



VILLAGE OF JACKSON
VILLAGE BOARD MEETING AGENDA

Tuesday, February 13, 2024 at 7:30 PM

Jackson Municipal Complex
Village Board Room
N168W19851 Main Street
Jackson, WI 53037

1. Call to Order and Roll Call
2. Pledge of Allegiance
3. Presentations
 - a. Municipal Complex Roof Drainage Project - Presentation from Corey Scheidler, Cedar Corporation, with Possible Action
4. Village Citizen Comment on an Agenda Item (Please sign-in with the Clerk prior to speaking. Please note this is the Village Board's monthly business meeting, not a public hearing. People wishing to speak on an item on the agenda should present their comments under this agenda item. Each commenter will be limited to a total of 2 minutes.)
5. Consent Agenda
 - a. Approval of Minutes for the Special Village Board Meeting of January 30, 2024
 - b. Reschedule August Budget & Finance Committee Meeting to August 6, 2024
 - c. Reschedule August Village Board Meeting to August 6, 2024
 - d. Resolution #24-01 Opposition to State of Wisconsin Senate Bill 691
6. Review of Requested 2024 DPW Projects from Washington County "Shared Revenue Program"
7. Licenses
 - a. Annual Entertainment License, Coffeerville Company, N168W20101 Main Street
8. Budget and Finance Committee
 - a. Change Order #1 - Jackson Wastewater Treatment Facility Storage Garage - Hunzinger Construction
 - b. Change Order #2 - Jackson Wastewater Treatment Facility Storage Garage - Hunzinger Construction
 - c. Change Order #3 - Jackson Wastewater Treatment Facility Storage Garage - Hunzinger Construction
 - d. Pay Request #3 - Jackson Wastewater Treatment Facility Storage Garage - Hunzinger Construction, in the Amount of \$227,905.83
 - e. Pay Request #4 - Jackson Wastewater Treatment Facility Storage Garage - Hunzinger Construction, in the Amount of \$142,692.68
 - f. Pay Request #3 - STH 60 Street Lighting Project - Wil-Surge, in the Amount of \$125,124.79

- g. Review of Bids for the 2024 Jackson Wastewater Treatment Plant Improvement Project, in the Amount of \$4,715,248.00
 - h. Review Bids for the Eagle Drive & STH 60 Intersection Improvement Project, in the Amount of \$294,459.02
 - i. Jackson Dog Park Feasibility and Design Proposal, Not to Exceed \$11,750.00
- 9. West Bend School District
 - 10. Washington County Board Report
 - 11. Greater Jackson Business Alliance
 - 12. Mid-Moraine Municipal Association Report
 - 13. Closed Session Pursuant to Wis. Stats. §19.85(1)(e) “deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session.”

The closed session is for the following purposes:

- 1. To Discuss Development Agreements, a Protective Covenant, and Shared Access and Maintenance Agreement for Property Publicly Owned in TID 7; and
 - 2. To Approve the Sale of Property Publicly Owned in TID 7; and
 - 3. To Discuss the Purchase of Land.
- 14. Reconvene into Open Session with Possible Action Related to the Subject of the Preceding Closed Session
 - 15. Adjourn

Persons with disabilities requiring special accommodations for attendance at the meeting should contact the Administration Department at the Jackson Municipal Complex at least one (1) business day prior to the meeting.

It is possible that members of the Village Board may attend the above meeting. No action will be taken by any governmental body at this meeting other than the governmental body specifically referred to in this meeting notice. This notice is given so that members of the Village Board may attend the meeting without violating the open meeting law.

MINUTES
VILLAGE BOARD MEETING
Tuesday, January 30, 2024 at 6:45 PM
Village Board Meeting

1. Call to Order and Roll Call

The meeting was called to order at 6:56 PM by Pres. Heckendorf.

Members Present: Pres. Heckendorf, Tr. Emmrich, Tr. Engelhardt, Tr. Olson, Tr. Kruepke, Tr. Matter, and Tr. Wells.

Members Excused: None

Members Absent: None

Staff Present: Administrator Jen Keller, Treasurer Darlene Smith, Police Chief Ryan Vossekuil, Fire Chief Aaron Swaney, Public Works Director Brian Kober, and Clerk Anastasia Gonstead.

2. Pledge of Allegiance

The Pledge of Allegiance was recited by those who were in attendance.

3. Village Citizen Comment on an Agenda Item (Please sign-in with the Clerk prior to speaking. Please note this is the Village Board's monthly business meeting, not a public hearing. People wishing to speak on an item on the agenda should present their comments under this agenda item. Each commenter will be limited to a total of 2 minutes.)

None.

4. Consent Agenda

- a. Approval of Minutes for the Village Board Meeting of December 12, 2023
- b. Approval of the Agreements for 2024 Jackson Fire Department Services with the Town of Polk and the Town of Jackson

The motion to approve the items enumerated in the Consent Agenda was made by Tr. Emmrich and seconded by Tr. Engelhardt.

Vote: 7 ayes, 0 nays. Motion carried.

5. Approval of Licenses

- a. Massage Establishment License Renewal for Blissful Massage, N163 W20135 Ash Drive

- b. Massage Technician License Renewal for Sarah Ybanez of Blissful Massage, N163 W20135 Ash Drive

The motion to approve the enumerated licenses, en mass, was made by Tr. Wells and seconded by Tr. Emmrich.

Vote: 7 ayes, 0 nays. Motion carried.

6. Budget and Finance Committee

- a. Pay Request #2 - STH 60 Street Lighting Project - Wil-Surge, in the Amount of \$94,502.93

The motion to approve Pay Request #2 for the State Hwy 60 Street Lighting Project, to Wil-Surge, in the amount of \$94,502.93 was made by Tr. Wells and seconded by Tr. Kruepke.

Vote: 7 ayes, 0 nays. Motion carried.

7. Plan Commission

- a. Two-Lot Certified Survey Map for Parcels V3_053600F and V3_053600G - Village of Jackson

The motion to approve the two-lot Certified Survey Map for parcels V3_053600F and V3_053600G was made by Pres. Heckendorf and seconded by Tr. Kruepke.

Vote: 7 ayes, 0 nays. Motion carried.

- b. Amended Site Plan for Parcel V3_053600F - 250 Focus, LLC

The motion to approve the amended site plan for parcel V3_053600F, for 250 Focus, LLC, was made by Tr. Emmrich and seconded by Tr. Kruepke.

Vote: 7 ayes, 0 nays. Motion carried.

- c. Ordinance #24-01 - Amending Village Ordinance Section 6-54, Pertaining to the Maximum Number of Dogs Per Residence

A motion to approve Ordinance #24-01 was made by Tr. Emmrich and seconded by Tr. Engelhardt.

Votes: 7 ayes, 0 nays. Motion carried.

A motion to suspend the rules for a second reading of Ordinance #24-01 was made by Pres. Heckendorf and seconded by Tr. Emmrich. A roll vote was taken:

Pres. Heckendorf: Aye

Tr. Emmrich: Aye

Tr. Engelhardt: Aye

Tr. Kruepke: Aye
Tr. Matter: Aye
Tr. Olson: Aye
Tr. Wells: Aye

Vote: 7 ayes, 0 nays. Motion carried.

A motion to approve the second reading of Ordinance #24-01 was made by Tr. Emmrich and seconded by Tr. Engelhardt.

Vote: 7 ayes, 0 nays. Motion carried.

d. Review and Consideration of Zoning Audit Report

Administrator Keller provided an overview of the presentation regarding the Zoning Audit Report from the Plan Commission meeting earlier in the month, providing the benefits of pursuing the audit.

The motion to authorize staff to proceed with a request for proposal to revise and update the Village Zoning Codes based on the recommendations outlined in the Zoning Code audit was made by Pres. Heckendorf and seconded by Tr. Emmrich.

Discussion: Tr. Engelhardt asked about the financial costs associated with this. Administrator Keller provided an overview of phase one, which was under budget, as well as the projected cost for phase two. Further explaining, it would be spread across multiple budget years, as the next phase will take approximately 14-18 months. There was further discussion among the body and Administrator Keller regarding the process and implementation.

Vote: 7 ayes, 0 nays. Motion carried.

8. Personnel Committee

a. Intergovernmental Agreement for Building Inspection Services - City of Hartford

The motion to approve the intergovernmental agreement for building inspection services with the City of Hartford was made by Tr. Engelhardt and seconded by Tr. Emmrich.

Discussion: Tr. Emmrich had questions regarding what would occur if the City of Hartford would enact the 180 days to pull out of the contract, and how that relates to the position. Administrator Keller clarified the Village would not be obligated to have the position for the full hours, but at that time the Village Board would need to make a decision on how they would like to proceed with the position. Tr. Emmrich expressed concerns regarding hours and WRS contributions. Administrator Keller provided an explanation of how the combined hours would make the position WRS eligible.

Vote: 6 ayes, 1 nays (Tr. Emmrich). Motion carried.

9. West Bend School District

Tr. Wells reported. 4K enrollment has opened. There are two seats up for election on the

West Bend School Board, with four individuals running. There was a presentation for the budget side of the building plan which occurred at the last meeting.

10. Washington County Board Report

Pres. Heckendorf reported that there was no correspondence received this month. No update to report.

11. Greater Jackson Business Alliance

Tr. Matter reported, at the mid-January meeting, Administrator Keller provided a Village update. Washington County Executive, Josh Shoemann, spoke about the need for more housing in the county and keeping younger residents from moving out of the county. An election was held, and new board members will be coming on.

12. Mid-Moraine Municipal Association Report

Tr. Olson reported, the last meeting was on January 10, 2024, and the planned speaker was unable to attend. They did discuss State of Wisconsin Senate Bill 691, regarding Urban Towns. Tr. Olson provided the body an overview of the bill. Mid-Moraine Municipal Association passed a resolution opposing Sental Bill 691 at their January dinner meeting. Tr. Olson reported he is now the vice president of the Mid-Moraine Municipal Association. Also at the January dinner meeting, they had a speaker from the EDWC. The topic focused around net promotor score, as well as how communities can utilize it for growth, attracting development, and other matters. The next meeting will be February 14, 2024.

13. Closed Session Pursuant to Wis. Stats. §19.85(1)(e) "deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session."

The closed session is for the following purposes:

1. To Discuss the Conveyance of Property Publicly Owned in TID 7; and
2. To Discuss a Development Agreement, Protective Covenant, and Shared Access and Maintenance Agreement for Property Publicly Owned in TID 7; and
3. To Approve the Sale of Property Publicly Owned in TID 7.

The motion to proceed into closed session pursuant to Wis. Stats. §19.85(e), for the enumerated purposes, was made by Heckendorf and seconded by Tr. Engelhardt. A roll vote was taken:

Pres. Heckendorf: Aye

Tr. Emmrich: Aye

Tr. Engelhardt: Aye

Tr. Olson: Aye

Tr. Kruepke: Aye

Tr. Matter: Aye

Tr. Wells: Aye

Vote: 7 ayes, 0 nays. Motion carried. A five-minute break was provided. The meeting proceeded into closed session at 7:30 PM. Those present for the entirety of the closed session were the members of the Village Board and Administrator Keller.

14. Reconvene into Open Session with Possible Action Related to the Subject of the Preceding Closed Session

The motion to proceed into open session was made by Pres. Heckendorf and seconded by Tr. Emmrich.

Vote: 7 ayes, 0 nays. Motion carried. The meeting resumed in open session at 7:39 PM.

15. Sale of Property Publicly Owned in TID 7

The motion to approve the Quit Claim Deed transferring ownership of outlots 1-5 and 7 to the Oaks of Jackson Homeowner's Association, Inc., conditioned upon insurance being in place prior to the recording of said Quit Claim Deed was made by Pres. Heckendorf and seconded by Tr. Wells.

Vote: 7 ayes, 0 nays. Motion carried.

16. Adjourn

A motion to adjourn the meeting was made by Tr. Kruepke and seconded by Tr. Emmrich.

Vote: 7 ayes, 0 nays. Motion carried. The meeting was adjourned at 7:41 PM.

Respectfully Submitted,
Anastasia Gonstead - Village Clerk

RESOLUTION #24-01

OPPOSITION TO STATE OF WISCONSIN SENATE BILL 691

WHEREAS, it has been demonstrated that Cities, Villages, and Towns can craft mutually beneficial revenue sharing and boundary agreements amongst themselves; and

WHEREAS, Cities and Villages have historically planned their Water Treatment Facilities for a carefully calculated capacity based on their own planned growth; and

WHEREAS, allowing newly formed "Urban Towns" to dictate what that capacity will be used for; and

WHEREAS, under SB691, Cities and Villages will lose their rights to extraterritorial zoning as well as their rights to extraterritorial plat approval; and

WHEREAS, SB691 theoretically can place an entire community's property rights in the hands of one opposing individual; and

WHEREAS, requiring Cities and Villages to extend services to an "Urban Town" where individual lot sizes can range from 1 to 20 acres making any extension cost prohibitive and thus creating an undue hardship to the providing community; and

WHEREAS, SB691 places existing Intergovernmental Agreements in great jeopardy; and

WHEREAS, residents of the affected City or Village would be stripped of their rights to plan and control their own communities' destiny.

NOW, THEREFORE, BE IT RESOLVED, that the Village of Jackson strongly opposes the advancement of SB691.

BE IT FURTHER RESOLVED, that the Village of Jackson stands ready to work with our State Legislators to encourage Cities, Villages, and Towns to work together to form mutually beneficial boundary agreements and to provide services where it's not only mutually beneficial but also a result of intergovernmental cooperation.

BE IT FURTHER RESOLVED, that the State and it's Representatives should encourage partnerships and cooperation among local governing bodies instead of the division and imposed hardships as laid forth in SB691.

BE IT FURTHER RESOLVED, that copies of this resolution be sent to all the State Legislators that represent the Village of Jackson, as well as to the League of Wisconsin Municipalities.

Introduced by:_____

Seconded by:_____

Vote: _____ Ayes _____ Nays

Passed and Approved:_____

Brian Heckendorf – Village President

Attest:_____
Anastasia Gonstead – Village Clerk

Proof of Posting:

I, the undersigned, certify that I posted this Resolution on bulletin boards at the Village Hall, Post Office, and one other location in the Village.

Village Official

Date



2023 SENATE BILL 691

November 21, 2023 - Introduced by Senators TESTIN, JAMES, QUINN, STAFSHOLT and WANGGAARD, cosponsored by Representatives HURD, KRUG, MACCO, MURSAU, O'CONNOR, PETRYK, SCHMIDT and WITTKE. Referred to Committee on Transportation and Local Government.

1 **AN ACT** *to amend* 62.23 (7a) (a) and 236.02 (5); and *to create* 60.10 (1) (h),
2 66.0217 (14) (c) and 66.0813 (7) of the statutes; **relating to:** water and
3 sewerage system connections and annexation of territory and extraterritorial
4 zoning in certain towns.

Analysis by the Legislative Reference Bureau

This bill allows certain towns to designate themselves as “urban towns,” a designation that would limit the effect of extraterritorial zoning and plat approval and annexation by other municipalities. The bill also requires local governments to allow connection, with certain limited exceptions, to their water or sewerage systems by certain other local governments.

Under the bill, a town that meets all of the following may designate itself as an “urban town” upon approval by the town meeting:

1. The town has a population of more than 5,000 and a population density of 750 persons in any one square mile.
2. The town provides law enforcement service.
3. The town has enacted a subdivision ordinance.
4. The town has enacted a zoning ordinance or is subject to county zoning.

Under the bill, a town that has been designated as an urban town is not subject to extraterritorial zoning or extraterritorial plat approval by a neighboring city or village. Also under the bill, certain significantly developed territory of an urban town may not be annexed to a city or village except by unanimous approval of all of the property owners of the property to be annexed. The territory covered by this

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limitation is territory in the urban town that is within three miles of the corporate limits of a first, second, or third class city, or one and one-half miles of a fourth class city or a village if 1) the territory has an average of more than 30 housing units per quarter section or 2) the territory has an assessed value, more than 25 percent of which is attributable to existing or potential mercantile, manufacturing, or public utility uses.

The bill also requires certain governmental units (cities, villages, and sanitary or utility districts located in cities and villages) to allow connection with limited exceptions to their sewer or water systems by urban towns (urban towns and sanitary or utility districts located in urban towns), and vice versa. Specifically, under the bill, an urban town may request the extension or connection of water or sewer service from an adjacent governmental unit by filing a written request for connection. The governmental unit may disapprove a request only if its water or sewerage system does not have sufficient capacity to serve the area that is the subject of the request as of the date of the filing. Likewise, a governmental unit may request an extension or connection to the sewer or water system of an urban town and the request must be approved unless the system does not have sufficient capacity to serve the area covered by the request. The bill also provides that a landowner may request a lateral connection to the water or sewerage system of a governmental unit or urban town. A request of this sort may also be denied only upon a determination of insufficient capacity.

For further information see the local fiscal estimate, which will be printed as an appendix to this bill.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. 60.10 (1) (h) of the statutes is created to read:

60.10 (1) (h) *Urban town designation.* Designate the town as an urban town if all of the following apply:

1. The town has a population of more than 5,000 and a population density of 750 persons in any one square mile.

2. The town provides law enforcement service in one of the manners provided under s. 60.56 (1) (a) 1. to 4.

3. The town has enacted a subdivision ordinance under s. 236.45 (2) (ac).

4. The town has enacted a zoning ordinance under s. 60.61 or 60.62 or is subject to county zoning under s. 59.69.

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1 **SECTION 2.** 62.23 (7a) (a) of the statutes is amended to read:

2 62.23 (7a) (a) Extraterritorial zoning jurisdiction means the unincorporated
3 area, other than qualified urban town territory, as defined in s. 66.0217 (14) (c) 1.,
4 within 3 miles of the corporate limits of a first, second or third class city, or 1 1/2 miles
5 of a fourth class city or a village. The unincorporated area subject to extraterritorial
6 zoning jurisdiction includes areas that are either surrounding or entirely
7 surrounded by a single city or village. Wherever extraterritorial zoning jurisdictions
8 overlap, the provisions of s. 66.0105 shall apply and any subsequent alteration of the
9 corporate limits of the city by annexation, detachment or consolidation proceedings
10 shall not affect the dividing line as initially determined under s. 66.0105. The
11 governing body of the city shall specify by resolution the description of the area to
12 be zoned within its extraterritorial zoning jurisdiction sufficiently accurate to
13 determine its location and such area shall be contiguous to the city. The boundary
14 line of such area shall follow government lot or survey section or fractional section
15 lines or public roads, but need not extend to the limits of the extraterritorial zoning
16 jurisdiction. Within 15 days of the adoption of the resolution the governing body
17 shall declare its intention to prepare a comprehensive zoning ordinance for all or part
18 of its extraterritorial zoning jurisdiction by the publication of the resolution in a
19 newspaper having general circulation in the area proposed to be zoned, as a class 1
20 notice, under ch. 985. The city clerk shall mail a certified copy of the resolution and
21 a scale map reasonably showing the boundaries of the extraterritorial jurisdiction
22 to the clerk of the county in which the extraterritorial jurisdiction area is located and
23 to the town clerk of each town, any part of which is included in such area.

24 **SECTION 3.** 66.0217 (14) (c) of the statutes is created to read:

SENATE BILL 691**SECTION 3**

1 66.0217 (14) (c) 1. In this paragraph, “qualified urban town territory” means
2 the territory of an urban town designated under s. 60.10 (1) (h) that is within 3 miles
3 of the corporate limits of a 1st, 2nd, or 3rd class city, or 1.5 miles of a 4th class city
4 or a village if any of the following applies to the entire territory of the urban town
5 satisfying the proximity requirement under this subd. 1. (intro.):

6 a. The territory has an average of more than 30 housing units per quarter
7 section, excluding any mercantile, manufacturing, public utility developed areas,
8 publicly owned land, and areas where residential development is impracticable due
9 to geographic features, perpetually restricted development rights, or state law.

10 b. The territory has an assessed value for real estate tax purposes, more than
11 25 percent of which is attributable to existing or potential mercantile,
12 manufacturing, or public utility uses.

13 2. No qualified urban town territory may be annexed to a city or village unless
14 the annexation is by unanimous approval under sub. (2).

15 **SECTION 4.** 66.0813 (7) of the statutes is created to read:

16 66.0813 (7) (a) In this subsection:

17 1. “Commission” means the public service commission.

18 2. “Governmental unit” means a city or village that owns, operates, manages,
19 or controls a water or sewerage system or a sanitary or utility district that owns,
20 operates, manages, or controls a water or sewerage system that is located, in whole
21 or in part, in a city or village.

22 3. “Lateral” means the water or sewer lateral or service pipes to be constructed
23 or located from the lot line or near the lot line to the main or from the lot line to the
24 building to be serviced, or both.

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1 4. “Sewerage system” means all structures, conduits, pipelines, and
2 appurtenances by which sewage, storm water, or surface water are collected,
3 transported, pumped, treated, and disposed of, except plumbing inside and in
4 connection with buildings served, and service pipes from building to street main.

5 5. “Urban town” means an urban town designated under s. 60.10 (1) (h) that
6 owns, operates, manages, or controls a water or sewerage system or a sanitary or
7 utility district that owns, operates, manages, or controls a water or sewerage system
8 that is located, in whole or in part, in an urban town.

9 6. “Water system” means all structures, conduits, and appurtenances by means
10 of which water is delivered to consumers, except piping and fixtures inside buildings
11 served and service pipes from building to street main.

12 (b) 1. Notwithstanding subs. (1) and (3) to (5), an urban town may request the
13 extension or connection of water or sewer service from an adjacent governmental
14 unit by filing a written request for connection with the governmental unit’s clerk or,
15 if the governmental unit does not have a clerk, the governmental unit’s secretary.
16 The urban town shall specify in its request the area that will be served by the
17 extension or connection. The urban town may specify the point on the water or
18 sewerage system from which service is to be extended or connected.

19 2. A governmental unit shall make a written determination approving or
20 denying a request under subd. 1. within 45 days of receiving the request. The
21 governmental unit may disapprove a request under subd. 1. only if its water or
22 sewerage system does not have sufficient capacity to serve the area that is the subject
23 of the request as of the date of the filing under subd. 1. The system shall be
24 considered to have sufficient capacity if the urban town agrees to pay for the
25 expansion of the system to accommodate the request.

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1 3. An urban town may appeal a denial under subd. 2. to the commission. The
2 commission may include in its decision conditions on the extension or connection of
3 service to ensure that costs resulting from the extension or connection are borne by
4 the users causing the costs and that the connection point is reasonable. The urban
5 town or the governmental unit may appeal the decision of the commission to the
6 circuit court for the county in which the proposed extension or connection would
7 occur.

8 4. Upon extension or connection pursuant to an approval under subd. 2. or 3.,
9 the portion of the water or sewerage system located in the urban town shall be owned
10 and maintained by the urban town unless the urban town and the governmental unit
11 agree otherwise.

12 5. Upon extension or connection pursuant to an approval under subd. 2. or 3.,
13 the governmental unit may charge benefited landowners in the urban town a fee that
14 bears a reasonable relationship to the costs incurred by the governmental unit in
15 providing the water or sewer service to those benefited properties. A fee is
16 unreasonable under this subdivision if it does not directly arise out of the
17 governmental unit's cost or if it is not proportionate to what a similarly situated
18 parcel in the governmental unit would be charged for the same service.

19 6. The cost of an urban town's construction and connection of its water or
20 sewerage system to a governmental unit's water or sewerage system pursuant to an
21 approval under subd. 2. or 3. is the responsibility of the urban town.

22 (c) 1. Notwithstanding subs. (1) and (3) to (5), a governmental unit may request
23 the extension or connection of water or sewer service from an adjacent urban town
24 by filing a written request for connection with the urban town's clerk, or if the urban
25 town does not have a clerk, the urban town's secretary. The governmental unit shall

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1 specify in its request the area that will be served by the extension or connection. The
2 governmental unit may specify the point on the water or sewerage system from
3 which service is to be extended or connected.

4 2. An urban town shall make a written determination approving or denying a
5 request under subd. 1. within 45 days of receiving the request. The urban town may
6 disapprove a request under subd. 1. only if its water or sewerage system does not
7 have sufficient capacity to serve the area that is the subject of the request as of the
8 date of the filing under subd. 1. The system shall be considered to have sufficient
9 capacity if the governmental unit agrees to pay for the expansion of the system to
10 accommodate the request.

11 3. A governmental unit may appeal a denial under subd. 2. to the commission.
12 The commission may include in its decision conditions on the extension or connection
13 of service to ensure that costs resulting from the extension or connection are borne
14 by the users causing the costs and that the connection point is reasonable. The urban
15 town or governmental unit may appeal the decision of the commission to the circuit
16 court for the county in which the proposed extension or connection would occur.

17 4. Upon extension or connection pursuant to an approval under subd. 2. or 3.,
18 the portion of the water or sewerage system located in the governmental unit shall
19 be owned and maintained by the governmental unit unless the urban town and the
20 governmental unit agree otherwise.

21 5. Upon extension or connection pursuant to an approval under subd. 2. or 3.,
22 the urban town may charge benefited landowners in the governmental unit a fee that
23 bears a reasonable relationship to the costs incurred by the urban town in providing
24 the water or sewer service to those benefited properties. A fee is unreasonable if it

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1 does not directly arise out of the urban town's cost or if it is not proportionate to what
2 a similarly situated parcel in the urban town would be charged for the same service.

3 6. The cost of construction and connection of the water or sewerage system of
4 a governmental unit to an urban town's water or sewerage system pursuant to an
5 approval under subd. 2. or 3. is the responsibility of the governmental unit.

6 (d) 1. Notwithstanding subs. (1) and (3) to (5), a landowner may request a
7 lateral connection to the water or sewerage system of a governmental unit or urban
8 town by filing a written request for connection with the clerk of the governmental
9 unit or urban town or, if the governmental unit or urban town does not have a clerk,
10 the governmental unit's secretary.

11 2. A governmental unit or urban town shall make a written determination
12 approving or denying a request under subd. 1. within 45 days of receiving the
13 request. The governmental unit or urban town may disapprove a request under
14 subd. 1. only if its water or sewerage system does not have sufficient capacity to serve
15 the landowner as of the date of the filing under subd. 1. The system shall be
16 considered to have sufficient capacity if the landowner agrees to pay for the
17 expansion of the system to accommodate the request.

18 3. A landowner may appeal a denial under subd. 2. to the commission. The
19 commission may include in its decision conditions on the lateral connection to ensure
20 that costs resulting from the lateral connection are borne by the landowner. The
21 landowner or the governmental unit or urban town may appeal the decision of the
22 commission to the circuit court for the county in which the proposed lateral
23 connection would occur.

24 4. Upon connection pursuant to an approval under subd. 2. or 3., the
25 governmental unit or urban town may charge the landowner a fee that bears a

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1 reasonable relationship to the costs incurred by the governmental unit or urban town
2 in providing the water or sewer service to the landowner's property. A fee is
3 unreasonable if it does not directly arise out of the governmental unit's or urban
4 town's cost or if it is not proportionate to what a similarly situated parcel in the
5 governmental unit or urban town would be charged for the same service.

6 5. The cost of constructing and installing the lateral connection to the water or
7 sewerage system of the governmental unit or urban town pursuant to an approval
8 under subd. 2. or 3. is the responsibility of the landowner. The governmental unit
9 or urban town may charge the landowner a lateral connection fee that is equivalent
10 to the lateral connection fee that would be charged to a similarly situated parcel in
11 the governmental unit or urban town.

12 6. A governmental unit or urban town may not prohibit a lateral connection
13 under this paragraph except for prior nonpayment of water or sewer charges by the
14 landowner.

15 (e) An intergovernmental cooperation agreement may not include a limitation
16 on the ability of an urban town to seek or obtain extension or connection of water or
17 sewer service under par. (b).

18 **SECTION 5.** 236.02 (5) of the statutes is amended to read:

19 236.02 (5) "Extraterritorial plat approval jurisdiction" means the
20 unincorporated area, other than qualified urban town territory, as defined in s.
21 66.0217 (14) (c) 1., within 3 miles of the corporate limits of a first, second or third class
22 city, or 1 1/2 miles of a fourth class city or a village.

23 (END)

Memo

To: Jen Keller, Village Administrator
From: Brian W. Kober, P. E., Director of Public Works
Subject: 2024 DPW Projects using Washington County Share Revenue
Date: February 8, 2024

Policy Question: Does the Village Board wish to participate in the “Washington County Shared Revenue Program” for DPW Projects?

Background:

- 1) Washington County Executive Schoemann and Chief Elected Officials in the county, including President Heckendorf, have met to discuss how shared revenues will be distributed from the County back to municipalities in a variety of ways in 2024 and 2025. One of those ways is to include shared DPW services where Washington County laborers and equipment are shared for projects, and the municipalities are to contribute to the cost of materials to perform the work.
- 2) Village Staff has identified appropriate projects and will submit a request for shared services from the County on or before 2/15. Sample DPW projects Jackson may want to request Washington County assistance with include patching, pavement marking, and traffic/speed study.
- 3) The Village budgeted \$18,000 in 2024 for road repair (patching), \$8,000 for painting/stripping, and \$24,000 for crack filling.
- 4) The Village of Jackson has been allocated \$20,832.28 for DPW projects in Washington County 2024 Shared Revenue Program.
- 5) Last year the Village paid Washington County to perform line painting for center line and fog lines throughout the Village. The total cost was \$7,357.20 with Labor & Equipment being \$2,244.49, and materials \$5,112.71. Per the proposed program line painting would cost in 2024 with total cost \$15,030.00, Labor & Equipment \$5,550.00, and materials \$9,480.00. The materials cost has a increase of 54% using the program.
- 6) In the event the Village proceeds with DPW projects via the Shared Revenue Program, the county would provide a monthly “invoice”, if applicable, to the local municipalities where the materials would be billed, and the cost of equipment and labor would be totaled and credited back to Jackson.

Summary: A request has been made with the County for a Traffic Study to be conducted on Glen Brooke Drive from South Street to Glen Hill Drive and if there is going to be charged for the study. We have filled out the form by selecting line painting and asphalt patching to achieve spending the Village allocation amount. The Village might be better off proceeding as in the past by using Washington County for line painting and the rest of the work by private contractors to get a greater return on investment.

If you have any questions, please do not hesitate to ask.

Brian W. Kober, P.E.



Roadway Maintenance Shared Revenue Washington County

November 30, 2023

Funding the plan



2024 – 2025 budget

~ \$450,000 each year

History of Work for locals



Work performed for local Municipalities (includes materials)

Pavement Marking	Mechanic Work
Crack Filling	Pavement Milling
Mastic	Event Message Boards
Culvert Replacement/Lining	Bridge Inspections
Pavement Repairs/patching	Rent Plow truck
Gravel Shoulder Installation	Salt Storage
Ditching	Plowing
Landscaping for ditching	Mowing
Remove Ice from culverts	Roadway Safety and Improvement Planning
Inlet Repair	Speed Studies w/ Traffic Counts
Bird netting on bridges	Road Sweeping
Bridge repairs	Survey Monument Preservation/Replacement
Install road signs	

Materials Sold to local Municipalities

Salt and Salt Storage
Cold Patch
Equipment Parts
Wood Posts
Signs
Salt Brine
Paint

History of Work for locals



2022 - \$240,000 Equipment and Labor
 \$ 90,000 Materials (not including cold patch or brine)
 \$330,000 Total

WisDOT has not increased funding for maintenance on the State system, which allows for time to work on local roadways.

History of Work for locals



3 year average	2022						
Payment for work performed	Municipality		Total Payments	Labor and Equipment	Materials	Municipality	Type of work
\$ 5,822.22	Addison		\$ 16,283.00	\$ 15,565.37	\$ 717.63	Addison	Culvert
\$ 15,980.25	Barton		\$ 1,401.81	\$ 670.81	\$ 731.00	Barton	Unplug culvert, deliver cold patch
\$ 16,016.84	Erin		\$ 13,375.26	\$ 10,433.39	\$ 2,941.87	Erin	Paint and Crack Fill
\$ 14,066.23	Farmington		\$ 30,656.30	\$ 25,312.95	\$ 5,343.35	Farmington	Paint and Bird netting and Shouldering
\$ 459.85	T. Germantown		\$ 256.10	\$ 11.10	\$ 245.00	T. Germantown	
\$ 1,966.35	T. Hartford		\$ 3,856.62	\$ 1,827.52	\$ 2,029.10	T. Hartford	Paint
\$ 15,539.92	T. Jackson		\$ 22,567.80	\$ 13,929.09	\$ 8,638.71	T. Jackson	Paint, Mastic
\$ 265.65	T. Kewaskum		\$ 796.96	\$ 319.90	\$ 477.06	T. Kewaskum	Sign repair and posts
\$ 7,882.27	Polk		\$ 7,917.57	\$ 2,601.76	\$ 5,315.81	Polk	Paint
\$ 47,735.61	V Richfield		\$ 44,082.98	\$ 26,683.00	\$ 17,399.98	V Richfield	Paint and Crack Fill
\$ 7,101.79	Trenton		\$ 9,155.02	\$ 6,615.05	\$ 2,539.97	Trenton	Paint Bridge Rail repair
\$ 31,620.36	Wayne		\$ 17,898.59	\$ 14,966.81	\$ 2,931.78	Wayne	Culvert and Ditching
\$ 595.83	T. West Bend		\$ 938.73	\$ 508.69	\$ 430.04	T. West Bend	Paint, install sign
\$ 3,385.61	V Newburg		\$ 375.74	\$ 73.25	\$ 302.49	V Newburg	Deliver Cold Patch
\$ 46,684.37	V. Germantown		\$ 52,209.77	\$ 22,914.02	\$ 29,295.75	V. Germantown	Paint
\$ 5,279.22	V. Jackson		\$ 7,357.20	\$ 2,244.49	\$ 5,112.71	V. Jackson	Paint
\$ 2,440.39	V. Slinger		\$ 3,006.32	\$ 1,608.66	\$ 1,397.66	V. Slinger	Paint
\$ 12,030.39	C. Hartford		\$ 6,709.00	\$ 2,105.42	\$ 4,603.58	C. Hartford	Paint
\$ 16,256.21	C. West Bend		\$ 1,066.21	\$ 1,066.21		C. West Bend	
\$ -	V. Kewaskum			\$ -		V. Kewaskum	
\$ 251,129.35			\$ 239,910.98	\$ 149,457.49	\$ 90,453.49		

Work for locals



Work we could perform for local Municipalities (includes materials)		Professional Services for local Municipalities
Guard Rail repair		Intersection Safety Plans
Tree cutting/removal		Roadway Safety Plans
Ditch spraying		2050 Transportation Network Sustainability Plan
Chip Sealing		Construction/Paving Inspection
Equipment Competency Training		PASER Evaluations (WISLR road ratings)
		Permitting
		Culvert Inspection/Training & Data Housing
		Fleet Management

Funding Distribution



- Washington County would utilize its workforce and equipment to complete projects on the local roadway network.
- Washington County would not charge the local municipality for the administrative, small tool, workforce or equipment charges until the agreed upon funding amount is met.
- The local municipality would only be responsible for material charges.
- The Washington County Highway Department will provide a monthly invoice if applicable to the local municipality. The materials will be highlighted on this invoice to pay.
- Twice a year the local municipality governing body will be provided a statement of the shared revenue grant program. The local municipality must take official action on this statement to have the highway department labor and equipment charges forgiven.
- Additionally, Washington County will pay for all bridge inspections

WCSRP Meeting (December)



1. Elect a chairperson
2. Each municipality has one vote by the chief elected official
3. I recommend any action is approved by 14 municipalities.
4. Committees first action item is to determine how to distribute the \$450,000 annual amount.
5. Distribution could take various forms.
6. The distribution methodology will determine the need/length of future WCSRP meetings.

Funding Administration



For 2024:

1. Complete the funding requisition form and provide to Washington County in mid January 2024.
2. Washington County Highway Department will provide cost and workload estimates for the work by January 21, 2024.
3. Municipalities will send one official to a meeting at the end of January to learn/determine which projects will be completed.
4. This meeting will be run similar in nature to the LRIP meetings – called WCSRP
5. Washington County will review the funding in early September of 2024.
6. The group will reconvene in late September of 2024 to review the funding to date and look for possible projects to complete in 2024.

Funding Administration



For 2025 and beyond:

1. Complete the attached form and provide to Washington County by September 1, 2024.
2. Washington County Highway Department will provide cost and workload estimates for the work by September 21, 2024.
3. Municipalities will send one official to a meeting at the end of September to determine which projects will be completed yet in 2024, and also the ones to complete in 2025
This meeting will be run similar in nature to the LRIP meetings – called WCSRP

Funding Requisition Form



Municipality: _____

Date: _____

X	DESCRIPTION OF ITEM	PRIORITY	UNIT	QTY	MATERIAL UNIT COST	MATERIAL COST	LAB & EQUIP UNIT COST	LAB & EQUIP COST	TOTAL PROJECT COST	LOCATIONS
		#								
	PAVEMENT MARKING (CENTER LINE ONLY)		MILES	0	\$300.00	\$0.00	\$150.00	\$0.00	\$0.00	
X	PAVEMENT MARKING (CENTER AND EDGE LINE)		MILES	25	\$600.00	\$15,000.00	\$400.00	\$10,000.00	\$25,000.00	
	PAVEMENT MARKINGS (SPECIAL MARKINGS)		EACH	0	\$25.00	\$0.00	\$150.00	\$0.00	\$0.00	
	CRACK FILLING		MILES	0	\$2,700.00	\$0.00	\$8,600.00	\$0.00	\$0.00	
	MASTIC - ROADWAY		MILES	0	\$5,000.00	\$0.00	\$8,600.00	\$0.00	\$0.00	
	MASTIC - SPOT LOCATIONS		EACH	0	\$250.00	\$0.00	\$300.00	\$0.00	\$0.00	
	CHIP SEAL		MILES	0	\$14,000.00	\$0.00	\$11,000.00	\$0.00	\$0.00	
	CULVERT REPLACEMENT (50")		EACH	0	\$4,000.00	\$0.00	\$5,000.00	\$0.00	\$0.00	
	CULVERT LINING (50" - 30" liner dry conditions)		EACH	0	\$4,250.00	\$0.00	\$3,200.00	\$0.00	\$0.00	
	SHOULDER RECLAIMING (BOTH SIDES OF ROADWAY)		MILES	0	\$1,000.00	\$0.00	\$2,400.00	\$0.00	\$0.00	
	SHOULDERING (3' WIDE 4" DEEP)		MILES	0	\$4,000.00	\$0.00	\$4,000.00	\$0.00	\$0.00	
	DITCHING		LF	0	\$1.50	\$0.00	\$3.50	\$0.00	\$0.00	
	ASPHALT)		EACH	0	\$1,200.00	\$0.00	\$3,600.00	\$0.00	\$0.00	
	BRIDGE APPROACH ASPHALT (BOTH SIDES)		EACH	0	\$1,900.00	\$0.00	\$11,600.00	\$0.00	\$0.00	
	INSTALL ROAD SIGNS		EACH	0	\$50.00	\$0.00	\$200.00	\$0.00	\$0.00	
	ROADSIDE VEGETATION/TREE REMOVAL -WINTER WORK		LF	0	\$0.02	\$0.00	\$2.00	\$0.00	\$0.00	
	ROADSIDE MOWING		MILES	0	\$0.00	\$0.00	\$400.00	\$0.00	\$0.00	
	ASPHALT PATCHING (24'x30')		EACH	0	\$1,900.00	\$0.00	\$10,000.00	\$0.00	\$0.00	
	VEGETATION SPRAYING		MILES	0	\$133.00	\$0.00	\$85.30	\$0.00	\$0.00	
	GUARD RAIL REPAIR		LF	0	\$140.00	\$0.00	\$60.00	\$0.00	\$0.00	
	TOTAL					\$15,000.00		\$10,000.00	\$25,000.00	

DISCOVER. CONNECT. PROSPER.

QUESTIONS



Scott M. Schmidt
Washington County Chief Public Works Officer
900 Lang Street
West Bend, WI 53090
262-335-6881
scott.schmidt@washcowisco.gov

Shared Revenue Roadway Funding for Local Municipalities

This form is due February 15, 2024 to scott.schmidt@washcowisco.gov (earlier is appreciated) - contact Scott with any questions 262-335-6881

Please fill out all highlighted cells (If you do not want a particular service, leave the quantity at 0)

Municipality: Village of Jackson **Date:** 2/8/2024 **Contact (phone and e-mail):** Brian W. Kober 262-677-0707 brian.kober@villageofjacksonwi.gov

						The red number above would be the municipalities financial responsibility		The green number above should closely match the green highlighted number for your municipality below	This green amount will be forgiven once the local municipality takes official action to accept the grant. Municipality will only have to pay this amount if it does not take action.	Exact locations are not needed at this time and can be modified at a later date.
--	--	--	--	--	--	---	--	--	--	--

	DESCRIPTION OF SERVICE ITEM	PRIORITY	UNIT	QTYS	MATERIAL	MATERIAL	LABOR & EQUIP	LABOR & EQUIP	TOTAL	LOCATIONS and NOTES
		#			UNIT COST	COST	UNIT COST	COST	PROJECT COST	
	PAVEMENT MARKING (CENTER LINE ONLY)	1	MILES	15.4	\$300.00	\$4,620.00	\$150.00	\$2,310.00	\$6,930.00	
	PAVEMENT MARKING (CENTER AND EDGE LINE)	1	MILES	8.1	\$600.00	\$4,860.00	\$400.00	\$3,240.00	\$8,100.00	
	PAVEMENT MARKINGS (SPECIAL MARKINGS)		EACH	0	\$25.00	\$0.00	\$150.00	\$0.00	\$0.00	
	CRACK FILLING		MILES	0	\$2,700.00	\$0.00	\$8,600.00	\$0.00	\$0.00	
	MASTIC - ROADWAY		MILES	0	\$5,000.00	\$0.00	\$8,600.00	\$0.00	\$0.00	
	MASTIC - SPOT LOCATIONS		EACH	0	\$250.00	\$0.00	\$300.00	\$0.00	\$0.00	
	CHIP SEAL		MILES	0	\$14,000.00	\$0.00	\$11,000.00	\$0.00	\$0.00	
	CULVERT REPLACEMENT (24" - 50')		EACH	0	\$4,000.00	\$0.00	\$5,000.00	\$0.00	\$0.00	
	CULVERT LINING (50' - 30" liner dry conditions)		EACH	0	\$4,250.00	\$0.00	\$3,200.00	\$0.00	\$0.00	
	SHOULDER RECLAIMING (BOTH SIDES OF ROADWAY)		MILES	0	\$1,000.00	\$0.00	\$2,400.00	\$0.00	\$0.00	
	SHOULDERING (3' WIDE 4" DEEP)		MILES	0	\$4,000.00	\$0.00	\$4,000.00	\$0.00	\$0.00	
	DITCHING		LF	0	\$1.50	\$0.00	\$3.50	\$0.00	\$0.00	
	STORM INLET REPAIR (ONE CONCRETE RING, MORTAR, 10' CONCRETE CURB, ASPHALT)		EACH	0	\$1,200.00	\$0.00	\$3,600.00	\$0.00	\$0.00	
	BRIDGE APPROACH ASPHALT (BOTH SIDES)		EACH	0	\$1,900.00	\$0.00	\$11,600.00	\$0.00	\$0.00	
	INSTALL ROAD SIGNS		EACH	0	\$50.00	\$0.00	\$200.00	\$0.00	\$0.00	
	ROADSIDE VEGETATION/TREE REMOVAL - WINTER WORK		LF	0	\$0.02	\$0.00	\$2.00	\$0.00	\$0.00	
	ROADSIDE MOWING (both sides of roadway included)		MILES	0	\$0.00	\$0.00	\$400.00	\$0.00	\$0.00	
	ASPHALT PATCHING (24'x30')	2	EACH	1.5	\$1,900.00	\$2,850.00	\$10,000.00	\$15,000.00	\$17,850.00	
	VEGETATION SPRAYING (both sides of roadway included)		MILES	0	\$133.00	\$0.00	\$85.30	\$0.00	\$0.00	
	GUARD RAIL REPAIR		LF	0	\$140.00	\$0.00	\$60.00	\$0.00	\$0.00	
	INSERT ANOTHER SERVICE - Traffic Study									
	TOTAL					\$12,330.00		\$20,550.00	\$32,880.00	

All the numbers above are estimates, invoicing will occur based on actual time and materials.

Municipality	Total
T. Addison	\$ 33,371.92
T. Barton	\$ 26,138.83
T. Erin	\$ 30,117.80
T. Farmington	\$ 34,314.21
T. Germantown	\$ 10,188.66
T. Hartford	\$ 27,283.31
T. Jackson	\$ 29,576.08
T. Kewaskum	\$ 23,002.97
T. Polk	\$ 30,850.26
T. Trenton	\$ 33,803.01
T. Wayne	\$ 30,823.56
T. West Bend	\$ 25,574.23
V. Jackson	\$ 20,832.28
V. Newburg	\$ 10,978.35
V. Richfield	\$ 65,669.02
V. Slinger	\$ 20,126.52



PCCO #001

Hunzinger Construction Company
21100 Enterprise Avenue
Brookfield, Wisconsin 53045-5226
Phone: (262) 797-0797
Fax: (262) 797-0474

Project: 23-155 - Jackson - 2023 WWTF Storage Garage Expansion
W194N16658 Eagle Dr.
Jackson, Wisconsin 53037
Phone: 414-430-7196
Fax: 262-797-0474

Prime Contract Change Order #001: PCO's #01, 02, 03, & 04

TO:	Village of Jackson W194N16660 Eagle Drive Jackson, Wisconsin 53037	FROM:	Hunzinger Construction Company 21100 Enterprise Avenue Brookfield Wisconsin 53045-5226
DATE CREATED:	12/ 07 /2023	CREATED BY:	Matt Horton (Hunzinger Construction Company)
AIA CONTRACT#:		REVISION:	0
DESIGNATED REVIEWER:	Matt Horton (Hunzinger Construction Company)	REVIEWED BY:	
SCHEDULE IMPACT:	0 days	EXECUTED:	No
CONTRACT FOR:	1:HCCo. Prime/General Contract	TOTAL AMOUNT:	(\$51,677.00)

DESCRIPTION:

PCO#01/CE #001 - Shingle Roofing System

Provide an Alternate Shingle Roofing System in lieu of the specified Metal Panel Roofing System, per Hunzinger proposed V/E Alternate #1 Credit dated 8/31/23 and as approved by Owner during PreConstruction meeting. Refer to approved submittals for further detail on materials.

PCO#02/CE #002 - Alternate Metal Panel MFG & Thickness

Provide an Alternate Metal Wall Panel (Central States Manufacturing - Panel-Loc Plus) and a revised Metal Wall Panel Thickness of 26ga in lieu of the specified metal panel manufacturer and thickness, per Hunzinger proposed V/E Alternates #3 & #4 dated 9/19/23 and as approved by Owner via Email on 9/25/23. Refer to approved submittals for further detail on materials.

PCO#03/CE #003 - Alternate Vinyl Windows

Provide an Alternate Vinyl Windows in lieu of the specified Aluminum Clad Wood Windows, per Hunzinger proposed V/E Alternates credit dated 9/26/23 and as approved by Owner via Email on 9/27/23.

PCO#04/CE #004 - MAU Support Stand Modification

Provide modification to the MAU support stand to increase it's height to 10ft AFF and omit the associated specified concrete pad, per Owner Request.

ATTACHMENTS:

[PCO#04 - Jackson WWTF NTP - MAU Stand Mod COR.pdf](#) [PCO#03 - Jackson Approval for Alternate Vinyl Windows.pdf](#) [PCO#02 - Jackson Approval for Central States Siding Alts #3 & #4.pdf](#) [PCO#01 - COR Credit Shingles vs. Metal Panel Roofing.pdf](#)

POTENTIAL CHANGE ORDERS IN THIS CHANGE ORDER:

PCO #	Title	Schedule Impact	Amount
001	CE #001 - Alternate Shingle Roofing System	0 days	(48,250.00)
002	CE #002 - Alternate Metal Panel & Thickness	0 days	(4,189.00)
003	CE #003 - Alternate Vinyl Windows	0 days	(1,400.00)
004	CE #004 - MAU Support Stand Modification	0 days	2,162.00
TOTAL:			(\$51,677.00)

The original (Contract Sum)	\$ 867,000.00
Net change by previously authorized Change Orders	\$ 0.00
The contract sum prior to this Change Order was	\$ 867,000.00
The contract sum will be decreased by this Change Order in the amount of	(\$51,677.00)
The new contract sum including this Change Order will be	\$ 815,323.00
The contract time will not be changed by this Change Order by 0 days	



PCCO #001

Gregory Droessler, P.E. (Town & Country Engineering, Inc.)
6264 Nesbitt Road
Madison Wisconsin 53719

Village of Jackson
W194N16660 Eagle Drive
Jackson Wisconsin 53037

Hunzinger Construction Company
21100 Enterprise Avenue
Brookfield Wisconsin 53045-5226

SIGNATURE **DATE**

Hunzinger Construction Company

SIGNATURE **DATE**

page 2 of 2

SIGNATURE **DATE**
 **12/7/23**
James R Hunzinger-EVP

Printed On: 12/7/ 2023 03:03 PM

Matt Horton

From: Matt Horton
Sent: Tuesday, September 19, 2023 3:40 PM
To: Brian Kober
Cc: Joel Becker; Gregory J. Droessler (gdroessler@tcengineers.net)
Subject: RE: Jackson WWTF - Storage Garage Expansion: V/E Alternatives for Consideration

Importance: High

Brian,

I just wanted to confirm our understanding of your direction for the proposed V/E Alternatives in the email below. Per the Preconstruction Meeting, you have accepted Item 1 below for the Shingled Roof System in lieu of Metal Roof. Conversely, item 2 regarding the Sectional OH Door options has been rejected (the OH submittal came back without those proposed changes being noted/accepted as well).

Please confirm,

Thanks,

Matt

From: Matt Horton
Sent: Thursday, August 31, 2023 4:15 PM
To: Brian Kober <brian.kober@villageofjacksonwi.gov>
Cc: Joel Becker <jbecker@hunzinger.com>; Marc Gilman <mgilman@hunzinger.com>; Gregory J. Droessler (gdroessler@tcengineers.net) <gdroessler@tcengineers.net>
Subject: Jackson WWTF - Storage Garage Expansion: V/E Alternatives for Consideration

Brian,

During our initial meeting last month, you indicated that you would like to know of any Value-Engineering opportunities that we may be able to propose for your review. To that end, we can provide the following items for your consideration:

- 1. All New Shingle Roof in lieu of Metal Panel Roofing: LUMP SUM DEDUCT: -\$48,250**
 - a. Remove existing shingle roofing (same as base bid)
 - b. Provide Ice & Water Shield at Gutter Edge/Eaves
 - c. Provide Synthetic Underlayment at all other roof areas without Ice & Water shield.
 - d. Provide Certainteed Landmark Series Shingles (Standard Landmark Shingle). Refer to attached product data and warranty information for the Landmark Series Shingles.
- 2. Sectional Overhead Doors:**
 - A. Omit Manual Slide Lock and associated operator interlock on (2) OH Doors with Motor Operators: LUMP SUM DEDUCT: -\$1,450**
 - B. Omit ADA Horn/Strobe on (2) OH Doors: LUMP SUM DEDUCT: -\$1,800**

Please note that we are not accepting any design responsibility with these proposed cost reduction alternatives. Please let us know if you wish to accept any these Alternatives, or discuss in further detail.

Thanks,
Matt

Matt Horton

From: Brian Kober <brian.kober@villageofjacksonwi.gov>
Sent: Monday, September 25, 2023 2:19 PM
To: Matt Horton; Gregory J. Droessler (gdroessler@tcengineers.net)
Cc: Joel Becker; Jeff Deitsch; Chad Russ
Subject: RE: Jackson WWTF - Garage Expansion: Metal Panel Siding Voluntary Alternates
Attachments: Central States Mfg color chart.pdf

Matt,

The Jackson Sewer Utility approves both Alternate #3 & #4 deducts. Use Central Sates Mfg. colors as described below.

If you have any questions please do not hesitate to ask.

Brian W. Kober. P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037
Phone: 262-677-0707
Fax: 262-677-8770

From: Matt Horton <mhorton@hunzinger.com>
Sent: Tuesday, September 19, 2023 3:19 PM
To: Brian Kober <brian.kober@villageofjacksonwi.gov>; Gregory J. Droessler (gdroessler@tcengineers.net) <gdroessler@tcengineers.net>
Cc: Joel Becker <JBecker@hunzinger.com>
Subject: Jackson WWTF - Garage Expansion: Metal Panel Siding Voluntary Alternates
Importance: High

Brian & Greg,

We are following up on our previous discussion regarding the potential for cost savings alternatives for the Metal Panel Siding Scope on this project.

To that end, we offer the following Voluntary Alternates for your consideration:

Voluntary Alternate #3 – Provide Interior Metal Panel Siding Material in 26 Ga. thickness (to match existing), in lieu of specified 24 Ga. thickness (All McElroy Standard Color material): **DEDUCT \$798**

Acceptance of this Alternate would mean that we would now be matching all the existing buildings metal panel siding thickness, for the new addition construction:

- A. Exterior Wall Siding - 26 Ga.
- B. Interior Wall Siding- 26 Ga.
- C. Interior Ceiling Siding – 29 Ga.

Voluntary Alternate #4 – Provide Central States Mfg. Metal Panel Siding Material (in the same thickness as in Voluntary Alternate #1), in lieu of Specified McElroy Material (ALL Material in Standard Colors): **DEDUCT \$3,391***

*Unfortunately, after our preconstruction meeting with you, we were informed by Drexel Building Supply, that Central States Manufacturing NO longer offers the good color match "CLAY" that we left a sample of with Greg on-site. So if you wish to proceed with the Alternate Central States Metal Panel Siding Deduct, in lieu of the specified McElroy material, it would need to be from the current available standard colors which I have attached herein. We did not see a real good remaining Central States color match available to the existing Exterior siding. We believe Taupe & Light Stone are the closest matches to the current exterior siding, and that the Burnished Slate is the closest match to the existing Exterior dark trim. The existing Interior of the building is white, and both McElroy and Central States only offer (1) white selection.

I have also attached The McElroy color chart for review. We believe "CLAY" is a decent match to the existing Exterior siding, and that Patrician Bronze is the closest match offered by McElroy to the existing Exterior trim.

Lastly, the panel profiles for both the Central States "Panel-Loc Plus" and McElroy "Max-Rib" match the existing building metal siding profile.

Please advise how you wish to proceed, and we will formally submit for approval accordingly.

Thanks,

Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com

www.hunzinger.com



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Matt Horton

From: Brian Kober <brian.kober@villageofjacksonwi.gov>
Sent: Wednesday, September 27, 2023 7:34 AM
To: Matt Horton; Gregory Droessler
Cc: Joel Becker; Phillip Moran, Jr.; Megan Campbell; Jeff Deitsch; Chad Russ
Subject: RE: Jackson WWTF - Window Submittal - Vinyl in Lieu of Aluminum Clad Credit

Matt,

Vinyl windows will work just fine. We will take the credit of \$1,400, and proceed with Vinyl Windows.

Brian W. Kober. P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037
Phone: 262-677-0707
Fax: 262-677-8770

From: Matt Horton <mhorton@hunzinger.com>
Sent: Tuesday, September 26, 2023 4:14 PM
To: Gregory Droessler <gdroessler@tcengineers.net>; Brian Kober <brian.kober@villageofjacksonwi.gov>
Cc: Joel Becker <JBecker@hunzinger.com>; Phillip Moran, Jr. <pmoran@hunzinger.com>; Megan Campbell <mcampbell@tcengineers.net>
Subject: Jackson WWTF - Window Submittal - Vinyl in Lieu of Aluminum Clad Credit
Importance: High

Brian & Greg,

Per my discussion with Greg last week, the windows on the existing building are Vinyl, 100% Vinyl frames. The Drawing Key Notes indicate to provide Aluminum Clad Wood windows. We have since submitted 100% Vinyl Framed Windows for approval.

Your Approval of the Vinyl windows submittal will result in a net credit in the amount of \$1,400. Please confirm how you wish to proceed.

Thanks,
Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com www.hunzinger.com





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Matt Horton *LEED AP BD+C*

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

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mhorton@hunzinger.com

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Matt Horton

From: Brian Kober <brian.kober@villageofjacksonwi.gov>
Sent: Wednesday, November 22, 2023 8:46 AM
To: Gregory J. Droessler (gdroessler@tcengineers.net)
Cc: Matt Horton; Joel Becker; Chad Russ; Jeff Deitsch
Subject: RE: Jackson WWTF - Proposed MAU Raised Stand Drawing
Attachments: HCCo. COR - MAU Stand Modification.pdf; Metal MAU Stand 10 ' Tall .pdf

Importance: High

Greg,

The Jackson Sewer Utility accepts the pricing to raise the MUA unit. Please proceed accordingly with a change order or place as a line item in the pay request.

If you have any questions please do not hesitate to ask.

Happy Thanksgiving,

Brian W. Kober. P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037
Phone: 262-677-0707
Fax: 262-677-8770

From: Gregory Droessler <gdroessler@tcengineers.net>
Sent: Tuesday, November 21, 2023 4:34 PM
To: Brian Kober <brian.kober@villageofjacksonwi.gov>
Subject: FW: Jackson WWTF - Proposed MAU Raised Stand Drawing
Importance: High

Brian,

Here is the pricing for raising that MUA unit up. Please let me know if you want to proceed with this.

Thanks,

Greg

Gregory J. Droessler, P.E. – Vice President
gdroessler@tcengineers.net
Town and Country Engineering, Inc.
10505 Corporate Drive
Suite 105A
Pleasant Prairie, WI 53158
262.925.3210 (direct)
608.273.3350 (office)
262.620.2914 (cell)

From: Matt Horton <mhorton@hunzinger.com>
Sent: Tuesday, November 21, 2023 3:39 PM
To: Gregory Droessler <gdroessler@tcengineers.net>
Cc: Joel Becker <JBecker@hunzinger.com>
Subject: RE: Jackson WWTF - Proposed MAU Raised Stand Drawing
Importance: High

Greg,
Per your request, attached is the pricing for the modifications to the MAU Stand. The overall cost change to increase the height of the steel stand to 10ft, and omit the concrete pad is an ADD of \$2,162.
Please advise if this change is approved and that we are authorized to proceed accordingly.
Thanks,
Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com

www.hunzinger.com



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From: Gregory Droessler <gdroessler@tcengineers.net>
Sent: Tuesday, November 14, 2023 2:57 PM
To: Matt Horton <mhorton@hunzinger.com>
Cc: Phillip Moran, Jr. <pmoran@hunzinger.com>; Joel Becker <JBecker@hunzinger.com>
Subject: RE: Jackson WWTF - Proposed MAU Raised Stand Drawing

Matt,

The sketch for this looks good, please proceed with getting pricing for this change swapping the concrete pad for the taller platform.

Thanks,

Greg

Gregory J. Droessler, P.E. – Vice President
gdroessler@tcengineers.net
Town and Country Engineering, Inc.
10505 Corporate Drive
Suite 105A

Pleasant Prairie, WI 53158
262.925.3210 (direct)
608.273.3350 (office)
262.620.2914 (cell)

From: Matt Horton <mhorton@hunzinger.com>
Sent: Monday, November 13, 2023 2:50 PM
To: Gregory Droessler <gdroessler@tcengineers.net>
Cc: Phillip Moran, Jr. <pmoran@hunzinger.com>; Joel Becker <JBecker@hunzinger.com>
Subject: Jackson WWTF - Proposed MAU Raised Stand Drawing
Importance: High

Greg,
Hope you had a safe and successful pheasant hunt in SD.
Not sure if you heard, but after reviewing the current drawings showing a 24" high MAU Stand on a concrete pad, Brian & the Village want to raise the MAU as high as possible (similar to existing MAU), with no concrete pad.
To that end, Rohde has sketched up a stand, similar in height to the existing MAU, see the attached sketch. Please review and advise if this is acceptable and we will price up this change accordingly.

Obviously, the intake to the MAU and the supply to the room would raise with the MAU, so you and your Engineer would need to be Okay with that as well.

Please advise,
Thanks,
Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com www.hunzinger.com



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From: Erik Johnsen <johnsene@rohdebros.com>
Sent: Friday, November 10, 2023 8:48 AM
To: Matt Horton <mhorton@hunzinger.com>
Cc: Phillip Moran, Jr. <pmoran@hunzinger.com>
Subject: Jackson WWTP Stand Drawing

Matt,

Attached is the proposed steel stand for the MAU. If this is acceptable I will move forward with providing a change order price to do this.

Thanks,



Erik Johnsen
Project Engineer
Rohde Brothers, Inc.
Phone: (920) 449-5738
Cell: (262) 363-6946
johnsene@rohdebros.com



Hunzinger Construction Company
21100 Enterprise Avenue
Brookfield, Wisconsin 53045-5226
Phone: (262) 797-0797
Fax: (262) 797-0474

Project: 23-155 - Jackson - 2023 WWTF Storage Garage Expansion
W194N16658 Eagle Dr.
Jackson, Wisconsin 53037
Phone: 414-430-7196
Fax: 262-797-0474

Prime Contract Change Order #002: CE #006 - Lighting Modifications

TO:	Village of Jackson W194N16660 Eagle Drive Jackson, Wisconsin 53037	FROM:	Hunzinger Construction Company 21100 Enterprise Avenue Brookfield Wisconsin 53045-5226
DATE CREATED:	1/ 16 /2024	CREATED BY:	Matt Horton (Hunzinger Construction Company)
AIA CONTRACT#:		REVISION:	0
DESIGNATED REVIEWER:		REVIEWED BY:	
SCHEDULE IMPACT:	0 days	EXECUTED:	No
CONTRACT FOR:	1:HCCo. Prime/General Contract	TOTAL AMOUNT:	\$ 684.00

DESCRIPTION:

CE #006 - Lighting Modifications

Provide Lighting modifications as requested by the Village of Jackson, including adding a night light above the new 10'x10' wall opening, modifying the light switching in the new addition. Refer to the attached HCCo email COR dated 1/9/24 for additional information.

ATTACHMENTS:

[Jackson & T&C NTP - Lighting Mods.pdf](#)

POTENTIAL CHANGE ORDERS IN THIS CHANGE ORDER:

PCO #	Title	Schedule Impact	Amount
005	CE #006 - Lighting Modifications	0 days	684.00
TOTAL:			\$ 684.00

The original (Contract Sum)	\$ 867,000.00
Net change by previously authorized Change Orders	(\$51,677.00)
The contract sum prior to this Change Order was	\$ 815,323.00
The contract sum would be changed by this Change Order in the amount of	\$ 684.00
The new contract sum including this Change Order will be	\$ 816,007.00
The contract time will not be changed by this Change Order by 0 days	

Gregory Droessler, P.E. (Town & Country Engineering, Inc.)

6264 Nesbitt Road
Madison Wisconsin 53719

Village of Jackson

W194N16660 Eagle Drive
Jackson Wisconsin 53037

Hunzinger Construction Company

21100 Enterprise Avenue
Brookfield Wisconsin 53045-5226

James R Hunzinger-EVP

SIGNATURE DATE

SIGNATURE DATE

SIGNATURE 1/16/23 DATE

Matt Horton

From: Gregory Droessler <gdroessler@tcengineers.net>
Sent: Tuesday, January 9, 2024 9:11 AM
To: Matt Horton
Subject: FW: Jackson WWTF - Storage Garage Expansion: Owner Requested Lighting Mods

Matt,

Yes please proceed with the night light.

Greg

Gregory J. Droessler, P.E. – Vice President
gdroessler@tcengineers.net
Town and Country Engineering, Inc.
10505 Corporate Drive
Suite 105A
Pleasant Prairie, WI 53158
262.925.3210 (direct)
608.273.3350 (office)
262.620.2914 (cell)

From: Brian Kober <brian.kober@villageofjacksonwi.gov>
Sent: Tuesday, January 9, 2024 9:02 AM
To: Gregory Droessler <gdroessler@tcengineers.net>
Cc: Jeff Deitsch <jeff.deitsch@villageofjacksonwi.gov>; Chad Russ <chad.russ@villageofjacksonwi.gov>
Subject: RE: Jackson WWTF - Storage Garage Expansion: Owner Requested Lighting Mods

Yes proceed.

Brian W. Kober. P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037
Phone: 262-677-0707
Fax: 262-677-8770

From: Gregory Droessler <gdroessler@tcengineers.net>
Sent: Tuesday, January 9, 2024 8:16 AM
To: Brian Kober <brian.kober@villageofjacksonwi.gov>
Cc: Jeff Deitsch <jeff.deitsch@villageofjacksonwi.gov>; Chad Russ <chad.russ@villageofjacksonwi.gov>
Subject: FW: Jackson WWTF - Storage Garage Expansion: Owner Requested Lighting Mods
Importance: High

Brian,

I forgot to mention this one yesterday when we talked. Hunzinger has a CO request to add the night light in the garage and modify the switches. It looks like they are adding a light in lieu of simply placing the closest overhead fixture on a separate switch. Please let me know if we're ok to proceed with this.

Thanks,

Greg

Gregory J. Droessler, P.E. – Vice President
gdroessler@tcengineers.net
Town and Country Engineering, Inc.
10505 Corporate Drive
Suite 105A
Pleasant Prairie, WI 53158
262.925.3210 (direct)
608.273.3350 (office)
262.620.2914 (cell)

From: Matt Horton <mhorton@hunzinger.com>
Sent: Monday, January 8, 2024 12:03 PM
To: Gregory Droessler <gdroessler@tcengineers.net>
Cc: Joel Becker <JBecker@hunzinger.com>
Subject: RE: Jackson WWTF - Storage Garage Expansion: Owner Requested Lighting Mods
Importance: High

Greg,

The pricing to Add the interior Night Light and lighting switch modifications is as follows:

1. Lemberg Electric Materials (Pipe, Wire & Light): \$217
2. Lemberg Electric Labor: \$405
3. Subtotal: \$622
4. Hunzinger OH&P @ 10%: \$62
5. Total: \$684

Please advise if we are to proceed accordingly.

Thanks,

Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com

www.hunzinger.com



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From: Gregory Droessler <gdroessler@tcengineers.net>
Sent: Monday, December 18, 2023 11:47 AM
To: Matt Horton <mhorton@hunzinger.com>

Cc: Phillip Moran, Jr. <pmoran@hunzinger.com>; Joel Becker <JBecker@hunzinger.com>
Subject: RE: Jackson WWTF - Storage Garage Expansion: Owner Requested Lighting Mods

Matt,

That is fine with me, please proceed as directed by the staff.

Thanks,

Greg

Gregory J. Droessler, P.E. – Vice President
gdroessler@tcengineers.net
Town and Country Engineering, Inc.
10505 Corporate Drive
Suite 105A
Pleasant Prairie, WI 53158
262.925.3210 (direct)
608.273.3350 (office)
262.620.2914 (cell)

From: Matt Horton <mhorton@hunzinger.com>
Sent: Monday, December 18, 2023 11:22 AM
To: Gregory Droessler <gdroessler@tcengineers.net>
Cc: Phillip Moran, Jr. <pmoran@hunzinger.com>; Joel Becker <JBecker@hunzinger.com>
Subject: Jackson WWTF - Storage Garage Expansion: Owner Requested Lighting Mods
Importance: High

Greg,
Please see email below from HCCo Superintendent Phil Moran, indicating that there are some lighting modifications being requested by the Owner. Please advise as to how we should proceed.
Thanks,
Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

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An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com www.hunzinger.com



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From: Phillip Moran, Jr. <pmoran@hunzinger.com>
Sent: Monday, December 18, 2023 10:20 AM
To: Matt Horton <mhorton@hunzinger.com>

Cc: Joel Becker <JBecker@hunzinger.com>

Subject: Additional Light

Matt

After conversations with the Village, they would like to add an additional "night light" over the new 10' x 10' opening. They would also like all of the fixtures in the addition to be on the same switch. Per plan it currently says that the three lights to the east side of the addition would be on one switch and the remaining two on the west side would be on the other. They would like all 5 fixtures to be on one switch and the new Night Light to be on the other. Please advise if this is acceptable, and advise if we should proceed with pricing up this change in scope.

Thanks

JR



Phillip Moran, Jr.

Superintendent

m. 414-430-7196

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave Brookfield, WI 53045

pmoran@hunzinger.com

www.hunzinger.com



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PCCO #003

Hunzinger Construction Company
21100 Enterprise Avenue
Brookfield, Wisconsin 53045-5226
Phone: (262) 797-0797
Fax: (262) 797-0474

Project: 23-155 - Jackson - 2023 WWTF Storage Garage Expansion
W194N16658 Eagle Dr.
Jackson, Wisconsin 53037
Phone: 414-430-7196
Fax: 262-797-0474

Prime Contract Change Order #003: CE #007 - Omit OH Dr. Horn/Strobe & Manual Slide Lock

TO:	Village of Jackson W194N16660 Eagle Drive Jackson, Wisconsin 53037	FROM:	Hunzinger Construction Company 21100 Enterprise Avenue Brookfield Wisconsin 53045-5226
DATE CREATED:	1/ 24 /2024	CREATED BY:	Matt Horton (Hunzinger Construction Company)
AIA CONTRACT#:		REVISION:	0
DESIGNATED REVIEWER:		REVIEWED BY:	
SCHEDULE IMPACT:	0 days	EXECUTED:	No
CONTRACT FOR:	1:HCCo. Prime/General Contract	TOTAL AMOUNT:	(\$1,200.00)

DESCRIPTION:

CE #007 - Omit OH Dr. Horn/Strobe & Manual Lock
Per Village of Jackson Request, Omit the Horn/Strobe and manual slide lock from the Overhead Doors work scope.

ATTACHMENTS:

[Village of Jackson NTP Omit OH Dr Horn & Strobe & Manual Lock.pdf](#) [Arbon COR - Omit Horn-Strobe & manual lock.pdf](#)

POTENTIAL CHANGE ORDERS IN THIS CHANGE ORDER:

PCO #	Title	Schedule Impact	Amount
006	CE #007 - Omit OH Dr. Horn/Strobe & Manual Slide Lock	0 days	(1,200.00)
TOTAL:			(\$1,200.00)

The original (Contract Sum)	\$ 867,000.00
Net change by previously authorized Change Orders	(\$51,677.00)
The contract sum prior to this Change Order was	\$ 815,323.00
The contract sum will be decreased by this Change Order in the amount of	(\$1,200.00)
The new contract sum including this Change Order will be	\$ 814,123.00
The contract time will not be changed by this Change Order by 0 days	

Gregory Droessler, P.E. (Town & Country
Engineering, Inc.)

6264 Nesbitt Road
Madison Wisconsin 53719

Village of Jackson

W194N16660 Eagle Drive
Jackson Wisconsin 53037

Hunzinger Construction Company

21100 Enterprise Avenue
Brookfield Wisconsin 53045-5226

SIGNATURE DATE

SIGNATURE DATE

SIGNATURE DATE
James R Hunzinger-EVP 01/24/24

Matt Horton

From: Brian Kober <brian.kober@villageofjacksonwi.gov>
Sent: Tuesday, January 23, 2024 10:33 AM
To: Matt Horton
Cc: Joel Becker; Gregory J. Droessler (gdroessler@tcengineers.net); Phillip Moran, Jr.; Chad Russ; Jeff Deitsch
Subject: RE: Jackson WWTF - Storage Garage Expansion: V/E Alternatives for Consideration

Matt,

Proceed with the process of omitting the work.

Thanks,

Brian W. Kober. P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037
Phone: 262-677-0707
Fax: 262-677-8770

From: Matt Horton <mhorton@hunzinger.com>
Sent: Tuesday, January 23, 2024 8:53 AM
To: Brian Kober <brian.kober@villageofjacksonwi.gov>
Cc: Joel Becker <JBecker@hunzinger.com>; Gregory J. Droessler (gdroessler@tcengineers.net) <gdroessler@tcengineers.net>; Phillip Moran, Jr. <pmoran@hunzinger.com>
Subject: RE: Jackson WWTF - Storage Garage Expansion: V/E Alternatives for Consideration

Good Morning Brian,

I informed Arbon equipment of your request to omit these items now, and Raynor (Manufacturer) indicated that they would no longer accept the return of these items for material credit. However, Arbon has indicated that they can still credit the installation portion for these items which would equate to a Deduct of \$1,200. Please advise if you still wish to proceed with omitting this work from the scope of the project.

Thanks,

Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com www.hunzinger.com



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From: Brian Kober <brian.kober@villageofjacksonwi.gov>
Sent: Monday, January 22, 2024 9:44 AM
To: Matt Horton <mhorton@hunzinger.com>
Cc: Joel Becker <JBecker@hunzinger.com>; Gregory J. Droessler (<gdroessler@tcengineers.net>)
<gdroessler@tcengineers.net>; Phillip Moran, Jr. <pmoran@hunzinger.com>
Subject: RE: Jackson WWTF - Storage Garage Expansion: V/E Alternatives for Consideration

Matt,

The Jackson Sewer Utility will accept the Lump Sum Deducts as described in item 2:

2. **Sectional Overhead Doors:**
 - A. **Omit Manual Slide Lock and associated operator interlock on (2) OH Doors with Motor Operators: LUMP SUM DEDUCT: -\$1,450**
 - B. **Omit ADA Horn/Strobe on (2) OH Doors: LUMP SUM DEDUCT: -\$1,800**

Please make the necessary arrangements to create another change order.

If you have any questions please do not hesitate to ask.

Brian W. Kober. P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037
Phone: 262-677-0707
Fax: 262-677-8770

From: Matt Horton <mhorton@hunzinger.com>
Sent: Tuesday, September 19, 2023 3:40 PM
To: Brian Kober <brian.kober@villageofjacksonwi.gov>
Cc: Joel Becker <JBecker@hunzinger.com>; Gregory J. Droessler (<gdroessler@tcengineers.net>)
<gdroessler@tcengineers.net>
Subject: RE: Jackson WWTF - Storage Garage Expansion: V/E Alternatives for Consideration
Importance: High

Brian,

I just wanted to confirm our understanding of your direction for the proposed V/E Alternatives in the email below.
Per the Preconstruction Meeting, you have accepted Item 1 below for the Shingled Roof System in lieu of Metal Roof.

Conversely, item 2 regarding the Sectional OH Door options has been rejected (the OH submittal came back without those proposed changes being noted/accepted as well).

Please confirm,

Thanks,

Matt



Matt Horton LEED AP BD+C

Senior Project Manager

p. 262-780-9132 m. 414-640-0323

Hunzinger Construction Company

An ESOP Company

21100 Enterprise Ave. Brookfield, WI 53045

mhorton@hunzinger.com

www.hunzinger.com



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From: Matt Horton

Sent: Thursday, August 31, 2023 4:15 PM

To: Brian Kober <brian.kober@villageofjacksonwi.gov>

Cc: Joel Becker <jbecker@hunzinger.com>; Marc Gilman <mgilman@hunzinger.com>; Gregory J. Droessler <gdroessler@tcengineers.net> <gdroessler@tcengineers.net>

Subject: Jackson WWTF - Storage Garage Expansion: V/E Alternatives for Consideration

Brian,

During our initial meeting last month, you indicated that you would like to know of any Value-Engineering opportunities that we may be able to propose for your review. To that end, we can provide the following items for your consideration:

1. **All New Shingle Roof in lieu of Metal Panel Roofing: LUMP SUM DEDUCT: -\$48,250**
 - a. Remove existing shingle roofing (same as base bid)
 - b. Provide Ice & Water Shield at Gutter Edge/Eaves
 - c. Provide Synthetic Underlayment at all other roof areas without Ice & Water shield.
 - d. Provide Certainteed Landmark Series Shingles (Standard Landmark Shingle). Refer to attached product data and warranty information for the Landmark Series Shingles.
2. **Sectional Overhead Doors:**
 - A. **Omit Manual Slide Lock and associated operator interlock on (2) OH Doors with Motor Operators: LUMP SUM DEDUCT: -\$1,450**
 - B. **Omit ADA Horn/Strobe on (2) OH Doors: LUMP SUM DEDUCT: -\$1,800**

Please note that we are not accepting any design responsibility with these proposed cost reduction alternatives. Please let us know if you wish to accept any these Alternatives, or discuss in further detail.

Thanks,

Matt

QUOTE: QT-346075

01/23/2024

PREPARED FOR:
Wwtp Storage Garage
W194 N16658 Eagle Drive
Jackson, Wisconsin 53037, United States

SEND PURCHASE ORDER TO:
Arbon Equipment Corporation - Northcentral
195 S Rite-Hite Way
Milwaukee, Wisconsin 53204, United States
414-410-2114
Trevor Baer
tbaer@ritehite.com
414-699-8477 (mobile)

LINE	PRODUCT DESCRIPTION	QTY	UNIT PRICE	EXTENDED PRICE
1	Horn/Strobe and Lock Labor Deduct	2	Included	Included

Freight and Handling	Included
Installation	Included
Tax	Included
TOTAL	- \$ 1,200.00

Quote Summary:

APPLICATION AND CERTIFICATE FOR PAYMENT

AIA DOCUMENT G702

TO: Village of Jackson, WI
Public Works
Attn: Brian Kober P.E.
W194 N16660 Eagle Dr,
Jackson, WI 53037

PROJECT: Jackson 2023 WWTF Garage Exp
W194 N16658 Eagle Dr.
Jackson, WI 53037

APPLICATION NO.: 23155-3
PERIOD TO: 12/15/2023
PROJECT NOS.: 23155

Distribution to:
☐ OWNER
☐ ARCHITECT
☐ CONTRACTOR
☐
☐

FROM CONTRACTOR: Hunzinger Construction Company
21100 Enterprise Ave.
Brookfield, WI 53045

VIA ARCHITECT: Town & Country Engineering
Attn: Greg Droessler

CONTRACT DATE: 8/8/2023
INVOICE #: 1123057

CONTRACT FOR: General Contract

Wiring instructions can only be changed by verbal confirmation from John Hunzinger - President of Hunzinger Construction Company

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract Continuation Sheet is attached.

1. **ORIGINAL CONTRACT SUM** \$867,000.00
2. **Net change by Change Orders** -\$51,677.00
3. **CONTRACT SUM TO DATE** (Line 1 + 2) \$815,323.00
4. **TOTAL COMPLETED & STORED TO DATE** \$623,910.97
(Column G on Continuation Sheet)
5. **RETAINAGE:**
 - a. 5.00 % of Completed Work \$31,195.56
(Columns D + E on Continuation Sheet)
 - b. 0.00 % of Stored Material \$0.00
(Column E.1 on Continuation Sheet)

Total Retainage (Line 5a + 5b or
Total in Column I of Continuation Sheet) \$31,195.56
6. **TOTAL EARNED LESS RETAINAGE** \$592,715.41
(Line 4 less Line 5 Total)
7. **LESS PREVIOUS CERTIFICATES FOR PAYMENT** \$364,809.58
(Line 6 from prior Certificate)
8. **CURRENT PAYMENT DUE** \$227,905.83
9. **BALANCE TO FINISH, INCLUDING RETAINAGE** \$222,607.59
(Line 3 less line 6)

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	0.00	0.00
Total approved this Month	2,162.00	-53,839.00
TOTALS	2,162.00	-53,839.00
NET CHANGES by Change Order		-51,677.00

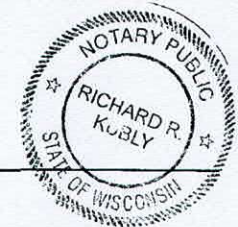
The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Hunzinger Construction Company

By: [Signature] Date: 12/11/23

State of: Wisconsin
County of: Waukesha
Subscribed and sworn before
me this 11th day of December, 2023

Notary Public: [Signature]
My Commission expires: 3/29/26



ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ 227,905.83

(Attach explanation if amount certified differs from the amount applied for. Initial all figures on this Application and on the Continuation Sheet that are changed to conform to the amount certified.)

ARCHITECT: Town & Country Engineering

By: [Signature] Date: 12/14/23

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 23155-3

APPLICATION DATE: 12/11/2023

PERIOD TO: 12/15/2023

ARCHITECT'S PROJECT NO: 23155

A	B	C	C.1	C.2	D	E	E.1	F	G	H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULE OF VALUES	APPROVED CHANGES TO DATE	REVISED SCHEDULE OF VALUES	PREVIOUS APPLICATIONS	THIS PERIOD	MATERIALS PRESENTLY STORED	TOTAL COMPLETED AND STORED TO DATE (D+E)	% (F/C)	BALANCE TO FINISH (C-F)	RETAINAGE (IF VARIABLE RATE)
1	General Conditions/Requirement	157,068.00	0.00	157,068.00	62,827.20	57,361.23	0.00	120,188.43	76.52	36,879.57	6,009.42
2	Site Demo & Earthwork	48,873.00	0.00	48,873.00	44,216.00	4,657.00	0.00	48,873.00	100.00	0.00	2,443.65
3	Selective Demolition	6,670.00	0.00	6,670.00	6,670.00	0.00	0.00	6,670.00	100.00	0.00	333.50
4	Concrete	53,541.00	0.00	53,541.00	48,186.90	5,354.10	0.00	53,541.00	100.00	0.00	2,677.06
5	Carpentry	125,801.00	0.00	125,801.00	124,542.99	0.00	0.00	124,542.99	99.00	1,258.01	6,227.15
6	Roofing & sheet Metal	122,323.00	0.00	122,323.00	50,000.00	72,323.00	0.00	122,323.00	100.00	0.00	6,116.15
7	Metal Wall/Ceiling Panel Sys	101,167.00	0.00	101,167.00	10,000.00	60,816.90	0.00	70,816.90	70.00	30,350.10	3,540.85
8	OH Doors	32,371.00	0.00	32,371.00	0.00	30,752.45	0.00	30,752.45	95.00	1,618.55	1,537.62
9	Plumbing Systems	23,685.00	0.00	23,685.00	12,000.00	3,500.00	0.00	15,500.00	65.44	8,185.00	775.00
10	HVAC Systems	155,262.00	0.00	155,262.00	9,100.00	42,550.00	0.00	51,650.00	33.27	103,612.00	2,582.50
11	Electrical Systems	23,772.00	0.00	23,772.00	0.00	14,263.20	0.00	14,263.20	60.00	9,508.80	713.16
12	GC Performance/Payment Bonds	6,361.00	0.00	6,361.00	6,361.00	0.00	0.00	6,361.00	100.00	0.00	318.05
13	GC Insurances	10,106.00	0.00	10,106.00	10,106.00	0.00	0.00	10,106.00	100.00	0.00	505.30
14	PCCO#1-PCO#1: Alt. Roofing	0.00	-48,250.00	-48,250.00	0.00	-48,250.00	0.00	-48,250.00	100.00	0.00	-2,412.50
15	PCCO#1-PCO#2: Alt. Metal Panel	0.00	-4,189.00	-4,189.00	0.00	-4,189.00	0.00	-4,189.00	100.00	0.00	-209.45
16	PCCO#1-PCO#3: Alt. Windows	0.00	-1,400.00	-1,400.00	0.00	-1,400.00	0.00	-1,400.00	100.00	0.00	-70.00
17	PCCO#1-PCO#4: MAU Stand	0.00	2,162.00	2,162.00	0.00	2,162.00	0.00	2,162.00	100.00	0.00	108.10
TOTALS		867,000.00	-51,677.00	815,323.00	384,010.09	239,900.88	0.00	623,910.97	76.52	191,412.03	31,195.56

APPLICATION AND CERTIFICATE FOR PAYMENT

AIA DOCUMENT G702

TO: Village of Jackson, WI
Public Works
Attn: Brian Kober P.E.
W194 N16660 Eagle Dr,
Jackson, WI 53037

PROJECT: Jackson 2023 WWTF Garage Exp
W194 N16658 Eagle Dr.
Jackson, WI 53037

APPLICATION NO.: 23155-4
PERIOD TO: 1/15/2024
PROJECT NOS.: 23155

Distribution to:
☐ OWNER
☐ ARCHITECT
☐ CONTRACTOR
☐
☐

FROM CONTRACTOR: Hunzinger Construction Company
21100 Enterprise Ave.
Brookfield, WI 53045

VIA ARCHITECT: Town & Country Engineering
Attn: Greg Droessler

CONTRACT DATE: 8/8/2023
INVOICE #: 1223064

CONTRACT FOR: General Contract

Wiring instructions can only be changed by verbal confirmation from John Hunzinger - President of Hunzinger Construction Company

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM \$867,000.00
2. Net change by Change Orders -\$51,677.00
3. CONTRACT SUM TO DATE (Line 1 + 2) \$815,323.00
4. TOTAL COMPLETED & STORED TO DATE \$774,113.80
(Column G on Continuation Sheet)
5. RETAINAGE:
 - a. 5.00 % of Completed Work \$38,705.71
(Columns D + E on Continuation Sheet)
 - b. 0.00 % of Stored Material \$0.00
(Column E.1 on Continuation Sheet)

Total Retainage (Line 5a + 5b or
Total in Column I of Continuation Sheet) \$38,705.71
6. TOTAL EARNED LESS RETAINAGE \$735,408.09
(Line 4 less Line 5 Total)
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT \$592,715.41
(Line 6 from prior Certificate)
8. CURRENT PAYMENT DUE \$142,692.68
9. BALANCE TO FINISH, INCLUDING RETAINAGE \$79,914.91
(Line 3 less line 6)

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	2,162.00	-53,839.00
Total approved this Month	0.00	0.00
TOTALS	2,162.00	-53,839.00
NET CHANGES by Change Order		-51,677.00

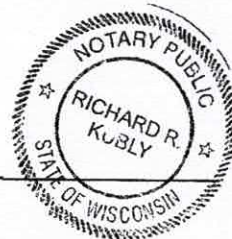
The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Hunzinger Construction Company

By: [Signature] Date: 1/11/24

State of: Wisconsin
County of: Waukesha
Subscribed and sworn before
me this 11th day of January, 2024

Notary Public: [Signature]
My Commission expires: 3/29/26



ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ 142,692.68
(Attach explanation if amount certified differs from the amount applied for. Initial all figures on this Application and on the Continuation Sheet that are changed to conform to the amount certified.)

