TOWN OF BROOKFIELD PLAN COMMISSION MINUTES May 23, 2023

Town Chairman Keith Henderson called the meeting to order at 7:02pm on Tuesday, May 23, 2023, at the Town of Brookfield Town Hall, 645 North Janacek Road, Brookfield, Wisconsin. Also present at the meeting were Supervisor Ryan Stanelle, Commissioners Gordon Gaeth, William Neville, Kevin Riordan, Len Smeltzer, Jeremy Watson, and Town Planner Bryce Hembrook.

CONFIRMATION OF MEETING NOTICE

Town Planner Bryce Hembrook reported that the agenda was noticed and posted as required.

MINUTES

Commissioner Watson moved to approve the minutes of the regular meeting of the April 25, 2023 Plan Commission meeting as presented. The motion was seconded by Commissioner Neville, voted on, and carried unanimously.

COREY WALLACE (WESENBERG ARCHITECTS), REPRESENTING OUEST INTERIORS, FOR A RECOMMENDATION FOR PRELIMINARY AND FINAL APPROVAL OF A NEW BUILDING CONSISTING OF AN OFFICE, PRODUCT SHOWROOM, AND PRODUCT STORAGE AND SHIPPING AREA LOCATED AT 21055 CROSSROADS CIRCLE. Planner Hembrook described the location and site plan. Parking, setbacks, total floor area, and building height meet code requirements. There are two access points from Crossroads Circle. The proposed landscaping plan was also reviewed, as well as architectural renderings. The loading dock location faces south. Planner Hembrook further reported that the Architectural Review Committee (ARC) recommended approval of preliminary plans, however they delayed recommending final approval in order to get the final report from the town engineer. Chairman Henderson inquired about the dumpster enclosure. Michael Noffke from Wesenberg Architects was present and indicated the location, and that screening between the wall and the building is to allow for additional outdoor storage. Chairman Henderson questioned if the enclosure could be moved closer to the building, allowing it to be further from the residential area to the west. Mark Twohig co-owner of Quest Interiors was in attendance and asked for clarification of the distance from the property line to the dumpster enclosure, which was determined to be 53 feet. Mr. Noffke reported that there will be no removal of trees at the property line. Mr. Twohig indicated the building will be used from 6:30am until 5:00pm, and that it is rather low use as most of their builders have their own showrooms. Quest mostly delivers their product. Chairman Henderson advised of the noise ordinance in the Town of Brookfield that includes prohibiting noise before 7:00am. The potential for trucks and back-up noises could be an issue before that time in the morning. Bollards are not shown on the plan but Mr. Noffke indicated that they will be included. Planner Hembrook asked for clarification on the site plan the extent of the trees on the landscape plan. Kurt Geiger of Excel Engineering explained that the tree drip line and where it falls, as opposed to where the trunks actually are. Mr. Geiger also showed where the sanitary sewer connection is, which is the southwest corner of the site. The only removal of trees would be to service the sewer connection should it become necessary, and would be as minimal as possible. The drainage swale location and path of drainage will be staying the same or very similar to the current status. There will be a wet pond per DNR regulations. There are doors including an overhead and passenger door on the west, and an egress door on the northwest of the building, with a stoop and grass. A motion was made by Commissioner Smeltzer to grant preliminary approval of a new building consisting of an office, product showroom and product storage and shipping area located at 21055 Crossroads Circle. The motion was seconded by Commissioner Watson, voted on, and carried unanimously.

RECOMMENDATION TO SCHEDULE A PUBLIC HEARING FOR A ZONING CODE TEXT AMENDMENT RELATED TO ADULT AND CHILDREN DAY CARE CENTERS. Planner Hembrook described the growing interest in adult and children day care centers recently, stated how the code reads currently, and that it could be considered somewhat vague. The suggested amendment would be that the two uses be permitted by conditional use in the B-2 and B-3 zoning districts. The Plan Commission expressed safety concerns with two of the same uses in the same building.

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Planner Hembrook indicated that any requirements that the Plan Commission might recommend could be included in the language of an amendment. Commissioner Watson made a motion to **recommend** the Town Board set a date for a public hearing for a zoning code text amendment related to adult and children day care centers. The motion was seconded by Commissioner Gaeth, voted on, and carried unanimously.

DISCUSSION REGARDING A POTENTIAL MUNICIPAL CODE TEXT AMENDMENT TO ADD SECTION 12.08, WHICH ESTABLISHES REQUIREMENTS FOR MOBILE FOOD TRUCKS **OPERATING WITHING THE TOWN OF BROOKFIELD.** Planner Hembrook reported that this is not part of the zoning code, but will be reviewing a proposed ordinance and wanted to get the Plan Commission's feedback. There is no public hearing required, this agenda item is just for discussion and feedback. Assistant Fire Chief Tony D'Amico has been working on the ordinance, along with Planner Hembrook, Town Administrator Tom Hagie, Town Attorney Michael Van Kleunen, and Building Inspector Jason Chromy. Asst. Chief D'Amico was present at tonight's meeting. Planner Hembrook further stated that there has been an increase in mobile food truck interest. This amendment is not for special events, but for individuals that want to park in a lot with the owner's permission. The trucks would be on private property, not parked on town roads. A handout was provided from the town attorney outlining recommended requirements. Location restrictions were addressed; hours would be limited (8:00am – 11:00pm). Signage is limited to one sandwich board, measuring at most 24" x 36". Trash receptacles are required. Trucks in the town (excluding special events) would be limited to five, not including special events. Asst. Fire Chief D'Amico opined that food trucks are gaining in popularity, and better to have an ordinance for safety reasons. D'Amico inspects all food trucks, and would approve locations. If necessary, the building inspector will do an inspection. Commissioner Smeltzer asked if private residences are permitted to have food trucks for parties. D'Amico responded that a residence can have a food truck, but would have to get a permit. Proposed fees were discussed. Commissioner Riordan pointed out that brick and mortar restaurants are against food trucks. Hembrook pointed out that many municipalities have a distance requirement from brick and mortar restaurants. D'Amico reported that food trucks are a standard commercial kitchen with a hood system, fire suppression system, etc., and the inspection is to ensure that the trucks are well equipped. The Health Department also does an inspection. A suggestion is to have the approvals good for one year. Chairman Henderson inquired whether after the suggestions from the Plan Commission are submitted for consideration, does the Plan Commission want to look at this again. The consensus was to move the proposed text code amendment forward. Plan Commission members suggested the following:

- A limit of four food trucks instead of five;
- A specific distance from brick and mortar restaurants.

TOWN OF BROOKFIELD FOR A RECOMMENDATION OF APPROVAL FOR A ZONING CODE TEXT AMENDMENT TO SECTION 17.02(14)(b)1, RELATED TO CONDITIONAL USE PERMIT PROCEDURES. This item has been on previous agendas, as well as a public hearing held before this Plan Commission meeting, in which there were no public comments. There were no additional comments from Planner Hembrook, nor the Plan Commission. Commissioner Watson made a motion to recommend approval for a zoning code text amendment to Section 17.02(14)(b)1, related to conditional use permit procedures. The motion was seconded by Commissioner Smeltzer, voted on, and carried unanimously.

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TOWN OF BROOKFIELD FOR A RECOMMENDATION OF APPROVAL FOR A ZONING CODE TEXT AMENDMENT TO SECTION 17.02(14)(g)11 RELATED TO FENCES. Chairman Henderson made the following suggestions for amendment:

- A privacy fence shall be 5 feet from the lot line;
- A fence shall not extend into the street yard.
- Fences currently not in compliance shall not be grandfathered in to this amendment.

Chairman Henderson pointed out that Item 11, paragraph "i", "and shall not extend into the street yard" should also be placed in paragraph "ii". Planner Hembrook indicated that there did not seem to be a consensus at the last meeting regarding setbacks. It was recommended that a fence within 5 feet should require a property survey. After further discussion, the consensus is to require a survey with a 5-foot setback. Chairman Henderson opined that a reason for the 5-foot setback is so the property owner can maintain the fence without trespassing on the neighbor's yard. It was clarified that a non-privacy fence on the property line is acceptable. Planner Hembrook pointed out that the amendment as written would require a survey for a 4-foot non-privacy fence if within 5 feet of the property line. The Plan Commission agreed to prohibit chain link fencing, other than for pet kennels, and non-residential properties such as a school. Commissioner Watson asked for clarification of the setback discussion, which is as follows: a fence is permitted up to the lot line, with at least a 3-foot setback being a strong suggestion; and any fence being installed within 5 feet of the lot line requires a property survey. Watson suggested adding "but not on the lot line". Commissioner Gaeth suggested that a requirement to contact Chairman Henderson suggested a step-by-step policy outlining these Diggers Hotline is appropriate. requirements. Hembrook commented that a section at the top of a permit application could point out that the contractor/ homeowner should contact Diggers Hotline. Hembrook also indicated that he will include the following: "shall not extend into the street yard". A suggestion was made to indicate that underground electric fences for dogs are permissible. Hembrook reported that the building inspector suggested a \$70 permit fee, which is the minimum. Commissioner Smeltzer inquired about memory care facilities, and their ability to have a fence higher than six feet for safety reasons. Six feet is the maximum height, however Hembrook reminded the Plan Commission that any proposed fence that does not conform to the provisions in the zoning code could go through a conditional use permit process. Further discussion included defining what is "grandfathered" in the amendment. Commissioner Watson made a motion to recommend that the amendment be written in ordinance form of the zoning code text amendment to Section 17.02(14)(g)11 related to fences, and brought back to the next Plan Commission meeting with the proposed changes added. The motion was seconded by Commissioner Gaeth, voted on, and carried unanimously.

CORRESPONDENCE AND ANNOUNCEMENTS

The next meeting is June 27, 2023.

ADJOURN

There being no further business, Commissioner Neville made a motion to adjourn the meeting. The motion was seconded by Commissioner Watson, voted on, and carried unanimously. Chairman Henderson closed the meeting at 8:27pm.

Respectfully submitted, Bryce Hembrook



Building a Better World for All of Us®

TOWN OF BROOKFIELD PLAN COMMISSION ZONING REPORT

TO: Plan Commission

FROM: Bryce Hembrook, AICP

Town Planner

REPORT DATE: June 22, 2023 PC MEETING DATE: June 27, 2023

RE: Quest Interiors – Final Approval

21055 Crossroads Circle BKFT1129999007

SEH No. 171421, TASK 5

Applicant: Corey Wallace, Wesenberg Architects representing Quest Interiors

Application Type: Final Approval

Request

Final approval of a new building consisting of an office area, showroom, and product storage and shipping area, located at 21055 Crossroads Circle.

Summary of Request

- Zoning District = B-2 Limited General Business District
- Currently a vacant 3.68 acre parcel in an office park.
- Proposed structure = 23,431 square foot one-story facility for Quest Interiors consisting of an office area, product showroom, and product storage/shipping area. The business's main customer is local home builders and contractors. It is essentially considered a building supply store.
 - Office area = 3,470 square feet
 - Showroom = 5,803 square feet
 - Warehouse area = 14,158 square feet
- Approximately 49 parking stalls currently proposed; 39 in customer parking area and 10 stalls intended for staff.
 - According to the code, 35 parking spaces are required. Stall per land use breakdown below:
 - Office area = 14
 - Warehouse = 12
 - Showroom = 9
- Proposed setbacks:
 - o Front = 108'
 - o Side = 109' south and 50' north
 - o Rear = 121'
 - o All setbacks will meet code requirements.

- Sum total of floor area
 - o Proposed = 14.6% of lot area.
 - Required = No less than 6,000sf or 15% of the lot area, whichever is less. Shall not exceed 50% of lot area.
 - o Requirement is met.
- Proposed building height appears to be approximately 28'.
- There are single-family residences directly to the west of the subject property, but only one of the adjacent parcels is zoned residential. The majority of trees along the western property line are proposed to remain to maintain the buffer between the residential properties and the new building.

Final Approval Requirements

The purpose of final project review shall be to determine that this chapter and other Town ordinances have been fully complied with, and to authorize the issuance of a building permit, subject to the developer receiving approval of the Wisconsin Department of Safety and Professional Services (SPS) of the building plans, if required, including architectural details and lighting plan. The Plan Commission may require appropriate sureties to guarantee the completion of grading, landscaping, and construction and paving of parking and loading areas within an approved time schedule. Final approval granted by the Town Board shall expire within 12 months unless necessary building permits have been applied for and issued.

Development Review Team Feedback

The Development Review Team has reviewed the proposed plans and all of their comments and/or concerns were described in the past review letters from the Town Engineer. The Town Engineer has confirmed that all of his concerns have been addressed.

Next Steps

If approved, the Town Board will review and make a final determination.

Plan Commission Recommendation

Recommended final approval of the proposed building to the Town Board.

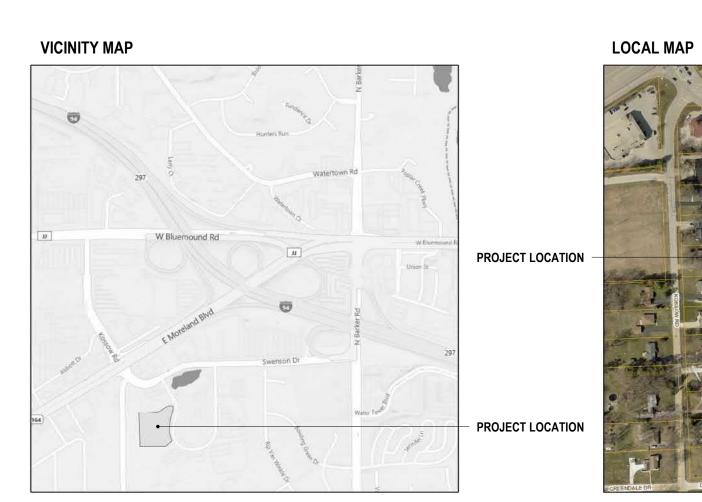
PROPOSED SHOWROOM, OFFICE & WAREHOUSE BUILDING

QUEST INTERIORS

21055 Crossroads Circle Town of Brookfield, WI









ARCHITECT: WESENBERG ARCHITECTS
146 ALGOMA BLVD OSHKOSH, WISCONSIN 54901 (920) 230 - 4900 Chet Wesenberg chet.wesenberg@cwarchitect.net
OWNER: KTFM, LLC
N7799 US HWY 51 FOND DU LAC, WISCONSIN 54935 (920) 233 - 3200 Mark Twohig mtwohig@questinteriorsusa.com
STRUCTURAL ENGINEER: PATERA, LLC
2601 S. SUNNYSLOPE ROAD NEW BERLIN, WI 53151 (262) 786 - 6676 John Lavin john@PateraLLC.com
CIVIL: EXCEL ENGINEERING, INC.
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PLUMBING & FIRE PROTECTION: EXCEL ENGINEERING, INC.
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ELECTRICAL DESIGNER: EXCEL ENGINEERING, INC.
100 CAMELOT DRIVE FOND DU LAC, WI 54935 (920) 926 - 9800 Tim Stoppleworth tim.stoppleworth@excelengineer.com

SHEET		
NUMBER	SHEET NAME	DISCIPLINE
G100	COVER SHEET	GENERAL
C0.1	CIVIL COVER AND SPECIFICATION SHEET	CIVIL
C1.0	EXISTING SITE AND DEMOLITION PLAN	CIVIL
C1.1	SITE PLAN	CIVIL
C1.2	GRADING AND EROSION CONTROL PLAN	CIVIL
C1.3	UTILITY PLAN	CIVIL
C1.4	LANDSCAPE AND RESTORATION PLAN	CIVIL
C2.0	DETAILS	CIVIL
C2.1	DETAILS	CIVIL
C2.2	DETAILS	CIVIL
C3.1	SITE PHOTOMETRICS PLAN & DETAILS	CIVIL
AS100	SITE CONTEXT PLAN	ARCHITECTURAL SITE
AS101	ARCHITECTURAL SITE PLAN	ARCHITECTURAL SITE
A100	FIRST FLOOR DESIGN PLAN	ARCHITECTURAL
Z300	EXTERIOR DESIGN ELEVATIONS	ARCHITECTURAL PRESENTAT
Z301	EXTERIOR DESIGN ELEVATIONS	ARCHITECTURAL PRESENTAT
Z400	BUILDING SECTION DIAGRAM	ARCHITECTURAL PRESENTAT
Z900	PRESENTATION DRAWING	ARCHITECTURAL PRESENTAT
Z901	PRESENTATION DRAWING	ARCHITECTURAL PRESENTAT

ZONING SUBMITTAL JRAL SITE JRAL SITE NO. DESCRIPTION DATE RAL PRESENTATION RAL PRESENTATION

COVER SHEET

PRINTED: 4/19/2023 2:08:09 PM

PREPARATION OF SHOP DRAWINGS, CONSTRUCTION AND INSTALLATION.

© Wesenberg Architects

ISSUE DATE:

19 April, 2023

SET TYPE:

REVISIONS:

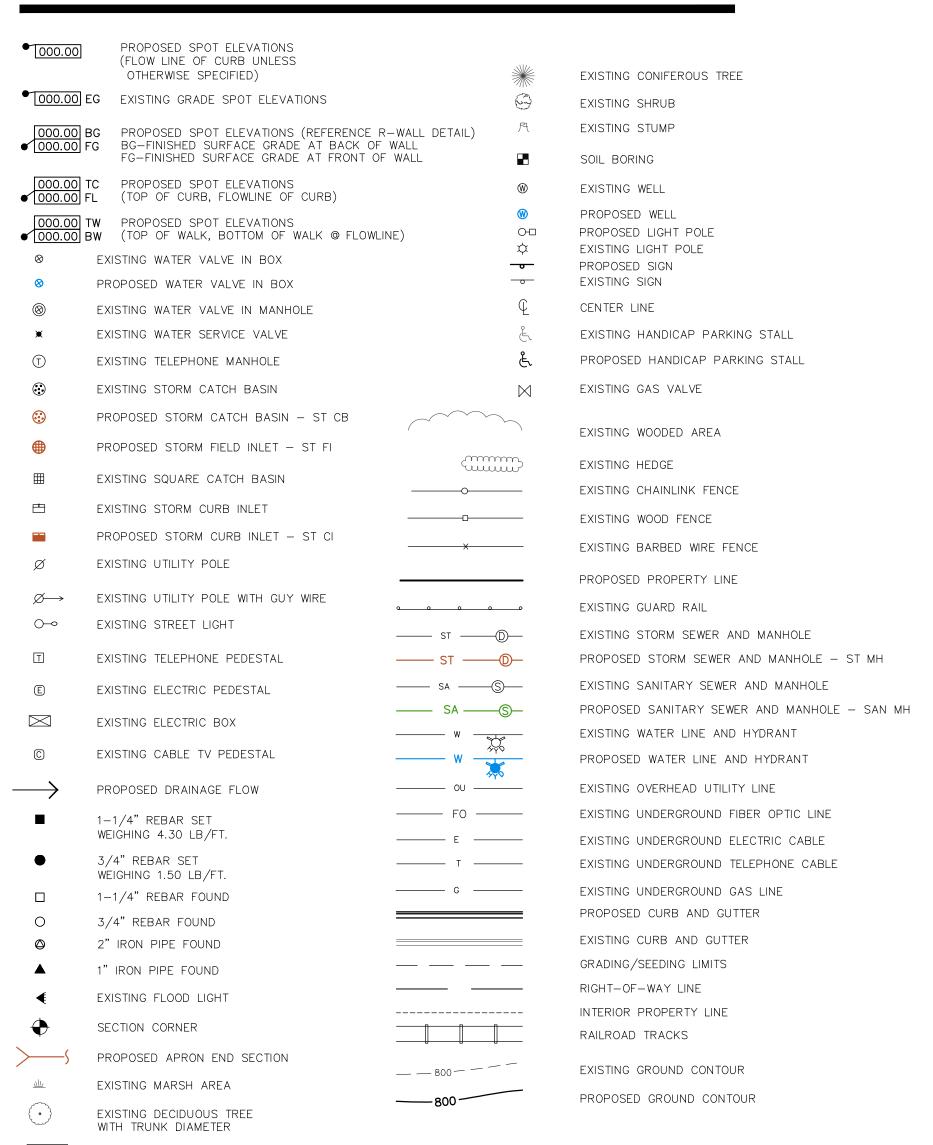
PROJECT NUMBER

FOR PROPER INTERPRETATION, THESE DRAWINGS SHALL BE PRINTED IN COLOR

SHEET NUMBER

PROPOSED OFFICES, SHOWROOM AND WAREHOUSE FOR: KTFM, LLC

TOWN OF BROOKFIELD, WI LEGEND



CIVIL SHEET INDEX

EROSION MATTING

PROPOSED INLET PROTECTION

SHEET	SHEET TITLE
C0.1	CIVIL COVER AND SPECIFICATION SHEET
C1.0	EXISTING SITE AND DEMOLITION PLAN
C1.1	SITE PLAN
C1.2	GRADING AND EROSION CONTROL PLAN
C1.3	UTILITY PLAN
C1.4	LANDSCAPE AND RESTORATION PLAN
C2.0	DETAILS
C2.1	DETAILS
C2.2	DETAILS
C3.1	SITE PHOTOMETRIC PLAN & DETAILS



PROJECT LOCATION MAP

DIVISION 31 EARTH WORK

- 31 10 00 SITE CLEARING (DEMOLITION)

 A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN
- LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.

 B. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION.
- C. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTORS EXPENSE.D. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

31 20 00 EARTH MOVING

- A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE
- GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE
 RESPECTIVE CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS.

 C. ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND AT SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES
 BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT
 POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL
- REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING REQUIREMENTS.

 D. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS, UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT
- FILL OR BACKFILL LAYER BEFORE COMPACTION AS RECOMMENDED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY DENSITY.

