

GENERAL NOTES

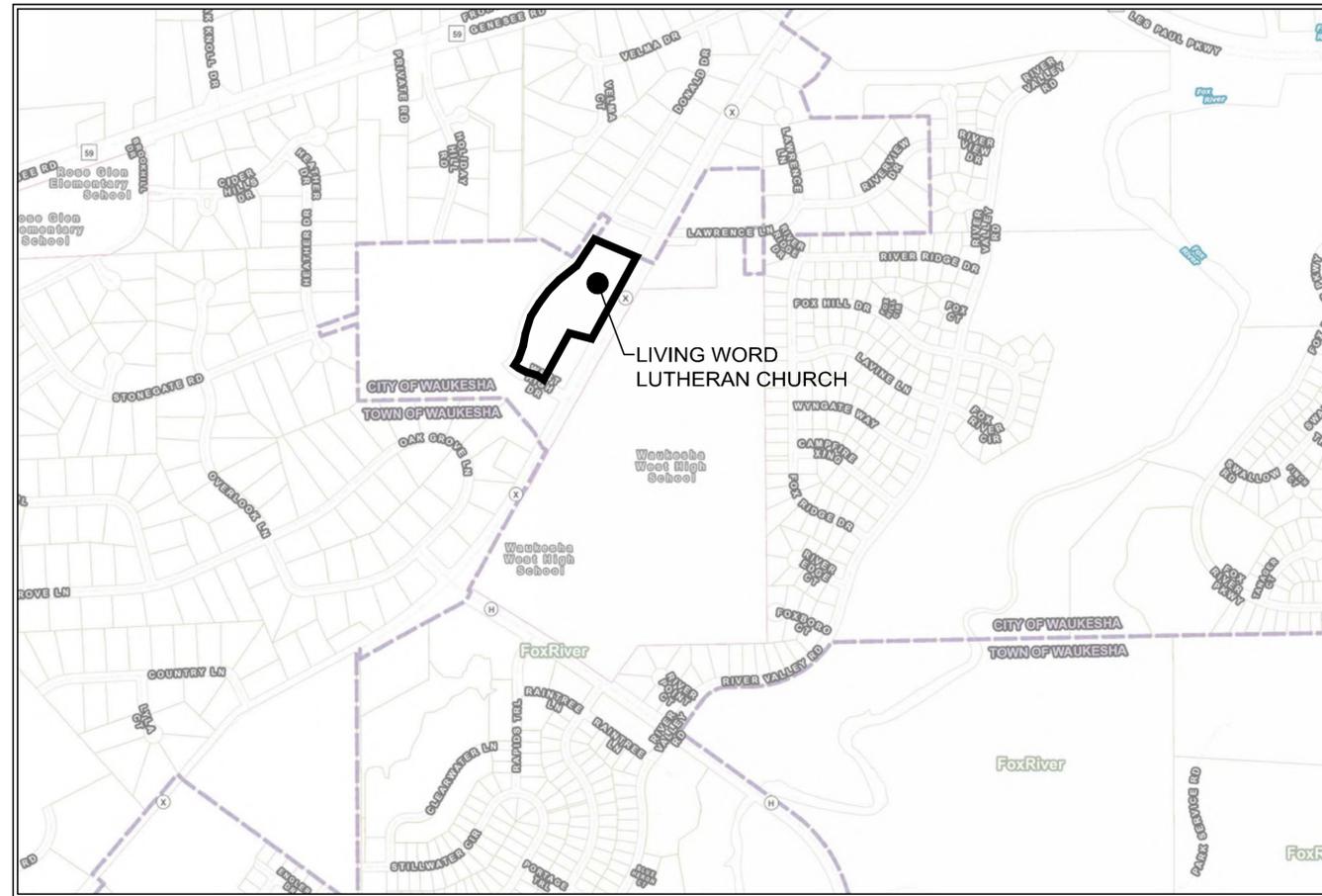
- THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED.
 - STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION (SSSWCW)
 - THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
 - WDNR STORMWATER RUNOFF TECHNICAL STANDARDS.
 - WISDOT PAL APPROVED EROSION CONTROL MEASURES LIST, LATEST EDITION.
 - CITY OF WAUKESHA DEVELOPMENT STANDARDS.
 - CITY OF WAUKESHA STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MINIMIZE EROSION, WATER POLLUTION AND SILTATION CAUSED BY CONSTRUCTION OF THIS PROJECT. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
- EROSION CONTROL PLAN: PRIOR TO BEGINNING WORK, AN APPROVED EROSION CONTROL PLAN WILL BE PROVIDED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY IMPLEMENTING THE APPROVED PLAN.
- THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY FLOOR, CURB OR PAVEMENT ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION (CALL DIGGERS HOTLINE AT 800-242-8511). COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- EXISTING UTILITY INFORMATION IS SHOWN FROM SURVEY WORK, FIELD OBSERVATIONS, AVAILABLE PUBLIC RECORDS, AND AS-BUILT DRAWINGS. EXACT LOCATIONS AND ELEVATIONS OF UTILITIES SHALL BE DETERMINED PRIOR TO INSTALLING NEW WORK. EXCAVATE TEST PITS AS REQUIRED.
- PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF PERFORMING ANY CONSTRUCTION.
- ALL TRENCHING SHALL BE PERFORMED ACCORDING TO OSHA STANDARDS.
- ALL ITEMS SHALL INCLUDE ALL THE NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- THE CONTRACTOR SHALL CLEAN ALL ADJACENT STREETS OF ANY SEDIMENT OR DEBRIS BY SWEEPING BEFORE THE END OF THE WORKING DAY.
- THE CONTRACTOR MUST AND IS REQUIRED TO NOTIFY THE CITY OF WAUKESHA SEWER AND WATER UTILITY A MINIMUM OF 7 DAYS IN ADVANCE OF WATER MAIN FILLING, WATER MAIN FLUSHING, WATER MAIN TESTING AND WATER MAIN CONNECTIONS. NO CONNECTION SHALL BE MADE TO THE EXISTING WATER SYSTEM UNTIL SAFE SAMPLES FROM THE NEW MAIN HAVE BEEN OBTAINED. THE CITY OF WAUKESHA WILL REQUIRE A METER WHEN FLUSHING THE WATER MAIN AFTER THE PRESSURE TEST AND SAFE WATER SAMPLE IS TAKEN.
- CONTRACTOR SHALL NOTIFY THE CITY OF WAUKESHA 7 DAYS PRIOR TO STARTING ANY PUBLIC WATER MAIN AND CULVERT CONSTRUCTION.

LIVING WORD LUTHERAN CHURCH

PROPOSED SITE DEVELOPMENT PLANS

CTH "X"/ SAYLESVILLE ROAD

CITY OF WAUKESHA, WISCONSIN



SITE VICINITY MAP
NOT TO SCALE

ARCHITECTS:
TREDO GROUP
219 N MILWAUKEE ST - SUITE 630
MILWAUKEE, WI 53202
TEL: 414-539-3336

SITE CIVIL ENGINEER:
TRIO ENGINEERING, LLC
12660 W. NORTH AVE, BLDG. D
BROOKFIELD, WI 53005
PHONE: 262-790-1480

PROPERTY ADDRESS:
DONALD DRIVE
WAUKESHA, WI 53188

WETLAND DELINEATOR:
ONEIDA TOTAL INTEGRATED ENTERPRISES
1033 N MAYFAIR ROAD SUITE 200
MILWAUKEE, WI 53226
PHONE: 414-257-4200

GEOTECHNICAL CONSULTANT:
CGC, INC
336 S. CURTIS ROAD
WEST ALLIS, WI 53214
PHONE: 414-443-2000

DATUM:
CITY OF WAUKESHA DATUM



AERIAL SITE PHOTO
NOT TO SCALE

SHEET INDEX

CIVIL	
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C1.9	- CONSTRUCTION DETAILS
C2.0	- PROJECT SPECIFICATIONS



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EMAIL: jpauletto@trioeng.com

PROJECT:
LIVING WORD LUTHERAN CHURCH

CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SJSSEX LANE
WAUKESHA, WI 53188

REVISION HISTORY

DATE	DESCRIPTION
06/26/2019	per CITY COMMENTS
06/18/2019	per COUNTY SUBMITTAL
06/04/2019	SITE PLAN REV.
06/28/2018	DSPS SUBMITTAL
06/06/2018	INITIAL SUBMITTAL

DATE:
JUNE 26, 2019

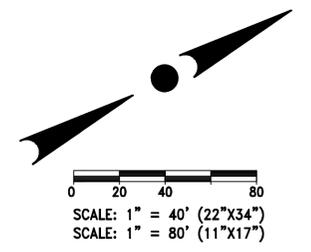
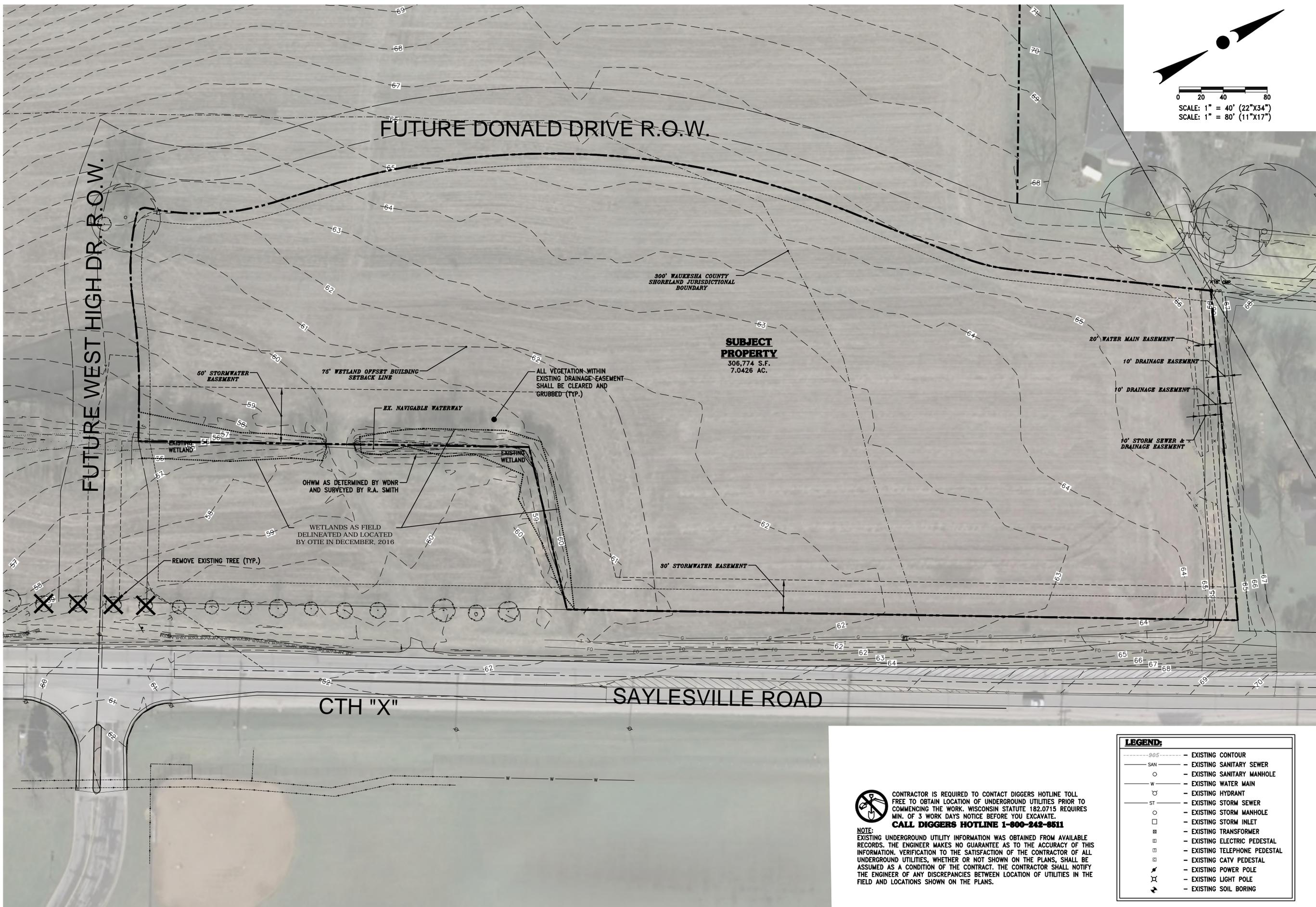
JOB NUMBER:
15025

DESCRIPTION:
COVER SHEET

SHEET

T1

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BY: LIVING WORD LUTHERAN CHURCH
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DATE:
JUNE 26, 2019

JOB NUMBER:
15025

DESCRIPTION:
EXISTING SITE PLAN

SHEET

C1.0



NOTE:
CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.
CALL DIGGERS HOTLINE 1-800-243-8511

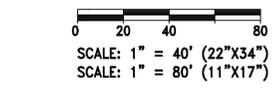
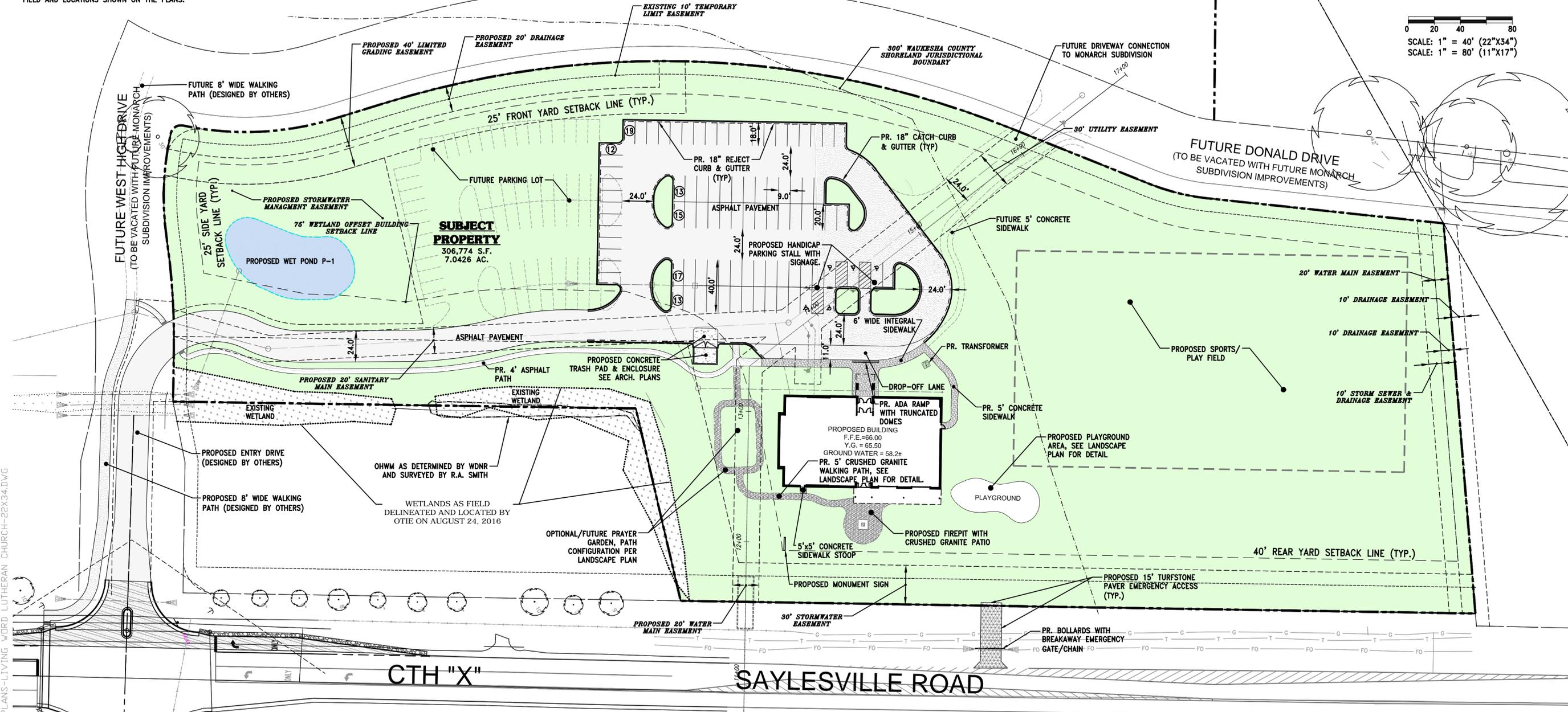
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LEGEND:	
---905---	EXISTING CONTOUR
—SAN—	EXISTING SANITARY SEWER
○	EXISTING SANITARY MANHOLE
—W—	EXISTING WATER MAIN
⊕	EXISTING HYDRANT
—ST—	EXISTING STORM SEWER
○	EXISTING STORM MANHOLE
□	EXISTING STORM INLET
⊠	EXISTING TRANSFORMER
⊞	EXISTING ELECTRIC PEDESTAL
⊠	EXISTING TELEPHONE PEDESTAL
⊞	EXISTING CATV PEDESTAL
⚡	EXISTING POWER POLE
⚡	EXISTING LIGHT POLE
⚡	EXISTING SOIL BORING



