

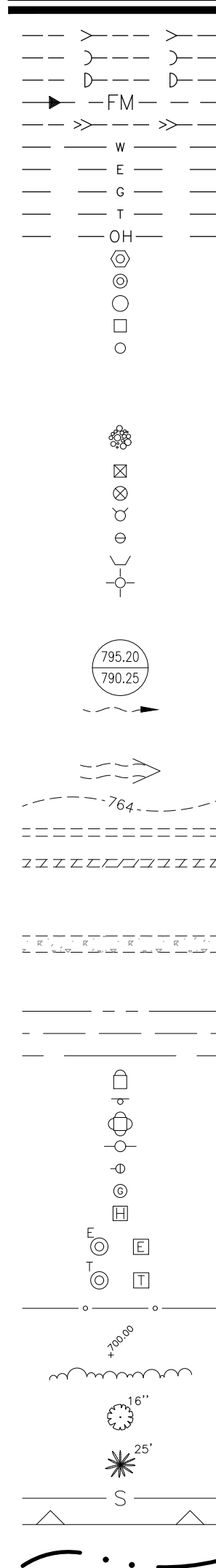
Proposed Improvements
for

PROPOSED TOWER COURT RESIDENCES DEVELOPMENT

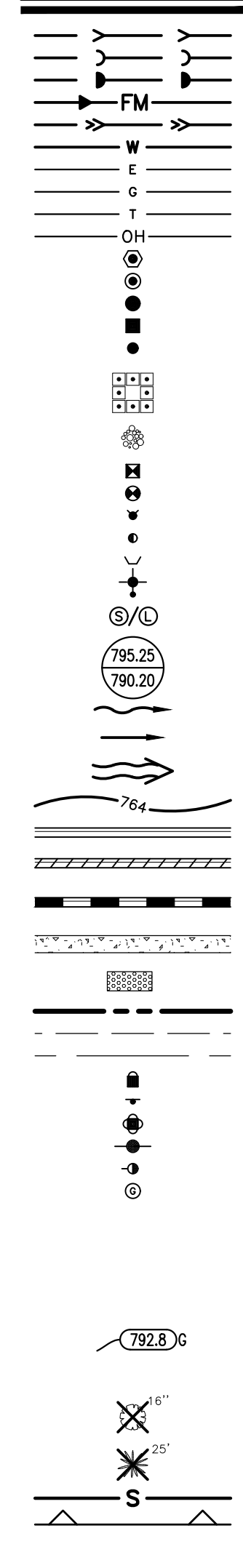
TOWER COURT
CITY OF NAPERVILLE, ILLINOIS

STANDARD SYMBOLS

EXISTING



PROPOSED



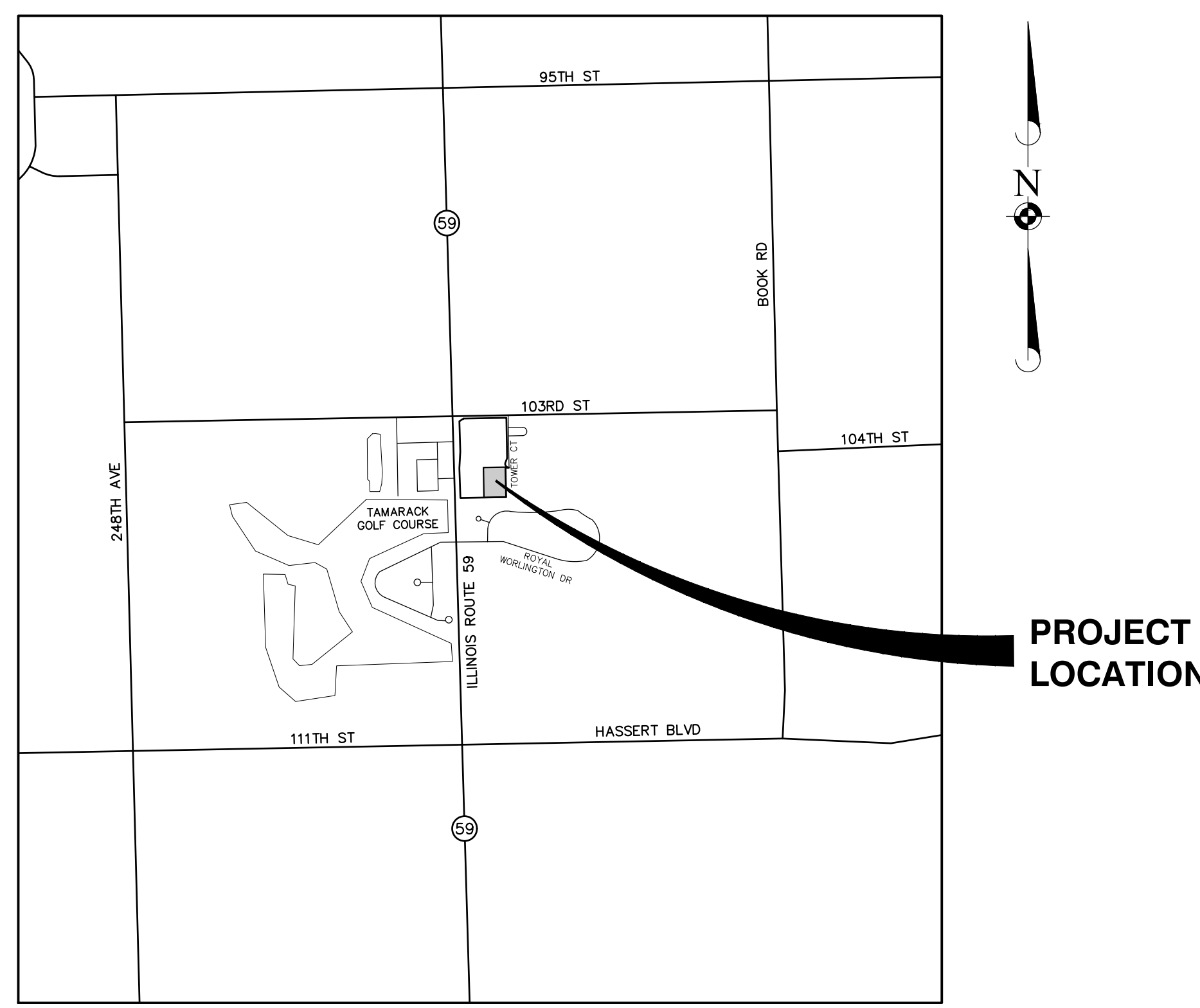
- STORM SEWER
- SANITARY SEWER
- COMBINED SEWER
- FORCEMAIN
- DRAIN TILE
- WATER MAIN
- ELECTRIC
- GAS
- TELEPHONE
- OVERHEAD WIRES
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN
- STORM INLET
- CLEANOUT
- HAY BALES
- RIP RAP
- VALVE IN VAULT
- VALVE IN BOX
- FIRE HYDRANT
- BUFFALO BOX
- FLARED END SECTION
- STREET LIGHT
- SUMMIT / LOW POINT
- RIM ELEVATION
- INVERT ELEVATION
- DITCH OR SWALE
- DIRECTION OF FLOW
- OVERFLOW RELIEF SWALE
- 1 FOOT CONTOURS
- CURB AND GUTTER
- DEPRESSED CURB AND GUTTER
- REVERSE CURB AND GUTTER
- SIDEWALK
- DETECTABLE WARNINGS
- PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- MAIL BOX
- SIGN
- TRAFFIC SIGNAL
- POWER POLE
- GUY WIRE
- GAS VALVE
- HANDHOLE
- ELECTRICAL EQUIPMENT
- TELEPHONE EQUIPMENT
- CHAIN-LINK FENCE
- SPOT ELEVATION
- BRUSH/TREE LINE
- DECIDUOUS TREE WITH TRUNK DIA. IN INCHES (TBR)
- CONIFEROUS TREE WITH HEIGHT IN FEET (TBR)
- SILT FENCE
- RETAINING WALL
- WETLAND

