CITY OF DES MOINES PLAN & ZONING COMMISSION
STAFF REPORT AND RECOMMENDATION
Thursday, January 18, 2024

AGENDA ITEMS #1A – #1C	**ZONG-2023-000073 & COMP-2023-000044**

Applicant: City of Des Moines (owner), represented by Dwayne Myers (officer).

Location: Vicinity of 3500 Vandalia Avenue.

Requested Action(s): A) Determination as to whether the requested rezoning is in conformance with the PlanDSM Creating Our Tomorrow Comprehensive Plan.

B) Amend the PlanDSM Creating Our Tomorrow Comprehensive Plan to revise the future land use classification of the property from Business Park to Industrial. (COMP-2023-000044)

C) Rezone approximately 8.36 acres of the property from "EX" Mixed Use District to "I2" Industrial District, to allow the development of a vehicle storage, maintenance, and operation facility for the Des Moines Area Regional Transit Authority (DART). (ZONG-2023-000073)

I. GENERAL INFORMATION

1. **Purpose of Request:** The Des Moines Area Regional Transit (DART) is proposing to relocate its existing Operations and Maintenance Facility (currently located at 1100 DART Way) to the subject property. This proposed use would be considered a "Trucking and Transportation Terminal" use, which necessitates the proposed rezoning. This parcel is currently owned by the City of Des Moines and is 37.9 acres in area in its entirety. However, approximately 8.36 acres of the property is currently zoned "EX" district. A rezoning to "I2" District of this portion is required to match with the zoning designation of the rest of the property.

   The existing DART facility is aging and in poor condition. A new facility is anticipated to allow DART to operate more effectively in the long term. The project is multi-phased with funding contingent on Federal grants.

2. **Size of Site:** 8.36 acres.

3. **Existing Zoning (site):** "EX" Mixed Use District.

4. **Existing Land Use (site):** Undeveloped land.

5. **Adjacent Land Use and Zoning:**

   North – "EX"; Uses include vacant agricultural land.

   South – "EX"; Uses warehousing, office and chemical processing facility.

   East - "I2", "EX"; Uses are heavy industrial and vacant land.

   West - "I2"; Uses include Copart Auto Salvage business.

6. **General Neighborhood/Area Land Uses:** The subject property is located in a heavy industrial area along Vandalia Road within the eastern portion of the City.

7. **Applicable Recognized Neighborhood(s):** The subject property is not within a designated Neighborhood Association. All neighborhood associations were notified of the January 18, 2024, public hearing by emailing the Preliminary Agenda on December 29, 2023, and the Final Agenda on January 12, 2024. Additionally, separate notifications of the hearing for this specific item were mailed on December 29, 2023 (20 days prior to the public hearing) and January 8, 2024 (10 days prior to the public hearing) to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

   All notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Development Division on the date of the mailing.

   The applicant can provide a summary of the neighborhood outreach at the public hearing.

8. **Relevant Zoning History:** None

9. **PlanDSM: Creating Our Tomorrow Land Use Plan Designation:** Business Park.

10. **Applicable Regulations:** The Commission reviews all proposals to amend zoning boundaries or regulations within the City of Des Moines. Such amendments must be in conformance with the comprehensive plan for the City and designed to meet the criteria in 414.3 of the Iowa Code, and taking into consideration the criteria set forth in Chapter 18B of the Iowa Code. The Commission may make recommendations to the City Council on conditions to be made in addition to the existing regulations so long as the subject property owner agrees to them in writing. The recommendation of the Commission will be forwarded to the City Council.

II. ADDITIONAL APPLICABLE INFORMATION

1. **PlanDSM Creating Our Tomorrow:** The 8.36-acre area proposed for rezoning currently has a future land use designation of "Business Park". The

applicant is proposing to amend this future land use designation to "Industrial". Plan DSM describes these designations as follows:

> *Business Park: Accommodates light industrial, office and employment uses along with limited complementary retail uses. Industrial uses in this category would produce little or no noise, odor, vibration, glare, or other objectionable influences and would have little or no adverse effect on surrounding properties.*
>
> *Industrial: Accommodates industrial development and limited supporting commercial uses. Development in this classification could have a large impact on adjoining properties and the environment which would need to be mitigated.*

The applicant is proposing to rezone the subject property to "I2" Industrial District.

The Zoning Ordinance states that the "I2" District is intended for general and higher intensity industrial uses as well as warehousing and transportation terminals. Building types allowed in this district include the General Building, Workshop/Warehouse, Civic Building, and Principal-Use Parking Structure.

Staff believes that industrial uses should be located in areas of the City that are already designated for those types of uses. The subject property is located in an area that is predominantly heavy industrial in nature. The rezoning of a portion of this property is necessary to match the required zoning designation and allow the proposed maintenance and operation facility for the region's primary transit service agency.

2. **Planning and Design Ordinance:** Any construction or change in use must comply with all applicable site plan and design regulations of the Planning and Design Ordinance (City Code Chapter 135). Furthermore, the applicant will be required to prepare a Site Plan and building elevations for any proposed additions or modifications for review before the property can be utilized for the proposed use.

   This project is proposed to be phased. Each phase of the project would be accompanied by its own Site Plan.

3. **Supplemental Use Regulations**: The proposed "Trucking and Transportation Terminal" use would subject to the following supplemental use regulations, per City Code Section 134-3.6.3:

   1. Outdoor storage of inoperable or unsafe vehicles in quantities constituting a junk or salvage yard is prohibited.
   2. No part of the use may be a residential use.
   3. No odors, gases, noise, vibration, pollution of air, water or soil, or lighting is emitted onto any adjoining property so as to create a nuisance.

4. The owner or occupant has provided the neighborhood services department with a written statement upon a form acceptable to the neighborhood services director describing the use to occur upon the property and the nature of any odors, gases, noise, vibration, and other environmental impacts that may be generated by such use, and certifying that the use upon the property will be operated in a manner that does not permit any odors, gases, noise, vibration, pollution of air, water or soil, or lighting to be emitted onto any adjoining property so as to create a nuisance.
5. The use shall be operated in strict conformance with the statement provided pursuant to paragraph 4, above.

III. STAFF RECOMMENDATION

Part A) Staff recommends that the requested "I2" District be found not in conformance with PlanDSM Creating Our Tomorrow Comprehensive Plan future land use classification of Business Park.

Part B) Staff recommends approval of the requested amendment to the PlanDSM: Creating Our Tomorrow Plan to revise the future land use classification from Business Park to Industrial.

Part C) Staff recommends approval of the rezoning of the property from "EX" Mixed Use District to "I2" Industrial District.

January 5, 2024

Staff, Commissions and Committees
City of Des Moines
400 Robert D. Ray Dr.
Des Moines, IA 50309

To whom it may concern:

The Des Moines Area Regional Transit Authority (DART) is in the process of replacing its aging Operations & Maintenance Facility at 1100 DART Way in order to support DART's daily service to Greater Des Moines. With the current facility at the end of its useful life, in poor condition, and landlocked, building a new facility will cost local taxpayers less and allow DART to operate more effectively long-term. DART plans to use primarily federal funding to build a new facility at 3500 Vandalia Rd. in order to continue meeting the community's transit needs well into the future.

Why a new facility?
DART has operated out of its operations and maintenance facility at 1100 DART Way since 1978. Most areas of the facility are in need of major updates and repairs.

In September 2023, the DART Commission unanimously approved beginning Phase 1 of building a new facility. Reasons for this decision include:

- Most major electrical and mechanical systems need replacement.
- The current facility is in poor condition – having experienced multiple flooding events – and is in a flood plain directly adjacent to the Racoon River.
- Buildings are undersized for modern buses
- DART has outgrown the current facility and is landlocked within a growing residential area.

Because of multiple challenges with the existing facility, DART would not receive competitive federal grants to renovate the facility, putting the estimated $63 million cost of repairs on local taxpayers. Updating the new facility would also not meet DART's infrastructure needs for the next 50 years.

Des Moines Area Regional Transit Authority

620 Cherry Street
Des Moines, Iowa
50309-4530

515-283-8100
Fax 515-283-8135
ridedart.com

Investing in a new facility will allow DART to improve efficiencies in operations, provide a safer and more functional workspace for DART staff, and minimize taxpayer costs as DART prepares for its future transit needs.

How is the project funded?
Funding for the new Operations and Maintenance facility will come from competitive federal grants and DART's capital budget. DART's capital budget is comprised primarily of FTA annual formula funding, with a required 20% local match, as well as local funds set aside in past years. Local property taxes are primarily used to fund DART's day-to-day operations, so any reduction in local funding from DART's member communities would impact DART's operating budget, rather than capital budget.

The FTA requires federal funding be primarily allocated to capital expenses; therefore DART is limited in how much federal funds can be used to address the potential shortfall in operating funding. For example, in FY 2025 the DART Commission plans to reallocate $1 million from the capital budget towards operating expenses to lower the property tax need. This is not a long-term solution, since lower funding for capital would result in underinvestment in buildings, vehicles and equipment, and would eventually result in higher operational costs to maintain aging assets.

Phase 1 of building a new facility is fully funded at $35 million, with 75% from federal funding and 25% from local funding. With the ability to apply for federal funds for future phases, building a new facility will be a long-term term investment that happens in phases as grants are secured.

Staying in the current facility would require an estimated $63 million local taxpayer investment in new buildings, infrastructure, and site improvements. It would take 20 years due to funding and operational constraints. A renovated facility would still be prone to flooding and would not leave room for DART to grow to meet the region's needs or transition to zero emissions technologies.

What is the timeline?
Phase 1 of the project is currently underway. It includes purchasing land for a new facility, completing facility design, and constructing most of the maintenance building. Construction is expected to begin in summer 2024 and will take 12-16 months to complete.

Des Moines Area Regional Transit Authority

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The timing of future phases will depend on securing additional federal grants.

Thank you for considering the necessary approvals for this important piece of public infrastructure.

Respectfully,



Luis Montoya,
Chief Planning Officer

Des Moines Area Regional Transit Authority

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AGENDA ITEMS #2A - #2C	**COMP-2023-000043 & ZONG-2023-000074**

Applicant: Elim Christian Fellowship of Des Moines (owner), represented by Michael K. Hurst (officer).

Location: 525 East 9th Street.

Requested Action: A) Determination as to whether the requested rezoning is in conformance with the PlanDSM Creating Our Tomorrow Comprehensive Plan.

B) Amend the PlanDSM Creating Our Tomorrow Comprehensive Plan to revise the future land use classification of the property from Public/Semi-Public to Downtown Mixed Use. (COMP-2023-000043)

C) Rezone the property from "P2" Public, Civic and Institutional District to "DXR" Downtown District, to allow renovation of an existing church building for a school and multiple household residential use. (ZONG-2023-000074)

I. GENERAL INFORMATION

1. **Purpose of Request:** The applicant is proposing to amend the future land use classification of the property to Downtown Mixed Use and to rezone the subject property to "DXR" Downtown District, to allow conversion of the existing church building to school and multiple-household residential uses for "Starts Right Here".

   Any future conversion, construction, or reuse of the site must comply with all applicable site plan and design regulations of the Planning and Design Ordinance (Chapter 135 of City Code).

2. **Size of Site:** 20,000 square feet (0.459 acres).

3. **Existing Zoning (site):** "P2" Public, Civic, and Institutional District.

4. **Existing Land Use (site):** The subject property contains an 18,676 square foot building most recently occupied for a Church use.

5. **Adjacent Land Use and Zoning:**

   North – "P2"; Use are offices and surface parking lots.

   South – "P2", Uses are administrative offices and surface parking lots for the State of Iowa.

   East – "P2", Uses are administrative offices and surface parking lots for the State of Iowa.

   West – "P2"; Use is Henry A. Wallace Agricultural Building for the State of Iowa.

6. **General Neighborhood/Area Land Uses:** The subject property is located at the southeast corner of the Des Moines Street and East 9th Street intersection. The area consists of a mix of government administration, surface parking, and one- and two-household residential uses.

7. **Applicable Recognized Neighborhood(s):** The subject property is within the Historic East Village Neighborhood. The neighborhood associations were notified of the public hearing by mailing of the Preliminary Agenda on December 29, 2023 and by mailing of the Final Agenda on January 12, 2024. Additionally, separate notifications of the hearing for this specific item were mailed on December 29, 2023 (20 days prior to the public hearing) and January 8, 2024 (10 days prior to the public hearing) to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

   All agendas and notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Development Division on the date of the mailing. The Historic East Village Neighborhood mailings were sent to Luke Dickens, PO Box 93904, Des Moines, IA 50393.

   The applicant is required to conduct neighborhood outreach. They will be available to provide a summary of that outreach during the public hearing.

8. **Additional Information:**

9. **Relevant Zoning History:** None.

10. **PlanDSM: Creating Our Tomorrow Plan Land Use Plan Designation:** Public / Semi Public.

11. **Applicable Regulations:** Taking into consideration the criteria set forth in Chapter 18B of the Iowa Code, the Commission reviews all proposals to amend zoning boundaries or regulations within the City of Des Moines. Such amendments must be in conformance with the comprehensive plan for the City and designed to meet the

criteria in 414.3 of the Iowa Code. The Commission may make recommendations to the City Council on conditions to be made in addition to the existing regulations so long as the subject property owner agrees to them in writing. The recommendation of the Commission will be forwarded to the City Council.

II. ADDITIONAL APPLICABLE INFORMATION

1. **Additional Information:** "Starts Right Here" would operate a charter school with educational services within the basement and first floor sanctuary of the building, preserving the historic character of these spaces. These activities would include high school equivalency degree classes and tutoring. "Starts Right Here" is also proposing to add 17 dorm-type affordable studio apartments in the former church offices within the basement, first, and second floors of the building. These dwelling units would include private restrooms and sleeping areas but would not include kitchens. The existing church kitchen in the basement common space would be retained. There would also be one live-in supervisor apartment suite in the building.

2. **PlanDSM: Creating Our Tomorrow:** The applicant is proposing to rezone the subject property from "P2" District to "DXR" Downtown Mixed Use District. The Zoning Ordinance states that the "P2" District is intended for civic and institutional facilities, such as religious assembly places, cultural or arts centers, community centers, schools, infrastructure, recreational facilities, and other institutional facilities. Infrastructure includes public or private infrastructure, including rail corridors and utility corridors or sites. The Zoning Ordinance also states that the "DXR" District is intended for the mainly residential neighborhoods of the downtown surrounding the downtown, and across the rivers from downtown.

   The existing Public / Semi Public designation is described as follows:

   Public/Semi-Public
   Areas that are mostly open to public use or public access. May include government facilities, schools, hospitals, libraries, and community facilities.

   In order for the proposed rezoning to "DXR" District to be in conformance with PlanDSM, the future land use designation must be revised to Downtown Mixed Use. The proposed Downtown Mixed Use designation is described as follows:

   Downtown Mixed Use
   Allows mixed-use, high density residential uses and compact combinations of pedestrian oriented retail, office, residential, and parking in downtown. Should include active uses (e.g. retail) on ground floor, particularly at key intersections. .

Based on these designations, the proposed “DXR” District zoning would not be found in conformance with the Comprehensive Plan designation of Public/Semi-Public but would be found in conformance with the requested designation of Downtown Mixed Use.

2. **Planning and Design Ordinance:** Any development must comply with all applicable site plan and design regulations of the Planning and Design Ordinance. Should the rezoning be approved, the applicant would be required to prepare a Site Plan and building elevations for review before the expansion can be occupied by the proposed use.

3. **Drainage/Grading:** Any site plan for an area over 10,000 square feet would require compliance with the stormwater management requirements of the City Code. Any improvements over an acre in area would require submittal of a Storm Water Pollution Protection Plans (SWPPP) with approval by Iowa DNR.

III. STAFF RECOMMENDATION

Part A) Staff recommends that the requested “DXR” District be found not in conformance with PlanDSM Creating Our Tomorrow Comprehensive Plan future land use classification of Public / Semi Public.

Part B) Staff recommends approval of the requested amendment to the PlanDSM: Creating Our Tomorrow Plan to revise the future land use classification from Public/Semi-Public to Downtown Mixed Use.

Part C) Staff recommends approval of the request to rezone the property from “P2” Public, Civic, and Institutional District to “DXR” Downtown Mixed-Use District.

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AGENDA ITEMS #3A-3C	**COMP-2023-000046 & ZONG-2023-000062**

Applicant: Juan's Auto Repair, LLC (owner), represented by Juan Lopez (officer).

Location: 1660 East Army Post Road.

Requested Action: A) Determination as to whether the requested rezoning is in conformance with the PlanDSM: Creating Our Tomorrow Comprehensive Plan.

B) Amend the PlanDSM: Creating Our Tomorrow Comprehensive Plan to revise the future land use classification of the property from Business Park within a Regional Node to Community Mixed Use within a Regional Node. (COMP-2023-000046)

C) Rezone the property from "EX" Mixed Use District to "CX" Mixed Use District, to allow the construction of a new auto body repair shop. (ZONG-2023-000062)

I. GENERAL INFORMATION

1. **Purpose of Request:** The applicant is proposing to construct a new building to be used for an auto body repair shop.

2. **Size of Site:** 48,874 square feet (1.1 acres).

3. **Existing Zoning (site):** "EX" Mixed Use District.

4. **Existing Land Use (site):** The subject property is undeveloped.

5. **Adjacent Land Use and Zoning:**

   North – "N1a"; Uses are one-household residential.

   South – "EX"; Uses are commercial, industrial, and agricultural.

   East – "EX" & "N1a"; Uses are one-household residential, commercial, and retail.

   West – "EX" & "CX"; Uses are one-household residential, commercial, and retail.

6. **General Neighborhood/Area Land Uses:** The subject property is located on the northwest corner of the intersection of East Army Post Road and Southeast 16th Court. The surrounding area is a mix of commercial, one-household residential, and agricultural uses.

7. **Applicable Recognized Neighborhood(s):** The subject property is located in the Easter Lake Area Neighborhood Association (ELANA). All neighborhood associations were notified of the public hearing by emailing of the Preliminary

Agenda on December 29, 2023, and of the Final Agenda on January 12, 2024. Additionally, separate notifications of the hearing for this specific item were mailed on December 29, 2023 (20 days prior to the public hearing) and January 8, 2023 (10 days prior to the public hearing) to the Neighborhood Association and to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

All notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Development Division on the date of the mailing. The Easter Lake Area Neighborhood Association (ELANA) mailings were sent to Jim Bollard.

The applicant can provide a summary of the neighborhood meeting at the public hearing.

8. **Relevant Zoning History:** None.

9. **PlanDSM: Creating Our Tomorrow Plan Land Use Plan Designation:** Business Park within a Regional Node.

10. **Applicable Regulations:** Taking into consideration the criteria set forth in Chapter 18B of the Iowa Code, the Commission reviews all proposals to amend zoning boundaries or regulations within the City of Des Moines. Such amendments must be in conformance with the comprehensive plan for the City and designed to meet the criteria in 414.3 of the Iowa Code. The Commission may make recommendations to the City Council on conditions to be made in addition to the existing regulations so long as the subject property owner agrees to them in writing. The recommendation of the Commission will be forwarded to the City Council.

II. ADDITIONAL APPLICABLE INFORMATION

1. **PlanDSM: Creating Our Tomorrow:** The applicant is requesting that the future land use designation of the property be amended from “Business Park” to “Community Mixed Use”. PlanDSM describes these designations as follows:

   Business Park: Accommodates light industrial, office and employment uses along with limited complementary retail uses. Industrial uses in this category would produce little or no noise, odor, vibration, glare, or other objectionable influences, and would have little or no adverse effect on surrounding properties.

   Community Mixed Use: Small- to medium-scale mixed use development, located on high capacity transit corridors or at the intersection of transportation corridors. Community mixed use areas include both a mix of

medium density residential and a mix of retail and service establishments designed to attract customers from a large service area encompassing multiple neighborhoods and may include specialty retail that attracts regional customer.

Regional Node: The largest node, regional nodes are concentrations of employment, retail, and housing and may include light industrial uses. They serve the widest geographical area and attract people from throughout the City and region. High density residential development is appropriate at regional nodes.

The subject property is currently zoned "CX" Mixed Use District which the Zoning Ordinance describes as, "intended for nodes and corridors with larger-scale single-use commercial accommodating higher levels of vehicular traffic than MX districts and more intensive commercial uses, especially with outdoor sales and storage."

The applicant is proposing to rezone the property to the "EX" Mixed-Use District which the Zoning Ordinance describes as, "intended for locations and corridors with a mix of light industrial and heavier commercial uses, accommodating higher levels of vehicular traffic than MX districts and a predominance of mid-scale employment uses, such as office, low intensity industrial, and warehouse spaces associated with offices."

Staff believes that the subject site would be an appropriate location for an auto body repair shop given the site's location within a Regional Node near a high-capacity roadway (Southeast 14th Street). The character of the surrounding location consists of commercial and light industrial uses similar to the use being proposed.

2. **Planning and Design Ordinance:** Any development must comply with all applicable site plan and design regulations of the Planning and Design Ordinance. Should the rezoning be approved, the applicant would be required to prepare a Site Plan and building elevations for review and approval before the property can be occupied by the proposed use.

III. STAFF RECOMMENDATION

Part A) Staff recommends that the requested rezoning to "CX" Mixed-Use District be found not in conformance with the PlanDSM: Creating Our Tomorrow Comprehensive Plan, which designates this property as Business Park within a Regional Node.

Part B) Staff recommends approval of the request to amend the PlanDSM: Creating Our Tomorrow Comprehensive Plan to revise the future land use classification for the property from Business Park within a Regional Node to Community Mixed Use within a Regional Node.

Part C) Staff recommends approval of the request to rezone the property from “EX” Mixed Use District to “CX” Mixed-Use District.

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AGENDA ITEM #4 **SITE-2023-000156**

Applicant: James McCaughey, Hawkeye Land Co., and Timelis Restorations (owners), represented by James McCaughey, Kristi McCaughey, Rick Stickle, and Carl Wiederaenders (officers).

Location: Vicinity of 2142 East Market Street.

Requested Action: Review and approval of a Public Hearing Site Plan "RW Excavating Solutions" and for a Type 2 Design Alternative in accordance with City Code Sections 135-9.2.4(B) and 135-9.3.1(B), to allow accessory buildings to reach 30 feet in height, when the maximum height for accessory structures is 17 feet, per City Code Section 135-2.22.1.D.5.

I. GENERAL INFORMATION

1. **Purpose of Request:** The applicant is proposing to develop a concrete recycling facility, reusing the existing building, conducting paving improvements, and adding auxiliary conveyors, a crusher, excavators, and a scale to the site. The site plan also proposes the construction of some accessory structures to store aggregate materials. Design Alternative review criteria can be found in Section I, subparagraph 10 of this report. Staff analysis of the proposal can be found in Section II of the report.

2. **Size of Site:** 10.67 acres.

3. **Existing Zoning (site):** "I2" Industrial District.

4. **Existing Land Use (site):** Portable toilets are currently stored within part of the site (they would be removed with site redevelopment for the concrete recycling facility). The remainder of the site is undeveloped ground. A portion of the Dean Lake drainage basin forms the site's northern and eastern border.

5. **Adjacent Land Use and Zoning:**

   North – "I1", Use is Dean Lake drainage basin.

   South – "I1" and "I2", Uses are East Market Street, a rail spur, and outdoor storage areas.

   East – "I1", Use is Dean Lake drainage basin.

   West – "I1", Uses are Union-Pacific railroad and an outdoor storage yard.

6. **General Neighborhood/Area Land Uses:** The subject site sits on the north side of East Market Street, between a Union-Pacific railroad (immediately west) and the Titan Tire manufacturing facility (approximately 1,000 feet to the east). The area surrounding the site is dominated by railways, outdoor storage uses, heavy industrial uses, and some undeveloped parcels.

7. **Applicable Recognized Neighborhood(s):** The subject property is not located within a recognized neighborhood association boundary. All neighborhood associations were notified of the Commission meeting by emailing of the Preliminary Agenda on December 29, 2023 and emailing of the Final Agenda on January 12, 2024. Notifications of the hearing for this specific item were mailed on January 8, 2024 (10 days prior to the public hearing) to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

   All agendas and notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Services Department.

8. **Relevant Zoning History:** On July 17, 2023, the City Council, by Ordinance No. 16,263, rezoned the property from "I1" Industrial District to "I2" Industrial District to allow use of the property for a "Junk or Salvage Yard" use. The Commission recommended approval of this rezoning request by a vote of 11-0 at the June 15, 2023 meeting.

   On August 23, 2023, the Zoning Board of Adjustment, by Docket ZBOA-2023-000059 and by a vote of 6-0, approved a Conditional Use request for this property for a "Junk or Salvage Yard" use in an "I2" zoning district.

9. **PlanDSM Future Land Use Plan Designation:** Industrial.

10. **Applicable Regulations:** Pursuant to Section 135-9.1.1.B of the Planning and Design Ordinance, the site plan review requirements of Chapter 135 are designed to ensure the orderly and harmonious development of property in a manner that shall:

    - Promote the most beneficial relation between present and proposed future uses of land and the present and proposed future circulation of traffic throughout the city;

    - Permit present development of property commensurate with fair and orderly planning for future development of other properties in the various areas of the city with respect to the availability and capacity, present and foreseeable, of public facilities and services. The factors to be considered in arriving at a conclusion concerning proposed present development of property shall include the following:

- The maximum population density for the proposed development, the proposed density of use, and consideration of the effect the proposal will have on the capacity of existing water and sanitary sewer lines to the end that existing systems will not become overloaded or capacity so substantially decreased that site use will inhibit or preclude planned future development;

- Zoning restrictions at the time of the proposal;

- The city's comprehensive plan;

- The city's plans for future construction and provision for public facilities and services; and

- The facilities and services already available to the area which will be affected by the proposed site use;

- Encourage adequate provision for surface and subsurface drainage, in order to ensure that future development and other properties in various areas of the city will not be adversely affected;

- Provide suitable screening of parking, truck loading, refuse and recycling disposal, and outdoor storage areas from adjacent residential districts;

- Encourage the preservation of canopied areas and mature trees and require mitigation for the removal of trees; and

- Consider the smart planning principles set forth in Iowa Code Chapter 18B.

Based on Chapter Section 135-9.2.4 and 135-9.3.1.B of the Planning and Design Ordinance, Type 2 Design Alternatives are to be considered by the Plan and Zoning Commission after a public hearing whereby the following criteria are considered:

- The design alternative provisions of Section 135-9.2.4 are intended to authorize the granting of relief from strict compliance with the regulations of this chapter as part of the site plan or alternate design documentation review process when specific site features or characteristics of the subject property, including the presence of existing buildings, creates conditions that make strict compliance with applicable regulations impractical or undesirable. The design alternative provisions are also intended to recognize that alternative design solutions may result in equal or better implementation of the regulation's intended purpose and greater consistency with the comprehensive plan.

- Consideration of requested design alternatives through the administrative and public hearing review processes will be evaluated on the merits of the

applicable request and independently of prior requests from the same applicant, and may include the following criteria:

- An evaluation of the character of the surrounding neighborhood, such as:
    - Whether at least 50% of the developed lots within 250 feet of the subject property are designed and constructed consistently with the requested design alternative(s); and
    - Whether the directly adjoining developed lots are designed and constructed consistently with the requested design alternative(s);

- For purposes of this subsection, if the lots that exist within 250 feet of the subject property are undeveloped, then the neighborhood character determination will be based upon the assumption that such lots, as if developed, comply with the applicable requirements of this chapter for which a design alternative(s) has been requested;

- The totality of the number and extent of design alternatives requested compared to the requirements of this chapter for each site plan or alternate design documentation reviewed;
- Whether the requested design alternative(s) is consistent with all relevant purpose and intent statements of this design ordinance and with the general purpose and intent of the comprehensive plan;
- Whether the requested design alternative(s) will have a substantial or undue adverse effect upon adjacent property, the character of the surrounding area or the public health, safety and general welfare;
- Whether any adverse impacts resulting from the requested design alternative(s) will be mitigated to the maximum extent feasible; and
- Other factors determined relevant by the community development director, plan and zoning commission, or city council as applicable.

II. ADDITIONAL APPLICABLE INFORMATION

Accessory Structure Regulations: Section 135-2.22.1.D.5 of City Code stipulates that the maximum height of any accessory structure is 17 feet. The applicant is proposing four (4) hoop buildings throughout the property that each would reach approximately 30 feet in height.

The hoop buildings would be constructed with a 3-sided, concrete, 4-foot-tall “bunker” as a base, with the “hoop” structure attached to the top of said base. The total height of the bunker and the hooped attachment is approximately 30 feet. This type of structure

requires a building permit and would be required to meet all requirements of the City's Permit and Development Center, specifically any elements related to building and fire codes.

This site is located within a very industrial area of the City. There are no aesthetic concerns with the proposed heights of the hoop buildings as they would fit within the existing industrial character of this corridor. Staff notes that the proposed hoop building solution is desired over a solution to have uncovered, outdoor piles of aggregate products, which is a condition that exists at other industrial sites within the City. The proposed buildings would otherwise generally meet the requirements of accessory structures/outbuildings that are specified in City Code Sections 135-2.22.1.D and 135-2.22.2.C. In addition to maintenance of some of the existing vegetation, new tree planting is also proposed along the East Market Street right-of-way to provide screening of the buildings and the site's operations.

Staff supports this Type 2 Design Alternative request.

III. STAFF RECOMMENDATION

Staff recommends approval of the Public Hearing Site Plan and the requested Design Alternative, subject to compliance with all administrative review comments.

