#2020-191
Casey's – Final Planned Unit Development Amendment, Special Use Permit and Final Plat of Subdivision
Project Review for Planning and Zoning Commission

Meeting Date: July 7, 2021

Requests: 1) Final Planned Unit Development Amendment and Special Use Permit for a new Gasoline Station with a Convenience Store, and
2) Preliminary and Final Plat of Subdivision for a 3-lot subdivision.

Location: 4220 Northwest Highway

Acreage: Approximately 6.8 acres

Existing Zoning: B-2 PUD General Commercial Planned Unit Development

Surrounding Properties:

North:	M Manufacturing
South:	B-2 PUD General Commercial and R-3B PUD Multi-Family Residential
East:	I-1 and B-1 McHenry County
West:	B-2 PUD General Commercial and M Manufacturing

Staff Contact: Elizabeth Maxwell (815.356.3615)

Background:

- The property was annexed on March 4, 2003 and was granted a PUD upon annexation. It was the Crystal Valley RV location.
- In 2018, the owners requested a PUD Amendment for mass grading and tree removal. That work has been completed.
- This request is to subdivide the property and grant PUD approval for the Casey's development.

Land Use Analysis:

ZONING

- The site is currently zoned B-2 PUD General Commercial. Gasoline Stations with Convenience Stores are allowed as a Special Use Permit in the B-2 zoning district.
- The Comprehensive Land Use Plan designates this area as Commerce. The proposed Gasoline Station and Convenience Store use fits in the Commerce land use designation.

SITE PLAN

- The site is at the northeast corner of Northwest Highway and Sands Road. Access into the

site is via a right-in/right-out along Northwest Highway and a full access point at the signalized intersection of Sands Road.

- The Casey's is a 4,900 square-foot convenience store with 16 gas pumps.
- The access will accommodate all three users of the development.

TRAFFIC STUDY

- A traffic study was completed by CivilTech and is in review by IDOT.
- The traffic study recommended
    - A longer southbound left turn lane from Sands Road to Route 14.
    - A longer eastbound left turn lane from Route 14 to Sands Road at final build out of the development.
    - Install a westbound right turn lane on Route 14 at the right-in/right-out.
    - Modify the traffic signal to include a right turn arrow for the eastbound right turn lane from Route 14 to Sands Road at the final build out of the development.
    - Connect the right-in/right-out to the internal roadway system for the overall development.
    - Install a right turn lane on Sands Road into the development.

PARKING

- Parking for a Gasoline Station and Convenience Store is [1 per 4 pumps (4) + 1 per 350 gross square feet of store space (14)] a total of 18.
- The site provides 18 spaces. This meets our requirements.

ELEVATIONS

- The Casey's is primarily a red brick (Redstone Antique) with a variety of architectural details.
- A soldier course of brick in Glacier Gray creates a break from the red brick and distinguishes between the base, middle, and the top of the facade.
- The gray color is also repeated on the end columns, which are stacked cultured stone colored Ashlar Casey's Gray.
- The main façade contains a large sign band area. This area is red EIFS panel system.
- The windows are surrounded by bronze tinted frames.
- Staff has reviewed the elevations based on the criteria listed in the Design Standards. The project meets 6 of the 10 criteria with two being not applicable, provided an off-set of 2 feet is added along the elevations.
- Staff would suggest that the other two users try to incorporate similar architectural details to ensure this site looks like one development.

LANDSCAPE PLAN

- Street trees are provided along Sands Road and Route 14.
- The UDO requires a 15-foot landscape area between parking lots and roadways. The front

of the Casey's paved area is not technically a parking lot since no vehicles will be parking along this area, but there is still a concern of headlights from drivers stopped under the gas canopy shining out to Route 14. It is suggested to work with staff to increase the landscape in this area.

- Foundation Base plantings are required around the building at a minimum of 5 feet in width. Casey's is showing foundation base along the front and rear of the building. There is some landscape on the west side, which should be increased. The ease side is reserved as a loading area. Landscape has been added to the opposite side of the loading area around the trash enclosure.
- The monument sign requires 1 square foot of landscape, which is illustrated in shrubs and flowers. Trees are also required, but a variation has been requested from this requirement.
- Casey's has done a good job of using a variety of landscape materials including trees on the interior of the site.

SIGNAGE

- There are three signs on the main façade, the Casey's name and two advertising poster areas.
- The gas canopy is red with gray and black edge trim.
- The detailed analysis of the signage is listed below.
- The proposed signage meets the UDO requirements.

Signs

Sign Type	**Size**
Casey's on front façade	37.85
Front Advertising	24 SF
Front Advertising	8.56 SF
Canopy "Casey's"	6.14 SF x 3 = 18.42
Monument	9 feet high 53 SF

TOTAL WALL SF 88.83 square feet

SUBDIVISION

- The property is currently two parcels. It will be resubdivided into three lots.
- Casey's will be constructed on Lot 1, leaving the other two lots for potential development.
- All three lots meet the B-2 zoning district requirements.
- The Subdivision Ordinance requires that street trees and sidewalk be installed all frontages. The street trees are shown on private property for the Casey's and will be required as part of the other two lots when they develop. Sidewalks will be required to be installed.

Findings of fact:

Final Planned Unit Development Amendment and Special Use Permit

The petitioner is requesting approval of a Final Planned Unit Development Amendment and Special Use Permit to allow the construction of a Casey's Gasoline Station and the three-lot

subdivision. A Planned Unit Development is a Special Use and Special Uses require separate review because of their potential to impact surrounding properties and the orderly development of the City.

Section 2-400 B General Standards for all special uses in the Unified Ordinance establishes standards for all special uses in Crystal Lake. Briefly, the criteria are as follows:

1. The use is necessary or desirable, at the proposed location, to provide a service or facility which will further the public convenience and general welfare.
   ☐ *Meets* ☐ *Does not meet*

2. The use will not be detrimental to area property values.
   ☐ *Meets* ☐ *Does not meet*

3. The use will comply with the zoning districts regulations.
   ☐ *Meets* ☐ *Does not meet*

4. The use will not negatively impact traffic circulation.
   ☐ *Meets* ☐ *Does not meet*

5. The use will not negatively impact public utilities or municipal service delivery systems. If required, the use will contribute financially to the upgrading of public utilities and municipal service delivery systems.
   ☐ *Meets* ☐ *Does not meet*

6. The use will not negatively impact the environment or be unsightly.
   ☐ *Meets* ☐ *Does not meet*

7. The use, where possible will preserve existing mature vegetation, and provide landscaping and architecture, which is aesthetically pleasing, compatible or complementary to surrounding properties and acceptable by community standards.
   ☐ *Meets* ☐ *Does not meet*

8. The use will meet requirements of all regulating governmental agencies.
   ☐ *Meets* ☐ *Does not meet*

9. The use will conform to any conditions approved as part of the issued Special Use Permit.
   ☐ *Meets* ☐ *Does not meet*

10. The use will conform to the regulations established for specific special uses, where applicable.
    ☐ *Meets* ☐ *Does not meet*

In addition PUDs must also meet the standards in Section 4-500 C. Development Standards and 4-500 D. 1 Additional standards for Planned Unit Developments Commercial PUDs.

1. Implements the vision and land use policies of the Comprehensive Plan.
   ☐ Meets ☐ Does not meet

2. Shall not result in substantial adverse effect on adjacent property, natural resources, infrastructure, public sites or other matter of public health, safety and welfare.
   ☐ Meets ☐ Does not meet

3. PUDs must provide transitional uses to blend with adjacent development.
   ☐ Meets ☐ Does not meet

4. PUD phases must be logically sequenced.
   ☐ Meets ☐ Does not meet

5. The density and intensity of a PUD shall be in accordance with the Comprehensive Plan.
   ☐ Meets ☐ Does not meet

6. All dimensional standards shall be listed within the PUD plan if they do not meet the Ordinance minimum standards.
   ☐ Meets ☐ Does not meet

7. The responsible parties for all on-site and other required public improvements shall be established and a utility plan indicating all proposed easements shall be provided.
   ☐ Meets ☐ Does not meet

8. Any private infrastructure shall comply with the city standards.
   ☐ Meets ☐ Does not meet

9. The PUD plan shall establish the responsibility of the applicant/developer.
   ☐ Meets ☐ Does not meet

10. A bond or letter of credit shall be posted to cover required fees or public improvements.
    ☐ Meets ☐ Does not meet

Planned Unit Development Variations
The purpose of Planned Unit Developments is to encourage and allow more creative and imaginative design of land developments than is possible under district zoning regulations. Planned Unit Developments are, therefore, intended to allow substantial flexibility in planning and designing a proposal. This flexibility is often in the form of relief from compliance with conventional zoning ordinance site and design requirements which may otherwise require individual requests and applications for zoning variations.

Ideally, this flexibility results in a development that is better planned, contains more amenities, and is ultimately more desirable than one that would have been produced through compliance with typical zoning ordinance and subdivision controls.
Therefore more lenient site requirements may be granted where the Planned Unit Development contains features not normally required of traditional developments. Although a formal variation request is not required to be made in conjunction with a Planned Unit Development, Staff identifies

those aspects of the Planned Unit Development which effectively result in variations from UDO requirements. If the evidence is not found to justify these variations from the UDO that fact shall be reported to the City Council with a recommendation that the variations from the UDO which are proposed as part of the Planned Development be lessened or denied.

The Planned Unit Development proposed by the Petitioner includes the following variations from the UDO:

1) 4-400 F Site Landscaping.
    a. 4-400 F 1.a.i. from having a landscape island every 10 spaces and at the ends of each parking row.
    b. 4-400 F 4. From the requirement to provide foundation base landscape along the east side of the building.
    c. 4-400 F 6 landscape around signs to not have any trees around the sign.

2) 4-800 D Exterior Lighting Standards.
    a. 4-800 D.1.a. to allow 347,642 lumens per acre, a variation from the maximum 100,000 lumens allowed. Still allowing 100,000 maximum lumens for the other two lots.
    b. 4-800 D.2.a Table 4-800 D1 to exceed the on-site lighting levels for a private parking lot, driveway entrances, building entrances and pedestrian paths.

Special Use Permit
The petitioner is requesting approval of a Special Use Permit to allow a Gasoline Service Station with Gasoline Electronic Pricing Sign. A Special Use requires separate review because of its potential to impact surrounding properties and the orderly development of the City.

Section 2-400 B General Standards for all special uses in the Unified Ordinance establishes standards for all special uses in Crystal Lake. Gasoline Stations have specific Special Use Criteria they have to meet. Gasoline stations must comply with the following standards:

1. Location: Gasoline stations are not permitted within the City's wellhead protection areas. Stations in the Crystal Lake watershed require a site specific analysis by the City's watershed consultant
   ☐ *Meets* ☐ *Does not meet*

2. Environmental impact: No gasoline station shall commence operations unless it has first provided an environmental impact statement (EIS) from a qualified expert in the related field that the use will not negatively affect ground water resources or contaminate the soil.
   ☐ *Meets* ☐ *Does not meet*

3. Screening: Gasoline stations adjacent to residential properties shall provide a 6-foot tall solid screen consisting of a solid wooden fence, in accordance with the provisions of Article 4-700, Fences, Walls and Screening or opaque landscaping along the perimeters of

the property abutting the residential district or use, in accordance with the provisions of Article 4-400, Landscaping and Screening Standards.

☐ *Meets* ☐ *Does not meet*

4. Canopy: Flat canopies are not permitted. Canopies must have a minimum 4:12 pitch (Amended per Ord. 6970, 11-5-2013).The edge of the pump canopy shall be setback at least 15 feet from all property lines.

   ☐ *Meets* ☐ *Does not meet*

5. Curb cuts: There shall be a maximum of 2 curb cuts per property. Corner lots shall be limited to 1 curb cut per street frontage. Curb cuts for corner lots shall be located at least 75 feet from the intersection, or as deemed appropriate by the City Engineer.

   ☐ *Meets* ☐ *Does not meet*

6. Vending machines: One vacuums and one air compressors shall be permitted on-site. Vending machines are treated as outside sales and display. Refer to the handout on Outdoor Sales, Service, Storage and Display available through the Planning and Economic Development Department for further clarification.

   ☐ *Meets* ☐ *Does not meet*

7. Outside sales: Outside product display and sales of seasonal items are prohibited. Propane tanks stored in 1 locked metal cage are not treated as outside sales and permitted subject to the approval of the City's Fire Prevention Bureau. For any other outside display and sales, refer to the handout on Outdoor Sales, Service, Storage and Display available through the Planning and Economic Development Department for further clarification.

   ☐ *Meets* ☐ *Does not meet*

   Since there is no convenience store associated with this use, only the required attendant booth, no outside sales and display is permitted.

8. Monitoring: Monitoring wells finished at appropriate depths and locations best suited to detect a contaminate plume are required to be designed and located by a groundwater professional for stations within the Crystal Lake watershed or as determined by the City Engineer.

   ☐ *Meets* ☐ *Does not meet*

9. Electronic Pricing Signs: Electronic pricing signs must be requested as part of the Special Use Permit.

   ☐ *Meets* ☐ *Does not meet*

Gasoline electronic pricing signs. All gasoline electronic pricing signs must comply with the following criteria:

a. Gasoline electronic pricing (GEP) signs are permitted only on properties where a special use permit for a gasoline station has been previously granted by the City.

☐ *Meets* ☐ *Does not meet*

b. The GEP sign may be incorporated into (1) freestanding business sign on the property. A new freestanding sign incorporating a GEP portion must meet all the ordinance requirements for that sign.

☐ *Meets* ☐ *Does not meet*

c. The GEP portion of the sign shall meet all the following design conditions:

(i) The GEP unit must be equipped with both a programmed dimming sequence as well as an additional overriding mechanical photocell that adjusts the brightness of the display to ambient light at all times of the day. Such programming and mechanical equipment shall be set so that the GEP, at night or in overcast conditions, will be no more than 40% of the daytime brightness level;

☐ *Meets* ☐ *Does not meet*

(ii) The GEP unit must be illuminated by white, amber, or green incandescent lamps, LED (light-emitting diode) or magnetic discs;

☐ *Meets* ☐ *Does not meet*

(iii) The pricing displayed on the GEP unit may only transition from one message (price) to another by either fading or dissolving to black with another message (price) appearing immediately thereafter, without movement or other transition effects in between;

☐ *Meets* ☐ *Does not meet*

(iv) Except as otherwise provided herein, all messages displayed on the GEP unit must be static and may not reflect movement, flashing scrolling or changes in shape or size of messages or portions of messages. Streaming and/or live-time video is not permitted and this function of the EMC must be disables; and

☐ *Meets* ☐ *Does not meet*

(v) The GEP sign must be set in a manner that the display will turn dark in case of a malfunction.

☐ *Meets* ☐ *Does not meet*

d. The maximum gross surface area of the GEP portion of the sign shall not exceed 20 square feet.

☐ *Meets* ☐ *Does not meet*

e. Prices cannot switch between multiple grades on one GEP. The GEP must display only one grade or have separate GEP for each grade.

☐ *Meets* ☐ *Does not meet*

Preliminary and Final Plat of Subdivision
The petitioner is requesting a Preliminary and Final Plat of Subdivision approval for a three-lot subdivision. Final Plats are required to meet the following requirements:

a) Promote the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of the City by providing for the orderly growth and development of the City;
☐ *Meets* ☐ *Does not meet*

b) Coordinating streets and roads within proposed subdivisions with the City's planned street system, and with other public facilities;
☐ *Meets* ☐ *Does not meet*

c) Providing right-of-way easements for streets and utilities;
☐ *Meets* ☐ *Does not meet*

d) Avoiding congestion and overcrowding, and encouraging the proper arrangement of streets in relation to existing or planned streets;
☐ *Meets* ☐ *Does not meet*

e) Ensuring there is adequate open space and recreation facilities to serve development;
☐ *Meets* ☐ *Does not meet*

f) Ensuring there is proper recordation of landownership records;
☐ *Meets* ☐ *Does not meet*

g) Installation of any public improvements including water, sewer, storm sewer or detention, parkway trees, and sidewalks;
☐ *Meets* ☐ *Does not meet*

h) Burial of overhead utility lines and all new lines and services in appropriate easements; and
☐ *Meets* ☐ *Does not meet*

i) Ensuring the provision of such other matters as the City Council may deem necessary in order to protect the general health, safety, and welfare of the City
☐ *Meets* ☐ *Does not meet*

Comprehensive Land Use Plan 2030 Summary Review:
The Comprehensive Plan designates the subject property as Commercial, which allows for existing and future commercial and business uses. The following goal is applicable to this request:

Land Use – Commercial
Goal: Maintain a dynamic and sustainable base of commercial uses that provides a solid tax

base, goods, services and jobs to the city as well as the surrounding region through coordination in the Unified Development Ordinance, Comprehensive Land Use Plan and Economic Development Strategic Plan.

This can be accomplished with the following supporting actions:

Supporting Action: Promote, retain and attract businesses that provide a diverse tax base.

Success Indicator: The number of new "chain store" occupancies.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made it should be with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Jemco Properties LLC, received 11/13/20)
   B. Site Plan (Arc Design, dated 05/21/21, received 5/24/21)
   C. Landscape Plan (Arc Design, dated 05/21/21, received 05/24/21)
   D. Colored Elevations (RTA Technology Solutions, undated 05/12/21, received 05/24/21)
   E. Elevations (Casey's Construction Division, dated 05/11/21, received 05/24/21)
   F. Civil Plans (Arc Design, dated 05/21/21, received 05/24/21)
   G. Sign Packet (Jacob Clark, dated 04/28/21, received 05/24/21)
   H. Plat of Subdivision (Haeger Engineering, dated 05/21/21, received 05/24/21)
   I. Traffic Study (CivilTech, dated 04/01/21, received 04/01/21)

2. Site Plan
   A. Per the subdivision and development requirements in the UDO sidewalk is required along all frontages. Work with staff on sidewalk location. The remaining two lots will need to install sidewalk as part of their development.

3. Landscape Plan
   A. Add additional foundation base landscape along the west side of the building. Also landscape is shown over the sidewalk, correct the plans.
   B. Work with staff to increase the landscape area along Route 14 adding additional shrubs and plantings to screen the car headlights.

