THE CITY OF Fitchburg	City of Fitchburg Planning/Zoning Department 5520 Lacy Road Fitchburg, WI 53711 (608-270-4200)	**REZONING APPLICATION**

The undersigned owner, or owner's authorized agent, of property herein described hereby petitions to amend the zoning district map of the Fitchburg zoning ordinance by reclassifying from the ~~H-B~~ B-H district to the ~~H-B PDD~~ Pre-App PDD GM district the following described property:

1. **Location of Property/Street Address:** Rolfsmeyer Drive, Madison, WI 53713

Legal Description - (Metes & Bounds, or Lot No. And Plat):

Lots 1, 3, 5 and 6, Brown Business Park, in the City of Fitchburg, Dane County, Wisconsin.

***Also submit in electronic format (MS WORD or plain text) by email to: **planning@fitchburgwi.gov**

2. **Proposed Use of Property - Explanation of Request:**

See attached.

3. **Proposed Development Schedule:** Approvals and permitting in CY 2020 with construction completed in CY 2021

***Pursuant to Section 22-3(b) of the Fitchburg Zoning Ordinance, all Rezonings shall be consistent with the currently adopted City of Fitchburg Comprehensive Plan.

***Attach three (3) copies of a site plan which shows any proposed land divisions, plus vehicular access points and the location and size of all existing and proposed structures and parking areas. Two (2) of the three (3) copies shall be no larger than 11" x 17". Submit one (1) electronic pdf document of the entire submittal to **planning@fitchburgwi.gov**. Additional information may be requested.

Type of Residential Development (If Applicable): N/A

Total Dwelling Units Proposed: N/A **No. Of Parking Stalls:** N/A

Type of Non-residential Development (If Applicable): Multi-level Climate Controlled Public Storage

Proposed Hours of Operation: 9:00 A.M. to 9:00 P.M. daily **No. Of Employees:** 2

Floor Area: 100,000 Square Feet +/- **No. Of Parking Stalls:** 5 plus required ADA Parking

Sewer: Municipal ☐ **Private** ☑ **Water: Municipal** ☑ **Private** ☐

Current Owner of Property: 601 Rolfsmeyer LLC

Address: P.O. Box 626, Appleton, WI 54912 **Phone No:** 920-639-6787

Contact Person: Richard Johnston

Email: rjohnston@preceptco.com

Address: P.O. Box 626, Appleton, WI 54912 **Phone No:** 920-639-6787

Respectfully Submitted By: _____ Ben LaFrombois

Owner's or Authorized Agent's Signature — Print Owner's or Authorized Agent's Name

PLEASE NOTE - Applicants shall be responsible for legal or outside consultant costs incurred by the City. Submissions shall be made at least four (4) weeks prior to desired plan commission meeting.

For City Use Only: **Date Received:** 10/20/20 **Publish:** _____ and _____

Ordinance Section No. _____ **Fee Paid:** N/A

Permit Request No. Pre-App PDD

MEMORANDUM

TO: City of Fitchburg

FROM: 601 Rolfsmeyer LLC by Richard Johnston

DATE: October 20, 2020

RE: Rezoning Request for PDD-GIP

Pursuant to Sec. 22-593, we submit the following statements in support of the PDD-GIP application documents:

22-593	
(1)	A map of the project area including its relationship to surrounding properties and topography and other key features, such as, but not limited to, woodlots, heritage or specimen trees, streams, wetlands, floodplains, environmental corridors, rock outcroppings, and existing buildings or improvements.
	Dane County Planning and Zoning provides mapping that shows relatively steep slopes on the 1 and 5-foot contour maps, area improvements, and tree cover that should satisfy the first part of this requirement. A review was conducted of the various other layers available in the mapping system, based on that review there are no results on the site relating to the following items: 1. *Woodlots: the bulk of the vegetative cover is scrub vegetation with several larger pines that, at the request of a neighbor, are to be moved off site to one of the adjoining properties and several large oaks in the southwest corner of the site that the Developer will attempt to preserve if parking allows; at the request of the same neighbor and on the advice of an arborist, these are expected to remain.* 2. *Heritage or specimen trees: Excluding the trees listed above, there are no heritage or specimen trees on the site.* 3. *Streams: There are no streams on the site.* 4. *Wetlands: There are no wetlands on the site.* 5. *Floodplains: There are no floodplains on the site, however, there is a small corner of the site that is in the County's "Area of Minimal Flood Hazard".* 6. *Environmental corridors: There is an environmental corridor in the general area of the site but not immediately adjacent to any portion of the site.* 7. *Rock outcroppings: There are no rock outcroppings noted on the site. Additionally, the geotechnical data suggest that there is no subsurface rock present.* *The existing buildings and/or improvements evidenced on the topographic map have been removed.*
	Specific wetland, woods or tree inventories, impact analysis, or other studies relative to key features may be required by planning staff or the plan commission.

	The Developer expects to conduct a Phase 1 Wetland Delineation of the site as part of the development project, however, based on the available mapping, the Developer expects to find no wetlands on the site. As stated there is likely to be minimal pine tree relocation and oak tree rescue. The Developer has conducted successful preliminary soil borings to determine the viability of the project (see attached copy of the soil boring report).
(2)	A statement of rationale as to why the planned development district zoning is proposed.
	Current zoning B-H (Highway Business Zoning District) allows outside storage as an ancillary use as both a Permitted Use and a Conditional Use. The only Zoning District that allows public storage (public warehousing) is the R-D (Rural Development District) as a Conditional Use. The Applicant proposes to use the B-H (Highway Business District) with a PDD (Planned Development District) overlay to provide public storage as a primary use. The Applicant is proposing an urban structure that requires municipal sanitary sewer and municipal water to provide the Public storage with the following amenities: 1. *Multi-level enclosed storage* 2. *Climate controlled storage* 3. *Fire protected storage* 4. *Generator and/or solar panel backup power* 5. *Cistern rain water recovery for landscaping maintenance* 6. *Secure digital access control* 7. *Digital access to surveillance cameras* 8. *The proposed structure will consist of partial solid surface construction materials*
	The proposal shall detail in text, graphic, and statistical forms the lack of other available chapter 22 zoning districts to provide the development intended.
	A review of the City's Zoning Code of Ordinances shows that Personal Storage facilities are allowed only in the R-D (Rural Development District) as a Conditional Use, 22 - Public Warehousing. As described above, the Developer intends to provide an urban Public storage facility. Constructing such a Public storage facility in the rural setting places a burden on the residents using the service and the public infrastructure needed to provide utilities and access to the Public storage facility. Additionally, a Rural Development District is expected to provide locations for services used by the agricultural/rural community so that their needs are satisfied by providers in the area, not services for urban residential users. Following a review of the City's Zoning Code of Ordinances the Developer believes that the project would better serve the community as an urban facility developed in the urban B-H zoning district using the PDD overlay process. This belief is based on the similarity of the approval process for Conditional Use and the PDD overlay. Specifically, the approval process requirements for a Conditional Use in the R-D Zoning District and PDD overlay in the B-H are virtually identical. The significant benefit to the community for using the B-H, PDD overlay zoning application is a product that better serves the residents by placing a Public storage facility in an urban environment in proximity to the users of the Public storage facility.
	The statement shall identify barriers that the developer perceives in other chapter 22 zoning districts
	The obvious barrier to the Development is inherent in a Code that allows Personal Storage facilities only in the Rural Development Zoning District as a Conditional Use. The end result

	of the Zoning Code requirements places such facilities away from urban residential areas and the businesses and customers that routinely make use of the product.
	and opportunities for community betterment the developer suggests are available through the proposed planned development district zoning.
	Using the PDD overlay zoning will allow the City to work with the Developer to provide an improved facility that goes well beyond the minimum code requirements, meets the City's development goals, and mitigates the City's concerns with the personal storage products in an urban business and/or industrial environment. The facility as proposed concentrates Public storage vertically on the site. That concentration allows for the features and benefits listed earlier in this document on a smaller footprint as well as a concentrated manner. Additionally, the project will provide greater esthetic appeal to the site and greater taxable value to the City.
(3)	An analysis of social and economic impacts on the community of the project.
	The use of the PDD option will allow for the development of a storage product with esthetic improvements, higher taxable value, and ease of access to the consuming public satisfying a demonstrable need for the product identified by the Developer's market study for the project. Additionally, the municipal sanitary sewer and municipal water constructed for the proposed facility are expected to be used by the existing residential structure adjacent to the site and the 1-acre +/- lot created by the consolidation of the site that will be made available for development.
(4)	An analysis of how the proposal is consistent with, and will advance the goals, policies and objectives of the comprehensive plan.
	The opening statement in the City's Comprehensive Plan reads as follows: "Healthy communities grow. A community's "growth" can take many different forms. It can reference physical growth, evidenced in new residents, housing, businesses, streets, and parks. Furthermore, it can reference a growth in the efficiency and quality of services and processes that these new community elements require. Finally, it can indicate social growth, evidenced in development of cooperative, productive working relationships between a community's residents, businesses, elected/appointed officials, and staff." The proposed project fits all of the elements of this statement. The use of the PDD Zoning Overlay allows the City and the Developer to provide the public, through a cooperative process, a product that serves the needs of residents of the community, improves the expected quality of the development, keeps uses in the proximity of the users, and ads taxable value to the City.
(5)	A detailed analysis discussing the intended specific environmental design,
	As shown in the Site Plan, the project proposes to make use of the topography of the property to minimize its footprint and maximize its capacity (multi-story building), the visibility of the project, and the marketability of the project. The project will provide the required storm water management facilities. The Developer proposes to, within reason, work with the City to improve the esthetic quality of the project as well as any issues the City may have with the proposed project. The project as proposed will also use items listed earlier to provide amenities to the project with minimal impact on the environment.

	the amenities to be gained by the planned development district zoning proposal,
	The proposed development would convert existing vacant land with no public utilities by using a Certified Survey Map (CSM) to consolidate the site and re-dividing it into two developable properties served by private sanitary sewer utility and a municipal water utility. The proposed utilities will also serve the existing single family home located adjacent to the proposed development One of the lots created by the proposed (CSM) is to be developed with a multi-story, public storage facility, that includes the listed amenities to include a secured, and climate controlled facility. Using the PDD overlay will allow the Developer and the City to cooperatively generate a project that provides added value to the City while at the same time providing public storage in an area where there is a demonstrable need. The second lot will be sold for development that fits within the H-B Zoning District.
	and, specifically, a statement as to why such benefits and amenities would not be realized under any other chapter 22 zoning district.
	The City's Zoning Code of Ordinances allows personal storage facilities only in the R-D (Rural Development District) as a Conditional Use. Placing the proposed Public storage facilities in a rural environment where personal storage is not an issue for residents and away from the residential and business customers that need and use the product. The project as proposed would not be viable in the R-D Zoning District even if the Conditional Use were to be approved by the City. Specifically, the need for municipal utilities would make the project difficult if not impossible in a rural environment.
(6)	A general development plan of the proposed project showing at least the following information in sufficient detail to make possible evaluation against criteria for approval:
	a. Public and private roads, driveways and parking facilities; bicycle and pedestrian facilities, bus shelters, and any other multi-modal forms of transportation and their related facilities.
	The project has no new public roads or other transportation facilities. Since Rolfsmeyer Road is a dead end road that is not likely to be extended in the foreseeable future, it is not likely that such additional facilities are going to be needed. Access to the two development sites will be from a common driveway off of Rolfsmeyer Road. Parking facilities for the projects will be provided on site for each development project. See attached site plan.
	b. Land uses and size, arrangement and location of lots and proposed buildings or groups of buildings.
	The project as proposed uses a Certified Survey Map (CSM) to create 2 lots by consolidating the existing 4 lots and existing rights-of-way. The new lots will be 1 +/- acres and 3 +/- acres, the larger lot is proposed to be used to construct the described state-of-the-art Public storage facility. See attached site plan.
	c. The types, size, intended uses, and location of structures.
	The 1 +/- acre lot will be placed on the market for development using the B-H Zoning District criteria. The larger 3 +/- acres lot is proposed to be used to construct the described 100,000 square foot +/- state-of-the-art Public storage facility. See attached site plan.