RW EXCAVATING SITE IMPROVEMENTS

2142 E MARKET STREET, DES MOINES, IOWA 50317

PROPERTY OWNERS

HAWKEYE LAND COMPANY
ATTN: RICK STICKLE
4625 20TH AVENUE SW
CEDAR RAPIDS, IOWA 52404
PHONE: (319) 449-6539

JAMES McCAUGHY
1005 BOULDER AVENUE
DES MOINES, IOWA 50315
PHONE: (515) 943-3585

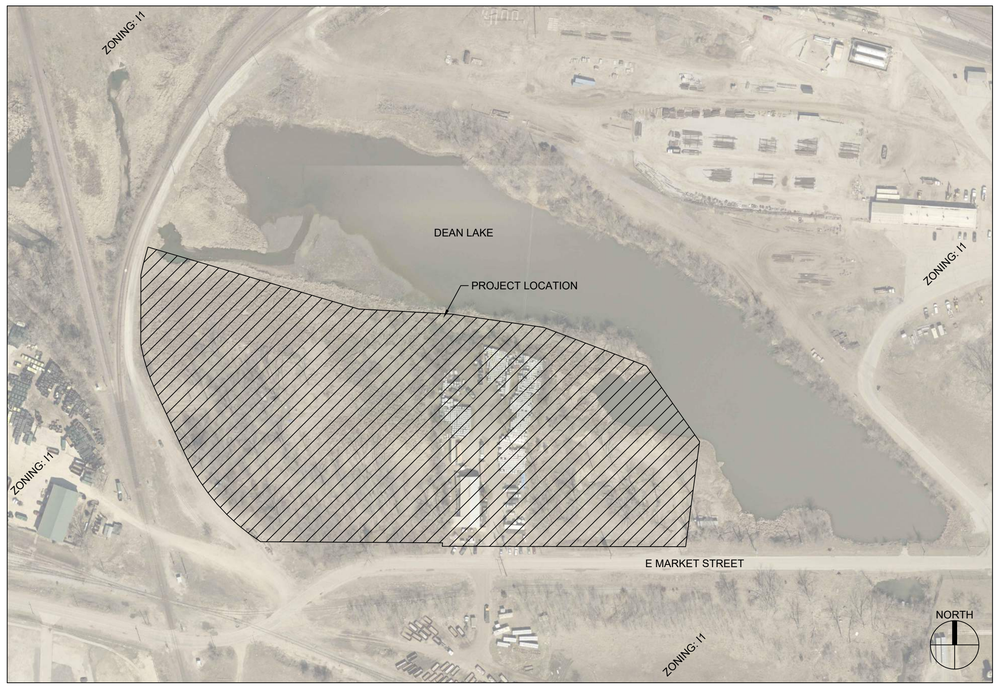
TIMELIS RESTORATIONS
ATTN: CARL WIEDERAENDERS
4312 KINGMAN BOULEVARD
DES MOINES, IOWA 50311
PHONE: (515) 490-9083

ENGINEER

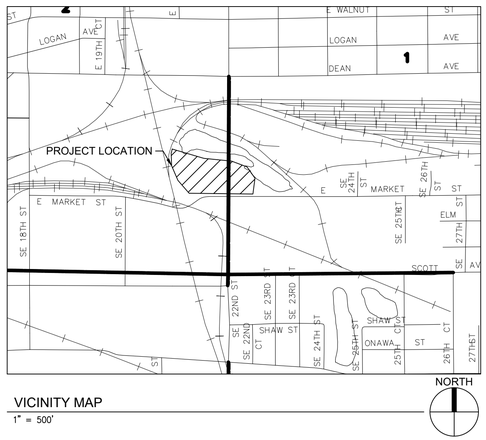
SHIVE-HATTERY, INC.
ATTN: BRENT STRAUCH
4125 WESTOWN PKWY, SUITE 100
WEST DES MOINES, IOWA 50266
PHONE: (515) 223-8104

APPLICANT

RW EXCAVATING SOLUTIONS
ATTN: DAN WILSON
13293 S 88TH AVENUE W
PRAIRIE CITY, IOWA 50228
PHONE: (515) 994-2648



PROJECT LOCATION MAP
1" = 150'



VICINITY MAP
1" = 500'

PARKING SUMMARY

REQUIRED PARKING:
1 STALL PER 2 STAFF — 4 STAFF/2 = 2 STALLS

TOTAL PROPOSED PARKING PROVIDED: = 5 STALLS

ADA PARKING REQUIRED (1 TO 25 TOTAL STALLS): = 1 STALL
ADA PARKING PROVIDED: = 1 STALL

Sheet List Table

Sheet Number	Sheet Title
C000	COVER SHEET
CD01	EXISTING CONDITIONS AND DEMOLITION PLAN
C101	SITE PLAN
C201	GRADING AND UTILITY PLAN
C501	NOTES AND CONSTRUCTION DETAILS
L101	LANDSCAPE PLAN
L501	LANDSCAPE DETAILS

SITE PLAN APPROVAL:

☐ APPROVED ☐ APPROVED WITH CONDITIONS – SEE EXHIBIT "A"

IN ACCORDANCE WITH SECTION 135-9, 2019 DES MOINES MUNICIPAL CODE, AS AMENDED.

NO CHANGES TO THIS PLAN UNLESS APPROVED IN WRITING FROM THE DEVELOPMENT SERVICES DIRECTOR.

DEVELOPMENT SERVICES DIRECTOR: _____ DATE: _____

ZONING INFORMATION

CURRENT ZONING:
I2: INDUSTRIAL DISTRICT

PROPOSED ZONING:
I2: INDUSTRIAL DISTRICT

LANDSCAPE SUMMARY

SEE LANDSCAPE PLAN FOR SUMMARY

PROJECT SETBACKS

PRIMARY FRONTAGE SETBACK	25'
NON-PRIMARY FRONTAGE SETBACK	25'
INTERIOR SIDE SETBACK	0' OR 25' ABUTTING N DISTRICT
REAR SETBACK	0' OR 25' ABUTTING N DISTRICT

PROJECT DATA

EXISTING USE: STORAGE, DISTRIBUTION AND WHOLESALING - EQUIPMENT AND MATERIALS STORAGE, OUTDOOR
PROPOSED USE: STORAGE, DISTRIBUTION AND WHOLESALING - EQUIPMENT AND MATERIALS STORAGE, OUTDOOR

PRINCIPAL BUILDING USE: STORAGE, DISTRIBUTION AND WHOLESALING - EQUIPMENT AND MATERIALS STORAGE, OUTDOOR; JUNK OR SALVAGE YARD; OFFICE - BUSINESS OR PROFESSIONAL
BUILDING TYPE: WORKSHOP/WAREHOUSE
BUILDING HEIGHT: 1 STORY

LOT AREA: 464,910 SF (10.67 ACRE)
TOTAL DISTURBED AREA: 5.13 ACRE
BUILDING FOOTPRINT: 4,284 SF (EXISTING); 30,496 SF (PROPOSED); 34,780 (TOTAL)

EXISTING IMPERVIOUS AREA: 70,475 SF — PROPOSED IMPERVIOUS AREA: 71,465 SF
EXISTING PERVIOUS AREA: 394,435 SF — PROPOSED PERVIOUS AREA: 393,445 SF

ZONING BOARD OF ADJUSTMENT - CONDITIONAL USE APPROVAL

DATE: 8/23/2023
DOCKET: ZBOA-2023-000059
PROPOSAL: CONDITIONAL USE FOR A RECYCLED CONCRETE PROCESSING AND BATCH PLANT BUSINESS, "JUNK AND SALVAGE YARD" USE, THAT INCLUDES A STAGING AREA FOR THE RECYCLED AGGREGATE, ROCK, DIRT, AND FILL; A CRUSHER, CONVEYORS, EXCAVATORS, WHEEL LOADER, TRUCK SCALE, AND OTHER EQUIPMENT AS ACCESSORY TO THE PRIMARY USE.

APPEAL(S): CONDITIONAL USE FOR A "JUNK OR SALVAGE YARD" USE IN AN "I2" INDUSTRIAL DISTRICT. REQUIRED BY CITY CODE TABLE 134-4.2-1, SECTIONS 134-4.5.4 & 134-6.4.

THE VOTE: 6-0

CONDITIONS:
1. ANY SITE IMPROVEMENTS SHALL BE IN ACCORDANCE WITH AN APPROVED SITE PLAN THAT SATISFIES ALL APPLICABLE STANDARDS IN CITY CODE CHAPTER 135, INCLUDING BUT NOT LIMITED TO LANDSCAPING, SETBACKS, SCREENING, AND ALL SUPPLEMENTAL USE REGULATIONS IN CITY CODE CHAPTER 134-3.6.4. B.

2. ANY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND FIRE CODES, WITH ISSUANCE OF ALL NECESSARY PERMITS BY THE CITY'S PERMIT AND DEVELOPMENT CENTER.

3. ALL DRIVEWAYS, PARKING LOTS AND AREAS USED FOR TEMPORARY STORAGE OF VEHICLES SHALL BE SURFACED WITH AN ASPHALTIC OR PORTLAND CEMENT BINDER PAVEMENT OR SUCH OTHER SURFACE AS APPROVED BY THE CITY ENGINEER SO AS TO PROVIDE A DURABLE AND DUSTLESS SURFACE AND SHALL BE GRADED TO PROPERLY DRAIN ALL SURFACE WATER ACCUMULATION WITHIN THE AREA.

4. ALL AREAS OUTSIDE A COMPLETELY ENCLOSED BUILDING USED FOR THE STORAGE OF INOPERABLE OR UNSAFE VEHICLES, JUNK, OR SALVAGE MATERIALS SHALL BE ENCLOSED ON ALL SIDES BY A SOLID OPAQUE FENCE AND GATES AT LEAST EIGHT FEET IN HEIGHT AND OF UNIFORM DESIGN AND COLOR, SO AS TO EFFECTIVELY SCREEN SUCH AREAS FROM PUBLIC VIEW. IF SUCH AREA ABUTS AN AREA UPON THE ADJOINING PROPERTY THAT IS ALSO USED FOR THE STORAGE OF INOPERABLE OR UNSAFE VEHICLES, JUNK OR SALVAGE MATERIALS, NO FENCE OR SETBACK IS REQUIRED ALONG THE COMMON PROPERTY LINE WHILE SUCH ADJOINING USE CONTINUES. ALL FENCES SHALL BE MAINTAINED IN GOOD REPAIR.

5. JUNK AND SALVAGE MATERIALS SHALL NOT BE STACKED HIGHER THAN THE PERIMETER FENCE WITHIN 75 FEET OF THE FENCE AND SHALL NOT BE STACKED HIGHER THAN 25 FEET ANYWHERE ON THE SITE.

6. THE DISMANTLING OR REPAIR OF VEHICLES SHALL OCCUR ONLY UPON AN IMPERMEABLE SURFACE WITH ADEQUATE PROVISION FOR THE COLLECTION AND DISPOSAL OF FLUIDS AND WASTES.

7. ANY JUNK OR SALVAGE YARD SHALL PROVIDE A PAVED AREA FOR THE RECEIPT AND TEMPORARY STORAGE OF MATERIAL, WHICH IS SCREENED FROM THE ADJOINING PUBLIC RIGHT-OF-WAY.

8. THE BEST PRACTICAL CONTROL TECHNOLOGY SHALL BE EMPLOYED TO MINIMIZE ANY OBNOXIOUS OR OFFENSIVE ODOR, DUST, SMOKE, GAS, NOISE, OR SIMILAR NUISANCE GENERATED BY THE PROPOSED USE, AND THE BEST PRACTICAL MEANS KNOWN SHALL BE EMPLOYED FOR THE DISPOSAL OF REFUSE MATTER.

9. ANY JUNK OR SALVAGE YARD REQUIRING A LICENSE OR PERMIT FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES OR SIMILAR STATE AGENCY SHALL PROVIDE PROOF OF VALID LICENSE OR PERMIT, AS APPLICABLE, TO THE NEIGHBORHOOD SERVICES DEPARTMENT PRIOR TO COMMENCING SUCH USE AND FOLLOWING ANY AMENDMENT OR RENEWAL TO SAID LICENSE OR PERMIT.

10. IN ACCORDANCE WITH CITY CODE SECTION 134-6.4.14, IF THE ZONING ENFORCEMENT OFFICER DETERMINES AT ANY TIME THAT THE APPLICANT OR PROPERTY OWNER OR DESIGNEE EXHIBITS A PATTERN OF VIOLATING THE CONDITIONS SET FORTH IN THE CONDITIONAL USE APPROVAL, THE ZONING ENFORCEMENT OFFICER MAY APPLY TO THE BOARD TO RECONSIDER THE ISSUANCE OF THE CONDITIONAL USE

LEGAL DESCRIPTION

AN IRREGULAR SHAPED PORTION OF LAND LYING IN PART OF LOTS 21 AND 22 OF BROOKS & COS ADDITION, AN OFFICIAL PLAT AS RECORDED IN BOOK A, PAGE 59 OF THE POLK COUNTY RECORDER; PART OF LOT 1 OF DIAGRAM A DEAN'S ESTATE, AN OFFICIAL PLAT; PART OF LOT 19 OF THE OFFICIAL PLAT OF THE SOUTH 1/2 OF SECTION 1, TOWNSHIP 78 NORTH, RANGE 24 WEST, AS RECORDED IN BOOK B, PAGE 304 OF THE POLK COUNTY RECORDER; AND PART OF LOT 3 OF THE OFFICIAL PLAT OF THE SOUTHEAST 1/4 OF SECTION 2, TOWNSHIP 78 NORTH, RANGE 24 WEST, AS RECORDED IN BOOK B, PAGE 136 OF THE POLK COUNTY RECORDER, MORE PARTICULARLY DESCRIBED AS:

BEGINNING AT AN IRON ROD WITH ORANGE IDENTIFICATION CAP #12265, SAID MONUMENT BEING THE SOUTHWEST CORNER OF THE WEST 653 FEET NORTH OF MARKET STREET, LOT 19 OF THE OFFICIAL PLAT OF THE SOUTH 1/2 OF SECTION 1, TOWNSHIP 78 NORTH, RANGE 24 WEST, AS DESCRIBED IN THE DEED FOUND IN BOOK 16515, PAGE 577 OF THE POLK COUNTY RECORDER (HEREINAFTER REFERRED TO AS "TIMELIS RESTORATIONS PARCEL"); THENCE N00°08'10"E ALONG THE WEST LINE OF SAID TIMELIS RESTRATIONS PARCEL, A DISTANCE OF 238.50 FEET TO THE NORTHWEST CORNER OF SAID TIMELIS RESTORATION PARCEL; THENCE CONTINUING N00°08'10"E ALONG THE EAST LINE OF THE NORTH 300 FEET OF LOT 4 OF THE SOUTHEAST 1/4 OF SECTION 2, TOWNSHIP 78 NORTH, RANGE 24 WEST, AS DESCRIBED IN THE DEED RECORDED IN BOOK 8526, PAGE 577 OF THE POLK COUNTY RECORDER (HEREINAFTER REFERRED TO AS "MCCAUGHEY PARCEL"), TO THE NORTHEAST CORNER OF SAID MCCAUGHEY PARCEL; THENCE N89°42'43"W ALONG THE NORTH LINE OF SAID MCCAUGHEY PARCEL, A DISTANCE OF 138.60 FEET TO THE NORTHWEST CORNER OF SAID MCCAUGHEY PARCEL; THENCE S05°20'49"W ALONG THE WEST LINE OF SAID MCCAUGHEY PARCEL, A DISTANCE OF 245.51 FEET TO THE ORIGINAL NORTH RIGHT-OF-WAY LINE OF MARKET STREET AS DESCRIBED IN THE DEED RECORDED IN BOOK 5469, PAGE 452 OF THE POLK COUNTY RECORDER (HEREINAFTER REFERRED TO AS "UNION PACIFIC DEED"); THENCE N89°37'34W ALONG SAID ORIGINAL NORTH RIGHT-OF-WAY LINE OF MARKET STREET, A DISTANCE OF 337.18 FEET TO A POINT BEING ON A LINE TWENTY-FIVE FEET EASTERLY OF AND PARALLEL TO THE CENTERLINE OF THE FORMER ARMSTRONG TIRE & RUBBER COMPANY INDUSTRY LEAD TRACK, AS DESCRIBED IN SAID UNION PACIFIC DEED; THENCE NORTHERLY ALONG A LINE TWENTY-FIVE FEET EASTERLY OF AND PARALLEL TO THE CENTERLINE OF SAID FORMER ARMSTRONG TIRE & RUBBER COMPANY LEAD TRACK TO A LINE TWENTY-FIVE FEET EASTERLY OF AND PARALLEL TO THE CENTERLINE OF THE EXISTING SOUTHEAST WYE TRACK AS DESCRIBED IN SAID UNION PACIFIC DEED, TO A POINT WHICH LIES 581.89 FEET NORTHERLY OF AND NORMALLY DISTANT TO SAID ORIGINAL NORTH LINE OF MARKET STREET; THENCE S73°37'26E, A DISTANCE OF 434.88 FEET; THENCE S86°53'57E, A DISTANCE OF 184.42 FEET; THENCE S81°44'49E, A DISTANCE OF 184.36 FEET; THENCE S69°24'33E, A DISTANCE OF 217.07 FEET; THENCE S35°03'44E, A DISTANCE OF 182.93 FEET; THENCE S07°34'44W, A DISTANCE OF 207.32 FEET TO THE EXISTING NORTH RIGHT-OF-WAY LINE OF MARKET STREET; THENCE S89°46'22W ALONG SAID EXISTING NORTH RIGHT-OF-WAY LINE OF MARKET STREET, A DISTANCE OF 315.36 FEET TO THE POINT OF BEGINNING, SAID TRACT CONTAINING 419,887 SQUARE FEET, OR 9.64 ACRES.

REZONING INFORMATION

PLAN AND ZONING COMMISSION
DATE: 6/15/23
DOCKET: ZONG-2023-000024
COMMISSION ACTION: CHRIS DRAPER MADE A MOTION FOR:
PART A) THE PROPOSED REZONING BE FOUND IN CONFORMANCE WITH THE PLANDSM CREATING OUR TOMORROW COMPREHENSIVE PLAN.
PART B) APPROVAL OF THE REZONING OF THE PROPERTY FROM "I1" INDUSTRIAL DISTRICT TO "I2" INDUSTRIAL DISTRICT SUBJECT TO THE FOLLOWING CONDITIONS

1. THE PROPERTY SHALL BE BROUGHT INTO CONFORMANCE WITH CURRENT CITY OF DES MOINES SITE PLAN STANDARDS.
2. ANY ADJOINING PROPERTY USED OR DEVELOPED IN COMMON WITH THE SUBJECT PROPERTY SHALL COMPLY WITH CONDITION #1.

THE VOTE: 11-0

CITY COUNCIL
DATE: 7/17/2023
ROLL CALL: 23-1039 (MOVED BY GATTO, SECOND BY VOSS, MOTION CARRIED 6-1 (SHEUMAKER ABSENT))
ORDINANCE NO: 16,263

OUTDOOR STORAGE SITE DESIGN REGULATIONS

A. ALL OUTDOOR STORAGE AREAS SHALL BE DESIGNED TO ALLOW NO PART OF ANY STORED MATERIAL, VEHICLES OR EQUIPMENT TO ENCROACH INTO THE REQUIRED SETBACKS.
B. ALL OUTDOOR STORAGE AREAS SHALL BE MAINTAINED WITH BOTH A DUSTLESS SURFACE, INCLUDING ASPHALTIC OR PORTLAND CEMENT BINDER PAVEMENT OR OTHER SURFACE APPROVED BY THE CITY ENGINEER, GRADED TO DRAIN PROPERLY AND A DRAINAGE SYSTEM APPROVED BY THE CITY ENGINEER.
C. ALL OUTDOOR STORAGE AREAS SHALL BE SET BACK A MINIMUM OF 25 FEET FROM ANY STREET FRONTAGE AND A MINIMUM OF 10 FEET FROM ALL OTHER LOT LINES.
D. ALL OUTDOOR STORAGE AREAS SHALL BE SCREENED FROM VIEW OF ADJACENT LOTS AND STREETS USING THE MEDIUM SIDE AND REAR BUFFER PER SECTION 135-7.8.3 OF THIS CHAPTER, UNLESS ADJACENT TO AN N DISTRICT OR VISIBLE FROM A PUBLIC CORRIDOR AS DETERMINED BY THE DEVELOPMENT SERVICES DIRECTOR WHICH REQUIRES THE USE OF THE HEAVY BUFFER PER SECTION 135-7.8.4 OF THIS CHAPTER.
E. ALL OUTDOOR STORAGE SHALL BE LOCATED IN THE REAR OR INTERIOR SIDE YARD OF THE LOT.
F. LOOSE MATERIALS SHALL NOT BE STACKED HIGHER THAN SIX FEET AND SHALL, AT A MINIMUM, BE STORED IN A THREE-SIDED COVERED SHELTER.
G. GOODS, MATERIALS AND EQUIPMENT SHALL NOT BE STACKED HIGHER THAN THE HEIGHT OF THE PERIMETER SCREENING.

LANDSCAPE ARCHITECT

I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND RESPONSIBLE CHARGE. I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

HOLLY C. REID
PRINTED OR TYPED NAME OR SECURE ELECTRONIC SIGNATURE

SIGNATURE DATE

PAGES OR SHEETS COVERED BY THIS SEAL
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License Expires 06/30/2024

CIVIL ENGINEER

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE DATE

PRINTED OR TYPED NAME BRENT M. STRAUCH
LICENSE NUMBER 24125
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2024
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ARCHITECTURE + ENGINEERING
4125 WESTOWN PKWY, SUITE 100
WEST DES MOINES, IOWA 50266
515.223.8104 | SHIVE-HATTERY.COM

RW EXCAVATING SITE IMPROVEMENTS
2142 E MARKET STREET, DES MOINES, IOWA 50317

PRELIMINARY - NOT FOR CONSTRUCTION

CITY SUBMITTAL 03
ISSUE DATE: 12/19/2023

PROJECT NUMBER: 2142302300

C000

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LEGEND

- CLEARING, GRUBBING, AND TREE REMOVAL LIMITS
- GRANULAR MATERIAL REMOVAL

PROPERTY LINE (TYP)

PROTECT EXISTING UTILITY POLES AND OVERHEAD LINES (TYP)

REMOVE AND DISPOSE OF GRANULAR MATERIAL AS-NEEDED FOR CONSTRUCTION

PROTECT EXISTING SEPTIC SYSTEM

REMOVE EXISTING FENCING ALONG PROPERTY LINE AS NEEDED TO INSTALL PROPOSED FENCING

PROTECT EXISTING BUILDING

PROTECT EXISTING PAVEMENT

SAWCUT FULL DEPTH, REMOVE AND DISPOSE OF PCC PAVING

PROTECT EXISTING TREES/SHRUBBERY

REMOVE EXISTING FENCING AND TREES/SHRUBBERY ALONG PROPERTY LINE AS NEEDED TO INSTALL PROPOSED FENCING - REFER TO LANDSCAPE PLAN FOR ADDITIONAL REMOVAL INFORMATION

PROTECT EXISTING PAVEMENT

PROTECT EXISTING LIGHT POLES AND RELOCATE OVERHEAD LINES UNDERGROUND - COORDINATE WITH UTILITY PROVIDER

RELOCATE OVERHEAD ELECTRICAL SERVICE UNDERGROUND - COORDINATE WITH UTILITY PROVIDER

CLEARING, GRUBBING, AND TREE REMOVAL LIMITS AS NEEDED FOR CONSTRUCTION

PROTECT EXISTING UTILITY POLES AND OVERHEAD LINES (TYP)

REMOVE EXISTING FENCING AND TREES/SHRUBBERY ALONG PROPERTY LINE AS NEEDED TO INSTALL PROPOSED FENCING - REFER TO LANDSCAPE PLAN FOR ADDITIONAL REMOVAL INFORMATION

NORTH

0 25 50 100

SCALE IN FEET

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IRW EXCAVATING SITE IMPROVEMENTS

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2142 E MARKET STREET, DES MOINES, IOWA 50317

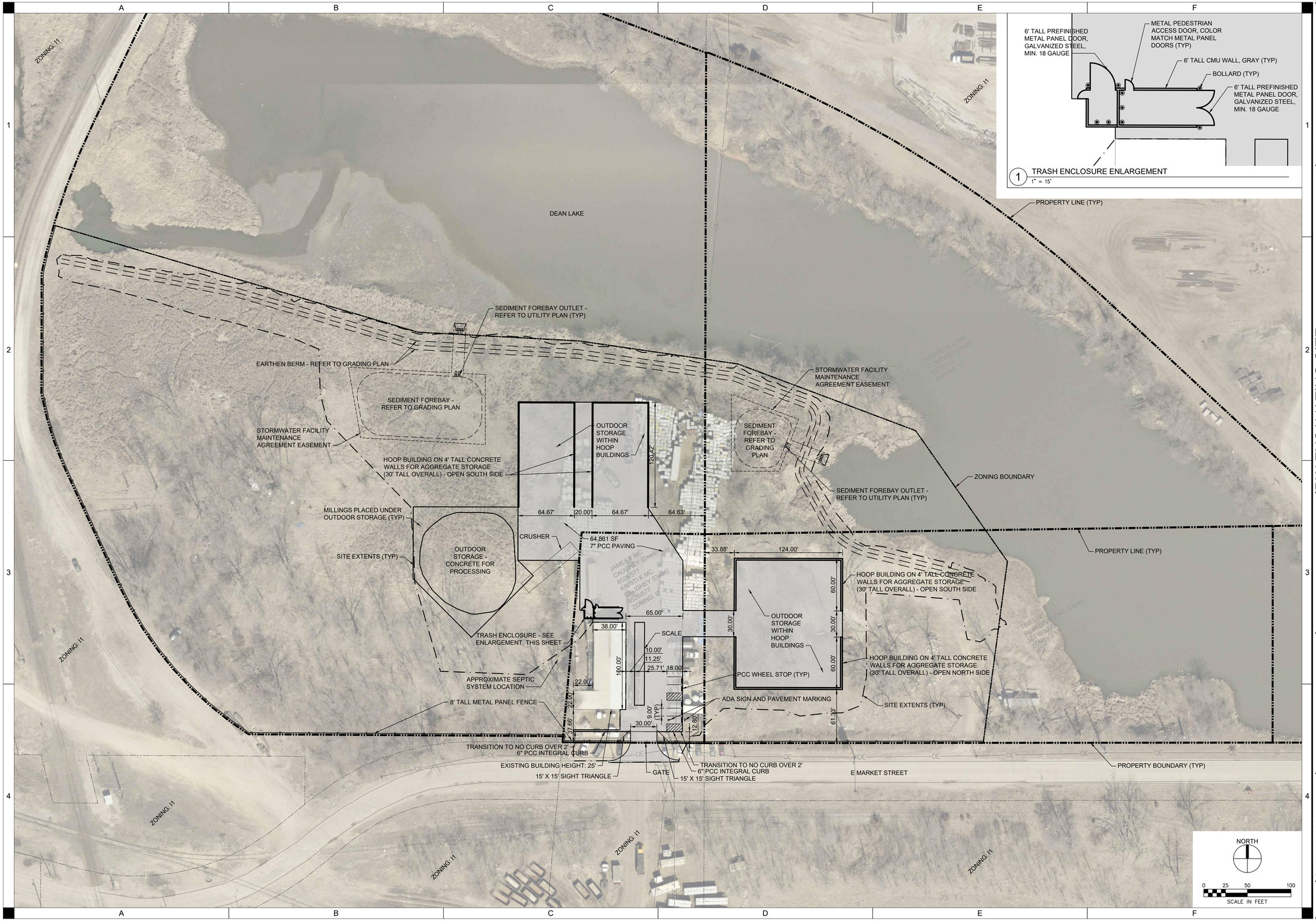
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PROJECT NUMBER	2142302300
FIELD BOOK	--

EXISTING CONDITIONS AND DEMOLITION PLAN

CD01

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1 TRASH ENCLOSURE ENLARGEMENT
1" = 15'

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IRW EXCAVATING SITE IMPROVEMENTS

2142 E MARKET STREET, DES MOINES, IOWA 50317

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FIELD BOOK	--

SITE PLAN

C101

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DEAN LAKE

PROPERTY LINE (TYP)

7 TONS CLASS 'D' REVETMENT

15" FES
IE @ FES END = 9.73

55 LF (INCLUDES FES)
15" HDPE @ 0.50%

15" FES
IE @ FES END = 10.00

SEDIMENT FOREBAY
NWL = 10.00
BOT = 7.00

HAWKEYE LAND COMPANY (Deed)
5473/114
ZONING: I1

SEDIMENT FOREBAY
NWL = 10.00
BOT = 7.00

OVERTOP LOCATION

15" FES
IE @ FES END = 10.00

45 LF (INCLUDES FES)
15" HDPE @ 0.50%

7 TONS CLASS 'D' REVETMENT

15" FES
IE @ FES END = 9.78

ZONING BOUNDARY

GRADING LIMITS/SITE EXTENTS (TYP)

PROPERTY LINE (TYP)

SWALE (TYP)

GRADING LIMITS/SITE EXTENTS (TYP)

JAMES C. CAUCHEY (Deed)
8539/577
KRISTIN C. CAUCHEY (Deed)
8539/577
ZONING: I2

PUBLIC SERVICE CORPORATIONS (Deed)
5473/577
ZONING: I1

E MARKET STREET

NORTH

0 25 50 100
SCALE IN FEET

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2142 E MARKET STREET, DES MOINES, IOWA 50317

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ISSUED FOR	CITY SUBMITTAL 03
ISSUE DATE	12/19/2023
PROJECT NUMBER	214230300
FIELD BOOK	--

GRADING AND UTILITY PLAN

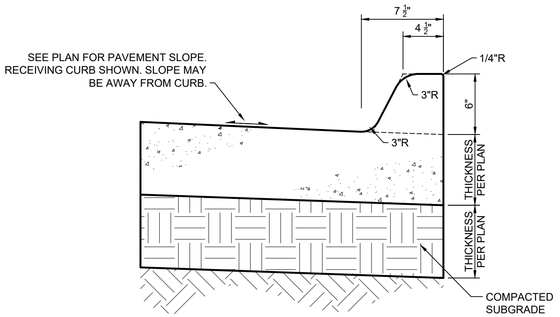
C201

GENERAL NOTES:

1. THE LOCATIONS OF UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS PLOTTED ON THIS DRAWING ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO SHIVE-HATTERY, INC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS NOT KNOWN TO SHIVE-HATTERY, INC. AND NOT SHOWN ON THIS DRAWING. THE VERIFICATION OF EXISTENCE OF, AND THE DETERMINATION OF THE EXACT LOCATION OF, UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR(S).
2. IOWA CODE UNDERGROUND FACILITIES INFORMATION, REQUIRES VERBAL NOTICE TO IOWA ONE-CALL 1-800-292-8989, NOT LESS THAT 48 HOURS BEFORE EXCAVATING, EXCLUDING WEEKENDS AND HOLIDAYS.
3. NOTIFY UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS OF THE SCHEDULE PRIOR TO EACH STAGE OF CONSTRUCTION.
4. CONTRACTOR SHALL VERIFY WITH OWNER THAT THERE ARE NO PRIVATE UTILITIES WHICH WILL BE IMPACTED BY CONSTRUCTION.
5. THE MEANS OF THE WORK AND THE SAFETY OF THE CONTRACTOR'S EMPLOYEES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. NO WORK SHALL BE PERFORMED BEYOND THE PROJECT LIMITS WITHOUT PRIOR AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE.
7. UNLESS OTHERWISE SPECIFIED, ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE IOWA STATEWIDE URBAN DESIGN SPECIFICATIONS AND CITY OF DES MOINES SUPPLEMENTAL SPECIFICATIONS.
8. MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION.
9. SITE CLEANUP SHALL BE PERFORMED ON A DAILY BASIS. DRIVES, ROADWAYS, ETC. SHALL BE KEPT CLEAN AT ALL TIMES.
10. ANY WORK REQUIRED TO COMPLETE THE SCOPE OF THIS PROJECT BUT NOT SPECIFICALLY CALLED OUT, SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE COMPLETION OF THIS WORK.
11. REPAIR OR REPLACE DAMAGED FACILITIES (WALLS, PAVEMENT, UTILITIES, SIDEWALKS, ETC.) TO REMAIN, AT NO ADDITIONAL EXPENSE TO THE OWNER.
12. WORK WHICH DOES NOT CONFORM TO THE REQUIREMENTS OF THE CONTRACT WILL BE CONSIDERED UNACCEPTABLE. UNACCEPTABLE WORK, WHETHER THE RESULT OF POOR WORKMANSHIP, USE OF DEFECTIVE MATERIALS, DAMAGE THROUGH CARELESSNESS OR ANY OTHER CAUSE, FOUND TO EXIST PRIOR TO THE FINAL ACCEPTANCE OF THE WORK, SHALL BE REMOVED AND REPLACED IN AN ACCEPTABLE MANNER, AS REQUIRED BY OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE. WORK DONE CONTRARY TO THE INSTRUCTIONS OF THE OWNER'S REPRESENTATIVE, WORK DONE BEYOND THE LINES SHOWN ON THE PLANS OR ANY EXTRA WORK DONE WITHOUT WRITTEN AUTHORIZATION WILL NOT BE PAID FOR.
13. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY/STATE REGULATIONS/CODES AND OSHA STANDARDS.
14. CONTRACTOR TO MATCH EXISTING GRADES AT CONSTRUCTION LIMITS. ALL FINISH GRADES SHALL BE INSTALLED IN A MANNER THAT PREVENTS PONDING AND PROVIDES POSITIVE DRAINAGE AND SMOOTH TRANSITIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM POSITIVE DRAINAGE PRIOR TO CONSTRUCTION ON ALL NEW AND ADJACENT PAVING NO MATTER WHAT GRADES ARE SHOWN ON THE DRAWINGS. CONTRACTOR TO COORDINATE ANY GRADE ADJUSTMENTS WITH THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING WITH THE WORK.
15. CONTRACTOR TO BACKFILL ALL PAVING AND CURBS TO MATCH EXISTING GRADES.
16. EROSION CONTROL MEASURES SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION TO MEET REQUIREMENTS OF ALL REGULATORY AGENCIES, INCLUDING MEASURES AT POINT DISCHARGE LOCATIONS.
17. CONTRACTOR SHALL PROVIDE ALL TRAFFIC AND PEDESTRIAN CONTROL REQUIRED ACCORDING TO MUTCD AND AS REQUESTED BY CITY OR OWNER.
18. CONTRACTOR SHALL PROVIDE ALL SURVEY STAKING REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR EXISTING DOCUMENTATION AND LAYOUT AS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACCURACY AND REESTABLISHING SURVEY CONTROL POINTS AS REQUIRED FOR CONSTRUCTION.
19. CONTRACTOR IS RESPONSIBLE FOR FOR OBTAINING A GRADING PERMIT PRIOR TO CONSTRUCTION.
20. ALL WORK DONE IN THE CITY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH SUDAS AND THE CITY OF DES MOINES GENERAL SUPPLEMENTAL SPECIFICATIONS TO SUDAS EFFECTIVE AT THE TIME OF PLAN APPROVAL.

