

U.S. Postal Service

National Delivery Planning Standards

**A Guide for Builders and
Developers**

Handbook PO-632

July 2020



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1 Introduction

The United States Postal Service® is proud to provide every new home and business with excellent, efficient mail delivery service. This guide will assist you in preparing your new development for mail service by planning locations and space for mail equipment early in the development process.

The U.S. Postal Service™ is responsible for establishing the method or “mode” of delivery for all new developments—both residential and commercial. The mode of delivery includes the following:

- Type of mailbox you will use.
- Location of the mailbox for each delivery address.

Centralized delivery is our preferred method of mail delivery. Centralized delivery equipment improves delivery efficiency and provides space for large mail items, including packages, which is a great benefit for customers. Freestanding, pedestal-style outdoor centralized mailboxes are called cluster box units or CBUs. CBUs are “package friendly” because they are designed to accommodate the majority of packages delivered through the U.S. Mail®. CBUs also include parcel lockers, which provide separate, locked storage for many packages.

Other types of centralized mailbox equipment are also available. Builders and developers are responsible for the purchase and installation of mailbox equipment. Property owners are responsible for ongoing maintenance, repairs, and replacement of mailbox equipment.

This guide provides information about the types of USPS®-approved mailbox equipment options available commercially and information about other aspects of mail delivery planning that may apply to your specific development.

With more than 150 million households and businesses served daily—and another 1 million new delivery points added on average every year—it is imperative that the U.S. Postal Service make its mail delivery network more efficient while still delivering the service our customers expect. We appreciate your assistance in furthering that objective, while at the same time helping provide new customers with convenient mail delivery for their new homes and businesses.

We also want to connect you with local USPS delivery planning individuals in your area—referred to as Growth Managers. Postal Service Growth Managers are available to assist you. Prior to submitting your master plan and plat to the local municipality and/or county for approval, you must arrange for a local USPS Growth Manager to review your development plans prior to commencing construction.

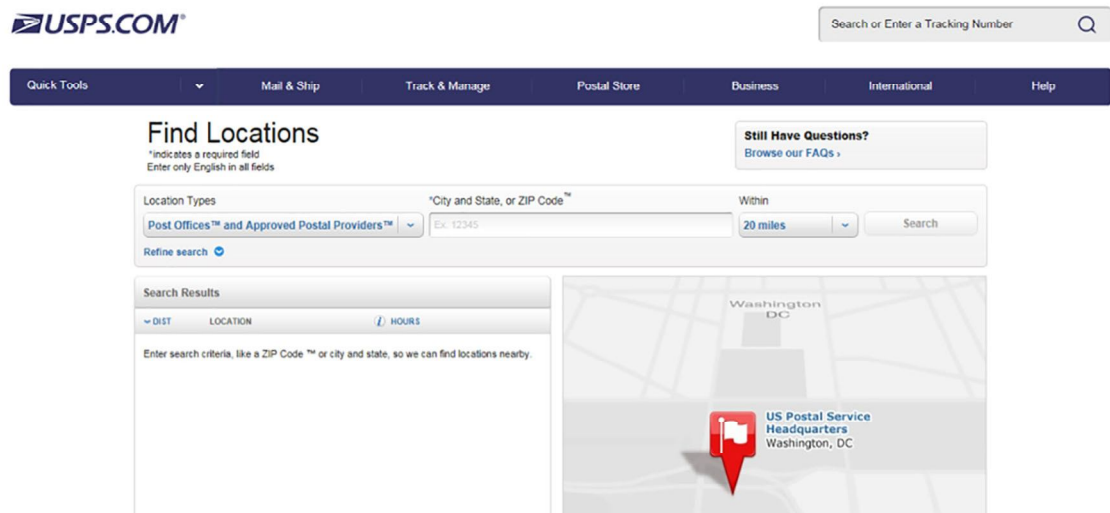
Thank you for reviewing the Postal Service’s mail delivery-planning standards—we look forward to working with you!

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2 Finding Your Growth Manager and USPS Online Resources

2-1 Find a Post Office

The Postal Service lists all local Post Offices™ on its website at: www.usps.com. To find the Post Office closest to your new development, search using the appropriate ZIP Code™.



2-2 Find Your Local USPS Growth Manager

Every area where the U.S. Postal Service provides mail delivery has a Postal Service employee assigned to help developers and builders with planning mail service for new developments. These “new delivery planning” employees are referred to as Growth Managers.

To find the Growth Manager that covers your specific development’s geographic location, send an email to: Delivery.Growth@USPS.GOV, or contact your Post Office and ask to speak to either the Postmaster or the person assigned to assist developers with planning new mail service.

If you do not receive a reply from your District Growth Manager or Post Office, please email your concern to the above email address and the escalation process within the Postal Service will occur as follows:

- a. First Level of Inquiry – The District Growth Manager (to respond within 2 weeks).
- b. Second Level of Inquiry – The Area Growth Manager (to respond within 2 weeks).
- c. Third Level of Inquiry – The Headquarters Growth Manager (to respond within 30 days).

2-2.1 **Appeal Process for Builders and Developers**

Once the authorized mode of delivery decision has been communicated by the Growth Manager, a builder/developer may appeal an adverse decision as follows:

- a. First level of appeal is to District Manager who has 30 days to respond to builder/developer.
- b. Second level of appeal is to Area Manager, Delivery Programs Support (MDPS) who has 30 days to respond to builder/developer.
- c. Third level of appeal is to Area Vice President who has 30 days to respond to builder/developer.

2-3 **USPS-Approved Mailbox Equipment**

Mailboxes used in new construction projects can be one of the following two types of centralized mailbox equipment:

- a. Pedestal-mounted USPS-approved CBU.
- b. Wall-mounted USPS-approved STD-4C mailboxes (4C).



The Postal Service annually publishes a list of USPS-approved mailbox equipment and approved manufacturers in its Postal Bulletin. You can also find the latest list of USPS-approved equipment and approved manufacturers at:

<http://about.usps.com/what-we-are-doing/current-initiatives/delivery-growth-management/welcome.htm>

2-4 Delivery Planning Resources for Builders and Developers

The most current version of this guide will always be available on the webpage at: <http://about.usps.com/what-we-are-doing/current-initiatives/delivery-growth-management/welcome.htm>.

The following links provide additional resources for builders and developers:

- a. Find a Post Office: <https://tools.usps.com/go/POLocatorAction!input.action>.
- b. Centralized Delivery/Residential Applications: <http://about.usps.com/publications/pub265a.pdf>.
- c. Centralized Delivery/Garden Apt Applications: <http://about.usps.com/publications/pub265c.pdf>.
- d. Centralized Delivery/Commercial Applications: <http://about.usps.com/publications/pub265b.pdf>.

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3 General Planning Guidelines for Mailboxes in New Developments

3-1 Letter Carrier Access to Deliver U.S. Mail

Centralized delivery is the Postal Service's preference for new addresses, whether residential or commercial. The customer is responsible for keeping the approach to his or her mailbox and adjacent area clear to facilitate delivery. You may provide curbside delivery only with prior approval from the Postal Service. Place curbside mail receptacles approved by the Postal Service where they protect the mail, can be safely and conveniently serviced by carriers without leaving their vehicles, and can be reasonably and safely accessed by customers. These receptacles must be on the right-hand side of the road in the direction of travel when required by traffic conditions, or when driving on the left-hand side of the road to reach the mail receptacle would violate traffic laws.

3-2 Mailbox Locks and Keys

The Postal Service prohibits carriers from accepting keys for locks on private mail receptacles, buildings, or offices, except where an electromechanical door lock system or key keeper box is used.