ARCHITECT: Town & Country Engineering

By: [Signature] Date: 1/12/2024

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT ,
containing Contractor's signed Certification, is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 23155-4
APPLICATION DATE: 1/11/2024
PERIOD TO: 1/15/2024
ARCHITECT'S PROJECT NO: 23155

A	B	C	C.1	C.2	D	E	E.1	F	G	H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULE OF VALUES	APPROVED CHANGES TO DATE	REVISED SCHEDULE OF VALUES	PREVIOUS APPLICATIONS	THIS PERIOD	MATERIALS PRESENTLY STORED	TOTAL COMPLETED AND STORED TO DATE (D+E)	% (F/C)	BALANCE TO FINISH (C-F)	RETAINAGE (IF VARIABLE RATE)
1	General Conditions/Requirement	157,068.00	0.00	157,068.00	120,188.43	29,026.17	0.00	149,214.60	95.00	7,853.40	7,460.73
2	Site Demo & Earthwork	48,873.00	0.00	48,873.00	48,873.00	0.00	0.00	48,873.00	100.00	0.00	2,443.65
3	Selective Demolition	6,670.00	0.00	6,670.00	6,670.00	0.00	0.00	6,670.00	100.00	0.00	333.50
4	Concrete	53,541.00	0.00	53,541.00	53,541.00	0.00	0.00	53,541.00	100.00	0.00	2,677.06
5	Carpentry	125,801.00	0.00	125,801.00	124,542.99	1,258.01	0.00	125,801.00	100.00	0.00	6,290.05
6	Roofing & sheet Metal	122,323.00	0.00	122,323.00	122,323.00	0.00	0.00	122,323.00	100.00	0.00	6,116.15
7	Metal Wall/Ceiling Panel Sys	101,167.00	0.00	101,167.00	70,816.90	30,350.10	0.00	101,167.00	100.00	0.00	5,058.36
8	OH Doors	32,371.00	0.00	32,371.00	30,752.45	1,618.55	0.00	32,371.00	100.00	0.00	1,618.55
9	Plumbing Systems	23,685.00	0.00	23,685.00	15,500.00	4,700.00	0.00	20,200.00	85.29	3,485.00	1,010.00
10	HVAC Systems	155,262.00	0.00	155,262.00	51,650.00	78,250.00	0.00	129,900.00	83.67	25,362.00	6,495.00
11	Electrical Systems	23,772.00	0.00	23,772.00	14,263.20	5,000.00	0.00	19,263.20	81.03	4,508.80	963.16
12	GC Performance/Payment Bonds	6,361.00	0.00	6,361.00	6,361.00	0.00	0.00	6,361.00	100.00	0.00	318.05
13	GC Insurances	10,106.00	0.00	10,106.00	10,106.00	0.00	0.00	10,106.00	100.00	0.00	505.30
14	PCCO#1-PCO#1: Alt. Roofing	0.00	-48,250.00	-48,250.00	-48,250.00	0.00	0.00	-48,250.00	100.00	0.00	-2,412.50
15	PCCO#1-PCO#2: Alt. Metal Panel	0.00	-4,189.00	-4,189.00	-4,189.00	0.00	0.00	-4,189.00	100.00	0.00	-209.45
16	PCCO#1-PCO#3: Alt. Windows	0.00	-1,400.00	-1,400.00	-1,400.00	0.00	0.00	-1,400.00	100.00	0.00	-70.00
17	PCCO#1-PCO#4: MAU Stand	0.00	2,162.00	2,162.00	2,162.00	0.00	0.00	2,162.00	100.00	0.00	108.10
TOTALS		867,000.00	-51,677.00	815,323.00	623,910.97	150,202.83	0.00	774,113.80	94.95	41,209.20	38,705.71



January 25, 2024

Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037

Attention: Brian Kober, P.E.
Director of Public Works

Subject: Project: VOJ 23-02
STH 60 – Street Lighting
Industrial Drive – Ridgeway Drive
Pay Request #3

Dear Mr. Kober:

Enclosed you will find Pay Request #3 for the STH 60 Street Lighting project in the Village of Jackson. The total amount, due to the contractor, has been reduced by five percent (5%) for retainage but not to exceed maximum retainage. The maximum retainage was met with the previous pay request #2. This is per Article 6.02.A.1 Progress Payments; Retainage, of Contract Document 00500, Agreement:

Total work completed to date	= \$341,895.50
Work completed, Pay Request #3	= \$125,124.79
Total Retainage	= \$9,454.40
Amount due to Contractor, Pay Request #3	= \$125,124.79

If you have any questions or comments, please contact me at (920) 924-5720.

Sincerely,

Blake Furlano

Blake Furlano
Project Inspector
Gremmer & Associates, Inc.

Project VOJ 23-02
 STH 60 - Street Lighting
 Industrial Drive - Ridgeway Drive

Pay Request #3
 Wil-Surge - Prime Contractor

Item No.	Description	Units	Total	Wil-Surge		Pay Request #1		Pay Request #2		Pay Request #3		Cumulative Totals		% Complete
				Unit Price	Bid Total	Actual Quantity	Total	Actual Quantity	Total	Actual Quantity	Total	Actual Quantity	Total	
619.1000	Mobilization	EACH	1	\$15,428.00	\$15,428.00	1.0	\$15,428.00	0	\$0.00	0.00	\$0.00	1	\$15,428.00	100%
628.7015	Inlet Protection Type C	EACH	25	\$89.00	\$2,225.00	0.0	\$0.00	0	\$0.00	0.00	\$0.00	0	\$0.00	0%
643.5000	Traffic Control	LS	1	\$16,871.00	\$16,871.00	1.0	\$16,871.00	0	\$0.00	0.00	\$0.00	1	\$16,871.00	100%
653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	17	\$987.00	\$16,779.00	0.0	\$0.00	0	\$0.00	17.00	\$16,779.00	17	\$16,779.00	100%
654.0105	Concrete Bases Type 5	EACH	36	\$891.00	\$32,076.00	0.0	\$0.00	36	\$32,076.00	0.00	\$0.00	36	\$32,076.00	100%
655.0610	Electrical Wire Lighting 12 AWG	LF	7,629	\$0.92	\$7,018.68	0.0	\$0.00	0	\$0.00	256.00	\$235.52	256	\$235.52	3%
655.0620	Electrical Wire Lighting 8 AWG	LF	20,342	\$1.68	\$34,174.56	0.0	\$0.00	0	\$0.00	21467.00	\$36,064.56	21467	\$36,064.56	106%
655.0625	Electrical Wire Lighting 6 AWG	LF	30,513	\$1.81	\$55,228.53	0.0	\$0.00	0.00	\$0.00	32200.50	\$58,282.91	32201	\$58,282.91	106%
671.0212	Conduit HDPE Directional Bore 1-Duct 2-Inch	LF	10,835	\$13.79	\$149,414.65	5267.0	\$72,631.93	4782	\$65,943.78	100.00	\$1,379.00	10149	\$139,954.71	94%
SPV.0060.01	Install Village Furnished Lighting Unit	EACH	36	\$832.00	\$29,952.00	0.0	\$0.00	0	\$0.00	0.00	\$0.00	0	\$0.00	0%
SPV.0060.02	Install Village Furnished Meter Breaker Pedestal	EACH	2	\$6,910.00	\$13,820.00	2.0	\$13,820.00	0	\$0.00	0.00	\$0.00	2	\$13,820.00	100%
SPV.0180.01	Concrete Restoration	SY	3.3	\$348.00	\$1,148.40	0.0	\$0.00	0	\$0.00	0.00	\$0.00	0	\$0.00	0%
SPV.0180.02	Asphalt Restoration	SY	5	\$808.00	\$4,040.00	0.0	\$0.00	0	\$0.00	0.00	\$0.00	0	\$0.00	0%
CO #1	Concrete Replacement (Replaces Item SPV.0180.01)	SF	700	\$13.00	\$9,100.00	0.0	\$0.00	0	\$0.00	952.60	\$12,383.80	953	\$12,383.80	136%
STH 60 TOTAL					\$387,275.82		\$118,750.93		\$98,019.78		\$125,124.79		\$341,895.50	88.28%
TOTAL					\$387,275.82		\$118,750.93		\$98,019.78		\$125,124.79		\$341,895.50	88.28%

Wil-Surge original bid #
 \$378,175.82
 Difference / Increase of
 \$7,951.60

\$5,937.55 Retainage Est #1
 \$3,516.85 Retainage Est #2
 \$0.00 Retainage Est #3

Max retainage to hold = \$9,454.40
 Based off original bid price

Work completed, previous estimate \$98,019.78
 Work completed, this estimate \$125,124.79
 Total work completed \$341,895.50
 Retainage, this estimate \$0.00
 Total retainage, previous estimates \$9,454.40
 Total retainage \$9,454.40
 Amount due to contractor, this estimate \$125,124.79



Amanda J. Yancey

Memo

To: Board of Public Works

From: Brian W. Kober, P. E., Director of Public Works 

Subject: 2024 WWTP Improvement Project
Tertiary Filters and Disinfection

Date: January 26, 2024

The bid opening date was changed to Tuesday, January 30, 2024, at 1:00 PM. The bid information will be distributed at the meeting. We have a good interest from contractors for the project. Hoping for a very competitive bid.

If you have any questions, please do not hesitate to ask.

Brian W. Kober, P.E.

2024 Wastewater Improvements - Tertiary Filters and Disinfection

Quest Number: 8909406

Closing Date: Tue, 01/30/2024 01:00 PM CST

Posting Type: Construction Project

QuestCDN Partner Posting

Location Details -

City:	Jackson
County:	Washington
State/Province:	WI

Project Details -

Online Bidding:	Available
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Closing Date:	Tue, 01/30/2024 01:00 PM CST
Project Bid Received By & Opening Information:	Village of Jackson, W194N16660 Eagle Drive, Jackson, WI 53037. Bids will be publicly opened and read aloud immediately thereafter in the meeting room.

Pre-Bid Meeting Info:	A pre-bid meeting is scheduled for January 16, 2024 at 10:00 a.m. at the WWTF. Questions regarding the work can be addressed to Greg Droessler at Town and Country Engineering (gdroessler@tcengineers.net).
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Project Description -

Project Category Code:	Wastewater Treatment Plant Improvements, Buildings/Public
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Description:

The addition to the tertiary filter building and disinfection facilities in the Village of Jackson, including:

- Construction of an approximate 40' x 54' masonry building addition to the existing tertiary filter building, including additional process tanks for enhanced phosphorus removal. Improvements will also include renovation of the existing building, including structural, process, HVAC, and electrical improvements.
- Renovation of the existing disinfection tank to remove the existing chlorination equipment and replace it with new UV equipment. Improvements also include various structural upgrades to this tank including new metal grating and an open-air structure.
- Site improvements that include process piping, site grading, asphalt paving and various other improvements.
- Various HVAC, plumbing, and electrical improvements to the new and existing building.

Bidders must be pre-qualified with the Village of Jackson within the last year or must be pre-qualified for this work 5 days prior to the bid deadline in accordance with Section 66.0901 of the Wisconsin Statutes. Each bidder must deposit, with his bid, security in the amount of 5% of the maximum bid amount. Bidders must be experienced in municipal pipeline construction. The Village of Jackson reserves the right to reject any and all bids and to waive informalities in any bid.

This project will be funded by the Clean Water Fund (CWF) established under Wisconsin State Statutes, as administered by the Wisconsin Department of Natural Resources. Neither the State of Wisconsin nor any of its departments, agencies, or employees is or will be party to this invitation for bids or any resulting contract. Disadvantaged Business Enterprises (DBE), including minority business enterprises (MBE) and women business enterprises (WBE) are encouraged to apply and be used to the greatest extent feasible. Qualified DBEs will be included in the Unified Certification Program WisDOT UCP list. Program policy requires all bidders to show good faith efforts to solicit proposals from DBEs. Contractors with a DBE classification are strongly encouraged to bid as the Prime Contractor on this project provided they are qualified to do the work. Award of the contract will be subject to the Federal government's policy of good faith effort for increased use of DBE businesses. A description of the policy and forms to be used are included in the specifications. Funding under the CWF program also requires all iron and steel products used in the construction of the project be produced in the United States (FFY 2014 Appropriations Act and/or Section 608 of the Federal Water Pollution Control Act (FWPCA)), including lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials. The successful bidder will be required to conform to the wage requirements prescribed by the federal Davis-Bacon and Related Acts which requires that all laborers and mechanics employed by contractors and sub-contractors performing on contracts funded in whole or in part with federal funds in excess of \$2,000 pay their laborers and mechanics not less than the prevailing wage rates and fringe benefits, as determined by the Secretary of Labor, for corresponding classes

of laborers and mechanics employed on similar projects in the area, per the U.S. Department of Labor Wage and Hour Division May 29, 2009 Guidance.

Primary Contact Information

Owner Details

Owner Name: **Village of Jackson**

Solicitor Details

Solicitor Name: **Town & Country Engineering**
Design Discipline: **Soliciting agent**
Address: **6264 Nesbitt Road, Madison, WI - 53719**
Phone: **608-273-3350**
Contact: **Greg Droessler, P.E.**
Email: gdroessler@tcengineers.net

Project Document Information

Document Information: **Paper copies of the Contract Documents and the Construction Plans may be obtained at the office of Town & Country Engineering, Inc., 6264 Nesbitt Road, Madison, WI 53719 via appointment only. There is a \$75 non-refundable copying and distribution charge for these documents.**

Quest EBidDoc™ Delivery Info: **Download delivery fee is \$42.00, file size is 47 MB .**



Preview



Download

2024 Wastewater Improvements - Tertiary Filters and Disinfection

Quest eBidDoc™ Number: 8909406

Closing Date: Tue, 01/30/2024 01:00 PM CST **Posting Type:** Construction Project **Owner Name:** Village of Jackson **Solicitor Name:** Town & Country Engineering **Contact:** Greg Droessler, P.E. **Phone:** 608-273-3350 **Email:** gdroessler@tcengineers.net

<u>Company Name & Address</u>	<u>Contact Name/Email Address</u>	<u>Phone/Fax</u>	<u>Bus. Cert</u>	<u>Bus. Desig</u>	<u>Entry Date</u>	<u>Doc Type</u>	<u>Comments</u>
Village of Jackson W194N16660 Eagle Drive, Jackson, WI - 53037	Village of Jackson use_gdroessler@tcengineers.net	000-000-0000		Project Owner	12/27/2023	Paper	
J. Miller Electric, Inc. 512 S. Park St, Port Washington, WI-53074	Justin Miller justin.jmillerelectric@gmail.com	262-284-2646 262-284-6282		Subcontractor	01/04/2024	eBidDoc	
C.D. Smith Construction 125 Camelot Drive, Fond du Lac, WI-54935	Patty Guldán pguldán@cdsmith.com	9209242900 920-924-2910		Prime Bidder	01/04/2024	eBidDoc	
Hunzinger Construction 21100 Enterprise Ave, Brookfield, WI-53045	Marc Gilman mgilman@hunzinger.com	2627970797 2627970474		Prime Bidder	01/04/2024	eBidDoc	
August Winter & Sons, Inc 2323 N. Roemer Rd., Appleton, WI-54911	Kurt Van Grinsven pma@augustwinter.com	920-739-8881 920-739-2230		Prime Bidder	01/04/2024	eBidDoc	
Pieper Electric, Inc - New Berlin Office 5477 S. Westridge Court, New Berlin, WI-53151	Kim Schuenemann kim.schuenemann@pieperpower.com	262-879-8229		Subcontractor	01/04/2024	eBidDoc	
Dorner Company N61 W23043 Silver Spring Dr, Sussex, WI-53089	Pete Pronold petep@dornerco.com	2629322100 2629322101		Supplier	01/04/2024	eBidDoc	
Ferguson Waterworks #1476 5350 N. RICHMOND ST., APPLETON, WI-54913	Jeremy Roskopf jeremy.roskopf@ferguson.com	920-731-3252 920-731-2305		Supplier	01/04/2024	eBidDoc	
Mid City Corporation 12930 W. Custer Avenue, Butler, WI-53007	Mid City Corporation estimating@midcitycorp.us	262-781-5940 262-781-4005	SBE	Prime Bidder	01/04/2024	eBidDoc	
J. F. Ahern Co. - Fond du Lac 855 Morris St, Fond du Lac, WI-54935	Clerical Department centralservices@jfahern.com	920-921-9020 920-921-8632		Prime Bidder	01/04/2024	eBidDoc	
Hawkins, Inc. 2381 Rosegate, Roseville, MN-55113	Brian Greffin brian.greffin@hawkinsinc.com	612-225-6587 612-331-5450		Supplier	01/04/2024	eBidDoc	
Peterson and Matz, Inc. 6408 River Bend Rd. Ste 100, weston, WI-54476	Rob Szekeress rob.szekeress@petersonandmatz.com	7153551436 7153551437		Supplier	01/04/2024	eBidDoc	
Minnesota Builders Exchange 1123 Glenwood Ave, Minneapolis, MN-55405	David Siegel addenda@mbex.org	612-381-2625		Plan Room	01/05/2024	eBidDoc	
Wolf Paving 1320 Walnut Ridge Dr, Hartland, WI-53029	Wolf Paving bidrequest@wolfpaving.com	262-965-2121		Subcontractor	01/05/2024	eBidDoc	
Veolia Water Technologies 4001 Weston Parkway, Cary, NC-27513	Simba Washaya simba.washaya@veolia.com	919-677-8310 919-677-0082		Supplier	01/05/2024	eBidDoc	
Rohde Brothers, Inc. W5745 Woodchuck Lane, Plymouth, WI-53073	Craig Bahr bids@rohdebros.com	(920) 893-5905 9208935908		Subcontractor	01/06/2024	eBidDoc	
Dodge Data & Analytics 2860 S State Hwy 161, Grand Prairie, TX-75052	Daedri Cavuoto daedri.cavuoto@construction.com	513.666.3354 800-768-5594		Plan Room	01/08/2024	eBidDoc	

<u>Company Name & Address</u>	<u>Contact Name/Email Address</u>	<u>Phone/Fax</u>	<u>Bus. Cert</u>	<u>Bus. Desig</u>	<u>Entry Date</u>	<u>Doc Type</u>	<u>Comments</u>
ConstructConnect 3825 Edwards Rd, Cincinnati, OH-45209	Eric Mills content@constructconnect.com	800-364-2059 866-570-8187		Plan Room	01/08/2024	eBidDoc	
Energenecs, Inc 700 East Milan Drive, Saukville, WI-53080	Doralee Piering doralee.piering@energenecs.com	262-377-6360 262-377-1515	SBE	Supplier	01/08/2024	eBidDoc	
Lee Mechanical Inc 9909 S 57th st., Franklin, WI-53132	Dave Ruffalo DRuffalo@selectlee.com	2626579490		Subcontractor	01/08/2024	eBidDoc	
Crane Engineering Sales, Inc PO Box 38, Kimberly, WI- 54136	Eric Finnilla e.finnilla@craneengineering.net	920-257-0109 920-733-2871	SBE	Supplier	01/08/2024	eBidDoc	
Dodge Data & Analytics 2860 S State Hwy 161, Grand Prairie, TX-75052	DodgeAPI dodge.docs@construction.com	513.666.3354 800-768-5594		NOT BIDDING	01/08/2024	eBidDoc	
Staab Construction Corporation 1800 Laemle Avenue, Marshfield, WI-54449	Valerie Schubert bid@staabco.com	715-387-8429 715-384-4846		Prime Bidder	01/09/2024	eBidDoc	
Core & Main LP 2804 Larue Fields Lane, Sun Prairie, WI-53590	Mark Dombrosky Mark.Dombrosky@coreandmain.com	608-834-1311		Supplier	01/09/2024	eBidDoc	
Mulcahy Shaw Water N57 W6316 Center St., Cedarburg, WI-53012	Tom Mulcahy info@mulcahyshaw.com	262-241-1199 262-241-4997		Supplier	01/09/2024	eBidDoc	
LW ALLEN, LLC 4633 Tompkins Drive, Madison, WI-53716	Amber Link bids@lwallen.com	608-222-8622 608-222-9414		Supplier	01/11/2024	eBidDoc	
Quest Construction Data Network PO Box 517, Shakopee, MN-55379	QuestCDN Support and Sales skahl@questcdn.com	952-233-1632		Other	01/12/2024	eBidDoc	
JH Hassinger, Inc. N60W16289 Kohler Lane, Menomonee Falls, WI- 53051	Shelly shelly@jhassinger.com	2622524701 262-252-4227		Prime Bidder	01/16/2024	eBidDoc	
NEXT Electric, LLC 1121 Marlin Ct., Waukesha, WI-53186	Leo Maney leo.maney@nextelectricinc.com	262-506-3271		Subcontractor	01/18/2024	eBidDoc	
Ferguson Waterworks #1476 5350 N. RICHMOND ST., APPLETON, WI-54913	Keith Fischer keith.fischer@ferguson.com	920-731-3252 920-731-2305		Supplier	01/19/2024	eBidDoc	
County Materials S16 W33633 Wolf Road, Oconomowoc, WI-53066	Ed Kamenick ed.kamenick@countymaterials.com	262-201-4844		Supplier	01/23/2024	eBidDoc	

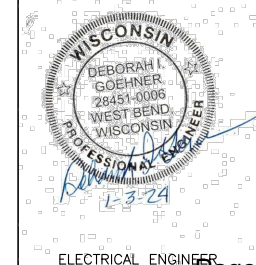
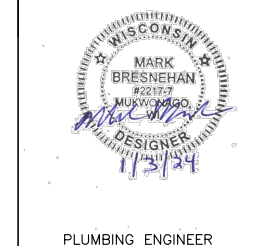
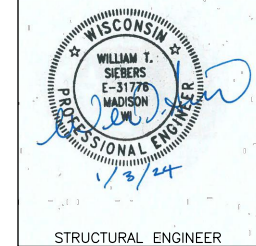
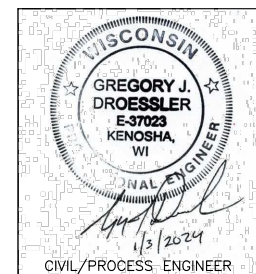
Village of Jackson, Wisconsin



—PROJECT SITE
W194N16658 EAGLE DR
JACKSON, WI 53037



VILLAGE OF JACKSON
WASHINGTON COUNTY, WISCONSIN



PROJECT NO.: JK 18		DRAWN BY: R.T.G.	2024 WASTEWATER IMPROVEMENTS TERTIARY FILTERS AND DISINFECTION Village of Jackson, Wisconsin				SHEET		REVISIONS	BY	DATE	
DRAWING FILE: COVER & 00-G		CHECKED BY: G.J.D.										
DATE: 1-4-24		REV. DATE:										
TOWN & COUNTRY ENGINEERING, INC. 6264 Nesbitt Road Madison, WI 53719 (608) 273-3350 www.tceengineers.net												

STANDARD ABBREVIATIONS

ACT	ACTUATED	M	METER
AER	AERATION, AEROBIC	MATL	MATERIAL
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
AHP	AIR – HIGH PRESSURE	MECH	MECHANICAL
ALP	AIR – LOW PRESSURE	MFR	MANUFACTURER
ALT	ALTERNATE	MGD	MILLION GALLONS PER DAY
ALUM	ALUMINUM	MH	MANHOLE
APPROX	APPROXIMATE, –LY	MID	MIDDLE
ARCH	ARCHITECTUAL	MIN	MINIMUM
ASPH	ASPHALT	MISC	MISCELLANEOUS
ASSY	ASSEMBLY	MJ	MECHANICAL JOINT
AVG	AVERAGE	ML	MIXED LIQUOR
		MLSS	MIXED LIQUOR SUSPENDED SOLIDS
B/	BOTTOM OF	MM	MILLIMETER
BAF	BAFFLE	MOT	MOTOR, –IZED
BCKWSH	BACKWASH	MTL	METAL
BFV	BUTTERFLY VALVE		
BF	BLIND FLANGE	N	NORTHING
BIT	BITUMINOUS	NH3–N	AMMONIA–NITROGEN
BLDG	BUILDING	NO.	NUMBER
BM	BENCH MARK	NPT	NATIONAL PIPE THREAD
BOD	BIOCHEMICAL OXYGEN DEMAND	NPW	NONPOTABLE WATER
BOT	BOTTOM	NTS	NOT TO SCALE
BSMT	BASEMENT		
BV	BALL VALVE	OC	ON CENTER
BYP	BYPASS	OD	OUTSIDE DIAMETER
		OPNG	OPENING
		OVER	OVER, –FLOW
C/C	CENTER TO CENTER	P	PHOSPHORUS
CF	CUBIC FEET	PNEU	PNEUMATIC
CFM	CUBIC FEET PER MINUTE	PNV	PINCH VALVE
CHAN	CHANNEL	PE	POLYETHYLENE
CHEM	CHEMICAL	PLMB	PLUMBING
CI	CAST IRON	POLY	POLYMER
C/L	CENTERLINE	PP	POWER POLE
CLASS	CLASSIFICATION	PRV	PRESSURE REDUCING VALVE
CLG	CEILING	PSF	POUNDS PER SQUARE FOOT
CMP	CORRUGATED METAL PIPE	PSI	POUNDS PER SQUARE INCH
CON	CONCENTRIC	PT	POINT
CONC	CONCRETE	PV	PLUG VALVE
CONN	CONNECTION	PVC	POLYVINYL CHLORIDE
CONTR	CONTRACTOR	PVMT	PAVEMENT
CTR, CTRD	CENTER, –ED	PW	POTABLE WATER
CV	CHECK VALVE		
CY	CUBIC YARD	R	RADIUS
		R/W	RIGHT–OF–WAY
DAF	DISSOLVED AIR FLOTATION THICKENER	RAS	RETURN ACTIVATED SLUDGE
DEC	DECANT	RCP	REINFORCED CONCRETE PIPE
DEG	DEGREE	RCY	RECYCLE
DG	DIGESTER GAS	RED	REDUCER
DIA	DIAMETER	REF	REFERENCE
DIG	DIGESTER	REQ'D	REQUIRED
DI	DUCTILE IRON	RM	ROOM
DISCH	DISCHARGE	ROT	ROTATE, –D
DN	DOWN	RR	RAILROAD
DNR	DEPARTMENT OF NATURAL RESOURCES	RT	RIGHT
DRN	DRAIN	RWW	RAW WASTEWATER
DWG	DRAWING	SAN	SANITARY
		SBR	SEQUENCING BATCH REACTOR
E	EASTING	SCH	SCHEDULE
EA	EACH	SDR	STRUCTURAL DIMENSION RATIO
ECC	ECCENTRIC	SEC	SECTION
EFFL	EFFLUENT	SEP	SEPTAGE
ELB	ELBOW	SF	SQUARE FOOT
ELEC	ELECTRIC, –AL	SHT	SHEET
EL, ELEV	ELEVATION	SLG	SLUDGE
EQ	EQUALIZATION	SPEC	SPECIFICATION
EQUIP	EQUIPMENT	SQ	SQUARE
EST	ESTIMATE, –D	SS	STAINLESS STEEL
EX	EXISTING	STA	STATION
		STL	STEEL
FH	FIRE HYDRANT	STR	STRUCTURE
FFC	FLANGED FLEXIBLE CONNECTOR	SUP	SUPERNATANT
FL	FLOW LINE	SNV	SOLENOID VALVE
FLR	FLOOR	SW	SIDEWALK
FLTR	FILTER	SY	SQUARE YARD
FM	FORCE MAIN		
FRP	FIBERGLASS REINFORCED PLASTIC	T/	TOP OF
FT	FEET	T/W	TOP OF WALL
FTG	FOOTING	TEMP	TEMPERATURE
		TSS	TOTAL SUSPENDED SOLIDS
GAL	GALLON	TYP	TYPICAL
GALV	GALVANIZED	UV	ULTRAVIOLET
GC	GENERAL CONTRACTOR	VERT	VERTICAL
GND	GROUND	VF	VERTICAL FEET
GR	GRIT		
GV	GATE VALVE	W/	WITH
		W/O	WITHOUT
HORIZ	HORIZONTAL	WAS	WASTE ACTIVATED SLUDGE
HP	HORSEPOWER	WAT	WATER
HR	HOURL	WW	WASTEWATER
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING		
HWL	HIGH WATER LEVEL	YD	YARD
HYD	HYDRANT	YR	YEAR
ID	INSIDE DIAMETER		
IN	INCH		
INCL	INCLUDE, –ING		
INFL	INFLUENT		
INV	INVERT		
LB(S)	POUND(S)		
LF	LINEAL FEET		
LIN	LINEAR		
LR	LONG RADIUS		
LS	LUMP SUM		
LT	LEFT		
LWL	LOW WATER LEVEL		

SITE LEGEND

UNDERGROUND TELE.
UNDERGROUND CATV.
UNDERGROUND ELEC.
OVERHEAD
EXISTING GAS
PROPERTY LINE
EXISTING SITE PIPING
EXISTING FENCE LINE
EXISTING CONTOURS
NEW CONTOURS
SAWCUT
NEW STORM SEWER
NEW SITE PIPING
SITE PIPING REMOVAL/ABANDON

— . . . — UT — . . . — UT — . . . — UT —

— UE — UE — UE — UE — UE — UE —

— OH — OH — OH — OH — OH —

— G — G — G — G — G —

— — — — —

— x — x — x — x — x — x —

— — — — —

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

— — — — —

— — — — —

NEW ITEMS:

 WATER VALVE

 CURB STOP

 HYDRANT

 MANHOLE

 CURB INLET

 ENDWALL

 GAS WARNING

EXISTING ITEMS:

 FLAG POLE

 MAILBOX

 POWER POLE

 LIGHT POLE

 LAMP POST

 PULL BOX

 WATER VALVE

 CURB STOP

 HYDRANT

 WELL

 MONITORING WELL

 TRACER WIRE

 SANITARY MANHOLE

 SANITARY VALVE

 CLEANOUT

 STORM MANHOLE

 CURB INLET

 CIRCULAR INLET

 SQUARE INLET

 ENDWALL

 STUMP

 DECID. TREE

 EVERGREEN (RELATIVE SIZE SHOWN)

 SHRUB OR HEDGE

 SIGN

 CATV. PED.

 TELE. PED.

 ELEC. PED.

 GAS VALVE

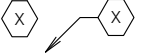
 STREET SIGN

 IRON PIPE

 IRON ROD

NOTES: 1.) EXISTING FEATURES AND LABELS ARE SHOWN WITH SCREENED, LIGHTER LINES.
2.) NEW CONCRETE IS SHOWN SHADED IN PLAN VIEWS
3.) CONCRETE AND ASPHALT REMOVALS ARE SHOWN BY CROSS-HATCHING

 EXISTING PIPING LABEL

 NEW PIPING LABEL

 KEY NOTE

 REMOVAL NOTE

GENERAL NOTES

- EXISTING INFORMATION, INCLUDING UNDERGROUND PIPING AND UTILITIES, SHOWN ON THE PLANS WAS OBTAINED FROM OWNER INFORMATION AND FIELD MEASUREMENTS WHERE AVAILABLE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL EXISTING INFORMATION AS REQUIRED TO ACCOMMODATE NECESSARY CONSTRUCTION. UTILITIES THAT MAY BE AFFECTED BY CONSTRUCTION MUST BE MAINTAINED AND ANY DAMAGES TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF PROPERTY AND RESTORATION OF DAMAGED PROPERTY CAUSED BY CONSTRUCTION ACTIVITIES. AFTER THE COMPLETION OF CONSTRUCTION, ANY EXISTING PROPERTY DAMAGED AS A RESULT OF THE CONTRACTOR'S ACTIVITIES DURING EXECUTION OF THE CONTRACT SHALL BE RESTORED SO AS TO MATCH THE EXISTING AT NO COST TO THE OWNER.
- DRAWINGS SCALES MAY VARY FROM ONE SHEET TO THE NEXT. ALL PERSONS SHALL BE RESPONSIBLE FOR VERIFYING THE CORRECT SCALE OF ANY MEASUREMENTS MADE ON THE PLAN SHEETS. DRAWINGS IN GENERAL DO NOT SHOW DIMENSIONS OF EXISTING CONSTRUCTION, BUT ARE DRAWN APPROXIMATELY TO SCALE. CONTRACTOR SHALL OBTAIN ALL DIMENSIONS REQUIRED FOR CONSTRUCTION.
- WHEN THE TERM 'REMOVE' IS USED ON DRAWINGS IT SHALL MEAN THAT THE CONTRACTOR IS TO REMOVE THE REFERENCED MATERIAL OR EQUIPMENT AND DISPOSE OF IN A PROPER MANNER. WHEN THE TERM 'REMOVE AND SALVAGE' IS USED THE CONTRACTOR SHALL REMOVE THE REFERENCED MATERIAL OR EQUIPMENT, TRANSPORT TO THE DESTINATION INDICATED, AND UNLOAD THE MATERIAL OR EQUIPMENT AS DIRECTED BY THE OWNER. THE PLANS DO NOT NECESSARILY SPELL OUT ALL ITEMS REQUIRING REMOVAL, DEMOLITION, OR PATCHING. WHERE NOT SHOWN, ALL REMOVAL, DEMOLITION, CUTTING, PATCHING AND OTHER WORK NECESSARY TO ACCOMMODATE NEW CONSTRUCTION SHALL BE PROVIDED AS A PART OF THE CONTRACT.

PROCESS PIPING LEGEND

 PLUG VALVE

 GATE VALVE

 CHECK VALVE

 BUTTERFLY VALVE

 PINCH VALVE

 P

 M

 PNEUMATIC–, MOTORIZED (ELECTRIC) ACTUATORS

 ELBOWS

 CROSS, TEE, WYE

 PIPE UP, PIPE DOWN

 CONCENTRIC REDUCER, ECCENTRIC REDUCER

 FLANGED FLEXIBLE CONNECTOR

 FLOW METER

PIPING SMALLER THAN 3"

 BALL VALVE

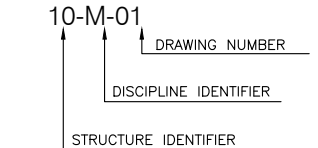
 CONTROL VALVE

 PRESSURE REGULATOR

 ELBOW/TEE DOWN

 ELBOW/TEE UP

DRAWING NUMBER DESIGNATION



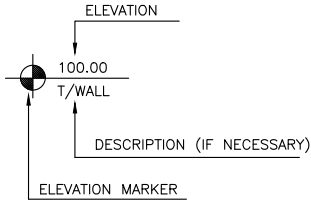
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DRAWING NUMBER

DISCIPLINE IDENTIFIER

STRUCTURE IDENTIFIER

ELEVATION MARKER



ELEVATION

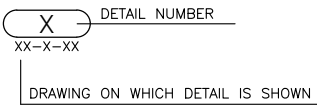
100.00

T/WALL

DESCRIPTION (IF NECESSARY)

ELEVATION MARKER

DETAIL DESIGNATION



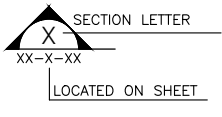
X

DETAIL NUMBER

XX–X–XX

DRAWING ON WHICH DETAIL IS SHOWN

SECTION DESIGNATION



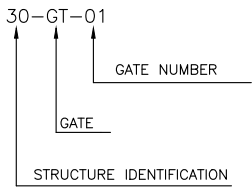
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SECTION LETTER

XX–X–XX

LOCATED ON SHEET

GATE IDENTIFIER



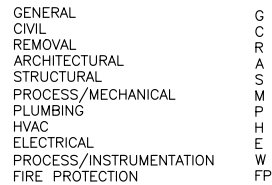
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GATE

STRUCTURE IDENTIFICATION

GATE NUMBER

DISCIPLINE DESIGNATION



GENERAL
CIVIL
REMOVAL
ARCHITECTURAL
STRUCTURAL
PROCESS/MECHANICAL
PLUMBING
HVAC
ELECTRICAL
PROCESS/INSTRUMENTATION
FIRE PROTECTION

G
C
R
A
S
M
P
H
E
W
F
P

STANDARD ABBREVIATIONS, DESIGNATIONS,
SITE/PROCESS LEGENDS & GENERAL NOTES

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

Village of Jackson, Wisconsin

PROJECT NO.:
DRAWING FILE:
COVER & 00-G
DRAWN BY:
CHECKED BY:
DATE:
REVISIONS:
SCALE:
SHEET: 2

00-G-02

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ELECTRICAL PLAN SYMBOLS

OUTLETS AND DEVICES

	DUPLEX
	DUPLEX (COUNTER TOP HEIGHT)
	SINGLE
	DOUBLE DUPLEX
	SPECIAL OUTLET
	EQUIPMENT CONNECTION
	DATA OUTLET
	TELEPHONE/DATA OUTLET
	TELEPHONE OUTLET
	TELEPHONE BLACKBOARD

LIGHTING

	LUMINAIRE, CEILING MOUNTED, RECESSED OR SURFACE
	WALL MOUNTED FIXTURE
	FIXTURE – DOUBLE OR SINGLE HEAD SPOTLIGHT
	EXIT FIXTURE WITH EMERGENCY BATTERY AND HEADS WHERE SHOWN
	EMERGENCY BATTERY REMOTE HEADS
	EMERGENCY BATTERY UNIT WITH HEADS
	SINGLE POLE MOUNTED FIXTURE
	TWIN POLE MOUNTED FIXTURE

SWITCHES

\$	SINGLE POLE SWITCH
\$ ₂	DOUBLE POLE SWITCH
\$ ₃	THREE WAY SWITCH
\$ ₄	FOUR WAY SWITCH
\$ _a \$ _b \$ _c	SWITCH CONTROL A, B, C
\$ _K	KEY OPERATED
\$ _P	SWITCH WITH PILOT LIGHT
\$ _{WP}	WEATHERPROOF SWITCH
\$ _D	DIMMER SWITCH
	OCCUPANCY SENSOR, WALL MOUNTED
	OCCUPANCY SENSOR, CEILING MOUNTED
\$ _M	MOTOR RATED SWITCH
\$ _{MS}	MANUAL MOTOR STARTER

SERVICE AND DISTRIBUTION

	LIGHTING OR POWER PANEL – RECESSED
	LIGHTING OR POWER PANEL – SURFACE
	DISTRIBUTION PANEL
	MOTOR CONTROL CENTER
	TRANSFORMER – REFER TO ONE-LINE. XX-XFMR-01 INDICATES LOCATION AT STRUCTURE XX.
	CURRENT TRANSFORMER CABINET (UTILITY METERING)
	METER AND SOCKET

MOTOR CONTROL

	DISCONNECT SWITCH, NON-FUSED
	DISCONNECT SWITCH, FUSED
	ENCLOSED CIRCUIT BREAKER
	MAGNETIC CONTACTOR
	ADJUSTABLE FREQUENCY DRIVE
	MAGNETIC MOTOR STARTER
	COMBINATION MAGNETIC MOTOR STARTER
	EQUIPMENT CONTROL PANEL – XXX INDICATES EQUIPMENT SERVED
	PUSHBUTTON
	ON/OFF PUSHBUTTON
	THREE FUNCTION PUSHBUTTON (UP/DOWN/STOP)
	THERMOSTAT
	SOLENOID VALVE
	MOTOR – NUMBER INDICATES HORSEPOWER

GENERAL NOTES

- THIS DRAWING IS A STANDARD LEGEND. SYMBOLS SHOWN MAY NOT ALL APPEAR ON DRAWINGS FOR THIS PROJECT.
- ALL CONTACTS ARE SHOWN IN THE DE-ENERGIZED (SHELF) POSITION. BI-STABLE RELAYS ARE SHOWN IN THE RESET POSITION.
- ONE-LINE DIAGRAMS FOR POWER SWITCHGEAR, USE ANSI STANDARD SYMBOLS AND ABBREVIATIONS.
- SEE INSTRUMENTATION I + C SYMBOLS LEGEND FOR INSTRUMENTATION SYMBOLS AND DETAILS.
- OTHER ABBREVIATIONS PER NECA 100-213 AND ISA S5.1
- ELEVATIONS ADJACENT TO SYMBOLS ARE BASED ON STATION DATUM. HEIGHTS ADJACENT TO SYMBOLS (+4.0) ARE REFERENCED TO FINISHED FLOOR GRADE.
- SEE SPECIFICATIONS AND SCHEDULES FOR COMPONENT REQUIREMENTS FOR MOTOR CONTROLLERS AND FOR CONTRACTORS.

SECURITY AND FIRE PROTECTION

	DOOR HOLDER
	HORN AND STROBE
	HORN ONLY
	STROBE ONLY
	MANUAL PULL STATION
	SMOKE DETECTOR
	HEAT DETECTOR – RATE OF RISE
	HEAT DETECTOR – FIXED TEMPERATURE
	WATER FLOW SWITCH
	LOW PRESSURE SWITCH
	TAMPER SWITCH
	SECURITY CAMERA – WP INDICATES WEATHERPROOF EXTERIOR CAMERA
	MOTION DETECTOR
	FIRE ALARM ANNUNCIATOR
	FIRE ALARM CONTROL PANEL

WIRING AND CONDUIT

- SIZE CONDUIT PER NEC. MINIMUM SIZE $\frac{3}{4}$ ".
 - (X)#12 & #12G
- REFERS TO NUMBER OF WIRE(S) AND SIZE OF WIRE(S) REQUIRED, WHERE AS:
(1)= ONE WIRE
#12 = THE SIZE OF WIRE REQUIRED
G = GROUND WIRE
- (X) 1-1/2°C

REFERS TO NUMBER OF CONDUIT(S) AND SIZE OF CONDUIT(S) REQUIRED, WHERE AS:
(1)= ONE CONDUIT
1-1/2°C = THE SIZE OF CONDUIT REQUIRED

*REFER TO DRAWINGS FOR REQ'D WIRE AND CONDUIT SIZES AND AMOUNTS

CIRCUITS

	CONDUIT STUB – TERMINATE WITH CAP
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	HOMERUN TO PANELBOARD – H(X)-(Y,Z) OR L(X)-(Y,Z) – HIGH OR LOW VOLTAGE PANEL (X) – CIRCUIT (Y,Z) AS INDICATED
	JUNCTION BOX

ELECTRICAL ABBREVIATIONS

1P	ONE POLE
2P	TWO POLE
3P	THREE POLE
4P	FOUR POLE
1P1W	ONE POLE, ONE WIRE
1P2W	ONE POLE, TWO WIRE
2P2W	TWO POLE, TWO WIRE
2P3W	TWO POLE, THREE WIRE
3P2W	THREE POLE, TWO WIRE
3P3W	THREE POLE, THREE WIRE
3P4W	THREE POLE, FOUR WIRE
4P4W	FOUR POLE, FOUR WIRE
A	AMPERE
AC	ALTERNATING CURRENT
AF	AMP FRAME
AFCI	ARC-FAULT CIRCUIT INTERRUPTER
AFD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
ALUM	ALUMINUM
AS	AMP SWITCH
AT	AMP TRIP
ARCH	ARCHITECT
ATS	AUTOMATIC TRANSFER SWITCH
AUD	AUDIOMETER BOX CONNECTION
AUX	AUXILIARY
A/V	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
C	CONDUIT (GENERIC TERM FOR RACEWAY.)
CAM	CAMERA
CAT	CATALOG
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COL	COLUMN
C.T.	CURRENT TRANSFORMER
C.U.	COPPER
CL	CENTERLINE
DC	DIRECT CURRENT
Δ	DELTA
DET	DETECTOR
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DWG	DRAWING

E	WIRED ON EMERGENCY CIRCUIT
EA	EACH
EC	ELECTRICAL CONTRACTOR
ECB	ENCLOSED CIRCUIT BREAKER
EDH	ELECTRICAL DUCT HEATER
EF	EXHAUST FAN
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
EM	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
ENCL	ENCLOSURE
ENL	END OF LINE
EP	EXPLOSION PROOF
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
EUH	ELECTRIC UNIT HEATER
EW	ELECTRIC WATER COOLER
EW	ELECTRIC WATER HEATER
EXIST.	EXISTING
F	FLUSH
FA	FIRE ALARM
FBO	FURNISHED BY OTHERS
FC	FIRE PROTECTION CONTRACTOR
FCU	FAN COIL UNIT
FDN	FOUNDATION
FIXT	FIXTURE
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FLR	FLOOR
FMC	FLEXIBLE METALLIC CONDUIT
FRE	FIBERGLASS REINFORCED EPOXY CONDUIT
FURN	FURNITURE
G	GROUND
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFPE	GROUND FAULT PROTECTION EQUIPMENT
GND	GROUND
GRC	GALVANIZED RIGID CONDUIT
HGT	HEIGHT
HP	HORSEPOWER
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HW	HOT WATER
HZ	HERTZ (CYCLE) PER SECOND

IAM	INDIVIDUAL ADDRESSABLE MODULE
ID	IDENTIFICATION
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
I/O	INPUT/OUTPUT
IR	PASSIVE INFARED
I.S.	INTRINSICALLY SAFE
J-JO	JUNCTION BOX
KCMIL	ONE THOUSAND CIRCULAR MILS
K/O	KNOCK-OUT
KVA	KILOVOLT AMPERE
KVAR	KILOVOLT AMPERE REACTIVE
KW	KILOWATT
LFMC	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
LFNC	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
LP	LIGHTING PANELBOARD
LS	LIMIT SWITCH
LTG	LIGHTING
LV	LOW VOLTAGE
MAINT	MAINTAINED
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MISC	MISCELLANEOUS
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MOD	MOTOR OPERATED DISCONNECT SWITCH
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
N	NORTH
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NF	NON-FUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NM	NONMETALLIC SHEATHED CABLE
NO	NORMALLY OPEN
NRTL	NATIONALLY RECOGNIZED TESTING LAB
#	NUMBER
NTS	NOT TO SCALE

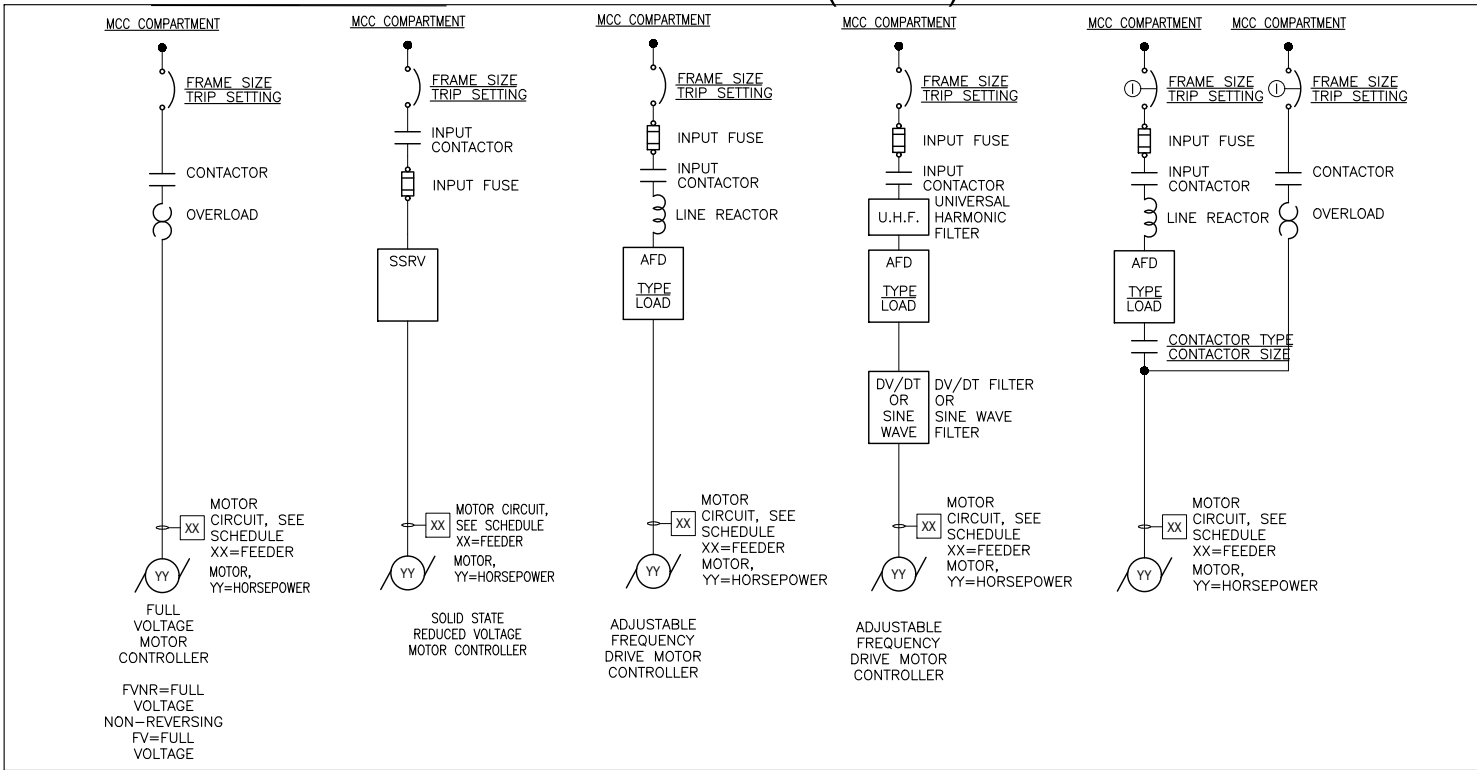
OHD	OVERHEAD DOOR OPERATOR
OL	OVERLOAD
P	POLE
PB	PULL BOX
PC	PLUMBING SYSTEM CONTRACTOR
PE	PRIMARY SERVICE
PEC	PHOTO ELECTRIC CONTROL
PH	PHASE
PIV	POST INDICATING VALVE
PNL	PANEL(BOARD)
PP	POWER PANEL
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE CONDUIT
PWR	POWER
RE	REMOVE EXISTING
REC	RECESSED
RECP	RECEPTACLE
REQD	REQUIRED
RM	ROOM
RMC	RIGID METAL CONDUIT
RTU	ROOFTOP UNIT
S	SURFACE MOUNTED
SCH	SCHEDULE
SEC	SECONDARY
SIG	SIGNAL
SN	SOLID NEUTRAL
SP	SPARE
SPD	160KA/ PHASE MINIMUM SURGE PROTECTIVE DEVICE
SPEC	SPECIFICATION
SPKR	SPEAKER
SS	STAINLESS STEEL
STP	SHIELDED TWISTED PAIR
STL	CARBON STEEL
SUSP	SUSPENDED
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TELEPHONE CABINET
TCI	TELECOMMUNICATIONS CABLING INSTALLER
TCP	TEMPERATURE CONTROL PANEL
TEL	TELEPHONE/DATA
TEL/DATA	TELEPHONE
TEMP	TEMPORARY
TERM	TERMINAL(S)
TV	TELEVISION
TYP	TYPICAL

UC	UNDER COUNTER
UG	UNDERGROUND
UH	UNIT HEATER
UPS	UNINTERRUPTIBLE POWER SOURCE
UTIL	UTILITY
UTP	UNSHIELDED TWISTED PAIR
V	VOLT
VPD	VARIABLE FREQUENCY DRIVE
W	WATT
W/	WITH
WH	WATTHOUR
WP	WEATHERPROOF
XFMR	TRANSFORMER
XLP	CROSS LINKED POLETHYLENE
Y	WYE
ZAM	ZONE ADAPTER MODULE

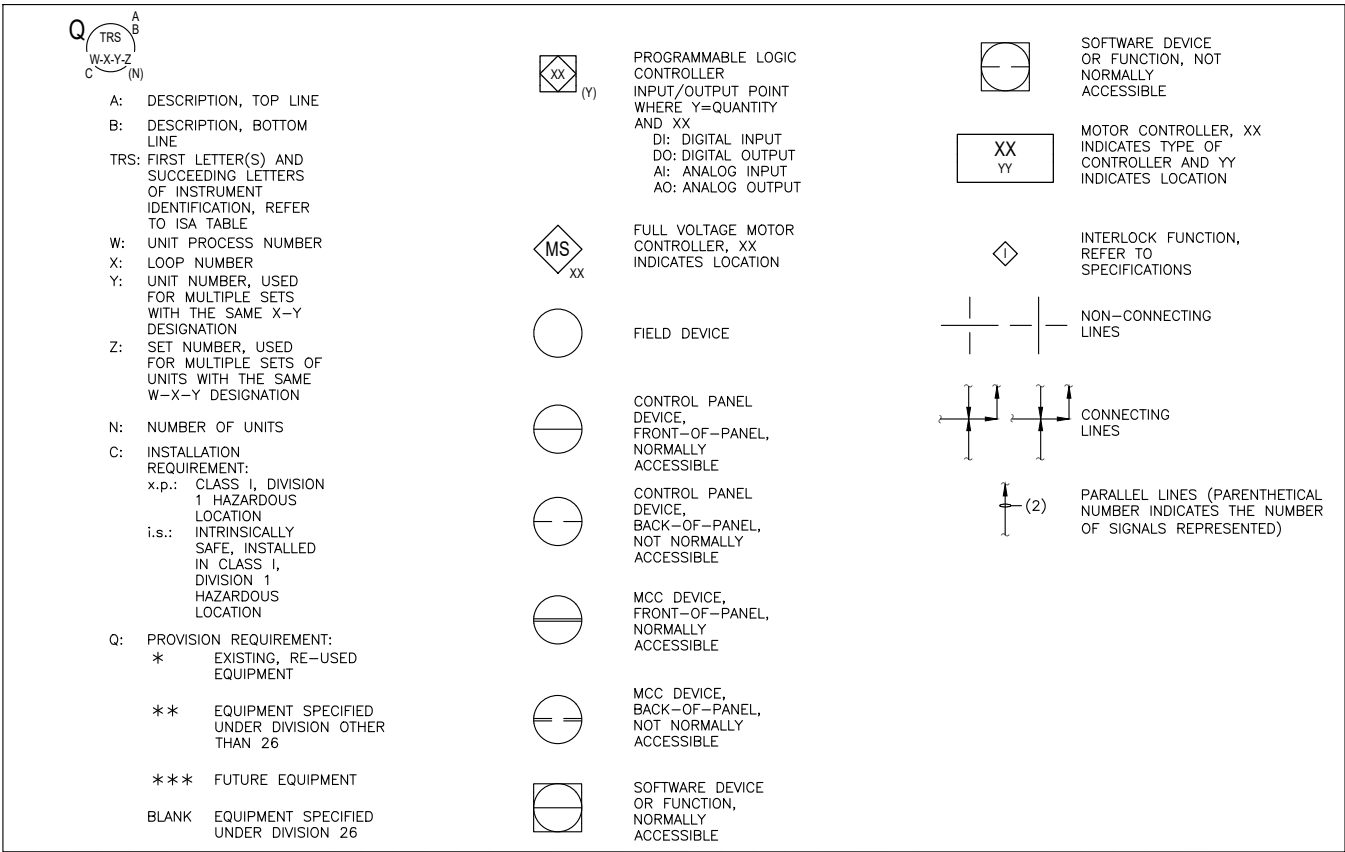
INTERNATIONAL SOCIETY OF AUTOMATION
INSTRUMENT IDENTIFICATION

	FIRST LETTER(S)		SUCCEEDING LETTERS		
	MEASURED OR INITIATING VARIABLE	VARIABLE	READOUT / PASSIVE FUNCTION	OUTPUT / ACTIVE FUNCTION	FUNCTION
A	ANALYSIS		ALARM		
B	BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	USER'S CHOICE			CONTROL	CLOSE
D	USER'S CHOICE	DIFFERENCES			DEVIATION
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW, FLOW RATE	RATIO			
G	USER'S CHOICE		GLASS, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT		INDICATE		
J	POWER				
K	TIME, SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOISTURE				MIDDLE, INTERMEDIATE
N	TORQUE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE, RESTRICTION		OPEN
P	PRESSURE (VACUUM)		POINT, TEST CONNECTION		
Q	QUANTITY	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		RUN
S	SPEED, FREQUENCY	SAFETY		SWITCH	STOP
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE, PRESENCE	Y AXIS	AUXILIARY DEVICES		
Z	POSITION, DIMENSION	Z AXIS, SAFETY INSTRUMENT OF SYSTEM		DRIVE ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

MOTOR CONTROL (MCC) SYMBOLS



P&ID SYMBOLS (TYPICAL)



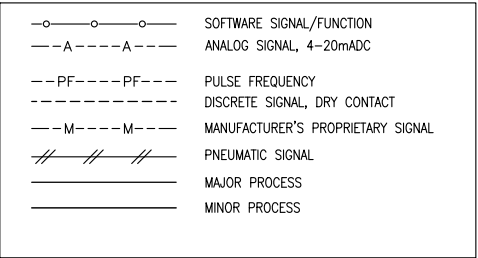
INSTRUMENT WIRING LEGEND

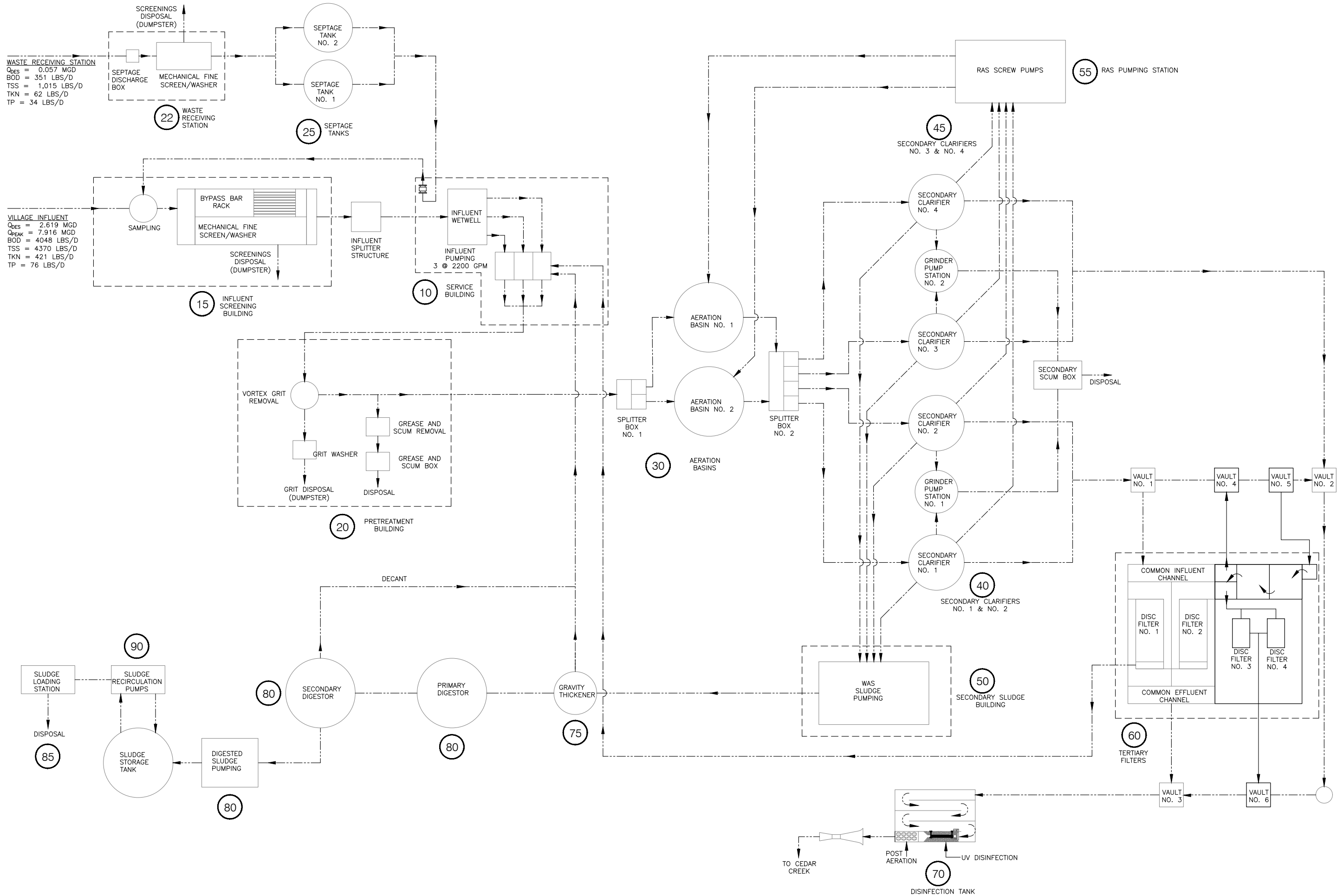
- AX = 2C#16 SHIELDED, TWISTED PAIR CABLE (X = NUMBER OF CABLES)
- DX = #14 THHN WIRE (X = NUMBER OF WIRES)
- MX = 1" CONDUIT FOR CABLE SUPPLIED BY MANUFACTURER (X = NUMBER OF CONDUITS)
- ELX = 3/4" CONDUIT AND CAT6(X) 300V CABLE(S) (X = NUMBER OF CABLES)
- EHX = 3/4" CONDUIT AND CAT6(X) 600V CABLE(S)
- FO(X) = CONDUIT AND FIBER OPTIC CABLE (X = NUMBER OF STRANDS)

PROCESS NOTES

- PROVIDE SEPARATE CONDUITS FOR THE FOLLOWING:
 - 24 V DC ANALOG
 - 24 V DC CONTROL/ DC PULSE
 - INTRINSICALLY SAFE
 - MANUFACTURERS CABLE
 - 120 VOLT CONTROL
 - 120 VOLT POWER
 - 480 VOLT POWER
 - 480 VOLT MOTOR FEEDER
 - LOW VOLTAGE INSTRUMENTATION COMMUNICATION
- REFER TO SPECIFICATION 26 90 00 FOR LOOP AND OPERATOR INTERFACE FUNCTIONS.
- REFER TO RESPECTIVE DIVISION SPECIFICATIONS FOR ADDITIONAL DETAILS REGARDING INSTRUMENTATION AND CONTROL EQUIPMENT FURNISHED UNDER THOSE SPECIFICATIONS.

LINETYPE LEGEND



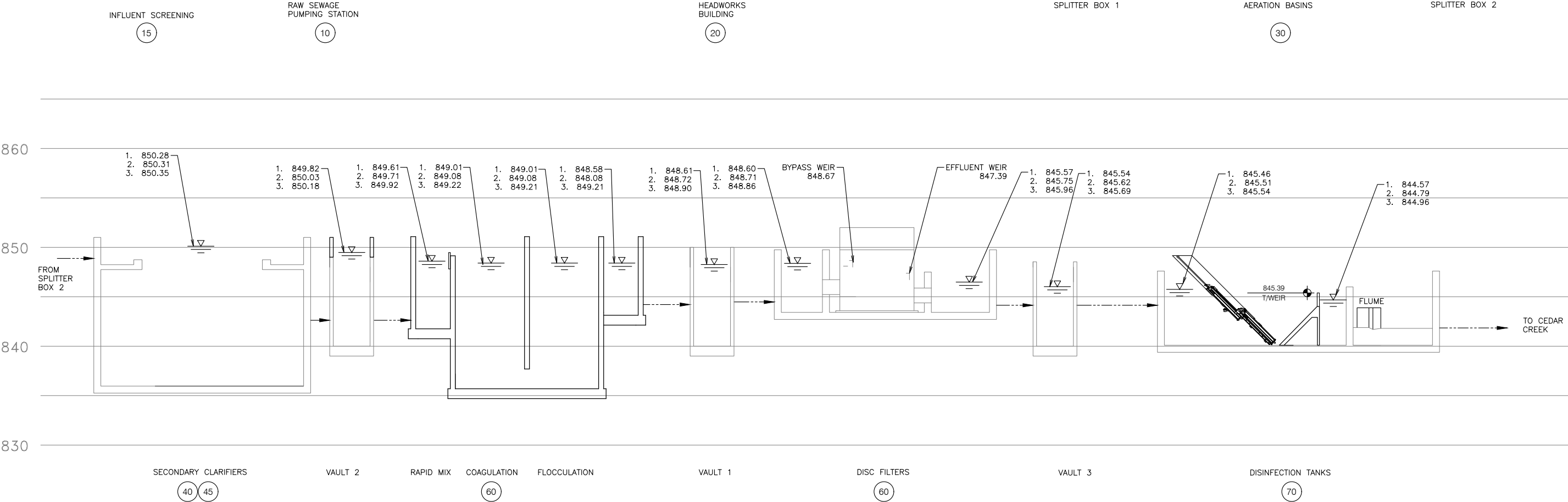
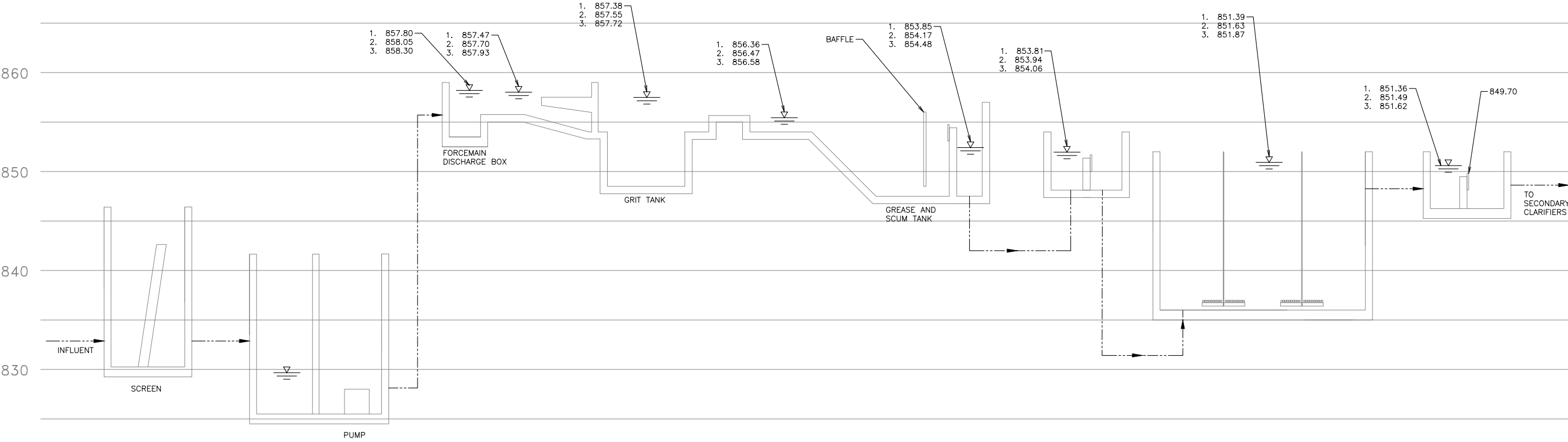


WATER SURFACE ELEVATIONS

1. DESIGN AVERAGE DAY FLOW = 2.046 MGD
2. MAX DAY FLOW = 5.418 MGD
3. PEAK HOUR FLOW = 7.916 MGD

RIVER STAGES

1. NORMAL = 834.00 FT
2. 100-YEAR FLOOD ELEVATION = 844.00 FT
3. WATER LEVEL FOR MODEL = 840.00 FT



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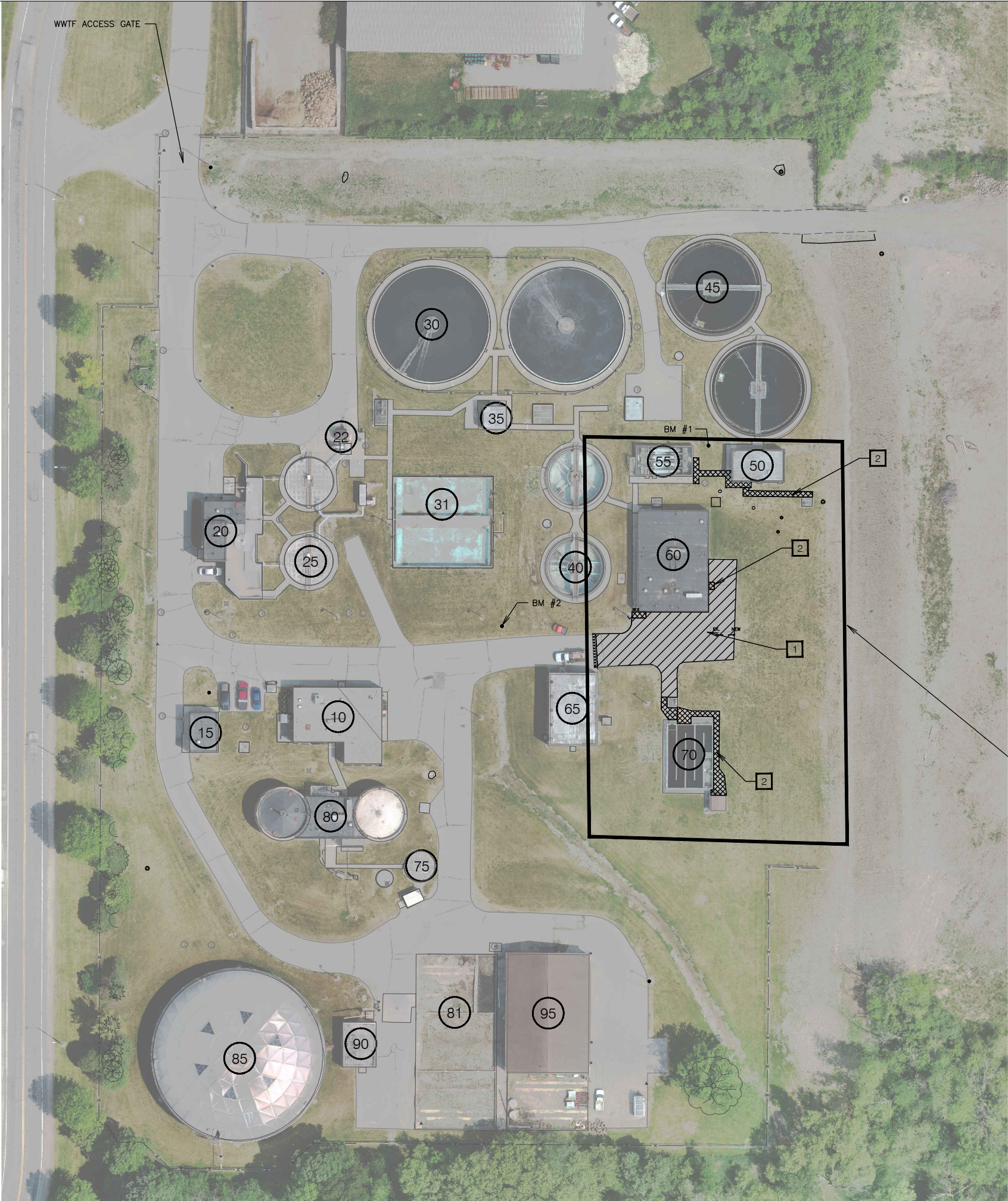


HYDRAULIC PROFILE

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION
Village of Jackson, Wisconsin

PROJECT NO.:	JK 18
DRAWING FILE:	COVER & 00-G
DRAWN BY:	R.T.G.
CHECKED BY:	G.J.D.
DATE:	1-4-24
REVISIONS:	
SCALE:	
SHEET:	6

00-G-06



GENERAL NOTES

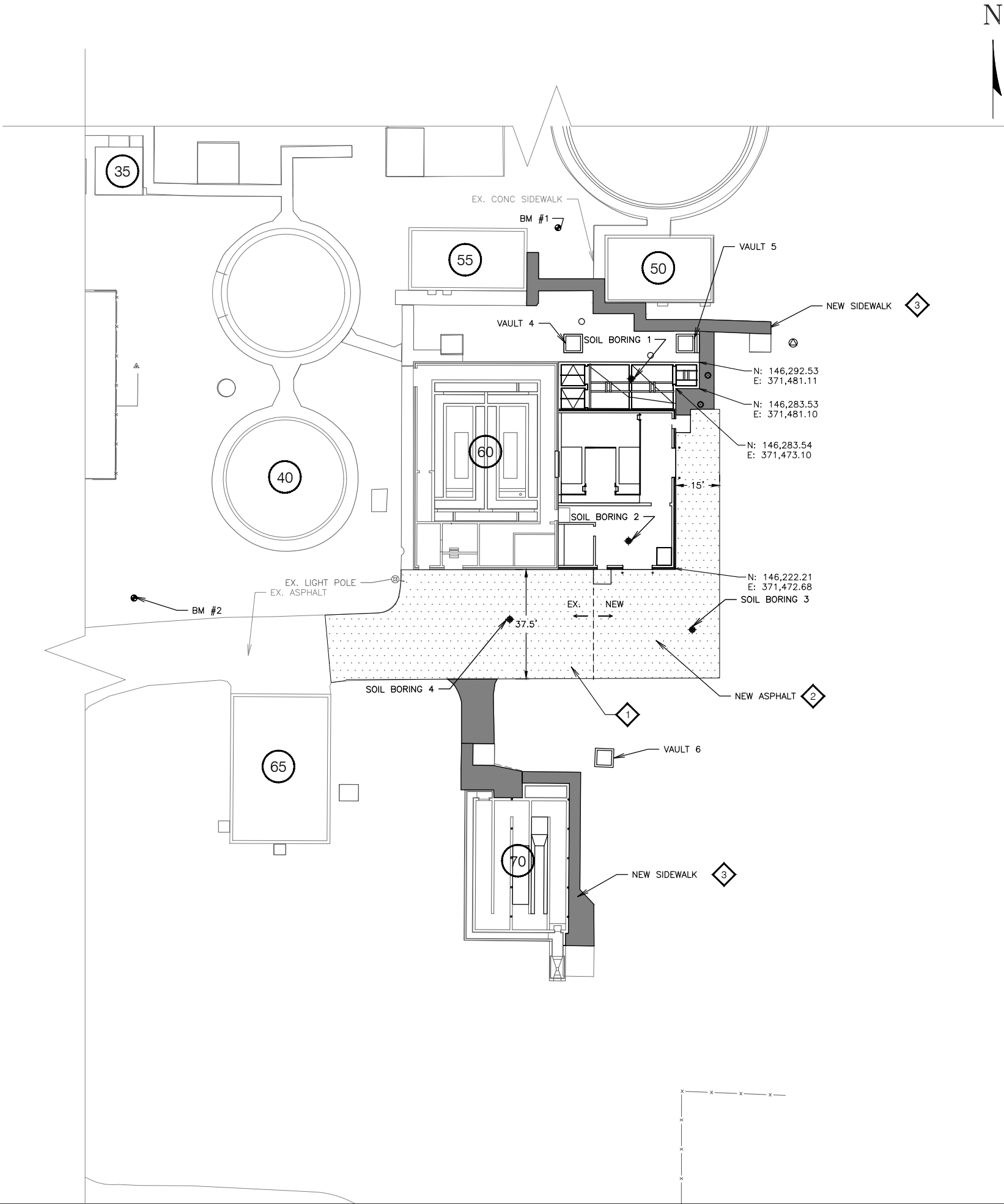
1. TREATMENT PLANT OPERATION MUST BE MAINTAINED THROUGHOUT REMOVAL AND CONSTRUCTION PROCESS.
2. EXISTING UTILITIES AND PIPING ARE BASED ON OWNER INFORMATION. CONTRACTOR SHALL SPOT DIG TO VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND RESTORING ALL CONCRETE SURFACES, LANDSCAPING AND GRADING, AND FENCING THAT ARE IMPACTED DURING CONSTRUCTION.

☒ REMOVAL NOTES

1. REMOVE EXISTING ASPHALT IN THE AREA SHOWN.
2. REMOVE AND REPLACE THE EXISTING CONC. SIDEWALK IN THE AREA SHOWN.

STRUCTURE SCHEDULE	
10	EX SERVICE BUILDING
15	EX INFLUENT SCREEN BUILDING
20	EX PRETREATMENT BUILDING
22	EX WASTE RECEIVING STATION
25	EX SEPTAGE TANKS
30	EX AERATION BASINS
31	EX RBC TANKS
35	EX AERATION CONTROL BUILDING
40	EX SECONDARY CLARIFIERS #1 & #2
45	EX SECONDARY CLARIFIERS #3 & #4
50	EX SECONDARY SLUDGE BUILDING
55	EX RAS PUMPING STATION
60	EX TERTIARY FILTER BUILDING
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75	EX GRAVITY THICKENER
80	EX ANAEROBIC DIGESTERS AND BUILDING
81	EX SLUDGE DRYING BEDS
85	EX SLUDGE STORAGE TANKS
90	EX SLUDGE PUMPING BUILDING
95	EX STORAGE GARAGE

	BENCH MARK	ELEV
#1	SOUTH FLANGE BOLT ON HYDRANT, WEST OF STR 50	851.21
#2	NORTH FLANGE BOLT ON HYDRANT, SW OF STR 45	848.05



GENERAL NOTES

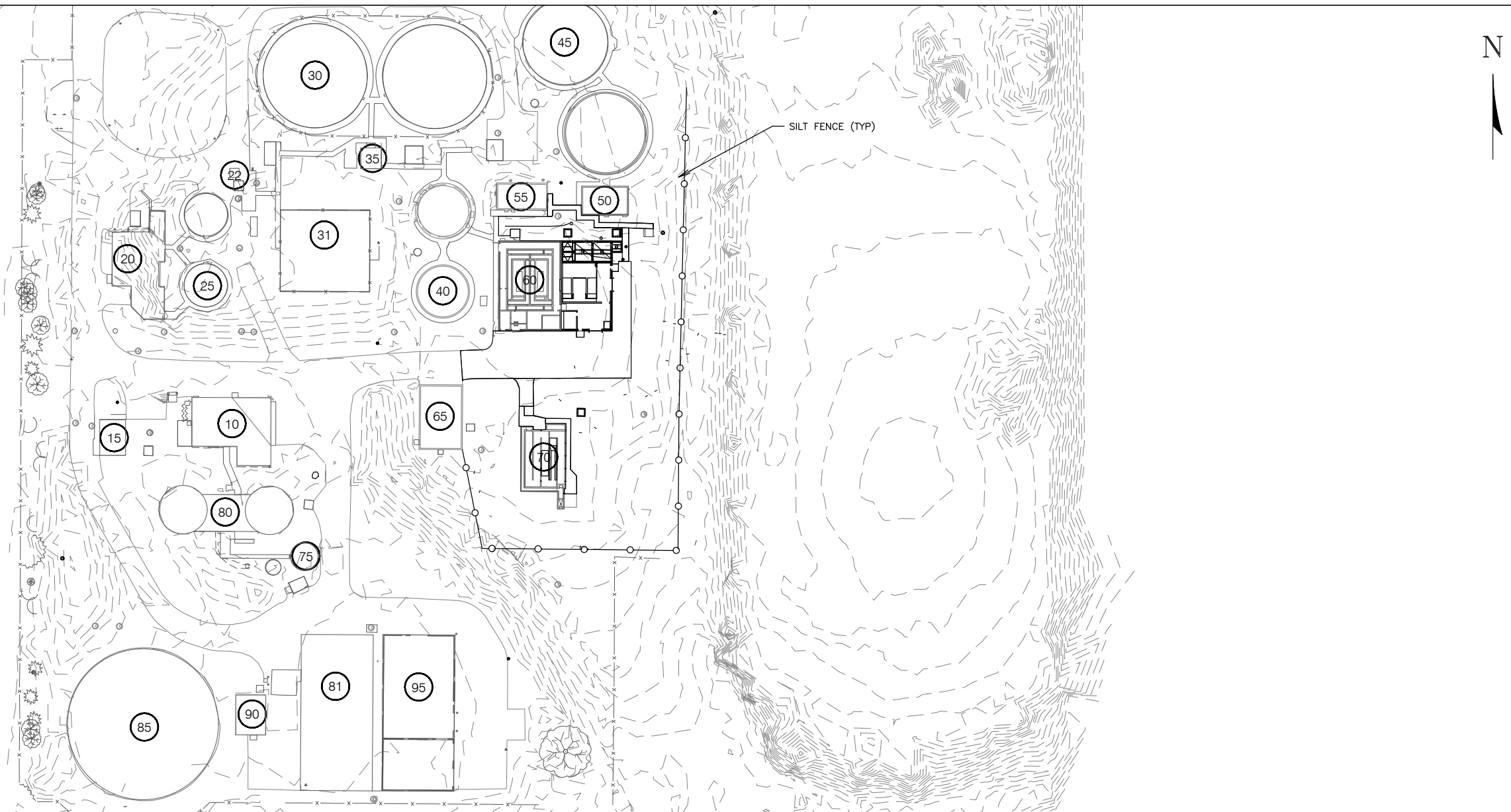
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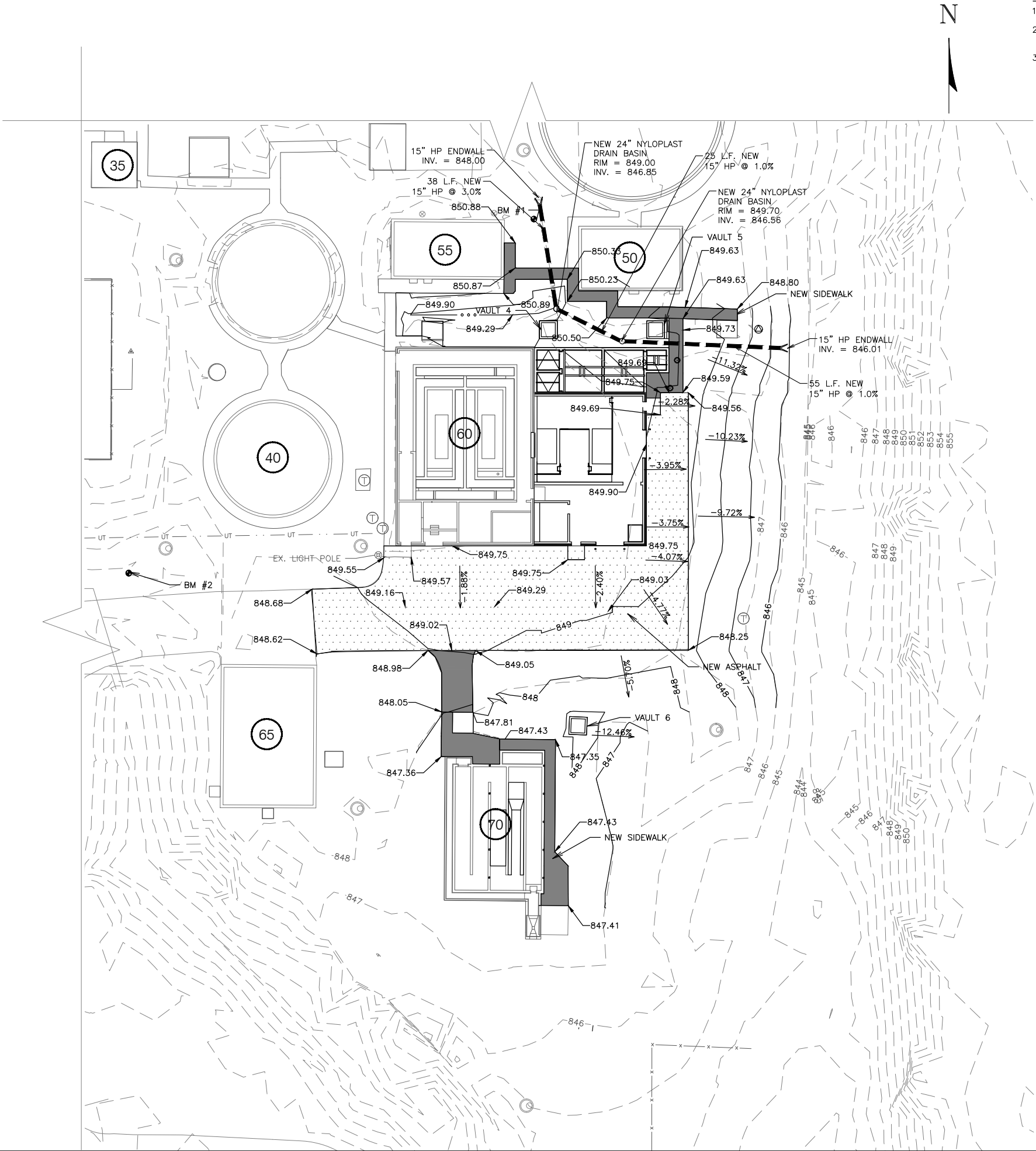
KEY NOTES

- 1. NEW 4" ASPHALT PAVEMENT ON EXISTING AGGREGATE BASE COURSE.
- 2. NEW 4" ASPHALT PAVEMENT ON NEW AGGREGATE BASE PER DETAIL 100-C-02.
- 3. NEW CONCRETE SIDEWALK PER DETAIL SHEET 100-C-01.

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- GENERAL NOTES
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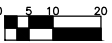


GRADING PLAN

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

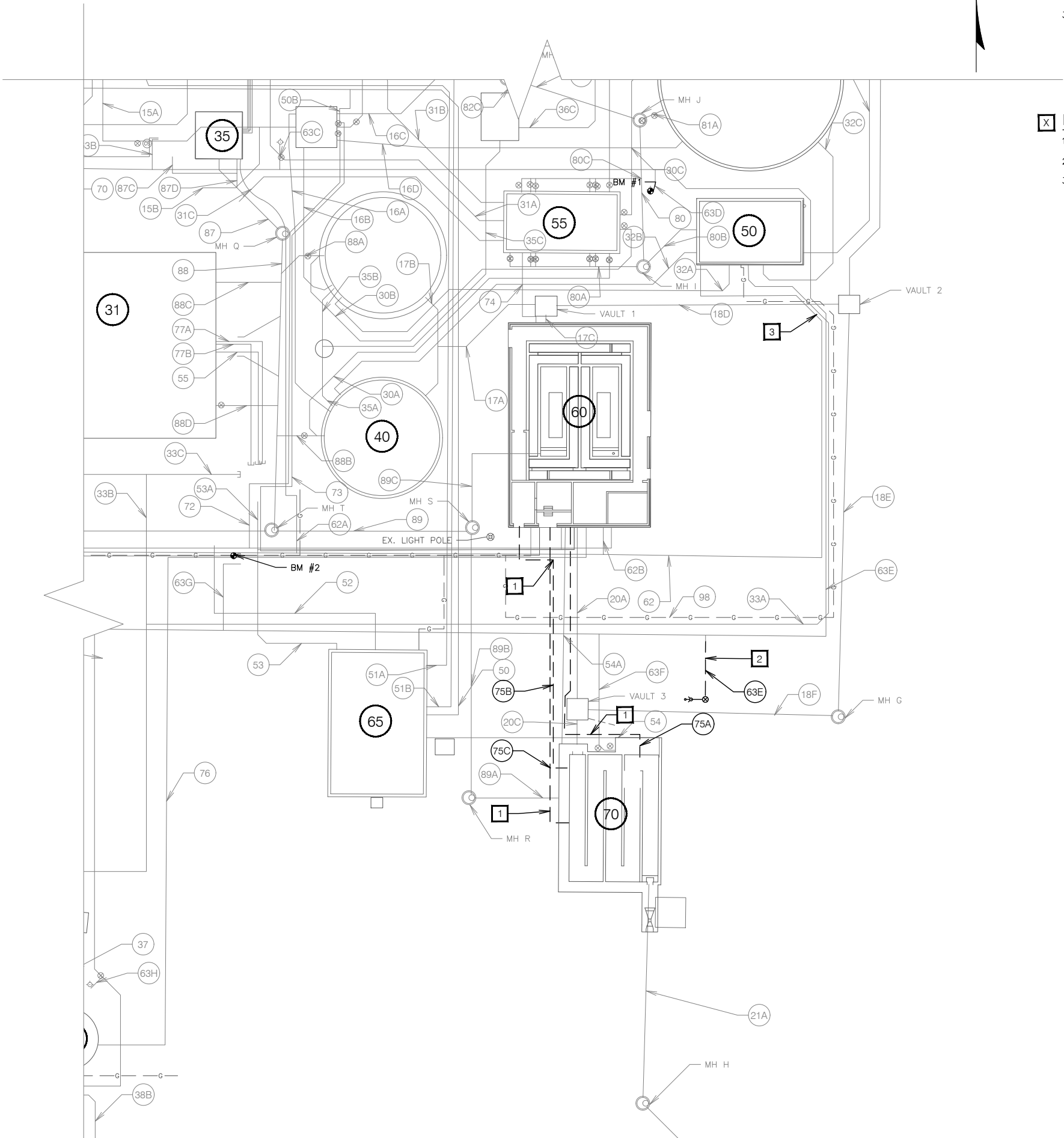
Village of Jackson, Wisconsin

PROJECT NO.: JK 18
DRAWING FILE: 05-SITE
DRAWN BY: R.T.G.
CHECKED BY: G.J.D.
DATE: 1-4-24
REVISIONS:
SCALE:



SHEET: 10

05-C-04



GENERAL NOTES

- 1. TREATMENT PLANT OPERATION MUST BE MAINTAINED THROUGHOUT REMOVAL AND CONSTRUCTION PROCESS.
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X REMOVAL NOTES

- 1. ABANDON AND/OR REMOVE THE EXISTING PIPES SHOWN BY DISCONNECTING OR PLUGGING AT THE EXISTING STRUCTURES AS SHOWN.
- 2. REMOVE EXISTING 6" HYDRANT LEAD, VALVE, AND HYDRANT. SALVAGE HYDRANT FOR REUSE.
- 3. RELOCATE EXISTING WATER AND NATURAL GAS PIPING FOR NEW STRUCTURE PER 05-M-02.