	d. A general utility plan, preliminary grading plan.
	The project proposes to insert the multi-story Public storage facility into the existing hill to take advantage of the site's change in elevation to support the structure. Any fill generated by the excavation will be used on site and/or trucked to an area fill site. The sanitary sewer and water utilities are designed to connect to the existing City of Madison, Town of Madison, and Madison Metropolitan Sewerage District (MMSD) Public Utilities and treatment plant. See attached site plan.
	e. The location of recreational and open space areas and facilities and specifically describing those that are to be reserved or dedicated for public acquisition and use.
	There are proposed green spaces included in the project; however, there are no recreational facilities or land for public acquisition and use on the site. See attached Site Plan.
	f. General landscape treatment plan.
	The Developer has reserved 15% as green space. The landscape treatment plan will meet PDD requirements and is subject to negotiation. The Developer also intends to collect rain water from the structure's roof to help maintain the proposed green space. See attached site plan
	g. Statistical data on size of the development, density/intensity of various parts of the development, ratio of various land uses, economic analysis of the development, expected staging, and any other plans or data required by the plan commission or common council.
	The Developer intends to place the smaller lot on the market for development based on existing economic conditions. The larger lot is proposed to be developed as a 100,000 square foot +/- Public storage facility. The size and quality of the facility are based on the Developer's market study for the facility. See attached site plan. *Amanda Helfrich of Starr Commercial Real Estate is one of the leading self-storage site analysts in the country. The market analysis suggests strong demand for the product being proposed. The following is from Amanda's report:* *"The site is located on a dead-end street, surrounded by a mix of light industrial users, including an existing self-storage facility across the street. This location is ideal for self-storage development, consistent with many other facilities located in the market.* *The proposed facility will be constructed with high end finishes with enclosed storage units, making it attractive and superior to other interstate fronting businesses in the market area. As compared to other surveyed storage facilities in the market, the subject will be superior to most and considered a Class A facility. The use is complementary to other businesses in the immediate area. The market appears to be very undersupplied in terms of self-storage and the proposed use will serve the market well."*
(7)	General outline of the intended organizational structure for a property owners association, if any; proposed condominium documents, if any; deed restrictions and all agreements necessary to accommodate private provision of common services, if any.
	The Developer expects to draft any easements needed to provide ingress and egress access, shared storm water management and shared facilities maintenance. These documents are

	expected to be drafted in consultation with the City's Common Council, Plan Commission, and Municipal Staff.
(8)	For any project plan proposed, a schedule for completion of the public and private improvements proposed within the project plan.
	The Developer expects to complete the permitting process early in CY 2021 with construction and occupancy in CY 2021 or early CY 2022. Construction of the public utilities are planned to start in early spring of CY 2021 with paving to be in place by late spring of CY 2021. It is understood that the Developer will need to join Diggers Hotline to routinely locate the proposed private sanitary sewer force main.
(9)	Neighborhood input. a. Prior to the formal petition for rezoning, the applicant shall make a reasonable effort to meet with property owners and individuals within and near the area of the proposal. Property owners and residents within the project area and those within 300 feet of the project boundary shall be noticed at least ten days prior to a meeting in which the conceptual project will be presented. The meeting shall be fashioned to solicit input on the proposed design. More than one neighborhood meeting may be necessary to gather input, address comments received, and provide information relative to any intended application. b. A statement describing the reasonable efforts made to meet with and receive input from individuals required to receive notice shall be submitted with the rezoning petition application when it is filed for review at the planning department.
	The Developer has made contact with neighboring property owners to discuss and gather input on the specifics of the project.

Attached Exhibits:

A. Site Plan
B. Soil Report

EXHIBIT A
SITE PLAN

See attached.

SITE DATA

LOCATION: 509 ROLFSMEYER DRIVE
BROWN BUSINESS PARK, CITY OF FITCHBURG, WI
AREA: 4.86 ACRE
PID: 0609-021-2056-2, 0609-021-8520-0

ZONING: B-H & R-L

USE: HIGHWAY BUSINESS
LOW DENSITY RESIDENTIAL

PROPOSED BUILDING AREA:

DOGGY DAY CARE = 17,200 S.F.
MINI STORAGE = 73,491 S.F.

PROPOSED BUILDING HEIGHT:
38'-0" ± PEAK (MINI STORAGE)
20'-0" ± PEAK (DOG DAYCARE)

MINIMUM PARKING SPACES:
MINI STORAGE
.75 SPACE / 1000 SQ. FT. OF GROSS BUILDING AREA
= .75 (73,491 / 1000) = 56 SPACES

DOGGY DAY CARE
1 SPACE / 7 DOGS + 1 SPACE / EMPLOYEE ON LARGEST SHIFT
= 22 SPACES

TOTAL PARKING SPACES PROVIDED: 74
HANDICAP PARKING SPACES PROVIDED: 4

LOADING SPACES REQUIRED: 1

PERVIOUS AREA: 1.39 AC.
IMPERVIOUS AREA: 3.47 AC.

LOT COVERAGE: 3.47/4.86 X 100% = 71.40%

LEGEND

(9) PARKING SPOTS

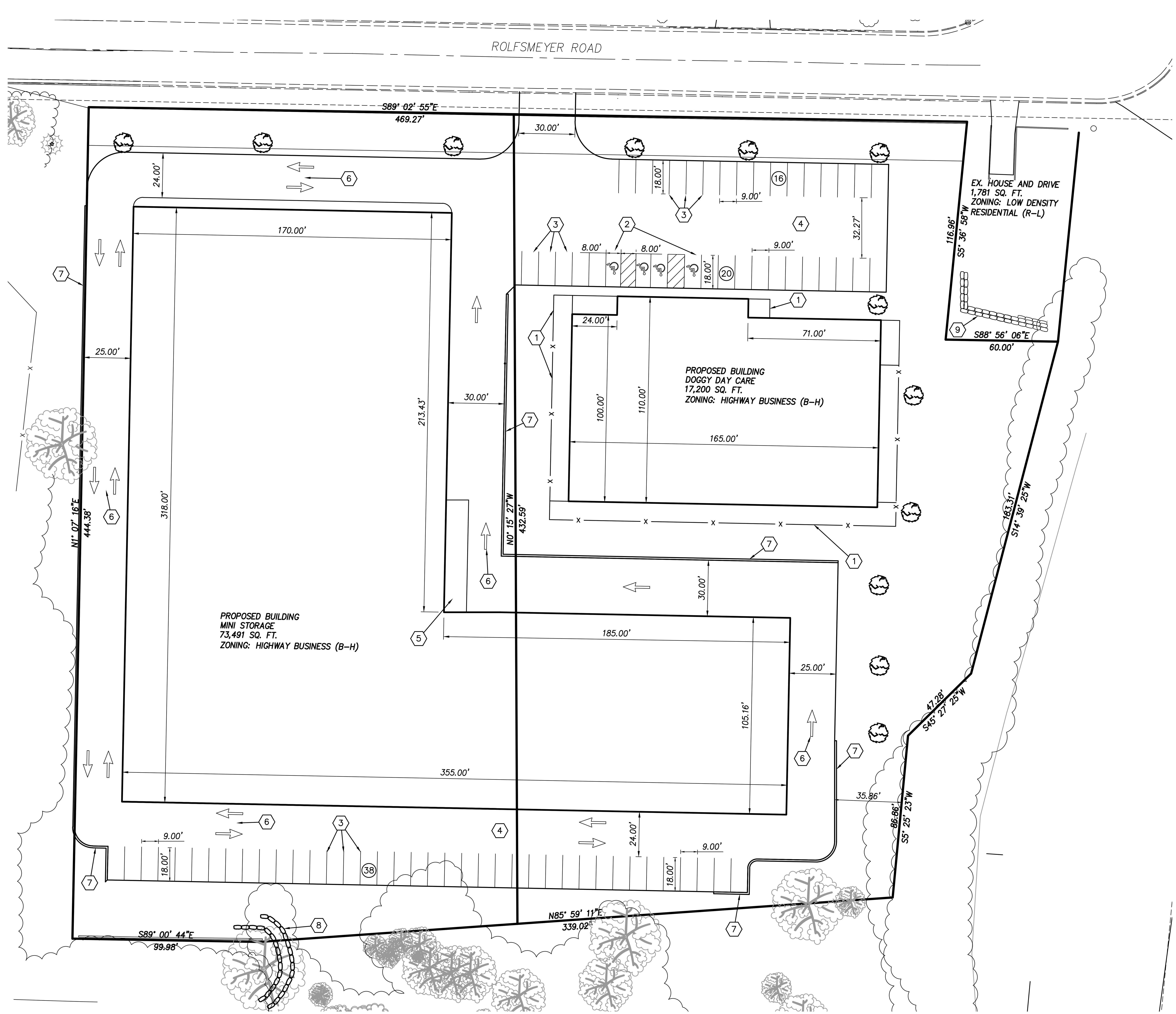
EARTHWORK DATA

ASPHALT PAVEMENT AREA: 1.390 ACRE

NET CUT & FILL VOLUME: 19,371 CU.YD. – CUT

KEYED NOTES

1. PROPOSED FENCE
2. PROPOSED ADA PARKING SPACE.
3. PROPOSED 4" PARKING STRIPES.
4. PROPOSED ASPHALT LOT.
5. PROPOSED LOADING DOCK.
6. PROPOSED PAVEMENT MARKINGS.
7. PROPOSED RETAINING WALL.
8. EXISTING ROCK WALL TO REMAIN.
9. EXISTING ROCK WALL TO BE REMOVED.



GRAPHIC SCALE
30 15 0 30
(IN FEET)
1 inch = 30 ft.