ABBREVIATIONS

- | | | |
|-------------------------------------|---|------------------------------|
| ADJ. ADJUST | F/L FLOW LINE | R.O.W. RIGHT-OF-WAY |
| AGG. AGGREGATE | FM FORCE MAIN | RCP REINFORCED CONCRETE PIPE |
| ARCH. ARCHITECT | G GROUND | REM REMOVAL |
| B.A.M. BITUMINOUS AGGREGATE MIXTURE | G/F GRADE AT FOUNDATION | REV REVERSE |
| B-B BACK TO BACK | GW GUY WIRE | RR RAILROAD |
| B/C BACK OF CURB | HDWL HEADWALL | RT RIGHT |
| B/P BOTTOM OF PIPE | HH HANDHOLE | RT SANITARY |
| B/W BACK OF WALK | HWL HIGH WATER LEVEL | SF SQUARE FOOT |
| B-BOX BUFFALO BOX | HYD HYDRANT | SHLD. SHOULDER |
| BIT. BITUMINOUS | INL INLET | SL STREET LIGHT |
| BM BENCHMARK | INV INVERT | SMH SANITARY MANHOLE |
| B.O. BY OTHERS | IP IRON PIPE | ST STORM |
| C.E. COMMERCIAL ENTRANCE | LT LEFT | STA STATION |
| CB CATCH BASIN | MAX. MAXIMUM | STD STANDARD |
| CL CENTERLINE | MB MAILBOX | SW SQUARE YARDS |
| CMP CORRUGATED METAL PIPE | M/E MEET EXISTING | TBR TO BE REMOVED |
| CONTR. CONTROL | MH MANHOLE | T TELEPHONE |
| CO CLEANOUT | MIN. MINIMUM | T-A TYPE A |
| CONC. CONCRETE | NWL NORMAL WATER LEVEL | T/C TOP OF CURB |
| CY CUBIC YARD | P.E. PRIVATE ENTRANCE | T/F TOP OF FOUNDATION |
| D DITCH | PC POINT OF CURVATURE | T/P TOP OF PIPE |
| DIA. DIAMETER | PCC POINT OF COMPOUND CURVE | T/W TOP OF WALK |
| DIP DUCTILE IRON PIPE | PGL PROFILE GRADE LINE | T/WALL TOP OF WALL |
| DWM DUCTILE IRON WATER MAIN | PI POINT OF INTERSECTION | TEMP. TEMPORARY |
| DS DOWNSPOUT | R PROPERTY LINE | TRANS. TRANSFORMER |
| DT DRAIN TILE | PP POWER POLE | V.B. VALVE BOX |
| E ELECTRIC | PROP. PROPOSED | VCP VITRIFIED CLAY PIPE |
| E-E EDGE TO EDGE | PT POINT OF TANGENCY | V.V. VALVE VAULT |
| ELEV. ELEVATION | PVC POLYVINYL CHLORIDE PIPE | WL WATER LEVEL |
| E/P EDGE OF PAVEMENT | PVC POINT OF VERTICAL CURVATURE | WM WATER MAIN |
| EX. EXISTING | PVI POINT OF VERTICAL INTERSECTION | |
| F.O. FIELD ENTRANCE | PVT POINT OF VERTICAL TANGENCY | |
| F-F FACE TO FACE | P PAVEMENT | |
| F.F. FINISHED FLOOR | P.U.D.E. PUBLIC UTILITY & DRAINAGE EASEMENT | |
| FES FLARED END SECTION | R RADIUS | |

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PRELIMINARY SITE PLAN
3	PRELIMINARY GRADING PLAN
4	PRELIMINARY UTILITY PLAN - EAST
5	PRELIMINARY UTILITY PLAN - WEST



LOCATION MAP
N.T.S.

OWNER:
GORMAN AND COMPANY
200 N. MAIN STREET
OREGON, WI. 53575
(608) 835-5411 (612) 481-3377

- NOTE:**
THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A FIELD SURVEY COMPLETED BY MANHARD CONSULTING ON APRIL 24, 2023. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY MANHARD CONSULTING AND THE CLIENT IN WRITING OF ANY DIFFERING CONDITIONS.
- BENCHMARKS:**
SOURCE BENCHMARK: NGS PID: DH5798 A.K.A. NAPERVILLE 1002
STAINLESS STEEL ROD IN SLEEVE APPROXIMATELY 46 FEET SOUTH OF THE CENTERLINE OF W 103RD STREET AND APPROXIMATELY 23 EAST OF THE CENTERLINE OF TOWER COURT.
ELEVATION=667.60 DATUM=NAVD88-GEOD 18
- SITE BENCHMARK 1:**
TAG BOLT ON FIRE HYDRANT LOCATED APPROXIMATELY 52 FEET SOUTH OF THE CENTERLINE OF W 103RD STREET AND APPROXIMATELY 152 EAST OF THE CENTERLINE OF ILLINOIS RTE 59.
ELEVATION=669.06 DATUM=NAVD88-GEOD 18
- SITE BENCHMARK 2:**
TAG BOLT ON FIRE HYDRANT LOCATED APPROXIMATELY 42 FEET SOUTH OF THE CENTERLINE OF W 103RD STREET AND APPROXIMATELY 47 WEST OF THE CENTERLINE OF TOWER COURT.
ELEVATION=668.75 DATUM=NAVD88-GEOD 18
- SITE BENCHMARK 3:**
TAG BOLT ON FIRE HYDRANT LOCATED APPROXIMATELY 528 FEET SOUTH OF THE CENTERLINE OF W 103RD STREET, APPROXIMATELY 28 WEST OF THE CENTERLINE OF TOWER COURT AND APPROXIMATELY 259 FEET NORTH OF THE CENTERLINE OF BITUMINOUS ENTRANCE DRIVE OFF OF TOWER COURT.
ELEVATION=670.96 DATUM=NAVD88-GEOD 18
- SITE BENCHMARK 4:**
TAG BOLT ON FIRE HYDRANT LOCATED APPROXIMATELY 76 FEET NORTHEASTERLY OF THE NORTHWEST CORNER OF THE WHEATLAND TOWNSHIP BUILDING AT 4232 TOWER COURT AND APPROXIMATELY 49 EAST OF THE SOUTHERLY EXTENSION OF THE CENTERLINE OF TOWER COURT.
ELEVATION=671.20 DATUM=NAVD88-GEOD 18



Manhard CONSULTING

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Civil Engineers • Surveyors • Water Resources Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners



MANHARD CONSULTING IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS OR METHODS OF CONSTRUCTION.