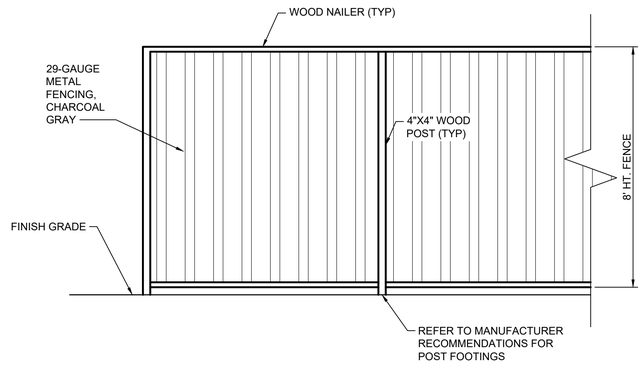
CITY OF DES MOINES NOTES

1. THIS SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE ON THE DATE OF SITE PLAN APPROVAL.
2. ALL ROOFTOP MECHANICAL EQUIPMENT MUST BE SCREENED ON ALL SIDES WITH ARCHITECTURAL SCREENING EQUAL TO THE HEIGHT OF THE EQUIPMENT.
3. MECHANICAL EQUIPMENT SHALL NOT BE LOCATED IN THE FRONT YARD OR STREET SIDE YARD AND SHALL BE SCREENED FROM VIEW FROM ANY PUBLIC WAY WITH LANDSCAPING, FENCING, OR WALLS CONSISTENT WITH THE BUILDING DESIGN, COLORS, AND MATERIALS.
4. ANY AMENDMENTS OR CHANGES TO THE PROJECT SITE THAT DO NOT MEET WHAT IS SHOWN ON THE SITE PLAN NEED TO BE APPROVED WITH THE PERMIT AND DEVELOPMENT CENTER PRIOR TO INSTALLATION/CONSTRUCTION.
5. LIGHTING MUST BE LOW GLARE CUT OFF TYPE FIXTURES TO REDUCE THE GLARE OF LIGHT POLLUTION ON SURROUNDING PROPERTIES.
6. THE REQUIRED LANDSCAPING, BOTH EXISTING AND PROPOSED, SHALL BE MAINTAINED FOR THE LIFE OF THE CERTIFICATE OF OCCUPANCY.
7. ALL DISTURBED AREAS SHOULD BE RESTORED BY SEEDING OR SODDING.
8. ALL PLANTING BEDS SHALL INCLUDE NON-LIVING PERMEABLE MATERIALS SUCH AS MULCH, AND NOT INCLUDING ROCK.
9. ANY NEW CABLE, UTILITY, ELECTRIC, OR OTHER TRANSMISSION SYSTEMS WILL BE INSTALLED UNDERGROUND.
10. ANY EXPANSIONS OF OUTDOOR STORAGE AREAS OR NEW HOOP BUILDINGS (DIFFERENT THAN THE EXTENTS SHOWN ON THIS SITE PLAN) WILL REQUIRE EITHER A REVISED SITE PLAN OR A NEW SITE PLAN PER DIRECTION FROM PLANNING AND URBAN DESIGN STAFF.

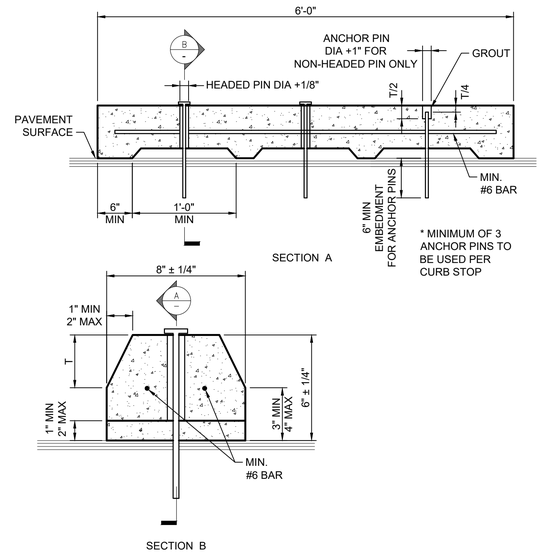


E2 6" PCC INTEGRAL CURB
NOT TO SCALE

NOTE: IF PREFERRED, CONTRACTOR MAY CHOOSE TO LEAVE POST FOOTING 8" BELOW FINISH GRADE TO ALLOW PLACEMENT OF SOIL/PAVING ABOVE FOOTING. IF PAVING IS PLACED OVER TOP OF FOOTING, GRANULAR SUBBASE SHALL BE PLACED BETWEEN TOP OF FOOTING AND BOTTOM OF PAVING. EXPANSION MATERIAL AND JOINT SEALANT SHALL ALSO BE PLACED BETWEEN POST AND PAVING.



C4 8' TALL METAL PANEL FENCE
NOT TO SCALE



E4 PCC WHEEL STOP
NOT TO SCALE

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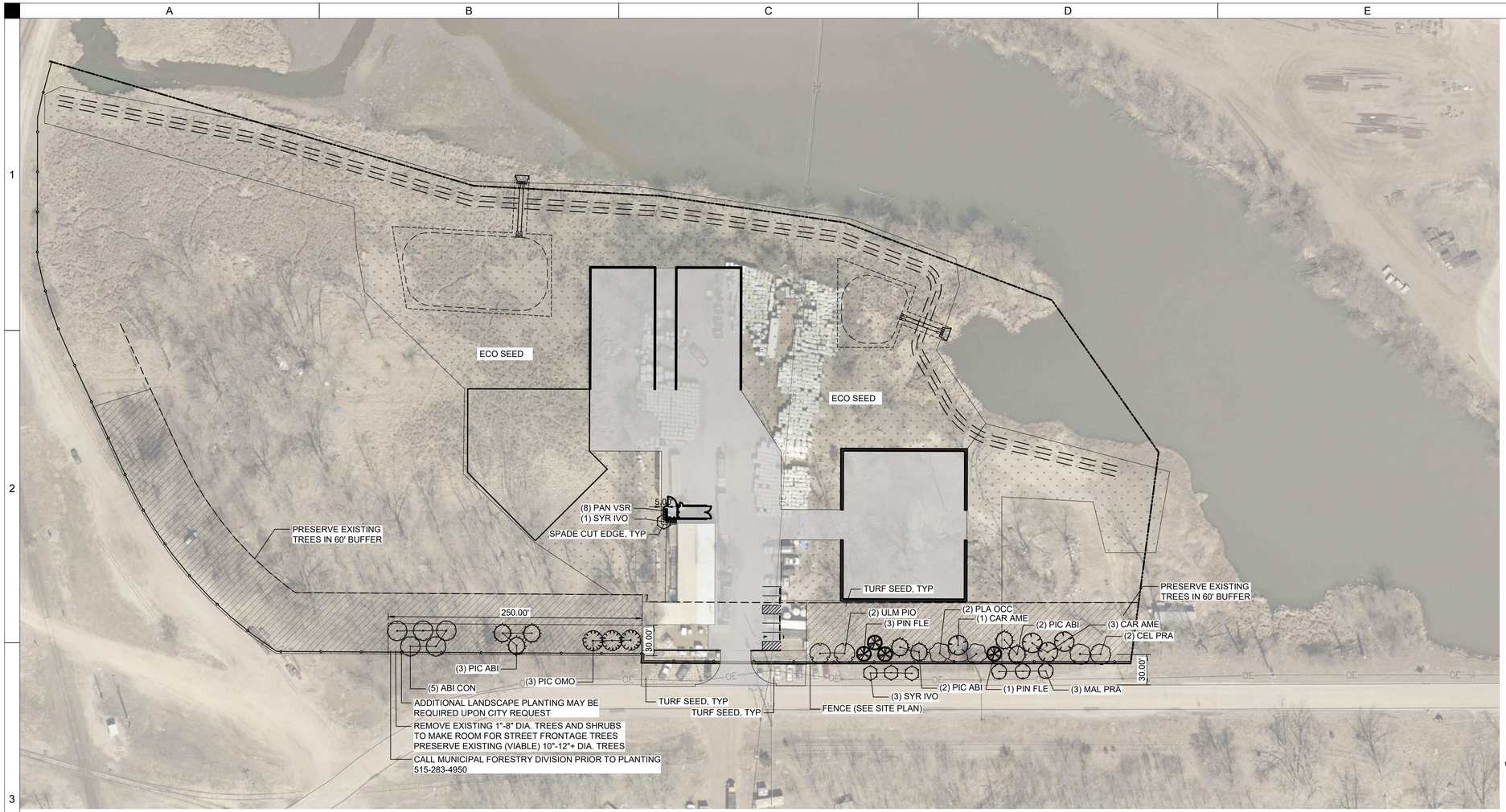
2142 E MARKET STREET, DES MOINES, IOWA 50317

PRELIMINARY - NOT FOR CONSTRUCTION

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APPROVED BY	BMS
ISSUED FOR	CITY SUBMITTAL 03
ISSUE DATE	12/19/2023
PROJECT NUMBER	2142302300
FIELD BOOK	--

NOTES AND CONSTRUCTION DETAILS

C501



GENERAL LANDSCAPE NOTES :

1. ALL PLANTING WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES ON SITE.
2. POSITION OF PLANTINGS MAY VERY BASED ON LOCATION OF EXISTING TREES. VERIFY PLACEMENT WITH LANDSCAPE ARCHITECT AND THE MUNICIPAL FORESTRY DIVISION.
3. LOCATIONS OF ALL UTILITIES SHOWN ON THE PLANS ARE TAKEN FROM EXISTING RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL UTILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT.
4. PROTECT ALL EXISTING AND NEW STRUCTURES AND UTILITY SERVICES DURING INSTALLATION OF ALL PLANT MATERIAL. IF CONFLICTS EXIST BETWEEN PROPOSED PLANTING LOCATIONS AND OTHER STRUCTURES AND UTILITIES, CONTRACTOR SHALL COORDINATE PLANTING ADJUSTMENTS WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. ALL PLANT MATERIALS MUST CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK (A.S.N.S.). LATEST EDITION PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, WASHINGTON D.C. LARGER SIZED PLANT MATERIALS OF THE SPECIES LISTED MAY BE USED IF THE STOCK CONFORMS TO THE A.S.N.S.
6. ALL WIRE, TWINE AND BURLAP SHALL BE REMOVED FROM THE ROOTBALL OF TREES PRIOR TO PLANTING.
7. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
8. ALL NEW STREET TREES ARE REQUIRED TO BE APPROVED BY THE CITY FORESTRY DIVISION
9. ALL TREE REMOVALS MUST BE APPROVED BY THE CITY FORESTRY DIVISION. MITIGATION IS REQUIRED FOR MATURE TREES OF APPROVED SPECIES 12" OR LARGER IN CALIPER SIZE PER SECTION 42-555 - TREE PROTECTION AND MITIGATION STANDARDS.
10. WOOD MULCH SHALL BE DOUBLE-SHREDDED HARDWOOD MULCH, PLACED TO A 3" TYPICAL DEPTH PER PLAN.
11. PLANTING SOIL MIX SHALL CONSIST OF (1) PART LEAF-BASED ORGANIC COMPOST THOROUGHLY MIXED WITH (4) PARTS EXISTING TOPSOIL, PLACED TO A MINIMUM DEPTH OF 12".
12. THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING SOIL MIX.
13. APPLY PRE-EMERGENT WEED PREVENTER TO PLANTING AREAS PRIOR TO MULCHING.
14. SITE DISTURBANCE BEYOND WHAT IS SHOWN ON PLANS SHALL BE RESTORED WITH TURF SEED WITH HYDROMULCH.
15. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL TO BE IN A LIVE AND HEALTHY GROWING CONDITION FOR ONE FULL YEAR AFTER SUBSTANTIAL COMPLETION OR SHALL BE REPLACED FREE OF CHARGE, BY CONTRACTOR, WITH THE SAME GRADE AND SPECIES IN CONFORMANCE WITH LANDSCAPE SPECIFICATIONS.

STREET TREE REQUIREMENTS :

STREET TREE REQUIREMENTS: - HEAVY BUFFER - (2) SHADE TREES, (6) ORNAMENTAL/EVERGREEN TREES PER EVERY 100 LINEAL FEET

TOTAL STREET FRONTAGE LNFT - 730 LNFT
REQUIRED TREES: 58 TREES
EXISTING: 4 OVERSTORY TREES ON EAST SIDE OF THE ENTRANCE AND 360 LINEAR FEET OF EXISTING WOODED AREA ON THE WEST SIDE OF THE ENTRANCE
PROPOSED: 19 EVERGREEN TREES
6 OVERSTORY TREES
10 ORNAMENTAL TREES
TOTAL TREES = 35

TOTAL TREES PROVIDED = 6 EXISTING (EAST OF ENTRANCE) + 35 NEW = 41 TREES

TREE CANOPY COVERAGE SUMMARY:

LOT AREA: 87,816 SF
REQUIRED CANOPY COVERAGE 15% = .15 X 464,910 SF = 68,536 SF

CANOPY COVERAGE BY TREE SIZE AT MATURITY (TABLE 135-7.4.2)

NEW SHADE OR OVERSTORY TREE	= 1,000 SF X 0 TREE	= 0
NEW ORNAMENTAL TREE	= 700 SF X 0 TREES	= 0
EXISTING UNDERSTORY TREE	= 300 SF X 0 TREES	= 0
EXISTING OVERSTORY TREE	= 1,000 SF X 69 TREE	= 69,000 SF
		69,000 SF

REQUIRED: 68,536 SF
PROVIDED: 69,000 SF

69 HEALTHY OVERSTORY TREES MUST BE PRESERVED WHEN CLEARING THE EXISTING WOODED AREA. ADDITIONAL OVERSTORY TREE PLANTINGS MAY BE REQUIRED TO MEET CANOPY COVERAGE REQUIREMENTS. SEE GENERAL LANDSCAPE NOTES FOR EXISTING TREE MITIGATION.

CLEAR 1"-8" TREES IN DESIGNATED AREA ON WEST SIDE OF ENTRANCE. PRESERVE ALL VIABLE TREES OVER 12" DIA. PLANT 11 NEW EVERGREEN TREES IN THE CLEARED SPACE.

CONTACT MUNICIPAL FORESTRY DIVISION PRIOR TO PLANTING 515-283-4950

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE
TREES					
CEL PRA	2	Celtis occidentalis 'Prairie Pride'	Prairie Pride Hackberry	B & B	2"Cal
PLA OCC	2	Platanus occidentalis	American Sycamore	B & B	2"Cal
ULM PIO	2	Ulmus x 'Pioneer'	Pioneer Elm	B & B	2"Cal
EVERGREEN TREES					
ABI CON	5	Abies concolor	White Fir	B & B	6` HT.
PIC ABI	7	Picea abies	Norway Spruce	B & B	6` HT.
PIC OMO	3	Picea omorika	Serbian Spruce	B & B	6` HT.
PIN FLE	4	Pinus flexilis 'Vanderwolf's Pyramid'	Vanderwolf's Pyramid Limber Pine	B & B	6` HT.
ORNAMENTAL TREES					
CAR AME	4	Carpinus caroliniana	American Hornbeam	B & B	1.5"Cal
MAL PRA	3	Malus x 'Prairiefire'	Prairiefire Crabapple	B & B	1.5"Cal
SYR IVO	4	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	B & B	1.5"Cal
ORNAMENTAL GRASS					
PAN VSR	8	Panicum virgatum 'RR1'	Ruby Ribbons® Switch Grass	CONT.	1 gal

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
GROUND COVERS					
	125 sf	Double Shredded Hardwood Mulch	Hardwood Mulch	SF	
	166,934 sf	ECO Seed	ECO Seed W/ Hydro Mulch	SF	
	15,797 sf	FS Greenyard 'Delux'	Turf Seed w/ Hydro Mulch	SF	

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2142 E MARKET STREET, DES MOINES, IOWA 50317

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ISSUED FOR	CITY SUBMITTAL 03
ISSUE DATE	12/19/2023
PROJECT NUMBER	2142302300
FIELD BOOK	-

LANDSCAPE PLAN

L101

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STEP 1 - PEEL BACK ROPE/BURLAP/CAGE AND REMOVE SUFFICIENT SOIL TO EXPOSE ROOT FLARE.

STEP 2 - MEASURE FROM ROOT FLARE TO BOTTOM OF ROOT BALL.

STEP 3 - DIG HOLE TO DEPTH WHERE TOPMOST ROOTS ARE BURIED 1-2 INCHES AND THE ROOT FLARE SITS SLIGHTLY ABOVE GROUND LEVEL. DIG A HOLE 2-3 TIMES WIDER THAN THE DIAMETER OF THE ROOT BALL WITH SLOPING SIDES TO ALLOW FOR PROPER ROOT GROWTH.

STEP 4 - REMOVE LOWER THIRD OF WIRE CAGE.

STEP 5 - SET TREE IN HOLE. SUPPORT WITH SOME SOIL. ENSURE THAT IT'S STRAIGHT, THEN REMOVE ENTIRE WIRE CAGE AND TOP TWO-THIRDS OF BURLAP.

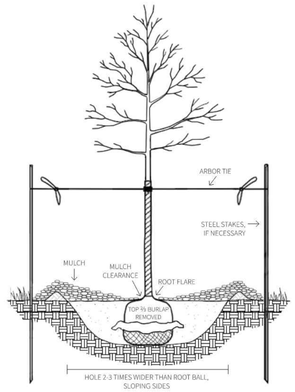
STEP 6 - BACKFILL WITH TWO-THIRDS OF LOOSE NATIVE SOIL (UNLESS IT'S ALL CLAY) AND USE WATER TO SETTLE. DO NOT TAMP OR STEP ON SOIL.

STEP 7 - BACKFILL BALANCE AND WATER AGAIN. EXCESS SOIL MAY BE USED TO CREATE A BERM/SAUCER OUTSIDE OF ROOT BALL.

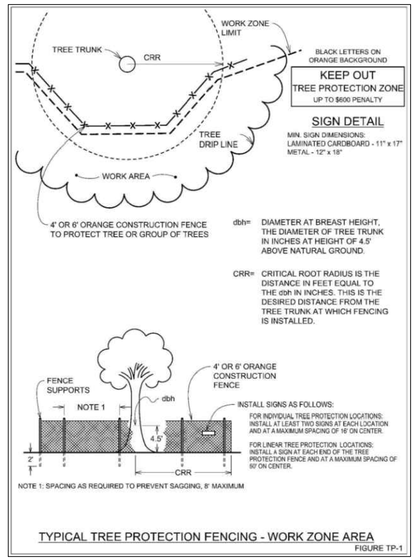
STEP 8 - ADD 2-4 INCHES OF WOOD MULCH, LEAVING A 1- TO 2-INCH CLEARANCE BETWEEN THE MULCH AND THE TRUNK.

STEP 9 - WATER A FINAL TIME.

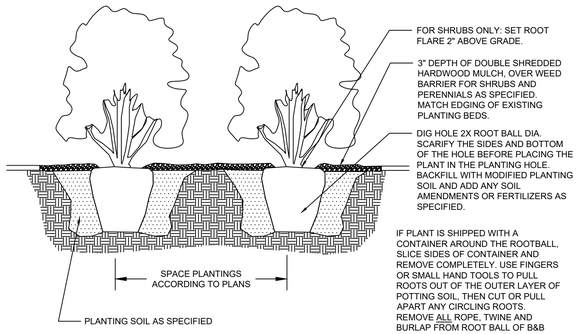
STEP 10 - IF NECESSARY, PLACE TWO OPPOSING STEEL T-STAKES OUTSIDE THE ROOT BALL WITH ARBOR TIE SECURING TREE. TIES PREFERRED ON LOWER HALF OF TRUNK TO ALLOW MOVEMENT.



A2 CITY OF DES MOINES PLANTING SPECIFICATIONS DETAIL
NTS



C2 CITY OF DES MOINES TREE PROTECTION DETAIL
NTS



C3 PERENNIAL AND SHRUB PLANTING BED
NTS

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LANDSCAPE DETAILS

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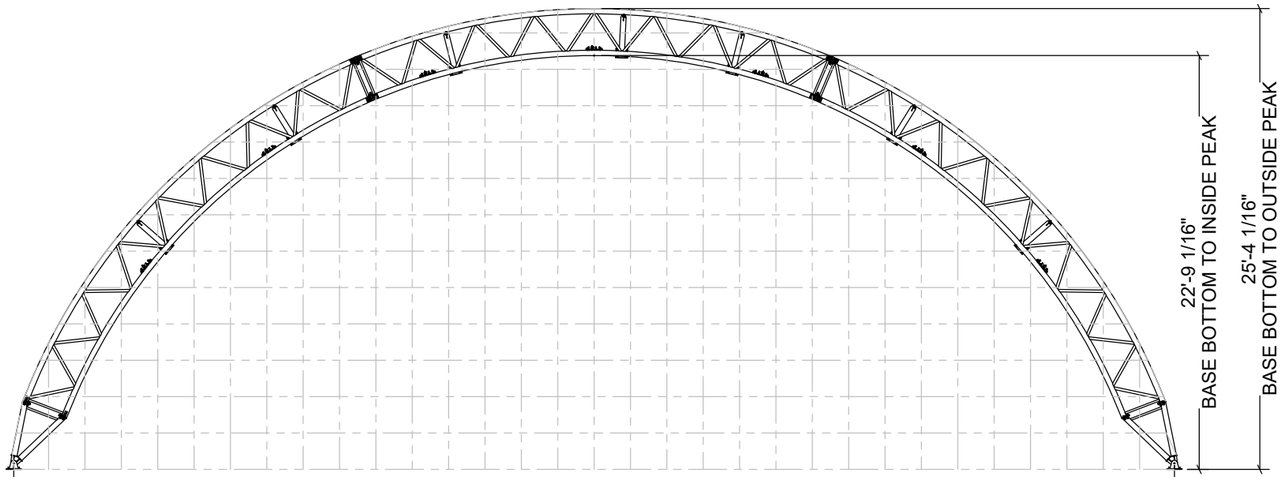
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ADDITIONAL INFORMATION

THESE PRINTS IDENTIFY AND SHOW THE MAIN COMPONENTS AND CONNECTIONS FOR THIS BUILDING. LENGTH, WIDTH, AND OTHER IMPORTANT DIMENSIONS ARE ALSO PRESENT.

TO BEST UNDERSTAND HOW TO CONSTRUCT THIS BUILDING, THE INFORMATION CONTAINED WITHIN THESE SHEETS SHALL BE USED WITH THE INSTRUCTION MANUAL SHIPPED WITH THE BUILDING.

THE INSTRUCTIONS INCLUDE DETAILS NEEDED DURING CONSTRUCTION.



WARNING: Cancer and Reproductive Toxicity - P65Warnings.ca.gov

NOTE: FOUNDATION AND ANCHOR DESIGN IS NOT BY CLEARSPAN. THE FOUNDATION AND ANCHOR DESIGN IS BY OTHERS. THE FOUNDATION AND ANCHORS ARE CRITICAL ELEMENTS FOR THE BUILDING TO FUNCTION AS DESIGNED. THE OWNER IS RESPONSIBLE FOR ENSURING THE FOUNDATION IS DESIGNED FOR THE BUILDING BY A PROFESSIONAL IN ACCORDANCE WITH LOCAL REQUIREMENTS.

BUILDING CONTENT GUIDE:

[A1] ..... COVER SHEET
[B1] ..... GENERAL NOTES
[C1] ..... BUILDING PLAN VIEW
[D1] ..... MATERIAL SPECIFICATIONS
[E1] ..... RAFTER PROFILES
[F1] ..... SIDE PROFILES
[G1] ..... DETAIL LOCATIONS & BASE DETAILS
[G2] ..... GENERAL CONNECTION DETAILS
[G3] ..... CABLE LAYOUT & DETAILS
[H1] ..... BASE PLATE LAYOUT & DETAILS
[I] ..... OMITTED
[J1] ..... BUILDING REACTION DATA
[K] ..... OMITTED
[L1 - L2] ..... OMITTED: SOUTH ENDWALL (OPEN)
[M1 - M2] ..... NORTH ENDWALL: EW065RDF3490D

CUSTOMER DESIGN APPROVAL

PLEASE SIGN AND CHECK THE APPROPRIATE BOX BELOW THE SIGNATURE AFTER REVIEWING THE DOCUMENTS.

MY SIGNATURE BELOW ACKNOWLEDGES THAT I HAVE READ AND REVIEWED ALL THE SHEETS LISTED IN THE CONTENT GUIDE AND AGREE TO THE SPECIFICATIONS SHOWN UNLESS OTHERWISE NOTED.

UPON ACCEPTANCE OF THE DRAWINGS, ANY DEVIATIONS FROM THE SIGNED DRAWINGS AND SPECIFICATIONS OUTLINED IN THE EXECUTED DRAWINGS ARE SUBJECT TO ADDITIONAL CHARGES AND MAY RESULT IN DELAY OF INSTALLATION OR DELIVERY OF YOUR STRUCTURE. A CHANGE ORDER WILL BE ISSUED TO YOU WITH THE OUTLINED ADDITIONAL COST ASSOCIATED WITH THESE CHANGES AND A PROPOSED NEW DELIVERY SCHEDULE.

NO CHANGES WILL BE ACCEPTED UNLESS WE HAVE A CHANGE ORDER SIGNED BY AN AUTHORIZED REPRESENTATIVE.

FIRE-RATED OR NON FIRE-RATED IPG RU88X-6 400 (NON FIRE-RATED)
TERMINATION OF FABRIC POUND IN STRIP
FABRIC COLOR WHITE W/ GREY TRIM
WEIGHT OF MATERIAL 12 **OZ.**

CUSTOMER SIGNATURE *DATE*

☐ **APPROVE** ☐ **APPROVE WITH CHANGES**

DEVELOPED BY
ClearSpan
A DIVISION OF
ENGINEERING SERVICES & PRODUCTS CO.
1440 18TH AVENUE SW
DYERSVILLE, IA 52040
P: 563.875.6113
F: 563.875.2317
WWW.ESAPCO.COM

ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
13283 S 88TH AVE W
PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT:
AUDREY HIGGINS

CONTACT PHONE:
515-497-6985

STRUCTURE SKU #:
T065RDMF182120

STRUCTURE SIZE:
65' X 120'

STRUCTURE DESCRIPTION:
-

SHEET TITLE:
COVER SHEET

DRAWING DETAILS

DRAWN BY:	CREATION DATE:
TJL	11/16/2023

REVISIONS:

NO.	BY:	REVISION DATE:
1		
2		
3		
4		

NOT TO SCALE — SHEET SIZE: 11X17

SHEET: **A1**

SITE LOCATION AND BUILDING DESCRIPTION:

SITE LOCATION: 2142 E MARKET ST
DES MOINES, IA 50317
POLK COUNTY

BUILDING SIZE: 65' X 120': 7,800 SQUARE FEET
BUILDING TYPE: PRE-ENGINEERED FABRIC STRUCTURE
CONSTRUCTION TYPE: VB
FABRIC: IPG RU88X-6 400 (NON FIRE-RATED)

GENERAL NOTES:

1. DESIGNED IN CONFORMANCE WITH THE STRUCTURAL PROVISIONS OF THE INTERNATIONAL BUILDING CODE, 2018 EDITION.

2. DESIGN LOADS:

   A. FLOOR LIVE LOAD: N/A
   B. ROOF LIVE LOAD: 5 PSF (FABRIC ROOF)
   C. ROOF SNOW LOADS:

   Pg (GROUND SNOW LOAD) = 30 PSF
   Ce (SNOW EXPOSURE FACTOR) = 1.0 (PARTIALLY EXPOSED TERRAIN CATEGORY C)
   Ct (THERMAL FACTOR) = 1.2 (COLD ROOF)
   Is (SNOW IMPORTANCE FACTOR) = 0.8 (RISK CATEGORY I)
   Pf (FLAT ROOF SNOW LOAD) = 24.0 PSF
   Ps (SLOPED ROOF SNOW LOAD) = Cs Pf
   Cs (SLOPE FACTOR) = AS DETERMINED FOR GABLE OR ARCHED ROOF PER ASCE 7 (BALANCED AND UNBALANCED LOADING CONDITIONS CONSIDERED)

   SNOW DRIFTING FROM ADJACENT BUILDINGS, STRUCTURES, OR ANY OTHER HORIZONTAL SURFACES HAS NOT BEEN CONSIDERED.