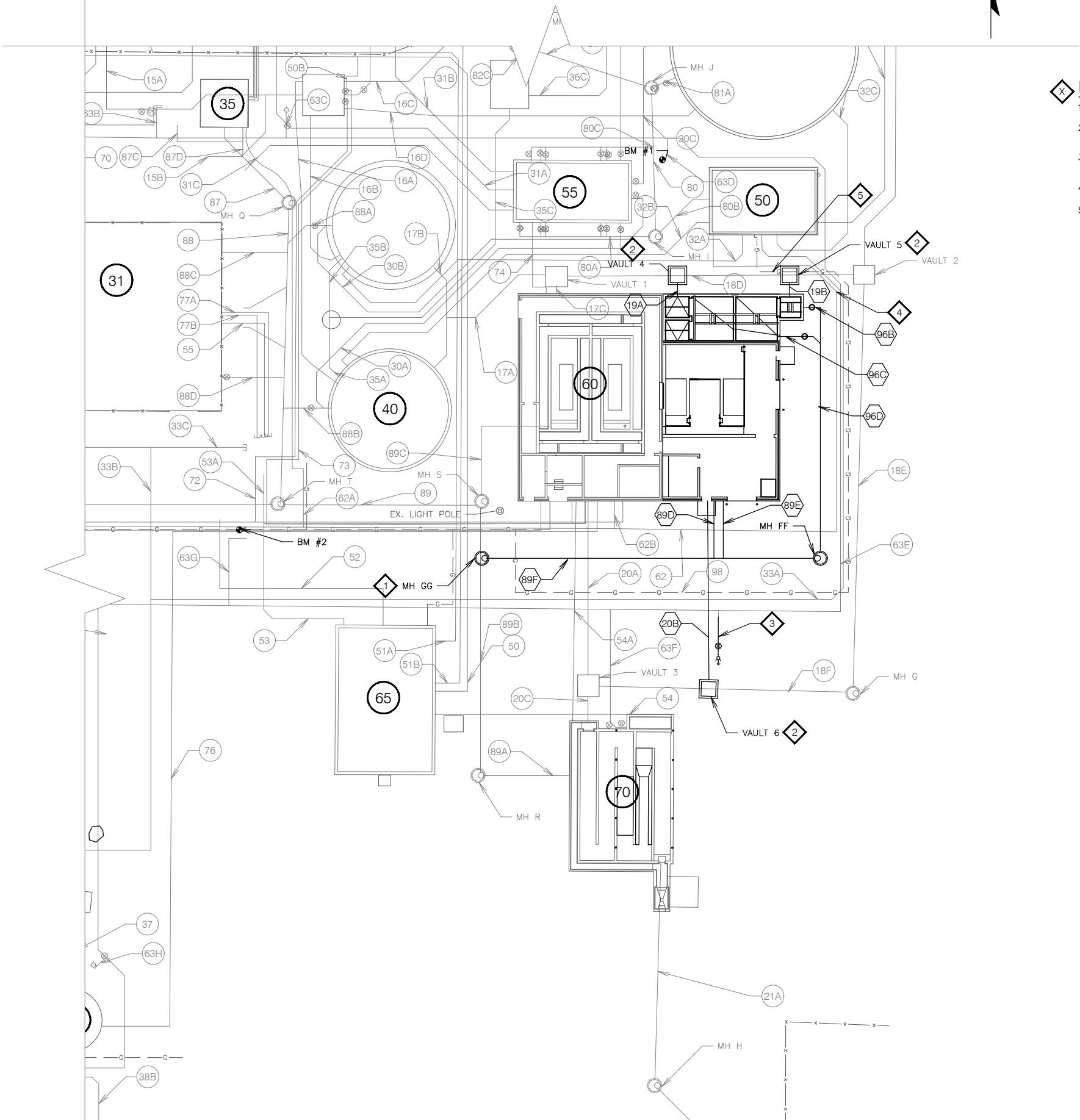
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	BENCH MARK	ELEV
#1	SOUTH FLANGE BOLT ON HYDRANT, WEST OF STR 50	851.21
#2	NORTH FLANGE BOLT ON HYDRANT, SW OF STR 45	848.05

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

PROCESS AND UTILITY REMOVAL PLAN





GENERAL NOTES

1. TREATMENT PLANT OPERATION MUST BE MAINTAINED THROUGHOUT REMOVAL AND CONSTRUCTION PROCESS.
2. EXISTING UTILITIES AND PIPING ARE BASED ON OWNER INFORMATION. CONTRACTOR SHALL SPOT DIG TO VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS.
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KEY NOTES

1. CUT IN NEW 4' DIA. PRECAST MANHOLE WITH EXTERIOR DROP FOR NEW SITE DRAIN PIPING.
2. CUT IN NEW PRECAST VAULT AT EXISTING RCP PIPE. CAST-IN-PLACE NEW BASE AND INSTALL NEW STRUCTURE PER DETAILS ON SHEET 60-M-05.
3. REMOVE EXISTING HYDRANT AND VALVE FOR INSTALLATION OF VAULT 6. INSTALL NEW 6" HYDRANT LEAD FROM EXISTING TEE WITH NEW 6" GATE VALVE AND REUSE EXISTING HYDRANT.
4. RELOCATE EXISTING 2" WATER SERVICE NORTH OF VAULT 5 WITH NEW HDPE PIPE AND COUPLINGS TO FACILITATE INSTALLATION.
5. RELOCATE EXISTING 1 1/2" NG SERVICE NORTH OF VAULT 5 WITH NEW HDPE PIPE AND COUPLINGS TO FACILITATE INSTALLATION.

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PROCESS AND UTILITY IMPROVEMENTS PLAN

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

Village of Jackson, Wisconsin

PROJECT NO.: JK 18
DRAWING FILE: 05-SITE
DRAWN BY: R.T.G.
CHECKED BY: G.J.D.

DATE: 1-4-24
REVISIONS:

SCALE:



SHEET: 12

05-M-02

PIPE SCHEDULE

COPY	MEDIA	DIA./MATL	FROM	TO	COMMENTS
1	SAN	8"	SENECA LAGOON	MH A	
2A	SAN	21"	NORTH	MH A	
2B	SAN	21"	MH A	MH B	
2C	SAN	21"	MH B	MH D	
3A	SAN	27"	SOUTH	MH C	
3B	SAN	27"	MH C	MH D	
4	SAN	36"	MH D	MH E	
5	SAN	36"	MH E	STR 15	
10A	RAW	36"	STR 15	INFL SPLITTER	
10B	RAW	30"	INFL SPLITTER	MH F	
10C	RAW	30"	MH F	STR 10	
10D	RAW	30"	INFL SPLITTER	STUB	FUTURE
11A	SEPT	6"	STR 22	STR 25 (SOUTH)	SECONDARY SEPTAGE TANK NO.1
11B	SEPT	6"	STR 22	STR 25 (NORTH)	SECONDARY SEPTAGE TANK NO.2
11C	SEPT	6"	STR 25 (SOUTH)	CLEANOUT	SEPTAGE CLEANOUT
11D	SEPT	6"	STR 25 (NORTH)	CLEANOUT	SEPTAGE CLEANOUT
11E	SEPT	6"	CLEANOUT	STR 10	
11F	SEPT	4"	STR 10	STR 15	
12A	RAW	16"	STR 10	STR 20	
13A	RAW	24"	STR 20	SPLITTER BOX NO.1	
13B	RAW	20"	STR 20	SPLITTER BOX NO.1	
14A	RAW	20"	SPLITTER BOX NO.1	STR 30 (WEST)	AERATION BASIN NO.1
14B	RAW	20"	SPLITTER BOX NO.1	STR 30 (EAST)	AERATION BASIN NO.2
14C	RAW	20"	SPLITTER BOX NO.1	STUB	FUTURE AERATION BASIN
15A	MLSS	24"	STR 30 (WEST)	SPLITTER BOX NO.2	
15B	MLSS	30"	PIPE 15B	STUB	
15C	MLSS	24"	STR 30 (EAST)	SPLITTER BOX NO.2	
16A	MLSS	20"	SPLITTER BOX NO.2	STR 40 (SOUTH)	SECONDARY CLARIFIER NO.1
16B	MLSS	20"	SPLITTER BOX NO.2	STR 40 (NORTH)	SECONDARY CLARIFIER NO.2
16C	MLSS	30"	SPLITTER BOX NO.2	STR 45 (NORTH)	SECONDARY CLARIFIER NO.4
16D	MLSS	30"	SPLITTER BOX NO.2	STR 45 (SOUTH)	SECONDARY CLARIFIER NO.3
17A	SE	24"	STR 40 (SOUTH)	VAULT 1	
17B	SE	24"	STR 40 (NORTH)	PIPE 16A	
17C	SE	36"	VAULT 1	STR 60	
18A	SE	24"	STR 45 (SOUTH)	PIPE 18C	
18B	SE	24"	STR 45 (NORTH)	PIPE 18C	
18C	SE	30"	PIPE 18A & 18B	VAULT 2	
18D	SE	30"	VAULT 2	VAULT 1	PIPE IS SECTIONED INTO 3 PARTS AFTER VAULT 4 & 5 ARE ADDED
18E	BYP	36"	VAULT 2	MH G	
18F	BYP	36"	MH G	VAULT 3	PIPE IS SECTIONED INTO 2 PARTS AFTER VAULT 6 IS ADDED
19A	SE	30"	VAULT 4	STR 60	
19B	SE	30"	STR 60	VAULT 5	
20A	TE	24"	STR 60	VAULT 3	
20B	TE	24"	STR 60	VAULT 6	
20C	TE	36" CONC	VAULT 4	STR 70	
21A	FE	30"	STR 70	MH H	
21B	FE	30"	MH H	OUTFALL	
30A	RAS	12"	STR 40 (SOUTH)	STR 55	
30B	RAS	12"	STR 40 (NORTH)	STR 55	
30C	RAS	12"	STR 45 (SOUTH)	STR 55	
30D	RAS	12"	STR 45 (NORTH)	STR 55	
31A	RAS	12"	STR 55	STR 30	AERATION BASIN NO.1
31B	RAS	12"	STR 55	STR 30	AERATION BASIN NO.2
31C	RAS	16"	STR 55	STUB	FUTURE AERATION BASIN
32A	WAS	6"	STR 40 (SOUTH)	STR 50	
32B	WAS	6"	STR 40 (NORTH)	STR 50	
32C	WAS	6"	STR 45 (SOUTH)	STR 50	
32D	WAS	6"	STR 45 (NORTH)	STR 50	
33A	WAS	6"	STR 50	STR 80	
33B	WAS	6"	PIPE 33A	STUB	
33C	WAS	6"	PIPE 33B	STUB	
34A	WAS	6"	STR 80	STR 75	
34B	WAS	6"	STR 80	STR 75	
35A	SCUM	6"	STR 40 (SOUTH)	GRINDER STATION NO.1	
35B	SCUM	6"	STR 40 (NORTH)	GRINDER STATION NO.1	
35C	SCUM	2"	GRINDER STATION NO.1	SECONDARY SCUM WELL	
36A	SCUM	6"	STR 45 (SOUTH)	GRINDER STATION NO.2	
36B	SCUM	6"	STR 45 (NORTH)	GRINDER STATION NO.2	
36C	SCUM	2"	GRINDER STATION NO.2	SECONDARY SCUM WELL	
37	SCUM	6"	STR 75	SCUM BOX	
38A	DIG SLG	6"	STR 80	STR 81	
38B	DIG SLG		SHED	PIPE 38A	

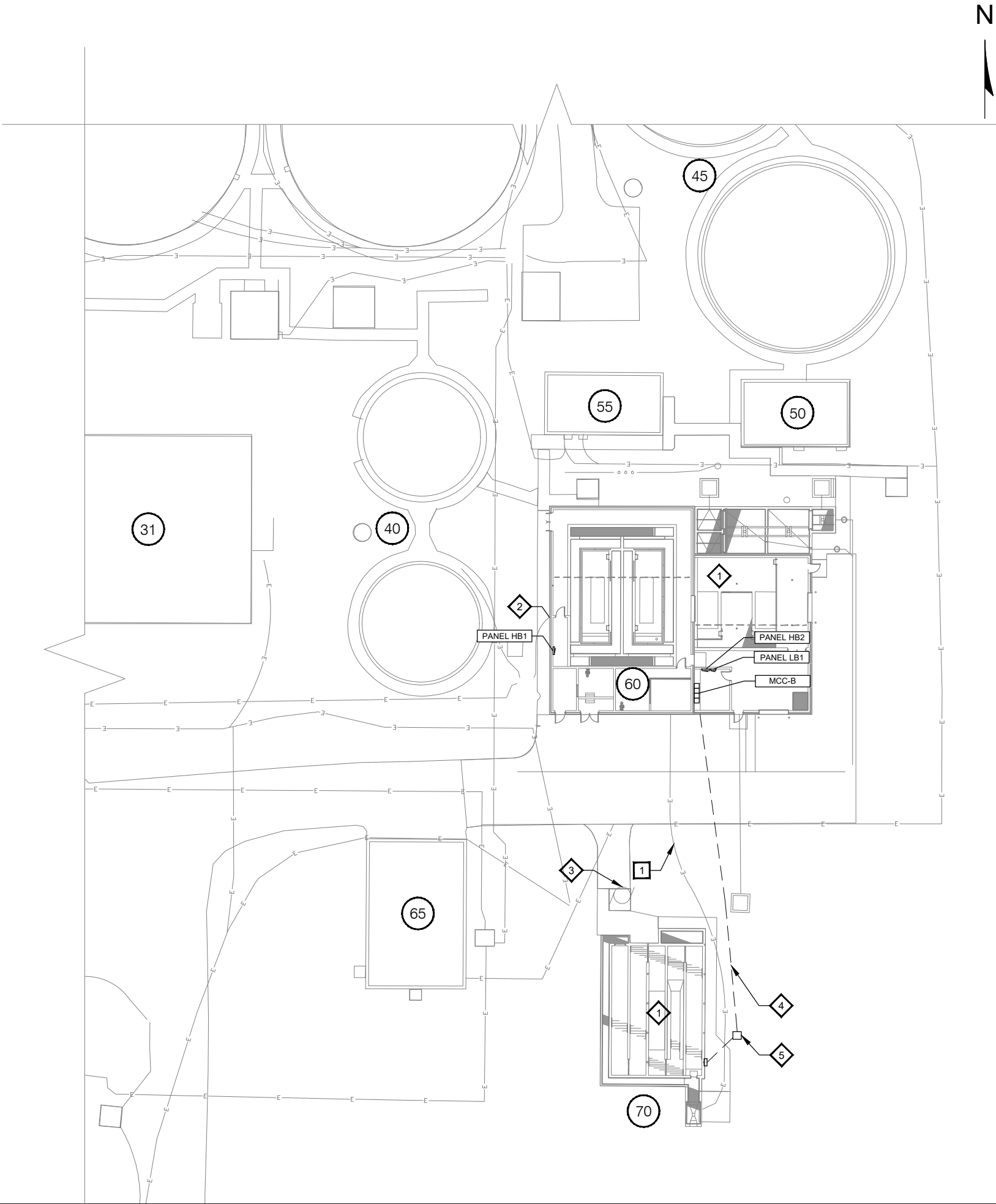
PIPE NO.	MEDIA	DIA./MATL	FROM	TO	COMMENTS
38C	DIG SLG	6"	PIPE 38A	STR 85	
39	DIG SLG	6"	STR 85	SLG LOADOUT	
40	DIG SLG	18"	STR 85	STR 90	
41	DIG SLG	18"	STR 85	STR 90	
42	DIG SLG	6"	STR 90	PIPE 39	
43A	DIG SLG	8"	STR 90	STR 85	
43B	DIG SLG	8"	STR 90	STR 85	
43C	DIG SLG	8"	STR 90	STR 85	
43D	DIG SLG	8"	STR 90	STR 85	
43E	DIG SLG	8"	STR 90	STR 85	
43F	DIG SLG	8"	STR 90	STR 85	
43G	DIG SLG	8"	STR 90	STR 85	
50	ALP	4"	STR 65	STR 20	
50B	ALP	4"	PIPE 50	SPLITTER BOX NO.1	
50C	ALP	4"	PIPE 50	SPLITTER BOX NO.2	
51A	ALP	8"	STR 65	STR 30 (WEST)	AERATION BASIN NO.1
51B	ALP	8"	STR 65	STR 30 (EAST)	AERATION BASIN NO.2
52	ALP	8"	STR 65	STUB	
53	ALP	8"	STR 65	STR 60	
53A	ALP	8"	PIPE 53	STUB	
54A	ALP	4"	PIPE 54	STR 60	
55	ALP	8"	STR 31	STUB	ABANDONED
60	WATER	3"	EAGLE DR	STR 10	
60A	WATER	3"	PIPE 60	FIRE HYDRANT	
61	W1	3"	STR 10	STR 20	
61A	W1	1-1/4"	PIPE 61	STR 80	
62	W1	1-1/4"	PIPE 61	STR 50	
62A	W1	2"	PIPE 62	STR 35	
62B	W1	2"	PIPE 62	STR 60	
63	W2	6"	STR 20	STR 90	LINE MOVES CLOCKWISE
63A	W2	6"	PIPE 63	YD HYD	SOUTH OF SEPTAGE TANK NO.2
63B	W2	6"	PIPE 63	ACETIC BUILDING	
63C	W2	6"	PIPE 63	YD HYD	EAST OF STR 35
63D	W2	6"	PIPE 63	YD HYD	BETWEEN STR 55 & STR 50
63E	W2	6"	PIPE 63	YD HYD	NORTH OF STR 70
63F	W2	6"	PIPE 63	STR 70	
63G	W2	6"	PIPE 63	YD HYD	NORTHEAST OF STR 65
63H	W2	6"	PIPE 63	YD HYD	NORTH OF STR 75
63I	W2	6"	PIPE 63	YD HYD	NORTHEAST OF STR 90
63J	W2	6"	PIPE 63	YD HYD	NORTHWEST OF STR 90
63K	W2	6"	PIPE 63	STR 15	
64	W2	6"	PIPE 63K	YD HYD	NORTH OF STR 15
65	W2	6"	PIPE 63K	PIPE 63	
70	CHEM	1"	ACETIC BUILDING	SPLITTER BOX NO.1	
71	CHEM	2"	STR 60	STR 10	
72	CHEM	1"	STR 60	SPLITTER BOX NO.2	
72A	CHEM	1"	PIPE ??	STUB	
73	CHEM	2"	STR 60	SPLITTER BOX NO.2	
74	CHEM	1"	STR 60	STR 55	
75A	CHEM	1-1/2"	STR 60	STR 70	ABANDON
75B	CHEM	1-1/2"	STR 60	STR 70	ABANDON
75C	CHEM	1-1/2"	STR 60	STR 70	ABANDON
76	CHEM	2"	STR 60	STR 75	
77A	CHEM	2"	STR 31	STUB	ABANDONED
77B	CHEM	1"	STR 31	STUB	ABANDONED
80	DRN	6"	MH I	MH J	
80A	DRN	6"	STR 55	MH I	SOUTH SIDE VALVES OF STR 55
80B	DRN	4"	STR 50	MH I	
80C	DRN	6"	STR 55	PIPE 80	NORTH SIDE VALVES OF STR 55
81	DRN	8"	MH J	MH L	
81A	DRN	8"	STR 45	MH J	CLARIFIER 3
82	DRN	8"	MH K	MH L	
82A	DRN	8"	STR 45	MH K	CLARIFIER 4
82B	DRN	8"	STR 30	MH K	AERATION BASIN NO.2
82C	DRN	8"	SECONDARY SCUMWELL	MH L	
83	DRN	8"	MH L	MH M	
83A	DRN	1-1/2"	STR 30	PIPE 83	AERATION BASIN NO.1
84	DRN	6"	MH M	MH N	
84A	DRN	6"	TRENCH DRAIN	MH M	
85	DRN	6"	MH N	MH P	

PIPE SCHEDULE (CONT.)

PIPE NO.	MEDIA	DIA.	FROM	TO	COMMENTS
85A	DRN	8"	STR 20	GREASE/SCUM WELL	
85B	DRN	8"	GREASE/SCUM WELL	MH O	
85C	DRN	6"	STR 20	PIPE 85B	
85D	DRN	6"	MH O	MH P	
86	DRN	8"	MH P	MH V	
87	DRN	4"	STR 35	MH Q	
87A	DRN	1-1/2"	STR 30	STR 35	AERATION BASIN NO.1
87B	DRN	1-1/2"	STR 30	STR 35	AERATION BASIN NO.2
87C	DRN	4"	ACETIC BUILDING	PIPE 87	
87D	DRN	8"	STR 35	PIPE 87	
88	DRN	6"	MH Q	MHT	
88A	DRN	8"	PIPE 30B	PIPE 87	
88B	DRN	8"	PIPE 30A	PIPE 87	
88C	DRN	6"	STR 31	PIPE 87	ABANDONED
88D	DRN	8"	STR 31	PIPE 87	ABANDONED
89	DRN	8"	MH S	MH T	
89A	DRN	8"	STR 70	MH R	
89B	DRN	8"	MH R	MH S	PIPE IS SECTIONED INTO 2 PARTS AFTER MH GG IS ADDED
89C	DRN	8"	STR 60	MH S	
89D	DRN	6"	STR 60	PIPE 89F	
89E	DRN	4"	STR 60	PIPE 89F	
89F	DRN	6"	MH FF	MH GG	
90	DRN	8"	MH T	MH U	
91	DRN	8"	MH U	MH V	
92	DRN	8"	MH V	MH W	
92A	DRN	8"	MH W	MH F	
93	DRN	8"	MH W	MH X	
94	DRN	8"	MH X	MH B	
95	DRN	8"	MH Z	MH C	
95A	DRN	8"	MH Y	MH Z	
95B	DRN	8"	STR 90	PIPE 94	
95C	DRN	8"	STR 81	MH Y	
96	DRN	8"	MH Z	INFL SPLITTER	
96A	DRN	6"	STR 80	PIPE 95	
96B	DRN	6"	STR 60	PIPE 96D	
96C	DRN	6"	STR 60	PIPE 96D	
96D	DRN	6"	STR 60	MH FF	
97A	DEC	6"	STR 75	STR 80	
97B	DEC	6"	STR 80	STR 10	
98	NG	1-1/2"	UTILITY	SITE	
98A	WG	3"	STR 80	BURNER	WASTE GAS
99A	SAMP	1-1/4"	STR 30	STR 35	AERATION BASIN NO.1
99B	SAMP	1-1/4"	STR 30	STR 35	AERATION BASIN NO.2

MANHOLE SCHEDULE

MANHOLE	PRECAST	CATALOG	LID	RIM	INVERT ELEVATIONS (1)				Comments
	SIZE	NUMBER		ELEVATION	DIRECTION				
MH A	48"	EX	EX	847.07	837.01 (E)	831.55 (N)	831.55 (S)		
MH B	48"	EX	EX	846.96	832.11 (E)	831.49 (N)	831.49 (S)		
MH C	48"	EX	EX	847.28	832.26 (SW)	831.62 (N)			
MH D	96"	EX	EX	846.16	831.08 (N)	831.08 (W)	831.08 (E)		
MH E	60"	EX	EX	846.17	831.00 (W)	831.00 (E)			
MH F	60"	EX	EX	846.41	833.51 (NE)	829.59 (W)	829.59 (S)	829.59 (E)	
MH G	72"	EX	EX	849.10	840.60				
MH H	48"	EX	EX	845.02	835.90 (N)	835.90 (SE)			
MH I	48"	EX	EX	850.87	841.70 (W)	841.93 (W)	839.88 (N)		
MH J	48"	EX	EX						
MH K	48"	EX	EX	849.86	837.03 (NE)	837.06 (W)	836.94 (S)		
MH L		EX	EX	850.72	836.63 (N)	838.32 (S)	836.58 (E)	836.56 (W)	
MH M	48"	EX	EX	852.62	835.04 (N)	835.04 (SE)	844.02 (NW)		
MH N	48"	EX	EX	853.29	834.64 (NE)	834.64 (S)	848.89 (E)		
MH O		EX	EX	854.51	844.74 (N)	844.59 (E)			
MH P	24"	EX	EX						
MH Q	48"	EX	EX						
MH R		EX	EX	847.74	835.30 (E)	835.23 (N)			
MH S	48"	EX	EX	849.33	840.42 (N)	834.84 (S)	834.67 (W)		
MH T	48"	EX	EX	847.77	834.54 (E)	834.59 (N)	834.45 (W)		
MH U	48"	EX	EX	849.26	834.07 (E)	834.07 (W)			
MH V	48"	EX	EX	850.16	833.93 (E)	833.98 (N)	833.93 (W)		
MH W	48"	EX	EX	850.68	833.63 (E)	832.86 (S)			
MH X	48"	EX	EX	847.09	843.83 (N)	843.73 (NW)	843.78 (SE)		
MH Y	72"x48"	EX	EX	846.14	836.86 (E)	838.89 (W)	833.43 (W)	835.00 (S)	
MH Z	48"	EX	EX	845.83	832.65 (SE)	832.54 (N)			
MH AA	48"	EX	EX	846.08	836.10 (N)	835.85 (E)			
MH BB	24"x24"	EX	EX	845.27	843.51 (N)				
MH CC	19"	EX	EX	845.52	842.02 (NE)				
MH DD	24"	EX	EX	845.16					
MH EE	36"x36"	EX	EX	846.10					
MH FF	48"	NEW		849.00	835.55 (W)	835.55 (N)			
MH GG	48"	NEW		849.00	835.00 (N)	835.00 (S)	835.10 (E)		
VAULT 1	66"x72"	EX	EX	850.18	841.18				
VAULT 2	66"x78"	EX	EX	849.13	841.13				
VAULT 3	66"x78"	EX	EX	848.66	840.66				
VAULT 4	60"x60"	NEW		851.00	841.77 (W)	841.77 (E)	843.41 (S)		
VAULT 5	60"x60"	NEW		851.00	841.75 (W)	841.75 (E)	843.50 (S)		
VAULT 6	60"x60"	NEW		849.00	840.50 (W)	840.50 (E)	842.00 (N)		
Note: Final rim elevations could vary up to 3 inches depending on final grading.									
(1) Provide external manhole drop connection when invert elevation is greater than 2 ft above manhole outlet invert per dtl 102 on 100-C-01.									
(2) Provide square precast cover with opening for R-1550 casting. Gate/valve operator penetration to be coordinated with contractor.									
(3) Bench configuration should match chemical manhole bench and drain. See detail 417 on 100-M-03.									
(4) Contractor to pothole to locate and verify invert of existing line prior to submitting manhole shop drawings.									
(5) Install "Doghouse" style manhole base per detail 400 on sheet 100-M-02.									
(6) Install chemical manhole per detail 417 on 100-M-03.									
UD #1: Neenah Foundry Type "B" Lid, Non-Rocking, Gasketed, with Concealed Pick-hole									
UD #2: Neenah Foundry Type "C" Flat Radial Grate, Non-Rocking									



GENERAL NOTES

- 1. DO NOT SCALE DRAWINGS TO DETERMINE EXACT LOCATION OF ELECTRICAL EQUIPMENT AND CONNECTIONS.
- 2. DUCT BANK ROUTING IS DIAGRAMMATIC IN NATURE AND IS NOT INTENDED TO DICTATE EXACT ROUTING. CONTRACTOR IS TO DETERMINE BEST ROUTING BASED ON OTHER UTILITIES AND FIELD CONDITIONS.
- 3. 120V HOMERUN WIRING SHALL BE A MINIMUM OF (2) #12 & #12G IN 3/4" UNLESS OTHERWISE NOTED. SIZE FOR VOLTAGE DROP.
- 4. SEE ONE-LINE DIAGRAM, PANEL SCHEDULE, AND FIELD DEVICE WIRING SCHEDULE FOR WIRING OF ALL PROCESS AND INSTRUMENTATION.
- 4. INSTALL FIELD INSTRUMENTS PER DETAIL REFERENCED IN FIELD DEVICE WIRING SCHEDULE.
- 5. ALL CONDUIT STUBBED UP THROUGH CONCRETE SHALL BE PVC COATED GRS.
- 6. SEE SCADA OVERVIEW FOR COMMUNICATIONS CABLING REQUIREMENTS.
- 7. REFER TO SPECIFICATION 26 05 00 FOR CONDUIT, BOX, AND HARDWARE USAGE REQUIREMENTS.
- 8. ALL UNDERGROUND CONDUIT SHALL BE CONCRETE ENCASED PER DETAIL E2-09, UNLESS OTHERWISE NOTED.
- 9. COORDINATE ALL ELECTRICAL REMOVAL IN FIELD WITH ENGINEER AND EXISTING CONDITIONS. PLANS DEPICT KNOWN EQUIPMENT TO BE REMOVED BASED ON EXISTING DOCUMENTATION AND FIELD OBSERVATION. CONTRACTOR TO VERIFY ACTUAL FIELD CONDITIONS.
- 10. REMOVE ALL ABANDONED CONDUCTORS BACK TO SOURCE TO EXTENT FEASIBLE.
- 11. REMOVE ALL ABANDONED EXPOSED RACEWAY. CUT CONDUIT BELOW GRADE OR FINISHED FLOOR AND PATCH FLUSH TO MATCH ADJOINING SURFACE.
- 12. PATCH ALL ABANDONED ELECTRICAL PENETRATIONS AND FINISH TO MATCH ADJOINING.
- 13. REFER TO ELECTRICAL, PROCESS, ARCHITECTURAL/STRUCTURAL, AND HVAC PLANS FOR EQUIPMENT TO REMAIN AND FOR NEW WORK.
- 14. REFER TO CONSTRUCTION SEQUENCE IN DIVISION 1 AND COORDINATE ALL OUTAGES WITH ENGINEER.
- 15. MAINTAIN OPERATION OF ALL LOADS THAT ARE TO REMAIN DURING CONSTRUCTION. COORDINATE ANY OUTAGES WITH ENGINEER AND OWNER.

REMOVAL NOTES

- 1. EXISTING UNDERGROUND FEEDER SERVING EFFLUENT STRUCTURE FROM TERTIARY FILTER BUILDING TO BE ABANDONED IN PLACE.

KEY NOTES

- 1. SEE ELECTRICAL SHEETS FOR WORK IN THIS STRUCTURE.
- 2. EXISTING ELECTRICAL SERVICE ENTRY POINT. CONFIRM ACTUAL LOCATION IN FIELD.
- 3. EXISTING GATE ACTUATOR TO REMAIN.
- 4. PROVIDE CONCRETE ENCASED DUCT BANK PER DETAIL E2-09.
 - 4.1. (1) 2" FIBER OPTIC CABLE
 - 4.2. (1) 2" 480V FEEDER
 - 4.3. (1) 2" 480V FEEDER
 - 4.4. (1) 2" 120V POWER
 - 4.5. (1) 2" SPARE
- 5. PROVIDE ELECTRICAL HANDHOLE PER DETAIL E2-12.

STRUCTURE SCHEDULE	
10	EX SERVICE BUILDING
15	EX INFLUENT SCREEN BUILDING
20	EX PRETREATMENT BUILDING
22	EX WASTE RECEIVING STATION
25	EX SEPTAGE TANKS
30	EX AERATION BASINS
31	EX RBC TANKS
35	EX AERATION CONTROL BUILDING
40	EX SECONDARY CLARIFIERS #1 & #2
45	EX SECONDARY CLARIFIERS #3 & #4
50	EX SECONDARY SLUDGE BUILDING
55	EX RAS PUMPING STATION
60	EX TERTIARY FILTER BUILDING
65	EX BLOWER BUILDING
70	EX DISINFECTION TANK
75	EX GRAVITY THICKENER
80	EX ANAEROBIC DIGESTERS AND BUILDING
81	EX SLUDGE DRYING BEDS
85	EX SLUDGE STORAGE TANKS
90	EX SLUDGE PUMPING BUILDING
95	EX STORAGE GARAGE

BASIS OF STRUCTURAL DESIGN	
[1.0] ROOF LIVE LOADS:	
SNOW: GROUND (P_g)/ROOF FLAT (P_f)	30/25 PSF
UNBAL. SNOW LOAD (ASCE-7 FIG. 7-5)	40/25 PSF
IMPORTANCE FACTOR (I_s)	1.0
THERMAL FACTOR (C_e)	1.0
SNOW EXPOSURE FACTOR (C_{ex})	1.2
[1.1] SUPERIMPOSED ROOF DEAD LOADS (LOADS ON COMPONENTS):	
ROOFING, INSUL., FP, MEP, MISC.	20 PSF
[1.2] FLOOR LIVE LOADS:	
SLAB-ON-GRADE	250 PSF
[2.0] WIND (SIMPLIFIED PROCEDURE LOW-RISE BUILDINGS):	
WIND RISK CATEGORY	II
ENCLOSURE LEVEL	FULL
ULTIMATE DESIGN WIND SPEED (V_{ult})	115 MPH
NOMINAL DESIGN WIND SPEED (V_{asd})	90 MPH
IMPORTANCE FACTOR (I_w)	1.0
EXPOSURE CATEGORY	C
INTERNAL PRESSURE COEFFICIENT	± 0.18
[3.0] SEISMIC (EQUIVALENT LATERAL FORCE PROCEDURE):	
SEISMIC RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR (I_w)	1.00
SITE CLASS	D
SEISMIC DESIGN CATEGORY	A
SEISMIC FORCE-RESISTING SYSTEM	NOTE-2
[4.0] ALLOWABLE SOIL BEARING CAPACITY & SUBGRADE MODULUS (ASSUMED):	
FOOTINGS	2,000 PSF
SLAB-ON-GRADE	150 PCI

BUILDING CODE SUMMARY	
BUILDING INFORMATION	
PROJECT TYPE	ADDITION
STRUCTURE PURPOSE	NOTE-3
USE & OCCUPANCY	NOTE-4
NO. STORIES	1
CONSTRUCTION CLASS	IIIB
GROSS AREA NEW CONSTRUCTION	2,827 SF
GROSS AREA EXIST. & NEW	6,313 SF
GROSS ENCLOSED VOLUME	87,200 CF
FIRE SUPPRESSION (Y/N)	N
FIRE ALARM (Y/N)	N
EXIT TRAVEL DIST. (MAX. PER T.1017.2)	300'
ACCESSIBILITY	NOTE-5
CODE AUTHORITY SUBMITTAL (Y/N)	Y

1. PROJECT ADDRESS: - W194N16658 EAGLE DRIVE, JACKSON, WI
2. COMMERCIAL BUILDINGS DELEGATED AUTHORITY: WISCONSIN DEPARTMENT OF SAFETY & PROFESSIONAL SERVICES (IBC 2015)
3. STRUCTURE PURPOSE: CONSTRUCT ADDITION TO ADD WISCONSIN EQUIPMENT
4. USE & OCCUPANCY:
FACTORY GROUP F-2. NO SEPARATIONS REQUIRED, TABLE 508.4, ALLOWABLE BUILDING AREA = 18,000 SQ. FT. (NS, MOST RESTRICTIVE), TABLE 506.2
5. ACCESSIBILITY: EXEMPT AREAS PER IBC1103.2.7 AND/OR 1103.2.9

1. PROVIDE FOR ADDITIONAL 5 PSF LL AT ALL ATTIC SPACES.
2. SEISMIC FORCE-RESISTING SYSTEM: A BEARING WALL SYSTEMS, 9. ORDINARY REINFORCED MASONRY SHEAR WALLS (PER ASCE 7).
3. COMPONENT DELEGATED DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PROVISIONS OF THE WISCONSIN DEPARTMENT OF ADMINISTRATIVE CODE, CHAPTER SPS 362 (CURRENT EDITION). COMPONENT SUBMITTAL SHALL INCLUDE: WOOD ROOF TRUSSES.

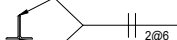
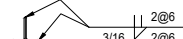
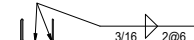
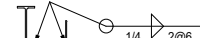


1. GENERAL NOTES, REMOVAL NOTES, AND KEY NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO CONVEY TYPICAL CONDITIONS AND SHALL BE TAKEN TO ALSO APPLY TO SIMILAR CONSTRUCTION DEPICTED ELSEWHERE THROUGHOUT THE PROJECT DOCUMENTS.
2. EXISTING INFORMATION SHOWN ON DRAWINGS WAS OBTAINED, IN PART, FROM EXISTING DOCUMENTATION, FIELD MEASUREMENTS AND INFORMATION PROVIDED BY OTHERS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACCURACY OF INFORMATION AS REQUIRED TO ACCOMMODATE ALTERATIONS & NEW CONSTRUCTION.
3. CONCRETE REMOVAL METHOD SHALL UTILIZE STRAIGHT UNIFORM SAW-CUTS WHERE PARTIAL REMOVAL IS REQUIRED.
4. FURNISH COLOR SELECTION CHARTS FOR ALL FACTORY-FINISHED COMPONENTS.
5. REFERENCE ROOM FINISH SCHEDULE FOR REQUIREMENTS AT EXISTING AND NEW STRUCTURE.

1. REMOVE AND SALVAGE EX. OVERHEAD DOOR AND HARDWARE
2. REMOVE ALL EX. INTERIOR & EXTERIOR DOORS, HARDWARE, AND FRAMES, TYP.
3. REMOVE EX. PARAPET METAL COPING AS NECESSARY TO ACCOMMODATE NEW ADDITION ROOFING INSTALLATION

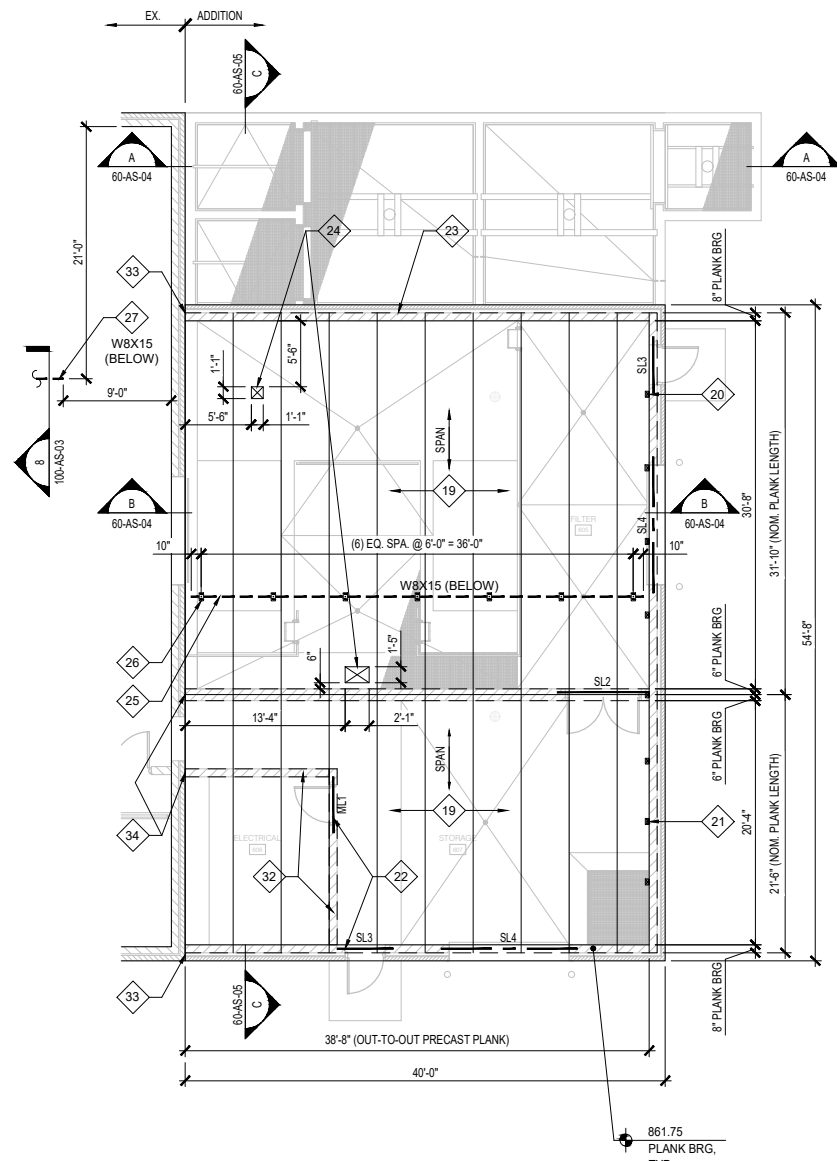
1. NEW REPLACEMENT HOLLOW METAL DOOR, FRAME & HARDWARE, REF. APPLICABLE SCHEDULE AND SPECIFICATION, TYP. ALL EX. DOORS
2. HOLLOW METAL DOOR(S), FRAME & HARDWARE, REF. DOOR SCHEDULE, TYP.
3. 4" RAISED EQUIP. PAD, REF. ELEC. DWGS
4. NON-LOAD BEARING 8" CMU INTERIOR PARTITION WALL
5. 18" RECESSED FLOOR WITH ALUM. I-BAR GRATING, REF. FOUNDATION PLAN FOR DIMENSIONS & GRATING SUPPORT PLAN FOR SUPPORT & FRAMING REQUIREMENTS
6. MASONRY CAVITY WALL WITH SPLIT-FACED CMU VENEER
7. INSULATED SECTIONAL METAL OVERHEAD DOOR, REF. DOOR SCHEDULE, TYP.
8. 8" STEEL PIPE BOLLARD, TYP. AT OVERHEAD DOORS
9. STRUCTURAL CONCRETE STOOP TYP. AT EXT. WALK DOORS, REF. FOUNDATION PLAN ON 60-AS-02 FOR DIMENSIONS, TYP.
10. ALUM. ACCESS LADDER
11. FIXED ALUMINUM GUARDRAIL, TYP.
12. FLOOR DRAIN (FD), REF. FOUNDATION PLAN FOR ELEVATIONS AND FLOOR SLOPE INFORMATION, ALSO REF. PLUMBING DWGS
13. 6" RAISED EQUIPMENT PAD, REF. "M" DWGS, TYP.
14. ALUMINUM GRATING, TYP. ALL LOCATIONS OF NEW ADDITION
15. ALUM. GRATING SUPPORT ANGLES, REF. SHEET 60-AS-02 FOR INSTRUCTION ON TYPE & FASTENING
16. GRATING OPENING FOR GATES, REF. "M" DWGS FOR REQUIRED CLEARANCES
17. SLOPED CONCRETE GROUT, TYP. WHERE SHOWN
18. 18" GALVANIZED & PAINTED STEEL JAMB-PROTECTION PLATES, MIN. 3" RETURN TO I.F. STRUCTURAL WYTHE CMU, ANCHOR WITH RECESSED SCREWS INTO BOTH WYTHES AT MAX. SPACING 24" O.C. STARTING 3" A.F.F. & CONTINUING FULL HEIGHT OF PLATE, CONT. SEALANT AT EDGES ALL AROUND BETWEEN PLATE AND CMU, TYP. EA. JAMB AT O.H.d.s.
19. NEW ADHERED 60 MIL EPSM ROOF SYSTEM ON TAPERED POLYISOCYANURATE, MIN. 3" INSULATION THICKNESS AT ROOF DRAINS, MIN. SLOPE 1/4" PER FOOT TO DRAINS AS SHOWN, REF. SPECIFICATION 07.05.00 FOR COMPLETE SYSTEM SPECIFICATIONS, EPDM TO RETURN UP INSIDE FACE OF PARAPET WALL AND TERMINATE UNDER THE PROTECTION OF NEW FACTORY-FINISHED ALUMINUM PARAPET COPING(S)
20. NEW FACTORY-FINISHED PARAPET COPING AROUND PERIMETER EXT. WALLS AND AT NEW-TO-EX. ROOF TRANSITION
21. PRIMARY & OVERFLOW ROOF DRAIN, (2) LOCATIONS ADJUNCTION, REF. 1/100-AS-04 & PLUMBING DRAWINGS, TYP.
22. 1/4" PER FT. SLOPE MIN.
23. DUCT OPENINGS, REF. HVAC DRAWINGS, COORD. LOCATIONS WITH PRECAST PLANK SUBMITTALS
24. NEW 1/2T. CAPACITY LIFT BEAM & TROLLEY ABOVE, FASTEN TO EX. & NEW PRECAST ROOF STRUCTURE, AS DETAILED FOR EA. LOCATION
25. NEW WALL-MOUNTED EMERGENCY EYE WASH (EEW) STATION, TYP. (2) LOC., REF. PLUMBING DWGS
26. MIXER SUPPORT MEMBERS BY MIXER SUPPLIER, REF. "M" DWGS
27. PRIMARY MIXER AND/OR ALUM. GRATING SUPPORT BEAMS, REF. 60-AS-02 FOR LOCATIONS, SIZES AND ATTACHMENT REQUIREMENTS NOT SHOWN THIS SHEET, TYP.
28. NEW FLOOR SLAB-ON-GRADE, REF. FOUNDATION PLAN FOR THICKNESS AND REINFORCING REQUIRED AT SPECIFIED LOCATIONS, TYP.
29. FIRE EXTINGUISHER [FE], IN WALL-MOUNTED CABINET, REF. MOUNTING DETAIL ON SHEET 100-AS-01, TYP. WHERE SHOWN



LINTEL SCHEDULE		
MARK	TYPE	DETAIL/REMARKS
ML1	BOND BEAM W/2-#5 CONT. (& LOOSE STEEL LINTEL AT MASONRY VENEER LOCATIONS)	
SL1	B/B L6X3 1/2X3/8 (LLV)	
SL2	B/B L6X3 1/2X3/8 (LLV) WITH 3/8" BOT. PL., PLATE WIDTH = WALL WIDTH MINUS 1"	
SL3	B/B L6X3 1/2X3/8 (LLV) WITH 3/8"T. BOT. PL., PL. WIDTH = WALL MINUS 1"	
SL4	W8X24 & L6X3 1/2X3/8 (LLV) WITH 3/8"T. BOT. PL., PL. WIDTH = WALL MINUS 1"	

NOTES:

1. SCHEDULED LINTELS MAY OR MAY NOT BE REFERENCED IN THIS STRUCTURE.
2. MINIMUM LINTEL BEARING 8" UNLESS DETAILED OTHERWISE.
3. INSTALL L5X3 1/2X3/8 (LLV) LOOSE LINTEL AT MISC. CMU VENEER M.O., UNO.
4. INSTALL "ML1" AT MISC. UNSCHEDULED LINTEL OPENINGS < 2'-0" IN WIDTH.

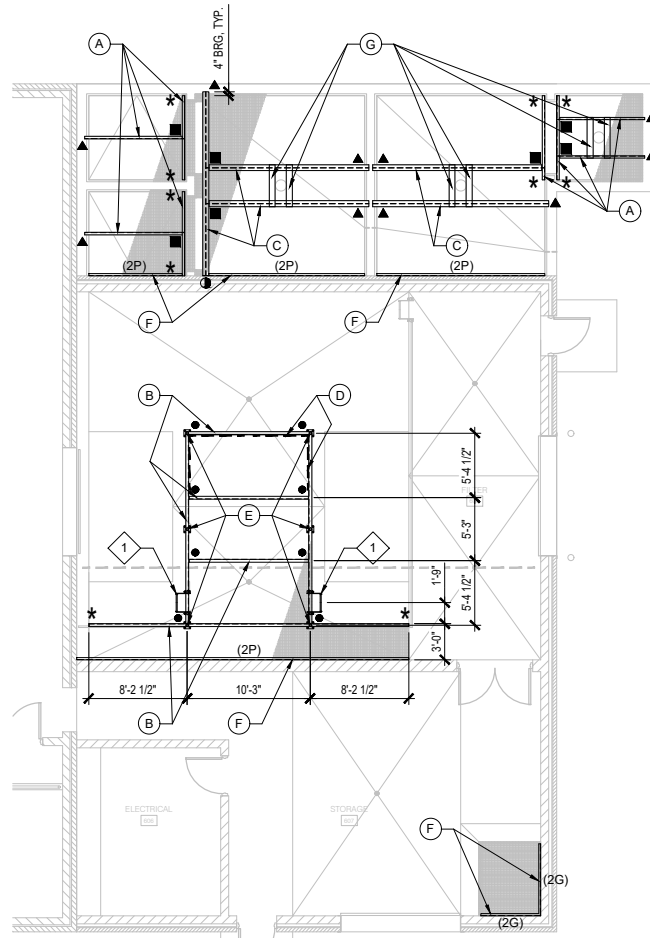


ROOF FRAMING PLAN

1

SUPPORT MEMBER FRAMING NOTES:

1. WHERE NOT SHOWN ON SUPPORT MEMBER FRAMING PLAN, REF. FOUNDATION PLAN FOR MEMBER LOCATION & DIMENSIONS.
2. ALUMINUM FRAMING IS DELEGATED DESIGN, SUBMIT SHOP DRAWINGS FOR A/E REVIEW & COMMENT PRIOR TO FABRICATION.
3. DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. VERIFY CLEARANCES AND ASSOCIATED REQUIRED DIMENSIONS BASED ON EQUIPMENT FINAL SELECTIONS.



MEMBER FRAMING KEY

- (A) CS6X4.03 CHANNEL, ALUM.
- (B) C12X10.4 CHANNEL, ALUM.
- (C) W10X22 BEAM, GALV. STEEL
- (D) L3X3X1/4 45° KNEE-BRACE EA. DIR., ALUM.
- (E) 3" DIA. SCHED. 40 PIPE, ALUM.
- (F) L2X2X3/16 ANGLE, SURFACE-MOUNTED (2G' OR 2P'), ALUM.
- (G) MEMBER FURNISHED BY MIXER SUPPLIER

- ▲ 4" BEARING ON 1/2" PL. & (2) 1/2" DIA. ANCHOR BOLTS, 9" EMBED, GALV. STEEL
- DOUBLE ANGLE BOLTED CONN., MATERIAL TO MATCH CONNECTED PARTS
- * (2) 1/2" X 4" EMBED. S.S. EXPANSION ANCH.
- 1/2" SHOP-WELDED FLANGE END PLATE WITH (4) 1/2" DIA. X 5" EMBED. S.S. EXP. ANCH. SHIM 1/2" MAX., TYP.
- AS DETAILED ELSEWHERE

SUPPORT FRAMING PLAN

2

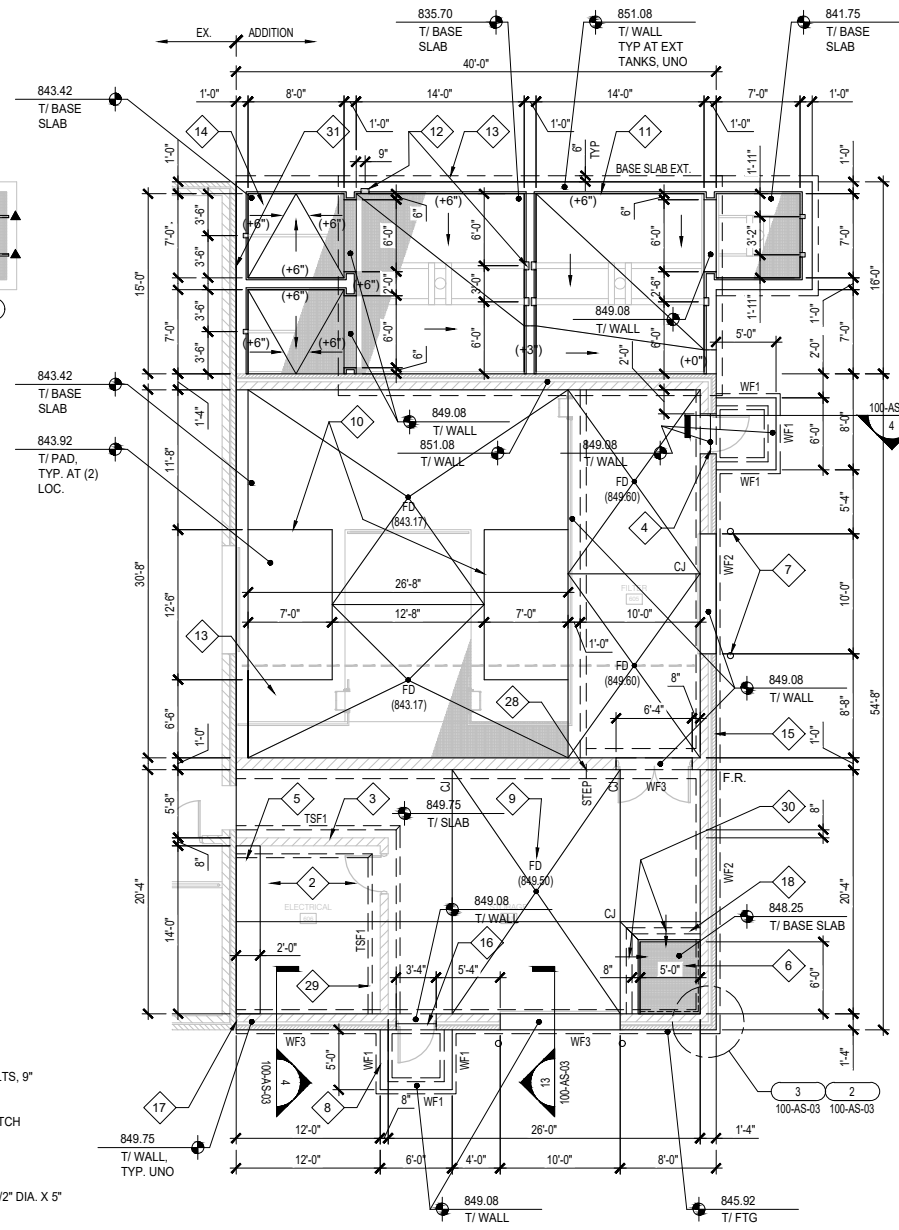
WALL FOOTINGS				
MARK	SIZE		REIN.	REMARKS
	W (IN)	T (IN)		
WF1	1'-6"	12"	(2) #4 CONT.	-
WF2	2'-0"	12"	(3) #5 CONT.	-
WF3	2'-6"	12"	(3) #5 CONT.	-
TSF2	2'-0"	12"	-	REF. 11/100-AS-02

NOTES:

1. FOOTING SCHEDULE APPLIES TO THIS SHEET ONLY.
2. FOOTINGS ARE CENTERED BELOW WALLS TYP. UNO.
3. INSTALL CONC. WALL-TO-FOOTING DOWELS, #4 X 24" @ 48" O.C., 9" EMBED. INTO FOOTING, TYP. UNO.

NOTE

ALL FINISH-EXPOSED FORMED CONCRETE SURFACES SHALL RECEIVE A SMOOTH RUBBED FINISH PER SPECIFICATION SECTION 03 30 00 (3.7). INTERIOR CONCRETE SLABS SHALL BE STEEL TROWEL-FINISHED TO TOLERANCE $F_F=25$, $F_I=20$. UNO.



FOUNDATION PLAN

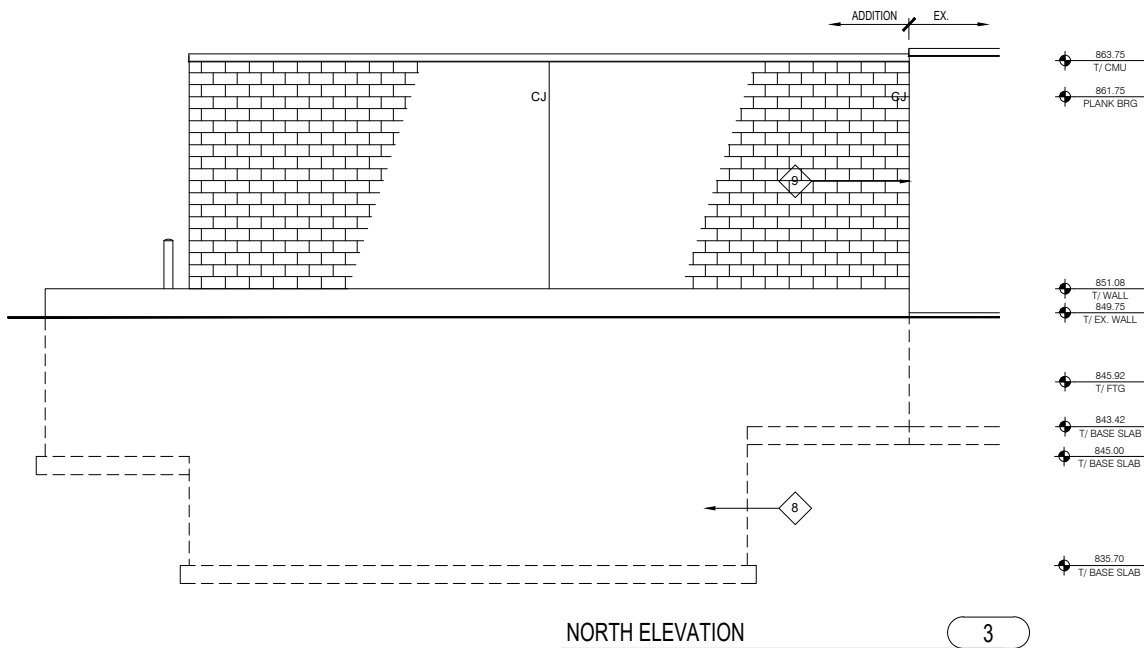
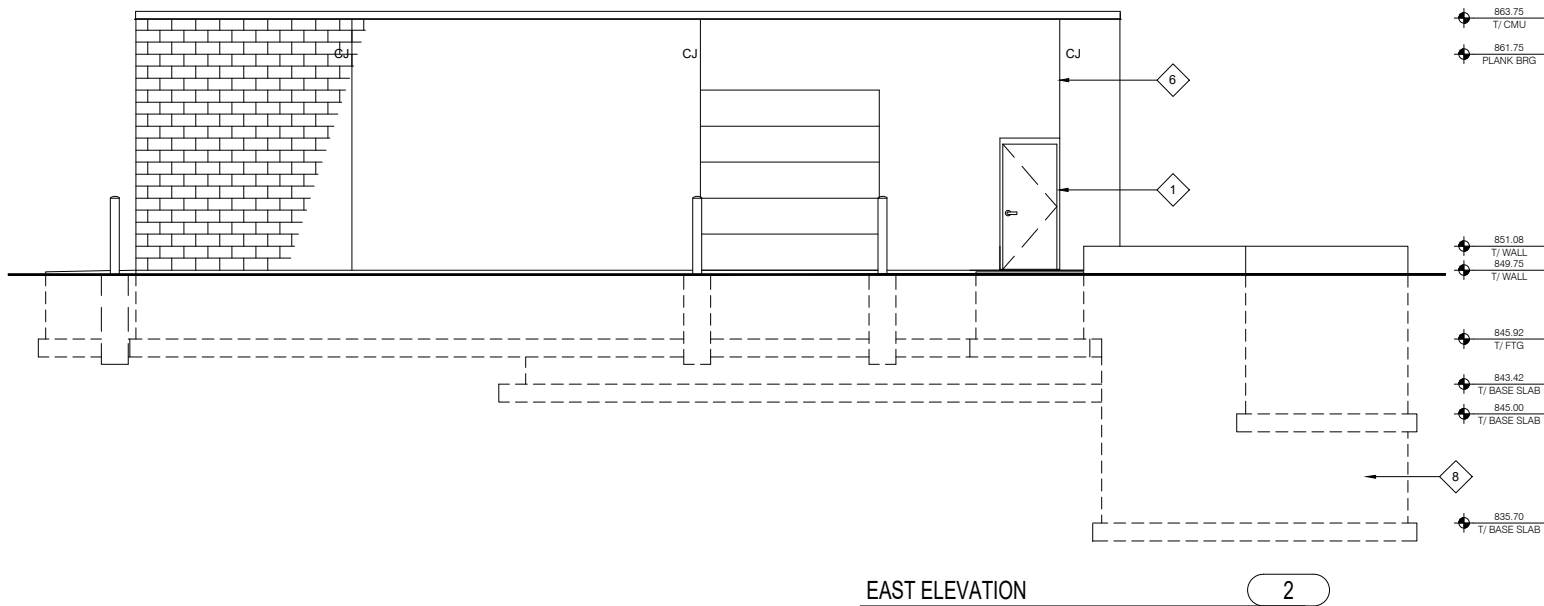
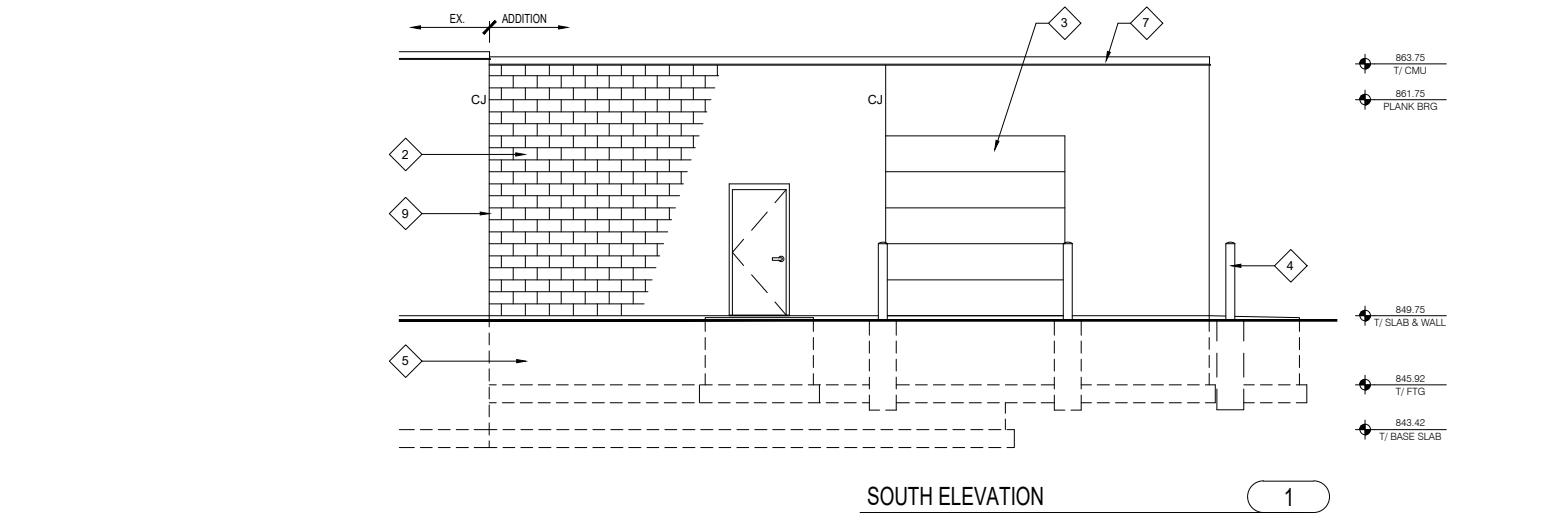
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GENERAL NOTES

1. GENERAL NOTES, REMOVAL NOTES, AND KEY NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO CONVEY TYPICAL CONDITIONS AND SHALL BE TAKEN TO ALSO APPLY TO SIMILAR CONSTRUCTION DEPICTED ELSEWHERE THROUGHOUT THE PROJECT DOCUMENTS.
2. EXISTING INFORMATION SHOWN ON DRAWINGS WAS OBTAINED, IN PART, FROM EXISTING DOCUMENTATION, FIELD MEASUREMENTS AND INFORMATION PROVIDED BY OTHERS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF INFORMATION AS REQUIRED TO ACCOMMODATE REMOVALS & NEW CONSTRUCTION.
3. A SITE-SPECIFIC GEOTECHNICAL INVESTIGATION WAS CONDUCTED FOR THIS PROJECT. FLOOR SLAB BEARING AREAS SHALL BE PREPARED AS SHOWN TO PROVIDE MINIMUM SUB-GRADE MODULUS 150 PSI. WHERE SUBSTANDARD SOILS ARE ENCOUNTERED BELOW NEW FOUNDATION & SLAB-ON-GRADE, REFER TO GEOTECHNICAL REPORT RECOMMENDATIONS REGARDING SUB-GRADE REMOVAL & REPLACEMENT REQUIREMENTS.
4. VERIFY SIZE AND LOCATION OF ANY AND ALL ROOF, FLOOR, AND WALL OPENINGS WITH MECHANICAL, HVAC AND ELECTRICAL CONTRACTORS. OPENINGS LESS THAN 12 INCHES IN DIMENSION ARE GENERALLY NOT SHOWN.
5. REF. 8/100-AS-02 FOR CONCRETE REINFORCING LAP SPlice TABLE AND REINFORCING CLEAR COVER REQUIREMENTS.
6. REF. 3/100-AS-02 FOR CONCRETE REINFORCING TYPICAL BAR BEND DETAILING.
7. REF. 10/100-AS-02 FOR MISC. UTILITY COORD. OPENINGS REQ'D IN FOUNDATION FROST WALLS.
8. SEQUENCED CONSTRUCTION PLANEMENT SHALL UTILIZE LAP SPICES AS INDICATED IN 8/100-AS-02 EXCEPT WHERE APPROVED BY A/E IN ADVANCE WHERE DETAIL 7/100-AS-02 MAY BE PERMITTED.
9. G.C. SHALL SUBMIT THE FOLLOWING COMPONENT DESIGNS TO A/E: HOLLOW-CORE PRECAST CONCRETE PLANK.
10. PRECAST PLANK SUPERIMPOSED DEAD AND LIVE DESIGN LOADS: DL: 10 PSF; LL: 50 PSF
11. CONCEALED SURFACES OF ALUMINUM COMPONENTS CAST INTO CONC. SHALL BE SHOP-COATED WITH COAL-TAR EPOXY, TYP.
12. FOUNDATION WALL CONTROL JOINT WITH FORMED REVEAL WHERE "R": INDICATED ON FOUNDATION PLAN. REF. 100-AS-02
14. REF. 8/100-AS-03 FOR MISC. EX. SLAB-ON-GRADE REMOVAL REPAIR. COORD WITH OTHER TRADES FOR SIZE AND LOCATIONS, AS APPLICABLE.
15. REF. SHEETS 100-AS-05 AND 100-AS-06 FOR TYPICAL DETAILS OF ALUMINUM STAIRS, GUARDRAILS, GRATING AND PLANKING FABRICATION AND INSTALLATION.

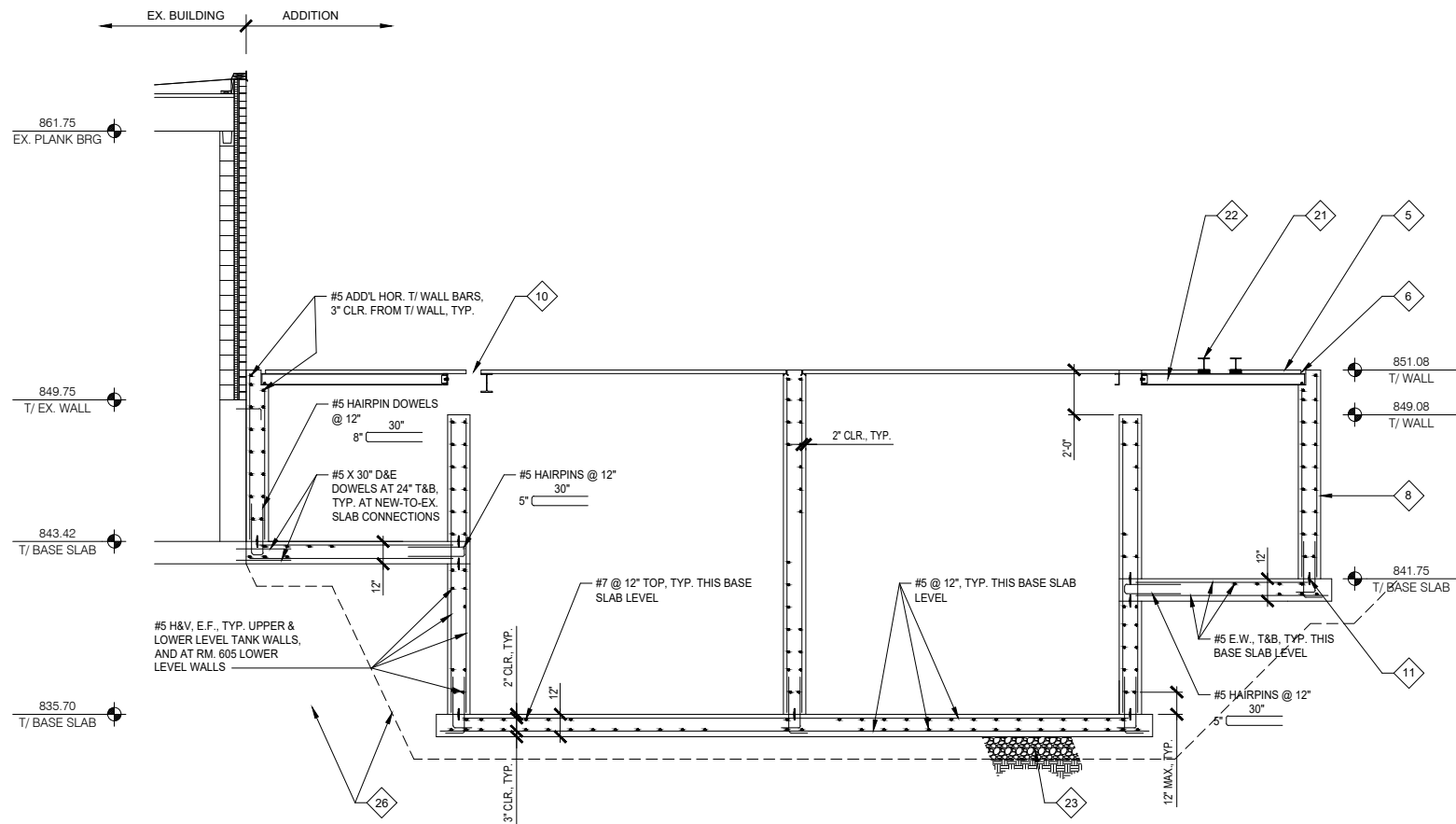
 KEY NOTES

1. 6061-T6 ALUM. ACCESS LADDER, REF. 4/100-AS-04
2. CONCRETE SLAB-ON-GRADE:
6" THICKNESS; RM 607 - REINF. WITH (1) MAT #4 @ 16" O.C. EW.; ELSEWHERE - REINF. W/6X6 W2.9 X W2.9 WWF, FURNISH WWF IN FLAT SHEETS, CENTER IN SLAB, MIN. 6" OVERLAP WWF SHEET EDGES, REF. 1/AS-05 FOR SUB-GRADE PREP. & POLY VAPOR RETARDER REQUIREMENTS, TYP. AT INTERIOR FLOORS, ALSO REF. APPLICABLE DETAILING FOR 12" THICK BASE SLABS AT LIQUID RETAINING TANKS AND BOTTOMS OF RM 605
3. CONCRETE SLAB CONTROL JOINT (C.J.), SAW-CUT WITHIN 12 HRS CONCRETE PLACEMENT/FINISHING, REF. 5/100-AS-02
4. T.WALL ELEVATION LOWERED TO 8" AT O.H.D. DOOR AND EX. WALL OPENINGS TO ALLOW SLAB 'OVER-CUR'
5. 4" RAISED EQUIP. PAD, REF. 9/100-AS-02 & ELEC. DWGS
6. 18" RECESSED, REF. FOUNDATION PLAN FOR DIMENSIONS & GRATING SUPPORT PLAN FOR SUPPORT FRAMING REQUIREMENTS, SINE GRATING TO SUPPORT 3.000# CONCENTRATED LOAD IN CENTER OF PANEL
7. 8" STEEL PIPE BOLLARD, TYP. AT OVERHEAD DOORS, REF. 3/100-AS-04
8. STRUCTURAL CONCRETE STOOPTYP. AT EXT. WALK DOORS
9. FLOOR DRAIN (FD), TYP. FLOOR DRAIN ELEVATION SHOWN IN PARENTHESIS, SLOPE FLOOR TO DRAINS AS SHOWN, ALSO REF. PLUMBING DWGS
10. 6" RAISED EQUIP. PAD, REF. "M" DWGS, TYP.
11. EMBEDDED ALUM. GRATING SUPPORT ANGLES TYPE '1P' OR '1G' AS APPLICABLE FOR TYPE OF PLANKING OR GRATING INDICATED, TYP. EXCEPT WHERE SURFACE-FASTENED TYPE SPECIFICALLY DENOTED BY '1P2' OR '1G2' IN GRATING SUPPORT FRAMING PLAN THIS SHEET
12. BEAM BEARING POCKET, 5"L X BEAM WIDTH +2", BEAR ON 12" PLATE W/ 12" DIA. X 5" WHS CENTERED AT 3" GAGE, COORD. BEARING DEPTH BASED ON MEMBER SIZE, GROUT POCKET SOLID AFTER BEAMS SET
13. 12" REINFORCED CONCRETE BASE SLAB
14. GROUT FILL, SLOPE TO PIPES AS SHOWN, (+ INCHES) GROUT ON HIGH SIDE, ALSO REF. "M" DWGS
15. FROST WALL TYPE FOUNDATION & FOOTING, REF. SCHEDULE THIS SHEET, TYP.
16. SLAB-ON-GRADE & STOOPLAB CONSTRUCTION JOINT TO BE LOCATED CONCEALED BELOW DOOR THRESHOLD, TYP. AT EXT. WALK DOORS
17. DOWEL NEW-TO-EX. CONCRETE WALL & FOOTING PER DETAIL 7/100-AS-02, TYP.
18. THICKEN SLAB EDGE, MIN. 8" AT BEARING ON BASE SLAB, HOOKED #5 DOWELS @ 16" UP IN SLAB OVER-CUR, 3" CLEAR FROM RECESS EXPOSED VERT. FACE, TYP. (2) SIDES OF 18" RECESSED AREA, INSTALL WATER-STOP AT COLD-JOINTS
19. 8" HOLLOW-CORE PRECAST CONCRETE PLANK
20. L3X3X1/4, 4"L, CONNECTION ANGLES AT (5) EQ. SPA., WELD TO PRECAST EMBED AND ANCHOR INTO CMU BOND BEAM WITH (1) 1/2" X 4" EMBED, S.S. EXP. ANCH. PRECAST DESIGN LOAD 3K LATERAL LOAD PARALLEL WITH WALL AT CLIP ANGLE, SINE EMBED, 1" LARGER ALL AROUND TO ALLOW WELDS
21. L3X3X1/4, 4"L, CONNECTION ANGLES AT (4) EQ. SPA., WELD TO PRECAST EMBED AND ANCHOR INTO CMU BOND BEAM WITH (1) 1/2" X 4" EMBED, S.S. EXP. ANCH. PRECAST DESIGN LOAD 3K LATERAL LOAD PARALLEL WITH WALL AT CLIP ANGLE, SINE EMBED, 1" LARGER ALL AROUND TO ALLOW WELDS
22. STEEL OR MASONRY LIFT UP DOOR OPENING BELOW, REF. SCHEDULE THIS SHEET, TYP.
23. 8" STRUCTURAL CMU BEARING WALL BELOW, TYP.
24. HVAC OPENING IN PRECAST PLANK, ALSO REF. "H" DWGS
25. W8X15 TROLLEY BEAM ATTACHED BELOW INSTALLED PLANK, 1/2T. CAPACITY
26. LIFT BEAM ATTACHMENT, REF. 7/100-AS-03, TYP.
27. LWBX15 LIFT BEAM TO BE INSTALLED BELOW EX. PRECAST DOUBLE-TEE CONCRETE PLANK, REF. 7/100-AS-03 FOR ATTACHMENT, SIMI/TYP. COORD. WITH ENGINEER FOR LOCATION OF ATTACHMENT AT TIME OF CONSTRUCTION, REF. 3/100-AS-03 FOR CONTROL JOINT REQTS, SIM, USE TEE-STYLE GASKET, TYP. BOTH SIDES BUILDING
28. THICKENED SLAB FOOTING (TSF), REF. SCHED. THIS SHEET
29. PITCH 7/ SLAB 12" DOWNWARD TOWARD GRATING TWO SIDES GRATED AREA
30. NEW-TO-EX. T/ WALL ON EXTERIOR: CREATE 3/4"W. X 3/4"D. REVEAL AT WALLS JOINT & FILL FLUSH WITH POURABLE POLYSULFIDE SEALANT, COLOR GRAY
31. #4 DRILL-IN DOWELS AT 24" O.C. INTO NON-LOAD BEARING WALL BELOW, NO EPOXY, EMBED, 5" INTO TOP COURSE BOND BEAM
32. FULL HEIGHT MASONRY CONTROL JOINT AT NEW-TO-EX. WALL CONSTRUCTION, REF. 3/100-AS-03 FOR CONTROL JOINT REQTS, SIM, USE TEE-STYLE GASKET, TYP. BOTH SIDES BUILDING
33. DOWEL NEW-TO-EX. MASONRY WITH #3 X 24" BAR EVERY FOURTH COURSE, EXTEND/EMBED, MIN. 5" INTO STRUCTURAL WYTHE MASONRY EX. BUILDING, DO NOT EPOXY, TYP.



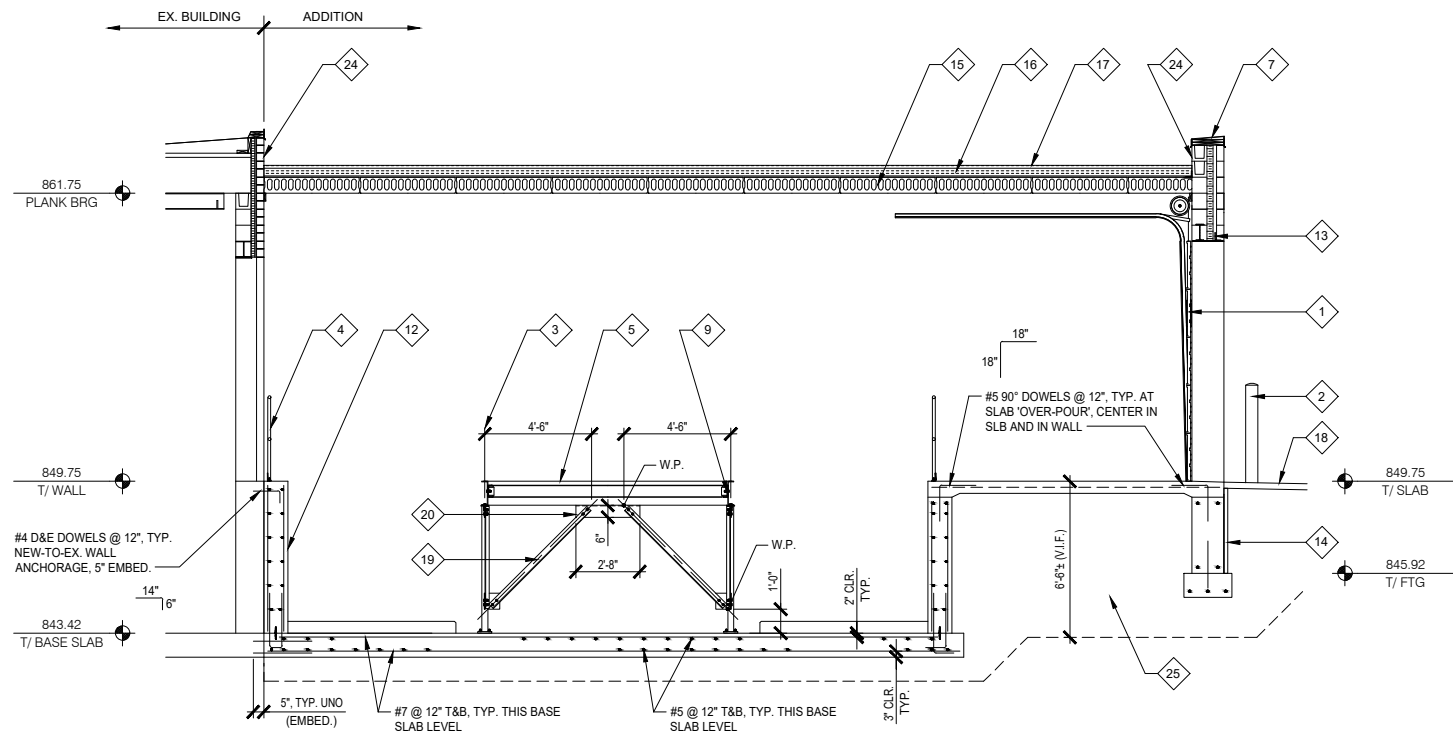
- GENERAL NOTES**
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- KEY NOTES**
1. HOLLOW METAL DOOR(S), FRAME & HARDWARE, REF. DOOR SCHEDULE
 2. MASONRY CAVITY WALL WITH SPLIT-FACED CMU VENEER
 3. INSULATED SECTIONAL METAL OVERHEAD DOOR, REF. DOOR SCHEDULE, TYP.
 4. 8" STEEL PIPE BOLLARD, TYP. AT OVERHEAD DOORS
 5. STRUCTURAL CONCRETE STOOP, TYP. AT EXT. WALK DOORS
 6. MASONRY WALL CONTROL JOINT, REF. 3/100-AS-03, TYP.
 7. FACTORY-FINISHED PARAPET CAP COPING TO MATCH EX.
 8. BELOW-GRADE CONCRETE WETWELL(S)
 9. REF. KEY-NOTE 33 & 34 ON 60-AS-02 FOR CONTROL JOINT AND MASONRY WALL CONNECTION REQUIREMENTS AT NEW-TO-EX. MASONRY



STRUCTURE SECTION

A



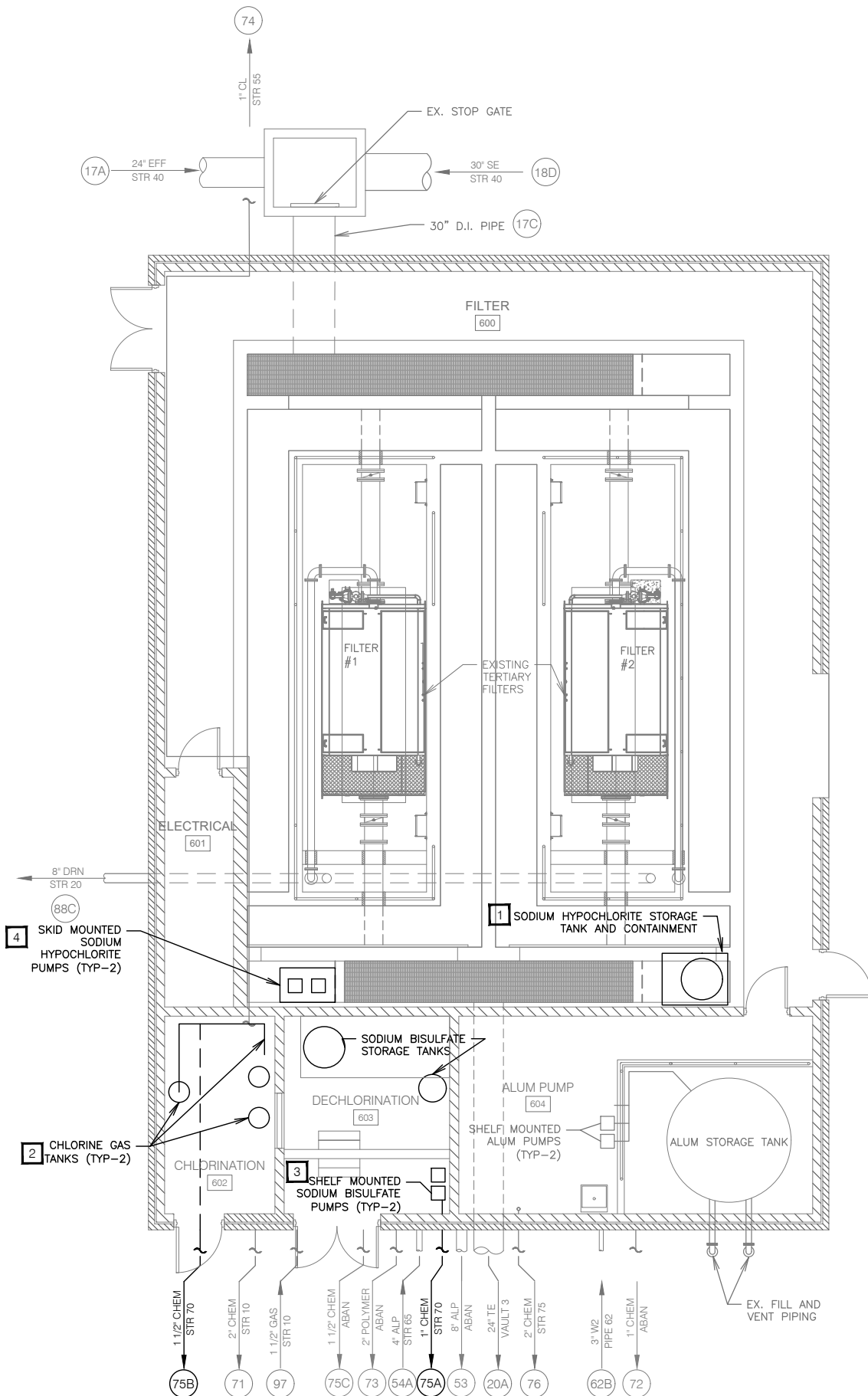
STRUCTURE SECTION

B

- GENERAL NOTES**
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- KEY NOTES**
- INSULATED SECTIONAL METAL OVERHEAD DOOR, REF. DOOR SCHEDULE, TYP.
 - 8" STEEL PIPE BOLLARD, TYP. AT OVERHEAD DOORS
 - FIXED ALUMINUM GUARDRAIL, TYP.
 - REMOVABLE ALUM. GUARDRAIL, ONLY WHERE SPECIFICALLY NOTED BY THIS KEY NOTE
 - ALUMINUM BAR GRATING
 - EMBEDDED ALUM. GRATING SUPPORT ANGLES (OR SURFACE-MOUNTED WHERE SPECIFICALLY NOTED)
 - FACTORY-FINISHED PARAPET CAP COPING TO MATCH EX.
 - BELOW-GRADE CONCRETE WETWELL(S)
 - ACCESS PLATFORM ALUM. SUPPORT STRUCTURE
 - GRATING OPENING FOR GATES, REF. "M" DWGS FOR REQUIRED CLEARANCES
 - CONT. P.V.C. WATER-STOP AT CONCRETE PLACEMENT JOINTS BELOW TANK HIGH LIQUID LEVEL (HLL), REF. 2/100-AS-04, TYP.
 - NEW 12" CONCRETE TANK WALL CAST AGAINST EX. FOUNDATION WALL, TYP. AT NEW WETWELLS AND RECESSED EQUIPMENT PIT ONLY, REF. FND PLAN
 - STEEL LINTEL, REF. LINTEL SCHEDULE, TYP.
 - 2" POLYSTYRENE INSULATION AROUND HEATED STRUCTURE PERIMETER, EXTEND TO MIN. 48" BELOW FIN. GRADE, TYP.
 - 8" HOLLOW-CORE PRECAST CONCRETE PLANK
 - TAPERED POLYISOCYANURATE INSULATION SYSTEM, 3" MIN. THICKNESS AT ROOF PRIMARY AND OVERFLOW DRAINS, MIN. 1/4" PER FT. SLOPE
 - 60 MIL MIN. EPDM ROOFING SYSTEM, REF. SPEC
 - SITE PAVING, REF. CIVIL DWGS
 - ALUM. ANGLE KNEE BRACE
 - ALUM. KNEE BRACE CONN. ANGLE
 - MIXER SUPPORT MEMBERS BY MIXER SUPPLIER, REF. "M" DWGS
 - PRIMARY MIXER AND/OR ALUM. GRATING SUPPORT BEAMS, REF. 60-AS-02 FOR LOCATIONS, SIZES AND ATTACHMENT REQUIREMENTS NOT SHOWN, TYP.
 - REF. C/60-AS-05 FOR BELOW-SLAB BEARING MATERIAL & VAPOR-RETARDER REQUIREMENTS, TYP.
 - EXTEND EPDM UP UNDER PARAPET COPING, TYP.
 - SUB-GRADE REMOVAL AND REPLACEMENT ZONE, REF. GEOTECHNICAL NOTES ON 100-AS-01
 - MAX. EXCAVATION IN BEARING SOIL INFLUENCE ZONE EX. BUILDING 1:1, MAINTAIN EX. FOUNDATION SUPPORT AT ALL TIMES DURING CONSTRUCTION. G.C. SHALL PROVIDE FOR TEMPORARY SHEETING IF DEEMED NECESSARY BASED ON PROJECT CONDITIONS AT TIME OF CONSTRUCTION

NOTE:
REINFORCING NOT SHOWN ALL LOCATIONS, WHERE TYPICAL REF. CONSTRUCTION NOTES ELSEWHERE THIS SHEET FOR SIMILAR REINFORCING REQUIREMENTS.



