**A G E N D A**
**CITY OF WAUPUN PLAN COMMISSION MEETING**
**City Hall, Council Chambers**
**Wednesday, March 18, 2020 at 4:45 PM**

**CALL TO ORDER**

**ROLL CALL**

**PERSONS WISHING TO ADDRESS THE PLAN COMMISSION**--*State name, address, and subject of comments. (2 Minutes)*

***No Public Participation after this point.***

**FUTURE MEETINGS AND GATHERING INVOLVING THE PLAN COMMISSION**

**CONSIDERATION - ACTION**

1. Approve minutes of the February 19, 2020 meeting
2. Site Plan Review - Pine Valley Apartments - Mayfair St.

**ADJOURNMENT**

*Upon reasonable notice, efforts will be made to accommodate disabled individuals through appropriate aids and services. For additional information, contact the City Clerk at 920-324-7915.*

**( D R A F T ) M I N U T E S**
**CITY OF WAUPUN PLAN COMMISSION MEETING**
**Waupun City Hall – 201 E. Main Street, Waupun WI**
**Wednesday, February 19, 2020 at 4:45 PM**

**CALL TO ORDER**
The Waupun Plan Commission met at 4:45 pm in the Council Chambers, City Hall, Waupun.

**ROLL CALL**
Members Present: Julie Nickel, Fred Lueck, Mike Matoushek, Elton TerBeest, Jerry Medema, and Jeff Daane.
Member Excused: Derek Drews
Staff Present: Susan Leahy, Sarah VanBuren, and Kathy Schlieve

**PERSONS WISHING TO ADDRESS THE PLAN COMMISSION**--
Chairman Nickel asked if there were any persons wishing to address the committee on any items not included on today's agenda. Hearing nothing, Chairman Nickel proceeded to address the items listed for consideration and action on today's committee agenda.

**FUTURE MEETINGS AND GATHERING INVOLVING THE PLAN COMMISSION**
Chairman Nickel indicated the next meeting of the Plan Commission may be March 18, 2020, at 4:45 pm.

**CONSIDERATION - ACTION**
1. Approve minutes of the January 15, 2020 meeting.
   Motion by Medema, seconded by Matoushek to approve the minutes of the January 15, 2020 meeting as presented. Motion carried, unanimously.

2. Site Plan Review - 412 Shaler Dr - Dentistry of Wisconsin.
   Grant Duchac, engineer with Excel Engineering appeared and discussed the site plan for Dentistry of Wisconsin to be located at the intersection of Shaler Dr. and E. Lincoln St. The lot is approximately 1.5 acres in size. The proposed single story building would contain approximately 4,800 sq. ft. and meet all yard and setback requirements of the City's Zoning Ordinance. A sign is proposed at the intersection of Shaler Dr. and E. Lincoln St. The site would contain 41 parking stalls. The location of a future addition is also shown on the rear of the main structure. City Engineer Daane indicated that he has been working with MSA on a storm water agreement and a stormwater conveyance system as well as erosion control plans. A lighting layout has also been provided.

   Robert Metzger, father of the owner and Martin Sell, architect also appeared to answer any questions. Lueck noted that they have made about two additions to their office in Beaver Dam and wondered if this building would be larger than that one. Mr. Metzger thought it might be slightly larger than their Beaver Dam office. It would be large enough for a two-person practice. He also noted that if everything falls in place, they hope to start construction around May 6th.

   Hearing no further questions, Chairman Nickel called for a motion to act on the site plan.

   Motion by Matoushek, seconded by TerBeest to approve the site plan for the construction of a new office building for Dentistry of Wisconsin at 412 Shaler Dr. in accordance with the plans submitted with their application and any approvals required by the City Engineer.
   Vote: Daane, Medema, TerBeest, Matoushek, Lueck, and Nickel - "AYE"
   Motion carried, unanimously 6/0

3. Housing Study and Needs Analysis

Sarah VanBuren, Community & Economic Development Coordinator and Kathy Schlieve, City Administrator appeared to give a brief overview of the City's Housing study and needs analysis recently approved by the City Council on February 11, 2020. This study is intended to help elected officials and others to understand the City's housing needs and how to address these issues.

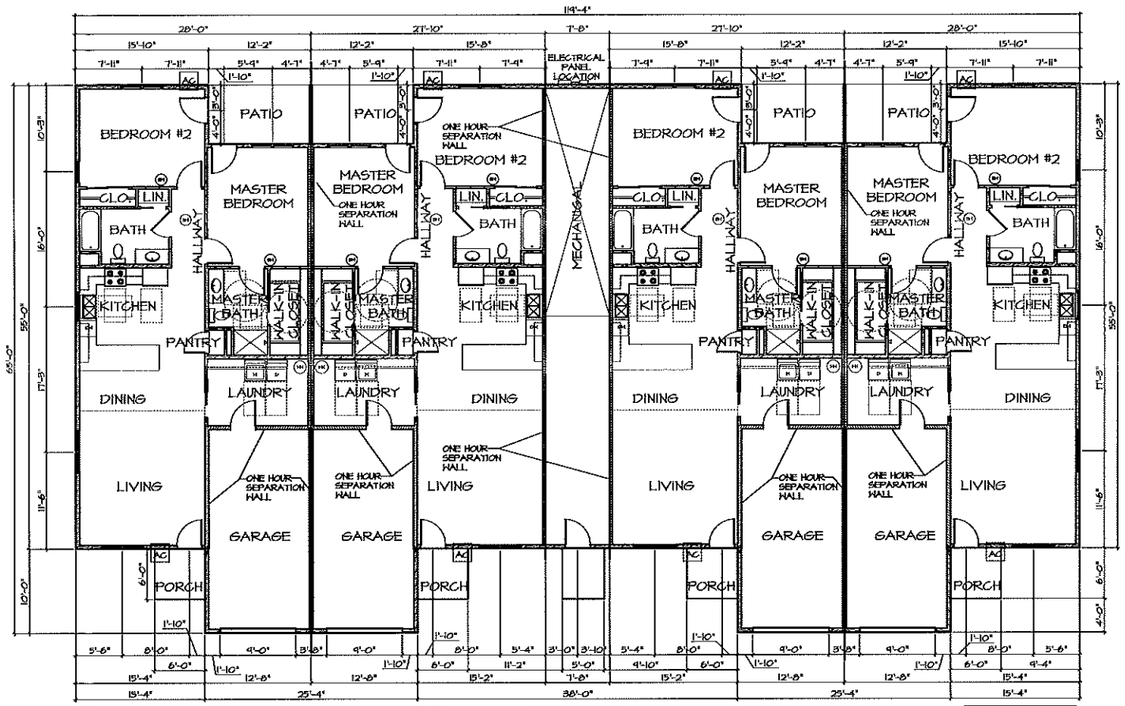
Some of the issues noted were affordable housing, community demographics, existing housing characteristics, economic factors, housing affordability gap, stake holder interviews, land use planning, municipal codes, housing needs and recommended actions. If a household spends more than 30% of their income on housing and related costs then the household is considered overburdened. The cost of construction is up 187%. TIF districts can make housing more affordable in their opinion.

In 2021 one of the City's TIF districts is going to close and the units in this district will lose their tax incentives which may result in the unit rents to skyrocket. They feel there is a lack of short-term housing in the City. What are the solutions? Possibly allow accessory dwelling units on lots, reduce lot widths, eliminate R-1 zoning district, revise the zoning ordinance and create a developers guide are some possibilities among others for the study.

**ADJOURNMENT**

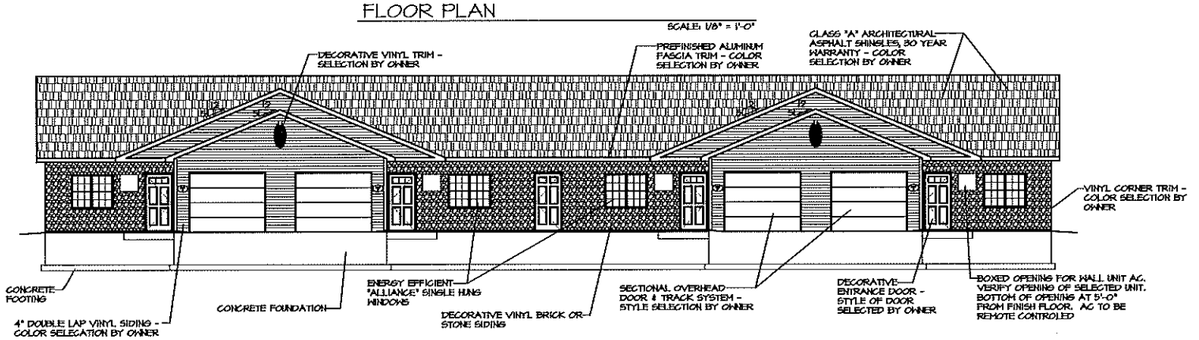
Motion by Lueck, seconded by Nickel to adjourn the meeting. Motion carried, meeting adjourned at 5:11 pm

Fred Lueck
Secretary



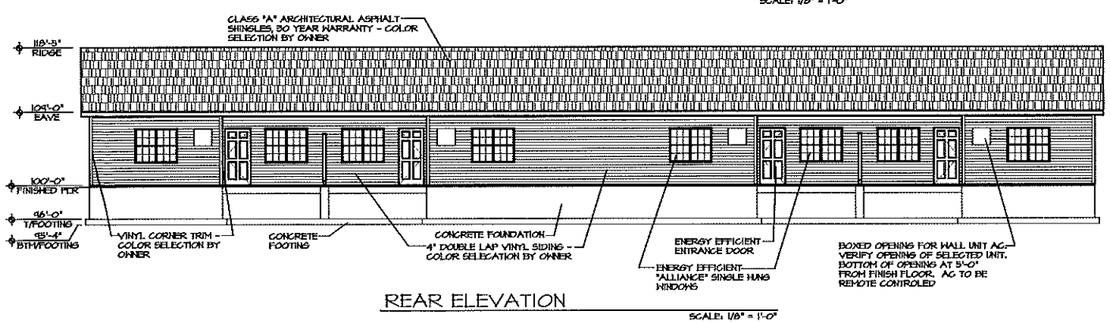

FLOOR PLAN

SCALE: 1/8" = 1'-0"



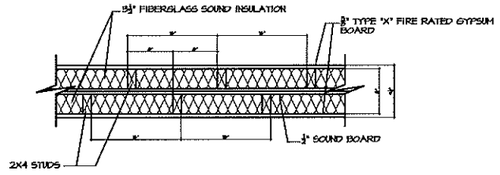

FRONT ELEVATION

SCALE: 1/8" = 1'-0"

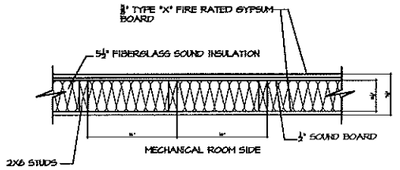



REAR ELEVATION

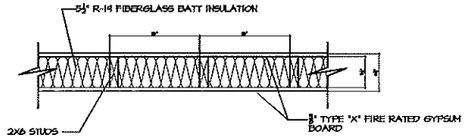
SCALE: 1/8" = 1'-0"



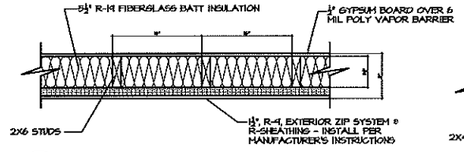

1 A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"



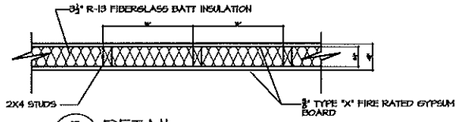

2 A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"



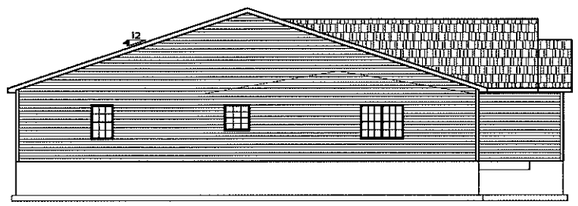

3 A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"




4 A1 DETAIL
TYP'L EXTERIOR WALL
SCALE: 1" = 1'-0"

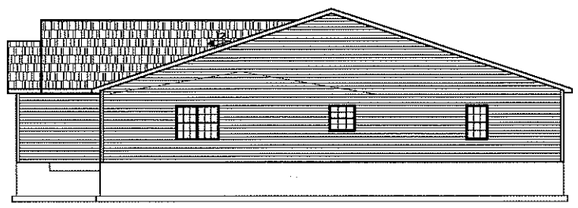



5 A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"




LEFT ELEVATION

SCALE: 1/8" = 1'-0"




RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

REVISIONS

PROPOSED 4-UNIT APARTMENT BUILDING
APARTMENTS
MAYFAIR STREET, WAUPUN, WI

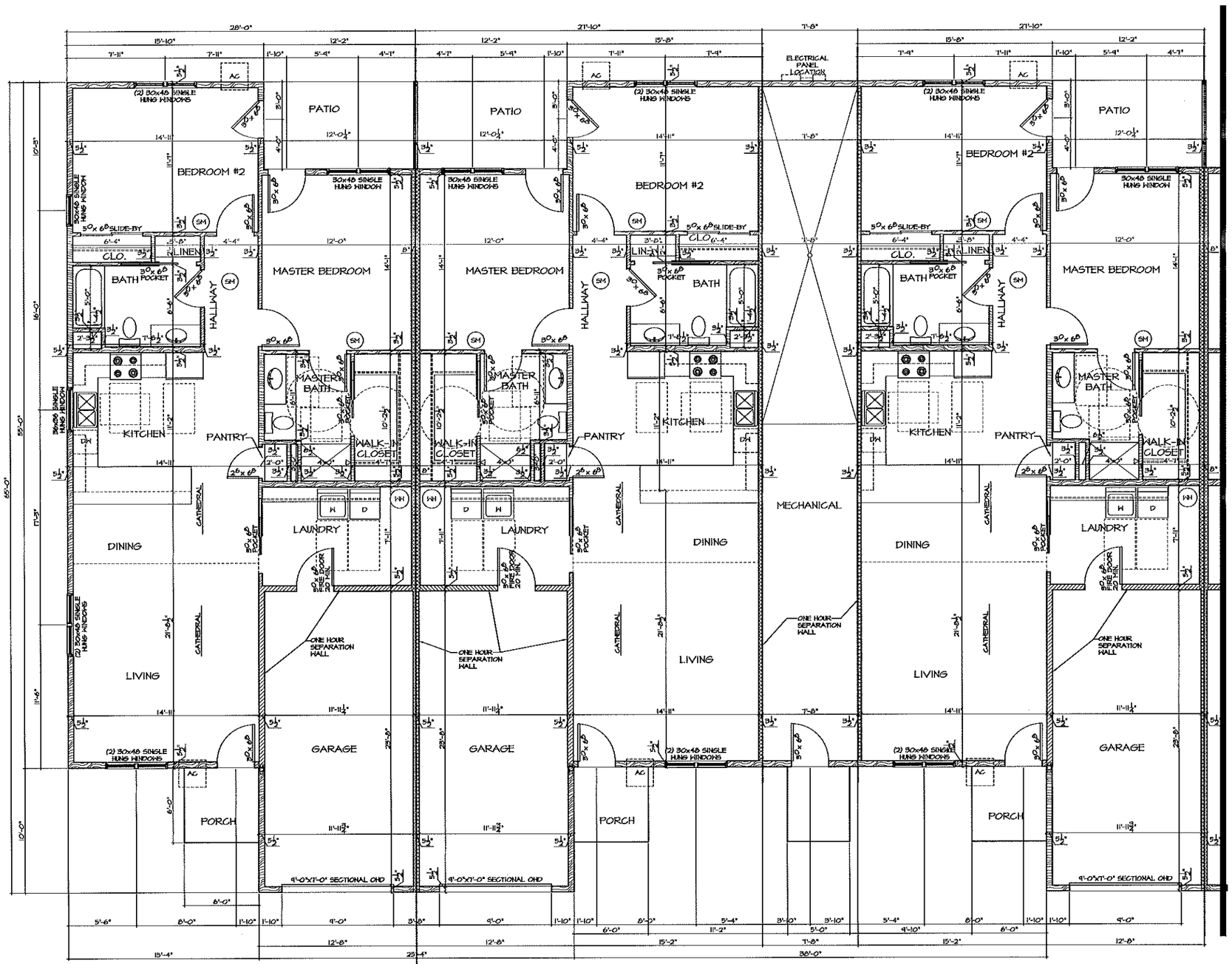
FLOOR PLAN, EXTERIOR ELEVATIONS, & FIRE WALL DETAILS

