

CITY OF WASHBURN
119 Washington Avenue
P.O. Box 638
Washburn, WI 54891



715-373-6160
715-373-6161
FAX 715-373-6148

NOTICE OF PLAN COMMISSION MEETING

DATE: Thursday, December 20, 2018
TIME: 5:30 P.M
PLACE: Washburn City Hall

AGENDA:

- Call to Order
- Roll Call
- Approval of Minutes – November 15, 2018
- Discussion and Action on Architectural Review/Downtown Design Review for a Proposed Modification to a Structure at Tax ID# 33228 112 S. Washington Avenue, Nicholas Wills - Petitioner
- Discussion and Action on New Site Plan/Architectural Review for Pearl Beach Construction, Lot 48 on City Land Sale List, Tax ID# 32607, Corner of S. Central Ave. and W. Harborview Dr., Karl Dornburg - Petitioner
- Plan Commission Will Visit the Site of South Shore Brewery at 532 W. Bayfield Street. This Site Visit Will Allow for the Members to Engage in Discussion and Pose Questions Related to a Potential Future Zoning Code Amendment to Allow for an Enlarged Structure on the Site and also Potential Site Development Standards. No Final Decisions Shall be Rendered During this Meeting.
- Adjourn

November 15, 2018
5:30pm Washburn City Hall

CITY OF WASHBURN PLAN COMMISSION MEETING

COMMISSION MEMBERS: Dave Anderson, Richard Avol, John Baregi, Leo Ketchum-Fish, Jeremy Oswald, Adeline Swiston.

ABSENT: John Gray,

MUNICIPAL PERSONNEL: Scott Kluver-City Administrator, Tammy DeMars-City Treasurer/Deputy Clerk

Meeting called to order at 5:30PM by Avol attendance as recorded above.

Approval of Minutes – October 18, 2018 – Moved by Swiston to approve minutes of October 18, 2018 as presented, second by Anderson. Motion carried unanimously

Discussion & Recommendation on Request to Vacate the Alley in Block 6 of Vaughn and Austrian Addition to the Townsite of Washburn Adjacent to Lots 19 and 20, Stephanie Arntsen- Petitioner – Ms. Arntsen present. Petitioner is trying to sell her property, but ran into issues as the garage is encroaching on neighboring properties and is on the City alley. The remainder of the alley was vacated in 1980 but the property owner back then objected to completely vacating the alley because it would cut off legal access to the garage. Unfortunately, they did not address the encroachment issue at the time. Kluver has no objections to the vacating as long as the access issue is addressed and utility easements are maintained. The petitioner and the church are in negotiation for the sale of Lot 20, which would satisfy the access issue and this would need to be done before final approval of the vacation would be given. Moved by Avol to recommend approval of the request to vacate the alley in Block 6 of Vaughn and Austrian Addition to the Townsite of Washburn adjacent to Lots 19 and 20, maintaining utility easement and contingent on the access issue being addressed, second by Ketchum-Fish. Motion carried unanimously.

Discussion & Action on Plan Commission Resolution 18-001 to Amend the Comprehensive Plan Land Use Map to Change Land Use Districts for Boat Storage Buildings Near the Washburn Marina-Washburn Harbor Commission, Petitioner- The Harbor Commission is requesting this change as the Marina and the owners of the boat storage building, they depend on each other for customer service. If approved this would be the first step, once the Comprehensive Plan is amended a zoning map change will be needed to be consistent with the land use map. Moved by Avol to recommend approval of Resolution 18-001 to amend the Comprehensive Plan Land Use Map to change land use districts for boat storage buildings near the Washburn Marina, second by Swiston. Discussion included if it would be beneficial to extend the change to encompass the property owned by Pearl Beach, at this time no one thought it was necessary to do so. Original motion approved unanimously.

Plan Commission will Visit the Site of South Shore Brewery at 532 W. Bayfield Street. This Site Visit Will Allow for the Members to Engage in Discussion and Pose Questions Related to a Potential Future Zoning Code Amendment to Allow for an Enlarged Structure on the Site and also Potential Site Development Standards. No Final Decisions Shall be Rendered During this Meeting – This item was taken off the Agenda for tonight as Mr. Belanger had to go out of town business to attend.

Adjourn - Moved by Oswald to adjourn @ 5:55pm, second by Baregi. Motion carried unanimously.

Respectfully Submitted,
Tammy L. DeMars
Treasurer/Deputy Clerk

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To: Honorable Mayor and City Council Members
From: Scott J. Kluver, ^{SK} Administrator
Re: Downtown Design Review – Nick Wills, Residential Structure
Date: December 14, 2018

Enclosed you will find a request from Mr. Nicholas Wills to construct an awning on the multifamily structure at 112 S. Washington Avenue. The structure is located within the Downtown Design Overlay District and the project would be considered major work per zoning code 14-5.

Please note that the property is also considered a legal non-conforming use (multifamily housing), and the use may continue until it ceases for 12 months or more. The provision that needs to be noted is 21-5(d) is that structural alterations may not exceed 50 percent of the equalized value of the structure on a cumulative basis. At this time, the equalized value of the property is \$139,900. The estimated project cost is \$2,500. If approved, the structure could yet be altered by \$67,450 for the remainder of its natural life as long as the use remains non-conforming.

Please see the building design standards of 14-7 (as revised which I have included). Provisions (5), (6), and (7) seem to apply. I note that the awning provisions appear to be intended for front awnings on the front of businesses. This is a little different as this is at the rear of a residential structure. The intention or the awning, or roof extension, is to address the snow sliding off of the roof.

I do not have an objection to this request, but we must make sure that the code is applied in a fair and logical manner.

CONSTRUCTION PERMIT APPLICATION

Rec'd 11/26/18

Remodeling
 Windows
 Doors
 Roofing
 Siding
 Plumbing/HVAC

Permit Request:

AWNING
 New Construction
 Deck
 Fence
 Flat Work
 Demolition
 Electrical

Complete the following with name, address, (house # and mailing address) & telephone

Owner NICHOLAS WILLS E-Mail NIXIT1@GMAIL.COM
 Construction Contractor BLACKHAWK CONSTRUCTION Phone 715-209-6506
 Address BAYFIELD WI License # _____
 Excavation Contractor _____ Phone: _____
 Address _____ License # _____

Owner is ultimately responsible for all code compliance related to the work for which this permit is issued.

PROJECT INFORMATION

Site Address 112 S WASHINGTON AVE Pin # _____
 RE Tax ID # _____ Zoning District _____ Lot Area _____

Description of work AWNING ON E. SIDE OF BLDG. SET ON (4) 4" x 4" TREATED POSTS.
AND EXTENDING 6' AWAY AND 28' ALONG SIDE OF BLDG USING TREATED LUMBER
SET ON CONCRETE FILLED SONOTUBE WITH METAL BROWN ROOFING.
2x8 TREATED RAFTERS Estimated Project Cost 2500.⁰⁰

NEW CONSTRUCTION	Area Involved	Water & Sewer:
Building Height _____	Basement _____ sq ft	Water Municipal or Private Well
1-story Other _____	Living Area _____ sq ft	Sewer Municipal or Septic
2-story Basement _____	Garage _____ sq ft	Permit Numbers _____
	Total _____ sq ft	

Additional permits that may not be covered by this application: *Driveways; Sewer; Water.*

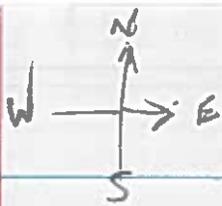
I agree to comply with all applicable codes, statutes and ordinances and with the conditions of this permit; understand that the issuance of the permit creates no legal liability, express or implied, on the State of Wisconsin or the City of Washburn; and certify that all of the above information is accurate. If I am an owner applying for an erosion control or construction permit, I have read the cautionary statement regarding contractor financial responsibility on the reverse side of this application form.

Applicant Signature Date 11-26-18

CONDITIONS OF APPROVAL This permit is issued pursuant to the following conditions. Failure to comply with these conditions may result in suspension or revocation of this permit or other penalty.

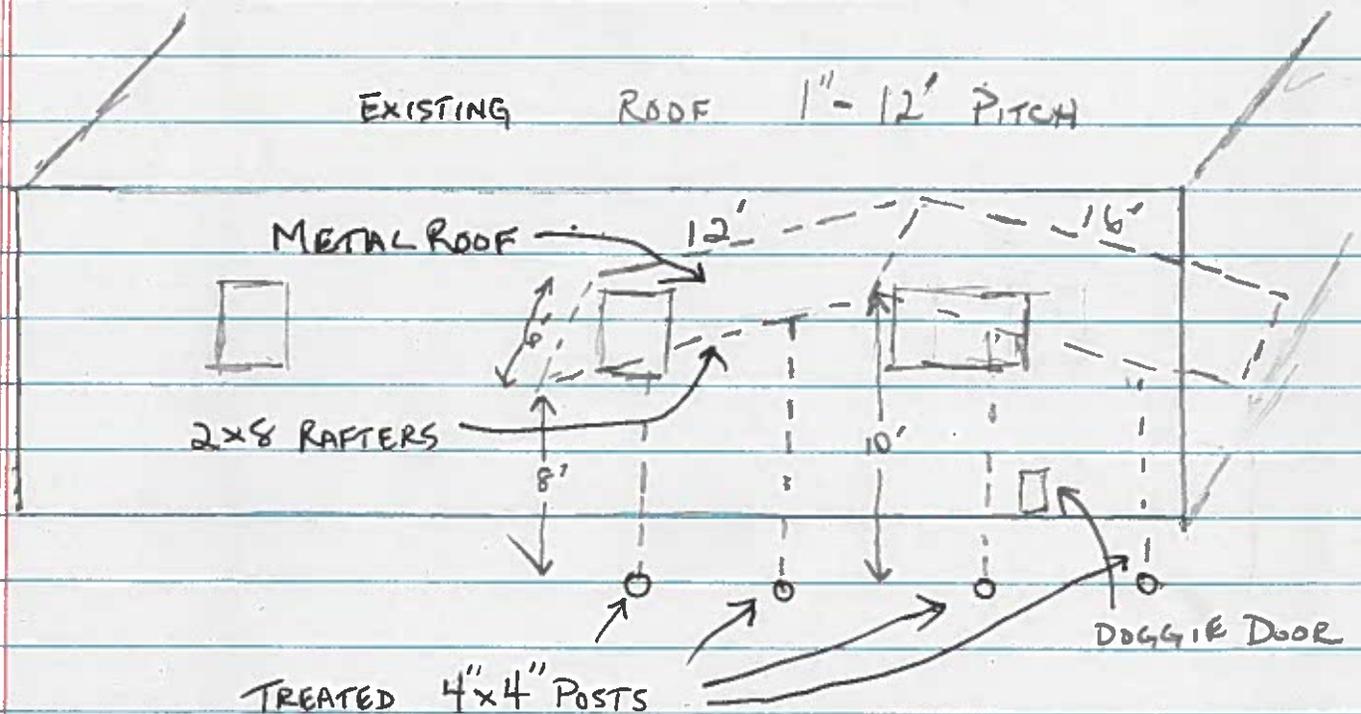
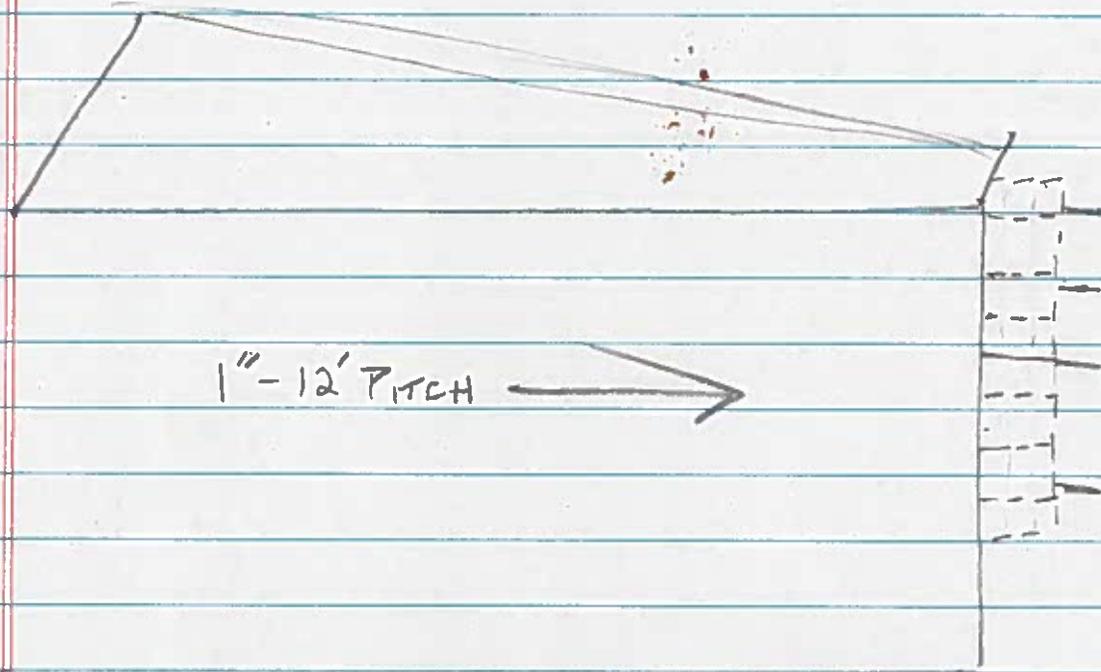
See Attached Condition Letter

