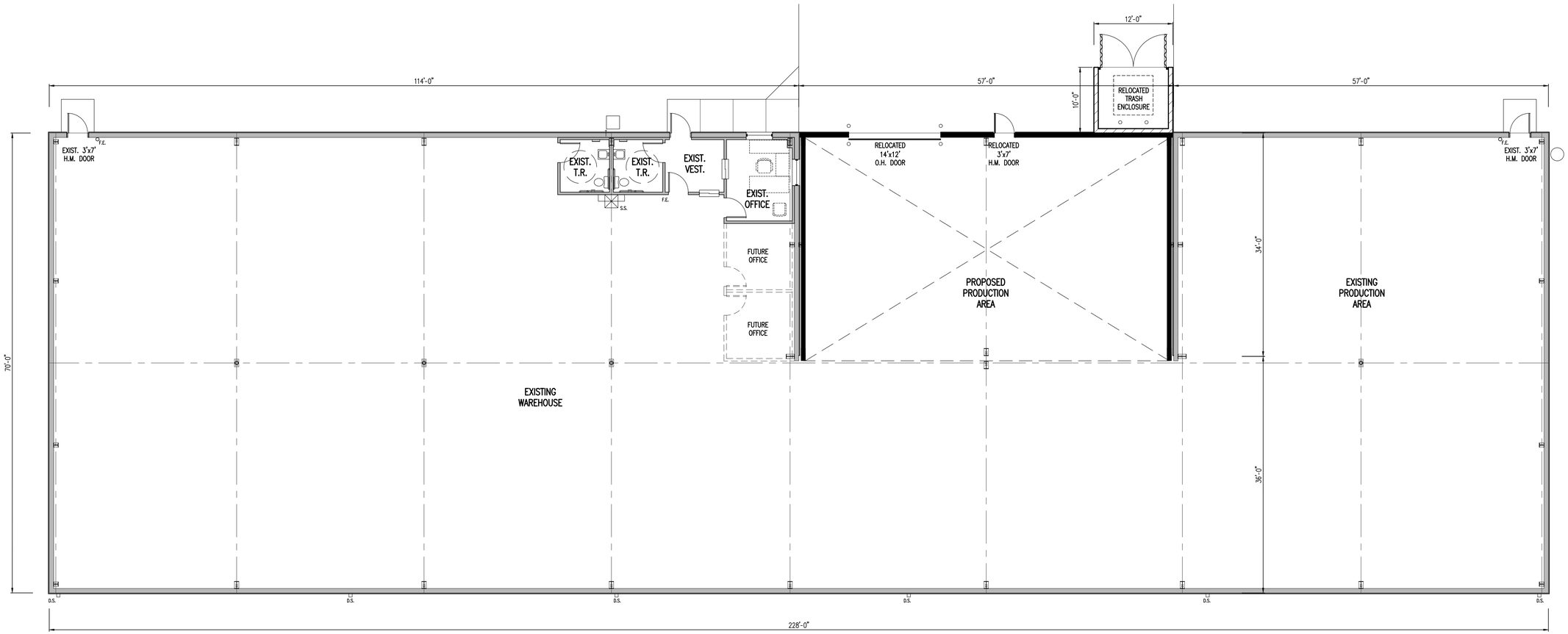

BUILDING PLAN

1/8" = 1'-0"

Legend

- EXISTING WALLS
- NEW WALLS

DATE	DESCRIPTION
7-21-23	PLANNING SUBMITTAL

STATE OF OHIO * ARCHITECT * REGISTERED
JOHN M. ROLL 10658

ROLL & ASSOCIATES, INC.
ARCHITECTS & PLANNERS
3176 KETTERING BOULEVARD DAYTON, OHIO 45439
PHONE (937) 299-4243 FAX (937) 299-3254

THALER MACHINE COMPANY
216 TAHLEQUAH TRAIL, SPRINGBORO, OH 45066

PROJECT NO.
56462

PROJECT TITLE
WAREHOUSE ADDITION

DWG. TITLE
BUILDING PLAN

DWG. NO.
2

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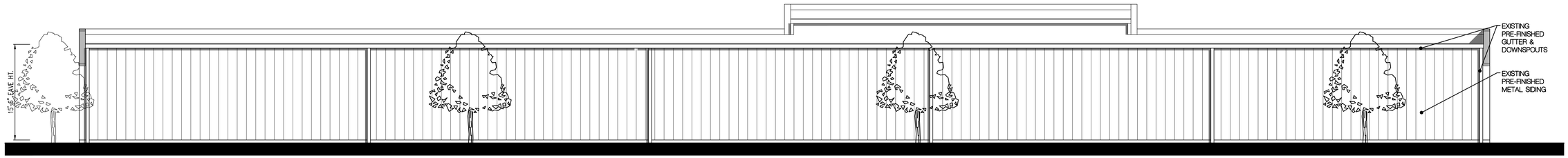
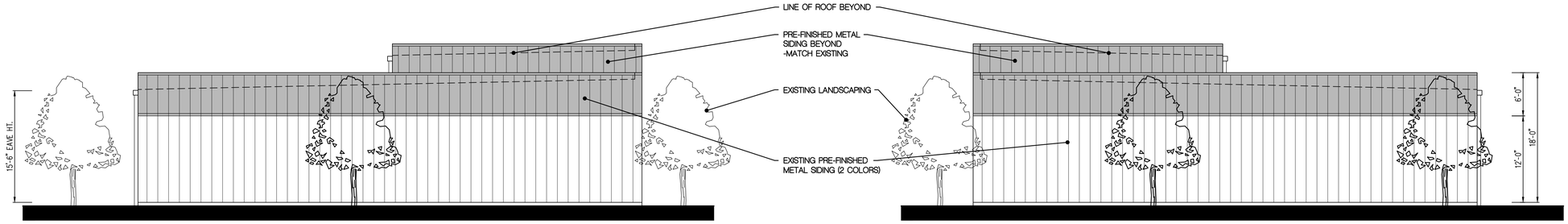
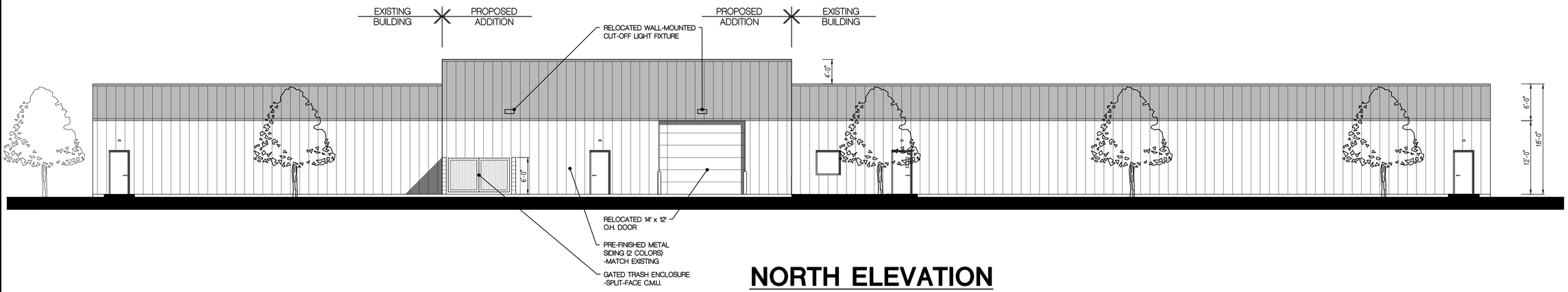


SOUTH ELEVATION
1/8" = 1'-0"



EAST ELEVATION
1/8" = 1'-0"

WEST ELEVATION
1/8" = 1'-0"



NORTH ELEVATION
1/8" = 1'-0"

DATE	DESCRIPTION
7-21-23	PLANNING SUBMITTAL

STATE OF OHIO * ARCHITECT * JOHN M. ROLL 10658 * REGISTERED

ROLL & ASSOCIATES, INC.
ARCHITECTS & PLANNERS
3176 KETTERING BOULEVARD DAYTON, OHIO 45439
PHONE (937) 299-4243 FAX (937) 299-3254

THALER MACHINE COMPANY
216 TAHLEQUAH TRAIL, SPRINGBORO, OH 45066

PROJECT NO.
56462

PROJECT TITLE
WAREHOUSE ADDITION

DWG. TITLE
BUILDING ELEVATIONS

DWG. NO.
3

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APPLICATION—PLANNED UNIT DEVELOPMENTS
CITY OF SPRINGBORO PLANNING COMMISSION

☐ REZONING/GENERAL PLAN ☒ FINAL DEVELOPMENT PLAN ☐ RECORD PLAN ☐ VARIANCE

The undersigned requests the approval identified above. Approvals subject to expiration provided for in Chapter 1266 of Planning & Zoning Code. For all approvals under this application, it is understood that it shall only authorize the approval described in this application, subject to any conditions or safeguards required by the Planning Commission, and/or City Council.

- ☐ Owner
- ☒ Agent
- ☐ Lessee
- ☐ Signed Purchase Contract

APPLICANT NAME: SCOTT CSENDES

Address: 700 BROADWAY ST

CINCINNATI, OH 45202

Telephone No. (513) 864-8620

Fax No. ( ) _____

Email Address SCOTT.CSENDES@KZF.COM

PROPERTY OWNER NAME (IF OTHER): CITY OF SPRINGBORO CONTACT: CHRIS POZZUTO

Address: 320 W. CENTRAL AVE.

SPRINGBORO, OH 45066

Telephone No. (937) 748-4352

Property Address or General Location: GARDNER ROAD

Parcel Number(s): 0415480012 Acreage: 4.0625

PUD Category: ☐ Residential ☐ Retail ☒ Office ☐ Manufacturing ☐ Mixed Use

If Mixed Use, Acreage in Each Category: _____

For Residential Proposed Density _____ Number of Residential Units _____

Proposed Use: FIRE STATION

The applicant or representative who is authorized to speak on behalf of the request must also be present at all meetings.

(Signature of Applicant and/or Agent) (Date) 6/23/23

SCOTT CSENDES
Printed Name

CONSTRUCTION DOCUMENTS

CLEARCREEK FIRE DISTRICT HEADQUARTERS

CLEARCREEK TWP
CITY OF SPRINGBORO, WARREN COUNTY, OHIO

SHEET INDEX

C001 - TITLE SHEET
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C701 - EROSION & SEDIMENT CONTROL NOTES
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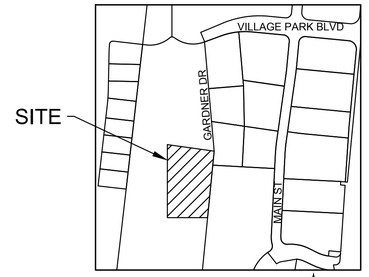
C800 - SIGNAGE AND STRIPING PLAN
L100 - LANDSCAPE PLAN
L110 - LANDSCAPE DETAILS
L111 - LANDSCAPE SPECIFICATIONS



VICINITY MAP
NTS

SITE DATA

ZONING:

PROPERTY OWNER:	CLEARCREEK TOWNSHIP
PARCEL ID:	0415480012
PROPOSED USE:	FIRESTATION
SITE ACREAGE:	4.0625 AC
EXISTING ZONING:	PUD-MU
FEMA FLOODPLAIN:	39165C0028E ZONE X 12/17/2010

SITE LAYOUT DATA:

MINIMUM DRIVE AISLE WIDTH:	26 FT
STANDARD PARKING STALL:	9x18 FT
ADA PARKING STALL:	8x18 FT
PARKING SETBACK/BUFFER:	SEE SITE PLAN
BUILDING SETBACK/BUFFER:	SEE SITE PLAN

BUILDING DATA:

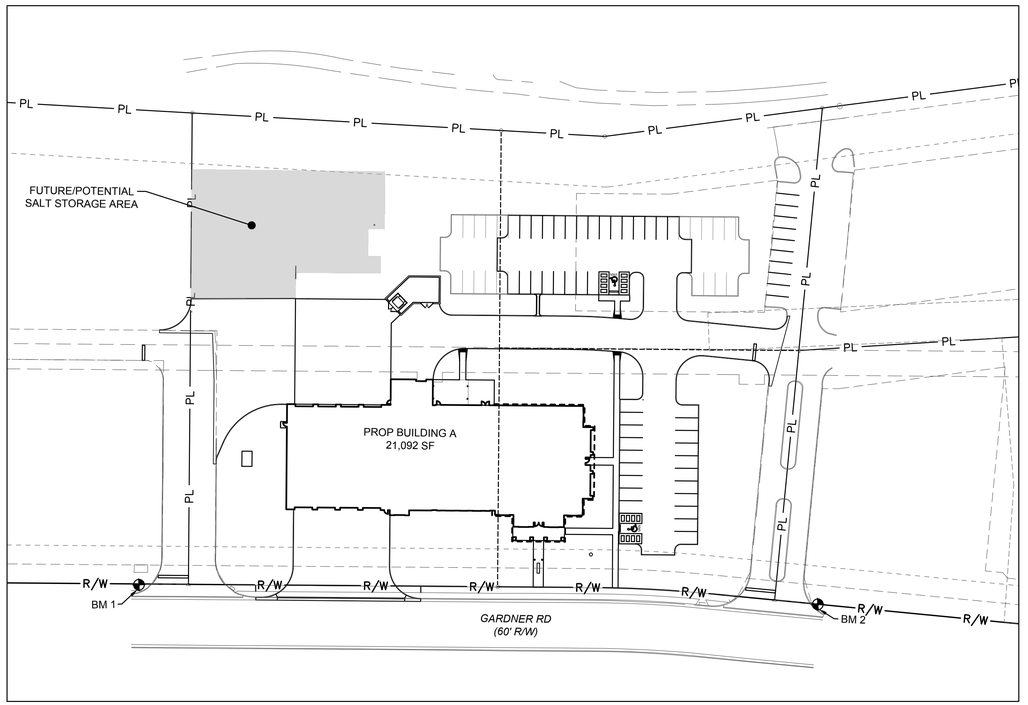
TOTAL AREA:	24,908 SF
MAX BUILDING HEIGHT:	136'-8"

PARKING DATA:

STANDARD SPACES:	56 SPACES
ADA ACCESSIBLE	2 SPACES

LANDSCAPE DATA:

EXISTING IMPERVIOUS AREA:	0.08 ACRES
PROPOSED IMPERVIOUS AREA:	1.96 ACRES
GREENSPACE:	2.11 ACRES



INDEX MAP
1" = 60'

BASIS OF BEARING

BASED ON STATE PLANE COORDINATE SYSTEM OHIO SOUTH ZONE (NAD83).

ELEVATION DATUM

NAVD88 AS ESTABLISHED BY ODOT VRS GPS OBSERVATIONS.

BENCHMARKS

TBM 1
ELEVATION = 906.46

TBM 2
ELEVATION = 911.40

OWNER/ DEVELOPER
CLEARCREEK TOWNSHIP
7593 BUNNELL HILL ROAD
SPRINGBORO, OH 45066
PHONE: 937-748-1267
EMAIL: INFO@CLEARCREEKTOWNSHIP.COM

ARCHITECT
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700 BROADWAY STREET
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CONTACT: SCOTT CSENDES
PHONE: 513-621-6211
EMAIL: SCOTT.CSENDES@KZF.COM

ENGINEER
AMERICAN STRUCTUREPOINT
2550 CORPORATE EXCHANGE DRIVE, SUITE 300
COLUMBUS, OHIO 43231
CONTACT: DARRELL MILLER
PHONE: 614-901-2235
EMAIL: DMILLER@STRUCTUREPOINT.COM

REGISTERED ENGINEER DATE
DARRELL S. MILLER, E-74726, P.E.

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AMERICAN STRUCTUREPOINT INC.
2550 Corporate Exchange Dr. Ste 300 | Columbus, Ohio 43231
TEL 614.901.2235 | FAX 614.901.2236
www.structurepoint.com

CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
TITLE SHEET

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
DRAWN BY:	MRF
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C001

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:46 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 TS.DWG

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE, REVIEW ALL CONSTRUCTION DOCUMENTS, AND FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BIDDING. NO ADDITIONAL COMPENSATION WILL BE GIVEN FOR WORK THAT COULD HAVE BEEN IDENTIFIED BY A SITE VISIT OR CONSTRUCTION DOCUMENT REVIEW.

2. SPECIFICATIONS - PERFORM ALL WORK IN ACCORDANCE WITH CITY AND OHIO DEPARTMENT OF TRANSPORTATION (ODOT) MATERIAL SPECIFICATIONS AND STANDARD CONSTRUCTION DRAWINGS, INCLUDING ALL SUPPLEMENTS THERETO. IN CASE OF DISCREPANCY BETWEEN CITY AND ODOT REQUIREMENTS AND PROJECT SPECIFICATIONS, THE MORE STRICT SPECIFICATION SHALL APPLY. WHEREVER THE WORDS "STATE," "DEPARTMENT," OR "DEPUTY DIRECTOR" OCCUR, IT IS TO MEAN THE OWNER. WHEREVER THE WORD "ENGINEER" OCCURS, IT IS TO MEAN AMERICAN STRUCTUREPOINT, INC.

   THIS PROJECT IS TO BE BID AND ADMINISTERED AS A LUMP SUM PROJECT. ALL REFERENCES TO UNIT PRICES AND METHODS OF MEASUREMENT FOR THE PURPOSE OF PAYMENT SHALL BE DISREGARDED,

3. IT IS THE CONTRACTORS RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND MARK ALL EXISTING UTILITIES 48 HOURS BEFORE CONSTRUCTION STARTS. CONTACT OUPS UTILITY LOCATING SERVICE TO FIELD LOCATE EXISTING UTILITIES. CONTACT UTILITY OWNER IF DAMAGE OCCURS DUE TO CONSTRUCTION.

4. PROTECT ALL EXISTING STRUCTURES AND UTILITIES WHICH ARE NOT SCHEDULED FOR REMOVAL.

5. BENCHMARKS - THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, SURVEY MONUMENTS, PROPERTY CORNERS, REFERENCE POINTS, AND STAKES. ANY BENCHMARK, PROPERTY CORNER, OR SURVEY MARKER DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE RESET BY AN OHIO REGISTERED SURVEYOR AT THE CONTRACTOR'S EXPENSE.

6. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) OF 1970. THE CONTRACTOR SHALL EXERCISE PRECAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.

7. PERMITS & LICENSES - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND LICENSES NEEDED FOR THE CONSTRUCTION OF THIS PROJECT.

8. EXISTING SEWERS & STRUCTURES - THE CONTRACTOR SHALL REPLACE, TO THE SATISFACTION OF THE ENGINEER, ALL EXISTING MANHOLES, CATCH BASINS, DRAINS, SEWERS, AND APPURTENANCES REMOVED OR DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE DEBRIS, SILT, ETC. FROM THE EXISTING MANHOLES AND CATCH BASINS WHICH HAVE BEEN AFFECTED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL MAINTAIN SERVICE IN EXISTING SEWERS DURING CONSTRUCTION.

9. SAW-CUT - ALL EXISTING PAVEMENTS, WALKWAYS, CURBS, ETC. SHALL BE SAW-CUT BEFORE REMOVAL. IF DURING CONSTRUCTION, THE PAVEMENT, WALKWAY, CURB, ETC. IS DAMAGED BEYOND THE ORIGINAL SAW-CUT, THE DAMAGED AREA SHALL BE RE-CUT TO NEAT LINES, AS DIRECTED BY THE ENGINEER. SAW-CUT SHALL BE PERFORMED ALONG EXISTING JOINTS WHERE POSSIBLE. WHENEVER PORTIONS OF EXISTING PAVEMENT OR CURB ARE TO BE REMOVED ALLOWING PORTIONS OF THE PAVEMENT TO REMAIN, THE CONTRACTOR SHALL SAW-CUT THE ASPHALT OR CONCRETE PRIOR TO REMOVAL.

10. NON-RUBBER TIRED VEHICLES - NO NON-RUBBER TIRED VEHICLES SHALL BE MOVED ON EXISTING PAVEMENT TO REMAIN. EXCEPTIONS MAY BE GRANTED BY THE OWNER WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE OWNER.

11. CLEAN-UP - IT IS THE INTENT OF THE OWNER TO KEEP INCONVENIENCE TO THE SURROUNDING PROPERTIES TO AN ABSOLUTE MINIMUM. ALL WORK PRESCRIBED AND DESCRIBED IN THESE PLANS AND SPECIFICATIONS IS SITUATED IN IMPROVEMENT AREAS. ALL WORK IS TO CONTINUE ON A UNIFORM BASIS AND ON SCHEDULE, PARTICULARLY THE RESTORATION AND CLEANUP OF DISTURBED AREAS AFTER CONSTRUCTION. ALL DEBRIS, RUBBLE, UNSUITABLE MATERIALS, AND ITEMS NOT SALVAGED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF PROPERLY ACCORDING TO LOCAL CODES. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO THEIR ORIGINAL CONDITION AND ELEVATION. ANY DIRT, SEDIMENT OR MUD DEPOSITED ON CITY STREETS ON OR OFF THE PROJECT SITE SHALL IMMEDIATELY BE CLEANED BY THE CONTRACTOR. THE CONTRACTOR IS REQUIRED TO PERFORM WEEKLY STREET CLEANING THROUGHOUT THE DURATION OF THE PROJECT. THIS MAY INCLUDE REMOVAL BY SWEEPING, POWER CLEANING, OR MANUAL METHODS. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATERCOURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE GRADES AND CROSS-SECTIONS THAT EXISTED BEFORE CONSTRUCTION.

12. ADDITIONAL COMPENSATION - THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, SERVICES, AND RELATED ACCESSORIES FOR A COMPLETE PROJECT AS SHOWN AND DESCRIBED IN THE PLANS AND SPECIFICATIONS. SUBMISSIONS OF A BID SHALL BE CONSIDERED EVIDENCE THAT THE BIDDER IS SATISFIED WITH THE PLANS AND CONDITIONS AS SHOWN. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COMPLIANCE WITH THE PLANS, SPECIFICATIONS, OR SPECIAL PROVISIONS.

13. SANITARY FACILITIES - THE CONTRACTOR SHALL FURNISH AND MAINTAIN SANITARY CONVENIENCE FACILITIES FOR THE WORKERS AND INSPECTORS FOR THE DURATION OF THE WORK.

14. STORAGE OF EQUIPMENT AND MATERIALS - ALL MATERIALS, INCLUDING PIPE, SHALL BE STORED IN AREAS TO MINIMIZE INCONVENIENCE AND LOSS OF USE TO OWNER PROPERTY. STORAGE EQUIPMENT, DURING NON-WORKING HOURS, SHALL ALSO COMPLY WITH THIS REQUIREMENT. COMPLIANCE WITH THIS REQUIREMENT ALONG WITH ADDITIONAL PROVISIONS OF THE CONTRACT SPECIFICATIONS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF THIS LEGAL RESPONSIBILITIES OR LIABILITIES FOR THE SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL RECEIVE OWNER APPROVAL OF STORAGE AREAS PRIOR TO CONSTRUCTION.

15. CONTRACTOR LAYDOWN AREAS - CONTRACTOR STAGING, LAYDOWN, AND TRAILER AREAS WILL BE PROVIDED AT THE PROJECT SITE. COORDINATE EXACT LOCATION WITH THE OWNER. PROTECTION OF LAYDOWN AREAS AND STAGING AREAS ARE AS DEEMED NECESSARY BY THE CONTRACTOR. PROVIDE ORANGE CONSTRUCTION FENCE AROUND ALL LAYDOWN AREAS. ALL LAYDOWN AREAS AND STAGING AREAS SHALL BE RESTORED TO ORIGINAL CONDITION PRIOR TO ACCEPTANCE BY THE OWNER.

16. CONSTRUCTION PRACTICES - BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT (25 GALLONS OR MORE) THE LOCAL FIRE DEPARTMENT IS TO BE CONTACTED. PROVIDE SECONDARY CONTAINMENT OF ANY TEMPORARY FUEL STORAGE TANK AND/OR EQUIPMENT THAT HAS POTENTIAL FOR CAUSING A SPILL.

17. TESTING - REFER TO PROJECT MANUAL FOR TESTING AND INSPECTION REQUIREMENTS.

18. UTILITY PROTECTION - THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE OBTAINED FROM A TOPOGRAPHIC SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHOWN. THE CONTRACTOR SHALL EXPOSE UTILITIES AND STRUCTURES PRIOR TO THE CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. ANY DEVIATIONS FROM THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY, SUCH THAT, ANY MODIFICATIONS TO THE PROPOSED DESIGN CAN BE MADE. POTHOLES AND/OR EXCAVATIONS SHALL BE USED WHERE NECESSARY AND AS APPROVED BY THE OWNER. ITEMS SHALL BE EXPOSED SUFFICIENTLY IN ADVANCE TO MAINTAIN THE PROJECT SCHEDULE.

    THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 72 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.

    MECHANICAL DIGGING EQUIPMENT SHALL NOT BE USED FOR EXPOSING ANY UNDERGROUND UTILITY. ONLY HAND TOOLS MAY BE USED TO UNCOVER THE UTILITY AND THE UTILITY COMPANY SHALL BE NOTIFIED AND HAVE A REPRESENTATIVE PRESENT WHEN THE UTILITY IS EXPOSED.

    LOCATE EXISTING UNDERGROUND UTILITIES IN THE AREAS OF THE WORK. IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF PROTECTING DURING EXCAVATION OPERATIONS. SHOULD UNCHARTED OR INCORRECTLY CHARTED PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY FOR DIRECTIONS.

    CONTRACTOR SHALL SUPPORT ALL EXISTING UTILITIES TRAVERSING THROUGH THE EXCAVATION. DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED OUTSIDE OF THE PROJECT AREA, EXCEPT WHEN PERMITTED IN WRITING BY THE AFFECTED PARTY AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

    COOPERATE WITH THE OWNER AND THE PUBLIC UTILITY COMPANIES IN KEEPING THEIR RESPECTIVE SERVICES AND FACILITIES IN OPERATION. REPAIR DAMAGED UTILITIES TO THE SATISFACTION OF THE UTILITY OWNER.

19. CONTRACTOR SHALL INSTALL A CONSTRUCTION FENCE, AS NECESSARY, TO KEEP ALL PEDESTRIANS SAFELY AWAY FROM WORK. FENCE SHALL BE 6' HIGH CHAIN LINK FENCE WITH GROUND MOUNTED POSTS OR TEMPORARY POSTS SECURELY ANCHORED.

20. ALL EXCAVATION, CONSTRUCTION, AND BACKFILL TO BE CONSTRUCTED UNDER THIS CONTRACT SHALL BE CONSTRUCTED UNDER DRY CONDITIONS. THE CONTRACTOR SHALL MAINTAIN ALL EXCAVATIONS IN A DE-WATERED, WORKABLE CONDITION, AND PROPER DE-WATERING MEASURES SHALL BE TAKEN AS DICTATED BY FIELD CONDITIONS. THE DISCHARGE OF SEDIMENT LADEN WATERS INTO ANY PUBLIC WATERCOURSE IS STRICTLY PROHIBITED. ALL SEDIMENTS MUST BE REMOVED PRIOR TO DISCHARGE.

21. HAZARDOUS MATERIALS - THE CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER AND THE OWNER'S REPRESENTATIVE, ANY MATERIAL ENCOUNTERED DURING EXECUTION OF THE WORK THAT THE CONTRACTOR SUSPECTS IS HAZARDOUS.

22. REPLACEMENT OF DRAIN TILE AND STORM SEWER - ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED, OR REMOVED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS THE EXISTING. THE DRAIN TILE AND/OR STORM SEWER SHALL BE CONNECTED TO THE CURB SUB-DRAIN, STORM SEWER SYSTEM, OR PROVIDED WITH AN OUTLET INTO THE ROADWAY DITCH AS APPLICABLE. REPLACEMENT DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT WORK SHALL BE DONE AT THE TIME OF THE BACKFILL OPERATION.

23. SUBGRADE - REFER TO PROJECT GEOTECHNICAL REPORT REGARDING SUBGRADE RECOMMENDATIONS FOR THE PROJECT SITE.

24. OPEN TRENCH EXCAVATION - SLOUGHING AND CAVING OF EXCAVATIONS SHOULD BE ANTICIPATED WHERE SATURATED WEAK SOILS ARE ENCOUNTERED OR WHERE GRANULAR SEAMS AND LAYERS ARE PRESENT. ALL EXCAVATIONS MUST BE PERFORMED WITHOUT ENDANGERING THE CONSTRUCTION WORKERS. THEREFORE, IN ACCORDANCE WITH THE OSHA TRENCH/EXCAVATION REGULATIONS (OSHA 29 CFR PART 1926), FOR ANY EXCAVATIONS EXCEEDING A DEPTH OF 5 FEET IN WHICH WORKERS WILL BE ENTERING THE EXCAVATION/TRENCH, THE EXCAVATION SIDES MUST BE BRACED OR SLOPED TO THE REQUIRED MAXIMUM INCLINATION OR FLATTER (BASED ON THE SOIL TYPE AND STRENGTH).

    ANY EXCAVATION INSTALLED USING AN OPEN TRENCH CONSTRUCTION METHOD COULD POTENTIALLY CAUSE DAMAGE TO EXISTING UNDERGROUND UTILITIES, STRUCTURES, OR PAVEMENT CURRENTLY LOCATED IN THE VICINITY OF THE PROPOSED UTILITY ALIGNMENT AND POSITIONED AT HIGHER ELEVATIONS THAN THE PLANNED EXCAVATION DEPTH. THIS WOULD APPLY TO EITHER THE TYPICAL OPEN CUT TRENCH THAT HAS NEAR VERTICAL SIDES OR A TRENCH BOX. THEREFORE, THE LATERAL DISTANCE, DEPTH OF THE EXISTING UTILITY, AND THE PLANNED EXCAVATION DEPTH MUST BE KNOWN TO DETERMINE WHETHER ADJACENT UNDERGROUND UTILITIES COULD BE AFFECTED BY THE EXCAVATION. THE RISK OF LATERAL MOVEMENT WITHIN THE INFLUENCE ZONE INCREASES WITH BOTH THE LENGTH OF THE EXCAVATION AND THE TIME THE TRENCH REMAINS OPEN.

    WHERE BRACED EXCAVATIONS ARE REQUIRED, TRENCH EXCAVATIONS SHALL BE DIRECTLY BRACED AT THE TIME OF THE EXCAVATION. THE BRACING MUST BE DESIGNED AS A RIGID SYSTEM WITHOUT DEFLECTION ALONG ITS ENTIRETY, CONSTRUCTED "TIGHT' AGAINST THE RETAINED SOIL. THE BRACING SYSTEM CANNOT BE INSTALLED AFTER THE EXCAVATION IS MADE.

25. TRENCH BACKFILL - TRENCH COMPACTED BACKFILL SHALL BE PER ODOT ITEM 611 & 638.08. COMPACTED GRANULAR MATERIAL IS REQUIRED IN ALL TRENCHES UNDER PAVEMENT AREAS (DRIVEWAYS, STREETS, SIDEWALKS, ETC.) OR WHERE THE FRONT FACE OF TRENCHES PARALLELING THE PAVEMENT, ARE WITHIN 36" OF THE FACE OF CURB OR EDGE OF PAVEMENT. UNLESS SHOWN OTHERWISE ON THE PLANS, THE MATERIAL WILL EXTEND LATERALLY 36" BEYOND THE FACE OF CURB OR EDGE OF PAVEMENT FROM TRENCHES WHICH CROSS THE PAVEMENT. AT ALL POINTS OF CROSSING WATER MAINS OR OTHER SEWERS, THE BACKFILL SHALL BE OF GRANULAR MATERIAL BETWEEN THE DEEPER AND SHALLOWER PIPES.

26. PLAN CHANGES - GRADES AND ELEVATIONS SHOWN ON THE PLANS SHALL NOT BE REVISED UNDER ANY CIRCUMSTANCES WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE ENGINEER. INVERT ELEVATIONS SHALL NOT DEVIATE FROM PLAN ELEVATION BY MORE THAN 0.05 FOOT. FAILING TO MEET THE ABOVE REQUIREMENTS ARE CAUSE FOR REJECTION OF THE AFFECTED SECTION OF SEWER.

DEMOLITION NOTES:

1. CONFIRM EXISTING CONDITIONS PRIOR TO BEGINNING WORK.

2. ALL CLEARING, GRUBBING, AND RELATED ACTIVITIES SHALL CONFORM TO ODOT ITEM 201. DISPOSE OF TREES OFF SITE.

3. ALL TREES, SAPLINGS, CROPS, GRASS, OR MONUMENTS LOCATED WITHIN THE WORK AREA WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS ARE TO BE PRESERVED, UNLESS NOTED TO BE REMOVED OR UNLESS APPROVAL TO REMOVE IS GIVEN IN WRITING BY THE ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY CLAIM FROM DAMAGE TO TREES, SAPLINGS, CROPS, OR GRASSES WHICH MAY OCCUR AS THE RESULT OF THE CONSTRUCTION OPERATIONS, DAMAGE TO SIGNS, FENCES, LAWN AREAS, HEDGES, FLOWERS, SHRUBBERY, ETC. AS A RESULT OF THE CONSTRUCTION SHALL BE RESTORED IN LIKE KIND AND CHARACTER TO THE SATISFACTION OF THE ENGINEER.

4. REMOVE ALL ON-GRADE SITE FEATURES WITHIN THE AREA OF WORK INCLUDING: SIDEWALKS, CURBS, CONCRETE FOUNDATIONS, CONCRETE AND ASPHALT PAVEMENT.

5. SAW-CUT, FULL DEPTH, EXISTING ASPHALT PAVEMENT AND CONCRETE CURB WHERE NEW WORK ABUTS EXISTING CONSTRUCTION. USE CARE TO SAW-CUT NEAT STRAIGHT LINES. WHEN SAW-CUTTING EXISTING CONCRETE, CUT ALONG EXISTING JOINT LINES WHEREVER POSSIBLE.

6. CONTRACTOR SHALL USE CAUTION TO PROTECT EXISTING SITE FEATURES TO REMAIN. REPLACE ANY DAMAGE AT NO COST TO THE OWNER.

7. LEGALLY DISPOSE OF ALL CONSTRUCTION DEBRIS OFF-SITE IN ACCORDANCE WITH LOCAL CODES. NO ON-SITE BURNING.

8. USE ALL MEANS NECESSARY TO CONTROL DUST ON-SITE AND PREVENT TRACKING SOIL OFF-SITE.

9. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR EXISTING BUILDING AND/OR STRUCTURES DEMOLITION AND PROTECTION.

EARTHWORK & GRADING NOTES:

1. NO CONSTRUCTION WORK WILL BE PERMITTED WITHOUT APPROVED PLANS AND INSPECTION.

2. ALL PAVEMENT ELEVATIONS REFER TO FINISHED PAVEMENT ELEVATION AT FACE OF CURB UNLESS OTHERWISE NOTED. ALL DIMENSIONS AND COORDINATES ARE TO FACE OF CURB OR FACE OF BUILDING, UNLESS OTHERWISE NOTED.

3. THE CONTRACTOR SHALL LIMIT THE DISTURBED AREA AS MUCH AS POSSIBLE.

4. ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION. EROSION CONTROL SHALL BE INSTALLED TO PREVENT SEDIMENT FROM RUNNING OFF ONTO ADJACENT PROPERTIES. ANY DAMAGE TO ADJACENT PROPERTIES MUST BE CORRECTED AND RESTORED, AT NO COST TO THE OWNER, AS SOON AS PERMISSION IS GRANTED FROM THE ADJACENT PROPERTY OWNER(S).

5. SOIL EROSION AND SEDIMENTATION BMP MEASURES,SHALL BE INSTALLED PRIOR TO START OF ANY CONSTRUCTION AND SHALL BE MAINTAINED AT ALL TIMES UNTIL CONSTRUCTION HAS BEEN COMPLETED; INCLUDING ALL GRASS BEING WELL ESTABLISHED AND/OR PERMANENT EROSION AND SEDIMENTATION BMP MEASURES IN PLACE. ALL BMP MEASURES SHALL BE TO THE SATISFACTION OF THE LOCAL AUTHORITY AND OHIO EPA.

6. USE ALL MEANS NECESSARY TO CONTROL DUST ON THE SITE AND PREVENT TRACKING SOIL OFF-SITE. CONTRACTOR SHALL, AT THE END OF EACH WORKING DAY, CLEAN ALL DIRT AND SEDIMENT TRACKED ONTO THE STREETS.

7. REMOVE SEDIMENT FROM DETENTION AREAS, OUTLET STRUCTURES, AND ALL UNDERDRAINS ONCE FINAL SEED HAS BEEN ESTABLISHED.

8. CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL THROUGHOUT THE SITE PRIOR TO EXCAVATION. UPON COMPLETION OF FINAL GRADING, PROVIDE MINIMUM 6" OF TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION, INCLUDING LAYDOWN AREAS AND TRAILER LOCATIONS, IF LOCATED OUTSIDE THE GRADING/SEEDING LIMITS.

9. EXCAVATION AND EMBANKMENT SHALL COMPLY WITH ODOT ITEM 203 AND LOCAL AUTHORITY REQUIREMENTS.

10. THE CONTRACTOR'S BID SHALL BE COMPREHENSIVE AND INCLUDE ALL LABOR AND EQUIPMENT TO COMPLETE ALL EXCAVATION, FILL AND GRADING IN ACCORDANCE WITH THE APPROVED ENGINEERING PLANS AND SPECIFICATIONS.

11. EXCAVATION AND EMBANKMENT QUANTITIES DO NOT INCLUDE ANY PROVISION FOR UNDERCUTTING, FOOTINGS, OR UNSUITABLE MATERIAL.

12. ALL FIELD TILE BROKEN OR ENCOUNTERED DURING EXCAVATION SHALL BE REPLACED OR REPAIRED AND CONNECTED TO THE PUBLIC STORM SEWER SYSTEM AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

13. THE INTENT IS TO STRIP AND SALVAGE TOPSOIL FOR POTENTIAL RE-SPREADING ON THE SITE, IF APPROVED BY THE LANDSCAPE ARCHITECT AND/OR SPECIFICATIONS. TOPSOIL - AFTER COMPACTION - SHALL BE RE-SPREAD PRIOR TO SEEDING AND MULCHING. EXCESS TOPSOIL MAY BE REMOVED FROM THE SITE PROVIDING THERE IS ADEQUATE TOPSOIL REMAINING TO PROPERLY FINISH THE SITE, AS NOTED ABOVE. THE CONTRACTOR SHALL REFER TO THE LANDSCAPE DRAWINGS AND SPECIFICATIONS FOR ANY SPECIAL TOPSOIL OR PLANTING REQUIREMENTS.

14. AFTER THE TOPSOIL IS REMOVED, PROOFROLL THE PAVEMENT AND BUILDING AREA SUBGRADES TO BE FILLED PER ODOT ITEM 204. SOFT AREAS SHOULD BE UNDERCUT AND STABILIZED PRIOR TO FILLING OPERATIONS. RELATIVE DEPTH OF UNDERCUT WILL BE DETERMINED WHEN SOFT AREAS ARE DISCOVERED. THE TESTING AGENCY SHALL DETERMINE THE DEPTH AND EXTENT OF THE UNDERCUT.

15. TOPSOIL MIX AND DEPTHS SHALL BE PER LANDSCAPE DRAWINGS.

16. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS AND GEOTECHNICAL REPORT.

17. BACKFILL WITHIN A 1:1 INFLUENCE LINE OF EXISTING STRUCTURES (HOUSES, GARAGES, ETC.) OR PUBLIC INFRASTRUCTURE (PAVEMENT, CURBS, SIDEWALKS, BIKE PATHS, ETC.) SHALL BE COMPACTED GRANULAR BACKFILL OF THE STANDARD SPECIFICATIONS OR FLOWABLE CDF, TYPE II ACCORDING TO ODOT ITEM 613. ITEM 911 OF THE STANDARD SPECIFICATIONS SHALL BE USED ELSEWHERE.

18. ALL WET OR OTHERWISE UNSUITABLE SOILS MUST BE STABILIZED PRIOR TO PAVEMENT CONSTRUCTION. THIS MAY BE ACCOMPLISHED BY DRYING, REMOVAL & REPLACEMENT, DRYING & RE-COMPACTION, OR SOIL TREATMENT (LIME/CEMENT). MEANS AND METHODS SHALL BE DETERMINED BY OWNER'S TESTING AGENCY.

19. EXPOSE UTILITIES PRIOR TO BEGINNING WORK ON THAT UTILITY TO DETERMINE EFFECTS ON THE PROPOSED ALIGNMENT AND PROFILE. REPORT ELEVATION AND LOCATION TO THE ENGINEER IN ORDER THAT ANY CORRECTIONS TO THE ELEVATION AND LOCATION CAN BE MADE.

20. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.

21. ALL CONCRETE ADJACENT TO BUILDING SHALL BE SLOPED AWAY FROM BUILDING AT 2.0% UNLESS OTHERWISE NOTED ON THE PLANS.

22. PROVIDE POSITIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.

23. HANDICAP PARKING AREAS SHALL NOT HAVE SLOPES IN ANY DIRECTION THAT EXCEED 2%.

24. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

25. ALL INLETS SHALL BE CHANNELIZED.

26. PROVIDE 10' UNDERDRAINS IN FOUR DIRECTIONS AT ALL CATCH BASINS IN PAVEMENT AREAS, UNLESS OTHERWISE NOTED ON THE PLANS. UNDERDRAINS SHALL BE PLACED AT EACH STRUCTURE FACE EXTENDING IN A PERPENDICULAR DIRECTION.

27. OUTLET CURB UNDERDRAINS TO ADJACENT EXISTING UNDERDRAINS OR STORM SEWER SYSTEM.

28. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RINGS & COVERS.

29. ALL EXISTING VALVES, MANHOLES, AND OTHER APPURTENANCES TO REMAIN LOCATED WITHIN THE WORK LIMITS SHALL BE ADJUSTED TO FINISHED GRADE.

30. MAXIMUM FINISH SLOPES SHALL BE 4:1, UNLESS OTHERWISE NOTED. FOR SLOPES 3:1 OR GREATER PROVIDE EROSION CONTROL MATTING PER ODOT ITEM 671 OR AS OTHERWISE PROVIDED ON THE PLANS.

31. ALL DOWNSPOUT LEADER STORM SEWER CONNECTION SHALL BE MINIMUM 6" WITH A MINIMUM SLOPE OF 1.20% OR AS OTHERWISE NOTED.

EARTHWORK NOTES (STANDARD):

EXCAVATE AND REMOVE UNSUITABLE MATERIAL AS DEFINED IN THE GEOTECHNICAL ENGINEERING REPORT, OF WHICH SHALL BE CONSIDERED A PART OF THESE CONTRACT DOCUMENTS:

A. STRIP AND STOCKPILE EXISTING TOPSOIL WITHIN GRADING/SEEDING LIMITS. FINAL STOCKPILE LOCATION TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER. SEED STOCKPILES IN ACCORDANCE WITH SPECIFICATIONS ON EROSION CONTROL PLAN, SEE SHEET C700. REFER TO GEOTECHNICAL REPORT FOR EXISTING TOPSOIL DEPTHS.

B. SUBSEQUENT TO TOPSOIL REMOVAL, BENEATH PAVEMENT AREAS AND PROPOSED BUILDING PAD, PROOF-ROLL EXPOSED SUBGRADE WITH A FULLY-LOADED, TANDEM-AXLE DUMP TRUCK (OR EQUIVALENT) TO IDENTIFY POTENTIAL UNSUITABLE AND UNSTABLE SUBGRADE AREAS. IN LOCATIONS WHERE PROOF-ROLLING HAS FAILED, SOILS SHALL BE DISKED, DRIED AND RECOMPACTED, OR UNDERCUT AND REPLACED WITH COMPACTED ENGINEERED FILL, OR OTHERWISE IMPROVED AS DETERMINED BY THE TESTING AGENCY. IN AREAS WHERE OVER EXCAVATION HAS BEEN CHOSEN TO IMPROVE SUBGRADE, STOCKPILE OVER EXCAVATED SOILS FOR REUSE AS ENGINEERED FILL OR AS GENERAL SITE FILL IN LANDSCAPING AREAS.

C. ESTABLISHING THE GRADES SHOWN ON THIS PLAN WILL REQUIRE IMPORT/EXPORT OF MATERIAL. CONTRACTOR SHALL CONFIRM QUANTITIES.

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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
GENERAL NOTES

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
DRAWN BY:	MRF
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C002

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:46 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 TS.DWG

UTILITY

1. OBTAIN ALL PERMITS AND PAY ALL FEES NECESSARY TO COMPLETE THE WORK AS SHOWN.

2. ALL EXCAVATIONS, CONSTRUCTION, AND BACKFILL OF PIPES SHALL BE CONSTRUCTED UNDER DRY CONDITIONS. THE CONTRACTOR SHALL MAINTAIN ALL EXCAVATIONS IN A DE-WATERED, WORKABLE CONDITION, AND SHALL BE RESPONSIBLE FOR INSTALLING, OPERATING, AND MAINTAINING SUCH DE-WATERING SYSTEMS AS ARE REQUIRED.

3. SUPPORT AND PROTECT ALL UTILITIES EXPOSED DURING EXCAVATION AND TRENCHING.

4. THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO OHIO UTILITIES PROTECTION SERVICE (TELEPHONE NUMBER 800-362-2764), PRODUCER'S UNDERGROUND PROTECTION SERVICE (TELEPHONE NUMBER 614-587-0486), AND TO OWNERS OF UNDERGROUND UTILITIES THAT ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE. NOTICE SHALL BE GIVEN AT LEAST 2 WORKING DAYS BEFORE START OF CONSTRUCTION.

5. THE IDENTITY AND LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR DEPTHS OF UNDERGROUND FACILITIES SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF THE SAME AND FOR ANY RESULTING CONTINGENT DAMAGE.

6. WHERE PLANS PROVIDE FOR A PROPOSED UTILITY TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING UNDERGROUND SEWER OR UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED UTILITY. THESE LOCATIONS ARE NOTED ON THE PLANS AS "EXPOSE."

   IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

   IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

7. COORDINATE SERVICE CONNECTION LOCATIONS AT THE BUILDING WITH THE PLUMBING CONTRACTOR PRIOR TO CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR UNCOORDINATED WORK.

8. CONTRACTORS SHALL COORDINATE ALL WORK WITH GAS, ELECTRIC, TELEVISION, AND TELEPHONE COMPANIES PRIOR TO START OF CONSTRUCTION.

9. ALL AREAS DISTURBED BY UTILITY CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER. CONTRACTOR SHALL SAW-CUT EXISTING PAVEMENT AT LIMITS OF REMOVAL. PAVEMENT AND CURB REPLACEMENT SHALL CONFORM TO LOCAL AUTHORITY CONSTRUCTION STANDARDS.

10. ALL SIGNS, POLES, BENCHES, FLOWER BEDS, BRICK PAVERS AND ANY OTHER SITE FEATURE REQUIRING REMOVAL DUE TO CONSTRUCTION ACTIVITIES SHALL BE STORED ON-SITE AND RE-INSTALLED BY THE CONTRACTOR UPON COMPLETION OF CONSTRUCTION ACTIVITIES.

11. ALL UTILITIES SHALL BE INSPECTED AND APPROVED PRIOR TO BACKFILLING.

12. AT ALL POINTS OF CROSSING WATER MAINS OR OTHER SEWERS, THE BACKFILL SHALL BE GRANULAR MATERIAL BETWEEN THE DEEPER AND SHALLOWER PIPES.

13. CONTRACTOR SHALL COORDINATE CONNECTION TO EXISTING SANITARY SEWER WITH THE LOCAL AUTHORITY.

14. CONTRACTOR SHALL COORDINATE CONNECTION TO EXISTING WATER MAIN WITH THE LOCAL AUTHORITY.

15. MAINTAIN MINIMUM 48" COVER OVER ALL WATER LINES

16. MAINTAIN MINIMUM 30" COVER OVER ALL GAS LINES

17. MAINTAIN MINIMUM 18" VERTICAL CLEARANCE FROM THE OUTSIDE OF ANY WATERLINE PIPE TO THE OUTSIDE OF ANY STORM OR SANITARY SEWER.

18. PROVIDE THRUST BLOCKS OR RESTRAINED MECHANICAL JOINT PIPE AT EACH VALVE, TEE, FITTING, OR CHANGE IN DIRECTION OF WATERLINE, UNLESS OTHERWISE NOTED.

19. REFER TO THE LOCAL AUTHORITY STANDARD DRAWINGS FOR TYPICAL FIRE HYDRANT INSTALLATION DETAILS.

20. CONNECTION TO EXISTING WATER MAINS SHALL NOT BE PERFORMED UNTIL THE NEW LINES HAVE BEEN SANITIZED AND ALL TESTS HAVE BEEN COMPLETED AS SPECIFIED BY THE LOCAL AUTHORITY.

21. ANY REQUIRED WATERLINE SHUT-DOWNS SHALL BE COORDINATED WITH THE LOCAL AUTHORITY.

22. GAS TAP, SERVICE LINE, CURB BOX, AND METER SETTING BY UTILITY PROVIDER. SITE CONTRACTOR TO PROVIDE AND INSTALL GAS SERVICE LINE FROM METER SETTING TO A POINT 5'-0" OUTSIDE OF BUILDING. PLUMBING CONTRACTOR TO INSTALL SERVICE LINE FROM 5'-0" OUTSIDE OF BUILDING FACE TO GAS SERVICE FOR BUILDING. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.

SANITARY SEWERS

1. CONNECTIONS TO THE SANITARY SEWER WILL BE PERMITTED UPON RECEIVING AN OEPA PERMIT TO INSTALL (PTI), AND UPON RECEIVING A SATISFACTORY LETTER FROM THE DESIGN ENGINEER STATING THAT THE PROJECT HAS BEEN CONSTRUCTED AS PER THE PLANS, AND ALL OF THE CONDITIONS OF THE PTI HAVE BEEN MET. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL REQUIRED OHIO EPA APPROVALS AND PAYING REVIEW FEES.

2. SANITARY SEWAGE COLLECTION SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES, REGULATIONS, STANDARDS AND SPECIFICATIONS OF THE LOCAL AUTHORITY, OHIO EPA, OHIO DEPARTMENT OF HEALTH AND THE CURRENT EDITION OF THE GREAT LAKES-UPPER MISSISSIPPI RIVER BOARD (TEN STATES) - RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES.

3. THE MINIMUM REQUIREMENTS FOR SANITARY SEWER PIPE WITH DIAMETERS 15 INCHES AND SMALLER SHALL BE REINFORCED CONCRETE PIPE ASTM C76 CLASS 3, OR PVC SEWER PIPE ASTM D3034, SDR 35. PIPE FOR 6-INCH DIAMETER HOUSE SERVICE LINES SHALL BE PVC PIPE ASTM D3034, SDR 35. PVC PIPE SHALL NOT BE USED AT DEPTHS GREATER THAN 28 FEET. PIPE MATERIALS AND RELATED STRUCTURES SHALL BE SHOP TESTED IN ACCORDANCE WITH LOCAL REGULATIONS. PIPE JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM D3212.

4. THE MINIMUM REQUIREMENTS FOR SANITARY SEWER PIPES WITH DIAMETERS GREATER THAN 15 INCHES SHALL BE REINFORCED CONCRETE PIPE ASTM C76 WITH CLASS DESIGNATION SPECIFIED IN THE APPROVED CONSTRUCTION DRAWINGS.

5. ALL IN-LINE WYE AND TEE CONNECTIONS IN CONCRETE SEWERS, 18-INCH DIAMETER AND LARGER, SHALL BE EITHER KOR-N-TEE OR KOR-N-SEAL CONNECTIONS CONFORMING TO THE MANUFACTURER'S RECOMMENDATIONS.

6. ALL MANHOLE LIDS SHALL BE PROVIDED WITH CONTINUOUS SELF-SEALING GASKETS. THE APPROVED CONSTRUCTION DRAWINGS SHALL SHOW WHERE BOLT-DOWN LIDS ARE REQUIRED. SANITARY SEWER MANHOLES SHALL BE PRECAST CONCRETE OR AS APPROVED BY THE ENGINEER AND CONFORM TO THE LOCAL REGULATIONS.

7. ALL PVC SEWER PIPES SHALL BE DEFLECTION TESTED NO LESS THAN 60 DAYS AFTER COMPLETION OF BACKFILLING OPERATIONS. ALL OTHER REQUIREMENTS SHALL BE ACCORDING TO LOCAL SPECIFICATIONS.

8. TEMPORARY BULKHEADS SHALL BE PLACED IN PIPES AT LOCATIONS SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS AND SHALL REMAIN IN PLACE UNTIL THE PERMIT TO INSTALL (PTI) HAS BEEN ISSUED BY THE OEPA AND THE SEWERS HAVE BEEN APPROVED FOR USE BY THE ENGINEER. THE COST FOR FURNISHING, INSTALLING, MAINTAINING, AND REMOVING BULKHEADS SHALL BE INCLUDED IN THE CONTRACT UNIT BID PRICE FOR THE VARIOUS SANITARY SEWER ITEMS.

9. ALL SANITARY SEWERS INCLUDING SANITARY SEWER SERVICE LINES SHALL BE SUBJECTED TO AND PASS INFILTRATION OR EXFILTRATION TESTS ACCORDING TO THE LOCAL AUTHORITY AND MUST BE APPROVED FOR USE BY THE ENGINEER BEFORE ANY SERVICE CONNECTIONS ARE TAPPED INTO SEWERS.

10. FOR SANITARY SEWER INFILTRATION, LEAKAGE THROUGH JOINTS SHALL NOT EXCEED 100 GALLONS PER INCH OF TRIBUTARY SEWER DIAMETER PER 24 HOURS PER MILE OF LENGTH OR THE COMPUTED EQUIVALENT. ALL SANITARY SEWERS SHALL BE TESTED.

11. AT THE DETERMINATION OF THE ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO PERFORM A TV INSPECTION OF THE SANITARY SEWER SYSTEM PRIOR TO FINAL ACCEPTANCE BY THE LOCAL AUTHORITY. THIS WORK SHALL BE COMPLETED BY THE CONTRACTOR AT HIS EXPENSE.

12. VISIBLE LEAKS OR OTHER DEFECTS OBSERVED OR DISCOVERED DURING TV INSPECTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER.

13. ROOF DRAINS, FOUNDATION DRAINS, FIELD TILE OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE STRICTLY PROHIBITED.

14. SERVICE RISERS SHALL BE INSTALLED WHERE THE DEPTH FROM WYES TO PROPOSED GROUND ELEVATION EXCEEDS 10 FEET. TOPS OF RISERS SHALL BE NO LESS THAN 9 FEET BELOW PROPOSED GROUND ELEVATION IF BASEMENT SERVICE IS INTENDED.

15. WHERE SERVICE RISERS ARE NOT INSTALLED, A MINIMUM 5-FOOT LENGTH OF SANITARY SEWER SERVICE PIPE OF THE SAME SIZE AS THE WYE OPENING SHALL BE INSTALLED.

16. THE CONTRACTOR SHALL FURNISH AND PLACE, AS DIRECTED, APPROVED WYE POLES MADE OF 2 INCHES X 2 INCHES LUMBER AT ALL WYE LOCATIONS, ENDS OF EXTENDED SERVICES, OR AT THE END OF EACH RISER WHERE RISERS ARE REQUIRED. WYE POLES SHALL BE VISIBLE BEFORE ACCEPTANCE BY THE LOCAL AUTHORITY. THE COST OF THESE POLES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE VARIOUS SEWER ITEMS.

17. EXISTING SANITARY SEWER FLOWS SHALL BE MAINTAINED AT ALL TIMES. COSTS FOR PUMPING AND BYPASSING SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE BID FOR THE RELATED ITEMS.

18. THE CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, AND LABOR TO MAKE CONNECTIONS TO EXISTING MANHOLES. THE SEWER PIPE TO MANHOLE CONNECTIONS FOR ALL SANITARY SEWERS SHALL BE FLEXIBLE AND WATERTIGHT. ALL HOLES SHALL BE NEATLY CORED. THE SEWER PIPE BARREL AT THE SPRINGLINE SHALL NOT EXTEND MORE THAN 1 INCH BEYOND THE INSIDE FACE OF THE MANHOLE. TO MAINTAIN FLEXIBILITY IN THE CONNECTION, A 1-INCH SPACE SHALL BE LEFT BETWEEN THE END OF THE PIPE INSIDE THE MANHOLE AND THE CONCRETE CHANNEL; THIS SPACE SHALL BE FILLED WITH A WATERPROOF FLEXIBLE JOINT FILLER. ANY METAL THAT IS USED SHALL BE TYPE 300 SERIES STAINLESS STEEL. THE CONNECTION MAY BE ANY OF THE FOLLOWING TYPES:

   A. RUBBER SLEEVE WITH STAINLESS STEEL BANDING.
      1) KOR-N-SEAL AS MANUFACTURED BY NATIONAL POLLUTION CONTROL SYSTEMS, INC.
      2) LOCK JOINT FLEXIBLE MANHOLE SLEEVE AS MANUFACTURED BY INTERPACE CORPORATION.
      3) OR EQUAL AS APPROVED BY THE CITY ENGINEER.

   B. RUBBER GASKET COMPRESSION.
      1) PRESS WEDGE II AS MANUFACTURED BY PRESS-SEAL GASKET CORPORATION.
      2) DURA SEAL III AS MANUFACTURED BY DURA TECH, INC.
      3) LINK-SEAL AS MANUFACTURED BY THUNDERLINE CORPORATION.
      4) OR EQUAL AS APPROVED BY THE CITY ENGINEER.

19. SANITARY SEWER P.V.C. SEWER PIPE SHALL ADHERE TO ASTM D3034 (SDR-35) FOR SEWERS UP TO AND INCLUDING 18" DIAMETER AND PROVIDE PIPE JOINTS CONFORMING TO THE REQUIREMENTS OF ASTM D3212

20. SEWER LATERALS TO BE MIN. 6" SDR 35 WITH 2% SLOPE

STORM SEWER

1. ALL STORM WATER DETENTION AND RETENTION AREAS AND MAJOR FLOOD ROUTING SWALES SHALL BE CONSTRUCTED TO FINISH GRADE AND HYDRO-SEEDED AND HYDRO-MULCHED ACCORDING TO ODOT ITEMS 203 AND 659.

2. ALL STORM SEWERS SHALL BE HDPE CONFORMING TO AASHTO M252/ M294, ASTM F2648/ F2306, & ASTM D3350, GASKETS PER ASTM F477, AND JOINTS PER ASTM D3212; OR BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM DESIGNATION C76, WALL B, CLASS IV FOR PIPE DIAMETERS 12 INCHES TO 15 INCHES, CLASS III FOR 18 INCHES TO 24 INCH PIPES, AND 27 INCHES AND LARGER PIPE SHALL BE CLASS II, UNLESS OTHERWISE SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS.

3. HEADWALLS AND ENDWALLS SHALL BE REQUIRED AT ALL STORM SEWER INLETS OR OUTLETS TO AND FROM STORMWATER MANAGEMENT FACILITIES.

4. STORM INLETS OR CATCH BASINS SHALL BE CHANNELIZED AND HAVE BICYCLE SAFE GRATES. MANHOLE LIDS SHALL INCLUDE CITY OF SPRINGBORO LOGO AND ALL CURB INLET AND CATCH BASIN GRATES SHALL INCLUDE ENGRAVED LETTERING: "DUMP NO WASTE; DRAINS TO RIVER."

5. STORM SEWER OUTLETS GREATER THAN 18 INCHES IN DIAMETER ACCESSIBLE FROM STORMWATER MANAGEMENT FACILITIES OR WATERCOURSES SHALL BE PROVIDED WITH SAFETY GRATES, AS APPROVED BY THE CITY ENGINEER.

RETENTION/DETENTION BASINS

1. ANTI-SEEP COLLARS ARE REQUIRED FOR ALL RETENTION/DETENTION POND OUTLETS. A MINIMUM OF TWO COLLARS ARE REQUIRED. COLLARS MUST BE CONSTRUCTED (EXCAVATED) A MINIMUM OF 3.0' INTO UNDISTURBED SOIL ON ALL THREE SIDES. CLASS C CONCRETE PER CURRENT DELAWARE COUNTY SUPPLEMENTAL SPECIFICATIONS SHALL BE USED FOR REPLACEMENT OF THE EXCAVATED MATERIAL. THE COLLARS MUST BE A MINIMUM OF 8 INCHES THICK.