 E. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.

 F. COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698, STANDARD
- PROCTOR TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT.

 1. UNDER FOUNDATIONS SUBGRADE, AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 98 PERCENT.

 2. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB PLACE A DRAINAGE COURSE LAYER OF 3/4" CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE
- SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.

 3. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE- PLACE A DRAINAGE COURSE LAYER OF CLEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
- LESS THAN 95 PERCENT.

 5. UNDER WALKWAYS COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.

 6. UNDER LAWN OR UNPAVED AREAS COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 85 PERCENT.

 G. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS.

 CONTRACTOR SHALL PROVIDE DOCUMENTATION OF PASSING DENSITY TESTING AND PROOF-ROLLING TO ENGINEER UPON COMPLETION. IT IS

4. UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS - COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT

SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS. THE GEOTECHNICAL REPORT WAS PERFORMED BY PSI INTERTEK.

H. ALLOW THE TESTING AGENCY TO TEST AND INSPECT SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS. PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 50 LINEAR FEET OF WALL STRIP FOOTING.

I. WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS

. THE BUILDING SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING AS INDICATED ON THE PLANS, SITE EARTHWORK SHALL BE

GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE GRADING PLAN. 31 30 00 EROSION CONTROL/STORMWATER MANAGEMENT

- A. THE DESIGN ENGINEER SHALL PREPARE A SITE SPECIFIC EROSION CONTROL AND A STORMWATER MANAGEMENT PLAN PURSUANT TO NR 216.46
 AND NR 216.47. THE DESIGN ENGINEER SHALL ALSO FILE A CONSTRUCTION NOTICE OF INTENT WITH THE WISCONSIN DEPARTMENT OF NATURAL
 RESOURCES PURSUANT TO NR 216.43 OR TO AN AUTHORIZED LOCAL PROGRAM PURSUANT TO NR 216.415 TO OBTAIN COVERAGE UNDER THE
- B. THE CONTRACTOR SHALL KEEP THE NOTICE OF INTENT PERMIT, APPROVED EROSION CONTROL AND STORMWATER MANAGEMENT PLANS, AND
 PLAN AMENDMENTS ON THE CONSTRUCTION SITE AT ALL TIMES PURSUANT TO NR 216.455 UNTIL PERMIT COVERAGE IS TERMINATED.
 C. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE MONITORING, MAINTENANCE, AND REPORTING REQUIREMENTS OF NR 216.48.
 INSPECTIONS OF IMPLEMENTED EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MUST AT A MINIMUM BE INSPECTED EVERY 7
 DAYS AND WITHIN 24 HOURS AFTER A PRECIPITATION EVENT OF 0.5" OR MORE. A PRECIPITATION EVENT MAY BE CONSIDERED TO BE THE TOTAL
 AMOUNT OF PRECIPITATION RECORDED IN ANY CONTINUOUS 24-HOUR PERIOD. THE CONTRACTOR SHALL REPAIR OR REPLACE EROSION AND
 SEDIMENT CONTROL AS NECESSARY WITHIN 24 HOURS OF AN INSPECTION OR AFTER A DEPARTMENT NOTIFICATION WHERE REPAIR OR
 REPLACEMENT IS REQUESTED.
- E. THE CONTRACTOR SHALL MAINTAIN, AT THE CONSTRUCTION SITE OR AVAILABLE VIA AN INTERNET WEBSITE, WEEKLY WRITTEN REPORTS OF ALL INSPECTIONS CONDUCTED. WISCONSIN DNR CONSTRUCTION SITE INSPECTION REPORT FORM 3400-187 SHALL BE USED. WEEKLY INSPECTION REPORTS SHALL INCLUDE ALL OF THE FOLLOWING:

 1. THE DATE. TIME. AND LOCATION OF THE CONSTRUCTION SITE INSPECTION.
- THE NAME OF THE INDIVIDUAL WHO PERFORMED THE INSPECTION.
 AN ASSESSMENT OF THE CONDITION OF THE EROSION AND SEDIMENT CONTROLS.
- 4. A DESCRIPTION OF ANY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE IMPLEMENTATION AND MAINTENANCE PERFORMED.
 5. A DESCRIPTION OF THE PRESENT PHASE OF LAND DISTURBING CONSTRUCTION ACTIVITY AT THE CONSTRUCTION SITE.
 F. EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151, THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF MANAGEMENT PERFORMANCE STANDARDS. TECHNICAL STANDARDS PUBLISHED BY THE WISCONSIN DNR SHALL ALSO BE UTILIZED TO IMPLEMENT THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED.
- SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED
 AROUND THE PERIMETER OF ALL SOIL STOCKPILES THAT WILL EXIST FOR MORE THAN 7 DAYS. FOLLOW PROCEDURES FOUND IN WISCONSIN
 DNR TECHNICAL STANDARD 1056 (CURRENT EDITION).
- 2. DITCH CHECKS SHALL BE PROVIDED TO REDUCE THE VELOCITY OF WATER FLOWING IN DITCH BOTTOMS. PLACE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1062 (CURRENT EDITION).
 3. STONE TRACKING PADS AND TRACKOUT CONTROL PRACTICES SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATIONS. THE AGGREGATE USED FOR THE STONE TRACKING PAD SHALL BE 3/8" TO 3 INCH CLEAR OR WASHED STONE AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC AS NEEDED. THE TRACKING PAD SHALL BE THE
- FULL WIDTH OF THE EGRESS POINT (12' MIN WIDTH) AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. OTHER TRACKOUT CONTROL PRACTICES INCLUDING STABILIZED WORK SURFACES, MANUFACTURED TRACKOUT CONTROL DEVICES, TIRE WASHING, AND STREET/PAVEMENT CLEANING SHALL BE IMPLEMENTED AS NECESSARY TO MITIGATE THE TRACKOUT OF SEDIMENT OFFSITE. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1057 (CURRENT EDITION).

 4. STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR
- C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060 (CURRENT EDITION).

 5. DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. CONTROL MEASURES SHOULDDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL FOLLOW PROCEDURES FOLUND IN WISCONSIN DUR TECHNICAL STANDARD 1068 (CURRENT FOITION)
- MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068 (CURRENT EDITION).

 1. THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.

 2. CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND
- STORMWATER DRAINAGE SYSTEM. WASHOUT AREA SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.

 3. TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES THAT EXIST FOR MORE THAN 7 DAYS. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF EXPOSED SOIL. PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADING. TOPSOIL, SEED, AND MULCH SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR
- FINAL STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.

 4. IF SITE DEWATERING IS REQUIRED FOR PROPOSED CONSTRUCTION ACTIVITIES, ALL SEDIMENT LADEN WATER GENERATED DURING THE DEWATERING PROCESS SHALL BE TREATED TO REMOVE SEDIMENT PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE. FOLLOW ALL
- PROCEDURES FOUND IN TECHNICAL STANDARD 1061.

 5. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. DUST CONTROL REQUIREMENTS SHALL BE FOLLOWED PER WI DNR TECHNICAL STANDARD 1068 (CURRENT EDITION). FLUSHING SHALL NOT BE ALLOWED.

 G. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
- H. ONCE THE CONSTRUCTION SITE HAS BEEN FULLY STABILIZED AND TEMPORARY EROSION CONTROL BEST MANAGEMENT PRACTICES HAVE BEEN REMOVED, THE CONTRACTOR SHALL FILE A CONSTRUCTION NOTICE OF TERMINATION WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES IN ACCORDANCE WITH NR 216.55.

J. ALL POST CONSTRUCTION STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES SHALL BE CONSTRUCTED BEFORE THE SITE HAS

RESOURCES IN ACCORDANCE WITH NR 216.55.
AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL GIVE THE OWNER COPIES OF THE EROSION CONTROL AND STORM WATER MANAGEMENT PLANS, AMENDMENTS TO PLANS, SUPPORTING PLAN DATA, AND CONSTRUCTION SITE EROSION CONTROL INSPECTION REPORTS.
THE OWNER SHALL RETAIN THESE FOR A PERIOD OF 3 YEARS FROM THE DATE OF TERMINATING COVERAGE UNDER WPDES GENERAL PERMIT.

CONSTRUCTION STAKING SERVICES

PLAN SPECIFICATIONS (BASED ON CSI FORMAT)

DIVISION 32 EXTERIOR IMPROVEMENTS

32 10 00 AGGREGATE BASE & ASPHALT PAVEMENT

A. CONTRACTOR TO PROVIDE COMPACTED AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT WHERE INDICATED ON THE PLANS. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. PROVIDE HOT MIX ASPHALT MIXTURE TYPES PER SECTION 460 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. CONTRACTOR SHALL OBTAIN AND REVIEW SOILS REPORT FOR RECOMMENDATIONS FOR GEO-GRID / GEOTEXTILE BELOW CRUSHED AGGREGATE (IF APPLICABLE). CONTRACTOR TO PROVIDE AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT TYPES AND DEPTHS AS INDICATED BELOW:

12" OF 1-1/4" CRUSHED AGGREGATE

- STANDARD ASPHALT PAVING SECTION
 1-3/4" SURFACE COURSE (5 LT 58-28S)

 (WISDOT 455.2.5 TACK COAT (STAGED PAVING)
 2" BINDER COURSE (4 LT 58-28S)

 HEAVY ASPHALT PAVING SECTION
 1-3/4" SURFACE COURSE (5 LT 58-28S)

 WISDOT 455.2.5 TACK COAT (STAGED PAVING)
 2-1/2" BINDER COURSE (4 LT 58-28S)
- B. CONTRACTOR TO COMPACT THE AGGREGATE BASE, ASPHALT BINDER COURSE, AND ASPHALT SURFACE COURSE TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL ASPHALT PAVEMENT AREAS SHALL BE PAVED TO WITHIN 0.05' OF DESIGN SURFACE GRADES WITH POSITIVE DRAINAGE BEING MAINTAINED IN ACCORDANCE WITH DESIGN PLANS. A MINIMUM OF 1.5% SLOPE SHALL BE MAINTAINED IN ALL ASPHALT PAVEMENT AREA.

HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT OR CONSTRUCTION

D. CONTRACTOR TO PROVIDE 4" WIDE YELLOW PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. YELLOW PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

32 20 00 CONCRETE AND AGGREGATE BASE

- A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS.

 B. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR
- HIGHWAY AND STRUCTURE CONSTRUCTION.

 C. DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 330R-08 & ACI 318-08.

 D. EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION. CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:

 1. SIDEWALK CONCRETE 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONTRACTION JOINTS SHALL CONSIST OF 1/8" WIDE BY
- 1" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS.

 2. LOADING DOCK CONCRETE 8" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE BASE.

 a. CONCRETE SHALL BE REINFORCED WITH ONE OF THE FOLLOWING AND PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB:
- 1). 4"X4" W5.5XW5.5 W.W.F TWO LAYERS OF 4"X4" W 2.9XW2.9 W.W.F.

10" OF 1-1/4" CRUSHED AGGREGATE

- #3 REBARS AT 7-1/2" O.C. #4 REBARS AT 13" O.C.
- b. LOADING DOCK CONCRETE JOINTING SHALL BE AS FOLLOWS:
 1). CONTRACTION SAWCUT JOINT -CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER. SAWCUT JOINT SHALL BE 2" IN DEPTH.

 TYPICAL DOLLS CONTROLLOWS. POLIC CONTROLLOWS SHALL BE PROVIDED WITH 1 1/4" DIAMETER BY 20" LONG SMOOTH DOWELD LAGED AT
- 2). TYPICAL POUR CONTROL JOINT POUR CONTROL JOINT SHALL BE PROVIDED WITH 1-1/4" DIAMETER BY 20" LONG SMOOTH DOWEL PLACED AT 12" ON CENTER. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENSTREAK 9" SPEED DOWEL TUBES SHALL BE USED.

 3. DUMPSTER PAD CONCRETE 8" OF CONCRETE OVER 6" OF AGGREGATE BASE.

 a. CONCRETE SHALL BE STEEL REINFORCED WITH THE FOLLOWING AND PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB:
- 1). TIE BARS AT ALL CONTRACTION JOINTS OF THE CONCRETE. TIE BARS SHALL BE #4 REBAR 30" LONG PLACED AT 30" O.C.b. DUMPSTER PAD CONCRETE JOINTING SHALL BE AS FOLLOWS:
- DOWNSTER PAD CONCRETE JOINTING SHALL BE AS POLLOWS.
 CONTRACTION SAWCUT JOINT CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER. SAWCUT SHALL BE 2" IN DEPTH
- SHALL BE 2" IN DEPTH.

 2). TYPICAL POUR CONTROL JOINT POUR CONTROL JOINT SHALL BE PROVIDED WITH 1-1/4" DIAMETER BY 20" LONG SMOOTH DOWEL
- PLACED AT 12" O.C. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENSTREAK 9" SPEED DOWEL TUBES SHALL BE USED.

 4. HEAVY DUTY CONCRETE 7" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE BASE. CONCRETE SHALL BE REINFORCED WITH MICRO-FIBERS THAT ARE 100% VIRGIN POLYPROPYLENE, FIBRILLATED, ROUGH TEXTURED, INTERCONNECTED FIBERS CONTAINING NO PREPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MADDLE CONCRETE FIBERS.
- MATERIALS AND SPECIFICALLY MANUFACTURED FOR CONCRETE REINFORCEMENT AT A RATE OF 1.5LBS FIBER/YARD³ OF CONCRETE. FIBER REINFORCEMENT SHALL BE FIBERMESH 300 (OR EQ.) AND CONFORM WITH ASTM C 1116, TYPE III FIBER REINFORCED CONCRETE. CONTRACTION JOINTS SHALL BE SAWCUT 1.5" IN DEPTH AND BE SPACED A MAXIMUM OF 15' O.C.

 a. CONCRETE SHALL BE STEEL REINFORCED AS FOLLOWS:

 1). TIE BARS AT OUTERMOST CONTRACTION JOINT (FIRST JOINT FROM EDGE OR AT CURB JOINT) AROUND PERIMETER OF CONCRETE. TIE BARS
- SHALL BE #5 REBAR 24" LONG PLACED AT 30" O.C.

 2). TYPICAL POUR CONTROL JOINT POUR CONTROL JOINT SHALL BE PROVIDED WITH 1/4" X 4-1/2" X 4-1/4" DIAMOND SHAPED TAPERED PLATE
 DOWELS MANUFACTURED PER ASTM A36. INSTALL PER MANUFACTURERS SPECIFICATIONS.
- DOWELS MANUFACTURED PER ASTM A36. INSTALL PER MANUFACTURERS SPECIFICATIONS.

 E. DESIGN MIXES SHALL BE IN ACCORDANCE WITH ASTM C94
- STRENGTH TO BE MINIMUM OF 4,500 PSI AT 28 DAYS FOR EXTERIOR CONCRETE.
 MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45.
- 3. SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK
 4. SLUMP SHALL BE 2.5" OR LESS FOR SLIP-FORMED CURB AND GUTTER
- 5. SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR NON SLIP-FORMED CURB AND GUTTER
- ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
 MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES.
- F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH RESPECTIVE CONTRACTORS. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6-W1.4 X W1.4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 3.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR.
- G. ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINES SHALL BE CONSTRUCTED TO WITHIN 0.05' OF DESIGN SURFACE AND FLOWLINE GRADES ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS.

 H. CONCRETE FLAT WORK SHALL HAVE CONSTRUCTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURE
- AND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6' MIN.). IF CONCRETE PAVEMENT IS ADJACENT TO CONCRETE CURB, JOINTING IN THE PAVEMENT AND CURB SHALL ALIGN. ALL EXTERIOR CONCRETE SHALL HAVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHOULD BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT AND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE MASONRY UNITS.

 I. ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN 3"
- 1. ALL REINFORCING BARS SHALL BE ASIM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN 3"
 WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" IN ALL OTHER LOCATIONS. ALL
 REINFORCING SHALL BE LAPPED 36 DIAMETERS FOR UP TO #6 BARS, 60 DIAMETERS FOR #7 TO #10 BARS OR AS NOTED ON THE DRAWINGS AND
 EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN
 ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCEMENT SHALL NOT BE PAINTED AND MUST BE FREE OF
 GREASE/OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 185.
- GREASE/OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 185. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE.

 J. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX EXCEEDING 5 CU. YD., BUT LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. PERFORM COMPRESSIVE-STRENGTH TESTS ACCORDING TO ASTM C 39. TEST TWO SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS. PERFORM SLUMP TESTING ACCORDING TO ASTM.
- CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.

 K. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING, BUT BEFORE POWER FLOATING AND TROWELLING.

43. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH

L. LIMIT MAXIMUM WATER-CEMENTIOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DEICING SALTS TO 0.45.

M. TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.

32 30 00 LANDSCAPING AND SITE STABILIZATION

- A. TOPSOIL: CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS, OTHER THAN A LANDSCAPE ISLANDS SHALL BE PROVIDED WITH A MINIMUM OF 10" OF TOPSOIL. REUSE SURFACE SOIL STOCKPILED ON SITE AND SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN QUANTITIES ARE INSUFFICIENT. EXCAVATOR SHALL BE RESPONSIBLE FOR ROUGH PLACEMENT OF TOPSOIL TO WITHIN 1" OF FINAL GRADE PRIOR TO LANDSCAPER FINAL GRADING. LANDSCAPER TO PROVIDE PULVERIZING AND FINAL GRADING OF TOPSOIL FOWIDE SOIL ANALYSIS BY A QUALIFIED SOIL TESTING LABORATORY AS REQUIRED TO VERIFY THE SUITABILITY OF SOIL TO BE USED AS TOPSOIL AND TO DETERMINE THE NECESSARY SOIL AMENDMENTS. TEST SOIL FOR PRESENCE OF ATRAZINE AND INFORM EXCEL ENGINEERING, INC. IF PRESENT PRIOR TO BIDDING PROJECT. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 8, CONTAIN A MINIMUM OF 5 PERCENT ORGANIC MATERIAL CONTENT, AND SHALL BE FREE OF STONES 1 INCH OR LARGER IN DIAMETER. ALL MATERIALS HARMFUL TO PLANT GROWTH
- TOPSOIL INSTALLATION: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES AND REMOVE STONES LARGER THAN 1" IN DIAMETER. ALSO REMOVE ANY STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND DISPOSE OF THEM OFF THE PROPERTY. SPREAD TOPSOIL TO A DEPTH OF 6" BUT NOT LESS THAN WHAT IS REQUIRED TO MEET FINISHED GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD TOPSOIL IF SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WIT LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION.
- 1. PERMANENT LAWN AREAS SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 65% KENTUCKY BLUEGRASS BLEND (2.0-2.6 LBS./1,000 S.F.), 20% PERENNIAL RYEGRASS (0.6-0.8 LBS./1,000 S.F.), 15% FINE FESCUE (0.4-0.6 LBS./1,000 S.F.). STRAW AND MULCH SHALL BE LAID AT 100LBS/1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS/1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. ALL SITE DISTURBED AREAS NOT DESIGNATED FOR OTHER LANDSCAPING AND SITE STABILIZATION METHODS SHALL BE SEEDED AS PERMANENT LAWN. NO BARE TOPSOIL SHALL BE LEFT ONSITE. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.

 2. ALL PERMANENT AND TEMPORARY STORM WATER CONVEYANCE SWALE BOTTOMS AND SIDE SLOPES AS WELL AS STORMWATER MANAGEMENT BASIN BOTTOMS AND SIDE SLOPES SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 45% KENTUCKY BLUEGRASS (0.60 LBS./1000 S.F.), 40% CREEPING RED FESCUE (0.50 LBS./1,000 S.F.) AND 15% PERENNIAL RYEGRASS (0.20 LBS./1,000 S.F.). FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR
- OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.

 3. ALL TEMPORARY SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE: 100% RYEGRASS AT 1.9 LBS./1,000 S.F. STRAW AND MULCH SHALL BE LAID AT 100 LBS./1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.
- C. SEEDED LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS SHOULD BE ESTABLISHED FREE OF WEEDS AND SURFACE IRREGULARITIES. LAWN COVERAGE SHOULD EXCEED 90% AND BARE SPOTS SHOULD NOT EXCEED 5"X5". CONTRACTOR SHOULD REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY.
- D. <u>EROSION MATTING:</u>
 1. CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND
 GREATER OUTSIDE OF STORMWATER CONVEYANCE SWALES AND STORMWATER MANAGEMENT BASINS. LAWN SEED SHALL BE PLACED <u>BELOW</u>
 MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.
 2. CONTRACTOR TO PROVIDE FROSION MATTING (NORTH AMERICAN GREEN C125) OR FOUNDALENT IN ALL SWALE ROTTOMS AND SIDE SLOPES AS
- WELL AS STORMWATER MANAGEMENT BASIN BOTTOMS AND SIDE SLOPES AS REQUIRED. LAWN SEED SHALL BE PLACED <u>BELOW</u> MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.

 E. <u>STORMWATER MANAGEMENT POND SAFETY SHELF SEEDING</u>: SAFETY SHELF SHALL BE SEEDED WITH A WET PRAIRIE EMERGENT PLANT TYPE MIX.

 F. <u>RIP RAP</u>: ALL RIP RAP ASSOCIATED WITH STORMWATER MANAGEMENT AND STORMWATER CONVEYANCE, AS DELINEATED ON THE PLANS, SHALL BE
- F. RIP RAP: ALL RIP RAP ASSOCIATED WITH STORMWATER MANAGEMENT AND STORMWATER CONVEYANCE, AS DELINEATED ON THE PLANS, SHALL BE CONSTRUCTED WITH THE TOP OF RIP RAP MATCHING THE PROPOSED ADJACENT GRADE ELEVATIONS. PLACEMENT OF RIP RAP ABOVE THE PROPOSED ADJACENT GRADE ELEVATIONS IS NOT ACCEPTABLE. ALL RIP RAP SHALL BE PLACED ON TYPE HR FILTER FABRIC PER SECTION 645 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURAL CONSTRUCTION.