NOTES	FEES (per Title 15 Municipal Code)		PERMIT ISSUED BY:
	<input type="checkbox"/> Remodeling <input type="checkbox"/> New Construction <input type="checkbox"/> Fence <input type="checkbox"/> Flat Work <input type="checkbox"/> Siding <input type="checkbox"/> Roofing <input type="checkbox"/> Driveway	<input type="checkbox"/> Demolition <input type="checkbox"/> Deck <input type="checkbox"/> Shelter <input type="checkbox"/> _____ <input type="checkbox"/> Early Start TOTAL _____	DATE ISSUED _____ PERMIT NO. _____

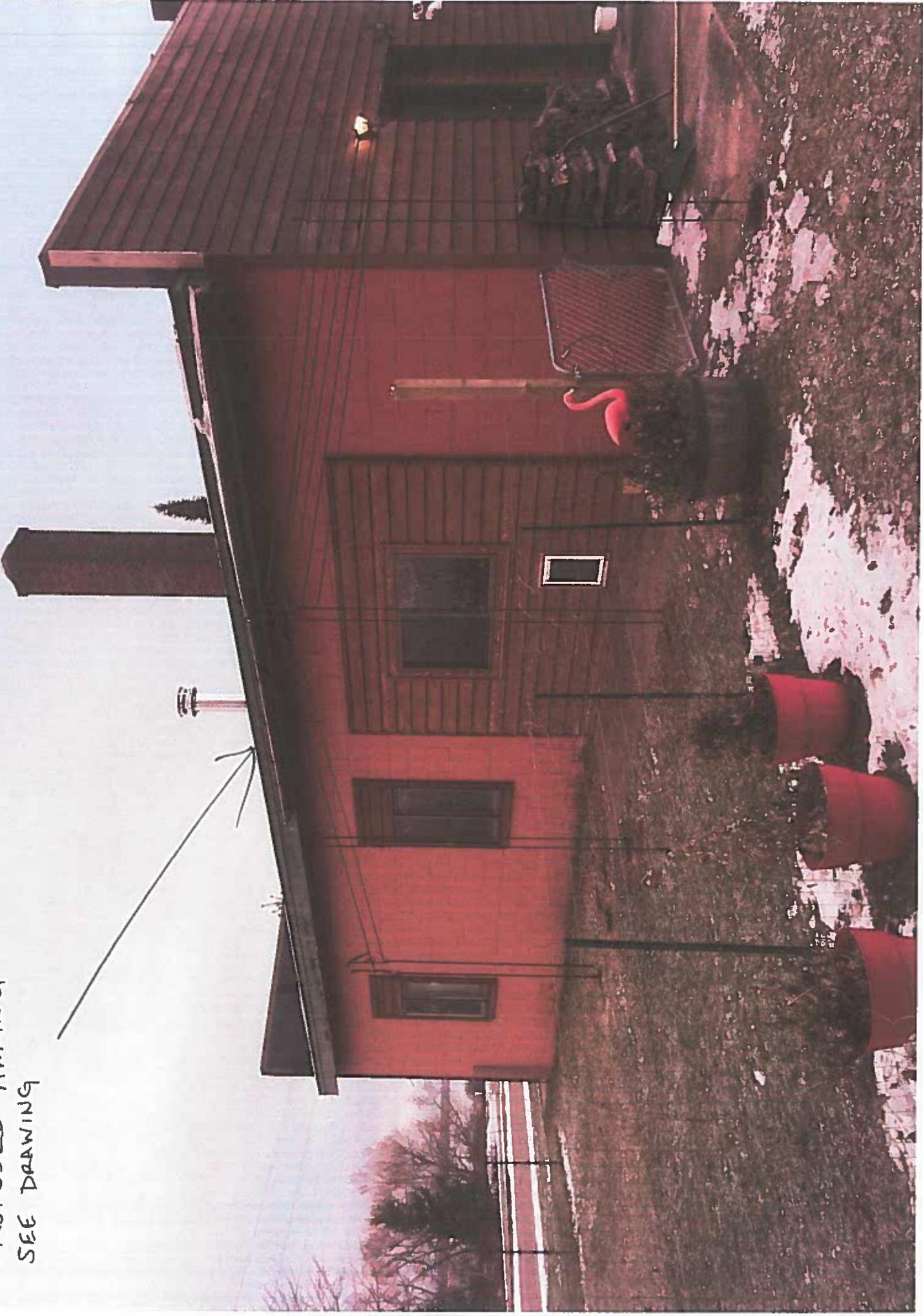


112 S WASHINGTON AVE

DIVERTER FOR ICE COMING OFF BLDG.



PROPOSED AWNING
SEE DRAWING

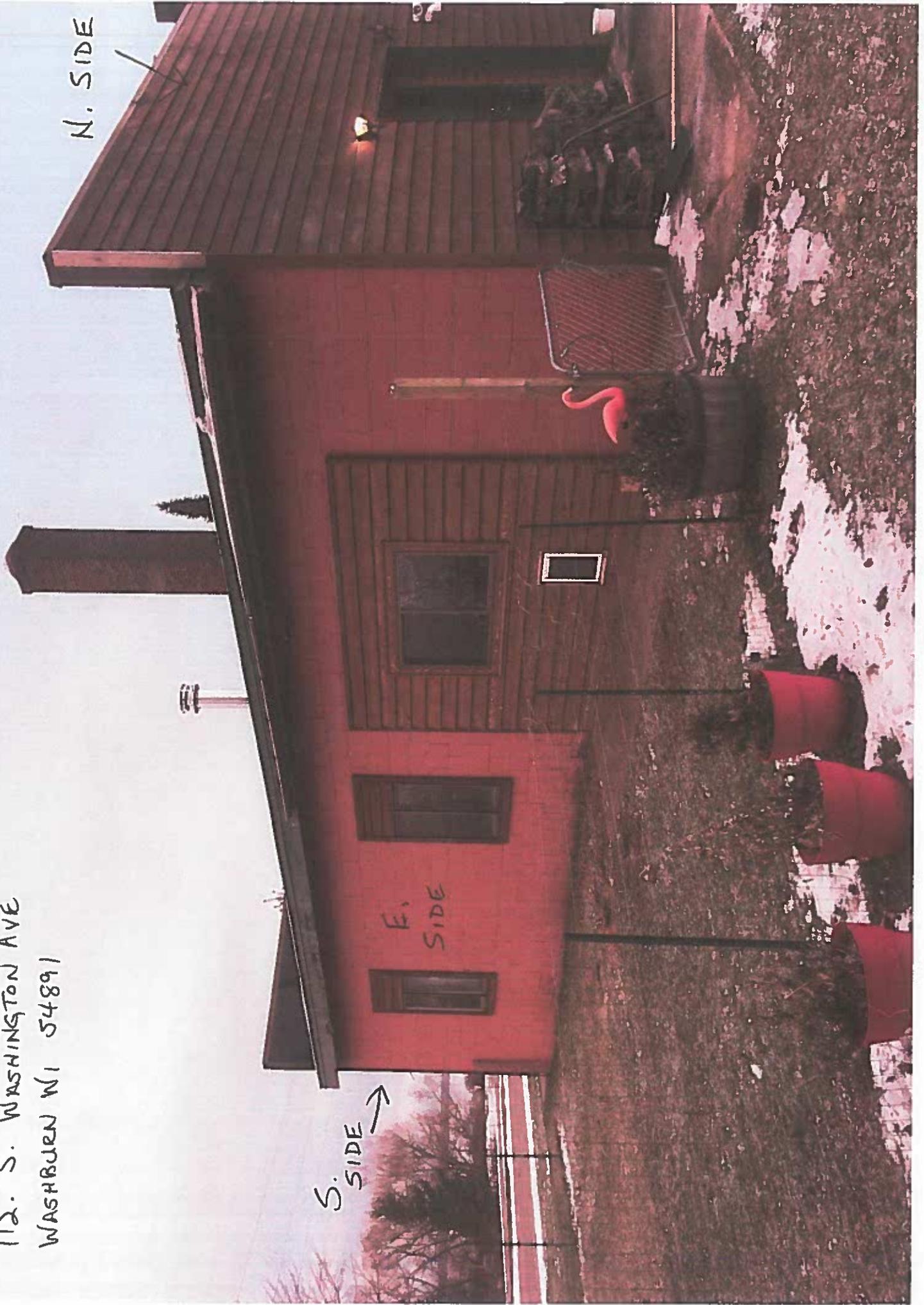


EXISTING STRUCTURE
112. S. WASHINGTON AVE
WASHBURN WI 54891

N. SIDE

S. SIDE →

E. SIDE



Real Estate Bayfield County Property Listing

Today's Date: 11/26/2018

Property Status: Current
Created On: 3/15/2006 1:16:13 PM

Description	Updated: 8/8/2017
Tax ID:	33228
PIN:	04-291-2-48-04-05-1 00-312-31100
Legacy PIN:	291107405000
Map ID:	