2. A CLAY CORE OF SUFFICIENT THICKNESS IS REQUIRED FOR ALL DETENTION AND RETENTION PONDS IN CUT AREAS. THE LOCAL AUTHORITY SHALL FIELD APPROVE THE CORE THICKNESS OR THE CONDITION OF THE EXISTING SOILS AS A SUBSTITUTE FOR A CLAY CORE (E.G., EXISTING CLAY MATERIAL).

3. TREES AND LANDSCAPING SHALL NOT BE PERMITTED ON EMBANKMENT SURFACES.

WATER SYSTEM GENERAL NOTES:

1. WATER LINE DESIGN, MATERIALS, AND INSTALLATION METHODS SHALL CONFORM TO APPLICABLE SECTIONS OF RECOMMENDED STANDARDS FOR WATER WORKS (TEN STATES STANDARDS), AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS, AND THE LOCAL AUTHORITY.

2. WATER MAINS SHALL BECOME THE OWNERSHIP OF THE LOCAL AUTHORITY WATER UPON FINAL ACCEPTANCE.

3. WATER LINE CONSTRUCTION:
   a. WATER LINES SHALL BE NSF 61 APPROVED, AND COMPLIANT WITH ASTM D2241 & OHIO EPA ENG-08-001 STANDARDS.

   b. USE THE FOLLOWING TYPE AND CLASS OF PIPE UNLESS OTHERWISE INDICATED ON THE DRAWINGS:
      i. 2-INCH WATER LINE PIPE: CLASS 200 SDR 21 YELOMINE PVC (RESTRAINED JOINT).
      ii. 4-INCH WATER LINE PIPE: CLASS 200 SDR 21 PVC, OR DIP PER AWWA C151 CLASS 52.
      iii. 6-INCH WATER LINE PIPE: CLASS 200 SDR 21 PVC, OR DIP PER AWWA C151 CLASS 52.
      iv. 8-INCH TO 12-INCH WATER LINE PIPE: CLASS 160 SDR 26 PVC, OR DIP PER AWWA C151 CLASS 52.
      v. 16-INCH AND LARGER WATER LINE PIPE: AWWA C151 CLASS 52 DIP.
      vi. 4-INCH PIPE AND LARGER USED FOR FIRE SERVICE: AWWA C900 DR 18 (235 PSI) PVC, OR DIP PER AWWA C151 CLASS 52.
      vii. ALL LATERALS TO BE MIN 1 INCH K COPPER WITH METER AND MTU INSIDE THE BUILDING

   c. ALL FITTINGS SHALL BE MECHANICAL JOINT CONFORMING TO AWWA C153.

   d. ALL VALVES SHALL BE MECHANICAL JOINT CONFORMING TO AWWA WITH AISI 304 STAINLESS STEEL EXTERNAL HARDWARE. VALVES 12-INCH AND SMALLER SHALL BE RESILIENT-SEATED GATE VALVES PER AWWA C509 AND VALVES 16-INCH AND LARGER SHALL BE PRATT GROUNDHOG BUTTERFLY VALVES PER AWWA C504.

   e. PROVIDE HEAVY-DUTY VALVE BOXES ON ALL HOT-TAPS AND AT VALVES LOCATED UNDER GRAVEL OR PAVEMENT SURFACES.

   f. TOP OF VALVE BOX SHALL BE FLUSH WITH FINISHED GRADE IN PAVED AREAS, AND 4 INCHES ABOVE FINISHED GRADE IN NON-PAVED AREAS.

   g. MAINTAIN A MINIMUM 10-FOOT HORIZONTAL AND 1.5-FOOT VERTICAL SEPARATION BETWEEN WATER LINES AND SANITARY AND STORM SEWERS.

   h. ALL OTHER BURIED UTILITIES SHALL MAINTAIN A MINIMUM 5-FOOT HORIZONTAL SEPARATION, AND 2-FOOT VERTICAL SEPARATION FROM THE CENTERLINE OF WATER LINES AS FINALLY LAID AND CONSTRUCTED.

   i. PROVIDE CONCRETE THRUST BLOCKING FOR ALL FITTINGS, VALVES, ANCHOR TEES, AND HYDRANTS.

   j. BURY WATER LINES A MINIMUM DEPTH OF 48-INCHES TO THE TOP OF PIPE AT ALL LOCATIONS EXCEPT AT SPECIFIC HYDRANT TEE LOCATIONS AS SHOWN ON THE PLANS. HIGH POINTS IN THE WATERLINE MUST OCCUR AT THE STATIONED HYDRANT TEE LOCATIONS.

   k. ALL ENGINEERED FILL TO BE PLACED OVER OR UNDER WATER LINES SHALL BE IN PLACE PRIOR TO THE CONSTRUCTION OF THE WATER LINES.

   l. PLACE A 5-FOOT STEEL FENCE POST OR 4"X4" WOOD POST AT VALVES AND THE ENDS OF LINES. PAINT BLUE.

4. DISINFECT ALL WATER LINES IN ACCORDANCE WITH AWWA C651 AND LOCAL AUTHORITY SPECIFICATIONS. LOCATION OF STERILIZATION AND TESTING CONNECTIONS AT VALVES SHALL BE DIRECTED BY THE OWNER AND ALL COST ASSOCIATED WITH PLACING AND UTILIZING SAID STERILIZATION AND TESTING CONNECTIONS SHALL BE PAID BY THE CONTRACTOR.

5. ALL PIPE INSTALLATION AND PRESSURE TESTING SHALL BE IN ACCORDANCE WITH AWWA C600 FOR DUCTILE IRON PIPE AND C605 FOR PLASTIC PIPE, AND LOCAL AUTHORITY REQUIREMENTS.

6. CHLORINATION TO BE COMPLETED BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS AND ALL ASSOCIATED COSTS PAID BY THE CONTRACTOR.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING THE WATER LINE PRIOR TO FINAL ACCEPTANCE BY LOCAL AUTHORITY, AND REPAIRING ALL DAMAGES FROM CONSTRUCTION ACTIVITY.

8. ALL WATER MAINS, INCLUDING THOSE NOT DESIGNED TO PROVIDE FIRE PROTECTION, SHALL BE SIZED FOLLOWING AN ANALYSIS BASED ON FLOW DEMANDS, AND PRESSURE REQUIREMENTS. THE SYSTEM SHALL BE DESIGNED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI AT GROUND LEVEL AT ALL POINTS IN THE DISTRIBUTION SYSTEM UNDER ALL DESIGNED FLOW CONDITIONS. NORMAL WORKING PRESSURE IN THE DISTRIBUTION SYSTEM SHALL NOT BE LESS THAN 35 PSI.

9. NO WATER SERVICE CONNECTIONS TO ANY BUILDING SHALL BE PERMITTED PRIOR TO FINAL ACCEPTANCE BY THE THE OWNER WHICH SHALL INCLUDE APPROVED RECTIFICATION OF ALL PUNCH LIST ITEMS.

10. FIRE HYDRANTS SHALL BE PER LOCAL FIRE DEPARTMENT.

11. ELECTRONICALLY SUPERVISED POST INDICATING VALVE SHALL BE MUELLER COMPANY A-20808, REFER TO ELECTRICAL DRAWINGS FOR POWER SUPPLY. SEE PLANS FOR PIV LOCATION.

12. ALL PVC WATER LINE RESTRAINT BENDS SHALL BE BULLDOG TYPE RESTRAINED SYSTEM (SEE TABLES BELOW FOR RESTRAINT LENGTHS AND THRUST FORCE) WITH MEGALUG OR EQUAL INSTALLED AT ALL , HYDRANTS, TEES, ETC.

13. IN AREAS WITH CORROSIVE SOILS, ZINC ANODE CAPS SHALL BE PLACED ON ALL BOLTS. CATHODIC PROTECTION WILL BE ON ALL METALLIC MATERIAL. COORDINATE WITH CATHODIC CONSULTANT.

14. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR PRELIMINARY CHECKING. THE ENGINEER SHALL FORWARD THE CHECKED SHOP DRAWINGS TO THE OWNER FOR FINAL APPROVAL.

HORIZONTAL RESTRAINT JOINT (FIRE LOOP) - 150 PSI

	FITTING TYPE	RESTRAINT LENGTH (FT)	THRUST (LBS)
8"	22.5° BEND	4	3,766
	45° BEND	8	7,386
	90° BEND	19	13,647
10"	22.5° BEND	5	5,664
	45° BEND	9	11,110
	90° BEND	22	20,529
12"	22.5° BEND	6	8,010
	45° BEND	11	15,712
	90° BEND	26	29,031

VERTICAL RESTRAINT JOINT (FIRE LOOP) - 150 PSI

	FITTING TYPE	UPPER BAND RESTRAINT LENGTH (FT)	LOW SIDE DEPTH	LOWER BAND RESTRAINT LENGTH (FT)	THRUST (LBS)
8"	22.5° BEND	15	6	3	3,766
	45° BEND	31	6	6	7,386
	22.5° BEND	15	7	3	3,766
	45° BEND	31	7	6	7,386
	22.5° BEND	15	8	3	3,766
	45° BEND	31	8	5	7,386
10"	22.5° BEND	18	6	4	5,664
	45° BEND	37	6	8	11,110
	22.5° BEND	18	7	4	5,664
	45° BEND	37	7	7	11,110
	22.5° BEND	18	8	3	5,664
	45° BEND	37	8	6	11,110
12"	22.5° BEND	21	6	5	8,010
	45° BEND	44	6	9	15,712
	22.5° BEND	21	7	4	8,010
	45° BEND	44	7	8	15,712
	22.5° BEND	21	8	4	8,010
	45° BEND	44	8	8	15,712

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FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
GENERAL NOTES

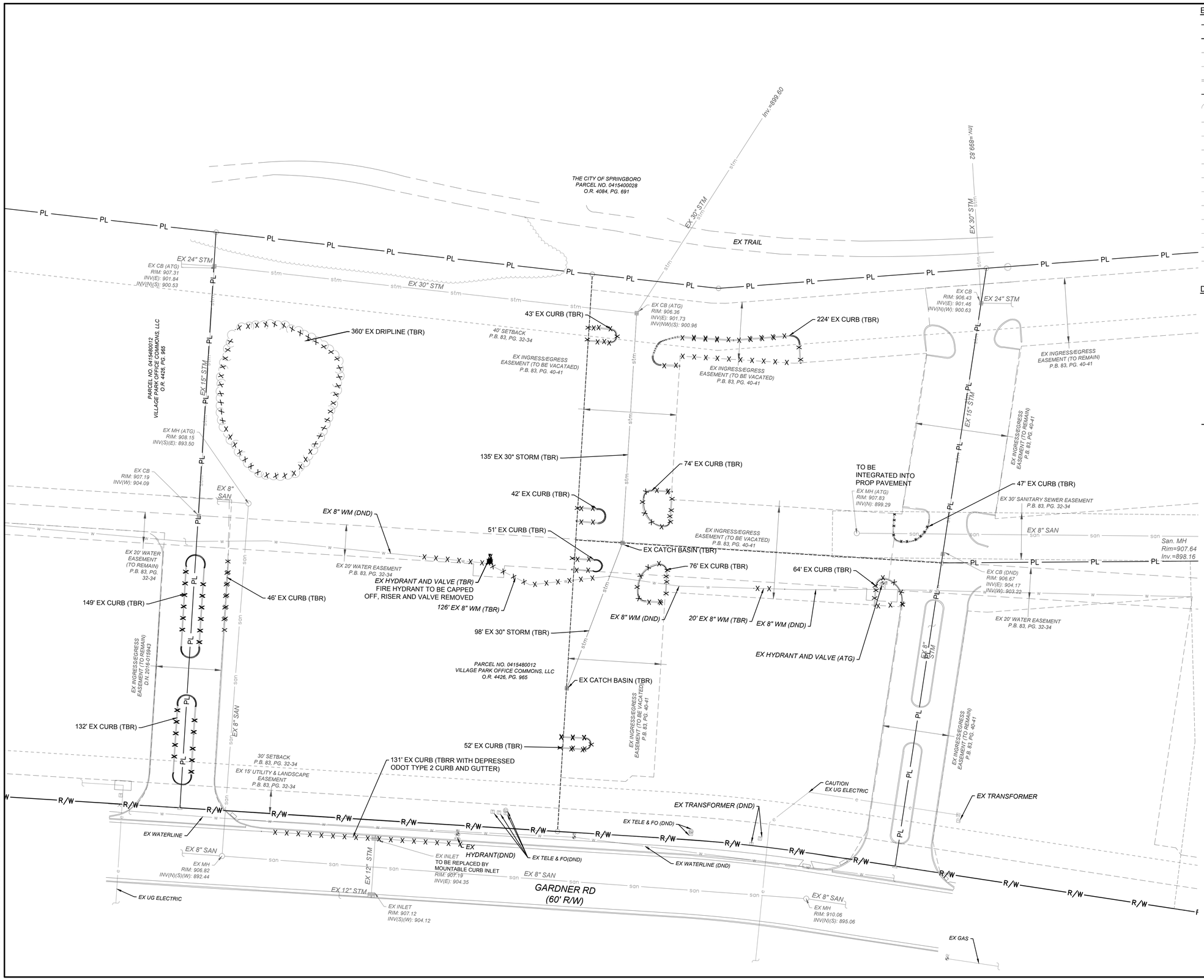
REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
DRAWN BY:	MRF
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C003

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 8:45 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 EC.DWG



EXISTING LEGEND

PL	PROPERTY LINE
R/W	RIGHT-OF-WAY
	PAVEMENT/ SIDEWALK
	PAVEMENT STRIPING
	CURB
	ROAD CENTERLINE
	TREE DRIP LINE
/	FENCE
	STREAM
stm	STORM SEWER
san	SANITARY SEWER
w	WATER LINE
g	GAS LINE
fo	FIBER OPTIC LINE
e	ELECTRIC
ohe	OVERHEAD ELECTRIC
t	TELECOMMUNICATION
ctv	CABLE TELEVISION

DEMOLITION LEGEND

TBR	TO BE REMOVED
TBRO	TO BE REMOVED BY OTHERS
TBRR	TO BE REMOVED AND REPLACED
TBA	TO BE ABANDONED
DND	DO NOT DISTURB
	ASPHALT PAVEMENT TO BE REMOVED
	CONCRETE PAVEMENT TO BE REMOVED
	BUILDING TO BE REMOVED
X–X–X	ITEM TO BE REMOVED

KZF DESIGN
Designing Better Futures

AMERICAN STRUCTUREPOINT INC.
2550 Corporate Exchange Dr. Ste 300 | Columbus, Ohio 43231
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CONSTRUCTION DOCUMENTS
FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
EXISTING CONDITIONS & DEMOLITION PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

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C100

SITE LEGEND

- PL — PROPERTY LINE
- R/W — RIGHT-OF-WAY
- (X) — PARKING STALL COUNT
- (X) — ADA PARKING STALL COUNT
- STRAIGHT CURB
- CURB AND GUTTER
- LIGHT POLE (BY OTHERS)
- x — FENCE
- PARKING BLOCK
- SIGN
- CONCRETE BOLLARD
- HEAVY DUTY ASPHALT PAVEMENT
- MEDIUM DUTY ASPHALT PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE
- CONCRETE WALK
- GRAVEL PATH

THE CITY OF SPRINGBORO
PARCEL NO. 0415400028
O.R. 4084, PG. 691

PARCEL NO. 0415480012
VILLAGE PARK OFFICE COMMONS, LLC
O.R. 4426, PG. 965

FUTURE/POTENTIAL SALT STORAGE AREA

PROP LANDSCAPE BERM

40' SET BACK
P.B. 83, PG. 32-34

EX PARKING TO BE STRIPED (11 SPACES)

FUTURE/POTENTIAL PARKING

FUTURE/POTENTIAL PARKING

EX INGRESS/EGRESS EASEMENT (TO REMAIN)
P.B. 83, PG. 40-41

135' (15 SPACES)

PROP VISITOR LOT

72' (8 SPACES)

PROP DUMPSTER LOCATION

CONNECT TO EX EOP

71.46'

83.5'

EX 20' WATER EASEMENT (TO REMAIN)
P.B. 83, PG. 32-34

EX 30' SANITARY SEWER EASEMENT
P.B. 83, PG. 32-34

DETECTABLE WARNING

CONNECT TO EX EOP

EX 20' WATER EASEMENT
P.B. 83, PG. 32-34

CONNECT TO EX CURB

N:578811.94
E: 1479989.00

PROP OUTSIDE REC AREA

PROP CANOPY

EX INGRESS/EGRESS EASEMENT (TO REMAIN)
D.N. 2016-015943

PARCEL NO. 0415480012
VILLAGE PARK OFFICE COMMONS, LLC
O.R. 4426, PG. 965

PROP BUILDING A
21,092 SF

(TYP)

N:578807.85
E: 1480072.23

PROP STAFF PARKING (21 SPACES)

76.98'

PROP CANOPY

30' SETBACK
P.B. 83, PG. 32-34

EX 15' UTILITY & LANDSCAPE EASEMENT
P.B. 83, PG. 32-34

76'

PROP CONCRETE APRON FOR EQUIPMENT

EX INGRESS/EGRESS EASEMENT (TO REMAIN)
P.B. 83, PG. 40-41

PROP FLAG POLES

CONNECT TO CURB

DEPRESSED ODOT TYPE 2 CURB AND GUTTER

CONNECT TO EOP

CONNECT TO CURB

PROP MONUMENT

CONNECT TO EX WALK

GARDNER RD
(60' R/W)

HORZ 1"=30' 0 30 60

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CONSTRUCTION DOCUMENTS FOR
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SITE PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

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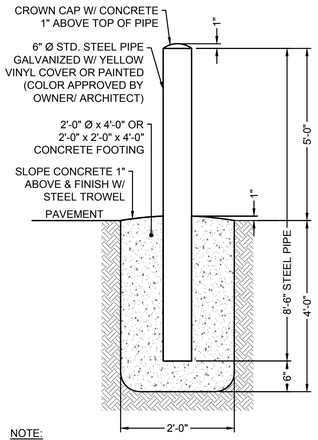
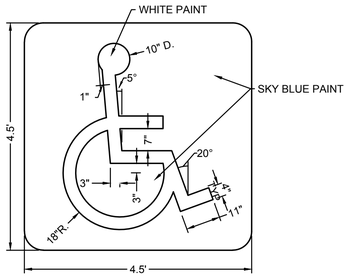


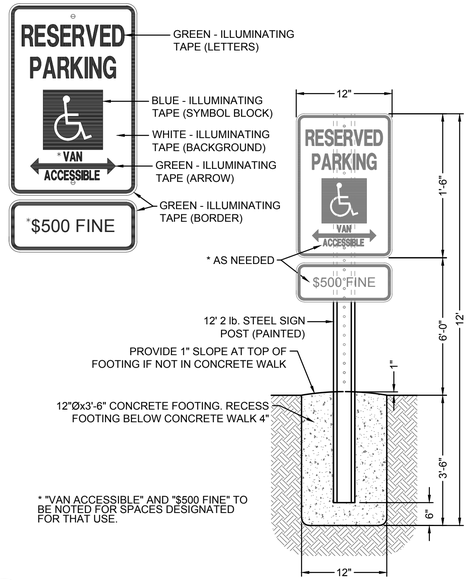
NOTE:

CONTRACTOR SHALL PROVIDE PIPE BOLLARDS AT 6'-0" O.C. (MAXIMUM SPACING) AT ALL GAS METERS, ELECTRICAL TRANSFORMERS, ELECTRICAL SWITCH GEAR, MECHANICAL UNITS AND OTHER SUCH DEVICES WHICH ARE EXPOSED TO TRUCK OR AUTOMOBILE TRAFFIC.

A 6 INCH STEEL PIPE BOLLARD
NOT TO SCALE

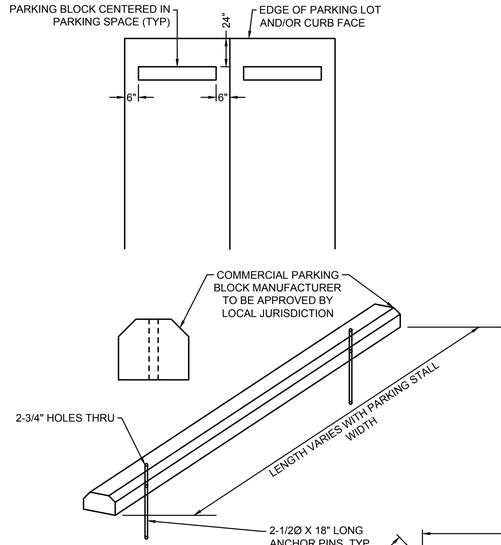


B ADA ACCESSIBLE PARKING SYMBOL
NOT TO SCALE

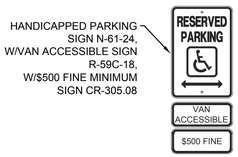


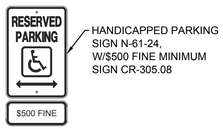
* "VAN ACCESSIBLE" AND "$500 FINE" TO BE NOTED FOR SPACES DESIGNATED FOR THAT USE.

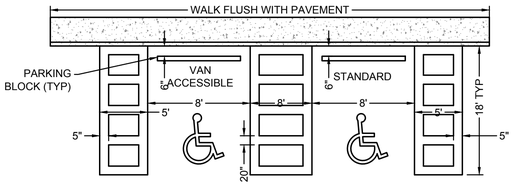
C ADA ACCESSIBLE PARKING SIGN
NOT TO SCALE



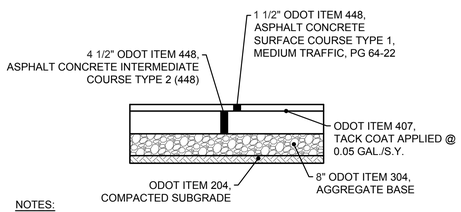
D PARKING BLOCK
NOT TO SCALE







E STANDARD AND VAN ACCESSIBLE PARKING STRIPING
NOT TO SCALE

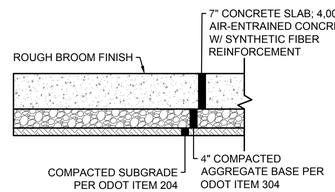


NOTES:

1. COMPOSE HOT MIX ASPHALT MIXTURE WITH AGGREGATE AND ASPHALT BINDER MEETING ODOT 401 REQUIREMENTS.
2. SUBMIT AN APPROVED JOB MIX FORMULA INCLUDING MIX TYPE PROPOSED FOR USE, AGGREGATE SOURCE, TYPE, AND GRADATION, PERCENT OF ASPHALT BINDER, AND UNIT WEIGHT OF THE MIXTURE.
3. OBTAIN JOB MIX FORMULA APPROVAL BY PROVIDING A PREVIOUSLY ODOT APPROVED FORMULA OR CONTRACT AN INDEPENDENT TESTING AGENCY TO PROVIDE TESTING AND WRITTEN APPROVAL OF THE FORMULA. THE AGENCY PERFORMING THE TESTING MUST BE LEVEL III BITUMINOUS CONCRETE APPROVED BY ODOT.

NOTE:
PAVEMENT DESIGN IS BASED ON A GEOTECHNICAL ENGINEERS RECOMMENDATION MADE ON 04/05/2023. AMERICAN STRUCTUREPOINT IS NOT RESPONSIBLE FOR PAVEMENT DESIGN.

H HEAVY DUTY ASPHALT PAVEMENT
NOT TO SCALE



NOTE:
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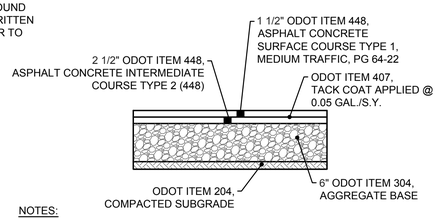
NOTES:

1. SYNTHETIC FIBER REINFORCEMENT: ASTM C1116-97 AND ASTM C1018-97. ACCEPTABLE PRODUCTS INCLUDE, BUT ARE NOT LIMITED:
   A. NYCON NYLON FIBERS
   B. FORTA NYLO-MONO NYLON FIBERS
   C. FIBERMESH FIBERMIX STEALTH POLYPROPYLENE FIBERS
   D. GRACE POLYPROPYLENE FIBERS
   E. TUFF-STRAND OR APPROVED EQUAL

   SYNTHETIC FIBER REINFORCEMENT SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. DOSAGE RATE SHALL BE AS RECOMMENDED BY THE MANUFACTURER, BUT NOT LESS THAN 3 POUNDS PER CUBIC YARD.
2. DISSIPATING CURING COMPOUND: COMPLY WITH ASTM C309-98A, TYPE 1, CLASS A OR B (CLEAR), EXCEPT MOISTURE LOSS NOT TO EXCEED 0.40 KG/SQ M. IN 72 HOURS. COMPOUND SHALL COMPLY WITH EPA'S VOC REQUIREMENTS. APPLY AT THE MANUFACTURER'S WRITTEN RECOMMENDED APPLICATION RATE. COMPLETELY REMOVE CURING COMPOUND PRIOR TO THE APPLICATION OF PENETRATIONG SEALER.

F INDUSTRIAL CONCRETE SLAB
NOT TO SCALE



NOTES:

1. COMPOSE HOT MIX ASPHALT MIXTURE WITH AGGREGATE AND ASPHALT BINDER MEETING ODOT 401 REQUIREMENTS.
2. SUBMIT AN APPROVED JOB MIX FORMULA INCLUDING MIX TYPE PROPOSED FOR USE, AGGREGATE SOURCE, TYPE, AND GRADATION, PERCENT OF ASPHALT BINDER, AND UNIT WEIGHT OF THE MIXTURE.
3. OBTAIN JOB MIX FORMULA APPROVAL BY PROVIDING A PREVIOUSLY ODOT APPROVED FORMULA OR CONTRACT AN INDEPENDENT TESTING AGENCY TO PROVIDE TESTING AND WRITTEN APPROVAL OF THE FORMULA. THE AGENCY PERFORMING THE TESTING MUST BE LEVEL III BITUMINOUS CONCRETE APPROVED BY ODOT.

NOTE:
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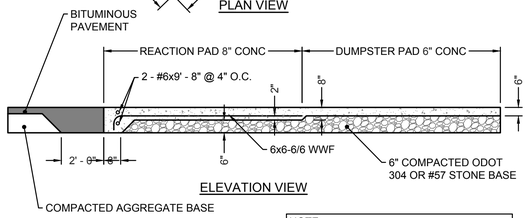
I LIGHT DUTY ASPHALT PAVEMENT
NOT TO SCALE

PLAN VIEW



ELEVATION VIEW

NOTE:
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G TRASH PAD
NOT TO SCALE

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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
SITE PLAN DETAILS

REVISIONS	DATE	SHEET NO.	DESCRIPTION

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C201

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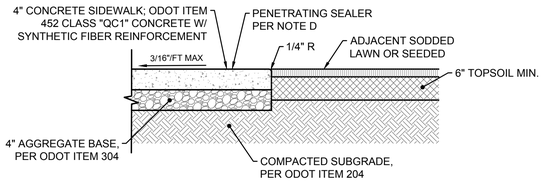

NOTES:

A. PROVIDE PROPORTIONING REQUIREMENTS FOR PORTLAND CEMENT CONCRETE MIX DESIGNS, MIXING, AND CONTROLS PER ODOT ITEM 499.

B. SYNTHETIC FIBER REINFORCEMENT: ASTM C1116. ACCEPTABLE PRODUCTS INCLUDE, BUT ARE NOT LIMITED:
   1. NYCON NYLON FIBERS
   2. FORTA NYLO-MONO NYLON FIBERS
   3. FIBERMESH FIBERMIX STEALTH POLYPROPYLENE FIBERS
   4. GRACE POLYPROPYLENE FIBERS
   5. TUFF STRAND OR APPROVED EQUAL

   SYNTHETIC FIBER REINFORCEMENT SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. DOSAGE RATE SHALL BE AS RECOMMENDED BY THE MANUFACTURER, BUT NOT LESS THAN 1 POUND PER CUBIC YARD.

C. DISSIPATING CURING COMPOUND: COMPLY WITH ASTM C309, TYPE 1, CLASS A OR B (CLEAR), EXCEPT MOISTURE LOSS NOT TO EXCEED 0.40 KG/SQ M. IN 72 HOURS. COMPOUND SHALL COMPLY WITH EPA'S VOC REQUIREMENTS. APPLY AT THE MANUFACTURER'S WRITTEN RECOMMENDED APPLICATION RATE. COMPLETELY REMOVE CURING COMPOUND PRIOR TO THE APPLICATION OF PENETRATIONS SEALER.

D. PENETRATING SEALER: ACCEPTABLE PRODUCTS INCLUDE, BUT ARE NOT LIMITED TO:
   1. L&M CONSTRUCTION CHEMICALS - AQUAPEL PLUS
   2. PROSOCO - SALTGUARD WB
   3. PROTECTOSIL - CHEM-TRETE 40 VOC
   4. LYMTAL INTERNATIONAL - ISO-FLEX 618-50 WB
   5. BASF - MASTER PROTECT H 400
   6. TEX-COTE - RAINSTOPPER RS1500

J CONCRETE SIDEWALK
NOT TO SCALE

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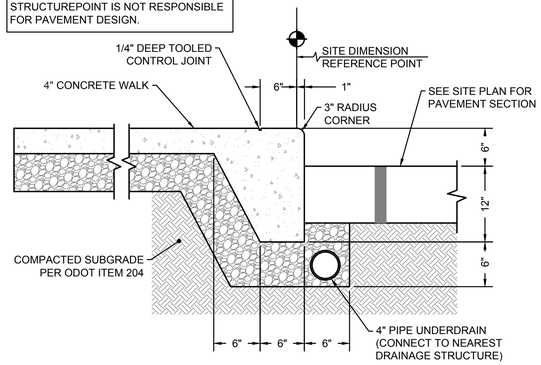

K INTEGRAL CONCRETE WALK AND CURB
NOT TO SCALE

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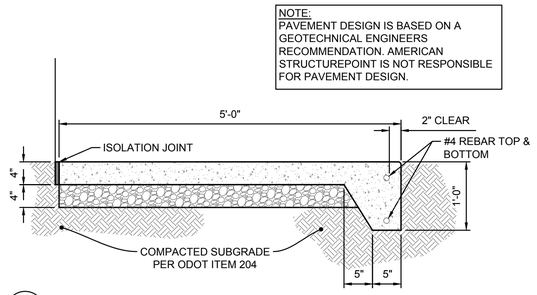
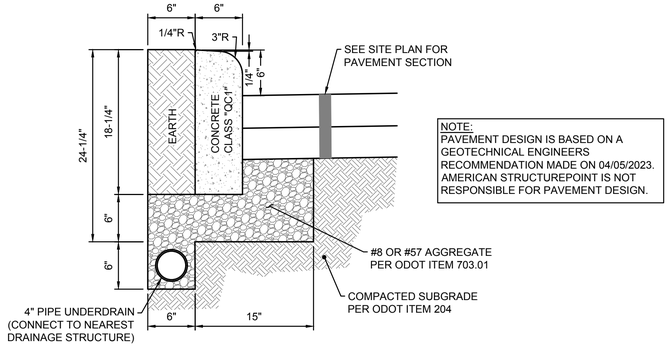


L CONCRETE STOOP
NOT TO SCALE



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NOTES:

1. ALL EXPOSED SURFACES OF CONCRETE CURB TO BE FLOATED AND BRUSH FINISHED, UNLESS PLACED BY A CURB MACHINE.

M STRAIGHT 18 IN CONCRETE CURB WITH UNDERDRAIN
NOT TO SCALE

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UTILITY LEGEND

- GAS
- SANITARY GRAVITY
- SANITARY SERVICE
- WATER
- ELECTRIC
- TELECOMMUNICATION
- LIGHTING
- STORM SEWER
- CATCH BASIN
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- FIRE DEPARTMENT CONNECTION
- LIGHT POLE (BY OTHERS)

THE CITY OF SPRINGBORO
PARCEL NO. 0415400028
O.R. 4084, PG. 691

EX TRAIL

EX 24" STM
EX CB (ATG)
RIM: 907.31
INV(E): 901.84
INV(N)(S): 900.53

EX 30" STM

EX CB (ATG)
RIM: 906.36
INV(E): 901.73
INV(NW)(S): 900.96

EX CB
RIM: 906.43
INV(E): 901.46
INV(N)(W): 900.63

EX 24" STM

Inv.=899.60

Inv.=899.82

FUTURE/POTENTIAL
SALT STORAGE AREA

PARCEL NO. 0415480012
VILLAGE PARK OFFICE COMMONS, LLC
O.R. 4426, PG. 965

40' SETBACK
P.B. 83, PG. 32-34

EX INGRESS/EGRESS
EASEMENT (TO BE VACATAED)
P.B. 83, PG. 40-41

EX INGRESS/EGRESS
EASEMENT (TO BE VACATED)
P.B. 83, PG. 40-41

EX INGRESS/EGRESS
EASEMENT (TO REMAIN)
P.B. 83, PG. 40-41

PROP TRANSFORMER

PROP DUMPSTER
ENCLOSURE PAD

PROP EQUIPMENT
STORAGE
GENERATOR

24" STM

15" STM

12" STM

18" STM

EX 15" STM

EX MH (ATG)
RIM: 908.15
INV(S)(E): 893.50

PROP PRIMARY
ELECTRIC

PROP ELECTRIC
SERVICE

EX CB
RIM: 907.19
INV(W): 904.09

PROP WATER
SERVICE

EX 8"
SAN

PROP FIRE DEPT
STORAGE
GENERATOR

SEE SHEET C500
FOR WATERLINE
RELOCATION

EX MH (ATG)
RIM: 907.83
INV(N): 899.29

EX 30' SANITARY SEWER EASEMENT
P.B. 83, PG. 32-34

EX 8" SAN

San. MH
Rim=907.64
Inv.=898.16

EX 8" WM

PROP FH

PROP 8" WM

EX 20' WATER EASEMENT
(TO REMAIN)
P.B. 83, PG.
32-34

EX 20' WATER EASEMENT
P.B. 83, PG. 32-34

FDC

FDC CONNECTION

EX CB
RIM: 906.67
INV(E): 904.17
INV(W): 903.22

EX 20' WATER EASEMENT
P.B. 83, PG. 32-34

PROP APPARATUS
BAY/OIL WASTE SEWER

PROP OIL
SEPARATOR

PROP SAN
SERVICE FOR
MAIN BUILDING

EX FH AND VALVE

UTILITES ARE
PROVIDED UP TO 5'
FROM THE BUILDING.
CONTRACTOR TO
COORDINATE WITH
UTILITY ENGINEER
FOR CONNECTION

SS

EX INGRESS/EGRESS
EASEMENT (TO REMAIN)
D.N. 2016-01843

PROP GAS
SERVICE (TO BE SLEEVED
IN VENTED CONDUIT)

PARCEL NO. 0415480012
VILLAGE PARK OFFICE COMMONS, LLC
O.R. 4426, PG. 965

PROP TELE
& FO

PROP BUILDING A
21,092 SF

EX INGRESS/EGRESS
EASEMENT (TO BE VACATED)
P.B. 83, PG. 40-41

UGT

PROP NATURAL GAS
METER, CONCRETE PAD,
AND BOLLARDS

EX 6"
STM

EX INGRESS/EGRESS
EASEMENT (TO REMAIN)
P.B. 83, PG. 40-41

EX 8" SAN

30' SETBACK
P.B. 83, PG. 32-34

EX 15' UTILITY & LANDSCAPE
EASEMENT
P.B. 83, PG. 32-34

12" STM

CAUTION
EX UG ELECTRIC

EX WATERLINE

EX 8" SAN
EX MH
RIM: 906.82
INV(N)(S)(W): 892.44

EX INLET
TO BE REPLACED BY
MOUNTABLE CURB INLET
RIM: 907.19
INV(E): 904.35

EX TELE & FO

EX WATERLINE

EX TELE & FO

PROP TELE

EX 8" SAN

GARDNER RD
(60' R/W)

EX 12" STM

EX INLET
RIM: 907.12
INV(S)(W): 904.12

EX 8" SAN
EX MH
RIM: 910.06
INV(N)(S): 895.06

EX UG ELECTRIC

EX GAS

NOTES:

CONTRACTOR TO FIELD VERIFY
LOCATION OF EXISTING UTILITIES

HORZ 1"=30' 0 30 60

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:24 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 CD UP.DWG

KZF DESIGN
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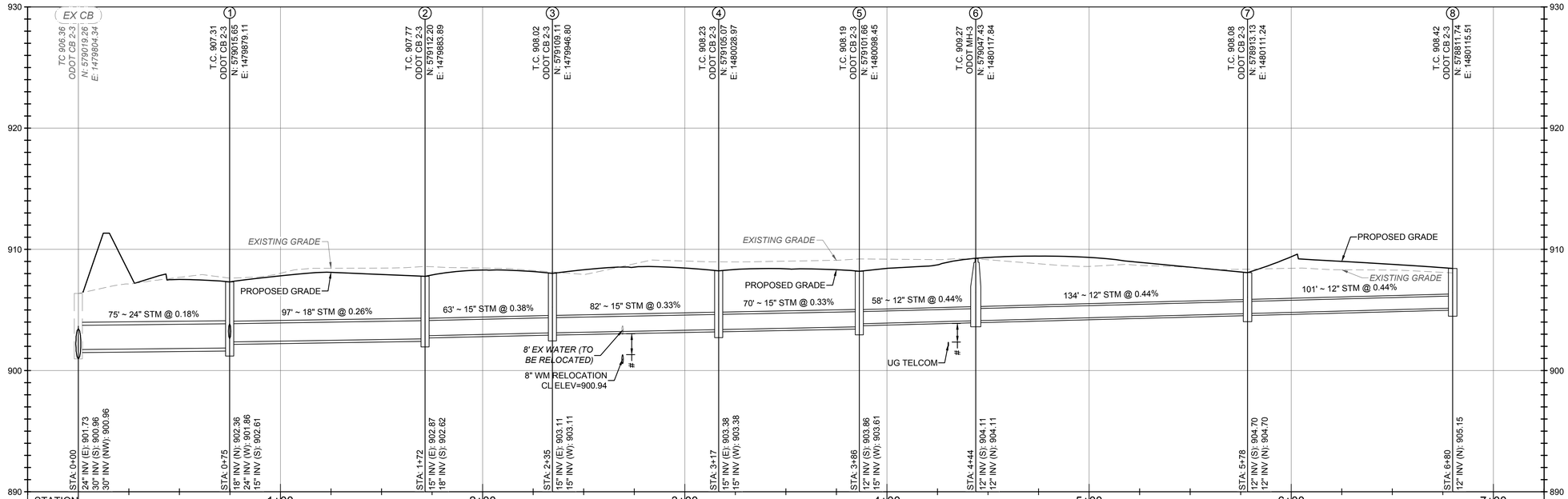
CONSTRUCTION DOCUMENTS
FOR
CLEARCREEK FIRE DISTRICT
HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
UTILITY PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
DRAWN BY:	MRF
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

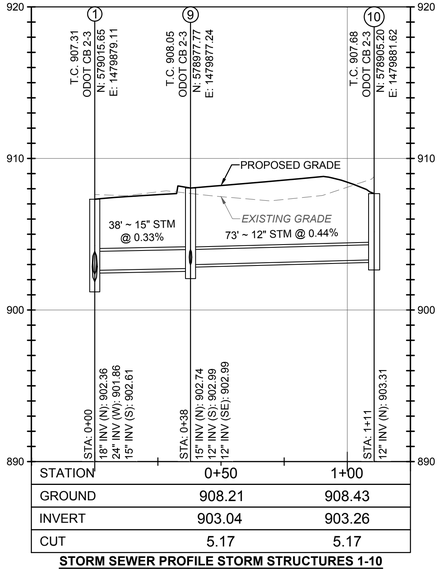
C300



STATION	1+00	2+00	3+00	4+00	5+00	6+00	7+00
GROUND	907.81	908.29	908.46	908.43	909.33	909.39	
INVERT	902.43	902.98	903.32	903.92	904.36	904.80	
CUT	5.39	5.31	5.13	4.51	4.98	4.59	

STORM SEWER PROFILE STORM STRUCTURES EX-8

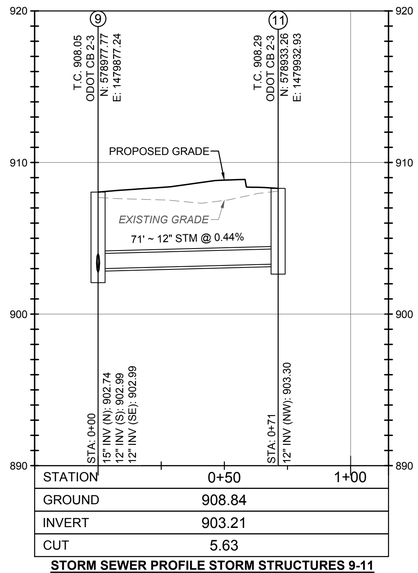
SCALE: H:1"=30', V:1"=5'



STATION	0+50	1+00
GROUND	908.21	908.43
INVERT	903.04	903.26
CUT	5.17	5.17

STORM SEWER PROFILE STORM STRUCTURES 1-10

SCALE: H:1"=30', V:1"=5'



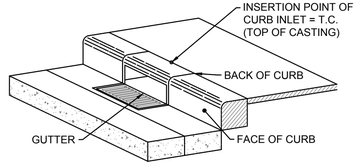
STATION	0+50	1+00
GROUND	908.84	
INVERT	903.21	
CUT	5.63	

STORM SEWER PROFILE STORM STRUCTURES 9-11

SCALE: H:1"=30', V:1"=5'

STORM SEWER PROFILE NOTES:

1. PROFILE VERTICAL DATUM NAVD '88.
2. ALL STORM STRUCTURES ARE CITY OF SPRINGBORO STANDARD STRUCTURES UNLESS OTHERWISE NOTED.
3. MAINTAIN A MINIMUM OF 18" VERTICAL AND 10' HORIZONTAL CLEARANCE FROM WATERLINES. AND OTHER PROPOSED AND EXISTING UTILITIES, AS DENOTED WITH A "#".
4. ALL BACKFILL SHALL BE COMPACTED TO THE DENSITY OF THE EXISTING GROUND UNLESS OTHERWISE NOTED:
   * COMPACTED BACKFILL PER COS CMS ITEM 911
   ** COMPACTED GRANULAR BACKFILL PER COS CMS ITEM 912
5. ALL FILLS ARE TO BE PLACED A MINIMUM OF 2.5' ABOVE THE PROPOSED STORM SEWER PER ODOT CMS ITEM 203 PRIOR TO THE START OF STORM SEWER CONSTRUCTION. HATCH BELOW FOR REFERENCE.
6. ALL STORM STRUCTURES WITHIN PAVEMENT LIMITS SHALL HAVE HEAVY DUTY TRAFFIC RATED GRATES.
7. NORTHING AND EASTING OF CURB AND GUTTER INLETS ARE IN REFERENCE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
8. T.C. (TOP OF CASTING) ELEVATION AND LOCATION FOR ALL CURB AND GUTTER INLETS IS IN REFERENCE TO THE BACK OF CURB ELEVATION.
9. PIPE RUNS DENOTED WITH A (++) ARE TO HAVE SANITARY GRADE JOINTS WITH GASKETS PER COS CMS 901.15.



HORZ 1"=30' 0 30 60

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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
STORM PROFILES

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
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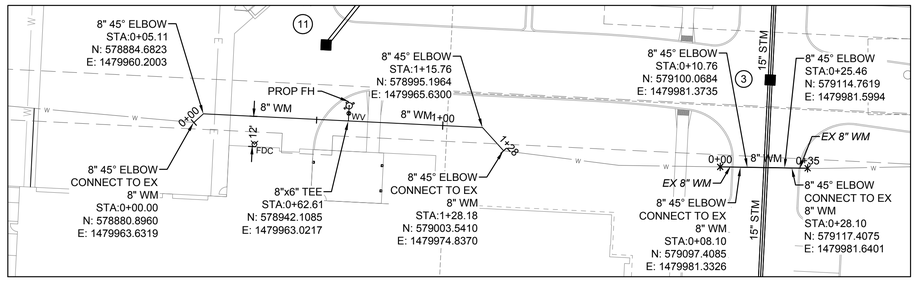
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

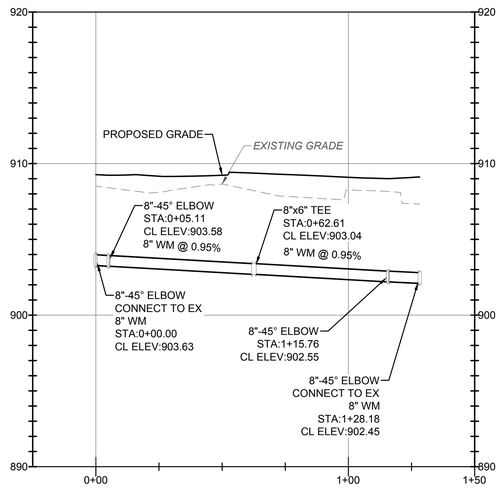
C400

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 8:08 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D_DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 ST&SAN PROFILES.DWG



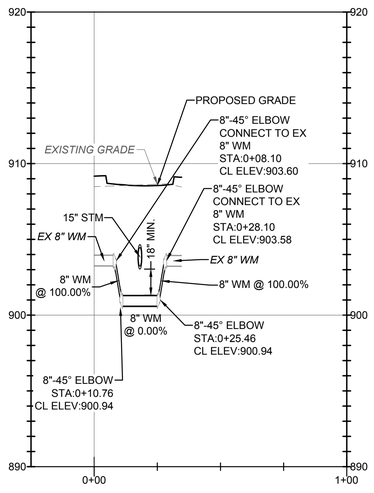
WATERLINE RELOCATION DETAIL

SCALE 1"=30'



PROP 8 WM RELOCATION AROUND PROP BUILDING

SCALE: H:1"=30', V:1"=5'



PROP 8" WM RELOCATION AROUND PROP STORM

SCALE: H:1"=30', V:1"=5'

NOTES:

CONTRACTOR TO FIELD VERIFY
LOCATION OF EXISTING UTILITIES

VERT 1"=5' 0 5 10

HORZ 1"=30' 0 30 60

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CONSTRUCTION DOCUMENTS
FOR
CLEARCREEK FIRE DISTRICT
HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO

WATERLINE RELOCATION PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION

IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
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JOB NUMBER:	2022.02228

C500

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:10 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D_DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 CD WATERLINE RELOCATION.DWG

FUTURE/POTENTIAL SALT STORAGE AREA

EX SAN MH ATG

6' WIDE SWALE AT 0.75%

EX CB

24" STM

12" STM

15" STM

18" STM

SEE DETAIL A ON SHEET C601

SEE DETAIL B ON SHEET C601

SEE DETAIL C ON SHEET C601

SEE DETAIL D ON SHEET C601

6' WIDE SWALE AT 1.59%

PROP BUILDING A
21,092 SF

×FFE=909.50

HORZ 1"=20' 0 20 40

GRADING LEGEND

XXX	PROPOSED MAJOR CONTOUR
XXX	PROPOSED MINOR CONTOUR
XXX	EXISTING MAJOR CONTOUR
XXX	EXISTING MINOR CONTOUR
FFE=110.00	FINISHED FLOOR ELEVATION
×10.00	SPOT ELEVATION
×100.00 TC	TOP OF CASTING ELEVATION
×10.00 HP	HIGH POINT ELEVATION
×10.00 ME	MATCH EXISTING ELEVATION
10.50 / 10.00	TOP OF CURB ELEVATION / BOTTOM OF CURB ELEVATION
×10.00 TW	TOP OF WALL ELEVATION
×10.00 BW	BOTTOM OF WALL ELEVATION
X.XX%	SLOPE ARROW
	FLOW ARROW
	FLOOD ROUTE
	NORMAL POOL
	SWALE
ATG	ADJUST TO GRADE

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SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

CLEARCREEK FIRE DISTRICT HEADQUATERS

SPRINGBORO, WARREN COUNTY, OHIO

GRADING PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
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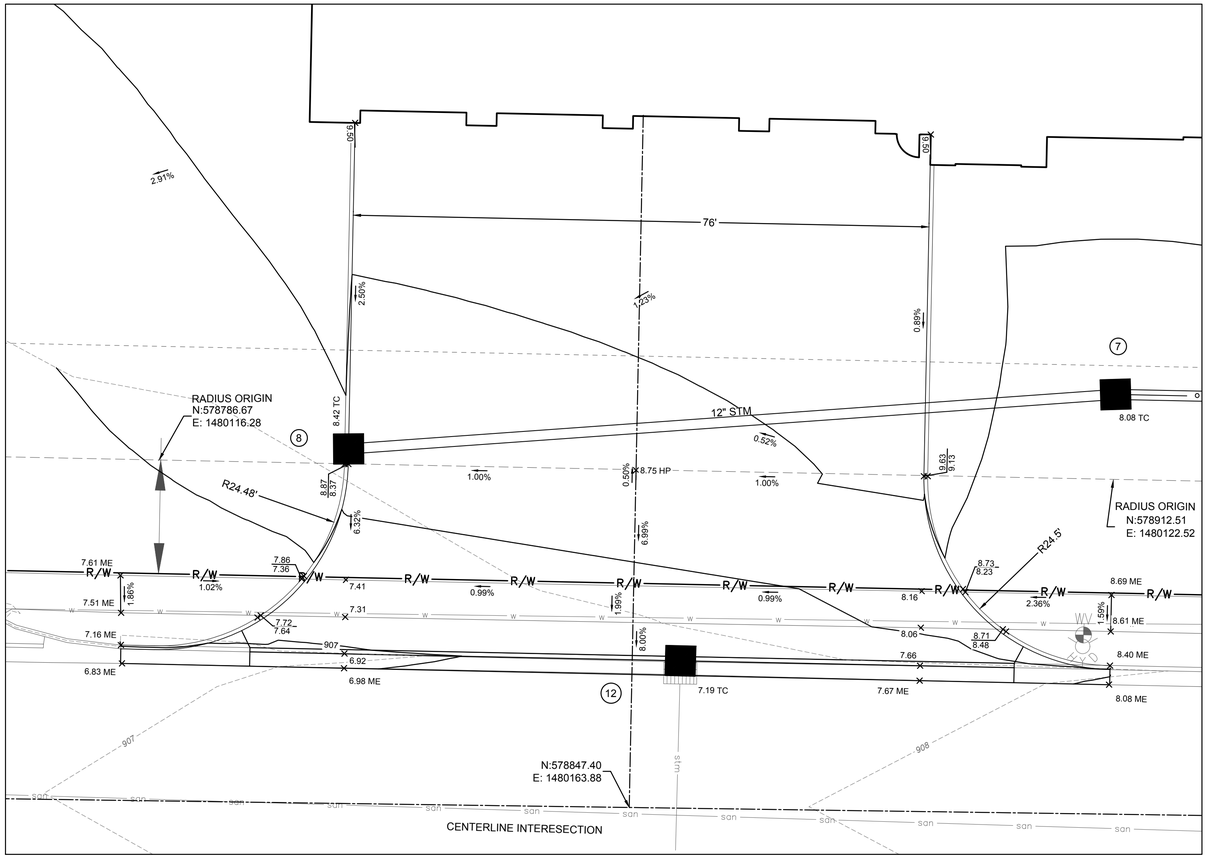
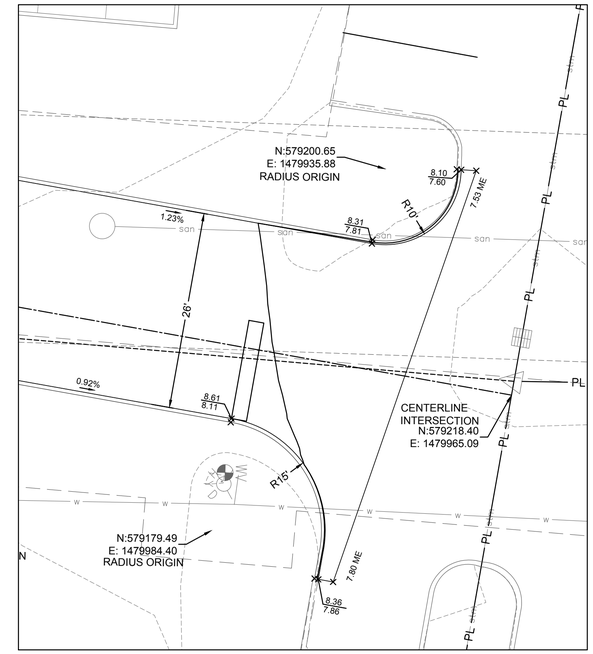
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C600

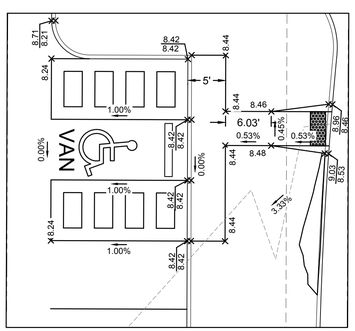
PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:26 AM EDITED BY: ASTALEY DRAWING FILE: O:\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 CDS GP.DWG



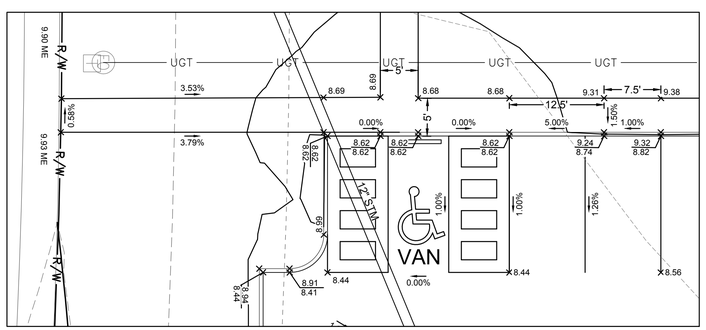
A SOUTHEAST DRIVE ENTRANCE DETAIL
1" = 10'



B NORTH DRIVE ENTRANCE DETAIL
1" = 10'



C VISITOR LOT ADA PARKING SPACE
1" = 10'



D STAFF LOT ADA PARKING SPACE
1" = 10'

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SCHEMATIC DESIGN
FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
SPRINGBORO, WARREN COUNTY, OHIO
DETAILED GRADING PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/20/2023
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CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C601

PLOT SCALE: 1:1 EDIT DATE: 7/20/23 - 3:14 PM EDITED BY: ASTALEY DRAWING FILE: O:\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 DGP.DWG

EROSION CONTROL LEGEND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- LIMITS OF DISTURBANCE
- SILT FENCE
- FILTER SOCK
- ORANGE CONSTRUCTION FENCE
- SWALE
- TEMPORARY DIVERSION CHANNEL
- CWA — CONCRETE WASHOUT AREA
- CD — CHECK DAM
- DB — DANDY BAG INLET PROTECTION
- BD — BEAVER DAM INLET PROTECTION SILT FENCE INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- ROCK CHANNEL PROTECTION

FUTURE/POTENTIAL SALT STORAGE AREA

PARCEL NO. 0415480012
VILLAGE PARK OFFICE COMMONS, LLC
O.R. 4426, PG. 965

THE CITY OF SPRINGBORO
PARCEL NO. 0415400028
O.R. 4084, PG. 691

BEGIN PROP DIVERSION SWALE
ELEV: 906.36'
SLOPE: 0.5%

BEGIN PROP DIVERSION SWALE
ELEVATION: 906.36
SLOPE: 0.5%

END OF SWALE
ELEV: 907.88'

END OF PROP DIVERSION SWALE
ELEVATION: 908.70

EX CB

EX INGRESS/EGRESS EASEMENT (TO BE VACATED) P.B. 83, PG. 40-41

EX INGRESS/EGRESS EASEMENT (TO REMAIN) P.B. 83, PG. 40-41

EX 30' SANITARY SEWER EASEMENT P.B. 83, PG. 32-34

EX 20' WATER EASEMENT (TO REMAIN) P.B. 83, PG. 32-34

EX 20' WATER EASEMENT P.B. 83, PG. 32-34

EX INGRESS/EGRESS EASEMENT (TO REMAIN) D.N. 2016-01943

30' SETBACK, P.B. 83, PG. 32-34
EX. 20' UTILITY & LANDSCAPE EASEMENT, P.B. 83, PG. 32-34

24" STM
15" STM
12" STM
18" STM

GARDNER RD
(60' R/W)

HORZ 1"=30' 0 30 60

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:27 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 ESCP.DWG

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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
EROSION & SEDIMENT CONTROL PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
DRAWN BY:	MRF
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C700

SITE NARRATIVE

PLAN DESIGNER	OWNER	SITE CONTACT
AMERICAN STRUCTUREPOINT, INC. 2550 CORPORATE EXCHANGE DR., STE 300 COLUMBUS, OHIO 43231 CONTACT: DARRELL S. MILLER PHONE: (614) 901-2235 EMAIL: Dmiller@structurepoint.com	CITY OF SPRINGBORO 320 W CENTRAL AVENUE SPRINGBORO, OH 45066 PHONE: 937-748-0815 EMAIL: ASKUS@CITYOFSPRINGBORO.COM	CHIEF STEVE AGENBROAD FIRE CHIEF PHONE: 937-748-2766

EXISTING SITE CONDITIONS: THE EXISTING SITE CURRENTLY HAS CURBS, AND WATERLINE. LAND USE CONSISTS OF AN OVERGROWN FIELD WITH VILLAGE BLVD TO THE NORTH AND GARDNER ROAD TO THE EAST.

PROJECT DESCRIPTION: ACTIVITIES INCLUDE THE CONSTRUCTION OF A FIRE STATION, ASSOCIATED UTILITIES, DRIVES, SIDEWALK AND PAVEMENT IMPROVEMENTS. APPROXIMATELY 3.32 ACRES OF THE SITE WILL BE DISTURBED.

RECEIVING STREAM: DRAINING TO EXISTING SPRINGBORO MS4, EVENTUALLY DRAINING TO CLEAR CREEK.

DISTURBED AREA: 3.32 ACRES

SITE BMPS: FINAL LOCATIONS OF ALL SITE BMPS, INCLUDING DUMPSTERS, VEHICLE FUELING AREAS, CONCRETE TRUCK WASH, MATERIAL STORAGE, AND TOPSOIL STOCKPILES SHALL BE DETERMINED BY CONTRACTOR. IF FINAL LOCATION OF BMPS DIFFER FROM THE LOCATIONS SHOWN, CONTRACTOR SHALL MODIFY SWPPP AND INFORM OHIO EPA OF NEW LOCATIONS OF BMPS.

ADJACENT AREAS:
EAST: GARDNER ROAD RUNS WITH A 60' R/W
NORTH: ACESS ROAD
WEST: EXISTING TRAIL AND PARK TO THE EAST OF THE SITE
SOUTH: LARGE TREEELINE AND SMALL HILLS TO BE DISTURBED

GRADING REQUIREMENTS: DISTURBED AREAS WILL BE PROTECTED BY SILT FENCE, INLET PROTECTIONS, AND CONSTRUCTION ENTRANCE. AREAS WILL BE STABILIZED WHEN GRADED TO PREVENT EROSION ON THE SITE.

EROSION & SEDIMENT CONTROL MEASURES: A COMBINATION OF MEASURES WILL BE USED TO PROVIDE EROSION & SEDIMENT CONTROL, INCLUDING SILT FENCE AND SEEDING.

PROVIDE INLET PROTECTION AT ALL NEW AND EXISTING DRAINAGE STRUCTURES.

ANY OFF SITE BORROW OR SPOIL AREAS SHALL BE SUBJECT TO THE REQUIREMENTS SET FORTH BY THE OHIO EPA. ALL EROSION AND SEDIMENT CONTROL MEASURES FOR OFF-SITE AREAS NOT COVERED BY A SEPARATE NOI OR SWPPP SHALL BE COORDINATED WITH THE OHIO EPA.

ALL TRENCH OR EXCAVATION GROUNDWATER CONTAINING SEDIMENT MUST BE EFFECTIVELY TREATED PRIOR TO DISCHARGE INTO THE STORM SEWER SYSTEM.

USE ALL MEANS NECESSARY TO CONTROL DUST ON THE SITE AND PREVENT TRACKING SOIL OFF SITE.