CBUs have secure, locking mailbox, and parcel locker compartments. Whether your new development is commercial or residential, the builder or property owner is responsible for providing lock and key service for cluster box units. The locks/keys for each of the compartments will be provided with the CBU. The Postal Service will furnish the "master access lock" that allows mail to be delivered. See 3-3 for more information.

Your local USPS Growth Manager will discuss specific requirements and processes appropriate for your new development as part of the overall coordination process related to establishing the mode of delivery for your new development.

3-3 USPS Master Access Lock

The Postal Service furnishes its own “master access lock” so that carriers have access to deliver the mail. This lock is not available to developers and builders to pre-install.

Your local USPS Growth Manager will coordinate installation of the “master lock” as part of the overall coordination process when starting new mail delivery for customers.

3-4 Safety Considerations

If curbside delivery is approved by the Postal Service, posts and other supports for curbside mailboxes are owned and controlled by the customer. The owner of the property is responsible for ensuring that posts are neat and adequate in strength and size.

When installing centralized delivery equipment, such as CBUs or STD-4C (4C) equipment, the mailboxes must be safely located so that customers are not required to travel an unreasonable distance to obtain their mail. Typically, mailbox receptacles are located within 1 block of the residence.

When new developments, either residential or commercial, are in the design phase, developers or architects must meet with the USPS Growth Manager to ensure that safe and durable receptacles are properly specified and located in conformance with regulations. The Growth Manager will also meet with the builder at the appropriate time during the construction phase to review the physical mailroom installation and discuss coordination and timing of initiating mail delivery.

3-5 Customer and Carrier Accessibility Considerations

Curb delivery may only be provided with prior approval from the Postal Service if the carrier can efficiently, safely, and conveniently service the mailbox from the carrier’s vehicle and if the customer can safely and easily access the mailbox.

Apartment house delivery requires that mailboxes be located reasonably close to the entrance in vestibules, halls, or lobbies. The carrier must also be able to service the boxes without interference from swinging or open doors. Consult with your local USPS Growth Manager early in the design process to ensure you select an appropriate location for the apartment building mailroom.

3-5.1 Placement of Outdoor Cluster Boxes

The local USPS Growth Manager or designee must approve the CBU mailbox sites and type of equipment. Cluster boxes must be safely located so that customers are not required to travel an unreasonable distance to obtain their mail and so there is sufficient access to mailbox locations with

adequate space for carriers to deliver and customers to retrieve the mail. Typically, a mailbox receptacle will be located within 1 block of the residence.

3-5.2 **Construction Accessibility Guidelines**

Accessibility requirements and regulations, including those required to accommodate customers with disabilities, may vary by type of facility and governing jurisdiction. Always consult local building officials and codes for applicable accessibility requirements that apply to your specific development and mailbox project.

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4 Single-point Residential Deliveries

New mail delivery planning for single-family residential developments typically falls into the following two primary categories:

- a. Site-constructed single family homes.
- b. Mobile or trailer homes.

4-1 Residential Single Family Site Constructed Development

During the design and planning phase (i.e., before plans and site plats are finalized with the appropriate planning/zoning authorities), developers and builders must notify the U.S. Postal Service of the planned development so that the Postal Service can determine the appropriate mode of delivery while considering input from the parties involved with the development.

Developers and builders must plan to install centralized mail delivery receptacles in new residential communities, which include secure parcel lockers.

New homes built or established within a block of existing homes can only receive the same type of mail delivery service as the older, existing homes after the Postal Service has completed an operational efficiency analysis. When new delivery replaces more than 1 block, delivery methods must comply with mode of delivery options for establishment and extension of delivery service, which is typically centralized mail service.

Your local USPS Growth Manager will work closely with you to determine the best approach to providing mail delivery service to customers in your new residential development. It is important that you contact the Growth Manager in your area as early as possible in your planning process.

4-2 Residential Mobile or Trailer Home Development

The delivery options for mobile or trailer home developments depend on whether the development is *permanent* or *transient* as determined by the Postal Service.

Permanent Developments—Permanent developments consist of managed mobile home parks or residential mobile home subdivisions with the following characteristics:

- a. The lots are permanently assigned.
- b. The streets are maintained for public use.
- c. The conditions resemble those of a residential subdivision.

For permanent developments, the delivery options are either central, curbside, or sidewalk delivery. Postal Service will determine and specify the type of mail delivery for any permanent mobile/trailer home development. The general practice of the Postal Service is to specify centralized delivery.

Transient Developments—Transient developments are mobile home, trailer, and recreational vehicle parks where the lots are temporarily occupied or rented and considered transient, short-term, or seasonal. For transient developments, the only option is delivery to a single point or receptacle designated by park management and approved by local Postal Service management. The single delivery point defined will be for the receipt of all mail from USPS; employees of the park will complete the subsequent distribution of mail and forwarding.

Whether your new mobile home development is permanent or transient, contact your local Growth Manager early in the process so that we can work with you in laying out the space plan for mail delivery for the residents of your new community.

5 Multi-point Residential Deliveries

5-1 Apartment Communities

The following are important U.S. Postal Service guidelines for determining the location and composition of mail receptacles for apartment communities:

- a. All new or remodeled apartment houses must install USPS-approved 4C centralized mailbox equipment. There must be at least 1 parcel locker for every 5 mailbox compartments. The Postal Service requires no maximum number of parcel lockers to be installed—only the 1:5 parcel locker/mailbox minimum.
- b. Locate mail receptacles and parcel lockers in apartment buildings reasonably close to the entrance in vestibules, hall, or lobbies. The carrier must also be able to serve the boxes without interference from swinging or open doors.
- c. Exterior centralized mailboxes may also be an option. The Postal Service may authorize the installation of standard, approved apartment receptacles (4C or CBU) in exterior walls of buildings provided they are not installed directly on the street or a public sidewalk. Provide a canopy for outdoor mailbox installations. The canopy design and location must provide maximum protection from the weather, including driving rain, and provide adequate nighttime lighting.

5-2 Student Housing and Off-Campus Student Apartment Communities

Mail delivery protocols to student housing vary depending on the characteristics of the student housing community being served. Below are general guidelines for establishing new mail service.

Mail is delivered to dormitory buildings and residence halls when addressed to a specific building. Mail is delivered in bulk to a designated representative of the school or property in the building. The representative is responsible for further distribution to students/residents. The Postal Service will determine the proper mode of delivery to be established and may require that designees from the student housing property be identified to accept mail for each location prior to initiating delivery.

The Postal Service defines a dormitory building or residence hall as a building that consists of single or multi-room units that may share or have

access to centrally located kitchens, bathrooms, showers, or social or common areas. Whether located on or off campus, and regardless of private ownership, such buildings are nevertheless dormitories and either the school or building owner is responsible for the final delivery of student mail. Post Office personnel do not distribute mail into apartment-type mailboxes for dormitories or residence halls.

As always, it is important to contact your local USPS Growth Manager early in the planning process to ensure understanding and requirements related to providing mail delivery for your new student housing development.

6 Delivery to Business and Industrial Parks

The following paragraphs provide important U.S. Postal Service guidelines for determining the location, type of mailbox receptacles, and other requirements related to initiating new mail delivery for business and industrial parks.

The type and design of buildings included in the business and industrial park will govern the mode of delivery that is implemented. As with all new mail delivery planning, the location of the USPS-approved delivery equipment is subject to Postal Service approval. Delivery mode options for business parks are door, centralized, curbside, or sidewalk delivery. Door delivery will generally not be available for new delivery points. The primary options are as follows:

- a. **Centralized Delivery**. Centralized delivery service applies to all business office buildings, office complexes, and industrial and professional parks. If the U.S. Postal Service is delivering directly to the mailboxes, the type of equipment allowed for newly constructed buildings must either be USPS-approved CPUs or STD-4C (4C) wall-mounted receptacles.
- b. **Single-Point Delivery**. Single-point delivery is generally not available to new business park developments unless it is in the form of a bulk mail drop.