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PROJECT:
LIVING WORD LUTHERAN CHURCH

CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SJSSEX LANE
WAUKESHA, WI 53188

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08/08/2018	INITIAL SUBMITTAL

DATE:
JUNE 26, 2019

JOB NUMBER:
15025

DESCRIPTION:
OVERALL
PROPOSED SITE
PLAN

SHEET

C1.1

LEGEND:	
---	EXISTING CONTOUR
---	EXISTING SANITARY SEWER
---	EXISTING WATER MAIN
---	EXISTING STORM SEWER
---	PROPOSED SANITARY SEWER
○	PROPOSED SANITARY MANHOLE
---	PROPOSED WATER MAIN
⊙	PROPOSED HYDRANT
⊙	PROPOSED WATER VALVE
---	PROPOSED STORM SEWER
○	PROPOSED STORM MANHOLE
□	PROPOSED STORM INLET
---	PROPOSED STORM END SECTION

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PROJECT:
LIVING WORD LUTHERAN CHURCH

CITY OF WALKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SUSSEX LANE
WALKESHA, WI 53188

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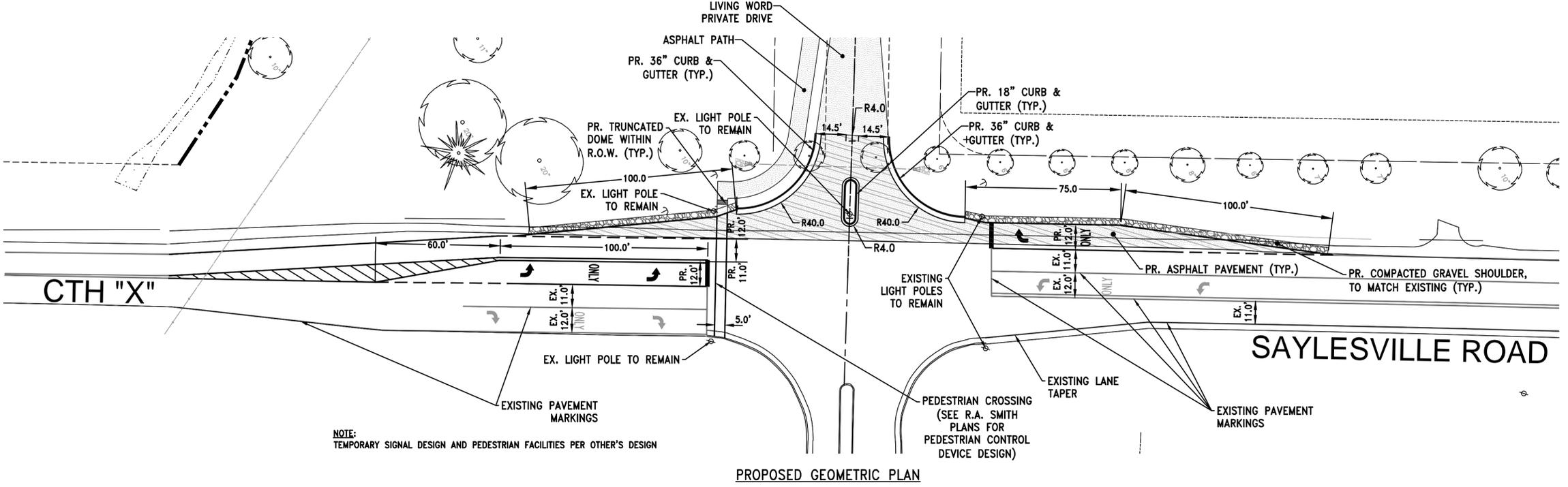
DATE:
JUNE 26, 2019

JOB NUMBER:
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DESCRIPTION:
INTERSECTION
IMPROVEMENT
PLAN

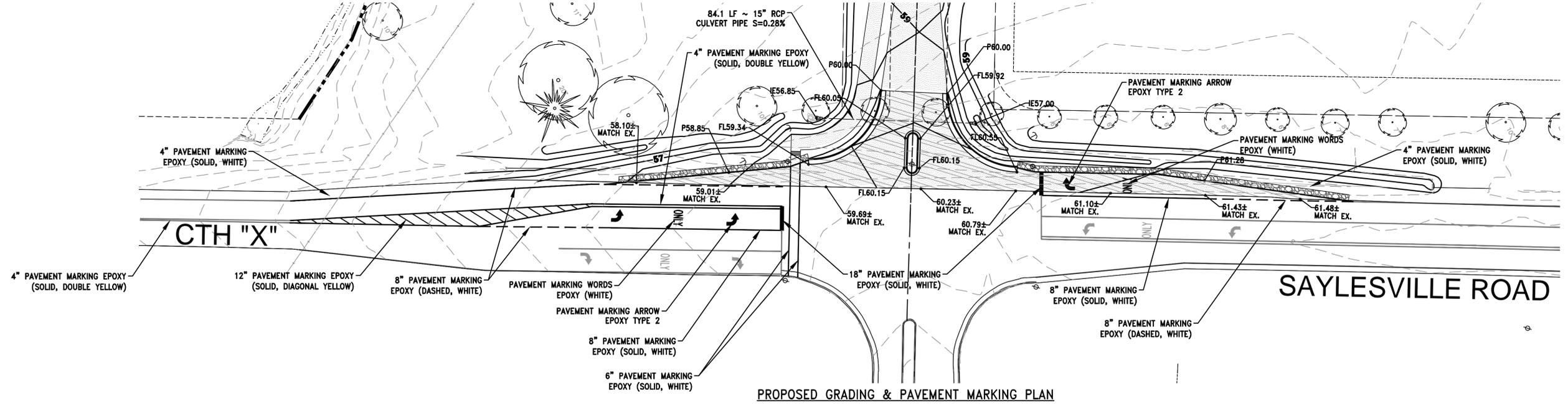
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NOTE:
TEMPORARY SIGNAL DESIGN AND PEDESTRIAN FACILITIES PER OTHER'S DESIGN

PROPOSED GEOMETRIC PLAN

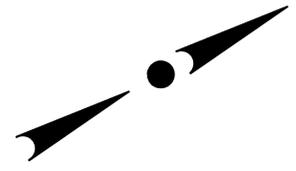


PROPOSED GRADING & PAVEMENT MARKING PLAN



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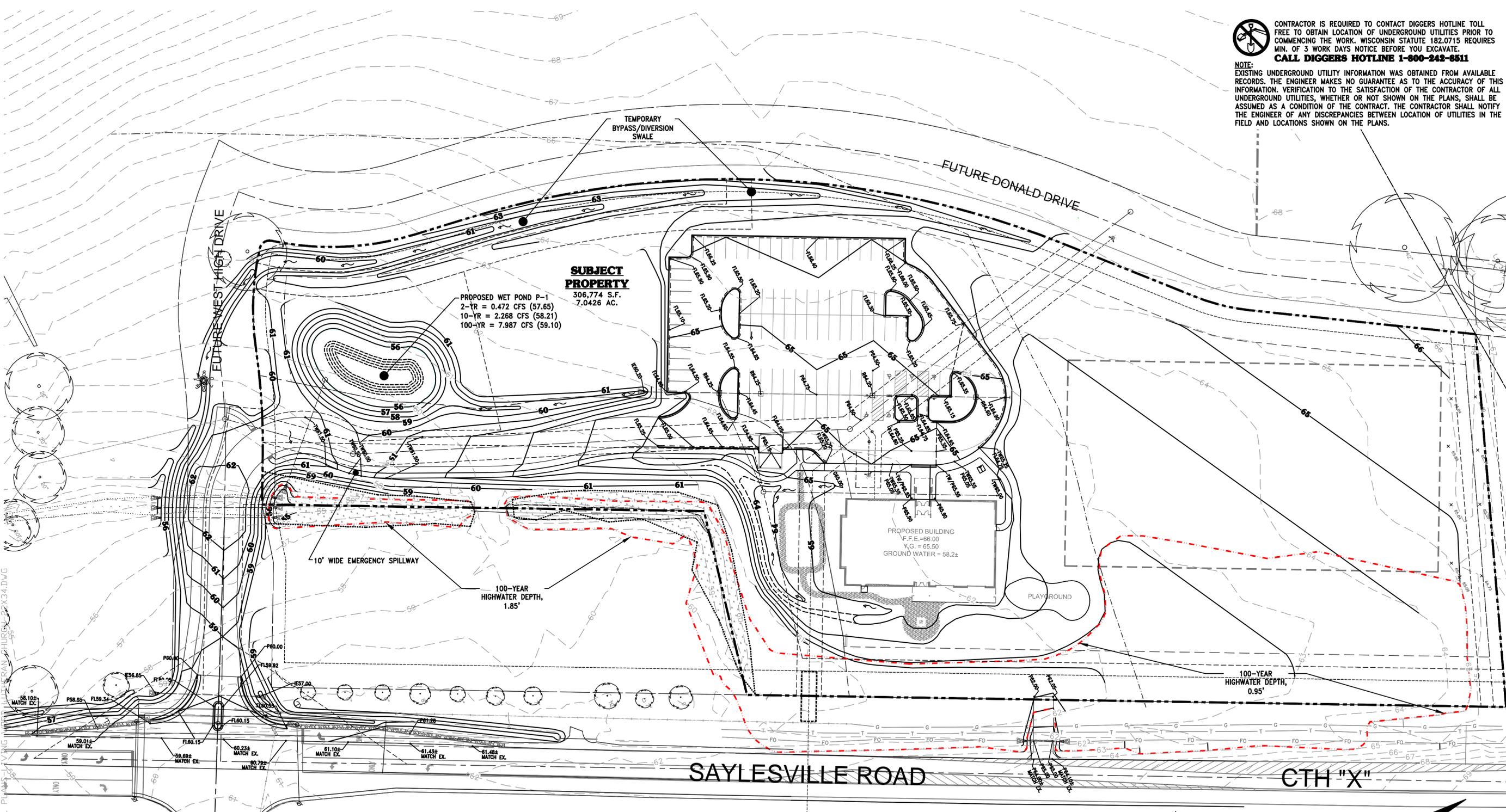
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0 15 30 60
SCALE: 1" = 30' (22"X34")
SCALE: 1" = 60' (11"X17")

LEGEND:	
	- EXISTING CONTOUR
	- EXISTING SANITARY SEWER
	- EXISTING WATER MAIN
	- EXISTING STORM SEWER
	- PROPOSED SANITARY SEWER
	- PROPOSED SANITARY MANHOLE
	- PROPOSED WATER MAIN
	- PROPOSED HYDRANT
	- PROPOSED WATER VALVE
	- PROPOSED STORM SEWER
	- PROPOSED STORM MANHOLE
	- PROPOSED STORM INLET
	- PROPOSED STORM END SECTION

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WISCONSIN
Professional Engineer
Matthew Paul
E-4433
NAS 020

TRIO
CIVIL ENGINEERING

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PROJECT:
LIVING WORD LUTHERAN CHURCH

CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SJSSEX LANE
WAUKESHA, WI 53188

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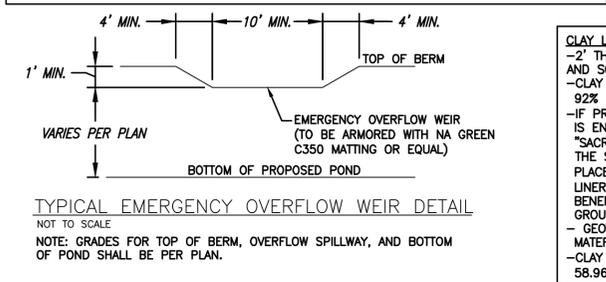
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15025

DESCRIPTION:
PROPOSED GRADING PLAN

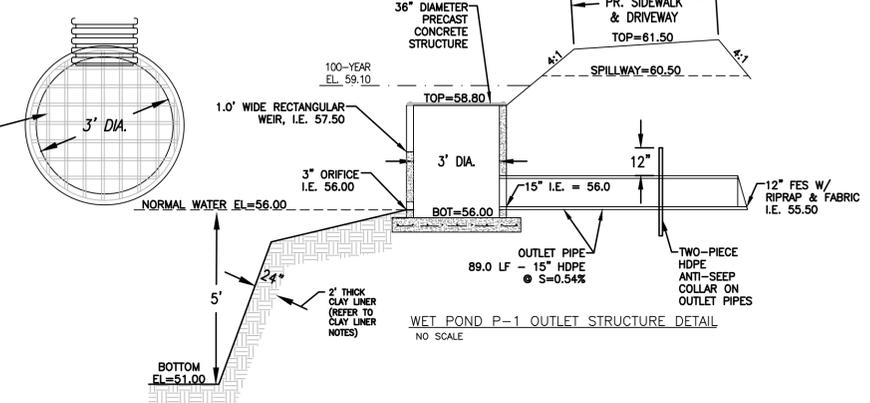
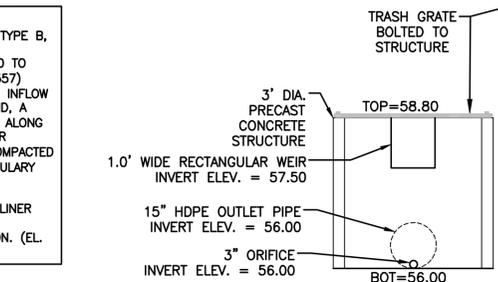
SHEET

C1.3

POND NOTE:
THE PROPOSED STORM WATER MANAGEMENT & POND DESIGN INCLUDED WITH IN THIS PLAN SET HAS BEEN DESIGNED FOR THE PROPOSED DEVELOPMENT SITE ONLY. FUTURE EXPANSION OR DEVELOPMENT WITH IN THE SITE, EXCLUDING THE FUTURE DRIVEWAY CONNECTION AND PRAYER GARDEN, WILL NEED TO INVOLVE THE MODIFICATION OF THE POND AND/OR OVERALL STORM WATER MANAGEMENT SYSTEM TO ENSURE PROPER STORM WATER MANAGEMENT IS ACHIEVED.



NOTE:
THE CONTRACTOR SHALL NOTIFY THE CITY IN THE EVENT OF ANY DRAIN TILE BEING UNCOVERED DURING CONSTRUCTION. THE CITY MAY REQUIRE ANY DISTURBED DRAIN TILE TO BE RESTORED AND CONNECTED TO OTHER DRAINAGE SYSTEMS. NO DISCHARGE OF GROUNDWATER FROM TILE LINES, SUMP PUMPS OR OTHER MEANS SHALL BE ALLOWED ONTO ANOTHER PERSONS LAND OR ANY PUBLIC SPACE WITHOUT THE WRITTEN APPROVAL OF THE OWNER OR UNIT OF GOVERNMENT.