PERMANENT STABILIZATION: THE SITE WILL BE STABILIZED BY THE USE OF SEEDING OR SODDING IN LAWN AREAS.

MAINTENANCE: ALL EROSION CONTROL DEVICES ARE TO BE INSPECTED BY THE CONSTRUCTION SUPERINTENDENT WEEKLY AND AFTER SIGNIFICANT RAINFALLS. ANY DAMAGED FACILITIES ARE TO BE REPLACED OR REPAIRED IMMEDIATELY AS MAY BE NECESSARY.

GENERAL CONSTRUCTION SEQUENCE: (UNLESS NOTED OTHERWISE, ALL EROSION AND SEDIMENT CONTROL MEASURES FROM THE BEGINNING OF EARTH DISTURBING ACTIVITIES TO FINAL COMPLETION OF THE PROJECT ARE THE RESPONSIBILITY OF THE CONTRACTOR)

1 - ESTABLISH CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT CONSTRUCTION AREA.
2 - CONSTRUCT TEMPORARY SEDIMENT CONTROLS AND PERIMETER EROSION CONTROL MEASURES, INCLUDING CONSTRUCTION ENTRANCE, AND SILT FENCE. MEASURES SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING.
3 - CLEAR AND GRUB
4 - STRIP AND STOCKPILE TOPSOIL. SEED STOCKPILES. PROVIDE PERIMETER SILT FENCE AT TOE OF STOCKPILE SLOPE.
5 - PERFORM ROUGH GRADING AND EXCAVATION. STABILIZE AREAS AS INDICATED HEREIN.
6 - INSTALL TEMPORARY SEDIMENT BASINS AND TEMPORARY OUTLET STRUCTURE.
7 - INSTALL STORM SEWERS, OUTLET STRUCTURE, AND INLET FILTERS.
8 - COMPLETE ALL PAVEMENT ACTIVITIES.
9 - COMPLETE FINE GRADING OF SEEDED AREAS AND STABILIZE DISTURBED AREAS.
10 - ONCE FINAL SEED HAS BEEN ESTABLISHED, CONTRACTOR TO REMOVE TEMPORARY EROSION CONTROL MEASURES AND CLEAN ALL SEDIMENT FROM STRUCTURES AND PAVEMENT. SEDIMENT/WATER QUALITY BASIN SHALL BE CLEANED OF ALL ACCUMULATED SEDIMENT AND RESTORED TO THE ORIGINAL DESIGN CONTOURS SHOWN ON THESE PLANS.
11 - PRIOR TO FINISHING WORK, ALL AREAS OF THE SITE DISTURBED BY CONSTRUCTION ACTIVITY (INCLUDING, BUT NOT LIMITED TO MATERIAL STORAGE AREAS, TRAILER AREAS, FUELING AREAS, TRUCK WASH AREAS, EQUIPMENT PATHS, HAUL ROADS, ETC.) SHALL BE RESTORED TO THEIR ORIGINAL CONDITIONS, OR IF IN AREAS OF PROPOSED IMPROVEMENTS, TO THEIR PROPOSED CONDITIONS. ALL STONE, TRASH, AND DEBRIS SHALL BE REMOVED FROM THE SOIL. THE UPPER 12" OF SOIL SHALL BE SCARIFIED, AND AREA SHALL BE GRADED TO SUBGRADE WITH SUITABLE MATERIALS. FURNISH 6" MINIMUM OF TOPSOIL AND SEED ALL AREAS.

SCHEDULE: THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE OWNER. SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE PLACED IN ACCORDANCE WITH THIS SCHEDULE.

JURISDICTION: ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF MUNICIPALITY AND/OR THE OHIO EPA.

OEPA NOI: SUBMITTED, PENDING APPROVAL

RUNOFF CURVE NUMBER:
PRE-DEVELOPED: CN = 81
POST-DEVELOPED: CN = 88
PRE-DEVELOPED IMPERVIOUS AREA: 0.08 ACRES
POST-DEVELOPED IMPERVIOUS AREA: 1.95 ACRES

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO ANY SITE GRADING OPERATIONS. ALL APPLICABLE GOVERNING AGENCIES MUST BE NOTIFIED UPON COMPLETION OF THE INSTALLATION OF THE REQUIRED EROSION FACILITIES AND PRIOR TO ANY GRADING OPERATION BEING COMMENCED. IF DAMAGED OR REMOVED DURING CONSTRUCTION, ALL EROSION CONTROL FACILITIES SHALL BE RESTORED AND IN PLACE AT THE END OF EACH WORK DAY.
2. ANY EROSION CONTROL FACILITIES DEEMED NECESSARY BY THE GOVERNING AGENCIES; BEFORE, DURING OR AFTER THE GRADING ACTIVITIES, SHALL BE INSTALLED AT THEIR REQUEST.
3. FLOWS FROM DIVERSION CHANNELS OR PIPES (TEMPORARY OR PERMANENT) SHALL BE ROUTED TO SEDIMENTATION BASINS OR APPROPRIATE ENERGY DISSIPATERS TO PREVENT TRANSPORT OF SEDIMENT TO OUTFLOW TO LATERAL CONVEYORS AND TO PREVENT EROSION AND SEDIMENTATION WHEN RUNOFF FLOWS INTO THESE CONVEYORS.
4. SITE ACCESS ROADS SHALL BE GRADED OR OTHERWISE PROTECTED WITH SILT FENCES, DIVERSION CHANNELS, OR DIKES AND PIPES TO PREVENT SEDIMENT FROM EXITING THE SITE VIA THE ACCESS ROADS. SITE-ACCESS ROADS/DRIVEWAYS SHALL BE SURFACED WITH CRUSHED ROCK WHERE THEY ADJOIN EXISTING PAVED ROADWAYS.
5. SOILS TRACKED FROM THE SITE BY MOTOR VEHICLES OR EQUIPMENT SHALL BE CLEANED DAILY FROM PAVED ROADWAY SURFACES, OR MORE FREQUENTLY IF REQUESTED BY GOVERNING AGENCIES, THROUGHOUT THE DURATION OF CONSTRUCTION.
6. DUST CONTROL MEASURES SHALL BE PERFORMED PERIODICALLY WHEN CONDITIONS REQUIRE AND/OR AS DIRECTED BY THE GOVERNING AGENCIES.
7. ALL EROSION CONTROL MEASURES SHALL BE USED AND MAINTAINED FOR THE DURATION OF SITE CONSTRUCTION. IF CONSTRUCTION OPERATIONS OR NATURAL EVENTS DAMAGE OR INTERFERE WITH THESE EROSION CONTROL MEASURES, THEY SHALL BE RESTORED TO SERVE THEIR INTENDED FUNCTION AT THE END OF EACH DAY OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
8. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED AS SOON AS POSSIBLE. ANY AREAS WHICH HAVE BEEN FINISHED GRADED SHALL BE SODDED. AREAS THAT HAVE BEEN DISTURBED AND FOR WHICH GRADING OR SITE BUILDING CONSTRUCTION OPERATIONS ARE NOT ACTIVELY UNDERWAY SHALL BE TEMPORARILY SEEDED AND MULCHED AS REQUIRED BY GOVERNING AGENCIES.
9. RUNOFF SHALL BE PREVENTED FROM ENTERING ALL STORM SEWER CATCH BASINS PROVIDING THEY ARE NOT NEEDED DURING CONSTRUCTION. WHERE STORM SEWER CATCH BASINS ARE NECESSARY FOR SITE DRAINAGE DURING CONSTRUCTION, A SILT FENCE OR SEDIMENT PROTECTION DEVICES SHALL BE INSTALLED AND MAINTAINED AROUND ALL CATCH BASINS UNTIL THE TRIBUTARY AREA TO THE CATCH BASIN IS RESTORED.
10. EROSION CONTROL FACILITIES SHALL BE INSTALLED AND MAINTAINED AROUND THE PERIMETER OF ALL LAKES, PONDS, AND WETLANDS, IF ANY WITHIN OR ADJACENT TO THE AREA TO BE GRADED UNTIL THE AREA TRIBUTARY TO THE LAKE, POND, OR WETLAND IS RESTORED.
11. TO MINIMIZE EROSION, ALL 3:1 SLOPES OR GREATER SHALL BE COVERED WITH A TEMPORARY EROSION CONTROL BLANKET OR STAKED SOD.
12. ACCUMULATION OF ALL SEDIMENT OCCURRING IN STORM SEWERS, DITCHES, LAKES, PONDS, WETLANDS SHALL BE REMOVED PRIOR TO, DURING AND AFTER COMPLETION OF GRADING ACTIVITIES, AT NO ADDITIONAL COST TO OWNER.
13. EROSION CONTROL ITEMS AND DEVICES SHALL BE REMOVED ONLY AFTER THE AREA HAS RECEIVED FINAL STABILIZATION.

POST CONSTRUCTION STORM WATER QUALITY MANAGEMENT - DETENTION BASIN NOTES:

THE DETENTION BASIN WILL ACT AS A STORM WATER QUALITY BASIN. THE BASIN WAS SIZED TO TREAT WATER QUALITY VOLUME IN ADDITION TO PROVIDING STORM WATER DETENTION. AN ADDITIONAL 20% OF VOLUME WAS PROVIDED FOR SEDIMENT LOADING. THE WATER QUALITY VOLUME WILL DRAIN THROUGH A SMALL DIAMETER ORIFICE ON THE OUTLET STRUCTURE.

1. GENERAL MAINTENANCE: INSPECT BASIN AND OUTLET STRUCTURE ONCE PER MONTH OR AFTER RAINFALL EVENTS OF 0.5 INCHES OR GREATER. MAINTAIN DOCUMENTATION OF ALL INSPECTIONS AND MAINTENANCE.
2. BASIN MAINTENANCE: EXCAVATE AND DISPOSE SEDIMENT OFF-SITE IN ACCORDANCE WITH LOCAL STANDARDS WHEN BASIN HAS ACCUMULATED 3 INCHES OF SEDIMENT. SEDIMENT SHALL BE REMOVED FROM THE FOREBAY AND MICROPOOL OF THE BASIN. ONCE SITE HAS BEEN STABILIZED, CLEAN OUT ALL SEDIMENT CONTAINED IN THE FOREBAY AND MIRCOPOOL. ALL SEDIMENT REMOVAL THEREAFTER SHALL BE LESS FREQUENT AND SHALL OCCUR WHEN BASIN FUNCTIONALITY HAS DECREASED OR ACCUMULATION HAS EXCEEDED 3 INCHES.
3. OUTLET STRUCTURE MAINTENANCE: REMOVE FLUSHED DEBRIS AND SEDIMENT FROM OUTLET STRUCTURE WITH VACUUM TRUCK MINIMUM OF ONCE EVERY SIX MONTHS OR WHEN SEDIMENT ACCUMULATES TO WITHIN 6 INCHES OF OUTLET, OF IF STANDING WATER PERSISTS FOR MORE THAN 72 HOURS.

SEDIMENT AND EROSION CONTROL NOTES:

MAINTENANCE & INSPECTION PROCEDURES:
ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS FOLLOWING ANY STORM EVENT OF 0.5INCHES OR GREATER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE SEDIMENTATION AND EROSION CONTROL FEATURES ON THIS PROJECT. ANY SEDIMENT OR DEBRIS WHICH REDUCES THE EFFICIENCY OF A CONTROL FEATURE SHALL BE REMOVED IMMEDIATELY. SHOULD A STRUCTURE OR FEATURE BECOME DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THE OWNER AND IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

TEMPORARY SEEDING AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION, AND A WRITTEN LOG MUST BE KEPT. THIS LOG SHALL INDICATE THE DATE OF THE INSPECTION, NAME OF THE INSPECTOR, WEATHER CONDITIONS, OBSERVATIONS, ANY CORRECTIVE ACTIONS TAKEN, AND BE SIGNED IN ACCORDANCE WITH THE CONDITIONS OF THE NPDES PERMIT. ANY CONTROL MEASURE MUST BE REPAIRED/REPLACED WITHIN THREE DAYS OF INSPECTION.

PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES SHALL BE TRAINED IN ALL INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER. A WRITTEN DOCUMENT CONTAINING THE SIGNATURES OF ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED IN THE IMPLEMENTATION OF ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE MAINTAINED AS PROOF ACKNOWLEDGING THAT THEY REVIEWED AND UNDERSTAND THE CONDITIONS AND RESPONSIBILITIES OF THE PLAN. THE DOCUMENT SHALL BE CREATED BY THE CONTRACTOR SIGNED PRIOR TO THE START OF CONSTRUCTION.

DISPOSAL OF SOLID/SANITARY/TOXIC WASTE:
SOLID, SANITARY, AND TOXIC WASTE MUST BE DISPOSED OF IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS

IT IS PROHIBITED TO BURN, BURY, OR POUR OUT ONTO THE GROUND OR INTO A STORM SEWER WATER CONVEYANCE ANY SOLVENTS, PAINTS, STAINS, GASOLINE, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS, AND OTHER SUCH SOLID AND HAZARDOUS WASTES.

ANY RINSE WATERS OF SUCH MATERIAL ARE ALSO PROHIBITED FROM BEING PLACED WHERE THEY MAY ENTER DRAINAGEWAYS.

WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN A DIKED, DESIGNATED AREA, AWAY FROM ANY CONVEYANCE CHANNEL.

COORDINATE WASH OUT AREA WITH CONSTRUCTION MANAGER.

CONTRACTORS RESPONSIBILITIES:
THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.

DETAILS HAVE BEEN PROVIDED ON THE PLANS IN AN EFFORT TO HELP THE CONTRACTOR PROVIDE EROSION AND SEDIMENTATION CONTROL. THE DETAILS SHOWN ON THE PLAN SHALL BE CONSIDERED A MINIMUM. ADDITIONAL OR ALTERNATE DETAILS MAY BE FOUND IN THE ODNR MANUAL "RAINWATER AND LAND DEVELOPMENT". THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER CONTROL OF EROSION AND SEDIMENT RUNOFF FROM THE SITE ALONG WITH PROPER MAINTENANCE AND INSPECTION IN COMPLIANCE WITH THE NPDES GENERAL PERMIT FOR STORM DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE OWNER. THE SCHEDULE SHOULD INCLUDE A SEQUENCE OF THE PLACEMENT OF THE SEDIMENTATION AND EROSION CONTROL MEASURES THAT PROVIDES FOR CONTINUAL PROTECTION OF THE SITE THROUGHOUT EARTH MOVING ACTIVITIES.

PRIOR TO CONSTRUCTION OPERATIONS IN A PARTICULAR AREA, ALL SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE IN PLACE. FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS MAY BE MADE BY THE ENGINEER AND/OR THE OHIO EPA.

THE CONTRACTOR SHALL PLACE INLET PROTECTION FOR THE SEDIMENTATION CONTROL IMMEDIATELY AFTER CONSTRUCTION OF THE CATCH BASINS OR INLETS WHICH ARE NOT TRIBUTARY TO A SEDIMENT BASIN OR DAM.

IT MAY BECOME NECESSARY TO REMOVE PORTIONS OF SEDIMENTATION CONTROLS DURING CONSTRUCTION TO FACILITATE THE GRADING OPERATIONS IN CERTAIN AREAS. HOWEVER, THE CONTROLS SHALL BE REPLACED UPON GRADING OR DURING ANY INCLEMENT WEATHER.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT OFFSITE TRACKING OF SEDIMENTS BY VEHICLES AND EQUIPMENT IS MINIMIZED. ALL SUCH OFFSITE SEDIMENT SHALL BE CLEANED UP DAILY.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT NO SOLID OR LIQUID WASTE IS DISCHARGED INTO STORM WATER RUNOFF. UNTREATED SEDIMENT-LADEN RUNOFF SHALL NOT FLOW OFFSITE WITHOUT BEING DIRECTED THROUGH A CONTROL PRACTICE.

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE INTO OR ALONG SIDE RIVERS, STREAMS, CREEKS, NATURAL OR MAN-MADE CHANNELS OR SWALES LEADING THERETO. CONCRETE WASH WATER AND SURPLUS CONCRETE SHALL BE CONFINED TO APPROVED AREAS. AFTER SOLIDIFYING THESE WASTED MATERIALS SHALL BE REMOVED FROM THE SITE.

POST FLOOD EVENT SITE MAINTENANCE:

FOLLOWING A FLOOD EVENT, INSPECT ALL MECHANICAL EQUIPMENT THAT ARE LOCATED ON THE SITE FOR ANY DAMAGES. WALLS AND WALL PENETRATIONS SHALL ALSO BE CHECKED FOR CRACKS AND LEAKS AND REPAIRED AS NECESSARY. ALL DEBRIS THAT MAY HAVE ACCUMULATED ALONG THE SITE SHALL BE GATHERED AND DISPOSED OF ACCORDING TO CITY STANDARDS. CHECK AND ENSURE THAT ALL DRAINAGE STRUCTURES ARE IN STANDARD OPERATION AND REPAIR ANY DAMAGES OR CLOGS THAT MAY HAVE OCCURRED DURING FLOODING.

STABILIZATION PROCEDURES

CONTRACTOR SHALL BE RESPONSIBLE TO KEEP A RECORD OF DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN EARTH DISTURBANCE HAS TEMPORARILY OR PERMANENTLY CEASED ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES HAVE BEEN INITIATED. THE LIMITS OF SEEDING AND MULCHING ARE AS SHOWN WITHIN THE PLAN AS INDICATED BY THE LIMITS OF DISTURBANCE. ALL AREAS NOT DESIGNATED TO BE SEEDED SHALL REMAIN UNDER NATURAL GROUND COVER. THOSE AREAS DISTURBED OUTSIDE THE SEEDING LIMITS SHALL BE SEEDED AND MULCHED AT THE CONTRACTOR'S EXPENSE.

TEMPORARY STABILIZATION
TOPSOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY CEASES FOR AT LEAST 14 DAYS WILL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. DISTURBED AREAS WITHIN 50 FEET OF A STREAM, FIRST ORDER OR LARGER, SHALL BE STABILIZED WITHIN 2 DAYS OF INACTIVITY. TEMPORARY STABILIZATION MUST BE APPLIED TO ANY AREA OF THE SITE WHICH WILL REMAIN IDLE OVER THE WINTER. THE TEMPORARY SEED SHALL BE RYE (GRASS) APPLIED AT A RATE OF 25 LBS PER 1000 SY. PRIOR TO SEEDING, 900 LBS OF GROUND AGRICULTURAL LIMESTONE AND 200 LBS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EVERY 1000 SY STABILIZED. IMMEDIATELY AFTER ANY GIVEN AREA IS SEEDED, STRAW OR HAY SHALL BE EVENLY PLACED OVER ALL SEEDED AREAS. TWO TONS PER ACRE FOR STRAW, OR 3 TONS PER ACRE FOR HAY SHALL BE PLACED WHEN SEEDING IS PREFORMED BETWEEN THE DATES OF MARCH 15 AND OCTOBER 15. THREE TONS PER ACRE STRAW, OR 4.5 TONS PER ACRE FOR HAY, SHALL BE PLACED WHEN SEEDING IS PREFORMED BETWEEN THE DATES OF OCTOBER 15 AND MARCH 15 OF THE SUCCEEDING YEAR. IF DORMANT SEEDING IS BEING USED FOR STABILIZATION, SEED SHALL BE PLANTED AFTER NOVEMBER 20. AREAS TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING STONE BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

IN ADDITION TO TEMPORARY SEEDING, THE CONTRACTOR SHALL PLACE A FILTER FABRIC BARRIER AROUND THE BASE OF ALL SOIL STOCKPILES.

PERMANENT STABILIZATION
DISTURBED PORTIONS OF THE SITE WHEN CONSTRUCTION HAS COMPLETED, OR PORTIONS THAT WILL REMAIN DORMANT FOR LONGER THAN ONE YEAR, SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER FINAL GRADE HAS BEEN ESTABLISHED. THE PERMANENT SEED MIX SHALL CONSIST OF 260 LBS/ACRE OF TURF TYPE TALL FESCUE. PRIOR TO SEEDING, APPLY COMMERCIAL FERTILIZER AT THE RATE OF 1 LB ACTUAL NITROGEN PER 1000 SF. FERTILIZER TO HAVE 20-22-14 ANALYSIS. AFTER SEEDING, EACH AREA SHALL BE MULCHED USING TURFIBER (OR EQUIVALENT) AT A RATE OF 2000 LBS PER ACRE WITH 50 LBS OF TURFIBER ADDED PER 100 GALLONS OF MACHINE CAPACITY. KEEP HYDROMULCH FROM NON-TARGET AREAS INCLUDING PAVEMENT, PLANT MATERIALS, CURBING, AND STRUCTURES. IF THESE SURFACES ARE HIT DURING HYDROMULCHING OPERATIONS, WASH THE SURFACE IMMEDIATELY.

IF SEASONAL CONDITIONS PROHIBIT THE ESTABLISHMENT OF VEGETATIVE COVER, OTHER METHODS OF STABILIZATION, SUCH AS MULCHING WITH A TACKIFIER OR MATTING, MUST BE EMPLOYED AND MAINTAINED UNTIL A MORE PERMANENT METHOD CAN BE IMPLEMENTED.

TEMPORARY SEEDING			
SEEDING DATES	SPECIES	LB/1,000 SF	PER ACRE
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	PERENNIAL RYEGRASS	1	40 LB
	TALL FESCUE	1	40 LB
	ANNUAL RYGRASS	1	40 LB
AUGUST 16 TO NOVEMBER 1	RY	3	2 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYGRASS	1	40 LB
	PERENNIAL RYEGRASS	1	40 LB
	TALL FESCUE	1	40 LB
	ANNUAL RYGRASS	1	40 LB
NOVEMBER 1 TO SPRING SEEDING	USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING.		
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED			

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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
EROSION & SEDIMENT CONTROL NOTES

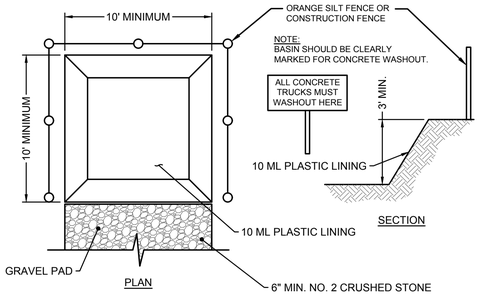
REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
DRAWN BY:	MRF
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C701

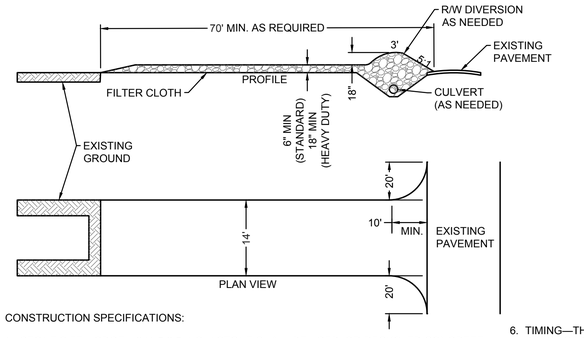
PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:27 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D_DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 ESCP.DWG



NOTE:

1. CONCRETE WASHOUT AREA SHALL BE LOCATED A MINIMUM OF 100' FROM STORM SEWER INLETS, STREAMS, WETLANDS OR ANY OTHER SURFACE WATERS.
2. IF CONCRETE WASHOUT AREA IS LOCATED AWAY FROM A PAVED SURFACE, CONSTRUCT A GRAVEL ACCESS ROUTE EQUAL IN COMPOSITION TO A CONSTRUCTION ENTRANCE.
3. CONCRETE WASHOUT AREA SHALL BE SUFFICIENT SIZE TO CONTAIN CONCRETE WASTE GENERATED. LARGE SITES MAY REQUIRE MULTIPLE CONCRETE WASHOUT AREAS.
4. PLASTIC LINIG SHALL BE DOUBLE-LINED, CONTINUOUS 10-ML POLYETHYLENE SHEETING FREE OF HOLES, TEARS OR OTHER DEFECTS INSTALLED ON A SMOOTH, LEVEL SURFACE, FREE OF LARGE ROCKS AND DEBRIS.
5. CONCRETE WASHOUT SIGNAGE SHALL BE CLEARLY VISIBLE AND LOCATED WITHIN 30 FEET OF EACH WASHOUT AREA.
6. CONCRETE WASHOUT AREA SHALL BE COVERED DURING INCLEMENT WEATHER TO PREVENT OVERFLOW.
7. PREFABRICATED, PORTABLE AND RE-USABLE CONCRETE WASHOUT CONTAINERS ARE ACCEPTABLE.
8. CONCRETE WASHOUT AREA SHALL BE INSPECTED DAILY TO CHECK FOR DAMAGE AND DETERMINE IF IT NEEDS CLEANED OR REPLACED. ANY DAMAGE TO THE SIDEWALLS OR PLASTIC LINING SHALL BE REPAIRED IMMEDIATELY. REPLACE THE ENTIRE CONCRETE WASHOUT AREA WHEN IT IS 75% FULL.

A CONCRETE WASHOUT AREA
NOT TO SCALE



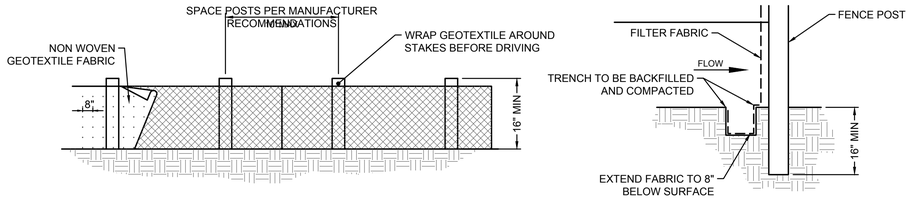
CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE—ODOT # 2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH—THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS).
3. THICKNESS -THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH -THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS
5. GEOTEXTILE -A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

GEOTEXTILE SPECIFICATION FOR CONSTRUCTION ENTRANCE	
MINIMUM TENSILE STRENGTH	200 lbs
MINIMUM PUNCTURE STRENGTH	80 psi
MINIMUM TEAR STRENGTH	50 lbs
MINIMUM BURST STRENGTH	320 psi
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS<0.6 mm
PERMITIVITY	$1x10^{-3}$ cm/sec

6. TIMING—THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT -A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR -A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR PREVENT FLOWING SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS. WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
11. REMOVAL—THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

B CONSTRUCTION ENTRANCE
NOT TO SCALE

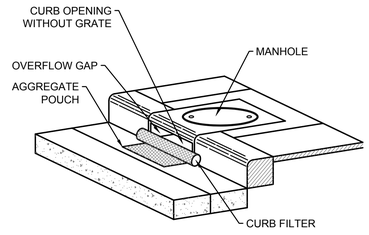


NOTES:

1. FENCE POST SHALL BE A MINIMUM LENGTH OF 32 INCHES LONG PLUS BURIAL DEPTH, COMPOSED OF NOMINAL DIMENSIONED 2x2 INCH HARDWOOD OF SOUND QUALITY. ALTERNATELY POST MATERIAL SHALL BE STEEL OR SYNTHETIC AND SHALL BE OF SUFFICIENT STRENGTH TO RESIST DAMAGE DURING INSTALLATION, TO SUPPORT APPLIED LOADS, AND SO THE GEOTEXTILE CAN BE ADEQUATELY SECURED TO POST
2. FABRIC SHALL BE A NEEDLE PUNCHED NON-WOVEN GEOTEXTILE FABRIC CONSISTING OF STRONG, ROT RESISTANT, MATERIALS RESISTANT TO DETERIORATION FROM ULTRAVIOLET AND HEAT EXPOSURE.
3. MINIMUM 8" FABRIC BURY REQUIRED.
4. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
5. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
7. SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY HALF THE HEIGHT OF THE SILT FENCE.

MINIMUM CRITERIA FOR SILT FENCE FABRIC (ODOT, 2002)		
MINIMUM TENSILE STRENGTH	120 lbs (535 N)	ASTM D 4632
MAXIMUM ELONGATION AT 60 LBS	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 lbs (220 N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 lbs (180 N)	ASTM D 4533
APPARENT OPENING SIZE	≤ 0.84 mm	ASTM D 4751
MINIMUM PERMITIVITY	$1x10^{-2}$ sec. $^{-1}$	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70%	ASTM D 4355

D SILT FENCE
NOT TO SCALE



INSTALLATION:

1. STAND GRATE ON END. SLIDE THE BEAVER DAM BAG ON WITH DAM ON TOP OF THE GRATE. PULL ALL EXCESS DOWN.
2. LAY UNIT ON ITS SIDE. CAREFULLY TUCK FLAP IN. PRESS VELCRO STRIPS TOGETHER.
3. INSTALL THE UNIT MAKING SURE FRONT EDGE OF GRATE IS INSERTED IN FRAME FIRST, THEN LOWER BACK INTO PLACE.
4. PRESS VELCRO DOTS TOGETHER WHICH ARE LOCATED UNDER LIFTING STRAPS. THIS ENSURES STRAPS REMAIN FLUSH WITH GUTTER.

MAINTENANCE:

1. WITH A STIFF BRISTLE BROOM, SWEEP SILT AND OTHER DEBRIS OFF SURFACE AFTER EACH STORM EVENT.

DANDY BAG WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT THAT MEETS OR EXCEEDS THE FOLLOWING SPEFICICATIONS	
GRAB TENSILE STRENGTH	ASTM D 4632
GRAB TENSILE ELONGATION	ASTM D 4632
PUNCTURE STRENGTH	ASTM D 4833
MULLEN BURST STRENGTH	ASTM D 3786
TRAPEZOID TEAR STRENGTH	ASTM D 4533
UV RESISTANCE	ASTM D 4355
APPARENT OPENING SIZE	ASTM D 4751
FLOW RATE	ASTM D 4491
PERMITIVITY	ASTM D 4491

E BEAVER DAM INLET PROTECTION
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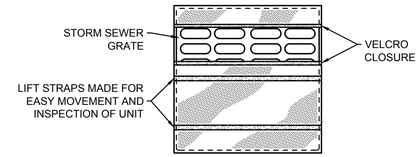


INSTALLATION:

1. STAND GRATE ON END. PLACE DANDY BAG OVER GRATE.
2. FLIP GRATE OVER SO THAT OPEN END IS UP. PULL UP SLACK. TUCK FLAP IN. BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR DANDY BAG WILL NOT FIT PROPERLY.
3. HOLDING HANDLES, CAREFULLY PLACE DANDY BAG WITH THE GRATE INSERTED INTO CATCH BASIN FRAME SO THAT RED DOT ON THE TOP OF THE DANDY BAG IS VISIBLE.

MAINTENANCE:

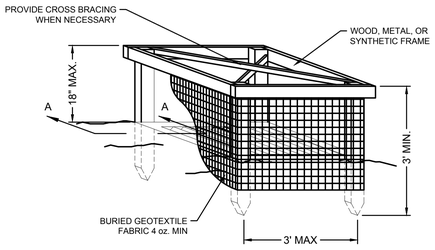
AFTER EACH STORM EVENT AND SILT HAS DRIED, REMOVE ACCUMULATED DEBRIS FROM THE SURFACE OF DANDY BAG WITH BROOM.

NOTE:

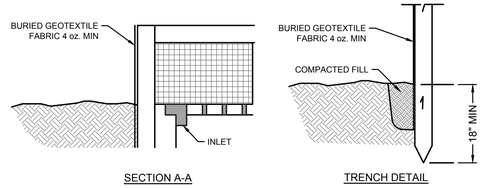
PROVIDE FOR INLETS LOCATED IN PAVEMENT

DANDY BAG WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT THAT MEETS OR EXCEEDS THE FOLLOWING SPEFICICATIONS	
GRAB TENSILE STRENGTH	ASTM D 4632
GRAB TENSILE ELONGATION	ASTM D 4632
PUNCTURE STRENGTH	ASTM D 4833
MULLEN BURST STRENGTH	ASTM D 3786
TRAPEZOID TEAR STRENGTH	ASTM D 4533
UV RESISTANCE	ASTM D 4355
APPARENT OPENING SIZE	ASTM D 4751
FLOW RATE	ASTM D 4491
PERMITIVITY	ASTM D 4491

C DANDY BAG INLET PROTECTION
NOT TO SCALE



FRAME DETAIL



SECTION A-A

TRENCH DETAIL

NOTE:

PROVIDE FOR INLETS **NOT** LOCATED IN PAVEMENT

1. INLET PROTECTION SHALL BE CONSTRUCTION EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE INLET BECOMES FUNCTIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH OF AT LEAST 18 INCHES.
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-INCH BY 4-INCH CONSTRUCTION GRADE LUMBER. THE 2-INCH BY 4-INCH POSTS SHALL BE DRIVEN ONE (1) FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-INCH BY 4-INCH FRAME ASSEMBLED USING THE OVERLAP JOIN SHOWN. The TOP OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WILL POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE MATERIAL SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6-INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE OR CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IS NOT IN A DEPRESSION. THE TOP OF THE DIKE SHALL BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME.

F SILT FENCE INLET PROTECTION
NOT TO SCALE

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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
EROSION & SEDIMENT CONTROL DETAILS

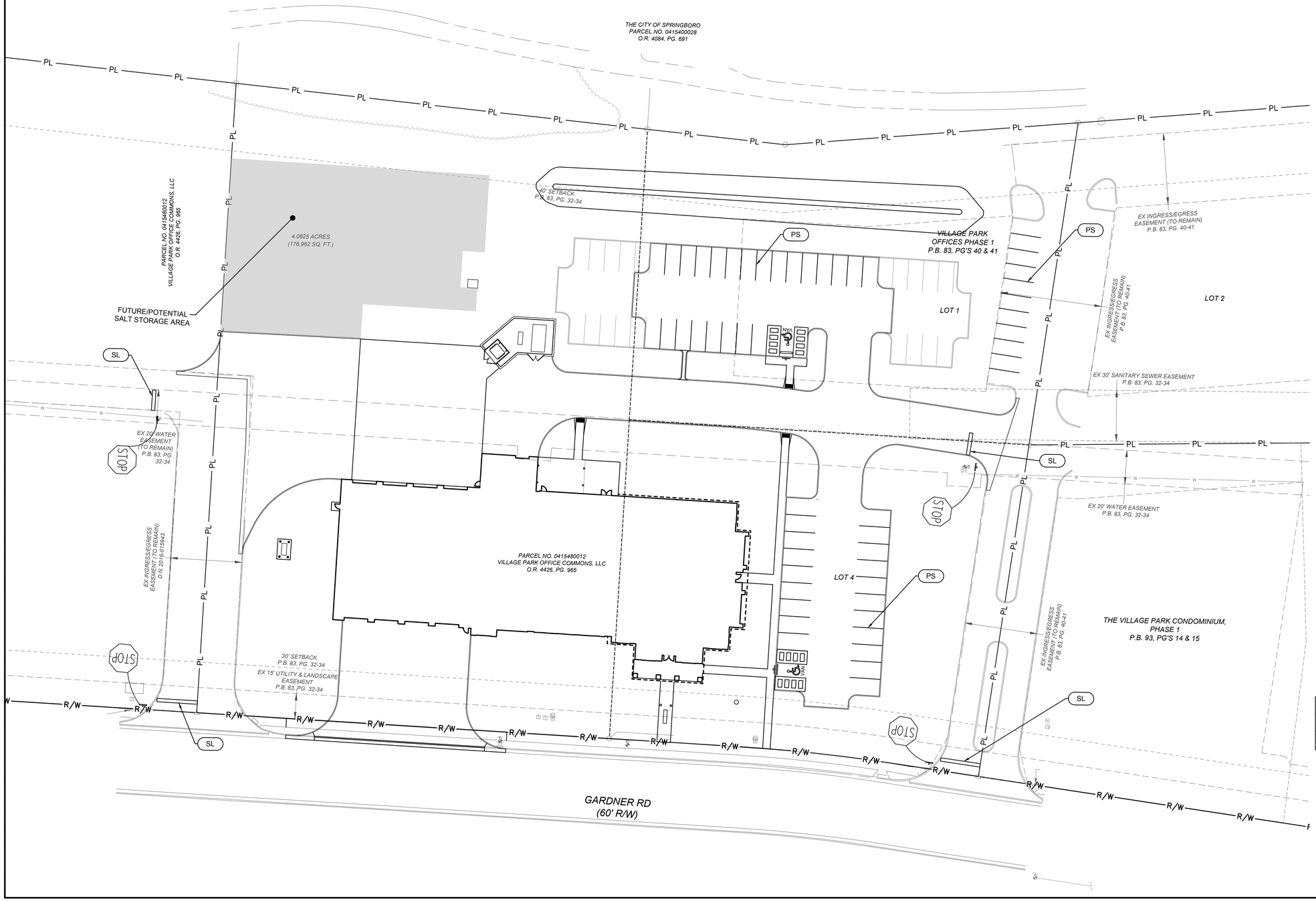
REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/21/2023
DRAWN BY:	MRF
CHECKED BY:	DSM
JOB NUMBER:	2022.02228

C702

PLOT SCALE: 1:1 EDIT DATE: 7/21/23 - 9:27 AM EDITED BY: ASTALEY DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022 \02228 ESCP.DWG



SIGNAGE LEGEND

EXISTING SIGN TO REMAIN

PROPOSED SIGN

STRIPING LEGEND	
PS	ITEM 644 PARKING LOT STALL, 4" WHITE
SL	STOP LINE, 24" WHITE

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CONSTRUCTION DOCUMENTS
FOR
CLEARCREEK FIRE DISTRICT
HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
SIGNAGE AND
STRIPING PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION

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C800

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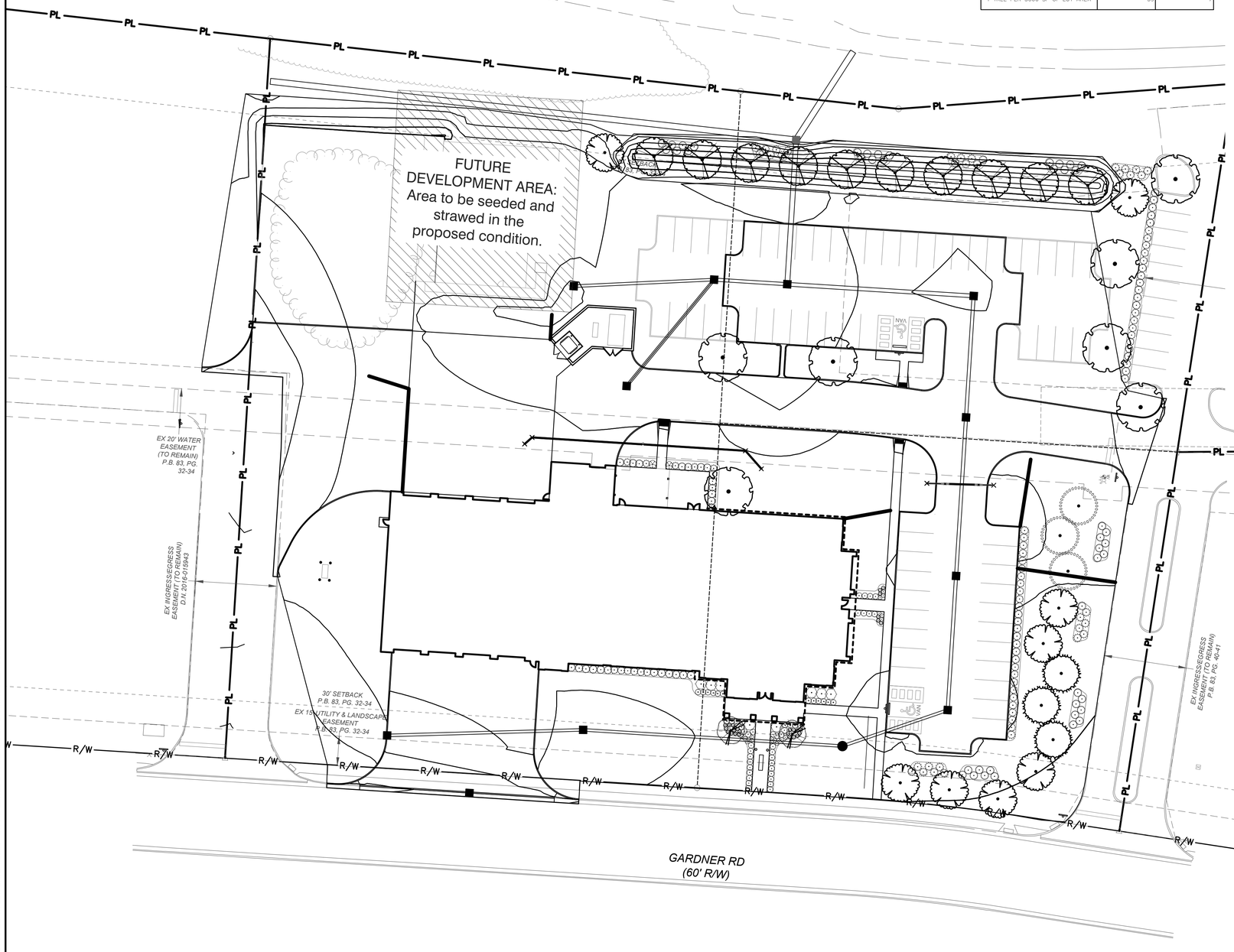
PLANTING ORDINANCE REQUIREMENTS			
1280.04.C LANDSCAPING ADJACENT TO ROADS			
PLANT TYPE	ITEM	REQUIRED	PROVIDED
TREES	1 PER 40 LINEAR FEET OF ROAD FRONTAGE OR FRACTION THEREOF	6	6
SHRUBS	1 PER 5 LINEAR FEET OF ROAD FRONTAGE OR FRACTION THEREOF	48	14 + BUILDING BASE PLANTINGS
1280.04.C REQUIRED LANDSCAPING & BUFFER			
BUFFER	ITEM	REQUIRED	PROVIDED
WEST (245 LF)	30-FT. WIDE BUFFER; 1 TREE PER 20 FT. (MIN. OF 50% EVERGREEN TREES)	6 DECIDUOUS, 6 EVERGREEN	12 DECIDUOUS
NORTH (175 LF)		4 DECIDUOUS, 5 EVERGREEN	3 DECIDUOUS, 6 EVERGREEN
1280.04.F SITE LANDSCAPING			
ITEM		REQUIRED	PROVIDED
1 TREE PER 3000 SF OF LOT AREA		59	7

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	COND.	SIZE	SPACING
	2	Cercis canadensis / Eastern Redbud	B & B	2" Cal.	As shown
	7	Liquidambar styraciflua `Fastigiata` / Columnar Sweet Gum	B & B	2.5" Cal.	As shown
	3	Picea abies / Norway Spruce	B & B	6` HT	As shown
	3	Pinus strobus / White Pine	B & B	6` HT	As shown
	10	Quercus alba / White Oak	B & B	2.5" Cal.	As shown
	8	Sassafras albidum / Sassafras	B & B	2.5" Cal.	As shown

SHRUBS	QTY	BOTANICAL / COMMON NAME	COND.	SIZE	SPACING
	19	Aquilegia canadensis / Eastern Columbine	CONT.	1 GAL	2` O.C.
	53	Aronia melanocarpa / Black Chokeberry	CONT.	3 GAL	4` O.C.
	24	Buxus x `Green Velvet` / Green Velvet Boxwood	CONT.	3 GAL	3` O.C.
	20	Cornus stolonifera `Arctic Fire` / Arctic Fire Dogwood	CONT.	1 Gal.	3` O.C.
	10	Hibiscus laevis / Marsh Hibiscus	CONT.	3 GAL	3` O.C.
	2	Hydrangea paniculata `Pee Wee` / Pee Wee Panicle Hydrangea	CONT.	3 GAL	3` O.C.
	8	Hydrangea quercifolia `Alice` / Alice Oakleaf Hydrangea	CONT.	5 GAL	6` O.C.
	36	Ilex glabra `Chamzin` / Nordic™ Inkberry Holly	CONT.	3 GAL.	4` O.C.
	45	Juniperus chinensis `Sea Green` / Sea Green Juniper	CONT.	1 GAL	4` O.C.
	27	Liatris spicata / Blazing Star	CONT.	1 GAL	2` O.C.
	26	Physocarpus opulifolius 'Jefam' TM / Amber Jubilee Ninebark	CONT.	3 GAL	4` O.C.

NOTE: Any areas of land outside of plantings, mulch beds, and tree rings shall be seeded or sodded with turf grass. Refer to erosion control plans.



REFERENCE NOTES

1. Contractor to verify all utility locations in the field prior to beginning work and is responsible for any damage to utilities associated with work. Utilities shall be repaired to satisfaction of the utility owner and/or operating authority at no additional cost.
2. In case of discrepancies between the plan and the plant list, the plan shall dictate. Dimensioned details take precedence over scaled details. If in question, contact the landscape architect.
3. If Contractor wishes to propose plant substitutions, substitution must be confirmed by Owner/Architect prior to bid date in writing.
4. All plants shall be inspected and tagged with project identification at nursery or contractor's operation prior to moving to job site. Plants may also be inspected and approved or rejected on the job site.
5. All disturbed lawn areas shall be seeded or sodded as shown on plans. Refer to erosion control plans for temporary seeding and areas not shown on landscape plans.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED, THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

VERT V0TH V1ST V2ND
HORZ 0TH 1ST 2ND
TEXT ONLY

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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
LANDSCAPE PLAN

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L100

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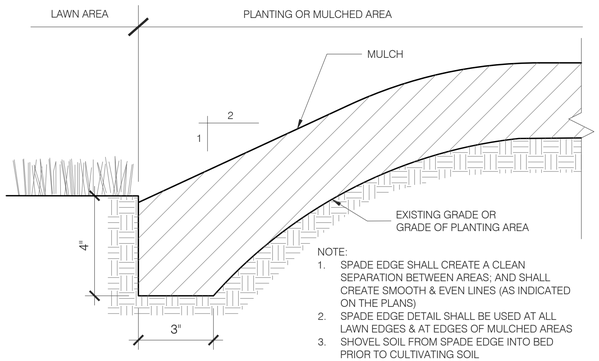
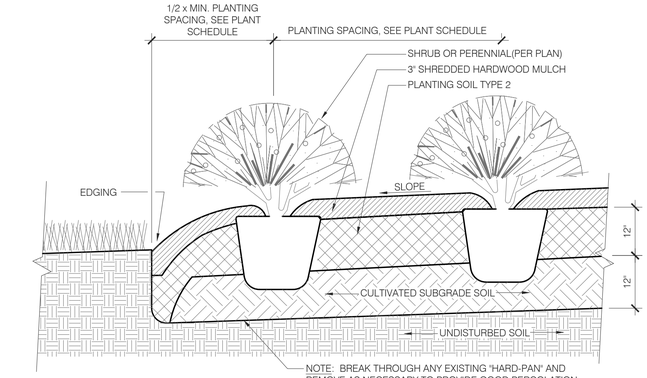


NOTE:
1. SPADE EDGE SHALL CREATE A CLEAN SEPARATION BETWEEN AREAS; AND SHALL CREATE SMOOTH & EVEN LINES (AS INDICATED ON THE PLANS)
2. SPADE EDGE DETAIL SHALL BE USED AT ALL LAWN EDGES & AT EDGES OF MULCHED AREAS
3. SHOVEL SOIL FROM SPADE EDGE INTO BED PRIOR TO CULTIVATING SOIL

04 EDGE - SPADE

NTS



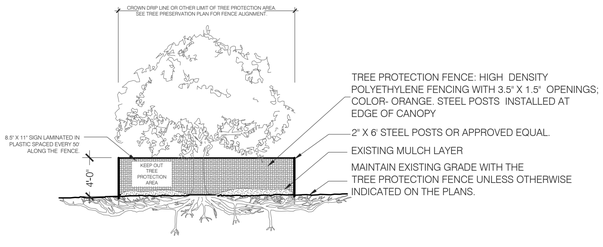
PLANTING PROCEDURE

1. LAYOUT BED AND OUTLINE EDGE.
2. PREPARE PLANTING SOIL PER SPECIFICATIONS.
3. INSTALL PLANTS, MULCH AND WATER THOROUGHLY. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.

02 SHRUB AND PERENNIAL PLANTING

NTS

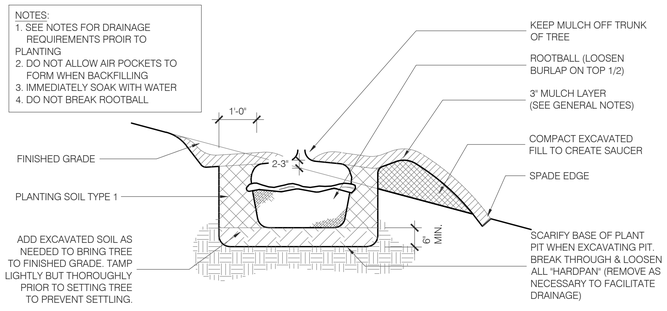
NOTES:
1. SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
2. IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
3. NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
5. SEE SITE PREPARATION PLAN FOR ANY MODIFICATIONS WITH THE TREE PROTECTION AREA.



05 TREE PROTECTION DETAIL

NTS

NOTES:
1. SEE NOTES FOR DRAINAGE REQUIREMENTS PROIR TO PLANTING
2. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
3. IMMEDIATELY SOAK WITH WATER
4. DO NOT BREAK ROOTBALL



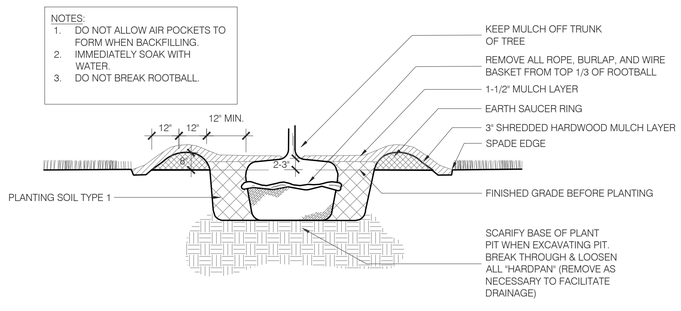
PLANTING PROCEDURE

1. EXCAVATE ROOTBALL PIT
2. SET TREE SUCH THAT TOP OF ROOTBALL IS 2-3" HIGHER THAN FINISH GRADE.
3. REMOVE ALL TWINE, ROPE, WIRE BASKET, AND BURLAP FROM TOP 1/3 OF ROOTBALL & EXPOSE ROOT FLARE.
4. BACKFILL WITH SOIL MIX & "WATER IN"
5. COMPLETE BACKFILLING, CONSTRUCT SAUCER, SPADE-EDGE & ADD MULCH
6. STAKE & GUY SECURELY (AS REQUIRED)
7. INSTALL WATERING DEVICE (AS REQUIRED)

03 TREE PLANTING - ON SLOPE

NTS

NOTES:
1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
2. IMMEDIATELY SOAK WITH WATER.
3. DO NOT BREAK ROOTBALL.



PLANTING PROCEDURE

1. EXCAVATE ROOTBALL PIT
2. SET TREE SUCH THAT TOP OF ROOTBALL IS 2-3" HIGHER THAN FINISH GRADE.
3. REMOVE ALL TWINE, ROPE, WIRE BASKET, AND BURLAP FROM TOP 1/3 OF ROOTBALL & EXPOSE ROOT FLARE.
4. BACKFILL WITH SOIL MIX & "WATER IN"
5. COMPLETE BACKFILLING, CONSTRUCT SAUCER, SPADE-EDGE & ADD MULCH
6. STAKE & GUY SECURELY (AS REQUIRED)
7. INSTALL WATERING DEVICE (AS REQUIRED)

01 TREE PLANTING - LEVEL AREA

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CONSTRUCTION DOCUMENTS FOR
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CITY OF SPRINGBORO, WARREN COUNTY, OHIO
LANDSCAPE DETAILS

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SOIL PREPARATION (PERFORMANCE SPECIFICATION)
PART 1 - GENERAL
1.1 SUMMARY
A. Section includes planting soils specified according to performance requirements of the mixes.
1.2 DEFINITIONS
A. CEC: Cation exchange capacity.
B. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.
C. Imported Soil: Soil that is transported to Project site for use.
D. Manufactured Soil: Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.
E. Organic Matter: The total of organic materials in soil exclusive of undecayed plant and animal tissues, their partial decomposition products, and the soil biomass; also called "humus" or "soil organic matter."
F. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
G. RCRA Metals: Hazardous metals identified by the EPA under the Resource Conservation and Recovery Act.
H. SSSA: Soil Science Society of America.
I. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
J. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
K. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.
L. USCC: U.S. Composting Council.
PART 2 - PRODUCTS
2.1 PLANTING SOILS SPECIFIED ACCORDING TO PERFORMANCE REQUIREMENTS
A. Planting-Soil Type 1: Existing, on-site surface soil, with the duff layer, if any, retained and stockpiled on-site; modified to produce viable planting soil. Using preconstruction soil analyses and materials specified in other articles of this Section, amend existing, on-site surface soil to become planting soil complying with the following requirements:
1. Particle Size Distribution by USDA Textures: Classified as sandy loam / loam / silt loam / loamy sand soil according to USDA textures.
2. Fragment Size Distribution:
a. Coarse Fragments: Maximum 8 percent by dry weight.
b. Sticks and Roots: Maximum 1 percent by dry weight.
c. Debris and Other Foreign Materials: Maximum 1 percent by dry weight.
3. Percentage of Organic Matter: Minimum 3 percent by volume.
4. Soil Reaction: pH of 6 to 7.
5. CEC of Total Soil: Minimum 10 meq/100 mL at pH of 7.0.
6. Soluble-Salt Content: 5 to 10 dS/m measured by electrical conductivity.
7. Bulk Density: 1.0 g/cu. cm to 1.5 g/cu. cm at 85 percent compaction.
8. Total Porosity: Minimum 45 percent at 85 percent compaction.
9. Macro Porosity: Minimum 5 percent at 85 percent compaction.
10. RCRA Metals: Below maximum limits established by the EPA.
11. Phytotoxicity: Below phytotoxicity limits established by SSSA.
B. Planting-Soil Type 2: Manufactured soil consisting of manufacturer's basic topsoil, blended in a manufacturing facility with sand, stabilized organic soil amendments, and other materials as specified in other articles of this Section to produce viable planting soil.
1. Basic Properties: Manufactured soil shall not contain the following:
a. Unacceptable Materials: Concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
b. Unsuitable Materials: Stones, roots, plants, sod, clay lumps, and pockets of coarse sand that exceed a combined maximum of 5 percent by dry weight of the manufactured soil.
c. Large Materials: Stones, clods, roots, clay lumps, and pockets of coarse sand exceeding 1-1/2 inches in any dimension.
2. Fragment Size Distribution:
a. Coarse Fragments: Maximum 8 percent by dry weight.
b. Sticks and Roots: Maximum 1 percent by dry weight.
c. Debris and Other Foreign Materials: Maximum 1 percent by dry weight.
3. Percentage of Organic Matter: Minimum 8 percent by volume.
4. Soil Reaction: pH of 6 to 7.
5. CEC of Total Soil: Minimum 10 meq/100 mL at pH of 7.0.
6. Soluble-Salt Content: 5 to 10 dS/m measured by electrical conductivity.
7. Bulk Density: 1.0 g/cu. cm to 1.5 g/cu. cm at 85 percent compaction.
8. Total Porosity: Minimum 50 percent at 85 percent compaction.
9. Macro Porosity: Minimum 5 percent at 85 percent compaction.
10. RCRA Metals: Below maximum limits established by the EPA.
11. Phytotoxicity: Below phytotoxicity limits established by SSSA.
2.2 INORGANIC SOIL AMENDMENTS
A. Lime: ASTM C602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent.
B. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent elemental sulfur, with a minimum of 99 percent passing through a No. 6 sieve and a maximum of 10 percent passing through a No. 40 sieve.
C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
D. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through a No. 50 sieve.
E. Sand: Clean, washed, natural or manufactured, free of toxic materials, and according to ASTM C33/C33M.
2.3 ORGANIC SOIL AMENDMENTS
A. Compost: Well-composted, stable, and weed-free organic matter produced by composting feedstock, and bearing USCC's "Seal of Testing Assurance," and as follows:
1. Feedstock: Limited to leaves.
2. Reaction: pH of 5.5 to 8.
3. Soluble-Salt Concentration: Less than 4 dS/m.
4. Moisture Content: 35 to 55 percent by weight.
5. Organic-Matter Content: 50 to 60 percent of dry weight.
6. Particle Size: Minimum of 98 percent passing through a 2-inch sieve.
B. Sphagnum Peat: Partially decomposed sphagnum peat moss, finely divided or of granular texture, a pH of 3.4 to 4.8, and a soluble-salt content measured by electrical conductivity of maximum 5 dS/m.
C. Muck Peat: Partially decomposed moss peat, native peat, or reed-sedge peat, finely divided or of granular texture, a pH of 6 to 7.5, a soluble-salt content measured by electrical conductivity of maximum 5 dS/m, having a water-absorbing capacity of 1100 to 2000 percent, and containing no sand.
D. Wood Derivatives: Shredded and composted, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture and free of chips, stones, sticks, soil, or toxic materials.
E. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.
2.4 FERTILIZERS
A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium.
B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium.
PART 3 - EXECUTION
3.1 GENERAL
A. Place planting soil and fertilizers according to requirements in other Specification Sections.
B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil.
3.2 PREPARATION OF UNAMENDED, ON-SITE SOIL BEFORE AMENDING
A. Excavation: Excavate soil from designated area(s) to a depth of 6 inches and stockpile until amended.
B. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
C. Unsuitable Materials: Clean soil to contain a combined maximum of 8 percent by dry weight of stones, roots, plants, sod, clay lumps, and pockets of coarse sand.
D. Screening: Pass unamended soil through a 3-inch sieve to remove large materials.
3.3 PLACING AND MIXING PLANTING SOIL OVER EXPOSED SUBGRADE
A. General: Apply and mix unamended soil with amendments on-site to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
B. Subgrade Preparation: Till subgrade to a minimum depth of 12 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
C. Mixing: Spread unamended soil to total depth of 6 inches, but not less than required to meet finish grades after mixing with amendments and natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
1. Amendments: Apply soil amendments and fertilizer, if required, evenly on surface, and thoroughly blend them with unamended soil to produce planting soil.
a. Mix lime and sulfur with dry soil before mixing fertilizer.
b. Mix fertilizer with planting soil no more than seven days before planting.
2. Lifts: Apply and mix unamended soil and amendments in lifts not exceeding 8 inches in loose depth for material compacted by compaction equipment, and not more than 6 inches in loose depth for material compacted by hand-operated tampers.
D. Compaction: Compact each blended lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D698.
E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
3.4 PLACING MANUFACTURED PLANTING SOIL OVER EXPOSED SUBGRADE
A. General: Apply manufactured soil on-site in its final, blended condition. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
B. Subgrade Preparation: Till subgrade to a minimum depth of 12 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
C. Application: Spread planting soil to total depth of 12 inches, but not less than required to meet finish grades after natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
1. Lifts: Apply planting soil in lifts not exceeding 12 inches in loose depth for material compacted by compaction equipment, and not more than 6 inches in loose depth for material compacted by hand-operated tampers.
D. Compaction: Compact each lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D698.
E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
3.5 BLENDING PLANTING SOIL IN PLACE
A. General: Mix amendments with in-place, unamended soil to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
B. Preparation: Till unamended, existing soil in planting areas to a minimum depth of 12 inches. Remove stones larger than 3 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
C. Mixing: Apply soil amendments and fertilizer, if required, evenly on surface, and thoroughly blend them into full depth of unamended, in-place soil to produce planting soil.
1. Mix lime and sulfur with dry soil before mixing fertilizer.
2. Mix fertilizer with planting soil no more than seven days before planting.
D. Compaction: Compact blended planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D698.
E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
3.6 FIELD QUALITY CONTROL
A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
B. Perform the following tests:
1. Compaction: Test planting-soil compaction after placing each lift and at completion using a densitometer or soil-compaction meter calibrated to a reference test value based on laboratory testing according to ASTM D698. Space tests at no less than one for each 2000 sq. ft. of in-place soil or part thereof.
2. Performance Testing: For each amended planting-soil type, demonstrating compliance with specified performance requirements. Perform testing according to "Soil-Sampling Requirements" and "Testing Requirements" articles.
C. Soil will be considered defective if it does not pass tests.
D. Prepare test reports.
E. Label each sample and test report with the date, location keyed to a site plan or other location system, visible conditions when and where sample was taken, and sampling depth.
3.7 PROTECTION AND CLEANING
A. Protection Zone: Identify protection zones according to Section 015639 "Temporary Tree and Plant Protection."
B. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Vehicle traffic.
4. Foot traffic.
5. Erection of sheds or structures.
6. Impoundment of water.
7. Excavation or other digging unless otherwise indicated.
C. Remove surplus soil and waste material including excess subsoil, unsuitable materials, trash, and debris and legally dispose of them off Owner's property unless otherwise indicated.
END OF SECTION