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7 Establishment of City Delivery

To establish city delivery service, consider a combination of mail delivery methods to provide regular and effective service to all residential and business sections of a community. Consider the establishment of city delivery service when the following requirements are met:

- a. Within the area to be served, there is a population of 2,500 or more or 750 possible deliveries.
- b. At least 10 percent of the building lots in the area to be served are improved with houses or places of business. Where a house or building and its yard or ground cover more than one lot, all lots so covered are considered improved. The streets are paved or otherwise improved to permit the travel of Postal Service vehicles at all times, without damage or delay.
- c. Streets are named and house numbers are assigned by the municipal authorities in accordance with Management Instruction DM-940-89-3, *Addressing Conventions*.
- d. Street signs are in place and house numbers are displayed.
- e. Rights-of-way, turnouts, and areas next to the roads and streets are sufficiently improved so that the installation, servicing, and accessing of mailboxes are not hazardous to the public or Postal Service employees.
- f. Satisfactory walkways exist for the carrier where required.

Note: During a new residential or commercial development's design and planning phase (i.e., before the developers and builders finalize plans and site plats with the appropriate planning/zoning authorities), developers and builders must notify the Postal Service so that the Postal Service can determine the appropriate mode of delivery while considering input from these parties.

Developers and builders should plan for centralized mail delivery installations for residential communities or business developments.

It is important to contact your local USPS Growth Manager while you are still in the design process so that we can collaborate with you to prepare the most efficient, effective plan to provide mail delivery for the customers who will live or work in your new development.

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8 Inspection and Commencement of Mail Delivery Services

8-1 Mail Receptacles and Customer Obligations

Appropriate mail receptacles must be provided for the receipt of mail. The type of mail receptacle depends on the mode of delivery in place. Purchase, installation, maintenance, repair, and replacement of mail receptacles are the responsibility of the customer. Verify with the local Postmaster or Growth Manager, the appropriate locations for installation. The following apply:

- a. In locations where the Postal Service has determined that centralized delivery is appropriate, customers must install mail receptacles that comply with the USPS STD- 4C wall-mounted mail receptacles or USPSB1118, Postal Service specification, CBUs, to include secured parcel lockers.
- b. If curblane delivery is authorized, customers must erect curb-mounted receptacles that comply with USPS-STD-7C.
- c. If sidewalk delivery is authorized, customers must erect sidewalk-mounted receptacles that comply with USPS-STD-7C.

The Postal Service annually publishes a list of USPS-approved mailbox equipment and approved manufacturers in its Postal Bulletin. You can find the latest list of USPS-approved equipment and approved manufacturers at:

<http://about.usps.com/what-we-are-doing/current-initiatives/delivery-growth-management/welcome.htm>

8-2 Centralized Mail Receptacle Installation

You must consider many variables when installing centralized mailbox equipment. In addition to providing accessible locations, you must conduct proper foundation preparation and follow specific mounting procedures, to name a few requirements.

Appendices A through D of this guide provide sample diagrams of various CBU installations to help you understand space requirements, placement, etc.

Note: It is critical that you refer to the installation manuals furnished by each of the manufacturers for the specific USPS-approved centralized mailbox equipment purchased commercially.

For assistance with siting your outdoor centralized mail equipment, contact your local USPS Growth Manager so that the Postal Service can advise about the proper locations as you finalize plans for your new development.

9 Closing

Thank you for taking time to review this guide for planning mail delivery for new development.

We periodically update this guide—so be sure to check online for the latest version on the ABOUT.USPS.COM website at:

<http://about.usps.com/what-we-are-doing/current-initiatives/delivery-growth-management/welcome.htm>.

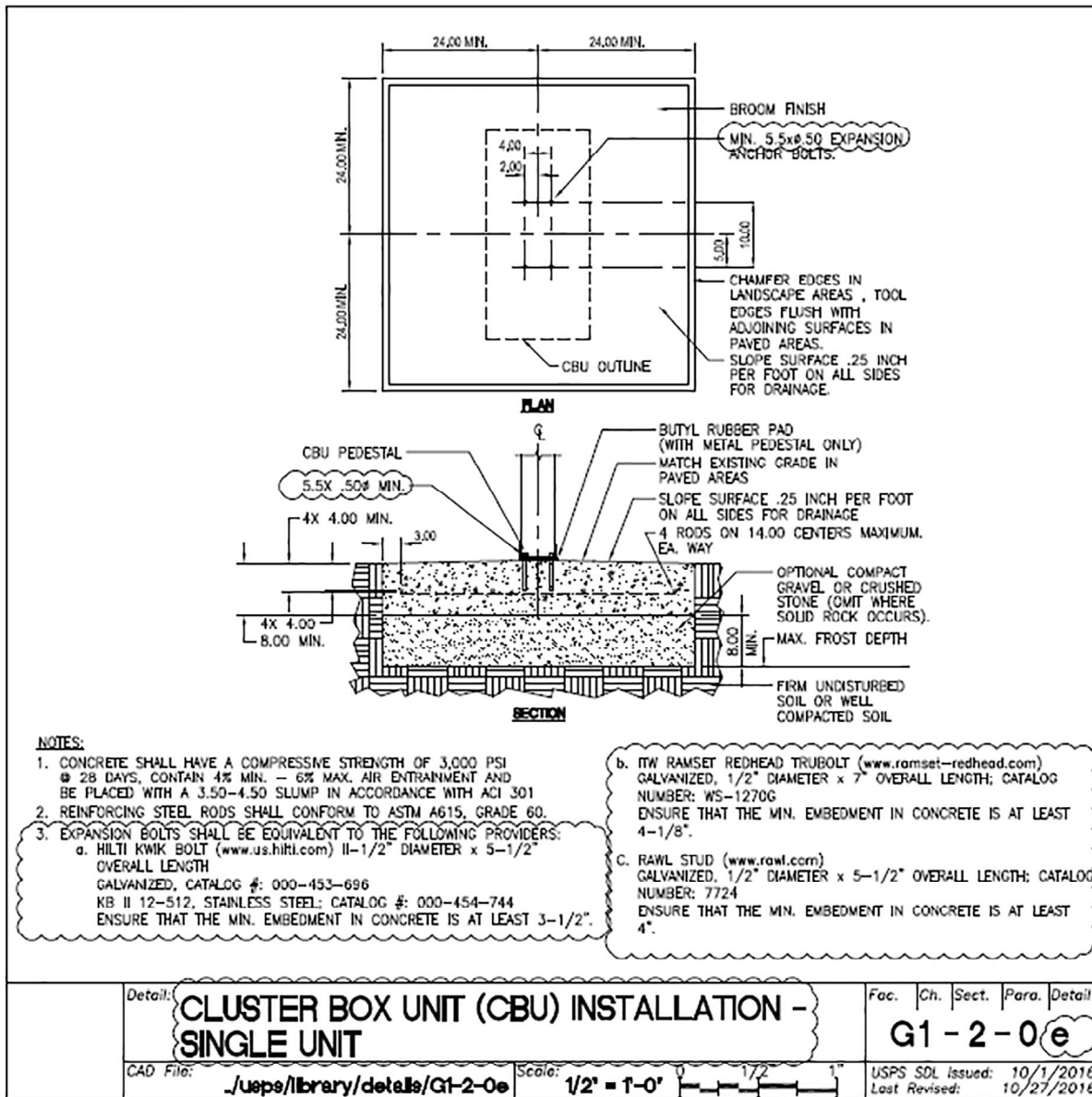
Reminder: You can find the Growth Manager who covers your specific development geography by sending an email to:

Delivery.Growth@USPS.GOV.