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

DATE: FEBRUARY 2020

DRAWN BY:

SHEET NO. A1




ENLARGED FLOOR PLAN - UNIT "A", "B" & "C"

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

**UNIT "A"**
LIVING: 1,282.98 SF
GARAGE: 248.52 SF
TYPE "A" UNIT

**UNIT "B"**
LIVING: 1,273.81 SF
GARAGE: 248.52 SF
TYPE "A" OR "B" UNIT

**UNIT "C"**
LIVING: 1,273.81 SF
GARAGE: 248.52 SF
TYPE "A" OR "B" UNIT

REVISIONS

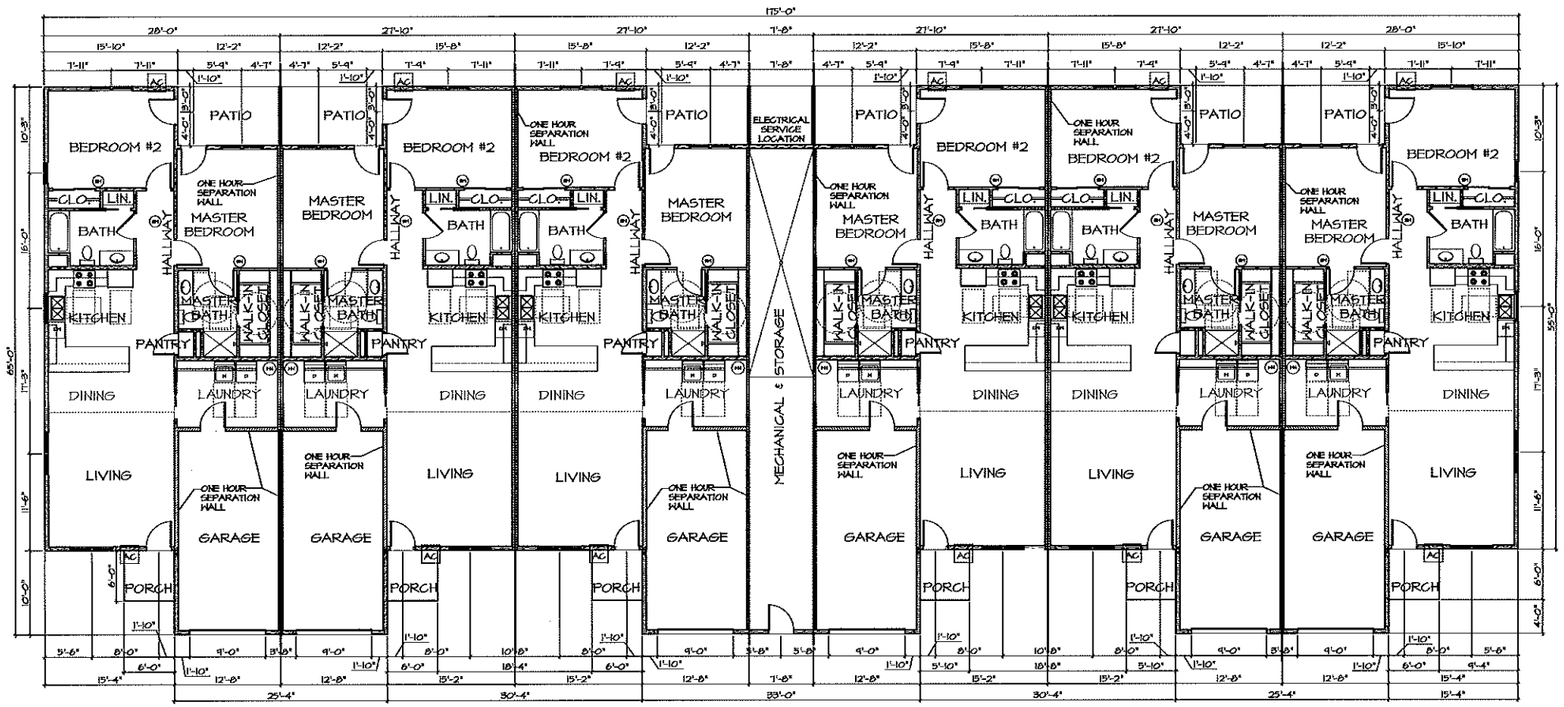
PROPOSED 4-UNIT APARTMENT BUILDING
APARTMENTS
MAYFAIR STREET, WAUPUN, WI
ENLARGED FLOOR PLAN UNIT "A", "B" & "C"

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

DATE: FEBRUARY 2020

DRAWN BY:

SHEET NO. A2




UNIT "A"
LIVING: 1,282.48 SF
GARAGE: 248.52 SF
TYPE "A" UNIT

UNIT "B"
LIVING: 1,278.81 SF
GARAGE: 248.52 SF
TYPE "A" OR "B" UNIT

UNIT "C"
LIVING: 1,278.81 SF
GARAGE: 248.52 SF
TYPE "A" OR "B" UNIT

UNIT "B"
LIVING: 1,278.81 SF
GARAGE: 248.52 SF
TYPE "A" OR "B" UNIT

UNIT "C"
LIVING: 1,278.81 SF
GARAGE: 248.52 SF
TYPE "A" OR "B" UNIT

UNIT "D"
LIVING: 1,282.48 SF
GARAGE: 248.52 SF
TYPE "A" UNIT

FLOOR PLAN
SCALE: 1/8" = 1'-0"




A/A1 CABINET DETAIL
SCALE: 1/2" = 1'-0"




B/A1 CABINET DETAIL
SCALE: 1/2" = 1'-0"

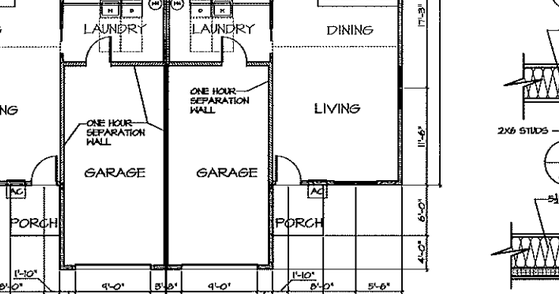



C/A1 CABINET DETAIL
SCALE: 1/2" = 1'-0"

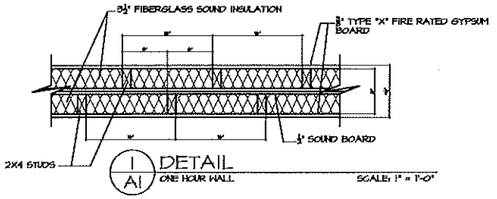
ACCESSIBLE GENERAL NOTES:
1. ALL DOORS SHALL HAVE LEVER STYLE HARDWARE.
2. PROVIDE SOLID BLOCKING AT TOILET, SHOWER AND TUB FOR FUTURE GRABBARS.
3. AC UNITS & CEILING FANS SHALL HAVE REMOTE CONTROL FEATURES.



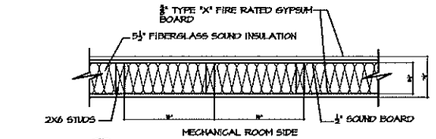

D/A1 CABINET DETAIL
SCALE: 1/2" = 1'-0"



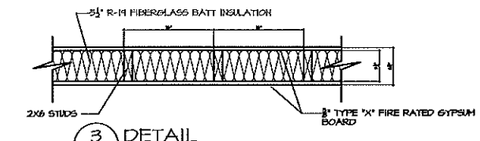

F/A1 CABINET DETAIL
SCALE: 1/2" = 1'-0"



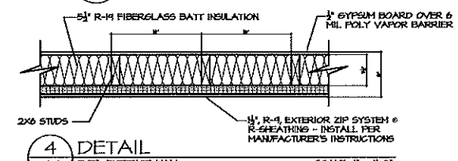

1/A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"



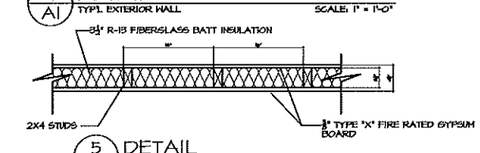

2/A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"



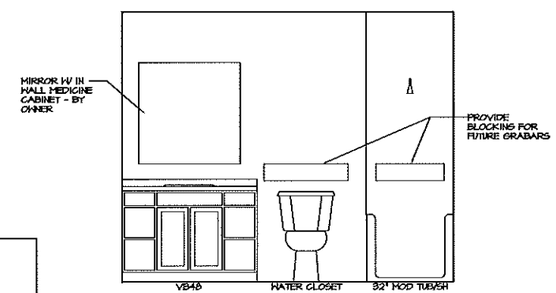

3/A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"




4/A1 DETAIL
TYP1. EXTERIOR WALL
SCALE: 1" = 1'-0"




5/A1 DETAIL
ONE HOUR WALL
SCALE: 1" = 1'-0"

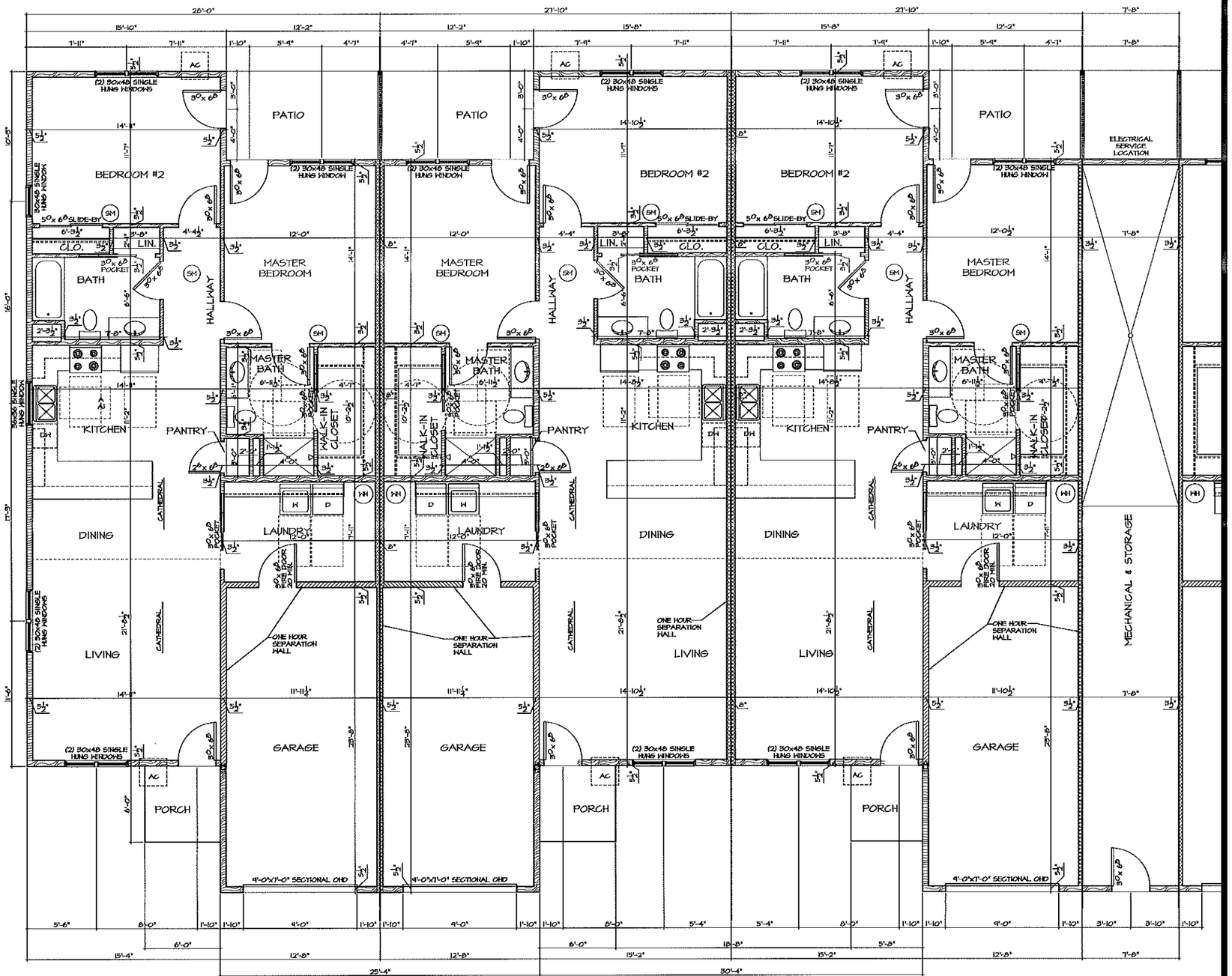



E/A1 CABINET DETAIL
SCALE: 1/2" = 1'-0"

REVISIONS

PROPOSED 6-UNIT APARTMENT BUILDING
APARTMENTS
MAYFAIR STREET, WAUPUN, WI 53963
FLOOR PLAN, WALL DETAILS, & CABINET DETAILS

SCALE: 1/8" = 1'-0"
DATE: FEBRUARY 2020
DRAWN BY:
SHEET NO. A1




## UNIT "A"

LIVING: 1,262.98 SF
GARAGE: 249.52 SF
TYPE "A" UNIT

## UNIT "B"

LIVING: 1,273.81 SF
GARAGE: 249.52 SF
TYPE "A" OR "B" UNIT

## UNIT "C"

LIVING: 1,273.81 SF
GARAGE: 249.52 SF
TYPE "A" OR "B" UNIT

ENLARGED FLOOR PLAN - UNIT "A", "B" & "C"