PLANTS, TREE WATERING DEVICES, MULCHES, EDGINGS
PART 1 - GENERAL
1.1 DEFINITIONS
A. Backfill: The earth used to replace or the act of replacing earth in an excavation.
B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant. Some sources classify herbicides separately from pesticides.
C. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 329115 "Soil Preparation (Performance Specification)" for drawing designations for planting soils.
D. Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.
1.2 CLOSEOUT SUBMITTALS
A. Maintenance Data: Recommended procedures to be provided to Owner for maintenance of plants during a calendar year.
1.3 QUALITY ASSURANCE
A. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
1. Pesticide Applicator: State licensed, commercial.
B. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1.
1.4 DELIVERY, STORAGE, AND HANDLING
A. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.
B. Handle planting stock by root ball.
C. Store bulbs, corms, and tubers in a dry place at 60 to 65 deg F until planting.
D. Deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.
1.5 WARRANTY
A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.
1. Failures include, but are not limited to, the following:
a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner.
b. Structural failures including plantings falling or blowing over.
2. Warranty Periods: From date of Substantial Completion.
a. Trees, Shrubs, Vines, and Ornamental Grasses: 12 months.
b. Ground Covers, Biennials, Perennials, and Other Plants: October 15th of year of Substantial Completion.
c. Annuals: Two months.
PART 2 - PRODUCTS
2.1 PLANT MATERIAL
A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant List, Plant Schedule, or Plant Legend indicated on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
B. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which begins at root flare according to ANSI Z60.1. Root flare shall be visible before planting.
C. Annuals and Biennials: Provide healthy, disease-free plants of species and variety shown or listed, with well-established root systems reaching to sides of the container to maintain a firm ball, but not with excessive root growth encircling the container. Provide only plants that are acclimated to outdoor conditions before delivery and that are in bud but not yet in bloom.
2.2 FERTILIZERS
A. Planting Tablets: Tightly compressed chip-type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots.
1. Size: 10-gram tablets.
2. Nutrient Composition: 20 percent nitrogen, 10 percent phosphorous, and 5 percent potassium, by weight plus micronutrients.
2.3 MULCHES
A. Organic Mulch: Shredded hardwood.
B. Mineral Mulch: Rounded riverbed gravel or smooth-faced stone, washed.
1. Size Range: 1-1/2 inches maximum, 3/4 inch minimum.
2. Color: Natural gravel full color range.
2.4 WEED-CONTROL BARRIERS
A. Nonwoven Geotextile Filter Fabric: Polypropylene or polyester fabric, 3 oz./sq. yd. minimum, composed of fibers formed into a stable network so that fibers retain their relative position. Fabric shall be inert to biological degradation and resist naturally encountered chemicals, alkalis, and acids.
2.5 PESTICIDES
A. General: Pesticide registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
2.6 LANDSCAPE EDGINGS
A. Steel Edging: Standard commercial-steel edging, fabricated in sections of standard lengths, with loops stamped from or welded to face of sections to receive stakes.
1. Edging Size: 1/4 inch thick by 5 inches deep.
2. Finish: Black.
B. Aluminum Edging: Standard-profile extruded-aluminum edging, ASTM B221, Alloy 6063-T6, fabricated in standard lengths with interlocking sections with loops stamped from face of sections to receive stakes.
1. Edging Size: 1/8 inch thick by 5-1/2 inches deep.
2. Finish: Black anodized.
2.7 TREE-WATERING DEVICES
A. Slow-Release Watering Device: Standard product manufactured for drip irrigation of plants and emptying its water contents over an extended time period; manufactured from UV-light-stabilized nylon-reinforced polyethylene sheet, PVC, or HDPE plastic.
1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
a. Spectrum Products, Inc.; Treegator® Original
PART 3 - EXECUTION
3.1 PLANTING AREA ESTABLISHMENT
A. General: Prepare planting area for soil placement and mix planting soil according to "Soil Preparation (Performance Specification)."
B. Placing Planting Soil: Place manufactured planting soil over exposed subgrade, unless otherwise indicated on Drawings.
3.2 EXCAVATION FOR TREES AND SHRUBS
A. Planting Pits and Trenches: Excavate circular planting pits.
1. Excavate planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are unacceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
2. Excavate approximately three times as wide as ball diameter.
3. Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.
B. Backfill Soil: Subsoil and topsoil removed from excavations may be used as backfill soil unless otherwise indicated.
3.3 TREE, SHRUB, AND VINE PLANTING
A. Inspection: At time of planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.
B. Roots: Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
C. Set each plant plumb and in center of planting pit or trench with root flare adjacent finish grades according to planting details.
1. Balled and Burlapped Stock: After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
2. Balled and Potted and Container-Grown Stock: Carefully remove root ball from container without damaging root ball or plant.
3. Fabric Bag-Grown Stock: Carefully remove root ball from fabric bag without damaging root ball or plant. Do not use planting stock if root ball is cracked or broken before or during planting operation.
4. Bare-Root Stock: Support stem of each plant and spread roots without tangling or turning toward surface. Plumb before backfilling, and maintain plumb while working. Carefully work backfill around roots by hand. Bring roots into close contact with the soil.
5. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
6. Place planting tablets equally distributed around each planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
a. Quantity: Per manufacturer recommendations.
7. Continue backfilling process. Water again after placing and tamping final layer of soil.
D. Slopes: When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.
3.4 TREE, SHRUB, AND VINE PRUNING
A. Remove only dead, dying, or broken branches. Do not prune for shape.
B. Prune, thin, and shape trees, shrubs, and vines as directed by Landscape Architect.
C. Prune, thin, and shape trees, shrubs, and vines according to standard professional horticultural and arboricultural practices. Unless otherwise indicated by Landscape Architect, do not cut tree leaders; remove only injured, dying, or dead branches from trees and shrubs; and prune to retain natural character.
D. Do not apply pruning paint to wounds.
3.5 GROUND COVER AND PLANT PLANTING
A. Set out and space ground cover and plants other than trees, shrubs, and vines as indicated on Drawings in even rows with triangular spacing.
B. Use planting soil as indicated on Drawings for backfill.
C. Dig holes large enough to allow spreading of roots.
D. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
E. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
F. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.
3.6 PLANTING AREA MULCHING
A. Mulch backfilled surfaces of planting areas and other areas indicated on Drawings.
3.7 INSTALLATION OF EDGING
A. Steel Edging: Install steel edging where indicated according to manufacturer's written instructions. Anchor with steel stakes spaced approximately 30 inches apart, driven below top elevation of edging.
B. Aluminum Edging: Install aluminum edging where indicated according to manufacturer's written instructions. Anchor with aluminum stakes spaced approximately 36 inches apart, driven below top elevation of edging.
C. Shovel-Cut Edging: Separate mulched areas from turf areas with a 45-degree, 4- to 6-inch-deep, shovel-cut edge.
3.8 INSTALLATION OF SLOW-RELEASE WATERING DEVICE
A. Provide one device for each tree.
3.9 PLANT MAINTENANCE
A. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.
B. Fill in, as necessary, soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices when possible to minimize use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.
D. Apply pesticides and other chemical products and biological control agents according to authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
E. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
F. At time of Substantial Completion, verify that tree-watering devices are in good working order and leave them in place. Replace improperly functioning devices.
3.10 MAINTENANCE SERVICE
A. Maintenance Service: Provide maintenance by skilled employees of landscape Installer. Maintain as required in "Plant Maintenance" Article. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established, but for not less than maintenance period below:
1. Maintenance Period for Trees and Shrubs: 12 months from date of Substantial Completion.
2. Maintenance Period for Ground Cover and Other Plants: October 15th of year of Substantial Completion.
END OF SECTION

TURF AND GRASSES
PART 1 - GENERAL
1.1 DEFINITIONS
A. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
B. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 329115 "Soil Preparation (Performance Specification)" and drawing designations for planting soils.
1.2 DELIVERY, STORAGE, AND HANDLING
A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.
PART 2 - PRODUCTS
2.1 SEED
A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances.
B. Seed Species:
1. Quality, Non-State Certified: Seed of grass species as listed below for solar exposure, with not less than 85 percent germination, not less than 95 percent pure seed, and not more than 0.5 percent weed seed:
2. Full Sun and Partial Shade: Blend at least three locally appropriate strain varieties by weight as follows:
a. Turf-Type Tall Fescue, 40-80 percent
b. Turf-Type Perennial Ryegrass, 10-40 percent
c. Kentucky Bluegrass, 10-20 percent
3. Shade: Blend at least three locally appropriate strain varieties by weight as follows:
a. Creeping Fescue, Chewings Fescue, and/or Hard Fescue, 40-70 percent
b. Turf-Type Perennial Ryegrass, 20-40 percent
c. Kentucky Bluegrass, 10-20 percent
2.2 FERTILIZERS
A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
2.3 MULCHES
A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.
2.4 PESTICIDES
A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
PART 3 - EXECUTION
3.1 TURF AREA PREPARATION
A. General: Prepare planting area for soil placement and mix planting soil according to "Soil Preparation (Performance Specification), modify topsoil depth to 4 inches, minimum."
B. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
3.2 SEEDING
A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph.
1. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
2. Do not use wet seed or seed that is moldy or otherwise damaged.
3. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer.
B. Sow seed at a total rate of 8 lb/1000 sq. ft..
C. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with fine spray.
D. Protect seeded areas with slopes not exceeding 1:6 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket 1-1/2 inches in loose thickness over seeded areas.
1. Anchor straw mulch by crimping into soil with suitable mechanical equipment.
3.3 TURF MAINTENANCE
A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
B. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings.
3.4 SATISFACTORY TURF
A. Turf installations shall meet the following criteria:
1. Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.
2. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.
B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.
END OF SECTION

KZF DESIGN
Designing Better Futures
AMERICAN STRUCTUREPOINT INC
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CONSTRUCTION DOCUMENTS FOR
CLEARCREEK FIRE DISTRICT HEADQUATERS
CITY OF SPRINGBORO, WARREN COUNTY, OHIO
LANDSCAPE SPECIFICATIONS

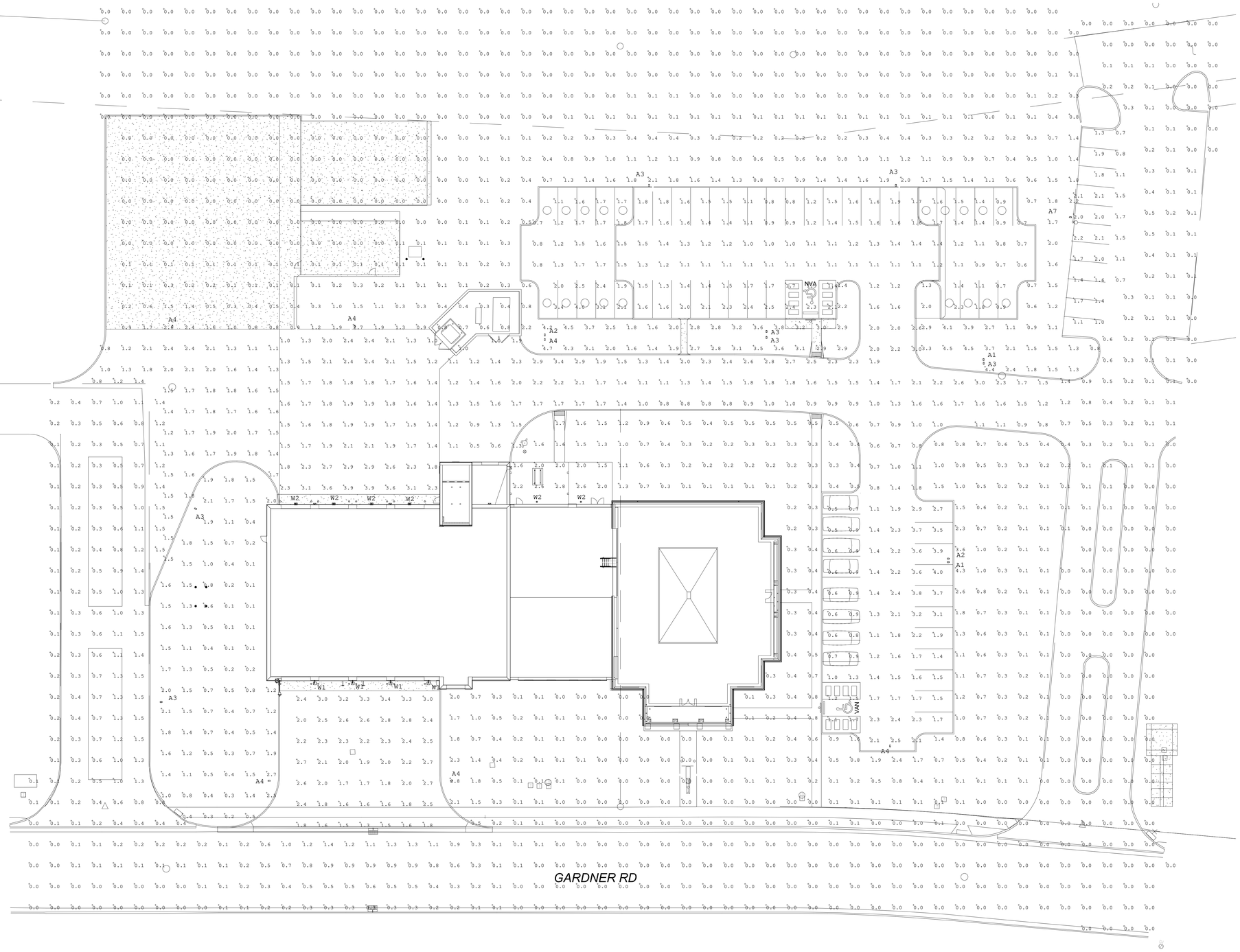
REVISIONS	DATE	SHEET NO.	DESCRIPTION

APPROVAL PENDING NOT FOR CONSTRUCTION
IN SUBMITTING BIDS IN RELIANCE ON THESE PLANS THE CONTRACTOR ASSUMES ALL RISKS OF ADDITIONAL COSTS OF REVISIONS DUE TO REQUIREMENTS OF THE OWNER OR GOVERNMENTAL AUTHORITIES AND MATERIAL REVISIONS IN THE COURSE OF COMPLETING THE FINAL DESIGN.

DATE:	7/20/2023
DRAWN BY:	ALM
CHECKED BY:	LAK
JOB NUMBER:	2022.02228

L111

PLOT SCALE: 1:1 EDIT DATE: 7/20/23 - 4:10 PM EDITED BY: AMENCHACA DRAWING FILE: \\COLUFS2\PROJECTS\2022\02228\D. DRAWINGS\CIVIL\CONSTRUCTION DOCUMENTS\CDS\2022.02228 PP DWG



Luminaire Schedule									
Symbol	Qty	Tag	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	6	W2	IST-SA1B-740-U-T4FT	Single	IST-SA1B-740-U-T4FT	0.900	3462	25.4	152.4
	2	A1	EMM-E03-LED-E1-SLL	Single	EMM-E03-LED-E1-SLL	0.900	7847	75.2	150.4
	2	A2	EMM-E03-LED-E1-SLR	Single	EMM-E03-LED-E1-SLR	0.900	7847	75.2	150.4
	1	A7	EMM-E03-LED-E1-T2	Single	EMM-E03-LED-E1-T2	0.900	8844	75.2	75.2
	7	A3	EMM-E03-LED-E1-T3	Single	EMM-E03-LED-E1-T3	0.900	8809	75.2	526.4
	6	A4	EMM-E03-LED-E1-T4	Single	EMM-E03-LED-E1-T4	0.900	8627	75.2	451.2
	4	W1	W1 - TRR-50-LED-E1-2-XX	Single	TRR-50-LED-E1-2-XX	0.900	2901	57.4	229.6

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Firetruck Drive South	Illuminance	Fc	2.24	3.4	1.3	1.72	2.62
N Greenspace to Trail	Illuminance	Fc	0.50	4.7	0.0	N.A.	N.A.
NE Annex Parking	Illuminance	Fc	1.54	2.2	0.7	2.20	3.14
NES Greenspace of FS	Illuminance	Fc	0.47	4.3	0.0	N.A.	N.A.
North Drive	Illuminance	Fc	1.72	4.0	0.5	3.44	8.00
North Lot	Illuminance	Fc	1.49	4.0	0.6	2.48	6.67
Street	Illuminance	Fc	0.23	1.5	0.0	N.A.	N.A.
W Greenspace of FS	Illuminance	Fc	1.00	2.7	0.1	10.00	27.00

01 EP100 **SITE LIGHTING PHOTOMETRIC PLAN**
1" = 20'-0"

PLAN TRUE

SCALE: 1"=20'-0"

NO. DATE DESCRIPTION

CLEARCREEK FIRE DISTRICT STATION 24

Gardner Road
Springboro, OH 45066

KZF DESIGN
Designing Better Futures

KZF DESIGN INC.
700 Broadway Street
Cincinnati, OH 45202

main 513.621.6211
kzf.com

DESIGNED	COMM. NO.
EDWARDS	6969.01
DRAWN	DATE
EDWARDS	07-21-2023
CHECKED	PROJ. MGR.
STEGMAN	CSENDES

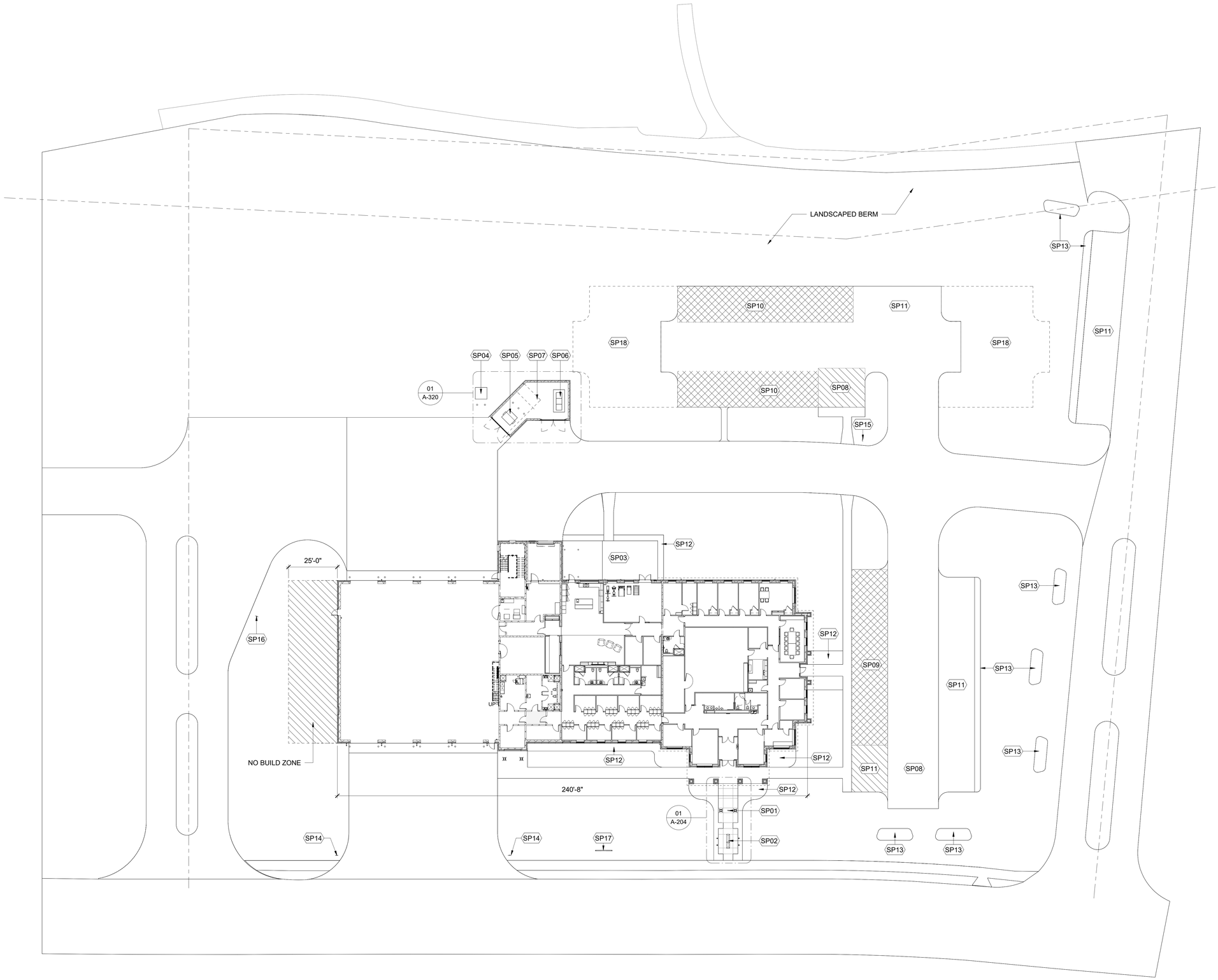
SITE LIGHTING PHOTOMETRIC PLAN

DRAWING NUMBER ISSUE
EP100

NOT FOR CONSTRUCTION

DRAWING NOTES

SP01	FLAG POLE
SP02	MONUMENT SIGN
SP03	CONCRETE PATIO
SP04	TRANSFORMER
SP05	DUMPSTER (BY OTHERS)
SP06	FIRE DEPARTMENT GENERATOR
SP07	SPACE FOR FUTURE GENERATOR
SP08	ACCESSIBLE PARKING SPACES
SP09	OFFICIAL VEHICLE PARKING SPACES. PAINT RED.
SP10	STAFF PARKING SPACES. PAINT RED.
SP11	VISITOR PARKING. STANDARD PAINT STRIPING.
SP12	LANDSCAPED AREA. REFER TO LANDSCAPING PLANS.
SP13	LANDSCAPED SCREENING AREA. REFER TO LANDSCAPING PLANS.
SP14	SITE CIRCULATION SIGNAGE - SCS-1 "EMERGENCY VEHICLES ONLY, NO TURN AROUND". REFER TO A-204.
SP15	SITE CIRCULATION SIGNAGE - SCS-2 "EMERGENCY VEHICLES ONLY, THROUGH TRAFFIC". REFER TO A-204.
SP16	SITE CIRCULATION SIGNAGE - SCS-3 "EMERGENCY VEHICLES ONLY, NO RIGHT TURN". REFER TO A-204.
SP17	4'X8' CONSTRUCTION SIGN.
SP18	FUTURE PARKING LOT.



PLAN TRUE

0 20' 40'

SCALE: 1"=20'-0"

NO. DATE DESCRIPTION

CLEARCREEK FIRE DISTRICT STATION 24

Gardner Road
Springboro, OH 45066

KZF DESIGN
Designing Better Futures

KZF DESIGN INC.
700 Broadway Street
Cincinnati, OH 45202

main 513.621.6211
kzf.com

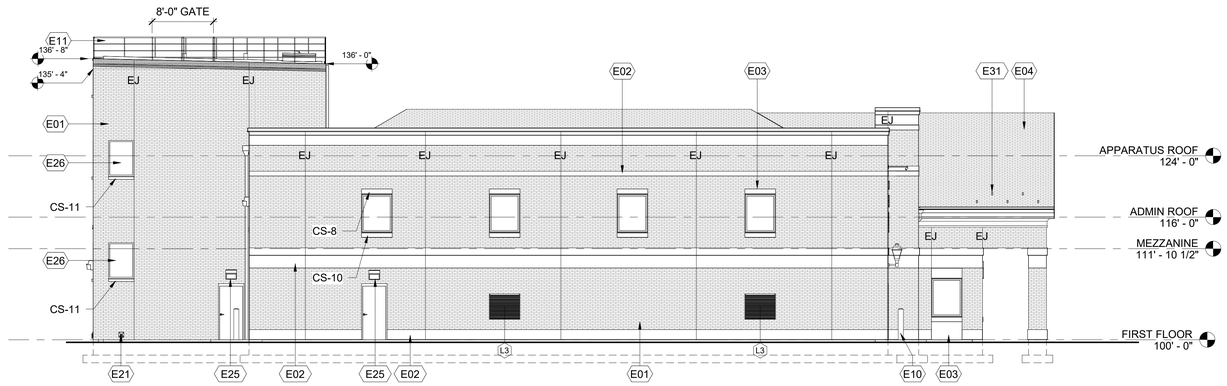
DESIGNED	COMM. NO.
Designer	6969.01
DRAWN	DATE
Author	11/15/22
CHECKED	PROJ. MGR.
Checker	CSENDES

ARCHITECTURAL SITE PLAN

DRAWING NUMBER ISSUE

A-100

NOT FOR CONSTRUCTION

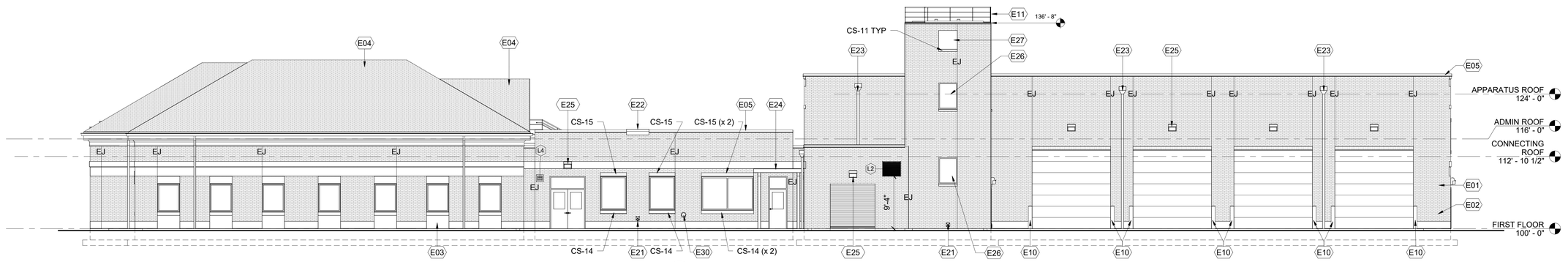


04 A-201 **SOUTH ELEVATION**
1/8" = 1'-0"

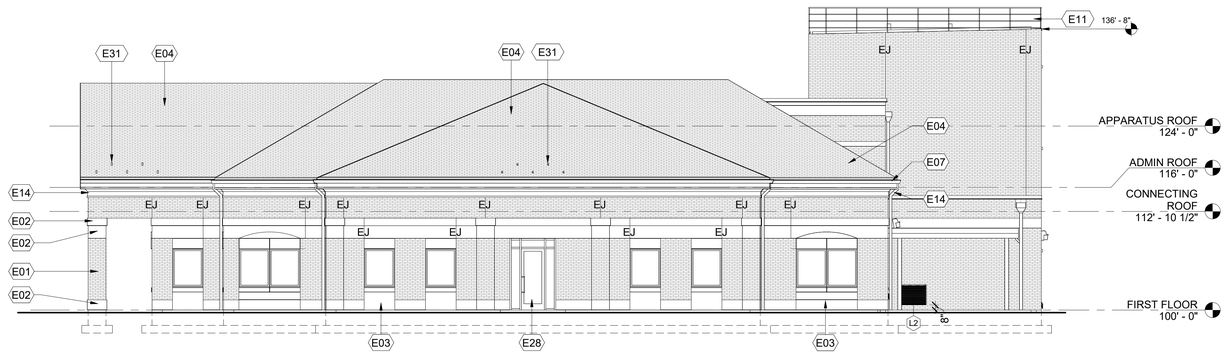
REFER TO A-204 FOR EXTERIOR MATERIAL SCHEDULE

DRAWING NOTES

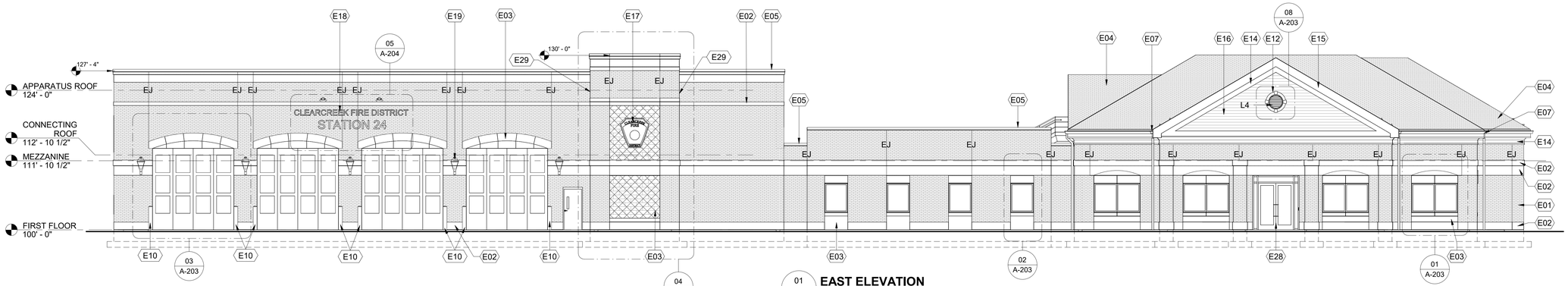
E01	VENEER BRICK
E02	CAST STONE BAND
E03	CAST STONE ACCENTS. ALL ACCENTS TO BE COLOR 1 UNLESS INDICATED BY DIAGONAL CROSSHATCH TO BE COLOR 2
E04	ASPHALT SHINGLE ROOF
E05	METAL COPING
E07	METAL GUTTER AND DOWNSPOUT
E10	PAINTED METAL BOLLARD
E11	PAINTED METAL GUARDRAIL
E12	ACCENT LOUVER TRIM
E14	ENGINEERED WOOD TRIM. REFER TO SECTIONS FOR PROFILES.
E15	ENGINEERED WOOD FASCIA
E16	FIBER CEMENT LAP SIDING
E17	FABRICATED BUILDING SIGNAGE
E18	CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE
E19	DECORATIVE LIGHT FIXTURE
E21	LIGHT DUTY TRAINING ANCHOR. REFER TO DETAILS ON A-301.
E22	PARAPET PROTECTION PLATE. STAINLESS STEEL BENT DIAMOND DECK WITH LADDER TIE-OFF ANCHOR. REFER TO A-330 DETAILS.
E23	METAL SCUPPER AND 4 1/4" X 3" DOWNSPOUT
E24	PRE-ENGINEERED METAL CANOPY. POST SUPPORTED.
E25	WALL MOUNTED LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
E26	TRAINING WINDOW. PAINT TO MATCH ADJACENT BRICK.
E27	LADDER TRAINING SIMULATED WINDOW. PAINT EXPOSED CMU TO MATCH ADJACENT BRICK.
E28	ALUMINUM STOREFRONT
E29	BRICK EXPANSION JOINT AT INSIDE CORNER
E30	ROOF OVERFLOW NOZZLE
E31	SNOW GUARDS



03 A-201 **WEST ELEVATION**
1/8" = 1'-0"



02 A-201 **NORTH ELEVATION**
1/8" = 1'-0"



01 A-201 **EAST ELEVATION**
1/8" = 1'-0"

0 4' 8' 16'
SCALE: 1/8"=1'-0"

NO. DATE DESCRIPTION

CLEARCREEK FIRE DISTRICT STATION 24

Gardner Road
Springboro, OH 45066

KZF DESIGN
Designing Better Futures

KZF DESIGN INC.
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Cincinnati, OH 45202

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kzf.com

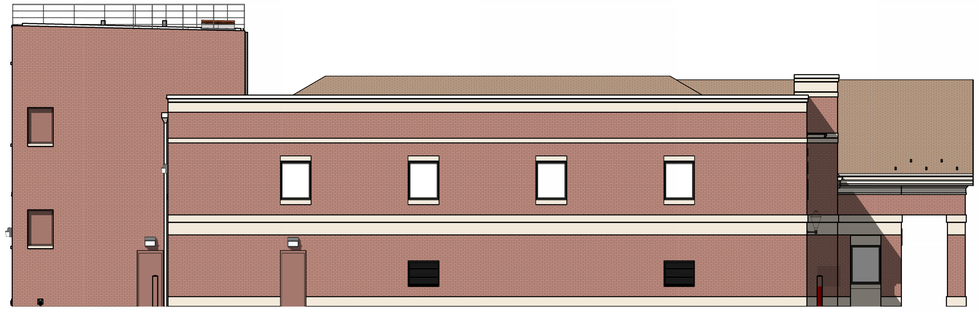
DESIGNED	COMM. NO.
ROSS	6969.01
DRAWN	DATE
ELLIS	MM-DD-YYYY
CHECKED	PROJ. MGR.
SCHMITZ	CSENDES

BUILDING ELEVATIONS

DRAWING NUMBER ISSUE
A-201

NOT FOR CONSTRUCTION

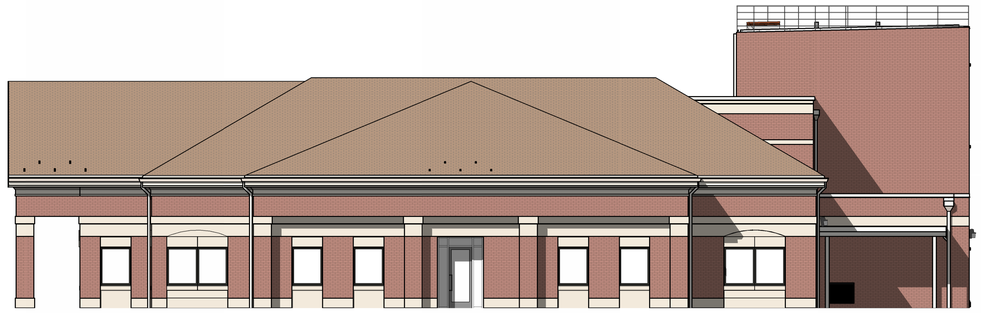
REFER TO A-204 FOR EXTERIOR MATERIAL SCHEDULE



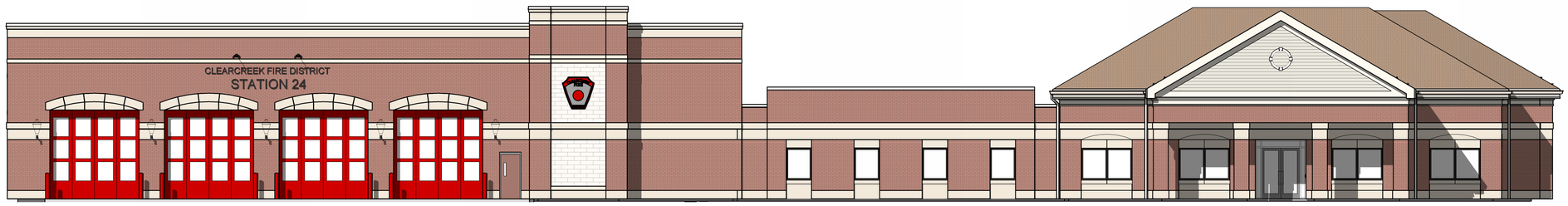
04 A-202 **SOUTH ELEVATION**
1/8" = 1'-0"



03 A-202 **WEST ELEVATION**
1/8" = 1'-0"



02 A-202 **NORTH ELEVATION**
1/8" = 1'-0"



01 A-202 **EAST ELEVATION**
1/8" = 1'-0"

0 4' 8' 16'
SCALE: 1/8"=1'-0"

NO.	DATE	DESCRIPTION

CLEARCREEK FIRE DISTRICT STATION 24

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Springboro, OH 45066

KZF DESIGN
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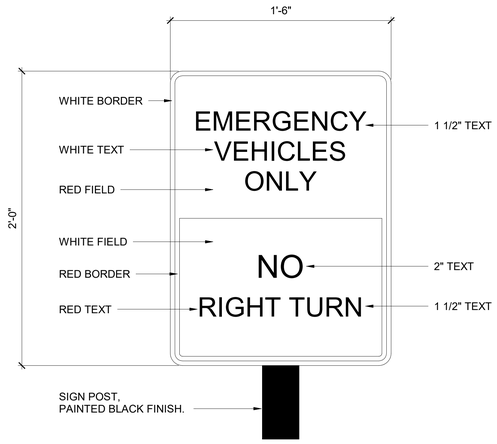
DESIGNED	COMM. NO.
Designer	6969.01
DRAWN	DATE
Author	12/08/22
CHECKED	PROJ. MGR.
Checker	CSENDES

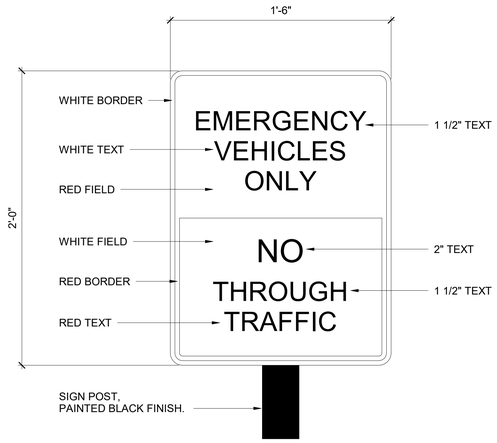
BUILDING ELEVATIONS - COLOR

DRAWING NUMBER ISSUE
A-202

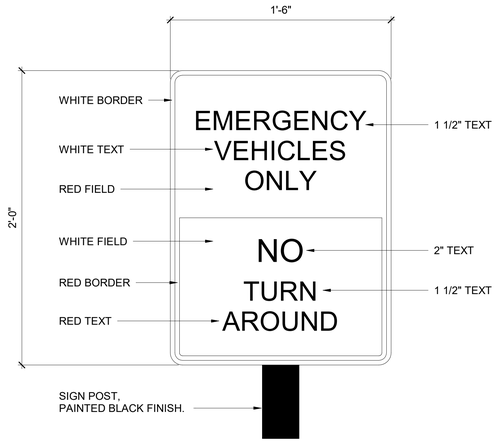
NOT FOR CONSTRUCTION



SITE CIRCULATION SIGNAGE SCS-3



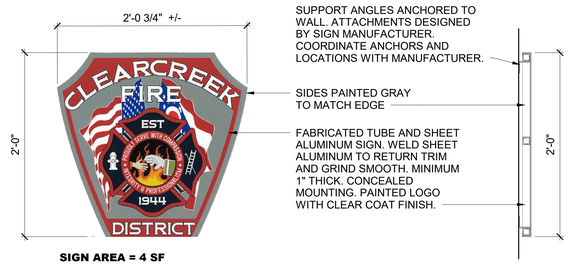
SITE CIRCULATION SIGNAGE SCS-2



SITE CIRCULATION SIGNAGE SCS-1

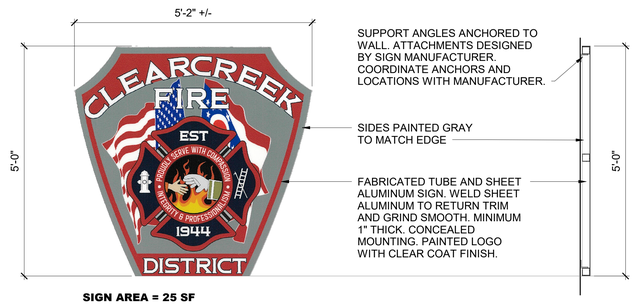
GENERAL NOTES:
A. BACKGROUND AND LETTERS TO BE REFLECTIVE WITH UV FADE RESISTANT INK AND WEATHERPROOF FOR OUTDOOR USE.
B. FOR SIGN POSTS AND FOOTINGS REFER TO PARKING SIGN DETAILS ON CIVIL DRAWINGS.

08 A-204 **SITE SIGNAGE** 1 : 5



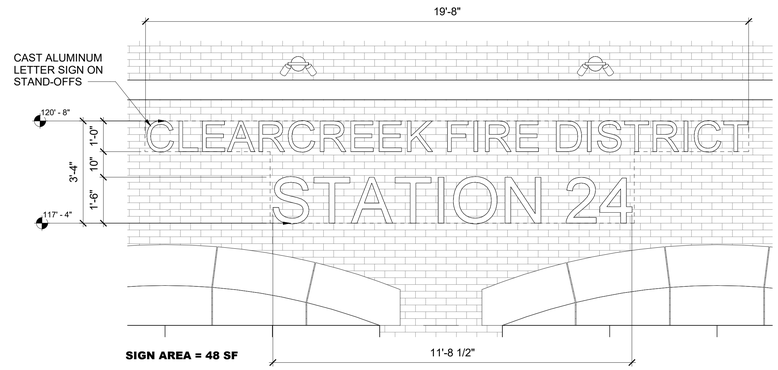
SIGN AREA = 4 SF

07 A-204 **MONUMENT SIGN - CCFD PATCH - 24"H** 1 1/2" = 1'-0"



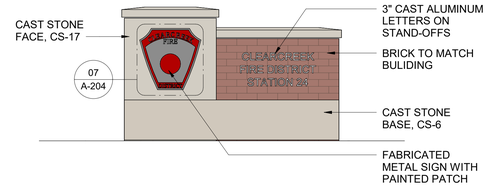
SIGN AREA = 25 SF

06 A-204 **BUILDING SIGN - CCFD PATCH - 60" H** 3/4" = 1'-0"

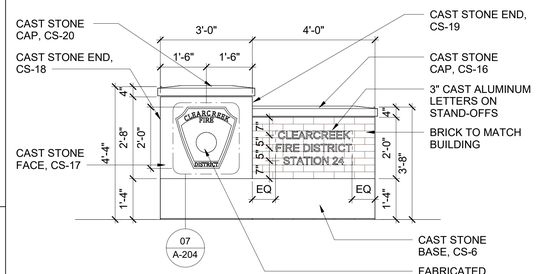


SIGN AREA = 48 SF

05 A-204 **BUILDING SIGN - APPARATUS BAY** 1/2" = 1'-0"

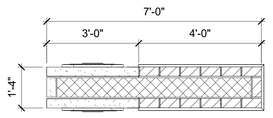


04 A-204 **MONUMENT SIGN ELEVATION - COLOR** 1/2" = 1'-0"

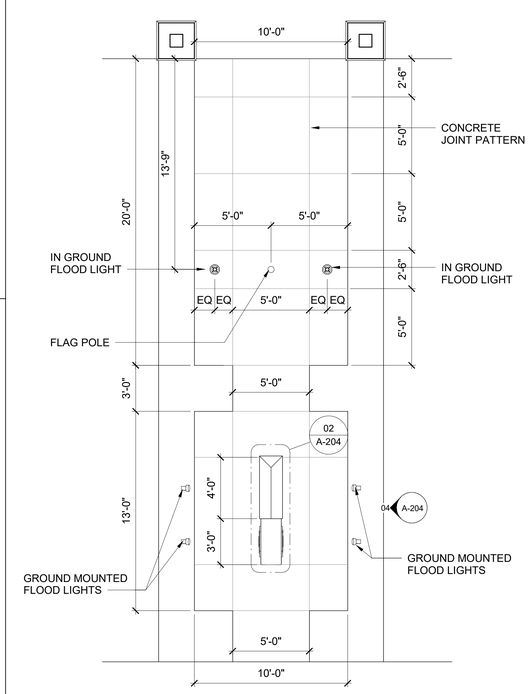


TEXT SIGN AREA = 3 SF
PATCH SIGN AREA = 4 SF

03 A-204 **MONUMENT SIGN ELEVATION** 1/2" = 1'-0"



02 A-204 **MONUMENT SIGN PLAN** 1/2" = 1'-0"



01 A-204 **MONUMENT SIGN & FLAG POLE AREA PLAN** 1/4" = 1'-0"

BUILDING SIGN SCHEDULE

APPARATUS BAY SIGN =	48 SF
BUILDING SIGN CCFD PATCH =	25 SF
MONUMENT SIGN TEXT =	3 SF
MONUMENT SIGN TEXT =	3 SF
MONUMENT SIGN CCFD PATCH =	4 SF
TOTAL =	**83 SF**
MAXIMUM TOTAL SIGN AREA =	360 SF
ACTUAL SIGN AREA =	83 SF
MAXIMUM BUILDING SIGN AREA =	65 SF
ACTUAL BUILDING SIGN AREA =	48 SF, 25 SF
MAXIMUM GROUND SIGN AREA =	30 SF
ACTUAL MONUMENT SIGN AREA =	10 SF

NO. DATE DESCRIPTION

CLEARCREEK FIRE DISTRICT STATION 24

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Springboro, OH 45066

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Cincinnati, OH 45202

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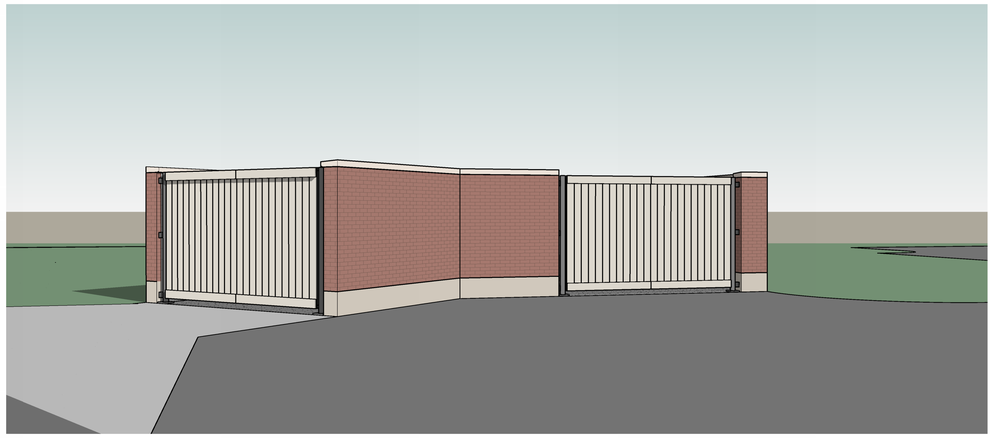
DESIGNED ROSS	COMM. NO. 6969.01
DRAWN ELLIS	DATE MM/DD/YYYY
CHECKED SCHMITZ	PROJ. MGR. CSENDES

SIGNAGE DETAILS

DRAWING NUMBER ISSUE
A-204

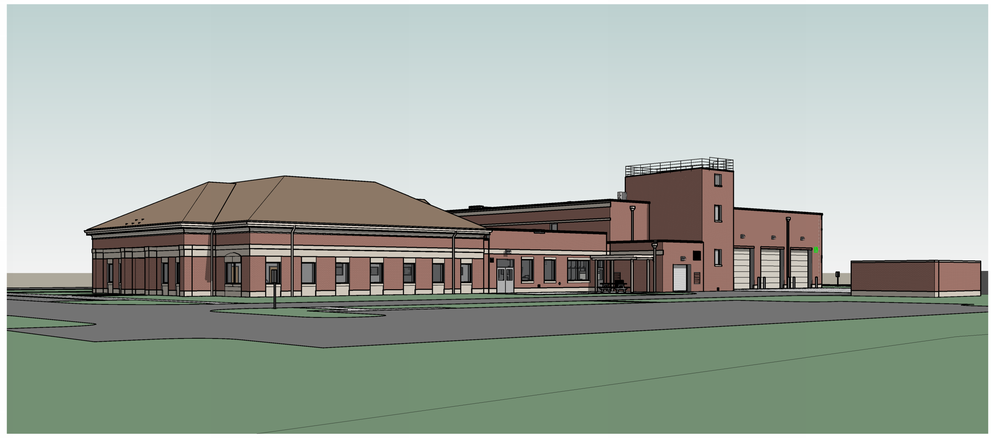
NOT FOR CONSTRUCTION



06 A-210 **3D View - Dumpster and Generator Enclosure**



03 A-210 **3D View - Apparatus Bay entry drive**



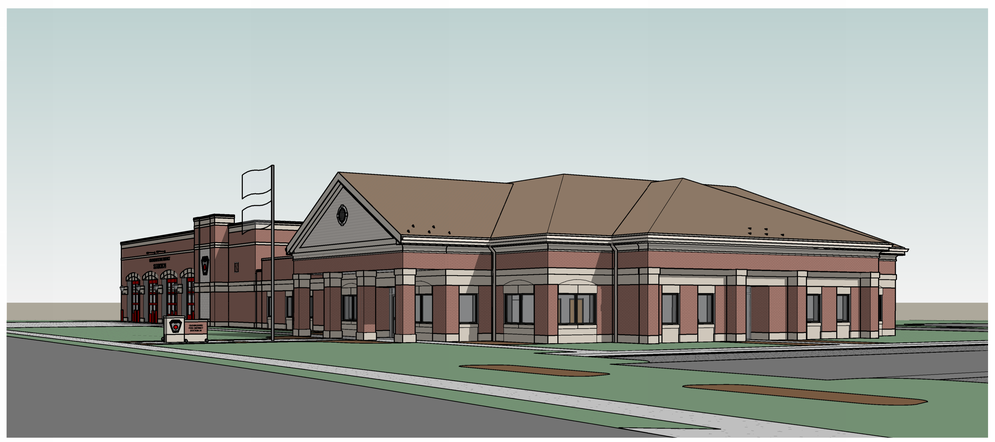
05 A-210 **3D View - from park walking path**



02 A-210 **3D View - South Entrance Drive**



04 A-210 **3D View - Gardner Road**



01 A-210 **3D View - North Entrance Drive**

NO.	DATE	DESCRIPTION

CLEARCREEK FIRE DISTRICT STATION 24

Gardner Road
Springboro, OH 45066

KZF DESIGN
Designing Better Futures

KZF DESIGN INC.
700 Broadway Street
Cincinnati, OH 45202

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DESIGNED	COMM. NO.
Designer	6969.01
DRAWN	DATE
Author	11/22/22
CHECKED	PROJ. MGR.
Checker	CSENDES

EXTERIOR VIEWS

DRAWING NUMBER ISSUE

A-210

NOT FOR CONSTRUCTION

2023-07-21 PLANNING/ZONING FINAL & EARLY RELEASE GMP BIDDING

DESCRIPTION

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

Catalog #		Type
Project		A1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

TOP: Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). MIDSECTION: Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. DOORFRAME: Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

Optics

Choice of twelve patented, high-efficiency AccuLED Optic™ technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CC. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less that 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.Options to meet Buy American Act requirements

Warranty

Five-year warranty.





ECM/EMM
EPIC MEDIUM LED

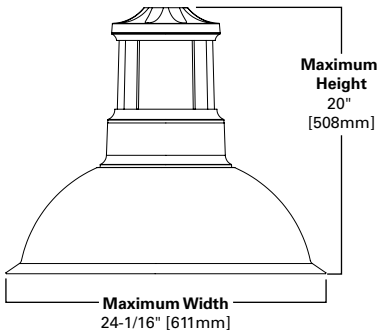
1 - 4 LightBARs

Solid State LED

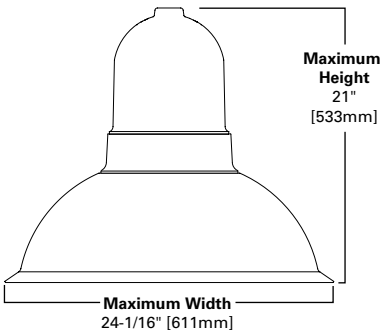
DECORATIVE AREA LUMINAIRE

DIMENSIONS

ECM Classical



EMM Modern



See configurations for more detailed information.

CERTIFICATION DATA

UL/cUL Listed
DesignLights Consortium® Qualified*
IP66 LIghtBARs
LM79 / LM80 Compliant
2G Vibration Tested
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.94

SHIPPING DATA

Approximate Net Weight:
45 lbs. [20 kgs.]

COOPER Lighting Solutions

*www.designlights.org

CONFIGURATIONS

HOUSING

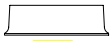


Classical
8-5/8" H x 8-3/4" W



Modern
9-3/8" H
x 8-7/8" W

MID SECTION

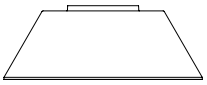


Solid
3-7/16" H x 9-15/16" W

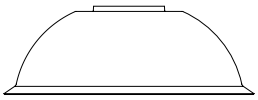


Solid Rings
3-7/16" H x 12" W

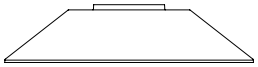
SHADE



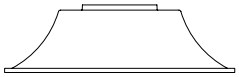
Straight Narrow
6-5/8" H x 19-1/8" W



Bell
8" H x 24" W

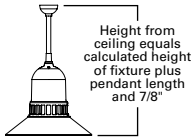


Straight Wide
5-1/8" H x 23-15/16" W



Flute
6" H x 22-1/2" W

MOUNTING OPTION



POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

Number of LightBARs		E01	E02	E03	E04
Drive Current		350mA Drive Current			
Power (Watts)		25W	52W	75W	97W
Current @ 120V (A)		0.22	0.44	0.63	0.82
Current @ 277V (A)		0.10	0.20	0.28	0.36
Power (Watts)		31W	58W	82W	99W
Current @ 347V (A)		0.11	0.19	0.28	0.29
Current @ 480V (A)		0.09	0.15	0.20	0.21
T2	Lumens	2,948	5,896	8,844	11,792
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T3	Lumens	2,936	5,873	8,809	11,745
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T4	Lumens	2,876	5,752	8,627	11,503
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3
5MQ	Lumens	3,054	6,108	9,161	12,215
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5WQ	Lumens	2,987	5,975	8,962	11,949
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,982	5,963	8,945	11,926
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3
SL2	Lumens	2,878	5,756	8,634	11,512
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,894	5,788	8,682	11,576
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL4	Lumens	2,823	5,647	8,470	11,294
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
RW	Lumens	2,957	5,915	8,872	11,829
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,616	5,231	7,847	10,462
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3

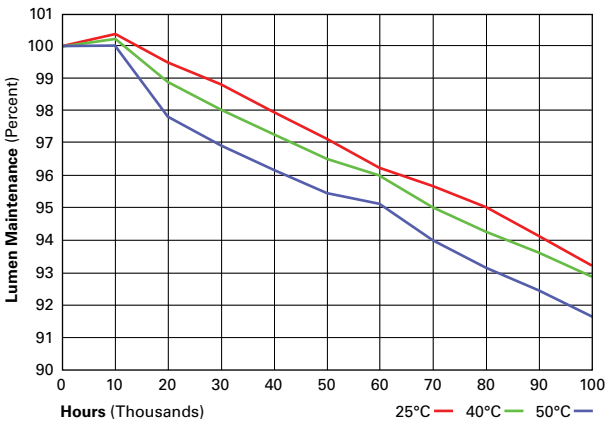
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

Number of LightBARs		F01	F02	F03	F04
Drive Current		1A Drive Current			
Power (Watts)		26W	55W	78W	102W
Current @ 120V (A)		0.22	0.46	0.66	0.86
Current @ 277V (A)		0.10	0.21	0.29	0.37
Power (Watts)		32W	60W	85W	105W
Current @ 347V (A)		0.11	0.19	0.28	0.30
Current @ 480V (A)		0.09	0.15	0.21	0.22
T2	Lumens	2,434	4,867	7,301	9,735
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T3	Lumens	2,424	4,848	7,272	9,696
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T4	Lumens	2,374	4,748	7,122	9,496
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
5MQ	Lumens	2,521	5,042	7,563	10,084
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
5WQ	Lumens	2,466	4,932	7,398	9,864
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,461	4,923	7,384	9,845
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3
SL2	Lumens	2,376	4,752	7,127	9,503
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,389	4,778	7,167	9,556
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2
SL4	Lumens	2,331	4,662	6,993	9,323
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
RW	Lumens	2,441	4,883	7,324	9,765
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,159	4,318	6,478	8,637
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25ºC	> 99%	> 97%	> 96%	> 93%	> 450,000
40ºC	> 98%	> 97%	> 96%	> 92%	> 425,000
50ºC	> 97%	> 96%	> 95%	> 91%	> 400,000

* Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99
50ºC	0.96

CONTROL OPTIONS

0-10V (DIM)
The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

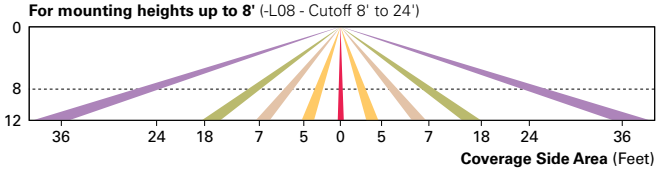
Photocontrol (PC, PER and PER7)
Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

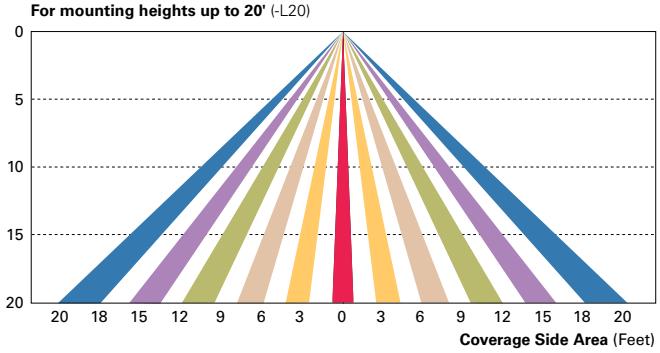
These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-40’.