LEGEND:

- 905 --- EXISTING CONTOUR
- PROPOSED CONTOUR
- P812.80 --- PROPOSED SPOT ELEVATION
- PROPOSED FLOW ARROW
- PROPOSED YARD GRADE
- FG 900.0 --- PROPOSED EXPOSURE GRADE
- EXP 895.0 --- PROPOSED EXPOSURE GRADE

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PROJECT:
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CITY OF WAUKESHA, WISCONSIN
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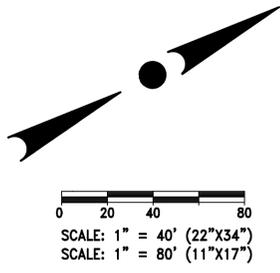
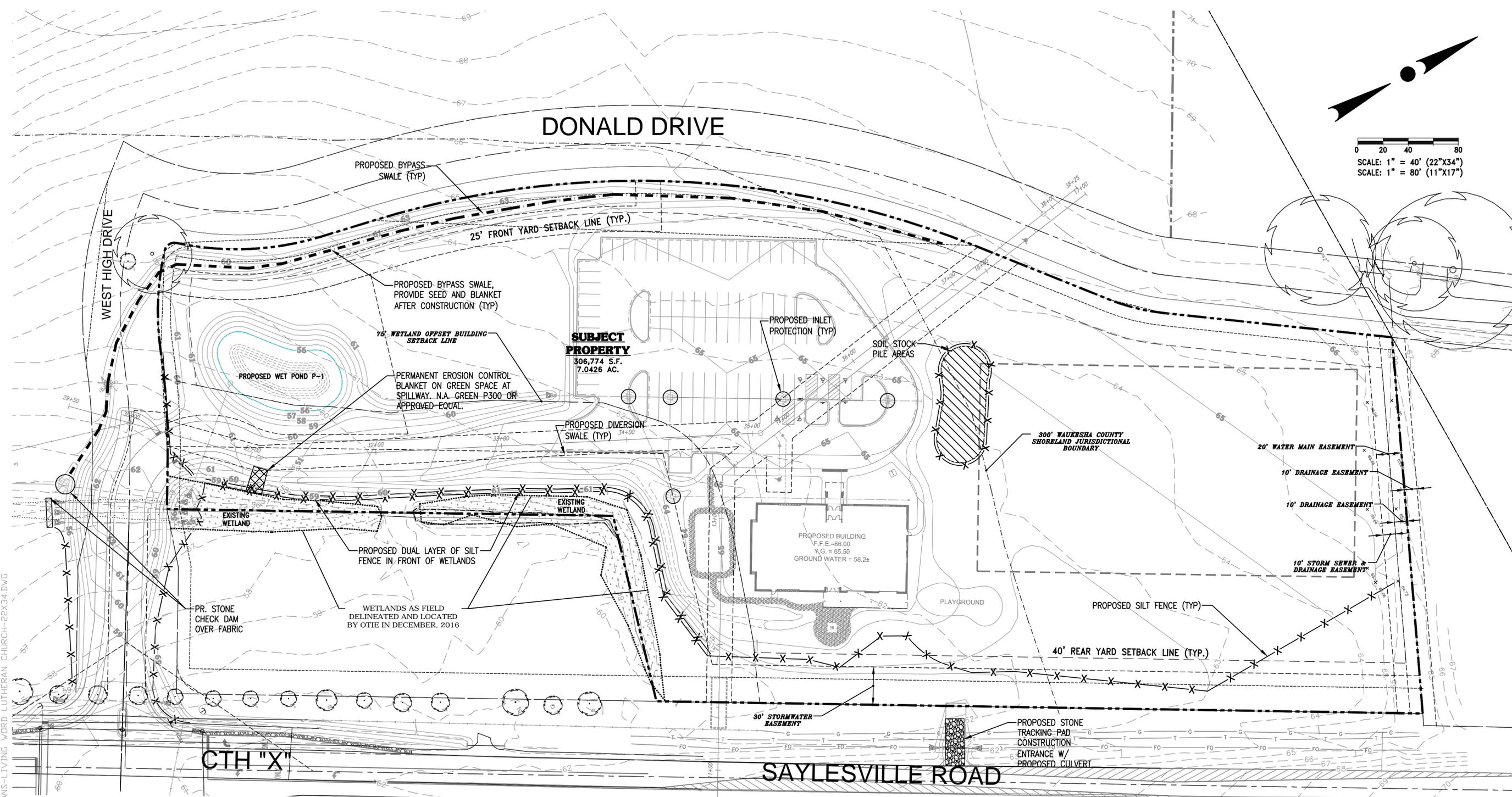
DATE:
JUNE 26, 2019

JOB NUMBER:
15025

DESCRIPTION:
PROPOSED
EROSION CONTROL
PLAN

SHEET

C1.4



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NOTE:
ROADWAY AND UTILITIES SHOWN BEYOND THE SUBJECT PROPERTY ARE PROPOSED IMPROVEMENTS FOR THE SIEPMANN MONARCH OVERLOOK SUBDIVISION. (CURRENTLY UNDER REVIEW WITH CITY)

EROSION SLOPE MATTING NOTE:
ALL SLOPES 25% OR STEEPER SHALL BE MATTED WITH A CLASS A TYPE I EROSION MAT PER WDNR TECH STANDARD 1052

WISCONSIN DEPARTMENT OF NATURAL RESOURCES, CONSERVATION PRACTICE STANDARD:
1052 - NON-CHANNEL EROSION MAT
1055 - SEDIMENT BALE BARRIER (NON-CHANNEL)
1056 - SILT FENCE
1057 - STONE TRACKING PAD AND TIRE WASHING
1058 - MULCHING FOR CONSTRUCTION SITES
1059 - TEMPORARY SEEDING
1060 - STORM DRAIN INLET PROTECTION FOR CONST. SITES
1061 - DEWATERING
1062 - DITCH CHECK
1066 - TEMPORARY DIVERSION BERM
1050 - LAND APPLICATION OF ANIONIC POLYACRYLAMIDE
1064 - SEDIMENT BASIN

LEGEND:

	817 - EXISTING CONTOUR
	817 - PROPOSED CONTOUR
	PROPOSED SILT FENCE
	PROPOSED INLET PROTECTION
	PROPOSED SILT SOCK
	PROPOSED TRACKING PAD



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- CONSTRUCTION SEQUENCE PLAN**
- INSTALL SILT FENCE (OR SILT SOCK), AS SHOWN ON PLANS, TRACKING PAD AT ENTRANCE AND ALL INLET PROTECTION PRIOR TO LAND DISTURBING ACTIVITIES.
 - GRADE BYPASS SWALES PER PLAN. PROVIDE SEED AND BLANKET TEMPORARY STABILIZATION.
 - GRADE POND FOR USE AS TEMPORARY SEDIMENT TRAP. PROVIDE STONE WEEPER OUTLET PER WDNR TECHNICAL SPECIFICATIONS.
 - ROUGH GRADE SITE; TEMPORARY SEED AND STABILIZE AREAS PLANNED TO BE LEFT UNDISTURBED FOR >7 DAYS.
 - NOTE THAT WDNR LATE SEASON STABILIZATION MEASURES WILL BE REQUIRED FOR WORK OCCURRING AFTER OCTOBER 15-SPRING.
 - CONSTRUCT BUILDINGS
 - BUILDING CONSTRUCTION MAY BEGIN CONCURRENT WITH STEP 2 BUT AFTER THE EXISTING STRUCTURES HAVE BEEN RAZED.
 - INSTALL SANITARY SEWER & WATER SERVICE LATERALS. PLUMBER SHALL OBTAIN ALL REQUIRED PERMITS FROM CITY AND STATE AND SHALL FOLLOW ALL PERMIT PROVISIONS.
 - INSTALL STORM SEWER PIPING; PLUMBER SHALL SECURE ANY CITY PERMITS THAT MAY BE REQUIRED AND SHALL FOLLOW STATE DSPS COMM 382 PERMIT REQUIREMENTS FOR INSTALLATION.
 - INSTALL NEW GAS/ELECTRIC/TELEPHONE UTILITIES PER PLANS BY OTHERS.
 - FINISH GRADE SITE AND INSTALL PROPOSED PAVEMENT AND DRIVEWAY APPROACH.
 - REMOVE ALL SEDIMENT ACCUMULATION FROM TEMPORARY SEDIMENT TRAP AND GRADE POND TO PROPOSED GRADES. INSTALL PROPOSED OUTLET STRUCTURE AND PIPE.
 - SPREAD TOPSOIL, SEED, MULCH AND STABILIZE DISTURBED AND PROPOSED OPEN SPACE AREAS AS NOTED ON PLAN AND PER WDNR AND CITY REQUIREMENTS. TO BE COMPLETED AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINAL GRADING.
 - INSTALL LANDSCAPING PER PLAN.
 - REMOVE ANY REMAINING SILT FENCE AND CONSTRUCTION FENCE, ONCE SITE HAS OBTAINED 70% STABILIZATION.
- NOTE THAT CONSTRUCTION MANAGER MAY MODIFY THIS SEQUENCE PLAN TO BEST SUIT THE NEEDS OF THE PROJECT.

- EROSION CONTROL NOTES:**
- THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MINIMIZE EROSION, WATER POLLUTION AND SILTATION CAUSED BY CONSTRUCTION OF THIS PROJECT. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
 - EROSION CONTROL PLAN: PRIOR TO BEGINNING WORK, THE CONTRACTOR MAY BE REQUIRED TO SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN, DETAILING SPECIFIC MEASURES THAT WILL BE USED IN THE VARIOUS STAGES OF CONSTRUCTION FOR APPROVAL BY THE ENGINEER.
 - IMPLEMENTATION: THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL AFTER INITIAL EROSION AND SEDIMENT CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
 - EROSION CONTROL MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
 - DIVERT UPSTREAM RUNOFF FROM FLOWING THROUGH THE CONSTRUCTION SITE.
 - PROTECT DOWNSTREAM OR ADJACENT WATERWAYS AND WETLANDS WITH SILT FENCE.
 - DELAY STRIPPING TOPSOIL UNTIL REQUIRED FOR CONSTRUCTION.
 - PLACE SILT SOCKS/STRAW WATTLES OR EROSION CONTROL BALES IN DITCHES AND OTHER DRAINAGE WAYS TO COLLECT SEDIMENT AND TO SLOW THE VELOCITY OF RUNOFF.
 - MAINTAIN EXISTING SEDIMENT BASIN AS DICTATED BY SITE CONDITIONS.
 - PROTECT STORM SEWER INLETS AND THE UPSTREAM END OF CULVERTS WITH SILT FENCE OR EROSION CONTROL BALES.
 - PROMPT REMOVAL OF EXCAVATED MATERIAL.
 - PROPER STORAGE OF BACKFILL AND BEDDING MATERIALS INCLUDING PLACING SILT FENCE OR EROSION CONTROL BALES ON THE DOWNSLOPE SIDES OF SPOIL PILES.
 - CONSTRUCTION OF TRACKING PAD TO CONSTRUCTION SITE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO ROADWAYS.
 - PROMPT (SAME DAY) CLEANUP OF MATERIAL TRACKED ONTO ADJACENT STREETS.
 - TIMELY RESTORATION OF DAMAGE SURFACE AREAS.
 - ALL AREAS THAT WILL REMAIN DISTURBED AFTER OCTOBER 15, MUST BE TEMPORARY SEED AS OF THAT DATE.

- TEMPORARY EROSION CONTROL MEASURES.
 - THE CONTRACTOR SHALL CONSTRUCT TEMPORARY EROSION CONTROL MEASURES, WHERE EROSION IS LIKELY TO BE A PROBLEM, PRIOR TO BEGINNING WORK ON THOSE SECTION(S) OF THE PROJECT. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL AFTER PERMANENT EROSION CONTROL, SUCH AS SEEDING OR SOODOING, HAS BEEN ESTABLISHED.
 - IN THE EVENT THE PERMANENT EROSION CONTROL MEASURES ARE NOT FULLY IMPLEMENTED IN CURRENT CONSTRUCTION SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL AFTER PERMANENT MEASURES HAVE BEEN COMPLETED IN THE FOLLOWING YEAR.
- ALL DISTURBANCE AREAS THAT REMAIN INACTIVE FOR SEVEN DAYS OR LONGER SHALL RECEIVE TEMPORARY SEEDING.
- TRENCH DEWATERING SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS.
- INSTALL SILT FENCE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DETAILS
- ALL RIP RAP AT PIPE OUTLETS SHALL BE 3"x5" MEDIUM RIP RAP OVER TYPE R FABRIC PER WDOT SPECIFICATIONS UNLESS OTHERWISE DESIGNATED.
- EROSION CONTROL INSPECTION AND MAINTENANCE
 - INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER SITE RECEIVES 0.5" OF RAIN IN A 24-HOUR PERIOD DURING CONSTRUCTION.
 - REPAIR OR REPLACE EROSION CONTROLS THAT ARE DAMAGED OR FAILING.
- ALL AREAS TO BE SEEDED AND MULCHED SHALL USE WDOT SEED MIXTURE NO. 20. MULCH SHALL APPLIED PER WDOT SPECIFICATIONS USING METHOD B FOR PLACEMENT.



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BROOKFIELD, WI 53005
PHONE: (262) 790-1480
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EMAIL: jpadelco@trioeng.com

PROJECT:
LIVING WORD LUTHERAN CHURCH

CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SJSSEX LANE
WAUKESHA, WI 53188

REVISION HISTORY	
DATE	DESCRIPTION
06/26/2019	per CITY COMMENTS
06/18/2019	per COUNTY SUBMITTAL
06/04/2019	SITE PLAN REV.
08/28/2018	DSPS SUBMITTAL
08/06/2018	INITIAL SUBMITTAL

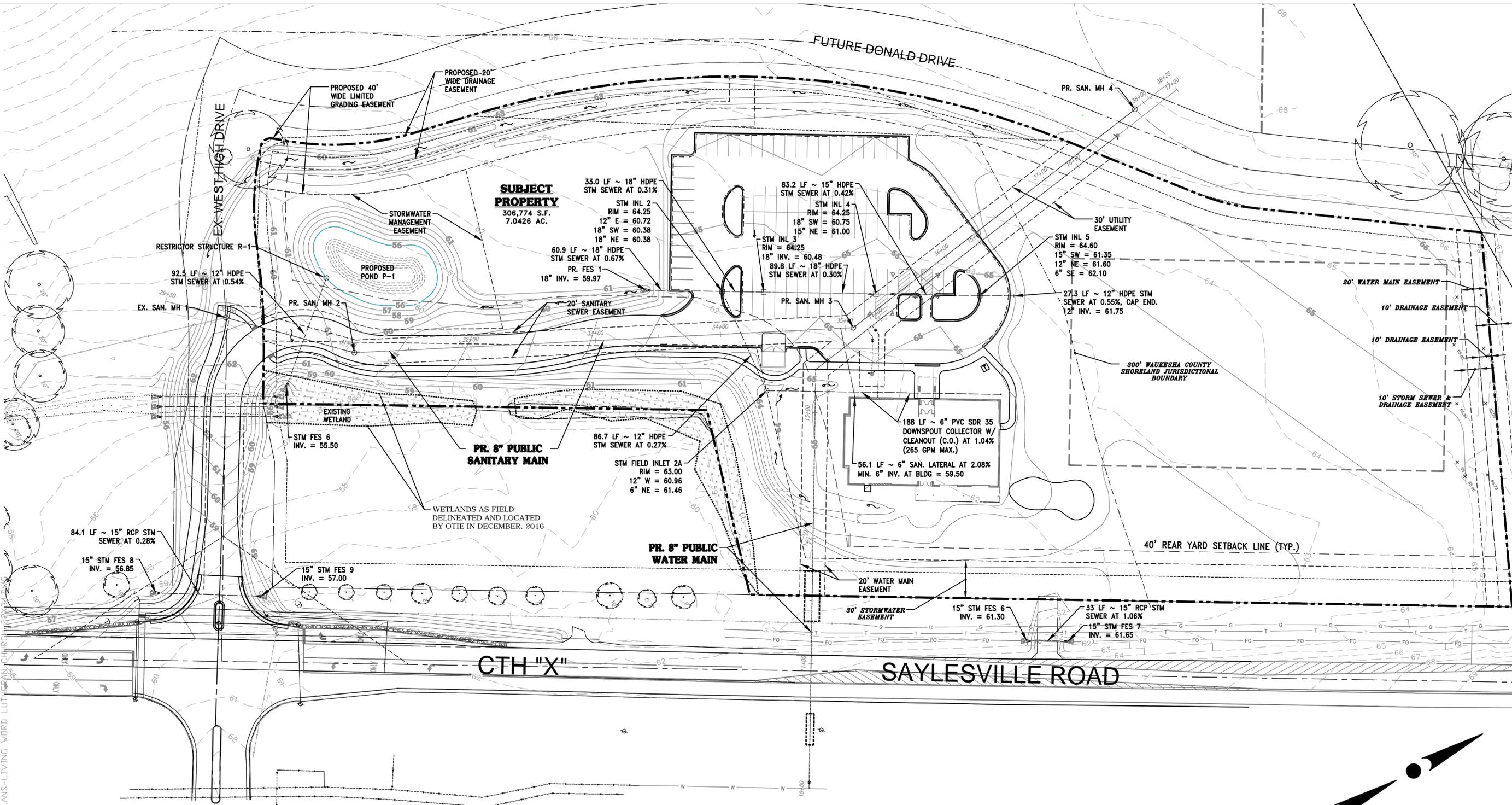
DATE:
JUNE 26, 2019

JOB NUMBER:
15025

DESCRIPTION:
PROPOSED UTILITY PLAN

SHEET

C1.5



UTILITY NOTE:
EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATION OF EXISTING UTILITIES IN CLOSE PROXIMITY TO PROPOSED UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION OF PROPOSED UTILITY. IF CONFLICTS ARE ENCOUNTERED, CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER PRIOR TO INSTALLING PROPOSED UTILITIES.