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

REVISIONS

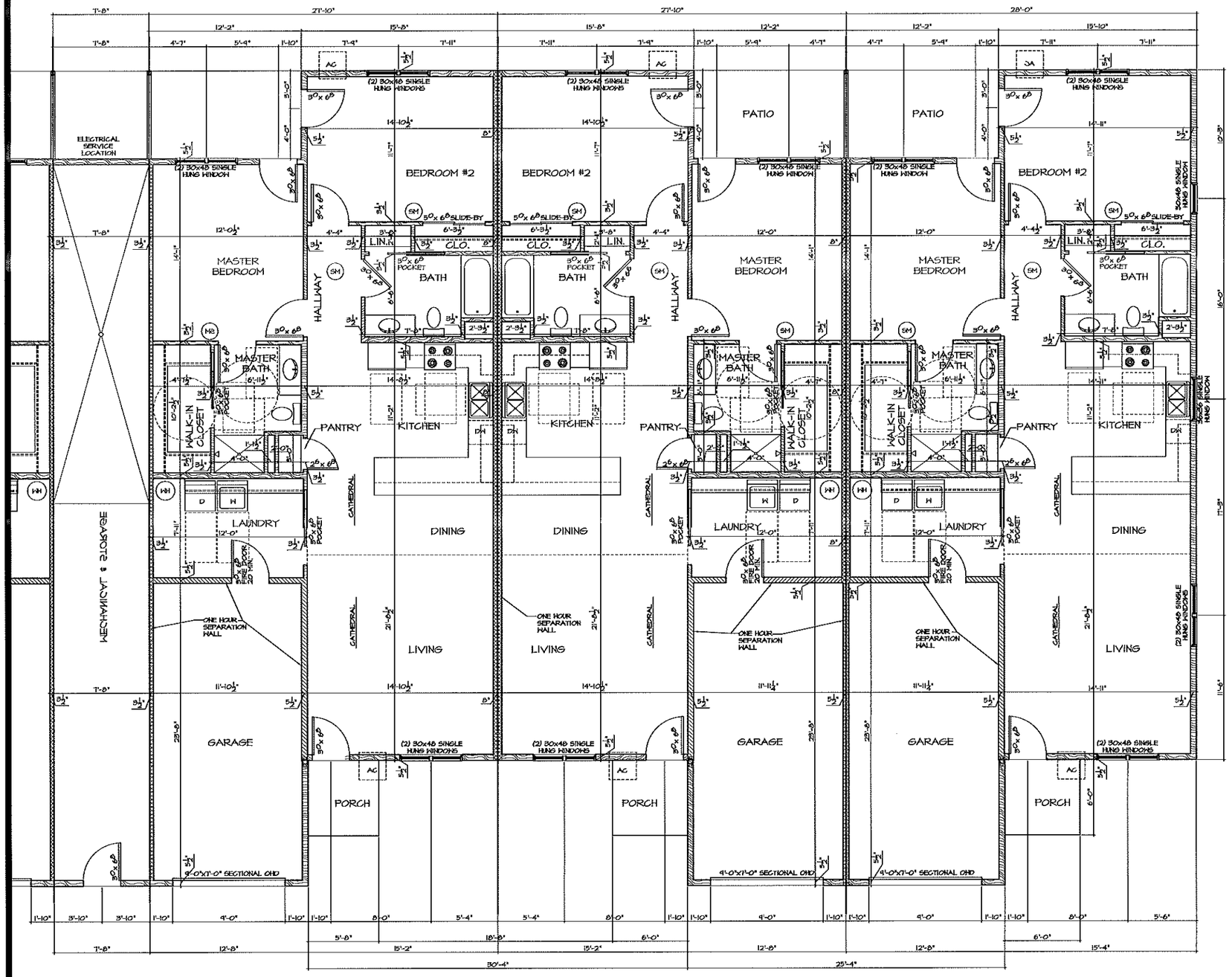
PROPOSED 6-UNIT APARTMENT BUILDING
APARTMENTS
MAYFAIR STREET, WAUPUN, WI 53963
ENLARGED FLOOR PLAN UNIT "A", "B" & "C"

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

DATE: FEBRUARY 2020

DRAWN BY:

SHEET NO. A2




ENLARGED FLOOR PLAN - UNIT "B", "C" & "D"

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

REVISIONS

PROPOSED 6-UNIT APARTMENT BUILDING
APARTMENTS
MAYFAIR STREET, WAUPUN, WI 53963
ENLARGED FLOOR PLAN UNIT "B", "C" & "D"

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

DATE: FEBRUARY 2020

DRAWN BY:

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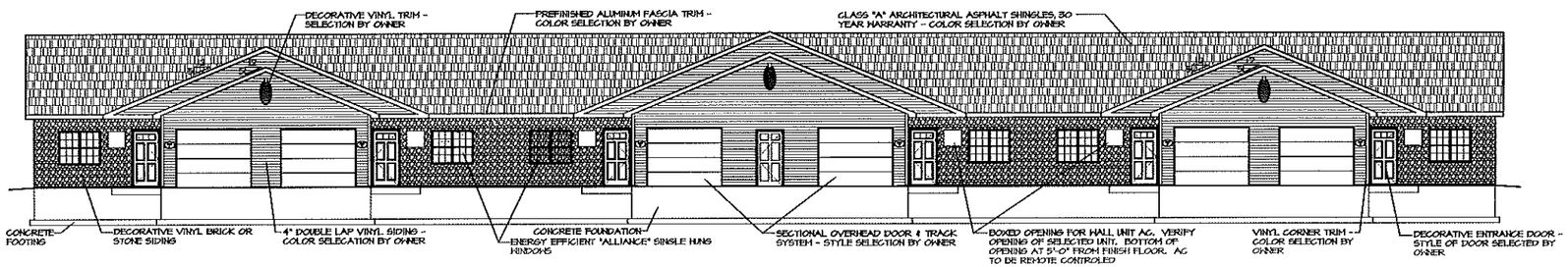
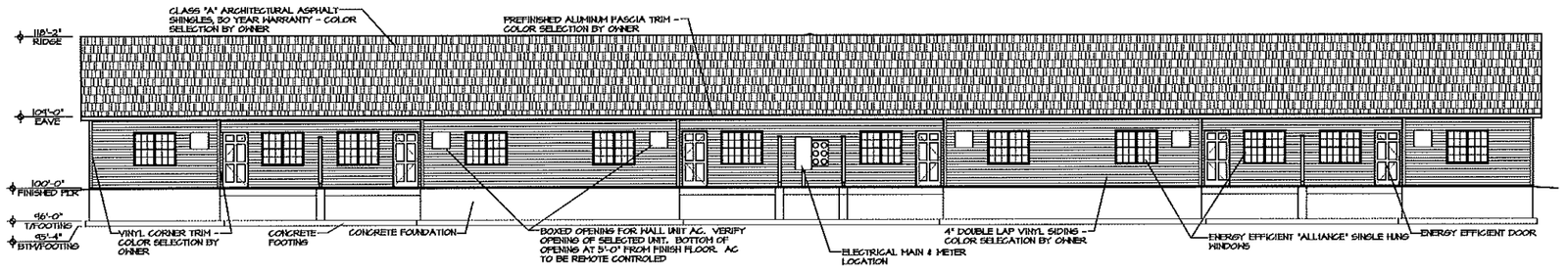


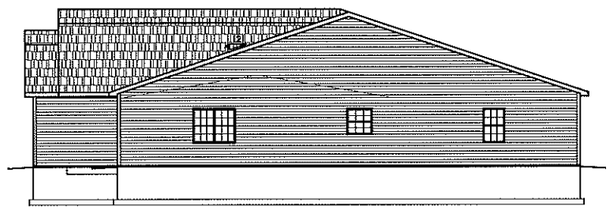

FRONT ELEVATION

SCALE: 1/8" = 1'-0"




REAR ELEVATION

SCALE: 1/8" = 1'-0"




RIGHT ELEVATION

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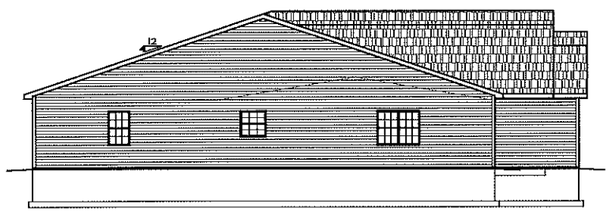



LEFT ELEVATION

SCALE: 1/8" = 1'-0"

REVISIONS

PROPOSED 6-UNIT APARTMENT BUILDING
APARTMENTS
MAYFAIR STREET, WAUPUN, WI 53963
EXTERIOR ELEVATIONS

SCALE:
1/8" = 1'-0"

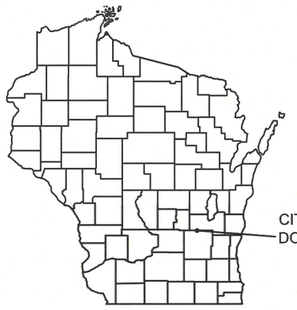
DATE:
FEBRUARY 2020

DRAWN BY:

SHEET NO.
A4

# WAUPUN PINE VALLEY APARTMENTS PROJECT

## WAUPUN PINE VALLEY APARTMENTS LLC
## CITY OF WAUPUN, DODGE COUNTY, WISCONSIN




## SHEET INDEX




## LOCATION MAP
NOT TO SCALE

## LEGEND

| | |
|---|---|
| W | EXISTING WATER MAIN |
| W | EXISTING WATER MAIN, VALVE & HYDRANT |
| W | EXISTING WATER SERVICE & CURB STOP |
| W | PROPOSED WATER MAIN, VALVE, & HYDRANT |
| W | PROPOSED WATER SERVICE & CURB STOP |
| SAN | EXISTING SANITARY SEWER & MANHOLE |
| S | PROPOSED SANITARY SEWER & MANHOLE |
| FM | EXISTING FORCEMAIN |
| SS | EXISTING STORM SEWER & INLET |
| SS | PROPOSED STORM SEWER & INLET |
| SS | PROPOSED STORM SEWER & MANHOLE |
| E | BURIED ELECTRIC |
| G | BURIED GAS & VALVE |
| TV | BURIED CABLE TELEVISION |
| T | BURIED TELEPHONE |
| FO | BURIED FIBER OPTICS |
| OH | OVERHEAD UTILITY |
| | RAILROAD TRACKS |
| | EXISTING CURB & GUTTER |
| | PROPOSED CURB & GUTTER |
| | EXISTING SIDEWALK |
| | PROPOSED SIDEWALK |
| CP | EXISTING CULVERT PIPE |
| | PROPOSED CULVERT PIPE |
| | FENCE LINE |
| | DRAINAGE ARROW |
| | SILT FENCE |
| | RIGHT-OF-WAY |
| | BASELINE |
| | PROPERTY LINE |
| | TREE LINE |
| | BENCHMARK |
| | IRON PIPE |
| | IRON ROD |
| | CONTROL POINT |
| | UTILITY POLE & GUY |
| 1 000.00 | SOIL BORING |
| | LIGHT POLE |
| | PEDESTAL |
| | STREET SIGN |
| | MAILBOX |
| | FLAGPOLE |
| | TREE - DECIDUOUS |
| | TREE - CONIFEROUS |
| | TREE TO BE REMOVED |

WISCONSIN
JASON M. LAUE
E-39859
BEAVER DAM, WI
PROFESSIONAL ENGINEER

2-25-2020
REV. 3-10-2020

## UTILITIES

GAS:
ALLIANT ENERGY
120 E. MAPLE AVENUE
BEAVER DAM, WI 53916
PHONE: 920-887-6030
CONTACT: DAVID KROHN

ELECTRIC:
WAUPUN UTILITIES
817 S. MADISON STREET
WAUPUN, WI 53963
PHONE: 920-324-7920
CONTACT: RANDY POSTHUMA

TELEPHONE:
AT&T
70 E. DIVISION STREET, FLOOR 1
FOND DU LAC, WI 54935
PHONE: 920-929-1013
CONTACT: CHUCK BARTELT

SANITARY & WATER:
WAUPUN UTILITIES
817 S. MADISON STREET
WAUPUN, WI 53963
PHONE: 920-210-0079
CONTACT: STEVE SCHRAMM

STORM SEWER & STREET
CITY OF WAUPUN
201 E. MAIN STREET
WAUPUN, WI 53963
PHONE: 920-210-8200
CONTACT: JEFF DAANE

CATV:
CHARTER COMMUNICATIONS
N3760 C.T.H. "DJ"
JUNEAU, WI 53039
PHONE: 920-349-3201
CONTACT: NICK FRASE

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

NOTE: UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND CONTRACTOR SHALL HAVE APPROPRIATE UTILITY MARK EXACT LOCATIONS PRIOR TO CONSTRUCTION.

## ABBREVIATIONS

| | | | | | |
|---|---|---|---|---|---|
| R/W | = RIGHT OF WAY | SG | = SPOT GRADE | P.C. | = POINT OF CURVATURE |
| MH | = MANHOLE | T/C | = TOP OF CURB | P.T. | = POINT OF TANGENCY |
| PROP. | = PROPOSED | FOW | = FRONT OF SIDEWALK | P.I. | = POINT OF INTERSECTION |
| EX. | = EXISTING | INV | = INVERT | B.V.C. | = BEGINNING OF VERTICAL CURVATURE |
| CONC. | = CONCRETE | W.M. | = WATERMAIN | E.V.C. | = END OF VERTICAL CURVATURE |
| HYD. | = HYDRANT | SAN. | = SANITARY | P.V.I. | = POINT OF VERTICAL INTERSECTION |
| NOR. | = NORMAL | FL | = FLOW LINE | E/P | = EDGE OF PAVEMENT |
| TYP. | = TYPICAL | STM. | = STORM | E/G | = EDGE OF GRAVEL |
| TAN. | = TANGENT | ELEV. | = ELEVATION | R.C.P. | = REINFORCED CONCRETE PIPE |
| FF | = FIRST FLOOR | INC. | = INCIDENTAL | H.E.R.C.P. | = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE |
| YD | = YARD GRADE | STA. | = STATION | C.M.P. | = CORRUGATED METAL PIPE |
| C/L | = CENTERLINE | SWR. | = SEWER | D.I. | = DUCTILE IRON PIPE |
| CONN. | = CONNECTION | BOC | = BACK OF CURB | P.V.C. | = POLYVINYL CHLORIDE PIPE |
| CEN. | = CENTER | LF | = LINEAR FEET | H.D.P.E. | = HIGH DENSITY POLYETHLENE |

| | | NO. | DATE | REVISION | BY |
|---|---|---|---|---|---|
| PROJECT DATE: . | DRAWN BY: SEW | 1 | 3/5/2020 | REVISED WATER MAIN PER WAUPUN UTILITIES | SEW |
| | DESIGNED BY: JML | . | . | . | . |
| | CHECKED BY: JML | . | . | . | . |

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WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

TITLE SHEET

PROJECT NO. 02690001
SHEET G1

NOTE: THE CONTRACTOR SHALL INSTALL INLET PROTECTION IN ALL PROPOSED STORM MANHOLES/INLETS ONCE INSTALLED (SEE DETAILS).

LEGEND

- SURFACE DRAINAGE DIRECTION ARROW
- 900 EXISTING 5' CONTOUR
- 901 EXISTING 1' CONTOUR
- SILT FENCE (SEE DETAIL)
- APPROX. DISTURBANCE LIMITS

0 20 40

SOUTH WATERTOWN STREET (STATE ROAD "26")

MAYFAIR STREET

CONTRACTOR TO REMOVE EXISTING CONCRETE SIDEWALK

REMOVE EX. DRIVEWAY APPROACH EXISTING SIDEWALK AND CURB/GUTTER TO REMAIN UNDISTURBED.

INSTALL AND MAINTAIN TEMPORARY EROSION BARRIER (SEE DETAIL)

EX. CURB

EX. SIDEWALK

APPROX. R/W LINE

SILT FENCE ALONG APPROX. DISTURBANCE LIMITS

30.0' FRONT YARD SETBACK

15.0' SIDE YARD SETBACK

EXISTING GRAVEL TO BE REMOVED

INSTALL AND MAINTAIN TRACKING PAD(S) AT ALL ACCESS LOCATIONS TO THE PROJECT (SEE DETAIL)

VACANT LOT

INSTALL AND MAINTAIN TEMPORARY EROSION BARRIER (SEE DETAIL)

CONTRACTOR TO COORDINATE RELOCATION OF EXISTING LIGHT POLE WITH WAUPUN UTILITIES FOR PROPOSED DRIVEWAY ENTRANCE.