 G. TREES AND SHRUBS: FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT
- G. TREES AND SHRUBS: FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, AND HEALTHY LOOKING STOCK. STOCK SHOULD ALSO BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. SEE THE LANDSCAPE PLAN FOR SPECIFIC SPECIE TYPE, SIZE, AND LOCATION.

 H. TREE AND SHRUB INSTALLATION: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO
- H. TREE AND SHRUB INSTALLATION: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO SUPPORT ROOT BALL. EXCAVATE PIT APPROXIMATELY THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER. SET TREES AND SHRUBS PLUMB AND IN CENTER OF PIT WITH TOP OF BALL 1" ABOVE ADJACENT FINISHED GRADES. PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS AND TAMP TO SETTLE MIX. WATER ALL PLANTS THOROUGHLY. PROVIDE TEMPORARY STAKING FOR TREES AS REQUIRED.

(. LANDSCAPE STONE: PROVIDE 3" MINIMUM THICK BLANKET OF 1.5" MINIMUM TO 2.5" MAXIMUM CRUSHED DECORATIVE STONE AT ALL PLANTING

- I. TREE AND SHRUB MAINTENANCE/WARRANTY: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. MAINTENANCE TO INCLUDE REGULAR WATERING AS REQUIRED FOR SUCCESSFUL PLANT ESTABLISHMENT. CONTRACTOR TO PROVIDE 1 YEAR WARRANTY ON ALL TREES, SHRUBS, AND PERENNIALS.
- CONTRACTOR TO PROVIDE 1 YEAR WARRANTY ON ALL TREES, SHRUBS, AND PERENNIALS.

 J. ORGANIC MULCH: PROVIDE 3" MINIMUM THICK BLANKET OF SHREDDED HARDWOOD MULCH AT ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.
- AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.

 L. PLASTIC EDGING: INSTALL VALLEY VIEW INDUSTRIES BLACK DIAMOND LAWN EDGING TO SEPARATE ALL PLANTING BEDS FROM LAWN AREAS. EDGING TO BE 5.5" TALL WITH METAL STAKES INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

DIVISION 33 UTILITIES

33 10 00 SITE UTILITIES

- A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER
- POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY.

 B. ALL PROPOSED SANITARY PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON CO.1 OF THE PROPOSED DI ANSET.
- C. SANITARY MANHOLES SHALL BE 48" PRECAST AND CONFORM TO THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN-CURRENT EDITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SANITARY MANHOLE FRAME AND GRATE TO BE NEENAH R-1550-A OR EQUAL. RIM ELEVATION TO BE SET AT FINISHED GRADE IN DEVELOPED AREAS AND 12" ABOVE FINISHED GRADE IN UNDEVELOPED AREAS EXCEPT AS OTHERWISE DIRECTED BY THE ENGINEER.
- D. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY SERVICE AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONSIST OF A 6" VERTICAL PVC PIPE WITH A WATER TIGHT REMOVABLE CLEANOUT PLUG. AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS SHALLOWER. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM
- REQUIREMENTS.

 E. ALL PROPOSED WATER PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF THE PROPOSED PLANSET. 6' MINIMUM COVER SHALL BE PROVIDED OVER ALL WATER PIPING UNLESS OTHERWISE SPECIFIED.

 F. ALL PROPOSED STORM PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF
- THE PROPOSED PLANSET. PIPE SHALL BE PLACED MIN. 8' HORIZONTALLY FROM FOUNDATION WALLS.

 G. SANITARY, STORM, AND WATER UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10' OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE UTILITY DESIGN PLANS AND STATE REQUIREMENTS.

 H. SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MINIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN STORM SEWER FOR INTERNALLY DRAINED BUILDINGS TO A POINT WHICH IS A MINIMUM OF
- 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN DOWNSPOUT LEADS TO BUILDING FOUNDATION AND UP 6" ABOVE SURFACE GRADE FOR CONNECTION TO DOWNSPOUT. ALL DOWNSPOUT LOCATIONS SHOULD BE VERIFIED WITH ARCHITECTURAL PLANS AND DOWNSPOUT CONTRACTOR/GC PRIOR TO INSTALLATION OF DOWNSPOUT LEADS. DOWNSPOUT LEADS SHALL NOT UNDERMINE BUILDING FOUNDATIONS. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFIED BY THE PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.

 I. ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE). PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL
- WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET. TRACER WIRE SHALL TERMINATE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AT GRADE OR IN TERMINATION BOX PER LOCAL/STATE REQUIREMENTS.

 J. ALL UTILITIES SHALL BE INSTALLED PER STATE, LOCAL, AND INDUSTRY STANDARDS. WATER, SANITARY, AND STORM SEWER SHALL BE INSTALLED PER "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN". THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR
- OBTAINING STATE PLUMBING REVIEW APPROVAL. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED TO INSTALL WATER, SANITARY AND STORM SEWER.

 K. SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.

33 20 00 PUBLIC SITE UTILITIES

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY.
 B. SEE SHEETS FOR PUBLIC WATER MAIN MAIN SPECIFICATIONS.

UtilityMaterialPipe CodeFitting CodeJoint CodeCombined Domestic/Fire ServiceC900 PVCAWWA C900, ASTM D1785, ASTM D2466, ASTM D2466, ASTM D2467, ASTM D2467, ASTM D2467, ASTM D2467, ASTM D2467, ASTM D2467, ASTM D2311, ASTM F1336, ASTM F1336, ASTM F1866Joint: ASTM D3139 Integral Bell & Spigot Elastomeric Seal: ASTM F477Sanitary SewerSDR 35 PVCASTM D1785, ASTM D2665, ASTM D2665, ASTM D2665, ASTM D3034, ASTM F891ASTM F1336Push On: ASTM D3212 for Tightnes Elastomeric Gasket: ASTM F477Storm SewerHDPEASTM F2648ASTM F2306 Saddle GasketJoint: ASTM F2648 Bell & Spigot Elastomeric Seal: ASTM F477

Table A: Allowable Pipe Material Schedule

GENERAL PROJECT NOTES

ALL DRIVEWAYS AND CURB CUTS TO BE CONSTRUCTED ACCORDING TO LOCAL ORDINANCES. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS.

CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED BY THE CONTRACTOR AT

RYAN.W@EXCELENGINEER.COM TO GET STAKING PRICE TO INCLUDE IN BID TO OWNER. PAYMENT OF STAKING COSTS

ABOVE AND BEYOND THE BASE PRICE DUE TO RESTAKING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, NOT

THE OWNER. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.

- 2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.
- 3. CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AS—BUILT SURVEY OF STORMWATER POND FOLLOWING COMPLETION OF THE POND.

THE CONTRACTOR'S EXPENSE. CONTRACTOR TO CONTACT RYAN WILGREEN AT 920-926-9800 OR

STORMWATER POND ASBUILT NOTE

CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER POND. THE SURVEY SHALL BE COMPLETED PRIOR TO THE POND FILLING WITH WATER. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

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	TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
	CALL DIGGERS HOTLINE 1-800-242-8511
	TOLL FREE TELEFAX (414) 259-0947 TDD (FOR THE HEARING IMPAIRED) 1-800 542-2289
	WISCONSIN STATUTE 182.0175 (1974)

REQUIRES MINIMUM OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE

Pavement Underdrain

CONTACTS

ASTM F667

OWNER

QUEST INTERIORS
21055 CROSSROADS CIRCLE
TOWN OF BROOKFIELD, WI
CONTACT: MARK TWOHIG
P: (920) 922-2006
mtwohig@questinterioursusa.com

Single Wall HDPE-Socked | ASTM F667

CIVIL

EXCEL ENGINEERING

100 CAMELOT DRIVE

FOND DU LAC, WISCONSIN 54935

CONTACT: KURTIS GEIGER

P: (920) 926-9800

F: (920) 926-9801

kurt.geiger@excelengineer.com

CIVIL COVER AND SPECIFICATION SHEET

ASTM D1056 Grade 2A2 Gasketed



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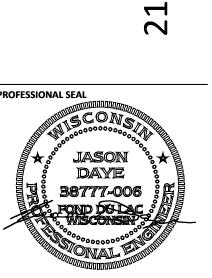
100 Camelot Drive Fond du Lac, WI 54935 920-926-9800 excelengineer.com

PROJECT INFORMATION

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KTFM, LLC



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PRELIMINARY DATES	
APR. 19, 2023	
MAY 3, 2023	CONSTRUCTION
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MAY 22, 2023	_ 3
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CO.1

SANITARY MH RIM=903.44 N 8" PVC=881.75 NE 8" PVC=881.75 SW 8" PVC=881.75

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FOR WAREHOUSE ROOKFIELD, AND SHOWROOM

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PRELIMINARY DATES APR. 19, 2023 MAY 3, 2023 MAY 17, 2023 MAY 22, 2023

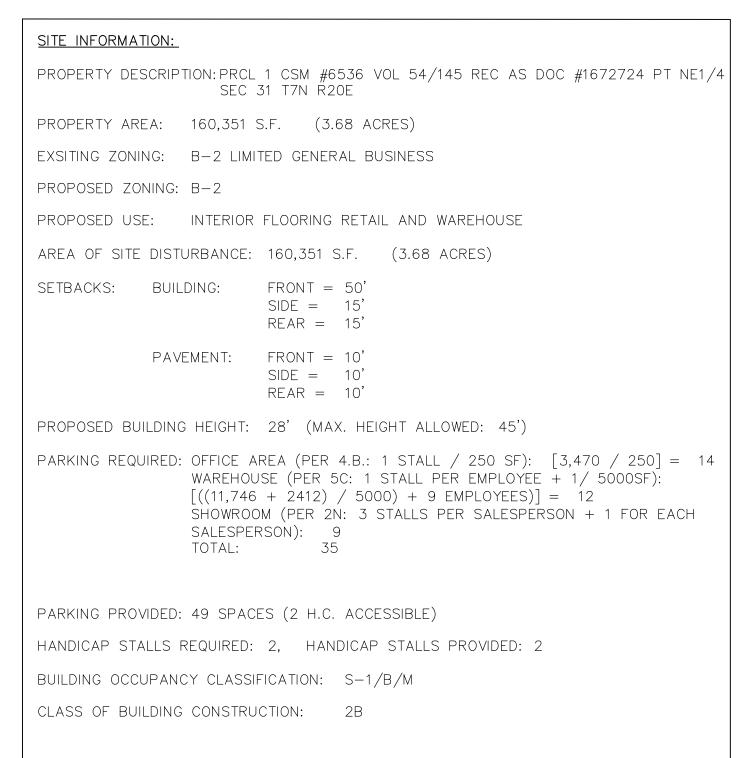
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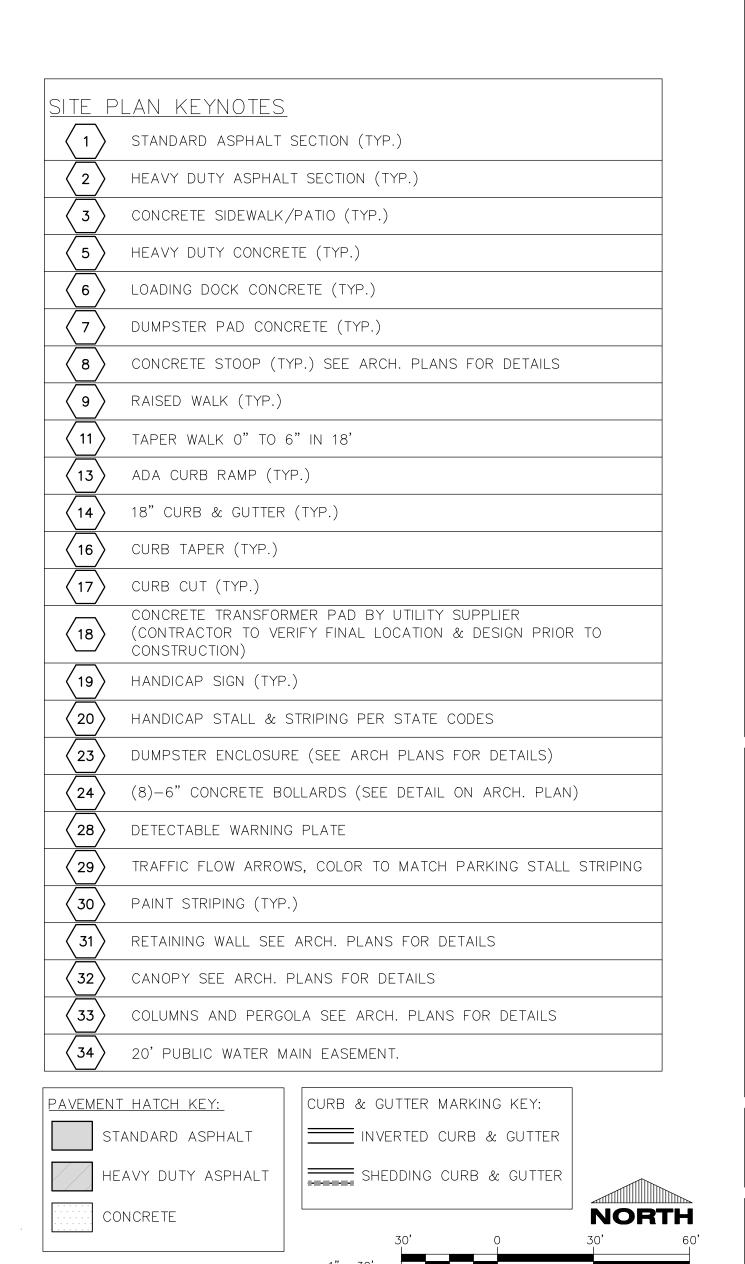
SHEET NUMBER

CIVIL EXISTING SITE AND DEMOLITION PLAN

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SPECIFICATION NOTE: SEE SHEET CO.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS





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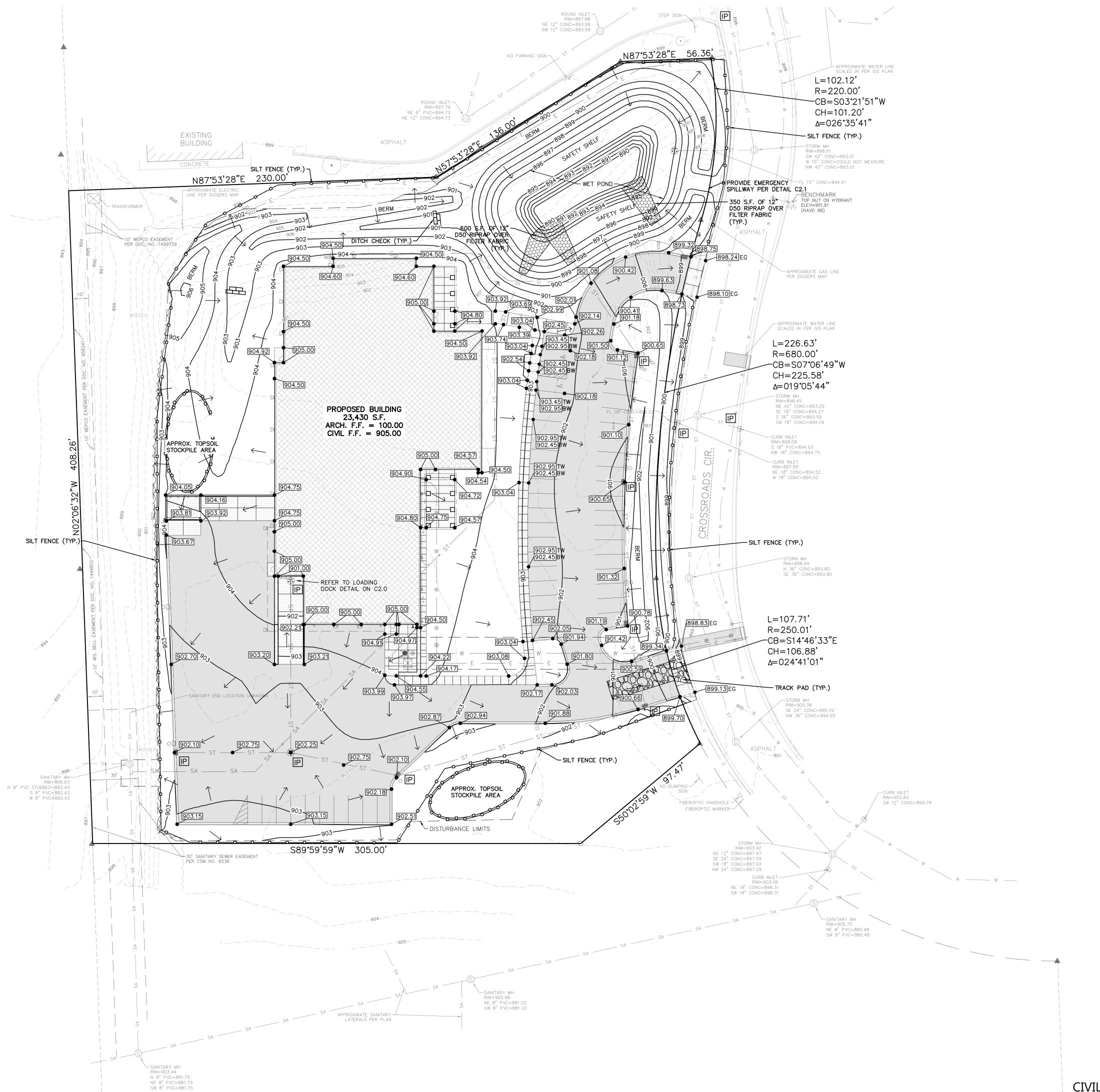
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JOB NUMBER 230030600

SHEET NUMBER

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CIVIL SITE PLAN



SPECIFICATION NOTE: SEE SHEET CO.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

1. HANDICAP STALL AND ACCESS AISLES SHALL NOT EXCEED A SLOPE OF 1.50% IN ANY DIRECTION. HANDICAP STALL & ACCESS AISLES SHALL CONFORM TO ADA REQUIREMENTS (CURRENT EDITION)

2. ÀLL SIDEWALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 1.50% AND RUNNING SLOPE OF 4.50% UNLESS OTHERWISE SPECIFIED.

INLET PROTECTION NOTE:

CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION FOR ALL CURB INLETS & CATCH BASINS ONSITE & OFFSITE IMMEDIATELY DOWNSTREAM OF THE PROJECT SITE PER LOCAL CODE.

STABILIZED CONSTRUCTION ENTRANCE NOTE:

CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT CONSTRUCTION ENTRANCE FOR PROPOSED IMPROVEMENTS AS REQUIRED PER CODE.

CONCRETE WASHOUT NOTE:

CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AS REQUIRED PER CODE. FINAL LOCATION TBD BY CONTRACTOR.

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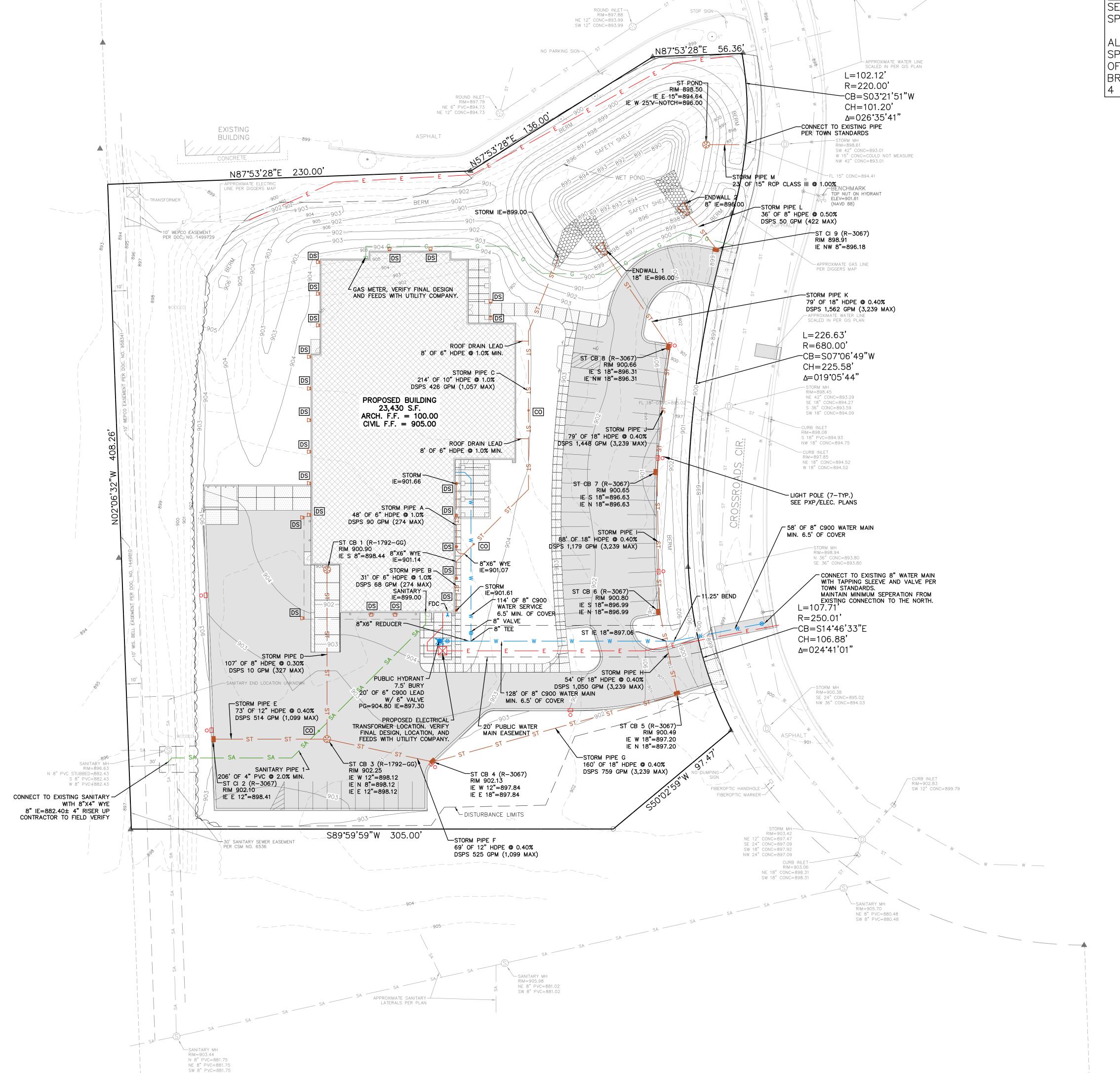
JOB NUMBER 230030600

SHEET NUMBER

NORTH

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CIVIL GRADING AND EROSION CONTROL PLAN



SPECIFICATION NOTE: SEE SHEET CO.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS.