SANITARY SEWER
• ALL PVC SEWER PIPE SHALL MEET THE REQUIREMENTS SET FORTH IN SECTION 8.10.0 (SSSWCW).
• ALL SANITARY SEWER LATERALS (OUTSIDE OF BUILDINGS) SHALL BE MADE OF GASKETED PVC FITTINGS MEETING ASTM D-3034, SDR 35.
• TRACER WIRE IS REQUIRED FOR ALL SANITARY SEWER LATERALS.

TRACER WIRE NOTE
• CONTRACTOR SHALL INSTALL PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE) PER SPS 382.30(1)(H). PLASTIC WIRE MAY BE TAPED TO PLASTIC DRAIN PIPE. IF ATTACHED, THE TRACER SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET.

WATER MAIN NOTES
WATERMAIN
• ALL 8" WATERMAIN CONSTRUCTED AS PART OF THIS PLAN THAT FALLS WITHIN THE LISBON RD. R.O.W. AND/OR EASEMENTS SHALL BE DUCTILE IRON.
• ALL PVC WATERMAIN CONSTRUCTED AS PART OF THIS PLAN SHALL BE PVC, C-900, CLASS 150 (DR18), UNLESS OTHERWISE NOTED. PVC PIPE SHALL HAVE PUSH-ON JOINTS WITH RUBBER GASKET.
• HYDRANTS SHALL BE SET AT 2 FT. BEHIND THE BACK OF CURB, WITH THE NOZZLE ELEVATION 20 INCHES ABOVE TOP OF CURB.
• ALL VALVES SHALL BE LOCATED 3 FT. FROM FITTINGS.
• ALL WATERMANS (AND SERVICES) CALLED FOR ON THESE PLANS ARE TO BE INSTALLED WITH CLASS "B" BEDDING AS SPECIFIED IN CH. 4.3.0, LAYING OF WATERMAIN, AND FILE NO. 36, PART VII (SSSWCW). ALL WATERMAIN INSTALLED WITHIN THE VILLAGE OF UNION GROVE RIGHT OF WAY SHALL BE BEDDED IN SAND.
TRACER WIRE NOTE
• CONTRACTOR SHALL INSTALL PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE) PER COMM 82.30(1)(H). PLASTIC WIRE MAY BE TAPED TO PLASTIC PIPE. IF ATTACHED, THE TRACER SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET.

STORM SEWER
• UNLESS OTHERWISE NOTED, HDPE STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE SMOOTH-WALL INTERIOR CORRUGATED PIPE & SHALL BE AS MANUFACTURED BY ADS OR EQUAL, WITH WATER TIGHT JOINTS, HAVING A MANNING "N" VALUE OF 0.010, OR EQUAL.
• ALL PVC STORM SEWER PIPE SHALL BE ASTM D-3034, SDR 35. SCHEDULE 40 PIPE SHALL BE INSTALLED FOR ALL PIPE WITHIN THE PROPOSED BUILDING FOOTPRINT, PER MANUFACTURER SPECIFICATIONS.
• ALL STORM SEWER WITHIN THE RIGHT OF WAY SHALL BE R.C.P. MEETING SECTION 8.6.0 (SSSWCW) AND BE RUBBER GASKETED MEETING THE REQUIREMENTS SET FORTH IN WSWW CHAPTER 6.0.
• RCP PIPE CLASSES:
12" DIA. RCP STORM SEWER SHALL BE CL-V
15" DIA. RCP STORM SEWER SHALL BE CL-IV
18" & ABOVE DIA. RCP STORM SEWER SHALL BE CL-III
• STORM MANHOLES SHALL BE MIN. 48" DIAMETER PRECAST CONCRETE FOR STORM MAINS OF 24" DIAMETER OR SMALLER WITH NEENAH R-1861 FRAME & VENTED LID.
• STORM INLETS IN VERTICAL FACE CURB SHALL USE FRAMES & GRATES AS SPECIFIED ON PLANS AND/OR ON DETAILS.
• CONNECT TO BUILDING STORM SEWER CONVEYANCE PIPING PER SPS 382 SPECIFICATIONS AND REQUIREMENTS.
TRACER WIRE NOTE
• CONTRACTOR SHALL INSTALL PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE) PER COMM 82.30(1)(H). PLASTIC WIRE MAY BE TAPED TO PLASTIC PIPE. IF ATTACHED, THE TRACER SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET.

0 20 40 80
SCALE: 1" = 40' (22"x34")
SCALE: 1" = 80' (11"x17")

LEGEND:

- - - - - 905 - - - - - EXISTING CONTOUR
- - - - - SAN - - - - - EXISTING SANITARY SEWER
- - - - - W - - - - - EXISTING WATER MAIN
- - - - - ST - - - - - EXISTING STORM SEWER
- - - - - - - - - - - PROPOSED SANITARY SEWER
- - - - - - PROPOSED SANITARY MANHOLE
- - - - - - - - - - - PROPOSED WATER MAIN
- ⊕ - - - - - PROPOSED HYDRANT
- ⊙ - - - - - PROPOSED WATER VALVE
- - - - - - - - - - - PROPOSED STORM SEWER
- - - - - - PROPOSED STORM MANHOLE
- - - - - - PROPOSED STORM INLET
- ⊠ - - - - - PROPOSED STORM END SECTION

H:\C900\990\15025-01\CONSTRUCTION PLANS\CIVIL PLANS\LIVING WORD LUTHERAN CHURCH\DWG



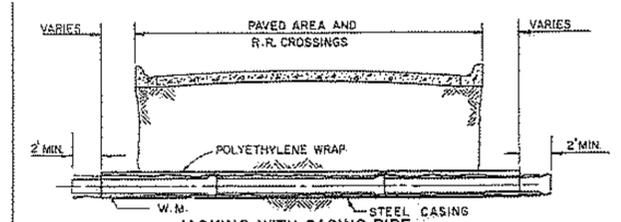
12660 W. NORTH AVE, BLDG D
BROOKFIELD, WI 53005
PHONE: (262) 790-1480
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SCALE: 1" = 40' (22"x34")
SCALE: 1" = 80' (11"x17")

CASING PIPE NOTES:
18" DIAMETER CASING PIPE IS TO BE STEEL MEETING THE SPECIFICATIONS OF ASTM A139 GRADE B AND CONSTRUCTED PER STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN.

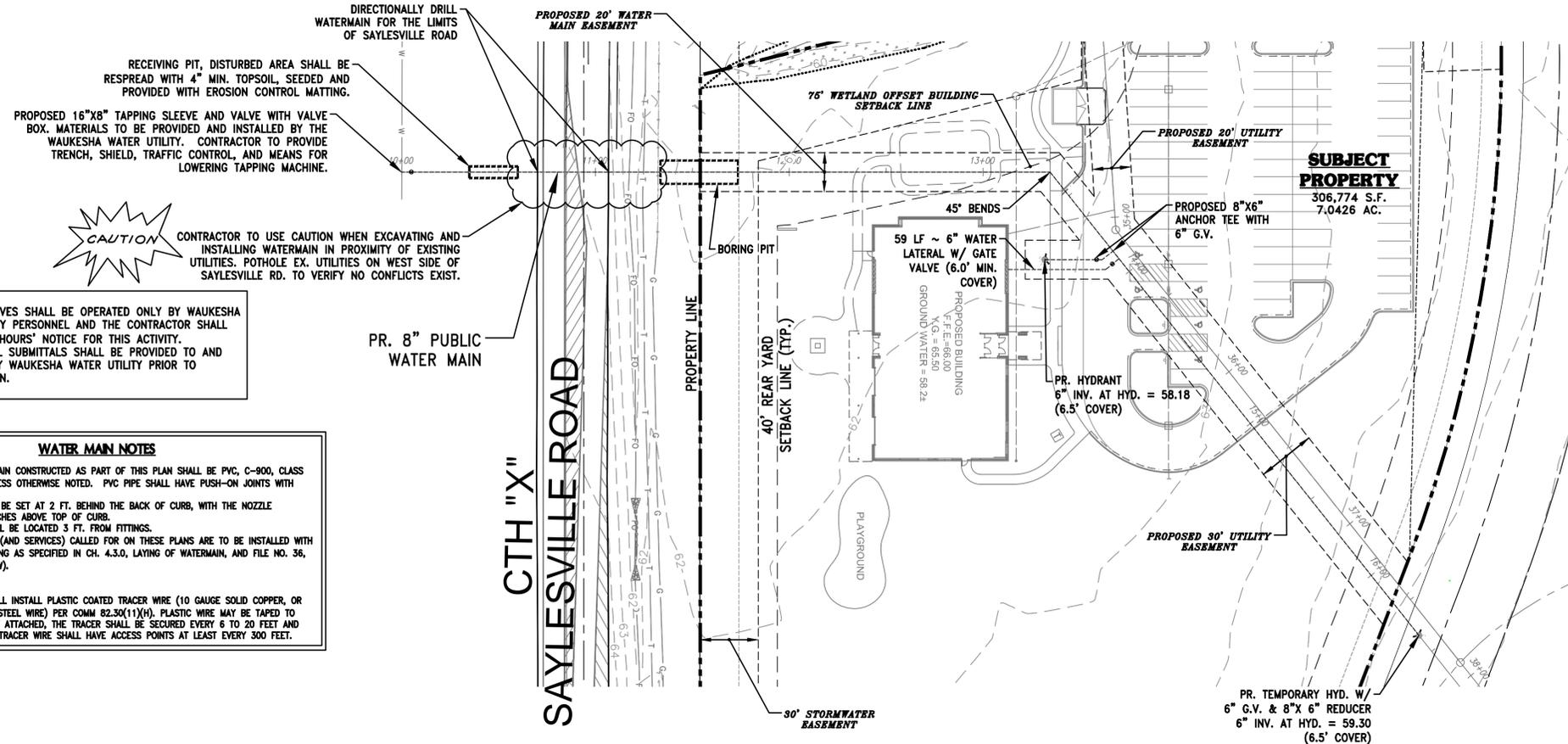
CASING PIPE SHALL CONTAIN SPACERS TO HOLD WATER MAIN PIPE CENTERED AND CLEAR OF CASING PIPE.

18" CASING PIPE IS TO HAVE SEAL & GROUT AT END OF CASING TO PROVIDE WATER TIGHT SEAL AROUND WATER MAIN (TYP.)



| STEEL CASING PIPE | | | |
|---|-----------------------|------------------|---|
| ASTM A-53 GRADE B 35,000 PSI MIN. YIELD | | | |
| SIZE | CASING W.M. MIN. WALL | CASING MIN. DIA. | NOTE |
| 8" | 0.312 | 18" | 12" THICK CONC. OR BRICK BULKHEADS REQUIRED (2) ONLY IN R.R. R.O.W.S UNLESS OTHERWISE NOTED ON THE PLAN |
| 12" | 0.406 | 24" | |
| 18" | 0.469 | 30" | |
| 24" | 0.563 | 42" | |

REF: CHAP. 4.3.3.D
BORING OR JACKING WITH CASING PIPE
NOT TO SCALE
MARCH 1980
FILE NO. 49



NOTE:
- EXISTING VALVES SHALL BE OPERATED ONLY BY WAUKESHA WATER UTILITY PERSONNEL AND THE CONTRACTOR SHALL PROVIDE 24 HOURS' NOTICE FOR THIS ACTIVITY.
- ALL MATERIAL SUBMITTALS SHALL BE PROVIDED TO AND APPROVED BY WAUKESHA WATER UTILITY PRIOR TO CONSTRUCTION.

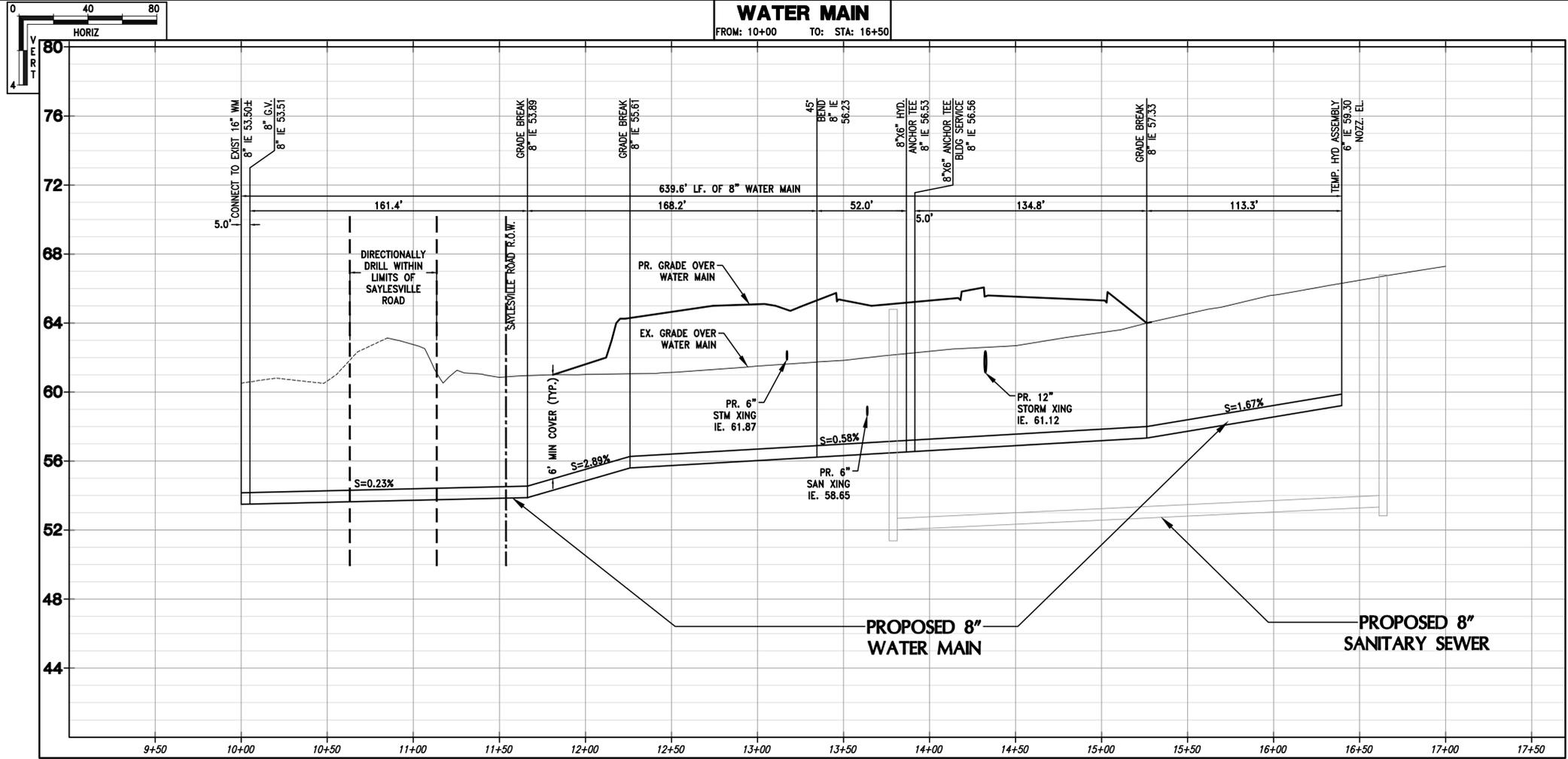
WATER MAIN NOTES
WATERMAIN
• ALL PVC WATERMAIN CONSTRUCTED AS PART OF THIS PLAN SHALL BE PVC, C-900, CLASS 150 (DR18), UNLESS OTHERWISE NOTED. PVC PIPE SHALL HAVE PUSH-ON JOINTS WITH RUBBER GASKET.
• HYDRANTS SHALL BE SET AT 2 FT. BEHIND THE BACK OF CURB, WITH THE NOZZLE ELEVATION 20 INCHES ABOVE TOP OF CURB.
• ALL VALVES SHALL BE LOCATED 3 FT. FROM FITTINGS.
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TRACER WIRE NOTE
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CONTRACTOR TO USE CAUTION WHEN EXCAVATING AND INSTALLING WATERMAIN IN PROXIMITY OF EXISTING UTILITIES. POT HOLE EX. UTILITIES ON WEST SIDE OF SAYLESVILLE RD. TO VERIFY NO CONFLICTS EXIST.