   D. WIND DESIGN DATA: (MAIN WIND FORCE RESISTING SYSTEM)

   V (ULTIMATE WIND SPEED) = 103 MPH
   Kd (WIND DIRECTIONALITY FACTOR) = 0.85
   Kzt (WIND TOPOGRAPHIC FACTOR) = 1.0 (ASSUMED)
   EXP (EXPOSURE CATEGORY) = C
   GCpi (INT. PRES. COEFF.) = +/-0.55 (PARTIALLY ENCLOSED)
   Cp (EXT. PRES. COEFF.) = AS DETERMINED FOR GABLE OR ARCHED ROOF: PER ASCE 7

   COMPONENTS AND CLADDING WIND PRESSURE: PER ASCE 7

   E. EARTHQUAKE DESIGN DATA: (EQUIV. LATERAL FORCE METHOD)
   SEISMIC DESIGN CATEGORY = B
   RISK CATEGORY = I, SEISMIC IMPORTANCE FACTOR = 1.0
   S_S = 0.062 g, S_1 = 0.052 g, SITE CLASS: D
   S_{DS} = 0.066 g, S_{D1} = 0.083 g
   C_S = 0.022, R = 3, SEISMIC BASE SHEAR = 0.3 KIPS
   BASIC SEISMIC-FORCE-RESISTING SYSTEM = STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.

3. THE TRUSSES ARE DESIGNED TO ACCOMMODATE LIMITED ADDITIONAL WEIGHT. ADDITIONAL LOADS, SUCH AS FOR LIGHTING, HEATING, AND VENTILATING EQUIPMENT, SHALL NOT EXCEED 300 LBS. PER ASSEMBLED TRUSS, WITHOUT THE WRITTEN APPROVAL OF THE DESIGN ENGINEER. LOADS SHALL BE APPLIED AT PANEL POINTS (POINTS OF CONTACT BETWEEN TRUSS WEB AND CHORD), AND SHALL BE DISTRIBUTED SO THAT NO MORE THAN 150 LBS. IS SUSPENDED FROM ANY SINGLE LOCATION.

FOUNDATION:

1. FOUNDATION AND ANCHORING SHALL BE ENGINEERED AND APPROVED BY A LOCALLY LICENSED STRUCTURAL ENGINEER TO ACCOUNT FOR THE BUILDING REACTION DATA SHOWN ON SHEET [J1].

GENERAL ABBREVIATIONS:

TOS TOP OF STEEL / **TSL** TOP OF SLAB / **GALV.** GALVANIZED / **FND** FOUNDATION / **EL** ELEVATION / **RND.** ROUND / **GA** GAUGE / **DIA.** DIAMETER / **TYP.** TYPICAL / **LBS.** POUNDS / **CL** CENTERLINE

SITE CONDITIONS:

1. NEITHER CLEARSPAN NOR THE BUILDING ENGINEER HAVE VISITED THIS JOBSITE. INFORMATION CONTAINED HEREIN IS BASED ON CLIENT SUPPLIED DATA AND MEASUREMENTS. THE DESIGN AND DEPICTED FABRICATION, ERECTION, AND FOUNDATION DRAWINGS ARE ONLY VALID FOR THE EXACT DESIGN PARAMETERS AND COMBINATIONS OF PARAMETERS DOCUMENTED. NEITHER CLEARSPAN NOR THE BUILDING ENGINEER SHALL BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. WORK SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CLEARSPAN AND/OR THE BUILDING ENGINEER SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO RE-EVALUATE THEIR WORK UPON DISCOVERY OF ANY INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.

STEEL:

1. UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL TUBING SHALL BE GALVANIZED, MIN. YIELD STRENGTH 50 KSI, AND SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM A500.

2. UNLESS OTHERWISE NOTED, STEEL PLATES SHALL COMPLY WITH ASTM A572 GRADE 50 OR EQUAL FOR 3/16" OR GREATER THICKNESS AND ASTM A1011 GRADE 50 OR ASTM A653 GRADE 50 OR EQUAL FOR LESS THAN 3/16" THICKNESS.

3. ALL STRUCTURAL STEEL IS TO BE FABRICATED IN ACCORDANCE WITH THE LATEST EDITION OF AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."

BOLTS:

1. UNLESS OTHERWISE NOTED, ALL BOLTED CONNECTIONS SHALL USE SAE J429 GRADE 2 OR A307 OR BETTER BOLTS WITH COMPATIBLE WASHERS AND NUTS OF DIAMETERS INDICATED ON PLANS. BOLTS NEED ONLY BE TIGHTENED TO THE SNUG-TIGHT CONDITION. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH, OR THE FULL EFFORT OF A PERSON USING AN ORDINARY SPUD WRENCH.

CABLES AND HARDWARE:

1. ALL CABLE SHALL BE GALVANIZED STEEL, MULTIPURPOSE, 7X19 (UP TO 3/8" DIA.) OR 6X26 (1/2" DIA.) CLASS STRAND CORE COMMERCIAL GRADE, OF DIAMETER INDICATED.

2. CABLE SLEEVES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

3. USE THIMBLES WITH CABLE SLEEVES IN ALL LOOP-END APPLICATIONS.

4. TENSION CABLES AT TURNBUCKLE TO TAUT CONDITION (STRAIGHT AND NOT SLACK OR LOOSE).

5. TIGHTEN CABLES SEQUENTIALLY TO AVOID TWISTING OR DEFORMING STRUCTURAL ELEMENTS DURING ERECTION. RECHECK PREVIOUSLY TIGHTENED CABLES UNTIL ALL CABLES ACHIEVE TAUT CONDITION.

SHACKLE WORKING LOADS	
1/4" GALV.	1.1 KIPS
1/2" GALV.	3.9 KIPS

WELDING:

1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AWS D1.1 AND D1.3.

2. REFER TO AWS PUBLICATION D19.0-72: WELDING ZINC-COATED STEEL AND "WELDING GUIDELINES" PUBLISHED BY ALLIED TUBE AND CONDUIT-HARVEY ILLINOIS, FOR RECOMMENDED PROCESSES AND PRACTICES FOR WELDING GALVANIZED STEEL.

3. ALL SHOP WELDING IS TO BE PERFORMED BY CERTIFIED WELDERS.

PAINTING AND TOUCH-UP:

1. AFTER SHOP FABRICATION, PAINT ALL BARE STEEL, WELDS, AND ABRADED AREAS WITH COLD GALVANIZING COMPOUND CONSISTENT WITH GALVANIZED TUBE MANUFACTURER'S RECOMMENDATIONS FOR COLOR AND COMPOSITION. PRIOR TO TOUCH-UP, CLEAN WELDED AND ABRADED AREAS WITH A WIRE BRUSH. SURFACES MUST BE CLEAN AND OIL FREE.

2. AFTER FIELD INSTALLATION, TOUCH-UP ANY FIELD WELDS AND DAMAGED AREAS WITH COLD GALVANIZING COMPOUND.

ERECTION AND FIELD QUALITY CONTROL:

1. THE ERECTOR IS RESPONSIBLE FOR DESIGNING AND FURNISHING ALL TEMPORARY BRACING, SHORING, AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF ERECTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STRUCTURE DURING ERECTION.

2. NO MODIFICATIONS OR ALTERATIONS (OTHER THAN THOSE SHOWN ON THE DRAWINGS) SHALL BE MADE IN ANY STRUCTURAL MEMBER OR CONNECTION WITHOUT THE WRITTEN APPROVAL OF THE DESIGN ENGINEER.

BOX BOLT HOLE SIZES & INSTALLATION TORQUE[1]

BOX BOLT DIA.	HOLE DIA.	INSTALLATION TORQUE
1/4"	7/16"	14 FT-LB
5/16"	9/16"	18 FT-LB
3/8"	3/4"	33 FT-LB
1/2"	13/16"	59 FT-LB
5/8"	1-1/16"	140 FT-LB
3/4"	1-5/16"	221 FT-LB

1. REFER TO BOX BOLT TECHNICAL DATA FOR MORE INFORMATION IF USING BOX BOLTS

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WWW.ESAPCO.COM

ORDER #: **7843052**

CUSTOMER #: **9117068**

STRUCTURE SKU #: **T065RDMF182120**
STRUCTURE SIZE: **65' X 120'**
STRUCTURE DESCRIPTION: **-**

CUSTOMER INFORMATION: **WILSON AGGREGATE, LLC.** 13295 S 86TH AVE W PRAIRIE CITY, IA 50228-8771
CONTACT PHONE: **515-497-6985**
CUSTOMER CONTACT: **AUDREY HIGGINS**
SHEET TITLE: **GENERAL NOTES**

DRAWING DETAILS	
DRAWN BY: TJL	CREATION DATE: 11/16/2023

REVISIONS:

NO.	BY:	REVISION DATE:
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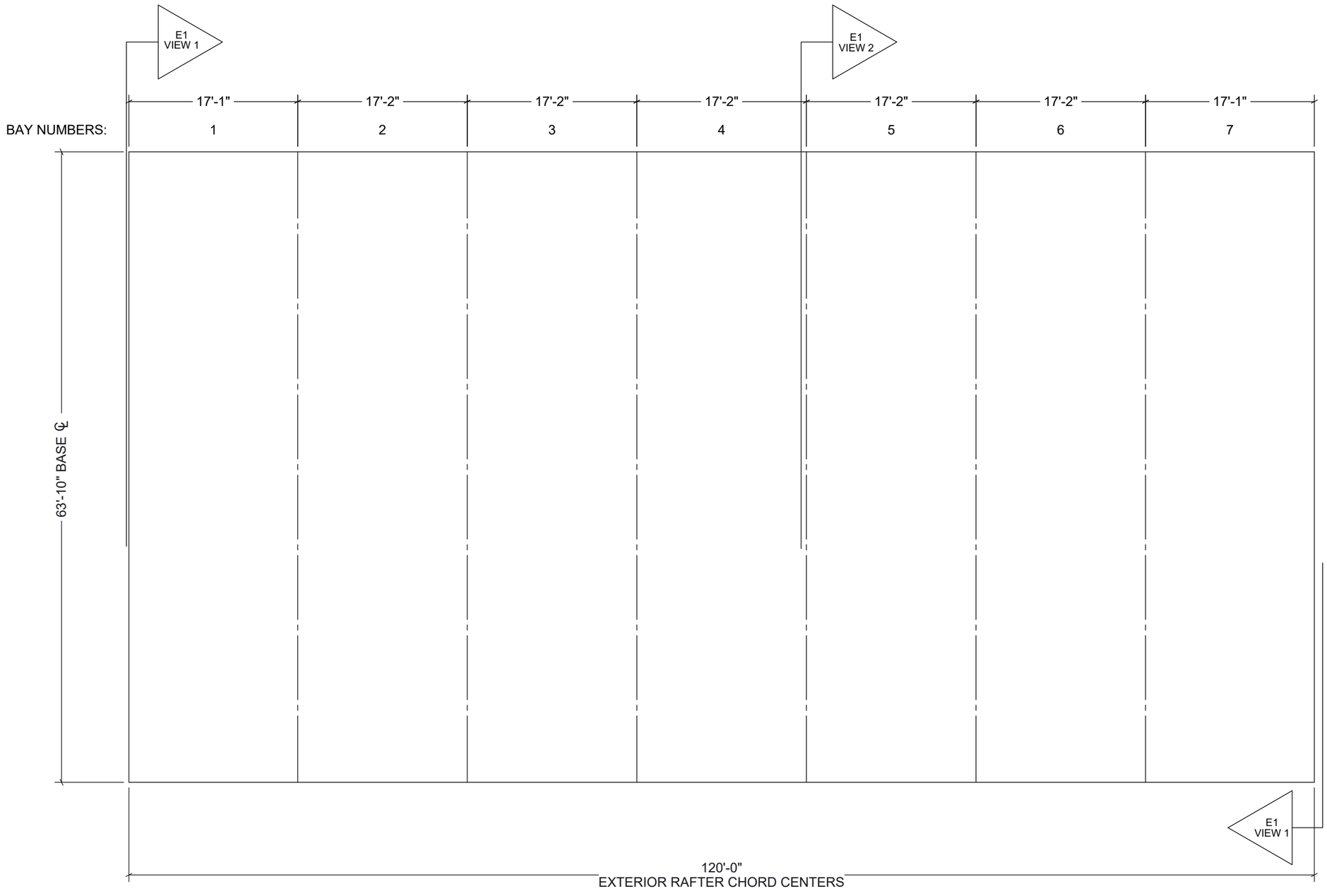
NOT TO SCALE | SHEET SIZE: 11X17

SHEET: **B1**

IBC 2018 SEAL - SEISMIC V01.1

WEST SIDE - SEE SHEET [F1] FOR ELEVATION VIEW

SOUTH ENDWALL: OPEN



NORTH ENDWALL: EW065RDF3490D
SEE SHEET [M1] FOR ELEVATION VIEW

EAST SIDE - SEE SHEET [F1] FOR ELEVATION VIEW

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ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
13293 S 98TH AVEW
PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT:
AUDREY HIGGINS

CONTACT PHONE:
515-497-6985

STRUCTURE SKU #:
T065RDMF182120

STRUCTURE SIZE:
65' X 120'

STRUCTURE DESCRIPTION:
-

SHEET TITLE:
BUILDING PLAN VIEW

DRAWING DETAILS	
DRAWN BY: TJL	CREATION DATE: 11/16/2023

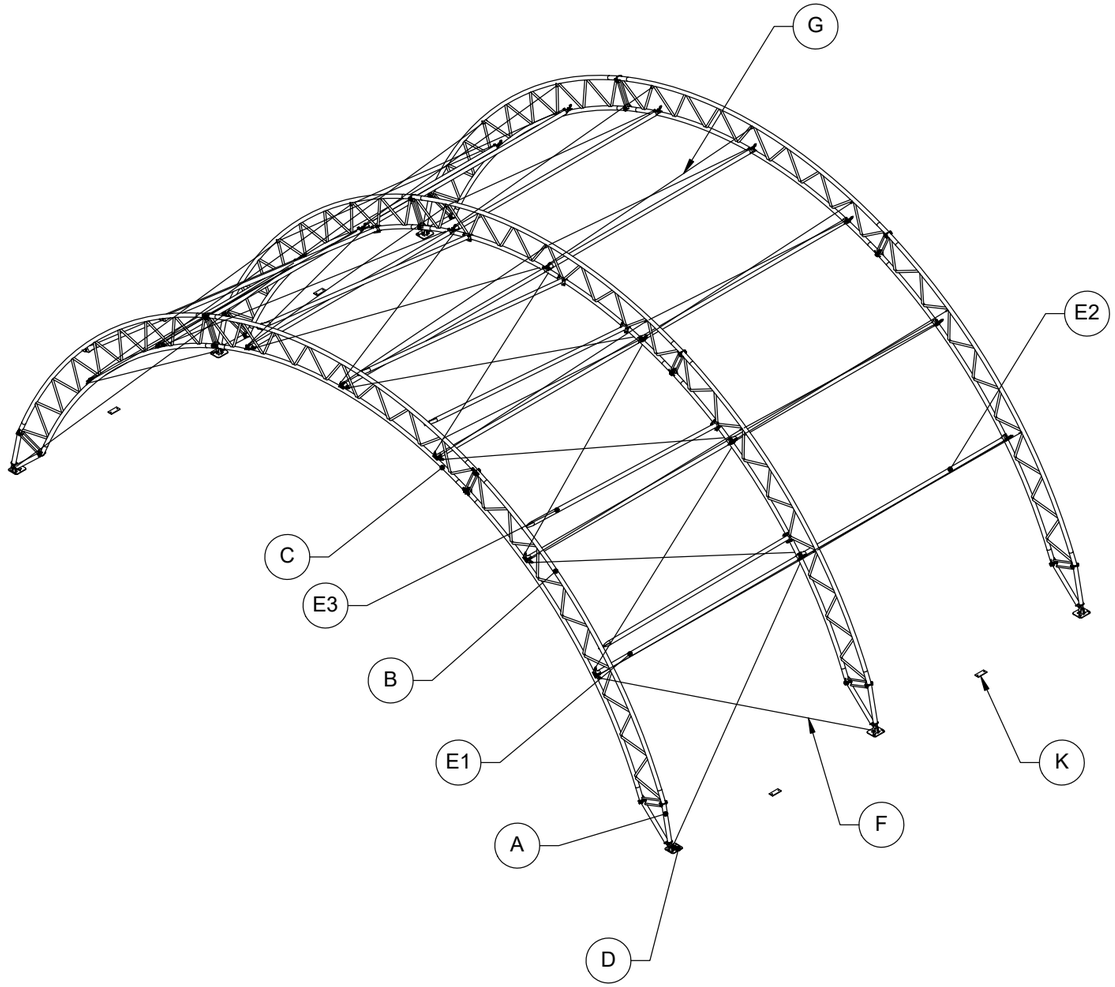
REVISIONS:

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NOT TO SCALE | SHEET SIZE: 11X17

SHEET:
C1

ITEM	DESCRIPTION	MATERIAL
A	SUPPORT BASE	
	OUTER CHORD	GALV. RND. STEEL TUBE - ∅ 3.5" - 14 GA
	INNER CHORD	GALV. RND. STEEL TUBE - ∅ 3.5" - 14 GA
	WEB (STRAIGHT)	GALV. RND. STEEL TUBE - ∅ 1.25" - 14 GA
	CONNECTION PLATES	STEEL PLATE, 1/2" THICK
	GUSSETS	STEEL PLATE, 3/8" THICK
	PIVOT PLATE (CHORD)	STEEL PLATE, 3/8" THICK
	PIVOT PLATE (ROUND)	STEEL PLATE, 1/2" THICK
B&C	SEGMENT	
	OUTER CHORD	GALV. RND. STEEL TUBE - ∅ 3.5" - 11 GA
	INNER CHORD	GALV. RND. STEEL TUBE - ∅ 3.5" - 11 GA
	WEB (STRAIGHT)	GALV. RND. STEEL TUBE - ∅ 1.25" - 14 GA
	WEB (ANGLED)	GALV. RND. STEEL TUBE - ∅ 1.66" - 14 GA
	CONNECTION PLATES	STEEL PLATE, 1/2" THICK
	GUSSETS	STEEL PLATE, 3/8" THICK
D	BASES	
	HORIZONTAL	STEEL PLATE, 1/2" THICK
	VERTICAL (ROUNDED)	STEEL PLATE, 3/8" THICK
	THREADED STUDS	CFL FULLY THREADED STUD - 1/2"-13 X 1"
	GUSSETS	STEEL PLATE, 3/8" THICK
E	BRACING	
E1	LATERAL BRACING (END)	GALV. RND. STEEL TUBE - ∅ 3.50" - 14 GA
E2	LATERAL BRACING (MID)	GALV. RND. STEEL TUBE - ∅ 3.50" - 14 GA
E3	ANGLED BRACE	GALV. RND. STEEL TUBE - ∅ 3.50" - 14 GA
	THREADED STUD PLATE	1/4" PLATE W/ 1/2" X 2" STUDS
F	CABLE ASSEMBLY	SEE SHEET G3
	CABLE CONNECTION PLATE	STEEL PLATE, 5/16" THICK
G	SWAY CABLE ASSEMBLY	SEE SHEET G3
	CABLE CONNECTION PLATE	STEEL PLATE, 1/8" THICK
H	BRACE PLATES	
	SUPPORT BASE TO SEGMENT	STEEL PLATE, 1/8" THICK
	SEGMENT TO SEGMENT	STEEL PLATE, 1/8" THICK
J	WINCH ASSEMBLY	
	WINCH	2" LASHING WINCH (10,000 LBS. STRENGTH)
	STRAP	2" STRAP (10,000 LBS. STRENGTH)
K	WINCH PLATE	
	HORIZONTAL	STEEL PLATE, 1/2" THICK
	THREADED STUDS	CFL FULLY THREADED STUD - 1/2"-13 X 1"



NOTE: THIS VIEW IS GENERIC TO ILLUSTRATE LOCATIONS OF ITEMS IN THE TABLE ONLY. CABLE PATTERN AND/OR OTHER DETAILS MAY NOT FULLY MATCH THE SPECIFICS FOR THIS PROJECT. SEE OTHER SHEETS FOR ORDER-SPECIFIC DETAILS.

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ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
13295 S 86TH AVE W
PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT:
AUDREY HIGGINS

CONTACT PHONE:
515-497-6985

STRUCTURE SKU #:
T065RDMF182120

STRUCTURE SIZE:
65' X 120'

STRUCTURE DESCRIPTION:
-

SHEET TITLE:
MATERIAL SPECIFICATIONS

DRAWING DETAILS	
DRAWN BY: **TJL**	CREATION DATE: **11/16/2023**

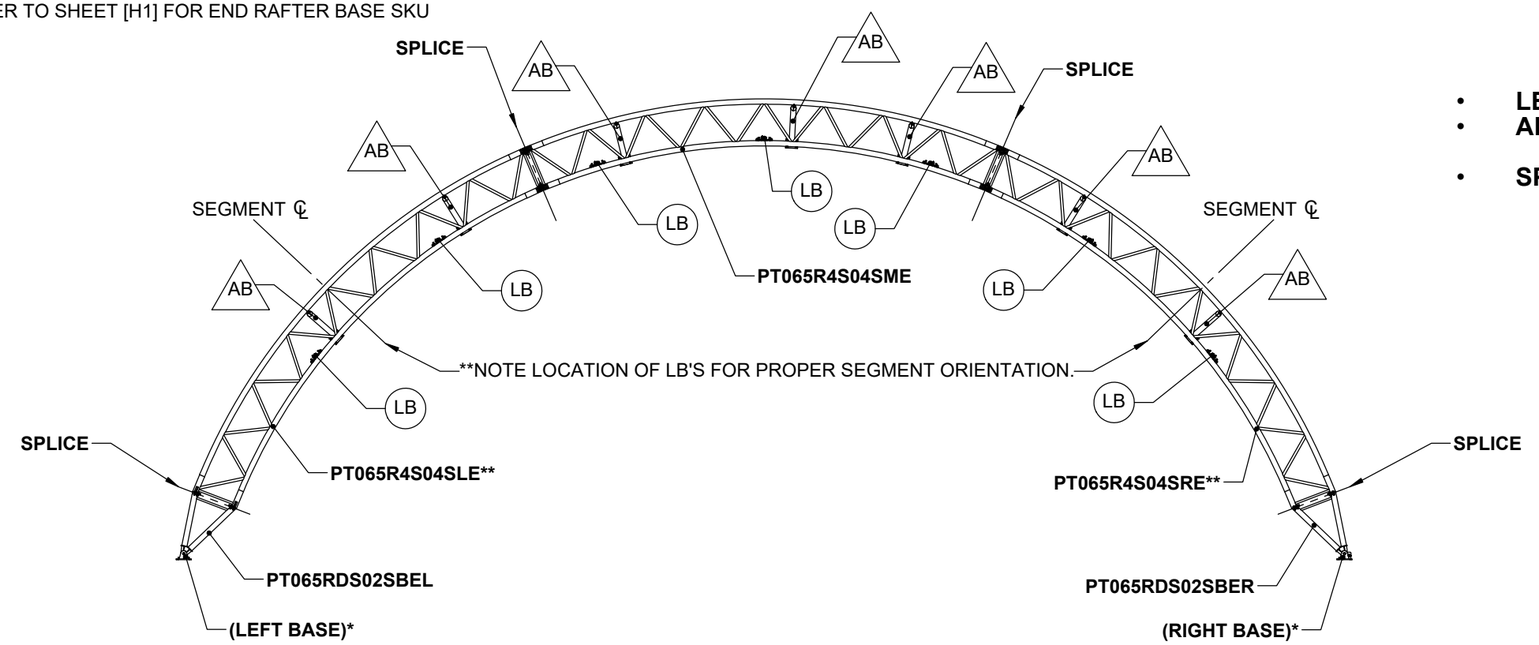
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NOT TO SCALE | SHEET SIZE: 11X17

SHEET:
D1

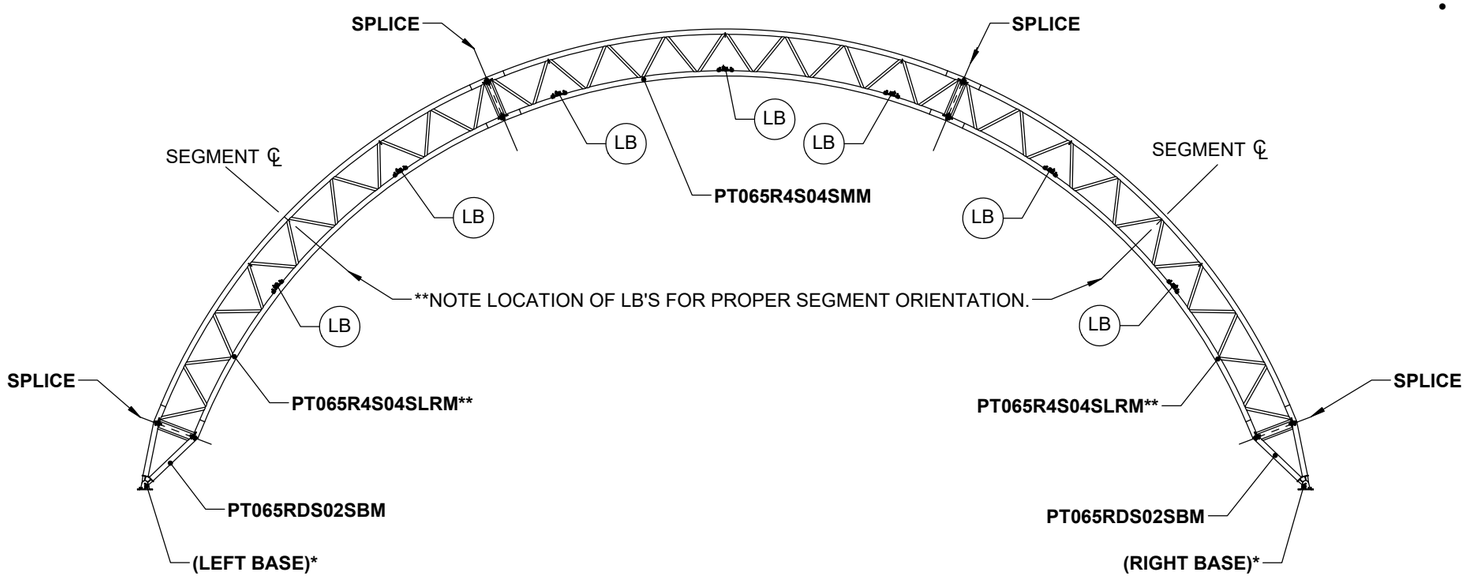
***NOTE:** REFER TO SHEET [H1] FOR END RAFTER BASE SKU



- **LB =** LATERAL BRACE (SKU: **LB35G14STL205**)
- **AB =** ANGLED BRACE (SKU: **AB35G14SRL205**)
- **SPLICE:** SEE DETAIL SHEET [G2]

[E1] VIEW 1 - PROFILE (END RAFTER)

***NOTE:** REFER TO SHEET [H1] FOR MID RAFTER BASE SKU



- **LB =** LATERAL BRACE (SKU: **LB35G14STL206**)
- **SPLICE:** SEE DETAIL SHEET [G2]

[E1] VIEW 2 - PROFILE (MID RAFTER)

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ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION: **WILSON AGGREGATE, LLC.** 13283 S 98TH AVE W PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT: **AUDREY HIGGINS**

CONTACT PHONE: **515-497-6985**

STRUCTURE SKU #: **T065RDMF182120**

STRUCTURE SIZE: **65' X 120'**

STRUCTURE DESCRIPTION: **-**

SHEET TITLE: **RAFTER PROFILES**

DRAWING DETAILS

DRAWN BY:	CREATION DATE:
TJL	11/16/2023

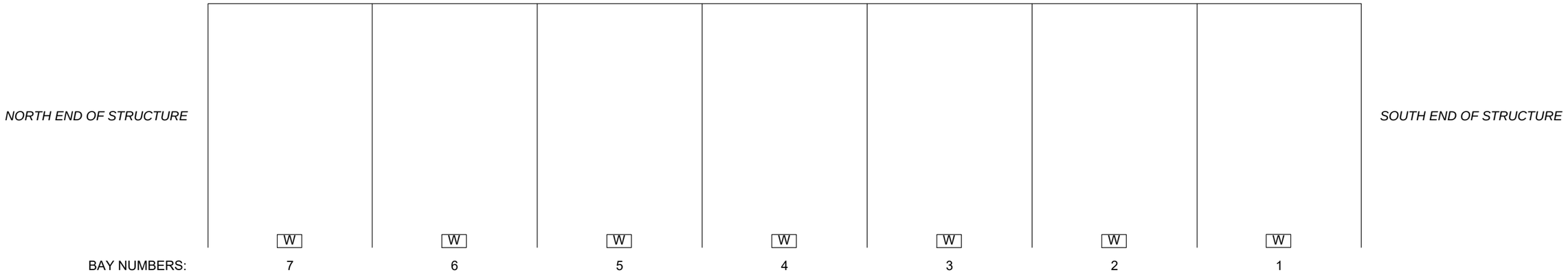
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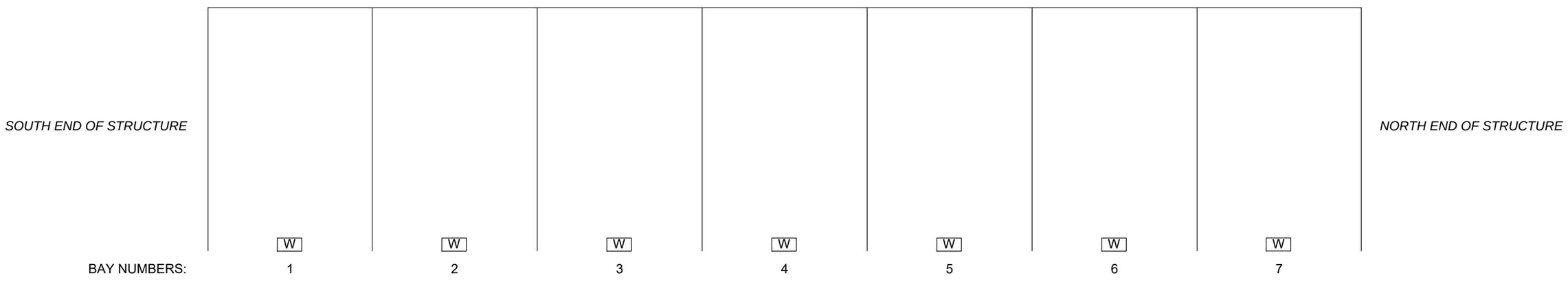
NOT TO SCALE | SHEET SIZE: 11X17

SHEET: **E1**

NOTE: REFER TO SHEET [E1] FOR PROFILE OF BRACE LOCATIONS
& SHEET [C1] FOR PLAN VIEW OF DOOR LOCATIONS (IF APPLICABLE).