CONTRACTOR TO REMOVE EXISTING CONCRETE CURB/GUTTER AND CONCRETE SIDEWALK

INSTALL AND MAINTAIN TRACKING PAD(S) AT ALL ACCESS LOCATIONS TO THE PROJECT (SEE DETAIL)

APPROX. LOT LINE

EX. PAVEMENT

EX. GRAVEL SHOULDER

25.0' REAR YARD SETBACK

SILT FENCE ALONG DISTURBANCE LIMITS

EX. STORM WATER POND

APPROX. DISTURBANCE LIMITS

| | | NO. | DATE | REVISION | BY |
|---|---|---|---|---|---|
| PROJECT DATE: . | DRAWN BY: SEW | . | . | . | . |
| | DESIGNED BY: JML | . | . | . | . |
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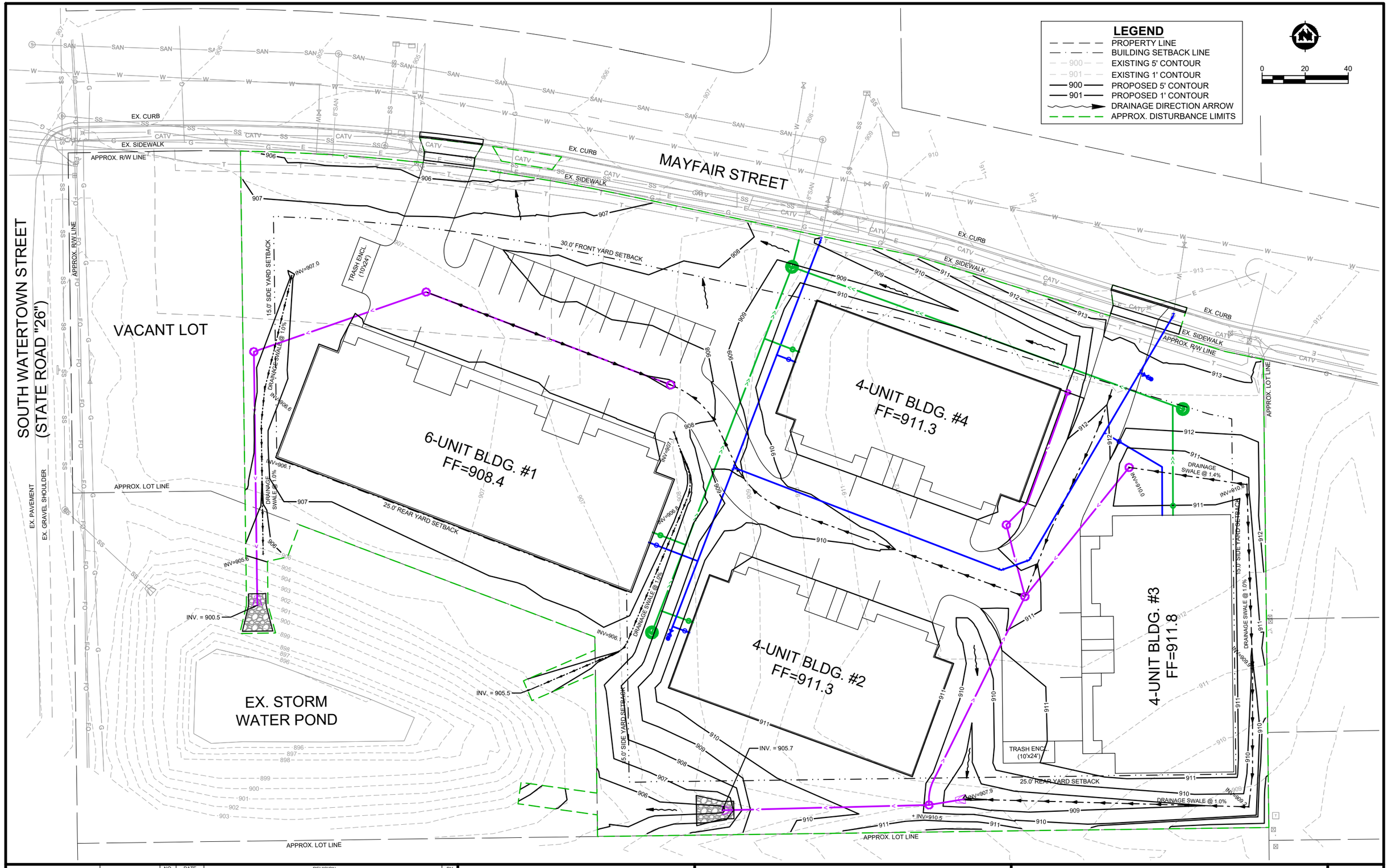
WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

EROSION CONTROL & REMOVALS SHEET

PROJECT NO. 02690001

SHEET ST1

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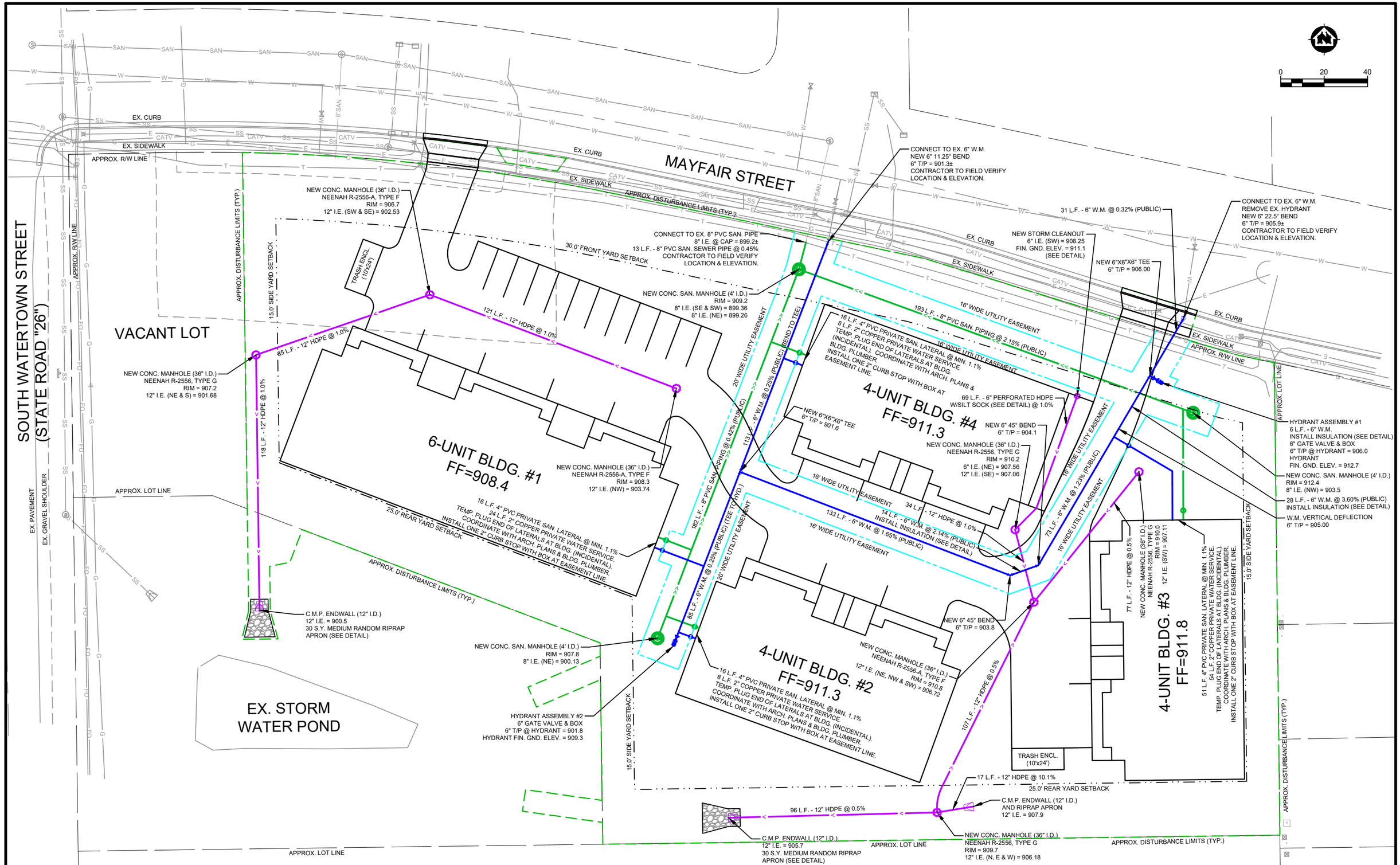
WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

GRADING PLAN SHEET

PROJECT NO. 02690001

SHEET ST2




| | | NO. | DATE | REVISION | BY |
|---|---|---|---|---|---|
| PROJECT DATE: . | DRAWN BY: SEW | 1 | 3/5/2020 | REVISED WATER MAIN PER WAUPUN UTILITIES | SEW |
| | DESIGNED BY: JML | . | . | . | . |
| | CHECKED BY: JML | . | . | . | . |

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WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

UTILITY PLAN SHEET

PROJECT NO. 02690001
SHEET U1

KEY NOTE:
① PROPOSED CONCRETE SLAB - SEE ARCH. PLANS

**LEGEND**
- DRAINAGE PATH
- 2.0% DRAINAGE SLOPE & DIRECTION
- + TP=900.00 TOP OF PAVEMENT ELEV.
- CROSS MARK REFERENCES LOCATION OF ELEV.
- + YD=900.00 FINISHED YARD ELEVATION
- + INV.=900.00 FINISHED INVERT ELEVATION
- APPROX. DISTURBANCE LIMITS

0 20 40

SOUTH WATERTOWN STREET (STATE ROAD "26")

MAYFAIR STREET

EX. CURB

EX. SIDEWALK

APPROX. R/W LINE

SAWCUT EXISTING CURB TO FORM OPENING FOR PROPOSED DRIVEWAY APRON

INSTALL CONCRETE DRIVEWAY APRON & SIDEWALK 6" THICK CONCRETE ON 6" THICK DENSE GRADED BASE

RESTORE UN-PAVED DISTURBED AREAS WITH TOPSOIL & GRASS LAWN TURF (TYPICAL - SEE SPEC).

INSTALL CONCRETE CURB/GUTTER

VACANT LOT

APPROX. LOT LINE

EX. PAVEMENT

EX. GRAVEL SHOULDER

EROSION MATTING IN SWALE

RIPRAP

EX. STORM WATER POND

10'X24' CONCRETE PAD & TRASH ENCLOSURE SEE ARCH. PLAN

TRASH ENCL. (10'x24')

15.0' SIDE YARD SETBACK

30.0' FRONT YARD SETBACK

25.0' REAR YARD SETBACK

6-UNIT BLDG. #1
FF=908.4

4-UNIT BLDG. #2
FF=911.3

4-UNIT BLDG. #3
FF=911.8

4-UNIT BLDG. #4
FF=911.3

GARAGE SLAB ELEV.=908.2

GARAGE SLAB ELEV.=911.1

GARAGE SLAB ELEV.=911.6

PARKING STALL

1.0% SLOPE

1.2% SLOPE

4.7% SLOPE

RESTORE WITH DECORATIVE LANDSCAPE ROCK PER OWNER (SEE DETAIL)

| PROJECT DATE: . | | NO. | DATE | REVISION | BY |
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| | DRAWN BY: SEW | . | . | . | . |
| | DESIGNED BY: JML | . | . | . | . |
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WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

PAVING & RESTORATION PLAN SHEET

PROJECT NO. 02690001

SHEET R1

## GENERAL PROJECT NOTES:

1. ALL EXISTING UTILITIES WITHIN THIS PLAN ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND NO RESPONSIBILITY IS ASSUMED BY THE ENGINEER OR CITY FOR THEIR ACCURACY OR DEGREE OF COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE, LOCATION, AND ELEVATION OF ALL UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGING ANY SUCH UTILITIES. THE CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE AT (800) 242-8511 PRIOR TO ANY CONSTRUCTION SO THAT THE SITE MAY BE MARKED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ANY UTILITIES.

2. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS ARE APPARENT, BRING TO ATTENTION OF THE PROJECT ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR RE-DESIGN MAY OCCUR.

3. UNLESS SPECIFIED WITHIN THIS CONSTRUCTION PLAN, NO EXISTING TREES SHALL BE DISTURBED OR DAMAGED. THE OWNER, IN WRITING, MUST APPROVE THE REMOVAL OF ANY EXISTING TREES IF THE CONTRACTOR BELIEVES THAT AN EXISTING TREE IS IN CONFLICT WITH THE PROPOSED IMPROVEMENTS. NO TREES OR TREE STUMPS SHALL BE BURIED ONSITE.

4. EXISTING KNOWN SURVEY MONUMENTS (SHOWN ON THE PLANS) ENCOUNTERED DURING CONSTRUCTION ARE TO BE PRESERVED AND LEFT UNDISTURBED. SHOULD THE CONTRACTOR ENCOUNTER UNKNOWN MONUMENTS, PROPERTY STAKES, ETC. (NOT SHOWN ON THE PLANS), THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO ANY DISTURBANCE. FAILURE TO PRESERVE SUCH MONUMENTS SHALL NOT BE ALLOWED AND REPLACEMENT BY A REGISTERED LAND SURVEYOR SHALL BE AT THE CONTRACTOR'S EXPENSE.

5. ELEVATIONS SHOWN WITHIN THIS PLAN REFERENCE THE NORTH AMERICAN VERTICAL DATUM.

6. REFER TO THE PROJECT ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR DETAILS PERTAINING TO THE PROPOSED BUILDINGS, ASSOCIATED ARCHITECTURAL FEATURES, TRASH ENCLOSURE AREAS, AND SITE WORK SURROUNDING THE BUILDINGS.

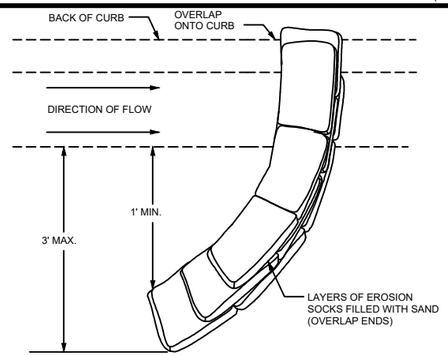
7. THE CONTRACTOR SHALL COORDINATE WITH ALL PRIVATE UTILITIES (GAS, ELECTRIC, TELEPHONE, CABLE TV, ETC.) REGARDING THE LOCATION, SIZE, DEPTH, ETC. OF EXISTING AND PROPOSED SERVICE LINES WITHIN THE PROJECT SITE. THE CONTRACTOR SHALL COORDINATE THE RELOCATION OF ANY PRIVATE UTILITIES THAT ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL CAREFULLY WORK AROUND EXISTING UTILITY LINES, UTILITY POLES, UTILITY STRUCTURES, GUY WIRES, ETC. THAT ARE TO REMAIN UNDISTURBED. THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TEMPORARY SHORING OR OTHER MEASURES TO PROTECT THESE FEATURES DURING CONSTRUCTION ACTIVITIES. (ALL INCIDENTAL TO CONSTRUCTION)

## GENERAL EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL INSTALL ALL NECESSARY EROSION CONTROL MEASURES TO PREVENT EROSION ONTO THE ADJACENT PROPERTIES AND INTO THE ADJACENT EXISTING STREETS. ADDITIONAL EROSION CONTROL, NOT SHOWN ON THIS PLAN, MAY BE REQUIRED BY THE ENGINEER AND/OR THE OWNER DURING CONSTRUCTION (INCIDENTAL). EROSION CONTROL AND SITE STABILIZATION MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THIS CONSTRUCTION PLAN, THE PROJECT SPECIFICATIONS, THE WISCONSIN DEPT. OF NATURAL RESOURCES CONSERVATION PRACTICE STANDARDS, ANY LOCAL EROSION CONTROL ORDINANCES, AND ANY CONDITIONS OF APPROVAL. INSTALL EROSION CONTROL MEASURES PRIOR TO INITIATION OF ANY SITE WORK. SEE THE "CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS" LISTED ON THIS SHEET FOR FURTHER EROSION CONTROL REQUIREMENTS AND NOTES.