DATE	REVISIONS	DATE	REVISIONS
		09-24-24	PRELIMINARY SUBMITTAL 4
		08-02-24	REVISED PER CITY REVIEW
		03-26-24	REVISED PER CITY REVIEW

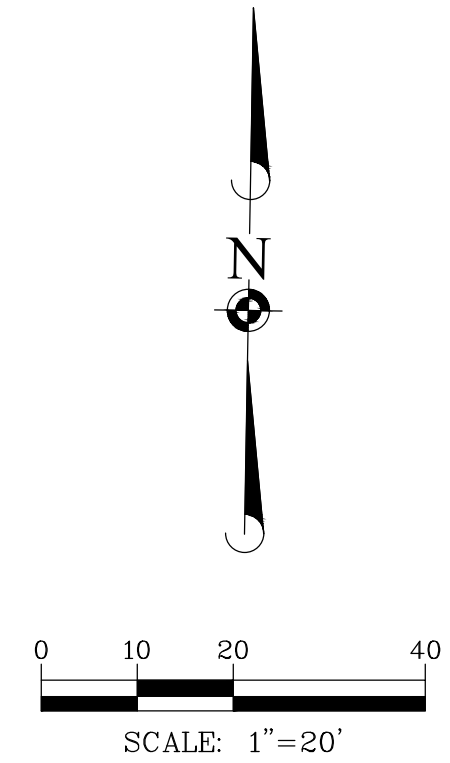
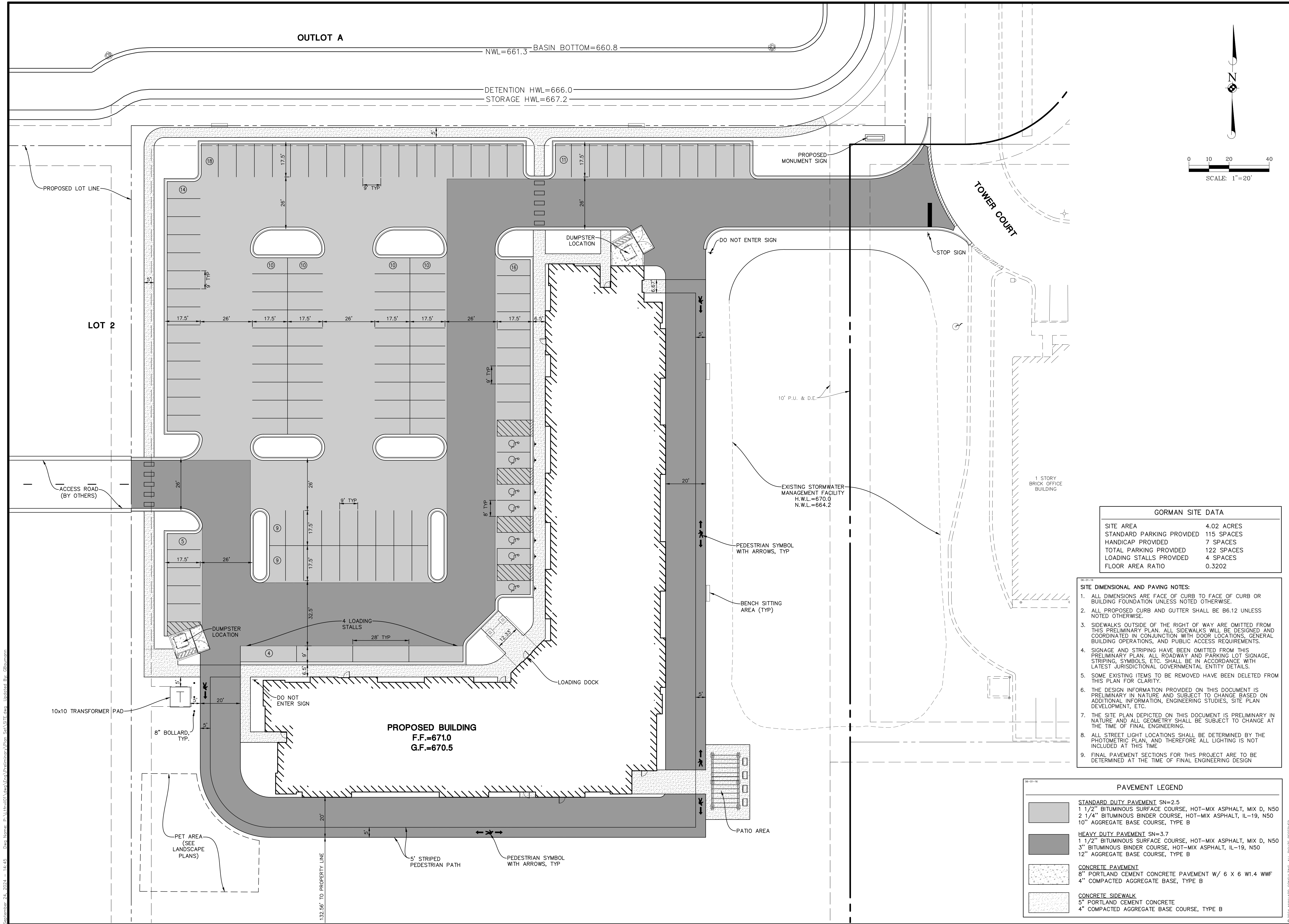
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PROPOSED TOWER COURT RESIDENCES DEVELOPMENT
CITY OF NAPERVILLE, ILLINOIS
TITLE SHEET

PROJ. MGR.: TEC
PROJ. ASSOC.: GTB
DRAWN BY: MH
DATE: 07-19-23
SCALE: N.T.S.

SHEET
1 OF **5**
GORNVL01

July 29, 2024 - 11:13 Draw Name: P:\11700\Manhard\Projects\Tower Court\Title - GORMAN.dwg Updated By: mhamilton



DATE	REVISIONS

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Naperville, IL 60563
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Civil Engineers • Surveyors • Water Resource Engineers • Wetland Delineation Engineers • Environmental Scientists • Environmental Planners
Construction Managers • Landscape Architects

**PROPOSED TOWER COURT RESIDENCES DEVELOPMENT
CITY OF NAPERVILLE, ILLINOIS
PRELIMINARY SITE PLAN**

GORMAN SITE DATA	
SITE AREA	4.02 ACRES
STANDARD PARKING PROVIDED	115 SPACES
HANDICAP PROVIDED	7 SPACES
TOTAL PARKING PROVIDED	122 SPACES
LOADING STALLS PROVIDED	4 SPACES
FLOOR AREA RATIO	0.3202