Municipality:	(291) CITY OF WASHBURN
STR:	S05 T48N R04W
Description:	ORIG TOWNSITE OF WASHBURN LOTS 25-28 BLOCK 45 IN 2017R-568132 544A
Recorded Acres:	0.000
Calculated Acres:	0.198
Lottery Claims:	0
First Dollar:	Yes
ESN:	102

Tax Districts	Updated: 3/15/2006
1	STATE
04	COUNTY
291	CITY OF WASHBURN
046027	SCHL-WASHBURN
001700	TECHNICAL COLLEGE

Recorded Documents	Updated: 7/13/2012
LAND CONTRACT	
Date Recorded: 4/28/2017	2017R-568132
QUIT CLAIM DEED	
Date Recorded: 6/26/2012	2012R-544467 1085-243
CONVERSION	
Date Recorded: 3/15/2006	447-84;532-126;612-64

Ownership	Updated: 8/8/2017
NICHOLAS M & NOREEN M OVADIA WILLS WASHBURN WI	
Billing Address:	Mailing Address:
NICHOLAS M & NOREEN M OVADIA WILLS PO BOX 302 WASHBURN WI 54891-0302	NICHOLAS M & NOREEN M OVADIA WILLS PO BOX 302 WASHBURN WI 54891-0302

Site Address	* Indicates Private Road
112 S WASHINGTON AVE , UNIT A	WASHBURN 54891
112 S WASHINGTON AVE , UNIT B	WASHBURN 54891

Property Assessment	Updated: 10/16/2006		
2018 Assessment Detail			
Code	Acres	Land	Imp.
G1-RESIDENTIAL	0.000	10,400	123,500

2-Year Comparison	2017	2018	Change
Land:	10,400	10,400	0.0%
Improved:	123,500	123,500	0.0%
Total:	133,900	133,900	0.0%

Property History	N/A
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(b) **Major work.** Any work not classified as minor work in this section shall be reviewed using the procedures specified below.

- (1) buildings - architectural review
- (2) site work - site plan
- (3) signs - sign permit

Examples of major work includes relocation of an existing building, construction of a new building, addition to an existing building, alteration of a building elevation, alterations to windows, siding, entries, and trim, erection of new signs or modification of existing signs, changes to the site including parking, pedestrian circulation, and the like.

14-6 Building setbacks

The setback of buildings from street-yard and side-yard lot lines shall be compatible with existing buildings in the immediate area.

14-7 Building design

In addition to meeting the standards in Division 9 of Article 8, buildings shall comply with each of the following:

- (1) **Building height.** The height of a building shall not be more than one story taller or shorter than the height of the adjoining building. In no event, shall the height of a building exceed the maximum building height established for the base zoning district.
- (2) **Special requirements for large buildings.** A building façade fronting on a public street with a frontage of 75 feet or more shall be designed to look like two or more individual building fronts. This may be achieved by using different building materials, facade articulations, or other design approach that gives the appearance of separate, but attached buildings.
- (3) **Horizontal rhythms.** The horizontal pattern of exterior building elements formed by patterns of building openings for windows and doors, and related elements such as piers and columns shall be spaced at regular intervals across all visible façades of the building.
- (4) **Vertical rhythms.** The floor heights on main façades shall complement those of adjoining buildings. The rhythm of the ground floor shall harmonize with the rhythm of upper floors. The vertical pattern of exterior building elements formed by patterns of building openings for windows and doors, and related elements such as sills, headers, transoms, cornices, and sign bands shall be compatible in design and elevation with adjoining buildings in immediate area.
- (5) **Roof forms.** Flat or gently sloping roofs which are not visible from the street grade shall generally be used. Mansards or other exotic roof shapes are not characteristic of the district's character and are prohibited.
- (6) **Awnings.** The size, color, placement, and design of an awning should complement the architectural character of the building on which it is located. Soft, weather-treated canvas or vinyl materials which allow for flexible or fixed installation shall be used. Awnings covered with shingles, metal roofing, or the like are prohibited. Backlit awnings are prohibited.
- (7) **Building materials.** Selected building materials shall be compatible with those of existing buildings in the immediate area which generally consist of natural materials such as stone, brick, and wood. Concrete masonry units, corrugated metal, half-log siding, and vinyl siding are prohibited.

Amendment(s):

1. Ordinance 18-006, adopted October 8, 2018

14-8 Off-street parking and access

(a) **Placement.** Off-street parking should be located to the rear of the principal building, or on the side as a less preferable alternative.

(b) **Paving.** New parking lots that are located to the side of a building shall be hard surfaced (e.g., interlocking pavers, asphalt, or concrete).

(c) **New curb-cuts.** New curb-cuts shall occur on the side streets rather than on Bayfield Street.

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To: Honorable Mayor and City Council Members
From: Scott J. Kluver, ^{SK} Administrator
Re: Site Plan Review – Pearl Beach Construction
Date: December 13, 2018

Enclosed you will find the site plan for the Pearl Beach Construction development. Below is my summary of the various areas for review:

Site Plan – Dimensional standards comply (e.g. setbacks, building size, impervious area, etc.). An upstairs residence is proposed, and a two bedroom unit is allowable with the current square footage. If Mr. Dornburg would use this unit for personal use, a conditional use permit (CUP) would be required. At this time, he is planning to have it available for employees/general rent so no CUP is required at this time. Site provisions 8-1 through 8-164 have been reviewed and are in compliance. The architect should verify the sewer lateral elevations required to reach the sewer main in the easement area west of the property. Water access is possible off of Harbor View Drive.

Architectural Review – In reviewing section 8-181 through 8-184 as recently revised, it is noted that at least 50 percent of the exterior is constructed of brick/masonry. It was also noted that as the front elevation of the building (Central Avenue) is 890 square feet. As such, a canopy/entryway was added to meet the requirement of dividing the space into planes of 500 square feet or less. It is my judgement that the proposed plans meet the required architectural standards.

Landscaping – The requirements of Article 16 for the landscaping appears to have been met. The required number of points for plantings are: along the street frontage (329 points), building foundation (136 points), parking lot (39 points), and lot interior requirements (55 points). I calculate at least 340 points for street frontage, 140 points for building frontage, 42 points for parking (one tree on the NE counted), and 54 shrub points for the interior requirements plus additional points for the existing trees on the south boundary. It should be noted that additional trees are planted on the west boundary as a buffer that is not technically required, but requested to provide a barrier from the neighboring property.

Parking and Loading – One residential unit is indicated for the upstairs. This would require two parking spaces. There is 960 sq. ft. of downstairs office space which requires four parking spaces. The minimum

number of parking spaces required is six. With six or more spaces, the parking lot must have a solid surface and the parking lot is indicated as asphalt.

Signs and Murals – No sign proposed at this time. Any sign added in the future will need to meet the code requirements.

Outdoor Lighting – Two different lighting fixtures are utilized, one over and one under 1000 lumens; however, both are cutoff compliant. Both fixtures, at the distances that they are proposed, would be less than the .2 foot-candles of light trespass onto the neighboring property (standard met at about 50 feet from fixture). Height of the lighting is at 16 feet or less. This is zone 1 for outdoor lighting, so 100,000 lumens per acre are allowed. The property is 1.26 acres, so 126,000 lumens are allowed. Eight TWD LED 40 K fixtures with an average 9,214 lumens each are proposed (73,712 lumens) and five Mako LED with 425 lumens each (2,125 lumens) are proposed. The total number of lumens is within the limit. The lighting will meet the minimum .2 foot-candles for the loading area. The fixtures in the front of the building will need to be able to be reduced by 50 percent by 10:00 p.m.

Storm Water – Construction run off measures are needed, and silt fencing is indicated on the plan to address this. The project is just under the limits for requiring post-construction stormwater run-off controls such as detention ponds. It was noted that there were concerns with the amount of water behind the existing boat storage buildings. Steps were taken late this fall by the owners of those buildings to clear the drainage tiles to avoid ponding of water behind those buildings. At this time, it was noted that the drainage of that area has been improved; however, it is too early to observe the full impact of the steps that have been taken to date.

Please let me know if you have any questions on the proposed site plan that I could answer or get information on prior to the meeting.

PROPOSED NEW BUILDING FOR:

PEARL BEACH CONSTRUCTION

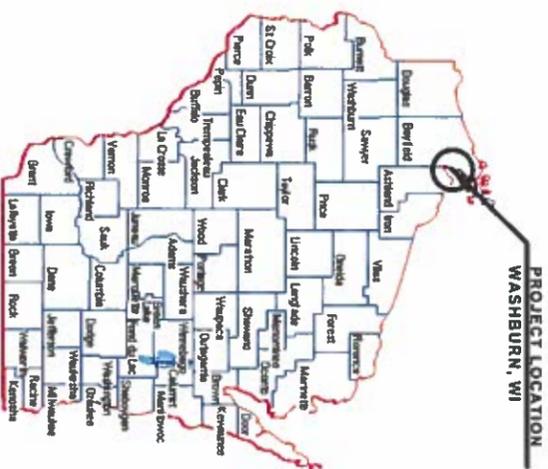
OWNER: KARL DORNBURG

SOUTH CENTRAL AVE
WASHBURN, WI 54891

PROJECT NUMBER: 18-3239

GENERAL NOTES

1. THE CONTRACTORS ARE TO KEEP A SET OF STATE APPROVED PLANS AT THE JOB SITE AT ALL TIMES.
2. A PRE-CONSTRUCTION CONFERENCE WILL BE HELD WITH THE CONTRACTORS BEFORE ANY WORK COMMENCES.
3. ALL BUILDING DIMENSIONS MUST BE FIELD VERIFIED.
4. ALL PROPERTY LINES ARE ASSUMED UNLESS A CERTIFIED SURVEY MAP HAS BEEN PROVIDED FOR THE PROPERTY.
5. ANY DISCREPANCIES IN THE PLANS ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.
6. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE WISCONSIN BUILDING, PLUMBING, ELECTRICAL, AND HVAC CODE (IBCC) CURRENTLY IN EFFECT.
7. THE CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS AT THE JOB SITE.
8. THE CONTRACTOR IS TO REVEAL THE UTILITY LINES VERIFIED BY THE STATE OF WISCONSIN BEFORE ANY EXCAVATION OR OTHER WORK IS TO BE PERFORMED. LOCATE DONE BY DIGGER'S INCLUDE PRIOR TO BREAKING OF GROUND. PHONE 1-888-242-4311
9. THE CONTRACTOR SHALL BE AWARE OF ALL PRIVATE UTILITIES LOCATIONS SUCH AS WATER, SEWER, AND GAS.
10. ALL EQUIPMENT AND MATERIAL INSTALLATION SHOULD BE IN STRICT ACCORDANCE WITH THE UTILITY COMPANIES INVOLVED AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
11. ALL STATE AND LOCAL BUILDING PERMITS WILL BE OBTAINED BY THE OWNER AND MUST BE POSTED AT THE JOB SITE BY THE CONTRACTOR.
12. ALL DAMAGE TO EXISTING DRIVEWAYS, ROADWAYS, STREETS, CONCRETE, SIDEWALKS, LAWNS, ETC. MUST BE RESTORED TO THE CONDITION THEY WERE BEFORE CONSTRUCTION COMMENCED.
13. PROVIDE A MINIMUM OF 2% DRAINAGE SLOPE AWAY FROM THE ENTIRE PERIMETER OF THE BUILDING FOR THE FIRST 20 FEET. EXCEPT WHERE NOTED.
14. REFER TO ENGINEERED TRUSS DRAWING, IF APPLICABLE, FOR PLACEMENT OF TRUSS COMPONENTS. CONTRACTOR IS TO FIELD VERIFY ALL TRUSS DIMENSIONS BEFORE PRODUCTION OF TRUSSES.
15. ALL BUILDING SETBACKS ARE MEASURED FROM THE EAVE LINE OF THE BUILDING.
16. IF APPLICABLE, THE FIRE RATING OF WALLS AND CEILING MUST BE MAINTAINED BEHIND ALL INSTALLED FIXTURES (BATH UNITS, VANITIES, CEILING FAN, ELECTRICAL BOXES, EXHAUST FANS, ETC.)
17. IF APPLICABLE, AIR CONDITIONING AND HEATING EQUIPMENT SHOULD BE PLACED IN AN UNFINISHED AREA TO ALLOW FOR FUTURE FINISHES. VERIFY LOCATION WITH OWNER BEFORE INSTALLATION.