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Columbus OH 43235 US
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Fax 614 818 4901
Jeff.Dietrich@ibigroup.com
ibigroup.com

REVISION:

SUBMISSION:

■ PRELIMINARY ENGINEERING SET
☐ AGENCY REVIEW SET
☐ CONSTRUCTION DOCUMENT SET
☐ AS-BUILT DOCUMENT SET

STAMP:

CITY OF FITCHBURG

BROWN BUSINESS PARK

DANE COUNTY, WISCONSIN

DESIGN	DRAFT	CHECK
TSN	WTC	JCD

IBI NO.: 125185

DATE: 10/13/2020

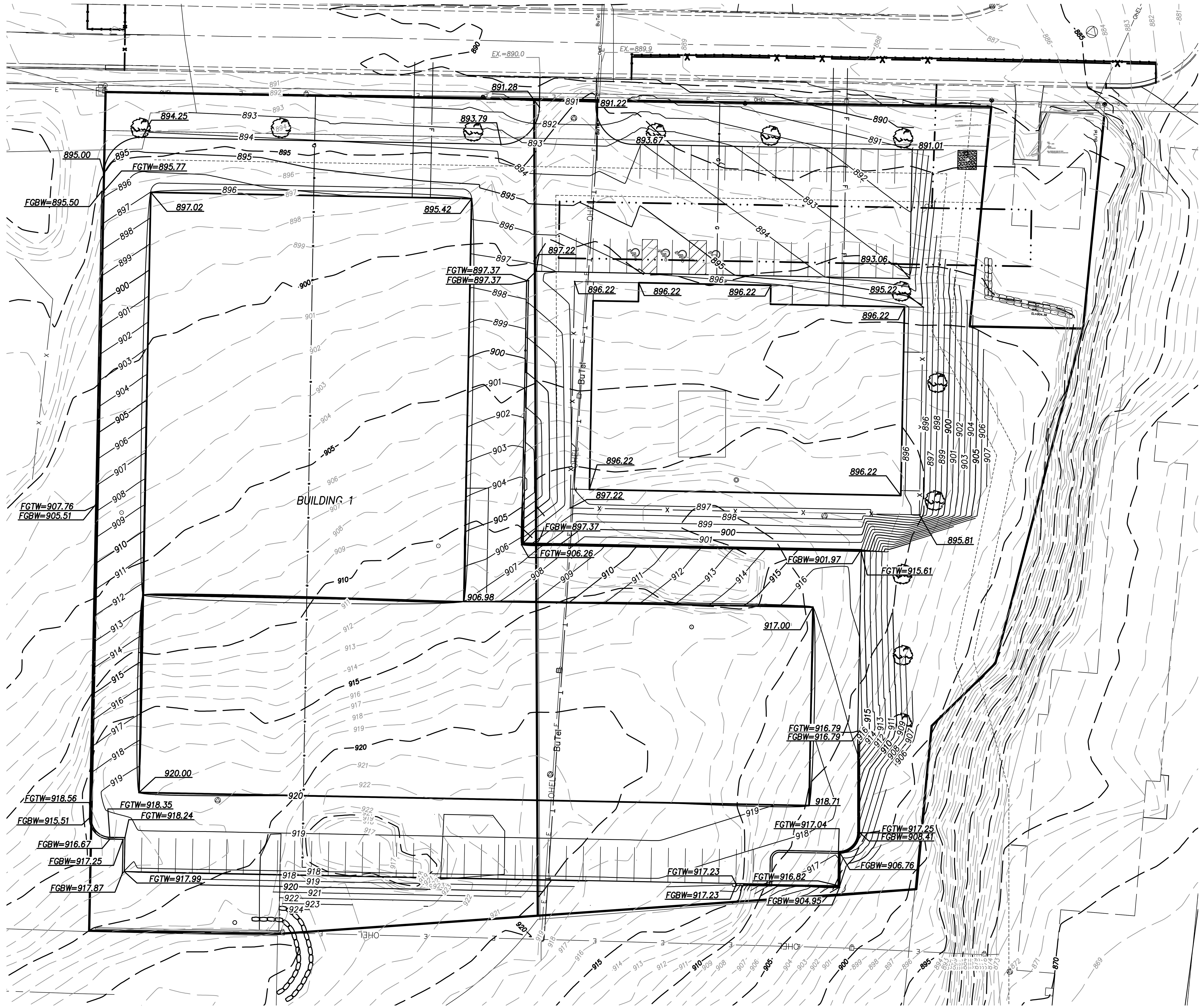
SHEET TITLE:

SITE DIMENSION PLAN

SHEET NO.: C200

LEGEND

824	PROPOSED CONTOUR
T/C=824.00	PROPOSED CATCH BASIN TOP OF CASTING
× 824.00	PROPOSED ELEVATION
× 824.00F	FUTURE ELEVATION
× 824.00E	EXISTING ELEVATION



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DANE COUNTY, WISCONSIN

DESIGN	DRAFT	CHECK
TSN	WTC	JCD

IBI NO.: 125185

DATE: 10/13/2020

SHEET TITLE:

Site Grading

SHEET NO.: C300

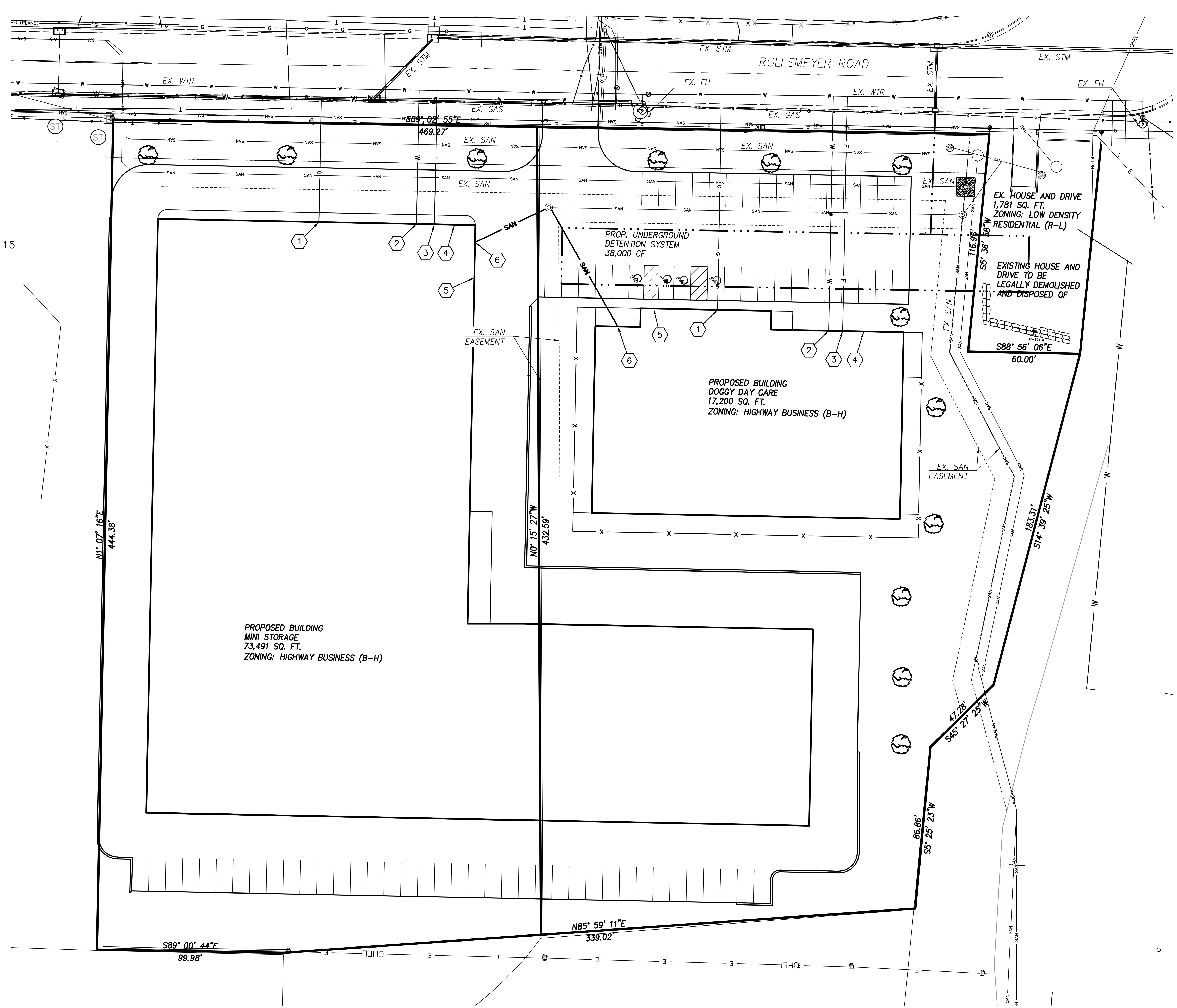
LEGEND

R/W	RIGHT OF WAY LINE
℞	PROPERTY LINE
SAN	EXISTING/FUTURE SANITARY SEWER
— — —	EXISTING/FUTURE STORM SEWER
W	EXISTING/FUTURE WATER LINE
T	EXISTING TELEPHONE LINE
E	EXISTING ELECTRIC LINE
G	EXISTING GAS LINE
F	PROPOSED FIRE LINE
STM	PROPOSED STORM SEWER
SAN	PROPOSED SANITARY SEWER
W	PROPOSED WATER LINE
x (triangle)	SEE WATER LINE COORDINATE TABLE ON SHEET 15
x (square)	SANITARY CLEANOUT NUMBER

CODED NOTES

1. PROPOSED GAS SERVICE.
2. PROPOSED WATER SERVICE.
3. PROPOSED FIRE SERVICE.
4. PROPOSED FIRE DEPARTMENT CONNECTION (FDC).
5. PROPOSED KNOX BOX.
6. PROPOSED SANITARY SERVICE.

NOTE: ALL UTILITY INSTALLATIONS MUST FOLLOW FOX CROSSING UTILITIES STANDARD SPECIFICATIONS.



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DANE COUNTY, WISCONSIN

DESIGN	DRAFT	CHECK
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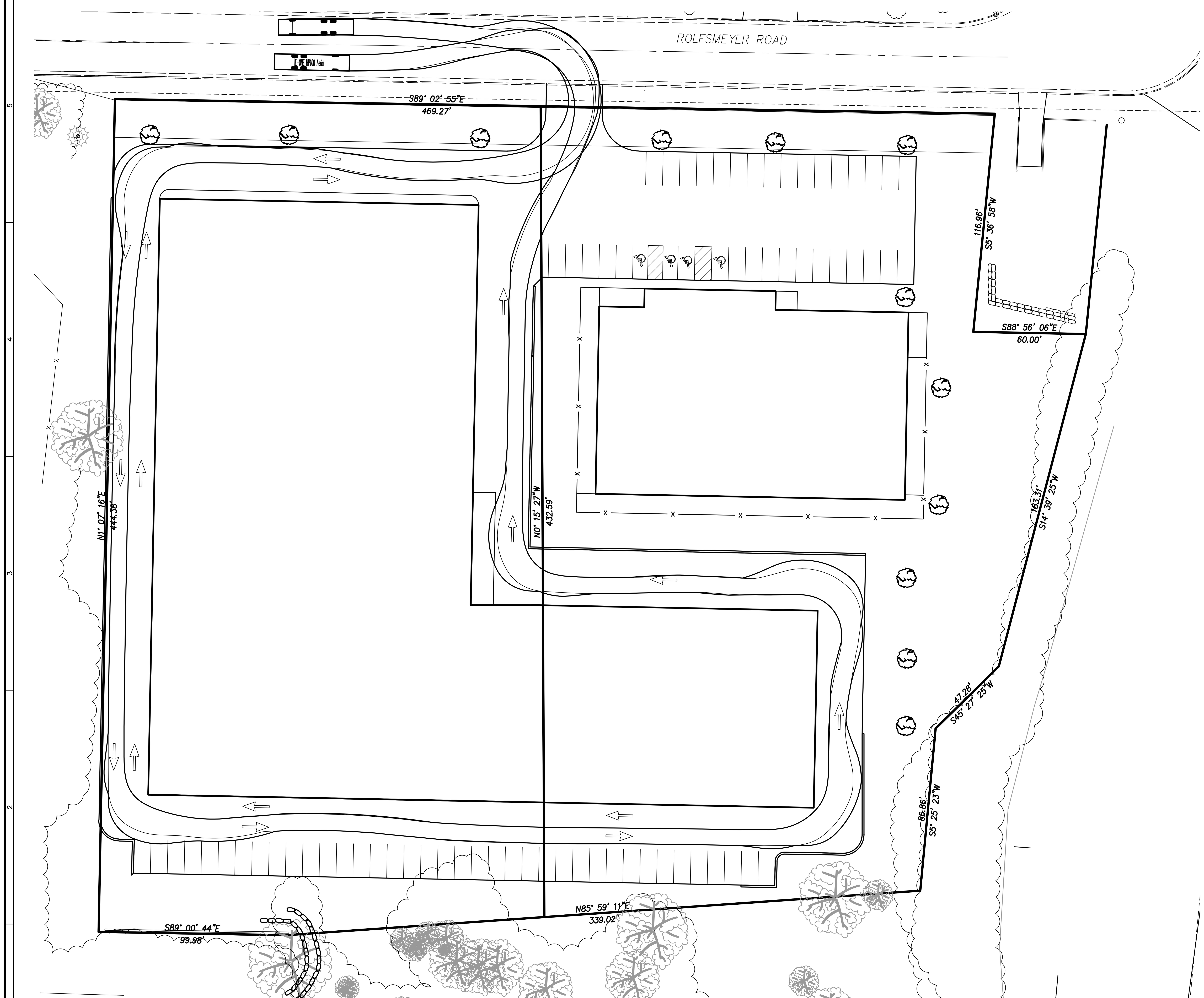
IBI NO.: 125185