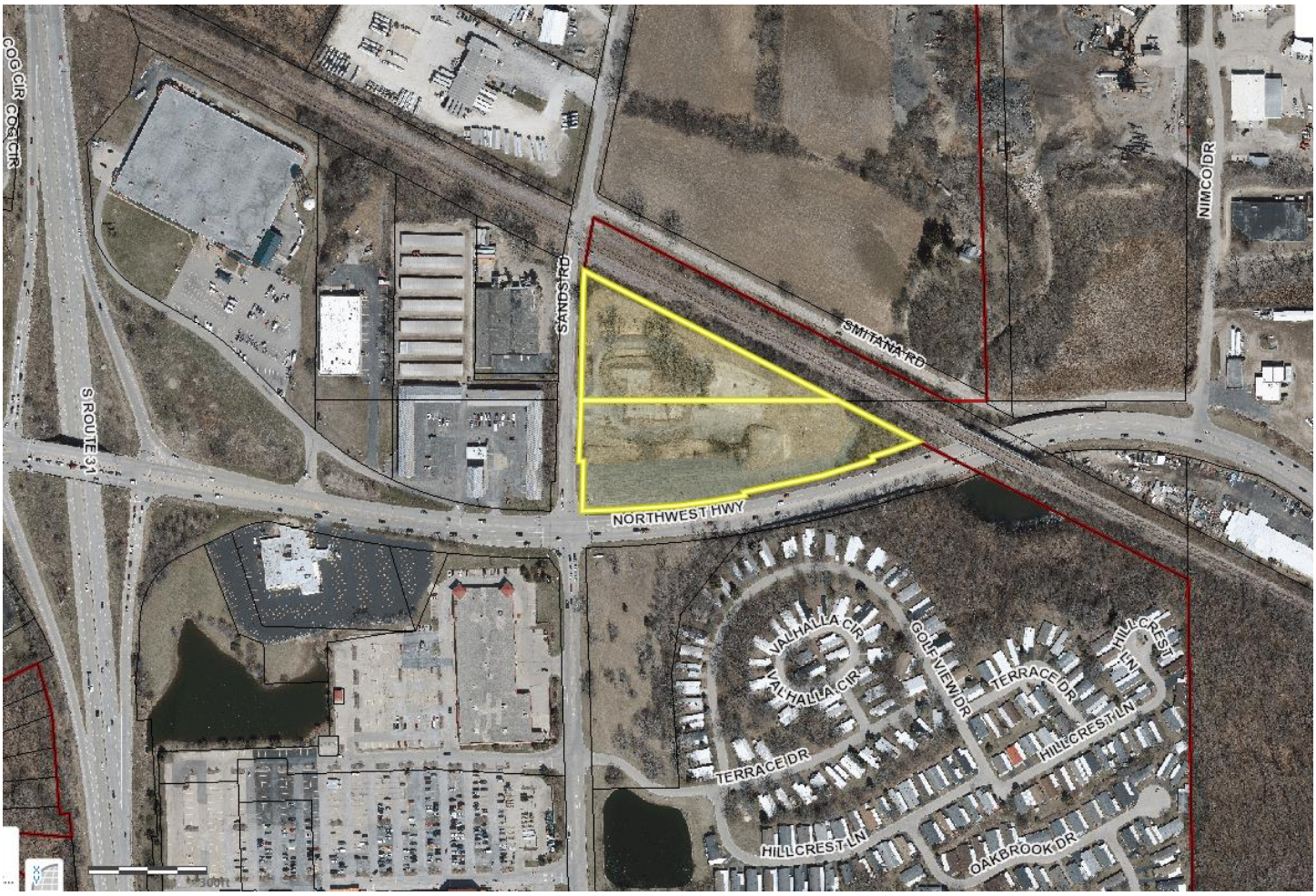
4. Elevations
   A. Ensure the end columns at the front and rear of the building project out, creating a minimum 2-foot projection along the side and rear elevations to meet the design standards.

5. Traffic Study
   A. Follow all recommendations in the Final Traffic Study.
   B. Casey's may not receive temporary or full occupancy approval until the access road is completed.

6. On the Final Plat of Subdivision document correct the Plan Commission Certificate to remove the "Attest: Secretary" line.

7. The petitioner shall address all of the review comments and requirements of the Community Development, Fire Rescue, and Public Works Departments, as well as the City's Stormwater Consultant and the final approved Traffic Study.

PIQ Map
4220 Northwest Highway



City of Crystal Lake
Development Application

Office Use Only
File # _____

Project Title: Casey's Crystal Lake

Action Requested

__	Annexation	__	Preliminary PUD
__	Comprehensive Plan Amendment	__	Preliminary Plat of Subdivision
__	Conceptual PUD Review	__	Rezoning
__	Final PUD	X	Special Use Permit
X	Final PUD Amendment	X	Variation
X	Final Plat of Subdivision	__	Other

Petitioner Information

Name: Casey's Retail Company - Erik Nikkel
Address: One SE Convenience Blvd
Ankeny, IA 50021
Phone: 515-381-5722
Fax: _____
E-mail: Erik.Nikkel@caseys.com

Owner Information (if different)

Name: Jemco Properties, LLC - Donald Mueller
Address: 1320 S. Virginia Rd.
Crystal Lake, IL 60014
Phone: (847) 658-4342
Fax: _____
E-mail: dmueller@gosunset.com

Property Information

Project Description: Proposing a minor subdivision, amendment to a PUD, and variance necessary for the development of a Casey's convenience store and fueling station. Improvements include utility extension to serve the subdivision, access driveways, site development of the Casey's, and necessary stormwater management facilities. See plans included with submittal for more information.

Project Address/Location: 4220 Northwest Highway, Crystal Lake, IL
NE Corner of Sands Road and HWY 14

PIN Number(s): 19-10-200-014, 19-03-452-001

Development Team

Please include address, phone, fax and e-mail

Developer: Jemco Properties, LLC - Donald Mueller / Casey's Retail Company - Erik Nikkel

Architect: Jeff Dalton, AIA - SGA Design Group - 1437 S. Boulder Ave.Suite 550Tulsa, OK 74119, 918-587-8602 x255, JeffD@sgadesigngroup.com

Attorney:

Engineer: Mike Anderson, PE - Haeger Engineering - 100 East State ParkwaySchaumburg, IL 60173, 847-230-3170, mike-a@haegerengineering.com

Lauren Downing, PE - Arc Design Resources - 5291 Zenith Parkway, Loves Park, IL, 815-484-4300 x 220, ldowning@arcdesign.com

Landscape Architect: Matt Adas - Arc Design Resources - 815-484-4300 x 236, madas@arcdesign.com

Planner:

Surveyor: Haeger Engineering (Subdivision Plat)

Other: Arc Design Resources Surveyor - Lee Sprecher 815-484-4300 x 238, lsprecher@arcdesign.com

Signatures

PETITIONER: Print and Sign name (*if different from owner*) **Date**

As owner of the property in question, I hereby authorize the seeking of the above requested action.

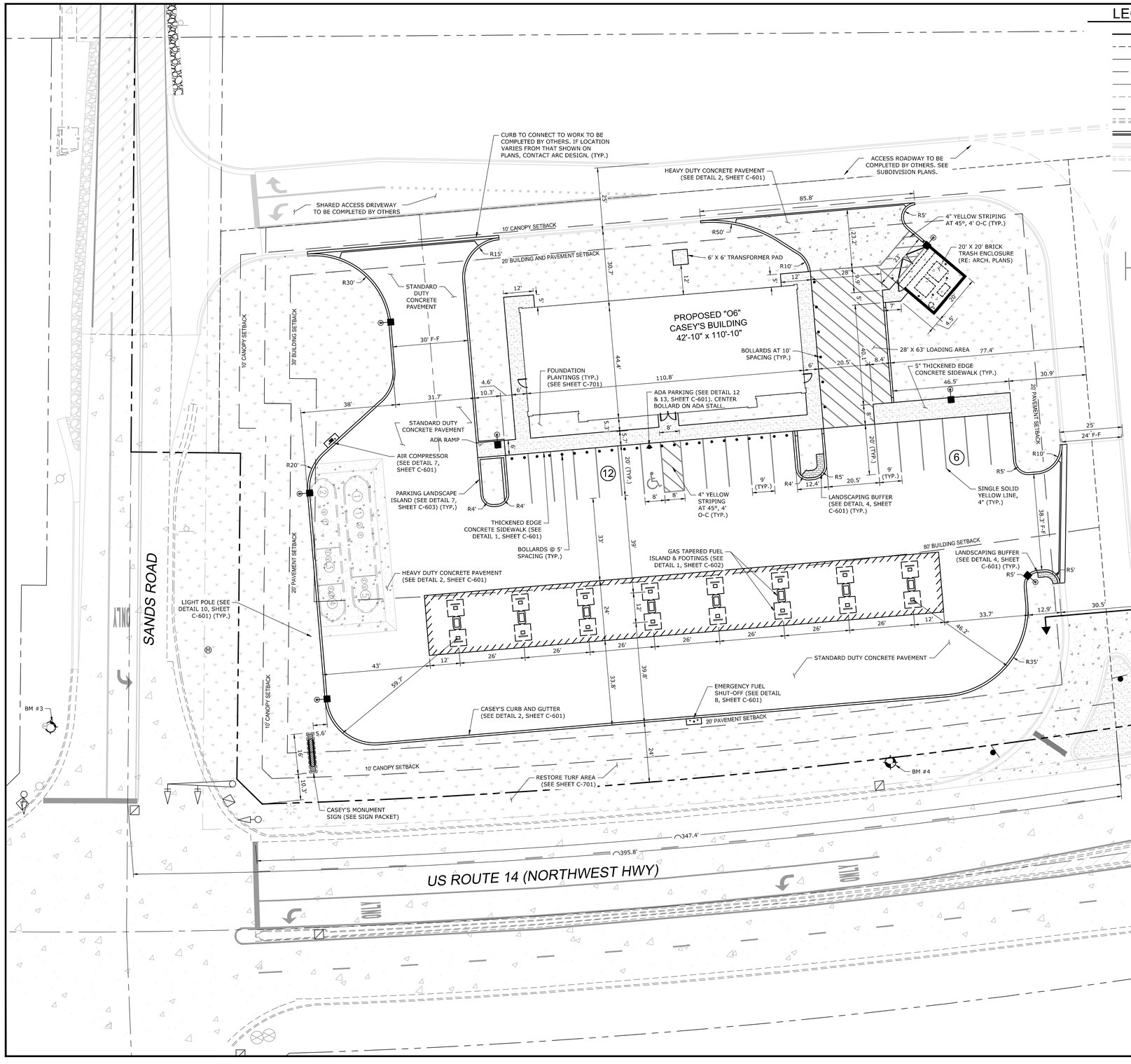
Donald J. Mueller 6/30/2021

OWNER: Print and Sign name **Date**

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

PUBLIC NOTICE BEFORE THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS IN THE MATTER OF THE PETITION OF Jemco Prop LLC LEGAL NOTICE Notice is hereby given in compliance with the Unified Development Ordinance of the City of Crystal Lake, Illinois that a public hearing will be held before the Planning and Zoning Commission upon the application by Donald Mueller with Jemco Prop LLC, for a Rezoning and Preliminary and Final Plat of Subdivision, relating to the properties at 4220 Northwest Highway in Crystal Lake, Illinois 60014. PINs: 19-03-452-001 and 19-10-4100-041.

This application is filed for the purpose of seeking a Planned Unit Development Amendment with a Special Use Permit, and a Preliminary and Final Plat of Subdivision to allow a 3-lot subdivision with a Casey's gas station and convenience store being constructed on Lot 1, with variations from Article 4-400 F Site Landscaping, Article 4-800 Lighting, as well as any other variations as presented at the hearing, pursuant to Article 2, Article 4, Article 5 and Article 9. Plans for this project can be viewed at the Crystal Lake Community Development Department at City Hall. A public hearing before the Planning and Zoning Commission for this request will be held at 7:00 p.m. on Wednesday July 7, 2021, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person determining to be heard may be present. Jeff Greenman, Chairperson Planning and Zoning Commission City of Crystal Lake (Published in the Northwest Herald June 19, 2021) 1895168



LEGEND

- PROPERTY LINE
- PROPOSED LOT LINE
- EXISTING RIGHT-OF-WAY
- SECTION LINE
- CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED SETBACK LINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- CURB AND GUTTER TO BE CONSTRUCTED BY OTHERS
- CURB AND GUTTER TO BE CONSTRUCTED AS PART OF FUTURE DEVELOPMENT
- EXISTING FENCE
- PROPOSED CONCRETE SIDEWALK
- PROPOSED STANDARD DUTY CONCRETE PAVEMENT (SEE DETAIL 2, SHEET C-601)
- PROPOSED CONCRETE PAVEMENT (SEE DETAIL 2, SHEET C-601)
- EXISTING CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- PROPOSED TURF OR LANDSCAPED AREA (SEE C-701 LANDSCAPING PLANS)
- PROPOSED LANDSCAPING PROTECTORS (SEE DETAIL 4, SHEET C-601)
- LIGHT POLE AND FIXTURE (SEE DETAIL 10, SHEET C-601)
- PROPOSED ADA PARKING SPACE
- (12) NUMBER OF PROPOSED PARKING SPACES IN A ROW
- PROPOSED PARKING STALLS

LAYOUT NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE INVERTS, FLOOR ELEVATIONS, CURB OR PAVEMENT WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.
2. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
3. DIMENSIONS THAT LOCATE THE BUILDING ARE MEASURED TO THE OUTSIDE FACE OF THE BUILDING.
4. SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
5. COORDINATE WORK WITHIN THE US-14 ROW WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1 OFFICE. TRAFFIC CONTROL SHALL CONFORM TO IDOT STANDARDS FOR WORK IN THE RIGHT OF WAY.
6. COORDINATE WORK WITHIN THE SANDS RD ROW WITH THE CITY OF CRYSTAL LAKE, IL. TRAFFIC CONTROL SHALL CONFORM TO IDOT STANDARDS FOR WORK IN THE RIGHT OF WAY AT A MINIMUM.
7. ALL RADII ARE DIMENSIONED TO THE BACK OF CURB.
8. ALL CURB AND GUTTER IS INTEGRAL TO PAVEMENT UNLESS NOTED OTHERWISE. REFER TO THE DETAIL SHEETS FOR CURB DETAILS.
9. SOME FIELD ADJUSTMENTS MAY BE NECESSARY AT POINTS WHERE PROPOSED PAVEMENT, CURB AND SIDEWALKS MEET EXISTING PAVEMENT, CURB AND SIDEWALKS. REVIEW ANY REQUIRED CHANGES WITH ENGINEER PRIOR TO CONSTRUCTION OF WORK.
10. ELECTRICAL CIRCUITRY TO SITE LIGHTING AND MONUMENT SIGN SHOWN ON ARCHITECTURAL PLANS.
11. FOR REQUIRED PAVEMENT REMOVAL ADJACENT WITHIN RIGHT OF WAY, A FULL DEPTH SAWCUT IS REQUIRED AND SHALL NOT BE LESS THAN 2' IN WIDTH.
12. FOR ALL PAVEMENT PATCHING WITHIN THE RIGHT OF WAY THE BACKFILL MATERIAL USED SHALL BE CONTROLLED LOW STRENGTH MATERIAL UP TO THE BOTTOM OF THE PAVEMENT. THE THICKNESS OF THE HMA PAVEMENT REPLACEMENT SHALL BE A MINIMUM OF THE SAME THICKNESS AS THE EXISTING PAVEMENT STRUCTURE. THE MIXES USED SHALL CONFORM TO THE SPECIFICATIONS AND REQIREMENTS SET BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT).
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION, COORDINATION AND OBTAINING APPROVAL OF A TRAFFIC MANAGEMENT PLAN IF CLOSURES OF LANES EXCEED THE CRITERIA SPECIFIED BY IDOT.

PARKING TABLE

NUMBER OF PARKING STALLS REQUIRED	17 (1 - A.D.A.)
NUMBER OF PARKING STALLS PROPOSED	18 (1 - A.D.A.)

SITE AREA TABLE (LOT 1)

IMPERVIOUS AREA	54,629 SF (1.25 ACRES)
TOTAL SITE AREA	79,858 SF (1.8333 AC)
% IMPERVIOUS AREA	31.6%

ARC DESIGN RESOURCES INC.
5291 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
www.arcdesign.com
Design Firm License No. 184-001334

CASEY'S GENERAL STORE - CRYSTAL LAKE, IL — 20067

PROJECT LOCATION & OWNER:
4220 NORTHWEST HWY
CRYSTAL LAKE, IL 60014

CASEY'S RETAIL COMPANY
ONE CONVENIENCE BLVD
ANKENY, IA 50021
ERIK NIKKEL
(515) 381-5722

DRAWN BY:	CHECKED BY:	PM:
KG	LND	LND

ISSUED FOR:
1. CLIENT REVIEW — 10/27/2020
2. AGENCY REVIEW — 11/13/2020
3. AGENCY REVIEW — 05/21/2021
4. --- — ---
5. --- — ---
6. --- — ---
7. --- — ---
8. --- — ---

FOR CONSTRUCTION: ---

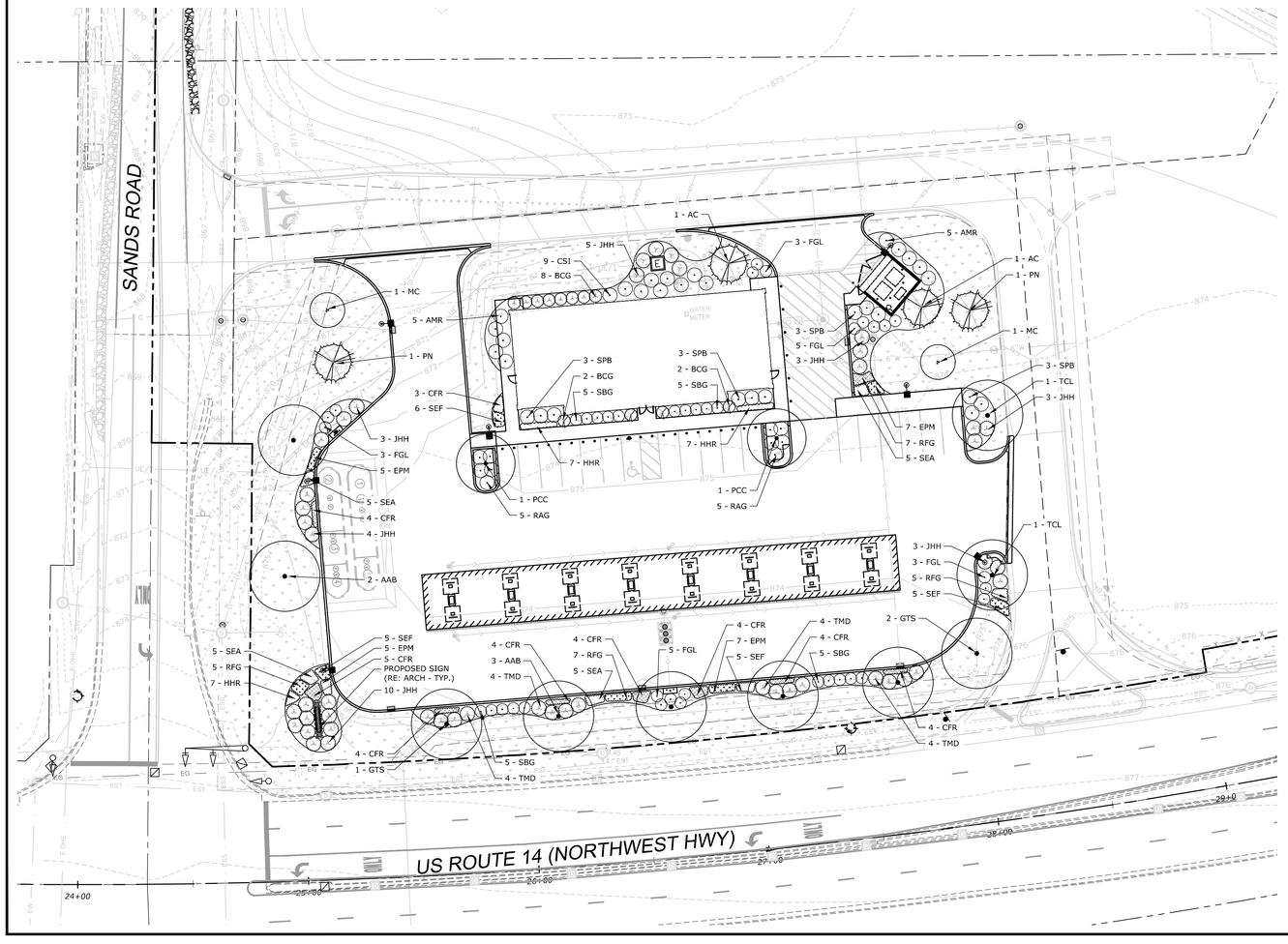
REVISIONS:
1. ---
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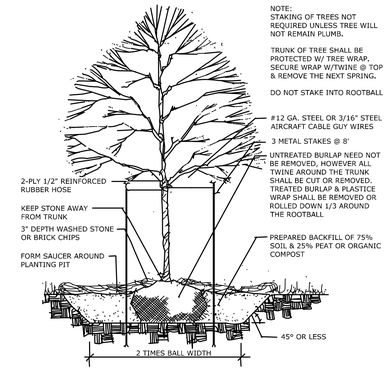
LAYOUT PLAN