INDEX TO DRAWINGS

NO.	TITLE PAGE
A-1	TITLE PAGE
A-2	PROPOSED SITE/LANDSCAPING PLAN
A-3	PROPOSED EROSION CONTROL PLAN
A-4	PROPOSED ELEVATIONS
A-5	RENDERINGS

PROPOSED NEW BUILDING FOR:
PEARL BEACH CONSTRUCTION
 SOUTH CENTRAL AVE, WASHBURN, WI 54891

TITLE PAGE

CS DESIGN & ENGINEERING
 with framework design inc
 803 Lake Shore Drive West, Ashland, WI 54806
 Telephone (715) 682-0330 www.csdesignengineering.com

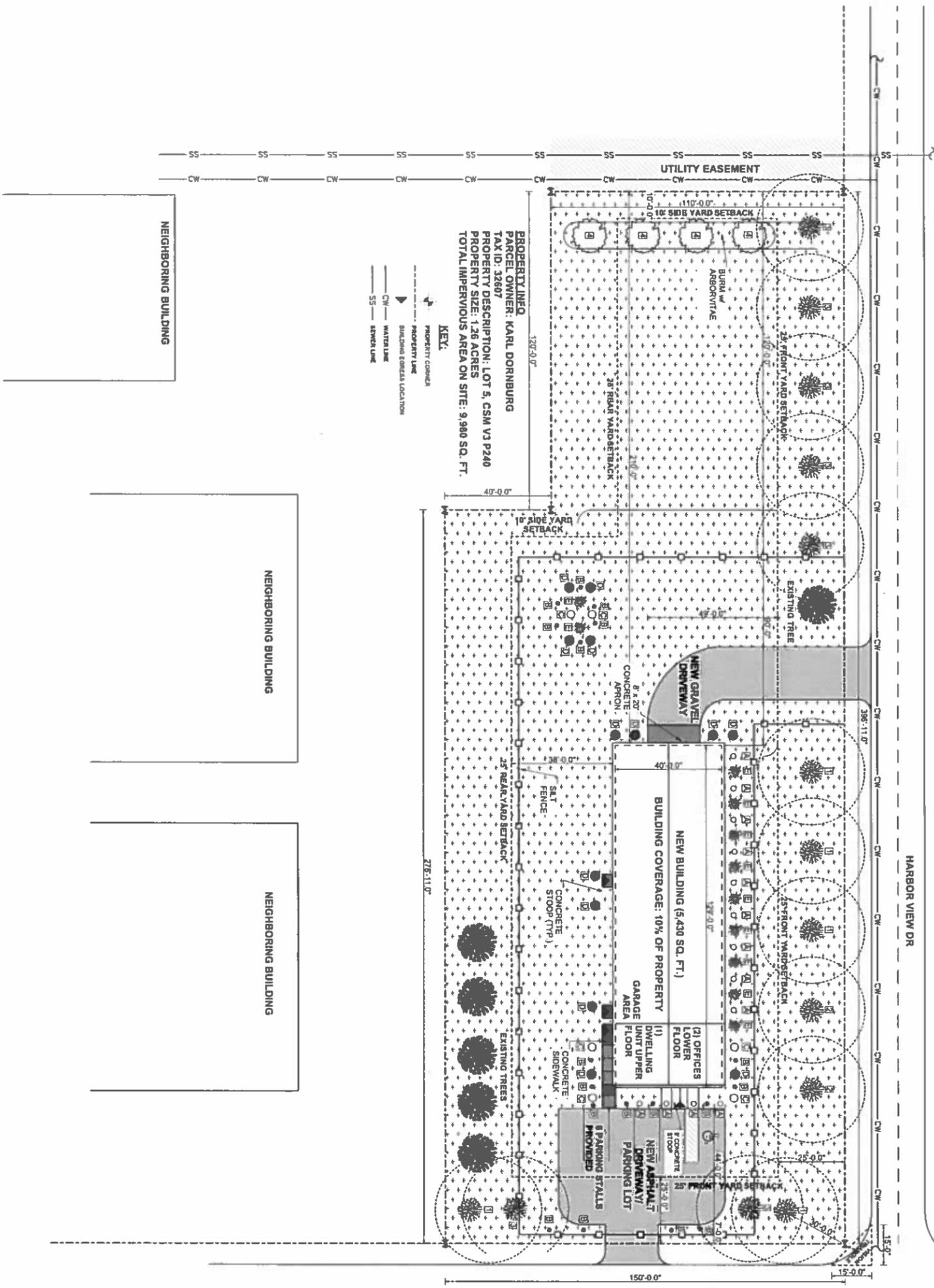
PROJECT NO:
18-3239

SHEET NO:
A-1

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 PRINTED 12/2018

Site Plan/Landscaping Plan

SCALE: 1" = 20'



PLANTING SCHEDULE

SYM.	DESCRIPTION	PLANTING SIZE	SIZE AT MATURITY
Q	LOW DECIDUOUS SHRUBS DWARF BURNING BUSH (1 POINT) SNOWBERN, SPINDLE (1 POINT)	18" MIN	6" WIDE x 2' HIGH
B	LOW EVERGREEN SHRUBS JUNIPER, SPINDLE, AND/OR PINE (1 POINT)	12" MIN	8" WIDE x 2' HIGH
E	MEDIUM DECIDUOUS BUSHES ARROWWOOD, ELDERBERRY, ROSE SHRUB, WINTERBERRY, HAZELNUT, ETC. (3 POINTS)	24" MIN	10" WIDE x 10" TO 12" HIGH
B	MEDIUM EVERGREEN SHRUBS JUNIPER, FITZGER, YEW, JAPANESE (3 POINTS)	18" MIN	10" WIDE x 8" HIGH
B	LARGE DECIDUOUS BUSHES JUNIBERRY, YUCCA, SQUALAC, DOGWOOD, ETC. (3 POINTS)	36" MIN	20" TO 30"
U	DECIDUOUS TREE RED OAK (30 POINTS)	1 1/4" CALIPER 8" TO 10" HIGH	50" TO 70" HIGH
B	DECIDUOUS TREE RED MAPLE (30 POINTS)	1 1/4" CALIPER 8" TO 10" HIGH	50" TO 70" HIGH
B	DECIDUOUS TREE PAPER BIRCH (15 POINTS)	1 1/4" CALIPER 8" TO 10" HIGH	30" TO 40" HIGH
B	ARBORETALE (20 POINTS)	4" MIN	60" HIGH

NOTES:
 1. THE LOCATION OF THE PLANTS LISTED ON THE LANDSCAPING PLAN ARE APPROXIMATE AND SUBJECT TO CHANGE. A BETTER PROPOSAL IS FOUND DURING THE CONSTRUCTION PHASE, THE NUMBER OF PLANTS SHOWN AND THEIR GENERAL SIZE WILL NOT CHANGE.
 2. ALL PLANT SPECIES ARE SUBJECT TO AVAILABILITY. A SIMILAR SPECIES FROM LOCAL NURSERIES, IF A LISTED PLANT IS UNAVAILABLE, A SIMILAR SPECIES WILL BE FROM STOCK NATIVE TO WISCONSIN.

PROPOSED NEW BUILDING FOR:
PEARL BEACH CONSTRUCTION
 SOUTH CENTRAL AVE, WASHBURN, WI 54891

Site/Landscaping Plan

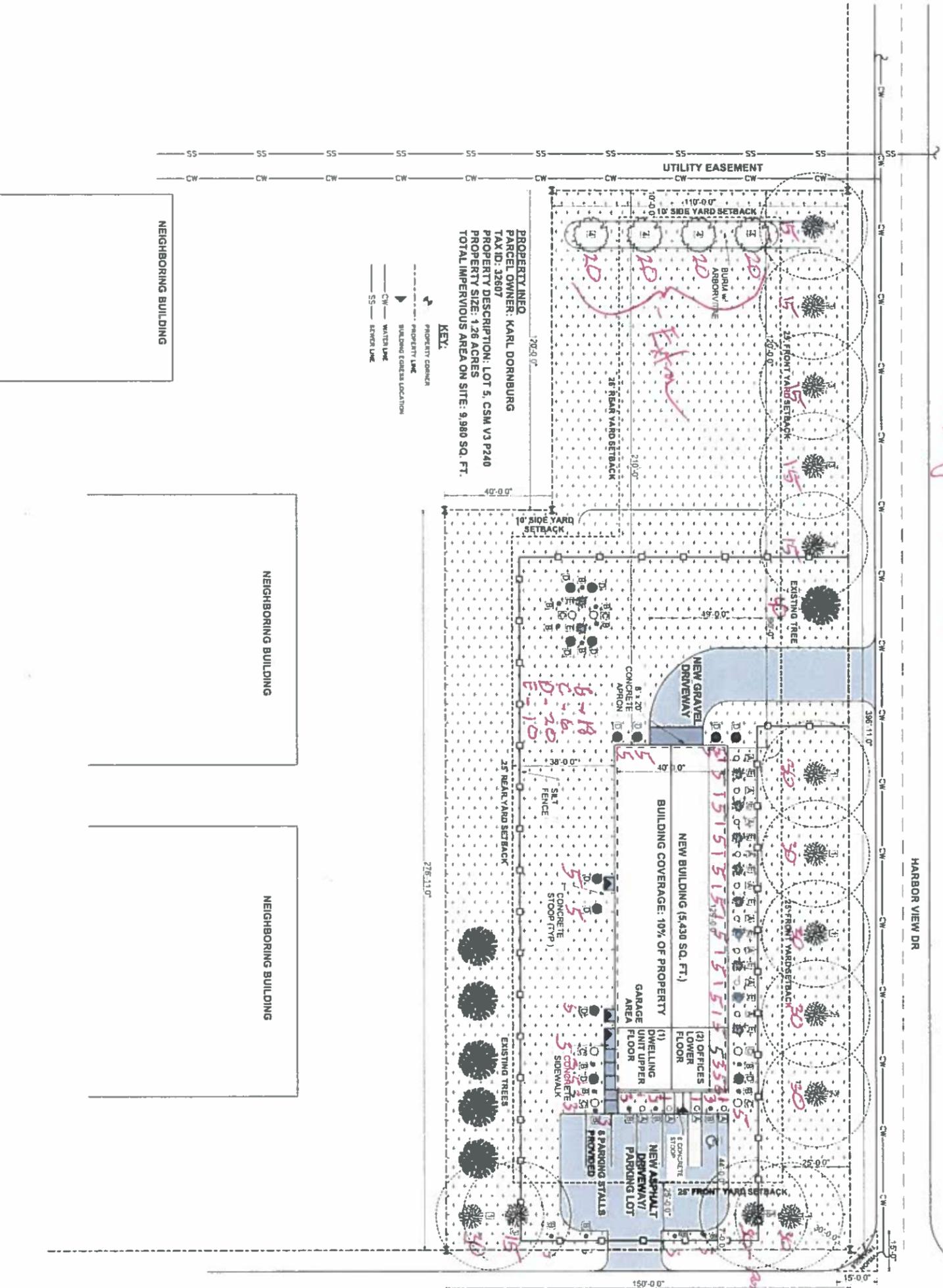
DESIGN & ENGINEERING
 with framework design inc.
 803 Lake Shore Drive West, Ashland, WI 54806
 Telephone (715) 682-0330 www.csdesignengineering.com