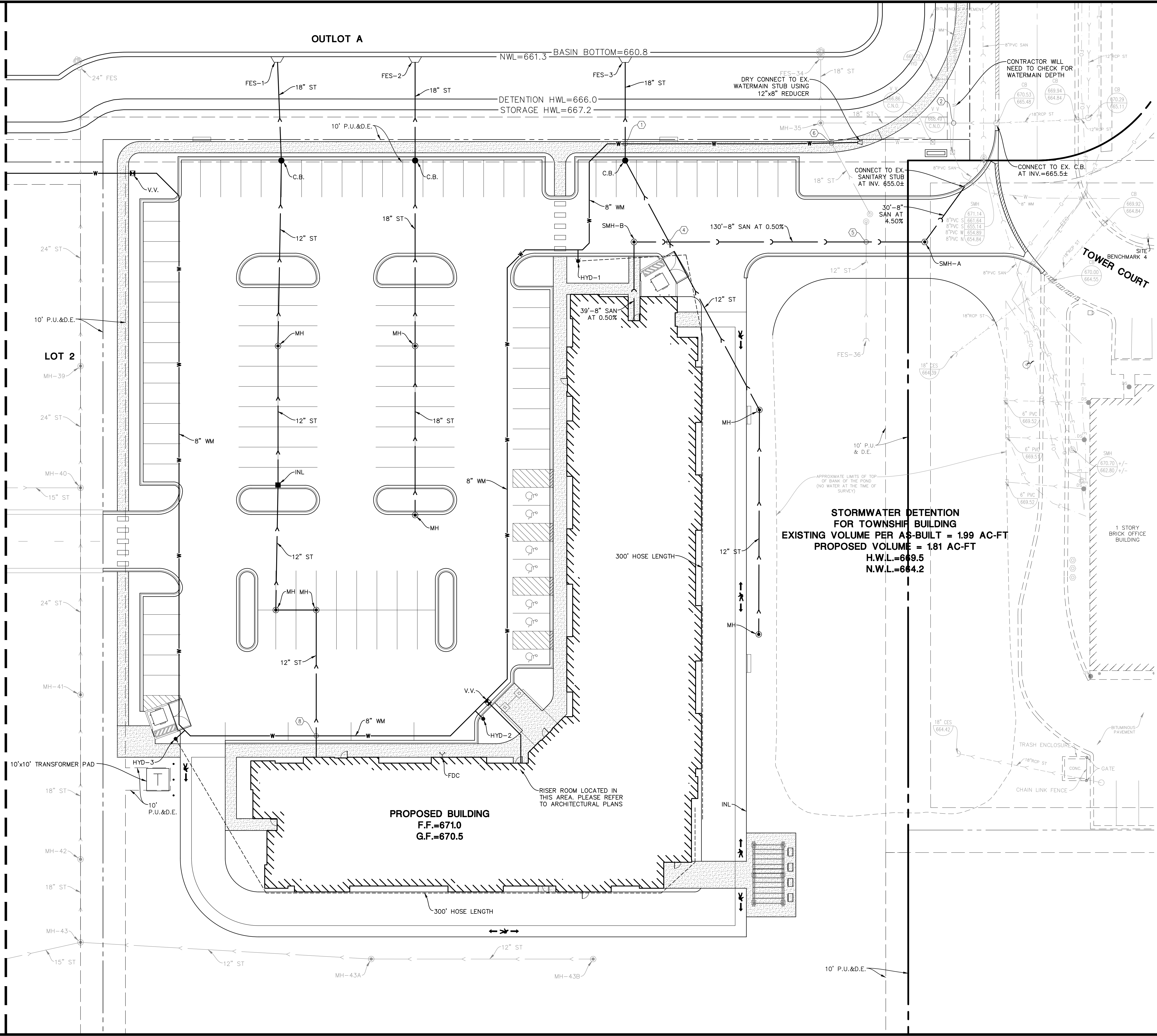
- SITE DIMENSIONAL AND PAVING NOTES:**
- ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE.
 - ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS NOTED OTHERWISE.
 - SIDEWALKS OUTSIDE OF THE RIGHT OF WAY ARE OMITTED FROM THIS PRELIMINARY PLAN. ALL SIDEWALKS WILL BE DESIGNED AND COORDINATED IN CONJUNCTION WITH DOOR LOCATIONS, GENERAL BUILDING OPERATIONS, AND PUBLIC ACCESS REQUIREMENTS.
 - SIGNAGE AND STRIPING HAVE BEEN OMITTED FROM THIS PRELIMINARY PLAN. ALL ROADWAY AND PARKING LOT SIGNAGE, STRIPING, SYMBOLS, ETC. SHALL BE IN ACCORDANCE WITH LATEST JURISDICTIONAL GOVERNMENTAL ENTITY DETAILS.
 - SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY.
 - THE DESIGN INFORMATION PROVIDED ON THIS DOCUMENT IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON ADDITIONAL INFORMATION, ENGINEERING STUDIES, SITE PLAN DEVELOPMENT, ETC.
 - THE SITE PLAN DEPICTED ON THIS DOCUMENT IS PRELIMINARY IN NATURE AND ALL GEOMETRY SHALL BE SUBJECT TO CHANGE AT THE TIME OF FINAL ENGINEERING.
 - ALL STREET LIGHT LOCATIONS SHALL BE DETERMINED BY THE PHOTOMETRIC PLAN, AND THEREFORE ALL LIGHTING IS NOT INCLUDED AT THIS TIME.
 - FINAL PAVEMENT SECTIONS FOR THIS PROJECT ARE TO BE DETERMINED AT THE TIME OF FINAL ENGINEERING DESIGN.

PAVEMENT LEGEND	
	STANDARD DUTY PAVEMENT SN=2.5 1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50 2 1/4" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50 10" AGGREGATE BASE COURSE, TYPE B
	HEAVY DUTY PAVEMENT SN=3.7 1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50 3" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50 12" AGGREGATE BASE COURSE, TYPE B
	CONCRETE PAVEMENT 8" PORTLAND CEMENT CONCRETE PAVEMENT W/ 6 X 6 W1.4 WWF 4" COMPACTED AGGREGATE BASE, TYPE B
	CONCRETE SIDEWALK 5" PORTLAND CEMENT CONCRETE 4" COMPACTED AGGREGATE BASE COURSE, TYPE B

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September 24, 2024 - 08:30 Des Name: P:\Projects\24\24-001\Drawings\24-001-01-01-01.dwg User: gbr... Updated By: mhamilton

MATCH LINE SEE SHEET 5



UTILITY CROSSINGS

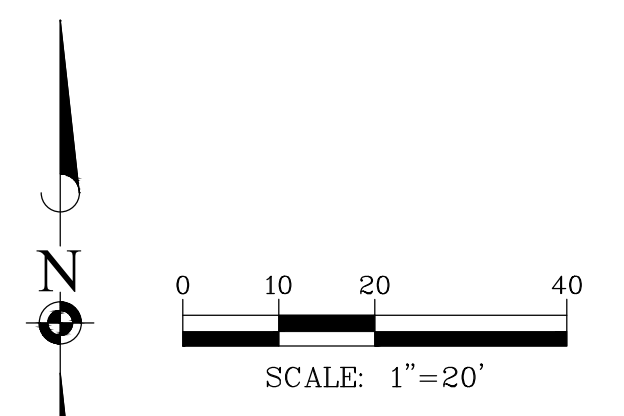
1 ST OVER WM B/P ST = 661.9 T/P WM = 660.4* *LOWER WM*	6 ST OVER WM B/P SAN = 663.1 T/P WM = 661.6* *LOWER WM*
2 ST OVER EX. WM B/P ST = 664.4 T/P EX. WM = 662.7	7 INTENTIONALLY OMITTED
3 INTENTIONALLY OMITTED	8 ST OVER WM B/P ST = 664.6 T/P WM = 661.9* *LOWER WM*
4 ST OVER SAN B/P ST = 662.6 T/P SAN = 658.4	9 INTENTIONALLY OMITTED
5 ST OVER SAN B/P ST = 663.7 T/P SAN = 658.5	

NOTE: WATER AND SEWER CROSSINGS SHALL MEET STATE EPA SEPARATION AND PIPE MATERIAL REQUIREMENTS. (SEE DETAIL SHEET)

NOTE: METERS, INSTRUMENTAL TRANSFORMERS, AND MAIN DISCONNECT SHALL BE LOCATED WITHIN 50' OF THE TRANSFORMER AND SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING. THE INSTRUMENT TRANSFORMERS AND MAIN DISCONNECT MAY BE INSTALLED INSIDE THE BUILDING IF THE SERVICE ENTRANCE CAPACITY IS 1200 AMPS OR GREATER. METERS SHALL BE INSTALLED ON THE BUILDING EXTERIOR.