2. CONTRACTOR SHALL PROTECT ALL EXISTING AND PROPOSED INLETS, MANHOLES, DRAINAGE SWALES, CULVERTS, ETC. FROM SILTATION DURING CONSTRUCTION AND UNTIL FINAL STABILIZATION OCCURS (INCIDENTAL TO EROSION CONTROL)..

3. ALL EROSION CONTROL MEASURES AND STRUCTURES SHALL BE INSPECTED, MAINTAINED, AND DOCUMENTED BY THE CONTRACTOR (WEEKLY AND WITHIN 24 HOURS AFTER A PRECIPITATION EVENT 0.5 INCHES OR GREATER) IN ACCORDANCE WITH THE WISCONSIN D.N.R. STORM WATER DISCHARGES ASSOCIATED WITH LAND DISTURBING CONSTRUCTION ACTIVITIES GENERAL PERMIT. ALL NECESSARY REPAIR AND MAINTENANCE WILL BE DONE AT THIS INSPECTION TIME. THESE INSPECTIONS SHALL BE DOCUMENTED BY THE CONTRACTOR AND AVAILABLE TO THE ENGINEER AND/OR OWNER UPON REQUEST. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OR INCLUDED IN THE CORRESPONDING EROSION CONTROL PRICE BID (IF APPLICABLE).



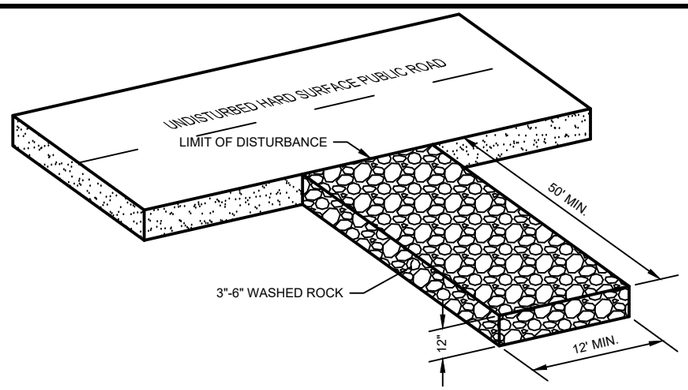

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

2. ALTERNATIVE MATERIALS PLANNED BY THE CONTRACTOR SHALL BE APPROVED BY THE CITY AND ENGINEER PRIOR TO INSTALLATION.

## TEMPORARY EROSION BARRIER DETAIL

NO SCALE




## VEHICLE TRACKING PAD

NO SCALE

## GENERAL TRAFFIC CONTROL NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE HIS/HER WORK TO MINIMIZE THE INCONVENIENCE TO THE ADJACENT RESIDENTS AND BUSINESSES TO THE PROJECT SITE. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST TWO DAYS PRIOR TO CLOSING ANY SECTION OF STREET.

2. ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE UNITED STATES DEPARTMENT OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL DURING THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL INSPECT ALL TRAFFIC CONTROL MEASURES DAILY AND PERFORM ANY NECESSARY MAINTENANCE OR ADJUSTMENTS BASED ON THE ACTIVITIES PLANNED. ADDITIONAL TRAFFIC CONTROL MEASURES NOT SPECIFIED WITHIN THE CONTRACT DOCUMENTS MAY BE REQUIRED DURING CONSTRUCTION BY THE OWNER AND ENGINEER (INCIDENTAL TO CONSTRUCTION).

3. AFTER ALL CONSTRUCTION RELATED ACTIVITIES ARE COMPLETED, THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL MEASURES. ANY DISTURBANCE OR DAMAGE RESULTING FROM THE REMOVAL OF THE TRAFFIC CONTROL MEASURES SHALL BE RESTORED OR REPAIRED TO THE SATISFACTION OF THE OWNER.

## GENERAL GRADING NOTES:

1. ALL GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THIS CONSTRUCTION PLAN, THE PROJECT SPECIFICATIONS, AND ANY CONDITIONS OF APPROVAL..

2. ALL PROPOSED GRADES SHOWN WITHIN THE PLANS ARE FINISHED GRADES. UNLESS SPECIFIED ON THE PLAN, THE CONTRACTOR SHALL CONSTRUCT/GRADE ALL CONCRETE, ASPHALT, AND GRASS AREAS TO A MINIMUM SLOPE OF 1.0%, 1.0%, AND 1.0%, RESPECTIVELY. THE MAXIMUM SURFACE SLOPE ACROSS HANDICAP PARKING STALLS AND WALKWAYS IN ANY DIRECTION SHALL BE 2.0% AND ACROSS HANDICAP ACCESSIBLE RAMPS SHALL BE 8.0%. THE MAXIMUM SURFACE SLOPE ACROSS THE PROPOSED PAVEMENT SHALL BE 6.0% UNLESS SPECIFIED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, PRIOR TO CONSTRUCTION, OF ANY AREAS WHICH DO NOT SATISFY THE ABOVE MENTIONED SLOPES.

3. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE HIS/HER OWN COMPUTATIONS FOR DETERMINATION OF EARTHWORK AND TOPSOIL QUANTITIES PRIOR TO BIDDING. IT IS RECOMMENDED THAT EACH BIDDER VISIT THE SITE TO VERIFY THE EXISTING CONDITIONS. NO CHANGES WILL BE MADE IN THE BID QUANTITY AMOUNT OR UNIT PRICE UNLESS CHANGES ARE MADE TO THE CONTRACT DRAWINGS AFTER BIDDING OF THE CONTRACT.

4. NO STOCKPILES (TOPSOIL OR EARTH MATERIAL) SHALL REMAIN AFTER ALL GRADING WORK IS COMPLETED UNLESS DIRECTED OTHERWISE BY THE OWNER. IF AFTER THE COMPLETION OF ALL SITE GRADING AND SUBGRADE PREPARATION WORK THERE IS EXCESS FILL MATERIAL, THE CONTRACTOR SHALL HAUL/STOCKPILE THE MATERIAL AT A LOCATION(S) AS DESIGNATED BY THE OWNER OR DISPOSE OF THE MATERIAL AS DIRECTED BY THE OWNER. IF THERE IS A SHORTAGE OF FILL MATERIAL, THE CONTRACTOR SHALL PURCHASE/IMPORT THE MATERIAL FROM OFFSITE. ALL GRADING AND SUBGRADE PREPARATION WORK AS WELL AS ANY DISPOSAL OF EXCESS MATERIAL AND/OR IMPORTING OF MATERIAL SHALL BE INCIDENTAL TO THE UNCLASSIFIED EXCAVATION BID ITEM.

5. FILL PLACED WITHIN 10 FEET OR LESS FROM THE OUTSIDE EDGE OF A BUILDING SHALL BE SUITABLE EXCAVATED SOIL FREE OF ORGANIC DEBRIS, CLAY BALLS, AND AGGREGATE LARGER THAN 1.5-INCHES. THE FILL MATERIAL WITHIN THESE AREAS SHALL BE SPREAD AND COMPACTED UNIFORMLY IN 6-INCH TO 8-INCH MAXIMUM LIFTS TO AT LEAST 95 PERCENT MAXIMUM DRY DENSITY PER MODIFIED PROCTOR (ASTM D1557). ALL OTHER FILL AREAS WITHIN THE PROJECT SITE SHALL BE SPREAD AND COMPACTED IN 12-INCH MAXIMUM LIFTS TO AT LEAST 93 PERCENT DRY DENSITY PER MODIFIED PROCTOR (ASTM D1557).

## GENERAL UTILITY NOTES:

1. ALL PROPOSED UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THIS CONSTRUCTION PLAN, THE PROJECT SPECIFICATIONS, THE REQUIREMENTS OF THE CITY, THE LATEST EDITION OF THE WISCONSIN STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION (FOR SANITARY & WATER), THE LATEST EDITION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (STORM), AND ANY CONDITIONS OF APPROVAL.

2. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION AS MEASURED BY THE FIELD ENGINEER AND THE CONTRACTOR SHALL BE PAID ACCORDING TO THE LENGTH OF PIPING INSTALLED.

3. A 7.0 FEET DEPTH OF COVER OVER ALL NEWLY INSTALLED WATERMAIN IS DESIRED AND SHALL BE MAINTAINED UNLESS FIELD CONDITIONS PROHIBIT. THE CONTRACTOR SHALL MAINTAIN A MINIMUM DEPTH OF COVER OF 5.0 FEET UNLESS DIRECTED OTHERWISE BY THE OWNER. ALL NEWLY INSTALLED WATERMAIN WITH COVER LESS THAN 7.0 FEET SHALL BE INSULATED ACCORDING TO THE SPECIFICATIONS AND INSULATION DETAIL. INSULATION SHALL ALSO BE INSTALLED AT ALL LOCATIONS WHERE STORM SEWER CROSSES THE WATER MAIN, WATER SERVICES, AND HYDRANT LEADS. MINIMUM VERTICAL SEPARATION DISTANCE WHERE WATERMAIN CROSSES OVER SEWERS IS 6 INCHES. MINIMUM VERTICAL SEPARATION DISTANCE WHERE WATERMAIN CROSSES UNDER SEWERS IS 18 INCHES.

4. THE PROPOSED WATERMAIN SHALL BE INSTALLED AT LEAST 8 FEET HORIZONTALLY FROM ANY SANITARY SEWER OR STORM SEWER. THE DISTANCE SHALL BE MEASURED CENTER OF PIPE TO CENTER OF PIPE.

5. THE CONTRACTOR SHALL COORDINATE SANITARY AND WATER LATERAL LOCATIONS WITH THE OWNER AND THE BUILDING PLANS PRIOR TO CONSTRUCTION. UNLESS DIRECTED OTHERWISE BY THE OWNER, THE CONTRACTOR SHALL STUB THE SANITARY AND WATER LATERALS APPROXIMATELY 5 FEET FROM THE PROPOSED BUILDING LOCATION AND MARK ALL STUBS WITH A 2'x4' EXTENDING A MINIMUM OF 2 FEET ABOVE THE FINISHED GROUND SURFACE.

6. TRACER WIRE SHALL BE INSTALLED ALONG ALL SANITARY SEWER, SANITARY LATERALS, WATERMAIN, AND WATER SERVICES (INCIDENTAL TO THE SPECIFIC PIPING). TRACER WIRE SHALL BE SURFACED AT ALL SANITARY MANHOLES, HYDRANTS, WATER SERVICE VALVES (TO BUILDINGS), AND SANITARY LATERAL TRACER WIRE TERMINAL BOXES.

7. ALL SAWCUTTING, BENDS, FERNCO CONNECTORS, FITTINGS, AND OTHER MATERIALS NOT SPECIFICALLY ITEMIZED ON THE BID BUT NECESSARY TO PROVIDE A COMPLETE WORKING SYSTEM AND TO MAKE A WATERTIGHT CONNECTION TO THE EXISTING SANITARY OR WATER PIPING SHALL BE INCIDENTAL TO CONSTRUCTION. ALL PROPOSED SANITARY SEWER AND WATER PIPING CONNECTIONS INTO EXISTING PIPING OR STRUCTURES SHALL BE INCIDENTAL TO CONSTRUCTION. ALL EXISTING SANITARY SEWER AND WATER PIPE ABANDONMENT AS WELL AS THE REMOVAL OF EX. MANHOLES, HYDRANTS, VALVE MANHOLES, AND VALVE BOXES THAT ARE NO LONGER IN USE SHALL BE INCIDENTAL TO CONSTRUCTION. ALL EXISTING SANITARY OR WATER PIPING TO BE ABANDONED SHALL BE MADE BY COMPLETELY FILLING EACH END OF THE PIPE WITH POUR-IN-PLACE CONCRETE.

8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (SHORING, BRACING, ETC.) AND SHALL CAREFULLY INSTALL THE NEW SANITARY SEWER, WATER, AND STORM SEWER IMPROVEMENTS SO AS NOT TO DISTURB ANY EXISTING PRIVATE UTILITY STRUCTURES OR PIPING AS WELL AS TO PREVENT ANY DISTURBANCE TO EXISTING SITE FEATURES THAT ARE TO REMAIN UNDISTURBED. ANY DISTURBANCE OR DAMAGE (AS DETERMINED BY THE OWNER) SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

## GENERAL PAVING NOTES:

1. ALL PROPOSED PAVEMENT SHALL BE INSTALLED IN ACCORDANCE WITH THIS CONSTRUCTION PLAN, THE PROJECT SPECIFICATIONS, THE REQUIREMENTS OF THE CITY, THE LATEST EDITION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, AND ANY CONDITIONS OF APPROVAL.

2. ALL PROPOSED GRADES SHOWN WITHIN THE PLANS ARE FINISHED GRADES. UNLESS SPECIFIED ON THE PLAN, THE CONTRACTOR SHALL CONSTRUCT/GRADE ALL CONCRETE, ASPHALT, AND GRASS AREAS TO A MINIMUM SLOPE OF 1.0%, 1.0%, AND 1.0%, RESPECTIVELY. THE MAXIMUM SURFACE SLOPE ACROSS HANDICAP PARKING STALLS AND WALKWAYS IN ANY DIRECTION SHALL BE 2.0% AND ACROSS HANDICAP ACCESSIBLE RAMPS SHALL BE 8.0%. THE MAXIMUM SURFACE SLOPE ACROSS THE PROPOSED PAVEMENT SHALL BE 6.0% UNLESS SPECIFIED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, PRIOR TO CONSTRUCTION, OF ANY AREAS WHICH DO NOT SATISFY THE ABOVE MENTIONED SLOPES.

3. ALL SAWCUTTING OF EXISTING ASPHALT AND CONCRETE SHALL BE INCIDENTAL TO PAVING.

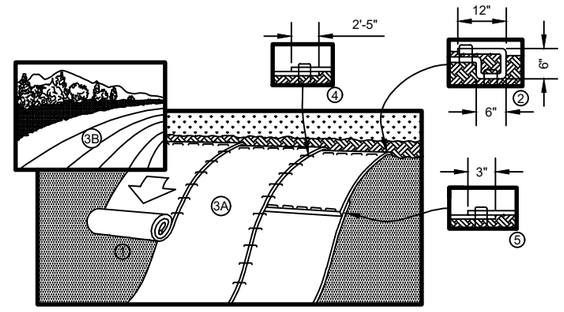
## GENERAL RESTORATION NOTES:

1. ALL PROPOSED RESTORATION SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THIS CONSTRUCTION PLAN, THE PROJECT SPECIFICATIONS, THE REQUIREMENTS OF THE CITY, AND ANY CONDITIONS OF APPROVAL.

2. ALL DISTURBED OPEN SPACE AREAS SHALL BE TOPSOILED (MINIMUM 6" THICK), SEEDED, FERTILIZED, AND MULCHED IN ACCORDANCE WITH THE CONSTRUCTION PLANS, THE PROJECT SPECIFICATIONS, AND THE WISCONSIN DNR CONSERVATION PRACTICE STANDARD 1059.