GENERAL NOTES

1. DRAWINGS IN GENERAL DO NOT SHOW DIMENSIONS OF EXISTING CONSTRUCTION, BUT ARE DRAWN APPROXIMATELY TO SCALE. CONTRACTOR SHALL OBTAIN ALL DIMENSIONS REQUIRED FOR CONSTRUCTION.
2. ROOM NAMES SHOWN ON DEMOLITION (EXISTING) PLANS MAY DIFFER FROM ROOM DESIGNATIONS FOR IMPROVEMENTS PLANS.
3. SEE SPECIFICATIONS FOR GENERAL DEMOLITION REQUIREMENTS.
4. PLANS DO NOT NECESSARILY CALL FOR ALL ITEMS REQUIRING DEMOLITION REMOVAL, CUTTING, OR PATCHING. WHERE NOT SHOWN, ALL DEMOLITION, REMOVAL, CUTTING, PATCHING AND OTHER WORK NECESSARY TO ACCOMMODATE NEW CONSTRUCTION SHALL BE PROVIDED AS A PART OF THE CONTRACT.
5. REFER TO ARCHITECTURAL, STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION AND MODIFICATIONS NOT LISTED HERE.
6. EXISTING STRUCTURE IS TO REMAIN IN SERVICE DURING CONSTRUCTION. REFER TO SPECIFICATION SECTION 01 00 00 FOR ANTICIPATED SEQUENCE OF CONSTRUCTION. COORDINATE DEMOLITION SCHEDULE WITH THE OWNER.

REMOVAL NOTES

1. REMOVE AND SALVAGE EXISTING SODIUM HYPOCHLORITE TANKS AND CONTAINMENT TO VILLAGE.
2. REMOVE EXISTING CHLORINE GAS TANKS, SCALES, PIPING, AND REGULATOR EQUIPMENT. CAP EXISTING PIPES AT THE FLOOR AND ABANDON BELOW GRADE PIPES IN-PLACE. SALVAGE SCALES TO THE VILLAGE.
3. REMOVE EXISTING SODIUM BISULFATE TANKS, PUMPS, PIPING AND REGULATOR EQUIPMENT.

PROCESS REMOVAL PLAN
STRUCTURE 60

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

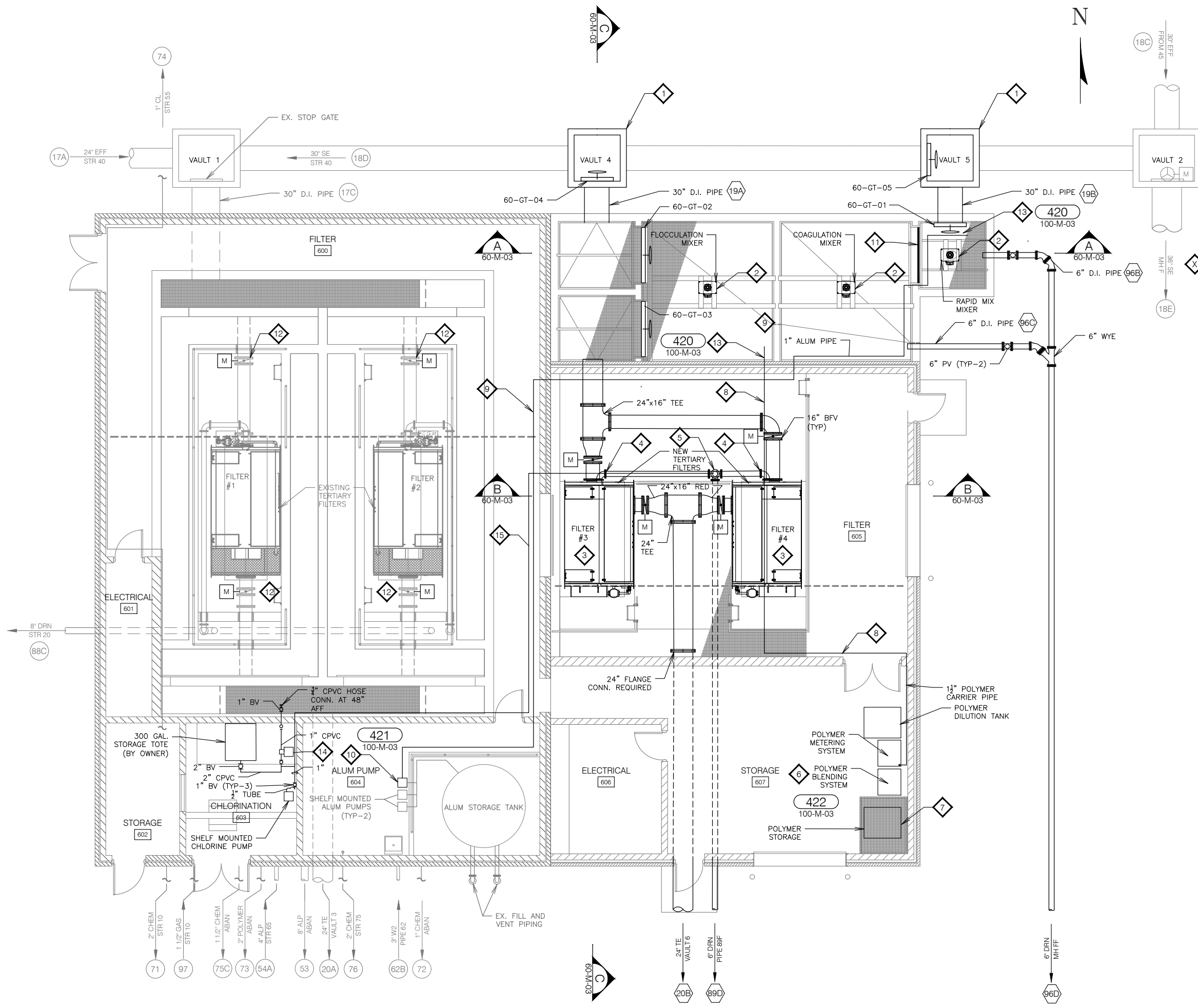
PROJECT NO.:	JK 18
DRAWING FILE:	60-M
DRAWN BY:	J.L.R.
CHECKED BY:	G.J.D.
DATE:	1-3-24
REVISIONS:	
SCALE:	
	0 1 2 3 5 FEET
SHEET:	21

60-M-01

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Madison, WI 53719
(608) 273-3350
www.tceengineers.net

tc TOWN & COUNTRY
ENGINEERING, INC.

Village of Jackson, Wisconsin



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 2. ROOM/TANK NAMES SHOWN ON DEMOLITION (EXISTING) PLANS MAY DIFFER FROM ROOM/TANK DESIGNATIONS FOR IMPROVEMENTS PLANS.
 3. SEE SPECIFICATIONS FOR GENERAL DEMOLITION REQUIREMENTS.
 4. PLANS DO NOT NECESSARILY CALL FOR ALL ITEMS REQUIRING DEMOLITION REMOVAL, CUTTING, OR PATCHING. WHERE NOT SHOWN, ALL DEMOLITION, REMOVAL, CUTTING, PATCHING AND OTHER WORK NECESSARY TO ACCOMMODATE NEW CONSTRUCTION SHALL BE PROVIDED AS A PART OF THE CONTRACT.
 5. REFER TO ARCHITECTURAL, STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION AND MODIFICATIONS NOT LISTED HERE.
 6. EXISTING STRUCTURE IS TO REMAIN IN SERVICE DURING CONSTRUCTION. REFER TO SPECIFICATION SECTION 01 00 00 FOR ANTICIPATED SEQUENCE OF CONSTRUCTION. COORDINATE DEMOLITION SCHEDULE WITH THE OWNER.
 7. THE TERTIARY DISC FILTERS, MIXERS, AND POLYMER FEED SYSTEM HAVE BEEN PRE-SELECTED. MANUFACTURER INFORMATION IS INCLUDED IN THE SPECIFICATION SECTION 01 02 00 AND THE PRE-SELECTED EQUIPMENT MANUAL.
 8. ALTERNATE BID ITEMS: THE PROCESS PIPE IS SHOWN WITH D.I. FITTINGS. THE BASE BID FOR ALL NEW PROCESS PIPE IN THE FILTER ROOM IS SCH 80 PVC. ALTERNATE BIDS FOR D.I. AND S.S. ARE INCLUDED ON THE BID FORM.

- KEY NOTES**
1. PRECAST VAULT TO BE CUT INTO EXISTING 30" REINFORCED CONCRETE PIPE. SEE SECTION 01 20 00 - SEQUENCE OF CONSTRUCTION FOR BYPASS REQUIREMENTS FOR THE EXISTING FILTER BUILDING.
 2. NEW TOP-MOUNT MIXERS TO BE PROVIDED PER SECTION 46 61 41 BY THE FILTER MANUFACTURER. MOUNT MIXERS ON PLATE/BEAMS PER THE MANUFACTURER'S REQUIREMENTS.
 3. NEW TERTIARY DISC FILTERS PROVIDED PER SECTION 46 61 41.
 4. NEW 6" DRAIN PIPING FROM DISC FILTER FLANGE CONNECTION TO THE FLANGE CONNECTION AT THE FLOOR.
 5. NEW 6" DRAIN PIPING FROM A FLANGE MOUNTED 6" ABOVE THE FLOOR TO THE EXTERIOR PIPE CONNECTION AS SHOWN ON THE SITE PIPING PLAN.
 6. NEW POLYMER BLENDING SYSTEM AS PROVIDED PER SECTION 46 61 41 BY THE FILTER MANUFACTURER. CONNECT TO WATER SUPPLY PER SHEET 60-P-01.
 7. POLYMER STORAGE TOTE BY OWNER.
 8. 1 1/2" CPVC POLYMER CARRIER PIPE FROM THE POLYMER METERING SYSTEM TO THE FLOCCULATION TANK AS SHOWN. ROUTE PIPE ALONG THE CEILING OF THE FILTER ROOM, EXIT ROOM THROUGH THE WALL NEAR THE FLOOR OF THE FILTER SPACE WITH A LINK-SEAL THROUGH THE WALL. ROUTE THE PIPE TO 6" OFF THE FLOOR OF THE FLOCCULATION TANK FOR 4' WITH A DIFFUSER PIPE ALONG THE WALL OPENING.
 9. 1" CPVC ALUM CARRIER PIPE TO BE ROUTED FROM THE NEW ALUM PUMP TO THE RAPID MIX TANK AS SHOWN. ROUTE THE PIPE ALONG THE CEILING OF THE CHEMICAL ROOM AND FILTER ROOM, DROP PIPE AND EXIT WALL TO THE COAGULATION TANK / RAPID MIX TANK BELOW THE GRATING TO THE LOCATION SHOWN.
 10. NEW ALUM PUMP TO BE MOUNTED WHERE SHOWN. SEE DETAIL 421 ON SHEET 100-M-03 FOR ALUM FEED SYSTEM.
 11. NEW 12" TALL BY 7' LONG FIBERGLASS WEIR TO BE MOUNTED AT THE FACE OF THE WALL OPENING. SEE DETAILS FOR WEIR MOUNTING.
 12. INSTALL NEW ELECTRIC VALVE ACTUATOR ON EXISTING 16" BVF, 4 LOCATIONS. ROTATE EXISTING VALVES AS NEEDED TO FIT THE ACTUATOR ADDITION. SEE SHEET 60-E-02 FOR ELECTRICAL REQUIREMENTS.
 13. MOUNT CHEMICAL DIFFUSERS AT 6" ABOVE FLOOR AT OPENING.
 14. NEW VANTON SIZE 30 CHEMICAL TRANSFER PUMP MOUNTED ON EXISTING ELEVATED PAD. CONNECT 1" CPVC PIPE TO PUMP, BOTH SIDES, WITH 1" BRAIDED HOSE CONNECTION.
 15. NEW 1" CPVC SODIUM HYPOCHLORITE (BLEACH) CARRIER PIPE FROM PUMP TO NEW TERTIARY FILTER DRAIN PIPE. ROUTE THE PIPE ALONG THE CEILING ALONG THE ROUTE SHOWN AND CONNECT TO THE NEW DRAIN LINE WITH A CHEMICAL INJECTION QUILL PER DETAIL ON SHEET 100-M-03.

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(608) 273-3350
www.tceengineering.net

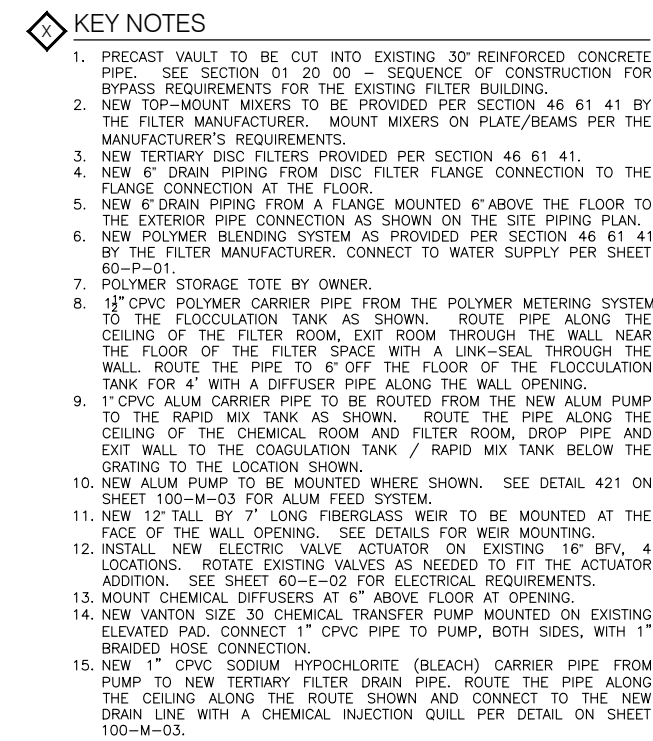
tc TOWN & COUNTRY
ENGINEERING, INC.

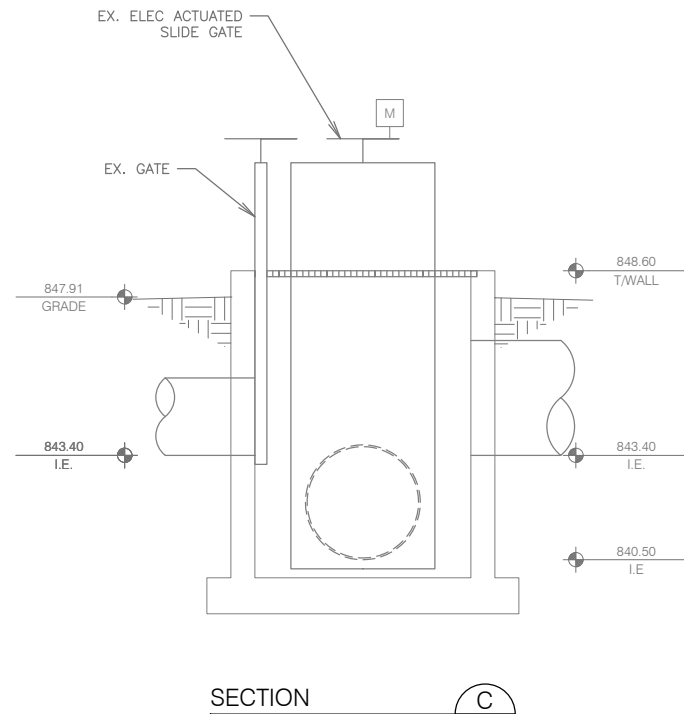
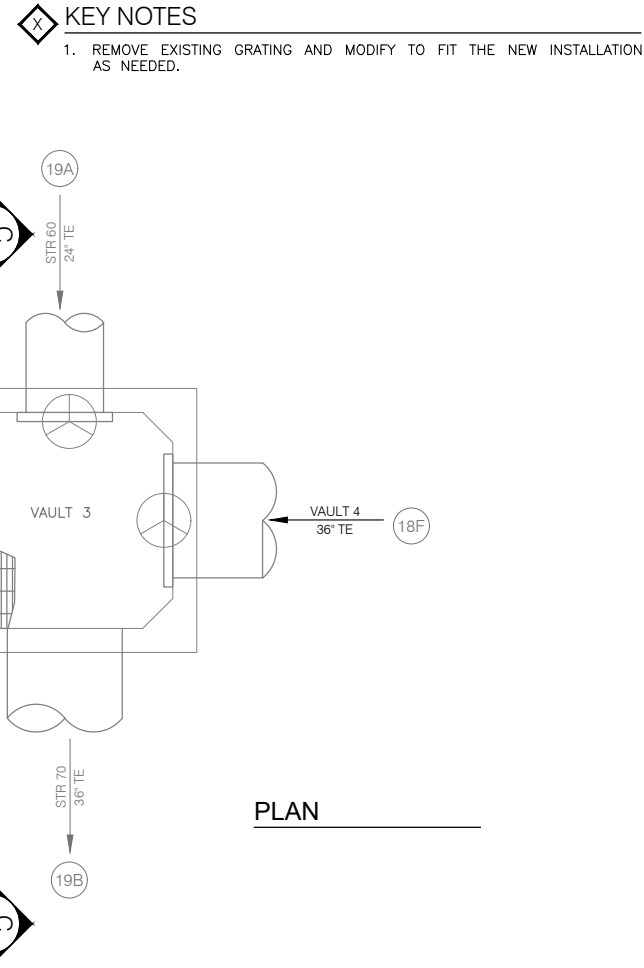
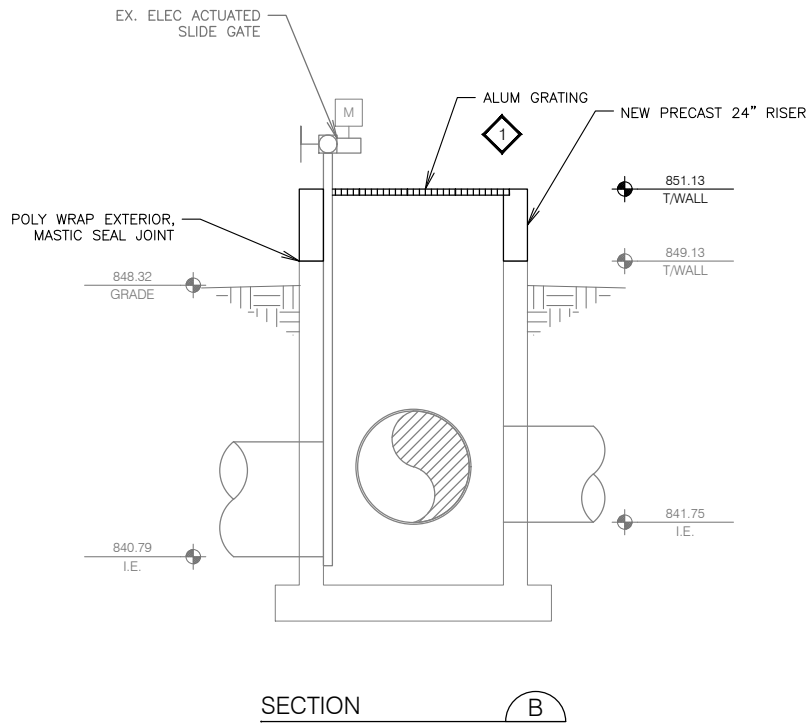
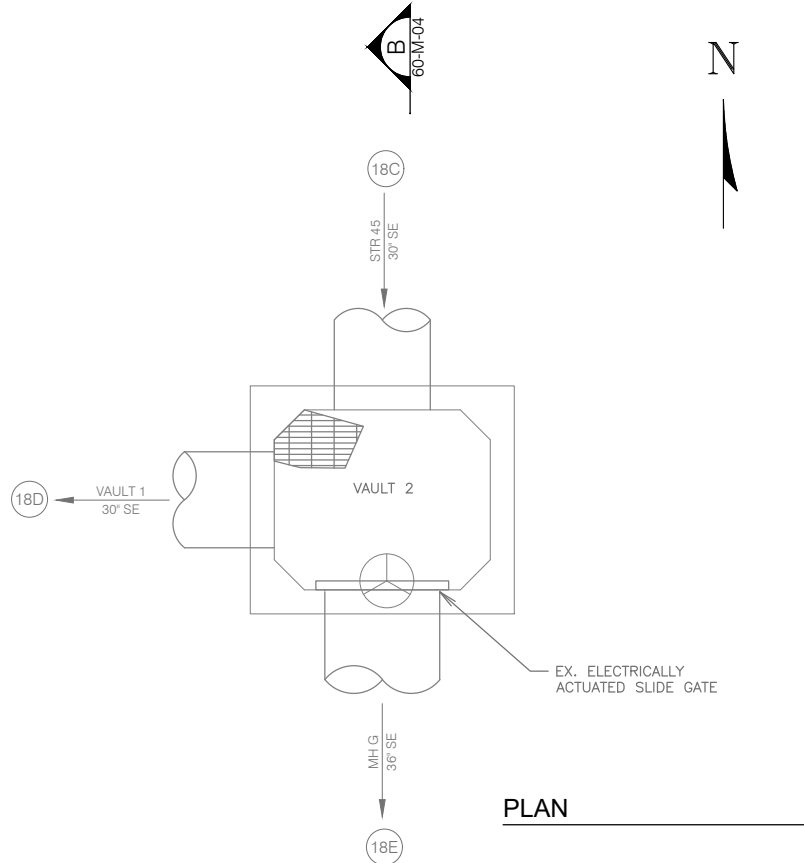
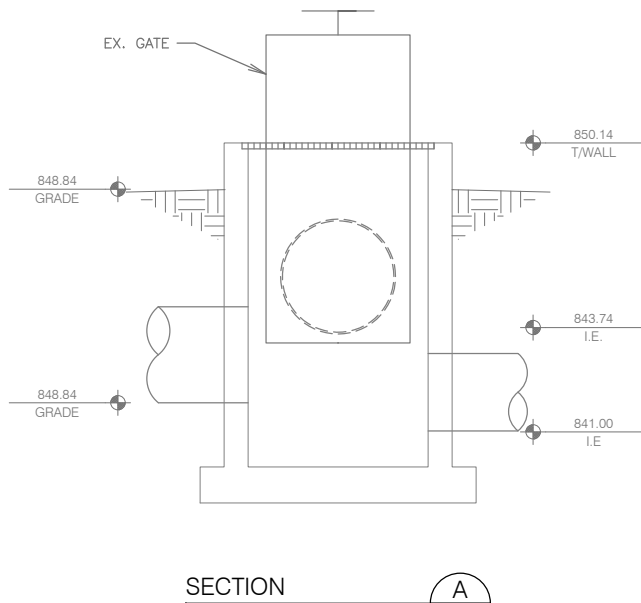
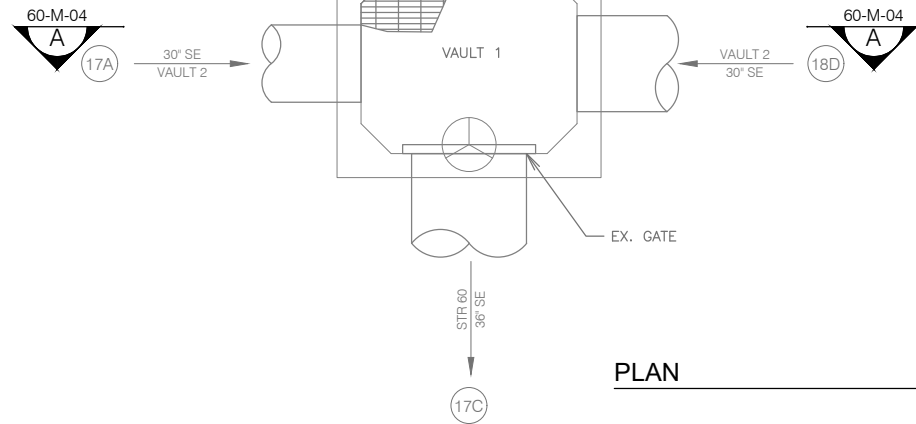
PROCESS PLAN
STRUCTURE 60

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

Village of Jackson, Wisconsin

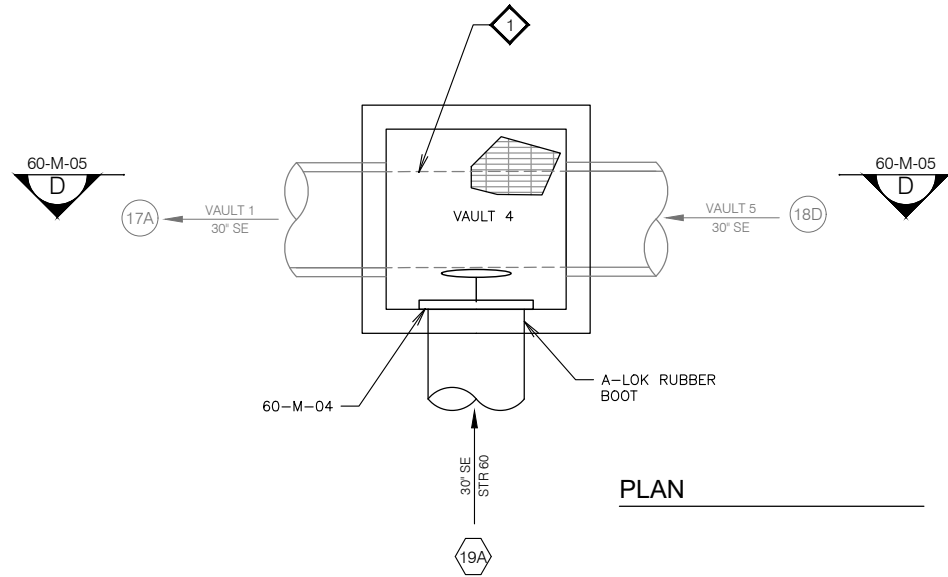
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60-M
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J.L.R.
CHECKED BY:
G.J.D.
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REVISIONS:
SCALE:
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60-M-02



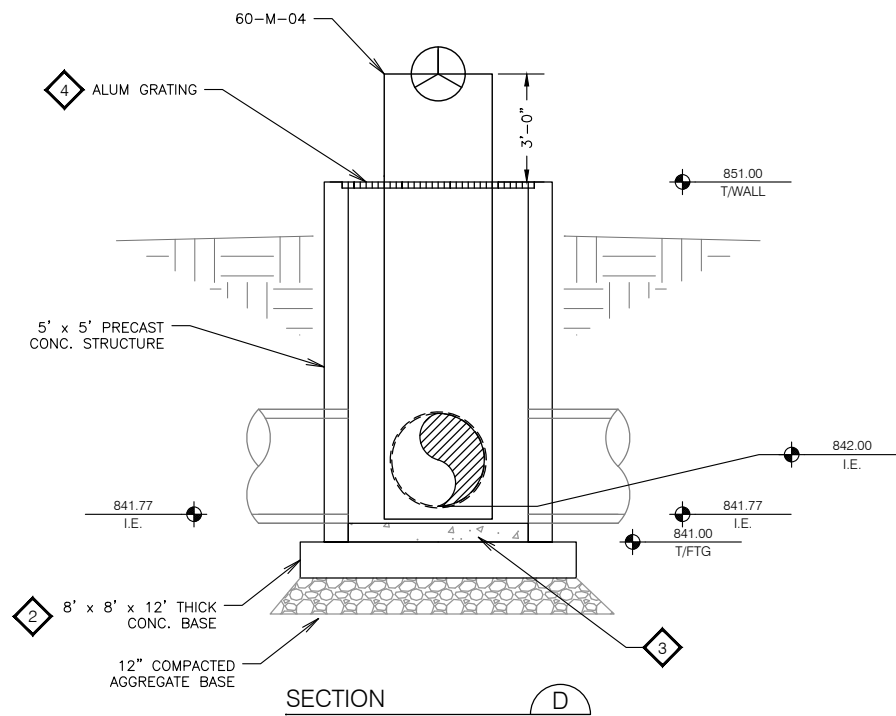


KEY NOTES

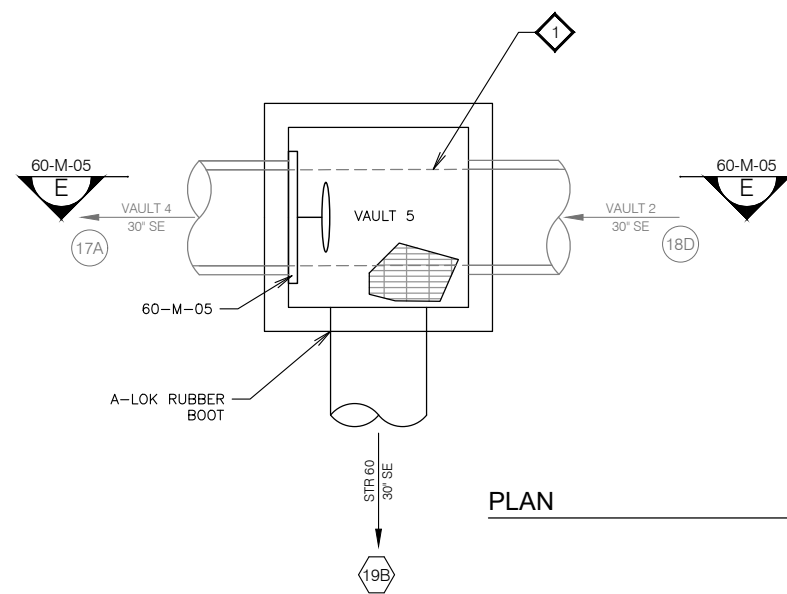
1. REMOVE EXISTING GRATING AND MODIFY TO FIT THE NEW INSTALLATION AS NEEDED.



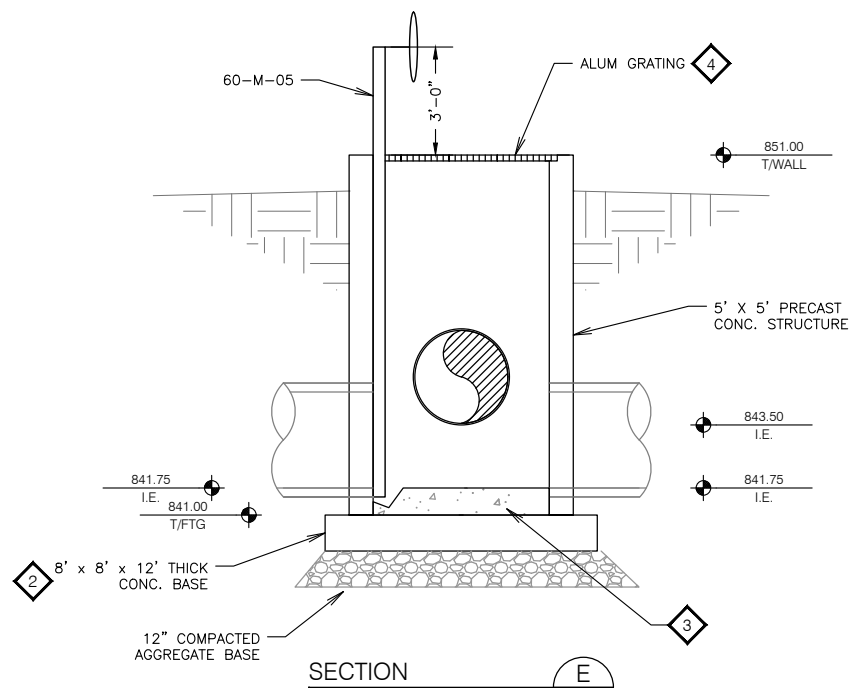
PLAN



SECTION



PLAN

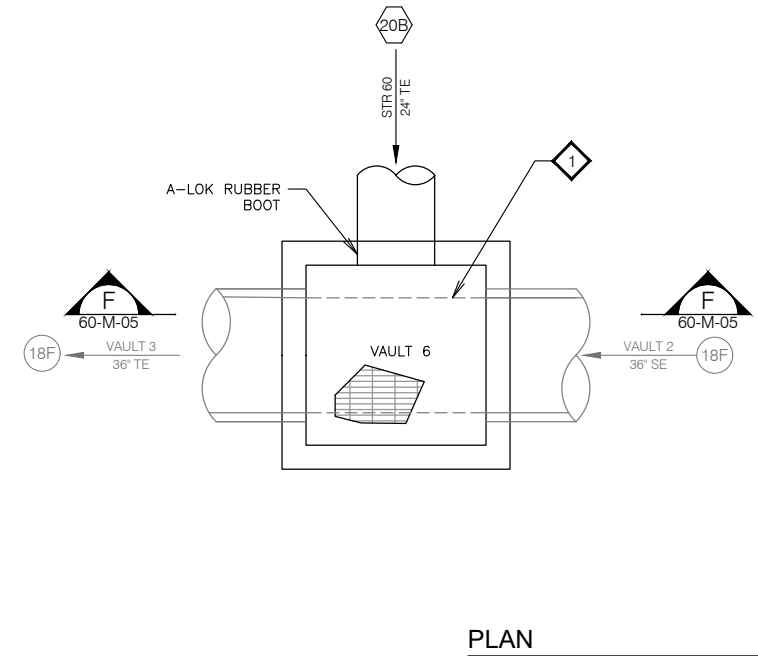


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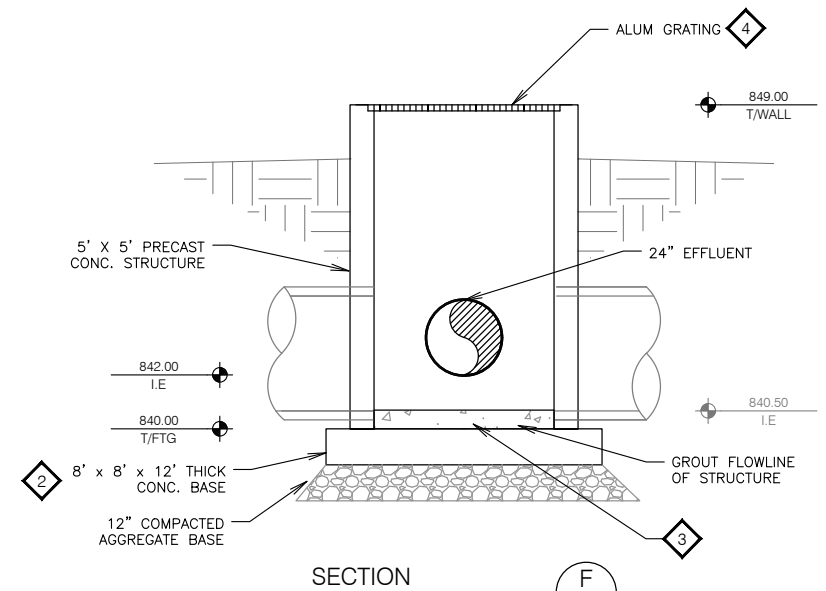


KEY NOTES

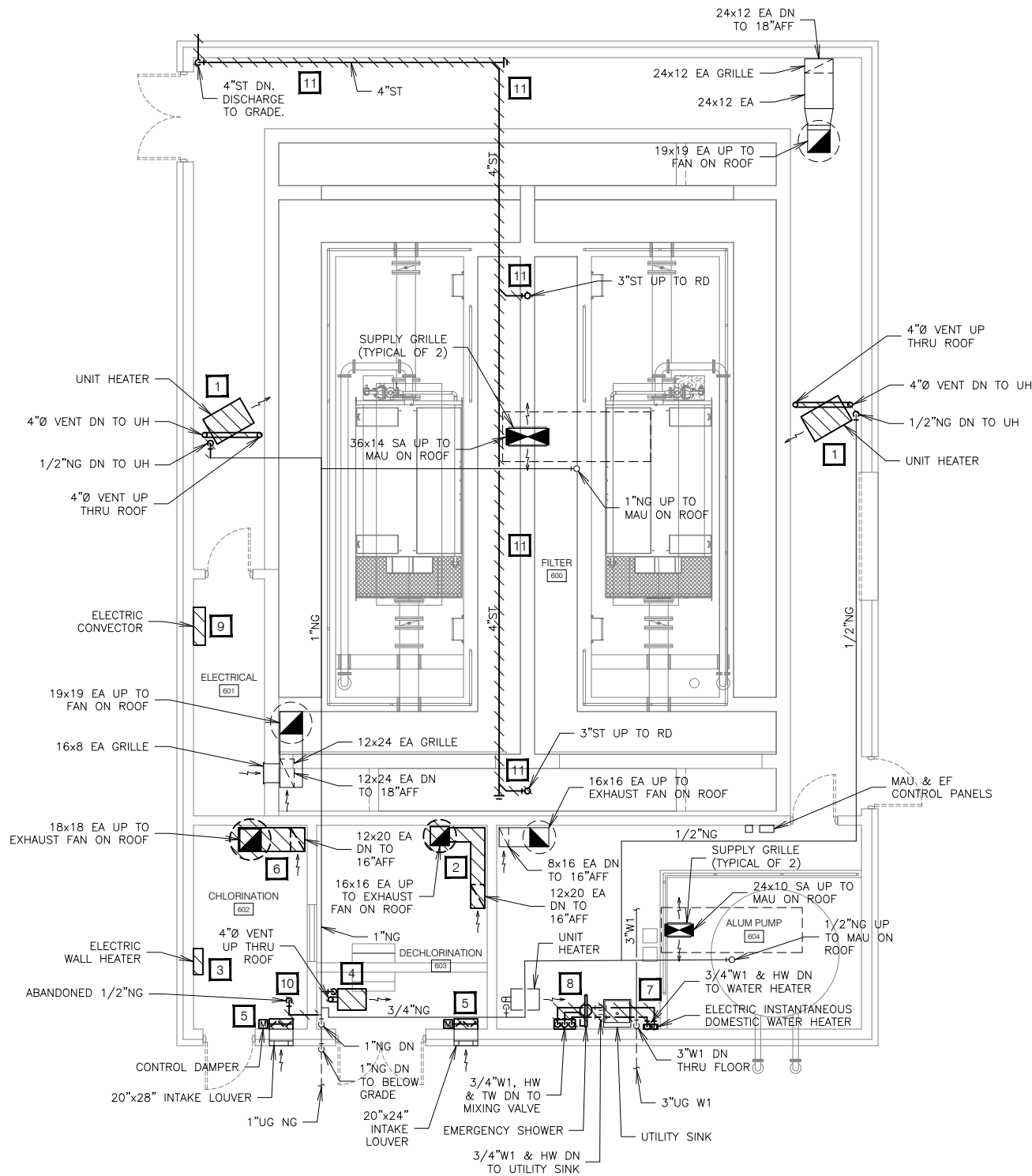
1. CONTRACTOR TO MODIFY EXISTING RCP TO FIT NEW STRUCTURE. SEAL CONNECTION WITH EXISTING PIPE WITH BENTONITE AND NON-SHRINK GROUT. NEW CONNECTIONS WITH A-LOCK RUBBER BOOT.
2. #5 BARS 12" O.C. EACH WAY FOR CONCRETE BASES. CONTRACTOR MAY ALSO USE PRECAST BASES IF PREFERRED.
3. GROUT BASE OF EACH STRUCTURE, 4" MIN.
4. EMBED ALUM. SUPPORTS AND SIZE GRATING PER DETAILS ON SHEET 100-AS-06.



PLAN



SECTION

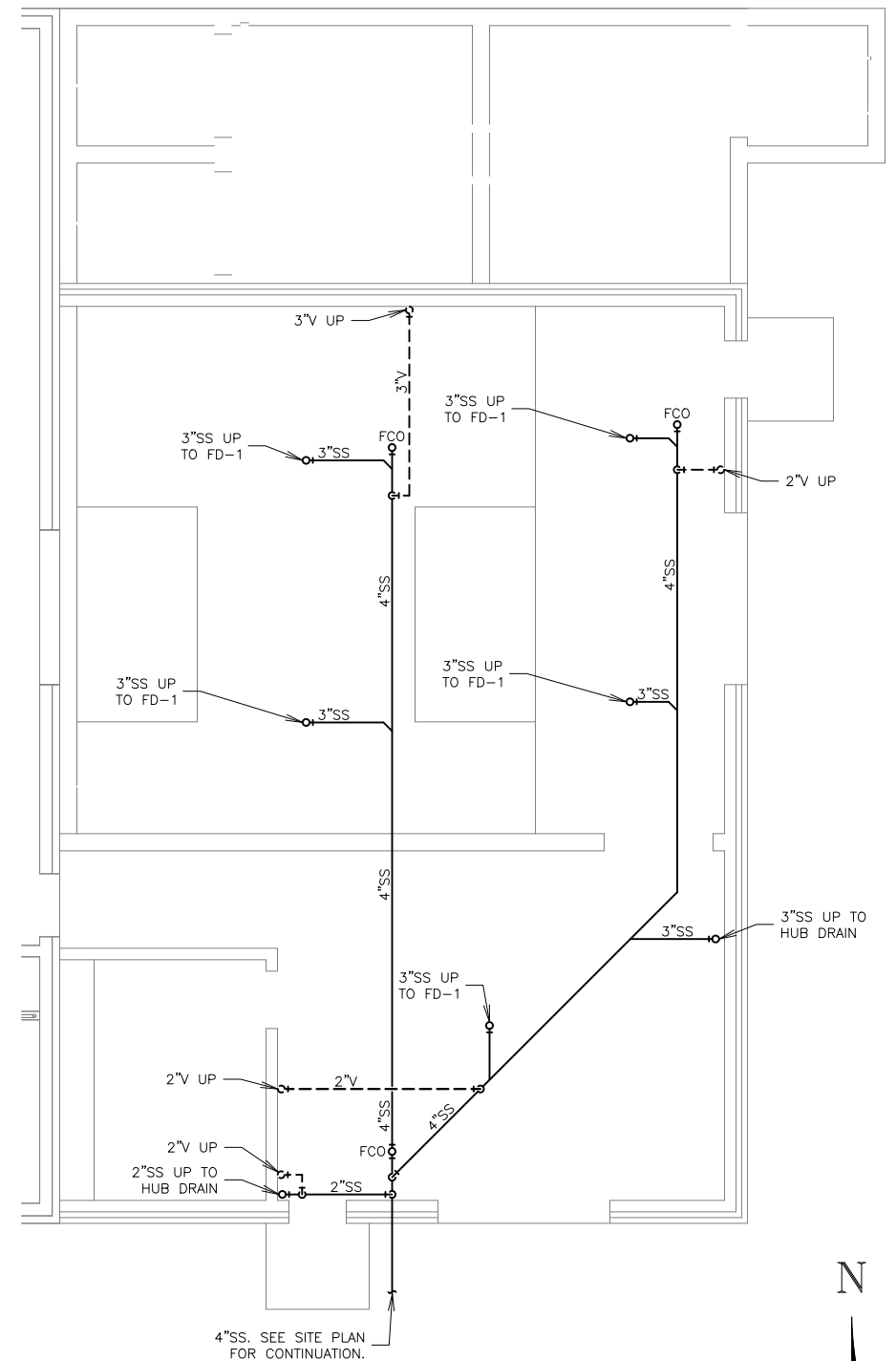
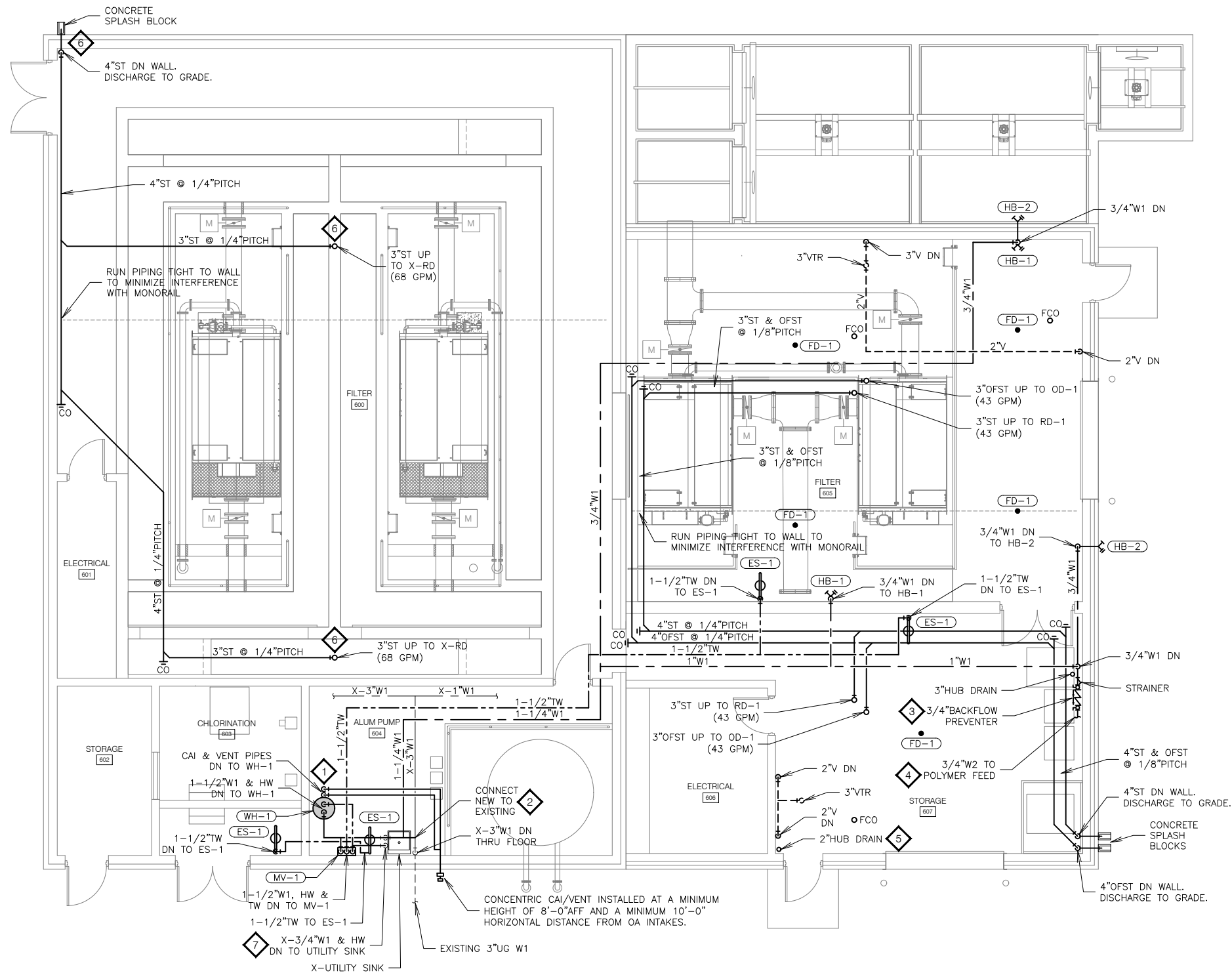


PLUMBING/HVAC REMOVAL PLAN

X REMOVAL NOTES

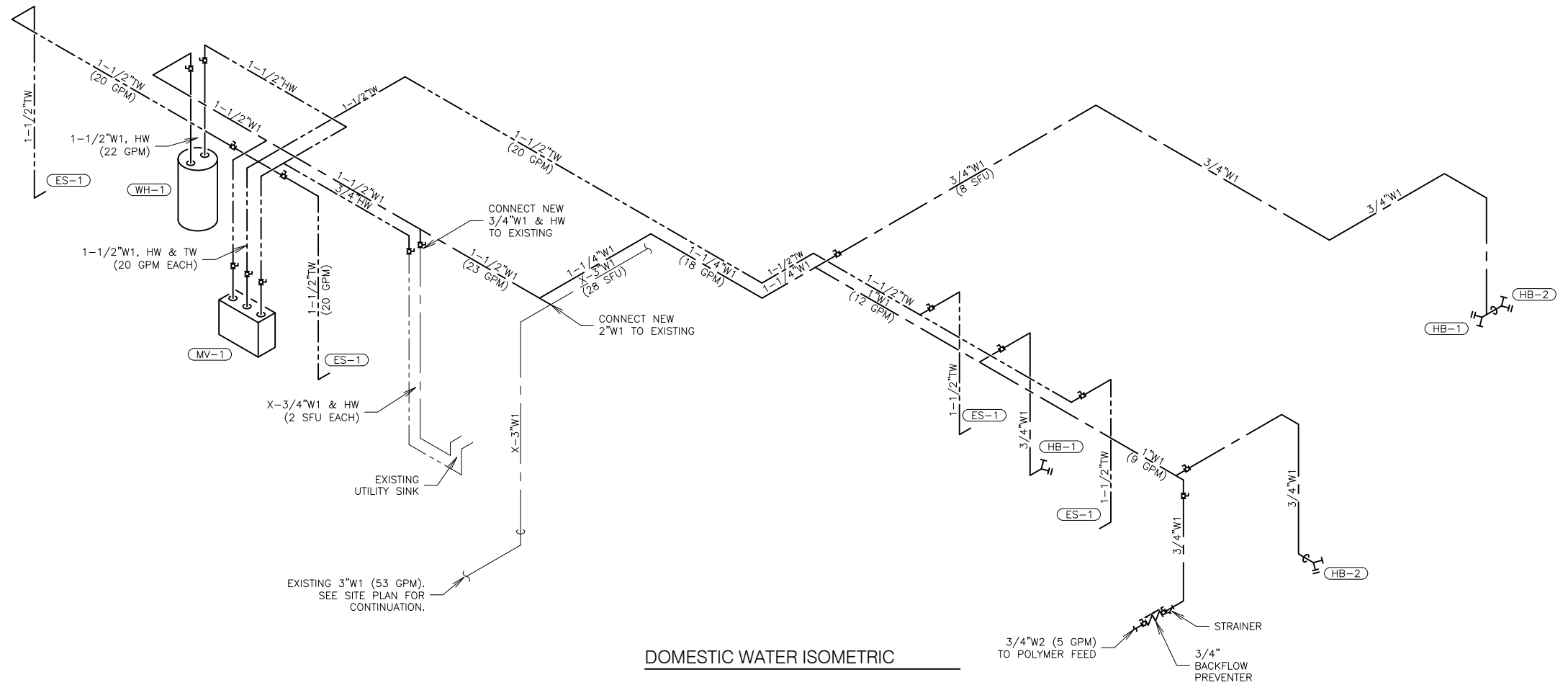
1. REMOVE GAS FIRED UNIT HEATER ALONG WITH ALL ASSOCIATED VENTING, WIRING, AND CONTROL. UNIT HEATER TO BE REPLACED WITH NEW AS SHOWN ON NEW WORK PLAN. MODIFY NG PIPING AS NECESSARY TO INSTALL NEW UNIT HEATER. ROOF OPENING TO BE RE-USED.
2. REMOVE ROOF MOUNTED EXHAUST FAN ALONG WITH ALL ASSOCIATED DUCTWORK, WIRING AND CONTROL. FAN TO BE REPLACED WITH NEW. ROOF OPENING AND ROOF CURB TO BE RE-USED.
3. REMOVE ELECTRIC WALL HEATER ALONG WITH ALL ASSOCIATED WIRING AND CONTROL. PATCH WALL TO MATCH EXISTING.
4. REMOVE GAS FIRED UNIT HEATER ALONG WITH ALL ASSOCIATED VENTING, WIRING, AND CONTROL. PATCH ROOF OPENING TO MATCH EXISTING. REMOVE NG PIPING BACK TO MAIN AND CAP.
5. REMOVE ELECTRIC CONTROL DAMPER ALONG WITH ALL ASSOCIATED DUCTWORK, WIRING AND CONTROL. LOUVER TO REMAIN.
6. REMOVE ROOF MOUNTED EXHAUST FAN ALONG WITH ALL ASSOCIATED DUCTWORK, WIRING AND CONTROL. PROVIDE INSULATED ROOF CURB CAP OVER ROOF CURB. FLASH AND SEAL WATERTIGHT.
7. REMOVE ELECTRIC INSTANTANEOUS DOMESTIC WATER HEATER ALONG WITH ALL ASSOCIATED W1 & HW PIPING, WIRING AND CONTROL.
8. REMOVE EMERGENCY SHOWER AND MIXING VALVE ALONG WITH ALL ASSOCIATED W1, HW AND TW PIPING.
9. REMOVE ELECTRIC CONVECTOR ALONG WITH ALL ASSOCIATED WIRING AND CONTROL. CONVECTOR TO BE REPLACED WITH NEW.
10. REMOVE ABANDONED 1/2"NG BRANCH BACK TO MAIN AND CAP. PATCH WALL OPENING TO MATCH EXISTING.
11. REMOVE ALL INTERIOR STORM DRAIN PIPING. ROOF DRAINS TO REMAIN. DISCONNECT STORM PIPING FROM ROOF DRAINS AS REQUIRED. ALL STORM DRAIN PIPING TO BE REPLACED WITH NEW AS SHOWN ON NEW WORK PLAN.



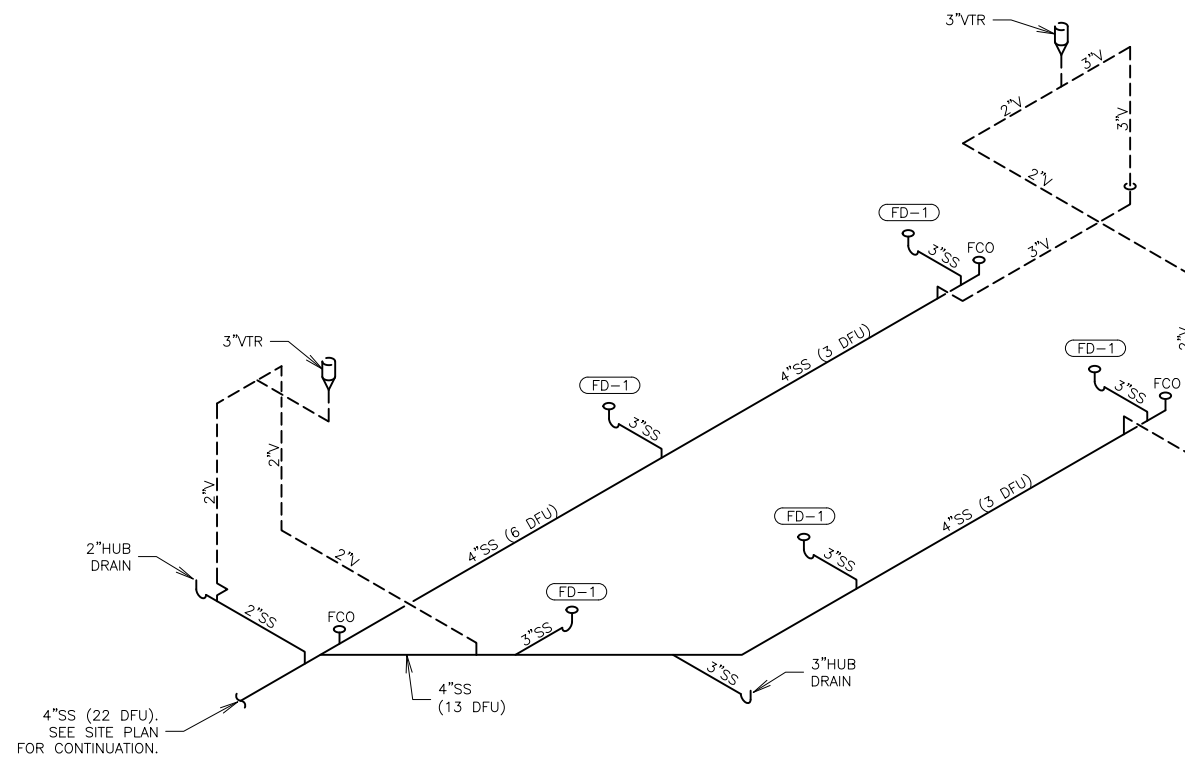


 KEY NOTES

1. MOUNT NEW DOMESTIC WATER HEATER (WH-1) ON NEW CONCRETE HOUSEKEEPING PAD. FIELD VERIFY EXACT SIZE AND LOCATION.
2. CONNECT NEW 2"W1 TO EXISTING 3"W1 AS REQUIRED. FIELD VERIFY EXACT SIZE AND LOCATION.
3. NEW 3/4"BACKFLOW PREVENTER SHALL BE WATTS MODEL LF909QT-S. PROVIDE WITH AIR GAP AND DRAIN LINE PIPED TO HUB DRAIN BELOW.
4. CONNECT 3/4"W2 TO POLYMER FEED SYSTEM. COORDINATE EXACT CONNECTION SIZE AND LOCATION WITH PROCESS CONTRACTOR.
5. HUB DRAIN FOR AIR CONDITIONING CONDENSATE. COORDINATE EXACT LOCATION WITH HVAC CONTRACTOR.
6. CONNECT NEW STORM PIPING TO EXISTING ROOF DRAIN AS REQUIRED. DISCHARGE NEW PIPING THRU EXISTING EXTERIOR WALL OPENING. FIELD VERIFY EXACT SIZE AND LOCATION.
7. RECONNECT EXISTING 3/4"W1 & HW SERVING EXISTING UTILITY SINK AS REQUIRED. FIELD VERIFY EXACT SIZE AND LOCATION.



DOMESTIC WATER ISOMETRIC



SANITARY WASTE & VENT ISOMETRIC



WATER CALCULATION WORKSHEET

Information Needed for Water Service Sizing

- 1 53 Demand of building in gallons per minute.
- 2 60 Low pressure at building entrance.
- 3 0 Difference in elevation from main to meter (or external pressure tank to building control valve).
- 4 NA Size of water meter (if applicable).
- 5 0 Developed length from main to meter (or external pressure tank to building control valve).
- First Find Available Pressure After the Water Meter
(or at building control valve)
- 6 0 Find pressure loss due to friction in 3 inch diameter water service.
- 7 0.0 Find pressure loss due to elevation, main to meter (or external pressure tank to building control valve). Multiply the difference in elevation by .434 psi/ft.
- 8 0 Find pressure loss due to meter. (from manufacturer or AWWA)
- 9 60.0 Subtract the loss due to friction (Step 6), loss due to elevation (Step 7), and loss due to meter (Step 8) from the low main pressure (or low pressure at external pressure tank) (Step 2). This calculation is the **available pressure after the water meter** (or at the building control valve). This answer is entered in Line B, below.

Information Needed for Water Distribution Sizing

Using the following formula, find the pressure available for uniform loss (psi/100' of pipe)

A = [B - (C + D + E)] / F x 100

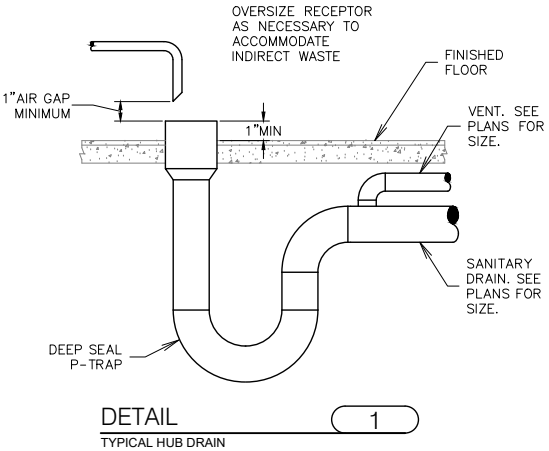
- A 19.6 Pressure available for uniform loss (psi/100' of pipe).
- B 60.0 Available pressure after water meter (at the building control valve or low pressure at internalpressure tank). (See step 9 above)
- C 35 Pressure needed at controlling fixture.
- D 0.0 Difference in elevation between water meter (building control valve or internal pressure tank) and controlling fixture in feet 0 x .434 psi/ft.
- E 0 Pressure loss due to water softeners, water treatment devices, instantaneous water heaters and backflow preventors which serve the controlling fixture. Conventional water heaters usually do not have a pressure loss.
- F 127.5 Developed length from water meter (building control valve or internal pressure tank) to controlling fixture in feet 85 x 1.5

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	WSFU			DFU VALUE
				HW	CW	TOTAL	
ES-1	BRADLEY	S19314TT	COMBINATION EMERGENCY SHOWER AND EYE/FACE WASH STATION. UNIT SHALL INCLUDE ABS PLASTIC SPINTEC SHOWER HEAD WITH INTEGRAL FLOW CONTROL, STAINLESS STEEL SHROUD AND 1"CHROME PLATED BRASS STAY-OPEN SHOWER BALL VALVE ACTIVATED BY STAINLESS STEEL TRIANGULAR PULL HANDLE, ABS PLASTIC HALO EYE/FACE WASH HEADS WITH INTEGRAL FLOW CONTROL, FIP TOP DUST COVERS, STAINLESS STEEL BOWL AND 1/2"CHROME PLATED BRASS, STAY-OPEN BALL VALVE ACTIVATED BY STAINLESS STEEL PUSH HANDLE. UNIT CONSTRUCTED OF 1-1/4" SCHEDULE 40 GALVANIZED STEEL PIPE AND FITTINGS AND FLOOR FLANGE WITH BRADTECT SAFETY YELLOW COATING. EYE/FACE WASH BOWL SHALL BE PIPED TO FLOOR.	NA	NA	NA	NA
FD-1	SIOUX CHIEF	863-43NR	ADJUSTABLE 3"FLOOR DRAIN, PVC ADAPTER BODY WITH PVC TOP HOUSING AND ROUND CAST NICKEL RING AND STRAINER. PROVIDE 3"SCHEDULE 40 HUB ADAPTER.	NA	NA	NA	3.0
HB-1	WOODFORD	24	NON-FREEZE AREA, ANTI-SIPHON VACUUM BREAKER PROTECTED WALL FAUCET, 3/4" MALE HOSE THREAD NOZZLE, BRASS VALVE BODY, ONE PIECE VALVE PLUNGER, HARDENED STAINLESS STEEL OPERATING STEM AND METAL WHEEL HANDLE. PROVIDE WITH POLISHED CHROME FINISH.	NA	4.0	4.0	NA
HB-2	WOODFORD	19	AUTOMATIC DRAINING, ANTI-SIPHON VACUUM BREAKER PROTECTED, FREEZELESS WALL FAUCET, 3/4" MALE HOSE THREAD NOZZLE, BRASS VALVE BODY, ONE PIECE VALVE PLUNGER TO CONTROL BOTH FLOW AND DRAINAGE, HARDENED STAINLESS STEEL OPERATING STEM AND OVAL, POWDER COATED DIE CAST ALUMINUM HANDLE. COORDINATE FINISH WITH ARCHITECT.	NA	4.0	4.0	NA
MV-1	LEONARD VALVE	TM-800-LF-STSTL-EXP	THERMOSTATIC MIXING VALVE WITH INTEGRAL STRAINER CHECKSTOPS ON INLETS, ADJUSTABLE SET POINT AND DIAL THERMOMETER IN SURFACE MOUNTED STAINLESS STEEL CABINET.	NA	NA	NA	NA
OD-1	JAY R SMITH	1070	15.25"Ø ROOF OVERFLOW DRAIN WITH BOTTOM NO-HUB OUTLET, COMBINED FLASHING CLAMP AND GRAVEL STOP, CAST IRON BODY, PVC STANDPIPE, LOW PROFILE CAST IRON VANDAL PROOF DOME, EXTENSION COLLAR, UNDERDECK CLAMP AND SUMP RECEIVER. SEE PLANS FOR SIZE.	NA	NA	NA	NA
RD-1	JAY R SMITH	1010	15.25"Ø ROOF DRAIN WITH BOTTOM NO-HUB OUTLET, COMBINED FLASHING CLAMP AND GRAVEL STOP, CAST IRON BODY, LOW PROFILE CAST IRON VANDAL PROOF DOME, EXTENSION COLLAR, UNDERDECK CLAMP AND SUMP RECEIVER. SEE PLANS FOR SIZE.	NA	NA	NA	NA

GAS FIRED WATER HEATER SCHEDULE

MARK	MANUFACTURER	TYPE	MODEL	STORAGE CAPACITY (GAL)	BTUH (INPUT)	GPH RECOVERY @ 90 F	VOLTS/PHASE	DIMENSIONS	REMARKS
WH-1	AMERICAN	SEALED COMB.	PDVGG62-40S40-NV	40	40,000	45	120V / 1Ø	22"Ø x 50"H	1, 2, 3
1. PROVIDE DISCONNECT									
2. PROVIDE CONCENTRIC CA/VENT									
3. PROVIDE SPARE ANODE RODS									



PLUMBING GENERAL NOTES

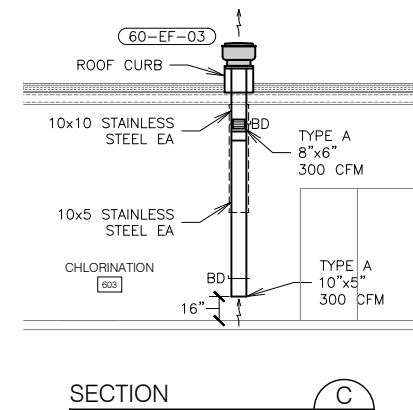
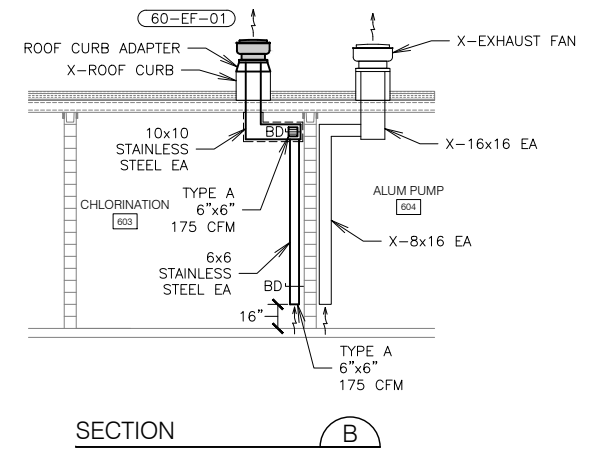
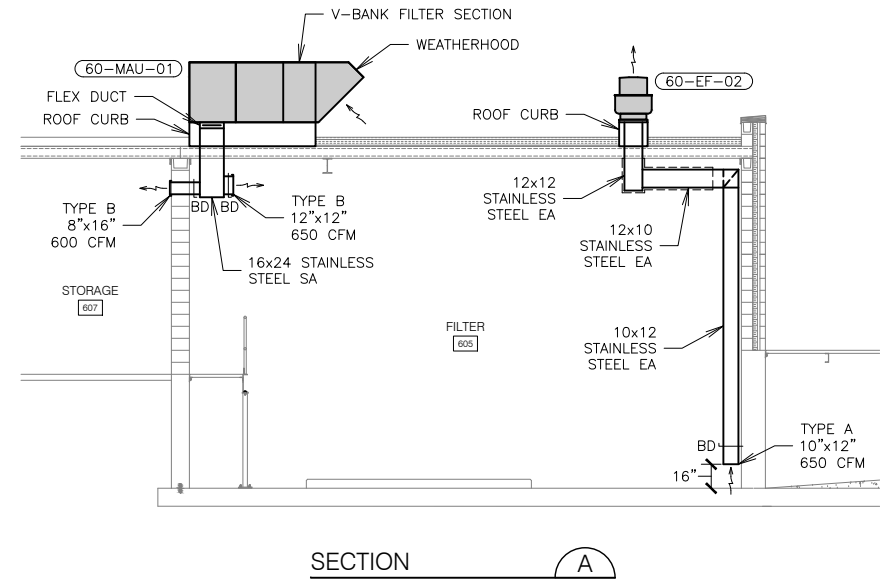
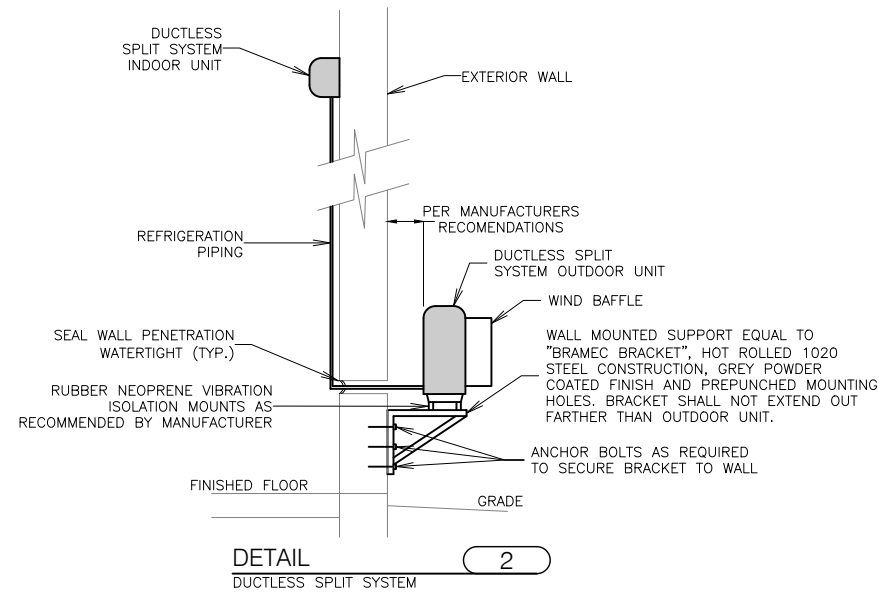
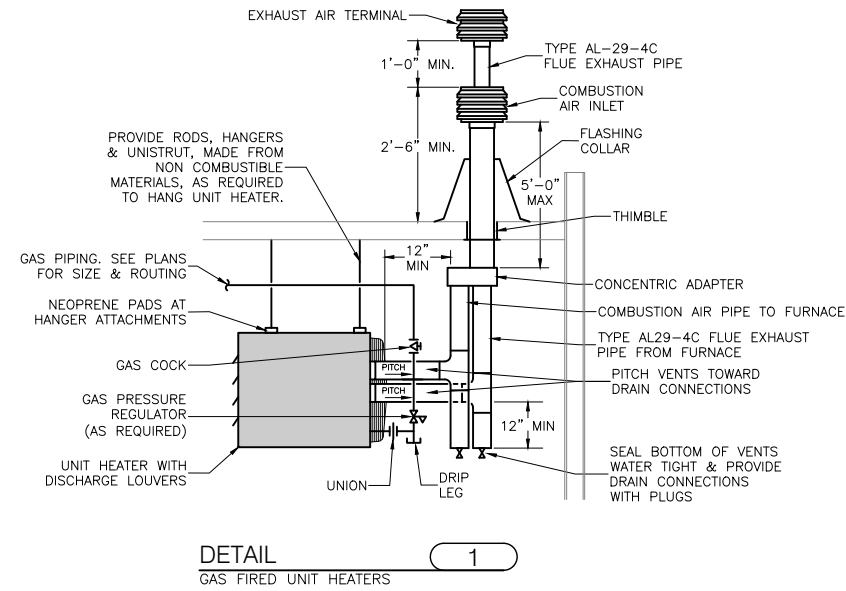
1. THESE DRAWINGS DO NOT ATTEMPT TO SHOW THE COMPLETE DETAILS OF BUILDING CONSTRUCTION, WHICH AFFECT THE PLUMBING INSTALLATION. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND REFER TO THE ARCHITECTURAL, CIVIL, STRUCTURAL, HVAC AND ELECTRICAL DRAWINGS FOR ADDITIONAL DETAILS WHICH AFFECT THE PROPER INSTALLATION OF THIS WORK. NO EXTRA PAYMENT WILL BE ALLOWED FOR THE FAILURE TO OBTAIN THIS INFORMATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING FIELD CONDITIONS. THE CONTRACTOR SHALL REVIEW EXISTING FIELD CONDITIONS PRIOR TO BID AND SHALL TAKE INTO ACCOUNT IN BID PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO CONTRACTORS FAILURE TO INCLUDE ALL NECESSARY WORK IN BID PROPOSAL.
3. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHER TRADES. RESOLVE ALL CONFLICTS AT NO ADDITIONAL COST TO THE OWNER OR ARCHITECT.
4. THESE DRAWINGS ARE A DIAGRAMMATIC REPRESENTATION OF WORK TO BE ACCOMPLISHED AND AS SUCH DO NOT SHOW ALL REQUIRED OFFSETS OF PIPING. PLUMBING CONTRACTOR SHALL INSTALL MATERIAL AND EQUIPMENT AS TO CONFORM TO THE STRUCTURE, EQUIPMENT CONNECTIONS AND MAINTAIN HEADROOM AND PASSAGWAY.
5. ALL NON-POTABLE WATER PIPING AND FIXTURES SHALL CLEARLY BE LABELED AS SUCH.

PLUMBING ABBREVIATIONS

AHP	AIR PIPING-HIGH PRESSURE
BFP	BACKFLOW PREVENTER
CA	COMPRESSED AIR
CO	CLEANOUT
DN	DOWN
ES	EMERGENCY SHOWER
EW	EYE WASH
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
HB	HOSE BIB
HD	HUB DRAIN
LAV	LAVATORY
RD	ROOF DRAIN
SH	SHOWER
SPD	SUMP PUMP DISCHARGE
UG	UNDERGROUND
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WATER HEATER
VTR	VENT THRU ROOF
X-...	EXISTING ...

PLUMBING LEGEND

----	NEW DOMESTIC COLD WATER (W1)
----	EXISTING DOMESTIC COLD WATER (X-W1)
----	NEW DOMESTIC HOT WATER (HW)
----	EXISTING DOMESTIC HOT WATER (X-HW)
----	NEW DOMESTIC TEMPERED WATER (TW)
----	EXISTING DOMESTIC TEMPERED WATER (TW)
----	NEW NON-POTABLE WATER (W2)
----	EXISTING NON-POTABLE WATER (X-W2)
----	NEW SANITARY SEWER (SS)
----	EXISTING SANITARY SEWER (X-SS)
----	NEW STORM PIPING (ST)
----	NEW STORM OVER FLOW PIPING (OFST)
----	EXISTING STORM PIPING (X-ST)
----	NEW VENT (V)
----	EXISTING VENT (X-V)
	EQUIPMENT TO BE REMOVED
	BALL VALVE
	GATE VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	CONTROL VALVE
	PRESSURE REGULATOR
	STRAINER
	HOSE BIB
	PIPE ELBOW/TEE DOWN
	PIPE ELBOW/TEE UP
	CAPPED PIPE END



DUCTLESS SPLIT SYSTEM																				
MARK	MANUFACTURER	TYPE	LOCATION	REFRIGERANT	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	INDOOR UNIT						OUTDOOR UNIT						REMARKS	
							MODEL	AMPS	VOLTS / PHASE	DIMENSIONS (W x D x H)	OPERATING WEIGHT	NOISE RATING dB(A)	MODEL	MCA	MOCP	VOLTS / PHASE	DIMENSIONS (W x D x H)	OPERATING WEIGHT		NOISE RATING dB(A)
60-DSS-01	LG	HIGH WALL	ELECTRICAL 606	R-410A	12,000	13,600	LSN120HSV5	0.4	208-230V/1Ø	34" x 8" x 12"	20 LBS	41 / 35 / 25	LSU120HSV5	10	15	208-230V/1Ø	32" x 12" x 22"	75 LBS	47	1, 2, 3, 4, 5
1. PROVIDE DISCONNECT. 2. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT. 3. PROVIDE WALL MOUNTED WIRED THERMOSTAT. 4. PROVIDE LOW AMBIENT WIND BAFFLE TO PERMIT OPERATION DOWN TO 0°F. 5. PROVIDE WALL MOUNTING BRACKETS FOR OUTDOOR UNIT.																				

GAS FIRED MAKEUP AIR UNITS																				
MARK	MANUFACTURER	MODEL	SERVICE	SUPPLY FAN					HEATING			FILTERS	UNIT ELECTRICAL			PHYSICAL DATA				REMARKS
				SUPPLY AIR (CFM)	ESP (IN WC)	MOTOR HP	BHP	RPM	INPUT (MBH)	OUTPUT (MBH)	STAGES		MCA	MOP	VOLTS / PH	LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	
60-MAU-01	GREENHECK	DGX-P112-H12-MF	FILTER 605 & STORAGE 607	1,250	0.5	1/2	0.44	1,779	205	189	MODULATING	ALUMINUM	1.7	15	480V / 3Ø	116"	34"	39"	750	1, 2, 3, 4, 5, 6
1. PROVIDE DISCONNECT SWITCH. UNIT TO BE PROVIDED WITH INTEGRAL STARTER. 2. PROVIDE REMOTE CONTROL PANEL. 3. PROVIDE INLET DAMPER. 4. PROVIDE WEATHERHOOD WITH BIRDSCREEN. 5. PROVIDE 18"HIGH ROOF CURB. 6. PROVIDE V-BANK FILTER SECTION																				

FANS																
MARK	MANUFACTURER	MODEL	SERVICE	LOCATION	CONSTRUCTION			AIR			ELECTRICAL			WEIGHT (LBS)	SONES	REMARKS
					TYPE	FAN MATERIAL	DRIVE	AIRFLOW (CFM)	ESP (IN WC)	RPM	HP	BHP	VOLTS / PH			
60-EF-01	GREENHECK	CUE-090-VG	CHLORINATION 603	ROOF	UPBLAST	ALUMINUM	DIRECT	350	0.25	1,276	1/10	0.05	115V / 1Ø	30	5.5	1, 2, 3, 4, 5
60-EF-02	GREENHECK	CUE-099-VG	FILTER 605	ROOF	UPBLAST	ALUMINUM	DIRECT	650	0.5	1,408	1/4	0.13	115V / 1Ø	55	7.7	1, 2, 3, 4, 5
60-EF-03	GREENHECK	CUE-095-VG	STORAGE 607	ROOF	UPBLAST	ALUMINUM	DIRECT	600	0.25	1,515	1/6	0.11	115V / 1Ø	50	7.8	1, 2, 3, 4, 5
1. PROVIDE GRAVITY BACKDRAFT DAMPER. 2. PROVIDE FACTORY MOUNTED AND WIRED DISCONNECT SWITCH. 3. PROVIDE HI-PRO POLYESTER COATING ON ALL PARTS INCLUDING DAMPER. COLOR TO BE EITHER GREY OR IVORY. FINAL SELECTION BY ARCHITECT. 4. PROVIDE ROOF CURB/ROOF CURB ADAPTER. 5. PROVIDE VARI-GREEN EC MOTOR WITH DIAL SPEED CONTROL MOUNTED ON MOTOR FOR BALANCING PURPOSES.																

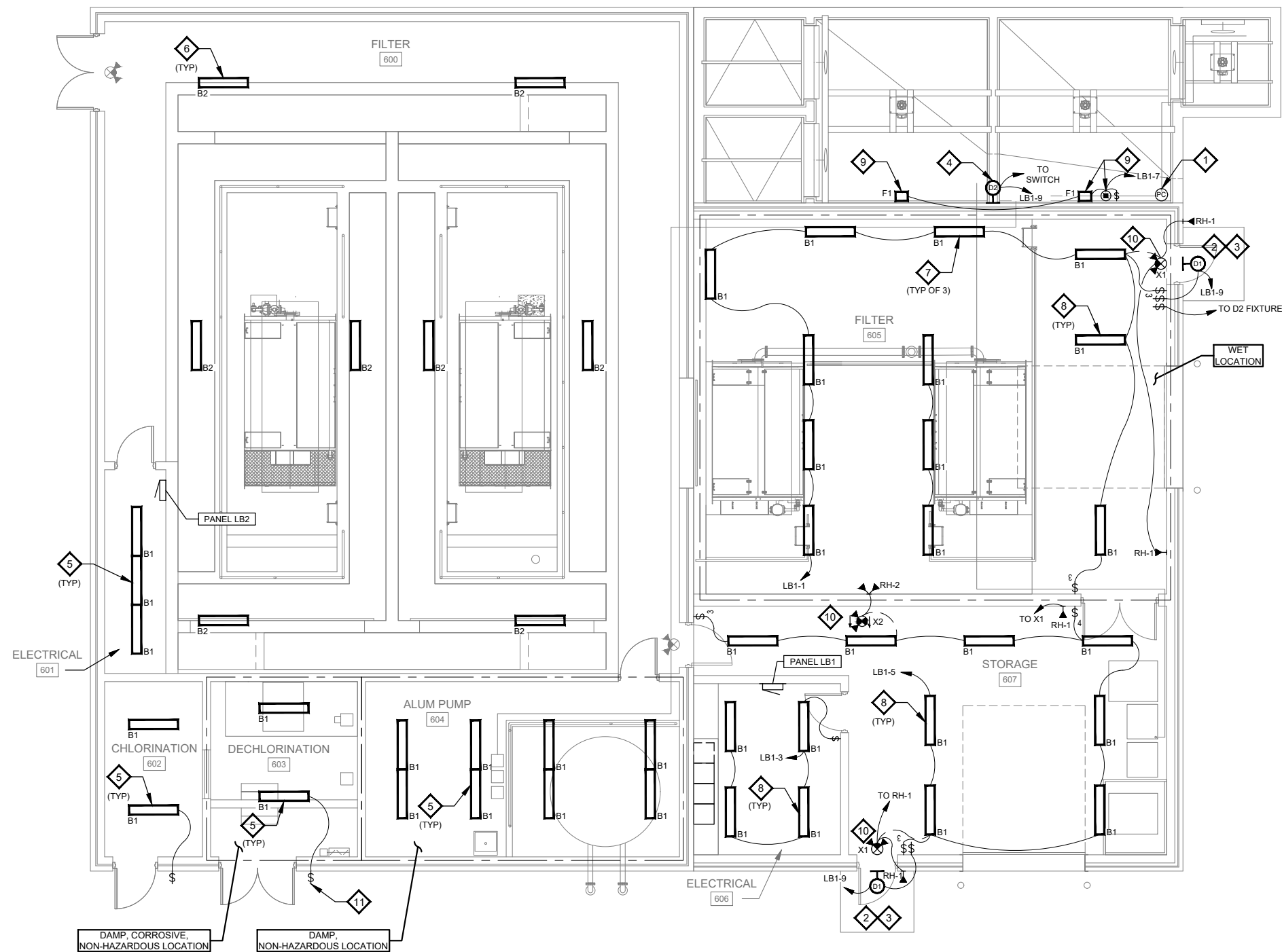
DIFFUSERS AND GRILLES										
TYPE	MANUFACTURER	MODEL	TYPE	SERVICE	MATERIAL	BLADES		MOUNTING / FRAME	FINISH	REMARKS
						SPACING	ANGLE			
A	CONTR. FABRICATED	-	-	EXHAUST	STAINLESS STEEL	-	-	DUCT	MILL	1
B	TITUS	132RS	DOUBLE DEFLECTION	SUPPLY	ALUMINUM	3"	-	SIDEWALL	WHITE	
1. 1" x 1" STAINLESS STEEL SCREENING WITH STAINLESS STEEL FRAMED BORDER.										

ELECTRIC CONVECTOR									
MARK	MANUFACTURER	MODEL	MOUNTING	LOCATION	ELECTRICAL			OPERATING WEIGHT	REMARKS
					KW	AMPS	VOLTS / PH		
60-CONV-01	CHROMALOX	HCH-201	SURFACE	ELECTRICAL 601	2	9.6	208V / 1Ø	41 LBS	1, 2
1. PROVIDE FACTORY MOUNTED AND WIRED INTEGRAL THERMOSTAT. 2. PROVIDE DISCONNECT SWITCH.									

ELECTRIC CONTROL DAMPERS							
MARK	MANUFACTURER	MODEL	BLADE CONFIGURATION	SIZE	LOCATION	VOLTS/ PHASE	REMARKS
60-D-01	TAMCO	SERIES 1000	PARALLEL	20" x 24"	CHLORINATION 603	115V / 1Ø	1, 2, 3, 4
1. PROVIDE WITH BELIMO ACTUATOR. VERIFY NUMBER OF ACTUATORS REQUIRED AND COORDINATE WITH ELECTRICAL CONTRACTOR. 2. PROVIDE WITH 3 COAT BAKED PHENOLIC COATING. 3. PROVIDE WITH CORROSION RESISTANT ACTUATOR HOUSING. 4. DAMPER TO BE MOUNTED TO EXISTING LOUVER. FIELD VERIFY EXACT SIZE PRIOR TO ORDERING NEW DAMPER.							

GAS FIRED UNIT HEATERS											
MARK	MANUFACTURER	MODEL	NATURAL GAS INPUT (MBH)	MINIMUM EFFICIENCY	CFM	MOTOR		ELECTRICAL		OPERATING WEIGHT	REMARKS
						HP	RPM	AMPS	VOLTS / PH		
60-GUH-01	MODINE	HDS SIZE 60	60	82%	990	1/12	1,625	3.3	115V / 1Ø	80 LBS	1, 2, 3, 4
60-GUH-02	MODINE	HDS SIZE 60	60	82%	990	1/12	1,625	3.3	115V / 1Ø	80 LBS	1, 2, 3, 4
60-GUH-03	MODINE	HDS SIZE 45	45	82%	720	1/15	1,550	3.8	115V / 1Ø	60 LBS	1, 2, 3, 4
60-GUH-04	MODINE	HDS SIZE 30	30	82%	505	1/15	1,550	3.8	115V / 1Ø	55 LBS	1, 2, 3, 4
1. PROVIDE DISCONNECT. 2. PROVIDE CONCENTRIC COMBUSTION AIR INTAKE/VENT KIT. 3. PROVIDE STAINLESS STEEL HEAT EXCHANGER AND FLUE COLLECTOR BOX. 4. MOUNT HEATER SUCH THAT THE BOTTOM OF THE UNIT IS AT A HEIGHT OF 8'-0" AFF.											

ELECTRIC UNIT HEATERS										
MARK	MANUFACTURER	MODEL	KW	CFM	MOTOR		ELECTRICAL		OPERATING WEIGHT	REMARKS
					HP	RPM	AMPS	VOLTS / PH		
60-EUH-01	Q-MARK	MUH03-41	3	350	1/100	1,600	3.6	480V / 3Ø	27 LBS	1, 2, 3
60-EUH-02	INDEECO	234-U11N-0080U	7.5	700	1/4	1,750	11.0	480V / 3Ø	56 LBS	1, 2, 3, 4, 5
60-EUH-03	INDEECO	234-U11N-0080U	7.5	700	1/4	1,750	11.0	480V / 3Ø	56 LBS	1, 2, 3, 4, 5
60-EUH-04	Q-MARK	MUH03-41	3	350	1/100	1,600	3.6	480V / 3Ø	27 LBS	1, 2, 3
1. PROVIDE FACTORY MOUNTED AND WIRED INTEGRAL THERMOSTAT. 2. PROVIDE FACTORY MOUNTED AND WIRED INTEGRAL DISCONNECT SWITCH. 3. MOUNT HEATER SUCH THAT THE BOTTOM OF THE UNIT IS AT A HEIGHT OF 8'-0" AFF. 4. PROVIDE STAINLESS STEEL MOUNTING BRACKET WITH EPOXY COATING. 5. UNIT HEATER SHALL BE CORROSION RESISTANT (316 STAINLESS STEEL CONSTRUCTION).										