DEPARTMENT OF PUBLIC UTILITIES - ELECTRIC GENERAL NOTES

- THE DEVELOPER SHALL SUPPLY THE DPU-E ENGINEER WITH CATALOG CUTS FOR ALL CT/METER EQUIPMENT (INCLUDING BUT NOT LIMITED TO METER SOCKETS, PT CABINET, CT CABINET, DISCONNECT CABINET) AND TRANSFORMER PAD/VAULT. THE CATALOG CUTS SHALL BE APPROVED BY DPU-E PRIOR TO PURCHASING. THE CT/METER CABINET SHALL BE TOP FED. CT/METER EQUIPMENT ARE LONG LEAD TIME ITEMS AND DPU-E SHALL NOT BE HELD RESPONSIBLE FOR DELAYS RESULTING FROM NON-COMPLIANT CT/METER EQUIPMENT.
- DPU-E WILL PROVIDE, INSTALL, AND MAINTAIN THE TRANSFORMERS, ALL PRIMARY (15KV) CABLE AND CONDUIT, AND THE METERS AND INSTRUMENT TRANSFORMERS ONCE THE INSTALLATION IS COMPLETE AND THE BUILDING IS READY TO BE ENERGIZED. THE DEVELOPER IS RESPONSIBLE FOR PROVIDING, INSTALLING, AND MAINTAINING THE TRANSFORMER PAD/VAULT, ALL SERVICE LATERAL (480V) CABLE AND CONDUIT, THE SERVICE ENTRANCE EQUIPMENT INCLUDING THE CT/METER CABINET AND ALL BANKED METER SOCKETS.
- THE DEVELOPER SHALL COORDINATE SITE CONSTRUCTION WITH DPU-E TO ALLOW ELECTRIC FACILITIES TO BE INSTALLED PRIOR PAVING AND CURBING. DPU-E REQUIRES 30 WORKING DAYS ADVANCE WRITTEN NOTICE PRIOR TO PAVEMENT INSTALLATION TO ALLOW FOR THE INSTALLATION OF ELECTRIC FACILITIES. GRADE ELEVATION MUST BE WITHIN 4" OF FINAL GRADING BEFORE ELECTRIC FACILITIES CAN BE INSTALLED.
- ELECTRIC FACILITIES SHALL BE INSTALLED PURSUANT TO SECTION 8-1C-3 OF THE CITY OF NAPERVILLE MUNICIPAL CODE, WHICH REQUIRES A CONSTRUCTION FEE PAYMENT FOR INSTALLATION OF ELECTRIC FACILITIES.
- AT ALL TIMES, THE CUSTOMER SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING A SUITABLE APPROACH TO THE METER LOCATION, WITH NO OBSTRUCTIONS WITHIN FOUR (4) FEET OF THE FRONT AND TWO (2) FEET OF THE SIDES OF THE METER. PER NAPERVILLE SERVICE RULES AND POLICES 22.2.F.
- CLEARANCE TO TRANSFORMER PAD SHALL BE 5' FROM ALL SIDES, 10' FROM FRONT, AND THE AREA ABOVE MUST BE COMPLETELY CLEAR OF OBSTRUCTION. NO TREES, SHRUBS, OR OTHER OBSTACLES WILL BE ALLOWED WITHIN THIS AREA. TRANSFORMER PAD SHALL MAINTAIN MINIMUM CLEARANCE OF 20' FROM EGRESS POINTS. PER DPU-E SPECIFICATIONS C10-2130 AND C30-0016.
- DPU-E REQUIRES A MINIMUM 5' OF SEPARATION BETWEEN ITS ELECTRIC FACILITIES AND ANY FIRE HYDRANTS, STORM DRAINS, STORM SEWERS, WATER MAINS, GAS MAINS, ETC. THAT RUN PARALLEL TO ITS FACILITIES.
- TO HAVE AN EXISTING SERVICE DISCONNECTED CALL THE CITY DISPATCH OFFICE AT 830-420-6187. PLEASE ALLOW AT LEAST 24 HOURS NOTICE. METERS AND METER SEALS ARE TO BE REMOVED ONLY BY DPU-E PERSONNEL. THE LOCATION AND TYPE OF NEW OR REPLACEMENT METER RELATED EQUIPMENT MUST BE PRE-APPROVED IN WRITING BY DPU-E. AN ELECTRIC SERVICE MUST BE INSPECTED BY THE DEVELOPMENT SERVICES TEAM ELECTRICAL INSPECTOR PRIOR TO CONNECTION.
- LABEL ALL METER SOCKETS WITH THE COMPLETE ADDRESS IN 1" LETTERS USING PERMANENT STICKERS. IN MULTIPLE METER BANKS, THE COMPLETE ADDRESS MAY BE ON THE DISCONNECT SWITCH AND THE SUITE NUMBERS ON THE METER SOCKETS. THE ELECTRICAL SERVICE EQUIPMENT WILL NOT PASS INSPECTION WITHOUT APPROPRIATE ADDRESS LABELING.
- APPROVAL OF METERING EQUIPMENT BY DPU-E DOES NOT REMOVE YOUR RESPONSIBILITY TO COMPLY WITH THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE AS ADOPTED BY THE CITY OF NAPERVILLE. DETERMINATION OF COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE WILL BE MADE BY THE TRANSPORTATION, ENGINEERING AND DEVELOPMENT DEPARTMENT.
- A CUSTOMER'S GROUNDING CONDUCTOR SHALL NOT BE CONNECTED TO DPU-E DISTRIBUTION EQUIPMENT.
- DUE TO SUPPLY CHAIN ISSUES DPU-E IS EXPERIENCING LONG LEAD TIMES (+900 DAYS) ON TRANSFORMERS. PLEASE TAKE THIS INTO CONSIDERATION WHEN PLANNING CONSTRUCTION.
- DPU-E WILL INSTALL AND ENERGIZE ALL METERS IN A MULTIPLE METER BANK AT ONE TIME, PROVIDED ALL METER SOCKETS PASS INSPECTION. IN THE EVENT OF AN INCOMPLETE INSTALLATION, ONLY THE INSPECTED AND APPROVED EQUIPMENT SHALL BE ENERGIZED AND A METER INSTALLED. INDIVIDUAL TENANT PERMITS WILL BE REQUIRED FOR INSTALLATION OF THE OTHER METERS IN THE METER BANK.
- THE DEVELOPER IS RESPONSIBLE FOR THE CONSTRUCTION AND INSTALLATION OF A TRANSFORMER PAD AND VAULT. THE DPU-E ENGINEER MUST BE INFORMED PRIOR TO THE INSTALLATION OF THE PAD AND VAULT. A MAIN DISCONNECT OR CIRCUIT BREAKER IS REQUIRED FOR DPU-E ACCESS IN CASE OF A NEED FOR SERVICE OR IN AN EMERGENCY. DPU-E SHALL MAKE THE FINAL CONNECTIONS OF THE CUSTOMER'S SERVICE TO THE TRANSFORMER TERMINALS. A MINIMUM OF EIGHT FEET OF ADDITIONAL CONDUCTOR LENGTH MUST BE LEFT ON THE CUSTOMER'S SERVICE CABLES.



STORMWATER DETENTION FOR TOWNSHIP BUILDING
 EXISTING VOLUME PER AS-BUILT = 1.99 AC-FT
 PROPOSED VOLUME = 1.81 AC-FT
 H.W.L.=669.5
 N.W.L.=664.2