Or, you can contact your Post Office and ask to speak to the Postmaster or person assigned to assist developers with planning new mail service.

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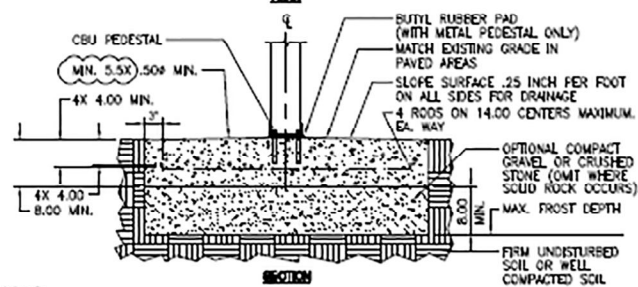
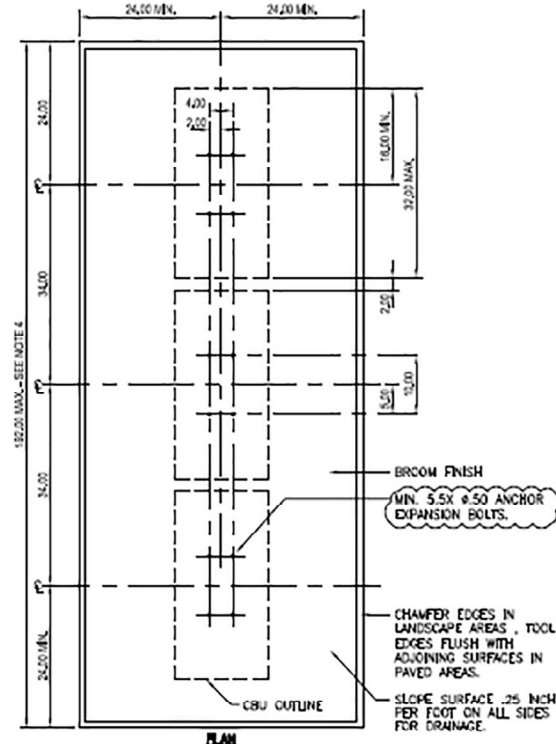
Cluster Box Unit Installation Single Unit



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Cluster Box Unit Installation Multiple Unit

NOTES TO A/E:



NOTES:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI @ 28 DAYS, CONTAIN 4% MIN. - 6% MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A612, GRADE 60
3. EXPANSION BOLTS SHALL BE EQUIVALENT TO THE FOLLOWING PROVIDERS:
 - a. HILTI KWIK BOLT (www.us.hilti.com) 1/2" DIAMETER x 5-1/2" OVERALL LENGTH
 GALVANIZED, CATALOG #: 000-453-896
 KB 1 12-512, STAINLESS STEEL: CATALOG #: 000-454-744
 ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 3-1/2".
 - b. ITW RAMSET REDHEAD TRUBOLT (www.ramset-redhead.com)
 GALVANIZED, 1/2" DIAMETER x 7" OVERALL LENGTH; CATALOG NUMBER: WS-12700
 ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4-1/8".
 - c. RAWL STUD (www.rawl.com)
 GALVANIZED, 1/2" DIAMETER x 5-1/2" OVERALL LENGTH; CATALOG NUMBER: 7724
 ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4".
4. A 3 CBU CONFIGURATION IS DEPICTED. A 2 OR 4 CBU CONFIGURATION MAY BE USED AS LONG AS THEY ARE ARRANGED IN GROUPS SUCH THAT THE OVERALL DIMENSION OF THE CONCRETE BASE DOES NOT EXCEED 16 FEET.

Detail:	CLUSTER BOX UNIT (CBU) INSTALLATION - MULTIPLE UNIT	Fac.	Ch.	Sect.	Para.	Detail
		G1 - 2 - 0 e1				
CAD File:	./usps/library/details/G1-2-0e1	Scale:	1/2" = 1'-0"		USPS SDL issued: 10/1/2016 Last Revised: 10/27/2016	

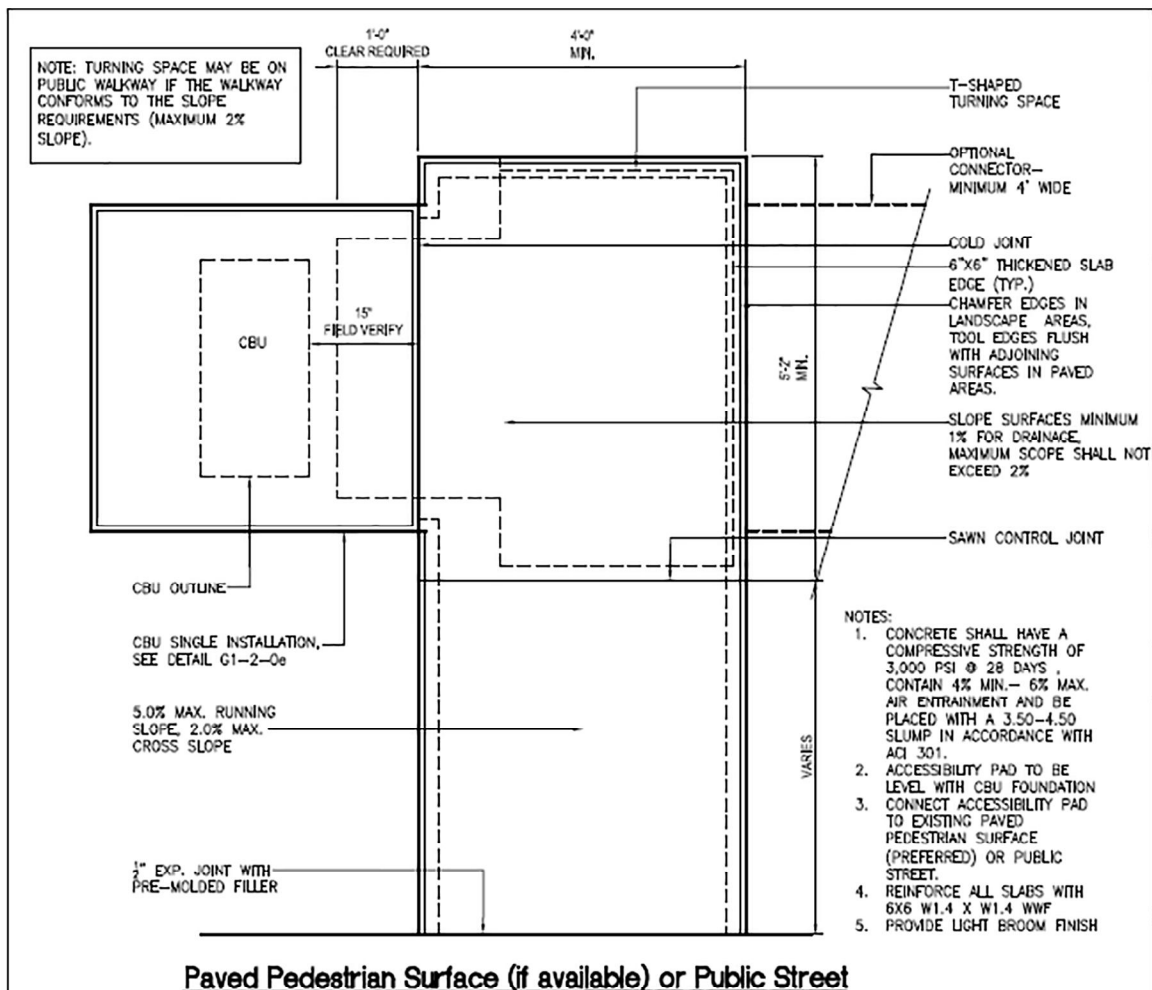
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Appendix C

Cluster Box Unit Access Maneuvering Space – Single Unit

NOTES TO A/E:

- IF THE ACCESSIBLE ROUTE FROM THE CBU(S) CONNECTS WITH A STREET OR OTHER PAVED SURFACE AT A VERTICAL CURB, A CURB RAMP SHOULD BE INSTALLED IN ACCORDANCE WITH RE-4 REQUIREMENTS.