WEST SIDE VIEW



W = WINCH PLATE LOCATION

NOTE: WINCH PLATES (IF APPLICABLE) TO BE CENTERED BETWEEN RAFTERS, UNLESS NOTED OTHERWISE.

EAST SIDE VIEW

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ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
13293 S 98TH AVIEW
PRAIRIE CITY, IA 50228-8771

CONTACT PHONE: **515-497-6985**

CUSTOMER CONTACT: **AUDREY HIGGINS**

STRUCTURE SKU #: **T065RDMF182120**

STRUCTURE SIZE: **65' X 120'**

STRUCTURE DESCRIPTION: **-**

SHEET TITLE: **SIDE PROFILES**

DRAWING DETAILS

DRAWN BY:	CREATION DATE:
TJL	11/16/2023

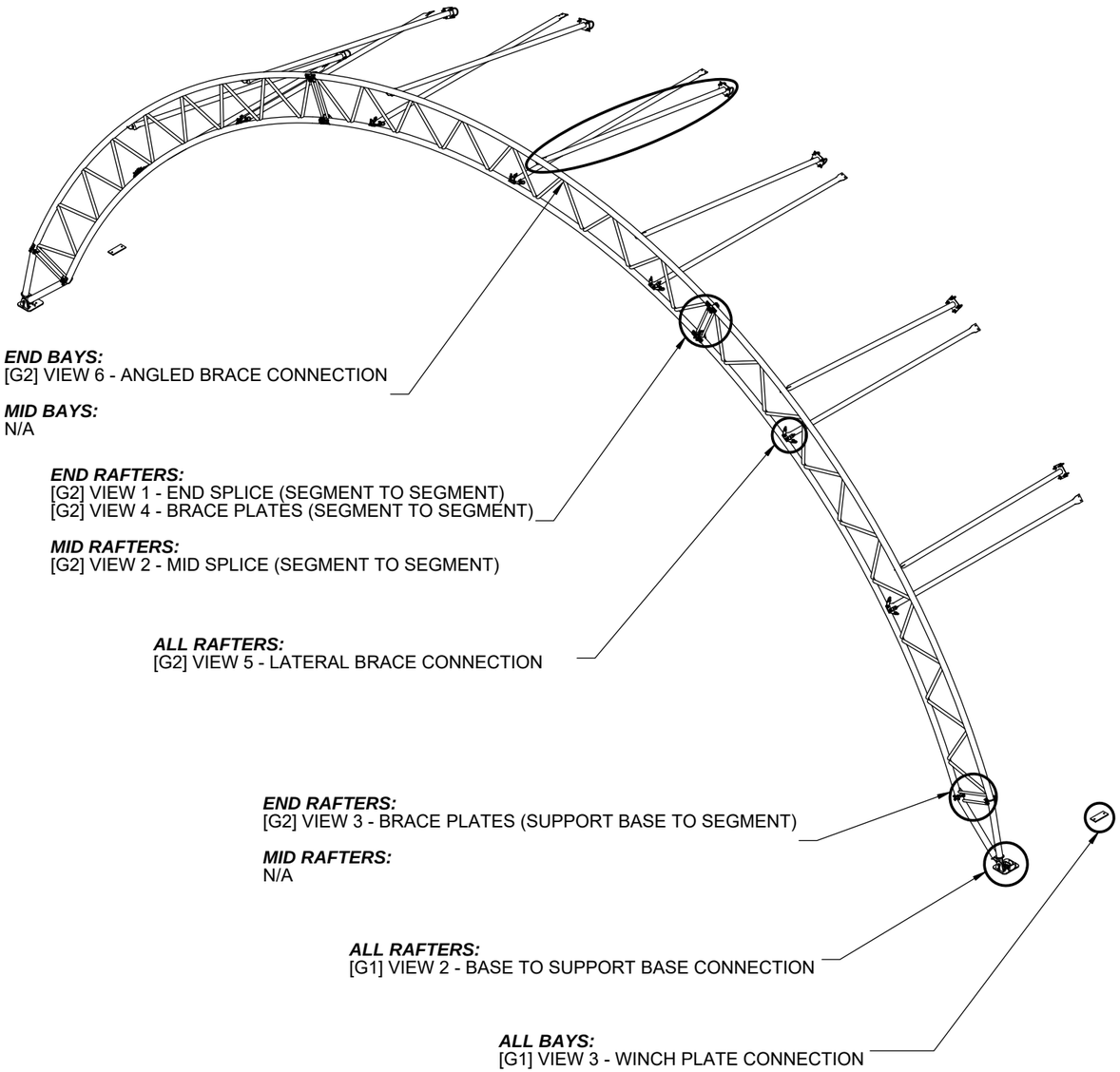
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NOT TO SCALE | SHEET SIZE: 11X17

SHEET: **F1**

DETAIL LOCATION CALL-OUTS



END BAYS:
[G2] VIEW 6 - ANGLED BRACE CONNECTION

MID BAYS:
N/A

END RAFTERS:
[G2] VIEW 1 - END SPLICE (SEGMENT TO SEGMENT)
[G2] VIEW 4 - BRACE PLATES (SEGMENT TO SEGMENT)

MID RAFTERS:
[G2] VIEW 2 - MID SPLICE (SEGMENT TO SEGMENT)

ALL RAFTERS:
[G2] VIEW 5 - LATERAL BRACE CONNECTION

END RAFTERS:
[G2] VIEW 3 - BRACE PLATES (SUPPORT BASE TO SEGMENT)

MID RAFTERS:
N/A

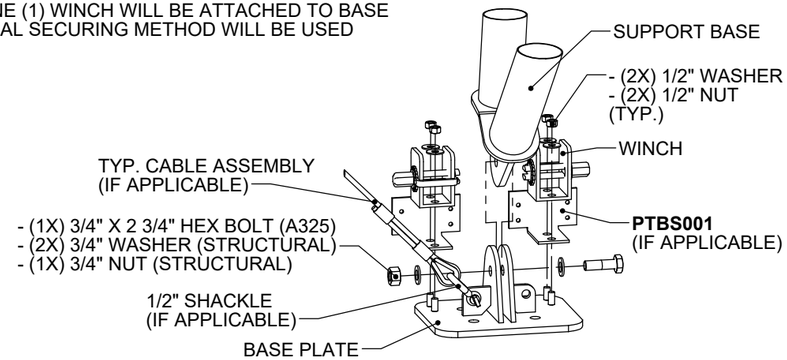
ALL RAFTERS:
[G1] VIEW 2 - BASE TO SUPPORT BASE CONNECTION

ALL BAYS:
[G1] VIEW 3 - WINCH PLATE CONNECTION

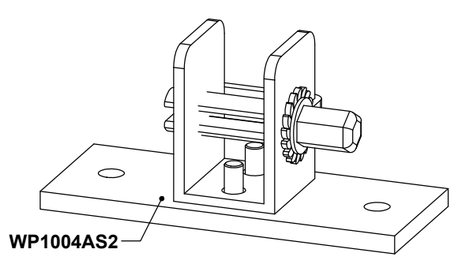
DETAILS WITH LOCATION CALL-OUTS NOT SHOWN ON THIS SHEET:
[G3] VIEW 1 - CABLE SKU PER SPAN
[G3] VIEW 2 - TYPICAL CABLE CONNECTION DETAIL
[G3] VIEW 3 - TYPICAL CABLE ASSEMBLY
[G3] VIEW 4 - SWAY CABLE LOCATIONS
[G3] VIEW 5 - SWAY CABLE DETAILS
[G3] VIEW 6 - TYPICAL SWAY CABLE ASSEMBLY

[G1] VIEW 1 - NOT USED

NOTE: IF COVER IS TO BE INSTALLED USING ONLY THE POCKET ABOVE THE BASE FOR TENSIONING, TWO (2) WINCHES WILL BE USED AS SHOWN. IF COVER IS TO BE INSTALLED USING BOTH THE POCKET ABOVE AND THE POCKET BELOW THE BASE FOR TENSIONING, ONLY ONE (1) WINCH WILL BE ATTACHED TO BASE AND ONE (1) ADDITIONAL SECURING METHOD WILL BE USED BELOW BASE.



[G1] VIEW 2 - BASE TO SUPPORT BASE CONNECTION



[G1] VIEW 3 - WINCH PLATE CONNECTION

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ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
12283 S 98TH AVE W
PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT: **AUDREY HIGGINS**

CONTACT PHONE: **515-497-6985**

STRUCTURE SKU #: **T065RDMF182120**

STRUCTURE SIZE: **65' X 120'**

STRUCTURE DESCRIPTION: **-**

SHEET TITLE: **DETAIL LOCATIONS & BASE DETAILS**

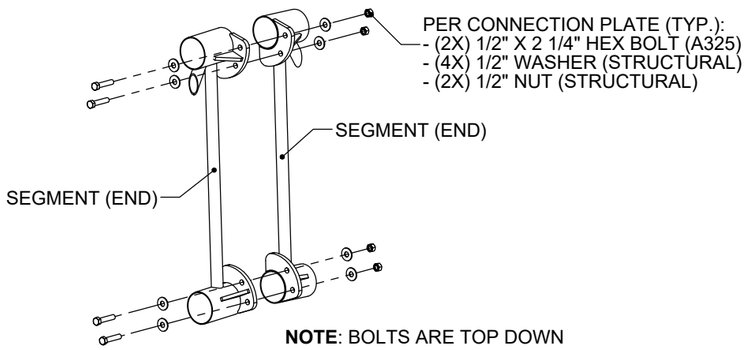
DRAWING DETAILS	
DRAWN BY: TJL	CREATION DATE: 11/16/2023

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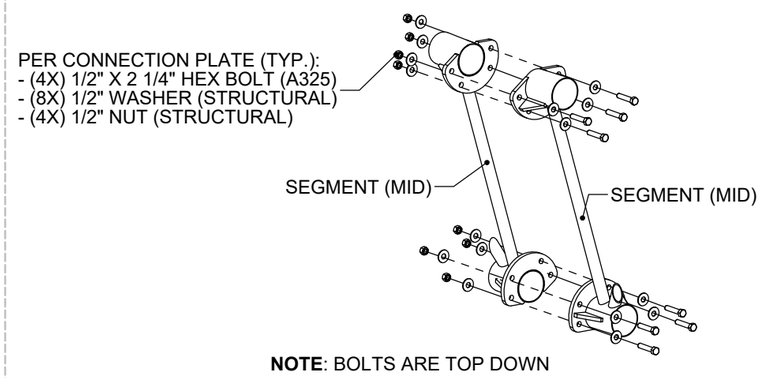
NOT TO SCALE | SHEET SIZE: 11X17

SHEET: **G1**



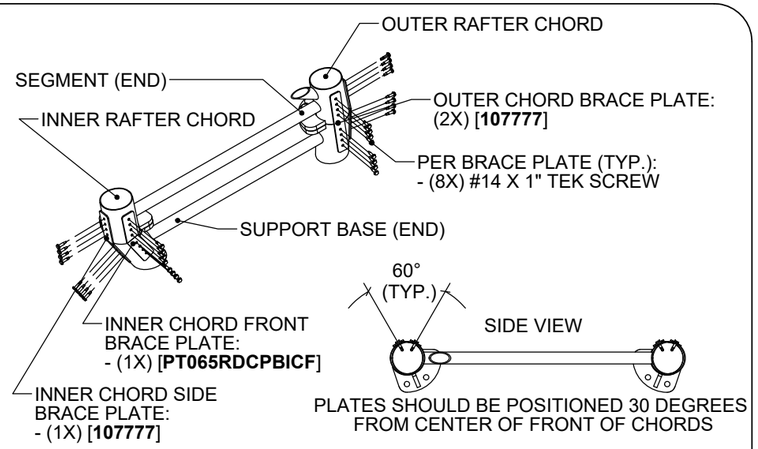
NOTE: BOLTS ARE TOP DOWN

[G2] VIEW 1 - END SPLICE (SEGMENT TO SEGMENT)

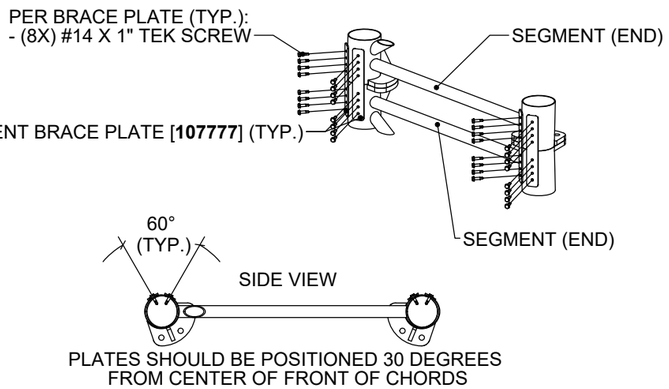


NOTE: BOLTS ARE TOP DOWN

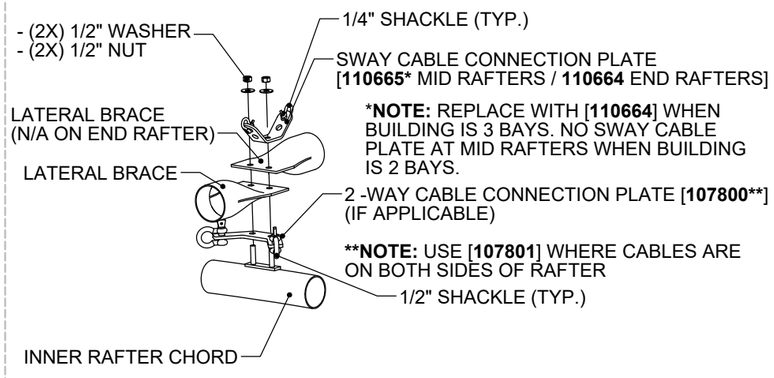
[G2] VIEW 2 - MID SPLICE (SEGMENT TO SEGMENT)



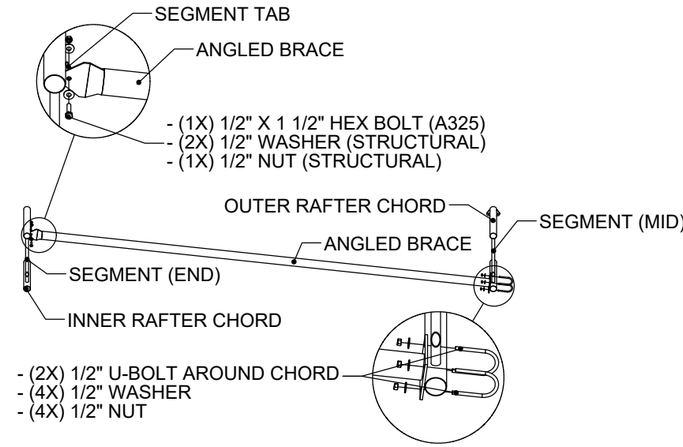
[G2] VIEW 3 - BRACE PLATES (SUPPORT BASE TO SEGMENT)



[G2] VIEW 4 - BRACE PLATES (SEGMENT TO SEGMENT)



[G2] VIEW 5 - LATERAL BRACE CONNECTION



[G2] VIEW 6 - ANGLED BRACE CONNECTION

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ORDER #: **7843052**

CUSTOMER #: **9117068**

STRUCTURE SKU #: **T065RDMF182120**

STRUCTURE SIZE: **65' X 120'**

STRUCTURE DESCRIPTION: **-**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
13293 S 98TH AVE W
PRAIRIE CITY, IA 50228-8771

CONTACT PHONE: **515-497-6985**

CUSTOMER CONTACT: **AUDREY HIGGINS**

SHEET TITLE: **GENERAL CONNECTION DETAILS**

DRAWING DETAILS

DRAWN BY:	CREATION DATE:
TJL	11/16/2023

REVISIONS:

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NOT TO SCALE | SHEET SIZE: 11X17

SHEET: **G2**

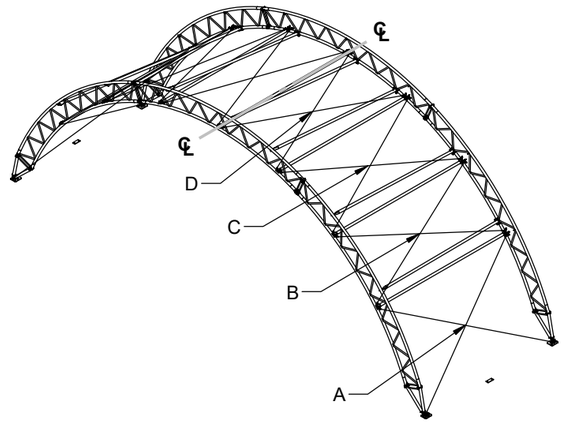
NOTES:

- RAFTER VIEW SHOWN REPRESENTS TYPICAL CABLE SPAN LABELS TO ILLUSTRATE LOCATIONS OF SPANS IN THE TABLE. THE CABLE PATTERN SHOWN MAY NOT FULLY MATCH THE SPECIFICS FOR THIS PROJECT.
- CABLE PATTERN REPEATS ON OPPOSITE SIDE OF ℄ UNLESS NOTED OTHERWISE.
- CABLE IS NOT PRESENT IN BAY NUMBERS NOT LISTED IN TABLE.

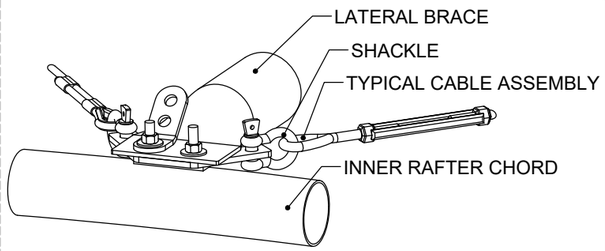
CABLE ATTACHMENT COMPONENTS	
TURNBUCKLE	1/2" X 12" GALV E-E
SHACKLE	1/2" GALV
CABLE	3/8" GALV 7X19

*REFER TO SHEET [C1] FOR BAY NUMBERING

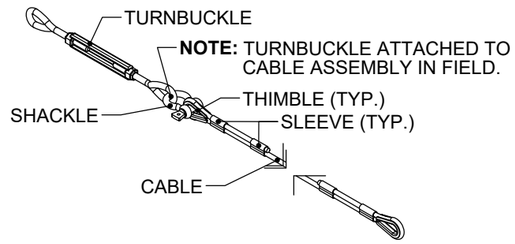
CABLE ASSEMBLY SKU'S				
BAY NUMBER*	***SPAN 'A'***	***SPAN 'B'***	***SPAN 'C'***	***SPAN 'D'***
1 & 7	CAB37G1802	CAB37G1601	CAB37G1601	CAB37G1601
2 & 6	CAB37G1803	CAB37G1602	CAB37G1602	N/A



[G3] VIEW 1 - CABLE SKU PER SPAN

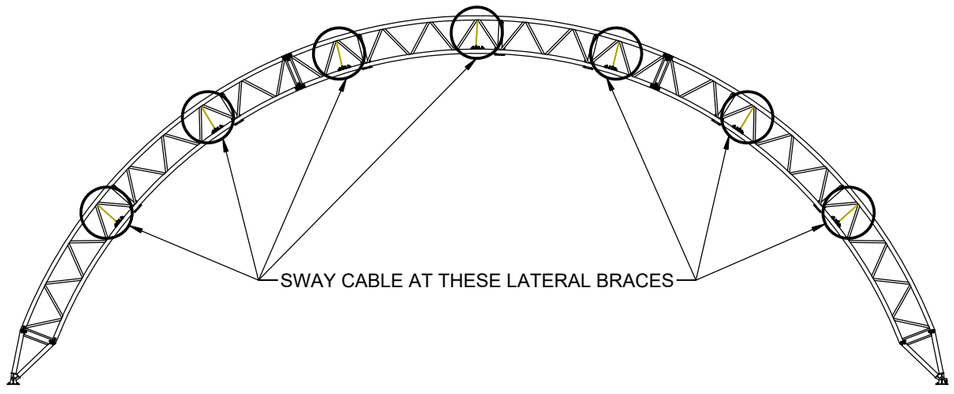


[G3] VIEW 2 - TYPICAL CABLE CONNECTION DETAIL



[G3] VIEW 3 - TYPICAL CABLE ASSEMBLY

SWAY CABLE REPEATS DOWN LENGTH OF BUILDING AT LOCATIONS SHOWN BELOW

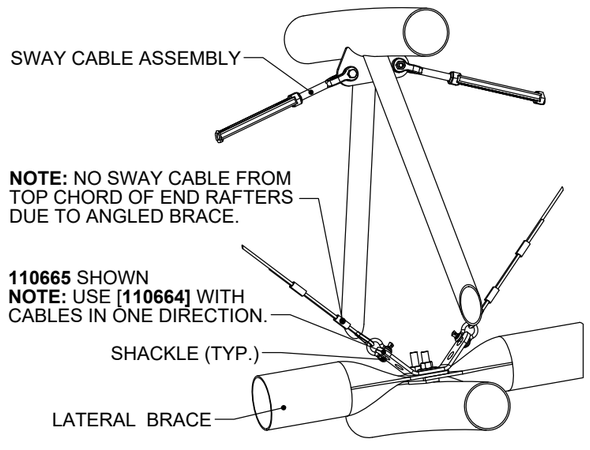


CABLE ATTACHMENT COMPONENTS	
TURNBUCKLE	1/2" X 6" GALV J-J
SHACKLE	1/4" GALV
CABLE	3/16" GALV 7X19

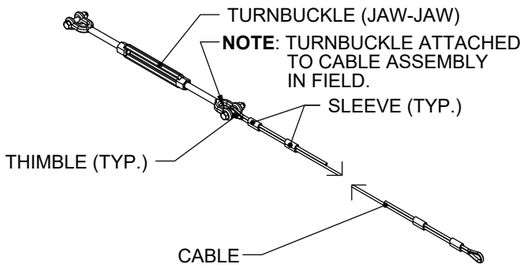
*REFER TO SHEET [C1] FOR BAY NUMBERING

SWAY CABLE ASSEMBLY SKU'S	
BAY NUMBER*	**SWAY CABLE SKU**
1 & 7	CAB18G1504
2 - 6	CAB18G1505

[G3] VIEW 4 - SWAY CABLE LOCATIONS



[G3] VIEW 5 - SWAY CABLE DETAILS



[G3] VIEW 6 - TYPICAL SWAY CABLE ASSEMBLY

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1440 18TH AVENUE SW
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P: 563.875.6113
F: 563.875.2317
WWW.ESAPCO.COM

ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
13293 S 98TH AVE W
PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT:
AUDREY HIGGINS

CONTACT PHONE:
515-497-6985

STRUCTURE SKU #:
T065RDMF182120

STRUCTURE SIZE:
65' X 120'

STRUCTURE DESCRIPTION:
-

SHEET TITLE:
CABLE LAYOUT & DETAILS

DRAWING DETAILS	
DRAWN BY: **TJL**	CREATION DATE: **11/16/2023**

REVISIONS:

NO.	BY:	REVISION DATE:
1		
2		
3		
4		

NOT TO SCALE | SHEET SIZE: 11X17

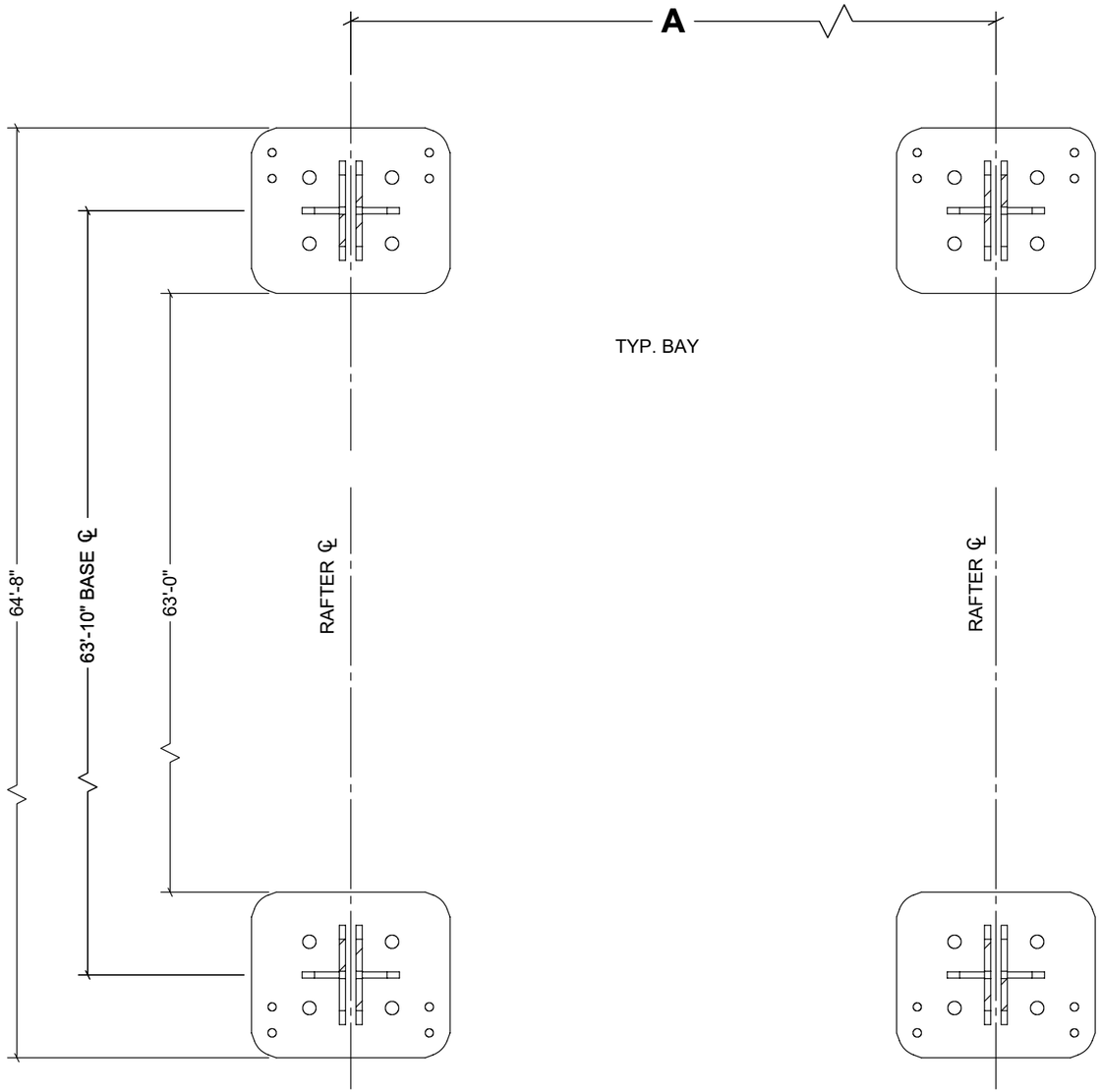
SHEET: **G3**

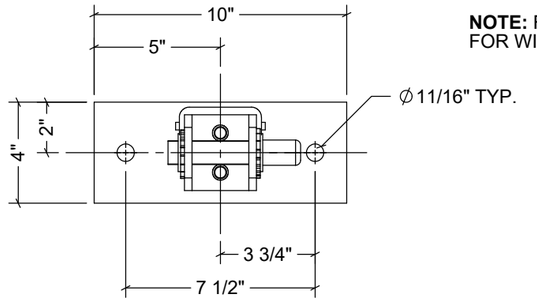
*REFER TO SHEET [C1] FOR BAY NUMBERING

BAY NUMBER*	A (RAFTER SPACING)
1 & 7	17'-1"
2 - 6	17'-2"

**REFER TO SHEET [E1] FOR BASE LOCATIONS

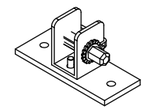
RAFTER TYPE	LEFT BASE SKU**	RIGHT BASE SKU**
END	BP061M	BP061M
MID	BP061M	BP061M





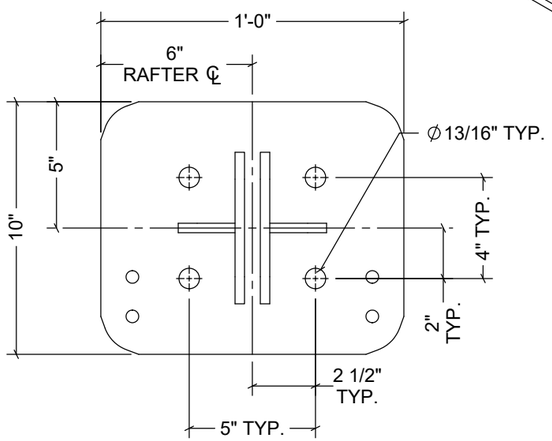
TOP VIEW

NOTE: REFER TO SHEET [F1] FOR WINCH PLATE LOCATIONS.