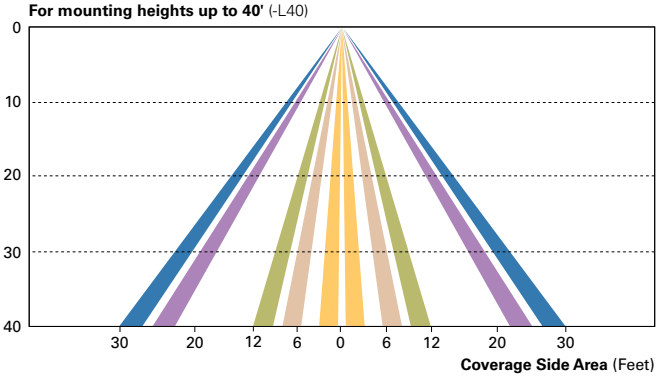
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



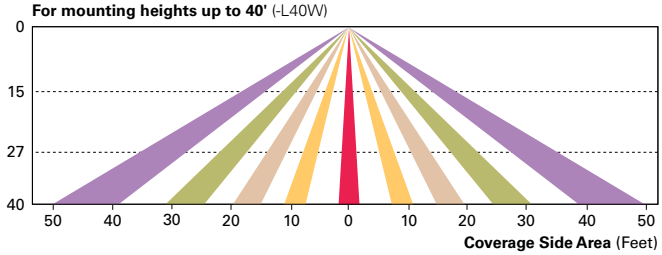
For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40)



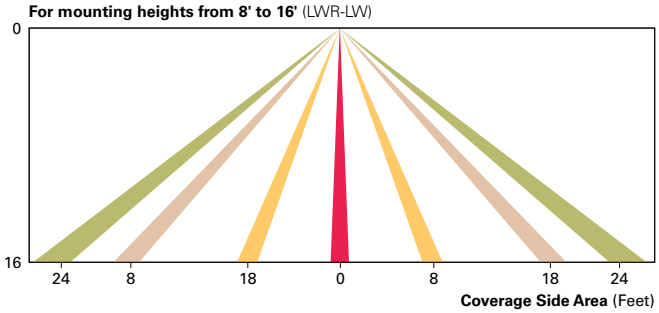
For mounting heights up to 40' (-L40W)



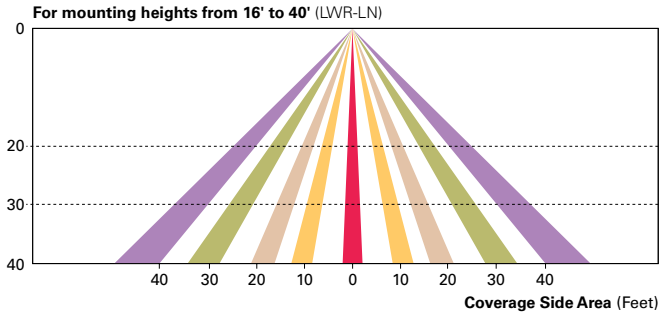
LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



ORDERING INFORMATION

Sample Number: ECM-E04-LED-E1-T2-FL-GM

Product Family [1]	Number of LightBARs [2, 3]	Lamp Type	Voltage	Distribution	Mid Section Type	Shade Type	Color [5]
ECM=Epic Classical Medium **EMM**=Epic Modern Medium **BAA-ECM**=Epic Classical Medium Buy American Act Compliant [19] **BAA-EMM**=Epic Modern Medium Buy American Act Compliant [19]	**E01**=(1) 21 LED LightBAR **E02**=(2) 21 LED LightBARs **E03**=(3) 21 LED LightBARs **E04**=(4) 21 LED LightBARs **F01**=(1) 7 LED LightBAR **F02**=(2) 7 LED LightBARs **F03**=(3) 7 LED LightBARs **F04**=(4) 7 LED LightBARs	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V **480**=480V [4]	**T2**=Type II **T3**=Type III **T4**=Type IV **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **5XQ**=Type V Square Extra Wide **RW**=Rectangular Wide **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right	**SO**=Solid **SR**=Solid Rings	**SN**=Straight Narrow **SW**=Straight Wide **BL**=Bell **FL**=Flute	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)

2L=Two Circuits [6]
7030=70 CRI / 3000K CCT [7]
7050=70 CRI / 5000K CCT [7]
8030=80 CRI / 3000K CCT [7]
LCF=LightBAR Cover Plate Matches Housing Finish
MS-LXX=Motion Sensor for ON/OFF Operation [8]
MS/X-LXX=Motion Sensor for Bi-Level Switching [9]
PMXX=Pendant Mount (XX=Pendant Length in Inches, 9.5" min - 48.0" max) [10]
HSS=Factory Installed House Side Shield [11]
DIM=0-10V Dimming Driver [12]

Accessories (Order Separately) [20]

OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap
OA/RA1027=NEMA Twistlock Photocontrol - 480V
OA/RA1201=NEMA Twistlock Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
LB/HSS-21=Field Installed House Side Shield for "E" LightBARs [11, 15]
LB/HSS-07=Field Installed House Side Shield for "F" LightBARs [11, 15]

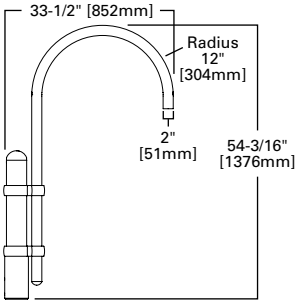
Mounting Accessories (Order Separately)
Classical
VA6150-XX=Bishop Wall Mount Arm
VA6151-XX=Bishop Wall Mount Arm with Cross Rod
VA6152-XX=Traditional Wall Mount Arm
VA6153-XX=Traditional Wall Mount Arm with 45° Strap
VA6154-XX=Bishop Single Pole Mount Arm
VA6155-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6156-XX=Bishop Twin Pole Mount Arm
VA6157-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6158-XX=Traditional Single Pole Mount Arm
VA6159-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6160-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6161-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6162-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6163-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6165-XX=Traditional Twin Pole Mount Arm
VA6166-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6167-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6168-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6169-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6170-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6171-XX=Mast Arm Adapter
Modern
VA6101-XX=Bishop Wall Mount Arm
VA6102-XX=Bishop Wall Mount Arm with Cross Rod
VA6103-XX=Traditional Wall Mount Arm
VA6104-XX=Traditional Wall Mount Arm with 45° Strap
VA6105-XX=Bishop Single Pole Mount Arm
VA6106-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6107-XX=Bishop Twin Pole Mount Arm
VA6108-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6109-XX=Traditional Single Pole Mount Arm
VA6110-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6111-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6112-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6113-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6114-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6116-XX=Traditional Twin Pole Mount Arm
VA6117-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6118-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6119-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6120-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6121-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6122-XX=Mast Arm Adapter

Accessory Options [16]
V=Victorian Finial [17]
M=Modern Finial [17]
A=Architectural Finial [17]
N=Nostalgic Finial [17]
R=NEMA Twistlock Photocontrol Receptacle [18]

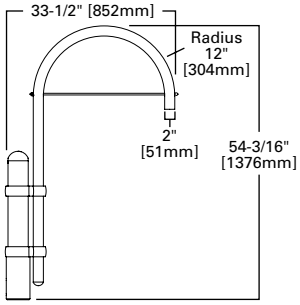
NOTES:
1. Arm not included. Order separately. See accessories.
2. Standard 4000K CCT and greater than 70 RI.
3. 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
6. Low-level output varies by bar count. Consult factory. Requires quantity of two or more LightBARs.
7. Consult customer service for lead times and multiplier.
8. Sensor mounted to the luminaire. Available in E01-E04 and F01-F04 configurations. Replace "XX" with mounting height in feet for proper lens selection, (e.g., MS-L25). Consult factory for additional information.
9. Sensor mounted to the luminaire. Available in E02-E04 and F02-F04 configurations. Replace "X" with number of LightBARs operating in low output mode and replace XX with mounting height in feet for proper lens selection, (e.g., MS/3-L25). Maximum four bars in low output mode. Consult factory for additional information.
10. Pendant mount option "PMXX" must be used with Invue Pendant mount kit only. Includes pendant pipe, swivel hangar and canopy cover. Other pendant lengths can be specified in inches (XX). Minimum pendant length is 9-1/2". For lengths above 48", consult your lighting representative at Cooper Lighting Solutions for more information.
11. Only for use with SL2, SL3 and SL4 distributions.
12. Dimming leads provide for external 0-10V control system (by others).
13. Replace XX with color suffix.
14. Only available with traditional arms.
15. One required for each LightBAR.
16. Add as suffix to mounting accessory. Example: VA6106-BK-R.
17. Not available with finials, pendant mount "PM48" or bishop wall mounts.
18. Requires use of 4" O.D. round straight pole.
19. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
20. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

MOUNTING ACCESSORIES

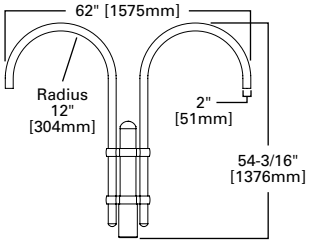
Pole mount arms are designed to fit both medium ECM/EMM housings. (Only these arms are compatible with the Epic luminaire). Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners. Wall mount arms are designed to fit both medium ECM/EMM housings. Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners.



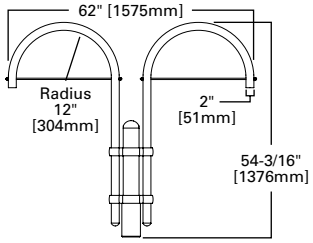
BISHOP SINGLE POLE MOUNT ARM
VA6105 (Modern), VA6154 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 0.92



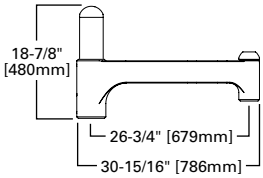
BISHOP SINGLE POLE MOUNT ARM WITH CROSS ROD
VA6106 (Modern), VA6155 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 0.98



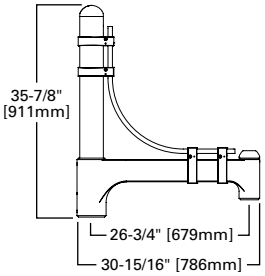
BISHOP TWIN POLE MOUNT ARM
VA6107 (Modern), VA6156 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.43



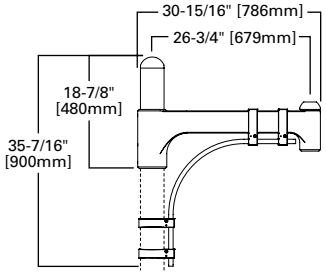
BISHOP TWIN POLE MOUNT ARM WITH CROSS RODS
VA6108 (Modern), VA6157 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 39 lbs. E.P.A: 1.55



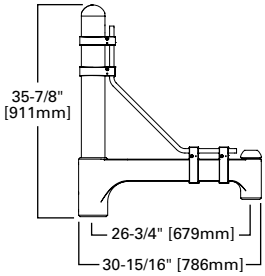
TRADITIONAL SINGLE POLE MOUNT ARM
VA6109 (Modern), VA6158 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 20 lbs. E.P.A: 0.86



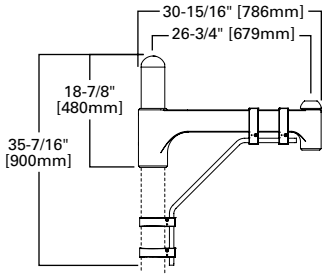
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED UPPER BAR
VA6110 (Modern), VA6159 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 28 lbs. E.P.A: 1.4



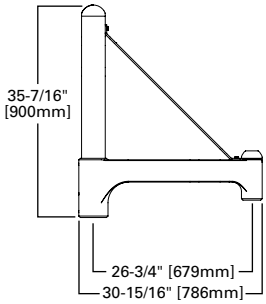
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED LOWER BAR
VA6111 (Modern), VA6160 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 1.16



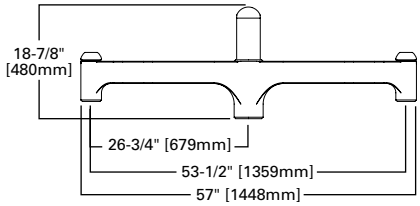
TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER BAR
VA6112 (Modern), VA6161 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" round tenon.
Weight: 28 lbs. E.P.A: 1.38



TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° LOWER BAR
VA6113 (Modern), VA6162 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

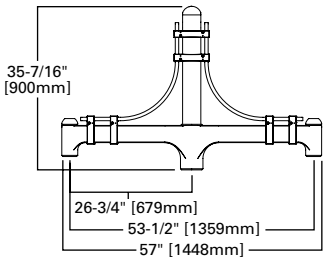


TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER STRAP
VA6114 (Modern), VA6163 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

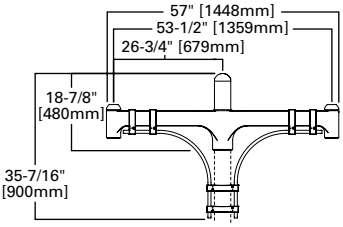


TRADITIONAL TWIN POLE MOUNT ARM
VA6116 (Modern), VA6165 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 30 lbs. E.P.A: 1.44

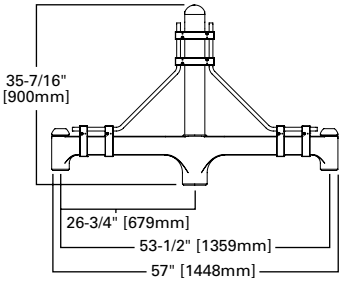
MOUNTING ACCESSORIES



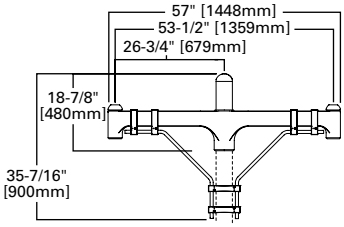
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED UPPER BARS
VA6117 (Modern), VA6166 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.28



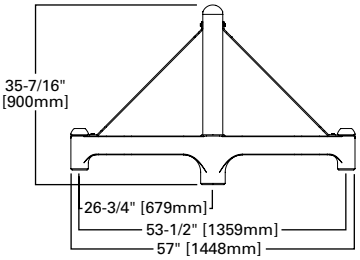
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED LOWER BARS
VA6118 (Modern), VA6167 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.04



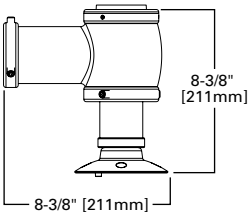
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER BARS
VA6119 (Modern), VA6168 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.24



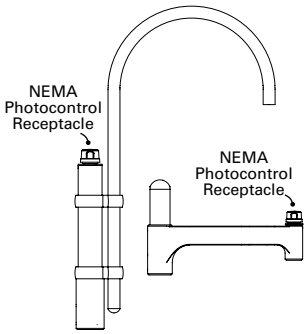
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° LOWER BARS
VA6120 (Modern), VA6169 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.0



TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER STRAPS
VA6121 (Modern), VA6170 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.81

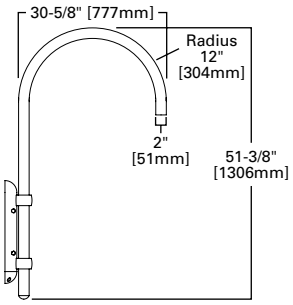


MAST ARM ADAPTER
VA6122 (Modern), VA6171 (Classical)
Secures fixture to nominal 2" pipe (2-3/8" horizontal O.D.)
Weight: 4 lbs.

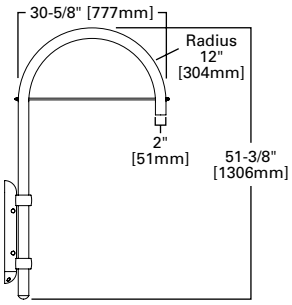


NEMA TWISTLOCK PHOTOCONTROL (R)
Order separately (Not compatible with finials or wall mount bishop arms)

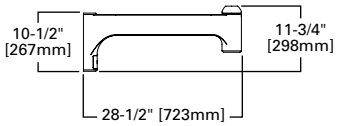
Wall Mount Accessories



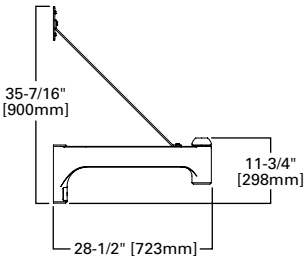
BISHOP WALL MOUNT ARM
VA6101 (Modern), VA6150 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 16 lbs.



BISHOP WALL MOUNT ARM WITH CROSS ROD
VA6102 (Modern), VA6151 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM
VA6103 (Modern), VA6152 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM WITH 45° STRAP
VA6104 (Modern), VA6153 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 18 lbs.

DESCRIPTION

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

Catalog #		Type
Project		A1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

TOP: Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). MIDSECTION: Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. DOORFRAME: Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

Optics

Choice of twelve patented, high-efficiency AccuLED Optic™ technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CC. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less that 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.Options to meet Buy American Act requirements

Warranty

Five-year warranty.





ECM/EMM
EPIC MEDIUM LED

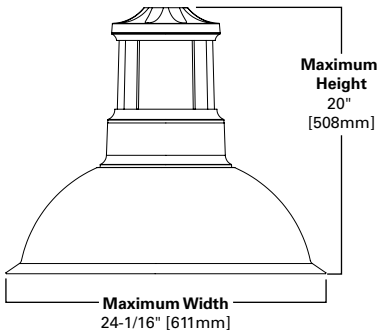
1 - 4 LightBARs

Solid State LED

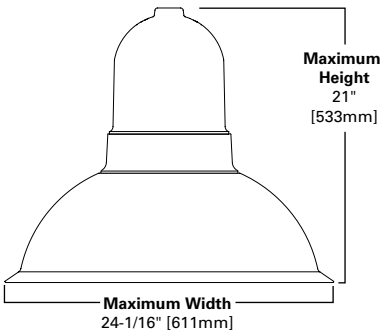
DECORATIVE AREA LUMINAIRE

DIMENSIONS

ECM Classical



EMM Modern



See configurations for more detailed information.

CERTIFICATION DATA

UL/cUL Listed
DesignLights Consortium® Qualified*
IP66 LIghtBARs
LM79 / LM80 Compliant
2G Vibration Tested
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.94

SHIPPING DATA

Approximate Net Weight:
45 lbs. [20 kgs.]

COOPER Lighting Solutions

*www.designlights.org

CONFIGURATIONS

HOUSING

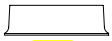


Classical
8-5/8" H x 8-3/4" W



Modern
9-3/8" H
x 8-7/8" W

MID SECTION

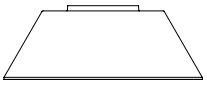


Solid
3-7/16" H x 9-15/16" W

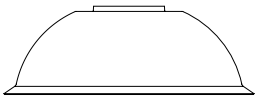


Solid Rings
3-7/16" H x 12" W

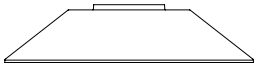
SHADE



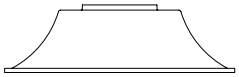
Straight Narrow
6-5/8" H x 19-1/8" W



Bell
8" H x 24" W

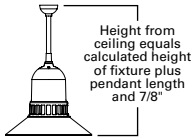


Straight Wide
5-1/8" H x 23-15/16" W



Flute
6" H x 22-1/2" W

MOUNTING OPTION



POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

Number of LightBARs		E01	E02	E03	E04
Drive Current		350mA Drive Current			
Power (Watts)		25W	52W	75W	97W
Current @ 120V (A)		0.22	0.44	0.63	0.82
Current @ 277V (A)		0.10	0.20	0.28	0.36
Power (Watts)		31W	58W	82W	99W
Current @ 347V (A)		0.11	0.19	0.28	0.29
Current @ 480V (A)		0.09	0.15	0.20	0.21
T2	Lumens	2,948	5,896	8,844	11,792
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T3	Lumens	2,936	5,873	8,809	11,745
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T4	Lumens	2,876	5,752	8,627	11,503
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3
5MQ	Lumens	3,054	6,108	9,161	12,215
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5WQ	Lumens	2,987	5,975	8,962	11,949
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,982	5,963	8,945	11,926
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3
SL2	Lumens	2,878	5,756	8,634	11,512
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,894	5,788	8,682	11,576
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL4	Lumens	2,823	5,647	8,470	11,294
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
RW	Lumens	2,957	5,915	8,872	11,829
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,616	5,231	7,847	10,462
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3

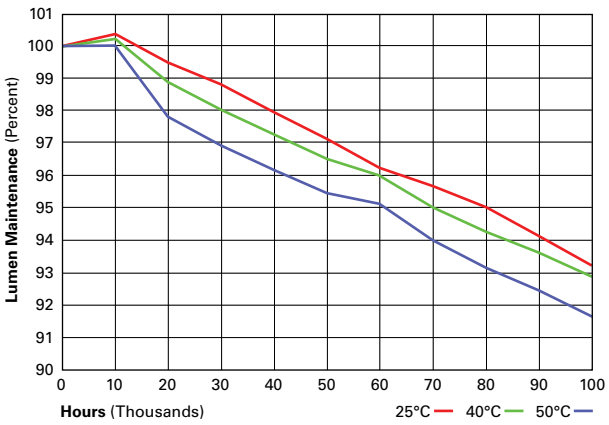
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

Number of LightBARs		F01	F02	F03	F04
Drive Current		1A Drive Current			
Power (Watts)		26W	55W	78W	102W
Current @ 120V (A)		0.22	0.46	0.66	0.86
Current @ 277V (A)		0.10	0.21	0.29	0.37
Power (Watts)		32W	60W	85W	105W
Current @ 347V (A)		0.11	0.19	0.28	0.30
Current @ 480V (A)		0.09	0.15	0.21	0.22
T2	Lumens	2,434	4,867	7,301	9,735
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T3	Lumens	2,424	4,848	7,272	9,696
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T4	Lumens	2,374	4,748	7,122	9,496
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
5MQ	Lumens	2,521	5,042	7,563	10,084
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
5WQ	Lumens	2,466	4,932	7,398	9,864
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,461	4,923	7,384	9,845
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3
SL2	Lumens	2,376	4,752	7,127	9,503
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,389	4,778	7,167	9,556
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2
SL4	Lumens	2,331	4,662	6,993	9,323
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
RW	Lumens	2,441	4,883	7,324	9,765
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,159	4,318	6,478	8,637
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25ºC	> 99%	> 97%	> 96%	> 93%	> 450,000
40ºC	> 98%	> 97%	> 96%	> 92%	> 425,000
50ºC	> 97%	> 96%	> 95%	> 91%	> 400,000

* Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99
50ºC	0.96

CONTROL OPTIONS

0-10V (DIM)
The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

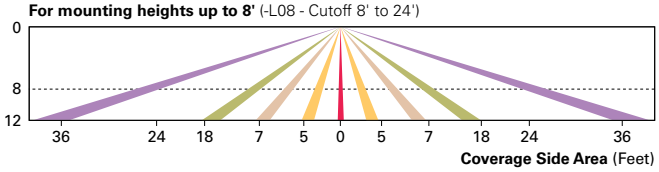
Photocontrol (PC, PER and PER7)
Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

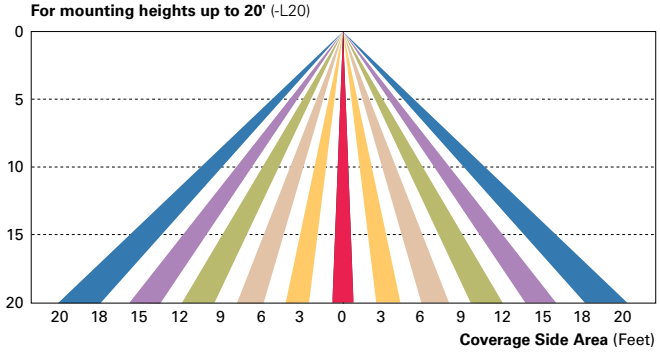
These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-40’.

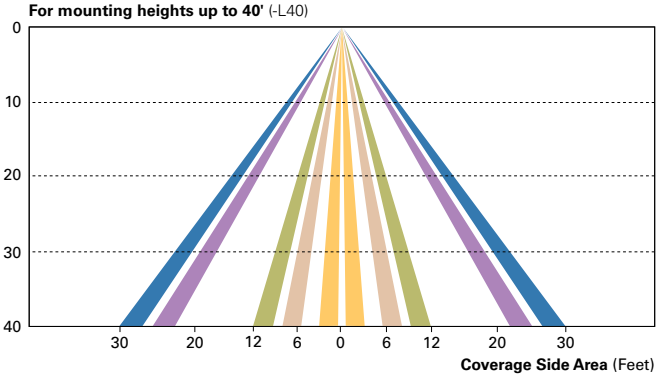
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



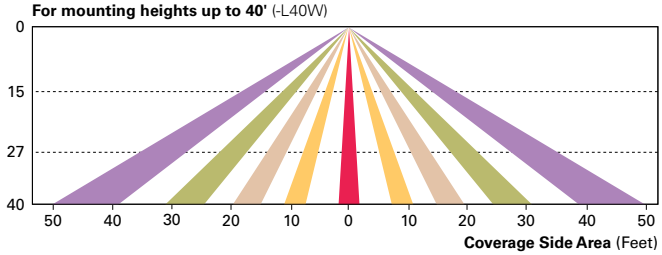
For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40)



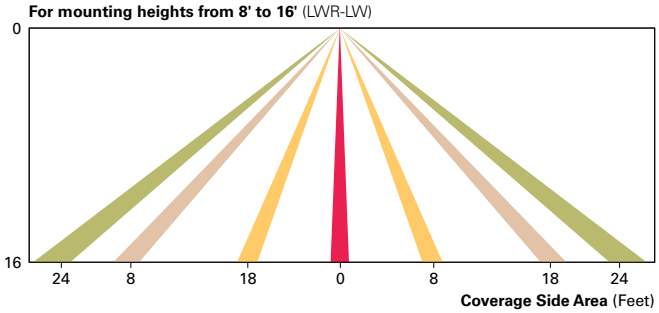
For mounting heights up to 40' (-L40W)



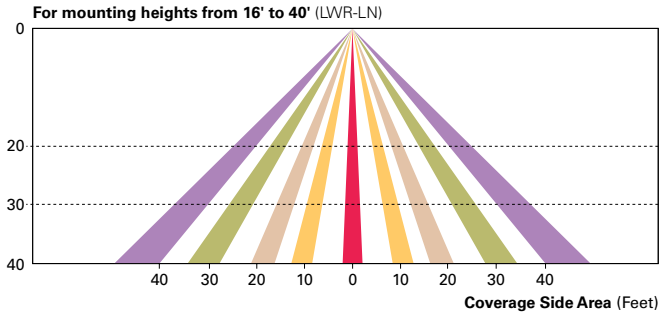
LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



ORDERING INFORMATION

Sample Number: ECM-E04-LED-E1-T2-FL-GM

Product Family [1]	Number of LightBARs [2, 3]	Lamp Type	Voltage	Distribution	Mid Section Type	Shade Type	Color [5]
ECM=Epic Classical Medium **EMM**=Epic Modern Medium **BAA-ECM**=Epic Classical Medium Buy American Act Compliant [19] **BAA-EMM=**Epic Modern Medium Buy American Act Compliant [19]	**E01**=(1) 21 LED LightBAR **E02**=(2) 21 LED LightBARs **E03**=(3) 21 LED LightBARs **E04**=(4) 21 LED LightBARs **F01**=(1) 7 LED LightBAR **F02**=(2) 7 LED LightBARs **F03**=(3) 7 LED LightBARs **F04**=(4) 7 LED LightBARs	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V **480**=480V [4]	**T2**=Type II **T3**=Type III **T4**=Type IV **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **5XQ**=Type V Square Extra Wide **RW**=Rectangular Wide **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right	**SO**=Solid **SR**=Solid Rings	**SN**=Straight Narrow **SW**=Straight Wide **BL**=Bell **FL**=Flute	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)

2L=Two Circuits [6]
7030=70 CRI / 3000K CCT [7]
7050=70 CRI / 5000K CCT [7]
8030=80 CRI / 3000K CCT [7]
LCF=LightBAR Cover Plate Matches Housing Finish
MS-LXX=Motion Sensor for ON/OFF Operation [8]
MS/X-LXX=Motion Sensor for Bi-Level Switching [9]
PMXX=Pendant Mount (XX=Pendant Length in Inches, 9.5" min - 48.0" max) [10]
HSS=Factory Installed House Side Shield [11]
DIM=0-10V Dimming Driver [12]

Accessories (Order Separately) [20]

OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap
OA/RA1027=NEMA Twistlock Photocontrol - 480V
OA/RA1201=NEMA Twistlock Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
LB/HSS-21=Field Installed House Side Shield for "E" LightBARs [11, 15]
LB/HSS-07=Field Installed House Side Shield for "F" LightBARs [11, 15]

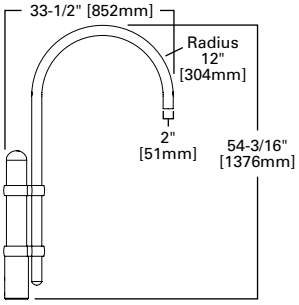
Mounting Accessories (Order Separately)
Classical
VA6150-XX=Bishop Wall Mount Arm
VA6151-XX=Bishop Wall Mount Arm with Cross Rod
VA6152-XX=Traditional Wall Mount Arm
VA6153-XX=Traditional Wall Mount Arm with 45° Strap
VA6154-XX=Bishop Single Pole Mount Arm
VA6155-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6156-XX=Bishop Twin Pole Mount Arm
VA6157-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6158-XX=Traditional Single Pole Mount Arm
VA6159-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6160-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6161-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6162-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6163-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6165-XX=Traditional Twin Pole Mount Arm
VA6166-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6167-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6168-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6169-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6170-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6171-XX=Mast Arm Adapter
Modern
VA6101-XX=Bishop Wall Mount Arm
VA6102-XX=Bishop Wall Mount Arm with Cross Rod
VA6103-XX=Traditional Wall Mount Arm
VA6104-XX=Traditional Wall Mount Arm with 45° Strap
VA6105-XX=Bishop Single Pole Mount Arm
VA6106-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6107-XX=Bishop Twin Pole Mount Arm
VA6108-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6109-XX=Traditional Single Pole Mount Arm
VA6110-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6111-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6112-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6113-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6114-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6116-XX=Traditional Twin Pole Mount Arm
VA6117-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6118-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6119-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6120-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6121-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6122-XX=Mast Arm Adapter

Accessory Options [16]
V=Victorian Finial [17]
M=Modern Finial [17]
A=Architectural Finial [17]
N=Nostalgic Finial [17]
R=NEMA Twistlock Photocontrol Receptacle [18]

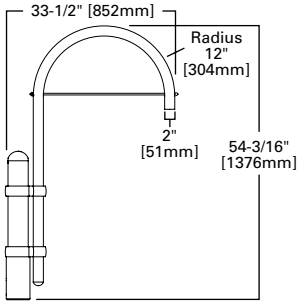
NOTES:
1. Arm not included. Order separately. See accessories.
2. Standard 4000K CCT and greater than 70 RI.
3. 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
6. Low-level output varies by bar count. Consult factory. Requires quantity of two or more LightBARs.
7. Consult customer service for lead times and multiplier.
8. Sensor mounted to the luminaire. Available in E01-E04 and F01-F04 configurations. Replace "XX" with mounting height in feet for proper lens selection, (e.g., MS-L25). Consult factory for additional information.
9. Sensor mounted to the luminaire. Available in E02-E04 and F02-F04 configurations. Replace "X" with number of LightBARs operating in low output mode and replace XX with mounting height in feet for proper lens selection, (e.g., MS/3-L25). Maximum four bars in low output mode. Consult factory for additional information.
10. Pendant mount option "PMXX" must be used with Invue Pendant mount kit only. Includes pendant pipe, swivel hangar and canopy cover. Other pendant lengths can be specified in inches (XX). Minimum pendant length is 9-1/2". For lengths above 48", consult your lighting representative at Cooper Lighting Solutions for more information.
11. Only for use with SL2, SL3 and SL4 distributions.
12. Dimming leads provide for external 0-10V control system (by others).
13. Replace XX with color suffix.
14. Only available with traditional arms.
15. One required for each LightBAR.
16. Add as suffix to mounting accessory. Example: VA6106-BK-R.
17. Not available with finials, pendant mount "PM48" or bishop wall mounts.
18. Requires use of 4" O.D. round straight pole.
19. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
20. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

MOUNTING ACCESSORIES

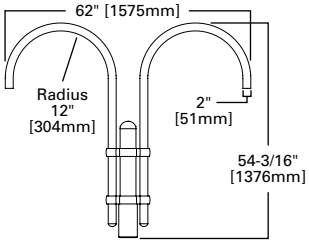
Pole mount arms are designed to fit both medium ECM/EMM housings. (Only these arms are compatible with the Epic luminaire). Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners. Wall mount arms are designed to fit both medium ECM/EMM housings. Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners.



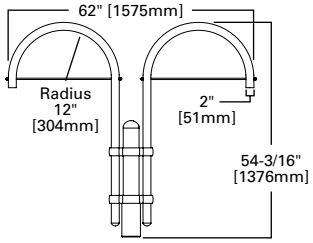
BISHOP SINGLE POLE MOUNT ARM
VA6105 (Modern), VA6154 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 0.92



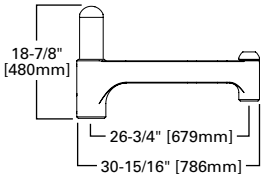
BISHOP SINGLE POLE MOUNT ARM WITH CROSS ROD
VA6106 (Modern), VA6155 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 0.98



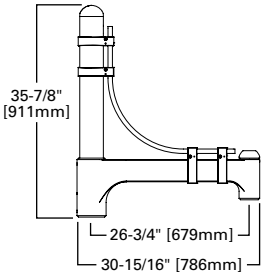
BISHOP TWIN POLE MOUNT ARM
VA6107 (Modern), VA6156 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.43



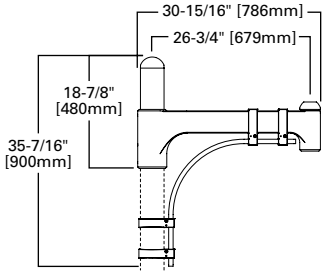
BISHOP TWIN POLE MOUNT ARM WITH CROSS RODS
VA6108 (Modern), VA6157 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 39 lbs. E.P.A: 1.55



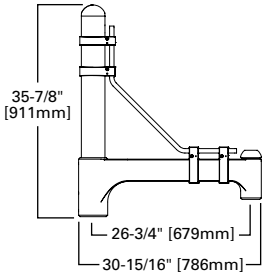
TRADITIONAL SINGLE POLE MOUNT ARM
VA6109 (Modern), VA6158 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 20 lbs. E.P.A: 0.86



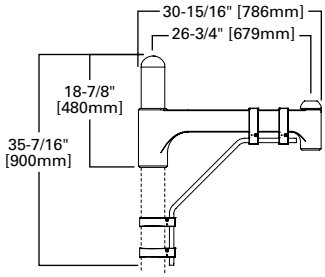
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED UPPER BAR
VA6110 (Modern), VA6159 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 28 lbs. E.P.A: 1.4



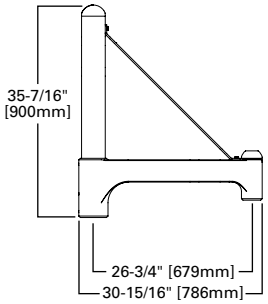
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED LOWER BAR
VA6111 (Modern), VA6160 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 1.16



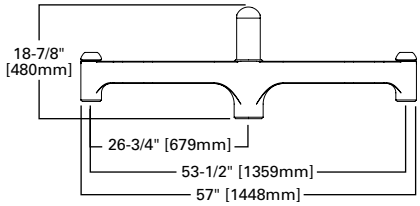
TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER BAR
VA6112 (Modern), VA6161 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" round tenon.
Weight: 28 lbs. E.P.A: 1.38



TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° LOWER BAR
VA6113 (Modern), VA6162 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

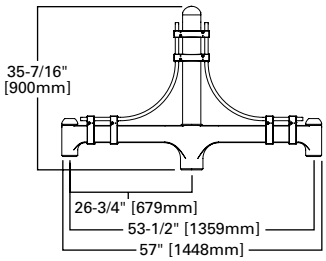


TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER STRAP
VA6114 (Modern), VA6163 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

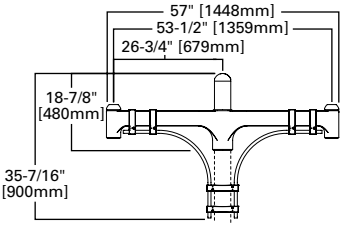


TRADITIONAL TWIN POLE MOUNT ARM
VA6116 (Modern), VA6165 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 30 lbs. E.P.A: 1.44

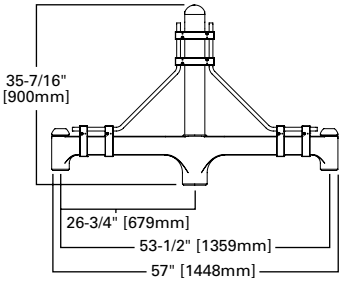
MOUNTING ACCESSORIES



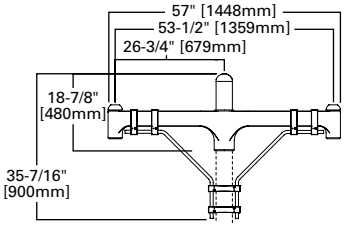
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED UPPER BARS
VA6117 (Modern), VA6166 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.28



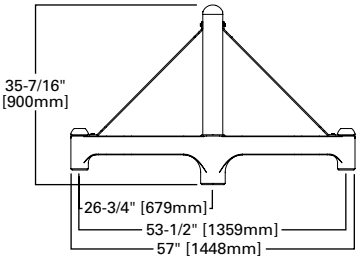
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED LOWER BARS
VA6118 (Modern), VA6167 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.04



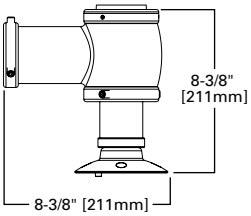
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER BARS
VA6119 (Modern), VA6168 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.24



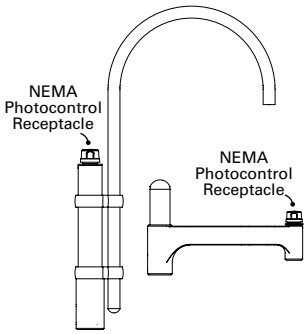
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° LOWER BARS
VA6120 (Modern), VA6169 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.0



TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER STRAPS
VA6121 (Modern), VA6170 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.81

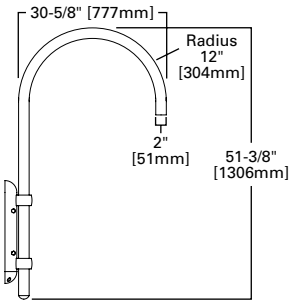


MAST ARM ADAPTER
VA6122 (Modern), VA6171 (Classical)
Secures fixture to nominal 2" pipe (2-3/8" horizontal O.D.)
Weight: 4 lbs.

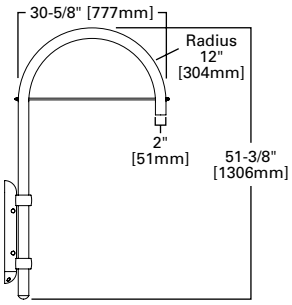


NEMA TWISTLOCK PHOTOCONTROL (R)
Order separately (Not compatible with finials or wall mount bishop arms)

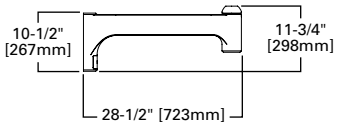
Wall Mount Accessories



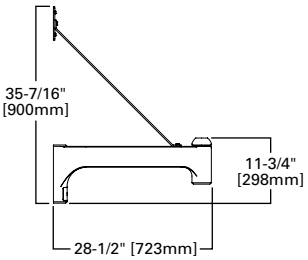
BISHOP WALL MOUNT ARM
VA6101 (Modern), VA6150 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 16 lbs.



BISHOP WALL MOUNT ARM WITH CROSS ROD
VA6102 (Modern), VA6151 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM
VA6103 (Modern), VA6152 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM WITH 45° STRAP
VA6104 (Modern), VA6153 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 18 lbs.

DESCRIPTION

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

Catalog #		Type
Project		A1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

TOP: Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). MIDSECTION: Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. DOORFRAME: Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

Optics

Choice of twelve patented, high-efficiency AccuLED Optic™ technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CC. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less that 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.Options to meet Buy American Act requirements

Warranty

Five-year warranty.





ECM/EMM
EPIC MEDIUM LED

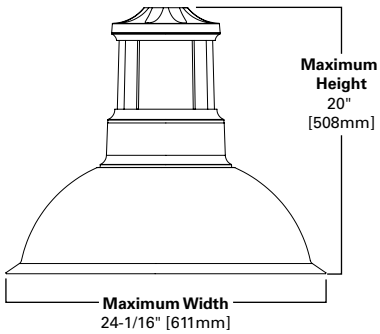
1 - 4 LightBARs

Solid State LED

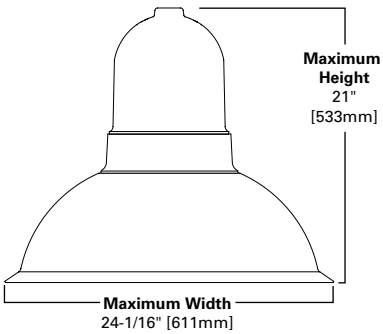
DECORATIVE AREA LUMINAIRE

DIMENSIONS

ECM Classical



EMM Modern



See configurations for more detailed information.

CERTIFICATION DATA

UL/cUL Listed
DesignLights Consortium® Qualified*
IP66 LIghtBARs
LM79 / LM80 Compliant
2G Vibration Tested
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.94

SHIPPING DATA

Approximate Net Weight:
45 lbs. [20 kgs.]

COOPER Lighting Solutions

*www.designlights.org

CONFIGURATIONS

HOUSING

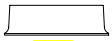


Classical
8-5/8" H x 8-3/4" W



Modern
9-3/8" H
x 8-7/8" W

MID SECTION

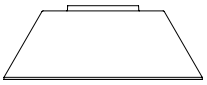


Solid
3-7/16" H x 9-15/16" W

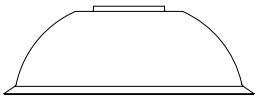


Solid Rings
3-7/16" H x 12" W

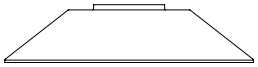
SHADE



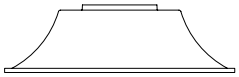
Straight Narrow
6-5/8" H x 19-1/8" W



Bell
8" H x 24" W

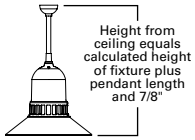


Straight Wide
5-1/8" H x 23-15/16" W



Flute
6" H x 22-1/2" W

MOUNTING OPTION



POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

Number of LightBARs		E01	E02	E03	E04
Drive Current		350mA Drive Current			
Power (Watts)		25W	52W	75W	97W
Current @ 120V (A)		0.22	0.44	0.63	0.82
Current @ 277V (A)		0.10	0.20	0.28	0.36
Power (Watts)		31W	58W	82W	99W
Current @ 347V (A)		0.11	0.19	0.28	0.29
Current @ 480V (A)		0.09	0.15	0.20	0.21
T2	Lumens	2,948	5,896	8,844	11,792
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T3	Lumens	2,936	5,873	8,809	11,745
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T4	Lumens	2,876	5,752	8,627	11,503
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3
5MQ	Lumens	3,054	6,108	9,161	12,215
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5WQ	Lumens	2,987	5,975	8,962	11,949
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,982	5,963	8,945	11,926
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3
SL2	Lumens	2,878	5,756	8,634	11,512
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,894	5,788	8,682	11,576
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL4	Lumens	2,823	5,647	8,470	11,294
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
RW	Lumens	2,957	5,915	8,872	11,829
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,616	5,231	7,847	10,462
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3

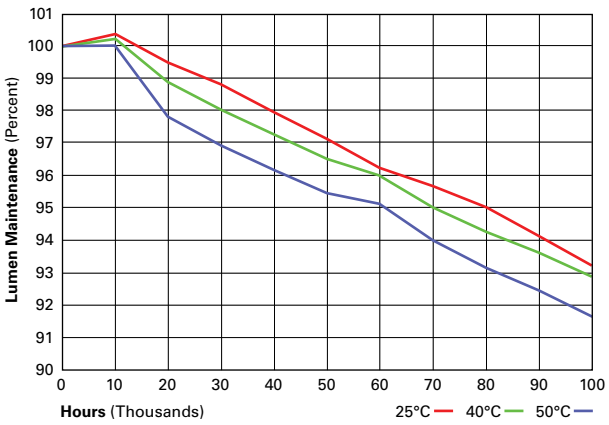
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

Number of LightBARs		F01	F02	F03	F04
Drive Current		1A Drive Current			
Power (Watts)		26W	55W	78W	102W
Current @ 120V (A)		0.22	0.46	0.66	0.86
Current @ 277V (A)		0.10	0.21	0.29	0.37
Power (Watts)		32W	60W	85W	105W
Current @ 347V (A)		0.11	0.19	0.28	0.30
Current @ 480V (A)		0.09	0.15	0.21	0.22
T2	Lumens	2,434	4,867	7,301	9,735
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T3	Lumens	2,424	4,848	7,272	9,696
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T4	Lumens	2,374	4,748	7,122	9,496
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
5MQ	Lumens	2,521	5,042	7,563	10,084
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
5WQ	Lumens	2,466	4,932	7,398	9,864
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,461	4,923	7,384	9,845
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3
SL2	Lumens	2,376	4,752	7,127	9,503
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,389	4,778	7,167	9,556
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2
SL4	Lumens	2,331	4,662	6,993	9,323
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
RW	Lumens	2,441	4,883	7,324	9,765
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,159	4,318	6,478	8,637
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25ºC	> 99%	> 97%	> 96%	> 93%	> 450,000
40ºC	> 98%	> 97%	> 96%	> 92%	> 425,000
50ºC	> 97%	> 96%	> 95%	> 91%	> 400,000

* Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99
50ºC	0.96

CONTROL OPTIONS

0-10V (DIM)
The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

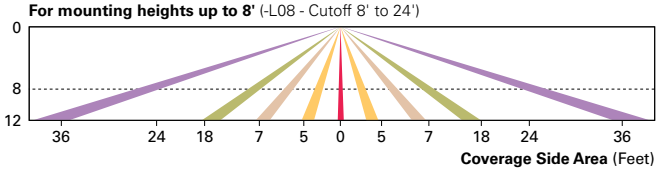
Photocontrol (PC, PER and PER7)
Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

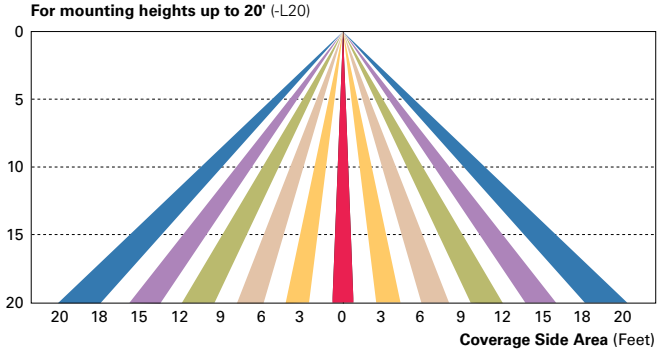
These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-40’.

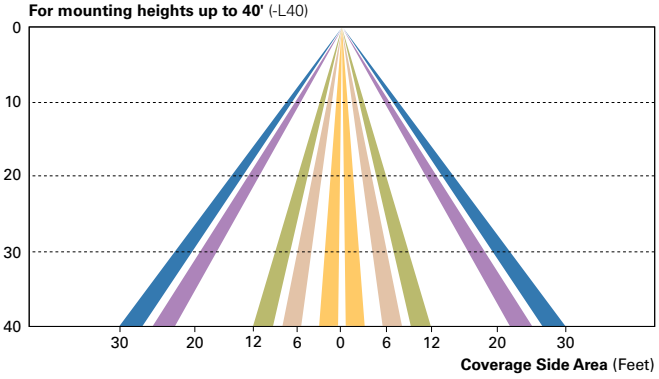
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



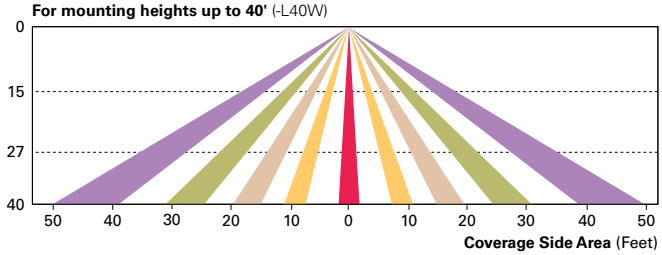
For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40)



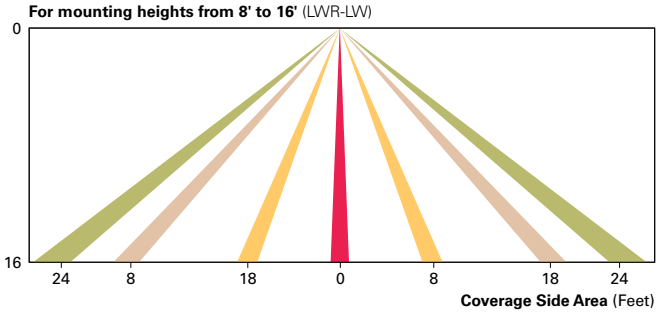
For mounting heights up to 40' (-L40W)



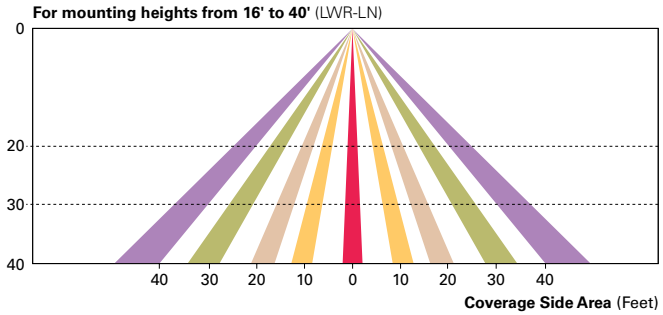
LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



ORDERING INFORMATION

Sample Number: ECM-E04-LED-E1-T2-FL-GM

Product Family [1]	Number of LightBARs [2, 3]	Lamp Type	Voltage	Distribution	Mid Section Type	Shade Type	Color [5]
ECM=Epic Classical Medium **EMM**=Epic Modern Medium **BAA-ECM**=Epic Classical Medium Buy American Act Compliant [19] **BAA-EMM=**Epic Modern Medium Buy American Act Compliant [19]	**E01**=(1) 21 LED LightBAR **E02**=(2) 21 LED LightBARs **E03**=(3) 21 LED LightBARs **E04**=(4) 21 LED LightBARs **F01**=(1) 7 LED LightBAR **F02**=(2) 7 LED LightBARs **F03**=(3) 7 LED LightBARs **F04**=(4) 7 LED LightBARs	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V **480**=480V [4]	**T2**=Type II **T3**=Type III **T4**=Type IV **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **5XQ**=Type V Square Extra Wide **RW**=Rectangular Wide **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right	**SO**=Solid **SR**=Solid Rings	**SN**=Straight Narrow **SW**=Straight Wide **BL**=Bell **FL**=Flute	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)

2L=Two Circuits [6]
7030=70 CRI / 3000K CCT [7]
7050=70 CRI / 5000K CCT [7]
8030=80 CRI / 3000K CCT [7]
LCF=LightBAR Cover Plate Matches Housing Finish
MS-LXX=Motion Sensor for ON/OFF Operation [8]
MS/X-LXX=Motion Sensor for Bi-Level Switching [9]
PMXX=Pendant Mount (XX=Pendant Length in Inches, 9.5" min - 48.0" max) [10]
HSS=Factory Installed House Side Shield [11]
DIM=0-10V Dimming Driver [12]

Accessories (Order Separately) [20]

OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap
OA/RA1027=NEMA Twistlock Photocontrol - 480V
OA/RA1201=NEMA Twistlock Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
LB/HSS-21=Field Installed House Side Shield for "E" LightBARs [11, 15]
LB/HSS-07=Field Installed House Side Shield for "F" LightBARs [11, 15]

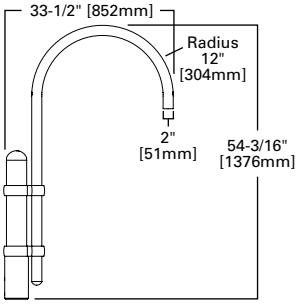
Mounting Accessories (Order Separately)
Classical
VA6150-XX=Bishop Wall Mount Arm
VA6151-XX=Bishop Wall Mount Arm with Cross Rod
VA6152-XX=Traditional Wall Mount Arm
VA6153-XX=Traditional Wall Mount Arm with 45° Strap
VA6154-XX=Bishop Single Pole Mount Arm
VA6155-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6156-XX=Bishop Twin Pole Mount Arm
VA6157-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6158-XX=Traditional Single Pole Mount Arm
VA6159-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6160-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6161-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6162-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6163-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6165-XX=Traditional Twin Pole Mount Arm
VA6166-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6167-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6168-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6169-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6170-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6171-XX=Mast Arm Adapter
Modern
VA6101-XX=Bishop Wall Mount Arm
VA6102-XX=Bishop Wall Mount Arm with Cross Rod
VA6103-XX=Traditional Wall Mount Arm
VA6104-XX=Traditional Wall Mount Arm with 45° Strap
VA6105-XX=Bishop Single Pole Mount Arm
VA6106-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6107-XX=Bishop Twin Pole Mount Arm
VA6108-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6109-XX=Traditional Single Pole Mount Arm
VA6110-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6111-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6112-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6113-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6114-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6116-XX=Traditional Twin Pole Mount Arm
VA6117-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6118-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6119-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6120-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6121-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6122-XX=Mast Arm Adapter

Accessory Options [16]
V=Victorian Finial [17]
M=Modern Finial [17]
A=Architectural Finial [17]
N=Nostalgic Finial [17]
R=NEMA Twistlock Photocontrol Receptacle [18]

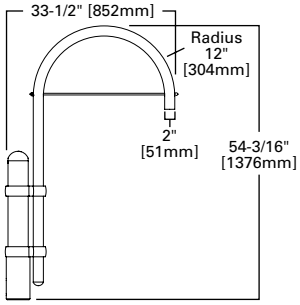
NOTES:
1. Arm not included. Order separately. See accessories.
2. Standard 4000K CCT and greater than 70 RI.
3. 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
6. Low-level output varies by bar count. Consult factory. Requires quantity of two or more LightBARs.
7. Consult customer service for lead times and multiplier.
8. Sensor mounted to the luminaire. Available in E01-E04 and F01-F04 configurations. Replace "XX" with mounting height in feet for proper lens selection, (e.g., MS-L25). Consult factory for additional information.
9. Sensor mounted to the luminaire. Available in E02-E04 and F02-F04 configurations. Replace "X" with number of LightBARs operating in low output mode and replace XX with mounting height in feet for proper lens selection, (e.g., MS/3-L25). Maximum four bars in low output mode. Consult factory for additional information.
10. Pendant mount option "PMXX" must be used with Invue Pendant mount kit only. Includes pendant pipe, swivel hangar and canopy cover. Other pendant lengths can be specified in inches (XX). Minimum pendant length is 9-1/2". For lengths above 48", consult your lighting representative at Cooper Lighting Solutions for more information.
11. Only for use with SL2, SL3 and SL4 distributions.
12. Dimming leads provide for external 0-10V control system (by others).
13. Replace XX with color suffix.
14. Only available with traditional arms.
15. One required for each LightBAR.
16. Add as suffix to mounting accessory. Example: VA6106-BK-R.
17. Not available with finials, pendant mount "PM48" or bishop wall mounts.
18. Requires use of 4" O.D. round straight pole.
19. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
20. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

MOUNTING ACCESSORIES

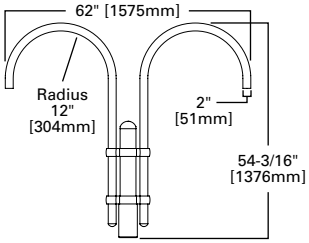
Pole mount arms are designed to fit both medium ECM/EMM housings. (Only these arms are compatible with the Epic luminaire). Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners. Wall mount arms compliment pole mount luminaires and attractively transition fixture scale in lower mounting height pedestrian environments. Wall mount arms are designed to fit both medium ECM/EMM housings. Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners.



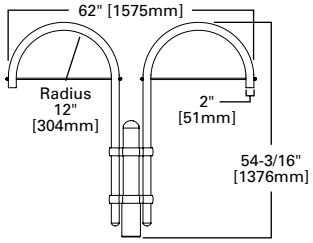
BISHOP SINGLE POLE MOUNT ARM
VA6105 (Modern), VA6154 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 0.92



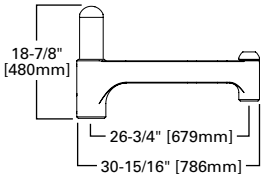
BISHOP SINGLE POLE MOUNT ARM WITH CROSS ROD
VA6106 (Modern), VA6155 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 0.98



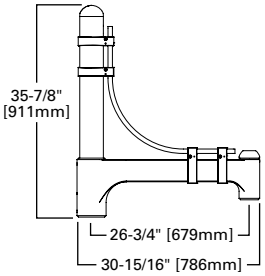
BISHOP TWIN POLE MOUNT ARM
VA6107 (Modern), VA6156 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.43



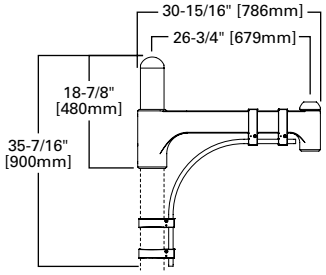
BISHOP TWIN POLE MOUNT ARM WITH CROSS RODS
VA6108 (Modern), VA6157 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 39 lbs. E.P.A: 1.55



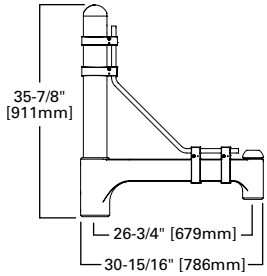
TRADITIONAL SINGLE POLE MOUNT ARM
VA6109 (Modern), VA6158 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 20 lbs. E.P.A: 0.86



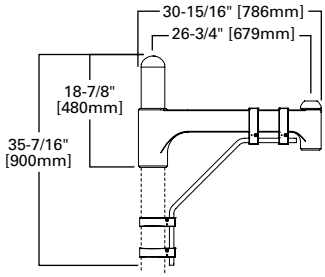
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED UPPER BAR
VA6110 (Modern), VA6159 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 28 lbs. E.P.A: 1.4



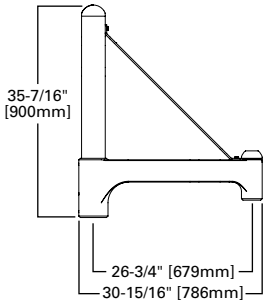
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED LOWER BAR
VA6111 (Modern), VA6160 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 1.16



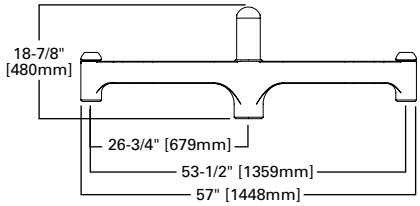
TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER BAR
VA6112 (Modern), VA6161 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" round tenon.
Weight: 28 lbs. E.P.A: 1.38



TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° LOWER BAR
VA6113 (Modern), VA6162 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

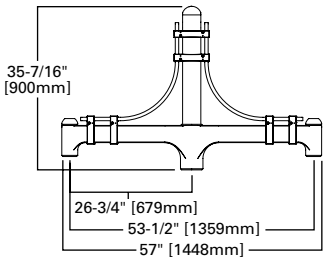


TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER STRAP
VA6114 (Modern), VA6163 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

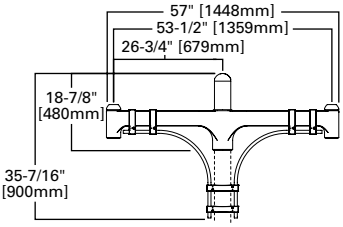


TRADITIONAL TWIN POLE MOUNT ARM
VA6116 (Modern), VA6165 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 30 lbs. E.P.A: 1.44

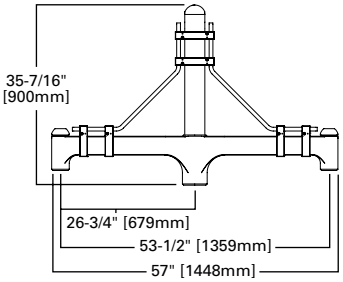
MOUNTING ACCESSORIES



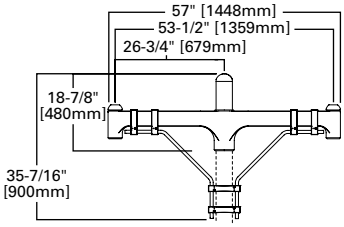
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED UPPER BARS
VA6117 (Modern), VA6166 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.28



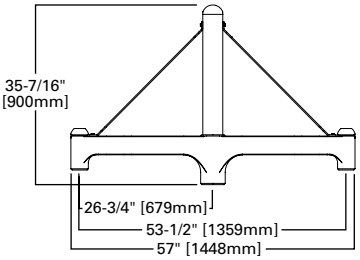
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED LOWER BARS
VA6118 (Modern), VA6167 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.04



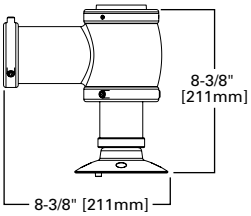
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER BARS
VA6119 (Modern), VA6168 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.24



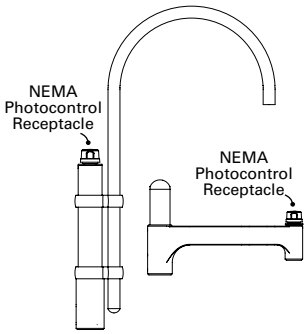
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° LOWER BARS
VA6120 (Modern), VA6169 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.0



TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER STRAPS
VA6121 (Modern), VA6170 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.81

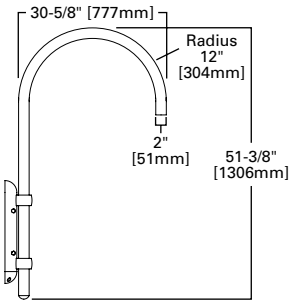


MAST ARM ADAPTER
VA6122 (Modern), VA6171 (Classical)
Secures fixture to nominal 2" pipe (2-3/8" horizontal O.D.)
Weight: 4 lbs.