## WORK OUTSIDE OF PROJECT PROPERTY NOTES:

1. ALL DISTURBANCE WITHIN THE EXISTING RIGHT-OF-WAY OF MAYFAIR STREET SHALL BE KEPT TO A MINIMUM. ALL PAVEMENT, GRASS AREAS, ETC. DISTURBED WITHIN THESE AREAS DURING CONSTRUCTION SHALL BE RESTORED EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AND TO THE SATISFACTION OF THE CITY. EXISTING GRAVEL BASE AND PAVEMENT DISTURBED WITHIN THE EXISTING STREET SHALL BE RESTORED WITH EQUAL THICKNESS AND WORKMANSHIP TO EXISTING CONDITIONS. THE CONTRACTOR SHALL COORDINATE WITH THE CITY STAFF REGARDING BACKFILL AND COMPACTION REQUIREMENTS FOR ANY WORK PERFORMED WITHIN THESE AREAS.

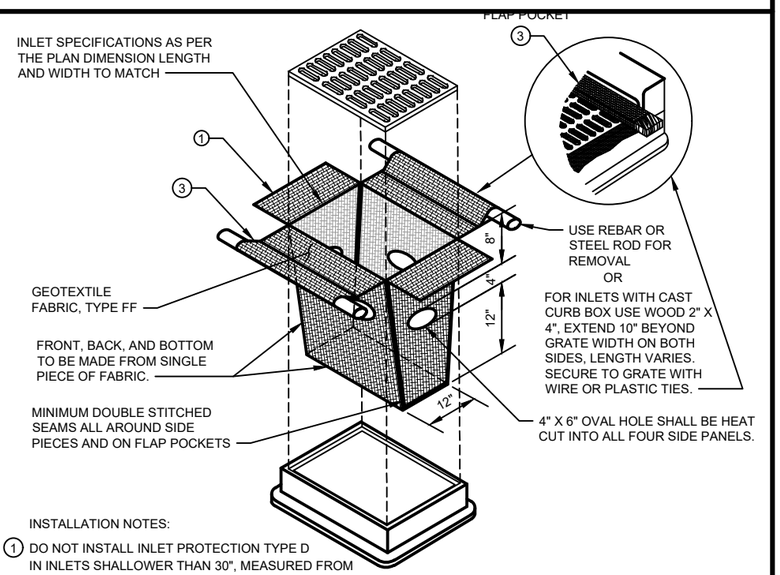



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5 CM-12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

## EROSION CONTROL BLANKET DETAIL

NO SCALE




INSTALLATION NOTES:

1. DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
2. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
3. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

## INLET PROTECTION, TYPE D

NO SCALE
CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE

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DESIGNED BY: JML
CHECKED BY: JML

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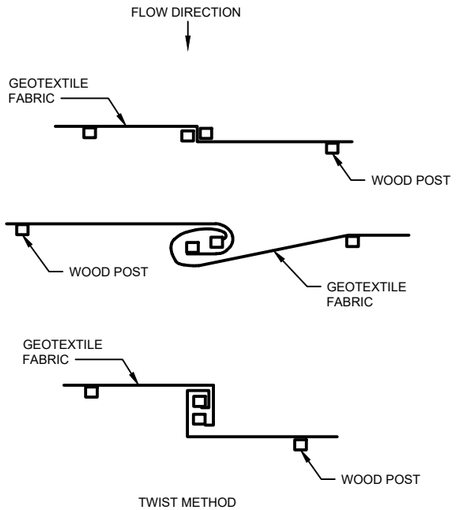
WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

CONSTRUCTION DETAILS

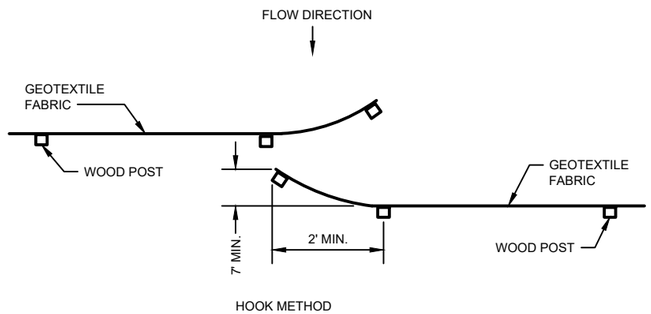
PROJECT NO. 02690001
SHEET D1

## CONSTRUCTION SITE
## EROSION CONTROL REQUIREMENTS

1. SECTION NR216.46 OF WISCONSIN STATE ADMINISTRATIVE CODE IDENTIFIES REQUIREMENTS FOR CONSTRUCTION SITE AND POST-CONSTRUCTION EROSION CONTROL. IT IS THE INTENT OF THESE PLANS TO SATISFY THESE REQUIREMENTS. THE METHODS AND STRUCTURES USED TO CONTROL EROSION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL IMPLEMENT AN APPROPRIATE MEANS OF CONTROLLING EROSION DURING SITE OPERATION AND UNTIL THE VEGETATION IS RE-ESTABLISHED. ADJUSTMENTS TO THE CONTROL SYSTEM SHALL BE MADE AS REQUIRED.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE WISCONSIN DNR'S CONSERVATION PRACTICE STANDARDS. THESE STANDARDS ARE PERIODICALLY UPDATED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND REFERENCE THE MOST RECENTLY RELEASED STANDARD.
3. THIS INFORMATION IS ONLY ONE PART OF THE OVERALL EROSION CONTROL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY ALSO BE SHOWN ON THE CONTRACT DRAWINGS AND IN THE ACCOMPANYING SPECIFICATIONS.
4. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE OWNER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
5. THE AREA OF EROSIVE LAND EXPOSED TO THE ELEMENTS BY GRUBBING, EXCAVATION, TRENCHING, BORROW AND FILL OPERATIONS AT ANY ONE TIME SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE. FOR ANY DISTURBED AREA THAT REMAINS INACTIVE FOR GREATER THAN 7 WORKING DAYS, OR WHERE GRADING WORK EXTENDS BEYOND THE PERMANENT SEEDING DEADLINES, THE SITE MUST BE TREATED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING AND/OR MULCHING. ALL DISTURBED AREAS SHALL BE TREATED WITH PERMANENT STABILIZATION MEASURES WITHIN 3 WORKING DAYS OF FINAL GRADING.
6. ALL EROSION CONTROL MEASURES AND STRUCTURES SERVING THE SITE MUST BE INSPECTED AT LEAST WEEKLY OR WITHIN 24 HOURS OF THE TIME 0.5 INCHES OF RAIN HAS OCCURRED. ALL NECESSARY REPAIR AND MAINTENANCE WILL BE DONE AT THIS INSPECTION TIME.
7. ALL EROSION CONTROL DEVICES AND/OR STRUCTURES SHALL BE PROPERLY INSTALLED PRIOR TO CLEARING AND GRUBBING OPERATIONS WITHIN THEIR RESPECTIVE DRAINAGE AREAS. THESE SHALL BE PROPERLY MAINTAINED FOR MAXIMUM EFFECTIVENESS UNTIL VEGETATION IS RE-ESTABLISHED.
8. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY INSTALLED PRIOR TO ANY SOIL DISTURBANCE.
9. ANY SLOPES STEEPER THAN 3H:1V SHALL BE STAKED WITH EROSION CONTROL FABRIC UNLESS INDICATED ON THE PLAN.
10. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
11. WIND EROSION SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH, OR A TACKING AGENT MAY BE REQUIRED TO PROTECT NEARBY RESIDENCES AND WATER RESOURCES.
12. CHANNELIZED RUNOFF ENTERING THE PROJECT SITE FROM ADJOINING LANDS SHALL BE DIVERTED THROUGH NATURALLY OR ARTIFICIALLY EROSION-RESISTANT CONVEYANCES. IF CHANNELIZED RUNOFF CANNOT BE DIVERTED, SITE BEST MANAGEMENT PRACTICES MUST ACCOUNT FOR THE ADDITIONAL FLOW RATES AND EROSION POTENTIAL THAT SUCH RUNOFF PRESENTS.
13. THE CONTRACTOR SHALL TAKE ALL POSSIBLE PRECAUTIONS TO PREVENT SOILS FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. PAVED SURFACES ADJACENT TO CONSTRUCTION SITE VEHICLE ACCESS SHALL BE SWEPT AND/OR SCRAPED (NOT FLUSHED) PERIODICALLY TO REMOVE SOIL, DIRT, AND/OR DUST.
14. EROSION CONTROLS SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF TEMPORARY STOCKPILES. ANY SOIL STOCKPILE THAT REMAINS FOR MORE THAN 30 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING. ALL STOCK PILES SHALL BE PLACED AT LEAST 75 FEET FROM STREAMS OR WETLANDS.
15. ADDITIONAL EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.) SHALL INCLUDE THE FOLLOWING:
    a. PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
    b. BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
    c. DISCHARGE OF TRENCH WATER OR DEWATERING EFFLUENT MUST BE PROPERLY TREATED TO REMOVE SEDIMENT IN ACCORDANCE WITH THE WDNR CONSERVATION PRACTICE STANDARD 1061 - DEWATERING OR A SUBSEQUENT WDNR DEWATERING STANDARD PRIOR TO DISCHARGE INTO A STORM SEWER, DITCH, DRAINAGEWAY, OR WETLAND OR LAKE.
16. ALL DRAINAGE CULVERTS, STORM DRAIN INLETS, MANHOLES, OR ANY OTHER EXISTING STRUCTURES THAT COULD BE DAMAGED BY SEDIMENTATION SHALL BE PROTECTED ACCORDING TO THE VARIOUS METHODS PROVIDED IN THE PRINTED CONSERVATION PRACTICE STANDARDS.
17. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
18. THE FIRST SIX WEEKS AFTER INITIAL STABILIZATION, ALL NEWLY SEEDED AND MULCHED AREAS SHALL WATERED WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
19. WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY BMP'S SUCH AS SILT FENCES, STRAW BALES, AND SEDIMENT TRAPS SHALL BE REMOVED AND THESE AREAS STABILIZED.
20. ALL TEMPORARY BEST MANAGEMENT PRACTICES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED.
21. ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED WITH SEED AND MULCH UNLESS OTHERWISE SPECIFIED. A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE APPLIED TO ALL AREAS TO BE SEEDED OR SODDED.

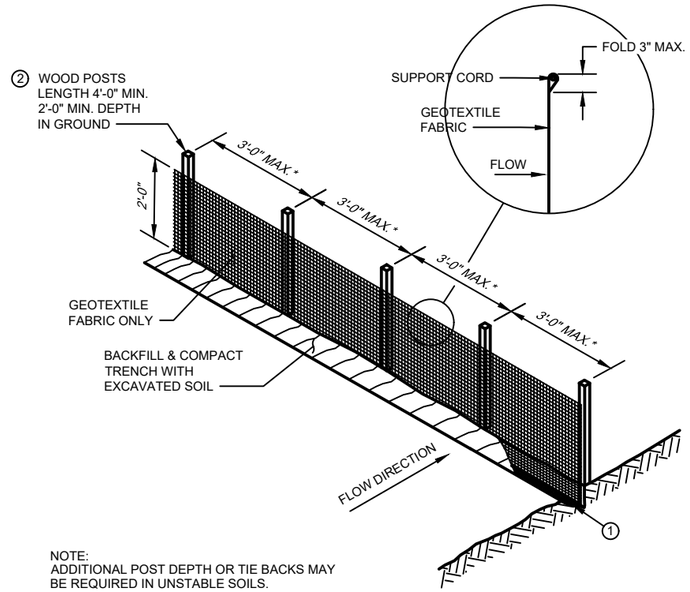



TWIST METHOD




HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ③




NOTE:
ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS.

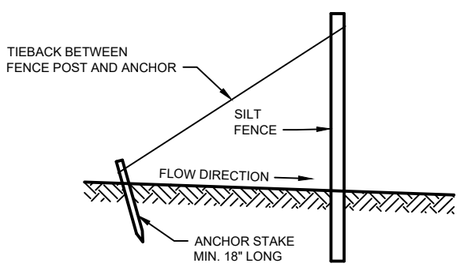
* 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED, OR IF THE SILT FENCE IS FACTORY ASSEMBLED.

ATTACH THE FABRIC TO THE POSTS WITH WIRE STAPLES OR WOODEN LATH AND NAILS.

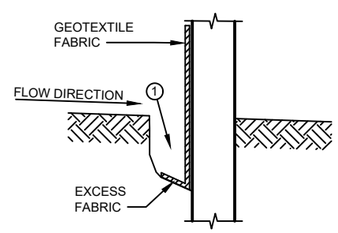
SILT FENCE

GENERAL NOTES

1. TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
2. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 $\frac{1}{8}$" x 1 $\frac{1}{8}$" OF OAK OR HICKORY.
3. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS: A) TWIST METHOD -- OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK METHOD -- HOOK THE END OF EACH SILT FENCE LENGTH.




SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)




TRENCH DETAIL

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WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

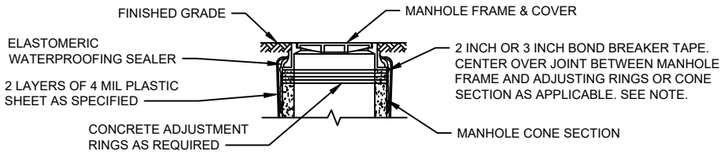
CONSTRUCTION DETAILS

PROJECT NO. 02690001
SHEET D2

## GENERAL NOTES - INLET PROTECTION

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

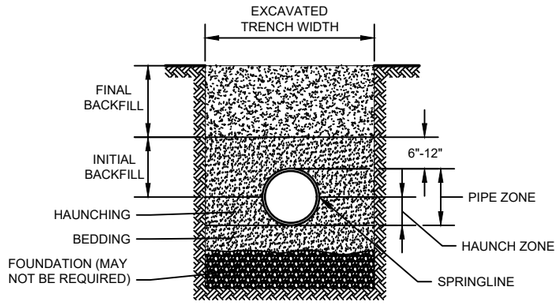



THE BOND BREAKER TAPE IS TO PREVENT THE SEALER FROM BONDING TO THE EDGE OF THE FLANGE OF THE MH FRAME AND THE UPPER 1-1/2 INCHES OF ADJUSTING RING OR CONE. IF THE EDGE OF FLANGE IS NOT FLUSH WITH ADJUSTING RING OR CONE, APPLY ADDITIONAL TAPE AS REQUIRED TO PREVENT SUCH BONDING.