WATER MAIN

FROM: 10+00 TO: STA: 16+50



LEGEND:

- - - - - 905 - - EXISTING CONTOUR
- - - - - SAN - - EXISTING SANITARY SEWER
- - - - - W - - EXISTING WATER MAIN
- - - - - ST - - EXISTING STORM SEWER
- - - - - - - - PROPOSED SANITARY SEWER
- - - - - PROPOSED SANITARY MANHOLE
- - - - - PROPOSED WATER MAIN
- ⊙ - - - - PROPOSED HYDRANT
- ⊙ - - - - PROPOSED WATER VALVE
- - - - - PROPOSED STORM SEWER
- - - - - PROPOSED STORM MANHOLE
- - - - - PROPOSED STORM INLET
- △ - - - - PROPOSED STORM END SECTION



CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.
CALL DIGGERS HOTLINE 1-800-242-8611

NOTE:
EXISTING UNDERGROUND UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS. THE ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN LOCATION OF UTILITIES IN THE FIELD AND LOCATIONS SHOWN ON THE PLANS.

PROJECT:
LIVING WORD LUTHERAN CHURCH

CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SUSSEX LANE
WAUKESHA, WI 53188

REVISION HISTORY

| DATE | DESCRIPTION |
|------------|----------------------|
| 08/28/2019 | per CITY COMMENTS |
| 08/18/2019 | per COUNTY SUBMITTAL |
| 08/04/2019 | SITE PLAN REV. |
| 08/28/2018 | DSPS SUBMITTAL |
| 08/06/2018 | INITIAL SUBMITTAL |

DATE:
JUNE 26, 2019

JOB NUMBER:
15025

DESCRIPTION:
PROPOSED WATER MAIN PLAN AND PROFILE

SHEET

C1.6

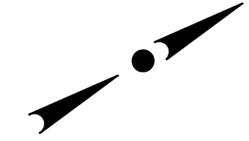
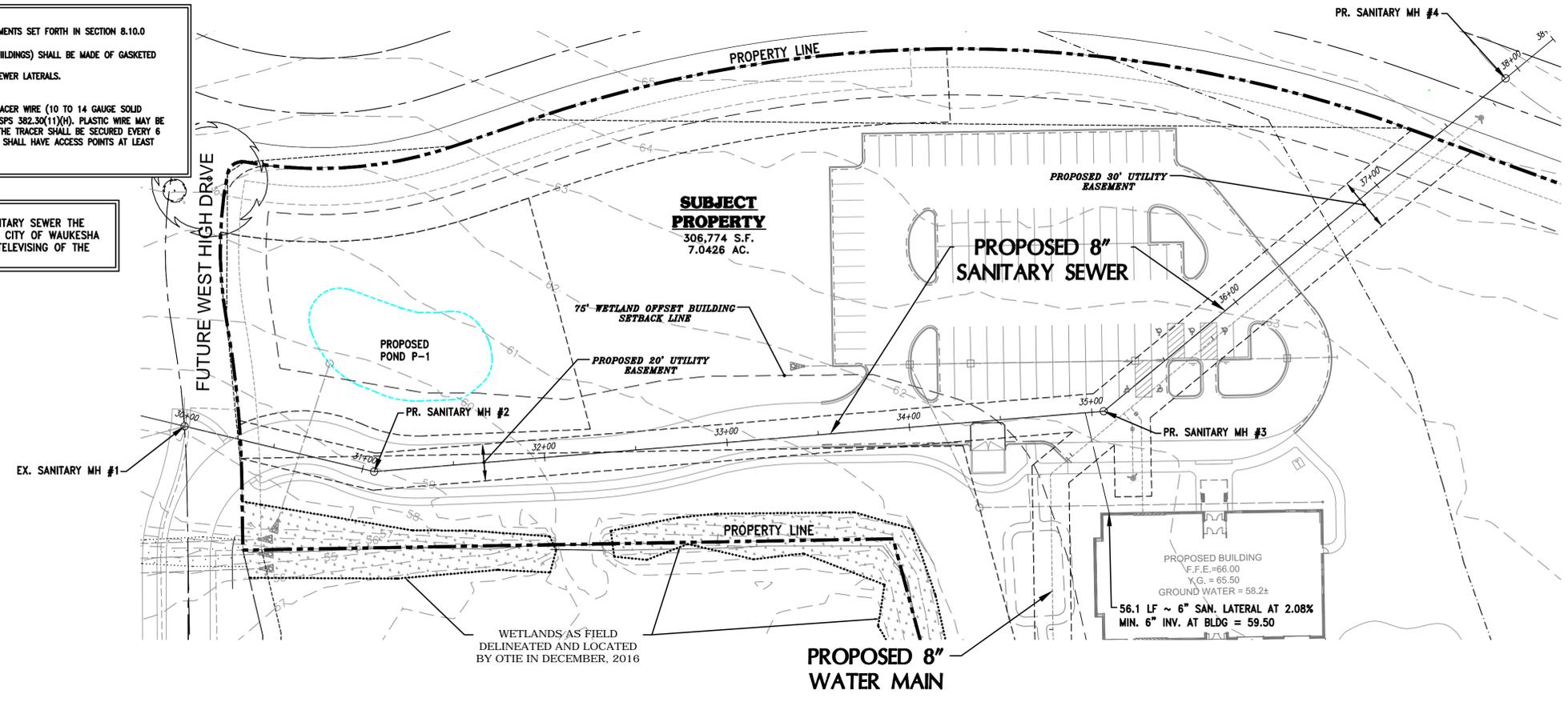
SANITARY SEWER

- ALL PVC SEWER PIPE SHALL MEET THE REQUIREMENTS SET FORTH IN SECTION 8.10.0 (SSSW).
- ALL SANITARY SEWER LATERALS (OUTSIDE OF BUILDINGS) SHALL BE MADE OF GASKETED PVC FITTINGS MEETING ASTM D-3034, SDR 35.
- TRACER WIRE IS REQUIRED FOR ALL SANITARY SEWER LATERALS.

TRACER WIRE NOTE

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NOTE:
UPON COMPLETION OF THE PROPOSED SANITARY SEWER THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS FOR THE TELEVISIONING OF THE SEWER, FOR THEIR APPROVAL.



0 20 40 80
SCALE: 1" = 40' (22"x34")
SCALE: 1" = 80' (11"x17")

LEGEND:

| | |
|-----|----------------------------|
| --- | EXISTING CONTOUR |
| SAN | EXISTING SANITARY SEWER |
| W | EXISTING WATER MAIN |
| ST | EXISTING STORM SEWER |
| --- | PROPOSED SANITARY SEWER |
| ○ | PROPOSED SANITARY MANHOLE |
| --- | PROPOSED WATER MAIN |
| ⊕ | PROPOSED HYDRANT |
| ⊕ | PROPOSED WATER VALVE |
| --- | PROPOSED STORM SEWER |
| ○ | PROPOSED STORM MANHOLE |
| ⊕ | PROPOSED STORM INLET |
| --- | PROPOSED STORM END SECTION |

NOTE:
ROADWAY AND UTILITIES SHOWN BEYOND THE SUBJECT PROPERTY ARE PROPOSED IMPROVEMENTS FOR THE SIEPMANN MONARCH OVERLOOK SUBDIVISION. (CURRENTLY UNDER REVIEW WITH CITY)

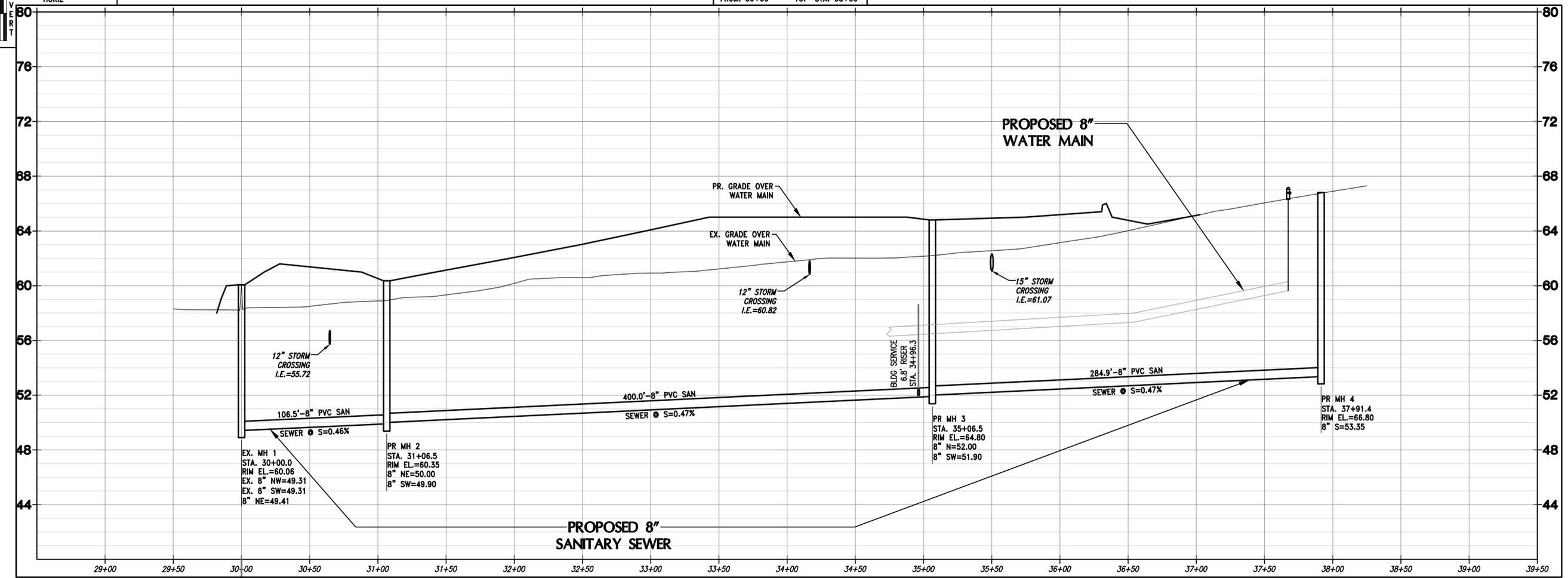


CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.
CALL DIGGERS HOTLINE 1-800-242-8511

NOTE:
EXISTING UNDERGROUND UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS. THE ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN LOCATION OF UTILITIES IN THE FIELD AND LOCATIONS SHOWN ON THE PLANS.

0 40 80
HORIZ
4 80
VERT

SANITARY SEWER
FROM: 30+00 TO: STA: 38+00



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PHONE: (262) 790-1480
FAX: (262) 790-1481
EMAIL: jpadelko@trioeng.com

PROJECT:
LIVING WORD LUTHERAN CHURCH

CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SJSSEX LANE
WAUKESHA, WI 53188

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DATE:
JUNE 26, 2019

JOB NUMBER:
15025

DESCRIPTION:
PROPOSED
SANITARY PLAN
AND PROFILE

SHEET

C1.7

H:\C9000\990\15025-01\CONSTRUCTION PLANS\CIVIL PLANS-LIVING WORD LUTHERAN CHURCH-22X34.DWG

COMPLIANT DOCUMENTATION:

THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED.

- STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION (SSSWCW)
- THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
- WDMR STORMWATER RUNOFF TECHNICAL STANDARDS.
- WISDOT PAL APPROVED EROSION CONTROL MEASURES LIST, LATEST EDITION.
- CITY OF WAUKESHA MUNICIPAL CODE, LATEST EDITION.
- CITY OF WAUKESHA STANDARDS AND SPECIFICATIONS.

CONTRACTOR RESPONSIBILITY:

-EXISTING UNDERGROUND UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD SURVEY. THE ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN LOCATION OF UTILITIES IN THE FIELD AND LOCATIONS SHOWN ON THE PLANS.

-THE LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS.

-THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR(S) TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS WORK. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR ALL REQUIRED PERMITS, UNLESS OTHERWISE SPECIFIED.

-THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AS CONSTRUCTION ACTIVITIES ARE COMPLETED TO PROVIDE CONSTRUCTION OVERSIGHT AND INSPECTION IN ACCORDANCE WITH THE CONSTRUCTION INSPECTION PLAN.

-THE OWNER WILL PROVIDE ALL SURVEYING AND CONSTRUCTION STAKING FOR THIS CONTRACT. THE CONTRACTOR SHALL EXERCISE CARE AND DILIGENCE IN PROTECTING THE SAME. ANY EXPENSE INCURRED FOR ADDITIONAL RESTAKING CAUSED BY CONTRACTOR'S NEGLIGENCE MAY BE CHARGED TO THE CONTRACTOR AND DEDUCTED FROM THE SUMS DUE HIM UNDER THIS CONTRACT.

-ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.

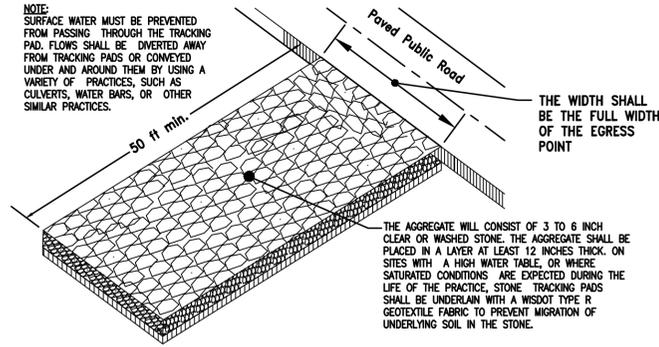
-CONTRACTOR SHALL BE PREPARED FOR DEWATERING CONDITIONS BY HAVING APPROPRIATE PUMPS AND FILTER BAGS ONSITE FOR DEWATERING AND REMOVAL OF ALL SEDIMENT PER CITY, COUNTY AND WDMR REQUIREMENTS PER TECHNICAL STANDARD 1061.