ALL WATER MAIN SHALL MEET THE SPECIFICATIONS AND REQUIREMENTS OF NR 811.70 WAC AND TOWN OF BROOKFIELD SANITARY DISTRICT NO. 4 TECHNICAL SPECIFICATIONS.

TOWN OF BROOKFIELD NOTES:

- 1. PRIOR TO WATER UTILITY CONSTRUCTION CAN BEGIN A MODIFICATION TO THE WATER SERVICE APPLICATION WILL NEED TO BE SUBMITTED TO THE TOWN. IF PLUMBING FIXTURES ARE BEING ADDED, CALCULATIONS SHOULD BE PROVIDED FOR PROPER METER
- 2. CONTRACTOR SHALL NOTIFY THE TOWN SANITARY DISTRICT NO. 4 AND FIELD STAFF A MINIMUM OF 72 HOURS BEFORE THE START OF ANY CONSTRUCTION OR CONNECTION TO EXISTING PUBLIC UTILITIES.

DOWNSPOUT NOTE:

GRADE LOCATIONS. PROVIDE SPLASH BLOCKS AT ALL DS TO GRADE LOCATIONS. SEE ARCH PLANS FOR FINAL LOCATIONS.

DOWNSPOUT NOTE:

= DENOTES DOWNSPOUT CONNECT TO CLEANOUT AT GRADE FOR STORM SEWER LEAD. SEE ARCH PLANS FOR FINAL

CLEANOUT NOTE:

LOCATIONS.

• = DENOTES LOCATIONS WHERE CONTRACTOR SHALL INSTALL CLEANOUTS, SEE CO.1 FOR SPECIFICATION.

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PRELIMINARY DATES APR. 19, 2023 MAY 3, 2023 MAY 17, 2023 MAY 22, 2023

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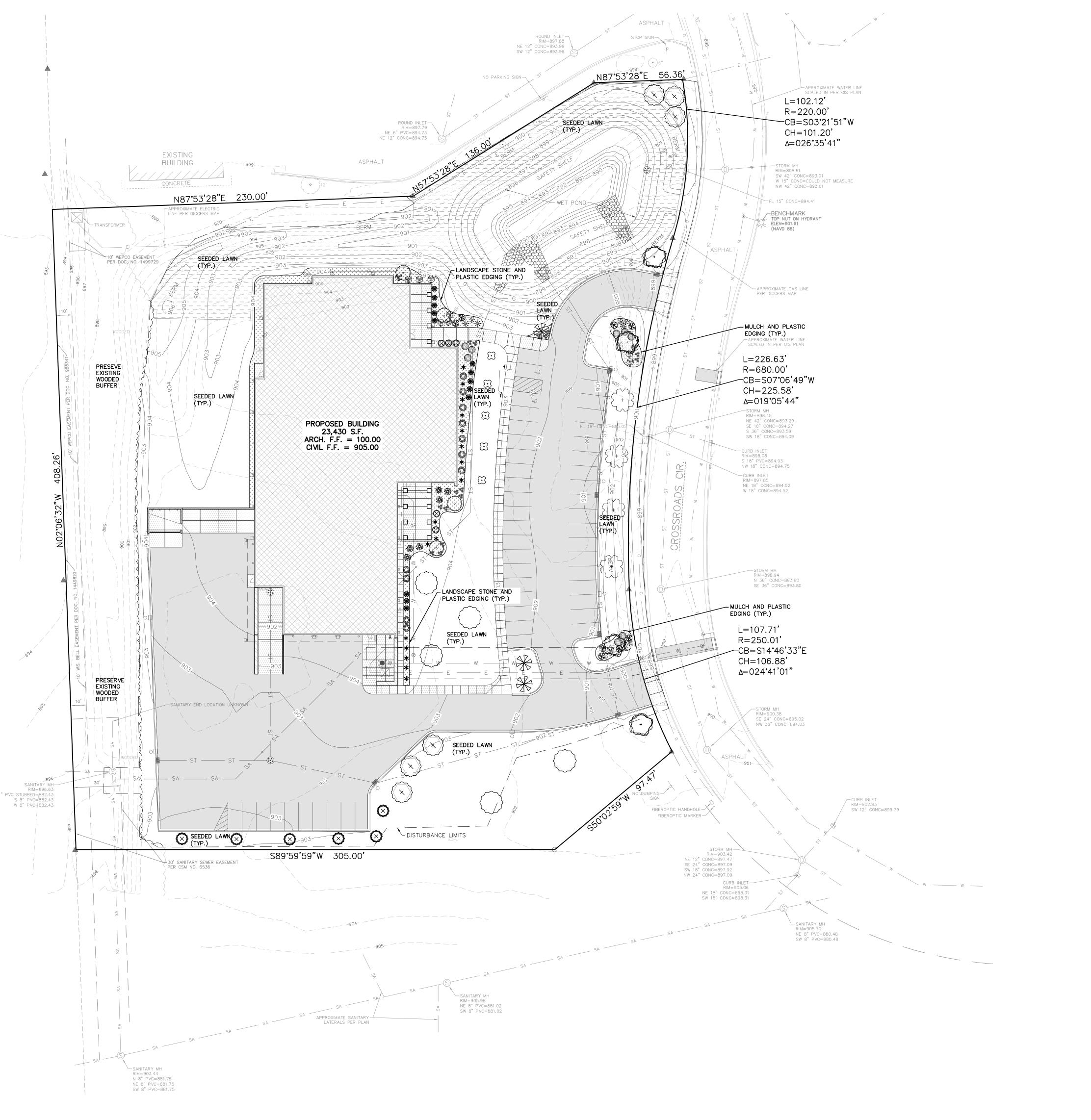
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CIVIL UTILITY PLAN

1"= 30'

SCALE

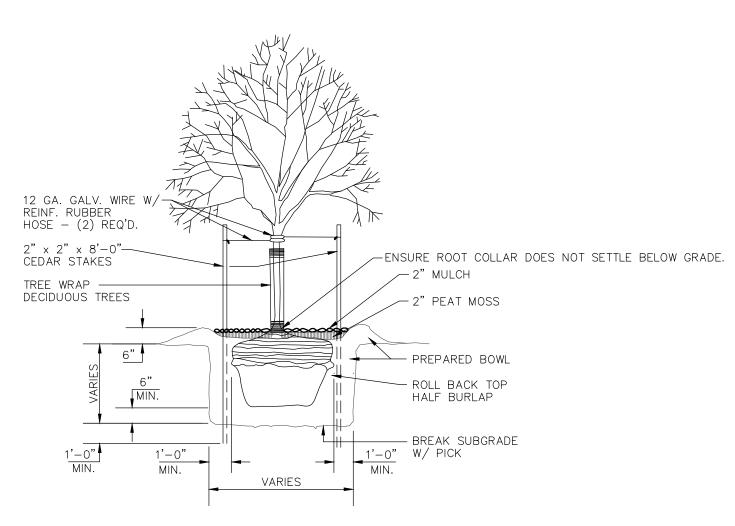
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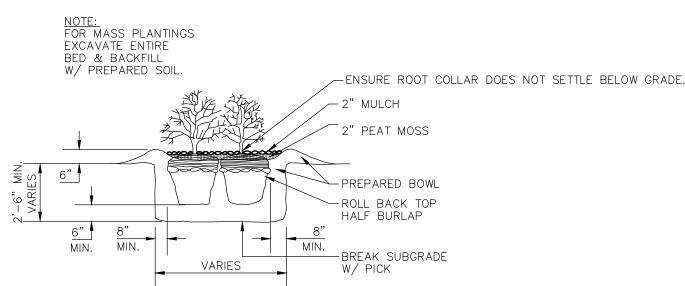
SPECIFICATION NOTE: SEE SHEET CO.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

EROSION MATTING LOCATION

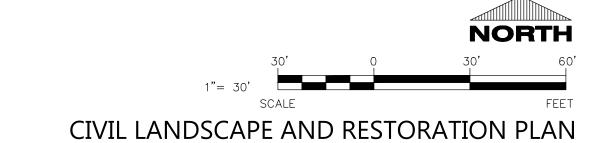
	00141011 11415	DOTANIOAL NIAME	PLANTED	OLIANIT
SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	QUANT
	DECIDU	JOUS TREES		
<u>O</u>	Skyline Honeylocust	Gleditsia triacanthos 'Skyline'	2"	4
€	Autumn Blaze Maple	Acer x freemanii 'Jeffsred'	2"	4
\bigcirc	Redmond Linden	Tilia americana	2"	5
*	Flowering Crabapple (Spring Snow)	Malus x hybrid (Spring Snow)	2"	3
\odot	Ann Magnolia	Magnolia liliflora 'Nigra'	2"	4
	EVERG	REEN TREES		
\odot	Black Hills Spruce	Picea glauca	6'	6
8	Arborvitae — Nigra	Thuja occidentalis 'Nigra'	6'	6
**	Anthony Waterer Spirea Gro-Low Fragrant Sumac	Spiraea x bumalda 'Anthony Water' Rhus gromatica 'Gro Low'	18" 18"	6 13
	Anthony Waterer Spired	Spirgea y humalda 'Anthony Water'	18"	6
	Gro-Low Fragrant Sumac	Times are maried of a Lett		13
0	Rhododendron	Rhodendron haaga	18"	9
Ξ	Limelight Hydrangea Tree	Hydrangea paniculata 'Limelight'	4'-5'	5
	EVERGE	REEN SHRUBS		
₩	Arcadia Juniper	Juniperus sabina 'arcadia'	24"	7
②	Taunton Yew	Tauntonii	24"	5
	Wintergreen Boxwood	Buxus sinica var Insularis 'Wintergreen'	18"	11
	<u>PE</u> I	<u>RENNIALS</u>		
*	Karl Foerster Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 gal pot	16
**	Daylilies 'Stella de Oro'	Hemerocallis 'Stella de Oro'	1 gal pot	15
*	Walker's Low Catmint	Nepeta x faassenii 'Walker's low'	1 gal pot	9
*	Hostas	Hostas 'Royal Standard'	1 gal pot	13



TREE PLANTING DETAIL NO SCALE



SHRUB PLANTING DETAIL NO SCALE





PROJECT INFORMATION

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AND SHOWROOM

ROOI SROADS

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PROFESSIONAL SEAL

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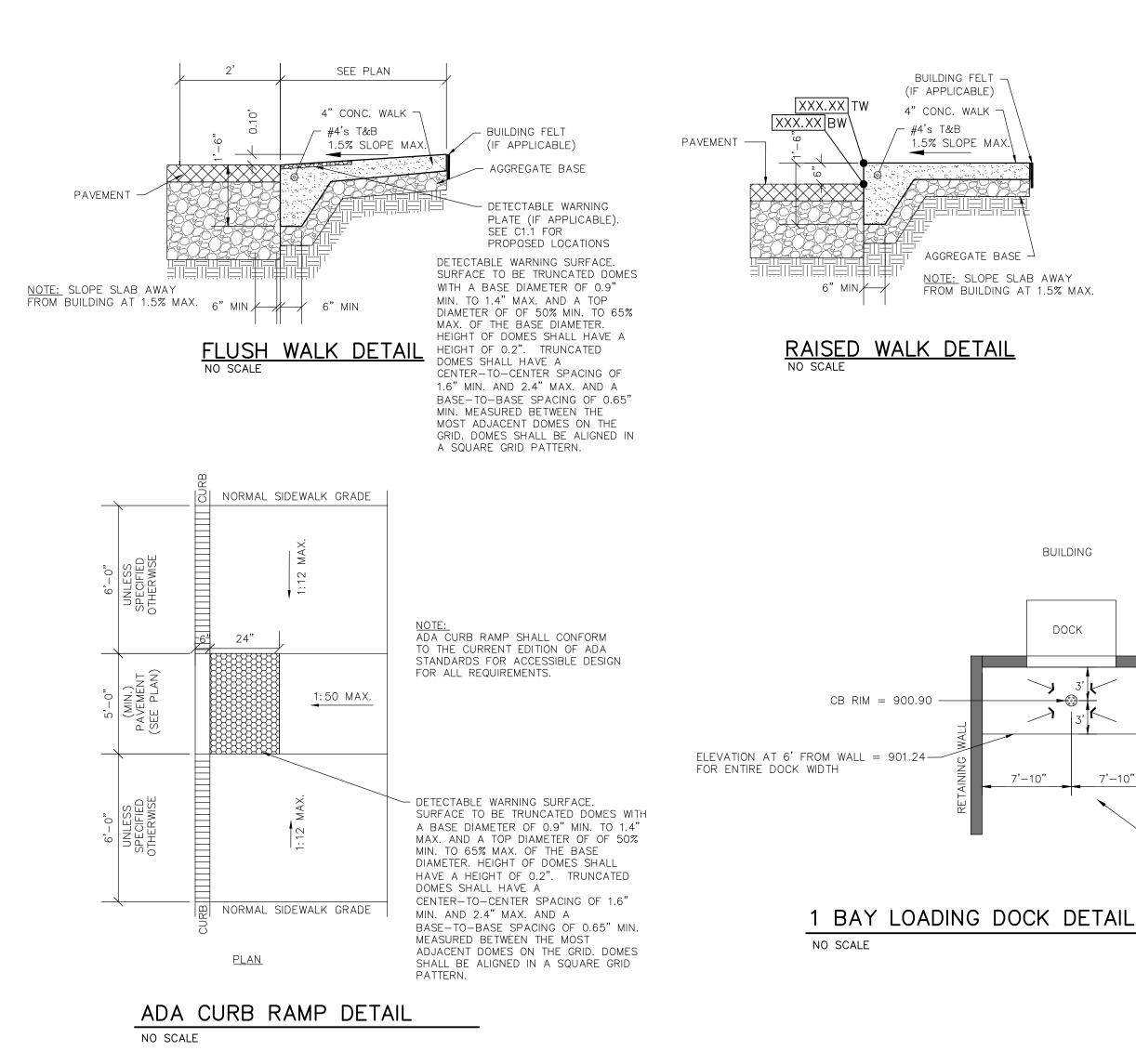
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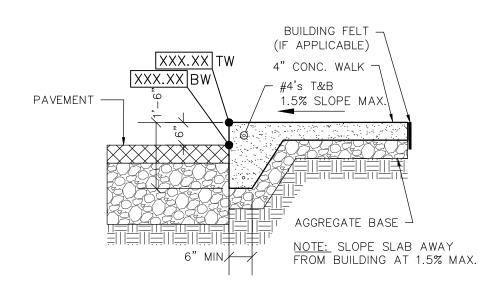
PRELIMINARY DATES APR. 19, 2023 MAY 3, 2023 MAY 17, 2023 MAY 22, 2023

JOB NUMBER 230030600

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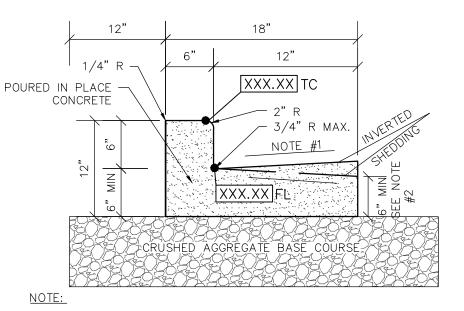




RAISED WALK DETAIL

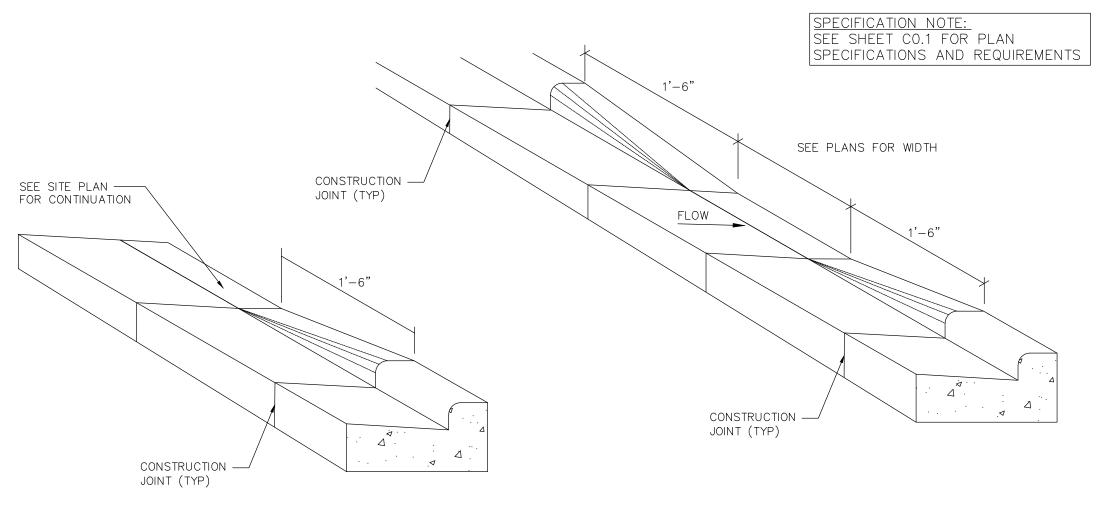
BUILDING

DOCK



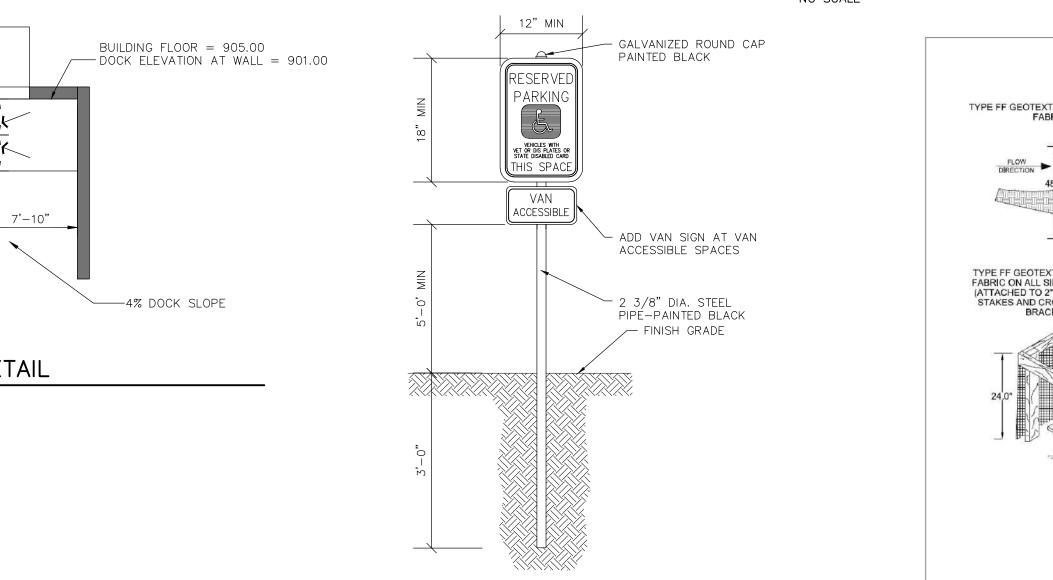
- 1. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS. 2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A
- 6" MIN. GUTTER THICKNESS IS MAINTAINED. 3. SEE SITE PLAN & GRADING PLAN FOR INVERTED & SHEDDING CURB LOCATIONS