ELASTOMERIC FRAME/CHIMNEY SEAL

## MANHOLE WATERPROOFING DETAIL

NO SCALE



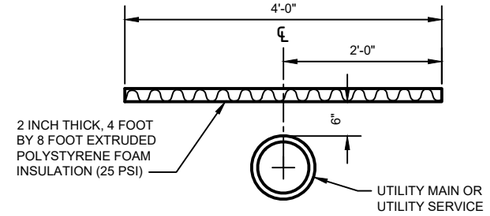

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO ASTM D2321.
2. CLASS II EMBEDMENT MATERIAL SHALL BE CLEAN, COARSE-GRAINED SOILS WITH LITTLE TO NO FINES. NO PARTICLES LARGER THAN 1 1/2 -INCHES SHALL BE USED IN THE PIPE EMBEDMENT.
3. WHERE HYDRAULIC GRADIENT EXISTS USE A WELL-GRADED MIXTURE TO MINIMIZE MIGRATION OF FINES FROM ADJACENT SOIL.
4. CLASS II MATERIAL IS SUITABLE AS A FOUNDATION AND FOR REPLACING OVER- EXCAVATED AND UNSTABLE TRENCH BOTTOM. INSTALL AND COMPACT IN 6-INCH MAXIMUM LAYERS.
5. INSTALL AND COMPACT BEDDING IN 6-INCH MAXIMUM LAYERS. LEVEL FINAL GRADE BY HAND. MINIMUM DEPTH 4 INCH (6 INCH IN ROCK CUTS.)
6. INSTALL AND COMPACT HAUNCHING IN 6-INCH MAXIMUM LAYERS. WORK IN AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT.
7. INSTALL AND COMPACT INITIAL BACKFILL TO A MINIMUM OF 6 INCH ABOVE PIPE CROWN.
8. EMBEDMENT COMPACTION:

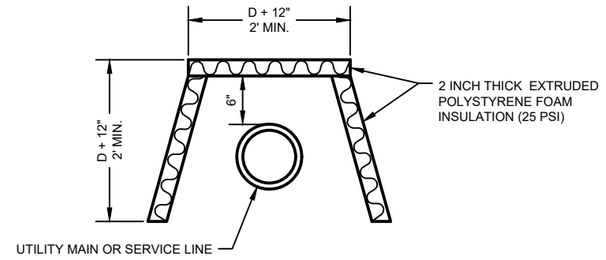
   MINIMUM DENSITY 85% STANDARD PROCTOR. USE HAND TAMPERS OR VIBRATORY COMPACTORS.

## CLASS II - FLEXIBLE PIPE EMBEDMENT DETAIL

NO SCALE




STANDARD INSTALLATION




SIDE PROTECTION INSTALLATION

GENERAL NOTES:

1. THE SIDE PROTECTION INSTALLATION SHALL BE USED WHERE FROST WILL PENETRATE BELOW THE PIPE INVERT.

## PIPE INSULATION DETAIL

NO SCALE

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|---|---|
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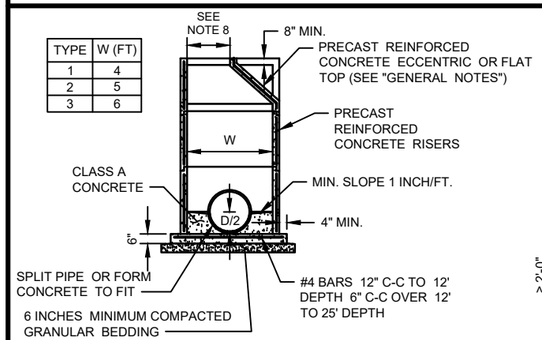
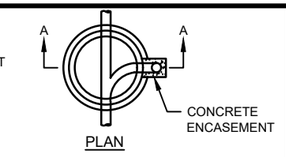
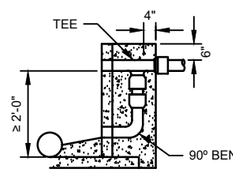
| 2 | 5 |
| 3 | 6 |




PLAN




SECTION A-A

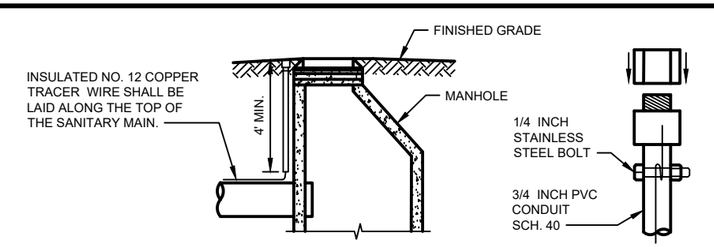
DROP ASSEMBLY DETAIL

GENERAL NOTES:

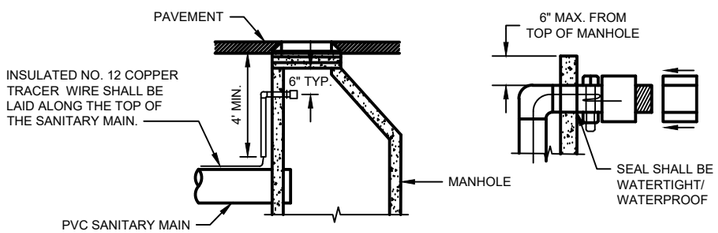
1. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING AND THE APPLICABLE SPECIAL CONDITIONS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
2. DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.
3. PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
4. ECCENTRIC CONE TOPS SHALL BE USED ON ALL STRUCTURES 5 FEET OR GREATER IN DEPTH, AND FLAT TOPS SHALL BE USED ONLY ON STRUCTURES LESS THAN 5 FEET IN DEPTH, UNLESS DIRECTED BY THE ENGINEER.
5. PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.
6. ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.
7. DROP CONNECTIONS SHALL BE USED WHEN THE PIPE INVERT IS MORE THAN 2 FEET ABOVE THE MANHOLE INVERT. PRECAST STRUCTURE MANWAY CLEAR OPENING SHALL MATCH CASTING - REFER TO STANDARD SPECIFICATION
8. DIVISION 33 AND THE APPLICABLE SPECIAL CONDITIONS.
   - OPENING SHALL BE 24" FOR R-1550 CASTINGS
   - OPENING SHALL BE 27" FOR R-1642 CASTINGS
9. DROP CONNECTION AND ASSEMBLY SHALL BE CONSTRUCTED WITH DUCTILE IRON PIPE.

## PRECAST REINFORCED CONCRETE MANHOLE DETAIL

NO SCALE




INSTALLATION IN UNPAVED AREA



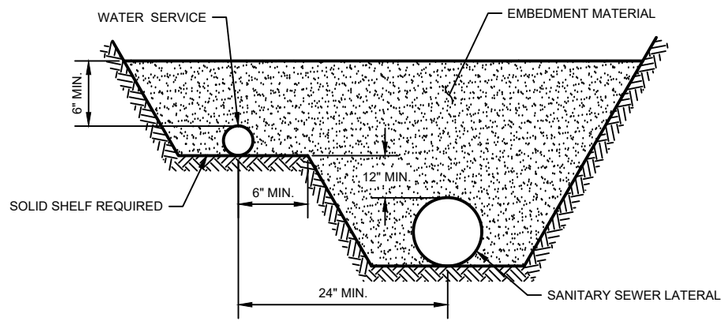

INSTALLATION IN PAVED AREA

GENERAL NOTES:

1. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE.
2. A THREADED, FEMALE PVC SCHEDULE 40 PLUG AND MALE COUPLING GLUED TO 3/4 INCH SCHEDULE 40 SHALL BE INSTALLED IN OR ADJACENT TO THE VALVE VAULT AND MANHOLE.
3. WIRE PIGTAIL SHALL BE WRAPPED AROUND BOLT AND READILY ACCESSIBLE, WITH SUFFICIENT LENGTH FOR EASY CONNECTION.

## TRACER WIRE INSTALLATION FOR PVC SANITARY MAIN

NO SCALE




GENERAL NOTES:

1. WATER SERVICES 2 INCHES IN DIAMETER AND LESS SHALL BE LAID WITH A CLEAR HORIZONTAL SEPARATION NOT LESS THAN 2 FEET FROM THE SANITARY LATERAL.

## WATER SERVICE AND SANITARY SEWER LATERAL DETAIL

NO SCALE

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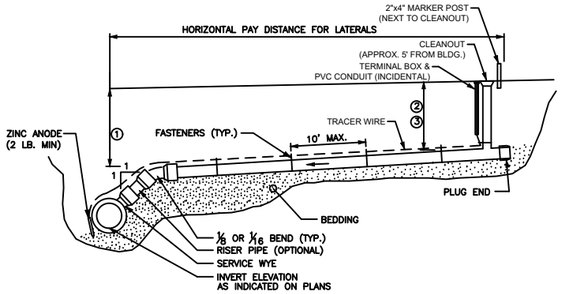
WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

CONSTRUCTION DETAILS

PROJECT NO. 02690001

SHEET D3




ELEVATION VIEW

**NOTES FOR LATERAL INSTALLATION:**

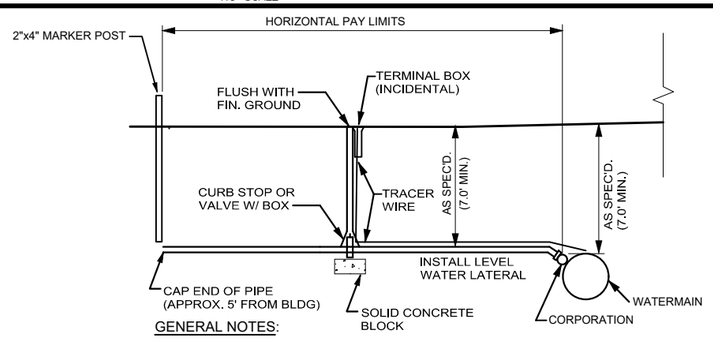
1. MINIMUM DEPTH OF COVER UNDER ROADWAY = 7 FEET.
2. MINIMUM DEPTH OF COVER UNDER GRASS AREAS = 5 1/2 FEET.
3. MINIMUM DEPTH OF COVER UNDER GRASS AREAS WITH FROST PROTECTION = 3 FEET 6 INCHES.
4. LATERAL SLOPES SHALL BE 1/8 INCH PER FOOT MINIMUM AND 1/2 INCH PER FOOT MAXIMUM.

**NOTES FOR TRACER WIRE INSTALLATION:**

1. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE.
2. TRACER WIRE SHALL BE INSTALLED WITH THE NON-CONDUCTIVE SERVICE. PIPE TRACER WIRE TERMINAL CONDUITS SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER LATERAL OR AS DETERMINED BY THE ENGINEER OR OWNER.
3. TRACER WIRE SHALL BE RESTRAINED BY CABLE-TIES, TAPE, OR BY NON-CORRESIVE FASTNER APPROVED BY THE OWNER, INSTALLED EVERY 10 FEET ALONG SERVICE. DO NOT WRAP TRACER WIRE AROUND THE PIPE.
4. TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A TERMINAL BOX FLUSH WITH THE FINISHED GROUND. PROVIDE 2-FEET EXTRA TRACER WIRE IN ACCESS PIPE AND ATTACH TRACER WIRE TO TERMINAL BOLTS. (INCIDENTAL TO PIPE INSTALLATION)

## SANITARY SEWER LATERAL DETAIL

NO SCALE

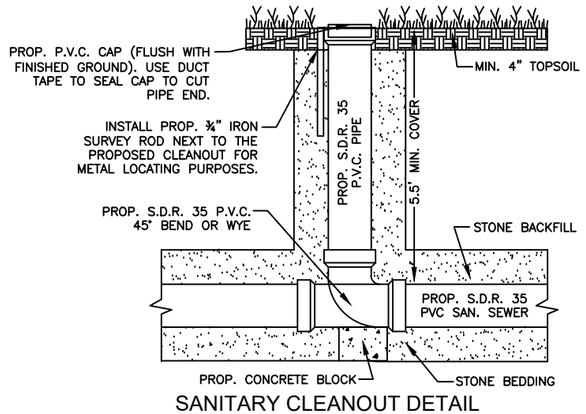



GENERAL NOTES:

1. SEE PLANS AND SPECIFICATIONS FOR SIZE AND TYPE OF CURB STOP AND BOX CORPORATION AND SERVICE LINE.
2. COMMUNITY STANDARDS SHALL SUPERCEED THE DIMENSIONS FROM THE PROPERTY LINE.
3. TRACER WIRE SHALL BE INSTALLED ALONG ALL NEWLY INSTALLED WATER SERVICES (INCIDENTAL TO WATER SERVICE PIPING).

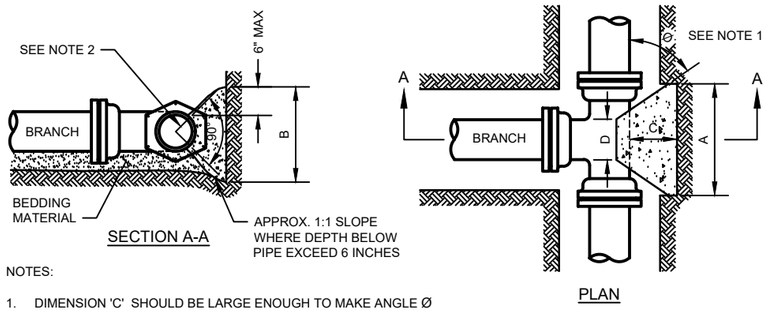
## WATER SERVICE DETAIL

NO SCALE




## SANITARY CLEANOUT DETAIL

NO SCALE




NOTES:

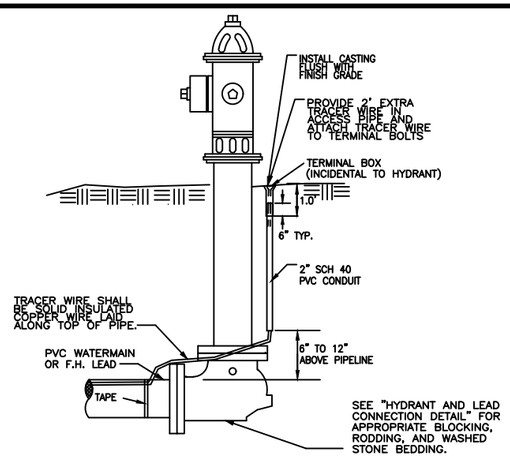
1. DIMENSION 'C' SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø GREATER THAN OR EQUAL TO 45°.
2. CONCRETE SHOULD BEAR ON THIS QUADRANT OF PIPE AT A MINIMUM.
3. DIMENSION 'D' SHOULD BE AS LARGE AS POSSIBLE BUT CONCRETE SHOULD NOT INTERFERE WITH MECHANICAL JOINTS.
4. BUTTRESS DIMENSIONS ARE BASED ON A SOIL RESISTANCE OF TWO TONS PER SQ. FT. AND A WATER PRESSURE OF 150 PSI. INFORM THE ENGINEER IF ON-SITE SOIL DOES NOT MEET THIS CONDITION OR PRESSURES EXCEED 150 PSI.
5. BUTTRESS TO BE PLACED AGAINST FIRM UNDISTURBED SOIL, OR DISTURBED SOIL COMPACTED TO 95%% OF MODIFIED PROCTOR DENSITY, ASTM D1557.
6. CONCRETE SHALL HAVE A MINIMUM 7-DAY COMPRESSIVE STRENGTH OF 2000 PSI.
7. ALL POURED BUTTRESSED FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.
8. IN ADDITION TO BUTTRESSES, ALL JOINTS SURROUNDING TEES SHALL BE RESTRAINED WITH WEDGE ACTION RESTRAINING GLANDS.

| BUTTRESS DIMENSIONS | | | | |
|---|---|---|---|---|
| DIA. | A | B | C | D |
| 6" | 1'-3" | 1'-0" | SEE NOTE NO. 1 | SEE NOTE NO. 3 |
| 8" | 1'-6" | 1'-4" | | |
| 10" | 1'-10" | 1'-8" | | |
| 12" | 2'-3" | 2'-0" | | |
| 16" | 3'-2" | 2'-6" | | |
| 20" | 4'-0" | 3'-0" | | |
| 24" | 5'-3" | 3'-4" | | |