C-102

PLANTING NOTES

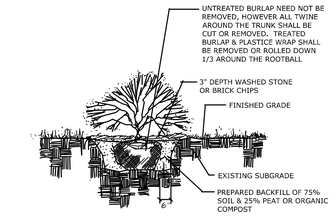
1. Landscape Contractor (Contractor) shall make a site visit prior to bidding/construction to inspect the current site conditions and review proposed planting plan and related work. Contractor shall report any discrepancies in the field to the Landscape Architect and/or Owner.
2. Contractor shall verify locations of all underground utilities prior to begining construction on his phase of work. Electric, gas, telephone, and cable television can be located by calling J.U.L.I.E. at '811'. For regional locating, contact "Digger's Hotline". Any damage or interruption of services shall be the responsibility of the contractor. Contractor to coordinate all related activities with other trades on the job and shall report any unacceptable job conditions to owner's representative prior to commencing work.
3. For details pertaining to Utilities, Easements, Grading, Retaining Walls, Layout, Geometry, Wetland/Flood Plain Delineations, etc., or other trades refer to Architectural and Civil Engineering plans and/or owner.
4. Contractor is responsible for application and cost of all necessary building permits and code verifications. Submit copies of all documents to owner and landscape architect.
5. Contractor shall grade entire site as per grading/engineering plans and/or correct surface irregularities in preparation for seed/sod. Roto-til, disc, drag, harrow or hand rake sub grade to a depth of 4" in all lawn areas and remove construction debris, foreign matter or stones larger than 2". Grading shall provide slopes which are smooth, continuous, free from depressions or ridges. Level, rake and roll as necessary to an even and true condition and obtain positive drainage in all areas. Finish grades shall meet the approval of owner prior to lawn installation.
6. All disturbed areas are to receive a minimum 3" of approved topsoil and be finished with mulch, straw mulch, seed, sod, etc. or as noted. All lawn areas to be watered until a healthy stand of grass is established. (see seed/sod notes for acceptance details).
7. Quantity lists are supplied as a convenience; however, the contractor should verify all quantities. The drawings shall take precedence over the lists.
8. Plantings may need to be adjusted in the field to accommodate utilities, easements, drainage ways, downspouts, etc.; however, quantities and sizes shall remain consistent with these plans.
9. Size & grading standards of plant material shall conform to the latest addition of ANSI Z60.1 AMERICAN STANDARD OF NURSERY STOCK, by the American Nursery & Landscape Association. Plant material shall be nursery grown and be either balled and burlap or container grown.
10. All plant species specified are subject to availability. Material shortages in the landscape industry may require substitutions. All substitutions must be approved by the Landscape Architect and/or Owner.
11. Plant symbols illustrated on this plan are a graphic representation of proposed plant material types and are intended to provide for visual clarity. However, the symbols do not necessarily represent actual plant spread at the time of installation. Sizes and/or spread on plant list represent minimum requirements at the time of installation; mature growth may exceed figures listed.
12. Any plant materials with damaged or crooked/disfigured leaders, bark abrasion, sun scald, insect damage, etc. are not acceptable and will be rejected by Landscape Architect and/or Owner. Trees with multiple leaders will be rejected unless called for in the plant list as multi-stem or clump.
13. Upon inspection and acceptance of all landscape items by Landscape Architect and/or Owner the contractor shall assume maintenance responsibilities for a period of thirty (30) days, for all plant material, to include: watering, cultivating, weeding, pruning, mulching and spraying as necessary to keep plants free of insects and in a healthy, vigorous condition until responsibility is transferred to the owner (see below).
14. All plant material shall be guaranteed for one (1) year after acceptance by landscape architect and/or owner. After the first thirty (30) days, the owner shall assume maintenance responsibilities as described (see above). Contractor shall replace without cost to owner any dead or unacceptable plants, as determined by the landscape architect at the end of one (1) year guarantee period. Contractor shall notify immediately, in writing, any concerns related to maintenance practices.
15. All planting beds and tree saucers shall be finished continuous with 3" depth washed aggregate stone, 1-3" size (CA1), or brick chips with heavy duty weed barrier fabric, see planting details. All deciduous trees (shade / ornamental) that are not located in in a planting bed shall be edged and finished with a 3'-0" diameter circle of stone and fabric. Evergreen trees shall be edged and finished with stone and fabric to outer-most branches at the time of installation.
16. Planting edge delineation at all planting bed lines and tree saucers shall require installation of 4" interlocking steel edge with steel stakes continuous between lawn and mulched areas as indicated on plan.
17. Contractor to install sod in all areas indicated on plan. Sod to be well established mineral type growth, no peat sod will be allowed. Sod grass blend shall consist of the following suggested bluegrass types: 55% Barrons, 15% Majestic, 15% Adelphi, 15% Glade. Sod pieces are to fit tightly together so that no joints are visible, alternate and stagger courses and tamp or roll firmly. All sodded lawn areas shall be fertilized at first cutting with 15-40-5 analysis fertilizer, at a rate of 6 lbs. per 1,000 s.f.. Acceptance and guarantee note shall apply to all sod areas.
18. Contractor to seed all lawn areas as indicated on plan. Seeded lawn to be a combination of bluegrass, perennial rye and red fescue with the suggested following analysis by weight: 30% rugby Kentucky bluegrass, 20% park Kentucky bluegrass, 20% creeping red fescue, 20% scaldis hard fescue, and 10% perennial ryegrass. Seed to be applied at a rate of 4 lbs. per 1,000 s.f.. All seeded lawn areas shall be covered with straw mulch or erosion control netting, consisting of hand or machine application at a rate of 2 ton per acre. Mulch shall be compact enough to reduce erosion of seed and topsoil but loose enough to allow air to circulate. Install per Method 1, Section 251, of the Standard Specifications for Road and Bridge Construction.
19. All seeded lawn areas shall be fertilized at installation with 0-26-26 analysis, at a rate of 6 lbs. per 1,000 s.f.. A second application of 15-40-5 to be applied at rate of 6 lbs. per 1,000 s.f. after the first cutting. Acceptance and guarantee notes shall apply to all seeded areas.
20. Acceptance of grading and sod and/or seed shall be by landscape architect and/or owner. Contractor shall assume maintenance responsibilities for a minimum of sixty (60) days or until second cutting, whichever is longer. Maintenance shall include watering, weeding, re-seeding (wash-offs), replacement (sod) and other operations necessary to keep lawn in a thriving condition. Upon final acceptance, owner shall assume all maintenance responsibilities. After lawn areas have germinated, areas which fail to show a uniform stand of grass for any reason whatsoever shall be re-seeded or replaced repeatedly until all areas are covered with a satisfactory stand of grass. Minimum acceptance of seeded lawn areas may include scattered bare or dead spots, none of which are larger than one (1) square foot and when combined do not exceed 2% of total lawn area.
21. Existing plants (trees, shrubs, native vegetation, etc.) as shown on plan are to remain and must be protected from construction activity during construction timeline.





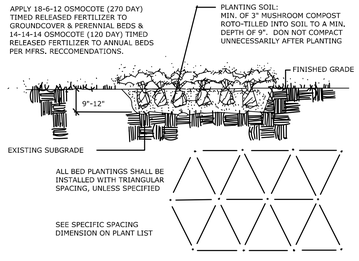
DECIDUOUS TREE

NOT TO SCALE



SHRUBS

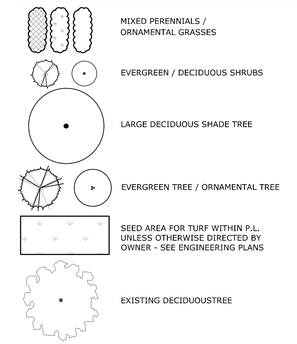
NOT TO SCALE



BED PLANTING DETAIL

(GROUNDCOVER, PERENNIALS & ANNUALS) NOT TO SCALE

LEGEND

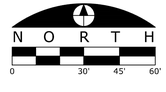


PLANT LIST

KEY	QTY	Botanical name COMMON NAME	SIZE	REMARKS
AAB	5	Acer x freemanii ' Autumn Blaze' AUTUMN BLAZE MAPLE	2.5"	
AC	2	Abies concolor CONCOLOR WHITE FIR	6'	EVERGREEN
GTS	3	Gleditsia triacanthos 'Skyline' SKYLINE HONEYLOCUST	2.5"	
MC	2	Malus x 'Cardinal' CARDINAL CRABAPPLE	8'	
PCC	2	Pyrus calleryana x 'Canticleer' CALLERY PEAR TREE	2.5"	MATCHED, NON-FRUITING
PN	2	Pinus nigra AUSTRIAN PINE	6'	EVERGREEN
TCL	2	Tillia cordata 'Littleleaf' LITTLE LEAF LINDEN	2.5"	
AMR	10	Aronia melanocarpa 'Professor Ed' PROFESSOR ED CHOKEBERRY	36"	
CSI	9	Cornus sericea 'Isanti' RED TWIG DOGWOOD	36"	
BCG	12	Buxus microphylla 'Chicago Green' CHICAGO GREEN BOXWOOD	24"	EVERGREEN
FGL	19	Forsythia x intermedia 'Goldilocks' GOLDILOCKS COMPACT FORSYTHIA	18"	
JHH	31	Juniperus horizontalis 'Hughes' HUGHES JUNIPER	5 GAL.	EVERGREEN
RAG	10	Rhus aromatica 'Grow Low' GROW LOW SUMAC	5 GAL.	
SBG	22	Spiraea bumalda 'Goldflame' GOLDFLAME SPIREA	18"	
SPB	12	Syringa patula 'Bloomerang' BLOOMERANG M1SS KIM DWARF LILAC	36"	
TMD	16	Taxus x media 'Densiformis' DENSE COMPACT YEW	24"	EVERGREEN
CFR	36	Calamagrostis acutiflora stricta FEATHER REED GRASS	GAL	3'-0" O.C.
EPM	24	Echinacea purpurea 'Magnus' PURPLE CONEFLOWER	GAL	2'-0" O.C.
HHR	21	Hemerocallis 'Happy Returns' HAPPY RETURNS REBLOOMING DAYLILY	GAL	2'-0" O.C.
RFG	24	Rudbeckia fulgida 'Goldsturm' GOLDSTURM BLACK-EYED SUSAN	GAL	2'-0" O.C.
SEA	20	Sedum x 'Autumn Joy' AUTUMN JOY SEDUM	GAL	2'-0" O.C.
SEF	21	Salvia x 'East Freisland' EAST FREISLAND SALVIA	GAL	2'-0" O.C.

ZONING DATA

CATEGORY	QUANTITY	REQUIREMENT	PROVISION
FOUNDATION	305'	5' WIDTH AROUND BUILDING PERIMETER w/ MIX OF DECIDUOUS AND EVERGREEN SPECIES	5' WIDTH CONTINUOUS w/ MIX OF SPECIES AND TREE / SHRUBS
PARKING INTERIOR:	19 SPACES	3 ISLANDS = 3 TREES + 15 SHRUBS (1 ISLAND PER 10 SPACES w/ 1 TREE + 5 SHRUBS, AND AT THE END OF EA. ROW)	3 ISLANDS + 3 TREES AND 15 SHRUBS w/ MIX OF SPECIES
PERIMETER: PARKING NOT ON R.O.W.	8' WIDTH AREA	8' WIDTH + 7 TREES + 35 SHRUBS (280.5' LENGTH) (8' WIDTH w/ 1 TREE + 5 SHRUBS PER 40')	8' WIDTH AREA + 7 TREES AND 37 SHRUBS w/ MIX OF SPECIES
SIGNAGE	114 S.F. (SIGN S.F.)	114 S.F. = PLANTING AREA (1 S.F. PLANTING AREA PER S.F. OF SIGN FACE AREA AT SIGN BASE w/ MIX OF DECIDUOUS AND EVERGREEN SPECIES + 50% PERENNIAL / G.C.	718 S.F. PLANTING AREA w/ MIX OF SPECIES + 50% PERENNIAL / G.C.
BUFFERS	NORTH P.L.: SOUTH P.L.: WEST P.L.: EAST P.L.:	N/A - MANUF./LESSER (E) USE N/A - COM./SAME (D) USE N/A - MANUF./COM. (E/D) USE N/A - MANUF./LESSER (E) USE	N/A N/A N/A N/A
*SUBJECT PROPERTY IS CLASSIFIED AS B-2 GENERAL COMMERCIAL (D USE)			



ARC DESIGN RESOURCES INC.
5291 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
www.arcdesign.com
Design Firm License No. 184-001334

CASEY'S GENERAL STORE - CRYSTAL LAKE, IL — 20067

PROJECT LOCATION & OWNER:
4220 NORTHWEST HWY
CRYSTAL LAKE, IL 60014
CASEY'S RETAIL COMPANY
ONE CONVENIENCE BLVD
ANKENY, IA 50021
ERIK NIKKEL
(515) 381-5722

DRAWN BY:	CHECKED BY:	PM
DB	LND	LND

ISSUED		FOR CONSTRUCTION
1 CLIENT REVIEW	10/27/2020	----
2 AGENCY REVIEW	11/13/2020	REVISIONS
3 AGENCY REVIEW	05/21/2021	1. ----
4. ----	----	2. ----
5. ----	----	3. ----
6. ----	----	4. ----
7. ----	----	5. ----
8. ----	----	6. ----

LANDSCAPING PLAN

C-701



FRONT ELEVATION



RIGHT ELEVATION

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RLAtechnolgy.com
513-574-9500
RLA TECHNOLOGY SOLUTIONS



BACK ELEVATION

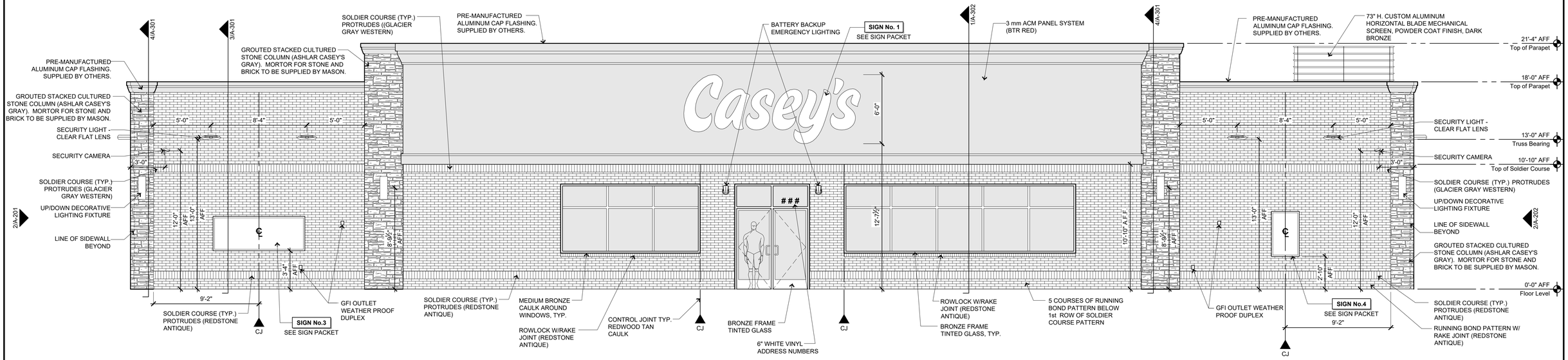


LEFT ELEVATION

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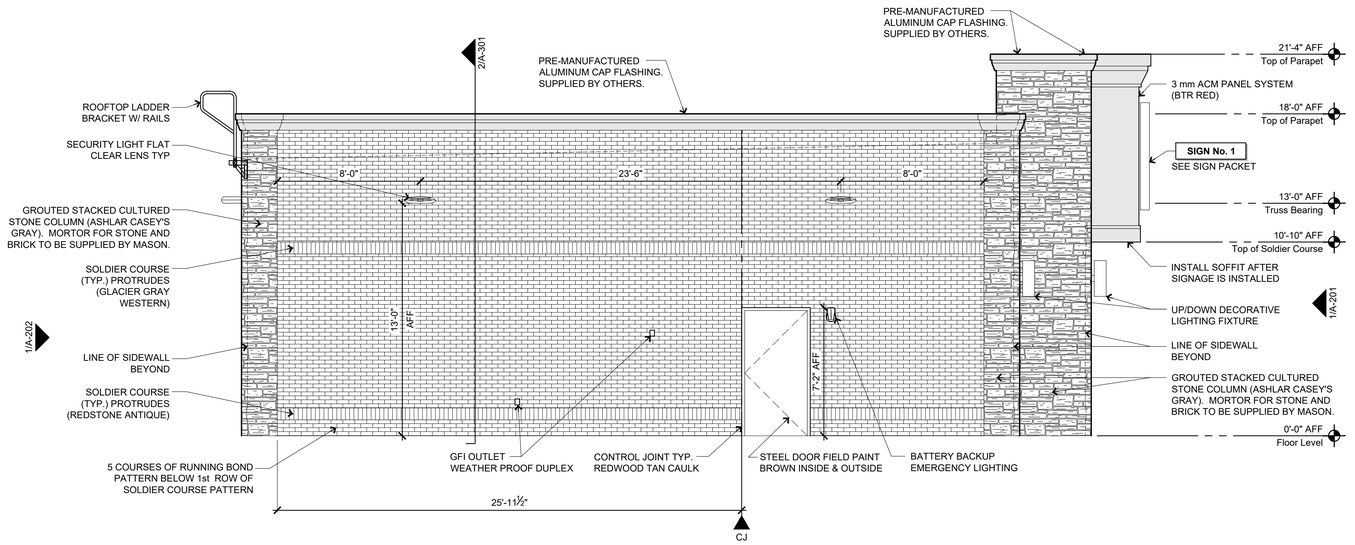
RLAtechnolgy.com
513-574-9500

RLA TECHNOLOGY SOLUTIONS



1 Exterior Elevation - Left Side of Building (Plan South)

1/4"=1'-0"



2 Exterior Elevation - Front of Building (Plan West)

1/4"=1'-0"

General Notes

1. REVIEW AND COORDINATE WITH ALL DETAIL PAGES REFERENCED ON THIS PLAN, NOTIFY ARCHITECT AND OWNER OF DISCREPANCIES
2. **RELATED DRAWING SHEETS**: REFER TO THE FOLLOWING:
   AL-101: FOR BUILDING LOCATION ON SITE
   AL-601: FOR INFORMATION RELATING TO SIGNAGE
   A-101: PRIMARY FLOOR PLAN FOR CONSTRUCTION LAYOUT
   A-121: ROOF PLAN/ROOF TOP EQUIPMENT
   A-601: DOOR & WINDOW SCHEDULES AND NOTES
   S-101: FOOTINGS AND FOUNDATIONS
   S-102: ROOF TRUSSES
3. **WORKING POINT**: THE WORKING POINT (***WP***) INDICATED ON THE DRAWINGS IS RELATIVE TO THE FACE OF SHEATHING ON THE EXTERIOR WALL AND IS A COMMON POINT OF REFERENCE WHERE EVER USED IN THESE DRAWINGS
4. ALL VENT PENETRATIONS ON BACK OF BACKSIDE OF ROOF.