DATE: 10/13/2020

SHEET TITLE:

SITE UTILITY PLAN

SHEET NO.: C400



TRUCK DIMENSIONS – E-ONE HP100 AERIAL

OVERALL LENGTH	40.00 FT
OVERALL WIDTH	8.333 FT
OVERALL BODY HEIGHT	11.000 FT
MIN. GROUND CLEARANCE	1.393 FT
TRACK WIDTH	8.333 FT
LOCK-TO-LOCK TIME	6.00 S
MAX WHEEL ANGLE	45.00°

GRAPHIC SCALE

30 15 0 30

(IN FEET)
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TSN	WTC	JCD

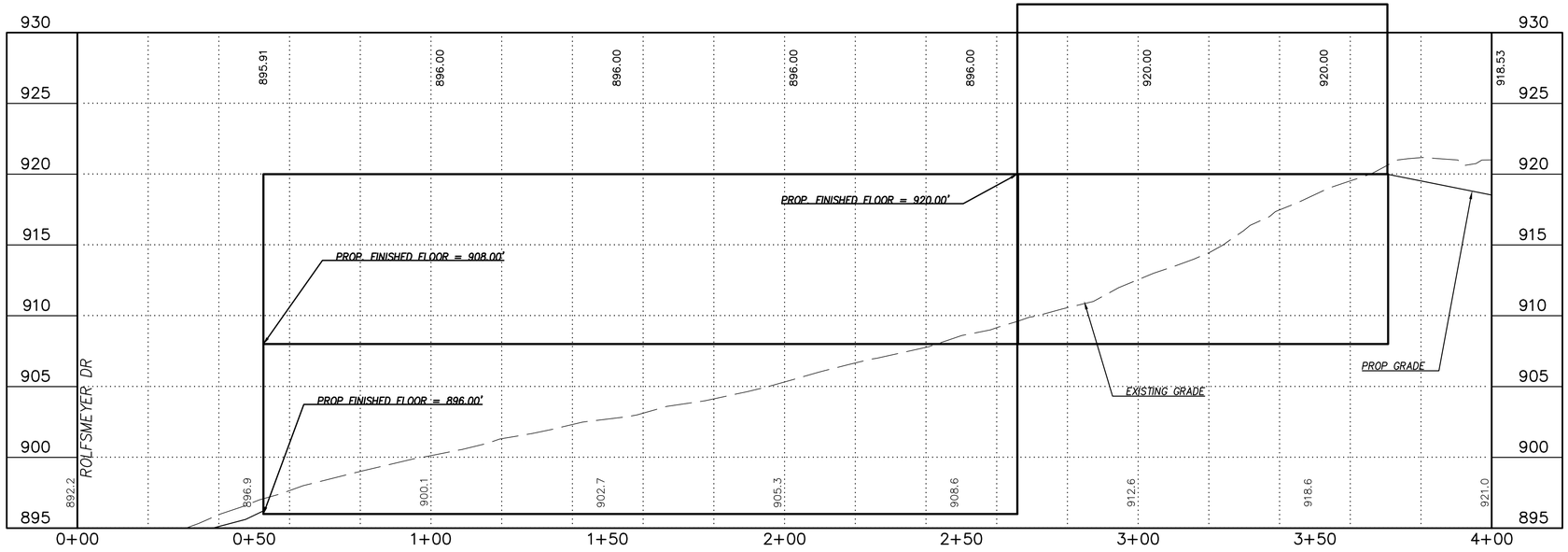
IBI NO.: 125185

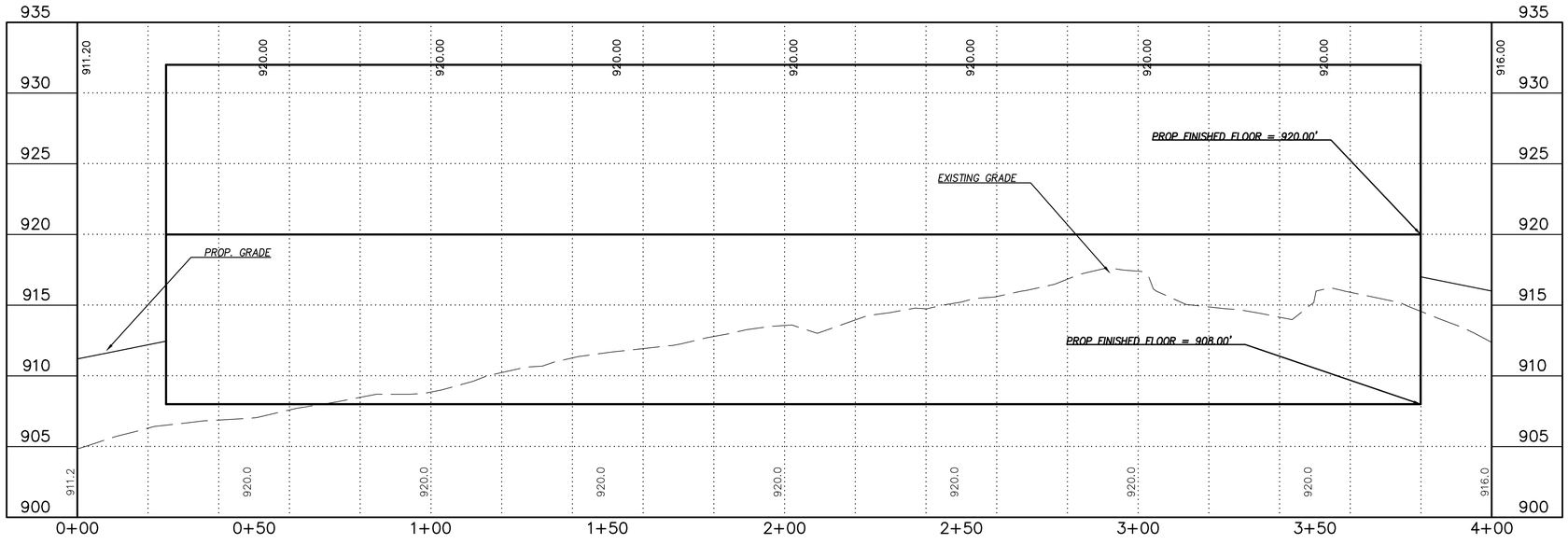
DATE: 10/13/2020

SHEET TITLE:

SITE DIMENSION PLAN

SHEET NO.: C200





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DESIGN	DRAFT	CHECK
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IBI NO.: 125185

DATE: 10/13/2020

SHEET TITLE:

BUILDING PROFILE

SHEET NO.: 1

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EXHIBIT B
SOIL REPORT

See attached.

CGC, Inc.

Construction • Geotechnical
Consulting Engineering/Testing

January 14, 2008
C07467

Mr. Stewart Brown
SMR Real Estate, LLC
401 Rolfsmeyer Drive
Madison, WI 53713

Re: Preliminary Geotechnical Exploration Report
Brown Business Park
Rolfsmeyer Drive
Madison, Wisconsin

Dear Mr. Brown:

Construction • Geotechnical Consultants, Inc. (CGC) has completed the preliminary subsurface exploration program for the above-referenced project. The purpose of this exploration program was to evaluate the subsurface conditions at the site and to provide preliminary geotechnical recommendations regarding site preparation, utility, and roadway design/construction. We recommend that additional borings be completed as site plans progress to develop site-specific geotechnical recommendations for buildings. Two copies of this report are submitted for your use, and an additional copy is being forwarded to the project civil engineer, Mr. Aaron Falkosky of Quam Engineering.

PROJECT AND SITE DESCRIPTION

We understand that a parcel south of Rolfsmeyer Drive will be developed. Specific building locations, sizes, etc. have not been determined at this time. The preliminary site development will include utility and roadway construction. Significant site grading is anticipated, with cuts of 10 to 12 ft anticipated on higher areas of the site.

The existing site includes five structures, some of which have basements. Some of the structures have already been partially removed, with the remaining structures to be demolished for the proposed development. Three septic fields are also located on the site. The site is vegetated with scattered trees in the northern half of the site and numerous trees in the southern half of the site. A topographic high point exists near the west central area of the site, and the site generally slopes down gently to moderately steeply on all sides. Very steep slopes are present along the east side of the site. Existing elevations range from to EL 922 to EL 868 ft.

SUBSURFACE CONDITIONS

Subsurface conditions on site were explored by drilling three Standard Penetration Test (SPT) soil borings to planned depths of 15 to 25 ft below existing site grades. Note that auger refusal

2921 Perry Street, Madison WI 53713
Telephone: 608/288-4100
FAX: 608/288-7887

CC-01-07

was encountered at 12 ft in Boring 1 on an apparent boulder. Boring 1A was offset 5 ft south of Boring 1 and blind drilled (without sampling) to 12 ft and drilled to the 20-ft completion depth. The borings were located in the field by CGC personnel based on a site map provided by Quam Engineering by taping off of existing features. The borings were drilled on January 2 and 3, 2008 by Badger State Drilling (under subcontract to CGC) using an ATV-mounted CME-750 drill rig equipped with hollow-stem augers. The boring locations are shown in plan on the Soil Boring Location Map attached in Appendix B. Ground surface elevations at the boring locations were estimated using a topographic map provided by Quam Engineering.

The subsurface profile at the boring locations is fairly uniform and can generally be described by the following strata, in descending order:

- 5 to 7 in. of clayey ***topsoil***; over
- 2.5 to 5.5 ft of stiff ***lean clay*** (note that the clay may be *possible fill* in Boring 2); over
- Loose to very dense ***sand*** with significant silt and gravel content and scattered cobbles and boulders to the maximum depth explored.

Groundwater was not encountered in the borings during or shortly after drilling. Groundwater levels can be expected to fluctuate with seasonal variations in precipitation, infiltration, evapotranspiration and other factors. A more detailed description of the site soil and groundwater conditions is presented on the Soil Boring Logs attached in Appendix B.

DISCUSSION AND RECOMMENDATIONS

Subject to the limitations described below and based on the subsurface exploration, it is our opinion that the site can be developed for the intended use. Our recommendations for site preparation, asphalt pavement, and utility design/construction are presented in the following subsections. Additional information regarding the conclusions and recommendations presented in this report is discussed in Appendix C.