Detail:	CLUSTER BOX UNIT (CBU) ACCESS MANEUVERING SPACE - SINGLE UNIT	Fac.	Ch.	Sect.	Para.	Detail
						G1-2-0(e2)
CAD File:	\\usps\library\details\G1-2-0e2.dwg	Scale:	1/2" = 1'-0"			USPS SDL Issued: 10/1/2016 Last Revised: 7/14/2016

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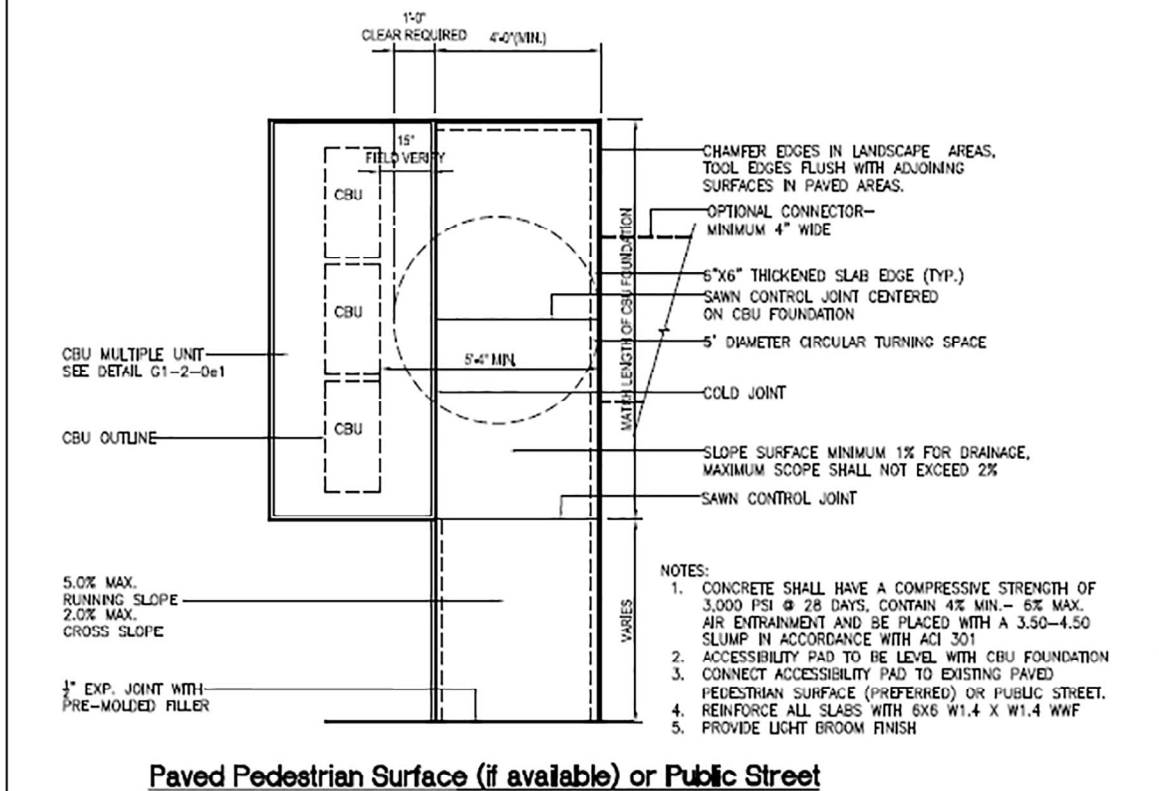
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Cluster Box Unit Access Maneuvering Space – Multiple Unit

NOTES TO A/E:

- IF THE ACCESSIBLE ROUTE FROM THE CBU(S) CONNECTS WITH A STREET OR OTHER PAVED SURFACE AT A VERTICAL CURB, A CURB RAMP SHOULD BE INSTALLED IN ACCORDANCE WITH RE-4 REQUIREMENTS.

NOTE: TURNING SPACE MAY BE ON PUBLIC WALKWAY IF THE WALKWAY CONFORMS TO THE SLOPE REQUIREMENTS (MAXIMUM 2% SLOPE).



Paved Pedestrian Surface (if available) or Public Street

Detail	CLUSTER BOX UNIT (CBU) ACCESS MANEUVERING SPACE – MULTIPLE UNIT				Fac.	Ch.	Sect.	Para.	Detail
					G1 - 2 - 0 e3				
CAD File:	..\\usps\\library\\details\\G1-2-0e3.dwg			Scale:	1/4"=1'-0"		0 1/2" 1"		USPS SDL Issued: 10/1/2016 Last Revised: 7/14/2016