18" CONCRETE CURB & GUTTER DETAIL NO SCALE

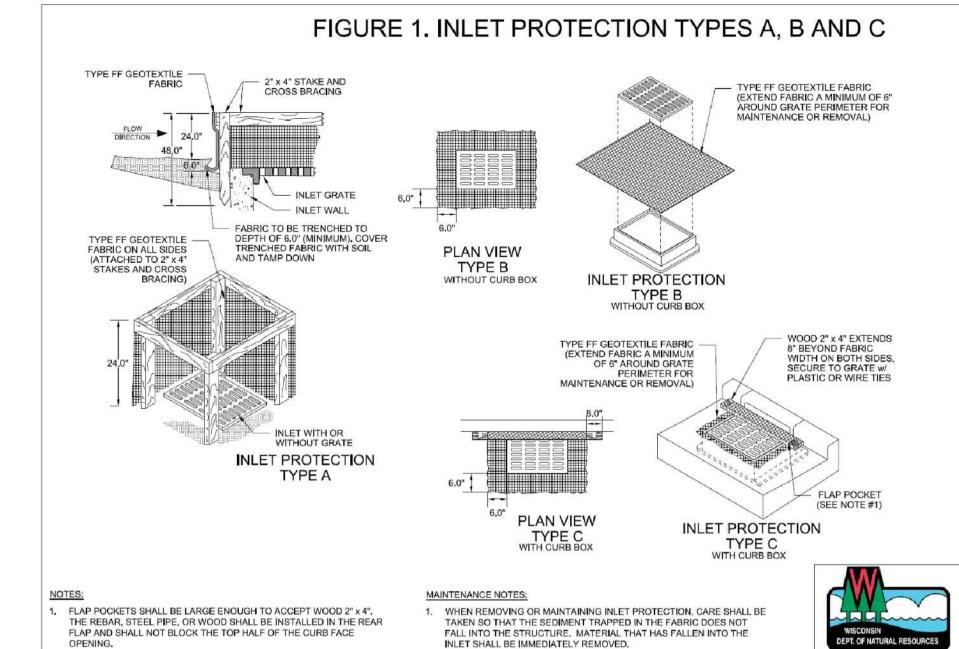


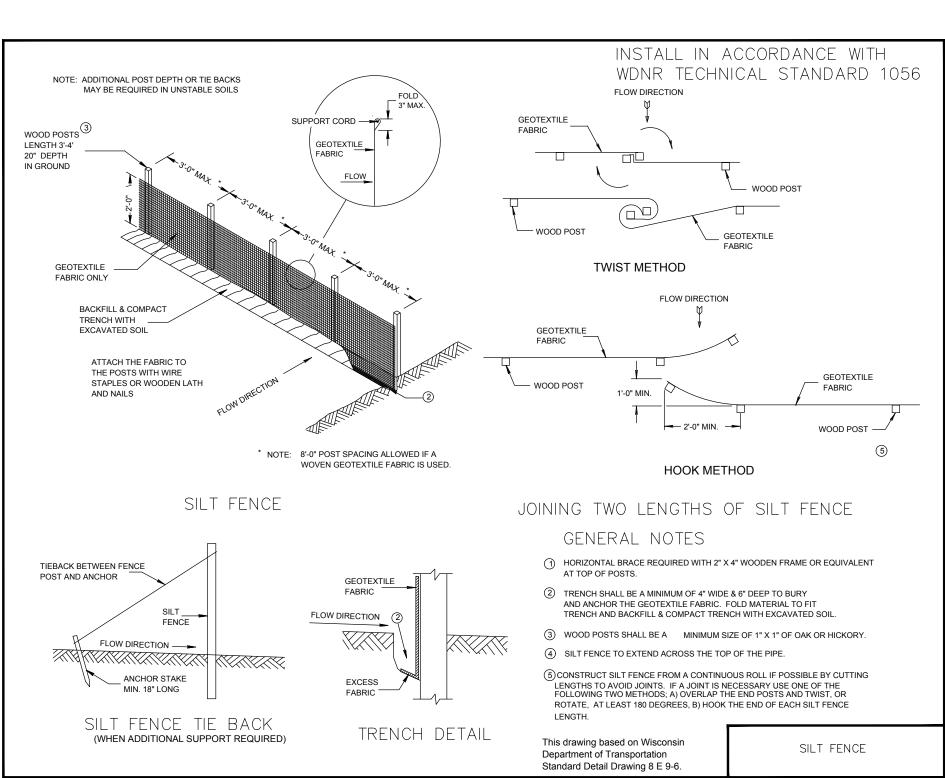
CURB CUT DETAIL NO SCALE

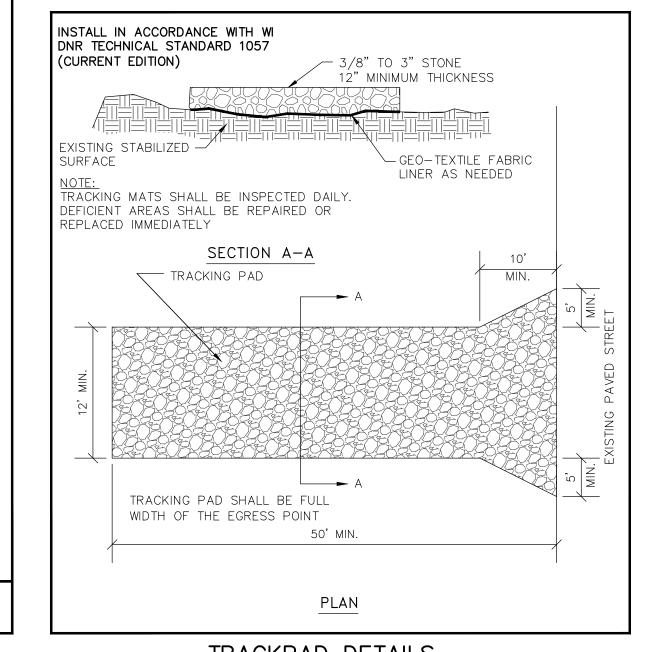
CURB TAPER DETAIL

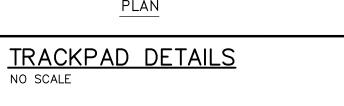


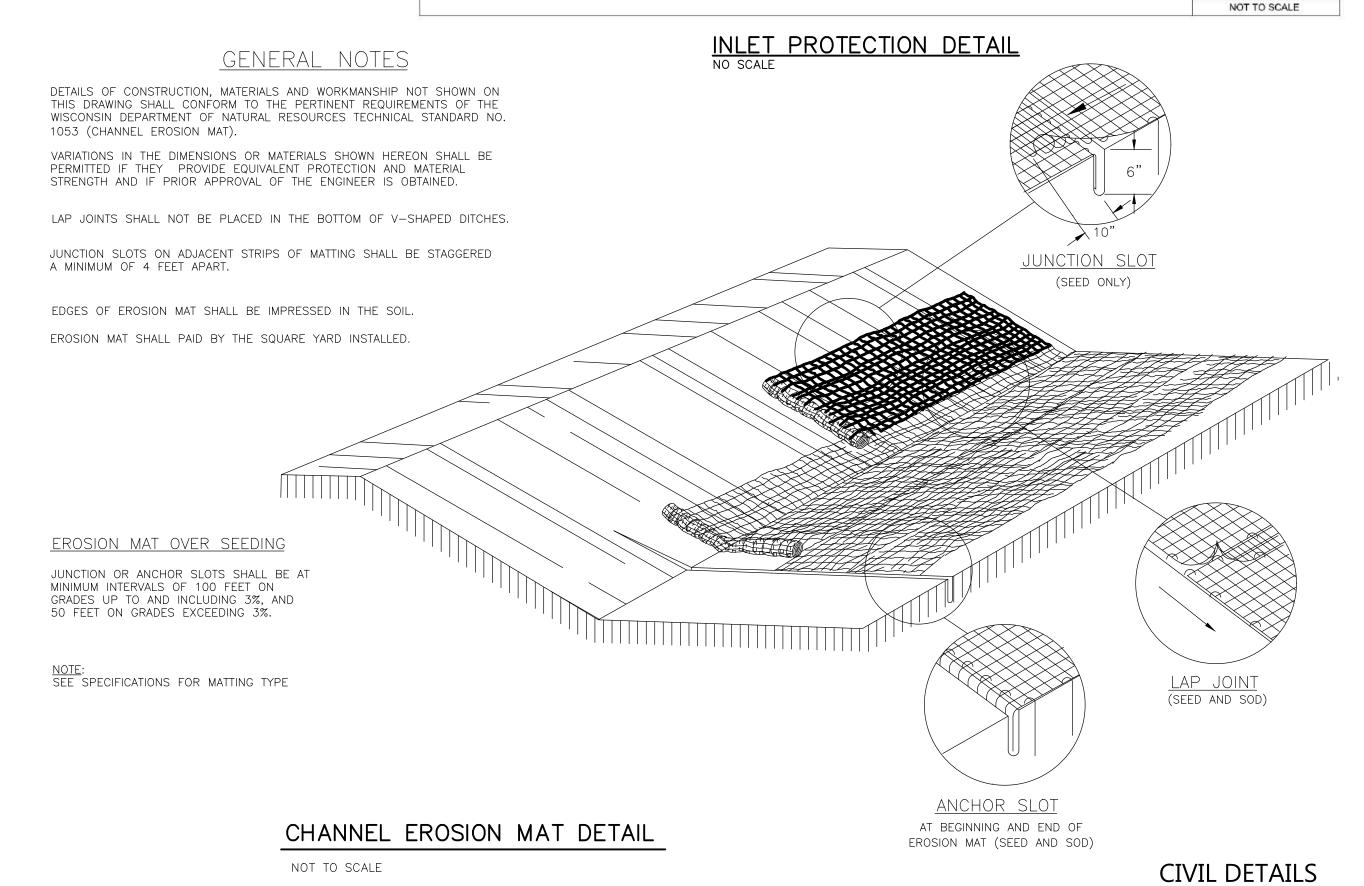
HANDICAP SIGNAGE WITHOUT CONCRETE BASE DETAIL











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12/2021 REVISION DATE

PRELIMINARY DATES APR. 19, 2023 MAY 3, 2023 MAY 17, 2023 MAY 22, 2023

JOB NUMBER 230030600

SHEET NUMBER

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<u>SILT FENCE - INSTALLATION DETAIL</u>

NEENAH FOUNDRY OR — EQ. R-3067 CAST IRON FRAME & GRATE ADJUST TO GRADE WITH PRECAST CONCRETE EXTENSION RINGS, APPLY MORTAR IN JOINTS AGGREGATE BASE PER -PAVEMENT SECTION - PRECAST CONC. M.H. SEGMENTS. SEAL ALL JOINTS WATERTIGHT 2'X3' BOX - PROVIDE COPOLYMER PROPYLENE PLASTIC STEPS M.A. IND. INC. MODEL PS-2-PF-S (ASTM C-478) OR EQUAL AT A MAXIMUM OF 16" O.C. IN ALL STORM STRUCTURES 5' OR GREATER IN DEPTH. NOTE: FINAL STRUCTURE SIZES TO BE VERIFIED WITH THE SUPPLIER NOTE: CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM C-478 REQUIREMENTS. 6" No. 1 STONE UNDISTURBED EARTH -STORM CURB INLET (CI) DETAIL
NO SCALE

"ZURN" Z-1474-N HEAVY DUTY CLEANOUT HOUSING - CLEANOUT PLUG CONCRETE FINISHED GRADE IN PAVED AREAS GRAVEL FINISHED GRADE IN LAWN AREAS 8" PVC FROST SLEEVE COMBINATION -WYE FITTING

<u>SPECIFICATION NOTE</u>

SEE SHEET CO.1 FOR PLAN

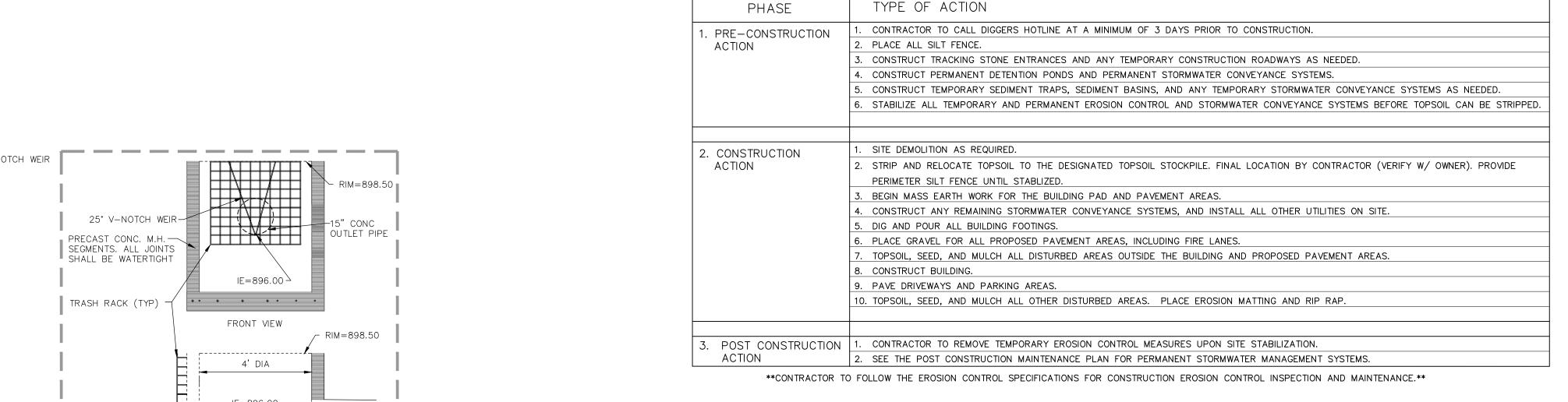
SPECIFICATIONS AND REQUIREMENTS

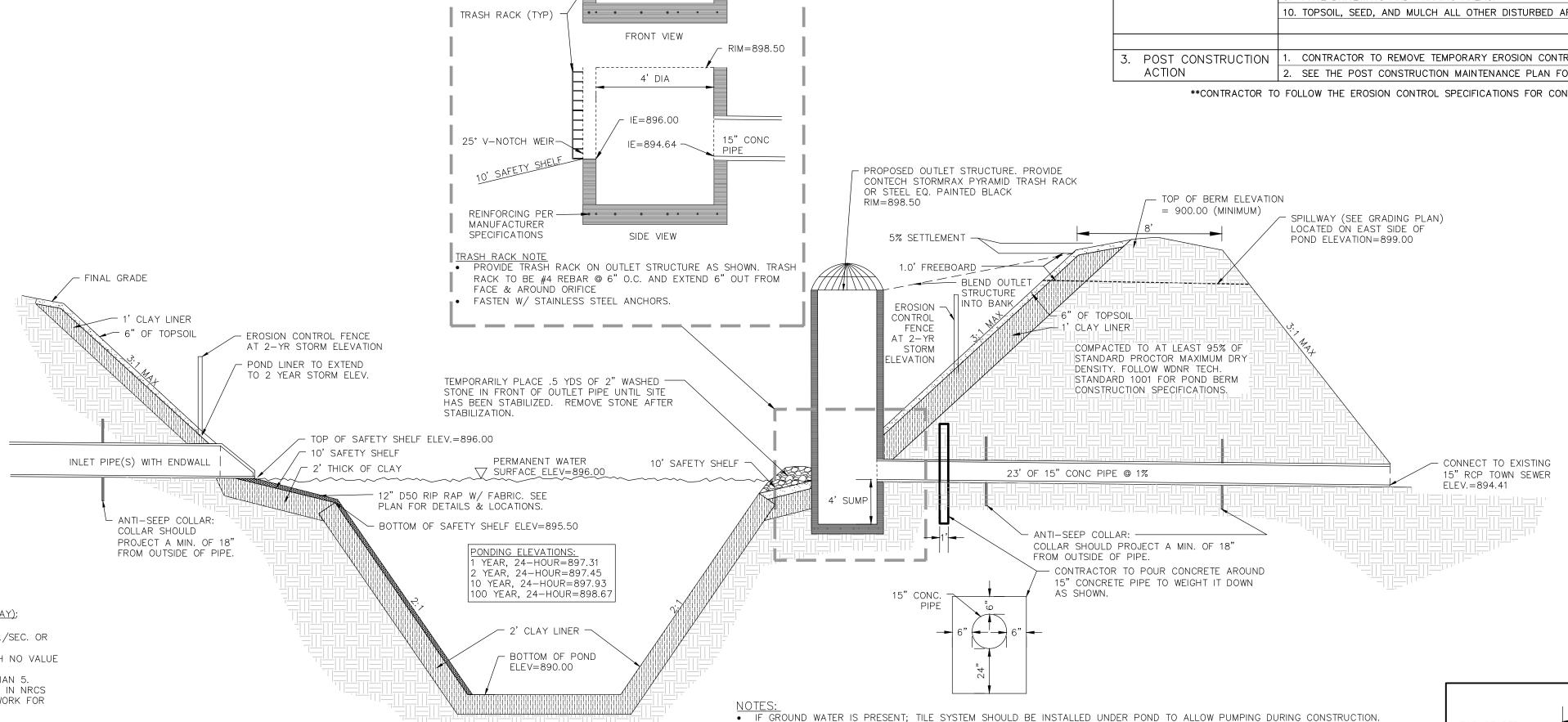
CLEANOUT TO GRADE DETAIL

CONSTRUCTION SEQUENCE

STORM CATCH BASIN (CB) W/ SUMP DETAIL

WET RETENTION POND





TYPE B

POND LINER CRITERIA FOR SAFETY SHELF AND BELOW (CLAY):

- 50% FINES (200 SIEVE) OR MORE. • AN IN-PLACE HYDRAULIC CONDUCTIVITY OF 1x10-6 CM./SEC. OR
- AVERAGE LIQUID LIMIT VALUE OF 16 OR GREATER, WITH NO VALUE
- AVERAGE PI OF 7 OR MORE WITH NO VALUES LESS THAN 5. CLAY COMPACTION AND DOCUMENTATION AS SPECIFIED IN NRCS
- WISCONSIN CONSTRUCTION SPECIFICATION 204, EARTHWORK FOR WASTE STORAGE FACILITIES.
- MINIMUM THICKNESS OF TWO FEET. SPECIFY METHOD FOR KEEPING POOL FULL OR USE OF COMPOSITE SOILS BELOW LINER.

POND LINER ALTERNATE:

LESS THAN 14.

 CONTRACTOR TO PROVIDE 40 MIL/HDPE POND LINER IN LIEU OF CLAY LINER TO LINE ENTIRE POND AREA UP TO THE 2 YEAR, 24-HOUR WATER PONDING ELEVATION (SEE ELEVATION ON DETAIL)

DESIGN ACCORDING TO THE CRITERIA IN TABLE 3 OF THE NRCS

313, WASTE STORAGE FACILITY TECHNICAL STANDARD INSTALL ACCORDING TO NRCS WISCONSIN CONSTRUCTION SPECIFICATION 202, POLYETHYLENE GEOMEMBRANE LINING.

4-6" ROUND STONE OVER FILTER FABRIC SHALL BE PROVIDED TO COVER THE ENTIRE LINER. TOP OF STONE SHALL MATCH PROPOSED

OVERALL STORMWATER FACILITY DETAIL

NO SCALE

· A LINING BASE SHALL BE PREPARED ON THE BOTTOM AND SLOPES OF THE AREA ARE TO BE LINED.

• THE BASE MATERIAL SHALL BE NATIVE MATERIALS OR MATERIALS OBTAINED FROM A BORROW SOURCE COMPACTED TO A MIN.

• THE SUBGRADE SHALL BE PREPARED IMMEDIATELY PRIOR TO THE PLACING OF THE LINER. THE SURFACE ON WHICH THE LINER

AT END OF SITE CONSTRUCTION, POND DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE

CONSTRUCTION OF THE STORMWATER POND. THE SURVEY SHALL BE COMPLETED PRIOR TO THE POND FILLING WITH WATER.

CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING

CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE

CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY

• LINING BASE MATERIAL SHALL BE FREE OF ALL SHARP OBJECTS, ROOTS GRASS AND VEGETATION.

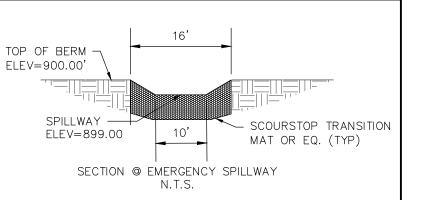
• CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER SPECIFICATIONS NOTED ON CO.1.

OF 95% COMPACTING OR AN APPROVED CONSTRUCTION FABRIC.

IS TO BE PLACED IS TO BE FIRM, CLEAN, DRY AND SMOOTH.

REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

DESIGN DEPTH ORIGINALLY PROPOSED.