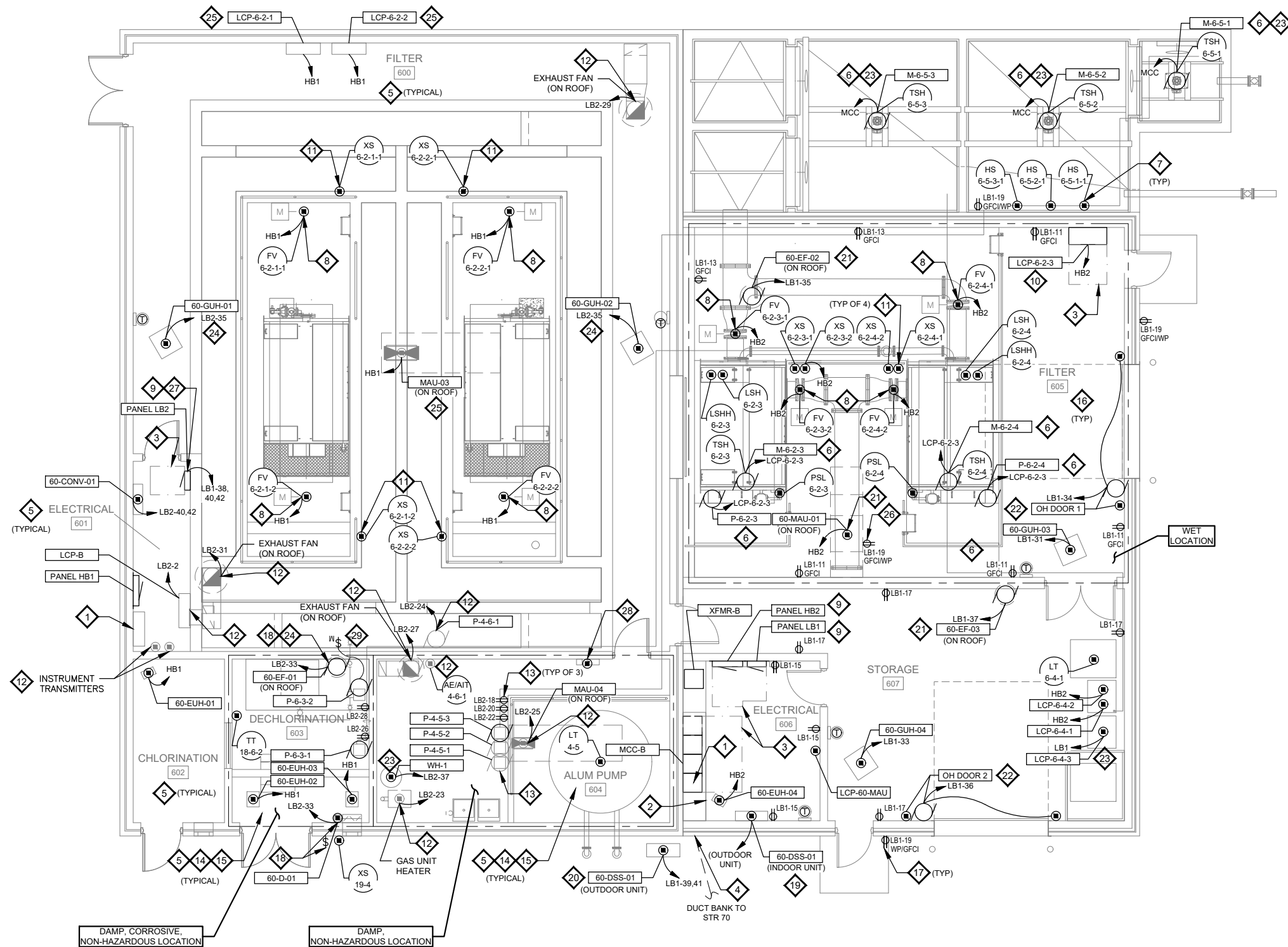


GENERAL NOTES

1. DO NOT SCALE DRAWINGS TO DETERMINE EXACT LOCATION OF ELECTRICAL EQUIPMENT AND CONNECTIONS.
2. 120V HOMERUN WIRING SHALL BE A MINIMUM OF (2) #12 & #12IG IN 3/4" UNLESS OTHERWISE NOTED. SIZE FOR VOLTAGE DROP.
3. ALL CONDUIT STUBBED UP THROUGH CONCRETE SHALL BE PVC COATED GR5.
4. REFER TO SPECIFICATION 26 05 00 FOR CONDUIT, BOX, AND HARDWARE USAGE REQUIREMENTS.
5. ALL CONDUIT IN CHEMICAL ROOMS SHALL BE EXPOSED, SCH 80 PVC.
6. VERIFY CONTINUITY OF ALL NEW AND EXISTING CIRCUITS THAT ARE TO BE CONNECTED OR RE-CONNECTED AS A PART OF THIS PROJECT AND PROVIDE TESTING REPORT TO ENGINEER. REFER TO REQUIREMENTS IN SPECIFICATION 26 05 19.

 KEY NOTES

1. PROVIDE PHOTOCELL, TORK MODEL #2001, OR EQUAL, TO CONTROL EXTERIOR WALL PACK FIXTURES.
2. WIRE EXTERIOR TYPE 'D1' FIXTURES TO BE CONTROLLED FROM PHOTOCELL AND INTERNAL MOTION SENSOR WHEN SWITCH IS IN THE ON POSITION. CIRCUIT AS INDICATED.
3. WALL MOUNT TYPE 'D1' FIXTURE 12" ABOVE HEIGHT OF DOOR OPENING. EXTERIOR TYPE 'D1' FIXTURE TO BE FIELD LOCATED TO AVOID CONFLICTS WITH ARCHITECTURAL DESIGN AND PROCESS EQUIPMENT.
4. WALL MOUNT TYPE 'D2' FIXTURE AT 11' AFF. EXTERIOR TYPE 'D2' FIXTURE TO BE FIELD LOCATED TO AVOID CONFLICTS WITH ARCHITECTURAL DESIGN AND PROCESS EQUIPMENT.
5. MOUNT TYPE 'B1' FIXTURES IN SAME LOCATION AS EXISTING.
6. MOUNT TYPE 'B2' FIXTURES IN SAME LOCATION AS EXISTING..
7. PROVIDE WALL BRACKETS TO MOUNT TYPE 'B1' FIXTURES IN LOWER LEVEL AT 45 DEGREE ANGLE. MOUNT AT 8' AFF. COORDINATE LOCATION IN FIELD TO AVOID CONFLICTS WITH PROCESS PIPING.
8. MOUNT TYPE 'B1' FIXTURE TIGHT TO CEILING.
9. MOUNT TYPE 'F1' FIXTURE 78" ABOVE FINISHED TANK FLOOR. GC TO PROVIDE NICHE IN TANK WALL PER MANUFACTURER'S REQUIREMENTS. COORDINATE WITH ELECTRICAL CONTRACTOR. ROUTE MANUFACTURER'S CORD IN CONDUIT FROM FIXTURE J-BOX TO J-BOX AND SWITCH.
10. PROVIDE CIRCUIT FOR REMOTE HEADS FROM EXIT FIXTURES AS SHOWN.
11. PROVIDE TWO-POLE SWITCH TO CONTROL LIGHTS AND FAN. INTERLOCK LIGHT SWITCH WITH LOCAL CONTROL STATION SO THAT FAN RUNS WHEN LIGHT SWITCH IS ON AND LOCAL CONTROL STATION IS IN ANY POSITION. REFER TO POWER & INSTRUMENTATION PLAN, ELECTRICAL SPECIFICATIONS, AND HVAC SEQUENCE OF OPERATION.



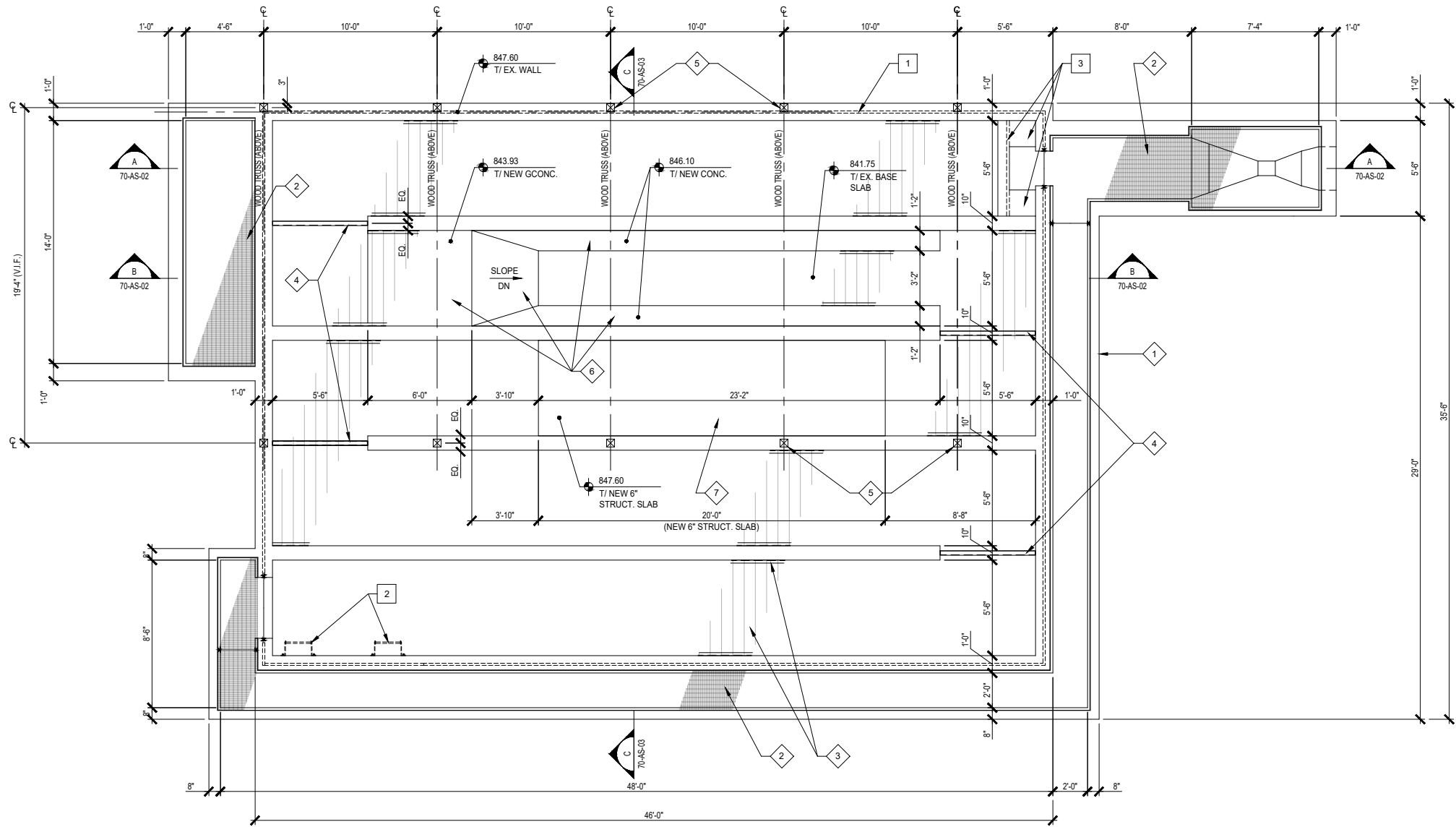
POWER AND INSTRUMENTATION PLAN

GENERAL NOTES

1. DO NOT SCALE DRAWINGS TO DETERMINE EXACT LOCATION OF ELECTRICAL EQUIPMENT AND CONNECTIONS.
2. 120V HOMERUN WIRING SHALL BE A MINIMUM OF (2) #12 & #12G IN 3/4" UNLESS OTHERWISE NOTED. SIZE FOR VOLTAGE DROP.
3. SEE ONE-LINE DIAGRAM, PANEL SCHEDULE, AND FIELD DEVICE WIRING SCHEDULE FOR WIRING OF ALL PROCESS AND INSTRUMENTATION.
4. PROVIDE RACEWAY FOR ALL HVAC EQUIPMENT CIRCUITS. PROVIDE WIRING FOR ALL HVAC POWER AND CONTROL CIRCUITS AT LINE VOLTAGE AND ABOVE.
5. INSTALL FIELD INSTRUMENTS PER DETAIL REFERENCED IN FIELD DEVICE WIRING SCHEDULE.
6. ALL CONDUIT STUBBED UP THROUGH CONCRETE SHALL BE PVC COATED GRS.
7. REFER TO SPECIFICATION 26 05 00 FOR CONDUIT, BOX, AND HARDWARE USAGE REQUIREMENTS.
8. SEE SCADA OVERVIEW FOR COMMUNICATIONS CABLING REQUIREMENTS.
9. ALL EXTERIOR RECEPTACLES OR RECEPTACLES MOUNTED IN WET LOCATIONS SHALL BE WET LOCATION GFCI TYPE WITH WEATHERPROOF WHILE-IN-USE COVERS.
10. ALL CONDUIT IN CHEMICAL ROOMS SHALL BE EXPOSED, SCH 80 PVC.
11. PROVIDE GFCI CIRCUIT BREAKERS FOR ALL RECEPTACLE LOADS IN CHEMICAL ROOMS.
12. VERIFY CONTINUITY OF ALL NEW AND EXISTING CIRCUITS THAT ARE TO BE CONNECTED OR RE-CONNECTED AS A PART OF THIS PROJECT AND PROVIDE TESTING REPORT TO ENGINEER. REFER TO REQUIREMENTS IN SPECIFICATION 26 05 19.

KEY NOTES

1. CONNECT EXISTING BUILDING FEEDER TO NEW MAIN CIRCUIT BREAKER IN PANEL HB1.
2. GC TO PROVIDE 4" CONCRETE HOUSEKEEPING PAD FOR MCC AND TRANSFORMER PER ARCHITECTURAL/STRUCTURAL REQUIREMENTS. PAD TO EXTEND 4" IN FRONT OF AND 2" TO THE SIDES OF EQUIPMENT. COORDINATE SIZE WITH EQUIPMENT TO BE SUPPLIED. MAINTAIN SPACE FOR FUTURE SECTION ON NORTH END OF LINEUP AS SHOWN.
3. MAINTAIN NEC REQUIRED WORKING CLEARANCES.
4. PROVIDE CONDUIT ENTRANCE PER E2-14. TERMINATE POWER CIRCUITS BELOW DISTRIBUTION PANELS LB1 AND HB2. ROUTE FIBER OPTIC AND FUTURE CONDUIT TO JUST INSIDE SOUTH WALL OF ELECTRICAL ROOM STUBBED UP 2" AFF. EXTEND FIBER OPTIC CONDUIT TO PANEL LCP-B. PROVIDE CAP FOR FUTURE CONDUIT. REFER TO SITE PLAN.
5. EXISTING LIGHT SWITCHES AND RECEPTACLES IN THIS AREA, UNLESS OTHERWISE NOTED, ARE TO REMAIN IN SERVICE AND BE RE-CIRCUITED TO NEW PANEL AS SCHEDULED. EXTEND RACEWAY AND CONDUCTORS AS NEEDED.
6. PROVIDE MOTOR CONNECTION PER DETAIL E1-01 OR E1-02, DEPENDING ON CONDUIT ROUTING.
7. WALL MOUNT CONTROL STATIONS AND DISCONNECT SWITCHES AT 48" AFF.
8. PROVIDE MOTOR RATED SWITCH, SQUARE D TYPE 2510, OR EQUAL, TO SERVE AS LOCAL DISCONNECT. PROVIDE PEDESTAL PER DETAIL E1-03 OR WALL-MOUNT IN LOCATION WITHIN SIGHT OF VALVE. COORDINATE LOCATION IN FIELD WITH ENGINEER.
9. MOUNT PANEL PER DETAIL E2-01.
10. MOUNT CONTROL PANEL PER DETAIL E2-05.
11. MOUNT CONTROL STATION ON RAILING PER DETAIL E2-04.
12. EXISTING EQUIPMENT TO REMAIN. EXTEND CIRCUIT AS NEEDED AND RECONNECT EXISTING CIRCUIT TO NEW PANEL LB2 AS SCHEDULED. VERIFY CIRCUIT CONTINUITY PER SPECIFICATIONS. CONFIRM CIRCUITS IN FIELD. REFER TO HVAC PLANS AND ELECTRICAL REMOVAL PLANS.
13. PROVIDE STAINLESS STEEL STRUT FOR NEW RECEPTACLES AND CONTROL CIRCUITS SERVING ONE NEW AND TWO EXISTING ALUM PUMPS.
14. ALL NEW CONDUIT AND WIRING DEVICES IN CHEMICAL ROOMS SHALL BE SURFACE-MOUNTED SCH 80 PVC.
15. ALL RECEPTACLES IN THE CHEMICAL ROOMS SHALL BE CHEMICAL RESISTANT TYPE WITH WEATHERPROOF WHILE IN USE COVERS, AND SHALL BE PROTECTED BY GFCI CIRCUIT BREAKERS IN LIGHTING PANEL.
16. ALL RECEPTACLES IN THIS AREA SHALL BE WET LOCATION, GFCI TYPE WITH WEATHERPROOF COVERPLATES.
17. PROVIDE GFCI RECEPTACLES WITH METALLIC WEATHERPROOF WHEN IN USE COVERPLATES.
18. INTERLOCK FAN, DAMPER AND LIGHTS PER HVAC PLANS AND SEQUENCE AND P&ID REFER TO LIGHTING PLAN NOTES.
19. INDOOR UNIT POWERED BY OUTDOOR UNIT.
20. PROVIDE 2-#10 AND 1-#10 GROUND PER MANUFACTURER'S RECOMMENDATIONS FOR POWER CONDUCTORS TO DSS OUTDOOR UNIT.
21. INTERLOCK FAN OPERATION WITH MAKEUP AIR UNIT PER P&IDS AND HVAC SEQUENCE OF OPERATION.
22. PROVIDE RACEWAY AND CONDUCTOR FOR LOCAL CONTROL STATION AND SAFETY SYSTEM OF OVERHEAD DOOR OPERATOR PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
23. PROVIDE LOCAL NON-FUSED DISCONNECT SWITCH. MOUNT ON WALL NEAR EQUIPMENT.
24. NEW EQUIPMENT TO BE REPLACED IN SAME LOCATION AS EXISTING. EXTEND CIRCUIT AS NEEDED AND CONNECT EXISTING CIRCUIT TO NEW PANEL AS SCHEDULED. VERIFY CIRCUIT CONTINUITY PER SPECIFICATIONS. CONFIRM CIRCUITS IN FIELD. REFER TO HVAC PLANS AND ELECTRICAL REMOVAL PLANS.
25. EXISTING EQUIPMENT TO REMAIN. EXTEND CIRCUIT TO NEW PANEL HB1 AS SCHEDULED. PROVIDE JUNCTION BOX AT EXISTING MCC TO EXTEND CIRCUIT TO NEW PANEL. VERIFY CIRCUIT CONTINUITY PER SPECIFICATIONS. CONFIRM CIRCUITS IN FIELD AND REFER TO ELECTRICAL REMOVAL PLAN.
26. PROVIDE GFCI RECEPTACLE WITH METALLIC WEATHERPROOF COVERPLATE AND MOUNT ON ROOF NEAR MAKEUP AIR UNIT.
27. PROVIDE 3-#3 & #8G IN 1" CONDUIT FROM PANEL LB1 TO SERVE PANEL LB2.
28. EXISTING MAKEUP AIR UNIT AND FAN CONTROL STATIONS TO REMAIN.
29. PROVIDE MOTOR RATED SWITCH TO SERVE CHLORINE PUMP.



STRUCTURE PLAN

1

GENERAL NOTES

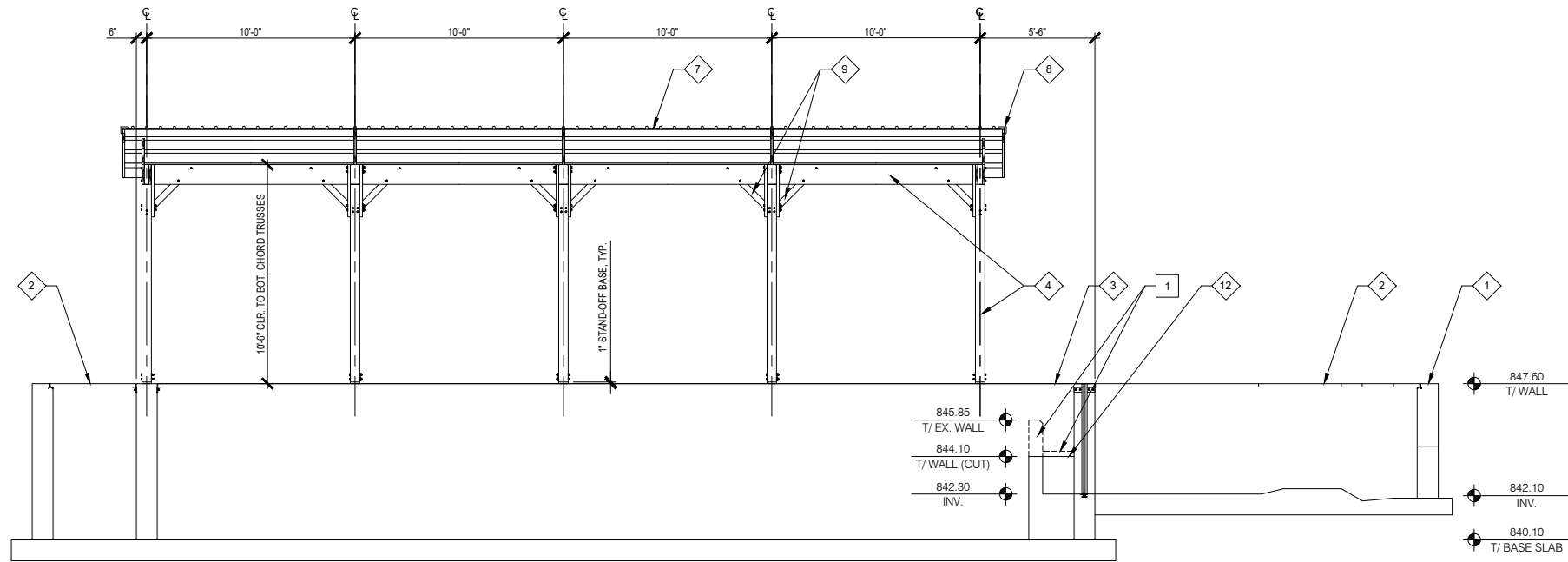
1. GENERAL NOTES, REMOVAL NOTES, AND KEY NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO CONVEY TYPICAL CONDITIONS AND SHALL BE TAKEN TO ALSO APPLY TO SIMILAR CONSTRUCTION DEPICTED ELSEWHERE THROUGHOUT THE PROJECT DOCUMENTS.
2. EXISTING INFORMATION SHOWN ON DRAWINGS WAS OBTAINED, IN PART, FROM EXISTING DOCUMENTATION, FIELD MEASUREMENTS AND INFORMATION PROVIDED BY OTHERS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACCURACY OF INFORMATION AS REQUIRED TO ACCOMMODATE REMOVALS & NEW CONSTRUCTION.
3. NEW WOOD FRAME SHELTER STRUCTURE ABOVE EL. 847.60 SHALL BE A DELEGATED DESIGN PRE-ENGINEERED POLE-TYPE STRUCTURE, INCLUDING BUT NOT LIMITED TO: PRIMARY & SECONDARY STRUCTURAL FRAMING SYSTEMS, BRACING, METAL ROOFING, TRIM, ANCHORS, AND ACCESSORIES.
4. PRE-ENGINEERED BUILDING SUPPLIER (PEBS) SHALL FURNISH DESIGN DRAWINGS AND CALCULATIONS SEALED BY A WISCONSIN LICENSED PROFESSIONAL ENGINEER. DESIGN SHALL BE COMPLETED BASED ON LOADINGS INDICATED, AND ACCORDING TO APPLICABLE PROVISIONS OF THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES SPS 362 (IBC 2009 WITH WI AMENDMENTS).
5. DELEGATED DESIGN LOADS
GRAVITY SNOW, SEISMIC & WIND LOAD DESIGN PER ASCE 7-05. REFERENCE SPECIFICATION FOR ADDITIONAL REQTS.
6. DESIGN AND CONSTRUCTION SHALL COMPLY WITH AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS)".
7. PERMANENT TRUSS BRACING INSTALLATION SHALL BE IN ACCORDANCE WITH "BUILDING COMPONENT SAFETY INFORMATION" (BCSI) MANUAL JOINTLY PRODUCED BY THE TRUSS PLATE INSTITUTE (TPI) AND STRUCTURAL BUILDING COMPONENTS ASSOCIATION (SBCA), 2013 EDITION, UPDATED MARCH 2015.
8. INSTALL PERMANENT TRUSS BRIDGING AS REQUIRED BY DESIGN.
9. MISC. WOOD CONNECTIONS SHALL BE PER IBC TABLE 2304.9.1
10. LIMIT DEFLECTION FOR LIVE OR SNOW LOADS TO L/180.
11. LIMIT BUILDING LATERAL DRIFT TO H/180.
12. COMPLY WITH APPLICABLE TPI STANDARDS.
13. PRE-ENGINEERED WOOD SYSTEM SHALL BE CONSTRUCTED OF PRESSURE-TREATED (P.T.) WOOD COMPONENTS.
14. ALL FASTENERS CONNECTING PRESSURE-TREATED WOOD COMPONENTS AND INCLUDING CONNECTION TO FOUNDATION SHALL BE ZINC PLATED OR HOT-DIP GALVANIZED.
15. TRUSSES SHALL BE CLEAR SPAN.

REMOVAL NOTES

1. REMOVE ALL EX. ALUM. GUARDRAIL, SALVAGE FOR REUSE BY OWNER
2. REMOVE EX. LADDER RUNGS
3. REMOVE EX. CONC. STEM WALL AND GROUT BENCH TO LIMITS SHOWN

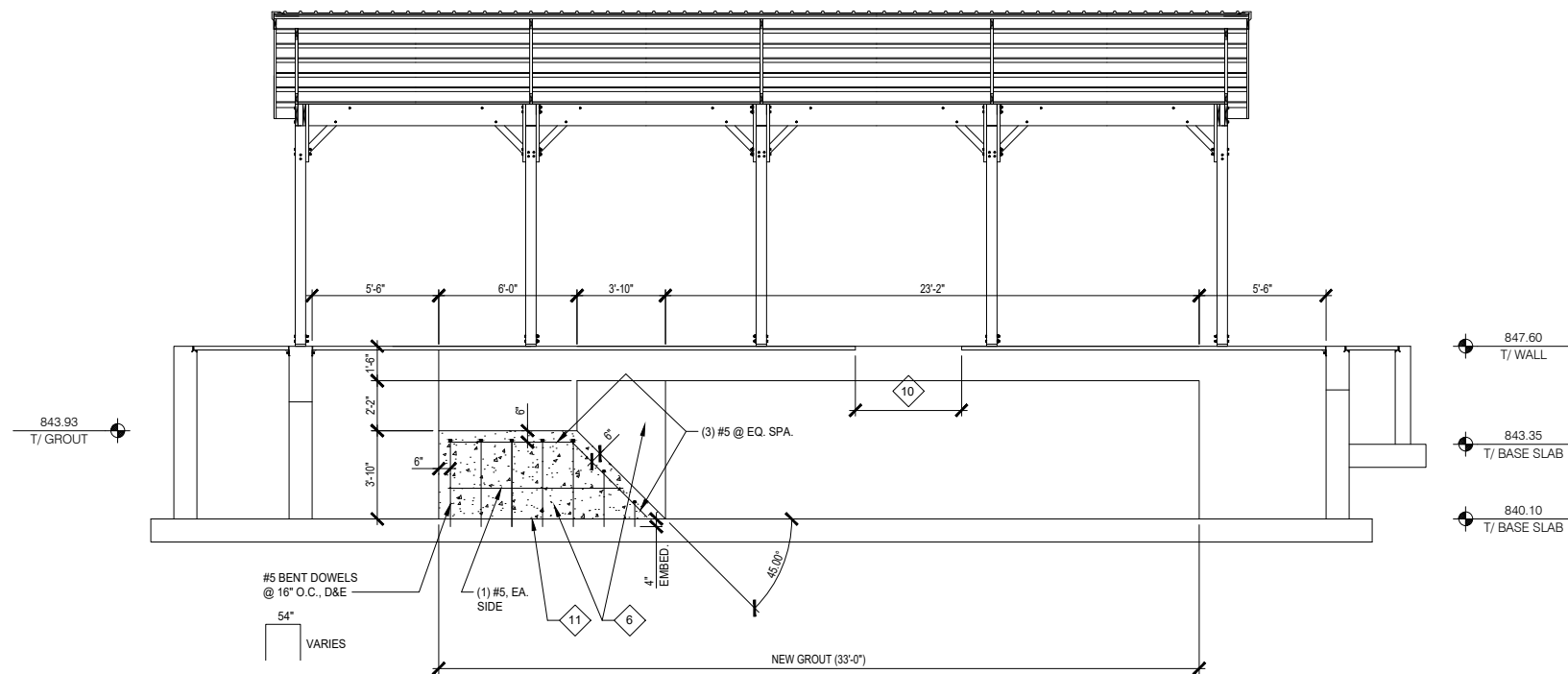
KEY NOTES

1. EX. CONCRETE STRUCTURE
2. EX. ALUM. GRATING OVER CHANNEL TO REMAIN
3. NEW ALUM. CLOSED PLANK & SURFACE MOUNT ALUM. SUPPORT ANGLES AT ALL LOCATIONS WITHOUT EX. GRATING, PROVIDE HINGED SECTIONS AT STOP GATES, REF. SHEET 100-AS-06 FOR TYPICAL DETAILS OF DESIGN, CONSTRUCTION & INSTALLATION
4. CS ALUM. PLANKING SUPPORT BEAM, TYP.
5. NEW P.T. 6X6 WOOD POST, TYP. AT (10) LOC., PRE-ENGINEERED BUILDING (PEB) POLE-TYPE STRUCTURE, REF. SPECIFICATION 13 34 00
6. NEW CONCRETE GROUT
7. NEW 6" STRUCTURAL CONCRETE SLAB



STRUCTURE SECTION

A



STRUCTURE SECTION

B

GENERAL NOTES

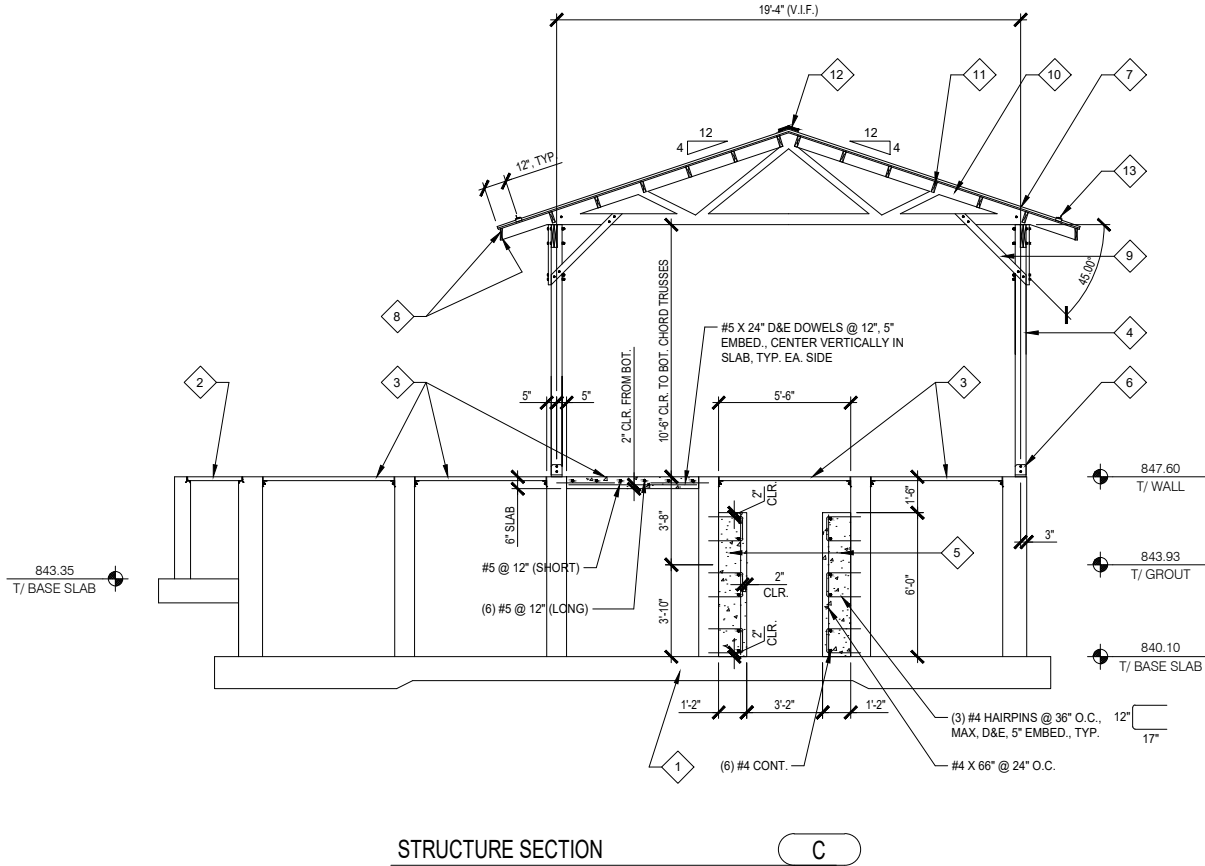
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2. EXISTING INFORMATION SHOWN ON DRAWINGS WAS OBTAINED, IN PART, FROM EXISTING DOCUMENTATION, FIELD MEASUREMENTS, AND INFORMATION PROVIDED BY OTHERS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACCURACY OF INFORMATION AS REQUIRED TO ACCOMMODATE REMOVALS & NEW CONSTRUCTION.

REMOVAL NOTES

1. REMOVE EX. CONC. STEM WALL AND GROUT BENCH TO LIMITS SHOWN, SAW-CUT AND GRIND SURFACE LEVEL.

KEY NOTES

1. EX. CONCRETE STRUCTURE
2. EX. ALUM. GRATING OVER TANK, CHANNEL & PARSHALL FLUME STRUCTURE TO REMAIN
3. NEW ALUM. PLANKING & SURFACE MOUNT ALUM. SUPPORT ANGLE TYPE '2P' AS SHOWN ON SHEET 100-AS-06, TYP. AT ALL LOCATIONS WITHOUT EX. GRATING, PROVIDE HINGED PLANK SECTIONS AT STOP GATES
4. NEW 6X6 WOOD STRUCTURE, POST ANCHORAGE TO EX. STRUCTURE BY PEBBS
5. EX. FLOW CONTROL GATE, TYP.
6. NEW CONCRETE GROUT
7. FACTORY-FINISHED METAL ROOF SYSTEM
8. FACTORY-FINISHED COPINGS & TRIM, WRAP FASCIA AT EAVE AND RAKE & RETURN MIN. 1" UP INSIDE FACE
9. WOOD KNEE BRACES AS REQUIRED BY DESIGN
10. OPENING IN NEW ALUM. PLANKING SYSTEM, REF. 'M' DWGS FOR EXACT LOCATION & EXTENTS
11. CLEAN EX. CONCRETE, REMOVE ANY LAITANCE, COAT WITH BONDING AGENT PRIOR TO NEW CONCRETE PLACEMENT, TYP. PREP. AT NEW-TO-EX. CONCRETE SURFACES
12. COAT REINFORCING AND CONCRETE SURFACE EXPOSED BY REMOVAL, WITH EPOXY PAINT



- GENERAL NOTES**
1. GENERAL NOTES, REMOVAL NOTES, AND KEY NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO CONVEY TYPICAL CONDITIONS AND SHALL BE TAKEN TO ALSO APPLY TO SIMILAR CONSTRUCTION DEPICTED ELSEWHERE THROUGHOUT THE PROJECT DOCUMENTS.
 2. EXISTING INFORMATION SHOWN ON DRAWINGS WAS OBTAINED, IN PART, FROM EXISTING DOCUMENTATION, FIELD MEASUREMENTS AND INFORMATION PROVIDED BY OTHERS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACCURACY OF INFORMATION AS REQUIRED TO ACCOMMODATE REMOVALS & NEW CONSTRUCTION.

- KEY NOTES**
1. EX. CONCRETE STRUCTURE
 2. EX. ALUM. GRATING OVER CHANNEL TO REMAIN
 3. NEW ALUM. PLANKING & SURFACE MOUNT ALUM. SUPPORT ANGLE TYPE '2P' AS SHOWN ON SHEET 100-AS-06, TYP. AT ALL LOCATIONS WITHOUT EX. GRATING. PROVIDE HINGED PLANK SECTIONS AT STOP GATES
 4. NEW P.T. 6X6 WOOD POST, TYP. AT (10) LOC., PRE-ENGINEERED BUILDING (PEB) POLE-TYPE STRUCTURE, REF. SPECIFICATION 13 34 00
 5. NEW CONCRETE GROUT
 6. BASE BRACKET POST ANCHORAGE BY PEBs, TYP. AT ALL NEW WOOD POST LOCATIONS
 7. FACTORY-FINISHED LAP-SEAM METAL ROOF SYSTEM
 8. FACTORY-FINISHED COPINGS & TRIM, WRAP FASCIA AT EAVE AND RAKE & RETURN MIN. 1" UP INSIDE FACE
 9. P.T. WOOD KNEE BRACES AS REQUIRED BY DESIGN
 10. P.T. WOOD TRUSSES AT 10'-0" O.C.
 11. P.T. 2X PURLINS AT 24" O.C.
 12. FACTORY-FINISHED CONT. METAL RIDGE COPING
 13. INSTALL CONT. BAR-TYPE SNOW GUARD ALONG EACH EAVE LINE AS SHOWN, 'S-5 BAR-TYPE' AS MANUFACTURED/SUPPLIED BY WWW.ROCKYMOUNTAINSNOWGUARDS.COM, OR APPROVED EQUAL, INSTALL PER MANUFACTURER RECOMMENDATIONS, SET GASKET/FASTENERS IN CLEAR SILICONE SEALANT

STRUCTURE SECTION

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

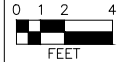
Village of Jackson, Wisconsin

PROJECT NO.:
JK 18
DRAWING FILE:

DRAWN BY:
WTS
CHECKED BY:

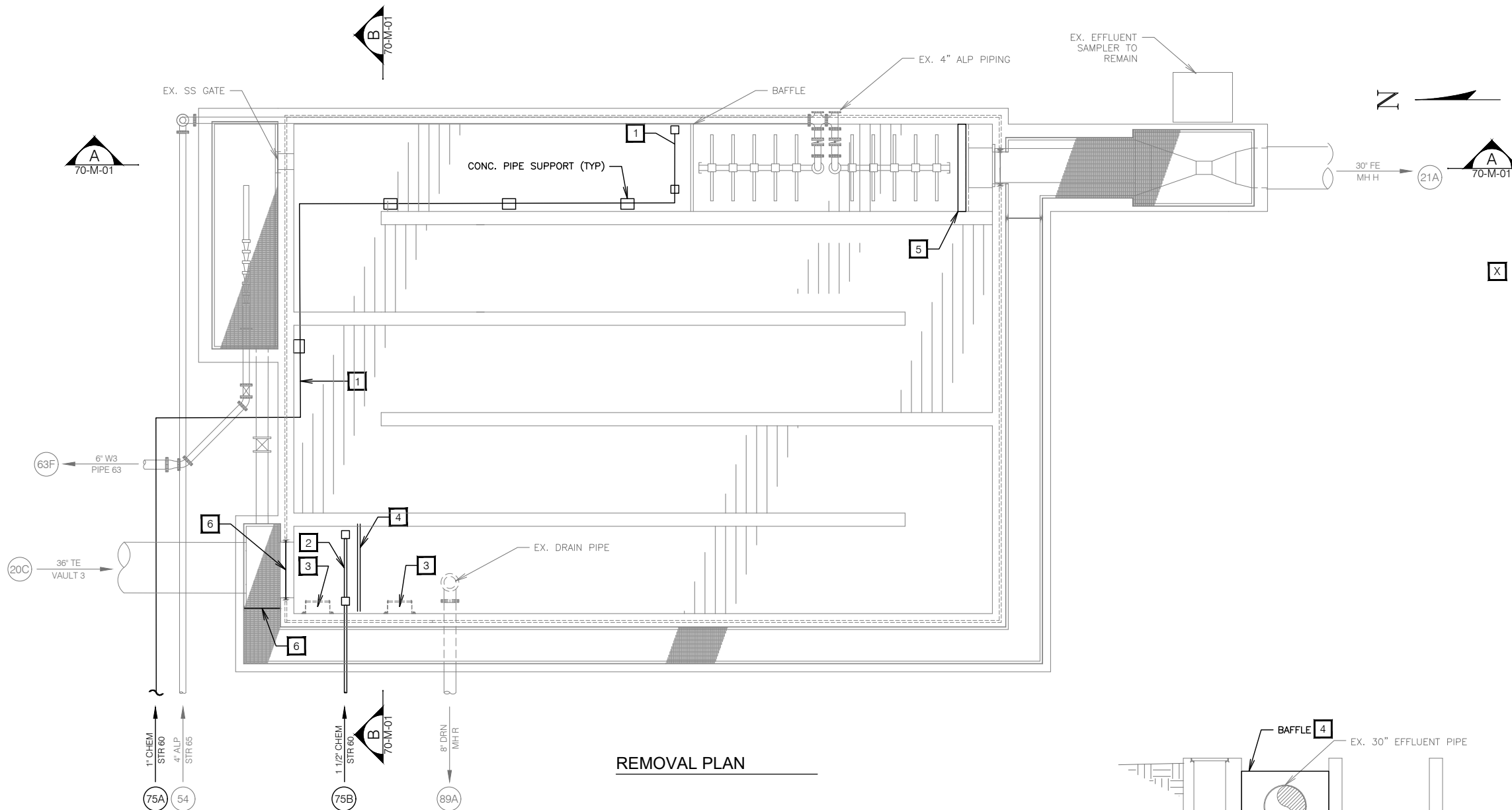
DATE:
1/3/24
REVISIONS:

SCALE:

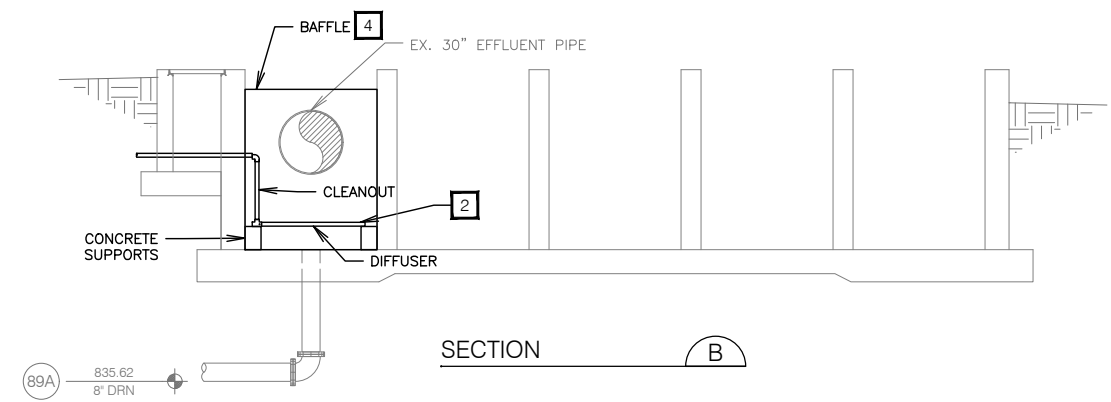


SHEET:
38
70-AS-03

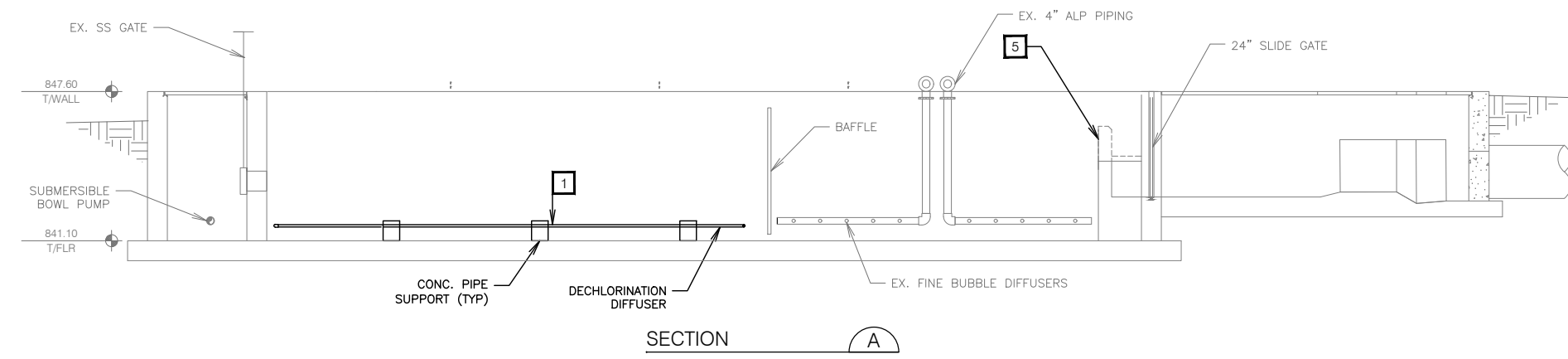
6264 Nesbitt Road
Madison, WI 53719
(608) 273-3350
www.tcengineers.net
TC
TOWN & COUNTRY
ENGINEERING, INC.



REMOVAL PLAN



SECTION B



SECTION A

GENERAL NOTES

1. REFER TO STRUCTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION AND MODIFICATIONS NOT LISTED HERE.
2. THE EXISTING STRUCTURE IS TO REMAIN IN SERVICE DURING CONSTRUCTION. COORDINATE DEMOLITION SCHEDULE WITH OWNER PER SECTION 01 00 00 OF SPECIFICATIONS.

REMOVAL NOTES

1. REMOVE EXISTING SODIUM BISULFATE PIPING AND SUPPORTS BACK TO THE WALL PENETRATION. CAP PIPE AT THE INTERIOR WALL.
2. REMOVE EXISTING CHLORINATION PIPING AND SUPPORTS BACK TO THE WALL PENETRATION. CAP PIPE AT THE INTERIOR WALL.
3. REMOVE ALL EXISTING MANHOLE RUNGS.
4. REMOVE EXISTING BAFFLE WALL.
5. SAWCUT AND REMOVE THE TOP 20" OF WALL. SEE SHEET 70-AS-01.
6. REMOVE EXISTING GATE AND FRAME.

6264 Nesbitt Road
Madison, WI 53719
(608) 273-3350
www.tceengineers.net



PROCESS REMOVAL PLAN AND SECTIONS
STRUCTURE 70

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION
Village of Jackson, Wisconsin

PROJECT NO.:	JK 18
DRAWING FILE:	70-M
DRAWN BY:	J.L.R.
CHECKED BY:	G.J.D.
DATE:	1-4-24
REVISIONS:	
SCALE:	
	0 1 2 4 FEET
SHEET:	39

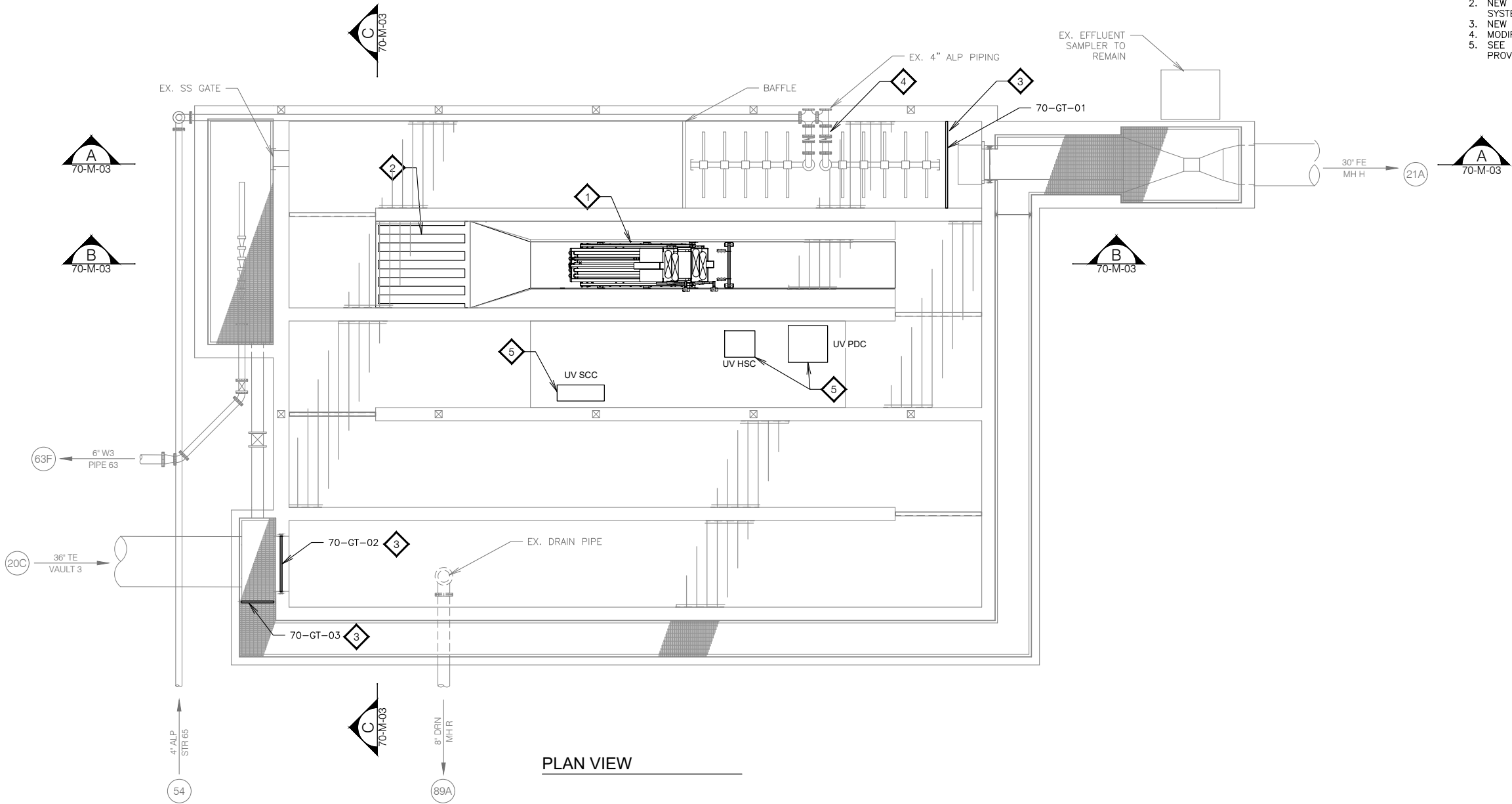
70-M-01

GENERAL NOTES

- 1. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION AND MODIFICATIONS NOT LISTED HERE.
- 2. THE EXISTING STRUCTURE IS TO REMAIN IN SERVICE DURING CONSTRUCTION. COORDINATE DEMOLITION SCHEDULE WITH OWNER.
- 3. THE UV DISINFECTION EQUIPMENT HAS BEEN PRE-SELECTED. MANUFACTURER'S INFORMATION IS INCLUDED IN THE SPECIFICATION SECTION 01 20 00 AND PRE-SELECTED EQUIPMENT MANUAL.

KEY NOTES

- 1. NEW TROJAN SIGNA UV DISINFECTION SYSTEM. REFERENCE SECTION 46 66 55 FOR EQUIPMENT.
- 2. NEW S.S. LEVEL CONTROL WEIR PROVIDED WITH UV DISINFECTION SYSTEM.
- 3. NEW STOP LOG GATE WITH FRAME GROUTED IN PLACE.
- 4. MODIFY GRATING TO FIT EXISTING PIPE LOCATION.
- 5. SEE 70-E-01 FOR PLACEMENT OF NEW ELECTRICAL EQUIPMENT PROVIDED WITH UV DISINFECTION SYSTEM.



PLAN VIEW

6264 Nesbitt Road
Madison, WI 53719
(608) 273-3350
www.tceengineers.net



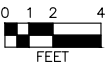
PROCESS PLAN
STRUCTURE 70

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION
Village of Jackson, Wisconsin

PROJECT NO.: JK 18
DRAWING FILE: 70-M
DRAWN BY: J.L.R.
CHECKED BY: G.J.D.

DATE: 1-4-24
REVISIONS:

SCALE:



SHEET: 40

70-M-02

- X

KEY NOTES
1.

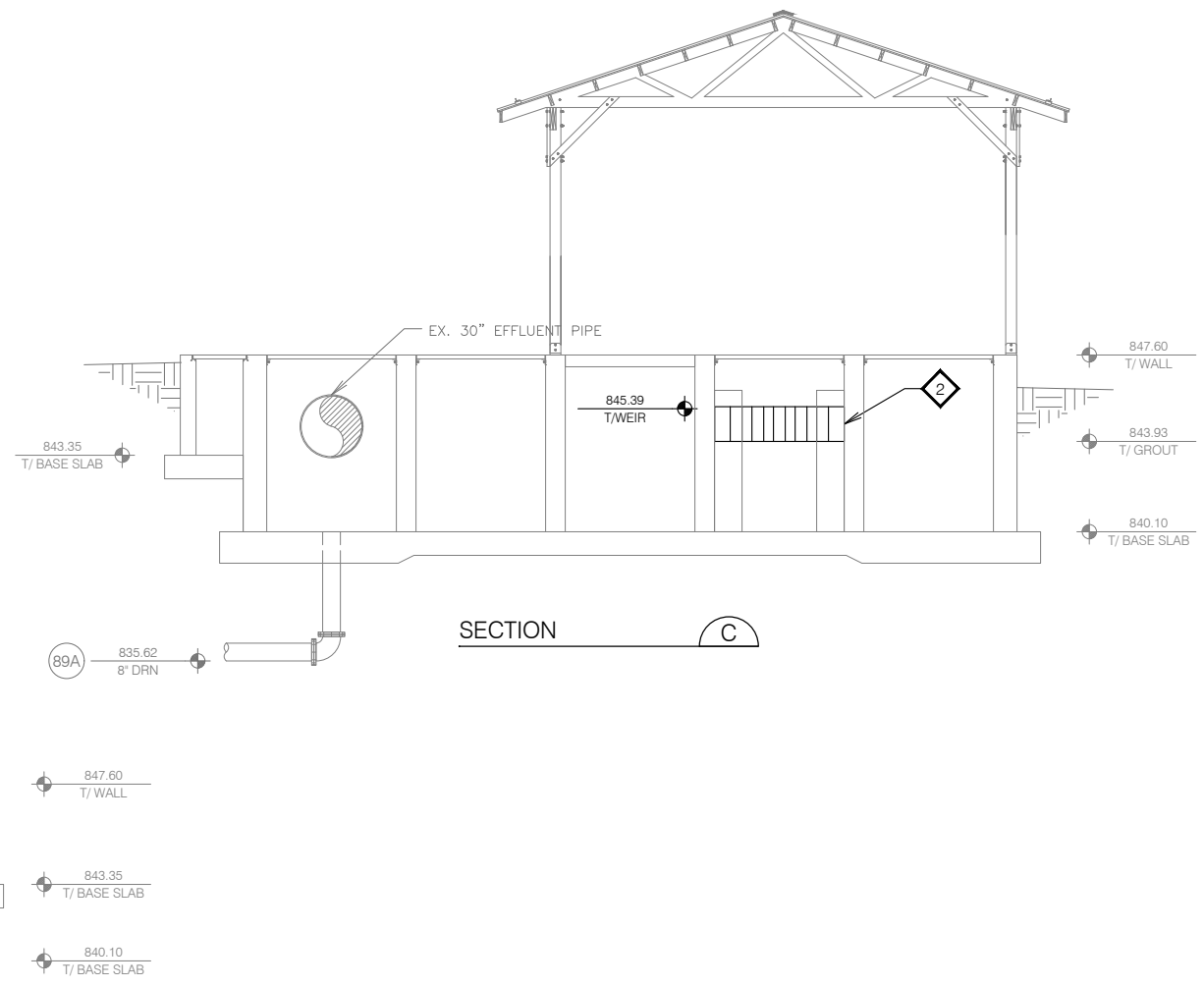
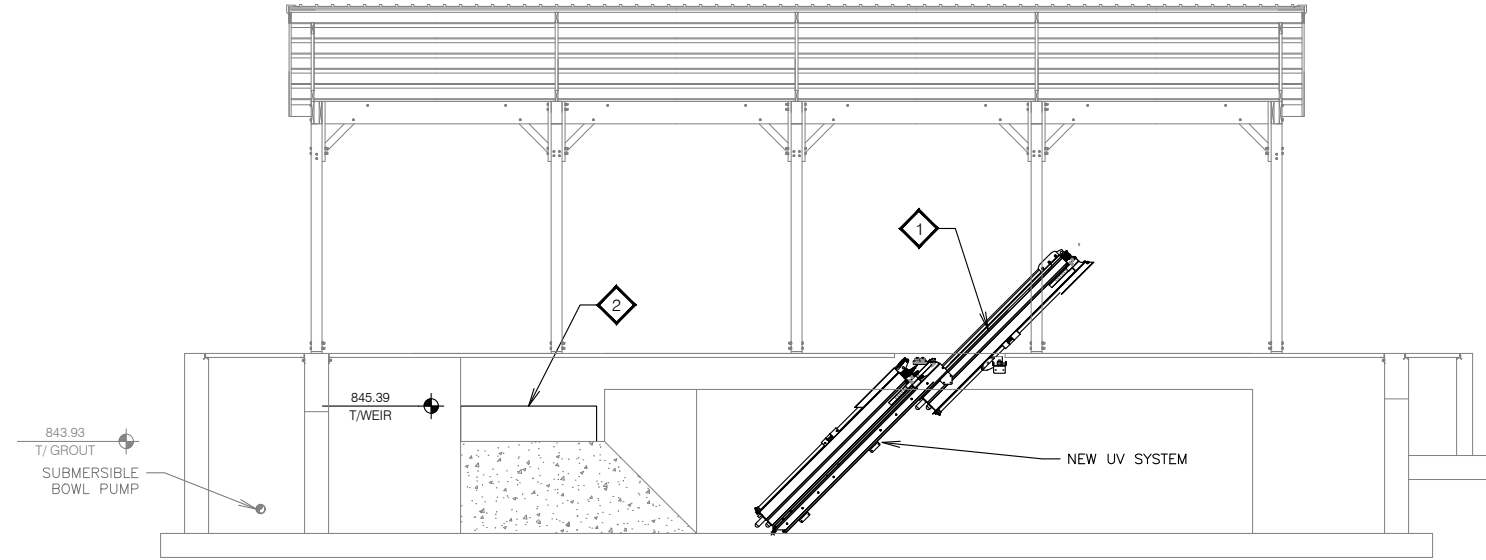
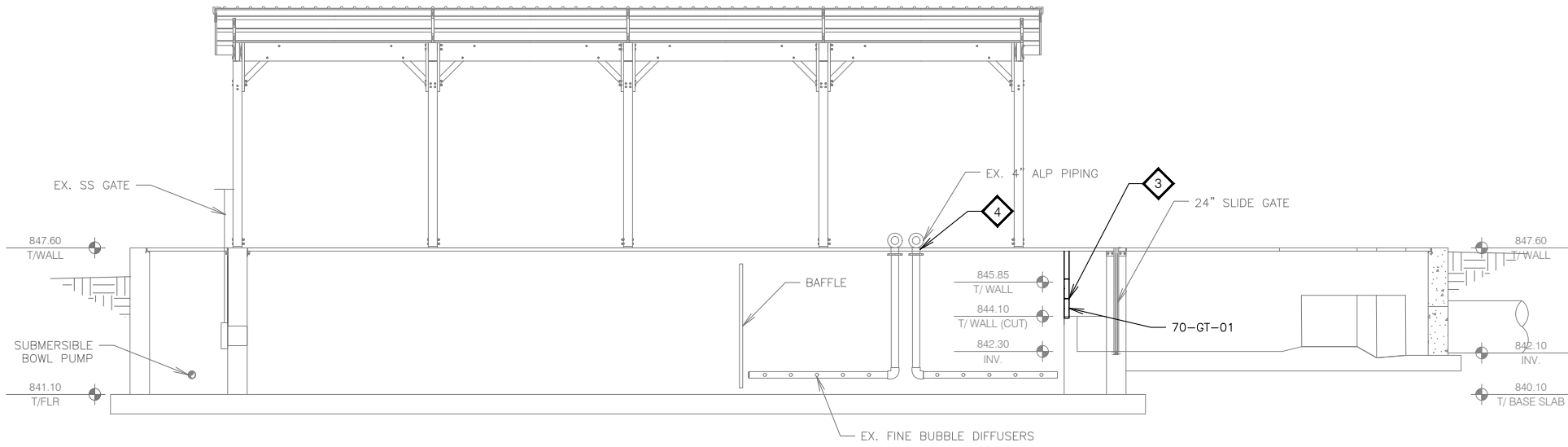
NEW TROJAN SIGNA UV DISINFECTION SYSTEM. REFERENCE SECTION 46 66 55 FOR EQUIPMENT.
2.

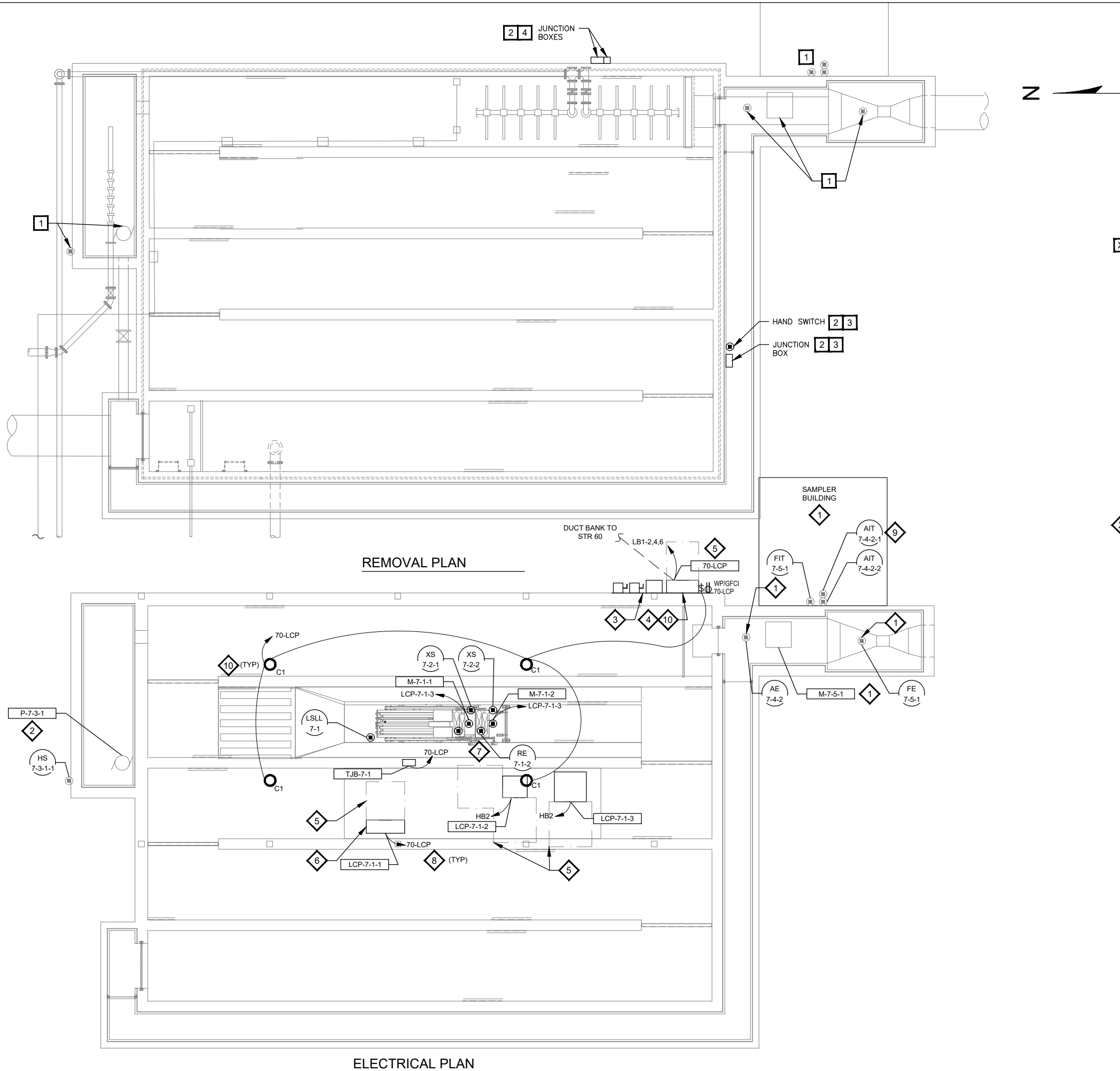
NEW S.S. LEVEL CONTROL WEIR PROVIDED WITH UV DISINFECTION SYSTEM.
3.

NEW STOP LOG GATE WITH FRAME GROUTED IN PLACE.
4.

MODIFY GRATING TO FIT EXISTING PIPE LOCATION.
5.

SEE 70-E-01 FOR PLACEMENT OF NEW ELECTRICAL EQUIPMENT PROVIDED WITH UV DISINFECTION SYSTEM.





GENERAL NOTES

- DO NOT SCALE DRAWINGS TO DETERMINE EXACT LOCATION OF ELECTRICAL EQUIPMENT AND CONNECTIONS.
- EXISTING CONDITIONS ARE SHOWN BASED ON THE EXISTING DOCUMENTATION AVAILABLE. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS IN FIELD.
- PATCH ALL ELECTRICAL PENETRATIONS TO MATCH ADJOINING SURFACES.
- MAINTAIN OPERATION OF ALL LOADS THAT ARE TO REMAIN DURING CONSTRUCTION. COORDINATE ANY OUTAGES WITH ENGINEER AND OWNER.
- 120V HOMERUN WIRING SHALL BE A MINIMUM OF (2) #12 & #12G IN 3/4" UNLESS OTHERWISE NOTED. SIZE FOR VOLTAGE DROP.
- ALL CONDUIT STUBBED UP THROUGH CONCRETE SHALL BE PVC COATED GRS.
- REFER TO SPECIFICATION 26 05 00 FOR CONDUIT, BOX, AND HARDWARE USAGE REQUIREMENTS.
- SEE ONE-LINE DIAGRAM, PANEL SCHEDULE, AND FIELD DEVICE WIRING SCHEDULE FOR WIRING OF ALL PROCESS AND INSTRUMENTATION.
- INSTALL FIELD INSTRUMENTS PER DETAIL REFERENCED IN FIELD DEVICE WIRING SCHEDULE.
- ALL CONDUIT STUBBED UP THROUGH CONCRETE SHALL BE PVC COATED GRS.
- SEE SCADA OVERVIEW FOR COMMUNICATIONS CABLING REQUIREMENTS.
- ALL EXTERIOR RECEPTACLES OR RECEPTACLES MOUNTED IN WET LOCATIONS SHALL BE GFCI WITH WEATHERPROOF WHILE-IN-USE COVERS.

REMOVAL NOTES

- EXISTING EQUIPMENT TO REMAIN.
- DISCONNECT AND REMOVE ELECTRICAL AND ASSOCIATED EQUIPMENT. REMOVE ALL ABOVE GRADE CONDUIT AND CONDUCTORS.
- CUT CONDUIT TO BELOW CONCRETE SURFACE AND PATCH FLUSH.
- CUT CONDUIT TO BELOW CONCRETE THAT IS TO BE REMOVED AND REPLACED.

KEY NOTES

- EXISTING SAMPLER BUILDING, SAMPLER, AND INSTRUMENTATION TO REMAIN.
- PUMP AND CONTROL STATION TO REMAIN. MAINTAIN EXISTING EQUIPMENT POWER AND CONTROL CIRCUITS TO BLOWER BUILDING.
- PROVIDE STAINLESS STEEL SUPPORT STRUCTURE PER DETAIL E2-17 SIZED FOR EQUIPMENT TO BE FURNISHED, AND COORDINATE LOCATION IN FIELD WITH ENGINEER. AVOID ADJACENT AIR PIPING. SECURE TO SHELTER STRUCTURE FOR:
 - STAINLESS STEEL JUNCTION BOX TO TERMINATE 480V POWER CIRCUITS FROM DUCT BANK
 - NETWORK DISTRIBUTION PANEL.
 - NON-FUSED DISCONNECT SWITCHES IN NEMA 4X STAINLESS STEEL ENCLOSURES TO SERVE LCP-7-1-2 AND LCP-7-1-3
 - GFCI RECEPTACLE WITH METALLIC WEATHERPROOF WHEN IN USE COVERPLATE.
 - LIGHT SWITCH.
- NETWORK DISTRIBUTION PANEL:
 - ROUTE 208V POWER AND FIBER OPTIC CABLE FROM DUCT BANK INTO BOTTOM OF PANEL.
 - RECONNECT ALL EXISTING SIGNAL CIRCUITS TO REMAIN.
 - RECONNECT EXISTING POWER CIRCUIT SERVING EFFLUENT STRUCTURE TO NEW DEDICATED CIRCUIT LOCATED IN NEW DISTRIBUTION PANEL 70-LCP.
- MAINTAIN NEC REQUIRED WORKING CLEARANCE AND DEDICATED EQUIPMENT SPACE.
- MOUNT UV SYSTEM CONTROL PANEL, LCP-7-1-1 ON CONCRETE DECKING PER MANUFACTURER'S REQUIREMENTS. COORDINATE LOCATION IN FIELD WITH ENGINEER.
- ROUTE UV CABLES FROM POWER DISTRIBUTION PANEL LCP-7-1-3 IN TROUGH TO UV UNITS, M-7-1-1 AND M-7-1-2. COORDINATE WITH MANUFACTURER REQUIREMENTS AND WITH ENGINEER IN FIELD.
- COORDINATE CONDUIT ROUTING FOR UV EQUIPMENT, POWER CIRCUITS, AND INSTRUMENTATION TO 70-LCP AND DUCT BANK IN FIELD WITH ENGINEER.
- RELOCATE DO TRANSMITTER AIT-7-4-2-1 FROM ALUM ROOM TO SAMPLER HUT AND CONNECT TO EXISTING AIT-7-4-2-2. ROUTE NEW ANALOG SIGNAL CIRCUITS TO 70-LCP AS SCHEDULED.
- MOUNT C1 FIXTURES TO BOTTOM OF TRUSS.

MATERIAL STRENGTH SPECIFICATION SUMMARY				
MATERIAL (AS APPLICABLE)				
[1.0] CAST-IN-PLACE CONCRETE:				
CONCRETE CLASS (NORMAL WEIGHT):	F'c	W/C	SLUMP	% AIR
– CLASS A: FOOTINGS, GRADE BEAMS & TIE BEAMS	4,000 PSI	0.45	4"	NOTE-3
– CLASS B: FOUNDATION WALLS	4,000 PSI	0.45	4"	NOTE-3
– CLASS C: INTERIOR SLAB-ON-GRADE	4,000 PSI	0.45	4"	NOTE-3
– CLASS D: INTERIOR SUSPENDED SLABS	4,000 PSI	0.45	4"	NOTE-3
– CLASS F: CONCRETE TOPPINGS & MASONRY GROUT	3,500 PSI	0.45	4"	NOTE-3
– CLASS G: BUILDING FRAME MEMBERS	4,500 PSI	0.45	4"	NOTE-3
– CLASS H: BUILDING WALLS	4,500 PSI	0.45	4"	NOTE-3
– CLASS I: INTERIOR METAL PAN STAIRS & LANDINGS	3,000 PSI	0.50	3"	N/A
– CLASS J: EXTERIOR RETAINING WALLS	4,000 PSI	0.45	4"	NOTE-3
[2.0] PRECAST CONCRETE:				
– PLANK, BEAMS & COLUMNS	5,000 PSI	–	–	NOTE-4
[3.0] REINFORCING STEEL:				
REBAR	ASTM A615/A775, GR. 60			
CMU HORIZONTAL REINF., GALV. TRUSS	9 GA.			
WELDED WIRE FABRIC (FURNISH IN FLAT SHEETS)	ASTM A185, PLAIN			
[4.0] STRUCTURAL STEEL:				
HSS	ASTM A500B			
STRUCTURAL SHAPES	ASTM A992, GR. 50			
PLATES	ASTM A36, GR. 36			
[5.0] STRUCTURAL ALUMINUM				
MISC. SHAPES	6061-T6, OR AS OTHERWISE INDICATED IN NOTE-5 BELOW			
[6.0] ANCHORING SYSTEMS:				
STRUCTURAL BONDING EPOXY	HILTI HVA, OR EQ. (USE AT DRILL & EPOXY BARS = D&E)			
HIGH STRENGTH BOLTS	ASTM A325X			
ANCHOR BOLTS & RODS	ASTM F1554, GR. 36			
[7.0] CONCRETE MASONRY				
PORTLAND CEMENT	F'm = 1,900 PSI			
WEIGHT CLASSIFICATION	NORMAL WEIGHT			
MORTAR	TYPE-S			

- NOTES:
- TABLE IS INTENDED AS A SUMMARY ONLY, AS APPLICABLE. REFER TO PROJECT MANUAL FOR COMPREHENSIVE SPECIFICATIONS.
 - REF. APPLICABLE ACI & ASTM SPECIFICATIONS FOR PROPER MIX DESIGN, BATCHING, HANDLING, AND TESTING REQUIREMENTS.
 - REF. SPECIFICATION 03 30 00 FOR AIR PERCENTAGE REQUIRED AT EACH EXPOSURE CLASS.
 - REF. SPECIFICATION 03 41 00 FOR AIR PERCENTAGE REQUIRED BASED ON EXPOSURE AND PER PCI MNL 116.
 - REF. SHEETS 100-AS-08 & 100-AS-09 FOR GUARDRAIL, GRATING, PLANKING & ASSOCIATED EXTRUSIONS MATERIAL GRADES.

GENERAL STRUCTURAL NOTES:

- COMPONENT DELEGATED DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PROVISIONS OF THE WISCONSIN DEPARTMENT OF ADMINISTRATIVE CODE, CHAPTER SPS 362 (CURRENT EDITION).
- G.C. SHALL SUBMIT THE FOLLOWING COMPONENT DESIGNS TO A/E FOR STATE OF WISCONSIN DEFERRED SUBMITTAL(S) TO FOLLOW PERMIT DOCUMENTS: PRECAST CONCRETE, ALUMINUM AND/OR FIBERGLASS GUARDRAILS, WALKWAYS, STAIR SYSTEMS, LADDERS, GRATINGS, PLANKINGS & LANDINGS.
- COORDINATE WITH ARCHITECTURAL, PROCESS MECHANICAL, HVAC, PLUMBING, AND ELECTRICAL DRAWINGS & TRADES FOR LOCATION AND DIMENSIONS OF CURBS, DEPRESSIONS, AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON 'S' AND/OR 'AS' DRAWINGS.
- G.C. SHALL VERIFY AND COORDINATE DIMENSIONS AND DETAILS AS SHOWN ON COLLECTIVE DRAWINGS. WHEN DISCREPANCIES OR QUESTIONS ARISE, THE A/E SHALL BE NOTIFIED.
- VERIFY SIZE AND LOCATION OF ALL ROOF, FLOOR, AND WALL OPENINGS WITH PROCESS MECHANICAL, HVAC AND ELECTRICAL CONTRACTORS. OPENINGS LESS THAN 12 INCHES IN DIMENSION ARE GENERALLY NOT SHOWN.
- STANDARD DETAILS INCLUDED IN DRAWING 100-AS SHEETS AND NOT SPECIFICALLY REFERENCED SHALL BE CONSIDERED TO APPLY TO COLLECTIVE PROJECT, AS MAY BE RELEVANT TO STANDARD DETAIL INCLUDED.
- REF. 10/100-AS-02 FOR MISC. OPENINGS IS FOUNDATION FROSTWALLS, TYP.
- REF. 6/100-AS-03 FOR MISC. SLAB-ON-GRADE REMOVAL REPAIR, COORD. WITH OTHER TRADES FOR SIZE AND LOCATIONS AT APPLICABLE STRUCTURES.

GEOTECHNICAL INFORMATION:

A SITE-SPECIFIC GEOTECHNICAL SUBSURFACE INVESTIGATION AND REPORT WAS COMPLETED FOR THE SITE. RECOMMENDATIONS THEREIN SHALL BE INCORPORATED INTO THE PROJECT REQUIREMENTS. IN GENERAL, BIDDER SHALL PROVIDE FOR PROJECT BASE BID TO INCLUDE THE FOLLOWING SOILS WORK:

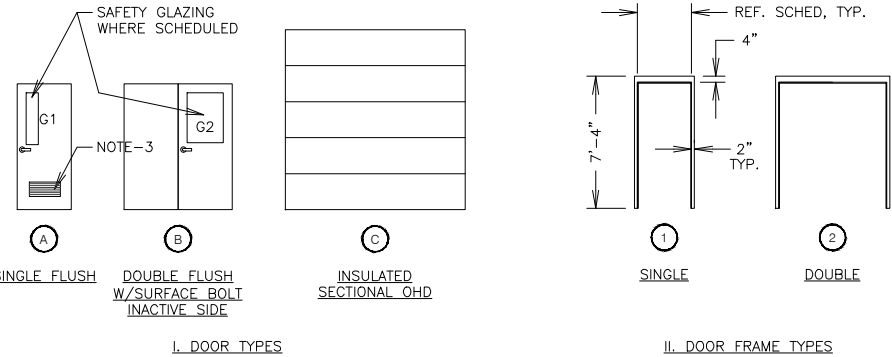
STRUCTURE 60 ADDITION
PREPARE BUILDING FOOTING AND BASE SLAB BEARING SOILS TO MEET MINIMUM CAPACITY INDICATED IN 'BASIS OF BUILDING STRUCTURAL DESIGN' TABLE ON SHEET 60-AS-01. SUBSTANDARD SOILS ARE EXPECTED TO BE ENCOUNTERED REQUIRING ADDITIONAL SUB-GRADE REMOVAL & REPLACEMENT IN SOME AREAS WITH ENGINEERED FILL, AS APPROVED IN ADVANCE BY ENGINEER AT TIME OF CONSTRUCTION. IN GENERAL, BIDDER SHALL PROVIDE FOR SUB-GRADE REMOVAL AND REPLACEMENT IN THE AREA BOUNDED BY BUILDING FOUNDATION FOOTPRINT FOR THE AREA SOUTH AND EAST OF THE FILTER PIT, TO APPROX. EL. 843.00. PREPARE CONCRETE FLOOR SLAB-ON-GRADE SUB-GRADE AS DETAILED IN REPORT, OR AS OTHERWISE DETAILED ON DRAWINGS, WHICHEVER PROVIDES FOR GREATER SUB-GRADE CAPACITY. ONCE SUB-GRADE SOILS ARE RESTORED TO REQUIRED ELEVATIONS WITH ENGINEERED FILL, PROVIDE MIN. 6" COMPACTED AGGREGATE BASE BELOW INTERIOR FLOOR SLAB-ON-GRADE.

FOR DETAILED DESCRIPTION OF SOILS AND FOUNDATION SUB-GRADE PREPARATION, REFER TO:

GEOTECHNICAL EXPLORATION REPORT
BY: CGC, INC.
DATE: JANUARY 2, 2024
REPORT NO.: CM23205
CONTACT: PAUL J. GIESE, PE
PHONE: 414-443-2099

DOOR, FRAME & HARDWARE SCHEDULE																												
BUILDING	DOOR NO.	ROOM NO.	ROOM NAME	DOOR												FRAME ⊖	THRESHOLD			MISC.			REMARKS					
				SIZE				'T'		TYPE	MATERIAL	'G'	HAND				HOLLOW METAL HOLLOW FIBERGLASS	NONE	ALUMINUM	PVC	HW SET (NOTE-1)	INSULATED		UL RATING (HRS)	CLOSER			
				3'-0"W. X 7'-0"H.	3'-4"W. X 7'-0"H.	(2)3'-0"W. X 7'-0"H.	(2)3'-2"W. X 7'-0"H.	10'-0"W. X 10'-0"H.	1 3/4"				2"	(A)	(B)	(C)										HOLLOW METAL	HOLLOW FIBERGLASS	GLAZING TYPE
STRUCTURE-60 (FILTER)	600	600	FILTER			●			●			●						●	2		●			1	●		●	NOTE-1, 2, 4, 6
	601	601	ELECTRICAL	●					●		●	●						●	1					2		●	●	NOTE-1, 4, 6
	602	602	CHLORINATION		●				●		●	●						●	1		●			5	●		●	NOTE-1, 4, 6
	603	603	DECHLORINATION			●			●			●						●	1		●			7	●		●	NOTE-1, 4, 6
	604	604	ALUM PUMP	●					●		●	●	G1					●	1		●			2		●	●	NOTE-1, 4, 6
	605.1	605	FILTER	●					●		●	●					●		1		●			6	●		●	NOTE-1, 6
	605.2	605	FILTER					●		●					●											●	●	NOTE-5, 6
	605.3	605	FILTER			●			●			●	G1				●	2			●			4	●	●	●	NOTE-1, 2, 6
	606	606	ELECTRICAL		●				●		●	●	G1				●	1			●			3		●	●	NOTE-1, 2, 6
	607.1	607	STORAGE					●		●					●											●	●	●
607.2	607	STORAGE	●					●		●							●	1			●			6	●	●	●	NOTE-1, 6

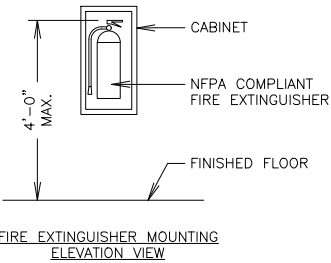
- NOTES:
- REF. SPECIFICATION SECTION 08 71 00 (3.3) FOR DOOR HARDWARE SETS INDICATED 1 THRU 7 IN SCHEDULE. HARDWARE FINISHES AS SPECIFIED. LOCKSETS SHALL BE KEYED PER OWNER.
 - 'HAND' DENOTES ACTIVE SIDE ON DOUBLE DOORS.
 - PROVIDE VENT PANEL INSERT IN DOOR WHERE 'NOTE-3' IS INDICATED IN SCHEDULE REMARKS.
 - VERIFY IN FIELD ROUGH OPENING (R.O.) AND MASONRY OPENING (M.O.) AT EXISTING DOORS SCHEDULED FOR REPLACEMENT.
 - DOOR TRACKS SHALL BE HIGH-CLEARANCE.
 - REF. 5/100-AS-03 FOR TYPICAL WALL JAMB, HEAD & THRESHOLD DETAILS AT DOORS.



ROOM FINISH SCHEDULE											
BUILDING	ROOM NO.	ROOM NAME	WALLS				FLOOR	BASE	CEILING		REMARKS
			N	E	S	W			MAT'L	HEIGHT	
STRUCTURE-60 (FILTER)	600	FILTER	CMU/PT	CMU/PT	CMU/PT	CMU/PT	C	NONE	PC	12'-0"	NOTE-1
	601	ELECTRICAL	CMU/PT	CMU/PT	CMU/PT	CMU/PT	C	NONE	PC	12'-0"	NOTE-1
	602	CHLORINATION	CMU/PT	CMU/PT	CMU/PT	CMU/PT	C	NONE	PC	12'-0"	NOTE-1
	603	DECHLORINATION	CMU/PT	CMU/PT	CMU/PT	CMU/PT	C	NONE	PC	12'-0"	NOTE-1
	604	ALUM PUMP	CMU/PT	CMU/PT	CMU/PT	CMU/PT	C	NONE	PC	12'-0"	NOTE-1
	605	FILTER	CMU/PT	CMU/PT	CMU/PT	CMU/PT	SC	NONE	PC	12'-0"	NOTE-2, 3
	606	ELECTRICAL	CMU/PT	CMU/PT	CMU/PT	CMU/PT	SC	NONE	PC	12'-0"	NOTE-2, 3
	607	STORAGE	CMU/PT	CMU/PT	CMU/PT	CMU/PT	SC	NONE	PC	12'-0"	NOTE-2, 3

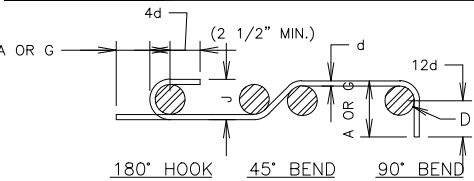
- ABBREVIATIONS:
- | | |
|--------------------------------------|-------------------------------|
| C - CONCRETE | PT - PAINT |
| EP - EPOXY PAINTED, BROADCAST QUARTZ | SC - ETCHED & SEALED CONCRETE |
| M - MASONRY | U - UNFINISHED |
| PC - PRECAST PLANK | |

- NOTES:
- CLEAN AND PAINT EX. EXPOSED SURFACES WITH (1) COAT.
 - PREPARE SURFACES TO BE PAINTED OR SEALED PER SPEC. SECTION 09 96 00.
 - SUBMIT COLOR SELECTION OPTIONS CHART(S) DURING SUBMITTAL REVIEW PHASE FOR SELECTION BY ENGINEER/OWNER.

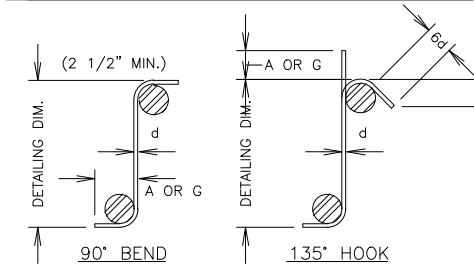


FIRE EXTINGUISHER NOTE:
PROVIDE WALL SURFACE-MOUNTED FIRE EXTINGUISHER IN CABINET AT LOCATIONS SHOWN ON STRUCTURE FLOOR PLANS (NO CABINET REQ'D WHERE MARKED 'SIM', AS APPLICABLE).

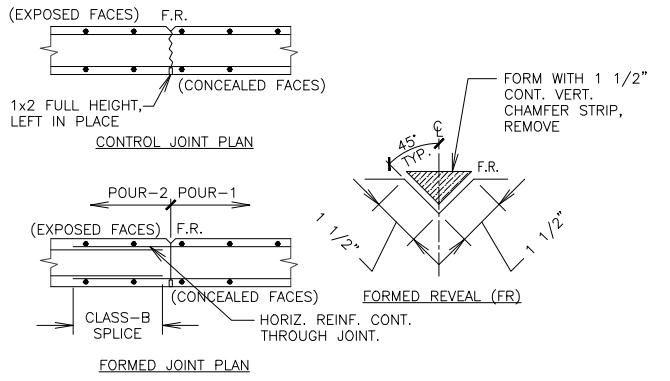
BAR SIZE	D	180°		90°	
		A OR G	J	A OR G	
#3	2 1/4"	6d	5"	3"	6"
#4	3"		6"	4"	8"
#5	3 3/4"		7"	5"	10"
#6	4 1/2"		8"	6"	12"
#7	5 1/4"		10"	7"	14"
#8	6"		11"	8"	6"
#9	9 1/2"		8d	15"	11 3/4"
NOTE: "D" DENOTES FINISHED BAR BEND DIAMETER.					