DESIGNED: L.D.
 DRAWN: J.C.D.
 SCALE: AS NOTED
 DATE: DECEMBER 2018

PROJECT NO:
18-3239

SHEET NO:
A-2
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 PRINTED 12/12/2018

Landscaping Points calculation



PROPERTY INFO
 PARCEL OWNER: KARL DORNBERG
 TAX ID: 32607
 PROPERTY DESCRIPTION: LOT 5, CSM V3 P240
 PROPERTY SIZE: 1.26 ACRES
 TOTAL IMPERVIOUS AREA ON SITE: 9,980 SQ. FT.

KEY:
 PROPERTY CENTER
 BUILDING FOOTPRINT LOCATION
 CW - WATER LINE
 SS - SEWER LINE

NEIGHBORING BUILDING

NEIGHBORING BUILDING

NEIGHBORING BUILDING

Site Plan/Landscaping Plan

SCALE: 1" = 20'

SYM.	DESCRIPTION	PLANTING SIZE	SIZE AT MATURITY
1	LOW DECIDUOUS SHRUBS DWARF BUSH HONEYSUCKLE SNOWBERRY, SPINDLE ETC. (1 POINT)	18" MIN	6 WIDE x 2 HIGH
2	LOW EVERGREEN SHRUBS JUNIPER, SAND SPRUCE, YUCCA (5 POINTS)	12" MIN	8 WIDE x 2 HIGH
3	MEDIUM DECIDUOUS SHRUBS ARROWWOOD, ELDERBERRY, ROSE SPYR, YONKERSBERRY, HAZELNUT, ETC. (3 POINTS)	24" MIN	10 WIDE x 10 TO 12 HIGH
4	MEDIUM EVERGREEN SHRUBS JUNIPER, PRITZER, YEW, JAPANESE (5 POINTS)	18" MIN	10 WIDE x 8 HIGH
5	LARGE DECIDUOUS SHRUBS JUNEBERRY, NAWYBERRY, SLALAC DOGWOOD, ETC. (6 POINTS)	36" MIN	20 TO 30
6	DECIDUOUS TREE RED OAK (10 POINTS)	1 1/4" CALIPER 8 TO 10 HIGH	50 TO 70 HIGH
7	DECIDUOUS TREE RED MAPLE (10 POINTS)	1 1/4" CALIPER 8 TO 10 HIGH	30 TO 70 HIGH
8	DECIDUOUS TREE PAPER BIRCH (15 POINTS)	1 1/4" CALIPER 8 TO 10 HIGH	30 TO 40 HIGH
9	ARBORVITAE (20 POINTS)	4 MIN	80 HIGH

NOTES:
 1 THE LOCATION OF THE PLANTS LISTED ON THE LANDSCAPING PLAN ARE APPROXIMATE AND SUBJECT TO CHANGE IF A BETTER ARRANGEMENT IS FOUND DURING THE CONSTRUCTION PHASE. THE NUMBER OF POINTS SHOWN AND THE PLANT SPECIES ARE SUBJECT TO AVAILABILITY.
 2 FROM LOCAL NURSERIES. IF A LISTED PLANT IS UNAVAILABLE, A SIMILAR SPECIES WILL BE SUBSTITUTED. ALL PLANTS SELECTED AS PART OF THE LANDSCAPING PLAN WILL BE FROM STOCK (NAME TO WISCONSIN).

PROJECT NO:
18-3239

DATE:
 DECEMBER 2018

DESIGNED BY:
 J.C.D.

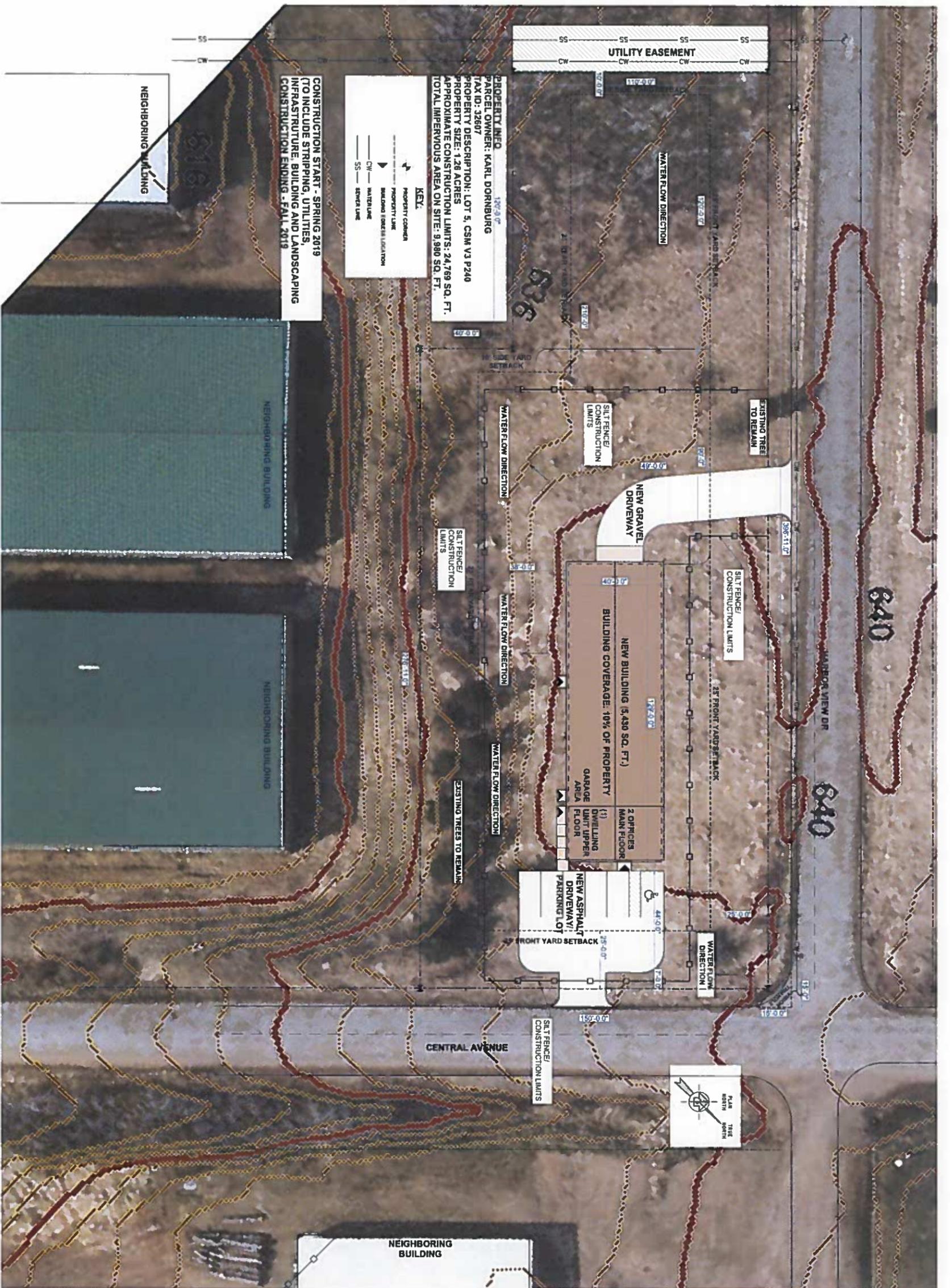
AS NOTED

DESIGNED BY:
 L.D.

DESIGN & ENGINEERING
 with framework design inc.
 803 Lake Shore Drive West, Ashland, WI 54806
 Telephone (715) 682 0310 www.csdesignengineering.com

PROPOSED NEW BUILDING FOR:
PEARL BEACH CONSTRUCTION
 SOUTH CENTRAL AVE WASHBURN, WI 54881

Site/Landscaping Plan



PROPERTY INFO
 120-9-07
 PARCEL OWNER: KARL DORNBERG
 TAX ID: 32607
 PROPERTY DESCRIPTION: LOT 5, CSM V3 P240
 PROPERTY SIZE: 1.28 ACRES
 APPROXIMATE CONSTRUCTION LIMITS: 24,769 SQ. FT.
 TOTAL IMPERVIOUS AREA ON SITE: 9,980 SQ. FT.