(EAST) EMERGENCY NO SCALE

CIVIL DETAILS

Always a Better Plan 100 Camelot Drive Fond du Lac, WI 54935 920-926-9800

excelengineer.com

PROJECT INFORMATION

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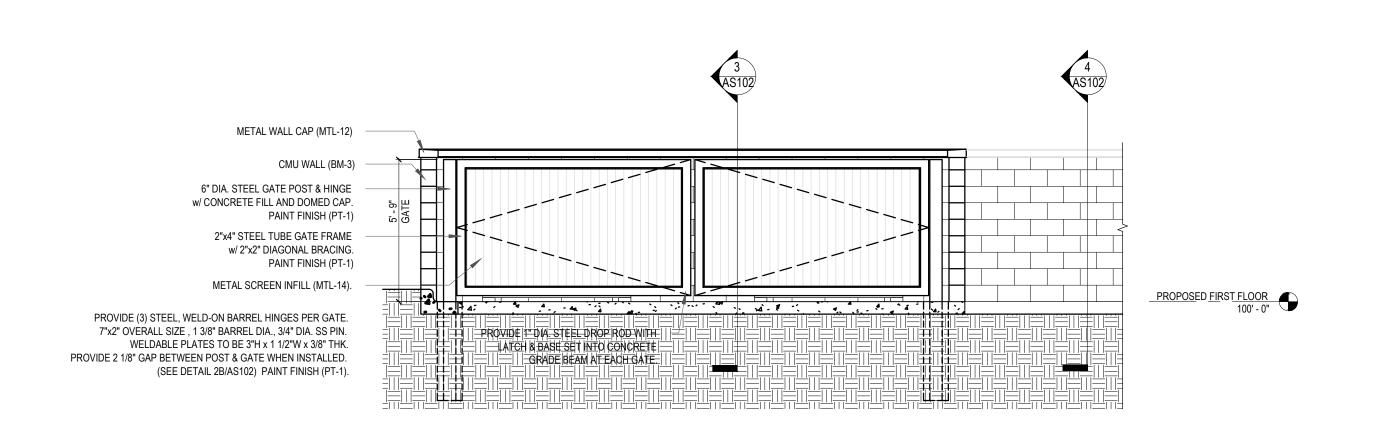
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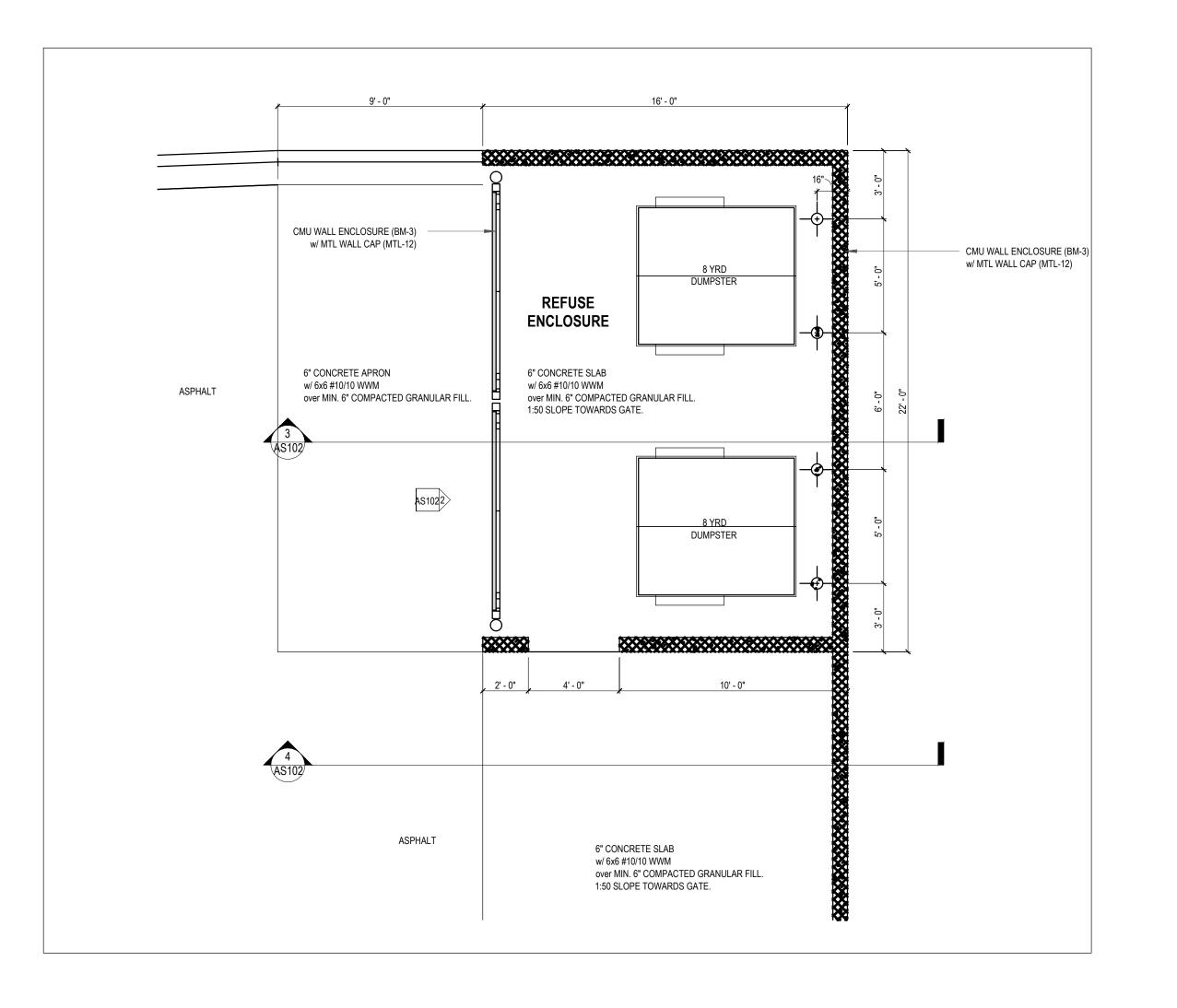
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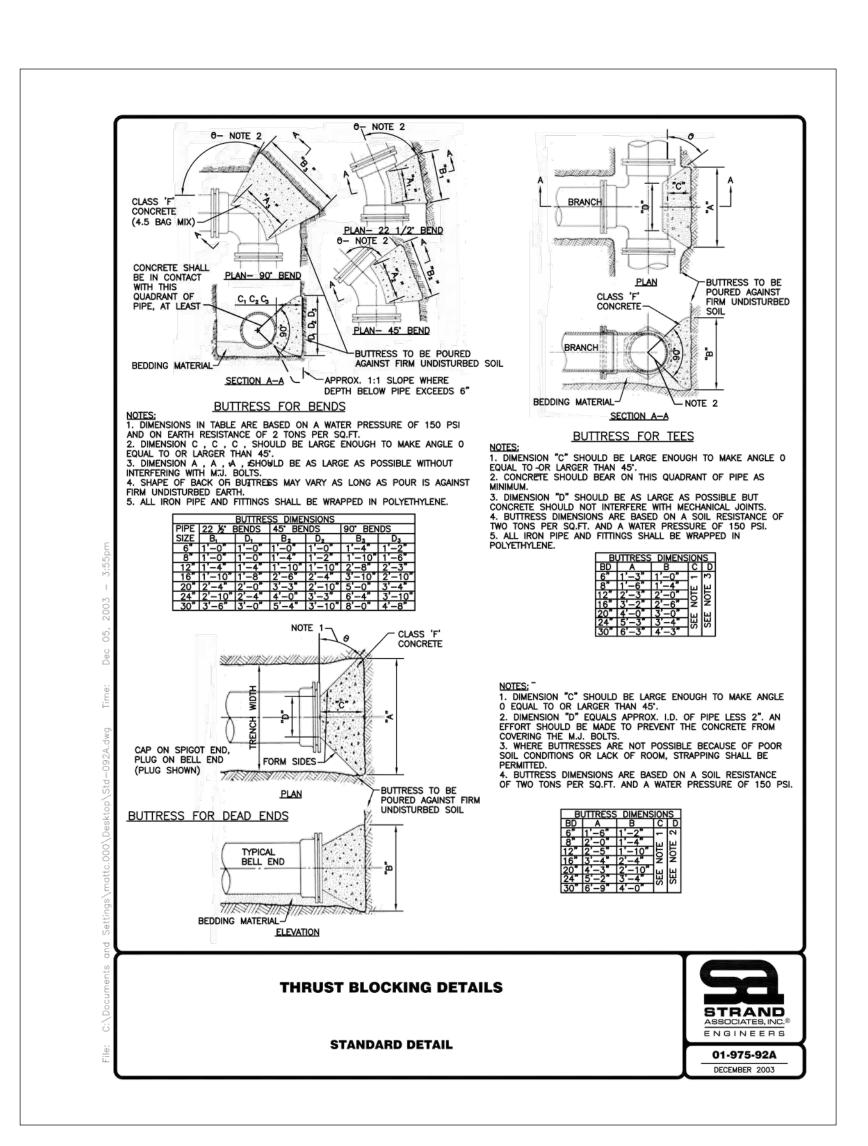
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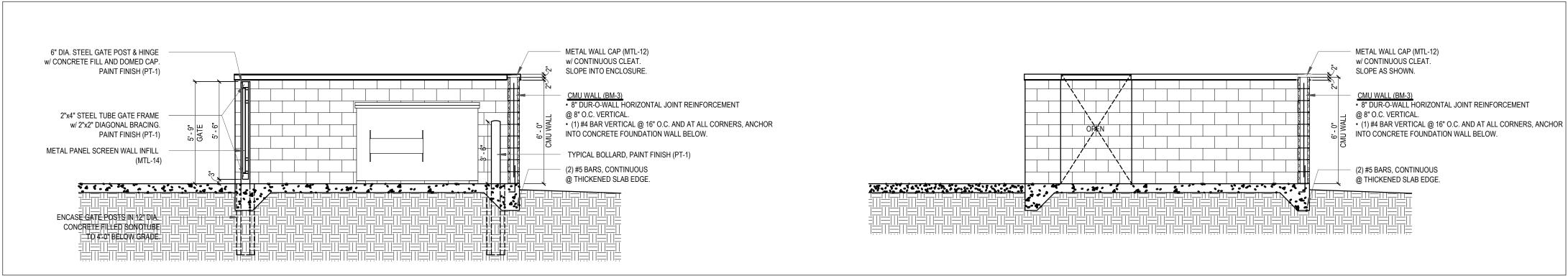
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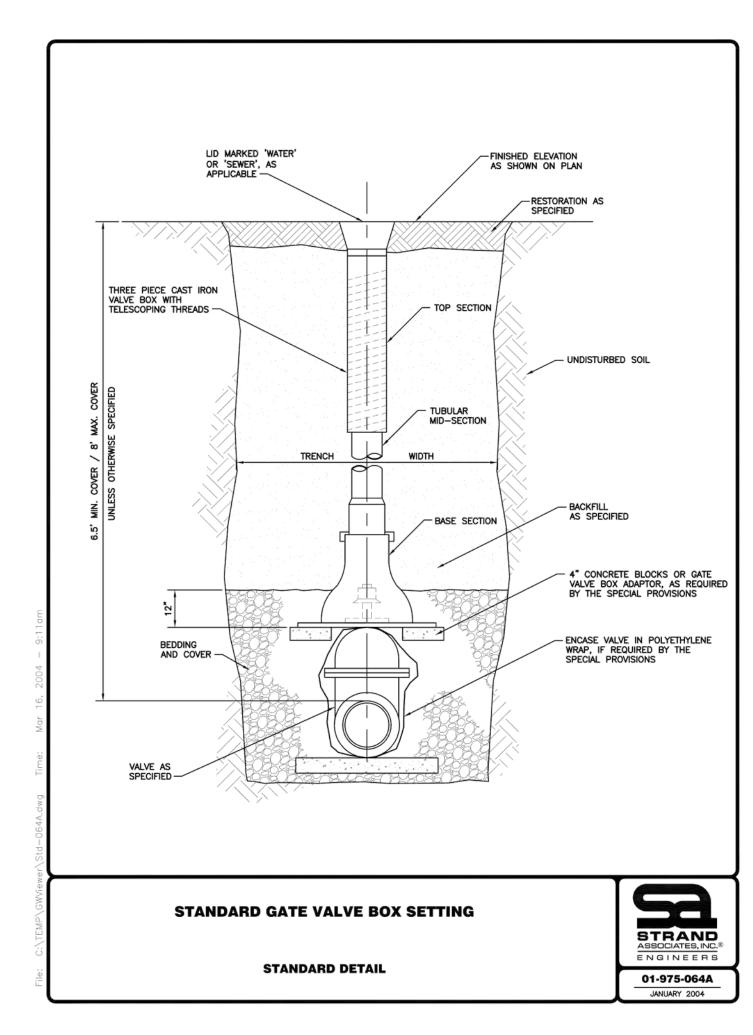


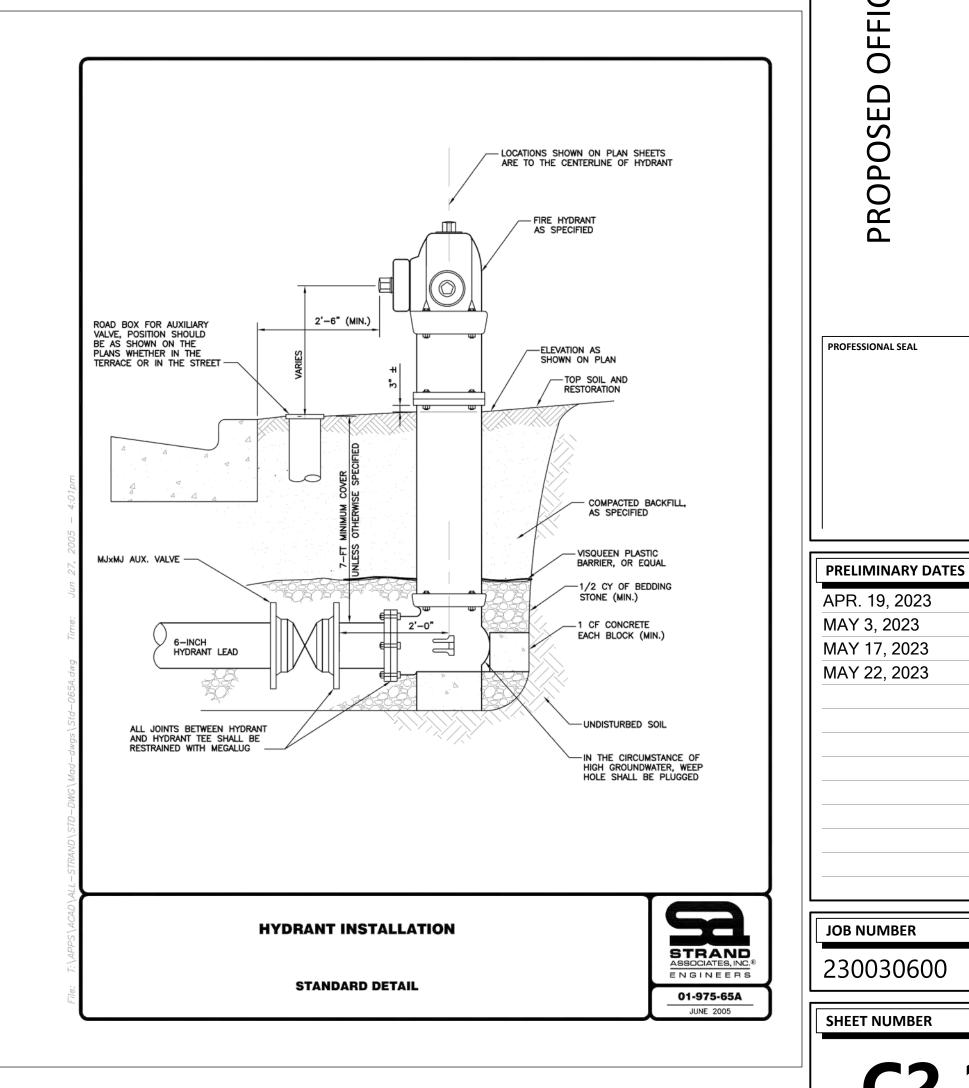


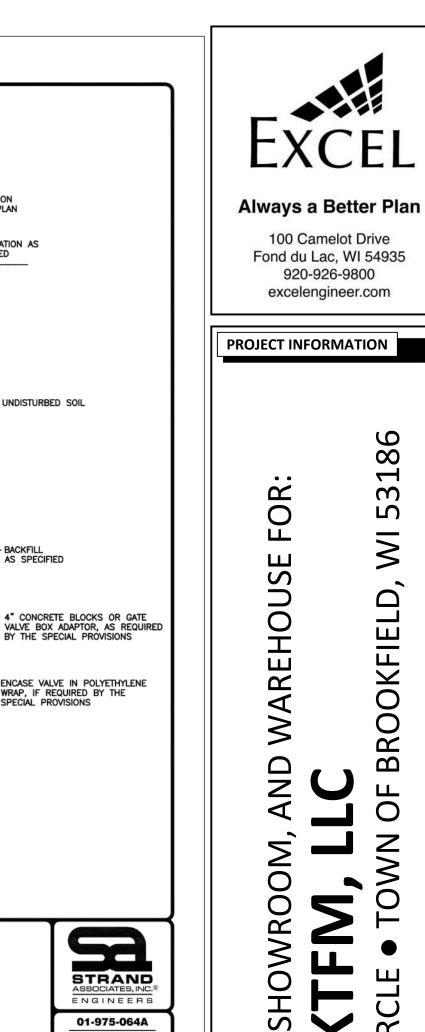












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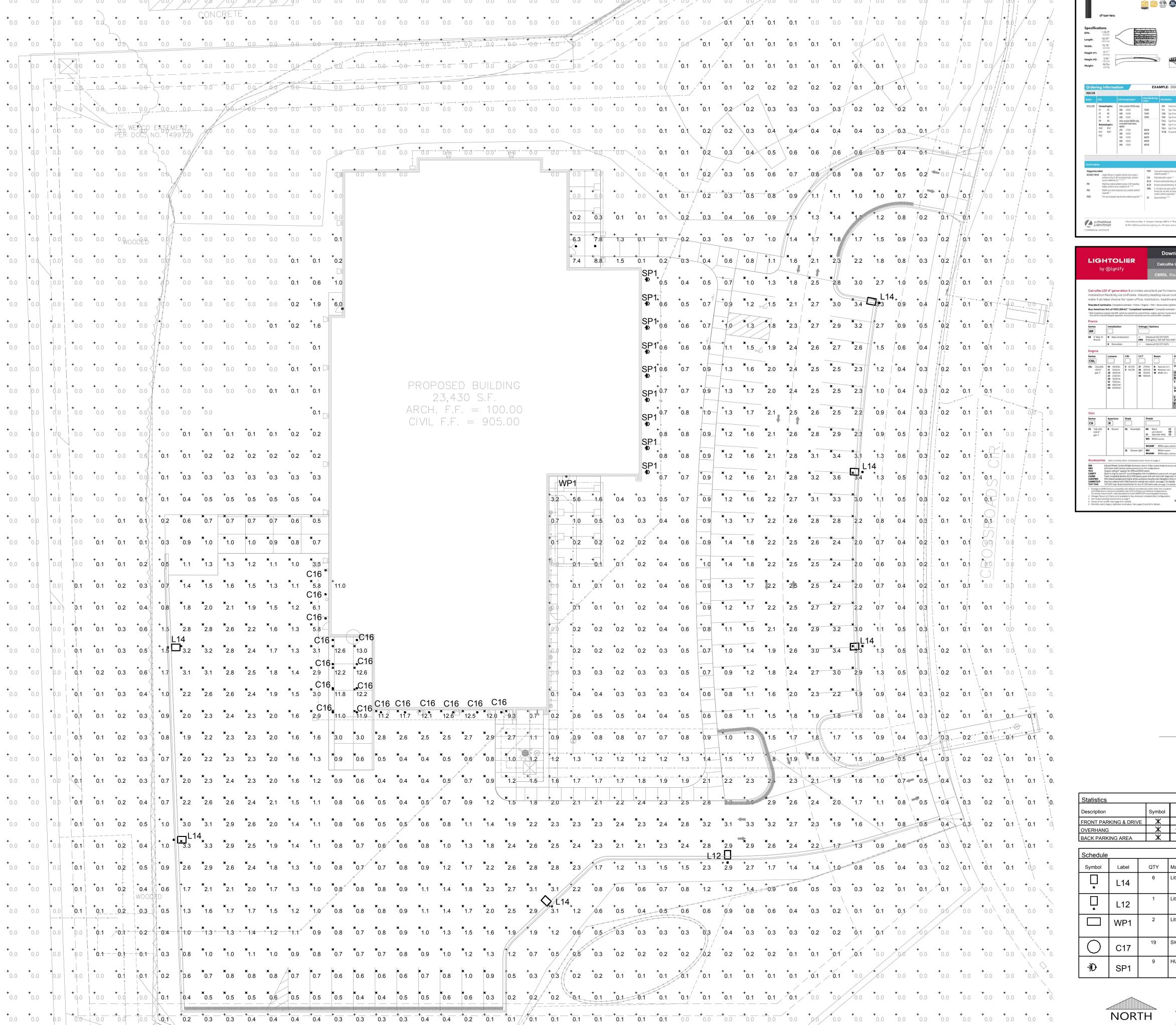
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CIVIL DETAILS

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PROPOSED BUILDING

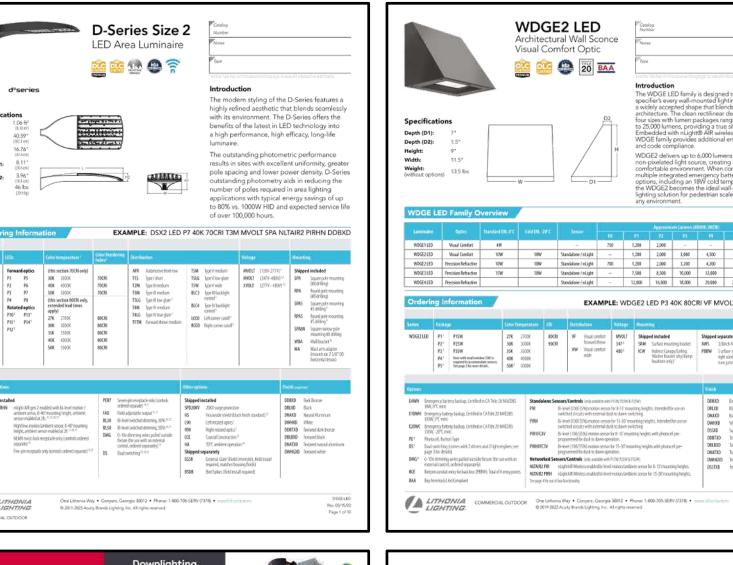
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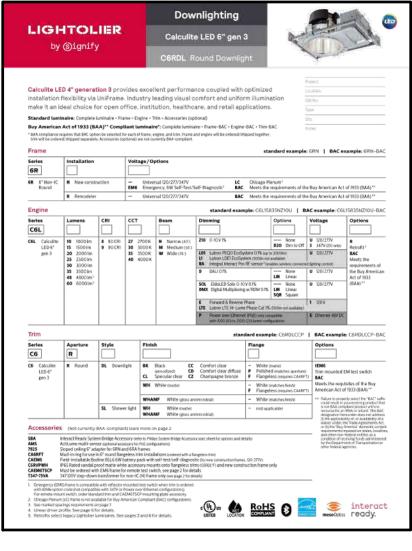
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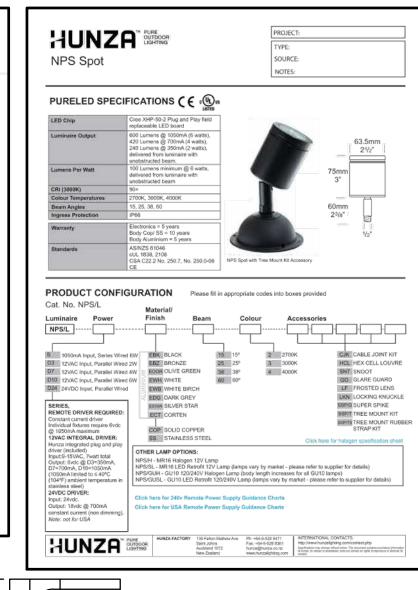
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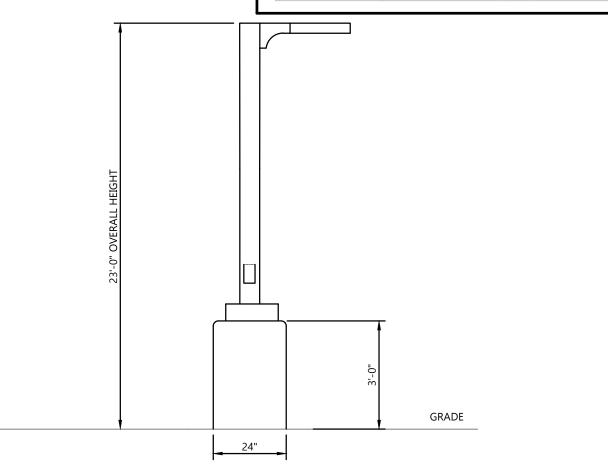
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LIGHT POLE DETAIL