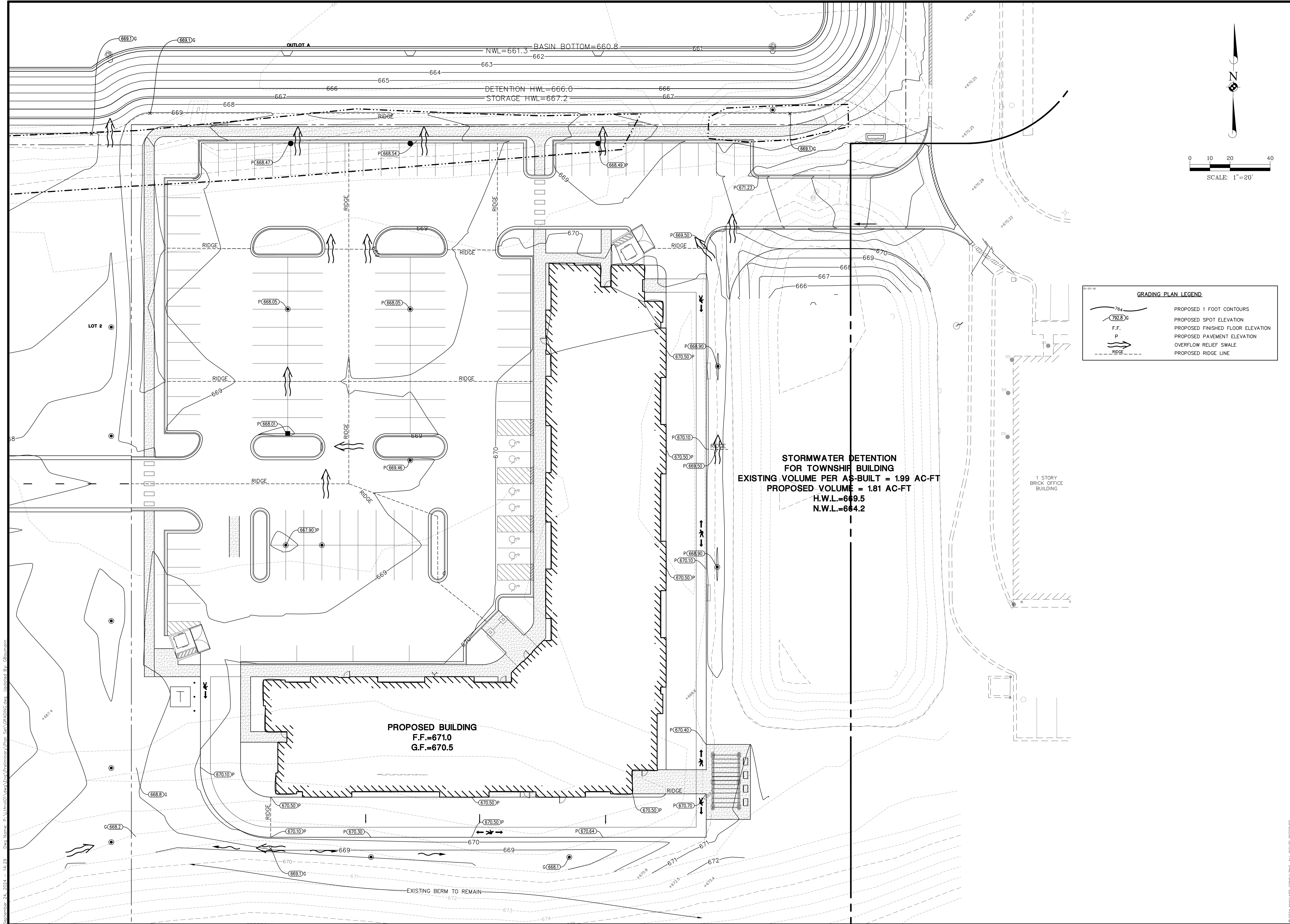
PROPOSED BUILDING
 F.F.=671.0
 G.F.=670.5

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 Civil Engineers • Surveyors • Water Resource Engineers • Wetland & Wetland-Related Engineering • Construction Management • Environmental Scientists • Landscape Architects • Planners

PROPOSED TOWER COURT RESIDENCES DEVELOPMENT
 CITY OF NAPERVILLE, ILLINOIS
 PRELIMINARY UTILITY PLAN - EAST

PROJ. MGR.: TEC
 PROJ. ASSOC.: GTB
 DRAWN BY: MH
 DATE: 07-19-23
 SCALE: 1"=20'

SHEET
4 OF **5**
 CORNV101



GRADING PLAN LEGEND

	PROPOSED 1 FOOT CONTOURS
	PROPOSED SPOT ELEVATION
	PROPOSED FINISHED FLOOR ELEVATION
	PROPOSED PAVEMENT ELEVATION
	OVERFLOW RELIEF SWALE
	PROPOSED RIDGE LINE

**STORMWATER DETENTION
FOR TOWNSHIP BUILDING**
 EXISTING VOLUME PER AS-BUILT = 1.99 AC-FT
 PROPOSED VOLUME = 1.81 AC-FT
 H.W.L.=669.5
 N.W.L.=664.2