CONSTRUCTION START - SPRING 2019
 (TO INCLUDE STRIPING, UTILITIES,
 INFRASTRUCTURE, BUILDING AND LANDSCAPING
 CONSTRUCTION ENDING - FALL 2019)

KEY
 PROPERTY OWNER
 PROPERTY LINE
 BUILDING FOOTPRINT LOCATION
 CW - WATER LINE
 SS - SEWER LINE

NEIGHBORING BUILDING

NEIGHBORING BUILDING

NEIGHBORING BUILDING

NEIGHBORING BUILDING

erosion control
 SCALE: 1" = 20'

PROPOSED NEW BUILDING FOR:
PEARL BEACH CONSTRUCTION
 SOUTH CENTRAL AVE, WASHBURN, WI 54891

Erosion Control Plan

CS DESIGN & ENGINEERING
 with framework design inc
 803 Lake Shore Drive West, Ashland, WI 54806
 Telephone (715) 682-0330 www.csdesignengineering.com

DESIGNED	L.D.
CHECKED	J.C.D.
SCALE	AS NOTED
DATE	DECEMBER 2018
PROJECT NO.	18-3239
SHEET NO.	A-3

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 PRINTED 11/22/2018



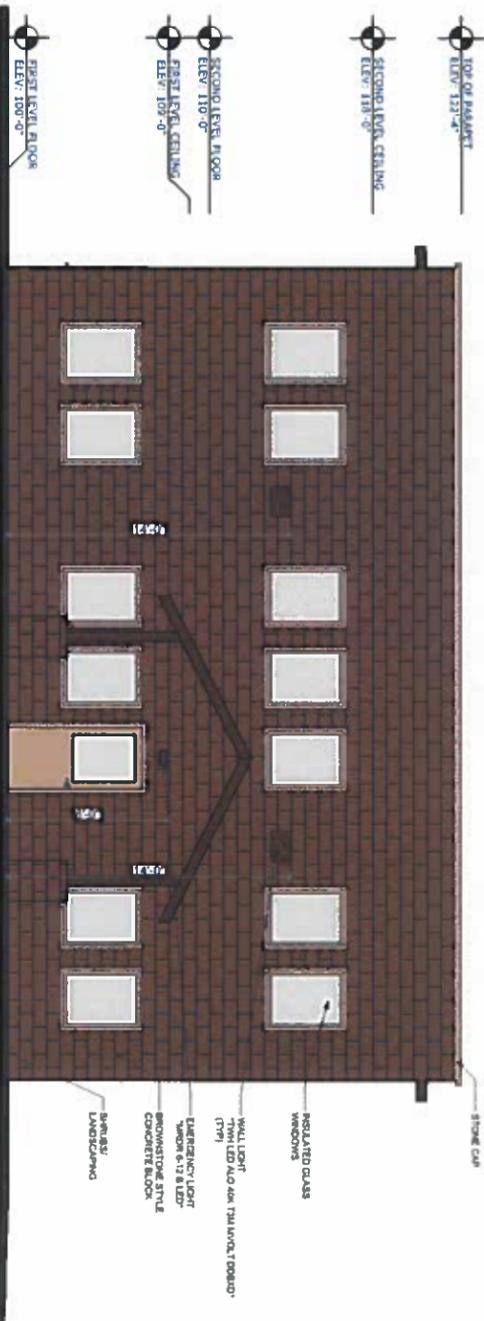
NORTH ELEVATION (VIEW FROM WEST HARBOR VIEW DRIVE)

SCALE: 3/16" = 1'-0"



WEST ELEVATION

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



EAST ELEVATION (VIEW FROM SOUTH CENTRAL AVENUE)

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



SOUTH ELEVATION

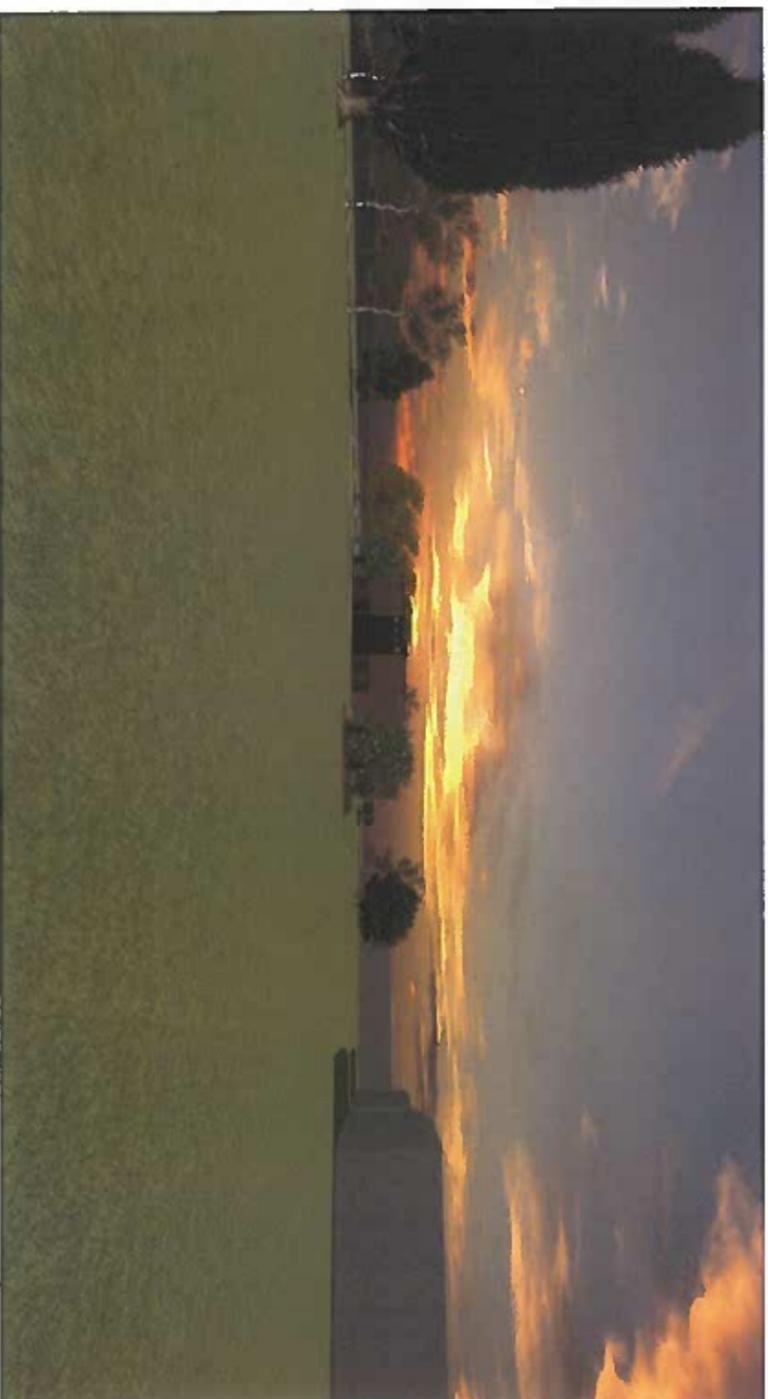
SCALE: 3/16" = 1'-0"

PROPOSED NEW BUILDING FOR:
PEARL BEACH CONSTRUCTION
SOUTH CENTRAL AVE, WASHBURN, WI 54891

ELEVATIONS

CS DESIGN & ENGINEERING
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803 Lake Shore Drive West, Ashland, WI 54806
Telephone (715) 682 0330 www.csdesignengineering.com

DESIGNED	L.D.
DRAWN	J.C.D.
SCALE	AS NOTED
DATE	DECEMBER 2018
PROJECT NO.	18-3239



PROPOSED NEW BUILDING FOR:
PEARL BEACH CONSTRUCTION
 SOUTH CENTRAL AVE, WASHBURN, WI 54801

RENDERINGS

CS DESIGN & ENGINEERING
 with framework design inc.
 803 Lake Shore Drive West, Ashland, WI 54806
 Telephone (715) 682-0330 www.csdesignengineering.com

APPROVED

APPROVED

DESIGNED BY
 L.D.
 DRAWN BY
 J.C.B.
 SCALE
 AS NOTED
 DATE
 DECEMBER 2018

PROJECT NO.
18-3239

DATE
A-5
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RENDERINGS
 NOT TO SCALE

NOTE: RENDERINGS SHOW
 TREES/SHRUBS AT MATURE
 AGE



TWH LED LED Wall Luminaire



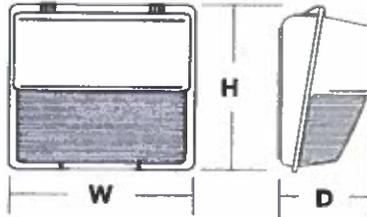
Specifications

Width: 16-1/4"
(41.3 cm)

Height: 15-3/4"
(40.0 cm)

Depth: 8"
(20.3 cm)

Weight: 28 lbs
(12.7 kg)



Catalog
Number

Notes

Type

For the TWH LED luminaire, visit www.lithonia.com.

Introduction

The TWH LED offers a classic appearance and is powered by advanced LEDs.

The new TWH LED luminaire is powerful yet energy efficient, capable of replacing up to a 400W metal halide luminaire while saving up to 83% in energy costs. Offering an expected service life of more than 20 years, the TWH LED eliminates frequent lamp and ballast replacements associated with traditional technologies.

The new TWH LED features an Adjustable Light Output (ALO), that allows the contractor to set the light output, during installation, to a level perfectly suited for the job site. The feature allows one luminaire to replace anywhere from 70W to all the way up to 400W metal halide luminaire.

Ordering Information

EXAMPLE: TWH LED ALO 50K T3M MVOLT DDBXD

Series	Power Package	Color temperature	Distribution	Voltage	Control Options	Other Options	Finish (required)
TWH LED	ALO	30K 40K 50K	T3M Type III Medium	MVOLT ¹ 120 208 240 277 347 480	Shipped installed PER NEMA twist-lock receptacle only (no controls) PE Photoelectric cell, button type ²	Shipped installed SF Single fuse (120, 277, 347V) ³ DF Double fuse (208, 240, 480V) ³ TP Tamper proof screws SPD Separate surge protection Shipped separately VG Vandal guard ^{4,5} WG Wire guard ^{4,5}	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBL BXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Stock configurations are offered for shorter lead times:

Standard Part Number	Stock Part Number	CI Codes
TWH LED ALO 40K T3M MVOLT DDBXD	TWH LED ALO 40K	*265A1X
TWH LED ALO 50K T3M MVOLT DDBXD	TWH LED ALO 50K	*265A24

Accessories

Ordered and shipped separately

DLL127F 1.5 IU	PhotoCell - SSL twist-lock (120-277V) ⁴
DLL347 1.5 CUL IU	PhotoCell - SSL twist-lock (347V) ⁴
DLL480 1.5 CUL IU	PhotoCell - SSL twist-lock (480V) ⁴
DSHORT SRA U	Shorting cap ⁵
TWHVGU	Vandal guard accessory ⁴
TWHWGU	Wire guard accessory ⁴

For more control options, visit DLI and RCAM online.

NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- VG and WG options cannot be installed together. Also available as a separate accessory; see Accessories information at left.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.
- Included when ordering PER.
- Requires field modification (only when ordered as a separate accessory).