1. Site Preparation

We recommend that the surficial topsoil be stripped/removed at least 5 ft beyond the proposed construction areas, including areas required for cuts and fills beyond the proposed building footprints or pavement limits. The topsoil can be stockpiled on-site and re-used as fill in

landscaped areas. Based on the borings, topsoil thicknesses of 5 to 7 in. are anticipated, but thicker topsoil deposits could be encountered.

We recommend that the existing structures be demolished and completely removed from within roadway and building areas. Existing slabs can be left in place below pavement areas provided the slabs are at least 2 ft below the bottom of the pavement section, do not interfere with utility installation and are broken up to allow drainage. Obsolete utilities, septic fields and wells should be removed or abandoned in accordance with WDNR or local municipality regulations and codes.

Following topsoil removal, the exposed subgrades are expected to consist of native and possible fill cohesive soils. Exposed cohesive soils in areas to receive fill or at final grade should be should be proof-rolled with a loaded tri-axle dump truck to check for soft/yielding areas. If soft/yielding areas are detected that, these areas should be undercut/removed. Grade should be re-established using suitable granular backfill (sand or gravel) compacted to at least 95% compaction based on modified Proctor methods (ASTM D1557) or compacted breaker run stone.

Where fill is required, we recommend using granular soils as fill within roadways, as these soils are generally easier to place and compact in most weather conditions. We do not recommend using clay/silt soils as structural fill (within building envelopes or below pavements) because moisture conditioning will be required to achieve required compaction levels, which could delay construction progress. Silt/clay soils are best used as fill in landscaped areas. Fill/backfill should be compacted to at least 95% (ASTM D1557) in accordance with our Recommended Compacted Fill Specifications presented in Appendix D. Periodic field density tests should be taken by CGC staff within the fill/backfill to document the adequacy of compactive effort.

2. Roadway Pavement Design

According to the *Soil Survey of Dane County, Wisconsin*, the soils across the northern portion of the site are mapped as St. Charles silt loam (ScC2), and the soils in the southern portion of the site are mapped as McHenry silt loam (MdC2) and Kidder soils (KrD2). St. Charles silt loam is described as deep, nearly-level to moderately steep, well-drained to moderately well-drained soils on glaciated uplands, which typically consists of the following profile (in descending order): silt loam, silty clay loam, silt loam, loam and sandy loam. McHenry silt loam is described as deep, well-drained, gently sloping to moderately steep soils on glaciated uplands, which consists of silt loam, silty clay loam, sandy clay loam and sandy loam. Kidder soil is described as deep, well-drained, gently sloping to very steep soils in areas of drumlins, terminal and recessional moraines, which consists of silt loam, loam, sandy clay loam and sandy loam.

The clay soils encountered across most of the site will control the pavement design, as we anticipate that the pavement subgrades will generally consist of lean clay and sand soils after topsoil stripping. Standard earthwork-related techniques that should be used during roadway construction after topsoil stripping include proof-rolling, undercutting/stabilization and compaction control of fill/backfill as discussed in the Site Preparation section of this report.

The following parameters should be used to develop the design pavement section:

AASTHO classification	A-6
Frost group index	F-3
Design group index	14
Soil support value	3.9
Subgrade modulus, k (pci)	100
Estimated percent shrinkage	20 - 30
Estimated CBR value	2 - 5

Assuming traffic volumes up to 500 cars and 6 to 50 trucks per day per design lane (i.e., a moderate traffic classification), a typical pavement design per WDOT Standard Specifications is 1.5-in. bituminous upper layer, 2.5-in. bituminous lower layer and 12-in. of compacted aggregate base course. A typical pavement section for traffic areas having 5 or fewer trucks per day is typically 1.5 in. of bituminous upper layer, 1.5 in. of bituminous lower layer and 10 in. of compacted aggregate base course. Alternative pavement designs for different traffic count data are also acceptable providing they are based on the given design parameters. Because of the potential for softer clays at or below subgrade levels, an adequate allowance for undercutting and stabilization with breaker run stone perhaps in combination with a woven geotextile fabric (e.g., Mirafi 600X or equivalent) should be included in the budget for this development. It has been our experience that clay or silt soils with pocket penetrometer readings of less than 1.5 tsf will likely require undercutting after proof-rolling as described above.

3. Utility Construction

Based on the available soil and groundwater information, it appears that utility construction can proceed using traditional open-cut methods. Dewatering is not expected to be a major concern on this site for shallow utility installations. It is expected that excavation sidewalls will be sloped back for relatively shallow installations (i.e., less than 4 ft in depth) and that a trench shield and/or internal bracing will be used for deeper excavations. The following are our recommendations regarding trench excavation, dewatering, and backfilling:

- Excavation: Open cuts should be sloped and/or braced in accordance with OSHA guidelines. Slopes of 1H:1V or flatter through the on-site clay and silty sand soils are expected to be temporarily stable. Flatter slopes may be required if pockets of cleaner sands or wet soils are encountered. Temporary bracing should be designed by a registered professional engineer.

- Rock Removal: Bedrock was not encountered in the borings to the maximum depth explored.

- Dewatering: Based on observations made during the field exploration, groundwater infiltration into shallow excavations is not expected to be a problem. Water accumulating at the base of the utility excavations as a result of precipitation or seepage should be quickly removed using pumps operating from filtered sump pits.

- Backfilling - Excavation backfilling may proceed using the following guidelines:

  -- Both silty/clayey and sandy excavation spoils may be used to backfill the utility trenches above the pipe and associated granular bedding material. However, we recommend that granular soils be used as backfill, because sands/gravels are relatively easy to place and compact in most weather conditions. Silty/clayey soils will likely require some moisture conditioning prior to placement and compaction, which could delay construction progress. Granular soils with cobbles and boulders should not be used in direct contact with utility lines.

  -- Backfill material should be placed in accordance with Appendix D guidelines or applicable municipal requirements.

  -- Compaction recommendations:
     - Depths greater than 3 ft below grade: 90% modified Proctor (ASTM D1557)
     - Final 3 ft: 95% modified Proctor

FOLLOW UP EXPLORATION

This subsurface exploration is preliminary and not intended to provide geotechnical recommendations for individual structures. We recommend that follow-up borings be conducted

CGC, Inc.

on the building lots to formulate specific geotechnical parameters for building design and construction. We can provide additional details at the appropriate time.

*****

It has been a pleasure to serve you on this project. If you have any questions or need additional consultation, please contact us.

Sincerely,
CGC, INC.

David Staab

David A. Staab, E.I.T.
Geotechnical Engineer

William W. Wuellner

William W. Wuellner, P.E.
Senior Geotechnical Engineer

Encl.: Appendix A - Field Exploration
Appendix B - Soil Boring Location Map
Logs of Test Borings (3)
Log of Test Borings-General Notes
Unified Soil Classification System
Appendix C - Document Qualifications
Appendix D - Recommended Compacted Fill Specifications

cc: Mr. Aaron Falkosky, Quam Engineering, Madison, WI

APPENDIX A

FIELD EXPLORATION

A total of three Standard Penetration Test (SPT) soil borings were drilled to planned depths of 15 to 25 ft below existing site grades. Note that auger refusal was encountered at 12 ft in Boring 1 on an apparent boulder. Boring 1A was offset 5 ft south of Boring 1 and blind drilled to 12 ft and drilled to the 20-ft completion depth. The borings were located in the field by CGC personnel based on a site map provided by Quam Engineering and by taping off of existing features. The borings were drilled on January 2 and 3, 2008 by Badger State Drilling (under subcontract to CGC) using an ATV-mounted CME-750 drill rig equipped with hollow-stem augers. The boring locations are shown in plan on the Soil Boring Location Map attached in Appendix B. Ground surface elevations at the boring locations were estimated using a topographic map provided by Quam Engineering.

In each boring, soil samples were obtained at 2.5 foot intervals to a depth of 10 ft and at 5 ft intervals thereafter. The soil samples were obtained in general accordance with specifications for standard penetration testing, ASTM D 1586. The specific procedures used for drilling and sampling are described below.

1. Boring Procedures between Samples

   The boring is extended downward, between samples, by a hollow-stem auger.

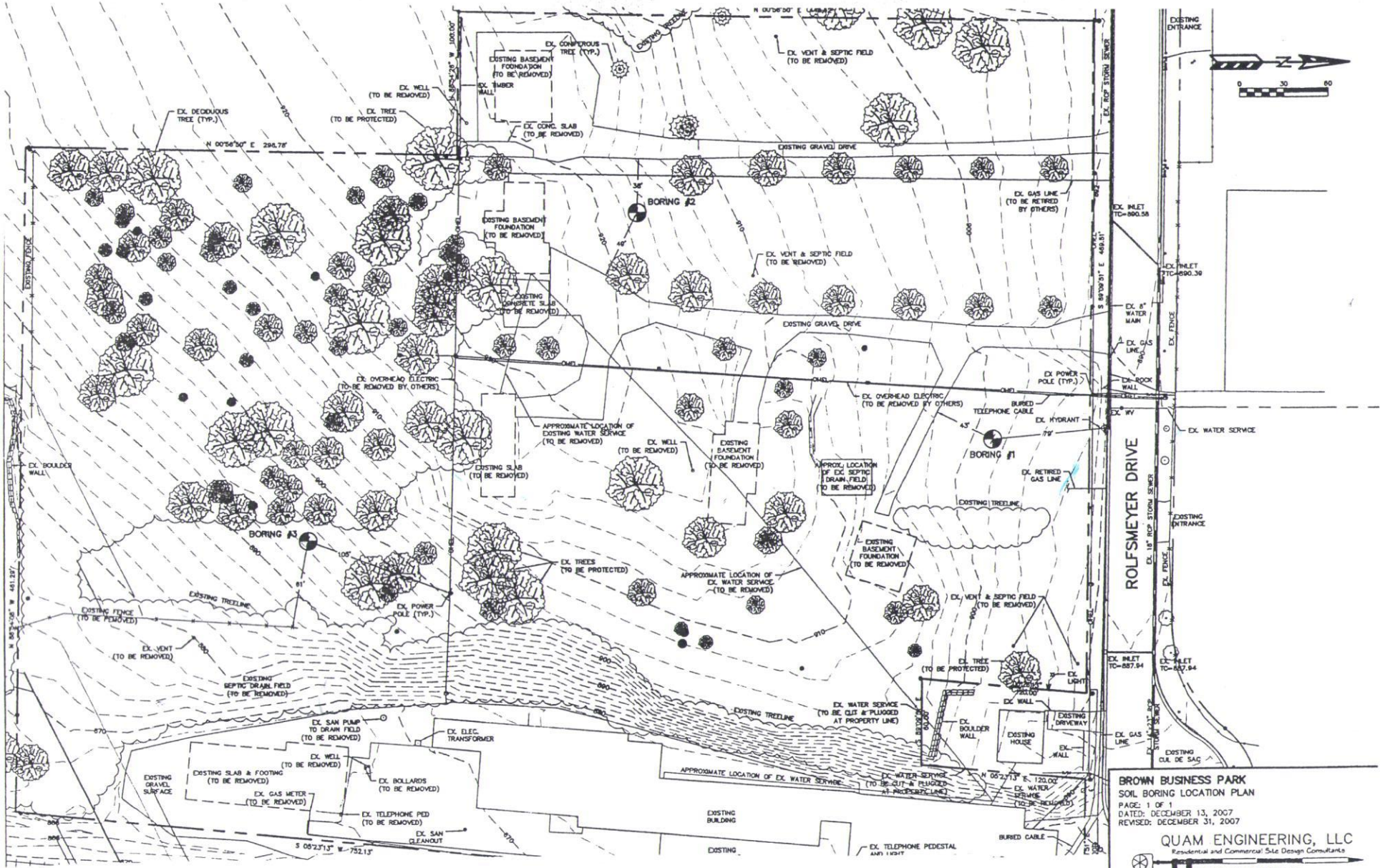
2. Standard Penetration Test and Split-Barrel Sampling of Soils
   (ASTM Designation: D 1586)

   This method consists of driving a 2-inch outside diameter split-barrel sampler using a 140-pound weight falling freely through a distance of 30 inches. The sampler is first seated 6 inches into the material to be sampled and then driven 12 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the log of borings and is known as the Standard Penetration Resistance.