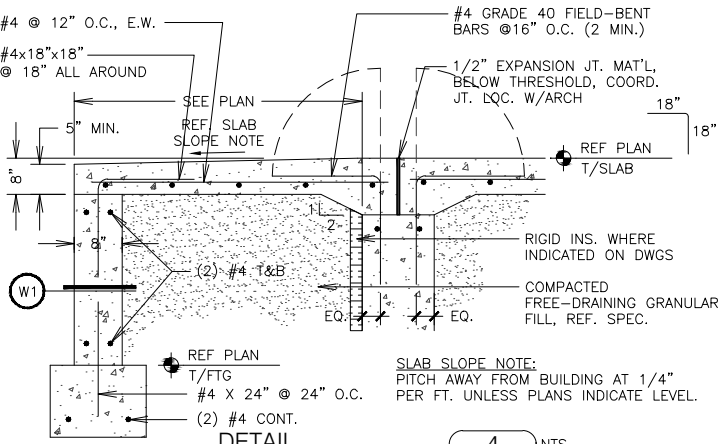
BAR SIZE	D	90° HOOK		135° HOOK
		A OR G	A OR G	H
#3	1 1/2"	4"	4 1/4"	3"
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"



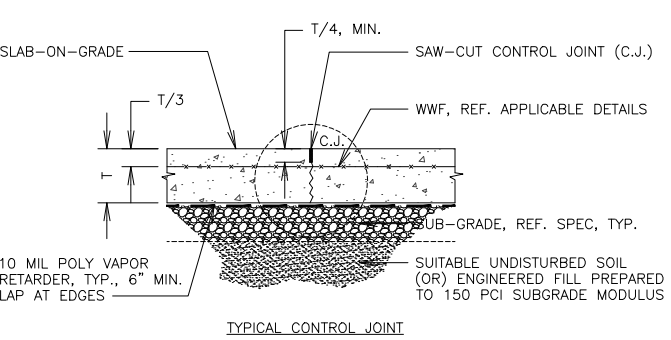
DETAIL 3 NTS
MILD REINFORCING BENDS



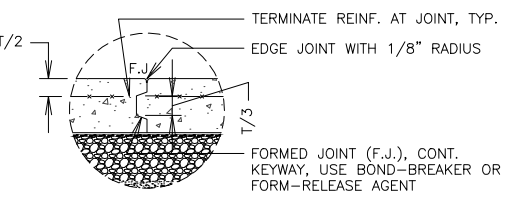
DETAIL 1 NTS
FOUNDATION WALL CONTROL JOINT



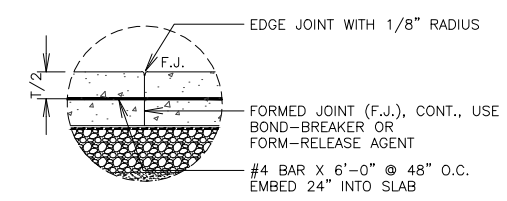
DETAIL 4 NTS
STRUCTURAL CONCRETE STOOP



TYPICAL CONTROL JOINT

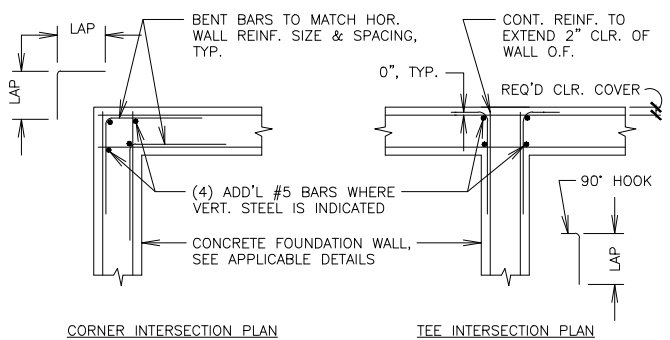


TYPICAL CONSTRUCTION JOINT TYPE-1



TYPICAL DOWELED CONSTRUCTION JOINT TYPE-2

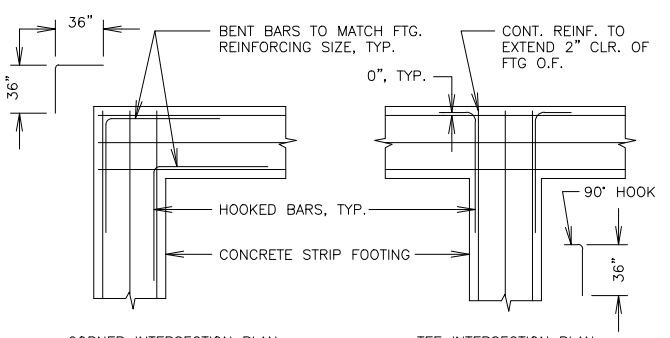
DETAIL 5 NTS
SLAB-ON-GRADE JOINTS



CORNER INTERSECTION PLAN

TEE INTERSECTION PLAN

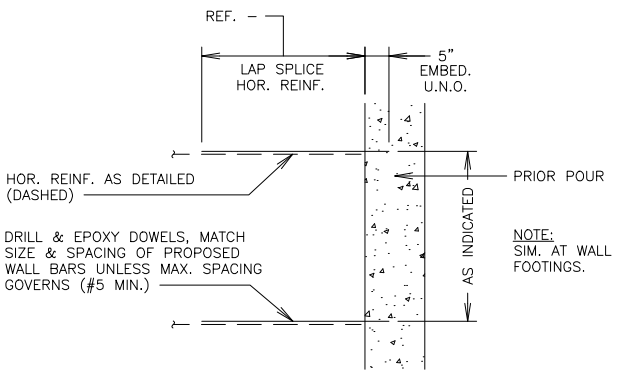
DETAIL 2 NTS
CONC. WALL INTERSECTION REINFORCING (TYP. UNLESS NOTED OTHERWISE)



CORNER INTERSECTION PLAN

TEE INTERSECTION PLAN

DETAIL 6 NTS
FOOTING INTERSECTION REINFORCING



SECTION/ELEVATION

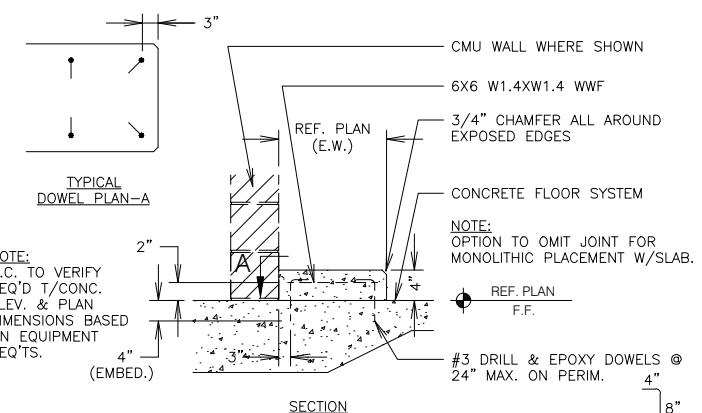
DETAIL 7 NTS
SEQUENCED CONCRETE PLACEMENT

CLASS-B TENSION LAP SPLICE SCHEDULE													
CLASS BAR SIZE	COL. (N/A)		FOUNDATIONS				SLABS						
			f'c = 4 KSI		f'c = 5 KSI		f'c = 4 KSI		f'c = 5 KSI				
	f'c = 4 KSI	f'c = 5 KSI	BOT. BARS	TOP *BARS	BOT. BARS	TOP *BARS	BOT. BARS	TOP *BARS	BOT. BARS	TOP *BARS	BOT. BARS	TOP *BARS	TOP *BARS
#3	16	16	16	18	24	16	16	21	16	18	24	16	21
#4	19	17	19	24	32	17	22	28	19	24	32	17	28
#5	23	21	23	30	40	21	27	35	23	30	40	21	35
#6	28	25	28	36	47	25	33	42	28	36	47	25	42
#7	33	29	33	42	55	29	38	50	33	43	57	30	51
#8	39	35	39	51	67	35	46	60	44	57	75	39	67
#9	50	44	50	64	84	44	58	75	56	72	94	50	84
#10	88	79	82	107	131	79	96	120	92	120	147	82	107
#11	108	97	100	131	161	97	117	147	112	147	177	101	131

NOTES:
1. * DENOTES EPOXY-COATED REINFORCING, AS APPLICABLE WHERE INDICATED ON DWGS ONLY.

CONCRETE REINFORCING SHALL HAVE THE FOLLOWING MINIMUM COVER, TYPICAL UNLESS DETAILED OTHERWISE:
- CONCRETE IN CONTACT AND/OR PLACED AGAINST EARTH (3")
- CONCRETE EXPOSED TO WEATHER: #5 & SMALLER (2")
- CONCRETE WITH INTERIOR EXPOSURE (1 1/2")

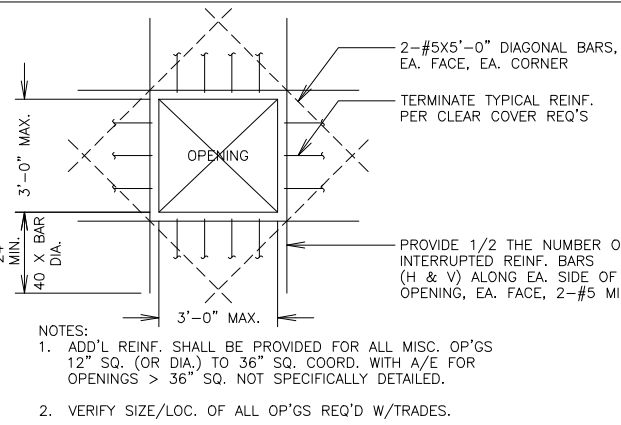
DETAIL 8 NTS
REINF. LAP SPLICE & PROTECTIVE COVER



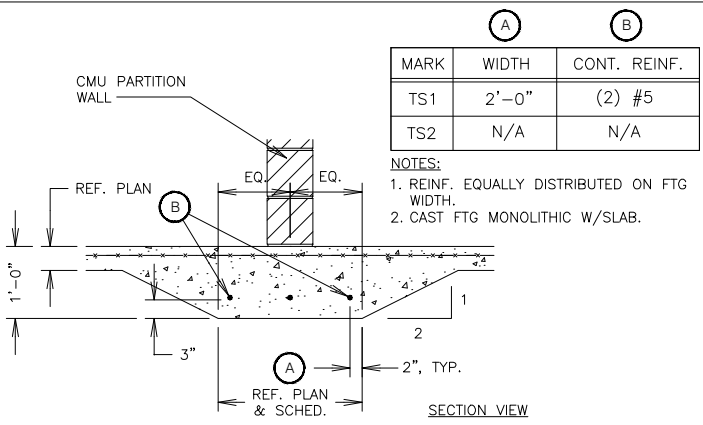
TYPICAL DOWEL PLAN-A

SECTION

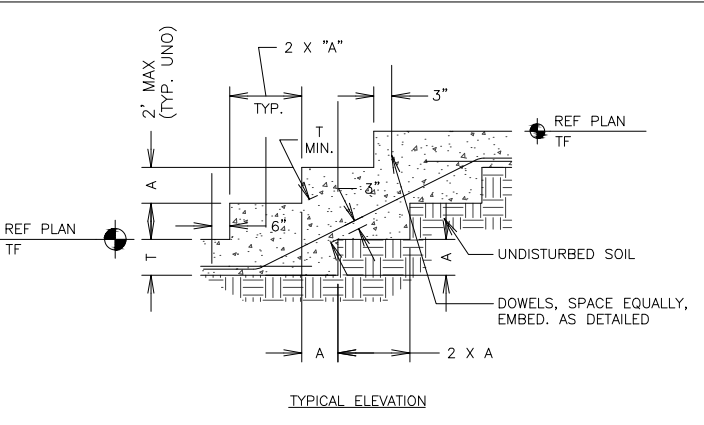
DETAIL 9 NTS
NON-ISOLATED EQUIPMENT PAD



DETAIL 10 NTS
ADD'L REINF. AT CONC. WALL OPENINGS

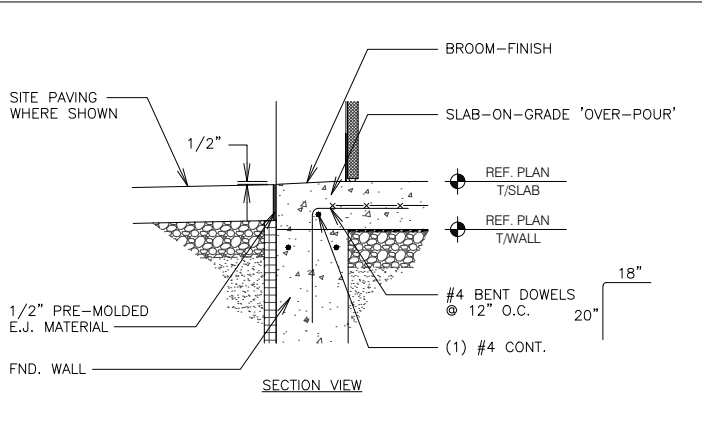


DETAIL 11 NTS
THICKENED SLAB FOOTING (TS#)



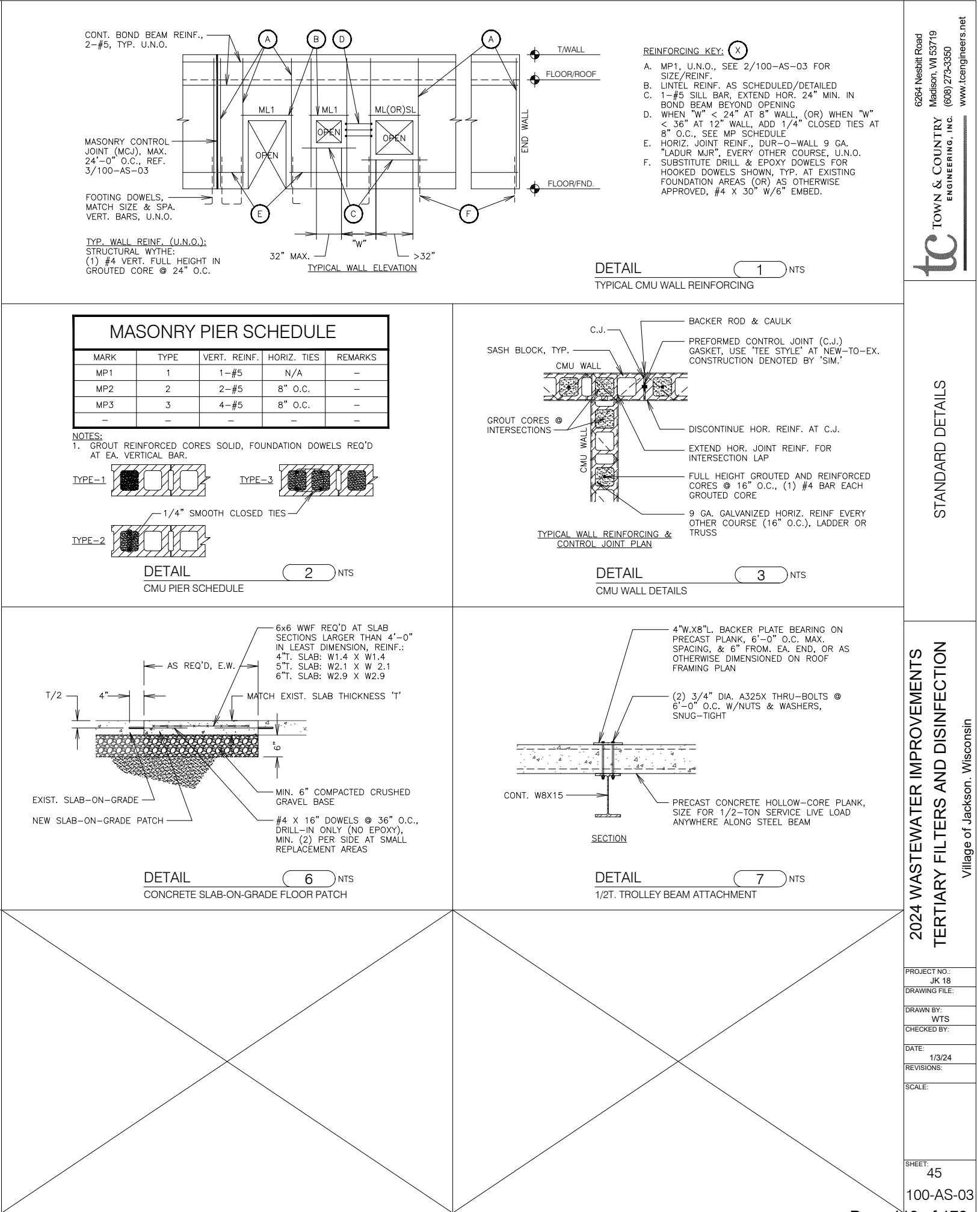
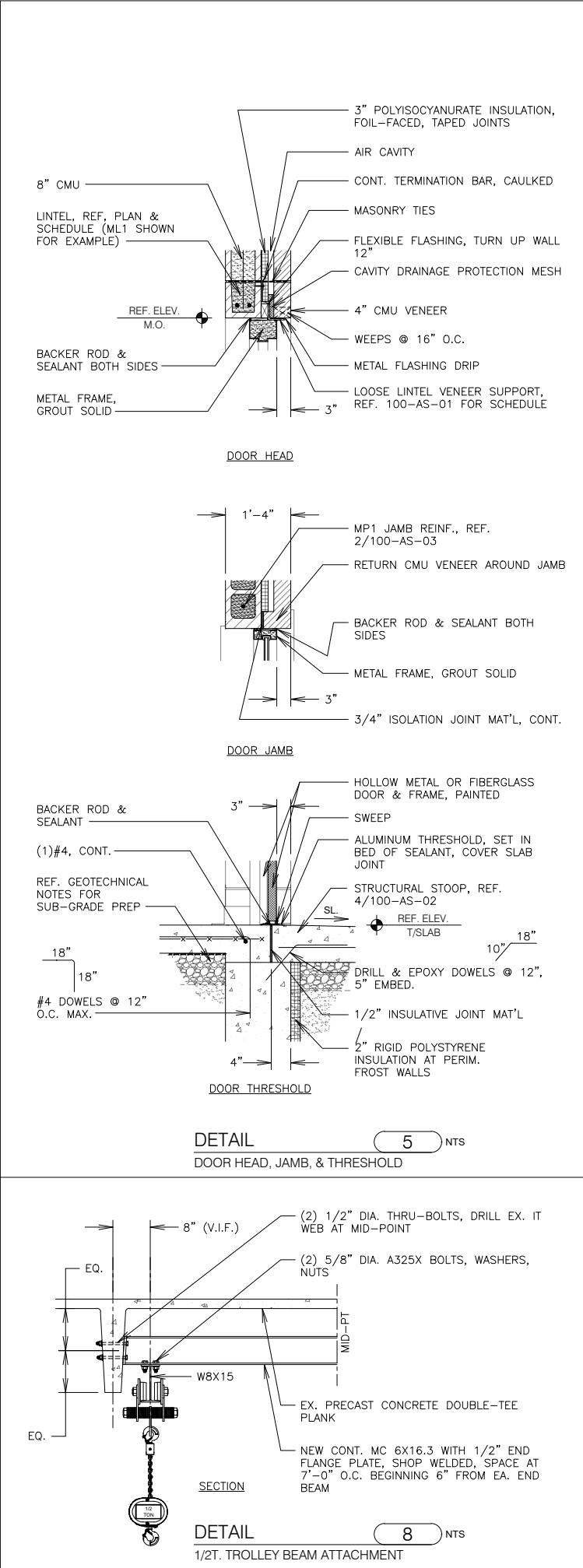
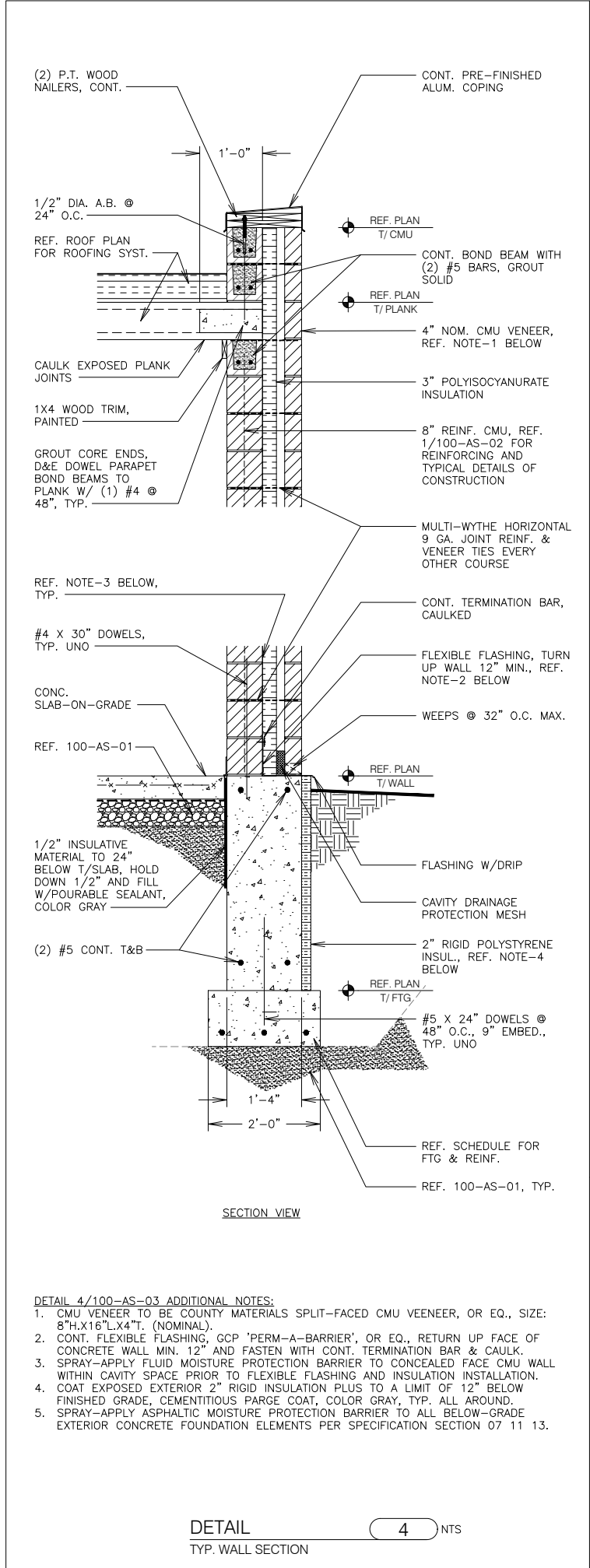
TYPICAL ELEVATION

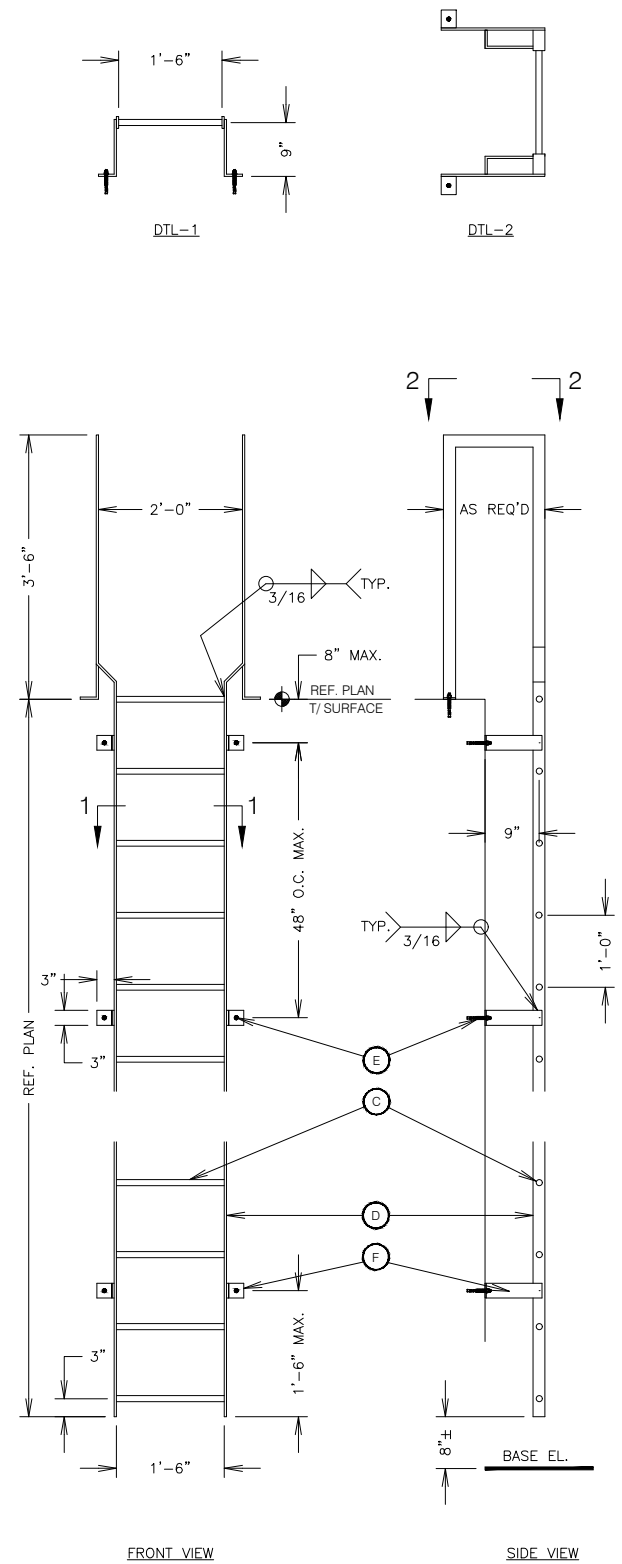
DETAIL 12 NTS
STEPPED FOOTING



SECTION VIEW

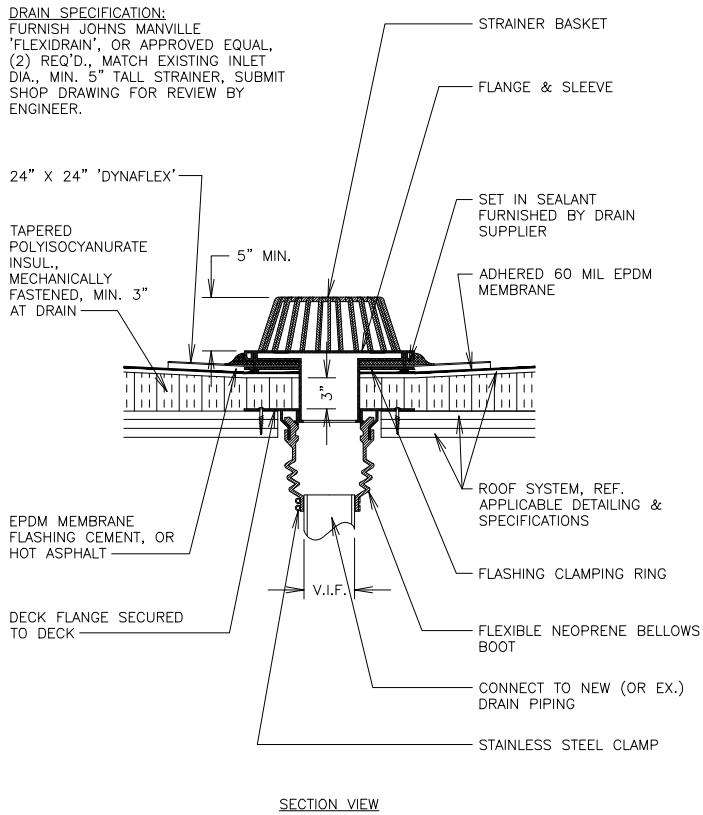
DETAIL 13 NTS
THRESHOLD AT OVERHEAD DOOR



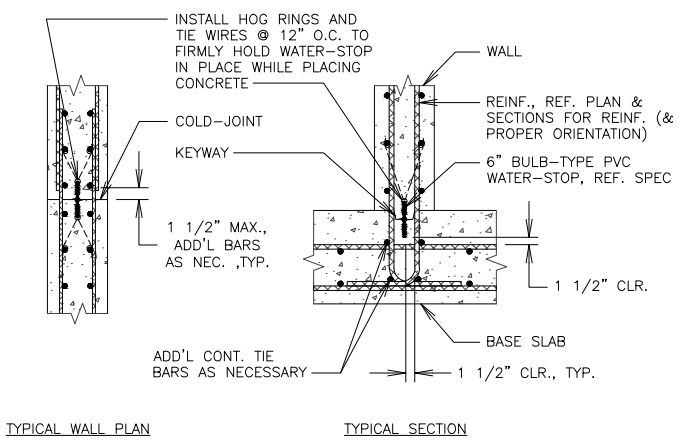


- KEY NOTES**
- A. CONSTRUCT LADDER IN CONFORMANCE WITH OSHA 1910.27.
 - B. LADDER SHALL BE SHOP-FABRICATED ALUM. 6061-T6.
 - C. 1" DIAMETER BAR RUNGS SHALL BE KNURLED OR COATED WITH A NON-SLIP MATERIAL.
 - D. 3/8" T. X 2" W. ALUM. 6061-T6 BAR MATERIAL.
 - E. 1/2" DIA. X 3, 1/2" S.S. EXPANSION ANCHORS INTO CONC.
 - F. 1/4" ALUM. 6061-T6 ATTACHMENT BRACKETS.

DETAIL 4 NTS
FIXED ACCESS LADDER

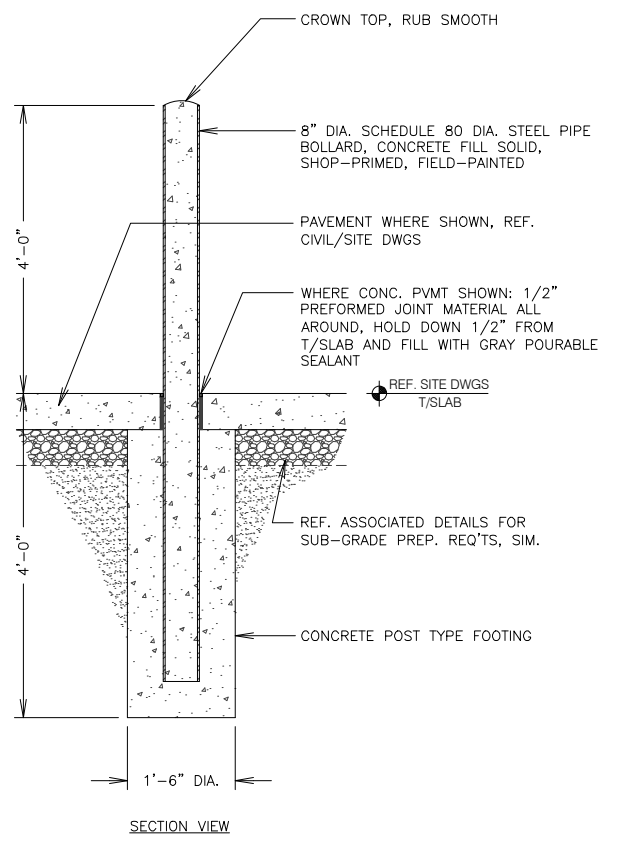


DETAIL 1 NTS
ROOF DRAIN

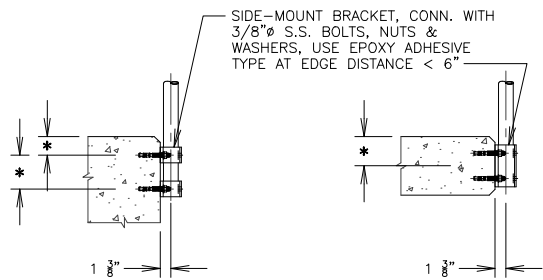


- WATER-STOP NOTES:**
1. REF. SPECIFICATION SECTION 03 30 00 FOR ACCEPTABLE PRODUCTS & MANUFACTURERS.
 2. FACTORY CORNERS AND TRANSITIONS SHALL BE USED, LEAVING ONLY STRAIGHT BUTT JOINT SPLICES FOR FIELD WELDING OF EMBEDDED WATER-STOP.
 3. INSTALL WATER-STOP IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 4. USE ONLY SPLICING IRON SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR HEAT FUSED WELDING OF PVC.
 5. SECURE EMBEDDED WATER-STOP ALONG ITS LENGTH WITH HOG RINGS, AS REQUIRED TO MAINTAIN CENTER BULB CENTERED ON COLD JOINT.
 6. PLACE CONCRETE WITHOUT DISPLACING WATER-STOP.
 7. THOROUGHLY VIBRATE THE CONCRETE AROUND WATER-STOP TO MINIMIZE VOIDS.
 8. CLEAN CONCRETE SPATTER OFF PVC WATER-STOP FROM PRIOR POUR, PRIOR TO SUBSEQUENT CONCRETE PLACEMENT.

DETAIL 2 NTS
CONT. 6" PVC WATER-STOP

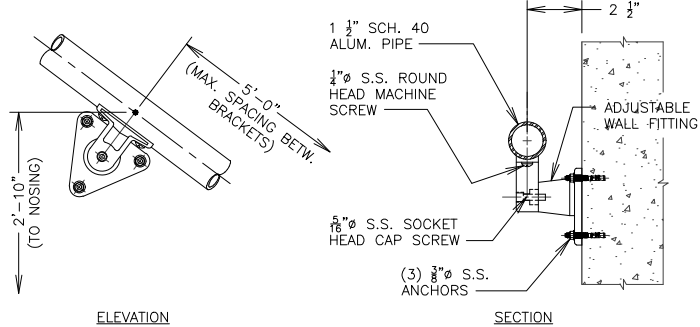


DETAIL 3 NTS
PIPE BOLLARD

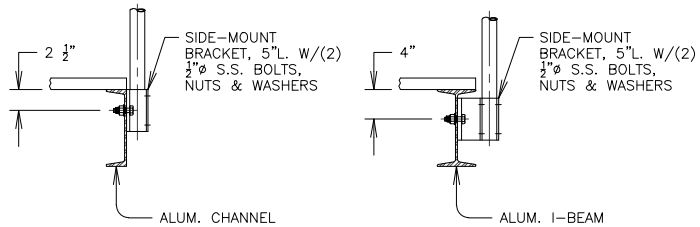


TYPICAL SIDE MOUNT CONN.
TO CONC. WALL

TYPICAL SIDE MOUNT CONN.
TO CONC. SLAB

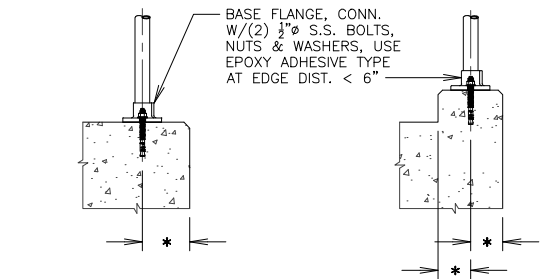


WALL RAIL CONNECTION



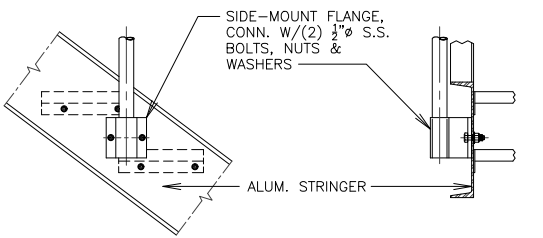
TYPICAL SIDE MOUNT CONN.
TO CHANNEL

TYPICAL SIDE MOUNT CONN.
TO BEAM

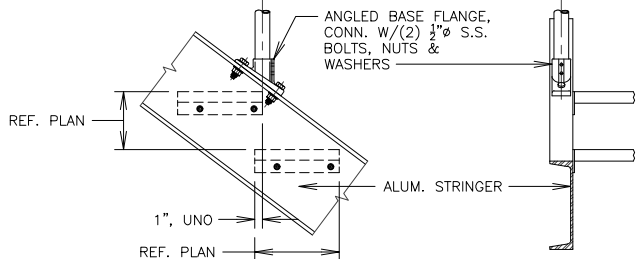


TYPICAL TOP MOUNT CONN.
TO CONC. WALL

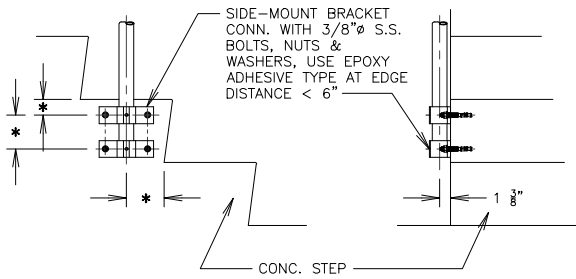
TYPICAL TOP MOUNT CONN.
TO CONC. CURB



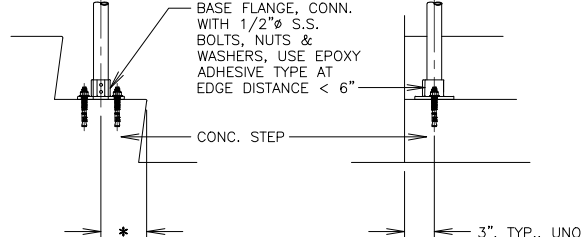
TYPICAL SIDE MOUNT CONN.
TO STEEL STRINGER



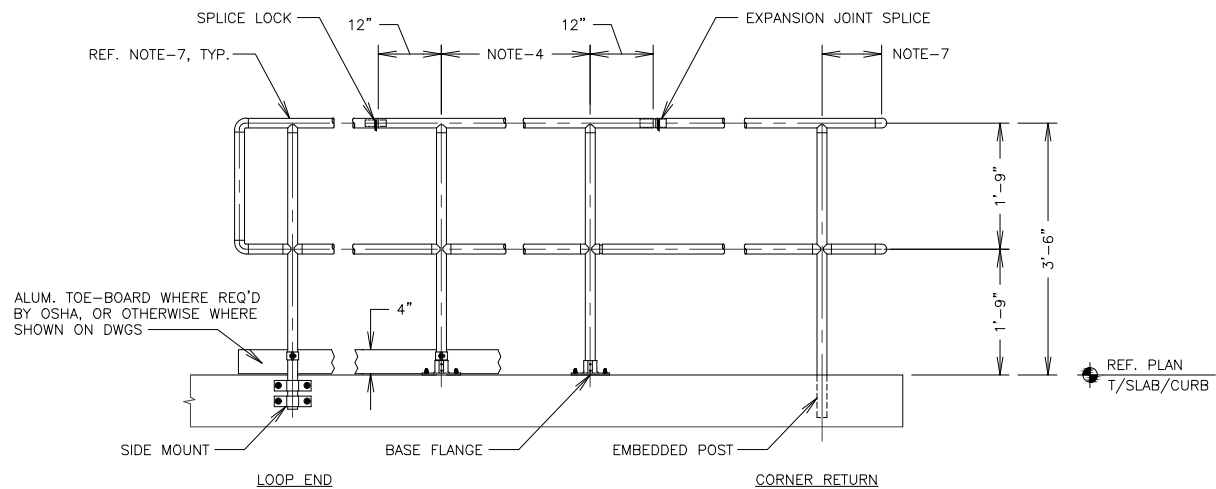
TYPICAL TOP MOUNT CONN.
TO STEEL STRINGER



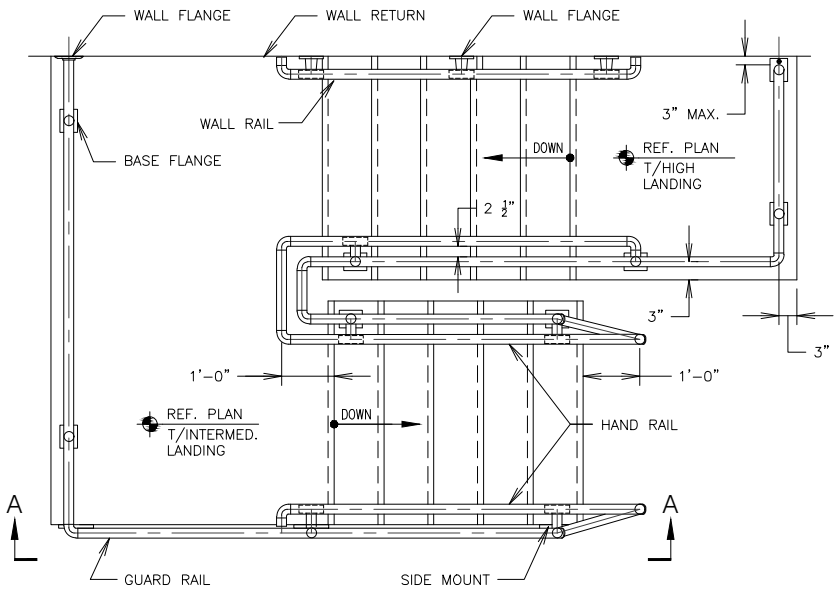
TYPICAL SIDE MOUNT CONN.
TO CONC. STAIR



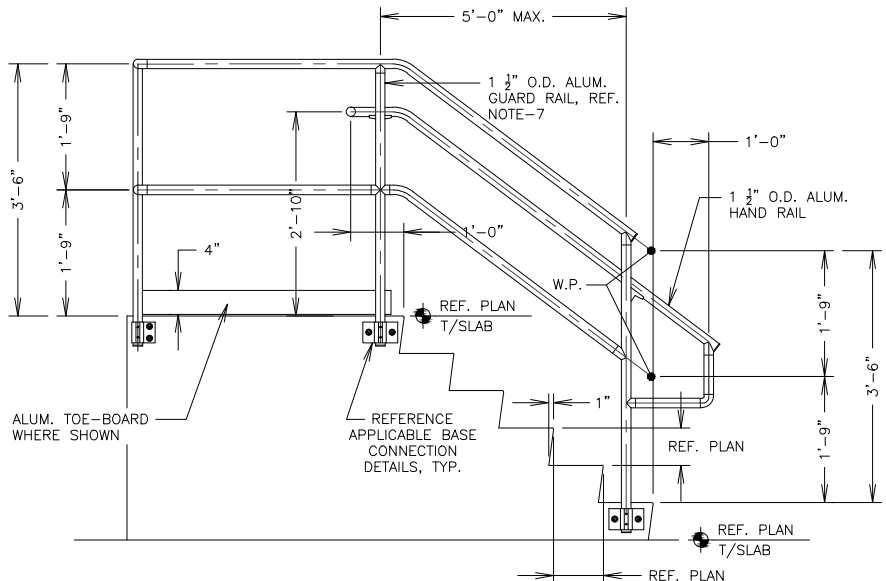
TYPICAL TOP MOUNT CONN.
TO CONC. STAIR



TYPICAL GUARD RAIL ELEVATION
(GUARDRAILS SHALL BE BASE FLANGE
MOUNTED UNLESS INDICATED OTHERWISE)



TYPICAL OSHA GUARD RAIL AT STAIRS - PLAN
(GUARDRAILS SHALL BE BASE FLANGE
MOUNTED UNLESS INDICATED OTHERWISE)



VIEW A-A
(GUARDRAILS SHALL BE BASE FLANGE
MOUNTED UNLESS INDICATED OTHERWISE)

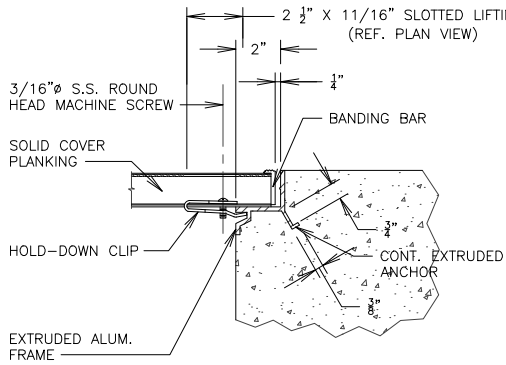
DESIGN SPECIFICATION SUMMARY - OSHA TYPE ALUM. GUARD RAIL:

- COMPONENTS SHOWN ON THIS SHEET ARE A DELEGATED DESIGN. CONCEPT SHOWN IS FOR GENERAL REFERENCE ONLY TO CONVEY MINIMUM STANDARDS. FINAL DESIGN BY COMPONENT SUPPLIER SHALL MEET APPLICABLE CODES AND INDUSTRY STANDARDS. REF. ADDITIONAL NOTES ON 100-AS-01 REGARDING COMPONENT MANUFACTURER DESIGN AND SUBMITTAL REQUIREMENTS.
- GUARDRAILS AND HANDRAILS SHALL BE THE PRODUCT OF A COMPANY NORMALLY ENGAGED IN THE MANUFACTURE OF PIPE RAILING. RAILING SHALL BE SHOP ASSEMBLED IN LENGTHS NOT TO EXCEED 24 FEET FOR FIELD ERECTION.
- HANDRAIL SHALL BE MADE OF PIPES JOINED TOGETHER WITH COMPONENT FITTINGS. SAMPLES OF ALL COMPONENTS, BASES, TOE PLATE AND PIPE SHALL BE SUBMITTED FOR APPROVAL AT THE REQUEST OF THE ENGINEER. COMPONENTS THAT ARE POP-RIVETED OR GLUED AT THE JOINTS WILL NOT BE ACCEPTABLE. ALL COMPONENTS MUST BE MECHANICALLY FASTENED WITH STAINLESS STEEL HARDWARE. HANDRAIL AND COMPONENTS SHALL BE TUFRAIL, AS MANUFACTURED BY THOMPSON FABRICATING, LLC (BIRMINGHAM, ALABAMA) OR APPROVED EQUAL.
- RAILINGS SHALL BE 1 1/2" SCHEDULE 40 ALUMINUM PIPE ALLOY 6105-T5, ASTM-B-429 OR ASTM-B-221. POSTS SHALL BE 1 1/2" SCHEDULE 40 ALUMINUM PIPE OF THE SAME ALLOY. POST SPACING SHALL BE A MAXIMUM OF 5'-0".
- GUARDRAILS AND HANDRAILS SHALL BE DESIGNED TO WITHSTAND A 200 LB CONCENTRATED LOAD APPLIED IN ANY DIRECTION AND AT ANY POINT ON THE TOP RAIL.
- ALUMINUM ASSOCIATION APPROVED LAB TEST RESULTS OF BASE CASTINGS OR BASE EXTRUSIONS SHALL BE INCLUDED IN CALCULATION SUBMITTAL.
- POSTS SHALL NOT INTERRUPT THE CONTINUATION OF THE TOP RAIL AT ANY POINT ALONG THE RAILING, INCLUDING CORNERS AND END TERMINATIONS (OSHA 1910.23). THE TOP SURFACE OF THE TOP RAILING SHALL BE SMOOTH AND SHALL NOT BE INTERRUPTED BY PROJECTED FITTINGS.
- THE MID-RAIL AT A CORNER RETURN SHALL BE ABLE TO WITHSTAND A 200 LB LOAD WITHOUT LOOSENING. THE MANUFACTURER IS TO DETERMINE THIS DIMENSION FOR THEIR SYSTEM AND PROVIDE CALCULATIONS OR PHYSICAL LABORATORY TESTS TO CONFIRM COMPLIANCE.
- CONCRETE ANCHORS SHALL BE STAINLESS STEEL TYPE 303 OR 304 AND SHALL BE DESIGNED AND FURNISHED BY THE HANDRAIL MANUFACTURER. THE ANCHOR DESIGN SHALL INCLUDE THE APPROPRIATE REDUCTION FACTORS FOR SPACING AND EDGE DISTANCES IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED DATA.
- CONCRETE ANCHOR EDGE DISTANCES SHALL BE AS SHOWN. WHERE NOT SHOWN AND/OR SPECIFICALLY SPECIFIED, PROVIDE DESIGN FOR EPOXY TYPE POST-INSTALLED ANCHORS AT EDGE DISTANCES < 6", EXPANSION OR SLEEVE TYPE AT EDGE DISTANCES AT OR > 6".
- TOE PLATE SHALL CONFORM TO OSHA STANDARDS. TOE PLATE SHALL BE A MINIMUM OF 4" HIGH AND SHALL BE AN EXTRUSION THAT ATTACHES TO THE POSTS WITH CLAMPS THAT WILL ALLOW FOR EXPANSION AND CONTRACTION BETWEEN POSTS. TOE PLATES SHALL BE SET 1/4" ABOVE THE WALKING SURFACE. TOE PLATES SHALL BE PROVIDED ON HANDRAILS AS REQUIRED BY OSHA AND/OR AS SHOWN ON DRAWINGS. TOE PLATES SHALL BE SHIPPED LOOSE IN STOCK LENGTHS FOR FIELD INSTALLATION.
- OPENINGS IN THE RAILING SHALL BE GUARDED BY A SELF-CLOSING GATE. (OSHA 1910.23). SAFETY CHAINS SHALL NOT BE USED UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS.
- FINISH SHALL BE ALUMINUM ASSOCIATION M10-C22-A41 (215-R1). THE PIPE SHALL BE PLASTIC-WRAPPED. THE PLASTIC WRAP IS TO BE REMOVED AFTER ERECTION.
- ALUMINUM SURFACES IN CONTACT WITH CONCRETE, GROUT OR DISSIMILAR METALS WILL BE PROTECTED WITH A COAT OF BITUMINOUS PAINT, MYLAR ISOLATORS OR OTHER APPROVED MATERIAL.

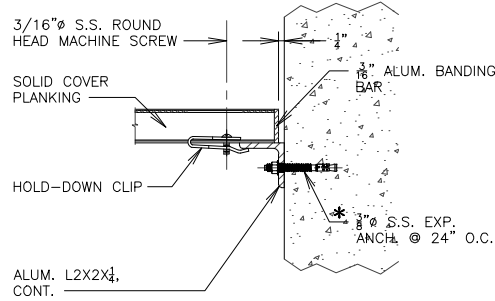
* CONCRETE ANCHOR DIAMETER, EDGE DISTANCES, EMBEDMENT, AND REQUIRED SPACING FINAL DESIGN TO BE DETERMINED BY COMPONENT DESIGNER.

DETAIL (ENTIRE SHEET) 1 NTS
TYPICAL OSHA-TYPE GUARD RAIL

SPAN CHART FOR ALUMINUM PLANK GRATING	
MAXIMUM SPAN	MIN. GRATING DEPTH
4'-0"	1 1/4"
4'-8"	1 1/2"
5'-2"	1 3/4"
5'-8"	2"
6'-2"	2 1/4"
6'-9"	2 1/2"

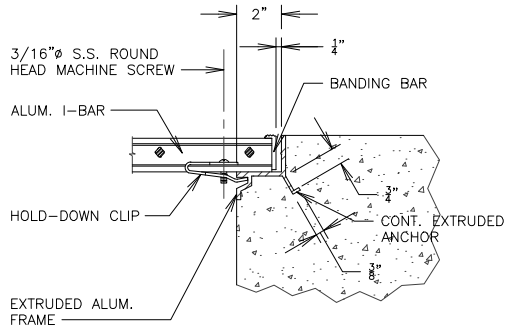


EMBEDDED SUPPORT TYPE-1P

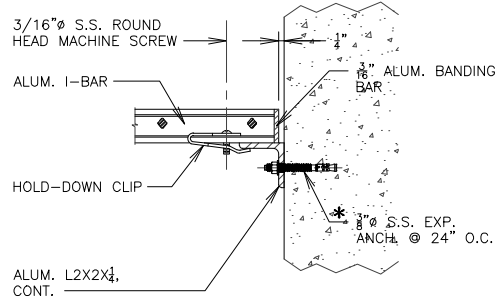


SHELF ANGLE SUPPORT TYPE-2P

SPAN CHART FOR ALUMINUM I-BAR GRATING	
MAXIMUM SPAN	MIN. GRATING DEPTH
3'-8"	1 1/4"
4'-2"	1 1/2"
4'-8"	1 3/4"
5'-2"	2"
5'-8"	2 1/4"
6'-2"	2 1/2"



EMBEDDED SUPPORT TYPE-1G

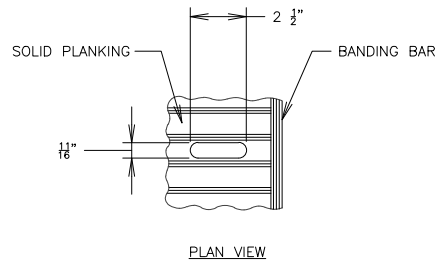


SHELF ANGLE SUPPORT TYPE-2G

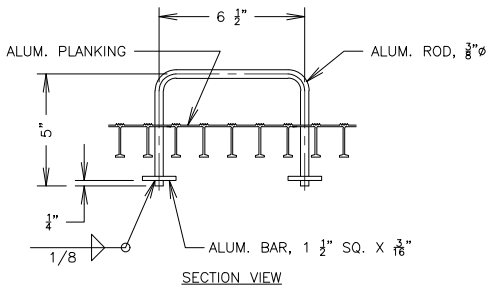
SOLID COVER UNPUNCHED ALUMINUM PLANKING
(REF. PLAN)

* CONCRETE ANCHOR DIAMETER, EDGE DISTANCES, EMBEDMENT, AND REQUIRED SPACING FINAL DESIGN TO BE DETERMINED BY COMPONENT DESIGNER.

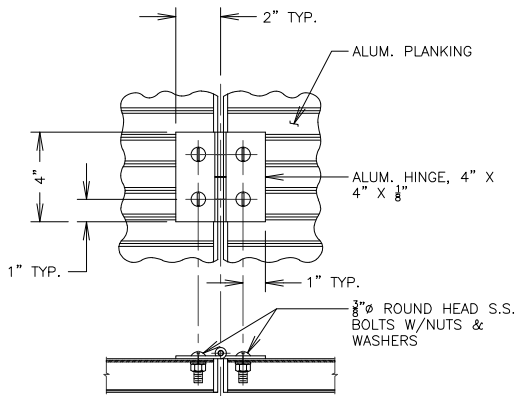
ALUMINUM I-BAR GRATING
(REF. PLAN)



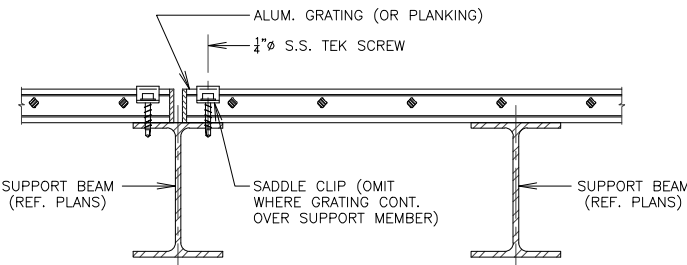
LIFTING HOLE AT PLANKING
(ALSO PROVIDES ACCESS TO HOLD-DOWN CLIP)



LIFT HANDLE AT PLANKING
(TYP. AT PLANK ENDS)

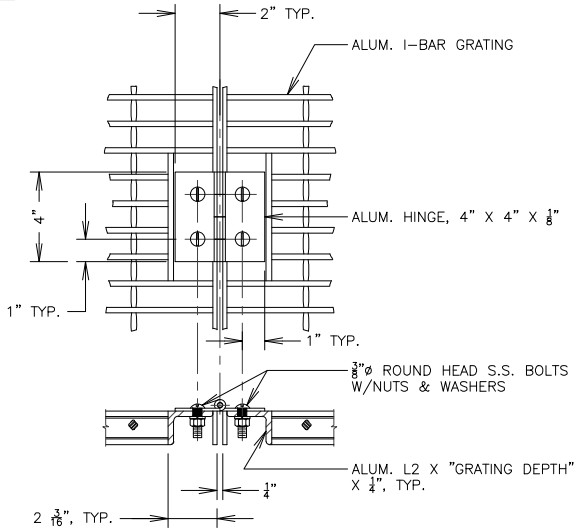


HINGE AT PLANKING
(WHERE SHOWN ON PLANS)



SUPPORT AT END(S) OF GRATING PANELS
GRATING CONT. OVER SUPPORT

GRATING AT SUPPORT BEAMS
(TYP. AT PLANK ENDS)



HINGE AT I-BAR GRATING
(WHERE SHOWN ON PLANS)

DESIGN SPECIFICATION SUMMARY – ALUMINUM GRATING, PLANKING & TREADS:

- COMPONENTS SHOWN ON THIS SHEET ARE A DELEGATED DESIGN. CONCEPT SHOWN IS FOR GENERAL REFERENCE ONLY TO CONVEY MINIMUM STANDARDS. FINAL DESIGN BY COMPONENT SUPPLIER SHALL MEET APPLICABLE CODES AND INDUSTRY STANDARDS. REF. ADDITIONAL NOTES ON 100-AS-01 REGARDING COMPONENT MANUFACTURER DESIGN AND SUBMITTAL REQUIREMENTS.
- I-BAR GRATING SHALL BE FABRICATED OF ALUMINUM I-SHAPED BARS, ALLOY 6063-T6, WITH SWAGED CROSS BARS SPACED ON 4" CENTERS. BEARING BARS SHALL BE SPACED ON 1 3/16" CENTERS. TOP SURFACE OF BEARING BARS SHALL BE STRIATED TO PROVIDE A NON-SLIP SURFACE.
- PLANKING SHALL BE EXTRUDED FROM ALUMINUM ALLOY 6063-T6. TOP SURFACE SHALL BE PUNCHED (WITH UPSET EDGES) OR UN-PUNCHED, AS SPECIFIED ON THE PLANS, AND SHALL HAVE CONTINUOUS STRIATIONS FOR SKID RESISTANCE.
- GRATING AND PLANKING SHALL SUPPORT A UNIFORM LOAD OF 200 POUNDS PER SQUARE FOOT WITH A DEFLECTION OF NOT MORE THAN 1/4". MAXIMUM FIBER STRESS SHALL NOT EXCEED THAT ALLOWED BY THE ALUMINUM ASSOCIATION. MINIMUM DEPTH SHALL BE 1 1/4".
- STANDARD INSTALLATION CLEARANCES AND TOLERANCES SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT METAL BAR GRATING MANUAL PUBLISHED BY THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS.
- INSTALL ALUMINUM CLAMPS OR CLIPS TO ANCHOR GRATING AND PLANKING TO SUPPORTS. A MINIMUM OF FOUR FASTENERS IS REQUIRED PER PANEL UNLESS OTHERWISE NOTED ON THE DRAWINGS. CLIPS SHALL NOT PROTRUDE ABOVE THE TOP OF THE GRATING.
- CUT-OUTS FOR CIRCULAR OBSTRUCTIONS TO BE AT LEAST 2" LARGER IN DIAMETER THAN THE OBSTRUCTION. CUTOUTS FOR ALL PIPING 4" AND LESS IN DIAMETER TO BE MADE IN THE FIELD. ALL OPENINGS WHERE MORE THAN FOUR BEARING BARS ARE CUT SHALL BE Banded WITH BAR THE SAME DEPTH AS THE BEARING BARS. THE ENDS OF ALL GRATING AND PLANKING SHALL BE Banded.
- GRATING AND/OR PLANKING SUPPORTS SHALL BE EMBEDDED TYPE UNO. SHELF ANGLE TYPE ARE DENOTED ON PLANS BY "(S)".
- SHELF ANGLES SHALL BE ANCHORED TO CONCRETE WITH STAINLESS STEEL TYPE 303 OR 304 WEDGE ANCHORS, UNO. CONCRETE ANCHOR EDGE DISTANCES SHALL BE AS SHOWN. WHERE NOT SHOWN AND/OR SPECIFICALLY SPECIFIED, PROVIDE DESIGN FOR EPOXY TYPE POST-INSTALLED ANCHORS AT EDGE DISTANCES < 6", EXPANSION OR SLEEVE TYPE AT EDGE DISTANCES AT OR > 6".
- ALUMINUM STAIR TREADS SHALL BE I-BAR GRATING TYPE TREADS AND SHALL BE FURNISHED WITH EXTRUDED ALUMINUM CORRUGATED NOSING. ALUMINUM CARRIER ANGLES SHALL BE WELDED TO THE ENDS OF STAIR TREADS. MINIMUM DEPTH OF GRATING TREADS SHALL BE 1 1/4".
- ALUMINUM SURFACES IN CONTACT WITH CONCRETE OR DISSIMILAR METALS SHALL BE PROTECTED WITH A COAT OF BITUMINOUS PAINT.
- REINFORCE GRATING SUPPORT ANGLES ACROSS OPENINGS WITH L3X2X1/4(LLV), ANCHOR ENDS TO SIDES OF OPENINGS, AS APPLICABLE, TYP. UNO.

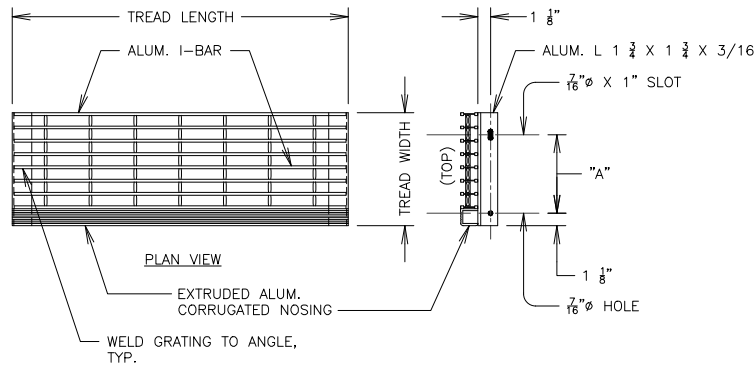
ALUMINUM I-BAR TREADS		
TREAD WIDTH	NUMBER OF BEARING BARS	DIM. A
6 5/8"	5	2 1/2"
7 13/16"	6	4 1/2"
9"	7	4 1/2"
10 3/16"	8	7"
11 3/8"	9	7"
12 9/16"	10	7"

TREAD TYPE-1T

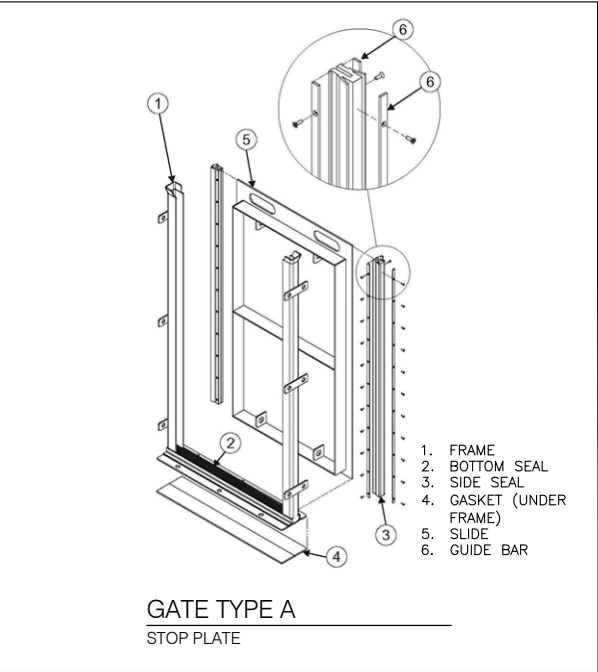
ALUMINUM I-BAR TREADS	
BEARING BAR SIZE	MAXIMUM TREAD **LENGTH
1 1/4"	2'-8"
1 1/2"	3'-6"
1 3/4"	4'-7"
2"	5'-8"

**BASED ON 400 LB. CONCENTRATED LOAD APPLIED ON THE CENTERLINE OF THE SPAN AND DISTRIBUTED OVER THE NOSING & 4 BEARING BARS
SAME TABLE FOR PLANKING TREADS WHEN SPECIFIED ON DRAWINGS

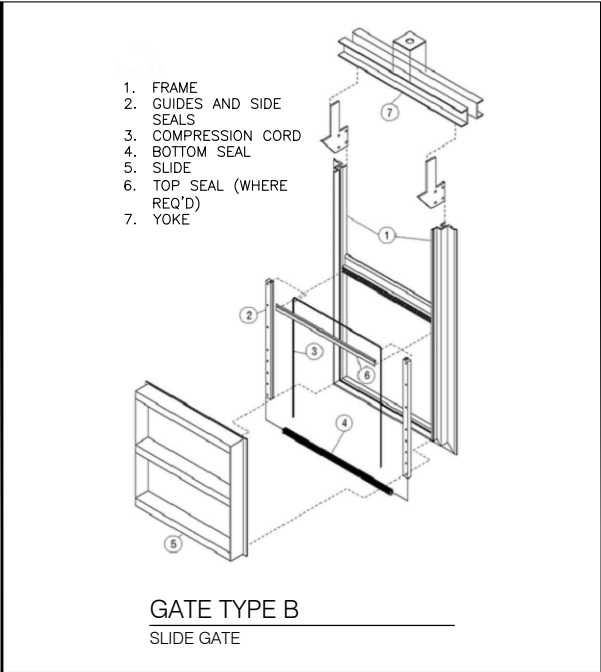
TREAD TYPE-2T



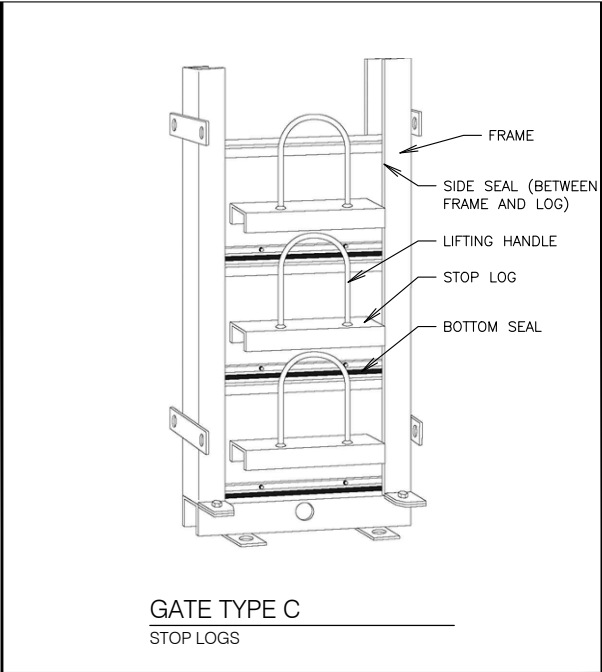
ALUMINUM I-BAR GRATING STAIR TREAD
(REF. PLAN)



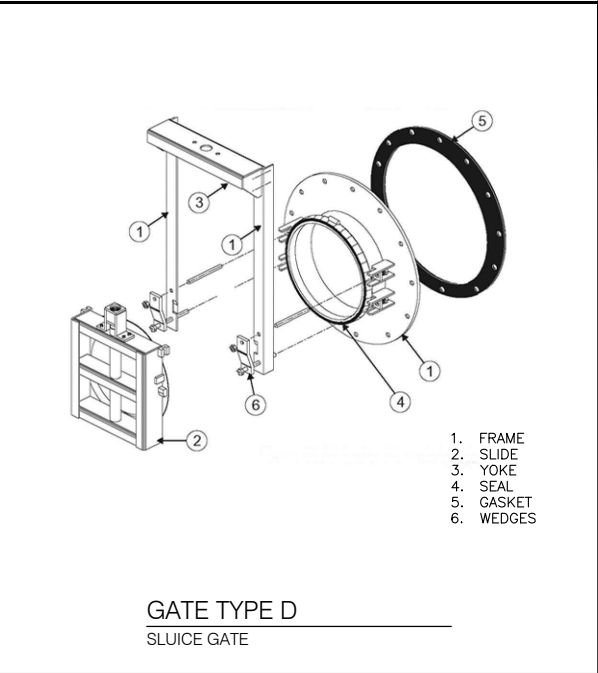
GATE TYPE A
STOP PLATE



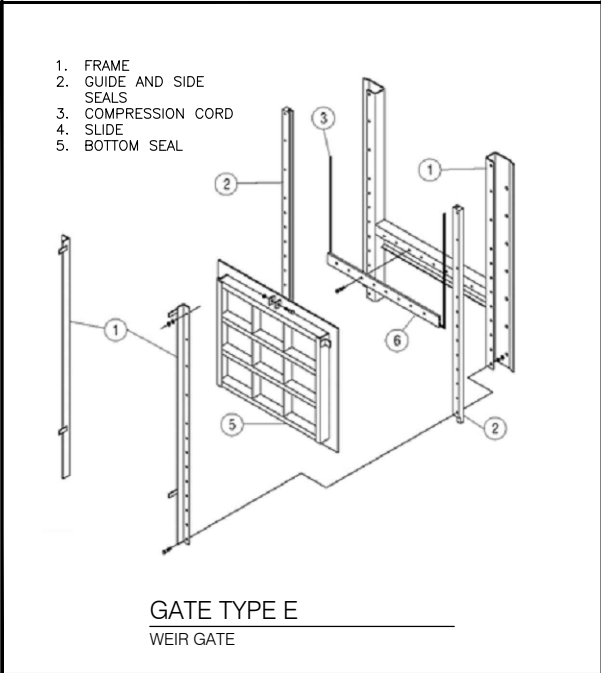
GATE TYPE B
SLIDE GATE



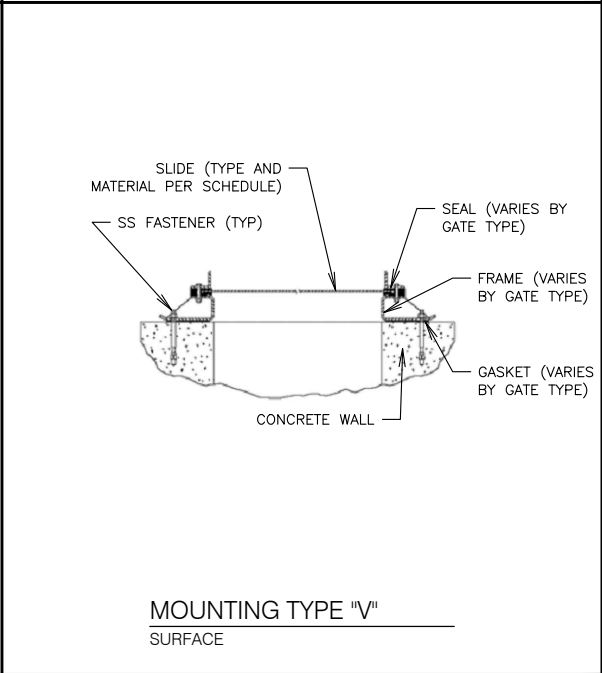
GATE TYPE C
STOP LOGS



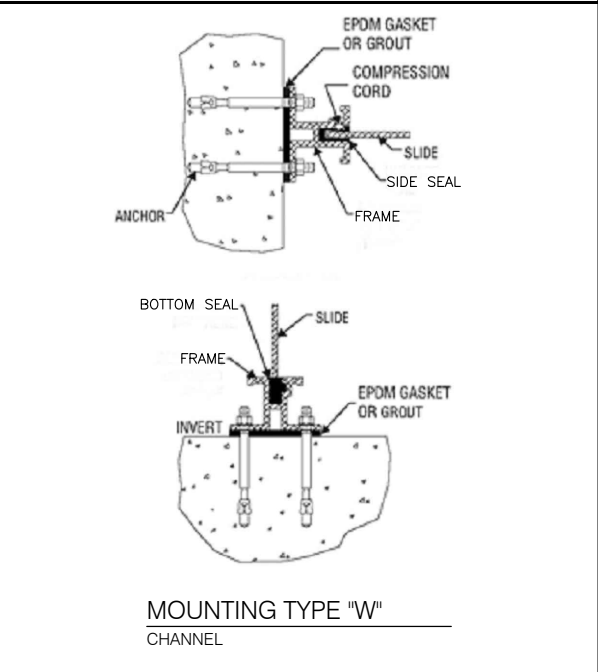
GATE TYPE D
SLUICE GATE



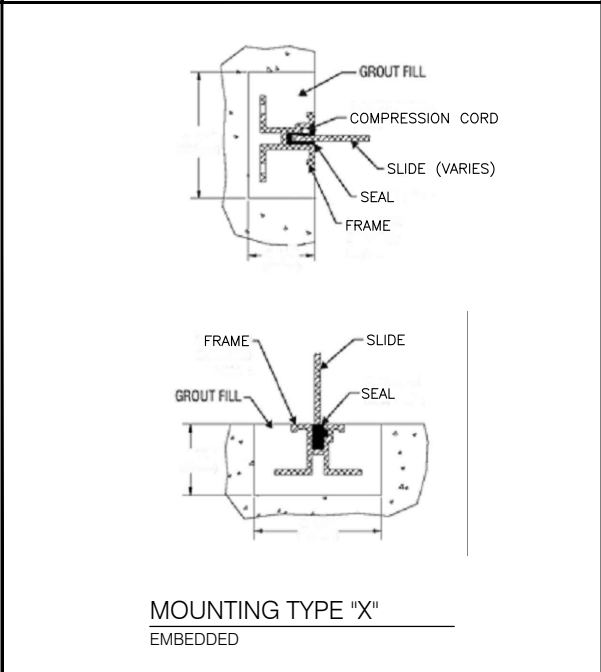
GATE TYPE E
WEIR GATE



MOUNTING TYPE "V"
SURFACE

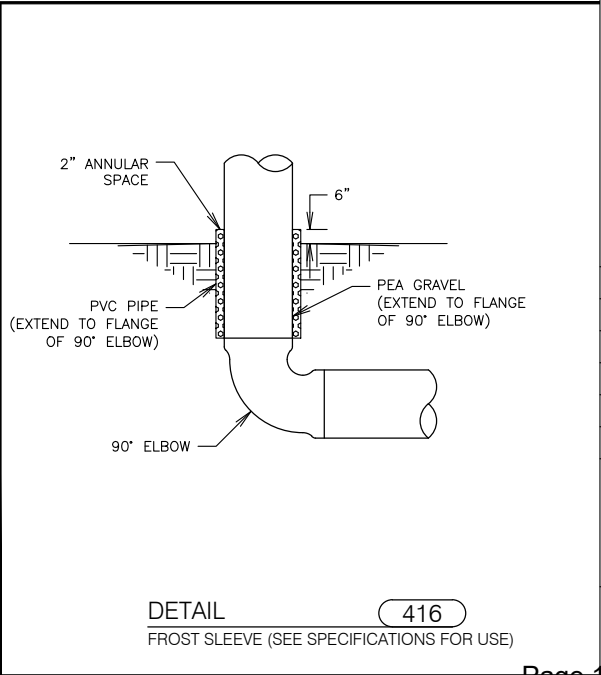
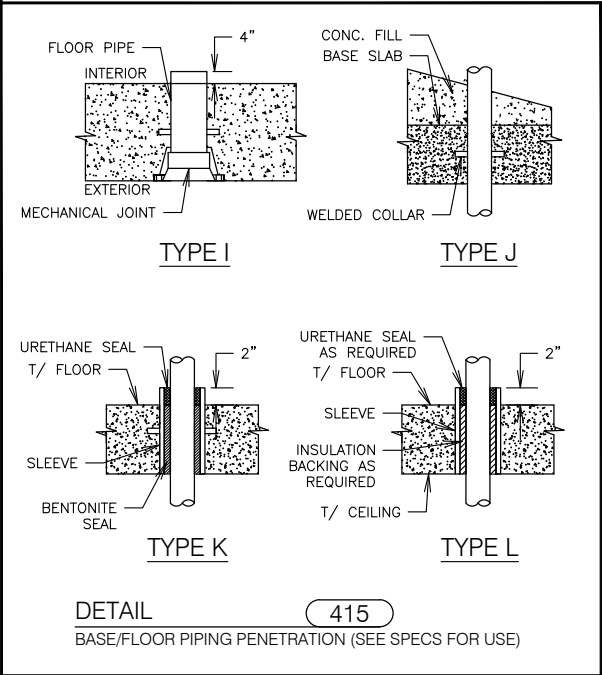
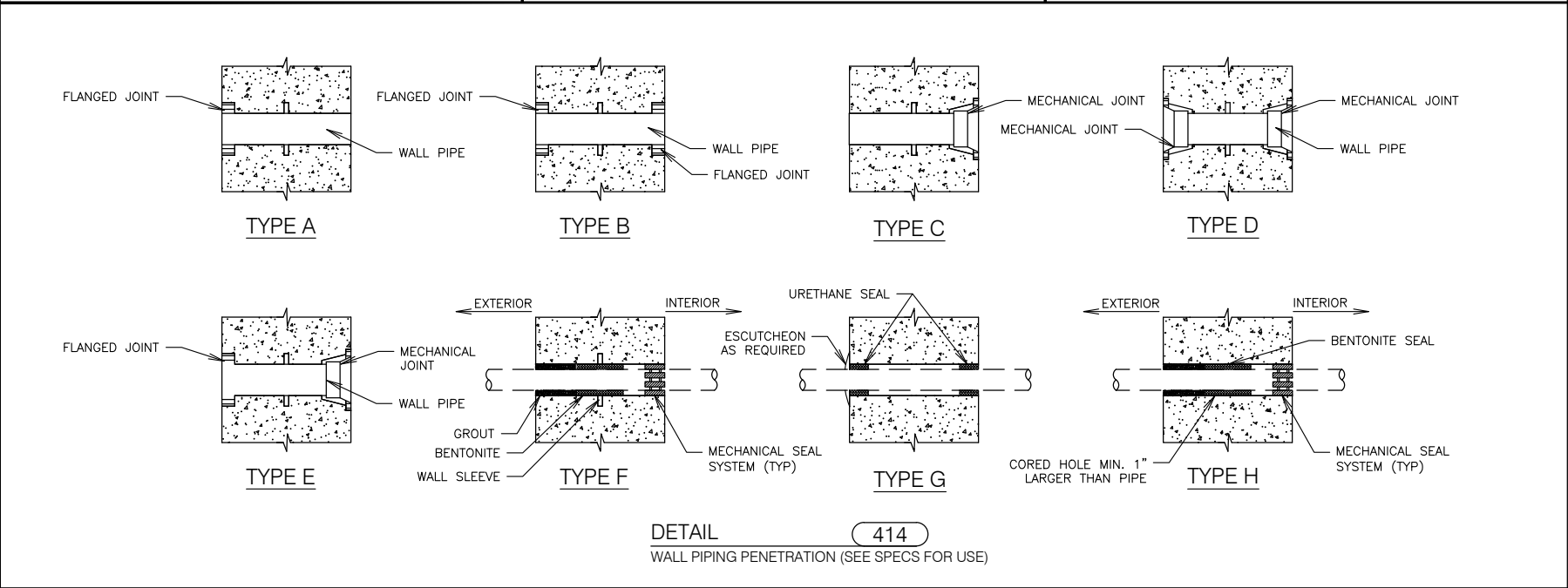
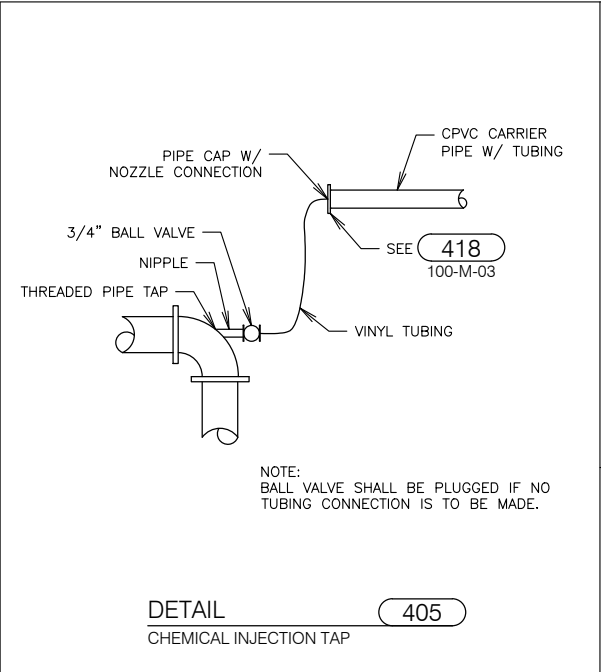
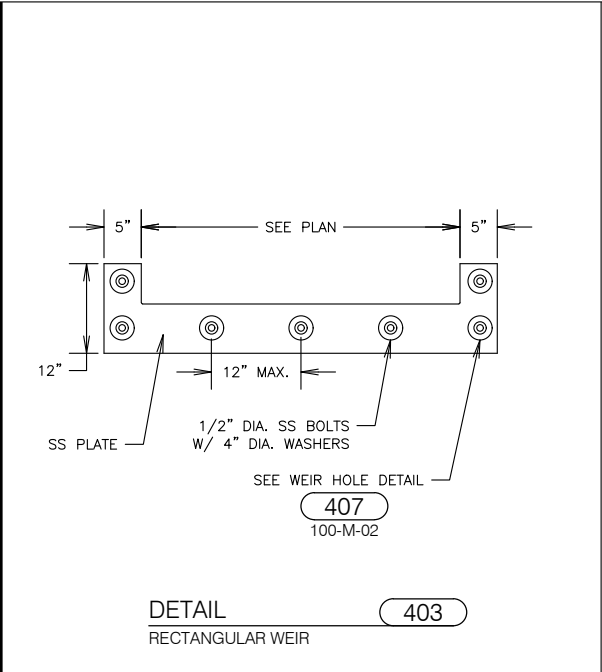
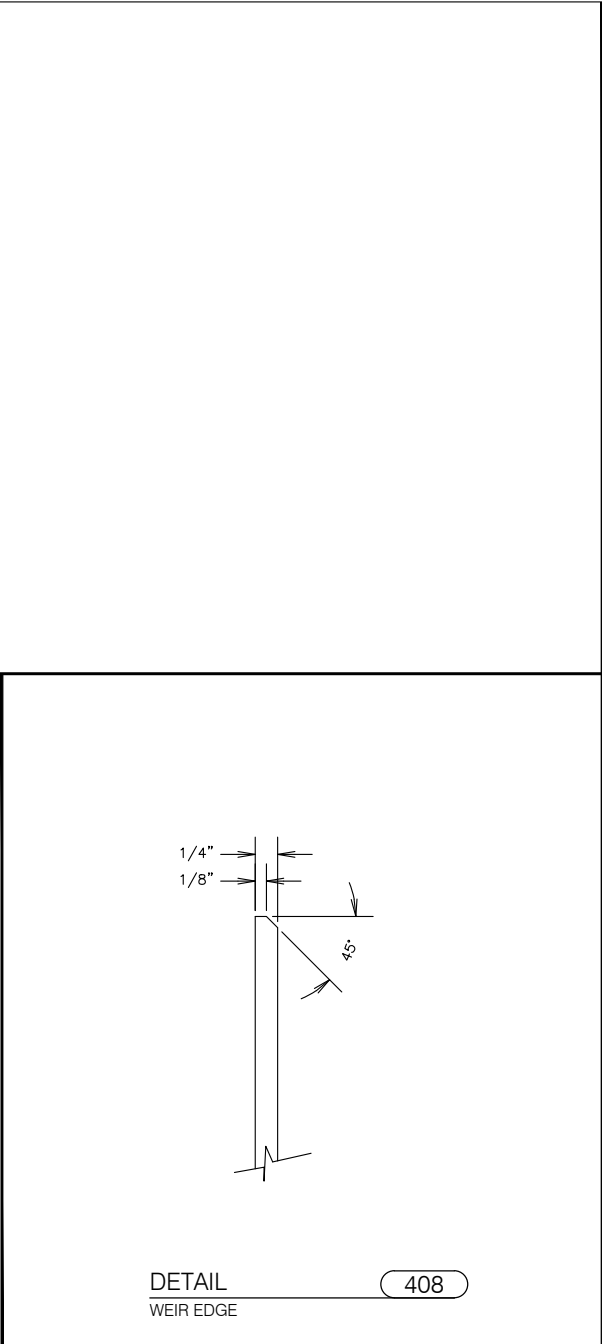
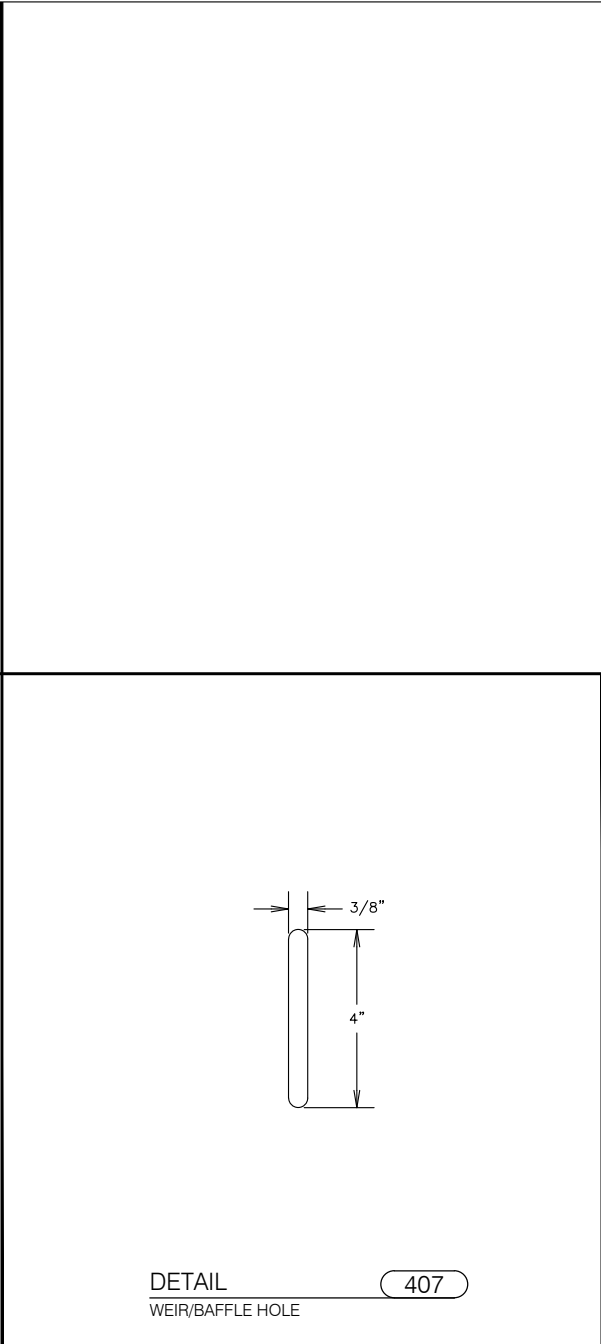
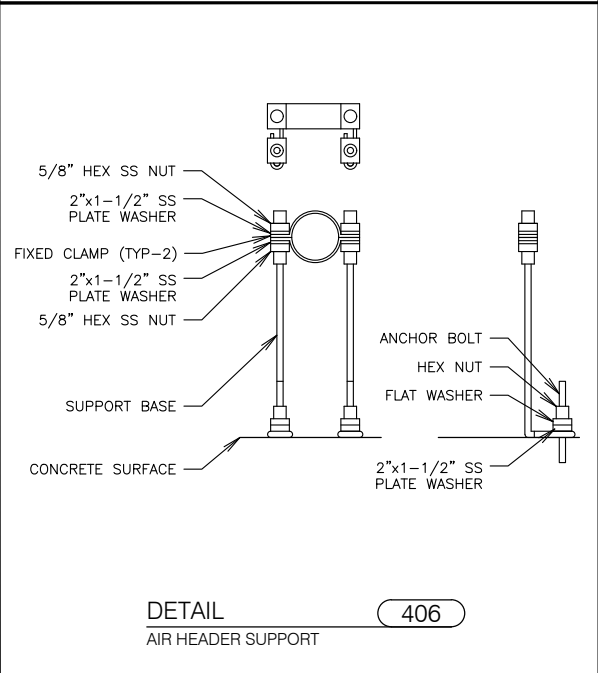
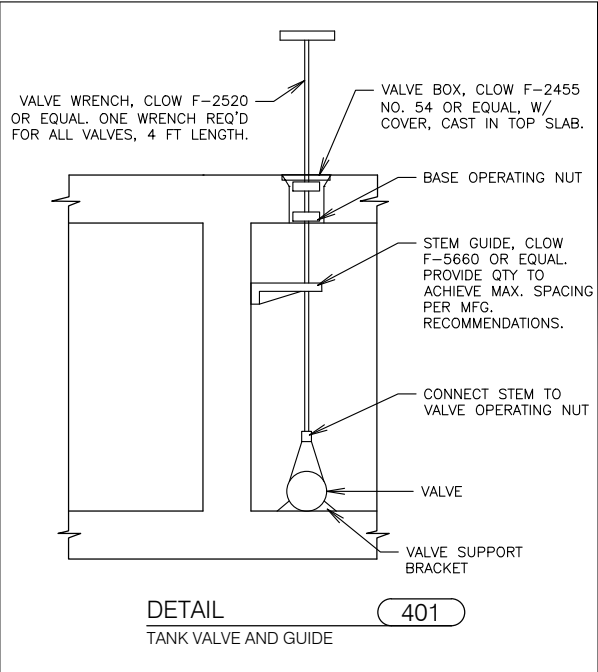


MOUNTING TYPE "W"
CHANNEL



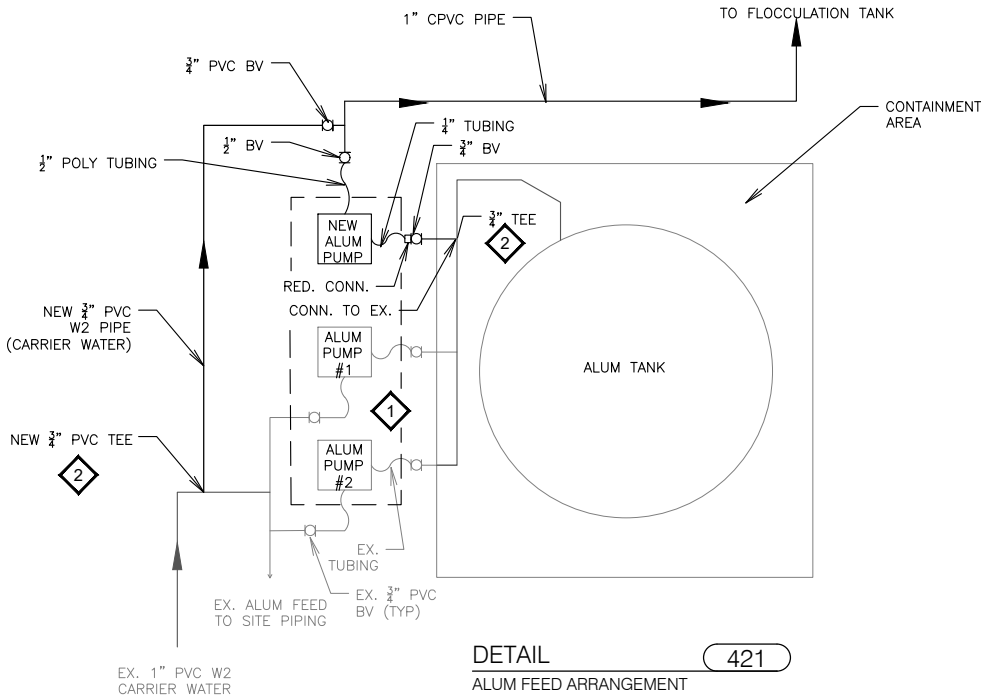
MOUNTING TYPE "X"
EMBEDDED

PROCESS GATE SCHEDULE											
GATE					OPENING				DESIGN PARAMETERS		
NO.	TYPE	MOUNTING	OPERATOR	MATERIAL	INVERT*	WIDTH	HEIGHT	T/WALL	TRAVEL**	SEATING HEAD***	UNSEATING HEAD***
60-GT-01	B	V	12	304 SS	843.42	30"	30"	851.08	30"	3'	3'
60-GT-02	E	V	12	304 SS	847.00	72"	18"	851.08	18"	3'	3'
60-GT-03	E	V	12	304 SS	847.00	72"	18"	851.08	18"	3'	3'
60-GT-04	B	V	12	304 SS	843.41	30"	30"	851.00	30"	3'	3'
60-GT-05	B	V	12	304 SS	841.75	30"	30"	851.00	30"	3'	3'
70-GT-01	C	X	10	304 SS	843.20	78"	52"	847.60	-	2'	2'
70-GT-02	C	X	10	304 SS	843.35	42"	51"	847.60	-	2'	2'
70-GT-03	C	X	10	304 SS	843.35	24"	51"	847.60	-	2'	2'
Notes:											
1.	OPERATOR TYPE 10 IS A MANUAL LIFTING DEVICE FOR STOP LOGS OR MANUAL FOR STOP PLATES; TYPE 11 IS A HANDWHEEL; TYPE 12 IS A SINGLE STEM AND GEARBOX; TYPE 13 IS A SINGLE NON-RISING STEM WITH OPERATING NUT; TYPE 14 IS A DUAL STEM AND GEARBOX; AND TYPE 15 IS AN ELECTRICALLY ACTUATED CRANK. SIDE MOUNT OPERATION TO BE ACCESSIBLE FROM WALKWAY.										
2.	FRP GATE OR ALUMINUM MATERIAL MAY BE USED IN LIEU OF STAINLESS STEEL AS LISTED.										
3.	PROVIDE THREE (3) 12" HIGH STOP LOGS, TWO (2) 6" HIGH STOP LOGS FOR EACH GATE										
4.	PROVIDE GUIDES/FRAMES ONLY. WILL SHARE STOP LOGS/PLATES WITH OTHER GATES.										
5.	SEE DETAILS FOR GATE TYPES AND MOUNTING.										
6.	TOP OF WALL FOR GATE FRAME AND OPERATOR DIFFER. REFER TO ASSOCIATED PLANS.										
*	INVERT IS OPENING INVERT. MANUFACTURER TO DETERMINE APPROPRIATE GATE INVERT.										
**	GATE TRAVEL IS MEASURED FROM THE INVERT OF THE OPENING UP THE DISTANCE OF TRAVEL.										
***	SEATING AND UNSEATING HEAD IS FROM THE CENTERLINE OF THE GATE TO THE MAXIMUM WATER LEVEL.										