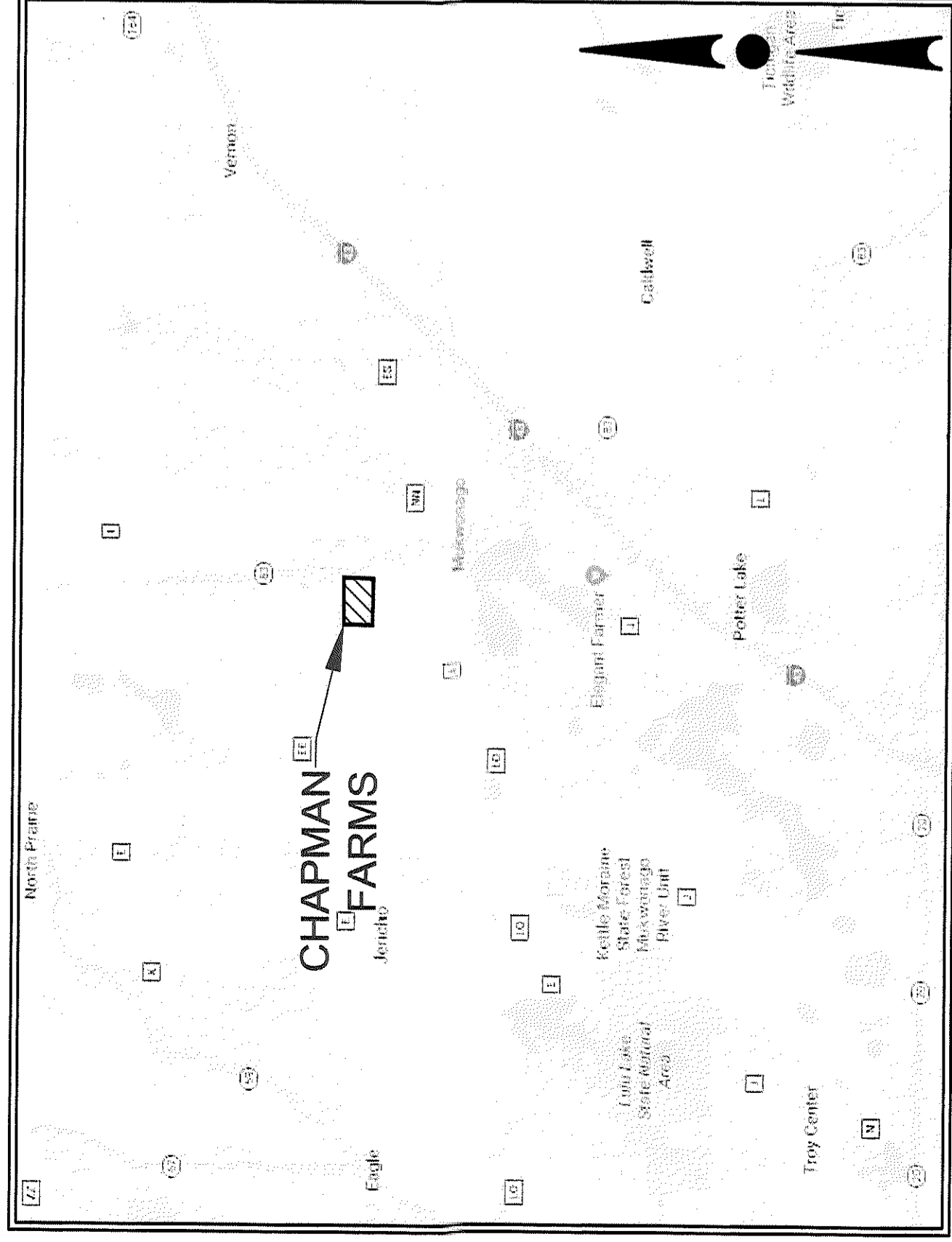
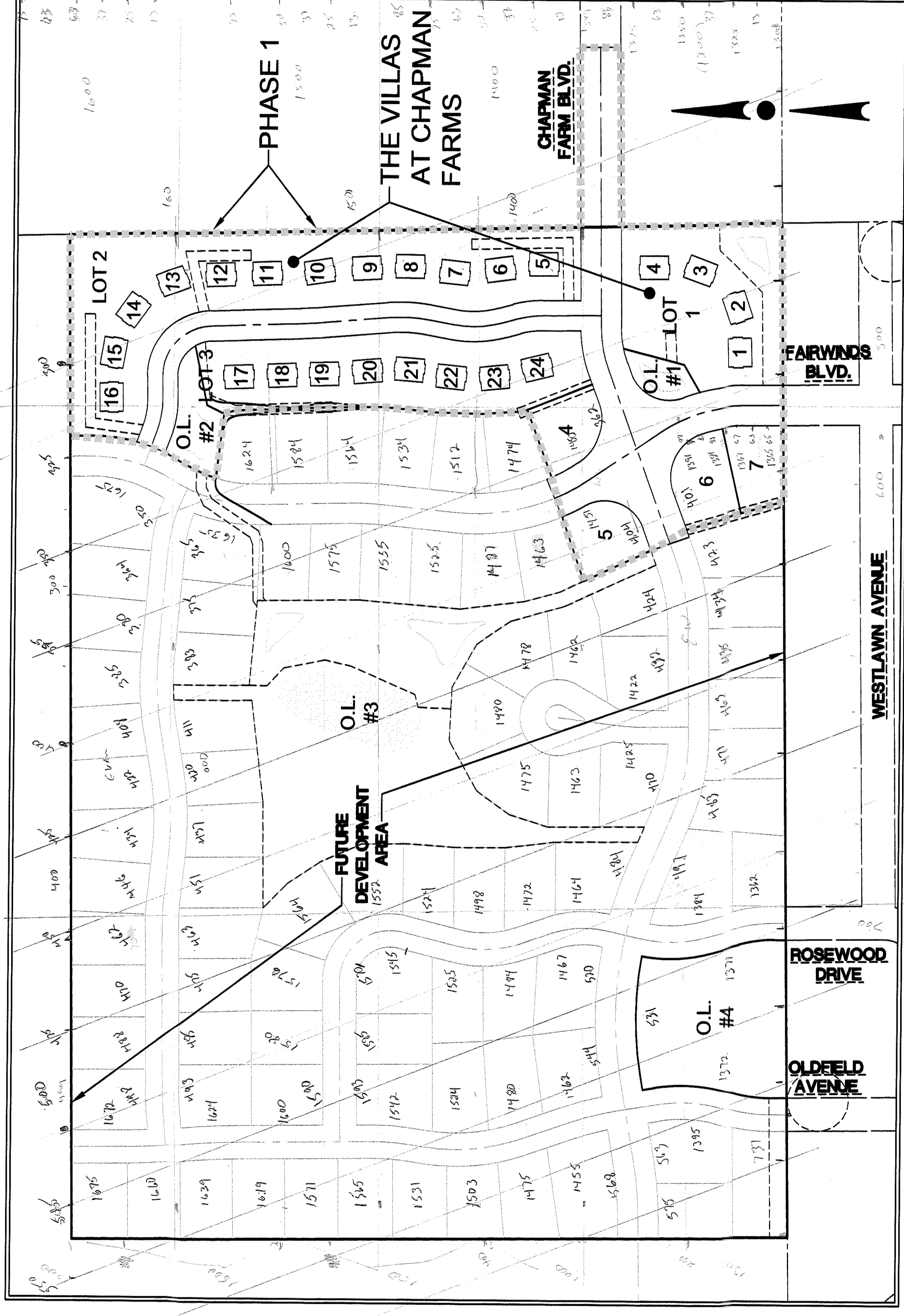
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GENERAL NOTES

1. THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED.
 -STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION (SSSWC)
 -THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
 -MNOR STORMWATER RUNOFF TECHNICAL STANDARDS.
 -WISDOT PAL APPROVED EROSION CONTROL MEASURES LIST, LATEST EDITION.
 -VILLAGE OF MUKWONAGO STANDARDS & REQUIREMENTS FOR DEVELOPMENT, LATEST EDITION.
2. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MINIMIZE EROSION, WATER POLLUTION AND SILTATION CAUSED BY CONSTRUCTION OF THIS PROJECT. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
3. EROSION CONTROL PLAN: PRIOR TO BEGINNING WORK, AN APPROVED EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY IMPLEMENTING THE APPROVED PLAN.
4. 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 OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.
5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION (CALL DIGGERS HOTLINE AT 800-242-6811). COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
6. EXISTING UTILITY INFORMATION IS SHOWN FROM SURVEY WORK, 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.
7. PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF PERFORMING ANY CONSTRUCTION.
9. ALL TRENCHING SHALL BE PERFORMED ACCORDING TO OSHA STANDARDS.
10. ALL ITEMS SHALL INCLUDE ALL THE NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
11. THE CONTRACTOR SHALL CLEAN ALL ADJACENT STREETS OF ANY SEDIMENT OR DEBRIS AS REQUIRED BY MUNICIPAL ORDINANCE.
12. NOTIFY ENGINEER IF DRAIN TILE ARE ENCOUNTERED DURING SITE CONSTRUCTION. RECONNECT ANY BROKEN OR DAMAGED DRAIN TILE DURING CONSTRUCTION.

CHAPMAN FARMS

RESIDENTIAL COMMUNITY PLANS PHASE 1 SITE DEVELOPMENT PLANS VILLAGE OF MUKWONAGO, WISCONSIN



LOCATION MAP
NOT TO SCALE



CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.
CALL DIGGERS HOTLINE 1-800-242-6811

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SHEET INDEX

CIVIL	DESCRIPTION
T1	COVER SHEET
C1.0	OVERALL GRADING PLAN
C1.1	PHASE 1 OVERALL GRADING PLAN
C1.2-C1.3	GRADING & DRAINAGE PLANS
C1.4-C1.8	POND PLANS & DETAILS
C2.0	EROSION CONTROL PLAN
C3.0	OVERALL SANITARY SEWER & WATER MAIN SYSTEM PLAN
C3.1-C3.3	SANITARY SEWER & WATER MAIN PLAN & PROFILES
C4.0	OVERALL STORM SEWER SYSTEM PLAN & PROFILES
C4.1-C4.3	ROADWAY & STORM SEWER PLAN & PROFILES
C4.4-C4.7	STORM SEWER PLAN & PROFILES
C5.0	ROUNDABOUT DETAIL PLAN
C5.1	CUL-DE-SAC & INTERSECTION DETAILS PLAN
C5.0-C5.1	CONSTRUCTION NOTES & DETAILS