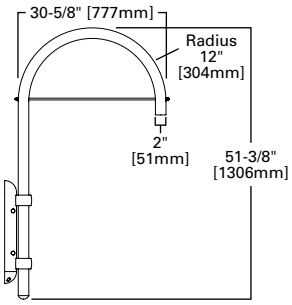


NEMA TWISTLOCK PHOTOCONTROL (R)
Order separately (Not compatible with finials or wall mount bishop arms)

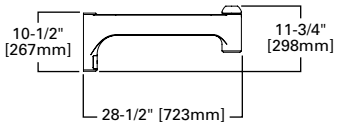
Wall Mount Accessories



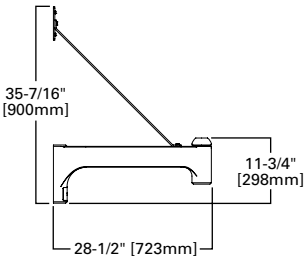
BISHOP WALL MOUNT ARM
VA6101 (Modern), VA6150 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 16 lbs.



BISHOP WALL MOUNT ARM WITH CROSS ROD
VA6102 (Modern), VA6151 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM
VA6103 (Modern), VA6152 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM WITH 45° STRAP
VA6104 (Modern), VA6153 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 18 lbs.

DESCRIPTION

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

Catalog #		Type
Project		A1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

TOP: Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). MIDSECTION: Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. DOORFRAME: Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

Optics

Choice of twelve patented, high-efficiency AccuLED Optic™ technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CC. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less that 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.Options to meet Buy American Act requirements

Warranty

Five-year warranty.





ECM/EMM
EPIC MEDIUM LED

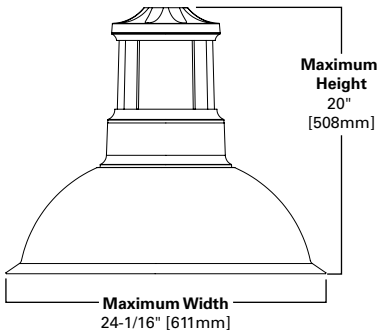
1 - 4 LightBARs

Solid State LED

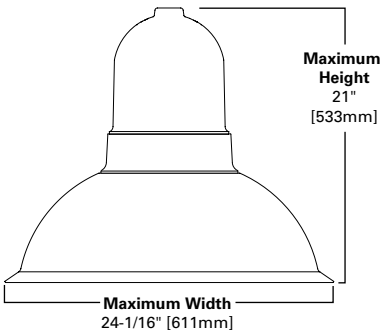
DECORATIVE AREA LUMINAIRE

DIMENSIONS

ECM Classical



EMM Modern



See configurations for more detailed information.

CERTIFICATION DATA

UL/cUL Listed
DesignLights Consortium® Qualified*
IP66 LIghtBARs
LM79 / LM80 Compliant
2G Vibration Tested
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.94

SHIPPING DATA

Approximate Net Weight:
45 lbs. [20 kgs.]

COOPER Lighting Solutions

*www.designlights.org

CONFIGURATIONS

HOUSING

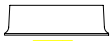


Classical
8-5/8" H x 8-3/4" W



Modern
9-3/8" H
x 8-7/8" W

MID SECTION

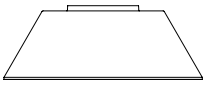


Solid
3-7/16" H x 9-15/16" W

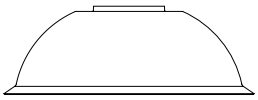


Solid Rings
3-7/16" H x 12" W

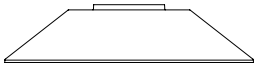
SHADE



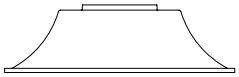
Straight Narrow
6-5/8" H x 19-1/8" W



Bell
8" H x 24" W

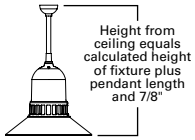


Straight Wide
5-1/8" H x 23-15/16" W



Flute
6" H x 22-1/2" W

MOUNTING OPTION



POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

Number of LightBARs		E01	E02	E03	E04
Drive Current		350mA Drive Current			
Power (Watts)		25W	52W	75W	97W
Current @ 120V (A)		0.22	0.44	0.63	0.82
Current @ 277V (A)		0.10	0.20	0.28	0.36
Power (Watts)		31W	58W	82W	99W
Current @ 347V (A)		0.11	0.19	0.28	0.29
Current @ 480V (A)		0.09	0.15	0.20	0.21
T2	Lumens	2,948	5,896	8,844	11,792
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T3	Lumens	2,936	5,873	8,809	11,745
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T4	Lumens	2,876	5,752	8,627	11,503
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3
5MQ	Lumens	3,054	6,108	9,161	12,215
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5WQ	Lumens	2,987	5,975	8,962	11,949
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,982	5,963	8,945	11,926
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3
SL2	Lumens	2,878	5,756	8,634	11,512
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,894	5,788	8,682	11,576
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL4	Lumens	2,823	5,647	8,470	11,294
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
RW	Lumens	2,957	5,915	8,872	11,829
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,616	5,231	7,847	10,462
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3

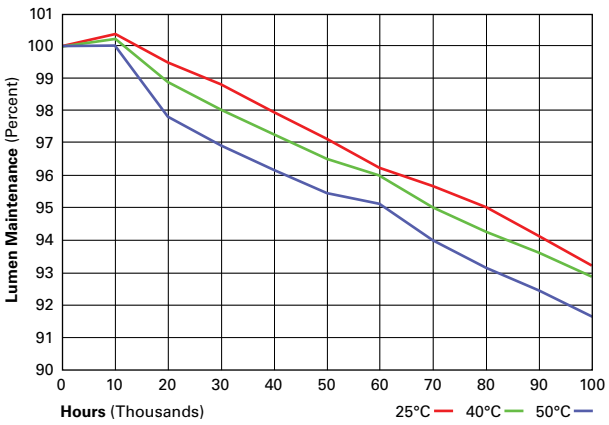
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

Number of LightBARs		F01	F02	F03	F04
Drive Current		1A Drive Current			
Power (Watts)		26W	55W	78W	102W
Current @ 120V (A)		0.22	0.46	0.66	0.86
Current @ 277V (A)		0.10	0.21	0.29	0.37
Power (Watts)		32W	60W	85W	105W
Current @ 347V (A)		0.11	0.19	0.28	0.30
Current @ 480V (A)		0.09	0.15	0.21	0.22
T2	Lumens	2,434	4,867	7,301	9,735
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T3	Lumens	2,424	4,848	7,272	9,696
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T4	Lumens	2,374	4,748	7,122	9,496
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
5MQ	Lumens	2,521	5,042	7,563	10,084
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
5WQ	Lumens	2,466	4,932	7,398	9,864
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,461	4,923	7,384	9,845
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3
SL2	Lumens	2,376	4,752	7,127	9,503
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,389	4,778	7,167	9,556
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2
SL4	Lumens	2,331	4,662	6,993	9,323
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
RW	Lumens	2,441	4,883	7,324	9,765
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,159	4,318	6,478	8,637
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25ºC	> 99%	> 97%	> 96%	> 93%	> 450,000
40ºC	> 98%	> 97%	> 96%	> 92%	> 425,000
50ºC	> 97%	> 96%	> 95%	> 91%	> 400,000

* Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99
50ºC	0.96

CONTROL OPTIONS

0-10V (DIM)
The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

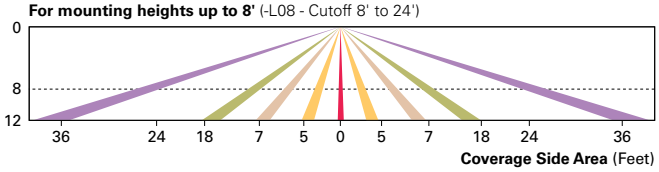
Photocontrol (PC, PER and PER7)
Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

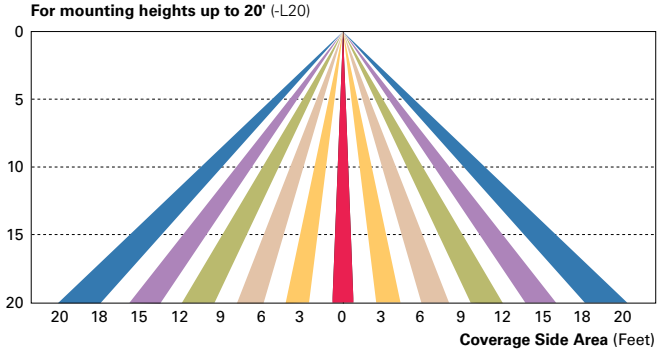
These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-40’.

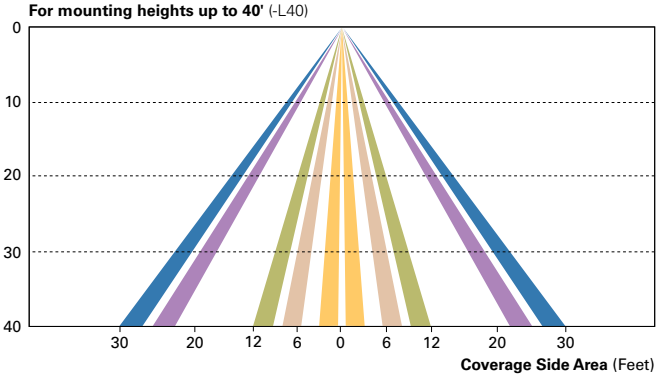
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



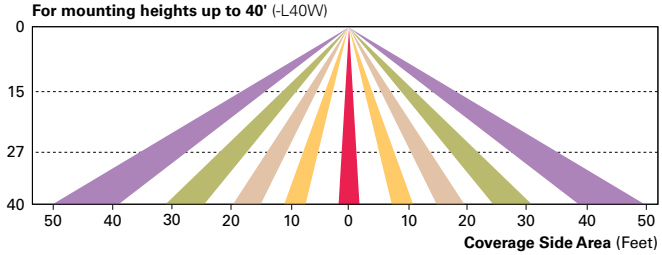
For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40)



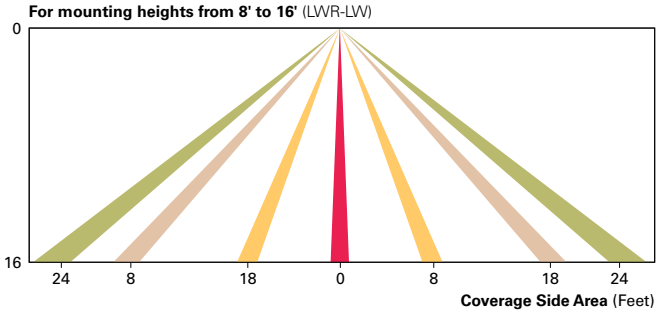
For mounting heights up to 40' (-L40W)



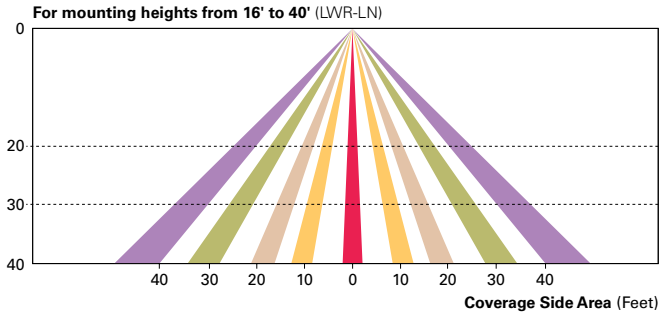
LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



ORDERING INFORMATION

Sample Number: ECM-E04-LED-E1-T2-FL-GM

Product Family [1]	Number of LightBARs [2, 3]	Lamp Type	Voltage	Distribution	Mid Section Type	Shade Type	Color [5]
ECM=Epic Classical Medium **EMM**=Epic Modern Medium **BAA-ECM**=Epic Classical Medium Buy American Act Compliant [19] **BAA-EMM=**Epic Modern Medium Buy American Act Compliant [19]	**E01**=(1) 21 LED LightBAR **E02**=(2) 21 LED LightBARs **E03**=(3) 21 LED LightBARs **E04**=(4) 21 LED LightBARs **F01**=(1) 7 LED LightBAR **F02**=(2) 7 LED LightBARs **F03**=(3) 7 LED LightBARs **F04**=(4) 7 LED LightBARs	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V **480**=480V [4]	**T2**=Type II **T3**=Type III **T4**=Type IV **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **5XQ**=Type V Square Extra Wide **RW**=Rectangular Wide **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right	**SO**=Solid **SR**=Solid Rings	**SN**=Straight Narrow **SW**=Straight Wide **BL**=Bell **FL**=Flute	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)

2L=Two Circuits [6]
7030=70 CRI / 3000K CCT [7]
7050=70 CRI / 5000K CCT [7]
8030=80 CRI / 3000K CCT [7]
LCF=LightBAR Cover Plate Matches Housing Finish
MS-LXX=Motion Sensor for ON/OFF Operation [8]
MS/X-LXX=Motion Sensor for Bi-Level Switching [9]
PMXX=Pendant Mount (XX=Pendant Length in Inches, 9.5" min - 48.0" max) [10]
HSS=Factory Installed House Side Shield [11]
DIM=0-10V Dimming Driver [12]

Accessories (Order Separately) [20]

OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap
OA/RA1027=NEMA Twistlock Photocontrol - 480V
OA/RA1201=NEMA Twistlock Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
LB/HSS-21=Field Installed House Side Shield for "E" LightBARs [11, 15]
LB/HSS-07=Field Installed House Side Shield for "F" LightBARs [11, 15]

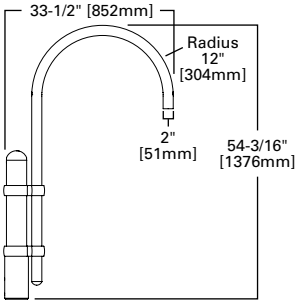
Mounting Accessories (Order Separately)
Classical
VA6150-XX=Bishop Wall Mount Arm
VA6151-XX=Bishop Wall Mount Arm with Cross Rod
VA6152-XX=Traditional Wall Mount Arm
VA6153-XX=Traditional Wall Mount Arm with 45° Strap
VA6154-XX=Bishop Single Pole Mount Arm
VA6155-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6156-XX=Bishop Twin Pole Mount Arm
VA6157-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6158-XX=Traditional Single Pole Mount Arm
VA6159-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6160-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6161-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6162-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6163-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6165-XX=Traditional Twin Pole Mount Arm
VA6166-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6167-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6168-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6169-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6170-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6171-XX=Mast Arm Adapter
Modern
VA6101-XX=Bishop Wall Mount Arm
VA6102-XX=Bishop Wall Mount Arm with Cross Rod
VA6103-XX=Traditional Wall Mount Arm
VA6104-XX=Traditional Wall Mount Arm with 45° Strap
VA6105-XX=Bishop Single Pole Mount Arm
VA6106-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6107-XX=Bishop Twin Pole Mount Arm
VA6108-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6109-XX=Traditional Single Pole Mount Arm
VA6110-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6111-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6112-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6113-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6114-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6116-XX=Traditional Twin Pole Mount Arm
VA6117-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6118-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6119-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6120-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6121-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6122-XX=Mast Arm Adapter

Accessory Options [16]
V=Victorian Finial [17]
M=Modern Finial [17]
A=Architectural Finial [17]
N=Nostalgic Finial [17]
R=NEMA Twistlock Photocontrol Receptacle [18]

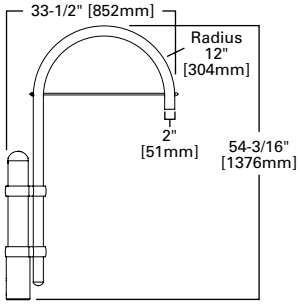
NOTES:
1. Arm not included. Order separately. See accessories.
2. Standard 4000K CCT and greater than 70 RI.
3. 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
6. Low-level output varies by bar count. Consult factory. Requires quantity of two or more LightBARs.
7. Consult customer service for lead times and multiplier.
8. Sensor mounted to the luminaire. Available in E01-E04 and F01-F04 configurations. Replace "XX" with mounting height in feet for proper lens selection, (e.g., MS-L25). Consult factory for additional information.
9. Sensor mounted to the luminaire. Available in E02-E04 and F02-F04 configurations. Replace "X" with number of LightBARs operating in low output mode and replace XX with mounting height in feet for proper lens selection, (e.g., MS/3-L25). Maximum four bars in low output mode. Consult factory for additional information.
10. Pendant mount option "PMXX" must be used with Invue Pendant mount kit only. Includes pendant pipe, swivel hangar and canopy cover. Other pendant lengths can be specified in inches (XX). Minimum pendant length is 9-1/2". For lengths above 48", consult your lighting representative at Cooper Lighting Solutions for more information.
11. Only for use with SL2, SL3 and SL4 distributions.
12. Dimming leads provide for external 0-10V control system (by others).
13. Replace XX with color suffix.
14. Only available with traditional arms.
15. One required for each LightBAR.
16. Add as suffix to mounting accessory. Example: VA6106-BK-R.
17. Not available with finials, pendant mount "PM48" or bishop wall mounts.
18. Requires use of 4" O.D. round straight pole.
19. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
20. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

MOUNTING ACCESSORIES

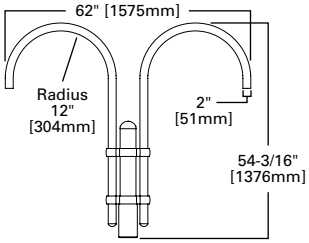
Pole mount arms are designed to fit both medium ECM/EMM housings. (Only these arms are compatible with the Epic luminaire). Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners. Wall mount arms compliment pole mount luminaires and attractively transition fixture scale in lower mounting height pedestrian environments. Wall mount arms are designed to fit both medium ECM/EMM housings. Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners.



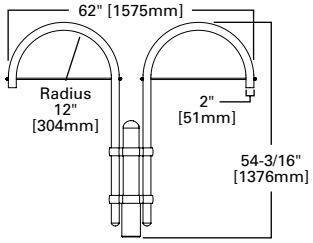
BISHOP SINGLE POLE MOUNT ARM
VA6105 (Modern), VA6154 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 0.92



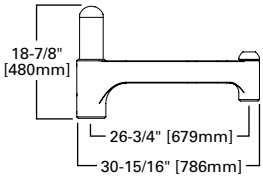
BISHOP SINGLE POLE MOUNT ARM WITH CROSS ROD
VA6106 (Modern), VA6155 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 0.98



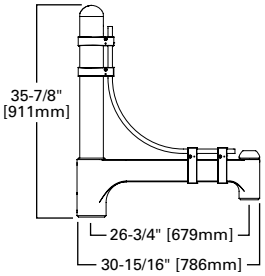
BISHOP TWIN POLE MOUNT ARM
VA6107 (Modern), VA6156 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.43



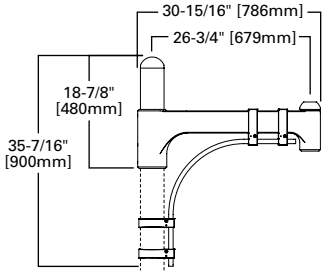
BISHOP TWIN POLE MOUNT ARM WITH CROSS RODS
VA6108 (Modern), VA6157 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 39 lbs. E.P.A: 1.55



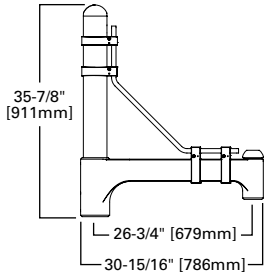
TRADITIONAL SINGLE POLE MOUNT ARM
VA6109 (Modern), VA6158 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 20 lbs. E.P.A: 0.86



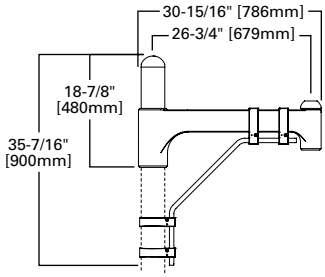
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED UPPER BAR
VA6110 (Modern), VA6159 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 28 lbs. E.P.A: 1.4



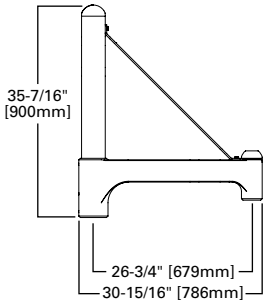
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED LOWER BAR
VA6111 (Modern), VA6160 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 1.16



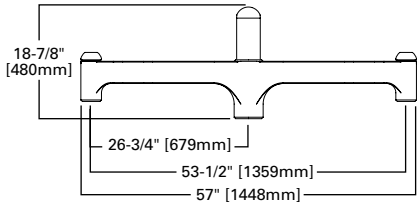
TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER BAR
VA6112 (Modern), VA6161 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" round tenon.
Weight: 28 lbs. E.P.A: 1.38



TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° LOWER BAR
VA6113 (Modern), VA6162 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

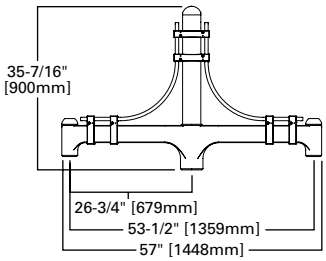


TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER STRAP
VA6114 (Modern), VA6163 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

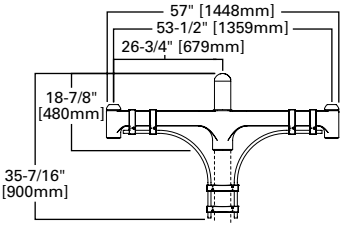


TRADITIONAL TWIN POLE MOUNT ARM
VA6116 (Modern), VA6165 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 30 lbs. E.P.A: 1.44

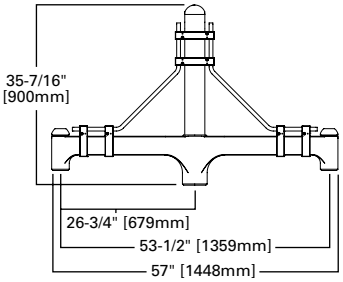
MOUNTING ACCESSORIES



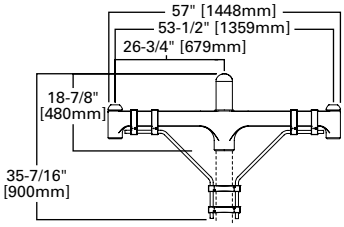
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED UPPER BARS
VA6117 (Modern), VA6166 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.28



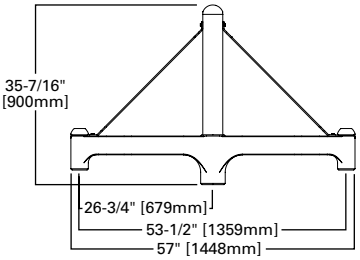
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED LOWER BARS
VA6118 (Modern), VA6167 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.04



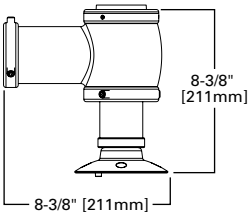
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER BARS
VA6119 (Modern), VA6168 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.24



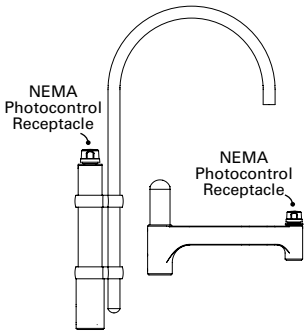
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° LOWER BARS
VA6120 (Modern), VA6169 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.0



TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER STRAPS
VA6121 (Modern), VA6170 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.81

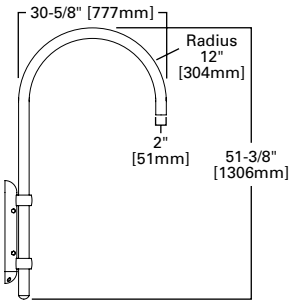


MAST ARM ADAPTER
VA6122 (Modern), VA6171 (Classical)
Secures fixture to nominal 2" pipe (2-3/8" horizontal O.D.)
Weight: 4 lbs.

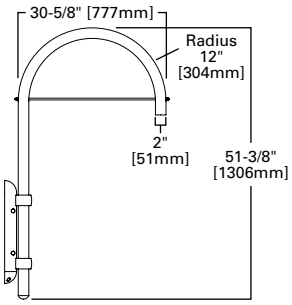


NEMA TWISTLOCK PHOTOCONTROL (R)
Order separately (Not compatible with finials or wall mount bishop arms)

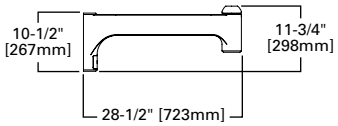
Wall Mount Accessories



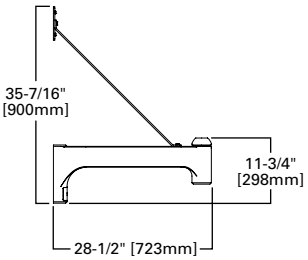
BISHOP WALL MOUNT ARM
VA6101 (Modern), VA6150 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 16 lbs.



BISHOP WALL MOUNT ARM WITH CROSS ROD
VA6102 (Modern), VA6151 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM
VA6103 (Modern), VA6152 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM WITH 45° STRAP
VA6104 (Modern), VA6153 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 18 lbs.

DESCRIPTION

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

Catalog #		Type
Project		A1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

TOP: Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). MIDSECTION: Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. DOORFRAME: Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

Optics

Choice of twelve patented, high-efficiency AccuLED Optic™ technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CC. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less that 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.Options to meet Buy American Act requirements

Warranty

Five-year warranty.





ECM/EMM
EPIC MEDIUM LED

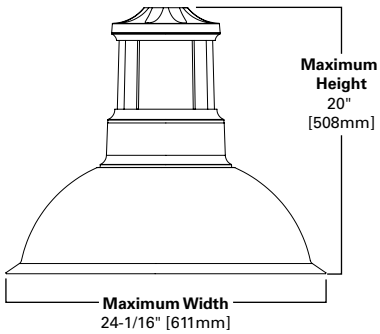
1 - 4 LightBARs

Solid State LED

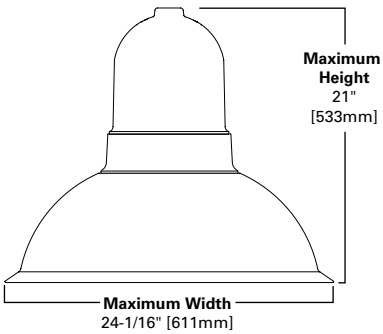
DECORATIVE AREA LUMINAIRE

DIMENSIONS

ECM Classical



EMM Modern



See configurations for more detailed information.

CERTIFICATION DATA

UL/cUL Listed
DesignLights Consortium® Qualified*
IP66 LIghtBARs
LM79 / LM80 Compliant
2G Vibration Tested
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.94

SHIPPING DATA

Approximate Net Weight:
45 lbs. [20 kgs.]

COOPER Lighting Solutions

*www.designlights.org

CONFIGURATIONS

HOUSING

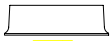


Classical
8-5/8" H x 8-3/4" W



Modern
9-3/8" H
x 8-7/8" W

MID SECTION

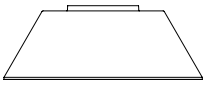


Solid
3-7/16" H x 9-15/16" W

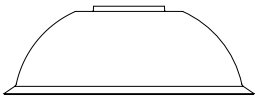


Solid Rings
3-7/16" H x 12" W

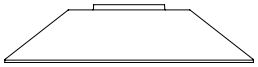
SHADE



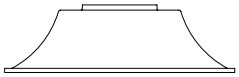
Straight Narrow
6-5/8" H x 19-1/8" W



Bell
8" H x 24" W

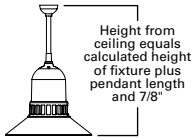


Straight Wide
5-1/8" H x 23-15/16" W



Flute
6" H x 22-1/2" W

MOUNTING OPTION



POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

Number of LightBARs		E01	E02	E03	E04
Drive Current		350mA Drive Current			
Power (Watts)		25W	52W	75W	97W
Current @ 120V (A)		0.22	0.44	0.63	0.82
Current @ 277V (A)		0.10	0.20	0.28	0.36
Power (Watts)		31W	58W	82W	99W
Current @ 347V (A)		0.11	0.19	0.28	0.29
Current @ 480V (A)		0.09	0.15	0.20	0.21
T2	Lumens	2,948	5,896	8,844	11,792
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T3	Lumens	2,936	5,873	8,809	11,745
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
T4	Lumens	2,876	5,752	8,627	11,503
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3
5MQ	Lumens	3,054	6,108	9,161	12,215
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5WQ	Lumens	2,987	5,975	8,962	11,949
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,982	5,963	8,945	11,926
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3
SL2	Lumens	2,878	5,756	8,634	11,512
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,894	5,788	8,682	11,576
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
SL4	Lumens	2,823	5,647	8,470	11,294
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
RW	Lumens	2,957	5,915	8,872	11,829
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,616	5,231	7,847	10,462
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3

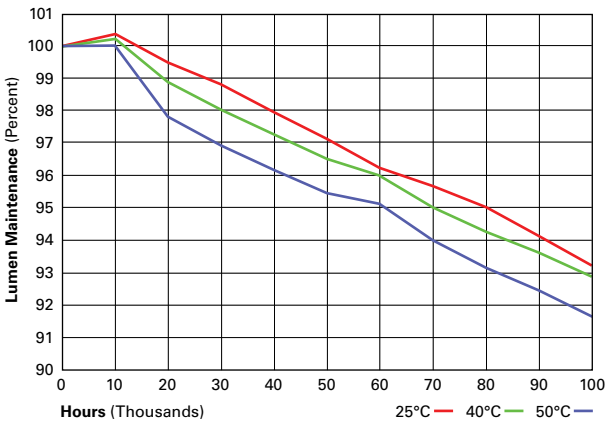
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

Number of LightBARs		F01	F02	F03	F04
Drive Current		1A Drive Current			
Power (Watts)		26W	55W	78W	102W
Current @ 120V (A)		0.22	0.46	0.66	0.86
Current @ 277V (A)		0.10	0.21	0.29	0.37
Power (Watts)		32W	60W	85W	105W
Current @ 347V (A)		0.11	0.19	0.28	0.30
Current @ 480V (A)		0.09	0.15	0.21	0.22
T2	Lumens	2,434	4,867	7,301	9,735
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T3	Lumens	2,424	4,848	7,272	9,696
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
T4	Lumens	2,374	4,748	7,122	9,496
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
5MQ	Lumens	2,521	5,042	7,563	10,084
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
5WQ	Lumens	2,466	4,932	7,398	9,864
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2
5XQ	Lumens	2,461	4,923	7,384	9,845
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3
SL2	Lumens	2,376	4,752	7,127	9,503
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
SL3	Lumens	2,389	4,778	7,167	9,556
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2
SL4	Lumens	2,331	4,662	6,993	9,323
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
RW	Lumens	2,441	4,883	7,324	9,765
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3
SLL/SLR	Lumens	2,159	4,318	6,478	8,637
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25ºC	> 99%	> 97%	> 96%	> 93%	> 450,000
40ºC	> 98%	> 97%	> 96%	> 92%	> 425,000
50ºC	> 97%	> 96%	> 95%	> 91%	> 400,000

* Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99
50ºC	0.96

CONTROL OPTIONS

0-10V (DIM)
The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

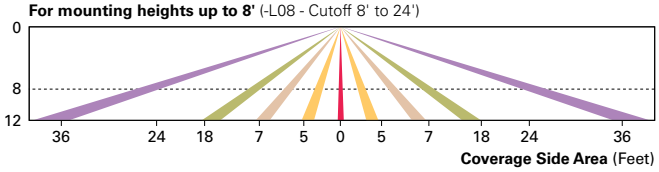
Photocontrol (PC, PER and PER7)
Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

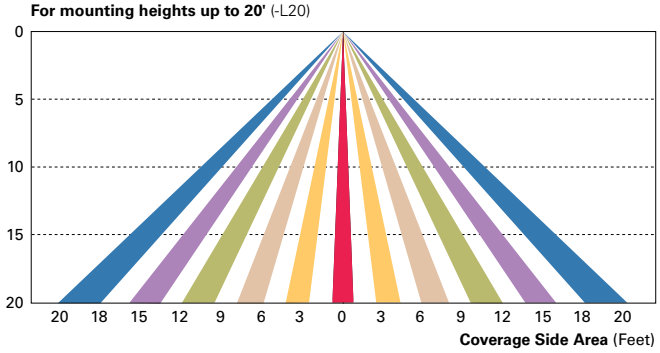
These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-40’.

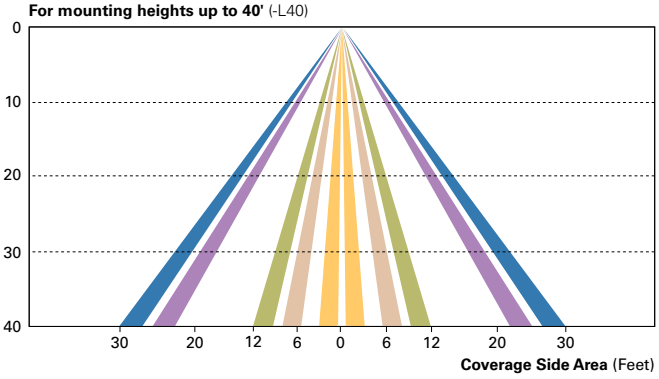
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



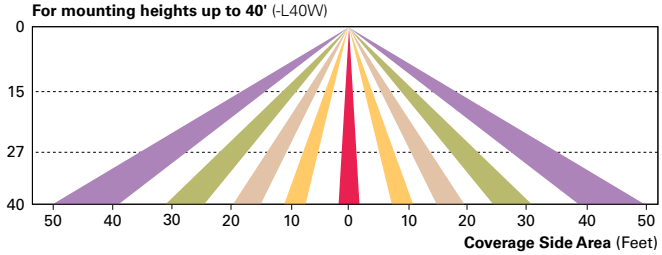
For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40)



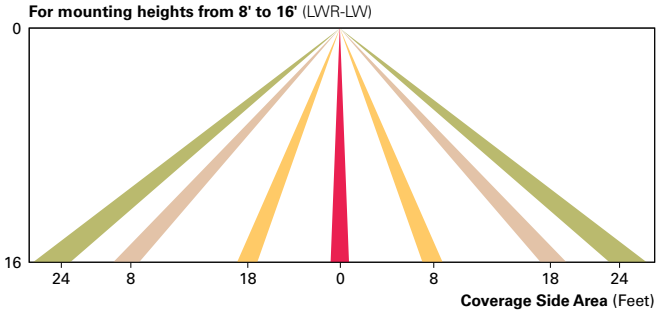
For mounting heights up to 40' (-L40W)



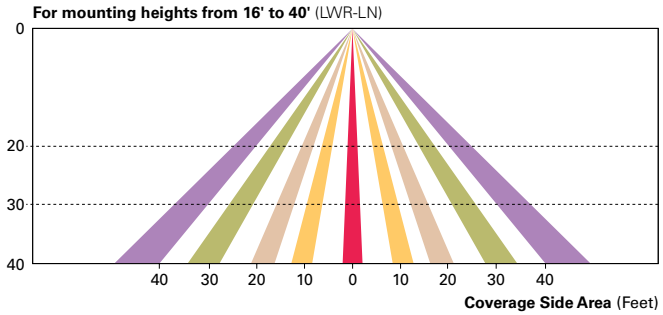
LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



ORDERING INFORMATION

Sample Number: ECM-E04-LED-E1-T2-FL-GM

Product Family [1]	Number of LightBARs [2, 3]	Lamp Type	Voltage	Distribution	Mid Section Type	Shade Type	Color [5]
ECM=Epic Classical Medium **EMM**=Epic Modern Medium **BAA-ECM**=Epic Classical Medium Buy American Act Compliant [19] **BAA-EMM=**Epic Modern Medium Buy American Act Compliant [19]	**E01**=(1) 21 LED LightBAR **E02**=(2) 21 LED LightBARs **E03**=(3) 21 LED LightBARs **E04**=(4) 21 LED LightBARs **F01**=(1) 7 LED LightBAR **F02**=(2) 7 LED LightBARs **F03**=(3) 7 LED LightBARs **F04**=(4) 7 LED LightBARs	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V **480**=480V [4]	**T2**=Type II **T3**=Type III **T4**=Type IV **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **5XQ**=Type V Square Extra Wide **RW**=Rectangular Wide **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right	**SO**=Solid **SR**=Solid Rings	**SN**=Straight Narrow **SW**=Straight Wide **BL**=Bell **FL**=Flute	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)

2L=Two Circuits [6]
7030=70 CRI / 3000K CCT [7]
7050=70 CRI / 5000K CCT [7]
8030=80 CRI / 3000K CCT [7]
LCF=LightBAR Cover Plate Matches Housing Finish
MS-LXX=Motion Sensor for ON/OFF Operation [8]
MS/X-LXX=Motion Sensor for Bi-Level Switching [9]
PMXX=Pendant Mount (XX=Pendant Length in Inches, 9.5" min - 48.0" max) [10]
HSS=Factory Installed House Side Shield [11]
DIM=0-10V Dimming Driver [12]

Accessories (Order Separately) [20]

OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap
OA/RA1027=NEMA Twistlock Photocontrol - 480V
OA/RA1201=NEMA Twistlock Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
LB/HSS-21=Field Installed House Side Shield for "E" LightBARs [11, 15]
LB/HSS-07=Field Installed House Side Shield for "F" LightBARs [11, 15]

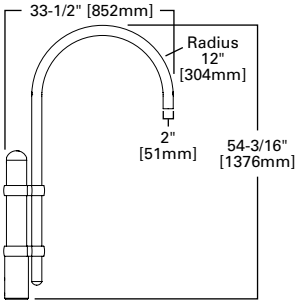
Mounting Accessories (Order Separately)
Classical
VA6150-XX=Bishop Wall Mount Arm
VA6151-XX=Bishop Wall Mount Arm with Cross Rod
VA6152-XX=Traditional Wall Mount Arm
VA6153-XX=Traditional Wall Mount Arm with 45° Strap
VA6154-XX=Bishop Single Pole Mount Arm
VA6155-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6156-XX=Bishop Twin Pole Mount Arm
VA6157-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6158-XX=Traditional Single Pole Mount Arm
VA6159-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6160-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6161-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6162-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6163-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6165-XX=Traditional Twin Pole Mount Arm
VA6166-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6167-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6168-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6169-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6170-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6171-XX=Mast Arm Adapter
Modern
VA6101-XX=Bishop Wall Mount Arm
VA6102-XX=Bishop Wall Mount Arm with Cross Rod
VA6103-XX=Traditional Wall Mount Arm
VA6104-XX=Traditional Wall Mount Arm with 45° Strap
VA6105-XX=Bishop Single Pole Mount Arm
VA6106-XX=Bishop Single Pole Mount Arm with Cross Rod
VA6107-XX=Bishop Twin Pole Mount Arm
VA6108-XX=Bishop Twin Pole Mount Arm with Cross Rods
VA6109-XX=Traditional Single Pole Mount Arm
VA6110-XX=Traditional Single Pole Mount Arm with Rounded Upper Bar
VA6111-XX=Traditional Single Pole Mount Arm with Rounded Lower Bar [14]
VA6112-XX=Traditional Single Pole Mount Arm with 45° Upper Bar
VA6113-XX=Traditional Single Pole Mount Arm with 45° Lower Bar [14]
VA6114-XX=Traditional Single Pole Mount Arm with 45° Upper Strap
VA6116-XX=Traditional Twin Pole Mount Arm
VA6117-XX=Traditional Twin Pole Mount Arm with Rounded Upper Bars
VA6118-XX=Traditional Twin Pole Mount Arm with Rounded Lower Bars [14]
VA6119-XX=Traditional Twin Pole Mount Arm with 45° Upper Bars
VA6120-XX=Traditional Twin Pole Mount Arm with 45° Lower Bars [14]
VA6121-XX=Traditional Twin Pole Mount Arm with 45° Upper Straps
VA6122-XX=Mast Arm Adapter

Accessory Options [16]
V=Victorian Finial [17]
M=Modern Finial [17]
A=Architectural Finial [17]
N=Nostalgic Finial [17]
R=NEMA Twistlock Photocontrol Receptacle [18]

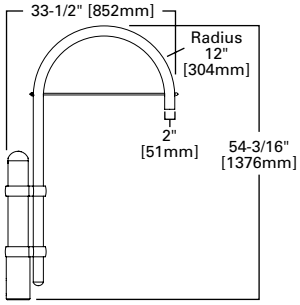
NOTES:
1. Arm not included. Order separately. See accessories.
2. Standard 4000K CCT and greater than 70 RI.
3. 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
6. Low-level output varies by bar count. Consult factory. Requires quantity of two or more LightBARs.
7. Consult customer service for lead times and multiplier.
8. Sensor mounted to the luminaire. Available in E01-E04 and F01-F04 configurations. Replace "XX" with mounting height in feet for proper lens selection, (e.g., MS-L25). Consult factory for additional information.
9. Sensor mounted to the luminaire. Available in E02-E04 and F02-F04 configurations. Replace "X" with number of LightBARs operating in low output mode and replace XX with mounting height in feet for proper lens selection, (e.g., MS/3-L25). Maximum four bars in low output mode. Consult factory for additional information.
10. Pendant mount option "PMXX" must be used with Invue Pendant mount kit only. Includes pendant pipe, swivel hangar and canopy cover. Other pendant lengths can be specified in inches (XX). Minimum pendant length is 9-1/2". For lengths above 48", consult your lighting representative at Cooper Lighting Solutions for more information.
11. Only for use with SL2, SL3 and SL4 distributions.
12. Dimming leads provide for external 0-10V control system (by others).
13. Replace XX with color suffix.
14. Only available with traditional arms.
15. One required for each LightBAR.
16. Add as suffix to mounting accessory. Example: VA6106-BK-R.
17. Not available with finials, pendant mount "PM48" or bishop wall mounts.
18. Requires use of 4" O.D. round straight pole.
19. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
20. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

MOUNTING ACCESSORIES

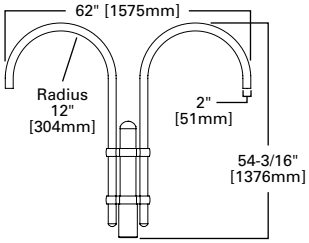
Pole mount arms are designed to fit both medium ECM/EMM housings. (Only these arms are compatible with the Epic luminaire). Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners. Wall mount arms compliment pole mount luminaires and attractively transition fixture scale in lower mounting height pedestrian environments. Wall mount arms are designed to fit both medium ECM/EMM housings. Arms feature a precision welded cast aluminum mounting hub for attachment of fixture head to arm with four stainless steel fasteners.



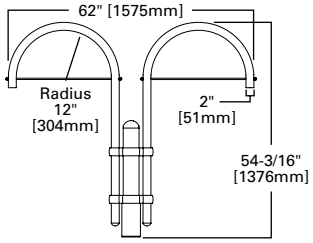
BISHOP SINGLE POLE MOUNT ARM
VA6105 (Modern), VA6154 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 0.92



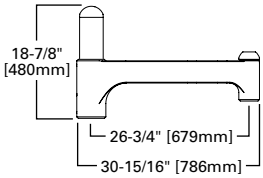
BISHOP SINGLE POLE MOUNT ARM WITH CROSS ROD
VA6106 (Modern), VA6155 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 0.98



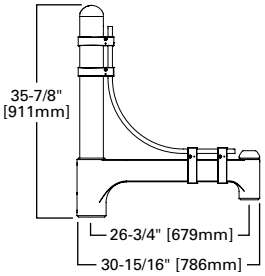
BISHOP TWIN POLE MOUNT ARM
VA6107 (Modern), VA6156 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.43



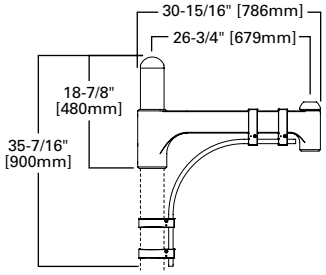
BISHOP TWIN POLE MOUNT ARM WITH CROSS RODS
VA6108 (Modern), VA6157 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 39 lbs. E.P.A: 1.55



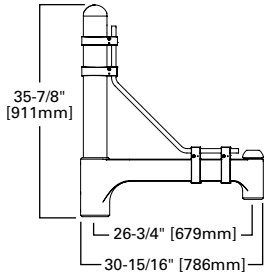
TRADITIONAL SINGLE POLE MOUNT ARM
VA6109 (Modern), VA6158 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 20 lbs. E.P.A: 0.86



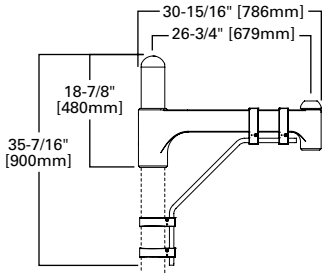
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED UPPER BAR
VA6110 (Modern), VA6159 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 28 lbs. E.P.A: 1.4



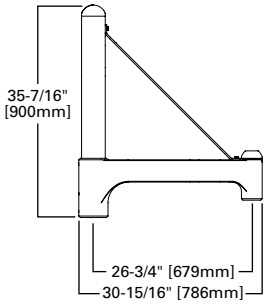
TRADITIONAL SINGLE POLE MOUNT ARM WITH ROUNDED LOWER BAR
VA6111 (Modern), VA6160 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 25 lbs. E.P.A: 1.16



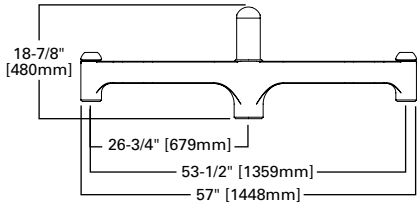
TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER BAR
VA6112 (Modern), VA6161 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" round tenon.
Weight: 28 lbs. E.P.A: 1.38



TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° LOWER BAR
VA6113 (Modern), VA6162 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

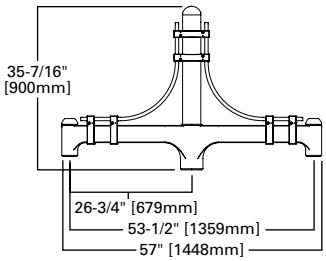


TRADITIONAL SINGLE POLE MOUNT ARM WITH 45° UPPER STRAP
VA6114 (Modern), VA6163 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 24 lbs. E.P.A: 1.17

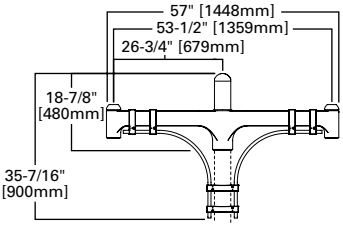


TRADITIONAL TWIN POLE MOUNT ARM
VA6116 (Modern), VA6165 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 30 lbs. E.P.A: 1.44

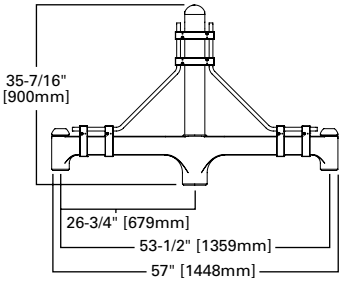
MOUNTING ACCESSORIES



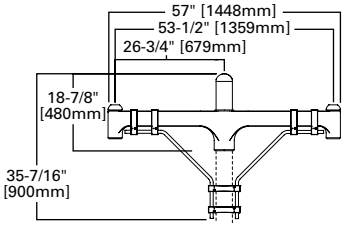
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED UPPER BARS
VA6117 (Modern), VA6166 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.28



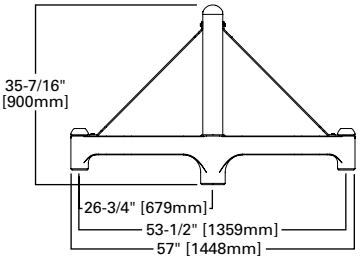
TRADITIONAL TWIN POLE MOUNT ARM WITH ROUNDED LOWER BARS
VA6118 (Modern), VA6167 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.04



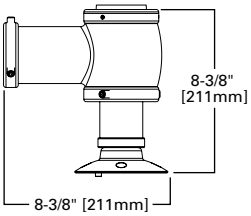
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER BARS
VA6119 (Modern), VA6168 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 43 lbs. E.P.A: 2.24



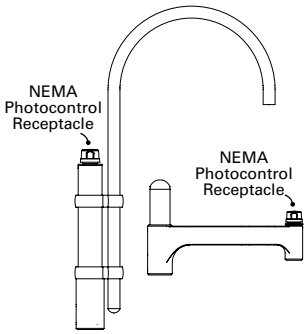
TRADITIONAL TWIN POLE MOUNT ARM WITH 45° LOWER BARS
VA6120 (Modern), VA6169 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 40 lbs. E.P.A: 2.0



TRADITIONAL TWIN POLE MOUNT ARM WITH 45° UPPER STRAPS
VA6121 (Modern), VA6170 (Classical)
Slipfits over 4" round straight pole, or 4" O.D. by 6" tall round tenon.
Weight: 37 lbs. E.P.A: 1.81

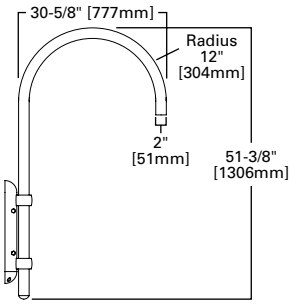


MAST ARM ADAPTER
VA6122 (Modern), VA6171 (Classical)
Secures fixture to nominal 2" pipe (2-3/8" horizontal O.D.)
Weight: 4 lbs.

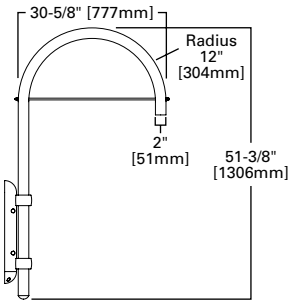


NEMA TWISTLOCK PHOTOCONTROL (R)
Order separately (Not compatible with finials or wall mount bishop arms)

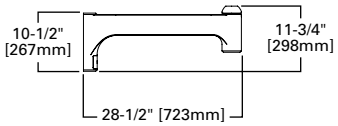
Wall Mount Accessories



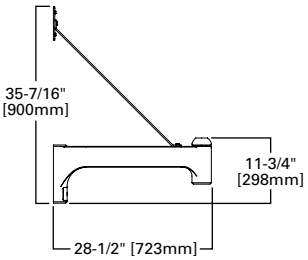
BISHOP WALL MOUNT ARM
VA6101 (Modern), VA6150 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 16 lbs.



BISHOP WALL MOUNT ARM WITH CROSS ROD
VA6102 (Modern), VA6151 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM
VA6103 (Modern), VA6152 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 17 lbs.



TRADITIONAL WALL MOUNT ARM WITH 45° STRAP
VA6104 (Modern), VA6153 (Classical)
Mounts to wall with four stainless steel lag bolts (provided by other).
Weight: 18 lbs.

McGRAW-EDISON®

energy solutions

DESCRIPTION

The Traditionaire™ luminaire displays the old-fashioned charm of traditional area lighting, enhancing any setting with a distinctive styling. UL listed and CSA certified for wet locations.

As a decorative luminaire, the Traditionaire luminaire tastefully complements the architectural and environmental design of estates, parks, motels, restaurants, apartments, churches, institutions and roadways.

Catalog #		Type
Project		W1
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
HOUSING + COVER: Hinged (stainless steel hinge pins) die-cast aluminum housing and cover with cupola.

Optical
REFRACTOR: The injection-molded acrylic refractor panels are precisely designed utilizing a combination of refractive an reflective prisms to create Type II or Type V distributions while maintaining a consistent exterior form. High efficiency refractive optical systems constructed of lighting grade acrylic ensures long lasting optical clarity and resistance to the gradual discoloration that results from exposure to sunlight.

Electrical
LED DRIVER: Assembly incorporates quick disconnects for ease of installation and maintenance. LED LIGHT ENGINE: Solid State LED engine provides even and uniform illumination without the pixilation common to LED applications. Thermal management incorporates both conduction and natural convection to transfer heat rapidly away from the LED source and retain optimal efficiency and light output. The LED replacement module is backwards compatible with existing Traditionaire luminaire installations enabling retrofit opportunities. Shipped standard with Cooper Lighting Solutions proprietary circuit module designed to withstand 10kV of transient line surge. 50,000 + hour life with >70% lumen maintenance. For low temperature operation the Traditionaire luminaire is suitable to -30°C.

Mounting
Self-aligning pole-top fitter fits 3" O.D. pole tops or vertical tenons. Square headed 1-1/4" polymer coated mounting bolts with a lock nut.

Finish
Cast components finished in a super-durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult the McGraw-Edison Architectural Color brochure for a complete selection. Standard colors include: black, bronze, grey, white, dark platinum, graphite metallic and hartford green. RAL and custom color matches available.

Warranty
Five-year warranty.

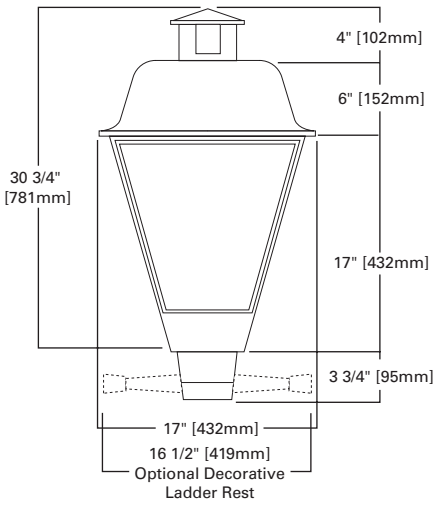


TRR
TRADITIONAIRE™ LED

Solid State LED

POST TOP AREA LUMINAIRE

DIMENSIONS



EPA

Effective Projected Area:
2.3 Sq. Ft.

SHIPPING DATA

Approximate Net Weight:
37 lbs. (17 kgs.)

COOPER Lighting Solutions

ISO 9001 SYSTEMS CERTIFIED

ORDERING INFORMATION

Sample Number: TRR-50-LED-E1-5-BK

Product Family	Lamp Package [1]	Source Type	Voltage	Distribution	Color [3]
TRR=Traditionaire	**50**=5000 Lumens	**LED**=Solid State Light-Emitting	**E1**=Electronic 120-277V	**2**=Type II **5**=Type V Refractive	**AP**=Grey **BZ**=Bronze **BK**=Black **GN**=Hartford Green **WH**=White **DP**=Dark Platinum **GM**=Graphite Metallic

Options (Add as Suffix)	**Accessories** (Order Separately)
P=Polycarbonate Refractor **R**=NEMA Twistlock Photocontrol Receptacle **S**=Tool-less Entry **2L**=Two Circuits **8030**=80 CRI/3000K CCT **SH**=Street Side/House Side Switching Capable	**OA/RA1016**=NEMA Twistlock Photocontrol - Multi-Tap **TA1BK**=Ladder Rest **MA1252**=10kV Circuit Module Replacement **TRR-50-E1**=5000 Lumen LED Replacement Module with 120-277V Universal Driver **TRR-50-E1-2L**=5000 Lumen LED Replacement Module with 120-277V Universal Driver and Bi-level Switching Capable **TRR-50-E1-SH**=5000 Lumen LED Replacement Module with 120-277V Universal Driver and Street Side/House Side Switching Capable

Notes:
1. LED module nominal source lumens prior to optical and configuration losses based on 65 CRI/5000K package at 25°C ambient. Refer to IES files for delivered lumens by configuration.
2. Other finish colors available, including a full line of RAL color matches. Consult your Cooper Lighting Solutions representative.

COOPER Lighting Solutions

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

Specifications and dimensions subject to change without notice.

McGraw-Edison

DESCRIPTION

The Impact Elite family of wall luminaires is the ideal complement to site design. Incorporating modular LightSquares technology, the Impact Elite luminaire provides outstanding uniformity and energy-conscious illumination. Combined with a rugged construction, the Impact Elite luminaire is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments and recreational facilities. UL/cUL listed for wet locations.

		Type
Catalog #		W2
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two captive fasteners. Optional tamper-resistant Torx™ head fasteners offer vandal resistant access to the electrical chamber.

Optics
Choice of 10 patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K and 5700K CCT.

Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and are suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightSquares feature an IP66 enclosure rating and maintain greater than 90% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments and occupancy sensor available.

Mounting
Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish
Cast components finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.









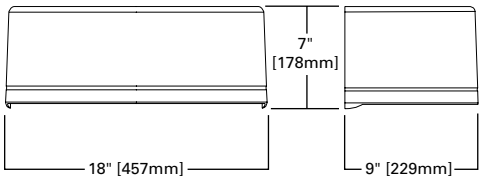
ISC/ISS/IST/ISW
IMPACT ELITE LED

1 LightSquare
Solid State LED

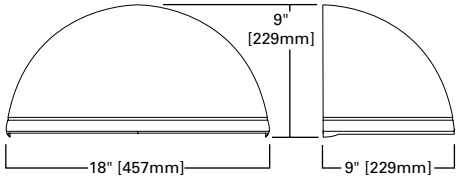
WALL MOUNT LUMINAIRE

DIMENSIONS

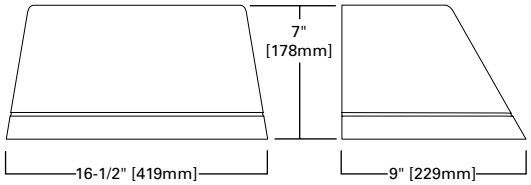
Cylinder



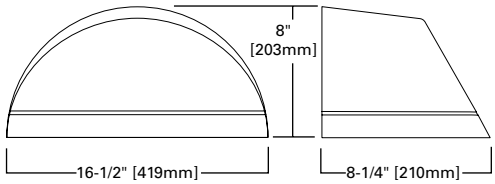
Quarter Sphere



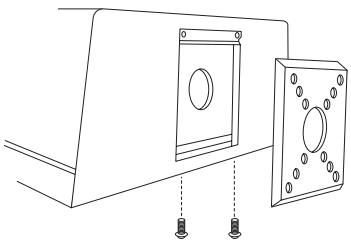
Trapezoid



Wedge



HOOK-N-LOCK MOUNTING



CERTIFICATION DATA
UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightSquare
DesignLights Consortium® Qualified*
ISO 9001

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA
Approximate Net Weight:
18 lbs. (8 kgs.)

*www.designlights.org

POWER AND LUMENS

1 LightSquare (AF)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120-277V	20.3	25.5	33.4	43.9	55.1	66.2	20.3	25.5	33.4	43.9	55.1	66.2
Current (A)	120V	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.05	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics													
T2	Lumens	2,390	3,001	3,915	4,901	5,793	6,592	2,555	3,208	4,185	5,239	6,193	7,047
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
T3	Lumens	2,440	3,063	3,996	5,001	5,912	6,728	2,561	3,216	4,195	5,251	6,207	7,063
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
T4FT	Lumens	2,414	3,031	3,955	4,950	5,851	6,658	2,589	3,250	4,240	5,308	6,274	7,139
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2
T4W	Lumens	2,441	3,065	3,998	5,004	5,916	6,732	2,557	3,211	4,189	5,244	6,198	7,053
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL2	Lumens	2,309	2,899	3,782	4,734	5,596	6,368	2,469	3,100	4,044	5,062	5,983	6,809
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
SL3	Lumens	2,271	2,851	3,719	4,656	5,503	6,262	2,419	3,038	3,963	4,961	5,864	6,673
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B0-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
SL4	Lumens	2,158	2,710	3,535	4,425	5,230	5,951	2,286	2,870	3,744	4,686	5,539	6,303
	BUG Rating	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B0-U1-G1	B0-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2
SLL/SLR	Lumens	2,036	2,555	3,334	4,174	4,934	5,614	2,204	2,767	3,610	4,519	5,341	6,078
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
RW	Lumens	2,435	3,057	3,987	4,992	5,900	6,715	2,521	3,166	4,130	5,170	6,111	6,954
	BUG Rating	B1-U0-G0	B2-U0-G0	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B1-U1-G1	B2-U1-G1	B2-U1-G1	B2-U1-G1	B2-U1-G1	B3-U1-G1

LUMEN MAINTENANCE

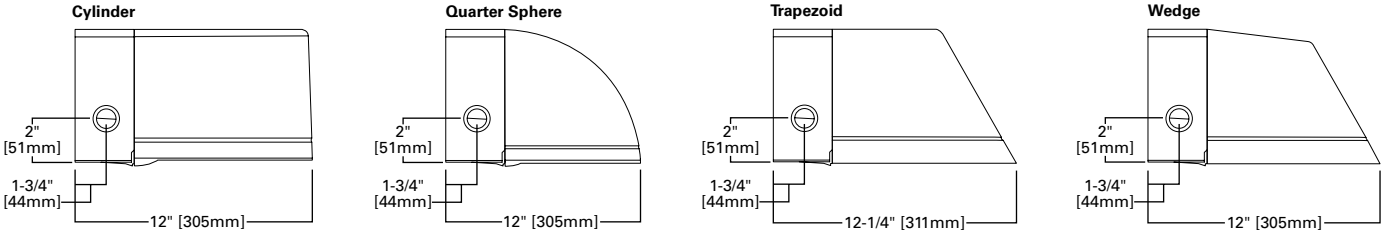
Current	Ambient Temperature	25000 Hours*	50000 Hours*	60000 Hours*	100000 Hours*	Theoretical L70 (Hours)*
Up to 1.2A	Up to 40°C	>95%	>91%	>90%	>83%	204,000

*Data calculated based on TM-21 calculator.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

THRUWAY BACK BOX



CONTROL OPTIONS

0-10V
This fixture is offered standard with 0-10V dimming driver.