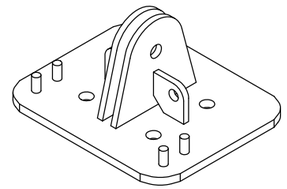


ISOMETRIC VIEW

WP1004AS2 DETAILS



TOP VIEW



ISOMETRIC VIEW

BP061M DETAILS

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ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION:
WILSON AGGREGATE, LLC.
13295 S 66TH AVE W
PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT:
AUDREY HIGGINS

CONTACT PHONE:
515-497-6985

STRUCTURE SKU #:
T065RDMF182120

STRUCTURE SIZE:
65' X 120'

STRUCTURE DESCRIPTION:
-

SHEET TITLE:
BASE PLATE LAYOUT & DETAILS

DRAWING DETAILS	
DRAWN BY: **TJL**	CREATION DATE: **11/16/2023**

REVISIONS:

NO.	BY:	REVISION DATE:
1		
2		
3		
4		

NOT TO SCALE | SHEET SIZE: 11X17

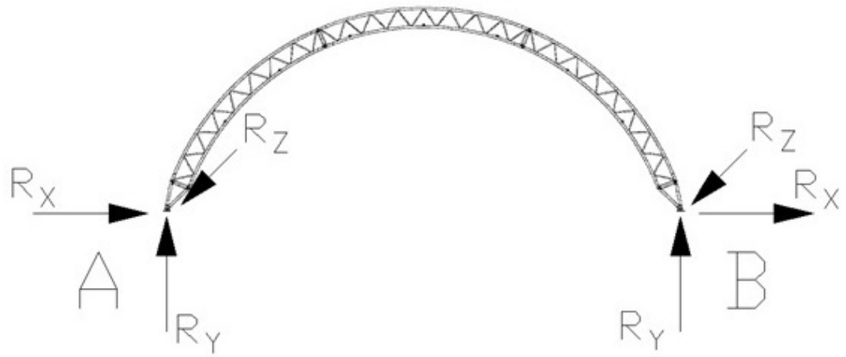
SHEET: **H1**

MAY ONLY BE USED WITH ESAPCO

FOUNDATION NOTES:

- CLEARSPAN DOES NOT PROVIDE ANY MATERIAL OR DESIGN CRITERIA FOR THE CREATION OF THE FOUNDATION OR ANCHORING OF THIS BUILDING, UNLESS OTHERWISE NOTED.
- FOUNDATION AND ANCHORING SHALL BE ENGINEERED AND APPROVED BY A LICENSED STRUCTURAL ENGINEER OF OWNER'S CHOICE.
- FOUNDATION MUST MEET THE BUILDING REACTION DATA SHOWN BELOW.
- SEE ENDWALL DRAWINGS FOR ENDWALL REACTIONS.

*See notes below		UNFACTORED BASE REACTIONS TO CONSIDER AT TYPICAL BASES			
Load Case		Side A		Side B	
		Rx (kip)	Ry (kip)	Rx (kip)	Ry (kip)
Dead Load, Self Weight	DL	0.41	0.82	-0.41	0.82
Dead Load, Collateral	EL	0.10	0.15	-0.10	0.15
Snow Load, Balanced	S	6.68	8.58	-6.68	8.58
Snow Load, Unbalanced	Su	3.28	2.57	-3.28	6.67
Wind Load	Wx	-9.00	-11.73	4.34	-12.89
Wind Load	Wx2	-5.28	0.31	0.61	-0.84
Wind Load	Wz	-2.29	-12.98	5.52	-12.17
Wind Load	Wz2	1.44	-0.12	1.30	0.57
		0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00



CONTROLLING ASD COMBINATIONS TO CONSIDER AT TYPICAL BASES			
Max Gravity (kip)	9.55	DL + EL + S	
Max Uplift (kip)	-7.30	0.6DL + 0.6Wz	
Max Inward Lateral (kip)	-5.16	0.6DL + 0.6Wx	
Max Outward Lateral (kip)	7.19	DL + EL + S	

*See notes below		ADDITIONAL UNFACTORED BASE REACTIONS TO CONSIDER AT BASES WITH CABLE ATTACHED					
Load Case		Side A			Side B		
		Rx (kip)	Ry (kip)	Rz (kip)	Rx (kip)	Ry (kip)	Rz (kip)
Wind Load	Wz	-3.52	-13.76	-1.58	6.26	-13.06	-1.53
Dead Load, Cable (Wz)	DL	0.01	0.02		-0.01	0.02	
Wind Load	Wz2	2.74	1.61	0.00	0.00	2.29	0.00
Dead Load, Cable (Wz2)	DL	0.01	0.02		-0.01	0.02	

ADDITIONAL CONTROLLING ASD COMBINATIONS TO CONSIDER AT BASES WITH CABLE ATTACHED			
Max Gravity (kip)	9.58	DL + EL + S	
Max Uplift (kip)	-7.75	0.6DL + 0.6Wz	
Max Inward Lateral (kip)	-5.15	0.6DL + 0.6Wx	
Max Outward Lateral (kip)	7.20	DL + EL + S	

V2.6

Notes:

a. The above Reaction Data should be combined as required by the Load Combinations from IBC or other applicable code.

b. The Reaction Data is for a building that represents a low hazard to human life in the event of a failure. Examples of such are agricultural buildings, unoccupied private buildings, unoccupied storage buildings, or temporary buildings. A building is considered "unoccupied" when employees are typically in the building only to move materials in and out (no permanent workstations) and it is not open to the public.

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F: 563.875.2317
WWW.ESAPCO.COM

ORDER #: 7843052

CUSTOMER #: 9117068

STRUCTURE SKU #: T065RDMF182120

STRUCTURE SIZE: 65' X 120'

STRUCTURE DESCRIPTION: -

CUSTOMER INFORMATION: WILSON AGGREGATE, LLC. 13293 S 88TH AVE W PRAIRIE CITY, IA 50228-8771

CONTACT PHONE: 515-497-8985

CUSTOMER CONTACT: AUDREY HIGGINS

SHEET TITLE: BUILDING REACTION DATA

DRAWING DETAILS

DRAWN BY: TJL

CREATION DATE: 11/16/2023

REVISIONS:

NO.	BY:	REVISION DATE:
1		
2		
3		
4		

NOT TO SCALE

SHEET SIZE: 11X17

SHEET: J1

EW065RDF3490D

NOTES:

- ALL DIMENSIONS ARE FROM CENTER TO CENTER UNLESS OTHERWISE NOTED.
- FRAMING FOR VENTS AND ADDITIONAL FRAMING, IF REQUIRED, WILL BE CUT IN FIELD USING 2" X 3" RECT. TUBE AND USE INSERTS [**107923**] OR [**110356ALT/110356BALT**].
- FRAMING FOR WALK DOORS, IF REQUIRED, WILL BE CUT IN FIELD USING 2" X 4" RECT. TUBE AND USE INSERTS [**115790**] OR [**110356ALT/110356BALT**].
- DIMENSIONS FOR TELESCOPING PURLIN LOCATIONS ARE APPROXIMATE. LOCATIONS CAN BE FIELD ADJUSTED +/- 12" FROM WHAT IS SHOWN.
- FOUNDATION ELEMENTS ARE NOT SHOWN.

LINE STYLES:

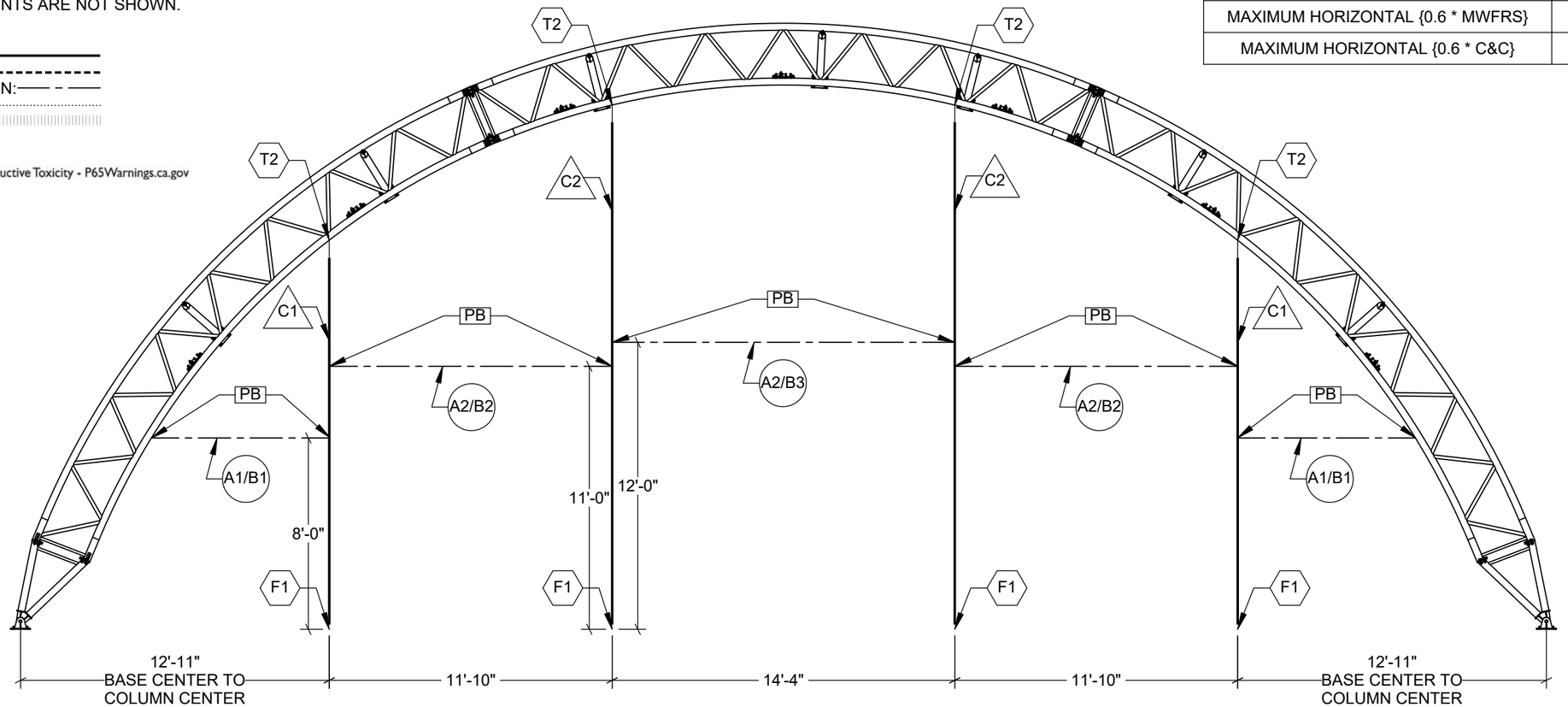
COLUMN: ————————
HEADER: – – – – – – – – – –
TELESCOPING PURLIN: —— – ——
2" X 3" TUBE: ·····
2" X 4" TUBE:

WARNING: Cancer and Reproductive Toxicity - P65Warnings.ca.gov

NORTH ENDWALL CONTENT GUIDE:

[M1] .....COVER SHEET/PART LOCATIONS/LAYOUT
[M2] .....CONNECTION DETAILS

ASD ENDWALL COLUMN REACTIONS	
MAXIMUM GRAVITY	370 LBS
MAXIMUM NET UPLIFT	540 LBS
MAXIMUM HORIZONTAL {0.6 * MWFRS}	1620 LBS
MAXIMUM HORIZONTAL {0.6 * C&C}	2380 LBS



△ COLUMNS

4" X 4", 8 GA, 1-PLY SQUARE TUBE

C1: **EWC1P184G08**

4" X 4", 8 GA, 2-PLY SQUARE TUBE

C2: **EWC2P252G08**

◯ TELESCOPING PURLINS

2.0" OD, 11 GA ROUND PIPE

A1: **200TP060**
A2: **200TP078**

2.375" OD, 14 GA ROUND PIPE

B1: **2375TP050**
B2: **2375TP085**
B3: **2375TP120**

⬡ INSERTS

TOP COLUMN INSERTS
(3.5" SQ. TUBE / 1/4" STEEL PLATE)

T2: **108151SA/108151SB**

BOTTOM COLUMN INSERTS
(3.5" SQ. TUBE / 1/2" STEEL PLATE)

F1: **111700**

□ BRACKETS

PURLIN BRACKET (1/8" STEEL PLATE)

PB: **106755**

CUSTOMER DESIGN APPROVAL

CUSTOMER SIGNATURE _____

DATE _____ □ **APPROVE WITH CHANGES** □ **APPROVE**

COVER/TERMINATION DETAILS: NON FIRE-RATED, POUND IN STRIP, WHITE, 12oz.

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WWW.ESAPCO.COM

ORDER #: **7843052**

CUSTOMER #: **9117068**

CUSTOMER INFORMATION: **WILSON AGGREGATE, LLC.** 13283 S 98TH AVE W PRAIRIE CITY, IA 50228-8771

CUSTOMER CONTACT: **AUDREY HIGGINS**

CONTACT PHONE: **515-497-6985**

STRUCTURE SKU #: **EW065RDF3490D**

STRUCTURE SIZE: **65' X 120'**

STRUCTURE DESCRIPTION: **-**

SHEET TITLE: **COVER SHEET/PART LOCATIONS/LAYOUT**

DRAWING DETAILS	
DRAWN BY: TJL	CREATION DATE: 11/16/2023

REVISIONS:

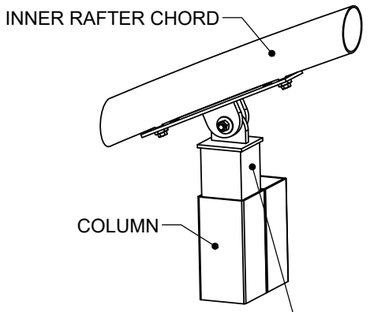
NO.	BY:	REVISION DATE:
1		
2		
3		
4		

NOT TO SCALE | SHEET SIZE: 11X17

SHEET: **M1**

VIEW 1: NOT USED

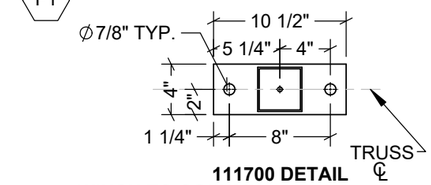
T2



ADJUSTABLE TOP COLUMN INSERT
- (1X) 1/2" X 2 1/2" HEX BOLT (HINGE BOLT)
- (2X) 1/2" WASHER
- (1X) 1/2" HEX NUT
- (2X) 3/8" BOX BOLT (THRU CHORD)

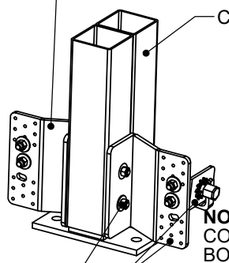
VIEW 2: ADJUSTABLE TOP COLUMN INSERT DETAIL

F1



111700 DETAIL

WINCH TO COLUMN BRACKET [116659]



NOTE: BOTTOM HOLE OF COLUMN TO ALIGN WITH BOTTOM HOLE OF INSERT

WINCH TO COLUMN BRACKET
- (2X) 1/2" X 1 1/2" HEX BOLT
- (2X) 1/2" WASHER
- (2X) 1/2" HEX NUT

COLUMN BRACKET TO COLUMN
- (2X) 1/2" X 5 1/2" HEX BOLT
- (4X) 1/2" WASHER
- (2X) 1/2" HEX NUT

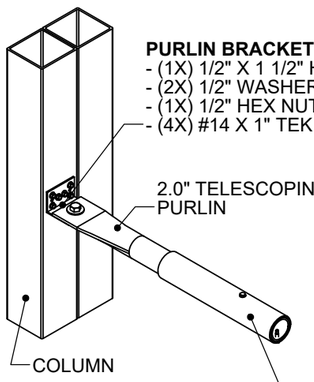
VIEW 3: BOTTOM COLUMN INSERT DETAIL

VIEW 4: NOT USED

VIEW 5: NOT USED

VIEW 6: NOT USED

PB



PURLIN BRACKET
- (1X) 1/2" X 1 1/2" HEX BOLT
- (2X) 1/2" WASHER
- (1X) 1/2" HEX NUT
- (4X) #14 X 1" TEK SCREW

2.375" TELESCOPING PURLIN
- (2X) #14 X 1" TEK SCREW*

***NOTE:** (1X) EACH ON OPPOSING FACE FROM THE OTHER.

VIEW 7: PURLIN BRACKET DETAIL

BOX BOLT HOLE SIZES & INSTALLATION TORQUE [1]		
BOX BOLT DIA.	**HOLE DIA.**	**INSTALLATION TORQUE**
1/4"	7/16"	14 FT-LB
5/16"	9/16"	18 FT-LB
3/8"	3/4"	33 FT-LB
1/2"	13/16"	59 FT-LB
5/8"	1-1/16"	140 FT-LB
3/4"	1-5/16"	221 FT-LB
1. REFER TO BOX BOLT TECHNICAL DATA FOR MORE INFORMATION IF USING BOX BOLTS		

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WWW.ESAPCO.COM

ORDER #: **7843052**

CUSTOMER #: **9117068**

STRUCTURE SKU #: **EW065RDF3490D**

STRUCTURE SIZE: **65' X 120'**

STRUCTURE DESCRIPTION: **1**

CUSTOMER INFORMATION: **WILSON AGGREGATE, LLC.** 13295 S 86TH AVE W PRAIRIE CITY, IA 50228-8771

CONTACT PHONE: **515-497-6985**

CUSTOMER CONTACT: **AUDREY HIGGINS**

SHEET TITLE: **CONNECTION DETAILS**

DRAWING DETAILS	
DRAWN BY: **TJL**	CREATION DATE: **11/16/2023**

REVISIONS:

NO.	BY:	REVISION DATE:
1		
2		
3		
4		

NOT TO SCALE | SHEET SIZE: 11X17

SHEET: **M2**

TEMPLATE STANDARD V2.7

Membrane Structure Fabric with ArmorKote

RU88X-6, 400

INTERTAPE POLYMER GROUP

TECHNICAL DATA SHEET

DESCRIPTION

RU88X-6, 400 is a heavyweight fabric for applications requiring UV stability. The scrim is produced in a special weaving pattern to enhance flatness, abrasion resistance, and tear properties. The proprietary coating is used to enhance abrasion resistance, flex resistance, seam strength, UV resistance and longevity. RU88X-6, 400 is perfect for a wide range of building applications in agriculture, oil and gas, mining, recreation and municipal structures.

FABRIC SPECIFICATIONS

Weave:	Woven clear HDPE scrim
Coating:	LDPE, 4 mil average each side (95 g/m^2/side)
Color:	Natural (clear), white, blue, green, red, beige and other colors available upon request
Weight:	12 oz/yd^2 (407g/m^2) +/- 5 %

ROLL SPECIFICATIONS

Cores:	4 inch I.D. or 5 inch I.D. available
Width:	Up to 144 inches (-0, +0.5) as ordered
Length:	Minimum 250 yds/roll; up to 1000 yds/roll

These values are typical data and are not intended as limiting specifications.

PERFORMANCE PROPERTIES

The following data are typical values based on ASTM standard tests. These data should not be considered specification.

Thickness ASTM D1777	23 mil (0.59 mm)
Grab Tensile ASTM D5034	Warp 370 lb 1664 N / Weft 345 lb 1532 N
Strip Tensile (N/5cm) ASTM D5035	Warp 245 lb/in (2178)/Weft 235 lb/in (2086)
Tongue Tear ASTM D2261	Warp 110 lb 488 N / Weft 100 lb 444 N
Trapezoidal Tear ASTM D4533	Warp 95 lb 422 N / Weft 90 lb 400 N
Mullen Burst ASTM D3786	655 psi / 4512 kPa
Accelerated UV Weathering[1] ASTM G154	>90 % strength retention after 2000 hrs exposure @ 0.77 W/m²/nm, or 1200 hrs exposure @ 1.35 W/m²/nm
Accelerated Natural Weathering ASTM G90	>80 % strength retention after 5 Florida Standard Years[2]
Low Temperature Bend ASTM D2136	-60°C

[1] Q.U.V [A-340 Lamps]; 8 hrs UV @ 60°C; 4hrs condensation @ 50°C [2] 1333 MJ

FR PERFORMANCE

This product meets the requirements of ASTM E84-00a (Class 1).

ipg intertape polymer group™

100 Paramount Drive, Suite 300 | Sarasota, FL 34232 | USA

Customer Service: 800.565.2000

www.itape.com | info@itape.com

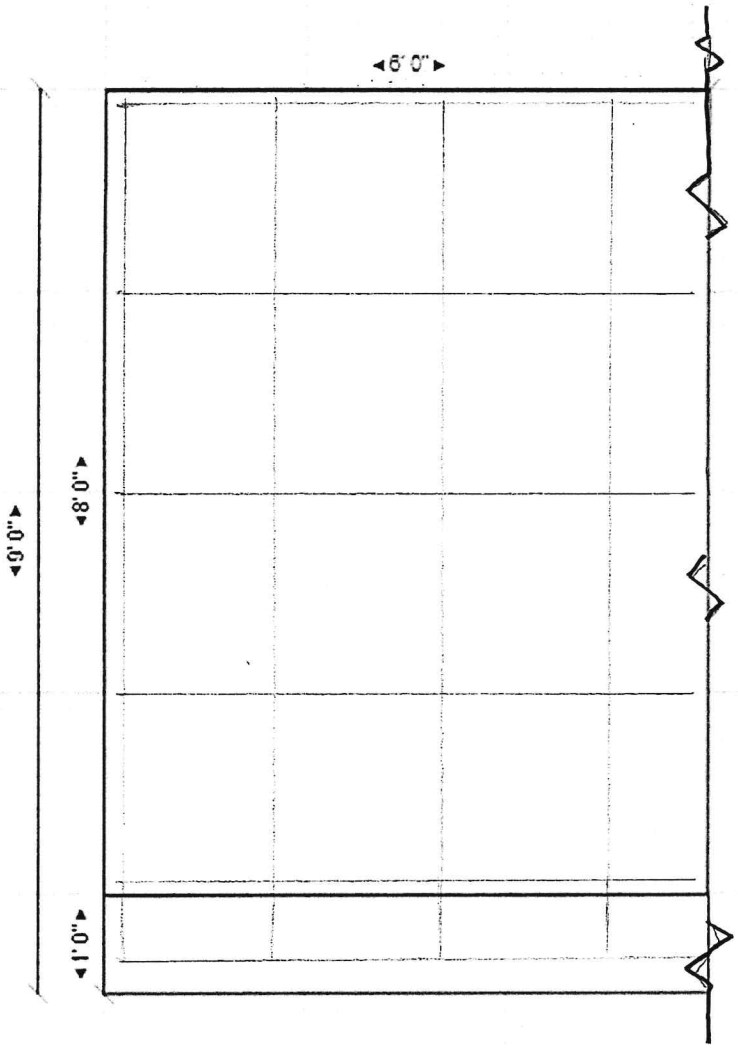
While we believe them to be reliable, the statements and information herein are only for general guidance and are not warrants or guarantees for accuracy and completeness. The user must, by test or otherwise, determine suitability for this purpose. There is no warranty of fitness for a particular purpose. Our standard term and conditions of sale apply exclusively to all orders, and all liability for damages of any kind, including consequential, exceeding purchase price is excluded. No one is authorized by us to make oral warranties. We reserve the right to make changes without notice or obligation in our products and publications.

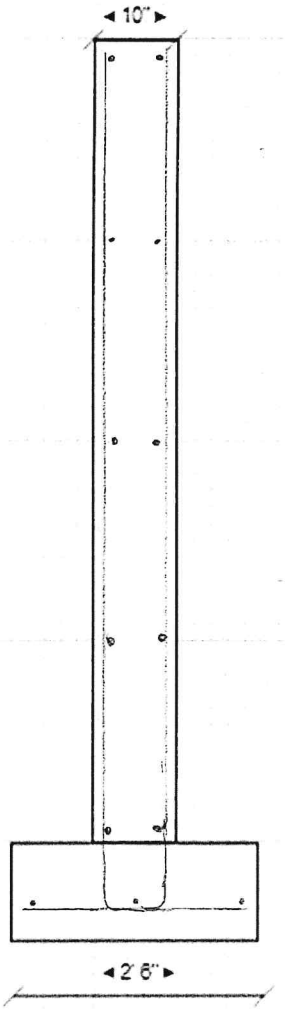
EFFECTIVE: 01/18

NovaShield™ BRAND

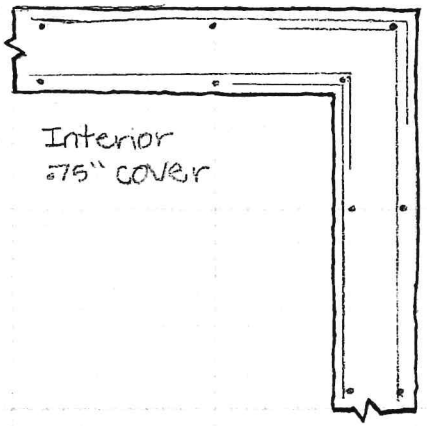
VERTICAL 20" o.c.?

HORIZONTAL 2" o.c.





EXTERIOR
=2" cover



Interior
=.75" cover

Site: Wilson Aggregate	Drawing: 8000001	Project: 0000001	Drawn: Mattie Flack	Notes: 6' wall section 1/2" Bars	Wilson Aggregate
Title: Hoop Building Foundation	Scale: 1/4":1'0"	Date: 11/07/23	Rev: A		

Table R404.1.3.2.3 — Foundation Walls for Conventional Light Frame Construction

Height of Foundation Wall (Net measured from top of basement slab to top of foundation wall)*		Thickness of Foundation Walls		Reinforcement Type and Placement within Foundation Wall**	Reinforcement Type and Placement within Foundation Wall** (maximum 12' span between corners and supporting cross walls.)	Type of Mortar
		Unit				
Gross	Net	Concrete	Masonry	Concrete	Masonry	Masonry
8	7'8"	7½"	8"	½"horizontal bars, placement in the middle, and near the top & bottom — ½" bars @ 6' max. vertically	0.075 square inch bar 8' o.c. vertically in fully grouted cells. If block is 12" nominal thickness, may be unreinforced.	Type M or S. Grout & Mortar shall meet provisions of Chapter 21 IBC
9	8'8"	8"	See Chapter 18 IBC	½" bars 2' o.c. horizontally & 20" vertically o.c. (⅝" bars 2' o.c. horizontally & 30" vertically o.c.)	See Chapter 18 IBC	Same as above
10	9'8"	8"	See Chapter 18 IBC		See Chapter 18 IBC	Same as above

*Concrete floor slab to be nominal 4". If such floor slab is not provided prior to backfill, provide 1) 36" vertical #4 rebar embedded in the footing @ maximum 7' O.C. spacing -and/or- 2) full depth nominal 2" depth × 4"width keyway in footing

**All steel reinforcement bars shall meet ASTM A6175 grade 40 minimum and be deformed. Placement of bars shall be in center of wall and meet the provisions of chapters 18, 19, and 21 of the International Building Code.

Note: Cast in place concrete shall have a compressive strength of 3,000 lbs @ 28 days. Footings shall contain continuous reinforcement of minimum 2 - ½" diameter rebar throughout. Placement of reinforcement and concrete shall meet the requirements of Chapter 19 of the International Building Code.

Note: Material used for backfilling shall be carefully placed granular soil of average or high permeability and shall be drained with an approved drainage system as prescribed in Section 1805.4 of the International Building Code. Where soils containing a high percentage of clay, fine silt or similar materials of low permeability or expansive soils are encountered or where backfill materials are not drained or an unusually high surcharge is to be placed adjacent to the wall, a specially designed wall shall be required.

Note: Foundation plate or sill anchorage shall be installed in accordance with the respective codes as applicable

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TABLE 1807.1.6.2
CONCRETE FOUNDATION WALLS[b,c]

MAXIMUM WALL HEIGHT (feet)	MAXIMUM UNBALANCED BACKFILL HEIGHT[e] (feet)	MINIMUM VERTICAL REINFORCEMENT-BAR SIZE AND SPACING (inches)								
		Design lateral soil load[a] (psf per foot of depth)								
		30[d]			45[d]			60		
		Minimum wall thickness (inches)								
		7.5	9.5	11.5	7.5	9.5	11.5	7.5	9.5	11.5
5	4	PC	PC	PC	PC	PC	PC	PC	PC	PC
	5	PC	PC	PC	PC	PC	PC	PC	PC	PC
6	4	PC	PC	PC	PC	PC	PC	PC	PC	PC
	5	PC	PC	PC	PC	PC	PC	PC	PC	PC
	6	PC	PC	PC	PC	PC	PC	PC	PC	PC
7	4	PC	PC	PC	PC	PC	PC	PC	PC	PC
	5	PC	PC	PC	PC	PC	PC	PC	PC	PC
	6	PC	PC	PC	PC	PC	PC	#5 at 48	PC	PC
	7	PC	PC	PC	#5 at 46	PC	PC	#6 at 48	PC	PC
8	4	PC	PC	PC	PC	PC	PC	PC	PC	PC
	5	PC	PC	PC	PC	PC	PC	PC	PC	PC
	6	PC	PC	PC	PC	PC	PC	#5 at 43	PC	PC
	7	PC	PC	PC	#5 at 41	PC	PC	#6 at 43	PC	PC
	8	#5 at 47	PC	PC	#6 at 43	PC	PC	#6 at 32	#6 at 44	PC
9	4	PC	PC	PC	PC	PC	PC	PC	PC	PC
	5	PC	PC	PC	PC	PC	PC	PC	PC	PC
	6	PC	PC	PC	PC	PC	PC	#5 at 39	PC	PC
	7	PC	PC	PC	#5 at 37	PC	PC	#6 at 38	#5 at 37	PC
	8	#5 at 41	PC	PC	#6 at 38	#5 at 37	PC	#7 at 39	#6 at 39	#4 at 48
	9[d]	#6 at 46	PC	PC	#7 at 41	#6 at 41	PC	#7 at 31	#7 at 41	#6 at 39
10	4	PC	PC	PC	PC	PC	PC	PC	PC	PC
	5	PC	PC	PC	PC	PC	PC	PC	PC	PC
	6	PC	PC	PC	PC	PC	PC	#5 at 37	PC	PC
	7	PC	PC	PC	#6 at 48	PC	PC	#6 at 35	#6 at 48	PC
	8	#5 at 38	PC	PC	#7 at 47	#6 at 47	PC	#7 at 35	#7 at 47	#6 at 45
	9[d]	#6 at 41	#4 at 48	PC	#7 at 37	#7 at 48	#4 at 48	#6 at 22	#7 at 37	#7 at 47
	10[d]	#7 at 45	#6 at 45	PC	#7 at 31	#7 at 40	#6 at 38	#6 at 22	#7 at 30	#7 at 38

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot per foot = 0.157kPa/m.

a. For design lateral soil loads, see Section 1610.

b. Provisions for this table are based on design and construction requirements specified in Section 1807.1.6.2.

c. "PC" means plain concrete.

d. Where unbalanced backfill height exceeds 8 feet and design lateral soil loads from Table 1610.1 are used, the requirements for 30 and 45 psf per foot of depth are not applicable (see Section 1610).

e. For height of unbalanced backfill, see Section 1807.1.2.

CITY OF DES MOINES PLAN & ZONING COMMISSION
STAFF REPORT AND RECOMMENDATION
Thursday, January 18, 2024

AGENDA ITEM #5 **SITE-2023-000189**

Applicant: Fireworks Leasing LLC (owner), represented by Jason Marietta (officer).

Location: 2221 E Euclid Avenue.

Requested Action: Review and approval of a Public Hearing Site Plan Amendment "Jake's Fireworks" and for a Type 2 Design Alternative to allow outdoor storage in the front and street-side yards where outdoor storage shall be located in the rear or interior side yards per section 135-8.2.2.E.