SITE PLAN
SCALE: 1" = 150'

TRIO
 CIVIL ENGINEERING
 4100 N. CANTONWAY, SUITE 100
 BROOKFIELD, WISCONSIN 53005
 PHONE: (262) 790-1490
 FAX: (262) 790-1491
 Website: info@trioeng.com

PROJECT:
 SINGLE- & MULTI-FAMILY RESIDENTIAL SUBDIVISION
CHAPMAN FARMS - PHASE 1

BY: BELINSKI HOMES
 VILLAGE OF MUKWONAGO, WISCONSIN
 1630 MEADOW LN., SUITE A
 PEWAUKEE, WI 53072

REVISED: SEP 20 2019

REVISION HISTORY	DATE	DESCRIPTION
02/02/2019	Per INITIAL SUBMITTAL	
02/27/2019	Per VILLAGE COMMENTS	
05/07/2019	Per VILLAGE COMMENTS	
06/26/2019	Per SWMP COMMENTS	
09/10/2019	Per VILLAGE COMMENTS	
09/24/2019	Per VILLAGE COMMENTS	

DATE: SEPTEMBER 24, 2019
JOB NUMBER: 14023-02
DESCRIPTION:
COVER SHEET
SHEET
T1

PROFESSIONAL ENGINEER
 JOSHUA D. PUDELKO
 E-39420
 WAUKESHA, WI


Note: EUC Set on CD given to D. Dystra 9/24/19 - BR

CHAPMAN FARMS ADDITION NO. 1

BEING A REDIVISION OF OUTLOT 3 OF CHAPMAN FARMS, LOCATED IN A PART OF THE NORTHWEST 1/4, NORTHEAST 1/4, SOUTHWEST 1/4 AND SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 22, TOWN 5 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN.

There are no objections to this plat with respect to Secs 236 15, 236 16, 236 20 and 236 21(1) and (2), Wis Stats as provided by s 236 12, Wis Stats

Certified _____ 20____

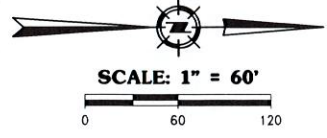


Department of Administration

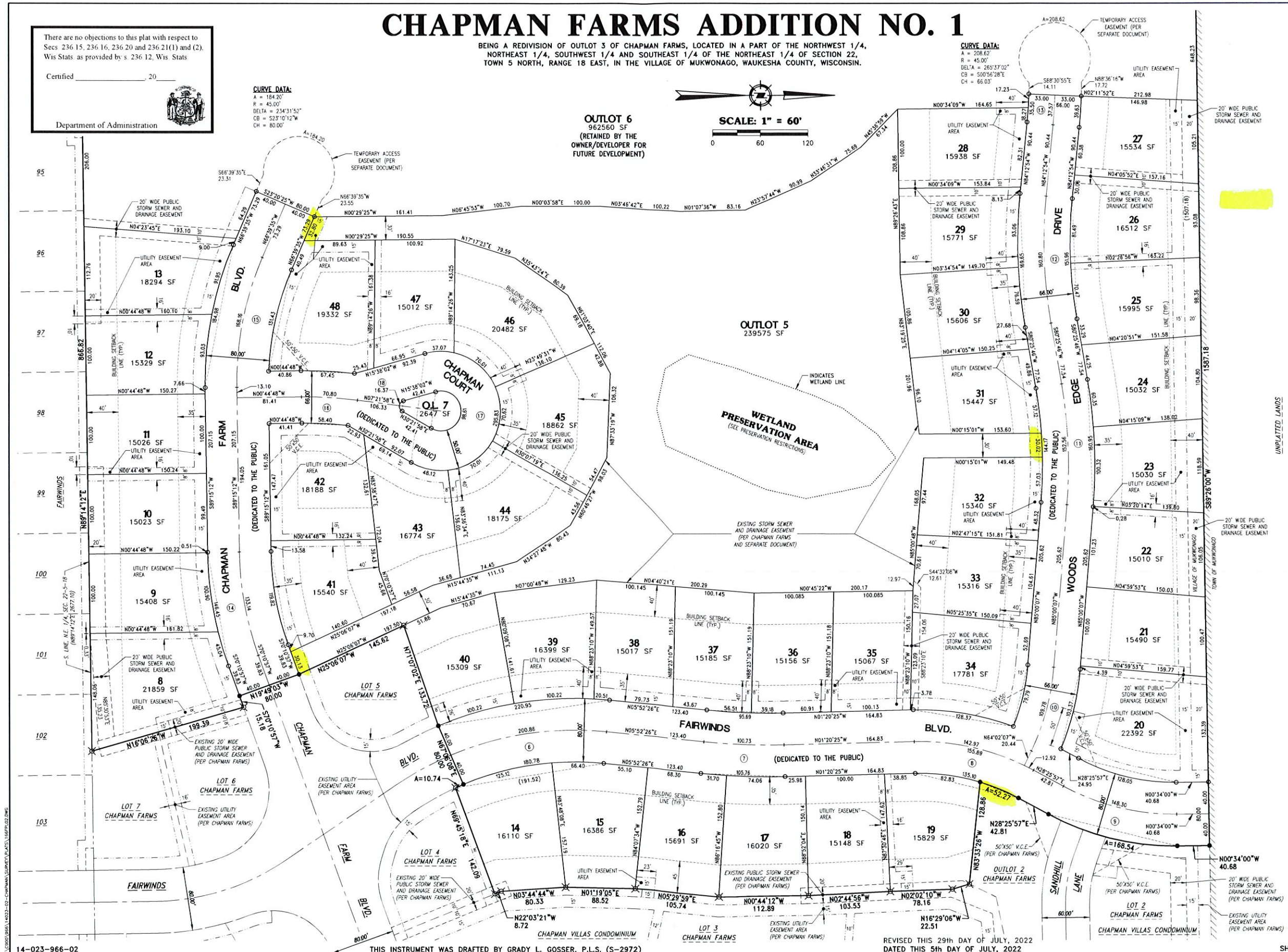
CURVE DATA:
 A = 184.20
 R = 45.00'
 DELTA = 234°31'53"
 CB = 52°10'12"W
 CH = 80.00'

OUTLOT 6
 962560 SF
 (RETAINED BY THE OWNER/DEVELOPER FOR FUTURE DEVELOPMENT)

SCALE: 1" = 60'



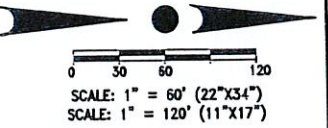
CURVE DATA:
 A = 208.62
 R = 45.00'
 DELTA = 265°37'02"
 CB = 50°56'28"E
 CH = 66.03'



Post office
CBU
MOD
Locations optional sites

Post office
MOD Delivery Locations

CBU Locations
9/16/22



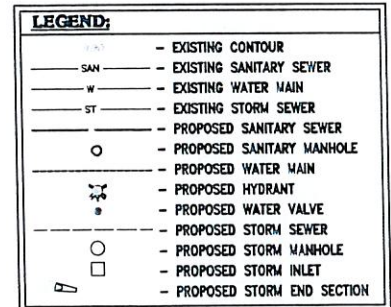
BACKFILL NOTES
TRENCH BACKFILL
SPOL BACKFILL MAY BE USED FOR UTILITY TRENCHES CONTINGENT ON TESTING AND APPROVAL BY THE VILLAGE OF MUKWONAGO. ALL SPOL BACKFILL TO BE USED MUST MEET THE STATE OF WISCONSIN SPECIFICATIONS FOR UTILITY BACKFILL.

NOTE:
ALL MATERIALS SHALL BE APPROVED BY THE VILLAGE OF MUKWONAGO PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLATION.