SCREENING

Casey's

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, Ia. 50021 515-965-6100

PROJECT: 2021 "O6" STYLE STORE FLAT ROOF

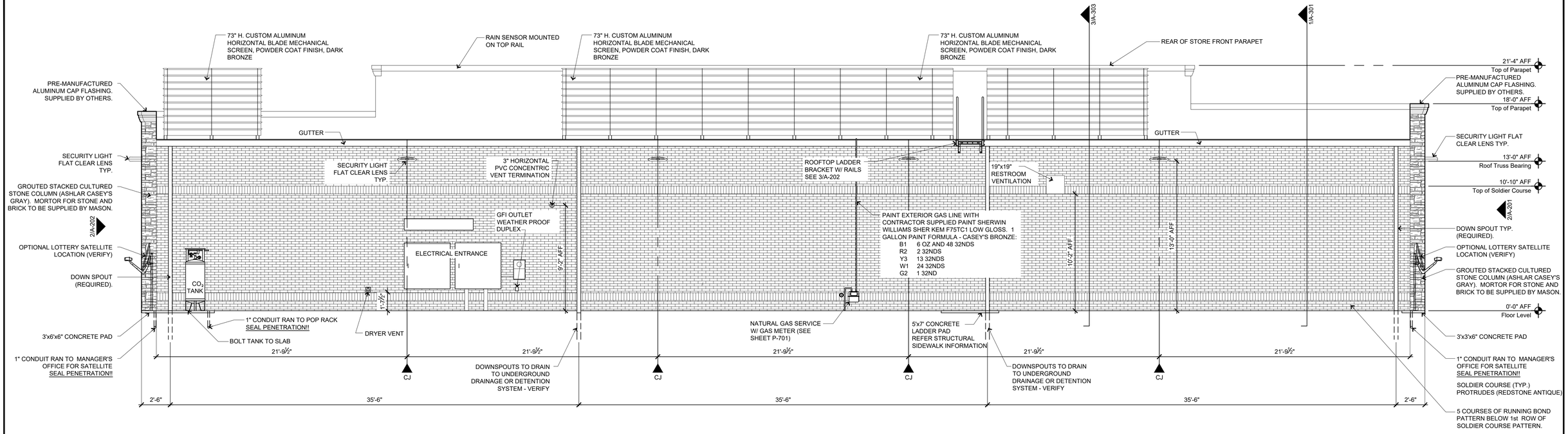
PUBLISHED ON: 04/22/21
REVISED ON: 05/11/21 (1)

DRAWING INFORMATION: CONSTRUCTION DIVISION

DRAWN BY: Arlon Goforth III
CHECKED BY:

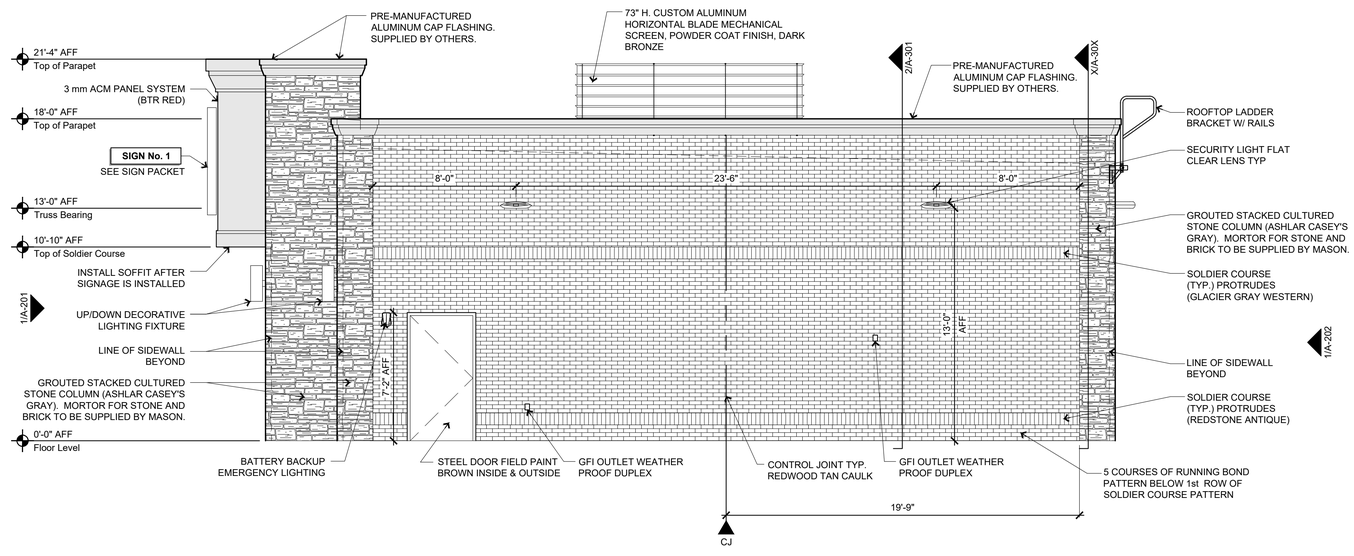
DRAWING INFORMATION: EXTERIOR ELEVATIONS

A-201



1 Exterior Elevation - Left Side of Building (Plan North)

1/4"=1'-0"



2 Exterior Elevation - Front of Building (Plan East)

1/4"=1'-0"

3 Ladder Bracket

1/2"=1'-0"

General Notes

1. REVIEW AND COORDINATE WITH ALL DETAIL PAGES REFERENCED ON THIS PLAN, NOTIFY ARCHITECT AND OWNER OF DISCREPANCIES
2. **RELATED DRAWING SHEETS**: REFER TO THE FOLLOWING:
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   A-601: DOOR & WINDOW SCHEDULES AND NOTES
   S-101: FOOTINGS AND FOUNDATIONS
   S-102: ROOF TRUSSES
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4. ALL VENT PENETRATIONS ON BACK OF BACKSIDE OF ROOF.

SCREENING

Casey's

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, Ia. 50021 515-965-6100

PROJECT: 2021 "O6" STYLE STORE FLAT ROOF	PLAN ISSUED: 04/22/21
	REVISED ON: 05/11/21 (1)
DRAWING INFORMATION: CONSTRUCTION DIVISION	
DRAWN BY: Arlon Goforth III	CHECKED BY:
DRAWING INFORMATION: EXTERIOR ELEVATIONS	A-202

CASEY'S GENERAL STORE - CRYSTAL LAKE, IL

4220 NORTHWEST HWY

CRYSTAL LAKE, IL 60014

GENERAL NOTES

1. The designs represented in these plans are in accordance with established practices of civil engineering for the design functions and uses intended by the owner at this time. Neither the engineer nor its personnel can or do warrant these designs or plans as constructed except in the specific cases where the engineer inspects and controls the physical construction on a contemporary basis at the site.
2. The contractor, by agreeing to perform the work, agrees to indemnify and hold harmless the owner, the engineer, the City, and all agents and assigns of those parties, from all suits and claims arising out of the performance of said work, and further agrees to defend or otherwise pay all legal fees arising out of the defense of said parties.
3. In accordance with generally accepted construction practices, the contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. Any construction observation by the engineer of the contractor's performance is not intended to include review of the adequacy of the contractors safety measures, in, or near the construction site. The contractor is responsible for maintaining adequate signs, barricades, fencing, traffic control devices and measures, and all other measures that are necessary to protect the safety of the site at all times.
4. Maintain access for vehicular and pedestrian traffic as required for other construction activities. Use traffic control devices to include temporary striping, flagmen, barricades, warning signs, and warning lights shall be in accordance with current MUTCD and IDOT standards.
5. All phases of the site work for this project shall meet or exceed industry standards and requirements set forth by the the owner's "Description of Work", the City of Crystal Lake, the State of Illinois, and this plan set.
6. The contractor shall coordinate all permit and inspection requirements with responsible local, state, and federal agencies. The contractor shall include the costs of this coordination and all inspection fees in the bid price.
7. All work performed by the contractor shall come with a warranty against defects in workmanship and materials. This warranty period shall run concurrent with the required warranty periods the owner must provide to each local government agency, as a condition of the permit.
8. The contractor will be held solely responsible for and shall take precautions necessary to avoid property damage to adjacent properties during the construction of this project.
9. All structures, inlets, pipes, swales, roads and public egresses must be kept clean and free of dirt and debris at all times.
10. Any field tiles encountered during construction shall be recorded showing size, location, and depth by the contractor, and either reconnected and rerouted or connected to the storm sewer system. The owner shall be notified immediately upon encountering any tile.
11. The contractor shall field verify the elevations of the benchmarks prior to commencing work. The contractor shall also field verify the location and elevation of existing pipe inverts, curb or pavement where matching into existing work. The contractor shall field verify horizontal control by referencing property corners to known property lines. Notify the engineer of discrepancies in either vertical or horizontal control prior to proceeding.
12. All elevations are on NAVD 88 elevation datum and Illinois State Planes Coordinate System - East Zone horizontal datum.
13. Parking areas designated as A.D.A. and all sidewalk shall be compliant with state and local A.D.A. requirements.
14. Tactile warning plates per IDOT specifications shall be placed at all locations where sidewalk that is to be replaced intersects public roads and at locations indicated in this plan set.
15. The contractor shall verify the location of all utilities in the field prior to construction. This includes sanitary sewer, water main, storm sewer, COMED, AT&T/Xfinity, Nicor, if any. The JULIE phone number is 1-800-892-0123 or 811. Property corners shall be carefully protected until they have been referenced by a Professional Land Surveyor.
16. The contractor shall keep careful measurements and records of all construction and shall furnish the Engineer, the Owner and the City with record drawings in a digital format compatible with AutoCAD Release 14 upon completion of his work.
17. Any excess dirt or materials shall be placed by the contractor onsite at the owner's direction or as indicated on the plans.
18. Notify the owner and City of Crystal Lake of any existing wells. Obtain permit from the Illinois IEPA. Cap and abandon wells in accordance with local, state, and federal regulations.
19. Finish grade shall in all areas not specifically reserved for storm water management shall drain freely. No ponding shall occur. Tolerances to be observed will be measured to the nearest 0.04 of a foot for paved surfaces and 0.10 of a foot for unpaved areas.
20. Contact the City of Crystal Lake at (815) 356-3605 at least 48 hours in advance of the start of construction.
21. Compliance with City Ordinance does not relieve the developer from compliance with applicable state, county, federal, and other regulatory agencies.

UTILITY OFFICIALS

CITY PLANNER
CITY OF CRYSTAL LAKE, IL
CITY PLANNER
ELIZABETH MAXWELL
(815) 356-3738
EMAXWELL@CRYSTALLAKE.ORG

CITY ENGINEER
CITY OF CRYSTAL LAKE, IL
CITY ENGINEER
ABIGAIL WELGREEN
(815) 356-3605
AWILGREEN@CRYSTALLAKE.ORG

BUILDING DEPARTMENT
CITY OF CRYSTAL LAKE, IL
PLANS EXAMINER
MARTY BROWN
(815) 356-3605
MBROWN@CRYSTALLAKE.ORG

WATER & SEWER SERVICE
CITY OF CRYSTAL LAKE, IL
PUBLIC WORKS SUPERINTENDENT
ANDREW RESEK
(815) 356-3614
ARESEK@CRYSTALLAKE.ORG

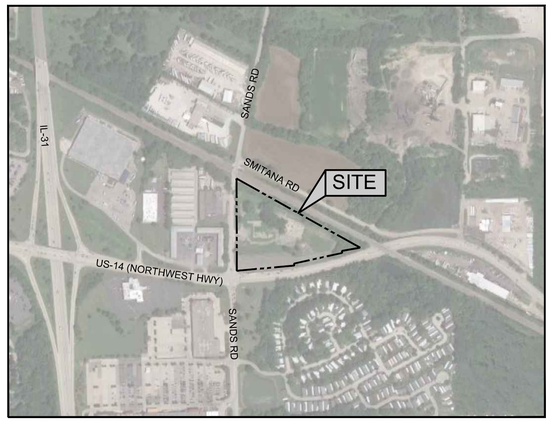
IDOT PERMIT OFFICE
IDOT DISTRICT 1
PERMITS SECTION
YELEINA HAYDEL
(847) 705-4145

TELEPHONE & INTERNET:
AT&T
NEW BUSINESS LINE
(877) 219-3898

ELECTRIC:
COMED
NEW BUSINESS LINE
(866) 639-3532

GAS:
NICOR GAS CO
NEW BUSINESS COORDINATOR
FORAM SHAH
(847) 598-4011
FSHAH@SOUTHERNCO.COM

VICINITY MAP



Call Before You Dig
JULIE
ILLINOIS ONE CALL SYSTEM
DIAL 811 OR (800) 892-0123

Sheet List Table

SHEET NUMBER	SHEET TITLE
C-001	COVER
C-002	GENERAL NOTES
C-003	GENERAL NOTES & QUANTITIES
C-004	ALTA SURVEY
C-005	ALTA SURVEY
C-100	REMOVALS PLAN
C-101	LAYOUT OVERVIEW PLAN
C-102	LAYOUT PLAN
C-201	GRADING PLAN
C-202	PLAN & PROFILE
C-203	SECTION VIEWS
C-204	DRAINAGE PLAN
C-301	UTILITY PLAN
C-401	SWPPP
C-501	OFFSITE PLANS COVER
C-502	OFFSITE PLANS GENERAL NOTES
C-503	OFFSITE REMOVALS PLAN
C-504	OFFSITE EROSION CONTROL PLAN
C-505	OFFSITE PLAN & PROFILE
C-506	OFFSITE PLAN & PROFILE
C-507	OFFSITE SECTION STA. 27+50 TO 29+50
C-508	OFFSITE SECTIONS STA. 30+00 TO 32+50
C-509	OFFSITE IDOT DETAILS
C-510	OFFSITE IDOT DETAILS
C-511	OFFSITE IDOT DETAILS
C-512	OFFSITE IDOT DETAILS
C-513	OFFSITE TRAFFIC CONTROL PLAN
C-601	CASEY'S DETAILS
C-602	CASEY'S DETAILS
C-603	CASEY'S DETAILS
C-604	DETAILS
C-605	CITY OF CRYSTAL LAKE DETAILS
C-606	CITY OF CRYSTAL LAKE DETAILS
C-607	CITY OF CRYSTAL LAKE DETAILS
C-608	IDOT DETAILS
C-701	LANDSCAPING PLAN

APPROVAL	DATE
CITY OF CRYSTAL LAKE, IL	PENDING
ILLINOIS DEPARTMENT OF TRANSPORTATION	PENDING
NPDES	PENDING

OWNER:

CASEY'S RETAIL COMPANY
ONE CONVENIENCE BLVD
ANKENY, IA 50021

ERIK NIKKEL
(515) 381-5722

ENGINEER:

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LICENSED PROFESSIONAL ENGINEER
LAUREN NICOLE DOWNING
062-069006
OF ILLINOIS

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CASEY'S GENERAL STORE - CRYSTAL LAKE, IL — 20067

PROJECT LOCATION & OWNER:
4220 NORTHWEST HWY
CRYSTAL LAKE, IL 60014
CASEY'S RETAIL COMPANY
ONE CONVENIENCE BLVD
ANKENY, IA 50021
ERIK NIKKEL
(515) 381-5722

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3 AGENCY REVIEW	05/21/2021	1 ----
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COVER

C-001

BENCHMARKS

	ELEVATION (NAVD 88)
BENCHMARK 1 TOP BURY BOLT OF FIRE HYDRANT LOCATED 23' WEST OF CENTERLINE OF SANDS RD AND 605' NORTH OF CENTERLINE OF US-14	882.98
BENCHMARK 2 TOP NW BOLT OF FIRE HYDRANT LOCATED 30' WEST OF CENTERLINE OF SANDS RD AND 420' NORTH OF CENTERLINE OF US-14	872.37
BENCHMARK 3 TOP NW BOLT OF FIRE HYDRANT LOCATED 30' WEST OF CENTERLINE OF SANDS RD AND 80' NORTH OF CENTERLINE OF US-14	877.53
BENCHMARK 4 X -CUT ON SOUTH SIDE OF LIGHT POLE BASE LOCATED 300' EAST OF CENTERLINE OF SANDS RD AND 50' NORTH OF CENTERLINE OF US-14	876.29

BM #1

BM #2

BM #3

BM #4

(314.54')
314.54'

N 0°41'23" E

(N 0°37'53" E)

N 0°32'25" E

(N 0°29'01" E)

88.30'

130.13'

(130.09')

(169.06')
165.38'

(1040.73')
1040.53'

(N 89°33'44" E)
N 89°37'08" E

N 89°22'05" W 43.69'
(N 89°30'59" W) (43.00')

N 45°41'11" W 14.12'
(N 45°33'00" W) (13.89')

(S 62°54'26" E)
S 62°50'56" E

643.47'

(680.57')
680.34'

N 89°37'08" E 31.37'
(N 89°33'38" E) (31.37')

(291.98')
291.66'

76.97' (76.97')
S 72°09'19" W
(S 72°05'49" W)

S 16°55'06" E 10.00'
(S 16°58'36" E) (10.00')

S 9°55'06" E 10.00'
(S 9°58'36" E) (10.00')

Future Right-of-Way Line

Future Right-of-Way Line

Future Lot Line

Future Lot Line

WORK TO BE COMPLETED BY OTHERS

FUTURE ACCESS DRIVE

N 85°10'06" E
10' CANOPY SETBACK

20' BUILDING AND PAVEMENT SETBACK

341.36'

40.8'

110.8'

46.8'

112.3'

115.9'

10.69'

64.1'

33.8'

24'

24'

27.44'

S 4°49'54" E

20' PAVEMENT SETBACK

30' BUILDING SETBACK

10' CANOPY SETBACK

20' PAVEMENT SETBACK

30' BUILDING SETBACK

10' CANOPY SETBACK

20' PAVEMENT SETBACK

10' CANOPY SETBACK

LOT 3
109,345 SF
2.5102 ACRES

LOT 2
91,687 SF
2.1048 ACRES

LOT 1
79,858 SF
1.8333 ACRES

CURVE L-1
Δ = 6°58'07"
R = 2814.78'
L = 342.36'
T = 171.39'
CB = S 84°52'55" W
CD = 342.14'

CURVE L-2
Δ = 1°18'57"
R = 2814.78'
L = 64.64'
T = 32.32'
CB = S 80°44'23" W
CD = 64.64'

CURVE C-1
Δ = 0°55'35"
R = 2794.78'
L = 45.19'
T = 22.59'
CB = S 72°37'07" W
CD = 45.19'

CURVE C-2
Δ = 7°00'00"
R = 2804.78'
L = 342.67'
T = 171.55'
CB = S 76°34'54" W
CD = 342.45'

CURVE C-3
Δ = 8°17'04"
R = 2814.78'
L = 407.00'
T = 203.85'
CB = S 84°13'27" W
CD = 406.64'