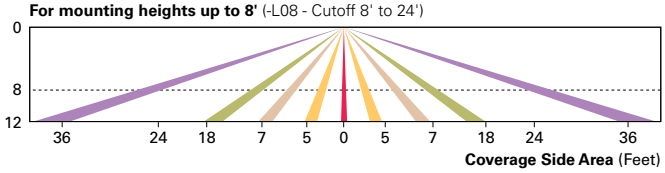
Photocontrol (PC1, PC2 and PER7)
Optional button-type photocontrol provides a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

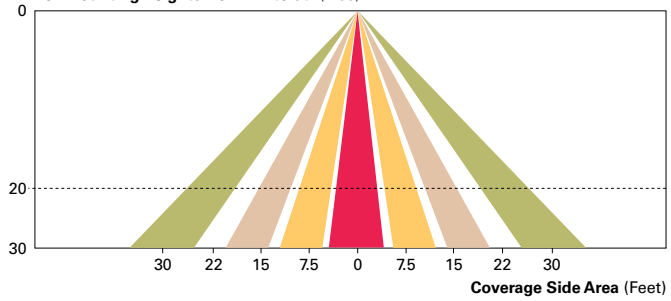
Dimming Occupancy Sensor (MS/DIM-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting -- the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.

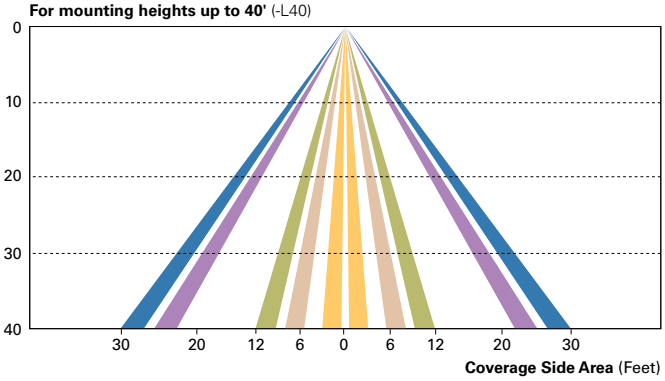
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



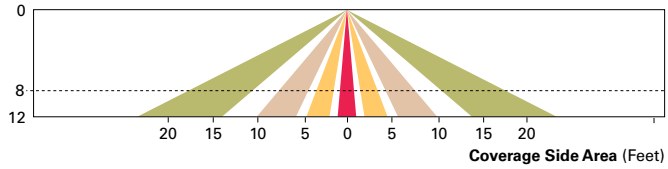
For mounting heights from 12' to 30' (-L30)



For mounting heights up to 40' (-L40)

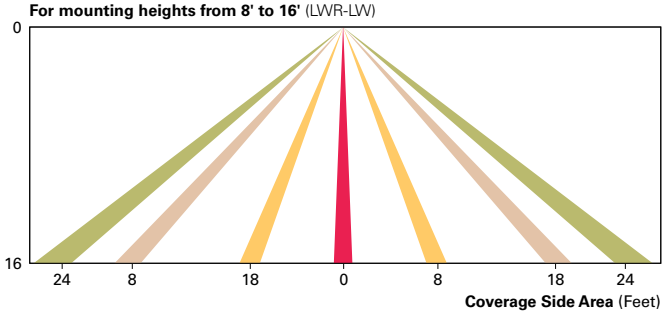


For mounting heights from 8' to 12' (-L12)

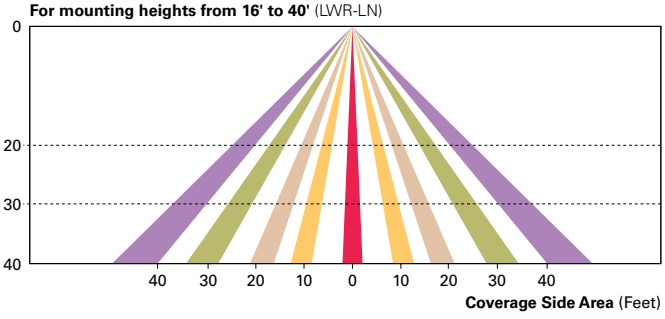


Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)
Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)
The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

ORDERING INFORMATION

Sample Number: ISC-AF-1200-LED-E1-T3-BZ

Product Family [1]	Light Engine	Drive Current	Lamp Type	Voltage	Distribution	Color
ISC=Impact Elite LED Small Cylinder **ISS**=Impact Elite LED Small Quarter Sphere **IST**=Impact Elite LED Small Trapezoid **ISW**=Impact Elite LED Small Wedge	**AF**=(1) LightSquare	**350**=Drive Current Factory Set to 350mA **450**=Drive Current Factory Set to 450mA **600**=Drive Current Factory Set to 600mA **800**=Drive Current Factory Set to 800mA **1000**=Drive Current Factory Set to 1000mA **1200**=Drive Current Factory Set to 1200mA [2]	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V [2] **480**=480V [2, 3]	**T2**=Type II **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	**Accessories** (Order Separately) [16]
7027=70 CRI / 2700K CCT [4] **7030**=70 CRI / 3000K CCT [4] **7050**=70 CRI / 5000K CCT [4] **7060**=70 CRI / 5700K CCT [4] **8030**=80 CRI / 3000K CCT [4] **AMB**=Amber 590nm [22, 23] **PER7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [2, 5, 6] **P**=Button Type Photocontrol (Available in 120, 208, 240 or 277V. Must Specify Voltage) [2, 6] **HA**=50°C High Ambient [7] **AHD145**=After Hours Dim, 5 Hours, 50% [8] **AHD245**=After Hours Dim, 6 Hours, 50% [8] **AHD255**=After Hours Dim, 7 Hours, 50% [8] **AHD355**=After Hours Dim, 8 Hours, 50% [8] **MS/DIM-LXX**=Motion Sensor for Dimming Operation [9, 10, 11] **LWR-LW**=Enlighted Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [6, 11, 12] **LWR-LN**=Enlighted Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [6, 11, 12] **CBP**=Battery Pack with Back Box, Cold Weather Rated [13, 21] **CBP-CEC**=Battery Pack with Back Box, Cold Weather Rated, CEC compliant [13] **LCF**=LightSquare Trim Plate Matches Housing Finish **HSS**=Factory Installed House Side Shield [14] **ULG**=Uplight Glow [5, 6] **TR**=Tamper Resistant Hardware **X**=Driver Surge Protection (6kV) Only [15] **ZW**=WaveLinx-enabled 4-PIN Twistlock Receptacle [18, 19] **ZD**=WaveLinx Module with DALI driver and 4-PIN Receptacle [18, 19] **SWPD4XX**=WaveLinx Sensor Only, 7'-15' [16, 20] **SWPD5XX**=WaveLinx Sensor Only, 15'-40' [16, 20]	**MA1253**=10kV Circuit Module Replacement **MA1254-XX**=Thruway Back Box - Impact Elite Trapezoid **MA1255-XX**=Thruway Back Box - Impact Elite Cylinder **MA1256-XX**=Thruway Back Box - Impact Elite Quarter Sphere **MA1257-XX**=Thruway Back Box - Impact Elite Wedge **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor **WOLC-7P-10A**=WaveLinx Outdoor Control Module (7-pin) [17, 18] **SWPD4-XX**=Wavelinx Wireless Sensor, 7' – 15' Mounting Height [16, 18, 19, 20] **SWPD5-XX**=Wavelinx Wireless Sensor, 15' – 40' Mounting Height [16, 18, 19, 20]

NOTES:
1. Standard 4000K CCT and greater than 70 CRI.
2. Not available with ULG option.
3. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
4. Exentended lead times apply.
5. Not available with ISS or ISW.
6. Not available with LWR-XX or MS/DIM-LXX.
7. Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1.A or less.
8. Requires the use of P photocontrol or the PER7 photocontrol receptacle with photocontrol accessory. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information.
9. Specify lens in place of XX. Round to next highest option based on mounting height. Available options are 08, 20 and 40W.
10. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
11. Includes integral photocell.
12. Enlighted wireless sensors are factory installed and requiring network components in appropriate quantities. See www.cooperlighting.com for Enlighted application information.
13. Battery pack with back box rated for operating temperature of -20°C to +40°C. Operates downlight for 90-minutes.
14. Only for use with SL2, SL3 and SL4 distributions. The LightSquare trim plate is painted black when the HSS option is selected.
15. Removes additional surge module.
16. Replace XX with sensor color (WH, BZ, or BK).
17. Requires PER7.
18. Cannot be used in conjunction with photocontrol or other controls systems (P, R, MS, LWR).
19. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed.
20. Requires ZW or ZD receptacle.
21. Must specify 120V or 277V.
22. Amber 590nm +/-5nm. Choose drive current 450 (nominal), actual drive current provided is 500mA. Available with SL2, SL3 and SL4 optics.
23. Not available with HA option.

APPLICATION—SITE PLANS, SUBDIVISIONS & RECORD PLANS
CITY OF SPRINGBORO PLANNING COMMISSION

☐ SITE PLAN ☐ REVISION TO APPROVED SITE PLAN ☐ CONCEPT PLAN ☐ PRELIMINARY SUBDIVISION ☒ RECORD PLAN

The undersigned requests the approval identified above. Site Plan Review approvals subject to expiration provided for in Section 1284.18 of the Planning and Zoning Code. For all approvals under this application, it is understood that it shall only authorize the approval described in this application, subject to any conditions or safeguards required by the Planning Commission, and/or City Council.

- ☐ Owner
- ☐ Agent
- ☐ Lessee
- ☒ Signed Purchase Contract

APPLICANT NAME: Skilken Gold Real Estate Development

Address: 4270 Morse Road Columbus, OH 43230

Telephone No. 614-418-3100

Fax No. (_____) _____

Email Address apurdon@skilkengold.com

PROPERTY OWNER NAME (IF OTHER): Edwards Furniture Inc.

Address: 800 W Central Ave Springboro, OH 45066

Telephone No. (_____) _____

Property Address or General Location: 800 W Central Ave Springboro, OH 45066

Parcel Number(s): 0420401001 Zoning District: HBD

Proposed Use: Convenience Store, Restaurant, Fueling

The applicant or representative who is authorized to speak on behalf of the request must also be present at all meetings.

Alison Purdon
(Signature of Applicant and/or Agent)

7/20/23
(Date)

Alison Purdon
Printed Name

RECORD PLAN
MIDWAY MEADOWS SECTION 3

BEING A REPLAT OF LOT 1 OF MIDWAY MEADOWS SECTION ONE
AS RECORDED IN PLAT BOOK 9, PAGE 42
CITY OF SPRINGBORO, CLEARCREEK TOWNSHIP,
WARREN COUNTY, OHIO
SECTION 20, TOWN 2 EAST, RANGE 5 NORTH
CONTAINING 2.4017 TOTAL ACRES
JULY 2023

DEED REFERENCE

SITUATED IN SECTION 20, TOWN 2E, RANGE 5N, CITY OF SPRINGBORO, CLEARCREEK TOWNSHIP, WARREN COUNTY, OHIO, CONTAINING 2.4017 ACRES, BEING ALL THAT REMAINS OF THE ORIGINAL 23.1815 ACRES CONVEYED TO EDWARDS FURNITURE INC, DESCRIBED IN THE DEED RECORDED IN O.R. 549, PAGE 407.

DEDICATION:

WE, THE UNDERSIGNED, BEING ALL THE OWNERS AND LIEN HOLDERS OF THE PROPERTY HEREIN PLATTED, DO HEREBY VOLUNTARILY CONSENT TO THE EXECUTION OF SAID PLAT, THEREBY CONVEYING TITLE, IN FULL, TO THE PUBLIC, AND DO DEDICATE THE STREETS AND EASEMENTS AS SHOWN HEREON, INCLUDING EXTRATERRITORIAL EASEMENTS, AS APPLICABLE, TO THE PUBLIC USE FOREVER.

ANY "PUBLIC UTILITY EASEMENTS" AS SHOWN ON THIS PLAT ARE FOR THE PLACEMENT OF PUBLIC UTILITIES AND FOR THE MAINTENANCE AND REPAIR OF SAID UTILITIES. THIS EASEMENT AND ALL OTHER EASEMENTS SHOWN ON THIS PLAT, UNLESS DESIGNATED FOR A SPECIFIC PURPOSE, ARE FOR THE CONSTRUCTION, OPERATION, MAINTENANCE, REPAIR, REPLACEMENT OR REMOVAL OF WATER, SEWER, GAS, ELECTRIC, TELEPHONE, CABLE TELEVISION, OR OTHER UTILITY LINES OR SERVICES, STORMWATER DISPOSAL AND FOR THE EXPRESS PRIVILEGE OF CUTTING, TRIMMING OR REMOVING ANY AND ALL TREES OR OTHER OBSTRUCTIONS WITHIN SAID EASEMENT, OR IMMEDIATELY ADJACENT THERETO, TO THE FREE USE OF SAID EASEMENTS OR ADJACENT STREETS AND FOR PROVIDING INGRESS AND EGRESS TO THE PROPERTY FOR SAID PURPOSES AND ARE TO BE MAINTAINED AS SUCH FOREVER. NO BUILDINGS OR OTHER STRUCTURES MAY BE BUILT WITHIN SAID EASEMENTS, NOR MAY THE EASEMENT AREA BE PHYSICALLY ALTERED SO AS TO (1) REDUCE CLEARANCES OF EITHER OVERHEAD OR UNDERGROUND FACILITIES; (2) IMPAIR THE LAND SUPPORT OF SAID FACILITIES; (3) IMPAIR ABILITY TO MAINTAIN THE FACILITIES OR (4) CREATE A HAZARD.

SIGNED AND ACKNOWLEDGE
IN THE PRESENCE OF:

_____
WITNESS

_____
WITNESS

OWNER: _____
EDWARDS FURNITURE INC.

BY: _____
PRINTED NAME:
TITLE:

CERTIFICATE OF NOTARY PUBLIC:

STATE OF OHIO SS:
COUNTY OF _____

BE IT REMEMBERED THAT ON THIS _____ DAY OF _____, 2023 A.D. BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE SAID COUNTY AND STATE, PERSONALLY CAME _____ ON BEHALF OF SAID LIMITED LIABILITY COMPANY, AND ACKNOWLEDGED THE SIGNING AND EXECUTION OF THE FOREGOING PLAT TO BE HIS VOLUNTARY ACT AND DEED.

THIS IS AN ACKNOWLEDGEMENT. NO OATH OR AFFIRMATION WAS ADMINISTERED TO THE SIGNER WITH REGARD TO THIS NOTARIAL ACT.

IN TESTIMONY WHEREOF, I HAVE SET MY HAND, AND NOTARY SEAL ON THE DAY AND DATE WRITTEN HEREON:

_____ _____
NOTARY PUBLIC MY COMMISSION EXPIRES

LENDER'S CONSENT:

ASSOCIATED BANK, NATIONAL ASSOCIATION, A NATIONAL BANKING ASSOCIATION

_____
WITNESS
PRINTED NAME:

_____ _____
WITNESS PRINTED NAME:

BY: _____
PRINTED NAME:
TITLE:

CERTIFICATE OF NOTARY PUBLIC:

STATE OF OHIO SS:
COUNTY OF _____

BE IT REMEMBERED THAT ON THIS _____ DAY OF _____, 2023 A.D. BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE SAID COUNTY AND STATE, PERSONALLY CAME _____ ON BEHALF OF SAID NATIONAL BANKING ASSOCIATION, AND ACKNOWLEDGED THE SIGNING AND EXECUTION OF THE FOREGOING PLAT TO BE HIS VOLUNTARY ACT AND DEED.

THIS IS AN ACKNOWLEDGEMENT. NO OATH OR AFFIRMATION WAS ADMINISTERED TO THE SIGNER WITH REGARD TO THIS NOTARIAL ACT.

IN TESTIMONY WHEREOF, I HAVE SET MY HAND, AND NOTARY SEAL ON THE DAY AND DATE WRITTEN HEREON:

_____ _____
NOTARY PUBLIC MY COMMISSION EXPIRES

WARREN COUNTY AUDITOR:

TRANSFERRED ON THIS _____ DAY OF _____, _____.

_____
DEPUTY WARREN COUNTY AUDITOR

WARREN COUNTY RECORDER:

FILE NO. _____

RECEIVED ON THIS _____ DAY OF _____, _____ AT _____.M.

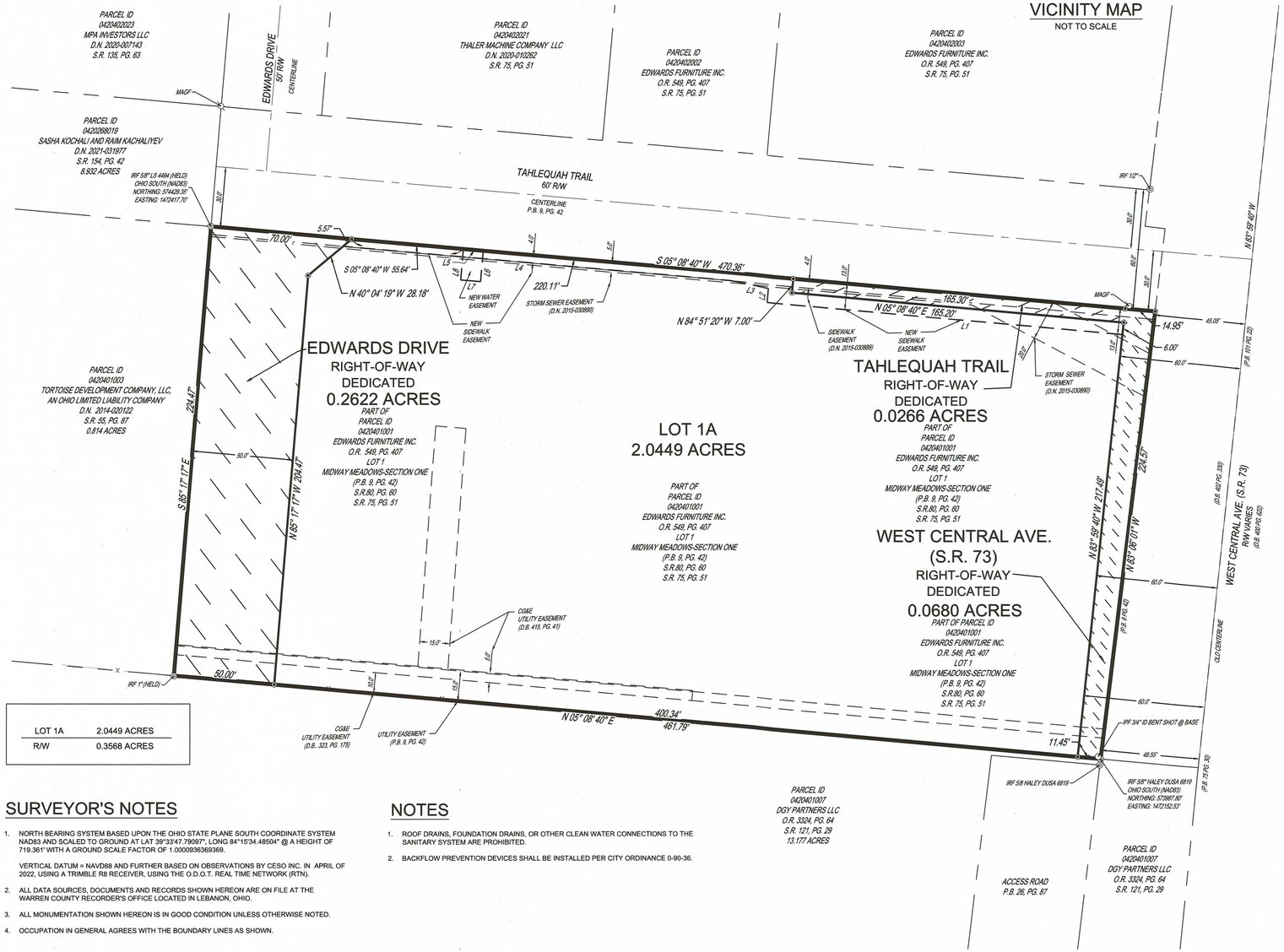
RECORDED ON THIS _____ DAY OF _____, _____ AT _____.M.

RECORDED IN PLAT BOOK NO. _____, PAGE _____.

FEE _____

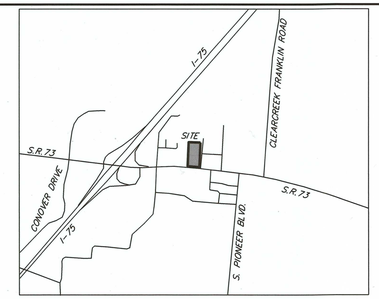
_____
DEPUTY WARREN COUNTY RECORDER

Line Table		
Line #	Direction	Length
L1	S05° 08' 40"W	176.95
L2	N84° 51' 20"W	7.00
L3	S11° 13' 55"W	19.26
L4	S05° 08' 40"W	193.03
L5	S05° 08' 40"W	10.00
L6	N85° 02' 42"W	15.44
L7	N04° 57' 18"E	10.00
L8	S85° 02' 42"E	15.48



LOT 1A	2.0449 ACRES
R/W	0.3568 ACRES

VICINITY MAP
NOT TO SCALE



APPROVED BY COUNCIL OF THE
MUNICIPALITY OF SPRINGBORO

THIS _____ DAY OF _____,2023

_____
MAYOR

ATTEST: _____
CLERK OF COUNCIL

_____
ENGINEER

SURVEYOR'S NOTES

1. NORTH BEARING SYSTEM BASED UPON THE OHIO STATE PLANE SOUTH COORDINATE SYSTEM NAD83 AND SCALED TO GROUND AT LAT 39°33'47.79097", LONG 84°15'34.48504" @ A HEIGHT OF 719.361' WITH A GROUND SCALE FACTOR OF 1.0000936369369.

   VERTICAL DATUM = NAVD88 AND FURTHER BASED ON OBSERVATIONS BY CESO INC. IN APRIL OF 2022, USING A TRIMBLE R8 RECEIVER, USING THE O.D.O.T. REAL TIME NETWORK (RTN).
2. ALL DATA SOURCES, DOCUMENTS AND RECORDS SHOWN HEREON ARE ON FILE AT THE WARREN COUNTY RECORDER'S OFFICE LOCATED IN LEBANON, OHIO.
3. ALL MONUMENTATION SHOWN HEREON IS IN GOOD CONDITION UNLESS OTHERWISE NOTED.
4. OCCUPATION IN GENERAL AGREES WITH THE BOUNDARY LINES AS SHOWN.

NOTES

1. ROOF DRAINS, FOUNDATION DRAINS, OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SYSTEM ARE PROHIBITED.
2. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED PER CITY ORDINANCE 0-90-36.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS MAP IS A TRUE AND COMPLETE SURVEY MADE BY ME (UNDER MY SUPERVISION), ON _____ AND THAT ALL MONUMENTS AND LOT CORNER PINS ARE (OR WILL BE) SET AS SHOWN.

7-20-2023

SEAN BROOKS, P.S. #8828
REGISTERED SURVEYOR

STATE OF OHIO
SEAN BROOKS PS-8828
REGISTERED PROFESSIONAL SURVEYOR

LEGEND

- IRON PIN FOUND AS NOTED
- PIPE FOUND
- MAG NAIL FOUND
- 5/8" x 30" IRON REBAR SET WITH YELLOW CESO CAP
- MAG NAIL SET

ADJOINER BOUNDARY LINE
CENTER OF RIGHT-OF-WAY
EASEMENT LINE
PROPOSED EASEMENT LINE
EXISTING FENCE

REVISIONS		
NO.	DATE	DESCRIPTION
1		
2		
3		

NORTH & BEARING SYSTEM
BASED UPON THE
OHIO STATE PLANE
SOUTH ZONE (NAD83)

GRAPHIC SCALE
30 0 15 30 60
SCALE: 1" = 30'

OWNER:
EDWARDS FURNITURE INC.
800 WEST CENTRAL AVE.
SPRINGBORO, OH 45066

DEVELOPER:
SKILKEN GOLD REAL ESTATE DEVELOPMENT
4270 MORSE ROAD
COLUMBUS, OH 43230
(614) 418-3100

PREPARED BY:
CESO, INC.
3601 RIGBY ROAD, SUITE 300
MIAMISBURG, OHIO 45342
(937) 435-8584

RECORD PLAN

MIDWAY MEADOWS SECTION 3

CITY OF SPRINGBORO, CLEARCREEK TWP. — SEC 20, TOWN 2E, RANGE 5N WARREN COUNTY, OHIO

SCALE: 1" = 30' | DATE: 07-19-2023

DESIGN: | PREPARED BY: CESO WWW.CESOINC.COM | JOB NO.: 760643-01

DRAWN: TBC

CHECKED: STB | SHEET NO.: 1 OF 1

W:\PROJECTS\SKILKEN GOLD\760643-01 SKILKEN GOLD - C-STORE - 094 SPRINGBORO, OH\04-SURVEY\DWG\760643-01 - REPLAT OF LOT 1.DWG - 7/19/2023 12:20 PM

APPLICATION—SITE PLANS, SUBDIVISIONS & RECORD PLANS
CITY OF SPRINGBORO PLANNING COMMISSION

☐ SITE PLAN ☐ REVISION TO APPROVED SITE PLAN ☐ CONCEPT PLAN ☒ PRELIMINARY SUBDIVISION ☐ RECORD PLAN

The undersigned requests the approval identified above. Site Plan Review approvals subject to expiration provided for in Section 1284.18 of the Planning and Zoning Code. For all approvals under this application, it is understood that it shall only authorize the approval described in this application, subject to any conditions or safeguards required by the Planning Commission, and/or City Council.

- ☐ Owner
- ☐ Agent
- ☐ Lessee
- ☐ Signed Purchase Contract

APPLICANT NAME: JOSHUA LILES, P.E.

Address: 1068 N. UNIVERSITY BLVD
MIDDLETOWN, OH 45042

Telephone No. (513) 424-5202

Fax No. (513) 424-6202

Email Address apexengineering@sbcglobal.net

PROPERTY OWNER NAME (IF OTHER): ASSOCIATE CONST.

Address: 31 EAGLE CT. STE. A
CARLISLE, OH 45005

Telephone No. (937) 313-2496

Property Address or General Location: SHARTS RD. SOUTH of ADVANCED DR.

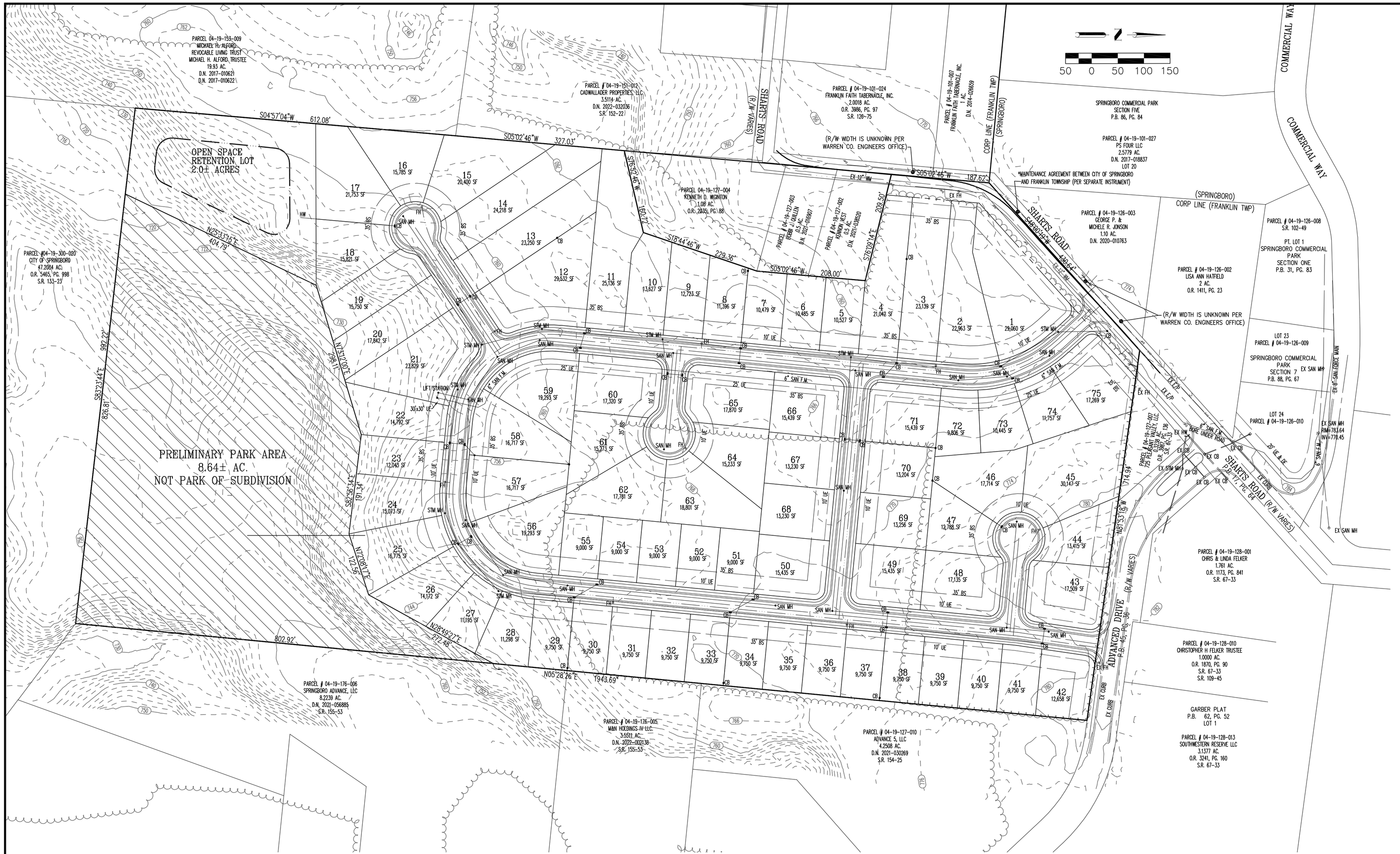
Parcel Number(s): 04191760020 & 04191270050 Zoning District: R-2

Proposed Use: SINGLE FAMILY SUBDIVISION

The applicant or representative who is authorized to speak on behalf of the request must also be present at all meetings.

(Signature of Applicant and/or Agent) 07/21/23 (Date)

JOSHUA LILES
Printed Name


PARCEL 04-19-153-009
MICHAEL H. ALFORD REVOCABLE LIVING TRUST
MICHAEL H. ALFORD, TRUSTEE
19.93 AC.
D.N. 2017-010621
D.N. 2017-010622
OPEN SPACE RETENTION LOT 2.0± ACRES
PARCEL #04-19-300-008
CITY OF SPRINGBORO
67.2064 AC.
O.R. 3465, PG. 998
S.R. 133-23
PRELIMINARY PARK AREA
8.64± AC.
NOT PART OF SUBDIVISION
PARCEL # 04-19-151-012
CADWALLADER PROPERTIES, LLC
3.5114 AC.
D.N. 2022-032036
S.R. 152-27
PARCEL # 04-19-101-024
FRANKLIN FAITH TABERNACLE, INC.
2.0018 AC.
O.R. 3986, PG. 97
S.R. 126-75
PARCEL # 04-19-101-007
FRANKLIN FAITH TABERNACLE, INC.
D.N. 2014-026859
(R/W WIDTH IS UNKNOWN PER WARREN CO. ENGINEERS OFFICE)
SHARTS ROAD (R/W VARIES)
CORP LINE (FRANKLIN TWP) (SPRINGBORO)
COMMERCIAL WAY
SPRINGBORO COMMERCIAL PARK SECTION FIVE P.B. 86, PG. 84
PARCEL # 04-19-101-027
PS FOUR LLC
2.5779 AC.
D.N. 2017-018837
LOT 20
*MAINTENANCE AGREEMENT BETWEEN CITY OF SPRINGBORO AND FRANKLIN TOWNSHIP (PER SEPARATE INSTRUMENT)
PARCEL # 04-19-127-004
KENNETH D. MIGNTON
1.09 AC.
O.R. 2003, PG. 188
PARCEL # 04-19-127-003
REBEL J. OWLIA
0.46 AC.
D.N. 2021-028609
PARCEL # 04-19-127-002
GEORGE P. & MICHELE R. JONSON
0.47 AC.
D.N. 2021-028609
PARCEL # 04-19-126-003
GEORGE P. & MICHELE R. JONSON
1.10 AC.
D.N. 2020-010783
PARCEL # 04-19-126-008
S.R. 102-49
PT. LOT 1
SPRINGBORO COMMERCIAL PARK SECTION ONE
P.B. 31, PG. 83
PARCEL # 04-19-126-002
LISA ANN HATFIELD
2 AC.
O.R. 1411, PG. 23
LOT 23
PARCEL # 04-19-126-009
SPRINGBORO COMMERCIAL PARK SECTION 7
P.B. 88, PG. 67
LOT 24
PARCEL # 04-19-126-010
PARCEL # 04-19-128-001
CHRIS & LINDA FELKER
1.761 AC.
O.R. 1173, PG. 841
S.R. 67-33
PARCEL # 04-19-128-010
CHRISTOPHER H FELKER TRUSTEE
1.0000 AC.
O.R. 1870, PG. 90
S.R. 67-33
S.R. 109-45
GARBER PLAT
P.B. 62, PG. 52
LOT 1
PARCEL # 04-19-128-013
SOUTHWESTERN RESERVE LLC
3.1377 AC.
O.R. 3741, PG. 160
S.R. 67-33
PARCEL # 04-19-176-006
SPRINGBORO ADVANCE, LLC
8.2239 AC.
D.N. 2021-050885
S.R. 155-53
PARCEL # 04-19-176-005
MAH HOLDINGS IV LLC
3.5511 AC.
D.N. 2022-002138
S.R. 155-53
PARCEL # 04-19-127-010
ADVANCE 5, LLC
4.2508 AC.
D.N. 2021-030269
S.R. 154-25
S04°57'04"W 612.08'
S05°02'46"W 327.03'
S15°45'46"W 180.72'
S15°44'46"W 229.36'
S05°02'46"W 208.00'
S05°02'46"W 187.62'
S15°03'14"E 209.50'
S74°57'14"E 490.64'
N74°57'14"W 1,174.94'
N15°03'16"E 714.54'
N25°53'15"E 401.79'
N13°52'00"E 296.71'
S82°23'44"E 826.81'
S05°58'34"E 151.34'
N12°09'17"E 122.45'
N62°49'27"E 771.48'
802.92'
N05°28'26"E 1943.69'
EX 12" WM
EX FH
EX SAN MH
EX 8" SAN FORCE MAIN
EX SAN MH RIM=763.64 INV=778.45
EX 8" SAN F.M.
6" SAN F.M.
EX D.I.P.
EX CB
EX STM MH
EX 10" UE & 4" UE
EX 10" UE
EX 35' BS
EX 25' UE
EX 30' UE
EX 6" SAN F.M. FORCE UNDER ROAD
EX 6" SAN F.M. PER PLAT
EX 8" SAN F.M. PER PLAT
EX 8" SAN F.M. PER O.R. 1411, PG. 23
EX 8" SAN F.M. PER D.N. 2021-028609
EX 8" SAN F.M. PER D.N. 2021-028609
EX 8" SAN F.M. PER D.N. 2020-010783
EX 8" SAN F.M. PER D.N. 2017-018837
EX 8" SAN F.M. PER O.R. 3986, PG. 97
EX 8" SAN F.M. PER D.N. 2014-026859
EX 8" SAN F.M. PER D.N. 2017-018837
EX 8" SAN F.M. PER D.N. 2017-018837
EX 8" SAN F.M. PER D.N. 2017-018837

APPLICATION—SITE PLANS, SUBDIVISIONS & RECORD PLANS
CITY OF SPRINGBORO PLANNING COMMISSION

☒ SITE PLAN ☐ REVISION TO APPROVED SITE PLAN ☐ CONCEPT PLAN ☐ PRELIMINARY SUBDIVISION ☐ RECORD PLAN

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❑ Owner
☒ Agent
❑ Lessee
❑ Signed Purchase Contract

APPLICANT NAME: Christopher A. Hinkel, President Dryden Builders, Inc.

Address: 1741 Thomas Paine Parkway
Centerville, Ohio 45459

Telephone No. (937) 439-2728

Fax No. (937) 439-2729

Email Address: chris@drydenbuilders.com

PROPERTY OWNER NAME (IF OTHER): Sahana Properties, LLC

Address: 748 Gardner Road
Springboro, Ohio 45066

Telephone No. (937) 680-1600

Property Address or General Location: Lot next to Springboro Wine & Spirits, 748 Gardner Road

Parcel Number(s): 04154000400 Zoning District: PUD - MU

Proposed Use: Construct two single story buildings for commercial use, total 8,982 SF

The applicant or representative who is authorized to speak on behalf of the request must also be present at all meetings.

(Signature of Applicant and/or Agent) 7-21-2023 (Date)

Christopher A. Hinkel, President
Dryden Builders, Inc.
Printed Name



PROPOSED
RETAIL BUILDING:
GARDNER ROAD
SPRINGBORO, OHIO 45066

DRYDEN BUILDERS
1741 Thomas Paine Parkway
Dayton, OH 45459
Office (937) 439-2728 chris@drydenbuilders.com

JAMES C. HAWTHORN ASSOCIATES
ARCHITECTS
1900 Kress Wood Circle
Dayton, Ohio 45459
P: 937.298.3607 jim@jcharc.com

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STATE OF OHIO ★ JAMES C. HAWTHORN 7946 ★ REGISTERED ARCHITECT
James C. Hawthorn License # 6807946
Expiration Date: 8/31/24

REVISIONS

NO.	DATE	DESCRIPTION

DATE
7.21.23

JOB. NO.
23.008

TITLE

SHEET NO.
A1.0

PROPOSED RETAIL BUILDING:

GARDNER ROAD
SPRINGBORO, OHIO 45066

DRYDEN BUILDERS
1741 Thomas Paine Parkway
Dayton, OH 45459
Office (937) 439-2728 chris@drydenbuilders.com

JAMES C. HAWTHORN ASSOCIATES
ARCHITECTS
1900 Kress Wood Circle
Dayton, Ohio 45459
P: 937.298.3607 jim@jchparc.com

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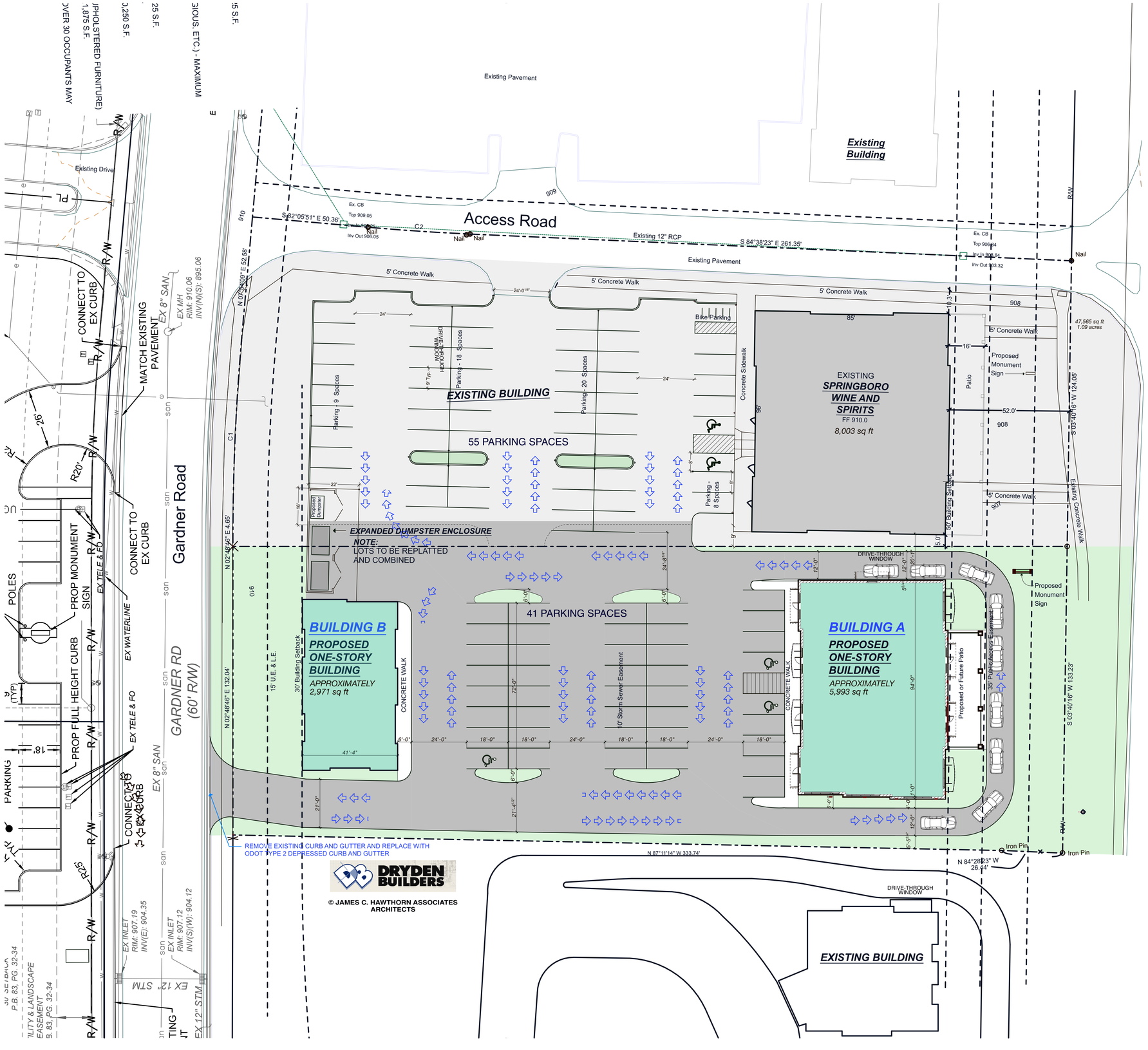
James C. Hawthorn License # 6907946
Expiration Date: 12/31/24



SPRINGBORO WINE & SPIRITS

MAXIMUM BUILDING AREA

NON-SPRINKLERED, TYPE II-B

A-2 ASSEMBLY (RESTAURANTS, BARS, ETC.) - MAXIMUM 9,500 S.F.
- -OPEN AREA INCREASE WITH 30' CLEAR - 9,500 + (9,500 X .75) = 16,625 S.F.
- -OVER 5,000 S.F. REQUIRES FIRE BARRIER
- -OVER 100 OCCUPANTS REQUIRES FIRE BARRIER

A-3 ASSEMBLY (COMMUNITY HALLS, GYMNASIUMS, ART GALLERIES, RELIGIOUS, ETC.) - MAXIMUM 9,500 S.F.
- -OVER 12,000 S.F. REQUIRES FIRE BARRIER
- -OVER 300 OCCUPANTS REQUIRES FIRE BARRIER
- -OPEN AREA INCREASE WITH 30' CLEAR - 9,500 + (9,500 X .75) = 16,625 S.F.

BUSINESS (PROFESSIONAL OFFICES, ETC.)- 23,000 S.F.
- -OPEN AREA INCREASE WITH 30' CLEAR - 23,000 + (23,000 X .75) = 40,250 S.F.

MERCANTILE (RETAIL) - 12,500 S.F.
- -OVER 12,000 S.F. REQUIRES FIRE BARRIER (MAXIMUM 8,000 FOR UPHOLSTERED FURNITURE)
- -OPEN AREA INCREASE WITH 30' CLEAR - 12,500 + (12,500 X .75) = 21,875 S.F.

NOTE THAT CORRIDORS IN ANY NON-SPRINKLERED OCCUPANCY WITH OVER 30 OCCUPANTS MAY REQUIRE FIRE RATED CORRIDORS

SITE PLAN

0 10' 20' 40'

SCALE: 1" = 20'-0"

N

NOTE:

THIS SITE PLAN IS INTENDED FOR PRELIMINARY PLANNING PURPOSES ONLY AND IS BASED ON INFORMATION PROVIDED BY THE CLIENT. VERIFY PROPERTY LINES, SETBACKS AND EASEMENTS PRIOR TO CONSTRUCTION. GRADING AND RETAINING WALL AS SHOWN ARE APPROXIMATE AND MUST BE VERIFIED. THE ARCHITECT IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION ON THIS PLAN.

DRYDEN BUILDERS

© JAMES C. HAWTHORN ASSOCIATES ARCHITECTS

REVISIONS

NO.	DESCRIPTION	DATE

DATE
7.21.23

JOB. NO.
23.008

TITLE

SHEET NO.
A1.1

BUILDING B



SOUTH ELEVATION

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



NORTH ELEVATION

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



WEST ELEVATION

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



EAST ELEVATION

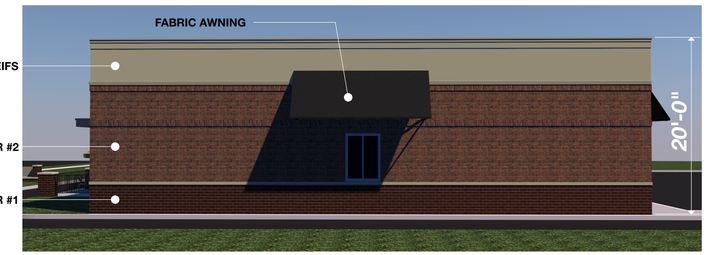
SCALE: 1/8" = 1'-0"

BUILDING A



SOUTH ELEVATION

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



NORTH ELEVATION

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



WEST ELEVATION

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



EAST ELEVATION

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

PROPOSED
RETAIL BUILDING:
GARDNER ROAD
SPRINGBORO, OHIO 45066

DRYDEN BUILDERS
1741 Thomas Paine Parkway
Dayton, OH 45459
Office (937) 439-2728 chris@drydenbuilders.com

JAMES C. HAWTHORN ASSOCIATES
ARCHITECTS
1900 Kress Wood Circle
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STATE OF OHIO ★ REGISTERED ARCHITECT ★ JAMES HAWTHORN 7946
James C. Hawthorn License # 8007946
Expiration Date: 12/31/24

REVISIONS

NO.	DESCRIPTION	DATE

DATE
7.21.23

JOB. NO.
23.008

TITLE

SHEET NO.
A2.1

APPLICATION—PLANNED UNIT DEVELOPMENTS
CITY OF SPRINGBORO PLANNING COMMISSION

☒ REZONING/GENERAL PLAN ☐ FINAL DEVELOPMENT PLAN ☐ RECORD PLAN ☐ VARIANCE

The undersigned requests the approval identified above. Approvals subject to expiration provided for in Chapter 1266 of Planning & Zoning Code. For all approvals under this application, it is understood that it shall only authorize the approval described in this application, subject to any conditions or safeguards required by the Planning Commission, and/or City Council.

❑ Owner
❑ Agent
❑ Lessee
☒ Signed Purchase Contract

APPLICANT NAME: M/I Homes of Cincinnati, LLC

Address: 9349 Waterstone Boulevard, Suite 100
Cincinnati, OH 45249

Telephone No. (513) 833-2206

Fax No. ( ) _____

Email Address jlanham@mihomes.com

PROPERTY OWNER NAME (IF OTHER): Peter S. Morris, Successor Trustee

Address: 1525 S. Main Street
Springboro, OH 45066

Telephone No. (407) 786-5125

Property Address or General Location: 1525 S. Main Street Springboro, OH 45066

Parcel Number(s): 08182000131 & 08182000132 Acreage: 35.62

PUD Category: ☒ Residential ☐ Retail ☐ Office ☐ Manufacturing ☐ Mixed Use

If Mixed Use, Acreage in Each Category: N/A

For Residential Proposed Density 2.11 Number of Residential Units 75 + Existing House

Proposed Use: 75 for sale new homes with a typical lot size of 62'x135'

The applicant or representative who is authorized to speak on behalf of the request must also be present at all meetings.

(Signature of Applicant and/or Agent) 7/21/2023 (Date)

Justin Lanham
Printed Name

M/I HOMES
Welcome to Better

Cincinnati Division
9349 Waterstone Boulevard, Suite 100
Cincinnati, OH 45249
513.248.5400 **OFFICE**

July 21, 2023

Daniel J. Boron, AICP
Planner, City of Springboro
320 West Central Avenue
Springboro, Ohio 45066

Subject: Morris Property – Application for Amendment of Zoning Map & General Plan
Enclosed: Proposed House Elevations and Floorplans (10 Pages)

Dear Mr. Boron,

M/I Homes is pleased to provide an Application for an Amendment of Zoning Map & General Plan for the 35.62 acre Morris property located at 1525 S Main Street Springboro, OH 45066. The proposed General Plan shows (75) single-family detached lots with a typical lot dimension of 62'x135' and 25' front and rear setbacks as well as 5' side setbacks on each side (10' total). The existing house will remain and be platted on a 2-acre lot. The streets are in a 50' public right-of-way that will include 5' sidewalk on both sides of the internal streets.

The proposed plan has 13.72 acres of active and passive open space which is 38.5% of the total acreage. The central 6 acre green space will feature the existing pond, seating shelter, and walking paths. The open space will be owned and maintained by a Homeowners Association that shall govern the community through the Covenants, Conditions, & Restrictions.

If the Amendment of Zoning Map & General Plan is approved, we plan to break ground in the Spring of 2024 with the goal of having a model home open in the Fall of 2024. We will offer for sale detached ranch and two-story homes targeting empty-nester and family buyers. The enclosed house plans include a variety of elevations and colors with square footage ranging from 1,544sf to more than 3,000sf. Buildout is expected to take 3-5 years depending on market conditions. We will propose a new marketing name and submit final house plans at the Final Development Plan stage.

The City of Springboro Master Plan adopted in February 2022 locates the property within Policy Area 16 which is described as having the following existing and preferred future characteristics:

1. Low-to moderate-density detached residential (Pg. 79).
    - The proposed plan density is 2.11 detached du/ac (2.13 including the existing house) which is consistent with the "low-to moderate density" prescribed for Policy Area 16.

M/I HOMES
Welcome to Better

Cincinnati Division
9349 Waterstone Boulevard, Suite 100
Cincinnati, OH 45249
513.248.5400 **OFFICE**

2. Extensive active and passive open space areas (Pg. 79).
   - The proposed plan includes 38.5% active and passive open space including walking paths, seating shelter, naturally wooded areas, and the existing pond.

3. Policy area 16 is characterized by large lot single family residential uses (Pg. 79).
   - While the area does have a mixture of large lots including multiple single-family lots along S.R. 741 that could be redeveloped in the future, there are pockets of residential lots similar in size to the proposed plan most notably across at Heatherwoode Blvd.

4. Encourage safe school access for nearby residents through the establishment of sidewalks and/or walking trails (Pg. 80).
   - The proposed plan includes sidewalk on both sides of the internal streets and a direct sidewalk connection to the school campus to the south.

5. Promote and maintain the Heatherwoode Golf Course as a valuable local and regional amenity (Pg. 80).
   - The proposed plan will not negatively impact the golf course but should be a source of new customers.

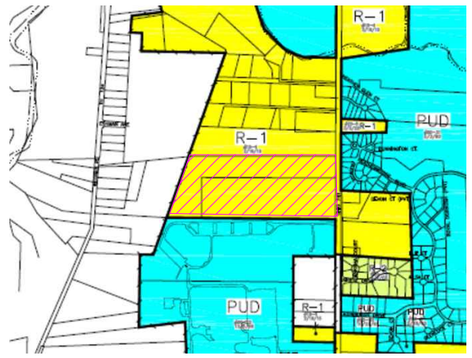
Based on these characteristics, we believe the proposed plan "emphasizes residential uses that conform to the existing character of the neighborhood" as is recommended by the 2022 Master Plan (Pg. 80). We look forward to working with the City of Springboro and creating a community that current and future residents can be proud of. Please contact me should you have any questions or need additional information.

Respectfully,

Justin Lanham
M/I Homes of Cincinnati, LLC
9349 Waterstone Boulevard, Suite 100
Cincinnati, OH 45249
(513) 551-3954
jlanham@mihomes.com



VICINITY MAP 1"=1000'



ZONING MAP: 1"=1000'

R-1	(R-1) ESTATE-TYPE RESIDENTIAL DISTRICT
R-2	(R-2) LOW DENSITY RESIDENTIAL DISTRICT (SINGLE FAMILY)
R-3	(R-3) MEDIUM DENSITY RESIDENTIAL DISTRICT (SINGLE & MULTI-FAMILY)
HBD	(HBD) HIGHWAY BUSINESS DISTRICT
LBD	(LBD) LOCAL BUSINESS DISTRICT
CBD	(CBD) CENTRAL BUSINESS DISTRICT
UVD	(UVD) URBAN VILLAGE DISTRICT
M-1	(M-1) LIGHT MANUFACTURING DISTRICT
M-2	(M-2) HEAVY MANUFACTURING DISTRICT
ED	(ED) EMPLOYMENT CENTER DISTRICT
PUD	(PUD) PLANNED UNIT DEVELOPMENT DISTRICT
PUD-MU	(PUD-MU) PLANNED UNIT DEVELOPMENT-MIXED USE
PUD-O	(PUD-O) PLANNED UNIT DEVELOPMENT-OFFICE
PUD-B	(PUD-B) PLANNED UNIT DEVELOPMENT-BUSINESS
PUD-R	(PUD-R) PLANNED UNIT DEVELOPMENT-RESIDENTIAL
O-R	(O-R) OFFICE-RESIDENTIAL DISTRICT
O	(O) OFFICE PARK DISTRICT
ADD-1	(ADD-1) AUSTIN DEVELOPMENT DISTRICT 1
ADD-2	(ADD-2) AUSTIN DEVELOPMENT DISTRICT 2

1. KASH TERRY ARTHUR
6614 WEIDNER RD
SPRINGBORO OH 45066

2. SAGE LAND DEVELOPMENT LLC
3601 RIGBY RD
STE 300
MIAMISBURG OH 45342

3. CALMES SANDRA L
1405 S MAIN ST
SPRINGBORO OH 45066

4. PENWELL PHILLIP L & BARBARA J
23 DUNNINGTON CT
SPRINGBORO OH 45066

5. BRUNNER E MELVIN & SUSAN
29 DUNNINGTON CT
SPRINGBORO OH 45066

6. MORRIS PETER S TRUSTEE
1525 S MAIN ST
SPRINGBORO OH 45066

7. MORRIS PETER S TRUSTEE
1525 S MAIN ST
SPRINGBORO OH 45066

8. FERGUSON REBECCA A
6584 WEIDNER RD
SPRINGBORO OH 45066

9. SIR EDWARDS GLEN OWNERS ASSOCIATION
44 DUNNINGTON CT
SPRINGBORO OH 45066

10. CHRISTOPHER ANASTASIA
17 DUNNINGTON CT
SPRINGBORO OH 45066

11. MCLAIN DOUGLAS & CHRISTINE
11 DUNNINGTON CT
SPRINGBORO OH 45066

12. ANDERSON JANA S
5 N DUNNINGTON CT
SPRINGBORO OH 45066

13. GOLLIHUGH CURTIS R & LOIS J
4 DUNNINGTON CT
SPRINGBORO OH 45066

14. MUNTZ GARY W & MARY L
10 GLENCOE CT
SPRINGBORO OH 45066

15. BURCH KEVIN W
30 GLENCOE CT
SPRINGBORO OH 45066

16. BURNS PATRICK & PAMELA
5 GLENCOE CT
SPRINGBORO OH 45066

17. VALENTINO NICHOLAS V
15 GLENCOE CT
SPRINGBORO OH 45066

18. ASHBY HULAN C
25 GLENCOE CT
SPRINGBORO OH 45066

19. RUTLEDGE LARRY R JR
35 GLENCOE CT
SPRINGBORO OH 45066

20. HAGAMAN HENRY R & KAREN S
45 GLENCOE CT
SPRINGBORO OH 45066

21. MARTIN LORI A & DUDAS ELMER
55 GLENCOE CT
SPRINGBORO OH 45066

22. SKELDING RICHARD C & ROBIN K
65 N GLENCOE CT
SPRINGBORO OH 45066

23. CARNES RALPH M & MELANIE A
5707 WEIDNER RD
SPRINGBORO OH 45066

24. CARNES MICHAEL A
1520 S MAIN ST
SPRINGBORO OH 45066

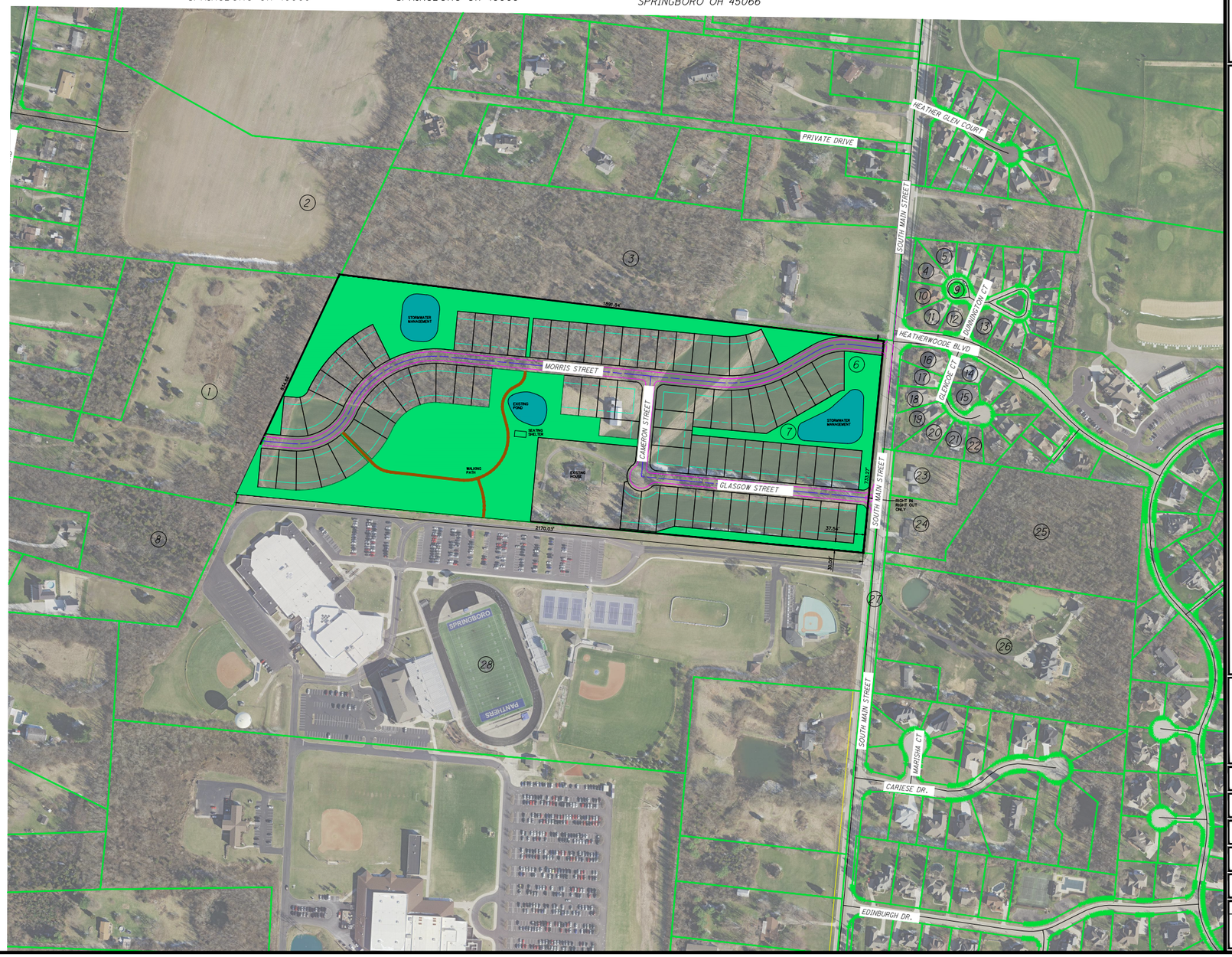
25. CRANE ROBERT M & REGINA
138 TIMBERSIDE CT
SPRINGBORO OH 45066

26. DO DAKLAK CAO & DAKBLA TRAN
1550 S MAIN ST
SPRINGBORO OH 45066

27. CITY OF SPRINGBORO
320 W CENTRAL AVE
SPRINGBORO OH 45066

28. SPRINGBORO COMMUNITY CITY SCHOOLS
1685 S MAIN ST
SPRINGBORO OH 45066

SCALE IN FEET
0 100 200 400



ChoiceOne Engineering
SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
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WHISPERING PINES
CITY OF SPRINGBORO
SCHEMATIC PLAN

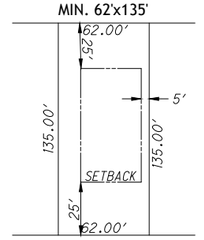
REVISIONS:

FILE NAME	VICINITY
DRAWN BY	JBP
CHECKED BY	JSP
PROJECT No.	WARSPR2303
DATE	07-21-2023
SHEET NUMBER	1 OF 4

Z:\project\Warren\Springboro\WAR-SPR-2303MorrisProperty\WARSPR2303_PreliminaryPlatExhibits.dwg 20-Jul-23 1:07 PM



MIN. 62'x135'



TYPICAL LOT
8,370 S.F.
AVERAGE LOT
9,000 S.F.