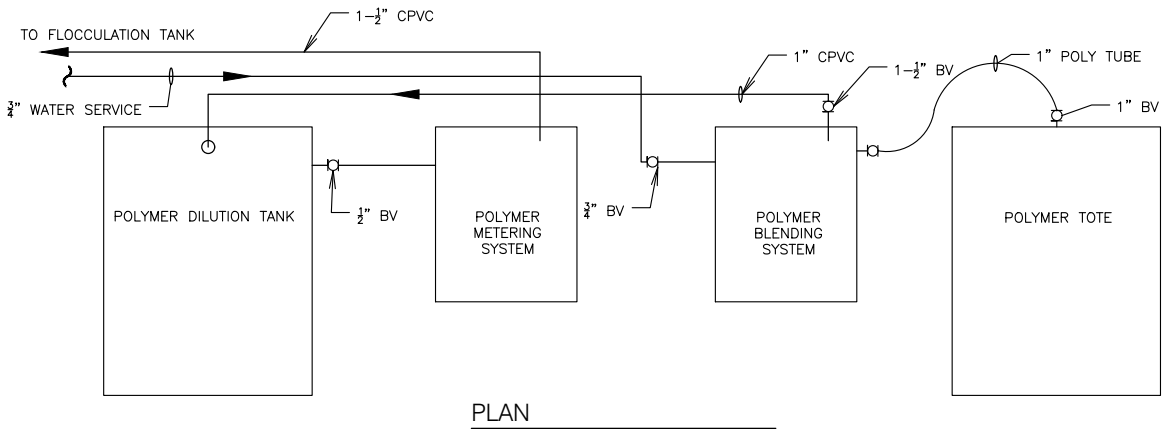


KEY NOTES

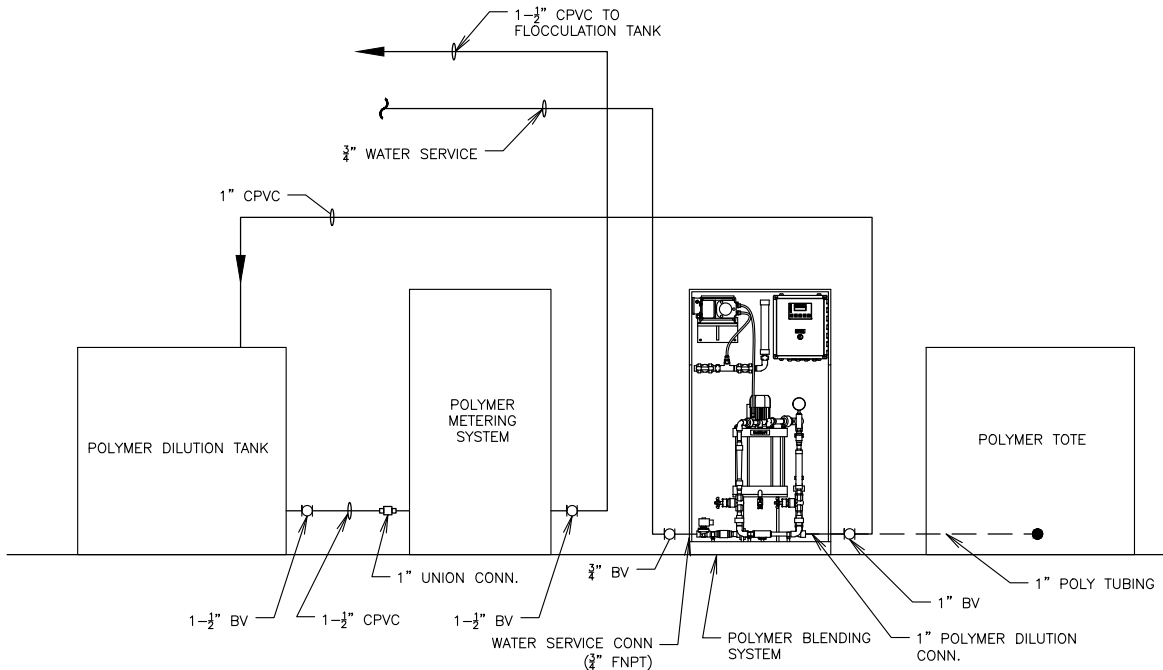
1. PROVIDE NEW 16"W X 48"L X 42" TALL WOOD FRAME WORK BENCH FOR MOUNTING EXISTING AND NEW ALUM PUMPS AT CURRENT LOCATION.
2. CONTRACTOR TO CONFIRM THE EXISTING MATERIAL AND SIZE AT EACH CONNECTION LOCATION.



DETAIL 421
ALUM FEED ARRANGEMENT

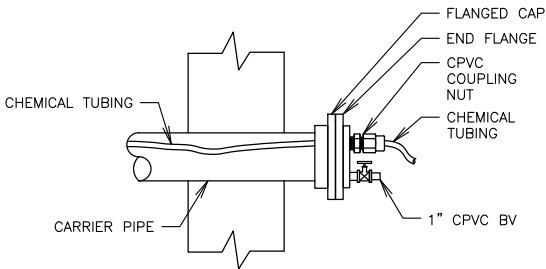


PLAN



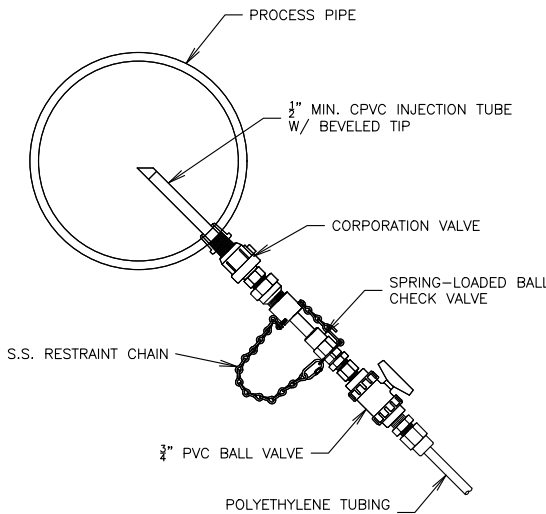
PROFILE

DETAIL 422
POLYMER FEED ARRANGEMENT

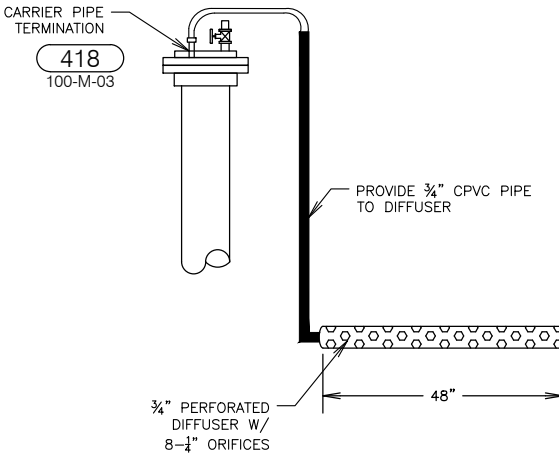


- NOTES:
1. CARRIER PIPE TO BE CAPPED AS DEPICTED AT ALL ENTRANCES AND EXITS TO AND FROM BUILDING INTERIORS, MANHOLES, AND WASTEWATER STRUCTURES.
 2. TUBING COUPLING NUT SHALL BE PROVIDED FOR EACH CHEMICAL TUBE LOCATED IN THE CARRIER PIPE.
 3. THE COUPLING NUT SHALL BE TAPPED THRU THE CAP AND FORM A WATERTIGHT CONNECTION.
 4. EXCESS TUBING TO BE PROVIDED AT INTERIOR OF CAP TO ALLOW REMOVAL OF CAP.
 5. PROVIDE BALL VALVE FOR DRAIN LINES AT ROOM INTERIORS.

DETAIL 418
CARRIER PIPE TERMINATION



DETAIL 419
CHEMICAL INJECTION TAP



DETAIL 420
CHEMICAL DIFFUSER

6264 Nesbit Road
Madison, WI 53719
(608) 273-3350
www.tceengineers.net

TOWN & COUNTRY
ENGINEERING, INC.

PROCESS DETAILS

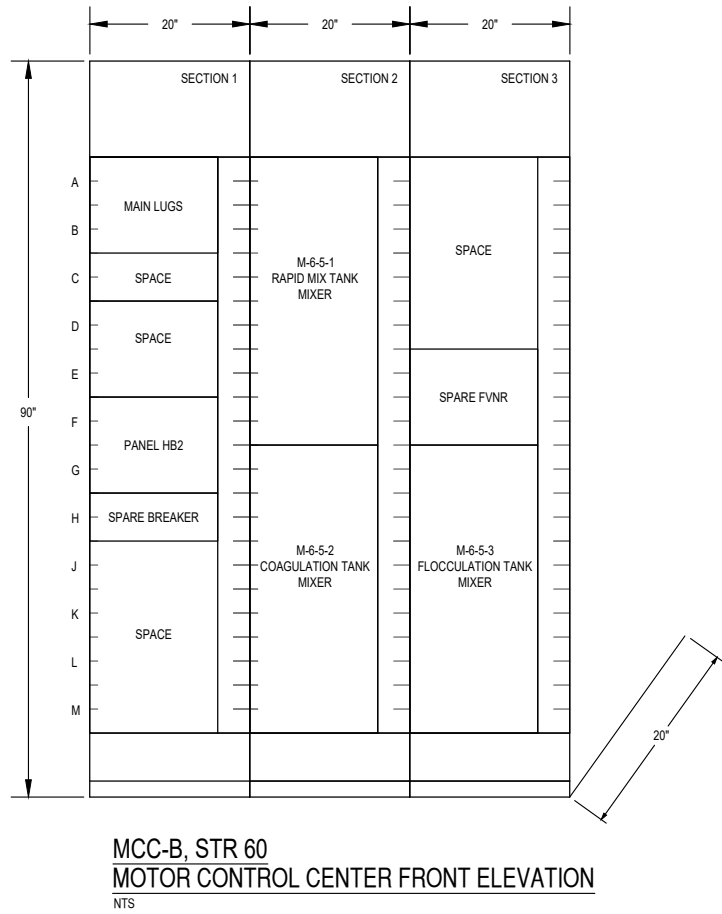
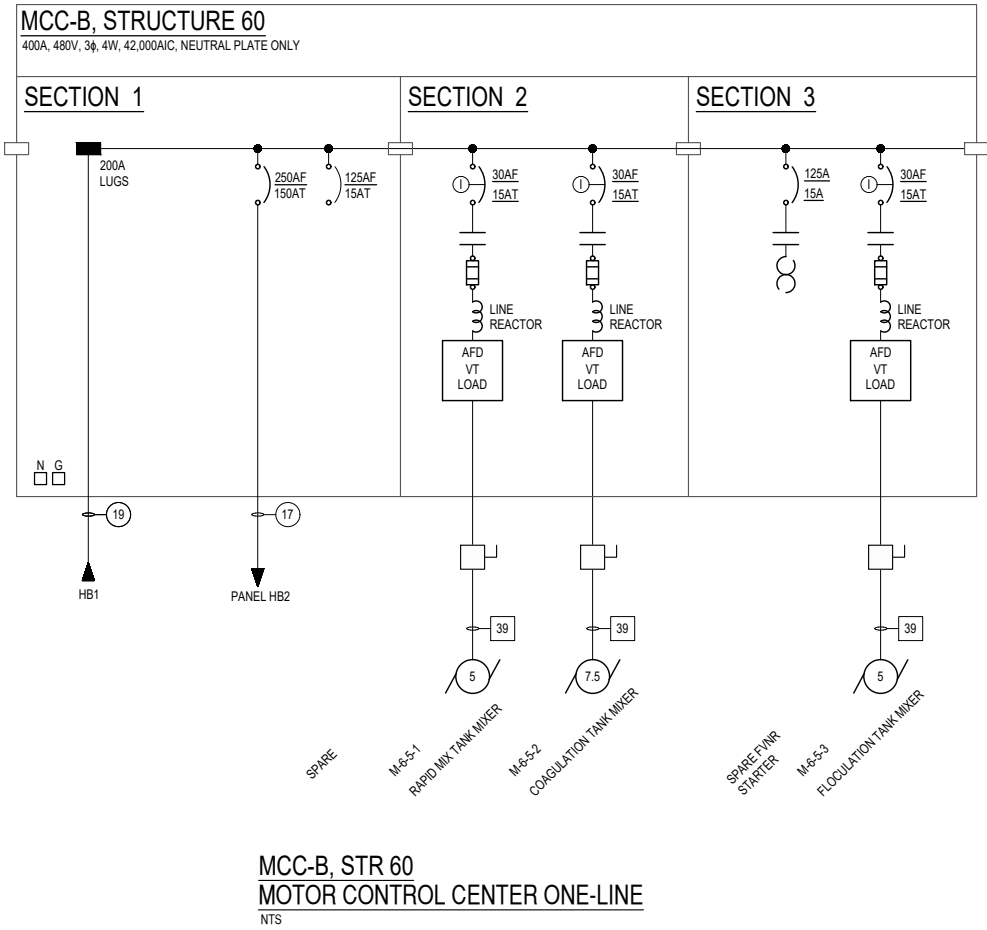
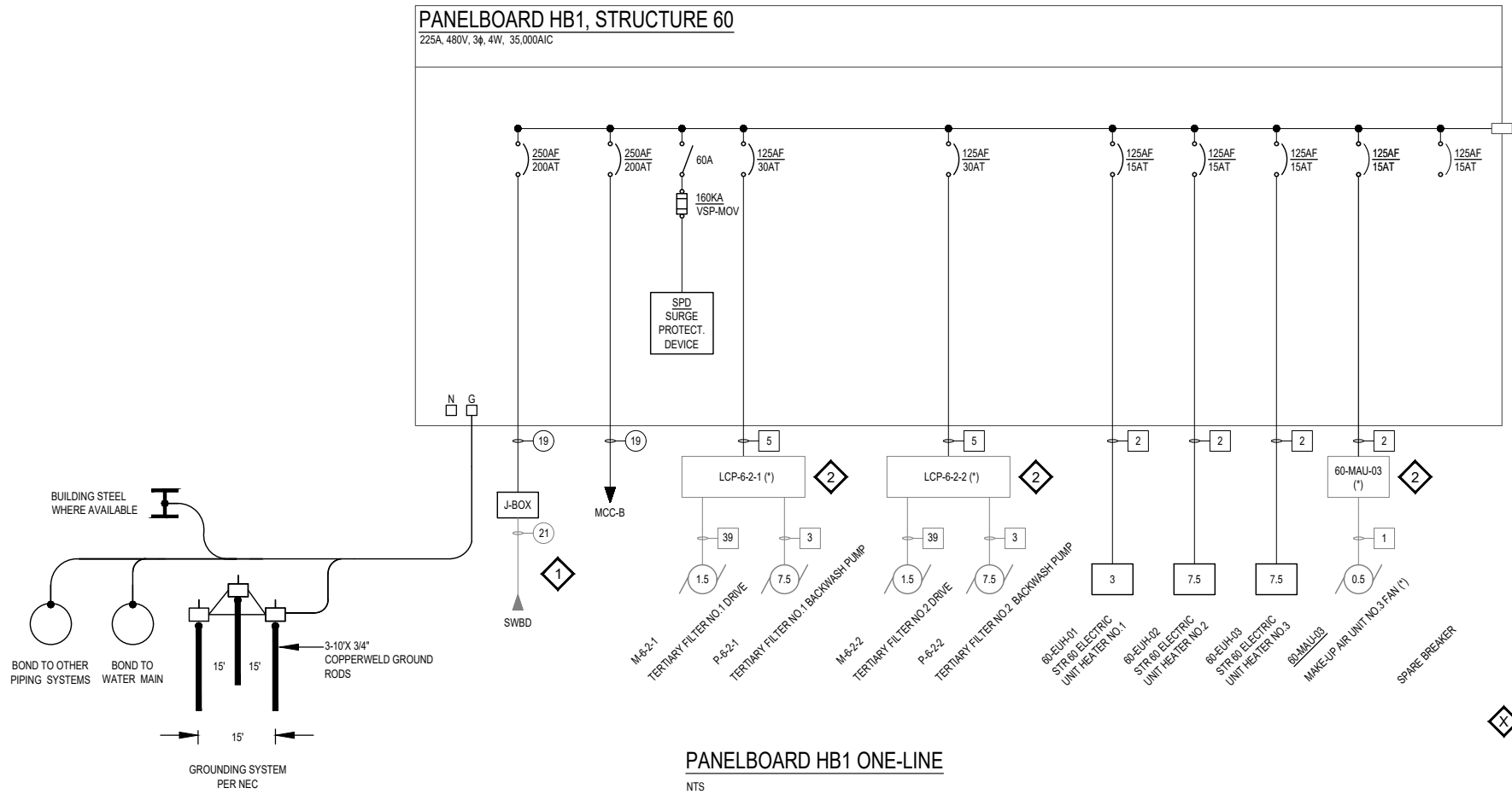
2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION
Village of Jackson, Wisconsin

PROJECT NO.: JK 18
DRAWING FILE: 100-M-03
DRAWN BY: J.L.R.
CHECKED BY: G.J.D.
DATE: 1-4-24
REVISIONS:
SCALE:

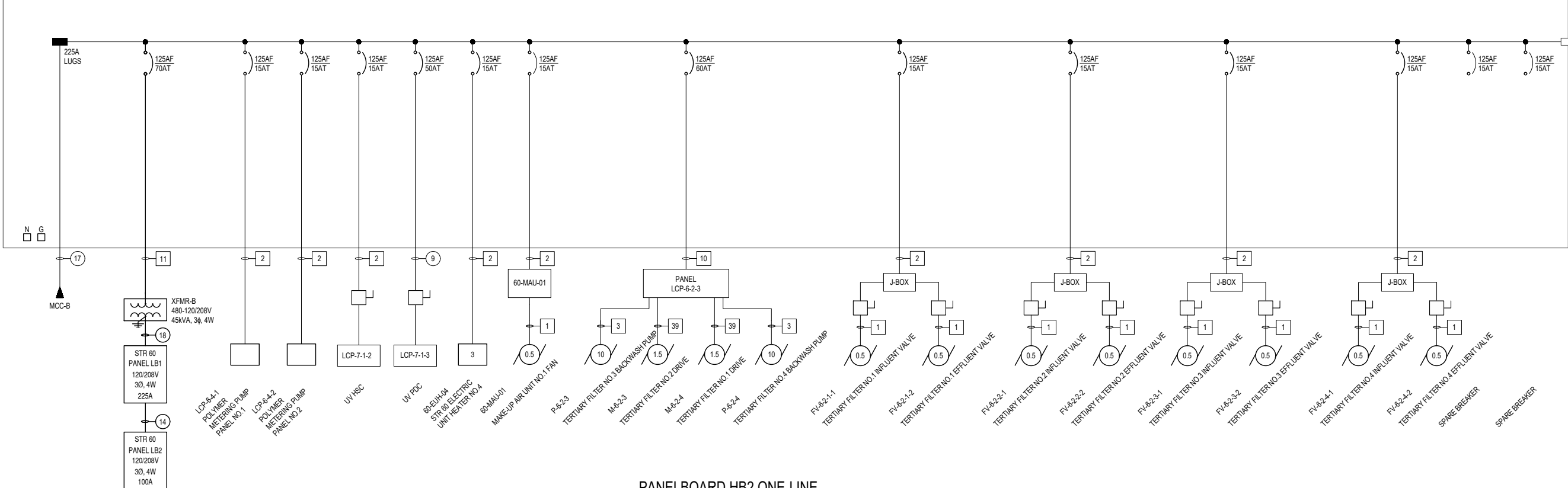
N.T.S.

SHEET: 51

100-M-03



PANELBOARD HB2, STRUCTURE 60
225A, 480V, 3Ø, 4W, 35,000AIC



PANELBOARD HB2 ONE-LINE
NTS

FIXTURE SCHEDULE						
TYPE	DESCRIPTION	LAMP TYPE	WATTS/ FIXTURE	MANUFACTURER	CATALOG NUMBER	NOTE
B1	INDUSTRIAL LINEAR BAY	LED	31	METALUX	4ILED-LD5-5-W-UNV-L840-CD1-U	
B2	INDUSTRIAL LINEAR BAY	LED	60	METALUX	4ILED-LD5-9-W-UNV-L840-CD1-U	
C1	13-IN ROUND, WET LOCATION, ENCLOSED AND GASKETED	LED	24	KENALL	MR13FL-PP-MW020L40K-DV	
F1	UNDERWATER NICHE FIXTURE	LED	44	HYDREL	4426-SS-18LED-WHT41K-120-VWFL-CLS-NM-CSLX-SWM	1
D1	EXTERIOR WALL PACK	LED	28	GARDCO	121-16L-530-NW-G4-4-UNV-BL-IMR13-BZ	
D2	EXTERIOR AREA LIGHT	LED	38	LITHONIA	DSX0-LED-P1-40K-T3M-MVOLT-TWBA-DDL-CDBXD	
RH-1	SINGLE REMOTE HEAD, NEMA 4X	LED	3	DUAL LITE	DYNRS-4X	
RH-2	DUAL REMOTE HEAD, NEMA 4X	LED	6	DUAL LITE	DYNRD-4X	
X1	WALL MTD. EXIT FIXTURE COMBINATION, WET LOCATION	LED	6	DUAL LITE	DYNC-S-R-W-12	
X2	CEILING MTD. EXIT FIXTURE COMB., WET LOC., DUAL FACE	LED	6	DUAL LITE	DYNC-D-R-W-12	
FIXTURE NOTES: 1. PROVIDE CORD LENGTH SUITABLE FOR INSTALLATION.						

THREE PHASE PANEL SCHEDULE										LB1			
TYPE: <u>LIGHTING & APPLIANCE</u> VOLTAGE: <u>208 / 120 - 3P4W</u> MOUNT: <u>SURFACE</u> <u>SINGLE TUB</u>										BUS CONSTRUCTION: <u>CU</u> GROUND BUS: <u>YES</u> ISOLATED GROUND BUS: <u>NO</u>		BUS AMPACITY: <u>225A</u> MAIN CIRCUIT BREAKER: <u>175A</u> SUB-FEED LUGS: <u>NONE</u> INTERRUPTING CAPACITY: <u>10 KAIC</u>	
NOTE		DESCRIPTION	LOAD	BKR	A	B	C	BKR	LOAD	DESCRIPTION		NOTE	
	1	LIGHTS, ROOM 605	5.00	20/1	14.0	***	***		9.00			2	
	3	LIGHTS, ROOM 606	1.50	20/1	***	10.5	***	40/3	9.00	70-LCP		4	
	5	LIGHTS, ROOM 607	4.00	20/1	***	***	13.0		9.00			6	
1	7	LIGHTS, EXTERIOR, TANKS	0.50	20/1	14.5	***	***	20/1	14.00	LCP-7-4-3		8	
	9	LIGHTS, EXTERIOR	1.00	20/1	***	1.0	***	20/1		SPARE		10	
	11	RECEPT, ROOM 605, UPPER	6.00	20/1	***	***	6.0	20/1		SPARE		12	
	13	RECEPT, ROOM 605, LOWER	3.00	20/1	3.0	***	***	20/1		SPARE		14	
	15	RECEPT, ROOM 606	4.50	20/1	***	4.5	***	20/1		SPARE		16	
	17	RECEPT, ROOM 607	6.00	20/1	***	***	6.0	20/1		SPARE		18	
	19	RECEPT, EXTERIOR	3.00	20/1	3.0	***	***	20/1		SPARE		20	
	21	SPARE		20/1	***	0.0	***	20/1		SPARE		22	
	23	SPARE		20/1	***	***	0.0	20/1		SPARE		24	
	25	SPARE		20/1	0.0	***	***	20/1		SPARE		26	
	27	SPARE		20/1	***	0.0	***	20/1		SPARE		28	
	29	SPARE		20/1	***	***	0.0	20/1		SPARE		30	
	31	60-GUH-03	4.00	20/1	4.0	***	***	20/1		SPARE		32	
	33	60-GUH-04	4.00	20/1	***	14.0	***	20/1	10.00	OH DOOR 1, ROOM 605		34	
	35	60-EF-02	6.00	20/1	***	***	16.0	20/1	10.00	OH DOOR 2, ROOM 607		36	
	37	60-EF-03	5.00	20/1	45.0	***	***		40.00			38	
	39		10.00		***	50.0	***	100/3	40.00	PANEL LB2		40	
	41	60-DSS-01	10.00	15/2	***	***	50.0		40.00			42	
TOTAL AMPS / PHASE: 83.5 80.0 91.0													
KVA / PHASE: 10.0 9.6 10.9													
TOTAL CONNECTED KVA: 30.6													

SCHEDULE NOTES:
1. PROVIDE GFCI TYPE BREAKER FOR CIRCUIT SERVING MIXING TANK LIGHTS.

FEEDER SCHEDULE															
IDENTIFIER	THERMAL-MAGNETIC CIRCUIT BREAKER	BREAKER PICKUP AMPS (80%)	SINGLE-PHASE TWO-WIRE CIRCUIT		SINGLE OR THREE-PHASE THREE-WIRE CIRCUIT		THREE-PHASE FOUR-WIRE CIRCUIT		ALL	MAX. DISTANCES (FT) 480V 3-PHASE		MAX. DISTANCES (FT) 240V 3-PHASE		MAX. DISTANCES (FT) 120/240V 1-PHASE	
			CONDUIT	CIRCUIT CONDUCTORS	CONDUIT	CIRCUIT CONDUCTORS	CONDUIT	CIRCUIT CONDUCTORS		FEEDER (2% DROP)	BRANCH (3% DROP)	FEEDER (2% DROP)	BRANCH (3% DROP)	FEEDER (2% DROP)	BRANCH (3% DROP)
1	10	8	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12	335	502	167	251	145	218
2	15	12	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12	223	335	112	167	97	145
3	20	16	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12	167	251	84	126	73	109
4	25	20	3/4"	(2) #10	3/4"	(3) #10	3/4"	(4) #10	#10	212	317	106	159	92	138
5	30	24	3/4"	(2) #10	3/4"	(3) #10	3/4"	(4) #10	#10	176	264	88	132	76	115
6	35	28	3/4"	(2) #8	3/4"	(3) #8	3/4"	(4) #8	#10	241	361	120	181	104	157
7	40	32	3/4"	(2) #8	3/4"	(3) #8	3/4"	(4) #8	#10	211	316	105	158	91	137
8	45	36	3/4"	(2) #8	3/4"	(3) #8	3/4"	(4) #8	#10	187	281	94	140	81	122
9	50	40	3/4"	(2) #8	3/4"	(3) #8	3/4"	(4) #8	#10	169	253	84	126	73	110
10	60	48	3/4"	(2) #6	3/4"	(3) #6	3/4"	(4) #6	#10	224	336	112	168	97	146
11	70	56	1"	(2) #4	1"	(3) #4	1-1/4"	(4) #4	#8	305	457	152	228	132	198
12	80	64	1"	(2) #4	1"	(3) #4	1-1/4"	(4) #4	#8	266	400	133	200	115	173
13	90	72	1"	(2) #3	1"	(3) #3	1-1/4"	(4) #3	#8	290	436	145	218	126	189
14	100	80	1"	(2) #3	1"	(3) #3	1-1/4"	(4) #3	#8	261	392	131	196	113	170
15	110	88	1"	(2) #2	1"	(3) #2	1-1/2"	(4) #2	#6	307	461	154	230	133	200
16	125	100	1-1/4"	(2) #1	1-1/2"	(3) #1	1-1/2"	(4) #1	#6	340	510	170	255	147	221
17	150	120	1-1/4"	(1) #1/0	1-1/2"	(3) #1/0	2"	(4) #1/0	#6	355	533	178	266	154	231
18	175	140	N/A	N/A	2"	(3) #2/0	2"	(4) #2/0	#6	377	566	189	283	163	245
19	200	160	N/A	N/A	2"	(3) #3/0	2"	(4) #3/0	#6	413	619	206	310	179	268
20	225	180	N/A	N/A	2"	(3) #4/0	2-1/2"	(4) #4/0	#4	459	688	229	344	199	298
21	250	200	N/A	N/A	2-1/2"	(3) 250KCMIL	3"	(4) 250KCMIL	#4	484	725	242	363	210	314
22	300	240	N/A	N/A	3"	(3) 350KCMIL	3"	(4) 350KCMIL	#4	552	829	276	414	239	359
23	350	280	N/A	N/A	3"	(3) 500KCMIL	3-1/2"	(4) 500KCMIL	#3	647	970	323	485	280	420
24	400	320	N/A	N/A	3-1/2"	(3) 600KCMIL	4"	(4) 600KCMIL	#3	661	992	331	496	286	430
25	450	360	N/A	N/A	(2) 2"	2 SETS OF (3) #4/0	(2) 2-1/2"	2 SETS OF (4) #4/0	#2	459	688	229	344	199	298
26	500	400	N/A	N/A	(2) 2-1/2"	2 SETS OF (3) 250KCMIL	(2) 3"	2 SETS OF (4) 250KCMIL	#2	484	725	242	363	210	314
27	600	480	N/A	N/A	(2) 3"	2 SETS OF (3) 350KCMIL	(2) 3"	2 SETS OF (4) 350KCMIL	#1	552	829	276	414	239	359
28	700	560	N/A	N/A	(2) 3"	2 SETS OF (3) 500KCMIL	(2) 3-1/2"	2 SETS OF (4) 500KCMIL	#1/0	647	970	323	485	280	420
29	800	640	N/A	N/A	(2) 3-1/2"	2 SETS OF (3) 600KCMIL	(2) 4"	2 SETS OF (4) 600KCMIL	#1/0	661	992	331	496	286	430
39	20	16	N/A	N/A	1"	3C#12 SHIELDED MOTOR CABLE	N/A	N/A	(3) #10	167	251	84	126	73	109
40	30	24	N/A	N/A	1"	3C#10 SHIELDED MOTOR CABLE	N/A	N/A	(3) #10	176	264	88	132	76	115
41	50	40	N/A	N/A	1"	3C#8 SHIELDED MOTOR CABLE	N/A	N/A	(3) #10	169	253	84	126	73	110
42	60	48	N/A	N/A	1 1/4"	3C#6 SHIELDED MOTOR CABLE	N/A	N/A	(3) #10	224	336	112	168	97	146
43	80	64	N/A	N/A	1 1/4"	3C#4 SHIELDED MOTOR CABLE	N/A	N/A	(3) #10	266	400	133	200	115	173
44	100	80	N/A	N/A	1 1/2"	3C#3 SHIELDED MOTOR CABLE	N/A	N/A	(3) #10	261	392	131	196	113	170
45	125	100	N/A	N/A	2"	3C#1 SHIELDED MOTOR CABLE	N/A	N/A	(3) #8	340	510	170	255	147	221
46	175	140	N/A	N/A	2"	3C#2/0 SHIELDED MOTOR CABLE	N/A	N/A	(3) #6	377	566	189	283	163	245
PLAN NOTATION: Δ SINGLE-PHASE, TWO-WIRE FEEDER, NUMBER IS THE FEEDER IDENTIFIER □ SINGLE OR THREE-PHASE, THREE-WIRE FEEDER, NUMBER IS THE FEEDER IDENTIFIER ○ THREE-PHASE, FOUR-WIRE FEEDER, NUMBER IS THE FEEDER IDENTIFIER															

THREE PHASE PANEL SCHEDULE										LB2			
TYPE: <u>LIGHTING & APPLIANCE</u> VOLTAGE: <u>208 / 120 - 3P4W</u> MOUNT: <u>SURFACE</u> <u>SINGLE TUB</u>										BUS CONSTRUCTION: <u>CU</u> GROUND BUS: <u>YES</u> ISOLATED GROUND BUS: <u>NO</u>		BUS AMPACITY: <u>100A</u> MAIN CIRCUIT BREAKER: <u>100A</u> SUB-FEED LUGS: <u>NONE</u> INTERRUPTING CAPACITY: <u>10 KAIC</u>	
NOTE		DESCRIPTION	LOAD	BKR	A	B	C	BKR	LOAD	DESCRIPTION		NOTE	
1	1	LIGHTS, ROOM 600 N & S	2.00	20/1	7.0	***	***	20/1	5.00	CONTROL PANEL, LCP-B	2	1	
1	3	LIGHTS, ROOM 600 EAST	1.00	20/1	***	2.0	***	20/1	1.00	FILTER LEVEL SENSOR	4	1	
1	5	LIGHTS, ROOM 600 WEST	1.00	20/1	***	***	2.0	20/1	1.00	BACKWASH FLOW TRANSMITTER	6	1	
1	7	LIGHTS, ROOM 603	1.00	20/1	1.0	***	***	20/1		SPARE	8		
1	9	LIGHTS, ROOM 602	1.00	20/1	***	1.0	***	20/1		SPARE	10		
1	11	LIGHTS, ROOM 604	4.00	20/1	***	***	4.0	20/1		SPARE	12		
1	13	EXIT LIGHTS	1.00	20/1	1.0	***	***	20/1		SPARE	14		
1	15	SPARE		20/1	***	1.0	***	20/1	1.00	COAGULANT PUMP CONTROLLER	16	1	
1	17	RECEPT, RMS 602, 203, 604 & 600 S	6.00	20/1	***	***	7.5	20/1	1.50	P-4-5-1 RECEPT	18	3	
1	19	RECEPT, ROOM 600 WEST	3.00	20/1	4.5	***	***	20/1	1.50	P-4-5-2 RECEPT	20	3	
1	21	RECEPT, ROOM 600 N & E	7.50	20/1	***	9.0	***	20/1	1.50	P-4-5-3 RECEPT	22	3	
2	23	GUH, ROOM 604	2.00	20/1	***	***	8.0	20/1	6.00	P-4-6-1	24	3	
1	25	MAU-04	7.50	20/1	9.0	***	***	20/1	1.50	P-6-3-1 RECEPT	26	3	
1	27	EXHAUST FAN, ROOM 604	4.50	20/1	***	6.0	***	20/1	1.50	P-6-3-2 RECEPT	28	3	
1	29	EXHAUST FAN, ROOM 600 NORTH	4.50	20/1	***	***	6.0	20/1	1.50	TELEPHONE RECEPT.	30	1	
1	31	EXHAUST FAN, ROOM 600 SOUTH	7.50	20/1	7.5	***	***	20/1		SPARE	32		
2	33	60-EF-01, 60-D-01	4.00	20/1	***	4.0	***	20/1		SPARE	34		
2	35	60-GUH-01, 60-GUH-02	7.00	20/1	***	***	7.0	20/1		SPARE	36		
1	37	WH-1	5.00	20/1	5.0	***	***	20/1		SPARE	38		
1	39	SUMP PUMPS, ROOM 600 EAST	10.00	20/1	***	19.6	***		9.60				
1	41	SUMP PUMPS, ROOM 600 WEST	10.00	20/1	***	***	19.6	20/2	9.60	60-CONV-01	42	2	
TOTAL AMPS / PHASE: 35.0 42.6 54.1													
KVA / PHASE: 4.2 5.1 6.5													
TOTAL CONNECTED KVA: 15.8													

STR 60 PROCESS INSTRUMENTATION AND EQUIPMENT WIRING SCHEDULE													
TAG NUMBER	DESCRIPTION	FIRST SIGNAL/CONTROL HOMERUN			SECOND SIGNAL/CONTROL HOMERUN			POWER HOMERUN				DETAIL	NOTES
		DESTINATION	WIRING TYPE	WIRING	DESTINATION	WIRING TYPE	WIRING	CIRCUIT	VOLTAGE	CKT. BKR.	WIRING		
TT-18-6-2	TEMPERATURE TRANSMITTER, ROOM 603	LCP-B	24VDC ANALOG	A1								E2-03	
XS-19-4	CONTROL STATION, EXHAUST FAN NO.1	LCP-B	120VAC DISCRETE	D5								E2-03	
LT-4-5	LEVEL TRANSMITTER, ALUM TANK	LCP-B	24VDC ANALOG	A1									
AE/AIT-4-6-1	PHOSPHATE ANALYZER	LCP-B	120VAC DISCRETE	D2				EXISTING					
LCP-60-MAU	MAKE-UP AIR UNIT REMOTE CONTROL STATION	60-MAU-01	120VAC DISCRETE	D10	60-MAU-01	24VDC ANALOG	A1						
LCP-60-MAU	MAKE-UP AIR UNIT REMOTE CONTROL STATION	LCP-B	120VAC DISCRETE	D4									
LCP-6-2-1	POLYMER METERING PUMP PANEL NO.1	LCP-6-2-3	120VAC DISCRETE	D10	LCP-6-2-3	24VDC ANALOG	A1	HB2-X			SEE ONE-LINE		
XS-6-2-1-1	TERTIARY FILTER NO.1 INFLUENT VALVE CONTROL STATION	FV-6-2-1-1	120VAC DISCRETE	D10								E2-04	
XS-6-2-1-2	TERTIARY FILTER NO.1 EFFLUENT VALVE CONTROL STATION	FV-6-2-2-1	120VAC DISCRETE	D10								E2-04	
LCP-6-2-2	POLYMER METERING PUMP PANEL NO.2	LCP-6-2-3	120VAC DISCRETE	D10	LCP-6-2-3	24VDC ANALOG	A1	HB2-X			SEE ONE-LINE		
XS-6-2-2-1	TERTIARY FILTER NO.2 INFLUENT VALVE CONTROL STATION	FV-6-2-2-1	120VAC DISCRETE	D10								E2-04	
XS-6-2-2-2	TERTIARY FILTER NO.2 EFFLUENT VALVE CONTROL STATION	FV-6-2-2-2	120VAC DISCRETE	D10								E2-04	
PSL-6-2-3	PRESSURE SWITCH LOW, TERTIARY FILTER NO.3 BACKWASH PUMP	LCP-6-2-3	120VAC DISCRETE	D2									
LSH-6-2-3	LEVEL SWITCH, HIGH, TERTIARY FILTER NO.3	LCP-6-2-3	120VAC DISCRETE	D2									
LCP-6-2-3	TERTIARY FILTER NO.3 & 4 LOCAL CONTROL PANEL	LCP-B	120VAC DISCRETE	D8	LCP-B	COPPER ETHERNET 600V	EH1						
LSHH-6-2-3	LEVEL SWITCH, HIGH ALARM, TERTIARY FILTER NO.3	LCP-6-2-3	120VAC DISCRETE	D2									
TSH-6-2-3	TEMPERATURE SWITCH, HIGH, TERTIARY FILTER NO.3 DRIVE MOTOR	LCP-6-2-3	120VAC DISCRETE	D2									
XS-6-2-3-1	TERTIARY FILTER NO.3 INFLUENT VALVE CONTROL STATION	FV-6-2-3-1	120VAC DISCRETE	D10								E2-04	
XS-6-2-3-2	TERTIARY FILTER NO.3 EFFLUENT VALVE CONTROL STATION	FV-6-2-2-3	120VAC DISCRETE	D10								E2-04	
LSHH-6-2-4	LEVEL SWITCH, HIGH ALARM, TERTIARY FILTER NO.4	LCP-6-2-3	120VAC DISCRETE	D2									
PSL-6-2-4	PRESSURE SWITCH LOW, TERTIARY FILTER NO.4 BACKWASH PUMP	LCP-6-2-3	120VAC DISCRETE	D2									
LSH-6-2-4	LEVEL SWITCH, HIGH, TERTIARY FILTER NO.4	LCP-6-2-3	120VAC DISCRETE	D2									
TSH-6-2-4	TEMPERATURE SWITCH, HIGH, TERTIARY FILTER NO.4 DRIVE MOTOR	LCP-6-2-3	120VAC DISCRETE	D2									
XS-6-2-4-1	TERTIARY FILTER NO.4 INFLUENT VALVE CONTROL STATION	FV-6-2-4-1	120VAC DISCRETE	D10								E2-04	
XS-6-2-4-2	TERTIARY FILTER NO.4 EFFLUENT VALVE CONTROL STATION	FV-6-2-2-4	120VAC DISCRETE	D10								E2-04	
LT-6-4-3	LEVEL TRANSMITTER, POLYMER AGING TANK	LCP-6-4-3	24VDC ANALOG	A1									
LCP-6-4-3	POLYMER MAKEDOWN SKID	LCP-6-2-3	120VAC DISCRETE	D8	LCP-6-2-3	24VDC ANALOG	A2	LB1-X	120V/1-PH	20A/1-POLE	2#12 & #12G		
TSH-6-5-1	TEMPERATURE SWITCH, HIGH, RAPID MIX TANK MIXER MOTOR	MCC-B	120VAC DISCRETE	D2									
HS-6-5-1-1	JOG-OFF-REMOTE, RAPID MIX TANK MIXER	MCC-B	120VAC DISCRETE	D3									
TSH-6-5-2	TEMPERATURE SWITCH, HIGH, COAGULATION TANK MIXER MOTOR	MCC-B	120VAC DISCRETE	D2									
HS-6-5-2-1	JOG-OFF-REMOTE, COAGULATION TANK MIXER	MCC-B	120VAC DISCRETE	D3									
TSH-6-5-3	TEMPERATURE SWITCH, HIGH, FLOCCULATION TANK MIXER MOTOR	MCC-B	120VAC DISCRETE	D2									
HS-6-5-3-1	JOG-OFF-REMOTE, FLOCCULATION TANK MIXER	MCC-B	120VAC DISCRETE	D3									
60-MAU-01	MAKE-UP AIR UNIT CONTROL PANEL	LCP-B	120VAC DISCRETE	D6									
-P-4-5-3	ALUM PUMP NO.3	LCP-B	120VAC DISCRETE	D2	LCP-B	24VDC ANALOG	A1						
-P-6-3-1	CHLORINE PUMP NO.1	LCP-B	120VAC DISCRETE	D2	LCP-B	24VDC ANALOG	A1						

STR 70 PROCESS INSTRUMENTATION AND EQUIPMENT WIRING SCHEDULE													
TAG NUMBER	DESCRIPTION	FIRST SIGNAL/CONTROL HOMERUN			SECOND SIGNAL/CONTROL HOMERUN			POWER HOMERUN				DETAIL	NOTES
		DESTINATION	WIRING TYPE	WIRING	DESTINATION	WIRING TYPE	WIRING	CIRCUIT	VOLTAGE	CKT. BKR.	WIRING		
LSLL-7-1	LEVEL SWITCH LOW ALARM, UV CHANNEL	TJB-7-1	120VAC DISCRETE	D2								E2-04	
TJB-7-1	UV LEVEL CONTROL TERMINAL JUNCTION BOX	LCP-7-1-3	12VDC DISCRETE	D2				70-LCP	120V/1-PH	20A/1-POLE	2#12 & #12G		
M-7-1-1	UV BANK A	LCP-7-1-3	MANUFACTURER'S CABLE	M10									
LCP-7-1-1	UV SCC - SYSTEM CONTROL CENTER	70-LCP	120VAC DISCRETE	D6	70-LCP	COPPER ETHERNET 600V	EH1	70-LCP	120V/1-PH	20A/1-POLE	2#12 & #12G		
RE-7-1-1	UV INTENSITY SENSOR, UV BANK A	LCP-7-1-3	MANUFACTURER'S CABLE	M1									
M-7-1-2	UV BANK B	LCP-7-1-3	MANUFACTURER'S CABLE	M10									
RE-7-1-2	UV INTENSITY SENSOR, UV BANK B	LCP-7-1-3	MANUFACTURER'S CABLE	M1									
LCP-7-1-2	UV HSC - HYDRAULIC SYSTEM CENTER	LCP-7-1-1	MODBUS	BELDEN 3106A	LCP-7-1-3	MODBUS	BELDEN 3106A	HB2-X			SEE ONE-LINE		
LCP-7-1-3	UV PDC - POWER DISTRIBUTION CENTER	LCP-7-1-2	MODBUS	BELDEN 3106A	TJB-7-1	120VAC DISCRETE	D2	HB2-X			SEE ONE-LINE		
XS-7-2-1	POSITION MONITOR, UV BANK A	LCP-7-1-3	MANUFACTURER'S CABLE	M1									
XS-7-2-2	POSITION MONITOR, UV BANK B	LCP-7-1-3	MANUFACTURER'S CABLE	M1									
AIT-7-4-2-1	EFFLUENT DO TRANSMITTER	70-MCP	24VDC ANALOG	A1				EXISTING					
FIT-7-5-1	EFFLUENT FLOW TRANSMITTER	70-LCP	24VDC ANALOG	A1									
70-LCP	STR 70 NETWORK DISTRIBUTION PANEL	LCP-B	FIBER OPTIC CABLE3	FO6				LB1-X	208V/3-PH	40A/3-POLE	3#8 & #10G		

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SCHEDULES

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

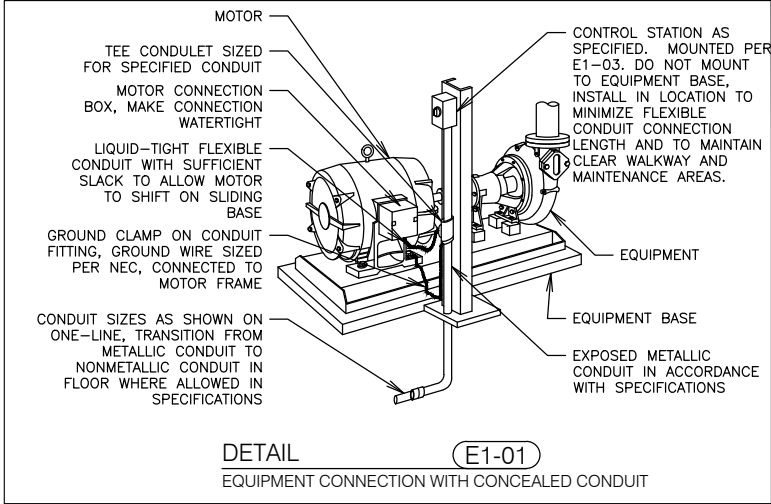
PROJECT NO.:
JK 18
DRAWING FILE:
100-E-04
DRAWN BY:
N.W.W.
CHECKED BY:
D.L.G.
DATE:
1-3-24
REVISIONS:

SCALE:

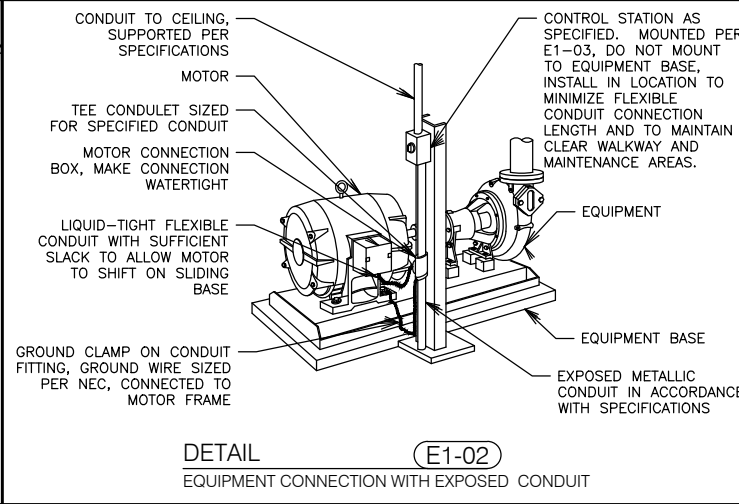
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100-E-04

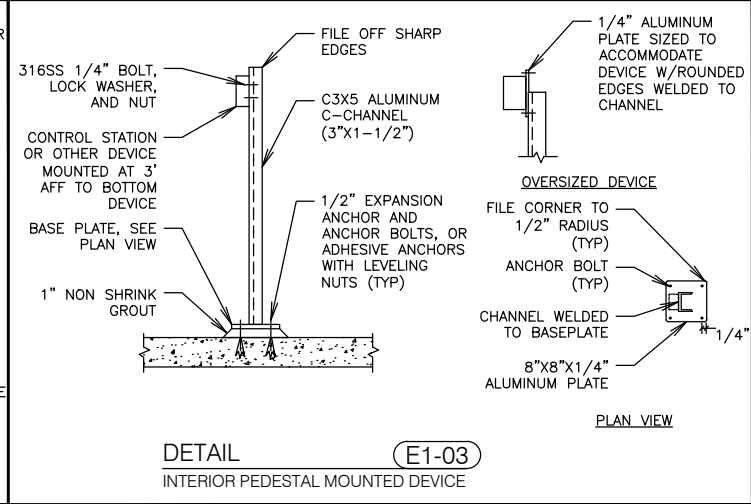
Village of Jackson, Wisconsin



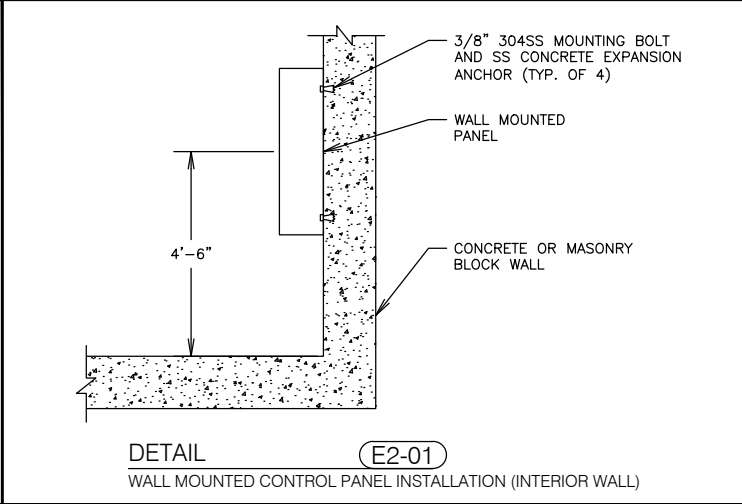
DETAIL (E1-01)
EQUIPMENT CONNECTION WITH CONCEALED CONDUIT



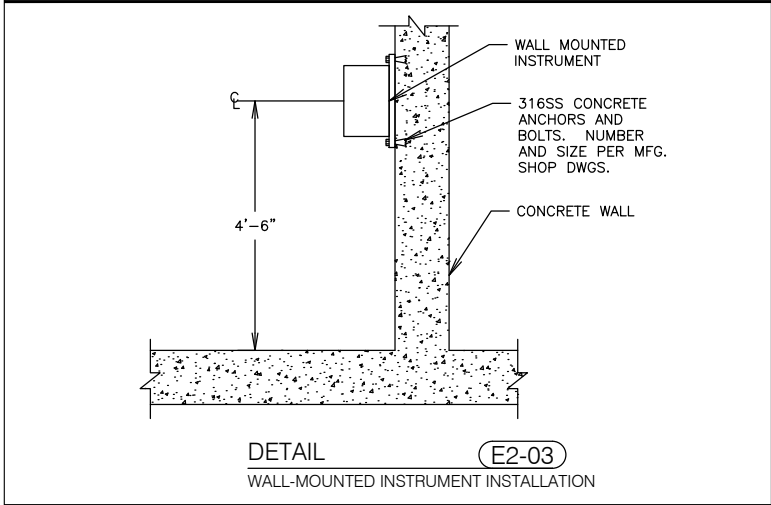
DETAIL (E1-02)
EQUIPMENT CONNECTION WITH EXPOSED CONDUIT



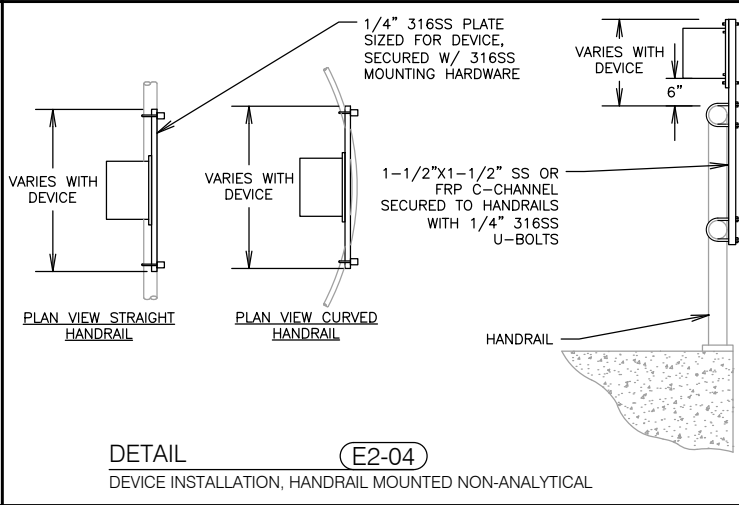
DETAIL (E1-03)
INTERIOR PEDESTAL MOUNTED DEVICE



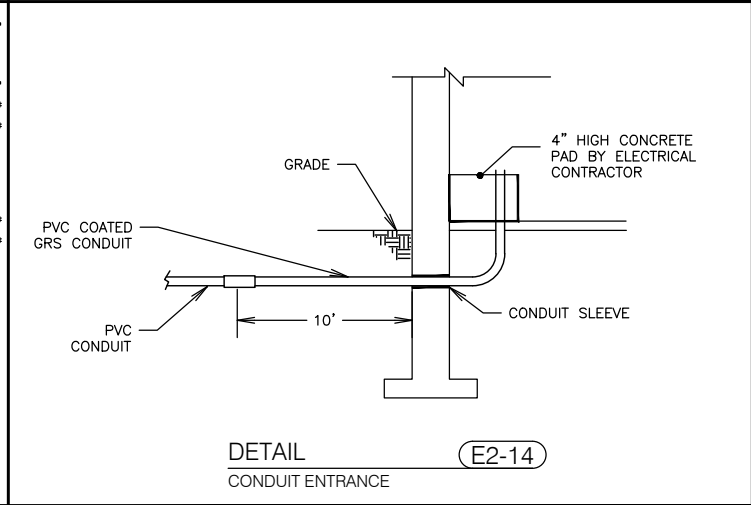
DETAIL (E2-01)
WALL MOUNTED CONTROL PANEL INSTALLATION (INTERIOR WALL)



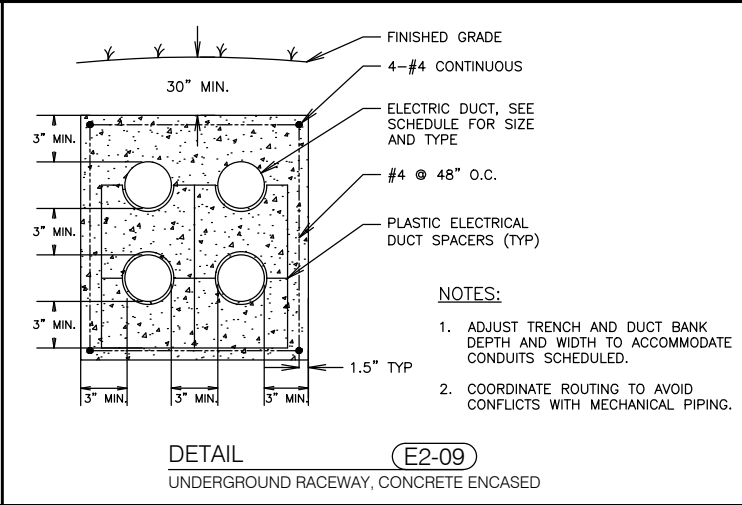
DETAIL (E2-03)
WALL-MOUNTED INSTRUMENT INSTALLATION



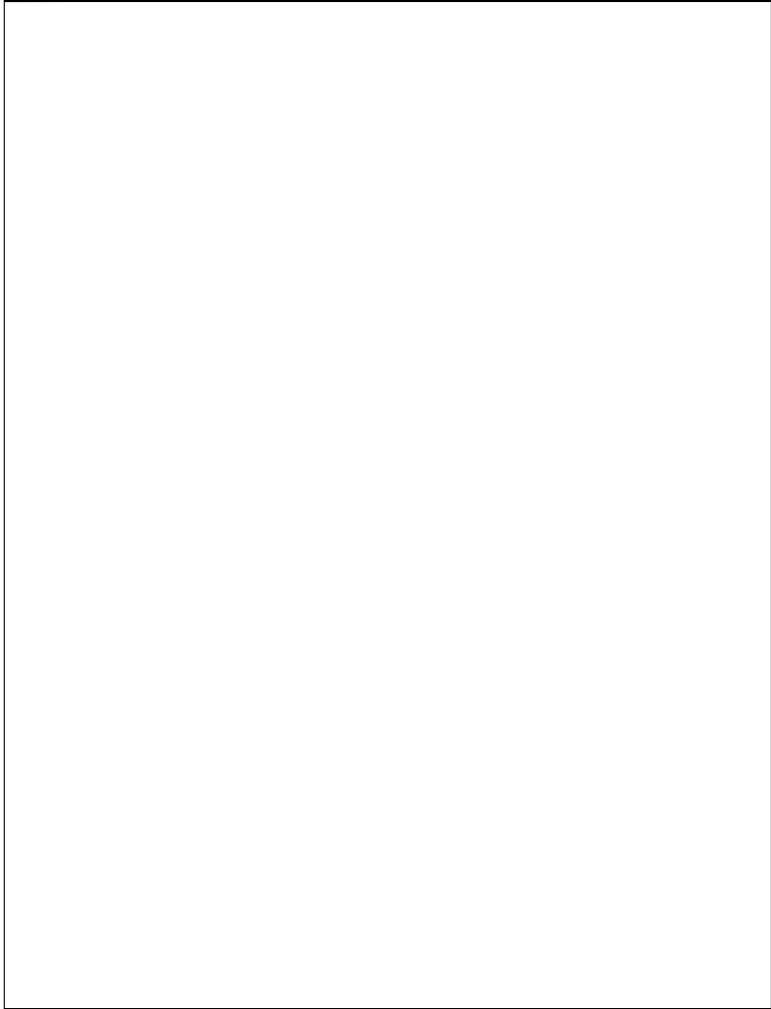
DETAIL (E2-04)
DEVICE INSTALLATION, HANDRAIL MOUNTED NON-ANALYTICAL



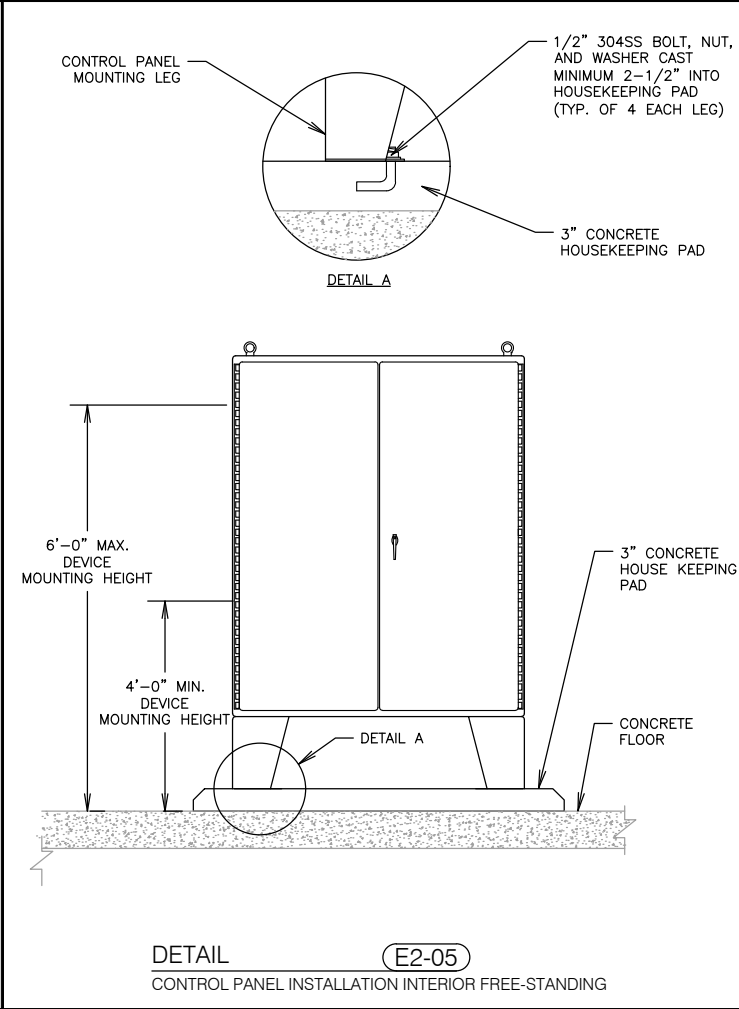
DETAIL (E2-14)
CONDUIT ENTRANCE



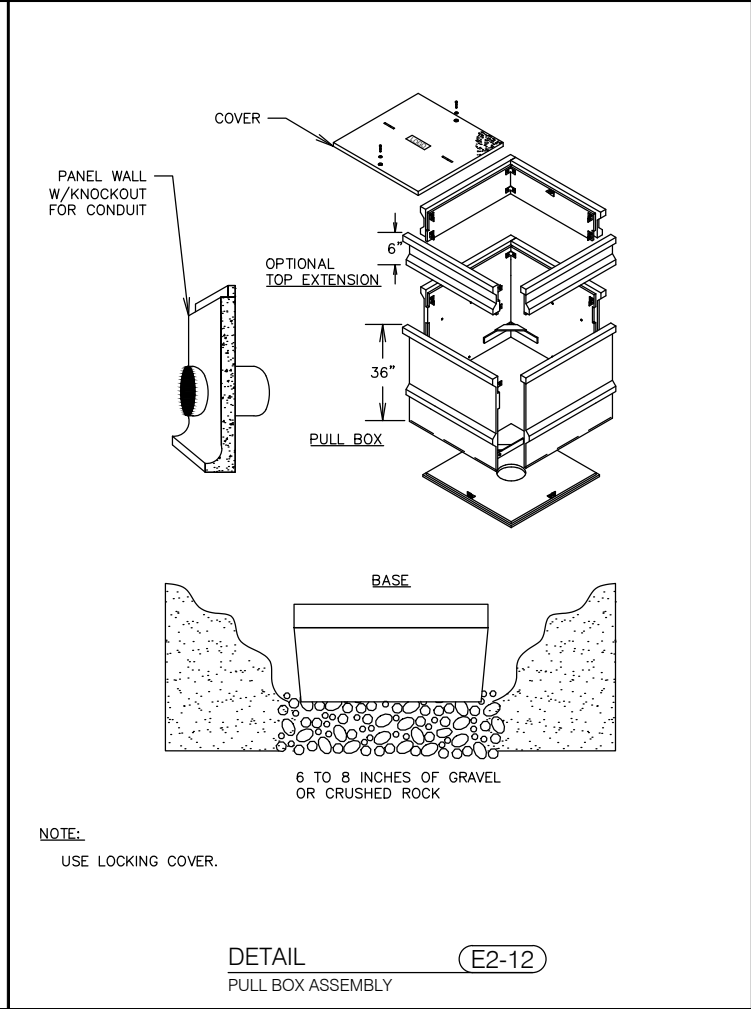
DETAIL (E2-09)
UNDERGROUND RACEWAY, CONCRETE ENCASED



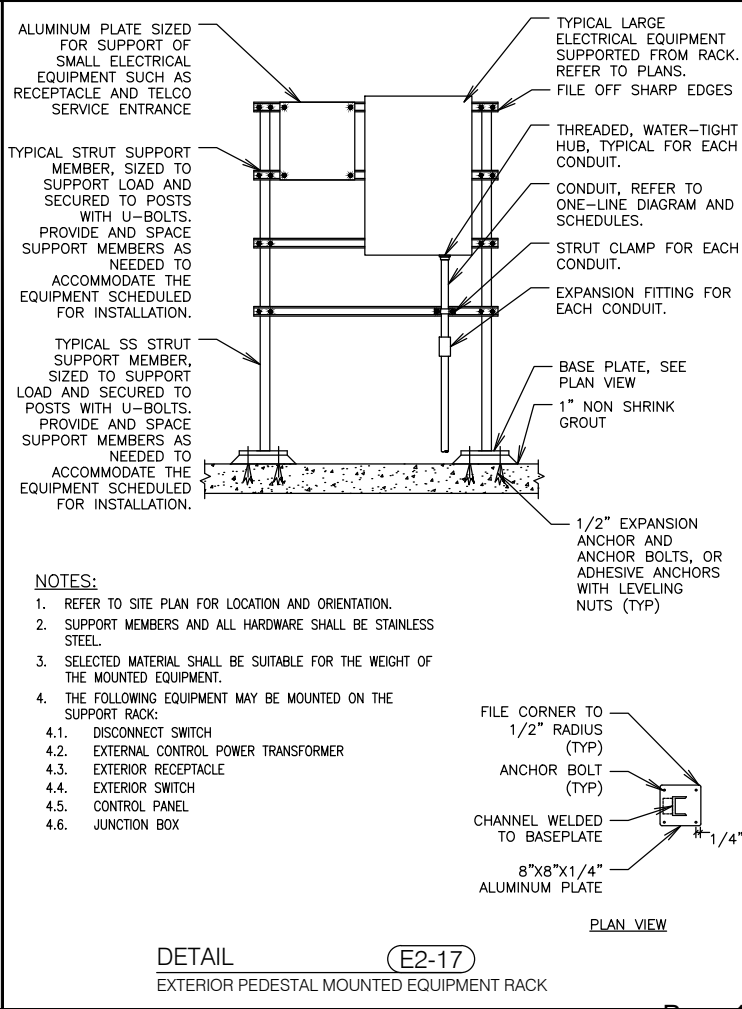
DETAIL (E2-05)
CONTROL PANEL INSTALLATION INTERIOR FREE-STANDING



DETAIL (E2-05)
CONTROL PANEL INSTALLATION INTERIOR FREE-STANDING

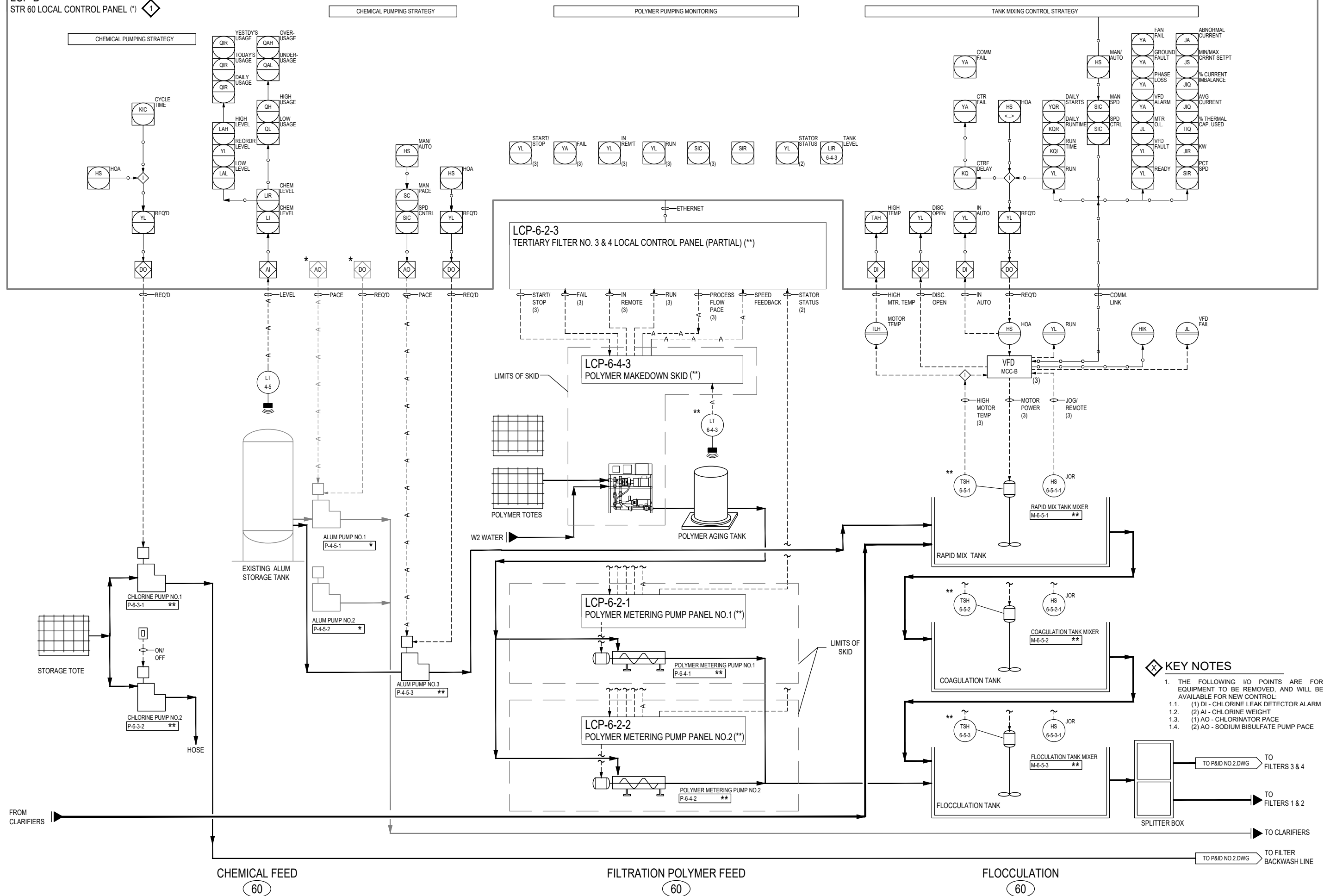


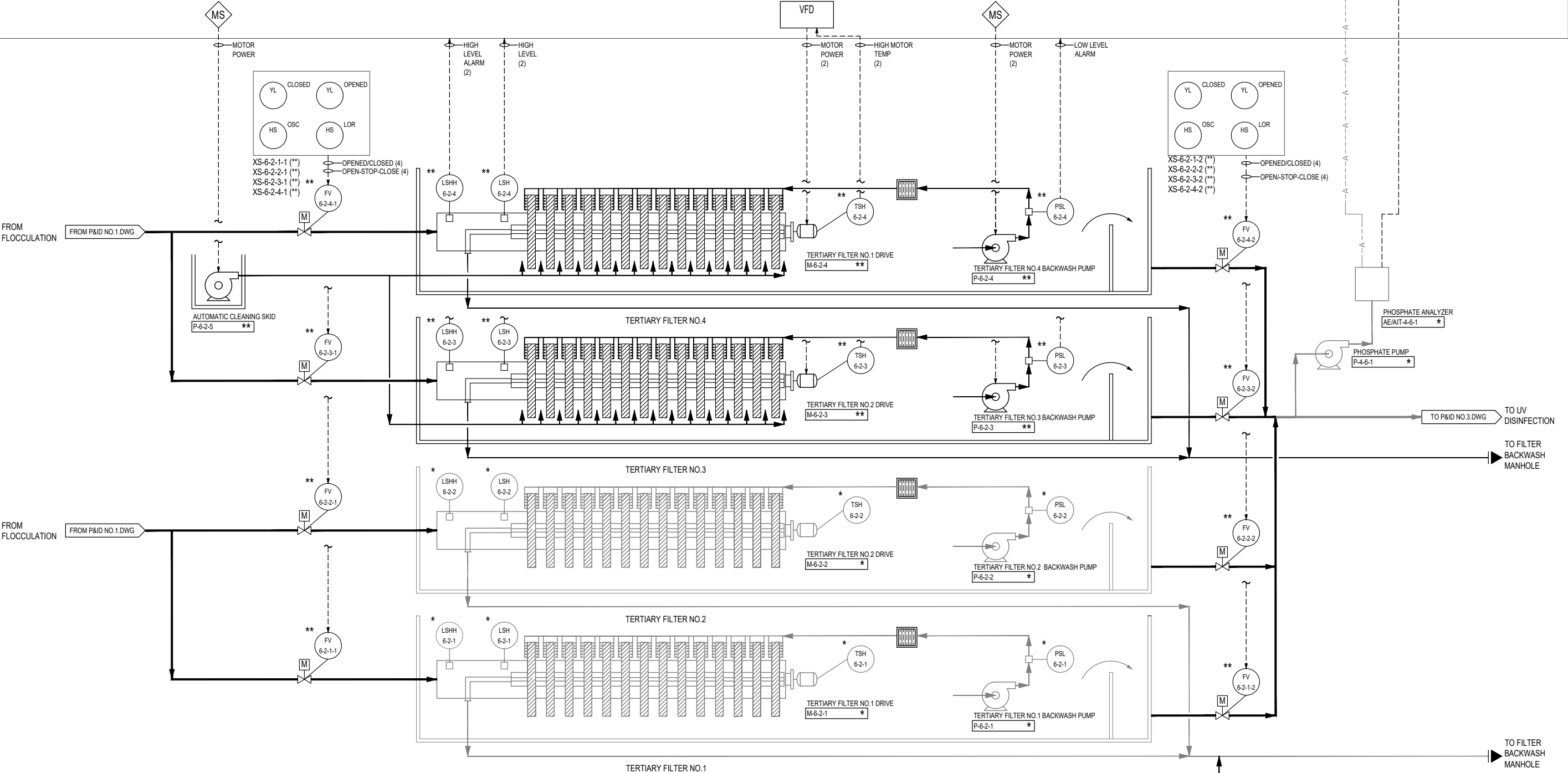
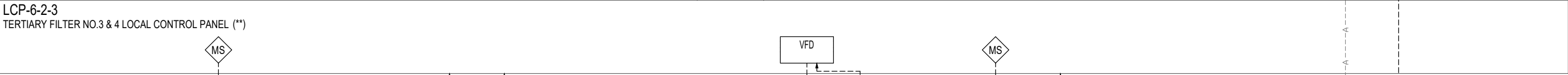
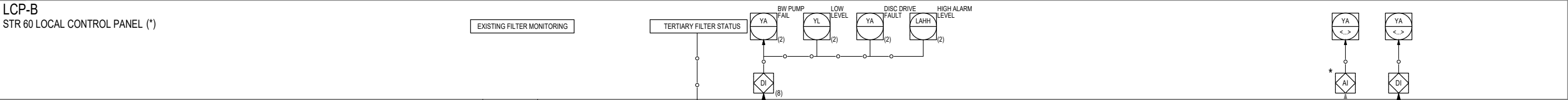
DETAIL (E2-12)
PULL BOX ASSEMBLY



DETAIL (E2-17)
EXTERIOR PEDESTAL MOUNTED EQUIPMENT RACK

LCP-B
STR 60 LOCAL CONTROL PANEL (*)





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P&ID NO.2

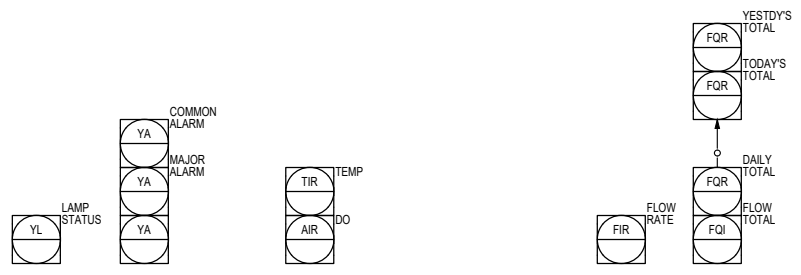
2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION

PROJECT NO.: JK 18
DRAWING FILE: 100-W-02
DRAWN BY: N.W.W.
CHECKED BY: D.L.G.
DATE: 1-3-24
REVISIONS:

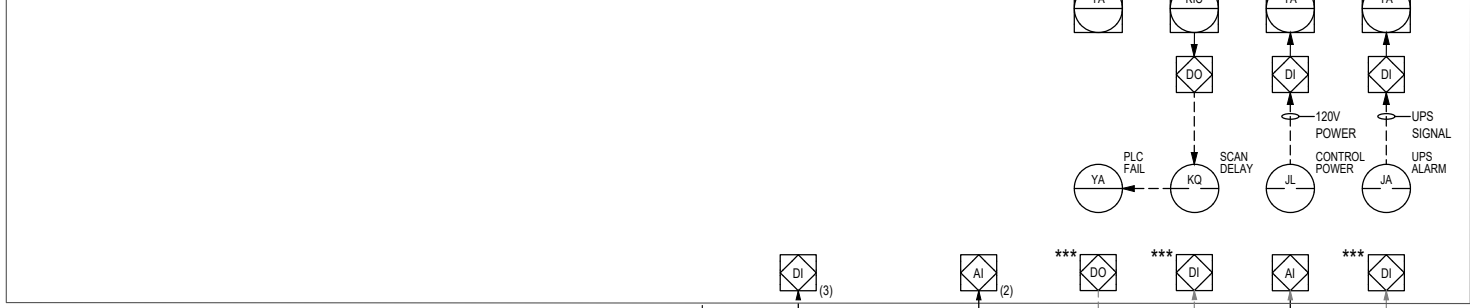
SCALE: N.T.S.

SHEET: 58
100-W-02

LCP-B
STR 60 LOCAL CONTROL PANEL (*)



70-LCP
STR 70 NETWORK DISTRIBUTION PANEL

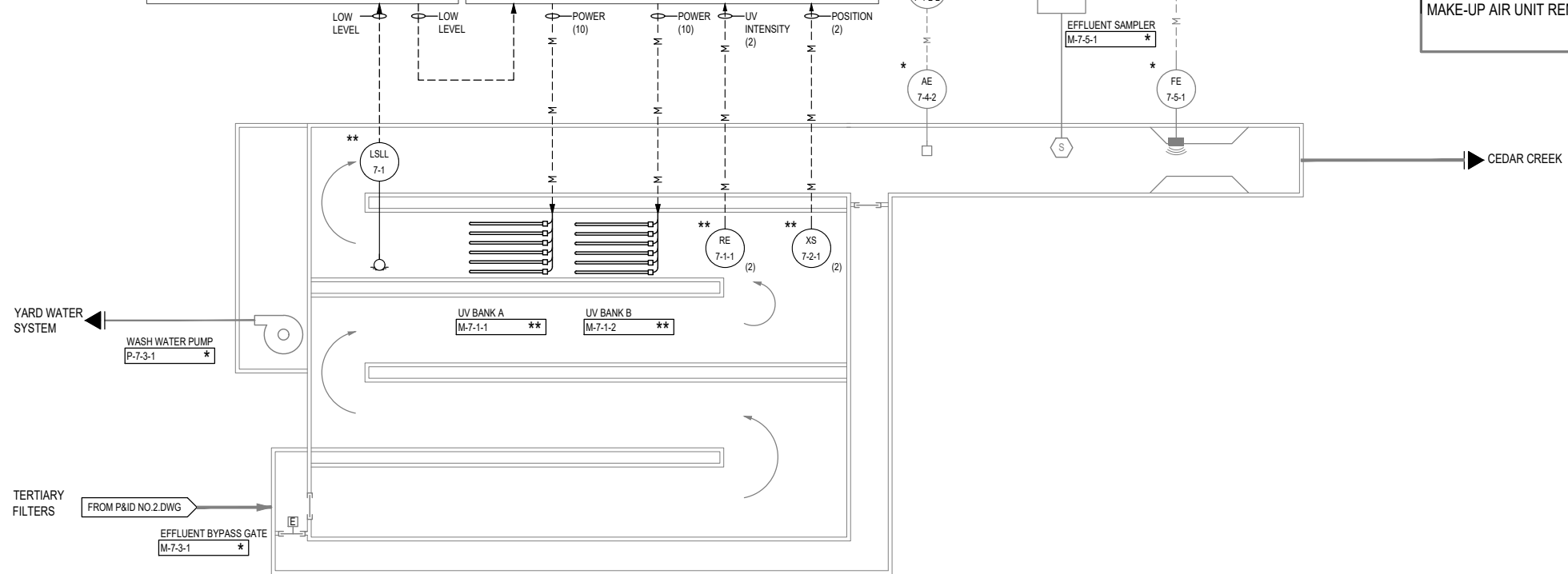


LCP-7-1-2 (**)
UV HSC - HYDRAULIC SYSTEM CENTER

LCP-7-1-1 (**)
UV SCC - SYSTEM CONTROL CENTER

TJB-7-1 (**)
UV LEVEL CONTROL TERMINAL JUNCTION BOX

LCP-7-1-3 (**)
UV PDC - POWER DISTRIBUTION CENTER

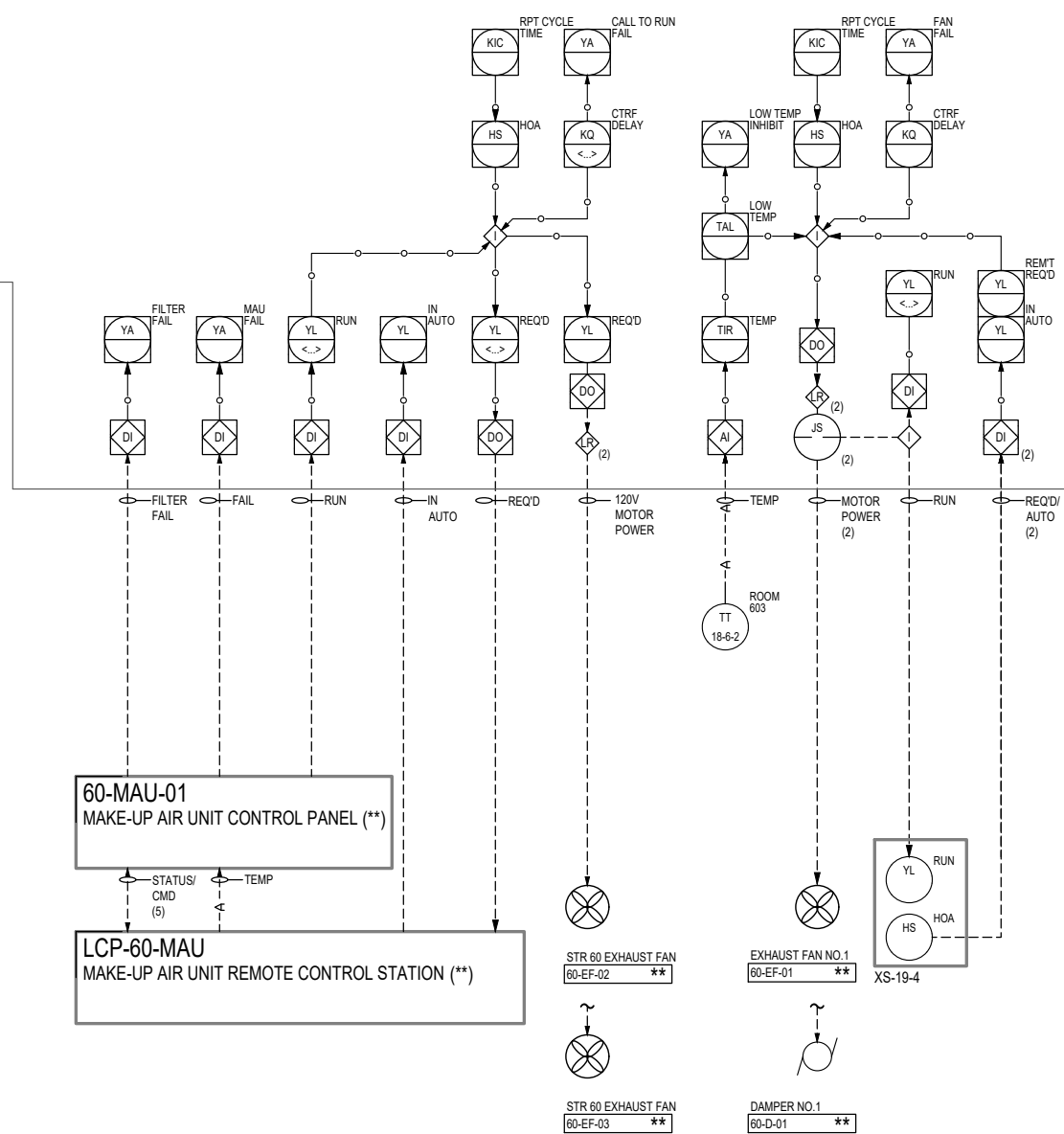


UV DISINFECTION

70

EFFLUENT MONITORING

70



60-MAU-01
MAKE-UP AIR UNIT CONTROL PANEL (**)

LCP-60-MAU
MAKE-UP AIR UNIT REMOTE CONTROL STATION (**)

STR 60 EXHAUST FAN
60-EF-02 (**)

EXHAUST FAN NO.1
60-EF-01 (**)

STR 60 EXHAUST FAN
60-EF-03 (**)

DAMPER NO.1
60-D-01 (**)

HVAC AND ENVIRONMENTAL CONTROL
AND MONITORING

60

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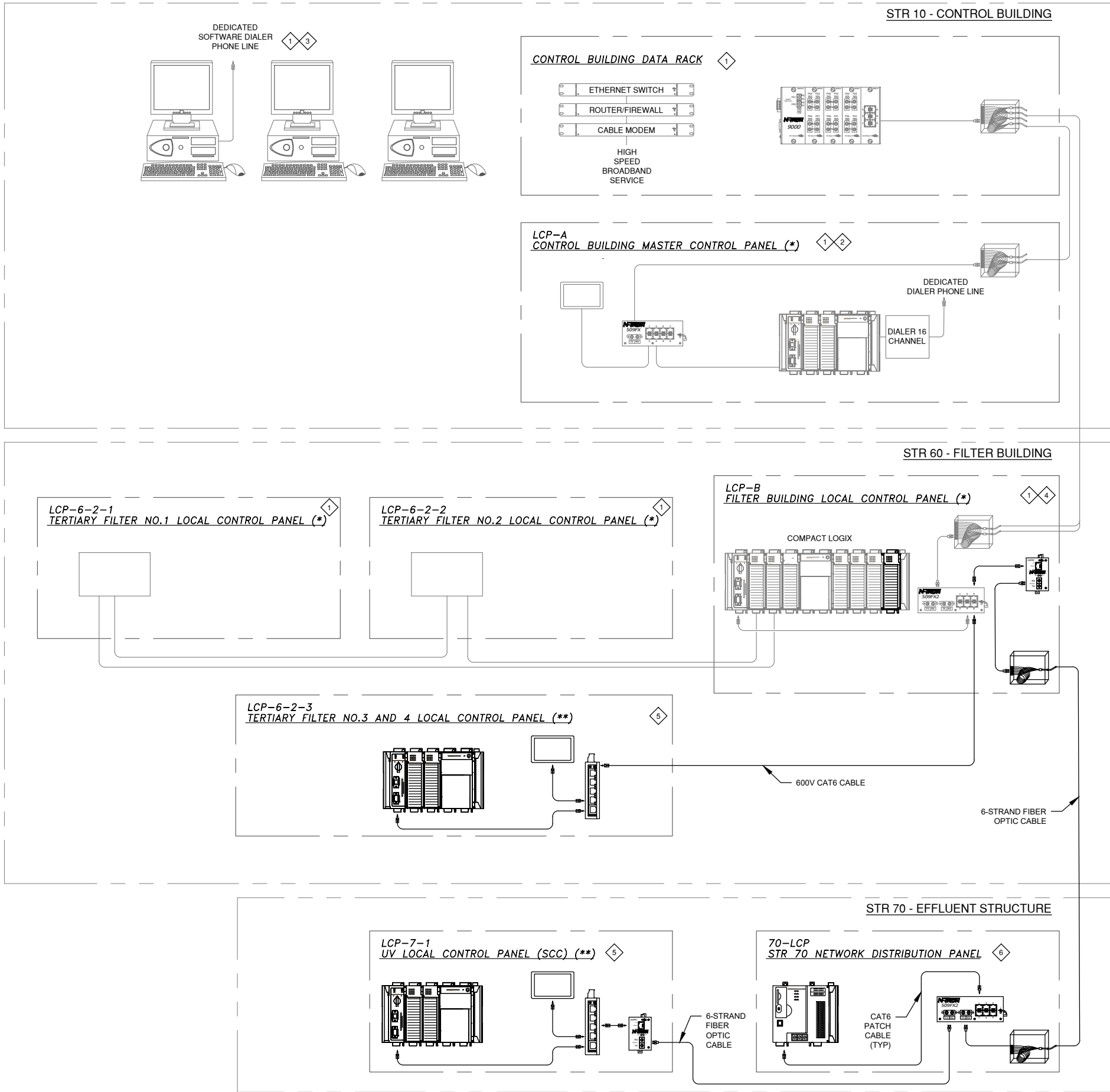
P&ID NO.3

2024 WASTEWATER IMPROVEMENTS
TERTIARY FILTERS AND DISINFECTION
Village of Jackson, Wisconsin

PROJECT NO.: JK 18
DRAWING FILE: 100-W-03
DRAWN BY: N.W.W.
CHECKED BY: D.L.G.
DATE: 1-3-24
REVISIONS:

SCALE: N.T.S.