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
FRONT PARKING & DRIVE	Ж	2.1 fc	3.6 fc	0.2 fc	18.0:1	10.5:1
OVERHANG	Ж	11.9 fc	13.0 fc	9.3 fc	1.4:1	1.3:1
BACK PARKING AREA	Ж	2.1 fc	13.0 fc	0.3 fc	43.3:1	7.0:1

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	L14	6	Lithonia Lighting	DSX2 LED P1 40K 80CRI T4M HS	D-Series Size 2 Area Luminaire P1 Performance Package 4000K CCT 80 CRI Type 4 Medium Houseside Shield	1	15605	0.9	134.5029
	L12	1	Lithonia Lighting	DSX2 LED P1 40K 80CRI T2M	D-Series Size 2 Area Luminaire P1 Performance Package 4000K CCT 80 CRI Type 2 Medium	1	17668	0.9	134.5
	WP1	2	Lithonia Lighting	WDGE1 LED P2 40K 80CRI VF	WDGE1 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT FORWARD OPTIC	1	1978	0.9	15.0178
0	C17	19	SIGNIFY LIGHTOLIER	C6RN+C6L15835MZ10U +C6RDLCL	CALCULITE 6" ROUND LED DOWNLIGHT CLEAR FINISH	1	1483	0.9	12.6
*	SP1	9	HUNZA	NPS-L-S-25-4	NPS SPOT- PURE LED - SERIES WIRED 1050MA - IP66 - 4000K - 25 DEG - REMOTE DRIVER REQUIRED	1	573	1	6.3



SITE PLAN - PHOTOMETRIC

SITE PLAN PHOTOMETRIC



PROJECT INFORMATION

WAREHOUSE

PROPOSED 1055

CROSSI

PROFESSIONAL SEAL

PRELIMINARY DATES APR. 19, 2023 MAY 22, 2023

JOB NUMBER 230030600

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Strand Associates, Inc.®



910 West Wingra Drive Madison, WI 53715 (P) 608.251.4843 www.strand.com

June 1, 2023

Mr. Bryce Hembrook Town of Brookfield 645 North Janacek Road Brookfield, WI 53045

Re: Quest Interiors Development

21055 Crossroads Circle

Town of Brookfield, Wisconsin (Town)

Dear Bryce,

Strand Associates, Inc.® (Strand) has finished its review of the construction drawings and Storm Water & Erosion Control Calculations resubmittal for the Quest Interiors Development that were received from Excel Engineering, Inc. (Excel) on May 22, 2023, for conformance with the Town specifications and general engineering practices. Before construction may begin, the contractor shall submit all required permits for the development to the state, Wisconsin Department of Natural Resources, Town, and any other relevant agencies. New drawings, stormwater management plan and calculations, and a letter describing the revisions should be returned to Strand after the following concerns have been addressed. Excel's responses to Strand's original comments are *italicized* and Strand's most recent comments are in **bold**.

Stormwater Management Plan

1. Strand's May 3, 2023, Comment—The time of concentration calculation for the pre-development basin has a sheet flow length of 178 feet. Standard engineering protocol is to use a maximum sheet flow length of 100 feet.

Excel's May 22, 2023, Response—The modeling and stormwater management report has been revised to reflect this.

Strand's Current Response—It was verified that the sheet flow length for the pre-development basin was modified to 100 feet. It appears that the sheet flow length for the "Post 1A" subbasin is 126 feet and still greater than 100 feet.

2. Strand's May 3, 2023, Comment—The time of concentration values appear to be directly entered into the HydroCAD model for the proposed 1A (2S) and 1B (3S) drainage areas. These time of concentration calculations should be provided. Also, the time of concentration paths should be shown on the Post-Development Basin Area exhibit in Appendix B.

Excel's May 22, 2023, Response—Flow paths have been added to the post development plan. Calculation input for Basin 1A has been revised. Basin 1B has been revised to 6-minute and remains as a direct input given its small area and proximity to boundaries while maintaining the engineering practice of 6-minute minimum time of concentration.

Strand's Current Response-It was verified that the flow paths were added to the post-development plan. As noted above, it appears that the sheet flow length for the "Post 1A" subbasin is 126 feet and still greater than 100 feet.

Mr. Bryce Hembrook Town of Brookfield Page 2 June 1, 2023

3. Strand's May 3, 2023, Comment–Within the WinSLAMM input information in Appendix F, the total area draining to the pond (2S) is listed as 2.147 acres. The HydroCAD model notes that the drainage area into the proposed pond is 2.54 acres. Clarification should be given and/or modeling updated accordingly.

Excel's May 22, 2023, Response-The WinSLAMM calculations are updated to include the additional landscape area.

Strand's Current Response–It was verified that the area (2.54 acres) draining to the pond now matches in both the HydroCAD and WinSLAMM modeling calculations.

4. Strand's May 3, 2023, Comment–A stormwater maintenance agreement should be established between the owner and Town.

Excel's May 22, 2023, Response–A draft maintenance agreement is provided for review.

Strand's Current Response—The draft maintenance agreement was reviewed and appears to meet the Town's requirements and match the standard template. The Town Attorney shall review before final approval.

Stormwater Conveyance

Strand's May 3, 2023, Comment–Storm sewer sizing and inlet capacity calculations should be provided for the proposed storm sewers.

Excel's May 22, 2023, Response–Storm sewer calculations have been added to the stormwater report.

Strand's Current Response—The storm sewer calculations located in Appendix G of the stormwater report were reviewed. The calculations for the total flow of each drainage basin should be provided showing the weighted runoff coefficient uses as well as intensity for the design storm event.

Civil Existing Site and Demolition Plan–Sheet C1.0

Strand's May 3, 2023, Comment–Specifications or a detail should be provided describing or showing how the storm sewer pipe will be plugged.

Excel's May 22, 2023, Response–Call out note on C1.0 has been revised to provide more directive on plug.

Strand's Current Response-The revised note was reviewed and is acceptable.

Mr. Bryce Hembrook Town of Brookfield Page 3 June 1, 2023

Civil Site Plan–Sheet C1.1

1. Strand's May 3, 2023, Comment–According to 17.06(3)(c)(4) in the Town ordinance, the minimum dimensions for all parking spaces provided for use by physically disabled shall be 12 feet by 18 feet. It appears that these stalls are 9 feet by 18 feet.

Excel's May 22, 2023, Response—The plans shows (2) two 9-foot by 18-foot stalls with a shared 9-foot van accessible aisle. Taking 4.5-feet of the shared stall plus the 9-foot stall provides a 13.5-foot area meeting the code requirements. This will also be discussed at the PC meeting.

Strand's Current Response–Based on the width of the accessible route, there appears to be adequate space for parking and access and would be able to accommodate cars and vans.

2. Strand's May 3, 2023, Comment—There is a callout for a Keynote 27 in the plan, but there is no description for "27" in the Keynote legend.

Excel's May 22, 2023, Response–This keynote has been removed from the plan.

Strand's Current Response-It was verified the keynote was removed.

3. Strand's May 3, 2023, Comment–A turning movement exhibit should be provided to verify the largest vehicle (including any emergency vehicles) that will access the site can perform the required turning movements with the proposed layout.

Excel's May 22, 2023, Response-A truck turning exhibit is included in the resubmittal.

Strand's Current Response—A turning template was provided for a WB-67 interstate semi-trailer and it appears it will be able to access the southern portion of the site and back into the loading dock area. The Town Fire Department should verify whether emergency vehicles, such as a fire truck, should be evaluated for access in the eastern parking lot or northern driveway.

Civil Grading and Erosion Control Plan–Sheet C1.2

1. Strand's May 3, 2023, Comment–The anticipated locations of the topsoil stockpiles should be shown on the plan.

Excel's May 22, 2023, Response–Topsoil stockpile locations have been added to plan sheet C1.2.

Strand's Current Response–It was verified topsoil stockpile locations are shown on Sheet C1.2 and are in upland areas with two layers of silt fence around the perimeter.

2. Strand's May 3, 2023, Comment–Silt fence should be provided between the two driveway entrances just upstream of the curb line to prevent sediment from washing on to Crossroads Circle.

Excel's May 22, 2023, Response–This has been added to plan sheet C1.2.

Strand's Current Response-It was verified silt fence was added at this location.

Mr. Bryce Hembrook Town of Brookfield Page 4 June 1, 2023

3. Strand's May 3, 2023, Comment–Safety railings should be provided where the top of wall elevation is more than 30 inches above the adjacent grade according to Section 1013.1 of the Unified Building Code. The top of the retaining wall on the west side of the loading dock ramp. There is a drop of approximately 4 feet from top of the retaining wall on the west side of the loading dock ramp to the bottom of ramp near the building.

Excel's May 22, 2023, Response-The architectural plans will cover this scope and requirement.

Strand's Current Response–The architectural committee should review the plans to verify requirements are met.

4. Strand's May 3, 2023, Comment–The scale bar appears to be incorrect.

Excel's May 22, 2023, Response-This has been rectified.

Strand's Current Response-Confirmed.

Civil Utility Plan–Sheet C1.3

1. Strand's May 3, 2023, Comment—The callout for the rim elevation of CB-1 (901.12) does not match the callout for the rim elevation shown in the Bay Loading Dock Detail (900.90).

Excel's May 22, 2023, Response—The rim elevation on C1.3 for ST CB 1 has been revised to match the detail.

Strand's Current Response-It was confirmed that elevations now match on both sheets.

2. Strand's May 3, 2023, Comment–Evaluate that proper separation between water, storm, and sanitary sewer mains are meeting the requirements of Section NR 811.74 of the Wisconsin Administrative Code (WAC).

Excel's May 22, 2023, Response–A minimum separations are maintained throughout the design.

Strand's Current Response–It appears the proper separation distance between water and storm crossings are maintained.

3. Strand's May 3, 2023, Comment–The storm sewer structure and casting types should be called out on the plan.

Excel's May 22, 2023, Response–Abbreviation designations are on the plan sheet to correspond to detail on C2.1.

Strand's Current Response-It was verified casting types are called out for each structure.

Mr. Bryce Hembrook Town of Brookfield Page 5 June 1, 2023

4. Strand's May 3, 2023, Comment–Review that all water main design meets the requirements of Section NR 811.70 of WAC and Section 12 of the Town Sanitary District No. 4 technical specifications (see Sections 12.1–Water Main Material, 12.2–Valve Type, 12.3–Pipe Cover and length requirements, 12.5–Thrust Restraint, and 12.18–Fire Hydrant Type). Supporting documentation should be provided.

Excel Response: Design requirements are meet and notes and details have been added to the plans.

Strand's Current Response–It was verified notes and details were added to the construction drawings.

5. Strand's May 3, 2023, Comment–It should be noted that, before water utility construction can begin, a modification to the water service application will need to be submitted to the Town and, if plumbing fixtures are being added, calculations should be provided for proper meter sizing.

Excel's May 22, 2023, Response-This note has been included on plan sheet C1.3.

Strand's Current Response-It was verified that the note was added to Sheet C1.3.

6. Strand's May 3, 2023, Comment—A note should be added stating that the contractor shall notify the Town Sanitary District No. 4 and field staff a minimum of 72 hours before the start of any construction or connection to existing public utilities.

Excel's May 22, 2023, Response-This note has been included on plan sheet C1.3.

Strand's Current Response-It was verified that the note was added to Sheet C1.3.

7. Strand's May 3, 2023, Comment—The existing sanitary sewer is not shown correctly on the west side of the property where the proposed sanitary service connection to the main is taking place. The sewer main is entering the manhole from the west and then heads south. There is no sewer line running north of this manhole (see enclosed markup). This will require a modification of the proposed sewer service connection to the main.

Excel's May 22, 2023, Response-The sanitary lateral location has been modified based on this information.

Strand's Current Response—The existing sanitary sewer line north of the manhole is still shown. This does not exist and should be removed. It should be verified that the proposed 4-inch-diameter lateral has adequate capacity to handle proposed loadings.

8. Strand's May 3, 2023, Comment–A 6-inch water valve should be added to the proposed water service (see enclosed markup).

Excel's May 22, 2023, Response—The water service location has been revised and a valve has been added to plans.

Strand's Current Response—It appears that the fire hydrant and valve will be located behind a masonry wall and near an electrical transformer. It should be verified there is enough room for access by the fire department and Town Sanitary District No. 4 for emergency situations and maintenance.

Mr. Bryce Hembrook Town of Brookfield Page 6 June 1, 2023

9. Strand's May 3, 2023, Comment–The proposed water main tapping location is near an existing water service connection. A note should be added stating the required distance from the existing connection.

Excel's May 22, 2023, Response—The connection note on plan sheet C1.3 has been revised to reflect this.

Strand's Current Response—It was verified that a note was added regarding maintaining the minimum separation distance from the existing connection.

10. Strand's May 3, 2023, Comment–The scale bar appears to be incorrect.

Excel's May 22, 2023, Response-This has been rectified.

Strand's Current Response-Confirmed.

Civil Landscape and Restoration Plan-Sheet C1.4

1. Strand's May 3, 2023, Comment–Please denote intended tree protection or woodland area protection provided on-site.

Excel's May 22, 2023, Response–Plan notes are on C1.0 and C1.4 to provide intent of preservation of wooded area.

Strand's Current Response-Notes were reviewed and are adequate.

- 2. Landscaping Planting Schedule Comments
 - a. Strand's May 3, 2023, Comment–According to plant symbols and the plant data chart, selected species appear appropriate. A full comparison of plan quantities as laid-out versus in the planting table was not completed. It may be appropriate for plant callout leaders for use in the field or for final reviews. Planting densities, arrangement, and selection appear appropriate. See notes.

Excel's May 22, 2023, Response-This comment is acknowledged.

Strand's Current Response-No further comment.

b. Strand's May 3, 2023, Comment–Varieties of flowering pear (Pyrus calleryana) are regarded as potentially invasive. If acceptable, please explore potential replacements such as suitable varieties of flowering crabapple (Malus species) or redbud (Cercis canadensis).

Excel's May 22, 2023, Response-The Jack pear species has been substituted with a flowering crabapple.

Strand's Current Response—The replacement species appears to be adequate.

Mr. Bryce Hembrook Town of Brookfield Page 7 June 1, 2023

c. Strand's May 3, 2023, Comment–Deciduous shrub "Planted Size" below 18 inches does not meet code. Please remove 15-inch reference for deciduous shrubs.

Excel's May 22, 2023, Response–Planting size of shrubs have been revised to a minimum of 18-inches.

Strand's Current Response–It was confirmed that the planting size of shrubs was revised to a minimum of 18 inches.

d. Strand's May 3, 2023, Comment–Similarly, arborvitae "Planted Size" should be corrected to the 6-foot requirement, in accordance with code.

Excel's May 22, 2023, Response-The planted size of Arborvitae species has been modified to 6-feet.

Strand's Current Response–It was confirmed that the planted size of Arborvitae species has been modified to 6 feet.

e. Strand's May 3, 2023, Comment–Please revise Botanical Name (genus) for Karl Forester Reed Grass as "Calamogrostis."

Excel's May 22, 2023, Response-The Botanical name is shown as Calamagrostis.

Strand's Current Response-It was confirmed that the botanical name spelling is now correct.

3. Strand's May 3, 2023, Comment–Long-term light pole interference—The seeded lawn area between the parking lot and Crossroads Circle (and some other project areas) contain light poles with large deciduous tree plantings (basswood and honeylocust) within 10 to 12 feet of the poles. Please evaluate spacing arrangements or evaluate the use of smaller trees as needed.

Excel's May 22, 2023, Response–Adjustments have been made to the tree count and location to address spacing.

Strand's Current Response-The tree count and revised tree locations appear to be adequate.

4. Strand's May 3, 2023, Comment–Because of proximities within 12 feet of the Crossroads Circle road surface, please review planting beds that are present north and south of site access drives to confirm that they are appropriately resistant or distant to potential salt spray and other effects of the roadway and associated ditch.

Excel's May 22, 2023, Response–Based on the separation of both distance and elevation from the roadway the plantings should be protected from deterioration.

Strand's Current Response-Confirmed and understood.

Mr. Bryce Hembrook Town of Brookfield Page 8 June 1, 2023

5. Strand's May 3, 2023, Comment—To potentially avoid installation "settling" of plantings, burial of root collars, and potential survivability issues; please consider additions to the Tree Planting and Shrub Planting Details. This may involve altering the figure or potentially calling out plants to be "set" in the planting hole on a rigid substrate and similarly denoting the location of the root collar relative to planting and mulch placement.

Excel's May 22, 2023, Response-Adjustment to details and additional notes are included to addresses settling.

Strand's Current Response—The root collar note is acknowledged and suitable. It is suggested that both the tree and shrub planting detail denote an undisturbed planting mound directly under the plant and a callout leader added such as "Retain a portion of undisturbed subgrade to support plant weight and avoid plant settling."

6. Strand's May 3, 2023, Comment–The scale bar appears to be incorrect.

Excel's May 22, 2023, Response-This has been rectified.

Strand's Current Response-Confirmed.

Civil Details-Sheet C2.1

1. Strand's May 3, 2023, Comment—The Wet Retention Pond Detail should include the 2.5-foot rise dimension for the sharp-crested vee weir that is modeled in HydroCAD.

Excel's May 22, 2023, Response–A rim elevation was added to the V-Notch Weir detail.

Strand's Current Response-It was confirmed a rim elevation was added to the detail.

2. Strand's May 3, 2023, Comment—The Wet Retention Pond detail notes a 2-foot sump in the callout for the pyramid trash rack on top of the outlet structure which does not match the callout for a 4-foot sump dimension noted on the bottom of the structure. Detail should be updated accordingly.

Excel's May 22, 2023, Response-This has been rectified.

Strand's Current Response-It was confirmed that the 2-foot sump callout was removed.

3. Strand's May 3, 2023, Comment—The Wet Retention Pond Detail contains callouts for the "2 Year Storm Elev.". This elevation should be provided on the detail so the contractor knows the exact elevation to install the erosion control fence and pond clay liner.

Excel's May 22, 2023, Response–A note has been added to the detail to provide elevations for design storm events.

Strand's Current Response–It was confirmed that the design storm elevations were added to the detail.

Mr. Bryce Hembrook Town of Brookfield Page 9 June 1, 2023

Site Lighting Plan

Strand's May 3, 2023, Comment—The light level at the property line shall not exceed 0.2 foot-candles at any point. Revise light pole locations or add shielding to reduce light levels at the southern property line to 0.2 foot-candles or lower.

Excel's May 22, 2023, Response-The C3.1 plan sheet has been revised to meet the requirements.

Strand's Current Response–The lighting plan was reviewed and confirmed that the light candles do not exceed 0.2 foot-candles along the southern property line.

Further comments will be provided at the time of future submittals. Please call 608-251-4843 if you have any questions.

Sincerely,

STRAND ASSOCIATES, INC.®

Justin J. Gutoski, P.E.

c: Tom Hagie, P.E. Town Administrator, Town of Brookfield
Tony Skof, Sanitary District No. 4 Superintendent, Town of Brookfield
Scott Hartung, Department of Public Works Superintendent, Town of Brookfield

Ord. No.	
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ORDINANCE AMENDING, OR REPEALING AND RECREATING, CERTAIN PROVISIONS IN CHAPTER 17 OF THE MUNICIPAL CODE OF THE TOWN OF BROOKFIELD

NOW THEREFORE, the Town Board of the Town of Brookfield, Wisconsin does ordain as follows:

<u>SECTION 1</u>: The following provision of Section 17.01 of the Town Code is hereby stricken and removed from the Town Code:

DAY-CARE CENTER

An establishment providing care and supervision for four or more persons under the age of seven, licensed by the state under § 48.65, Wis. Stats.

<u>SECTION 2</u>: The following provision of Section 17.01 of the Town Code is hereby repealed and recreated to read as follows:

FAMILY CHILD CARE HOME

A dwelling licensed as a child care center by the state under §§ 48.65 and 66.1017, Wis. Stats., where care is provided for not more than eight children.