I. GENERAL INFORMATION

1. **Purpose of Request:** A site plan was previously approved for the project to convert the existing building to a retail fireworks sales use. The proposed amendment includes outdoor storage areas within the parking lot to the west and northeast of the building for seasonal storage of concrete blocks.

2. **Size of Site:** 1.615 acres.

3. **Existing Zoning (site):** "I1" Industrial District.

4. **Existing Land Use (site):** Retail Fireworks Sales.

5. **Adjacent Land Use and Zoning:**

   North – "I1", Use is retail and warehousing.

   South - "I1", Uses are contractor offices and warehouses.

   East – Use is I-235 interstate highway.

   West – "I1", Use is an auto repair shop.

6. **General Neighborhood/Area Land Uses:** The subject property is located just west of the southbound on-ramp to Interstate-235 from East Euclid Avenue. The surrounding area is generally industrial in character.

7. **Applicable Recognized Neighborhood(s):** The subject property is located within the Fairmont Park Neighborhood. All neighborhoods were notified of the public hearing by mailing of the Preliminary Agenda on December 29, 2023. All agendas are mailed to the primary contact person designated to the City of Des Moines Neighborhood Services Department by the recognized neighborhood association. Additionally, separate notifications of the hearing for this specific item were mailed on January 8, 2024 (10 days prior to the hearing) to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site. Fairmont Park Neighborhood mailings were sent to Jeff Witte, 2501 Morton Avenue, Des

Moines, IA 50317. A Final Agenda was mailed to recognized neighborhoods on January 12, 2024.

8. **Relevant Case History:** None.

9. **PlanDSM Future Land Use Plan Designation:** Industrial.

10. **Applicable Regulations:** Pursuant to Section 135-9.1.1.B of the Planning and Design Ordinance, the site plan review requirements of Chapter 135 are designed to ensure the orderly and harmonious development of property in a manner that shall:

    - Promote the most beneficial relation between present and proposed future uses of land and the present and proposed future circulation of traffic throughout the city;

    - Permit present development of property commensurate with fair and orderly planning for future development of other properties in the various areas of the city with respect to the availability and capacity, present and foreseeable, of public facilities and services. The factors to be considered in arriving at a conclusion concerning proposed present development of property shall include the following:

        - The maximum population density for the proposed development, the proposed density of use, and consideration of the effect the proposal will have on the capacity of existing water and sanitary sewer lines to the end that existing systems will not become overloaded or capacity so substantially decreased that site use will inhibit or preclude planned future development;

        - Zoning restrictions at the time of the proposal;

    - The city's comprehensive plan;

    - The city's plans for future construction and provision for public facilities and services; and

    - The facilities and services already available to the area which will be affected by the proposed site use;

    - Encourage adequate provision for surface and subsurface drainage, in order to ensure that future development and other properties in various areas of the city will not be adversely affected;

- Provide suitable screening of parking, truck loading, refuse and recycling disposal, and outdoor storage areas from adjacent residential districts;

- Encourage the preservation of canopied areas and mature trees and require mitigation for the removal of trees; and

- Consider the smart planning principles set forth in Iowa Code Chapter 18B.

Based on Chapter Section 135-9.2.4 and 135-9.3.1.B of the Planning and Design Ordinance, Type 2 Design Alternatives are to be considered by the Plan and Zoning Commission after a public hearing whereby the following criteria are considered:

- The design alternative provisions of Section 135-9.2.4 are intended to authorize the granting of relief from strict compliance with the regulations of this chapter as part of the site plan or alternate design documentation review process when specific site features or characteristics of the subject property, including the presence of existing buildings, creates conditions that make strict compliance with applicable regulations impractical or undesirable. The design alternative provisions are also intended to recognize that alternative design solutions may result in equal or better implementation of the regulation's intended purpose and greater consistency with the comprehensive plan.

- Consideration of requested design alternatives through the administrative and public hearing review processes will be evaluated on the merits of the applicable request and independently of prior requests from the same applicant, and may include the following criteria:

  - An evaluation of the character of the surrounding neighborhood, such as:

    - Whether at least 50% of the developed lots within 250 feet of the subject property are designed and constructed consistently with the requested design alternative(s); and

    - Whether the directly adjoining developed lots are designed and constructed consistently with the requested design alternative(s);

- For purposes of this subsection, if the lots that exist within 250 feet of the subject property are undeveloped, then the neighborhood character determination will be based upon the assumption that such lots, as if developed, comply with the applicable requirements of this chapter for which a design alternative(s) has been requested;

- The totality of the number and extent of design alternatives requested compared to the requirements of this chapter for each site plan or alternate design documentation reviewed;

- Whether the requested design alternative(s) is consistent with all relevant purpose and intent statements of this design ordinance and with the general purpose and intent of the comprehensive plan;

- Whether the requested design alternative(s) will have a substantial or undue adverse effect upon adjacent: property, the character of the surrounding area or the public health, safety and general welfare;

- Whether any adverse impacts resulting from the requested design alternative(s) will be mitigated to the maximum extent feasible; and

- Other factors determined relevant by the community development director, plan and zoning commission, or city council as applicable.

II. ADDITIONAL INFORMATION

State regulations allow the retail fireworks use at this East Euclid Avenue location to be open for sales each year from July 1st through July 8th. In addition to this retail location, the business operates sales tents in Wal-Mart parking lots across the state that use large 2-foot by 2-foot by 4-foot concrete blocks. The owner is requesting to store the concrete blocks at the subject property during the off season when no fireworks sales are occurring. The East Euclid property is an ideal storage site for the business due to its central location for their Iowa operations, the existing large 8-inch reinforced concrete parking lot, and the industrial context of the area.

The site plan amendment includes outdoor storage for the concrete blocks at the west and northeast sides of the existing building. The location of the outdoor storage area to the west of the building in the side yard is compliant with the regulations in Chapter 135. However, the areas proposed for outdoor storage at the northeast side of the building are considered a front and street-side yard, which are prohibited areas. The site was formerly a gas station, and the existing building is located along the southern property line with the parking lot oriented towards the street in the front of the building. The existing building location limits the available areas for outdoor storage with almost no rear yard and limited side yards. The proposed outdoor storage locations to the east and west of the building would maintain public view of the building.

The storage area at the west side of the building is setback over 100 feet from the street right-of-way with robust frontage buffer landscaping and interior parking landscaping that screen and soften views from East Euclid Avenue. The areas proposed for storage at the northeast side of the building are adjacent to the on-ramp to I-235 and are

screened from the east by the grade change of the ramp, as well as existing landscaping along the east edge of the property. In lieu of a privacy fence, the applicant has proposed dense evergreen landscaping along the south sides of the outdoor storage areas to further screen and soften public views from East Euclid Avenue. In an industrial setting, concrete blocks are often used as the perimeter screening material for outdoor storage areas in lieu of fencing. The applicant has shown that the concrete blocks would be stacked neatly and have provided a visually organized site.

Staff is supportive of the proposed outdoor storage areas in the front yard due to the seasonal nature of the retail fireworks business, the specific type of items being stored, and the context of the site. Granting the Type 2 Design Alternative would be consistent with the intent and spirit of the ordinance. If the outdoor storage were expanded to include additional materials or areas beyond those currently identified, further review would be necessary.

III. STAFF RECOMMENDATION

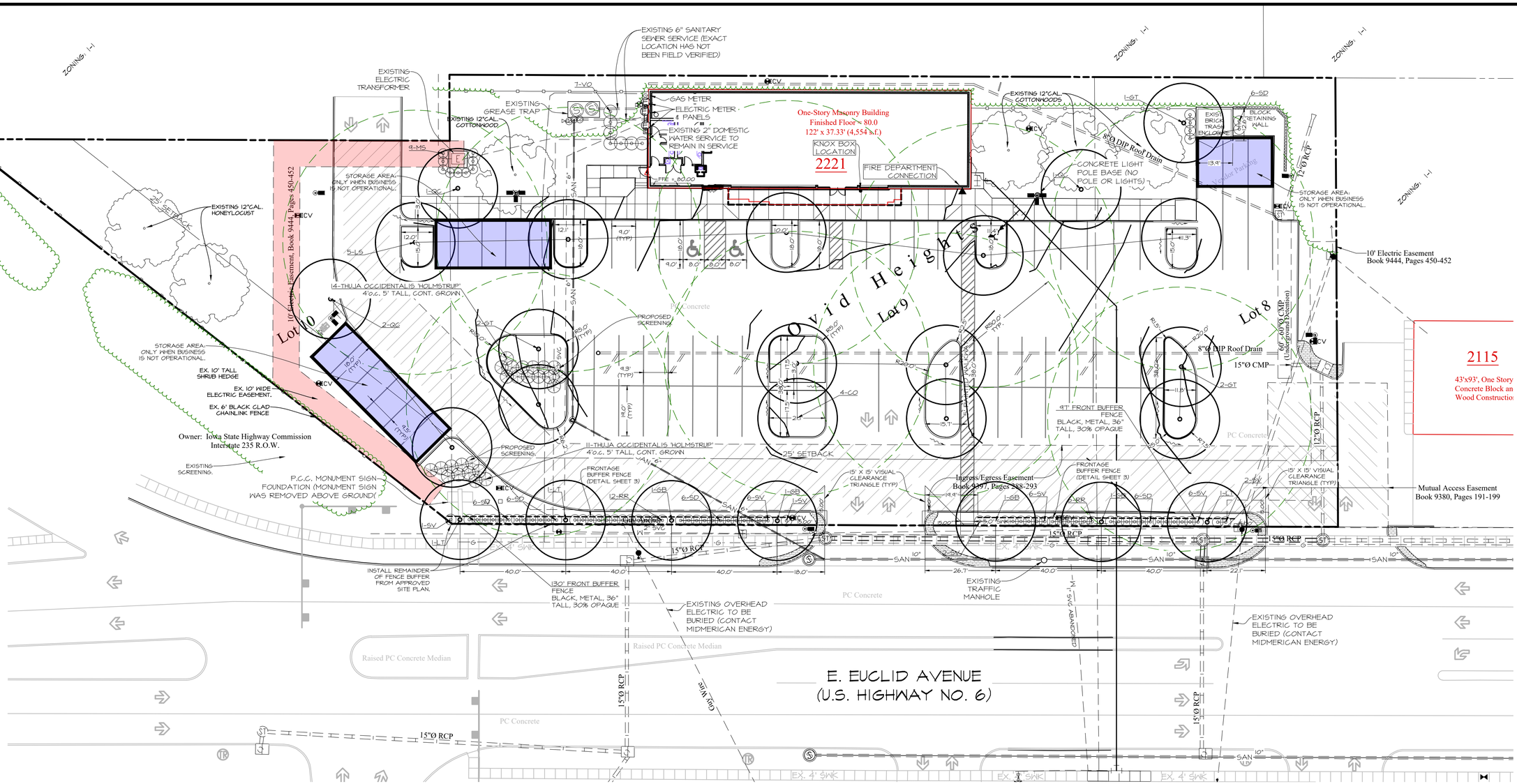
Staff recommends approval of the site plan amendment and Type 2 Design Alternative subject to the following conditions:

1. Compliance with all administrative review comments.

2. Outdoor storage shall be limited to large format concrete blocks only.

3. Concrete blocks shall be kept neatly stacked and organized within the parking lot locations identified on the approved site plan.

4. All outdoor storage areas shall be screened to the satisfaction of the Planning and Urban Design Administrator.



OPEN SPACE REQUIREMENTS

SITE AREA: 70,331 S.F. * 15% MATURE CANOPY COVERAGE = 10,550 S.F.
OVERSTORY TREE = 1,000 S.F.
UNDERSTORY TREE = 700 S.F.
EVERGREEN TREE = 300 S.F.

STREET TREE REQUIREMENTS

30' MINIMUM SPACING, MINIMUM 2' FROM PAVING.
IDOT WILL NOT ALLOW STREET TREES ALONG U.S. HWY. 6.

FENCE FRONTAGE BUFFER

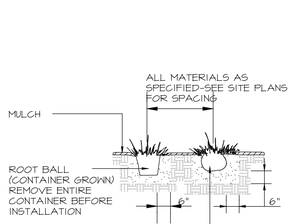
CONTINUOUS 3' TALL STEEL FENCE (30% MIN. OPACITY), 2' FROM PARKING LOT CURB WITH SHADE TREES 40' OC MAX. & CONTINUOUS SHRUB ROW 36" OC MAX.

INTERIOR PARKING LOT REQUIREMENTS

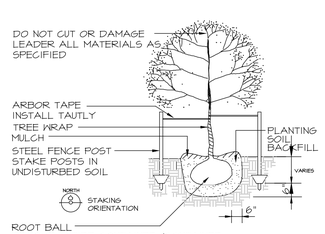
ONE, SINGLE TRUNK SHADE TREE REQUIRED FOR EACH PARKING LOT ISLAND.
ALL PARKING STALLS MUST BE WITHIN 50 FEET OF AN INTERIOR PARKING LOT TREE.
62 PARKING STALLS SHOWN: ONE SHADE TREE FOR EACH 5 STALLS MUST BE WITHIN 4' OF PAVING. BUFFER TREES DO NOT COUNT TOWARDS THIS REQUIREMENT.
MATURE TREE CANOPIES MUST COVER MINIMUM 30% OF PAVING SURFACE. CANOPY SIZE PER TABLE 135-7.4.2 OF ARTICLE 135 CITY CODE.

PLANT SCHEDULE

MARK	Botanical name / COMMON NAME	QUAN.	SIZE	ROOT TYPE	REMARKS
CO	*Celtis occidentalis 'Prairie Pride'*	4	1.5" CAL.	B&B	MATCHED, SPECIMEN
	PRAIRIE PRIDE HACKBERRY				
GB	*Ginkgo biloba 'Princeton Sentry'*	4	2" CAL.	B&B	MATCHED, SPECIMEN
	PRINCTON SENTRY GINKGO				30" FROM CURB, 30' OC
GT	Gleditsia triacanthos f. inermis 'Skycole'	5	1.5" CAL.	B&B	MATCHED, SPECIMEN
	SKYLINE HONEYLOCUST				
LS	*Liquidambar styraciflua 'Rotundifolia'*	5	1.5" CAL.	B&B	MATCHED, SPECIMEN
	ROUNDLEAF SWEETGUM				
LT	*Liriodendron tulipifera 'JFS-Oz'*	3	1.5" CAL.	B&B	MATCHED, SPECIMEN
	EMERALD CITY TULIP TREE				30" FROM CURB, 30' OC
MS	*Miscanthus sinsensis 'Gracillimus'*	9	5 GAL.	CONT.	MATCHED, SPECIMEN, 2' FROM MOAT
	MAIDEN GRASS				3' OC, MULCH BED
QC	*Quercus coccinea*	4	1.5" CAL.	B&B	MATCHED, SPECIMEN
	SCARLET OAK				42" FROM PAVING/CURB
RR	Rosa 'Radsun'	19	3 GAL.	CONT.	MATCHED, SPECIMEN, 40" FROM BACK OF CURB
	CAREFREE SUNSHINE ROSE				36" OC, MULCH BED
SD	*Spiraea 'Darsnorm'*	25	3 GAL.	CONT.	MATCHED, SPECIMEN, 40" FROM BACK OF CURB
	SNOW STORM SPIREA				36" OC, MULCH BED
SV	Syringa vulgaris 'Little Boy Blue'	28	3 GAL.	CONT.	MATCHED, SPECIMEN, 40" FROM BACK OF CURB
	WONDER BLUE LILAC				36" OC, MULCH BED
VO	*Viburnum opulus var. americanum*	7	3 GAL.	CONT.	MATCHED, SPECIMEN, MULCH BED
	AMERICAN CRANBERRYBUSH VIBURNUM				4' OC



SHRUB PLANTING DETAIL
NO SCALE



DECIDUOUS TREE PLANTING AND STAKING DETAIL
NO SCALE

NOTES

1. MULCH WITH 3" SHREDDED HARDWOOD MULCH - NATURAL COLOR.
2. SEED ALL DISTURBED AREAS WITH S.U.D.A.S. TYPE 1 SEED.

STATE OF IOWA — KENT R. ZARLEY — LANDSCAPE ARCHITECT NO. 257 — LICENSED LANDSCAPE ARCHITECT

I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

BY:_____ DATE:_____
KENT R. ZARLEY, IOWA REG. NO. 257
MY LICENSE RENEWAL DATE IS: JUNE 30, 2023
PAGES OR SHEETS COVERED BY THIS SEAL:
THIS SHEET ONLY

SCALE: 1"=20'
0' 5' 10' 15' 20' 40'

NORTH

PROPOSED DESIGN ALTERNATIVE 2: 12/12/2023

CEC
Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12 . Des Moines, Iowa 50322
515.276.4884 . mail@ceclac.com

DATE:	Dec. 12, 2023
3RD SUBMIT	06/18/2021
2ND SUBMIT	06/11/2021
1ST SUBMIT	05/04/2021
DATE OF SURVEY:	MAR. 26, 2014
DESIGNED BY:	MHH
DRAWN BY:	CM

JAKES FIREWORKS
2221 E. EUCLID AVENUE, DES MOINES IOWA 50317

LANDSCAPING PLAN

SHEET 7 OF 7

E-8570

Q:\E-FILES\E-8000\E8570_C3D Drawings\Construction Documents\Site Plan\E8570 SP.dwg, 12/12/2023 9:17:34 AM, kzarley, 1:1

CITY OF DES MOINES PLAN & ZONING COMMISSION
STAFF REPORT AND RECOMMENDATION
Thursday, January 18, 2024

AGENDA ITEMS #6A-6C	**COMP-2023-000041 & ZONG-2023-000068**

Applicant: IA9 Des Moines, LLC (owner), represented by Bryan Slama (officer).

Location: Vicinity of 1475 Hart Avenue.

Requested Action: A) Determination as to whether the requested rezoning is in conformance with the PlanDSM: Creating Our Tomorrow Comprehensive Plan.

B) Amend the PlanDSM: Creating Our Tomorrow Comprehensive Plan to revise the future land use classification of the property from Low Density Residential within a Neighborhood Node to Business Park within a Neighborhood Node. (COMP-2023-000041)

C) Rezone property from "N1a" Neighborhood District to Limited "EX" Mixed Use District, to allow the development of self-storage and/or flex warehouse buildings, where no individual storage unit shall be less than 600 square feet. (ZONG-2023-000068)

Item 6 was continued from the December 21, 2023 meeting of the Commission. The applicant has since revised their application to request a rezoning to a Limited "EX" District.

I. GENERAL INFORMATION

1. **Purpose of Request:** The applicant is proposing to rezone the subject properties to Limited "EX" Mixed Use District to construct 3 warehouse buildings measuring 6,480 square feet, 19,440 square feet, and 8,640 square feet. The applicant has indicated that the buildings would likely be used for self-service storage or flex warehousing with self-storage units that shall be no smaller than 600 square feet.

   Any future construction or redevelopment of the subject properties must comply with all applicable site plan and design regulations contained in the Planning and Design Ordinance (Chapter 135 of City Code).

2. **Size of Site:** 113,382 square feet (2.6 acres).

3. **Existing Zoning (site):** "N1a" Neighborhood District.

4. **Existing Land Use (site):** The subject properties are undeveloped and used as agricultural land.

5. **Adjacent Land Use and Zoning:**

   North – "N1a" & "PUD"; Uses are Stoney Pointe PUD, one-household residential and agricultural.

   South – "CX-V"; Uses are commercial.

   East – "N2b"; Uses are one-household residential and agricultural.

   West – "MX3-V"; Uses are vacant and commercial (car wash).

6. **General Neighborhood/Area Land Uses:** The subject properties are located on the south side of Hart Avenue just east of the intersection of Hart Avenue and Southeast 14th Street. The surrounding area is a mix of commercial, one-household residential, multiple-household residential, and agricultural uses.

7. **Applicable Recognized Neighborhood(s):** The subject property is located in the Easter Lake Area Neighborhood Association (ELANA) and within 250 feet of the South Central DSM Neighborhood Association. All neighborhood associations were notified of the public hearing by emailing of the Preliminary Agenda on December 1, 2023 for the December 21, 2023 meeting of the Commission and on December 29, 2023 for the January 18, 2024 meeting of the Commission, and of the Final Agenda on December 15, 2023 for the December 21, 2023 meeting of the Commission and on January 12, 2024 for the January 18, 2024 meeting of the Commission.

   Additionally, separate notifications of the hearing for this specific item were mailed on December 1, 2023 (20 days prior to the December 21, 2023 meeting of the Commission) and December 29, 2023 (20 days prior to the December 21, 2023 meeting of the Commission) and December 11, 2023 (10 days prior to the December 21, 2023 meeting of the Commission) and January 8, 2024 (10 days prior to the January 18, 2024 meeting of the Commission) to the Neighborhood Association and to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

   All notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Development Division on the date of the mailing. The Easter Lake Area Neighborhood Association (ELANA) mailings were sent to Jim Bollard. The South Central DSM Neighborhood mailings were sent to Lisa Stocker-Ross.

   The applicant can provide a summary of the neighborhood meeting at the public hearing.

8. **Relevant Zoning History:** None.

9. **PlanDSM: Creating Our Tomorrow Plan Land Use Plan Designation:** Low Density Residential.

10. **Applicable Regulations:** Taking into consideration the criteria set forth in Chapter 18B of the Iowa Code, the Commission reviews all proposals to amend zoning boundaries or regulations within the City of Des Moines. Such amendments must be in conformance with the comprehensive plan for the City and designed to meet the criteria in 414.3 of the Iowa Code. The Commission may make recommendations to the City Council on conditions to be made in addition to the existing regulations so long as the subject property owner agrees to them in writing. The recommendation of the Commission will be forwarded to the City Council.

II. ADDITIONAL APPLICABLE INFORMATION

1. **PlanDSM: Creating Our Tomorrow:** The applicant is requesting that the future land use designation of the property be amended from "Low Density Residential" within a Neighborhood Node to "Business Park" within a Neighborhood Node. PlanDSM describes these designations as follows:

   Low Density Residential: Areas developed with primarily single family and two family residential units with up to 6 dwelling units per net acre.

   Business Park: Accommodates light industrial, office and employment uses along with limited complementary retail uses. Industrial uses in this category would produce little or no noise, odor, vibration, glare, or other objectionable influences, and would have little or no adverse effect on surrounding properties.

   Neighborhood Node: These nodes are the smallest in size and offer services that provide for basic daily needs of the local population in the surrounding neighborhood. May include restaurants, shops and smaller-scale businesses. Residential development including low-medium and medium densities may occur.

   The subject property is currently zoned "N1a" Neighborhood Mix District which the Zoning Ordinance describes as, "intended for large lots for mostly single-household residential houses with a more flexible building form pursuant to House A building type in section 135-2.13 of this code."

   The applicant is proposing to rezone the property to "EX" Mixed-Use District which the Zoning Ordinance describes as, "intended for locations and corridors with a mix of light industrial and heavier commercial uses, accommodating higher levels of vehicular traffic than MX districts and a predominance of mid-scale employment uses, such as office, low intensity industrial, and warehouse spaces associated with offices." The applicant is additionally requesting the rezoning of the subject properties to a Limited "EX" Mixed-Use District where no individual storage unit shall be less than 600 square feet.

2. **Planning and Design Ordinance:** Any development must comply with all applicable site plan and design regulations of the Planning and Design Ordinance. Should the rezoning be approved, the applicant would be required to prepare a Site Plan and building elevations for review and approval before the property can be occupied by the proposed use.

   Once the applicant submits a formal Site Plan, staff would conduct a full review. A quick analysis of the rezoning concept illustration provided by the applicant has identified a few elements that do not conform to Chapter 135 and may require Type 2 Design Alternatives from the Plan and Zoning Commission. These may include, but are not limited to, the following possible Design Alternatives:

   - reduction of transparency requirements along Hart Avenue;
   - reduction of building entrances along Hart Avenue;
   - waiver of building facade materials; and,
   - reduction of the minimum required occupied space along the primary frontage.

III. STAFF RECOMMENDATION

Part A) Staff recommends that the requested rezoning to Limited "EX" Mixed-Use District be found not in conformance with the PlanDSM: Creating Our Tomorrow Comprehensive Plan, which designates this property as Low Density Residential within a Neighborhood Node.

Part B) Staff recommends approval of the request to amend the PlanDSM: Creating Our Tomorrow Comprehensive Plan to revise the future land use classification for the property from Low Density Residential within a Neighborhood Node to Business Park within a Neighborhood Node.

Part C) Staff recommends approval of the request to rezone the property from "N1a" Neighborhood District to Limited "EX" Mixed-Use District, subject to the condition that any Self-Storage use shall have no individual storage unit that is less than 600 square feet in area.

CITY OF DES MOINES PLAN & ZONING COMMISSION
STAFF REPORT AND RECOMMENDATION
Thursday, January 18, 2024

AGENDA ITEM #7 **COMP-2023-000045**

Applicant: Clayton Enterprises (owner), represented by George Michael Clayton (officer).

Location: 1726 Oakland Avenue.

Requested Action: Amend PlanDSM: Creating Our Tomorrow Comprehensive Plan to revise the future land use designation from Low-Medium Density Residential to High Density Residential to the addition of three (3) additional dwelling units for a net density greater than 17 dwelling units per acre.

I. GENERAL INFORMATION

Purpose of Request: The applicant is proposing to amend the future land use designation from Low-Medium Density Residential to High Density Residential to allow construction of three (3) dwelling units in the building's basement which would be in addition to the existing six (6) units. The resulting nine (9) dwelling units on 0.342-acre of land represents a net density of 27 dwelling units per acre.

Approval of this Land Use Plan amendment request would allow any future site plan for the subject property with nine (9) dwelling units to be found in conformance with PlanDSM: Creating Our Tomorrow comprehensive plan.

2. **Size of Site:** 14,880 square feet (0.342 acre).

3. **Existing Zoning (site):** "NX2" Neighborhood Mix District.

4. **Existing Land Use (site):** The subject property contains a multiple-household residential building with six (6) dwelling units and a paved parking lot.

5. **Adjacent Land Use and Zoning:**

North – "NX2" and "N5"; Uses are one-household residential and multiple-household residential.

South – "NX2", "N5", & "N5-4"; Uses are one-household residential and multiple-household residential.

East – "NX2", "N5", & "N5-4"; Uses are one-household residential and multiple-household residential.

West – "RX1" & "MX1"; Uses are nursing home, senior multiple-household residential, and multiple-household residential.

6. **General Neighborhood/Area Land Uses:** The site is located along the west side of Oakland Avenue to the south of the intersection with Franklin Avenue. The area consists of a mix of one-household residential and multiple-household residential uses.

7. **Applicable Recognized Neighborhood(s):** The subject property is located in the River Bend Neighborhood Association. All neighborhood associations were notified of the public hearing by emailing of the Preliminary Agenda on December 29, 2023, and of the Final Agenda on January 12, 2024.

   All notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Development Division on the date of the mailing. The River Bend Neighborhood Association mailings were sent to Kathy Hellstern.

8. **Relevant Zoning History:** None.

9. **PlanDSM: Creating Our Tomorrow Plan Land Use Plan Designation:** Low-Medium Density Residential.

10. **Applicable Regulations:** Taking into consideration the criteria set forth in Chapter 18B of the Iowa Code, the Commission reviews all proposals to amend the future land use map within the City of Des Moines' Comprehensive Land Use Plan. The recommendation of the Commission will be forwarded to the City Council.

    In accordance with City Code Section 135-9.1.1, any future Site Plan for the property must be in accordance with the City's Comprehensive Land Use Plan, including conformance with the density of use allowed per the City's future land use map.

II. ADDITIONAL APPLICABLE INFORMATION

1. **PlanDSM: Creating Our Tomorrow:** The applicant is requesting that the future land use designation for the property be amended from "Low-Medium Density Residential" to "High Density Residential." Plan DSM describes these designations as follows:

   Low-Medium Density Residential: Areas developed with mix of single family, two-family and multi-family residential up to 12 dwelling units per net acre.

   High Density Residential: Areas developed with primarily higher intensity multi-family housing with a minimum density over 17 dwelling units per net acre.

   The subject property is currently zoned "NX2" Neighborhood Mix District. The Zoning Ordinance describes this district as "intended for a mix of single-household houses

with appropriately scaled and detailed multiple-household building types in the same neighborhood."

In 2016, the City of Des Moines adopted a new Land Use Map which designated the surrounding area, including the subject property, as Low-Medium Density Residential. Staff notes that the subject's property is legal non-conforming as the pre-existing six (6) units on 0.342 acre of land represent a current net density of 18 dwelling units per acre, which already exceeds the density allowed by the Low-Medium Density Residential designation.

The subject property is located midblock along Oakland Avenue in an area that consists of a mix of single-household residential and multiple-household residential uses. The dwellings were either purpose-built multiple-household residential uses from the 1950s to the 1980s or conversions of Victorian era houses. These building styles typically did not include the use of basement levels for individual dwelling units. The basement levels of the buildings in the surrounding area would have typically been used as service and storage areas.

For these reasons, staff believes that the request to increase the allowed density would not be appropriate and would negatively impact the surrounding area.

2. **Planning and Design Ordinance:** Any future redevelopment must comply with all applicable site plan and design regulations of the Planning and Design Ordinance (City Code Chapter 135). As such, the applicant would be required to prepare a Site Plan and building elevations for review before the property can be occupied by the proposed use.

III. STAFF RECOMMENDATION

Staff recommends denial of the request to amend PlanDSM: Creating Our Tomorrow Comprehensive Plan to revise the future land use designation from Low-Medium Density Residential to High Density Residential.

CITY OF DES MOINES PLAN & ZONING COMMISSION
STAFF REPORT AND RECOMMENDATION
Thursday, January 18, 2024

AGENDA ITEM #9 **SITE-2022-000022**

Applicant: Hawkeye Tack & Western Supply, Inc. (owner), represented by Sherry L Hansen (officer).

Location: 720 East 30th Street.

Requested Action: Review and approval of the Public Hearing Site Plan "International Reformed Holy Spirit Church in America Building Renovation" and for a Type 2 Design Alternative to allow two (2) driveways off the primary street where only one (1) driveway off each non-primary street is allowed in accordance with City Code Section 135-2.5.3.A.9.

I. GENERAL INFORMATION

1. **Purpose of Request:** The proposed project includes interior building renovations that will change the use from retail to a church. This requires a site plan that is in conformance with current site and landscaping standards. Proposed site improvements would include a pedestrian sidewalk connection, fence frontage buffer, interior parking lot landscape islands, and a bike rack.

   The Civic building type limits the number of permitted driveway accesses to one (1) off each non-primary street. A site plan was prepared and approved showing the drive access allowed by code. Following approval, the applicant submitted an amendment to retain all four (4) driveway accesses, including two (2) along East 30th Street, one (1) along Maple Street, and one (1) along Lyon Street..