PROPOSED BUILDING
 F.F.=671.0
 G.F.=670.5

DATE	
REVISIONS	
09-24-24	PRELIMINARY SUBMITTAL 4
03-26-24	PRELIMINARY SUBMITTAL 2

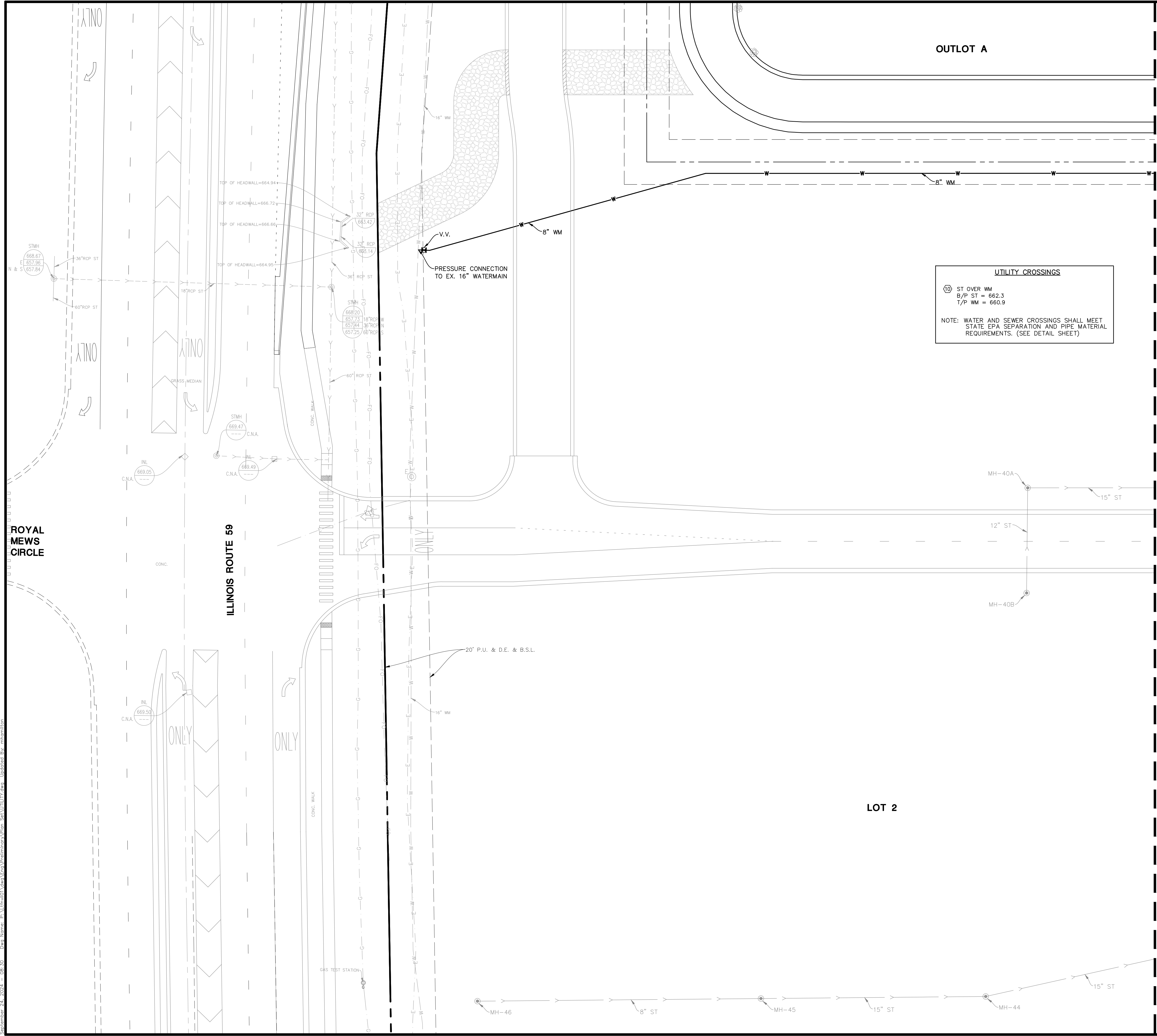


PROPOSED TOWER COURT RESIDENCES DEVELOPMENT
 CITY OF NAPERVILLE, ILLINOIS
 PRELIMINARY GRADING PLAN

PROJ. MGR.	TEC
PROJ. ASSOC.	GTB
DRAWN BY	TEC
DATE	07-19-23
SCALE	1"=20'
SHEET	3 OF 5
	CORNVL01

September 24, 2024 - 14:29 Des Name: P:\Invo\01\Area\Pre\Initial\Plan Set\GRADING.dwg Updated By: GBoorman