SECTION 3: Section 17.01 of the Town Code shall be amended to include the following provision:

COMMERCIAL DAYCARE CENTER

A child care center licensed by the state under § 48.65, Wis. Stats., where care and supervision is provided for four or more children under the age of seven for less than 24 hours a day, or an adult day care center licensed by the state under § 49.45(47), Wis. Stats., that provides services for part of a day in a group setting to adults who need an enriched health-supportive or social experience and who may need assistance with activities of daily living, supervision or protection. A family child care home is not a commercial daycare center.

<u>SECTION 4</u>: The following provision of Section 17.01 of the Town Code is hereby repealed and recreated to read as follows:

COMMUNITY LIVING ARRANGEMENT

The following facilities licensed and operated or permitted under the authority of the Wisconsin Statutes: child welfare agencies under § 48.60, group foster homes for children under § 48.02(7), and, adult family homes and community-based residential facilities under § 50.033; but does not include commercial daycare centers, nursing homes, general hospitals, special hospitals, prisons or jails. The establishment of community living arrangements is governed by §§ 46.03(22), 59.69(15), 60.23, and 62.63(7)(i), Wis. Stats.

<u>SECTION 5</u>: "Family day care homes" in Sections 17.04(4)(a)4., 17.04(5)(a)4., 17.04(6)(a)4., 17.04(7)(a)4., 17.04(8)(a)4., 17.04(9)(a)4., 17.04(10)(a)4. of the Town Code shall be stricken and replaced with "Family child care homes".

<u>SECTION 6</u>: "Commercial day-care centers" in Section 17.04(12)(a) of the Town Code shall be stricken and removed from the Town Code.

SECTION 7: Section 17.06(3)(h)6.h.iii. of the Town Code is hereby repealed and recreated to read as follows:

Children's nursery schools and commercial daycare centers: one space per employee for the work shift with the greatest number of employees, plus one space per six students at the highest class attendance period.

SECTION 8: Section 17.02(14)(b)4.i. of the Town Code is hereby repealed and recreated to read as follows: "Commercial daycare centers in B-2 Limited General Business District and B-3 Office and Professional Districts.".

<u>SECTION 9</u>: Except as expressly provided by this Ordinance, all other provisions contained in the Town Code shall remain in full force and effect.

<u>SECTION 10:</u> All ordinances or parts of this Ordinance conflicting or contravening the provisions of this Ordinance are hereby repealed.

SECTION 11: This Ordinance shall take effect upon passage and posting or publication as provided by law.

PASSED AND ADOPTED by the	Town Board of the Town of Brookfield, Waukesha
County, Wisconsin this, day of	, 2023.
By: Keith Henderson, Chairman	By:Steve Kohlmann, Supervisor
By:	By: John R. Schatzman, Supervisor
By:	Attest: Tom Hagie, Administrator and Interim Clerk

- (9) Definitions.
- (a) General definitions. For the purposes of this chapter, certain words or phrases shall have meanings that either vary somewhat from their customary dictionary meanings or are intended to be interpreted to have a specific meaning. Words used in the present tense include the future. The word "person" includes a firm, association, partnership, trust, company or corporation as well as an individual. The word "he" includes the word "she." The word "shall" is mandatory, "should" is advisory, and "may" is permissive. Any words not defined in this section shall be presumed to have their customary dictionary definitions.
- (b) Specific words and phrases. The following terms shall have the meanings indicated: ...

COMMERCIAL DAYCARE CENTER

A child care center licensed by the state under § 48.65, Wis. Stats., where care and supervision is provided for four or more children under the age of seven for less than 24 hours a day, or an adult day care center licensed by the state under § 49.45(47), Wis. Stats., that provides services for part of a day in a group setting to adults who need an enriched health-supportive or social experience and who may need assistance with activities of daily living, supervision or protection. A family child care home is not a commercial daycare center.

COMMUNITY LIVING ARRANGEMENT

The following facilities licensed and operated or permitted under the authority of the Wisconsin Statutes: child welfare agencies under § 48.60, group foster homes for children under § 48.02(7), and, adult family homes and community-based residential facilities under § 50.033; but does not include commercial day-care centers, nursing homes, general hospitals, special hospitals, prisons or jails. The establishment of community living arrangements is governed by §§ 46.03(22), 59.69(15), 60.23, and 62.63(7)(i), Wis. Stats.

DAY-CARE CENTER

An establishment providing care and supervision for four or more persons under the age of seven, licensed by the state under § 48.65, Wis. Stats.

FAMILY CHILDDAY CARE HOME

A dwelling licensed as a <u>child day</u> care center by the state under § 48.65 <u>and 66.1017</u>, Wis. Stats., where care is provided for not more than eight children.

$\S~17.02$ General provisions.

- (14) Use restrictions. The following use restrictions and regulations shall apply:
- (b) Conditional uses.
- 4. Business uses. The following commercial uses shall be conditional uses and may be permitted as specified:
- a. Automotive, marine, and aircraft sales, service, repair, and storage facilities in the B-2 Business District, provided that there shall be not more than two automotive facilities or two marine facilities or two aircraft facilities in a one-mile radius.
- b. Drive-in theaters in the B-2 Business District, provided that a planting screen at least 25 feet wide is created along any side abutting a residential district and no access is permitted to or within 1,000 feet of an arterial street.
- c. Drive-in banks in the B-1, B-2 and B-3 Business Districts.
- d. Drive-through and fast-food restaurants in the B-2 Business District. [Amended 5-17-2016]

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- e. Funeral homes in any business district and the I-1 Institutional District, provided all principal structures and uses are not less than 25 feet from any lot line.
- f. Gasoline service stations and car washes in the B-1 and B-2 Business Districts, provided that all service islands, pumps, and structural supports for canopies shall meet the setback and yard requirements of the district, and further provided that there shall be not more than two such facilities in a one-mile radius.
- g. Transmitting towers, receiving towers, relay and microwave towers in the B-2 Business and I-1 Institutional Districts.
- h. Broadcast studios in the I-1 Institutional District.
- Commercial daycare centers Adult day care facilities in B-2 Limited General Business District and B-3
 Office and Professional Districts. [Added 9-5-2017]

§ 17.04 Zoning districts.

- (4) Rs-1 Single-Family Residential District. The Rs-I Residential District is intended to provide for single-family residential development at densities not to exceed 1.1 dwelling units per net acre.
- (a) Permitted uses.
- 1. Single-family dwellings.
- 2. Community living arrangements which have a capacity for eight or fewer persons, and which are located not less than 2,500 feet from the location of another community living arrangement, subject to the limitations and conditions set forth in Wis. Stat. § 60.63. [Amended 5-17-2016]
- 3. Foster family homes.
- 4. Family childday care homes.
- 5. Essential services.
- (5) Rs-2 Single-Family Residential District. The Rs-2 Residential District is intended to provide for single-family residential development at densities not to exceed 1.5 dwelling units per net acre.
- (a) Permitted uses.
- 1. Single-family dwellings.
- Community living arrangements which have a capacity for eight or fewer persons, subject to the limitations in § 60.63, Wis. Stats.
- 3. Foster family homes.
- 4. Family childday care homes.
- Essential services.
- (6) Rs-3 Single-Family Residential District. The Rs-3 Residential District is intended to provide for single-family residential development at densities not to exceed 2.2 dwelling units per net acre.
- (a) Permitted uses.
- 1. Single-family dwellings.

- Community living arrangements which have a capacity for eight or fewer persons, subject to the limitations in 60.63, Wis. Stats.
- 3. Foster family homes.
- Family <u>child</u>day care homes.
- 5. Essential services.
- (7) Rs-4 Single-Family Residential District. The Rs-4 Residential District is intended to provide for single-family residential development at densities not to exceed 2.9 dwelling units per net acre, served by centralized sewer and water facilities.
- (a) Permitted uses.
- 1. Single-family dwellings.
- Community living arrangements which have a capacity for eight or fewer persons, subject to the limitations in § 60.63, Wis. Stats.
- 3. Foster family homes.
- 4. Family childday care homes.
- 5. Essential services.
- (8) Rd-1 Two-Family Residential District. The Rd-1 Residential District is intended to provide for two-family residential development at densities not exceeding 4.4 dwelling units per net acre, served by municipal sewer and water facilities.
- (a) Permitted uses.
- 1. Two-family dwellings.
- Community living arrangements which have a capacity for eight or fewer persons, subject to the limitations in § 60.63, Wis. Stats.
- 3. Foster family homes.
- Family <u>childday</u> care homes.
- Essential services.
- (9) Rm-1 Multifamily Residential District. The Rm-1 Residential District is intended to provide for multifamily residential development at densities not exceeding 4.4 dwelling units per net acre, served by municipal sewer and water facilities.
- (a) Permitted uses.
- Two-family and multifamily dwellings. Multifamily residential structures shall not exceed eight dwelling units per structure.
- 2. Community living arrangements which have a capacity for 15 or fewer persons, subject to the limitations in § 60.63, Wis. Stats.
- 3. Foster family homes.

- Family <u>child</u>day care homes.
- 5. Essential services.
- (10) Rm-2 Multifamily Residential District. The Rm-2 Residential District is intended to provide for multifamily residential development at densities not exceeding 7.3 dwelling units per net acre. The Rm-2 Residential District is intended for use in more intensely developed areas, particularly in areas adjacent to business and manufacturing areas. It is not intended that the Rm-2 Residential District be located directly adjacent to single-family residential development in the Town. All Rm-2 residential developments should be served by municipal sewer and water facilities.
- (a) Permitted uses.
- Two-family and multifamily dwellings. Multifamily residential structures shall not exceed eight dwelling units per structure.
- 2. Community living arrangements which have a capacity for 15 or fewer persons, subject to the limitations in § 60.63, Wis. Stats.
- 3. Foster family homes.
- 4. Family childday care homes.
- 5. Essential services.
- (12)B-2 Limited General Business District. The B-2 Limited General Business District is intended to provide for the orderly and attractive grouping at appropriate locations of businesses offering a wider range of retail products and services than are provided in neighborhood business districts. Many such businesses are related to and dependent upon highway traffic or are specifically designed to serve the need of such traffic.
- (a) Permitted uses. [Amended 12-7-2004]
- Antique and collector's stores
- Appliance stores
- Art shops
- Bakeries
- Banks, savings and loan and other financial institutions; including drive-in facilities
- Barbershops
- Beauty shops
- Book or stationery stores
- Building supply stores, excluding lumber yards
- Business offices

Camera and photographic supply stores Clinics Clothing stores Communication offices or exchanges Commercial day care centers Confectioneries and ice cream stores Convenience food store Delicatessens Department stores Drugstores Dry cleaning and dying establishments Electronic equipment sales, service, and repair Equipment rental facilities Fish markets Florist shops Fruit and vegetable markets Funeral homes Furniture stores Garden centers Gift shops Grocery and other food products stores Hardware stores Hobby shops Hotels and motels Indoor tennis and racquetball courts and physical fitness centers

Insurance sales offices

- Interior decorators
- Jewelry stores
- Meat markets
- Music and radio stores
- Notion and variety stores
- Optical stores
- Packaged beverage stores
- Pharmacies
- Photography and art studios
- Printing and publishing houses
- Professional offices
- Radio and television broadcast studios, not including transmission towers
- Real estate sales offices
- Restaurants, not including drive-through or fast-food restaurants
- Self-service laundries
- Shoe stores
- Soda fountains
- Sporting goods stores
- Super markets
- Tailoring or dressmaking shops
- Tobacco stores
- Videotape sales and rental

§ 17.06 Traffic, loading, parking and access.

- (3) Parking requirements. In all districts, in connection with every use, there shall be provided at the time any use is erected, enlarged, extended or increased, off-street parking stalls for all vehicles in accordance with the following:
- (h) The following guide specifies the minimum number of parking spaces required. In the case of structures or uses not specified herein, the number of spaces specified as the general standard for the use class or number of spaces specified for similar use shall apply. In developments involving the establishment or

addition of two or more uses on one lot or parcel, the cumulative number of spaces required for each use shall determine the total number of spaces required.

- 6. Institutional and related uses.
- a. Churches: one space per three seats based on the maximum capacity of the facility.
- b. Libraries: one space per 250 square feet of gross floor area or one space per four seats based on maximum capacity, whichever is greater, plus one space per employee for the work shift with the greatest number of employees.
- c. Museums: one space per 250 square feet of gross floor area, plus one space per employee for the work shift with the greatest number of employees.
- d. Rooming houses and boardinghouses, fraternity and sorority houses, dormitories, and rectories: one space per bed.
- e. Convents and monasteries: one space per three residents, plus one space per employee for the work shift with the largest number of employees, plus one space per five chapel seats if the public may attend.
- f. Nursing homes: one space per three patient beds, plus one space per employee for the work shift with the largest number of employees.
- g. Hospitals: two spaces per three patient beds, plus one space per staff doctor, plus one space per employee, excluding doctors, for the work shift with the largest number of employees.
- h. Schools:
- Elementary, middle and high schools: one space for each teacher and staff member, plus one space for each 10 students 16 years of age or older.
- Colleges, universities, and trade schools: one space for each teacher and staff member, plus one space for each two students during the highest attendance period.
- iii. Children's nursery schools and <u>commercial</u> day-care centers: one space per employee for the work shift with the greatest number of employees, plus one space per six students at the highest class attendance period.

Ord. No.:

ORDINANCE REPEALING AND RECREATING SECTION 17.02(14)(g)11. OF THE MUNICIPAL CODE OF THE TOWN OF BROOKFIELD

NOW THEREFORE, the Town Board of the Town of Brookfield, Wisconsin does ordain as follows:

SECTION 1: Section 17.02(14)(g)11. of the Town Code is hereby repealed and recreated to read as follows:

- 11. Fences. Fences may be permitted as an accessory use in any district upon issuance of a permit and compliance with the requirements in this section. All fences shall be constructed in such a manner that the "finished" side faces the neighboring property and the fence posts are on the side of the fence facing the subject property.
 - a. In residential districts, fences shall comply with the following requirements:
 - i. Open fences are permitted up to the lot line in the side and rear yards but shall not extend into the street yard or exceed a height of four feet. Unless approved by a conditional use permit, chain link and barbed wire fences are prohibited. Such prohibition includes chain link and barbed wire fences surrounding tennis courts, basketball courts, and other similar recreational areas.
 - ii. Solid fences are permitted up to the lot line in the side and rear yard but shall not extend into the street yard or exceed a height of six feet. Solid fences may be placed in the street yard of double frontage or corner lots if the fence is setback at least five feet from the street right-of-way, the side facing the street is attractively landscaped, and the zoning administrator determines that the fence's location and appearance is consistent with the surrounding neighborhood continuity standard.
 - iii. Prior to permit approval, any person proposing a fence that will be located within five feet of a lot line shall submit a plat of survey depicting the location of the proposed fence and stake the corners of the property.
 - b. In any district, ornamental fences are permitted up to the lot line in the side, rear, and street yard but shall not extend into the street right-of-way or exceed a height of three feet. Ornamental fences shall comply with the traffic visibility requirements set forth in § 17.06 of this chapter.
 - c. In any district except residential districts, chain link, barbed wire, or other security fencing is permitted up to the lot line in the side, rear, and street yard but shall not extend into the street right-of-way or exceed a height of ten feet. Any portion of such fencing located in the street yard

shall be an open fence as defined in § 17.01(9)(b) of this chapter. Barbed wire fences may include up to four strands of barbed wire on the top of the fence, provided that the barbed wire is at least eight feet above grade with the vertical supports for the barbed wire slanting inward away from the neighboring property line. Fences authorized by this section shall comply with the traffic visibility requirements set forth in § 17.06 of this chapter.

- d. Reserved.
- e. Except as otherwise permitted in this section, barbed wire, razor wire, corrugated metal, chicken wire, T-posts and U-posts, and electric fences are prohibited.
- f. Exemptions from permit and permit standards. The following fences are exempt from the requirements of this section:
 - i. Temporary fencing used for the protection of excavation, construction sites, and individuals plants.
 - ii. Decorative fencing, fences encompassing a garden, pet kennels, and other similar fences provided that they are not located in the front yard, setback at least five feet from all property lines, and do not exceed a height of six feet.
 - iii. Invisible fences intended for pets.
 - g. All fences and posts shall be maintained in a structurally sound and attractive manner.
 - h. Any utility equipment located within a fence shall be safe and accessible. If the metering location becomes unsafe or inaccessible, the owner shall be required to remove the fence or have the utility equipment moved at the owner's expense.
 - i. Fence permits may be approved administratively by the zoning administrator. Any proposed fence that does not comply with this section shall be considered a conditional use under § 17.02(14) of this chapter.
 - SECTION 2: All other provisions of the Town Code shall remain in full force and effect.
- <u>SECTION 3:</u> All ordinances or parts of this ordinance conflicting or contravening the provisions of this Ordinance are hereby repealed.
- SECTION 4: This Ordinance shall take effect upon passage and posting or publication as provided by law.

PASSED AND	ADOPTED by the	Town Board of the	Town of Brookfield,	Waukesha
County, Wisconsin this	s, day of		, 2023.	

BY:		BY:
	KEITH HENDERSON, Chairman	STEVE KOHLMANN, Supervisor
BY:		BY:
ы.	JOHN CHARLIER, Supervisor	JOHN R. SCHATZMAN, Supervisor
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BY:		ATTEST:
	RYAN STANELLE, Supervisor	TOM HAGIE, Administrator and
		Interim Clerk

Fences. Fences are a permitted accessory use in any district upon issuance of a permit and compliance with the requirements in this section. All fences shall be constructed in such a manner that the "finished" side faces the neighboring property and the fence posts are on the side of the fence facing the subject property. and may be erected without a permit, provided that fences shall comply with the following requirements:

- a. Residential fences shall be constructed in such a manner that the "finished" side shall face the neighboring property. Fence posts shall be on the side of the fence facing the subject property In residential districts, fences shall comply with the following requirements:
 - i. Open residential fences are permitted up to the lot line in the side and rear yards <u>but shall not extend into the street yard of residential districts, but shall notor</u> exceed a height of four feet. <u>Unless approved by a conditional use permit, chain link and barbed wire fences are prohibited. Such prohibition includes chain link and barbed wire fences surrounding tennis courts, basketball courts, and other similar recreational areas., and shall not extend into the street yard.</u>

ii.

Solid residential fences, as defined in § 17.01(9)(b) of this chapter, are permitted up to the lot line in the side and rear yard but shall not extend into the street yard or exceed a height of six feet. Solid fences may be placed in the street yard of double frontage or corner lots if the fence is setback at least five feet from the street right-of-way, the side facing the street is attractively landscaped, and the zoning administrator determines that the fence's location and appearance is consistent with the surrounding neighborhood continuity standard. shall meet the offset requirements of the district. Fences shall not exceed six feet in height and shall be placed in the rear yard only.

<u>iii. Prior to permit approval, any person proposing a fence that will be located within five feet of a lot line shall submit a plat of survey depicting the location of the proposed fence and stake the corners of the property.</u>

b. In any district, oornamental fences, as defined in § 17.01(9)(b) of this chapter, are permitted up to the lot line in the side, rear, and in the street yard in any district, but shall not extend into the be erected in a street right-of-way orand shall not exceed a fence height of three feet.

Ornamental fences shall comply with the traffic visibility requirements set forth in § 17.06 of this chapter.

c. In any district except residential districts, chain link, barbed wire, or other security fences is or screening fences are permitted up to the lotproperty lines in the side, rear, and street yard but shall not extend into the street right-of-way all districts except residential districts, but shall ornot exceed a height of 10 feet in total height and shall be "open fences" as defined in § 17.01(9)(b) of this chapter when located in the street yard. Any portion of such fencing located in the street yard shall be an open fence as defined in § 17.01(9)(b) of this chapter. Barbed wire Security fences may include up to four strands of barbed wire on the top of the fence, provided that the barbed wire is at least eight feet above grade with the vertical supports for

the barbed wire slanting inward away from the <u>neighboring</u> property line. Security and screening Ffences <u>authorized by this section</u> shall comply with the traffic visibility requirements set forth in § 17.06 of this chapter. Security fences shall be constructed in such a manner that the "finished" side shall face the neighboring property. Fence posts shall be on the side of the fence facing the permit applicant's property.

- d. Reserved. Solid, privacy fences, as described in § 17.01(9)(b) of this chapter, not exceeding six feet in height, may be placed in a street yard of double frontage or corner lots subject to approval by the Building Inspector or Architectural Review Committee. Approval shall be based upon a neighborhood continuity standard. Such fencing may be placed at a minimum five foot setback to a street right of way, providing the side facing the street is attractively landscaped.
- e. Except as otherwise permitted in this section, <u>b</u>Barbed wire, <u>razor wire</u>, <u>corrugated metal</u>, <u>chicken wire</u>, <u>T-posts and U-posts</u>, <u>fences</u> and electric fences are prohibited in the Town of <u>Brookfield</u>.
- f. Exemptions from permit and permit standards. The following fences are exempt from the requirements of this section:
 - i. Temporary fencing used for the protection of excavation, construction sites and individuals plants.
 - <u>ii.</u> Decorative fencing, fences encompassing a garden, pet kennels and other similar fences provided that they are not located in the front yard, setback a minimum of five feet from all property lines, and do not exceed a height of six feet.
 - iii. Invisible fences intended for pets.
- g. All fences or posts shall be maintained in a structurally sound and attractive manner.
- h. Any utility equipment located within a fence shall be safe and accessible. If the metering location becomes unsafe or inaccessible, the owner shall be required to remove the fence or have the utility equipment moved at the owner's expense.
- if. Fence permits may be approved administratively by the zoning administrator. Any proposed fence that doeswhich would not conform with this sectione above provisions shall be considered a conditional use under as described in § 17.02(14) of this chapter.

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