SHEET: 59
100-W-03



WWTF SCADA ARCHITECTURE (PARTIAL)

GENERAL NOTES

- THIS DRAWING INCLUDES PLAN NOTES THAT ARE REFERENCED ON THE SCADA SYSTEM ARCHITECTURE DRAWING.
- ALL EQUIPMENT SHOWN IS NEW, UNLESS OTHERWISE NOTED.
- REFER TO SCADA SYSTEM P&IDS FOR I/O REQUIREMENTS OF NEW PLC SYSTEM. PROVIDE A MINIMUM OF 10% SPARE I/O FOR EACH TYPE IN USE AT EACH PANEL.
- THE SYSTEM INTEGRATOR SHALL CONFIGURE ALL ETHERNET SWITCHING EQUIPMENT TO PROVIDE OPTIMAL NETWORK PERFORMANCE.
- CONFIGURE ROUTER/FIREWALL AS GATEWAY BETWEEN SCADA NETWORK AND OFFICE NETWORK.
- ETHERNET CABLES SHALL BE INDUSTRIAL UTP CAT 6 CABLE. PROVIDE ALL CABLE REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
- PROVIDE A GRAPHIC OPERATOR MANUAL. INCLUDE SCREEN PRINTOUTS OF EACH SCREEN, AND A NARRATIVE FOR WHAT IS DISPLAYED, ALL OPERATOR ADJUSTABLE SET-POINTS, AND PERMISSIBLE RANGES OF VALUES.
- SCADA GRAPHIC DESIGN, ALARM POINT ENABLE/DISABLE FUNCTIONALITY, AND ALARM AND EVENT LOGGING AND REPORTING SHALL COMPLY WITH TYPICAL TOWN & COUNTRY PROJECT REQUIREMENTS.

KEY NOTES

- EXISTING EQUIPMENT TO REMAIN.
- MAIN CONTROL PANEL (EXISTING) - INCORPORATE ALL NEW CONTROL, MONITORING, AND ALARMING INTO EXISTING MAIN PLC.
- OFFICE COMPUTERS (EXISTING) - INCORPORATE ALL NEW CONTROL, MONITORING AND ALARMING INTO EXISTING SCADA SOFTWARE AND ALARMING.
- MODIFY CONTROL PANEL AS FOLLOWS:
 - EXISTING ALLEN BRADLEY COMPACTLOGIX PLC SYSTEM, MODEL 1769-L33ER - PROVIDE NEW I/O TO INCORPORATE ALL NEW CONTROL, MONITORING AND ALARM POINTS AS SCHEDULED.
 - PROVIDE FIBER OPTIC BREAKOUT PANEL.
 - PROVIDE COPPER TO FIBER OPTIC CONVERTER.
- NEW MANUFACTURER-SUPPLIED CONTROL PANEL. COORDINATE CONTROL, MONITORING, AND ALARM POINTS WITH EQUIPMENT SUPPLIER. COORDINATE VPN ACCESS TO DISPLAY HMI ON EXISTING SCADA SYSTEM. ARRANGE FOR MANUFACTURER INTERNET ACCESS THROUGH PLANT FIREWALL FOR REMOTE TROUBLESHOOTING AND MODIFICATIONS UNDER WARRANTY.
- NETWORK DISTRIBUTION PANEL TO CONTAIN THE FOLLOWING:
 - COMPACTLOGIX L24 PROCESSOR
 - ETHERNET SWITCH
 - DC UPS
 - CIRCUIT BREAKERS AS SCHEDULED TO SERVE ALL LOADS. REFER TO SHEET 100-E-04.

January 30, 2024

Village of Jackson
W194N16660 Eagle Drive
Jackson, WI 53037

Attention: Mr. Brian Kober, P.E., Director of Public Works/Village Engineer

Subject: Analysis of Bids and Recommendation for Award
2024 Wastewater Improvements Tertiary Filters and Disinfection

Bid Deadline: January 30, 2024 at 1:00 p.m. local time

Ladies and Gentlemen:

The purpose of this letter is to analyze the bids received for the 2024 Wastewater Improvements Tertiary Filters and Disinfection project and to recommend award of a contract. This project involves modifications to the existing filter and disinfection structures, construction of a new filter building addition, equipment installation, pipe work, HVAC, plumbing, and electrical modifications.

The pre-bid estimate for the project base bid was \$4.8 million. Thirty-one (31) general contractors, subcontractors, and material suppliers requested sets of the plans, specifications, and bidding documents. Five (5) contractors submitted bids.

A summary of the bids is as follows:

Contractor	Base Bid	Supplemental Bid
J.H. Hassinger, Inc.	\$4,529,633	\$148,900
Staab Construction Corp.	\$4,802,000	\$115,000
C.D. Smith Construction	\$4,873,611	\$140,500
Hunzinger Construction	\$4,992,400	\$129,600
Mid City Corporation	\$4,942,633	\$216,900

A total of three Alternative Bid Items were separated from the original project scope to allow for alternative materials and/or to add additional scope the project. These alternative bid items are listed in the table below.

Schedule C – Alternative Bid Items:

Contractor	C-1: D.I. Pipe in lieu of PVC	C-2: S.S. Pipe in lieu of PVC	C-3: Sewer Repair
J.H. Hassinger Inc.	\$79,570	\$14,715	\$22,000
Staab Construction Corp	\$20,000	-\$20,000	\$44,000
CD Smith Construction	\$80,000	\$71,400	\$12,600
Hunzinger Construction	\$76,000	\$72,000	\$16,000
Mid City Corporation	\$47,300	\$25,800	\$98,800

All of the bids were properly submitted in electronic format, except that JH Hassinger had a minor discrepancy with a scanned document that was immediately resent to the Village and Town and Country Engineering after the bid opening. The re-scanned document is included in the accepted bids.

We would recommend that the Village consider selecting Alternative Bid Items C-2 (stainless steel piping in lieu of PVC) and item C-3 (sewer replacement) as they are each value-added items to the project at reasonable prices.

The low bidder, using the base bid only, the base bid and supplemental bid, or the base bid, alternative bid items (C-2 and C-3) and supplemental bid is JH Hassinger of Menomonee Falls, Wisconsin, an experienced general contractor that has completed similar projects for the Villages of Sussex and Menomonee Falls. We recommend that JH Hassinger be awarded a contract for the Base Bid, Supplemental Bid, and Alternative Bid Items C-2 and C-3 for a total of **\$4,715,248**.

If you have any questions with respect to our thoughts on this matter, I am available at your convenience to discuss them at (262) 925-3210 with you.

Respectfully,
TOWN & COUNTRY ENGINEERING, INC.



Gregory J. Droessler, P.E.
Vice-President

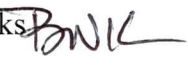
GJD:sai

J:\JOB#S\Jackson\JK-18-W2 2024 Wastewater Upgrades\10. Construction\A. Bidding\Tertiary Filters and Disinfection\Recommendation Letter.docx

Project: 2024 Wastewater Improvements Tertiary Filters and Disinfection; Village of Jackson																											
Engineer's Project No. JK 18													Bid Deadline: January 23, 2024 at 1:00 p.m. local time														
Contractor's Name:				JH Hassinger, Inc.				Staab Construction Corporation				C.D. Smith Construction				Hunzinger Construction				Mid City Corporation							
Base Bid Price (lump sum)				\$3,452,000.00				\$3,724,367.00				\$3,795,978.00				\$3,914,767.00				\$3,865,000.00							
Allowance Total				\$1,077,633.00				\$1,077,633.00				\$1,077,633.00				\$1,077,633.00				\$1,077,633.00							
Supplemental Bid Items (Schedule B total)				\$148,900.00				\$115,000.00				\$140,500.00				\$129,600.00				\$216,900.00							
TOTAL				\$4,678,533.00				\$4,917,000.00				\$5,014,111.00				\$5,122,000.00				\$5,159,533.00							
Schedule A - Equipment Bid Items																											
Spec No.	EQUIPMENT ITEM	Base Bid Manuf/Sup	Engineer Designated		Optional Alternate		Engineer Designated		Optional Alternate		Engineer Designated		Optional Alternate		Engineer Designated		Optional Alternate		Engineer Designated		Optional Alternate						
			Manuf/Sup	Add/Deduct	Manuf/Sup	AMOUNT	Manuf/Sup	AMOUNT	Manuf/Sup	AMOUNT	Manuf/Sup	Add/Deduct	Manuf/Sup	AMOUNT	Manuf/Sup	Add/Deduct	Manuf/Sup	AMOUNT	Manuf/Sup	AMOUNT	Manuf/Sup	AMOUNT					
26 90 00	System Integrator	Altronex Energenecs Integrated Process Solutions Wunderlich-Malec	Altronex Energenecs Integrated Process Solutions	\$59,460 - \$287,400.00 IPS	N/A	N/A	Altronex Energenecs Integrated Process Solutions Wunderlich-Malec	\$70,000 - \$315,000 - IPS	N/A	N/A	Altronex Energenecs Integrated Process Solutions Wunderlich-Malec	\$59,460 - \$287,400 IPS	N/A	N/A	Altronex Energenecs Integrated Process Solutions Wunderlich-Malec	\$65,000 Energenecs \$295,000 IPS	N/A	N/A	Altronex Energenecs Integrated Process Solutions Wunderlich-Malec	\$61,000 Energenecs	N/A	N/A					
40 05 58/ 40 05 59	Stop Plates and Logs / Slide and Weir Gates	RW Gate	Rodney Hunt	-\$19,700.00	N/A	N/A	Rodney Hunt	-\$15,000.00	N/A	N/A	Rodney Hunt	-\$16,000.00	N/A	N/A	Rodney Hunt	-\$12,000.00	N/A	N/A	Rodney Hunt	-\$15,000.00	N/A	N/A					
46 33 45	Peristaltic Chemical Metering Pumps	Blue-White	Watson Marlow Prominent	N/A	N/A	N/A	Watson Marlow Prominent	N/A	N/A	N/A	Watson Marlow	\$3,000.00	N/A	N/A	Watson Marlow	\$5,000.00	N/A	N/A	Watson Marlow	\$1,100.00	N/A	N/A					
Schedule B - Supplemental Bid Items																											
Item	Description	Unit	Quantity	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost						
B-1	Structural Excavation	CY	500	\$26.00	\$13,000.00	\$14.00	\$7,000.00	\$36.00	\$18,000.00	\$34.00	\$17,000.00	\$65.00	\$32,500.00														
B-2	Trench Excavation	CY	500	\$32.00	\$16,000.00	\$30.00	\$15,000.00	\$54.00	\$27,000.00	\$34.00	\$17,000.00	\$85.00	\$42,500.00														
B-3	Structural Fill	CY	1,000	\$52.00	\$52,000.00	\$20.00	\$20,000.00	\$36.00	\$36,000.00	\$34.00	\$34,000.00	\$60.00	\$60,000.00														
B-4	Reinforced Concrete	CY	100	\$600.00	\$60,000.00	\$600.00	\$60,000.00	\$500.00	\$50,000.00	\$500.00	\$50,000.00	\$600.00	\$60,000.00														
B-5	Crushed Aggregate Base Course	SY	200	\$11.00	\$2,200.00	\$25.00	\$5,000.00	\$18.00	\$3,600.00	\$21.00	\$4,200.00	\$60.00	\$12,000.00														
B-6	Geotextile Fabric	SY	200	\$6.00	\$1,200.00	\$10.00	\$2,000.00	\$4.50	\$900.00	\$7.00	\$1,400.00	\$12.00	\$2,400.00														
B-7	Concrete Sidewalk	SF	500	\$9.00	\$4,500.00	\$12.00	\$6,000.00	\$10.00	\$5,000.00	\$12.00	\$6,000.00	\$15.00	\$7,500.00														
Schedule B Bid Totals					\$148,900.00		\$115,000.00		\$140,500.00		\$129,600.00		\$216,900.00														
Schedule C - Alternative Bid Items																											
Item	Description	Unit	Quantity	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost						
C-1	Interior Process Piping – Ductile Iron in Lieu of PVC	LS	1	\$79,570.00	\$79,570.00	\$20,000.00	\$20,000.00	\$80,000.00	\$80,000.00	\$76,000.00	\$76,000.00	\$47,300.00	\$47,300.00														
C-2	Interior Process Piping – Stainless Steel in Lieu of PVC	LS	1	\$14,715.00	\$14,715.00	-\$20,000.00	-\$20,000.00	\$71,400.00	\$71,400.00	\$72,000.00	\$72,000.00	\$25,800.00	\$25,800.00														
C-3	Drawing 05-C-06 – Sewer Replacement (Pipe 94)	LS	1	\$22,000.00	\$22,000.00	\$44,000.00	\$44,000.00	\$12,600.00	\$12,600.00	\$16,000.00	\$16,000.00	\$98,800.00	\$98,800.00														
Schedule C Bid Totals					\$116,285.00		\$44,000.00		\$164,000.00		\$164,000.00		\$171,900.00														
Subcontractor Listing																											
Subcontracted Work				Company Name				Company Name				Company Name				Company Name				Company Name							
Site Work				Boteyn Peterson \$174,000.00				Staab				Bawmhardt				Cornerstone \$120,000.00				self-perform							
Concrete				JH Hassinger \$270,000.00				Staab				C.D. Smith self-perform				Hunzinger Construction \$200,000.00				Hunzinger \$400,000.00							
Process Piping				Rohde \$1,283,000.00				Staab				August Winter \$1,255,000.00				August Winter \$1,245,000.00				self-perform							
Plumbing				Same as Processing Pipe				Rohde Brothers \$150,000.00				August Winter in above				Same as Processing Pipe				self-perform							
Electrical				Next \$457,901.00				Next \$458,000.00				Next Electric \$457,901.00				Next \$457,000.00				Next \$458,000.00							
HVAC				Same as Processing Pipe				JH Heating \$115,000.00				August Winter in above				Same as Processing Pipe				self-perform							
High Performance Coating				Howard Grote \$174,987.00				Sanchez Painting Contractors \$95,000.00				Sanchez Coating				Omni \$157,000.00				T.A. Mason \$158,000.00							

Memo

To: Board of Public Works

From: Brian W. Kober, P. E., Director of Public Works 

Subject: Review of Bids
Eagle Drive & STH 60 Intersection – Roundabout Project

Date: January 26, 2024

WisDOT conducted the bid opening on January 9, 2024, for Eagle Drive & STH 60 Roundabout Project. A very competitive bidding occurred. The original agreement had the Village paying \$322,534.00 for the construction portion which was agreed upon on February 15, 2023. As of November 29, 2024, the estimated construction went up to \$404,769.64. After bidding the final number is \$294,459.02.

The intersection improvement is funded by TID #7. Recommend approval to proceed with the project.

If you have any questions, please do not hesitate to ask.

Brian W. Kober, P.E.

CORRESPONDENCE/MEMORANDUM

PROJECT AGREEMENT ACCEPTANCE

DATE: February 15, 2023

SUBJECT: Project Agreement: Initial

ID: 2310-13-01/71

Title: V JACKSON, EAGLE DR

Limits: INTERSECTION WITH STH 60

County: Washington

The Attached Agreement Is Recommended for Approval:

PROGRAM: 206 – STP OVER 200,000, 2023-2026

CONCEPTS COVERED by this AGREEMENT: Design Review, Construction

ESTIMATED COST: \$1,559,329

PARTICIPATION: Design is funded 100% Municipal and construction is funded 80% Federal/ 20% Local with a federal funding limit of \$1,210,135.

NON-PARTICIPATION: As Determined during design

EXECUTED BY: Village of Jackson

DATE: 2/15/2023

LET DATE: 1/09/24

NOTES:

REGION REVIEWER:

Jacob Varner

local sign
Local Program Engineer

2/15/2023

DATE

REGION: SE

Urbanized Area STP-Urban (206) Standard SMA Template

scheduled.

Extensions may be available upon approval of a written request by or on behalf of the Municipality to State. The written request shall explain the reasons for project implementation delay and revised timeline for project completion.

The dollar amounts shown in the Summary of Costs Table below are estimates. The final Municipal share is dependent on the final federal participation, and actual costs will be used in the final division of cost for billing and reimbursement. In no event shall federal or State funding exceed the estimate of \$1,210,135 in the Summary of Costs Table, unless such increase is approved in writing by the State through the State's Change Management Policy prior to the Municipality incurring the increased costs.

PHASE	SUMMARY OF COSTS				
	Total Est. Cost	Federal Funds	%	Municipal Funds	%
ID 2310-13-01					
State Review	\$21,660	\$0	0%	\$21,660	100%
ID 2310-13-71					
Participating Construction	\$1,512,669	\$1,190,135	80%	\$322,534	20% + BAL
Non-Participating Construction		\$0	0%	\$0	100%
State Review	\$25,000	\$20,000	80%	\$5,000	20% + BAL
Total Est. Cost Distribution	\$1,559,329	\$1,210,135	N/A	\$349,194	N/A

*Design ID# 2310-13-01 federal funding is limited to \$0.

*Construction ID# 2310-13-71 federal funding is limited to \$1,210,135

This request is subject to the terms and conditions that follow (pages 2 –7) and is made by the undersigned under proper authority to make such request for the designated Municipality and upon signature by the State and delivery to the Municipality shall constitute agreement between the Municipality and the State. No term or provision of neither the State/Municipal Agreement nor any of its attachments may be changed, waived or terminated orally but only by an instrument in writing executed by both parties to the State/Municipal Agreement.

Signatures certify the content has not been altered by the municipality.
Signed for and in behalf of: Village of Jackson (please sign in blue ink.)

Name B. W. [Signature] Title DIRECTOR OF PW/VILLAGE ENGINEER Date 2/15/2023

Signed for and in behalf of the State:

Name Tony J. Barth Title: SE Region Planning Chief Date 2/21/2023

GENERAL TERMS AND CONDITIONS:

- All projects must be in an approved Transportation Improvement Program (TIP) or State Transportation Improvement Program (STIP) prior to requesting authorization.
- Work prior to federal authorization is ineligible for federal funding.
- The Municipality, throughout the entire project, commits to comply with and promote all applicable federal and state laws and regulations that include, but are not limited to, the following:
 - Environmental requirements, including but not limited to those set forth in the 23 U.S.C. 139 and National Environmental Policy Act (42 U.S.C. 4321 et seq.)



Division of Transportation
System Development
Southeast Regional Office
141 N.W. Barstow Street
P.O. Box 798
Waukesha, WI 53187-0798

Governor Tony Evers
Secretary Craig Thompson
Internet: www.dot.wisconsin.gov

Telephone: (262) 548-5903
Facsimile (FAX): (262) 548-5662
E-Mail: waukesha.dtd@dot.wi.gov

November 29, 2023

Brian W. Kober, P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037

Dear Mr. Kober:

SUBJECT: I.D. 2310-13-71
Eagle Drive
Intersection with STH 60
Washington County

The above construction project is scheduled for a January 9, 2024 bid letting at an engineering estimated cost of \$1,614,904.64 including construction engineering. This estimate is confidential and should not be disclosed to potential bidders prior to bid opening. The project was authorized to incur costs effective November 17, 2023.

Based on the engineering estimate and the "Project Agreement", your share of the construction cost will be approximately \$404,769.64.

Unless we hear otherwise from you, we will proceed with the contract administration process of receiving bids and awarding a contract to the low bidder. If you have any questions, please contact Project Manager Andrew Pinter at (262) 548-6438.

Sincerely,

Kathy Bender

Kathy Bender
Transportation Program Coordinator

c: Andrew Pinter, WisDOT



Division of Transportation
System Development
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January 24, 2024

Brian W. Kober, P.E.
Director of Public Works/Village Engineer
Village of Jackson
W194 N16660 Eagle Drive
Jackson, WI 53037

Dear Mr. Kober:

SUBJECT: I.D. 2310-13-71
Eagle Drive
Intersection with STH 60
Washington County

Bids were received on January 9, 2024 for the above project. The following Estimate of Costs and Financing is based on the awarded bid. A copy of bid items and costs are attached for your information.

ESTIMATE OF COSTS:

Bid of Vinton Construction Company	\$1,280,256.56
Engineering & Contingencies	<u>\$ 192,038.48</u>
	\$1,472,295.04

ESTIMATE-SOURCE OF FINANCING

Federal/State Aid	\$1,177,836.02
Village of Jackson	<u>\$ 294,459.02</u>
Total	\$1,472,295.04

You will be billed on the basis of actual costs incurred.

Sincerely,
Kathy Bender
Kathy Bender
Transportation Program Coordinator

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 1 of 9

Project ID: 2310-13-71	Federal Project No.: WISC 2024118	Contract ID: 20240109012
Project Description: V Jackson, Eagle Dr; Intersection With STH 60		
Awarded Vendor: VI18	VINTON CONSTRUCTION COMPANY	

Category: 1000	Roadway Items		
Funding Source(s) and Participation:	1 FED Federal Funding	80.00%	1180135.00
	1 VIL Village of Jackson	20.00%	0.00
	2 VIL001 Village of Jackson	100.00%	0.00
Category Work Class: RDCN	Roadway Construction		
Fed Work Category: 04	Reconstruction - No Added Capacity		Category Length: 0.0000 MILES
Fed Construction Class: LET	Let Project Items		Category Width: 0.0000 FEET

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0002	203.0100	Removing Small Pipe Culverts	EACH	3.000	1,260.00000	3,780.00
0004	204.0150	Removing Curb & Gutter	LF	564.000	6.75000	3,807.00
0006	204.0155	Removing Concrete Sidewalk	SY	238.000	13.50000	3,213.00
0008	204.0220	Removing Inlets	EACH	2.000	563.00000	1,126.00
0010	204.0245	Removing Storm Sewer (size) 01. 12-inch	LF	113.000	48.00000	5,424.00
0012	205.0100	Excavation Common	CY	6,700.000	20.35000	136,345.00
0014	211.0101	Prepare Foundation for Asphaltic Paving (project) 02. 2310-13-71	EACH	1.000	6,400.00000	6,400.00
0016	213.0100	Finishing Roadway (project) 02. 2310-13-71	EACH	1.000	3,500.00000	3,500.00
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	60.000	65.00000	3,900.00
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	4,850.000	10.25000	49,712.50
0022	310.0110	Base Aggregate Open-Graded	TON	52.000	29.50000	1,534.00
0024	312.0110	Select Crushed Material	TON	5,425.000	19.50000	105,787.50
0026	405.0100	Coloring Concrete WisDOT Red	CY	140.000	110.00000	15,400.00
0028	415.2010	Concrete Truck Apron 12-inch	SY	342.000	101.00000	34,542.00
0030	455.0605	Tack Coat	GAL	372.000	2.30000	855.60

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 2 of 9

Project ID: 2310-13-71 **Federal Project No.:** WISC 2024118 **Contract ID:** 20240109012
Project Description: V Jackson, Eagle Dr; Intersection With STH 60
Awarded Vendor: VI18 VINTON CONSTRUCTION COMPANY

Category: 1000 Roadway Items

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0032	460.2000	Incentive Density HMA Pavement	DOL	870.000	1.00000	870.00
0034	460.6223	HMA Pavement 3 MT 58-28 S	TON	622.000	76.75000	47,738.50
0036	460.6424	HMA Pavement 4 MT 58-28 H	TON	727.000	97.40000	70,809.80
0038	465.0315	Asphaltic Flumes	SY	9.000	150.00000	1,350.00
0040	504.0900	Concrete Masonry Endwalls	CY	4.000	2,100.00000	8,400.00
0042	520.8000	Concrete Collars for Pipe	EACH	4.000	2,000.00000	8,000.00
0044	522.0421	Culvert Pipe Reinforced Concrete Class IV 21-Inch	LF	202.000	103.00000	20,806.00
0046	522.0448	Culvert Pipe Reinforced Concrete Class IV 48-Inch	LF	436.000	255.00000	111,180.00
0048	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	975.00000	975.00
0050	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	2.000	1,090.00000	2,180.00
0052	522.1021	Apron Endwalls for Culvert Pipe Reinforced Concrete 21-Inch	EACH	2.000	1,285.00000	2,570.00
0054	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000	3,427.00000	6,854.00
0056	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	185.000	27.13000	5,019.05
0058	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	1,913.000	36.68000	70,168.84
0060	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	242.000	43.13000	10,437.46
0062	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	273.000	34.88000	9,522.24
0064	601.0600	Concrete Curb Pedestrian	LF	129.000	42.13000	5,434.77
0066	602.0405	Concrete Sidewalk 4-Inch	SF	2,949.000	7.10000	20,937.90
0068	602.0410	Concrete Sidewalk 5-Inch	SF	6,507.000	8.05000	52,381.35
0070	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	256.000	35.00000	8,960.00

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 3 of 9

Project ID: 2310-13-71	Federal Project No.: WISC 2024118	Contract ID: 20240109012
Project Description: V Jackson, Eagle Dr; Intersection With STH 60		
Awarded Vendor: VI18 VINTON CONSTRUCTION COMPANY		

Category: 1000	Roadway Items
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Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0072	602.0810	Concrete Driveway 6-Inch	SY	53.000	70.00000	3,710.00
0074	606.0200	Riprap Medium	CY	46.000	110.00000	5,060.00
0076	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	424.000	103.00000	43,672.00
0078	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	53.000	109.00000	5,777.00
0080	611.0530	Manhole Covers Type J	EACH	2.000	495.00000	990.00
0082	611.0636	Inlet Covers Type HM-S	EACH	2.000	708.00000	1,416.00
0084	611.0639	Inlet Covers Type H-S	EACH	11.000	708.00000	7,788.00
0086	611.0651	Inlet Covers Type S	EACH	2.000	702.00000	1,404.00
0088	611.0652	Inlet Covers Type T	EACH	3.000	947.00000	2,841.00
0090	611.2004	Manholes 4-FT Diameter	EACH	2.000	4,037.00000	8,074.00
0092	611.3004	Inlets 4-FT Diameter	EACH	6.000	3,355.00000	20,130.00
0094	611.3230	Inlets 2x3-FT	EACH	9.000	2,760.00000	24,840.00
0096	611.9850.S	Pipe Grates (size) 01. 48-Inch	EACH	2.000	2,750.00000	5,500.00
0098	612.0106	Pipe Underdrain 6-Inch	LF	350.000	16.00000	5,600.00
0100	619.1000	Mobilization	EACH	0.050	276,500.00000	13,825.00
0102	620.0300	Concrete Median Sloped Nose	SF	308.000	12.00000	3,696.00
0104	624.0100	Water	MGAL	140.000	30.00000	4,200.00
0106	625.0100	Topsoil	SY	4,840.000	6.03000	29,185.20
0108	628.1504	Silt Fence	LF	980.000	2.12000	2,077.60
0110	628.1520	Silt Fence Maintenance	LF	980.000	0.10000	98.00

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 4 of 9

Project ID: 2310-13-71 **Federal Project No.:** WISC 2024118 **Contract ID:** 20240109012
Project Description: V Jackson, Eagle Dr; Intersection With STH 60
Awarded Vendor: VI18 VINTON CONSTRUCTION COMPANY

Category: 1000 Roadway Items

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0112	628.1905	Mobilizations Erosion Control	EACH	4.000	50.00000	200.00
0114	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	50.00000	100.00
0116	628.7005	Inlet Protection Type A	EACH	34.000	50.00000	1,700.00
0118	628.7015	Inlet Protection Type C	EACH	38.000	50.00000	1,900.00
0120	628.7555	Culvert Pipe Checks	EACH	25.000	20.00000	500.00
0122	629.0210	Fertilizer Type B	CWT	2.000	80.00000	160.00
0124	630.0120	Seeding Mixture No. 20	LB	9.000	8.00000	72.00
0126	630.0200	Seeding Temporary	LB	9.000	10.00000	90.00
0128	630.0500	Seed Water	MGAL	8.000	1.00000	8.00
0130	631.0300	Sod Water	MGAL	112.000	28.00000	3,136.00
0132	631.1000	Sod Lawn	SY	4,840.000	7.50000	36,300.00
0134	633.5100	Markers ROW	EACH	5.000	70.00000	350.00
0136	633.5200	Markers Culvert End	EACH	7.000	70.00000	490.00
0138	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	47.000	160.00000	7,520.00
0140	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	8.000	200.00000	1,600.00
0142	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	20.000	205.00000	4,100.00
0144	637.2210	Signs Type II Reflective H	SF	411.000	21.41000	8,799.51
0146	637.2230	Signs Type II Reflective F	SF	236.120	21.41000	5,055.33
0148	638.2102	Moving Signs Type II	EACH	2.000	50.00000	100.00
0150	638.2602	Removing Signs Type II	EACH	15.000	12.00000	180.00

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 5 of 9

Project ID: 2310-13-71**Federal Project No.:** WISC 2024118**Contract ID:** 20240109012**Project Description:** V Jackson, Eagle Dr; Intersection With STH 60**Awarded Vendor:** VI18**VINTON CONSTRUCTION COMPANY****Category:** 1000

Roadway Items

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0152	638.3000	Removing Small Sign Supports	EACH	18.000	15.00000	270.00
0154	643.0300	Traffic Control Drums	DAY	1,190.000	0.08000	95.20
0156	643.0420	Traffic Control Barricades Type III	DAY	810.000	0.45000	364.50
0158	643.0705	Traffic Control Warning Lights Type A	DAY	1,620.000	0.05000	81.00
0160	643.0715	Traffic Control Warning Lights Type C	DAY	605.000	0.05000	30.25
0162	643.0900	Traffic Control Signs	DAY	4,405.000	0.35000	1,541.75
0164	643.0910	Traffic Control Covering Signs Type I	EACH	4.000	175.00000	700.00
0166	643.1070	Traffic Control Cones 42-Inch	DAY	100.000	0.08000	8.00
0168	643.3165	Temporary Marking Line Paint 6-Inch	LF	1,335.000	0.40000	534.00
0170	643.5000	Traffic Control	EACH	0.050	57,439.70000	2,871.98
0172	644.1601	Temporary Pedestrian Curb Ramp	DAY	270.000	4.00000	1,080.00
0174	644.1605	Temporary Pedestrian Detectable Warning Field	SF	200.000	3.00000	600.00
0176	644.1810	Temporary Pedestrian Barricade	LF	400.000	5.50000	2,200.00
0178	645.0111	Geotextile Type DF Schedule A	SY	200.000	6.00000	1,200.00
0180	645.0120	Geotextile Type HR	SY	91.000	10.00000	910.00
0182	646.2020	Marking Line Epoxy 6-Inch	LF	4,009.000	0.82000	3,287.38
0184	646.4020	Marking Line Epoxy 10-Inch	LF	217.000	1.37000	297.29
0186	646.5020	Marking Arrow Epoxy	EACH	4.000	250.00000	1,000.00
0188	646.5120	Marking Word Epoxy	EACH	4.000	225.00000	900.00
0190	646.7120	Marking Diagonal Epoxy 12-Inch	LF	76.000	10.00000	760.00

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 6 of 9

Project ID: 2310-13-71 **Federal Project No.:** WISC 2024118 **Contract ID:** 20240109012
Project Description: V Jackson, Eagle Dr; Intersection With STH 60
Awarded Vendor: VI18 VINTON CONSTRUCTION COMPANY

Category: 1000 Roadway Items

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0192	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	280.000	20.00000	5,600.00
0194	646.8020	Marking Corrugated Median Epoxy	SF	80.000	5.75000	460.00
0196	646.8120	Marking Curb Epoxy	LF	80.000	8.50000	680.00
0198	646.8220	Marking Island Nose Epoxy	EACH	8.000	275.00000	2,200.00
0200	646.9000	Marking Removal Line 4-Inch	LF	235.000	0.65000	152.75
0202	650.6000	Construction Staking Pipe Culverts	EACH	4.000	300.00000	1,200.00
0204	650.8501	Construction Staking Electrical Installations (project) 02. 2310-13-71	EACH	1.000	2,500.00000	2,500.00
0206	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,130.000	9.00000	10,170.00
0208	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	6.000	1,600.00000	9,600.00
0210	654.0105	Concrete Bases Type 5	EACH	12.000	1,100.00000	13,200.00
0212	654.0224	Concrete Control Cabinet Bases Type L24	EACH	1.000	1,600.00000	1,600.00
0214	655.0610	Electrical Wire Lighting 12 AWG	LF	1,728.000	0.90000	1,555.20
0216	655.0620	Electrical Wire Lighting 8 AWG	LF	5,828.000	1.20000	6,993.60
0218	656.0201	Electrical Service Meter Breaker Pedestal (location) 04. Cabinet JA	EACH	1.000	1,500.00000	1,500.00
0220	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	12.000	518.00000	6,216.00
0222	657.0322	Poles Type 5-Aluminum	EACH	12.000	2,135.00000	25,620.00
0224	657.0715	Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	EACH	12.000	560.00000	6,720.00
0226	659.1115	Luminaires Utility LED A	EACH	12.000	185.00000	2,220.00
0228	659.2124	Lighting Control Cabinets 120/240 24-Inch	EACH	1.000	8,000.00000	8,000.00

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 7 of 9

Project ID: 2310-13-71**Federal Project No.:** WISC 2024118**Contract ID:** 20240109012**Project Description:** V Jackson, Eagle Dr; Intersection With STH 60**Awarded Vendor:** VI18**VINTON CONSTRUCTION COMPANY****Category:** 1000

Roadway Items

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0230	690.0150	Sawing Asphalt	LF	775.000	1.39000	1,077.25
0232	690.0250	Sawing Concrete	LF	15.000	1.95000	29.25
0234	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	1.00000	500.00
0236	SPV.0060	Special 22. Saddle Inlet	EACH	2.000	1,715.00000	3,430.00
0238	SPV.0060	Special 23. Construction Staking Roundabout	EACH	1.000	11,000.00000	11,000.00
0240	SPV.0060	Special 27. Utility Line Opening (ULO)	EACH	2.000	1,175.00000	2,350.00
0252	204.0100	Removing Concrete Pavement	SY	1,565.000	5.00000	7,825.00

Category 1000 Total: \$1,253,296.55**Eng & Contg:** \$187,994.48**Total:** \$1,441,291.03

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Cost Estimate**

Page 8 of 9

Project ID: 2310-13-71**Federal Project No.:** WISC 2024118**Contract ID:** 20240109012**Project Description:** V Jackson, Eagle Dr; Intersection With STH 60**Awarded Vendor:** VI18**VINTON CONSTRUCTION COMPANY****Category:** 2000

Structure Items

Funding Source(s) and Participation:

1	FED	Federal Funding
1	VIL	Village of Jackson
2	VIL001	Village of Jackson

80.00%	30000.00
20.00%	0.00
100.00%	0.00

Category Work Class: RDCN

Roadway Construction

Fed Work Category: 44

Other

Category Length: 32.0000 FEET**Fed Construction Class:** LET

Let Project Items

Category Width: 0.0000 FEET

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0242	203.0220	Removing Structure (structure) 01. R-66-87	EACH	1.000	4,500.00000	4,500.00
0244	513.8011	Railing Steel Pedestrian Type C2	LF	31.000	410.00000	12,710.00
0246	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	35.000	6.00000	210.00
0248	SPV.0165	Special 01. Wall Modular Block Mechanically Stabilized Earth (R-66-87)	SF	106.000	90.00000	9,540.00

Category 2000 Total:

\$26,960.00

Eng & Contg:

\$4,044.00

Total:

\$31,004.00



CONFIDENTIAL

Final Project Detail Estimate Report
Final Detail Cost Estimate

Project ID:2310-13-71	Federal Project No.: WISC 2024118	Contract ID: 20240109012
Project Description:V Jackson, Eagle Dr; Intersection With STH 60		
Awarded Vendor: VI18	VINTON CONSTRUCTION COMPANY	

Category: 3000	Non-Participating		
Funding Source(s) and Participation:	1 VIL001 Village of Jackson	100.00%	0.00
Category Work Class: RDCN	Roadway Construction		
Fed Work Category: 44	Other	Category Length: 0.0000 MILES	
Fed Construction Class: LET	Let Project Items	Category Width: 0.0000 FEET	

Line No.	Item Number	Item Description	Units	Qty	Unit Price	Amount
0250	618.0100	Maintenance and Repair of Haul Roads (project) 02. 2310-13-71	EACH	1.000	0.01000	0.01

Category 3000 Total:	\$0.01
Eng & Contg:	\$0.00
Total:	\$0.01

Project 2310-13-71 Engineer's Estimate w/o E&C Total:	\$1,446,326.04
Contractor's Bid w/o E&C Total:	\$1,280,256.56

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Estimate Funding Summary**

Page 1 of 1

Project ID: 2310-13-71**Project Description:** V Jackson, Eagle Dr; Intersection With STH 60**Awarded Vendor:** VI18**VINTON CONSTRUCTION COMPANY**

Category	Cost	E & C Percent	E&C Amount	Total	Funding Package	Fund	Funding Amount
1000	Roadway Items						
	1,253,296.55	15 %	187,994.48	1,441,291.03	1000 FED	Federal Funding	1,153,032.82
					1000 VIL	Village of Jackson	288,258.21
					1000 VIL001	Village of Jackson	0.00
Category Total 1000							\$1,441,291.03
3000	Non-Participating						
	0.01	15 %	0.00	0.01	V100 VIL001	Village of Jackson	0.01
Category Total 3000							\$0.01
2000	Structure Items						
	26,960.00	15 %	4,044.00	31,004.00	2000 FED	Federal Funding	24,803.20
					2000 VIL	Village of Jackson	6,200.80
					2000 VIL001	Village of Jackson	0.00
Category Total 2000							\$31,004.00
Project Total 2310-13-71							\$1,472,295.04

**CONFIDENTIAL****Final Project Detail Estimate Report
Final Detail Estimate Funding Summary By Unit**

Page 1 of 1

Project ID: 2310-13-71**Project Description:** V Jackson, Eagle Dr; Intersection With STH 60**Awarded Vendor:** VI18

VINTON CONSTRUCTION COMPANY

Unit	Cost	E&C Amount	Total	Funding Amount
Fund ID VIL	Fund Desc. Village of Jackson			
000	256,051.31	38,407.70	294,459.01	294,459.01
Fund VIL Totals	\$256,051.31	\$38,407.70	\$294,459.01	\$294,459.01
Fund ID VIL001	Fund Desc. Village of Jackson			
000	0.01	0.00	0.01	0.01
Fund VIL001 Totals	\$0.01	\$0.00	\$0.01	\$0.01
Fund ID FED	Fund Desc. Federal Funding			
000	1,024,205.24	153,630.78	1,177,836.02	1,177,836.02
Fund FED Totals	\$1,024,205.24	\$153,630.78	\$1,177,836.02	\$1,177,836.02
Project Total 2310-13-71	\$1,280,256.56	\$192,038.48	\$1,472,295.04	\$1,472,295.04

**Summary of Bids Received
January 9, 2024**

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Proposal Call: 012 **Proposal ID:** 20240109012**Project:** 1 **State Project:** 2310-13-70
Federal Project: WISC 2024117**Location:** Washington
Main St, Village Jackson; CTH P to Eagle Dr
STH 060, Washington County
Main St, Village Jackson**Project:** 2 **State Project:** 2310-13-71
Federal Project: WISC 2024118**Location:** Washington
V Jackson, Eagle Dr; Intersection With STH 60
LOC STR, Washington County
V Jackson, Eagle Dr**Type Of Work:** General Constr - No Dominant Work
Type

Order	Bid Amount	Contractor	Address	City & State
1	\$3,895,139.96	VINTON CONSTRUCTION COMPANY	2705 N. Rapids Road Po Box 1987	Manitowoc, WI 54221
2	\$3,945,786.39	ZIGNEGO COMPANY, INC.	W226 N2940 Duplainville Road	Waukesha, WI 53186
3	\$3,949,967.44	STARK PAVEMENT CORPORATION	12845 W. Burleigh Road	Brookfield, WI 53005
4	\$3,956,149.42	ROCK ROAD COMPANIES, INC.	Po Box 1818	Janesville, WI 53547-1818
5	\$3,997,371.71	PAYNE AND DOLAN, INC	Po Box 781	Waukesha, WI 53187-0781
6	\$4,070,410.69	JAMES PETERSON SONS, INC.	Po Box 120	Medford, WI 54451-0120

RFP RECOMMENDATION

DATE 2/6/2024

TO	FROM	REGARDING
*Jackson Village Board	Kelly Valentino, CPRP	Village Dog Park
*Jen Keller, Village Administrator	Jackson Parks & Recreation Director	Design/Engineering Services
*Brian Kober, Public Works Director	kelly.valentino@villageofjacksonwi.gov	RFP Recommendation
	Phone Ext: (262) 677-9665 x113	

The RFP for Engineering and Design Services for the Village Dog Park Concept received (2) proposals out of 17. The (2) vendors were MSA and Harwood, both architectural, engineering and design consultants. Each firm is reputable and we have worked with them in the past on other projects.

Typically a scoring sheet is provided to the JPRC to assist in the discision making process, however, after discussion, it was clear from the (2) proposals that one of the firms had significantly more experience in dog park specific projects.

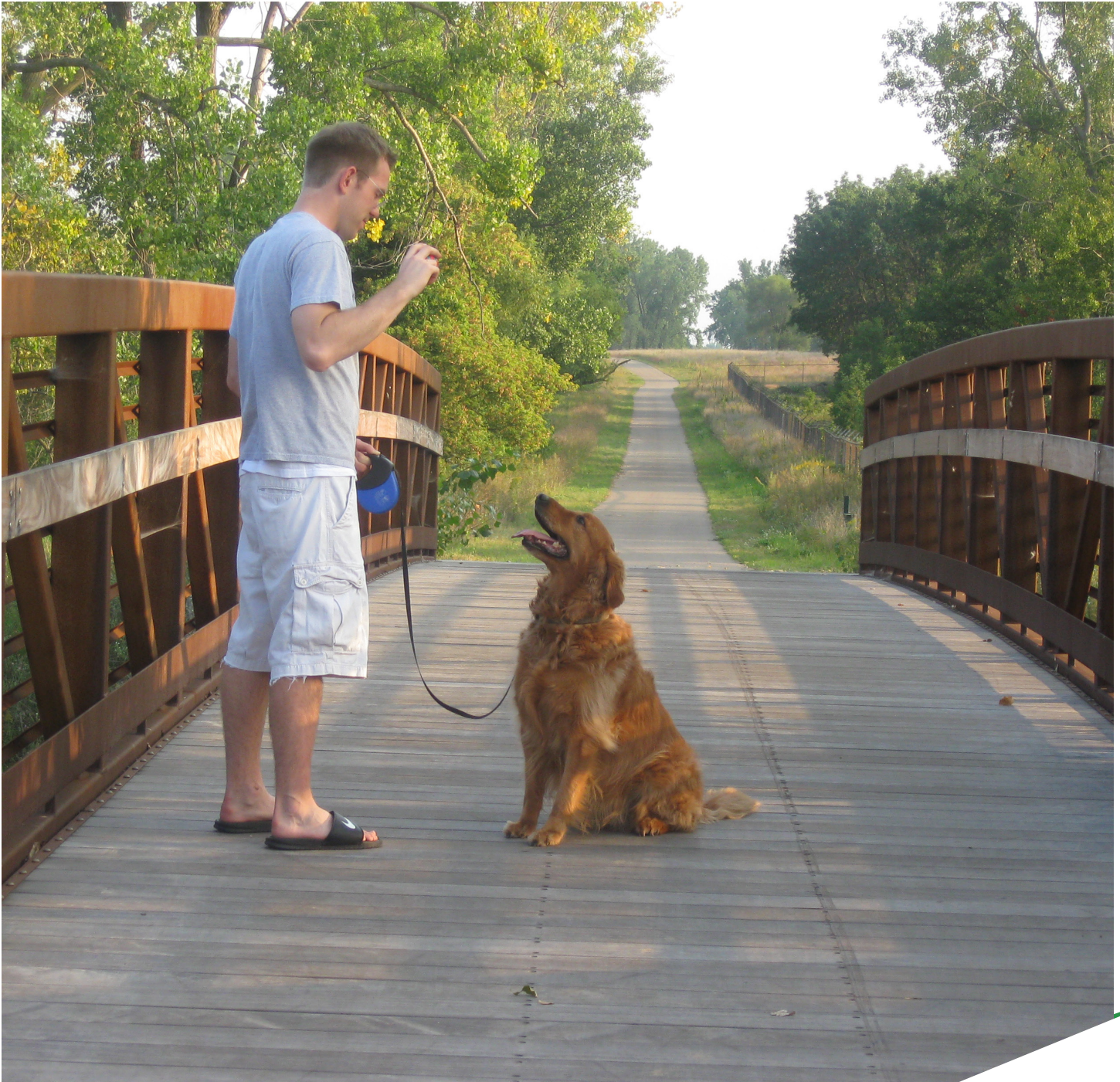
The Jackson Parks & Recreation Commission is recommending awarding the Village Dog Park Design/Engineering Services to MSA. There proposal came in at \$14,350, however we are able to eliminate \$2,600 in Phase II, 2.1 & 2.2 to complete community engagement in-house. Leaving the cost not to exceed at \$11,750.00. Funding has been allocated in the 2024 Budget for this portion of the project with \$10,000 from the CIP Budget and \$1,750 from Park Impact Fees.

Thank you for your time and consideration.



PROPOSAL TO PROVIDE

Engineering and Design Services for Jackson Community Dog Park



Prepared for:

Village of Jackson, WI
January 15, 2024



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January 15, 2024

Kelly Valentino, CPRP
Jackson Parks and Recreation Department
N165W20330 Hickory Lane
Jackson, WI 53037

Re: Proposal to Provide Engineering and Design Services for Jackson Community Dog Park

Dear Kelly,

The Village of Jackson offers a variety of recreational amenities to its residents and is positioning itself to reimagine and refocus its approach to planning and investing in a park facility. MSA offers a team-based approach that sustains excellence by subscribing to a holistically collaborative process. By applying a diverse set of experts and creative talents, we channel the energy and imagination of our clients, staff, public, and all the project stakeholders to create a meaningful and personalized plan. These skills, coupled with specific market expertise, allow our team to provide thoughtful and successful solutions. Working through the lens of the Village's goals and objectives, we are eager to apply our full-service experience to assist you and all project stakeholders in understanding, planning and designing a state-of-the-art, off-leash dog park facility for the Jackson Community.

Benefits we bring to your project include:

- **Vast Experience.** Our team has an extensive portfolio of park master plan projects. We have excelled in public engagement endeavors to develop guidance in planning open spaces to meet community goals and objectives. We recognize the value of balancing great design with economically sound means of implementation. Our team is well versed in working with regulatory agencies to incorporate support for improvements early in the process.
- **Full-service Team.** The park planning and design group at MSA includes professionals across the region with a wide spectrum of expertise and experience. We recognize that this project will require an understanding of the environment, stormwater issues, and design of defining spaces. We have assembled a team that consists of skilled landscape architects, engineers and planners who are committed to the success of your project.
- **Creative Solutions.** We understand the unique challenges and opportunities of locating, planning, developing and funding recreational amenities that improve quality of life — including environmentally sensitive, visually striking sites and well-used community assets. At MSA, we work hard to enable people to improve communities, and we are dedicated to seeing visions come to fruition.

We know you are as excited as we are to get started on the Jackson Community Dog Park. We look forward to working closely with the Village and refining a project approach collaboratively with you to confirm a path of success for the future of the park. Please do not hesitate to contact me directly at (608) 421-7146 or via email at lgeiger@msa-ps.com.

Sincerely,
MSA Professional Services, Inc.



Lucas Geiger, PLA, ASLA
Project Manager



OUR PURPOSE:

POSITIVELY IMPACTING THE LIVES OF OTHERS.
IN EVERY PROJECT. IN EVERY PLAN.



WHO WE ARE

MSA Professional Services, Inc. (MSA) specializes in the sustainable development of communities. We achieve this by building honest, open relationships that go beyond the project to become a trusted source of expertise and support for immediate challenges and long-term goals. Big or small, we do whatever it takes to meet each need, working to make communities stronger in the process. **It's more than a project. It's a commitment.**

HISTORY

MSA's roots reach back to 1919. Our firm consists of 400+ engineers, architects, planners, landscape architects, funding experts, surveyors, GIS experts and environmental scientists. MSA excels at helping clients identify grant and funding sources and then delivering high-quality, cost-effective solutions.

OWNERSHIP

Our professionals think like owners because they are owners. When you partner with MSA, your team will be comprised of individuals who are invested in your success and committed to a high standard of performance. We're proud to be 100% employee owned.

TEAM

Our 400+ planners, landscape architects, engineers, architects, surveyors, funding specialists, and environmental professionals are dedicated to your success. While you know the faces behind your projects, we are a team that works as one to support our clients. When you work with MSA, you're not just working with individuals—you're working with all of us.

RECOGNITION

Since 2017, we've been recognized throughout the Midwest with more than 33 industry awards. And, we're just getting started. When you partner with MSA you know you're in good hands.

POSITIVE IMPACT

Finding funding for projects is what we do. We know projects and plans are no good to you if they don't work toward implementation. We get creative. And, it's led to securing over \$625 million in grants and low-interest loans to offset costs for our partner communities.

CLIENT EXPERIENCE

The pillar of our success is seeing our clients succeed. The graphic below shows the percentage of clients who say MSA met or exceeded their expectations based on the following categories.

98%
ACCURACY



96%
HELPLESSNESS



99%
QUALITY



98%
RESPONSIVENESS



98%
SCHEDULE



97%
SCOPE & FEES





PLANNING AND DESIGN STUDIO

MSA's Planning + Design Studio is our team of dedicated planning experts. At MSA, we know that every project starts with a plan – a clear and consensus-driven vision for the future that can be realistically implemented. Our Planning + Design Studio is 29 strong consisting of:

- 12 American Institute of Certified Planners (AICP)
- 3 Professional Landscape Architects (PLA)
- 2 Landscape Designers
- 2 Housing Specialists
- 10 Planning & Economic Development Specialists

Members of our studio regularly give presentations on various planning topics at state and national conferences. The professional planners that comprise the Studio have helped hundreds of communities and private organizations define their vision, obtain funding, and implement the improvements they seek. And, because our planners are part of a multi-disciplinary firm, they are able to engage our professional engineers and architects in the planning processes to aid our clients in developing sustainable, implementable plans.

CORE SERVICES

Below is a sample of the services that MSA's Planning and Design Studio can offer.

- | | |
|--|--|
| • Capital Improvement and Strategic Plans | • Impact Fee Studies |
| • Comprehensive Plans | • Landscape Architecture |
| • Zoning: Ordinance Creation, Code Rewrites, Development Regulations and Zoning Administration | • Park and Recreation Planning: Park Master Plans, Comprehensive Outdoor Recreation Plans, ADA Studies |
| • Community Blight Studies | • Public Engagement |
| • Cooperative Boundary Agreements | • Redevelopment Studies: Downtown, Neighborhood, Corridor, and Site Planning |
| • Economic Development: Market Analysis, Tax Increment Financing, Feasibility Studies | • Transportation Planning: Bicycle + Pedestrian Plans, Safe Routes to Schools Plans, Access Management Studies |
| • Funding: Grant Writing, Grant Administration, Fundraising | • Urban Design: Wayfinding, Streetscaping, and Design Standards |
| • Housing Studies: Analysis of Impediments to Fair Housing, Market Analysis | |



Parks and Recreation CoP

MSA has internally developed our own Community of Practice (CoP) focused solely on Parks and Recreation. This community strives to broaden knowledge sharing across the company and develop standards and technical information to raise the bar on project design and assure clients benefit from the collaborative expertise of all. Each of the MSA professionals listed in this proposal are members of this CoP and communicate daily about project design and innovation.

How We Help

- ADA Audits for Park and Recreational Facilities
- Aerial Solutions (Mapping, Modeling, Marketing, Surveying)
- Aquatic Facilities (Indoor and Outdoor) and Splash Pads
- Architectural Design (Shelters, Restrooms, etc.)
- Asset Management
- Athletic Facilities (Indoor and Outdoor)
- Campground Development and Infrastructure Design
- Community/Recreational Centers
- Comprehensive Park and Recreation Plans (Municipal, County, Regional)
- Conceptual Site Plans, 3D Renderings and Virtual Reality
- Educational Programming
- Funding
- Infrastructure Survey and Design (Parking, Stormwater, Sewer, Water, etc.)
- Landscape Design
- Lighting Design
- Multimedia (360° Video, Esri Story Maps, etc.)
- Park and Recreational Grant and Funding Administration
- Park Planning and Design
- Playground Safety Audits
- Public Engagement (Public Input, Opinion Surveys, Visioning, etc.)
- Recreational Trails, Bridges and Boardwalks
- Skate Parks
- Tree Inventories and Assessments
- Waterfront Improvements (Boat Launches, Piers, Riverwalks)
- Wayfinding (Interpretive Signage, Interactive Kiosks, etc.)



DOG PARK PLANNING

WISCONSIN DELLS, WI

The City of Wisconsin Dells had been considering adding a dog park to their community for some time. Since the update of their Comprehensive Outdoor Recreation Plan in 2022, the dog park discussion was at the top of the list to consider and address. Several considerations for applicable sites had been discussed and the City decided to move forward with considering two sites to locate the new dog park.

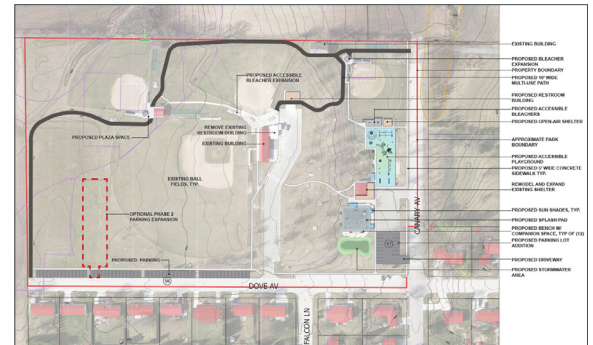
MSA assisted the City with reviewing the two sites in person. Key considerations included the terrain, layout, sizes, and stormwater to accommodate the dog park. MSA then developed preliminary concepts (one per site) and associated preliminary cost estimates for each site. The preliminary concepts included considerations for fencing, a small shelter, parking, utilities, and other applicable amenities to support the dog park.

From the two concepts, the City committed to developing a dog park on a 1.6-acre lot just off of Business Park Road. The proposed dog park will include exterior fencing and gating for the overall park area. The site will also include dog exercise features, associated parking and access drive, shade structure, drinking fountain, picnic tables, trash receptacles, and benches. The site will be further designed to include these features and provide proper access to the parking area and dog fenced area. MSA is currently providing topographic survey and site/civil engineering to develop the overall site plan concept into a site design layout and plan.

NENNIG, RIVERSIDE, AND NEW PARK MASTER PLANS

CHILTON, WI

The City of Chilton was looking to redevelop its parks system. Following the update to the City's Comprehensive Outdoor Recreation Plan, they were looking to complete several park master plans to provide a guiding path to their development and/or redevelopment. MSA provided concept development and final plans for the following parks. The process included evaluating existing site features, development of a master plan for each park, character images, and planning level cost estimates. These plans will aid the City in the development of the future budgets to identify phasing, accommodate final design/construction drawings and construction funding for future improvements as approved by the City.



Nennig Park

- Nennig Park** currently holds several athletic fields and courts that are highly utilized. This park is 15 acres. The park also houses an indoor/outdoor shelter, refreshment stand, two restroom buildings, various other park amenities, parking lot, and playground. The concept plan includes a proposed accessible parking stall, grill station, playground, bench with companion space, shoreline restoration, pedestrian bridge, and sidewalk extension. It also includes a proposed accessible bleacher expansion, plaza space, parking, multi-use path, restroom building, open air shelter, accessible playground, concrete sidewalk, sun shades, splash pad, bench with companion space, driveway, stormwater area. Proposed work includes removing the existing restroom building and remodeling and expanding the existing shelter. *This project moved forward into full engineering design and is currently under construction for phase 1.*
- Riverside Park** is located off E. Grant Street along the south branch of the Manitowoc River. The park is 1.3 acres. The park currently houses some older playground equipment in need of replacement. The concept plan includes a proposed accessible parking stall, grill station, playground, bench with companion space, shoreline restoration, pedestrian bridge, and sidewalk extension that will serve as a significant connection to fragmented areas of the community.
- New Park** is located on parcels 27668, 16632, and 16943 for a total of 4.3 acres. The concept plan includes a proposed gathering space/overlook, open air shelter with restrooms, bench with companion space, ADA canoe/kayak launch, shoreline restoration, gathering space with benches, multi-use path, sidewalk improvements, grain bin gazebo, driveway and parking lot, bike racks, planted berm, grill station, and a dog park. The dog park is to include a mixture of artificial turf and turf grass for different times of year and activity levels.



Riverside Park



New Park

The process included evaluating existing site features, development of a master plan for each park, character images, and planning level cost estimates. These plans will aid the City in the development of the future budgets to identify phasing, accommodate final design/construction drawings and construction funding for future improvements as approved by the City.



SOUTHTOWN MASTER PLANNING AND PRELIMINARY DESIGN

KALONA, IA

Kalona is a historic and welcoming community in a strategic location for future growth. Located within Kalona City limits, the SouthTown area provides design standards and the amenities of living in town while being immersed in nature. The area is unique in that it provides a scenic opportunity to live amongst nature, recreation and conservation. The City of Kalona and Washington County Conservation have partnered to provide a development design concept that allows for a seamless transition between residential living and nature at its best. MSA is providing master planning and preliminary design services to assist in these efforts.

Washington County Conservation brings over 2,300 acres of conservation management experience and expertise to the SouthTown area. The Conservation's mission will be to protect, preserve and educate the public about the natural features located within the SouthTown area. Collaboration efforts are underway to expand community recreation opportunities and conservation projects. Residents and visitors will be able to enjoy public access to projects throughout the 80-acre public park such as:

- Rock surfaced and natural trails
- Dog park
- Naturescape playground
- Fishing ponds
- Disc golf
- Native prairie restoration

PUBLIC ENGAGEMENT EXPERTISE

At MSA, we believe that when planning a public project, it must be done with the public's advice and input. Decisions made by local governments affect the future of all those who live and work in the community. We are committed to helping governments and organizations understand the diverse needs and concerns of the public, non-profit organizations, business interests and local governments. Aside from community support, this process also lends itself to ensuring the final project reflects the community's ethos and vision for its future.

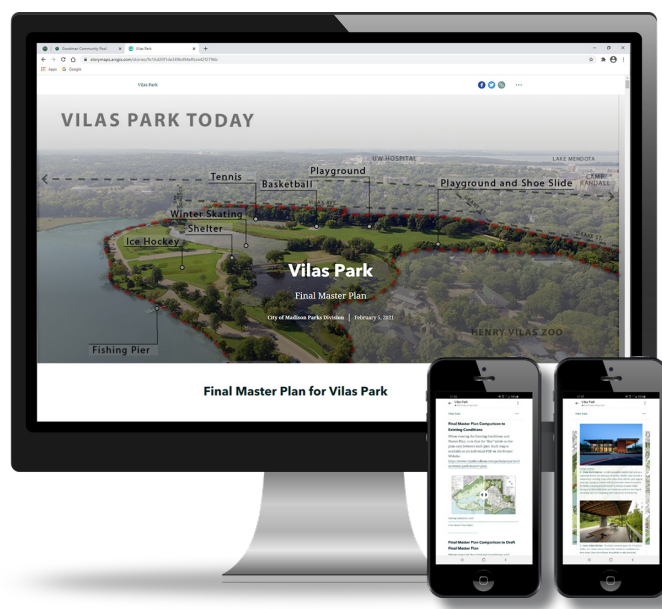
AN INTEGRATED SOLUTION

We specialize in working alongside our clients and selecting the best available methods to hear the voices of many citizens through the process. The type and combinations of methods selected will ensure a balance of informing, consulting, involving, collaborating and empowering the public. Therefore, engagement can and should be accomplished by tapping into a variety of sources, including community and non-profit organizations, public officials, youth, individuals with disabilities, mature citizens and those that have been traditionally underserved. Listed below are a few techniques we use to strengthen public involvement for your community.



- Neighborhood advisory committees
- Open houses
- StoryMap
- POLCO community engagement polling
- Pop-up booths at community events
- Community surveys
- Media relations
- Project websites
- Project newsletters/direct mailers
- Neighborhood office hours
- Stakeholder interviews/focus groups
- Interactive community mapping tools
- Door hangers/leave behinds
- Translation of materials into other languages

ENGAGING THE COMMUNITY



StoryMaps

One of the ways our teams engage the community is through the use of Esri ArcGIS StoryMaps. See the next page for project links that showcase our use of Esri GIS StoryMaps.



ArcGIS StoryMaps

CONSENSUS BUILDING | COMMUNITY RELATIONS | STAKEHOLDER ENGAGEMENT

Our ability to create and implement effective, comprehensive public participation plans is one of the many reasons communities turn to MSA for their public engagement needs.

WHAT OUR CLIENTS ARE SAYING

The following are municipal client references for which MSA has provided similar planning services within the last three to five years.

CITY OF WISCONSIN DELLS

Thad Meister, Director of Parks and Recreation

Assisted the City with reviewing two sites for a new dog park. We also developed preliminary concepts for each site and are continuing to provide topographic survey and site/civil engineering to develop the overall site plan for the selected concept into a site design layout and plan.

P: (608) 254-7458

E: tmeister@dellsparkandrec.com

CITY OF BEAVER DAM

Todd Janssen, Director of Engineering

As the City's general engineer, provides a wide range of engineering services to the City, including the following park-related projects: comprehensive outdoor recreation planning, Rotary Riverway Park improvements, and Swan Park improvements.

P: (920) 356-2543

E: tjanssen@ci.beaverdam.wi.gov

CITY OF CHILTON

Chris Marx, Director of Public Works

Worked with the City to develop/redevelop three park master plans, including a new park with a dog park.

P: (920) 849-2451 ext. 320

E: cmarx@chiltonwi.gov

CITY OF STOUGHTON

Tony King, Recreation Supervisor

In the last four years alone, we have provided ongoing services for the following six park projects: Tee Naasak Park Master Plan, 51 West Development Parks Master Plan, Mandt Park Master Plan, Racetrack Park Master Plan, Virgin Lake Trail, and an ADA Facility Audit.

P: (608) 873-6746

E: tking@cityofstoughton.com

WASHINGTON COUNTY (IA) CONSERVATION BOARD

Zach Rozmus, Executive Director, WCCB

Provided planning and preliminary design services for the SouthTown area in Kalona City. The 80-acre public park includes a dog park.

P: (319) 461-1346

E: zachwccb9279@gmail.com

PROJECT UNDERSTANDING

MSA's understanding of this community dog park project directly ties to our recent work on the Village of Jackson's Hasmer Lake Master Plan. During the development of the plan, MSA conducted public engagement, including a community survey, to gauge community interest in different parks and amenities across the community. Part of this was for the potential dog park. Later, the Village requested that MSA look at a preliminary plan of the dog park and provide feedback based on the design. It was noted that the adjacent wastewater treatment facility may have proved to be a good alternative site; however, it was going to go through an expansion and the land would not be viable. MSA is eager to continue our work and help the Village create a state-of-the-art, off-leash dog park facility.

PROJECT APPROACH

MSA's approach to this project is outlined below:

1. Carry out a thorough investigation of the site that documents site conditions, public access, and potential constraints.
2. Review supporting documentation to better understand the community's wants and needs, growth and development patterns, and overall goals.
3. Analyze our findings of the current selected site and provide an assessment of the current site with a recommendation to continue with only the Cedar Run Park or if an alternative site should be considered.
4. Meet with Village staff to discuss the results of our analysis and provide recommendations to move forward with only this site or if another site should be considered.
 - Optional task: We will discuss options with Village staff to identify any possible sites in the community that could be considered. With the guidance of the Village, MSA will do a preliminary review of any and all sites suggested and move forward with a full analysis of the best possible alternative from the Village suggested site.
5. Once a decision has been made by the Village, per our recommendations, we would move forward with the plan development phase of the site considering items identified during the investigation phase.
 - Optional task: Begin the plan development for the alternative site alongside the Cedar Run Park site.
6. We will develop, in coordination with Village Staff, public engagement materials and ideas to institute at an event of the Village's choosing.
 - Optional task: Public engagement materials will be produced to generate feedback on the alternative site.
7. Develop draft concept plan and cost estimate that meet the requirements of the community.
 - Optional task: Develop draft concept plan and cost estimate of alternative project site.
8. Present concept and cost estimate to Village staff for discussion and feedback.
 - Optional task: Present alternative site concept plan and cost estimate to Village staff.
9. After feedback has been received, we would modify our final plan into one final draft report that would incorporate an estimate of probable costs, plan renderings, analysis results, and public engagement summary.
 - Optional task: Incorporate any feedback for the alternative site findings and combine into the final report that compares the two sites.
10. Present our findings and recommendations to the Village of Jackson Parks and Recreation Commission for approval.
 - Optional task: Present findings and recommendations of the alternative site to the Parks and Recreation Commission for approval.
11. Make any necessary adjustments to the final report after the Parks and Recreation Commission meeting prior to submittal of documentation to Village staff.

SCOPE OF WORK

PHASE I – INVESTIGATION PHASE

Task 1.1 – Kick-off and Site Visit

MSA will conduct a kick-off meeting (**Meeting #1 – In Person**) with the Village to verify the project goals, schedule, and deliverables. We will conduct an on-site visit to assess the site while collecting photographic inventory of existing conditions.

Task 1.2 – Review Existing Information

MSA will review current maps, GIS, existing plans, and other available documents the Village or County currently holds for the Cedar Run Park property. The pertinent information gathered is supplemental to the analysis of existing conditions to understand how the future dog park development could be planned.

Task 1.3 – Site Analysis

MSA will prepare a site analysis diagram illustrating the existing conditions, utilities, opportunities and constraints of the park and adjacent connections. A scaled plan of the site will be provided in the master plan. Additionally, we will complete a cursory review of the potential traffic impacts of the proposed park road connections as well as any existing and proposed bicycle and pedestrian connections. During the analysis phase MSA will determine whether an alternative site should be considered. Reasons for pursuing alternative site(s) could be, but not limited to, wetland and permitting concerns, accessibility concerns, or previously unknown constraints.

Task 1.4 – Meet with Park Staff

MSA will prepare a memo with associated site analysis results regarding the Cedar Run Park site. This memo will share the completed SWOT analysis (strengths, weaknesses, opportunities, and constraints) of Cedar Run Park and provide a recommendation on whether a secondary site should be considered. MSA will present the findings with park staff (**Meeting #2 – Virtual**). At this meeting, MSA and Village staff will determine whether to pursue concept designs for Cedar Run Park only or if alternative park sites should be considered. Village staff will share with MSA any known alternative sites to consider at this time.

Meetings

- Kick-off meeting with staff - In-Person
- Project update meeting - Virtual

Deliverables

- Site inventory and analysis graphic (PDF)
- Memo of existing site understanding and recommendations (PDF)
- Meeting notes (PDF)

PHASE II – PLAN DEVELOPMENT

Task 2.1 – Public Engagement Event

After the completion of the site inventory and analysis and initial public engagement, MSA will work with the Village to prepare efforts to effectively engage the public for dog park needs. During **Meeting #2**, MSA and the Village will discuss needs for this event and identify potential events in the community. The Village will be responsible for coordinating attendance at the selected event. MSA will prepare items for the engagement event such as, but not limited to, character boards, sticky notes, markers, maps, note-taking items, and other items proven to assist in engagement events.

Task 2.2 – Online Survey

MSA will generate an online survey using SurveyMonkey to solicit feedback from the community. MSA will discuss needs and wants of the Village during **Meeting #2** to help guide question generation for the new dog park. MSA will send a draft of the questions to the Village prior to publishing the survey. MSA will share the link to the survey for the Village to share on the platforms of their choosing.

Task 2.3 – Develop Concept Plan

MSA will develop a preliminary concept plan based on feedback solicited during the public engagement tasks. The concept plan will be generated based on Cedar Run Park. Preliminary cost estimates for each concept plan will be generated.

Task 2.4 – Meet with Village Staff

MSA will present (**Meeting #3 – Virtual**) the concept plan to Village staff for discussion and feedback. Any changes to the plan or budget will be taken into consideration and updated in the final plan and report.

Task 2.5 – Final Plan and Report

A final report including updated cost estimates, site plan, and character image boards will be generated. MSA will present the result, in coordination with Village staff, to the Parks Commission (**Meeting #4 – In Person**).

Meetings

- Project Update Meeting - Virtual
- Parks Commission Meeting - In Person

Deliverables

- Concept plan (PDF)
- Preliminary cost estimates (PDF)
- Final report with final plan and all-inclusive cost estimates (PDF)
- Meeting minutes (PDF)

OPTIONAL PHASE III – ALTERNATIVE SITE PLAN DEVELOPMENT

This phase is to be completed only at the request of Village staff/Jackson Parks and Recreation and is not included in the overall lump sum cost. This is to be considered an additional service.

Optional Task 3.1 – Alternative Park Site Inventory and Analysis

Upon request by the Village staff identified during Meeting #2, MSA will identify an alternative site to be considered. MSA will complete additional site review and analysis for selecting another viable site. After initial research, MSA will select an alternative, complete a SWOT analysis of the site, and present findings at a Village staff meeting (**Additional Meeting #1 – Virtual**). Following the conclusion of the Village staff meeting, MSA will move forward with the design of the selected site.

Optional Task 3.2 – Alternative Park Site Public Engagement

MSA will complete engagement items alongside the engagement items listed in Phase II (Task 2.1 and 2.2). MSA understands that preparation of engagement materials and analysis of results for a second site will require additional effort.

Optional Task 3.3 – Alternative Park Site Plan Development

MSA will generate a concept plan with associated cost estimates for the alternative site previously agreed upon. MSA will present the concept plan at Meeting #3 in conjunction with the concept plan for Cedar Run Park.

Optional Task 3.4 – Alternative Park Site Final Plan and Report

MSA will include the alternative site in the final report and incorporate updated cost estimates and site plan. Character image boards will be generated. MSA will present the results, in coordination with Village staff, to the Parks Commission in conjunction with Meeting #4.

ITEMS PROVIDED BY THE CITY

- Existing site documentation such as utility plans, land information on lots, boundary, easements, etc.
- Available GIS data.

OTHER ADDITIONAL SERVICES

During and upon the completion of the final report and plan, with MSA's expert in-house staff, we can also provide the following services as additional items.

- **3D Renderings/Visualizations** - MSA can provide 3D renderings of the proposed final plan that are supplementary to the design. These can be requested at any time during Phase II or III with the extent/quantity being discussed at time of request.
- **Grant Assistance** – MSA can assist the Village with identifying grants for the project, and this information could be included in the final report.
- **Additional Public Engagement** – MSA can assist the Village with any public engagement efforts during the process of the project. These can be requested at any time during Phase I or II with the extent/quantity being discussed at time of request.
- **ArcGIS StoryMap** – MSA can provide StoryMap updates to the existing Hasmer Lake StoryMap or generate a StoryMap for the Cedar Run Dog Park. This effort can serve as a cost-effective way to share the plan and story with the community.
- **Construction Documentation and Construction Administration** – MSA understands this project is a request for understanding feasibility and a plan for selecting dog park play elements. This project does not include documentation for construction services or construction administration. MSA is fully capable and willing to assist the Village in preparing documentation, if so requested.

ESTIMATED LABOR HOURS

See our Cost Proposal on pages 20-21 for a summary of estimated labor hours by task and the number of hours performed by each participant organized by task.

ORGANIZATIONAL CHART

Our team is staffed to handle the needs of your projects. We are a group of experienced planners, landscape architects, and engineers backed by more than 400 other technical specialists who are accustomed to working together on similar projects. Our familiarity with each other will enable us to meet your workload and timeline requirements. **We have chosen a team that reflects the needs for this project, including familiarity with similar-sized projects, and the expertise to explore all viable alternatives.**



Lucas Geiger, PLA, ASLA
Project Manager | Landscape Architect



Emily Soderberg
Planner



Emma Wenman, ASLA
Landscape Designer
Site Designer



Raine Gardner, PE
Principal In Charge | QA/QC



Lucas Geiger, PLA, ASLA

PROJECT MANAGER | LANDSCAPE ARCHITECT

Lucas will be responsible for managing the planning effort, assisting with public engagement, and leading the design.

Lucas is heavily involved in MSA's parks and recreation projects, site developments, and downtown designs. He has taken on a passion for urban planning and design in the hopes of helping communities activate spaces for the good of the public. Lucas' resume includes site inventory and analysis, concept development and master planning, site design and engineering, construction document preparation, and project management. Lucas is currently one of the leaders in supporting the downtown Milwaukee office and growing MSA relationships within southeastern Wisconsin. He also leads 3D rendering and design efforts within MSA's Planning + Design Studio.

EDUCATION

B.S., Landscape Architecture,
University of Wisconsin-
Madison

REGISTRATIONS

Professional Landscape
Architect, WI

American Society of Landscape
Architects (ASLA)

AREAS OF EXPERTISE

- Project Management
- Site Design
- Park Master Planning
- 3D/2D Graphics
- Public Engagement and Outreach
- Client Relationship Management
- Grading and Stormwater Design
- Computer Graphics
- Computer Modeling
- Planting Design

SELECTED PROJECT EXPERTISE

- Parks Master Plan, Chilton, WI
- West Side Park and Leonard-Leota Park Improvements, Evansville, WI
- City Center Park, Park Falls, WI
- Fireman's Park, Verona, WI
- Mandt Park Master Plan, Stoughton, WI
- Swan Park Master Plan, Beaver Dam, WI
- Vilas Park Master Plan, Madison, WI
- Crawford Park Master Plan, Caledonia, WI
- Gramercy Park, East Dubuque, IL
- Waterfront Master Plan and Town Core Walkability Study, Dillon, CO
- Centennial Park Improvements, Hartford, WI
- Milwaukee Yacht Club Redevelopment, Milwaukee, WI
- Beach Drive Resiliency Project, Fox Point, WI
- Downtown Streetscape and Redevelopment, La Porte City, IA
- Nennig Park Improvements, Chilton, WI
- Alonzo Park Master Plan and Downtown Plan, Hortonville, WI
- Hasmer Lake Community Park Master Plan, Jackson, WI
- Jim Friedman Memorial Park Master Plan, Nekoosa, WI
- Washington Park Improvements, Tomahawk, WI
- Downtown Trail/Riverwalk, Hortonville, WI
- Fox River Access Points, Outagamie County, WI
- Waukau Dam Master Plan, Winnebago County, WI
- Great Sauk Trail Feasibility Study, Sauk County, WI
- Town Park, Germantown, WI
- Barron Streetscape Enhancements, Barron, WI
- Elm Street Plaza Design, Rendering and Construction Documents, Wisconsin Dells, WI
- Village Forest, West Baraboo, WI



Emma Wenman, ASLA
LANDSCAPE DESIGNER | SITE DESIGNER

Emma will be responsible for leading site investigation and analysis, public engagement, and final report compilation.

From site-specific design to master planning, Emma has a wide interest in landscape architecture. She has assisted on many park master planning projects and emphasizes the importance of the design process by being involved in community engagement opportunities. In her role as a landscape designer, Emma continues to develop project inventory and analyses, conceptual designs, landscape planting plans, and master planning documents.

Education

B.A., Landscape Architecture,
University of Wisconsin-Madison

Registration

American Society of Landscape Architects (ASLA)

Selected Project Experience

- Riverfront Park Master Plan, Fond du Lac, WI
- Park Planning for Grundahl Park and Grandma Foster Park, Mount Horeb, WI
- 28th Street Final Design - Path and Landscaping, Superior, WI
- La Salle Ave Phase 2 (downtown), Barron, WI
- Crawford Park Master Plan, Caledonia, WI
- Birch Lake Park and Memorial Park Master Plans and Comprehensive Outdoor, Recreation Plan Update, Bameveld, WI



Emily Soderberg
PLANNER

Emily will be responsible for identifying alternative sites, guiding planning decisions, and assisting with public engagement efforts.

Emily is an experienced project leader with diversified planning experience. She has successfully led the completion of community-wide plans across Wisconsin. As a skilled communicator, she is adept at leading public engagement, building consensus among project stakeholders, and keeping her clients informed as a project progresses.

Education

M.S., Urban and Regional Planning,
University of Michigan
B.S., Sustainable Built Environments,
University of Arizona Honors College

Registration/Certification

American Society of Adaptation Professionals (ASAP)
American Planning Association-WI

Selected Project Experience

- Sustainability Plan Development & Design, Madison, WI
- Comprehensive Plan Update, La Crosse, WI
- CORP/Bike-Ped Update, Waunakee & Westport, WI
- Parks Planning, La Crescent, MN
- Comprehensive Plan, La Crosse, WI
- San Damiano Community Vision and Master Plan Process, Monona, WI
- Memorial Park Master Plan and CORP Update, Hillsboro, WI



Raine Gardner, PE
PRINCIPAL IN CHARGE | QA/QC

Raine will provide quality assurance and quality control support throughout the duration of the project.

As our Parks and Recreation Practice Leader, Raine leads a team of landscape architects, waterfront development specialists and project engineers. She has worked on a variety of projects including recreational parks and trail projects, waterfront development/access, river corridor planning, stormwater, water main, and sanitary sewer design, roadway reconstruction, lake dredging, and streetscaping plans.

Education

M.S., Civil Engineering, University of Wisconsin-Madison
B.S., Civil Engineering, Michigan Technological University

Registration

Professional Engineer, WI, MI, IA, MN, OH, TX

Selected Project Experience

- Dog Park Planning, Wisconsin Dells, WI
- Liberty Park Shelter and Restroom, Sun Prairie, WI
- Park Services, Stoughton, WI
- Pheasant Branch Creek, Corridor Reconstruction Trail and Bridges, Middleton, WI
- San Damiano Community Vision and Master Plan, Monona, WI
- Vilas Park Master Plan, Madison, WI
- Fireman's Park, Verona, WI

PROJECT SCHEDULE

See our Cost Proposal on pages 20-21 for a proposed schedule that indicates project milestones and overall time for completion of the plan.

PHASE/TASK	COST	HOURS
PHASE I – INVESTIGATION PHASE February 2024 – March 2024	\$4,800	34
Task 1.1 Kick-off and Site Visit	\$1,600	12
Emma Wenman, Landscape Designer Site Designer	-	8
Lucas Geiger, Project Manager Landscape Architect	-	4
Task 1.2 Review Existing Information	\$800	6
Emma Wenman, Landscape Designer Site Designer	-	2
Emily Soderberg, Planner	-	2
Lucas Geiger, Project Manager Landscape Architect	-	2
Task 1.3 Site Analysis	\$1,400	10
Emma Wenman, Landscape Designer Site Designer	-	4
Emily Soderberg, Planner	-	2
Lucas Geiger, Project Manager Landscape Architect	-	2
Raine Gardner, Principal In Charge QA/QC	-	2
Task 1.4 Meet with Park Staff	\$800	6
Emma Wenman, Landscape Designer Site Designer	-	4
Lucas Geiger, Project Manager Landscape Architect	-	2
Estimated Expenses (travel, prints/copies, large plots)	\$200	-
PHASE II – PLAN DEVELOPMENT March 2024 – May 2024	\$9,550	72
Task 2.1 Public Engagement Event	\$2,000	16
Emma Wenman, Landscape Designer Site Designer	-	6
Emily Soderberg, Planner	-	6
Lucas Geiger, Project Manager Landscape Architect	-	4
Task 2.2 Online Survey	\$600	4
Emma Wenman, Landscape Designer Site Designer	-	3
Lucas Geiger, Project Manager Landscape Architect	-	1
Task 2.3 Develop Concept Plan	\$3,200	26
Emma Wenman, Landscape Designer Site Designer	-	20
Lucas Geiger, Project Manager Landscape Architect	-	4
Raine Gardner, Principal In Charge QA/QC	-	2
Task 2.4 Meet with Village Staff	\$600	4
Emma Wenman, Landscape Designer Site Designer	-	2
Lucas Geiger, Project Manager Landscape Architect	-	2
Task 2.5 Final Plan and Report	\$2,800	22
Emma Wenman, Landscape Designer Site Designer	-	16
Lucas Geiger, Project Manager Landscape Architect	-	4
Raine Gardner, Principal In Charge QA/QC	-	2
Expenses (travel, prints/copies, large plots, public engagement materials)	\$350	-

PHASE/TASK	NOTES
OPTIONAL PHASE III – ALTERNATIVE SITE PLAN DEVELOPMENT	Due to the alternative site being unknown at this time, we are unable to properly scope hours for the necessary work to be completed.
Task 3.1 Alternative Park Site Inventory and Analysis	
Emma Wenman, Landscape Designer Site Designer	
Emily Soderberg, Planner	
Lucas Geiger, Project Manager Landscape Architect	This will occur alongside the effort of Task 2.1 and efforts will be combined.
Task 3.2 Alternative Park Site Public Engagement	
Emma Wenman, Landscape Designer Site Designer	
Emily Soderberg, Planner	
Lucas Geiger, Project Manager Landscape Architect	The size and constraints of the alternative site are currently unknown and difficult to scope at this time.
Task 3.3 Alternative Park Site Plan Development	
Emma Wenman, Landscape Designer Site Designer	
Lucas Geiger, Project Manager Landscape Architect	
Raine Gardner, Principal In Charge QA/QC	This will occur alongside the effort of Task 2.5 and efforts will be combined for the final deliverable.
Task 3.4 Alternative Park Site Final Plan and Report	
Emma Wenman, Landscape Designer Site Designer	
Lucas Geiger, Project Manager Landscape Architect	
Raine Gardner, Principal In Charge QA/QC	

Other

- Additional Virtual Meetings: \$400 (assumed 1 hour meeting)
- Additional In-Person Meetings: \$800 (assumed 1 hour meeting)
- Additional Public Engagement Events: \$1,600 (max 4 hour event)

IT'S MORE THAN A PROJECT. IT'S A COMMITMENT.
JACKSON COMMUNITY DOG PARK | JACKSON, WI | JANUARY 15, 2024