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TWH-LED-2018-Upgrade-ALO
Rev 9/27/18

Performance Data

Lumen Output

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

FAO Setting	System Watts	30K (3000K, 70 CRI)		40K / 50K (4000K / 5000K, 70 CRI)		Replaces (Metal Hazel)
		Lumens	LPW	Lumens	LPW	
Step 8 (default)	78	8,477	109	9,214	118	400W
Step 7	73	8,008	110	8,704	119	
Step 6	63	7,046	112	7,659	122	250W
Step 5	54	6,063	112	6,590	122	
Step 4	44	5,058	115	5,498	125	150/175W
Step 3	34	4,030	119	4,381	129	
Step 2	25	2,981	119	3,241	130	100W
Step 1	16	1,910	119	2,076	130	70W

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the TWH LED 30C 1000 platform in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

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

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	1.00	0.98	0.93

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient	32°F	Lumen Multiplier
0°C	32°F	1.05
10°C	50°F	1.03
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.97

Electrical Load

Power Package	System Watts	Current (A)					
		120	208	240	277	347	480
ALO (default setting)	78W	0.7	0.41	0.36	0.3	0.23	0.12

Options and Accessories



VG - Vandal guard



WG - Wire guard

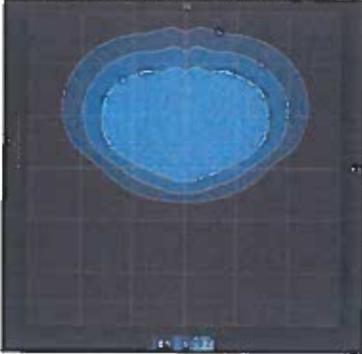
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's TWH LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards

LEGEND

- 0.5 fc
- 1.0 fc
- 2.0 fc

TWH LED ALO 50K T3M MVOLT (default setting) Mounting height - 15'



FEATURES & SPECIFICATIONS

INTENDED USE

The energy savings, long life and easy-to-install design of the TWH LED make it the smart choice for building-mounted doorway and pathway illumination for nearly any facility

CONSTRUCTION

Die-cast aluminum housing has an impact-resistant, tempered glass lens that is fully gasketed. Modular design allows for ease of maintenance. The LED driver is mounted to the front casting to thermally isolate it from the light engine for low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants

FINISH

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

OPTICS

Protective glass lens covers the light engine's precision-molded proprietary acrylic lenses. Light engines are available in 3000K, 4000K and 5000K configurations

ELECTRICAL

Light engine(s) consist of 72 high-efficacy LEDs mounted to a metal-core circuit board and integral aluminum heat sink to maximize heat dissipation and promote long life (L93/100,000 hrs at 25°C). The electronic driver has a power factor of >90%, THD <20%, and a minimum 6 KV surge rating. When ordering the SPD option, a separate surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2)

INSTALLATION

Back housing is separated from front housing, eliminating ballast weight and promoting easy handling. Top 3/4" threaded wiring access. Back access through removable 3/4" knockout. Feed-thru wiring can be achieved by using a conduit tee. Mount on any vertical surface. Not recommended in applications where a sprayed stream of water can come in direct contact with glass lens

LISTINGS

UL listed for use in the US and Canada. Suitable for use in wet locations. Rated for -40°C minimum operating temperature.

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

WARRANTY

5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

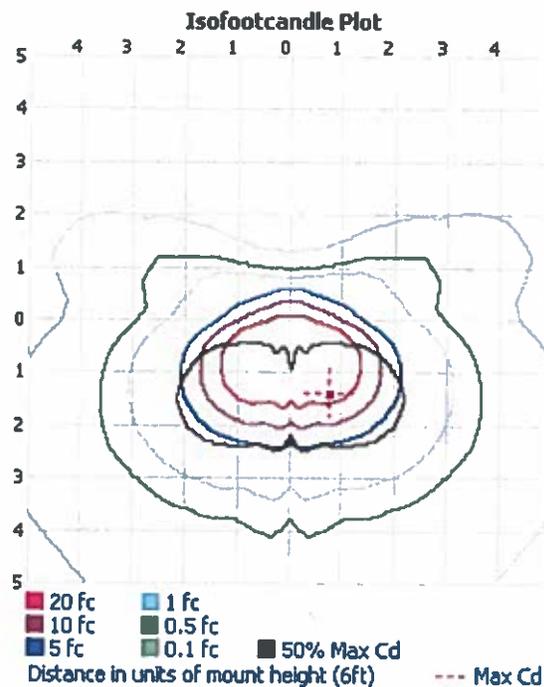
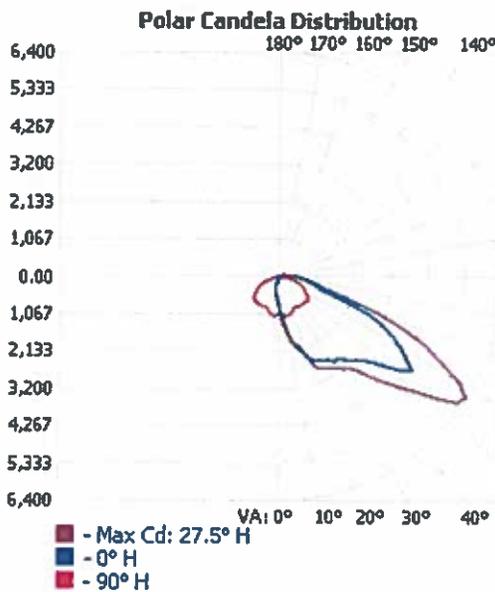
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



OUTDOOR PHOTOMETRIC REPORT

CATALOG: TWH LED ALO 40K T3M

TEST #: ISF 36664P11
 TEST LAB: SCALED PHOTOMETRY
 TEST DATE: 12/11/2017
 CATALOG: TWH LED ALO 40K T3M
 DESCRIPTION: TWH LED, ALO PERFORMANCE PACKAGE, 4000K CCT, TYPE 3 MEDIUM
 SERIES: TWH LED
 LAMP CATALOG: LED
 LAMP: LED
 LAMP OUTPUT: TOTAL LUMINAIRE LUMENS: 9214.2, **ABSOLUTE PHOTOMETRY ***
 BALLAST / DRIVER: LED DRIVER, LED DRIVER
 INPUT WATTAGE: 78
 LUMINOUS OPENING: RECTANGLE W/LUMINOUS SIDES (L: 0.12M, W: 0.34M, H: 0.16M)
 MAX CD: 6,346.0 AT HORIZONTAL: 27.5°, VERTICAL: 57.5°
 ROADWAY CLASS: VERY SHORT, TYPE III



*TEST BASED ON ABSOLUTE PHOTOMETRY WHERE LAMP LUMENS=LUMENS TOTAL.
 *CUTOFF CLASSIFICATION AND EFFICIENCY CANNOT BE PROPERLY CALCULATED FOR ABSOLUTE PHOTOMETRY.

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ISF 36664P11
 VISUAL PHOTOMETRIC TOOL

PUBLISH
 PAGE 1 OF 4

OUTDOOR PHOTOMETRIC REPORT
 CATALOG: TWH LED ALO 40K T3M



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LUMINAIRE
0-30	1,131.3	12.3%
0-40	2,148.4	23.3%
0-60	5,705.7	61.9%
60-90	3,072.1	33.3%
70-100	1,424.7	15.5%
90-120	353.7	3.8%
0-90	8,777.8	95.3%
90-180	436.4	4.7%
0-180	9,214.2	100%

LUMENS PER ZONE

ZONE	LUMENS	% TOTAL	ZONE	LUMENS	% TOTAL
0-10	107.6	1.2%	90-100	193.7	2.1%
10-20	364.0	4.0%	100-110	98.6	1.1%
20-30	659.7	7.2%	110-120	61.4	0.7%
30-40	1,017.1	11.0%	120-130	39.8	0.4%
40-50	1,477.7	16.0%	130-140	22.6	0.2%
50-60	2,079.6	22.6%	140-150	12.6	0.1%
60-70	1,841.2	20.0%	150-160	5.3	0.1%
70-80	857.3	9.3%	160-170	1.9	0%
80-90	373.6	4.1%	170-180	0.4	0%

ROADWAY SUMMARY

DISTRIBUTION: TYPE III, VERY SHORT

MAX CD, 90 DEG VERT:	592.0
MAX CD, 80 TO <90 DEG:	1,065.6
	LUMENS % LAMP
DOWNWARD STREET SIDE:	7,937.4 86.1%
DOWNWARD HOUSE SIDE:	840.0 9.1%
DOWNWARD TOTAL:	8,777.4 95.3%
UPWARD STREET SIDE:	334.1 3.6%
UPWARD HOUSE SIDE:	102.1 1.1%
UPWARD TOTAL:	436.2 4.7%
TOTAL LUMENS:	9,213.6 100%

LCS TABLE

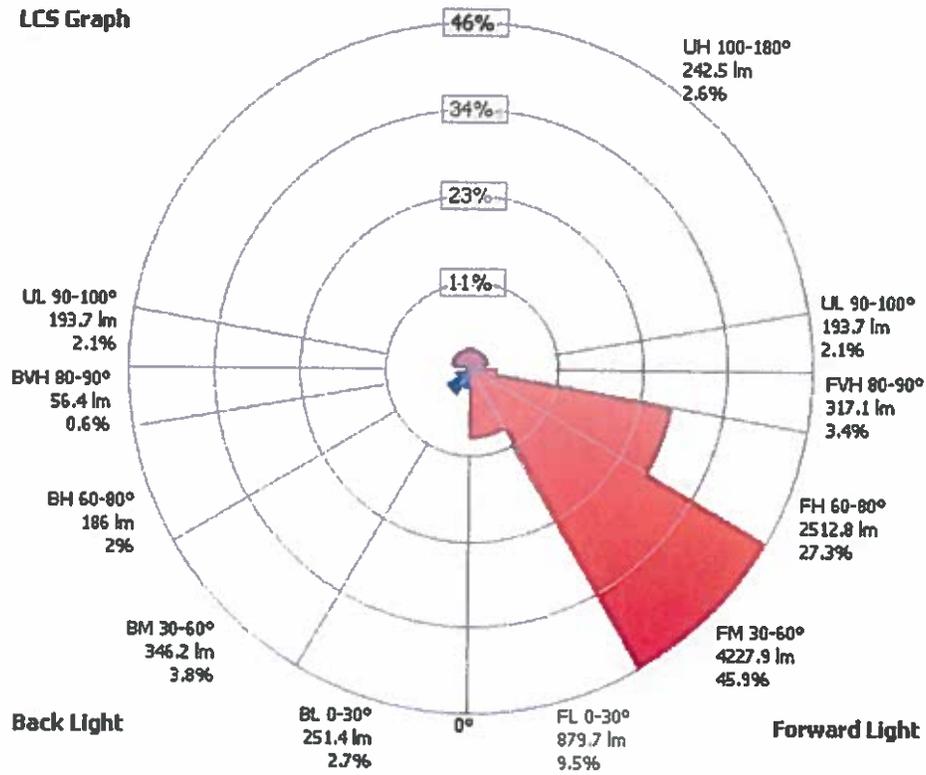
BUG RATING B1 - U3 - G3

FORWARD LIGHT	LUMENS	LUMENS %
LOW(0-30):	879.7	9.5%
MEDIUM(30-60):	4,227.9	45.9%
HIGH(60-80):	2,512.8	27.3%
VERY HIGH(80-90):	317.1	3.4%
BACK LIGHT		
LOW(0-30):	251.4	2.7%
MEDIUM(30-60):	346.2	3.8%
HIGH(60-80):	186.0	2%
VERY HIGH(80-90):	56.4	0.6%
UPLIGHT		
LOW(90-100):	193.7	2.1%
HIGH(100-180):	242.5	2.6%
TRAPPED LIGHT:	0.6	0%