During the field exploration, the driller visually classified the soil and prepared a field log. *Field screening of the soil samples for possible environmental contaminants was not conducted by the drillers as environmental site assessment activities were not part of CGC's work scope.* Water level observations were made in each boring during and after drilling and are shown at the bottom of each boring log. Upon completion of drilling, the borings were backfilled with bentonite (where required) to satisfy WDNR regulations and the soil samples were delivered to our laboratory for visual classification and laboratory testing. The soils were visually classified by a geotechnical engineer using the Unified Soil Classification System. The final logs prepared by the engineer and a description of the Unified Soil Classification System are presented in Appendix B.

APPENDIX B

TEST BORING LOCATION MAP
LOGS OF TEST BORINGS (3)
LOG OF TEST BORING-GENERAL NOTES
UNIFIED SOIL CLASSIFICATION SYSTEM



BROWN BUSINESS PARK
SOIL BORING LOCATION PLAN
PAGE: 1 OF 1
DATED: DECEMBER 13, 2007
REVISED: DECEMBER 31, 2007

QUAM ENGINEERING, LLC
Residential and Commercial Site Design Consultants
www.quamengineering.com
4893 Larson Beach Road, McFarland, Wisconsin 53558
Phone (608) 838-7750, Fax (608) 838-7752

Legend

Denotes boring location and number

Scale: As shown

Notes

1. Base map provided by Quam Engineering.
2. Soil borings drilled by Badger State Drilling in January 2008.
3. Boring locations are approximate.

Date: 1/08	CGC, Inc.	**SOIL BORING LOCATION MAP** **Brown Business Park** **Rolfsmeyer Drive** **Madison, Wisconsin**
Job No. C07467		

CGC Inc.

LOG OF TEST BORING

Project: **Brown Business Park**
Rolfsmeyer Drive
Location: **Madison, Wisconsin**

Boring No. 1
Surface Elevation (ft) 899±
Job No. C07467
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	LI
						7 in. TOPSOIL (OL)					
1		8	M	7		Stiff, Brown Lean CLAY, Trace to Little Sand (CL)	(1.5-2.0)				
2		16	M	6	5		(2.0)				
3		14	M	13		Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
4		18	M	11	10						
						End Boring/Auger Refusal at 12 ft on Probable Boulder					
					15	Borehole backfilled with bentonite chips					
						Boring offset 5 ft south and redrilled. See Boring 1A.					
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽	NW	Upon Completion of Drilling		NW
Time After Drilling				
Depth to Water				▼
Depth to Cave in				

The stratification lines represent the approximate boundary between

GENERAL NOTES

Start 1/3/08 End 1/3/08
Driller Badger Chief JR Rig CME-750
Logger ER Editor DAS
Drill Method 2 1/4" HSA

CGC Inc.

LOG OF TEST BORING

Project: Brown Business Park
Rolfsmeyer Drive
Location: Madison, Wisconsin

Boring No. 1A
Surface Elevation (ft) 899±
Job No. C07467
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LI
						Boring located 5 ft south of Boring 1					
						Blind drilled (without sampling) to 12 ft and continued drilling and sampling to 20 ft completion depth.					
					5						
					10						
						Dense to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
1		18	M	32	15						
2		14	M	62/ 11"	20						
						End Boring at 20 ft					
						Borehole backfilled with bentonite chips					
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW — Upon Completion of Drilling NW
Time After Drilling
Depth to Water
Depth to Cave in

GENERAL NOTES

Start 1/3/08 End 1/3/08
Driller Badger Chief JR Rig CME-7
Logger BR Editor DAS
Drill Method 2 1/4" HSA

CGC Inc.

LOG OF TEST BORING

Project: Brown Business Park, Rolfsmeyer Drive
Location: Madison, Wisconsin

Boring No. 2
Surface Elevation (ft) 917±
Job No. C07467
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LI
						5 in. TOPSOIL (OL)					
1		8	M	4		Stiff, Brown Lean CLAY, Trace Organic Material, Scattered Sand and Silt Seams (CL - Possible Fill)	(1.0)				
2		16	M	6	5		(2.0)				
3		18	M	30		Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
4		14	M	23	10						
5		18	M	20	15						
6		16	M	24	20						
7		18	M	25	25	End Boring at 25 ft Borehole backfilled with bentonite chips					
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW Upon Completion of Drilling NW
Time After Drilling
Depth to Water ▼
Depth to Cave in

GENERAL NOTES

Start 1/2/08 End 1/2/08
Driller Badger Chief JR Rig CME-75
Logger BR Editor DAS
Drill Method 2 1/4" HSA

CGC Inc.

LOG OF TEST BORING

Project: Brown Business Park
Rolfsmeyer Drive
Location: Madison, Wisconsin

Boring No. 3
Surface Elevation (ft) 894±
Job No. C07467
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LI
						7 in. TOPSOIL (OL)					
1		18	M	8		Stiff, Brown Lean CLAY, Little to Some Sand (CL)	(1.75)				
2		16	M	7	5	Loose to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
3		16	M	8							
4		14	M	12	10						
5		10	M	73	15	End Boring at 15 ft Borehole backfilled with bentonite chips					
					20						
					25						
					30						

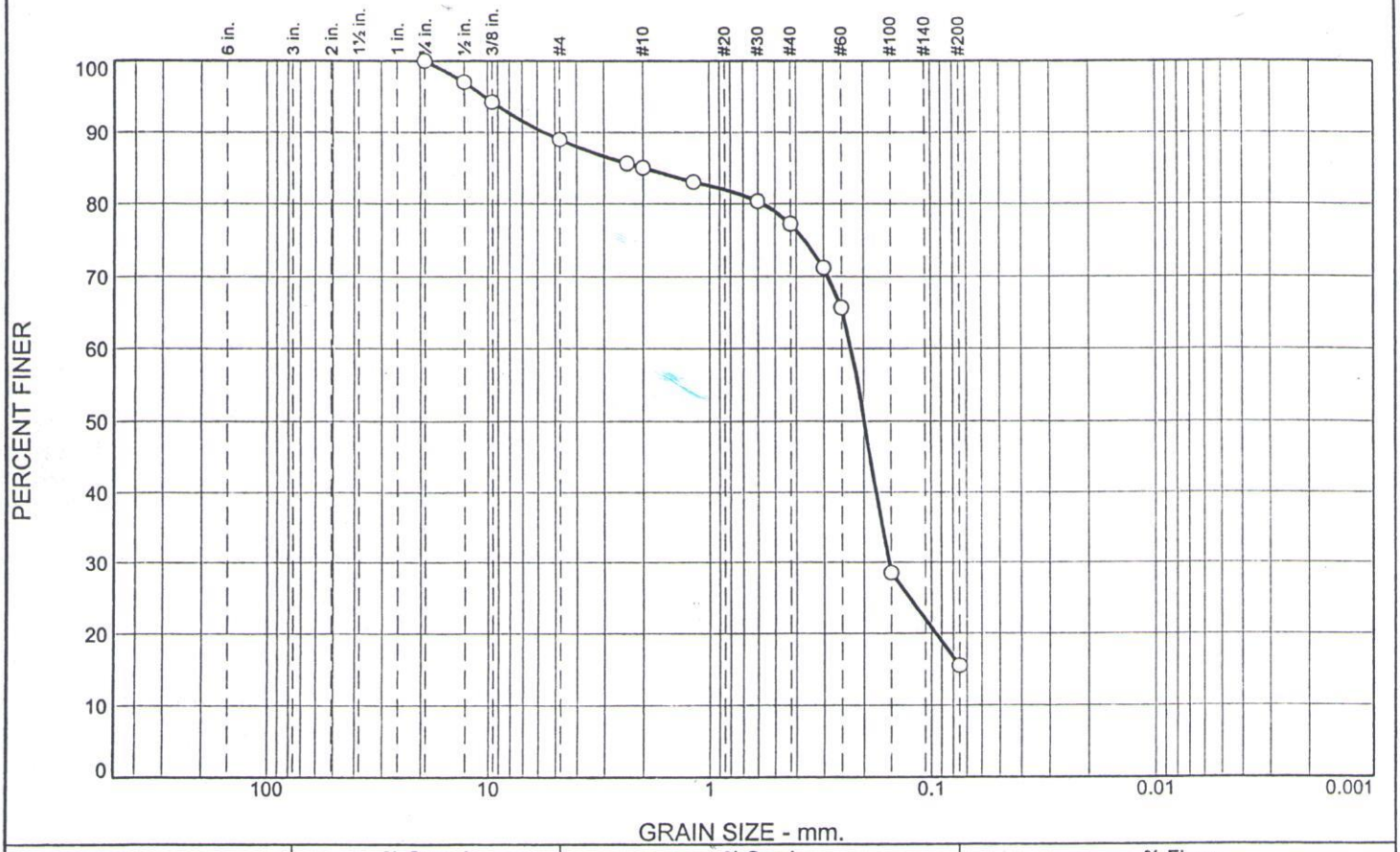
WATER LEVEL OBSERVATIONS

While Drilling ▽ NW — Upon Completion of Drilling NW
Time After Drilling
Depth to Water
Depth to Cave in

GENERAL NOTES

Start 1/3/08 End 1/3/08
Driller Badger Chief JR Rig CME-
Logger BR Editor DAS
Drill Method 2 1/4" HSA

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	11.0	4.0	7.7	61.8	15.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	97.0		
.375	94.2		
#4	89.0		
#8	85.6		
#10	85.0		
#16	83.0		
#30	80.3		
#40	77.3		
#50	71.2		
#60	65.6		
#100	28.5		
#200	15.5		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt, Little Gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.0052 D_{60}= 0.2266 D_{50}= 0.1983
D_{30}= 0.1536 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample Number: B-3 S-3 **Date:** 1/14/08

CGC, Inc.

Client:
Project: Brown Business Development
Project No: C07467 **Figure**

Tested By: KJS **Checked By:** DAS

CGC, Inc.

LOG OF TEST BORING

General Notes

Descriptive Soil Classification

GRAIN SIZE TERMINOLOGY

Soil Fraction	Particle Size	U.S. Standard Sieve Size
Boulders	Larger than 12"	Larger than 12"
Cobbles	3" to 12"	3" to 12"
Gravel: Coarse	3/4" to 3"	3/4" to 3"
Fine	4.76 mm to 3/4"	#4 to 3/4"
Sand: Coarse	2.00 mm to 4.76 mm	#10 to #4
Medium	0.42 to mm to 2.00 mm	#40 to #10
Fine	0.074 mm to 0.42 mm	#200 to #40
Silt	0.005 mm to 0.074 mm	Smaller than #200
Clay	Smaller than 0.005 mm	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

GENERAL TERMINOLOGY

Physical Characteristics
Color, moisture, grain shape, fineness, etc.
Major Constituents
Clay, silt, sand, gravel
Structure
Laminated, varved, fibrous, stratified, cemented, fissured, etc.
Geologic Origin
Glacial, alluvial, eolian, residual, etc.