TRAFFIC CONTROL:

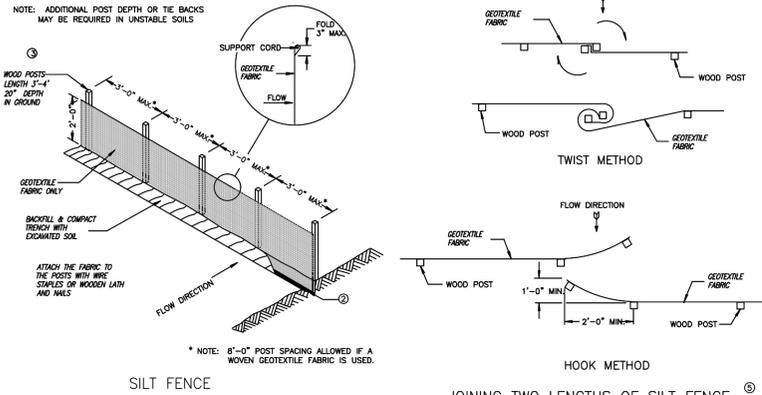
-PUBLIC ROADS SHALL NOT BE FULLY CLOSED TO TRAFFIC AT ANY TIME. ALL INGRESS AND EGRESS TRAFFIC TO THE PROJECT SHALL BE LIMITED TO THE GRAVEL ENTRANCE TO THE PROPERTY.

CONSTRUCTION NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, STATE OF WISCONSIN, LATEST EDITION, UNLESS OTHERWISE CALLED FOR ON THE PLANS, SPECIFICATIONS OR SPECIAL PROVISIONS.
- ALL EROSION CONTROL MEASURES SPECIFIED ON THIS PLAN SHALL MEET THE DESIGN CRITERIA, STANDARDS AND SPECIFICATIONS AS SET FORTH IN THE DEPARTMENT OF NATURAL RESOURCES WISCONSIN BEST MANAGEMENT PRACTICE HANDBOOK AND TECHNICAL STANDARDS.
- ALL EROSION CONTROL DEVICES (I.E., SILT FENCE, SILT SOCK, GRAVEL ENTRANCE, SILTATION BASIN, ETC.), SHALL BE INSTALLED PRIOR TO COMMENCING ANY GRADING OR UTILITY CONSTRUCTION. GRADING ASSOCIATED WITH INSTALLATION OF EROSION OR SEDIMENTARY PRACTICES MAY OCCUR CONCURRENTLY WITH INSTALLATION OF PRACTICES.
- ALL ACTIVITIES ON THE SITE SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME. REFER TO THE CONSTRUCTION SEQUENCING PLAN FOR ADDITIONAL INFORMATION.
- THE OWNER IS RESPONSIBLE FOR OBTAINING A GRADING AND/OR EROSION CONTROL PERMIT (OR ANY OTHER APPLICABLE PERMITS) PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE, ALL TOWN UTILITY DEPARTMENTS, AND GOVERNMENT UNITS WHOSE PROPERTY MAY BE AFFECTED BY THE CONTRACTOR'S OPERATIONS AT LEAST THREE (3) DAYS BEFORE BREAKING GROUND. DIGGERS HOTLINE NUMBER IS 1-800-242-9511.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE PROJECT AND PUBLIC ROADWAYS DURING CONSTRUCTION PER THE REQUIREMENTS SET FORTH BY THE LOCAL AND COUNTY AGENCIES. STREETS SHALL BE KEPT FREE OF SILT OR DIRT TRACKED FROM AREAS UNDER CONSTRUCTION BY SWEEPING OR OTHER APPROPRIATE MEASURES. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL BE MINIMIZED BY USE OF WATERING, CALCIUM CHLORIDE SURFACE TREATMENT, CONSTRUCTION SCHEDULING OR OTHER APPROPRIATE METHODS.
- INLETS SHALL BE PROTECTED WITH AN EROSION BARRIER MEETING WDMR TECHNICAL STANDARD 1060 UNTIL THE AREA HAS BEEN STABILIZED. FREQUENT INSPECTION AND TIMELY MAINTENANCE IS REQUIRED.
- UPON COMPLETION OF THE WORK AS SPECIFIED, RESPREAD A MINIMUM OF FOUR (4") INCHES OF SALVAGED TOPSOIL OVER ALL DISTURBED AREAS AND PROVIDE SEED, FERTILIZER AND MULCH PER THE STANDARD SPECIFICATIONS.
- ALL DISTURBED AREAS SHALL BE REVEGATATED WITHIN SEVEN DAYS AFTER BEING DISTURBED USING THE SEED MIX SPECIFIED ON THE PLANS.
- ALL EROSION CONTROL DEVICES SHALL BE ROUTINELY INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN 0.5 INCHES. CONTRACTOR IS REQUIRED TO PERFORM INSPECTIONS, KEEP A LOG, AND REPAIR BMP'S AS NEEDED.
- REFER TO EROSION CONTROL PLAN FOR SITE EROSION CONTROL ELEMENTS, REQUIREMENTS.



CONSTRUCTION ENTRANCE DETAIL
NO SCALE

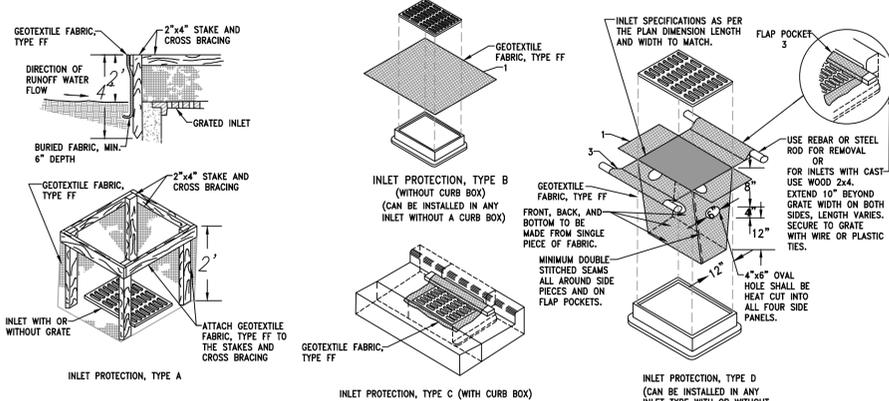


SILT FENCE
JOINING TWO LENGTHS OF SILT FENCE

GENERAL NOTES:

- HORIZONTAL SPACING REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO RIBBY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH DEGRADED SOIL.
- WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/2" X 1 1/2" OF OAK OR HICKORY.
- SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO HARD JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS: A) OVERLAP THE END POSTS AND TWIST, OR REWAVE, AT LEAST 180 DEGREES; B) HOOK THE END OF EACH SILT FENCE LENGTH.

SILT FENCE INSTALLATION DETAIL
NO SCALE



GENERAL NOTES:

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.

- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- 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.
- FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES:

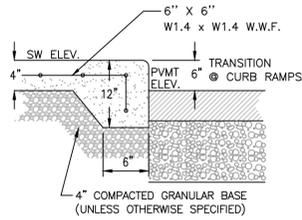
TYPE B & C
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D
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.

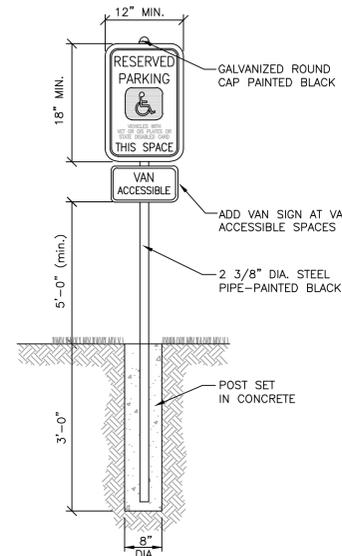
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

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.

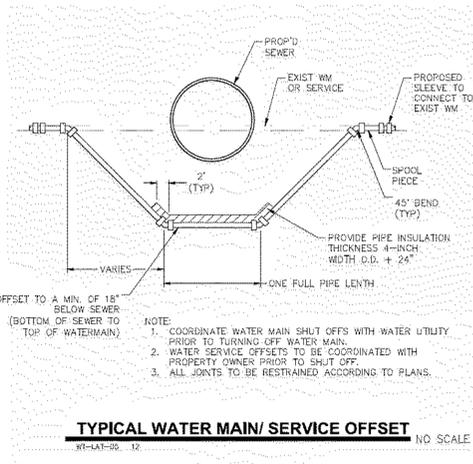
INLET PROTECTION DETAIL
NO SCALE



INTEGRAL SIDEWALK & BARRIER CURB
(WHERE SIDEWALK ADJOINS DRIVEWAYS/PARKING AREAS)
NO SCALE

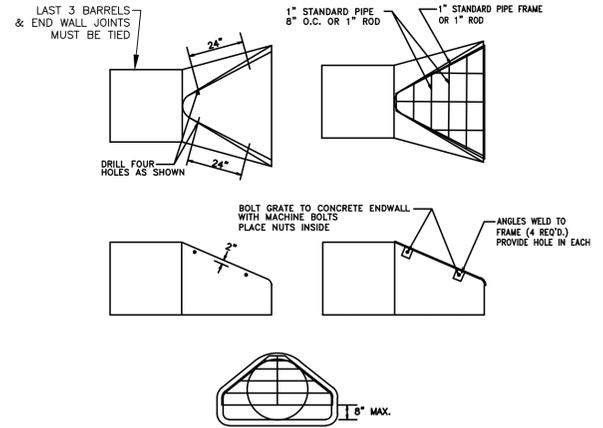


HANDICAP SIGNAGE DETAIL
NO SCALE

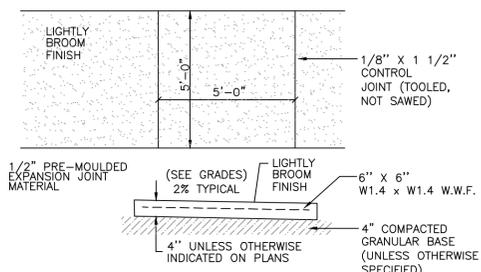


TYPICAL WATER MAIN/ SERVICE OFFSET

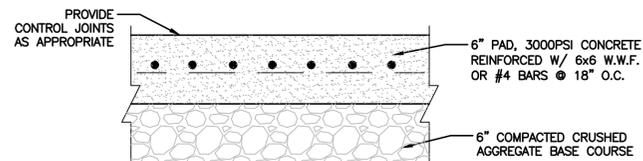
EXHIBIT WM-04



PIPE GRATE DETAIL
NO SCALE



CONCRETE SIDEWALK
NO SCALE



CONCRETE DUMPSTER PAD REQUIREMENT
NO SCALE



PROJECT:
LIVING WORD LUTHERAN CHURCH
CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SJSSEX LANE
WAUKESHA, WI 53188

REVISION HISTORY

| DATE | DESCRIPTION |
|------------|----------------------|
| 06/26/2019 | per CITY COMMENTS |
| 06/19/2019 | per COUNTY SUBMITTAL |
| 06/04/2019 | SITE PLAN REV. |
| 08/28/2018 | DSPS SUBMITTAL |
| 08/06/2018 | NTIAL SUBMITTAL |

DATE:
JUNE 26, 2019

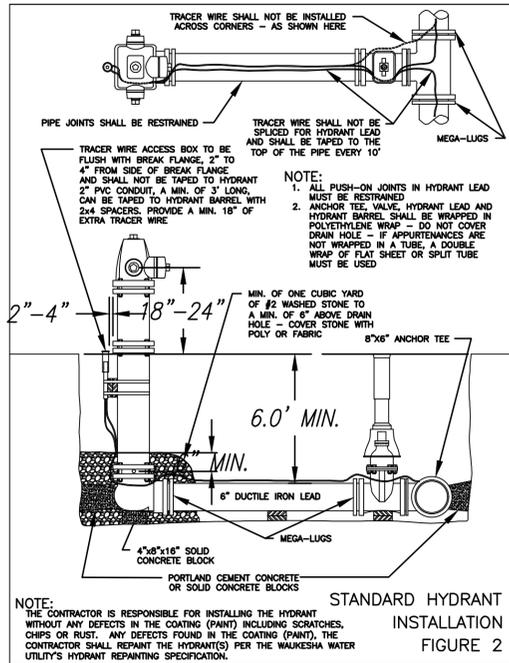
JOB NUMBER:
15025

DESCRIPTION:
CONSTRUCTION NOTES & DETAILS

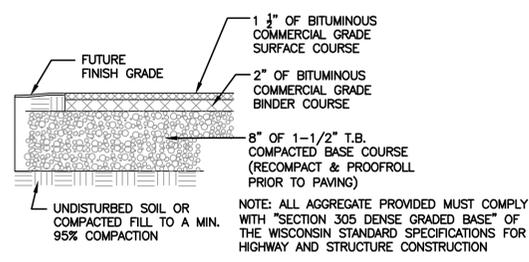
SHEET

C1.8

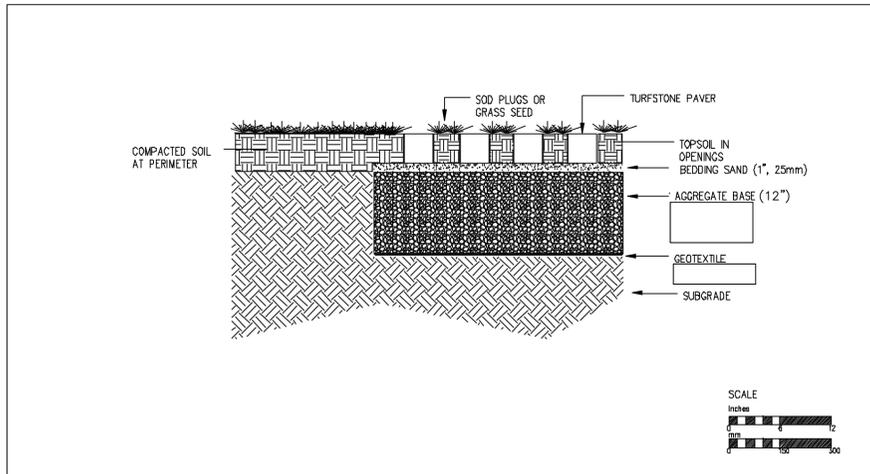
H:\C9000\9900\15025-01\CONSTRUCTION PLANS\CIVIL PLANS-LIVING WORD LUTHERAN CHURCH-22X34.DWG



STANDARD HYDRANT INSTALLATION
FIGURE 2

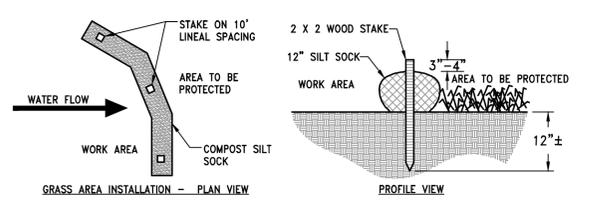


STANDARD DUTY ASPHALT PAVING SECTION
NO SCALE

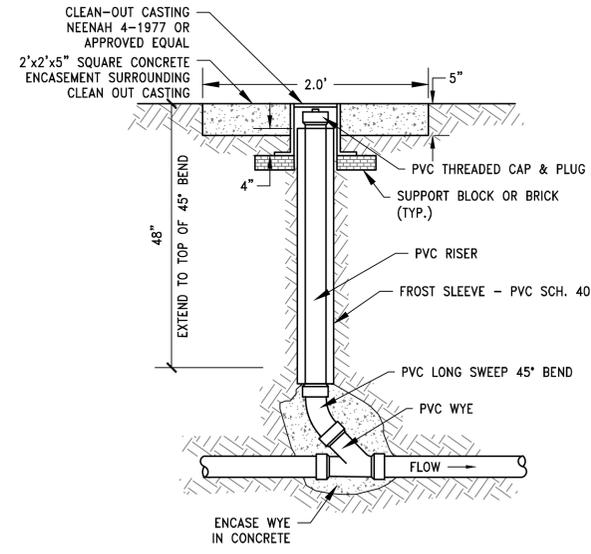


COMMERCIAL PAVING PAVES DETAIL
NO SCALE

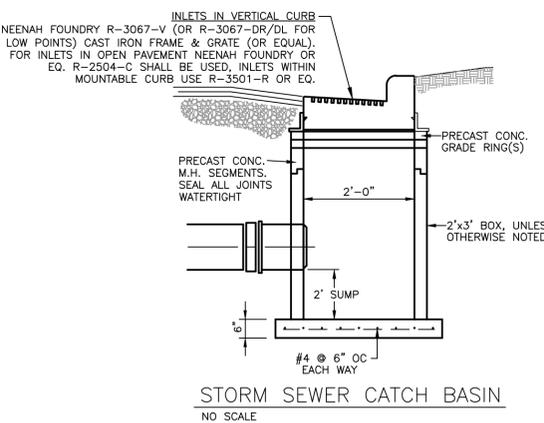
TURFSTONE PAVER DETAIL
NO SCALE



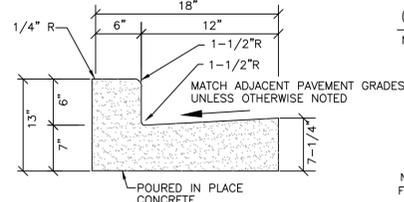
GRASS AREA INSTALLATION - PLAN VIEW
PROFILE VIEW
NO SCALE