OUTDOOR PHOTOMETRIC REPORT
CATALOG: TWH LED ALO 40K T3M



LCS Graph



Back Light

Forward Light

Scale = Max LCS %

Trapped Light: 0.6lm, 0%

OUTDOOR PHOTOMETRIC REPORT
 CATALOG: TWH LED ALO 40K T3M



CANDELA TABLE - TYPE C

	0	15	25	35	45	55	65	75	85	90	105	115	125	135	145	155	165	175	180
0	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033
5	1436	1421	1397	1367	1320	1258	1222	1172	1107	1071	959	906	858	817	781	764	752	746	746
10	1841	1829	1835	1808	1800	1723	1551	1362	1208	1143	929	832	764	716	669	630	619	610	607
15	2042	2019	2107	2306	2137	1986	1720	1441	1190	1083	835	737	675	633	583	542	512	497	497
20	2489	2516	2622	2439	2202	2178	1829	1462	1128	1018	752	654	580	527	491	465	432	420	417
25	2608	2960	2951	2741	2628	2306	1977	1521	1110	953	687	586	503	447	417	391	361	343	343
30	2714	3460	3081	3046	3037	2646	2173	1717	1175	971	663	536	435	376	346	326	323	290	293
35	2847	3602	3179	3439	3380	3061	2599	1930	1217	977	633	488	391	326	284	243	201	169	166
40	3111	3780	3422	3753	3694	3617	2948	2137	1285	997	627	450	349	281	195	133	95	77	74
45	3365	3954	4014	4384	4250	4043	3309	2380	1347	995	598	408	320	213	124	77	59	50	47
50	3951	4440	4884	5153	5047	4330	3540	2516	1421	1000	539	376	266	166	89	53	36	30	30
55	4638	5097	6186	5869	5843	4907	3940	2640	1373	935	462	355	237	130	62	30	18	12	12
60	3996	4280	5866	6245	6035	4913	3830	2540	1193	799	414	337	252	107	41	12	0	0	0
65	3226	3570	4594	4928	5073	4310	3155	2099	1021	687	420	376	228	92	30	0	0	0	0
70	1877	2244	2806	3274	3312	2975	2344	1557	826	574	521	482	186	77	18	0	0	0	0
75	1057	1202	1453	1699	1758	1717	1412	1012	586	414	521	408	154	65	18	0	0	0	0
80	855	929	1036	1054	977	980	823	601	349	243	379	334	145	71	24	0	0	0	0
85	598	648	704	707	622	586	488	349	189	136	263	260	130	77	24	3	0	0	0
90	480	521	527	512	438	379	302	210	118	95	204	216	118	71	27	6	0	0	0
95	334	361	379	355	302	266	219	148	95	89	160	160	107	71	27	6	0	0	0
100	219	231	246	231	201	184	154	115	95	92	118	118	92	62	27	12	3	0	0
105	157	160	172	160	145	124	107	86	77	77	92	83	77	53	24	12	3	0	3
110	127	130	133	127	118	101	80	71	68	65	71	68	59	41	21	9	3	0	3
115	115	118	118	110	101	83	68	65	62	59	59	53	41	30	18	9	3	0	0
120	98	101	101	98	83	71	59	56	59	56	47	41	33	24	18	9	6	0	3
125	80	83	86	83	71	59	47	47	53	50	38	33	30	24	15	6	3	0	3
130	62	65	68	65	56	47	36	36	41	41	30	27	24	18	12	6	3	0	0
135	47	53	53	53	47	36	30	30	30	30	30	27	24	15	9	6	3	0	0
140	33	38	38	36	36	27	24	24	27	27	30	24	18	12	9	3	0	0	0
145	24	30	30	30	27	24	24	24	24	27	30	24	18	12	9	6	3	0	0
150	12	18	18	18	18	18	18	21	24	24	24	21	18	12	6	6	0	0	0
155	6	6	9	12	12	15	18	18	21	18	18	18	12	12	6	3	3	0	0
160	0	6	6	9	12	15	15	15	15	15	15	12	12	6	6	3	3	0	0
165	0	3	6	6	6	9	12	12	12	12	9	6	6	6	6	3	0	0	0
170	0	3	6	6	6	6	9	9	9	9	6	6	6	6	6	6	0	0	0
175	0	3	6	6	6	6	6	6	6	6	6	6	6	6	3	3	0	0	0
180	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

MAKO-LED

ARCHITECTURAL / LED LUMINAIRE



An indoor/outdoor architecturally styled high performance LED Luminaire available with 'normally-on' operation powered by line voltage, emergency operation powered by a Nickel-Cadmium battery source or a combination of both. Low profile, die-cast aluminum housing available in four powder-coated finishes: dark bronze, white, nickel and black.

PRODUCT SPECIFICS

CONSTRUCTION

Housing and mounting plate are constructed of 1/8" die-cast aluminum and sealed with a 1/8" closed-cell silicone gasket. The acrylic lens allows 94% light transmission. The reflector is electro-polished aluminum with 95% reflectance. Housing finish is powder coated electro-deposition paint available in four colors: dark bronze, white, nickel and black.

INSTALLATION

Universal backplate knockouts for mounting to standard 3 1/2", 4" octagonal and 4" square electrical boxes. An adhesive-backed neoprene gasket is provided to ensure a waterproof seal. A 1/2" - 1/4 NPT threaded conduit opening is provided at the top of the enclosure and sealed with a closure plug. The housing "snaps" to the back plate by a "blade and socket" arrangement.

ILLUMINATION

The unit is illuminated by a high power light emitting diode (LED) assembly.

COMPLIANCES

- UL1598 and UL8750 (AC MODE)
- UL 924 Listed (EM MODE)
- UL Wet Location Listed
- NFPA 101 Life Safety Code
- NFPA 70 National Electrical Code
- ROHS
- OSHA
- IES full cut-off compliant

WARRANTY

Three-year warranty for unit and electronics.

CATALOG NUMBER:

NOTES:

FIXTURE TYPE:

PROJECT:

AVAILABLE OPERATION MODES

The MAKO-LED has three available modes of operation:

GENERAL LIGHTING (AC) MODE:

In the AC mode, power is supplied from 120V or 277V AC source and is switched on/off with a photosensor or the unit may be switched on/off via wall switch allowing the unit to behave like a typical luminaire.

EMERGENCY LIGHTING (EM) MODE:

Upon failure of normal utility power, the unit will automatically illuminate and provide a minimum of 90 minutes of emergency run-time powered by an internal nickel-cadmium battery.

Battery:

- 4.8V2.5Ah high temperature Nickel Cadmium battery provides more than 90 minutes discharge time to emergency source.
- 24 hours recharge after discharge.
- Low voltage battery disconnection-prevents deep discharge damage to the battery.
- Standard with self diagnostics.

GENERAL LIGHTING & EMERGENCY MODE (ACEM)

Under normal utility power, the unit will function in AC mode as detailed above. Upon the failure of Utility power, the unit will function in EM mode as Detailed above.

LUMINAIRE SPECIFICS

Light Source	10W High Output LED
LED Lamp Life	50,000 hrs. w/ 70% Lumen Maintenance
Kelvin Temperature	5000K
Color Rendering Index (CRI)	70
Total Lamp Output	425 Lumens
Total Input Watts	12 Watts
Input Voltage:	120/277VAC, 60 Hz.
Operating Temperature	AC Mode: -22°F to 122°F EM Mode: 32°F to 122°F EM Mode w/ IH Option: -22°F to 122°F
Power Factor	Average .80 (lagging)



ORDERING INFORMATION

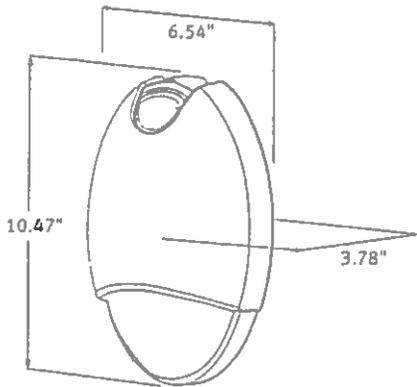
MODEL	OPERATION MODE	HOUSING COLOR	OPTIONS
MAKO-LED	AC = General Lighting	DB = Dark Bronze	III = Internal Battery Heater
	EM = Emergency Only	WH = White	
	ACEM = General and Emergency	BK = Black	
		NK = Nickel	

Ordering Example: MAKO-LED-ACEM-DB-III

MAKO-LED



ARCHITECTURAL / LED LUMINAIRE



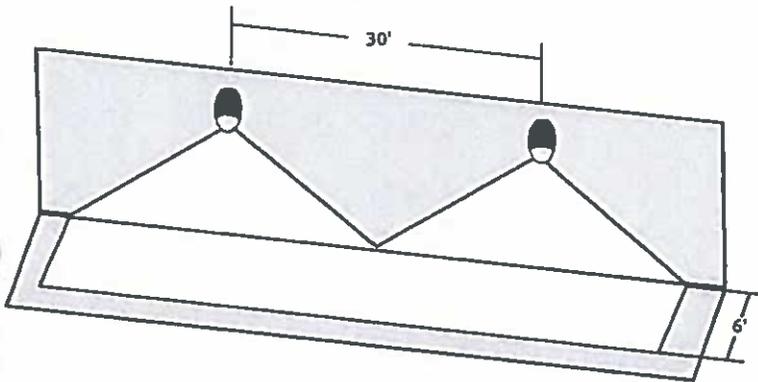
CATALOG NUMBER:

NOTES:

FIXTURE TYPE:

PROJECT:

PATHWAY ILLUMINANCE



Meets Life Safety Code standard minimum illuminance of 0.1 fc and average illuminance of 1.0 fc. Illustration shown is a guideline for corridor center-to-center spacing with 9 ft mounting height and Minimum 80-50-20 reflectance values.

SELF-DIAGNOSTICS (STANDARD ON EM & ACEM)

The circuit will continuously monitor the operating condition of the AC power, battery supply voltage, emergency lamp continuity, and charging circuit. If failure occurs, visual status will occur immediately via the dual-colored LED indicator that illuminates until fault has been corrected. The Self-Diagnostics also monitors the transfer circuit and performs automatic code compliant testing. The selftest will operate the equipment in emergency mode one minute every 28 days. A 30 minute full-function test is performed every six months, and a 90 minute full-function test is performed every 12 months. These tests can also be initiated manually by use of the test button.

MIRA Lighting

lighting facts™

A Program of the U.S. DOE

Light Output (Lumens)	418
Watts	11.8
Lumens per Watt (Efficacy)	35
Color Accuracy <small>Color Rendering Index (CRI)</small>	87
Light Color <small>Color Temperature (K)</small>	5015 (Daylight)

All results are according to IESNA LM-79 2008 Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) will be providing test data and reports.

Mail www.lightingfacts.com for the Label Reference Guide.

Registration Number: 8880-218714
Model Number: MAKO-LED
Type: Outdoor wall-mounted emergency luminaire (Panel pack)







CITY OF WASHBURN

PO BOX 638

WASHBURN, WI 54891

Receipt Nbr: 27387

Date: 12/11/2018

Other

RECEIVED
FROM

KARL DORNBURG

\$50.00

Type of Payment

Accounting

Description

ZONING PERMITS

SITE PLAN REVIEW KARL DORNBURG

Amount

50.00

TOTAL RECEIVED

50.00