RELATIVE DENSITY

Term	"N" Value
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

RELATIVE PROPORTIONS OF OF COHESIONLESS SOILS

Proportional Term	Defining Range by Percentage of Weight
Trace	0%-5%
Little	5%-12%
Some	12%-35%
And	35%-50%

CONSISTENCY

Term	q_u-tons/sq. ft.
Very Soft	0.0 to 0.25
Soft	0.25 to 0.50
Medium	0.50 to 1.0
Stiff	1.0 to 2.0
Very Stiff	2.0 to 4.0
Hard	Over 4.0

ORGANIC CONTENT BY COMBUSTION METHOD

Soil Description	Loss on Ignition
Non Organic	Less than 4%
Organic Silt/Clay	4-12%
Sedimentary Peat	12-50%
Fibrous and Woody Peat	More than 50%

PLASTICITY

Term	Plastic Index
None to Slight	0-4
Slight	5-7
Medium	8-22
High to Very High	Over 22

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6" penetrations of the 2" split-barrel sampler. The sampler is driven with a 140 lb. weight falling 30" and is seated to a depth of 6" before commencing the standard penetration test.

SYMBOLS

DRILLING AND SAMPLING

CS--Continuous Sampling
RC--Rock Coring: Size AW, BW, NW, 2"W
RQD--Rock Quality Designator
RB--Rock Bit
FT--Fish Tail
DC--Drove Casing
C--Casing: Size 2 1/2", NW, 4", HW
CW--Clear Water
DM--Drilling Mud
HSA--Hollow Stem Auger
FA--Flight Auger
HA--Hand Auger
COA--Clean-Out Auger
SS--2" Diameter Split-Barrel Sample
2ST--2" Diameter Thin-Walled Tube Sample
3ST--3" Diameter Thin-Walled Tube Sample
PT--3" Diameter Piston Tube Sample
AS--Auger Sample
WS--Wash Sample
PTS--Peat Sample
PS--Pitcher Sample
NR--No Recovery
S--Sounding
PMT--Borehole Pressuremeter Test
VS--Vane Shear Test
WPT--Water Pressure Test

LABORATORY TESTS

q_p--Penetrometer Reading, tons/sq. ft.
q_u--Unconfined Strength, tons/sq. ft.
W--Moisture Content, %
LL--Liquid Limit, %
PL--Plastic Limit, %
SL--Shrinkage Limit, %
LI--Loss on Ignition, %
D--Dry Unit Weight, lbs/cu. ft.
pH--Measure of Soil Alkalinity or Acidity
FS--Free Swell, %

WATER LEVEL MEASUREMENT

▽ --Water Level at time shown
NW--No Water Encountered
WD--While Drilling
BCR--Before Casing Removal
ACR--After Casing Removal
CW--Caved and Wet
CM--Caved and Moist

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

UNIFIED SOIL CLASSIFICATION SYSTEM

COARSE-GRAINED SOILS

(More than half of material is larger than No. 200 seive size.)

GRAVELS More than half of coarse fraction larger than No. 4 sieve size	**Clean Gravels** (Little or no fines)	
	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
	Gravels with Fines (Appreciable amount of fines)	
	GM^{d}_{u}	Silty gravels, gravel-sand-silt mixtures
	GC	Clayey gravels, gravel-sand-clay mixtures
SANDS More than half of coarse fraction smaller than No. 4 sieve size	**Clean Sands** (Little or no fines)	
	SW	Well-graded sands, gravelly sands, little or no fines
	SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with Fines (Appreciable amount of fines)	
	SM^{d}_{u}	Silty sands, sand-silt mixtures
	SC	Clayey sands, sand-clay mixtures

FINE-GRAINED SOILS

(More than half of material is smaller than No. 200 sieve.)

SILTS AND CLAYS Liquid limit less than 50%	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	CH	Inorganic clays of high plasticity, fat clays
	OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	PT	Peat and other highly organic soils

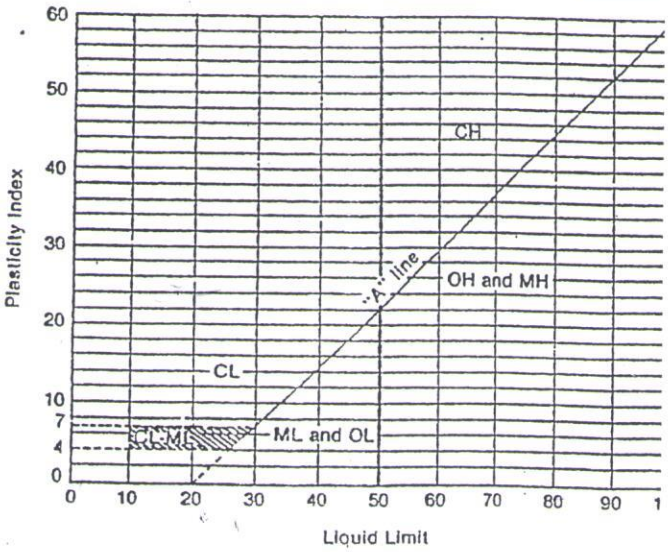
LABORATORY CLASSIFICATION CRITERIA

GW	$C_U = \frac{D_{60}}{D_{10}}$ greater than 4; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limits above "A" line with P.I. greater than 7	
SW	$C_U = \frac{D_{60}}{D_{10}}$ greater than 6; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for SW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in hatched zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
SC	Atterberg limits above "A" line with P.I. greater than 7	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 per cent	GW, GP, SW, SP
More than 12 per cent	GM, GC, SM, SC
5 to 12 per cent	Borderline cases requiring dual symbols

PLASTICITY CHART



For classification of fine-grained soils and fine fraction of coarse-grained soils.

Atterberg Limits plotting in hatched area are borderline classifications requiring use of dual symbols.

Equation of A-line: PI = 0.73 (LL - 20)

APPENDIX C

DOCUMENT QUALIFICATIONS

I. GENERAL RECOMMENDATIONS/LIMITATIONS

CGC, Inc. should be provided the opportunity for a general review of the final design and specifications to confirm that earthwork and foundation requirements have been properly interpreted in the design and specifications. CGC should be retained to provide soil engineering services during excavation and subgrade preparation. This will allow us to observe that construction proceeds in compliance with the design concepts, specifications and recommendations, and also will allow design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction. CGC does not assume responsibility for compliance with the recommendations in this report unless we are retained to provide construction testing and observation services.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices and no other warranties are expressed or implied. The opinions and recommendations submitted in this report are based on interpretation of the subsurface information revealed by the test borings indicated on the location plan. The report does not reflect potential variations in subsurface conditions between or beyond these borings. Therefore, variations in soil conditions can be expected between the boring locations and fluctuations of groundwater levels may occur with time. The nature and extent of the variations may not become evident until construction.

II. IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

More construction problems are caused by site subsurface conditions than any other factor. As troublesome as subsurface problems can be, their frequency and extent have been lessened considerably in recent years, due in large measure to programs and publications of ASFE/The Association of Engineering Firms Practicing in the Geosciences.

The following suggestions and observations are offered to help you reduce the geotechnical-related delays, cost-overruns and other costly headaches that can occur during a construction project.

A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

A CGC geotechnical report is based on a subsurface exploration plan designed to incorporate a unique set of project-specific factors. These typically include: the general nature of the structure involved, its size and configuration; the location of the structure on the site and its orientation; physical concomitants such as access roads, parking lots, and underground utilities, and the level of additional risk which the client assumed by virtue of limitations imposed upon the exploratory program. To help avoid costly problems, consult CGC's geotechnical engineers to determine how any factors which change subsequent to the date of the report may affect its recommendations.

Unless CGC indicates otherwise, your geotechnical engineering report should not be used:

- When the nature of the proposed structure is changed, for example, if an office building will be erected instead of a parking garage, or if a refrigerated warehouse will be built instead of an unrefrigerated one;
- when the size or configuration of the proposed structure is altered;
- when the location or orientation of the proposed structure is modified;
- when there is a change of ownership, or
- for application to an adjacent site.

CGC geotechnical engineers cannot accept responsibility for problems which may develop if they are not consulted after factors considered in their report's development have changed.

MOST GEOTECHNICAL "FINDINGS" ARE PROFESSIONAL ESTIMATES

Site exploration identifies actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and subsequent laboratory testing are extrapolated by geotechnical engineers who then render an opinion about overall subsurface conditions, their likely reaction to proposed construction activity, and appropriate foundation design. Even under optimal circumstances, actual conditions may differ from those inferred to exist, because no geotechnical engineer, no matter how qualified, and no subsurface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than a report indicates. Actual conditions in areas not sampled may differ from predictions. Nothing can be done to prevent the unanticipated, but steps can be taken to help minimize their impact. For this reason, most experienced owners retain their geotechnical consultants through the construction stage, to identify variances, conduct additional tests which may be needed, and to recommend solutions to problems encountered on site.

SUBSURFACE CONDITIONS CAN CHANGE

Subsurface conditions may be modified by constantly-changing natural forces. Because a geotechnical engineering report is based on conditions which existed at the time of subsurface exploration, construction decisions should not be based on a geotechnical engineering report whose adequacy may have been affected by time. Speak with CGC's geotechnical consultant to learn if additional tests are advisable before construction starts.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes or groundwater fluctuations may also affect subsurface conditions and, thus, the continuing adequacy of a geotechnical report. CGC's geotechnical engineer should be kept apprised of any such events, and should be consulted to determine if additional tests are necessary.

GEOTECHNICAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND PERSONS

CGC geotechnical reports are prepared to meet the specific needs of specific individuals. A report prepared for a consulting civil engineer may not be adequate for a construction contractor, or even some other consulting civil engineer. Unless indicated otherwise, this report was prepared expressly for the client involved and expressly for purposes indicated by the client. Use by any other persons for any purpose, or by the client for a different purpose, may result in problems. No individual other than the client should apply this report for its intended purpose without first conferring with the geotechnical engineer. No person should apply this report for any purpose other than that originally contemplated without first conferring with the geotechnical engineer.

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a geotechnical engineering report. To help avoid these problems, CGC's geotechnical engineer should be retained to work with other appropriate design professionals to explain relevant geotechnical findings and to review the adequacy of their plans and specifications relative to geotechnical issues.

BORING LOGS SHOULD NOT BE SEPARATED FROM THE ENGINEERING REPORT

Final boring logs are developed by CGC engineers based upon their interpretation of field logs (assembled by site personnel) and laboratory evaluation of field samples. Only final boring logs customarily are included in geotechnical engineering reports. These logs should not under any circumstances be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process. Although photographic reproduction eliminates this problem, it does nothing to minimize the possibility of contractors misinterpreting the logs during bid preparation. When this occurs, delays, disputes and unanticipated costs are the all-to-frequent result.

To minimize the likelihood of boring log misinterpretation, give contractors ready access to the complete geotechnical engineering report prepared or authorized for their use. Those who do not provide such access may proceed under the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems and the adversarial attitudes which aggravate them to disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY

Because geotechnical engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims being lodged against geotechnical consultants. To help prevent this problem, CGC geotechnical engineers have developed model clauses for use in written transmittals. These are not exculpatory clauses designed to foist our geotechnical engineers' liabilities onto someone else. Rather, they are definitive clauses which identify where our geotechnical engineers' responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your geotechnical engineering report, and you are encouraged to read them closely. CGC's geotechnical engineers will be pleased to give full and frank answers to your questions.