DIA. = BRANCH DIAMETER

## BUTTRESS FOR TEES DETAIL

NO SCALE

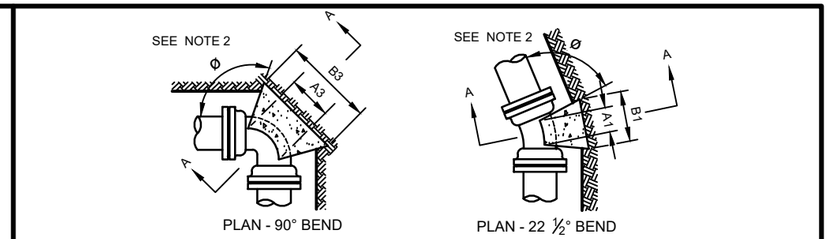



## TRACER WIRE INSTALLATION FOR PVC WATERMAIN DETAIL

SCALE: NONE

| RESTRAINED/TIED PIPE LENGTH CHART | | | | | | |
|---|---|---|---|---|---|---|
| MIN LENGTH REQUIRING RESTRAINT IN FEET | | | | | | |
| | 6" | 8" | 10" | 12" | 16" | 24" |
| FITTING TYPE | | | | | | |
| 11.25° BEND | 10 | 10 | 10 | 10 | 10 | 10 |
| 22.5° BEND | 10 | 10 | 10 | 10 | 11 | 15 |
| 45° BEND | 10 | 15 | 15 | 20 | 25 | 30 |
| 90° BEND | 25 | 30 | 35 | 40 | 55 | 75 |
| TEE/CROSS | 15 | 25 | 35 | 45 | 65 | 95 |
| STUB OR PLUG | 30 | 35 | 45 | 50 | 95 | 100 |
| | | | | | | |
| REDUCER | 0 | 20 | 35 | 50 | 105 | 125 |
| VERTICAL BEND (45°) | 20 | 30 | 35 | 40 | 50 | 75 |

THE ABOVE LENGTHS (GIVEN IN FEET) REPRESENT THE MINIMUM LENGTH OF PIPE TO BE TIED TOGETHER IN EACH REQUIRED DIRECTION FROM THE FITTING DESCRIBED



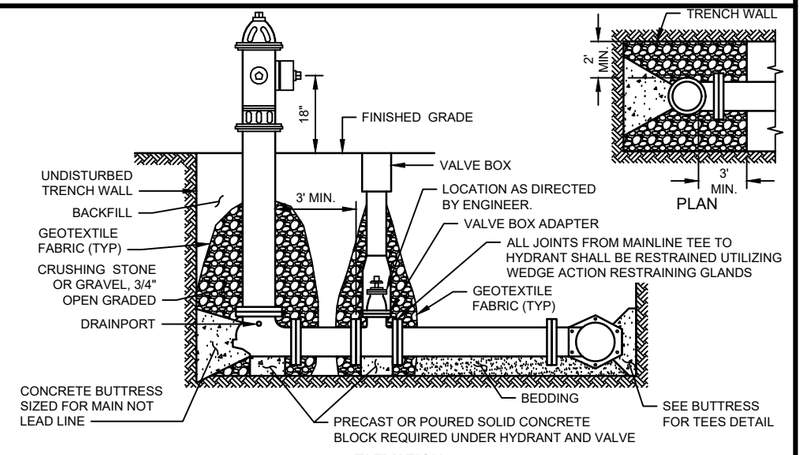

NOTES:

1. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND AN EARTH RESISTANCE OF 2 TONS PER SQ. FT. INFORM THE ENGINEER IF PRESSURES EXCEED 150 PSI, OR ON-SITE SOIL DOES NOT MEET THIS CONDITION.
2. DIMENSION C1 C2 C3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø EQUAL TO OR LARGER THAN 45°.
3. DIMENSION A1 A2 A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE MECHANICAL JOINT.
4. BUTTRESS TO BE POURED AGAINST FIRM UNDISTURBED SOIL, OR DISTURBED SOIL COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY, ASTM D1557.
5. ALL BUTTRESSED FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.
6. CONCRETE SHALL HAVE A MINIMUM 7-DAY COMPRESSIVE STRENGTH OF 2000 PSI.
7. IN ADDITION TO BUTTRESS, ALL JOINTS SURROUNDING BENDS SHALL BE RESTRAINED WITH WEDGE ACTION RESTRAINING GLANDS.

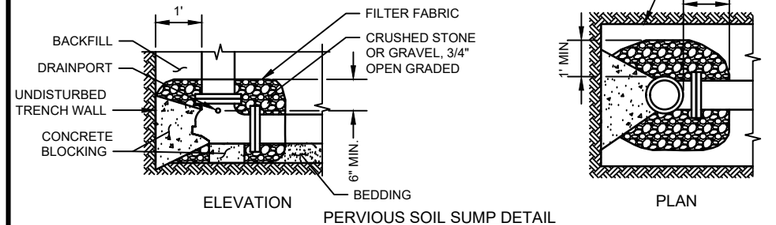
| BUTTRESS DIMENSIONS | | | | | | |
|---|---|---|---|---|---|---|
| PIPE SIZE | 22 ½° BENDS | | 45° BENDS | | 90° BENDS | |
| | B1 | D1 | B2 | D2 | B3 | D3 |
| 6" | 1'-0" | 1'-0" | 1'-0" | 1'-0" | 1'-4" | 1'-2" |
| 8" | 1'-0" | 1'-0" | 1'-4" | 1'-2" | 1'-10" | 1'-6" |
| 10" | 1'-2" | 1'-2" | 1'-7" | 1'-7" | 2'-3" | 1'-10" |
| 12" | 1'-4" | 1'-4" | 1'-10" | 1'-10" | 2'-8" | 2'-3" |
| 16" | 1'-10" | 1'-8" | 2'-6" | 2'-4" | 3'-10" | 2'-10" |
| 20" | 2'-4" | 2'-0" | 3'-3" | 2'-10" | 5'-0" | 3'-4" |
| 24" | 2'-10" | 2'-4" | 4'-0" | 3'-3" | 6'-4" | 3'-10" |

## BUTTRESS FOR BENDS DETAIL

NO SCALE




## IMPERVIOUS SOIL SUMP DETAIL




## PERVIOUS SOIL SUMP DETAIL

## HYDRANT AND LEAD CONNECTION DETAIL

NO SCALE

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|---|---|---|---|
| | | | |

PROJECT DATE: .
DRAWN BY: SEW
DESIGNED BY: JML
CHECKED BY: JML

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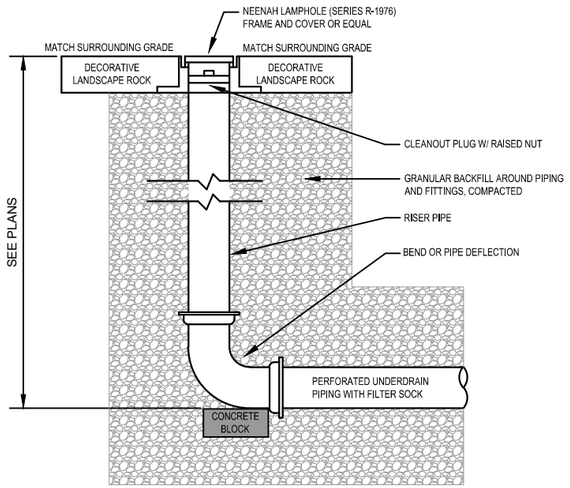
WAUPUN PINE VALLEY APARTMENTS PROJECT
WAUPUN PINE VALLEY APARTMENTS LLC
CITY OF WAUPUN, DODGE COUNTY, WISCONSIN

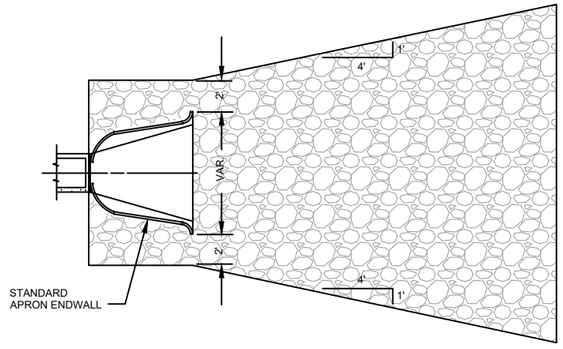
CONSTRUCTION DETAILS

PROJECT NO. 02690001
SHEET D4

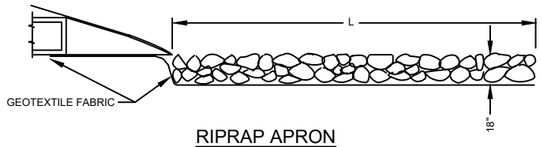



## STORM CLEANOUT DETAIL

SCALE: NONE

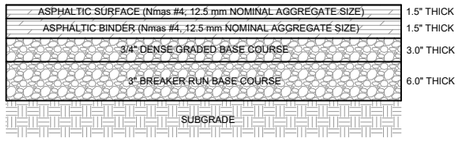



L = SHOWN ON PLAN OR DETERMINED BY THE ENGINEER IN THE FIELD



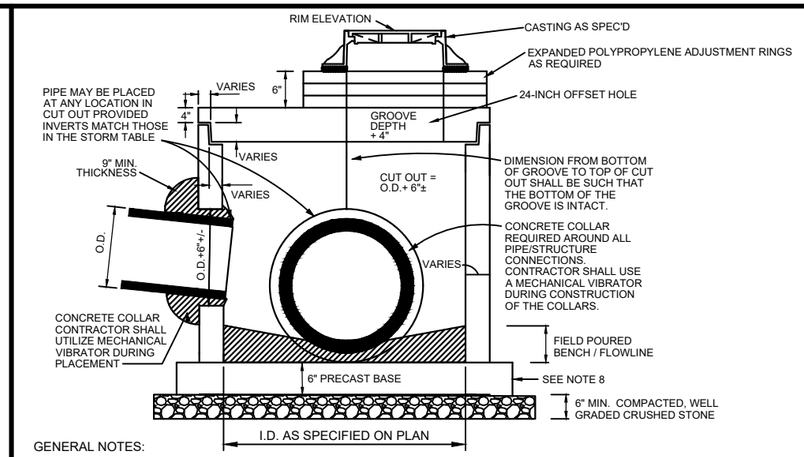

## RIPRAP APRON

NO SCALE




## PAVING DETAIL (WITHIN DEVELOPMENT)

SCALE: NONE

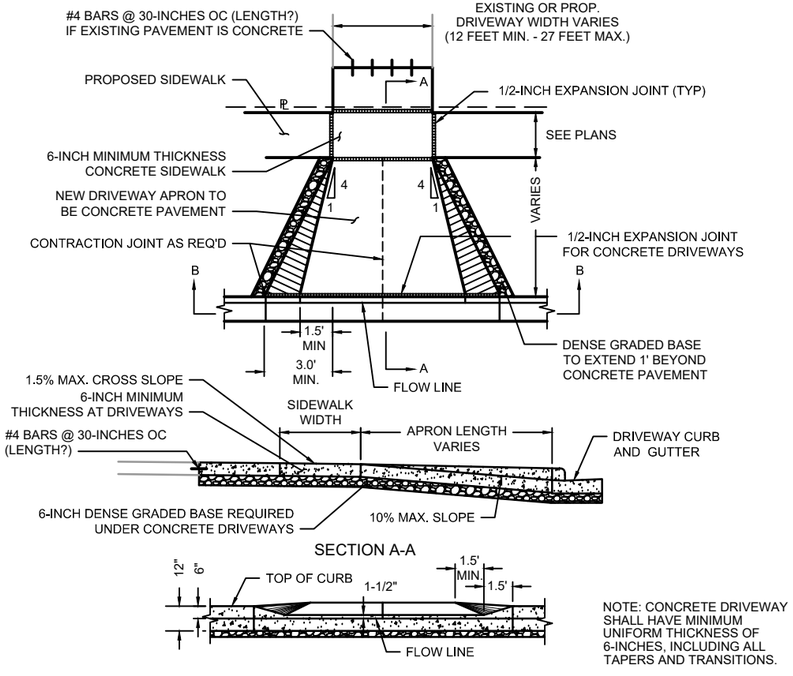



GENERAL NOTES:

1. SEE PLANS FOR SIZE, NUMBER, AND LOCATION OF PIPES.
2. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS.
3. DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.
4. ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.
5. PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR WELL GRADED CRUSHED STONE. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
6. ALL BAR STEEL AND WELDED WIRE FABRIC REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
7. PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.
8. OVERHANGING BASE NOT REQUIRED WHERE INTEGRAL BASE IS ALLOWED. SEE SPECIAL PROCEDURES OR CONTACT ENGINEER TO VERIFY.

## STORM MANHOLE DETAIL

NO SCALE

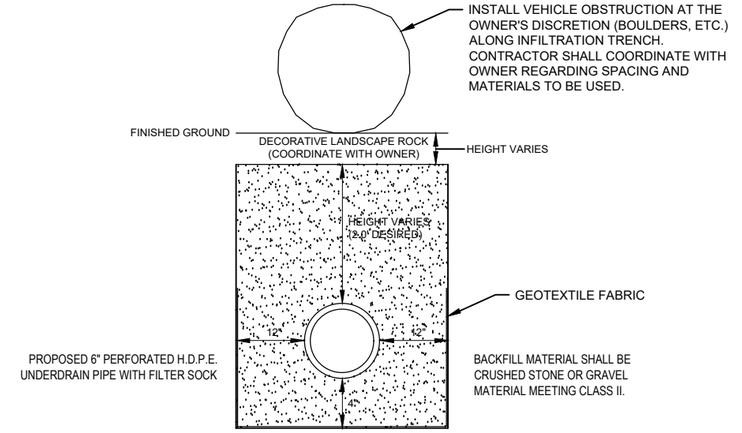



NOTE: CONCRETE DRIVEWAY SHALL HAVE MINIMUM UNIFORM THICKNESS OF 6-INCHES, INCLUDING ALL TAPERS AND TRANSITIONS.

SECTION B-B

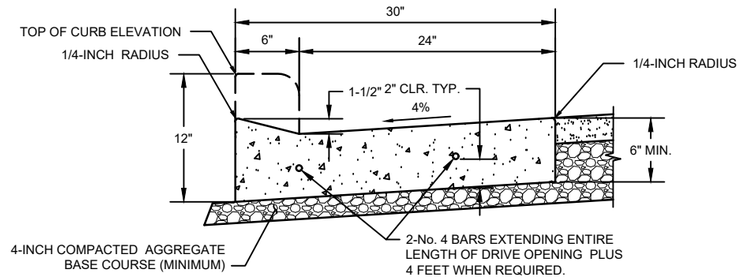
## CONCRETE DRIVEWAY DETAIL WITH CURB & GUTTER

NO SCALE

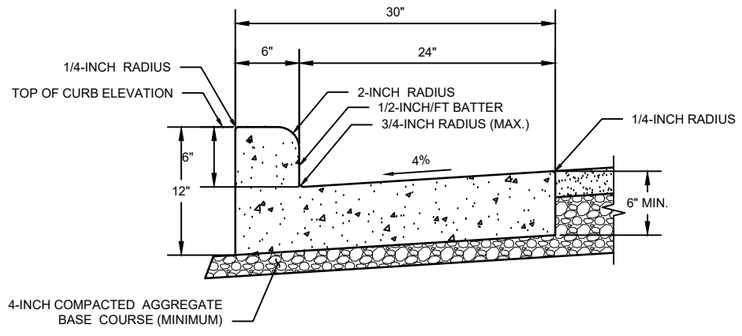



## INFILTRATION TRENCH DETAIL

NO SCALE




DRIVEWAY SECTION




STANDARD SECTION

## TYPE D CURB AND GUTTER DETAIL

NO SCALE

| | | NO. | DATE | REVISION | BY |
|---|---|---|---|---|---|
| PROJECT DATE: . | DRAWN BY: SEW | . | . | . | . |
| | DESIGNED BY: JML | . | . | . | . |
| | CHECKED BY: JML | . | . | . | . |

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