Curve L-1 L=342.36' R=2814.78'
Curve C-3 L=407.00'

L=74.74' Curve L-2

R=2804.78' L=342.67' Curve C-2

SANDS ROAD

US ROUTE 14 (NORTHWEST HWY)

B-2 GENERAL
COMMERCIAL PUD ZONING
AUTOMOBILE SERVICE CENTER

B-2 GENERAL
COMMERCIAL PUD ZONING
SHOPPING CENTER

B-2 GENERAL
COMMERCIAL PUD ZONING
VACANT LOT

SEE SUBDIVISION PLAT BY HAEGER ENGINEERING FOR OUTLOT DIMENSIONS AND EASEMENTS

N O R T H
0 40' 60' 80'

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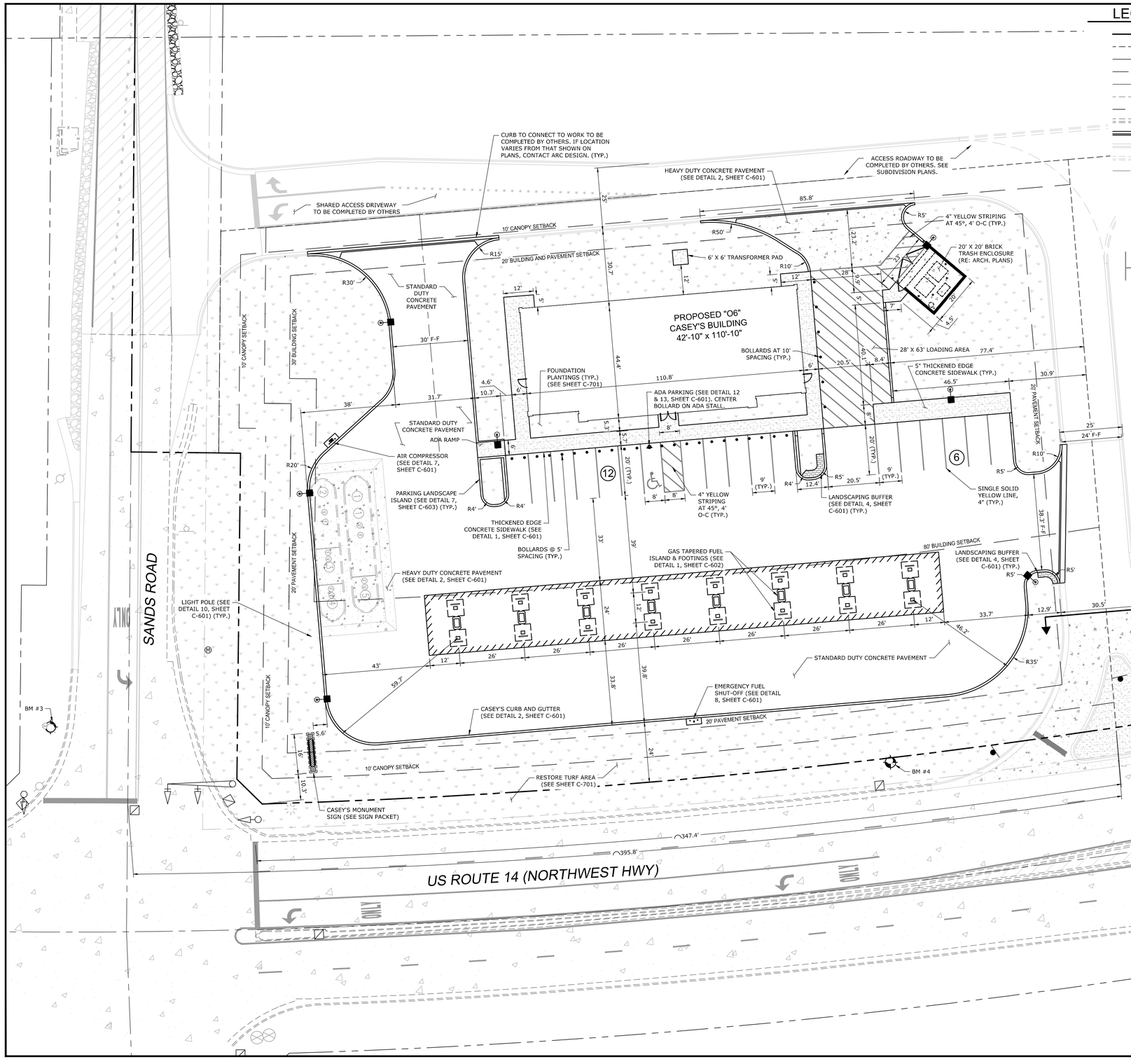
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FOR CONSTRUCTION:	

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LAYOUT OVERVIEW PLAN

C-101



LEGEND

- PROPERTY LINE
- PROPOSED LOT LINE
- EXISTING RIGHT-OF-WAY
- SECTION LINE
- CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED SETBACK LINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- CURB AND GUTTER TO BE CONSTRUCTED BY OTHERS
- CURB AND GUTTER TO BE CONSTRUCTED AS PART OF FUTURE DEVELOPMENT
- EXISTING FENCE
- PROPOSED CONCRETE SIDEWALK
- PROPOSED STANDARD DUTY CONCRETE PAVEMENT (SEE DETAIL 2, SHEET C-601)
- PROPOSED CONCRETE PAVEMENT (SEE DETAIL 2, SHEET C-601)
- EXISTING CONCRETE PAVEMENT
- EXISTING ASPHALT PAVEMENT
- PROPOSED TURF OR LANDSCAPED AREA (SEE C-701 LANDSCAPING PLANS)
- PROPOSED LANDSCAPING PROTECTORS (SEE DETAIL 4, SHEET C-601)
- LIGHT POLE AND FIXTURE (SEE DETAIL 10, SHEET C-601)
- PROPOSED ADA PARKING SPACE
- (12) NUMBER OF PROPOSED PARKING SPACES IN A ROW
- PROPOSED PARKING STALLS

LAYOUT NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE INVERTS, FLOOR ELEVATIONS, CURB OR PAVEMENT WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.
2. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
3. DIMENSIONS THAT LOCATE THE BUILDING ARE MEASURED TO THE OUTSIDE FACE OF THE BUILDING.
4. SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
5. COORDINATE WORK WITHIN THE US-14 ROW WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1 OFFICE. TRAFFIC CONTROL SHALL CONFORM TO IDOT STANDARDS FOR WORK IN THE RIGHT OF WAY.
6. COORDINATE WORK WITHIN THE SANDS RD ROW WITH THE CITY OF CRYSTAL LAKE, IL. TRAFFIC CONTROL SHALL CONFORM TO IDOT STANDARDS FOR WORK IN THE RIGHT OF WAY AT A MINIMUM.
7. ALL RADII ARE DIMENSIONED TO THE BACK OF CURB.
8. ALL CURB AND GUTTER IS INTEGRAL TO PAVEMENT UNLESS NOTED OTHERWISE. REFER TO THE DETAIL SHEETS FOR CURB DETAILS.
9. SOME FIELD ADJUSTMENTS MAY BE NECESSARY AT POINTS WHERE PROPOSED PAVEMENT, CURB AND SIDEWALKS MEET EXISTING PAVEMENT, CURB AND SIDEWALKS. REVIEW ANY REQUIRED CHANGES WITH ENGINEER PRIOR TO CONSTRUCTION OF WORK.
10. ELECTRICAL CIRCUITRY TO SITE LIGHTING AND MONUMENT SIGN SHOWN ON ARCHITECTURAL PLANS.
11. FOR REQUIRED PAVEMENT REMOVAL ADJACENT WITHIN RIGHT OF WAY, A FULL DEPTH SAWCUT IS REQUIRED AND SHALL NOT BE LESS THAN 2' IN WIDTH.
12. FOR ALL PAVEMENT PATCHING WITHIN THE RIGHT OF WAY THE BACKFILL MATERIAL USED SHALL BE CONTROLLED LOW STRENGTH MATERIAL UP TO THE BOTTOM OF THE PAVEMENT. THE THICKNESS OF THE HMA PAVEMENT REPLACEMENT SHALL BE A MINIMUM OF THE SAME THICKNESS AS THE EXISTING PAVEMENT STRUCTURE. THE MIXES USED SHALL CONFORM TO THE SPECIFICATIONS AND REQIREMENTS SET BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT).
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION, COORDINATION AND OBTAINING APPROVAL OF A TRAFFIC MANAGEMENT PLAN IF CLOSURES OF LANES EXCEED THE CRITERIA SPECIFIED BY IDOT.

PARKING TABLE

NUMBER OF PARKING STALLS REQUIRED	17 (1 - A.D.A.)
NUMBER OF PARKING STALLS PROPOSED	18 (1 - A.D.A.)

SITE AREA TABLE (LOT 1)

IMPERVIOUS AREA	54,629 SF (1.25 ACRES)
TOTAL SITE AREA	79,858 SF (1.8333 AC)
% IMPERVIOUS AREA	31.6%

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LAYOUT PLAN

C-102

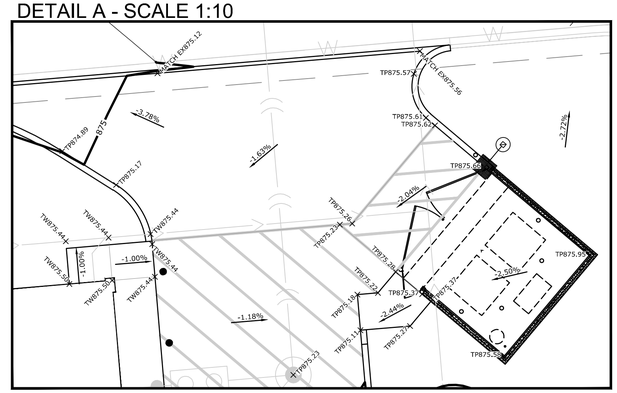
LEGEND

PROPERTY LINE	EST	EXISTING STORM SEWER	+TW000.00 TOP OF WALK ELEVATION
PROPOSED LOT LINE		PROPOSED GRADE BREAK LINE	+TP000.00 TOP OF PAVEMENT ELEVATION
EXISTING RIGHT-OF-WAY	800	PROPOSED CONTOUR LINE	+FG000.00 FINISHED GRADE ELEVATION
PROPOSED CURB AND GUTTER	800	EXISTING CONTOUR LINE	+T/FTG000.00 TOP OF FOOTING ELEVATION
EXISTING CURB AND GUTTER	CB / MH	PROPOSED CATCH BASIN OR MANHOLE	+MATCH EX 000.00 MATCH EXISTING ELEVATION
PROPOSED STORM SEWER	CO.	PROPOSED CLEANOUT	+RIM000.00 TOP OF UGST LID ELEVATION
	1.6%	DIRECTION OF SHEET FLOW	EMERGENCY OVERLAND FLOW ROUTE

GRADING NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE INVERTS, FLOOR ELEVATIONS CURB OR PAVEMENT WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL OR VERTICAL CONTROL BY REFERENCING SHOWN COORDINATES OR ELEVATIONS TO HORIZONTAL OR VERTICAL CONTROL POINTS PRIOR TO PROCEEDING WITH WORK.
2. ALL UNSURFACED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL AND SODDED (OR SEEDED WHERE NOTED) AND WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
3. ALL STORM SEWER PIPE IS TO BE REINFORCED CONCRETE CULVERT PIPE CLASS IV UNLESS OTHERWISE NOTED. WHERE HDPE OR PVC PIPE IS LISTED AS ACCEPTABLE MATERIALS, PVC SDR 35, HDPE DOUBLE WALL (ADS N-12), OR PVC SCHEDULE 40 MAY BE USED AT THE CONTRACTOR'S DISCRETION.
4. THE MAXIMUM SLOPE RATIO ON CUT/FILL SLOPES IS 3.0 HORIZONTAL TO 1 VERTICAL.
5. PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. CONTRACTOR SHALL SET ALL CLEANOUT, MANHOLE AND INLET CASTINGS, FIRE HYDRANTS AND VALVE BOXES TO FINISHED GRADE.
7. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT THE CONCLUSION OF EACH WORKING DAY.
8. ROOF AND CANOPY DRAIN SHALL INCORPORATE BOOT PER DETAIL. 6" PVC PIPE SHALL EXTEND TO A MAIN AS SHOWN ON THE PLAN. POSITIVE DRAINAGE SHALL BE MAINTAINED TOWARD MAIN AT 1.0% MINIMUM SLOPE. 6" PVC CONNECTION TO BE MADE WITH INSERT-A-TEE OR ENGINEER APPROVED EQUIVALENT BETWEEN DISSIMILAR MATERIALS.

DETAIL A - SCALE 1:10



DETAIL B - SCALE 1:10



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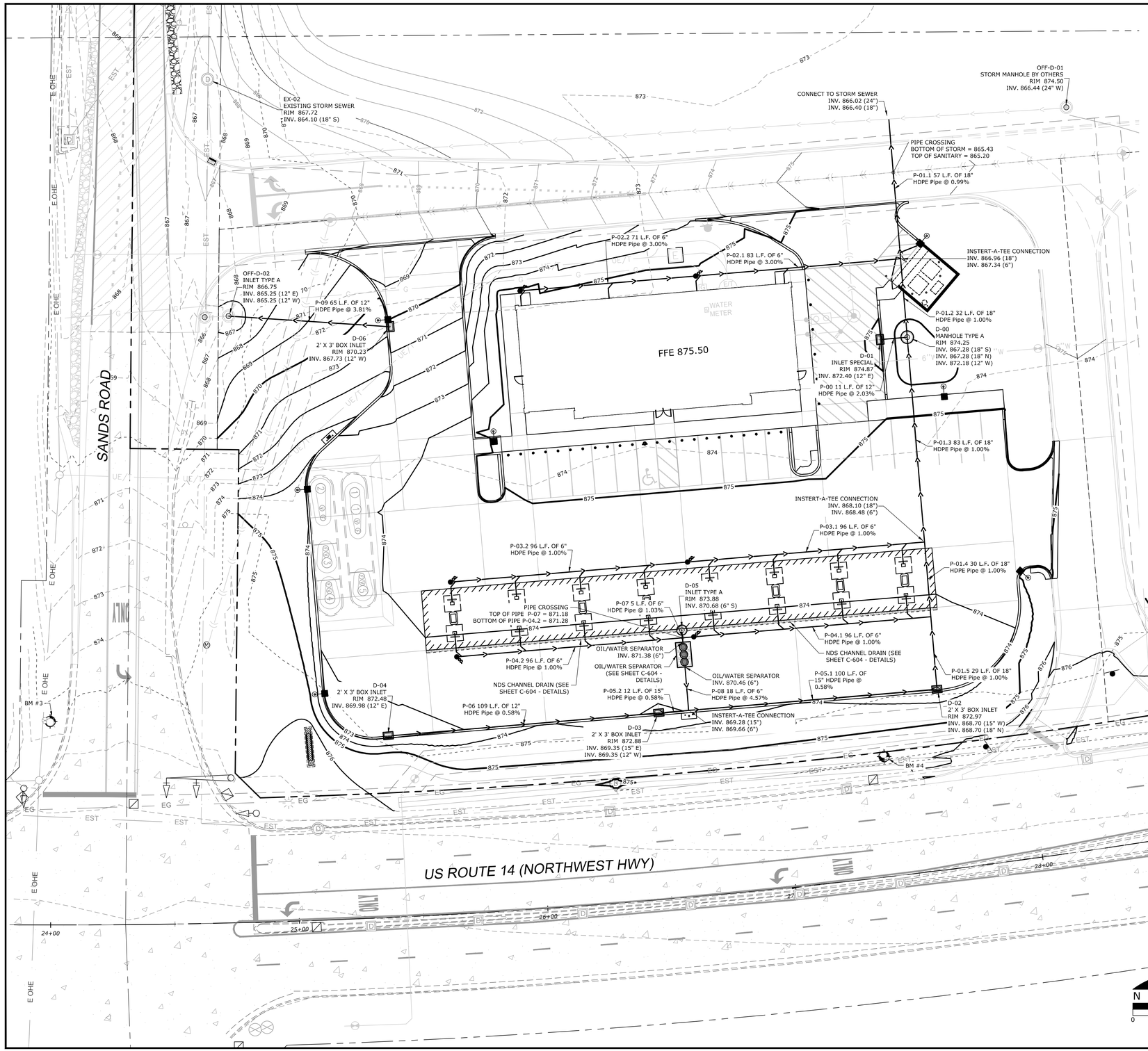
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GRADING PLAN

C-201



LEGEND

- PROPERTY LINE
- PROPOSED LOT LINE
- EXISTING RIGHT-OF-WAY
- SECTION LINE
- CENTERLINE
- EXISTING EASEMENT LINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED GRADE BREAK LINE
- PROPOSED CONTOUR LINE
- EXISTING CONTOUR LINE
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SEWER
- PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELECTRIC SERVICE
- PROPOSED TELEPHONE SERVICE
- EXISTING MANHOLE OR CATCH BASIN
- PROPOSED CATCH BASIN OR MANHOLE
- PROPOSED CLEANOUT
- DIRECTION OF SHEET FLOW

RIM ELEVATION DEFINITION

PAVED AREA INLET, CLOSED LID - EAST JORDAN IRON WORKS #1020AGS OR NEENAH FOUNDRY R-1772 WITH "GREASE TRAP" EMBOSSING OR APPROVED EQUIVALENT

RIM ELEV.

CURB INLET - NEENAH R-3067 W/TYPE L CRATE AND MOUNTABLE CURB BOX

RIM ELEV.