PROPOSED STREET RIGHTS OF WAY TO BE 50' IN WIDTH.
INTERNAL STREETS TO BE 29' BACK TO BACK CURB WITH 5' SIDEWALKS.

SITE: 35.62 Ac.

SUMMARY TABLE:

PROPOSED USE: SINGLE FAMILY RESIDENCE
NUMBER OF DWELL UNITS: 75

1 EXISTING HOUSE

NET DENSITY OF RESIDENTIAL USES:
75 UNITS / 35.62 Ac.
= 2.11 UNITS / ACRE

EXISTING ZONING: R-1 ZONING

PROPOSED ZONING: PUD-R ZONING

OPEN SPACE: 13.72 Ac./ 38.5%
STORMWATER MANAGEMENT: 3.1 Ac.

75 LOTS 62'x135'

FRONT SETBACK = 25'
REAR SETBACK= 25'
SIDE SETBACK= 5', 10' TOTAL

OPEN SPACE MAINTAINED BY HOA

PROPOSED WALKING PATH

SCALE IN FEET
0 50 100 200

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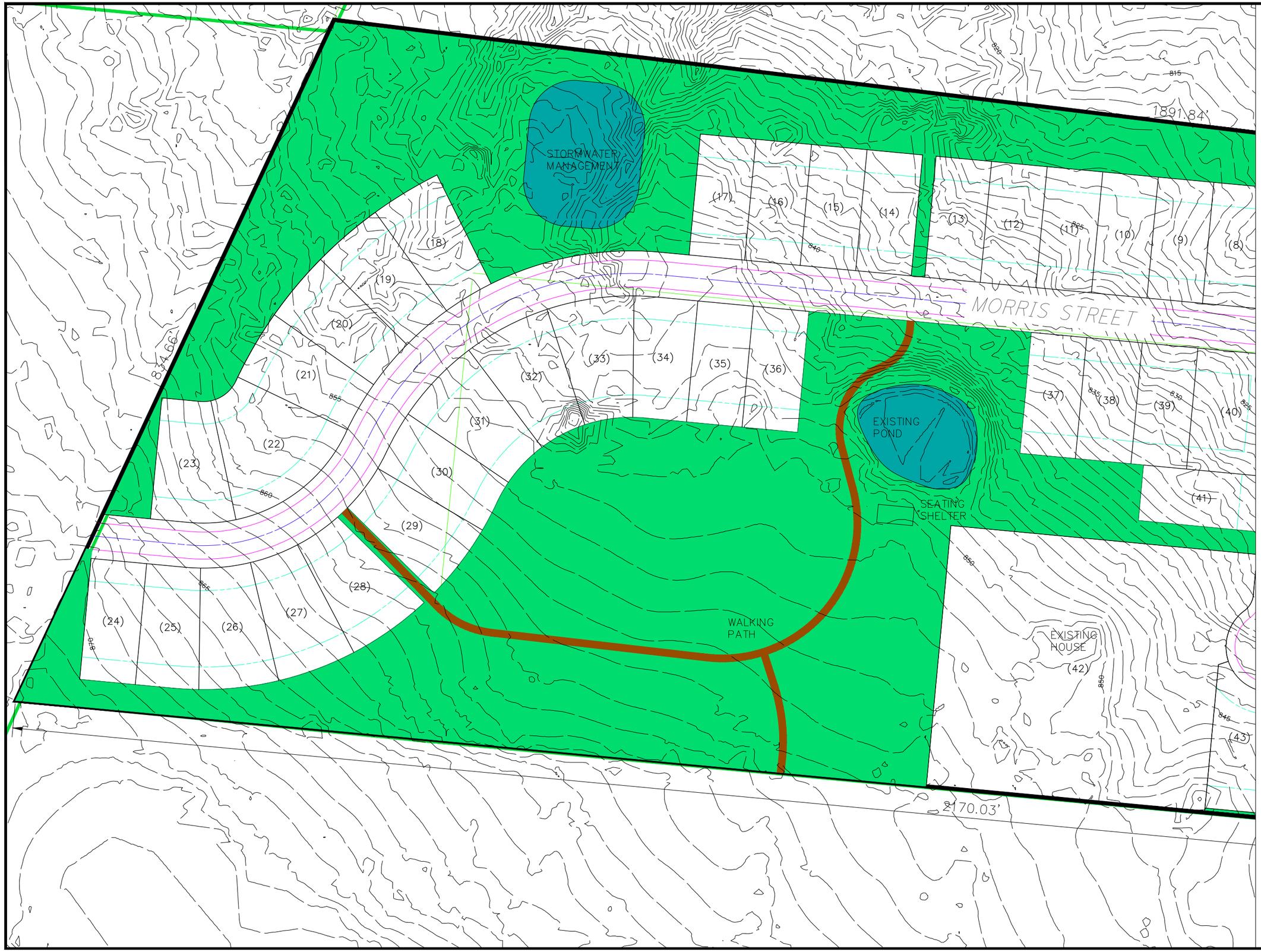
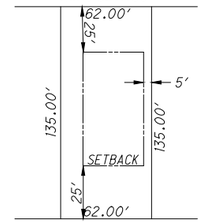
WHISPERING PINES
CITY OF SPRINGBORO
GENERAL PLAN

REVISIONS:

FILE NAME	PHASE
DRAWN BY	JBP
CHECKED BY	JSP
PROJECT No.	WARSPR2303
DATE	07-21-2023
SHEET NUMBER	2 OF 4



MIN. 62'x135'



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8,370 S.F.
AVERAGE LOT
9,000 S.F.

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STORMWATER MANAGEMENT: 3.1 Ac.

75 LOTS 62'x135'

FRONT SETBACK = 25'
REAR SETBACK= 25'
SIDE SETBACK= 5', 10' TOTAL

OPEN SPACE MAINTAINED BY HOA

PROPOSED WALKING PATH

SCALE IN FEET
0 25 50 100

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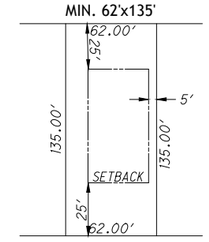
WHISPERING PINES
CITY OF SPRINGBORO
GENERAL PLAN

REVISIONS:

FILE NAME	50 SCALE-1
DRAWN BY	JBP
CHECKED BY	JSP
PROJECT No.	WARSPR2303
DATE	07-21-2023
SHEET NUMBER	3 OF 4





TYPICAL LOT
8,370 S.F.

AVERAGE LOT
9,000 S.F.

PROPOSED STREET RIGHTS OF WAY TO BE 50' IN WIDTH.
INTERNAL STREETS TO BE 29' BACK TO BACK CURB WITH 5' SIDEWALKS.

SITE: 35.62 Ac.

SUMMARY TABLE:

PROPOSED USE: SINGLE FAMILY RESIDENCE
NUMBER OF DWELL UNITS: 75

1 EXISTING HOUSE

NET DENSITY OF RESIDENTIAL USES:
75 UNITS / 35.62 Ac.
= 2.11 UNITS / ACRE

EXISTING ZONING: R-1 ZONING

PROPOSED ZONING: PUD-R ZONING

OPEN SPACE: 13.72 Ac. / 38.5%
STORMWATER MANAGEMENT: 3.1 Ac.

75 LOTS 62'x135'

FRONT SETBACK = 25'
REAR SETBACK= 25'
SIDE SETBACK= 5', 10' TOTAL

OPEN SPACE MAINTAINED BY HOA

PROPOSED WALKING PATH

SCALE IN FEET
0 25 50 100

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WHISPERING PINES
CITY OF SPRINGBORO
GENERAL PLAN

REVISIONS:

FILE NAME	50 SCALE-2
DRAWN BY	JBP
CHECKED BY	JSP
PROJECT No.	WARSPR2303
DATE	07-21-2023
SHEET NUMBER	4 OF 4

Faulkner



Elevation B - Shown w/ Opt coach lights, black windows & Brick Wainscot



Elevation A - Shown w/ Opt coach lights & Brick Wainscot



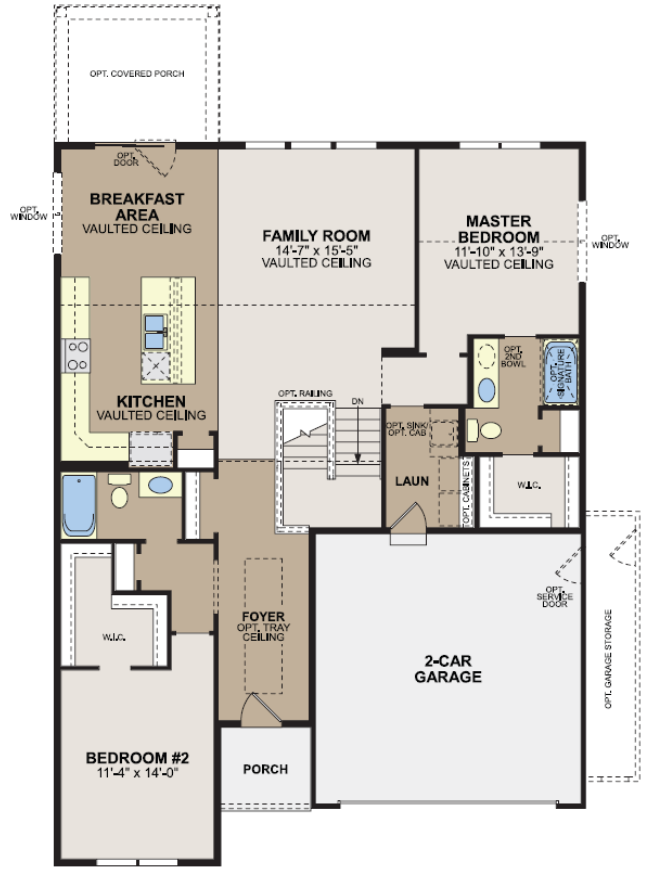
Elevation C - Shown w/ Opt coach lights & Brick Wainscot

Square Feet: 1,544
Bedrooms: 2-3
Full Baths: 2

Half Baths: 0
Garages: 2
Stories: 1

Note: Other elevation materials available and may be required by community. See MIHomes.com for more elevations.

M/I HOMES
Welcome to Better



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MORRIS PROPERTY

M/I HOMES

Cooper



Elevation C - Shown w/ Opt coach lights & Stone Wainscot



Elevation A - Shown w/ Opt coach lights & Brick Wainscot



Elevation B - Shown w/ Opt coach lights & Brick Wainscot

Square Feet: 1,776
Bedrooms: 3
Full Baths: 2

Half Baths: 0
Garages: 2
Stories: 1

M/I HOMES
Welcome to Better

"Note: Other elevation materials available and may be required by community. See MIHomes.com for more elevations."



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MORRIS PROPERTY

M/I HOMES

Melville



Elevation B - Shown w/ Opt Coach Lights & Brick Wainscot



Elevation A - Shown w/ Opt Coach Lights & Brick Wainscot



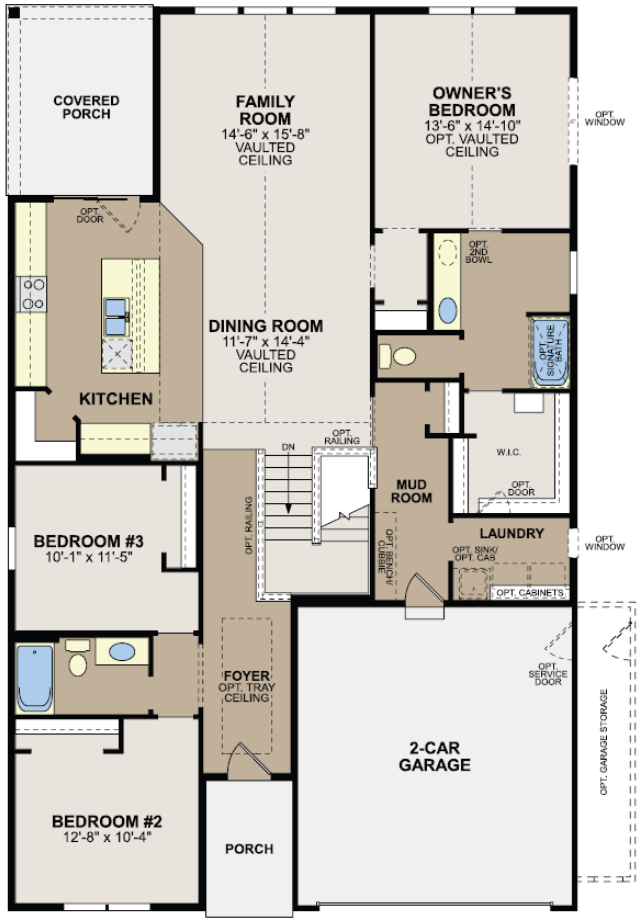
Elevation C - Shown w/ Opt Coach Lights & Brick Wainscot

Square Feet: 1,865
Bedrooms: 3
Full Baths: 2

Half Baths: 0
Garages: 2
Stories: 1

Note: Other elevation materials available and may be required by community. See MIHomes.com for more elevations.

M/I HOMES
Welcome to Better



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MORRIS PROPERTY

M/I HOMES

Serenity





Elevation B - Shown w/Opt Full Brick Front



Elevation C - Shown w/Opt Stone

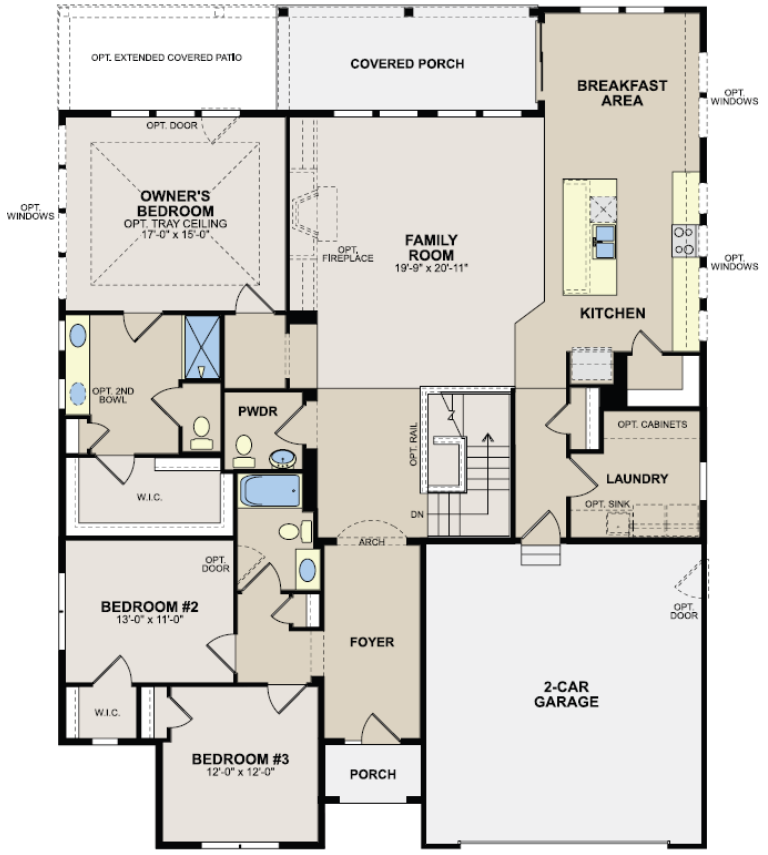


Elevation E

Square Feet: 2,330
Bedrooms: 3
Full Baths: 2

Half Baths: 1
Garages: 2
Stories: 1

M/I HOMES
Welcome to Better



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MORRIS PROPERTY

M/I HOMES

Dawson



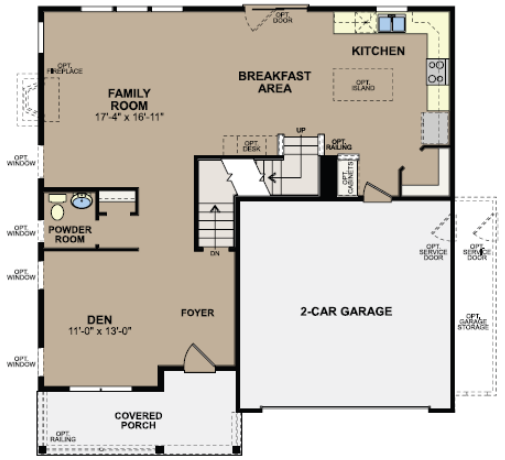

Elevation A


Elevation D - Shown w/Opt Stone

Square Feet: 2,461
Bedrooms: 3
Full Baths: 2

Half Baths: 1
Garages: 2
Stories: 2

M/I HOMES
Welcome to Better



FIRST FLOOR



SECOND FLOOR

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MORRIS PROPERTY

M/I HOMES

Inglewood



Elevation E - Shown w/ Opt Coach Lights



Elevation B - Shown w/ Opt Coach Lights



Elevation C - Shown w/ Opt Coach Lights

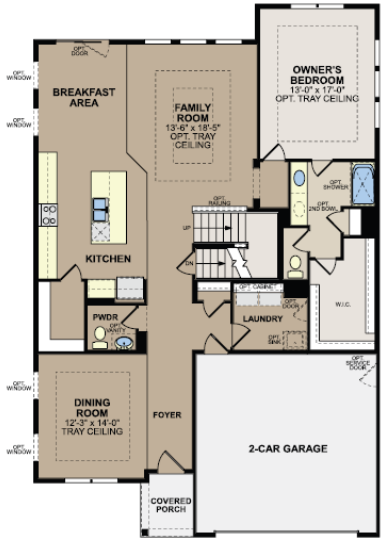


Elevation D - Shown w/ Opt Coach Lights

Square Feet: 2,558
Bedrooms: 3
Full Baths: 2

Half Baths: 1
Garages: 2
Stories: 2

M/I HOMES
Welcome to Better



FIRST FLOOR



SECOND FLOOR

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MORRIS PROPERTY

M/I HOMES

Cooke



Elevation C - Shown w/Opt Stone and Bonus Room



Elevation A



Elevation B



Elevation E

Square Feet: 2,624
Bedrooms: 4
Full Baths: 2

Half Baths: 1
Garages: 2
Stories: 2

M/I HOMES
Welcome to Better



FIRST FLOOR



SECOND FLOOR

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MORRIS PROPERTY

M/I HOMES

Dillon




Elevation A


Elevation B

Square Feet: 2,913
Bedrooms: 4
Full Baths: 2

Half Baths: 1
Garages: 2
Stories: 2

M/I HOMES
Welcome to Better



FIRST FLOOR



SECOND FLOOR

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MORRIS PROPERTY

M/I HOMES

Barrett



Elevation B - Shown w/Opt Coach Lights



Elevation A - Shown w/Opt Coach Lights



Elevation C - Shown w/Opt Coach Lights

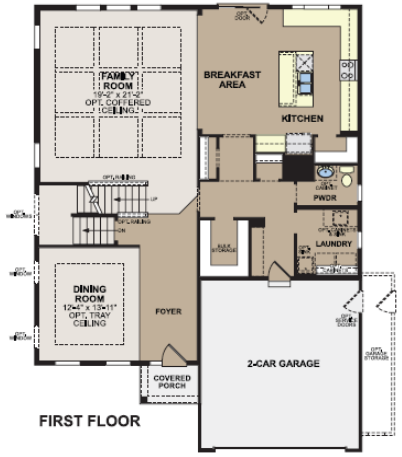


Elevation D - Shown w/Opt Coach Lights

Square Feet: 3,035
Bedrooms: 4
Full Baths: 2

Half Baths: 1
Garages: 2
Stories: 2

M/I HOMES
Welcome to Better



FIRST FLOOR



SECOND FLOOR

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MORRIS PROPERTY

M/I HOMES

Fairview



Elevation E - Shown w/ Opt Coach Lights



Elevation A - Shown w/ Opt Coach Lights



Elevation B - Shown w/ Opt Coach Lights



Elevation C - Shown w/ Opt Coach Lights



Elevation D - Shown w/ Opt Coach Lights

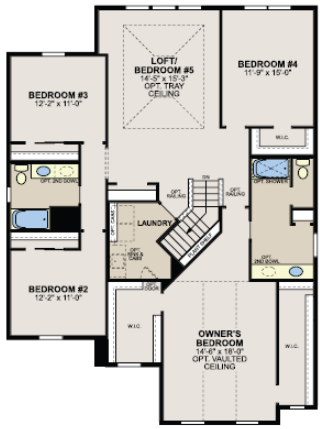
Square Feet: 3,313
Bedrooms: 4
Full Baths: 2

Half Baths: 1
Garages: 2
Stories: 2

M/I HOMES
Welcome to Better



FIRST FLOOR



SECOND FLOOR

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MORRIS PROPERTY

M/I HOMES

City of Springboro
320 West Central Avenue, Springboro, Ohio 45066
Planning Commission Meeting
Wednesday, July 12, 2023

I. Call to Order

Vice Chair Chris Pearson called the Springboro Planning Commission Meeting to order at 6:00 pm at the Springboro Municipal Building, Council Chambers, 320 West Central Avenue, Springboro, Ohio.

Present: Chris Pearson, Vice Chair, Rob Dimmitt, Steve Harding, Matt Leedy, John Sillies, and Mike Thompson

Staff Present: Dan Boron, City Planner; Elmer Dudas, Development Director; Chad Dixon, City Engineer; and September Bee, Planning Commission Secretary.

Mr. Harding motioned to excuse Ms. Iverson. Mr. Dimmitt seconded the motion.

Vote: Pearson, yes; Dimmitt, yes; Harding, yes; Leedy, yes; Sillies, yes; Thompson, yes (6-0)

II. Approval of Minutes

A. June 14, 2023 Planning Commission Minutes

Mr. Pearson asked for corrections or additions to the minutes. There were none.

Mr. Thompson motioned to approve the June 14, 2023 Planning Commission minutes. Mr. Sillies seconded the motion.

Vote: Pearson, yes; Dimmitt, abstain; Harding, yes; Leedy, yes; Sillies, yes; Thompson, yes (5 yes, 0 no, 1 abstain)

III. Public Hearing

A. Major Revision
Village Park PUD-MU, Planned Unit Development-Mixed Use, Southwest Corner North Main Street (SR 741) and Pennyroyal Road, change in list of permitted uses in retail component

The Public Hearing is in regards to a petition to revise the approved general plan for the retail component of the Village Park PUD-MU, Planned Unit Development-Mixed Use, located southwest of the intersection of North Main Street (SR 741) and Pennyroyal Road. The application requests the deletion of the prohibition on drive-in and drive-through facilities in the retail component only. The Village Park PUD-MU was approved in September 2004 and at present allows the 80-acre PUD to be used for residential, office, retail, and open space uses.

The Public Hearing will be limited to 30 minutes; 15 minutes reserved for the opponents, and 15 minutes reserved for the proponents.

DRAFT

Background Information

This agenda item is a request for a major revision to the approved general plan for the Village Park PUD-MU, Planned Unit Development-Mixed Use. The revision would remove the current prohibition on drive-in and drive-through facilities in the retail component of the PUD. The Village Park PUD-MU, approved in 2004, includes four components including the retail component located on the southeast corner of the property

General plan review is part of the first step in the three-step PUD approval process. The proposed use change is defined as a major revision under the terms of Chapter 1266, Planned Unit Developments, of the Planning & Zoning Code. To process the major revision a Public Hearing of Planning Commission will need to be conducted similar to the process used for the processing of rezoning applications by City Council. Following the Public Hearing, a motion will need to be made to approve the major revision in the form of a recommendation to City Council. City Council will then review the major change in the form of a Resolution. There is no Public Hearing of City Council on the requested change.

This agenda item is based on an application filed by Dryden Builders, Centerville, and stemmed from a request for final development plan approval of a plan for a new retail development immediately south of Springboro Wine & Spirits, 748 North Main Street. Both properties are owned by Sahana Properties, LLC. That final development plan included a small retail building fronting North Main Street and wrapped with a drive-though. That final development plan's review cannot proceed until the general plan review is concluded. As mentioned in the June 14th Planning Commission staff report, this will allow the applicant time to submit a more complete final development plan application, and to work with City staff on a traffic study.

Adjacent uses to the subject property include Springboro Wine & Spirits to the north, Huntington Bank to the east on the east side of North Main Street, Biggby's/Farmers & Merchants Bank to the south, and vacant land to the west on the west side of Gardner Road.

Zoning adjacent to the subject property is PUD-MU, for properties to the north, south, and west as part of the Village Park mixed-use development, and PUD for property to the east that is part of the Settlers Walk development on the east side of North Main Street.

Staff Recommendation

Following the Public Hearing, City recommends approval of the major revision to the general plan for the Village Park PUD-MU, retail component.

Comments related to the plans submitted for the June 14th Planning Commission meeting remain applicable for when then final development plan is reviewed.

Discussion

Mr. Pearson asked Mr. Boron to summarize the background and purpose of the Public Hearing.

Mr. Boron stated that the Public Hearing and major revision is in response to the applicant's request to remove the current prohibition on drive-in and drive-through facilities in the retail component of the PUD. This Public Hearing is a mechanism to hear public feedback about the zoning change for the retail component of this development.

Mr. Pearson called for proponents of the request for rezoning.

Mr. Chris Hinkle of Dryden Builders was present to speak as a proponent for the zoning change. He stated that his client is proposing to build two buildings, both which will be leased to tenants once built. Any potential food-service tenant will require a drive-through or drive-in pickup window. Mr. Hinkle noted that there are existing drive-throughs at several locations in Village Park. Parking for the two lots will be consolidated into one parking lot, easing traffic flow.

Mr. Pearson thanked Mr. Hinkle for his comments and called for any other proponents.

Mr. Jordan Ramberger, realtor for the property, was present to speak as a proponents for the zoning change. He said that he agrees with Mr. Hinkle, a drive-up carryout window would be needed if a restaurant were to become a tenant. The builder is not targeting typical fast food type businesses for this property.

Mr. Pearson called for any other proponents. There were none.

Mr. Pearson called for any opponents to change in the PUD-MU use. There were none.

Mr. Pearson closed the Public Hearing. He asked if the Planning Commission members wanted to add this item to the regular agenda for this evening.

Mr. Thompson asked if the existing drive-throughs in the district had been approved previously.

Mr. Boron answered that the other facilities with a drive-through are banks and were permitted always. This major change will correct an omission and will allow the Biggby's remain as a permitted use. This change would affect the retail component of this PUD only.

Mr. Thompson said that it only makes sense to approve the change in zoning since there are already existing drive-throughs.

Mr. Harding agreed with Mr. Thompson and noted that the builders would still have to follow all the normal, existing guidelines when they start building. He has no problem adding this item onto the agenda this evening.

Mr. Pearson called for a motion to approve adding the Major Revision, Village Park PUD-MU, Planned Unit Development-Mixed Use, Southwest Corner North Main Street (SR 741) and Pennyroyal Road, change in list of permitted uses in retail component to the agenda for the Planning Commission meeting this evening.

Mr. Boron commented that this item would need to be added to the action agenda.

Mr. Harding motioned to approve adding the item to the agenda. Mr. Thompson seconded the motion.

Mr. Pearson called for roll call.

Vote: Pearson, yes; Dimmitt, yes; Harding, yes; Leedy, yes; Sillies, yes; Thompson, yes (6-0)

Mr. Pearson said the motion is passed unanimously.

DRAFT

Mr. Harding made a motion to approve the Major Revision, Village Park PUD-MU, Planned Unit Development-Mixed Use, Southwest Corner North Main Street (SR 741) and Pennyroyal Road, change in list of permitted uses in retail component. Mr. Dimmitt seconded the motion.

Mr. Pearson called for roll call.

Vote: Pearson, yes; Dimmitt, yes; Harding, yes; Leedy, yes; Sillies, yes; Thompson, yes (6-0)

Mr. Pearson said the motion is passed unanimously.

Mr. Boron said that the next step in this process is to send this to City Council where they will review it at their meeting on August 3rd, at which time they will vote on a resolution to revise the PUD for the Village Park Planned Unit Development. Planning Commission may see the final development plan for preliminary review as early as the August 9th meeting.

IV. Agenda Items

A. Final Approval
Site Plan, 3233 South Tech Boulevard, new commercial building for Innomark

Background Information

This agenda item is a request for final approval of a site plan for the construction of a 96,000-square foot office/manufacturing/warehouse building for Innomark Real Estate, LLC, property owner at 3233 South Tech Boulevard in the South Tech Business Park. This item was reviewed at the June 14th Planning Commission meeting at which time this item was authorized for final approval at a future meeting.

Adjacent land uses include to the north, undeveloped land that is in the Springboro portion of the Austin Landing development fronting the I-75/Austin Boulevard interchange, to the east Innomark's existing facility at 3233 South Tech Boulevard, to the south Invotec at 10909 Industry Lane on the southwest corner of Industry Lane and South Tech Boulevard, and Kingscoat at 3334 South Tech Boulevard, and to the west Renegade at 3363 South Tech Boulevard.

Adjacent zoning to the north is ADD-2, Austin Development District 2, and to the east, south, and west, ADD-1, Austin Development District 1.

Staff Recommendation

City staff recommends approval of the site plan for the proposed Innomark facility with the following conditions. Applicant to note that staff comments may continue to be resolved concurrent to the review processes for the building and site.

1. Proposed lighting fixtures are acceptable in design and color-temperature standards with the exception of the square canopy light which is used in one location. Areas along east side of proposed building exceed 6.0 foot-candle maximum intensity.
2. Signage plan for building/site subject to review by Zoning Inspector for compliance with Sign Code, Chapter 1281, of Planning and Zoning Code outside of the site plan review process.

3. Cannot verify storm sewer design without pipe lengths. Add pipe lengths on all storm runs. Check depth of MH #17 to verify the correct slope for the tie into the existing storm along South Tech Boulevard. Call out proposed MH #18 to be a doghouse manhole.
4. Montgomery County to review water and sewer design. Water line testing (if any) will be per Montgomery County standards. Revise note on sheet C-1.3 accordingly.
5. An "AS BUILT" drawing showing as built location and elevations of all improvement shall be submitted prior to the issuance of an occupancy permit
6. Clearcreek Fire District does not have comments at this time.

Discussion:

Mr. Brandon Rose of Ferguson Construction was present to discuss their application for preliminary review, 3233 South Tech Boulevard, proposed new Innomark Building.

Mr. Pearson asked Mr. Boron if he had any additional comments.

Mr. Boron said that the Planning Commission had seen this item at the June meeting. The proposed new building is a permitted use within the zoning district, ADD-1, Austin Development District 1.

Mr. Pearson asked Mr. Ferguson if he had any questions regarding the staff comments.

Mr. Ferguson said they will comply with all staff comments.

Mr. Pearson called for discussion by the Planning Commission members.

Mr. Harding motioned to approve the final approval provided that Ferguson Construction will continue to work with City staff to finish out the six staff comments. Mr. Thompson seconded the motion.

Mr. Pearson called for roll call.

Vote: Pearson, yes; Dimmitt, yes; Harding, yes; Leedy, yes; Sillies, yes; Thompson, yes (6-0)

Mr. Pearson said that the motion is approved unanimously.

B. Final Approval
Site Plan Review, 25 West Central Avenue (SR 73), new River Valley Credit Union branch

Background Information

This agenda item is a request for final approval, based on an application submitted by Berardi+Partners, Columbus, Ohio on behalf of the property owners, proposing the construction a new River Valley Credit Union branch at 25 West Central Avenue (SR 73). This item was reviewed on a preliminary basis at the March 8th Planning Commission meeting. The ATM/ITM was approved at the April 12th Planning Commission meeting. The site is currently occupied by a River Valley Credit Union branch that includes a drive through. Under this proposal, the applicants propose to (1) construct of a new stand-alone drive-through facility to maintain operation on the property during redevelopment, (2) demolish the existing branch building, and (3) construct a new 2,490-square foot branch location as indicated in the submitted materials.

The subject property is located at the southwest corner of West Central Avenue (SR 73) and Florence Drive. Access is provided to the site from both streets in the existing and proposed plans, however the number of curb cuts on the Florence Drive frontage has been significantly revised in the proposed site plan.

The subject property is zoned UVD, Urban Village District. While the applicant has been advised that the proposed use is permitted, the redevelopment of the site and any other in the UVD will need to comply with the design and development standards of the UVD in addition to the standard site plan review requirements.

Existing land uses include to the east include a vacant City-owned parcel at the southwest corner of South Main Street (SR 741) and West Central Avenue (SR 73), and a multi-tenant building located at 20 South Main Street. To the south is the former site of Jonathan Wright Elementary School, to the west is Republic Mortgage at 55 West Central Avenue, and to the north on the north side of West Central Avenue (SR 73) is the developing Wright Station mixed-use area.

Existing zoning in the vicinity of the subject property is UVD to the east, west, and north, and R-2, Low-Density Residential District, on the former site of Jonathan Wright Elementary School.

Staff Recommendation

City staff recommends approval of the site plan for 25 West Central Avenue for River Valley Credit Union's new branch location subject to the following comments:

1. For lighting plan, confirm with City staff U.S. Architectural Lighting selected design, photometric analysis exceeds permitted levels near the ATM/ITM canopy, and provide information for proposed architectural lighting proposed for the west and north elevations.
2. Signage plan to be reviewed by Zoning Inspector for compliance with Chapter 1281, Signs. That review is separate from the site plan review process.
3. Monument sign minimum setbacks from right of way is 8 feet. Sheet C200 – Remove site keynote 16 from the curb and gutter section on the site plan; that is keynote 7. Add detail for ODOT Type 2 curb and gutter on sheet C202. Depress the curb and gutter at the drive aprons, note accordingly on plans.
4. Provide record plan dedicating the additional right of way.
5. Sheet C400 – Utility Keynote 5 – Water Service lateral to be "K" copper material; revise accordingly. Revise Keynote 7 to be a direct tap to existing water main, and not a tapping sleeve. Add info for keynote 4. Utility plan note 2 – water line cover to be minimum 54". Remove utility note #10 to state water main shall be class 52 ductile iron.
6. Remove curb and gutter on SR 73 accordingly and replace with ODOT Type 2 depressed curb and gutter. Add details on plan.
7. Sanitary sewer lateral to be tapped straight into existing main with sweeping wye, and remove riser in street. Add cleanouts in the sewer lateral in the parking lot at all bends. Lateral to be SDR 35 or SCH 40 material (utility note 8 – sheet C400).
8. An "AS BUILT" drawing showing as built location and elevations of all improvement shall be submitted prior to the issuance of an occupancy permit.
9. Clearcreek Fire District does not have comments at this time.

Discussion:

Mr. Harding recused himself from the meeting because River Valley Credit Union is one of his clients.

Mr. Steve Gagliardi and Ms. Jennifer Cahill of Berardi+Partners were present to discuss the site plan review for 25 West Central Avenue (SR 73), a new River Valley Credit Union branch.

Mr. Pearson asked Mr. Boron to summarize this item.

Mr. Boron stated that Planning Commission first saw this item at the March meeting. It was for the overall demolition of the existing building and ATM and then constructing a new branch building with an ATM/ITM onsite. In April the applicant presented plans for the ATM/ITM construction which will be built before the original branch office is demolished and rebuilt. This will allow for continuity of service for their customers. An additional request to add a generator at the south end of the property on the applicant's site should be easily accommodated. Screening of the generator from general site lines will be required.

Mr. Boron asked if Mr. Dudas or Mr. Dixon had any additional questions or comments.

Mr. Dudas replied that they do not have any additional questions or comments at this time.

Mr. Pearson asked if Mr. Gagliardi and Ms. Cahill if they had any questions regarding the staff comments.

Mr. Gagliardi said that they were working on the photometric comments for the lighting and that the lighting will be adjusted to the parameters required by the City.

Mr. Pearson asked if Planning Commission members had any questions.

Mr. Sillies asked about the timing of the project.

Ms. Cahill said they have already started Phase I of the project, the new ATM/ITM is being constructed now.

Mr. Pearson called for a motion to approve the Site Plan Review, 25 West Central Avenue (SR 73), new River Valley Credit Union branch.

Mr. Sillies motioned to approve. Mr. Leedy seconded the motion.

Mr. Pearson called for roll call.

Vote: Pearson, yes; Dimmitt, yes; Leedy, yes; Sillies, yes; Thompson, yes (5-0)

Mr. Pearson said that the motion is approved unanimously.

Mr. Harding rejoined the meeting after the vote was taken.

C. Final Approval

Final Development Plan, Southwest Corner East Central Avenue (SR 73) and Red Lion-Five Points Road, Clearview Crossing at Stoneridge PUD-R, Planned Unit Development-Residential, residential subdivision.

Background Information

This agenda items is a request for final approval of the final development plan filed by LSSE, Dublin, Ohio, on behalf of Maronda Homes of Cincinnati. The final development plan would allow for the development of a 41-dwelling unit subdivision by Maronda Homes on the southwest corner of East Central Avenue (SR 73) and Red Lion-Five Points Road. The 12.08-acre site was rezoned to PUD-R, Planned Unit Development-

Residential, earlier this year concurrently to the approval of a general plan outlining the plan for the conceptual layout of lots, streets, and open space in the subdivision. The rezoning and general plan were approved by the Planning Commission at their January 18th meeting; the rezoning was approved by City Council on April 6th (effective date May 6th) along with the general plan.

Final development plan review is the second stage of the three-step approval process for PUDs. The final development plan provides more detailed information, building on the general plan including proposed lots, streets, and open space. No action is required of City Council on the final development plan. Record plan review and approval by both Planning Commission and City Council is the last step in the PUD approval process.

Adjacent land uses in Springboro include the North Hills subdivision to the north on the north side of East Central Avenue (SR 73), and The Enclave subdivision to the south. In Clearcreek Township, single-family residential in the Stoneridge subdivision to the east, and to the west single-family residential along the south side of East Central Road, and on the north side of East Central Road farmland.

Adjacent zoning in the Springboro portion of the vicinity is PUD-R for both North Hills and The Enclave. In Clearcreek Township the Stoneridge subdivision to the east is zoned R-1, Rural Residence, and lands to the west are zoned SR-1, Suburban Residence.

Courtesy notification letters were sent out to all property owners within 300 feet of the subject property prior to the October 12th meeting. As stated at that meeting no follow-up letters will be mailed while this project is under review by Planning Commission, however City staff has notified The Enclave Homeowners Association (HOA) of the proposal being on the agenda. Should this proposal move forward, the same property owners will be notified of a Public Hearing of City Council on the rezoning of the property.

This item was reviewed on a preliminary basis at the June 14th meeting at which time the Planning Commission authorized this item to be placed on a future agenda for final approval.

Staff Recommendation

City staff is recommending approval of the final development plan for the Clearview Crossing PUD-R residential subdivision contingent on the following:

1. Provide housing plans for incorporation into the final development plan approval. All homes to be consistent with Section 1264.06, Development Standards for Specific Uses, Single-Family Dwellings (Detached) for compliance of some of the home plans with (b) Appearance, and (c) Garages with respect to 60% maximum width and side/rear access.
2. Coordinate with City staff on provided landscaping plan adjusted to Chapter 1280 standards. Landscaping for frontage revised to 1 tree per 40 foot of frontage, not 1 tree per 20 feet, interior street tree calculations appear to be correct, buffers to south and west are at rate of 1 tree per 20 feet, and site landscaping is in addition to other landscaping, not part of the interior street, exterior street, and buffer requirements. This may be accounted for as landscaping on individual home sites. Also, while it appears no existing trees are to be retained, note that existing landscaping 4 inches DBH may be credited against Chapter 1280 requirements.
3. For the fence proposed along the 10-foot pathway, provide a minimum two-foot buffer from the edge of pavement. The same standard applies to landscaping and other obstructions.
4. Expand vehicle pull-off area near centralized mailbox location to improve functionality.
5. Development signage, if proposed, to be reviewed by Zoning Inspector for compliance with Sign Code and sight distance requirements. Same applies to construction and other temporary signage.

6. Provide graphic scale on all applicable streets.
7. Provide turnaround along bike path at the west side of water vault adjacent to SR 73.
8. Clear the vegetation along the west side of the property within the existing 30 foot sanitary sewer easement.
9. Remove construction drawings from final development plan submittal. The construction drawings will be reviewed and approved by engineering staff.
10. Clearcreek Fire District does not have comments at this time.

Discussion:

Ms. Joanne Shelly of LSSE and Mr. Brian Hoesl of Maronda Homes were present to discuss the Final Approval, Final Development Plan, Southwest Corner East Central Avenue, (SR73) and Red Lion-Five Points Road, Clearview Crossing at Stoneridge PUD-R, Planned Unit Development-Residential, residential subdivision.

Mr. Pearson asked Mr. Boron for a summary of the agenda item.

Mr. Boron said that this item is for the final approval of the final development plan for Clearview Crossing. The review of the general plan for rezoning took place earlier this year following the adoption of the ordinance. The second phase is the final development plan. Construction plans are being processed concurrently with the final development plan. Most of the staff comments have to do with engineering requirements.

Mr. Pearson asked Ms. Shelly and Mr. Hoesl if they had any questions or concerns regarding the staff comments.

Ms. Shelly said they will work out the details of the landscaping with staff as the project progresses. Graphic scales will be added to all sheets as requested by Engineering.

Mr. Pearson asked if Planning Commission members had any questions or comments.

Mr. Sillies asked if the neighbors adjacent to the property had any objections to the new subdivision.

Mr. Boron stated that the City has received no further comment from them.

Mr. Harding said that be believed their questions had been answered at previous meetings.

Mr. Pearson call for a motion to approve the Final Approval, Final Development Plan, Southwest Corner East Central Avenue (SR 73) and Red Lion-Five Points Road, Clearview Crossing at Stoneridge PUD-R, Planned Unit Development-Residential, residential subdivision.

Mr. Harding motioned to approved. Mr. Sillies seconded the motion.

Mr. Pearson called for roll call.

Vote: Pearson, yes; Dimmitt, yes; Harding, yes; Leedy, yes; Sillies, yes; Thompson, yes (6-0)

Mr. Pearson said that the motion is approved unanimously.

D. Preliminary Review

Final Development Plan, Village Park PUD-MU, Planned Unit Development-Mixed Use, office component, Southwest of Intersection of Gardner Road and Village Park Drive, proposed fire station

Background Information

This agenda item is a preliminary review of a final development plan for the development of Clearcreek Fire District No. 24 on Gardner Road between Village Park Drive and Anna Drive in the office component of the Village Park PUD-MU, Planned Unit Development-Mixed Use. The final development plan, submitted by KZF Design, Cincinnati, would allow for the construction of a four-bay drive-through bay for apparatus, fire district administrative offices, living areas for Station No. 24, and training areas. The 4.0635-acre site will also include in the long-term space for use by the City of Springboro Public Works Department to be constructed at a later date.

The proposed site is vacant and is located in the office component of the Village Park PUD-MU. The use is permitted in this location as an essential service. Direct access for the apparatus bays will be to Gardner Road. Secondary access will be provided by private access drives shared with other properties to the north and south of the fire station.

All lands in the vicinity are within the Village Park PUD-MU, Planned Unit Development-Mixed Use, which was approved in September 2004. Immediately to the north of the proposed fire station site is Wade Insurance, 775 Gardner Road, to the south are two platted vacant office sites and Goddard School, 705 Gardner Road, and to the west is the City of Springboro's Gardner Park in the open space component of the PUD. To the east is the retail component of the PUD including Springboro Wine & Spirits, 748 Gardner Road, the vacant parcel that brought about tonight's Public Hearing, and Farmers & Merchants Bank/Biggby's Coffee, 720 Gardner Road. Zoning for all lands in the vicinity is controlled by the Village Park PUD-MU.

Staff Comments

City staff has the following comments regarding this agenda item:

1. Following preliminary review of final development plan, provide exterior lighting plan consistent with Chapter 1273, Exterior Lighting, of Planning and Zoning Code, and Village Park PUD-MU design standards.
2. Following preliminary review of final development plan, provide landscaping plan consistent with Chapter 1280, Landscaping, of Planning and Zoning Code, and Village Park PUD-MU design standards.
3. While not part of final development plan review process, signage to be reviewed by Zoning Inspector for compliance with Sign Code and Village Park PUD-MU design standards. Same applies to construction and other temporary signage.
4. Verify the existing location of the 8" water main, and relocate all sections to be (at a minimum) 10 feet away from the proposed building and patio/exterior recreation space.
5. Provide removal details of the existing fire hydrant at the rear entrance.
6. Relocate storm run from CB 6 to CB 5 to be 10 feet away from building.
7. Provide record plan replatting the lot lines and establishing/vacating any necessary easements.
8. Remove and replace curb along Gardner road curb cut to be depressed ODOT Type 2 curb and gutter.
9. Water laterals to be min 1" K copper with meter and mtu inside building. Sewer laterals to be min 6" SDR 35 with 2% slope.
10. Additional engineering comments are reserved until such time when designed improvements are completed on construction drawings, including but not limited to: easements, water, sanitary, and storm sewer.

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11. Clearcreek Fire District does not have comments at this time.

Discussion:

Mr. Scott Csendes, Mr. Mike Roach and Clearcreek Fire Chief Steve Agenbroad were present to discuss the proposed new fire station.

Mr. Pearson asked for a summary of the agenda item from Mr. Boron.

Mr. Boron said that this portion of the Village Park PUD-MU is dealing with the office component of the business park. This building which will provide essential services is a permitted use of the space. The new station will be located on the west side of Gardner Road.

Mr. Csendes said that they had no questions at this time regarding the staff comments.

Mr. Pearson asked about the location of the section of the park which is to be reserved for the City of Springboro's Public Works department.

Mr. Csendes said that it will be located at the southwest corner, near the Goddard School. It will be used for salt and equipment storage when it is built in the future. There are no immediate plans for this building to be constructed by the City of Springboro.

Mr. Boron stated that the salt and equipment storage building will not be a part of this review and approval process. The only thing being reviewed right now is the proposed new fire station.

Mr. Csendes said that he will remove the building from their future submittals to the Engineering department.

Mr. Pearson asked why this location had been selected for this project.

Chief Agenbroad replied that the call volume for assistance in the northwest response district of Springboro has greatly increased. This area includes Settlers Walk which continues to grow and future development is expected. Having a fire station at this location will significantly decrease the response time to render aid. Their northern boundary for response is just south of Austin Landing.

Mr. Thompson asked how large the fire station would be once completed.

Chief Agenbroad said that the current fire station near Heatherwoode is 12,000 square feet. The new station, which will be their headquarters, will be 22,000 square feet. An additional fire truck and ambulance will be put into service as well. A training tower, to be constructed at the back of the station, will be included at this site.

Mr. Sillies asked about the proposed path for the emergency vehicles to enter North Main Street (SR 741).

Chief Agenbroad stated that the location of the emergency would determine which direction they would turn out onto Gardner Road and then either on to North Main Street (SR 741), Remick Boulevard or Pennyroyal Road. Their vehicles are equipped with traffic preemption devices which will trigger the traffic signals.

Mr. Pearson asked if there were any further questions or comments.

There were no questions or comments.

Mr. Boron said that if Planning Commission members approve of the Final Development Plan Preliminary Review, this item could be added to the August 9th Planning Commission meeting agenda. A full set of plans would need to be developed by the submittal deadline of July 21.

E. Preliminary Review

Rezoning, R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential, 1525 South Main Street (SR 741), proposed single-family residential subdivision

F. Preliminary Review, General Plan, R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential, 1525 South Main Street (SR 741), proposed single-family residential subdivision

Background Information

These agenda items are based on a request filed by M/I Homes of Cincinnati, LLC, seeking rezoning and general plan approval for the proposed Whispering Pines subdivision, a residential subdivision on an approximately 35.62-acre site located at 1525 South Main Street (SR 73). The applicant is requesting rezoning and general plan approval under the City's Planned Unit Development (PUD) process from R-1, Estate-Type Residential District, to PUD-R, Planned Unit Development-Residential.

The applicant proposes to develop a total of 95 single-family residential units on the site. The proposed development density is 2.67 units per acre with typical lots proposed to be 8,370 square feet and an average of 9,000 square feet. Current zoning permits two units per acre on lots no less than 20,000 square foot lots. Two access points are proposed for the subdivision, both from the frontage on South Main Street, one at the midpoint of the property frontage, and a second on the northeast corner aligned with the intersection of Heatherwoode Boulevard. A stub street is also proposed for the west end of the site. That stub street would project into lands in Clearcreek Township. A total of 10.6 acres of open space is shown, or 30% of the property area. Residential PUDs require a minimum 25% open space.

The proposed rezoning/general plan appears as two separate items on the Planning Commission work session agenda. Rezoning together with general plan review and approval are the first step in the three-step PUD review and approval process. Approval by both Planning Commission and City Council are required. Final development plan, similar to the City's site plan review process, review and approval by Planning Commission is the second stage in the process. Final development plan may be submitted in a number of sections in conjunction with a site's incremental development. Record plan review and approval by both Planning Commission and City Council is the last step in the PUD approval process. This allows for the subdivision of lots and the dedication of right-of-way and open spaces. As with final development plans, record plans may be submitted in a number of sections as the development is completed.

The subject property is presently zoned R-1, Estate-Type Residential District. That classification dates to 2015 when large parts of Springboro were reclassified to R-1 District from Township or (T)R-1 District. The (T)R-1 designation was allowed to remain on properties annexed over time from lands originally in Clearcreek and Franklin Townships. The R-1 and (T)R-1 have similar development densities, however moving to R-1 District allows the City to manage its own long-range development though its own Planning and Zoning Code.

Adjacent land uses in Springboro include large lot residential to the west in Clearcreek Township, and to the north in the City. To the east, on the east side of South Main Street, cluster housing on Glencoe Court, Dunnington Court within the Heatherwoode PUD, and large lot residential, and to the south the Springboro Community Schools Junior High School and athletic facilities.

Adjacent zoning in the Springboro portion of the vicinity is R-1 District to the north and southeast, PUD to the east encompassing the Heatherwoode PUD, and PUD to the south incorporating the Junior High School and other school property to the south. Lands to the west in Clearcreek Township are zoned SR-1, Suburban Residence, which allows development up to two units per acre when connected to a centralized sewage system.

The *Springboro Master Plan*, adopted by City Council in February 2022, includes recommendations for the long-range development of the community. It is divided into 16 policy areas that make specific recommendations for smaller portions of the community and are grouped together because of proximity, land use patterns, date of development and other general characteristics. Policy Area 16, Heatherwoode, includes the subject area and land including the Heatherwoode, Farms of Heatherwoode, and Ashton Woods subdivisions, the City's Heatherwoode Golf Course, and the Springboro Community Schools main campus. The policy area recommends residential development and redevelopment that conforms to the existing character of adjoining neighborhoods. The plan also recommends connecting neighborhoods in the area, and improving pedestrian and bicycle access.

The three residential subdivisions in the vicinity were developed at the following densities:

- Ashton Woods, 21 units on 10.62 acres, 1.98 units/acre
- Farms of Heatherwoode, 162 units on 80.79 acres, 1.78 units/acre
- Heatherwoode, 221 units on 105.71 acres, 2.08 units/acre. This includes Glencoe Court and Dunnington Court. The golf course is not included in the density calculation.

Aside from school property, lands immediately abutting the property are 11.23 acres (west), and 16.65 acres (north) in area.

Courtesy notification letters were sent out to all property owners within 300 feet of the subject property prior to the July 12th meeting. Should this proposal move forward, the same property owners will be notified of a Public Hearing of City Council on the rezoning of the property.

Staff Comments

City staff has the following comments on the general plan and rezoning for 1525 South Main Street:

1. What is warranting a departure from the development density of the surrounding area as recommended in Master Plan Policy Area 16 (2.67 dwelling units proposed, three nearby subdivisions developed at 1.72 to 2.10 units/acre)?
2. Home plans to comply with Section 1264.06, Design Standards for Single-Family Detached Dwellings, of Planning and Zoning Code.
3. Indicate proposed exterior building materials for the subdivision.
4. Provide minimum lot sizes for all proposed lots.
5. Indicate percentage of open space that is set aside for storm water detention, that is buffering to adjacent development, and set aside for amenities within the subdivisions.

6. Reorganize the proposed open space plan so that it provides future residents with more quality open space this is contiguous and usable, then drains the property, then buffers neighboring development in that preference order.
7. Incorporate the circa 1832 Janney House into the common area of the subdivision, the home of a conductor on the Underground Railroad, and later home to a resident that was instrumental in the restoration of the Null Log Home.
8. Plan to incorporate an east-west multiuse trail into the design of the subdivision to connect Heatherwoode on the east with land fronting Weidner Road to the west.
9. Provide an access point to the open space between lots 62 and 63.
10. Proposed name of development to be changed. Whispering Pines is an existing street.
11. Streets to be built to City specifications, including 29 feet back to back of curb with 5 feet sidewalks. Back of sidewalk to be along the right of way line.
12. An HOA shall be developed to maintain all common elements, including but not limited to: detention facilities, sump drains, identification signage, central mailbox unit(s) and open space.
13. Provide location of Central Mailbox Unit(s), which are to be reviewed by the Post Master.
14. Engineering comments are reserved until such time when designed improvements are completed on construction drawings, including but not limited to: water, sanitary, storm sewer and detention basin design.
15. Traffic study is currently being reviewed.
16. Dedicate the right of way along South Main Street (SR 741) and make any necessary roadway improvements, including but not limited to roadway widening (if needed), pavement markings and signage.
17. Consider implementing traffic calming controls on Glasgow and Morris Streets.
18. Clearcreek Fire District does not have comments at this time.

Discussion:

Mr. Dudas recused himself from the meeting because the property for this agenda item is located in his neighborhood.

Mr. Justin Lanham of M/I Homes of Cincinnati, LLC, Mr. Gilbert Morris III, property owner, and Ms. Sunny Morris, property owner, were in attendance to answer any questions from the Planning Commission.

Mr. Pearson asked Mr. Boron to summarize this agenda item.

Mr. Boron said that this is two properties encompassing approximately 35 acres at 1525 South Main Street (SR 741). All property owners within 300 feet of this property have been notified of the rezoning request. It is currently zoned R-1, Residential District, which allows up to two units per acre on 20,000 square foot minimum. The applicant is asking for rezoning to PUD-R with up to 95 units on this property. There are several items of concern with this application. Proposed access to the property is in a problematic high volume traffic area of the community.

Mr. Pearson addressed the first staff comment about why the applicant feels the rezoning from R-1 to PUD-R is warranted.

Mr. Lanham said that the Master Plan that the City adopted one year ago references policy areas and policy area 16 has surrounding character of the area which is considered to be a low to moderate density but it is not well-defined what low to moderate density means. The applicant is proposing a residential district which will be two to four units per acre.

Mr. Harding asked how many units would be possible if the property is not rezoned as requested.

Mr. Lanham replied that it would probably be 50 to 55 units if the property is not rezoned.

Mr. Harding said that one of the goals of the Master Plan is to create housing diversity and affordability.

There was a discussion among Planning Commission members and staff regarding how much space would be required for right-of-ways, and storm water management areas.

Mr. and Ms. Morris explained that their goal with this property is to provide a variety of housing so that people can have more choices when trying to find a home in Springboro.

Planning Commission members and staff had a discussion regarding how density is calculated and how it affects the size of the lots.

Mr. Pearson commented that he is concerned with the design proposed for the street layout. He feels that it is too much like a racetrack which tends to encourage drivers to not pay attention to their surroundings as much.

Mr. Leedy asked if the proposed entrance/exit to the left is offset from the Heatherwoode entrance.

Mr. Dixon said the entrance/exit is offset from Heatherwoode. A traffic study has been conducted and he awaiting the results of the study.

Mr. Boron added that as far as the traffic flow will go, the placement of the entrance/exit makes the most sense for the area in question. He is confident that issues with the entrance/exit will be resolved if the project moves forward.

Mr. Lanham stated that there is a tree-line buffer which separates the property from the Junior High School and they intend to keep it there to help as a sound buffer when school sporting events are taking place.

Mr. Pearson asked about the historic house, known as the Janney House, located on the property.

Ms. Morris said that the home is currently unoccupied and a portion of the house is original to 1832. Additions have been made to the home and to restore it to its original state would be a massive renovation. It is not registered on any historic registry and is essentially an old farmhouse at this point. She indicated that M/I Homes has said that they will keep the building if the Springboro Community does not want it destroyed.

Mr. Boron said that the Janney House is an important part of Springboro's history as it was a conductor house on the Underground Railroad. The Historical Society and the community in general would like it to be preserved rather than destroyed.

Ms. Morris asked if the Janney House would be considered community property to the City or just to the subdivision residents.

Mr. Boron replied that it depends upon what M/I Homes proposes regarding its use and upkeep. Other historical properties have been used for community rooms, a pool house and even privately owned and maintained.

A discussion about how the traffic flow could be adjusted to accommodate keeping the existing house was had by Planning Commission members, staff and the applicant.

Mr. Pearson said that in order to move forward with making any decisions regarding the rezoning Planning Commission would need to see revised plans incorporating the changes discussed.

Mr. Leedy and Mr. Pearson added that Planning Commission would like to have a better idea of how the applicant intends to address the issues discussed this evening before they would feel comfortable voting for or against the agenda item.

Mr. Thompson said he thinks that Springboro would benefit by having more affordable housing available for purchase.

Mr. Sillies said his main concern right now is the question of density. The type of homes to be built is secondary, in his opinion.

The general consensus among Planning Commission and staff was that M/I Homes needs to revised their plans and then re-submit them for review at a later date.

Mr. Lanham asked what the process is going forward.

Mr. Boron told Mr. Lanham that the deadline to submit for the next Planning Commission meeting is Friday, July 21 and the plan can be conceptual in nature. Staff will work with them to get together a reasonable plan which should include smaller lots, no density increase, and more open space.

Mr. Boron said that the next Planning Commission meeting will be held on Wednesday, August 9 at 6:00 pm in Council Chambers.

Mr. Pearson called for a motion to adjourn.

Mr. Harding motioned to adjourn the July 12, 2023 Planning Commission Meeting at 7:48 pm
Mr. Sillies seconded the motion

Mr. Pearson called for roll call.

V. Guest Comments

Mr. Pearson called guest comments.

There were no guest comments.

VI. Planning Commission and Staff Comments

Mr. Pearson asked Mr. Boron if he had any further comments.

Mr. Boron said that there will be additional items on the August 9 agenda.

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VII. Adjournment

Mr. Pearson called for a motion to adjourn.

Mr. Harding motioned to adjourn the July 12, 2023 Planning Commission Meeting at 7:38 pm
Mr. Sillies seconded the motion.

Vote: Pearson, yes; Dimmitt, yes; Harding, yes; Leedy, yes; Sillies, yes; Thompson, yes (6-0)

_____
Becky Iverson, Planning Commission Chairperson

_____ _____
Dan Boron, Planning Consultant September Bee, Planning Commission Secretary

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