OTHER STEPS YOU CAN TAKE TO REDUCE RISK

CGC's geotechnical engineers will be pleased to discuss other techniques which can be employed to mitigate risk. In addition, ASFE has developed a variety of materials which may be beneficial. Contact ASFE for a complimentary copy of its publications directory.

APPENDIX D

CGC, INC.

RECOMMENDED COMPACTED FILL SPECIFICATIONS

Fill Materials

Proposed fill shall contain no vegetation, roots, topsoil, peat, ash, wood or any other non-soil material which by decomposition might cause settlement. Also, fill shall never be placed while frozen or on frozen surfaces. Rock, stone or broken concrete greater than 6 in. in the largest dimension shall not be placed within 10 ft of the building area. Fill used greater than 10 ft beyond the building limits shall not contain rock, boulders or concrete pieces greater than a 2 sq ft area and shall not be placed within the final 2 ft of finish subgrade or in designated utility construction areas. The rock, boulders or concrete pieces should contain finer material to fill in void spaces between the larger material.

Placement Method

The approved fill shall be placed, spread and leveled in layers generally not exceeding 10 in. in thickness before compaction. The fill shall be placed at a moisture content capable of achieving the desired compaction level. For clay soils or granular soils containing an appreciable amount of cohesive fines, moisture conditioning will likely be required.

It is the Contractor's responsibility to provide all necessary compaction equipment and other grading equipment that may be required to attain the specified compaction. Hand-guided vibratory or tamping compactors will be required whenever fill is placed adjacent to walls, footings, columns or in confined areas.

Compaction Specifications

Maximum dry density and optimum moisture content of the fill soil shall be determined in accordance with modified Proctor methods (ASTM D1557). The recommended field compaction as a percentage of the maximum dry density is shown in Table 1.

Table 1
Compaction Guidelines

Area	Percent Compaction+ Clay/Silt	Sand/Gravel
Within 10 feet of building lines		
• Footing bearing soils	93-95	95
• Under floors, steps and walks		
- Lightly loaded floor slab	90	90
- Heavily loaded floor slab & thicker fill zones	92	95
Beyond 10 feet of building lines		
• Under walks and pavements		
- Less than 2 ft below subgrade	92	95
- Greater than 2 ft below subgrade	90	90
• Landscaping	85	90

NOTES:

+ Based on Modified Proctor (ASTM D 1557)

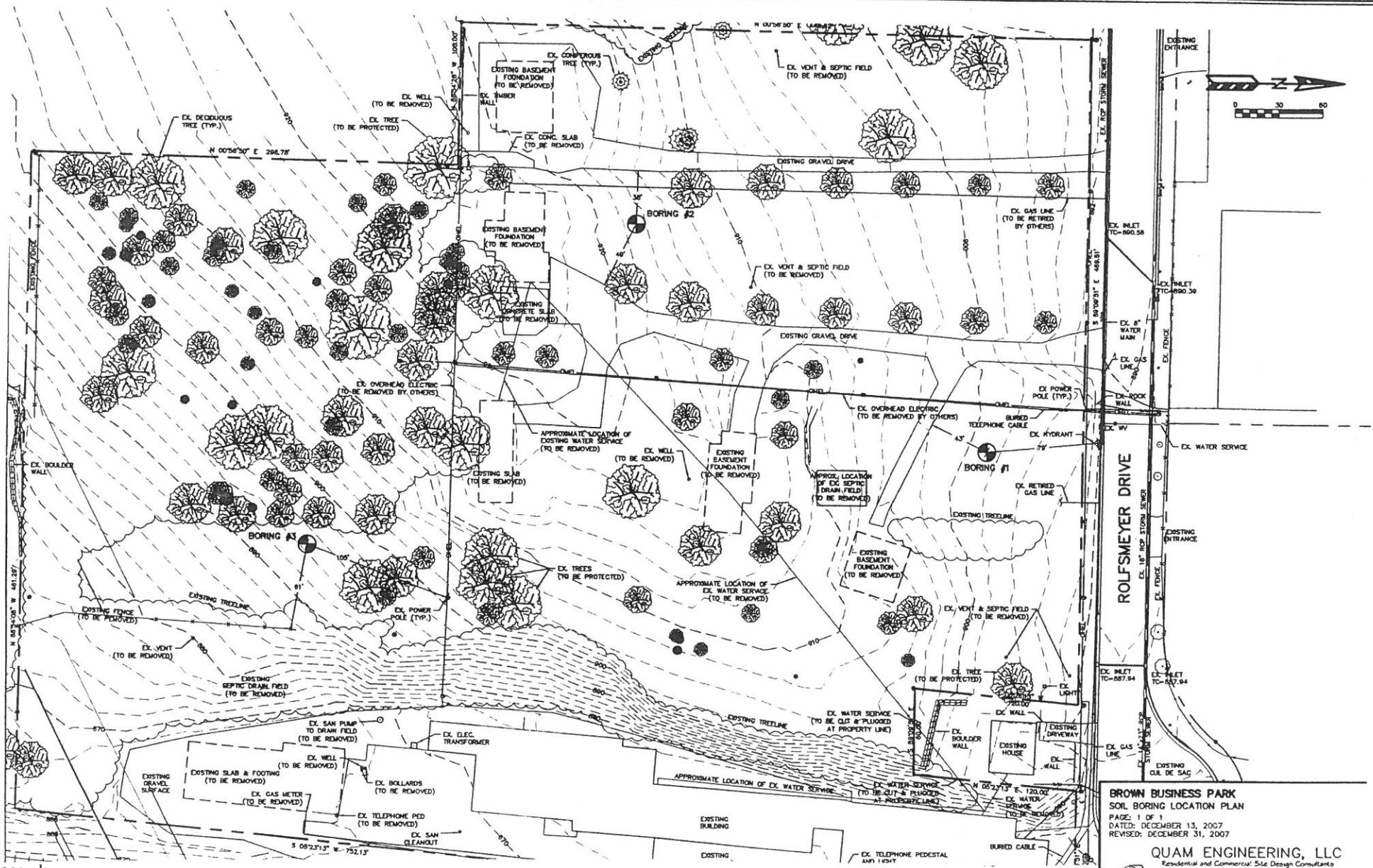
Testing Procedures

Representative samples of proposed fill shall be submitted to CGC, Inc. for optimum moisture-maximum density determination (ASTM D1557) prior to the start of fill placement. The sample size should be approximately 50 lb.

CGC, Inc. shall be retained to perform field density tests to determine the level of compaction being achieved in the fill. The tests shall generally be conducted on each lift at the beginning of fill placement and at a frequency mutually agreed upon by the project team for the remainder of the project.

APPENDIX B

TEST BORING LOCATION MAP
LOGS OF TEST BORINGS (3)
LOG OF TEST BORING-GENERAL NOTES
UNIFIED SOIL CLASSIFICATION SYSTEM



BROWN BUSINESS PARK
SOIL BORING LOCATION PLAN
PAGE: 1 OF 1
DATED: DECEMBER 13, 2007
REVISED: DECEMBER 31, 2007

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Residential and Commercial Site Design Consultants
www.quamengineering.com
4893 Larsen Beach Road; McFarland, Wisconsin 53558
Phone (608) 838-7750; Fax (608) 838-7752

Legend

⊕ Denotes boring location and number

Scale: As shown

Notes

1. Base map provided by Quam Engineering.
2. Soil borings drilled by Badger State Drilling in January 2008.
3. Boring locations are approximate.

Date: 1/08	CGC, Inc.	**SOIL BORING LOCATION MAP** **Brown Business Park** **Rolfsmeyer Drive** **Madison, Wisconsin**
Job No. C07467		

CGC Inc.

LOG OF TEST BORING

Project: **Brown Business Park**
Rolfsmeyer Drive
Location: **Madison, Wisconsin**

Boring No. **1**
Surface Elevation (ft) **899±**
Job No. **C07467**
Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	LI
						7 in. TOPSOIL (OL)					
1		8	M	7		Stiff, Brown Lean CLAY, Trace to Little Sand (CL)	(1.5-2.0)				
2		16	M	6			(2.0)				
					5						
3		14	M	13		Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
4		18	M	11							
					10						
						End Boring/Auger Refusal at 12 ft on Probable Boulder					
						Borehole backfilled with bentonite chips					
					15	Boring offset 5 ft south and redrilled. See Boring 1A.					
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW Upon Completion of Drilling NW
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between

GENERAL NOTES

Start **1/3/08** End **1/3/08**
Driller **Badger** Chief **JR** Rig **CME-750**
Logger **ER** Editor **DAS**
Drill Method **2 1/4" HSA**

CGC Inc.

LOG OF TEST BORING

Project: **Brown Business Park**
Rolfsmeyer Drive
Location: **Madison, Wisconsin**

Boring No. **1A**
Surface Elevation (ft) **899±**
Job No. **C07467**
Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	LI
						Boring located 5 ft south of Boring 1 Blind drilled (without sampling) to 12 ft and continued drilling and sampling to 20 ft completion depth.					
1		18	M	32	15	Dense to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
2		14	M	62/11"							
					20	End Boring at 20 ft Borehole backfilled with bentonite chips					

WATER LEVEL OBSERVATIONS

While Drilling ▽	NW	Upon Completion of Drilling		NW
Time After Drilling				
Depth to Water				▼
Depth to Cave in				

The stratification lines represent the approximate boundary between

GENERAL NOTES

Start **1/3/08** End **1/3/08**
Driller **Badger** Chief **JR** Rig **CME-750**
Logger **BR** Editor **DAS**
Drill Method **2 1/4" HSA**

CGC Inc.

LOG OF TEST BORING

Project: **Brown Business Park**
Rolfsmeyer Drive
Location: **Madison, Wisconsin**

Boring No. **2**
Surface Elevation (ft) **917±**
Job No. **C07467**
Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	LI
						5 in. TOPSOIL (OL)					
1		8	M	4		Stiff, Brown Lean CLAY, Trace Organic Material, Scattered Sand and Silt Seams (CL - Possible Fill)	(1.0)				
2		16	M	6	5		(2.0)				
3		18	M	30		Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
4		14	M	23	10						
5		18	M	20	15						
6		16	M	24	20						
7		18	M	25	25						
						End Boring at 25 ft Borehole backfilled with bentonite chips					
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW Upon Completion of Drilling NW
Time After Drilling
Depth to Water ▼
Depth to Cave in

The stratification lines represent the approximate boundary between

GENERAL NOTES

Start **1/2/08** End **1/2/08**
Driller **Badger** Chief **JR** Rig **CME-750**
Logger **BR** Editor **DAS**
Drill Method **2 1/4" HSA**

CGC Inc.

LOG OF TEST BORING

Project: Brown Business Park
Rolfsmeyer Drive
Location: Madison, Wisconsin

Boring No. 3
Surface Elevation (ft) 894±
Job No. C07467
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	LI
						7 in. TOPSOIL (OL)					
1		18	M	8		Stiff, Brown Lean CLAY, Little to Some Sand (CL)	(1.75)				
2		16	M	7	5	Loose to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM)					
3		16	M	8							
4		14	M	12	10						
5		10	M	73	15	End Boring at 15 ft Borehole backfilled with bentonite chips					
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW
Upon Completion of Drilling NW
Time After Drilling
Depth to Water
Depth to Cave in ▼

GENERAL NOTES

Start 1/3/08 End 1/3/08
Driller Badger Chief JR Rig CME-750
Logger BR Editor DAS
Drill Method