SEE SHEET C-601 - CASEY'S DETAILS FOR MORE INFORMATION

BENCHMARKS

	ELEVATION (IL SP EAST)
BENCHMARK 1 TOP BURY BOLT OF FIRE HYDRANT LOCATED 23' WEST OF CENTERLINE OF SANDS RD AND 605' NORTH OF CENTERLINE OF US-14	882.98
BENCHMARK 2 TOP NW BOLT OF FIRE HYDRANT LOCATED 30' WEST OF CENTERLINE OF SANDS RD AND 420' NORTH OF CENTERLINE OF US-14	872.37
BENCHMARK 3 TOP NW BOLT OF FIRE HYDRANT LOCATED 30' WEST OF CENTERLINE OF SANDS RD AND 80' NORTH OF CENTERLINE OF US-14	877.53
BENCHMARK 4 X -CUT ON SOUTH SIDE OF LIGHT POLE BASE LOCATED 300' EAST OF CENTERLINE OF SANDS RD AND 50' NORTH OF CENTERLINE OF US-14	876.29

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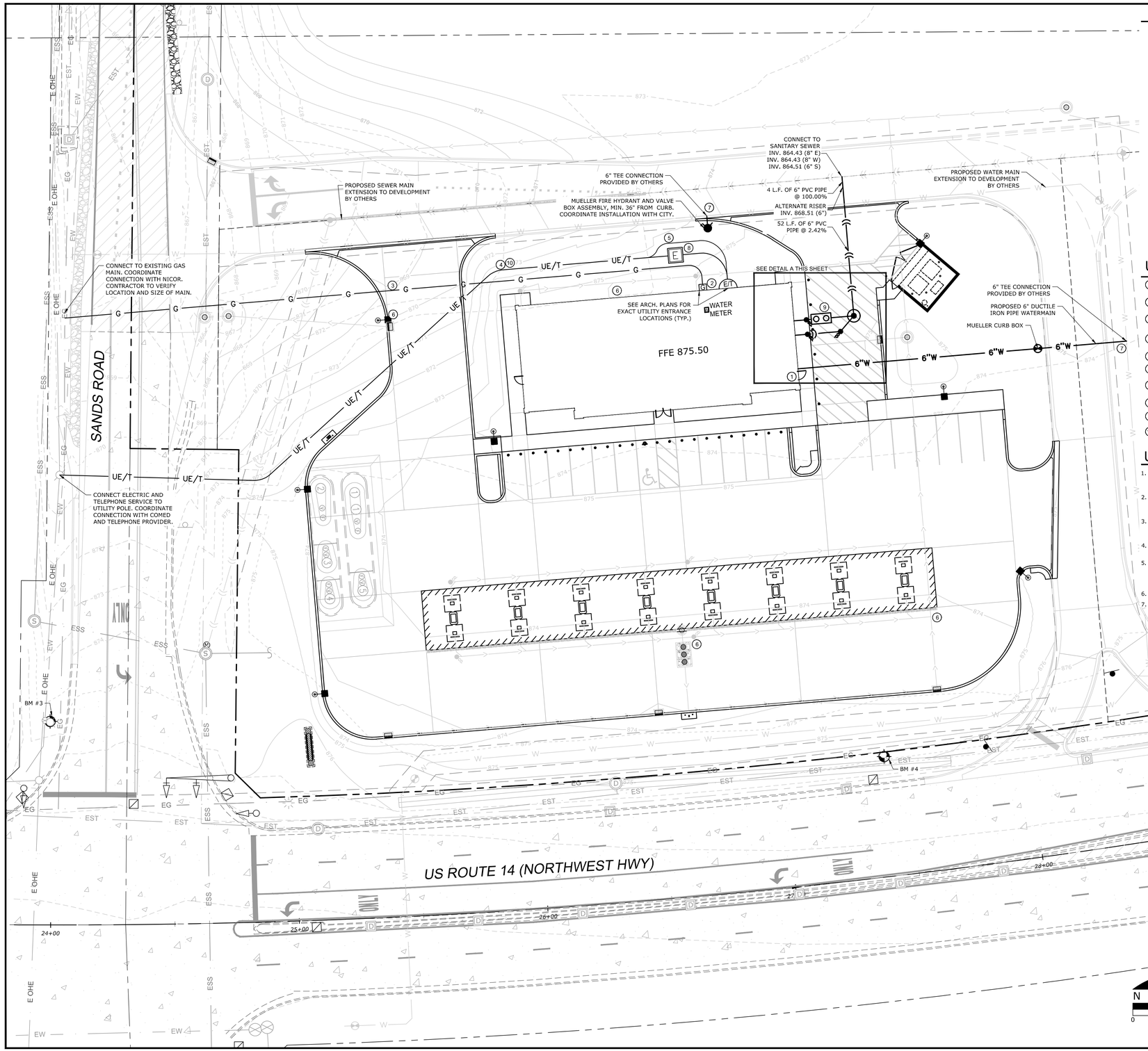
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DRAINAGE PLAN

C-204



LEGEND

- PROPERTY LINE
- PROPOSED LOT LINE
- EXISTING RIGHT-OF-WAY
- SECTION LINE
- CENTERLINE
- EXISTING EASEMENT LINE
- EXISTING CURB AND GUTTER
- EXISTING WATER MAIN
- PROPOSED WATER SERVICE
- PROPOSED WATER MAIN BY OTHERS
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY SEWER BY OTHERS
- PROPOSED STORM SEWER
- EXISTING GAS MAIN
- PROPOSED GAS SERVICE
- PROPOSED UNDERGROUND TELEPHONE AND ELECTRIC UTILITIES
- EXISTING OVERHEAD UTILITY LINES
- PROPOSED TRANSFORMER
- EXISTING FIRE HYDRANT ASSEMBLY
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED FIRE HYDRANT ASSEMBLY BY OTHERS
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- PROPOSED WATER VALVE BY OTHERS
- EXISTING MANHOLE OR CATCH BASIN
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY MANHOLE BY OTHERS
- PROPOSED SANTIARY CLEANOUT
- PROPOSED GREASE TRAP (SEE ARCH PLANS FOR DETAIL)
- EXISTING SANITARY MANHOLE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- LIGHT POLE AND FIXTURE (SEE ARCH. PLANS FOR ELECTRICAL ROUTING)

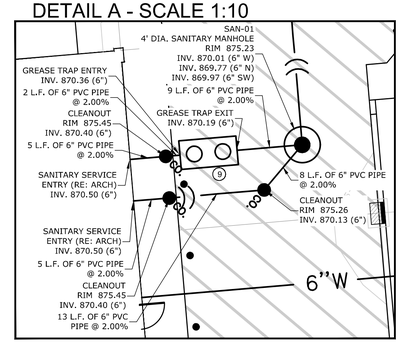
UTILITY KEY LEGEND

1. WATER METER AND 6" DUCTILE IRON PIPE WATER SERVICE. CONTRACTOR SHALL PURCHASE THE WATER METER THROUGH THE CITY OF CRYSTAL LAKE, IL
2. GAS SERVICE ENTRY AND METER (RE: ARCH)
3. PROPOSED 1.5" SCH. 40 STEEL PIPE GAS SERVICE (COORDINATE INSTALLATION WITH NICOR GAS). 680 MBH - 680,000 MBH INPUT - 618 CU FT/HR HOUSE PRESSURE 7"W.C.
4. PROPOSED ELECTRICAL SERVICE ENTRANCE (ELECTRIC 3 PHASE, 800 AMP 120/208 VOLTS, 4 WIRE) (CONTRACTOR TO COORDINATE CONNECTION WITH COMED)
5. PROPOSED PHONE SERVICE (20 PAIR, 8 LINES)
6. STORM SEWER, REFER TO SHEET C-202 DRAINAGE PLAN
7. CONNECT TO EXISTING WATER MAIN. COORDINATE CONNECTION WITH THE CITY PUBLIC WORKS DEPARTMENT. FIELD VERIFY EXISTING WATER MAIN LOCATION & SIZE.
8. TRANSFORMER PAD (CONTRACTOR TO COORDINATE WITH COMED). SEE ARCH. PLANS FOR PAD DETAIL.
9. 1000 GAL. GREASE TRAP INTERCEPTOR. RE: ARCH. PLANS SHEET P-501 FOR DETAIL.
10. CONTRACTOR SHALL INSTALL A 4" SCH. 40 PVC CONDUIT FOR THE PROPOSED ELECTRICAL SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF THE PROPOSED SERVICE WITH COMED.

UTILITY NOTES

1. THE CONTRACTOR SHALL PROVIDE PROPER SAFETY DEVICES IN ACCORDANCE WITH OSHA STANDARDS FOR ALL STAFF WORKING IN OPEN TRENCH CONDITIONS. TRENCH BOXES AND OTHER SHORING SHALL BE REQUIRED FOR ALL TRENCH WORK, IN THE RIGHT-OF-WAY, AND ON PRIVATE PROPERTY, WHILE THE SITE IS UNDER CONSTRUCTION.
2. ALL PRIVATE WATER MAINS CONSTRUCTED ON THE PROPERTY ARE TO BE CONSTRUCTED WITH MATERIALS THAT FOLLOW THE STATE AND LOCAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL REQUIREMENTS FOR PIPE MATERIAL AND OTHER WATER MAIN APPURTENANCES PRIOR TO THE START OF CONSTRUCTION.
3. EXISTING UTILITY INFORMATION IS SHOWN FROM SURVEY WORK BY OTHERS, FIELD OBSERVATIONS, AVAILABLE PUBLIC RECORDS AND AS-BUILT DRAWINGS. EXACT LOCATIONS AND ELEVATIONS OF UTILITIES SHALL BE DETERMINED PRIOR TO INSTALLING NEW WORK. EXCAVATE TEST PITS AS REQUIRED.
4. CONTACT ALL PUBLIC AND PRIVATE UTILITY COMPANIES 48 HOURS PRIOR TO ANY EXCAVATION. COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
5. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY FLOOR, CURB OR PAVEMENT ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL CONTROL PRIOR TO PROCEEDING WITH WORK.
6. REFER TO BUILDING PLANS FOR EXACT LOCATIONS OF NEW UTILITY ENTRIES.
7. CONTRACTOR SHALL SET ALL CLEANOUT, CASTINGS, AND VALVE BOXES TO FINISHED GRADE.

DETAIL A - SCALE 1:10



ARC DESIGN RESOURCES INC.
5291 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
www.arcdesign.com
Design Firm License No. 184-001334

CASEY'S GENERAL STORE - CRYSTAL LAKE, IL — 20067

PROJECT LOCATION & OWNER:
4220 NORTHWEST HWY
CRYSTAL LAKE, IL 60014

CASEY'S RETAIL COMPANY
ONE CONVENIENCE BLVD
ANKENY, IA 50021
ERIK NIXDEL
(515) 381-5722

ISSUED FOR:		FOR CONSTRUCTION:
1. CLIENT REVIEW	10/27/2020	----
2. AGENCY REVIEW	11/13/2020	REVISIONS:
3. AGENCY REVIEW	05/21/2021	1. ----
4. ----	----	2. ----
5. ----	----	3. ----
6. ----	----	4. ----
7. ----	----	5. ----
8. ----	----	6. ----

DRAWN BY: KG | CHECKED BY: LND | PM: LND

UTILITY PLAN

C-301

Casey's SIGN PACKET

JACOB CLARK | SIGNAGE PROJECT BUYER
3305 SE Delaware Ave | Ankeny, IA 50021
P: 515-963-3831 | E: jacob.clark@caseys.com

Crystal Lake, IL

O6 Flat

- 6' Building Signage
- 29" Canopy Signage
- 4 Product Custom Monument

04-28-21

Building & Wall Signs (O6 Flat Roof)

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
1	"Casey's"	Surface	Building Front	Internal	6'-0"	15' 4-1/4"	12' 2"	18' 2"	37.85
2	DO NOT INSTALL								
3	Snap Frame	Advertising	Building Front	N/A	3' 0"	8' 0"	3' 4"	6' 8-1/2"	24
4	Snap Frame	Advertising	Building Front	N/A	3' 8"	2' 4"	2' 10"	6' 10-1/2"	8.56
								Total	70.41

Canopy

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
5	"Casey's"	Surface	Canopy Front	Internal	2' 5"	6' 2-3/16"	17' 3"	19' 8"	6.14
5	"Casey's"	Surface	Canopy Side	Internal	2' 5"	6' 2-3/16"	17' 3"	19' 8"	6.14
5	"Casey's"	Surface	Canopy Side	Internal	2' 5"	6' 2-3/16"	17' 3"	19' 8"	6.14
	Canopy Snap Frame Signs Not Allowed							Total	18.42

Monument Sign (Custom)

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
6	Weathervane	Freestanding	Street	N/A	1' 3-9/16"	1' 2-1/8"	7' 8-7/16"	9' 0"	0.69
	House Logo	Freestanding	Street	Internal	3' 0"	5' 6-7/16"	4' 8-7/16"	7' 8-7/16"	11.29
	Product Labels	Freestanding	Street	Internal	1' 11"	10' 2"	3' 0"	4' 1"	11.02
	Digital Price Displays	Freestanding	Street	Internal	1' 6"	10' 2"	1' 6"	3' 0"	15.25
	Max 9' OAH, Max 80 Ft², Digital Price Sign Colors Amber, White, or Green Only & Max 20 Ft², Must Mimic Existing Crystal Lake Casey's Sign							Total	38.25

SIGNS 1, 2, 3

1



3

4

SIGN 5

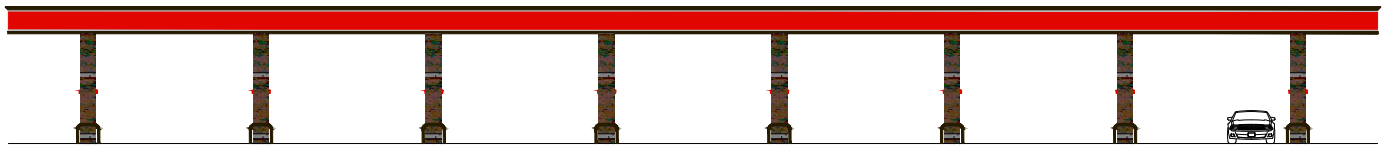


CANOPY COLUMNS TO BE BRICK,
MATCH STORE W/ GRAY SOLDIER COURSE





NO SNAP FRAMES





CRYSTAL LAKE, IL

FUEL CANOPY

DRAWN BY: J. CLARK

DATE: 12-11-20

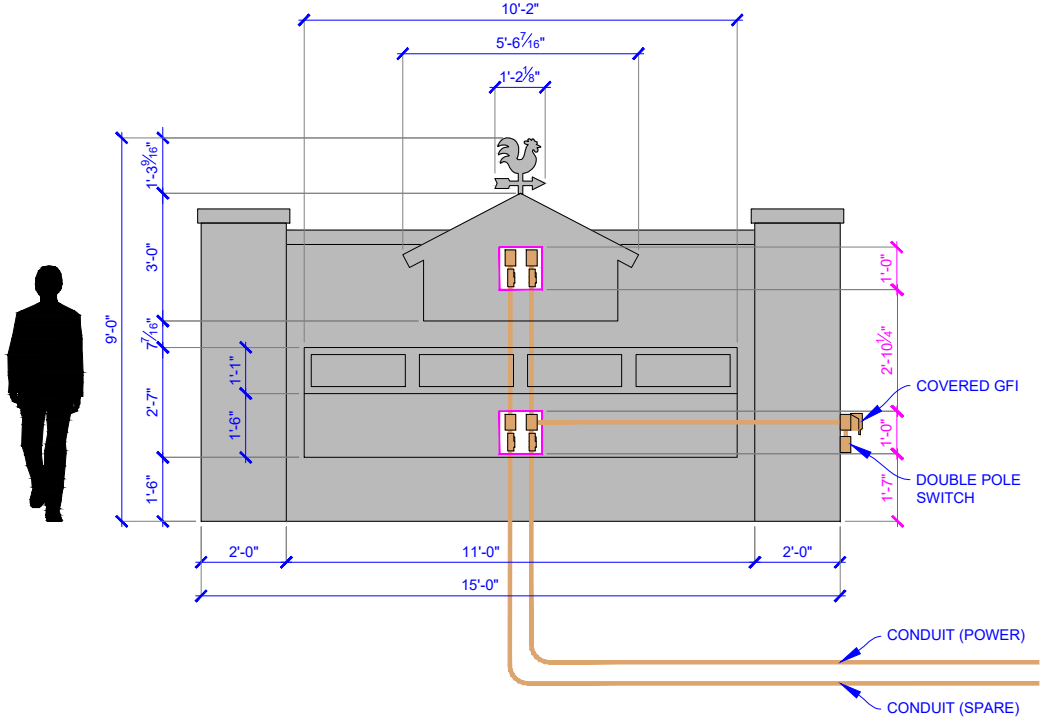
Monument Sign (Custom)

SIGN 6

Sign #	Sign	Type	Location	Illumination	Dimensions				
					Height	Width	Bottom	Top	Area Ft²
6	Weathervane	Freestanding	Street	N/A	1' 3-9/16"	1' 2-1/8"	7' 8-7/16"	9' 0"	0.69
	House Logo	Freestanding	Street	Internal	3' 0"	5' 6-7/16"	4' 8-7/16"	7' 8-7/16"	11.29
	Product Labels	Freestanding	Street	Internal	1' 11"	10' 2"	3' 0"	4' 1"	11.02
	Digital Price Displays	Freestanding	Street	Internal	1' 6"	10' 2"	1' 6"	3' 0"	15.25
Max 9' OAH, Max 80 Ft², Digital Price Sign Colors Amber, White, or Green Only & Max 20 Ft², Must Mimic Existing Crystal Lake Casey's Sign								**Total**	**38.25**

GRAY BRICK AND STONE CAP
TO MATCH BUILDING



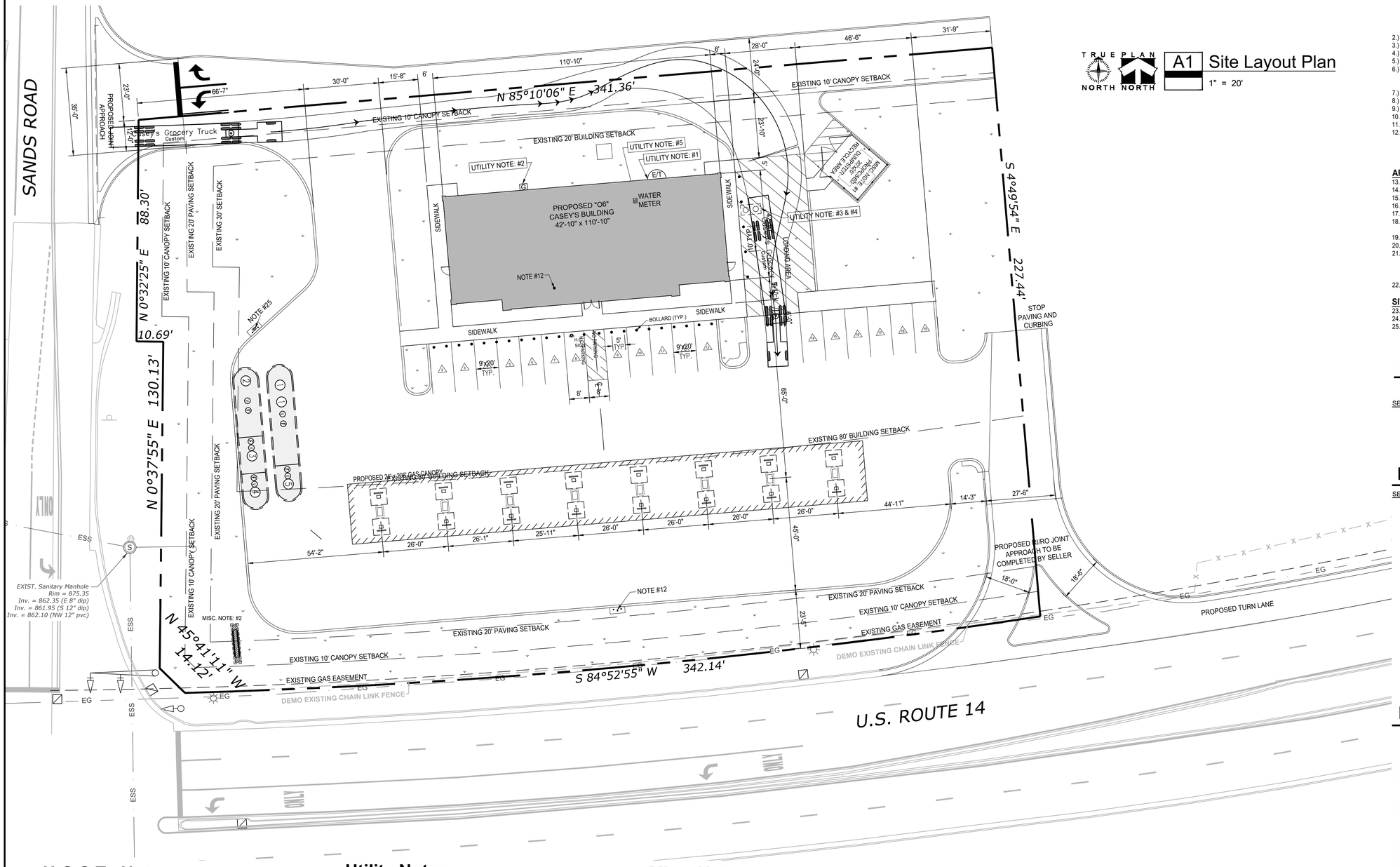


CRYSTAL LAKE, IL #2

CUSTOM MONUMENT

DRAWN BY: J. CLARK

DATE: 12-11-20



TRUE NORTH PLAN NORTH

A1 Site Layout Plan

1" = 20'

General Construction Notes

PETROLEUM:

1.) 2 - 30,000 GALLON DOUBLE WALL FIBERGLASS TANKS.
TANK 1 - 22,000 GALLON (87E)
TANK 2 - 14,000 GALLON (BIODIESEL BLEND)
TANK 3 - 8,000 GALLON (91E)
TANK 4 - 8,000 GALLON (93E)
TANK 5 - 8,000 GALLON (E85)
2.) TANK SETTING DETAILS PAGE QF-301
3.) FILL PIPE AND MANHOLE DETAIL PAGE QF-301
4.) GILBARCO WIRING PAGE QF-601
5.) GAS ISLAND SIZE - 3' x 5' W/DUAL GUARD PIPE
6.) 8 - GAS GILBARCO 700 S DISPENSERS (BLENDED)
2 = NG1 4 NOZZLES & 8 METERS EACH
6 = NF8 6 NOZZLES & 8 METERS EACH
7.) ISLAND DETAILS PAGE AL-501
8.) ISLAND CONDUIT DETAIL PAGE E-602
9.) DO NOT PLACE PRODUCT PIPING UNDER ISLAND
10.) 18" MIN. FROM TANK PIPING TO FINISH SURFACE
11.) RUN VENT LINES UP SEPARATE CANOPY COLUMN, VERIFY
12.) ALL FUEL DISPENSERS FALL WITHIN A 100 FOOT RADIUS OF THE EMERGENCY SHUT-OFF SWITCH LOCATED INSIDE AT THE SALES COUNTER FOR THE CONVENIENCE STAFF. A SECONDARY SHUTOFF SHALL BE INSTALLED ON A POST AT THE CURB IF ALL FUEL DISPENSERS **DO NOT** FALL WITHIN A 100 RADIUS.