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MATCH LINE SEE SHEET 4



- DEPARTMENT OF PUBLIC UTILITIES – WATER UTILITIES GENERAL NOTES**
- NEW WATER MAIN VALVES, INCLUDING PRESSURE TAP VALVES, ADJACENT TO AN EXISTING WATER MAIN, AND EXISTING WATER MAIN VALVES SHALL ONLY BE OPERATED BY THE CITY OF NAPERVILLE, DEPARTMENT OF PUBLIC UTILITIES CEE/CM DIVISION PERSONNEL WITH 48-HOUR NOTICE (MONDAY-FRIDAY). CONTACT NAPERVILLE TED BUSINESS GROUP AT 630-420-6082 FOR SCHEDULING.
 - ANY EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE COMPLETED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER. ADJUSTMENTS AND/OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO MORE THAN A TOTAL OF 12 INCHES OF ADJUSTING RINGS AND/OR 2 ADJUSTING RINGS SHALL BE ALLOWED. ALL STRUCTURE FRAMES SHALL BE FLUSH WITH FINAL GRADE.
 - TREES SHALL BE INSTALLED A MINIMUM OF FIVE (5) FEET HORIZONTALLY FROM UNDERGROUND ELECTRICAL FEEDERS. SANITARY SEWERS, SANITARY SERVICES, WATER MAINS, AND WATER SERVICES. TREES SHALL BE INSTALLED A MINIMUM OF TEN (10) FEET HORIZONTALLY FROM UTILITY STRUCTURES AND APPURTENANCES, INCLUDING, BUT NOT LIMITED TO, MANHOLES, VALVE VAULTS, VALVE BOXES AND FIRE HYDRANTS. NO TREES, SHRUBS OR OBSTACLES WILL BE ALLOWED 10' IN FRONT OF, 5' ON THE SIDES, AND 7' TO THE REAR OF THE ELECTRICAL TRANSFORMER.
 - ALL RETAINER GLANDS WHEN REQUIRED TO RESTRAIN VALVES, FITTINGS, HYDRANTS, AND PIPE JOINTS SHALL BE MECHANICAL JOINT WEDGE ACTION TYPE MEGALUG 1100 SERIES AS MANUFACTURED BY EBBA IRON, INC. OR UNI-FLANGE BLOCKBUSTER 1400 SERIES AS MANUFACTURED BY FORD METER BOX CO. AND SHALL BE FOR USE ON DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51, FOR NOMINAL PIPE SIZES 3" THROUGH 48".
 - EXISTING DUCTILE IRON SYSTEMS FOR RESTRAINING PUSH-ON PIPE BELLS SHALL BE MEGALUG SERIES 1100HD OR FORD SERIES 1390.
 - EXISTING DUCTILE IRON SYSTEMS REQUIRING RESTRAINT SHALL BE MEGALUG SERIES 1100SD (SPLIT MEGALUG) FOR MECHANICAL JOINTS.
 - DUCTILE IRON WATER MAIN TO BE CLASS 52. ALL DUCTILE IRON PIPE IS TO BE ENCASED IN POLYETHYLENE FILM POLYETHYLENE ENCASEMENT TO BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C105/A21.5-05.
 - A SET OF AS-BUILT RECORD DRAWING SHALL BE GIVEN TO THE CITY OF NAPERVILLE UPON COMPLETION OF IMPROVEMENTS SHOWING THE ELEVATION AND LOCATION (TIED TO TWO POINTS) OF ALL NEW AND EXISTING STRUCTURES INCLUDING FIRE HYDRANTS, VALVE BOXES AND VAULTS, LINESSTOP SLEEVES, WATER SERVICE CORPORATION STOPS, WATER MAIN FITTINGS/BENDS, MANHOLES, SANITARY SERVICE WYES (MEASURED FROM DOWNSTREAM MANHOLE), AND ABANDONED WATER OR SANITARY SERVICE LINES. ALL ELEVATIONS SHOULD BE REFERENCED TO THE SAME BENCHMARK DATUM AS THE ORIGINAL DESIGN PLANS. HORIZONTAL TIES SHALL BE REFERENCED TO LOT LINES, BACK OF CURB, OR PROPERTY CORNERS.
 - ALL SANITARY SEWER PIPING SHALL BE PVC PIPE MEETING THE REQUIREMENTS OF ASTM D-2241 WITH JOINTS CONFORMING TO ASTM D-3139. ALL SANITARY SEWER FITTINGS SHALL BE PVC MEETING THE FOLLOWING REQUIREMENTS: 4" TO 12" SHALL BE INJECTION MOLDED FITTINGS MEETING ASTM D-2241. GREATER THAN 12" SHALL BE FABRICATED FITTINGS MEETING ASTM D-2241 OR C905. MINIMUM PRESSURE RATING SHALL BE 150 PSI.
 - THE VALVES LESS THAN 16" SHALL BE STANDARD PATTERN, GATE VALVES AND SHALL HAVE THE NAME OR MARK OF THE MANUFACTURER, SIZE AND WORKING PRESSURE PLAINLY CAST IN RAISED LETTERS ON THE VALVE BODY. VALVES MAY BE APPROVED FROM ONE OF THE FOLLOWING MANUFACTURERS: AMERICAN, CLOW, WATEROUS OR KENNEDY.
 - STAINLESS STEEL NUTS, BOLTS/T-BOLTS, AND WASHERS, TYPE 304 OR BETTER, WILL BE REQUIRED ON ALL WATER MAIN INSTALLATIONS. THIS WILL APPLY TO HYDRANTS, TAPPING SLEEVES, VALVES, FITTINGS, RESTRAINT, AND OTHER APPURTENANCES BURIED OR IN VALVE VAULTS. MECHANICAL JOINTS AND RESTRAINT GLANDS REQUIRE 304 STAINLESS STEEL T-BOLTS. AN ANTI-SEIZE COMPOUND SHALL BE FACTORY APPLIED TO NUTS OR BOLTS – ANY DAMAGE TO THIS COATING SHALL BE REPAIR WITH FIELD APPLIED APPROVED ANTI-SEIZE COMPOUND THAT IS A MOLYBDENUM-BASE LUBRICANT, BOSTIK NEVER-SEIZ OR APPROVED EQUAL.
 - THE CONTRACTOR SHALL ROTATE AND/OR ADJUST AN EXISTING AND/OR NEW HYDRANT TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC UTILITIES.
 - WATER MAINS SHALL BE SUBJECTED TO A HYDROSTATIC/LEAKAGE TEST IN ACCORDANCE WITH NAPERVILLE STANDARD SPECIFICATIONS. TEST PRESSURE SHALL BE NO LESS THAN 150 PSI FOR A PERIOD OF 4 HOURS AND NOT VARY BY MORE THAN ± 5 PSI. DURING THE TEST, THE TEST GAUGE SHALL BE APPROVED BY THE CITY AND SHALL BE GLYCERIN OR OIL FILLED, WITH A RANGE OF NOT MORE THAN 200 PSI AND INCREMENTS NOT GREATER THAN 5 PSI, 4" MINIMUM DIAL SIZE. WATER RECOVERY TEST SHALL BE COMPLETED AT THE END OF THE TESTING PERIOD TO SHOW ACTUAL LEAKING AND THAT THE WATER MAIN DID NOT HAVE TOO MUCH TRAPPED AIR IN THE TESTED SECTION.
 - THE CITY OF NAPERVILLE PUBLIC UTILITIES DOES NOT GUARANTEE THAT ANY VALVE OR FITTING IN THE EXISTING WATER DISTRIBUTION SYSTEM WILL HOLD AGAINST A HYDROSTATIC/LEAKAGE TEST. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND ACCEPTABLE PRESSURE TEST WHICH SHALL INCLUDE PROVISIONS AROUND EXISTING VALVES AND FITTINGS.
 - FIRE HYDRANT SHOULD BE BAGGED "NOT IN SERVICE" UNTIL ALL TESTING AND DISINFECTION HAS BEEN COMPLETED AND NEW WATER MAIN SECTION IS SERVICE.
 - SANITARY SEWER AND WATER SHALL BE CONSTRUCTED, TESTED, AND PLACED INTO SERVICE IN ACCORDANCE WITH CITY OF NAPERVILLE STANDARD SPECIFICATION AND SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
 - ALL VALVE BOXES, VAULTS, HYDRANTS, AND MANHOLES SHALL NOT BE COVERED WITH CONSTRUCTION DEBRIS AND SHALL REMAIN ACCESSIBLE TO THE RESPECTIVE UTILITY COMPANY.
 - WATER SERVICE LINE SMALLER THAN 3" SHALL BE TYPE K COPPER. IF JOINTS ARE REQUIRED DUE TO LENGTH OF SERVICE, THEN ONLY COMPRESSION TYPE COUPLING SHALL BE PERMITTED. NO SOLDERED OR FLARED JOINT TYPES ARE ALLOWED.
 - ALL SANITARY MANHOLES SHALL BE TESTED FOR LEAKAGE BY VACUUM TESTING. THE MANHOLE FRAME AND ADJUSTING RINGS SHALL BE IN PLACE WHEN TESTING. ANY LEAKS SHALL BE REPAIRED FROM EXTERIOR OF MANHOLE – PATCHING INSIDE OF MANHOLE SHALL NOT BE ACCEPTABLE. A VACUUM OF 10" (254 MM) HG SHALL BE PLACE ON THE MANHOLE AND THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9" (229 MM) HG. THE VACUUM SHALL NOT DROP BELOW 9" (229 MM) HG FOR THE FOLLOWING TIME PERIODS FOR EACH SIZE OF MANHOLE:
 48-INCH DIAMETER – 60 SECONDS
 60-INCH DIAMETER – 75 SECONDS
 72-INCH DIAMETER – 90 SECONDS
 84-INCH DIAMETER – 105 SECONDS
 ANY MANHOLES THAT FAIL THE TEST SHALL BE SEALED AND RE-TESTED UNTIL ACCEPTABLE.
 - THE CONTRACTOR SHALL PROVIDE INTERNAL TELEVISED INSPECTION OF ALL INSTALLED SANITARY SEWER, LATERALS, MANHOLES AND CONNECTIONS TO THE PUBLIC SYSTEM. FOLLOWING COMPLETION OF TELEVISION WORK, THE CONTRACTOR SHALL SUBMIT VIDEO RECORDINGS ON DVD OR FLASH DRIVE ALONG WITH A COMPREHENSIVE TELEVISION REPORT WHICH WILL INDICATE THE LOCATION, FOOTAGES AND NATURE OF ANY DEFECTS. PRIOR TO FINAL ACCEPTANCE, THESE DEFECTS SHALL BE REPAIRED TO THE SATISFACTION OF THE WATER/WASTEWATER UTILITY AND RE-TELEVISED.
 - CONTRACTOR WORK HOURS ARE ONLY ALLOWED FROM 7:00 A.M. TO 5:00 P.M., MONDAY THROUGH SATURDAY. NO WORK SHALL BE PERMITTED ON SUNDAYS.
 - SANITARY PIPES WITH LESS THAN 4 FEET OR MORE THAN 25 FEET OF COVER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPING (CLASS 50, MINIMUM) AND ENCASED IN POLYWRAP.
 - ALL EXCAVATIONS MORE THAN 20 FEET DEEP MUST BE PROTECTED BY A SYSTEM DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
 - CONTRACTOR SHALL MAINTAIN 2' MINIMUM CLEARANCE BETWEEN EXISTING UTILITIES AND NEW FOUNDATIONS AND UNDERGROUND FACILITIES. IN AREAS WHERE FOUNDATIONS AND UNDERGROUND FACILITIES ARE PROPOSED ADJACENT TO EXISTING UTILITIES, THE CONTRACTOR SHALL POT HOLE BY VACUUM EXCAVATION OR HAND EXCAVATION TO LOCATE THE EXISTING UTILITY TO VERIFY MINIMUM CLEARANCE REQUIREMENT.
 - FENCES SHALL BE INSTALLED A MINIMUM OF 5 FEET FROM ANY WATER OR SANITARY MAINS WHEN RUNNING PARALLEL WITH THEM. WHERE FENCES ARE INSTALLED CROSSING WATER OR SANITARY MAINS, THE POSTS SHALL BE LOCATED TO HAVE THE MAIN BETWEEN THEM.
 - ALL BRASS COMPONENTS SHALL BE CERTIFIED TO BE LEAD FREE IN COMPLIANCE WITH NSF 61 AND NSF 372 AND IDENTIFIED WITH APPLICABLE MARKINGS.
 - SANITARY FORCE MAIN – FORCE MAIN SHALL BE TESTED A MINIMUM OF 1 HOUR AT 1.5 TIMES THE SHUT OFF HEAD OF THE PUMP, 2.5 TIMES THE OPERATING PRESSURE, OR 20 PSI WHICHEVER IS GREATEST. ALLOWABLE LEAKAGE SHALL BE IN ACCORDANCE WITH SECTION 41-2.14C OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION.

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Civil Engineers • Surveyors • Water Resources Engineers • Wetland & Wetlands Engineers • Planners • Construction Managers • Environmental Scientists • Landscape Architects

DATE: _____

NO.	DATE	REVISIONS

DB-02-24 REVISED PER CITY REVIEW
03-25-24 PRELIMINARY SUBMITAL 2

MT
GTB

PROPOSED TOWER COURT RESIDENCES DEVELOPMENT

CITY OF NAPERVILLE, ILLINOIS

PRELIMINARY UTILITY PLAN - WEST

PROJ. MGR.: **TEC**

PROJ. ASSOC.: **GTB**

DRAWN BY: **MT**

DATE: **07-19-23**

SCALE: **1"=20'**

SHEET
5 OF **5**
CORNV101

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September 24, 2024 - 08:30 Des Name: P:\M\rev\01\Jana\Yan\Pre\1\main\U\U\Pre.dwg User: jk_mhamilton