2. **Size of Site:** 1.157 acre (50,407 square feet).

3. **Existing Zoning (site):** "MX1" Mixed-Use District.

4. **Existing Land Use (site):** The site currently includes an "Assembly – Place of Worship" with an accessory surface parking lot on three sides of the building.

5. **Adjacent Land Use and Zoning:**

   North – "MX3" and "N3c"; Uses are one-household residential.

   South – "MX1" and "N3c"; Uses are one-household residential.

   East – "P2"; Use is state fairgrounds.

   West – "N3c"; Use is one-household residential.

6. **General Neighborhood/Area Land Uses:** The subject property is located along the west side of East 30th Street and two blocks south of East University Avenue. The

surrounding area includes a mix of commercial uses along East University Avenue and East 30th Street, the Iowa State Fairgrounds, and a low-density residential area to the west.

7. **Applicable Recognized Neighborhood(s):** The subject property is located in the Fairground Neighborhood Association. All neighborhood associations were notified of the January 18, 2024, public hearing by emailing of the Preliminary Agenda on December 29, 2023, and the Final Agenda on January 12, 2024. Additionally, separate notifications of the hearing for this specific item were mailed on January 8, 2024 (10 days prior to the public hearing) to the Fairground Neighborhood Association, and to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

   All notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Services Department on the date of the mailing. The Fairground Neighborhood mailings were sent to Tina Payton, 2336 Logan Ave, Des Moines, IA 50317.

8. **Relevant Case History:**
   - 11/23/21: Pre-Application meeting for change of use
   - 1/26/22: Conditional Use Approval from Zoning Board of Adjustment to allow the use in an MX1 zoning district subject to review and approval of a site plan
   - 8/16/22: Citizen complaint filed regarding church activities
   - 8/31/22: Notices of violation sent to occupant
   - 10/5/22: Violations referred to City Legal for insufficient progress
   - 10/28/22: Site Plan 1st Submittal
   - 12/6/22, 12/19/22, 12/28/22: Site Plan 2nd – 4th Submittals
   - 1/4/23: Site Plan Approval showing drive access as allowed by code
   - 5/1/23: Building permit issued per approved site plan
   - No temporary Certificate of Occupancy issued as final inspections had not been scheduled/completed
   - 9/29/23: Site Plan Amendment Submittal showing all 4 drive accesses retained
   - 11/6/23: Site inspection revealed site still in violation
   - 11/29/23: Site Plan Amendment 2nd Submittal and placement on 1/18/24 P+Z agenda for drive accesses
   - 12/4/23: Trial scheduled and canceled as occupant entered into an agreement with the City to correct all violations per the approved site plan by Court Order deadline 6/1/24

9. **PlanDSM: Creating Our Tomorrow Plan Land Use Plan Designation:** Community Mixed-Use: Small-to medium-scale mixed use development, located on high-capacity transit corridors or at the intersection of transportation corridors. Community mixed use area include both a mix of medium density residential and a mix of retail and service establishments designed to attract customers from a large service area

encompassing multiple neighborhoods and may include specialty retail that attracts regional customers.

10. **Applicable Regulations:** Pursuant to Section 135-9.1.1. B of the Planning and Design Ordinance, the site plan review requirements of Chapter 135 are designed to ensure the orderly and harmonious development of property in a manner that shall:

    - Promote the most beneficial relation between present and proposed future uses of land and the present and proposed future circulation of traffic throughout the city;

    - Permit present development of property commensurate with fair and orderly planning for future development of other properties in the various areas of the city with respect to the availability and capacity, present and foreseeable, of public facilities and services. The factors to be considered in arriving at a conclusion concerning proposed present development of property shall include the following:

        - The maximum population density for the proposed development, the proposed density of use, and consideration of the effect the proposal will have on the capacity of existing water and sanitary sewer lines to the end that existing systems will not become overloaded, or capacity so substantially decreased that site use will inhibit or preclude planned future development;

        - Zoning restrictions at the time of the proposal;

    - The city's comprehensive plan;
    - The city's plans for future construction and provision for public facilities and services; and
    - The facilities and services already available to the area which will be affected by the proposed site use;
    - Encourage adequate provision for surface and subsurface drainage, in order to ensure that future development and other properties in various areas of the city will not be adversely affected;
    - Provide suitable screening of parking, truck loading, refuse and recycling disposal, and outdoor storage areas from adjacent residential districts;
    - Encourage the preservation of canopied areas and mature trees and require mitigation for the removal of trees; and
    - Consider the smart planning principles set forth in Iowa Code Chapter 18B.

    Based on Chapter Section 135-9.2.4 and 135-9.3.1. B of the Planning and Design Ordinance, Type 2 Design Alternatives are to be considered by the Plan and Zoning Commission after a public hearing whereby the following criteria are considered:

- The design alternative provisions of Section 135-9.2.4 are intended to authorize the granting of relief from strict compliance with the regulations of this chapter as part of the site plan or alternate design documentation review process when specific site features or characteristics of the subject property, including the presence of existing buildings, creates conditions that make strict compliance with applicable regulations impractical or undesirable. The design alternative provisions are also intended to recognize that alternative design solutions may result in equal or better implementation of the regulation's intended purpose and greater consistency with the comprehensive plan.

- Consideration of requested design alternatives through the administrative and public hearing review processes will be evaluated on the merits of the applicable request and independently of prior requests from the same applicant, and may include the following criteria:

  - An evaluation of the character of the surrounding neighborhood, such as:

    - Whether at least 50% of the developed lots within 250 feet of the subject property are designed and constructed consistently with the requested design alternative(s); and

    - Whether the directly adjoining developed lots are designed and constructed consistently with the requested design alternative(s);

- For purposes of this subsection, if the lots that exist within 250 feet of the subject property are undeveloped, then the neighborhood character determination will be based upon the assumption that such lots, as if developed, comply with the applicable requirements of this chapter for which a design alternative(s) has been requested.

  - The totality of the number and extent of design alternatives requested compared to the requirements of this chapter for each site plan or alternate design documentation reviewed;

  - Whether the requested design alternative(s) is consistent with all relevant purpose and intent statements of this design ordinance and with the general purpose and intent of the comprehensive plan;

  - Whether the requested design alternative(s) will have a substantial or undue adverse effect upon adjacent: property, the character of the surrounding area or the public health, safety, and general welfare;

  - Whether any adverse impacts resulting from the requested design alternative(s) will be mitigated to the maximum extent feasible; and

- Other factors determined relevant by the community development director, plan and zoning commission, or city council as applicable.

II. ADDITIONAL APPLICABLE INFORMATION

1. **Traffic Safety:** East 30th Street is a truck route and minor arterial corridor carrying approximately 10,800 vehicles per day. It has been identified as a high-injury network street in the recently approved City of Des Moines Vision Zero Transportation Safety Action Plan. Corridor access management has been identified by the Federal Highway Administration as a proven safety countermeasure to reduce crashes and enhance safety along a corridor by controlling the number and type of conflict points between vehicle drivers, pedestrians, and bike riders in shared, public space.

   Removal of these driveways improves safety. According to the Iowa Statewide Urban Design and Specifications (SUDAS) and National Cooperative Highway Research Program (NCHRP Report 420), "the number of driveways per mile significantly affects the safety of a corridor. Crash rates increase very quickly as the number of access points increases on arterial roadways". The below table from SUDAS Section 5L-3, provides crash rates vs. access point density. For context, there are twenty-three (23) driveways between E University Avenue and Dean Avenue. This equates to a driveway density of approximately thirty-eight (38) access points per mile. Based on the table below, this corridor would see an approximate 145% increase in crashes due to the number of access points.

Table 5L-3.03: Crash Rates (crashes per million vehicle miles traveled) vs. Access Point Density

Access Points per Mile	Approximate Accesses per 500 feet	Representative Crash Rate for an Undivided Roadway	Increase in Crashes Associated with More Access Density
Under 20	Under 2	3.8	----
20 to 40	2 to 4	7.3	+92%
40 to 60	4 to 6	9.4	+147%
Over 60	Over 6	10.6	+179%

Source: National Cooperative Highway Research Program Report 420.

2. **Staff Rationale:** In addition to the paramount safety concerns for retaining the two (2) East 30th Street access drives, compliance with all applicable Sections of Chapter 135 is required with any site plan submittal. Removal of the two (2) driveways off of East 30th Street and their restoration to a traditional curb-and-gutter configuration is a City requirement, and doing so would bring the site into compliance with the site design standards of Chapter 135 of City Code.

   The site is situated on a double corner lot with Maple Street and Lyon Street, both non-primary streets, to the north and south. East 30th Street to the east is the primary street for this site. The applicants are proposing to retain two (2) access drives off East 30th Street, as well as an access off Maple Street and Lyon Street, for

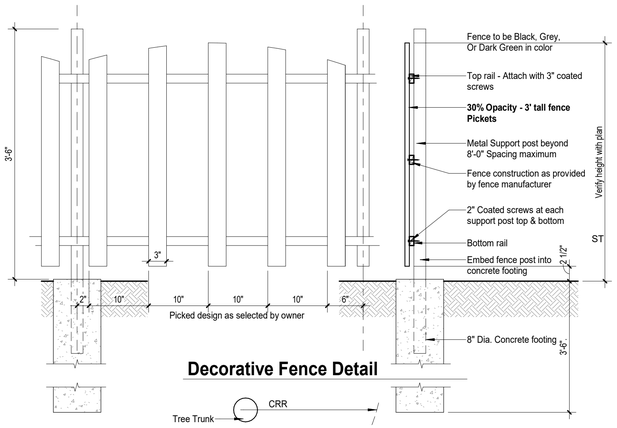
a total of four (4) access drives into the site. If the two (2) East 30th Street driveways were removed, traffic entering and exiting the site could do so by using the drive access currently on Lyon Street and Maple Street, without impacting traffic flow within the site.

Pedestrian safety significantly increases by removing pedestrian-vehicle conflict points that are common at low-visibility, private intersections. This is especially important with the site's proximity to the Iowa State Fairgrounds.

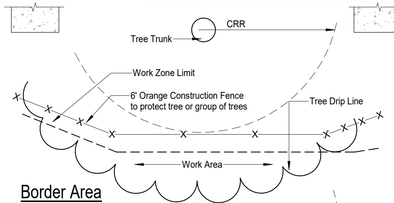
Both Planning and Traffic and Transportation staff do not support the retention of the two (2) driveways off East 30th Street.

III. STAFF RECOMMENDATION

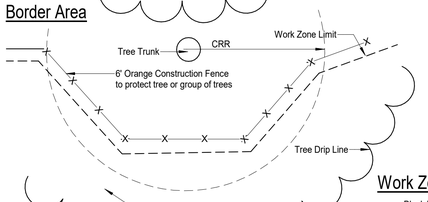
Staff recommends denial of the public hearing site plan and the Type 2 Design Alternative request to allow two (2) driveways off the primary street where only one (1) driveway off each non-primary street is allowed.



Decorative Fence Detail



Border Area



Work Zone Area

Black letters on
Orange background

KEEP OUT
TREE PROTECTION ZONE
UP TO $600 PENALTY

Sign Detail

Minimum sign dimensions:
Laminated cardboard - 11"x17"
Metal - 12"x18"

For individual tree protection : Install at least 2 signs at each location and at a maximum spacing of 16' on center

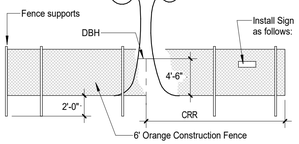
For linear tree protection: Install a sign at each end of the tree protection fence and at a maximum spacing of 50' on center

CRR =

Critical root radius is the distance in feet equal to the DBH in inches. This is the desired distance from the tree trunk at which fencing is installed.

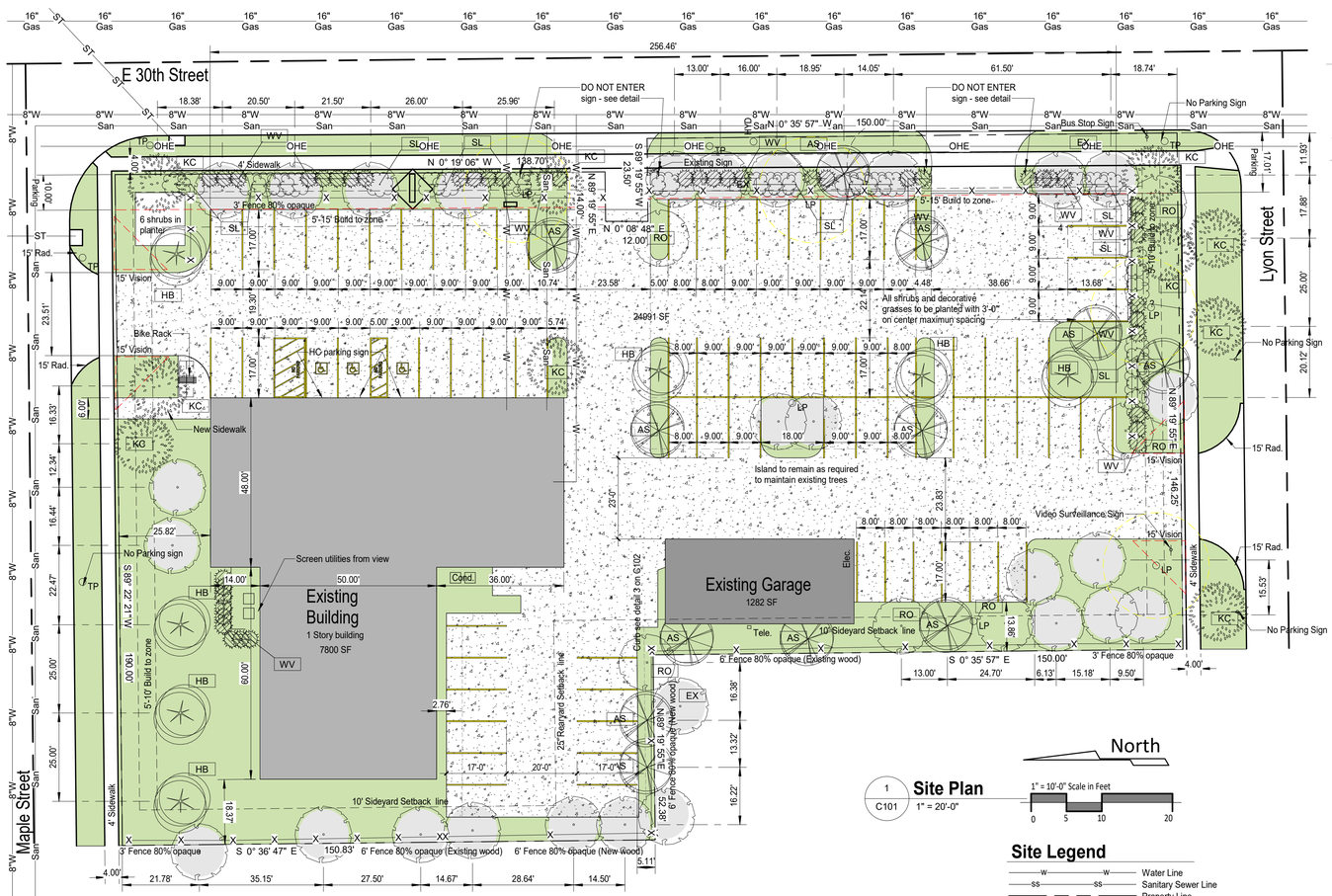
DBH =

Diameter at breast height, the diameter of the tree trunk in inches at a height of 4'-6" above the natural ground.



Note 1: Spacing as required to prevent sagging, 8' maximum.

Planting Protection Detail1



Proposed Planting Schedule				
Mark	Common Name	Latin Name	Size	Comments
AS	American Sycamore		1 1/2" - 2"	
American Sycamore: 12				
EX	Existing			
Existing: 27				
HB	Hackberry	Celtis Occidentalis	1 1/2" - 2"	
Hackberry: 7				
KC	Kentuckey Coffee Tree	Gymnocladus Dioicus	1 1/2" - 2"	
Kentuckey Coffee Tree: 10				
SL	Ludwig Spaeth Lilac		12'-0"	
Ludwig Spaeth Lilac: 32				
RO	Red Oak		1 1/2" - 2"	
Red Oak: 6				
WV	Variegated Dwarf Weigela		18"-24"	
Variegated Dwarf Weigela: 45				
Grand total: 139				

New Shrubs to have maximum 36" spacing

1 C101 **Site Plan** 1" = 20'-0"

1" = 10'-0" Scale in Feet
0 5 10 20

North

Site Legend

- Water Line
- Sanitary Sewer Line
- Property Line
- Building Setback Line
- Easement Line
- Road Centerline
- Paving
- Topography
- Tree

Solid Hatch indicated existing tree

Impervious Area:
50,355 sf Site area
Existing:
Parking 24,701 sf 49%
Building 7,800 sf 31%
Shed 1,282 sf 13%

Parking Requirement:
1 Space per 6 seats
200 seats / 6 = 34 Spaces required

57 Spaces provided
+1 accessible space provided.

Bike Parking:
2 space required per 135-6.3-1

Zoning Setbacks:
Front setback (Build to Zone): 5'-15'
Street side (Build to Zone): 5'-10'
Interior side setback: 7.5'-15' total
Rear setback (west property line): 25'

Legal Description:
East 10feet of Alley West & Adjacent & Lots 1, 2 & 3 Block 3
Elliots Addition; and All Alleys South & Adjacent & All Lot 11 & 12feet Aallet lying South of & Adjacent Lots 12, 13 & West 26feet Lot 14 & all Lots 12, 13 & West 40feet Lot 14 Block 9 Farwell Place a Plat Now included and forming part of the City of Des Moines, Polk County, Iowa

Property Address:
720 E 30th Street
Des Moines, Iowa, 50317

Property Owner:
Hawkeye Tack & Western Supply
Sharry & Don Hansen
515 250 6549

720 E 30th Street
Des Moines, Iowa 50317

Applicant/Contract Buyer:
Espy Vyizigiro
515 525 4229
peranceb@gmail.com

720 E 30th Street
Des Moines, Iowa 50317

Zoning:
MX-1 Mixed Use District
Civic Building

Principal Use:
Assembly - Place of Worship

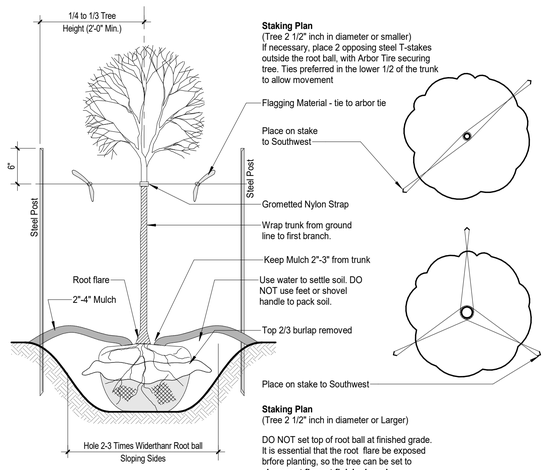
City of Des Moines Benchmarks:
Dean Avenue & E 30th Street
Benchmark# 5609
Elevation: 25.33'
Triangle cut in Traffic Signal Base NE Corner of 30th and Dean

E UNiversity Avenue & E 130h Street
Benchmark# 1710
Elevation: 36.29'
Tirangle Cut in SW Side Light Base at Burger King

Planting Requirements:
- **Site Trees**
  1. Lot area = 50,355 sf
  2. 50,355 sf * 15% = 7,553 sf Canopy coverage
     8 over story trees required
- **Frontage Buffer:**
  1. Parking Perimeter minimum planting requirements are one (1) Shade tree and continuous shrubs 40 lineal feet of frontage.
  2. Parking Perimeter: 390 LF / 40 LF = 9.75
     10 over story trees required
     130 shrubs required
- **Street Trees:**
  1. Street Frontage Perimeter:
     637 LF / 30 LF = 21.2
     21 over story trees required
- **Total Required Plantings:**
  1. Over story Trees: 39 required
  2. Evergreen Trees: 0 required
  3. Shrubs: 130 required

Site Notes

1. All work in the city right-of-way shall be done in accordance with SUDAS and the City of Des Moines General Supplemental Specifications to SUDAS effective at the time of plan approval.
2. All work in the city right-of-way requires a right-of-way permit.
3. Any new rooftop mechanical equipment must be screened from street level view.
4. Mechanical equipment shall not be located in the front yard or street side yard and shall be screened from view from any public way with landscaping, fencing, or walls consistent with the building design, colors, and materials.
5. Any amendments or changes to the project site that do not meet what is shown on the site plan need to be approved with the Permit and Development Center prior to installation/construction.
6. This site shall be maintained in compliance with all city code applicable on the date of site plan approval.
7. Lighting must be low glare cut off type fixtures to reduce the glare of light pollution on surrounding properties.
8. Any new parking lot lighting shall be pedestrian in scale, with light poles no taller than 20 feet in height (including base).
9. Light trespass shall not exceed 0.5 footcandles for MX, N, NX, and NM districts and 2.0 footcandles for all other districts.
10. All light-fixtures shall be full-cutoff, down-directed.
11. Light poles shall not exceed 20' in height from grade in vehicular areas and 15' in pedestrian areas.
12. The required landscaping, both existing and proposed, shall be maintained for the life of the Certificate of Occupancy.
13. Any shrubs, trees, or other required landscaping planted within the 20x70 Vision Clearance triangle shall not obstruct vision clearance at any height between 2 feet and 10 feet.
14. All disturbed areas should be restored by seeding or sodding.
15. No exterior dumpster will be provided on site which would require the need for a dumpster enclosure this will be handeled inside the building.
16. No parking or storage on unpaved surfaces is allowed.
17. All new exterior signs are reviewed separately and must be approved with Zoning Enforcement (283-4200) before sign permits can be issued. This note is for your information only and requires no formal addressing on the future submittal.
18. HC parking stalls will be less than 2% slope in all directions - Any new paving shall have 2% cross slope and 1/4" PLF running slope.
19. Every accessible entrance is called out and labeled. Exterior door landings for all accessible entrances are labeled and spot elevations are provided at the landings of accessible entrances.
20. All required accessible paths are labeled using arrows and labeling longitudinal slopes. Accessible paths must have a slope of 5% or less.
21. All wire, twine and burlap shall be removed from the rootball of street trees prior to planting.
22. Contact the Municipal Forestry Division prior to planting at (515-283-4950).
23. Recycling services will be handeled on the interior of the building.
24. All Planting beds shall include non-living permable materials such as mulch. and not include rock.



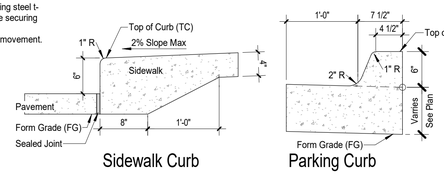
Staking Plan
(Tree 2 1/2" inch in diameter or smaller)
If necessary, place 2 opposing steel T-stakes outside the root ball, with Arbor Tire securing tree. Ties preferred in the lower 1/2 of the trunk to allow movement

Staking Plan
(Tree 2 1/2" inch in diameter or Larger)

DO NOT set top of root ball at finished grade. It is essential that the root flare be exposed brfore planting, so the tree can be set to **show root flare at finished grade**

Tree Staking Detail

Step 1 - peel back rope/burlap/cage and remove sufficient soil to expose root flare.
Step 2 - measure from root flare to bottom of root ball.
Step 3 - dig hole to depth where topmost roots are buried 1-2 inches and the root flare sits slightly above ground level. Dig a hole 2-3 times wider than the diameter of the root ball with sloping sides to allow for proper root growth.
Step 4 - remove lower third of wire cage.
Step 5 - set tree in hole. Support with some soil. Ensure that it's straight, then remove entire wire cage and top
Two-thirds of burlap.
Step 6 - backfill with two-thirds of loose native soil (unless it's all clay) and use water to settle. Do not tamp
Or step on soil.
Step 7 - backfill balance and water again. Excess soil may be used to create a berm/saucer outside of root ball.
Step 8 - add 2-4 inches of wood mulch, leaving a 1- to 2-inch clearance between the mulch and the trunk.
Step 9 - water a final time.
Step 10 - if necessary, place two opposing steel t-stakes outside the root ball with arbor tie securing tree. Ties
preferred on lower half of trunk to allow movement.

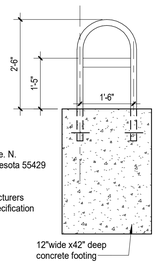


Sidewalk Curb

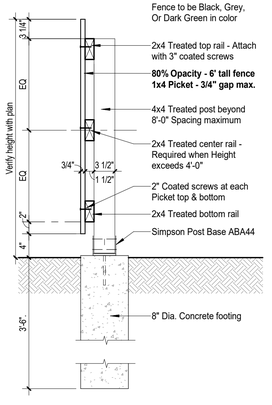
Parking Curb

Dero HQ
(888) 337-6729
5522 Lakeland Ave. N.
Minneapolis, Minnesota 55429
www.dero.com

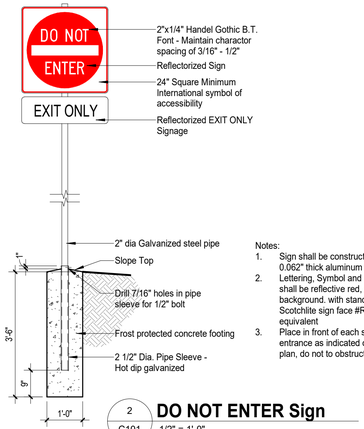
Install per manufacturers recommended specification



Bike Rack Detail



Fence Detail1



Notes:
1. Sign shall be constructed of 0.062" thick aluminum Minimum.
2. Lettering, Symbol and Border shall be reflective red, on white background. with standard 3M Scotchlite sign face #R5-24, or equivalent
3. Place in front of each side of entrance as indicated on the site plan, do not to obstruct view.

2 C101 **DO NOT ENTER Sign** 1/2" = 1'-0"

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International Reformed Holy Spirit Church in America
Building Renovation

720 E 30th Street | Des Moines, Iowa 50317

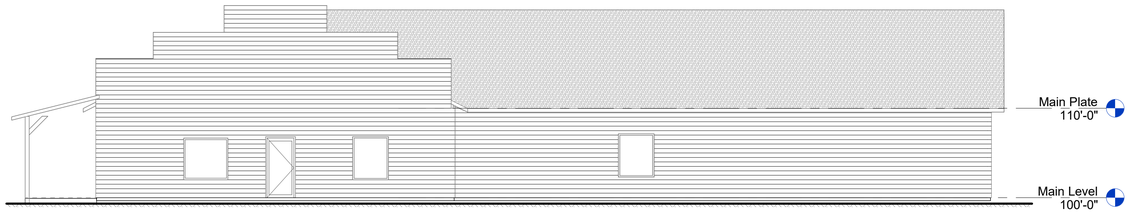
#	Date	Description
5	10/25/23	Revision 7
4	03/02/23	Revision 6
3	12/15/22	Revision 3
2	11/30/22	Site Plan 2
1	10/19/22	For Permit

10/26/2023 4:10:42 PM

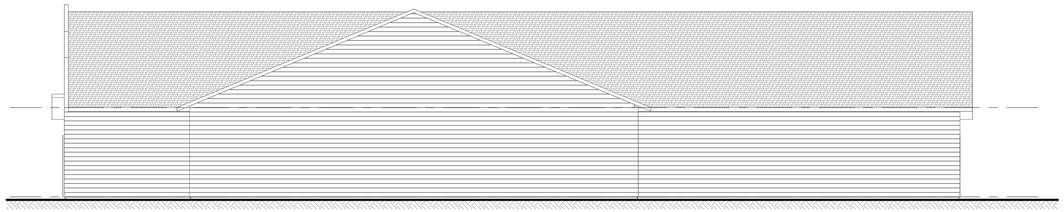
PROJECT NUMBER:
2111H

TITLE:
Site Plan

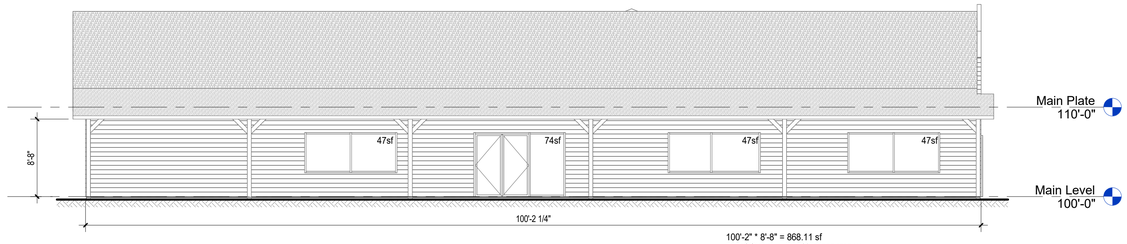
SHEET:
C101



1 A104 **North Elevation**
1/8" = 1'-0"



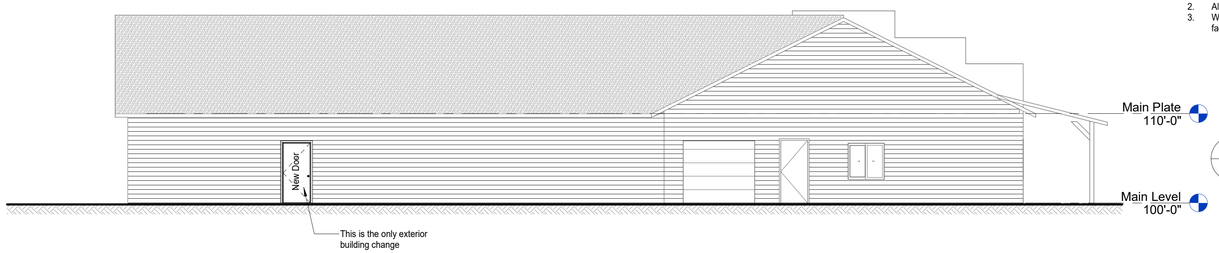
2 A104 **West Elevation**
1/8" = 1'-0"



100'-2" * 8'-8" = 868.11 sf
215sf Glass = 24.7% transparency

3 A104 **East Elevation**
1/8" = 1'-0"

1. All windows shall be recessed a minimum of 2".
2. All windows shall be vertically oriented.
3. Windows shall be a minimum 50% transmittance factor and reflectance factor of no more than 0.25.



4 A104 **South Elevation**
1/8" = 1'-0"

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International Reformed Holy Spirit Church in America
Building Renovation

720 E 30th Street | Des Moines, Iowa 50317

#	Date	Description
2	12/15/22	Revision 3
1	11/28/22	Toilet Layout

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PROJECT NUMBER:
2111H

TITLE:
Exterior Elevations

SHEET:
A104