MANHOLE AND VALVE NOTE
ALL MANHOLES AND VALVES TO BE SET TO FINISH GRADE. MANHOLES TO BE SET TO FINAL GRADE WITH CAST IRON ADJUSTING RINGS AND VALVE BOXES SHALL BE ADJUSTED TO FINAL GRADE AT TIME OF SURFACE COURSE PAVING.

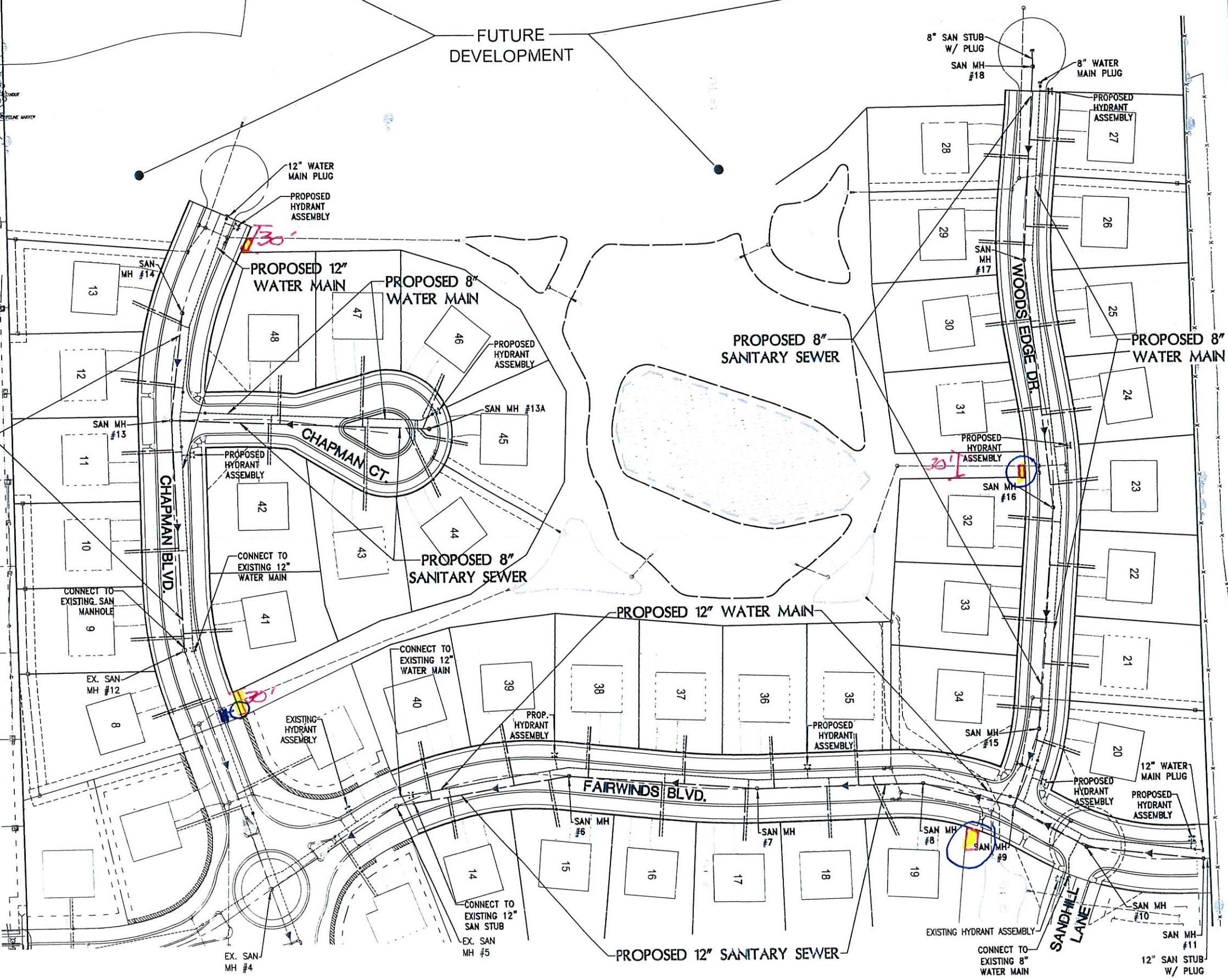
SANITARY SEWER NOTES
SANITARY SEWER
ALL 8" & 12" PVC SEWER PIPE SHALL MEET THE REQUIREMENTS SET FORTH IN SECTION S.10.0 (SSSWC).
ALL SANITARY MANHOLES SHALL BE 48" DIA. AND MEET THE REQUIREMENTS SET FORTH IN SSSWC.
SOR-35 PVC PIPE SHALL BE USED FOR SANITARY SEWERS LESS THAN 16 FEET DEEP. C-900 PVC PRESSURE PIPE SHALL BE USED FOR SANITARY SEWERS DEEPER THAN 16 FEET.
ALL SANITARY SEWER LATERALS FOR SINGLE FAMILY LOTS SHALL BE 8" DIA. SOR-35 PVC & MADE OF GASKETED PVC FITTINGS MEETING ASTM D-3034.
SANITARY CASTINGS SHALL BE SEALED WITH AN EXTERNAL BOOT AS SHOWN IN THE DETAILS.

WATER MAIN NOTES
WATERMAIN
ALL 8", 10" & 12" WATERMAIN CONSTRUCTED AS PART OF THIS PLAN SHALL BE PVC, C-900, CLASS 150 (DR-18).
PVC PIPE SHALL HAVE PUSH-ON JOINTS WITH RUBBER GASKET.
WATER MAIN SERVICES FOR SINGLE FAMILY LOTS SHALL BE 1/4" POLYETHYLENE TUBING.
HYDRANTS SHALL BE SET AT 3 FT. BEHIND THE BACK OF CURB, WITH THE NOZZLE ELEVATION 20 INCHES ABOVE TOP OF CURB.
ANCHOR TEES SHALL BE USED FOR EACH HYDRANT BRANCH.
ALL WATERMANS (AND SERVICES) CALLED FOR ON THESE PLANS ARE TO BE INSTALLED WITH CLASS "T" BEDDING AS SPECIFIED IN CH. 4.3.0, LAYING OF WATERMAIN, AND FILE NO. 36, PART VII (SSSWC).
TRACER WIRE NOTE
CONTRACTOR SHALL INSTALL PLASTIC COATED TRACER WIRE (10 GAUGE SOLID COPPER) PER COM 82.30(1)(M). PLASTIC WIRE MAY BE TAPED TO PLASTIC PIPE. IF ATTACHED, THE TRACER SHALL BE SECURED EVERY 5 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET.



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ROSEWOOD DR



PROJECT:
CHAPMAN FARMS - PHASE 1
SINGLE- & MULTI-FAMILY RESIDENTIAL SUBDIVISION
VILLAGE OF MUKWONAGO, WISCONSIN
BY: BIELINSKI HOMES
1830 MEADOW LN., SUITE A
PEWAUKEE, WI 53072

REVISION HISTORY

DATE	DESCRIPTION
12/09/2018	PH1 INITIAL SUBMITTAL
02/27/2019	Per VILLAGE COMMENTS
06/07/2019	Per VILLAGE COMMENTS
08/28/2019	Per SWMP COMMENTS
09/10/2019	Per VILLAGE COMMENTS
09/24/2019	Per VILLAGE COMMENTS
11/07/2019	WATER SERVICES
07/08/2020	ALTERNATIVE E.G. PLAN

DATE:
JULY 8, 2020

JOB NUMBER:
14023-02

DESCRIPTION:
OVERALL PHASE 2
SANITARY SEWER &
WATER MAIN
SYSTEM PLAN

SHEET

C3.0

Chapman Farms Villas - CBU Locations