APPROACHES/CONCRETE:

13.) DRIVEWAY JOINTS TO BE PACKED & CAULKED
14.) CONCRETE DRIVE TROWELED WITH LIGHT BROOM FINISH
15.) CONTROL JOINTS - MIN. 100 sq.ft. - MAX. 125 sq.ft. - 25% DEEP
16.) CONSTRUCTION JOINTS - PINNED 4' O.C. 12" EACH WAY WITH 1/2" REBAR #4
17.) APPROACHES TO BE 7" NON-REINFORCED OR AS PER STATE/CITY SPEC.
18.) SLOPE MAX. 2% FOR BUILDING SIDEWALK, H.C PARKING 1:50 ALL DIRECTIONS
ALL ACCESS ISLE STRIPING AT 45 DEGREE ANGLE BEING MAX. 4' SEPARATION
19.) 2% MAX. CROSS-SLOPE IN APPROACH/SIDEWALK AREA
20.) 10" ROLL-OVER CURB TYP. - SEE STANDARD CIVIL DETAILS
21.) CANOPY FOOTING: SIZE 6'-3" LENGTH x 6'-3" WIDTH x 3'-0" DEPTH.
CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF F'C-3000 p.s.i.
CONCRETE REINFORCING: ASTM A-615 GRADE 60.
REBAR CAGE: (8) #6 HORIZONTAL TIES LENGTH WISE TOP AND BOTTOM 12" MAXIMUM SPACING.
22.) SIGN BASE AND DETAILS PAGE AL-601

SITE ITEMS:

23.) VERIFY ALL UTILITY LOCATIONS AND DIMENSIONS.
24.) IRRIGATION REQUIRED WITH RAIN SENSOR MOUNTED ON BACK RAILING OF ROOF
25.) AIR COMPRESSOR BOX, MOUNTED TO STEEL POLE, INSTALLED ON CONCRETE PAD 16" FROM BACK OF CURB. 110 VOLT-60HZ-5.5 AMP. 8 GAUGE MINIMUM RECOMMENDED.

Keyed Construction Notes

NOTICE: ALL WORK IN/ON THE R.O.W. AREA IS SUBJECT TO THE CITY OF CRYSTAL LAKE & IL D.O.T. APPROVAL AND SPECIFICATIONS.

SEE CIVIL

Legal Description:

SEE CIVIL

Legend

- MARKED PARKING SPACES (PAINT LINES AS INDICATED)
- TYP. CONCRETE PAVING OR SIDEWALKS (51,608 SQ. FT.)
- AREA TO BE SOD
- AREA LIGHTS (0 SHOWN) REFER TO LIGHTING PLAN RL-?-S1 DONE BY RED LEONARD

NOTE:
SYMBOL INDICATES EXISTING UTILITY TO EXISTING STRUCTURE TO BE REMOVED OR DISCONNECTED BY APPROPRIATE CONTRACTOR. VERIFY WITH UTILITY COMPANY REPRESENTATIVE.

SPECIAL REQUIREMENTS:
ROOFTOP SCREENING REQ.
PARKING LOT LANDSCAPING ISLANDS REQ.
BRICK DUMPSTER ENCLOSURE REQ.
TRAFFIC IMPACT STUDY REQ.
KNOX BOX REQ.
SPRINKLER SYSTEM REQ.

U.G.S.T. Notes

(F) FILL W/SPILL CONTAINMENT & OVERSPILL PROTECTION (TYP.)

(1)(2)(3)(4)(5) TURBINE ENCLOSURE TYP. CONTAINS; SUB-PUMB W/LINE LEAK DETECTION, TANK PROBE FOR FUEL MONITORING, INTERSTITIAL SENSOR AND TANK SUMP SENSOR

(V) VENT W/SPILL CONTAINMENT & EXTRACTOR

SUMP SENSOR @ EACH DISPENSER.

General Notes

1. **RELATED SHEETS:** FOR ADDITIONAL INFORMATION NOT DIRECTLY REFERENCED, SEE CIVIL PLANS DONE BY ARC DESIGN ENGINEERING:

Utility Notes

UTILITY NOTE #1: ELECTRICAL: ELECTRICAL SERVICE ENTRANCE.
ELECTRIC 3 PHASE, 800 AMP., 120/208 VOLTS, 4 WIRE.
TELEPHONE 20 PAIR, 8 LINES.

UTILITY NOTE #2: GAS: 1.5" SCHEDULE 40 IRON PIPE GAS SERVICE CONNECTION, CONNECTION LOAD IS 680 MBH, TOTAL CONNECTED LOAD IS 680,000 BTU 618 CU/FT, HR. HOUSE PRESSURE IS 7" W.C.

UTILITY NOTE #3: SANITARY SEWER: 6" SCHEDULE 40 PVC SANITARY SEWER CONNECTION.

UTILITY NOTE #4: SANITARY SEWER: 1,000 GALLON BELOW GRADE GREASE INTERCEPTOR WITH 2 MANHOLES.

UTILITY NOTE #5: WATER: 2" CTS, HDPE, SDR9 C5-200 PSI WATER SERVICE CONNECTION.

Misc. Notes

Misc. #1:
DUMPSTER ENCLOSURE 6' HEIGHT BRICK
2-9' METAL GATES AND 4' METAL SERVICE GATE

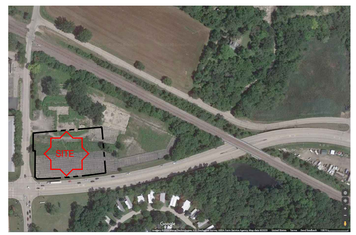
Misc. #2
4 PRODUCT CUSTOM MONUMENT SIGN - REFER TO SIGN PACKET

Zoning Information

ZONED: GENERAL BUSINESS (B-2)

SETBACKS:
FRONT (S): 80' BUILDING SETBACK
SIDE (W): 30' BUILDING SETBACK
REAR (N): 20' BUILDING SETBACK
ALL SIDES: 10' CANOPY SETBACK

PARKING:
1 SPACE / 4 PUMPS + 1 SPACE / 300 SQ FT. GROSS FLOOR AREA REQ.
(8 / 4) + (4,517 / 300) = 17 SPACES REQUIRED PLUS 1 ADA SPACE
19 SPACES PROVIDED INCLUDING 1 ADA SPACE.



VICINITY MAP

NTS

CASEY'S CONSTRUCTION DIVISION
One Convenience Blvd., P.O. Box 3001, Ankeny, IA 50021 515-965-6100

PROJECT: Crystal Lake, IL NEC U.S. 14 & SANDS RD. O4 STYLE STORE -FLAT ROOF	PUBLISHED: 08/21/20 REVISED ON: 09/25/20 09/29/20 10/09/20 10/27/20 12/15/20 04/16/21	DRAWING INFORMATION: SITE PLAN
DRAWING INFORMATION: CONSTRUCTION DIVISION		AL-101
DRAWN BY: Derek Wheatley	CHECKED BY:	

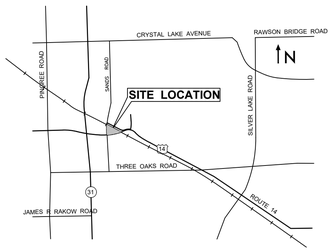
P.I.N. No. 19-03-452-001
19-10-200-041

MAIL PLAT TO:

HAEGER ENGINEERING LLC
CONSULTING ENGINEERS AND LAND SURVEYORS
100 EAST STATE PARKWAY
SCHAUMBURG, IL 60173

FINAL PLAT
OF
SANDS LANDING

BEING A SUBDIVISION IN THE SOUTHEAST QUART OF SECTION 3 AND THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN McHENRY COUNTY, ILLINOIS.



LOCATION MAP
Not To Scale

40 20 0 40
SCALE: 1" = 40'

LEGEND

- ■ Set Concrete Subdivision Monument
- ○ Set Iron Pipe
- Fnd Iron Pipe ○ Found Existing Monument as Noted
- (N 0°29'01" E) (169.06') Deed Bearing & Distance

T43N-R8E
3
10

Revised per City Review: 12/23/20, 5/21/21
Originally Prepared: 11/13/20 Project No. 18-095

HAEGER ENGINEERING
consulting engineers • land surveyors
100 East State Parkway, Schaumburg, IL 60173
Tel: 847.394.6600 Fax: 847.394.6608
Illinois Professional Design Firm License No. 184-003152
www.haegerengineering.com

© 2021 Haeger Engineering, LLC

Plot Date: May 20, 2021 - 7:39am Plotted By: mike-o Layout: PS 1
File Name: P:\2018\18095\Drawings\Final Survey\18095-Plat of Subdivision.dwg

P.I.N. No. 19-03-452-001
19-10-200-041

FINAL PLAT
OF
SANDS LANDING

BEING A SUBDIVISION IN THE SOUTHEAST QUART OF SECTION 3 AND THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN McHENRY COUNTY, ILLINOIS.

MAIL PLAT TO:

HAEGER ENGINEERING LLC
CONSULTING ENGINEERS AND LAND SURVEYORS
100 EAST STATE PARKWAY
SCHAUMBURG, IL 60173

PLAT PREPARED FOR:

JEMCO PROPERTIES LLC
1320 S. VIRGINIA ROAD
CRYSTAL LAKE, IL 60014

SEND NEW TAX BILL TO:

JEMCO PROPERTIES LLC
1320 S. VIRGINIA ROAD
CRYSTAL LAKE, IL 60014

THIS PLAT SUBMITTED FOR RECORDING BY:

_____
_____
_____

OWNER'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

THIS IS TO CERTIFY THAT THE UNDERSIGNED IS THE OWNER OF THE PROPERTY DESCRIBED HEREON AND THAT IT HAS CAUSED SAID PROPERTY TO BE SURVEYED AND SUBDIVIDED AS SHOWN HEREON FOR THE USES AND PURPOSES THEREIN SET FORTH AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE HEREON SHOWN.

IT FURTHER CERTIFIES TO THE BEST OF ITS KNOWLEDGE, THAT THE LAND INCLUDED HEREIN FALLS WITHIN CRYSTAL LAKE ELEMENTARY DISTRICT 47 AND COMMUNITY HIGH SCHOOL DISTRICT 155.

SIGNED AT _____, ILLINOIS, THIS _____ DAY OF _____, A.D. 20__.

BY: _____

ATTEST: _____

NOTARY CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

I, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE SAID COUNTY IN THE STATE AFORESAID DOES HEREBY CERTIFY THAT _____ PERSONALLY KNOWN TO ME OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGE THAT HE SIGNED AND DELIVERED SAID INSTRUMENT AS HIS OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID CORPORATION FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS _____DAY OF_____, 20__.

_____
PRINT NAME

_____
NOTARY PUBLIC

COMMISSION EXPIRES:_____ (SEAL)

COUNTY CLERK CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

I, _____, COUNTY CLERK OF McHENRY COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND IN THE ANNEXED PLAT. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT.

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK, McHENRY COUNT, ILLINOIS.

DATED THIS _____ DAY OF _____, A.D. 20_____

BY: _____
COUNTY CLERK

PLAN COMMISSION CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

REVIEWED BY THE PLAN COMMISSION OF THE CITY OF CRYSTAL LAKE, McHENRY COUNTY, ILLINOIS.

THIS _____ DAY OF_____, A.D. 20 _____

_____
CHAIRPERSON

_____
ATTEST: SECRETARY

CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

THIS SUBDIVISION IS APPROVED BY THE CITY COUNCIL OF THE CITY OF CRYSTAL LAKE, ILLINOIS, AT A MEETING HELD

THIS _____ DAY OF_____, A.D. 20 _____

_____
MAYOR

_____
CITY CLERK

ILLINOIS DEPARTMENT OF TRANSPORTATION

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO ROADWAY ACCESS PURSUANT TO PARAGRAPH 2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS," AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENT'S "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL, BE REQUIRED BY THE DEPARTMENT.

BY: _____
ANTHONY J. QUIGLEY, P.E.
REGION ONE ENGINEER

DATE: _____

MUNICIPAL UTILITY EASEMENT PROVISIONS

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH DOMESTIC WATER, SANITARY SEWER AND STORMWATER DRAINAGE IS HEREBY RESERVED FOR AND GRANTED TO THE CITY OF CRYSTAL LAKE, ILLINOIS, THEIR SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE, MAINTAIN, RELOCATE, RENEW AND REMOVE FACILITIES USED IN CONNECTION WITH SEWER AND WATER MAINS, IN, UNDER, ACROSS, ALONG, AND UPON THE SURFACE OF THE PROPERTY SHOWN ON THE PLAT WITHIN THE AREAS MARKED AS "MUNICIPAL UTILITY EASEMENT" (MUE) AND THOSE PARTS DESIGNATED ON THE PLAT AS DEDICATED FOR PUBLIC STREET, TOGETHER WITH THE RIGHT TO CUT, TRIM, OR REMOVE TREES, BUSHES, AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE PROPERTY FOR ALL SUCH PURPOSES.

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE MUNICIPAL UTILITY EASEMENT (MUE) SHALL CONCLUSIVELY BE DEEMED TO HAVE COVENANTED AND AGREED, JOINTLY AND SEVERALLY, TO:

I. THE SURFACE OF THE MUE MAY BE GRASS, SOD, OR PAVEMENT TO ALLOW FOR DRIVEWAYS OR PARKING. MINOR LANDSCAPING AS SHOWN ON THE APPROVED LANDSCAPE PLAN MAY BE PERMITTED.

II. CARE FOR AND MAINTAIN THE SURFACE OF THAT PORTION OF THE MUE WHICH IS LOCATED ON SUCH PARTY'S PROPERTY SO THAT IT IS IN GOOD CONDITION FOR ITS INTENDED PURPOSE AS A MUE WHICH MAINTENANCE MAY INCLUDE, BUT SHALL NOT BE LIMITED TO, THE REGULAR SEEDING, WATERING AND MOWING OF ALL LAWNS OR PAVEMENT RESTORATION.

NO TITLEHOLDER OF ANY PART OR PORTION OF THE MUE (OR ANY PARTY ACTING ON BEHALF OF THE TITLEHOLDER) SHALL:

III. INSTALL, CONSTRUCT, ERECT, PLACE OR PLANT ANY BUILDING, STRUCTURES, IMPROVEMENTS OR VEGETATION (OTHER THAN GRASS OR CITY APPROVED PLANTINGS) UPON THE MUE, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PATIOS, SHEDS, POSTS, TREES, PLANTS OR SHRUBBERY, EXCEPT AS SHOWN ON THE APPROVED LANDSCAPE PLAN, OR

IV. ALTER, MODIFY OR CHANGE IN ANY WAY THE TOPOGRAPHY OR ELEVATIONS OF THE MUE.

THE CITY SHALL MAINTAIN THE SEWER AND WATER MAINS LOCATED WITHIN THE MUE UP TO AND INCLUDING THE SHUT OFF VALVES, THE MANHOLES, FIRE HYDRANTS AND THE SANITARY SEWER MAIN, BUT NOT INCLUDING THE SERVICE CONNECTIONS AND LATERALS (REFERRED TO AS THE "SYSTEM"). THE CITY'S DUTIES WILL INCLUDE ALL NECESSARY WORK UP TO AND INCLUDING THE BACKFILL STAGE IN THE EVENT OF REPAIR AND REPLACEMENT WORK ON THE SYSTEM.

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE MUE WILL BE RESPONSIBLE FOR PROMPT, QUALITY RESTORATION OF ALL SURFACE AND ABOVE-GRADE IMPROVEMENTS MEETING OR EXCEEDING THE ORIGINAL CONSTRUCTION REQUIREMENTS OF ALL AREAS IN THE MUE THAT WERE DAMAGED BY THE CITY IN THE PROCESS OF REPAIRING, REPLACING OR CONSTRUCTING THE SYSTEM. THE CITY AGREES TO EXERCISE REASONABLE CARE IN REPAIRS MADE SO AS NOT TO CAUSE UNNECESSARY DAMAGES.

THE MUE IS EXCLUSIVE OF ANY OTHER BLANKET EASEMENT ON THE PROPERTY.

STORMWATER MANAGEMENT EASEMENT (SME)

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE STORMWATER MANAGEMENT EASEMENT (SME) SHALL CONCLUSIVELY BE DEEMED TO HAVE COVENANTED AND AGREED, JOINTLY AND SEVERALLY, TO:

I. CARE FOR AND MAINTAIN THE SURFACE OF THAT PORTION OF THE SME WHICH IS LOCATED ON SUCH PARTY'S PROPERTY AS A WELL LANDSCAPED, HIGH-QUALITY PARCEL (WHICH MAINTENANCE SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE REGULAR SEEDING, WATERING, AND MOWING OF ALL LAWNS), AND

II. KEEP ALL SURFACE OPENINGS OF THE DRAINAGE PIPES UNDERLYING THE SME FREE OF ALL GRASS CLIPPINGS, LEAVES, OR OTHER RELATED OR FOREIGN MATERIALS.