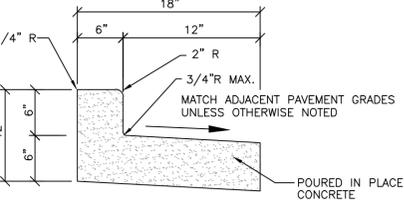
CLEAN-OUT STRUCTURE DETAIL
NO SCALE



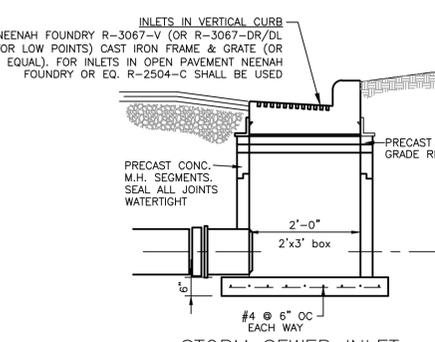
STORM SEWER CATCH BASIN
NO SCALE



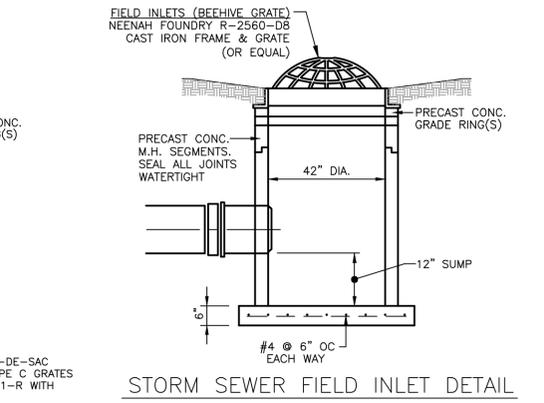
18" CONCRETE CURB & GUTTER
NO SCALE



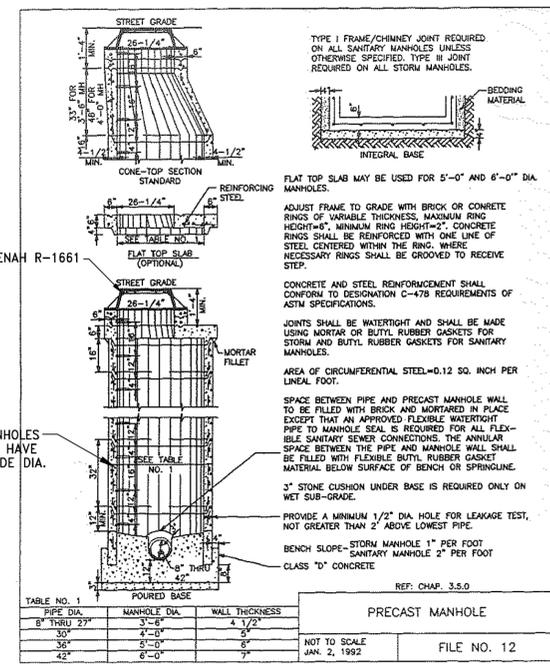
18" REJECT CURB & GUTTER DETAIL
NO SCALE



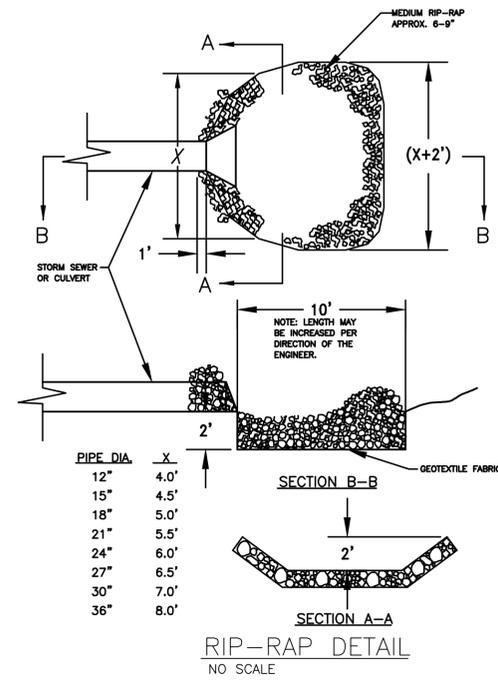
STORM SEWER INLET
NO SCALE



STORM SEWER FIELD INLET DETAIL
NO SCALE



SANITARY MANHOLE DETAIL
NO SCALE



RIP-RAP DETAIL
NO SCALE

WISCONSIN
Professional Engineer
TRIO
Civil Engineering
12660 W. NORTH AVE, BLDG D
BROOKFIELD, WI 53005
PHONE: (262) 790-1480
FAX: (262) 790-1481
EMAIL: jpudefico@trioeng.com

PROJECT:
LIVING WORD LUTHERAN CHURCH
CITY OF WALKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SJSSEX LANE
WALKESHA, WI 53188

REVISION HISTORY

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| 08/28/2018 | DSPS SUBMITTAL |
| 08/08/2018 | NTIAL SUBMITTAL |

DATE:
JUNE 26, 2019

JOB NUMBER:
15025

DESCRIPTION:
CONSTRUCTION DETAILS

SHEET

C1.9

GENERAL

- THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED:
 - WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) STORM WATER TECHNICAL STANDARDS
 - WISCONSIN EROSION CONTROL PRODUCT ACCEPTABILITY LIST
 - STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (SSSWC)
 - WISCONSIN ADMINISTRATIVE CODE, SECTIONS SPS 382-387
 - WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION
 - FEDERAL HIGHWAY ADMINISTRATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
 - CITY OF WAUKESHA DEVELOPMENT STANDARDS
- THE OWNER, ENGINEER AND MUNICIPALITY SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF PERFORMING ANY CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE WITH THIS PLAN.
- EXISTING UTILITY INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, BASED ON BEST AVAILABLE PUBLIC RECORDS, AS-BUILT DRAWINGS, AND FIELD OBSERVATIONS. NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR ACCURACY OR COMPLETENESS. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND NATURE OF EXISTING UTILITIES, AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
- THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL PROPOSED UTILITY CONNECTIONS AND CROSSINGS PRIOR TO PROCEEDING WITH ANY WORK. ANY CONFLICTS OR DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED. COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT IS AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- THE CONTRACTOR SHALL FIELD VERIFY ELEVATIONS OF THE BENCHMARKS AND HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES, AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH ANY WORK.
- SURVEY BENCHMARKS AND CONTROL POINTS SHALL BE MAINTAINED AND PROTECTED FROM DISTURBANCE.
- PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED AT ALL TIMES. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED.
- PUBLIC ROADS SHALL NOT BE FULLY CLOSED TO TRAFFIC AT ANY TIME. ALL INGRESS AND EGRESS TRAFFIC TO THE PROJECT SITE SHALL BE LIMITED TO THE GRAVEL CONSTRUCTION ENTRANCE.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS AND FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.

PREPARATION

- WORK SHALL CONSIST OF DEMOLITION, ABANDONMENT, AND REMOVAL OF EXISTING FOUNDATIONS, WALLS, SLABS, FENCES, PIPING, PAVEMENTS, AND OTHER MANMADE ITEMS INTERFERING WITH NEW CONSTRUCTION. WORK SHALL ALSO CONSIST OF CLEARING AND GRUBBING OF TREES, SHRUBS, VEGETATION, ROOTS, STUMPS, RUBBISH, AND OTHER PERISHABLE MATTER INTERFERING WITH NEW CONSTRUCTION.
- CONTACT DIGGERS HOTLINE AT 800-242-8511 TO NOTIFY UTILITY PROVIDERS AND REQUEST FIELD LOCATION OF EXISTING UTILITIES WITHIN PROJECT LIMITS PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES.
- INSTALL PERIMETER FENCING AND TEMPORARY EROSION CONTROL PRACTICES AS INDICATED PRIOR TO COMMENCING ANY LAND DISTURBING CONSTRUCTION RELATED ACTIVITY.
- CLEARLY IDENTIFY ALL VEGETATION TO BE PRESERVED AND/OR RELOCATED PRIOR TO CLEARING AND GRUBBING.
- PROTECT EXISTING IMPROVEMENTS TO REMAIN DURING CONSTRUCTION. ANY DAMAGED IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION, OR AS OTHERWISE ACCEPTABLE TO THE OWNER.
- REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
- SAWCUT ALL PAVEMENT TO BE REMOVED IN STRAIGHT LINES TO FULL DEPTH.
- DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS. BREAK UP CONCRETE SLABS THAT ARE 2 FEET OR MORE BELOW PROPOSED SUBGRADE TO PERMIT DRAINAGE.
- DISCONNECT AND SEAL/CAP EXISTING UTILITIES TO BE REMOVED, RELOCATED, OR ABANDONED IN ACCORDANCE WITH REQUIREMENTS OF UTILITY PROVIDERS.
- DO NOT INTERRUPT UTILITY SERVICE TO EXISTING FACILITIES UNLESS PERMITTED BY THE OWNER.
- REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS, TRASH, AND DEBRIS FROM THE PROJECT SITE.

EROSION CONTROL

- WORK SHALL CONSIST OF INSTALLATION OF TEMPORARY AND PERMANENT PRACTICES FOR SEDIMENTATION CONTROL, EROSION CONTROL, SLOPE PROTECTION, AND REMOVAL OF PRACTICES UPON FINAL SITE STABILIZATION.
- INSTALLATION AND MAINTENANCE OF PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WDNR TECHNICAL STANDARD, OR THE WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK IF A TECHNICAL STANDARD IS NOT AVAILABLE.
- ALL PRACTICES SHALL BE INSTALLED PRIOR TO COMMENCING ANY LAND DISTURBING CONSTRUCTION RELATED ACTIVITY. EARTHWORK ASSOCIATED WITH INSTALLATION OF PRACTICES MAY OCCUR CONCURRENTLY.
- ALL PRACTICES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH PERMIT REQUIREMENTS.
- ALL PRACTICES SHALL BE ROUTINELY INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN 0.5 INCHES. THE CONTRACTOR IS REQUIRED TO PERFORM INSPECTIONS, KEEP A LOG, AND CONDUCT REPAIRS AS NEEDED.
- ALL DISTURBED AREAS SHALL DRAIN TO A CONTROL PRACTICE AT ALL TIMES DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING UPON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL ADDITIONAL CONTROL PRACTICES IN VARIOUS LOCATIONS THROUGHOUT THE PROJECT SITE. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL PRACTICES NECESSARY TO PREVENT EROSION AND SEDIMENTATION.
- ALL DISTURBED GROUND LEFT INACTIVE FOR 7 DAYS SHALL BE STABILIZED WITH A TEMPORARY SEED MIXTURE AND MULCH. THE TEMPORARY SEED MIXTURE SHALL BE IN ACCORDANCE WITH SECTION 630 OF WISDOT STANDARD SPECIFICATIONS. WINTER WHEAT OR RYE SHALL BE USED FOR TEMPORARY SEED AFTER SEPTEMBER 1.
- DISTURBED AREAS THAT CAN NOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION DUE TO TEMPERATURE OR TIMING OF CONSTRUCTION SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM).
- ALL ACTIVITIES ON THE PROJECT SITE SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME.
- DUST GENERATED BY CONSTRUCTION RELATED ACTIVITIES SHALL BE MINIMIZED BY USE OF WATERING, CALCIUM CHLORIDE SURFACE TREATMENT, CONSTRUCTION SCHEDULING, OR OTHER APPROPRIATE MEASURES.
- THE CONTRACTOR SHALL BE PREPARED FOR DEWATERING CONDITIONS BY HAVING APPROPRIATE PUMPS AND FILTER BAGS ONSITE. ALL WATER FROM CONSTRUCTION DEWATERING SHALL BE TREATED PRIOR TO DISCHARGE FROM THE PROJECT SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE PROJECT SITE AND PUBLIC ROADS DURING CONSTRUCTION. PUBLIC ROADS SHALL BE KEPT FREE OF SEDIMENT TRACKED FROM AREAS UNDER CONSTRUCTION BY DAILY SWEEPING OR OTHER APPROPRIATE MEASURES.

EARTHWORK

- WORK SHALL CONSIST OF STRIPPING AND STORAGE OF TOPSOIL, EXCAVATION, EMBANKMENT, IMPORTING OR EXPORTING MATERIAL TO ACHIEVE LAND BALANCE, COMPACTION, FINISH GRADING, SUBGRADE PREPARATION, AND REPLACEMENT OF TOPSOIL.
- ALL EARTHWORK SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER AND THESE REQUIREMENTS. THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
- SATISFACTORY MATERIAL SHALL INCLUDE SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM AS ACCORDING TO ASTM D2487. IT SHALL BE FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES, FROZEN MATERIALS, VEGETATION, DEBRIS, AND ANY OTHER DELETERIOUS MATERIAL.
- UNSATISFACTORY MATERIAL SHALL INCLUDE SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT AS ACCORDING TO ASTM D2487. IT SHALL ALSO INCLUDE FILL MATERIAL NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.
- ENGINEERED FILL MATERIAL SHALL INCLUDE A MIXTURE OF NATURAL OR CRUSHED STONE, GRAVEL, AND SAND AS ACCORDING TO ASTM D2940, WITH AT LEAST 90 PERCENT PASSING A 37.5-MM SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE. IT SHALL BE FREE OF ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIAL AND HAVE A MAXIMUM PARTICLE SIZE OF 3 INCHES. CLAY CONTENT SHALL HAVE A LIQUID LIMIT OF LESS THAN 45 AND A PLASTICITY INDEX BETWEEN 11 AND 20.

- EXCAVATE TO SUBGRADE REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. EXCAVATED MATERIAL MAY INCLUDE ROCK AND UNCLASSIFIED OBSTRUCTIONS, WHICH IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE WORK.
- EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE COMPLETELY REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND BUILDING PAD AREAS. ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
- EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE REMOVED TO A MINIMUM OF 2 FEET BELOW PROPOSED SUBGRADE WITHIN GREENSPACE AND PAVEMENT AREAS. ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
- FILL MATERIAL SHALL BE WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT, PLACED IN MAXIMUM LIFTS OF 8 INCHES, AND COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST.
- AREAS SHALL BE GRADED TO WITHIN 1 INCH, MORE OR LESS, OF PROPOSED SUBGRADE. DEVIATIONS SHALL NOT BE CONSISTENT IN ONE DIRECTION.
- DISKING, HARROWING, AND AERATION TECHNIQUES SHALL BE USED TO DRY SUBGRADE PRIOR TO PROOF ROLLING.
- IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER, PROOF ROLL SUBGRADE BELOW BUILDING PAD AND PAVEMENT AREAS DURING DRY WEATHER WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK WHERE COHESIVE SOILS ARE PREDOMINANT, AND WITH A SMOOTH DRUMMED VIBRATORY ROLLER WHERE GRANULAR SOILS ARE PREDOMINANT, SUBGRADE WHICH IS OBSERVED TO RUT OR DEFLECT EXCESSIVELY SHALL BE UNDERCUT IN ACCORDANCE WITH RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. DO NOT PROOF ROLL WET OR SATURATED SUBGRADE.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. SURFACE WATER AND GROUNDWATER SHALL BE PREVENTED FROM ENTERING EXCAVATIONS, PONDING ON PREPARED SUBGRADES, AND FLOODING PROJECT SITE AND/OR SURROUNDING AREAS.
- THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ALL EARTHWORK COMPUTATIONS AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.