NO INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE SME SHALL:

I. INSTALL, CONSTRUCT, ERECT, PLACE OR PLANT ANY BUILDING, STRUCTURES, IMPROVEMENTS OR VEGETATION (OTHER THAN GRASS OR CITY APPROVED PLANTINGS) UPON THE SME INCLUDING, BUT NOT LIMITED TO, FENCES, WALLS, PATIOS, SHEDS, POSTS, TREES, PLANTS OR SHRUBBERY, EXCEPT AS SHOWN ON THE APPROVED LANDSCAPE PLAN, OR

II. ALTER, MODIFY, OR CHANGE IN ANY WAY THE TOPOGRAPHY OR ELEVATIONS OF THE SME, OR

III. OBSTRUCT, ALTER, OR MODIFY THE ESTABLISHED DRAINAGE PATTERN FROM OR OVER THE SME.

MAINTENANCE OF THE STORM SEWERS AND STORM STRUCTURES WITHIN THE SME SHALL BE THE SOLE RESPONSIBILITY OF EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE PURSUANT TO THE REQUIREMENTS CONTAINED HEREIN.

IF THE CITY DETERMINES THAT THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE IS IN DEFAULT OF SAID MAINTENANCE OBLIGATIONS AND UPON FIVE (5) DAYS NOTICE TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE SERVED BY CERTIFIED MAIL, THE CITY AND ITS SUCCESSORS AND ASSIGNS SHALL BE GRANTED AN EASEMENT OVER THE AREA DESCRIBED ON THIS DEED RESTRICTION FOR THE RIGHT, PRIVILEGE AND AUTHORITY, WITHOUT OBLIGATION, TO PERFORM SAID MAINTENANCE AND REPAIRS. THE CITY MAY ENTER UPON THE EASEMENT FOR THE PURPOSE OF EMERGENCY REPAIRS.

THE CHARGE OF THE EMERGENCY REPAIRS AND/OR MAINTENANCE IS THE RESPONSIBILITY OF THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE. THE CITY MAY, AT ITS SOLE ELECTION, RECORD NOTICE OF LIEN WITH THE RECORDER OF DEEDS FOR MCHENRY COUNTY AS DESCRIBED ABOVE AGAINST THE SUBJECT REAL PROPERTY. SAID LIEN SHALL INCLUDE THE APPLICABLE EXPENSE TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE PLUS ATTORNEY'S FEES AND COURT COSTS. UPON PAYMENT OF SAID LIEN, THE CITY SHALL ISSUE THE APPROPRIATE RELEASE OF LIEN TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE. IT SHALL NOT BE THE OBLIGATION OF THE CITY TO RECORD THE RELEASE OF THE LIEN BUT SHALL BE THE OBLIGATION OF THE PARTY PROCURING THE RELEASE.

INGRESS-EGRESS EASEMENT PROVISIONS

A PERPETUAL NONEXCLUSIVE EASEMENT FOR "ACCESS", BEING ACCESS OF VEHICLES AND PEDESTRIAN TRAFFIC, IS HEREBY RESERVED FOR AND GRANTED TO THE OWNERS OF ALL LOTS WITHIN THE SUBDIVISION AND TO THEIR RESPECTIVE SUCCESSORS, ASSIGNS, TENANTS, LICENSEES, INVITEES, AND EMPLOYEES ON, OVER, THROUGH, ALONG AND ACROSS THE AREA OF HEREON DESIGNATED AS "**INGRESS-EGRESS EASEMENT**" THE GRANTORS HEREBY COVENANT AND AGREE THAT NOTHING SHALL BE ERECTED OR MAINTAINED OR ALLOWED TO BE ERECTED OR MAINTAINED UPON SAID EASEMENT FOR ACCESS WHICH WOULD IN ANY WAY HINDER OR PREVENT THE FREE FLOW OF TRAFFIC. FOR THE USE AND BENEFIT OF THE OWNERS, OCCUPANTS AND INVITEES OF THE LAND SHOWN HEREON.

SURFACE WATER DRAINAGE CERTIFICATE

STATE OF ILLINOIS)
) SS:
COUNTY OF COOK)

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF. OR THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, ADEQUATE PROVISION HAS BEEN MADE FOR COLLECTION, DIVERSION, AND DISCHARGE OF SUCH WATERS INTO PUBLIC AREAS OR DRAINS WHICH THE SUBDIVIDER HAS THE RIGHT TO USE AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF SUBSTANTIVE DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

BY: _____ DATED _____
OWNER

BY: _____ DATED _____
ILLINOIS PROFESSIONAL ENGINEER
NO. 062-053214

MICHAEL L. ANDERSON
062-053214
LICENSED PROFESSIONAL ENGINEER
OF
STATE OF ILLINOIS

EXPIRES 11-30-21

PROFESSIONAL AUTHORIZATION

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

I, JEFFREY W. GLUNT, A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, LICENSE NUMBER 35-3695, DO HEREBY AUTHORIZE THE VILLAGE OF LAKE ZURICH, LAKE COUNTY, ILLINOIS, ITS STAFF OR AUTHORIZED AGENT, TO PLACE THIS DOCUMENT OF RECORD IN THE COUNTY RECORDERS OFFICE IN MY NAME AND IN COMPLIANCE WITH THE ILLINOIS STATUTES CHAPTER 109 PARAGRAPH 2, AS AMENDED.

SCHAUMBURG, ILLINOIS NOVEMBER 10, 2020

_____

JEFFREY W. GLUNT
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3695
MY LICENSE EXPIRES NOVEMBER 30, 2020 AND IS RENEWABLE

SURVEYORS CERTIFICATE

STATE OF ILLINOIS)
) SS:
COUNTY OF COOK)

I, JEFFREY W. GLUNT, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT I HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY:

PART OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SECTION 3 AND PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 10, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF THE SAID NORTH HALF OF THE NORTHEAST QUARTER OF SAID SECTION 10 AND RUNNING THENCE WEST ALONG THE SOUTH LINE THEREOF, 24 CHAINS AND 36 LINKS TO THE CENTER OF THE HIGHWAY KNOWN AS THE ALGONQUIN AND MCHENRY ROAD; THENCE NORTH 1-1 /2 DEGREES WEST ALONG THE CENTER OF SAID HIGHWAY, 21 CHAINS; THENCE NORTH 11 DEGREES EAST ALONG THE CENTER OF SAID HIGHWAY, 3 CHAINS AND 86 LINKS, MORE OR LESS, TO THE SOUTH LINE OF THE RIGHT OF WAY OF THE CHICAGO AND NORTHWESTERN RAILROAD COMPANY; THEN SOUTH 62-1 /2 DEGREES EAST ALONG THE SAID SOUTH LINE OF SAID RIGHT OF WAY TO THE EAST LINE OF THE SAID NORTH HALF OF THE NORTHEAST QUARTER OF SAID SECTION 1 O; THENCE SOUTH ALONG THE SAID EAST LINE TO THE PLACE OF BEGINNING (EXCEPT FROM SAID TRACT THAT PART THEREOF LYING SOUTH OF THE NORTH LINE OF STATE ROUTE NO. 14), IN TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ALSO EXCEPT THAT PART OF THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER; THENCE NORTH 89 DEGREES 33 MINUTES 44 SECONDS EAST, 1040.73 FEET (BEARINGS ASSUMED FOR DESCRIPTION PURPOSES ONLY) ALONG THE NORTH LINE OF SAID NORTHEAST QUARTER TO THE CENTERLINE OF SAND ROAD; THENCE SOUTH 00 DEGREES 29 MINUTES 1 SECOND WEST, 169 .06 FEET ALONG SAID CENTERLINE TO THE POINT OF BEGINNING; THENCE SOUTH 89 DEGREES 30 MINUTES 59 SECONDS EAST, 43.00 FEET; THENCE SOUTH 00 DEGREES 29 MINUTES 1 SECOND WEST, 130 FEET; THENCE SOUTH 45 DEGREES 33 MINUTES 00 SECONDS EAST, 13.89 FEET TO THE N011HERLY RIGHT OF WAY LINE OF U.S. ROUTE 14 AS PER CIRCUIT COURT CASE NUMBER 93ED10, FILED APRIL 11, 1994; THENCE WESTERLY 53.02 FEET ALONG SAID NORTHERLY RIGHT OF WAY, ON A NON-TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 2814.78 FEET, THE CHORD OF SAID CURVE BEARS SOUTH 88 DEGREES 51 MINUTES 29 SECONDS WEST, 53.02 FEET TO THE CENTER LINE OF SANDS ROAD; THENCE NORTH O DEGREES 29 MINUTES 1 SECOND EAST, 141.15 FEET ALONG THE CENTERLINE OF SANDS ROAD TO THE POINT OF BEGINNING, ALL IN MCHENRY COUNTY, ILLINOIS.

THE LANDS SHOWN ON THE PLAT AND DESCRIBED IN THE ABOVE CAPTION, AND THAT THE SAID PLAT, DRAWN TO A SCALE OF 40 FEET PER 1 INCH ON SHEET ONE IS A TRUE AND CORRECT REPRESENTATION OF THE SAID SURVEY AND SUBDIVISION. DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF AND ARE CORRECTED TO A TEMPERATURE OF 68 DEGREES FAHRENHEIT.

I FURTHER CERTIFY THAT UPON COMPLETION OF CONSTRUCTION BUT NOT LONGER THAN ONE YEAR FROM THE RECORDING OF THIS PLAT, CONCRETE MONUMENTS, AS SHOWN, AND IRON PIPES AT ALL LOT CORNERS AND POINTS OF CHANGE IN ALIGNMENT WILL BE SET, AS REQUIRED BY THE PLAT ACT (765 ILCS 205/0.01 ET SEQ.). THIS IS TO FURTHER CERTIFY THAT THE LAND INCLUDED IN THE ANNEXED PLAT IS WITHIN THE CORPORATE LIMITS OF THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS, WHICH HAS AN OFFICIAL COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY THE STATE OF ILLINOIS ACCORDING TO 65 ILCS 5/11-12-6 AS HERETOFORE AND HEREAFTER AMENDED.

I DO HEREBY FURTHER CERTIFY THAT THE ABOVE DESCRIBED PROPERTY IS ENTIRELY WITHIN THE CORPORATE LIMITS OF THE CITY OF CRYSTAL LAKE, ILLINOIS, WHICH HAS ADOPTED A CITY PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE AS AMENDED.

THIS IS TO CERTIFY THAT THE PARCELS INCLUDED IN THIS RECORD OF DEED ARE NOT LOCATED IN THE SPECIAL FLOOD HAZARD AREA IDENTIFIED FOR MCHENRY COUNTY, ILLINOIS, BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ON THE FLOOD INSURANCE RATE MAP, PANEL NO. 17111C0335J DATED NOVEMBER 16, 2006.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS OF PRACTICE APPLICABLE TO BOUNDARY SURVEYS.

SCHAUMBURG, ILLINOIS NOVEMBER 10, 2020

BY: _____

JEFFREY W. GLUNT
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3695
MY LICENSE EXPIRES NOVEMBER 30, 2020 AND IS RENEWABLE

STATE OF ILLINOIS
JEFFREY W. GLUNT
035-3695
SCHAUMBURG, ILLINOIS
PROFESSIONAL LAND SURVEYOR

EXPIRES 11-30-20

Revised per City Review: 12/23/20, 5/21/21
Originally Prepared: 11/13/20 Project No. 18-095

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Plot Date: May 20, 2021 - 7:39am Plotted By: mike-o Layout: PS 2
File Name: P:\2018\18095\Drawings\Final Survey\18095-Plat of Subdivision.dwg

IV. TRAFFIC EVALUATION

The results of the capacity analyses and the queue analysis at the roadway network intersections and site access driveways are discussed below.

A. U.S. Route 14 (Northwest Highway) and Sands Road

The results of the existing capacity analysis indicate that the signalized intersection of U.S. Route 14 (Northwest Highway) and Sands Road currently operates at an acceptable Level-of-Service (LOS) B overall during the weekday morning peak hour and evening peak hour and Level-of-Service (LOS) C overall during the Saturday midday peak hour. Under 2026 Background traffic conditions, vehicle delays increase slightly yet the overall intersection LOS remains unchanged. With the additional traffic resulting from the proposed Casey's development under **Stage I**, the intersection continues to perform the same as under 2026 Background conditions except that the morning peak hour overall intersection LOS drops from A to B. Adding the additional traffic resulting from the development of the north and east parcels under **Stage II**, the intersection experiences additional delays but continues to operate at the same overall LOSs as under **Stage I** development conditions except that the evening peak hour overall intersection LOS drops from B to C. The magnitude of delay increases are fairly minor and do not exceed five seconds per vehicle on average for any specific turning movement.

The results of the queue analysis indicate that the existing storage bay lengths for the turn lanes are adequate for all turning lanes except the northbound left turn movement where the 95th percentile queue exceeds the storage length under 2020 Existing traffic and 2026 Background traffic. For **Stage I** development, in addition to the northbound left turn queues exceeding the available storage, the 95th percentile queue for the southbound left turn movement also exceeds the provided storage bay length for all peak hours and eastbound right turn movement exceeds the provided storage bay length for the Saturday midday peak hour. Under **Stage II** development, queues continue to increase as traffic generated by the site increases. Upon full build-out of the Stage II development plan, the 95th percentile queue for the eastbound left turn movement also is anticipated to exceed the existing storage bay length for the evening peak hour by approximately 80 feet (5 vehicles).

Based on the capacity and queuing analysis results, the following improvements are recommended at the U.S. Route 14/Sands Road intersection:

- The southbound left turn lane on Sands Road should be designed with 275 feet of storage with a 9:1 taper as part of the **Stage I** development to accommodate most queues resulting from the full development of the site. While shorter queues are anticipated to be occurring prior to **Stage II**, adding the full turn lane length as part of **Stage I** improvements will avoid the need to widen Sands Road and modify the site access road intersection at a later date.
- The eastbound left turn lane on U.S. Route 14 should be extended from 220 feet to 300 feet in length as part of the **Stage II** development improvements. As there is a striped center median west of the existing turn lane, this should only require restriping to extend the length of the turn bay.
- Because the northbound left turn storage need is an existing condition, it is not considered attributable to the development and should be considered if the south leg of the intersection needs to be improved at some point in the future.
- Under **Stage II** development, the eastbound right turn queue may exceed the available storage in the right turn lane during the Saturday midday peak hour. In order to reduce the queuing for this movement, it is recommended that an eastbound right turn overlap signal phase be installed as part of the **Stage II** development plan to operate concurrently with the protected northbound left turn phase.

B. U.S. Route 14 at South Site RIRO Access

The results of the capacity analysis for 2026 total traffic conditions **Stage I** indicate that the movements at the unsignalized intersection of U.S. Route 14 (Northwest Highway) at the RIRO access driveway operate at a Level-of-Service (LOS) D or better during all analyzed peak hours. The 95th percentile queue is less than 2 vehicles during all peak hours for the southbound approach.

The results of the capacity analysis for 2026 total traffic conditions **Stage II** indicate that the movements at the unsignalized intersection of U.S. Route 14 (Northwest Highway) at the RIRO access driveway operate at a Level-of-Service (LOS) D or better during all analyzed peak hours with the exception of the evening peak hour which operates at a LOS F with a delay of just over one minute. The 95th percentile queue is less than 6 vehicles during all peak hours for the southbound approach. Therefore, it is concluded that while the southbound right turn movement may experience undesirable delays during the evening peak hour, these delays would not adversely affect site traffic circulation as long as a distance of 150 feet is maintained between the stop bar and the parking lot for the southbound approach.

To facilitate efficient internal site circulation as well as development of the other parcels on the site, it is recommended that the RIRO access be connected internally to the main east-west access roadway through the site as part of the **Stage I** development plan. Additionally, the exclusive westbound right turn lane proposed on the site plan should be constructed prior to opening of **Stage I** of the proposed development in order to satisfy IDOT BDE requirements.

C. Sands Road at West Site Access

The results of the capacity analysis for 2026 total traffic conditions under **Stage I** development indicate that the movements at the unsignalized intersection of Sands Road at the west site access roadway operate at a Level-of-Service (LOS) B or better during all analyzed peak hours. The 95th percentile queue is less than 1 vehicle during all peak hours for the westbound approach. The results of the capacity analysis for 2026 total traffic conditions **Stage II** indicate that the movements at the unsignalized intersection of Sands Road at the west site access roadway will continue to operate at a Level-of-Service (LOS) B or better during all analyzed peak hours. The 95th percentile queue is less than 2 vehicles during all peak hours for the westbound approach. Because the queues are anticipated to be short in length based on the capacity analysis, it is recommended that a 75 foot long right turn lane with a 9:1 taper be provided to allow right turning vehicles to bypass fuel delivery trucks departing the site.

Additionally, an exclusive northbound right turn lane should be constructed prior to opening of **Stage II** of the proposed development as discussed in **Section III-A**, and designed as specified in that section.

V. CONCLUSIONS AND RECOMMENDATIONS

Based on the proposed development plans and the preceding traffic impact study, the following conclusions and recommendations are presented.

- Generally, the roadway system surrounding the proposed site has sufficient reserve capacity in the 2026 design year and can accommodate both **Stage I** and **Stage II** development of the site without excessive negative impacts to the operation of the roadways.

- It is our understanding that the developer has obtained conceptual approval from IDOT forthe proposed RIRO site driveway along U.S. Route 14 (Northwest Highway). The driveway is currently proposed to be located 400 feet east of the Sands Road intersection, which is less than the 500 foot spacing required by IDOT SRA access criteria. The proposed location is acceptable provided that IDOT provides formal approval of the location as part of their access permit review process.

- We offer the following recommendations with respect to the intersection of U.S. Route 14 and Sands Road:

  Stage I Development Improvement Recommendations

  - The southbound left turn lane should be lengthened to provide a total of 275 feet of storage with a 9:1 taper to accommodate the increased volume of left turns anticipated to be generated by full build-out of the proposed development.

  - An exclusive westbound right turn lane is recommended along U.S. Route 14 at the RIRO access driveway based on the right turn lane criteria in the IDOT BDE Manual. The westbound right turn lane should be designed to be 145 feet long with a 175 foot taper to meet IDOT BDE requirements.

  - In order to avoid impacts to internal site circulation due to queues exiting the site, the distance between the stop bar on the RIRO driveway at U.S. Route 14 and any parking lot or driveway within the site should be no shorter than 150 feet.

  - In order to facilitate efficient site circulation and future development, the proposed RIRO access should be internally connected to the proposed east-west site access roadway.

  Stage II Development Improvement Recommendations

  - The eastbound left turn lane on U.S. Route 14 at Sands Road should be lengthened to provide 300 feet of storage to accommodate the left turns anticipated to be generated by the development.

  - An eastbound right turn overlap phase at the U.S. Route 14 and Sands Road intersection should be considered prior to Stage II development in order to reduce potential queuing during Saturday midday peak hours.

- We offer the following recommendations with respect to the intersection of Sands Road and the internal access roadway.

  Stage I Development Recommendations

  - In order to accommodate the southbound left turn lane extension at U.S. Route 14 and the northbound right turn lane into the site on Sands Road, the site access roadway intersection should be located no closer than 275 feet from the southbound stop bar at the U.S. Route 14/Sands Road intersection.

- The right turn storage for vehicles exiting the site onto Sands Road should be increased. It is recommended that a right turn lane length of 75 feet with a 9:1 taper be provided on the site access roadway approach.

Stage II Development Recommendations

- Based on the anticipated volumes entering the site from the south upon full development of the site, a northbound right turn lane should be constructed on Sands Road to serve the internal access roadway. The storage provided should be 135 feet with a 9:1 taper.