SANITARY SEWERAGE

- WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE SANITARY SEWERAGE SYSTEM AND ALL APPURTENANCES.
- ALL PUBLIC SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- ALL PRIVATE SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE SDR 35 CONFORMING TO ASTM D3034 FOR DEPTHS LESS THAN 18 FEET, AND SHALL BE SDR 18 CONFORMING TO AWWA C900 FOR DEPTHS GREATER THAN 18 FEET, BOTH WITH PUSH-ON RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTIONS 8.10.6 AND 8.41.4 OF SSSWCW.
- MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.39.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING. ADJUSTMENTS RINGS SHALL BE HDPE RINGS SEALED WITH BUTYL.
- TRENCH SECTION SHALL BE CLASS B IN ACCORDANCE WITH SECTION 3.2.6 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
- PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
- TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS. SLURRY BACKFILL SHALL BE USED WITHIN 5 FEET OF LISBON ROAD PAVEMENT LIMITS.
- ALL CONNECTIONS TO EXISTING SANITARY SEWER PIPES AND STRUCTURES SHALL BE CORED CONNECTIONS, UNLESS NOTED OTHERWISE. PREFABRICATED WYE CONNECTIONS ARE REQUIRED FOR ALL BUILDING SANITARY SERVICE PIPES, UNLESS NOTED OTHERWISE.
- CLEANOUTS AND RISER EXTENSIONS SHALL BE INSTALLED IN ACCORDANCE WITH SPS 382.35 FROM SEWER PIPES TO GROUND SURFACE. LIGHT DUTY LOADING CLASSIFICATION SHALL BE USED IN UNPAVED AREAS. MEDIUM DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED FOOT TRAFFIC AREAS. HEAVY DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED VEHICULAR TRAFFIC AREAS. FRAMES AND COVERS SHALL BE SET FLUSH WITH SURFACE.
- TRACER WIRE SHALL BE GREEN INSULATED SINGLE CONDUCTOR WIRE INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC SANITARY SEWER PIPE, PRIVATE SANITARY INTERCEPTOR PIPE, AND BUILDING SANITARY SERVICE PIPE. TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 10 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
- AFTER INSTALLATION OF SANITARY SEWERAGE SYSTEM, CLEAN ALL DEBRIS FROM SYSTEM AND INSPECT FOR DAMAGE. CONDUCT TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SSSWCW. REPAIR ANY DAMAGE AND REPLACE ANY PIPE NOT PASSING TESTING.

WATER DISTRIBUTION

- WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE WATER DISTRIBUTION SYSTEM AND ALL APPURTENANCES.
- ALL PUBLIC WATER SUPPLY WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- ALL PRIVATE WATER SUPPLY WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- POLYVINYL CHLORIDE (PVC) PIPE SHALL BE SDR 18, CLASS 150 CONFORMING TO AWWA C900 WITH INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS IN ACCORDANCE WITH SECTION 8.20.0 OF SSSWCW.
- DUCTILE IRON PIPE (DIP) SHALL BE CLASS 150 CONFORMING TO AWWA C151 WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTION 8.18.0 OF SSSWCW.
- POLYETHYLENE TUBING SHALL BE SDR 9 IN ACCORDANCE WITH SECTION 8.24.0 OF SSSWCW AND CONFORM TO AWWA C901.
- COPPER TUBING SHALL BE TYPE "K" IN ACCORDANCE WITH SECTION 8.24.0 OF SSSWCW AND CONFORM TO ASTM B88.
- BALL VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.30.0 OF SSSWCW AND CONFORM TO AWWA C800 AND ASTM B62.
- GATE VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.27.0 OF SSSWCW AND CONFORM TO AWWA C500.
- BUTTERFLY VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.28.0 OF SSSWCW AND CONFORM TO AWWA C504.
- VALVE BOXES SHALL BE IN ACCORDANCE WITH SECTION 8.29.0 OF SSSWCW AND CONFORM TO ASTM A48. VALVE BOXES SHALL BE SIZE DD, SCREW TYPE, 3 PIECE ASSEMBLY, WITH COVERS MARKED "WATER". ALL VALVE BOXES SHALL BE SET TO PROPOSED GRADE, TRULY VERTICAL, AND SUPPORTED BY USE OF ADAPTOR.
- HYDRANTS SHALL BE IN ACCORDANCE WITH SECTION 8.26.0 OF SSSWCW AND CONFORM TO AWWA C502. PUMPER NOZZLE SHALL BE PERPENDICULAR TO AND ORIENTED TOWARDS THE PAVEMENT. HYDRANTS SHALL BE ATTACHED BY MEANS OF ANCHORING TEE AND HAVE A GROUND LINE TO CENTER DISTANCE OF 24 INCHES.
- FITTINGS SHALL BE CLASS 150 IN ACCORDANCE WITH SECTION 8.22.0 OF SSSWCW, CONFORMING TO AWWA C110, AND PROVIDED WITH MECHANICAL JOINTS.
- MECHANICAL JOINTS SHALL BE MADE WITH "COR TEN" NUTS AND BOLTS, OR CORROSION-RESISTANT EQUIVALENTS CONFORMING TO AWWA C111.
- POLYETHYLENE WRAP SHALL BE IN ACCORDANCE WITH SECTION 8.21.0 OF SSSWCW AND PROVIDED FOR ALL METAL PIPES AND FITTINGS.
- THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH SECTION 4.3.13 OF SSSWCW AND PROVIDED FOR ALL BENDS, CAPS, PLUGS, AND TEES.
- TRENCH SECTION SHALL BE IN ACCORDANCE WITH FILE NO. 36 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
- PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
- TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS. SLURRY BACKFILL SHALL BE USED WITHIN 5 FEET OF LISBON ROAD PAVEMENT LIMITS.
- TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC WATER MAIN PIPE, PRIVATE WATER MAIN PIPE, AND BUILDING WATER SERVICE PIPE. TRACER WIRE SHALL BE BLUE INSULATED, SINGLE-CONDUCTOR, 10 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
- THE CONTRACTOR IS RESPONSIBLE FOR PRESSURE TESTING AND SAFE WATER SAMPLING. HYDROSTATIC TESTING SHALL BE IN ACCORDANCE WITH SECTION 4.15.0 OF SSSWCW. DISINFECTION SHALL BE IN ACCORDANCE WITH SECTION 4.16.0 OF SSSWCW AND CONFORM TO AWWA C651. WATER MAINS SHALL BE FLUSHED AND TESTED IN THE PRESENCE OF THE WATER UTILITY OPERATOR.

STORM DRAINAGE

- WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE STORM DRAINAGE SYSTEM AND ALL APPURTENANCES.
- ALL PUBLIC STORM DRAINAGE WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- ALL PRIVATE STORM DRAINAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- REINFORCED CONCRETE PIPE (RCP) AND END SECTIONS SHALL BE IN ACCORDANCE WITH SECTION 8.6.0 OF SSSWCW

- AND CONFORM TO ASTM C76 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM C443. UNLESS NOTED OTHERWISE, 12-INCH DIAMETER PIPE SHALL BE CLASS V, 15-INCH DIAMETER PIPE SHALL BE CLASS IV, AND 18-INCH DIAMETER PIPE AND LARGER SHALL BE CLASS III.
- CORRUGATED METAL PIPE (CMP) AND END SECTIONS SHALL BE 16 GAUGE CONFORMING TO ASTM A760.
- HIGH-DENSITY POLYETHYLENE (HDPE) PIPE AND FITTINGS SHALL BE ADS N12 AS APPROVED BY THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCTS REGISTER.
- POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE SDR 35 CONFORMING TO ASTM D3034 WITH PUSH-ON RUBBER GASKETED JOINTS CONFORMING TO ASTM D3212.
- MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.39.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
- CATCH BASINS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 3.6.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
- INLETS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 3.6.0 OF SSSWCW AND CONFORM TO ASTM C913. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
- AREA DRAINS SHALL BE ADS NYLOPLAST AS APPROVED BY THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCTS REGISTER.
- FRAMES AND GRATES SHALL BE AS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FRAMES AND GRATES ARE COMPATIBLE WITH PRECAST STRUCTURES PRIOR TO ORDERING.
- TRENCH SECTION SHALL BE CLASS B IN ACCORDANCE WITH SECTION 3.2.6 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
- PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
- TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS. SLURRY BACKFILL SHALL BE USED WITHIN 5 FEET OF LISBON ROAD PAVEMENT LIMITS.
- ALL CONNECTIONS TO EXISTING STORM SEWER PIPES AND STRUCTURES SHALL BE CORED CONNECTIONS, UNLESS NOTED OTHERWISE.
- CLEANOUTS AND RISER EXTENSIONS SHALL BE INSTALLED IN ACCORDANCE WITH SPS 382.35 FROM SEWER PIPES TO GROUND SURFACE. LIGHT DUTY LOADING CLASSIFICATION SHALL BE USED IN UNPAVED AREAS. MEDIUM DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED FOOT TRAFFIC AREAS. HEAVY DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED VEHICULAR TRAFFIC AREAS. FRAMES AND COVERS SHALL BE SET FLUSH WITH SURFACE.
- TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 2.11.1 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC STORM SEWER PIPE, PRIVATE STORM INTERCEPTOR PIPE, AND BUILDING STORM SERVICE PIPE. TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 12 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
- AFTER INSTALLATION OF STORM DRAINAGE SYSTEM, CLEAN ALL DEBRIS FROM SYSTEM AND INSPECT FOR DAMAGE. CONDUCT TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SSSWCW. REPAIR ANY DAMAGE AND REPLACE ANY PIPE NOT PASSING TESTING.

CONCRETE PAVING

- WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF CRUSHED STONE BASE, INSTALLATION OF CONCRETE, AND CLEANUP.
- CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.
- CONCRETE SHALL BE GRADE A AIR-ENTRAINED IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS.
- WATER SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C94 / C94M.
- AIR-ENTRAINING SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C260.
- LIQUID CURING COMPOUND SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS AND AASHTO M 148.
- CURBING SHALL BE IN ACCORDANCE WITH SECTION 601 OF WISDOT STANDARD SPECIFICATIONS.
- SIDEWALK AND PATIO SHALL BE IN ACCORDANCE WITH SECTION 602 OF WISDOT STANDARD SPECIFICATIONS.
- CONCRETE FORMS SHALL REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE INSTALLATION AND SHALL BE CLEANED AFTER EACH USE. CONCRETE FORMS SHALL BE COATED WITH RELEASE AGENT TO ALLOW SEPARATION WITHOUT DAMAGE TO CONCRETE.
- CONSTRUCTION AND CONTRACTION JOINTS SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS.
- ISOLATION JOINTS SHALL CONSIST OF PREFORMED JOINT FILLER STRIPS ABUTTING CURBING, INLETS, CATCH BASINS, MANHOLES, STRUCTURES, AND OTHER FIXED OBJECTS.
- EDGES OF CONCRETE PAVEMENT, CURBING, SIDEWALK, PATIOS, AND JOINTS SHALL BE TOOLED IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING AFTER APPLYING SURFACE FINISHES AND ELIMINATE TOOL MARKS ON SURFACES.
- FINISH, CURE, AND PROTECT CURBING IN ACCORDANCE WITH SECTION 601 OF WISDOT STANDARD SPECIFICATIONS.
- FINISH (LIGHT BROOM), CURE, AND PROTECT SIDEWALK AND PATIOS IN ACCORDANCE WITH SECTION 602 OF WISDOT STANDARD SPECIFICATIONS.
- FINISH (ARTIFICIAL TURF DRAG), CURE, AND PROTECT VEHICULAR PAVEMENT AND PADS IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS.
- MAINTAIN CONCRETE FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PRIOR TO SUBSTANTIAL COMPLETION INSPECTION.
- REMOVE AND REPLACE CONCRETE THAT IS BROKEN, DAMAGED, DEFECTIVE, OR DOES NOT COMPLY WITH THE REQUIREMENTS LISTED ABOVE.

ASPHALT PAVING

- WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF CRUSHED STONE BASE, INSTALLATION OF HOT-MIX ASPHALT, PAVEMENT MARKING, SIGNAGE, AND CLEANUP.
- CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.
- ASPHALTIC MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 455 OF WISDOT STANDARD SPECIFICATIONS.
- AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 460 OF WISDOT STANDARD SPECIFICATIONS.
- PAVEMENT MARKING PAINT SHALL BE IN ACCORDANCE WITH WISDOT APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS INDICATED OTHERWISE ON THIS PLAN.
- DO NOT CONDUCT ASPHALT PAVING IF ANY OF THE FOLLOWING CONDITIONS EXIST: CRUSHED STONE BASE IS WET OR EXCESSIVELY DAMP; TEMPERATURE IS BELOW 30 DEGREES FAHRENHEIT AT TIME OF BINDER COURSE INSTALLATION; TEMPERATURE HAS BEEN BELOW 35 DEGREES FAHRENHEIT WITHIN 12 HOURS PRIOR TO TACK COAT APPLICATION; TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AT TIME OF SURFACE COURSE INSTALLATION.
- COMPACT ASPHALT IN ACCORDANCE WITH SECTION 450 OF WISDOT STANDARD SPECIFICATIONS. COMPACT ASPHALT TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS 1/4-INCH FOR BINDER COURSE, AND WITHIN PLUS 1/4-INCH FOR SURFACE COURSE (NO MINUS).
- APPLY TACK COAT BETWEEN ASPHALT COURSES AT A MINIMUM RATE OF 0.25 GAL/SY.
- NO TRAFFIC SHALL BE ALLOWED ON ASPHALT AFTER FINAL ROLLING UNTIL IT HAS COOLED AND HARDENED.
- FINAL ASPHALT SURFACE SHALL BE WITHIN A 1/8-INCH TOLERANCE AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED LONGITUDINALLY OR TRANSVERSELY. REMOVE AND REPLACE ALL RAISED AND DEPRESSED AREAS EXCEEDING TOLERANCE.
- APPLY PAVEMENT MARKINGS TO CLEAN AND DRY SURFACE, FREE FROM FROST, TO ENSURE PROPER BONDING. APPLY PAINT IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS TO PRODUCE MARKINGS AS INDICATED WITH UNIFORM, STRAIGHT EDGES.

RETAINING WALLS

- WORK SHALL CONSIST OF FURNISHING DETAILED DESIGN, MATERIALS, LABOR, EQUIPMENT, SUPERVISION, AND DIRECTION TO CONSTRUCT RETAINING WALL SYSTEMS IN REASONABLY CLOSE CONFORMITY TO THE LINES, GRADES, AND DIMENSIONS SHOWN ON THIS PLAN. RETAINING WALLS SHOWN ON THIS PLAN ARE FOR GENERAL LOCATION AND MATERIAL REFERENCE ONLY.
- THE CONTRACTOR SHALL PROCURE DETAILED DESIGN CALCULATIONS AND DRAWINGS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER EXPERIENCED WITH RETAINING WALL DESIGN AND LICENSED IN THE STATE IN WHICH THE RETAINING WALLS ARE TO BE CONSTRUCTED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SURROUNDING STRUCTURES AND UTILITIES ARE PROTECTED FROM THE EFFECTS OF EXCAVATION AND PROVIDING ANY NECESSARY EXCAVATION SUPPORT.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION ADJACENT TO THE RETAINING WALLS DOES NOT DISTURB OR PLACE TEMPORARY LOADS ON THE RETAINING WALLS THAT EXCEED DESIGN LOADS.



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**PROJECT:
LIVING WORD LUTHERAN CHURCH**

**CITY OF WAUKESHA, WISCONSIN
BY: LIVING WORD LUTHERAN CHURCH
2712 SLSSEX LANE
WAUKESHA, WI 53188**

REVISION HISTORY

| DATE | DESCRIPTION |
|------------|----------------------|
| 08/28/2019 | per CITY COMMENTS |
| 08/18/2019 | per COUNTY SUBMITTAL |
| 08/04/2019 | SITE PLAN REV. |
| 08/28/2018 | DSPS SUBMITTAL |
| 08/08/2018 | NTIAL SUBMITTAL |

**DATE:
JUNE 26, 2019**

**JOB NUMBER:
15025**

**DESCRIPTION:
PROJECT
SPECIFICATIONS**

SHEET

C2.0